



2018 Periodic Review Report

Reporting Period: 03/31/2018 to 03/31/2019

NYSDEC BCP Site No. C828189

Location:

Former Michelsen Furniture Co. Site
182 Avenue D and 374 Conkey Avenue
City of Rochester, New York

Prepared for:

M+M Housing Development Fund Corp. as Nominee for
Mills and Michelsen LLC
312 State Street
Rochester, New York 14614

LaBella Project No. 2161282

April 2019



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LaBella Associates, D.P.C.
300 State Street
Rochester, New York 14614

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1.0 INTRODUCTION

LaBella Associates, D.P.C. (LaBella) is pleased to submit this Periodic Review Report (PRR) for the Former Michelsen Furniture Co. Site located at 182 Avenue D and 374 Conkey Avenue in the City of Rochester under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by the New York State Department of Environmental Conservation (NYSDEC). This PRR covers the Reporting Period from March 31, 2018 to March 31, 2019.

The Site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Index C828189-09-14, Site # C828189. A Site Location Map is included as Figure 1. The Site is located in the City of Rochester, County of Monroe, New York and is comprised of two parcels totaling +/- 0.62-acre (Section 091.770 Block 0002 and Lot 031 on the City of Rochester Tax Map).

The properties adjoining the Site and in the neighborhood surrounding the Site primarily include residential properties. The properties immediately south of the Site include residential properties and a mini-mart; the properties immediately north and west of the Site include residential properties; the properties immediately east of the Site include residential properties and a recreation center.

A Site Plan (included as Figure 2), illustrates the Site boundaries and the adjacent properties.

1.1 Environmental History

A Remedial Investigation (RI) was performed to characterize the nature and extent of contamination at the Site. The results of the RI are described in detail in the *Remedial Investigation Report, NYSDEC BCP Site #C828189*, prepared by LaBella and dated September 2015.

Additional detail regarding the history of the Site can be found in the *Site Management Plan, Former Michelsen Furniture Co. Site, NYSDEC Site Number: C828189*, prepared by LaBella and dated November 2015 (hereinafter referred to as the “SMP”).

Generally, the RI determined that solvent related volatile organic compounds (VOCs) (specifically Trichloroethene (TCE) and its breakdown compounds) existed in soil, with limited quantities of SVOCs being present in subsurface soil. Based on these findings, it appeared the source of the VOC plume was in the area of the former loading dock. The limits of the VOC impacts in soil were defined by the RI. The extent of off-site groundwater impacts have not been defined.



The following is a summary of site conditions when the RI was performed in 2014.

Soil

- Subsurface soil sampling at the Site only identified one area of soil that contains SVOCs above the SCGs. This area is located beneath the parking lot at the Site.
- Subsurface VOC impacts in soil were not identified at concentrations above the NYSDEC Part 375-6.8(b) Restricted Residential SCOs. However, low concentrations of VOCs above the NYSDEC Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives (SCOs) and Part 375-6.8(b) Protection of Groundwater SCOs in soil were detected beneath the Site building.

Areas of subsurface soil impacts detected during the RI are summarized in Tables 2 through 4 of the SMP and are detailed on Figure 5 of the SMP.

Site-Related Groundwater

Groundwater at the Site is impacted by CVOCs at concentrations above Part 703 groundwater standards. The groundwater flow at the Site is to the north, towards adjacent residential properties. The potential exists that CVOCs are migrating off-Site. While the results of on-Site sampling indicate groundwater contamination may be moving off-Site, off-Site sampling is necessary to confirm the nature and extent. Groundwater impacts detected during the RI are summarized in Table 4 of the SMP and are detailed on Figure 6 of the SMP.

Site-Related Soil Vapor Intrusion

Based on the concentrations of VOCs in soil and groundwater beneath the Site building a completed exposure pathway does appear to exist for VOCs. However, while, data is not available documenting current concentrations of VOCs in sub slab vapor or indoor air, the installation of the sub slab depressurization system and ventilation of the underground parking garage addresses any potential vapor intrusion concerns.

In addition, the following Interim Remedial Measures were implemented at the Site:

1. UST Removal – Two (2) 3,000 gallon heating oil USTs were removed, decommissioned and disposed as scrap steel. Approximately 550 gallons of residual heating oil was removed and disposed at Industrial Oil Tank Services in Oriskany, New York.
2. Soil Removal – A total of 1,917.06 tons of soil was characterized, removed from the Site and transported to Mill Seat Landfill in Riga, New York for disposal as non-hazardous waste.
3. Sub Slab Depressurization System (SSDS) – An SSDS was installed in the Site building during redevelopment.



The locations of IRMs implemented at the Site are detailed on Figure 7 of the SMP.

The Site was remediated in accordance with the NYSDEC-approved Remedial Action Work Plan dated September 2015. The following is a summary of the Remedial Actions performed at the Site:

1. Construction and maintenance of a soil cover system to prevent human exposure to remaining contaminated soil. This cover system includes a minimum of 24 inches of clean material or impervious surfaces (e.g., pavement, concrete) applied as part of the remedy. Geotextile fabric was placed as a demarcation layer between the cover material and underlying soil;
2. Injection of 13,200 pounds of sodium permanganate (“RemOx® L”) was pumped at an approximately 10% concentration into six injection wells and monitoring wells BW-02, BW-03, BW-04, GPMW-34, and GPMW-26. A total of 6,000 gallons of 10% solution was injected.
3. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the Site; and
4. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for Institutional Controls. Remedial activities were completed at the site in May 2014.

A groundwater treatment system consisting of a network of six injection wells was installed in the area between the building and the concrete ramp to the basement to facilitate introduction of in-situ chemical oxidation (ISCO) compounds to the subsurface (see Figure 9 of the SMP). Each injection well was constructed of two inch Sch 40 PVC with 0.020 inch machine slotted screens. Each well was installed to a total of five (5) feet into bedrock to straddle the bedrock/overburden contact. A quartz sand pack was placed around the screen section of each well followed by a two foot bentonite seal. The remainder of the annulus was grouted to the surface. Each injection well was completed at the surface with a flush-mount protective casing. In addition to the six dedicated injection wells, ISCO injections can be performed in bedrock monitoring wells BW-02, BW-03 and BW-04 and overburden monitoring wells GPMW-26 and GPMW-34.

The remedial work did not remove all contamination at the Site. Remaining contamination at the Site includes the following:

Soil

Additional soil samples were not collected subsequent to implementation of the remedial action. As such, VOC and SVOC concentrations in areas not affected by remedial actions are anticipated to remain similar to those identified in previous investigations.

Based on the results of laboratory analysis of soil samples collected during the RI, CVOCs are present at the Site at concentrations exceeding SCGs for soil. TCE was detected in one (1) soil sample collected during pre-RI investigations at a concentration above Part 375-6.8(a) Unrestricted SCOs but below Part 375-6.8(b) Restricted Residential SCOs. Concentrations of VOCs detected in RI soil samples did not exceed Part 375-6.8(b) Restricted Residential SCOs. TCE was detected in three soil samples collected from RI and pre-RI sampling at concentrations exceeding Part 375-6.8(b) Protection of Groundwater SCOs.



SVOCs were identified in one soil sample (i.e., IW-3 at a depth of 4' to 10' bgs) during the RI at concentrations exceeding Part 375-6.8(b) Restricted Industrial SCOs. Concentrations of all other SVOCs detected in soil samples were below Part 375-6.8(a) Unrestricted Use SCOs.

Groundwater

VOCs remain in Site groundwater at concentrations exceeding SCGs. Groundwater contamination was detected in bedrock monitoring wells located proximate the northern property line during the RI. The potential exists that contamination is migrating off-site with groundwater. Contaminant levels are anticipated to decrease over time due to the groundwater treatment remedy that was implemented at the site.

Table 8 in Appendix 4 and Figure 10 of the SMP summarize the results of all samples of groundwater that exceed the SCGs after completion of the remedial action.

Soil Vapor

Soil vapor samples have not been collected at the Site; however an SSDS has been installed at the Site to mitigate the potential for vapor intrusion into the Site building.

Since remaining contaminated soil and groundwater exists beneath portions of the Site, Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment. The EC/IC Plan, a component of the SMP, describes the procedures for the implementation and management of all EC/ICs at the Site.



2.0 PURPOSE AND SCOPE OF WORK

The purpose of this report is to present the annual monitoring work completed at the Site during the monitoring period. This work was completed in general accordance with the provisions of the SMP. As required in the SMP, this report includes the following information:

- Identification, assessment and certification of all Engineering Controls/Institutional Controls (ECs/ICs) required by the remedy for the Site;
- Results of the required annual site inspections and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the Site during the reporting period in electronic format (included in report);
- Data summary tables and graphical representations of contaminants of concern by media, which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends;
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;
- A Site evaluation, which includes the following:
 - The compliance of the remedy with the requirements of the Site-specific RAWP;
 - Any new conclusions or observations regarding Site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
 - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
 - The overall performance and effectiveness of the remedy.



3.0 ANNUAL MONITORING

The SMP identified the on-going monitoring of the performance of the remedy, via annual sampling of nine (9) existing groundwater monitoring wells, as summarized in the following table.

On-Site Wells Included in Annual Groundwater Monitoring Program

<u>Well ID</u>	<u>Frequency</u>	<u>Testing Parameter</u>
GPMW-34	Quarterly	TCL List VOCs via EPA Method 8260
GPMW-26	Quarterly	TCL List VOCs via EPA Method 8260
IW-2	Quarterly	TCL List VOCs via EPA Method 8260
IW-3	Quarterly	TCL List VOCs via EPA Method 8260
IW-4	Quarterly	TCL List VOCs via EPA Method 8260
IW-5	Quarterly	TCL List VOCs via EPA Method 8260
BMW-02	Quarterly	TCL List VOCs via EPA Method 8260
BMW-03	Quarterly	TCL List VOCs via EPA Method 8260
BMW-04	Quarterly	TCL List VOCs via EPA Method 8260

In addition to groundwater monitoring, Site-wide inspections will be performed on a regular schedule at a minimum of once a year. During these inspections, an inspection form will be completed, which will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage;
- General site conditions at the time of the inspection;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection; and
- Confirm that site records are up to date.

Annual monitoring of the performance of the remedy and overall reduction in contamination on-site will be conducted for the first five (5) years. The frequency thereafter will be determined by NYSDEC. Trends in contaminant levels in air, soil, and/or groundwater in the affected areas, will be evaluated to determine if the remedy continues to be effective in achieving remedial goals.



3.1 Groundwater Monitoring

Groundwater monitoring was conducted in May and November 2018 and March 2019.

Passive diffusion bag (PDB) samplers were used to collect groundwater samples according to the procedures outlined in the SMP.

Pace National Laboratory (formerly Environmental Science Corporation) of Mt. Juliet, Tennessee (Pace) analyzed the groundwater samples collected. Pace is a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory. The samples were analyzed for United States Environmental Protection Agency (USEPA) United States Environmental Protection Agency (USEPA) Target Compound List (TCL) VOCs using USEPA Method 8260. The laboratory analytical reports from Pace are included in Appendix A.

An Analytical Services Protocol (ASP) Category B deliverable for the laboratory reports were obtained (with one exception, see below), and a Data Usability Summary Reports (DUSR) was created for the laboratory report (see Appendix B).

3.2 Deviations from SMP

No groundwater samples were collected in the 3rd quarter of 2018.

According to Pace, samples from the May 2018 sampling event were inadvertently process under method 8260B instead of 8260C as required by New York. The lab indicated that the existing data did not meet 8260C criteria. At the time this situation was discovered the lab had utilized all of the VOA vials for some samples, leaving no pristine vials with zero headspace. As such, the data could not be validated. This laboratory discrepancy was communicated to the NYSDEC Project Manager and it was determined that the NYSDEC would not require that the samples be recollected for that round. A copy of the correspondence between Pace, LaBella and the NYSDEC is included in Appendix B.

4.0 GROUNDWATER FLOW CONTOURS

Historic monitoring information previously presented to the NYSDEC describes a direction of groundwater flow that is to the north. For informational purposes, a groundwater contour map from June 2015 is included as Figure 4.



5.0 SUMMARY OF GROUNDWATER MONITORING

The results of the groundwater monitoring are summarized in the attached Table 1 and are compared to the NYSDEC Part 703 groundwater standards. As summarized in Table 1 and the following table, the following VOCs were reported above the NYSDEC Part 703 groundwater standards in groundwater during the last monitoring event of the period (i.e., March 2019):

Well ID	VOC(s) above Part 703 Groundwater Standards
GPMW-34	Trichloroethene
GPMW-26	Trichloroethene
IW-2	Trichloroethene
IW-3	Trichloroethene
IW-4	Trichloroethene
IW-5	None
BMW-02	Trichloroethene
BMW-03	cis-1,2-Dichloroethene & Trichloroethene
BMW-04	cis-1,2-Dichloroethene, Trichloroethene, Vinyl Chloride



6.0 SITE EVALUATION

The annual monitoring work conducted for the March 31, 2018 to March 31, 2019 Reporting Period was completed in general accordance with the SMP, with any exceptions noted in Section 3.2.

The annual Site-wide inspection was performed on October 29, 2018 and conditions at the Site overall appeared very similar to previously observed (October 2018) conditions. A copy of the Site Inspection Form is included as Appendix C.

The analytical results from the monitoring period indicate that overall VOC concentrations continue to show a general downward trend. The previous PRR indicated that GPMW-26 and GPMW-34 were showing potential signs of rebound; however, sampling during this period show concentrations stabilizing or reducing slightly. Bedrock well BW-04 showed an increased concentration of cis-1,2-dichloroethene in the last sampling event of the period (March 2019).

The next quarterly sampling is scheduled for June 2019.

Revisions to SMP

Based on the overall downward trend in the groundwater concentrations the following revisions to the SMP are requested:

1. Reducing the groundwater monitoring schedule from quarterly to semi-annual for wells IW-02, IW-03, IW-04 and IW-05. Specifically, sampling is proposed for Summer (June) and Winter (December) of each year. Property line wells BW-02, BW-03 and BW-04 and wells GPMW-26 and GPMW-34 in the footprint of the Site building would continue to be sampled on a quarterly basis.

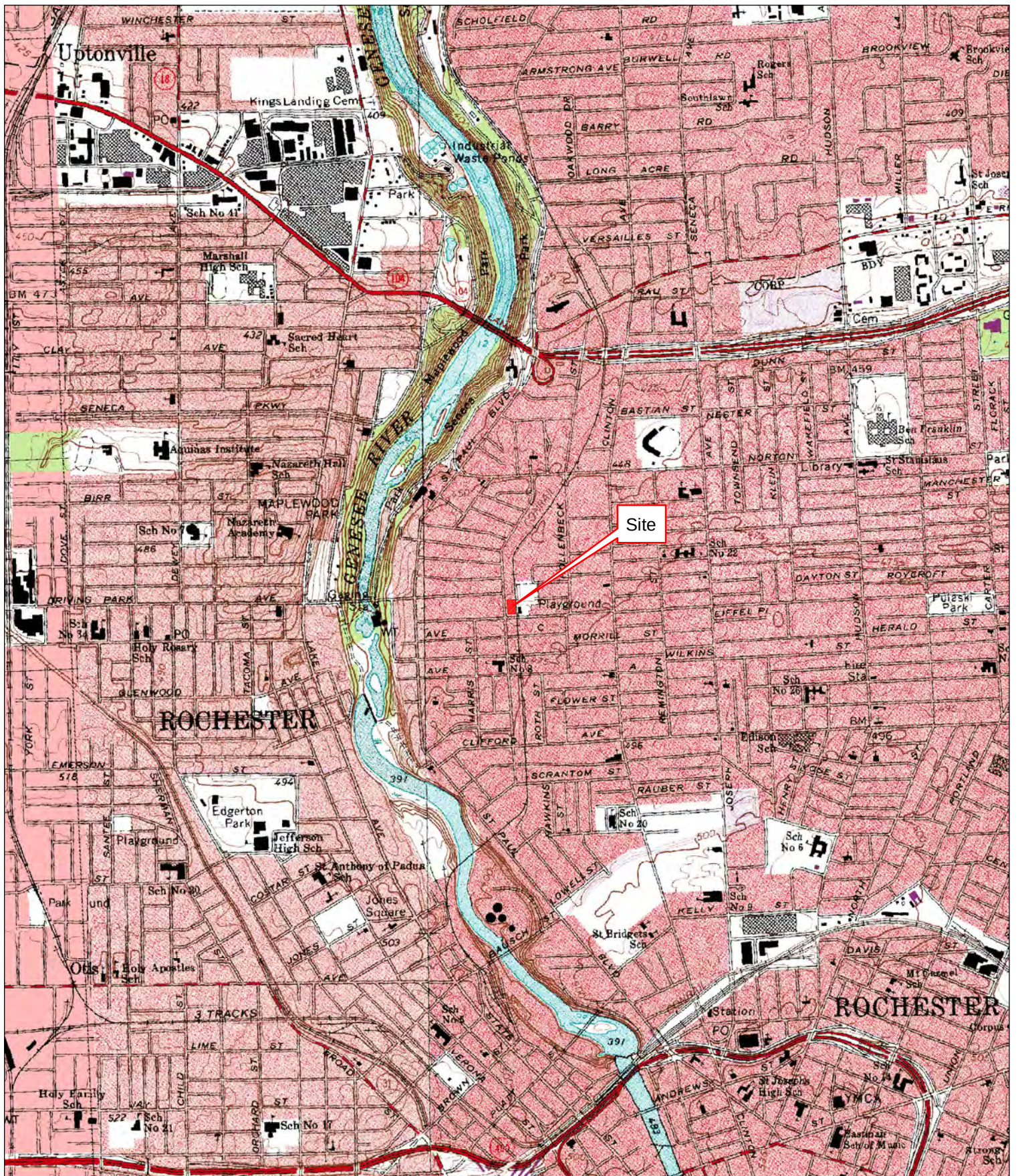
7.0 INSTITUTIONAL AND ENGINEERING CONTROLS CERTIFICATION

The NYSDEC Institutional and Engineering Controls Certification Form is included in Appendix D.

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Figures



PROJECT/DRAWING NUMBER [214539] FIGURE 1	DRAWING TITLE SITE LOCATION MAP ISSUED FOR: DRAFT DESIGNED BY: DKE DRAWN BY: DKE DATE: 09/11/2015	PROJECT/CLIENT Site Management Plan Former Michelsen Furniture Co. Site 182 Avenue D & 374 Conkey Ave. Rochester, New York Client: M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen LLC	ABELLA Associates, D.P.C. 300 STATE STREET ROCHESTER, NY 14614 P: (585) 454-6110 F: (585) 454-3066 www.abellapc.com COPYRIGHT 2003 0 1,050 2,100 4,200 Feet 1 inch = 2,000 feet North Arrow
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Former Michelsen Furniture
Co. Site
182 Avenue D &
374 Conkey Ave.
Rochester, New York

Title:
Adjacent Property Information

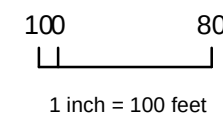


Figure 2



Path: I:\Wills & Michelsen LLC\2161282 - 182 Ave D Groundwater Sampling\Drawings\Fig 3 - GW monitoring.mxd



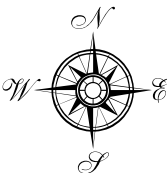
Periodic Review Report

Former Michelsen
Furniture Co. Site

182 Avenue D
&
374 Conkey Avenue
Rochester, New York

Urban League of Rochester
Economic Development
Corporation

Title:
Groundwater Monitoring
Locations



10 0 10
1 inch = 25 feet

[2161282]

[Figure 3]

Path: J:\Urban League of Rochester Economic Development\214539 - Michelson BCP Site RI & Remediation\Drawings\RI\Fig. 4 - GW Contours 6-1-2015.mxd



Legend

- 2015 RIWP Interface Well
- 2015 RIWP Bedrock Well
- Groundwater Elevation Contour (Feet)
- SiteBoundary

Notes:

1. Site Boundary determined using 2011 City of Rochester Tax Parcel data.
2. 2009 Aerial photograph obtained from NYS GIS Clearinghouse.
3. Groundwater contours created with Surfer 8 using the Kriging method.
4. Well and static water level elevations surveyed relative to each other and are intended for comparison to adjacent wells only.

BCP Remedial Investigation

Former Michelson
Furniture Co. Site

182 Avenue D
&
374 Conkey Avenue
Rochester, New York

Urban League of Rochester
Economic Development
Corporation

Title:
Groundwater Elevation
Contouring

Bedrock & Interface
Monitoring Wells
(6/1/2015)



10 0 10
1 inch = 25 feet

[214539]

[Figure 4]

Tables

Table 1 - Page 1
Periodic Site Monitoring - Post-injection
Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Summary of Detected Volatile Organic Compounds in Groundwater Samples
Results in Micrograms per Liter (µg/L) or Parts Per Billion (ppb)

[illegible]

Notes:

- 1. VOC analysis for TCL list VOCs by United States Environmental Protection Agency (USEPA) Method SW846 8260B.
- 2. Bold and highlighted type indicates that the constituent was detected above NYSDep Part 703 Groundwater Standards.
- 3. "ND" - Indicates that the constituent was not detected.
- 4. "NA" - Indicates information is not applicable or not available.
- 5. "J3" - The associated batch QC was outside the established quality control range for precision.
- 6. "J4" - Indicates that the associated batch QC was outside the established quality control range for accuracy.
- 7. "S" - Indicates that the sample matrix interfered with the ability to make any accurate determination; spike value is low.
- 8. "V" indicates the sample concentration is too high to evaluate accurate spike recoveries.

If no standard is established for a selected compound, TOGS Table 1.1.1 Guidance values are substituted.

Table 1 - Page 3
Periodic Site Monitoring - Post-injection
Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Summary of Detected Volatile Organic Compounds in Groundwater Samples
Results in Micrograms per Liter (µg/L) or Parts Per Billion (ppb)

Sample ID	Sample Location										NYSDEC Part 703 Groundwater Standards
	BW-04										
	Sample Collection Date	10/30/2015	8/11/2016	10/26/2016	1/30/2017	4/4/2017	8/18/2017	12/1/2017	5/18/2018	11/9/2018	
ACETONE	ND	ND	ND J3	ND	ND	ND	ND J0	ND	ND	ND	50
BENZENE	1.32	1.64	1.41	ND	ND	ND	ND	ND	ND	ND	1
BROMOCHLOROMETHANE	ND	ND	ND J4	ND	ND	ND	ND	ND	ND	ND	50
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
BROMOMETHANE	ND	ND	ND	ND J3	ND	ND J3	ND J0	ND	ND	ND	5
CARBON DISULFIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	60
CARBON TETRACHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
CHLOROMETHANE	ND	ND	ND	ND	ND	ND J0	ND J0	ND	ND	ND	5
CYCLOHEXANE	1.55	4.23	2.49	2.38	1.57	ND	ND	ND	ND	ND	3
1,2-DIBROMO-3-CHLOROPROPANE	ND	ND	ND J3	ND	ND	ND	ND	ND	ND	ND	0
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,2-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3
1,3-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3
1,4-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3
DICHLORODIFLUOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,1-DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,2-DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
1,1-DICHLOROETHENE	2.72	5.48	4.14	2.61	1.8	ND	ND	1.18	ND	1.34	5
CIS-1,2-DICHLOROETHENE	664	1810	974	1,050	654	301	177 V	817	63.2	1130	5
TRANS-1,2-DICHLOROETHENE	6.15	10.2	8.24	5.21	3.19	ND	ND	3.11	ND	4.88	5
1,2-DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
CIS-1,3-DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
TRANS-1,3-DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
2-HEXANONE	ND	ND	ND J3	ND	ND	ND	ND	ND	ND	ND	50
ISOPROPYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
2-BUTANONE (MEK)	ND	ND	ND J3	ND	ND	ND	ND	ND	ND	ND	50
METHYL ACETATE	ND	ND	ND	ND J6	ND	ND	ND	ND	ND	ND	1
METHYL CYCLOHEXANE	2.1	4.68	ND	2.99	2.21	ND	ND	ND	ND	ND	NA
METHYLENE CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
4-METHYL-2-PENTANONE (MIBK)	ND	ND	ND J3	ND	ND	ND	ND	ND	ND	ND	NA
METHYL TERT-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
TETRACHLOROETHENE	ND	ND	1.69	1.73	1.58	ND	ND	ND	ND	ND	5
TOLUENE	ND	1.51	ND	ND	ND	ND	ND	ND	ND	ND	5
1,2,3-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,1,1-TRICHLOROETHANE	ND	ND	1.46	ND	ND	ND	ND	ND	ND	ND	5
1,1,2-TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
TRICHLOROETHENE	256	240	301	201	139	20.2	7.7	51.4	ND	74.4	5
TRICHLOROFLUOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,1,2-TRICHLOROTRIFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
VINYL CHLORIDE	37.1	151	61.2	69.3	53.5	ND	1.2	51.4	ND	29	2
XYLENES, TOTAL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5

- Notes:
- VOC analysis for TCL List VOCs by United States Environmental Protection Agency (USEPA) Method SW846 8260B.
 - 2. Bold and highlighted type indicates that the constituent was detected above NYSDEC Part 703 Groundwater Standards.**
 - "ND" - Indicates that the constituent was not detected.
 - "NA" - Indicates information is not applicable or not available.
 - "J3" - The associated batch QC was outside the established quality control range for precision.
 - "J4" - Indicates that the associated batch QC was outside the established quality control range for accuracy.
 - "J6" - Indicates that The sample matrix interfered with the ability to make any accurate determination; spike value is low.
 - "V" indicates The sample concentration is too high to evaluate accurate spike recoveries.
 - If no standard is established for a selected compound, TOGS Table 1.1.1 Guidance values are substituted.

Appendix A

Laboratory Analytical Reports

June 20, 2018

LaBella Associates, P.C.

Sample Delivery Group: L995530
Samples Received: 05/19/2018
Project Number: 2161282
Description: Michelsen PDB May 2018

Report To: Mr. Steven Rife / Mr. Dave Engert
300 State Street, Suite 201
Rochester, NY 14614

Entire Report Reviewed By:



T. Alan Harvill

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1
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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



DUPE L995530-01 GW

			Collected by	Collected date/time	Received date/time
			S. Rife	05/18/18 00:00	05/19/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1114798	1	05/22/18 21:16	05/22/18 21:16	GLN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1125065	5	05/23/18 22:44	05/23/18 22:44	GLN

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

GPMW-26 L995530-02 GW

			Collected by	Collected date/time	Received date/time
			S. Rife	05/18/18 11:00	05/19/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1114798	1	05/22/18 21:36	05/22/18 21:36	GLN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1125065	1	05/23/18 23:04	05/23/18 23:04	GLN

GPMW-34 L995530-03 GW

			Collected by	Collected date/time	Received date/time
			S. Rife	05/18/18 10:50	05/19/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1114798	1	05/22/18 21:55	05/22/18 21:55	GLN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1125065	5	05/23/18 23:23	05/23/18 23:23	GLN

IW-2 L995530-04 GW

			Collected by	Collected date/time	Received date/time
			S. Rife	05/18/18 09:00	05/19/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1114798	1	05/22/18 22:14	05/22/18 22:14	GLN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1125065	1	05/23/18 23:43	05/23/18 23:43	GLN

IW-3 L995530-05 GW

			Collected by	Collected date/time	Received date/time
			S. Rife	05/18/18 09:15	05/19/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1114798	1	05/22/18 22:33	05/22/18 22:33	GLN

IW-4 L995530-06 GW

			Collected by	Collected date/time	Received date/time
			S. Rife	05/18/18 09:25	05/19/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1114798	1	05/22/18 22:53	05/22/18 22:53	GLN

IW-5 L995530-07 GW

			Collected by	Collected date/time	Received date/time
			S. Rife	05/18/18 09:45	05/19/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1114798	1	05/22/18 23:12	05/22/18 23:12	GLN

BW-2 L995530-08 GW

			Collected by	Collected date/time	Received date/time
			S. Rife	05/18/18 10:10	05/19/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1114798	1	05/22/18 23:32	05/22/18 23:32	GLN

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



BW-3 L995530-09 GW

			Collected by S. Rife	Collected date/time 05/18/18 10:30	Received date/time 05/19/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1114798	1	05/22/18 23:52	05/22/18 23:52	GLN

BW-4 L995530-10 GW

			Collected by S. Rife	Collected date/time 05/18/18 10:40	Received date/time 05/19/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1114798	1	05/23/18 00:11	05/23/18 00:11	GLN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1125065	5	05/24/18 00:02	05/24/18 00:02	GLN

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

T. Alan Harvill
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	ND		50.0	1	05/22/2018 21:16	WG1114798	¹ Cp
Benzene	ND		1.00	1	05/22/2018 21:16	WG1114798	² Tc
Bromochloromethane	ND		1.00	1	05/22/2018 21:16	WG1114798	³ Ss
Bromodichloromethane	ND		1.00	1	05/22/2018 21:16	WG1114798	⁴ Cn
Bromoform	ND		1.00	1	05/22/2018 21:16	WG1114798	⁵ Sr
Bromomethane	ND		5.00	1	05/22/2018 21:16	WG1114798	⁶ Qc
Carbon disulfide	ND		1.00	1	05/22/2018 21:16	WG1114798	⁷ Gl
Carbon tetrachloride	ND		1.00	1	05/22/2018 21:16	WG1114798	⁸ Al
Chlorobenzene	ND		1.00	1	05/22/2018 21:16	WG1114798	⁹ Sc
Chlorodibromomethane	ND		1.00	1	05/22/2018 21:16	WG1114798	
Chloroethane	ND		5.00	1	05/22/2018 21:16	WG1114798	
Chloroform	ND		5.00	1	05/22/2018 21:16	WG1114798	
Chloromethane	ND		2.50	1	05/22/2018 21:16	WG1114798	
Cyclohexane	ND		1.00	1	05/22/2018 21:16	WG1114798	
1,2-Dibromo-3-Chloropropane	ND		5.00	1	05/22/2018 21:16	WG1114798	
1,2-Dibromoethane	ND		1.00	1	05/22/2018 21:16	WG1114798	
1,2-Dichlorobenzene	ND		1.00	1	05/22/2018 21:16	WG1114798	
1,3-Dichlorobenzene	ND		1.00	1	05/22/2018 21:16	WG1114798	
1,4-Dichlorobenzene	ND		1.00	1	05/22/2018 21:16	WG1114798	
Dichlorodifluoromethane	ND		5.00	1	05/22/2018 21:16	WG1114798	
1,1-Dichloroethane	ND		1.00	1	05/22/2018 21:16	WG1114798	
1,2-Dichloroethane	ND		1.00	1	05/22/2018 21:16	WG1114798	
1,1-Dichloroethene	1.16		1.00	1	05/22/2018 21:16	WG1114798	
cis-1,2-Dichloroethene	774		5.00	5	05/23/2018 22:44	WG1125065	
trans-1,2-Dichloroethene	3.34		1.00	1	05/22/2018 21:16	WG1114798	
1,2-Dichloropropane	ND		1.00	1	05/22/2018 21:16	WG1114798	
cis-1,3-Dichloropropene	ND		1.00	1	05/22/2018 21:16	WG1114798	
trans-1,3-Dichloropropene	ND		1.00	1	05/22/2018 21:16	WG1114798	
Ethylbenzene	ND		1.00	1	05/22/2018 21:16	WG1114798	
2-Hexanone	ND		10.0	1	05/22/2018 21:16	WG1114798	
Isopropylbenzene	ND		1.00	1	05/22/2018 21:16	WG1114798	
2-Butanone (MEK)	ND		10.0	1	05/22/2018 21:16	WG1114798	
Methyl Acetate	ND		20.0	1	05/22/2018 21:16	WG1114798	
Methyl Cyclohexane	ND		1.00	1	05/22/2018 21:16	WG1114798	
Methylene Chloride	ND		5.00	1	05/22/2018 21:16	WG1114798	
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	05/22/2018 21:16	WG1114798	
Methyl tert-butyl ether	ND		1.00	1	05/22/2018 21:16	WG1114798	
Styrene	ND		1.00	1	05/22/2018 21:16	WG1114798	
1,1,2,2-Tetrachloroethane	ND		1.00	1	05/22/2018 21:16	WG1114798	
Tetrachloroethene	ND		1.00	1	05/22/2018 21:16	WG1114798	
Toluene	ND		1.00	1	05/22/2018 21:16	WG1114798	
1,2,3-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 21:16	WG1114798	
1,2,4-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 21:16	WG1114798	
1,1,1-Trichloroethane	ND		1.00	1	05/22/2018 21:16	WG1114798	
1,1,2-Trichloroethane	ND		1.00	1	05/22/2018 21:16	WG1114798	
Trichloroethene	58.5		1.00	1	05/22/2018 21:16	WG1114798	
Trichlorofluoromethane	ND		5.00	1	05/22/2018 21:16	WG1114798	
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	05/22/2018 21:16	WG1114798	
Vinyl chloride	50.5		1.00	1	05/22/2018 21:16	WG1114798	
o-Xylene	ND		1.00	1	05/22/2018 21:16	WG1114798	
m&p-Xylenes	ND		2.00	1	05/22/2018 21:16	WG1114798	
n-Butylbenzene	ND		1.00	1	05/22/2018 21:16	WG1114798	
sec-Butylbenzene	ND		1.00	1	05/22/2018 21:16	WG1114798	
1,2,4-Trimethylbenzene	ND		1.00	1	05/22/2018 21:16	WG1114798	
n-Propylbenzene	ND		1.00	1	05/22/2018 21:16	WG1114798	
p-Isopropyltoluene	ND		1.00	1	05/22/2018 21:16	WG1114798	



Collected date/time: 05/18/18 00:00

L995530

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	ND		1.00	1	05/22/2018 21:16	WG1114798
1,3,5-Trimethylbenzene	ND		1.00	1	05/22/2018 21:16	WG1114798
(S) Toluene-d8	108		80.0-120		05/22/2018 21:16	WG1114798
(S) Toluene-d8	98.9		80.0-120		05/23/2018 22:44	WG1125065
(S) 4-Bromofluorobenzene	102		80.0-120		05/22/2018 21:16	WG1114798
(S) 4-Bromofluorobenzene	96.9		80.0-120		05/23/2018 22:44	WG1125065
(S) Dibromofluoromethane	97.3		76.0-123		05/22/2018 21:16	WG1114798
(S) Dibromofluoromethane	96.5		76.0-123		05/23/2018 22:44	WG1125065
(S) a,a,a-Trifluorotoluene	105		80.0-120		05/22/2018 21:16	WG1114798
(S) a,a,a-Trifluorotoluene	103		80.0-120		05/23/2018 22:44	WG1125065

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	ND		50.0	1	05/22/2018 21:36	WG1114798	¹ Cp
Benzene	ND		1.00	1	05/22/2018 21:36	WG1114798	² Tc
Bromochloromethane	ND		1.00	1	05/22/2018 21:36	WG1114798	³ Ss
Bromodichloromethane	ND		1.00	1	05/22/2018 21:36	WG1114798	⁴ Cn
Bromoform	ND		1.00	1	05/22/2018 21:36	WG1114798	⁵ Sr
Bromomethane	ND		5.00	1	05/22/2018 21:36	WG1114798	⁶ Qc
Carbon disulfide	ND		1.00	1	05/22/2018 21:36	WG1114798	⁷ Gl
Carbon tetrachloride	ND		1.00	1	05/22/2018 21:36	WG1114798	⁸ Al
Chlorobenzene	ND		1.00	1	05/22/2018 21:36	WG1114798	⁹ Sc
Chlorodibromomethane	ND		1.00	1	05/22/2018 21:36	WG1114798	
Chloroethane	ND		5.00	1	05/22/2018 21:36	WG1114798	
Chloroform	ND		5.00	1	05/22/2018 21:36	WG1114798	
Chloromethane	ND		2.50	1	05/22/2018 21:36	WG1114798	
Cyclohexane	ND		1.00	1	05/22/2018 21:36	WG1114798	
1,2-Dibromo-3-Chloropropane	ND		5.00	1	05/22/2018 21:36	WG1114798	
1,2-Dibromoethane	ND		1.00	1	05/22/2018 21:36	WG1114798	
1,2-Dichlorobenzene	ND		1.00	1	05/22/2018 21:36	WG1114798	
1,3-Dichlorobenzene	ND		1.00	1	05/22/2018 21:36	WG1114798	
1,4-Dichlorobenzene	ND		1.00	1	05/22/2018 21:36	WG1114798	
Dichlorodifluoromethane	ND		5.00	1	05/22/2018 21:36	WG1114798	
1,1-Dichloroethane	ND		1.00	1	05/22/2018 21:36	WG1114798	
1,2-Dichloroethane	ND		1.00	1	05/22/2018 21:36	WG1114798	
1,1-Dichloroethene	ND		1.00	1	05/22/2018 21:36	WG1114798	
cis-1,2-Dichloroethene	2.42		1.00	1	05/23/2018 23:04	WG1125065	
trans-1,2-Dichloroethene	ND		1.00	1	05/22/2018 21:36	WG1114798	
1,2-Dichloropropane	ND		1.00	1	05/22/2018 21:36	WG1114798	
cis-1,3-Dichloropropene	ND		1.00	1	05/22/2018 21:36	WG1114798	
trans-1,3-Dichloropropene	ND		1.00	1	05/22/2018 21:36	WG1114798	
Ethylbenzene	ND		1.00	1	05/22/2018 21:36	WG1114798	
2-Hexanone	ND		10.0	1	05/22/2018 21:36	WG1114798	
Isopropylbenzene	ND		1.00	1	05/22/2018 21:36	WG1114798	
2-Butanone (MEK)	ND		10.0	1	05/22/2018 21:36	WG1114798	
Methyl Acetate	ND		20.0	1	05/22/2018 21:36	WG1114798	
Methyl Cyclohexane	ND		1.00	1	05/22/2018 21:36	WG1114798	
Methylene Chloride	ND		5.00	1	05/22/2018 21:36	WG1114798	
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	05/22/2018 21:36	WG1114798	
Methyl tert-butyl ether	ND		1.00	1	05/22/2018 21:36	WG1114798	
Styrene	ND		1.00	1	05/22/2018 21:36	WG1114798	
1,1,2,2-Tetrachloroethane	ND		1.00	1	05/22/2018 21:36	WG1114798	
Tetrachloroethene	1.47		1.00	1	05/22/2018 21:36	WG1114798	
Toluene	ND		1.00	1	05/22/2018 21:36	WG1114798	
1,2,3-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 21:36	WG1114798	
1,2,4-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 21:36	WG1114798	
1,1,1-Trichloroethane	ND		1.00	1	05/22/2018 21:36	WG1114798	
1,1,2-Trichloroethane	ND		1.00	1	05/22/2018 21:36	WG1114798	
Trichloroethene	24.4		1.00	1	05/22/2018 21:36	WG1114798	
Trichlorofluoromethane	ND		5.00	1	05/22/2018 21:36	WG1114798	
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	05/22/2018 21:36	WG1114798	
Vinyl chloride	ND		1.00	1	05/22/2018 21:36	WG1114798	
o-Xylene	ND		1.00	1	05/22/2018 21:36	WG1114798	
m&p-Xylenes	ND		2.00	1	05/22/2018 21:36	WG1114798	
n-Butylbenzene	ND		1.00	1	05/22/2018 21:36	WG1114798	
sec-Butylbenzene	ND		1.00	1	05/22/2018 21:36	WG1114798	
1,2,4-Trimethylbenzene	ND		1.00	1	05/22/2018 21:36	WG1114798	
n-Propylbenzene	ND		1.00	1	05/22/2018 21:36	WG1114798	
p-Isopropyltoluene	ND		1.00	1	05/22/2018 21:36	WG1114798	



Collected date/time: 05/18/18 11:00

L995530

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

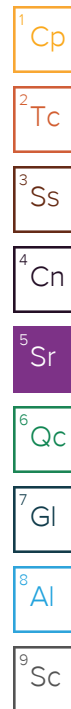
Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	ND		1.00	1	05/22/2018 21:36	WG1114798
1,3,5-Trimethylbenzene	ND		1.00	1	05/22/2018 21:36	WG1114798
(S) Toluene-d8	108		80.0-120		05/22/2018 21:36	WG1114798
(S) Toluene-d8	99.8		80.0-120		05/23/2018 23:04	WG1125065
(S) 4-Bromofluorobenzene	95.5		80.0-120		05/22/2018 21:36	WG1114798
(S) 4-Bromofluorobenzene	97.1		80.0-120		05/23/2018 23:04	WG1125065
(S) Dibromofluoromethane	97.5		76.0-123		05/22/2018 21:36	WG1114798
(S) Dibromofluoromethane	97.9		76.0-123		05/23/2018 23:04	WG1125065
(S) a,a,a-Trifluorotoluene	105		80.0-120		05/22/2018 21:36	WG1114798
(S) a,a,a-Trifluorotoluene	100		80.0-120		05/23/2018 23:04	WG1125065

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	05/22/2018 21:55	WG1114798
Benzene	ND		1.00	1	05/22/2018 21:55	WG1114798
Bromochloromethane	ND		1.00	1	05/22/2018 21:55	WG1114798
Bromodichloromethane	ND		1.00	1	05/22/2018 21:55	WG1114798
Bromoform	ND		1.00	1	05/22/2018 21:55	WG1114798
Bromomethane	ND		5.00	1	05/22/2018 21:55	WG1114798
Carbon disulfide	ND		1.00	1	05/22/2018 21:55	WG1114798
Carbon tetrachloride	ND		1.00	1	05/22/2018 21:55	WG1114798
Chlorobenzene	ND		1.00	1	05/22/2018 21:55	WG1114798
Chlorodibromomethane	ND		1.00	1	05/22/2018 21:55	WG1114798
Chloroethane	ND		5.00	1	05/22/2018 21:55	WG1114798
Chloroform	ND		5.00	1	05/22/2018 21:55	WG1114798
Chloromethane	ND		2.50	1	05/22/2018 21:55	WG1114798
Cyclohexane	ND		1.00	1	05/22/2018 21:55	WG1114798
1,2-Dibromo-3-Chloropropane	ND		5.00	1	05/22/2018 21:55	WG1114798
1,2-Dibromoethane	ND		1.00	1	05/22/2018 21:55	WG1114798
1,2-Dichlorobenzene	ND		1.00	1	05/22/2018 21:55	WG1114798
1,3-Dichlorobenzene	ND		1.00	1	05/22/2018 21:55	WG1114798
1,4-Dichlorobenzene	ND		1.00	1	05/22/2018 21:55	WG1114798
Dichlorodifluoromethane	ND		5.00	1	05/22/2018 21:55	WG1114798
1,1-Dichloroethane	ND		1.00	1	05/22/2018 21:55	WG1114798
1,2-Dichloroethane	ND		1.00	1	05/22/2018 21:55	WG1114798
1,1-Dichloroethene	ND		1.00	1	05/22/2018 21:55	WG1114798
cis-1,2-Dichloroethene	ND		1.00	1	05/22/2018 21:55	WG1114798
trans-1,2-Dichloroethene	ND		1.00	1	05/22/2018 21:55	WG1114798
1,2-Dichloropropane	ND		1.00	1	05/22/2018 21:55	WG1114798
cis-1,3-Dichloropropene	ND		1.00	1	05/22/2018 21:55	WG1114798
trans-1,3-Dichloropropene	ND		1.00	1	05/22/2018 21:55	WG1114798
Ethylbenzene	ND		1.00	1	05/22/2018 21:55	WG1114798
2-Hexanone	ND		10.0	1	05/22/2018 21:55	WG1114798
Isopropylbenzene	ND		1.00	1	05/22/2018 21:55	WG1114798
2-Butanone (MEK)	ND		10.0	1	05/22/2018 21:55	WG1114798
Methyl Acetate	ND		20.0	1	05/22/2018 21:55	WG1114798
Methyl Cyclohexane	ND		1.00	1	05/22/2018 21:55	WG1114798
Methylene Chloride	ND		5.00	1	05/22/2018 21:55	WG1114798
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	05/22/2018 21:55	WG1114798
Methyl tert-butyl ether	ND		1.00	1	05/22/2018 21:55	WG1114798
Styrene	ND		1.00	1	05/22/2018 21:55	WG1114798
1,1,2,2-Tetrachloroethane	ND		1.00	1	05/22/2018 21:55	WG1114798
Tetrachloroethene	3.39		1.00	1	05/22/2018 21:55	WG1114798
Toluene	ND		1.00	1	05/22/2018 21:55	WG1114798
1,2,3-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 21:55	WG1114798
1,2,4-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 21:55	WG1114798
1,1,1-Trichloroethane	ND		1.00	1	05/22/2018 21:55	WG1114798
1,1,2-Trichloroethane	ND		1.00	1	05/22/2018 21:55	WG1114798
Trichloroethene	335		5.00	5	05/23/2018 23:23	WG1125065
Trichlorofluoromethane	ND		5.00	1	05/22/2018 21:55	WG1114798
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	05/22/2018 21:55	WG1114798
Vinyl chloride	ND		1.00	1	05/22/2018 21:55	WG1114798
o-Xylene	ND		1.00	1	05/22/2018 21:55	WG1114798
m&p-Xylenes	ND		2.00	1	05/22/2018 21:55	WG1114798
n-Butylbenzene	ND		1.00	1	05/22/2018 21:55	WG1114798
sec-Butylbenzene	ND		1.00	1	05/22/2018 21:55	WG1114798
1,2,4-Trimethylbenzene	ND		1.00	1	05/22/2018 21:55	WG1114798
n-Propylbenzene	ND		1.00	1	05/22/2018 21:55	WG1114798
p-Isopropyltoluene	ND		1.00	1	05/22/2018 21:55	WG1114798





Collected date/time: 05/18/18 10:50

L995530

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	ND		1.00	1	05/22/2018 21:55	WG1114798
1,3,5-Trimethylbenzene	ND		1.00	1	05/22/2018 21:55	WG1114798
(S) Toluene-d8	110		80.0-120		05/22/2018 21:55	WG1114798
(S) Toluene-d8	102		80.0-120		05/23/2018 23:23	WG1125065
(S) 4-Bromofluorobenzene	99.9		80.0-120		05/22/2018 21:55	WG1114798
(S) 4-Bromofluorobenzene	95.5		80.0-120		05/23/2018 23:23	WG1125065
(S) Dibromofluoromethane	95.5		76.0-123		05/22/2018 21:55	WG1114798
(S) Dibromofluoromethane	97.0		76.0-123		05/23/2018 23:23	WG1125065
(S) a,a,a-Trifluorotoluene	108		80.0-120		05/22/2018 21:55	WG1114798
(S) a,a,a-Trifluorotoluene	98.3		80.0-120		05/23/2018 23:23	WG1125065

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Collected date/time: 05/18/18 09:00

L995530

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	05/22/2018 22:14	WG1114798
Benzene	ND		1.00	1	05/22/2018 22:14	WG1114798
Bromochloromethane	ND		1.00	1	05/22/2018 22:14	WG1114798
Bromodichloromethane	ND		1.00	1	05/22/2018 22:14	WG1114798
Bromoform	ND		1.00	1	05/22/2018 22:14	WG1114798
Bromomethane	ND		5.00	1	05/22/2018 22:14	WG1114798
Carbon disulfide	ND		1.00	1	05/22/2018 22:14	WG1114798
Carbon tetrachloride	ND		1.00	1	05/22/2018 22:14	WG1114798
Chlorobenzene	ND		1.00	1	05/22/2018 22:14	WG1114798
Chlorodibromomethane	ND		1.00	1	05/22/2018 22:14	WG1114798
Chloroethane	ND		5.00	1	05/22/2018 22:14	WG1114798
Chloroform	ND		5.00	1	05/22/2018 22:14	WG1114798
Chloromethane	ND		2.50	1	05/22/2018 22:14	WG1114798
Cyclohexane	ND		1.00	1	05/22/2018 22:14	WG1114798
1,2-Dibromo-3-Chloropropane	ND		5.00	1	05/22/2018 22:14	WG1114798
1,2-Dibromoethane	ND		1.00	1	05/22/2018 22:14	WG1114798
1,2-Dichlorobenzene	ND		1.00	1	05/22/2018 22:14	WG1114798
1,3-Dichlorobenzene	ND		1.00	1	05/22/2018 22:14	WG1114798
1,4-Dichlorobenzene	ND		1.00	1	05/22/2018 22:14	WG1114798
Dichlorodifluoromethane	ND		5.00	1	05/22/2018 22:14	WG1114798
1,1-Dichloroethane	ND		1.00	1	05/22/2018 22:14	WG1114798
1,2-Dichloroethane	ND		1.00	1	05/22/2018 22:14	WG1114798
1,1-Dichloroethene	ND		1.00	1	05/22/2018 22:14	WG1114798
cis-1,2-Dichloroethene	2.45		1.00	1	05/22/2018 22:14	WG1114798
trans-1,2-Dichloroethene	ND		1.00	1	05/22/2018 22:14	WG1114798
1,2-Dichloropropane	ND		1.00	1	05/22/2018 22:14	WG1114798
cis-1,3-Dichloropropene	ND		1.00	1	05/22/2018 22:14	WG1114798
trans-1,3-Dichloropropene	ND		1.00	1	05/22/2018 22:14	WG1114798
Ethylbenzene	ND		1.00	1	05/22/2018 22:14	WG1114798
2-Hexanone	ND		10.0	1	05/22/2018 22:14	WG1114798
Isopropylbenzene	ND		1.00	1	05/22/2018 22:14	WG1114798
2-Butanone (MEK)	ND		10.0	1	05/22/2018 22:14	WG1114798
Methyl Acetate	ND		20.0	1	05/22/2018 22:14	WG1114798
Methyl Cyclohexane	ND		1.00	1	05/22/2018 22:14	WG1114798
Methylene Chloride	ND		5.00	1	05/22/2018 22:14	WG1114798
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	05/22/2018 22:14	WG1114798
Methyl tert-butyl ether	ND		1.00	1	05/22/2018 22:14	WG1114798
Styrene	ND		1.00	1	05/22/2018 22:14	WG1114798
1,1,2,2-Tetrachloroethane	ND		1.00	1	05/22/2018 22:14	WG1114798
Tetrachloroethene	ND		1.00	1	05/22/2018 22:14	WG1114798
Toluene	ND		1.00	1	05/22/2018 22:14	WG1114798
1,2,3-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 22:14	WG1114798
1,2,4-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 22:14	WG1114798
1,1,1-Trichloroethane	ND		1.00	1	05/22/2018 22:14	WG1114798
1,1,2-Trichloroethane	ND		1.00	1	05/22/2018 22:14	WG1114798
Trichloroethene	4.40		1.00	1	05/23/2018 23:43	WG1125065
Trichlorofluoromethane	ND		5.00	1	05/22/2018 22:14	WG1114798
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	05/22/2018 22:14	WG1114798
Vinyl chloride	ND		1.00	1	05/22/2018 22:14	WG1114798
o-Xylene	ND		1.00	1	05/22/2018 22:14	WG1114798
m&p-Xylenes	ND		2.00	1	05/22/2018 22:14	WG1114798
n-Butylbenzene	ND		1.00	1	05/22/2018 22:14	WG1114798
sec-Butylbenzene	ND		1.00	1	05/22/2018 22:14	WG1114798
1,2,4-Trimethylbenzene	ND		1.00	1	05/22/2018 22:14	WG1114798
n-Propylbenzene	ND		1.00	1	05/22/2018 22:14	WG1114798
p-Isopropyltoluene	ND		1.00	1	05/22/2018 22:14	WG1114798

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 05/18/18 09:00

L995530

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	ND		1.00	1	05/22/2018 22:14	WG1114798
1,3,5-Trimethylbenzene	ND		1.00	1	05/22/2018 22:14	WG1114798
(S) Toluene-d8	109		80.0-120		05/22/2018 22:14	WG1114798
(S) Toluene-d8	101		80.0-120		05/23/2018 23:43	WG1125065
(S) 4-Bromofluorobenzene	101		80.0-120		05/22/2018 22:14	WG1114798
(S) 4-Bromofluorobenzene	95.8		80.0-120		05/23/2018 23:43	WG1125065
(S) Dibromofluoromethane	95.3		76.0-123		05/22/2018 22:14	WG1114798
(S) Dibromofluoromethane	98.8		76.0-123		05/23/2018 23:43	WG1125065
(S) a,a,a-Trifluorotoluene	105		80.0-120		05/22/2018 22:14	WG1114798
(S) a,a,a-Trifluorotoluene	101		80.0-120		05/23/2018 23:43	WG1125065

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	ND		50.0	1	05/22/2018 22:33	WG1114798	¹ Cp
Benzene	ND		1.00	1	05/22/2018 22:33	WG1114798	² Tc
Bromochloromethane	ND		1.00	1	05/22/2018 22:33	WG1114798	³ Ss
Bromodichloromethane	ND		1.00	1	05/22/2018 22:33	WG1114798	⁴ Cn
Bromoform	ND		1.00	1	05/22/2018 22:33	WG1114798	⁵ Sr
Bromomethane	ND		5.00	1	05/22/2018 22:33	WG1114798	⁶ Qc
Carbon disulfide	ND		1.00	1	05/22/2018 22:33	WG1114798	⁷ Gl
Carbon tetrachloride	ND		1.00	1	05/22/2018 22:33	WG1114798	⁸ Al
Chlorobenzene	ND		1.00	1	05/22/2018 22:33	WG1114798	⁹ Sc
Chlorodibromomethane	ND		1.00	1	05/22/2018 22:33	WG1114798	
Chloroethane	ND		5.00	1	05/22/2018 22:33	WG1114798	
Chloroform	ND		5.00	1	05/22/2018 22:33	WG1114798	
Chloromethane	ND		2.50	1	05/22/2018 22:33	WG1114798	
Cyclohexane	ND		1.00	1	05/22/2018 22:33	WG1114798	
1,2-Dibromo-3-Chloropropane	ND		5.00	1	05/22/2018 22:33	WG1114798	
1,2-Dibromoethane	ND		1.00	1	05/22/2018 22:33	WG1114798	
1,2-Dichlorobenzene	ND		1.00	1	05/22/2018 22:33	WG1114798	
1,3-Dichlorobenzene	ND		1.00	1	05/22/2018 22:33	WG1114798	
1,4-Dichlorobenzene	ND		1.00	1	05/22/2018 22:33	WG1114798	
Dichlorodifluoromethane	ND		5.00	1	05/22/2018 22:33	WG1114798	
1,1-Dichloroethane	ND		1.00	1	05/22/2018 22:33	WG1114798	
1,2-Dichloroethane	ND		1.00	1	05/22/2018 22:33	WG1114798	
1,1-Dichloroethene	ND		1.00	1	05/22/2018 22:33	WG1114798	
cis-1,2-Dichloroethene	ND		1.00	1	05/22/2018 22:33	WG1114798	
trans-1,2-Dichloroethene	ND		1.00	1	05/22/2018 22:33	WG1114798	
1,2-Dichloropropane	ND		1.00	1	05/22/2018 22:33	WG1114798	
cis-1,3-Dichloropropene	ND		1.00	1	05/22/2018 22:33	WG1114798	
trans-1,3-Dichloropropene	ND		1.00	1	05/22/2018 22:33	WG1114798	
Ethylbenzene	ND		1.00	1	05/22/2018 22:33	WG1114798	
2-Hexanone	ND		10.0	1	05/22/2018 22:33	WG1114798	
Isopropylbenzene	ND		1.00	1	05/22/2018 22:33	WG1114798	
2-Butanone (MEK)	ND		10.0	1	05/22/2018 22:33	WG1114798	
Methyl Acetate	ND		20.0	1	05/22/2018 22:33	WG1114798	
Methyl Cyclohexane	ND		1.00	1	05/22/2018 22:33	WG1114798	
Methylene Chloride	ND		5.00	1	05/22/2018 22:33	WG1114798	
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	05/22/2018 22:33	WG1114798	
Methyl tert-butyl ether	ND		1.00	1	05/22/2018 22:33	WG1114798	
Styrene	ND		1.00	1	05/22/2018 22:33	WG1114798	
1,1,2,2-Tetrachloroethane	ND		1.00	1	05/22/2018 22:33	WG1114798	
Tetrachloroethene	ND		1.00	1	05/22/2018 22:33	WG1114798	
Toluene	ND		1.00	1	05/22/2018 22:33	WG1114798	
1,2,3-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 22:33	WG1114798	
1,2,4-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 22:33	WG1114798	
1,1,1-Trichloroethane	ND		1.00	1	05/22/2018 22:33	WG1114798	
1,1,2-Trichloroethane	ND		1.00	1	05/22/2018 22:33	WG1114798	
Trichloroethene	2.05		1.00	1	05/22/2018 22:33	WG1114798	
Trichlorofluoromethane	ND		5.00	1	05/22/2018 22:33	WG1114798	
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	05/22/2018 22:33	WG1114798	
Vinyl chloride	ND		1.00	1	05/22/2018 22:33	WG1114798	
o-Xylene	ND		1.00	1	05/22/2018 22:33	WG1114798	
m&p-Xylenes	ND		2.00	1	05/22/2018 22:33	WG1114798	
n-Butylbenzene	ND		1.00	1	05/22/2018 22:33	WG1114798	
sec-Butylbenzene	ND		1.00	1	05/22/2018 22:33	WG1114798	
1,2,4-Trimethylbenzene	ND		1.00	1	05/22/2018 22:33	WG1114798	
n-Propylbenzene	ND		1.00	1	05/22/2018 22:33	WG1114798	
p-Isopropyltoluene	ND		1.00	1	05/22/2018 22:33	WG1114798	



Collected date/time: 05/18/18 09:15

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	ND		1.00	1	05/22/2018 22:33	WG1114798
1,3,5-Trimethylbenzene	ND		1.00	1	05/22/2018 22:33	WG1114798
(S) Toluene-d8	106		80.0-120		05/22/2018 22:33	WG1114798
(S) 4-Bromofluorobenzene	102		80.0-120		05/22/2018 22:33	WG1114798
(S) Dibromofluoromethane	95.5		76.0-123		05/22/2018 22:33	WG1114798
(S) a,a,a-Trifluorotoluene	102		80.0-120		05/22/2018 22:33	WG1114798

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Collected date/time: 05/18/18 09:25

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	ND		50.0	1	05/22/2018 22:53	WG1114798	¹ Cp
Benzene	ND		1.00	1	05/22/2018 22:53	WG1114798	² Tc
Bromochloromethane	ND		1.00	1	05/22/2018 22:53	WG1114798	³ Ss
Bromodichloromethane	ND		1.00	1	05/22/2018 22:53	WG1114798	⁴ Cn
Bromoform	ND		1.00	1	05/22/2018 22:53	WG1114798	⁵ Sr
Bromomethane	ND		5.00	1	05/22/2018 22:53	WG1114798	⁶ Qc
Carbon disulfide	ND		1.00	1	05/22/2018 22:53	WG1114798	⁷ Gl
Carbon tetrachloride	ND		1.00	1	05/22/2018 22:53	WG1114798	⁸ Al
Chlorobenzene	ND		1.00	1	05/22/2018 22:53	WG1114798	⁹ Sc
Chlorodibromomethane	ND		1.00	1	05/22/2018 22:53	WG1114798	
Chloroethane	ND		5.00	1	05/22/2018 22:53	WG1114798	
Chloroform	ND		5.00	1	05/22/2018 22:53	WG1114798	
Chloromethane	ND		2.50	1	05/22/2018 22:53	WG1114798	
Cyclohexane	ND		1.00	1	05/22/2018 22:53	WG1114798	
1,2-Dibromo-3-Chloropropane	ND		5.00	1	05/22/2018 22:53	WG1114798	
1,2-Dibromoethane	ND		1.00	1	05/22/2018 22:53	WG1114798	
1,2-Dichlorobenzene	ND		1.00	1	05/22/2018 22:53	WG1114798	
1,3-Dichlorobenzene	ND		1.00	1	05/22/2018 22:53	WG1114798	
1,4-Dichlorobenzene	ND		1.00	1	05/22/2018 22:53	WG1114798	
Dichlorodifluoromethane	ND		5.00	1	05/22/2018 22:53	WG1114798	
1,1-Dichloroethane	ND		1.00	1	05/22/2018 22:53	WG1114798	
1,2-Dichloroethane	ND		1.00	1	05/22/2018 22:53	WG1114798	
1,1-Dichloroethene	ND		1.00	1	05/22/2018 22:53	WG1114798	
cis-1,2-Dichloroethene	ND		1.00	1	05/22/2018 22:53	WG1114798	
trans-1,2-Dichloroethene	ND		1.00	1	05/22/2018 22:53	WG1114798	
1,2-Dichloropropane	ND		1.00	1	05/22/2018 22:53	WG1114798	
cis-1,3-Dichloropropene	ND		1.00	1	05/22/2018 22:53	WG1114798	
trans-1,3-Dichloropropene	ND		1.00	1	05/22/2018 22:53	WG1114798	
Ethylbenzene	ND		1.00	1	05/22/2018 22:53	WG1114798	
2-Hexanone	ND		10.0	1	05/22/2018 22:53	WG1114798	
Isopropylbenzene	ND		1.00	1	05/22/2018 22:53	WG1114798	
2-Butanone (MEK)	ND		10.0	1	05/22/2018 22:53	WG1114798	
Methyl Acetate	ND		20.0	1	05/22/2018 22:53	WG1114798	
Methyl Cyclohexane	ND		1.00	1	05/22/2018 22:53	WG1114798	
Methylene Chloride	ND		5.00	1	05/22/2018 22:53	WG1114798	
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	05/22/2018 22:53	WG1114798	
Methyl tert-butyl ether	ND		1.00	1	05/22/2018 22:53	WG1114798	
Styrene	ND		1.00	1	05/22/2018 22:53	WG1114798	
1,1,2,2-Tetrachloroethane	ND		1.00	1	05/22/2018 22:53	WG1114798	
Tetrachloroethene	2.36		1.00	1	05/22/2018 22:53	WG1114798	
Toluene	ND		1.00	1	05/22/2018 22:53	WG1114798	
1,2,3-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 22:53	WG1114798	
1,2,4-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 22:53	WG1114798	
1,1,1-Trichloroethane	ND		1.00	1	05/22/2018 22:53	WG1114798	
1,1,2-Trichloroethane	ND		1.00	1	05/22/2018 22:53	WG1114798	
Trichloroethene	6.24		1.00	1	05/22/2018 22:53	WG1114798	
Trichlorofluoromethane	ND		5.00	1	05/22/2018 22:53	WG1114798	
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	05/22/2018 22:53	WG1114798	
Vinyl chloride	ND		1.00	1	05/22/2018 22:53	WG1114798	
o-Xylene	ND		1.00	1	05/22/2018 22:53	WG1114798	
m&p-Xylenes	ND		2.00	1	05/22/2018 22:53	WG1114798	
n-Butylbenzene	ND		1.00	1	05/22/2018 22:53	WG1114798	
sec-Butylbenzene	ND		1.00	1	05/22/2018 22:53	WG1114798	
1,2,4-Trimethylbenzene	ND		1.00	1	05/22/2018 22:53	WG1114798	
n-Propylbenzene	ND		1.00	1	05/22/2018 22:53	WG1114798	
p-Isopropyltoluene	ND		1.00	1	05/22/2018 22:53	WG1114798	



