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2018 PERIODIC REVIEW REPORT FORMER SIGNORE, INC. ELLICOTTVILLE, NEW YORK BROWNFIELD CLEANUP PROGRAM Site Number C905034

April 11, 2018

File No. 21.0056367.81



PREPARED FOR:

Iskalo Ellicottville Holdings, LLC
Williamsville, New York

GZA GeoEnvironmental of New York

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MANAGEMENT

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VIA EMAIL

April 11, 2018
File No. 21.0056367.81

Mr. David Szymanski
New York State Department of Environmental Conservation
Division of Environmental Remediation
270 Michigan Avenue
Buffalo, New York 14203

Re: 2018 Periodic Review Report
Former Signore, Inc.
Ellicottville, New York
Brownfield Cleanup Program Site (Number C905034)

Dear Mr. Szymanski:

GZA GeoEnvironmental of New York (GZA) is pleased to submit this Periodic Review Report (PRR) on behalf of Iskalo Ellicottville Holdings, LLC (Iskalo). Iskalo is the owner and operator of the Former Signore, Inc. Brownfield Cleanup Program (BCP) Site (No. 905034; Site) located at 55-57 Jefferson Street in Ellicottville, New York. This is the second PRR to be submitted for the Site for which a Certificate of Completion (COC) was issued by the New York State Department of Environmental Conservation (NYSDEC) on December 11, 2015. GZA prepared this PRR in general conformance with the guidelines provided to Iskalo by the NYSDEC in their reminder notice letter dated January 26, 2018.

If you have any questions or need additional information, please call Jim Richert at (716) 844-7048.

Sincerely,

GZA GEOENVIRONMENTAL OF NEW YORK

James J. Richert, P.G.
Senior Project Manager

Bart A. Klettke, P.E.
Principal

cc: David Chiazza (Iskalo Ellicottville Holdings, LLC)



TABLE OF CONTENTS

	<u>Page</u>
1.0 EXECUTIVE SUMMARY.....	1
1.1 BACKGROUND	1
1.2 EFFECTIVENESS OF THE REMEDIAL PROGRAM	2
1.3 COMPLIANCE	2
1.4 RECOMMENDATIONS	2
2.0 SITE OVERVIEW.....	2
2.1 SITE LOCATION AND FEATURES.....	2
2.2 INVESTIGATION AND REMEDIAL HISTORY	2
3.0 EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS	3
4.0 INSTITUTIONAL CONTROL/ENGINEERING CONTROL (IC/EC) PLAN COMPLIANCE REPORT	4
4.1 IC/EC REQUIREMENTS AND COMPLIANCE	4
4.2 IC/EC CERTIFICATION.....	5
5.0 PRR CONCLUSIONS AND RECOMMENDATIONS.....	5
5.1 PRR CONCLUSIONS	5
5.2 PRR RECOMMENDATIONS.....	5

FIGURES

FIGURE 1 SITE LOCATION MAP

FIGURE 2 SITE PLAN WITH PHOTO LOCATIONS

FIGURE 3 JULY 2017 POST-INJECTION GROUNDWATER MONITORING REPORT, MICROWELL GROUNDWATER ELEVATION CONTOUR PLAN

FIGURE 4 JULY 2017 POST-INJECTION GROUNDWATER MONITORING REPORT, LOCATION OF ORGANIC CARBON ELECTRON DONOR SUBSTRATE INJECTIONS

APPENDICES

APPENDIX A PHOTOGRAPH LOG

APPENDIX B SITE MANAGEMENT FORM

APPENDIX C POST-INJECTION AND SITE-WIDE GROUNDWATER MONITORING REPORTS (JULY 2017)

APPENDIX D IC/EC CERTIFICATION FORM



1.0 EXECUTIVE SUMMARY

1.1 BACKGROUND

The Former Signore, Inc. Site (Site) is located in the Village of Ellicottville, Cattaraugus County, New York (**Figure 1**). The 8.43-acre BCP Site is part of the larger approximate 55-acre former Signore property addressed at 55-57 Jefferson Street. The 55-acre former Signore property is currently listed as a Class 4 site on the NYSDEC's Registry of Inactive Hazardous Waste sites (Site No. 905023), and involves groundwater contaminated with chlorinated volatile organic compounds (cVOCs).

The 8.43-acre BCP Site is currently occupied by a concrete slab (associated with a former 168,000 square foot main building that was demolished in July and August 2012) and three smaller ancillary buildings. Additional Site features include a paved parking area along the eastern and southern side of the concrete slab, and gravel and short vegetative ground cover surrounding the concrete slab on its northern, southern, and western sides. The Site is bounded by residences and the rest of the former Signore property to the north; residences, the rest of the former Signore property, and wooded vacant land to the south; Jefferson Street, residences, and a cemetery to the east; and the rest of the former Signore property to the west.

Environmental investigations identified localized petroleum-impacted soil and groundwater in historical underground storage tank (UST) areas. Groundwater sampling confirmed the presence of cVOCs at concentrations above NYSDEC Class GA groundwater criteria. Two interim remedial measures (IRMs) were completed in 2011 and 2013 to remove several USTs, septic tanks and associated impacted soils.

The remedial action objectives (RAOs) for groundwater targeted compliance with the NYSDEC Class GA criteria, and reducing the potential exposure from inhalation of organic vapors, ingestion, and dermal contact with contaminated groundwater.

In July 2015, GZA implemented an organic carbon electron donor substrate (OCEDS) injection program to enhance and accelerate natural attenuation of cVOCs in the groundwater.

A Certificate of Completion (COC) of the BCP remedy was issued by NYSDEC to Iskalo on December 11, 2015.

Institutional Controls Include:

- Property use may include restricted residential, restricted commercial, and/or restricted industrial uses;
- Groundwater may not be used without prior treatment and approval of the regulator;
- All future activities that will disturb remaining subsurface contaminated material must be conducted as defined in the SMP (in the Excavation Work Plan);
- Access to the Site must be provided to representatives of the State of New York;

Engineering Controls Include:

- Evaluation of vapor intrusion on new buildings and/or installation and operation of vapor mitigation systems;
- Groundwater monitoring must be performed and reported as defined in the SMP;



1.2 EFFECTIVENESS OF THE REMEDIAL PROGRAM

Contaminant sources have been removed from the Site. Natural attenuation of cVOCs in the groundwater continues to reduce their concentrations as indicated by data collected during groundwater monitoring program. Potential impacts of vapor intrusion will be evaluated for any new on-site buildings and vapor mitigation implemented as necessary. Therefore, the Site remedy continues to be effective at meeting the Site's RAOs.

1.3 COMPLIANCE

On November 2, 2017, GZA observed the Site to be in compliance with the SMP. The Institutional Controls and Engineering Controls (IC/ECs) remain in place and there are no active remedial systems requiring monitoring or operation and maintenance.

1.4 RECOMMENDATIONS

GZA received verbal confirmation from NYSDEC in Fall 2017 to decrease the semi-annual and groundwater remedy sampling and analysis frequency to annual. GZA requests an amendment letter to the SMP from NYSDEC indicating the approved annual groundwater sampling schedule.

GZA and Iskalo recommend no other changes to the SMP or frequency of PRR submittals at this time. Implementation of the SMP, including the Excavation Work Plan and evaluation for soil vapor intrusion, will proceed as the Site is redeveloped in compliance with the Environmental Easement.

2.0 **SITE OVERVIEW**

2.1 SITE LOCATION AND FEATURES

The Former Signore, Inc. Site is located in the Village of Ellicottville, Cattaraugus County, New York (**Figure 1**). The 8.43-acre BCP Site is part of the larger approximate 55-acre former Signore property addressed at 55-57 Jefferson Street. The 55-acre former Signore property is currently listed as a Class 4 site on the NYSDEC's Registry of Inactive Hazardous Waste sites (Site No. 905023), and includes groundwater contaminated with chlorinated volatile organic compounds (cVOCs).

The BCP Site is currently occupied by of the concrete slab foundation associated with the former main building, as well as three smaller ancillary buildings. Areas not occupied by the concrete slab include a paved parking area along the eastern and southern side of the slab, and gravel and short vegetative ground cover surrounding the slab on its northern, southern, and western sides. The Site is bounded by residences and the rest of the former Signore property to the north; residences, the rest of the former Signore property, and wooded vacant land to the south; Jefferson Street, residences, and a cemetery to the east; and the rest of the former Signore property to the west.

2.2 INVESTIGATION AND REMEDIAL HISTORY

The Site formerly included localized petroleum-impacted soil and groundwater in historical UST areas, which were remediated during two IRMs in 2011 and 2013. Several USTs and septic tanks and associated impacted soils were removed during these IRMs. Groundwater sampling events conducted prior to and following the



IRMs indicated the presence of cVOCs at concentrations above groundwater criteria. GZA determined that the cVOC-impacted groundwater at the Site would require remediation to reduce contaminant concentrations prior to the anticipated redevelopment.

The Remedial Action Objectives (RAOs) for the Site included:

Groundwater:

- Prevent ingestion of groundwater with contaminant levels exceeding NYSDEC Class GA drinking water standards.
- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.
- Restore groundwater aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

Soil:

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.
- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

Soil Vapor:

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at the Site.

In July 2015, GZA implemented an OCEDS injection program to enhance and accelerate natural attenuation of cVOCs.

Remediation of the Site under the BCP followed Track 2 of the program to achieve restricted residential cleanup status. Soils with constituents exceeding the NYSDEC Part 375 Soil Cleanup Objectives (SCOs) for Restricted Residential Use (RRSCOs) were remediated during the IRM activities conducted in 2011 and 2013. Additional remedial actions pertaining to subsurface soils were not required as part of the final remedy. Based on the results of the groundwater sampling conducted following the full-scale OCEDS injection program, the OCEDS injections were successful in reducing total cVOC concentrations, and continued reductions in concentrations by enhanced natural attenuation are anticipated. If the RAOs for groundwater are not met within three years of implementation of the full-scale injections, summer of 2018, the need to evaluate additional in-situ remediation will be considered at that time.

3.0 EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

GZA performed a Site Inspection on November 2, 2017, during the reporting period. A log of photographs taken during the inspection is provided in **Appendix A**, a Site inspection form was completed (**Appendix B**), and a map showing the locations and orientation of the Site photographs is provided as **Figure 2**. No evidence of Site activity



or excavations were observed during the inspection. The Site groundwater monitoring wells remain present for continued monitoring use and the Site remains vacant and undeveloped (excepting the remaining concrete slab and three ancillary buildings).

Appendix C provides copies of the July 2017 post-injection and site-wide groundwater monitoring reports (provided to NYSDEC on October 10, 2017). Data collected under the post-injection groundwater monitoring program confirm that natural attenuation of cVOCs in the groundwater continues. Therefore, the Site remedy continues to be effective at meeting the Site RAOs for protection of potential current and future Site users.

4.0 INSTITUTIONAL CONTROL/ENGINEERING CONTROL (IC/EC) PLAN COMPLIANCE REPORT

4.1 IC/EC REQUIREMENTS AND COMPLIANCE

IC/ECs for the Site were determined by NYSDEC and specified in the Decision Document (DD) issued by NYSDEC on July 24, 2015. The IC/ECs were carried forward in the Environmental Easement (EE), issued by NYSDEC on July 28, 2015, and later again included in the Site Management Plan (SMP) (prepared by GZA and approved by NYSDEC on October 6, 2015). Complete lists of the Site IC and ECs are provided in Sections 3.2 and 3.3 of the SMP. Summary lists of the ICs and ECs for the Site are provided as follow:

Summary of Site Institutional Controls:

- Property use may include restricted residential, restricted commercial, and/or restricted industrial uses;
- Groundwater may not be used without prior treatment and approval of the regulator;
- Access to the Site must be provided to representatives of the State of New York;
- Groundwater monitoring must be performed and reported as defined in the SMP;
- All future activities that will disturb remaining subsurface contaminated material must be conducted as defined in the SMP; and
- The potential for vapor intrusion must be evaluated for any buildings developed on the Site and any potential impacts identified must be monitored or mitigated.

Summary of Site Engineering Controls:

- Vapor intrusion will be evaluated on new buildings and mitigation systems. Sub-slab depressurization system(s), if installed, will be operated and monitored with NYSDEC and NYSDOH concurrence.
- Groundwater monitoring to assess natural attenuation will continue, as determined by NYSDEC in consultation with NYSDOH, until residual groundwater concentrations are found consistently below ambient water quality standards or have become asymptotic at an acceptable level over an extended period.

No on-Site activity has occurred during the reporting period of March 12, 2017 to March 12, 2018.

Based on observations made during the Site inspection and discussions with Iskalo, the Site owner is complying with the IC/ECs. The Site remains undeveloped and inactive. Site groundwater monitoring wells remain in place and functional. No occupied building structures are present on-Site and Site groundwater is not being used.



4.2 IC/EC CERTIFICATION

The Site-specific IC/EC Certification Form, for reporting period of March 12, 2017 to March 12, 2018, was provided to Iskalo as an attachment to the January 26, 2018 Reminder Notice letter sent by NYSDEC. This form has been completed by Iskalo as Site owner and Certified by GZA as Qualified Environmental Professional (QEP). The completed IC/EC Certification Form for this reporting period is provided in Appendix D of this PRR.

5.0 PRR CONCLUSIONS AND RECOMMENDATIONS

5.1 PRR CONCLUSIONS

GZA observed the BCP Site to be in compliance with provisions of the SMP. The IC/ECs remain in place and are unchanged since issuance the ending of the prior reporting period. There are no active remedial systems requiring operation, monitoring, or maintenance.

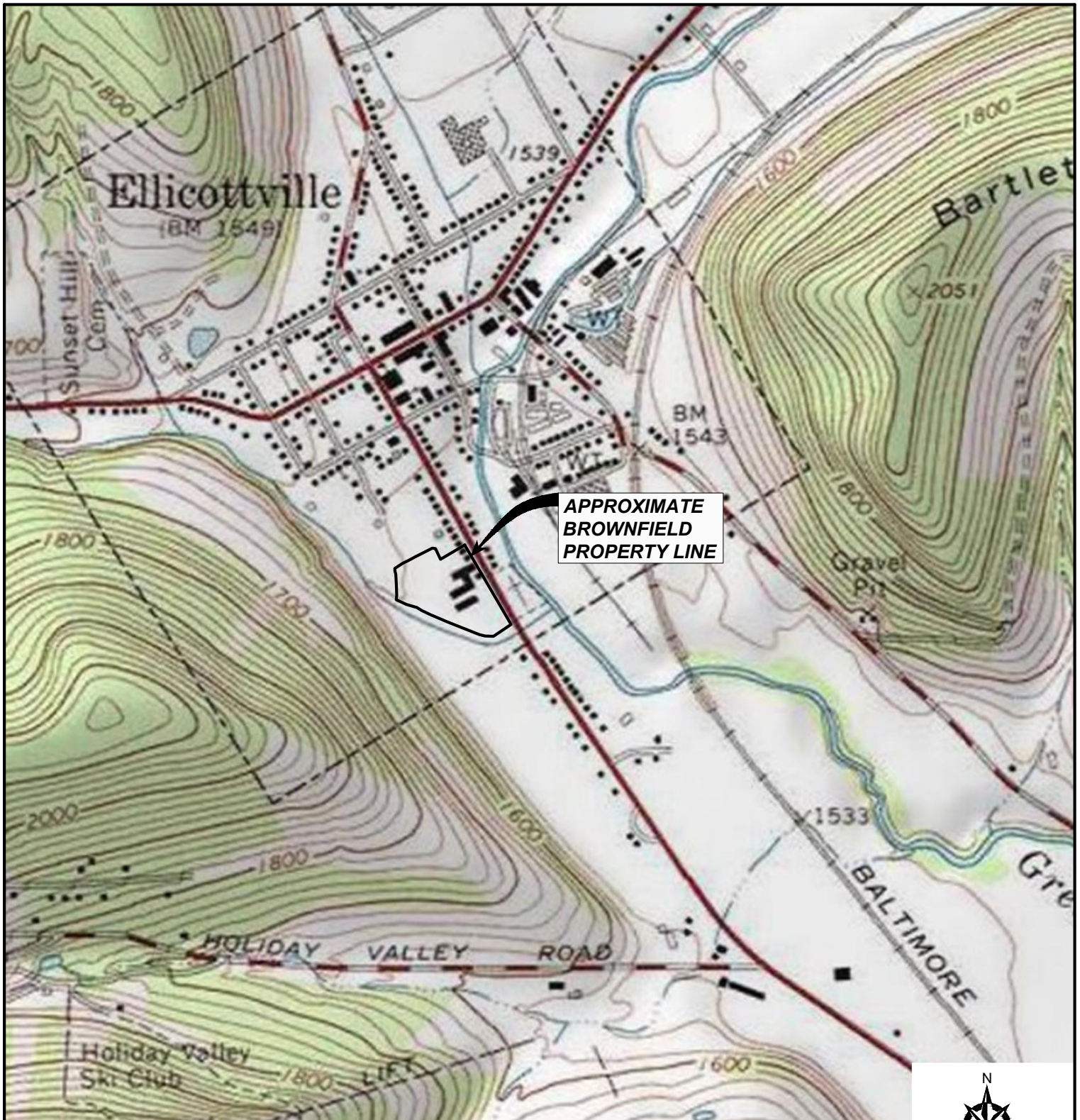
5.2 PRR RECOMMENDATIONS

GZA received verbal confirmation from NYSDEC in Fall 2017 to decrease the semi-annual and groundwater remedy sampling and analysis frequency to annual. GZA requests an amendment letter to the SMP from NYSDEC indicating the approved annual groundwater sampling schedule.

GZA and Iskalo recommend no other changes to the SMP or frequency of PRR submittals at this time. Implementation of the SMP, including the Excavation Work Plan and evaluation for soil vapor intrusion, will proceed as the Site is redeveloped in compliance with the Environmental Easement.



FIGURES



NOTE:
BASE MAP ADAPTED FROM USA TOPO
MAPS USING ArcGIS AUTOCAD PLUGIN

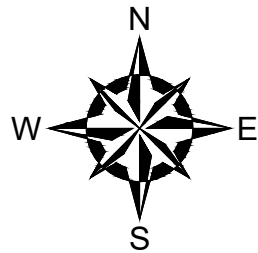
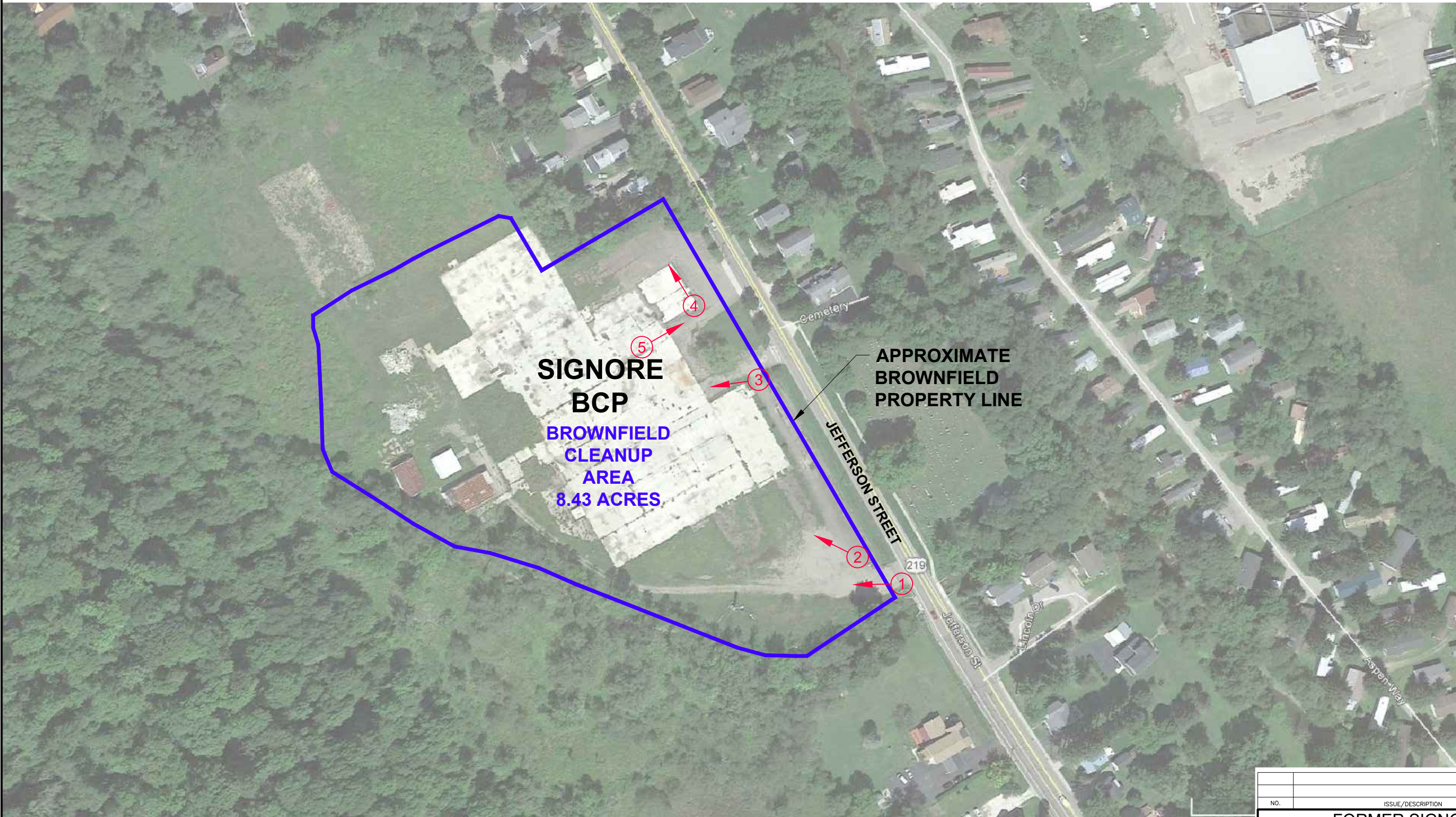
0 500 1000 2000
APPROXIMATE SCALE IN FEET



NO.	ISSUE/DESCRIPTION			BY	DATE
FORMER SIGNORE, INC. 55-57 JEFFERSON STREET ELLCOTTVILLE, NEW YORK BROWNFIELD CLEANUP PROGRAM SITE NO. C905034				FIGURE <	

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

© 2018 - GZA GeoEnvironmental of N.Y. G24-101-PROJECTS/66300/66307.01 Signor, Ellicottville PRR Figure 2 Site Plan Map [Figure 2 Site Plan Map] March 27, 2018 - 1:54pm Michael Weiss



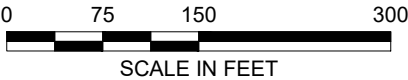
NOTES:

1. BASE MAP ADAPTED FROM A 2016 AERIAL PHOTO DOWNLOADED FROM GOOGLE EARTH PRO AND FIELD OBSERVATIONS.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

LEGEND:



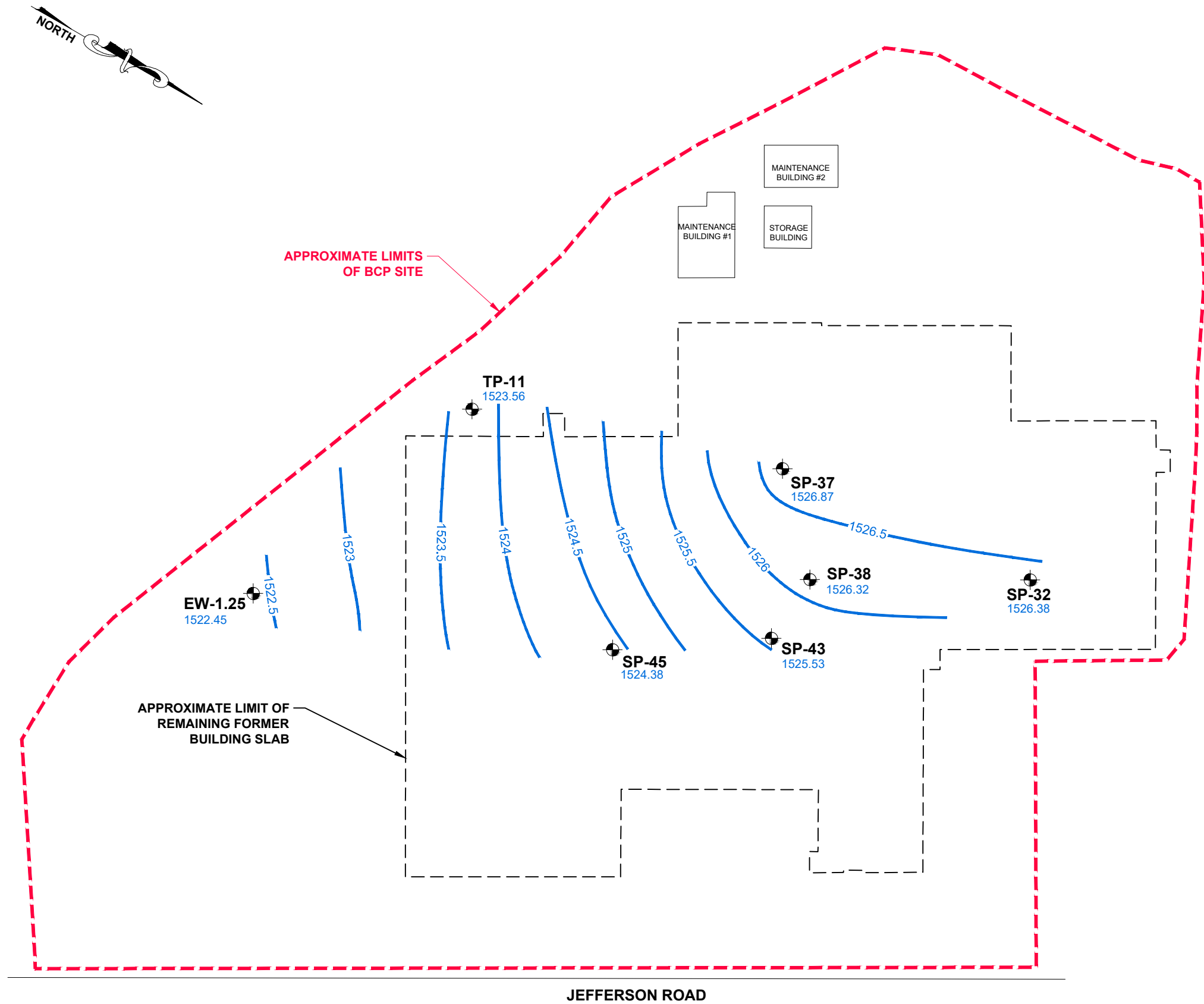
APPROXIMATE LOCATION AND ORIENTATION OF INSPECTION PHOTOGRAPHS COLLECTED ON 11-2-2017 (SEE APPENDIX A)



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NO.	ISSUE/DESCRIPTION			BY	DATE
FORMER SIGNORE, INC. 55-57 JEFFERSON STREET ELLCOTTVILLE, NEW YORK BROWNFIELD CLEANUP PROGRAM SITE NO. C905034					
PERIODIC REVIEW REPORT PHOTOGRAPH ORIENTATION MAP					
PREPARED BY:  GZA GeoEnvironmental of N.Y. Engineers and Scientists 300 PEARL STREET, SUITE 700 BUFFALO, NEW YORK 14202 (716) 685-2300			PREPARED FOR: ISKALO DEVELOPMENT INCORPORATED		
PROJ MGR:	TB	REVIEWED BY:	JJR	CHECKED BY:	BAK
DESIGNED BY:	TB	DRAWN BY:	MDK	SCALE:	AS SHOWN
DATE	PROJECT NO.		REVISION NO.		FIGURE 2
MARCH 2018	21.0056367.81				

© 2017 - GZA GeoEnvironmental of New York GZA-K:\PROJECTS\6300s\56367.63 Signor Ellicottville Post Injection\Figure 1.dwg [Figure 1] April 11, 2018 - 10:12am Michael.Kress



LEGEND:

-  **SP-37**
1526.87 APPROXIMATE LOCATION AND DESIGNATION OF 1" MICROWELL. GROUNDWATER ELEVATION MEASURED ON NOVEMBER 16, 2012.
-  1524.5 APPROXIMATE LOCATION AND ELEVATION OF GROUNDWATER CONTOUR LINE BASED ON MEASUREMENTS TAKEN ON JULY 12, 2017.

NOTES:

1. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.



NO.	ISSUE/DESCRIPTION	BY	DATE
UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.			
FORMER SIGNORE FACILITY 55-57 JEFFERSON STREET ELLCOTTVILLE, NEW YORK BROWNFIELD CLEANUP PROGRAM SITE NO. C905034			
JULY 2017 POST-INJECTION GROUNDWATER MONITORING REPORT, MICROWELL GROUNDWATER ELEVATION CONTOUR PLAN			
PREPARED BY:  GZA GeoEnvironmental of NY Engineers and Scientists www.gza.com		PREPARED FOR: ISKALO ELLICOTTVILLE HOLDINGS, LLC	
PROJ MGR: TB	REVIEWED BY: JR	CHECKED BY: BAK	FIGURE 3
DESIGNED BY: TB	DRAWN BY: MDK	SCALE: 1" = 80'	
DATE: AUGUST 2017	PROJECT NO. 21.0056367.63	REVISION NO.	



APPENDIX A

PHOTOGRAPH LOG



Photo 1 – Southern portion of Site looking west



Photo 2 – Center of Site looking northwest



Photo 3 – Central portion of Site looking west



Photo 4 – Northeast portion of Site looking northwest



Photo 5 – Northern Site entrance looking northeast



APPENDIX B

SITE MANAGEMENT FORM

Former Signore Site, Ellicottville, NY

BCP Site No.: C905034

Site Management Form

SITE DETAILS					
Site No.: C905034	Site Name: Former Signore, Inc.				
Site Address: 55-57- Jefferson St., Ellicottville, NY					
PERSON PERFORMING INSPECTION					
Name: Jim Richert			Email: James.Richert@GZA.com		
Company: GZA			Phone Number: 716/844-7048		
Others Present: None					
INSPECTION DATE AND SITE CONDITIONS					
Inspection Date: November 2, 2017			Inspection Time: 8:42 AM		
Weather Conditions: Overcast, Temp ~ 45 degrees F.					
REASON FOR SITE INSPECTION					
Type of Inspection: ☒ Annual Inspection ☐ Routine Maintenance Inspection ☐ Non-Routine Inspection					
Inspection after a Severe Condition that could effect Site control ☐ Yes ☒ No					
Describe severe condition triggering inspection: NA					
VERIFICATION OF SITE DETAILS					
Current Site Owner: Iskalo Ellicottville Holdings LLC					
Current Site Operator: Iskalo Ellicottville Holdings LLC					
Describe Current Site Use (check all that apply)					
☐ Industrial	☐ Commercial	☐ Residential	☒ Other	Vacant, awaiting redevelopment	
Briefly describe observed site uses:					
ite remains vacant and awaits redevelopment. No physical changes observed since the November 9, 2016 annual inspection.					
Note any additional pertinent information to Verification of Site Details (use additional pages if necessary).					
DESCRIPTION OF ENGINEERING CONTROLS					
Are the Engineering Controls still in place: ☒ Yes ☐ No					
If No, explain:					
Is the Site Management Plan still in place: ☒ Yes ☐ No					
If No, explain:					
AREAS IN NEED OF REPAIR OR MAINTENANCE					
Area discussed in this section must be shown on a figure and have photographic documentation.					
None					
INTRUSIVE ACTIVITIES PERFORMED AT SITE DURING INSPECTION PERIOD					
Location:			Date:		
Description of activities being performed:					
None observed and none reported by Site owner/operator					

Former Signore Site, Ellicottville, NY
BCP Site No.: C905034
Site Management Form

Are Site records being properly generated and maintained: ☒ Yes ☐ No	
Provide a summary of recordkeeping review and adequacy:	
ADDITIONAL NOTES & COMMENTS	
None	
INSPECTION CERTIFICATION	
I hereby certify that the information included in this report is complete and accurate to the best of my knowledge	
Inspector Signature: <u>Jim Richert</u>	Date: <u>March 27, 2018</u>



APPENDIX C

POST-INJECTION AND SITE-WIDE GROUNDWATER MONITORING REPORTS (JULY 2017)



Proactive by Design



JULY 2017 POST-INJECTION GROUNDWATER MONITORING DATA REPORT

**Former Signore Inc.
55-57 Jefferson Street
Ellicottville New York 14731**

August 30, 2017

File No. 21.0056367.63



PREPARED FOR:

**Iskalo Ellicottville Holdings LLC
Williamsville, New York**

GZA GeoEnvironmental of New York

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VIA EMAIL

August 30, 2017
File No. 21.0056367.63

Mr. David Chiazza
Iskalo Ellicottville Holdings LLC
Harbinger Square
5166 Main Street
Williamsville, NY 14221
dchiazza@iskalo.com

Re: July 2017 Post-Injection Groundwater Monitoring Data Report
Former Signore, Inc.
55-57 Jefferson Street
Ellicottville, NY 14731 (Site)
NYSDEC Site No. C905034

Dear David:

GZA GeoEnvironmental of New York (GZA) is pleased to submit this post-injection groundwater monitoring data report to Iskalo Ellicottville Holdings LLC (Client). This report presents the analytical results of a sampling event conducted on July 12, 2017 at the above referenced Site. The post-injection groundwater monitoring was conducted as required by the New York State Department of Environmental Conservation (NYSDEC), as specified in the Decision Document for Brownfield Cleanup Program (BCP) Site No. C905034 dated July 2015. The post-injection monitoring was conducted in conjunction with the semi-annual groundwater monitoring of 12 other wells that has been performed since 1992 as required by NYSDEC and specified in the Record of Decision (ROD) dated January 1992.

Details of the remedial injection program and the first (August 2015) round of post-injection monitoring were provided in the Final Engineering Report for the Site, dated October 2015.

This data report provides Site figures, well development forms, an analytical data summary table, graphs of pre- and post- injection concentrations of chlorinated solvents in groundwater, and the laboratory data report for the seven wells sampled.

The analytical results of the groundwater sampling provide useful information for documentation of concentrations of chlorinated volatile organic compounds (cVOCs) present in the on-Site groundwater. Groundwater cVOC concentrations measured at 24 months post-OCEDS injection (July 2017) follow trends typical for this stage of enhanced reductive dechlorination, with PCE and TCE concentrations decreasing in conjunction with production of DCE, VC, and ethene. As cVOC concentrations decline, biodegradation typically slows down due to less contact between cVOCs and dechlorination bacteria. Groundwater biogeochemical parameters are generally conducive to continued reductive dechlorination, with predominately low DO, ORP, nitrate, and sulfate in conjunction with elevated groundwater concentrations of methane and reduced iron and manganese. The TOC concentrations are lower than they were at 15 months post-OCEDS injection.



This is expected, as the OCEDS additive, by design, provides organic carbon for indigenous bacteria to consume while reducing electron acceptors that compete with cVOCs. Biomass generated by bacterial growth cycles provides a sustainable source of organic carbon, helping to maintain groundwater conditions conducive to reductive dechlorination as the injected OCEDS is consumed. In GZA's opinion, groundwater conditions are generally conducive to continued reductive dechlorination. Monitoring will continue to more fully assess the long-term impacts of the OCEDS injections on groundwater quality at the Site and to continue to document the dechlorination process.

Per the Site Management Plan (SMP), post-injection groundwater monitoring has been conducted semi-annually, with the July 2017 sampling event being the fifth post-injection monitoring event. The body of data collected since remedial injections indicate that reductive dichlorination is continuing to reduce the CVOC concentrations as intended and that a slow and steady overall trend of CVOC reduction has been established.

Considering the above findings and the rate of CVOC reduction observed, GZA requests NYSDEC approval of a modification of the SMP to allow for a reduced frequency of post-injection groundwater monitoring from semi-annual to annual. An annual monitoring frequency would continue to provide the necessary data for monitoring the long-term impacts of the injections on groundwater quality and documentation of the dechlorination process. The next post-injection groundwater monitoring event is scheduled for October of 2017, but GZA proposes changing that to July of 2018. We respectfully request NYSDEC response to this proposed change of sample frequency before September 30, 2017.

Should you have any questions or require additional information following your review, please contact Jim Richert at 716-844-7048 or Tom Bohlen at 716-844-7050.

Sincerely,

GZA GEOENVIRONMENTAL OF NEW YORK

A handwritten signature in blue ink that reads 'Thomas Bohlen'.

Thomas Bohlen
Project Manager

A handwritten signature in blue ink that reads 'Karen Kinsella'.

Karen Kinsella, Ph. D.
Senior Technical Specialist

A handwritten signature in blue ink that reads 'Jim Richert'.

James J. Richert, P.G. PA
Senior Project Manager

A handwritten signature in blue ink that reads 'Bart A. Klettke'.

Bart A. Klettke, P.E.
Principal



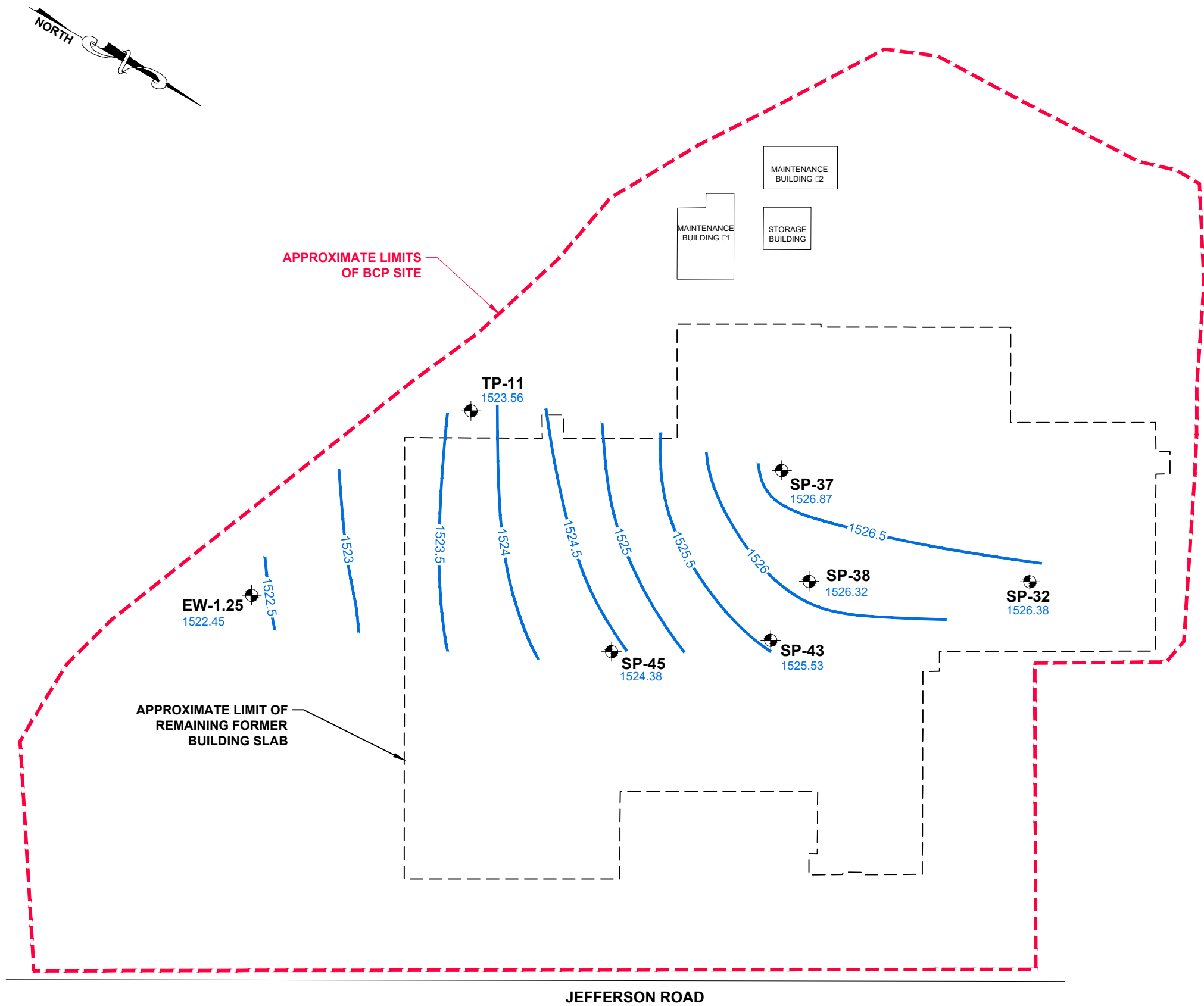
ATTACHMENTS

FIGURE 1	MICROWELL GROUNDWATER ELEVATION CONTOUR PLAN
FIGURE 2	LOCATION OF ORGANIC CARBON ELECTRON DONOR SUBSTRATE INJECTIONS
ATTACHMENT A	LIMITATIONS
ATTACHMENT B	WELL DEVELOPMENT FORMS
ATTACHMENT C	GROUNDWATER ANALYTICAL RESULTS SUMMARY
ATTACHMENT D	CONCENTRATIONS OF CVOC PARENT MATERIAL AND DAUGHTER PRODUCTS MEASURED IN GROUNDWATER
ATTACHMENT E	LABORATORY REPORT



FIGURES

©2017 - GZA GeoEnvironmental of New York G:\A-K\PROJECTS\56367.63 SITE\17 E\DWG\17A.DWG 17A.DWG 30, 2017 - 3:31 PM d

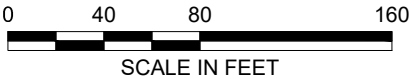


LEGEND

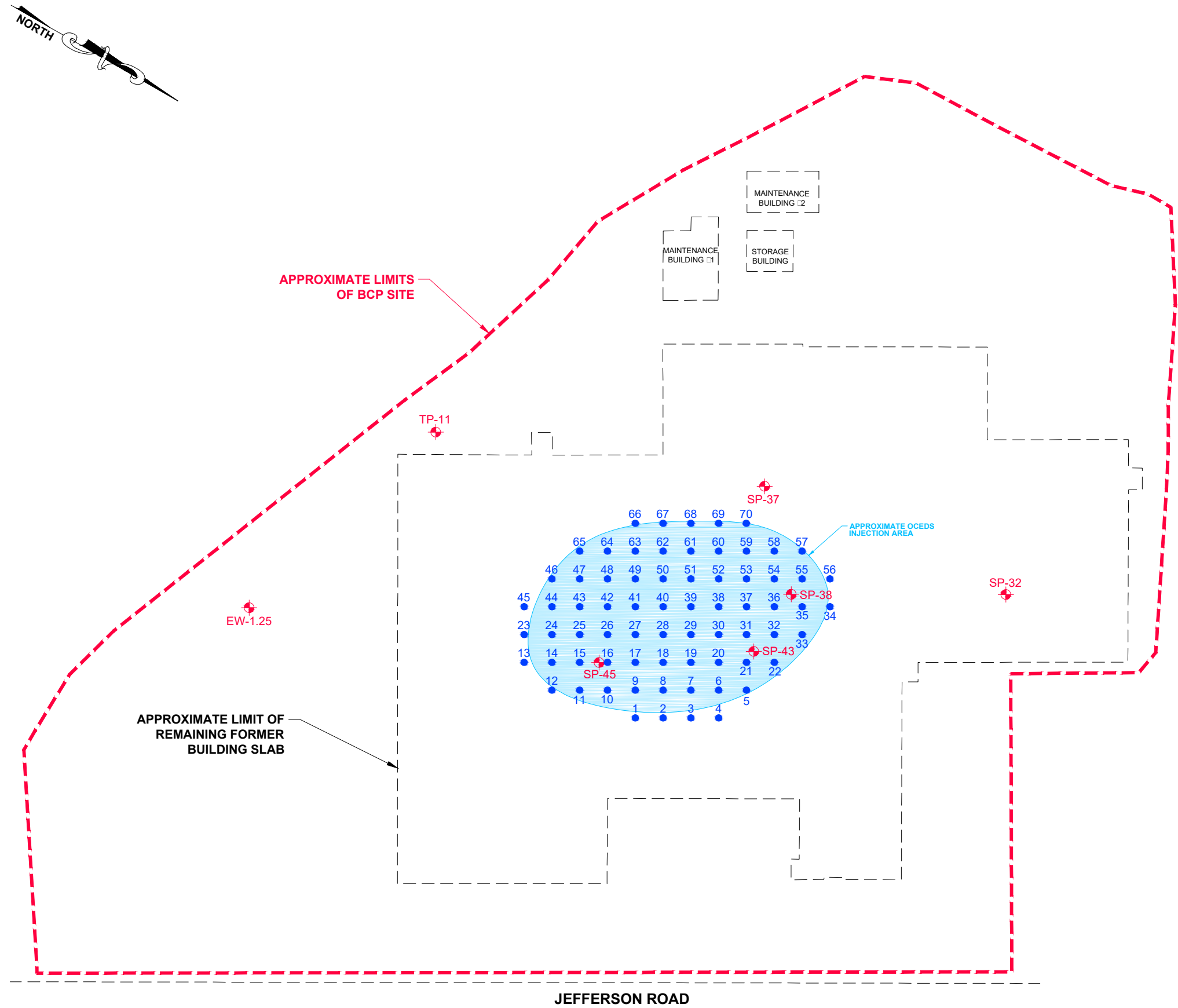
- SP-37** 1526.87 APPROXIMATE LOCATION AND DESIGNATION OF 1" MICROWELL. GROUNDWATER ELEVATION MEASURED ON NOVEMBER 16, 2012.
- 1524.5 APPROXIMATE LOCATION AND ELEVATION OF GROUNDWATER CONTOUR LINE BASED ON MEASUREMENTS TAKEN ON JULY 12, 2017.

NOTES

- THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.



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FORMER SIGNORE FACILITY 55-57 JEFFERSON STREET ELLCOTTVILLE, NEW YORK BROWNFIELD CLEANUP PROGRAM SITE NO. C905034			
LY OST IN ECTION GRO ND ATER MONITORING RE ORT MICRO ELL GRO ND ATER ELEVATION CONTO R LAN			
PREPARED BY GZA G E E E S c		PREPARED FOR ISKALO ELLICOTTVILLE HOLDINGS, LLC	
PROJ MGR TB	REVIEWED BY JR	CHECKED BY BAK	FIGURE 1
DESIGNED BY TB	DRAWN BY DEW	SCALE 1" 80	
DATE AUGUST 2017	PROJECT NO. 21.0056367.63	REVISION NO.	

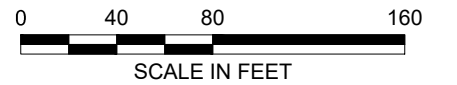


LEGEND ☐

- 1 ● ORGANIC CARBON ELECTRON DONOR
SUBSTRATE (OCEDS) INJECTION POINT
- SP-37 APPROXIMATE LOCATION AND DESIGNATION
OF MONITORING WELLS ASSOCIATED WITH
OCEDS INJECTIONS

NOTES ☐

1. BASE MAP ADAPTED FROM A 2006 AERIAL PHOTOGRAPH DOWNLOADED FROM www.fishbase.org AND FIELD OBSERVATIONS.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.



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FORMER SIGNORE FACILITY 55-57 JEFFERSON STREET ELLICOTTVILLE, NEW YORK BROWNFIELD CLEANUP PROGRAM SITE NO. C905034 □ □ LY □ □ □ □ □ OST IN ECTION GRO ND ATER MONITORING REPORT LOCATION OF ORGANIC CARBON ELECTRON DONOR S □ □ STRATE IN ECTIONS							
PREPARED BY □  GZA Geotechnical Engineering Inc. E □ □ □ □ □ □ □ Sc □ □ □ □ □ □ □ □ □ □ □ □ □ □				PREPARED FOR □ ISKALO ELLICOTTVILLE HOLDINGS, LLC			
PROJ MGR □ TB		REVIEWED BY □ JR		CHECKED BY □ BAK		FIGURE	
DESIGNED BY □ TB		DRAWN BY □ DEW		SCALE □ 1" = 60' □			
DATE □ AUGUST 2017		PROJECT NO. 21.0056367.63		REVISION NO.		2	



ATTACHMENT A

LIMITATIONS



USE OF REPORT

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

STANDARD OF CARE

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).
3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state or federal agency.
4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

SUBSURFACE CONDITIONS

5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs. The nature and extent of variations between these explorations may not become evident until further exploration or construction. If variations or other latent conditions then become evident, it will be necessary to reevaluate the conclusions and recommendations of this report.
6. Water level readings have been made, as described in this Report, in and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater however occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the Report.

COMPLIANCE WITH CODES AND REGULATIONS

7. We used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various, and possibly contradictory, interpretations. Interpretations and compliance with codes and regulations by other parties is beyond our control.



SCREENING AND ANALYTICAL TESTING

8. GZA collected environmental samples at the locations identified in the Report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future Site activities and uses may result in a requirement for additional testing.
9. Our interpretation of field screening and laboratory data is presented in the Report. Unless otherwise noted, we relied upon the laboratory's QA/QC program to validate these data.
10. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the Report.

INTERPRETATION OF DATA

11. Our opinions are based on available information as described in the Report, and on our professional judgment. Additional observations made over time, and/or space, may not support the opinions provided in the Report.

ADDITIONAL INFORMATION

12. In the event that the Client or others authorized to use this report obtain additional information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

ADDITIONAL SERVICES

13. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction, and/or property development/ redevelopment at the Site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.



ATTACHMENT B

WELL DEVELOPMENT FORMS

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLICOTTVILLE, NEW YORK**

Historic Information

Boring Log Available (yes/no/attached):

Installation Log Available (yes/no/attached)

Summary

Monitoring Well :	EW-1.25	Ground Surface Elevation: 1532.29	Riser/Screen Material: Steel/Stainless Steel
Installation Date:	7/90	Protective Casing Elevation: 1532.29 ft.	Top of Screen Depth: 15 ft.
Installed By:	Empire Soils	Monitoring Point Elevation: 1531.96 ft.	Bottom of Screen Depth: 25 ft.
Elevation Datum:			

Previous Field measurement Information Available (yes/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color

Notes:

Field Observations

Parameters +/-

Sampling Information

Exterior Observations:	<u>well cap missing</u>	pH	+/- 0.1	Sample ID: EW-1.25 - 820
Interior Observations:	<u>barrier provided w/ water</u>	Conductivity	+/- 3%	Sample Time: 820
		Temperature	+/- 10%	# of Sample Containers: 9
		Turbidity	+/- 10%	Duplicate Sample ID: NA
		ORP	+/- 10mV	Sample Analysis: VOCs 8260
Signs of Damage/Tampering:	<u>Yes</u>	DO	+/- 10%	MNA PARAMETERS

Locked (yes/no)

Well Cap (yes/no)

Surface Seal Intact (yes/no)

PID Measurement: 0.0 ppm

Odors: none

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
7-13-13	802	9.56	0	6.77	166	14.9	55.2	NA	141	-162.4	Depth of Water: 9.51
↓	810	9.58	0.25	6.77	166	14.6	16.4		17	-163.2	Length of Water Column: 14.39
	815	9.58	0.40	6.76	165	14.8	12.76	↓	15	-168.5	Depth of Well: 23.90
✓	820	9.59	0.60	6.77	165	14.7	13.13	↓	13	-169.9	Sheen Observed: Y (N)
											DNAPL Observed: Y (N)
											Did Well Go Dry: Y (N)
											Other:
											Pump inlet ~20'

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLICOTTVILLE, NEW YORK**

Historic Information

Boring Log Available (yes/no/attached):

Installation Log Available (yes/no/attached)

Summary

Monitoring Well :	<u>EW-1.25 TP-11</u>	Ground Surface Elevation: 1532.29	Riser/Screen Material: Steel/Stainless Steel
Installation Date:	<u>7/90</u>	Protective Casing Elevation: 1532.29 ft.	Top of Screen Depth: 15 ft.
Installed By:	<u>Empire Soils</u>	Monitoring Point Elevation: 1531.96 ft.	Bottom of Screen Depth: 25 ft.
Elevation Datum:			

Previous Field measurement Information Available (yes/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color

Notes:

Field Observations

Parameters +/-

Sampling Information

Exterior Observations:	<u>All good</u>	pH	<u>+/- 0.1</u>	Sample ID:	<u>EW-1.25 TP-11-071217</u>
Interior Observations:	<u>All good</u>	Conductivity	<u>+/- 3%</u>	Sample Time:	<u>1100</u>
		Temperature	<u>+/- 10%</u>	# of Sample Containers:	<u>3</u>
		Turbidity	<u>+/- 10%</u>	Duplicate Sample ID:	<u>NA</u>
		ORP	<u>+/- 10mV</u>	Sample Analysis:	<u>VOCs 8260</u>
		DO	<u>+/- 10%</u>		

Signs of Damage/Tampering: None

Locked (yes/no)	Well Cap (yes/no)	Surface Seal Intact (yes/no)	PID Measurement:	<u>0.000</u>	Odors:	<u>None</u>

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
7-12-17	1050	9.43	0	6.66	1399	16.4	6.95	NA	2.36	36.6	Depth of Water: 9.43
	1100	9.43	0.3	6.65	1394	16.3	5.22	1	2.01	17.1	Length of Water Column: 10.1
	1105	9.43	0.5	6.70	1393	16.7	5.12	1	2.03	11.0	Depth of Well: 19.52
	1110	9.43	0.7	6.69	1393	16.7	4.97	1	2.06	6.6	Screen Observed: Y ☒
											DNAPL Observed: Y ☒
											Did Well Go Dry: Y ☒
											Other:
											<u>Pump inlet ~14'</u>

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLICOTTVILLE, NEW YORK**

Historic Information

Boring Log Available (yes/no/attached):

Installation Log Available (yes/no/attached)

Summary

Monitoring Well : **SP-32** Ground Surface Elevation: Riser/Screen Material: PVC
 Installation Date: **9/27/2012** Protective Casing Elevation: Top of Screen Depth: **9 ft.**
 Installed By: **TREC** Monitoring Point Elevation: Bottom of Screen Depth: **19 ft.**
 Elevation Datum:

Previous Field measurement Information Available (yes/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color
9.23	6.45	0.65	16.5	6.76	Clear

Notes:

Field Observations**Parameters +/-****Sampling Information**

Exterior Observations: All good pH +/- 0.1 Sample ID: SP-32-071217
 Conductivity +/- 3% Sample Time: 12:15
 Interior Observations: All good Temperature +/- 10% # of Sample Containers: 9
 Turbidity +/- 10% Duplicate Sample ID: NA
 ORP +/- 10mV Sample Analysis: VOCs 8260
 DO +/- 10% MNA PARAMETERS

Signs of Damage/Tampering: None

Locked (yes/no) Well Cap (yes/no) Surface Seal Intact (yes/no) PID Measurement: 0.000 Odors: None

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
7-12-17	1150	7.28	0	6.07	1136	17.0	12.9	NA	2.59	40.9	Depth of Water: 7.14
	1200	7.30	0.2	5.95	1134	18.4	5.20		2.13	41.8	Length of Water Column: 11.54
	1205	7.30	0.4	5.93	1133	18.6	5.19		2.32	43.2	Depth of Well: 18.68
	1210	7.30	0.6	5.92	1133	18.5	4.89		2.29	42.4	Sheen Observed: Y <u>N</u>
	1215	7.30	0.8	5.93	1133	18.6	5.02		2.29	41.9	DNAPL Observed: Y <u>N</u>
											Did Well Go Dry: Y <u>N</u>
											Other:
											Pump inlet ~15'

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLCOTTVILLE, NEW YORK**

Historic InformationBoring Log Available (**yes/no/attached**):Installation Log Available (**yes/no/attached**):**Summary**

Monitoring Well :	SP-37	Ground Surface Elevation:	Riser/Screen Material: PVC
Installation Date:	9/27/2012	Protective Casing Elevation:	Top of Screen Depth: 9 ft.
Installed By:	TREC	Monitoring Point Elevation:	Bottom of Screen Depth: 19 ft.
		Elevation Datum:	

Previous Field measurement Information Available (**yes/no/attached**):**Ranges of Previous Field Measurements**

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color
9.59	6.39	0.535	17	9.35	Clear

Notes:

Field Observations**Parameters +/-****Sampling Information**

Exterior Observations: <u>All good</u>	pH +/- 0.1	Sample ID: <u>SP-37-091217</u>
	Conductivity +/- 3%	Sample Time: <u>1355</u>
Interior Observations: <u>All good</u>	Temperature +/- 10%	# of Sample Containers: <u>9</u>
	Turbidity +/- 10%	Duplicate Sample ID: <u>NA</u>
	ORP +/- 10mV	Sample Analysis: VOCs 8260
Signs of Damage/Tampering: <u>None</u>	DO +/- 10%	MNA PARAMETERS

Locked (yes/no)	Well Cap (yes/no)	Surface Seal Intact (yes/no)	PID Measurement: <u>0.023m</u>	Odors: <u>None</u>

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
7-12-17	1335	7.50	0	6.31	1194	19.3	20.4	NA	1.40	15.4	Depth of Water: 6.49
	1345	7.20	0.3	6.11	1192	18.3	11.7		.91	7.9	Length of Water Column: 12.58
	1350	7.50	0.5	6.10	1191	18.4	10.21		.89	7.7	Depth of Well: 19.07
	1355	7.50	0.7	6.08	1190	18.4	10.37	↓	.86	6.7	Screen Observed: Y (N)
											DNAPL Observed: Y (N)
											Did Well Go Dry: Y (N)
											Other:
											Pump inlet ~ 15'

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLICOTTVILLE, NEW YORK**

Historic Information

Boring Log Available (yes/no/attached):

Installation Log Available (yes/no/attached)

Summary

Monitoring Well :	SP-38	Ground Surface Elevation:	Riser/Screen Material: PVC
Installation Date:	9/27/2012	Protective Casing Elevation:	Top of Screen Depth: 9 ft.
Installed By:	TREC	Monitoring Point Elevation:	Bottom of Screen Depth: 19 ft.
		Elevation Datum:	

Previous Field measurement Information Available (yes/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color
9.93	6.72	0.412	15.2	2.12	Clear

Notes:

Field Observations

Parameters +/-

Sampling Information

Exterior Observations:	<i>All good</i>	pH	+/- 0.1	Sample ID:	<i>SP-38-071217</i>
		Conductivity	+/- 3%	Sample Time:	<i>1315</i>
Interior Observations	<i>All good</i>	Temperature	+/- 10%	# of Sample Containers:	<i>9</i>
		Turbidity	+/- 10%	Duplicate Sample ID:	<i>N/A</i>
		ORP	+/- 10mV	Sample Analysis:	<i>VOCs 8260</i>
Signs of Damage/Tampering:	<i>None</i>	DO	+/- 10%	MNA PARAMETERS	
Locked (yes/no)	<i>yes</i>	Well Cap (yes/no)		Surface Seal Intact (yes/no)	<i>yes</i>
				PID Measurement:	<i>0.000m</i>
				Odors:	<i>None</i>

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
7-12-17	1246	7.32	0	6.64	1377	17.3	3.40	NA	2.03	14.1	Depth of Water: 7.20
	1255	7.35	0.3	6.79	1403	17.1	6.14		1.96	-34.9	Length of Water Column: 11.46
	1300	7.35	0.5	6.81	1413	16.8	5.87		1.90	-46.9	Depth of Well: 18.66
	1305	7.35	0.7	6.83	1415	16.7	5.71		1.78	-71.7	Sheen Observed: Y (N)
	1310	7.35	0.9	6.86	1416	16.7	6.24		1.75	-77.7	DNAPL Observed: Y (N)
	1315	7.35	1.1	6.85	1416	16.7	5.88		1.72	-77.6	Did Well Go Dry: Y (N)
											Other:
											<i>Pump 1000 - 15'</i>

Boring Log Available (**yes/no/attached**):
Installation Log Available (**yes/no/attached**)

Monitoring Well :	SP-43	Ground Surface Elevation:	Riser/Screen Material: PVC
Installation Date:	10/1/2012	Protective Casing Elevation:	Top of Screen Depth: 10 ft.
Installed By:	TREC	Monitoring Point Elevation:	Bottom of Screen Depth: 20 ft.
		Elevation Datum:	

Previous Field measurement Information Available (yes/no/attached)

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color
10.03	5.88	0.513	18.4	4.04	Clear

Field Observations

Sampling Information

pH	+/- 0.1	Sample ID: <i>SP-43-GF1219</i>
Conductivity	+/- 3%	Sample Time: <i>1440</i>
Temperature	+/- 10%	# of Sample Containers: <i>9</i>
Turbidity	+/- 10%	Duplicate Sample ID: <i>NA</i>
ORP	+/- 10mV	Sample Analysis: VOCs 8260
DO	+/- 10%	MNA PARAMETERS

ORP	+/- 10mV	Sample Analysis: VOCs 8260
DO	+/- 10%	MNA PARAMETERS

Signs of Damage/Tampering: None

DO	+/- 10%	MNA PARAMETERS

Locked (yes/no)	Well Cap (yes/no)	Surface Seal Intact (yes/no)	PID Measurement: 0.07 ppm	Odors: none

[illegible]

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLCOTTVILLE, NEW YORK**

Historic InformationBoring Log Available (**yes/no/attached**):Installation Log Available (**yes/no/attached**)**Summary**

Monitoring Well :	SP-45	Ground Surface Elevation:	Riser/Screen Material: PVC
Installation Date:	10/1/2012	Protective Casing Elevation:	Top of Screen Depth: 9.2 ft.
Installed By:	TREC	Monitoring Point Elevation:	Bottom of Screen Depth: 19.2 ft.
		Elevation Datum:	

Previous Field measurement Information Available (**yes/no/attached**)**Ranges of Previous Field Measurements**

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color
11.25	6.83	0.363	17.8	2.3	Clear

Notes:

Field Observations**Parameters +/-****Sampling Information**

Exterior Observations: <i>All good</i>	pH +/- 0.1	Sample ID: <i>SP-45-071317</i>
	Conductivity +/- 3%	Sample Time: <i>9:25</i>
Interior Observations: <i>All good</i>	Temperature +/- 10%	# of Sample Containers: <i>9</i>
	Turbidity +/- 10%	Duplicate Sample ID: <i>NA</i>
	ORP +/- 10mV	Sample Analysis: VOCs 8260
Signs of Damage/Tampering: <i>None</i>	DO +/- 10%	MNA PARAMETERS
Locked (yes/no)	Well Cap (yes/no)	Surface Seal Intact (yes/no)
		PID Measurement: <i>0.00ppm</i>
		Odors: <i>None</i>

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
7-13-17	852	9.16	0	6.97	.366	18.9	34.3	NA	.25	-5.2	Depth of Water: 7.05
	910	9.18	0.5	6.84	.364	17.2	8.76		.16	-14.5	Length of Water Column: 79.6
	915	9.18	0.25	6.84	.367	17.3	6.42		.09	-20.8	Depth of Well: 19.81
	920	9.18	1.0	6.80	.367	17.5	6.12		.10	-22.4	Sheen Observed: Y (N)
	925	9.18	1.25	6.84	.370	17.5	6.27		.10	-22.9	DNAPL Observed: Y (N)
									.11	-23.6	Did Well Go Dry: Y (N)
											Other:
											<i>Pump inlet ~ 15'</i>



ATTACHMENT C

GROUNDWATER ANALYTICAL RESULTS SUMMARY

Attachment C
July 2017 Post-Injection Groundwater Analytical Results Summary
Former Signore Facility
Ellicottville, New York
BCP Site No. C905034

Sample Location Sample Date	Class GA Criteria	EW-1.25 6/25/2013	EW-1.25 10/16/2013	EW-1.25 6/10/2014	EW-1.25 6/4/2015	EW-1.25 8/21/2015	EW-1.25 10/21/2015	EW-1.25 6/15/2016	EW-1.25 10/25/2016	EW-1.25 7/13/2017
		Q	Q	Q	Q	Q	Q	Q	Q	Q
Volatile Organic Compounds - EPA Method SW-846, 8260B (ug/L)										
Acetone	50	<	<	<	<	<	3.8 J	2.3 J	<	<
Methylene Chloride	5	<	<	<	<	<	<	<	<	<
Carbon disulfide	NV	<	<	<	<	<	<	<	<	1.8
Chloromethane	NV	0.77 J	<	<	<	<	<	<	<	<
1,1-Dichloroethane	5	4.1	4.1	2.9	3	2.6	4.2	2.9	3.9	3.0
1,1-Dichloroethene	5	<	<	<	0.25 J	0.19 J	0.36 J	0.24 J	0.48 J	0.39 J
Vinyl chloride	2	4.6	5	2.4	2.6	<	3.3	3.2	6.6	<
2-Butanone	50	<	<	<	<	<	<	<	<	<
cis-1,2-Dichloroethene	5	31	32	23	29	28	44	28	98	57
Toluene	5	<	<	<	<	<	<	<	<	<
1,1,1-Trichloroethane	5	<	<	<	<	0.82 J	<	<	0.7 J	<
Tetrachloroethene	5	3.3	3.8	3.6	<	1.4	1.8	3.1	<	<
Trichloroethene	5	51	59	41	47	42	58	47	0.27 J	35
trans-1,2-dichloroethene	5	<	<	<	<	<	<	<	0.79 J	<
Total VOCs	2	94.77	103.9	72.9	81.85	75.01	115.46	86.74	110.74	97.19
Field Parameters										
Temperature (Deg. C)	NV	13	13.5	10.4	9.1	13.1	13.4	12.4	13	14.9
Specific Conductance (mS/cm)	NV	0.7	0.68	0.7	0.757	0.67	0.68	0.653	0.612	0.65
Dissolved Oxygen (mg/L)	NV	0.05	0.18	0.06	0.17	0.12	0.22	0.29	0.23	0.13
Oxygen Reduction Potential (mv)	NV	-88.5	-99.3	-91.2	-130.5	-86.2	-91.6	161.4	-125.1	-169.9
pH (std. units)	NV	7.35	6.85	6.78	6.73	6.77	6.89	6.79	6.87	6.77
Turbidity (NTUs)	NV	9.12	3.31	11.71	7.7	14.2	10.7	20.1	11.87	13.13
Inorganics (ug/L)										
Iron	300	NS	1,000	14,000	14,000	11,500	11,900	27,300	10,500	<
Manganese	NV	NS	1,300	1,600	1,482	1,265	1,465	1,453	1,354	1,256
Miscellaneous Water Quality Parameters										
Methane (ug/L)	NV	NS	1,000	170	237	218	190	244	130	130
Ethane (ug/L)	NV	NS	<	<	<	<	<	<	<	<
Ethene (ug/L)	NV	NS	1.7	<	<	0.535	<	0.558	0.55	0.55
Total Organic Carbon (mg/L)	NV	NS	<	<	2.07	2.47	1.92	2.26	1.56	1.84
Chloride (mg/L)	NV	NS	66 B	69	62	57	56	49	45	47
Nitrate (mg/L)	NV	NS	<	<	0.015 J	0.020 J	<	<	0.029 J	<
Nitrite (mg/L)	NV	NS	<	<	NS	NS	NS	NS	NS	NS
Sulfate (mg/L)	NV	NS	7.6	7.4 B	12.8	10.3	10.5	10.2	11.7	8.86

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 3. Analytical testing completed by TestAmerica and Alpha Analytical.
 4. Criteria is a guidance value.
 5. Laboratory qualifiers: B = compound was found in the blank and sample; J = result is less than the RL but greater than or equal to the MDL and the concentration is an approximation; * - LCS or LCSD exceeds the control limits; D = value shown is result of dilution analysis; E = value above quantitation range.
 6. mg/L = parts per million; ug/L = parts per billion
 7. NYSDEC Class GA Groundwater Criteria as promulgated in 6 NYCRR 703; Table 1 in Technical and Operational Guidance Series (1.1.1): Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, dated October 1993; revised June 1998; errata dated January 1999; addendum dated April 2000.
 8. NV = no value; NS = Not sampled.
 9. Shaded concentrations exceed Class GA criteria.

Attachment C
July 2017 Post-Injection Groundwater Analytical Results Summary
Former Signore Facility
Ellicottville, New York
BCP Site No. C905034

Sample Location Sample Date	Class GA Criteria	SP-32 10/3/2012		SP-32 10/17/2013		SP-32 6/10/2014		SP-32 6/4/2015		SP-32 8/21/2015		SP-32 10/22/2015		SP-32 6/15/2016		SP-32 10/25/2016		SP-32 7/12/2017	
			Q		Q		Q		Q		Q		Q		Q		Q		Q
Volatile Organic Compounds - EPA Method SW-84																			
Acetone	50	<		240	D	<		<		<		<		2.8	J	<		<	
Methylene Chloride	5	<		<		<		<		<		<		<		<		<	
Carbon disulfide	NV	<		<		<		<		<		<		<		<		<	
Chloromethane	NV	<		<		<		<		<		<		<		<		<	
1,1-Dichloroethane	5	<		<		<		<		<		<		<		<		<	
1,1-Dichloroethene	5	<		<		<		<		<		<		<		<		<	
Vinyl chloride	2	<		<		<		0.18	J	0.23	J	<		<		<		<	
2-Butanone	50	<		45		<		<		<		<		<		<		<	
cis-1,2-Dichloroethene	5	<		26		11		4.5		4.7		2.7		3.3		<		<	
Toluene	5	<		<		<		<		<		<		<		<		<	
1,1,1-Trichloroethane	5	<		<		<		<		<		<		<		<		<	
Tetrachloroethene	5	2.1		<		<		0.25	J	0.46	J	0.62		0.44	J	0.42	J	0.32	J
Trichloroethene	5	120		3.4		6.4		5.8		6.5		6.7		14		1.2		0.85	
trans-1,2-dichloroethene	5	<		<		<		<		<		<		<		<		<	
Total VOCs	2	122.1		314.4		17.4		10.73		11.89		10.02		20.54		1.62		1.17	
Field Parameters																			
Temperature (Deg. C)	NV	13.2		16.5		13.1		11.0		17.7		16.6		15.8		15.1		18.6	
Specific Conductance (mS/cm)	NV	0.418		0.65		0.392		0.326		0.272		0.223		0.232		0.181		0.133	
Dissolved Oxygen (mg/L)	NV	4.92		0.18		0.12		0.15		0.16		0.48		0.53		1.67		2.29	
Oxygen Reduction Potential (mv)	NV	50.3		-95.3		-21.9		104.4		57.7		169.9		236.7		153		41.9	
pH (std. units)	NV	7.23		6.45		6.48		6.28		6.34		6.25		6.22		6.0		5.9	
Turbidity (NTUs)	NV	35		6.76		4.95		0.6		7.15		4.42		7.6		4.96		5.02	
Inorganics (ug/L)																			
Iron	300	NS		3,480		16,000		339		246		206		541		66		<	
Manganese	NV	NS		24,600		19,000		6,468		8,331		2,897		2,668		1,144		12	
Miscellaneous Water Quality Parameters																			
Methane (ug/L)	NV	NS		120		660		725		932		208		205		3.31		0.55	J
Ethane (ug/L)	NV	NS		<		<		0.659		0.841		<		<		<		<	
Ethene (ug/L)	NV	NS		1.7		<		<		<		<		<		<		<	
Total Organic Carbon (mg/L)	NV	NS		51		<		1.35		1.7		1.02		1.45		0.87		1.08	
Chloride (mg/L)	NV	NS		5	B	3.1		3.46		3.12		2.83		2.72		1.59		0.861	
Nitrate (mg/L)	NV	NS		<		<		1.92		0.93		4.2		3.9		4.8		1.4	
Nitrite (mg/L)	NV	NS		<		<		NS		NS		NS		NS		NS		NS	
Sulfate (mg/L)	NV	NS		4.9	J	14	B	14.6		16.8		16.1		16.3		14.4		13.8	

- Notes:
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 6. mg/L = parts per million; ug/L = parts per billion
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 9. Shaded concentrations exceed Class GA criteria.

Attachment C
July 2017 Post-Injection Groundwater Analytical Results Summary
Former Signore Facility
Ellicottville, New York
BCP Site No. C905034

Sample Location Sample Date	Class GA Criteria	SP-37 10/5/2012		SP-37 10/17/2013		SP-37 6/10/2014		SP-37 6/4/2015		SP-37 8/21/2015		SP-37 10/23/2015		SP-37 6/16/2016		SP-37 10/26/2016		SP-37 7/12/2017	
			Q		Q		Q		Q		Q		Q		Q		Q		Q
Volatile Organic Compounds - EPA Method SW-84																			
Acetone	50	<		<		<		<		<		<		2.6	J	<		<	
Methylene Chloride	5	<		<		<		<		<		<		<		<		<	
Carbon disulfide	NV	<		<		<		<		<		<		<		<		<	
Chloromethane	NV	<		<		<		<		<		<		<		<		<	
1,1-Dichloroethane	5	<		<		<		<		<		<		<		<		<	
1,1-Dichloroethene	5	<		<		<		<		<		<		<		<		<	
Vinyl chloride	2	<		<		<		<		<		0.21	J	0.42	J	<		<	
2-Butanone	50	<		<		<		<		<		<		<		<		<	
cis-1,2-Dichloroethene	5	1.8		7.3		0.99	J	3.4		9.9		9.4		6.7		12		2.7	
Toluene	5	<		<		<		<		<		<		<		<		<	
1,1,1-Trichloroethane	5	<		<		<		<		0.82	J	<		<		<		<	
Tetrachloroethene	5	9.6		24		13		18		15		26		14		17		12	
Trichloroethene	5	13		20		7.2		10		11		19		13		14		7.8	
trans-1,2-dichloroethene	5	<		<		<		<		<		<		<		<		<	
Total VOCs	2	24.4		51.3		27.2		31.4		36.72		54.61		36.72		43		22.5	
Field Parameters																			
Temperature (Deg. C)	NV	13.5		17		11.9		10		17		15.3		13.3		14.2		18.4	
Specific Conductance (mS/cm)	NV	0.452		0.535		0.305		0.449		0.432		0.396		0.291		0.246		0.19	
Dissolved Oxygen (mg/L)	NV	0.28		0.2		0.58		0.68		0.07		0.13		0.29		0.55		0.86	
Oxygen Reduction Potential (mv)	NV	-122.4		74.8		107.7		117.6		16.1		82.8		306.5		130.2		6.7	
pH (std. units)	NV	6.6		6.39		6.28		6.12		6.28		6.3		6.03		5.99		6.08	
Turbidity (NTUs)	NV	2.5		9.35		12.5		1.4		5.27		2.3		5.93		5.02		10.37	
Inorganics (ug/L)																			
Iron	300	NS		61.7	B	900		81.4		409		66		85		56		<	
Manganese	NV	NS		336		150		1,021		6,015		2,035		1,137		1,445		73	
Miscellaneous Water Quality Parameters																			
Methane (ug/L)	NV	NS		26		2.5		28		108		67.4		47.2		<		<	
Ethane (ug/L)	NV	NS		<		<		<		<		<		<		<		<	
Ethene (ug/L)	NV	NS		<		<		<		<		<		<		<		<	
Total Organic Carbon (mg/L)	NV	NS		4	J	2.8	J	2.51		4.75		2.62		2.47		2.21		1.93	
Chloride (mg/L)	NV	NS		12	B	3.8		28.8		16.4		14.7		7.11		5.79		2.64	
Nitrate (mg/L)	NV	NS		4.8		5.2		2.98		0.04		0.27		1.40		3.20		1.30	
Nitrite (mg/L)	NV	NS		<		<		NS		NS		NS		NS		NS		NS	
Sulfate (mg/L)	NV	NS		36		24	B	23.3		18		21.1		18.3		21		14.3	

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Attachment C
July 2017 Post-Injection Groundwater Analytical Results Summary
Former Signore Facility
Ellicottville, New York
BCP Site No. C905034

Sample Location Sample Date	Class GA Criteria	SP-38 10/4/2012		SP-38 10/17/2013		SP-38 6/10/2014		SP-38 8/21/2015		SP-38 10/23/2015		SP-38 6/15/2016		SP-38 10/26/2016		SP-38 7/12/2017	
			Q		Q		Q		Q		Q		Q		Q		Q
Volatile Organic Compounds - EPA Method SW-84																	
Acetone	50	<		<		<		<		<		1.6	J	<		<	
Methylene Chloride	5	<		<		<		<		<		<		<		<	
Carbon disulfide	NV	<		<		<		1.8	J	1.9		<		<		<	
Chloromethane	NV	<		<		<		<		<		<		<		<	
1,1-Dichloroethane	5	<		<		<		2	J	1.9	J	<		<		<	
1,1-Dichloroethene	5	<		<		<		<		<		<		<		<	
Vinyl chloride	2	<		<		<		<		22		0.39	J		4.0		4.2
2-Butanone	50	<		<		<		26		2.1	J	<		<		<	
cis-1,2-Dichloroethene	5	<		1.5		1.2		46		0.82	J	<		<		<	
Toluene	5	<		<		<		<		1	J	<		<		<	
1,1,1-Trichloroethane	5	2.4		<		<		0.86	J	<		<		<		<	
Tetrachloroethene	5	5		<		5.2		0.22	J	0.37	J	0.28	J	0.48	J	0.2	J
Trichloroethene	5	17		7.8		19		0.45	J	0.29	J	5.5	J	8.2		6.5	
trans-1,2-dichloroethene	5	<		<		<		<		<		<		<		<	
Total VOCs	2	24.4		9.3		25.4		77.33		30.38		7.77		12.68		10.9	
Field Parameters																	
Temperature (Deg. C)	NV	13.1		15.2		11.6		15.2		15.1		16.1		14.8		16.7	
Specific Conductance (mS/cm)	NV	0.437		0.412		0.437		1.03		0.69		0.419		0.443		0.416	
Dissolved Oxygen (mg/L)	NV	3.25		2.88		4.65		0.07		0.11		1.32		0.23		0.72	
Oxygen Reduction Potential (mv)	NV	31.7		103.5		136		-124.2		-172.7		241.8		-22.5		-79.6	
pH (std. units)	NV	6.81		6.72		6.72		7.1		7.39		6.59		6.75		6.85	
Turbidity (NTUs)	NV	27.4		2.12		19.2		12.3		2.12		6.39		7.69		5.88	
Inorganics (ug/L)																	
Iron	300	<		<		1,500		5,660		3,040		352		811		<	
Manganese	NV	5,100		41.1	B	180		24,820		12,680		2762		9031		1,827	
Miscellaneous Water Quality Parameters																	
Methane (ug/L)	NV	<		20		1.1		807.0		636.0		3.9		13.7		10.1	
Ethane (ug/L)	NV	NM		<		<		<		2.57		<		0.633		<	
Ethene (ug/L)	NV	NM		<		<		3.45		4.56		<		2.04		0.652	
Total Organic Carbon (mg/L)	NV	<		<		<		86.9		2.22		1.21		1.32		1.05	
Chloride (mg/L)	NV	31		40	B	34		29		27.1		36.1		27.7		22.6	
Nitrate (mg/L)	NV	4.7		1.4		3.3		0.0	J	<		0.6		0.24		0.24	
Nitrite (mg/L)	NV					<		<		NS		NS		NS		NS	
Sulfate (mg/L)	NV	23		11		13	B	0.063	J	5.99		11.5		16.1		13.8	

Notes:

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Attachment C
July 2017 Post-Injection Groundwater Analytical Results Summary
Former Signore Facility
Ellicottville, New York
BCP Site No. C905034

Sample Location Sample Date	Class GA Criteria	SP-43 10/4/2012		SP-43 10/17/2013		SP-43 6/10/2014		SP-43 6/4/2015		SP-43 8/21/2015		SP-43 10/23/2015		SP-43 6/16/2016		SP-43 10/26/2016		SP-43 7/12/2017	
			Q		Q		Q		Q		Q		Q		Q		Q		Q
Volatile Organic Compounds - EPA Method SW-84																			
Acetone	50	<		53		<		<		<		<		1.9	J	<		<	
Methylene Chloride	5	<		<		<		<		<		<		<		<		<	
Carbon disulfide	NV	<		1.3		<		<		<		<		<		<		<	
Chloromethane	NV	<		<		<		<		<		<		<		<		<	
1,1-Dichloroethane	5	<		<		<		<		<		<		<		<		<	
1,1-Dichloroethene	5	<		<		<		<		<		<		<		<		<	
Vinyl chloride	2	<		<		<		<		0.48	J	6.6		<		<		<	
2-Butanone	50	<		84		<		<		21		<		<		<		<	
cis-1,2-Dichloroethene	5	<		5.4		3.9		1.1	J	9.4		9.2		4.6		2.1	J	<	
Toluene	5	<		<		<		<		<		84.0		<		<		<	
1,1,1-Trichloroethane	5	<		<		<		<		<		<		<		<		<	
Tetrachloroethene	5	93		24		14		14		10		17		7.7		11.0		6.9	
Trichloroethene	5	5.2		2.6		<		0.72		2.20		8.30		0.71		0.70		0.24	J
trans-1,2-dichloroethene	5	<		<		<		<		<		<		<		<		<	
Total VOCs	2	98.2		170.3		17.9		15.82		43.08		125.10		14.91		13.80		7.14	
Field Parameters																			
Temperature (Deg. C)	NV	14.1		18.4		13		12.2		16.6		15.9		14.6		14.2		20.5	
Specific Conductance (mS/cm)	NV	0.445		0.513		0.304		0.773		0.66		0.68		0.237		0.224		0.183	
Dissolved Oxygen (mg/L)	NV	1.48		0.22		0.23		1.1		0.12		0.12		1.23		1.96		1.96	
Oxygen Reduction Potential (mv)	NV	44.2		-39.3		149		175.8		-15.1		-88.2		310.9		184.3		12.4	
pH (std. units)	NV	6.55		5.88		6.13		5.82		6.31		6.83		5.87		6.02		6.12	
Turbidity (NTUs)	NV	39.8		4.04		18		0.2		31.7		4.26		6.7		3.12		4.72	
Inorganics (ug/L)																			
Iron	300	NS		6,150		7,100		54		5,780		6,220		127		114		<	
Manganese	NV	NS		5,510		1,600		1,254		8,919		10,240		171.8		190.4		5.4	
Miscellaneous Water Quality Parameters																			
Methane (ug/L)	NV	NS		16		12		0.756	J	2,490.000		6,520.000		0.612		<		0.619	J
Ethane (ug/L)	NV	NS		2.4		<		<		<		<		<		<		<	
Ethene (ug/L)	NV	NS		3.7		<		<		<		2.13		<		<		<	
Total Organic Carbon (mg/L)	NV	NS		80		<		1.84		28.8		3.62		2.09		1.91		1.58	
Chloride (mg/L)	NV	NS		6.3	B	2.2		136.0		62.2		40.0		12.2		9.6		4.1	
Nitrate (mg/L)	NV	NS		0.36		8.30		8.65		0.59		0.21		2.10		4.10		3.70	
Nitrite (mg/L)	NV	NS		<		0.042	J	NS		NS		NS		NS		NS		NS	
Sulfate (mg/L)	NV	NS		12		25	B	19.8		18.3		13.3		22		21.4		14.7	

- Notes:
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 4. Criteria is a guidance value.
 5. Laboratory qualifiers: B = compound was found in the blank and sample; J = result is less than the RL but greater than or equal to the MDL and the concentration is an approximation; * - LCS or LCSD exceeds the control limits; D = value shown is result of dilution analysis; E = value above quantitation range.
 6. mg/L = parts per million; ug/L = parts per billion
 7. NYSDEC Class GA Groundwater Criteria as promulgated in 6 NYCRR 703; Table 1 in Technical and Operational Guidance Series (1.1.1): Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, dated October 1993; revised June 1998; errata dated January 1999; addendum dated April 2000.
 8. NV = no value; NS = Not sampled.
 9. Shaded concentrations exceed Class GA criteria.