Collected date/time: 05/18/18 09:25

L995530

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	ND		1.00	1	05/22/2018 22:53	WG1114798
1,3,5-Trimethylbenzene	ND		1.00	1	05/22/2018 22:53	WG1114798
(S) Toluene-d8	111		80.0-120		05/22/2018 22:53	WG1114798
(S) 4-Bromofluorobenzene	97.8		80.0-120		05/22/2018 22:53	WG1114798
(S) Dibromofluoromethane	95.0		76.0-123		05/22/2018 22:53	WG1114798
(S) a,a,a-Trifluorotoluene	103		80.0-120		05/22/2018 22:53	WG1114798

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	05/22/2018 23:12	WG1114798
Benzene	ND		1.00	1	05/22/2018 23:12	WG1114798
Bromochloromethane	ND		1.00	1	05/22/2018 23:12	WG1114798
Bromodichloromethane	ND		1.00	1	05/22/2018 23:12	WG1114798
Bromoform	ND		1.00	1	05/22/2018 23:12	WG1114798
Bromomethane	ND		5.00	1	05/22/2018 23:12	WG1114798
Carbon disulfide	ND		1.00	1	05/22/2018 23:12	WG1114798
Carbon tetrachloride	ND		1.00	1	05/22/2018 23:12	WG1114798
Chlorobenzene	ND		1.00	1	05/22/2018 23:12	WG1114798
Chlorodibromomethane	ND		1.00	1	05/22/2018 23:12	WG1114798
Chloroethane	ND		5.00	1	05/22/2018 23:12	WG1114798
Chloroform	ND		5.00	1	05/22/2018 23:12	WG1114798
Chloromethane	ND		2.50	1	05/22/2018 23:12	WG1114798
Cyclohexane	ND		1.00	1	05/22/2018 23:12	WG1114798
1,2-Dibromo-3-Chloropropane	ND		5.00	1	05/22/2018 23:12	WG1114798
1,2-Dibromoethane	ND		1.00	1	05/22/2018 23:12	WG1114798
1,2-Dichlorobenzene	ND		1.00	1	05/22/2018 23:12	WG1114798
1,3-Dichlorobenzene	ND		1.00	1	05/22/2018 23:12	WG1114798
1,4-Dichlorobenzene	ND		1.00	1	05/22/2018 23:12	WG1114798
Dichlorodifluoromethane	ND		5.00	1	05/22/2018 23:12	WG1114798
1,1-Dichloroethane	ND		1.00	1	05/22/2018 23:12	WG1114798
1,2-Dichloroethane	ND		1.00	1	05/22/2018 23:12	WG1114798
1,1-Dichloroethene	ND		1.00	1	05/22/2018 23:12	WG1114798
cis-1,2-Dichloroethene	ND		1.00	1	05/22/2018 23:12	WG1114798
trans-1,2-Dichloroethene	ND		1.00	1	05/22/2018 23:12	WG1114798
1,2-Dichloropropane	ND		1.00	1	05/22/2018 23:12	WG1114798
cis-1,3-Dichloropropene	ND		1.00	1	05/22/2018 23:12	WG1114798
trans-1,3-Dichloropropene	ND		1.00	1	05/22/2018 23:12	WG1114798
Ethylbenzene	ND		1.00	1	05/22/2018 23:12	WG1114798
2-Hexanone	ND		10.0	1	05/22/2018 23:12	WG1114798
Isopropylbenzene	ND		1.00	1	05/22/2018 23:12	WG1114798
2-Butanone (MEK)	ND		10.0	1	05/22/2018 23:12	WG1114798
Methyl Acetate	ND		20.0	1	05/22/2018 23:12	WG1114798
Methyl Cyclohexane	ND		1.00	1	05/22/2018 23:12	WG1114798
Methylene Chloride	ND		5.00	1	05/22/2018 23:12	WG1114798
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	05/22/2018 23:12	WG1114798
Methyl tert-butyl ether	ND		1.00	1	05/22/2018 23:12	WG1114798
Styrene	ND		1.00	1	05/22/2018 23:12	WG1114798
1,1,2,2-Tetrachloroethane	ND		1.00	1	05/22/2018 23:12	WG1114798
Tetrachloroethene	ND		1.00	1	05/22/2018 23:12	WG1114798
Toluene	ND		1.00	1	05/22/2018 23:12	WG1114798
1,2,3-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 23:12	WG1114798
1,2,4-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 23:12	WG1114798
1,1,1-Trichloroethane	ND		1.00	1	05/22/2018 23:12	WG1114798
1,1,2-Trichloroethane	ND		1.00	1	05/22/2018 23:12	WG1114798
Trichloroethene	ND		1.00	1	05/22/2018 23:12	WG1114798
Trichlorofluoromethane	ND		5.00	1	05/22/2018 23:12	WG1114798
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	05/22/2018 23:12	WG1114798
Vinyl chloride	ND		1.00	1	05/22/2018 23:12	WG1114798
o-Xylene	ND		1.00	1	05/22/2018 23:12	WG1114798
m&p-Xylenes	ND		2.00	1	05/22/2018 23:12	WG1114798
n-Butylbenzene	ND		1.00	1	05/22/2018 23:12	WG1114798
sec-Butylbenzene	ND		1.00	1	05/22/2018 23:12	WG1114798
1,2,4-Trimethylbenzene	ND		1.00	1	05/22/2018 23:12	WG1114798
n-Propylbenzene	ND		1.00	1	05/22/2018 23:12	WG1114798
p-Isopropyltoluene	ND		1.00	1	05/22/2018 23:12	WG1114798

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 05/18/18 09:45

L995530

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	ND		1.00	1	05/22/2018 23:12	WG1114798
1,3,5-Trimethylbenzene	ND		1.00	1	05/22/2018 23:12	WG1114798
(S) Toluene-d8	107		80.0-120		05/22/2018 23:12	WG1114798
(S) 4-Bromofluorobenzene	99.8		80.0-120		05/22/2018 23:12	WG1114798
(S) Dibromofluoromethane	97.2		76.0-123		05/22/2018 23:12	WG1114798
(S) α,α,α-Trifluorotoluene	102		80.0-120		05/22/2018 23:12	WG1114798

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	05/22/2018 23:32	WG1114798
Benzene	ND		1.00	1	05/22/2018 23:32	WG1114798
Bromochloromethane	ND		1.00	1	05/22/2018 23:32	WG1114798
Bromodichloromethane	ND		1.00	1	05/22/2018 23:32	WG1114798
Bromoform	ND		1.00	1	05/22/2018 23:32	WG1114798
Bromomethane	ND		5.00	1	05/22/2018 23:32	WG1114798
Carbon disulfide	ND		1.00	1	05/22/2018 23:32	WG1114798
Carbon tetrachloride	ND		1.00	1	05/22/2018 23:32	WG1114798
Chlorobenzene	ND		1.00	1	05/22/2018 23:32	WG1114798
Chlorodibromomethane	ND		1.00	1	05/22/2018 23:32	WG1114798
Chloroethane	ND		5.00	1	05/22/2018 23:32	WG1114798
Chloroform	ND		5.00	1	05/22/2018 23:32	WG1114798
Chloromethane	ND		2.50	1	05/22/2018 23:32	WG1114798
Cyclohexane	ND		1.00	1	05/22/2018 23:32	WG1114798
1,2-Dibromo-3-Chloropropane	ND		5.00	1	05/22/2018 23:32	WG1114798
1,2-Dibromoethane	ND		1.00	1	05/22/2018 23:32	WG1114798
1,2-Dichlorobenzene	ND		1.00	1	05/22/2018 23:32	WG1114798
1,3-Dichlorobenzene	ND		1.00	1	05/22/2018 23:32	WG1114798
1,4-Dichlorobenzene	ND		1.00	1	05/22/2018 23:32	WG1114798
Dichlorodifluoromethane	ND		5.00	1	05/22/2018 23:32	WG1114798
1,1-Dichloroethane	ND		1.00	1	05/22/2018 23:32	WG1114798
1,2-Dichloroethane	ND		1.00	1	05/22/2018 23:32	WG1114798
1,1-Dichloroethene	ND		1.00	1	05/22/2018 23:32	WG1114798
cis-1,2-Dichloroethene	ND		1.00	1	05/22/2018 23:32	WG1114798
trans-1,2-Dichloroethene	ND		1.00	1	05/22/2018 23:32	WG1114798
1,2-Dichloropropane	ND		1.00	1	05/22/2018 23:32	WG1114798
cis-1,3-Dichloropropene	ND		1.00	1	05/22/2018 23:32	WG1114798
trans-1,3-Dichloropropene	ND		1.00	1	05/22/2018 23:32	WG1114798
Ethylbenzene	ND		1.00	1	05/22/2018 23:32	WG1114798
2-Hexanone	ND		10.0	1	05/22/2018 23:32	WG1114798
Isopropylbenzene	ND		1.00	1	05/22/2018 23:32	WG1114798
2-Butanone (MEK)	ND		10.0	1	05/22/2018 23:32	WG1114798
Methyl Acetate	ND		20.0	1	05/22/2018 23:32	WG1114798
Methyl Cyclohexane	ND		1.00	1	05/22/2018 23:32	WG1114798
Methylene Chloride	ND		5.00	1	05/22/2018 23:32	WG1114798
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	05/22/2018 23:32	WG1114798
Methyl tert-butyl ether	ND		1.00	1	05/22/2018 23:32	WG1114798
Styrene	ND		1.00	1	05/22/2018 23:32	WG1114798
1,1,2,2-Tetrachloroethane	ND		1.00	1	05/22/2018 23:32	WG1114798
Tetrachloroethene	ND		1.00	1	05/22/2018 23:32	WG1114798
Toluene	ND		1.00	1	05/22/2018 23:32	WG1114798
1,2,3-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 23:32	WG1114798
1,2,4-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 23:32	WG1114798
1,1,1-Trichloroethane	ND		1.00	1	05/22/2018 23:32	WG1114798
1,1,2-Trichloroethane	ND		1.00	1	05/22/2018 23:32	WG1114798
Trichloroethene	1.68		1.00	1	05/22/2018 23:32	WG1114798
Trichlorofluoromethane	ND		5.00	1	05/22/2018 23:32	WG1114798
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	05/22/2018 23:32	WG1114798
Vinyl chloride	ND		1.00	1	05/22/2018 23:32	WG1114798
o-Xylene	ND		1.00	1	05/22/2018 23:32	WG1114798
m&p-Xylenes	ND		2.00	1	05/22/2018 23:32	WG1114798
n-Butylbenzene	ND		1.00	1	05/22/2018 23:32	WG1114798
sec-Butylbenzene	ND		1.00	1	05/22/2018 23:32	WG1114798
1,2,4-Trimethylbenzene	ND		1.00	1	05/22/2018 23:32	WG1114798
n-Propylbenzene	ND		1.00	1	05/22/2018 23:32	WG1114798
p-Isopropyltoluene	ND		1.00	1	05/22/2018 23:32	WG1114798

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 05/18/18 10:10

L995530

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	ND		1.00	1	05/22/2018 23:32	WG1114798
1,3,5-Trimethylbenzene	ND		1.00	1	05/22/2018 23:32	WG1114798
(S) Toluene-d8	109		80.0-120		05/22/2018 23:32	WG1114798
(S) 4-Bromofluorobenzene	98.4		80.0-120		05/22/2018 23:32	WG1114798
(S) Dibromofluoromethane	95.1		76.0-123		05/22/2018 23:32	WG1114798
(S) a,a,a-Trifluorotoluene	103		80.0-120		05/22/2018 23:32	WG1114798

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	ND		50.0	1	05/22/2018 23:52	WG1114798	¹ Cp
Benzene	ND		1.00	1	05/22/2018 23:52	WG1114798	² Tc
Bromochloromethane	ND		1.00	1	05/22/2018 23:52	WG1114798	³ Ss
Bromodichloromethane	ND		1.00	1	05/22/2018 23:52	WG1114798	⁴ Cn
Bromoform	ND		1.00	1	05/22/2018 23:52	WG1114798	⁵ Sr
Bromomethane	ND		5.00	1	05/22/2018 23:52	WG1114798	⁶ Qc
Carbon disulfide	ND		1.00	1	05/22/2018 23:52	WG1114798	⁷ Gl
Carbon tetrachloride	ND		1.00	1	05/22/2018 23:52	WG1114798	⁸ Al
Chlorobenzene	ND		1.00	1	05/22/2018 23:52	WG1114798	⁹ Sc
Chlorodibromomethane	ND		1.00	1	05/22/2018 23:52	WG1114798	
Chloroethane	ND		5.00	1	05/22/2018 23:52	WG1114798	
Chloroform	ND		5.00	1	05/22/2018 23:52	WG1114798	
Chloromethane	ND		2.50	1	05/22/2018 23:52	WG1114798	
Cyclohexane	ND		1.00	1	05/22/2018 23:52	WG1114798	
1,2-Dibromo-3-Chloropropane	ND		5.00	1	05/22/2018 23:52	WG1114798	
1,2-Dibromoethane	ND		1.00	1	05/22/2018 23:52	WG1114798	
1,2-Dichlorobenzene	ND		1.00	1	05/22/2018 23:52	WG1114798	
1,3-Dichlorobenzene	ND		1.00	1	05/22/2018 23:52	WG1114798	
1,4-Dichlorobenzene	ND		1.00	1	05/22/2018 23:52	WG1114798	
Dichlorodifluoromethane	ND		5.00	1	05/22/2018 23:52	WG1114798	
1,1-Dichloroethane	ND		1.00	1	05/22/2018 23:52	WG1114798	
1,2-Dichloroethane	ND		1.00	1	05/22/2018 23:52	WG1114798	
1,1-Dichloroethene	ND		1.00	1	05/22/2018 23:52	WG1114798	
cis-1,2-Dichloroethene	130		1.00	1	05/22/2018 23:52	WG1114798	
trans-1,2-Dichloroethene	ND		1.00	1	05/22/2018 23:52	WG1114798	
1,2-Dichloropropane	ND		1.00	1	05/22/2018 23:52	WG1114798	
cis-1,3-Dichloropropene	ND		1.00	1	05/22/2018 23:52	WG1114798	
trans-1,3-Dichloropropene	ND		1.00	1	05/22/2018 23:52	WG1114798	
Ethylbenzene	ND		1.00	1	05/22/2018 23:52	WG1114798	
2-Hexanone	ND		10.0	1	05/22/2018 23:52	WG1114798	
Isopropylbenzene	ND		1.00	1	05/22/2018 23:52	WG1114798	
2-Butanone (MEK)	ND		10.0	1	05/22/2018 23:52	WG1114798	
Methyl Acetate	ND		20.0	1	05/22/2018 23:52	WG1114798	
Methyl Cyclohexane	ND		1.00	1	05/22/2018 23:52	WG1114798	
Methylene Chloride	ND		5.00	1	05/22/2018 23:52	WG1114798	
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	05/22/2018 23:52	WG1114798	
Methyl tert-butyl ether	ND		1.00	1	05/22/2018 23:52	WG1114798	
Styrene	ND		1.00	1	05/22/2018 23:52	WG1114798	
1,1,2,2-Tetrachloroethane	ND		1.00	1	05/22/2018 23:52	WG1114798	
Tetrachloroethene	ND		1.00	1	05/22/2018 23:52	WG1114798	
Toluene	ND		1.00	1	05/22/2018 23:52	WG1114798	
1,2,3-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 23:52	WG1114798	
1,2,4-Trichlorobenzene	ND	J4	1.00	1	05/22/2018 23:52	WG1114798	
1,1,1-Trichloroethane	ND		1.00	1	05/22/2018 23:52	WG1114798	
1,1,2-Trichloroethane	ND		1.00	1	05/22/2018 23:52	WG1114798	
Trichloroethene	21.4		1.00	1	05/22/2018 23:52	WG1114798	
Trichlorofluoromethane	ND		5.00	1	05/22/2018 23:52	WG1114798	
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	05/22/2018 23:52	WG1114798	
Vinyl chloride	2.83		1.00	1	05/22/2018 23:52	WG1114798	
o-Xylene	ND		1.00	1	05/22/2018 23:52	WG1114798	
m&p-Xylenes	ND		2.00	1	05/22/2018 23:52	WG1114798	
n-Butylbenzene	ND		1.00	1	05/22/2018 23:52	WG1114798	
sec-Butylbenzene	ND		1.00	1	05/22/2018 23:52	WG1114798	
1,2,4-Trimethylbenzene	ND		1.00	1	05/22/2018 23:52	WG1114798	
n-Propylbenzene	ND		1.00	1	05/22/2018 23:52	WG1114798	
p-Isopropyltoluene	ND		1.00	1	05/22/2018 23:52	WG1114798	



Collected date/time: 05/18/18 10:30

L995530

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	ND		1.00	1	05/22/2018 23:52	WG1114798
1,3,5-Trimethylbenzene	ND		1.00	1	05/22/2018 23:52	WG1114798
(S) Toluene-d8	110		80.0-120		05/22/2018 23:52	WG1114798
(S) 4-Bromofluorobenzene	99.1		80.0-120		05/22/2018 23:52	WG1114798
(S) Dibromofluoromethane	95.3		76.0-123		05/22/2018 23:52	WG1114798
(S) a,a,a-Trifluorotoluene	103		80.0-120		05/22/2018 23:52	WG1114798

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	ND		50.0	1	05/23/2018 00:11	WG1114798	¹ Cp
Benzene	ND		1.00	1	05/23/2018 00:11	WG1114798	² Tc
Bromochloromethane	ND		1.00	1	05/23/2018 00:11	WG1114798	³ Ss
Bromodichloromethane	ND		1.00	1	05/23/2018 00:11	WG1114798	⁴ Cn
Bromoform	ND		1.00	1	05/23/2018 00:11	WG1114798	⁵ Sr
Bromomethane	ND		5.00	1	05/23/2018 00:11	WG1114798	⁶ Qc
Carbon disulfide	ND		1.00	1	05/23/2018 00:11	WG1114798	⁷ Gl
Carbon tetrachloride	ND		1.00	1	05/23/2018 00:11	WG1114798	⁸ Al
Chlorobenzene	ND		1.00	1	05/23/2018 00:11	WG1114798	⁹ Sc
Chlorodibromomethane	ND		1.00	1	05/23/2018 00:11	WG1114798	
Chloroethane	ND		5.00	1	05/23/2018 00:11	WG1114798	
Chloroform	ND		5.00	1	05/23/2018 00:11	WG1114798	
Chloromethane	ND		2.50	1	05/23/2018 00:11	WG1114798	
Cyclohexane	ND		1.00	1	05/23/2018 00:11	WG1114798	
1,2-Dibromo-3-Chloropropane	ND		5.00	1	05/23/2018 00:11	WG1114798	
1,2-Dibromoethane	ND		1.00	1	05/23/2018 00:11	WG1114798	
1,2-Dichlorobenzene	ND		1.00	1	05/23/2018 00:11	WG1114798	
1,3-Dichlorobenzene	ND		1.00	1	05/23/2018 00:11	WG1114798	
1,4-Dichlorobenzene	ND		1.00	1	05/23/2018 00:11	WG1114798	
Dichlorodifluoromethane	ND		5.00	1	05/23/2018 00:11	WG1114798	
1,1-Dichloroethane	ND		1.00	1	05/23/2018 00:11	WG1114798	
1,2-Dichloroethane	ND		1.00	1	05/23/2018 00:11	WG1114798	
1,1-Dichloroethene	1.18		1.00	1	05/23/2018 00:11	WG1114798	
cis-1,2-Dichloroethene	817		5.00	5	05/24/2018 00:02	WG1125065	
trans-1,2-Dichloroethene	3.11		1.00	1	05/23/2018 00:11	WG1114798	
1,2-Dichloropropane	ND		1.00	1	05/23/2018 00:11	WG1114798	
cis-1,3-Dichloropropene	ND		1.00	1	05/23/2018 00:11	WG1114798	
trans-1,3-Dichloropropene	ND		1.00	1	05/23/2018 00:11	WG1114798	
Ethylbenzene	ND		1.00	1	05/23/2018 00:11	WG1114798	
2-Hexanone	ND		10.0	1	05/23/2018 00:11	WG1114798	
Isopropylbenzene	ND		1.00	1	05/23/2018 00:11	WG1114798	
2-Butanone (MEK)	ND		10.0	1	05/23/2018 00:11	WG1114798	
Methyl Acetate	ND		20.0	1	05/23/2018 00:11	WG1114798	
Methyl Cyclohexane	ND		1.00	1	05/23/2018 00:11	WG1114798	
Methylene Chloride	ND		5.00	1	05/23/2018 00:11	WG1114798	
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	05/23/2018 00:11	WG1114798	
Methyl tert-butyl ether	ND		1.00	1	05/23/2018 00:11	WG1114798	
Styrene	ND		1.00	1	05/23/2018 00:11	WG1114798	
1,1,2,2-Tetrachloroethane	ND		1.00	1	05/23/2018 00:11	WG1114798	
Tetrachloroethene	ND		1.00	1	05/23/2018 00:11	WG1114798	
Toluene	ND		1.00	1	05/23/2018 00:11	WG1114798	
1,2,3-Trichlorobenzene	ND	J4	1.00	1	05/23/2018 00:11	WG1114798	
1,2,4-Trichlorobenzene	ND	J4	1.00	1	05/23/2018 00:11	WG1114798	
1,1,1-Trichloroethane	ND		1.00	1	05/23/2018 00:11	WG1114798	
1,1,2-Trichloroethane	ND		1.00	1	05/23/2018 00:11	WG1114798	
Trichloroethene	58.0		1.00	1	05/23/2018 00:11	WG1114798	
Trichlorofluoromethane	ND		5.00	1	05/23/2018 00:11	WG1114798	
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	05/23/2018 00:11	WG1114798	
Vinyl chloride	51.4		1.00	1	05/23/2018 00:11	WG1114798	
o-Xylene	ND		1.00	1	05/23/2018 00:11	WG1114798	
m&p-Xylenes	ND		2.00	1	05/23/2018 00:11	WG1114798	
n-Butylbenzene	ND		1.00	1	05/23/2018 00:11	WG1114798	
sec-Butylbenzene	ND		1.00	1	05/23/2018 00:11	WG1114798	
1,2,4-Trimethylbenzene	ND		1.00	1	05/23/2018 00:11	WG1114798	
n-Propylbenzene	ND		1.00	1	05/23/2018 00:11	WG1114798	
p-Isopropyltoluene	ND		1.00	1	05/23/2018 00:11	WG1114798	



Collected date/time: 05/18/18 10:40

L995530

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	ND		1.00	1	05/23/2018 00:11	WG1114798
1,3,5-Trimethylbenzene	ND		1.00	1	05/23/2018 00:11	WG1114798
(S) Toluene-d8	108		80.0-120		05/23/2018 00:11	WG1114798
(S) Toluene-d8	101		80.0-120		05/24/2018 00:02	WG1125065
(S) 4-Bromofluorobenzene	92.0		80.0-120		05/23/2018 00:11	WG1114798
(S) 4-Bromofluorobenzene	97.8		80.0-120		05/24/2018 00:02	WG1125065
(S) Dibromofluoromethane	95.4		76.0-123		05/23/2018 00:11	WG1114798
(S) Dibromofluoromethane	97.9		76.0-123		05/24/2018 00:02	WG1125065
(S) a,a,a-Trifluorotoluene	106		80.0-120		05/23/2018 00:11	WG1114798
(S) a,a,a-Trifluorotoluene	101		80.0-120		05/24/2018 00:02	WG1125065

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Method Blank (MB)

(MB) R3312515-2 05/22/18 20:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Benzene	U		0.331	1.00
Bromodichloromethane	U		0.380	1.00
Bromochloromethane	U		0.520	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
n-Butylbenzene	U		0.361	1.00
sec-Butylbenzene	U		0.365	1.00
tert-Butylbenzene	U		0.399	1.00
Carbon disulfide	U		0.275	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
Cyclohexane	U		0.390	1.00
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,3-Dichlorobenzene	U		0.220	1.00
1,4-Dichlorobenzene	U		0.274	1.00
Dichlorodifluoromethane	U		0.551	5.00
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
Ethylbenzene	U		0.384	1.00
2-Hexanone	U		3.82	10.0
Isopropylbenzene	U		0.326	1.00
p-Isopropyltoluene	U		0.350	1.00
2-Butanone (MEK)	U		3.93	10.0
Methyl Acetate	U		4.30	20.0
Methyl Cyclohexane	U		0.380	1.00
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3312515-2 05/22/18 20:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methyl tert-butyl ether	U		0.367	1.00
n-Propylbenzene	U		0.349	1.00
Styrene	U		0.307	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.355	1.00
1,1,1-Trichloroethane	U		0.319	1.00
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,4-Trimethylbenzene	U		0.373	1.00
1,3,5-Trimethylbenzene	U		0.387	1.00
Vinyl chloride	U		0.259	1.00
o-Xylene	U		0.341	1.00
m&p-Xylenes	U		0.719	2.00
(S) Toluene-d8	111			80.0-120
(S) Dibromofluoromethane	95.5			76.0-123
(S) a,a,a-Trifluorotoluene	103			80.0-120
(S) 4-Bromofluorobenzene	100			80.0-120

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Laboratory Control Sample (LCS)

(LCS) R3312515-1 05/22/18 19:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	120	96.2	10.0-160	
Benzene	25.0	24.2	96.9	69.0-123	
Bromodichloromethane	25.0	24.9	99.6	76.0-120	
Bromochloromethane	25.0	27.0	108	76.0-122	
Bromoform	25.0	30.2	121	67.0-132	
Bromomethane	25.0	29.7	119	18.0-160	
n-Butylbenzene	25.0	21.3	85.4	72.0-126	
sec-Butylbenzene	25.0	25.7	103	74.0-121	
tert-Butylbenzene	25.0	28.6	114	75.0-122	
Carbon disulfide	25.0	24.8	99.1	55.0-127	
Carbon tetrachloride	25.0	28.1	112	63.0-122	

[L995530-01,02,03,04,05,06,07,08,09,10](#)

Laboratory Control Sample (LCS)

(LCS) R3312515-1 05/22/18 19:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Chlorobenzene	25.0	26.9	108	79.0-121	
Chlorodibromomethane	25.0	27.8	111	75.0-125	
Chloroethane	25.0	25.2	101	47.0-152	
Chloroform	25.0	24.1	96.5	72.0-121	
Chloromethane	25.0	29.5	118	48.0-139	
Cyclohexane	25.0	25.5	102	70.0-130	
1,2-Dibromo-3-Chloropropane	25.0	21.1	84.2	64.0-127	
1,2-Dibromoethane	25.0	27.3	109	77.0-123	
1,2-Dichlorobenzene	25.0	24.6	98.2	80.0-120	
1,3-Dichlorobenzene	25.0	26.9	108	72.0-123	
1,4-Dichlorobenzene	25.0	25.7	103	77.0-120	
Dichlorodifluoromethane	25.0	31.3	125	49.0-155	
1,1-Dichloroethane	25.0	27.2	109	70.0-126	
1,2-Dichloroethane	25.0	28.8	115	67.0-126	
1,1-Dichloroethene	25.0	25.5	102	64.0-129	
cis-1,2-Dichloroethene	25.0	23.9	95.8	73.0-120	
trans-1,2-Dichloroethene	25.0	25.5	102	71.0-121	
1,2-Dichloropropane	25.0	26.8	107	75.0-125	
cis-1,3-Dichloropropene	25.0	27.2	109	79.0-123	
trans-1,3-Dichloropropene	25.0	26.6	107	74.0-127	
Ethylbenzene	25.0	26.8	107	77.0-120	
2-Hexanone	125	139	111	58.0-147	
Isopropylbenzene	25.0	27.7	111	75.0-120	
p-Isopropyltoluene	25.0	25.6	102	74.0-126	
2-Butanone (MEK)	125	119	95.1	37.0-158	
Methyl Acetate	125	136	109	70.0-130	
Methyl Cyclohexane	25.0	26.0	104	70.0-130	
Methylene Chloride	25.0	23.6	94.3	66.0-121	
4-Methyl-2-pentanone (MIBK)	125	133	106	59.0-143	
Methyl tert-butyl ether	25.0	22.8	91.2	64.0-123	
n-Propylbenzene	25.0	26.9	108	79.0-120	
Styrene	25.0	29.2	117	78.0-124	
1,1,2,2-Tetrachloroethane	25.0	25.1	100	71.0-122	
Tetrachloroethene	25.0	30.6	123	70.0-127	
Toluene	25.0	25.8	103	77.0-120	
1,1,2-Trichlorotrifluoroethane	25.0	27.7	111	61.0-136	
1,2,3-Trichlorobenzene	25.0	14.9	59.6	61.0-133	J4
1,2,4-Trichlorobenzene	25.0	15.3	61.2	69.0-129	J4
1,1,1-Trichloroethane	25.0	26.9	108	68.0-122	
1,1,2-Trichloroethane	25.0	26.5	106	78.0-120	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Laboratory Control Sample (LCS)

(LCS) R3312515-1 05/22/18 19:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Trichloroethene	25.0	28.8	115	78.0-120	
Trichlorofluoromethane	25.0	28.8	115	56.0-137	
1,2,4-Trimethylbenzene	25.0	24.9	99.7	75.0-120	
1,3,5-Trimethylbenzene	25.0	26.0	104	75.0-120	
Vinyl chloride	25.0	29.1	116	64.0-133	
o-Xylene	25.0	25.5	102	78.0-120	
m&p-Xylenes	50.0	52.6	105	77.0-120	
(S) Toluene-d8			106	80.0-120	
(S) Dibromofluoromethane			94.4	76.0-123	
(S) a,a,a-Trifluorotoluene			103	80.0-120	
(S) 4-Bromofluorobenzene			108	80.0-120	

L995530-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L995530-08 05/22/18 23:32 • (MS) R3312515-3 05/23/18 03:09 • (MSD) R3312515-4 05/23/18 03:28

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	125	ND	144	149	84.8	88.7	1	10.0-139			3.30	25
Benzene	25.0	ND	25.3	24.9	101	99.6	1	34.0-147			1.75	20
Bromodichloromethane	25.0	ND	25.6	25.5	103	102	1	52.0-135			0.681	20
Bromochloromethane	25.0	ND	27.2	27.6	109	110	1	53.0-138			1.41	20
Bromoform	25.0	ND	29.2	28.0	117	112	1	50.0-146			4.18	20
Bromomethane	25.0	ND	31.1	31.1	124	124	1	10.0-160			0.0338	23
n-Butylbenzene	25.0	ND	23.4	23.2	93.5	92.8	1	50.0-144			0.759	20
sec-Butylbenzene	25.0	ND	27.7	27.7	111	111	1	48.0-143			0.233	20
tert-Butylbenzene	25.0	ND	29.8	30.2	119	121	1	50.0-142			1.27	20
Carbon disulfide	25.0	ND	24.5	24.4	98.0	97.4	1	10.0-147			0.597	20
Carbon tetrachloride	25.0	ND	30.1	29.6	120	118	1	41.0-138			1.58	20
Chlorobenzene	25.0	ND	29.5	28.9	118	116	1	52.0-141			2.28	20
Chlorodibromomethane	25.0	ND	30.3	29.6	121	118	1	54.0-142			2.13	20
Chloroethane	25.0	ND	26.4	26.8	106	107	1	23.0-160			1.47	20
Chloroform	25.0	ND	25.7	25.3	103	101	1	50.0-139			1.83	20
Chloromethane	25.0	ND	29.1	28.9	116	115	1	14.0-151			0.839	20
Cyclohexane	25.0	ND	27.5	27.1	110	108	1	70.0-130			1.55	20
1,2-Dibromo-3-Chloropropane	25.0	ND	20.0	19.5	80.2	77.9	1	49.0-144			2.91	24
1,2-Dibromoethane	25.0	ND	28.3	27.9	113	111	1	54.0-140			1.64	20
1,2-Dichlorobenzene	25.0	ND	25.8	24.8	103	99.2	1	56.0-139			3.94	20
1,3-Dichlorobenzene	25.0	ND	27.9	27.3	112	109	1	50.0-141			1.98	20
1,4-Dichlorobenzene	25.0	ND	27.7	27.2	111	109	1	53.0-136			1.56	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L995530-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L995530-08 05/22/18 23:32 • (MS) R3312515-3 05/23/18 03:09 • (MSD) R3312515-4 05/23/18 03:28

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Dichlorodifluoromethane	25.0	ND	32.8	31.6	131	126	1	20.0-160			3.77	21
1,1-Dichloroethane	25.0	ND	29.0	28.6	116	114	1	47.0-143			1.42	20
1,2-Dichloroethane	25.0	ND	30.0	29.4	120	118	1	47.0-141			1.98	20
1,1-Dichloroethene	25.0	ND	26.6	26.6	107	106	1	31.0-148			0.0763	20
cis-1,2-Dichloroethene	25.0	ND	25.6	25.7	102	103	1	43.0-142			0.216	20
trans-1,2-Dichloroethene	25.0	ND	27.2	26.2	109	105	1	36.0-141			3.73	20
1,2-Dichloropropane	25.0	ND	28.8	28.5	115	114	1	51.0-141			1.03	20
cis-1,3-Dichloropropene	25.0	ND	29.1	28.1	116	112	1	53.0-139			3.28	20
trans-1,3-Dichloropropene	25.0	ND	28.5	27.8	114	111	1	51.0-143			2.70	20
Ethylbenzene	25.0	ND	29.1	28.6	117	114	1	42.0-147			1.89	20
2-Hexanone	125	ND	143	139	114	111	1	36.0-145			2.85	23
Isopropylbenzene	25.0	ND	28.2	27.8	113	111	1	48.0-141			1.25	20
p-Isopropyltoluene	25.0	ND	27.4	27.2	110	109	1	49.0-146			0.904	20
2-Butanone (MEK)	125	ND	130	127	104	102	1	12.0-149			2.29	24
Methyl Acetate	125	ND	129	130	103	104	1	70.0-130			0.772	20.8
Methyl Cyclohexane	25.0	ND	27.7	28.1	111	112	1	70.0-130			1.16	20.8
Methylene Chloride	25.0	ND	24.7	24.4	98.9	97.5	1	42.0-135			1.48	20
4-Methyl-2-pentanone (MIBK)	125	ND	137	132	109	106	1	44.0-160			3.48	22
Methyl tert-butyl ether	25.0	ND	23.0	23.2	92.1	92.9	1	42.0-142			0.770	20
n-Propylbenzene	25.0	ND	28.9	28.3	116	113	1	47.0-144			2.30	20
Styrene	25.0	ND	29.2	28.0	117	112	1	47.0-147			4.09	20
1,1,2,2-Tetrachloroethane	25.0	ND	26.7	25.7	107	103	1	46.0-149			3.81	20
Tetrachloroethene	25.0	ND	32.4	31.5	130	126	1	38.0-147			2.88	20
Toluene	25.0	ND	28.3	27.0	113	108	1	42.0-141			4.37	20
1,1,2-Trichlorotrifluoroethane	25.0	ND	30.8	30.9	123	123	1	40.0-151			0.299	21
1,2,3-Trichlorobenzene	25.0	ND	15.2	15.0	60.7	60.0	1	45.0-145			1.16	22
1,2,4-Trichlorobenzene	25.0	ND	16.4	15.9	65.6	63.7	1	49.0-147			2.86	21
1,1,1-Trichloroethane	25.0	ND	29.0	29.1	116	116	1	46.0-140			0.180	20
1,1,2-Trichloroethane	25.0	ND	28.0	27.4	112	110	1	54.0-139			2.25	20
Trichloroethene	25.0	1.68	30.5	30.0	115	113	1	32.0-156			1.44	20
Trichlorofluoromethane	25.0	ND	31.6	31.1	126	124	1	32.0-152			1.49	20
1,2,4-Trimethylbenzene	25.0	ND	25.9	26.1	104	104	1	41.0-146			0.758	20
1,3,5-Trimethylbenzene	25.0	ND	27.8	27.3	111	109	1	44.0-143			2.08	20
Vinyl chloride	25.0	ND	30.0	30.3	120	121	1	24.0-153			0.763	20
o-Xylene	25.0	ND	27.8	27.7	111	111	1	44.0-146			0.475	20
m&p-Xylenes	50.0	ND	58.0	56.6	116	113	1	41.0-147			2.38	20
(S) Toluene-d8					110	106		80.0-120				
(S) Dibromofluoromethane					93.6	95.9		76.0-123				
(S) a,a,a-Trifluorotoluene					102	102		80.0-120				
(S) 4-Bromofluorobenzene					103	102		80.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3318187-3 05/23/18 22:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.260	1.00
Trichloroethene	U		0.398	1.00
(S) Toluene-d8	99.5			80.0-120
(S) Dibromofluoromethane	97.1			76.0-123
(S) a,a,a-Trifluorotoluene	101			80.0-120
(S) 4-Bromofluorobenzene	94.3			80.0-120

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

(LCS) R3318187-1 05/23/18 20:34 • (LCSD) R3318187-2 05/23/18 20:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,2-Dichloroethene	25.0	22.0	24.4	87.9	97.5	73.0-120			10.3	20
Trichloroethene	25.0	24.5	26.1	97.8	104	78.0-120			6.57	20
(S) Toluene-d8				100	99.6	80.0-120				
(S) Dibromofluoromethane				101	100	76.0-123				
(S) a,a,a-Trifluorotoluene				101	98.4	80.0-120				
(S) 4-Bromofluorobenzene				94.2	94.3	80.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Guide to Reading and Understanding Your Laboratory Report

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

Abbreviations and Definitions

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

Qualifier Description

J4	The associated batch QC was outside the established quality control range for accuracy.
----	---

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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

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

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN2000002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

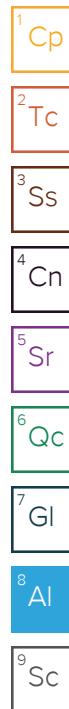
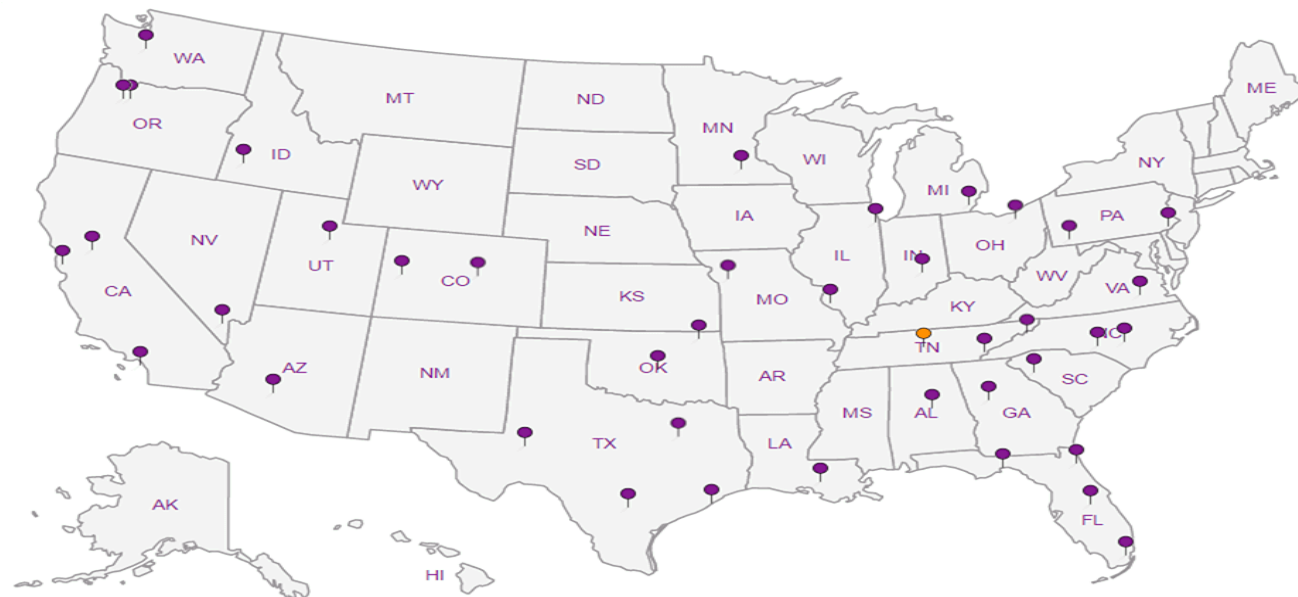
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.



ESC LAB SCIENCES Cooler Receipt Form

Client: LABNY	SDG#	1995530	
Cooler Received/Opened On: 5/19/18	Temperature:	1.7	
Received By: Keteishia Cameron			
Signature: <i>K Cameron</i>			
Receipt Check List	NP	Yes	No
COC Seal Present / Intact?		☒	
COC Signed / Accurate?		☒	
Bottles arrive intact?		☒	
Correct bottles used?		☒	
Sufficient volume sent?		☒	
If Applicable			
VOA Zero headspace?		☒	
Preservation Correct / Checked?			

November 23, 2018

LaBella Associates, P.C.

Sample Delivery Group: L1045571
Samples Received: 11/17/2018
Project Number: 2161282
Description: Michelsen GW - November 2018

Report To: Mr. Steven Rife / Mr. Dave Engert
300 State Street, Suite 201
Rochester, NY 14614

Entire Report Reviewed By:



T. Alan Harvill
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



BW-02/MS/MSD L1045571-01 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1199481	1	11/20/18 23:05	11/20/18 23:05	DWR

Collected by
S. Rife

Collected date/time
11/09/18 12:45

Received date/time
11/17/18 08:30

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

BW-03 L1045571-02 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1199053	1	11/19/18 20:30	11/19/18 20:30	JHH

Collected by
S. Rife

Collected date/time
11/09/18 13:00

Received date/time
11/17/18 08:30

BW-04 L1045571-03 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1199053	1	11/19/18 20:49	11/19/18 20:49	JHH

Collected by
S. Rife

Collected date/time
11/09/18 13:15

Received date/time
11/17/18 08:30

IW-2 L1045571-04 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1199053	1	11/19/18 21:08	11/19/18 21:08	JHH

Collected by
S. Rife

Collected date/time
11/09/18 13:30

Received date/time
11/17/18 08:30

IW-3 L1045571-05 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1199053	1	11/19/18 21:27	11/19/18 21:27	JHH

Collected by
S. Rife

Collected date/time
11/09/18 13:45

Received date/time
11/17/18 08:30

IW-4 L1045571-06 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1199203	1	11/20/18 04:59	11/20/18 04:59	PP

Collected by
S. Rife

Collected date/time
11/09/18 14:00

Received date/time
11/17/18 08:30

IW-5 L1045571-07 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1199203	1	11/20/18 05:19	11/20/18 05:19	PP

Collected by
S. Rife

Collected date/time
11/09/18 14:15

Received date/time
11/17/18 08:30

DUPE L1045571-08 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1199203	1	11/20/18 05:39	11/20/18 05:39	PP

Collected by
S. Rife

Collected date/time
11/09/18 00:00

Received date/time
11/17/18 08:30

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



GPMW-26 L1045571-09 GW

Collected by
S. Rife

Collected date/time
11/09/18 14:30

Received date/time
11/17/18 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1199203	1	11/20/18 05:59	11/20/18 05:59	PP

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



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

T. Alan Harvill
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	11/20/2018 23:05	WG1199481
Benzene	ND		1.00	1	11/20/2018 23:05	WG1199481
Bromochloromethane	ND		1.00	1	11/20/2018 23:05	WG1199481
Bromodichloromethane	ND		1.00	1	11/20/2018 23:05	WG1199481
Bromoform	ND		1.00	1	11/20/2018 23:05	WG1199481
Bromomethane	ND		5.00	1	11/20/2018 23:05	WG1199481
Carbon disulfide	ND		1.00	1	11/20/2018 23:05	WG1199481
Carbon tetrachloride	ND		1.00	1	11/20/2018 23:05	WG1199481
Chlorobenzene	ND		1.00	1	11/20/2018 23:05	WG1199481
Chlorodibromomethane	ND		1.00	1	11/20/2018 23:05	WG1199481
Chloroethane	ND		5.00	1	11/20/2018 23:05	WG1199481
Chloroform	ND		5.00	1	11/20/2018 23:05	WG1199481
Chloromethane	ND		2.50	1	11/20/2018 23:05	WG1199481
Cyclohexane	ND		1.00	1	11/20/2018 23:05	WG1199481
1,2-Dibromo-3-Chloropropane	ND		5.00	1	11/20/2018 23:05	WG1199481
1,2-Dibromoethane	ND		1.00	1	11/20/2018 23:05	WG1199481
1,2-Dichlorobenzene	ND		1.00	1	11/20/2018 23:05	WG1199481
1,3-Dichlorobenzene	ND		1.00	1	11/20/2018 23:05	WG1199481
1,4-Dichlorobenzene	ND		1.00	1	11/20/2018 23:05	WG1199481
Dichlorodifluoromethane	ND		5.00	1	11/20/2018 23:05	WG1199481
1,1-Dichloroethane	ND		1.00	1	11/20/2018 23:05	WG1199481
1,2-Dichloroethane	ND		1.00	1	11/20/2018 23:05	WG1199481
1,1-Dichloroethene	ND		1.00	1	11/20/2018 23:05	WG1199481
cis-1,2-Dichloroethene	1.91		1.00	1	11/20/2018 23:05	WG1199481
trans-1,2-Dichloroethene	ND		1.00	1	11/20/2018 23:05	WG1199481
1,2-Dichloropropane	ND		1.00	1	11/20/2018 23:05	WG1199481
cis-1,3-Dichloropropene	ND		1.00	1	11/20/2018 23:05	WG1199481
trans-1,3-Dichloropropene	ND		1.00	1	11/20/2018 23:05	WG1199481
Ethylbenzene	ND		1.00	1	11/20/2018 23:05	WG1199481
2-Hexanone	ND		10.0	1	11/20/2018 23:05	WG1199481
Isopropylbenzene	ND		1.00	1	11/20/2018 23:05	WG1199481
2-Butanone (MEK)	ND		10.0	1	11/20/2018 23:05	WG1199481
Methyl Acetate	ND		20.0	1	11/20/2018 23:05	WG1199481
Methyl Cyclohexane	ND		1.00	1	11/20/2018 23:05	WG1199481
Methylene Chloride	ND		5.00	1	11/20/2018 23:05	WG1199481
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	11/20/2018 23:05	WG1199481
Methyl tert-butyl ether	ND		1.00	1	11/20/2018 23:05	WG1199481
Naphthalene	ND		5.00	1	11/20/2018 23:05	WG1199481
Styrene	ND		1.00	1	11/20/2018 23:05	WG1199481
1,1,2,2-Tetrachloroethane	ND		1.00	1	11/20/2018 23:05	WG1199481
Tetrachloroethene	ND		1.00	1	11/20/2018 23:05	WG1199481
Toluene	ND		1.00	1	11/20/2018 23:05	WG1199481
1,2,3-Trichlorobenzene	ND		1.00	1	11/20/2018 23:05	WG1199481
1,2,4-Trichlorobenzene	ND		1.00	1	11/20/2018 23:05	WG1199481
1,1,1-Trichloroethane	ND		1.00	1	11/20/2018 23:05	WG1199481
1,1,2-Trichloroethane	ND		1.00	1	11/20/2018 23:05	WG1199481
Trichloroethene	ND		1.00	1	11/20/2018 23:05	WG1199481
Trichlorofluoromethane	ND		5.00	1	11/20/2018 23:05	WG1199481
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	11/20/2018 23:05	WG1199481
Vinyl chloride	ND		1.00	1	11/20/2018 23:05	WG1199481
o-Xylene	ND		1.00	1	11/20/2018 23:05	WG1199481
m&p-Xylenes	ND		2.00	1	11/20/2018 23:05	WG1199481
n-Butylbenzene	ND		1.00	1	11/20/2018 23:05	WG1199481
sec-Butylbenzene	ND		1.00	1	11/20/2018 23:05	WG1199481
tert-Butylbenzene	ND		1.00	1	11/20/2018 23:05	WG1199481
p-Isopropyltoluene	ND		1.00	1	11/20/2018 23:05	WG1199481

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 11/09/18 12:45

L1045571

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	11/20/2018 23:05	WG1199481
1,2,4-Trimethylbenzene	ND		1.00	1	11/20/2018 23:05	WG1199481
1,3,5-Trimethylbenzene	ND		1.00	1	11/20/2018 23:05	WG1199481
(S) Toluene-d8	102		80.0-120		11/20/2018 23:05	WG1199481
(S) Dibromofluoromethane	103		75.0-120		11/20/2018 23:05	WG1199481
(S) α,α,α-Trifluorotoluene	105		80.0-120		11/20/2018 23:05	WG1199481
(S) 4-Bromofluorobenzene	97.1		77.0-126		11/20/2018 23:05	WG1199481

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Collected date/time: 11/09/18 13:00

L1045571

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	11/19/2018 20:30	WG1199053
Benzene	ND		1.00	1	11/19/2018 20:30	WG1199053
Bromochloromethane	ND		1.00	1	11/19/2018 20:30	WG1199053
Bromodichloromethane	ND		1.00	1	11/19/2018 20:30	WG1199053
Bromoform	ND		1.00	1	11/19/2018 20:30	WG1199053
Bromomethane	ND	J4	5.00	1	11/19/2018 20:30	WG1199053
Carbon disulfide	ND		1.00	1	11/19/2018 20:30	WG1199053
Carbon tetrachloride	ND		1.00	1	11/19/2018 20:30	WG1199053
Chlorobenzene	ND		1.00	1	11/19/2018 20:30	WG1199053
Chlorodibromomethane	ND		1.00	1	11/19/2018 20:30	WG1199053
Chloroethane	ND		5.00	1	11/19/2018 20:30	WG1199053
Chloroform	ND		5.00	1	11/19/2018 20:30	WG1199053
Chloromethane	ND		2.50	1	11/19/2018 20:30	WG1199053
Cyclohexane	ND		1.00	1	11/19/2018 20:30	WG1199053
1,2-Dibromo-3-Chloropropane	ND		5.00	1	11/19/2018 20:30	WG1199053
1,2-Dibromoethane	ND		1.00	1	11/19/2018 20:30	WG1199053
1,2-Dichlorobenzene	ND		1.00	1	11/19/2018 20:30	WG1199053
1,3-Dichlorobenzene	ND		1.00	1	11/19/2018 20:30	WG1199053
1,4-Dichlorobenzene	ND		1.00	1	11/19/2018 20:30	WG1199053
Dichlorodifluoromethane	ND		5.00	1	11/19/2018 20:30	WG1199053
1,1-Dichloroethane	ND		1.00	1	11/19/2018 20:30	WG1199053
1,2-Dichloroethane	ND		1.00	1	11/19/2018 20:30	WG1199053
1,1-Dichloroethene	ND		1.00	1	11/19/2018 20:30	WG1199053
cis-1,2-Dichloroethene	37.0		1.00	1	11/19/2018 20:30	WG1199053
trans-1,2-Dichloroethene	ND		1.00	1	11/19/2018 20:30	WG1199053
1,2-Dichloropropane	ND		1.00	1	11/19/2018 20:30	WG1199053
cis-1,3-Dichloropropene	ND		1.00	1	11/19/2018 20:30	WG1199053
trans-1,3-Dichloropropene	ND		1.00	1	11/19/2018 20:30	WG1199053
Ethylbenzene	ND		1.00	1	11/19/2018 20:30	WG1199053
2-Hexanone	ND		10.0	1	11/19/2018 20:30	WG1199053
Isopropylbenzene	ND		1.00	1	11/19/2018 20:30	WG1199053
2-Butanone (MEK)	ND		10.0	1	11/19/2018 20:30	WG1199053
Methyl Acetate	ND		20.0	1	11/19/2018 20:30	WG1199053
Methyl Cyclohexane	ND		1.00	1	11/19/2018 20:30	WG1199053
Methylene Chloride	ND		5.00	1	11/19/2018 20:30	WG1199053
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	11/19/2018 20:30	WG1199053
Methyl tert-butyl ether	ND		1.00	1	11/19/2018 20:30	WG1199053
Naphthalene	ND		5.00	1	11/19/2018 20:30	WG1199053
Styrene	ND		1.00	1	11/19/2018 20:30	WG1199053
1,1,2,2-Tetrachloroethane	ND		1.00	1	11/19/2018 20:30	WG1199053
Tetrachloroethene	ND		1.00	1	11/19/2018 20:30	WG1199053
Toluene	ND		1.00	1	11/19/2018 20:30	WG1199053
1,2,3-Trichlorobenzene	ND		1.00	1	11/19/2018 20:30	WG1199053
1,2,4-Trichlorobenzene	ND		1.00	1	11/19/2018 20:30	WG1199053
1,1,1-Trichloroethane	ND		1.00	1	11/19/2018 20:30	WG1199053
1,1,2-Trichloroethane	ND		1.00	1	11/19/2018 20:30	WG1199053
Trichloroethene	5.68		1.00	1	11/19/2018 20:30	WG1199053
Trichlorofluoromethane	ND		5.00	1	11/19/2018 20:30	WG1199053
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	11/19/2018 20:30	WG1199053
Vinyl chloride	ND		1.00	1	11/19/2018 20:30	WG1199053
o-Xylene	ND		1.00	1	11/19/2018 20:30	WG1199053
m&p-Xylenes	ND		2.00	1	11/19/2018 20:30	WG1199053
n-Butylbenzene	ND		1.00	1	11/19/2018 20:30	WG1199053
sec-Butylbenzene	ND		1.00	1	11/19/2018 20:30	WG1199053
tert-Butylbenzene	ND		1.00	1	11/19/2018 20:30	WG1199053
p-Isopropyltoluene	ND		1.00	1	11/19/2018 20:30	WG1199053

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 11/09/18 13:00

L1045571

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	11/19/2018 20:30	WG1199053
1,2,4-Trimethylbenzene	ND		1.00	1	11/19/2018 20:30	WG1199053
1,3,5-Trimethylbenzene	ND		1.00	1	11/19/2018 20:30	WG1199053
(S) Toluene-d8	97.5		80.0-120		11/19/2018 20:30	WG1199053
(S) Dibromofluoromethane	102		75.0-120		11/19/2018 20:30	WG1199053
(S) α,α,α-Trifluorotoluene	97.5		80.0-120		11/19/2018 20:30	WG1199053
(S) 4-Bromofluorobenzene	100		77.0-126		11/19/2018 20:30	WG1199053

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	11/19/2018 20:49	WG1199053
Benzene	ND		1.00	1	11/19/2018 20:49	WG1199053
Bromochloromethane	ND		1.00	1	11/19/2018 20:49	WG1199053
Bromodichloromethane	ND		1.00	1	11/19/2018 20:49	WG1199053
Bromoform	ND		1.00	1	11/19/2018 20:49	WG1199053
Bromomethane	ND	J4	5.00	1	11/19/2018 20:49	WG1199053
Carbon disulfide	ND		1.00	1	11/19/2018 20:49	WG1199053
Carbon tetrachloride	ND		1.00	1	11/19/2018 20:49	WG1199053
Chlorobenzene	ND		1.00	1	11/19/2018 20:49	WG1199053
Chlorodibromomethane	ND		1.00	1	11/19/2018 20:49	WG1199053
Chloroethane	ND		5.00	1	11/19/2018 20:49	WG1199053
Chloroform	ND		5.00	1	11/19/2018 20:49	WG1199053
Chloromethane	ND		2.50	1	11/19/2018 20:49	WG1199053
Cyclohexane	ND		1.00	1	11/19/2018 20:49	WG1199053
1,2-Dibromo-3-Chloropropane	ND		5.00	1	11/19/2018 20:49	WG1199053
1,2-Dibromoethane	ND		1.00	1	11/19/2018 20:49	WG1199053
1,2-Dichlorobenzene	ND		1.00	1	11/19/2018 20:49	WG1199053
1,3-Dichlorobenzene	ND		1.00	1	11/19/2018 20:49	WG1199053
1,4-Dichlorobenzene	ND		1.00	1	11/19/2018 20:49	WG1199053
Dichlorodifluoromethane	ND		5.00	1	11/19/2018 20:49	WG1199053
1,1-Dichloroethane	ND		1.00	1	11/19/2018 20:49	WG1199053
1,2-Dichloroethane	ND		1.00	1	11/19/2018 20:49	WG1199053
1,1-Dichloroethene	ND		1.00	1	11/19/2018 20:49	WG1199053
cis-1,2-Dichloroethene	63.2		1.00	1	11/19/2018 20:49	WG1199053
trans-1,2-Dichloroethene	ND		1.00	1	11/19/2018 20:49	WG1199053
1,2-Dichloropropane	ND		1.00	1	11/19/2018 20:49	WG1199053
cis-1,3-Dichloropropene	ND		1.00	1	11/19/2018 20:49	WG1199053
trans-1,3-Dichloropropene	ND		1.00	1	11/19/2018 20:49	WG1199053
Ethylbenzene	ND		1.00	1	11/19/2018 20:49	WG1199053
2-Hexanone	ND		10.0	1	11/19/2018 20:49	WG1199053
Isopropylbenzene	ND		1.00	1	11/19/2018 20:49	WG1199053
2-Butanone (MEK)	ND		10.0	1	11/19/2018 20:49	WG1199053
Methyl Acetate	ND		20.0	1	11/19/2018 20:49	WG1199053
Methyl Cyclohexane	ND		1.00	1	11/19/2018 20:49	WG1199053
Methylene Chloride	ND		5.00	1	11/19/2018 20:49	WG1199053
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	11/19/2018 20:49	WG1199053
Methyl tert-butyl ether	ND		1.00	1	11/19/2018 20:49	WG1199053
Naphthalene	ND		5.00	1	11/19/2018 20:49	WG1199053
Styrene	ND		1.00	1	11/19/2018 20:49	WG1199053
1,1,2,2-Tetrachloroethane	ND		1.00	1	11/19/2018 20:49	WG1199053
Tetrachloroethene	ND		1.00	1	11/19/2018 20:49	WG1199053
Toluene	ND		1.00	1	11/19/2018 20:49	WG1199053
1,2,3-Trichlorobenzene	ND		1.00	1	11/19/2018 20:49	WG1199053
1,2,4-Trichlorobenzene	ND		1.00	1	11/19/2018 20:49	WG1199053
1,1,1-Trichloroethane	ND		1.00	1	11/19/2018 20:49	WG1199053
1,1,2-Trichloroethane	ND		1.00	1	11/19/2018 20:49	WG1199053
Trichloroethene	ND		1.00	1	11/19/2018 20:49	WG1199053
Trichlorofluoromethane	ND		5.00	1	11/19/2018 20:49	WG1199053
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	11/19/2018 20:49	WG1199053
Vinyl chloride	ND		1.00	1	11/19/2018 20:49	WG1199053
o-Xylene	ND		1.00	1	11/19/2018 20:49	WG1199053
m&p-Xylenes	ND		2.00	1	11/19/2018 20:49	WG1199053
n-Butylbenzene	ND		1.00	1	11/19/2018 20:49	WG1199053
sec-Butylbenzene	ND		1.00	1	11/19/2018 20:49	WG1199053
tert-Butylbenzene	ND		1.00	1	11/19/2018 20:49	WG1199053
p-Isopropyltoluene	ND		1.00	1	11/19/2018 20:49	WG1199053

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 11/09/18 13:15

L1045571

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	11/19/2018 20:49	WG1199053
1,2,4-Trimethylbenzene	ND		1.00	1	11/19/2018 20:49	WG1199053
1,3,5-Trimethylbenzene	ND		1.00	1	11/19/2018 20:49	WG1199053
(S) Toluene-d8	94.4		80.0-120		11/19/2018 20:49	WG1199053
(S) Dibromofluoromethane	104		75.0-120		11/19/2018 20:49	WG1199053
(S) α,α,α-Trifluorotoluene	98.7		80.0-120		11/19/2018 20:49	WG1199053
(S) 4-Bromofluorobenzene	100		77.0-126		11/19/2018 20:49	WG1199053

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	11/19/2018 21:08	WG1199053
Benzene	ND		1.00	1	11/19/2018 21:08	WG1199053
Bromochloromethane	ND		1.00	1	11/19/2018 21:08	WG1199053
Bromodichloromethane	ND		1.00	1	11/19/2018 21:08	WG1199053
Bromoform	ND		1.00	1	11/19/2018 21:08	WG1199053
Bromomethane	ND	J4	5.00	1	11/19/2018 21:08	WG1199053
Carbon disulfide	ND		1.00	1	11/19/2018 21:08	WG1199053
Carbon tetrachloride	ND		1.00	1	11/19/2018 21:08	WG1199053
Chlorobenzene	ND		1.00	1	11/19/2018 21:08	WG1199053
Chlorodibromomethane	ND		1.00	1	11/19/2018 21:08	WG1199053
Chloroethane	ND		5.00	1	11/19/2018 21:08	WG1199053
Chloroform	ND		5.00	1	11/19/2018 21:08	WG1199053
Chloromethane	ND		2.50	1	11/19/2018 21:08	WG1199053
Cyclohexane	ND		1.00	1	11/19/2018 21:08	WG1199053
1,2-Dibromo-3-Chloropropane	ND		5.00	1	11/19/2018 21:08	WG1199053
1,2-Dibromoethane	ND		1.00	1	11/19/2018 21:08	WG1199053
1,2-Dichlorobenzene	ND		1.00	1	11/19/2018 21:08	WG1199053
1,3-Dichlorobenzene	ND		1.00	1	11/19/2018 21:08	WG1199053
1,4-Dichlorobenzene	ND		1.00	1	11/19/2018 21:08	WG1199053
Dichlorodifluoromethane	ND		5.00	1	11/19/2018 21:08	WG1199053
1,1-Dichloroethane	ND		1.00	1	11/19/2018 21:08	WG1199053
1,2-Dichloroethane	ND		1.00	1	11/19/2018 21:08	WG1199053
1,1-Dichloroethene	ND		1.00	1	11/19/2018 21:08	WG1199053
cis-1,2-Dichloroethene	1.71		1.00	1	11/19/2018 21:08	WG1199053
trans-1,2-Dichloroethene	ND		1.00	1	11/19/2018 21:08	WG1199053
1,2-Dichloropropane	ND		1.00	1	11/19/2018 21:08	WG1199053
cis-1,3-Dichloropropene	ND		1.00	1	11/19/2018 21:08	WG1199053
trans-1,3-Dichloropropene	ND		1.00	1	11/19/2018 21:08	WG1199053
Ethylbenzene	ND		1.00	1	11/19/2018 21:08	WG1199053
2-Hexanone	ND		10.0	1	11/19/2018 21:08	WG1199053
Isopropylbenzene	ND		1.00	1	11/19/2018 21:08	WG1199053
2-Butanone (MEK)	ND		10.0	1	11/19/2018 21:08	WG1199053
Methyl Acetate	ND		20.0	1	11/19/2018 21:08	WG1199053
Methyl Cyclohexane	ND		1.00	1	11/19/2018 21:08	WG1199053
Methylene Chloride	ND		5.00	1	11/19/2018 21:08	WG1199053
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	11/19/2018 21:08	WG1199053
Methyl tert-butyl ether	ND		1.00	1	11/19/2018 21:08	WG1199053
Naphthalene	ND		5.00	1	11/19/2018 21:08	WG1199053
Styrene	ND		1.00	1	11/19/2018 21:08	WG1199053
1,1,2,2-Tetrachloroethane	ND		1.00	1	11/19/2018 21:08	WG1199053
Tetrachloroethene	ND		1.00	1	11/19/2018 21:08	WG1199053
Toluene	ND		1.00	1	11/19/2018 21:08	WG1199053
1,2,3-Trichlorobenzene	ND		1.00	1	11/19/2018 21:08	WG1199053
1,2,4-Trichlorobenzene	ND		1.00	1	11/19/2018 21:08	WG1199053
1,1,1-Trichloroethane	3.15		1.00	1	11/19/2018 21:08	WG1199053
1,1,2-Trichloroethane	ND		1.00	1	11/19/2018 21:08	WG1199053
Trichloroethene	2.71		1.00	1	11/19/2018 21:08	WG1199053
Trichlorofluoromethane	ND		5.00	1	11/19/2018 21:08	WG1199053
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	11/19/2018 21:08	WG1199053
Vinyl chloride	ND		1.00	1	11/19/2018 21:08	WG1199053
o-Xylene	ND		1.00	1	11/19/2018 21:08	WG1199053
m&p-Xylenes	ND		2.00	1	11/19/2018 21:08	WG1199053
n-Butylbenzene	ND		1.00	1	11/19/2018 21:08	WG1199053
sec-Butylbenzene	ND		1.00	1	11/19/2018 21:08	WG1199053
tert-Butylbenzene	ND		1.00	1	11/19/2018 21:08	WG1199053
p-Isopropyltoluene	ND		1.00	1	11/19/2018 21:08	WG1199053

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 11/09/18 13:30

L1045571

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	11/19/2018 21:08	WG1199053
1,2,4-Trimethylbenzene	ND		1.00	1	11/19/2018 21:08	WG1199053
1,3,5-Trimethylbenzene	ND		1.00	1	11/19/2018 21:08	WG1199053
(S) Toluene-d8	96.4		80.0-120		11/19/2018 21:08	WG1199053
(S) Dibromofluoromethane	104		75.0-120		11/19/2018 21:08	WG1199053
(S) α,α,α-Trifluorotoluene	98.1		80.0-120		11/19/2018 21:08	WG1199053
(S) 4-Bromofluorobenzene	102		77.0-126		11/19/2018 21:08	WG1199053

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	11/19/2018 21:27	WG1199053
Benzene	ND		1.00	1	11/19/2018 21:27	WG1199053
Bromochloromethane	ND		1.00	1	11/19/2018 21:27	WG1199053
Bromodichloromethane	ND		1.00	1	11/19/2018 21:27	WG1199053
Bromoform	ND		1.00	1	11/19/2018 21:27	WG1199053
Bromomethane	ND	J4	5.00	1	11/19/2018 21:27	WG1199053
Carbon disulfide	ND		1.00	1	11/19/2018 21:27	WG1199053
Carbon tetrachloride	ND		1.00	1	11/19/2018 21:27	WG1199053
Chlorobenzene	ND		1.00	1	11/19/2018 21:27	WG1199053
Chlorodibromomethane	ND		1.00	1	11/19/2018 21:27	WG1199053
Chloroethane	ND		5.00	1	11/19/2018 21:27	WG1199053
Chloroform	ND		5.00	1	11/19/2018 21:27	WG1199053
Chloromethane	ND		2.50	1	11/19/2018 21:27	WG1199053
Cyclohexane	ND		1.00	1	11/19/2018 21:27	WG1199053
1,2-Dibromo-3-Chloropropane	ND		5.00	1	11/19/2018 21:27	WG1199053
1,2-Dibromoethane	ND		1.00	1	11/19/2018 21:27	WG1199053
1,2-Dichlorobenzene	ND		1.00	1	11/19/2018 21:27	WG1199053
1,3-Dichlorobenzene	ND		1.00	1	11/19/2018 21:27	WG1199053
1,4-Dichlorobenzene	ND		1.00	1	11/19/2018 21:27	WG1199053
Dichlorodifluoromethane	ND		5.00	1	11/19/2018 21:27	WG1199053
1,1-Dichloroethane	ND		1.00	1	11/19/2018 21:27	WG1199053
1,2-Dichloroethane	ND		1.00	1	11/19/2018 21:27	WG1199053
1,1-Dichloroethene	ND		1.00	1	11/19/2018 21:27	WG1199053
cis-1,2-Dichloroethene	4.62		1.00	1	11/19/2018 21:27	WG1199053
trans-1,2-Dichloroethene	ND		1.00	1	11/19/2018 21:27	WG1199053
1,2-Dichloropropane	ND		1.00	1	11/19/2018 21:27	WG1199053
cis-1,3-Dichloropropene	ND		1.00	1	11/19/2018 21:27	WG1199053
trans-1,3-Dichloropropene	ND		1.00	1	11/19/2018 21:27	WG1199053
Ethylbenzene	ND		1.00	1	11/19/2018 21:27	WG1199053
2-Hexanone	ND		10.0	1	11/19/2018 21:27	WG1199053
Isopropylbenzene	ND		1.00	1	11/19/2018 21:27	WG1199053
2-Butanone (MEK)	ND		10.0	1	11/19/2018 21:27	WG1199053
Methyl Acetate	ND		20.0	1	11/19/2018 21:27	WG1199053
Methyl Cyclohexane	ND		1.00	1	11/19/2018 21:27	WG1199053
Methylene Chloride	ND		5.00	1	11/19/2018 21:27	WG1199053
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	11/19/2018 21:27	WG1199053
Methyl tert-butyl ether	ND		1.00	1	11/19/2018 21:27	WG1199053
Naphthalene	ND		5.00	1	11/19/2018 21:27	WG1199053
Styrene	ND		1.00	1	11/19/2018 21:27	WG1199053
1,1,2,2-Tetrachloroethane	ND		1.00	1	11/19/2018 21:27	WG1199053
Tetrachloroethene	ND		1.00	1	11/19/2018 21:27	WG1199053
Toluene	ND		1.00	1	11/19/2018 21:27	WG1199053
1,2,3-Trichlorobenzene	ND		1.00	1	11/19/2018 21:27	WG1199053
1,2,4-Trichlorobenzene	ND		1.00	1	11/19/2018 21:27	WG1199053
1,1,1-Trichloroethane	1.09		1.00	1	11/19/2018 21:27	WG1199053
1,1,2-Trichloroethane	ND		1.00	1	11/19/2018 21:27	WG1199053
Trichloroethene	3.02		1.00	1	11/19/2018 21:27	WG1199053
Trichlorofluoromethane	ND		5.00	1	11/19/2018 21:27	WG1199053
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	11/19/2018 21:27	WG1199053
Vinyl chloride	ND		1.00	1	11/19/2018 21:27	WG1199053
o-Xylene	ND		1.00	1	11/19/2018 21:27	WG1199053
m&p-Xylenes	ND		2.00	1	11/19/2018 21:27	WG1199053
n-Butylbenzene	ND		1.00	1	11/19/2018 21:27	WG1199053
sec-Butylbenzene	ND		1.00	1	11/19/2018 21:27	WG1199053
tert-Butylbenzene	ND		1.00	1	11/19/2018 21:27	WG1199053
p-Isopropyltoluene	ND		1.00	1	11/19/2018 21:27	WG1199053

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 11/09/18 13:45

L1045571

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	11/19/2018 21:27	WG1199053
1,2,4-Trimethylbenzene	ND		1.00	1	11/19/2018 21:27	WG1199053
1,3,5-Trimethylbenzene	ND		1.00	1	11/19/2018 21:27	WG1199053
(S) Toluene-d8	93.8		80.0-120		11/19/2018 21:27	WG1199053
(S) Dibromofluoromethane	103		75.0-120		11/19/2018 21:27	WG1199053
(S) α,α,α-Trifluorotoluene	98.7		80.0-120		11/19/2018 21:27	WG1199053
(S) 4-Bromofluorobenzene	103		77.0-126		11/19/2018 21:27	WG1199053

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Collected date/time: 11/09/18 14:00

L1045571

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	ND		50.0	1	11/20/2018 04:59	WG1199203	¹ Cp
Benzene	ND		1.00	1	11/20/2018 04:59	WG1199203	² Tc
Bromochloromethane	ND		1.00	1	11/20/2018 04:59	WG1199203	³ Ss
Bromodichloromethane	ND		1.00	1	11/20/2018 04:59	WG1199203	⁴ Cn
Bromoform	ND		1.00	1	11/20/2018 04:59	WG1199203	⁵ Sr
Bromomethane	ND	J3	5.00	1	11/20/2018 04:59	WG1199203	⁶ Qc
Carbon disulfide	ND		1.00	1	11/20/2018 04:59	WG1199203	⁷ Gl
Carbon tetrachloride	ND		1.00	1	11/20/2018 04:59	WG1199203	⁸ Al
Chlorobenzene	ND		1.00	1	11/20/2018 04:59	WG1199203	⁹ Sc
Chlorodibromomethane	ND		1.00	1	11/20/2018 04:59	WG1199203	
Chloroethane	ND		5.00	1	11/20/2018 04:59	WG1199203	
Chloroform	ND	J4	5.00	1	11/20/2018 04:59	WG1199203	
Chloromethane	ND		2.50	1	11/20/2018 04:59	WG1199203	
Cyclohexane	ND		1.00	1	11/20/2018 04:59	WG1199203	
1,2-Dibromo-3-Chloropropane	ND		5.00	1	11/20/2018 04:59	WG1199203	
1,2-Dibromoethane	ND		1.00	1	11/20/2018 04:59	WG1199203	
1,2-Dichlorobenzene	ND		1.00	1	11/20/2018 04:59	WG1199203	
1,3-Dichlorobenzene	ND		1.00	1	11/20/2018 04:59	WG1199203	
1,4-Dichlorobenzene	ND		1.00	1	11/20/2018 04:59	WG1199203	
Dichlorodifluoromethane	ND		5.00	1	11/20/2018 04:59	WG1199203	
1,1-Dichloroethane	ND		1.00	1	11/20/2018 04:59	WG1199203	
1,2-Dichloroethane	ND		1.00	1	11/20/2018 04:59	WG1199203	
1,1-Dichloroethene	ND		1.00	1	11/20/2018 04:59	WG1199203	
cis-1,2-Dichloroethene	ND		1.00	1	11/20/2018 04:59	WG1199203	
trans-1,2-Dichloroethene	ND		1.00	1	11/20/2018 04:59	WG1199203	
1,2-Dichloropropane	ND		1.00	1	11/20/2018 04:59	WG1199203	
cis-1,3-Dichloropropene	ND		1.00	1	11/20/2018 04:59	WG1199203	
trans-1,3-Dichloropropene	ND		1.00	1	11/20/2018 04:59	WG1199203	
Ethylbenzene	ND		1.00	1	11/20/2018 04:59	WG1199203	
2-Hexanone	ND		10.0	1	11/20/2018 04:59	WG1199203	
Isopropylbenzene	ND		1.00	1	11/20/2018 04:59	WG1199203	
2-Butanone (MEK)	ND		10.0	1	11/20/2018 04:59	WG1199203	
Methyl Acetate	ND		20.0	1	11/20/2018 04:59	WG1199203	
Methyl Cyclohexane	ND		1.00	1	11/20/2018 04:59	WG1199203	
Methylene Chloride	ND		5.00	1	11/20/2018 04:59	WG1199203	
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	11/20/2018 04:59	WG1199203	
Methyl tert-butyl ether	ND		1.00	1	11/20/2018 04:59	WG1199203	
Naphthalene	ND		5.00	1	11/20/2018 04:59	WG1199203	
Styrene	ND		1.00	1	11/20/2018 04:59	WG1199203	
1,1,2,2-Tetrachloroethane	ND		1.00	1	11/20/2018 04:59	WG1199203	
Tetrachloroethene	ND		1.00	1	11/20/2018 04:59	WG1199203	
Toluene	ND		1.00	1	11/20/2018 04:59	WG1199203	
1,2,3-Trichlorobenzene	ND		1.00	1	11/20/2018 04:59	WG1199203	
1,2,4-Trichlorobenzene	ND		1.00	1	11/20/2018 04:59	WG1199203	
1,1,1-Trichloroethane	ND		1.00	1	11/20/2018 04:59	WG1199203	
1,1,2-Trichloroethane	ND		1.00	1	11/20/2018 04:59	WG1199203	
Trichloroethene	ND		1.00	1	11/20/2018 04:59	WG1199203	
Trichlorofluoromethane	ND		5.00	1	11/20/2018 04:59	WG1199203	
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	11/20/2018 04:59	WG1199203	
Vinyl chloride	ND		1.00	1	11/20/2018 04:59	WG1199203	
o-Xylene	ND		1.00	1	11/20/2018 04:59	WG1199203	
m&p-Xylenes	ND		2.00	1	11/20/2018 04:59	WG1199203	
n-Butylbenzene	ND		1.00	1	11/20/2018 04:59	WG1199203	
sec-Butylbenzene	ND		1.00	1	11/20/2018 04:59	WG1199203	
tert-Butylbenzene	ND		1.00	1	11/20/2018 04:59	WG1199203	
p-Isopropyltoluene	ND		1.00	1	11/20/2018 04:59	WG1199203	



Collected date/time: 11/09/18 14:00

L1045571

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	11/20/2018 04:59	WG1199203
1,2,4-Trimethylbenzene	ND		1.00	1	11/20/2018 04:59	WG1199203
1,3,5-Trimethylbenzene	ND		1.00	1	11/20/2018 04:59	WG1199203
(S) Toluene-d8	91.5		80.0-120		11/20/2018 04:59	WG1199203
(S) Dibromofluoromethane	100		75.0-120		11/20/2018 04:59	WG1199203
(S) α,α,α-Trifluorotoluene	103		80.0-120		11/20/2018 04:59	WG1199203
(S) 4-Bromofluorobenzene	103		77.0-126		11/20/2018 04:59	WG1199203

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Collected date/time: 11/09/18 14:15

L1045571

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	11/20/2018 05:19	WG1199203
Benzene	ND		1.00	1	11/20/2018 05:19	WG1199203
Bromochloromethane	ND		1.00	1	11/20/2018 05:19	WG1199203
Bromodichloromethane	ND		1.00	1	11/20/2018 05:19	WG1199203
Bromoform	ND		1.00	1	11/20/2018 05:19	WG1199203
Bromomethane	ND	J3	5.00	1	11/20/2018 05:19	WG1199203
Carbon disulfide	ND		1.00	1	11/20/2018 05:19	WG1199203
Carbon tetrachloride	ND		1.00	1	11/20/2018 05:19	WG1199203
Chlorobenzene	ND		1.00	1	11/20/2018 05:19	WG1199203
Chlorodibromomethane	ND		1.00	1	11/20/2018 05:19	WG1199203
Chloroethane	ND		5.00	1	11/20/2018 05:19	WG1199203
Chloroform	ND	J4	5.00	1	11/20/2018 05:19	WG1199203
Chloromethane	ND		2.50	1	11/20/2018 05:19	WG1199203
Cyclohexane	ND		1.00	1	11/20/2018 05:19	WG1199203
1,2-Dibromo-3-Chloropropane	ND		5.00	1	11/20/2018 05:19	WG1199203
1,2-Dibromoethane	ND		1.00	1	11/20/2018 05:19	WG1199203
1,2-Dichlorobenzene	ND		1.00	1	11/20/2018 05:19	WG1199203
1,3-Dichlorobenzene	ND		1.00	1	11/20/2018 05:19	WG1199203
1,4-Dichlorobenzene	ND		1.00	1	11/20/2018 05:19	WG1199203
Dichlorodifluoromethane	ND		5.00	1	11/20/2018 05:19	WG1199203
1,1-Dichloroethane	ND		1.00	1	11/20/2018 05:19	WG1199203
1,2-Dichloroethane	ND		1.00	1	11/20/2018 05:19	WG1199203
1,1-Dichloroethene	ND		1.00	1	11/20/2018 05:19	WG1199203
cis-1,2-Dichloroethene	ND		1.00	1	11/20/2018 05:19	WG1199203
trans-1,2-Dichloroethene	ND		1.00	1	11/20/2018 05:19	WG1199203
1,2-Dichloropropane	ND		1.00	1	11/20/2018 05:19	WG1199203
cis-1,3-Dichloropropene	ND		1.00	1	11/20/2018 05:19	WG1199203
trans-1,3-Dichloropropene	ND		1.00	1	11/20/2018 05:19	WG1199203
Ethylbenzene	ND		1.00	1	11/20/2018 05:19	WG1199203
2-Hexanone	ND		10.0	1	11/20/2018 05:19	WG1199203
Isopropylbenzene	ND		1.00	1	11/20/2018 05:19	WG1199203
2-Butanone (MEK)	ND		10.0	1	11/20/2018 05:19	WG1199203
Methyl Acetate	ND		20.0	1	11/20/2018 05:19	WG1199203
Methyl Cyclohexane	ND		1.00	1	11/20/2018 05:19	WG1199203
Methylene Chloride	ND		5.00	1	11/20/2018 05:19	WG1199203
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	11/20/2018 05:19	WG1199203
Methyl tert-butyl ether	ND		1.00	1	11/20/2018 05:19	WG1199203
Naphthalene	ND		5.00	1	11/20/2018 05:19	WG1199203
Styrene	ND		1.00	1	11/20/2018 05:19	WG1199203
1,1,2,2-Tetrachloroethane	ND		1.00	1	11/20/2018 05:19	WG1199203
Tetrachloroethene	ND		1.00	1	11/20/2018 05:19	WG1199203
Toluene	ND		1.00	1	11/20/2018 05:19	WG1199203
1,2,3-Trichlorobenzene	ND		1.00	1	11/20/2018 05:19	WG1199203
1,2,4-Trichlorobenzene	ND		1.00	1	11/20/2018 05:19	WG1199203
1,1,1-Trichloroethane	ND		1.00	1	11/20/2018 05:19	WG1199203
1,1,2-Trichloroethane	ND		1.00	1	11/20/2018 05:19	WG1199203
Trichloroethene	ND		1.00	1	11/20/2018 05:19	WG1199203
Trichlorofluoromethane	ND		5.00	1	11/20/2018 05:19	WG1199203
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	11/20/2018 05:19	WG1199203
Vinyl chloride	ND		1.00	1	11/20/2018 05:19	WG1199203
o-Xylene	ND		1.00	1	11/20/2018 05:19	WG1199203
m&p-Xylenes	ND		2.00	1	11/20/2018 05:19	WG1199203
n-Butylbenzene	ND		1.00	1	11/20/2018 05:19	WG1199203
sec-Butylbenzene	ND		1.00	1	11/20/2018 05:19	WG1199203
tert-Butylbenzene	ND		1.00	1	11/20/2018 05:19	WG1199203
p-Isopropyltoluene	ND		1.00	1	11/20/2018 05:19	WG1199203

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 11/09/18 14:15

L1045571

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	11/20/2018 05:19	WG1199203
1,2,4-Trimethylbenzene	ND		1.00	1	11/20/2018 05:19	WG1199203
1,3,5-Trimethylbenzene	ND		1.00	1	11/20/2018 05:19	WG1199203
(S) Toluene-d8	96.6		80.0-120		11/20/2018 05:19	WG1199203
(S) Dibromofluoromethane	105		75.0-120		11/20/2018 05:19	WG1199203
(S) α,α,α-Trifluorotoluene	98.3		80.0-120		11/20/2018 05:19	WG1199203
(S) 4-Bromofluorobenzene	99.7		77.0-126		11/20/2018 05:19	WG1199203

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	ND		50.0	1	11/20/2018 05:39	WG1199203	¹ Cp
Benzene	ND		1.00	1	11/20/2018 05:39	WG1199203	² Tc
Bromochloromethane	ND		1.00	1	11/20/2018 05:39	WG1199203	³ Ss
Bromodichloromethane	ND		1.00	1	11/20/2018 05:39	WG1199203	⁴ Cn
Bromoform	ND		1.00	1	11/20/2018 05:39	WG1199203	⁵ Sr
Bromomethane	ND	J3	5.00	1	11/20/2018 05:39	WG1199203	⁶ Qc
Carbon disulfide	ND		1.00	1	11/20/2018 05:39	WG1199203	⁷ Gl
Carbon tetrachloride	ND		1.00	1	11/20/2018 05:39	WG1199203	⁸ Al
Chlorobenzene	ND		1.00	1	11/20/2018 05:39	WG1199203	⁹ Sc
Chlorodibromomethane	ND		1.00	1	11/20/2018 05:39	WG1199203	
Chloroethane	ND		5.00	1	11/20/2018 05:39	WG1199203	
Chloroform	ND	J4	5.00	1	11/20/2018 05:39	WG1199203	
Chloromethane	ND		2.50	1	11/20/2018 05:39	WG1199203	
Cyclohexane	ND		1.00	1	11/20/2018 05:39	WG1199203	
1,2-Dibromo-3-Chloropropane	ND		5.00	1	11/20/2018 05:39	WG1199203	
1,2-Dibromoethane	ND		1.00	1	11/20/2018 05:39	WG1199203	
1,2-Dichlorobenzene	ND		1.00	1	11/20/2018 05:39	WG1199203	
1,3-Dichlorobenzene	ND		1.00	1	11/20/2018 05:39	WG1199203	
1,4-Dichlorobenzene	ND		1.00	1	11/20/2018 05:39	WG1199203	
Dichlorodifluoromethane	ND		5.00	1	11/20/2018 05:39	WG1199203	
1,1-Dichloroethane	ND		1.00	1	11/20/2018 05:39	WG1199203	
1,2-Dichloroethane	ND		1.00	1	11/20/2018 05:39	WG1199203	
1,1-Dichloroethene	ND		1.00	1	11/20/2018 05:39	WG1199203	
cis-1,2-Dichloroethene	39.4		1.00	1	11/20/2018 05:39	WG1199203	
trans-1,2-Dichloroethene	ND		1.00	1	11/20/2018 05:39	WG1199203	
1,2-Dichloropropane	ND		1.00	1	11/20/2018 05:39	WG1199203	
cis-1,3-Dichloropropene	ND		1.00	1	11/20/2018 05:39	WG1199203	
trans-1,3-Dichloropropene	ND		1.00	1	11/20/2018 05:39	WG1199203	
Ethylbenzene	ND		1.00	1	11/20/2018 05:39	WG1199203	
2-Hexanone	ND		10.0	1	11/20/2018 05:39	WG1199203	
Isopropylbenzene	ND		1.00	1	11/20/2018 05:39	WG1199203	
2-Butanone (MEK)	ND		10.0	1	11/20/2018 05:39	WG1199203	
Methyl Acetate	ND		20.0	1	11/20/2018 05:39	WG1199203	
Methyl Cyclohexane	ND		1.00	1	11/20/2018 05:39	WG1199203	
Methylene Chloride	ND		5.00	1	11/20/2018 05:39	WG1199203	
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	11/20/2018 05:39	WG1199203	
Methyl tert-butyl ether	ND		1.00	1	11/20/2018 05:39	WG1199203	
Naphthalene	ND		5.00	1	11/20/2018 05:39	WG1199203	
Styrene	ND		1.00	1	11/20/2018 05:39	WG1199203	
1,1,2,2-Tetrachloroethane	ND		1.00	1	11/20/2018 05:39	WG1199203	
Tetrachloroethene	ND		1.00	1	11/20/2018 05:39	WG1199203	
Toluene	ND		1.00	1	11/20/2018 05:39	WG1199203	
1,2,3-Trichlorobenzene	ND		1.00	1	11/20/2018 05:39	WG1199203	
1,2,4-Trichlorobenzene	ND		1.00	1	11/20/2018 05:39	WG1199203	
1,1,1-Trichloroethane	ND		1.00	1	11/20/2018 05:39	WG1199203	
1,1,2-Trichloroethane	ND		1.00	1	11/20/2018 05:39	WG1199203	
Trichloroethene	4.56		1.00	1	11/20/2018 05:39	WG1199203	
Trichlorofluoromethane	ND		5.00	1	11/20/2018 05:39	WG1199203	
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	11/20/2018 05:39	WG1199203	
Vinyl chloride	ND		1.00	1	11/20/2018 05:39	WG1199203	
o-Xylene	ND		1.00	1	11/20/2018 05:39	WG1199203	
m&p-Xylenes	ND		2.00	1	11/20/2018 05:39	WG1199203	
n-Butylbenzene	ND		1.00	1	11/20/2018 05:39	WG1199203	
sec-Butylbenzene	ND		1.00	1	11/20/2018 05:39	WG1199203	
tert-Butylbenzene	ND		1.00	1	11/20/2018 05:39	WG1199203	
p-Isopropyltoluene	ND		1.00	1	11/20/2018 05:39	WG1199203	



Collected date/time: 11/09/18 00:00

L1045571

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

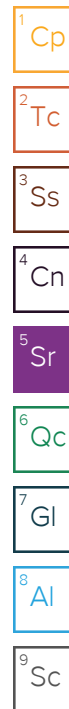
Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	11/20/2018 05:39	WG1199203
1,2,4-Trimethylbenzene	ND		1.00	1	11/20/2018 05:39	WG1199203
1,3,5-Trimethylbenzene	ND		1.00	1	11/20/2018 05:39	WG1199203
(S) Toluene-d8	95.0		80.0-120		11/20/2018 05:39	WG1199203
(S) Dibromofluoromethane	104		75.0-120		11/20/2018 05:39	WG1199203
(S) α,α,α-Trifluorotoluene	99.0		80.0-120		11/20/2018 05:39	WG1199203
(S) 4-Bromofluorobenzene	102		77.0-126		11/20/2018 05:39	WG1199203

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	11/20/2018 05:59	WG1199203
Benzene	ND		1.00	1	11/20/2018 05:59	WG1199203
Bromochloromethane	ND		1.00	1	11/20/2018 05:59	WG1199203
Bromodichloromethane	ND		1.00	1	11/20/2018 05:59	WG1199203
Bromoform	ND		1.00	1	11/20/2018 05:59	WG1199203
Bromomethane	ND	J3	5.00	1	11/20/2018 05:59	WG1199203
Carbon disulfide	ND		1.00	1	11/20/2018 05:59	WG1199203
Carbon tetrachloride	ND		1.00	1	11/20/2018 05:59	WG1199203
Chlorobenzene	ND		1.00	1	11/20/2018 05:59	WG1199203
Chlorodibromomethane	ND		1.00	1	11/20/2018 05:59	WG1199203
Chloroethane	ND		5.00	1	11/20/2018 05:59	WG1199203
Chloroform	ND	J4	5.00	1	11/20/2018 05:59	WG1199203
Chloromethane	ND		2.50	1	11/20/2018 05:59	WG1199203
Cyclohexane	ND		1.00	1	11/20/2018 05:59	WG1199203
1,2-Dibromo-3-Chloropropane	ND		5.00	1	11/20/2018 05:59	WG1199203
1,2-Dibromoethane	ND		1.00	1	11/20/2018 05:59	WG1199203
1,2-Dichlorobenzene	ND		1.00	1	11/20/2018 05:59	WG1199203
1,3-Dichlorobenzene	ND		1.00	1	11/20/2018 05:59	WG1199203
1,4-Dichlorobenzene	ND		1.00	1	11/20/2018 05:59	WG1199203
Dichlorodifluoromethane	ND		5.00	1	11/20/2018 05:59	WG1199203
1,1-Dichloroethane	ND		1.00	1	11/20/2018 05:59	WG1199203
1,2-Dichloroethane	ND		1.00	1	11/20/2018 05:59	WG1199203
1,1-Dichloroethene	ND		1.00	1	11/20/2018 05:59	WG1199203
cis-1,2-Dichloroethene	1.28		1.00	1	11/20/2018 05:59	WG1199203
trans-1,2-Dichloroethene	ND		1.00	1	11/20/2018 05:59	WG1199203
1,2-Dichloropropane	ND		1.00	1	11/20/2018 05:59	WG1199203
cis-1,3-Dichloropropene	ND		1.00	1	11/20/2018 05:59	WG1199203
trans-1,3-Dichloropropene	ND		1.00	1	11/20/2018 05:59	WG1199203
Ethylbenzene	ND		1.00	1	11/20/2018 05:59	WG1199203
2-Hexanone	ND		10.0	1	11/20/2018 05:59	WG1199203
Isopropylbenzene	ND		1.00	1	11/20/2018 05:59	WG1199203
2-Butanone (MEK)	ND		10.0	1	11/20/2018 05:59	WG1199203
Methyl Acetate	ND		20.0	1	11/20/2018 05:59	WG1199203
Methyl Cyclohexane	ND		1.00	1	11/20/2018 05:59	WG1199203
Methylene Chloride	ND		5.00	1	11/20/2018 05:59	WG1199203
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	11/20/2018 05:59	WG1199203
Methyl tert-butyl ether	ND		1.00	1	11/20/2018 05:59	WG1199203
Naphthalene	ND		5.00	1	11/20/2018 05:59	WG1199203
Styrene	ND		1.00	1	11/20/2018 05:59	WG1199203
1,1,2,2-Tetrachloroethane	ND		1.00	1	11/20/2018 05:59	WG1199203
Tetrachloroethene	1.28		1.00	1	11/20/2018 05:59	WG1199203
Toluene	ND		1.00	1	11/20/2018 05:59	WG1199203
1,2,3-Trichlorobenzene	ND		1.00	1	11/20/2018 05:59	WG1199203
1,2,4-Trichlorobenzene	ND		1.00	1	11/20/2018 05:59	WG1199203
1,1,1-Trichloroethane	ND		1.00	1	11/20/2018 05:59	WG1199203
1,1,2-Trichloroethane	ND		1.00	1	11/20/2018 05:59	WG1199203
Trichloroethene	27.7		1.00	1	11/20/2018 05:59	WG1199203
Trichlorofluoromethane	ND		5.00	1	11/20/2018 05:59	WG1199203
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	11/20/2018 05:59	WG1199203
Vinyl chloride	ND		1.00	1	11/20/2018 05:59	WG1199203
o-Xylene	ND		1.00	1	11/20/2018 05:59	WG1199203
m&p-Xylenes	ND		2.00	1	11/20/2018 05:59	WG1199203
n-Butylbenzene	ND		1.00	1	11/20/2018 05:59	WG1199203
sec-Butylbenzene	ND		1.00	1	11/20/2018 05:59	WG1199203
tert-Butylbenzene	ND		1.00	1	11/20/2018 05:59	WG1199203
p-Isopropyltoluene	ND		1.00	1	11/20/2018 05:59	WG1199203





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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	11/20/2018 05:59	WG1199203
1,2,4-Trimethylbenzene	ND		1.00	1	11/20/2018 05:59	WG1199203
1,3,5-Trimethylbenzene	ND		1.00	1	11/20/2018 05:59	WG1199203
(S) Toluene-d8	96.2		80.0-120		11/20/2018 05:59	WG1199203
(S) Dibromofluoromethane	104		75.0-120		11/20/2018 05:59	WG1199203
(S) α,α,α-Trifluorotoluene	99.0		80.0-120		11/20/2018 05:59	WG1199203
(S) 4-Bromofluorobenzene	102		77.0-126		11/20/2018 05:59	WG1199203

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Method Blank (MB)

(MB) R3361525-3 11/19/18 14:34

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Benzene	U		0.331	1.00
Bromodichloromethane	U		0.380	1.00
Bromochloromethane	U		0.520	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
n-Butylbenzene	U		0.361	1.00
sec-Butylbenzene	U		0.365	1.00
tert-Butylbenzene	U		0.399	1.00
Carbon disulfide	U		0.275	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
Cyclohexane	U		0.390	1.00
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,3-Dichlorobenzene	U		0.220	1.00
1,4-Dichlorobenzene	U		0.274	1.00
Dichlorodifluoromethane	U		0.551	5.00
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
Ethylbenzene	U		0.384	1.00
2-Hexanone	U		3.82	10.0
Isopropylbenzene	U		0.326	1.00
p-Isopropyltoluene	U		0.350	1.00
2-Butanone (MEK)	U		3.93	10.0
Methyl Acetate	U		4.30	20.0
Methyl Cyclohexane	U		0.380	1.00
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Method Blank (MB)

(MB) R3361525-3 11/19/18 14:34

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.349	1.00
Styrene	U		0.307	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.355	1.00
1,1,1-Trichloroethane	U		0.319	1.00
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,4-Trimethylbenzene	U		0.373	1.00
1,3,5-Trimethylbenzene	U		0.387	1.00
Vinyl chloride	U		0.259	1.00
o-Xylene	U		0.341	1.00
m&p-Xylenes	U		0.719	2.00
(S) Toluene-d8	94.7			80.0-120
(S) Dibromofluoromethane	100			75.0-120
(S) a,a,a-Trifluorotoluene	100			80.0-120
(S) 4-Bromofluorobenzene	96.5			77.0-126

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) R3361525-1 11/19/18 13:18 • (LCSD) R3361525-2 11/19/18 13:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	146	162	117	130	19.0-160			10.3	27
Benzene	25.0	27.0	26.9	108	108	70.0-123			0.370	20
Bromodichloromethane	25.0	27.2	26.2	109	105	75.0-120			3.61	20
Bromochloromethane	25.0	28.9	27.2	116	109	76.0-122			6.03	20
Bromoform	25.0	26.2	25.4	105	102	68.0-132			3.30	20
Bromomethane	25.0	54.3	53.8	217	215	10.0-160	J4	J4	0.878	25
n-Butylbenzene	25.0	26.0	27.4	104	110	73.0-125			4.97	20
sec-Butylbenzene	25.0	25.4	25.4	102	102	75.0-125			0.0599	20
tert-Butylbenzene	25.0	26.5	26.2	106	105	76.0-124			0.940	20
Carbon disulfide	25.0	26.8	26.4	107	106	61.0-128			1.21	20



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

(LCS) R3361525-1 11/19/18 13:18 • (LCSD) R3361525-2 11/19/18 13:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	25.0	27.0	27.8	108	111	68.0-126			2.72	20
Chlorobenzene	25.0	26.5	26.5	106	106	80.0-121			0.0981	20
Chlorodibromomethane	25.0	26.8	26.6	107	107	77.0-125			0.603	20
Chloroethane	25.0	31.2	31.3	125	125	47.0-150			0.0567	20
Chloroform	25.0	25.0	24.6	99.9	98.3	73.0-120			1.64	20
Chloromethane	25.0	32.9	32.6	132	130	41.0-142			0.798	20
Cyclohexane	25.0	29.1	27.9	116	112	71.0-124			4.13	20
1,2-Dibromo-3-Chloropropane	25.0	24.1	24.9	96.6	99.6	58.0-134			3.09	20
1,2-Dibromoethane	25.0	26.1	26.1	104	104	80.0-122			0.141	20
1,2-Dichlorobenzene	25.0	27.5	27.7	110	111	79.0-121			0.695	20
1,3-Dichlorobenzene	25.0	27.9	27.6	111	110	79.0-120			0.910	20
1,4-Dichlorobenzene	25.0	25.1	25.0	101	99.9	79.0-120			0.604	20
Dichlorodifluoromethane	25.0	33.5	31.5	134	126	51.0-149			6.12	20
1,1-Dichloroethane	25.0	27.4	26.7	110	107	70.0-126			2.67	20
1,2-Dichloroethane	25.0	28.7	27.6	115	110	70.0-128			3.94	20
1,1-Dichloroethene	25.0	28.0	26.8	112	107	71.0-124			4.14	20
cis-1,2-Dichloroethene	25.0	25.9	25.6	104	102	73.0-120			1.26	20
trans-1,2-Dichloroethene	25.0	27.2	26.7	109	107	73.0-120			1.89	20
1,2-Dichloropropane	25.0	28.3	27.7	113	111	77.0-125			2.11	20
cis-1,3-Dichloropropene	25.0	27.8	28.8	111	115	80.0-123			3.40	20
trans-1,3-Dichloropropene	25.0	27.3	27.2	109	109	78.0-124			0.351	20
Ethylbenzene	25.0	26.0	26.3	104	105	79.0-123			0.957	20
2-Hexanone	125	125	128	99.7	102	67.0-149			2.81	20
Isopropylbenzene	25.0	26.4	26.6	106	106	76.0-127			0.736	20
p-Isopropyltoluene	25.0	27.4	26.7	109	107	76.0-125			2.54	20
2-Butanone (MEK)	125	149	151	119	121	44.0-160			1.71	20
Methyl Acetate	125	129	127	103	102	57.0-148			1.27	20
Methyl Cyclohexane	25.0	27.8	26.7	111	107	68.0-126			4.17	20
Methylene Chloride	25.0	25.5	25.0	102	100	67.0-120			1.93	20
4-Methyl-2-pentanone (MIBK)	125	140	142	112	114	68.0-142			1.60	20
Methyl tert-butyl ether	25.0	26.3	26.2	105	105	68.0-125			0.496	20
Naphthalene	25.0	21.1	22.0	84.5	87.9	54.0-135			3.89	20
n-Propylbenzene	25.0	28.1	28.1	113	113	77.0-124			0.0334	20
Styrene	25.0	28.3	28.1	113	112	73.0-130			0.797	20
1,1,2,2-Tetrachloroethane	25.0	25.2	24.9	101	99.7	65.0-130			1.21	20
Tetrachloroethene	25.0	27.1	28.2	108	113	72.0-132			4.16	20
Toluene	25.0	25.2	25.7	101	103	79.0-120			2.14	20
1,1,2-Trichlorotrifluoroethane	25.0	30.2	29.5	121	118	69.0-132			2.57	20
1,2,3-Trichlorobenzene	25.0	23.3	24.3	93.3	97.2	50.0-138			4.15	20
1,2,4-Trichlorobenzene	25.0	22.8	23.4	91.0	93.7	57.0-137			2.87	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3361525-1 11/19/18 13:18 • (LCSD) R3361525-2 11/19/18 13:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,1,1-Trichloroethane	25.0	28.0	27.9	112	112	73.0-124			0.329	20
1,1,2-Trichloroethane	25.0	25.4	25.4	101	102	80.0-120			0.314	20
Trichloroethene	25.0	28.3	28.4	113	114	78.0-124			0.457	20
Trichlorofluoromethane	25.0	31.5	30.4	126	122	59.0-147			3.57	20
1,2,4-Trimethylbenzene	25.0	27.1	26.8	109	107	76.0-121			1.25	20
1,3,5-Trimethylbenzene	25.0	26.3	26.0	105	104	76.0-122			1.22	20
Vinyl chloride	25.0	28.7	28.2	115	113	67.0-131			1.73	20
o-Xylene	25.0	26.1	26.2	104	105	80.0-122			0.358	20
m&p-Xylenes	50.0	53.3	53.9	107	108	80.0-122			1.05	20
(S) Toluene-d8				94.4	98.2	80.0-120				
(S) Dibromofluoromethane				101	99.3	75.0-120				
(S) a,a,a-Trifluorotoluene				101	98.9	80.0-120				
(S) 4-Bromofluorobenzene				99.2	98.4	77.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1045153-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1045153-03 11/19/18 21:46 • (MS) R3361525-4 11/19/18 22:05 • (MSD) R3361525-5 11/19/18 22:24

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Acetone	125	U	707	694	113	111	5	10.0-160			1.85	35
Benzene	25.0	55.6	193	189	110	107	5	17.0-158			2.11	27
Bromodichloromethane	25.0	U	136	136	109	108	5	31.0-150			0.456	27
Bromochloromethane	25.0		144	140	115	112	5	38.0-142			2.81	26
Bromoform	25.0	U	129	130	103	104	5	29.0-150			0.951	29
Bromomethane	25.0	U	234	260	187	208	5	10.0-160	J5	J5	10.7	38
n-Butylbenzene	25.0	U	131	135	105	108	5	31.0-150			3.08	30
sec-Butylbenzene	25.0	U	122	127	97.9	102	5	33.0-155			3.66	29
tert-Butylbenzene	25.0	U	132	133	106	107	5	34.0-153			1.14	28
Carbon disulfide	25.0		134	132	107	106	5	10.0-156			1.16	28
Carbon tetrachloride	25.0	U	139	148	112	119	5	23.0-159			6.23	28
Chlorobenzene	25.0	U	142	137	114	110	5	33.0-152			3.37	27
Chlorodibromomethane	25.0	U	141	139	113	111	5	37.0-149			1.49	27
Chloroethane	25.0	U	149	144	119	115	5	10.0-160			3.64	30
Chloroform	25.0	U	125	127	99.7	102	5	29.0-154			2.02	28
Chloromethane	25.0	U	159	171	127	137	5	10.0-160			7.41	29
Cyclohexane	25.0		140	139	112	112	5	19.0-160			0.340	23
1,2-Dibromo-3-Chloropropane	25.0	U	122	127	97.3	101	5	22.0-151			4.00	34
1,2-Dibromoethane	25.0	U	137	138	110	110	5	34.0-147			0.439	27
1,2-Dichlorobenzene	25.0	U	140	142	112	114	5	34.0-149			1.33	28

L1045153-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1045153-03 11/19/18 21:46 • (MS) R3361525-4 11/19/18 22:05 • (MSD) R3361525-5 11/19/18 22:24

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,3-Dichlorobenzene	25.0	U	139	142	111	114	5	36.0-146			2.41	27
1,4-Dichlorobenzene	25.0	U	127	127	102	101	5	35.0-142			0.464	27
Dichlorodifluoromethane	25.0	U	153	152	122	121	5	10.0-160			0.785	29
1,1-Dichloroethane	25.0	U	140	138	112	110	5	25.0-158			1.69	27
1,2-Dichloroethane	25.0	U	141	139	113	111	5	29.0-151			1.66	27
1,1-Dichloroethene	25.0	U	141	139	113	111	5	11.0-160			1.56	29
cis-1,2-Dichloroethene	25.0	U	136	132	109	106	5	10.0-160			2.55	27
trans-1,2-Dichloroethene	25.0	U	139	139	111	111	5	17.0-153			0.299	27
1,2-Dichloropropane	25.0	U	144	143	115	115	5	30.0-156			0.572	27
cis-1,3-Dichloropropene	25.0	U	134	139	107	111	5	34.0-149			3.81	28
trans-1,3-Dichloropropene	25.0	U	144	138	116	111	5	32.0-149			4.31	28
Ethylbenzene	25.0	101	244	235	114	107	5	30.0-155			3.99	27
2-Hexanone	125		679	665	109	106	5	21.0-160			2.14	29
Isopropylbenzene	25.0	5.92	141	139	108	107	5	28.0-157			1.51	27
p-Isopropyltoluene	25.0	U	134	137	107	110	5	30.0-154			2.51	29
2-Butanone (MEK)	125	U	752	722	120	115	5	10.0-160			4.14	32
Methyl Acetate	125		647	642	104	103	5	18.0-151			0.772	30
Methyl Cyclohexane	25.0		137	135	110	108	5	11.0-160			1.67	24
Methylene Chloride	25.0	U	130	127	104	102	5	23.0-144			2.36	28
4-Methyl-2-pentanone (MIBK)	125	U	722	721	116	115	5	29.0-160			0.128	29
Methyl tert-butyl ether	25.0	U	131	134	105	107	5	28.0-150			2.05	29
Naphthalene	25.0	305	434	427	103	97.8	5	12.0-156			1.61	35
n-Propylbenzene	25.0	2.45	141	142	111	112	5	31.0-154			0.765	28
Styrene	25.0	12.7	161	153	119	112	5	33.0-155			5.05	28
1,1,2,2-Tetrachloroethane	25.0	U	129	127	103	102	5	33.0-150			1.46	28
Tetrachloroethene	25.0	U	148	144	118	115	5	10.0-160			2.40	27
Toluene	25.0	119	251	245	105	100	5	26.0-154			2.49	28
1,1,2-Trichlorotrifluoroethane	25.0	U	146	146	117	116	5	23.0-160			0.179	30
1,2,3-Trichlorobenzene	25.0	U	118	126	94.3	101	5	17.0-150			6.40	36
1,2,4-Trichlorobenzene	25.0	U	118	123	94.4	98.2	5	24.0-150			3.97	33
1,1,1-Trichloroethane	25.0	U	145	144	116	115	5	23.0-160			0.630	28
1,1,2-Trichloroethane	25.0	U	133	129	107	103	5	35.0-147			3.10	27
Trichloroethene	25.0	U	143	143	114	114	5	10.0-160			0.314	25
Trichlorofluoromethane	25.0	U	154	155	123	124	5	17.0-160			0.912	31
1,2,4-Trimethylbenzene	25.0	41.7	169	174	102	106	5	26.0-154			2.75	27
1,3,5-Trimethylbenzene	25.0	10.5	137	141	101	104	5	28.0-153			2.77	27
Vinyl chloride	25.0	U	140	140	112	112	5	10.0-160			0.306	27
o-Xylene	25.0		192	182	113	104	5	45.0-144			5.52	26
m&p-Xylenes	50.0		362	353	111	107	5	43.0-146			2.50	26
(S) Toluene-d8					97.9	96.9		80.0-120				

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

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Gl

8

Al

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Sc



L1045153-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1045153-03 11/19/18 21:46 • (MS) R3361525-4 11/19/18 22:05 • (MSD) R3361525-5 11/19/18 22:24

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
(S) Dibromofluoromethane					101	99.2		75.0-120				
(S) a,a,a-Trifluorotoluene					100	100		80.0-120				
(S) 4-Bromofluorobenzene					97.1	97.8		77.0-126				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3361607-3 11/19/18 20:26

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Benzene	U		0.331	1.00
Bromodichloromethane	U		0.380	1.00
Bromochloromethane	U		0.520	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
n-Butylbenzene	U		0.361	1.00
sec-Butylbenzene	U		0.365	1.00
tert-Butylbenzene	U		0.399	1.00
Carbon disulfide	U		0.275	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
Cyclohexane	U		0.390	1.00
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,3-Dichlorobenzene	U		0.220	1.00
1,4-Dichlorobenzene	U		0.274	1.00
Dichlorodifluoromethane	U		0.551	5.00
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
Ethylbenzene	U		0.384	1.00
2-Hexanone	U		3.82	10.0
Isopropylbenzene	U		0.326	1.00
p-Isopropyltoluene	U		0.350	1.00
2-Butanone (MEK)	U		3.93	10.0
Methyl Acetate	U		4.30	20.0
Methyl Cyclohexane	U		0.380	1.00
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3361607-3 11/19/18 20:26

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.349	1.00
Styrene	U		0.307	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.355	1.00
1,1,1-Trichloroethane	U		0.319	1.00
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,4-Trimethylbenzene	U		0.373	1.00
1,3,5-Trimethylbenzene	U		0.387	1.00
Vinyl chloride	U		0.259	1.00
o-Xylene	U		0.341	1.00
m&p-Xylenes	U		0.719	2.00
(S) Toluene-d8	96.7			80.0-120
(S) Dibromofluoromethane	104			75.0-120
(S) a,a,a-Trifluorotoluene	102			80.0-120
(S) 4-Bromofluorobenzene	98.2			77.0-126

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3361607-1 11/19/18 19:27 • (LCSD) R3361607-2 11/19/18 19:47

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	132	133	105	106	19.0-160			0.758	27
Benzene	25.0	30.7	30.2	123	121	70.0-123			1.65	20
Bromodichloromethane	25.0	29.0	28.6	116	114	75.0-120			1.19	20
Bromochloromethane	25.0	27.4	26.9	110	108	76.0-122			1.89	20
Bromoform	25.0	25.6	25.1	102	100	68.0-132			1.98	20
Bromomethane	25.0	27.4	19.2	110	76.9	10.0-160		J3	35.2	25
n-Butylbenzene	25.0	26.1	27.4	105	110	73.0-125			4.70	20
sec-Butylbenzene	25.0	25.7	26.4	103	106	75.0-125			2.57	20
tert-Butylbenzene	25.0	25.4	26.1	102	104	76.0-124			2.39	20
Carbon disulfide	25.0	29.6	26.5	118	106	61.0-128			11.0	20

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

(LCS) R3361607-1 11/19/18 19:27 • (LCSD) R3361607-2 11/19/18 19:47

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Carbon tetrachloride	25.0	25.6	25.5	102	102	68.0-126			0.308	20
Chlorobenzene	25.0	23.3	24.4	93.4	97.8	80.0-121			4.56	20
Chlorodibromomethane	25.0	23.8	24.2	95.1	96.8	77.0-125			1.75	20
Chloroethane	25.0	26.6	23.9	107	95.8	47.0-150			10.7	20
Chloroform	25.0	30.5	28.5	122	114	73.0-120	J4		6.83	20
Chloromethane	25.0	18.9	16.6	75.4	66.6	41.0-142			12.5	20
Cyclohexane	25.0	28.3	27.9	113	112	71.0-124			1.42	20
1,2-Dibromo-3-Chloropropane	25.0	22.8	23.7	91.0	94.7	58.0-134			3.97	20
1,2-Dibromoethane	25.0	23.1	23.2	92.2	92.7	80.0-122			0.494	20
1,2-Dichlorobenzene	25.0	26.0	26.4	104	105	79.0-121			1.47	20
1,3-Dichlorobenzene	25.0	26.5	26.9	106	107	79.0-120			1.46	20
1,4-Dichlorobenzene	25.0	24.2	25.1	96.8	100	79.0-120			3.53	20
Dichlorodifluoromethane	25.0	26.2	26.9	105	108	51.0-149			2.72	20
1,1-Dichloroethane	25.0	30.4	29.0	122	116	70.0-126			4.60	20
1,2-Dichloroethane	25.0	30.0	29.6	120	118	70.0-128			1.23	20
1,1-Dichloroethene	25.0	27.2	26.7	109	107	71.0-124			2.16	20
cis-1,2-Dichloroethene	25.0	28.8	28.4	115	114	73.0-120			1.37	20
trans-1,2-Dichloroethene	25.0	28.8	27.2	115	109	73.0-120			5.69	20
1,2-Dichloropropane	25.0	29.6	29.4	118	117	77.0-125			0.781	20
cis-1,3-Dichloropropene	25.0	26.7	27.2	107	109	80.0-123			1.71	20
trans-1,3-Dichloropropene	25.0	27.0	27.5	108	110	78.0-124			1.91	20
Ethylbenzene	25.0	24.1	24.6	96.4	98.4	79.0-123			2.02	20
2-Hexanone	125	123	123	98.4	98.3	67.0-149			0.0685	20
Isopropylbenzene	25.0	25.8	26.2	103	105	76.0-127			1.49	20
p-Isopropyltoluene	25.0	25.5	25.7	102	103	76.0-125			0.533	20
2-Butanone (MEK)	125	138	136	110	109	44.0-160			1.11	20
Methyl Acetate	125	130	132	104	106	57.0-148			1.82	20
Methyl Cyclohexane	25.0	25.8	25.8	103	103	68.0-126			0.0320	20
Methylene Chloride	25.0	27.9	27.0	112	108	67.0-120			3.42	20
4-Methyl-2-pentanone (MIBK)	125	116	117	93.0	93.5	68.0-142			0.481	20
Methyl tert-butyl ether	25.0	21.3	20.3	85.3	81.4	68.0-125			4.63	20
Naphthalene	25.0	22.9	23.8	91.7	95.1	54.0-135			3.62	20
n-Propylbenzene	25.0	26.5	26.9	106	108	77.0-124			1.48	20
Styrene	25.0	25.6	25.6	102	103	73.0-130			0.335	20
1,1,2,2-Tetrachloroethane	25.0	26.1	25.8	104	103	65.0-130			1.01	20
Tetrachloroethene	25.0	24.9	24.6	99.5	98.3	72.0-132			1.13	20
Toluene	25.0	25.3	25.7	101	103	79.0-120			1.56	20
1,1,2-Trichlorotrifluoroethane	25.0	24.0	22.9	95.9	91.5	69.0-132			4.78	20
1,2,3-Trichlorobenzene	25.0	24.4	25.5	97.7	102	50.0-138			4.12	20
1,2,4-Trichlorobenzene	25.0	26.3	27.7	105	111	57.0-137			5.33	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



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

(LCS) R3361607-1 11/19/18 19:27 • (LCSD) R3361607-2 11/19/18 19:47

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,1,1-Trichloroethane	25.0	27.9	26.4	112	106	73.0-124			5.41	20
1,1,2-Trichloroethane	25.0	23.5	23.8	93.9	95.4	80.0-120			1.57	20
Trichloroethene	25.0	25.3	25.3	101	101	78.0-124			0.127	20
Trichlorofluoromethane	25.0	27.8	27.8	111	111	59.0-147			0.151	20
1,2,4-Trimethylbenzene	25.0	25.4	26.0	102	104	76.0-121			2.39	20
1,3,5-Trimethylbenzene	25.0	25.3	26.1	101	104	76.0-122			3.17	20
Vinyl chloride	25.0	28.0	27.1	112	108	67.0-131			3.21	20
o-Xylene	25.0	25.2	25.7	101	103	80.0-122			2.20	20
m&p-Xylenes	50.0	49.1	50.3	98.1	101	80.0-122			2.42	20
(S) Toluene-d8				95.4	95.1	80.0-120				
(S) Dibromofluoromethane				107	101	75.0-120				
(S) a,a,a-Trifluorotoluene				100	98.7	80.0-120				
(S) 4-Bromofluorobenzene				102	103	77.0-126				

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Method Blank (MB)

(MB) R3361853-3 11/20/18 15:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Benzene	U		0.331	1.00
Bromodichloromethane	U		0.380	1.00
Bromochloromethane	U		0.520	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
n-Butylbenzene	U		0.361	1.00
sec-Butylbenzene	U		0.365	1.00
tert-Butylbenzene	U		0.399	1.00
Carbon disulfide	U		0.275	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
Cyclohexane	U		0.390	1.00
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,3-Dichlorobenzene	U		0.220	1.00
1,4-Dichlorobenzene	U		0.274	1.00
Dichlorodifluoromethane	U		0.551	5.00
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
Ethylbenzene	U		0.384	1.00
2-Hexanone	U		3.82	10.0
Isopropylbenzene	U		0.326	1.00
p-Isopropyltoluene	U		0.350	1.00
2-Butanone (MEK)	U		3.93	10.0
Methyl Acetate	U		4.30	20.0
Methyl Cyclohexane	U		0.380	1.00
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3361853-3 11/20/18 15:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.349	1.00
Styrene	U		0.307	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.355	1.00
1,1,1-Trichloroethane	U		0.319	1.00
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,4-Trimethylbenzene	U		0.373	1.00
1,3,5-Trimethylbenzene	U		0.387	1.00
Vinyl chloride	U		0.259	1.00
o-Xylene	U		0.341	1.00
m&p-Xylenes	U		0.719	2.00
(S) Toluene-d8	103			80.0-120
(S) Dibromofluoromethane	98.5			75.0-120
(S) a,a,a-Trifluorotoluene	102			80.0-120
(S) 4-Bromofluorobenzene	98.0			77.0-126

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

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

(LCS) R3361853-1 11/20/18 14:24 • (LCSD) R3361853-2 11/20/18 14:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	119	120	95.6	95.6	19.0-160			0.0618	27
Benzene	25.0	22.9	22.7	91.6	90.9	70.0-123			0.742	20
Bromodichloromethane	25.0	24.4	24.1	97.7	96.3	75.0-120			1.46	20
Bromochloromethane	25.0	24.6	24.1	98.5	96.3	76.0-122			2.27	20
Bromoform	25.0	24.6	24.5	98.3	98.2	68.0-132			0.180	20
Bromomethane	25.0	23.9	22.6	95.6	90.4	10.0-160			5.61	25
n-Butylbenzene	25.0	23.9	24.4	95.4	97.5	73.0-125			2.19	20
sec-Butylbenzene	25.0	24.1	24.7	96.5	98.6	75.0-125			2.19	20
tert-Butylbenzene	25.0	24.6	24.0	98.3	96.0	76.0-124			2.29	20
Carbon disulfide	25.0	26.2	25.9	105	104	61.0-128			1.11	20