Attachment C
July 2017 Post-Injection Groundwater Analytical Results Summary
Former Signore Facility
Ellicottville, New York
BCP Site No. C905034

Sample Location Sample Date	Class GA Criteria	SP-45 10/4/2012		SP-45 10/17/2013		SP-45 6/10/2014		SP-45 6/4/2015		SP-45 8/21/2015		SP-45 10/23/2015		SP-45 6/16/2016		SP-45 10/26/2016		SP-45 7/13/2017			
			Q		Q		Q		Q		Q		Q		Q		Q		Q		
Volatile Organic Compounds - EPA Method SW-84																					
Acetone	50	<		<		<		<		<		<		1.5	J	<		<			
Methylene Chloride	5	3.2	DJ	<		<		<		<		<		<		<		<			
Carbon disulfide	NV	<		<		<		<		<		<		<		<		<			
Chloromethane	NV	<		<		<		<		<		<		<		<		<			
1,1-Dichloroethane	5	<		<		<		<		<		<		<		<		<			
1,1-Dichloroethene	5	<		<		<		<		<		<		<		<		<			
Vinyl chloride	2	<		<		<		<		<		6.3		5.5		7.5		1.7			
2-Butanone	50	<		<		<		<		<		<		<		<		<			
cis-1,2-Dichloroethene	5	6.8		1.1		1.9		2.9		1.4	J	5.7		3.7		13		2.0	J		
Toluene	5	<		<		<		<		<		<		<		<		<			
1,1,1-Trichloroethane	5	<		<		<		<		<		<		<		<		<			
Tetrachloroethene	5	260	D	69		130		160		16		45		16		170		45			
Trichloroethene	5	13		3.6		6.4		8.5		1.5		7.5		7.2		53		10			
trans-1,2-dichloroethene	5	<		<		<		<		<		<		<		<		<			
Total VOCs	2	283.0		73.7		138.3		171.4		18.9		171.4		33.9		243.5		58.7			
Field Parameters																					
Temperature (Deg. C)	NV	14.6		17.8		16.5		14		19.1		15.8		15.2		15.8		15.8			
Specific Conductance (mS/cm)	NV	0.543		0.363		0.391		0.584		0.6		0.62		0.503		0.442		0.442			
Dissolved Oxygen (mg/L)	NV	1.07		5.21		3.02		3.58		0.09		0.07		0.5		0.06		0.06			
Oxygen Reduction Potential (mv)	NV	-29.5		88.3		143.1		73.3		-62.7		-61.7		250.7		-8.7		-8.7			
pH (std. units)	NV	6.48		6.83		6.71		6.71		7.05		7.05		6.91		6.66		6.66			
Turbidity (NTUs)	NV	3.95		2.3		3.17		0.5		14.91		5.06		11.25		17.2		17.2			
Inorganics (ug/L)																					
Iron	300	NS		32.1	B	170	J	27.2	J	45	J	1,260		197		386		<			
Manganese	NV	NS		<		<		1.93		296.4		3,510		1447		1,340		240			
Miscellaneous Water Quality Parameters																					
Methane (ug/L)	NV	NS		14		1.1		0.762	J	96.9		958		1500		3610		1760			
Ethane (ug/L)	NV	NS		<		<		<		<		<		1.18		2.47		1.0			
Ethene (ug/L)	NV	NS		<		<		<		<		1.08		2.59		3.36		0.77			
Total Organic Carbon (mg/L)	NV	NS		<		<		1.64		3.93		1.86		1.69		1.49		1.23			
Chloride (mg/L)	NV	NS		5.1	B	4.2		35.0		9.4		17.3		15.4		12.6		3.2			
Nitrate (mg/L)	NV	NS		6		5.2		2.68		1.2		1.9		0.39		0.72		0.79			
Nitrite (mg/L)	NV	NS		<		<		NS		NS		NS		NS		NS		NS			
Sulfate (mg/L)	NV	NS		39		33	B	32.7		43.4		22.4		24		23.8		19.1			

- Notes:
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 2. "<" indicates compound was not detected above the method detection limit.
 3. Analytical testing completed by TestAmerica and Alpha Analytical.
 4. Criteria is a guidance value.
 5. Laboratory qualifiers: B = compound was found in the blank and sample; J = result is less than the RL but greater than or equal to the MDL and the concentration is an approximation; * - LCS or LCSD exceeds the control limits; D = value shown is result of dilution analysis; E = value above quantitation range.
 6. mg/L = parts per million; ug/L = parts per billion
 7. NYSDEC Class GA Groundwater Criteria as promulgated in 6 NYCRR 703; Table 1 in Technical and Operational Guidance Series (1.1.1): Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, dated October 1993; revised June 1998; errata dated January 1999; addendum dated April 2000.
 8. NV = no value; NS = Not sampled.
 9. Shaded concentrations exceed Class GA criteria.

Attachment C
July 2017 Post-Injection Groundwater Analytical Results Summary
Former Signore Facility
Ellicottville, New York
BCP Site No. C905034

Sample Location Sample Date	Class GA Criteria	TP-11 6/3/2015	TP-11 10/22/2015	TP-11 6/16/2016	TP-11 10/25/2016	TP-11 7/12/2017
		Q	Q	Q	Q	Q
Volatile Organic Compounds - EPA Method SW-84						
Acetone	50	<	<	2 J	<	<
Methylene Chloride	5	<	<	<	<	<
Carbon disulfide	NV	<	<	<	<	<
Chloromethane	NV	<	<	<	<	<
1,1-Dichloroethane	5	<	<	<	<	<
1,1-Dichloroethene	5	<	<	<	<	<
Vinyl chloride	2	<	<	<	<	<
2-Butanone	50	<	<	<	<	<
cis-1,2-Dichloroethene	5	19	12	18	13	8.1
Toluene	5	<	<	<	<	<
1,1,1-Trichloroethane	5	<	<	<	<	<
Tetrachloroethene	5	0.58	1.5	0.53	1.2	0.25 J
Trichloroethene	5	88	74	77	58	40
trans-1,2-dichloroethene	5	<	<	<	<	<
Total VOCs	2	107.58	87.50	97.53	72.20	48.35
Field Parameters						
Temperature (Deg. C)	NV	17.5	14.4	12.4	13.4	16.9
Specific Conductance (mS/cm)	NV	0.37	0.535	0.493	0.504	0.393
Dissolved Oxygen (mg/L)	NV	0.11	1.57	2.84	2.24	2.06
Oxygen Reduction Potential (mv)	NV	-23.6	90.7	267.4	77.7	6.6
pH (std. units)	NV	6.84	7.04	6.9	6.8	6.69
Turbidity (NTUs)	NV	6.27	1.87	7.69	9.67	4.97
Inorganics (ug/L)						
Iron	300	NS	NS	NS	NS	NS
Manganese	NV	NS	NS	NS	NS	NS
Miscellaneous Water Quality Parameters						
Methane (ug/L)	NV	NS	NS	NS	NS	NS
Ethane (ug/L)	NV	NS	NS	NS	NS	NS
Ethene (ug/L)	NV	NS	NS	NS	NS	NS
Total Organic Carbon (mg/L)	NV	NS	NS	NS	NS	NS
Chloride (mg/L)	NV	NS	NS	NS	NS	NS
Nitrate (mg/L)	NV	NS	NS	NS	NS	NS
Nitrite (mg/L)	NV	NS	NS	NS	NS	NS
Sulfate (mg/L)	NV	NS	NS	NS	NS	NS

Notes:

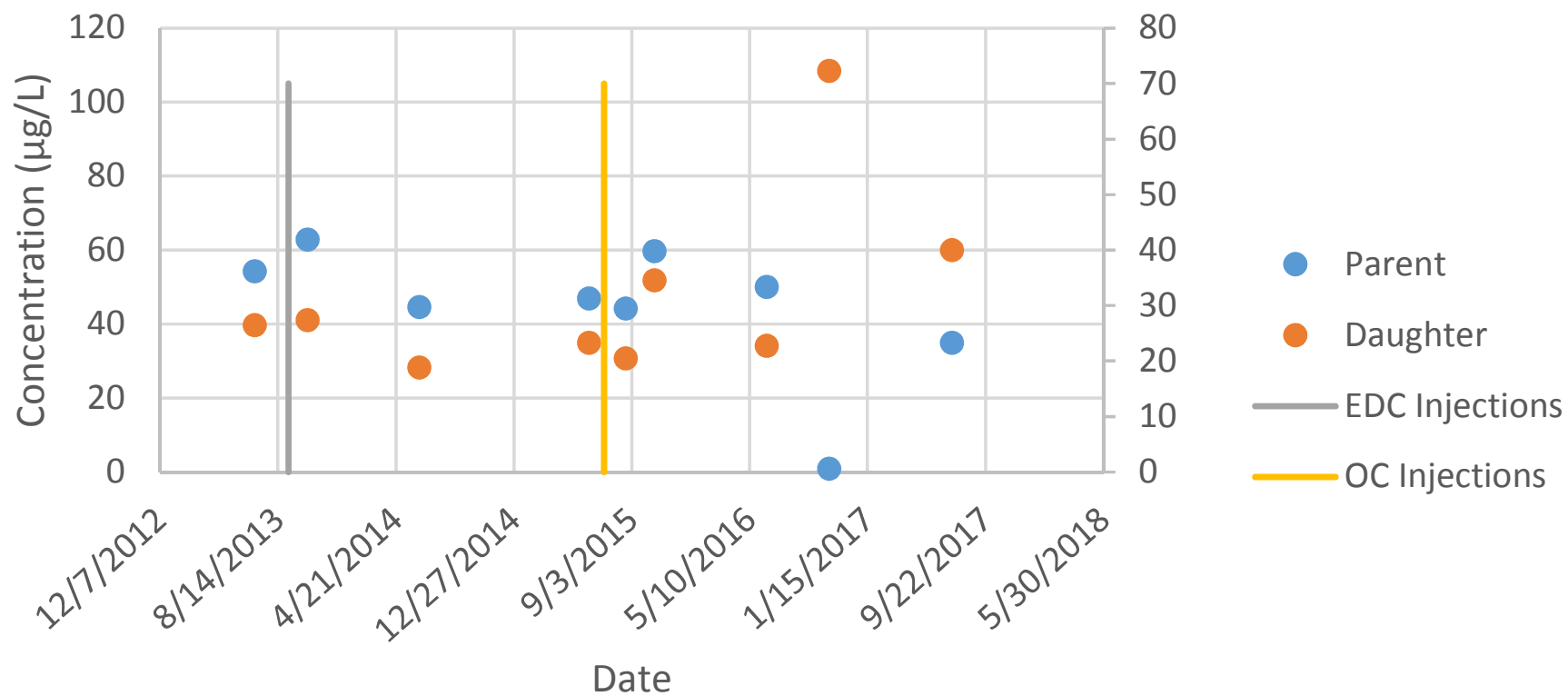
1. Only compounds detected in one or more of the groundwater samples are presented in this table.
2. "<" indicates compound was not detected above the method detection limit.
3. Analytical testing completed by TestAmerica and Alpha Analytical.
4. Criteria is a guidance value.
5. Laboratory qualifiers: B = compound was found in the blank and sample; J = result is less than the RL but greater than or equal to the MDL and the concentration is an approximation; * - LCS or LCSD exceeds the control limits; D = value shown is result of dilution analysis; E = value above quantitation range.
6. mg/L = parts per million; ug/L = parts per billion
7. NYSDEC Class GA Groundwater Criteria as promulgated in 6 NYCRR 703; Table 1 in Technical and Operational Guidance Series (1.1.1): Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, dated October 1993; revised June 1998; errata dated January 1999; addendum dated April 2000.
8. NV = no value; NS = Not sampled.
9. Shaded concentrations exceed Class GA criteria.



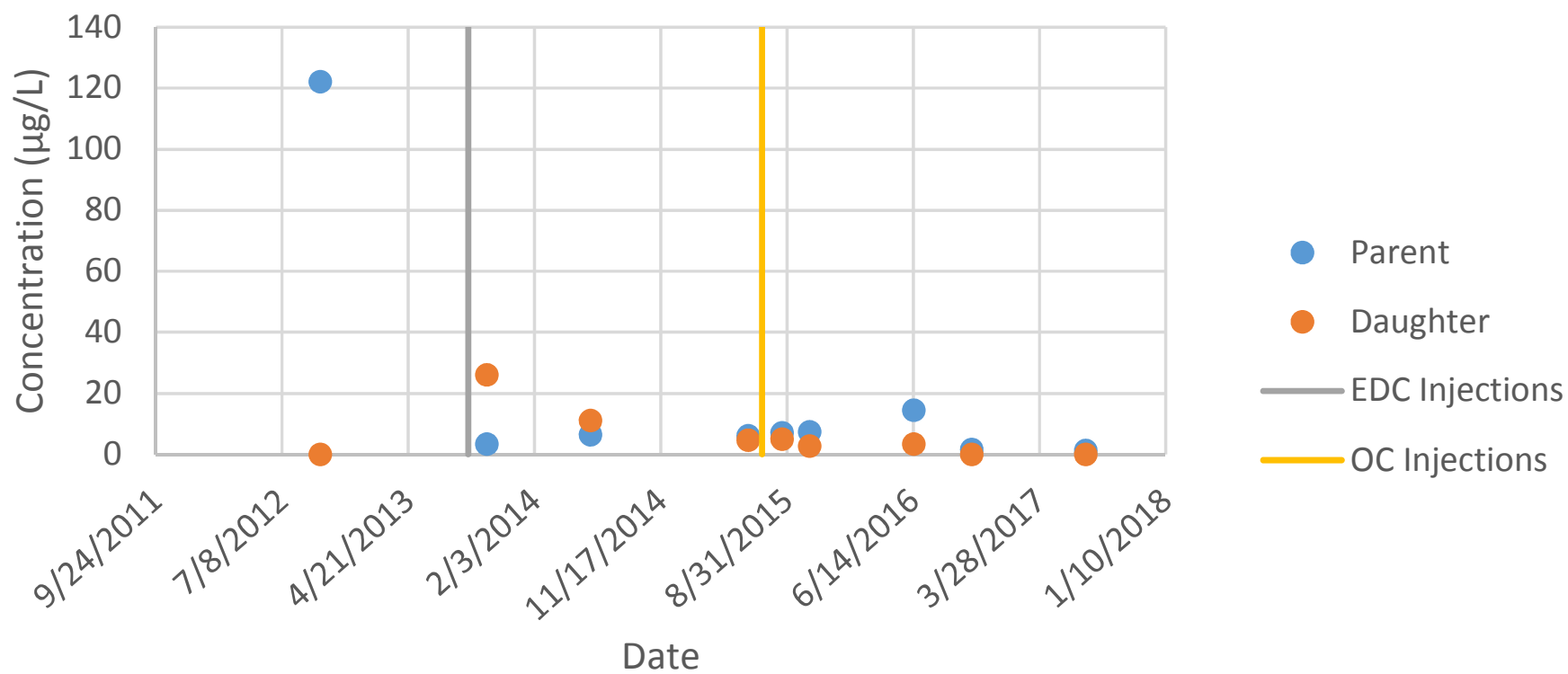
ATTACHMENT D

CONCENTRATIONS OF CVOC PARENT MATERIAL AND DAUGHTER PRODUCTS IN GROUNDWATER

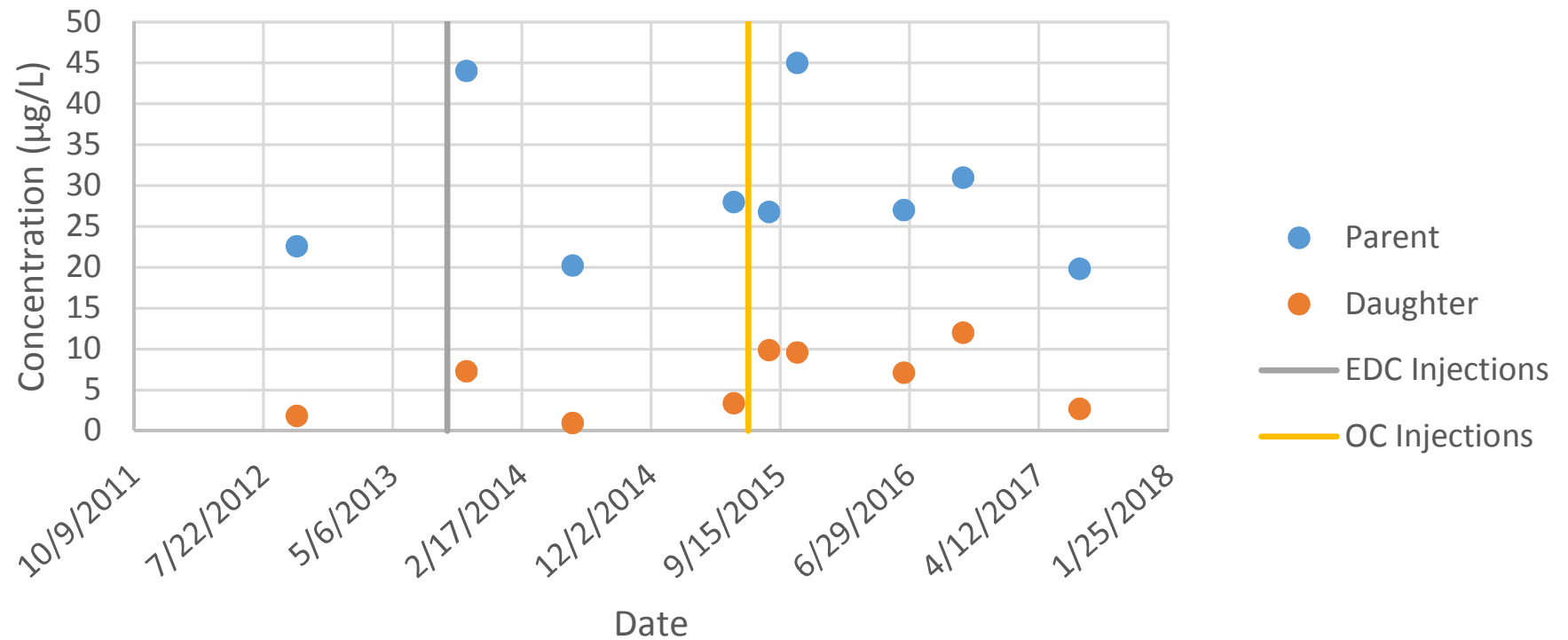
Total cVOC Concentration in EW-1.25



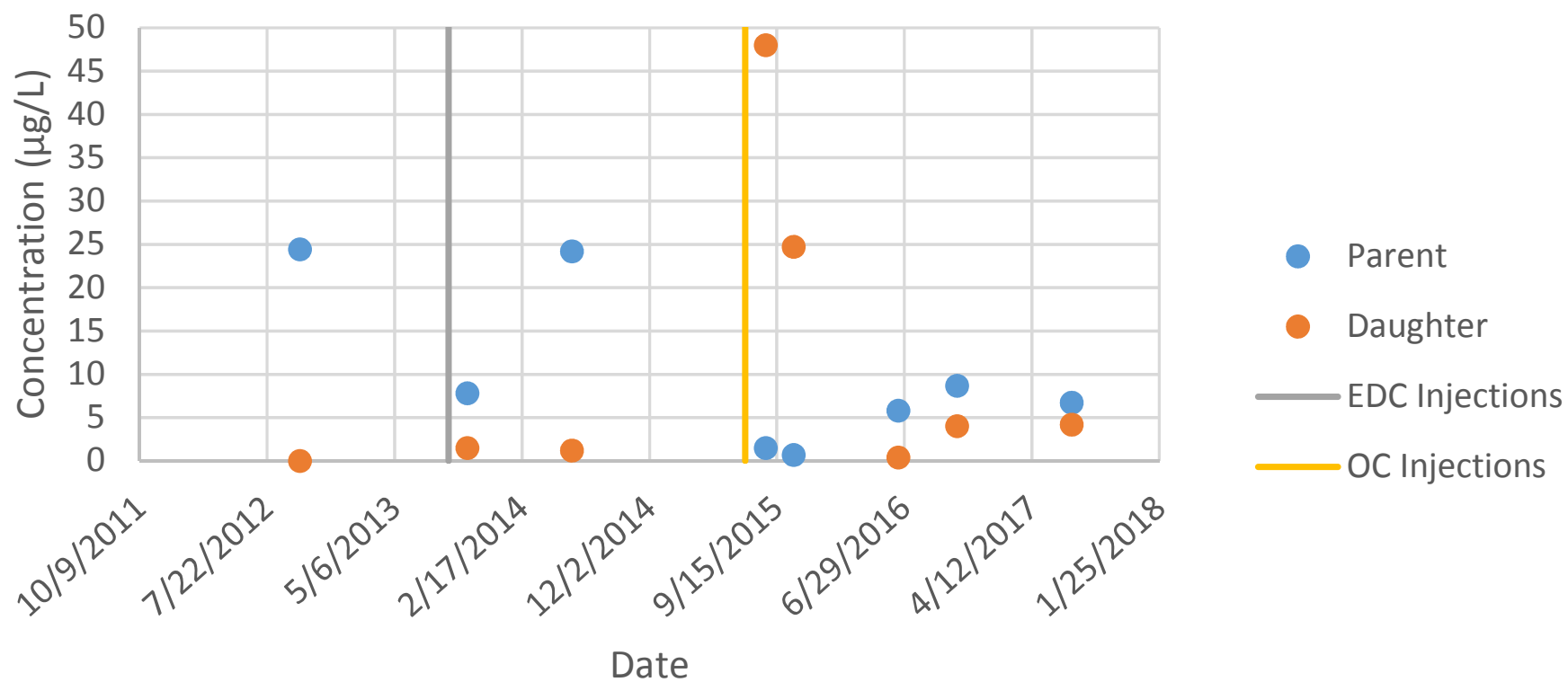
Total cVOC Concentration in SP-32



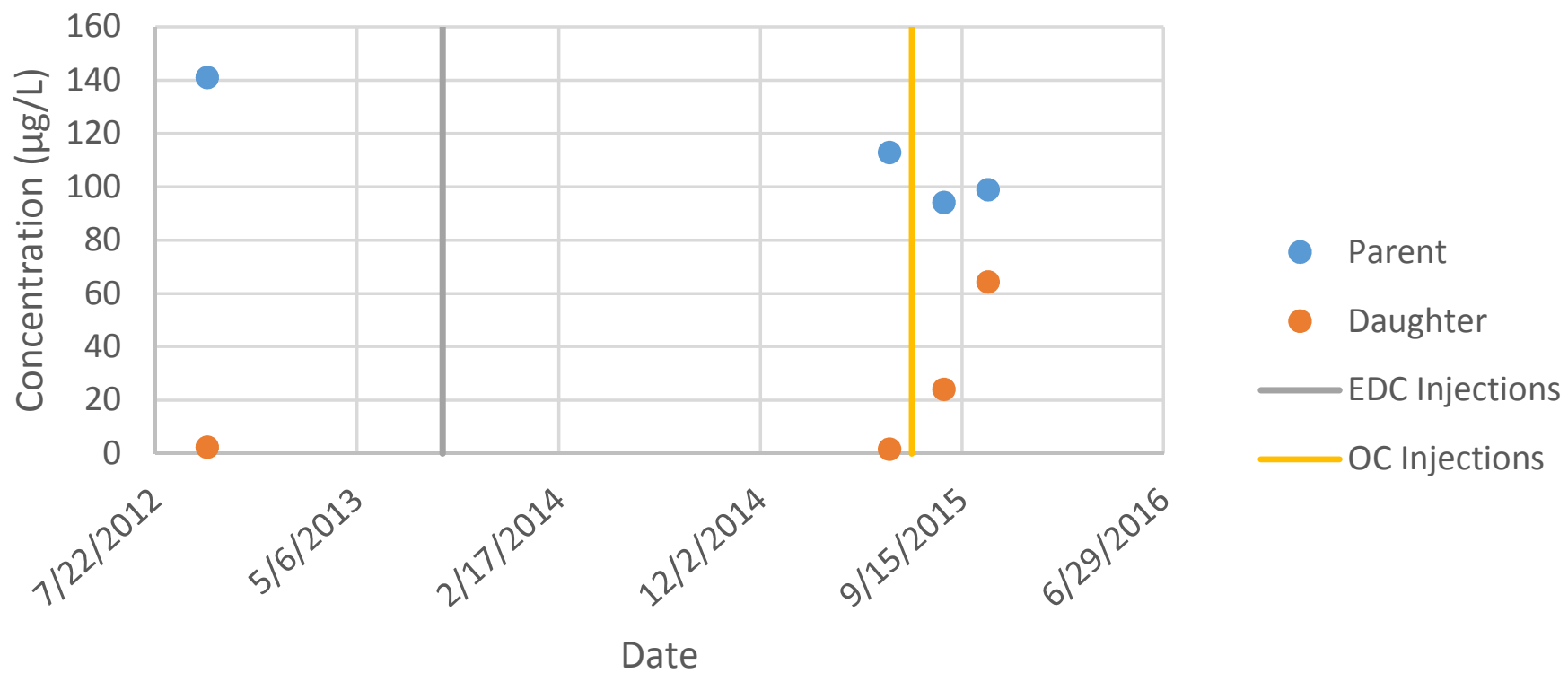
Total cVOC Concentration in SP-37



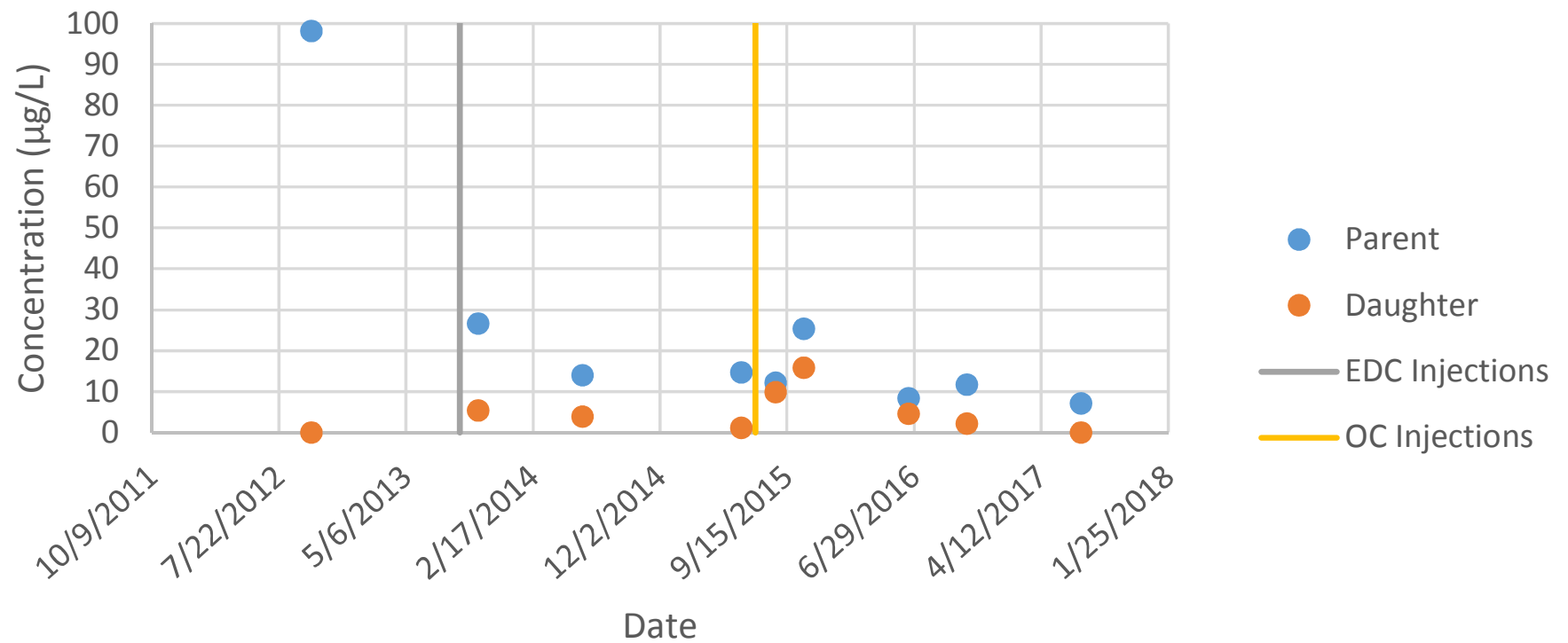
Total cVOC Concentration in SP-38



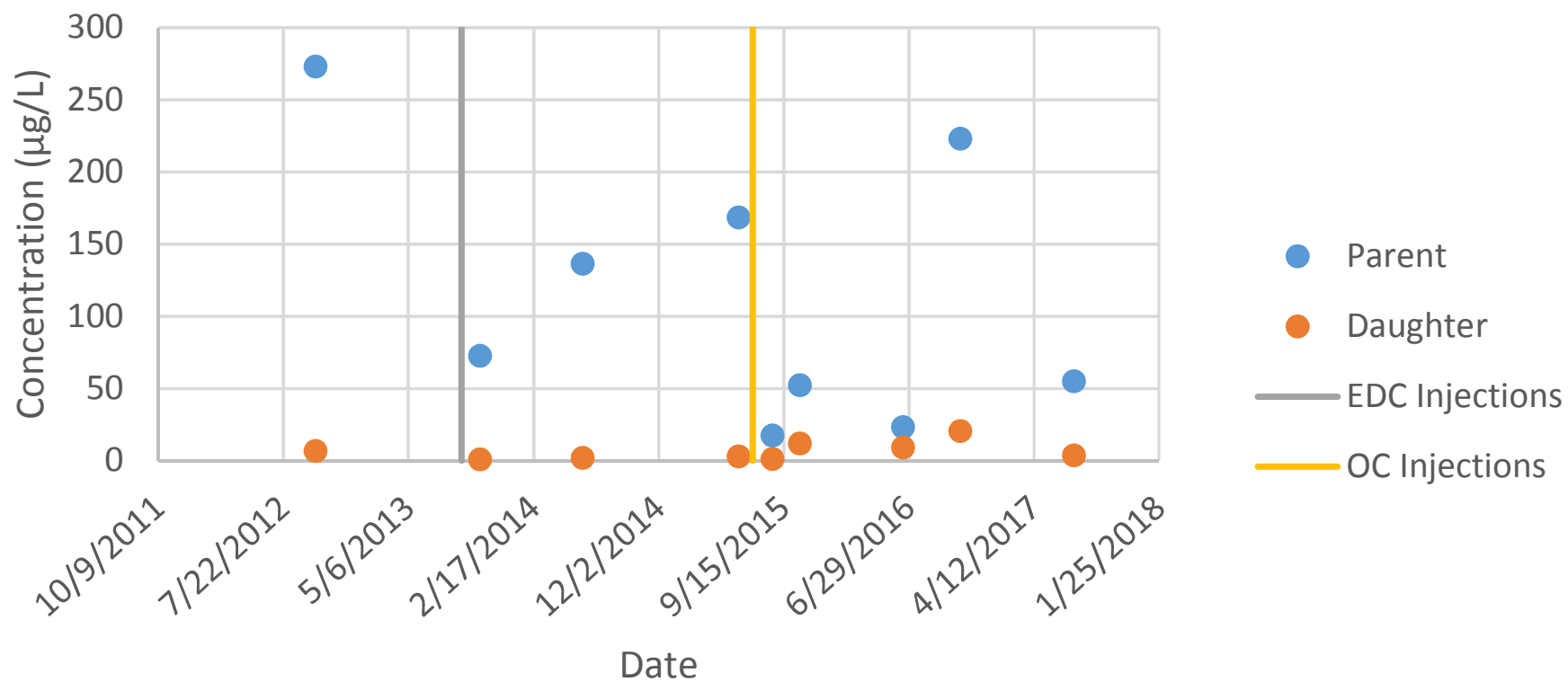
Total cVOC Concentration in SP-39



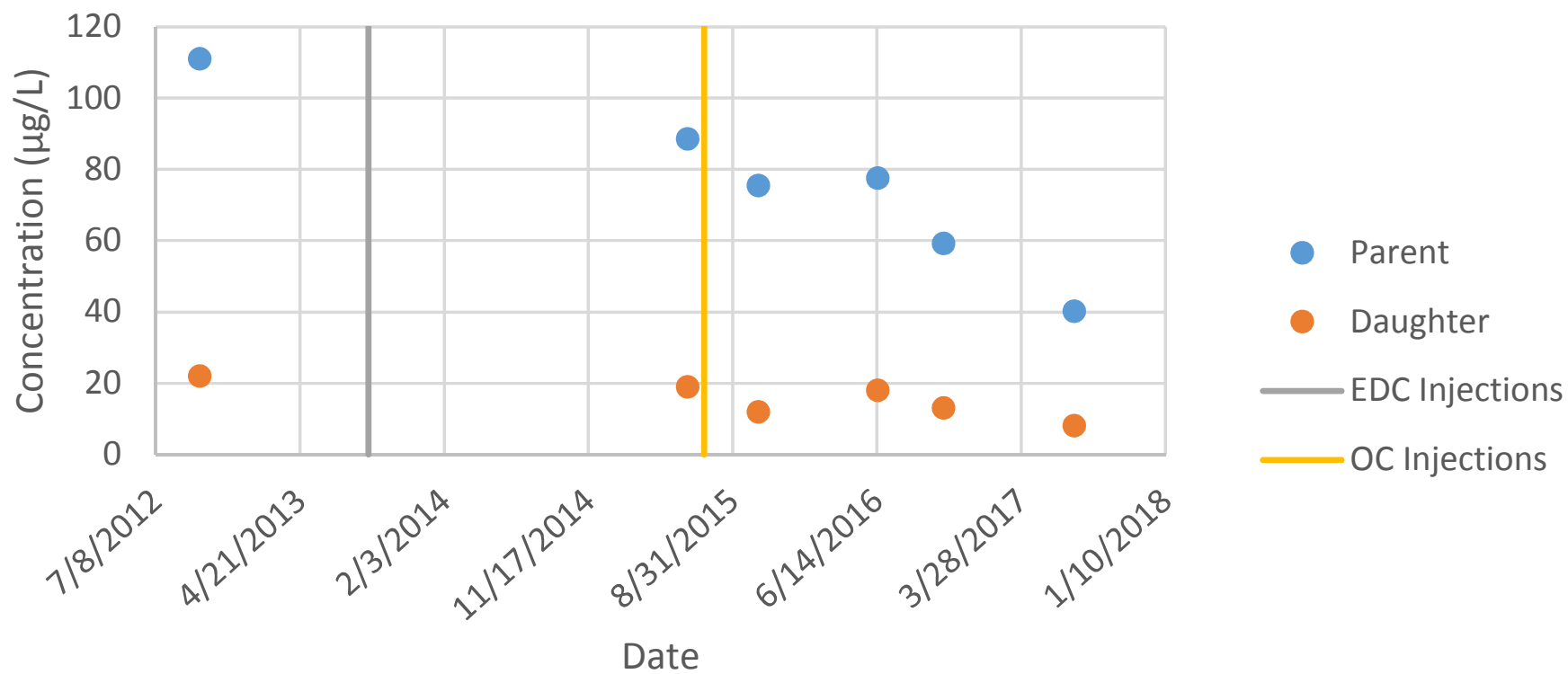
Total cVOC Concentration in SP-43



Total cVOC Concentration in SP-45



Total cVOC Concentration in TP-11





ATTACHMENT E

LABORATORY REPORT



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Alpha Analytical

Laboratory Code: 11148

SDG Number: L1723956

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Table of Contents

New York ASP Category B Data Deliverable Package.....	1
Table of Contents	2
Sample ID Cross Reference	4
SDG Narrative	5
Data Qualifier Definitions	7
Instrument Information	9
Volatile Organics Instruments	9
Volatile Organics in Air Instruments	9
Semivolatile Organics Instruments - Westborough.....	10
Semivolatile Organic Instruments - Mansfield	11
Sample Log-in Sheet	12
Lims COC (LN01)	13
External Chain of Custody	14
Organics Analysis	15
GCMS 8260 Analysis	16
Volatiles QC Summary	17
Form 2 - Organics	18
Form 3 - Organics	19
Form 4 - Organics	21
Form 5 - Organics	22
Form 8 - Organics	25
MDL Study - Volatile Organics 8260	26
Volatiles Sample Data	35
Form 1 - Organics	36
EW-1.25-071317 (L1723956-01) Analyzed: 07/17/17 23:03	40
Volatile Standards Data	54
Initial Calibration	55
Form 6 - Organics	56
ICAL for GONZO on 05/24/17 ICAL13686	59
Initial Calibration Summary - Cal Date: 05/24/17 00:00	59
BFB Injected on: 05/23/17 20:14	63
STD13 Injected on: 05/23/17 23:51	64
STD14 Injected on: 05/24/17 00:24	70
STD16 Injected on: 05/24/17 03:02	76
STD18 Injected on: 05/24/17 03:34	83
STD110 Injected on: 05/24/17 04:06	89
BFB Injected on: 05/24/17 15:05	95
STD111 Injected on: 05/24/17 16:00	96
STD11 Injected on: 05/24/17 16:34	99
STD12 Injected on: 05/24/17 17:39	104
ICV Summary Form Injected on: 05/24/17 18:45	111
ICV Quant Report Injected on: 05/24/17 18:45	114
Continuing Calibration	119
Form 7 - Organics	120
CC Summary - GONZO Run: 07/17/17 12:59	123
CC Quant - GONZO Run: 07/17/17 12:59	126
bfb tune - Inst. GONZO 07/17/17 12:34	133
Volatiles Raw QC Data	134
Laboratory Method BI (WG1023505-5) Analyzed: 07/17/17 14:40	135
Laboratory Control S (WG1023505-3) Analyzed: 07/17/17 12:59	145

Table of Contents

LCS Duplicate (WG1023505-4) Analyzed: 07/17/17 13:32	202
Volatiles Calculations	259
QC Batch WG1023505	260
ICAL Sequence for GONZO on 24-MAY-2017 00:00 ICAL13686	261
Sequence Log	263

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723956
Report Date: 07/18/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1723956-01	EW-1.25-071317	WATER	ELLCOTTVILLE	07/13/17 08:20	07/13/17

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723956
Report Date: 07/18/17

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: FORMER IGNORE
Project Number: 21.0056491.78

Lab Number: L1723956
Report Date: 07/18/17

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Amita Naik

Report Date: 07/18/17

Title: Technical Director/Representative

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers



Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723956
Report Date: 07/18/17

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers





Volatile Organics Instruments

Volatile Organics:

Instrument: Agilent 5975MSD (or equivalent)	Columns (length x ID x df):
Trap: Supelco K Trap (VOACARB 3000)	RTX-VMS 20m x 0.18mm x 1um
Concentrator: EST Encon (or equivalent)	RTX-VMS 30m x 0.25mm x 1.4um
Autosampler: EST Centurion (or equivalent)	RTX-502.2 40m x 0.18mm x 1um
Purge time: 11 min	

Volatile Organics: VPH

Instrument: Agilent 6890 (or equivalent)	Column Type: Restek RTX 502.2
Trap: Supelco K Trap (VOACARB 3000)	Column Length: 105 Meters
Concentrator: EST Encon (or equivalent)	df: 3.00 um
Autosampler: EST Centurion (or equivalent)	ID: 0.53mm

Volatile Organics: PIANO

Instrument: Agilent 7890 GC/5975C MSD	Column Type: DB-VRX
Trap: Supelco K Trap (VOACARB 3000)	Column Length: 60 Meters
Concentrator: Tekmar Velocity / EST Encon	df: 1.40 um
Autosampler: Varian Archon / EST Centurion	ID: 0.25 mm
Purge time: 11 min	Desorb: 1 min

Volatile Organics in Air Instruments

Volatile Organics in Air:

Instruments: Agilent 6890 GC / 5975 MSD Shimadzu QP2010-SE

Concentrator: Entech 7100A or 7200	Column Type: Restek RTX-1
Autosampler: Entech 7016CA or 7016D	Column Length: 60 Meters
	df: 1.00 um
	ID: 0.52 mm or 0.32 mm

Trap 1: Glass Bead: manufacturer-Entech: 20 cm packing material

Trap 2: Tenax: manufacturer-Entech: 20 cm packing material

Semivolatile Organics Instruments - Westborough

Semivolatile Organics (Acid/Base/Neutral Extractables):

Instrument: Agilent 5973N MSD	Injection volume: 1 ul
Column Type: Restek RXI-5SILMS	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM:

Instrument: Agilent 5973 MSD	Injection volume: 1 ul
Column Type: Restek RTX-5MS	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Pesticides/PCB

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column A: Restek RTX-CL/STX-CL	df: 0.32
Column B: Restek RTX/STX-CLPPesticide II	df: 0.25
Column Length: 30 Meters	ID: 0.32 mm

Herbicides

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column A: Restek RTX-1701	df: 0.25
Column B: Restek RTX-5	df: 0.25
Column Length: 30 Meters	ID: 0.32 mm

Petroleum

Instrument: Agilent 6890 w/FID / HP 5890 w/ FID	Injection Volume: 1uL
Column: Restek RTX 5	df: 0.25
Column Length: 30 Meters	
ID: 0.32 mm	

EPH

Instrument: Agilent 6890N w/FID	Injection Volume: 1uL
Column: Restek RTX 5	df: 0.25
Column Length: 30 Meters	
ID: 0.32 mm	



Semivolatile Organic Instruments - Mansfield

Semivolatile Organics (ALK-PAH Extractables):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 1 ul
Column Type: ZB-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (8270):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 2 ul
Column Type: ZB-Semivolatiles	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Semivolatile Organics (8270 SIM):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 3 ul
Column Type: ZB-5	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Semivolatile Organics (1,4-Dioxane):

Instrument: Agilent 5973N / 5975 / 5977 MSD	Injection volume: 3 ul
Column Type: RTX-5, RTX-PCB	df: 0.25um, 0.18 um
Column Length: 60 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (209 Congener):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 3 ul
Column Type: RTX-5, RTX-PCB	df: 0.25um, 0.18 um
Column Length: 60 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (ECD):

Instrument: Agilent 6890 / 7890	Injection volume: 1 ul
Column Type: RTX-5 / RTX-CLP II	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (SHC Extractables):

Instrument: Agilent 6890	Injection volume: 1 ul
Column Type: RTX-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm



Sample Delivery Group Summary

Alpha Job Number : L1723956

Received : 13-JUL-2017

Reviewer : William McClendon

Account Name : GZA GeoEnvironmental

Project Number : 21.0056491.78

Project Name : FORMER SIGNORE

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	2.9	

Condition Information

All samples on COC received? **YES**

Extra samples received? **NO**

Are there any sample container discrepancies? **NO**

Are there any discrepancies between sample labels & COC? **NO**

Are samples in appropriate containers for requested analysis? **YES**

Are samples properly preserved for requested analysis? **YES**

Are samples within holding time for requested analysis? **YES**

All sampling equipment returned? **NA**

Volatile Organics/VPH

Reagent Water Vials Frozen by Client? **NO**

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Jul 18 2017, 09:02 pm

Login Number: L1723956

Account: TPG GZA GeoEnvironmentalProject: 21.0056491.78

Sample #	Client ID	Received: 13JUL17	Due Date: 20JUL17
		Mat PR Collected	Container

L1723956-01 EW-1.25-071317 1 S0 13JUL17 08:20 3-Vial-B

8260: Report List Built (EPA TCL SOM01.2) curve.sub ASP-B Package Due Date: 07/20/17

ASP-B, NYTCL-8260

Page 1

Logged By: Candace Fox

Organics

GC/MS 8260

Analysis

Volatiles QC Summary

Form 2 Surrogate Recovery VOLATILES

Client: GZA GeoEnvironmental
Project Name: FORMER SIGNORE

Lab Number: L1723956
Project Number: 21.0056491.78
Matrix:

CLIENT ID (LAB SAMPLE NO.)	SMC1 DCA	SMC2 TOL	SMC3 BFB	SMC4 DBFM	TOT OUT
EW-1.25-071317 (L1723956-01)	104	99	97	104	0
WG1023505-3LCS	97	99	98	103	0
WG1023505-4LCSD	96	100	99	101	0
WG1023505-5BLANK	101	99	100	99	0

QC LIMITS

(70-130) DCA = 1,2-DICHLOROETHANE-D4
(70-130) TOL = TOLUENE-D8
(70-130) BFB = 4-BROMOFLUOROBENZENE
(70-130) DBFM = DIBROMOFLUOROMETHANE)

* Values outside of QC limits

FORM II NYTCL-8260



Laboratory Control Sample Form 3

Client : GZA GeoEnvironmental	Lab Number : L1723956
Project Name : FORMER SIGNORE	Project Number : 21.0056491.78
Matrix : WATER	
LCS Sample ID : WG1023505-3	Analysis Date : 07/17/17 12:59
LCS Sample ID : WG1023505-4	Analysis Date : 07/17/17 13:32
	File ID : VG170717N01
	File ID : VG170717N02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Methylene chloride	10	9.8	98	10	9.4	94	4	70-130	20
1,1-Dichloroethane	10	9.4	94	10	9.1	91	3	70-130	20
Chloroform	10	9.7	97	10	9.4	94	3	70-130	20
Carbon tetrachloride	10	9.4	94	10	9.2	92	2	63-132	20
1,2-Dichloropropane	10	9.6	96	10	9.5	95	1	70-130	20
Dibromochloromethane	10	9.3	93	10	9.0	90	3	63-130	20
1,1,2-Trichloroethane	10	9.7	97	10	9.4	94	3	70-130	20
Tetrachloroethene	10	9.7	97	10	9.4	94	3	70-130	20
Chlorobenzene	10	9.5	95	10	9.3	93	2	75-130	20
Trichlorofluoromethane	10	9.0	90	10	8.7	87	3	62-150	20
1,2-Dichloroethane	10	9.3	93	10	9.0	90	3	70-130	20
1,1,1-Trichloroethane	10	9.6	96	10	9.2	92	4	67-130	20
Bromodichloromethane	10	10.	100	10	9.7	97	3	67-130	20
trans-1,3-Dichloropropene	10	9.1	91	10	8.8	88	3	70-130	20
cis-1,3-Dichloropropene	10	9.3	93	10	9.0	90	3	70-130	20
Bromoform	10	9.5	95	10	9.3	93	2	54-136	20
1,1,2,2-Tetrachloroethane	10	9.8	98	10	9.7	97	1	67-130	20
Benzene	10	9.6	96	10	9.3	93	3	70-130	20
Toluene	10	9.5	95	10	9.3	93	2	70-130	20
Ethylbenzene	10	9.9	99	10	9.6	96	3	70-130	20
Chloromethane	10	6.8	68	10	6.2	62	Q 9	64-130	20
Bromomethane	10	9.6	96	10	8.7	87	10	39-139	20
Vinyl chloride	10	8.6	86	10	8.2	82	5	55-140	20
Chloroethane	10	9.5	95	10	8.8	88	8	55-138	20
1,1-Dichloroethene	10	9.4	94	10	9.1	91	3	61-145	20
trans-1,2-Dichloroethene	10	9.5	95	10	9.1	91	4	70-130	20
Trichloroethene	10	9.4	94	10	8.9	89	5	70-130	20
1,2-Dichlorobenzene	10	9.7	97	10	9.4	94	3	70-130	20



Laboratory Control Sample Form 3

Client : GZA GeoEnvironmental	Lab Number : L1723956
Project Name : FORMER SIGNORE	Project Number : 21.0056491.78
Matrix : WATER	
LCS Sample ID : WG1023505-3	Analysis Date : 07/17/17 12:59
LCSD Sample ID : WG1023505-4	Analysis Date : 07/17/17 13:32
	File ID : VG170717N01
	File ID : VG170717N02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
1,3-Dichlorobenzene	10	9.6	96	10	9.3	93	3	70-130	20
1,4-Dichlorobenzene	10	9.6	96	10	9.2	92	4	70-130	20
Methyl tert butyl ether	10	11.	110	10	11.	110	0	63-130	20
p/m-Xylene	20	20.	100	20	19.	95	5	70-130	20
o-Xylene	20	20.	100	20	19.	95	5	70-130	20
cis-1,2-Dichloroethene	10	9.7	97	10	9.3	93	4	70-130	20
Styrene	20	20.	100	20	20.	100	0	70-130	20
Dichlorodifluoromethane	10	7.4	74	10	7.0	70	6	36-147	20
Acetone	10	9.9	99	10	10.	100	1	58-148	20
Carbon disulfide	10	7.4	74	10	6.9	69	7	51-130	20
2-Butanone	10	10.	100	10	9.9	99	1	63-138	20
4-Methyl-2-pentanone	10	9.5	95	10	9.4	94	1	59-130	20
2-Hexanone	10	9.6	96	10	9.5	95	1	57-130	20
Bromochloromethane	10	9.7	97	10	9.4	94	3	70-130	20
1,2-Dibromoethane	10	10.	100	10	10.	100	0	70-130	20
1,2-Dibromo-3-chloropropane	10	9.6	96	10	8.8	88	9	41-144	20
Isopropylbenzene	10	9.8	98	10	9.8	98	0	70-130	20
1,2,3-Trichlorobenzene	10	12.	120	10	11.	110	9	70-130	20
1,2,4-Trichlorobenzene	10	10.	100	10	9.5	95	5	70-130	20
Methyl Acetate	10	9.3	93	10	9.2	92	1	70-130	20
Cyclohexane	10	8.9	89	10	8.5	85	5	70-130	20
1,4-Dioxane	500	560	112	500	550	110	2	56-162	20
Freon-113	10	9.3	93	10	8.9	89	4	70-130	20
Methyl cyclohexane	10	9.3	93	10	8.9	89	4	70-130	20

Method Blank Summary Form 4

Client	: GZA GeoEnvironmental	Lab Number	: L1723956
Project Name	: FORMER SIGNORE	Project Number	: 21.0056491.78
Lab Sample ID	: WG1023505-5	Lab File ID	: VG170717N04
Instrument ID	: GONZO		
Matrix	: WATER	Analysis Date	: 07/17/17 14:40

Client Sample No.	Lab Sample ID	Analysis Date
WG1023505-3LCS	WG1023505-3	07/17/17 12:59
WG1023505-4LCSD	WG1023505-4	07/17/17 13:32
EW-1.25-071317	L1723956-01	07/17/17 23:03

Instrument Performance Check

Bromofluorobenzene (BFB)

Form 5

Client : GZA GeoEnvironmental	Lab Number : L1723956
Project Name : FORMER SIGNORE	Project Number : 21.0056491.78
Instrument ID : GONZO	Analysis Date : 05/23/17 20:14
Tune Standard : WG1006728-1	Tune File ID : VG170523NBF3_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	18.7
75	30.0 - 60.0% of mass 95	46.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0 (0)1
174	Greater than 50.0 of mass 95	85.3
175	5.0 - 9.0% of mass 174	6.2 (7.3)1
176	95.0 - 101% of mass 174	84.9 (99.5)1
177	5.0 - 9.0% of mass 176	5.2 (6.1)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD13	R969997-1	VG170523N07	05/23/17 23:51
STD14	R969997-2	VG170523N08	05/24/17 00:24
STD16	R969997-3	VG170523N09	05/24/17 03:02
STD18	R969997-4	VG170523N10	05/24/17 03:34
STD110	R969997-5	VG170523N11	05/24/17 04:06

Instrument Performance Check

Bromofluorobenzene (BFB)

Form 5

Client : GZA GeoEnvironmental	Lab Number : L1723956
Project Name : FORMER SIGNORE	Project Number : 21.0056491.78
Instrument ID : GONZO	Analysis Date : 05/24/17 15:05
Tune Standard : WG1006728-2	Tune File ID : VG170524BF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	18.9
75	30.0 - 60.0% of mass 95	47.4
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.2 (.2)1
174	Greater than 50.0 of mass 95	79.9
175	5.0 - 9.0% of mass 174	5.7 (7.1)1
176	95.0 - 101% of mass 174	78.2 (97.9)1
177	5.0 - 9.0% of mass 176	5.2 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD11	R969997-6	VG170524A02	05/24/17 16:00
STD1	R969997-7	VG170524A03	05/24/17 16:34
STD2	R969997-8	VG170524A05	05/24/17 17:39
ICV Quant Report	R969997-9	VG170524A07	05/24/17 18:45

Instrument Performance Check

Bromofluorobenzene (BFB)

Form 5

Client : GZA GeoEnvironmental	Lab Number : L1723956
Project Name : FORMER SIGNORE	Project Number : 21.0056491.78
Instrument ID : GONZO	Analysis Date : 07/17/17 12:34
Tune Standard : WG1023505-1	Tune File ID : VG170717NBF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	18.8
75	30.0 - 60.0% of mass 95	45.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.6 (.7)1
174	Greater than 50.0 of mass 95	84
175	5.0 - 9.0% of mass 174	6.1 (7.2)1
176	95.0 - 101% of mass 174	83 (98.8)1
177	5.0 - 9.0% of mass 176	5.7 (6.9)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1023505-2CCAL	WG1023505-2	VG170717N01	07/17/17 12:59
WG1023505-3LCS	WG1023505-3	VG170717N01	07/17/17 12:59
WG1023505-4LCSD	WG1023505-4	VG170717N02	07/17/17 13:32
WG1023505-5BLANK	WG1023505-5	VG170717N04	07/17/17 14:40
EW-1.25-071317	L1723956-01	VG170717N19	07/17/17 23:03

Internal Standard Area and RT Summary Form 8

Client : GZA GeoEnvironmental
 Project Name : FORMER SIGNORE
 Instrument ID : GONZO
 Sample No : WG1023505-2

Lab Number : L1723956
 Project Number : 21.0056491.78
 Analysis Date : 07/17/17 12:59
 Lab File ID : VG170717N01

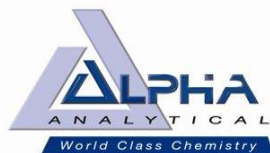
	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG1023505-2	698045	9.03	530469	13.49	270453	17.30
Upper Limit	1396090	9.53	1060938	13.99	540906	17.80
Lower Limit	349023	8.53	265235	12.99	135227	16.80
Sample ID						
WG1023505-3 LCS	698045	9.03	530469	13.49	270453	17.30
WG1023505-4 LCSD	734808	9.03	550817	13.50	272216	17.31
WG1023505-5 BLANK	720453	9.03	536845	13.50	250308	17.31
EW-1.25-071317	684122	9.03	518520	13.50	246535	17.31

Area Upper Limit = +100% of internal standard area
 Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
 RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits





Date Created: 11/07/16
 Created By: Jason Hebert
 File: PM2971-1
 Page: 1

Volatile Organics - EPA 8260C/5035 High (SOIL)

Holding Time: 14 days
 Container/Sample Preservation: 1 - Vial MeOH preserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methylene chloride	75-09-2	500	55.2	ug/kg	70-130	30	70-130	30	30			
1,1-Dichloroethane	75-34-3	75	4.28	ug/kg	70-130	30	70-130	30	30			
Chloroform	67-66-3	75	18.5	ug/kg	70-130	30	70-130	30	30			
Carbon tetrachloride	56-23-5	50	10.5	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloropropane	78-87-5	175	11.4	ug/kg	70-130	30	70-130	30	30			
Dibromochloromethane	124-48-1	50	7.68	ug/kg	70-130	30	70-130	30	30			
1,1,2-Trichloroethane	79-00-5	75	15.2	ug/kg	70-130	30	70-130	30	30			
Tetrachloroethene	127-18-4	50	7.01	ug/kg	70-130	30	70-130	30	30			
Chlorobenzene	108-90-7	50	17.4	ug/kg	70-130	30	70-130	30	30			
Trichlorofluoromethane	75-69-4	250	19.4	ug/kg	70-139	30	70-139	30	30			
1,2-Dichloroethane	107-06-2	50	5.67	ug/kg	70-130	30	70-130	30	30			
1,1,1-Trichloroethane	71-55-6	50	5.54	ug/kg	70-130	30	70-130	30	30			
Bromodichloromethane	75-27-4	50	8.66	ug/kg	70-130	30	70-130	30	30			
trans-1,3-Dichloropropene	10061-02-6	50	6.04	ug/kg	70-130	30	70-130	30	30			
cis-1,3-Dichloropropene	10061-01-5	50	5.88	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropene, Total	542-75-6	50	5.88	ug/kg				30	30			
1,3-Dichloropropene, Total	542-75-6	50	5.88	ug/kg				30	30			
1,1-Dichloropropene	563-58-6	250	7.07	ug/kg	70-130	30	70-130	30	30			
Bromoform	75-25-2	200	11.8	ug/kg	70-130	30	70-130	30	30			
1,1,2,2-Tetrachloroethane	79-34-5	50	5.04	ug/kg	70-130	30	70-130	30	30			
Benzene	71-43-2	50	5.9	ug/kg	70-130	30	70-130	30	30			
Toluene	108-88-3	75	9.74	ug/kg	70-130	30	70-130	30	30			
Ethylbenzene	100-41-4	50	6.37	ug/kg	70-130	30	70-130	30	30			
Chloromethane	74-87-3	250	14.7	ug/kg	52-130	30	52-130	30	30			
Bromomethane	74-83-9	100	16.9	ug/kg	57-147	30	57-147	30	30			
Vinyl chloride	75-01-4	100	5.87	ug/kg	67-130	30	67-130	30	30			
Chloroethane	75-00-3	100	15.8	ug/kg	50-151	30	50-151	30	30			
1,1-Dichloroethene	75-35-4	50	13.1	ug/kg	65-135	30	65-135	30	30			
trans-1,2-Dichloroethene	156-60-5	75	10.6	ug/kg	70-130	30	70-130	30	30			
Trichloroethene	79-01-6	50	6.25	ug/kg	70-130	30	70-130	30	30			
1,2-Dichlorobenzene	95-50-1	250	7.66	ug/kg	70-130	30	70-130	30	30			
1,3-Dichlorobenzene	541-73-1	250	6.75	ug/kg	70-130	30	70-130	30	30			
1,4-Dichlorobenzene	106-46-7	250	6.92	ug/kg	70-130	30	70-130	30	30			
Methyl tert butyl ether	1634-04-4	100	4.22	ug/kg	66-130	30	66-130	30	30			
p/m-Xylene	179601-23-1	100	17.55	ug/kg	70-130	30	70-130	30	30			
o-Xylene	95-47-6	100	16.9	ug/kg	70-130	30	70-130	30	30			
Xylene (Total)	1330-20-7	100	8.59	ug/kg				30	30			
Xylene (Total)	1330-20-7	100	8.59	ug/kg				30	30			
cis-1,2-Dichloroethene	156-59-2	50	7.14	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloroethene (total)	540-59-0	50	7.14	ug/kg				30	30			
1,2-Dichloroethene (total)	540-59-0	50	7.14	ug/kg				30	30			
Dibromomethane	74-95-3	500	8.18	ug/kg	70-130	30	70-130	30	30			

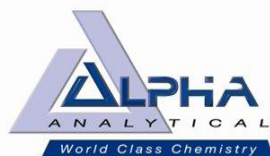
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 Page: 2

Volatile Organics - EPA 8260C/5035 High (SOIL)

Holding Time: 14 days
 Container/Sample Preservation: 1 - Vial MeOH preserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,4-Dichlorobutane	110-56-5	500	6.6	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichloropropane	96-18-4	500	8.13	ug/kg	68-130	30	68-130	30	30			
Styrene	100-42-5	100	20.1	ug/kg	70-130	30	70-130	30	30			
Dichlorodifluoromethane	75-71-8	500	9.54	ug/kg	30-146	30	30-146	30	30			
Acetone	67-64-1	1800	51.8	ug/kg	54-140	30	54-140	30	30			
Carbon disulfide	75-15-0	500	55.1	ug/kg	59-130	30	59-130	30	30			
2-Butanone	78-93-3	500	13.6	ug/kg	70-130	30	70-130	30	30			
Vinyl acetate	108-05-4	500	6.61	ug/kg	70-130	30	70-130	30	30			
4-Methyl-2-pentanone	108-10-1	500	12.2	ug/kg	70-130	30	70-130	30	30			
2-Hexanone	591-78-6	500	33.3	ug/kg	70-130	30	70-130	30	30			
Ethyl methacrylate	97-63-2	500	7.73	ug/kg	70-130	30	70-130	30	30			
Acrylonitrile	107-13-1	200	25.7	ug/kg	70-130	30	70-130	30	30			
Bromochloromethane	74-97-5	250	13.8	ug/kg	70-130	30	70-130	30	30			
Tetrahydrofuran	109-99-9	1000	49.8	ug/kg	66-130	30	66-130	30	30			
2,2-Dichloropropane	594-20-7	250	11.3	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromoethane	106-93-4	200	8.72	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropane	142-28-9	250	7.26	ug/kg	69-130	30	69-130	30	30			
1,1,1,2-Tetrachloroethane	630-20-6	50	15.9	ug/kg	70-130	30	70-130	30	30			
Bromobenzene	108-86-1	250	10.4	ug/kg	70-130	30	70-130	30	30			
n-Butylbenzene	104-51-8	50	5.74	ug/kg	70-130	30	70-130	30	30			
sec-Butylbenzene	135-98-8	50	6.1	ug/kg	70-130	30	70-130	30	30			
tert-Butylbenzene	98-06-6	250	6.77	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trichlorobenzene	108-70-3	200	11.5	ug/kg	70-130	30	70-130	30	30			
o-Chlorotoluene	95-49-8	250	7.99	ug/kg	70-130	30	70-130	30	30			
p-Chlorotoluene	106-43-4	250	6.64	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromo-3-chloropropane	96-12-8	250	19.8	ug/kg	68-130	30	68-130	30	30			
Hexachlorobutadiene	87-68-3	250	11.4	ug/kg	67-130	30	67-130	30	30			
Isopropylbenzene	98-82-8	50	5.19	ug/kg	70-130	30	70-130	30	30			
p-Isopropyltoluene	99-87-6	50	6.25	ug/kg	70-130	30	70-130	30	30			
Naphthalene	91-20-3	250	6.92	ug/kg	70-130	30	70-130	30	30			
n-Propylbenzene	103-65-1	50	5.46	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichlorobenzene	87-61-6	250	7.38	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trichlorobenzene	120-82-1	250	9.09	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trimethylbenzene	108-67-8	250	7.17	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trimethylbenzene	95-63-6	250	7.07	ug/kg	70-130	30	70-130	30	30			
trans-1,4-Dichloro-2-butene	110-57-6	250	19.6	ug/kg	70-130	30	70-130	30	30			
iso-Propyl Alcohol	67-63-0	5000	5000	ug/kg	70-130	20	70-130	20	20			
Ethyl ether	60-29-7	250	13	ug/kg	67-130	30	67-130	30	30			
Methyl Acetate	79-20-9	1000	13.5	ug/kg	65-130	30	65-130	30	30			
Ethyl Acetate	141-78-6	1000	46.1	ug/kg	70-130	30	70-130	30	30			
Isopropyl Ether	108-20-3	200	6.98	ug/kg	66-130	30	66-130	30	30			
Cyclohexane	110-82-7	1000	7.3	ug/kg	70-130	30	70-130	30	30			

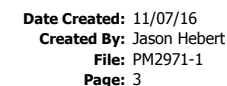
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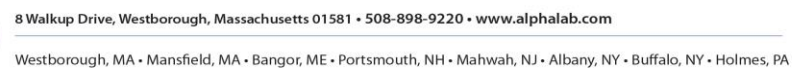
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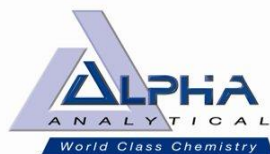




Holding Time: 14 days
Container/Sample Preservation: 1 - Vial MeOH preserved

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 File: PM2971-1
 Page: 1

VOCs - EPA 8260C/5035 High & Low (SOIL)

Holding Time: 14 days
 Container/Sample Preservation: 1 - 1 Vial MeOH/2 Vial Water

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methylene chloride	75-09-2	10	1.104	ug/kg	70-130	30	70-130	30	30			
1,1-Dichloroethane	75-34-3	1.5	0.0856	ug/kg	70-130	30	70-130	30	30			
Chloroform	67-66-3	1.5	0.37	ug/kg	70-130	30	70-130	30	30			
Carbon tetrachloride	56-23-5	1	0.21	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloropropane	78-87-5	3.5	0.228	ug/kg	70-130	30	70-130	30	30			
Dibromochloromethane	124-48-1	1	0.1536	ug/kg	70-130	30	70-130	30	30			
1,1,2-Trichloroethane	79-00-5	1.5	0.304	ug/kg	70-130	30	70-130	30	30			
Tetrachloroethene	127-18-4	1	0.1402	ug/kg	70-130	30	70-130	30	30			
Chlorobenzene	108-90-7	1	0.348	ug/kg	70-130	30	70-130	30	30			
Trichlorofluoromethane	75-69-4	5	0.388	ug/kg	70-139	30	70-139	30	30			
1,2-Dichloroethane	107-06-2	1	0.1134	ug/kg	70-130	30	70-130	30	30			
1,1,1-Trichloroethane	71-55-6	1	0.1108	ug/kg	70-130	30	70-130	30	30			
Bromodichloromethane	75-27-4	1	0.1732	ug/kg	70-130	30	70-130	30	30			
trans-1,3-Dichloropropene	10061-02-6	1	0.1208	ug/kg	70-130	30	70-130	30	30			
cis-1,3-Dichloropropene	10061-01-5	1	0.1176	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropene, Total	542-75-6	1	0.1176	ug/kg				30	30			
1,3-Dichloropropene, Total	542-75-6	1	0.1176	ug/kg				30	30			
1,1-Dichloropropene	563-58-6	5	0.1414	ug/kg	70-130	30	70-130	30	30			
Bromoform	75-25-2	4	0.236	ug/kg	70-130	30	70-130	30	30			
1,1,2,2-Tetrachloroethane	79-34-5	1	0.1008	ug/kg	70-130	30	70-130	30	30			
Benzene	71-43-2	1	0.118	ug/kg	70-130	30	70-130	30	30			
Toluene	108-88-3	1.5	0.1948	ug/kg	70-130	30	70-130	30	30			
Ethylbenzene	100-41-4	1	0.1274	ug/kg	70-130	30	70-130	30	30			
Chloromethane	74-87-3	5	0.294	ug/kg	52-130	30	52-130	30	30			
Bromomethane	74-83-9	2	0.338	ug/kg	57-147	30	57-147	30	30			
Vinyl chloride	75-01-4	2	0.1174	ug/kg	67-130	30	67-130	30	30			
Chloroethane	75-00-3	2	0.316	ug/kg	50-151	30	50-151	30	30			
1,1-Dichloroethene	75-35-4	1	0.262	ug/kg	65-135	30	65-135	30	30			
trans-1,2-Dichloroethene	156-60-5	1.5	0.212	ug/kg	70-130	30	70-130	30	30			
Trichloroethene	79-01-6	1	0.125	ug/kg	70-130	30	70-130	30	30			
1,2-Dichlorobenzene	95-50-1	5	0.1532	ug/kg	70-130	30	70-130	30	30			
1,3-Dichlorobenzene	541-73-1	5	0.135	ug/kg	70-130	30	70-130	30	30			
1,4-Dichlorobenzene	106-46-7	5	0.1384	ug/kg	70-130	30	70-130	30	30			
Methyl tert butyl ether	1634-04-4	2	0.0844	ug/kg	66-130	30	66-130	30	30			
p/m-Xylene	179601-23-1	2	0.351	ug/kg	70-130	30	70-130	30	30			
o-Xylene	95-47-6	2	0.338	ug/kg	70-130	30	70-130	30	30			
Xylene (Total)	1330-20-7	2	0.1718	ug/kg				30	30			
Xylene (Total)	1330-20-7	2	0.1718	ug/kg				30	30			
cis-1,2-Dichloroethene	156-59-2	1	0.1428	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloroethene (total)	540-59-0	1	0.1428	ug/kg				30	30			
1,2-Dichloroethene (total)	540-59-0	1	0.1428	ug/kg				30	30			
Dibromomethane	74-95-3	10	0.1636	ug/kg	70-130	30	70-130	30	30			

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Page: 2

VOCs - EPA 8260C/5035 High & Low (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - 1 Vial MeOH/2 Vial Water

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,4-Dichlorobutane	110-56-5	10	0.132	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichloropropane	96-18-4	10	0.1626	ug/kg	68-130	30	68-130	30	30			
Styrene	100-42-5	2	0.402	ug/kg	70-130	30	70-130	30	30			
Dichlorodifluoromethane	75-71-8	10	0.1908	ug/kg	30-146	30	30-146	30	30			
Acetone	67-64-1	36	1.036	ug/kg	54-140	30	54-140	30	30			
Carbon disulfide	75-15-0	10	1.102	ug/kg	59-130	30	59-130	30	30			
2-Butanone	78-93-3	10	0.272	ug/kg	70-130	30	70-130	30	30			
Vinyl acetate	108-05-4	10	0.1322	ug/kg	70-130	30	70-130	30	30			
4-Methyl-2-pentanone	108-10-1	10	0.244	ug/kg	70-130	30	70-130	30	30			
2-Hexanone	591-78-6	10	0.666	ug/kg	70-130	30	70-130	30	30			
Ethyl methacrylate	97-63-2	10	0.1546	ug/kg	70-130	30	70-130	30	30			
Acrylonitrile	107-13-1	4	0.514	ug/kg	70-130	30	70-130	30	30			
Bromochloromethane	74-97-5	5	0.276	ug/kg	70-130	30	70-130	30	30			
Tetrahydrofuran	109-99-9	20	0.996	ug/kg	66-130	30	66-130	30	30			
2,2-Dichloropropane	594-20-7	5	0.226	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromoethane	106-93-4	4	0.1744	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropane	142-28-9	5	0.1452	ug/kg	69-130	30	69-130	30	30			
1,1,1,2-Tetrachloroethane	630-20-6	1	0.318	ug/kg	70-130	30	70-130	30	30			
Bromobenzene	108-86-1	5	0.208	ug/kg	70-130	30	70-130	30	30			
n-Butylbenzene	104-51-8	1	0.1148	ug/kg	70-130	30	70-130	30	30			
sec-Butylbenzene	135-98-8	1	0.122	ug/kg	70-130	30	70-130	30	30			
tert-Butylbenzene	98-06-6	5	0.1354	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trichlorobenzene	108-70-3	4	0.23	ug/kg	70-130	30	70-130	30	30			
o-Chlorotoluene	95-49-8	5	0.1598	ug/kg	70-130	30	70-130	30	30			
p-Chlorotoluene	106-43-4	5	0.1328	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromo-3-chloropropane	96-12-8	5	0.396	ug/kg	68-130	30	68-130	30	30			
Hexachlorobutadiene	87-68-3	5	0.228	ug/kg	67-130	30	67-130	30	30			
Isopropylbenzene	98-82-8	1	0.1038	ug/kg	70-130	30	70-130	30	30			
p-Isopropyltoluene	99-87-6	1	0.125	ug/kg	70-130	30	70-130	30	30			
Naphthalene	91-20-3	5	0.1384	ug/kg	70-130	30	70-130	30	30			
n-Propylbenzene	103-65-1	1	0.1092	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichlorobenzene	87-61-6	5	0.1476	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trichlorobenzene	120-82-1	5	0.1818	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trimethylbenzene	108-67-8	5	0.1434	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trimethylbenzene	95-63-6	5	0.1414	ug/kg	70-130	30	70-130	30	30			
trans-1,4-Dichloro-2-butene	110-57-6	5	0.392	ug/kg	70-130	30	70-130	30	30			
Ethyl ether	60-29-7	5	0.26	ug/kg	67-130	30	67-130	30	30			
Methyl Acetate	79-20-9	20	0.27	ug/kg	65-130	30	65-130	30	30			
Ethyl Acetate	141-78-6	20	0.922	ug/kg	70-130	30	70-130	30	30			
Isopropyl Ether	108-20-3	4	0.1396	ug/kg	66-130	30	66-130	30	30			
Cyclohexane	110-82-7	20	0.146	ug/kg	70-130	30	70-130	30	30			
Ethyl-Tert-Butyl-Ether	637-92-3	4	0.1158	ug/kg	70-130	30	70-130	30	30			

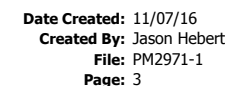
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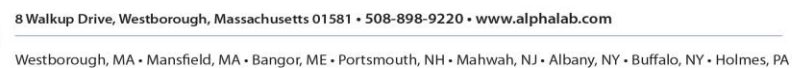


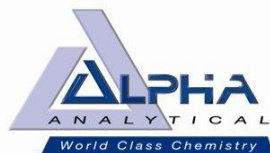


Holding Time: 14 days
Container/Sample Preservation: 1 - 1 Vial MeOH/2 Vial Water

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Volatile Organics - EPA 8260C (WATER)

Holding Time: 14 days
Container/Sample Preservation: 3 - Vial HCl preserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methylene chloride	75-09-2	3	0.678	ug/l	70-130	20	70-130	20	20			
1,1-Dichloroethane	75-34-3	0.75	0.21	ug/l	70-130	20	70-130	20	20			
Chloroform	67-66-3	0.75	0.162	ug/l	70-130	20	70-130	20	20			
Carbon tetrachloride	56-23-5	0.5	0.134	ug/l	63-132	20	63-132	20	20			
1,2-Dichloropropane	78-87-5	1.75	0.137	ug/l	70-130	20	70-130	20	20			
Dibromochloromethane	124-48-1	0.5	0.149	ug/l	63-130	20	63-130	20	20			
1,1,2-Trichloroethane	79-00-5	0.75	0.144	ug/l	70-130	20	70-130	20	20			
Tetrachloroethene	127-18-4	0.5	0.181	ug/l	70-130	20	70-130	20	20			
Chlorobenzene	108-90-7	0.5	0.178	ug/l	75-130	25	75-130	25	25			
Trichlorofluoromethane	75-69-4	2.5	0.161	ug/l	62-150	20	62-150	20	20			
1,2-Dichloroethane	107-06-2	0.5	0.132	ug/l	70-130	20	70-130	20	20			
1,1,1-Trichloroethane	71-55-6	0.5	0.158	ug/l	67-130	20	67-130	20	20			
Bromodichloromethane	75-27-4	0.5	0.192	ug/l	67-130	20	67-130	20	20			
trans-1,3-Dichloropropene	10061-02-6	0.5	0.164	ug/l	70-130	20	70-130	20	20			
cis-1,3-Dichloropropene	10061-01-5	0.5	0.144	ug/l	70-130	20	70-130	20	20			
1,3-Dichloropropene, Total	542-75-6	0.5	0.144	ug/l				20	20			
1,3-Dichloropropene, Total	542-75-6	0.5	0.144	ug/l				20	20			
1,1-Dichloropropene	563-58-6	2.5	0.173	ug/l	70-130	20	70-130	20	20			
Bromoform	75-25-2	2	0.248	ug/l	54-136	20	54-136	20	20			
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.167	ug/l	67-130	20	67-130	20	20			
Benzene	71-43-2	0.5	0.159	ug/l	70-130	25	70-130	25	25			
Toluene	108-88-3	0.75	0.161	ug/l	70-130	25	70-130	25	25			
Ethylbenzene	100-41-4	0.5	0.167	ug/l	70-130	20	70-130	20	20			
Chloromethane	74-87-3	2.5	0.176	ug/l	64-130	20	64-130	20	20			
Bromomethane	74-83-9	1	0.256	ug/l	39-139	20	39-139	20	20			
Vinyl chloride	75-01-4	1	0.0714	ug/l	55-140	20	55-140	20	20			
Chloroethane	75-00-3	1	0.134	ug/l	55-138	20	55-138	20	20			
1,1-Dichloroethene	75-35-4	0.5	0.169	ug/l	61-145	25	61-145	25	25			
trans-1,2-Dichloroethene	156-60-5	0.75	0.163	ug/l	70-130	20	70-130	20	20			
1,2-Dichloroethene (total)	540-59-0	0.5	0.163	ug/l				20	20			
1,2-Dichloroethene (total)	540-59-0	0.5	0.163	ug/l				20	20			
Trichloroethene	79-01-6	0.5	0.175	ug/l	70-130	25	70-130	25	25			
1,2-Dichlorobenzene	95-50-1	2.5	0.184	ug/l	70-130	20	70-130	20	20			
1,3-Dichlorobenzene	541-73-1	2.5	0.186	ug/l	70-130	20	70-130	20	20			
1,4-Dichlorobenzene	106-46-7	2.5	0.187	ug/l	70-130	20	70-130	20	20			
Methyl tert butyl ether	1634-04-4	1	0.166	ug/l	63-130	20	63-130	20	20			
p/m-Xylene	179601-23-1	1	0.332	ug/l	70-130	20	70-130	20	20			
o-Xylene	95-47-6	1	0.33	ug/l	70-130	20	70-130	20	20			
Xylene (Total)	1330-20-7	1	0.33	ug/l				20	20			
Xylene (Total)	1330-20-7	1	0.33	ug/l				20	20			
cis-1,2-Dichloroethene	156-59-2	0.5	0.187	ug/l	70-130	20	70-130	20	20			
Dibromomethane	74-95-3	5	0.363	ug/l	70-130	20	70-130	20	20			

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Date Created: 11/07/16
Created By: Jason Hebert
File: PM2970-1
Page: 2

Volatile Organics - EPA 8260C (WATER)

Holding Time: 14 days
Container/Sample Preservation: 3 - Vial HCl preserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,4-Dichlorobutane	110-56-5	5	0.464	ug/l	70-130	20	70-130	20	20			
1,2,3-Trichloropropane	96-18-4	5	0.176	ug/l	64-130	20	64-130	20	20			
Styrene	100-42-5	1	0.359	ug/l	70-130	20	70-130	20	20			
Dichlorodifluoromethane	75-71-8	5	0.244	ug/l	36-147	20	36-147	20	20			
Acetone	67-64-1	5	1.46	ug/l	58-148	20	58-148	20	20			
Carbon disulfide	75-15-0	5	0.299	ug/l	51-130	20	51-130	20	20			
2-Butanone	78-93-3	5	1.94	ug/l	63-138	20	63-138	20	20			
Vinyl acetate	108-05-4	5	0.311	ug/l	70-130	20	70-130	20	20			
4-Methyl-2-pentanone	108-10-1	5	0.416	ug/l	59-130	20	59-130	20	20			
2-Hexanone	591-78-6	5	0.515	ug/l	57-130	20	57-130	20	20			
Ethyl methacrylate	97-63-2	5	0.606	ug/l	70-130	20	70-130	20	20			
Acrylonitrile	107-13-1	5	0.43	ug/l	70-130	20	70-130	20	20			
Bromochloromethane	74-97-5	2.5	0.152	ug/l	70-130	20	70-130	20	20			
Tetrahydrofuran	109-99-9	5	0.834	ug/l	58-130	20	58-130	20	20			
2,2-Dichloropropane	594-20-7	2.5	0.204	ug/l	63-133	20	63-133	20	20			
1,2-Dibromoethane	106-93-4	2	0.193	ug/l	70-130	20	70-130	20	20			
1,3-Dichloropropane	142-28-9	2.5	0.212	ug/l	70-130	20	70-130	20	20			
1,1,1,2-Tetrachloroethane	630-20-6	0.5	0.164	ug/l	64-130	20	64-130	20	20			
Bromobenzene	108-86-1	2.5	0.152	ug/l	70-130	20	70-130	20	20			
n-Butylbenzene	104-51-8	0.5	0.192	ug/l	53-136	20	53-136	20	20			
sec-Butylbenzene	135-98-8	0.5	0.181	ug/l	70-130	20	70-130	20	20			
tert-Butylbenzene	98-06-6	2.5	0.185	ug/l	70-130	20	70-130	20	20			
o-Chlorotoluene	95-49-8	2.5	0.17	ug/l	70-130	20	70-130	20	20			
p-Chlorotoluene	106-43-4	2.5	0.185	ug/l	70-130	20	70-130	20	20			
1,2-Dibromo-3-chloropropane	96-12-8	2.5	0.353	ug/l	41-144	20	41-144	20	20			
Hexachlorobutadiene	87-68-3	0.5	0.217	ug/l	63-130	20	63-130	20	20			
Isopropylbenzene	98-82-8	0.5	0.187	ug/l	70-130	20	70-130	20	20			
p-Isopropyltoluene	99-87-6	0.5	0.188	ug/l	70-130	20	70-130	20	20			
Naphthalene	91-20-3	2.5	0.216	ug/l	70-130	20	70-130	20	20			
n-Propylbenzene	103-65-1	0.5	0.173	ug/l	69-130	20	69-130	20	20			
1,2,3-Trichlorobenzene	87-61-6	2.5	0.234	ug/l	70-130	20	70-130	20	20			
1,2,4-Trichlorobenzene	120-82-1	2.5	0.22	ug/l	70-130	20	70-130	20	20			
1,3,5-Trimethylbenzene	108-67-8	2.5	0.174	ug/l	64-130	20	64-130	20	20			
1,3,5-Trichlorobenzene	108-70-3	2	0.141	ug/l	70-130	20	70-130	20	20			
1,2,4-Trimethylbenzene	95-63-6	2.5	0.191	ug/l	70-130	20	70-130	20	20			
trans-1,4-Dichloro-2-butene	110-57-6	2.5	0.176	ug/l	70-130	20	70-130	20	20			
Ethyl ether	60-29-7	2.5	0.163	ug/l	59-134	20	59-134	20	20			
Methyl Acetate	79-20-9	10	0.234	ug/l	70-130	20	70-130	20	20			
Ethyl Acetate	141-78-6	10	0.716	ug/l	70-130	20	70-130	20	20			
Isopropyl Ether	108-20-3	2	0.425	ug/l	70-130	20	70-130	20	20			
Cyclohexane	110-82-7	10	0.271	ug/l	70-130	20	70-130	20	20			
Ethyl-Tert-Butyl-Ether	637-92-3	2	0.179	ug/l	70-130	20	70-130	20	20			

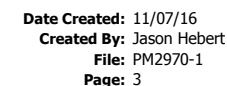
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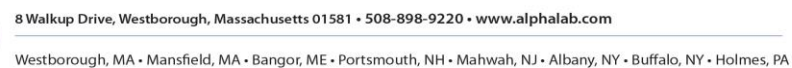




Holding Time: 14 days
Container/Sample Preservation: 3 - Vial HCl preserved

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Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.