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

(LCS) R3361853-1 11/20/18 14:24 • (LCSD) R3361853-2 11/20/18 14:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Carbon tetrachloride	25.0	24.3	24.1	97.4	96.6	68.0-126			0.829	20
Chlorobenzene	25.0	24.3	24.7	97.2	98.9	80.0-121			1.64	20
Chlorodibromomethane	25.0	27.0	26.9	108	108	77.0-125			0.271	20
Chloroethane	25.0	22.0	22.3	88.1	89.2	47.0-150			1.24	20
Chloroform	25.0	24.9	24.1	99.7	96.4	73.0-120			3.34	20
Chloromethane	25.0	24.1	24.0	96.4	96.0	41.0-142			0.428	20
Cyclohexane	25.0	24.2	24.9	96.7	99.6	71.0-124			3.00	20
1,2-Dibromo-3-Chloropropane	25.0	26.6	28.6	107	115	58.0-134			7.28	20
1,2-Dibromoethane	25.0	25.5	25.8	102	103	80.0-122			1.13	20
1,2-Dichlorobenzene	25.0	24.6	25.1	98.3	100	79.0-121			1.98	20
1,3-Dichlorobenzene	25.0	25.7	25.6	103	102	79.0-120			0.514	20
1,4-Dichlorobenzene	25.0	22.9	23.1	91.5	92.3	79.0-120			0.817	20
Dichlorodifluoromethane	25.0	25.3	26.2	101	105	51.0-149			3.41	20
1,1-Dichloroethane	25.0	24.6	24.5	98.2	98.0	70.0-126			0.223	20
1,2-Dichloroethane	25.0	22.2	21.9	88.6	87.5	70.0-128			1.31	20
1,1-Dichloroethene	25.0	25.2	25.5	101	102	71.0-124			1.23	20
cis-1,2-Dichloroethene	25.0	24.3	23.9	97.1	95.6	73.0-120			1.54	20
trans-1,2-Dichloroethene	25.0	24.7	24.5	98.6	98.2	73.0-120			0.466	20
1,2-Dichloropropane	25.0	23.8	23.1	95.2	92.4	77.0-125			3.01	20
cis-1,3-Dichloropropene	25.0	24.1	23.9	96.6	95.5	80.0-123			1.16	20
trans-1,3-Dichloropropene	25.0	23.4	24.5	93.5	98.1	78.0-124			4.82	20
Ethylbenzene	25.0	23.4	24.0	93.5	96.1	79.0-123			2.77	20
2-Hexanone	125	123	127	98.7	102	67.0-149			3.18	20
Isopropylbenzene	25.0	26.2	26.5	105	106	76.0-127			0.977	20
p-Isopropyltoluene	25.0	23.5	23.5	94.1	93.9	76.0-125			0.208	20
2-Butanone (MEK)	125	128	127	102	101	44.0-160			1.00	20
Methyl Acetate	125	115	116	91.9	92.5	57.0-148			0.565	20
Methyl Cyclohexane	25.0	24.7	25.4	98.7	102	68.0-126			3.08	20
Methylene Chloride	25.0	24.3	24.1	97.2	96.3	67.0-120			0.941	20
4-Methyl-2-pentanone (MIBK)	125	123	126	98.3	101	68.0-142			2.50	20
Methyl tert-butyl ether	25.0	24.9	24.1	99.6	96.6	68.0-125			3.09	20
Naphthalene	25.0	26.1	26.5	104	106	54.0-135			1.72	20
n-Propylbenzene	25.0	24.0	24.5	96.1	98.0	77.0-124			1.99	20
Styrene	25.0	26.8	26.6	107	106	73.0-130			1.04	20
1,1,2,2-Tetrachloroethane	25.0	21.3	23.0	85.4	92.1	65.0-130			7.63	20
Tetrachloroethene	25.0	24.0	24.2	96.0	97.0	72.0-132			1.00	20
Toluene	25.0	23.5	24.1	94.1	96.5	79.0-120			2.49	20
1,1,2-Trichlorotrifluoroethane	25.0	24.9	25.8	99.6	103	69.0-132			3.36	20
1,2,3-Trichlorobenzene	25.0	27.2	28.0	109	112	50.0-138			2.66	20
1,2,4-Trichlorobenzene	25.0	25.9	27.2	104	109	57.0-137			4.74	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



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

(LCS) R3361853-1 11/20/18 14:24 • (LCSD) R3361853-2 11/20/18 14:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,1,1-Trichloroethane	25.0	25.2	24.5	101	98.1	73.0-124			2.55	20
1,1,2-Trichloroethane	25.0	24.3	25.1	97.0	100	80.0-120			3.46	20
Trichloroethene	25.0	27.4	25.8	109	103	78.0-124			6.06	20
Trichlorofluoromethane	25.0	20.2	21.8	80.9	87.2	59.0-147			7.52	20
1,2,4-Trimethylbenzene	25.0	25.3	25.0	101	100	76.0-121			1.25	20
1,3,5-Trimethylbenzene	25.0	25.7	25.9	103	104	76.0-122			0.735	20
Vinyl chloride	25.0	25.8	25.9	103	104	67.0-131			0.390	20
o-Xylene	25.0	25.3	26.0	101	104	80.0-122			2.70	20
m&p-Xylenes	50.0	48.0	48.0	95.9	96.1	80.0-122			0.146	20
(S) Toluene-d8				99.8	103	80.0-120				
(S) Dibromofluoromethane				98.2	99.8	75.0-120				
(S) a,a,a-Trifluorotoluene				104	102	80.0-120				
(S) 4-Bromofluorobenzene				98.0	99.9	77.0-126				

L1045571-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1045571-01 11/20/18 23:05 • (MS) R3361853-4 11/20/18 23:25 • (MSD) R3361853-5 11/20/18 23:45

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Acetone	125	ND	63.5	54.0	42.6	35.1	1	10.0-160			16.1	35
Benzene	25.0	ND	12.0	11.3	48.2	45.3	1	17.0-158			6.12	27
Bromodichloromethane	25.0	ND	12.1	11.7	48.3	46.8	1	31.0-150			3.30	27
Bromochloromethane	25.0	ND	11.9	11.5	47.6	46.1	1	38.0-142			3.29	26
Bromoform	25.0	ND	11.2	10.7	45.0	42.7	1	29.0-150			5.14	29
Bromomethane	25.0	ND	10.5	10.0	42.0	40.2	1	10.0-160			4.50	38
n-Butylbenzene	25.0	ND	12.6	12.2	50.3	48.8	1	31.0-150			3.08	30
sec-Butylbenzene	25.0	ND	12.6	12.1	50.5	48.2	1	33.0-155			4.50	29
tert-Butylbenzene	25.0	ND	12.6	12.1	50.2	48.3	1	34.0-153			3.94	28
Carbon disulfide	25.0	ND	12.1	11.2	48.6	44.8	1	10.0-156			8.06	28
Carbon tetrachloride	25.0	ND	12.2	11.5	48.8	46.0	1	23.0-159			5.91	28
Chlorobenzene	25.0	ND	12.1	12.1	48.3	48.3	1	33.0-152			0.144	27
Chlorodibromomethane	25.0	ND	13.0	12.8	52.0	51.4	1	37.0-149			1.27	27
Chloroethane	25.0	ND	10.8	11.5	43.2	46.1	1	10.0-160			6.39	30
Chloroform	25.0	ND	12.6	12.2	50.3	48.9	1	29.0-154			2.71	28
Chloromethane	25.0	ND	12.8	12.7	51.1	50.8	1	10.0-160			0.588	29
Cyclohexane	25.0	ND	12.6	11.5	50.4	46.1	1	19.0-160			8.86	23
1,2-Dibromo-3-Chloropropane	25.0	ND	12.4	12.0	49.6	47.9	1	22.0-151			3.51	34
1,2-Dibromoethane	25.0	ND	12.7	12.7	50.9	51.0	1	34.0-147			0.208	27
1,2-Dichlorobenzene	25.0	ND	12.5	11.6	49.9	46.5	1	34.0-149			6.97	28

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L1045571-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1045571-01 11/20/18 23:05 • (MS) R3361853-4 11/20/18 23:25 • (MSD) R3361853-5 11/20/18 23:45

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,3-Dichlorobenzene	25.0	ND	13.1	12.1	52.4	48.3	1	36.0-146			8.08	27
1,4-Dichlorobenzene	25.0	ND	11.9	11.2	47.6	44.8	1	35.0-142			6.10	27
Dichlorodifluoromethane	25.0	ND	14.0	13.1	56.2	52.6	1	10.0-160			6.60	29
1,1-Dichloroethane	25.0	ND	12.8	11.9	51.2	47.6	1	25.0-158			7.38	27
1,2-Dichloroethane	25.0	ND	11.3	10.6	45.4	42.4	1	29.0-151			6.74	27
1,1-Dichloroethene	25.0	ND	13.2	12.2	52.7	48.8	1	11.0-160			7.68	29
cis-1,2-Dichloroethene	25.0	1.91	14.0	13.5	48.3	46.2	1	10.0-160			3.83	27
trans-1,2-Dichloroethene	25.0	ND	12.5	11.6	49.9	46.5	1	17.0-153			7.11	27
1,2-Dichloropropane	25.0	ND	12.3	11.2	49.1	44.8	1	30.0-156			8.99	27
cis-1,3-Dichloropropene	25.0	ND	12.7	12.8	50.9	51.2	1	34.0-149			0.588	28
trans-1,3-Dichloropropene	25.0	ND	12.2	11.8	48.7	47.4	1	32.0-149			2.83	28
Ethylbenzene	25.0	ND	11.8	11.6	47.4	46.2	1	30.0-155			2.45	27
2-Hexanone	125	ND	58.0	56.2	46.4	44.9	1	21.0-160			3.14	29
Isopropylbenzene	25.0	ND	13.0	12.5	52.1	49.9	1	28.0-157			4.19	27
p-Isopropyltoluene	25.0	ND	12.0	11.4	48.1	45.6	1	30.0-154			5.40	29
2-Butanone (MEK)	125	ND	55.1	50.7	44.1	40.5	1	10.0-160			8.48	32
Methyl Acetate	125	ND	58.3	54.4	46.7	43.5	1	18.0-151			6.92	30
Methyl Cyclohexane	25.0	ND	12.8	11.9	51.2	47.4	1	11.0-160			7.73	24
Methylene Chloride	25.0	ND	11.8	11.5	47.1	46.0	1	23.0-144			2.27	28
4-Methyl-2-pentanone (MIBK)	125	ND	57.4	57.3	45.9	45.8	1	29.0-160			0.279	29
Methyl tert-butyl ether	25.0	ND	11.7	10.7	46.9	42.9	1	28.0-150			9.06	29
Naphthalene	25.0	ND	12.5	12.1	50.2	48.4	1	12.0-156			3.64	35
n-Propylbenzene	25.0	ND	12.5	11.9	49.9	47.4	1	31.0-154			5.16	28
Styrene	25.0	ND	13.0	12.4	52.2	49.5	1	33.0-155			5.27	28
1,1,2,2-Tetrachloroethane	25.0	ND	12.4	12.0	49.5	48.0	1	33.0-150			2.96	28
Tetrachloroethene	25.0	ND	12.7	12.2	50.7	49.0	1	10.0-160			3.46	27
Toluene	25.0	ND	12.3	12.1	49.4	48.5	1	26.0-154			1.83	28
1,1,2-Trichlorotrifluoroethane	25.0	ND	13.6	13.1	54.5	52.3	1	23.0-160			4.14	30
1,2,3-Trichlorobenzene	25.0	ND	12.9	12.8	51.5	51.4	1	17.0-150			0.183	36
1,2,4-Trichlorobenzene	25.0	ND	12.8	12.3	51.2	49.3	1	24.0-150			3.76	33
1,1,1-Trichloroethane	25.0	ND	12.7	12.1	50.8	48.4	1	23.0-160			4.82	28
1,1,2-Trichloroethane	25.0	ND	12.3	12.3	49.2	49.3	1	35.0-147			0.377	27
Trichloroethene	25.0	ND	12.7	11.6	51.0	46.4	1	10.0-160			9.36	25
Trichlorofluoromethane	25.0	ND	8.52	8.05	34.1	32.2	1	17.0-160			5.65	31
1,2,4-Trimethylbenzene	25.0	ND	12.4	11.8	49.5	47.3	1	26.0-154			4.43	27
1,3,5-Trimethylbenzene	25.0	ND	12.0	11.5	47.9	45.8	1	28.0-153			4.44	27
Vinyl chloride	25.0	ND	14.2	14.0	56.8	56.0	1	10.0-160			1.47	27
o-Xylene	25.0	ND	12.6	11.9	50.3	47.6	1	45.0-144			5.67	26
m&p-Xylenes	50.0	ND	23.6	24.2	47.2	48.4	1	43.0-146			2.64	26
(S) Toluene-d8					102	105		80.0-120				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



L1045571-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1045571-01 11/20/18 23:05 • (MS) R3361853-4 11/20/18 23:25 • (MSD) R3361853-5 11/20/18 23:45

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
(S) Dibromofluoromethane					97.7	96.0		75.0-120				
(S) a,a,a-Trifluorotoluene					99.7	99.0		80.0-120				
(S) 4-Bromofluorobenzene					104	100		77.0-126				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Guide to Reading and Understanding Your Laboratory Report

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

Abbreviations and Definitions

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

Qualifier Description

J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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

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

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN2000002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

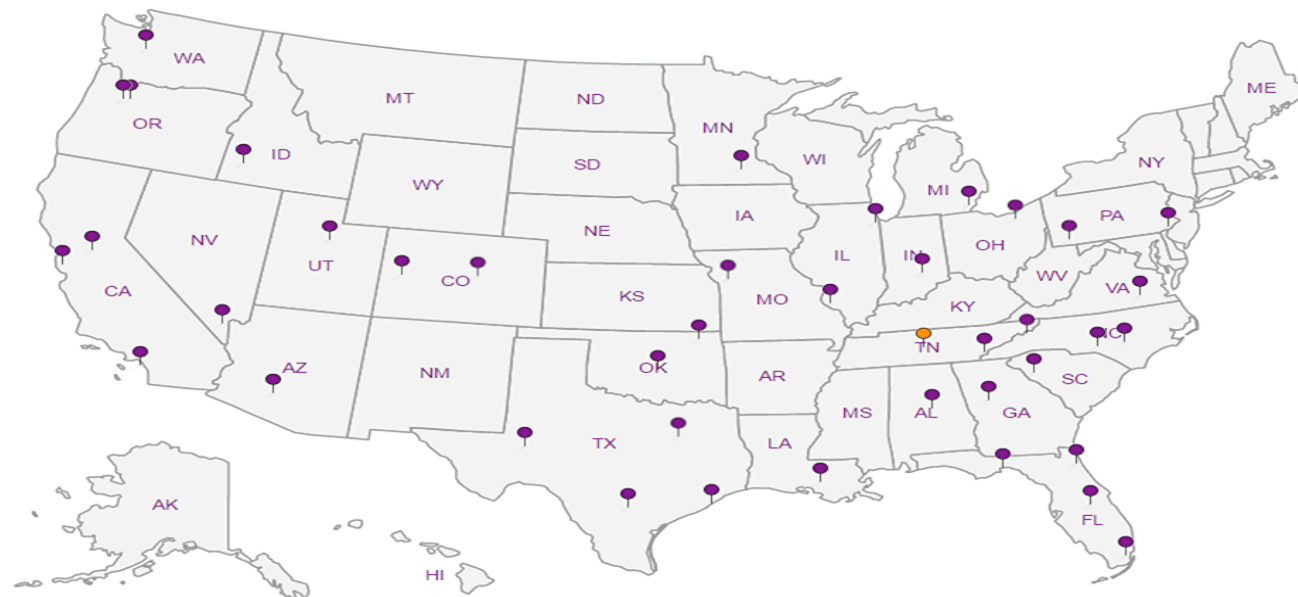
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Pace Analytical National Center for Testing & Innovation Cooler Receipt Form

Client: <u>LABRNY</u>	SDG#	<u>U1045571</u>	
Cooler Received/Opened On: 11/ <u>17</u> /18	Temperature:	<u>4.8</u>	
Received By: Adam Burns			
Signature: <u>[Signature]</u>			
Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	<u>/</u>		
COC Signed / Accurate?		<u>/</u>	
Bottles arrive intact?		<u>/</u>	
Correct bottles used?		<u>/</u>	
Sufficient volume sent?		<u>/</u>	
If Applicable		<u>/</u>	
VOA Zero headspace?			
Preservation Correct / Checked?			

Jeremy W. Watkins



Login #:11045571	Client:LABRNY	Date:11/17/18	Evaluated by:Myra "Katie" Ingram
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Non-Conformance (check applicable items)

Sample Integrity	Chain of Custody Clarification	If Broken Container:
Parameter(s) past holding time	Login Clarification Needed	
Temperature not in range	Chain of custody is incomplete	Insufficient packing material around container
Improper container type	Please specify Metals requested.	Insufficient packing material inside cooler
pH not in range.	Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Courier)
Insufficient sample volume.	Received additional samples not listed on coc.	Sample was frozen
Sample is biphasic.	Sample ids on containers do not match ids on coc	Container lid not intact
Vials received with headspace.	Trip Blank not received.	If no Chain of Custody:
Broken container	Client did not "X" analysis.	Received by:
Broken container:	Chain of Custody is missing	Date/Time:
Sufficient sample remains		Temp./Cont. Rec./pH:
		Carrier:
		Tracking#

Login Comments:

One of two vials received broken for ID: IW-4

Client informed by:	Call	Email	Voice Mail	Date: 11/19/18	Time: 8:19
TSR Initials: TAH	Client Contact:				

Login Instructions:

Run from intact container.

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ANALYTICAL REPORT

March 26, 2019

LaBella Associates, P.C.

Sample Delivery Group: L1080247
Samples Received: 03/19/2019
Project Number: 2161282
Description: Michelsen PDB - March 2019

Report To: Mr. Steven Rife / Mr. Dave Engert
300 State Street, Suite 201
Rochester, NY 14614

Entire Report Reviewed By:



T. Alan Harvill
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



BW-02 L1080247-01 GW

				Collected by S. Rife	Collected date/time 03/15/19 12:40	Received date/time 03/19/19 08:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1254695	1	03/24/19 17:12	03/24/19 17:12	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1255146	1	03/25/19 23:00	03/25/19 23:00	ACG	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

BW-03 L1080247-02 GW

				Collected by S. Rife	Collected date/time 03/15/19 13:05	Received date/time 03/19/19 08:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1254695	1	03/24/19 17:32	03/24/19 17:32	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1255146	1	03/25/19 23:20	03/25/19 23:20	ACG	Mt. Juliet, TN

⁴ Cn

⁵ Sr

⁶ Qc

BW-04 L1080247-03 GW

				Collected by S. Rife	Collected date/time 03/15/19 13:20	Received date/time 03/19/19 08:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1254695	1	03/24/19 17:52	03/24/19 17:52	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1255146	25	03/26/19 01:00	03/26/19 01:00	ACG	Mt. Juliet, TN

⁷ Gl

⁸ Al

⁹ Sc

GPMW-34 L1080247-04 GW

				Collected by S. Rife	Collected date/time 03/18/19 14:30	Received date/time 03/19/19 08:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1254695	1	03/24/19 18:12	03/24/19 18:12	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1255146	1	03/25/19 23:40	03/25/19 23:40	ACG	Mt. Juliet, TN

GPMW-26 L1080247-05 GW

				Collected by S. Rife	Collected date/time 03/15/19 12:20	Received date/time 03/19/19 08:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1254695	1	03/24/19 18:33	03/24/19 18:33	JHH	Mt. Juliet, TN

IW-2 L1080247-06 GW

				Collected by S. Rife	Collected date/time 03/15/19 13:35	Received date/time 03/19/19 08:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1254695	1	03/24/19 18:53	03/24/19 18:53	JHH	Mt. Juliet, TN

IW-3 L1080247-07 GW

				Collected by S. Rife	Collected date/time 03/15/19 13:50	Received date/time 03/19/19 08:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1254708	1	03/24/19 23:17	03/24/19 23:17	JHH	Mt. Juliet, TN

IW-4 L1080247-08 GW

				Collected by S. Rife	Collected date/time 03/15/19 14:10	Received date/time 03/19/19 08:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1254708	1	03/24/19 23:37	03/24/19 23:37	JHH	Mt. Juliet, TN



IW-5 L1080247-09 GW

				Collected by S. Rife	Collected date/time 03/15/19 14:30	Received date/time 03/19/19 08:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1254708	1	03/24/19 23:57	03/24/19 23:57	JHH	Mt. Juliet, TN

DUPE L1080247-10 GW

				Collected by S. Rife	Collected date/time 03/15/19 00:00	Received date/time 03/19/19 08:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1254708	1	03/25/19 00:18	03/25/19 00:18	JHH	Mt. Juliet, TN

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc



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

T. Alan Harvill
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	03/24/2019 17:12	WG1254695
Benzene	ND		1.00	1	03/24/2019 17:12	WG1254695
Bromochloromethane	ND		1.00	1	03/24/2019 17:12	WG1254695
Bromodichloromethane	ND		1.00	1	03/24/2019 17:12	WG1254695
Bromoform	ND		1.00	1	03/24/2019 17:12	WG1254695
Bromomethane	ND		5.00	1	03/24/2019 17:12	WG1254695
Carbon disulfide	ND		1.00	1	03/24/2019 17:12	WG1254695
Carbon tetrachloride	ND		1.00	1	03/24/2019 17:12	WG1254695
Chlorobenzene	ND		1.00	1	03/24/2019 17:12	WG1254695
Chlorodibromomethane	ND		1.00	1	03/24/2019 17:12	WG1254695
Chloroethane	ND		5.00	1	03/24/2019 17:12	WG1254695
Chloroform	ND		5.00	1	03/24/2019 17:12	WG1254695
Chloromethane	ND		2.50	1	03/24/2019 17:12	WG1254695
Cyclohexane	ND		1.00	1	03/24/2019 17:12	WG1254695
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/24/2019 17:12	WG1254695
1,2-Dibromoethane	ND		1.00	1	03/24/2019 17:12	WG1254695
1,2-Dichlorobenzene	ND		1.00	1	03/24/2019 17:12	WG1254695
1,3-Dichlorobenzene	ND		1.00	1	03/24/2019 17:12	WG1254695
1,4-Dichlorobenzene	ND		1.00	1	03/24/2019 17:12	WG1254695
Dichlorodifluoromethane	ND		5.00	1	03/24/2019 17:12	WG1254695
1,1-Dichloroethane	ND		1.00	1	03/24/2019 17:12	WG1254695
1,2-Dichloroethane	ND		1.00	1	03/24/2019 17:12	WG1254695
1,1-Dichloroethene	ND		1.00	1	03/24/2019 17:12	WG1254695
cis-1,2-Dichloroethene	ND		1.00	1	03/24/2019 17:12	WG1254695
trans-1,2-Dichloroethene	ND		1.00	1	03/24/2019 17:12	WG1254695
1,2-Dichloropropane	ND		1.00	1	03/24/2019 17:12	WG1254695
cis-1,3-Dichloropropene	ND		1.00	1	03/24/2019 17:12	WG1254695
trans-1,3-Dichloropropene	ND		1.00	1	03/24/2019 17:12	WG1254695
Ethylbenzene	ND		1.00	1	03/24/2019 17:12	WG1254695
2-Hexanone	ND		10.0	1	03/24/2019 17:12	WG1254695
Isopropylbenzene	ND		1.00	1	03/24/2019 17:12	WG1254695
2-Butanone (MEK)	ND		10.0	1	03/24/2019 17:12	WG1254695
Methyl Acetate	ND		20.0	1	03/24/2019 17:12	WG1254695
Methyl Cyclohexane	ND		1.00	1	03/24/2019 17:12	WG1254695
Methylene Chloride	ND		5.00	1	03/24/2019 17:12	WG1254695
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/24/2019 17:12	WG1254695
Methyl tert-butyl ether	ND		1.00	1	03/24/2019 17:12	WG1254695
Naphthalene	ND		5.00	1	03/24/2019 17:12	WG1254695
Styrene	ND		1.00	1	03/24/2019 17:12	WG1254695
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/24/2019 17:12	WG1254695
Tetrachloroethene	ND		1.00	1	03/24/2019 17:12	WG1254695
Toluene	ND		1.00	1	03/24/2019 17:12	WG1254695
1,2,3-Trichlorobenzene	ND		1.00	1	03/24/2019 17:12	WG1254695
1,2,4-Trichlorobenzene	ND		1.00	1	03/24/2019 17:12	WG1254695
1,1,1-Trichloroethane	ND		1.00	1	03/24/2019 17:12	WG1254695
1,1,2-Trichloroethane	ND		1.00	1	03/24/2019 17:12	WG1254695
Trichloroethene	11.5		1.00	1	03/24/2019 17:12	WG1254695
Trichlorofluoromethane	ND		5.00	1	03/24/2019 17:12	WG1254695
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	03/24/2019 17:12	WG1254695
Vinyl chloride	ND		1.00	1	03/24/2019 17:12	WG1254695
o-Xylene	ND		1.00	1	03/24/2019 17:12	WG1254695
m&p-Xylenes	ND		2.00	1	03/24/2019 17:12	WG1254695
n-Butylbenzene	ND		1.00	1	03/24/2019 17:12	WG1254695
sec-Butylbenzene	ND		1.00	1	03/24/2019 17:12	WG1254695
tert-Butylbenzene	ND		1.00	1	03/24/2019 17:12	WG1254695
p-Isopropyltoluene	ND		1.00	1	03/24/2019 17:12	WG1254695

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/15/19 12:40

L1080247

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	03/24/2019 17:12	WG1254695
1,2,4-Trimethylbenzene	ND		1.00	1	03/25/2019 23:00	WG1255146
1,3,5-Trimethylbenzene	ND		1.00	1	03/24/2019 17:12	WG1254695
(S) Toluene-d8	105		80.0-120		03/24/2019 17:12	WG1254695
(S) Toluene-d8	99.5		80.0-120		03/25/2019 23:00	WG1255146
(S) a,a,a-Trifluorotoluene	108		80.0-120		03/24/2019 17:12	WG1254695
(S) a,a,a-Trifluorotoluene	94.4		80.0-120		03/25/2019 23:00	WG1255146
(S) 4-Bromofluorobenzene	107		77.0-126		03/24/2019 17:12	WG1254695
(S) 4-Bromofluorobenzene	94.7		77.0-126		03/25/2019 23:00	WG1255146
(S) 1,2-Dichloroethane-d4	104		70.0-130		03/24/2019 17:12	WG1254695
(S) 1,2-Dichloroethane-d4	121		70.0-130		03/25/2019 23:00	WG1255146

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	03/24/2019 17:32	WG1254695
Benzene	ND		1.00	1	03/24/2019 17:32	WG1254695
Bromochloromethane	ND		1.00	1	03/24/2019 17:32	WG1254695
Bromodichloromethane	ND		1.00	1	03/24/2019 17:32	WG1254695
Bromoform	ND		1.00	1	03/24/2019 17:32	WG1254695
Bromomethane	ND		5.00	1	03/24/2019 17:32	WG1254695
Carbon disulfide	ND		1.00	1	03/24/2019 17:32	WG1254695
Carbon tetrachloride	ND		1.00	1	03/24/2019 17:32	WG1254695
Chlorobenzene	ND		1.00	1	03/24/2019 17:32	WG1254695
Chlorodibromomethane	ND		1.00	1	03/24/2019 17:32	WG1254695
Chloroethane	ND		5.00	1	03/24/2019 17:32	WG1254695
Chloroform	ND		5.00	1	03/24/2019 17:32	WG1254695
Chloromethane	ND		2.50	1	03/24/2019 17:32	WG1254695
Cyclohexane	ND		1.00	1	03/24/2019 17:32	WG1254695
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/24/2019 17:32	WG1254695
1,2-Dibromoethane	ND		1.00	1	03/24/2019 17:32	WG1254695
1,2-Dichlorobenzene	ND		1.00	1	03/24/2019 17:32	WG1254695
1,3-Dichlorobenzene	ND		1.00	1	03/24/2019 17:32	WG1254695
1,4-Dichlorobenzene	ND		1.00	1	03/24/2019 17:32	WG1254695
Dichlorodifluoromethane	ND		5.00	1	03/24/2019 17:32	WG1254695
1,1-Dichloroethane	ND		1.00	1	03/24/2019 17:32	WG1254695
1,2-Dichloroethane	ND		1.00	1	03/24/2019 17:32	WG1254695
1,1-Dichloroethene	ND		1.00	1	03/24/2019 17:32	WG1254695
cis-1,2-Dichloroethene	179		1.00	1	03/24/2019 17:32	WG1254695
trans-1,2-Dichloroethene	ND		1.00	1	03/24/2019 17:32	WG1254695
1,2-Dichloropropane	ND		1.00	1	03/24/2019 17:32	WG1254695
cis-1,3-Dichloropropene	ND		1.00	1	03/24/2019 17:32	WG1254695
trans-1,3-Dichloropropene	ND		1.00	1	03/24/2019 17:32	WG1254695
Ethylbenzene	ND		1.00	1	03/24/2019 17:32	WG1254695
2-Hexanone	ND		10.0	1	03/24/2019 17:32	WG1254695
Isopropylbenzene	ND		1.00	1	03/24/2019 17:32	WG1254695
2-Butanone (MEK)	ND		10.0	1	03/24/2019 17:32	WG1254695
Methyl Acetate	ND		20.0	1	03/24/2019 17:32	WG1254695
Methyl Cyclohexane	ND		1.00	1	03/24/2019 17:32	WG1254695
Methylene Chloride	ND		5.00	1	03/24/2019 17:32	WG1254695
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/24/2019 17:32	WG1254695
Methyl tert-butyl ether	ND		1.00	1	03/24/2019 17:32	WG1254695
Naphthalene	ND		5.00	1	03/24/2019 17:32	WG1254695
Styrene	ND		1.00	1	03/24/2019 17:32	WG1254695
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/24/2019 17:32	WG1254695
Tetrachloroethene	ND		1.00	1	03/24/2019 17:32	WG1254695
Toluene	ND		1.00	1	03/24/2019 17:32	WG1254695
1,2,3-Trichlorobenzene	ND		1.00	1	03/24/2019 17:32	WG1254695
1,2,4-Trichlorobenzene	ND		1.00	1	03/24/2019 17:32	WG1254695
1,1,1-Trichloroethane	ND		1.00	1	03/24/2019 17:32	WG1254695
1,1,2-Trichloroethane	ND		1.00	1	03/24/2019 17:32	WG1254695
Trichloroethene	23.6		1.00	1	03/24/2019 17:32	WG1254695
Trichlorofluoromethane	ND		5.00	1	03/24/2019 17:32	WG1254695
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	03/24/2019 17:32	WG1254695
Vinyl chloride	ND		1.00	1	03/24/2019 17:32	WG1254695
o-Xylene	ND		1.00	1	03/24/2019 17:32	WG1254695
m&p-Xylenes	ND		2.00	1	03/24/2019 17:32	WG1254695
n-Butylbenzene	ND		1.00	1	03/24/2019 17:32	WG1254695
sec-Butylbenzene	ND		1.00	1	03/24/2019 17:32	WG1254695
tert-Butylbenzene	ND		1.00	1	03/24/2019 17:32	WG1254695
p-Isopropyltoluene	ND		1.00	1	03/24/2019 17:32	WG1254695

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/15/19 13:05

L1080247

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	03/24/2019 17:32	WG1254695
1,2,4-Trimethylbenzene	ND		1.00	1	03/25/2019 23:20	WG1255146
1,3,5-Trimethylbenzene	ND		1.00	1	03/24/2019 17:32	WG1254695
(S) Toluene-d8	108		80.0-120		03/24/2019 17:32	WG1254695
(S) Toluene-d8	98.0		80.0-120		03/25/2019 23:20	WG1255146
(S) a,a,a-Trifluorotoluene	105		80.0-120		03/24/2019 17:32	WG1254695
(S) a,a,a-Trifluorotoluene	93.8		80.0-120		03/25/2019 23:20	WG1255146
(S) 4-Bromofluorobenzene	107		77.0-126		03/24/2019 17:32	WG1254695
(S) 4-Bromofluorobenzene	93.5		77.0-126		03/25/2019 23:20	WG1255146
(S) 1,2-Dichloroethane-d4	104		70.0-130		03/24/2019 17:32	WG1254695
(S) 1,2-Dichloroethane-d4	118		70.0-130		03/25/2019 23:20	WG1255146

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	ND		50.0	1	03/24/2019 17:52	WG1254695	¹ Cp
Benzene	ND		1.00	1	03/24/2019 17:52	WG1254695	² Tc
Bromochloromethane	ND		1.00	1	03/24/2019 17:52	WG1254695	³ Ss
Bromodichloromethane	ND		1.00	1	03/24/2019 17:52	WG1254695	⁴ Cn
Bromoform	ND		1.00	1	03/24/2019 17:52	WG1254695	⁵ Sr
Bromomethane	ND		5.00	1	03/24/2019 17:52	WG1254695	⁶ Qc
Carbon disulfide	ND		1.00	1	03/24/2019 17:52	WG1254695	⁷ Gl
Carbon tetrachloride	ND		1.00	1	03/24/2019 17:52	WG1254695	⁸ Al
Chlorobenzene	ND		1.00	1	03/24/2019 17:52	WG1254695	⁹ Sc
Chlorodibromomethane	ND		1.00	1	03/24/2019 17:52	WG1254695	
Chloroethane	ND		5.00	1	03/24/2019 17:52	WG1254695	
Chloroform	ND		5.00	1	03/24/2019 17:52	WG1254695	
Chloromethane	ND		2.50	1	03/24/2019 17:52	WG1254695	
Cyclohexane	ND		1.00	1	03/24/2019 17:52	WG1254695	
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/24/2019 17:52	WG1254695	
1,2-Dibromoethane	ND		1.00	1	03/24/2019 17:52	WG1254695	
1,2-Dichlorobenzene	ND		1.00	1	03/24/2019 17:52	WG1254695	
1,3-Dichlorobenzene	ND		1.00	1	03/24/2019 17:52	WG1254695	
1,4-Dichlorobenzene	ND		1.00	1	03/24/2019 17:52	WG1254695	
Dichlorodifluoromethane	ND		5.00	1	03/24/2019 17:52	WG1254695	
1,1-Dichloroethane	ND		1.00	1	03/24/2019 17:52	WG1254695	
1,2-Dichloroethane	ND		1.00	1	03/24/2019 17:52	WG1254695	
1,1-Dichloroethene	1.34		1.00	1	03/24/2019 17:52	WG1254695	
cis-1,2-Dichloroethene	1130		25.0	25	03/26/2019 01:00	WG1255146	
trans-1,2-Dichloroethene	4.88		1.00	1	03/24/2019 17:52	WG1254695	
1,2-Dichloropropane	ND		1.00	1	03/24/2019 17:52	WG1254695	
cis-1,3-Dichloropropene	ND		1.00	1	03/24/2019 17:52	WG1254695	
trans-1,3-Dichloropropene	ND		1.00	1	03/24/2019 17:52	WG1254695	
Ethylbenzene	ND		1.00	1	03/24/2019 17:52	WG1254695	
2-Hexanone	ND		10.0	1	03/24/2019 17:52	WG1254695	
Isopropylbenzene	ND		1.00	1	03/24/2019 17:52	WG1254695	
2-Butanone (MEK)	ND		10.0	1	03/24/2019 17:52	WG1254695	
Methyl Acetate	ND		20.0	1	03/24/2019 17:52	WG1254695	
Methyl Cyclohexane	ND		1.00	1	03/24/2019 17:52	WG1254695	
Methylene Chloride	ND		5.00	1	03/24/2019 17:52	WG1254695	
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/24/2019 17:52	WG1254695	
Methyl tert-butyl ether	ND		1.00	1	03/24/2019 17:52	WG1254695	
Naphthalene	ND		5.00	1	03/24/2019 17:52	WG1254695	
Styrene	ND		1.00	1	03/24/2019 17:52	WG1254695	
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/24/2019 17:52	WG1254695	
Tetrachloroethene	ND		1.00	1	03/24/2019 17:52	WG1254695	
Toluene	ND		1.00	1	03/24/2019 17:52	WG1254695	
1,2,3-Trichlorobenzene	ND		1.00	1	03/24/2019 17:52	WG1254695	
1,2,4-Trichlorobenzene	ND		1.00	1	03/24/2019 17:52	WG1254695	
1,1,1-Trichloroethane	ND		1.00	1	03/24/2019 17:52	WG1254695	
1,1,2-Trichloroethane	ND		1.00	1	03/24/2019 17:52	WG1254695	
Trichloroethene	74.4		1.00	1	03/24/2019 17:52	WG1254695	
Trichlorofluoromethane	ND		5.00	1	03/24/2019 17:52	WG1254695	
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	03/24/2019 17:52	WG1254695	
Vinyl chloride	29.0		1.00	1	03/24/2019 17:52	WG1254695	
o-Xylene	ND		1.00	1	03/24/2019 17:52	WG1254695	
m&p-Xylenes	ND		2.00	1	03/24/2019 17:52	WG1254695	
n-Butylbenzene	ND		1.00	1	03/24/2019 17:52	WG1254695	
sec-Butylbenzene	ND		1.00	1	03/24/2019 17:52	WG1254695	
tert-Butylbenzene	ND		1.00	1	03/24/2019 17:52	WG1254695	
p-Isopropyltoluene	ND		1.00	1	03/24/2019 17:52	WG1254695	



Collected date/time: 03/15/19 13:20

L1080247

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	03/24/2019 17:52	WG1254695
1,2,4-Trimethylbenzene	ND		1.00	1	03/24/2019 17:52	WG1254695
1,3,5-Trimethylbenzene	ND		1.00	1	03/24/2019 17:52	WG1254695
(S) Toluene-d8	107		80.0-120		03/24/2019 17:52	WG1254695
(S) Toluene-d8	98.9		80.0-120		03/26/2019 01:00	WG1255146
(S) a,a,a-Trifluorotoluene	108		80.0-120		03/24/2019 17:52	WG1254695
(S) a,a,a-Trifluorotoluene	92.5		80.0-120		03/26/2019 01:00	WG1255146
(S) 4-Bromofluorobenzene	110		77.0-126		03/24/2019 17:52	WG1254695
(S) 4-Bromofluorobenzene	95.3		77.0-126		03/26/2019 01:00	WG1255146
(S) 1,2-Dichloroethane-d4	106		70.0-130		03/24/2019 17:52	WG1254695
(S) 1,2-Dichloroethane-d4	119		70.0-130		03/26/2019 01:00	WG1255146

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	03/24/2019 18:12	WG1254695
Benzene	ND		1.00	1	03/24/2019 18:12	WG1254695
Bromochloromethane	ND		1.00	1	03/24/2019 18:12	WG1254695
Bromodichloromethane	ND		1.00	1	03/24/2019 18:12	WG1254695
Bromoform	ND		1.00	1	03/24/2019 18:12	WG1254695
Bromomethane	ND		5.00	1	03/24/2019 18:12	WG1254695
Carbon disulfide	ND		1.00	1	03/24/2019 18:12	WG1254695
Carbon tetrachloride	ND		1.00	1	03/24/2019 18:12	WG1254695
Chlorobenzene	ND		1.00	1	03/24/2019 18:12	WG1254695
Chlorodibromomethane	ND		1.00	1	03/24/2019 18:12	WG1254695
Chloroethane	ND		5.00	1	03/24/2019 18:12	WG1254695
Chloroform	ND		5.00	1	03/24/2019 18:12	WG1254695
Chloromethane	ND		2.50	1	03/24/2019 18:12	WG1254695
Cyclohexane	ND		1.00	1	03/24/2019 18:12	WG1254695
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/24/2019 18:12	WG1254695
1,2-Dibromoethane	ND		1.00	1	03/24/2019 18:12	WG1254695
1,2-Dichlorobenzene	ND		1.00	1	03/24/2019 18:12	WG1254695
1,3-Dichlorobenzene	ND		1.00	1	03/24/2019 18:12	WG1254695
1,4-Dichlorobenzene	ND		1.00	1	03/24/2019 18:12	WG1254695
Dichlorodifluoromethane	ND		5.00	1	03/24/2019 18:12	WG1254695
1,1-Dichloroethane	ND		1.00	1	03/24/2019 18:12	WG1254695
1,2-Dichloroethane	ND		1.00	1	03/24/2019 18:12	WG1254695
1,1-Dichloroethene	ND		1.00	1	03/24/2019 18:12	WG1254695
cis-1,2-Dichloroethene	ND		1.00	1	03/25/2019 23:40	WG1255146
trans-1,2-Dichloroethene	ND		1.00	1	03/24/2019 18:12	WG1254695
1,2-Dichloropropane	ND		1.00	1	03/24/2019 18:12	WG1254695
cis-1,3-Dichloropropene	ND		1.00	1	03/24/2019 18:12	WG1254695
trans-1,3-Dichloropropene	ND		1.00	1	03/24/2019 18:12	WG1254695
Ethylbenzene	ND		1.00	1	03/24/2019 18:12	WG1254695
2-Hexanone	ND		10.0	1	03/24/2019 18:12	WG1254695
Isopropylbenzene	ND		1.00	1	03/24/2019 18:12	WG1254695
2-Butanone (MEK)	ND		10.0	1	03/24/2019 18:12	WG1254695
Methyl Acetate	ND		20.0	1	03/24/2019 18:12	WG1254695
Methyl Cyclohexane	ND		1.00	1	03/24/2019 18:12	WG1254695
Methylene Chloride	ND		5.00	1	03/24/2019 18:12	WG1254695
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/24/2019 18:12	WG1254695
Methyl tert-butyl ether	ND		1.00	1	03/24/2019 18:12	WG1254695
Naphthalene	ND		5.00	1	03/24/2019 18:12	WG1254695
Styrene	ND		1.00	1	03/24/2019 18:12	WG1254695
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/24/2019 18:12	WG1254695
Tetrachloroethene	ND		1.00	1	03/24/2019 18:12	WG1254695
Toluene	ND		1.00	1	03/24/2019 18:12	WG1254695
1,2,3-Trichlorobenzene	ND		1.00	1	03/24/2019 18:12	WG1254695
1,2,4-Trichlorobenzene	ND		1.00	1	03/24/2019 18:12	WG1254695
1,1,1-Trichloroethane	ND		1.00	1	03/24/2019 18:12	WG1254695
1,1,2-Trichloroethane	ND		1.00	1	03/24/2019 18:12	WG1254695
Trichloroethene	49.5		1.00	1	03/24/2019 18:12	WG1254695
Trichlorofluoromethane	ND		5.00	1	03/24/2019 18:12	WG1254695
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	03/24/2019 18:12	WG1254695
Vinyl chloride	ND		1.00	1	03/24/2019 18:12	WG1254695
o-Xylene	ND		1.00	1	03/24/2019 18:12	WG1254695
m&p-Xylenes	ND		2.00	1	03/24/2019 18:12	WG1254695
n-Butylbenzene	ND		1.00	1	03/24/2019 18:12	WG1254695
sec-Butylbenzene	ND		1.00	1	03/24/2019 18:12	WG1254695
tert-Butylbenzene	ND		1.00	1	03/24/2019 18:12	WG1254695
p-Isopropyltoluene	ND		1.00	1	03/24/2019 18:12	WG1254695

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/18/19 14:30

L1080247

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	03/24/2019 18:12	WG1254695
1,2,4-Trimethylbenzene	ND		1.00	1	03/24/2019 18:12	WG1254695
1,3,5-Trimethylbenzene	ND		1.00	1	03/24/2019 18:12	WG1254695
(S) Toluene-d8	108		80.0-120		03/24/2019 18:12	WG1254695
(S) Toluene-d8	100		80.0-120		03/25/2019 23:40	WG1255146
(S) a,a,a-Trifluorotoluene	106		80.0-120		03/24/2019 18:12	WG1254695
(S) a,a,a-Trifluorotoluene	92.0		80.0-120		03/25/2019 23:40	WG1255146
(S) 4-Bromofluorobenzene	107		77.0-126		03/24/2019 18:12	WG1254695
(S) 4-Bromofluorobenzene	94.8		77.0-126		03/25/2019 23:40	WG1255146
(S) 1,2-Dichloroethane-d4	103		70.0-130		03/24/2019 18:12	WG1254695
(S) 1,2-Dichloroethane-d4	118		70.0-130		03/25/2019 23:40	WG1255146

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	03/24/2019 18:33	WG1254695
Benzene	ND		1.00	1	03/24/2019 18:33	WG1254695
Bromochloromethane	ND		1.00	1	03/24/2019 18:33	WG1254695
Bromodichloromethane	ND		1.00	1	03/24/2019 18:33	WG1254695
Bromoform	ND		1.00	1	03/24/2019 18:33	WG1254695
Bromomethane	ND		5.00	1	03/24/2019 18:33	WG1254695
Carbon disulfide	ND		1.00	1	03/24/2019 18:33	WG1254695
Carbon tetrachloride	ND		1.00	1	03/24/2019 18:33	WG1254695
Chlorobenzene	ND		1.00	1	03/24/2019 18:33	WG1254695
Chlorodibromomethane	ND		1.00	1	03/24/2019 18:33	WG1254695
Chloroethane	ND		5.00	1	03/24/2019 18:33	WG1254695
Chloroform	ND		5.00	1	03/24/2019 18:33	WG1254695
Chloromethane	ND		2.50	1	03/24/2019 18:33	WG1254695
Cyclohexane	ND		1.00	1	03/24/2019 18:33	WG1254695
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/24/2019 18:33	WG1254695
1,2-Dibromoethane	ND		1.00	1	03/24/2019 18:33	WG1254695
1,2-Dichlorobenzene	ND		1.00	1	03/24/2019 18:33	WG1254695
1,3-Dichlorobenzene	ND		1.00	1	03/24/2019 18:33	WG1254695
1,4-Dichlorobenzene	ND		1.00	1	03/24/2019 18:33	WG1254695
Dichlorodifluoromethane	ND		5.00	1	03/24/2019 18:33	WG1254695
1,1-Dichloroethane	ND		1.00	1	03/24/2019 18:33	WG1254695
1,2-Dichloroethane	ND		1.00	1	03/24/2019 18:33	WG1254695
1,1-Dichloroethene	ND		1.00	1	03/24/2019 18:33	WG1254695
cis-1,2-Dichloroethene	1.84		1.00	1	03/24/2019 18:33	WG1254695
trans-1,2-Dichloroethene	ND		1.00	1	03/24/2019 18:33	WG1254695
1,2-Dichloropropane	ND		1.00	1	03/24/2019 18:33	WG1254695
cis-1,3-Dichloropropene	ND		1.00	1	03/24/2019 18:33	WG1254695
trans-1,3-Dichloropropene	ND		1.00	1	03/24/2019 18:33	WG1254695
Ethylbenzene	ND		1.00	1	03/24/2019 18:33	WG1254695
2-Hexanone	ND		10.0	1	03/24/2019 18:33	WG1254695
Isopropylbenzene	ND		1.00	1	03/24/2019 18:33	WG1254695
2-Butanone (MEK)	ND		10.0	1	03/24/2019 18:33	WG1254695
Methyl Acetate	ND		20.0	1	03/24/2019 18:33	WG1254695
Methyl Cyclohexane	ND		1.00	1	03/24/2019 18:33	WG1254695
Methylene Chloride	ND		5.00	1	03/24/2019 18:33	WG1254695
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/24/2019 18:33	WG1254695
Methyl tert-butyl ether	ND		1.00	1	03/24/2019 18:33	WG1254695
Naphthalene	ND		5.00	1	03/24/2019 18:33	WG1254695
Styrene	ND		1.00	1	03/24/2019 18:33	WG1254695
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/24/2019 18:33	WG1254695
Tetrachloroethene	ND		1.00	1	03/24/2019 18:33	WG1254695
Toluene	ND		1.00	1	03/24/2019 18:33	WG1254695
1,2,3-Trichlorobenzene	ND		1.00	1	03/24/2019 18:33	WG1254695
1,2,4-Trichlorobenzene	ND		1.00	1	03/24/2019 18:33	WG1254695
1,1,1-Trichloroethane	ND		1.00	1	03/24/2019 18:33	WG1254695
1,1,2-Trichloroethane	ND		1.00	1	03/24/2019 18:33	WG1254695
Trichloroethene	20.9		1.00	1	03/24/2019 18:33	WG1254695
Trichlorofluoromethane	ND		5.00	1	03/24/2019 18:33	WG1254695
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	03/24/2019 18:33	WG1254695
Vinyl chloride	ND		1.00	1	03/24/2019 18:33	WG1254695
o-Xylene	ND		1.00	1	03/24/2019 18:33	WG1254695
m&p-Xylenes	ND		2.00	1	03/24/2019 18:33	WG1254695
n-Butylbenzene	ND		1.00	1	03/24/2019 18:33	WG1254695
sec-Butylbenzene	ND		1.00	1	03/24/2019 18:33	WG1254695
tert-Butylbenzene	ND		1.00	1	03/24/2019 18:33	WG1254695
p-Isopropyltoluene	ND		1.00	1	03/24/2019 18:33	WG1254695

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/15/19 12:20

L1080247

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	03/24/2019 18:33	WG1254695
1,2,4-Trimethylbenzene	ND		1.00	1	03/24/2019 18:33	WG1254695
1,3,5-Trimethylbenzene	ND		1.00	1	03/24/2019 18:33	WG1254695
(S) Toluene-d8	106		80.0-120		03/24/2019 18:33	WG1254695
(S) a,a,a-Trifluorotoluene	107		80.0-120		03/24/2019 18:33	WG1254695
(S) 4-Bromofluorobenzene	106		77.0-126		03/24/2019 18:33	WG1254695
(S) 1,2-Dichloroethane-d4	104		70.0-130		03/24/2019 18:33	WG1254695

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	03/24/2019 18:53	WG1254695
Benzene	ND		1.00	1	03/24/2019 18:53	WG1254695
Bromochloromethane	ND		1.00	1	03/24/2019 18:53	WG1254695
Bromodichloromethane	ND		1.00	1	03/24/2019 18:53	WG1254695
Bromoform	ND		1.00	1	03/24/2019 18:53	WG1254695
Bromomethane	ND		5.00	1	03/24/2019 18:53	WG1254695
Carbon disulfide	ND		1.00	1	03/24/2019 18:53	WG1254695
Carbon tetrachloride	ND		1.00	1	03/24/2019 18:53	WG1254695
Chlorobenzene	ND		1.00	1	03/24/2019 18:53	WG1254695
Chlorodibromomethane	ND		1.00	1	03/24/2019 18:53	WG1254695
Chloroethane	ND		5.00	1	03/24/2019 18:53	WG1254695
Chloroform	ND		5.00	1	03/24/2019 18:53	WG1254695
Chloromethane	ND		2.50	1	03/24/2019 18:53	WG1254695
Cyclohexane	ND		1.00	1	03/24/2019 18:53	WG1254695
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/24/2019 18:53	WG1254695
1,2-Dibromoethane	ND		1.00	1	03/24/2019 18:53	WG1254695
1,2-Dichlorobenzene	ND		1.00	1	03/24/2019 18:53	WG1254695
1,3-Dichlorobenzene	ND		1.00	1	03/24/2019 18:53	WG1254695
1,4-Dichlorobenzene	ND		1.00	1	03/24/2019 18:53	WG1254695
Dichlorodifluoromethane	ND		5.00	1	03/24/2019 18:53	WG1254695
1,1-Dichloroethane	ND		1.00	1	03/24/2019 18:53	WG1254695
1,2-Dichloroethane	ND		1.00	1	03/24/2019 18:53	WG1254695
1,1-Dichloroethene	ND		1.00	1	03/24/2019 18:53	WG1254695
cis-1,2-Dichloroethene	4.04		1.00	1	03/24/2019 18:53	WG1254695
trans-1,2-Dichloroethene	ND		1.00	1	03/24/2019 18:53	WG1254695
1,2-Dichloropropane	ND		1.00	1	03/24/2019 18:53	WG1254695
cis-1,3-Dichloropropene	ND		1.00	1	03/24/2019 18:53	WG1254695
trans-1,3-Dichloropropene	ND		1.00	1	03/24/2019 18:53	WG1254695
Ethylbenzene	ND		1.00	1	03/24/2019 18:53	WG1254695
2-Hexanone	ND		10.0	1	03/24/2019 18:53	WG1254695
Isopropylbenzene	ND		1.00	1	03/24/2019 18:53	WG1254695
2-Butanone (MEK)	ND		10.0	1	03/24/2019 18:53	WG1254695
Methyl Acetate	ND		20.0	1	03/24/2019 18:53	WG1254695
Methyl Cyclohexane	ND		1.00	1	03/24/2019 18:53	WG1254695
Methylene Chloride	ND		5.00	1	03/24/2019 18:53	WG1254695
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/24/2019 18:53	WG1254695
Methyl tert-butyl ether	ND		1.00	1	03/24/2019 18:53	WG1254695
Naphthalene	ND		5.00	1	03/24/2019 18:53	WG1254695
Styrene	ND		1.00	1	03/24/2019 18:53	WG1254695
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/24/2019 18:53	WG1254695
Tetrachloroethene	ND		1.00	1	03/24/2019 18:53	WG1254695
Toluene	ND		1.00	1	03/24/2019 18:53	WG1254695
1,2,3-Trichlorobenzene	ND		1.00	1	03/24/2019 18:53	WG1254695
1,2,4-Trichlorobenzene	ND		1.00	1	03/24/2019 18:53	WG1254695
1,1,1-Trichloroethane	3.34		1.00	1	03/24/2019 18:53	WG1254695
1,1,2-Trichloroethane	ND		1.00	1	03/24/2019 18:53	WG1254695
Trichloroethene	17.9		1.00	1	03/24/2019 18:53	WG1254695
Trichlorofluoromethane	ND		5.00	1	03/24/2019 18:53	WG1254695
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	03/24/2019 18:53	WG1254695
Vinyl chloride	ND		1.00	1	03/24/2019 18:53	WG1254695
o-Xylene	ND		1.00	1	03/24/2019 18:53	WG1254695
m&p-Xylenes	ND		2.00	1	03/24/2019 18:53	WG1254695
n-Butylbenzene	ND		1.00	1	03/24/2019 18:53	WG1254695
sec-Butylbenzene	ND		1.00	1	03/24/2019 18:53	WG1254695
tert-Butylbenzene	ND		1.00	1	03/24/2019 18:53	WG1254695
p-Isopropyltoluene	ND		1.00	1	03/24/2019 18:53	WG1254695

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/15/19 13:35

L1080247

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	03/24/2019 18:53	WG1254695
1,2,4-Trimethylbenzene	ND		1.00	1	03/24/2019 18:53	WG1254695
1,3,5-Trimethylbenzene	ND		1.00	1	03/24/2019 18:53	WG1254695
(S) Toluene-d8	104		80.0-120		03/24/2019 18:53	WG1254695
(S) o,o,o-Trifluorotoluene	106		80.0-120		03/24/2019 18:53	WG1254695
(S) 4-Bromofluorobenzene	106		77.0-126		03/24/2019 18:53	WG1254695
(S) 1,2-Dichloroethane-d4	101		70.0-130		03/24/2019 18:53	WG1254695

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	03/24/2019 23:17	WG1254708
Benzene	ND		1.00	1	03/24/2019 23:17	WG1254708
Bromochloromethane	ND		1.00	1	03/24/2019 23:17	WG1254708
Bromodichloromethane	ND		1.00	1	03/24/2019 23:17	WG1254708
Bromoform	ND		1.00	1	03/24/2019 23:17	WG1254708
Bromomethane	ND		5.00	1	03/24/2019 23:17	WG1254708
Carbon disulfide	ND		1.00	1	03/24/2019 23:17	WG1254708
Carbon tetrachloride	ND		1.00	1	03/24/2019 23:17	WG1254708
Chlorobenzene	ND		1.00	1	03/24/2019 23:17	WG1254708
Chlorodibromomethane	ND		1.00	1	03/24/2019 23:17	WG1254708
Chloroethane	ND		5.00	1	03/24/2019 23:17	WG1254708
Chloroform	ND		5.00	1	03/24/2019 23:17	WG1254708
Chloromethane	ND		2.50	1	03/24/2019 23:17	WG1254708
Cyclohexane	ND		1.00	1	03/24/2019 23:17	WG1254708
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/24/2019 23:17	WG1254708
1,2-Dibromoethane	ND		1.00	1	03/24/2019 23:17	WG1254708
1,2-Dichlorobenzene	ND		1.00	1	03/24/2019 23:17	WG1254708
1,3-Dichlorobenzene	ND		1.00	1	03/24/2019 23:17	WG1254708
1,4-Dichlorobenzene	ND		1.00	1	03/24/2019 23:17	WG1254708
Dichlorodifluoromethane	ND		5.00	1	03/24/2019 23:17	WG1254708
1,1-Dichloroethane	ND		1.00	1	03/24/2019 23:17	WG1254708
1,2-Dichloroethane	ND		1.00	1	03/24/2019 23:17	WG1254708
1,1-Dichloroethene	ND		1.00	1	03/24/2019 23:17	WG1254708
cis-1,2-Dichloroethene	3.80		1.00	1	03/24/2019 23:17	WG1254708
trans-1,2-Dichloroethene	ND		1.00	1	03/24/2019 23:17	WG1254708
1,2-Dichloropropane	ND		1.00	1	03/24/2019 23:17	WG1254708
cis-1,3-Dichloropropene	ND		1.00	1	03/24/2019 23:17	WG1254708
trans-1,3-Dichloropropene	ND		1.00	1	03/24/2019 23:17	WG1254708
Ethylbenzene	ND		1.00	1	03/24/2019 23:17	WG1254708
2-Hexanone	ND		10.0	1	03/24/2019 23:17	WG1254708
Isopropylbenzene	ND		1.00	1	03/24/2019 23:17	WG1254708
2-Butanone (MEK)	ND		10.0	1	03/24/2019 23:17	WG1254708
Methyl Acetate	ND		20.0	1	03/24/2019 23:17	WG1254708
Methyl Cyclohexane	ND		1.00	1	03/24/2019 23:17	WG1254708
Methylene Chloride	ND		5.00	1	03/24/2019 23:17	WG1254708
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/24/2019 23:17	WG1254708
Methyl tert-butyl ether	ND		1.00	1	03/24/2019 23:17	WG1254708
Naphthalene	ND		5.00	1	03/24/2019 23:17	WG1254708
Styrene	ND		1.00	1	03/24/2019 23:17	WG1254708
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/24/2019 23:17	WG1254708
Tetrachloroethene	ND		1.00	1	03/24/2019 23:17	WG1254708
Toluene	ND		1.00	1	03/24/2019 23:17	WG1254708
1,2,3-Trichlorobenzene	ND		1.00	1	03/24/2019 23:17	WG1254708
1,2,4-Trichlorobenzene	ND		1.00	1	03/24/2019 23:17	WG1254708
1,1,1-Trichloroethane	ND		1.00	1	03/24/2019 23:17	WG1254708
1,1,2-Trichloroethane	ND		1.00	1	03/24/2019 23:17	WG1254708
Trichloroethene	9.69		1.00	1	03/24/2019 23:17	WG1254708
Trichlorofluoromethane	ND		5.00	1	03/24/2019 23:17	WG1254708
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	03/24/2019 23:17	WG1254708
Vinyl chloride	ND		1.00	1	03/24/2019 23:17	WG1254708
o-Xylene	ND		1.00	1	03/24/2019 23:17	WG1254708
m&p-Xylenes	ND		2.00	1	03/24/2019 23:17	WG1254708
n-Butylbenzene	ND		1.00	1	03/24/2019 23:17	WG1254708
sec-Butylbenzene	ND		1.00	1	03/24/2019 23:17	WG1254708
tert-Butylbenzene	ND		1.00	1	03/24/2019 23:17	WG1254708
p-Isopropyltoluene	ND		1.00	1	03/24/2019 23:17	WG1254708

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/15/19 13:50

L1080247

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	03/24/2019 23:17	WG1254708
1,2,4-Trimethylbenzene	ND		1.00	1	03/24/2019 23:17	WG1254708
1,3,5-Trimethylbenzene	ND		1.00	1	03/24/2019 23:17	WG1254708
(S) Toluene-d8	106		80.0-120		03/24/2019 23:17	WG1254708
(S) a,a,a-Trifluorotoluene	104		80.0-120		03/24/2019 23:17	WG1254708
(S) 4-Bromofluorobenzene	104		77.0-126		03/24/2019 23:17	WG1254708
(S) 1,2-Dichloroethane-d4	104		70.0-130		03/24/2019 23:17	WG1254708