Volatiles Sample Data

Form 1

VOA

Client : GZA GeoEnvironmental
 Project Name : FORMER SIGNORE
 Lab ID : L1723956-01
 Client ID : EW-1.25-071317
 Sample Location : ELLICOTTVILLE
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG170717N19
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1723956
 Project Number : 21.0056491.78
 Date Collected : 07/13/17 08:20
 Date Received : 07/13/17
 Date Analyzed : 07/17/17 23:03
 Dilution Factor : 1
 Analyst : PD
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	3.0	2.5	0.70	
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	0.73	0.50	0.18	
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	0.39	0.50	0.17	J
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	35	0.50	0.18	



Form 1

VOA

Client : GZA GeoEnvironmental
 Project Name : FORMER SIGNORE
 Lab ID : L1723956-01
 Client ID : EW-1.25-071317
 Sample Location : ELLICOTTVILLE
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG170717N19
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1723956
 Project Number : 21.0056491.78
 Date Collected : 07/13/17 08:20
 Date Received : 07/13/17
 Date Analyzed : 07/17/17 23:03
 Dilution Factor : 1
 Analyst : PD
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	57	2.5	0.70	
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	1.8	5.0	1.0	J
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U



Form 1

VOA

Client : GZA GeoEnvironmental
 Project Name : FORMER SIGNORE
 Lab ID : WG1023505-5
 Client ID : WG1023505-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG170717N04
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1723956
 Project Number : 21.0056491.78
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 07/17/17 14:40
 Dilution Factor : 1
 Analyst : PD
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U



Form 1

VOA

Client : GZA GeoEnvironmental
 Project Name : FORMER SIGNORE
 Lab ID : WG1023505-5
 Client ID : WG1023505-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG170717N04
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1723956
 Project Number : 21.0056491.78
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 07/17/17 14:40
 Dilution Factor : 1
 Analyst : PD
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
 Data File : VG170717N19.D
 Acq On : 17 Jul 2017 11:03 pm
 Operator : GONZO:PD
 Sample : 11723956-01,31,10,10,,a
 Misc : WG1023505,ICAL13686 (Sig #1); WG,ICAL13686 (Sig #2)
 ALS Vial : 55 Sample Multiplier: 1

Quant Time: Jul 18 12:24:55 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:09:01 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170717N\VG170717N01.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.033	96	684122	10.000	ug/L	0.01
Standard Area 1 = 698045			Recovery	=	98.01%	
59) Chlorobenzene-d5	13.497	117	518520	10.000	ug/L	# 0.02
Standard Area 1 = 530469			Recovery	=	97.75%	
79) 1,4-Dichlorobenzene-d4	17.311	152	246535	10.000	ug/L	0.02
Standard Area 1 = 270453			Recovery	=	91.16%	
System Monitoring Compounds						
36) Dibromofluoromethane	7.972	113	167711	10.387	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.87%	
43) 1,2-Dichloroethane-d4	8.621	65	175737	10.426	ug/L	0.02
Spiked Amount 10.000	Range 70 - 130		Recovery	=	104.26%	
60) Toluene-d8	11.238	98	666019	9.916	ug/L	0.02
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.16%	
83) 4-Bromofluorobenzene	15.383	95	223781	9.703	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.03%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.000		0		N.D.	
3) Chloromethane	0.000		0		N.D. d	
4) Vinyl chloride	0.000		0		N.D. d	
5) Bromomethane	3.968	94	953	0.093	ug/L	# 70
6) Chloroethane	0.000		0		N.D. d	
7) Trichlorofluoromethane	0.000		0		N.D.	
10) 1,1-Dichloroethene	5.199	96	5968	0.391	ug/L	83
11) Carbon disulfide	5.868	76	96207M1	1.841	ug/L	
12) Freon-113	0.000		0		N.D.	
15) Methylene chloride	5.814	84	341		N.D.	
17) Acetone	0.000		0		N.D. d	
18) trans-1,2-Dichloroethene	6.186	96	10831	0.622	ug/L	91
19) Methyl acetate	5.571	43	63		N.D.	
20) Methyl tert-butyl ether	5.983	73	1315		N.D.	
23) 1,1-Dichloroethane	6.721	63	98668	3.004	ug/L	98
28) cis-1,2-Dichloroethene	7.491	96	1110449	57.386	ug/L	87
30) Bromochloromethane	0.000		0		N.D.	
31) Cyclohexane	8.242	56	171		N.D.	
32) Chloroform	0.000		0		N.D.	
34) Carbon tetrachloride	0.000		0		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
 Data File : VG170717N19.D
 Acq On : 17 Jul 2017 11:03 pm
 Operator : GONZO:PD
 Sample : l1723956-01,31,10,10,,a
 Misc : WG1023505,ICAL13686 (Sig #1); WG,ICAL13686 (Sig #2)
 ALS Vial : 55 Sample Multiplier: 1

Quant Time: Jul 18 12:24:55 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:09:01 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170717N\VG170717N01.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
37)	1,1,1-Trichloroethane	8.215	97	4645	0.595	ug/L		92
39)	2-Butanone	0.000		0	N.D.	d		
41)	Benzene	8.776	78	6904	0.093	ug/L	#	85
44)	1,2-Dichloroethane	8.736	62	341	N.D.			
47)	Methyl cyclohexane	0.000		0	N.D.	d		
48)	Trichloroethene	9.574	95	656285	34.708	ug/L	#	79
51)	1,2-Dichloropropane	0.000		0	N.D.			
54)	Bromodichloromethane	0.000		0	N.D.			
57)	1,4-Dioxane	0.000		0	N.D.			
58)	cis-1,3-Dichloropropene	0.000		0	N.D.			
61)	Toluene	11.353	92	543	N.D.			
62)	4-Methyl-2-pentanone	0.000		0	N.D.			
63)	Tetrachloroethene	12.313	166	15086	0.730	ug/L	#	81
65)	trans-1,3-Dichloropropene	0.000		0	N.D.			
68)	1,1,2-Trichloroethane	0.000		0	N.D.			
69)	Chlorodibromomethane	0.000		0	N.D.			
71)	1,2-Dibromoethane	0.000		0	N.D.			
72)	2-Hexanone	0.000		0	N.D.			
73)	Chlorobenzene	13.557	112	564	N.D.			
74)	Ethylbenzene	13.611	91	571	N.D.			
76)	p/m Xylene	13.726	106	588	N.D.			
77)	o Xylene	0.000		0	N.D.			
78)	Styrene	14.477	104	424	N.D.			
80)	Bromoform	0.000		0	N.D.			
82)	Isopropylbenzene	14.964	105	308	N.D.			
87)	1,1,2,2-Tetrachloroethane	0.000		0	N.D.			
100)	1,3-Dichlorobenzene	17.202	146	596	N.D.			
101)	1,4-Dichlorobenzene	17.358	146	856	N.D.			
104)	1,2-Dichlorobenzene	18.000	146	61	N.D.			
106)	1,2-Dibromo-3-chloropr...	0.000		0	N.D.			
109)	1,2,4-Trichlorobenzene	20.759	180	295	N.D.			
111)	1,2,3-Trichlorobenzene	0.000		0	N.D.			

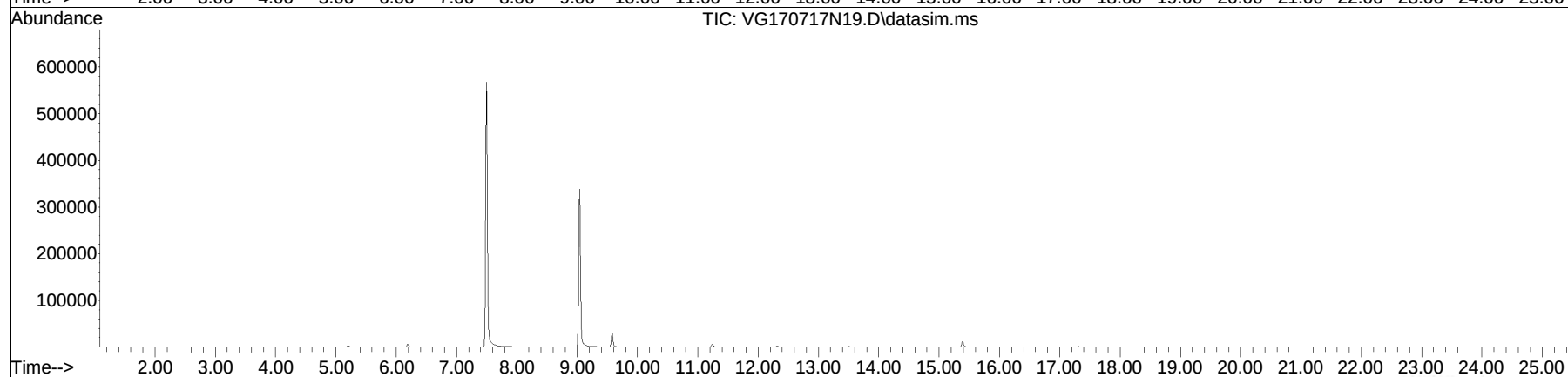
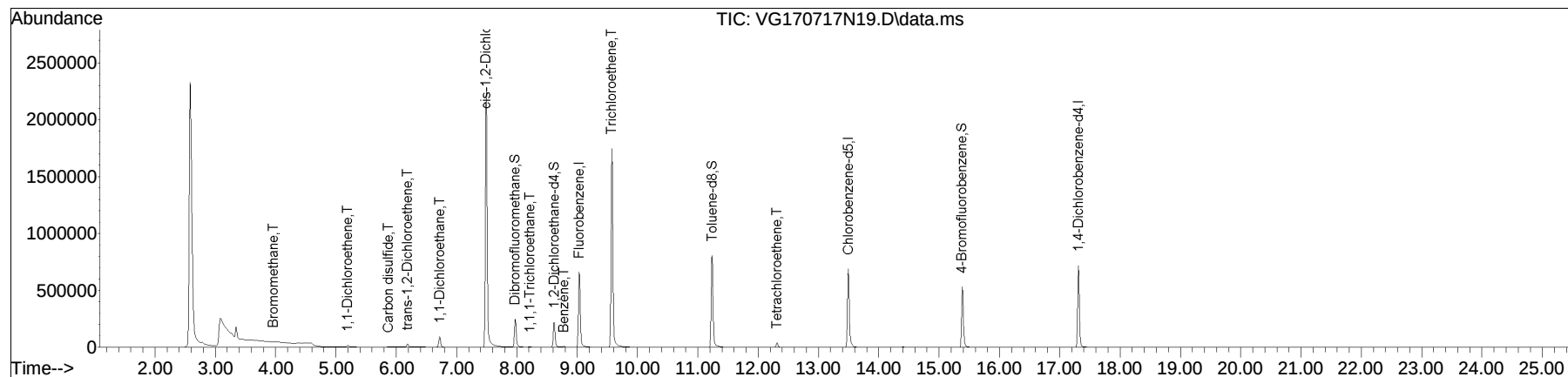
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
 Data File : VG170717N19.D
 Acq On : 17 Jul 2017 11:03 pm
 Operator : GONZO:PD
 Sample : l1723956-01,31,10,10,,a
 Misc : WG1023505,ICAL13686 (Sig #1); WG,ICAL13686 (Sig #2)
 ALS Vial : 55 Sample Multiplier: 1

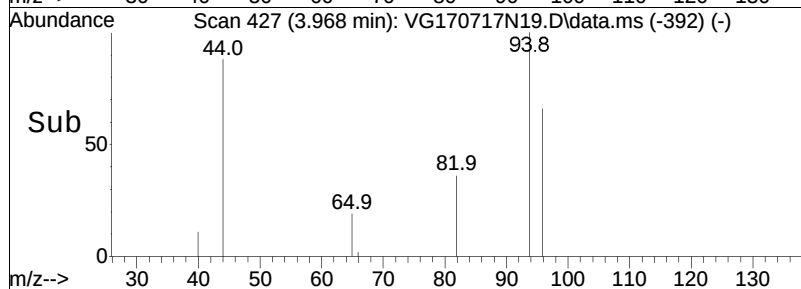
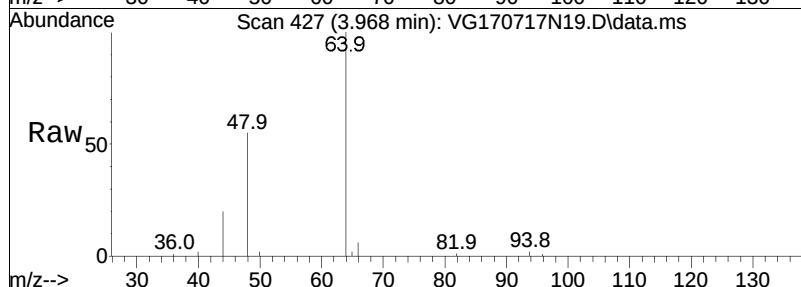
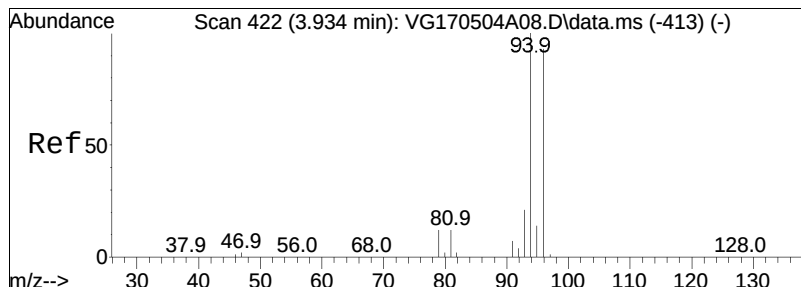
Quant Time: Jul 18 12:24:55 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:09:01 2017
 Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox0717N\VG170717N01.D•



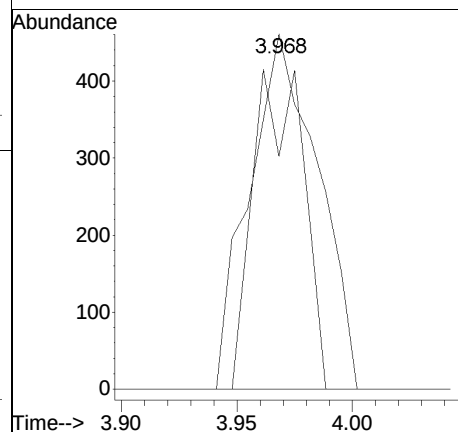
G_170523N_8260.m Tue Jul 18 12:25:09 2017

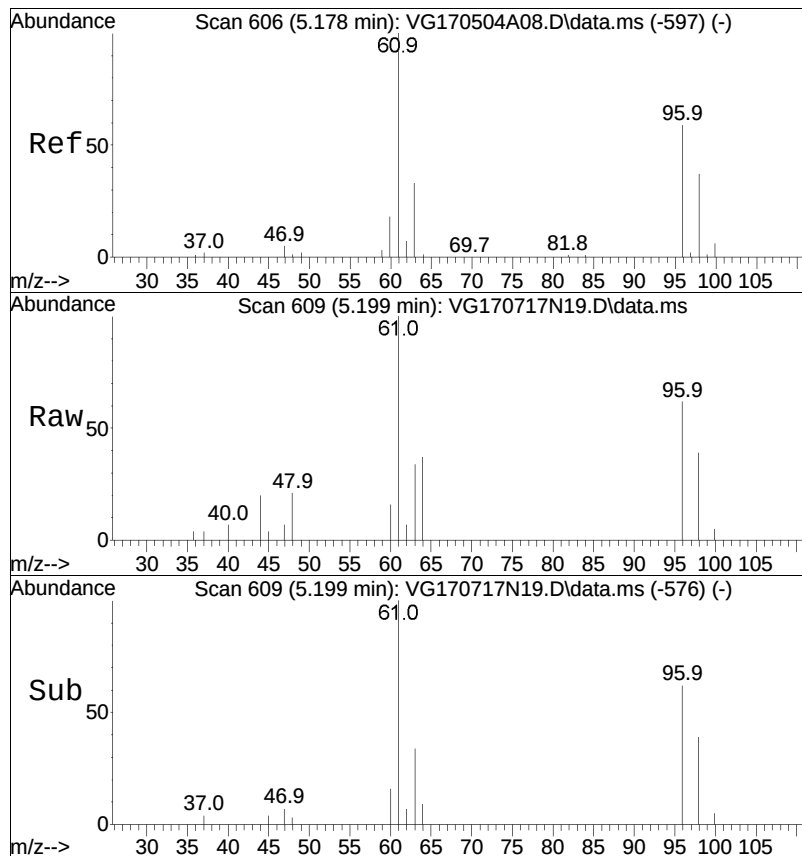
Page 3 : 4



#5
 Bromomethane
 Concen: 0.09 ug/L
 RT: 3.968 min Scan# 427
 Delta R.T. 0.034 min
 Lab File: VG170717N19.D
 Acq: 17 Jul 2017 11:03 pm

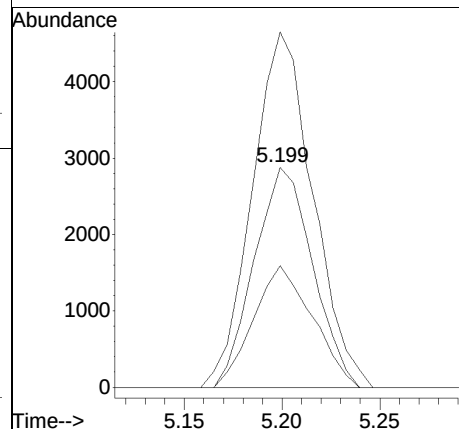
Tgt Ion: 94 Resp: 953
 Ion Ratio Lower Upper
 94 100
 96 65.9 75.4 115.4#

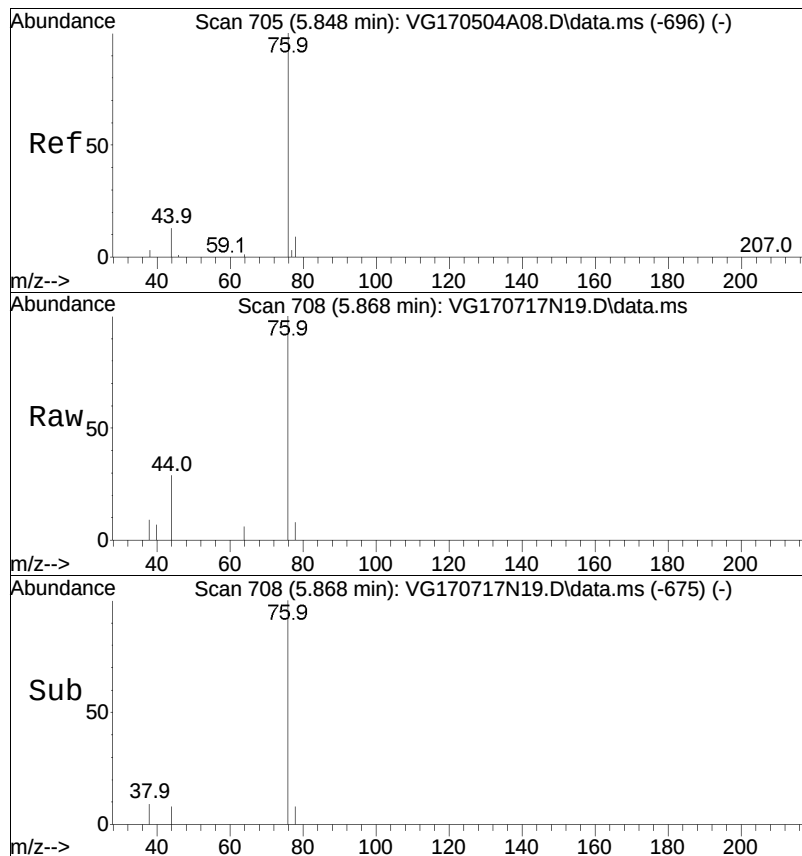




#10
 1,1-Dichloroethene
 Concen: 0.39 ug/L
 RT: 5.199 min Scan# 609
 Delta R.T. 0.021 min
 Lab File: VG170717N19.D
 Acq: 17 Jul 2017 11:03 pm

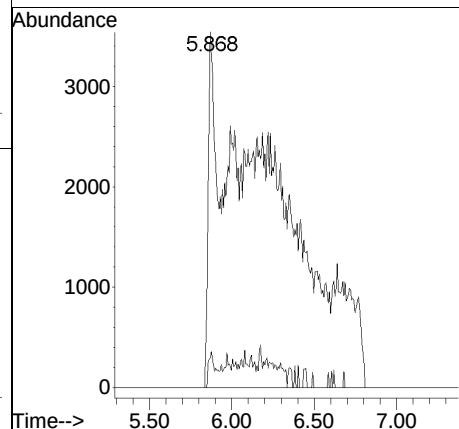
Tgt Ion:	96	Resp:	5968
Ion Ratio	Lower	Upper	
96	100		
61	167.8	157.3	235.9
63	56.0	50.1	75.1

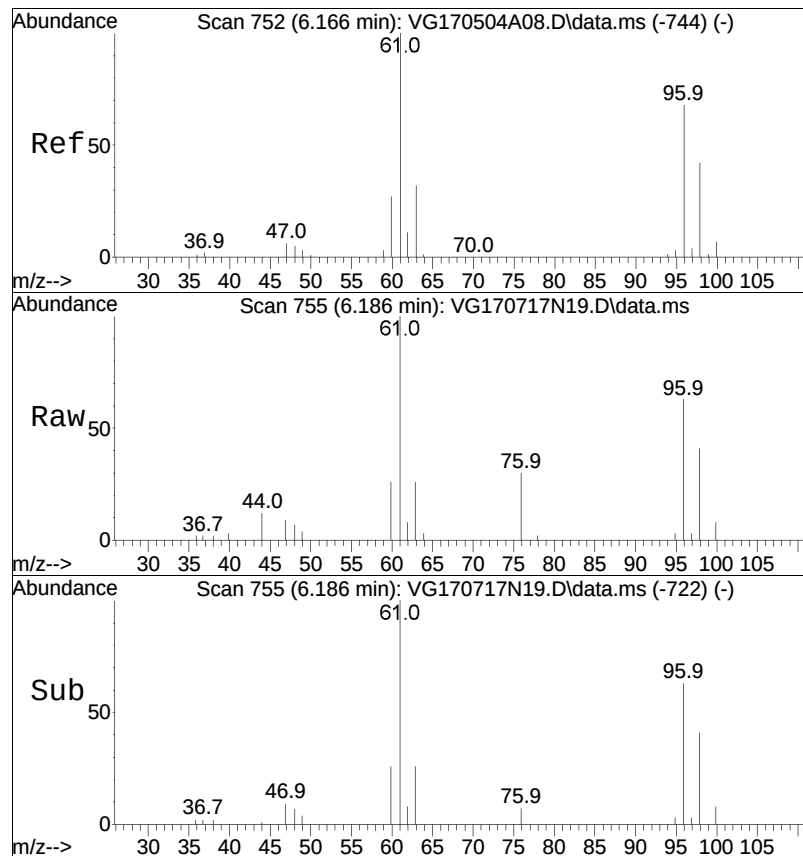




#11
 Carbon disulfide
 Concen: 1.84 ug/L M1
 RT: 5.868 min Scan# 708
 Delta R.T. 0.020 min
 Lab File: VG170717N19.D
 Acq: 17 Jul 2017 11:03 pm

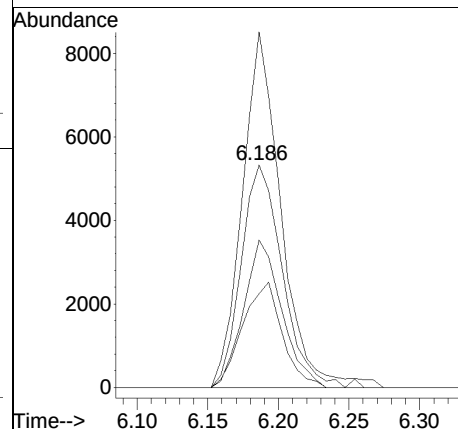
Tgt Ion	Ratio	Lower	Upper
76	100		
78	1.1	5.8	12.0#

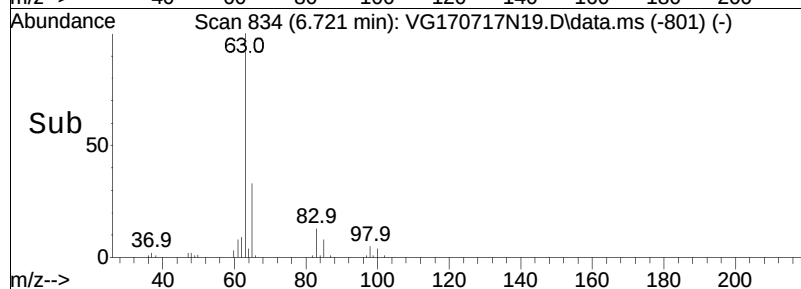
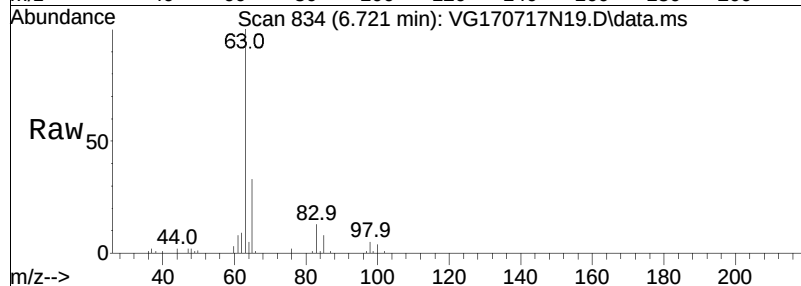
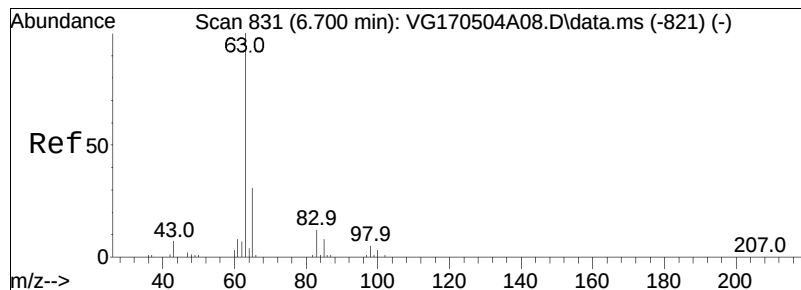




#18
 trans-1,2-Dichloroethene
 Concen: 0.62 ug/L
 RT: 6.186 min Scan# 755
 Delta R.T. 0.020 min
 Lab File: VG170717N19.D
 Acq: 17 Jul 2017 11:03 pm

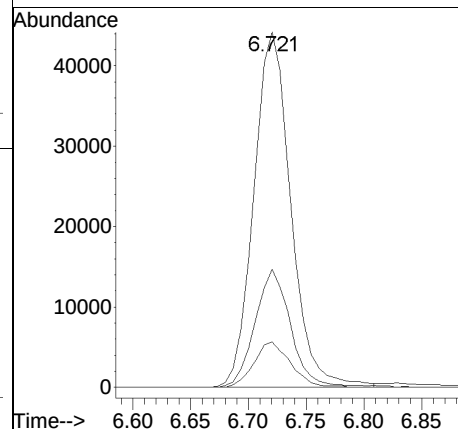
Tgt Ion:	96	Resp:	10831
Ion Ratio	Lower	Upper	
96	100		
61	149.6	107.5	223.3
98	61.1	40.0	83.0
63	45.3	33.9	70.3

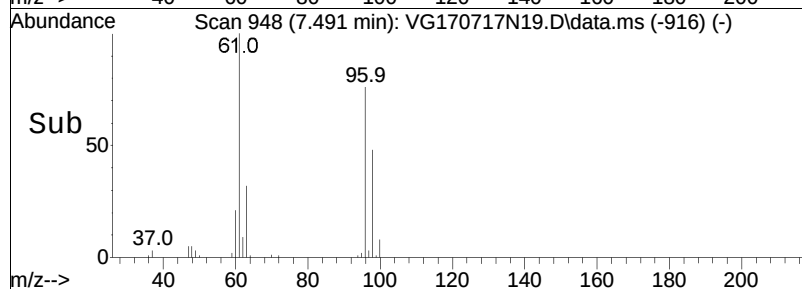
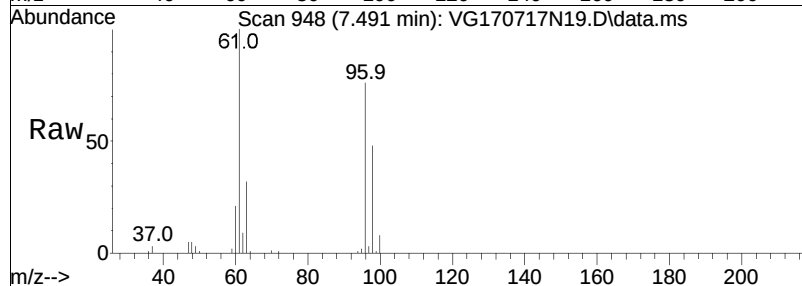
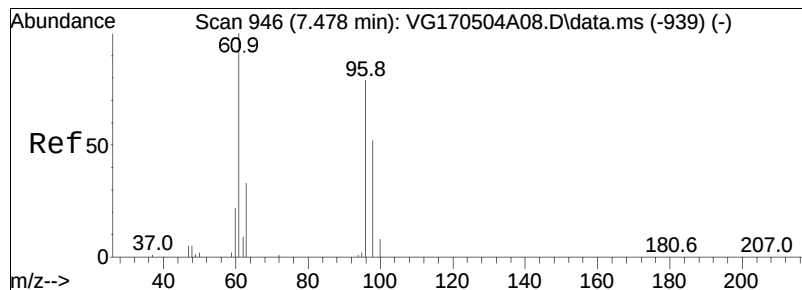




#23
 1,1-Dichloroethane
 Concen: 3.00 ug/L
 RT: 6.721 min Scan# 834
 Delta R.T. 0.021 min
 Lab File: VG170717N19.D
 Acq: 17 Jul 2017 11:03 pm

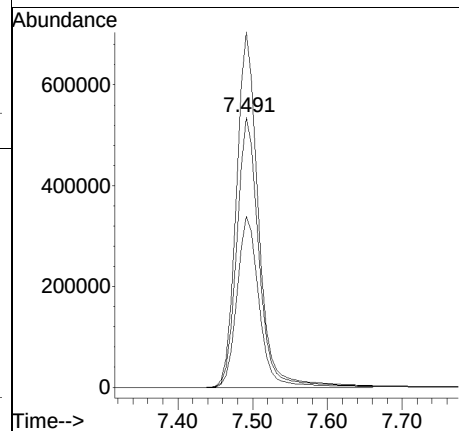
Tgt Ion	Ratio	Lower	Upper
63	100		
65	32.3	11.0	51.0
83	12.7	0.0	32.6

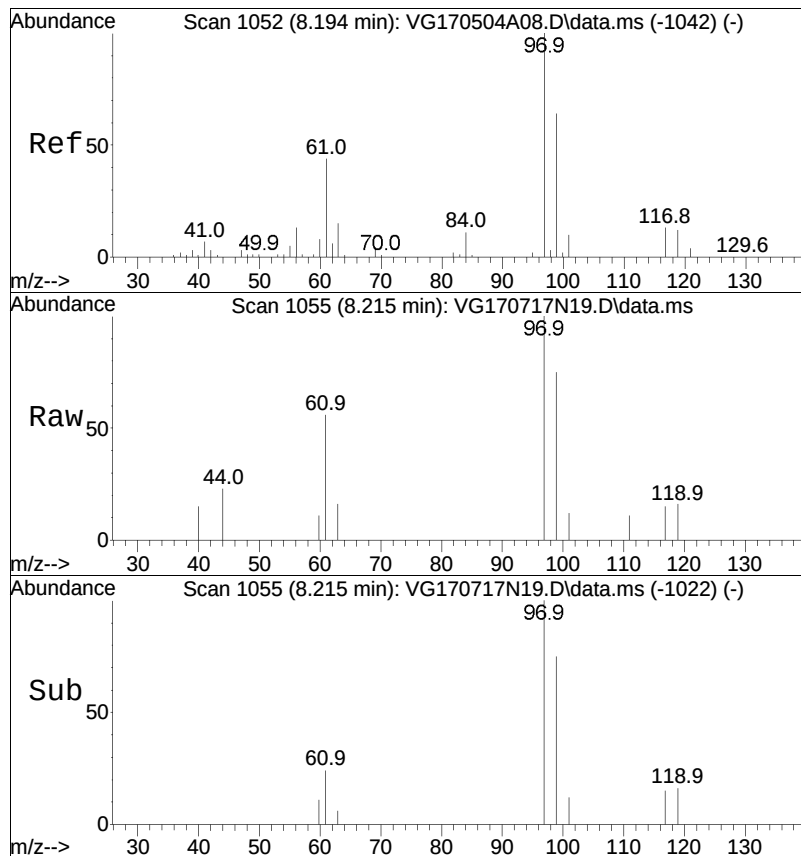




#28
 cis-1,2-Dichloroethene
 Concen: 57.39 ug/L
 RT: 7.491 min Scan# 948
 Delta R.T. 0.013 min
 Lab File: VG170717N19.D
 Acq: 17 Jul 2017 11:03 pm

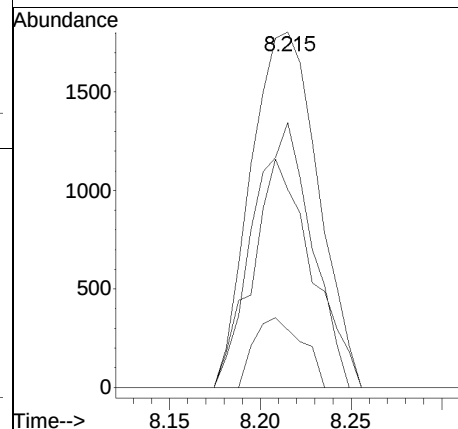
Tgt Ion	Ratio	Lower	Upper
96	100		
61	130.6	121.2	181.8
98	63.6	48.7	73.1

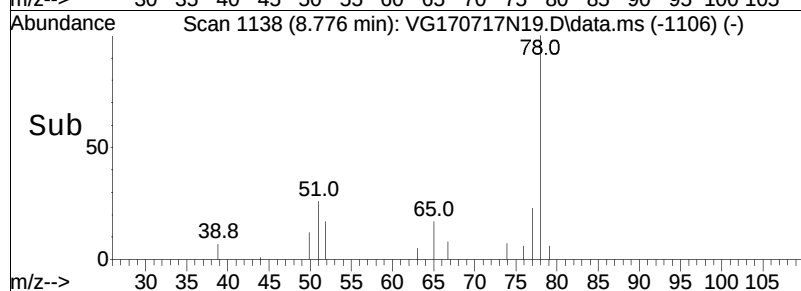
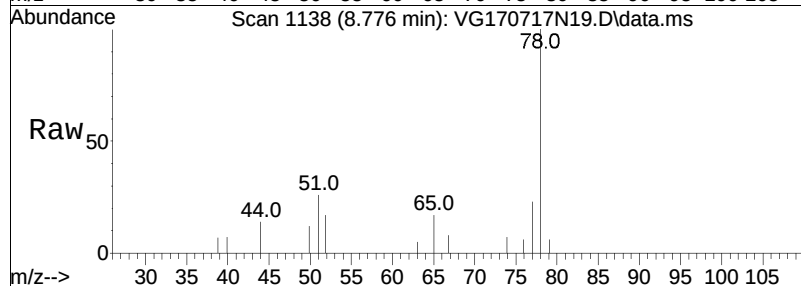
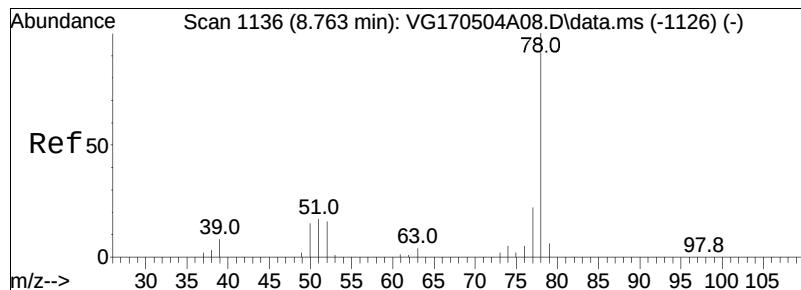




#37
 1,1,1-Trichloroethane
 Concen: 0.59 ug/L
 RT: 8.215 min Scan# 1055
 Delta R.T. 0.021 min
 Lab File: VG170717N19.D
 Acq: 17 Jul 2017 11:03 pm

Tgt Ion:	97	Resp:	4645
Ion Ratio	Lower	Upper	
97	100		
99	64.9	41.3	85.7
61	57.2	29.4	61.0
63	14.2	10.3	21.5





#41

Benzene

Concen: 0.09 ug/L

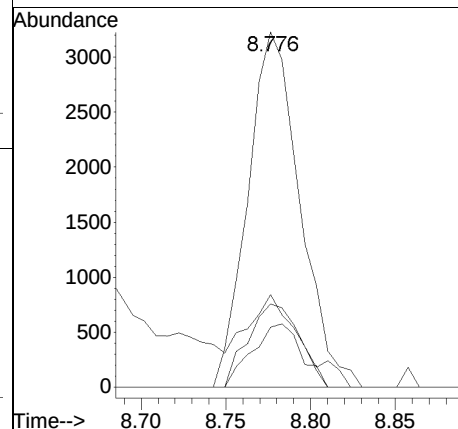
RT: 8.776 min Scan# 1138

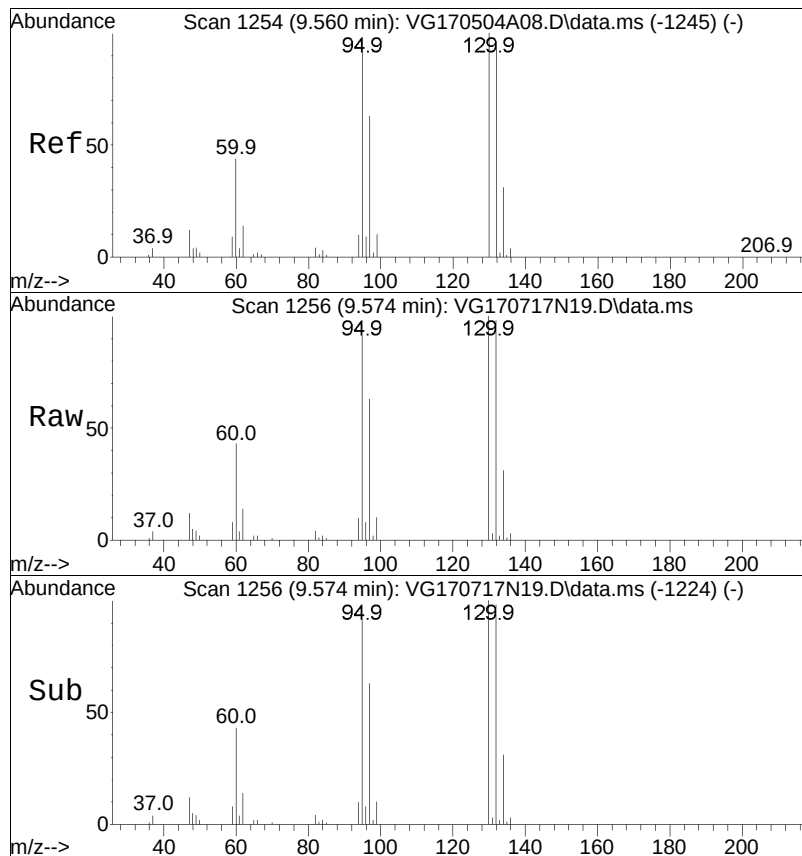
Delta R.T. 0.013 min

Lab File: VG170717N19.D

Acq: 17 Jul 2017 11:03 pm

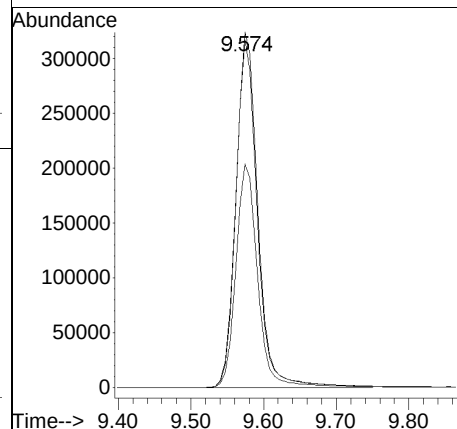
Tgt Ion: 78	Resp:	6904
Ion Ratio	Lower	Upper
78 100		
77 23.2	15.0	31.2
51 0.0	12.7	26.3#
52 16.8	9.9	20.7

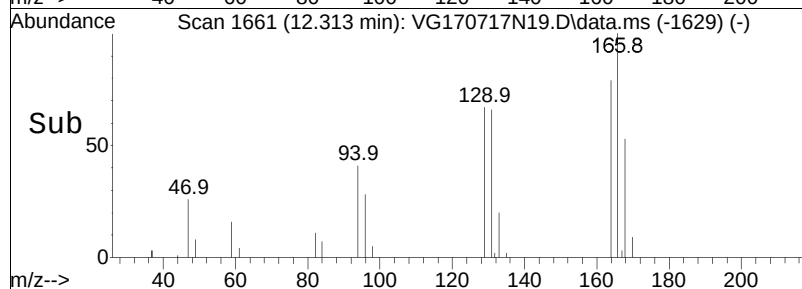
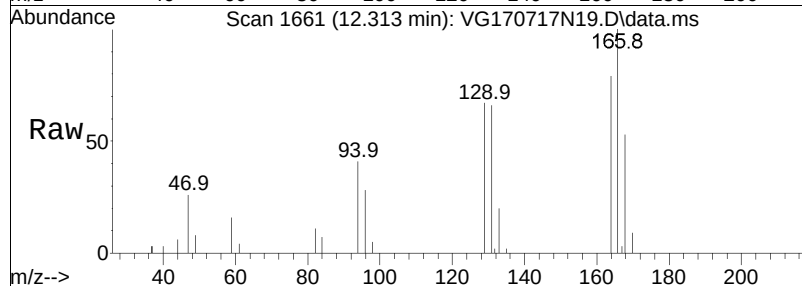
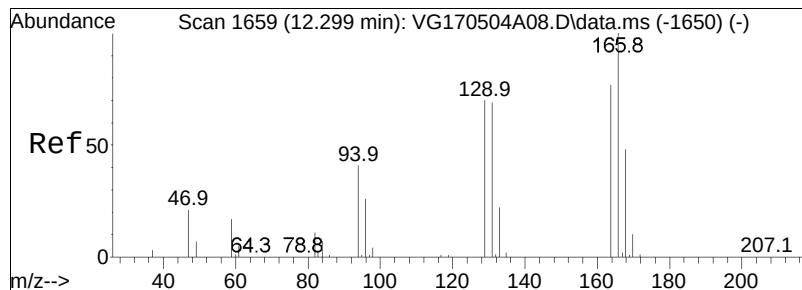




#48
 Trichloroethene
 Concen: 34.71 ug/L
 RT: 9.574 min Scan# 1256
 Delta R.T. 0.014 min
 Lab File: VG170717N19.D
 Acq: 17 Jul 2017 11:03 pm

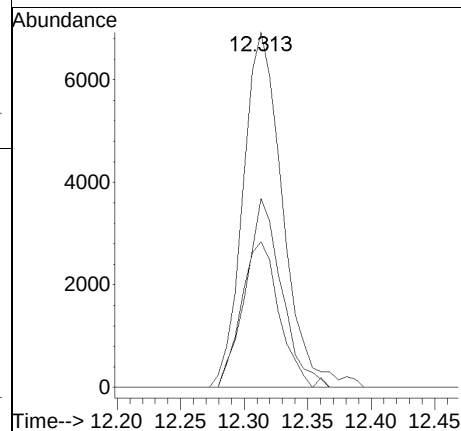
Tgt	Ion: 95	Resp: 656285
Ion	Ratio	Lower Upper
95	100	
97	64.6	47.6 71.4
130	103.0	60.4 90.6#





#63
 Tetrachloroethene
 Concen: 0.73 ug/L
 RT: 12.313 min Scan# 1661
 Delta R.T. 0.014 min
 Lab File: VG170717N19.D
 Acq: 17 Jul 2017 11:03 pm

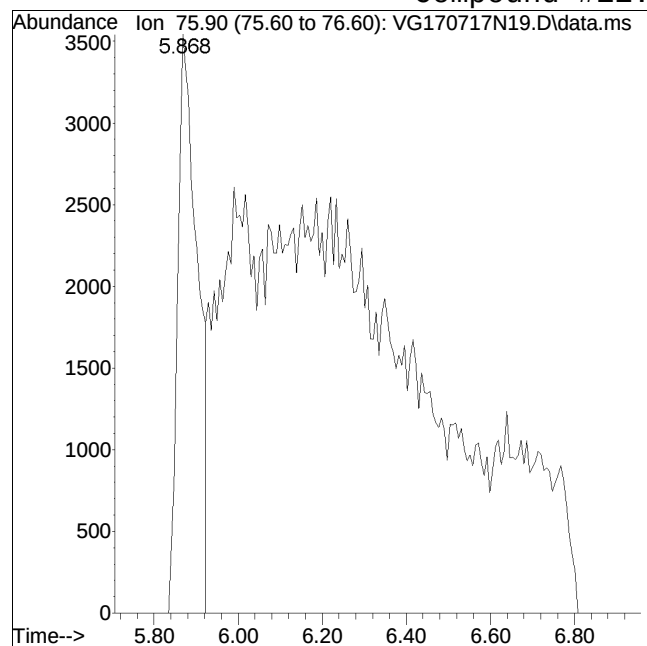
Tgt Ion:	166	Resp:	15086
Ion Ratio	Lower	Upper	
166	100		
168	48.1	30.3	70.3
94	39.2	43.6	83.6#



Manual Integration Report

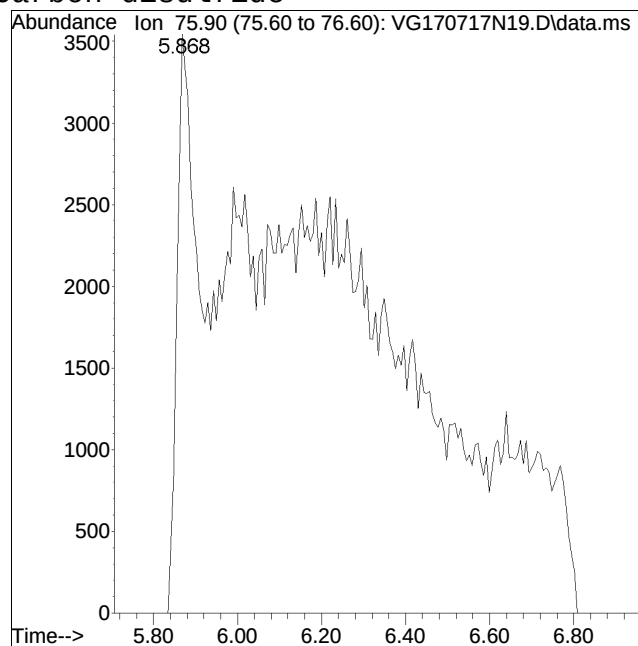
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170717N19.D Operator : GONZO:PD
Date Inj'd : 7/17/2017 11:03 pm Instrument : Gonzo
Sample : l1723956-01,31,10,10,,a Quant Date : 7/18/2017 7:04 am

Compound #11: Carbon disulfide



Original Peak Response = 11652

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



Manual Peak Response = 96207 M1

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary

Form 6

Client : GZA GeoEnvironmental
 Project Name : FORMER SIGNORE
 Instrument ID : GONZO
 Calibration dates : 05/23/17 23:51 05/24/17 17:39

Lab Number : L1723956
 Project Number : 21.0056491.78
 Ical Ref : ICAL13686

Calibration Files

L11 =VG170524A02.D L1 =VG170524A03.D L2 =VG170524A05.D L3 =VG170523N07.D L4 =VG170523N08.D
 L6 =VG170523N09.D L8 =VG170523N10.D L10 =VG170523N11.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----									
2) T Dichlorodifluo		0.263	0.260	0.241	0.267	0.274	0.271	0.264	0.263	4.12
3) T Chloromethane		0.181	0.154	0.178	0.179	0.189	0.207	0.238	0.190	14.07
4) T Vinyl chloride	0.332	0.295	0.297	0.293	0.300	0.295	0.283	0.262	0.295	6.50
5) T Bromomethane		0.189	0.135	0.143	0.148	0.144	0.144	0.146	0.150	11.76
6) T Chloroethane		0.158	0.162	0.155	0.155	0.151	0.141	0.141	0.152	5.32
7) T Trichlorofluor		0.428	0.420	0.390	0.431	0.442	0.429	0.398	0.420	4.48
8) T Ethyl ether		0.131	0.135	0.121	0.120	0.122	0.119	0.117	0.124	5.36
10) T 1,1-Dichloroet		0.232	0.223	0.209	0.221	0.224	0.227	0.225	0.223	3.21
11) T Carbon disulfide		0.999	0.746	0.678	0.804	0.730	0.702	0.687	0.764	14.67
12) T Freon-113		0.226	0.206	0.187	0.209	0.213	0.212	0.210	0.209	5.59
13) T Iodomethane		0.192	0.096	0.089	0.142	0.212	0.250	*Q		0.9986
14) T Acrolein		0.030	0.036	0.031	0.030	0.029	0.031	0.031	0.031	7.55
15) T Methylene chlo		0.300	0.255	0.233	0.227	0.227	0.227	0.230	0.243	11.26
17) T Acetone		0.153	0.074	0.038	0.036	0.038	0.035	0.034	*L	0.9980
18) T trans-1,2-Dich		0.280	0.255	0.241	0.245	0.252	0.254	0.253	0.254	4.91
19) T Methyl acetate		0.145	0.143	0.105	0.110	0.107	0.114	0.114	0.120	14.09
20) T Methyl tert butyl ether		0.462	0.480	0.390	0.436	0.448	0.520	0.547	0.469	11.19
21) T tert-Butyl alc			0.010	0.006	0.007	0.008	0.009	0.010	0.008	18.07
22) T Diisopropyl ether		1.005	1.034	0.944	0.946	0.942	0.971	0.952	0.971	3.67
23) T 1,1-Dichloroet		0.478	0.492	0.469	0.473	0.481	0.486	0.481	0.480	1.58
24) T Halothane		0.191	0.187	0.179	0.193	0.197	0.201	0.200	0.193	4.14
25) T Acrylonitrile		0.078	0.079	0.066	0.063	0.062	0.065	0.065	0.068	10.29
26) T Ethyl tert-but		0.342	0.377	0.301	0.384	0.463	0.581	0.667	*Q	0.9984
27) T Vinyl acetate		0.304	0.301	0.291	0.357	0.386	0.434	0.445	0.360	17.89
28) T cis-1,2-Dichlo		0.297	0.291	0.274	0.278	0.284	0.284	0.273	0.283	3.10
29) T 2,2-Dichloropr		0.126	0.130	0.111	0.172	0.247	0.279	0.308	*Q	0.9958
30) T Bromochloromet		0.123	0.124	0.122	0.121	0.122	0.123	0.112	0.121	3.39
31) T Cyclohexane		0.445	0.430	0.393	0.442	0.464	0.460	0.456	0.441	5.50
32) T Chloroform		0.438	0.459	0.438	0.443	0.453	0.452	0.447	0.447	1.79
33) T Ethyl acetate		0.179	0.188	0.155	0.165	0.157	0.165	0.160	0.167	7.35
34) T Carbon tetrachloride		0.165	0.179	0.186	0.275	0.341	0.351	0.354	*L	0.9926
35) T Tetrahydrofuran		0.058	0.064	0.049	0.048	0.046	0.048	0.047	0.051	13.24
36) S Dibromofluoromethane	0.236	0.234	0.237	0.235	0.235	0.237	0.238	0.236	0.236	0.46
37) T 1,1,1-Trichlor		0.257	0.268	0.252	0.331	0.386	0.396	0.397	*L	0.9958
39) T 2-Butanone		0.143	0.105	0.070	0.064	0.061	0.063	0.062	*L	0.9992
40) T 1,1-Dichloropr		0.357	0.350	0.325	0.348	0.362	0.363	0.360	0.352	3.73
41) T Benzene	1.135	1.095	1.111	1.071	1.074	1.104	1.099	1.036	1.091	2.75

Initial Calibration Summary

Form 6

Client : GZA GeoEnvironmental
 Project Name : FORMER SIGNORE
 Instrument ID : GONZO
 Calibration dates : 05/23/17 23:51 05/24/17 17:39

Lab Number : L1723956
 Project Number : 21.0056491.78
 Ical Ref : ICAL13686

Calibration Files

L11 =VG170524A02.D L1 =VG170524A03.D L2 =VG170524A05.D L3 =VG170523N07.D L4 =VG170523N08.D
 L6 =VG170523N09.D L8 =VG170523N10.D L10 =VG170523N11.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
42) T Tertiary-Amyl Methyl Ether		0.290	0.318	0.276	0.387	0.458	0.536	0.571	*Q	0.9975
43) S 1,2-Dichloroethane-d4	0.272	0.271	0.262	0.244	0.236	0.230	0.230	0.225	0.246	7.87
44) T 1,2-Dichloroet		0.350	0.349	0.314	0.308	0.307	0.307	0.303	0.320	6.48
47) T Methyl cyclohe		0.371	0.351	0.328	0.359	0.383	0.369	0.368	0.361	4.93
48) T Trichloroethene	0.325	0.274	0.268	0.256	0.264	0.276	0.275	0.273	0.276	7.57
50) T Dibromomethane		0.140	0.140	0.127	0.127	0.128	0.130	0.130	0.132	4.56
51) T 1,2-Dichloropr		0.264	0.264	0.262	0.266	0.272	0.273	0.272	0.267	1.74
53) T 2-Chloroethyl		0.079	0.096	0.097	0.104	0.112	0.117	0.120	0.104	13.88
54) T Bromodichlorom		0.260	0.278	0.282	0.316	0.338	0.340	0.339	0.308	10.94
57) T 1,4-Dioxane		0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	8.60
58) T cis-1,3-Dichlo		0.216	0.222	0.249	0.330	0.375	0.390	0.394	*L	0.9957
59) I Chlorobenzene-d5	-----ISTD-----									
60) S Toluene-d8	1.313	1.310	1.307	1.300	1.287	1.280	1.282	1.283	1.295	1.07
61) T Toluene		0.913	0.931	0.895	0.895	0.913	0.910	0.873	0.904	2.06
62) T 4-Methyl-2-pen		0.081	0.091	0.076	0.078	0.074	0.078	0.077	0.079	7.17
63) T Tetrachloroethene		0.434	0.390	0.379	0.395	0.403	0.401	0.389	0.399	4.40
65) T trans-1,3-Dich		0.169	0.174	0.211	0.318	0.384	0.410	0.428	*L	0.9904
67) T Ethyl methacry		0.197	0.239	0.267	0.313	0.320	0.337	0.339	0.287	18.98
68) T 1,1,2-Trichlor		0.219	0.235	0.211	0.207	0.202	0.206	0.206	0.212	5.38
69) T Chlorodibromom		0.182	0.208	0.226	0.272	0.297	0.305	0.308	*L	0.9979
70) T 1,3-Dichloropr		0.469	0.470	0.431	0.425	0.419	0.428	0.427	0.438	4.94
71) T 1,2-Dibromoethane		0.190	0.213	0.211	0.231	0.231	0.239	0.239	0.222	8.14
72) T 2-Hexanone		0.126	0.151	0.133	0.136	0.129	0.136	0.135	0.135	5.89
73) T Chlorobenzene		1.052	1.018	0.985	0.993	1.023	1.018	0.979	1.010	2.52
74) T Ethylbenzene		1.616	1.673	1.634	1.681	1.736	1.682	1.396	1.631	6.77
75) T 1,1,1,2-Tetrac		0.182	0.208	0.249	0.308	0.342	0.337	0.317	*L	0.9974
76) T p/m Xylene		0.659	0.657	0.647	0.666	0.674	0.638	0.569	0.644	5.43
77) T o Xylene		0.598	0.633	0.628	0.640	0.644	0.607	0.545	0.613	5.67
78) T Styrene		1.004	1.011	1.062	1.093	1.099	1.028	0.783	1.011	10.65
79) I 1,4-Dichlorobenzene-d4	-----ISTD-----									
80) T Bromoform		0.202	0.196	0.219	0.285	0.311	0.328	0.341	*L	0.9954
82) T Isopropylbenzene		3.421	3.440	3.217	3.272	3.223	3.166	2.760	3.214	7.02
83) S 4-Bromofluorobenzene	0.982	0.980	0.972	0.928	0.914	0.880	0.905	0.922	0.935	4.07
84) T Bromobenzene		0.894	0.831	0.811	0.806	0.783	0.796	0.789	0.816	4.64
85) T n-Propylbenzene		4.007	3.898	3.648	3.722	3.714	3.616	2.896	3.643	9.82
86) T 1,4-Dichlorobu		0.923	0.973	0.849	0.851	0.798	0.831	0.848	0.868	6.88
87) T 1,1,2,2-Tetrac		0.558	0.572	0.481	0.479	0.447	0.473	0.480	0.499	9.42
88) T 4-Ethyltoluene		3.220	3.187	3.071	3.147	3.136	3.072	2.737	3.081	5.24



Initial Calibration Summary

Form 6

Client : GZA GeoEnvironmental
 Project Name : FORMER SIGNORE
 Instrument ID : GONZO
 Calibration dates : 05/23/17 23:51 05/24/17 17:39

Lab Number : L1723956
 Project Number : 21.0056491.78
 Ical Ref : ICAL13686

Calibration Files

L11 =VG170524A02.D L1 =VG170524A03.D L2 =VG170524A05.D L3 =VG170523N07.D L4 =VG170523N08.D
 L6 =VG170523N09.D L8 =VG170523N10.D L10 =VG170523N11.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
89) T	2-Chlorotoluene	2.382	2.296	2.200	2.174	2.141	2.171	2.127	2.213	4.18	
90) T	1,3,5-Trimethy	2.592	2.701	2.571	2.560	2.559	2.539	2.391	2.559	3.58	
91) T	1,2,3-Trichlor	0.541	0.495	0.384	0.374	0.346	0.365	0.369	0.410	18.40	
92) T	trans-1,4-Dich	0.118	0.134	0.112	0.128	0.135	0.146	0.153	0.132	10.92	
93) T	4-Chlorotoluene	2.580	2.419	2.260	2.260	2.292	2.284	2.199	2.328	5.57	
94) T	tert-Butylbenzene	2.336	2.281	2.173	2.198	2.260	2.198	2.130	2.225	3.18	
97) T	1,2,4-Trimethy	2.675	2.721	2.630	2.633	2.655	2.605	2.372	2.613	4.30	
98) T	sec-Butylbenzene	3.252	3.138	2.929	3.041	3.143	3.006	2.671	3.026	6.23	
99) T	p-Isopropyltol	2.803	2.735	2.628	2.724	2.815	2.697	2.480	2.697	4.26	
100) T	1,3-Dichlorobe	1.664	1.511	1.461	1.480	1.508	1.509	1.511	1.520	4.35	
101) T	1,4-Dichlorobe	1.780	1.579	1.461	1.474	1.505	1.509	1.499	1.544	7.16	
102) T	p-Diethylbenzene	2.185	2.203	2.211	2.343	2.500	2.403	2.351	2.314	5.13	
103) T	n-Butylbenzene	2.918	2.806	2.707	2.832	2.992	2.786	2.659	2.814	4.08	
104) T	1,2-Dichlorobe	1.457	1.380	1.316	1.322	1.328	1.352	1.372	1.361	3.61	
105) T	1,2,4,5-Tetram	1.701	1.664	1.604	1.667	1.723	1.598	1.510	1.638	4.44	
106) T	1,2-Dibromo-3-	0.024	0.031	0.037	0.053	0.058	0.064	0.066	*L	0.9927	
107) T	1,3,5-Trichlor	1.167	1.029	0.969	1.010	1.079	1.036	1.052	1.049	5.96	
108) T	Hexachlorobuta	0.550	0.409	0.351	0.372	0.407	0.366	0.410	0.409	16.26	
109) T	1,2,4-Trichlor	0.983	0.794	0.689	0.749	0.777	0.754	0.779	0.789	11.63	
110) T	Naphthalene	1.463	1.224	0.997	1.118	1.076	1.074	1.165	1.159	13.13	
111) T	1,2,3-Trichlor	0.818	0.593	0.464	0.513	0.492	0.466	0.489	*L	0.9992	

Response Factor Report Gonzo

Method Path : I:\VOLATILES\Gonzo\2017\170523N\
 Method File : G_170523N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Thu May 25 10:09:01 2017
 Response Via : Initial Calibration

Calibration Files

L11 =VG170524A02.D L1 =VG170524A03.D L2 =VG170524A05.D L3 =VG170523N07.D L4 =VG170523N08.D
 L6 =VG170523N09.D L8 =VG170523N10.D L10 =VG170523N11.D

Compound		L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD

1) I	Fluorobenzene	-----ISTD-----									
2) T	Dichlorodifluo...	0.263	0.260	0.241	0.267	0.274	0.271	0.264	0.263	4.12	
3) T	Chloromethane	0.181	0.154	0.178	0.179	0.189	0.207	0.238	0.190	14.07	
4) T	Vinyl chloride	0.332	0.295	0.297	0.293	0.300	0.295	0.283	0.262	0.295	6.50
5) T	Bromomethane	0.189	0.135	0.143	0.148	0.144	0.144	0.146	0.150	11.76	
6) T	Chloroethane	0.158	0.162	0.155	0.155	0.151	0.141	0.141	0.152	5.32	
7) T	Trichlorofluor...	0.428	0.420	0.390	0.431	0.442	0.429	0.398	0.420	4.48	
8) T	Ethyl ether	0.131	0.135	0.121	0.120	0.122	0.119	0.117	0.124	5.36	
10) T	1,1-Dichloroet...	0.232	0.223	0.209	0.221	0.224	0.227	0.225	0.223	3.21	
11) T	Carbon disulfide	0.999	0.746	0.678	0.804	0.730	0.702	0.687	0.764	14.67	
12) T	Freon-113	0.226	0.206	0.187	0.209	0.213	0.212	0.210	0.209	5.59	
13) T	Iodomethane	0.192	0.096	0.089	0.142	0.212	0.250		*Q	0.9986	
14) T	Acrolein	0.030	0.036	0.031	0.030	0.029	0.031	0.031	0.031	7.55	
15) T	Methylene chlo...	0.300	0.255	0.233	0.227	0.227	0.227	0.230	0.243	11.26	
17) T	Acetone	0.153	0.074	0.038	0.036	0.038	0.035	0.034	*L	0.9980	
18) T	trans-1,2-Dich...	0.280	0.255	0.241	0.245	0.252	0.254	0.253	0.254	4.91	
19) T	Methyl acetate	0.145	0.143	0.105	0.110	0.107	0.114	0.114	0.120	14.09	
20) T	Methyl tert-bu...	0.462	0.480	0.390	0.436	0.448	0.520	0.547	0.469	11.19	
21) T	tert-Butyl alc...		0.010	0.006	0.007	0.008	0.009	0.010	0.008	18.07	
22) T	Diisopropyl ether	1.005	1.034	0.944	0.946	0.942	0.971	0.952	0.971	3.67	
23) T	1,1-Dichloroet...	0.478	0.492	0.469	0.473	0.481	0.486	0.481	0.480	1.58	
24) T	Halothane	0.191	0.187	0.179	0.193	0.197	0.201	0.200	0.193	4.14	
25) T	Acrylonitrile	0.078	0.079	0.066	0.063	0.062	0.065	0.065	0.068	10.29	
26) T	Ethyl tert-but...	0.342	0.377	0.301	0.384	0.463	0.581	0.667	*Q	0.9984	
27) T	Vinyl acetate	0.304	0.301	0.291	0.357	0.386	0.434	0.445	0.360	17.89	
28) T	cis-1,2-Dichlo...	0.297	0.291	0.274	0.278	0.284	0.284	0.273	0.283	3.10	
29) T	2,2-Dichloropr...	0.126	0.130	0.111	0.172	0.247	0.279	0.308	*Q	0.9958	
30) T	Bromochloromet...	0.123	0.124	0.122	0.121	0.122	0.123	0.112	0.121	3.39	
31) T	Cyclohexane	0.445	0.430	0.393	0.442	0.464	0.460	0.456	0.441	5.50	
32) T	Chloroform	0.438	0.459	0.438	0.443	0.453	0.452	0.447	0.447	1.79	
33) T	Ethyl acetate	0.179	0.188	0.155	0.165	0.157	0.165	0.160	0.167	7.35	

Response Factor Report Gonzo

Method Path : I:\VOLATILES\Gonzo\2017\170523N\
 Method File : G_170523N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Thu May 25 10:09:01 2017
 Response Via : Initial Calibration

Calibration Files

L11 =VG170524A02.D L1 =VG170524A03.D L2 =VG170524A05.D L3 =VG170523N07.D L4 =VG170523N08.D
 L6 =VG170523N09.D L8 =VG170523N10.D L10 =VG170523N11.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
34)	T Carbon tetrach...	0.165	0.179	0.186	0.275	0.341	0.351	0.354	*L	0.9926	
35)	T Tetrahydrofuran	0.058	0.064	0.049	0.048	0.046	0.048	0.047	0.051	13.24	
36)	S Dibromofluorom...	0.236	0.234	0.237	0.235	0.237	0.238	0.236	0.236	0.46	
37)	T 1,1,1-Trichlor...	0.257	0.268	0.252	0.331	0.386	0.396	0.397	*L	0.9958	
39)	T 2-Butanone	0.143	0.105	0.070	0.064	0.061	0.063	0.062	*L	0.9992	
40)	T 1,1-Dichloropr...	0.357	0.350	0.325	0.348	0.362	0.363	0.360	0.352	3.73	
41)	T Benzene	1.135	1.095	1.111	1.071	1.074	1.104	1.099	1.036	1.091	2.75
42)	T tert-Amyl meth...	0.290	0.318	0.276	0.387	0.458	0.536	0.571	*Q	0.9975	
43)	S 1,2-Dichloroet...	0.272	0.271	0.262	0.244	0.236	0.230	0.230	0.225	0.246	7.87
44)	T 1,2-Dichloroet...	0.350	0.349	0.314	0.308	0.307	0.307	0.303	0.320	6.48	
47)	T Methyl cyclohe...	0.371	0.351	0.328	0.359	0.383	0.369	0.368	0.361	4.93	
48)	T Trichloroethene	0.325	0.274	0.268	0.256	0.264	0.276	0.275	0.273	0.276	7.57
50)	T Dibromomethane	0.140	0.140	0.127	0.127	0.128	0.130	0.130	0.132	4.56	
51)	T 1,2-Dichloropr...	0.264	0.264	0.262	0.266	0.272	0.273	0.272	0.267	1.74	
53)	T 2-Chloroethyl ...	0.079	0.096	0.097	0.104	0.112	0.117	0.120	0.104	13.88	
54)	T Bromodichlorom...	0.260	0.278	0.282	0.316	0.338	0.340	0.339	0.308	10.94	
57)	T 1,4-Dioxane	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	8.60	
58)	T cis-1,3-Dichlo...	0.216	0.222	0.249	0.330	0.375	0.390	0.394	*L	0.9957	
59)	I Chlorobenzene-d5	-----ISTD-----									
60)	S Toluene-d8	1.313	1.310	1.307	1.300	1.287	1.280	1.282	1.283	1.295	1.07
61)	T Toluene	0.913	0.931	0.895	0.895	0.913	0.910	0.873	0.904	2.06	
62)	T 4-Methyl-2-pen...	0.081	0.091	0.076	0.078	0.074	0.078	0.077	0.079	7.17	
63)	T Tetrachloroethene	0.434	0.390	0.379	0.395	0.403	0.401	0.389	0.399	4.40	
65)	T trans-1,3-Dich...	0.169	0.174	0.211	0.318	0.384	0.410	0.428	*L	0.9904	
67)	T Ethyl methacry...	0.197	0.239	0.267	0.313	0.320	0.337	0.339	0.287	18.98	
68)	T 1,1,2-Trichlor...	0.219	0.235	0.211	0.207	0.202	0.206	0.206	0.212	5.38	
69)	T Chlorodibromom...	0.182	0.208	0.226	0.272	0.297	0.305	0.308	*L	0.9979	
70)	T 1,3-Dichloropr...	0.469	0.470	0.431	0.425	0.419	0.428	0.427	0.438	4.94	
71)	T 1,2-Dibromoethane	0.190	0.213	0.211	0.231	0.231	0.239	0.239	0.222	8.14	
72)	T 2-Hexanone	0.126	0.151	0.133	0.136	0.129	0.136	0.135	0.135	5.89	
73)	T Chlorobenzene	1.052	1.018	0.985	0.993	1.023	1.018	0.979	1.010	2.52	

Response Factor Report Gonzo

Method Path : I:\VOLATILES\Gonzo\2017\170523N\
 Method File : G_170523N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Thu May 25 10:09:01 2017
 Response Via : Initial Calibration

Calibration Files

L11 =VG170524A02.D L1 =VG170524A03.D L2 =VG170524A05.D L3 =VG170523N07.D L4 =VG170523N08.D
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	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
74) T	Ethylbenzene	1.616	1.673	1.634	1.681	1.736	1.682	1.396	1.631	6.77	
75) T	1,1,1,2-Tetrac...	0.182	0.208	0.249	0.308	0.342	0.337	0.317	*L	0.9974	
76) T	p/m Xylene	0.659	0.657	0.647	0.666	0.674	0.638	0.569	0.644	5.43	
77) T	o Xylene	0.598	0.633	0.628	0.640	0.644	0.607	0.545	0.613	5.67	
78) T	Styrene	1.004	1.011	1.062	1.093	1.099	1.028	0.783	1.011	10.65	
79) I	1,4-Dichlorobenzene-d4	-----ISTD-----									
80) T	Bromoform	0.202	0.196	0.219	0.285	0.311	0.328	0.341	*L	0.9954	
82) T	Isopropylbenzene	3.421	3.440	3.217	3.272	3.223	3.166	2.760	3.214	7.02	
83) S	4-Bromofluorob...	0.982	0.980	0.972	0.928	0.914	0.880	0.905	0.922	0.935	4.07
84) T	Bromobenzene	0.894	0.831	0.811	0.806	0.783	0.796	0.789	0.816	4.64	
85) T	n-Propylbenzene	4.007	3.898	3.648	3.722	3.714	3.616	2.896	3.643	9.82	
86) T	1,4-Dichlorobu...	0.923	0.973	0.849	0.851	0.798	0.831	0.848	0.868	6.88	
87) T	1,1,2,2-Tetrac...	0.558	0.572	0.481	0.479	0.447	0.473	0.480	0.499	9.42	
88) T	4-Ethyltoluene	3.220	3.187	3.071	3.147	3.136	3.072	2.737	3.081	5.24	
89) T	2-Chlorotoluene	2.382	2.296	2.200	2.174	2.141	2.171	2.127	2.213	4.18	
90) T	1,3,5-Trimethy...	2.592	2.701	2.571	2.560	2.559	2.539	2.391	2.559	3.58	
91) T	1,2,3-Trichlor...	0.541	0.495	0.384	0.374	0.346	0.365	0.369	0.410	18.40	
92) T	trans-1,4-Dich...	0.118	0.134	0.112	0.128	0.135	0.146	0.153	0.132	10.92	
93) T	4-Chlorotoluene	2.580	2.419	2.260	2.260	2.292	2.284	2.199	2.328	5.57	
94) T	tert-Butylbenzene	2.336	2.281	2.173	2.198	2.260	2.198	2.130	2.225	3.18	
97) T	1,2,4-Trimethy...	2.675	2.721	2.630	2.633	2.655	2.605	2.372	2.613	4.30	
98) T	sec-Butylbenzene	3.252	3.138	2.929	3.041	3.143	3.006	2.671	3.026	6.23	
99) T	p-Isopropyltol...	2.803	2.735	2.628	2.724	2.815	2.697	2.480	2.697	4.26	
100) T	1,3-Dichlorobe...	1.664	1.511	1.461	1.480	1.508	1.509	1.511	1.520	4.35	
101) T	1,4-Dichlorobe...	1.780	1.579	1.461	1.474	1.505	1.509	1.499	1.544	7.16	
102) T	p-Diethylbenzene	2.185	2.203	2.211	2.343	2.500	2.403	2.351	2.314	5.13	
103) T	n-Butylbenzene	2.918	2.806	2.707	2.832	2.992	2.786	2.659	2.814	4.08	
104) T	1,2-Dichlorobe...	1.457	1.380	1.316	1.322	1.328	1.352	1.372	1.361	3.61	
105) T	1,2,4,5-Tetram...	1.701	1.664	1.604	1.667	1.723	1.598	1.510	1.638	4.44	
106) T	1,2-Dibromo-3-...	0.024	0.031	0.037	0.053	0.058	0.064	0.066	*L	0.9927	
107) T	1,3,5-Trichlor...	1.167	1.029	0.969	1.010	1.079	1.036	1.052	1.049	5.96	

Response Factor Report Gonzo

Method Path : I:\VOLATILES\Gonzo\2017\170523N\
Method File : G_170523N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Thu May 25 10:09:01 2017
Response Via : Initial Calibration

Calibration Files

L11 =VG170524A02.D L1 =VG170524A03.D L2 =VG170524A05.D L3 =VG170523N07.D L4 =VG170523N08.D
L6 =VG170523N09.D L8 =VG170523N10.D L10 =VG170523N11.D

Compound		L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
108) T	Hexachlorobuta...	0.550	0.409	0.351	0.372	0.407	0.366	0.410	0.409	16.26	
109) T	1,2,4-Trichlor...	0.983	0.794	0.689	0.749	0.777	0.754	0.779	0.789	11.63	
110) T	Naphthalene	1.463	1.224	0.997	1.118	1.076	1.074	1.165	1.159	13.13	
111) T	1,2,3-Trichlor...	0.818	0.593	0.464	0.513	0.492	0.466	0.489	*L	0.9992	

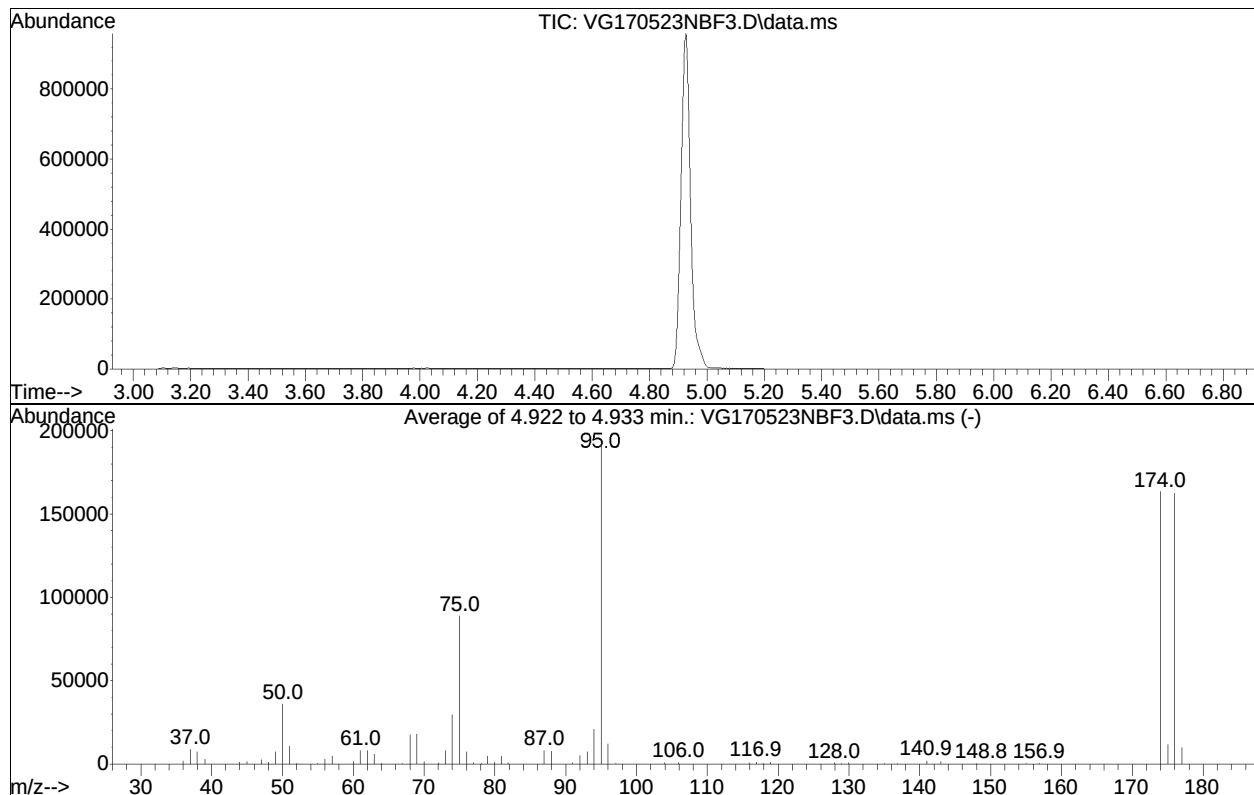
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BFB

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523NBF3.D
 Acq On : 23 May 2017 8:14 pm
 Operator : GONZO:MAB
 Sample : WG1006728-1
 Misc : WG1006728
 ALS Vial : 37 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Wed May 24 20:55:12 2017



AutoFind: Scans 351, 352, 353; Background Corrected with Scan 340

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.7	35816	PASS
75	95	30	60	46.5	89045	PASS
95	95	100	100	100.0	191616	PASS
96	95	5	9	6.3	12091	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	85.3	163499	PASS
175	174	5	9	7.3	11883	PASS
176	174	95	101	99.5	162667	PASS
177	176	5	9	6.1	9931	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N07.D
 Acq On : 23 May 2017 11:51 pm
 Operator : GONZO:MAB
 Sample : ISTD3
 Misc : WG1006728
 ALS Vial : 42 Sample Multiplier: 1

Quant Time: May 25 10:15:45 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.026	96	854022	10.000	ug/L	0.00
Standard Area 1 = 854022			Recovery	=	100.00%	
59) Chlorobenzene-d5	13.483	117	628818	10.000	ug/L	# 0.00
Standard Area 1 = 628818			Recovery	=	100.00%	
79) 1,4-Dichlorobenzene-d4	17.297	152	309860	10.000	ug/L	0.00
Standard Area 1 = 309860			Recovery	=	100.00%	
System Monitoring Compounds						
36) Dibromofluoromethane	7.965	113	201054	9.975	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.75%	
43) 1,2-Dichloroethane-d4	8.607	65	208503	9.909	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.09%	
60) Toluene-d8	11.224	98	817715	10.039	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.39%	
83) 4-Bromofluorobenzene	15.370	95	287484	9.918	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.18%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.818	85	205542	9.163	ug/L	98
3) Chloromethane	3.170	50	152175	9.399	ug/L	97
4) Vinyl chloride	3.339	62	250328	9.950	ug/L	100
5) Bromomethane	3.948	94	122205	9.542	ug/L	94
6) Chloroethane	4.049	64	132592	10.219	ug/L	99
7) Trichlorofluoromethane	4.394	101	333375	9.302	ug/L	99
8) Ethyl ether	4.759	74	103341	9.795	ug/L	# 71
10) 1,1-Dichloroethene	5.192	96	178498	9.369	ug/L	82
11) Carbon disulfide	5.861	76	579426	8.884	ug/L	100
12) Freon-113	4.942	101	159674	8.954	ug/L	# 84
13) Iodomethane	5.604	142	76296	7.825	ug/L	85
14) Acrolein	4.948	56	26268	9.856	ug/L	93
15) Methylene chloride	5.801	84	198999	9.603	ug/L	87
17) Acetone	5.023	43	32571	9.280	ug/L	# 88
18) trans-1,2-Dichloroethene	6.179	96	205930	9.477	ug/L	89
19) Methyl acetate	5.598	43	89813	8.789	ug/L	# 88
20) Methyl tert-butyl ether	5.976	73	333396	8.324	ug/L	# 71
21) tert-Butyl alcohol	5.280	59	25845M1	36.733	ug/L	
22) Diisopropyl ether	6.531	45	806570	9.731	ug/L	91
23) 1,1-Dichloroethane	6.713	63	400591	9.771	ug/L	100
24) Halothane	6.078	117	152466	9.271	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N07.D
 Acq On : 23 May 2017 11:51 pm
 Operator : GONZO:MAB
 Sample : ISTD3
 Misc : WG1006728
 ALS Vial : 42 Sample Multiplier: 1

Quant Time: May 25 10:15:45 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	5.956	53	56323	9.645	ug/L	95
26) Ethyl tert-butyl ether	7.045	59	257475	8.350	ug/L	93
27) Vinyl acetate	6.680	43	248658	8.095	ug/L #	94
28) cis-1,2-Dichloroethene	7.484	96	234228	9.696	ug/L	88
29) 2,2-Dichloropropane	7.424	77	94461	6.293	ug/L #	1
30) Bromochloromethane	7.910	128	104185	10.089	ug/L	92
31) Cyclohexane	8.235	56	335769	8.906	ug/L	85
32) Chloroform	7.681	83	374145	9.798	ug/L	95
33) Ethyl acetate	7.417	43	132128	9.272	ug/L #	94
34) Carbon tetrachloride	8.546	117	158585	6.010	ug/L	97
35) Tetrahydrofuran	7.944	42	42203	9.613	ug/L #	76
37) 1,1,1-Trichloroethane	8.201	97	215422	6.908	ug/L	96
39) 2-Butanone	7.221	43	59395	10.421	ug/L #	87
40) 1,1-Dichloropropene	8.404	75	277668	9.238	ug/L #	89
41) Benzene	8.769	78	914295	9.817	ug/L	98
42) tert-Amyl methyl ether	8.512	73	235430	7.353	ug/L #	22
44) 1,2-Dichloroethane	8.729	62	268229	9.820	ug/L	98
47) Methyl cyclohexane	9.655	83	279789	9.075	ug/L	94
48) Trichloroethene	9.567	95	218617	9.262	ug/L #	81
50) Dibromomethane	10.223	93	108266	9.621	ug/L #	85
51) 1,2-Dichloropropane	9.804	63	223695	9.796	ug/L #	89
53) 2-Chloroethyl vinyl ether	10.494	63	83020	9.375	ug/L #	1
54) Bromodichloromethane	10.135	83	240892	9.168	ug/L #	98
57) 1,4-Dioxane	10.142	88	56005M1	458.880	ug/L	
58) cis-1,3-Dichloropropene	10.859	75	212968	6.994	ug/L #	88
61) Toluene	11.339	92	562874	9.900	ug/L	99
62) 4-Methyl-2-pentanone	10.534	58	47687	9.567	ug/L	95
63) Tetrachloroethene	12.299	166	238250	9.506	ug/L #	82
65) trans-1,3-Dichloropropene	11.569	75	132686	5.893	ug/L	85
67) Ethyl methacrylate	11.508	69	168054	9.296	ug/L	96
68) 1,1,2-Trichloroethane	11.812	83	132871	9.955	ug/L	95
69) Chlorodibromomethane	12.610	129	142057	7.869	ug/L	98
70) 1,3-Dichloropropane	12.178	76	271175	9.835	ug/L	99
71) 1,2-Dibromoethane	12.921	107	132900	9.509	ug/L	97
72) 2-Hexanone	11.779	43	83761	9.855	ug/L	98
73) Chlorobenzene	13.544	112	619334	9.753	ug/L #	83
74) Ethylbenzene	13.598	91	1027477	10.017	ug/L	92
75) 1,1,1,2-Tetrachloroethane	13.591	131	156887	8.040	ug/L	96
76) p/m Xylene	13.713	106	813473	20.083	ug/L	76
77) o Xylene	14.402	106	789916	20.478	ug/L	76

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N07.D
 Acq On : 23 May 2017 11:51 pm
 Operator : GONZO:MAB
 Sample : ISTD3
 Misc : WG1006728
 ALS Vial : 42 Sample Multiplier: 1

Quant Time: May 25 10:15:45 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
78)	Styrene	14.457	104	1335443	20.996	ug/L	#	76
80)	Bromoform	15.025	173	67882	7.168	ug/L		99
82)	Isopropylbenzene	14.950	105	996791	10.009	ug/L		91
84)	Bromobenzene	15.701	156	251369	9.946	ug/L		100
85)	n-Propylbenzene	15.593	91	1130411	10.014	ug/L	#	88
86)	1,4-Dichlorobutane	15.099	55	263019	9.784	ug/L	#	87
87)	1,1,2,2-Tetrachloroethane	15.227	83	148929	9.642	ug/L		97
88)	4-Ethyltoluene	15.775	105	951512	9.966	ug/L		90
89)	2-Chlorotoluene	15.904	91	681539	9.940	ug/L	#	77
90)	1,3,5-Trimethylbenzene	15.843	105	796777	10.048	ug/L		87
91)	1,2,3-Trichloropropane	15.471	75	118971	9.354	ug/L		89
92)	trans-1,4-Dichloro-2-b...	15.566	53	34674	8.458	ug/L	#	57
93)	4-Chlorotoluene	15.971	91	700285	9.709	ug/L	#	77
94)	tert-Butylbenzene	16.424	119	673390	9.766	ug/L	#	80
97)	1,2,4-Trimethylbenzene	16.492	105	814949	10.065	ug/L	#	86
98)	sec-Butylbenzene	16.769	105	907471	9.680	ug/L		92
99)	p-Isopropyltoluene	16.986	119	814386	9.744	ug/L		88
100)	1,3-Dichlorobenzene	17.175	146	452598	9.607	ug/L		93
101)	1,4-Dichlorobenzene	17.344	146	452601	9.462	ug/L		94
102)	p-Diethylbenzene	18.954	119	685164	9.557	ug/L		90
103)	n-Butylbenzene	17.662	91	838677	9.617	ug/L	#	88
104)	1,2-Dichlorobenzene	17.966	146	407668	9.666	ug/L		94
105)	1,2,4,5-Tetramethylben...	17.682	119	497002	9.792	ug/L		74
106)	1,2-Dibromo-3-chloropr...	19.265	155	11362	6.460	ug/L		98
107)	1,3,5-Trichlorobenzene	19.650	180	300208	9.238	ug/L	#	93
108)	Hexachlorobutadiene	20.949	225	108657	8.566	ug/L		98
109)	1,2,4-Trichlorobenzene	20.725	180	213624	8.734	ug/L		98
110)	Naphthalene	21.172	128	308859	8.597	ug/L		100
111)	1,2,3-Trichlorobenzene	21.591	180	143661	9.256	ug/L		96

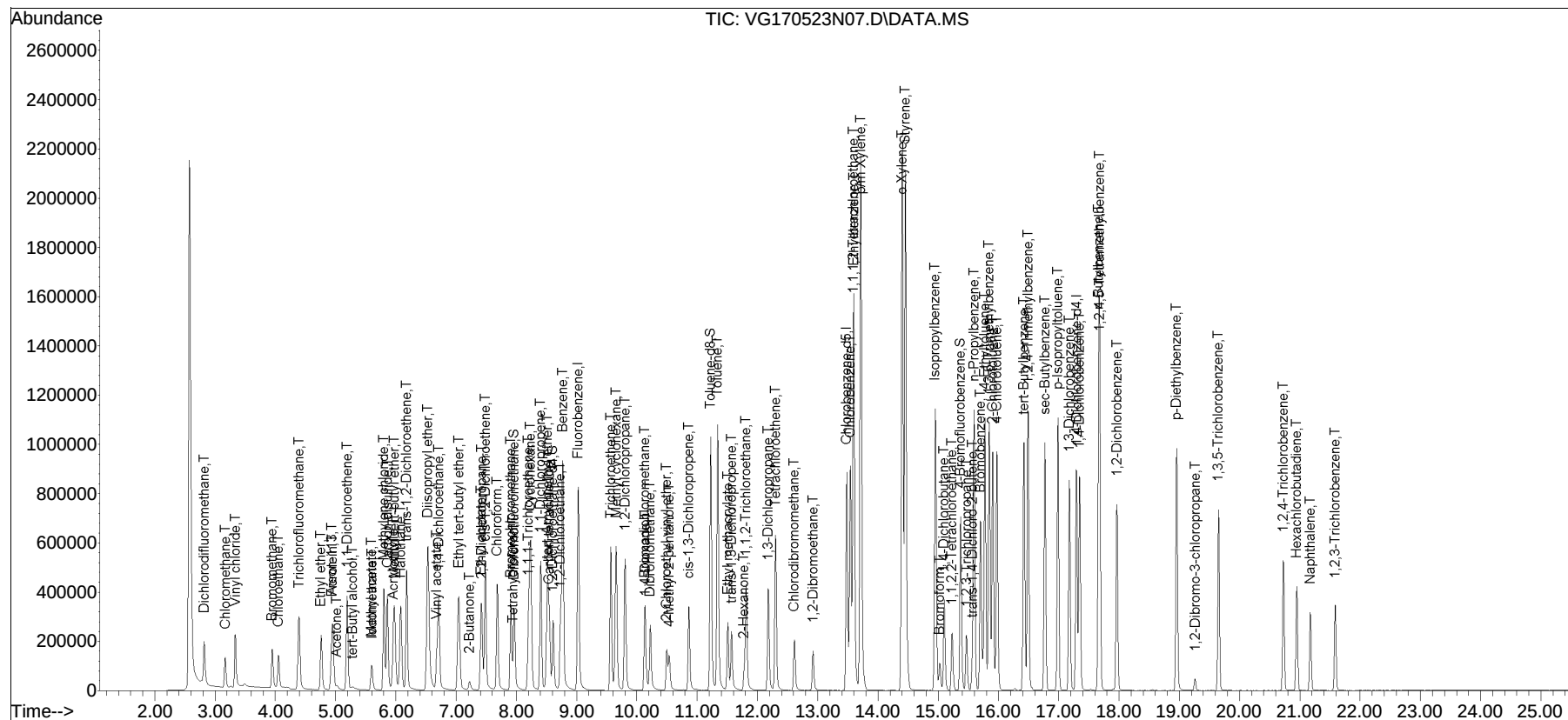
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N07.D
 Acq On : 23 May 2017 11:51 pm
 Operator : GONZO:MAB
 Sample : ISTD13
 Misc : WG1006728
 ALS Vial : 42 Sample Multiplier: 1

Quant Time: May 25 10:15:45 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

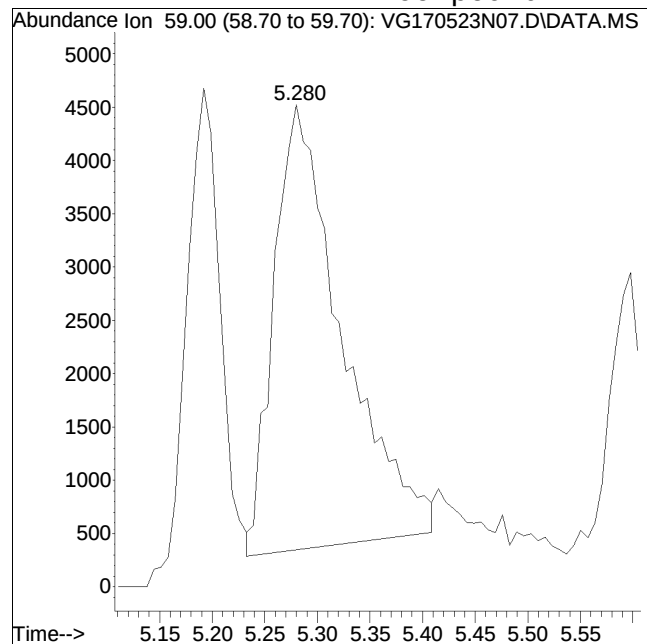
Sub List : 8260-Curve - Megamix plus Diox0523N\VG170523N07.D•



Manual Integration Report

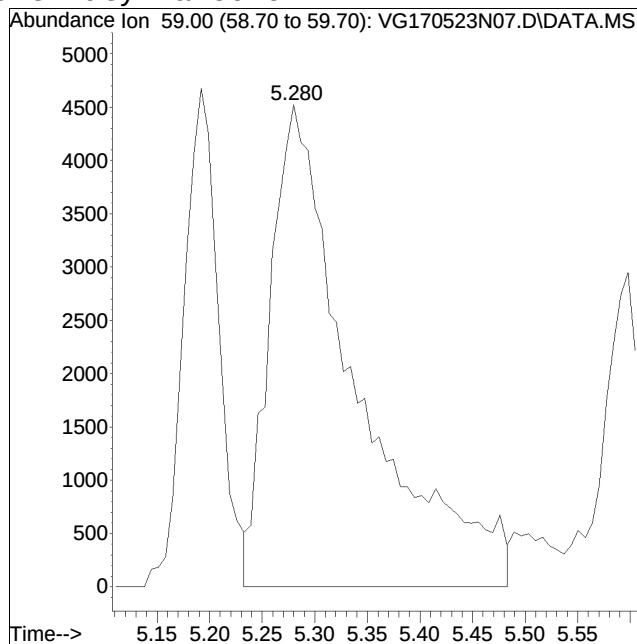
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170523N07.D Operator : GONZO:MAB
Date Inj'd : 5/23/2017 11:51 pm Instrument : Gonzo
Sample : ISTD13 Quant Date : 5/25/2017 10:15 am

Compound #21: tert-Butyl alcohol



Original Peak Response = 18752

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

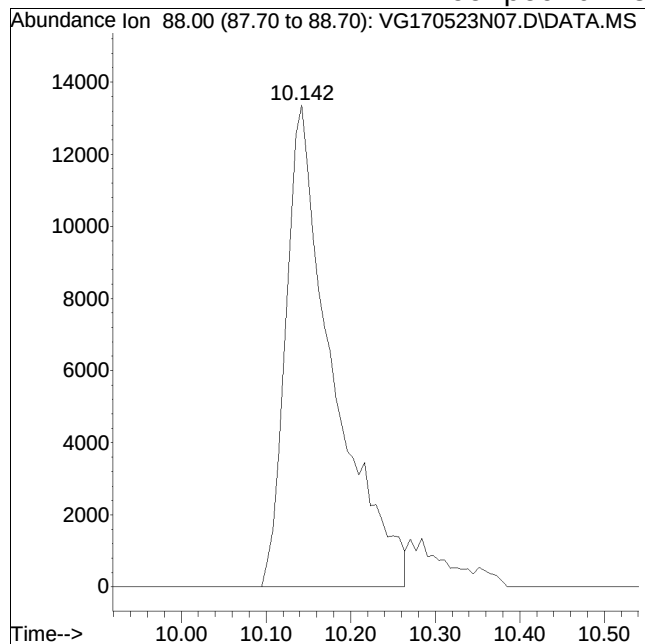


Manual Peak Response = 25845 M1

Manual Integration Report

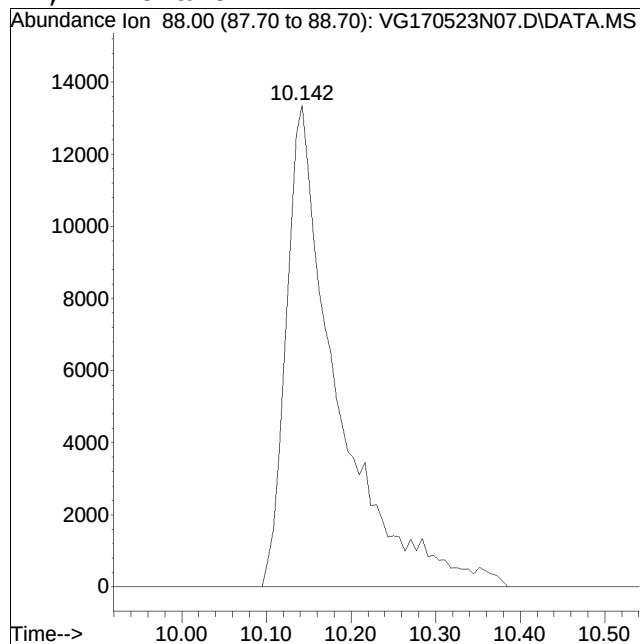
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170523N07.D Operator : GONZO:MAB
Date Inj'd : 5/23/2017 11:51 pm Instrument : Gonzo
Sample : ISTD L3 Quant Date : 5/25/2017 10:15 am

Compound #57: 1,4-Dioxane



Original Peak Response = 51472

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



Manual Peak Response = 56005 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N08.D
 Acq On : 24 May 2017 12:24 am
 Operator : GONZO:MAB
 Sample : ISTD4
 Misc : WG1006728
 ALS Vial : 43 Sample Multiplier: 1

Quant Time: May 25 10:15:52 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.026	96	877680	10.000	ug/L	0.00
Standard Area 1 = 854022			Recovery	=	102.77%	
59) Chlorobenzene-d5	13.483	117	656218	10.000	ug/L	# 0.00
Standard Area 1 = 628818			Recovery	=	104.36%	
79) 1,4-Dichlorobenzene-d4	17.297	152	332020	10.000	ug/L	0.00
Standard Area 1 = 309860			Recovery	=	107.15%	
System Monitoring Compounds						
36) Dibromofluoromethane	7.965	113	206173	9.954	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.54%	
43) 1,2-Dichloroethane-d4	8.614	65	206820	9.564	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	95.64%	
60) Toluene-d8	11.224	98	844540	9.935	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.35%	
83) 4-Bromofluorobenzene	15.370	95	303539	9.773	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.73%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.818	85	703000	30.493	ug/L	98
3) Chloromethane	3.170	50	471722	28.351	ug/L	96
4) Vinyl chloride	3.339	62	788668	30.503	ug/L	100
5) Bromomethane	3.948	94	390820	29.693	ug/L	99
6) Chloroethane	4.056	64	408691	30.648	ug/L	97
7) Trichlorofluoromethane	4.394	101	1133752	30.783	ug/L	99
8) Ethyl ether	4.759	74	315714	29.119	ug/L	# 73
10) 1,1-Dichloroethene	5.192	96	582290	29.740	ug/L	82
11) Carbon disulfide	5.862	76	2116701	31.579	ug/L	99
12) Freon-113	4.949	101	549620	29.990	ug/L	# 83
13) Iodomethane	5.605	142	372840	30.270	ug/L	86
14) Acrolein	4.949	56	80039	29.221	ug/L	94
15) Methylene chloride	5.801	84	597085	28.036	ug/L	88
17) Acetone	5.023	43	94023	29.375	ug/L	# 85
18) trans-1,2-Dichloroethene	6.179	96	646257	28.940	ug/L	89
19) Methyl acetate	5.598	43	290572	27.670	ug/L	# 88
20) Methyl tert-butyl ether	5.977	73	1147364	27.875	ug/L	# 78
21) tert-Butyl alcohol	5.287	59	96092M1	132.893	ug/L	
22) Diisopropyl ether	6.531	45	2490219	29.233	ug/L	92
23) 1,1-Dichloroethane	6.714	63	1246176	29.577	ug/L	100
24) Halothane	6.085	117	507911	30.052	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N08.D
 Acq On : 24 May 2017 12:24 am
 Operator : GONZO:MAB
 Sample : ISTD4
 Misc : WG1006728
 ALS Vial : 43 Sample Multiplier: 1

Quant Time: May 25 10:15:52 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	5.956	53	166909	27.813	ug/L	98
26) Ethyl tert-butyl ether	7.045	59	1009932	29.013	ug/L	94
27) Vinyl acetate	6.680	43	940493	29.793	ug/L	95
28) cis-1,2-Dichloroethene	7.485	96	731655	29.472	ug/L	88
29) 2,2-Dichloropropane	7.424	77	453422	26.084	ug/L #	28
30) Bromochloromethane	7.911	128	317463	29.915	ug/L	92
31) Cyclohexane	8.235	56	1162800	30.011	ug/L	85
32) Chloroform	7.687	83	1165219	29.692	ug/L	96
33) Ethyl acetate	7.417	43	433362	29.592	ug/L #	95
34) Carbon tetrachloride	8.546	117	723295	24.579	ug/L	96
35) Tetrahydrofuran	7.944	42	127085	28.168	ug/L #	78
37) 1,1,1-Trichloroethane	8.208	97	871353	25.955	ug/L	99
39) 2-Butanone	7.221	43	167884	30.089	ug/L	89
40) 1,1-Dichloropropene	8.404	75	916549	29.670	ug/L #	88
41) Benzene	8.769	78	2829020	29.557	ug/L	98
42) tert-Amyl methyl ether	8.519	73	1018882	28.527	ug/L #	65
44) 1,2-Dichloroethane	8.736	62	811500	28.909	ug/L	98
47) Methyl cyclohexane	9.655	83	944783	29.818	ug/L	94
48) Trichloroethene	9.567	95	694840	28.643	ug/L #	80
50) Dibromomethane	10.223	93	335296	28.993	ug/L #	83
51) 1,2-Dichloropropane	9.804	63	699854	29.821	ug/L #	90
53) 2-Chloroethyl vinyl ether	10.494	63	273958	30.103	ug/L #	1
54) Bromodichloromethane	10.136	83	832682	30.836	ug/L #	98
57) 1,4-Dioxane	10.136	88	70491M1	562.003	ug/L	
58) cis-1,3-Dichloropropene	10.866	75	868090	26.251	ug/L	91
61) Toluene	11.339	92	1761004	29.680	ug/L	99
62) 4-Methyl-2-pentanone	10.535	58	153121	29.436	ug/L	99
63) Tetrachloroethene	12.306	166	777467	29.724	ug/L #	82
65) trans-1,3-Dichloropropene	11.569	75	625492	24.190	ug/L	89
67) Ethyl methacrylate	11.508	69	616492	32.678	ug/L	96
68) 1,1,2-Trichloroethane	11.813	83	407475	29.253	ug/L	94
69) Chlorodibromomethane	12.617	129	535300	27.378	ug/L	98
70) 1,3-Dichloropropane	12.185	76	836379	29.066	ug/L	98
71) 1,2-Dibromoethane	12.922	107	455657	31.241	ug/L	97
72) 2-Hexanone	11.779	43	268104	30.227	ug/L	99
73) Chlorobenzene	13.544	112	1955399	29.508	ug/L #	84
74) Ethylbenzene	13.598	91	3309734	30.921	ug/L	92
75) 1,1,1,2-Tetrachloroethane	13.598	131	606645	28.729	ug/L	96
76) p/m Xylene	13.720	106	2620513	61.995	ug/L	76
77) o Xylene	14.409	106	2519779	62.597	ug/L	76

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N08.D
 Acq On : 24 May 2017 12:24 am
 Operator : GONZO:MAB
 Sample : ISTD4
 Misc : WG1006728
 ALS Vial : 43 Sample Multiplier: 1

Quant Time: May 25 10:15:52 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
78)	Styrene	14.457	104	4303982	64.844	ug/L	#	76
80)	Bromoform	15.025	173	283721	26.604	ug/L		98
82)	Isopropylbenzene	14.957	105	3259477	30.543	ug/L		91
84)	Bromobenzene	15.708	156	803040	29.652	ug/L		100
85)	n-Propylbenzene	15.600	91	3707370	30.650	ug/L	#	88
86)	1,4-Dichlorobutane	15.099	55	848009	29.440	ug/L	#	87
87)	1,1,2,2-Tetrachloroethane	15.234	83	477382	28.842	ug/L		97
88)	4-Ethyltoluene	15.782	105	3134891	30.642	ug/L		90
89)	2-Chlorotoluene	15.904	91	2165870	29.479	ug/L	#	77
90)	1,3,5-Trimethylbenzene	15.850	105	2549618	30.008	ug/L		87
91)	1,2,3-Trichloropropane	15.471	75	372148	27.306	ug/L		89
92)	trans-1,4-Dichloro-2-b...	15.566	53	127787	29.089	ug/L	#	73
93)	4-Chlorotoluene	15.978	91	2250842	29.123	ug/L	#	77
94)	tert-Butylbenzene	16.425	119	2189287	29.632	ug/L	#	80
97)	1,2,4-Trimethylbenzene	16.492	105	2622704	30.231	ug/L	#	86
98)	sec-Butylbenzene	16.770	105	3029126	30.154	ug/L		91
99)	p-Isopropyltoluene	16.993	119	2712834	30.292	ug/L		89
100)	1,3-Dichlorobenzene	17.175	146	1473900	29.198	ug/L		93
101)	1,4-Dichlorobenzene	17.351	146	1468222	28.645	ug/L		94
102)	p-Diethylbenzene	18.961	119	2334014	30.383	ug/L		90
103)	n-Butylbenzene	17.669	91	2821281	30.193	ug/L	#	88
104)	1,2-Dichlorobenzene	17.966	146	1317041	29.145	ug/L		94
105)	1,2,4,5-Tetramethylben...	17.682	119	1660182	30.525	ug/L		74
106)	1,2-Dibromo-3-chloropr...	19.265	155	52419	25.692	ug/L		97
107)	1,3,5-Trichlorobenzene	19.657	180	1005742	28.883	ug/L	#	92
108)	Hexachlorobutadiene	20.949	225	370603	27.266	ug/L		97
109)	1,2,4-Trichlorobenzene	20.732	180	746105	28.468	ug/L		98
110)	Naphthalene	21.179	128	1113763	28.931	ug/L		100
111)	1,2,3-Trichlorobenzene	21.591	180	511356	31.579	ug/L		96

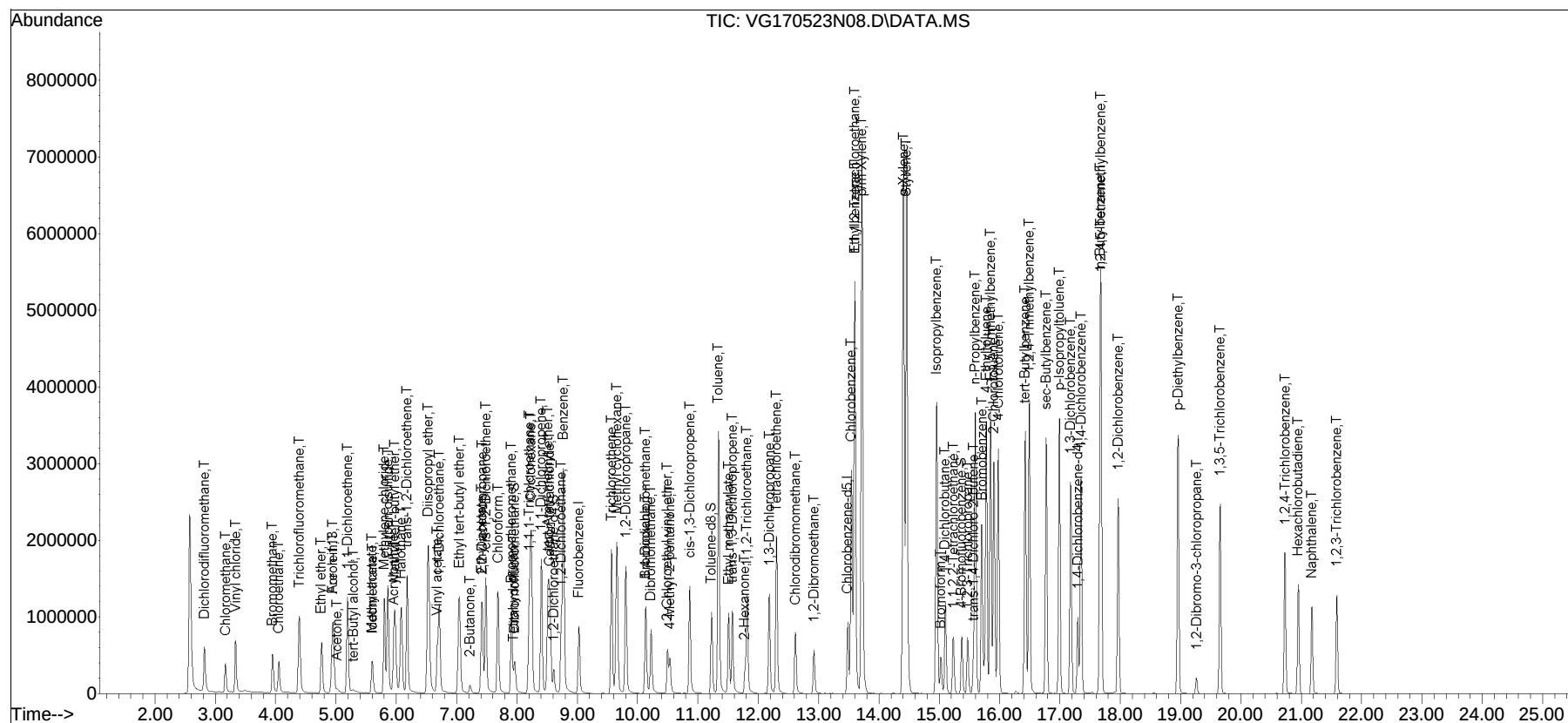
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Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
Data File : VG170523N08.D
Acq On : 24 May 2017 12:24 am
Operator : GONZO:MAB
Sample : ISTD4
Misc : WG1006728
ALS Vial : 43 Sample Multiplier: 1

Quant Time: May 25 10:15:52 2017
Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu May 25 10:13:56 2017
Response via : Initial Calibration

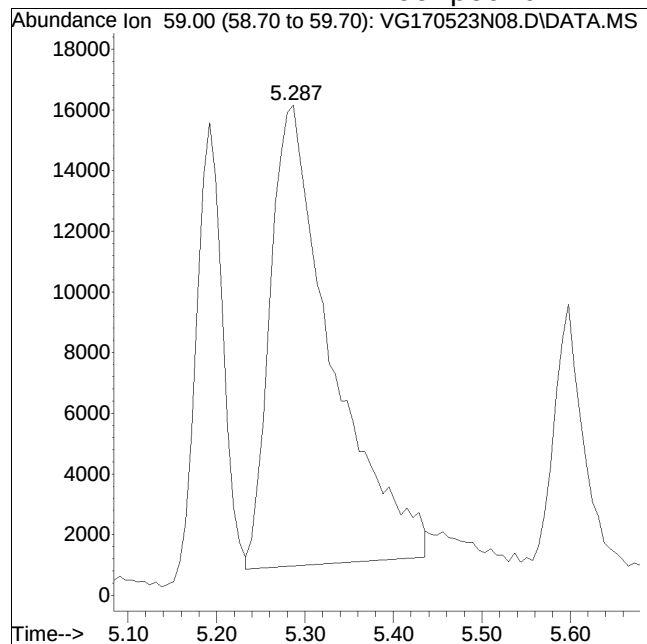
Sub List : 8260-Curve - Megamix plus Diox0523N\VG170523N07.D•



Manual Integration Report

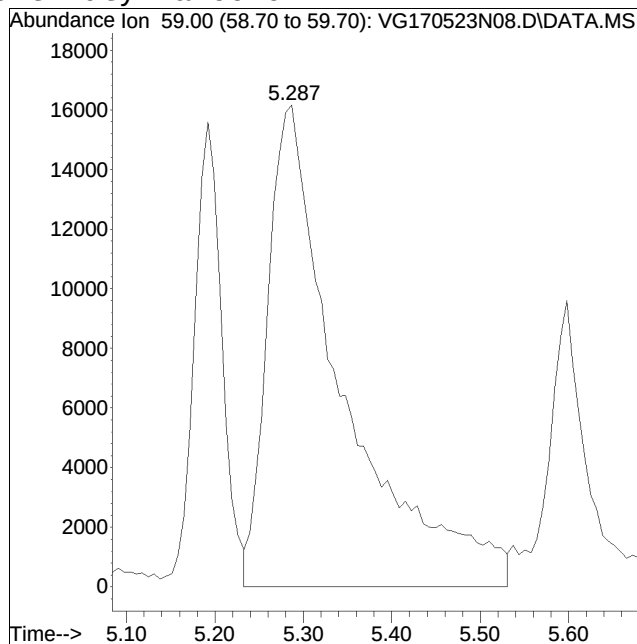
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170523N08.D Operator : GONZO:MAB
Date Inj'd : 5/24/2017 12:24 am Instrument : Gonzo
Sample : ISTD4 Quant Date : 5/25/2017 10:15 am

Compound #21: tert-Butyl alcohol



Original Peak Response = 73745

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

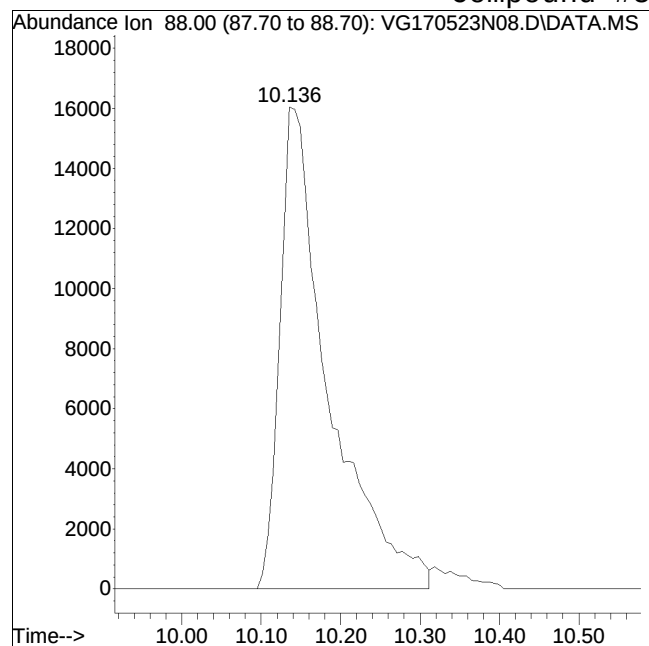


Manual Peak Response = 96092 M1

Manual Integration Report

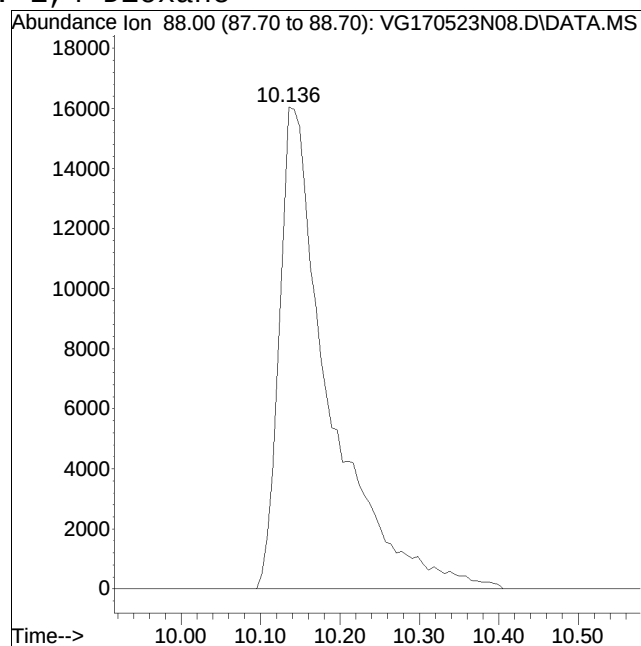
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170523N08.D Operator : GONZO:MAB
Date Inj'd : 5/24/2017 12:24 am Instrument : Gonzo
Sample : ISTD4 Quant Date : 5/25/2017 10:15 am

Compound #57: 1,4-Dioxane



Original Peak Response = 68392

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



Manual Peak Response = 70491 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N09.D
 Acq On : 24 May 2017 3:02 am
 Operator : GONZO:MAB
 Sample : ISTD6
 Misc : WG1006728
 ALS Vial : 44 Sample Multiplier: 1

Quant Time: May 25 10:15:59 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.006	96	886561	10.000	ug/L	-0.01
Standard Area 1 = 854022			Recovery	=	103.81%	
59) Chlorobenzene-d5	13.463	117	668922	10.000	ug/L	#-0.01
Standard Area 1 = 628818			Recovery	=	106.38%	
79) 1,4-Dichlorobenzene-d4	17.277	152	356954	10.000	ug/L	-0.01
Standard Area 1 = 309860			Recovery	=	115.20%	
System Monitoring Compounds						
36) Dibromofluoromethane	7.944	113	210068	10.040	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.40%	
43) 1,2-Dichloroethane-d4	8.587	65	203792	9.329	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	93.29%	
60) Toluene-d8	11.204	98	856512	9.885	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.85%	
83) 4-Bromofluorobenzene	15.356	95	314111	9.407	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	94.07%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.805	85	1941997	83.392	ug/L	99
3) Chloromethane	3.150	50	1343028	79.909	ug/L	97
4) Vinyl chloride	3.319	62	2091210	80.071	ug/L	100
5) Bromomethane	3.928	94	1019224	76.661	ug/L	98
6) Chloroethane	4.029	64	1067750	79.270	ug/L	98
7) Trichlorofluoromethane	4.367	101	3134352	84.249	ug/L	99
8) Ethyl ether	4.739	74	863719	78.865	ug/L	# 73
10) 1,1-Dichloroethene	5.172	96	1591294	80.460	ug/L	83
11) Carbon disulfide	5.835	76	5176078	76.447	ug/L	99
12) Freon-113	4.922	101	1509170	81.522	ug/L	# 84
13) Iodomethane	5.578	142	1501482	82.239	ug/L	85
14) Acrolein	4.922	56	207103	74.853	ug/L	95
15) Methylene chloride	5.780	84	1609846	74.833	ug/L	88
17) Acetone	4.996	43	268374M2	86.344	ug/L	
18) trans-1,2-Dichloroethene	6.152	96	1788319	79.280	ug/L	90
19) Methyl acetate	5.571	43	756994	71.363	ug/L	# 89
20) Methyl tert-butyl ether	5.949	73	3176237	76.392	ug/L	# 82
21) tert-Butyl alcohol	5.260	59	269707M1	369.261	ug/L	
22) Diisopropyl ether	6.504	45	6682675	77.662	ug/L	92
23) 1,1-Dichloroethane	6.687	63	3413330	80.201	ug/L	99
24) Halothane	6.058	117	1400117	82.012	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N09.D
 Acq On : 24 May 2017 3:02 am
 Operator : GONZO:MAB
 Sample : ISTD6
 Misc : WG1006728
 ALS Vial : 44 Sample Multiplier: 1

Quant Time: May 25 10:15:59 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	5.929	53	443227	73.117	ug/L	96
26) Ethyl tert-butyl ether	7.018	59	3283572	77.718	ug/L	94
27) Vinyl acetate	6.653	43	2736522	85.818	ug/L	96
28) cis-1,2-Dichloroethene	7.458	96	2014782	80.345	ug/L	88
29) 2,2-Dichloropropane	7.397	77	1754859	83.283	ug/L #	68
30) Bromochloromethane	7.884	128	867227	80.902	ug/L	92
31) Cyclohexane	8.215	56	3288269	84.016	ug/L	85
32) Chloroform	7.660	83	3214948	81.102	ug/L	96
33) Ethyl acetate	7.390	43	1115770	75.427	ug/L #	95
34) Carbon tetrachloride	8.526	117	2420718	80.028	ug/L	96
35) Tetrahydrofuran	7.917	42	323349	70.951	ug/L #	78
37) 1,1,1-Trichloroethane	8.181	97	2740563	79.927	ug/L	98
39) 2-Butanone	7.194	43	431206	77.766	ug/L #	89
40) 1,1-Dichloropropene	8.384	75	2564062	82.171	ug/L #	88
41) Benzene	8.749	78	7829752	80.984	ug/L	99
42) tert-Amyl methyl ether	8.492	73	3250356	79.578	ug/L #	82
44) 1,2-Dichloroethane	8.709	62	2173860	76.666	ug/L	98
47) Methyl cyclohexane	9.635	83	2716268	84.868	ug/L	95
48) Trichloroethene	9.547	95	1956803	79.856	ug/L #	81
50) Dibromomethane	10.203	93	905805	77.541	ug/L #	84
51) 1,2-Dichloropropane	9.784	63	1928562	81.352	ug/L #	90
53) 2-Chloroethyl vinyl ether	10.474	63	794499	86.426	ug/L #	1
54) Bromodichloromethane	10.108	83	2395512	87.821	ug/L #	98
57) 1,4-Dioxane	10.122	88	99327M1	783.971	ug/L	
58) cis-1,3-Dichloropropene	10.839	75	2659216	78.589	ug/L	93
61) Toluene	11.319	92	4884545	80.760	ug/L	100
62) 4-Methyl-2-pentanone	10.514	58	396517	74.779	ug/L	97
63) Tetrachloroethene	12.286	166	2154802	80.817	ug/L #	82
65) trans-1,3-Dichloropropene	11.549	75	2054482	76.409	ug/L	91
67) Ethyl methacrylate	11.488	69	1711397	88.991	ug/L	96
68) 1,1,2-Trichloroethane	11.792	83	1080193	76.076	ug/L	95
69) Chlorodibromomethane	12.590	129	1590319	79.033	ug/L	98
70) 1,3-Dichloropropane	12.164	76	2243565	76.489	ug/L	99
71) 1,2-Dibromoethane	12.901	107	1238433	83.297	ug/L	96
72) 2-Hexanone	11.758	43	690649	76.388	ug/L	99
73) Chlorobenzene	13.523	112	5474704	81.047	ug/L #	84
74) Ethylbenzene	13.584	91	9292292	85.163	ug/L	92
75) 1,1,1,2-Tetrachloroethane	13.578	131	1831135	84.301	ug/L	96
76) p/m Xylene	13.699	106	7211332	167.362	ug/L	76
77) o Xylene	14.389	106	6891959	167.959	ug/L	76

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N09.D
 Acq On : 24 May 2017 3:02 am
 Operator : GONZO:MAB
 Sample : ISTD16
 Misc : WG1006728
 ALS Vial : 44 Sample Multiplier: 1

Quant Time: May 25 10:15:59 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
78)	Styrene	14.443	104	11767030	173.915	ug/L	#	77
80)	Bromoform	15.011	173	888152	76.570	ug/L		99
82)	Isopropylbenzene	14.937	105	9204566	80.227	ug/L		91
84)	Bromobenzene	15.687	156	2235634	76.784	ug/L		100
85)	n-Propylbenzene	15.579	91	10606661	81.564	ug/L	#	88
86)	1,4-Dichlorobutane	15.086	55	2279119	73.597	ug/L	#	87
87)	1,1,2,2-Tetrachloroethane	15.214	83	1275273	71.667	ug/L		96
88)	4-Ethyltoluene	15.762	105	8955117	81.417	ug/L		91
89)	2-Chlorotoluene	15.890	91	6112638	77.385	ug/L	#	77
90)	1,3,5-Trimethylbenzene	15.836	105	7306372	79.987	ug/L	#	86
91)	1,2,3-Trichloropropane	15.451	75	988499	67.465	ug/L		89
92)	trans-1,4-Dichloro-2-b...	15.545	53	385883	81.706	ug/L	#	89
93)	4-Chlorotoluene	15.965	91	6546082	78.782	ug/L	#	79
94)	tert-Butylbenzene	16.411	119	6453861	81.253	ug/L	#	80
97)	1,2,4-Trimethylbenzene	16.479	105	7580659	81.276	ug/L	#	86
98)	sec-Butylbenzene	16.756	105	8974315	83.097	ug/L		91
99)	p-Isopropyltoluene	16.972	119	8038406	83.489	ug/L		89
100)	1,3-Dichlorobenzene	17.162	146	4306865	79.358	ug/L		93
101)	1,4-Dichlorobenzene	17.331	146	4298028	77.998	ug/L		94
102)	p-Diethylbenzene	18.940	119	7139881	86.451	ug/L		91
103)	n-Butylbenzene	17.655	91	8544434	85.054	ug/L	#	88
104)	1,2-Dichlorobenzene	17.953	146	3791852	78.049	ug/L		94
105)	1,2,4,5-Tetramethylben...	17.669	119	4921154	84.162	ug/L		76
106)	1,2-Dibromo-3-chloropr...	19.245	155	166846	74.806	ug/L		97
107)	1,3,5-Trichlorobenzene	19.644	180	3080688	82.290	ug/L	#	93
108)	Hexachlorobutadiene	20.935	225	1161915	79.512	ug/L		98
109)	1,2,4-Trichlorobenzene	20.719	180	2219525	78.771	ug/L		98
110)	Naphthalene	21.158	128	3071723	74.218	ug/L		100
111)	1,2,3-Trichlorobenzene	21.578	180	1403941	81.199	ug/L		96

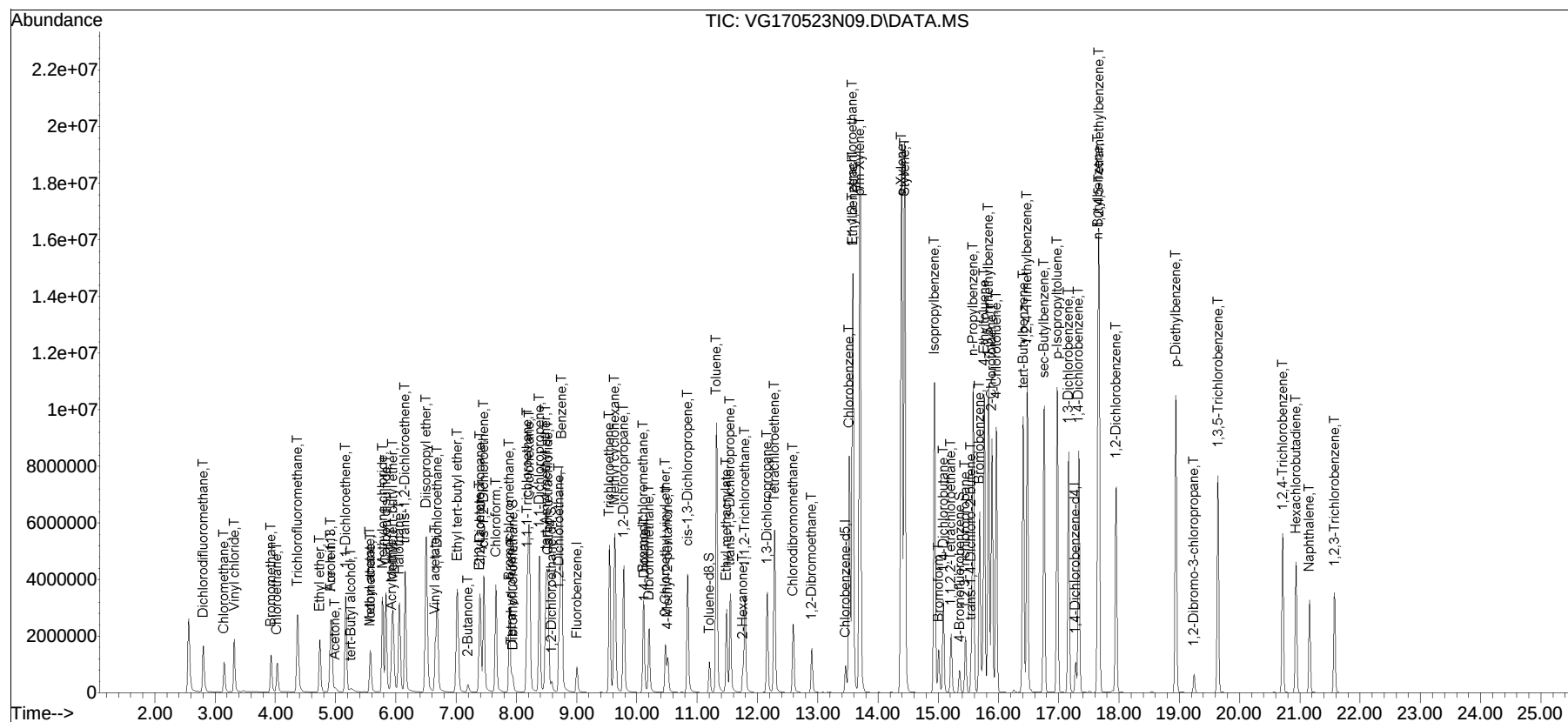
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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Data Path   : I:\VOLATILES\Gonzo\2017\170523N\
Data File  : VG170523N09.D
Acq On     : 24 May 2017    3:02 am
Operator   : GONZO:MAB
Sample     : ISTD16
Misc       : WG1006728
ALS Vial   : 44    Sample Multiplier: 1
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Quant Time: May 25 10:15:59 2017
Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu May 25 10:13:56 2017
Response via : Initial Calibration

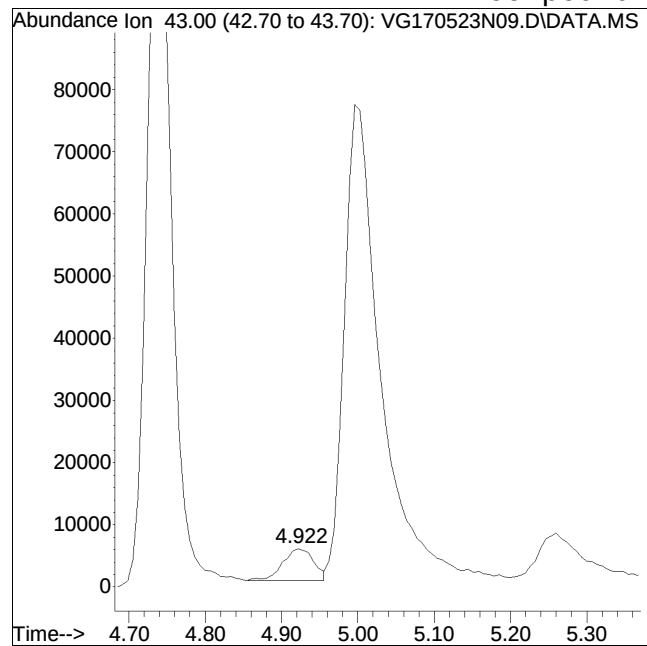
Sub List : 8260-Curve - Megamix plus Diox0523N\VG170523N07.D•



Manual Integration Report

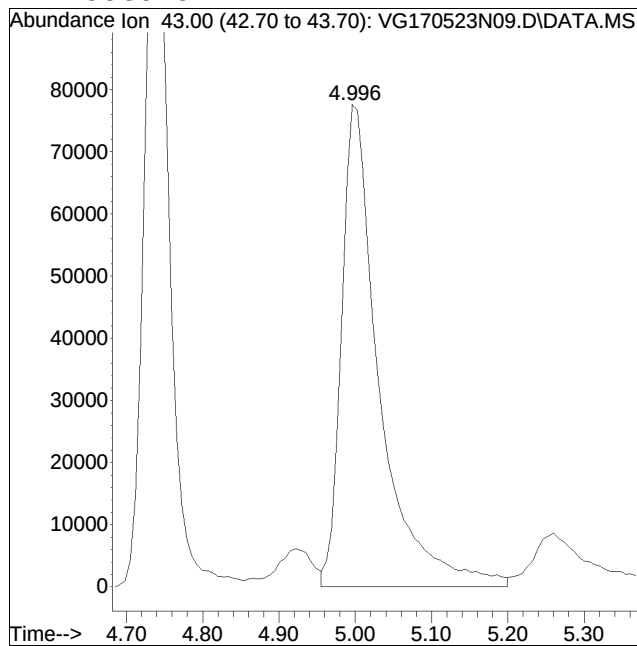
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170523N09.D Operator : GONZO:MAB
Date Inj'd : 5/24/2017 3:02 am Instrument : Gonzo
Sample : ISTD6 Quant Date : 5/25/2017 10:15 am

Compound #17: Acetone



Original Peak Response = 14972

M2 = Peak not found by automatic integration algorithm.

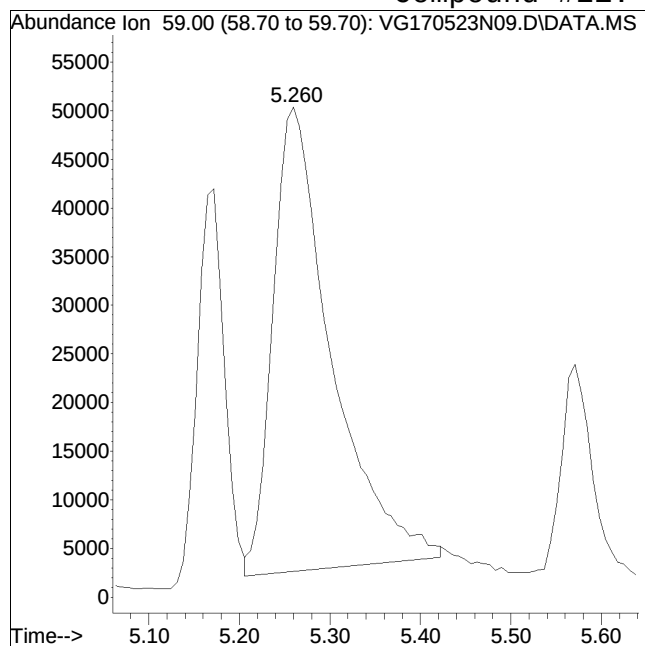


Manual Peak Response = 268374 M2

Manual Integration Report

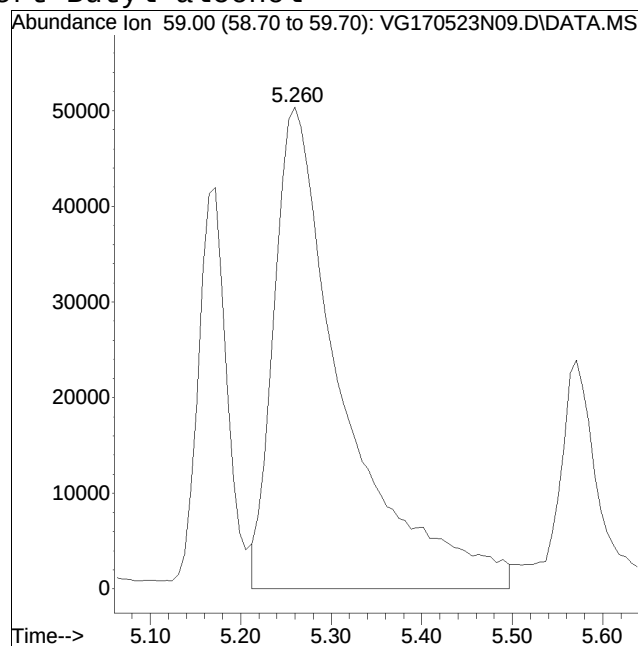
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170523N09.D Operator : GONZO:MAB
Date Inj'd : 5/24/2017 3:02 am Instrument : Gonzo
Sample : ISTD6 Quant Date : 5/25/2017 10:15 am

Compound #21: tert-Butyl alcohol



Original Peak Response = 214908

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

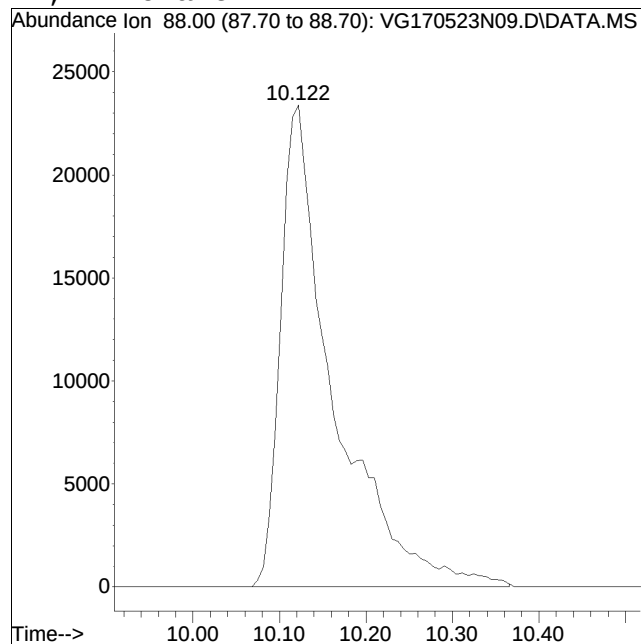
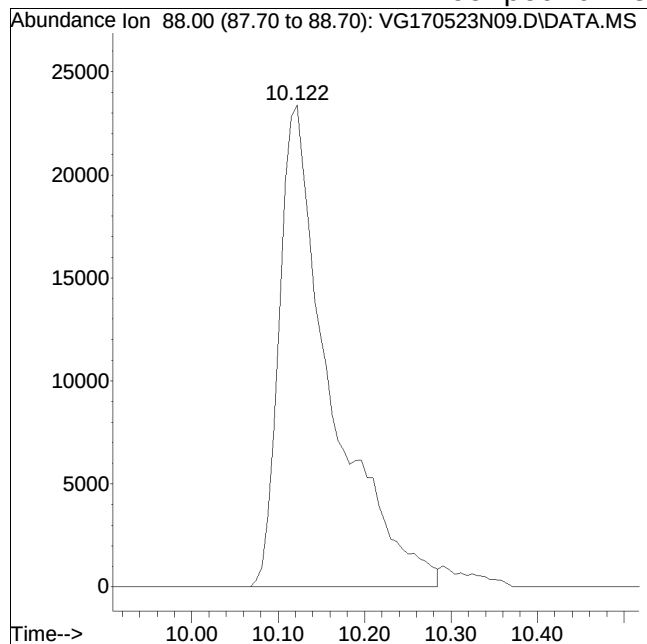


Manual Peak Response = 269707 M1

Manual Integration Report

Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170523N09.D Operator : GONZO:MAB
Date Inj'd : 5/24/2017 3:02 am Instrument : Gonzo
Sample : ISTD6 Quant Date : 5/25/2017 10:15 am

Compound #57: 1,4-Dioxane



Original Peak Response = 96646

Manual Peak Response = 99327 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N10.D
 Acq On : 24 May 2017 3:34 am
 Operator : GONZO:MAB
 Sample : ISTD18
 Misc : WG1006728
 ALS Vial : 45 Sample Multiplier: 1

Quant Time: May 25 10:16:06 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.026	96	938890	10.000	ug/L	0.00
Standard Area 1 = 854022			Recovery	=	109.94%	
59) Chlorobenzene-d5	13.476	117	704227	10.000	ug/L	# 0.00
Standard Area 1 = 628818			Recovery	=	111.99%	
79) 1,4-Dichlorobenzene-d4	17.290	152	370525	10.000	ug/L	0.00
Standard Area 1 = 309860			Recovery	=	119.58%	
System Monitoring Compounds						
36) Dibromofluoromethane	7.964	113	223021	10.065	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.65%	
43) 1,2-Dichloroethane-d4	8.607	65	216136	9.343	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	93.43%	
60) Toluene-d8	11.224	98	902574	9.894	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.94%	
83) 4-Bromofluorobenzene	15.369	95	335500	9.680	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	96.80%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.818	85	3049801	123.664	ug/L	99
3) Chloromethane	3.170	50	2330525	130.936	ug/L	97
4) Vinyl chloride	3.332	62	3193292	115.455	ug/L	100
5) Bromomethane	3.948	94	1624363	115.368	ug/L	98
6) Chloroethane	4.049	64	1594114	111.752	ug/L	98
7) Trichlorofluoromethane	4.387	101	4835365	122.727	ug/L	99
8) Ethyl ether	4.759	74	1339885	115.524	ug/L	# 74
10) 1,1-Dichloroethene	5.185	96	2552304	121.858	ug/L	82
11) Carbon disulfide	5.855	76	7912648	110.351	ug/L	99
12) Freon-113	4.942	101	2385778	121.691	ug/L	# 84
13) Iodomethane	5.598	142	2818416	118.894	ug/L	86
14) Acrolein	4.942	56	345166	117.799	ug/L	95
15) Methylene chloride	5.800	84	2554445	112.124	ug/L	88
17) Acetone	5.023	43	392262	119.863	ug/L	# 83
18) trans-1,2-Dichloroethene	6.172	96	2862046	119.808	ug/L	90
19) Methyl acetate	5.591	43	1282634	114.177	ug/L	# 89
20) Methyl tert-butyl ether	5.970	73	5853751	132.943	ug/L	# 87
21) tert-Butyl alcohol	5.280	59	509310M1	658.441	ug/L	
22) Diisopropyl ether	6.524	45	10940856	120.062	ug/L	91
23) 1,1-Dichloroethane	6.707	63	5471825	121.403	ug/L	100
24) Halothane	6.078	117	2264301	125.240	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N10.D
 Acq On : 24 May 2017 3:34 am
 Operator : GONZO:MAB
 Sample : ISTD18
 Misc : WG1006728
 ALS Vial : 45 Sample Multiplier: 1

Quant Time: May 25 10:16:06 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	5.949	53	731438	113.936	ug/L	96
26) Ethyl tert-butyl ether	7.038	59	6550667	125.715	ug/L	95
27) Vinyl acetate	6.673	43	4888324	144.756	ug/L	96
28) cis-1,2-Dichloroethene	7.478	96	3198152	120.427	ug/L	88
29) 2,2-Dichloropropane	7.417	77	3147900	126.014	ug/L #	80
30) Bromochloromethane	7.904	128	1381058	121.655	ug/L	92
31) Cyclohexane	8.235	56	5182986	125.046	ug/L	85
32) Chloroform	7.680	83	5093836	121.338	ug/L	96
33) Ethyl acetate	7.410	43	1854042	118.349	ug/L #	95
34) Carbon tetrachloride	8.546	117	3950098	122.980	ug/L	96
35) Tetrahydrofuran	7.937	42	537495	111.367	ug/L #	78
37) 1,1,1-Trichloroethane	8.201	97	4459724	122.591	ug/L	98
39) 2-Butanone	7.214	43	711966	121.700	ug/L #	88
40) 1,1-Dichloropropene	8.404	75	4085521	123.633	ug/L #	88
41) Benzene	8.769	78	12386949	120.979	ug/L	98
42) tert-Amyl methyl ether	8.512	73	6043697	126.584	ug/L	92
44) 1,2-Dichloroethane	8.729	62	3460190	115.230	ug/L	98
47) Methyl cyclohexane	9.655	83	4152329	122.505	ug/L	95
48) Trichloroethene	9.567	95	3100539	119.480	ug/L #	81
50) Dibromomethane	10.216	93	1461837	118.165	ug/L #	85
51) 1,2-Dichloropropane	9.804	63	3077156	122.569	ug/L #	89
53) 2-Chloroethyl vinyl ether	10.494	63	1323244	135.921	ug/L #	1
54) Bromodichloromethane	10.128	83	3832157	132.659	ug/L #	98
57) 1,4-Dioxane	10.135	88	151392M1	1128.313	ug/L	
58) cis-1,3-Dichloropropene	10.859	75	4396015	122.395	ug/L	94
61) Toluene	11.339	92	7691503	120.793	ug/L	99
62) 4-Methyl-2-pentanone	10.527	58	655164	117.364	ug/L	92
63) Tetrachloroethene	12.299	166	3389326	120.745	ug/L #	82
65) trans-1,3-Dichloropropene	11.569	75	3464634	121.978	ug/L	93
67) Ethyl methacrylate	11.508	69	2848020	140.670	ug/L	96
68) 1,1,2-Trichloroethane	11.812	83	1738907	116.328	ug/L	95
69) Chlorodibromomethane	12.610	129	2579451	121.549	ug/L	97
70) 1,3-Dichloropropane	12.178	76	3612846	116.997	ug/L	98
71) 1,2-Dibromoethane	12.915	107	2019721	129.035	ug/L	97
72) 2-Hexanone	11.772	43	1150508	120.871	ug/L	99
73) Chlorobenzene	13.544	112	8605743	121.012	ug/L #	86
74) Ethylbenzene	13.598	91	14212420	123.725	ug/L	92
75) 1,1,1,2-Tetrachloroethane	13.591	131	2851143	124.491	ug/L	96
76) p/m Xylene	13.719	106	10780873	237.661	ug/L #	70
77) o Xylene	14.409	106	10260399	237.513	ug/L #	70

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N10.D
 Acq On : 24 May 2017 3:34 am
 Operator : GONZO:MAB
 Sample : ISTD18
 Misc : WG1006728
 ALS Vial : 45 Sample Multiplier: 1

Quant Time: May 25 10:16:06 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
78)	Styrene	14.463	104	17373707	243.907	ug/L	#	79
80)	Bromoform	15.025	173	1456886	120.730	ug/L		98
82)	Isopropylbenzene	14.950	105	14075311	118.188	ug/L		91
84)	Bromobenzene	15.701	156	3540731	117.154	ug/L		100
85)	n-Propylbenzene	15.599	91	16079874	119.124	ug/L	#	88
86)	1,4-Dichlorobutane	15.099	55	3694850	114.944	ug/L	#	86
87)	1,1,2,2-Tetrachloroethane	15.227	83	2104674	113.946	ug/L		97
88)	4-Ethyltoluene	15.782	105	13659955	119.644	ug/L		91
89)	2-Chlorotoluene	15.904	91	9650868	117.704	ug/L	#	78
90)	1,3,5-Trimethylbenzene	15.850	105	11287350	119.043	ug/L		88
91)	1,2,3-Trichloropropane	15.464	75	1620958	106.578	ug/L		89
92)	trans-1,4-Dichloro-2-b...	15.559	53	649847	132.557	ug/L		96
93)	4-Chlorotoluene	15.978	91	10154853	117.738	ug/L	#	78
94)	tert-Butylbenzene	16.424	119	9772170	118.523	ug/L	#	80
97)	1,2,4-Trimethylbenzene	16.492	105	11584477	119.653	ug/L	#	86
98)	sec-Butylbenzene	16.769	105	13365249	119.221	ug/L		92
99)	p-Isopropyltoluene	16.992	119	11989571	119.966	ug/L		89
100)	1,3-Dichlorobenzene	17.175	146	6710040	119.110	ug/L		93
101)	1,4-Dichlorobenzene	17.351	146	6708523	117.283	ug/L		94
102)	p-Diethylbenzene	18.954	119	10684524	124.631	ug/L		91
103)	n-Butylbenzene	17.669	91	12386754	118.786	ug/L	#	88
104)	1,2-Dichlorobenzene	17.966	146	6012255	119.219	ug/L		94
105)	1,2,4,5-Tetramethylben...	17.682	119	7107279	117.098	ug/L		76
106)	1,2-Dibromo-3-chloropr...	19.258	155	285120	122.738	ug/L		97
107)	1,3,5-Trichlorobenzene	19.650	180	4606574	118.542	ug/L	#	93
108)	Hexachlorobutadiene	20.948	225	1629173	107.404	ug/L		98
109)	1,2,4-Trichlorobenzene	20.725	180	3351460	114.587	ug/L		99
110)	Naphthalene	21.172	128	4774781	111.141	ug/L		100
111)	1,2,3-Trichlorobenzene	21.584	180	2072388	115.621	ug/L		96

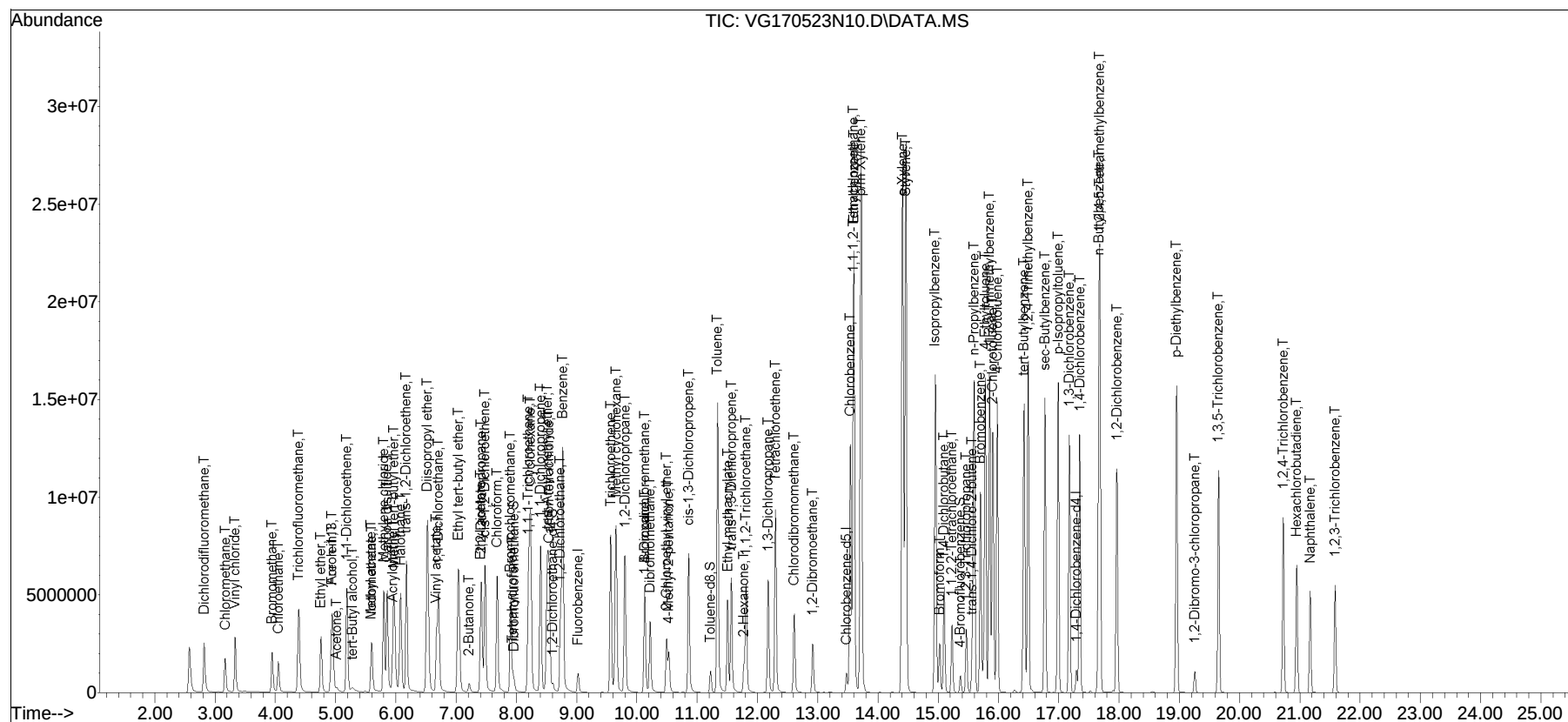
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N10.D
 Acq On : 24 May 2017 3:34 am
 Operator : GONZO:MAB
 Sample : ISTD18
 Misc : WG1006728
 ALS Vial : 45 Sample Multiplier: 1

Quant Time: May 25 10:16:06 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

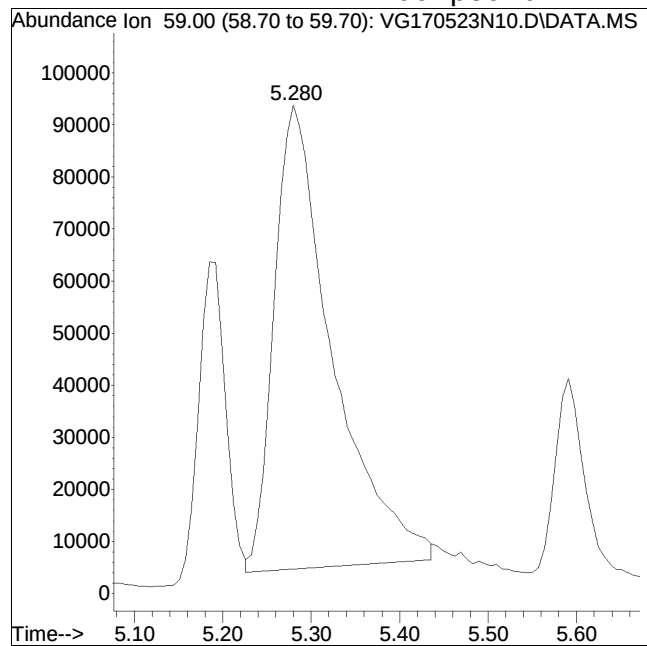
Sub List : 8260-Curve - Megamix plus Diox0523N\VG170523N07.D•



Manual Integration Report

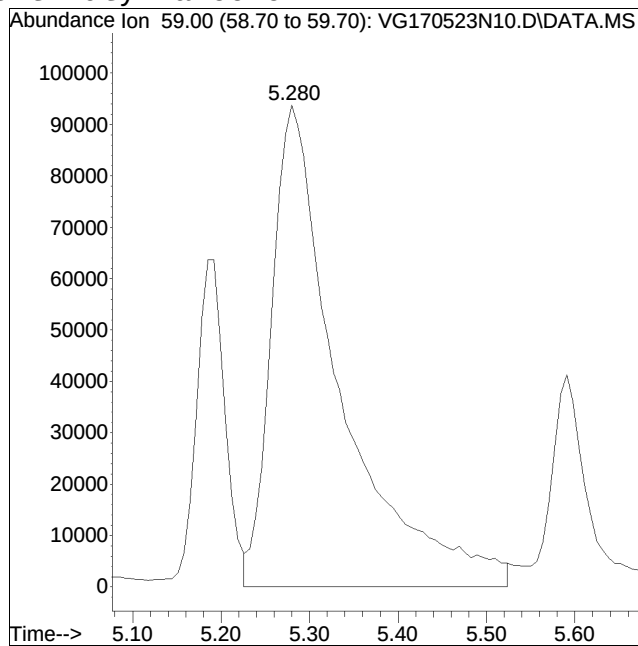
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170523N10.D Operator : GONZO:MAB
Date Inj'd : 5/24/2017 3:34 am Instrument : Gonzo
Sample : ISTD18 Quant Date : 5/25/2017 10:16 am

Compound #21: tert-Butyl alcohol



Original Peak Response = 408162

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

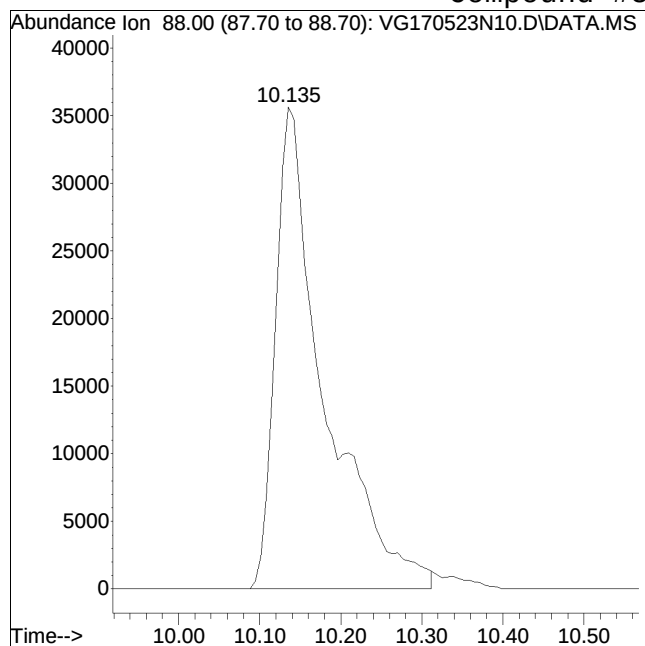


Manual Peak Response = 509310 M1

Manual Integration Report

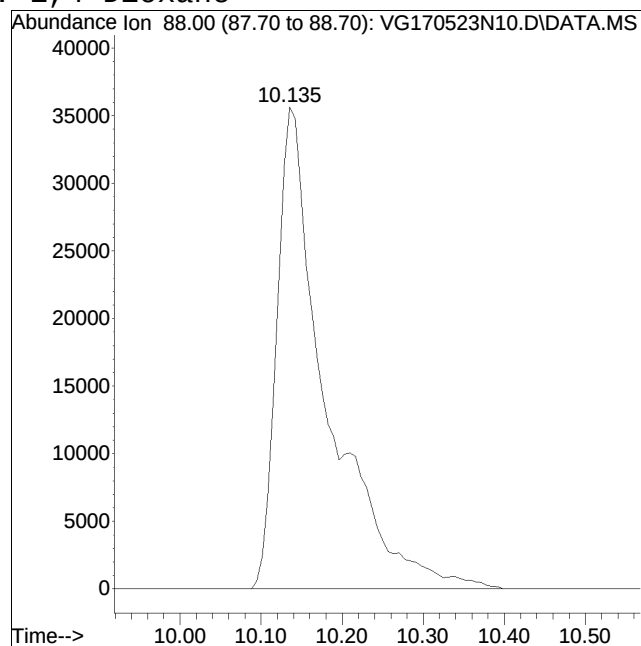
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170523N10.D Operator : GONZO:MAB
Date Inj'd : 5/24/2017 3:34 am Instrument : Gonzo
Sample : ISTD8 Quant Date : 5/25/2017 10:16 am