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	03/24/2019 23:37	WG1254708
Benzene	ND		1.00	1	03/24/2019 23:37	WG1254708
Bromochloromethane	ND		1.00	1	03/24/2019 23:37	WG1254708
Bromodichloromethane	ND		1.00	1	03/24/2019 23:37	WG1254708
Bromoform	ND		1.00	1	03/24/2019 23:37	WG1254708
Bromomethane	ND		5.00	1	03/24/2019 23:37	WG1254708
Carbon disulfide	ND		1.00	1	03/24/2019 23:37	WG1254708
Carbon tetrachloride	ND		1.00	1	03/24/2019 23:37	WG1254708
Chlorobenzene	ND		1.00	1	03/24/2019 23:37	WG1254708
Chlorodibromomethane	ND		1.00	1	03/24/2019 23:37	WG1254708
Chloroethane	ND		5.00	1	03/24/2019 23:37	WG1254708
Chloroform	ND		5.00	1	03/24/2019 23:37	WG1254708
Chloromethane	ND		2.50	1	03/24/2019 23:37	WG1254708
Cyclohexane	ND		1.00	1	03/24/2019 23:37	WG1254708
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/24/2019 23:37	WG1254708
1,2-Dibromoethane	ND		1.00	1	03/24/2019 23:37	WG1254708
1,2-Dichlorobenzene	ND		1.00	1	03/24/2019 23:37	WG1254708
1,3-Dichlorobenzene	ND		1.00	1	03/24/2019 23:37	WG1254708
1,4-Dichlorobenzene	ND		1.00	1	03/24/2019 23:37	WG1254708
Dichlorodifluoromethane	ND		5.00	1	03/24/2019 23:37	WG1254708
1,1-Dichloroethane	ND		1.00	1	03/24/2019 23:37	WG1254708
1,2-Dichloroethane	ND		1.00	1	03/24/2019 23:37	WG1254708
1,1-Dichloroethene	ND		1.00	1	03/24/2019 23:37	WG1254708
cis-1,2-Dichloroethene	ND		1.00	1	03/24/2019 23:37	WG1254708
trans-1,2-Dichloroethene	ND		1.00	1	03/24/2019 23:37	WG1254708
1,2-Dichloropropane	ND		1.00	1	03/24/2019 23:37	WG1254708
cis-1,3-Dichloropropene	ND		1.00	1	03/24/2019 23:37	WG1254708
trans-1,3-Dichloropropene	ND		1.00	1	03/24/2019 23:37	WG1254708
Ethylbenzene	ND		1.00	1	03/24/2019 23:37	WG1254708
2-Hexanone	ND		10.0	1	03/24/2019 23:37	WG1254708
Isopropylbenzene	ND		1.00	1	03/24/2019 23:37	WG1254708
2-Butanone (MEK)	ND		10.0	1	03/24/2019 23:37	WG1254708
Methyl Acetate	ND		20.0	1	03/24/2019 23:37	WG1254708
Methyl Cyclohexane	ND		1.00	1	03/24/2019 23:37	WG1254708
Methylene Chloride	ND		5.00	1	03/24/2019 23:37	WG1254708
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/24/2019 23:37	WG1254708
Methyl tert-butyl ether	ND		1.00	1	03/24/2019 23:37	WG1254708
Naphthalene	ND		5.00	1	03/24/2019 23:37	WG1254708
Styrene	ND		1.00	1	03/24/2019 23:37	WG1254708
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/24/2019 23:37	WG1254708
Tetrachloroethene	1.52		1.00	1	03/24/2019 23:37	WG1254708
Toluene	ND		1.00	1	03/24/2019 23:37	WG1254708
1,2,3-Trichlorobenzene	ND		1.00	1	03/24/2019 23:37	WG1254708
1,2,4-Trichlorobenzene	ND		1.00	1	03/24/2019 23:37	WG1254708
1,1,1-Trichloroethane	ND		1.00	1	03/24/2019 23:37	WG1254708
1,1,2-Trichloroethane	ND		1.00	1	03/24/2019 23:37	WG1254708
Trichloroethene	5.00		1.00	1	03/24/2019 23:37	WG1254708
Trichlorofluoromethane	ND		5.00	1	03/24/2019 23:37	WG1254708
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	03/24/2019 23:37	WG1254708
Vinyl chloride	ND		1.00	1	03/24/2019 23:37	WG1254708
o-Xylene	ND		1.00	1	03/24/2019 23:37	WG1254708
m&p-Xylenes	ND		2.00	1	03/24/2019 23:37	WG1254708
n-Butylbenzene	ND		1.00	1	03/24/2019 23:37	WG1254708
sec-Butylbenzene	ND		1.00	1	03/24/2019 23:37	WG1254708
tert-Butylbenzene	ND		1.00	1	03/24/2019 23:37	WG1254708
p-Isopropyltoluene	ND		1.00	1	03/24/2019 23:37	WG1254708

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/15/19 14:10

L1080247

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	03/24/2019 23:37	WG1254708
1,2,4-Trimethylbenzene	ND		1.00	1	03/24/2019 23:37	WG1254708
1,3,5-Trimethylbenzene	ND		1.00	1	03/24/2019 23:37	WG1254708
(S) Toluene-d8	108		80.0-120		03/24/2019 23:37	WG1254708
(S) a,a,a-Trifluorotoluene	105		80.0-120		03/24/2019 23:37	WG1254708
(S) 4-Bromofluorobenzene	107		77.0-126		03/24/2019 23:37	WG1254708
(S) 1,2-Dichloroethane-d4	104		70.0-130		03/24/2019 23:37	WG1254708

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Collected date/time: 03/15/19 14:30

L1080247

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	03/24/2019 23:57	WG1254708
Benzene	ND		1.00	1	03/24/2019 23:57	WG1254708
Bromochloromethane	ND		1.00	1	03/24/2019 23:57	WG1254708
Bromodichloromethane	ND		1.00	1	03/24/2019 23:57	WG1254708
Bromoform	ND		1.00	1	03/24/2019 23:57	WG1254708
Bromomethane	ND		5.00	1	03/24/2019 23:57	WG1254708
Carbon disulfide	ND		1.00	1	03/24/2019 23:57	WG1254708
Carbon tetrachloride	ND		1.00	1	03/24/2019 23:57	WG1254708
Chlorobenzene	ND		1.00	1	03/24/2019 23:57	WG1254708
Chlorodibromomethane	ND		1.00	1	03/24/2019 23:57	WG1254708
Chloroethane	ND		5.00	1	03/24/2019 23:57	WG1254708
Chloroform	ND		5.00	1	03/24/2019 23:57	WG1254708
Chloromethane	ND		2.50	1	03/24/2019 23:57	WG1254708
Cyclohexane	ND		1.00	1	03/24/2019 23:57	WG1254708
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/24/2019 23:57	WG1254708
1,2-Dibromoethane	ND		1.00	1	03/24/2019 23:57	WG1254708
1,2-Dichlorobenzene	ND		1.00	1	03/24/2019 23:57	WG1254708
1,3-Dichlorobenzene	ND		1.00	1	03/24/2019 23:57	WG1254708
1,4-Dichlorobenzene	ND		1.00	1	03/24/2019 23:57	WG1254708
Dichlorodifluoromethane	ND		5.00	1	03/24/2019 23:57	WG1254708
1,1-Dichloroethane	ND		1.00	1	03/24/2019 23:57	WG1254708
1,2-Dichloroethane	ND		1.00	1	03/24/2019 23:57	WG1254708
1,1-Dichloroethene	ND		1.00	1	03/24/2019 23:57	WG1254708
cis-1,2-Dichloroethene	ND		1.00	1	03/24/2019 23:57	WG1254708
trans-1,2-Dichloroethene	ND		1.00	1	03/24/2019 23:57	WG1254708
1,2-Dichloropropane	ND		1.00	1	03/24/2019 23:57	WG1254708
cis-1,3-Dichloropropene	ND		1.00	1	03/24/2019 23:57	WG1254708
trans-1,3-Dichloropropene	ND		1.00	1	03/24/2019 23:57	WG1254708
Ethylbenzene	ND		1.00	1	03/24/2019 23:57	WG1254708
2-Hexanone	ND		10.0	1	03/24/2019 23:57	WG1254708
Isopropylbenzene	ND		1.00	1	03/24/2019 23:57	WG1254708
2-Butanone (MEK)	ND		10.0	1	03/24/2019 23:57	WG1254708
Methyl Acetate	ND		20.0	1	03/24/2019 23:57	WG1254708
Methyl Cyclohexane	ND		1.00	1	03/24/2019 23:57	WG1254708
Methylene Chloride	ND		5.00	1	03/24/2019 23:57	WG1254708
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/24/2019 23:57	WG1254708
Methyl tert-butyl ether	ND		1.00	1	03/24/2019 23:57	WG1254708
Naphthalene	ND		5.00	1	03/24/2019 23:57	WG1254708
Styrene	ND		1.00	1	03/24/2019 23:57	WG1254708
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/24/2019 23:57	WG1254708
Tetrachloroethene	ND		1.00	1	03/24/2019 23:57	WG1254708
Toluene	ND		1.00	1	03/24/2019 23:57	WG1254708
1,2,3-Trichlorobenzene	ND		1.00	1	03/24/2019 23:57	WG1254708
1,2,4-Trichlorobenzene	ND		1.00	1	03/24/2019 23:57	WG1254708
1,1,1-Trichloroethane	ND		1.00	1	03/24/2019 23:57	WG1254708
1,1,2-Trichloroethane	ND		1.00	1	03/24/2019 23:57	WG1254708
Trichloroethene	1.27		1.00	1	03/24/2019 23:57	WG1254708
Trichlorofluoromethane	ND		5.00	1	03/24/2019 23:57	WG1254708
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	03/24/2019 23:57	WG1254708
Vinyl chloride	ND		1.00	1	03/24/2019 23:57	WG1254708
o-Xylene	ND		1.00	1	03/24/2019 23:57	WG1254708
m&p-Xylenes	ND		2.00	1	03/24/2019 23:57	WG1254708
n-Butylbenzene	ND		1.00	1	03/24/2019 23:57	WG1254708
sec-Butylbenzene	ND		1.00	1	03/24/2019 23:57	WG1254708
tert-Butylbenzene	ND		1.00	1	03/24/2019 23:57	WG1254708
p-Isopropyltoluene	ND		1.00	1	03/24/2019 23:57	WG1254708

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/15/19 14:30

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	03/24/2019 23:57	WG1254708
1,2,4-Trimethylbenzene	ND		1.00	1	03/24/2019 23:57	WG1254708
1,3,5-Trimethylbenzene	ND		1.00	1	03/24/2019 23:57	WG1254708
(S) Toluene-d8	109		80.0-120		03/24/2019 23:57	WG1254708
(S) α,α,α-Trifluorotoluene	107		80.0-120		03/24/2019 23:57	WG1254708
(S) 4-Bromofluorobenzene	108		77.0-126		03/24/2019 23:57	WG1254708
(S) 1,2-Dichloroethane-d4	103		70.0-130		03/24/2019 23:57	WG1254708

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	ND		50.0	1	03/25/2019 00:18	WG1254708	¹ Cp
Benzene	ND		1.00	1	03/25/2019 00:18	WG1254708	² Tc
Bromochloromethane	ND		1.00	1	03/25/2019 00:18	WG1254708	³ Ss
Bromodichloromethane	ND		1.00	1	03/25/2019 00:18	WG1254708	⁴ Cn
Bromoform	ND		1.00	1	03/25/2019 00:18	WG1254708	⁵ Sr
Bromomethane	ND		5.00	1	03/25/2019 00:18	WG1254708	⁶ Qc
Carbon disulfide	ND		1.00	1	03/25/2019 00:18	WG1254708	⁷ Gl
Carbon tetrachloride	ND		1.00	1	03/25/2019 00:18	WG1254708	⁸ Al
Chlorobenzene	ND		1.00	1	03/25/2019 00:18	WG1254708	⁹ Sc
Chlorodibromomethane	ND		1.00	1	03/25/2019 00:18	WG1254708	
Chloroethane	ND		5.00	1	03/25/2019 00:18	WG1254708	
Chloroform	ND		5.00	1	03/25/2019 00:18	WG1254708	
Chloromethane	ND		2.50	1	03/25/2019 00:18	WG1254708	
Cyclohexane	ND		1.00	1	03/25/2019 00:18	WG1254708	
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/25/2019 00:18	WG1254708	
1,2-Dibromoethane	ND		1.00	1	03/25/2019 00:18	WG1254708	
1,2-Dichlorobenzene	ND		1.00	1	03/25/2019 00:18	WG1254708	
1,3-Dichlorobenzene	ND		1.00	1	03/25/2019 00:18	WG1254708	
1,4-Dichlorobenzene	ND		1.00	1	03/25/2019 00:18	WG1254708	
Dichlorodifluoromethane	ND		5.00	1	03/25/2019 00:18	WG1254708	
1,1-Dichloroethane	ND		1.00	1	03/25/2019 00:18	WG1254708	
1,2-Dichloroethane	ND		1.00	1	03/25/2019 00:18	WG1254708	
1,1-Dichloroethene	ND		1.00	1	03/25/2019 00:18	WG1254708	
cis-1,2-Dichloroethene	ND		1.00	1	03/25/2019 00:18	WG1254708	
trans-1,2-Dichloroethene	ND		1.00	1	03/25/2019 00:18	WG1254708	
1,2-Dichloropropane	ND		1.00	1	03/25/2019 00:18	WG1254708	
cis-1,3-Dichloropropene	ND		1.00	1	03/25/2019 00:18	WG1254708	
trans-1,3-Dichloropropene	ND		1.00	1	03/25/2019 00:18	WG1254708	
Ethylbenzene	ND		1.00	1	03/25/2019 00:18	WG1254708	
2-Hexanone	ND		10.0	1	03/25/2019 00:18	WG1254708	
Isopropylbenzene	ND		1.00	1	03/25/2019 00:18	WG1254708	
2-Butanone (MEK)	ND		10.0	1	03/25/2019 00:18	WG1254708	
Methyl Acetate	ND		20.0	1	03/25/2019 00:18	WG1254708	
Methyl Cyclohexane	ND		1.00	1	03/25/2019 00:18	WG1254708	
Methylene Chloride	ND		5.00	1	03/25/2019 00:18	WG1254708	
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/25/2019 00:18	WG1254708	
Methyl tert-butyl ether	ND		1.00	1	03/25/2019 00:18	WG1254708	
Naphthalene	ND		5.00	1	03/25/2019 00:18	WG1254708	
Styrene	ND		1.00	1	03/25/2019 00:18	WG1254708	
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/25/2019 00:18	WG1254708	
Tetrachloroethene	ND		1.00	1	03/25/2019 00:18	WG1254708	
Toluene	ND		1.00	1	03/25/2019 00:18	WG1254708	
1,2,3-Trichlorobenzene	ND		1.00	1	03/25/2019 00:18	WG1254708	
1,2,4-Trichlorobenzene	ND		1.00	1	03/25/2019 00:18	WG1254708	
1,1,1-Trichloroethane	ND		1.00	1	03/25/2019 00:18	WG1254708	
1,1,2-Trichloroethane	ND		1.00	1	03/25/2019 00:18	WG1254708	
Trichloroethene	10.9		1.00	1	03/25/2019 00:18	WG1254708	
Trichlorofluoromethane	ND		5.00	1	03/25/2019 00:18	WG1254708	
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	03/25/2019 00:18	WG1254708	
Vinyl chloride	ND		1.00	1	03/25/2019 00:18	WG1254708	
o-Xylene	ND		1.00	1	03/25/2019 00:18	WG1254708	
m&p-Xylenes	ND		2.00	1	03/25/2019 00:18	WG1254708	
n-Butylbenzene	ND		1.00	1	03/25/2019 00:18	WG1254708	
sec-Butylbenzene	ND		1.00	1	03/25/2019 00:18	WG1254708	
tert-Butylbenzene	ND		1.00	1	03/25/2019 00:18	WG1254708	
p-Isopropyltoluene	ND		1.00	1	03/25/2019 00:18	WG1254708	



Collected date/time: 03/15/19 00:00

L1080247

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

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
n-Propylbenzene	ND		1.00	1	03/25/2019 00:18	WG1254708
1,2,4-Trimethylbenzene	ND		1.00	1	03/25/2019 00:18	WG1254708
1,3,5-Trimethylbenzene	ND		1.00	1	03/25/2019 00:18	WG1254708
(S) Toluene-d8	109		80.0-120		03/25/2019 00:18	WG1254708
(S) a,a,a-Trifluorotoluene	104		80.0-120		03/25/2019 00:18	WG1254708
(S) 4-Bromofluorobenzene	104		77.0-126		03/25/2019 00:18	WG1254708
(S) 1,2-Dichloroethane-d4	96.9		70.0-130		03/25/2019 00:18	WG1254708

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Method Blank (MB)

(MB) R3394872-3 03/24/19 11:47

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Benzene	U		0.331	1.00
Bromochloromethane	U		0.520	1.00
Bromodichloromethane	U		0.380	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
n-Butylbenzene	U		0.361	1.00
Carbon disulfide	U		0.275	1.00
sec-Butylbenzene	U		0.365	1.00
tert-Butylbenzene	U		0.399	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Cyclohexane	U		0.390	1.00
Chloromethane	U		0.276	2.50
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,3-Dichlorobenzene	U		0.220	1.00
1,4-Dichlorobenzene	U		0.274	1.00
Dichlorodifluoromethane	U		0.551	5.00
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
Ethylbenzene	U		0.384	1.00
2-Hexanone	U		3.82	10.0
Methyl Acetate	U		4.30	20.0
Isopropylbenzene	U		0.326	1.00
Methyl Cyclohexane	U		0.380	1.00
p-Isopropyltoluene	U		0.350	1.00
2-Butanone (MEK)	U		3.93	10.0
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Method Blank (MB)

(MB) R3394872-3 03/24/19 11:47

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.349	1.00
Styrene	U		0.307	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.355	1.00
1,1,1-Trichloroethane	U		0.319	1.00
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,4-Trimethylbenzene	U		0.373	1.00
o-Xylene	U		0.341	1.00
1,3,5-Trimethylbenzene	U		0.387	1.00
m&p-Xylenes	U		0.719	2.00
Vinyl chloride	U		0.259	1.00
(S) a,a,a-Trifluorotoluene	106			80.0-120
(S) Toluene-d8	104			80.0-120
(S) 4-Bromofluorobenzene	106			77.0-126
(S) 1,2-Dichloroethane-d4	102			70.0-130

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3394872-1 03/24/19 10:46 • (LCSD) R3394872-2 03/24/19 11:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	25.0	28.3	29.2	113	117	76.0-122			2.87	20
Carbon disulfide	25.0	27.5	27.4	110	110	61.0-128			0.462	20
Acetone	125	130	125	104	99.7	19.0-160			4.55	27
Cyclohexane	25.0	26.8	26.4	107	106	71.0-124			1.30	20
Benzene	25.0	25.7	25.5	103	102	70.0-123			0.807	20
Bromodichloromethane	25.0	25.7	26.2	103	105	75.0-120			2.11	20
Bromoform	25.0	29.1	28.5	116	114	68.0-132			1.84	20
Bromomethane	25.0	27.1	27.9	108	111	10.0-160			2.96	25
n-Butylbenzene	25.0	26.7	27.7	107	111	73.0-125			3.53	20
sec-Butylbenzene	25.0	26.5	26.4	106	106	75.0-125			0.113	20

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

(LCS) R3394872-1 03/24/19 10:46 • (LCSD) R3394872-2 03/24/19 11:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
tert-Butylbenzene	25.0	26.2	26.1	105	104	76.0-124			0.281	20
Carbon tetrachloride	25.0	26.7	26.1	107	105	68.0-126			2.25	20
Chlorobenzene	25.0	27.1	26.7	109	107	80.0-121			1.76	20
Chlorodibromomethane	25.0	27.6	27.2	110	109	77.0-125			1.17	20
Chloroethane	25.0	26.6	27.3	106	109	47.0-150			2.70	20
Chloroform	25.0	26.9	26.1	108	105	73.0-120			2.84	20
Chloromethane	25.0	25.0	24.7	100	98.8	41.0-142			1.22	20
1,2-Dibromo-3-Chloropropane	25.0	25.9	26.4	104	106	58.0-134			1.85	20
1,2-Dibromoethane	25.0	27.8	27.8	111	111	80.0-122			0.111	20
1,2-Dichlorobenzene	25.0	26.3	26.3	105	105	79.0-121			0.0578	20
1,3-Dichlorobenzene	25.0	26.3	27.3	105	109	79.0-120			3.69	20
1,4-Dichlorobenzene	25.0	25.0	26.2	100	105	79.0-120			4.38	20
2-Hexanone	125	139	134	112	107	67.0-149			3.78	20
Dichlorodifluoromethane	25.0	31.0	31.3	124	125	51.0-149			0.908	20
1,1-Dichloroethane	25.0	26.2	26.9	105	108	70.0-126			2.49	20
1,2-Dichloroethane	25.0	25.4	25.8	102	103	70.0-128			1.76	20
1,1-Dichloroethene	25.0	27.7	28.4	111	114	71.0-124			2.32	20
cis-1,2-Dichloroethene	25.0	26.3	26.6	105	106	73.0-120			0.936	20
Methyl Acetate	125	140	137	112	110	57.0-148			1.77	20
trans-1,2-Dichloroethene	25.0	26.1	27.0	104	108	73.0-120			3.53	20
1,2-Dichloropropane	25.0	26.4	26.5	105	106	77.0-125			0.664	20
Methyl Cyclohexane	25.0	25.8	25.9	103	103	68.0-126			0.446	20
cis-1,3-Dichloropropene	25.0	26.1	25.9	104	104	80.0-123			0.533	20
trans-1,3-Dichloropropene	25.0	28.4	27.7	114	111	78.0-124			2.54	20
Ethylbenzene	25.0	26.4	26.3	106	105	79.0-123			0.367	20
Isopropylbenzene	25.0	26.5	26.5	106	106	76.0-127			0.0887	20
p-Isopropyltoluene	25.0	27.4	27.7	110	111	76.0-125			1.27	20
2-Butanone (MEK)	125	135	129	108	103	44.0-160			4.41	20
Methylene Chloride	25.0	24.8	25.5	99.4	102	67.0-120			2.72	20
4-Methyl-2-pentanone (MIBK)	125	136	129	109	103	68.0-142			5.34	20
Methyl tert-butyl ether	25.0	26.0	26.4	104	106	68.0-125			1.81	20
Naphthalene	25.0	27.6	27.7	110	111	54.0-135			0.393	20
n-Propylbenzene	25.0	25.7	25.7	103	103	77.0-124			0.154	20
Styrene	25.0	27.8	28.0	111	112	73.0-130			0.525	20
1,1,2,2-Tetrachloroethane	25.0	26.9	26.2	108	105	65.0-130			2.80	20
o-Xylene	25.0	27.1	26.4	108	106	80.0-122			2.35	20
m&p-Xylenes	50.0	53.5	53.6	107	107	80.0-122			0.179	20
Tetrachloroethene	25.0	27.3	27.3	109	109	72.0-132			0.0264	20
Toluene	25.0	25.3	25.6	101	103	79.0-120			1.35	20
1,1,2-Trichlorotrifluoroethane	25.0	28.0	27.9	112	112	69.0-132			0.503	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3394872-1 03/24/19 10:46 • (LCSD) R3394872-2 03/24/19 11:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,2,3-Trichlorobenzene	25.0	29.4	28.2	118	113	50.0-138			4.24	20
1,2,4-Trichlorobenzene	25.0	28.7	28.0	115	112	57.0-137			2.36	20
1,1,1-Trichloroethane	25.0	27.7	27.2	111	109	73.0-124			1.72	20
1,1,2-Trichloroethane	25.0	26.7	26.3	107	105	80.0-120			1.84	20
Trichloroethene	25.0	27.4	27.6	110	110	78.0-124			0.574	20
Trichlorofluoromethane	25.0	28.0	27.9	112	111	59.0-147			0.572	20
1,2,4-Trimethylbenzene	25.0	26.9	27.0	108	108	76.0-121			0.337	20
1,3,5-Trimethylbenzene	25.0	24.9	25.4	99.4	102	76.0-122			2.10	20
Vinyl chloride	25.0	28.5	28.9	114	116	67.0-131			1.36	20
(S) a,a,a-Trifluorotoluene				106	107	80.0-120				
(S) Toluene-d8				104	103	80.0-120				
(S) 4-Bromofluorobenzene				106	105	77.0-126				
(S) 1,2-Dichloroethane-d4				111	112	70.0-130				

L1080247-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1080247-03 03/24/19 17:52 • (MS) R3394872-4 03/24/19 19:13 • (MSD) R3394872-5 03/24/19 19:34

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Bromochloromethane	25.0	ND	24.8	25.4	99.1	102	1	38.0-142			2.67	26
Carbon disulfide	25.0	ND	25.6	26.4	102	106	1	10.0-156			2.96	28
Acetone	125	ND	118	115	94.1	91.8	1	10.0-160			2.49	35
Cyclohexane	25.0	ND	25.7	27.2	103	109	1	19.0-160			5.38	23
Benzene	25.0	ND	25.8	26.7	102	105	1	17.0-158			3.42	27
Bromodichloromethane	25.0	ND	24.1	24.7	96.5	98.9	1	31.0-150			2.43	27
Bromoform	25.0	ND	18.5	17.6	74.0	70.2	1	29.0-150			5.27	29
Bromomethane	25.0	ND	26.4	30.3	106	121	1	10.0-160			13.7	38
n-Butylbenzene	25.0	ND	25.5	26.0	102	104	1	31.0-150			1.91	30
sec-Butylbenzene	25.0	ND	24.9	26.3	99.8	105	1	33.0-155			5.14	29
tert-Butylbenzene	25.0	ND	25.0	24.7	100	99.0	1	34.0-153			0.991	28
Carbon tetrachloride	25.0	ND	27.1	27.4	108	110	1	23.0-159			1.22	28
Chlorobenzene	25.0	ND	26.3	27.5	105	110	1	33.0-152			4.57	27
Chlorodibromomethane	25.0	ND	22.4	22.1	89.7	88.2	1	37.0-149			1.68	27
Chloroethane	25.0	ND	27.0	28.6	108	114	1	10.0-160			5.61	30
Chloroform	25.0	ND	25.8	26.8	103	107	1	29.0-154			3.77	28
Chloromethane	25.0	ND	23.8	24.9	95.2	99.6	1	10.0-160			4.48	29
1,2-Dibromo-3-Chloropropane	25.0	ND	21.7	21.8	86.9	87.3	1	22.0-151			0.388	34
1,2-Dibromoethane	25.0	ND	26.2	27.2	105	109	1	34.0-147			3.69	27
1,2-Dichlorobenzene	25.0	ND	24.7	25.2	98.9	101	1	34.0-149			1.78	28

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1080247-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1080247-03 03/24/19 17:52 • (MS) R3394872-4 03/24/19 19:13 • (MSD) R3394872-5 03/24/19 19:34

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,3-Dichlorobenzene	25.0	ND	25.1	26.0	100	104	1	36.0-146			3.70	27
1,4-Dichlorobenzene	25.0	ND	24.4	25.5	97.8	102	1	35.0-142			4.04	27
2-Hexanone	125	ND	124	126	99.5	101	1	21.0-160			1.48	29
Dichlorodifluoromethane	25.0	ND	30.2	32.0	121	128	1	10.0-160			5.90	29
1,1-Dichloroethane	25.0	ND	27.7	28.5	111	114	1	25.0-158			2.77	27
1,2-Dichloroethane	25.0	ND	24.6	26.0	98.5	104	1	29.0-151			5.35	27
1,1-Dichloroethene	25.0	1.34	29.8	31.6	114	121	1	11.0-160			5.72	29
Methyl Acetate	125	ND	127	127	101	101	1	18.0-151			0.245	30
cis-1,2-Dichloroethene	25.0	1310	1260	1300	0.000	0.000	1	10.0-160	EV	EV	2.48	27
Methyl Cyclohexane	25.0	ND	25.3	27.0	101	108	1	11.0-160			6.63	24
trans-1,2-Dichloroethene	25.0	4.88	30.9	32.5	104	111	1	17.0-153			5.18	27
1,2-Dichloropropane	25.0	ND	26.5	26.9	106	108	1	30.0-156			1.74	27
cis-1,3-Dichloropropene	25.0	ND	23.8	24.7	95.0	98.8	1	34.0-149			3.86	28
trans-1,3-Dichloropropene	25.0	ND	24.7	25.5	98.7	102	1	32.0-149			3.14	28
Ethylbenzene	25.0	ND	26.0	27.2	104	109	1	30.0-155			4.33	27
Isopropylbenzene	25.0	ND	26.5	27.3	106	109	1	28.0-157			2.95	27
p-Isopropyltoluene	25.0	ND	25.3	26.4	101	106	1	30.0-154			4.26	29
2-Butanone (MEK)	125	ND	122	123	97.6	98.3	1	10.0-160			0.660	32
Methylene Chloride	25.0	ND	25.2	26.3	101	105	1	23.0-144			4.07	28
4-Methyl-2-pentanone (MIBK)	125	ND	122	124	97.5	99.2	1	29.0-160			1.75	29
Methyl tert-butyl ether	25.0	ND	25.3	26.4	101	106	1	28.0-150			4.26	29
Naphthalene	25.0	ND	24.9	25.4	99.6	101	1	12.0-156			1.83	35
n-Propylbenzene	25.0	ND	24.5	25.5	98.2	102	1	31.0-154			3.91	28
o-Xylene	25.0	ND	25.9	27.1	104	108	1	45.0-144			4.25	26
Styrene	25.0	ND	26.2	27.1	105	108	1	33.0-155			3.22	28
m&p-Xylenes	50.0	ND	52.8	54.9	106	110	1	43.0-146			3.84	26
1,1,2,2-Tetrachloroethane	25.0	ND	24.8	24.6	99.0	98.2	1	33.0-150			0.827	28
Tetrachloroethene	25.0	ND	27.2	28.3	109	113	1	10.0-160			4.16	27
Toluene	25.0	ND	25.1	25.9	100	104	1	26.0-154			3.08	28
1,1,2-Trichlorotrifluoroethane	25.0	ND	27.6	29.9	111	120	1	23.0-160			7.91	30
1,2,3-Trichlorobenzene	25.0	ND	24.8	25.2	99.0	101	1	17.0-150			1.88	36
1,2,4-Trichlorobenzene	25.0	ND	25.6	27.3	103	109	1	24.0-150			6.28	33
1,1,1-Trichloroethane	25.0	ND	27.3	28.3	109	113	1	23.0-160			3.49	28
1,1,2-Trichloroethane	25.0	ND	25.3	26.8	101	107	1	35.0-147			5.79	27
Trichloroethene	25.0	74.4	97.3	103	91.4	112	1	10.0-160			5.27	25
Trichlorofluoromethane	25.0	ND	28.6	30.1	114	120	1	17.0-160			5.16	31
1,2,4-Trimethylbenzene	25.0	ND	24.9	25.9	99.5	104	1	26.0-154			4.25	27
1,3,5-Trimethylbenzene	25.0	ND	23.7	24.4	94.7	97.5	1	28.0-153			2.87	27
Vinyl chloride	25.0	29.0	55.6	59.2	106	121	1	10.0-160			6.27	27
(S) a,a,a-Trifluorotoluene					104	107		80.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L1080247-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1080247-03 03/24/19 17:52 • (MS) R3394872-4 03/24/19 19:13 • (MSD) R3394872-5 03/24/19 19:34

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
(S) Toluene-d8					101	104		80.0-120				
(S) 4-Bromofluorobenzene					104	108		77.0-126				
(S) 1,2-Dichloroethane-d4					110	109		70.0-130				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3395126-2 03/24/19 21:15

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Benzene	U		0.331	1.00
Bromochloromethane	U		0.520	1.00
Bromodichloromethane	U		0.380	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
n-Butylbenzene	U		0.361	1.00
Carbon disulfide	U		0.275	1.00
sec-Butylbenzene	U		0.365	1.00
tert-Butylbenzene	U		0.399	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Cyclohexane	U		0.390	1.00
Chloromethane	U		0.276	2.50
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,3-Dichlorobenzene	U		0.220	1.00
1,4-Dichlorobenzene	U		0.274	1.00
Dichlorodifluoromethane	U		0.551	5.00
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
Ethylbenzene	U		0.384	1.00
2-Hexanone	U		3.82	10.0
Methyl Acetate	U		4.30	20.0
Isopropylbenzene	U		0.326	1.00
Methyl Cyclohexane	U		0.380	1.00
p-Isopropyltoluene	U		0.350	1.00
2-Butanone (MEK)	U		3.93	10.0
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3395126-2 03/24/19 21:15

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.349	1.00
Styrene	U		0.307	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.355	1.00
1,1,1-Trichloroethane	U		0.319	1.00
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,4-Trimethylbenzene	U		0.373	1.00
o-Xylene	U		0.341	1.00
1,3,5-Trimethylbenzene	U		0.387	1.00
m&p-Xylenes	U		0.719	2.00
Vinyl chloride	U		0.259	1.00
(S) Toluene-d8	106			80.0-120
(S) a,a,a-Trifluorotoluene	105			80.0-120
(S) 4-Bromofluorobenzene	102			77.0-126
(S) 1,2-Dichloroethane-d4	99.5			70.0-130

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3395126-1 03/24/19 20:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromochloromethane	25.0	27.9	112	76.0-122	
Carbon disulfide	25.0	26.8	107	61.0-128	
Acetone	125	130	104	19.0-160	
Cyclohexane	25.0	26.5	106	71.0-124	
Benzene	25.0	25.6	102	70.0-123	
Bromodichloromethane	25.0	25.6	102	75.0-120	
Bromoform	25.0	26.3	105	68.0-132	
Bromomethane	25.0	27.3	109	10.0-160	
n-Butylbenzene	25.0	24.6	98.3	73.0-125	
sec-Butylbenzene	25.0	25.3	101	75.0-125	

Laboratory Control Sample (LCS)

(LCS) R3395126-1 03/24/19 20:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
tert-Butylbenzene	25.0	25.5	102	76.0-124	
Carbon tetrachloride	25.0	26.6	106	68.0-126	
Chlorobenzene	25.0	26.3	105	80.0-121	
Chlorodibromomethane	25.0	26.5	106	77.0-125	
Chloroethane	25.0	26.3	105	47.0-150	
Chloroform	25.0	26.1	104	73.0-120	
Chloromethane	25.0	23.2	92.8	41.0-142	
1,2-Dibromo-3-Chloropropane	25.0	23.7	94.7	58.0-134	
1,2-Dibromoethane	25.0	26.8	107	80.0-122	
1,2-Dichlorobenzene	25.0	24.7	98.9	79.0-121	
1,3-Dichlorobenzene	25.0	25.6	103	79.0-120	
1,4-Dichlorobenzene	25.0	24.2	96.9	79.0-120	
2-Hexanone	125	131	105	67.0-149	
Dichlorodifluoromethane	25.0	31.7	127	51.0-149	
1,1-Dichloroethane	25.0	26.5	106	70.0-126	
1,2-Dichloroethane	25.0	25.2	101	70.0-128	
1,1-Dichloroethene	25.0	26.3	105	71.0-124	
cis-1,2-Dichloroethene	25.0	27.1	109	73.0-120	
Methyl Acetate	125	131	105	57.0-148	
trans-1,2-Dichloroethene	25.0	25.9	104	73.0-120	
1,2-Dichloropropane	25.0	26.7	107	77.0-125	
Methyl Cyclohexane	25.0	25.3	101	68.0-126	
cis-1,3-Dichloropropene	25.0	24.6	98.5	80.0-123	
trans-1,3-Dichloropropene	25.0	26.1	104	78.0-124	
Ethylbenzene	25.0	26.1	104	79.0-123	
Isopropylbenzene	25.0	26.2	105	76.0-127	
p-Isopropyltoluene	25.0	25.4	102	76.0-125	
2-Butanone (MEK)	125	130	104	44.0-160	
Methylene Chloride	25.0	24.5	98.0	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	127	102	68.0-142	
Methyl tert-butyl ether	25.0	25.8	103	68.0-125	
Naphthalene	25.0	26.3	105	54.0-135	
n-Propylbenzene	25.0	24.4	97.4	77.0-124	
Styrene	25.0	26.8	107	73.0-130	
1,1,2,2-Tetrachloroethane	25.0	24.3	97.2	65.0-130	
o-Xylene	25.0	26.1	105	80.0-122	
m&p-Xylenes	50.0	52.9	106	80.0-122	
Tetrachloroethene	25.0	26.6	106	72.0-132	
Toluene	25.0	25.2	101	79.0-120	
1,1,2-Trichlorotrifluoroethane	25.0	27.6	110	69.0-132	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Laboratory Control Sample (LCS)

(LCS) R3395126-1 03/24/19 20:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
1,2,3-Trichlorobenzene	25.0	26.6	106	50.0-138	
1,2,4-Trichlorobenzene	25.0	26.1	104	57.0-137	
1,1,1-Trichloroethane	25.0	26.5	106	73.0-124	
1,1,2-Trichloroethane	25.0	25.9	104	80.0-120	
Trichloroethene	25.0	28.2	113	78.0-124	
Trichlorofluoromethane	25.0	27.0	108	59.0-147	
1,2,4-Trimethylbenzene	25.0	26.3	105	76.0-121	
1,3,5-Trimethylbenzene	25.0	24.3	97.1	76.0-122	
Vinyl chloride	25.0	28.2	113	67.0-131	
(S) Toluene-d8			103	80.0-120	
(S) a,a,a-Trifluorotoluene			104	80.0-120	
(S) 4-Bromofluorobenzene			106	77.0-126	
(S) 1,2-Dichloroethane-d4			111	70.0-130	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3395129-2 03/25/19 21:25

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.260	1.00
1,2,4-Trimethylbenzene	U		0.373	1.00
(S) Toluene-d8	99.3			80.0-120
(S) a,a,a-Trifluorotoluene	94.0			80.0-120
(S) 4-Bromofluorobenzene	95.1			77.0-126
(S) 1,2-Dichloroethane-d4	118			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3395129-1 03/25/19 20:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
cis-1,2-Dichloroethene	25.0	21.0	84.1	73.0-120	
1,2,4-Trimethylbenzene	25.0	23.5	94.1	76.0-121	
(S) Toluene-d8			98.7	80.0-120	
(S) a,a,a-Trifluorotoluene			91.1	80.0-120	
(S) 4-Bromofluorobenzene			97.2	77.0-126	
(S) 1,2-Dichloroethane-d4			123	70.0-130	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Guide to Reading and Understanding Your Laboratory Report

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

Abbreviations and Definitions

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

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
V	The sample concentration is too high to evaluate accurate spike recoveries.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



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

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

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

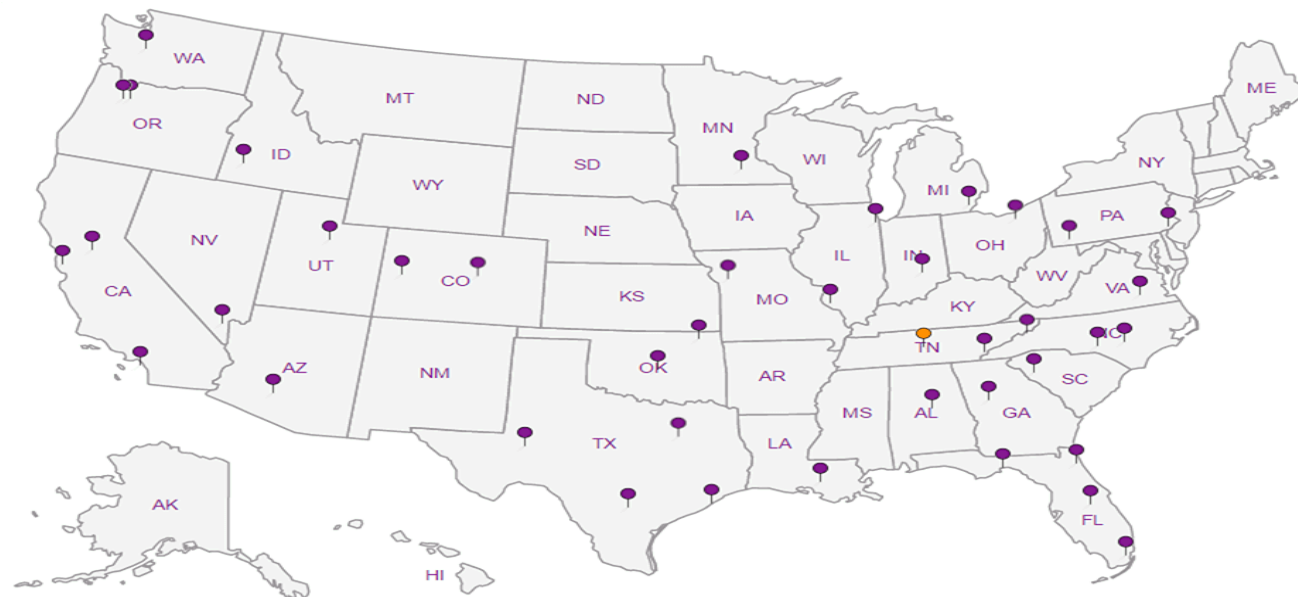
Third Party Federal Accreditations

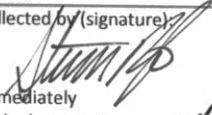
A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.

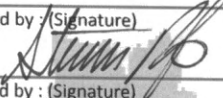
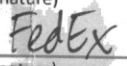


Company Name/Address: LaBella Associates, D.P.C. 300 State Street, Suite 201 Rochester, New York 14614				Billing Information: Attn: AP@labellapc.com				Analysis / Container / Preservative										Chain of Custody Page 1 of 1  L.A.B S.C.I.E.N.C.E.S YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859  L# 1080247 G006			
Report to: srife; dengert				Email To: srife; dengert				Analysis / Container / Preservative (10 columns)													
Project Description: Michelsen PDB - March 2019				City/State Collected: Rochester, NY																	
Phone: (585) 454-6110 Fax: NA		Client Project # 2161282		Lab Project #																	
Collected by (print): S. Rife		Site/Facility ID #		P.O. #																	
Collected by (signature):  Immediately Packed on Ice N ___ Y ☒		Rush? (Lab MUST Be Notified) ___ Same Day200% ___ Next Day100% ___ Two Day50% ___ Three Day25%		Date Results Needed Email? ___ No ☒ Yes FAX? ☒ No ___ Yes																	
No. of Cntrs																					
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time	TCL + CP-51 List VOCs (8260) (10 columns)														
BW-02		Grab	GW	14-16'	3/15/2019	1240															
BW-03		Grab	GW	14-16'	3/15/2019	1305															
BW-04/MS/MSD		Grab	GW	14-16'	3/15/2019	1320															
GPMW-34		Grab	GW	4-6'	3/18/2019	1430															
GPMW-26		Grab	GW	4-6'	3/15/2019	1220															
IW-2		Grab	GW	14-16'	3/15/2019	1335															
IW-3		Grab	GW	14-16'	3/15/2019	1350															
IW-4		Grab	GW	14-16'	3/15/2019	1410															
IW-5		Grab	GW	14-16'	3/15/2019	1430															
DUPE		Grab	GW	-	3/15/2019	-															

RAD SCREEN: <0.5 MPV

01
02
03
04
05
06
07
08
09
10

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____
 Remarks: ****NYS EQUIS EDD; ASP CAT B RPT**** 4510 166 91399

Relinquished by: (Signature) 		Date: 03/18/2019	Time: 1900	Received by: (Signature) 		Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐ _____		Hold #	
Relinquished by: (Signature)		Date:	Time:	Received by: (Signature)		Temp: °C Bottles Received: 1.6-0.3 = 1.3 PA 23 VB		Condition: (lab use only)	
Relinquished by: (Signature)		Date:	Time:	Received for lab by: (Signature) 		Date: 3/19/19 Time: 0830		COC Seal Intact: ☒ Y ___ N ___ NA pH Checked: NCF:	

Pace Analytical National Center for Testing & Innovation Cooler Receipt Form

Client: <u>LABRNY</u>		SDG#: <u>1080247</u>		
Cooler Received/Opened On: <u>3/17</u> / 19		Temperature: <u>1.3</u>		
Received By: Eric Struck				
Signature: <u>[Signature]</u>				
Receipt Check List		NP	Yes	No
COC Seal Present / Intact?			☒	
COC Signed / Accurate?			☒	
Bottles arrive intact?			☒	
Correct bottles used?			☒	
Sufficient volume sent?			☒	
If Applicable				
VOA Zero headspace?				
Preservation Correct / Checked?				

Appendix B

Data Usability Summary Reports

Engert, Dave

From: Engert, Dave
Sent: Friday, June 8, 2018 10:27 AM
To: 'Caffoe, Todd (DEC)'
Subject: RE: Michelsen PDB May 2018

Thanks Todd. We will make note of the issue with the lab in the next PRR.

Have a great weekend.

Dave

David Engert, CHMM

LaBella Associates | Remediation & Construction Manager

585-295-6630 direct
585-737-3293 mobile

From: Caffoe, Todd (DEC) [mailto:todd.caffoe@dec.ny.gov]
Sent: Friday, June 8, 2018 10:25 AM
To: Engert, Dave <dengert@LaBellaPC.com>
Subject: RE: Michelsen PDB May 2018

Dave,
You do not need to recollect the samples for this round. Future rounds will require DUSRs. Please see the attached. Let me know if you have any questions.

-Todd

Todd M. Caffoe, P.E.

Division of Environmental Remediation

New York State Department of Environmental Conservation

6274 East Avon-Lima Road, Avon, NY 14414

P: (585) 226-5350 | Todd.Caffoe@dec.ny.gov

www.dec.ny.gov |  | 

From: Engert, Dave [mailto:dengert@LaBellaPC.com]
Sent: Friday, June 08, 2018 10:12 AM
To: Caffoe, Todd (DEC) <todd.caffoe@dec.ny.gov>
Subject: FW: Michelsen PDB May 2018

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Todd,

I hope all is well with you. Please see below from ESC Lab Sciences. We collected a round of groundwater samples from the Michelsen site last month and the lab did not process them by EPA Method 8260C so we will not be able to have the data validated. Do we need to recollect the samples? I talked to Dan Noll and he indicated that on a couple of his sites that are in the long term monitoring phase the Department was not requiring DUSRs on periodic samples unless a decision was being made to remove a well from the sampling schedule, close a well out, etc.

Let me know, the lab has offered to analyze a new round of samples free of charge but we would still have labor costs to collect them.

Thanks,
Dave

David Engert, CHMM

LaBella Associates | Remediation & Construction Manager

585-295-6630 direct
585-737-3293 mobile

From: Alan Harvill [<mailto:AHarvill@esclabsciences.com>]

Sent: Monday, June 4, 2018 9:57 AM

To: Engert, Dave <dengert@LaBellaPC.com>

Subject: Michelsen PDB May 2018

Dave,

Thank you for taking time to speak to me this morning. As we discussed, these samples were inadvertently processed under method 8260B instead of 8260C as required by NY. Unfortunately, the existing data does not meet 8260C criteria. At the time this situation was discovered the lab had utilized all of the VOA vials for some samples, leaving no pristine vials with zero headspace. The 14 day hold has now expired. Please advise as to how you wish for us to proceed in reporting these samples. I apologize for the inconvenience. Please feel free to contact me if I can assist further.

Sincerely,

✉ Alan Harvill
Project Manager

ESC Lab Sciences-a subsidiary of Pace Analytical

12065 Lebanon Road | Mt. Juliet, TN 37122

615.773.9787 | Cell 615.924.6783

aharvill@esclabsciences.com | www.esclabsciences.com

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you have received this in error, please contact the sender immediately via reply email and immediately delete the message and any attachments without copying or disclosing the contents. Thank you.

DATA USABILITY SUMMARY REPORT

for

LABELLA ASSOCIATES, P.C.

300 State Street

Rochester, NY 14614

MICHELSON BCP SITE

Project 2161282

Aqueous Samples

SDG: L1045571

Sampled November 2018

VOLATILE ORGANICS

BW-02	(L1045571-01)	BW-03	(L1045571-02)
BW-04	(L1045571-03)	IW-2	(L1045571-04)
IW-3	(L1045571-05)	IW-4	(L1045571-06)
IW-5	(L1045571-07)	DUPE	(L1045571-08)
GPMW-26	(L1045571-09)		

DATA ASSESSMENT

An ASP Category B data package containing analytical results for nine aqueous samples was received from Labella Associates, P.C. on 18Apr19. The deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Michelson BCP Site, were identified by Chain of Custody documents and traceable through the work of ESC Lab Sciences, the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8260, addressed determinations of volatile organics. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOP NO. HW-33, Rev. #3, March 2013, Low/Medium Volatile Data Validation) was used as a technical reference.

The trichloroethene results from IW-4, IW-5, DUPE and GPMW-26 have been qualified as estimations due to poor calibration performance.

The results from BW-02 have been qualified as estimations due to low spiked sample recoveries.

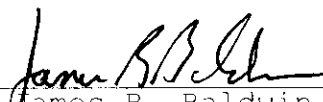
The positive results from DUPE and GPMW-26 have been qualified as estimations because confirming mass spectra were not included in the raw data.

CORRECTNESS AND USABILITY

The data package supporting the results from this group of samples was found to be complete and well organized. Reported data is felt to be completely usable in its present form. Data presenting a usable estimation of the conditions being measured has been flagged "J". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed strict QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly, DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature:


James B. Baldwin
DATAVAL Inc.

Date: 23 Apr 19

SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved or are not analyzed within established holding times may no longer be considered representative. Holding times are calculated from the time of sample collection. Samples must remain chilled to $4 \pm 2^\circ\text{C}$ between the time of collection and the time of analysis. Acid preserved VOC samples must be analyzed within 14 days, unpreserved VOC samples within 7 days. The holding time for VOC soils is 14 days. Aqueous semivolatile organics, pesticide and PCB samples must be extracted within seven days of collection. Soils must be extracted within 14 days. The extracts must then be analyzed within forty days of extraction. The holding times for cyanide and mercury samples are 14 and 28 days, respectively. Metals samples must be analyzed within six months.

This delivery group contained nine aqueous samples that were collected from the Michelson BCP Site on 09Nov18. The entire group of samples was shipped to the laboratory, via FedEx, on 15Nov18 and was received the following morning. At the time of receipt, the cooler of samples was found to be intact and properly chilled. A cooler temperature of 4.8°C was recorded in the laboratory. Although proper sample preservation was not documented in the field custody record, checks made at the time of analysis verified that each sample volume was properly stabilized at a $\text{pH} < 2$. Although not documented, it is assumed that the samples were maintained in secure, cold storage between the time of collection and the time of shipment to the laboratory.

VOLATILE ORGANICS

This group of acid preserved samples was analyzed for volatile organics between 19Nov18 and 20Nov18. The SW-846 holding time requirements were satisfied.

Blanks

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Trip blanks monitor shipment and storage activities. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank.

Three method blanks were analyzed with this group of samples. Each of these blanks demonstrated acceptable chromatography and was free of targeted analyte contamination.

MS Tuning

Mass spectrometer tuning and performance criteria are established to ensure sufficient mass resolution and sensitivity to accurately detect and identify targeted analytes. Verification is accomplished using a certified standard.

An Instrument Performance Check Standard of BFB was analyzed prior to each analytical sequence that included samples from this program. An Instrument Performance Check Form is present for each BFB evaluation. The BFB tunes associated with this group of samples satisfied the program acceptance criteria.

Calibrations

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration check standards verify instrument stability.

Initial instrument calibrations for VOC were performed on 10Oct18, 01Nov18 and 12Nov18. Standards of 0.25, 0.5, 1.0, 2.0, 5.0, 25, 100 and 200 µg/l were included. The 01Nov18 and 12Nov18 calibrations also included a 75 µg/l standard. With the exception of trichloroethene on 10Oct18 and methyl cyclohexane during each calibration, the analytes targeted by this program produced the required levels of instrument response and demonstrated an acceptable degree of linearity during each calibration. Trichloroethene standards failed to produce the required levels of instrument response on 10Oct18 and methyl cyclohexane demonstrated poor linearity during each calibration. The trichloroethene (TCE) results from IW-4, IW-5, DUPE and GPMW-26 have been qualified as estimations based on this performance.

Although methyl cyclohexane standards produced the required levels of instrument response, they demonstrated poor linearity.

Although errors might be expected in measurement of methyl cyclohexane, it may be assumed that this analyte would be detected if present in samples. Because methyl cyclohexane was not found in samples, data qualifications are not required.

Calibration check standards were analyzed on 19Nov18 (System MS30), 19Nov18 (System MS20) and 20Nov18 (System MS13), prior to the 12-hour periods of instrument operation that included samples from this program. When compared to the initial calibrations, each targeted analyte demonstrated an acceptable level of instrument stability during these checks. It is noted that the response of trichloroethene remained low on System 20.

Surrogates

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Surrogate Summary Sheets were properly prepared, based on the laboratory's statistical acceptance criteria. When compared to

the program requirements, however, an acceptable recovery was reported for each surrogate addition to this group of samples.

Internal Standards

Internal standards are added to each sample, blank and standard just prior to injection. Analyte concentrations are calculated relative to the response of a specific internal standard. Internal standard performance criteria ensure that GC/MS sensitivity and response are stable during the analysis of each sample. The area of internal standard peaks may not vary by more than a factor of two. When compared to the preceding calibration check, retention times may not vary by more than 30 seconds.

The laboratory correctly calculated control limits for internal standard response and retention times. When compared to this criteria, acceptable performance was reported for the internal standard additions to each program sample.

Matrix Spikes

Matrix spiking refers to the addition of known analyte concentrations to a sample prior to analysis. Analyte recoveries provide an indication of laboratory accuracy. The analysis of a duplicate spiked aliquot provides a measurement of precision.

BW-02 and a sample from an unrelated program were selected for matrix spiking. The entire list of targeted analytes was added to two aliquots of these samples. The spikes to the non-program sample produced a single high recovery of chloromethane (137%). This indication of positive bias, however, warrants no concern because chloromethane was not detected in this group of samples.

A low recovery was reported for all of the additions to both volumes of BW-02. The results reported from BW-02 have been qualified as estimations due to this indication of persistent negative bias.

Three pairs of spiked blanks (LCS/LCSD) were also analyzed with this group of samples. The recoveries reported from these LCS samples included high results for chloromethane (132%), bromomethane (215%, 217%) and chloroform (122%). These indications of positive bias warrant no concern because chloromethane, bromomethane and chloroform were not detected in this group of samples.

Duplicates

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. The results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision may be indicative of sample non-homogeneity, method defects, or poor laboratory technique.

The field split duplicate sample that was included in this delivery group was not identified.

Reported Analytes

Formal reports were provided for each sample. The data package also included total ion chromatograms and raw instrument print-outs. Reference mass spectra were provided to confirm the identification of the analytes found in every sample except DUPE and GPMW-26. The positive results from DUPE and GPMW-26 have been qualified as estimations because confirming mass spectra were not included in the raw data. Tentatively Identified Compounds (TIC) were not reported.

SUMMARY OF QUALIFIED DATA

MICHELSON BCP SITE

SAMPLED: NOVEMBER 2018

	CALIBRATE TCE	SPIKES VOC	MISSING SPECTRA
BW-02	(L1045571-01)	ALL J/CJ	
BW-03	(L1045571-02)		
BW-04	(L1045571-03)		
IW-2	(L1045571-04)		
IW-3	(L1045571-05)		
IW-4	(L1045571-06)	1.00UJ	
IW-5	(L1045571-07)	1.00UJ	
DUPE	(L1045571-08)	4.56J	ALL POS J
GPMW-26	(L1045571-09)	27.7J	ALL POS J

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1045571-01
Client Sample ID: BW-02/MS/MSD
Lab File ID: 1120_28
Instrument ID: VOCMS16
Analytical Batch: WG1199481
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%):

SDG: L1045571
Collected Date/Time: 11/09/18 12:45
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/20/18 23:05
Analysis Date/Time: 11/20/18 23:05
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol:
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	3.16	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.88	1.91	J	0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	4.18	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	8.55	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	0	ND		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEETSAMPLE NO.:
BW-02/MS/MSD

Lab Sample ID: L1045571-01
Client Sample ID: BW-02/MS/MSD
Lab File ID: 1120_28
Instrument ID: VOCMS16
Analytical Batch: WG1199481
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%):

SDG: L1045571
Collected Date/Time: 11/09/18 12:45
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/20/18 23:05
Analysis Date/Time: 11/20/18 23:05
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol:
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result ug/l	Qualifier	MDL ug/l	RDL ug/l
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	0	ND		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1045571-02
Client Sample ID: BW-03
Lab File ID: 1119_22
Instrument ID: VOCMS30
Analytical Batch: WG1199053
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%):

SDG: L1045571
Collected Date/Time: 11/09/18 13:00
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/19/18 20:30
Analysis Date/Time: 11/19/18 20:30
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol:
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	2.95	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND	J4	0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene ✓	156-59-2	3.65	37.0		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	0	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	0	ND		0.372	1.00
Toluene	108-88-3	5.30	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1045571-02
Client Sample ID: BW-03
Lab File ID: 1119_22
Instrument ID: VOCMS30
Analytical Batch: WG1199053
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1045571
Collected Date/Time: 11/09/18 13:00
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/19/18 20:30
Analysis Date/Time: 11/19/18 20:30
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene ✓	79-01-6	4.44	5.68		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1045571-03
Client Sample ID: BW-04
Lab File ID: 1119_23
Instrument ID: VOCMS30
Analytical Batch: WG1199053
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1045571
Collected Date/Time: 11/09/18 13:15
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/19/18 20:49
Analysis Date/Time: 11/19/18 20:49
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	2.94	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND	J4	0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene ✓	156-59-2	3.65	63.2		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	0	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	0	ND		0.372	1.00
Toluene	108-88-3	5.30	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1045571-03
Client Sample ID: BW-04
Lab File ID: 1119_23
Instrument ID: VOCMS30
Analytical Batch: WG1199053
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%):

SDG: L1045571
Collected Date/Time: 11/09/18 13:15
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/19/18 20:49
Analysis Date/Time: 11/19/18 20:49
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol:
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	4.44	ND		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	1.81	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00

1A-OR

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.

SAMPLE NO.:

IW-2

Lab Sample ID: L1045571-04
Client Sample ID: IW-2
Lab File ID: 1119_24
Instrument ID: VOCMS30
Analytical Batch: WG1199053
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1045571
Collected Date/Time: 11/09/18 13:30
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/19/18 21:08
Analysis Date/Time: 11/19/18 21:08
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	2.94	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND	J4	0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.65	1.71		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	0	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	0	ND		0.372	1.00
Toluene	108-88-3	5.30	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1045571-04
Client Sample ID: IW-2
Lab File ID: 1119_24
Instrument ID: VOCMS30
Analytical Batch: WG1199053
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%):

SDG: L1045571
Collected Date/Time: 11/09/18 13:30
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/19/18 21:08
Analysis Date/Time: 11/19/18 21:08
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol:
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	3.91	3.15		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	4.44	2.71		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1045571-05
Client Sample ID: IW-3
Lab File ID: 1119_25
Instrument ID: VOCMS30
Analytical Batch: WG1199053
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1045571
Collected Date/Time: 11/09/18 13:45
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/19/18 21:27
Analysis Date/Time: 11/19/18 21:27
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	2.94	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND	J4	0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.65	4.62		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	0	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	0	ND		0.372	1.00
Toluene	108-88-3	5.30	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.



SAMPLE NO.:

IW-3

Lab Sample ID: L1045571-05
Client Sample ID: IW-3
Lab File ID: 1119_25
Instrument ID: VOCMS30
Analytical Batch: WG1199053
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1045571
Collected Date/Time: 11/09/18 13:45
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/19/18 21:27
Analysis Date/Time: 11/19/18 21:27
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	3.91	1.09		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	4.44	3.02		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET



Lab Sample ID: L1045571-06
Client Sample ID: IW-4
Lab File ID: 1119_57
Instrument ID: VOCMS20
Analytical Batch: WG1199203
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1045571
Collected Date/Time: 11/09/18 14:00
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/20/18 04:59
Analysis Date/Time: 11/20/18 04:59
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	3.05	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND	J3	0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND	J4	0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.78	ND		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	4.07	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	4.57	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	8.52	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	5.67	ND		0.372	1.00
Toluene	108-88-3	5.42	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.



SAMPLE NO.:

IW-4

Lab Sample ID: L1045571-06
Client Sample ID: IW-4
Lab File ID: 1119_57
Instrument ID: VOCMS20
Analytical Batch: WG1199203
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1045571
Collected Date/Time: 11/09/18 14:00
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/20/18 04:59
Analysis Date/Time: 11/20/18 04:59
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	4.57	ND <i>ug</i>		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00

MS

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1045571-07
Client Sample ID: IW-5
Lab File ID: 1119_58
Instrument ID: VOCMS20
Analytical Batch: WG1199203
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1045571
Collected Date/Time: 11/09/18 14:15
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/20/18 05:19
Analysis Date/Time: 11/20/18 05:19
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	3.05	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND	J3	0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND	J4	0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.77	ND		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	4.07	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	0	ND		0.372	1.00
Toluene	108-88-3	5.42	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.



SAMPLE NO.:

IW-5

Lab Sample ID: L1045571-07
Client Sample ID: IW-5
Lab File ID: 1119_58
Instrument ID: VOCMS20
Analytical Batch: WG1199203
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1045571
Collected Date/Time: 11/09/18 14:15
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/20/18 05:19
Analysis Date/Time: 11/20/18 05:19
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	0	ND		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1045571-08
Client Sample ID: DUPE
Lab File ID: 1119_59
Instrument ID: VOCMS20
Analytical Batch: WG1199203
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1045571
Collected Date/Time: 11/09/18 00:00
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/20/18 05:39
Analysis Date/Time: 11/20/18 05:39
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	3.05	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND	J3	0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND	J4	0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.78	39.4 J		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	4.07	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	4.57	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	0	ND		0.372	1.00
Toluene	108-88-3	5.42	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.



SAMPLE NO.:

DUPE

Lab Sample ID: L1045571-08
Client Sample ID: DUPE
Lab File ID: 1119_59
Instrument ID: VOCMS20
Analytical Batch: WG1199203
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1045571
Collected Date/Time: 11/09/18 00:00
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/20/18 05:39
Analysis Date/Time: 11/20/18 05:39
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	4.57	4.56 J		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	1.90	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00

1A-OR

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.

SAMPLE NO.:

GPMW-26

Lab Sample ID: L1045571-09
Client Sample ID: GPMW-26
Lab File ID: 1119_60
Instrument ID: VOCMS20
Analytical Batch: WG1199203
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1045571
Collected Date/Time: 11/09/18 14:30
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/20/18 05:59
Analysis Date/Time: 11/20/18 05:59
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	3.05	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND	J3	0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND	J4	0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.78	1.28 J		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	0	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	4.57	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	5.67	1.28 J		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.



SAMPLE NO.:

GPMW-26

Lab Sample ID: L1045571-09
Client Sample ID: GPMW-26
Lab File ID: 1119_60
Instrument ID: VOCMS20
Analytical Batch: WG1199203
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1045571
Collected Date/Time: 11/09/18 14:30
Received Date/Time: 11/17/18 08:30
Preparation Date/Time: 11/20/18 05:59
Analysis Date/Time: 11/20/18 05:59
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	4.57	27.7 J		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00



Analytical Method: 8260C
Matrix: GW

SDG: L1045571

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1	DMC-2	DMC-3	DMC-4	TOT Out
				% Rec.	% Rec.	% Rec.	% Rec.	
BW-02/MS/MSD	L1045571-01	VOCMS16	1120_28	102 ✓	103 ✓	105 ✓	97.1 ✓	0
BW-03	L1045571-02	VOCMS30	1119_22	97.5	102	97.5	100	0
BW-04	L1045571-03	VOCMS30	1119_23	94.4	104	98.7	100	0
IW-2	L1045571-04	VOCMS30	1119_24	96.4	104	98.1	102	0
IW-3	L1045571-05	VOCMS30	1119_25	93.8	103	98.7	103	0
IW-4	L1045571-06	VOCMS20	1119_57	91.5	100	103	103	0
IW-5	L1045571-07	VOCMS20	1119_58	96.6	105	98.3	99.7	0
DUPE	L1045571-08	VOCMS20	1119_59	95.0	104	99.0	102	0
GPMW-26	L1045571-09	VOCMS20	1119_60	96.2	104	99.0	102	0
MS	R3361853-4	VOCMS16	1120_29	102	97.7	99.7	104	0
MSD	R3361853-5	VOCMS16	1120_30	105	96.0	99.0	100	0
MS	R3361525-4	VOCMS30	1119_27	97.9	101	100	97.1	0
MSD	R3361525-5	VOCMS30	1119_28	96.9	99.2	100	97.8	0
BLANK	R3361853-3	VOCMS16	1120_05	103	98.5	102	98.0	0
BLANK	R3361607-3	VOCMS20	1119_35	96.7	104	102	98.2	0
BLANK	R3361525-3	VOCMS30	1119_06	94.7	100	100	96.5	0
LCS	R3361853-1	VOCMS16	1120_02LCS	99.8	98.2	104	98.0	0
LCS	R3361607-1	VOCMS20	1119_32LCS	95.4	107	100	102	0
LCS	R3361525-1	VOCMS30	1119_02LCS	94.4	101	101	99.2	0
LCSD	R3361853-2	VOCMS16	1120_03	103	99.8	102	99.9	0
LCSD	R3361607-2	VOCMS20	1119_33	95.1	101	98.7	103	0
LCSD	R3361525-2	VOCMS30	1119_03	98.2	99.3	98.9	98.4	0

Parm Abbreviation

DMC-1	Toluene-d8
DMC-2	Dibromofluoromethane
DMC-3	a,a,a-Trifluorotoluene
DMC-4	4-Bromofluorobenzene

QC LIMITS

80.0 - 120
75.0 - 120
80.0 - 120
77.0 - 126

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

MATRIX SPIKE /
MATRIX SPIKE DUPLICATE RECOVERY
L1045571-02,03,04,05

MS Sample / File ID: R3361525-4 / 1119_27
MSD Sample / File ID: R3361525-5 / 1119_28
OS Sample / File ID: L1045153-03 / 1119_26
Instrument ID: VOCMS30
Analytical Method: 8260C

SDG: L1045571
Analytical Batch: WG1199053
Matrix: GW

Analyte	Spike Amount ug/l	OS Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	RPD %	RPD Limit %
Acetone	125	U	707	694	113	111	5	10.0 - 160	1.85	35
Benzene	25.0	55.6	193	189	110 ✓	107 ✓	5	17.0 - 158	2.11	27
Bromodichloromethane	25.0	U	136	136	109	108	5	31.0 - 150	0.456	27
Bromochloromethane	25.0		144	140	115	112	5	38.0 - 142	2.81	26
Bromoform	25.0	U	129	130	103	104	5	29.0 - 150	0.951	29
Bromomethane	25.0 ✓	U	234 ✓	260	187* ✓	208* ✓	5	10.0 - 160	10.7	38
n-Butylbenzene	25.0	U	131	135	105	108	5	31.0 - 150	3.08	30
sec-Butylbenzene	25.0	U	122	127	97.9	102	5	33.0 - 155	3.66	29
tert-Butylbenzene	25.0	U	132	133	106	107	5	34.0 - 153	1.14	28
Carbon disulfide	25.0		134	132	107	106	5	10.0 - 156	1.16	28
Carbon tetrachloride	25.0	U	139	148	112	119	5	23.0 - 159	6.23	28
Chlorobenzene	25.0	U	142	137	114 ✓	110 ✓	5	33.0 - 152	3.37	27
Chlorodibromomethane	25.0	U	141	139	113	111	5	37.0 - 149	1.49	27
Chloroethane	25.0	U	149	144	119	115	5	10.0 - 160	3.64	30
Chloroform	25.0	U	125	127	99.7	102	5	29.0 - 154	2.02	28
Chloromethane	25.0	U	159	171	127	137	5	10.0 - 160	7.41	29
Cyclohexane	25.0		140	139	112	112	5	19.0 - 160	0.340	23
1,2-Dibromo-3-Chloropropane	25.0	U	122	127	97.3	101	5	22.0 - 151	4.00	34
1,2-Dibromoethane	25.0	U	137	138	110	110	5	34.0 - 147	0.439	27
1,2-Dichlorobenzene	25.0	U	140	142	112	114	5	34.0 - 149	1.33	28
1,3-Dichlorobenzene	25.0	U	139	142	111	114	5	36.0 - 146	2.41	27
1,4-Dichlorobenzene	25.0	U	127	127	102	101	5	35.0 - 142	0.464	27
Dichlorodifluoromethane	25.0	U	153	152	122	121	5	10.0 - 160	0.785	29
1,1-Dichloroethane	25.0	U	140	138	112	110	5	25.0 - 158	1.69	27
1,2-Dichloroethane	25.0	U	141	139	113	111	5	29.0 - 151	1.66	27
1,1-Dichloroethene	25.0	U	141	139	113 ✓	111 ✓	5	11.0 - 160	1.56	29
cis-1,2-Dichloroethene	25.0	U	136	132	109	106	5	10.0 - 160	2.55	27
trans-1,2-Dichloroethene	25.0	U	139	139	111	111	5	17.0 - 153	0.299	27
1,2-Dichloropropane	25.0	U	144	143	115	115	5	30.0 - 156	0.572	27
cis-1,3-Dichloropropene	25.0	U	134	139	107	111	5	34.0 - 149	3.81	28
trans-1,3-Dichloropropene	25.0	U	144	138	116	111	5	32.0 - 149	4.31	28
Ethylbenzene	25.0	101	244	235	114	107	5	30.0 - 155	3.99	27
2-Hexanone	125		679	665	109	106	5	21.0 - 160	2.14	29
Isopropylbenzene	25.0	5.92	141	139	108	107	5	28.0 - 157	1.51	27
p-Isopropyltoluene	25.0	U	134	137	107	110	5	30.0 - 154	2.51	29
2-Butanone (MEK)	125	U	752	722	120	115	5	10.0 - 160	4.14	32
Methyl Acetate	125		647	642	104	103	5	18.0 - 151	0.772	30
Methyl Cyclohexane	25.0		137	135	110	108	5	11.0 - 160	1.67	24
Methylene Chloride	25.0	U	130	127	104	102	5	23.0 - 144	2.36	28
4-Methyl-2-pentanone (MIBK)	125	U	722	721	116	115	5	29.0 - 160	0.128	29
Methyl tert-butyl ether	25.0	U	131	134	105	107	5	28.0 - 150	2.05	29
Naphthalene	25.0	305	434	427	103	97.8	5	12.0 - 156	1.61	35
n-Propylbenzene	25.0	2.45	141	142	111	112	5	31.0 - 154	0.765	28

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3A-OR

MATRIX SPIKE /
MATRIX SPIKE DUPLICATE RECOVERY
L1045571-02,03,04,05

ONE LAB. NATIONWIDE.



SAMPLE NO.:

R3361525-4

R3361525-5

MS Sample / File ID: R3361525-4 / 1119_27
MSD Sample / File ID: R3361525-5 / 1119_28
OS Sample / File ID: L1045153-03 / 1119_26
Instrument ID: VOCMS30
Analytical Method: 8260C

SDG: L1045571
Analytical Batch: WG1199053
Matrix: GW

Analyte	Spike Amount ug/l	OS Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. % ✓	Dilution	Rec. Limits %	RPD %	RPD Limit %
Styrene	25.0	12.7	161	153	119	112	5	33.0 - 155	5.05	28
1,1,2,2-Tetrachloroethane	25.0	U	129	127	103	102	5	33.0 - 150	1.46	28
Tetrachloroethene	25.0	U	148	144	118	115	5	10.0 - 160	2.40	27
Toluene	25.0	119	251	245	105 ✓	100 ✓	5	26.0 - 154	2.49	28
1,1,2-Trichlorotrifluoroethane	25.0	U	146	146	117	116	5	23.0 - 160	0.179	30
1,2,3-Trichlorobenzene	25.0	U	118	126	94.3	101	5	17.0 - 150	6.40	36
1,2,4-Trichlorobenzene	25.0	U	118	123	94.4	98.2	5	24.0 - 150	3.97	33
1,1,1-Trichloroethane	25.0	U	145	144	116	115	5	23.0 - 160	0.630	28
1,1,2-Trichloroethane	25.0	U	133	129	107	103	5	35.0 - 147	3.10	27
Trichloroethene	25.0	U	143	143	114 ✓	114 ✓	5	10.0 - 160	0.314	25
Trichlorofluoromethane	25.0	U	154	155	123	124	5	17.0 - 160	0.912	31
1,2,4-Trimethylbenzene	25.0	41.7	169	174	102	106	5	26.0 - 154	2.75	27
1,3,5-Trimethylbenzene	25.0	10.5	137	141	101	104	5	28.0 - 153	2.77	27
Vinyl chloride	25.0	U	140	140	112	112	5	10.0 - 160	0.306	27
o-Xylene	25.0		192	182	113	104	5	45.0 - 144	5.52	26
m&p-Xylenes	50.0		362	353	111	107	5	43.0 - 146	2.50	26

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

ACCOUNT:
LaBella Associates, P.C.

PROJECT:
2161282

SDG:
L1045571

DATE/TIME:
04/02/19 05:21

PAGE:
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MATRIX SPIKE /
MATRIX SPIKE DUPLICATE RECOVERY
L1045571-01

SAMPLE NO.:

R3361853-4

R3361853-5

MS Sample / File ID: R3361853-4 / 1120_29
MSD Sample / File ID: R3361853-5 / 1120_30
OS Sample / File ID: L1045571-01 / 1120_28
Instrument ID: VOCMS16
Analytical Method: 8260C

SDG: L1045571
Analytical Batch: WG1199481
Matrix: GW

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limit
	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%
Acetone	125	ND	63.5	54.0	42.6	35.1	1	10.0 - 160	16.1	35
Benzene	25.0	ND	12.0	11.3	48.2	45.3	1	17.0 - 158	6.12	27
Bromodichloromethane	25.0	ND	12.1	11.7	48.3	46.8	1	31.0 - 150	3.30	27
Bromochloromethane	25.0	ND	11.9	11.5	47.6	46.1	1	38.0 - 142	3.29	26
Bromoform	25.0	ND	11.2	10.7	45.0	42.7	1	29.0 - 150	5.14	29
Bromomethane	25.0	ND	10.5	10.0	42.0	40.2	1	10.0 - 160	4.50	38
n-Butylbenzene	25.0	ND	12.6	12.2	50.3	48.8	1	31.0 - 150	3.08	30
sec-Butylbenzene	25.0	ND	12.6	12.1	50.5	48.2	1	33.0 - 155	4.50	29
tert-Butylbenzene	25.0	ND	12.6	12.1	50.2	48.3	1	34.0 - 153	3.94	28
Carbon disulfide	25.0	ND	12.1	11.2	48.6	44.8	1	10.0 - 156	8.06	28
Carbon tetrachloride	25.0	ND	12.2	11.5	48.8	46.0	1	23.0 - 159	5.91	28
Chlorobenzene	25.0	ND	12.1	12.1	48.3	48.3	1	33.0 - 152	0.144	27
Chlorodibromomethane	25.0	ND	13.0	12.8	52.0	51.4	1	37.0 - 149	1.27	27
Chloroethane	25.0	ND	10.8	11.5	43.2	46.1	1	10.0 - 160	6.39	30
Chloroform	25.0	ND	12.6	12.2	50.3	48.9	1	29.0 - 154	2.71	28
Chloromethane	25.0	ND	12.8	12.7	51.1	50.8	1	10.0 - 160	0.588	29
Cyclohexane	25.0	ND	12.6	11.5	50.4	46.1	1	19.0 - 160	8.86	23
1,2-Dibromo-3-Chloropropane	25.0	ND	12.4	12.0	49.6	47.9	1	22.0 - 151	3.51	34
1,2-Dibromoethane	25.0	ND	12.7	12.7	50.9	51.0	1	34.0 - 147	0.208	27
1,2-Dichlorobenzene	25.0	ND	12.5	11.6	49.9	46.5	1	34.0 - 149	6.97	28
1,3-Dichlorobenzene	25.0	ND	13.1	12.1	52.4	48.3	1	36.0 - 146	8.08	27
1,4-Dichlorobenzene	25.0	ND	11.9	11.2	47.6	44.8	1	35.0 - 142	6.10	27
Dichlorodifluoromethane	25.0	ND	14.0	13.1	56.2	52.6	1	10.0 - 160	6.60	29
1,1-Dichloroethane	25.0	ND	12.8	11.9	51.2	47.6	1	25.0 - 158	7.38	27
1,2-Dichloroethane	25.0	ND	11.3	10.6	45.4	42.4	1	29.0 - 151	6.74	27
1,1-Dichloroethene	25.0	ND	13.2	12.2	52.7	48.8	1	11.0 - 160	7.68	29
cis-1,2-Dichloroethene	25.0	1.91	14.0	13.5	48.3	46.2	1	10.0 - 160	3.83	27
trans-1,2-Dichloroethene	25.0	ND	12.5	11.6	49.9	46.5	1	17.0 - 153	7.11	27
1,2-Dichloropropane	25.0	ND	12.3	11.2	49.1	44.8	1	30.0 - 156	8.99	27
cis-1,3-Dichloropropene	25.0	ND	12.7	12.8	50.9	51.2	1	34.0 - 149	0.588	28
trans-1,3-Dichloropropene	25.0	ND	12.2	11.8	48.7	47.4	1	32.0 - 149	2.83	28
Ethylbenzene	25.0	ND	11.8	11.6	47.4	46.2	1	30.0 - 155	2.45	27
2-Hexanone	125	ND	58.0	56.2	46.4	44.9	1	21.0 - 160	3.14	29
Isopropylbenzene	25.0	ND	13.0	12.5	52.1	49.9	1	28.0 - 157	4.19	27
p-Isopropyltoluene	25.0	ND	12.0	11.4	48.1	45.6	1	30.0 - 154	5.40	29
2-Butanone (MEK)	125	ND	55.1	50.7	44.1	40.5	1	10.0 - 160	8.48	32
Methyl Acetate	125	ND	58.3	54.4	46.7	43.5	1	18.0 - 151	6.92	30
Methyl Cyclohexane	25.0	ND	12.8	11.9	51.2	47.4	1	11.0 - 160	7.73	24
Methylene Chloride	25.0	ND	11.8	11.5	47.1	46.0	1	23.0 - 144	2.27	28
4-Methyl-2-pentanone (MIBK)	125	ND	57.4	57.3	45.9	45.8	1	29.0 - 160	0.279	29
Methyl tert-butyl ether	25.0	ND	11.7	10.7	46.9	42.9	1	28.0 - 150	9.06	29
Naphthalene	25.0	ND	12.5	12.1	50.2	48.4	1	12.0 - 156	3.64	35
n-Propylbenzene	25.0	ND	12.5	11.9	49.9	47.4	1	31.0 - 154	5.16	28

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3A-OR

MATRIX SPIKE /
MATRIX SPIKE DUPLICATE RECOVERY
L1045571-01

ONE LAB. NATIONWIDE.



SAMPLE NO.:

R3361853-4

R3361853-5

MS Sample / File ID: R3361853-4 / 1120_29
MSD Sample / File ID: R3361853-5 / 1120_30
OS Sample / File ID: L1045571-01 / 1120_28
Instrument ID: VOCMS16
Analytical Method: 8260C

SDG: L1045571
Analytical Batch: WG1199481
Matrix: GW

Analyte	Spike Amount ug/l	OS Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	RPD %	RPD Limit %
Styrene	25.0	ND	13.0	12.4	52.2	49.5	1	33.0 - 155	5.27	28
1,1,2,2-Tetrachloroethane	25.0	ND	12.4	12.0	49.5	48.0	1	33.0 - 150	2.96	28
Tetrachloroethene	25.0	ND	12.7	12.2	50.7	49.0	1	10.0 - 160	3.46	27
Toluene	25.0	ND	12.3	12.1	49.4	48.5	1	26.0 - 154	1.83	28
1,1,2-Trichlorotrifluoroethane	25.0	ND	13.6	13.1	54.5	52.3	1	23.0 - 160	4.14	30
1,2,3-Trichlorobenzene	25.0	ND	12.9	12.8	51.5	51.4	1	17.0 - 150	0.183	36
1,2,4-Trichlorobenzene	25.0	ND	12.8	12.3	51.2	49.3	1	24.0 - 150	3.76	33
1,1,1-Trichloroethane	25.0	ND	12.7	12.1	50.8	48.4	1	23.0 - 160	4.82	28
1,1,2-Trichloroethane	25.0	ND	12.3	12.3	49.2	49.3	1	35.0 - 147	0.377	27
Trichloroethene	25.0	ND	12.7	11.6	51.0	46.4	1	10.0 - 160	9.36	25
Trichlorofluoromethane	25.0	ND	8.52	8.05	34.1	32.2	1	17.0 - 160	5.65	31
1,2,4-Trimethylbenzene	25.0	ND	12.4	11.8	49.5	47.3	1	26.0 - 154	4.43	27
1,3,5-Trimethylbenzene	25.0	ND	12.0	11.5	47.9	45.8	1	28.0 - 153	4.44	27
Vinyl chloride	25.0	ND	14.2	14.0	56.8	56.0	1	10.0 - 160	1.47	27
o-Xylene	25.0	ND	12.6	11.9	50.3	47.6	1	45.0 - 144	5.67	26
m&p-Xylenes	50.0	ND	23.6	24.2	47.2	48.4	1	43.0 - 146	2.64	26

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY
L1045571-02,03,04,05

LCS Sample / File ID: R3361525-1 / 1119_02LCS
LCSD Sample / File ID: R3361525-2 / 1119_03
Instrument ID: VOCMS30
Analytical Method: 8260C

SDG: L1045571
Analytical Batch: WG1199053
Dilution Factor: 1
Matrix: GW

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	RPD %	RPD Limit %
Acetone	125	146	162	117 ✓	130	19.0 - 160	10.3	27
Benzene	25.0	27.0	26.9	108 ✓	108 ✓	70.0 - 123	0.370	20
Bromodichloromethane	25.0	27.2	26.2	109	105	75.0 - 120	3.61	20
Bromochloromethane	25.0	28.9	27.2	116	109	76.0 - 122	6.03	20
Bromoform	25.0	26.2	25.4	105	102	68.0 - 132	3.30	20
Bromomethane	25.0	54.3	53.8	217*	215*	10.0 - 160	0.878	25
n-Butylbenzene	25.0	26.0	27.4	104	110	73.0 - 125	4.97	20
sec-Butylbenzene	25.0	25.4	25.4	102	102	75.0 - 125	0.0599	20
tert-Butylbenzene	25.0	26.5	26.2	106	105	76.0 - 124	0.940	20
Carbon disulfide	25.0	26.8	26.4	107	106	61.0 - 128	1.21	20
Carbon tetrachloride	25.0	27.0	27.8	108	111	68.0 - 126	2.72	20
Chlorobenzene	25.0	26.5	26.5	106 ✓	106 ✓	80.0 - 121	0.0981	20
Chlorodibromomethane	25.0	26.8	26.6	107	107	77.0 - 125	0.603	20
Chloroethane	25.0	31.2	31.3	125	125	47.0 - 150	0.0567	20
Chloroform	25.0	25.0	24.6	99.9	98.3	73.0 - 120	1.64	20
Chloromethane	25.0	32.9	32.6	132*	130	41.0 - 142	0.798	20
Cyclohexane	25.0	29.1	27.9	116	112	71.0 - 124	4.13	20
1,2-Dibromo-3-Chloropropane	25.0	24.1	24.9	96.6	99.6	58.0 - 134	3.09	20
1,2-Dibromoethane	25.0	26.1	26.1	104	104	80.0 - 122	0.141	20
1,2-Dichlorobenzene	25.0	27.5	27.7	110	111	79.0 - 121	0.695	20
1,3-Dichlorobenzene	25.0	27.9	27.6	111	110	79.0 - 120	0.910	20
1,4-Dichlorobenzene	25.0	25.1	25.0	101	99.9	79.0 - 120	0.604	20
Dichlorodifluoromethane	25.0	33.5	31.5	134	126	51.0 - 149	6.12	20
1,1-Dichloroethane	25.0	27.4	26.7	110	107	70.0 - 126	2.67	20
1,2-Dichloroethane	25.0	28.7	27.6	115	110	70.0 - 128	3.94	20
1,1-Dichloroethene	25.0	28.0	26.8	112 ✓	107 ✓	71.0 - 124	4.14	20
cis-1,2-Dichloroethene	25.0	25.9	25.6	104	102	73.0 - 120	1.26	20
trans-1,2-Dichloroethene	25.0	27.2	26.7	109	107	73.0 - 120	1.89	20
1,2-Dichloropropane	25.0	28.3	27.7	113	111	77.0 - 125	2.11	20
cis-1,3-Dichloropropene	25.0	27.8	28.8	111	115	80.0 - 123	3.40	20
trans-1,3-Dichloropropene	25.0	27.3	27.2	109	109	78.0 - 124	0.351	20
Ethylbenzene	25.0	26.0	26.3	104	105	79.0 - 123	0.957	20
2-Hexanone	125	125	128	99.7	102	67.0 - 149	2.81	20
Isopropylbenzene	25.0	26.4	26.6	106	106	76.0 - 127	0.736	20
p-Isopropyltoluene	25.0	27.4	26.7	109	107	76.0 - 125	2.54	20
2-Butanone (MEK)	125	149	151	119	121	44.0 - 160	1.71	20
Methyl Acetate	125	129	127	103	102	57.0 - 148	1.27	20
Methyl Cyclohexane	25.0	27.8	26.7	111	107	68.0 - 126	4.17	20
Methylene Chloride	25.0	25.5	25.0	102	100	67.0 - 120	1.93	20
4-Methyl-2-pentanone (MIBK)	125	140	142	112	114	68.0 - 142	1.60	20
Methyl tert-butyl ether	25.0	26.3	26.2	105	105	68.0 - 125	0.496	20
Naphthalene	25.0	21.1	22.0	84.5	87.9	54.0 - 135	3.89	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY
L1045571-02,03,04,05

SAMPLE NO.:

R3361525-1

R3361525-2

LCS Sample / File ID: R3361525-1 / 1119_02LCS
LCSD Sample / File ID: R3361525-2 / 1119_03
Instrument ID: VOCMS30
Analytical Method: 8260C

SDG: L1045571
Analytical Batch: WG1199053
Dilution Factor: 1
Matrix: GW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	ug/l	ug/l	ug/l	%	%	%	%	%
n-Propylbenzene	25.0	28.1	28.1	113	113	77.0 - 124	0.0334	20
Styrene	25.0	28.3	28.1	113	112	73.0 - 130	0.797	20
1,1,2,2-Tetrachloroethane	25.0	25.2	24.9	101	99.7	65.0 - 130	1.21	20
Tetrachloroethene	25.0	27.1	28.2	108	113	72.0 - 132	4.16	20
Toluene	25.0	25.2	25.7	101 ✓	103 ✓	79.0 - 120	2.14	20
1,1,2-Trichlorotrifluoroethane	25.0	30.2	29.5	121	118	69.0 - 132	2.57	20
1,2,3-Trichlorobenzene	25.0	23.3	24.3	93.3	97.2	50.0 - 138	4.15	20
1,2,4-Trichlorobenzene	25.0	22.8	23.4	91.0	93.7	57.0 - 137	2.87	20
1,1,1-Trichloroethane	25.0	28.0	27.9	112	112	73.0 - 124	0.329	20
1,1,2-Trichloroethane	25.0	25.4	25.4	101	102	80.0 - 120	0.314	20
Trichloroethene	25.0	28.3	28.4	113 ✓	114 ✓	78.0 - 124	0.457	20
Trichlorofluoromethane	25.0	31.5	30.4	126	122	59.0 - 147	3.57	20
1,2,4-Trimethylbenzene	25.0	27.1	26.8	109	107	76.0 - 121	1.25	20
1,3,5-Trimethylbenzene	25.0	26.3	26.0	105	104	76.0 - 122	1.22	20
Vinyl chloride	25.0	28.7	28.2	115	113	67.0 - 131	1.73	20
o-Xylene	25.0	26.1	26.2	104	105	80.0 - 122	0.358	20
m&p-Xylenes	50.0	53.3	53.9	107	108	80.0 - 122	1.05	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY
L1045571-06,07,08,09

LCS Sample / File ID: R3361607-1 / 1119_32LCS
LCSD Sample / File ID: R3361607-2 / 1119_33
Instrument ID: VOCMS20
Analytical Method: 8260C

SDG: L1045571
Analytical Batch: WG1199203
Dilution Factor: 1
Matrix: GW

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	RPD %	RPD Limit %
Acetone	125	132	133	105	106	19.0 - 160	0.758	27
Benzene	25.0	30.7	30.2	123 ✓	121 ✓	70.0 - 123	1.65	20
Bromodichloromethane	25.0	29.0	28.6	116	114	75.0 - 120	1.19	20
Bromochloromethane	25.0	27.4	26.9	110	108	76.0 - 122	1.89	20
Bromoform	25.0	25.6	25.1	102	100	68.0 - 132	1.98	20
Bromomethane	25.0	27.4	19.2	110	76.9	10.0 - 160	35.2*	25
n-Butylbenzene	25.0	26.1	27.4	105	110	73.0 - 125	4.70	20
sec-Butylbenzene	25.0	25.7	26.4	103	106	75.0 - 125	2.57	20
tert-Butylbenzene	25.0	25.4	26.1	102	104	76.0 - 124	2.39	20
Carbon disulfide	25.0	29.6	26.5	118	106	61.0 - 128	11.0	20
Carbon tetrachloride	25.0	25.6	25.5	102	102	68.0 - 126	0.308	20
Chlorobenzene	25.0	23.3	24.4	93.4 ✓	97.8 ✓	80.0 - 121	4.56	20
Chlorodibromomethane	25.0	23.8	24.2	95.1	96.8	77.0 - 125	1.75	20
Chloroethane	25.0	26.6	23.9	107	95.8	47.0 - 150	10.7	20
Chloroform	25.0	30.5	28.5	122*	114	73.0 - 120	6.83	20
Chloromethane	25.0	18.9	16.6	75.4	66.6	41.0 - 142	12.5	20
Cyclohexane	25.0	28.3	27.9	113	112	71.0 - 124	1.42	20
1,2-Dibromo-3-Chloropropane	25.0	22.8	23.7	91.0	94.7	58.0 - 134	3.97	20
1,2-Dibromoethane	25.0	23.1	23.2	92.2	92.7	80.0 - 122	0.494	20
1,2-Dichlorobenzene	25.0	26.0	26.4	104	105	79.0 - 121	1.47	20
1,3-Dichlorobenzene	25.0	26.5	26.9	106	107	79.0 - 120	1.46	20
1,4-Dichlorobenzene	25.0	24.2	25.1	96.8	100	79.0 - 120	3.53	20
Dichlorodifluoromethane	25.0	26.2	26.9	105	108	51.0 - 149	2.72	20
1,1-Dichloroethane	25.0	30.4	29.0	122	116	70.0 - 126	4.60	20
1,2-Dichloroethane	25.0	30.0	29.6	120	118	70.0 - 128	1.23	20
1,1-Dichloroethene	25.0	27.2	26.7	109 ✓	107 ✓	71.0 - 124	2.16	20
cis-1,2-Dichloroethene	25.0	28.8	28.4	115	114	73.0 - 120	1.37	20
trans-1,2-Dichloroethene	25.0	28.8	27.2	115	109	73.0 - 120	5.69	20
1,2-Dichloropropane	25.0	29.6	29.4	118	117	77.0 - 125	0.781	20
cis-1,3-Dichloropropene	25.0	26.7	27.2	107	109	80.0 - 123	1.71	20
trans-1,3-Dichloropropene	25.0	27.0	27.5	108	110	78.0 - 124	1.91	20
Ethylbenzene	25.0	24.1	24.6	96.4	98.4	79.0 - 123	2.02	20
2-Hexanone	125	123	123	98.4	98.3	67.0 - 149	0.0685	20
Isopropylbenzene	25.0	25.8	26.2	103	105	76.0 - 127	1.49	20
p-Isopropyltoluene	25.0	25.5	25.7	102	103	76.0 - 125	0.533	20
2-Butanone (MEK)	125	138	136	110	109	44.0 - 160	1.11	20
Methyl Acetate	125	130	132	104	106	57.0 - 148	1.82	20
Methyl Cyclohexane	25.0	25.8	25.8	103	103	68.0 - 126	0.0320	20
Methylene Chloride	25.0	27.9	27.0	112	108	67.0 - 120	3.42	20
4-Methyl-2-pentanone (MIBK)	125	116	117	93.0	93.5	68.0 - 142	0.481	20
Methyl tert-butyl ether	25.0	21.3	20.3	85.3	81.4	68.0 - 125	4.63	20
Naphthalene	25.0	22.9	23.8	91.7	95.1	54.0 - 135	3.62	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY
L1045571-06,07,08,09



SAMPLE NO.:

R3361607-1

R3361607-2

LCS Sample / File ID: R3361607-1 / 1119_32LCS
LCSD Sample / File ID: R3361607-2 / 1119_33
Instrument ID: VOCMS20
Analytical Method: 8260C

SDG: L1045571
Analytical Batch: WG1199203
Dilution Factor: 1
Matrix: GW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	ug/l	ug/l	ug/l	%	%	%	%	%
n-Propylbenzene	25.0	26.5	26.9	106	108	77.0 - 124	1.48	20
Styrene	25.0	25.6	25.6	102	103	73.0 - 130	0.335	20
1,1,2,2-Tetrachloroethane	25.0	26.1	25.8	104	103	65.0 - 130	1.01	20
Tetrachloroethene	25.0	24.9	24.6	99.5	98.3	72.0 - 132	1.13	20
Toluene	25.0	25.3	25.7	101 ✓	103 ✓	79.0 - 120	1.56	20
1,1,2-Trichlorotrifluoroethane	25.0	24.0	22.9	95.9	91.5	69.0 - 132	4.78	20
1,2,3-Trichlorobenzene	25.0	24.4	25.5	97.7	102	50.0 - 138	4.12	20
1,2,4-Trichlorobenzene	25.0	26.3	27.7	105	111	57.0 - 137	5.33	20
1,1,1-Trichloroethane	25.0	27.9	26.4	112	106	73.0 - 124	5.41	20
1,1,2-Trichloroethane	25.0	23.5	23.8	93.9	95.4	80.0 - 120	1.57	20
Trichloroethene	25.0	25.3	25.3	101 ✓	101 ✓	78.0 - 124	0.127	20
Trichlorofluoromethane	25.0	27.8	27.8	111	111	59.0 - 147	0.151	20
1,2,4-Trimethylbenzene	25.0	25.4	26.0	102	104	76.0 - 121	2.39	20
1,3,5-Trimethylbenzene	25.0	25.3	26.1	101	104	76.0 - 122	3.17	20
Vinyl chloride	25.0	28.0	27.1	112	108	67.0 - 131	3.21	20
o-Xylene	25.0	25.2	25.7	101	103	80.0 - 122	2.20	20
m&p-Xylenes	50.0	49.1	50.3	98.1	101	80.0 - 122	2.42	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY
L1045571-01

LCS Sample / File ID: R3361853-1 / 1120_02LCS
LCSD Sample / File ID: R3361853-2 / 1120_03
Instrument ID: VOCMS16
Analytical Method: 8260C

SDG: L1045571
Analytical Batch: WG1199481
Dilution Factor: 1
Matrix: GW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	ug/l	ug/l	ug/l	%	%	%	%	%
Acetone	125	119	120	95.6	95.6	19.0 - 160	0.0618	27
Benzene	25.0	22.9	22.7	91.6 ✓	90.9 ✓	70.0 - 123	0.742	20
Bromodichloromethane	25.0	24.4	24.1	97.7	96.3	75.0 - 120	1.46	20
Bromochloromethane	25.0	24.6	24.1	98.5	96.3	76.0 - 122	2.27	20
Bromoform	25.0	24.6	24.5	98.3	98.2	68.0 - 132	0.180	20
Bromomethane	25.0	23.9	22.6	95.6	90.4	10.0 - 160	5.61	25
n-Butylbenzene	25.0	23.9	24.4	95.4	97.5	73.0 - 125	2.19	20
sec-Butylbenzene	25.0	24.1	24.7	96.5	98.6	75.0 - 125	2.19	20
tert-Butylbenzene	25.0	24.6	24.0	98.3	96.0	76.0 - 124	2.29	20
Carbon disulfide	25.0	26.2	25.9	105	104	61.0 - 128	1.11	20
Carbon tetrachloride	25.0	24.3	24.1	97.4	96.6	68.0 - 126	0.829	20
Chlorobenzene	25.0	24.3	24.7	97.2 ✓	98.9 ✓	80.0 - 121	1.64	20
Chlorodibromomethane	25.0	27.0	26.9	108	108	77.0 - 125	0.271	20
Chloroethane	25.0	22.0	22.3	88.1	89.2	47.0 - 150	1.24	20
Chloroform	25.0	24.9	24.1	99.7	96.4	73.0 - 120	3.34	20
Chloromethane	25.0	24.1	24.0	96.4	96.0	41.0 - 142	0.428	20
Cyclohexane	25.0	24.2	24.9	96.7	99.6	71.0 - 124	3.00	20
1,2-Dibromo-3-Chloropropane	25.0	26.6	28.6	107	115	58.0 - 134	7.28	20
1,2-Dibromoethane	25.0	25.5	25.8	102	103	80.0 - 122	1.13	20
1,2-Dichlorobenzene	25.0	24.6	25.1	98.3	100	79.0 - 121	1.98	20
1,3-Dichlorobenzene	25.0	25.7	25.6	103	102	79.0 - 120	0.514	20
1,4-Dichlorobenzene	25.0	22.9	23.1	91.5	92.3	79.0 - 120	0.817	20
Dichlorodifluoromethane	25.0	25.3	26.2	101	105	51.0 - 149	3.41	20
1,1-Dichloroethane	25.0	24.6	24.5	98.2	98.0	70.0 - 126	0.223	20
1,2-Dichloroethane	25.0	22.2	21.9	88.6	87.5	70.0 - 128	1.31	20
1,1-Dichloroethene	25.0	25.2	25.5	101 ✓	102 ✓	71.0 - 124	1.23	20
cis-1,2-Dichloroethene	25.0	24.3	23.9	97.1	95.6	73.0 - 120	1.54	20
trans-1,2-Dichloroethene	25.0	24.7	24.5	98.6	98.2	73.0 - 120	0.466	20
1,2-Dichloropropane	25.0	23.8	23.1	95.2	92.4	77.0 - 125	3.01	20
cis-1,3-Dichloropropene	25.0	24.1	23.9	96.6	95.5	80.0 - 123	1.16	20
trans-1,3-Dichloropropene	25.0	23.4	24.5	93.5	98.1	78.0 - 124	4.82	20
Ethylbenzene	25.0	23.4	24.0	93.5	96.1	79.0 - 123	2.77	20
2-Hexanone	125	123	127	98.7	102	67.0 - 149	3.18	20
Isopropylbenzene	25.0	26.2	26.5	105	106	76.0 - 127	0.977	20
p-Isopropyltoluene	25.0	23.5	23.5	94.1	93.9	76.0 - 125	0.208	20
2-Butanone (MEK)	125	128	127	102	101	44.0 - 160	1.00	20
Methyl Acetate	125	115	116	91.9	92.5	57.0 - 148	0.565	20
Methyl Cyclohexane	25.0	24.7	25.4	98.7	102	68.0 - 126	3.08	20
Methylene Chloride	25.0	24.3	24.1	97.2	96.3	67.0 - 120	0.941	20
4-Methyl-2-pentanone (MIBK)	125	123	126	98.3	101	68.0 - 142	2.50	20
Methyl tert-butyl ether	25.0	24.9	24.1	99.6	96.6	68.0 - 125	3.09	20
Naphthalene	25.0	26.1	26.5	104	106	54.0 - 135	1.72	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY
L1045571-01



SAMPLE NO.:

R3361853-1

R3361853-2

LCS Sample / File ID: R3361853-1 / 1120_02LCS
LCSD Sample / File ID: R3361853-2 / 1120_03
Instrument ID: VOCMS16
Analytical Method: 8260C

SDG: L1045571
Analytical Batch: WG1199481
Dilution Factor: 1
Matrix: GW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	ug/l	ug/l	ug/l	%	%	%	%	%
n-Propylbenzene	25.0	24.0	24.5	96.1	98.0	77.0 - 124	1.99	20
Styrene	25.0	26.8	26.6	107	106	73.0 - 130	1.04	20
1,1,2,2-Tetrachloroethane	25.0	21.3	23.0	85.4	92.1	65.0 - 130	7.63	20
Tetrachloroethene	25.0	24.0	24.2	96.0	97.0	72.0 - 132	1.00	20
Toluene	25.0	23.5	24.1	94.1	96.5	79.0 - 120	2.49	20
1,1,2-Trichlorotrifluoroethane	25.0	24.9	25.8	99.6	103	69.0 - 132	3.36	20
1,2,3-Trichlorobenzene	25.0	27.2	28.0	109	112	50.0 - 138	2.66	20
1,2,4-Trichlorobenzene	25.0	25.9	27.2	104	109	57.0 - 137	4.74	20
1,1,1-Trichloroethane	25.0	25.2	24.5	101	98.1	73.0 - 124	2.55	20
1,1,2-Trichloroethane	25.0	24.3	25.1	97.0	100	80.0 - 120	3.46	20
Trichloroethene	25.0	27.4	25.8	109	103	78.0 - 124	6.06	20
Trichlorofluoromethane	25.0	20.2	21.8	80.9	87.2	59.0 - 147	7.52	20
1,2,4-Trimethylbenzene	25.0	25.3	25.0	101	100	76.0 - 121	1.25	20
1,3,5-Trimethylbenzene	25.0	25.7	25.9	103	104	76.0 - 122	0.735	20
Vinyl chloride	25.0	25.8	25.9	103	104	67.0 - 131	0.390	20
o-Xylene	25.0	25.3	26.0	101	104	80.0 - 122	2.70	20
m&p-Xylenes	50.0	48.0	48.0	95.9	96.1	80.0 - 122	0.146	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Lab Sample ID: R3361853-3
Lab File ID: 1120_05
Instrument ID: VOCMS16
Analytical Batch: WG1199481
Analytical Method: 8260C

SDG: L1045571
Preparation Date/Time: 11/20/18 15:24
Analysis Date/Time: 11/20/18 15:24
Dilution Factor: 1
Matrix: GW

Sample ID	Lab Sample ID	Instrument	File ID	Analysis date/time
LCS	R3361853-1	VOCMS16	1120_02LCS	11/20/18 14:24
LCSD	R3361853-2	VOCMS16	1120_03	11/20/18 14:44
BW-02/MS/MSD	L1045571-01	VOCMS16	1120_28	11/20/18 23:05
BW-02/MS/MSD	L1045571-01	VOCMS16	1120_28	11/20/18 23:05
MS	R3361853-4	VOCMS16	1120_29	11/20/18 23:25
MSD	R3361853-5	VOCMS16	1120_30	11/20/18 23:45

Lab Sample ID: R3361607-3
Lab File ID: 1119_35
Instrument ID: VOCMS20
Analytical Batch: WG1199203
Analytical Method: 8260C

SDG: L1045571
Preparation Date/Time: 11/19/18 20:26
Analysis Date/Time: 11/19/18 20:26
Dilution Factor: 1
Matrix: GW

Sample ID	Lab Sample ID	Instrument	File ID	Analysis date/time
LCS	R3361607-1	VOCMS20	1119_32LCS	11/19/18 19:27
LCSD	R3361607-2	VOCMS20	1119_33	11/19/18 19:47
IW-4	L1045571-06	VOCMS20	1119_57	11/20/18 04:59
IW-5	L1045571-07	VOCMS20	1119_58	11/20/18 05:19
DUPE	L1045571-08	VOCMS20	1119_59	11/20/18 05:39
GPMW-26	L1045571-09	VOCMS20	1119_60	11/20/18 05:59



Lab Sample ID: R3361525-3
Lab File ID: 1119_06
Instrument ID: VOCMS30
Analytical Batch: WG1199053
Analytical Method: 8260C

SDG: L1045571
Preparation Date/Time: 11/19/18 14:34
Analysis Date/Time: 11/19/18 14:34
Dilution Factor: 1
Matrix: GW

Sample ID	Lab Sample ID	Instrument	File ID	Analysis date/time
LCS	R3361525-1	VOCMS30	1119_02LCS	11/19/18 13:18
LCSD	R3361525-2	VOCMS30	1119_03	11/19/18 13:37
BW-03	L1045571-02	VOCMS30	1119_22	11/19/18 20:30
BW-04	L1045571-03	VOCMS30	1119_23	11/19/18 20:49
IW-2	L1045571-04	VOCMS30	1119_24	11/19/18 21:08
IW-3	L1045571-05	VOCMS30	1119_25	11/19/18 21:27
OS	L1045153-03	VOCMS30	1119_26	11/19/18 21:46
MS	R3361525-4	VOCMS30	1119_27	11/19/18 22:05
MSD	R3361525-5	VOCMS30	1119_28	11/19/18 22:24

GC/MS INSTRUMENT
PERFORMANCE CHECK

Lab File ID: 1112_02-1
Instrument ID: VOCMS16
Analysis Date/Time: 11/12/18 13:04

SDG: L1045571
Analytical Method: 8260C

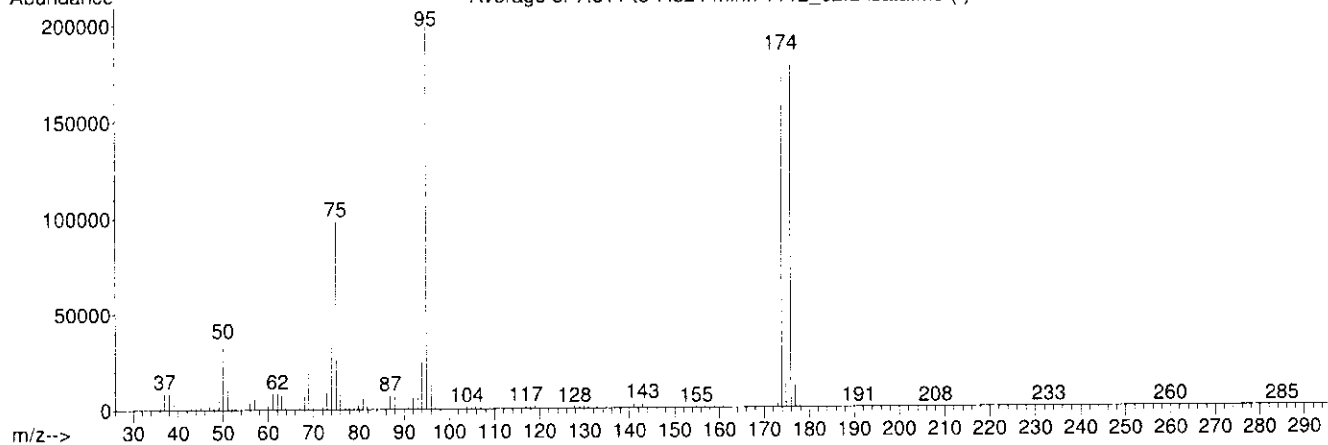
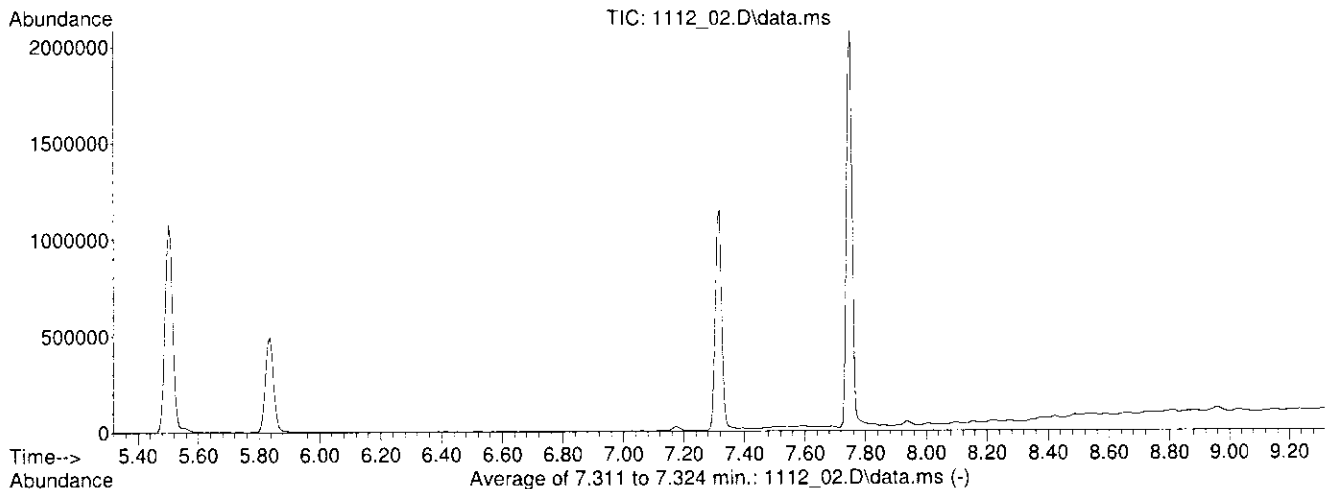
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
50	95	15	40	18 ✓
75	95	30	60	49
95	95	100	100	100
96	95	5	9	7
173	174	0	2	1
174	95	50	100	92
175	174	5	9	7
176	174	95	101	97
177	176	5	9	6

Sample ID	Lab Sample ID	File ID	Analysis date/time
STD-0.25	0.25	1112_04	11/12/18 13:44
STD-0.5	0.5	1112_05	11/12/18 14:04
STD-1	1	1112_06	11/12/18 14:24
STD-2	2	1112_07	11/12/18 14:44
STD-5.0	5.0	1112_08	11/12/18 15:04
STD-25	25	1112_09	11/12/18 15:25
STD-75	75	1112_10	11/12/18 15:45
STD-100	100	1112_11	11/12/18 16:05
STD-200	200	1112_12	11/12/18 16:25
SSCV	VOCMS161112181112_15-1459856	1112_15-1	11/12/18 17:25 ✓

Data Path : C:\msdchem\1\data\111218\
 Data File : 1112_02.D
 Acq On : 12 Nov 2018 1:04 pm
 Operator : 688
 Sample : INSTBLK
 Misc : water
 ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINTLRH.P

Method : C:\msdchem\1\methods\V816K12R.M
 Title : Env. Science Corp. 8260B/6210D/624 - VOCMS16
 Last Update : Tue Nov 13 09:27:43 2018



AutoFind: Scans 1184, 1185, 1186; Background Corrected with Scan 1175

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40 ✓	17.7	35360	PASS
75	95	30	60 ✓	49.4	98560	PASS
95	95	100	100 ✓	100.0	199488	PASS
96	95	5	9 ✓	6.6	13130	PASS
173	174	0.00	2 ✓	1.0	1851	PASS
174	95	50	100 ✓	92.4	184363	PASS
175	174	5	9 ✓	7.4	13606	PASS
176	174	95	101 ✓	96.9	178560	PASS
177	176	5	9 ✓	6.5	11597	PASS

GC/MS INSTRUMENT
PERFORMANCE CHECK

Lab File ID: 1120_01T-1
Instrument ID: VOCMS16
Analysis Date/Time: 11/20/18 14:04

SDG: L1045571
Analytical Method: 8260C

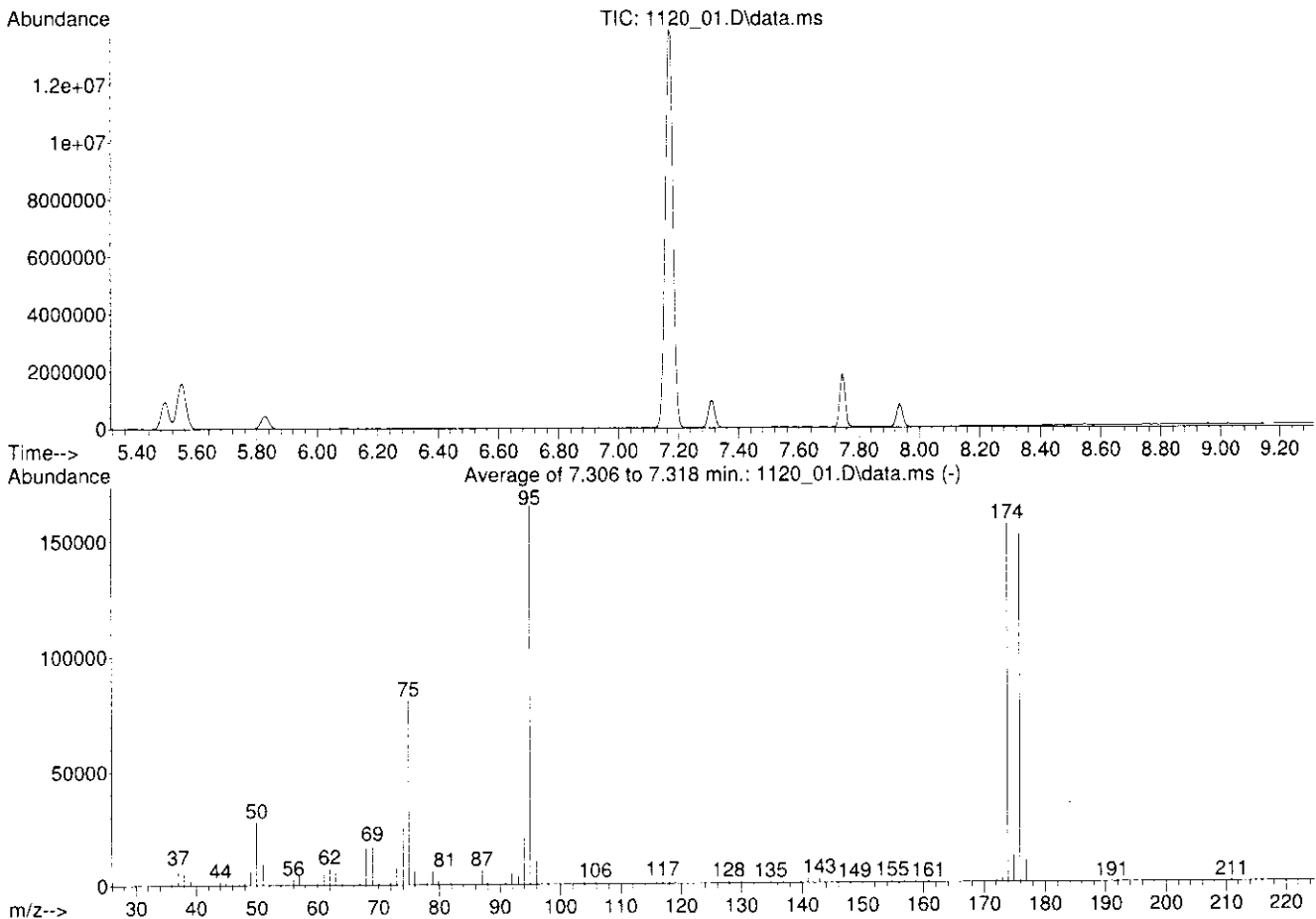
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
50	95	15	40	17 ✓
75	95	30	60	49
95	95	100	100	100
96	95	5	9	6
173	174	0	2	1
174	95	50	100	95
175	174	5	9	8
176	174	95	101	97
177	176	5	9	6

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	VOCMS161120181120_02-1459856	1120_02-1	11/20/18 14:24
LCS	R3361853-1	1120_02LCS	11/20/18 14:24
LCSD	R3361853-2	1120_03	11/20/18 14:44
BLANK	R3361853-3	1120_05	11/20/18 15:24
RL	VOCMS161120181120_06-1459856	1120_06-1	11/20/18 15:44
OS	L1045571-01	1120_28	11/20/18 23:05
BW-02/MS/MSD	L1045571-01	1120_28	11/20/18 23:05
MS	R3361853-4	1120_29	11/20/18 23:25
MSD	R3361853-5	1120_30	11/20/18 23:45 ✓

Data Path : C:\msdchem\1\data\112018\
 Data File : 1120_01.D
 Acq On : 20 Nov 2018 2:04 pm
 Operator : 688
 Sample : INSTBLK
 Misc : water
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINTLRH.P

Method : C:\msdchem\1\methods\V816K12R.M
 Title : Env. Science Corp. 8260B/6210D/624 - VOCMS16
 Last Update : Tue Nov 13 09:27:43 2018



Spectrum Information: Average of 7.306 to 7.318 min.