Compound #57: 1,4-Dioxane



Original Peak Response = 148353

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



Manual Peak Response = 151392 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N11.D
 Acq On : 24 May 2017 4:06 am
 Operator : GONZO:MAB
 Sample : ISTD10
 Misc : WG1006728
 ALS Vial : 46 Sample Multiplier: 1

Quant Time: May 25 10:16:13 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.026	96	977138	10.000	ug/L	0.00
Standard Area 1 = 854022			Recovery	=	114.42%	
59) Chlorobenzene-d5	13.483	117	725413	10.000	ug/L	# 0.00
Standard Area 1 = 628818			Recovery	=	115.36%	
79) 1,4-Dichlorobenzene-d4	17.297	152	377298	10.000	ug/L	0.00
Standard Area 1 = 309860			Recovery	=	121.76%	
System Monitoring Compounds						
36) Dibromofluoromethane	7.965	113	230267	9.985	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.85%	
43) 1,2-Dichloroethane-d4	8.614	65	220330	9.152	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	91.52%	
60) Toluene-d8	11.224	98	930748	9.905	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.05%	
83) 4-Bromofluorobenzene	15.376	95	348002	9.860	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.60%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.818	85	5159316	201.012	ug/L	98
3) Chloromethane	3.170	50	4659425	251.534	ug/L	97
4) Vinyl chloride	3.332	62	5125745	178.069	ug/L	100
5) Bromomethane	3.948	94	2862888	195.373	ug/L	98
6) Chloroethane	4.056	64	2756292	185.660	ug/L	98
7) Trichlorofluoromethane	4.394	101	7771509	189.529	ug/L	100
8) Ethyl ether	4.766	74	2296000	190.210	ug/L	# 73
10) 1,1-Dichloroethene	5.192	96	4399046	201.809	ug/L	82
11) Carbon disulfide	5.862	76	13428905	179.951	ug/L	99
12) Freon-113	4.949	101	4097763	200.833	ug/L	# 84
13) Iodomethane	5.605	142	4926593	163.244	ug/L	87
14) Acrolein	4.949	56	603348	197.852	ug/L	96
15) Methylene chloride	5.801	84	4490837	189.403	ug/L	87
17) Acetone	5.030	43	659460	194.748	ug/L	# 83
18) trans-1,2-Dichloroethene	6.179	96	4935759	198.529	ug/L	89
19) Methyl acetate	5.598	43	2223324	190.169	ug/L	# 89
20) Methyl tert-butyl ether	5.977	73	10684997	233.166	ug/L	90
21) tert-Butyl alcohol	5.287	59	945918M1	1175.025	ug/L	
22) Diisopropyl ether	6.531	45	18602019	196.143	ug/L	91
23) 1,1-Dichloroethane	6.714	63	9390820	200.197	ug/L	100
24) Halothane	6.085	117	3909557	207.775	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N11.D
 Acq On : 24 May 2017 4:06 am
 Operator : GONZO:MAB
 Sample : ISTD10
 Misc : WG1006728
 ALS Vial : 46 Sample Multiplier: 1

Quant Time: May 25 10:16:13 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	5.956	53	1267404	189.696	ug/L	96
26) Ethyl tert-butyl ether	7.045	59	13028281	198.075	ug/L	95
27) Vinyl acetate	6.680	43	8701821	247.596	ug/L	96
28) cis-1,2-Dichloroethene	7.485	96	5325712	192.691	ug/L	90
29) 2,2-Dichloropropane	7.424	77	6011207	196.708	ug/L	89
30) Bromochloromethane	7.911	128	2187117	185.118	ug/L	92
31) Cyclohexane	8.242	56	8917546	206.726	ug/L	85
32) Chloroform	7.687	83	8733534	199.894	ug/L	97
33) Ethyl acetate	7.417	43	3120136	191.371	ug/L #	95
34) Carbon tetrachloride	8.553	117	6913616	206.404	ug/L	96
35) Tetrahydrofuran	7.944	42	917884	182.737	ug/L #	79
37) 1,1,1-Trichloroethane	8.208	97	7755923	204.571	ug/L	97
39) 2-Butanone	7.221	43	1212096	199.598	ug/L	89
40) 1,1-Dichloropropene	8.404	75	7030175	204.414	ug/L #	89
41) Benzene	8.769	78	20243063	189.968	ug/L	98
42) tert-Amyl methyl ether	8.519	73	11168593	197.125	ug/L	98
44) 1,2-Dichloroethane	8.736	62	5927917	189.682	ug/L	98
47) Methyl cyclohexane	9.662	83	7182831	203.619	ug/L	95
48) Trichloroethene	9.567	95	5326378	197.219	ug/L #	82
50) Dibromomethane	10.223	93	2540594	197.326	ug/L #	86
51) 1,2-Dichloropropane	9.804	63	5306950	203.112	ug/L #	89
53) 2-Chloroethyl vinyl ether	10.494	63	2350608	231.999	ug/L #	1
54) Bromodichloromethane	10.136	83	6627810	220.457	ug/L #	98
57) 1,4-Dioxane	10.142	88	277148M1	1984.711	ug/L	
58) cis-1,3-Dichloropropene	10.866	75	7706753	205.831	ug/L	96
61) Toluene	11.346	92	12660855	193.029	ug/L	93
62) 4-Methyl-2-pentanone	10.534	58	1120804	194.913	ug/L	91
63) Tetrachloroethene	12.306	166	5639080	195.026	ug/L #	82
65) trans-1,3-Dichloropropene	11.576	75	6205457	211.581	ug/L	94
67) Ethyl methacrylate	11.515	69	4924605	236.133	ug/L	96
68) 1,1,2-Trichloroethane	11.819	83	2988392	194.076	ug/L	95
69) Chlorodibromomethane	12.617	129	4469795	204.204	ug/L	97
70) 1,3-Dichloropropane	12.185	76	6196103	194.792	ug/L	99
71) 1,2-Dibromoethane	12.922	107	3468739	215.138	ug/L	97
72) 2-Hexanone	11.779	43	1954593	199.350	ug/L	99
73) Chlorobenzene	13.551	112	14207728	193.952	ug/L #	87
74) Ethylbenzene	13.605	91	20258766	171.210	ug/L #	86
75) 1,1,1,2-Tetrachloroethane	13.598	131	4596156	194.603	ug/L	96
76) p/m Xylene	13.733	106	16522589	353.598	ug/L #	51
77) o Xylene	14.416	106	15802153	355.114	ug/L #	1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N11.D
 Acq On : 24 May 2017 4:06 am
 Operator : GONZO:MAB
 Sample : ISTD10
 Misc : WG1006728
 ALS Vial : 46 Sample Multiplier: 1

Quant Time: May 25 10:16:13 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	14.464	104	22713070	309.553	ug/L	91
80)	Bromoform	15.032	173	2572186	208.983	ug/L	98
82)	Isopropylbenzene	14.957	105	20827200	171.743	ug/L	86
84)	Bromobenzene	15.708	156	5950564	193.355	ug/L	100
85)	n-Propylbenzene	15.593	91	21851245	158.973	ug/L #	77
86)	1,4-Dichlorobutane	15.106	55	6396435	195.416	ug/L #	86
87)	1,1,2,2-Tetrachloroethane	15.234	83	3623398	192.647	ug/L	97
88)	4-Ethyltoluene	15.789	105	20651760	177.636	ug/L	86
89)	2-Chlorotoluene	15.917	91	16051852	192.257	ug/L #	79
90)	1,3,5-Trimethylbenzene	15.863	105	18041578	186.861	ug/L #	86
91)	1,2,3-Trichloropropane	15.471	75	2784999	179.826	ug/L	90
92)	trans-1,4-Dichloro-2-b...	15.573	53	1151758	230.720	ug/L	93
93)	4-Chlorotoluene	15.992	91	16596439	188.969	ug/L #	77
94)	tert-Butylbenzene	16.431	119	16071275	191.424	ug/L #	82
97)	1,2,4-Trimethylbenzene	16.499	105	17901160	181.578	ug/L #	83
98)	sec-Butylbenzene	16.770	105	20154257	176.554	ug/L	87
99)	p-Isopropyltoluene	16.993	119	18713488	183.883	ug/L	90
100)	1,3-Dichlorobenzene	17.182	146	11399632	198.723	ug/L	94
101)	1,4-Dichlorobenzene	17.358	146	11311373	194.204	ug/L	95
102)	p-Diethylbenzene	18.961	119	17737701	203.190	ug/L	88
103)	n-Butylbenzene	17.676	91	20067229	188.985	ug/L #	88
104)	1,2-Dichlorobenzene	17.973	146	10353405	201.616	ug/L	95
105)	1,2,4,5-Tetramethylben...	17.696	119	11394888	184.369	ug/L	76
106)	1,2-Dibromo-3-chloropr...	19.265	155	498631	210.335	ug/L	97
107)	1,3,5-Trichlorobenzene	19.664	180	7939285	200.636	ug/L #	93
108)	Hexachlorobutadiene	20.956	225	3096709	200.488	ug/L	98
109)	1,2,4-Trichlorobenzene	20.732	180	5879572	197.416	ug/L	99
110)	Naphthalene	21.179	128	8789896	200.926	ug/L	100
111)	1,2,3-Trichlorobenzene	21.591	180	3686589	202.254	ug/L	96

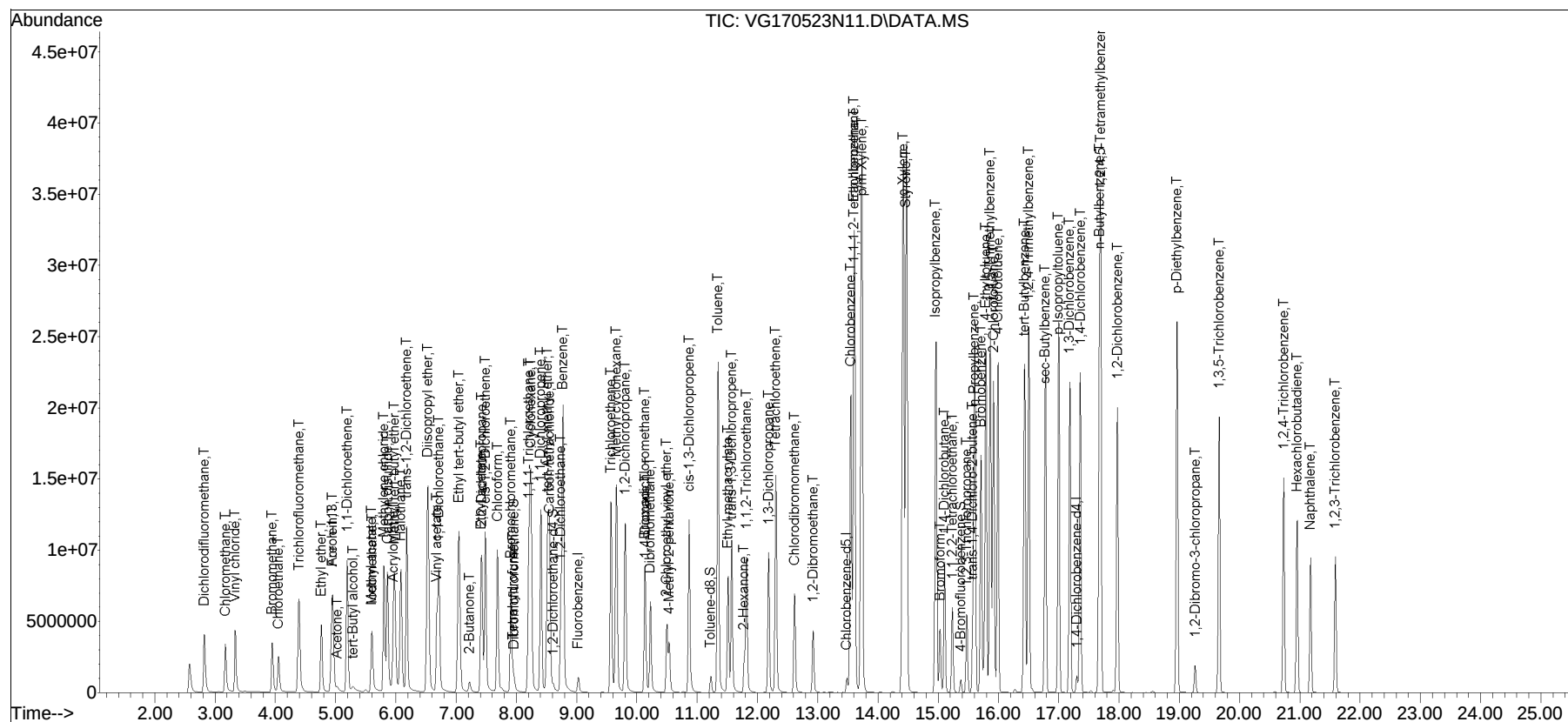
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170523N\
 Data File : VG170523N11.D
 Acq On : 24 May 2017 4:06 am
 Operator : GONZO:MAB
 Sample : ISTD10
 Misc : WG1006728
 ALS Vial : 46 Sample Multiplier: 1

Quant Time: May 25 10:16:13 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

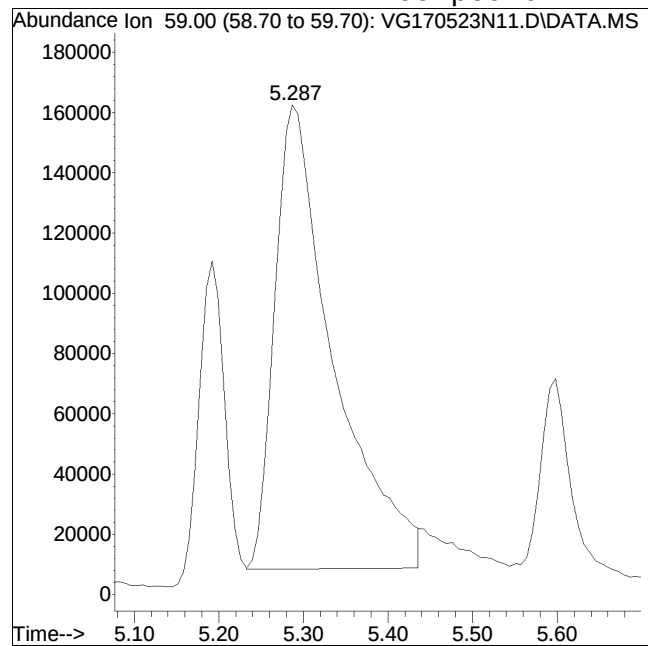
Sub List : 8260-Curve - Megamix plus Diox0523N\VG170523N07.D•



Manual Integration Report

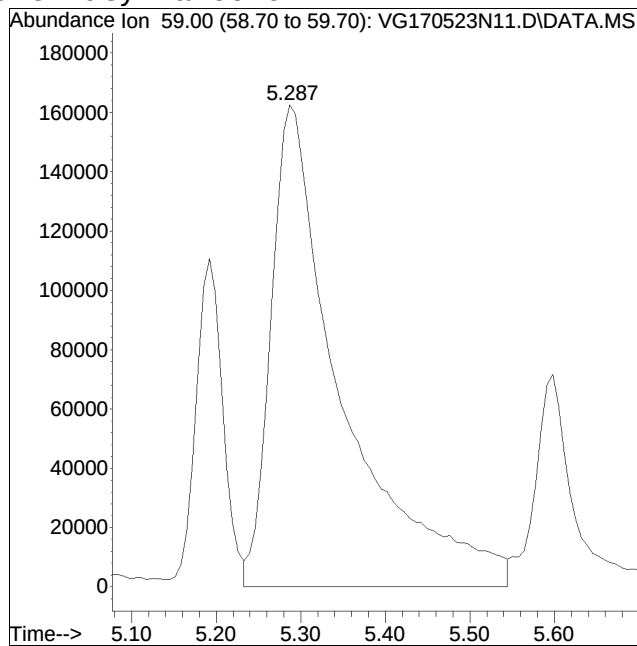
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170523N11.D Operator : GONZO:MAB
Date Inj'd : 5/24/2017 4:06 am Instrument : Gonzo
Sample : ISTD10 Quant Date : 5/25/2017 10:16 am

Compound #21: tert-Butyl alcohol



Original Peak Response = 744622

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

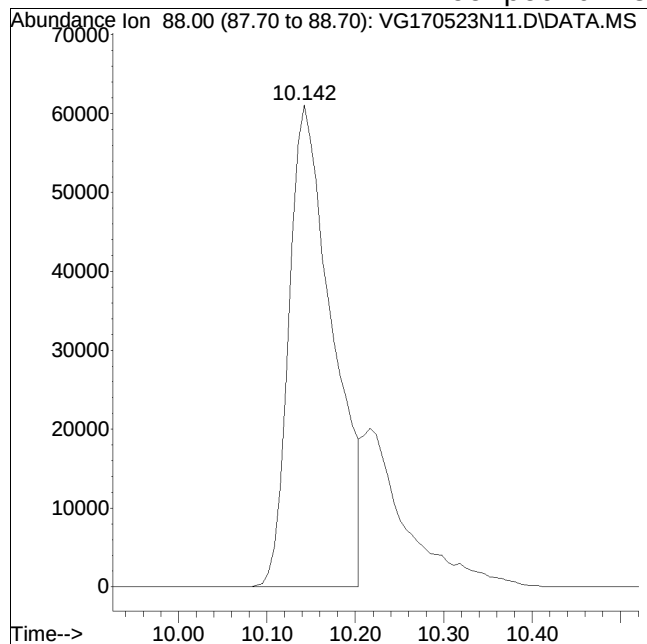


Manual Peak Response = 945918 M1

Manual Integration Report

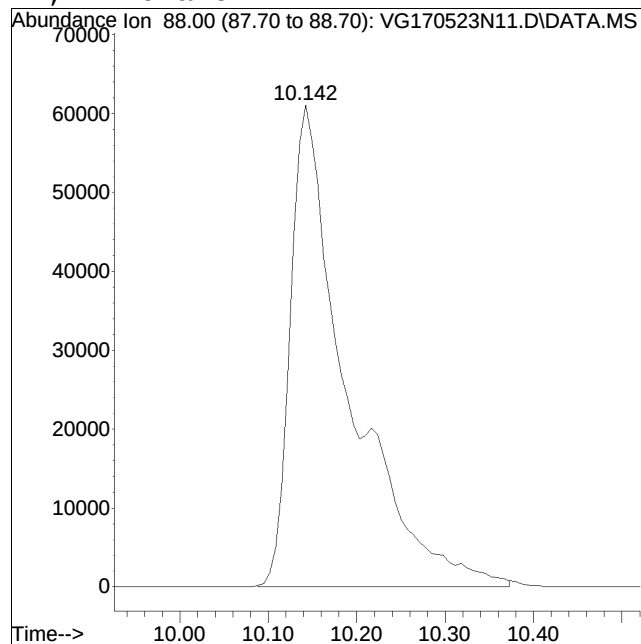
Data Path : I:\VOLATILES\Gonzo\2017\170 Method : G_170523N_8260.m
Data File : VG170523N11.D Operator : GONZO:MAB
Date Inj'd : 5/24/2017 4:06 am Instrument : Gonzo
Sample : ISTD10 Quant Date : 5/25/2017 10:16 am

Compound #57: 1,4-Dioxane



Original Peak Response = 209432

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



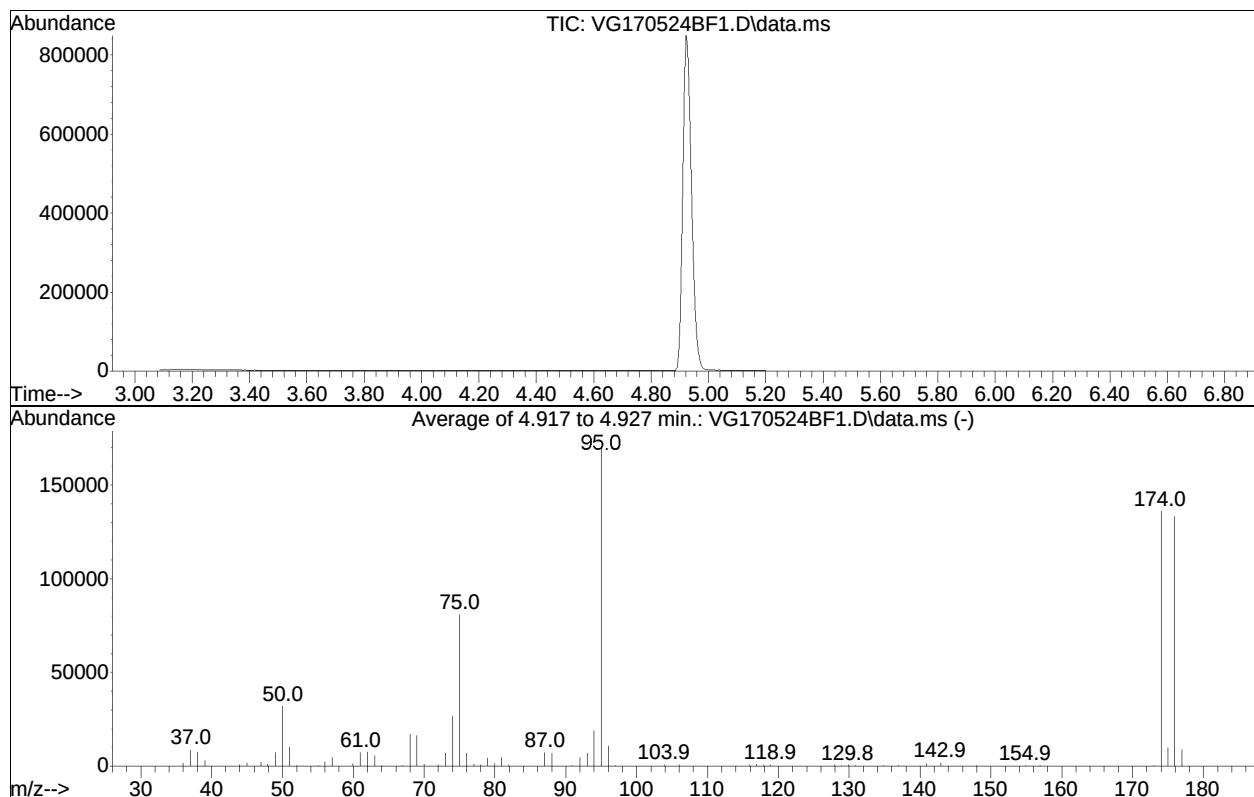
Manual Peak Response = 277148 M1

BFB

Data Path : I:\VOLATILES\Gonzo\2017\170524\
Data File : VG170524BF1.D
Acq On : 24 May 2017 3:05 pm
Operator : GONZO:MAB
Sample : WG1006728-2
Misc : WG1006728
ALS Vial : 37 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed May 24 20:55:12 2017



AutoFind: Scans 350, 351, 352; Background Corrected with Scan 341

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.9	32187	PASS
75	95	30	60	47.4	80915	PASS
95	95	100	100	100.0	170581	PASS
96	95	5	9	6.5	11004	PASS
173	174	0.00	2	0.2	286	PASS
174	95	50	100	79.9	136229	PASS
175	174	5	9	7.1	9739	PASS
176	174	95	101	97.9	133435	PASS
177	176	5	9	6.6	8800	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170524\
 Data File : VG170524A02.D
 Acq On : 24 May 2017 4:00 pm
 Operator : GONZO:MAB
 Sample : ISTD11
 Misc : WG1006728
 ALS Vial : 37 Sample Multiplier: 1

Quant Time: May 25 10:16:24 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-L11 - Level 11 for 8260-LRR product

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.033	96	822321	10.000	ug/L	0.01
Standard Area 1 = 854022			Recovery	=	96.29%	
59) Chlorobenzene-d5	13.490	117	593251	10.000	ug/L	# 0.01
Standard Area 1 = 628818			Recovery	=	94.34%	
79) 1,4-Dichlorobenzene-d4	17.304	152	277441	10.000	ug/L	0.01
Standard Area 1 = 309860			Recovery	=	89.54%	
System Monitoring Compounds						
36) Dibromofluoromethane	7.971	113	194428	10.018	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.18%	
43) 1,2-Dichloroethane-d4	8.614	65	223849	11.048	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	110.48%	
60) Toluene-d8	11.231	98	778824	10.134	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.34%	
83) 4-Bromofluorobenzene	15.383	95	272492	10.499	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	104.99%	
Target Compounds						
						Qvalue
4) Vinyl chloride	3.339	62	5453	0.225	ug/L #	63
34) Carbon tetrachloride	8.553	117	3141	0.720	ug/L	92
41) Benzene	8.776	78	18664	0.208	ug/L #	92
48) Trichloroethene	9.574	95	5352	0.235	ug/L #	77

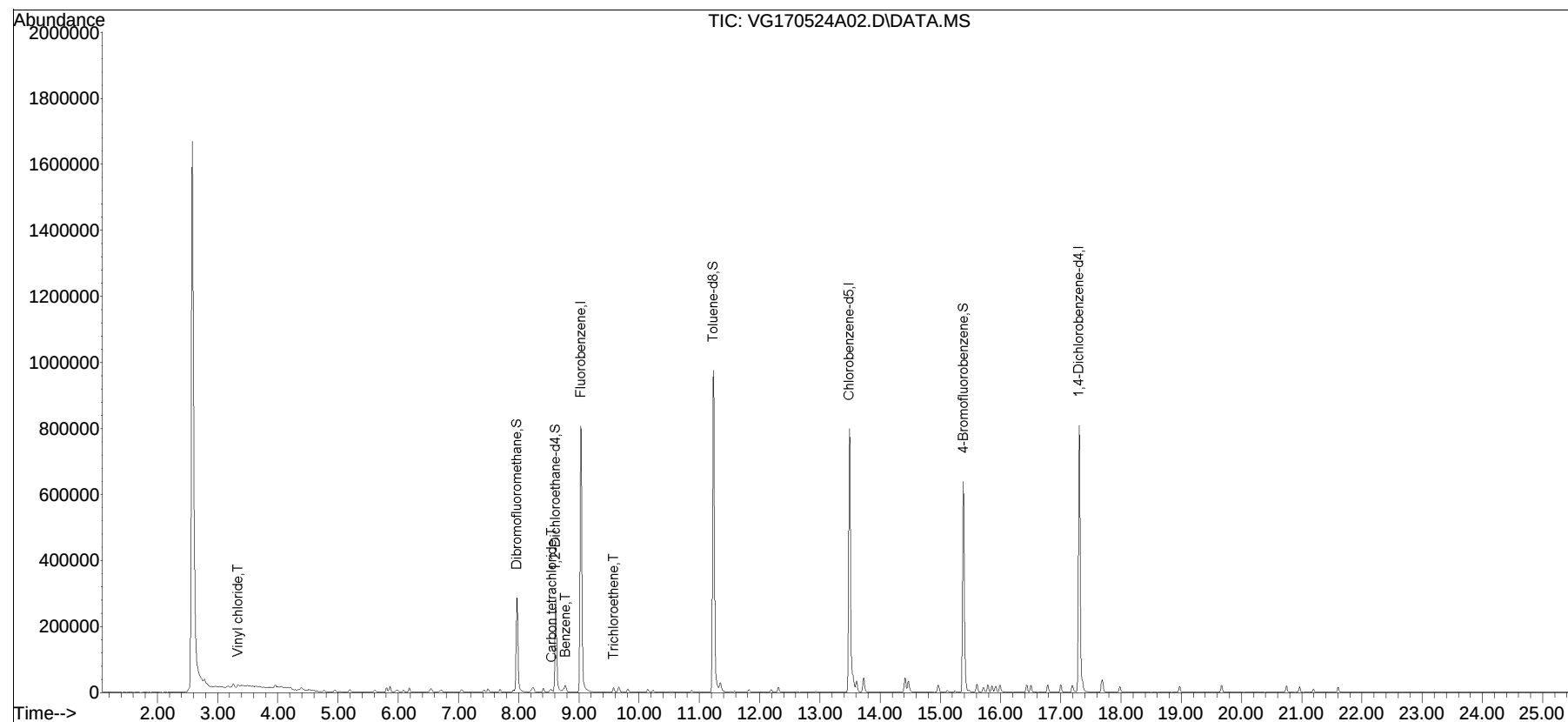
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170524\
 Data File : VG170524A02.D
 Acq On : 24 May 2017 4:00 pm
 Operator : GONZO:MAB
 Sample : ISTD11
 Misc : WG1006728
 ALS Vial : 37 Sample Multiplier: 1

Quant Time: May 25 10:16:24 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

Sub List : 8260-L11 - Level 11 for 8260-LRR product0523N07.D•



Manual Integration Report

Data Path	: I:\VOLATILES\Gonzo\2017\17Q	Method	: G_170523N_8260.m
Data File	: VG170524A02.D	Operator	: GONZO:MAB
Date Inj'd	: 5/24/2017 4:00 pm	Instrument	: Gonzo
Sample	: ISTD11	Quant Date	: 5/25/2017 10:16 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170524\
 Data File : VG170524A03.D
 Acq On : 24 May 2017 4:34 pm
 Operator : GONZO:MAB
 Sample : ISTD1
 Misc : WG1006728
 ALS Vial : 38 Sample Multiplier: 1

Quant Time: May 25 10:16:28 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.033	96	804146	10.000	ug/L	0.01
Standard Area 1 = 854022			Recovery	=	94.16%	
59) Chlorobenzene-d5	13.496	117	584833	10.000	ug/L	# 0.02
Standard Area 1 = 628818			Recovery	=	93.01%	
79) 1,4-Dichlorobenzene-d4	17.311	152	274235	10.000	ug/L	0.02
Standard Area 1 = 309860			Recovery	=	88.50%	
System Monitoring Compounds						
36) Dibromofluoromethane	7.971	113	188511	9.933	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.33%	
43) 1,2-Dichloroethane-d4	8.614	65	218309	11.018	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	110.18%	
60) Toluene-d8	11.231	98	766319	10.115	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.15%	
83) 4-Bromofluorobenzene	15.383	95	268754	10.476	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	104.76%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.825	85	10572	0.501	ug/L	99
3) Chloromethane	3.177	50	7284	0.478	ug/L	99
4) Vinyl chloride	3.339	62	11874	0.501	ug/L	90
5) Bromomethane	3.955	94	7591	0.629	ug/L	88
6) Chloroethane	4.056	64	6343	0.519	ug/L	99
7) Trichlorofluoromethane	4.394	101	17217	0.510	ug/L	97
8) Ethyl ether	4.773	74	5248	0.528	ug/L	# 60
10) 1,1-Dichloroethene	5.199	96	9346	0.521	ug/L	83
11) Carbon disulfide	5.862	76	40160	0.654	ug/L	97
12) Freon-113	4.949	101	9096	0.542	ug/L	# 85
13) Iodomethane	5.611	142	7725	0.696	ug/L	88
14) Acrolein	4.955	56	1214	0.484	ug/L	91
15) Methylene chloride	5.807	84	12070	0.619	ug/L	83
17) Acetone	5.030	43	6144	0.397	ug/L	95
18) trans-1,2-Dichloroethene	6.186	96	11269	0.551	ug/L	88
19) Methyl acetate	5.605	43	5829	0.606	ug/L	# 78
20) Methyl tert-butyl ether	5.983	73	18580	0.493	ug/L	# 72
21) tert-Butyl alcohol	5.294	59	2268	3.423	ug/L	# 78
22) Diisopropyl ether	6.545	45	40414	0.518	ug/L	92
23) 1,1-Dichloroethane	6.714	63	19239	0.498	ug/L	98
24) Halothane	6.085	117	7689	0.497	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170524\
 Data File : VG170524A03.D
 Acq On : 24 May 2017 4:34 pm
 Operator : GONZO:MAB
 Sample : ISTD1
 Misc : WG1006728
 ALS Vial : 38 Sample Multiplier: 1

Quant Time: May 25 10:16:28 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	5.956	53	3117	0.567	ug/L	93
26) Ethyl tert-butyl ether	7.052	59	13760	0.549	ug/L #	91
27) Vinyl acetate	6.687	43	12213	0.422	ug/L #	92
28) cis-1,2-Dichloroethene	7.491	96	11935	0.525	ug/L	91
29) 2,2-Dichloropropane	7.430	77	5054	0.758	ug/L #	1
30) Bromochloromethane	7.917	128	4953	0.509	ug/L	97
31) Cyclohexane	8.242	56	17908	0.504	ug/L	83
32) Chloroform	7.687	83	17615	0.490	ug/L	95
33) Ethyl acetate	7.424	43	7196	0.536	ug/L #	87
34) Carbon tetrachloride	8.560	117	6618	0.849	ug/L	93
35) Tetrahydrofuran	7.965	42	2340	0.566	ug/L #	76
37) 1,1,1-Trichloroethane	8.208	97	10342	0.751	ug/L	94
39) 2-Butanone	7.234	43	5742	0.339	ug/L #	82
40) 1,1-Dichloropropene	8.411	75	14359	0.507	ug/L #	89
41) Benzene	8.776	78	44010	0.502	ug/L	94
42) tert-Amyl methyl ether	8.526	73	11678	0.656	ug/L #	13
44) 1,2-Dichloroethane	8.742	62	14086	0.548	ug/L	95
47) Methyl cyclohexane	9.662	83	14908	0.514	ug/L	94
48) Trichloroethene	9.581	95	11011	0.495	ug/L #	80
50) Dibromomethane	10.230	93	5647	0.533	ug/L #	88
51) 1,2-Dichloropropane	9.811	63	10603	0.493	ug/L #	89
53) 2-Chloroethyl vinyl ether	10.507	63	3181	0.381	ug/L #	1
54) Bromodichloromethane	10.142	83	10473	0.423	ug/L	97
57) 1,4-Dioxane	10.156	88	12433	108.189	ug/L	99
58) cis-1,3-Dichloropropene	10.873	75	8686	0.783	ug/L	91
61) Toluene	11.353	92	26701	0.505	ug/L	97
62) 4-Methyl-2-pentanone	10.541	58	2374	0.512	ug/L #	40
63) Tetrachloroethene	12.313	166	12688	0.544	ug/L #	82
65) trans-1,3-Dichloropropene	11.583	75	4951	0.900	ug/L #	72
67) Ethyl methacrylate	11.522	69	5748	0.342	ug/L	93
68) 1,1,2-Trichloroethane	11.819	83	6401	0.516	ug/L	92
69) Chlorodibromomethane	12.617	129	5311	0.697	ug/L	95
70) 1,3-Dichloropropane	12.191	76	13727	0.535	ug/L	99
71) 1,2-Dibromoethane	12.935	107	5558	0.428	ug/L	90
72) 2-Hexanone	11.799	43	3680	0.466	ug/L #	93
73) Chlorobenzene	13.557	112	30751	0.521	ug/L #	76
74) Ethylbenzene	13.611	91	47246	0.495	ug/L	90
75) 1,1,1,2-Tetrachloroethane	13.605	131	5317	0.671	ug/L #	66
76) p/m Xylene	13.726	106	38535	1.023	ug/L	76
77) o Xylene	14.416	106	34955	0.974	ug/L	77

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170524\
 Data File : VG170524A03.D
 Acq On : 24 May 2017 4:34 pm
 Operator : GONZO:MAB
 Sample : ISTD1
 Misc : WG1006728
 ALS Vial : 38 Sample Multiplier: 1

Quant Time: May 25 10:16:28 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
78)	Styrene	14.470	104	58712	0.993	ug/L	#	75
80)	Bromoform	15.038	173	2775	0.777	ug/L		96
82)	Isopropylbenzene	14.964	105	46911	0.532	ug/L		90
84)	Bromobenzene	15.715	156	12252	0.548	ug/L		98
85)	n-Propylbenzene	15.606	91	54942	0.550	ug/L	#	90
86)	1,4-Dichlorobutane	15.113	55	12650	0.532	ug/L	#	86
87)	1,1,2,2-Tetrachloroethane	15.241	83	7645	0.559	ug/L		92
88)	4-Ethyltoluene	15.789	105	44150	0.522	ug/L		92
89)	2-Chlorotoluene	15.917	91	32656	0.538	ug/L	#	79
90)	1,3,5-Trimethylbenzene	15.863	105	35547	0.507	ug/L	#	85
91)	1,2,3-Trichloropropane	15.478	75	7423	0.659	ug/L		94
92)	trans-1,4-Dichloro-2-b...	15.593	53	1618	0.446	ug/L	#	6
93)	4-Chlorotoluene	15.985	91	35377	0.554	ug/L	#	81
94)	tert-Butylbenzene	16.438	119	32034	0.525	ug/L	#	83
97)	1,2,4-Trimethylbenzene	16.506	105	36673	0.512	ug/L		88
98)	sec-Butylbenzene	16.783	105	44585	0.537	ug/L		90
99)	p-Isopropyltoluene	16.999	119	38431	0.520	ug/L		91
100)	1,3-Dichlorobenzene	17.196	146	22814	0.547	ug/L		94
101)	1,4-Dichlorobenzene	17.358	146	24403	0.576	ug/L		95
102)	p-Diethylbenzene	18.974	119	29960	0.472	ug/L		90
103)	n-Butylbenzene	17.676	91	40016	0.518	ug/L	#	89
104)	1,2-Dichlorobenzene	17.980	146	19981	0.535	ug/L		95
105)	1,2,4,5-Tetramethylben...	17.696	119	23317	0.519	ug/L		75
106)	1,2-Dibromo-3-chloropr...	19.278	155	335	0.836	ug/L	#	71
107)	1,3,5-Trichlorobenzene	19.671	180	16004	0.556	ug/L		92
108)	Hexachlorobutadiene	20.962	225	7548	0.672	ug/L		96
109)	1,2,4-Trichlorobenzene	20.746	180	13475	0.622	ug/L		97
110)	Naphthalene	21.192	128	20065	0.631	ug/L		100
111)	1,2,3-Trichlorobenzene	21.605	180	11219	0.491	ug/L		98

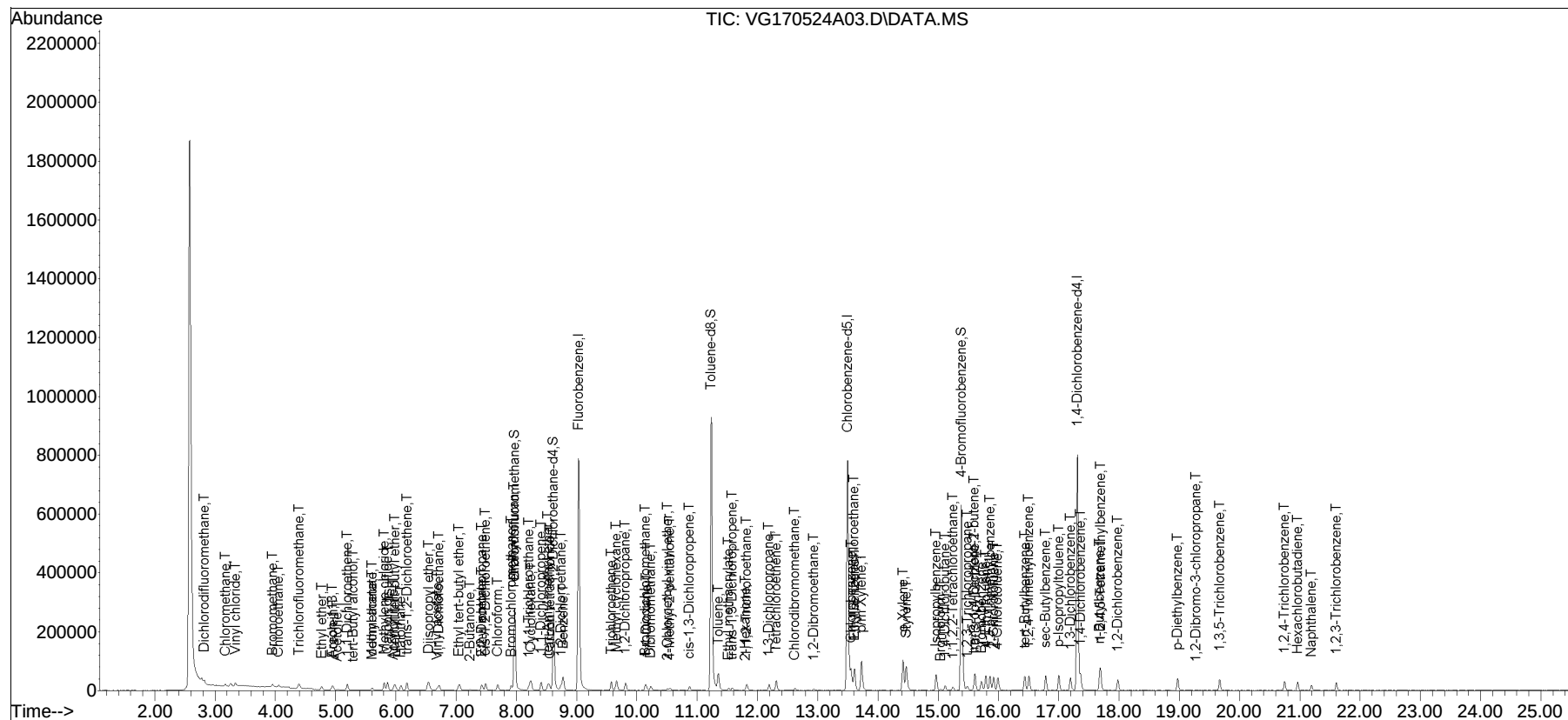
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170524\
 Data File : VG170524A03.D
 Acq On : 24 May 2017 4:34 pm
 Operator : GONZO:MAB
 Sample : ISTD1
 Misc : WG1006728
 ALS Vial : 38 Sample Multiplier: 1

Quant Time: May 25 10:16:28 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox0523N\VG170523N07.D•



Manual Integration Report

Data Path	: I:\VOLATILES\Gonzo\2017\17Q	Method	: G_170523N_8260.m
Data File	: VG170524A03.D	Operator	: GONZO:MAB
Date Inj'd	: 5/24/2017 4:34 pm	Instrument	: Gonzo
Sample	: ISTD1	Quant Date	: 5/25/2017 10:16 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170524\
 Data File : VG170524A05.D
 Acq On : 24 May 2017 5:39 pm
 Operator : GONZO:MAB
 Sample : ISTD2
 Misc : WG1006728
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: May 25 10:16:38 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.033	96	806737	10.000	ug/L	0.01
Standard Area 1 = 854022			Recovery	=	94.46%	
59) Chlorobenzene-d5	13.497	117	586472	10.000	ug/L	# 0.02
Standard Area 1 = 628818			Recovery	=	93.27%	
79) 1,4-Dichlorobenzene-d4	17.311	152	279511	10.000	ug/L	0.02
Standard Area 1 = 309860			Recovery	=	90.21%	
System Monitoring Compounds						
36) Dibromofluoromethane	7.972	113	190954	10.029	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.29%	
43) 1,2-Dichloroethane-d4	8.621	65	211436	10.637	ug/L	0.02
Spiked Amount 10.000	Range 70 - 130		Recovery	=	106.37%	
60) Toluene-d8	11.238	98	766804	10.093	ug/L	0.02
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.93%	
83) 4-Bromofluorobenzene	15.383	95	271565	10.386	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.86%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.825	85	41886	1.977	ug/L	99
3) Chloromethane	3.170	50	24829	1.623	ug/L	96
4) Vinyl chloride	3.339	62	47856	2.014	ug/L	100
5) Bromomethane	3.955	94	21790	1.801	ug/L	98
6) Chloroethane	4.056	64	26174	2.135	ug/L	96
7) Trichlorofluoromethane	4.394	101	67693	2.000	ug/L	99
8) Ethyl ether	4.773	74	21799	2.187	ug/L	# 67
10) 1,1-Dichloroethene	5.199	96	35975	1.999	ug/L	84
11) Carbon disulfide	5.868	76	120291	1.952	ug/L	100
12) Freon-113	4.949	101	33162	1.969	ug/L	# 87
13) Iodomethane	5.611	142	15541	1.625	ug/L	90
14) Acrolein	4.949	56	5873	2.333	ug/L	92
15) Methylene chloride	5.808	84	41158	2.103	ug/L	83
17) Acetone	5.030	43	11971	2.494	ug/L	# 87
18) trans-1,2-Dichloroethene	6.186	96	41218	2.008	ug/L	92
19) Methyl acetate	5.605	43	23025	2.385	ug/L	# 85
20) Methyl tert-butyl ether	5.983	73	77522	2.049	ug/L	# 72
21) tert-Butyl alcohol	5.287	59	7868M1	11.838	ug/L	
22) Diisopropyl ether	6.538	45	166763	2.130	ug/L	92
23) 1,1-Dichloroethane	6.721	63	79395	2.050	ug/L	99
24) Halothane	6.092	117	30150	1.941	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170524\
 Data File : VG170524A05.D
 Acq On : 24 May 2017 5:39 pm
 Operator : GONZO:MAB
 Sample : ISTD2
 Misc : WG1006728
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: May 25 10:16:38 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	5.956	53	12827	2.325	ug/L	94
26) Ethyl tert-butyl ether	7.052	59	60786	2.192	ug/L #	92
27) Vinyl acetate	6.687	43	48508	1.672	ug/L #	94
28) cis-1,2-Dichloroethene	7.491	96	46879	2.054	ug/L	88
29) 2,2-Dichloropropane	7.431	77	21015	1.823	ug/L #	1
30) Bromochloromethane	7.918	128	19985	2.049	ug/L	99
31) Cyclohexane	8.242	56	69397	1.949	ug/L	84
32) Chloroform	7.688	83	74039	2.053	ug/L	97
33) Ethyl acetate	7.424	43	30363	2.256	ug/L #	92
34) Carbon tetrachloride	8.553	117	28861	1.650	ug/L	98
35) Tetrahydrofuran	7.958	42	10276	2.478	ug/L #	75
37) 1,1,1-Trichloroethane	8.215	97	43222	1.798	ug/L	95
39) 2-Butanone	7.234	43	16987	2.587	ug/L #	81
40) 1,1-Dichloropropene	8.411	75	56396	1.986	ug/L #	89
41) Benzene	8.776	78	179201	2.037	ug/L	97
42) tert-Amyl methyl ether	8.526	73	51309	1.933	ug/L #	22
44) 1,2-Dichloroethane	8.743	62	56352	2.184	ug/L	96
47) Methyl cyclohexane	9.662	83	56601	1.943	ug/L	94
48) Trichloroethene	9.574	95	43298	1.942	ug/L #	82
50) Dibromomethane	10.230	93	22640	2.130	ug/L #	88
51) 1,2-Dichloropropane	9.811	63	42554	1.973	ug/L #	90
53) 2-Chloroethyl vinyl ether	10.508	63	15443	1.846	ug/L #	1
54) Bromodichloromethane	10.142	83	44839	1.806	ug/L #	100
57) 1,4-Dioxane	10.156	88	53084M1	460.440	ug/L	
58) cis-1,3-Dichloropropene	10.873	75	35785	1.657	ug/L #	82
61) Toluene	11.353	92	109190	2.059	ug/L	99
62) 4-Methyl-2-pentanone	10.555	58	10698	2.301	ug/L	96
63) Tetrachloroethene	12.313	166	45749	1.957	ug/L	84
65) trans-1,3-Dichloropropene	11.583	75	20397	1.549	ug/L #	76
67) Ethyl methacrylate	11.522	69	28060	1.664	ug/L	98
68) 1,1,2-Trichloroethane	11.826	83	27573	2.215	ug/L	96
69) Chlorodibromomethane	12.624	129	24352	1.770	ug/L	96
70) 1,3-Dichloropropane	12.191	76	55138	2.144	ug/L	97
71) 1,2-Dibromoethane	12.935	107	25038	1.921	ug/L	99
72) 2-Hexanone	11.799	43	17708	2.234	ug/L #	93
73) Chlorobenzene	13.557	112	119440	2.017	ug/L #	79
74) Ethylbenzene	13.612	91	196192	2.051	ug/L	92
75) 1,1,1,2-Tetrachloroethane	13.605	131	24373	1.666	ug/L	91
76) p/m Xylene	13.726	106	154042	4.078	ug/L	78
77) o Xylene	14.416	106	148407	4.125	ug/L	76

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170524\
 Data File : VG170524A05.D
 Acq On : 24 May 2017 5:39 pm
 Operator : GONZO:MAB
 Sample : ISTD2
 Misc : WG1006728
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: May 25 10:16:38 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
78)	Styrene	14.470	104	237233	3.999	ug/L	#	79
80)	Bromoform	15.038	173	10962	1.667	ug/L		99
82)	Isopropylbenzene	14.964	105	192285	2.140	ug/L		93
84)	Bromobenzene	15.715	156	46452	2.037	ug/L		99
85)	n-Propylbenzene	15.606	91	217900	2.140	ug/L	#	90
86)	1,4-Dichlorobutane	15.113	55	54409	2.244	ug/L	#	88
87)	1,1,2,2-Tetrachloroethane	15.241	83	31974	2.295	ug/L		96
88)	4-Ethyltoluene	15.789	105	178138	2.068	ug/L		91
89)	2-Chlorotoluene	15.918	91	128369	2.075	ug/L	#	77
90)	1,3,5-Trimethylbenzene	15.857	105	151015	2.111	ug/L		87
91)	1,2,3-Trichloropropane	15.478	75	27650	2.410	ug/L		93
92)	trans-1,4-Dichloro-2-b...	15.579	53	7494	2.026	ug/L	#	48
93)	4-Chlorotoluene	15.985	91	135228	2.078	ug/L	#	79
94)	tert-Butylbenzene	16.431	119	127535	2.051	ug/L	#	81
97)	1,2,4-Trimethylbenzene	16.506	105	152095	2.082	ug/L		88
98)	sec-Butylbenzene	16.783	105	175426	2.074	ug/L		93
99)	p-Isopropyltoluene	17.000	119	152900	2.028	ug/L		90
100)	1,3-Dichlorobenzene	17.189	146	84444	1.987	ug/L		94
101)	1,4-Dichlorobenzene	17.358	146	88261M3	2.045	ug/L		
102)	p-Diethylbenzene	18.974	119	123135	1.904	ug/L		90
103)	n-Butylbenzene	17.676	91	156836	1.994	ug/L	#	89
104)	1,2-Dichlorobenzene	17.980	146	77153	2.028	ug/L		94
105)	1,2,4,5-Tetramethylben...	17.696	119	92997	2.031	ug/L		74
106)	1,2-Dibromo-3-chloropr...	19.279	155	1747	1.634	ug/L		94
107)	1,3,5-Trichlorobenzene	19.671	180	57511	1.962	ug/L	#	93
108)	Hexachlorobutadiene	20.962	225	22852	1.997	ug/L		96
109)	1,2,4-Trichlorobenzene	20.746	180	44397	2.012	ug/L		99
110)	Naphthalene	21.192	128	68406	2.111	ug/L		100
111)	1,2,3-Trichlorobenzene	21.605	180	33143	2.101	ug/L		93

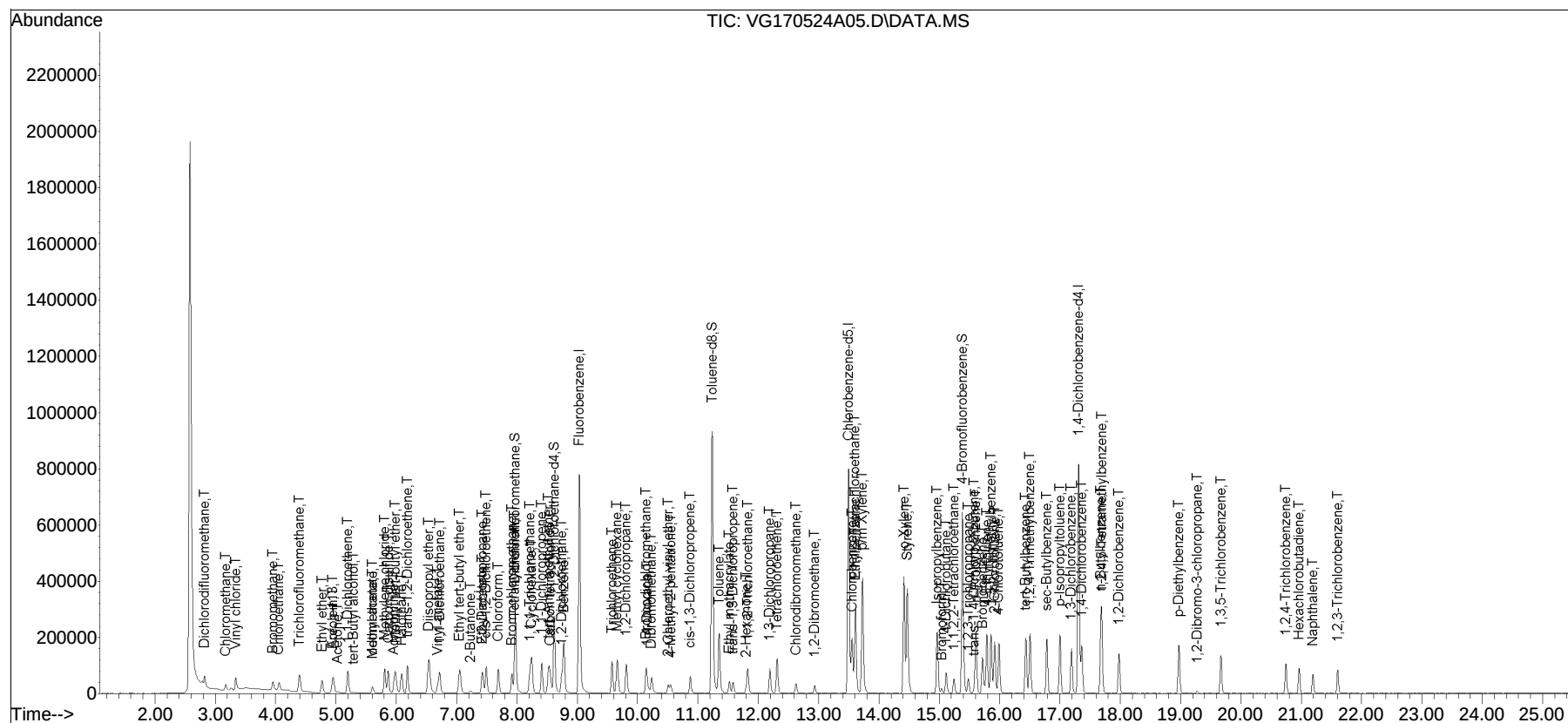
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170524\
Data File : VG170524A05.D
Acq On : 24 May 2017 5:39 pm
Operator : GONZO:MAB
Sample : ISTD12
Misc : WG1006728
ALS Vial : 40 Sample Multiplier: 1

Quant Time: May 25 10:16:38 2017
Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu May 25 10:13:56 2017
Response via : Initial Calibration

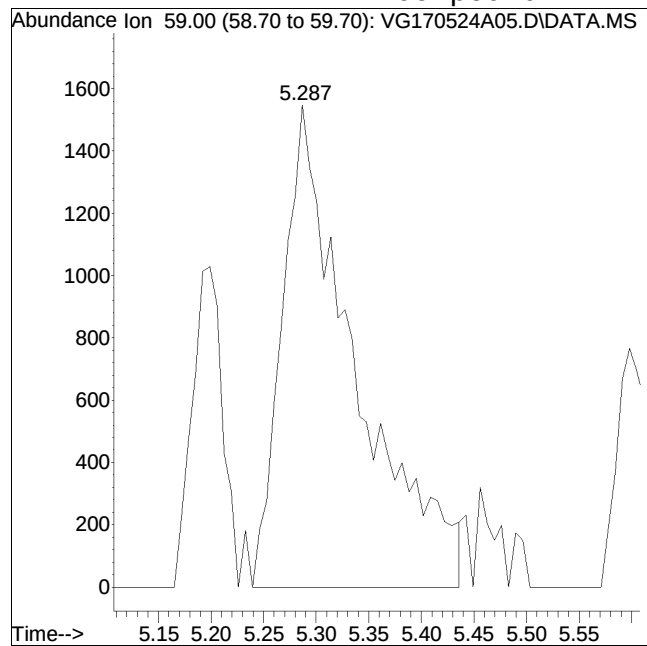
Sub List : 8260-Curve - Megamix plus Diox0523N\VG170523N07.D•



Manual Integration Report

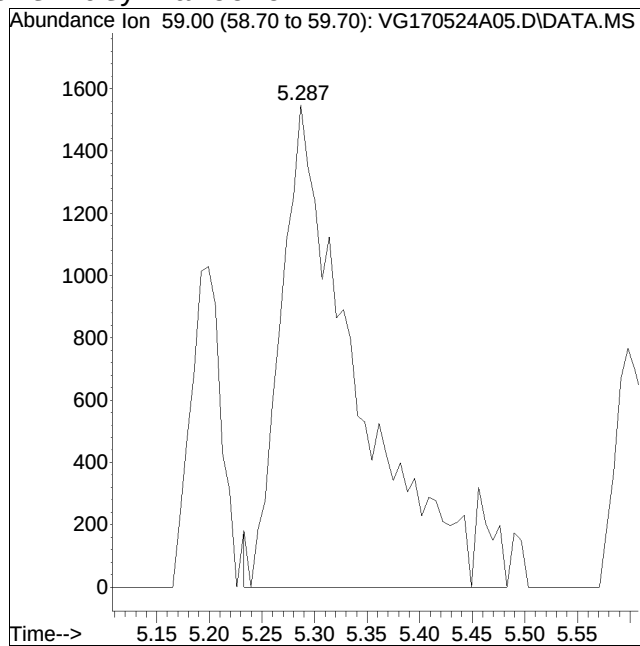
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170524A05.D Operator : GONZO:MAB
Date Inj'd : 5/24/2017 5:39 pm Instrument : Gonzo
Sample : ISTD2 Quant Date : 5/25/2017 10:16 am

Compound #21: tert-Butyl alcohol



Original Peak Response = 7421

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

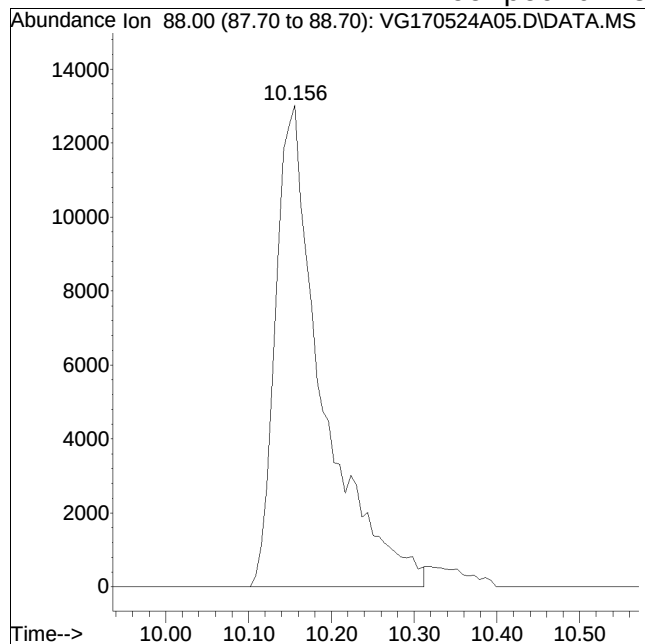


Manual Peak Response = 7868 M1

Manual Integration Report

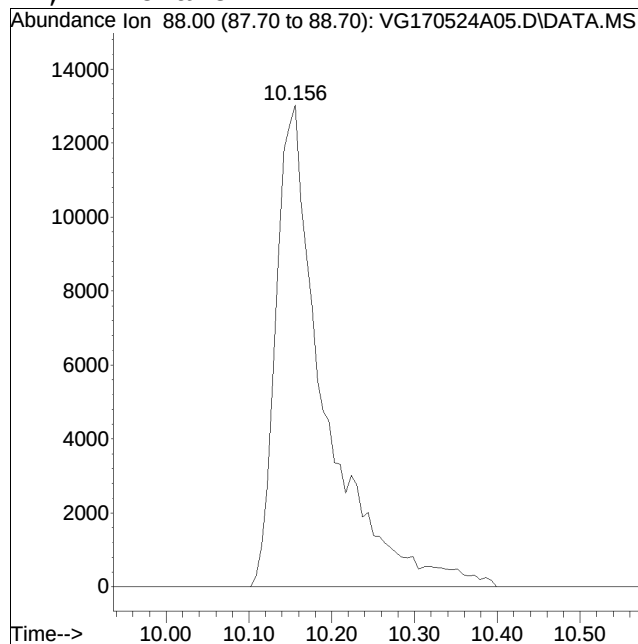
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170524A05.D Operator : GONZO:MAB
Date Inj'd : 5/24/2017 5:39 pm Instrument : Gonzo
Sample : ISTD L2 Quant Date : 5/25/2017 10:16 am

Compound #57: 1,4-Dioxane



Original Peak Response = 51207

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

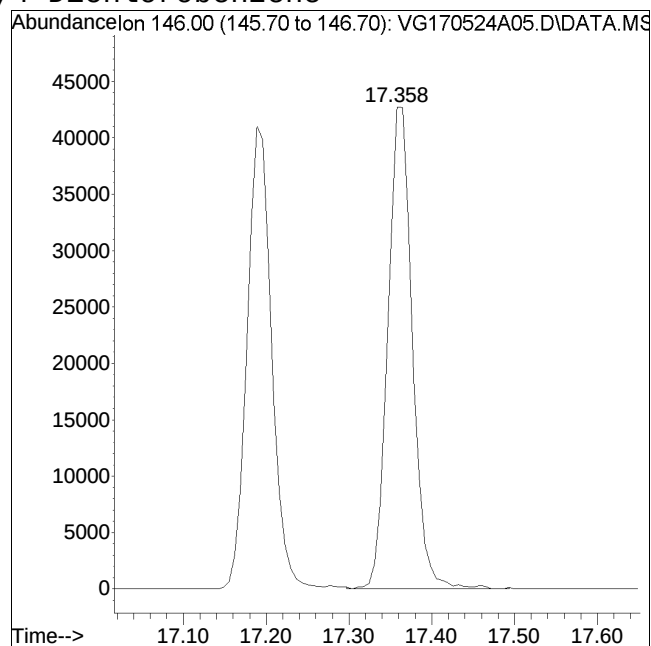
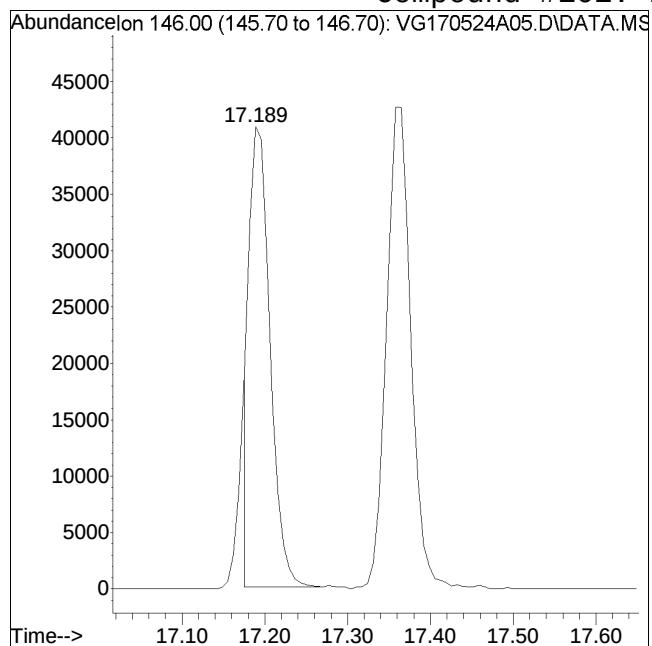


Manual Peak Response = 53084 M1

Manual Integration Report

Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170524A05.D Operator : GONZO:MAB
Date Inj'd : 5/24/2017 5:39 pm Instrument : Gonzo
Sample : ISTD L2 Quant Date : 5/25/2017 10:16 am

Compound #101: 1,4-Dichlorobenzene



Original Peak Response = 70540

Manual Peak Response = 88261 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2017\170524\
 Data File : VG170524A07.D
 Acq On : 24 May 2017 6:45 pm
 Operator : GONZO:MAB
 Sample : CSTDL3
 Misc : WG1006728
 ALS Vial : 42 Sample Multiplier: 1

Quant Time: May 25 10:16:46 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	92	0.01
2 T	Dichlorodifluoromethane	0.263	0.374	-42.2#	143	0.01
3 T	Chloromethane	0.190	0.157	17.4	81	0.02
4 T	Vinyl chloride	0.295	0.324	-9.8	102	0.01
5 T	Bromomethane	0.150	0.146	2.7	94	0.01
6 T	Chloroethane	0.152	0.171	-12.5	102	0.01
7 T	Trichlorofluoromethane	0.420	0.501	-19.3	118	0.01
8 T	Ethyl ether	0.124	0.139	-12.1	106	0.02
10 T	1,1-Dichloroethene	0.223	0.241	-8.1	106	0.01
11 T	Carbon disulfide	0.764	0.524	31.4#	71	0.01
12 T	Freon-113	0.209	0.249	-19.1	123	0.01
13 T	Iodomethane	* 10.000	8.272	17.3	98	0.01
14 T	Acrolein	0.031	0.028	9.7	84	0.01
15 T	Methylene chloride	0.243	0.244	-0.4	97	0.01
17 T	Acetone	* 10.000	13.198	-32.0#	125	0.03
18 T	trans-1,2-Dichloroethene	0.254	0.255	-0.4	98	0.01
19 T	Methyl acetate	0.120	0.156	-30.0#	137	0.02
20 T	Methyl tert-butyl ether	0.469	0.479	-2.1	113	0.01
21 T	tert-Butyl alcohol	0.00824	0.00948	-15.0	145	0.03
22 T	Diisopropyl ether	0.971	1.014	-4.4	99	0.02
23 T	1,1-Dichloroethane	0.480	0.503	-4.8	99	0.01
24 T	Halothane	0.193	0.191	1.0	99	0.01
25 T	Acrylonitrile	0.068	0.075	-10.3	106	0.01
26 T	Ethyl tert-butyl ether	* 10.000	10.805	-8.0	121	0.02
27 T	Vinyl acetate	0.360	0.349	3.1	111	0.02
28 T	cis-1,2-Dichloroethene	0.283	0.289	-2.1	97	0.01
29 T	2,2-Dichloropropane	* 10.000	8.690	13.1	131	0.02
30 T	Bromochloromethane	0.121	0.127	-5.0	96	0.01
31 T	Cyclohexane	0.441	0.504	-14.3	118	0.01
32 T	Chloroform	0.447	0.471	-5.4	99	0.01
33 T	Ethyl acetate	0.167	0.199	-19.2	119	0.02
34 T	Carbon tetrachloride	* 10.000	7.096	29.0#	111	0.01
35 T	Tetrahydrofuran	0.051	0.058	-13.7	109	0.02
36 S	Dibromofluoromethane	0.236	0.237	-0.4	93	0.01
37 T	1,1,1-Trichloroethane	* 10.000	8.247	17.5	111	0.01
39 T	2-Butanone	* 10.000	13.316	-33.2#	116	0.01
40 T	1,1-Dichloropropene	0.352	0.365	-3.7	104	0.01
41 T	Benzene	1.091	1.132	-3.8	98	0.01
42 T	tert-Amyl methyl ether	* 10.000	9.614	3.9	123	0.02

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2017\170524\
 Data File : VG170524A07.D
 Acq On : 24 May 2017 6:45 pm
 Operator : GONZO:MAB
 Sample : CSTDL3
 Misc : WG1006728
 ALS Vial : 42 Sample Multiplier: 1

Quant Time: May 25 10:16:46 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
43 S	1,2-Dichloroethane-d4	0.246	0.266	-8.1	100	0.01
44 T	1,2-Dichloroethane	0.320	0.338	-5.6	99	0.01
47 T	Methyl cyclohexane	0.361	0.415	-15.0	117	0.01
48 T	Trichloroethene	0.276	0.279	-1.1	101	0.01
50 T	Dibromomethane	0.132	0.142	-7.6	104	0.01
51 T	1,2-Dichloropropane	0.267	0.292	-9.4	103	0.01
53 T	2-Chloroethyl vinyl ether	0.104	0.108	-3.8	102	0.01
54 T	Bromodichloromethane	0.308	0.301	2.3	98	0.01
57 T	1,4-Dioxane	0.00143	0.00181	-26.6#	128	0.02
58 T	cis-1,3-Dichloropropene	* 10.000	8.278	17.2	111	0.01
59 I	Chlorobenzene-d5	1.000	1.000	0.0	95	0.02
60 S	Toluene-d8	1.295	1.308	-1.0	95	0.02
61 T	Toluene	0.904	0.940	-4.0	99	0.02
62 T	4-Methyl-2-pentanone	0.079	0.103	-30.4#	129	0.02
63 T	Tetrachloroethene	0.399	0.402	-0.8	100	0.01
65 T	trans-1,3-Dichloropropene	* 10.000	7.141	28.6#	117	0.02
67 T	Ethyl methacrylate	0.287	0.320	-11.5	113	0.02
68 T	1,1,2-Trichloroethane	0.212	0.234	-10.4	105	0.02
69 T	Chlorodibromomethane	* 10.000	8.839	11.6	107	0.01
70 T	1,3-Dichloropropane	0.438	0.478	-9.1	105	0.01
71 T	1,2-Dibromoethane	0.222	0.247	-11.3	111	0.02
72 T	2-Hexanone	0.135	0.188	-39.3#	134	0.02
73 T	Chlorobenzene	1.010	1.002	0.8	96	0.02
74 T	Ethylbenzene	1.631	1.771	-8.6	103	0.02
75 T	1,1,1,2-Tetrachloroethane	* 10.000	8.909	10.9	105	0.02
76 T	p/m Xylene	0.644	0.678	-5.3	99	0.01
77 T	o Xylene	0.613	0.657	-7.2	99	0.02
78 T	Styrene	1.011	1.127	-11.5	101	0.02
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	96	0.02
80 T	Bromoform	* 10.000	8.543	14.6	116	0.01
82 T	Isopropylbenzene	3.214	3.343	-4.0	100	0.01
83 S	4-Bromofluorobenzene	0.935	0.945	-1.1	98	0.01
84 T	Bromobenzene	0.816	0.843	-3.3	100	0.01
85 T	n-Propylbenzene	3.643	3.812	-4.6	100	0.01
86 T	1,4-Dichlorobutane	0.868	0.993	-14.4	112	0.02
87 T	1,1,2,2-Tetrachloroethane	0.499	0.589	-18.0	117	0.01
88 T	4-Ethyltoluene	3.081	3.311	-7.5	103	0.01

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2017\170524\
 Data File : VG170524A07.D
 Acq On : 24 May 2017 6:45 pm
 Operator : GONZO:MAB
 Sample : CSTD3
 Misc : WG1006728
 ALS Vial : 42 Sample Multiplier: 1

Quant Time: May 25 10:16:46 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
89 T	2-Chlorotoluene	2.213	2.307	-4.2	101	0.02
90 T	1,3,5-Trimethylbenzene	2.559	2.707	-5.8	101	0.01
91 T	1,2,3-Trichloropropane	0.410	0.459	-12.0	115	0.02
92 T	trans-1,4-Dichloro-2-butene	0.132	0.140	-6.1	120	0.02
93 T	4-Chlorotoluene	2.328	2.274	2.3	97	0.02
94 T	tert-Butylbenzene	2.225	2.272	-2.1	100	0.02
97 T	1,2,4-Trimethylbenzene	2.613	2.754	-5.4	100	0.02
98 T	sec-Butylbenzene	3.026	3.279	-8.4	107	0.02
99 T	p-Isopropyltoluene	2.697	2.761	-2.4	101	0.01
100 T	1,3-Dichlorobenzene	1.520	1.485	2.3	98	0.01
101 T	1,4-Dichlorobenzene	1.544	1.472	4.7	97	0.02
102 T	p-Diethylbenzene	2.314	2.388	-3.2	104	0.03
103 T	n-Butylbenzene	2.814	2.915	-3.6	103	0.02
104 T	1,2-Dichlorobenzene	1.361	1.380	-1.4	101	0.02
105 T	1,2,4,5-Tetramethylbenzene	1.638	1.617	1.3	97	0.02
106 T	1,2-Dibromo-3-chloropropane *	10.000	8.690	13.1	133	0.02
107 T	1,3,5-Trichlorobenzene	1.049	1.004	4.3	99	0.02
108 T	Hexachlorobutadiene	0.409	0.392	4.2	107	0.02
109 T	1,2,4-Trichlorobenzene	0.789	0.810	-2.7	113	0.02
110 T	Naphthalene	1.159	1.413	-21.9#	136	0.02
111 T	1,2,3-Trichlorobenzene *	10.000	12.884	-28.8#	132	0.02

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170524\
 Data File : VG170524A07.D
 Acq On : 24 May 2017 6:45 pm
 Operator : GONZO:MAB
 Sample : CSTDL3
 Misc : WG1006728
 ALS Vial : 42 Sample Multiplier: 1

Quant Time: May 25 10:16:46 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.033	96	788375	10.000	ug/L	0.01
Standard Area 1 = 854022			Recovery	=	92.31%	
59) Chlorobenzene-d5	13.496	117	595572	10.000	ug/L	# 0.02
Standard Area 1 = 628818			Recovery	=	94.71%	
79) 1,4-Dichlorobenzene-d4	17.311	152	297250	10.000	ug/L	0.02
Standard Area 1 = 309860			Recovery	=	95.93%	
System Monitoring Compounds						
36) Dibromofluoromethane	7.972	113	186965	10.049	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.49%	
43) 1,2-Dichloroethane-d4	8.614	65	209472	10.784	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	107.84%	
60) Toluene-d8	11.238	98	778719	10.094	ug/L	0.02
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.94%	
83) 4-Bromofluorobenzene	15.383	95	280834	10.100	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.00%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.818	85	294536	14.223	ug/L	98
3) Chloromethane	3.170	50	123695	8.276	ug/L	94
4) Vinyl chloride	3.332	62	255606	11.006	ug/L	99
5) Bromomethane	3.948	94	115290	9.752	ug/L	100
6) Chloroethane	4.049	64	135198	11.287	ug/L	98
7) Trichlorofluoromethane	4.394	101	394806	11.934	ug/L	99
8) Ethyl ether	4.766	74	109935	11.288	ug/L	# 69
10) 1,1-Dichloroethene	5.192	96	189624	10.782	ug/L	87
11) Carbon disulfide	5.862	76	413433	6.867	ug/L	100
12) Freon-113	4.949	101	196363	11.928	ug/L	# 86
13) Iodomethane	5.605	142	74711	8.272	ug/L	89
14) Acrolein	4.949	56	21980	8.934	ug/L	90
15) Methylene chloride	5.808	84	192114	10.043	ug/L	84
17) Acetone	5.037	43	40671	13.198	ug/L	91
18) trans-1,2-Dichloroethene	6.179	96	200815	10.011	ug/L	91
19) Methyl acetate	5.598	43	123311	13.073	ug/L	# 86
20) Methyl tert-butyl ether	5.977	73	377472	10.209	ug/L	# 76
21) tert-Butyl alcohol	5.287	59	37368M1	57.533	ug/L	
22) Diisopropyl ether	6.538	45	799368	10.447	ug/L	93
23) 1,1-Dichloroethane	6.714	63	396643	10.480	ug/L	99
24) Halothane	6.085	117	150888	9.939	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170524\
 Data File : VG170524A07.D
 Acq On : 24 May 2017 6:45 pm
 Operator : GONZO:MAB
 Sample : CSTDL3
 Misc : WG1006728
 ALS Vial : 42 Sample Multiplier: 1

Quant Time: May 25 10:16:46 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	5.956	53	59445	11.028	ug/L	98
26) Ethyl tert-butyl ether	7.052	59	311485	10.805	ug/L	93
27) Vinyl acetate	6.687	43	274984	9.698	ug/L #	95
28) cis-1,2-Dichloroethene	7.491	96	227669	10.210	ug/L	90
29) 2,2-Dichloropropane	7.431	77	123803	8.690	ug/L #	1
30) Bromochloromethane	7.917	128	99876	10.478	ug/L	98
31) Cyclohexane	8.242	56	397112	11.410	ug/L	84
32) Chloroform	7.687	83	371527	10.540	ug/L	96
33) Ethyl acetate	7.424	43	157235	11.953	ug/L #	93
34) Carbon tetrachloride	8.553	117	175821	7.096	ug/L	96
35) Tetrahydrofuran	7.958	42	45903	11.327	ug/L #	76
37) 1,1,1-Trichloroethane	8.208	97	239924	8.247	ug/L	96
39) 2-Butanone	7.228	43	68956	13.316	ug/L #	87
40) 1,1-Dichloropropene	8.411	75	288013	10.380	ug/L #	88
41) Benzene	8.776	78	892099	10.376	ug/L	97
42) tert-Amyl methyl ether	8.526	73	288475	9.614	ug/L #	43
44) 1,2-Dichloroethane	8.736	62	266379	10.564	ug/L	99
47) Methyl cyclohexane	9.662	83	327222	11.497	ug/L	92
48) Trichloroethene	9.574	95	219902	10.092	ug/L #	83
50) Dibromomethane	10.230	93	112309	10.812	ug/L #	87
51) 1,2-Dichloropropane	9.811	63	229854	10.903	ug/L #	90
53) 2-Chloroethyl vinyl ether	10.501	63	85019	10.400	ug/L #	1
54) Bromodichloromethane	10.142	83	236960	9.769	ug/L #	98
57) 1,4-Dioxane	10.149	88	71461	634.275	ug/L	98
58) cis-1,3-Dichloropropene	10.873	75	235483	8.278	ug/L #	87
61) Toluene	11.353	92	559693	10.393	ug/L	99
62) 4-Methyl-2-pentanone	10.548	58	61325	12.990	ug/L	98
63) Tetrachloroethene	12.313	166	239347	10.082	ug/L #	83
65) trans-1,3-Dichloropropene	11.583	75	155800	7.141	ug/L	85
67) Ethyl methacrylate	11.522	69	190678	11.136	ug/L	98
68) 1,1,2-Trichloroethane	11.826	83	139413	11.028	ug/L	95
69) Chlorodibromomethane	12.624	129	152022	8.839	ug/L	98
70) 1,3-Dichloropropane	12.191	76	284771	10.904	ug/L	98
71) 1,2-Dibromoethane	12.935	107	147179	11.118	ug/L	96
72) 2-Hexanone	11.792	43	112200	13.938	ug/L	96
73) Chlorobenzene	13.557	112	596733	9.922	ug/L #	84
74) Ethylbenzene	13.611	91	1054583	10.855	ug/L	92
75) 1,1,1,2-Tetrachloroethane	13.605	131	165487	8.909	ug/L	96
76) p/m Xylene	13.726	106	807394	21.046	ug/L	77
77) o Xylene	14.416	106	782247	21.411	ug/L	77

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170524\
 Data File : VG170524A07.D
 Acq On : 24 May 2017 6:45 pm
 Operator : GONZO:MAB
 Sample : CSTD3
 Misc : WG1006728
 ALS Vial : 42 Sample Multiplier: 1

Quant Time: May 25 10:16:46 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170523N\VG170523N07.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
78)	Styrene	14.470	104	1342203	22.281	ug/L	#	77
80)	Bromoform	15.038	173	78482	8.543	ug/L		99
82)	Isopropylbenzene	14.964	105	993642	10.400	ug/L		92
84)	Bromobenzene	15.715	156	250452	10.330	ug/L		100
85)	n-Propylbenzene	15.606	91	1133093	10.463	ug/L	#	89
86)	1,4-Dichlorobutane	15.113	55	295078	11.443	ug/L	#	86
87)	1,1,2,2-Tetrachloroethane	15.241	83	174970	11.808	ug/L		97
88)	4-Ethyltoluene	15.789	105	984169	10.745	ug/L		92
89)	2-Chlorotoluene	15.917	91	685884	10.427	ug/L	#	79
90)	1,3,5-Trimethylbenzene	15.857	105	804620	10.578	ug/L		88
91)	1,2,3-Trichloropropane	15.485	75	136321	11.173	ug/L		89
92)	trans-1,4-Dichloro-2-b...	15.579	53	41645	10.589	ug/L	#	55
93)	4-Chlorotoluene	15.992	91	675934	9.769	ug/L	#	78
94)	tert-Butylbenzene	16.438	119	675463	10.212	ug/L	#	81
97)	1,2,4-Trimethylbenzene	16.506	105	818672	10.540	ug/L	#	86
98)	sec-Butylbenzene	16.783	105	974683	10.838	ug/L		92
99)	p-Isopropyltoluene	16.999	119	820784	10.237	ug/L		89
100)	1,3-Dichlorobenzene	17.189	146	441343	9.766	ug/L		94
101)	1,4-Dichlorobenzene	17.365	146	437630	9.537	ug/L		95
102)	p-Diethylbenzene	18.974	119	709957	10.323	ug/L		91
103)	n-Butylbenzene	17.676	91	866464	10.357	ug/L	#	89
104)	1,2-Dichlorobenzene	17.980	146	410350	10.143	ug/L		94
105)	1,2,4,5-Tetramethylben...	17.696	119	480784	9.874	ug/L		78
106)	1,2-Dibromo-3-chloropr...	19.278	155	15077	8.690	ug/L		93
107)	1,3,5-Trichlorobenzene	19.671	180	298335	9.570	ug/L	#	93
108)	Hexachlorobutadiene	20.969	225	116663	9.587	ug/L		97
109)	1,2,4-Trichlorobenzene	20.746	180	240664	10.257	ug/L		98
110)	Naphthalene	21.192	128	420114	12.189	ug/L		100
111)	1,2,3-Trichlorobenzene	21.605	180	189825	12.884	ug/L		95

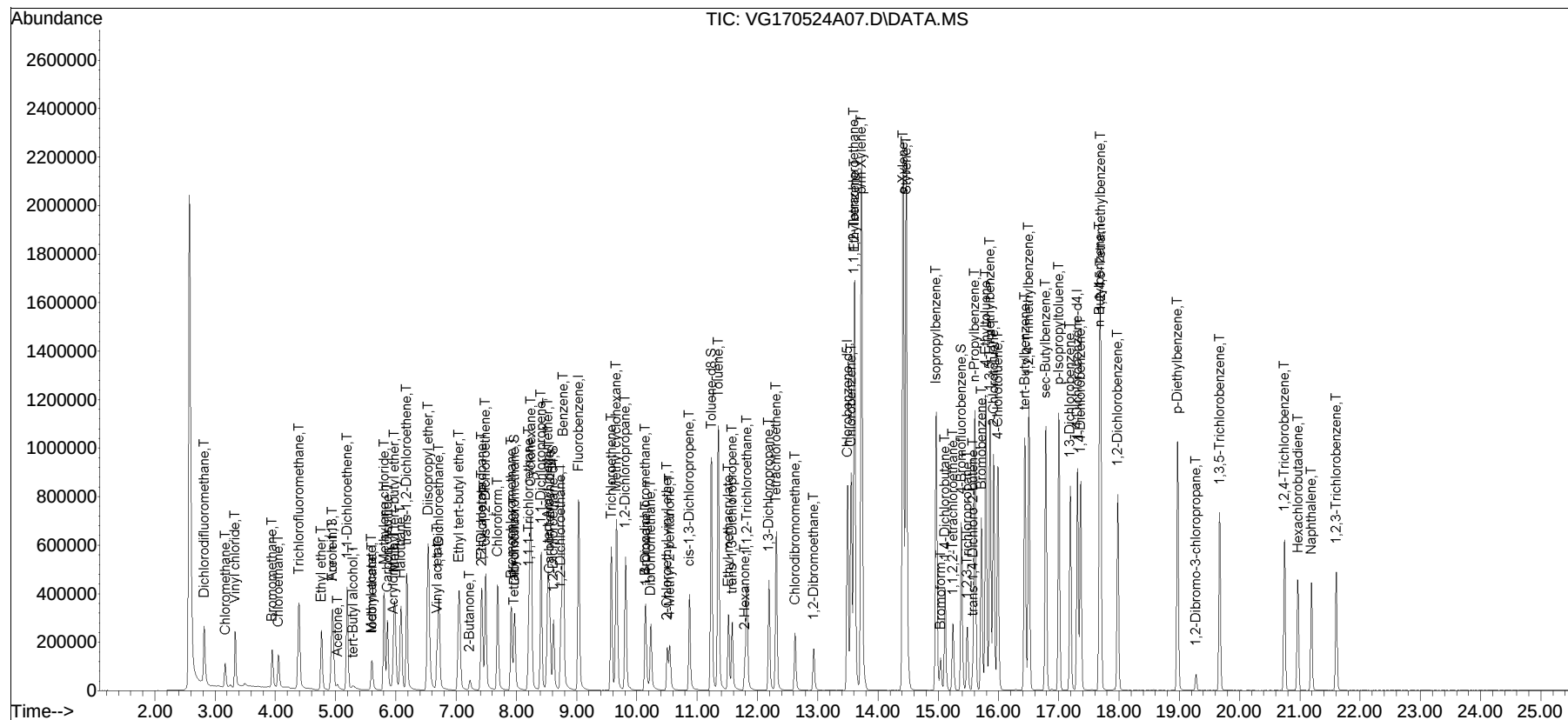
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170524\
 Data File : VG170524A07.D
 Acq On : 24 May 2017 6:45 pm
 Operator : GONZO:MAB
 Sample : CSTD L3
 Misc : WG1006728
 ALS Vial : 42 Sample Multiplier: 1

Quant Time: May 25 10:16:46 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170523N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:13:56 2017
 Response via : Initial Calibration

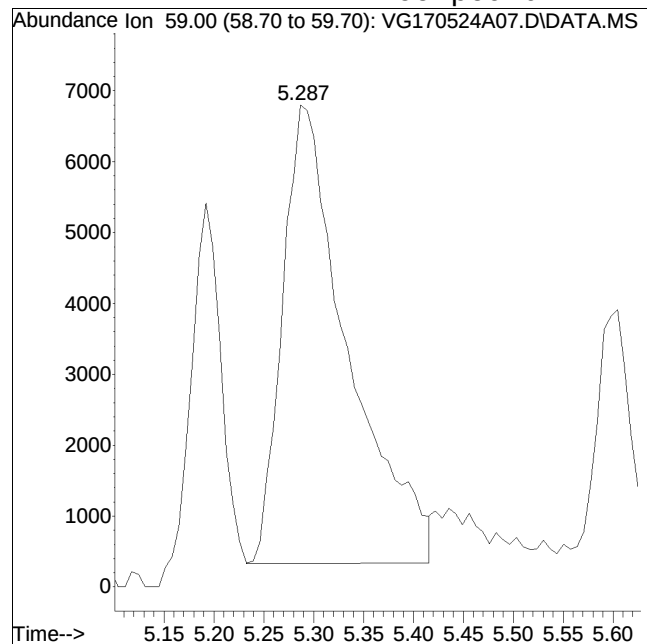
Sub List : 8260-Curve - Megamix plus Diox0523N\VG170523N07.D•



Manual Integration Report

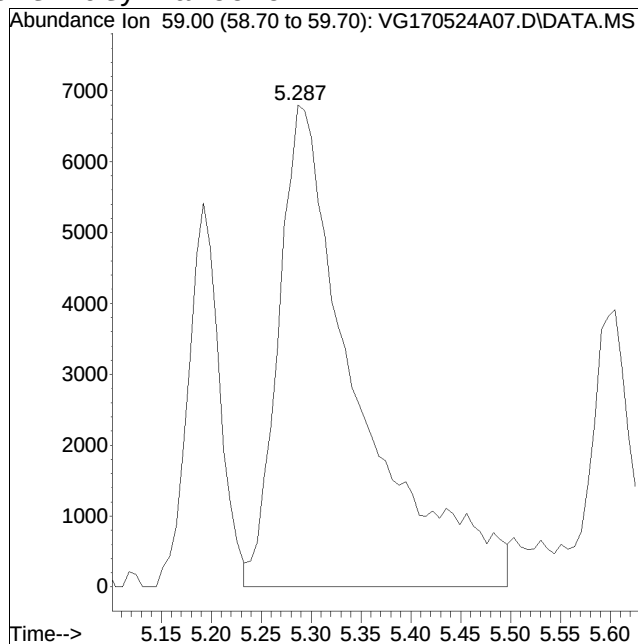
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170524A07.D Operator : GONZO:MAB
Date Inj'd : 5/24/2017 6:45 pm Instrument : Gonzo
Sample : CSTDL3 Quant Date : 5/25/2017 10:16 am

Compound #21: tert-Butyl alcohol



Original Peak Response = 29506

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



Manual Peak Response = 37368 M1

Continuing Calibration

Continuing Calibration Form 7

Client : GZA GeoEnvironmental
Project Name : FORMER SIGNORE
Instrument ID : GONZO
Lab File ID : VG170717N01
Sample No : WG1023505-2
Channel :

Lab Number : L1723956
Project Number : 21.0056491.78
Calibration Date : 07/17/17 12:59
Init. Calib. Date(s) : 05/23/17 05/24/17
Init. Calib. Times : 23:51 17:39

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	82	.01
Dichlorodifluoromethane	0.263	0.193	-	26.6*	20	66	.03
Chloromethane	0.19	0.13	-	31.6*	20	59	.03
Vinyl chloride	0.295	0.254	-	13.9	20	71	.03
Bromomethane	0.15	0.145	-	3.3	20	83	.03
Chloroethane	0.152	0.145	-	4.6	20	76	.03
Trichlorofluoromethane	0.42	0.377	-	10.2	20	79	.02
Ethyl ether	0.124	0.121	-	2.4	20	82	.03
1,1-Dichloroethene	0.223	0.21	-	5.8	20	82	.02
Carbon disulfide	0.764	0.563	-	26.3*	20	68	.02
Freon-113	0.209	0.194	-	7.2	20	85	.02
Iodomethane	10	10.342	-	-3.4	20	110	.02
Acrolein	0.031	0.03	-	3.2	20	81	.02
Methylene chloride	0.243	0.237	-	2.5	20	83	.02
Acetone	10	9.892	-	1.1	20	86	.03
trans-1,2-Dichloroethene	0.254	0.243	-	4.3	20	82	.02
Methyl acetate	0.12	0.111	-	7.5	20	87	.03
Methyl tert-butyl ether	0.469	0.519	-	-10.7	20	109	.02
tert-Butyl alcohol	0.00824	0.00959	-	-16.4	20	129	.03
Diisopropyl ether	0.971	0.866	-	10.8	20	75	.02
1,1-Dichloroethane	0.48	0.451	-	6	20	79	.02
Halothane	0.193	0.179	-	7.3	20	82	.01
Acrylonitrile	0.068	0.066	-	2.9	20	81	.02
Ethyl tert-butyl ether	10	16.381	-	-63.8*	20	167	.02
Vinyl acetate	0.36	0.39	-	-8.3	20	110	.02
cis-1,2-Dichloroethene	0.283	0.274	-	3.2	20	82	.01
2,2-Dichloropropane	10	14.053	-	-40.5*	20	195	.02
Bromochloromethane	0.121	0.117	-	3.3	20	78	.01
Cyclohexane	0.441	0.392	-	11.1	20	81	.01
Chloroform	0.447	0.434	-	2.9	20	81	.02
Ethyl acetate	0.167	0.148	-	11.4	20	78	.02
Carbon tetrachloride	10	9.447	-	5.5	20	134	.01
Tetrahydrofuran	0.051	0.048	-	5.9	20	79	.02
Dibromofluoromethane	0.236	0.243	-	-3	20	84	.01
1,1,1-Trichloroethane	10	9.568	-	4.3	20	115	.02
2-Butanone	10	10.125	-	-1.3	20	80	.01
1,1-Dichloropropene	0.352	0.328	-	6.8	20	82	.01
Benzene	1.091	1.053	-	3.5	20	80	.01
tert-Amyl methyl ether	10	12.02	-	-20.2*	20	137	.02
1,2-Dichloroethane-d4	0.246	0.239	-	2.8	20	80	.02
1,2-Dichloroethane	0.32	0.298	-	6.9	20	77	.02
Methyl cyclohexane	0.361	0.337	-	6.6	20	84	.01
Trichloroethene	0.276	0.259	-	6.2	20	83	.01
Dibromomethane	0.132	0.127	-	3.8	20	82	.01
1,2-Dichloropropane	0.267	0.256	-	4.1	20	80	.01

* Value outside of QC limits.