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	16.7	27627	PASS
75	95	30	60	48.9	80923	PASS
95	95	100	100	100.0	165461	PASS
96	95	5	9	6.2	10289	PASS
173	174	0.00	2	1.1	1747	PASS
174	95	50	100	94.8	156843	PASS
175	174	5	9	7.5	11837	PASS
176	174	95	101	97.2	152445	PASS
177	176	5	9	6.2	9521	PASS

GC/MS INSTRUMENT
PERFORMANCE CHECK

Lab File ID: 1010_12-1
Instrument ID: VOCMS20
Analysis Date/Time: 10/10/18 16:03

SDG: L1045571
Analytical Method: 8260C

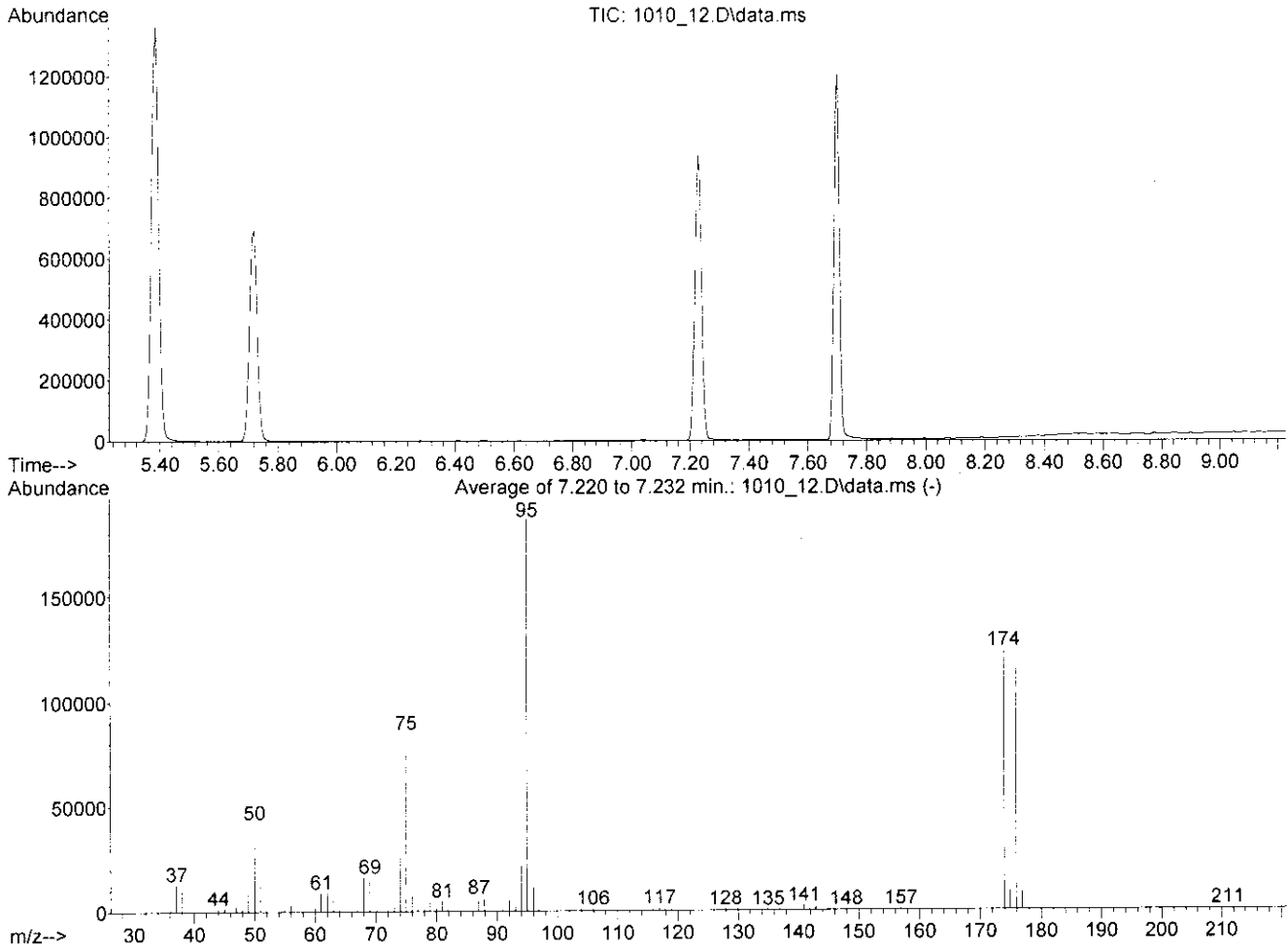
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
50	95	15	40	22 ✓
75	95	30	60	45
95	95	100	100	100
96	95	5	9	6
173	174	0	2	1
174	95	50	100	66
175	174	5	9	7
176	174	95	101	99
177	176	5	9	7

Sample ID	Lab Sample ID	File ID	Analysis date/time
STD-0.25	0.25	1010_14	10/10/18 16:43
STD-0.5	0.5	1010_15	10/10/18 17:03
STD-1	1	1010_16	10/10/18 17:23
STD-2	2	1010_17	10/10/18 17:42
STD-5.0	5.0	1010_18	10/10/18 18:02
STD-25	25	1010_19	10/10/18 18:22
STD-100	100	1010_21	10/10/18 19:02
STD-200	200	1010_22	10/10/18 19:22
SSCV	VOCMS201010181010_25-1457818	1010_25-1	10/10/18 20:21
STD-1A	1A	1010_27	10/10/18 21:01
STD-5A	5A	1010_28	10/10/18 21:21
STD-10A	10A	1010_29	10/10/18 21:40
STD-15A	15A	1010_30	10/10/18 22:00
STD-20A	20A	1010_31	10/10/18 22:20 ✓

Data Path : C:\msdchem\1\data\101018\
 Data File : 1010 12.D
 Acq On : 10 Oct 2018 4:03 pm
 Operator : 605
 Sample : INSTBLK
 Misc : water
 ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINTLRH.P

Method : C:\msdchem\1\methods\V820J10R.M
 Title : Env. Science Corp. 8260B/6210D/624 - VOCMS20
 Last Update : Thu Oct 11 11:02:49 2018



AutoFind: Scans 1005, 1006, 1007; Background Corrected with Scan 999

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.5 ✓	42069	PASS
75	95	30	60	45.4 ✓	85008	PASS
95	95	100	100	100.0	187264	PASS
96	95	5	9	6.2 ✓	11675	PASS
173	174	0.00	2	0.9 ✓	1122	PASS
174	95	50	100	66.2 ✓	123907	PASS
175	174	5	9	7.0 ✓	8697	PASS
176	174	95	101	99.3 ✓	123008	PASS
177	176	5	9	6.7 ✓	8293	PASS

GC/MS INSTRUMENT
PERFORMANCE CHECK

Lab File ID: 1119_31T-1
Instrument ID: VOCMS20
Analysis Date/Time: 11/19/18 19:07

SDG: L1045571
Analytical Method: 8260C

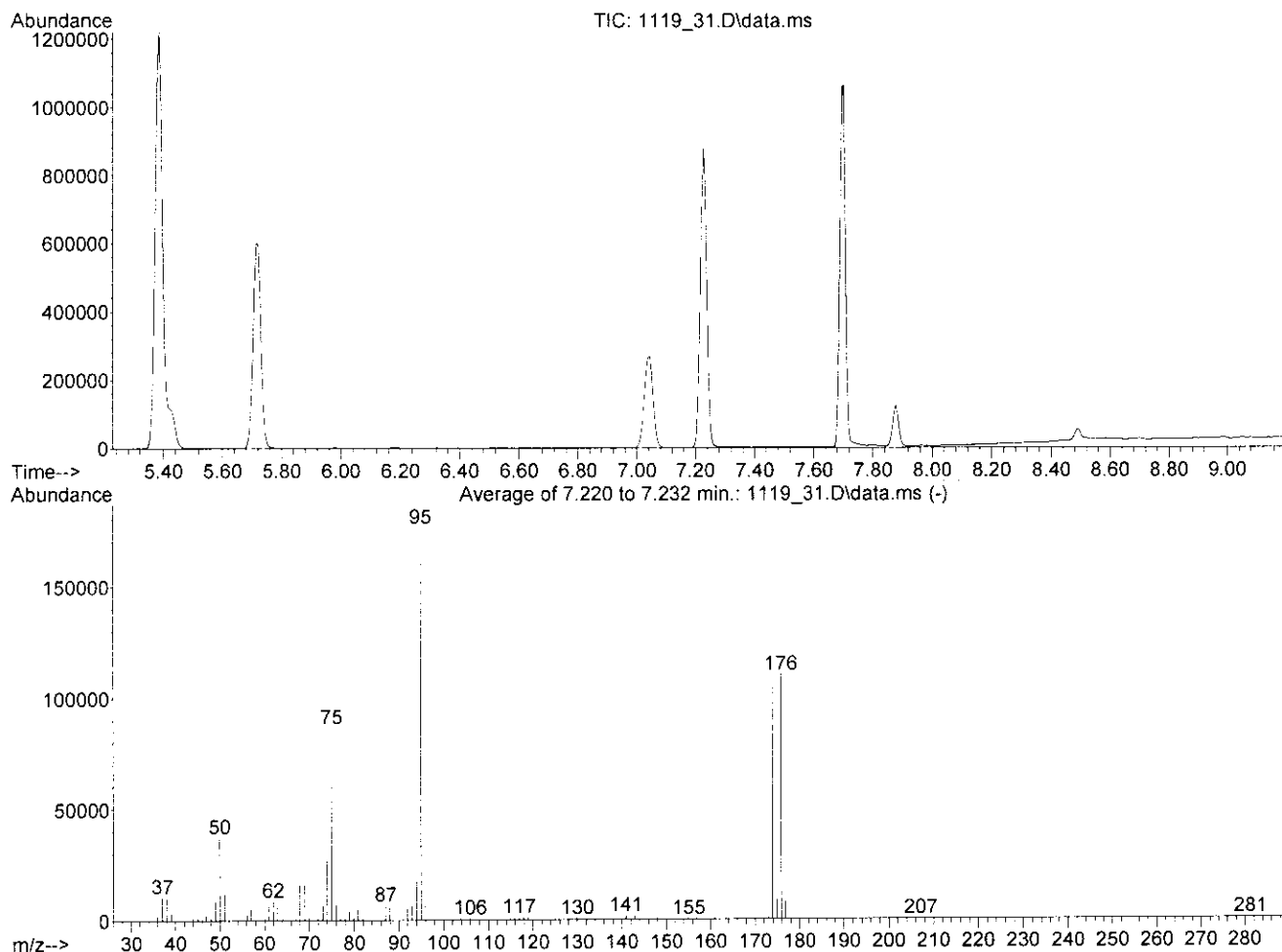
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
50	95	15	40	21 ✓
75	95	30	60	49
95	95	100	100	100
96	95	5	9	7
173	174	0	2	1
174	95	50	100	62
175	174	5	9	8
176	174	95	101	100
177	176	5	9	7

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	VOCMS201119181119_32-1457818	1119_32-1	11/19/18 19:27
LCS	R3361607-1	1119_32LCS	11/19/18 19:27
LCSD	R3361607-2	1119_33	11/19/18 19:47
BLANK	R3361607-3	1119_35	11/19/18 20:26
IW-4	L1045571-06	1119_57	11/20/18 04:59
IW-5	L1045571-07	1119_58	11/20/18 05:19
DUPE	L1045571-08	1119_59	11/20/18 05:39
GPMW-26	L1045571-09	1119_60	11/20/18 05:59 ✓

Data Path : C:\msdchem\1\data\111918\
Data File : 1119 31.D
Acq On : 19 Nov 2018 7:07 pm
Operator : 605
Sample : INSTBLK
Misc : water
ALS Vial : 31 Sample Multiplier: 1

Integration File: RTEINTLRH.P

Method : C:\msdchem\1\methods\V820J10R.M
Title : Env. Science Corp. 8260B/6210D/624 - VOCMS20
Last Update : Thu Oct 11 11:34:22 2018



AutoFind: Scans 1005, 1006, 1007; Background Corrected with Scan 999

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.9✓	37168	PASS
75	95	30	60	48.9✓	86912	PASS
95	95	100	100	100.0	177835	PASS
96	95	5	9	6.6✓	11776	PASS
173	174	0.00	2	0.8✓	856	PASS
174	95	50	100	61.9✓	110117	PASS
175	174	5	9	7.6✓	8372	PASS
176	174	95	101	100.2✓	110315	PASS
177	176	5	9	6.9✓	7661	PASS

GC/MS INSTRUMENT
PERFORMANCE CHECK

Lab File ID: 1101_10-1
Instrument ID: VOCMS30
Analysis Date/Time: 11/01/18 15:31

SDG: L1045571
Analytical Method: 8260C

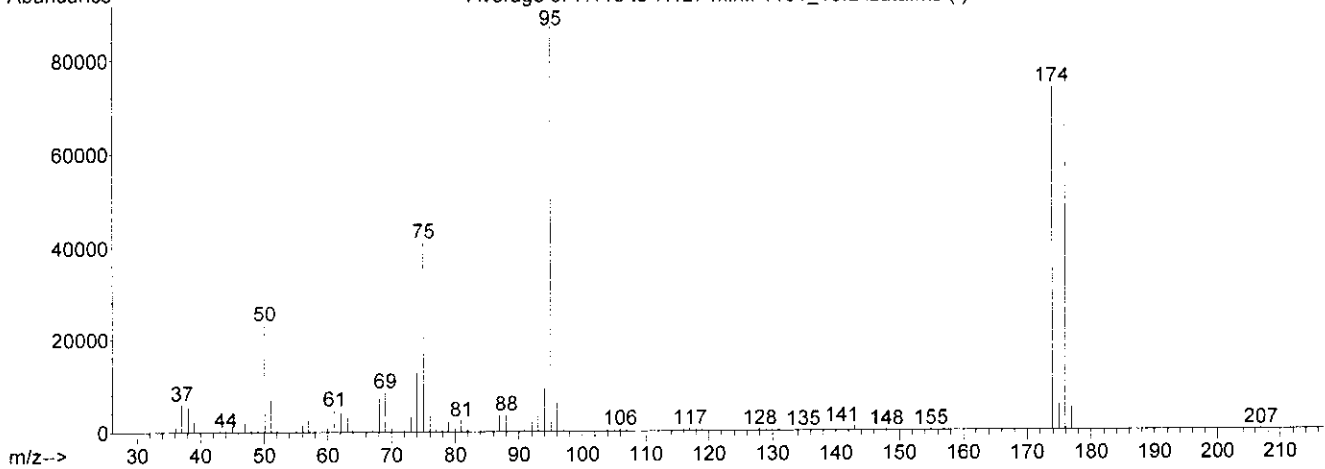
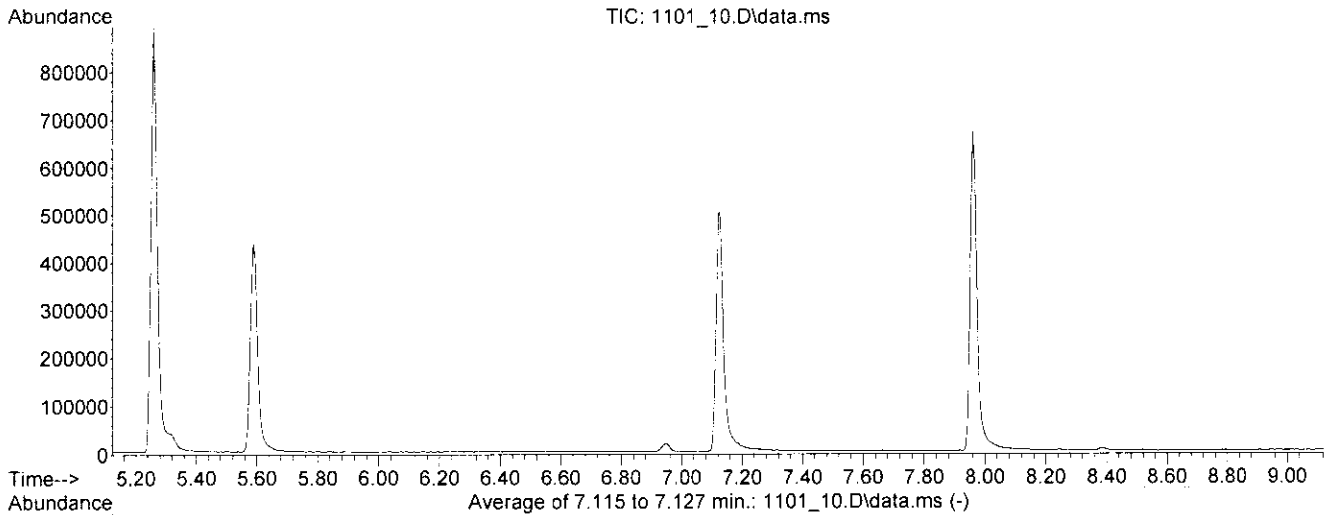
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
50	95	15	40	26 ✓
75	95	30	60	47
95	95	100	100	100
96	95	5	9	7
173	174	0	2	0
174	95	50	100	85
175	174	5	9	8
176	174	95	101	98
177	176	5	9	7

Sample ID	Lab Sample ID	File ID	Analysis date/time
STD-0.25	0.25	1101_12	11/01/18 16:09
STD-0.5	0.5	1101_13	11/01/18 16:28
STD-1	1	1101_14	11/01/18 16:47
STD-2	2	1101_15	11/01/18 17:06
STD-5.0	5.0	1101_16	11/01/18 17:25
STD-25	25	1101_17	11/01/18 17:44
STD-75	75	1101_18	11/01/18 18:03
STD-100	100	1101_19	11/01/18 18:22
STD-200	200	1101_20	11/01/18 18:41
SSCV	VOCMS301101181101_23-1459971	1101_23-1	11/01/18 19:37 ✓

Data Path : C:\msdchem\1\data\110118\
 Data File : 1101_10.D
 Acq On : 1 Nov 2018 3:31 pm
 Operator : 605
 Sample : INSTBLK
 Misc : water
 ALS Vial : 10 Sample Multiplier: 1

Integration File: RTEINTLRH.P

Method : C:\msdchem\1\methods\V830K01R.M
 Title : Env. Science Corp. 8260B/6210D/624 - VOCMS30
 Last Update : Fri Nov 02 14:55:45 2018



AutoFind: Scans 1156, 1157, 1158; Background Corrected with Scan 1151

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.5 ✓	23125	PASS
75	95	30	60	47.1 ✓	41099	PASS
95	95	100	100	100.0	87264	PASS
96	95	5	9	7.0 ✓	6069	PASS
173	174	0.00	2	0.0 ✓	0	PASS
174	95	50	100	85.0 ✓	74139	PASS
175	174	5	9	7.5 ✓	5582	PASS
176	174	95	101	97.6 ✓	72360	PASS
177	176	5	9	6.7 ✓	4812	PASS

GC/MS INSTRUMENT
PERFORMANCE CHECK

Lab File ID: 1113_49-1
Instrument ID: VOCMS30
Analysis Date/Time: 11/14/18 01:59

SDG: L1045571
Analytical Method: 8260C

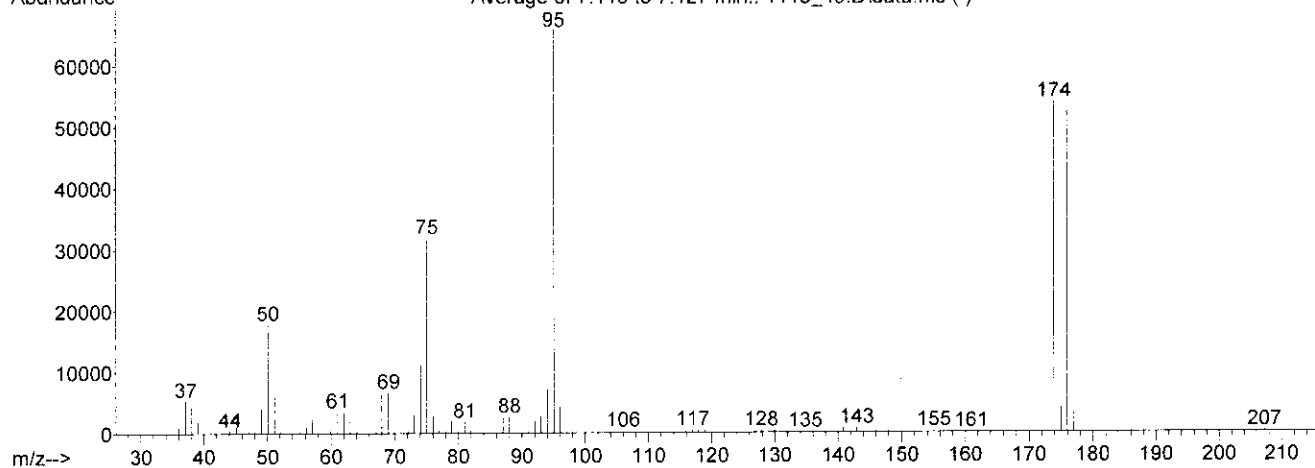
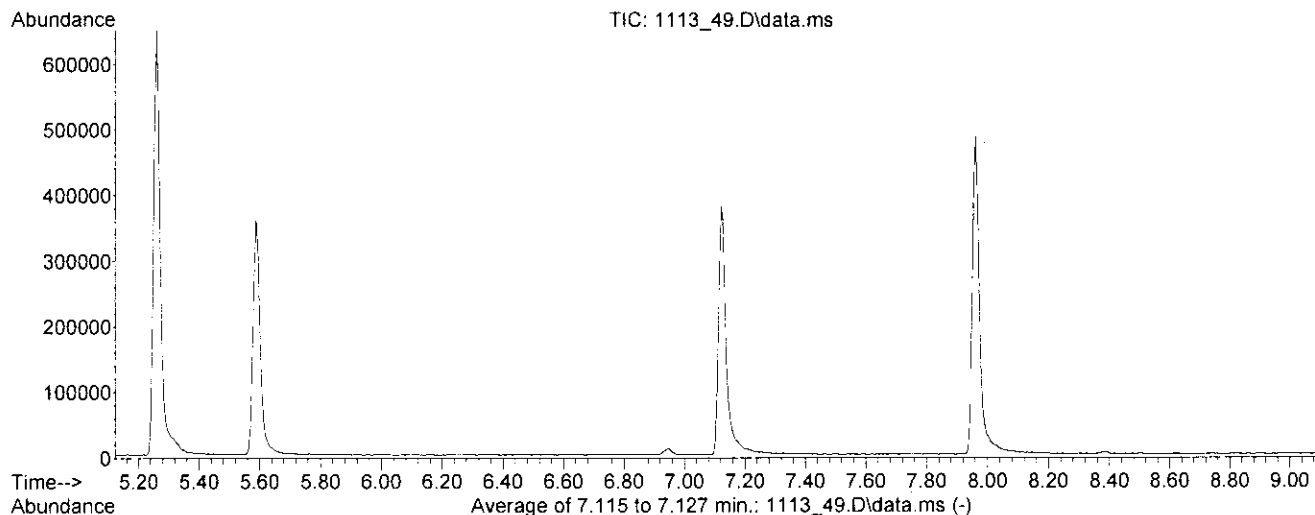
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
50	95	15	40	27
75	95	30	60	48
95	95	100	100	100
96	95	5	9	6
173	174	0	2	0
174	95	50	100	82
175	174	5	9	8
176	174	95	101	99
177	176	5	9	7

Sample ID	Lab Sample ID	File ID	Analysis date/time
STD-1A	1A	1113_51	11/14/18 02:37
STD-5A	5A	1113_52	11/14/18 02:56
STD-10A	10A	1113_53	11/14/18 03:15
STD-15A	15A	1113_54	11/14/18 03:34
STD-20A	20A	1113_55	11/14/18 03:53

Data Path : C:\msdchem\1\data\111318\
 Data File : 1113_49.D
 Acq On : 14 Nov 2018 1:59 am
 Operator : 605
 Sample : INSTBLK
 Misc : water IS/SURR 18J16488
 ALS Vial : 49 Sample Multiplier: 1

Integration File: RTEINTLRH.P

Method : C:\msdchem\1\methods\V830K01R.M
 Title : Env. Science Corp. 8260B/6210D/624 - VOCMS30
 Last Update : Fri Nov 02 14:55:45 2018



AutoFind: Scans 1156, 1157, 1158; Background Corrected with Scan 1151

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.8 ✓	17759	PASS
75	95	30	60	48.3 ✓	31965	PASS
95	95	100	100	100.0	66157	PASS
96	95	5	9	6.4 ✓	4213	PASS
173	174	0.00	2	0.0 ✓	0	PASS
174	95	50	100	81.9 ✓	54187	PASS
175	174	5	9	7.7 ✓	4150	PASS
176	174	95	101	98.9 ✓	53587	PASS
177	176	5	9	6.6 ✓	3531	PASS

GC/MS INSTRUMENT
PERFORMANCE CHECK

Lab File ID: 1119_01T-1
Instrument ID: VOCMS30
Analysis Date/Time: 11/19/18 12:59

SDG: L1045571
Analytical Method: 8260C

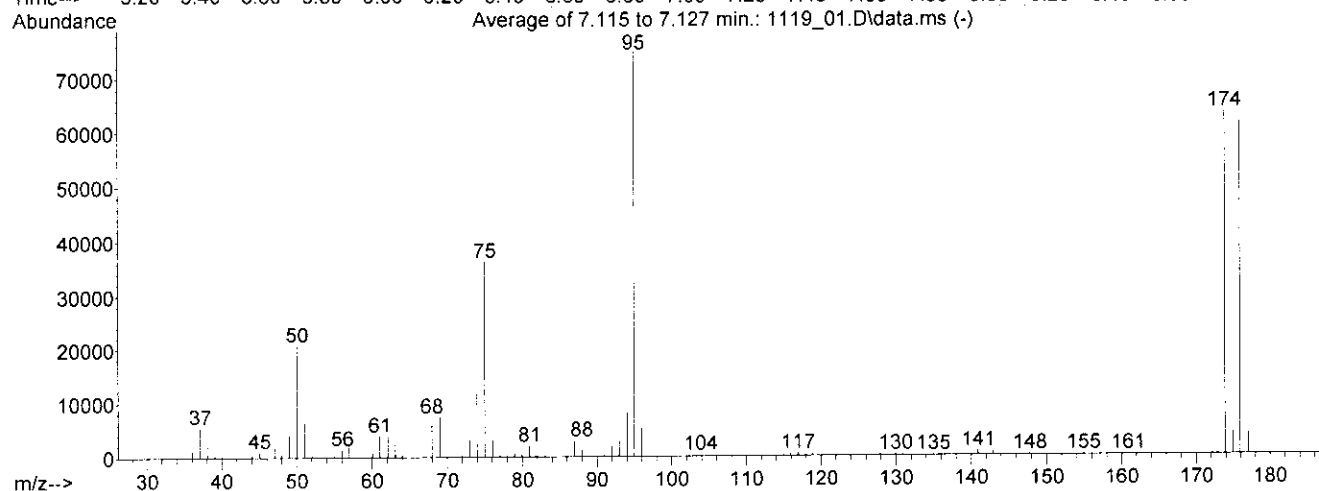
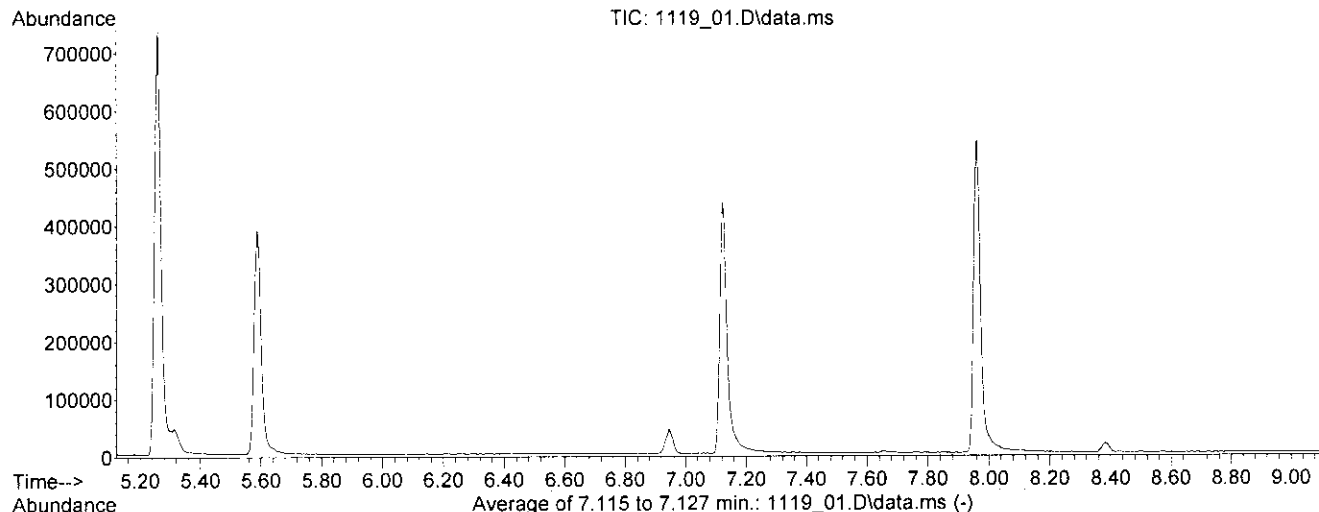
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
50	95	15	40	28 ✓
75	95	30	60	48
95	95	100	100	100
96	95	5	9	7
173	174	0	2	1
174	95	50	100	85
175	174	5	9	6
176	174	95	101	97
177	176	5	9	6

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	VOCMS301119181119_02-1459971	1119_02-1	11/19/18 13:18
LCS	R3361525-1	1119_02LCS	11/19/18 13:18
LCSD	R3361525-2	1119_03	11/19/18 13:37
BLANK	R3361525-3	1119_06	11/19/18 14:34
BW-03	L1045571-02	1119_22	11/19/18 20:30
BW-04	L1045571-03	1119_23	11/19/18 20:49
IW-2	L1045571-04	1119_24	11/19/18 21:08
IW-3	L1045571-05	1119_25	11/19/18 21:27
OS	L1045153-03	1119_26	11/19/18 21:46
MS	R3361525-4	1119_27	11/19/18 22:05
MSD	R3361525-5	1119_28	11/19/18 22:24 ✓

Data Path : C:\msdchem\1\data\111918\
 Data File : 1119_01.D
 Acq On : 19 Nov 2018 12:59 pm
 Operator : 605
 Sample : INSTBLK
 Misc : water
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINTLRH.P

Method : C:\msdchem\1\methods\V830K13R.M
 Title : Env. Science Corp. 8260B/6210D/624 - VOCMS30
 Last Update : Wed Nov 14 17:05:29 2018



AutoFind: Scans 1156, 1157, 1158; Background Corrected with Scan 1151

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	27.6 ✓	20728	PASS
75	95	30	60	48.3 ✓	36317	PASS
95	95	100	100	100.0	75173	PASS
96	95	5	9	6.9 ✓	5167	PASS
173	174	0.00	2	0.6 ✓	356	PASS
174	95	50	100	84.9 ✓	63795	PASS
175	174	5	9	6.5 ✓	4177	PASS
176	174	95	101	96.9 ✓	61827	PASS
177	176	5	9	6.2 ✓	3844	PASS

INTERNAL STANDARD
AND RETENTION TIME

SDG: L1045571
Instrument ID: VOCMS16
Std File: 1120_02-1

Analytical Method: 8260C
Calibration Start Date: 11/12/18 13:44
Calibration End Date: 11/12/18 16:25
Std Analysis Date: 11/20/18 14:24

Sample ID	File ID	1,4-DCB		DFB		BCP		PFB	
		Response	RT	Response	RT	Response	RT	Response	RT
STANDARD		390147	7.74	611559	4.68	97072	5.83	388775	4.35
UPPER LIMIT		780294		1223118		194144		777550	
LOWER LIMIT		195074		305780		48536		194388	
LCS R3361853-1 WG1199481 1x	1120_02LCS	390147	✓ 7.74	611559	✓ 4.68	97072	✓ 5.83	388775	✓ 4.35
LCSD R3361853-2 WG1199481 1x	1120_03	386541	7.75	607491	4.68	94140	5.83	390241	4.35
BLANK R3361853-3 WG1199481 1x	1120_05	365762	7.75	539895	4.68	84469	5.83	346909	4.35
L1045571-01 WG1199481 1x	1120_28	355585	7.74	488504	4.68	79065	5.83	307762	4.35
OS L1045571-01 WG1199481 1x	1120_28	355585	7.74	488504	4.68	79065	5.83	307762	4.35
MS R3361853-4 WG1199481 1x	1120_29	356686	7.75	564424	4.68	88226	5.83	357611	4.35
MSD R3361853-5 WG1199481 1x	1120_30	350535	7.75	562503	4.68	83940	5.84	357216	4.35

1,4-DCB - 8260-1,4-DICHLOROBENZENE-D4
BCP - 8260-2-BROMO-1-CHLOROPROPANE

DFB - 8260-1,4-DIFLUOROBENZENE
PFB - 8260-PENTAFLUOROBENZENE

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

INTERNAL STANDARD
AND RETENTION TIME

SDG: L1045571
Instrument ID: VOCMS20
Std File: 1119_32-1

Analytical Method: 8260C
Calibration Start Date: 10/10/18 16:43
Calibration End Date: 10/10/18 22:20
Std Analysis Date: 11/19/18 19:27

Sample ID	File ID	1,4-DCB		DFB		BCP		PFB	
		Response	RT	Response	RT	Response	RT	Response	RT
STANDARD		205166	7.70	598850	4.57	103442	5.72	333623	4.24
UPPER LIMIT		410332		1197700		206884		667246	
LOWER LIMIT		102583		299425		51721		166812	
LCS R3361607-1 WG1199203 1x	1119_32LCS	205166	✓ 7.70	598850	✓ 4.57	103442	✓ 5.72	333623	✓ 4.24
LCSD R3361607-2 WG1199203 1x	1119_33	202571	7.70	587483	4.57	101628	5.72	340860	4.24
BLANK R3361607-3 WG1199203 1x	1119_35	191606	7.70	547887	4.57	90488	5.72	321210	4.24
L1045571-06 WG1199203 1x	1119_57	190106	7.70	549602	4.57	97086	5.72	328922	4.24
L1045571-07 WG1199203 1x	1119_58	203027	7.70	593818	4.57	99554	5.72	339558	4.24
L1045571-08 WG1199203 1x	1119_59	191882	7.70	574405	4.57	97919	5.72	324792	4.24
L1045571-09 WG1199203 1x	1119_60	197883	7.70	590876	4.57	99937	5.72	335591	4.24

1,4-DCB - 8260-1,4-DICHLOROBENZENE-D4
BCP - 8260-2-BROMO-1-CHLOROPROPANE

DFB - 8260-1,4-DIFLUOROBENZENE
PFB - 8260-PENTAFLUOROBENZENE

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

INTERNAL STANDARD
AND RETENTION TIME

SDG: L1045571
Instrument ID: VOCMS30
Std File: 1119_02-1

Analytical Method: 8260C
Calibration Start Date: 11/01/18 16:09
Calibration End Date: 11/14/18 03:53
Std Analysis Date: 11/19/18 13:18

Sample ID	File ID	1,4-DCB		DFB		BCP		PFB	
		Response	RT	Response	RT	Response	RT	Response	RT
STANDARD		124585	7.96	270897	4.44	44393	5.59	200766	4.12
UPPER LIMIT		249170		541794		88786		401532	
LOWER LIMIT		62293		135449		22197		100383	
LCS R3361525-1 WG1199053 1x	1119_02LCS	124585	✓ 7.96	270897	✓ 4.44	44393	✓ 5.59	200766	✓ 4.12
LCSD R3361525-2 WG1199053 1x	1119_03	128218	7.96	285916	4.44	44763	5.59	210486	4.12
BLANK R3361525-3 WG1199053 1x	1119_06	126777	7.96	287055	4.44	44731	5.59	211868	4.12
L1045571-02 WG1199053 1x	1119_22	116279	7.96	278291	4.44	42732	5.59	203368	4.12
L1045571-03 WG1199053 1x	1119_23	115683	7.96	276080	4.44	42344	5.59	202203	4.12
L1045571-04 WG1199053 1x	1119_24	118245	7.96	283369	4.44	43495	5.59	204362	4.12
L1045571-05 WG1199053 1x	1119_25	114913	7.96	274747	4.44	43115	5.59	198818	4.12
OS L1045153-03 WG1199053 5x	1119_26	121410	7.96	285871	4.44	42227	5.59	205198	4.12
MS R3361525-4 WG1199053 5x	1119_27	127841	7.96	276918	4.44	43193	5.59	204219	4.12
MSD R3361525-5 WG1199053 5x	1119_28	128647	7.95	283302	4.44	44240	5.59	209113	4.12

1,4-DCB - 8260-1,4-DICHLOROBENZENE-D4
BCP - 8260-2-BROMO-1-CHLOROPROPANE

DFB - 8260-1,4-DIFLUOROBENZENE
PFB - 8260-PENTAFLUOROBENZENE

∗: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DATA USABILITY SUMMARY REPORT

for

LABELLA ASSOCIATES, P.C.

300 State Street

Rochester, NY 14614

MICHELSON BCP SITE

Project 2161282

Aqueous Samples

SDG: L1080247

Sampled March 2019

VOLATILE ORGANICS

BW-02	(L1080247-01)	BW-03	(L1080247-02)
BW-04	(L1080247-03)	GOMW-34	(L1080247-04)
GPMW-26	(L1080247-05)	IW-2	(L1080247-06)
IW-3	(L1080247-07)	IW-4	(L1080247-08)
IW-5	(L1080247-09)	DUPE	(L1080247-10)

DATA ASSESSMENT

An ASP Category B data package containing analytical results for ten aqueous samples was received from Labella Associates, P.C. on 01Apr19. The deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Michelson BCP Site, were identified by Chain of Custody documents and traceable through the work of ESC Lab Sciences, the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8260, addressed determinations of volatile organics. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOP NO. HW-33, Rev. #3, March 2013, Low/Medium Volatile Data Validation) was used as a technical reference.

The cis-1,2-dichloroethene concentration found in BW-04 has been qualified as an estimation due to a high surrogate standard recovery.

CORRECTNESS AND USABILITY

The data package supporting the results from this group of samples was found to be complete and well organized. Reported data is felt to be completely usable in its present form. Data presenting a usable estimation of the conditions being measured has been flagged "J". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed strict QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly, DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature:


James B. Baldwin
DATAVAL Inc.

Date: 08 Apr 19

SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved or are not analyzed within established holding times may no longer be considered representative. Holding times are calculated from the time of sample collection. Samples must remain chilled to $4\pm 2^{\circ}\text{C}$ between the time of collection and the time of analysis. Acid preserved VOC samples must be analyzed within 14 days, unpreserved VOC samples within 7 days. The holding time for VOC soils is 14 days. Aqueous semivolatile organics, pesticide and PCB samples must be extracted within seven days of collection. Soils must be extracted within 14 days. The extracts must then be analyzed within forty days of extraction. The holding times for cyanide and mercury samples are 14 and 28 days, respectively. Metals samples must be analyzed within six months.

This delivery group contained ten aqueous samples that were collected from the Michelson BCP Site between 15Mar19 and 18Mar19. The entire group of samples was shipped to the laboratory, via FedEx, on 18Mar19 and was received the following morning. At the time of receipt, the cooler of samples was found to be intact and properly chilled, with custody seals in place. A cooler temperature of 1.3°C was recorded in the laboratory. Although proper sample preservation was not documented in the field custody record, checks made at the time of analysis verified that each sample volume was properly stabilized at a $\text{pH} < 2$.

VOLATILE ORGANICS

This group of acid preserved samples was analyzed for volatile organics between 24Mar19 and 26Mar19. The SW-846 holding time requirements were satisfied.

Blanks

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Trip blanks monitor shipment and storage activities. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank.

Three method blanks were analyzed with this group of samples. Each of these blanks demonstrated acceptable chromatography and was free of targeted analyte contamination.

MS Tuning

Mass spectrometer tuning and performance criteria are established to ensure sufficient mass resolution and sensitivity to accurately detect and identify targeted analytes. Verification is accomplished using a certified standard.

An Instrument Performance Check Standard of BFB was analyzed prior to each analytical sequence that included samples from this program. An Instrument Performance Check Form is present for each BFB evaluation. The BFB tunes associated with this group of samples satisfied the program acceptance criteria.

Calibrations

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration check standards verify instrument stability.

Initial instrument calibrations for VOC were performed on 04Mar19 and 21Mar19. Standards of 0.04, 0.1, 0.2, 0.5, 1.0, 2.0, 5.0, 25, 75, 100 and 200 µg/l were included. Each analyte targeted by this program produced the required levels of instrument response and demonstrated an acceptable degree of linearity during both calibrations.

Calibration check standards were analyzed on 24Mar19 (10:46), 24Mar19 (20:34) and 25Mar19, prior to the 12-hour periods of instrument operation that included samples from this program. When compared to the initial calibrations, each targeted analyte demonstrated an acceptable level of instrument stability during these checks.

Surrogates

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Surrogate Summary Sheets were properly prepared, based on the laboratory's statistical acceptance criteria. When compared to the program requirements, however, unacceptable recoveries were reported for the additions of 1,2-dichloroethane-d4 to the samples of BW-02 (121%), BW-03 (118%), BW-04 (119%) and GPMW-34 (118%) that were analyzed on GC/MS System VOCMS25. The cis-1,2-dichloroethene concentration found in BW-04 has been qualified as an estimation based on these indications of positive bias. The remaining samples that were associated with these surrogates produced negative results that remain unqualified.

Internal Standards

Internal standards are added to each sample, blank and standard just prior to injection. Analyte concentrations are calculated relative to the response of a specific internal standard. Internal standard performance criteria ensure that GC/MS sensitivity and response are stable during the analysis of each sample. The area

of internal standard peaks may not vary by more than a factor of two. When compared to the preceding calibration check, retention times may not vary by more than 30 seconds.

The laboratory correctly calculated control limits for internal standard response and retention times. When compared to this criteria, acceptable performance was reported for the internal standard additions to each program sample.

Matrix Spikes

Matrix spiking refers to the addition of known analyte concentrations to a sample prior to analysis. Analyte recoveries provide an indication of laboratory accuracy. The analysis of a duplicate spiked aliquot provides a measurement of precision.

BW-04 was selected for matrix spiking. The entire list of targeted analytes was added to two aliquots of this sample. The analyte recoveries reported for these spikes demonstrated acceptable levels of measurement precision and accuracy.

Four spiked blanks (LCS/LCSD, LCS, LCS) were also analyzed with this group of samples. The recoveries reported from these LCS samples satisfied the program acceptance criteria.

Duplicates

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. The results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision may be indicative of sample non-homogeneity, method defects, or poor laboratory technique.

The field split duplicate sample that was included in this delivery group was not identified.

Reported Analytes

Formal reports were provided for each sample. The data package also included total ion chromatograms and raw instrument printouts. Reference mass spectra were provided to confirm the identification of each analyte that was found in this group of samples. Tentatively Identified Compounds (TIC) were not reported.

SUMMARY OF QUALIFIED DATA

SAMPLED: MARCH 2019

MICHELSON BCP SITE

SURROGATE
CIS-1,2-DICHLOROETHENE

1130J

BW-02 (L1080247-01)
 BW-03 (L1080247-02)
 BW-04 (L1080247-03)
 GOMW-34 (L1080247-04)
 GPMW-26 (L1080247-05)
 IW-2 (L1080247-06)
 IW-3 (L1080247-07)
 IW-4 (L1080247-08)
 IW-5 (L1080247-09)
 DUPE (L1080247-10)

1A-OR

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.

SAMPLE NO.:

BW-02

Lab Sample ID: L1080247-01
 Client Sample ID: BW-02
 Lab File ID: 0324_21
 Instrument ID: VOCMS7
 Analytical Batch: WG1254695
 Dilution Factor: 1
 Analytical Method: 8260C
 Matrix: GW
 Total Solids (%): _____

SDG: L1080247
 Collected Date/Time: 03/15/19 12:40
 Received Date/Time: 03/19/19 08:30
 Preparation Date/Time: 03/24/19 17:12
 Analysis Date/Time: 03/24/19 17:12
 Prep Method: 8260C
 Sample Vol Used: 5 mL
 Initial Wt/Vol: _____
 Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	3.04	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.76	ND		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	6.39	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	0	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	8.52	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	5.65	ND		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.



SAMPLE NO.:

BW-02

Lab Sample ID: L1080247-01
Client Sample ID: BW-02
Lab File ID: 0324_21
Instrument ID: VOCMS7
Analytical Batch: WG1254695
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%):

SDG: L1080247
Collected Date/Time: 03/15/19 12:40
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/24/19 17:12
Analysis Date/Time: 03/24/19 17:12
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol:
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	4.55	11.5		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	6.79	ND		0.341	1.00
m&p-Xylenes	1330-20-7	6.48	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,3,5-Trimethylbenzene	108-67-8	7.36	ND		0.387	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEETONE LAB. NATIONWIDE. 

SAMPLE NO.:

BW-02

Lab Sample ID: L1080247-01
Client Sample ID: BW-02
Lab File ID: 0325_42
Instrument ID: VOCMS25
Analytical Batch: WG1255146
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/15/19 12:40
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/25/19 23:00
Analysis Date/Time: 03/25/19 23:00
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result ug/l	Qualifier	MDL ug/l	RDL ug/l
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00

7/14/19

1A-OR

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE

SAMPLE NO.:

BW-03

Lab Sample ID: L1080247-02
Client Sample ID: BW-03
Lab File ID: 0324_22
Instrument ID: VOCMS7
Analytical Batch: WG1254695
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/15/19 13:05
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/24/19 17:32
Analysis Date/Time: 03/24/19 17:32
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	3.04	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.76	179		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	3.11	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	6.40	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	0	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	0	ND		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.



SAMPLE NO.:

BW-03

Lab Sample ID: L1080247-02
Client Sample ID: BW-03
Lab File ID: 0324_22
Instrument ID: VOCMS7
Analytical Batch: WG1254695
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/15/19 13:05
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/24/19 17:32
Analysis Date/Time: 03/24/19 17:32
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	4.55	23.6		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	1.90	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	6.49	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,3,5-Trimethylbenzene	108-67-8	7.36	ND		0.387	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEETONE LAB. NATIONWIDE. 

SAMPLE NO.:

BW-03

Lab Sample ID: L1080247-02
Client Sample ID: BW-03
Lab File ID: 0325_43
Instrument ID: VOCMS25
Analytical Batch: WG1255146
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/15/19 13:05
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/25/19 23:20
Analysis Date/Time: 03/25/19 23:20
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result ug/l	Qualifier	MDL ug/l	RDL ug/l
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00



1A-OR

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.

SAMPLE NO.:

BW-04

Lab Sample ID: L1080247-03
Client Sample ID: BW-04
Lab File ID: 0324_23
Instrument ID: VOCMS7
Analytical Batch: WG1254695
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/15/19 13:20
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/24/19 17:52
Analysis Date/Time: 03/24/19 17:52
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	3.04	ND		10.0	50.0
Benzene	71-43-2	4.23	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	3.46	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	2.67	1.34		0.398	1.00
trans-1,2-Dichloroethene	156-60-5	3.11	4.88		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	0	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	5.65	ND		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00

ACCOUNT:
 LaBella Associates, P.C.

PROJECT:
 2161282

SDG:
 L1080247

DATE/TIME:
 03/29/19 07:46

PAGE:
 107 of 413

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.



SAMPLE NO.:

BW-04

Lab Sample ID: L1080247-03
Client Sample ID: BW-04
Lab File ID: 0324_23
Instrument ID: VOCMS7
Analytical Batch: WG1254695
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/15/19 13:20
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/24/19 17:52
Analysis Date/Time: 03/24/19 17:52
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,1,1-Trichloroethane	71-55-6	4.02	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	4.55	74.4		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	1.89	29.0		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	6.48	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,2,4-Trimethylbenzene	95-63-6	7.53	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEETONE LAB. NATIONWIDE. 

SAMPLE NO.:

BW-04

Lab Sample ID: L1080247-03
Client Sample ID: BW-04
Lab File ID: 0325_48
Instrument ID: VOCMS25
Analytical Batch: WG1255146
Dilution Factor: 25
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/15/19 13:20
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/26/19 01:00
Analysis Date/Time: 03/26/19 01:00
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 0.2 mL

Analyte	CAS	RT	Result ug/l	Qualifier	MDL ug/l	RDL ug/l
cis-1,2-Dichloroethene	156-59-2	3.50	1130 J		6.50	25.0



1A-OR

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.

SAMPLE NO.:

GPMW-34

Lab Sample ID: L1080247-04
 Client Sample ID: GPMW-34
 Lab File ID: 0324_24
 Instrument ID: VOCMS7
 Analytical Batch: WG1254695
 Dilution Factor: 1
 Analytical Method: 8260C
 Matrix: GW
 Total Solids (%):

SDG: L1080247
 Collected Date/Time: 03/18/19 14:30
 Received Date/Time: 03/19/19 08:30
 Preparation Date/Time: 03/24/19 18:12
 Analysis Date/Time: 03/24/19 18:12
 Prep Method: 8260C
 Sample Vol Used: 5 mL
 Initial Wt/Vol:
 Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	3.04	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	0	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	5.65	ND		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.



SAMPLE NO.:

GPMW-34

Lab Sample ID: L1080247-04
Client Sample ID: GPMW-34
Lab File ID: 0324_24
Instrument ID: VOCMS7
Analytical Batch: WG1254695
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/18/19 14:30
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/24/19 18:12
Analysis Date/Time: 03/24/19 18:12
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	4.55	49.5		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	6.48	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,2,4-Trimethylbenzene	95-63-6	7.53	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEETONE LAB. NATIONWIDE. 

SAMPLE NO.:

GPMW-34

Lab Sample ID: L1080247-04
Client Sample ID: GPMW-34
Lab File ID: 0325_44
Instrument ID: VOCMS25
Analytical Batch: WG1255146
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/18/19 14:30
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/25/19 23:40
Analysis Date/Time: 03/25/19 23:40
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result ug/l	Qualifier	MDL ug/l	RDL ug/l
cis-1,2-Dichloroethene	156-59-2	3.50	ND		0.260	1.00



1A-OR

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.

SAMPLE NO.:

GPMW-26

Lab Sample ID: L1080247-05
Client Sample ID: GPMW-26
Lab File ID: 0324_25
Instrument ID: VOCMS7
Analytical Batch: WG1254695
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/15/19 12:20
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/24/19 18:33
Analysis Date/Time: 03/24/19 18:33
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	3.04	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.76	1.84		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	0	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	5.65	ND		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.



SAMPLE NO.:

GPMW-26

Lab Sample ID: L1080247-05
Client Sample ID: GPMW-26
Lab File ID: 0324_25
Instrument ID: VOCMS7
Analytical Batch: WG1254695
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%):

SDG: L1080247
Collected Date/Time: 03/15/19 12:20
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/24/19 18:33
Analysis Date/Time: 03/24/19 18:33
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol:
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	4.55	20.9		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	6.49	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,2,4-Trimethylbenzene	95-63-6	7.53	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00

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1A-OR

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.

SAMPLE NO.:

IW-2

Lab Sample ID: L1080247-06
 Client Sample ID: IW-2
 Lab File ID: 0324_26
 Instrument ID: VOCMS7
 Analytical Batch: WG1254695
 Dilution Factor: 1
 Analytical Method: 8260C
 Matrix: GW
 Total Solids (%): _____

SDG: L1080247
 Collected Date/Time: 03/15/19 13:35
 Received Date/Time: 03/19/19 08:30
 Preparation Date/Time: 03/24/19 18:53
 Analysis Date/Time: 03/24/19 18:53
 Prep Method: 8260C
 Sample Vol Used: 5 mL
 Initial Wt/Vol: _____
 Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	3.04	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	2.67	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.76	4.04		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	0	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	5.66	ND		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1080247-06
Client Sample ID: IW-2
Lab File ID: 0324_26
Instrument ID: VOCMS7
Analytical Batch: WG1254695
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/15/19 13:35
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/24/19 18:53
Analysis Date/Time: 03/24/19 18:53
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	4.02	3.34		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	4.55	17.9		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	6.48	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00

1A-OR

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.



SAMPLE NO.:

IW-3

Lab Sample ID: L1080247-07
Client Sample ID: IW-3
Lab File ID: 0324_39
Instrument ID: VOCMS7
Analytical Batch: WG1254708
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/15/19 13:50
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/24/19 23:17
Analysis Date/Time: 03/24/19 23:17
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	3.04	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.76	3.80		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	0	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	5.65	ND		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

ACCOUNT:
LaBella Associates, P.C.

PROJECT:
2161282

SDG:
L1080247

DATE/TIME:
03/29/19 07:46

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1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.



SAMPLE NO.:

IW-3

Lab Sample ID: L1080247-07
Client Sample ID: IW-3
Lab File ID: 0324_39
Instrument ID: VOCMS7
Analytical Batch: WG1254708
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/15/19 13:50
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/24/19 23:17
Analysis Date/Time: 03/24/19 23:17
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	4.02	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	4.55	9.69		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00

1A-OR

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.

SAMPLE NO.:

IW-4

Lab Sample ID: L1080247-08
Client Sample ID: IW-4
Lab File ID: 0324_40
Instrument ID: VOCMS7
Analytical Batch: WG1254708
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/15/19 14:10
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/24/19 23:37
Analysis Date/Time: 03/24/19 23:37
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	3.04	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	0	ND		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	0	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	5.65	1.52		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

ACCOUNT:
LaBella Associates, P.C.

PROJECT:
2161282

SDG:
L1080247

DATE/TIME:
03/29/19 07:46

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1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.



SAMPLE NO.:

IW-4

Lab Sample ID: L1080247-08
Client Sample ID: IW-4
Lab File ID: 0324_40
Instrument ID: VOCMS7
Analytical Batch: WG1254708
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/15/19 14:10
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/24/19 23:37
Analysis Date/Time: 03/24/19 23:37
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	4.55	5.00		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1080247-09
Client Sample ID: IW-5
Lab File ID: 0324_41
Instrument ID: VOCMS7
Analytical Batch: WG1254708
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/15/19 14:30
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/24/19 23:57
Analysis Date/Time: 03/24/19 23:57
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	3.04	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	0	ND		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	0	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	5.65	ND		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.



SAMPLE NO.:

IW-5

Lab Sample ID: L1080247-09
Client Sample ID: IW-5
Lab File ID: 0324_41
Instrument ID: VOCMS7
Analytical Batch: WG1254708
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/15/19 14:30
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/24/19 23:57
Analysis Date/Time: 03/24/19 23:57
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	4.55	1.27		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00

1A-OR

SAMPLE RESULT SUMMARY ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.

SAMPLE NO.:

DUPE

Lab Sample ID: L1080247-10
Client Sample ID: DUPE
Lab File ID: 0324_42
Instrument ID: VOCMS7
Analytical Batch: WG1254708
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/15/19 00:00
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/25/19 00:18
Analysis Date/Time: 03/25/19 00:18
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
Acetone	67-64-1	3.04	ND		10.0	50.0
Benzene	71-43-2	0	ND		0.331	1.00
Bromochloromethane	74-97-5	0	ND		0.520	1.00
Bromodichloromethane	75-27-4	0	ND		0.380	1.00
Bromoform	75-25-2	0	ND		0.469	1.00
Bromomethane	74-83-9	0	ND		0.866	5.00
Carbon disulfide	75-15-0	0	ND		0.275	1.00
Carbon tetrachloride	56-23-5	0	ND		0.379	1.00
Chlorobenzene	108-90-7	0	ND		0.348	1.00
Chlorodibromomethane	124-48-1	0	ND		0.327	1.00
Chloroethane	75-00-3	0	ND		0.453	5.00
Chloroform	67-66-3	0	ND		0.324	5.00
Chloromethane	74-87-3	0	ND		0.276	2.50
Cyclohexane	110-82-7	0	ND		0.390	1.00
1,2-Dibromo-3-Chloropropane	96-12-8	0	ND		1.33	5.00
1,2-Dibromoethane	106-93-4	0	ND		0.381	1.00
1,2-Dichlorobenzene	95-50-1	0	ND		0.349	1.00
1,3-Dichlorobenzene	541-73-1	0	ND		0.220	1.00
1,4-Dichlorobenzene	106-46-7	0	ND		0.274	1.00
Dichlorodifluoromethane	75-71-8	0	ND		0.551	5.00
1,1-Dichloroethane	75-34-3	0	ND		0.259	1.00
1,2-Dichloroethane	107-06-2	0	ND		0.361	1.00
1,1-Dichloroethene	75-35-4	0	ND		0.398	1.00
cis-1,2-Dichloroethene	156-59-2	3.76	ND		0.260	1.00
trans-1,2-Dichloroethene	156-60-5	0	ND		0.396	1.00
1,2-Dichloropropane	78-87-5	0	ND		0.306	1.00
cis-1,3-Dichloropropene	10061-01-5	0	ND		0.418	1.00
trans-1,3-Dichloropropene	10061-02-6	0	ND		0.419	1.00
Ethylbenzene	100-41-4	0	ND		0.384	1.00
2-Hexanone	591-78-6	0	ND		3.82	10.0
Isopropylbenzene	98-82-8	0	ND		0.326	1.00
2-Butanone (MEK)	78-93-3	0	ND		3.93	10.0
Methyl Acetate	79-20-9	0	ND		4.30	20.0
Methyl Cyclohexane	108-87-2	0	ND		0.380	1.00
Methylene Chloride	75-09-2	0	ND		1.00	5.00
4-Methyl-2-pentanone (MIBK)	108-10-1	0	ND		2.14	10.0
Methyl tert-butyl ether	1634-04-4	0	ND		0.367	1.00
Naphthalene	91-20-3	0	ND		1.00	5.00
Styrene	100-42-5	0	ND		0.307	1.00
1,1,2,2-Tetrachloroethane	79-34-5	0	ND		0.130	1.00
Tetrachloroethene	127-18-4	5.65	ND		0.372	1.00
Toluene	108-88-3	0	ND		0.412	1.00
1,2,3-Trichlorobenzene	87-61-6	0	ND		0.230	1.00

1A-OR

SAMPLE RESULT SUMMARY
ORGANIC ANALYSIS DATA SHEET

ONE LAB. NATIONWIDE.



SAMPLE NO.:

DUPE

Lab Sample ID: L1080247-10
Client Sample ID: DUPE
Lab File ID: 0324_42
Instrument ID: VOCMS7
Analytical Batch: WG1254708
Dilution Factor: 1
Analytical Method: 8260C
Matrix: GW
Total Solids (%): _____

SDG: L1080247
Collected Date/Time: 03/15/19 00:00
Received Date/Time: 03/19/19 08:30
Preparation Date/Time: 03/25/19 00:18
Analysis Date/Time: 03/25/19 00:18
Prep Method: 8260C
Sample Vol Used: 5 mL
Initial Wt/Vol: _____
Final Wt/Vol: 5 mL

Analyte	CAS	RT	Result	Qualifier	MDL	RDL
			ug/l		ug/l	ug/l
1,2,4-Trichlorobenzene	120-82-1	0	ND		0.355	1.00
1,1,1-Trichloroethane	71-55-6	0	ND		0.319	1.00
1,1,2-Trichloroethane	79-00-5	0	ND		0.383	1.00
Trichloroethene	79-01-6	4.55	10.9		0.398	1.00
Trichlorofluoromethane	75-69-4	0	ND		1.20	5.00
1,1,2-Trichlorotrifluoroethane	76-13-1	0	ND		0.303	1.00
Vinyl chloride	75-01-4	0	ND		0.259	1.00
o-Xylene	95-47-6	0	ND		0.341	1.00
m&p-Xylenes	1330-20-7	0	ND		0.719	2.00
n-Butylbenzene	104-51-8	0	ND		0.361	1.00
sec-Butylbenzene	135-98-8	0	ND		0.365	1.00
tert-Butylbenzene	98-06-6	0	ND		0.399	1.00
p-Isopropyltoluene	99-87-6	0	ND		0.350	1.00
n-Propylbenzene	103-65-1	0	ND		0.349	1.00
1,2,4-Trimethylbenzene	95-63-6	0	ND		0.373	1.00
1,3,5-Trimethylbenzene	108-67-8	0	ND		0.387	1.00



Analytical Method: 8260C
Matrix: GW

SDG:

L1080247

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	DMC-2 % Rec.	DMC-3 % Rec.	DMC-4 % Rec.	TOT Out
BW-02	L1080247-01	VOCMS7	0324_21	105 ✓	108 ✓	107 ✓	104	0
BW-02	L1080247-01	VOCMS25	0325_42	99.5	94.4	94.7	121	0
BW-03	L1080247-02	VOCMS7	0324_22	108	105	107	104	0
BW-03	L1080247-02	VOCMS25	0325_43	98.0	93.8	93.5	118	0
BW-04	L1080247-03	VOCMS7	0324_23	107	108	110	106	0
BW-04	L1080247-03	VOCMS25	0325_48	98.9	92.5	95.3	119	0
GPMW-34	L1080247-04	VOCMS7	0324_24	108	106	107	103	0
GPMW-34	L1080247-04	VOCMS25	0325_44	100	92.0	94.8	118	0
GPMW-26	L1080247-05	VOCMS7	0324_25	106	107	106	104	0
IW-2	L1080247-06	VOCMS7	0324_26	104	106	106	101	0
IW-3	L1080247-07	VOCMS7	0324_39	106	104	104	104	0
IW-4	L1080247-08	VOCMS7	0324_40	108	105	107	104	0
IW-5	L1080247-09	VOCMS7	0324_41	109	107	108	103	0
DUPE	L1080247-10	VOCMS7	0324_42	109	104	104	96.9	0
MS	R3394872-4	VOCMS7	0324_27	101	104	104	110	0
MSD	R3394872-5	VOCMS7	0324_28	104	107	108	109	0
BLANK	R3395129-2	VOCMS25	0325_38	99.3	94.0	95.1	118	0
BLANK	R3394872-3	VOCMS7	0324_05	104	106	106	102	0
BLANK	R3395126-2	VOCMS7	0324_33	106	105	102	99.5	0
LCS	R3395129-1	VOCMS25	0325_36	98.7	91.1	97.2	123	0
LCS	R3394872-1	VOCMS7	0324_02LCS	104	106	106	111	0
LCS	R3395126-1	VOCMS7	0324_31LCS	103	104	106	111	0
LCSD	R3394872-2	VOCMS7	0324_03	103	107	105	112	0

Parm Abbreviation

Parameter

DMC-1

Toluene-d8

DMC-2

a,a,a-Trifluorotoluene

DMC-3

4-Bromofluorobenzene

DMC-4

1,2-Dichloroethane-d4

QC LIMITS

80.0 - 120

80.0 - 120

77.0 - 126

76 70.0-130 114

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.



3A-OR

MATRIX SPIKE /
MATRIX SPIKE DUPLICATE RECOVERY
L1080247-01,02,03,04,05,06

SAMPLE NO.:

R3394872-4

R3394872-5

MS Sample / File ID: R3394872-4 / 0324_27
MSD Sample / File ID: R3394872-5 / 0324_28
OS Sample / File ID: L1080247-03 / 0324_23
Instrument ID: VOCMS7
Analytical Method: 8260C

SDG: L1080247
Analytical Batch: WG1254695
Matrix: GW

Analyte	Spike Amount ug/l	OS Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. % ✓	MSD Rec. % ✓	Dilution	Rec. Limits %	RPD %	RPD Limit %
Bromochloromethane	25.0	ND	24.8	25.4	99.1	102	1	38.0 - 142	2.67	26
Carbon disulfide	25.0	ND	25.6	26.4	102	106	1	10.0 - 156	2.96	28
Acetone	125	ND	118	115	94.1	91.8	1	10.0 - 160	2.49	35
Cyclohexane	25.0	ND	25.7	27.2	103	109	1	19.0 - 160	5.38	23
Benzene	25.0	ND	25.8	26.7	102 ✓	105 ✓	1	17.0 - 158	3.42	27
Bromodichloromethane	25.0	ND	24.1	24.7	96.5	98.9	1	31.0 - 150	2.43	27
Bromoform	25.0	ND	18.5	17.6	74.0	70.2	1	29.0 - 150	5.27	29
Bromomethane	25.0	ND	26.4	30.3	106	121	1	10.0 - 160	13.7	38
n-Butylbenzene	25.0	ND	25.5	26.0	102	104	1	31.0 - 150	1.91	30
sec-Butylbenzene	25.0	ND	24.9	26.3	99.8	105	1	33.0 - 155	5.14	29
tert-Butylbenzene	25.0	ND	25.0	24.7	100	99.0	1	34.0 - 153	0.991	28
Carbon tetrachloride	25.0	ND	27.1	27.4	108	110	1	23.0 - 159	1.22	28
Chlorobenzene	25.0	ND	26.3	27.5	105 ✓	110 ✓	1	33.0 - 152	4.57	27
Chlorodibromomethane	25.0	ND	22.4	22.1	89.7	88.2	1	37.0 - 149	1.68	27
Chloroethane	25.0	ND	27.0	28.6	108	114	1	10.0 - 160	5.61	30
Chloroform	25.0	ND	25.8	26.8	103	107	1	29.0 - 154	3.77	28
Chloromethane	25.0	ND	23.8	24.9	95.2	99.6	1	10.0 - 160	4.48	29
1,2-Dibromo-3-Chloropropane	25.0	ND	21.7	21.8	86.9	87.3	1	22.0 - 151	0.388	34
1,2-Dibromoethane	25.0	ND	26.2	27.2	105	109	1	34.0 - 147	3.69	27
1,2-Dichlorobenzene	25.0	ND	24.7	25.2	98.9	101	1	34.0 - 149	1.78	28
1,3-Dichlorobenzene	25.0	ND	25.1	26.0	100	104	1	36.0 - 146	3.70	27
1,4-Dichlorobenzene	25.0	ND	24.4	25.5	97.8	102	1	35.0 - 142	4.04	27
2-Hexanone	125	ND	124	126	99.5	101	1	21.0 - 160	1.48	29
Dichlorodifluoromethane	25.0	ND	30.2	32.0	121	128	1	10.0 - 160	5.90	29
1,1-Dichloroethane	25.0	ND	27.7	28.5	111	114	1	25.0 - 158	2.77	27
1,2-Dichloroethane	25.0	ND	24.6	26.0	98.5	104	1	29.0 - 151	5.35	27
1,1-Dichloroethene	25.0	1.34	29.8	31.6	114 ✓	121 ✓	1	11.0 - 160	5.72	29
Methyl Acetate	125	ND	127	127	101	101	1	18.0 - 151	0.245	30
cis-1,2-Dichloroethene	25.0 ✓	1310 ✓	1260	1300	0.000* ✓	0.000* ✓	1	10.0 - 160	2.48	27
Methyl Cyclohexane	25.0	ND	25.3	27.0	101	108	1	11.0 - 160	6.63	24
trans-1,2-Dichloroethene	25.0	4.88	30.9	32.5	104	111	1	17.0 - 153	5.18	27
1,2-Dichloropropane	25.0	ND	26.5	26.9	106	108	1	30.0 - 156	1.74	27
cis-1,3-Dichloropropene	25.0	ND	23.8	24.7	95.0	98.8	1	34.0 - 149	3.86	28
trans-1,3-Dichloropropene	25.0	ND	24.7	25.5	98.7	102	1	32.0 - 149	3.14	28
Ethylbenzene	25.0	ND	26.0	27.2	104	109	1	30.0 - 155	4.33	27
Isopropylbenzene	25.0	ND	26.5	27.3	106	109	1	28.0 - 157	2.95	27
p-Isopropyltoluene	25.0	ND	25.3	26.4	101	106	1	30.0 - 154	4.26	29
2-Butanone (MEK)	125	ND	122	123	97.6	98.3	1	10.0 - 160	0.660	32
Methylene Chloride	25.0	ND	25.2	26.3	101	105	1	23.0 - 144	4.07	28
4-Methyl-2-pentanone (MIBK)	125	ND	122	124	97.5	99.2	1	29.0 - 160	1.75	29
Methyl tert-butyl ether	25.0	ND	25.3	26.4	101	106	1	28.0 - 150	4.26	29
Naphthalene	25.0	ND	24.9	25.4	99.6	101	1	12.0 - 156	1.83	35
n-Propylbenzene	25.0	ND	24.5	25.5	98.2	102	1	31.0 - 154	3.91	28

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3A-OR

MATRIX SPIKE /
MATRIX SPIKE DUPLICATE RECOVERY
L1080247-01,02,03,04,05,06

ONE LAB. NATIONWIDE.