Continuing Calibration Form 7

Client : GZA GeoEnvironmental
Project Name : FORMER SIGNORE
Instrument ID : GONZO
Lab File ID : VG170717N01
Sample No : WG1023505-2
Channel :

Lab Number : L1723956
Project Number : 21.0056491.78
Calibration Date : 07/17/17 12:59
Init. Calib. Date(s) : 05/23/17 05/24/17
Init. Calib. Times : 23:51 17:39

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
2-Chloroethyl vinyl ether	0.104	0.086	-	17.3	20	72	.01
Bromodichloromethane	0.308	0.308	-	0	20	89	.01
1,4-Dioxane	0.00143	0.00161	-	-12.6	20	100	.02
cis-1,3-Dichloropropene	10	9.339	-	6.6	20	111	.01
Chlorobenzene-d5	1	1	-	0	20	84	.01
Toluene-d8	1.295	1.288	-	0.5	20	84	.01
Toluene	0.904	0.857	-	5.2	20	81	.02
4-Methyl-2-pentanone	0.079	0.075	-	5.1	20	84	.01
Tetrachloroethene	0.399	0.388	-	2.8	20	86	.01
trans-1,3-Dichloropropene	10	9.1	-	9	20	136	.02
Ethyl methacrylate	0.287	0.304	-	-5.9	20	96	.01
1,1,2-Trichloroethane	0.212	0.205	-	3.3	20	82	.02
Chlorodibromomethane	10	9.329	-	6.7	20	101	.01
1,3-Dichloropropane	0.438	0.416	-	5	20	81	.01
1,2-Dibromoethane	0.222	0.227	-	-2.3	20	90	.01
2-Hexanone	0.135	0.13	-	3.7	20	82	.02
Chlorobenzene	1.01	0.962	-	4.8	20	82	.01
Ethylbenzene	1.631	1.609	-	1.3	20	83	.02
1,1,1,2-Tetrachloroethane	10	10.096	-	-1	20	107	.02
p/m Xylene	0.644	0.642	-	0.3	20	84	.01
o Xylene	0.613	0.601	-	2	20	81	.02
Styrene	1.011	1.039	-	-2.8	20	83	.01
1,4-Dichlorobenzene-d4	1	1	-	0	20	87	.01
Bromoform	10	9.474	-	5.3	20	117	.01
Isopropylbenzene	3.214	3.158	-	1.7	20	86	.01
4-Bromofluorobenzene	0.935	0.917	-	1.9	20	86	.01
Bromobenzene	0.816	0.79	-	3.2	20	85	.01
n-Propylbenzene	3.643	3.641	-	0.1	20	87	.01
1,4-Dichlorobutane	0.868	0.806	-	7.1	20	83	.02
1,1,2,2-Tetrachloroethane	0.499	0.487	-	2.4	20	88	.01
4-Ethyltoluene	3.081	2.931	-	4.9	20	83	.01
2-Chlorotoluene	2.213	2.119	-	4.2	20	84	.02
1,3,5-Trimethylbenzene	2.559	2.534	-	1	20	86	.01
1,2,3-Trichloropropane	0.41	0.375	-	8.5	20	85	.01
trans-1,4-Dichloro-2-buten	0.132	0.128	-	3	20	100	.01
4-Chlorotoluene	2.328	2.227	-	4.3	20	86	.01
tert-Butylbenzene	2.225	2.177	-	2.2	20	87	.01
1,2,4-Trimethylbenzene	2.613	2.589	-	0.9	20	86	.01
sec-Butylbenzene	3.026	3.024	-	0.1	20	90	.02
p-Isopropyltoluene	2.697	2.685	-	0.4	20	89	.01
1,3-Dichlorobenzene	1.52	1.459	-	4	20	87	.01
1,4-Dichlorobenzene	1.544	1.476	-	4.4	20	88	.01
p-Diethylbenzene	2.314	2.257	-	2.5	20	89	.02
n-Butylbenzene	2.814	2.825	-	-0.4	20	91	.02
1,2-Dichlorobenzene	1.361	1.32	-	3	20	88	.01

* Value outside of QC limits.



Continuing Calibration Form 7

Client : GZA GeoEnvironmental
 Project Name : FORMER SIGNORE
 Instrument ID : GONZO
 Lab File ID : VG170717N01
 Sample No : WG1023505-2
 Channel :

Lab Number : L1723956
 Project Number : 21.0056491.78
 Calibration Date : 07/17/17 12:59
 Init. Calib. Date(s) : 05/23/17 05/24/17
 Init. Calib. Times : 23:51 17:39

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2,4,5-Tetramethylbenzene	1.638	1.6	-	2.3	20	87	.01
1,2-Dibromo-3-chloropropan	10	9.579	-	4.2	20	134	.01
1,3,5-Trichlorobenzene	1.049	0.996	-	5.1	20	90	.01
Hexachlorobutadiene	0.409	0.407	-	0.5	20	101	.01
1,2,4-Trichlorobenzene	0.789	0.793	-	-0.5	20	100	.01
Naphthalene	1.159	1.235	-	-6.6	20	108	.01
1,2,3-Trichlorobenzene	10	12.004	-	-20	20	112	.01

* Value outside of QC limits.



Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
 Data File : VG170717N01.D
 Acq On : 17 Jul 2017 12:59 pm
 Operator : GONZO:PD
 Sample : WG1023505-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1023505,ICAL13686 (Sig #1); WG,ICAL13686 (Sig #2)
 ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 17 13:26:54 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:09:01 2017
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	82	0.01
2 T	Dichlorodifluoromethane	0.263	0.193	26.6#	66	0.03
3 T	Chloromethane	0.190	0.130	31.6#	59	0.03
4 T	Vinyl chloride	0.295	0.254	13.9	71	0.03
5 T	Bromomethane	0.150	0.145	3.3	83	0.03
6 T	Chloroethane	0.152	0.145	4.6	76	0.03
7 T	Trichlorofluoromethane	0.420	0.377	10.2	79	0.02
8 T	Ethyl ether	0.124	0.121	2.4	82	0.03
10 T	1,1-Dichloroethene	0.223	0.210	5.8	82	0.02
11 T	Carbon disulfide	0.764	0.563	26.3#	68	0.02
12 T	Freon-113	0.209	0.194	7.2	85	0.02
13 T	Iodomethane	* 10.000	10.342	-3.4	110	0.02
14 T	Acrolein	0.031	0.030	3.2	81	0.02
15 T	Methylene chloride	0.243	0.237	2.5	83	0.02
17 T	Acetone	* 10.000	9.892	1.1	86	0.03
18 T	trans-1,2-Dichloroethene	0.254	0.243	4.3	82	0.02
19 T	Methyl acetate	0.120	0.111	7.5	87	0.03
20 T	Methyl tert-butyl ether	0.469	0.519	-10.7	109	0.02
21 T	tert-Butyl alcohol	0.00824	0.00959	-16.4	129	0.03
22 T	Diisopropyl ether	0.971	0.866	10.8	75	0.02
23 T	1,1-Dichloroethane	0.480	0.451	6.0	79	0.02
24 T	Halothane	0.193	0.179	7.3	82	0.01
25 T	Acrylonitrile	0.068	0.066	2.9	81	0.02
26 T	Ethyl tert-butyl ether	* 10.000	16.381	-63.8#	167	0.02
27 T	Vinyl acetate	0.360	0.390	-8.3	110	0.02
28 T	cis-1,2-Dichloroethene	0.283	0.274	3.2	82	0.01
29 T	2,2-Dichloropropane	* 10.000	14.053	-40.5#	195	0.02
30 T	Bromochloromethane	0.121	0.117	3.3	78	0.01
31 T	Cyclohexane	0.441	0.392	11.1	81	0.01
32 T	Chloroform	0.447	0.434	2.9	81	0.02
33 T	Ethyl acetate	0.167	0.148	11.4	78	0.02
34 T	Carbon tetrachloride	* 10.000	9.447	5.5	134	0.01
35 T	Tetrahydrofuran	0.051	0.048	5.9	79	0.02
36 S	Dibromofluoromethane	0.236	0.243	-3.0	84	0.01
37 T	1,1,1-Trichloroethane	* 10.000	9.568	4.3	115	0.02
39 T	2-Butanone	* 10.000	10.125	-1.3	80	0.01
40 T	1,1-Dichloropropene	0.352	0.328	6.8	82	0.01
41 T	Benzene	1.091	1.053	3.5	80	0.01
42 T	tert-Amyl methyl ether	* 10.000	12.020	-20.2#	137	0.02

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
 Data File : VG170717N01.D
 Acq On : 17 Jul 2017 12:59 pm
 Operator : GONZO:PD
 Sample : WG1023505-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1023505, ICAL13686 (Sig #1); WG, ICAL13686 (Sig #2)
 ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 17 13:26:54 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:09:01 2017
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
43 S	1,2-Dichloroethane-d4	0.246	0.239	2.8	80	0.02
44 T	1,2-Dichloroethane	0.320	0.298	6.9	77	0.02
47 T	Methyl cyclohexane	0.361	0.337	6.6	84	0.01
48 T	Trichloroethene	0.276	0.259	6.2	83	0.01
50 T	Dibromomethane	0.132	0.127	3.8	82	0.01
51 T	1,2-Dichloropropane	0.267	0.256	4.1	80	0.01
53 T	2-Chloroethyl vinyl ether	0.104	0.086	17.3	72	0.01
54 T	Bromodichloromethane	0.308	0.308	0.0	89	0.01
57 T	1,4-Dioxane	0.00143	0.00161	-12.6	100	0.02
58 T	cis-1,3-Dichloropropene	* 10.000	9.339	6.6	111	0.01
59 I	Chlorobenzene-d5	1.000	1.000	0.0	84	0.01
60 S	Toluene-d8	1.295	1.288	0.5	84	0.01
61 T	Toluene	0.904	0.857	5.2	81	0.02
62 T	4-Methyl-2-pentanone	0.079	0.075	5.1	84	0.01
63 T	Tetrachloroethene	0.399	0.388	2.8	86	0.01
65 T	trans-1,3-Dichloropropene	* 10.000	9.100	9.0	136	0.02
67 T	Ethyl methacrylate	0.287	0.304	-5.9	96	0.01
68 T	1,1,2-Trichloroethane	0.212	0.205	3.3	82	0.02
69 T	Chlorodibromomethane	* 10.000	9.329	6.7	101	0.01
70 T	1,3-Dichloropropane	0.438	0.416	5.0	81	0.01
71 T	1,2-Dibromoethane	0.222	0.227	-2.3	90	0.01
72 T	2-Hexanone	0.135	0.130	3.7	82	0.02
73 T	Chlorobenzene	1.010	0.962	4.8	82	0.01
74 T	Ethylbenzene	1.631	1.609	1.3	83	0.02
75 T	1,1,1,2-Tetrachloroethane	* 10.000	10.096	-1.0	107	0.02
76 T	p/m Xylene	0.644	0.642	0.3	84	0.01
77 T	o Xylene	0.613	0.601	2.0	81	0.02
78 T	Styrene	1.011	1.039	-2.8	83	0.01
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	87	0.01
80 T	Bromoform	* 10.000	9.474	5.3	117	0.01
82 T	Isopropylbenzene	3.214	3.158	1.7	86	0.01
83 S	4-Bromofluorobenzene	0.935	0.917	1.9	86	0.01
84 T	Bromobenzene	0.816	0.790	3.2	85	0.01
85 T	n-Propylbenzene	3.643	3.641	0.1	87	0.01
86 T	1,4-Dichlorobutane	0.868	0.806	7.1	83	0.02
87 T	1,1,2,2-Tetrachloroethane	0.499	0.487	2.4	88	0.01
88 T	4-Ethyltoluene	3.081	2.931	4.9	83	0.01

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
 Data File : VG170717N01.D
 Acq On : 17 Jul 2017 12:59 pm
 Operator : GONZO:PD
 Sample : WG1023505-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1023505, ICAL13686 (Sig #1); WG, ICAL13686 (Sig #2)
 ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 17 13:26:54 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:09:01 2017
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
89 T	2-Chlorotoluene	2.213	2.119	4.2	84	0.02
90 T	1,3,5-Trimethylbenzene	2.559	2.534	1.0	86	0.01
91 T	1,2,3-Trichloropropane	0.410	0.375	8.5	85	0.01
92 T	trans-1,4-Dichloro-2-butene	0.132	0.128	3.0	100	0.01
93 T	4-Chlorotoluene	2.328	2.227	4.3	86	0.01
94 T	tert-Butylbenzene	2.225	2.177	2.2	87	0.01
97 T	1,2,4-Trimethylbenzene	2.613	2.589	0.9	86	0.01
98 T	sec-Butylbenzene	3.026	3.024	0.1	90	0.02
99 T	p-Isopropyltoluene	2.697	2.685	0.4	89	0.01
100 T	1,3-Dichlorobenzene	1.520	1.459	4.0	87	0.01
101 T	1,4-Dichlorobenzene	1.544	1.476	4.4	88	0.01
102 T	p-Diethylbenzene	2.314	2.257	2.5	89	0.02
103 T	n-Butylbenzene	2.814	2.825	-0.4	91	0.02
104 T	1,2-Dichlorobenzene	1.361	1.320	3.0	88	0.01
105 T	1,2,4,5-Tetramethylbenzene	1.638	1.600	2.3	87	0.01
106 T	1,2-Dibromo-3-chloropropane *	10.000	9.579	4.2	134	0.01
107 T	1,3,5-Trichlorobenzene	1.049	0.996	5.1	90	0.01
108 T	Hexachlorobutadiene	0.409	0.407	0.5	101	0.01
109 T	1,2,4-Trichlorobenzene	0.789	0.793	-0.5	100	0.01
110 T	Naphthalene	1.159	1.235	-6.6	108	0.01
111 T	1,2,3-Trichlorobenzene *	10.000	12.004	-20.0#	112	0.01

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
 Data File : VG170717N01.D
 Acq On : 17 Jul 2017 12:59 pm
 Operator : GONZO:PD
 Sample : WG1023505-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1023505, ICAL13686 (Sig #1); WG, ICAL13686 (Sig #2)
 ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 17 13:26:54 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:09:01 2017
 Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.033	96	698045	10.000	ug/L	0.01
59) Chlorobenzene-d5	13.490	117	530469	10.000	ug/L	# 0.01
79) 1,4-Dichlorobenzene-d4	17.304	152	270453	10.000	ug/L	0.01
System Monitoring Compounds						
36) Dibromofluoromethane	7.971	113	169457	10.286	ug/L	0.01
Spiked Amount	10.000	Range 70 - 130	Recovery	=	102.86%	
43) 1,2-Dichloroethane-d4	8.621	65	166870	9.702	ug/L	0.02
Spiked Amount	10.000	Range 70 - 130	Recovery	=	97.02%	
60) Toluene-d8	11.231	98	683074	9.940	ug/L	0.01
Spiked Amount	10.000	Range 70 - 130	Recovery	=	99.40%	
83) 4-Bromofluorobenzene	15.383	95	247994	9.802	ug/L	0.01
Spiked Amount	10.000	Range 70 - 130	Recovery	=	98.02%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.832	85	134959	7.360	ug/L	98
3) Chloromethane	3.177	50	90429	6.834	ug/L	95
4) Vinyl chloride	3.346	62	177022	8.609	ug/L	100
5) Bromomethane	3.961	94	100966	9.645	ug/L	98
6) Chloroethane	4.063	64	101271	9.549	ug/L	98
7) Trichlorofluoromethane	4.401	101	262912	8.975	ug/L	100
8) Ethyl ether	4.773	74	84460	9.795	ug/L	# 75
10) 1,1-Dichloroethene	5.199	96	146734	9.423	ug/L	82
11) Carbon disulfide	5.868	76	393022	7.372	ug/L	99
12) Freon-113	4.955	101	135074	9.267	ug/L	# 83
13) Iodomethane	5.611	142	84161	10.342	ug/L	85
14) Acrolein	4.955	56	21227	9.744	ug/L	94
15) Methylene chloride	5.814	84	165425	9.766	ug/L	89
17) Acetone	5.036	43	28088	9.892	ug/L	# 79
18) trans-1,2-Dichloroethene	6.186	96	169319	9.533	ug/L	88
19) Methyl acetate	5.605	43	77795	9.315	ug/L	# 89
20) Methyl tert-butyl ether	5.983	73	362092	11.061	ug/L	# 89
21) tert-Butyl alcohol	5.287	59	33459M1	58.181	ug/L	
22) Diisopropyl ether	6.538	45	604565	8.923	ug/L	92
23) 1,1-Dichloroethane	6.720	63	314666	9.390	ug/L	100
24) Halothane	6.085	117	125036	9.302	ug/L	97
25) Acrylonitrile	5.963	53	45756	9.587	ug/L	97
26) Ethyl tert-butyl ether	7.052	59	429299	16.381	ug/L	95
27) Vinyl acetate	6.687	43	272355	10.848	ug/L	97
28) cis-1,2-Dichloroethene	7.491	96	191401	9.694	ug/L	86

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
 Data File : VG170717N01.D
 Acq On : 17 Jul 2017 12:59 pm
 Operator : GONZO:PD
 Sample : WG1023505-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1023505, ICAL13686 (Sig #1); WG, ICAL13686 (Sig #2)
 ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 17 13:26:54 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:09:01 2017
 Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
29)	2,2-Dichloropropane	7.430	77	184056	14.053	ug/L	#	72
30)	Bromochloromethane	7.917	128	81696	9.679	ug/L		90
31)	Cyclohexane	8.242	56	273498	8.875	ug/L		87
32)	Chloroform	7.694	83	302717	9.699	ug/L		97
33)	Ethyl acetate	7.424	43	103651	8.899	ug/L	#	95
34)	Carbon tetrachloride	8.553	117	212104	9.447	ug/L		96
35)	Tetrahydrofuran	7.958	42	33276	9.273	ug/L	#	79
37)	1,1,1-Trichloroethane	8.215	97	248289	9.568	ug/L		98
39)	2-Butanone	7.228	43	47269	10.125	ug/L		90
40)	1,1-Dichloropropene	8.411	75	228889	9.316	ug/L	#	87
41)	Benzene	8.776	78	734966	9.655	ug/L		99
42)	tert-Amyl methyl ether	8.526	73	323225	12.020	ug/L	#	86
44)	1,2-Dichloroethane	8.742	62	207686	9.303	ug/L		98
47)	Methyl cyclohexane	9.662	83	235554	9.347	ug/L		97
48)	Trichloroethene	9.574	95	180667	9.364	ug/L	#	81
50)	Dibromomethane	10.230	93	88403	9.611	ug/L	#	82
51)	1,2-Dichloropropane	9.811	63	178999	9.590	ug/L	#	89
53)	2-Chloroethyl vinyl ether	10.501	63	60082	8.301	ug/L	#	1
54)	Bromodichloromethane	10.142	83	214975	10.010	ug/L	#	98
57)	1,4-Dioxane	10.149	88	56076M1	562.128	ug/L		
58)	cis-1,3-Dichloropropene	10.873	75	236956	9.339	ug/L		96
61)	Toluene	11.353	92	454700	9.480	ug/L		99
62)	4-Methyl-2-pentanone	10.541	58	40036	9.521	ug/L	#	54
63)	Tetrachloroethene	12.313	166	205888	9.737	ug/L	#	81
65)	trans-1,3-Dichloropropene	11.583	75	180929	9.100	ug/L		96
67)	Ethyl methacrylate	11.515	69	161172	10.568	ug/L		96
68)	1,1,2-Trichloroethane	11.826	83	108897	9.671	ug/L		94
69)	Chlorodibromomethane	12.624	129	143253	9.329	ug/L		97
70)	1,3-Dichloropropane	12.191	76	220723	9.489	ug/L		99
71)	1,2-Dibromoethane	12.928	107	120179	10.193	ug/L		96
72)	2-Hexanone	11.792	43	68713	9.583	ug/L		97
73)	Chlorobenzene	13.550	112	510516	9.530	ug/L	#	83
74)	Ethylbenzene	13.611	91	853478	9.864	ug/L		91
75)	1,1,1,2-Tetrachloroethane	13.605	131	167939	10.096	ug/L		96
76)	p/m Xylene	13.726	106	681372	19.941	ug/L		74
77)	o Xylene	14.416	106	637781	19.600	ug/L		75
78)	Styrene	14.463	104	1102396	20.546	ug/L	#	75
80)	Bromoform	15.038	173	79635	9.474	ug/L		98
82)	Isopropylbenzene	14.964	105	854179	9.826	ug/L		92
84)	Bromobenzene	15.714	156	213782	9.691	ug/L		99
85)	n-Propylbenzene	15.606	91	984610	9.993	ug/L	#	89

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
 Data File : VG170717N01.D
 Acq On : 17 Jul 2017 12:59 pm
 Operator : GONZO:PD
 Sample : WG1023505-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1023505, ICAL13686 (Sig #1); WG, ICAL13686 (Sig #2)
 ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 17 13:26:54 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:09:01 2017
 Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
86)	1,4-Dichlorobutane	15.113	55	217907	9.287	ug/L	#	86
87)	1,1,2,2-Tetrachloroethane	15.241	83	131712	9.769	ug/L		97
88)	4-Ethyltoluene	15.789	105	792728	9.512	ug/L		90
89)	2-Chlorotoluene	15.917	91	573099	9.576	ug/L	#	78
90)	1,3,5-Trimethylbenzene	15.856	105	685265	9.901	ug/L		87
91)	1,2,3-Trichloropropane	15.478	75	101323	9.127	ug/L		88
92)	trans-1,4-Dichloro-2-b...	15.572	53	34603	9.670	ug/L	#	80
93)	4-Chlorotoluene	15.985	91	602403	9.569	ug/L	#	77
94)	tert-Butylbenzene	16.431	119	588900	9.785	ug/L	#	79
97)	1,2,4-Trimethylbenzene	16.499	105	700137	9.907	ug/L	#	86
98)	sec-Butylbenzene	16.783	105	817834	9.995	ug/L		91
99)	p-Isopropyltoluene	16.999	119	726223	9.955	ug/L		88
100)	1,3-Dichlorobenzene	17.189	146	394659	9.598	ug/L		93
101)	1,4-Dichlorobenzene	17.358	146	399291M2	9.564	ug/L		
102)	p-Diethylbenzene	18.967	119	610451	9.755	ug/L		91
103)	n-Butylbenzene	17.676	91	764158	10.040	ug/L	#	88
104)	1,2-Dichlorobenzene	17.973	146	357062	9.700	ug/L		93
105)	1,2,4,5-Tetramethylben...	17.689	119	432812	9.769	ug/L		77
106)	1,2-Dibromo-3-chloropr...	19.272	155	15234	9.579	ug/L		97
107)	1,3,5-Trichlorobenzene	19.664	180	269270	9.493	ug/L	#	92
108)	Hexachlorobutadiene	20.962	225	110062	9.941	ug/L		98
109)	1,2,4-Trichlorobenzene	20.739	180	214384	10.042	ug/L		98
110)	Naphthalene	21.185	128	334069	10.653	ug/L		100
111)	1,2,3-Trichlorobenzene	21.598	180	161224	12.004	ug/L		96