SAMPLE NO.:

R3394872-4

R3394872-5

MS Sample / File ID: R3394872-4 / 0324_27
MSD Sample / File ID: R3394872-5 / 0324_28
OS Sample / File ID: L1080247-03 / 0324_23
Instrument ID: VOCMS7
Analytical Method: 8260C

SDG: L1080247
Analytical Batch: WG1254695
Matrix: GW

Analyte	Spike Amount ug/l	OS Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. % ✓	MSD Rec. % ✓	Dilution	Rec. Limits %	RPD %	RPD Limit %
o-Xylene	25.0	ND	25.9	27.1	104	108	1	45.0 - 144	4.25	26
Styrene	25.0	ND	26.2	27.1	105	108	1	33.0 - 155	3.22	28
m&p-Xylenes	50.0	ND	52.8	54.9	106	110	1	43.0 - 146	3.84	26
1,1,2,2-Tetrachloroethane	25.0	ND	24.8	24.6	99.0	98.2	1	33.0 - 150	0.827	28
Tetrachloroethene	25.0	ND	27.2	28.3	109	113	1	10.0 - 160	4.16	27
Toluene	25.0	ND	25.1	25.9	100 ✓	104 ✓	1	26.0 - 154	3.08	28
1,1,2-Trichlorotrifluoroethane	25.0	ND	27.6	29.9	111	120	1	23.0 - 160	7.91	30
1,2,3-Trichlorobenzene	25.0	ND	24.8	25.2	99.0	101	1	17.0 - 150	1.88	36
1,2,4-Trichlorobenzene	25.0	ND	25.6	27.3	103	109	1	24.0 - 150	6.28	33
1,1,1-Trichloroethane	25.0	ND	27.3	28.3	109	113	1	23.0 - 160	3.49	28
1,1,2-Trichloroethane	25.0	ND	25.3	26.8	101	107	1	35.0 - 147	5.79	27
Trichloroethene	25.0	74.4	97.3	103	91.4 ✓	112 ✓	1	10.0 - 160	5.27	25
Trichlorofluoromethane	25.0	ND	28.6	30.1	114	120	1	17.0 - 160	5.16	31
1,2,4-Trimethylbenzene	25.0	ND	24.9	25.9	99.5	104	1	26.0 - 154	4.25	27
1,3,5-Trimethylbenzene	25.0	ND	23.7	24.4	94.7	97.5	1	28.0 - 153	2.87	27
Vinyl chloride	25.0	29.0	55.6	59.2	106	121	1	10.0 - 160	6.27	27

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

ACCOUNT:
LaBella Associates, P.C.

PROJECT:
2161282

SDG:
L1080247

DATE/TIME:
03/29/19 07:46

PAGE:
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LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY
L1080247-01,02,03,04,05,06

LCS Sample / File ID: R3394872-1 / 0324_02LCS
LCSD Sample / File ID: R3394872-2 / 0324_03
Instrument ID: VOCMS7
Analytical Method: 8260C

SDG: L1080247
Analytical Batch: WG1254695
Dilution Factor: 1
Matrix: GW

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	RPD %	RPD Limit %
Bromochloromethane	25.0	28.3	29.2	113	117	76.0 - 122	2.87	20
Carbon disulfide	25.0	27.5	27.4	110	110	61.0 - 128	0.462	20
Acetone	125	130	125	104	99.7	19.0 - 160	4.55	27
Cyclohexane	25.0	26.8	26.4	107	106	71.0 - 124	1.30	20
Benzene	25.0	25.7	25.5	103	102	70.0 - 123	0.807	20
Bromodichloromethane	25.0	25.7	26.2	103	105	75.0 - 120	2.11	20
Bromoform	25.0	29.1	28.5	116	114	68.0 - 132	1.84	20
Bromomethane	25.0	27.1	27.9	108	111	10.0 - 160	2.96	25
n-Butylbenzene	25.0	26.7	27.7	107	111	73.0 - 125	3.53	20
sec-Butylbenzene	25.0	26.5	26.4	106	106	75.0 - 125	0.113	20
tert-Butylbenzene	25.0	26.2	26.1	105	104	76.0 - 124	0.281	20
Carbon tetrachloride	25.0	26.7	26.1	107	105	68.0 - 126	2.25	20
Chlorobenzene	25.0	27.1	26.7	109	107	80.0 - 121	1.76	20
Chlorodibromomethane	25.0	27.6	27.2	110	109	77.0 - 125	1.17	20
Chloroethane	25.0	26.6	27.3	106	109	47.0 - 150	2.70	20
Chloroform	25.0	26.9	26.1	108	105	73.0 - 120	2.84	20
Chloromethane	25.0	25.0	24.7	100	98.8	41.0 - 142	1.22	20
1,2-Dibromo-3-Chloropropane	25.0	25.9	26.4	104	106	58.0 - 134	1.85	20
1,2-Dibromoethane	25.0	27.8	27.8	111	111	80.0 - 122	0.111	20
1,2-Dichlorobenzene	25.0	26.3	26.3	105	105	79.0 - 121	0.0578	20
1,3-Dichlorobenzene	25.0	26.3	27.3	105	109	79.0 - 120	3.69	20
1,4-Dichlorobenzene	25.0	25.0	26.2	100	105	79.0 - 120	4.38	20
2-Hexanone	125	139	134	112	107	67.0 - 149	3.78	20
Dichlorodifluoromethane	25.0	31.0	31.3	124	125	51.0 - 149	0.908	20
1,1-Dichloroethane	25.0	26.2	26.9	105	108	70.0 - 126	2.49	20
1,2-Dichloroethane	25.0	25.4	25.8	102	103	70.0 - 128	1.76	20
1,1-Dichloroethene	25.0	27.7	28.4	111	114	71.0 - 124	2.32	20
cis-1,2-Dichloroethene	25.0	26.3	26.6	105	106	73.0 - 120	0.936	20
Methyl Acetate	125	140	137	112	110	57.0 - 148	1.77	20
trans-1,2-Dichloroethene	25.0	26.1	27.0	104	108	73.0 - 120	3.53	20
1,2-Dichloropropane	25.0	26.4	26.5	105	106	77.0 - 125	0.664	20
Methyl Cyclohexane	25.0	25.8	25.9	103	103	68.0 - 126	0.446	20
cis-1,3-Dichloropropene	25.0	26.1	25.9	104	104	80.0 - 123	0.533	20
trans-1,3-Dichloropropene	25.0	28.4	27.7	114	111	78.0 - 124	2.54	20
Ethylbenzene	25.0	26.4	26.3	106	105	79.0 - 123	0.367	20
Isopropylbenzene	25.0	26.5	26.5	106	106	76.0 - 127	0.0887	20
p-Isopropyltoluene	25.0	27.4	27.7	110	111	76.0 - 125	1.27	20
2-Butanone (MEK)	125	135	129	108	103	44.0 - 160	4.41	20
Methylene Chloride	25.0	24.8	25.5	99.4	102	67.0 - 120	2.72	20
4-Methyl-2-pentanone (MIBK)	125	136	129	109	103	68.0 - 142	5.34	20
Methyl tert-butyl ether	25.0	26.0	26.4	104	106	68.0 - 125	1.81	20
Naphthalene	25.0	27.6	27.7	110	111	54.0 - 135	0.393	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY
L1080247-01,02,03,04,05,06

SAMPLE NO.:

R3394872-1

R3394872-2

LCS Sample / File ID: R3394872-1 / 0324_02LCS
LCSD Sample / File ID: R3394872-2 / 0324_03
Instrument ID: VOCMS7
Analytical Method: 8260C

SDG: L1080247
Analytical Batch: WG1254695
Dilution Factor: 1
Matrix: GW

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	RPD %	RPD Limit %
n-Propylbenzene	25.0	25.7	25.7	103	103	77.0 - 124	0.154	20
Styrene	25.0	27.8	28.0	111	112	73.0 - 130	0.525	20
1,1,2,2-Tetrachloroethane	25.0	26.9	26.2	108	105	65.0 - 130	2.80	20
o-Xylene	25.0	27.1	26.4	108	106	80.0 - 122	2.35	20
m&p-Xylenes	50.0	53.5	53.6	107	107	80.0 - 122	0.179	20
Tetrachloroethene	25.0	27.3	27.3	109	109	72.0 - 132	0.0264	20
Toluene	25.0	25.3	25.6	101✓	103✓	79.0 - 120	1.35	20
1,1,2-Trichlorotrifluoroethane	25.0	28.0	27.9	112	112	69.0 - 132	0.503	20
1,2,3-Trichlorobenzene	25.0	29.4	28.2	118	113	50.0 - 138	4.24	20
1,2,4-Trichlorobenzene	25.0	28.7	28.0	115	112	57.0 - 137	2.36	20
1,1,1-Trichloroethane	25.0	27.7	27.2	111	109	73.0 - 124	1.72	20
1,1,2-Trichloroethane	25.0	26.7	26.3	107	105	80.0 - 120	1.84	20
Trichloroethene	25.0	27.4	27.6	110✓	110✓	78.0 - 124	0.574	20
Trichlorofluoromethane	25.0	28.0	27.9	112	111	59.0 - 147	0.572	20
1,2,4-Trimethylbenzene	25.0	26.9	27.0	108	108	76.0 - 121	0.337	20
1,3,5-Trimethylbenzene	25.0	24.9	25.4	99.4	102	76.0 - 122	2.10	20
Vinyl chloride	25.0	28.5	28.9	114	116	67.0 - 131	1.36	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY
L1080247-07,08,09,10

LCS Sample / File ID: R3395126-1 / 0324_31LCS
LCSD Sample / File ID: _____
Instrument ID: VOCMS7
Analytical Method: 8260C

SDG: L1080247
Analytical Batch: WG1254708
Dilution Factor: 1
Matrix: GW

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result	LCS Rec. %	LCSD Rec. %	Rec. Limits %	RPD %	RPD Limit %
Bromochloromethane	25.0	27.9		112		76.0 - 122		
Carbon disulfide	25.0	26.8		107		61.0 - 128		
Acetone	125	130		104		19.0 - 160		
Cyclohexane	25.0	26.5		106		71.0 - 124		
Benzene	25.0	25.6		102		70.0 - 123		
Bromodichloromethane	25.0	25.6		102		75.0 - 120		
Bromoform	25.0	26.3		105		68.0 - 132		
Bromomethane	25.0	27.3		109		10.0 - 160		
n-Butylbenzene	25.0	24.6		98.3		73.0 - 125		
sec-Butylbenzene	25.0	25.3		101		75.0 - 125		
tert-Butylbenzene	25.0	25.5		102		76.0 - 124		
Carbon tetrachloride	25.0	26.6		106		68.0 - 126		
Chlorobenzene	25.0	26.3		105		80.0 - 121		
Chlorodibromomethane	25.0	26.5		106		77.0 - 125		
Chloroethane	25.0	26.3		105		47.0 - 150		
Chloroform	25.0	26.1		104		73.0 - 120		
Chloromethane	25.0	23.2		92.8		41.0 - 142		
1,2-Dibromo-3-Chloropropane	25.0	23.7		94.7		58.0 - 134		
1,2-Dibromoethane	25.0	26.8		107		80.0 - 122		
1,2-Dichlorobenzene	25.0	24.7		98.9		79.0 - 121		
1,3-Dichlorobenzene	25.0	25.6		103		79.0 - 120		
1,4-Dichlorobenzene	25.0	24.2		96.9		79.0 - 120		
2-Hexanone	125	131		105		67.0 - 149		
Dichlorodifluoromethane	25.0	31.7		127		51.0 - 149		
1,1-Dichloroethane	25.0	26.5		106		70.0 - 126		
1,2-Dichloroethane	25.0	25.2		101		70.0 - 128		
1,1-Dichloroethene	25.0	26.3		105		71.0 - 124		
cis-1,2-Dichloroethene	25.0	27.1		109		73.0 - 120		
Methyl Acetate	125	131		105		57.0 - 148		
trans-1,2-Dichloroethene	25.0	25.9		104		73.0 - 120		
1,2-Dichloropropane	25.0	26.7		107		77.0 - 125		
Methyl Cyclohexane	25.0	25.3		101		68.0 - 126		
cis-1,3-Dichloropropene	25.0	24.6		98.5		80.0 - 123		
trans-1,3-Dichloropropene	25.0	26.1		104		78.0 - 124		
Ethylbenzene	25.0	26.1		104		79.0 - 123		
Isopropylbenzene	25.0	26.2		105		76.0 - 127		
p-Isopropyltoluene	25.0	25.4		102		76.0 - 125		
2-Butanone (MEK)	125	130		104		44.0 - 160		
Methylene Chloride	25.0	24.5		98.0		67.0 - 120		
4-Methyl-2-pentanone (MIBK)	125	127		102		68.0 - 142		
Methyl tert-butyl ether	25.0	25.8		103		68.0 - 125		
Naphthalene	25.0	26.3		105		54.0 - 135		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY
L1080247-07,08,09,10



LCS Sample / File ID: R3395126-1 / 0324_31LCS
LCSD Sample / File ID: _____
Instrument ID: VOCMS7
Analytical Method: 8260C

SDG: L1080247
Analytical Batch: WG1254708
Dilution Factor: 1
Matrix: GW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limit
	ug/l	ug/l		%	%	%	%	%
n-Propylbenzene	25.0	24.4		97.4		77.0 - 124		
Styrene	25.0	26.8		107		73.0 - 130		
1,1,2,2-Tetrachloroethane	25.0	24.3		97.2		65.0 - 130		
o-Xylene	25.0	26.1		105		80.0 - 122		
m&p-Xylenes	50.0	52.9		106		80.0 - 122		
Tetrachloroethene	25.0	26.6		106		72.0 - 132		
Toluene	25.0	25.2		101		79.0 - 120		
1,1,2-Trichlorotrifluoroethane	25.0	27.6		110		69.0 - 132		
1,2,3-Trichlorobenzene	25.0	26.6		106		50.0 - 138		
1,2,4-Trichlorobenzene	25.0	26.1		104		57.0 - 137		
1,1,1-Trichloroethane	25.0	26.5		106		73.0 - 124		
1,1,2-Trichloroethane	25.0	25.9		104		80.0 - 120		
Trichloroethene	25.0	28.2		113		78.0 - 124		
Trichlorofluoromethane	25.0	27.0		108		59.0 - 147		
1,2,4-Trimethylbenzene	25.0	26.3		105		76.0 - 121		
1,3,5-Trimethylbenzene	25.0	24.3		97.1		76.0 - 122		
Vinyl chloride	25.0	28.2		113		67.0 - 131		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

3B-OR

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY
L1080247-01,02,03,04

ONE LAB. NATIONWIDE. 

SAMPLE NO.:

R3395129-1

LCS Sample / File ID: R3395129-1 / 0325_36
LCSD Sample / File ID: _____
Instrument ID: VOCMS25
Analytical Method: 8260C

SDG: L1080247
Analytical Batch: WG1255146
Dilution Factor: 1
Matrix: GW

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result	LCS Rec. %	LCSD Rec. %	Rec. Limits %	RPD %	RPD Limit %
cis-1,2-Dichloroethene	25.0	21.0		84.1		73.0 - 120		
1,2,4-Trimethylbenzene	25.0	23.5		94.1		76.0 - 121		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

ACCOUNT:
LaBella Associates, P.C.

PROJECT:
2161282

SDG:
L1080247

DATE/TIME:
03/29/19 07:46

PAGE:
17 of 413

Lab Sample ID: R3395129-2
Lab File ID: 0325_38
Instrument ID: VOCMS25
Analytical Batch: WG1255146
Analytical Method: 8260C

SDG: L1080247
Preparation Date/Time: 03/25/19 21:25
Analysis Date/Time: 03/25/19 21:25
Dilution Factor: 1
Matrix: GW

Sample ID	Lab Sample ID	Instrument	File ID	Analysis date/time
LCS	R3395129-1	VOCMS25	0325_36	03/25/19 20:45
BW-02	L1080247-01	VOCMS25	0325_42	03/25/19 23:00
BW-03	L1080247-02	VOCMS25	0325_43	03/25/19 23:20
GPMW-34	L1080247-04	VOCMS25	0325_44	03/25/19 23:40
BW-04	L1080247-03	VOCMS25	0325_48	03/26/19 01:00



Lab Sample ID: R3394872-3
Lab File ID: 0324_05
Instrument ID: VOCMS7
Analytical Batch: WG1254695
Analytical Method: 8260C

SDG: L1080247
Preparation Date/Time: 03/24/19 11:47
Analysis Date/Time: 03/24/19 11:47
Dilution Factor: 1
Matrix: GW

Sample ID	Lab Sample ID	Instrument	File ID	Analysis date/time
LCS	R3394872-1	VOCMS7	0324_02LCS	03/24/19 10:46
LCSD	R3394872-2	VOCMS7	0324_03	03/24/19 11:07
BW-02	L1080247-01	VOCMS7	0324_21	03/24/19 17:12
BW-03	L1080247-02	VOCMS7	0324_22	03/24/19 17:32
BW-04	L1080247-03	VOCMS7	0324_23	03/24/19 17:52
BW-04	L1080247-03	VOCMS7	0324_23	03/24/19 17:52
GPMW-34	L1080247-04	VOCMS7	0324_24	03/24/19 18:12
GPMW-26	L1080247-05	VOCMS7	0324_25	03/24/19 18:33
IW-2	L1080247-06	VOCMS7	0324_26	03/24/19 18:53
MS	R3394872-4	VOCMS7	0324_27	03/24/19 19:13
MSD	R3394872-5	VOCMS7	0324_28	03/24/19 19:34

4A-OR

METHOD BLANK

ONE LAB NATIONWIDE. 

SAMPLE NO.:

R3395126-2

Lab Sample ID: R3395126-2
Lab File ID: 0324_33
Instrument ID: VOCMS7
Analytical Batch: WG1254708
Analytical Method: 8260C

SDG: L1080247
Preparation Date/Time: 03/24/19 21:15
Analysis Date/Time: 03/24/19 21:15
Dilution Factor: 1
Matrix: GW

Sample ID	Lab Sample ID	Instrument	File ID	Analysis date/time
LCS	R3395126-1	VOCMS7	0324_31LCS	03/24/19 20:34
IW-3	L1080247-07	VOCMS7	0324_39	03/24/19 23:17
IW-4	L1080247-08	VOCMS7	0324_40	03/24/19 23:37
IW-5	L1080247-09	VOCMS7	0324_41	03/24/19 23:57
DUPE	L1080247-10	VOCMS7	0324_42	03/25/19 00:18

GC/MS INSTRUMENT
PERFORMANCE CHECK

Lab File ID: 0321_08-1
Instrument ID: VOCMS7
Analysis Date/Time: 03/21/19 17:30

SDG: L1080247
Analytical Method: 8260C

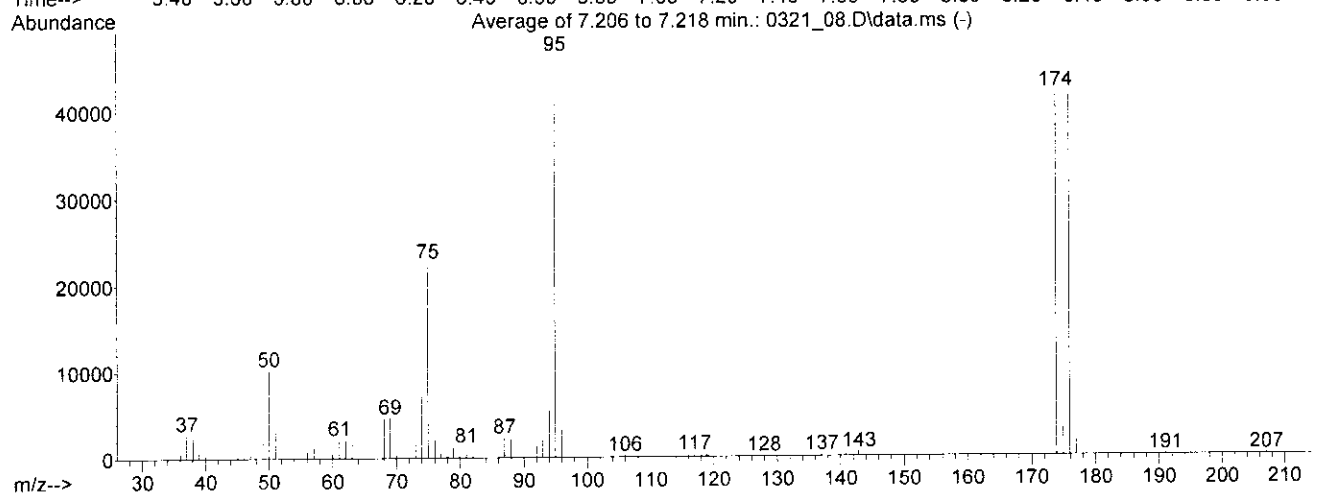
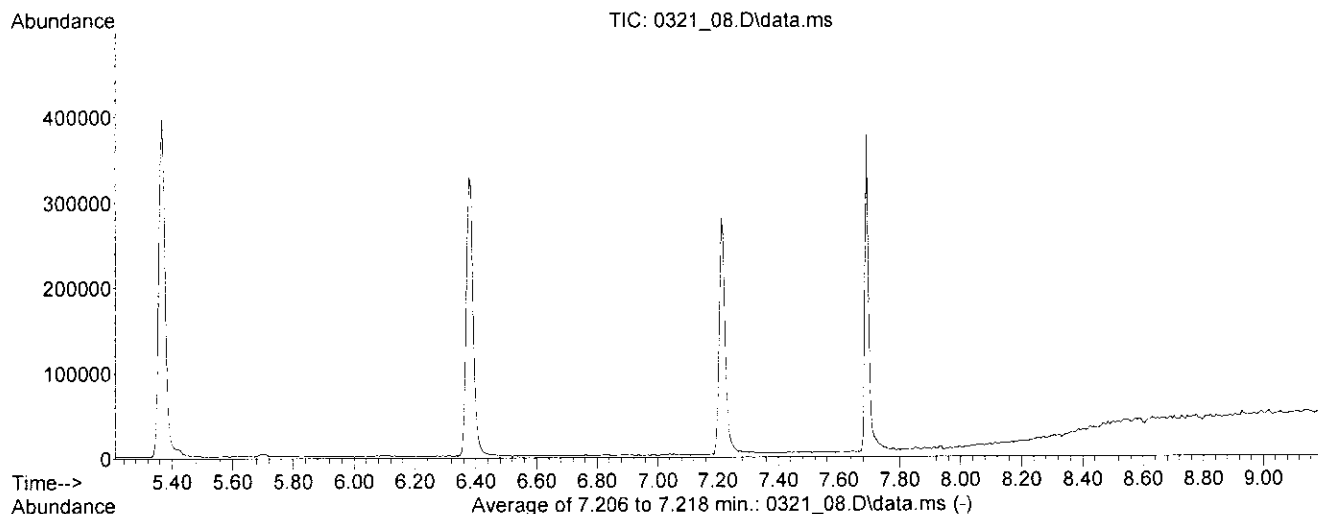
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
95	174	50	200	111
96	95	5	9	7
173	174	0	2	0
174	95	50	200	90
175	174	5	9	8
176	174	95	105	99
177	176	5	10	8

Sample ID	Lab Sample ID	File ID	Analysis date/time
STD-0.04	0.04	0321_12	03/21/19 18:51
STD-0.1	0.1	0321_13	03/21/19 19:11
STD-0.2	0.2	0321_14	03/21/19 19:31
STD-0.5	0.5	0321_15	03/21/19 19:51
STD-1	1	0321_16	03/21/19 20:12
STD-2	2	0321_17	03/21/19 20:32
STD-5.0	5.0	0321_18	03/21/19 20:52
STD-25	25	0321_19	03/21/19 21:13
STD-75	75	0321_20	03/21/19 21:33
STD-100	100	0321_21	03/21/19 21:53
STD-200	200	0321_22	03/21/19 22:14
SSCV	VOCMS70321190321_25-1468161	0321_25-1	03/21/19 23:28 ✓

Data Path : C:\msdchem\1\data\032119\
 Data File : 0321_08.D
 Acq On : 21 Mar 2019 5:30 pm
 Operator : 189
 Sample : INSTBLK
 Misc : water
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINTLRH.P

Method : C:\msdchem\1\methods\V807C21S.M
 Title : Volatile Organics by GC/MS
 Last Update : Sun Mar 24 09:29:20 2019



AutoFind: Scans 1171, 1172, 1173; Background Corrected with Scan 1166

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.8	10237	PASS
75	95	30	60	48.5	22736	PASS
95	95	100	100	100.0	46875	PASS
96	95	5	9	7.0	3300	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	90.1	42251	PASS
175	174	5	9	7.5	3180	PASS
176	174	95	101	98.9	41776	PASS
177	176	5	9	7.7	3198	PASS

GC/MS INSTRUMENT
PERFORMANCE CHECK

Lab File ID: 0324_01T
Instrument ID: VOCMS7
Analysis Date/Time: 03/24/19 10:26

SDG: L1080247
Analytical Method: 8260C

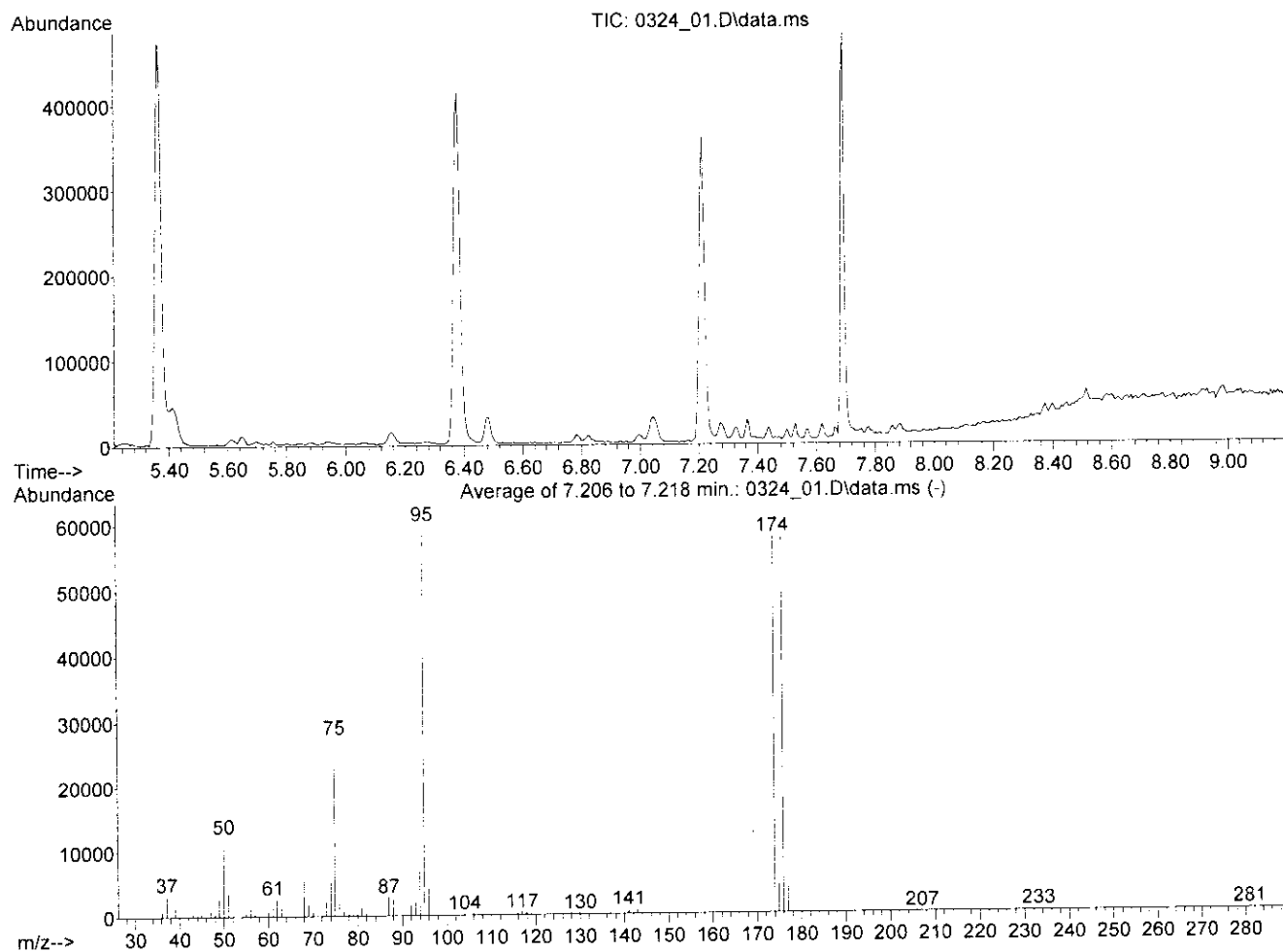
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
95	174	50	200	104
96	95	5	9	7
173	174	0	2	0
174	95	50	200	96
175	174	5	9	8
176	174	95	105	100
177	176	5	10	7

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	VOCMS70324190324_02468161	0324_02	03/24/19 10:46
LCS	R3394872-1	0324_02LCS	03/24/19 10:46
LCSD	R3394872-2	0324_03	03/24/19 11:07
BLANK	R3394872-3	0324_05	03/24/19 11:47
RL	VOCMS70324190324_06-1468161	0324_06-1	03/24/19 12:08
BW-02	L1080247-01	0324_21	03/24/19 17:12
BW-03	L1080247-02	0324_22	03/24/19 17:32
OS	L1080247-03	0324_23	03/24/19 17:52
BW-04	L1080247-03	0324_23	03/24/19 17:52
GPMW-34	L1080247-04	0324_24	03/24/19 18:12
GPMW-26	L1080247-05	0324_25	03/24/19 18:33
IW-2	L1080247-06	0324_26	03/24/19 18:53
MS	R3394872-4	0324_27	03/24/19 19:13
MSD	R3394872-5	0324_28	03/24/19 19:34 ✓

Data Path : C:\msdchem\1\data\032419\
 Data File : 0324_01.D
 Acq On : 24 Mar 2019 10:26 am
 Operator : 189
 Sample : INSTBLK
 Misc : water
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINTLRH.P

Method : C:\msdchem\1\methods\V807C21S.M
 Title : Volatile Organics by GC/MS
 Last Update : Sun Mar 24 09:29:20 2019



AutoFind: Scans 1171, 1172, 1173; Background Corrected with Scan 1166

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.2	12179	PASS
75	95	30	60	45.5	27475	PASS
95	95	100	100	100.0	60411	PASS
96	95	5	9	6.8	4122	PASS
173	174	0.00	2	0.3	189	PASS
174	95	50	100	96.0	57979	PASS
175	174	5	9	7.6	4385	PASS
176	174	95	101	100.0	57952	PASS
177	176	5	9	6.8	3965	PASS

GC/MS INSTRUMENT
PERFORMANCE CHECK

Lab File ID: 0324_29T-1
Instrument ID: VOCMS7
Analysis Date/Time: 03/24/19 19:54

SDG: L1080247
Analytical Method: 8260C

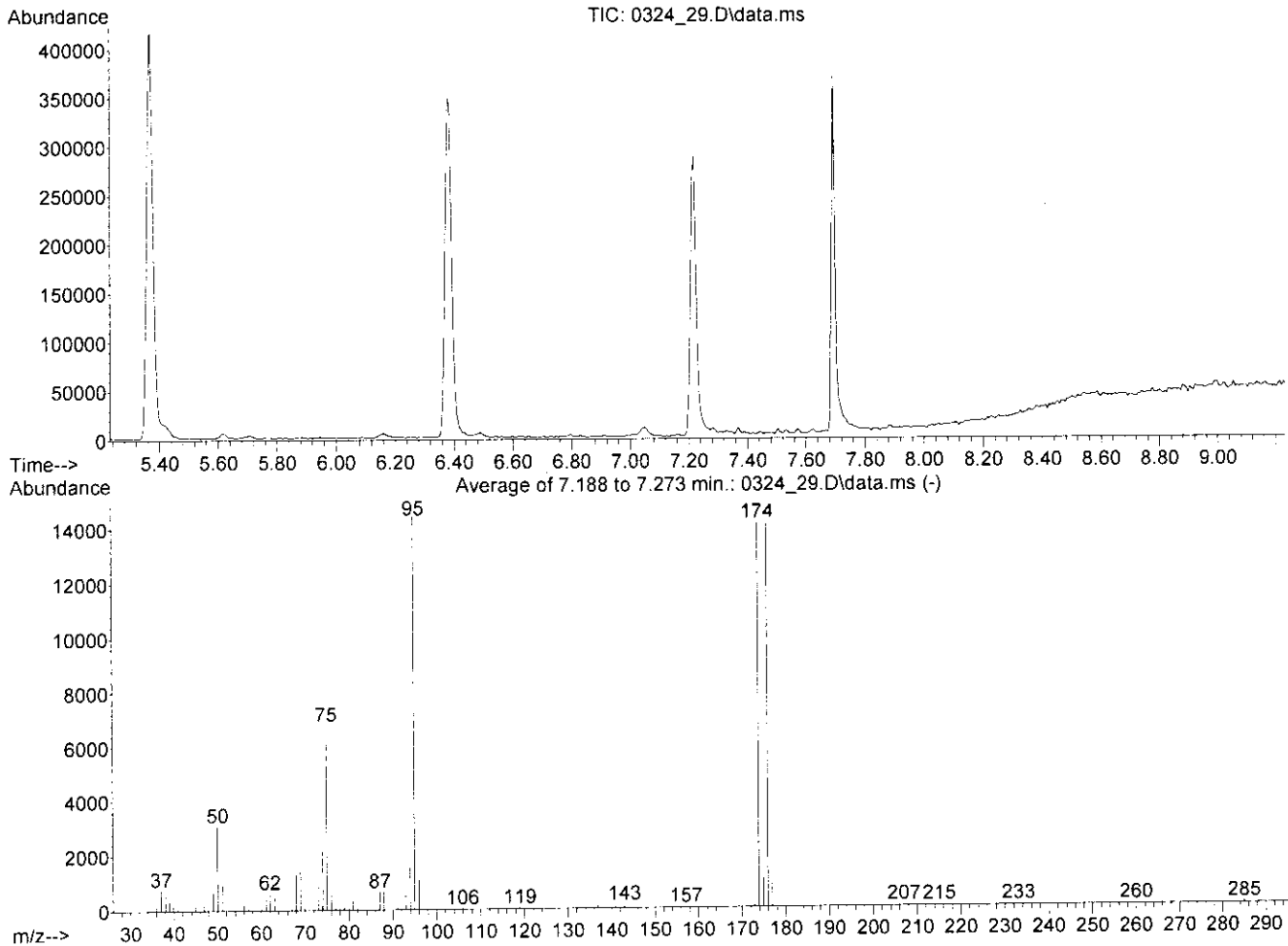
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
95	174	50	200	102
96	95	5	9	7
173	174	0	2	0
174	95	50	200	98
175	174	5	9	8
176	174	95	105	100
177	176	5	10	6

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	VOCMS70324190324_31-1468161	0324_31-1	03/24/19 20:34
LCS	R3395126-1	0324_31LCS	03/24/19 20:34
BLANK	R3395126-2	0324_33	03/24/19 21:15
RL	VOCMS70324190324_34-1468161	0324_34-1	03/24/19 21:35
IW-3	L1080247-07	0324_39	03/24/19 23:17
IW-4	L1080247-08	0324_40	03/24/19 23:37
IW-5	L1080247-09	0324_41	03/24/19 23:57
DUPE	L1080247-10	0324_42	03/25/19 00:18 ✓

Data Path : C:\msdchem\1\data\032419\
 Data File : 0324_29.D
 Acq On : 24 Mar 2019 7:54 pm
 Operator : 189
 Sample : INSTBLK
 Misc : water
 ALS Vial : 29 Sample Multiplier: 1

Integration File: RTEINTLRH.P

Method : C:\msdchem\1\methods\V807C21S.M
 Title : Volatile Organics by GC/MS
 Last Update : Sun Mar 24 09:29:20 2019



Spectrum Information: Average of 7.188 to 7.273 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.4 ✓	3086	PASS
75	95	30	60	47.0	6800	PASS
95	95	100	100	100.0	14453	PASS
96	95	5	9	7.4	1069	PASS
173	174	0.00	2	0.4	59	PASS
174	95	50	100	98.0	14170	PASS
175	174	5	9	7.5	1061	PASS
176	174	95	101	99.6	14117	PASS
177	176	5	9	6.1	856	PASS

GC/MS INSTRUMENT
PERFORMANCE CHECK

Lab File ID: 0304_04-1
Instrument ID: VOCMS25
Analysis Date/Time: 03/04/19 12:33

SDG: L1080247
Analytical Method: 8260C

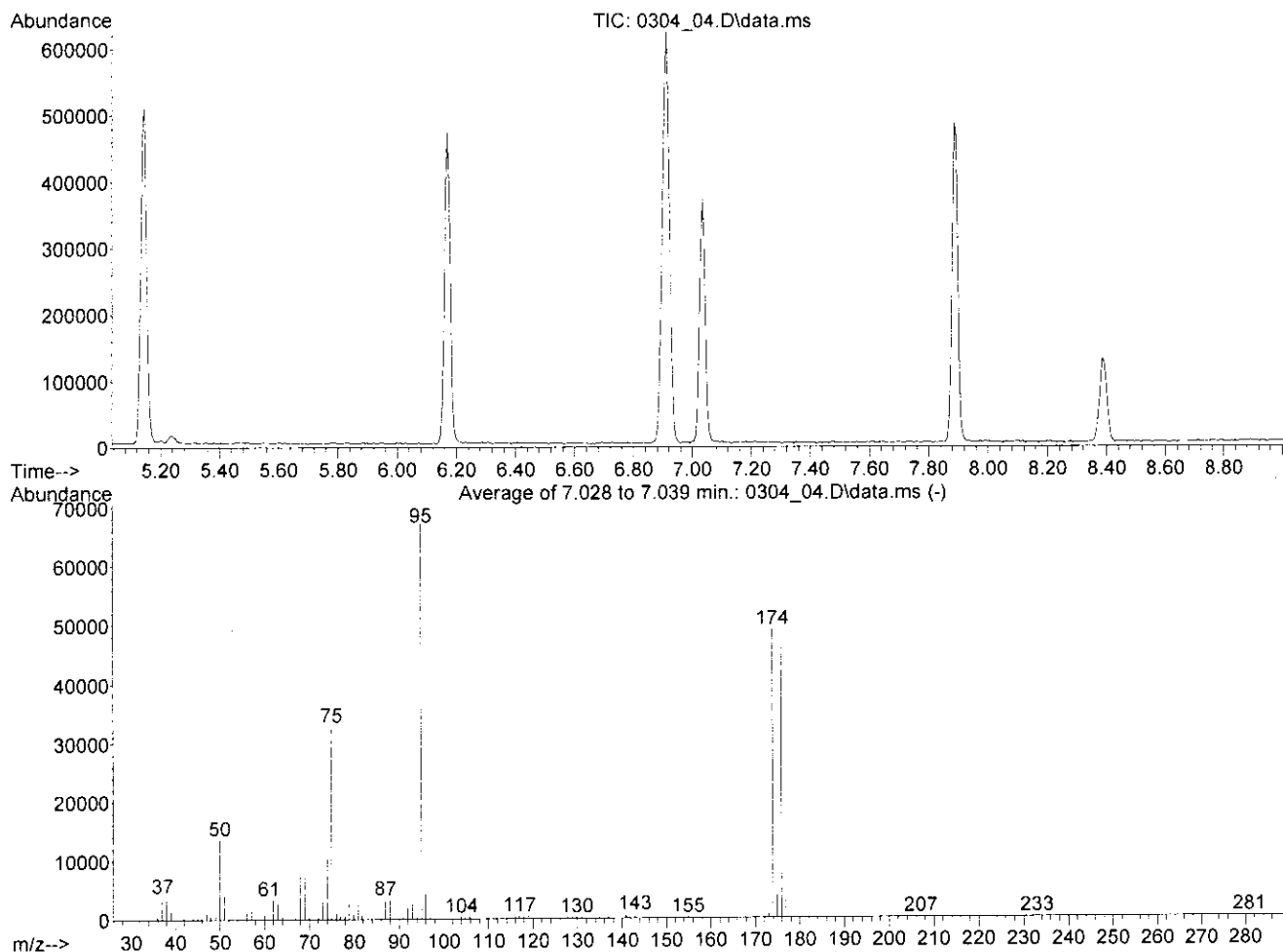
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
95	174	50	200	137
96	95	5	9	7
173	174	0	2	1
174	95	50	200	73
175	174	5	9	8
176	174	95	105	97
177	176	5	10	7

Sample ID	Lab Sample ID	File ID	Analysis date/time
STD-0.04	0.04	0304_08	03/04/19 14:08
STD-0.1	0.1	0304_09	03/04/19 14:28
STD-0.2	0.2	0304_10	03/04/19 14:48
STD-0.5	0.5	0304_11	03/04/19 15:08
STD-1	1	0304_12	03/04/19 15:28
STD-2	2	0304_13	03/04/19 15:48
STD-5.0	5.0	0304_14	03/04/19 16:09
STD-25	25	0304_15	03/04/19 16:29
STD-75	75	0304_16	03/04/19 16:49
STD-100	100	0304_17	03/04/19 17:09
STD-200	200	0304_18	03/04/19 17:29
SSCV	VOCMS250304190304_21-1466842	0304_21-1	03/04/19 18:30 ✓

Data Path : C:\msdchem\1\data\030419\
 Data File : 0304_04.D
 Acq On : 4 Mar 2019 12:33 pm
 Operator : 605
 Sample : INSTBLK
 Misc : water
 ALS Vial : 4 Sample Multiplier: 1

Integration File: RTEINTLRH.P

Method : C:\msdchem\1\methods\V825B04S.M
 Title : Env. Science Corp. 8260B/6210D/624 - VOCMS25
 Last Update : Tue Feb 05 10:28:04 2019



AutoFind: Scans 1010, 1011, 1012; Background Corrected with Scan 1003

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.2	13582	PASS
75	95	30	60	48.9	32928	PASS
95	95	100	100	100.0	67275	PASS
96	95	5	9	6.8	4555	PASS
173	174	0.00	2	1.3	617	PASS
174	95	50	100	73.2	49229	PASS
175	174	5	9	7.8	3857	PASS
176	174	95	101	96.7	47581	PASS
177	176	5	9	7.0	3354	PASS

GC/MS INSTRUMENT
PERFORMANCE CHECK

Lab File ID: 0325_34T-1
Instrument ID: VOCMS25
Analysis Date/Time: 03/25/19 20:05

SDG: L1080247
Analytical Method: 8260C

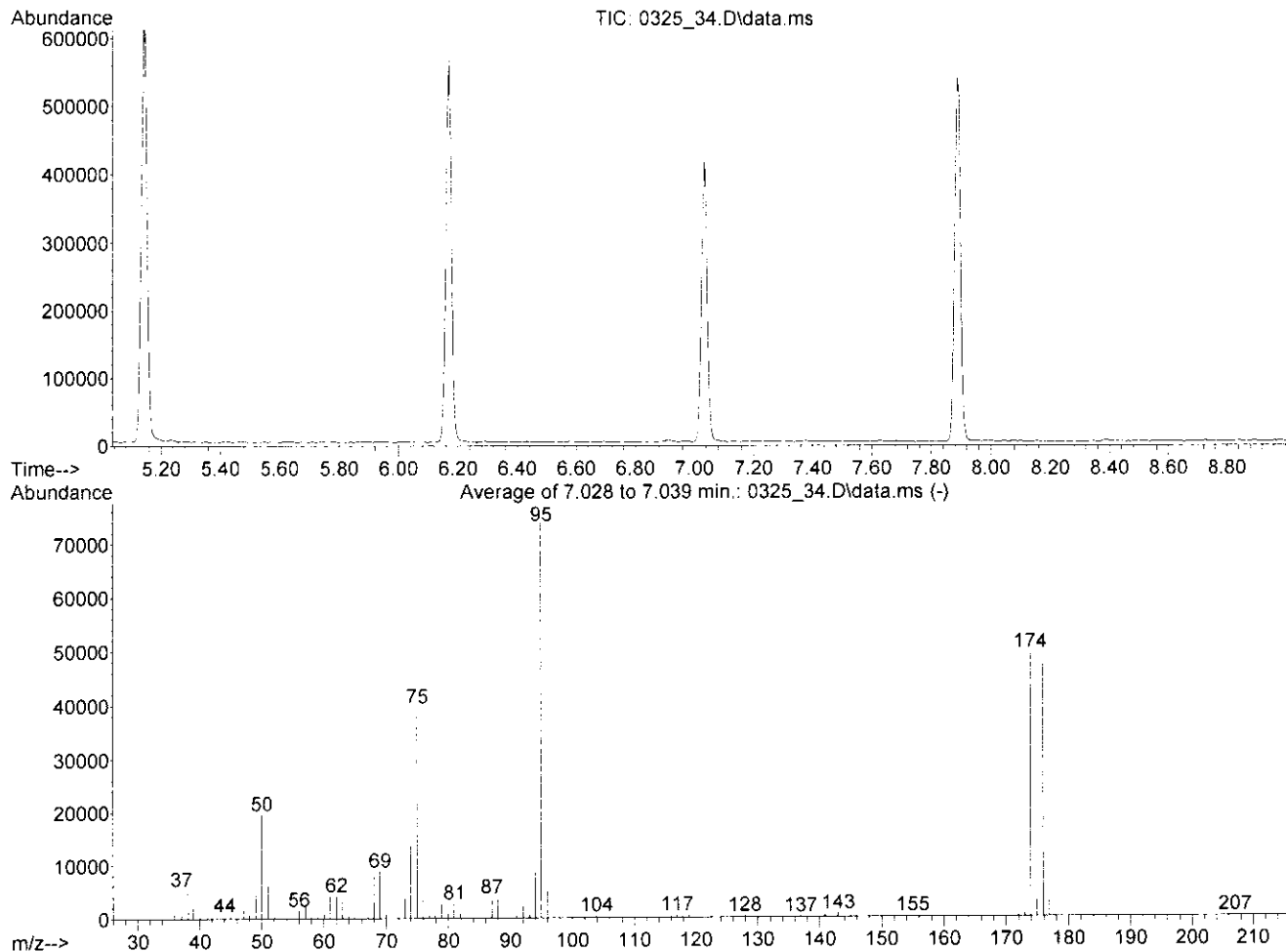
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
95	174	50	200	149
96	95	5	9	7
173	174	0	2	1
174	95	50	200	67
175	174	5	9	7
176	174	95	105	95
177	176	5	10	7

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	VOCMS250325190325_35-1466842	0325_35-1	03/25/19 20:25
LCS	R3395129-1	0325_36	03/25/19 20:45
BLANK	R3395129-2	0325_38	03/25/19 21:25
BW-02	L1080247-01	0325_42	03/25/19 23:00
BW-03	L1080247-02	0325_43	03/25/19 23:20
GPMW-34	L1080247-04	0325_44	03/25/19 23:40
BW-04	L1080247-03	0325_48	03/26/19 01:00 ✓

Data Path : C:\msdchem\1\data\032519\
 Data File : 0325_34.D
 Acq On : 25 Mar 2019 8:05 pm
 Operator : 605
 Sample : INSTBLK
 Misc : water
 ALS Vial : 34 Sample Multiplier: 1

Integration File: RTEINTLRH.P

Method : C:\msdchem\1\methods\V825C04S.M
 Title : Volatile Organics by GC/MS
 Last Update : Tue Mar 05 09:08:02 2019



AutoFind: Scans 1010, 1011, 1012; Background Corrected with Scan 1003

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.4	19509	PASS
75	95	30	60	53.6	39656	PASS
95	95	100	100	100.0	74019	PASS
96	95	5	9	6.6	4897	PASS
173	174	0.00	2	0.9	454	PASS
174	95	50	100	67.0	49629	PASS
175	174	5	9	7.3	3640	PASS
176	174	95	101	95.3	47312	PASS
177	176	5	9	6.6	3146	PASS

INTERNAL STANDARD
AND RETENTION TIME

SDG: L1080247
Instrument ID: VOCMS7
Std File: 0324_02

Analytical Method: 8260C
Calibration Start Date: 02/21/19 07:09
Calibration End Date: 03/21/19 22:14
Std Analysis Date: 03/24/19 10:46

Sample ID	File ID	1,4-DCB		8260-CHLOROBENZENE-D5		8260-FLUOROBENZENE	
		Response	RT	Response	RT	Response	RT
STANDARD		58415	7.69	92395	6.38	222591	4.45
UPPER LIMIT		116830		184790		445182	
LOWER LIMIT		29208		46198		111296	
LCS R3394872-1 WG1254695 1x	0324_02LCS	58415	7.69	92395	6.38	222591	4.45
LCSD R3394872-2 WG1254695 1x	0324_03	58465	7.69	93426	6.38	218058	4.45
BLANK R3394872-3 WG1254695 1x	0324_05	60291	7.69	94272	6.38	226705	4.46
L1080247-01 WG1254695 1x	0324_21	65389	7.69	92917	6.38	223930	4.46
L1080247-02 WG1254695 1x	0324_22	60331	7.69	89705	6.38	224478	4.45
L1080247-03 WG1254695 1x	0324_23	62716	7.69	91815	6.38	218088	4.45
OS L1080247-03 WG1254695 1x	0324_23	62716	7.69	91815	6.38	218088	4.45
L1080247-04 WG1254695 1x	0324_24	56908	7.69	89377	6.38	223464	4.45
L1080247-05 WG1254695 1x	0324_25	60586	7.69	93116	6.38	225981	4.45
L1080247-06 WG1254695 1x	0324_26	55914	7.69	92571	6.38	223527	4.46
MS R3394872-4 WG1254695 1x	0324_27	61086	7.69	94738	6.38	219033	4.45
MSD R3394872-5 WG1254695 1x	0324_28	62411	7.69	95268	6.38	219030	4.45

1,4-DCB - 8260-1,4-DICHLOROBENZENE-D4 8260-CHLOROBENZENE-D5 - 8260-CHLOROBENZENE-D5
8260-FLUOROBENZENE - 8260-FLUOROBENZENE

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.



INTERNAL STANDARD AND RETENTION TIME

SDG: L1080247
Instrument ID: VOCMS7
Std File: 0324_31-1

Analytical Method: 8260C
Calibration Start Date: 02/21/19 07:09
Calibration End Date: 03/21/19 22:14
Std Analysis Date: 03/24/19 20:34

Sample ID	File ID	1,4-DCB		8260-CHLOROBENZENE-D5		8260-FLUOROBENZENE	
		Response	RT	Response	RT	Response	RT
STANDARD		61865	7.69	96709	6.38	227386	4.45
UPPER LIMIT		123730		193418		454772	
LOWER LIMIT		30933		48355		113693	
LCS R3395126-1 WG1254708 1x	0324_31LC S	61865 ✓	7.69	96709 ✓	6.38	227386 ✓	4.45
BLANK R3395126-2 WG1254708 1x	0324_33	56493	7.69	92390	6.38	225538	4.46
L1080247-07 WG1254708 1x	0324_39	53829	7.69	91174	6.38	221662	4.46
L1080247-08 WG1254708 1x	0324_40	55814	7.69	90174	6.38	221897	4.46
L1080247-09 WG1254708 1x	0324_41	52169	7.69	86699	6.38	215643	4.45
L1080247-10 WG1254708 1x	0324_42	56746	7.69	87280	6.38	221782	4.45

1,4-DCB - 8260-1,4-DICHLOROBENZENE-D4 8260-CHLOROBENZENE-D5 - 8260-CHLOROBENZENE-D5
8260-FLUOROBENZENE - 8260-FLUOROBENZENE

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.



INTERNAL STANDARD AND RETENTION TIME

SDG: L1080247
Instrument ID: VOCMS25
Std File: 0325_35-1

Analytical Method: 8260C
Calibration Start Date: 03/04/19 14:08
Calibration End Date: 03/04/19 17:29
Std Analysis Date: 03/25/19 20:25

Sample ID	File ID	1,4-DCB		8260-CHLOROBENZENE-D5		8260-FLUOROBENZENE	
		Response	RT	Response	RT	Response	RT
STANDARD		109305	7.89	143567	6.17	307246	4.21
UPPER LIMIT		200090		266262		569080	
LOWER LIMIT		50023		66566		142270	
LCS R3395129-1 WG1255146 1x	0325_36	113487	✓ 7.89	152152	✓ 6.17	333192	✓ 4.21
BLANK R3395129-2 WG1255146 1x	0325_38	95366	7.89	135540	6.17	298182	4.20
L1080247-01 WG1255146 1x	0325_42	98725	7.89	138626	6.17	302062	4.20
L1080247-02 WG1255146 1x	0325_43	91699	7.89	129975	6.16	285446	4.20
L1080247-04 WG1255146 1x	0325_44	90693	7.89	129872	6.17	288105	4.20
L1080247-03 WG1255146 25x	0325_48	93469	7.89	133103	6.16	293274	4.20

1,4-DCB - 8260-1,4-DICHLOROBENZENE-D4 8260-CHLOROBENZENE-D5 - 8260-CHLOROBENZENE-D5
8260-FLUOROBENZENE - 8260-FLUOROBENZENE

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Appendix C

Site Inspection Form



300 State Street
Rochester, New York 14614
Phone: 585-454-6110
Fax: 585-454-3066

Site Wide Inspection Form

Project Name: Former Michelsen Furniture Co. Site

Location: 182 Avenue D & 374 Conkey Avenue

LaBella Project No.: 2161282

Inspected By: Dave Engert

Date of Inspection: 10/29/18

Weather Conditions: Cloudy, ~45°

Comments

Compliance with SMP/Environmental Easement

Yes

Condition of SSDS

Working, gauges showing vacuum and alarms tested.

Condition of groundwater monitoring wells to be used for long-term monitoring as indicated in SMP.

Good

General site conditions at time of inspection

Same as prior

Site management activities currently being conducted (if any)

None

Site records up to date?

Yes.

Additional Notes/Comments:

**SUB-SLAB DEPRESSURIZATION SYSTEM INSPECTION FORM**

Project Name: Former Michelsen Furniture Co. Site - Site No. C828189

Location: 182 Avenue D & 374 Conkey Ave, Rochester, New York

300 State Street

LaBella Project No.: 2161282

Rochester, New York 14614

Inspected By: Dave Engert

Phone: (585) 454-6110

Date of Inspection: 10/29/18

Fax: (585) 454-3066

Weather Conditions: Cloudy ~45° F**INSPECTION FINDINGS:**

Sub-Slab Depressurization System - Fan #1:

Operational -

Yes

No

Vacuum Gauge Reading (inches of water) -

2.5~~Open Ball Valve on Trap & Drain Water -~~

Alarm Check -

Alarm Sounded?

Alarm Failed?

Sub-Slab Depressurization System - Fan #2:

Operational -

Yes

No

Vacuum Gauge Reading (inches of water) -

3~~Open Ball Valve on Trap & Drain Water -~~

Alarm Check -

Alarm Sounded?

Alarm Failed?

Sub-Slab Depressurization System - Fan #3:

Operational -

Yes

No

Vacuum Gauge Reading (inches of water) -

3~~Open Ball Valve on Trap & Drain Water -~~

Alarm Check -

Alarm Sounded?

Alarm Failed?

Sub-Slab Depressurization System - Fan #4:

Operational -

Yes

No

Vacuum Gauge Reading (inches of water) -

2~~Open Ball Valve on Trap & Drain Water -~~

Alarm Check -

Alarm Sounded?

Alarm Failed?

Appendix D

Institutional Controls/Engineering Controls Certification Form



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site Details

Box 1

Site No. **C828189**

Site Name **Former Michelsen Furniture Co. Site**

Site Address: 182 Avenue D & 374 Conkey Avenue Zip Code: 14621
City/Town: Rochester
County: Monroe
Site Acreage: 0.630

Reporting Period: March 31, 2018 to March 31, 2019

YES NO

1. Is the information above correct?

☒ ☐

If NO, include handwritten above or on a separate sheet.

2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?

☐ ☒

3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?

☐ ☒

4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?

☐ ☒

If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.

5. Is the site currently undergoing development?

☐ ☒

Box 2

YES NO

6. Is the current site use consistent with the use(s) listed below?
Restricted-Residential, Commercial, and Industrial

☒ ☐

7. Are all ICs/ECs in place and functioning as designed?

☒ ☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

Box 2A

YES NO

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?



If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid?
(The Qualitative Exposure Assessment must be certified every five years)



If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C828189**Box 3****Description of Institutional Controls**ParcelOwnerInstitutional Control**091.77-2-31.001**

M M Housing Dev. & Mills and Michelsen

Ground Water Use Restriction
Landuse Restriction
Monitoring Plan
Site Management Plan
O&M Plan
IC/EC Plan

A Site Management Plan which includes a soil excavation plan and IC/EC plan.

An environmental easement that requires compliance with SMP; provides for periodic certification; limits site use to restricted residential, commercial or industrial uses; and restricts the use of groundwater as a potable source.

Box 4**Description of Engineering Controls**ParcelEngineering Control**091.77-2-31.001**

Groundwater Treatment System
Vapor Mitigation
Cover System

Cover System: The sitewide cover system consists either of the on-site buildings, pavement, sidewalks or two feet of clean soil.

Sub-slab Depressurization system: Continued operation of the SSDS in the main occupied building is required.

Groundwater Remediation System: Continued monitoring and operation of the groundwater treatment system.

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

☒ ☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

- (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

☒ ☐

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. C828189

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Kathy Wood at 312 State St, Rochester, NY
print name print business address
am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Kathy Wood 4-30-19
Signature of Owner, Remedial Party, or Designated Representative Date
Rendering Certification

IC/EC CERTIFICATIONS

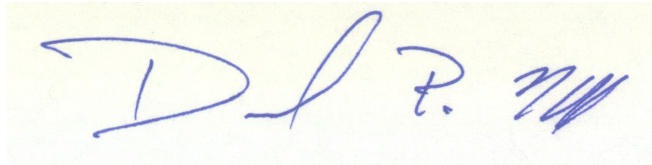
Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Daniel P. Noll at LaBella Associates,
300 State St. Rochester, NY,
print name print business address

am certifying as a Professional Engineer for the Owner
(Owner or Remedial Party)



4/30/19

Signature of Professional Engineer, for the Owner or
Remedial Party, Rendering Certification

Stamp
(Required for PE)

Date