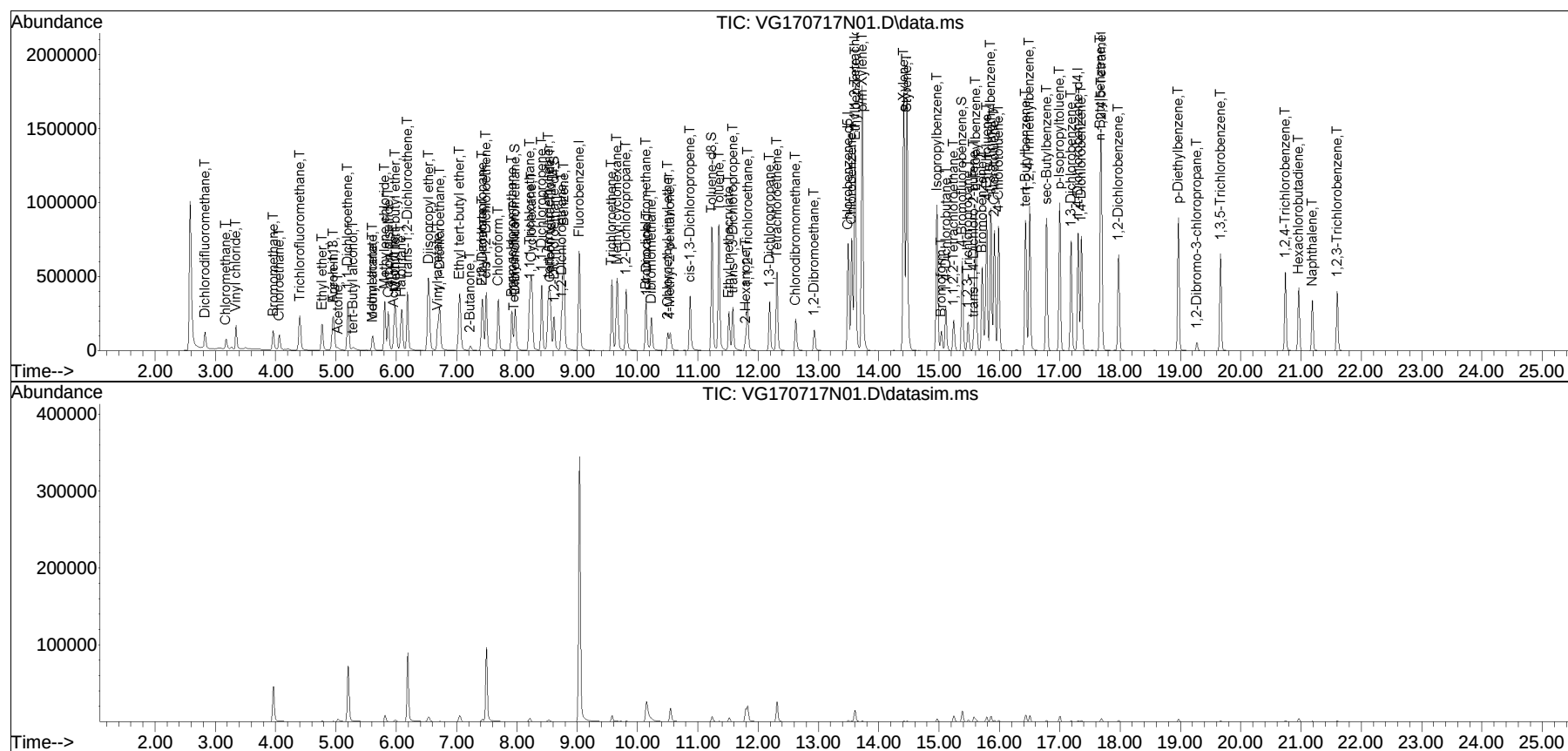
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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Data Path : I:\VOLATILES\Gonzo\2017\170717N\  
Data File : VG170717N01.D  
Acq On    : 17 Jul 2017  12:59 pm  
Operator  : GONZO:PD  
Sample    : WG1023505-2 (Sig #1); 8260 CCAL (Sig #2)  
Misc      : WG1023505,ICAL13686 (Sig #1); WG,ICAL13686 (Sig #2)  
ALS Vial  : 37      Sample Multiplier: 1
```

Quant Time: Jul 17 13:26:54 2017
Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu May 25 10:09:01 2017
Response via : Initial Calibration

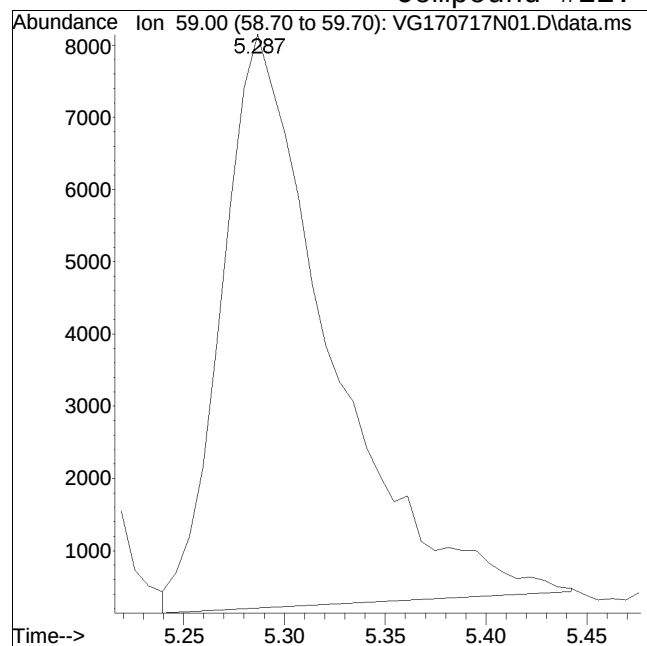
Sub List : 8260-Curve - Megamix plus Diox



Manual Integration Report

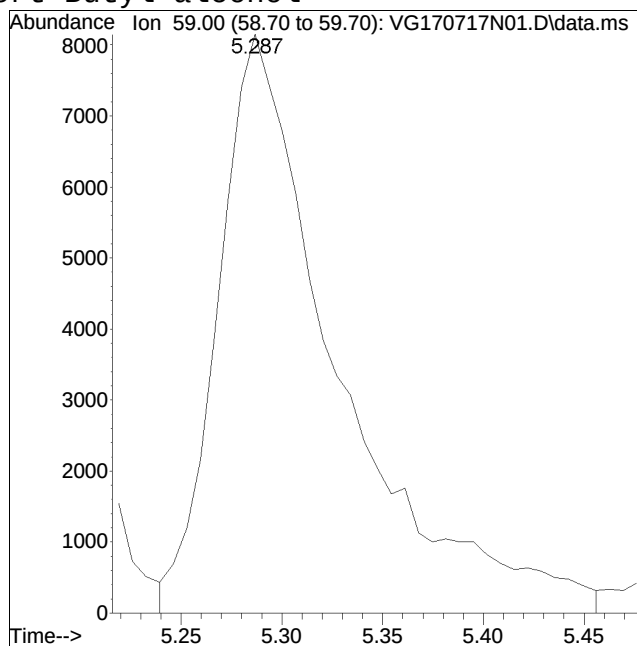
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170717N01.D Operator : GONZO:PD
Date Inj'd : 7/17/2017 12:59 pm Instrument : Gonzo
Sample : WG1023505-2 Quant Date : 7/17/2017 1:24 pm

Compound #21: tert-Butyl alcohol



Original Peak Response = 29695

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

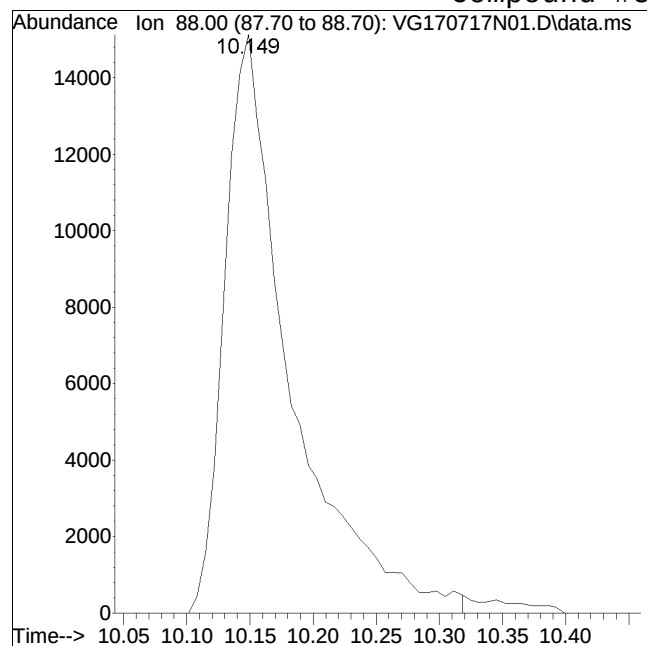


Manual Peak Response = 33459 M1

Manual Integration Report

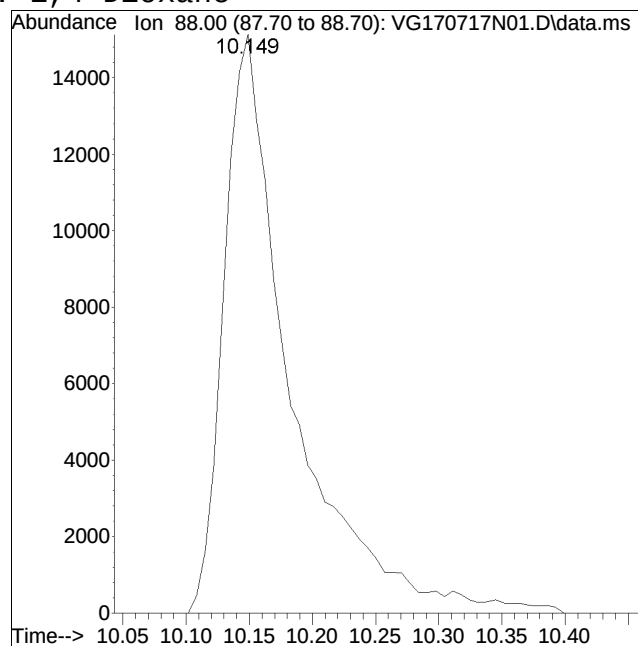
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170717N01.D Operator : GONZO:PD
Date Inj'd : 7/17/2017 12:59 pm Instrument : Gonzo
Sample : WG1023505-2 Quant Date : 7/17/2017 1:24 pm

Compound #57: 1,4-Dioxane



Original Peak Response = 54955

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

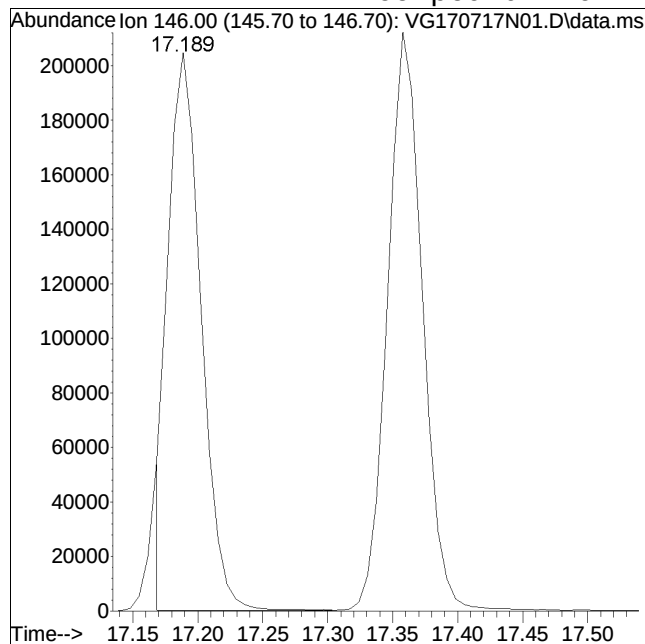


Manual Peak Response = 56076 M1

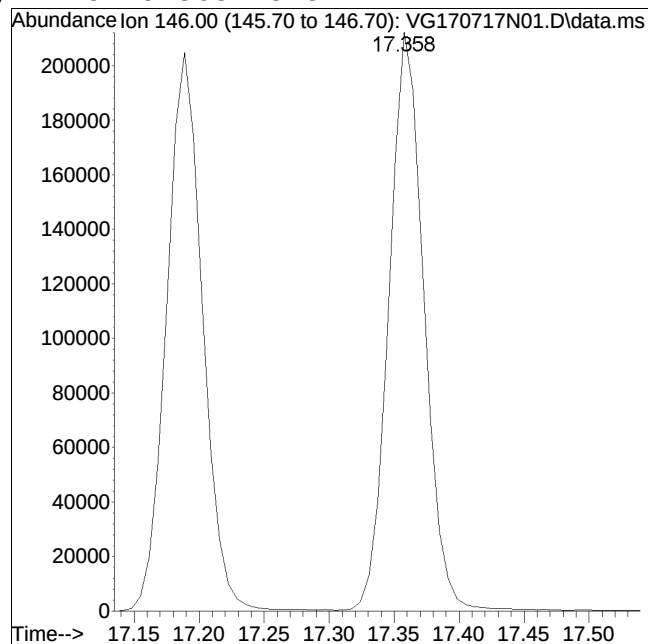
Manual Integration Report

Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170717N01.D Operator : GONZO:PD
Date Inj'd : 7/17/2017 12:59 pm Instrument : Gonzo
Sample : WG1023505-2 Quant Date : 7/17/2017 1:24 pm

Compound #101: 1,4-Dichlorobenzene



Original Peak Response = 358782



Manual Peak Response = 399291 M2

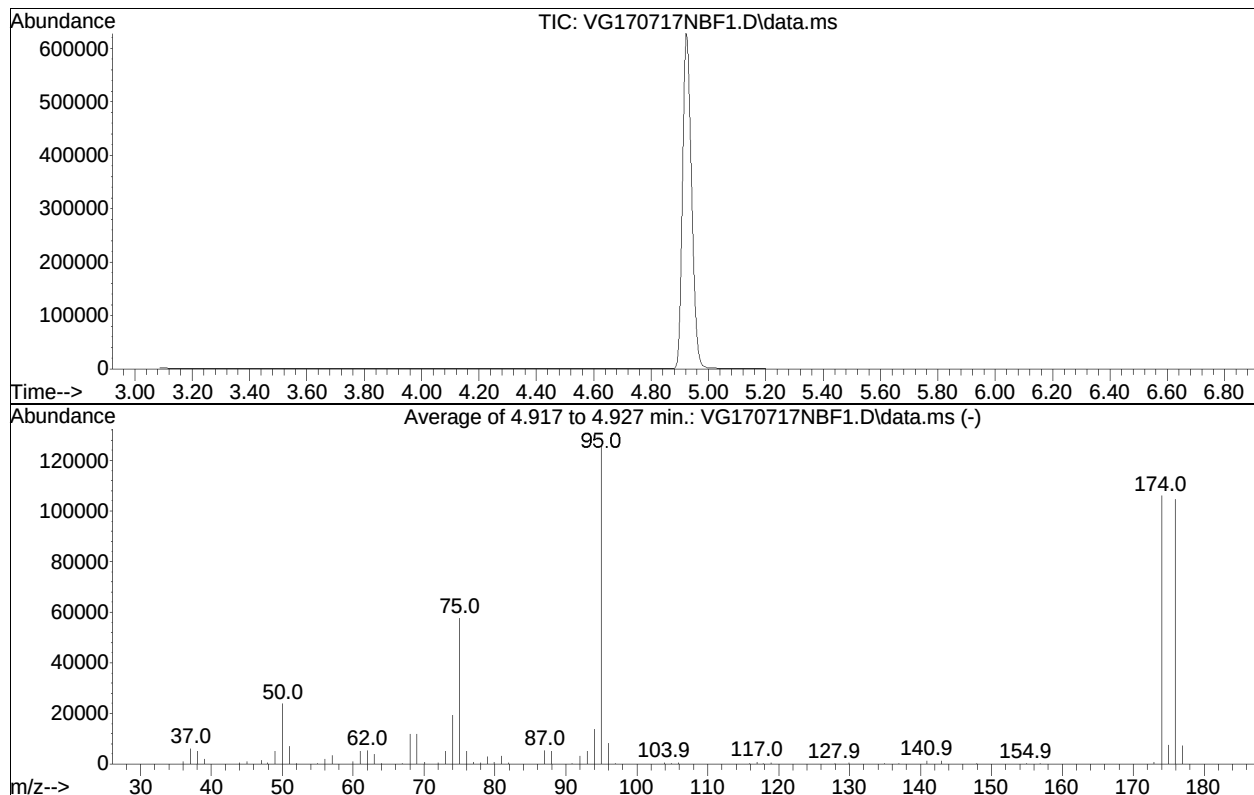
M2 = Peak not found by automatic integration algorithm.

BFB

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
Data File : VG170717NBF1.D
Acq On : 17 Jul 2017 12:34 pm
Operator : GONZO:PD
Sample : WG1023505-1
Misc : WG1023505
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Thu May 25 10:09:01 2017



AutoFind: Scans 350, 351, 352; Background Corrected with Scan 341

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.8	23789	PASS
75	95	30	60	45.7	57691	PASS
95	95	100	100	100.0	126213	PASS
96	95	5	9	6.6	8297	PASS
173	174	0.00	2	0.7	722	PASS
174	95	50	100	84.0	106029	PASS
175	174	5	9	7.2	7645	PASS
176	174	95	101	98.8	104720	PASS
177	176	5	9	6.9	7185	PASS

Volatiles Raw QC Data

Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
 Data File : VG170717N04.D
 Acq On : 17 Jul 2017 2:40 pm
 Operator : GONZO:PD
 Sample : WG1023505-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
 Misc : WG1023505,ICAL13686 (Sig #1); WG,ICAL13686 (Sig #2)
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jul 17 15:09:20 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:09:01 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170717N\VG170717N01.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.033	96	720453	10.000	ug/L	0.01
Standard Area 1 = 698045			Recovery	=	103.21%	
59) Chlorobenzene-d5	13.496	117	536845	10.000	ug/L	# 0.02
Standard Area 1 = 530469			Recovery	=	101.20%	
79) 1,4-Dichlorobenzene-d4	17.310	152	250308	10.000	ug/L	0.02
Standard Area 1 = 270453			Recovery	=	92.55%	
System Monitoring Compounds						
36) Dibromofluoromethane	7.971	113	168787	9.927	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.27%	
43) 1,2-Dichloroethane-d4	8.621	65	180084	10.145	ug/L	0.02
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.45%	
60) Toluene-d8	11.238	98	688856	9.906	ug/L	0.02
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.06%	
83) 4-Bromofluorobenzene	15.383	95	233749	9.983	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.83%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.825	85	221	N.D.		
3) Chloromethane	3.184	50	2527	0.185	ug/L	96
4) Vinyl chloride	3.346	62	66	N.D.		
5) Bromomethane	3.961	94	2602	0.241	ug/L	100
6) Chloroethane	4.056	64	196	N.D.		
7) Trichlorofluoromethane	4.401	101	157	N.D.		
10) 1,1-Dichloroethene	5.199	96	65	N.D.		
11) Carbon disulfide	5.868	76	8741	0.159	ug/L	97
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	5.801	84	843	N.D.		
17) Acetone	0.000		0	N.D.	d	
18) trans-1,2-Dichloroethene	6.186	96	625	N.D.		
19) Methyl acetate	5.571	43	104	N.D.		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	7.491	96	358	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
31) Cyclohexane	8.242	56	442	N.D.		
32) Chloroform	7.694	83	370	N.D.		
34) Carbon tetrachloride	0.000		0	N.D.		

Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
 Data File : VG170717N04.D
 Acq On : 17 Jul 2017 2:40 pm
 Operator : GONZO:PD
 Sample : WG1023505-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
 Misc : WG1023505,ICAL13686 (Sig #1); WG,ICAL13686 (Sig #2)
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jul 17 15:09:20 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:09:01 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170717N\VG170717N01.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
37)	1,1,1-Trichloroethane	0.000		0		N.D.		
39)	2-Butanone	0.000		0		N.D.	d	
41)	Benzene	8.776	78	1030		N.D.		
44)	1,2-Dichloroethane	8.742	62	579		N.D.		
47)	Methylcyclohexane	9.669	83	557		N.D.		
48)	Trichloroethene	9.581	95	431		N.D.		
51)	1,2-Dichloropropane	0.000		0		N.D.		
54)	Bromodichloromethane	0.000		0		N.D.		
57)	1,4-Dioxane	0.000		0		N.D.		
58)	cis-1,3-Dichloropropene	0.000		0		N.D.	d	
61)	Toluene	11.346	92	1015		N.D.		
62)	4-Methyl-2-pentanone	0.000		0		N.D.		
63)	Tetrachloroethene	12.313	166	889		N.D.		
65)	trans-1,3-Dichloropropene	0.000		0		N.D.	d	
68)	1,1,2-Trichloroethane	0.000		0		N.D.		
69)	Chlorodibromomethane	0.000		0		N.D.		
71)	1,2-Dibromoethane	0.000		0		N.D.		
72)	2-Hexanone	0.000		0		N.D.		
73)	Chlorobenzene	13.557	112	2232		N.D.		
74)	Ethylbenzene	13.618	91	2187		N.D.		
76)	p/m Xylene	13.733	106	1976		N.D.		
77)	o Xylene	14.416	106	883		N.D.		
78)	Styrene	14.484	104	2921		N.D.		
80)	Bromoform	0.000		0		N.D.		
82)	Isopropylbenzene	14.971	105	2341		N.D.		
87)	1,1,2,2-Tetrachloroethane	0.000		0		N.D.		
100)	1,3-Dichlorobenzene	17.195	146	3100	0.081	ug/L	#	86
101)	1,4-Dichlorobenzene	17.364	146	3938	0.102	ug/L	#	90
104)	1,2-Dichlorobenzene	17.987	146	2149		N.D.		
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.		
109)	1,2,4-Trichlorobenzene	20.753	180	3040	0.154	ug/L		95
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	d	

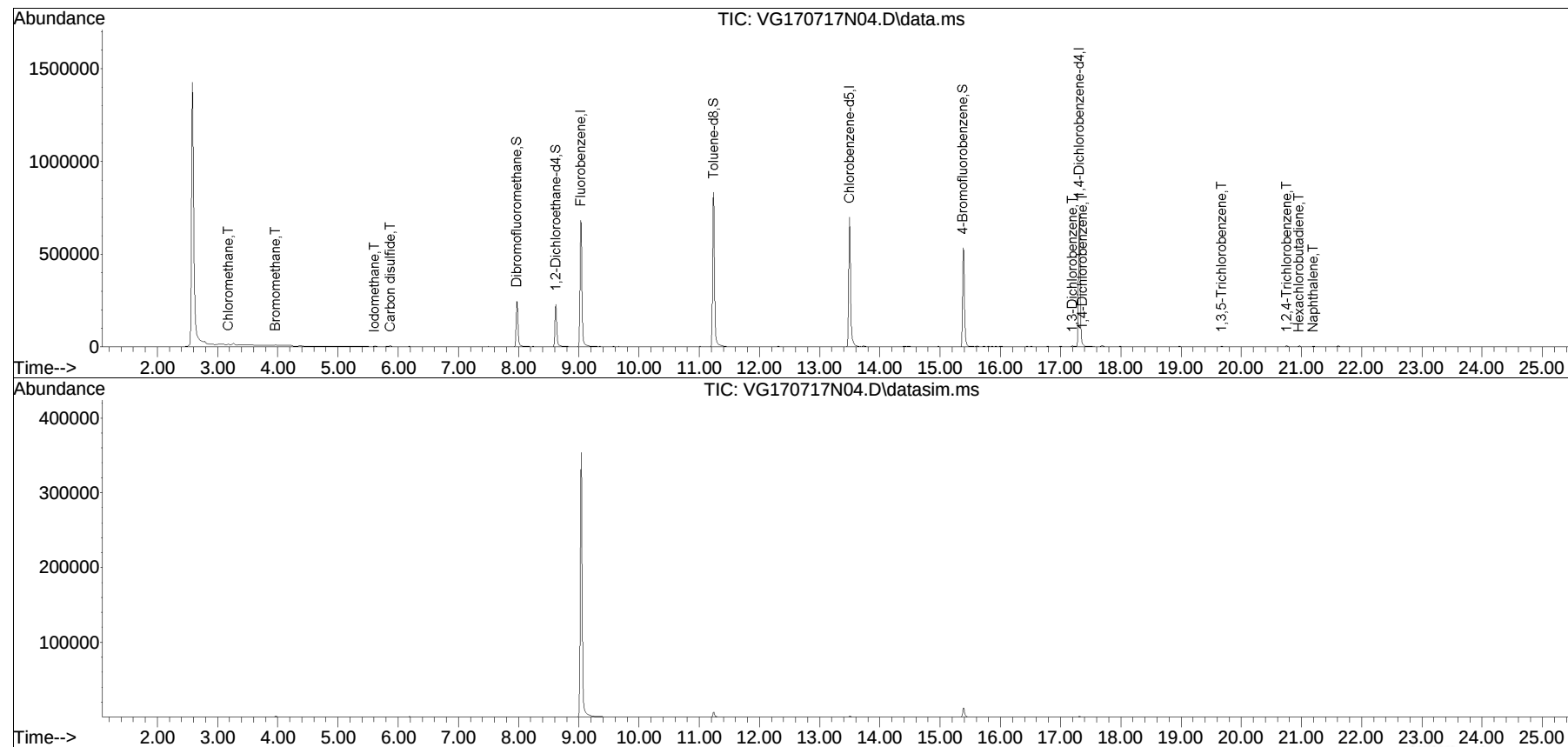
(#) = qualifier out of range (m) = manual integration (+) = signals summed

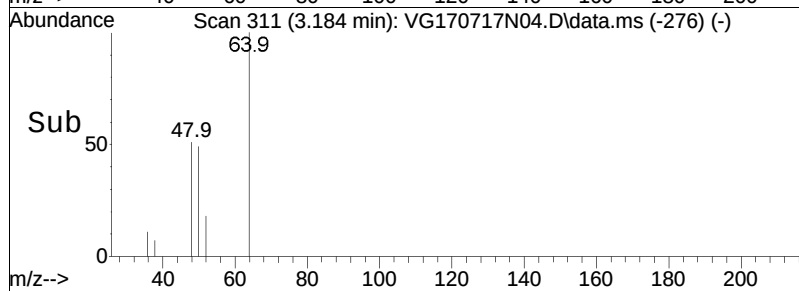
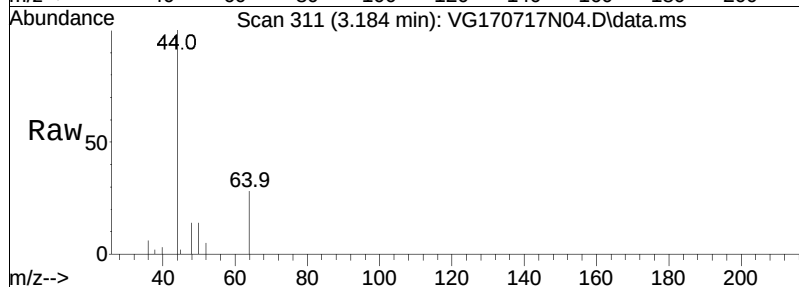
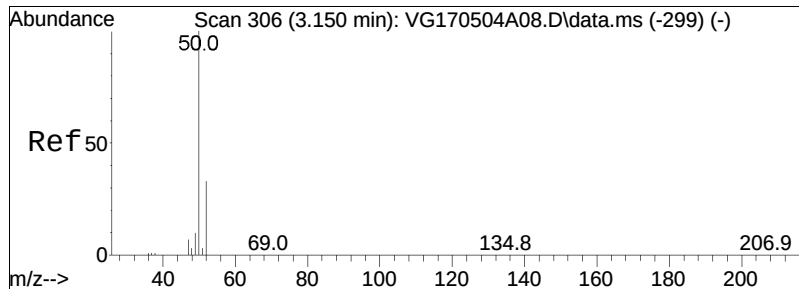
Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
 Data File : VG170717N04.D
 Acq On : 17 Jul 2017 2:40 pm
 Operator : GONZO:PD
 Sample : WG1023505-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
 Misc : WG1023505,ICAL13686 (Sig #1); WG,ICAL13686 (Sig #2)
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jul 17 15:09:20 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:09:01 2017
 Response via : Initial Calibration

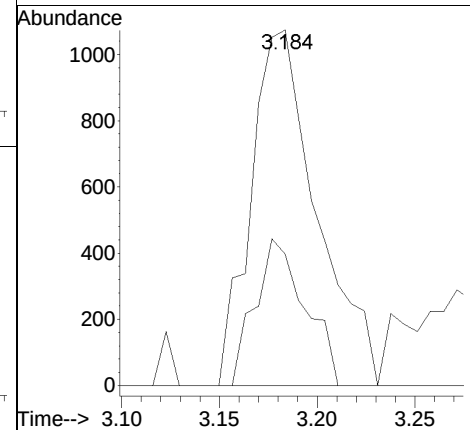
Sub List : 8260-Curve - Megamix plus Diox0717N\VG170717N01.D•

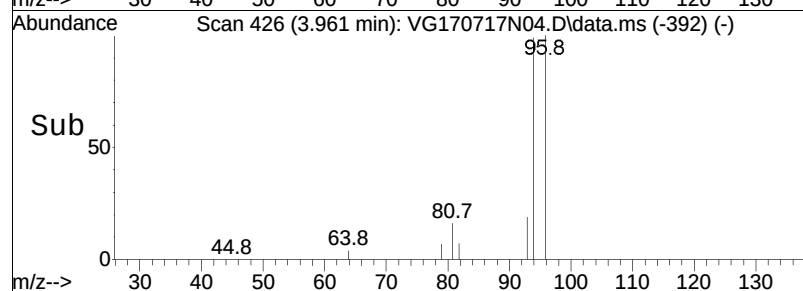
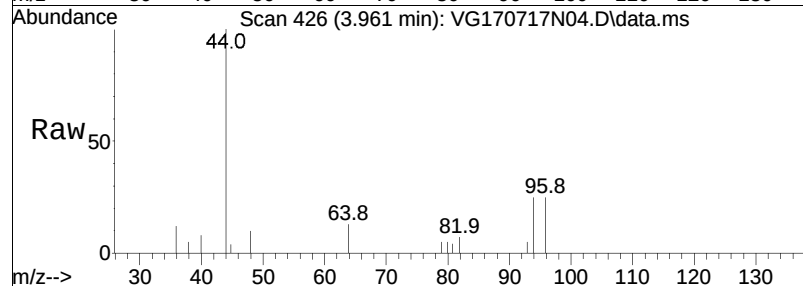
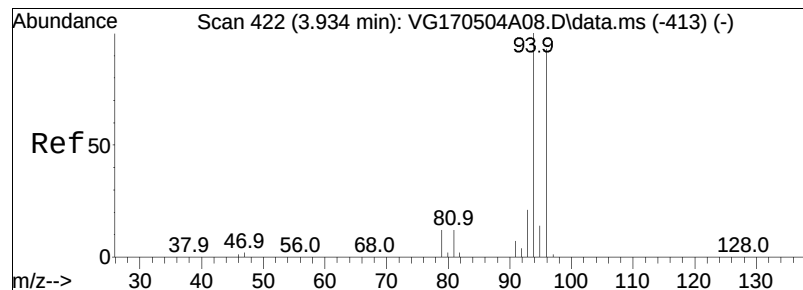




#3
 Chloromethane
 Concen: 0.19 ug/L
 RT: 3.184 min Scan# 311
 Delta R.T. 0.034 min
 Lab File: VG170717N04.D
 Acq: 17 Jul 2017 2:40 pm

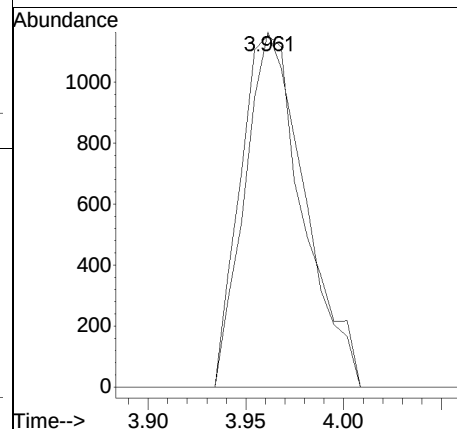
Tgt Ion: 50 Resp: 2527
 Ion Ratio Lower Upper
 50 100
 52 31.4 13.5 53.5

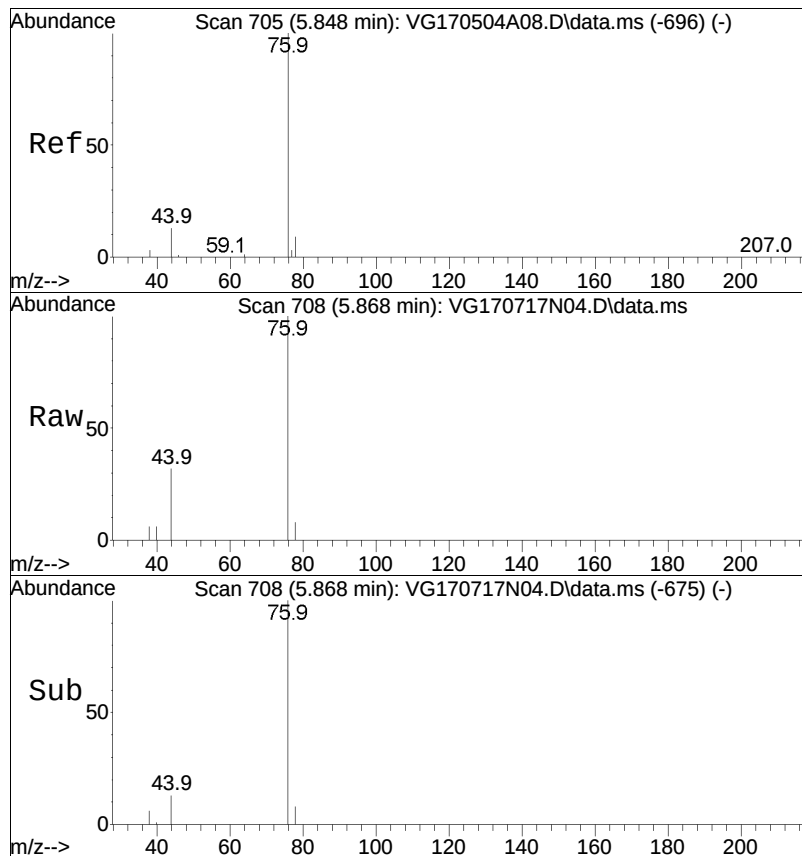




#5
 Bromomethane
 Concen: 0.24 ug/L
 RT: 3.961 min Scan# 426
 Delta R.T. 0.027 min
 Lab File: VG170717N04.D
 Acq: 17 Jul 2017 2:40 pm

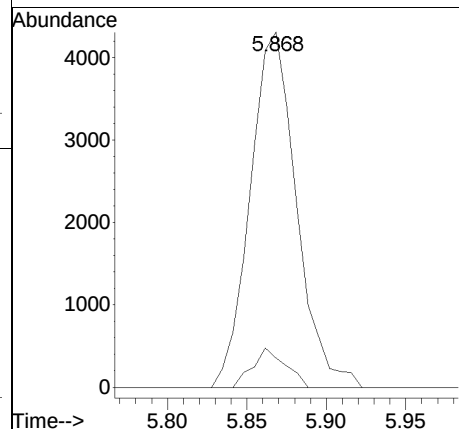
Tgt Ion	94	96	Ratio	Lower	Upper
Resp	2602				
Ion	94	96	100		
Ratio			94.9	75.4	115.4

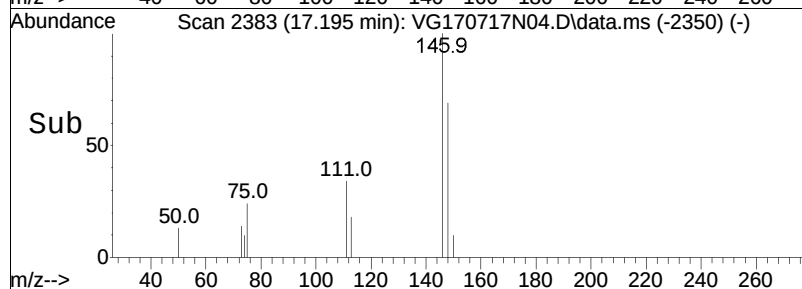
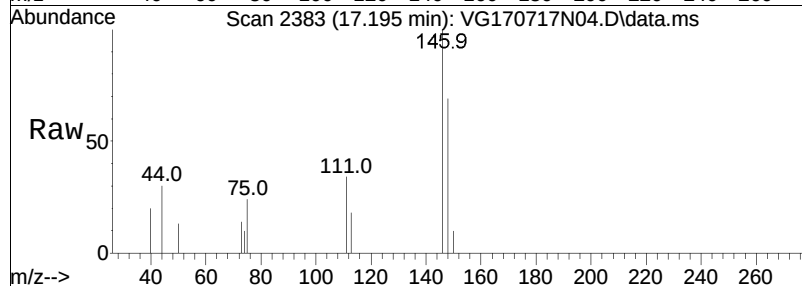
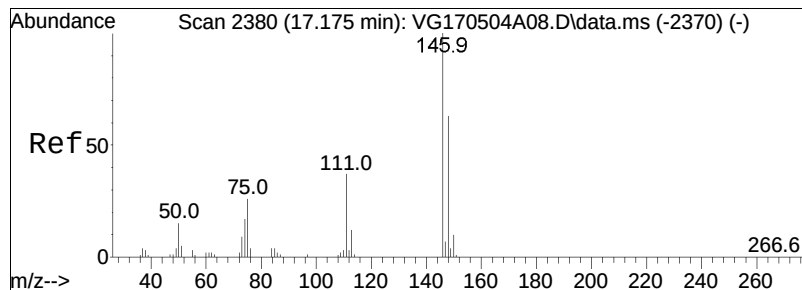




#11
 Carbon disulfide
 Concen: 0.16 ug/L
 RT: 5.868 min Scan# 708
 Delta R.T. 0.020 min
 Lab File: VG170717N04.D
 Acq: 17 Jul 2017 2:40 pm

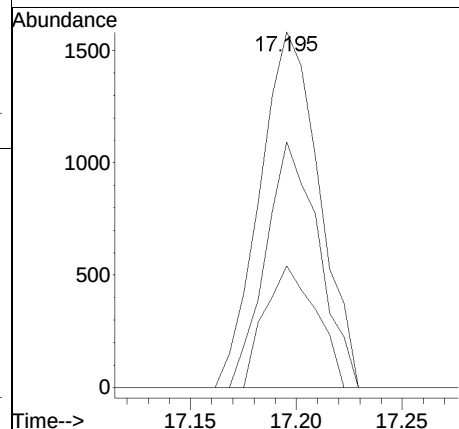
Tgt Ion	Ratio	Lower	Upper
76	100		
78	7.9	5.8	12.0

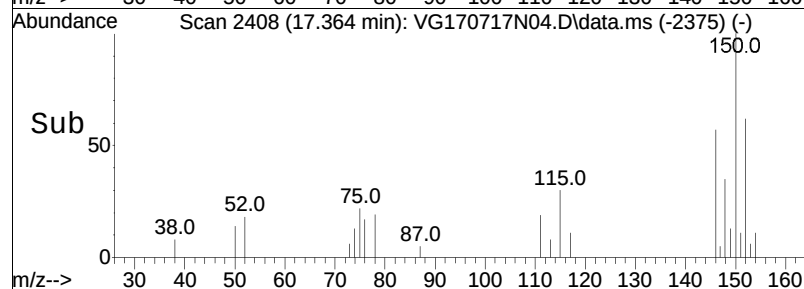
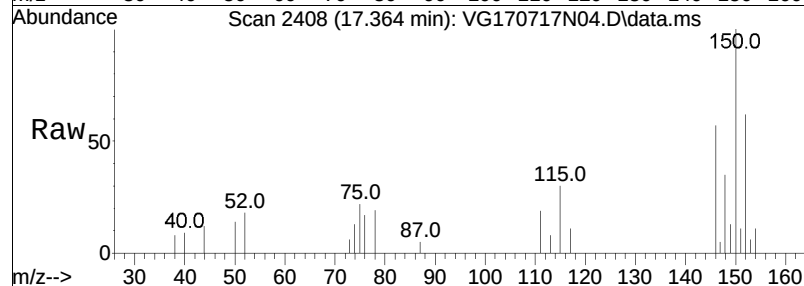
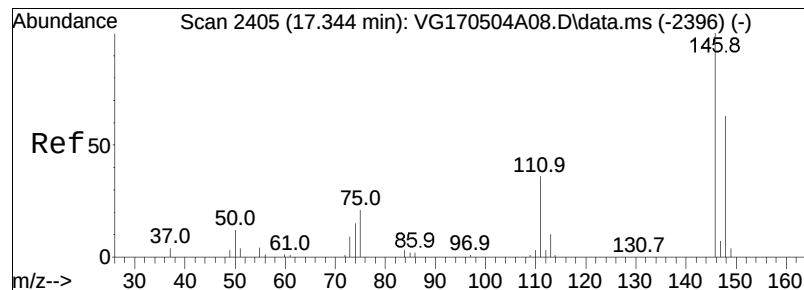




#100
 1,3-Dichlorobenzene
 Concen: 0.08 ug/L
 RT: 17.195 min Scan# 2383
 Delta R.T. 0.020 min
 Lab File: VG170717N04.D
 Acq: 17 Jul 2017 2:40 pm

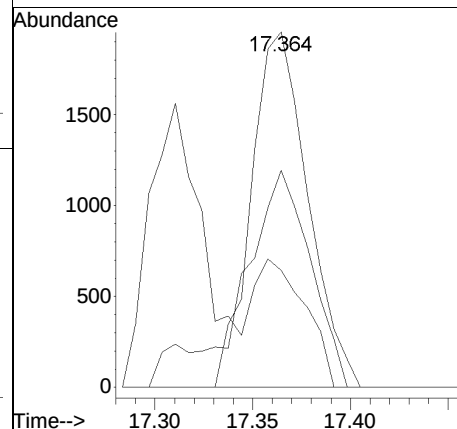
Tgt Ion	Ratio	Lower	Upper
146	100		
111	29.5	30.8	64.0#
148	61.4	42.0	87.2

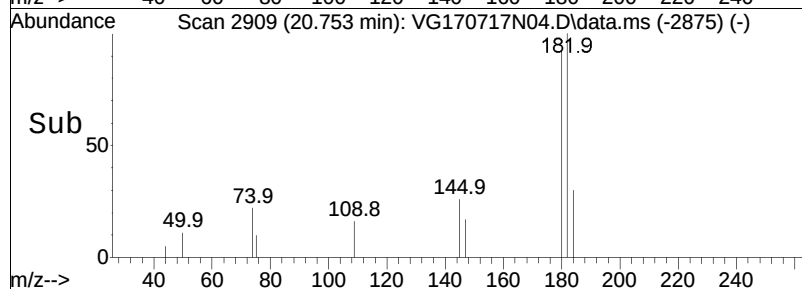
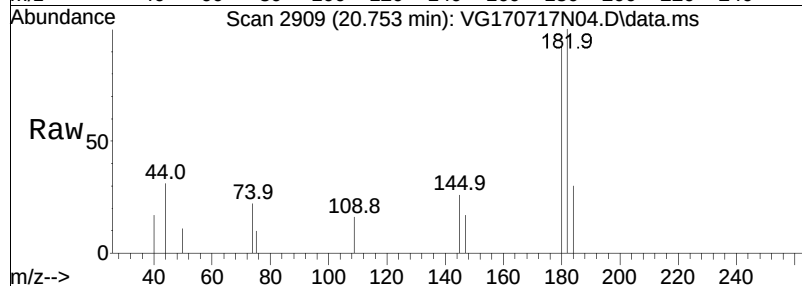
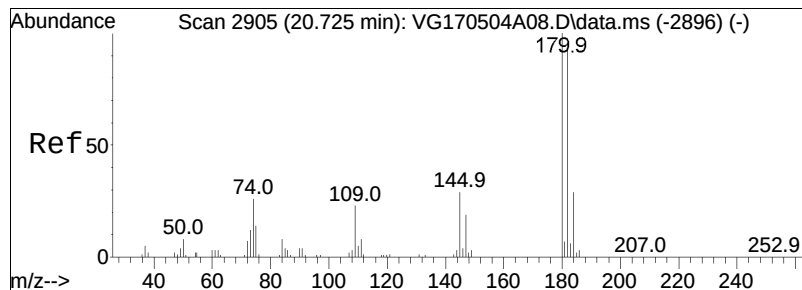




#101
 1,4-Dichlorobenzene
 Concen: 0.10 ug/L
 RT: 17.364 min Scan# 2408
 Delta R.T. 0.020 min
 Lab File: VG170717N04.D
 Acq: 17 Jul 2017 2:40 pm

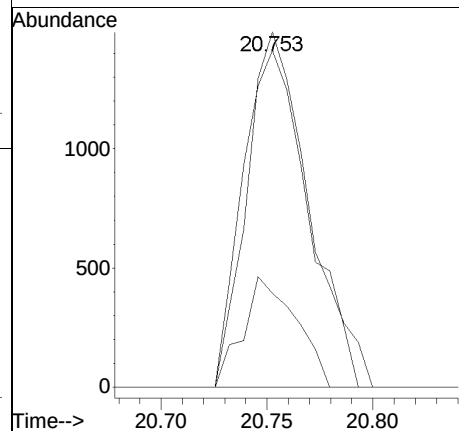
Tgt Ion	Ratio	Lower	Upper
146	100		
111	32.8	36.2	54.4#
148	66.6	50.8	76.2





#109
 1,2,4-Trichlorobenzene
 Concen: 0.15 ug/L
 RT: 20.753 min Scan# 2909
 Delta R.T. 0.027 min
 Lab File: VG170717N04.D
 Acq: 17 Jul 2017 2:40 pm

Tgt Ion	Ratio	Lower	Upper
180	100		
182	100.2	75.7	113.5
145	26.6	23.0	34.4



Manual Integration Report

Data Path	: I:\VOLATILES\Gonzo\2017\17Q	Method	: G_170523N_8260.m
Data File	: VG170717N04.D	Operator	: GONZO:PD
Date Inj'd	: 7/17/2017 2:40 pm	Instrument	: Gonzo
Sample	: WG1023505-5,31,10,10	Quant Date	: 7/17/2017 3:08 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
 Data File : VG170717N01.D
 Acq On : 17 Jul 2017 12:59 pm
 Operator : GONZO:PD
 Sample : WG1023505-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1023505,ICAL13686 (Sig #1); WG,ICAL13686 (Sig #2)
 ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 17 13:26:54 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:09:01 2017
 Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.033	96	698045	10.000	ug/L	0.01
59) Chlorobenzene-d5	13.490	117	530469	10.000	ug/L	# 0.01
79) 1,4-Dichlorobenzene-d4	17.304	152	270453	10.000	ug/L	0.01
System Monitoring Compounds						
36) Dibromofluoromethane	7.971	113	169457	10.286	ug/L	0.01
Spiked Amount	10.000	Range 70 - 130	Recovery	=	102.86%	
43) 1,2-Dichloroethane-d4	8.621	65	166870	9.702	ug/L	0.02
Spiked Amount	10.000	Range 70 - 130	Recovery	=	97.02%	
60) Toluene-d8	11.231	98	683074	9.940	ug/L	0.01
Spiked Amount	10.000	Range 70 - 130	Recovery	=	99.40%	
83) 4-Bromofluorobenzene	15.383	95	247994	9.802	ug/L	0.01
Spiked Amount	10.000	Range 70 - 130	Recovery	=	98.02%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.832	85	134959	7.360	ug/L	98
3) Chloromethane	3.177	50	90429	6.834	ug/L	95
4) Vinyl chloride	3.346	62	177022	8.609	ug/L	100
5) Bromomethane	3.961	94	100966	9.645	ug/L	98
6) Chloroethane	4.063	64	101271	9.549	ug/L	98
7) Trichlorofluoromethane	4.401	101	262912	8.975	ug/L	100
10) 1,1-Dichloroethene	5.199	96	146734	9.423	ug/L	82
11) Carbon disulfide	5.868	76	393022	7.372	ug/L	99
12) Freon-113	4.955	101	135074	9.267	ug/L	# 83
15) Methylene chloride	5.814	84	165425	9.766	ug/L	89
17) Acetone	5.036	43	28088	9.892	ug/L	# 79
18) trans-1,2-Dichloroethene	6.186	96	169319	9.533	ug/L	88
19) Methyl acetate	5.605	43	77795	9.315	ug/L	# 89
20) Methyl tert-butyl ether	5.983	73	362092	11.061	ug/L	# 89
23) 1,1-Dichloroethane	6.720	63	314666	9.390	ug/L	100
28) cis-1,2-Dichloroethene	7.491	96	191401	9.694	ug/L	86
30) Bromochloromethane	7.917	128	81696	9.679	ug/L	90
31) Cyclohexane	8.242	56	273498	8.875	ug/L	87
32) Chloroform	7.694	83	302717	9.699	ug/L	97
34) Carbon tetrachloride	8.553	117	212104	9.447	ug/L	96
37) 1,1,1-Trichloroethane	8.215	97	248289	9.568	ug/L	98
39) 2-Butanone	7.228	43	47269	10.125	ug/L	90
41) Benzene	8.776	78	734966	9.655	ug/L	99
44) 1,2-Dichloroethane	8.742	62	207686	9.303	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
 Data File : VG170717N01.D
 Acq On : 17 Jul 2017 12:59 pm
 Operator : GONZO:PD
 Sample : WG1023505-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1023505,ICAL13686 (Sig #1); WG,ICAL13686 (Sig #2)
 ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 17 13:26:54 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:09:01 2017
 Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47)	Methyl cyclohexane	9.662	83	235554	9.347	ug/L	97
48)	Trichloroethene	9.574	95	180667	9.364	ug/L #	81
51)	1,2-Dichloropropane	9.811	63	178999	9.590	ug/L #	89
54)	Bromodichloromethane	10.142	83	214975	10.010	ug/L #	98
57)	1,4-Dioxane	10.149	88	56076M1	562.128	ug/L	
58)	cis-1,3-Dichloropropene	10.873	75	236956	9.339	ug/L	96
61)	Toluene	11.353	92	454700	9.480	ug/L	99
62)	4-Methyl-2-pentanone	10.541	58	40036	9.521	ug/L #	54
63)	Tetrachloroethene	12.313	166	205888	9.737	ug/L #	81
65)	trans-1,3-Dichloropropene	11.583	75	180929	9.100	ug/L	96
68)	1,1,2-Trichloroethane	11.826	83	108897	9.671	ug/L	94
69)	Chlorodibromomethane	12.624	129	143253	9.329	ug/L	97
71)	1,2-Dibromoethane	12.928	107	120179	10.193	ug/L	96
72)	2-Hexanone	11.792	43	68713	9.583	ug/L	97
73)	Chlorobenzene	13.550	112	510516	9.530	ug/L #	83
74)	Ethylbenzene	13.611	91	853478	9.864	ug/L	91
76)	p/m Xylene	13.726	106	681372	19.941	ug/L	74
77)	o Xylene	14.416	106	637781	19.600	ug/L	75
78)	Styrene	14.463	104	1102396	20.546	ug/L #	75
80)	Bromoform	15.038	173	79635	9.474	ug/L	98
82)	Isopropylbenzene	14.964	105	854179	9.826	ug/L	92
87)	1,1,2,2-Tetrachloroethane	15.241	83	131712	9.769	ug/L	97
100)	1,3-Dichlorobenzene	17.189	146	394659	9.598	ug/L	93
101)	1,4-Dichlorobenzene	17.358	146	399291M2	9.564	ug/L	
104)	1,2-Dichlorobenzene	17.973	146	357062	9.700	ug/L	93
106)	1,2-Dibromo-3-chloropr...	19.272	155	15234	9.579	ug/L	97
109)	1,2,4-Trichlorobenzene	20.739	180	214384	10.042	ug/L	98
111)	1,2,3-Trichlorobenzene	21.598	180	161224	12.004	ug/L	96

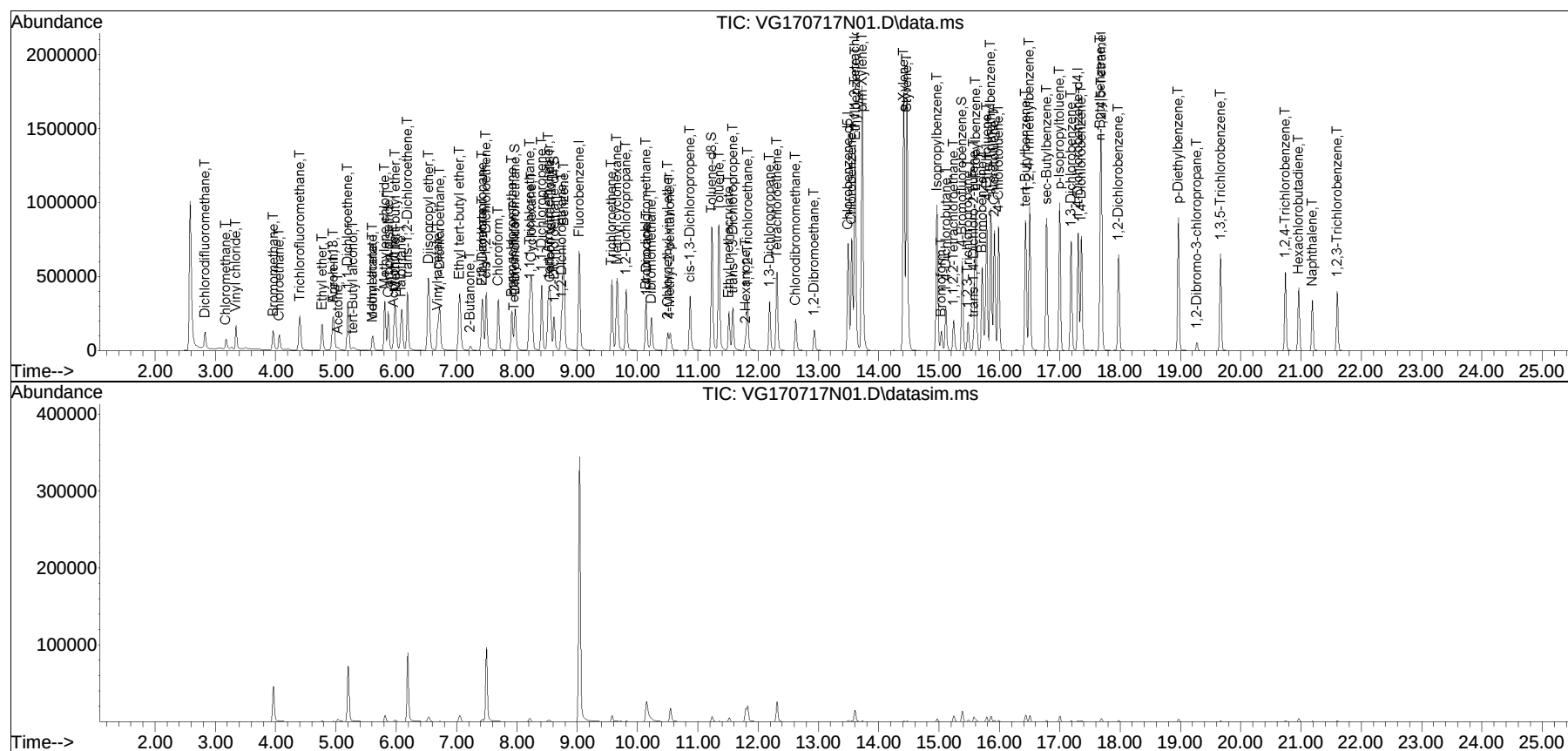
(#) = qualifier out of range (m) = manual integration (+) = signals summed

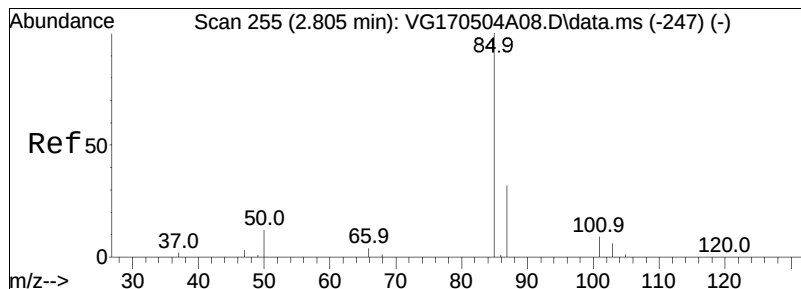
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
Data File : VG170717N01.D
Acq On : 17 Jul 2017 12:59 pm
Operator : GONZO:PD
Sample : WG1023505-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1023505,ICAL13686 (Sig #1); WG,ICAL13686 (Sig #2)
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 17 13:26:54 2017
Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu May 25 10:09:01 2017
Response via : Initial Calibration

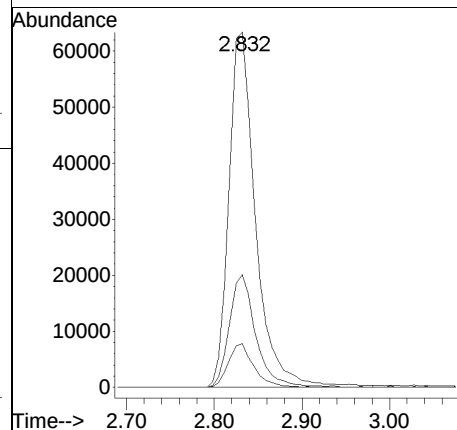
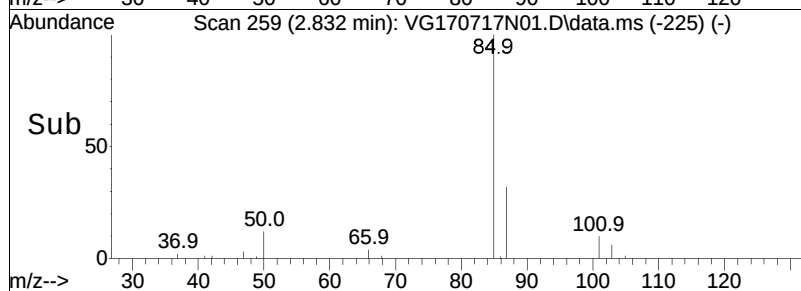
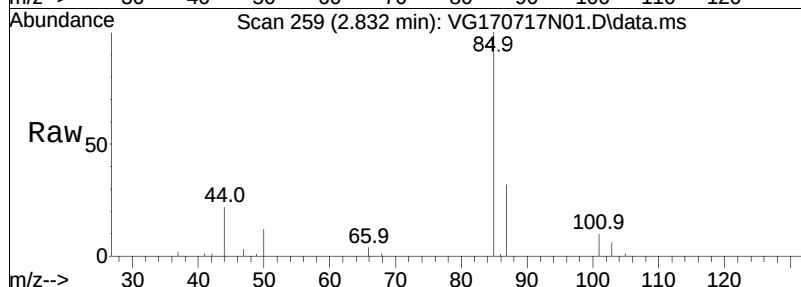
Sub List : 8260-Curve - Megamix plus Diox

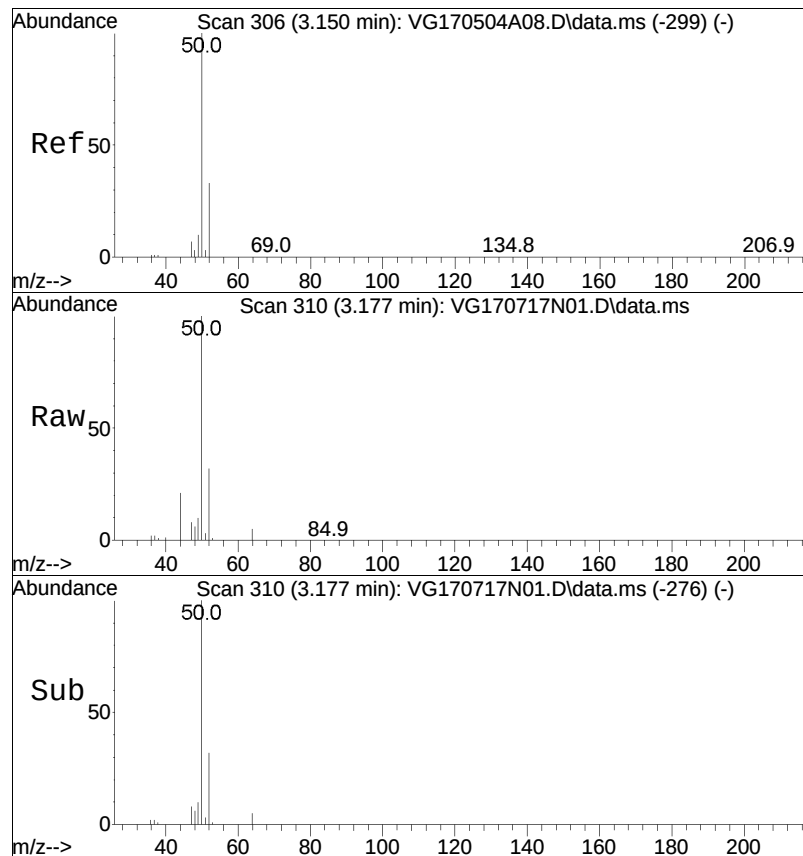




#2
 Dichlorodifluoromethane
 Concen: 7.36 ug/L
 RT: 2.832 min Scan# 259
 Delta R.T. 0.027 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

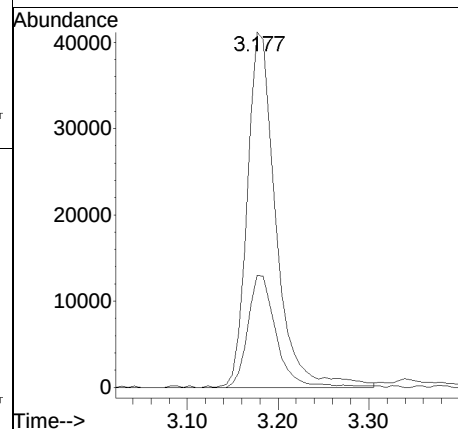
Tgt Ion	85	Ratio	Lower	Upper
85	100			
87	31.4	21.3	44.3	
50	11.8	7.2	15.0	

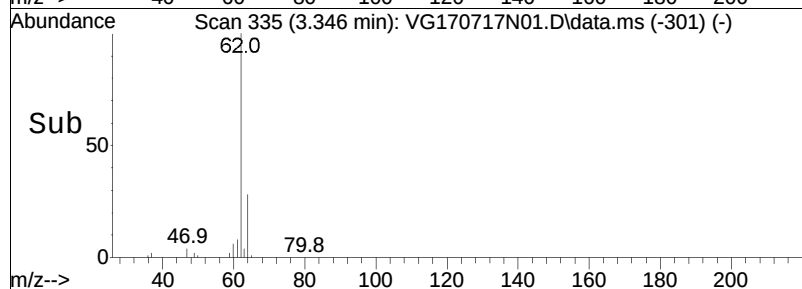
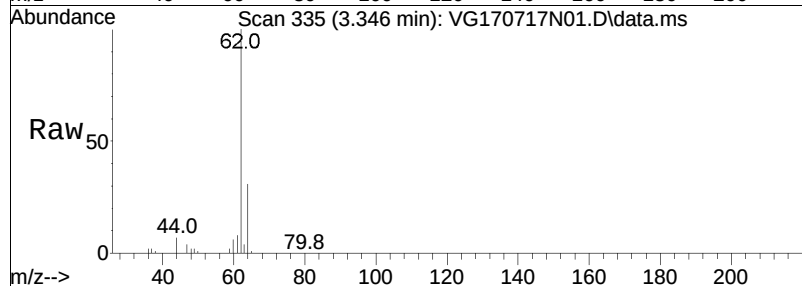
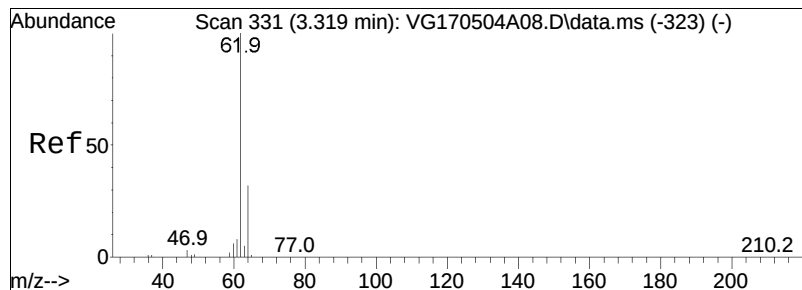




#3
 Chloromethane
 Concen: 6.83 ug/L
 RT: 3.177 min Scan# 310
 Delta R.T. 0.027 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

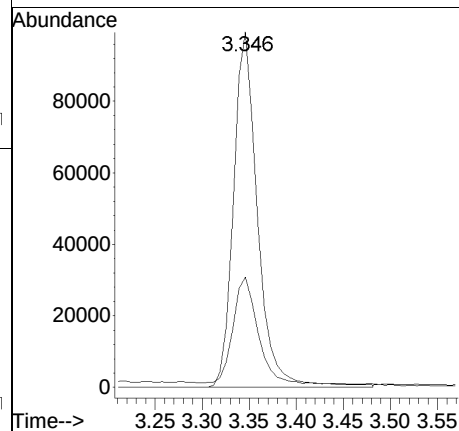
Tgt	Ion	Resp	Lower	Upper
50	100	90429		
52	30.7	13.5	53.5	

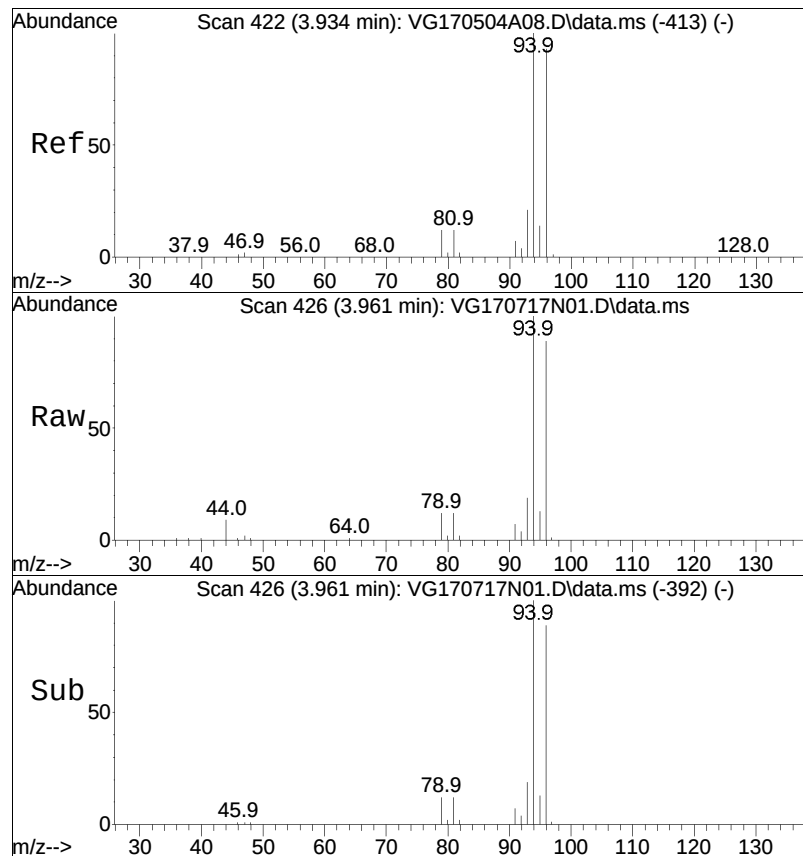




#4
 Vinyl chloride
 Concen: 8.61 ug/L
 RT: 3.346 min Scan# 335
 Delta R.T. 0.027 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

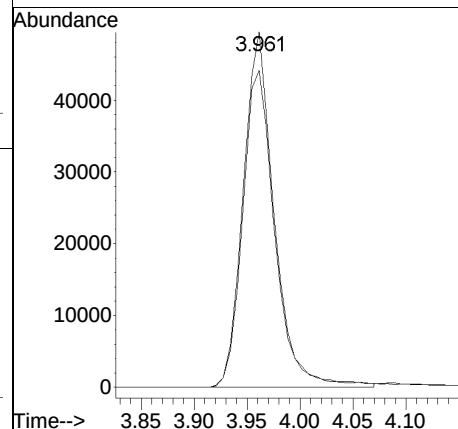
Tgt	Ion	Ratio	Lower	Upper
62	100			
64	31.6	11.4	51.4	

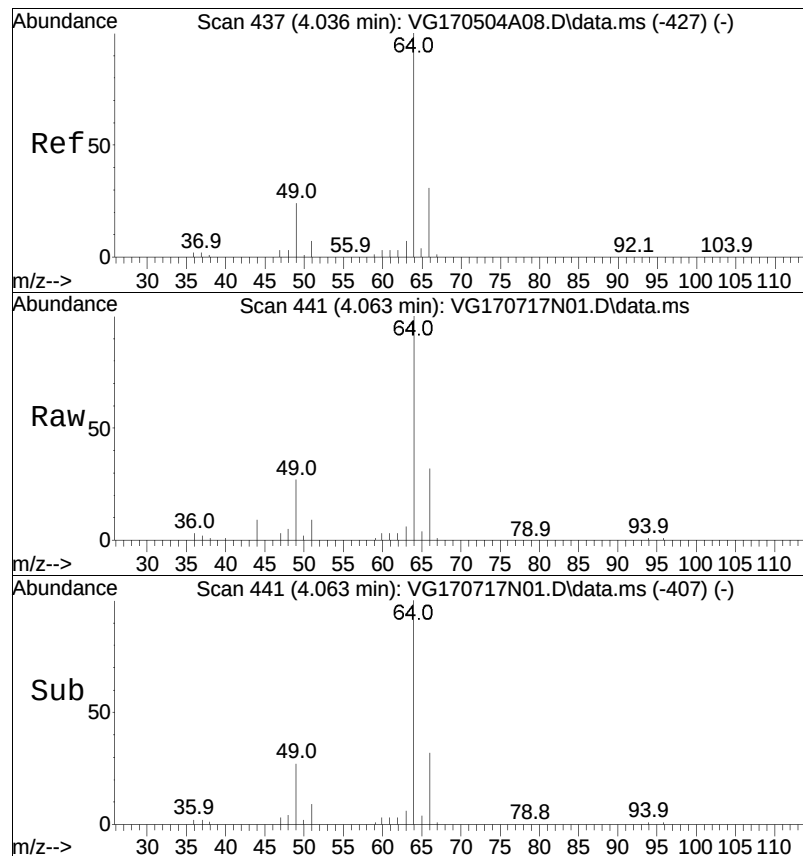




#5
 Bromomethane
 Concen: 9.65 ug/L
 RT: 3.961 min Scan# 426
 Delta R.T. 0.027 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

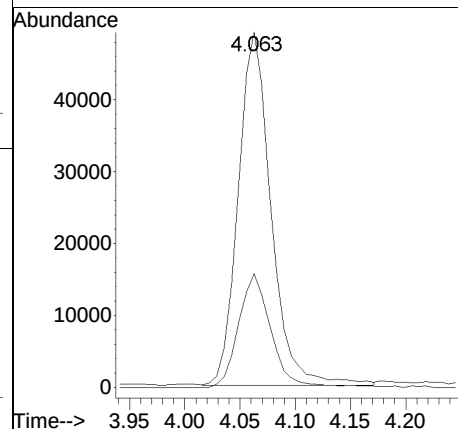
Tgt	Ion	Resp	Lower	Upper
94	100			
96	93.2	75.4	115.4	

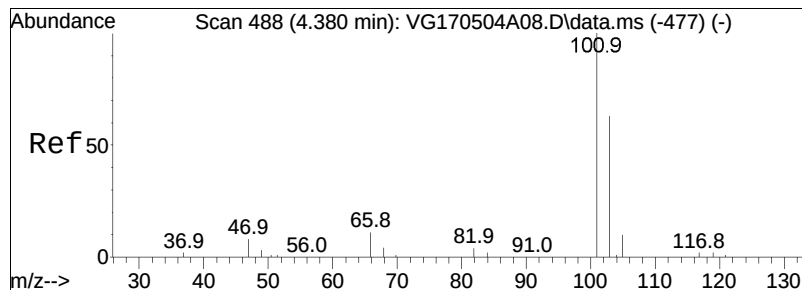




#6
 Chloroethane
 Concen: 9.55 ug/L
 RT: 4.063 min Scan# 441
 Delta R.T. 0.027 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

Tgt Ion	Ratio	Lower	Upper
64	100		
66	31.5	12.6	52.6





#7

Trichlorofluoromethane

Concen: 8.98 ug/L

RT: 4.401 min Scan# 491

Delta R.T. 0.021 min

Lab File: VG170717N01.D

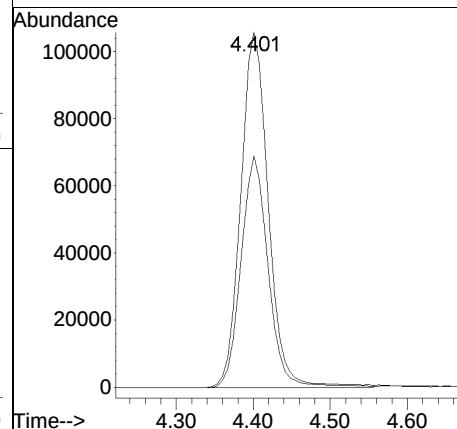
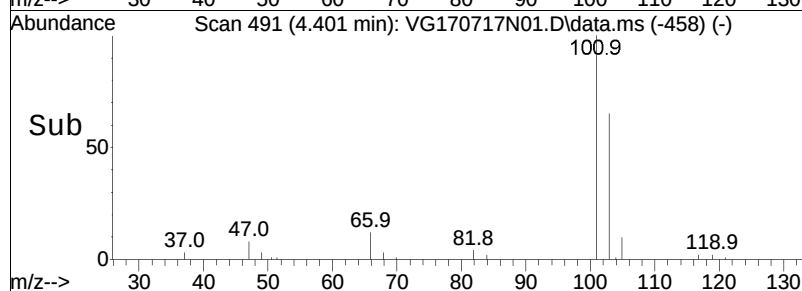
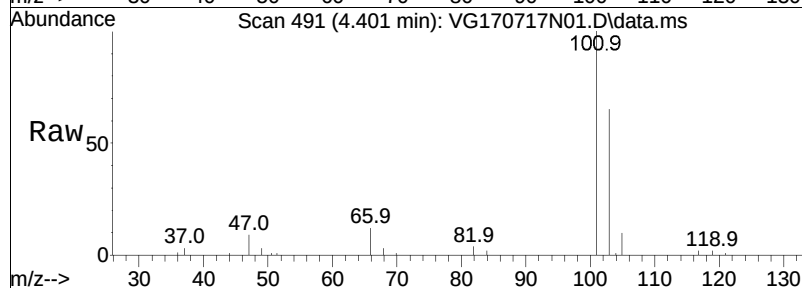
Acq: 17 Jul 2017 12:59 pm

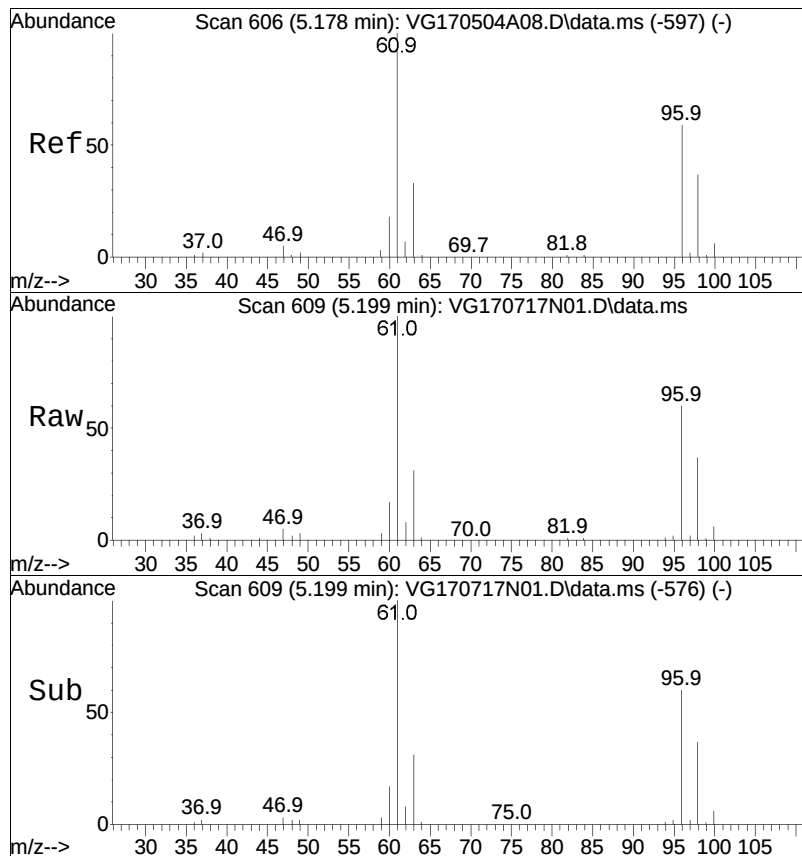
Tgt Ion:101 Resp: 262912

Ion Ratio Lower Upper

101 100

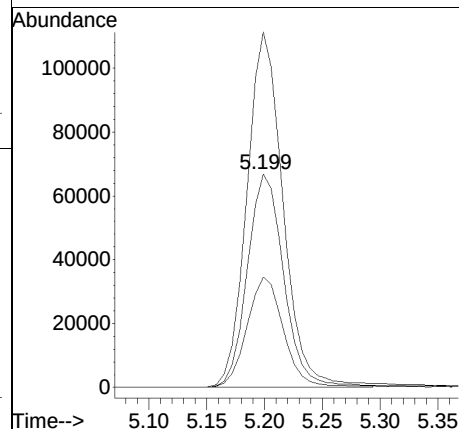
103 63.6 51.0 76.4

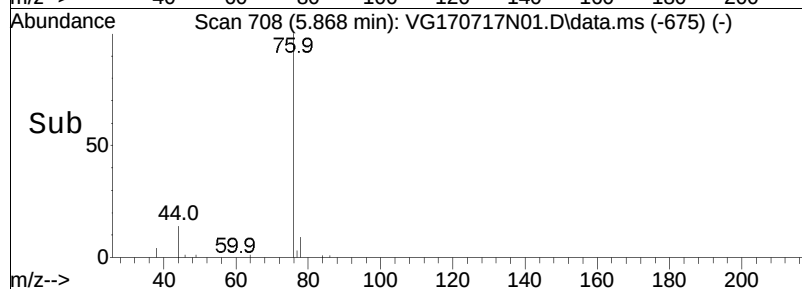
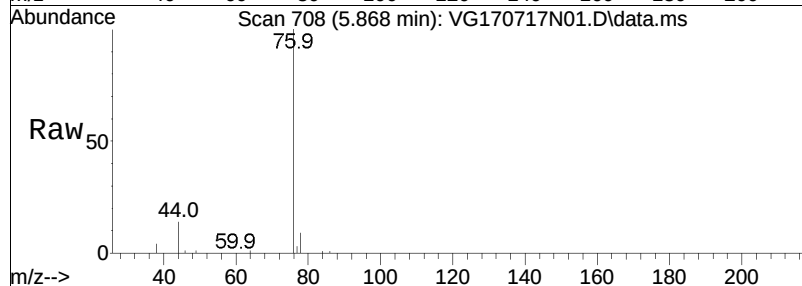
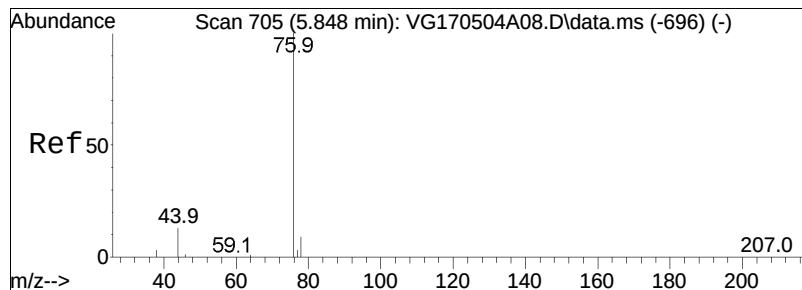




#10
 1,1-Dichloroethene
 Concen: 9.42 ug/L
 RT: 5.199 min Scan# 609
 Delta R.T. 0.021 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

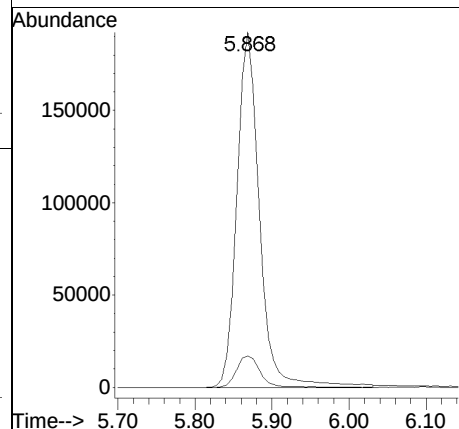
Tgt Ion:	96	Resp:	146734
Ion Ratio	Lower	Upper	
96	100		
61	167.7	157.3	235.9
63	52.6	50.1	75.1

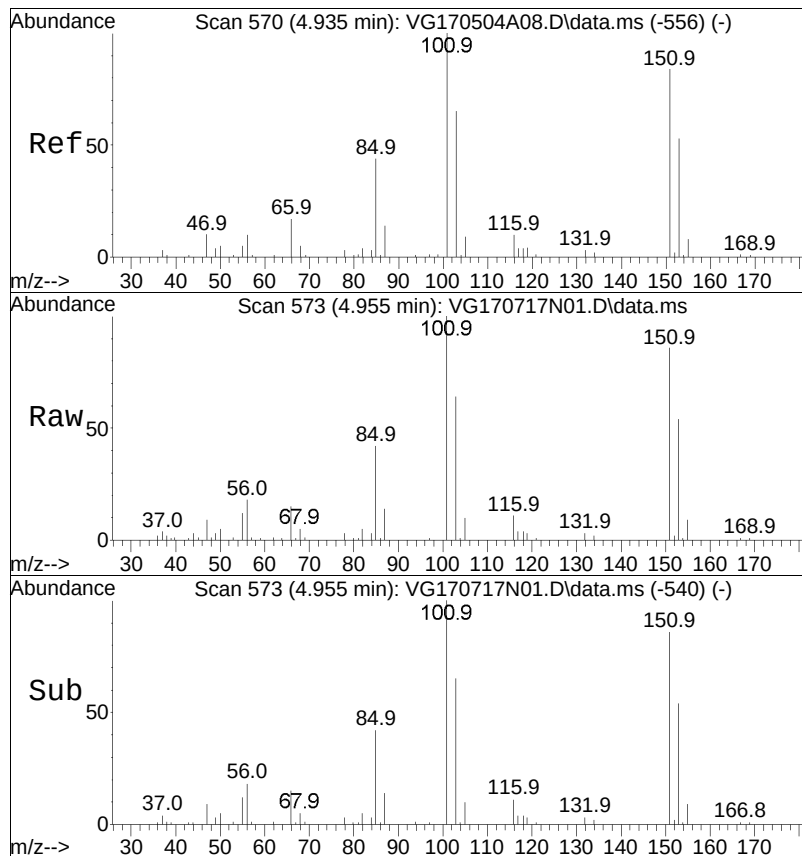




#11
Carbon disulfide
Concen: 7.37 ug/L
RT: 5.868 min Scan# 708
Delta R.T. 0.020 min
Lab File: VG170717N01.D
Acq: 17 Jul 2017 12:59 pm

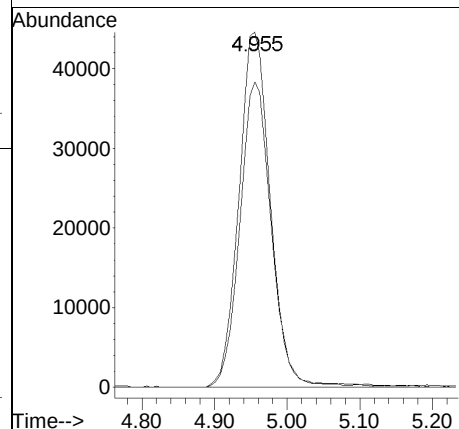
Tgt Ion	Ratio	Lower	Upper
76	100		
78	9.3	5.8	12.0

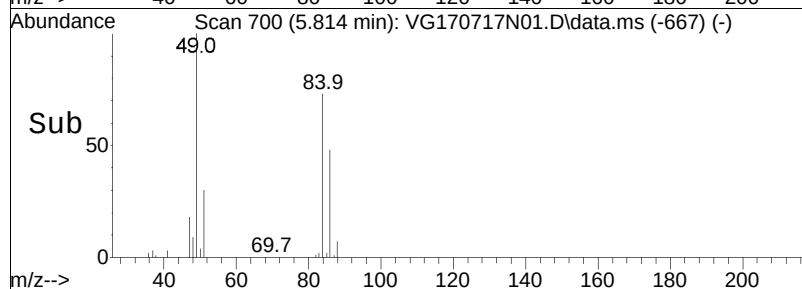
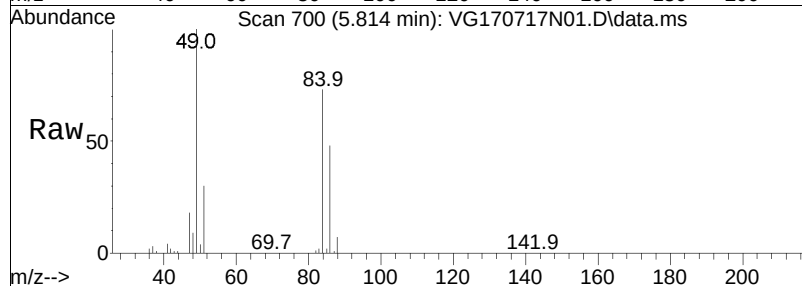
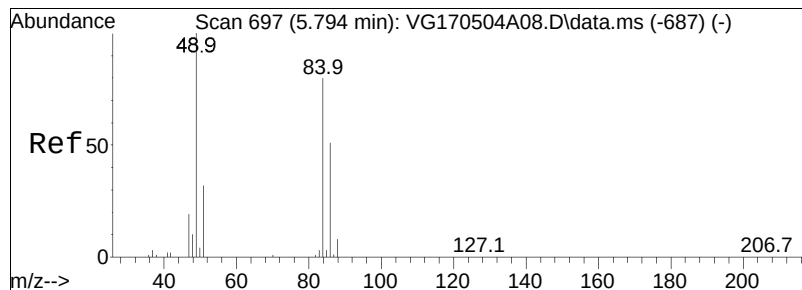




#12
 Freon-113
 Concen: 9.27 ug/L
 RT: 4.955 min Scan# 573
 Delta R.T. 0.020 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

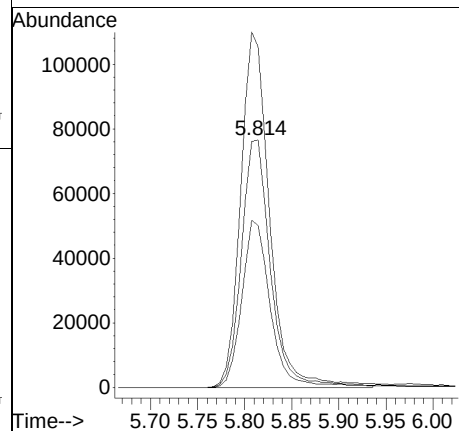
Tgt	Ion:101	Resp:	135074
Ion	Ratio	Lower	Upper
101	100		
151	85.3	57.1	85.7
76	0.0	0.0	0.0

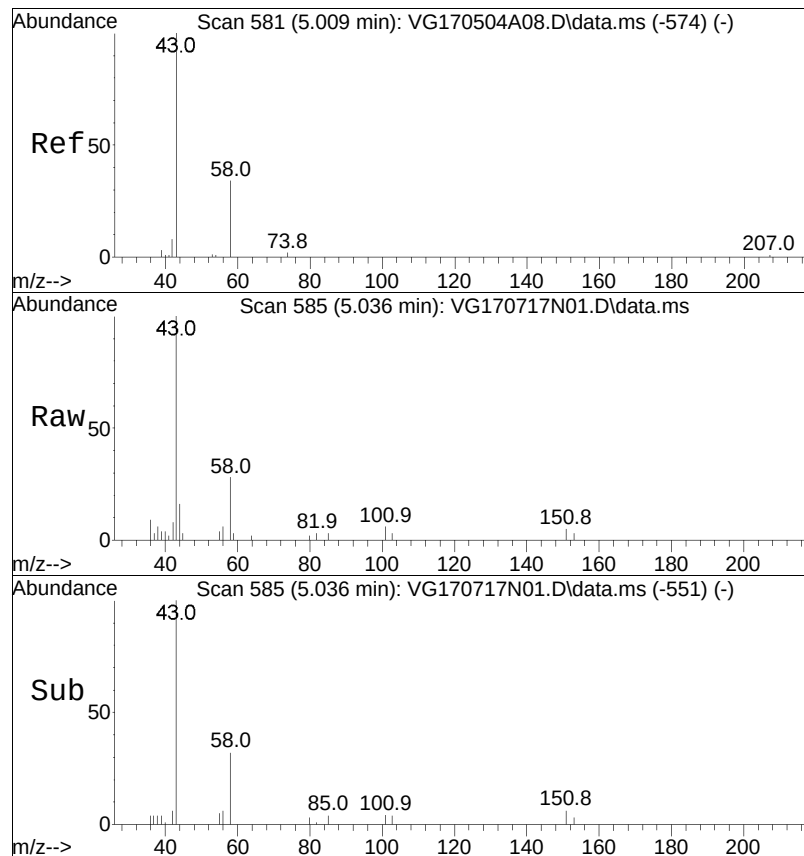




#15
Methylene chloride
Concen: 9.77 ug/L
RT: 5.814 min Scan# 700
Delta R.T. 0.020 min
Lab File: VG170717N01.D
Acq: 17 Jul 2017 12:59 pm

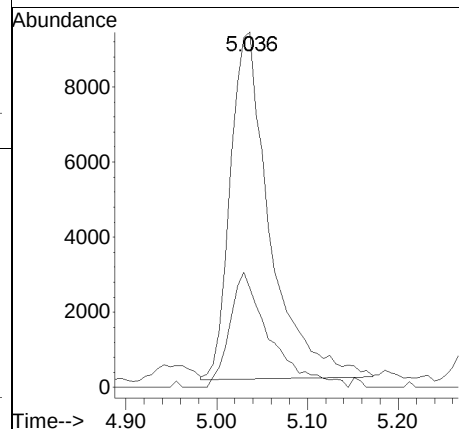
Tgt	Ion	Ratio	Lower	Upper
84	100			
86	66.5	43.1	89.5	
49	142.8	80.7	167.5	

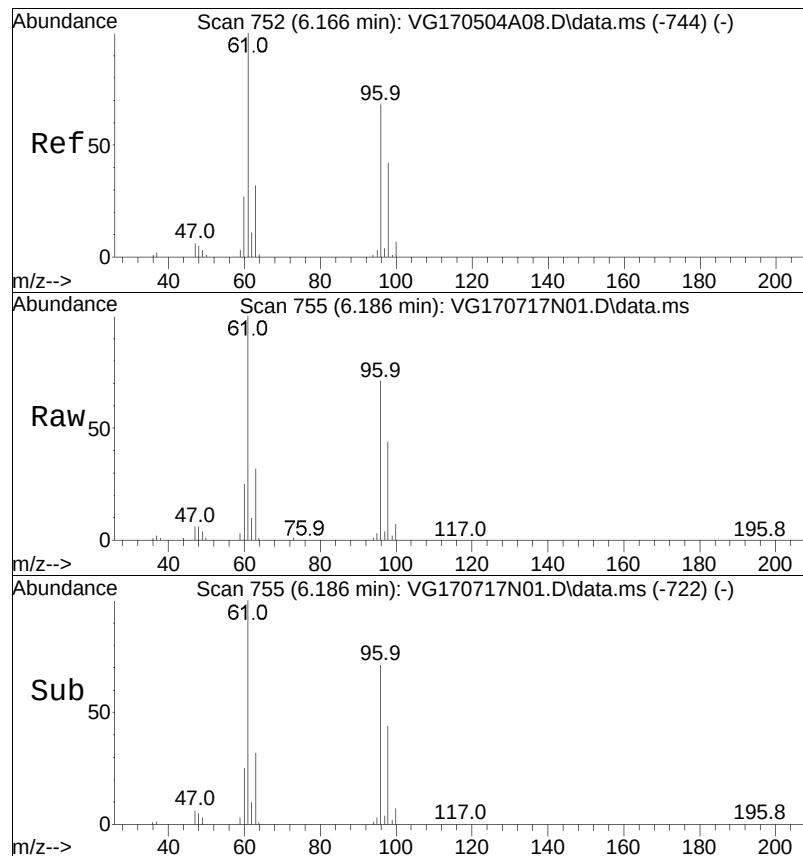




#17
 Acetone
 Concen: 9.89 ug/L
 RT: 5.036 min Scan# 585
 Delta R.T. 0.027 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

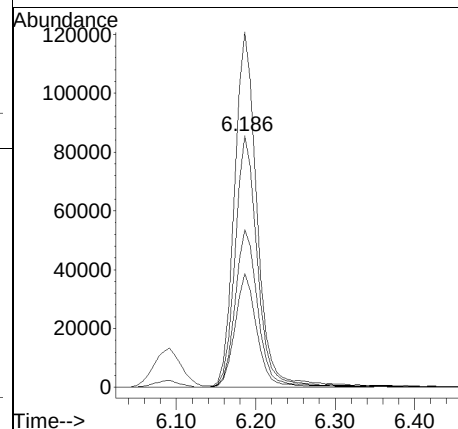
Tgt	Ion	Resp	Lower	Upper
43	100			
58	33.7	18.6	28.0#	

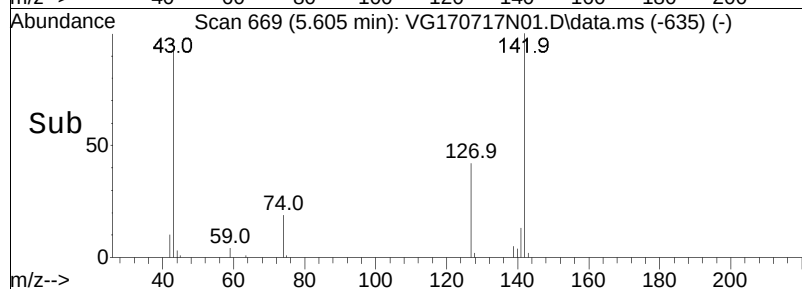
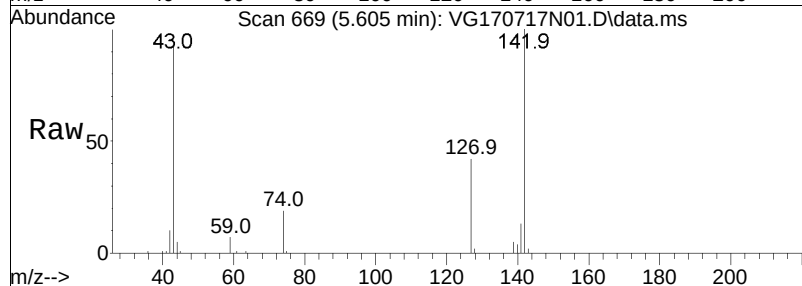
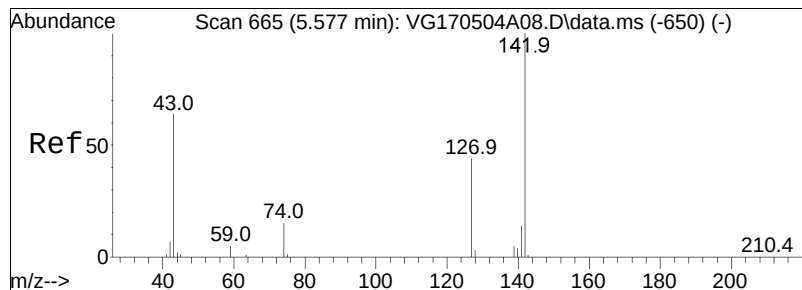




#18
 trans-1,2-Dichloroethene
 Concen: 9.53 ug/L
 RT: 6.186 min Scan# 755
 Delta R.T. 0.020 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

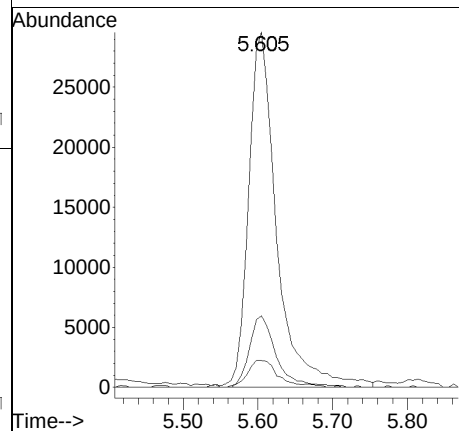
Tgt Ion:	96	Resp:	169319
Ion Ratio	Lower	Upper	
96	100		
61	142.3	107.5	223.3
98	61.8	40.0	83.0
63	44.9	33.9	70.3

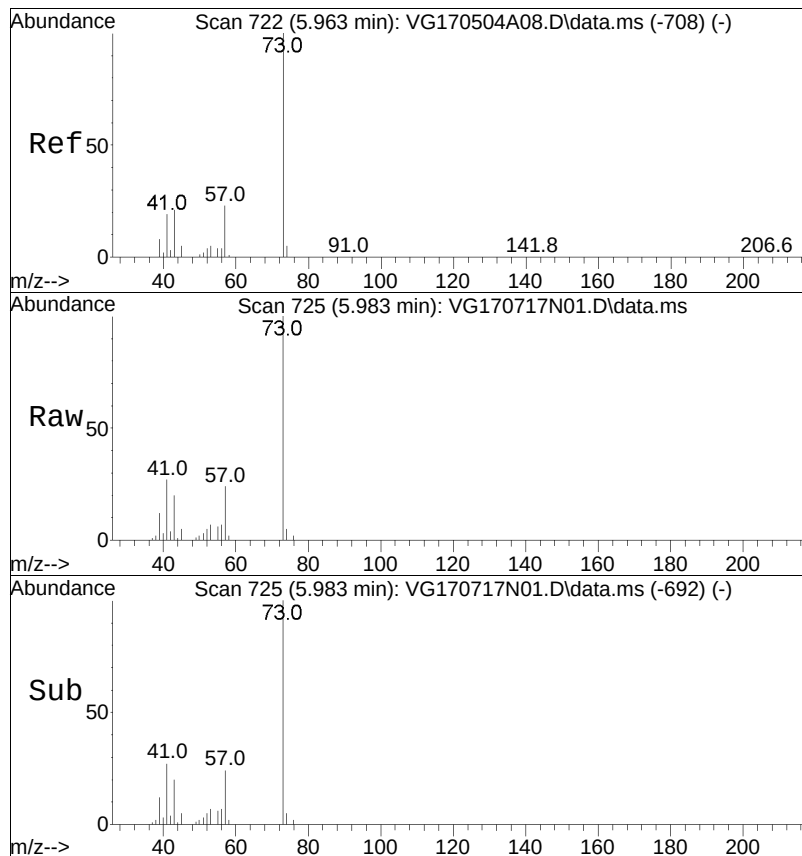




#19
Methyl acetate
Concen: 9.31 ug/L
RT: 5.605 min Scan# 669
Delta R.T. 0.028 min
Lab File: VG170717N01.D
Acq: 17 Jul 2017 12:59 pm

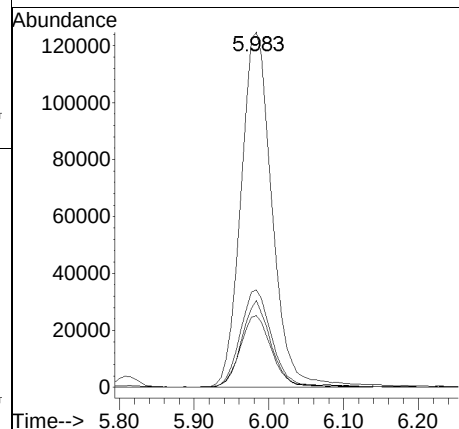
Tgt Ion	Ratio	Lower	Upper
43	100		
74	19.3	21.1	31.7#
59	8.5	7.1	10.7

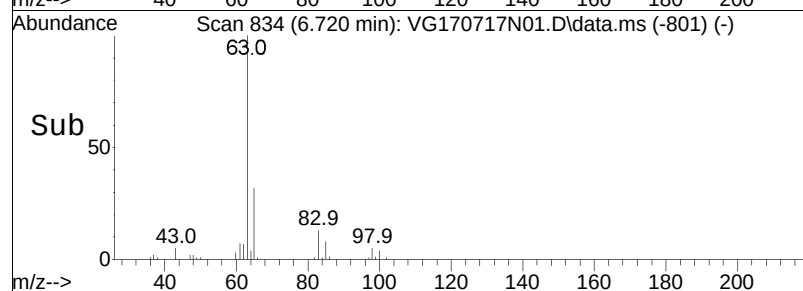
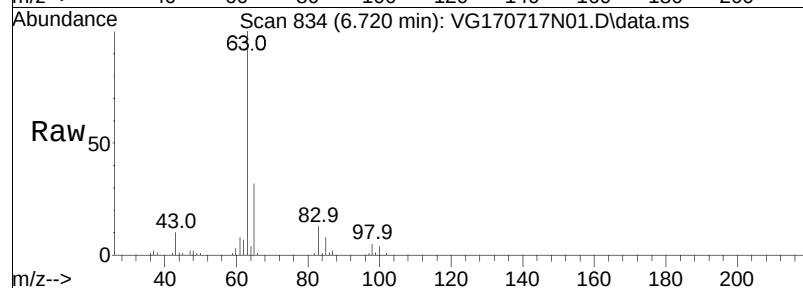
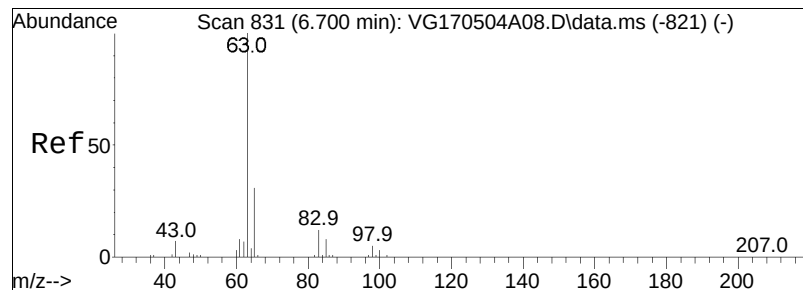




#20
Methyl tert-butyl ether
Concen: 11.06 ug/L
RT: 5.983 min Scan# 725
Delta R.T. 0.020 min
Lab File: VG170717N01.D
Acq: 17 Jul 2017 12:59 pm

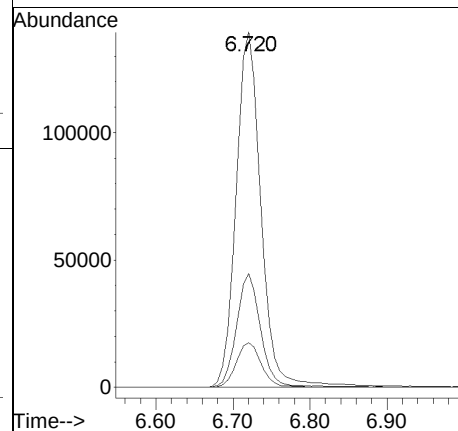
Tgt Ion:	73	Resp:	362092
Ion Ratio	Lower	Upper	
73	100		
57	23.2	11.4	23.8
43	20.3	12.5	25.9
41	28.2	12.7	26.5#

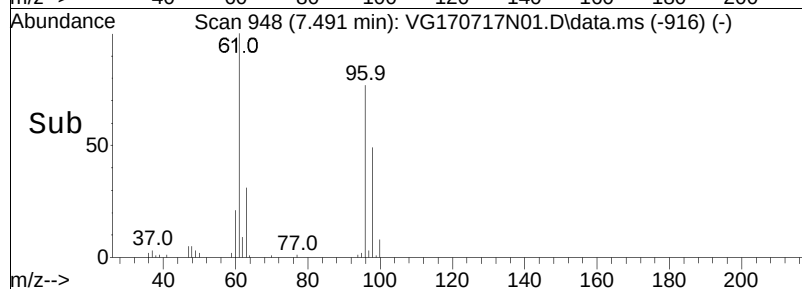
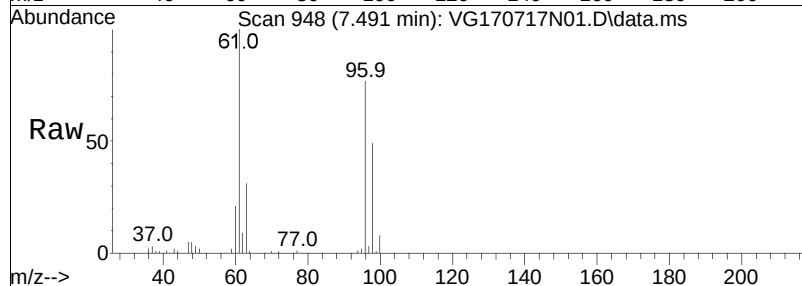
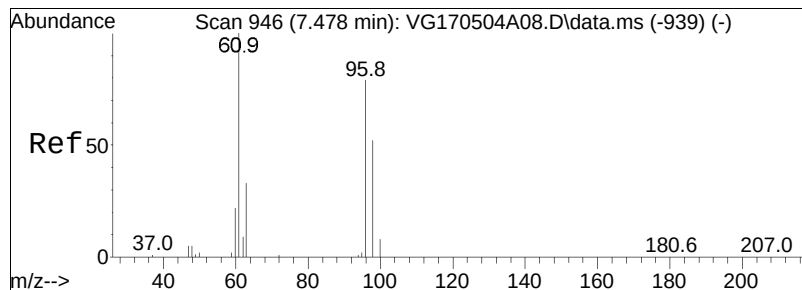




#23
 1,1-Dichloroethane
 Concen: 9.39 ug/L
 RT: 6.720 min Scan# 834
 Delta R.T. 0.020 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

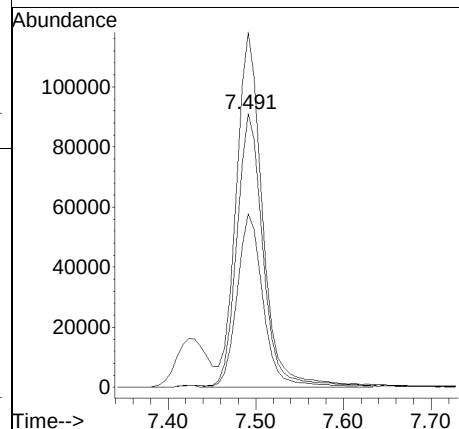
Tgt	Ion: 63	Resp:	314666
Ion	Ratio	Lower	Upper
63	100		
65	31.2	11.0	51.0
83	12.7	0.0	32.6

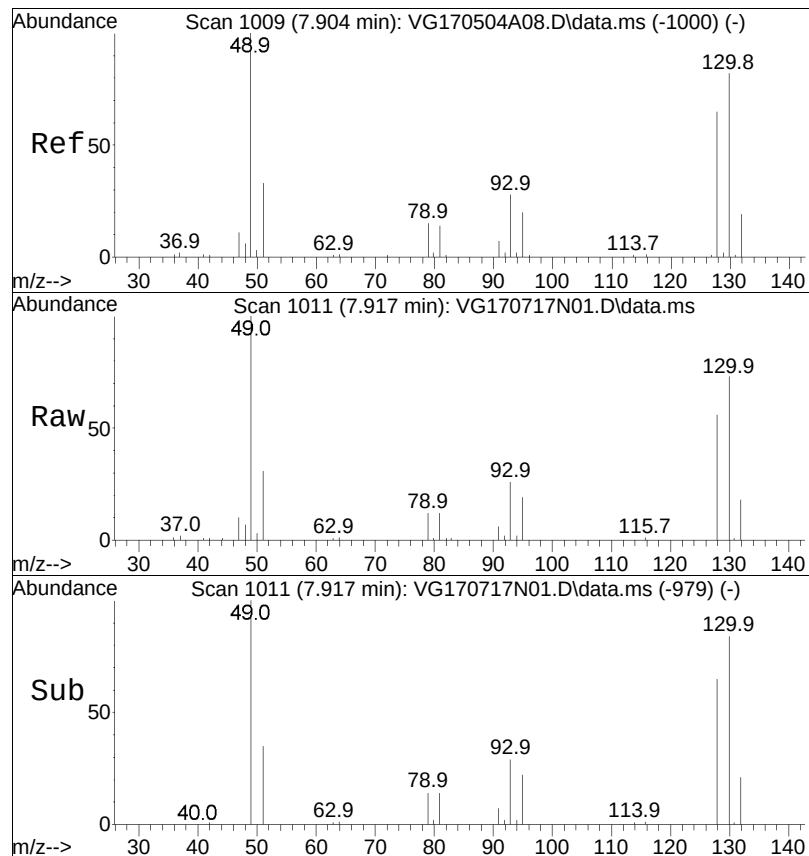




#28
 cis-1,2-Dichloroethene
 Concen: 9.69 ug/L
 RT: 7.491 min Scan# 948
 Delta R.T. 0.013 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

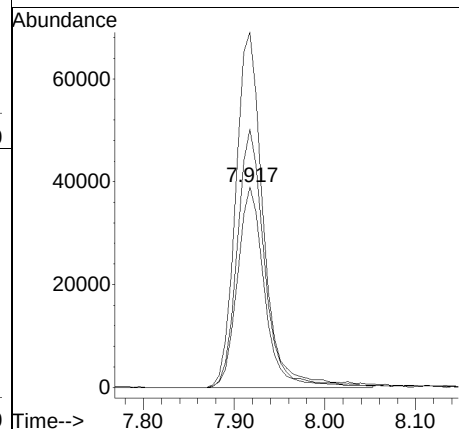
Tgt Ion	Ratio	Lower	Upper
96	100		
61	126.7	121.2	181.8
98	60.4	48.7	73.1

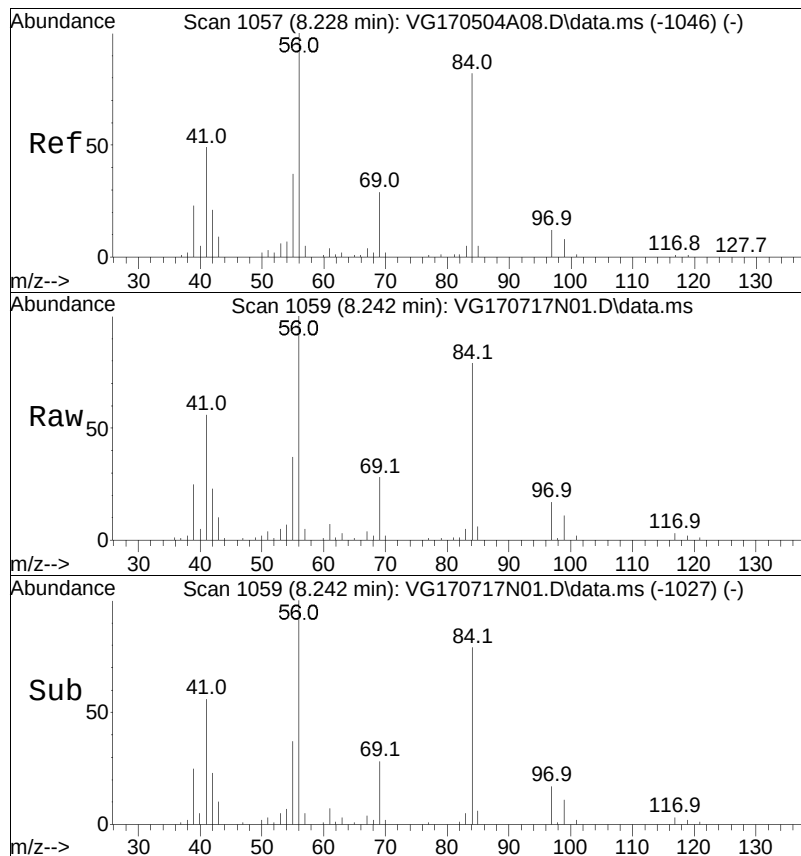




#30
 Bromochloromethane
 Concen: 9.68 ug/L
 RT: 7.917 min Scan# 1011
 Delta R.T. 0.013 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

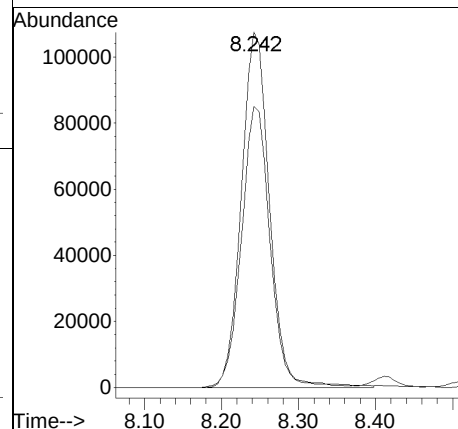
Tgt Ion	Ratio	Lower	Upper
128	100		
49	180.9	164.3	246.5
130	129.7	103.7	155.5

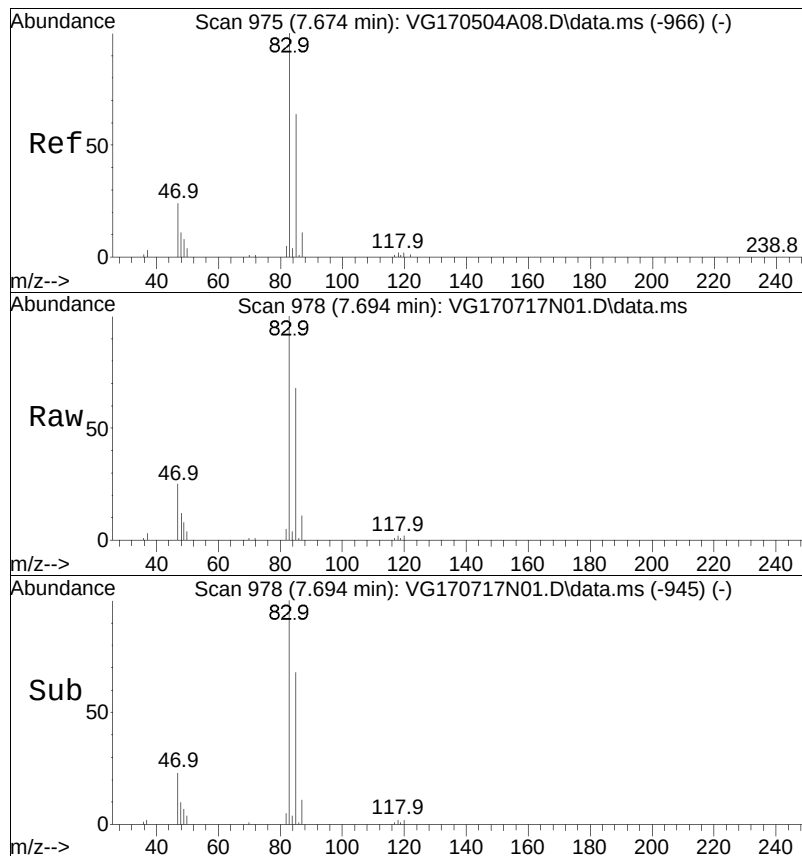




#31
Cyclohexane
Concen: 8.88 ug/L
RT: 8.242 min Scan# 1059
Delta R.T. 0.014 min
Lab File: VG170717N01.D
Acq: 17 Jul 2017 12:59 pm

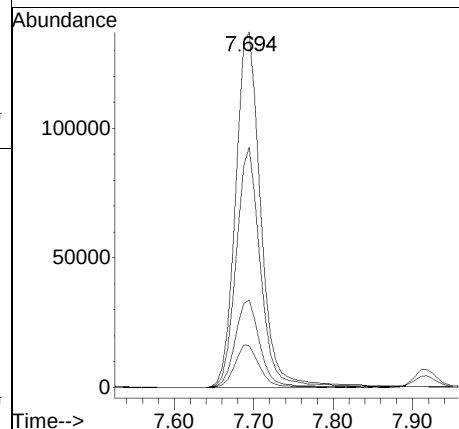
Tgt	Ion	Ratio	Lower	Upper
56	100			
84	80.1	59.9	124.3	

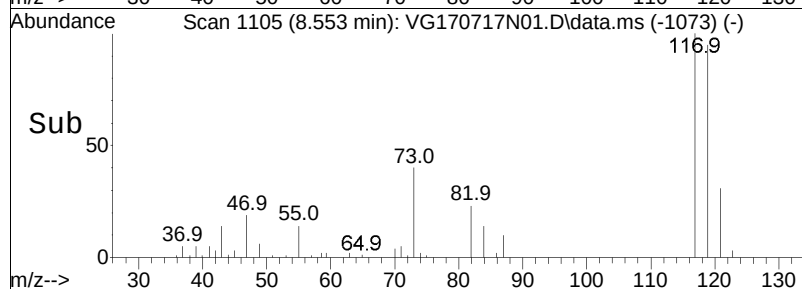
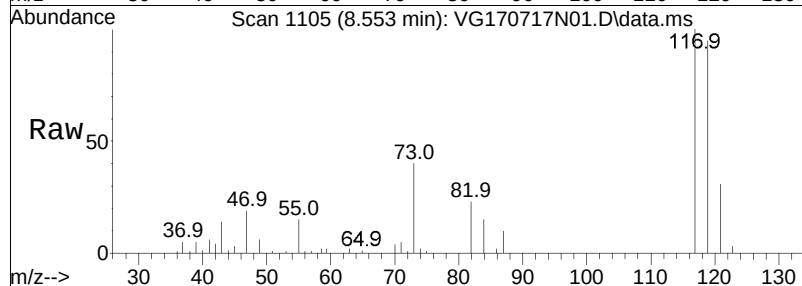
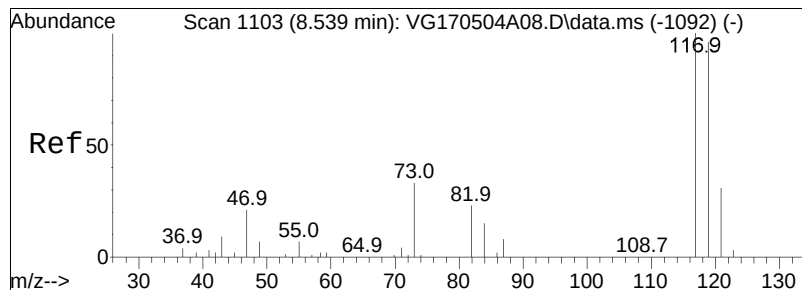




#32
 Chloroform
 Concen: 9.70 ug/L
 RT: 7.694 min Scan# 978
 Delta R.T. 0.020 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

Tgt	Ion: 83	Resp:	302717
Ion	Ratio	Lower	Upper
83	100		
85	65.7	41.4	86.0
47	24.2	15.0	31.2
48	11.8	6.9	14.3





#34

Carbon tetrachloride

Concen: 9.45 ug/L

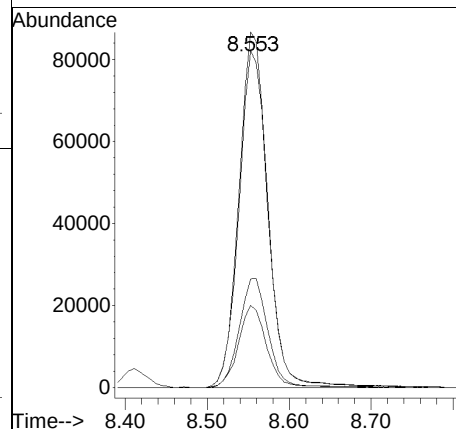
RT: 8.553 min Scan# 1105

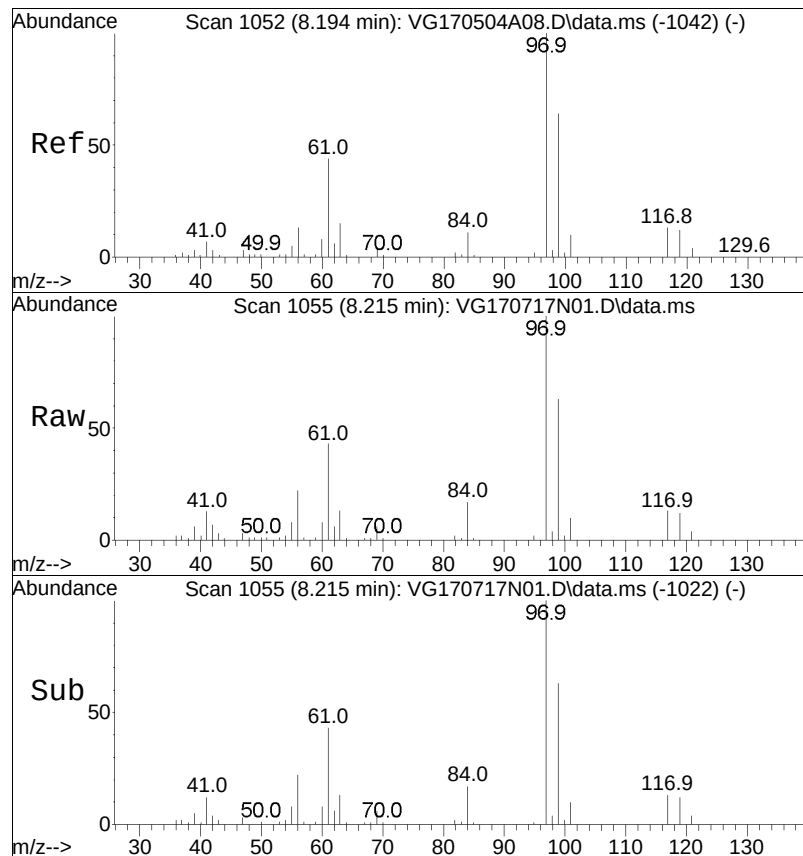
Delta R.T. 0.014 min

Lab File: VG170717N01.D

Acq: 17 Jul 2017 12:59 pm

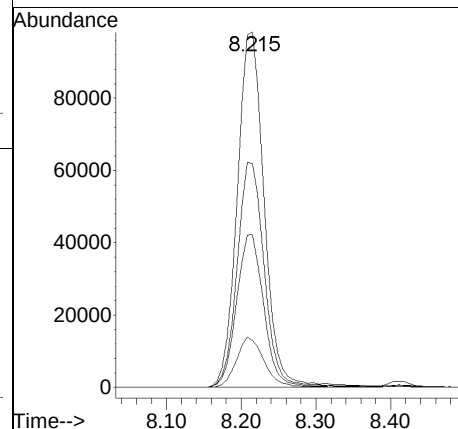
Tgt Ion:	117	Resp:	212104
Ion Ratio	Lower	Upper	
117	100		
119	95.2	60.0	124.6
121	30.5	19.4	40.2
82	22.6	17.3	35.9

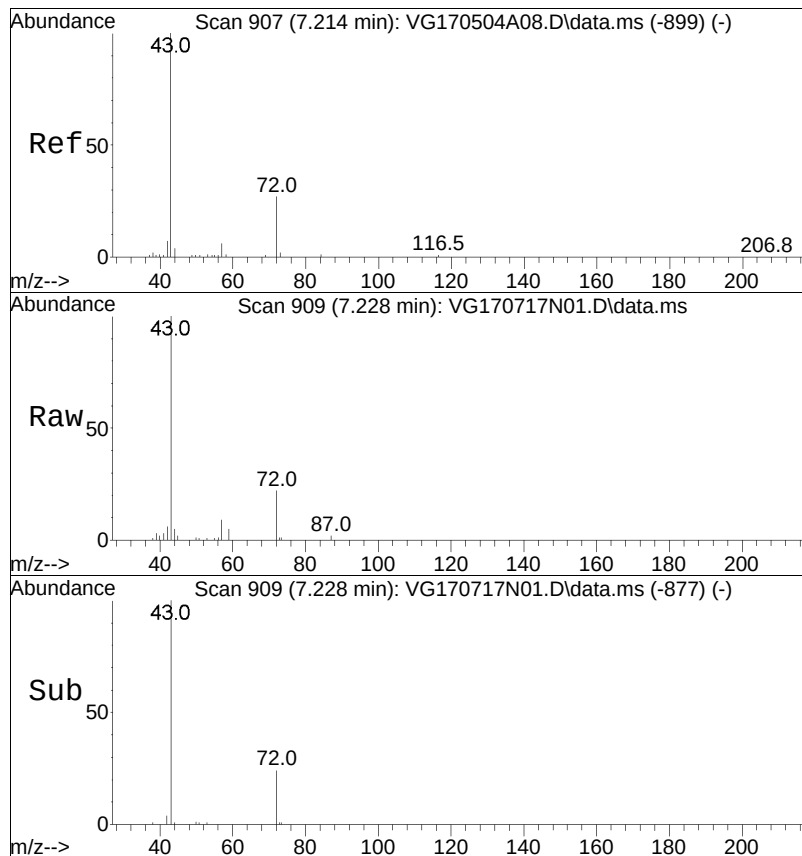




#37
 1,1,1-Trichloroethane
 Concen: 9.57 ug/L
 RT: 8.215 min Scan# 1055
 Delta R.T. 0.021 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

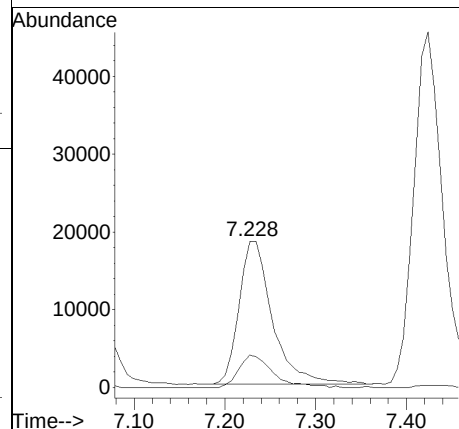
Tgt Ion:	97	Resp:	248289
Ion Ratio	Lower	Upper	
97	100		
99	63.4	41.3	85.7
61	43.3	29.4	61.0
63	14.5	10.3	21.5

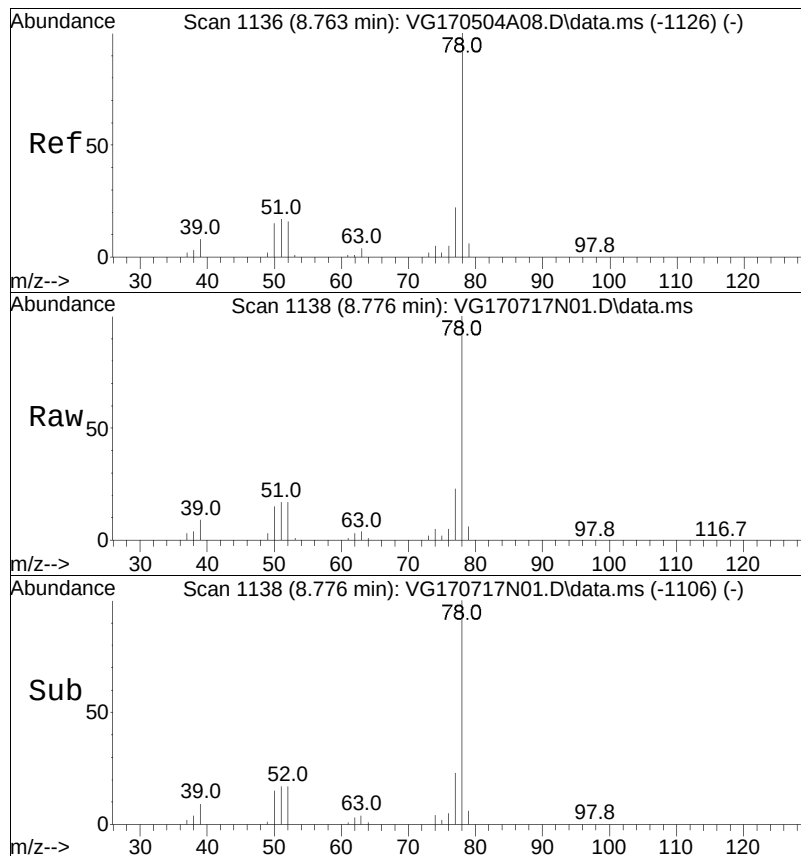




#39
 2-Butanone
 Concen: 10.13 ug/L
 RT: 7.228 min Scan# 909
 Delta R.T. 0.014 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

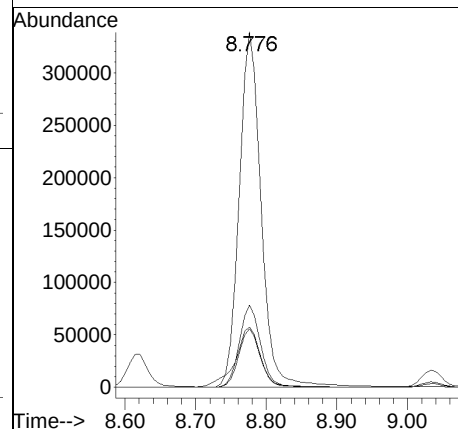
Tgt	Ion	Resp	Lower	Upper
43	100			
72	23.0	22.6	33.8	

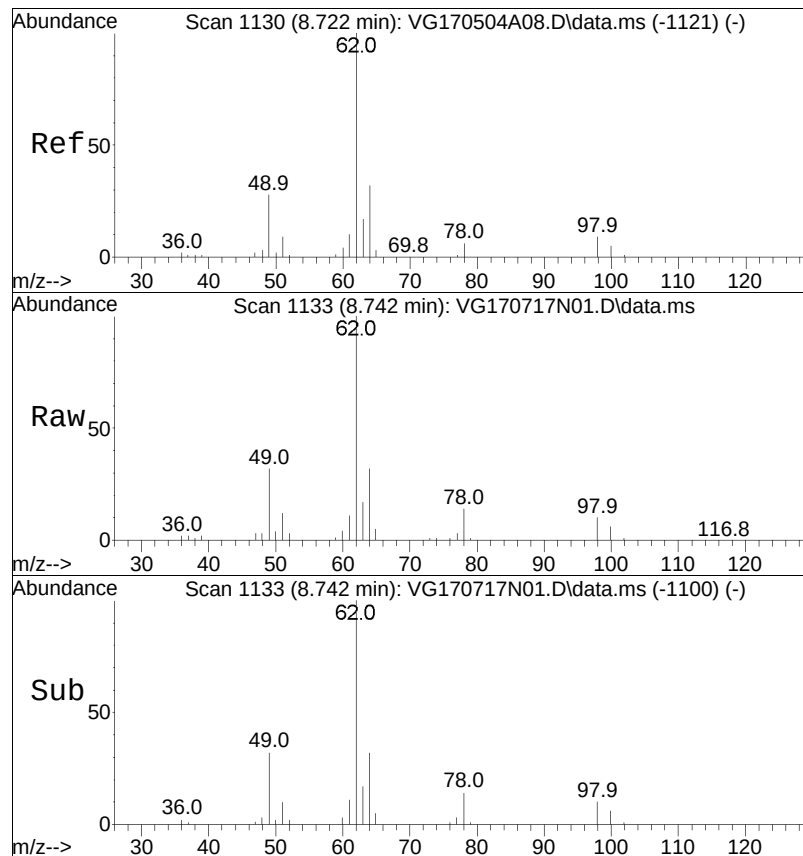




#41
Benzene
Concen: 9.65 ug/L
RT: 8.776 min Scan# 1138
Delta R.T. 0.013 min
Lab File: VG170717N01.D
Acq: 17 Jul 2017 12:59 pm

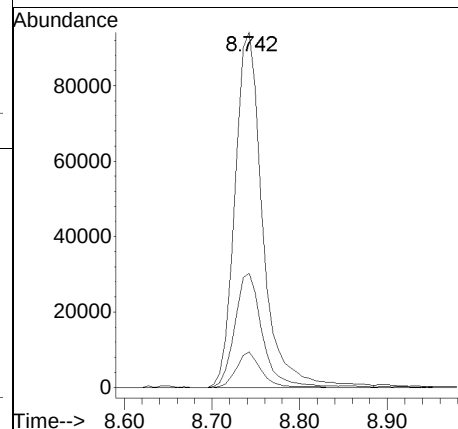
Tgt	Ion: 78	Resp:	734966
Ion	Ratio	Lower	Upper
78	100		
77	22.9	15.0	31.2
51	19.2	12.7	26.3
52	16.6	9.9	20.7

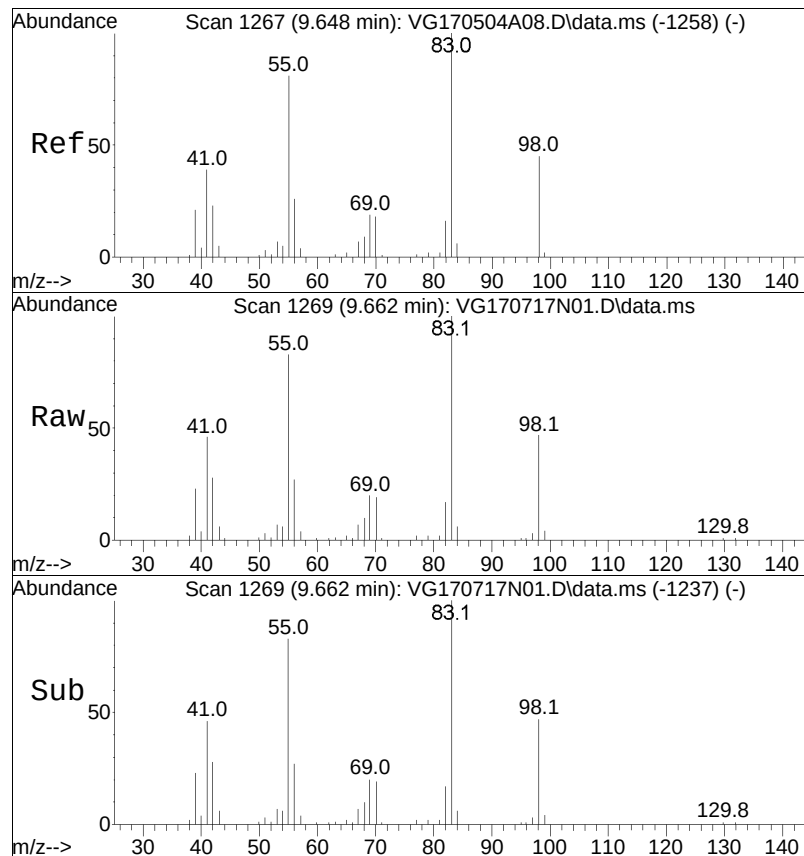




#44
 1,2-Dichloroethane
 Concen: 9.30 ug/L
 RT: 8.742 min Scan# 1133
 Delta R.T. 0.020 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

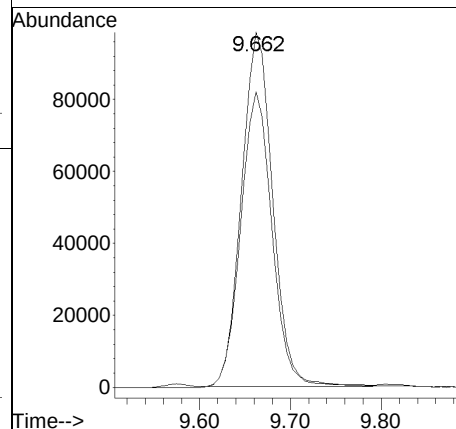
Tgt Ion:	62	Resp:	207686
Ion Ratio	Lower	Upper	
62	100		
64	32.1	11.5	51.5
98	8.9	0.0	25.6

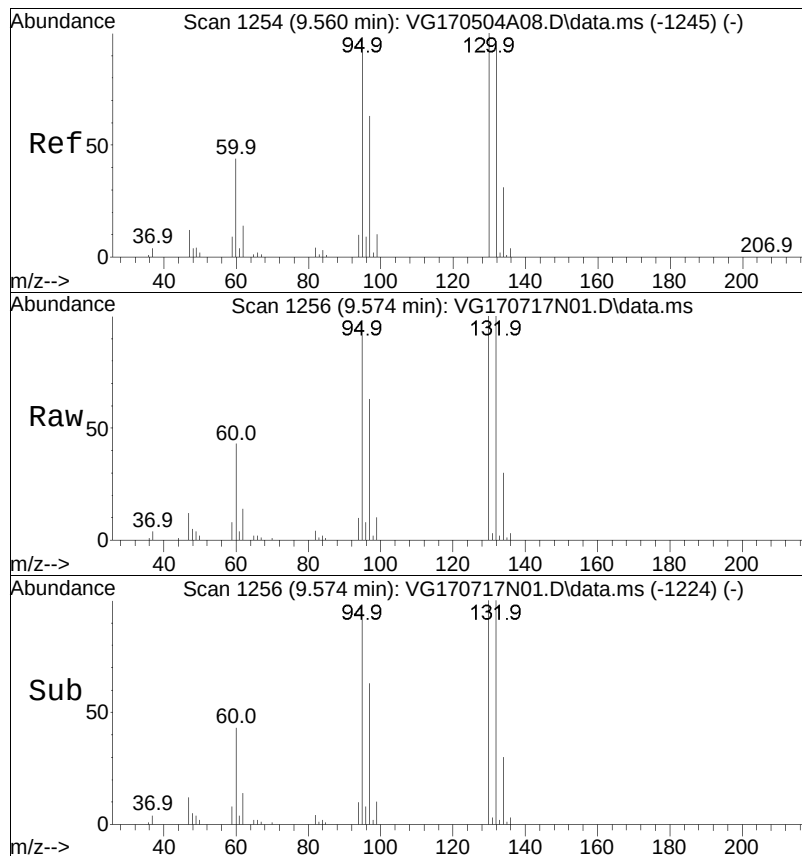




#47
Methyl cyclohexane
Concen: 9.35 ug/L
RT: 9.662 min Scan# 1269
Delta R.T. 0.014 min
Lab File: VG170717N01.D
Acq: 17 Jul 2017 12:59 pm

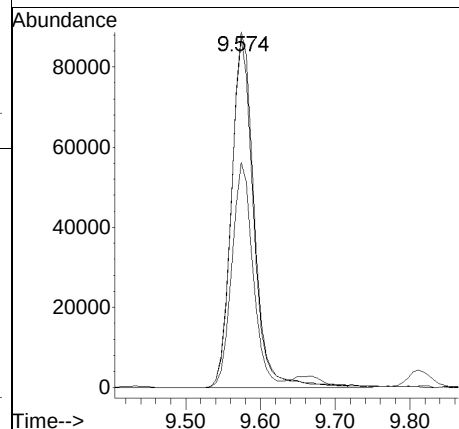
Tgt	Ion	Resp	Lower	Upper
83	100	235554		
55	84.5	65.3	97.9	

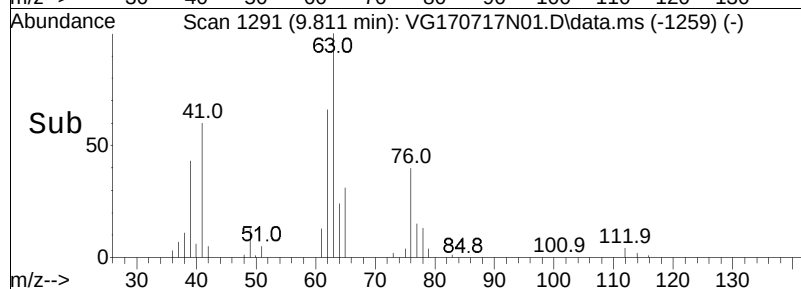
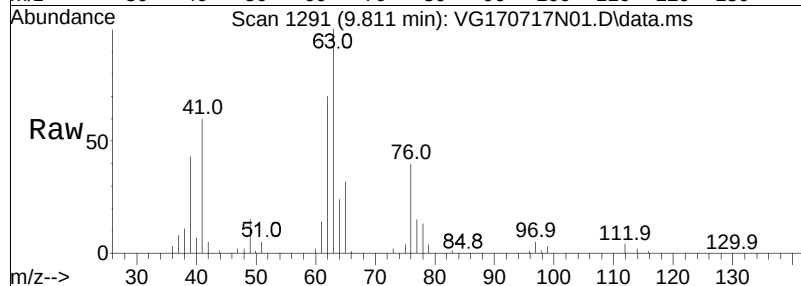
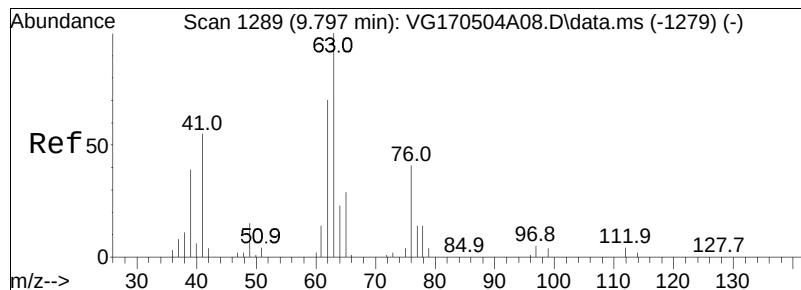




#48
 Trichloroethene
 Concen: 9.36 ug/L
 RT: 9.574 min Scan# 1256
 Delta R.T. 0.014 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

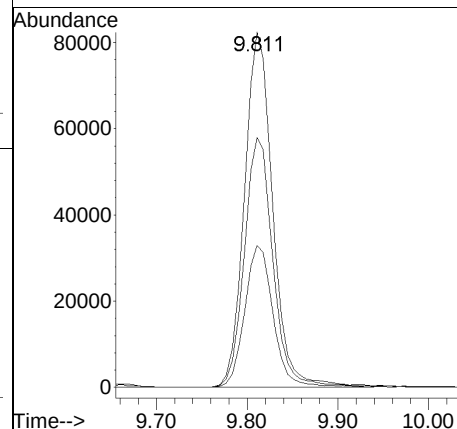
Tgt Ion:	95	Resp:	180667
Ion Ratio	Lower	Upper	
95	100		
97	61.1	47.6	71.4
130	103.0	60.4	90.6#

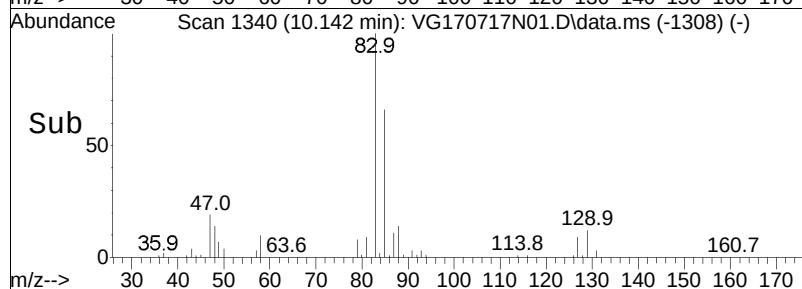
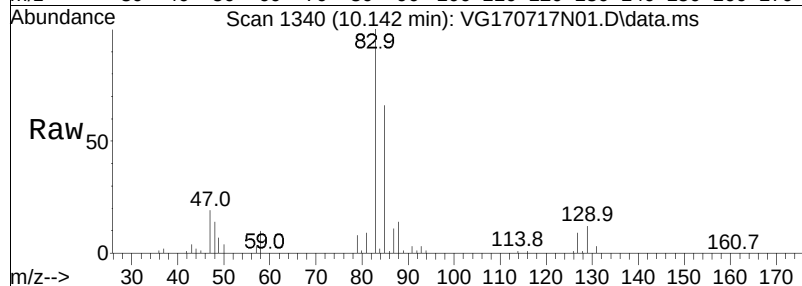
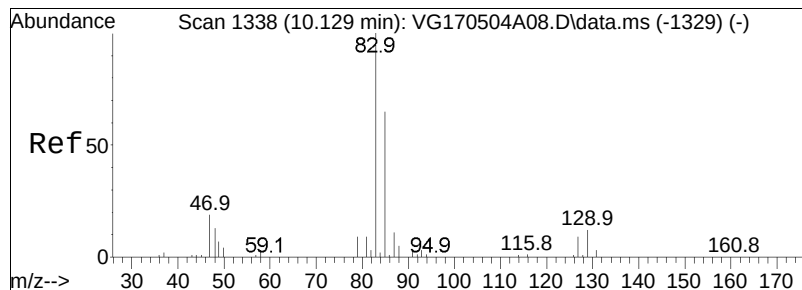




#51
 1,2-Dichloropropane
 Concen: 9.59 ug/L
 RT: 9.811 min Scan# 1291
 Delta R.T. 0.014 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

Tgt Ion:	63	Resp:	178999
Ion Ratio	Lower	Upper	
63	100		
62	71.5	56.3	84.5
76	40.2	45.3	67.9#





#54

Bromodichloromethane

Concen: 10.01 ug/L

RT: 10.142 min Scan# 1340

Delta R.T. 0.013 min

Lab File: VG170717N01.D

Acq: 17 Jul 2017 12:59 pm

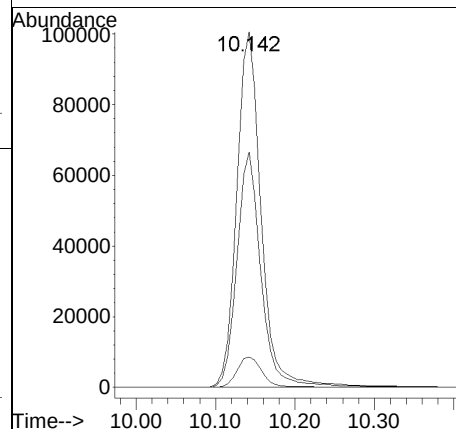
Tgt Ion: 83 Resp: 214975

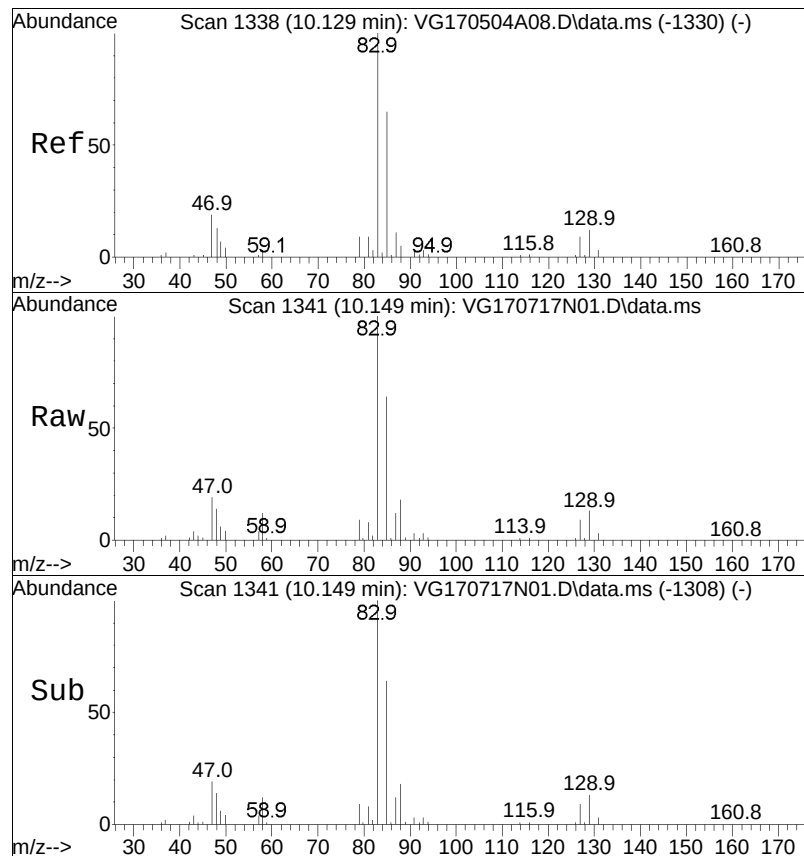
Ion Ratio Lower Upper

83 100

85 65.5 51.5 77.3

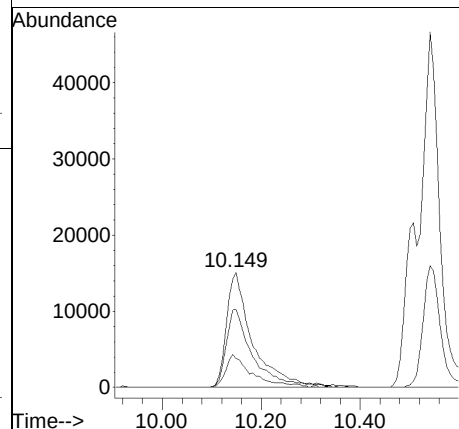
127 8.9 5.4 8.2#

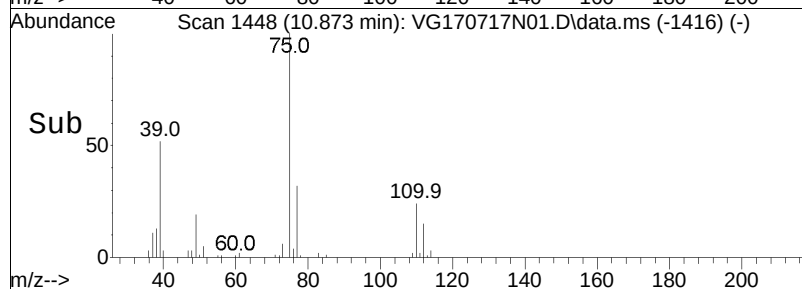
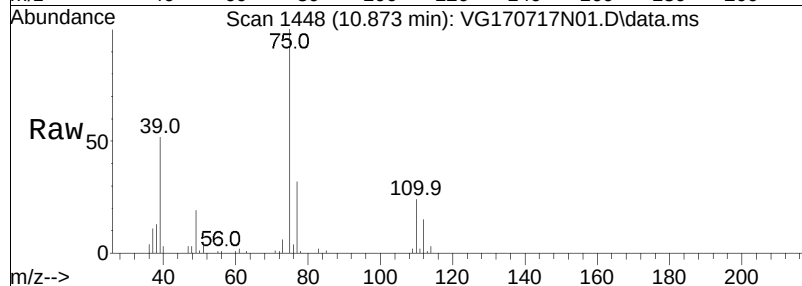
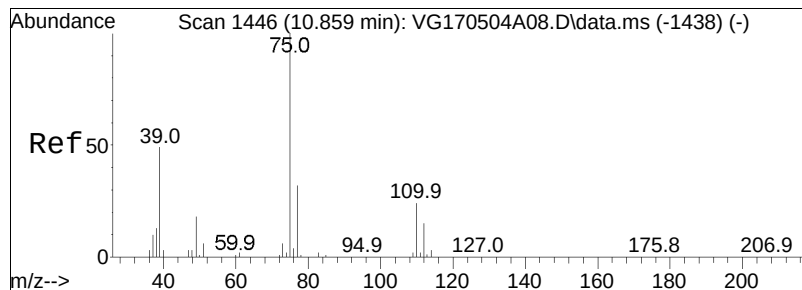




#57
 1,4-Dioxane
 Concen: 562.13 ug/L M1
 RT: 10.149 min Scan# 1341
 Delta R.T. 0.020 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

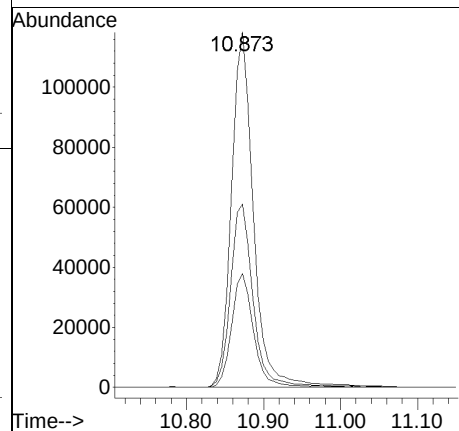
Tgt Ion	Ratio	Lower	Upper
88	100		
58	67.3	54.8	82.2
43	28.6	25.4	38.2

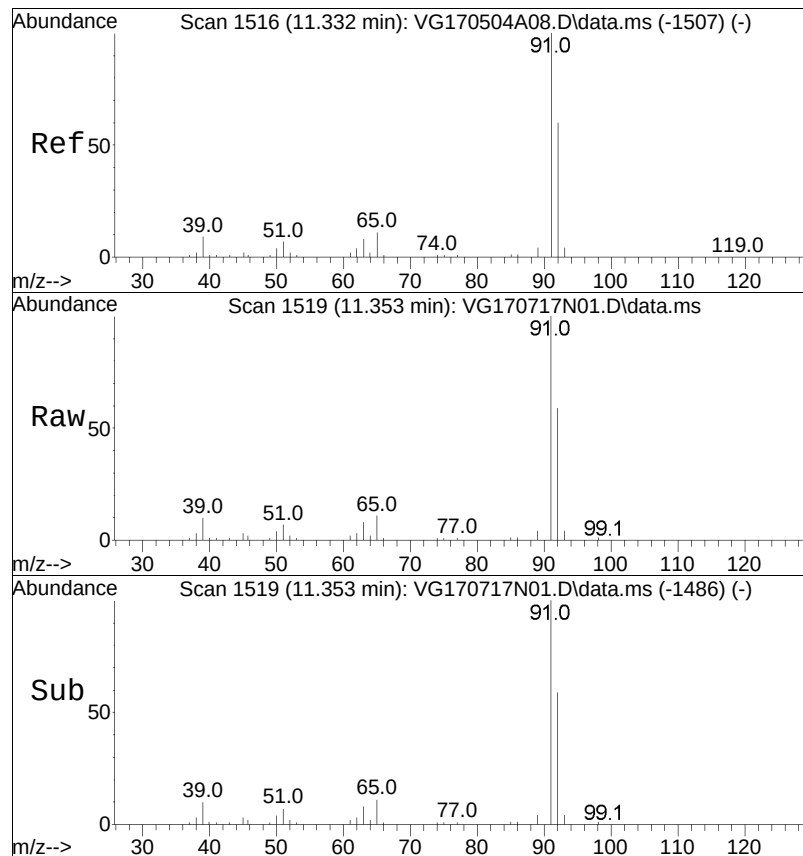




#58
 cis-1,3-Dichloropropene
 Concen: 9.34 ug/L
 RT: 10.873 min Scan# 1448
 Delta R.T. 0.014 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

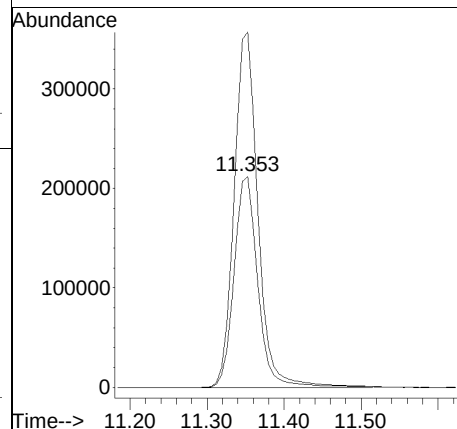
Tgt Ion:	75	Resp:	236956
Ion Ratio	Lower	Upper	
75	100		
77	31.7	23.9	35.9
39	53.0	39.7	59.5

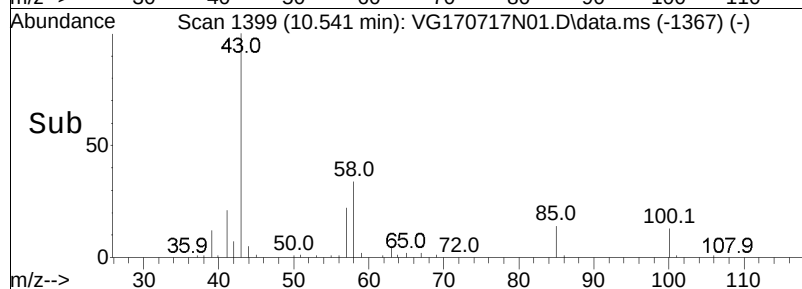
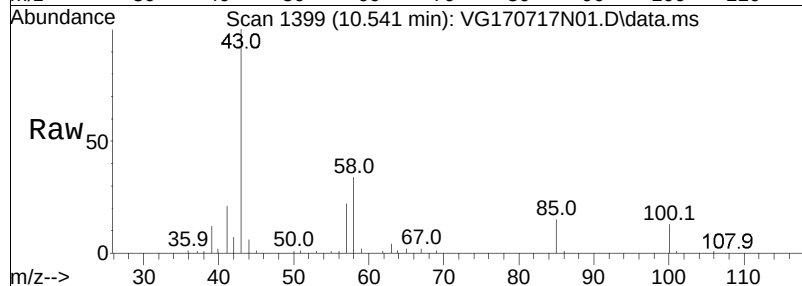
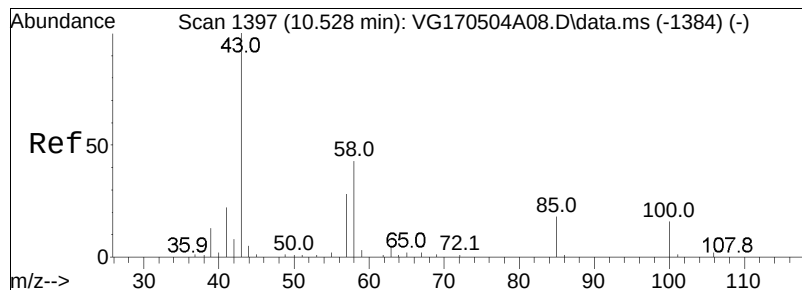




#61
 Toluene
 Concen: 9.48 ug/L
 RT: 11.353 min Scan# 1519
 Delta R.T. 0.021 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

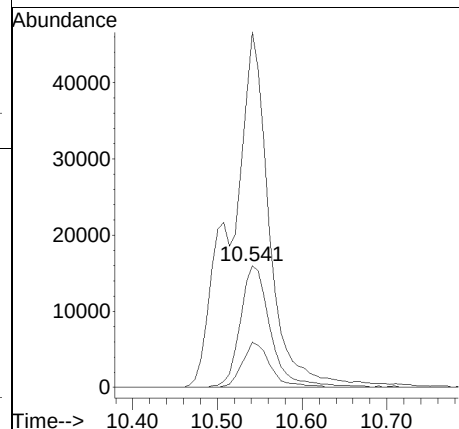
Tgt Ion	Ratio	Lower	Upper
92	100		
91	168.4	133.8	200.8

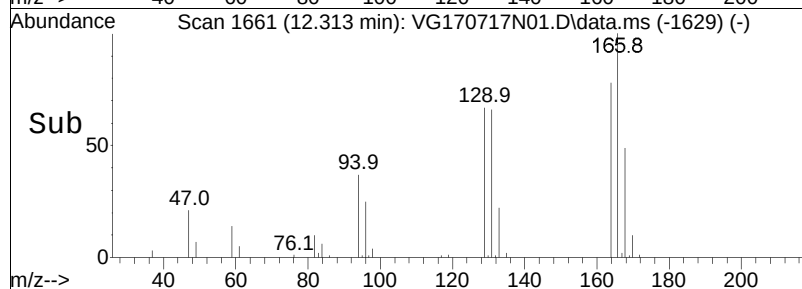
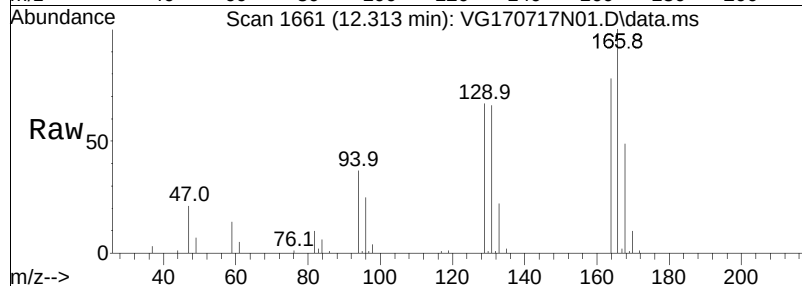
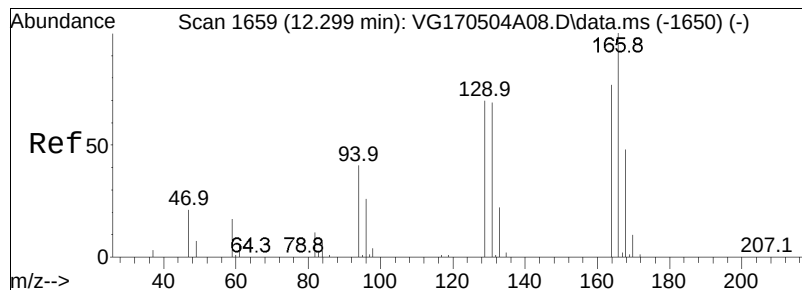




#62
 4-Methyl-2-pentanone
 Concen: 9.52 ug/L
 RT: 10.541 min Scan# 1399
 Delta R.T. 0.013 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

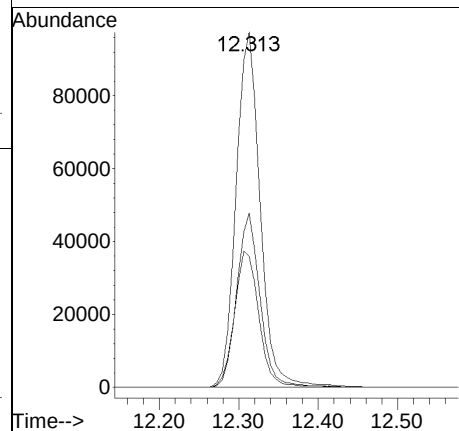
Tgt Ion	Ratio	Lower	Upper
58	100		
100	34.4	27.5	41.3
43	370.3	219.3	328.9#

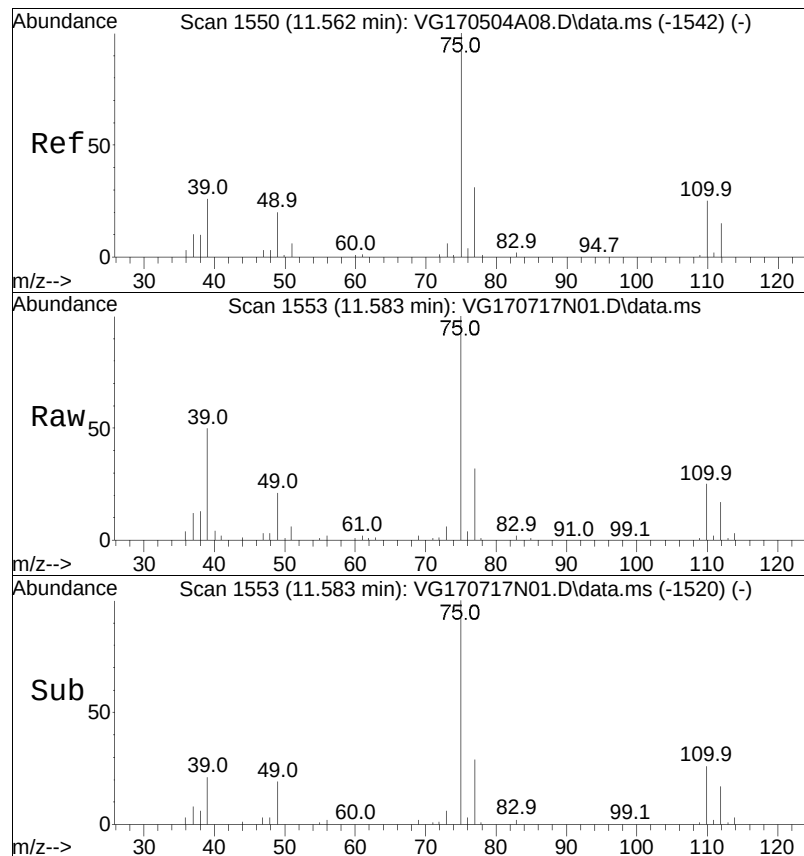




#63
 Tetrachloroethene
 Concen: 9.74 ug/L
 RT: 12.313 min Scan# 1661
 Delta R.T. 0.014 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

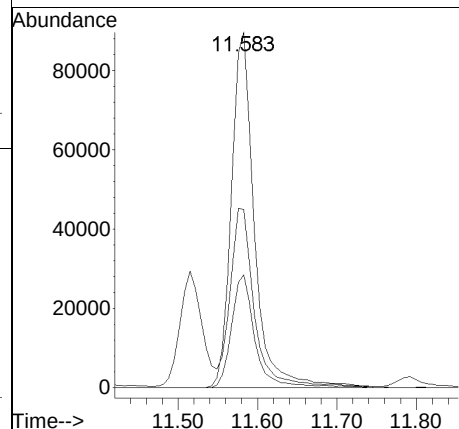
Tgt	Ion	Ratio	Resp	Lower	Upper
166	100		205888		
168	47.6	30.3		70.3	
94	39.0	43.6		83.6	

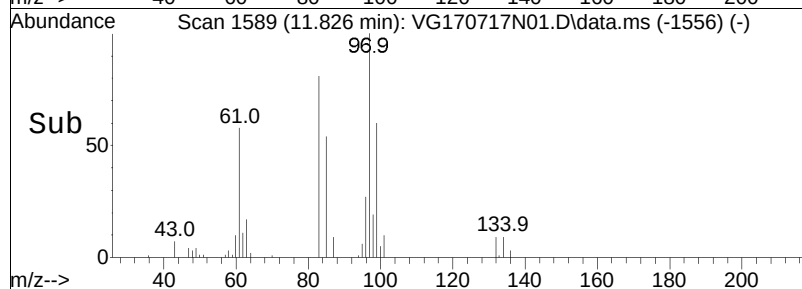
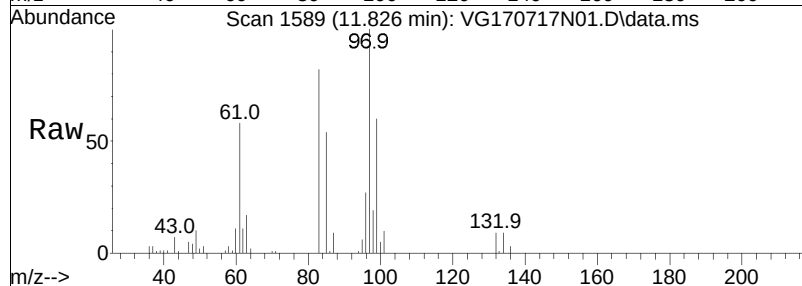
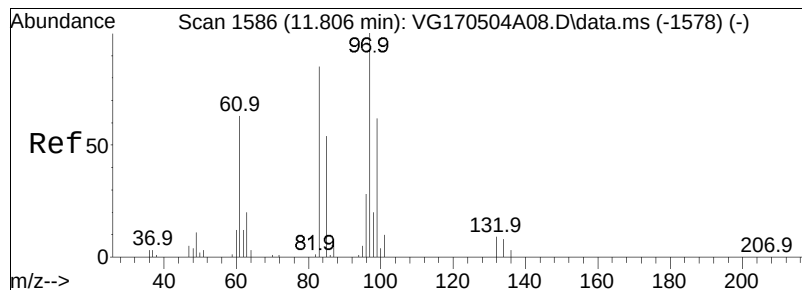




#65
 trans-1,3-Dichloropropene
 Concen: 9.10 ug/L
 RT: 11.583 min Scan# 1553
 Delta R.T. 0.021 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

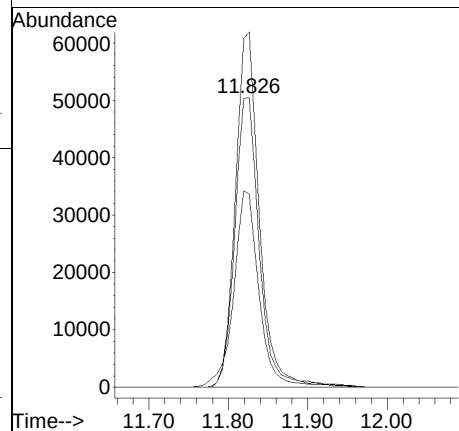
Tgt Ion	Ratio	Lower	Upper
75	100		
77	32.0	10.9	50.9
39	49.7	26.2	66.2

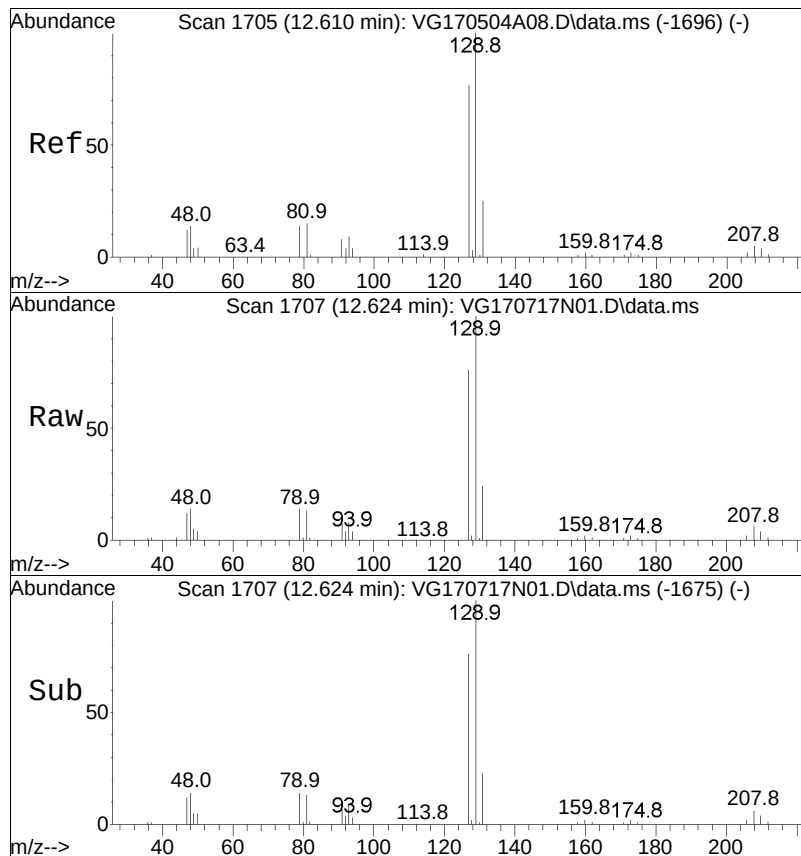




#68
 1,1,2-Trichloroethane
 Concen: 9.67 ug/L
 RT: 11.826 min Scan# 1589
 Delta R.T. 0.020 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

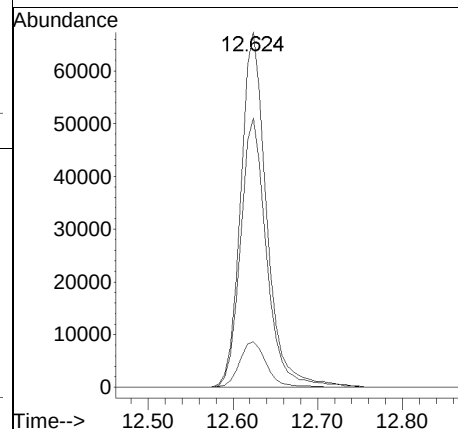
Tgt Ion:	83	Resp:	108897
Ion Ratio	Lower	Upper	
83	100		
97	120.4	90.3	130.3
85	70.0	49.8	89.8

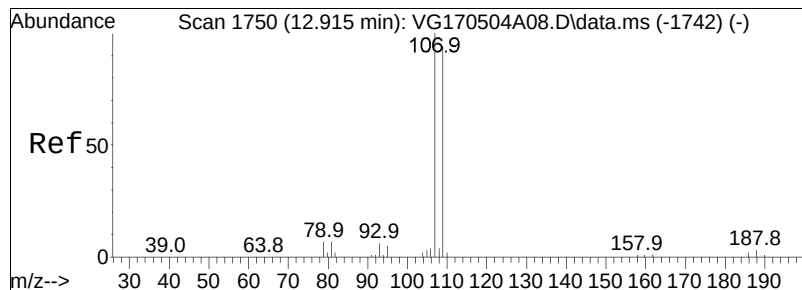




#69
 Chlorodibromomethane
 Concen: 9.33 ug/L
 RT: 12.624 min Scan# 1707
 Delta R.T. 0.014 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

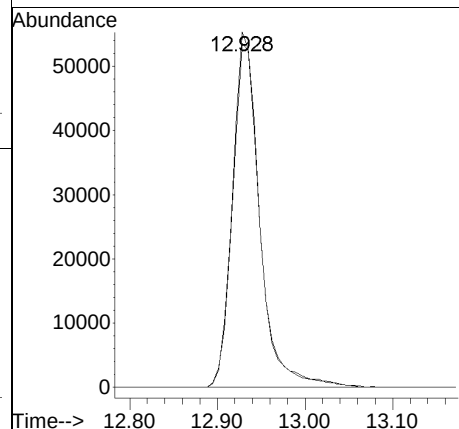
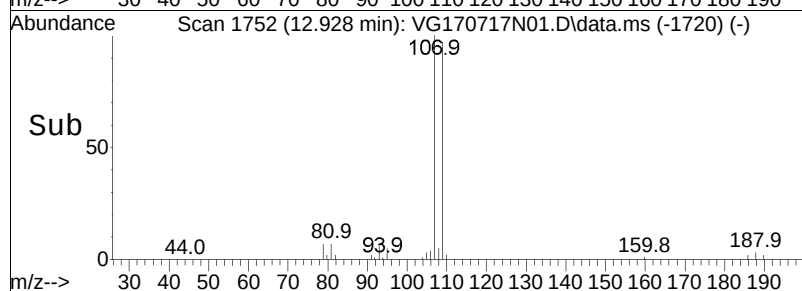
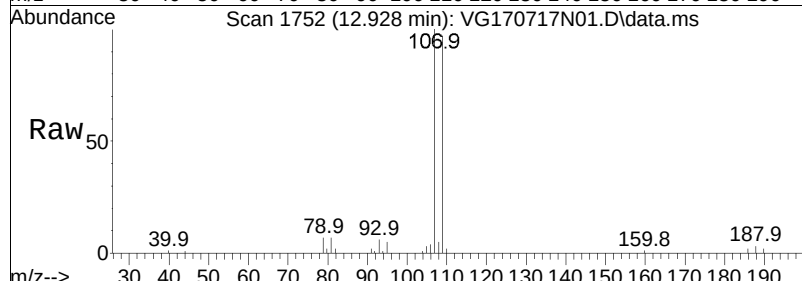
Tgt Ion:	129	Resp:	143253
Ion Ratio	Lower	Upper	
129	100		
81	13.5	0.0	39.1
127	76.6	57.6	97.6

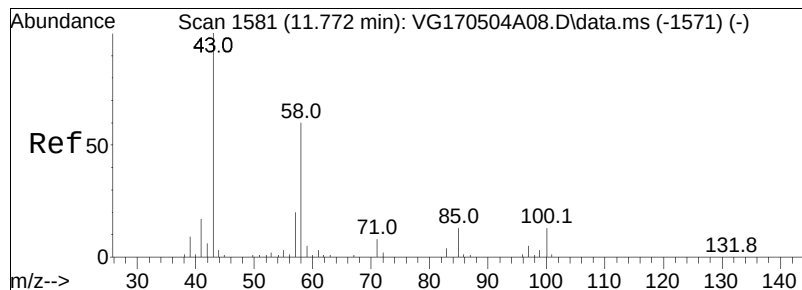




#71
 1,2-Dibromoethane
 Concen: 10.19 ug/L
 RT: 12.928 min Scan# 1752
 Delta R.T. 0.013 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

Tgt Ion	Ratio	Lower	Upper
107	100		
109	97.2	74.8	112.2





#72

2-Hexanone

Concen: 9.58 ug/L

RT: 11.792 min Scan# 1584

Delta R.T. 0.020 min

Lab File: VG170717N01.D

Acq: 17 Jul 2017 12:59 pm

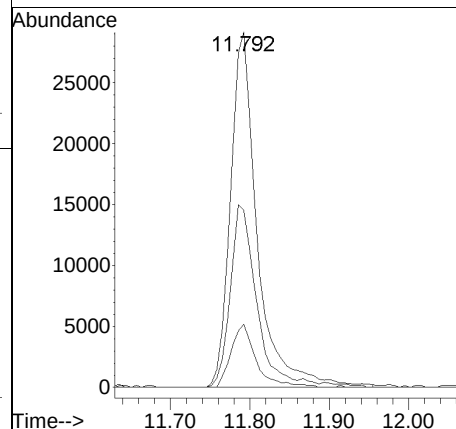
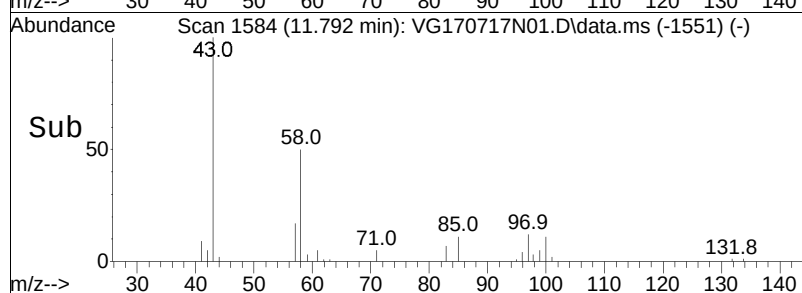
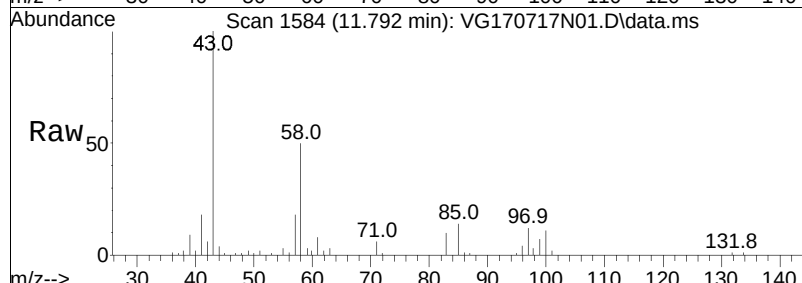
Tgt Ion: 43 Resp: 68713

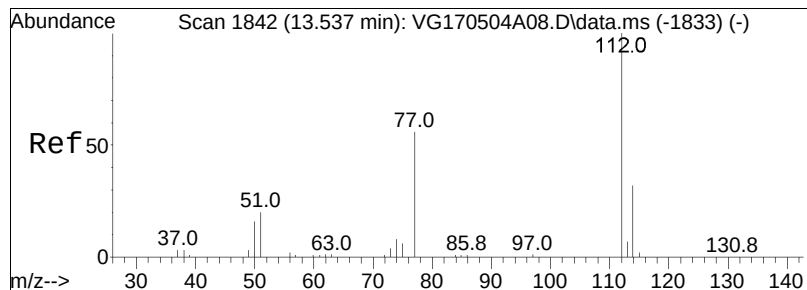
Ion Ratio Lower Upper

43 100

58 50.4 41.7 62.5

57 16.7 15.1 22.7





#73

Chlorobenzene

Concen: 9.53 ug/L

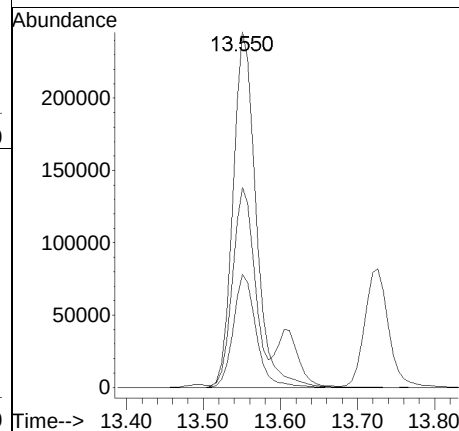
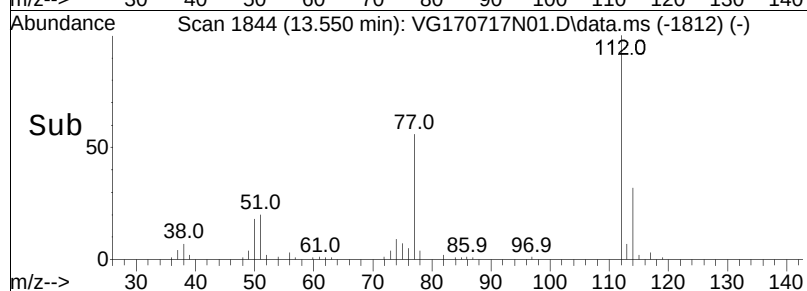
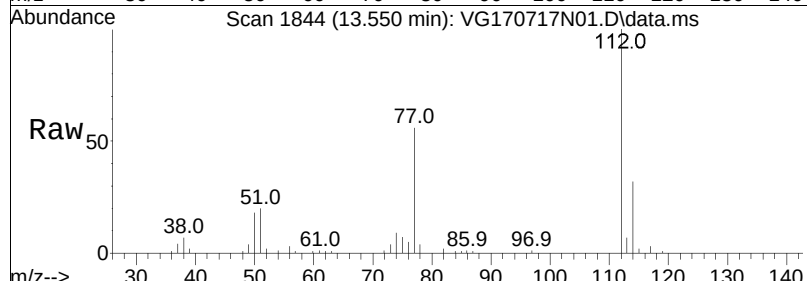
RT: 13.550 min Scan# 1844

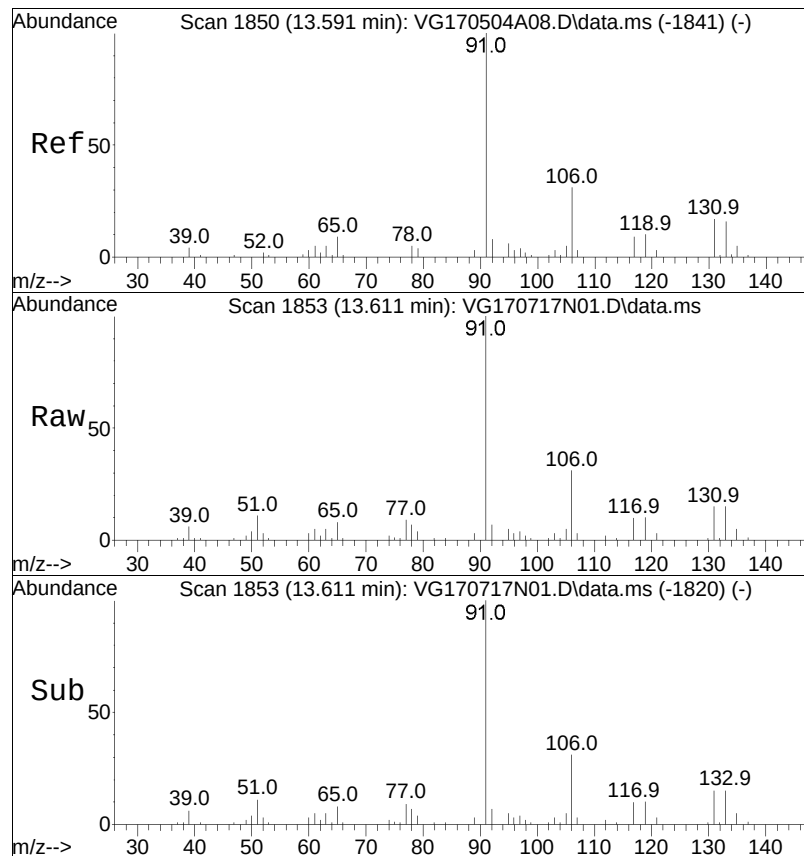
Delta R.T. 0.013 min

Lab File: VG170717N01.D

Acq: 17 Jul 2017 12:59 pm

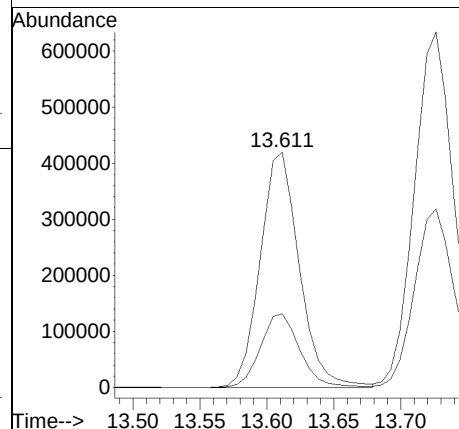
Tgt	Ion:112	Resp:	510516
Ion	Ratio	Lower	Upper
112	100		
77	54.3	59.8	89.8#
114	31.6	25.2	37.8

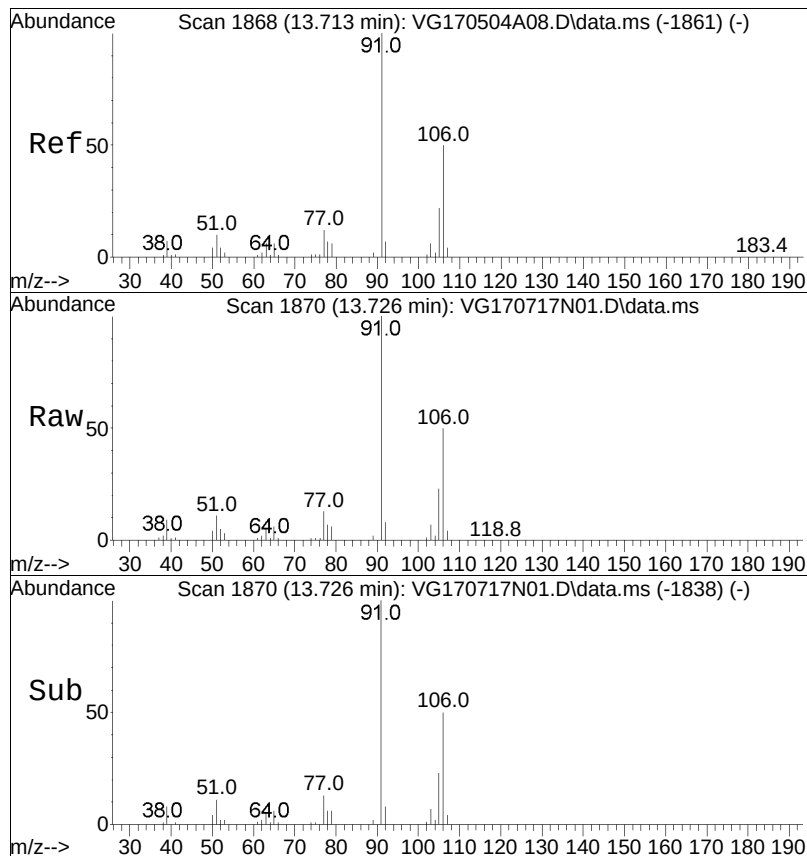




#74
 Ethylbenzene
 Concen: 9.86 ug/L
 RT: 13.611 min Scan# 1853
 Delta R.T. 0.020 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

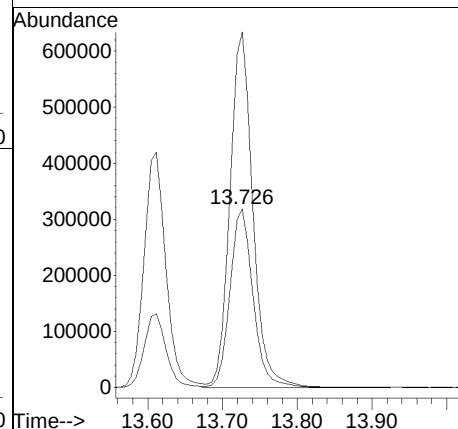
Tgt Ion	Ratio	Lower	Upper
91	100		
106	31.3	21.5	32.3

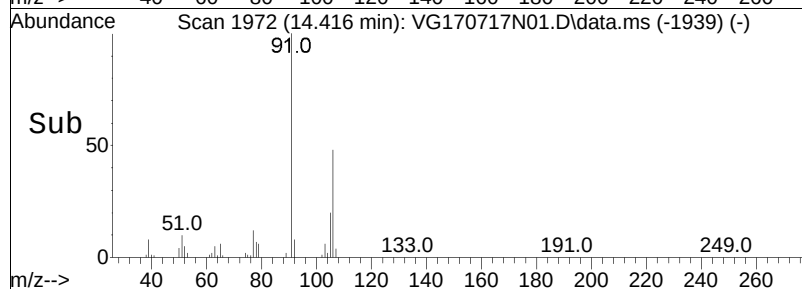
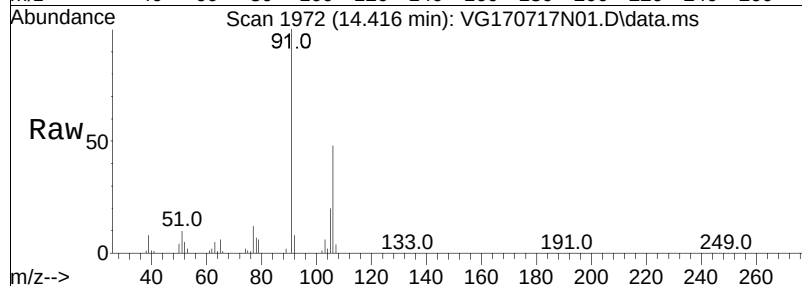
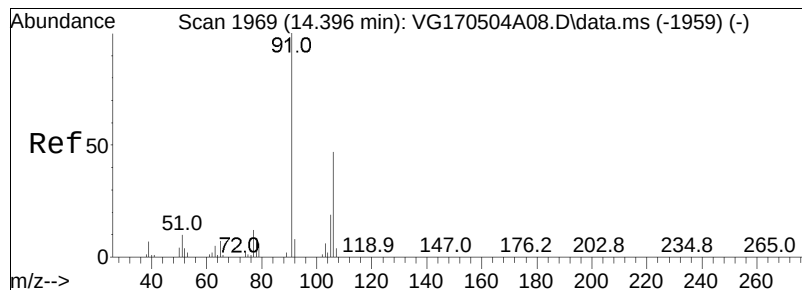




#76
 p/m Xylene
 Concen: 19.94 ug/L
 RT: 13.726 min Scan# 1870
 Delta R.T. 0.013 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

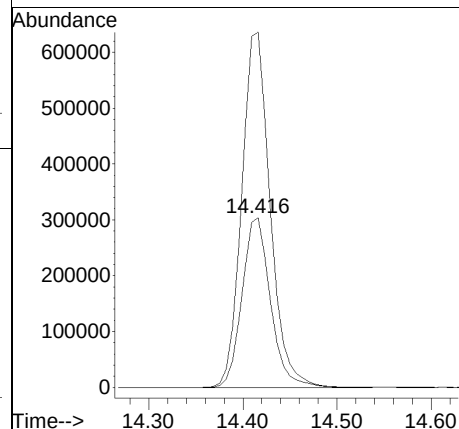
Tgt Ion	Ratio	Lower	Upper
106	100		
91	197.0	192.4	288.6

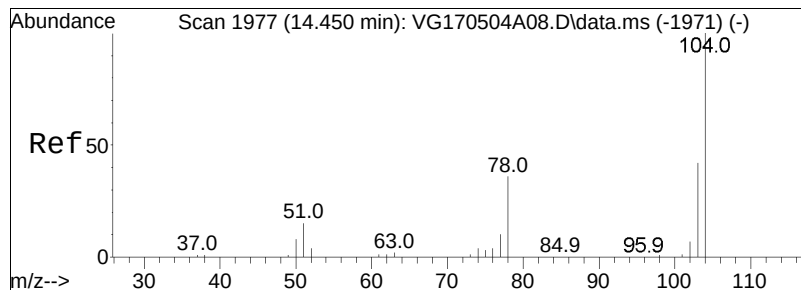




#77
o Xylene
Concen: 19.60 ug/L
RT: 14.416 min Scan# 1972
Delta R.T. 0.020 min
Lab File: VG170717N01.D
Acq: 17 Jul 2017 12:59 pm

Tgt	Ion	Ratio	Lower	Upper
106	106	100		
91	208.9	202.3	303.5	





#78

Styrene

Concen: 20.55 ug/L

RT: 14.463 min Scan# 1979

Delta R.T. 0.013 min

Lab File: VG170717N01.D

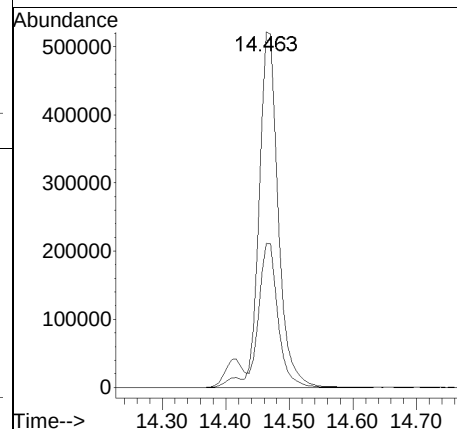
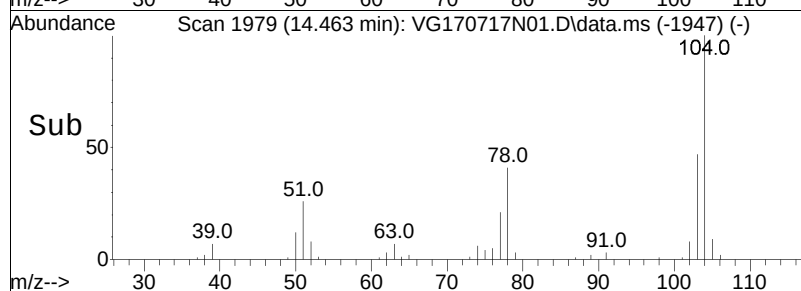
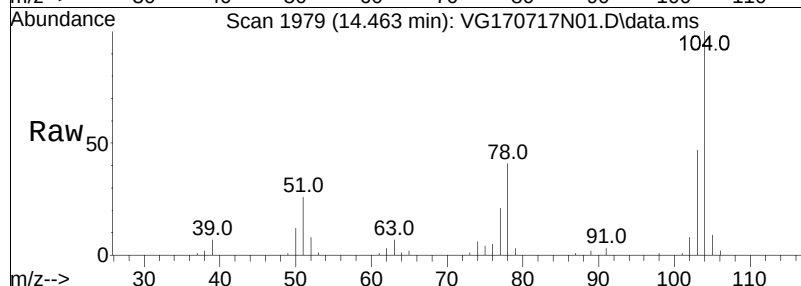
Acq: 17 Jul 2017 12:59 pm

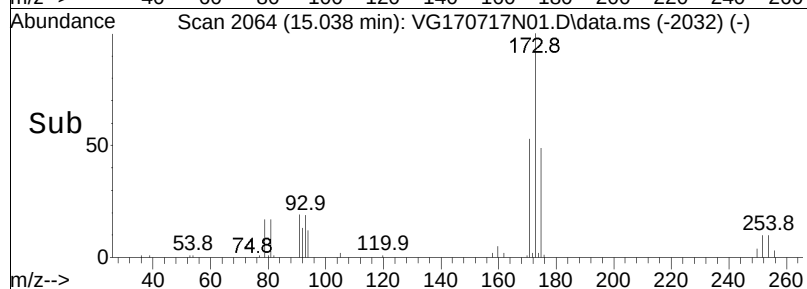
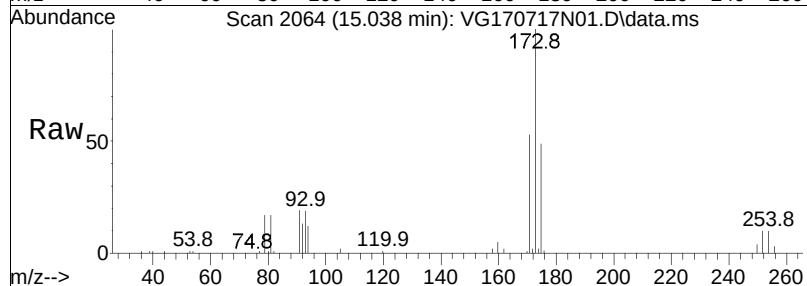
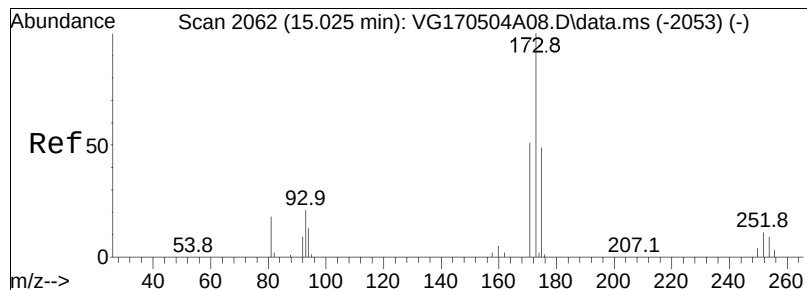
Tgt Ion:104 Resp: 1102396

Ion Ratio Lower Upper

104 100

78 39.3 46.6 69.8#





#80

Bromoform

Concen: 9.47 ug/L

RT: 15.038 min Scan# 2064

Delta R.T. 0.013 min

Lab File: VG170717N01.D

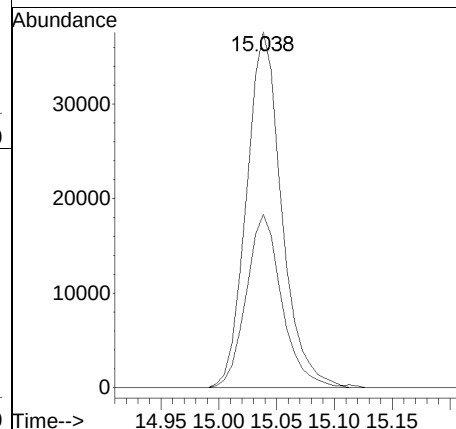
Acq: 17 Jul 2017 12:59 pm

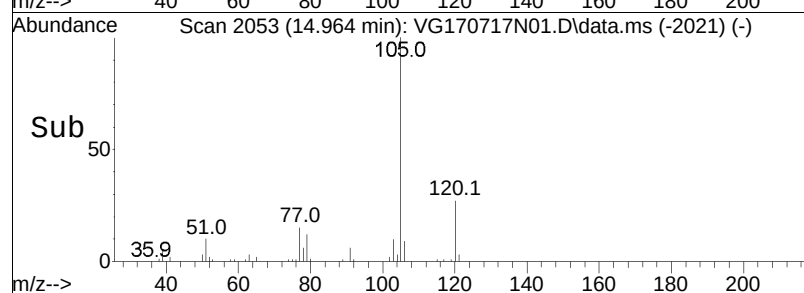
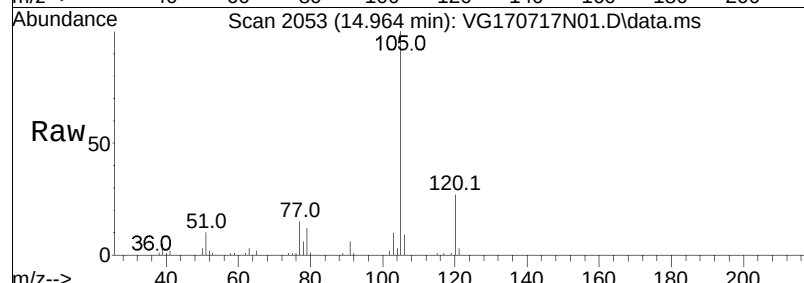
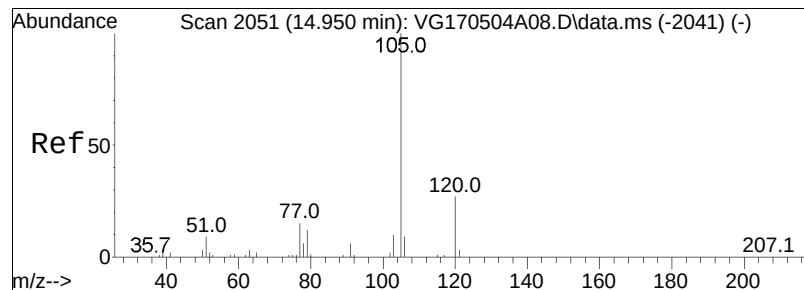
Tgt Ion:173 Resp: 79635

Ion Ratio Lower Upper

173 100

175 49.0 27.9 67.9





#82

Isopropylbenzene

Concen: 9.83 ug/L

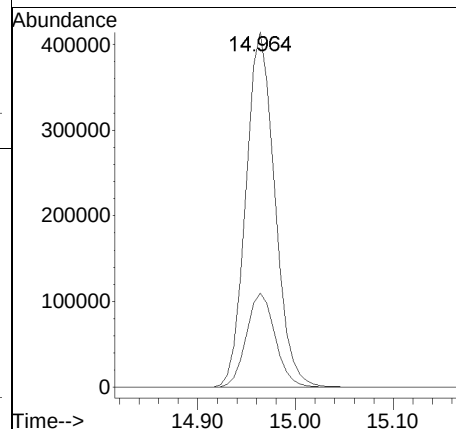
RT: 14.964 min Scan# 2053

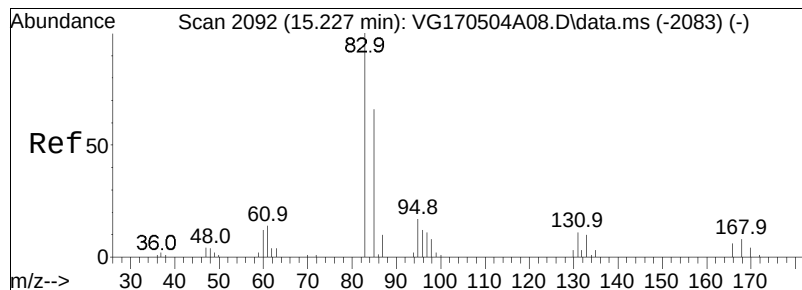
Delta R.T. 0.014 min

Lab File: VG170717N01.D

Acq: 17 Jul 2017 12:59 pm

Tgt Ion	Ratio	Lower	Upper
105	100		
120	26.5	2.4	42.4





#87

1,1,2,2-Tetrachloroethane

Concen: 9.77 ug/L

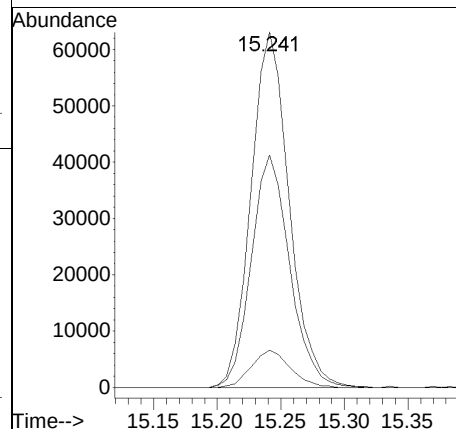
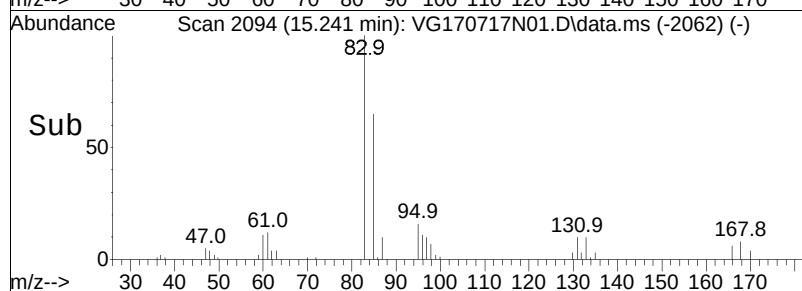
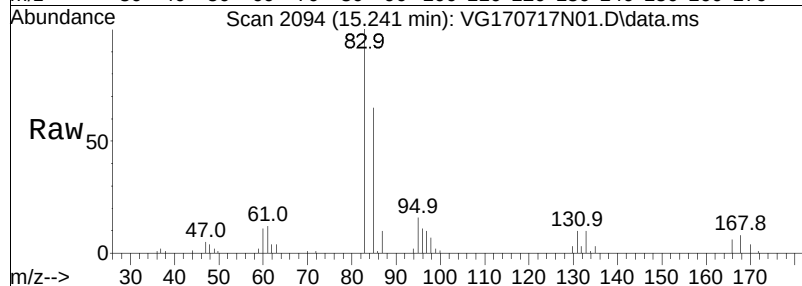
RT: 15.241 min Scan# 2094

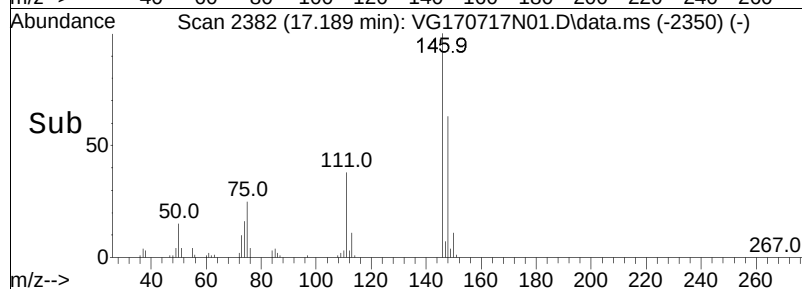
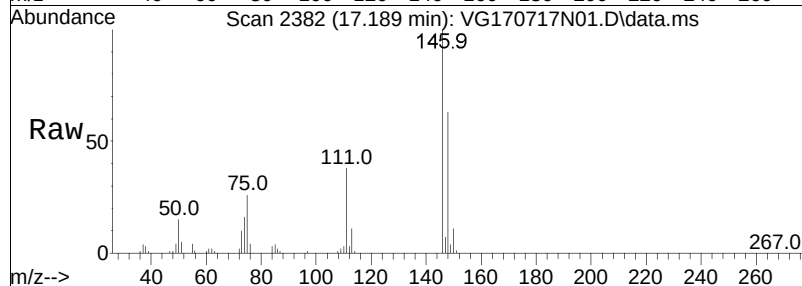
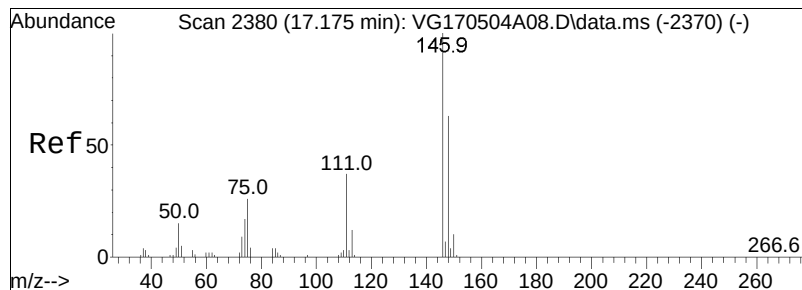
Delta R.T. 0.014 min

Lab File: VG170717N01.D

Acq: 17 Jul 2017 12:59 pm

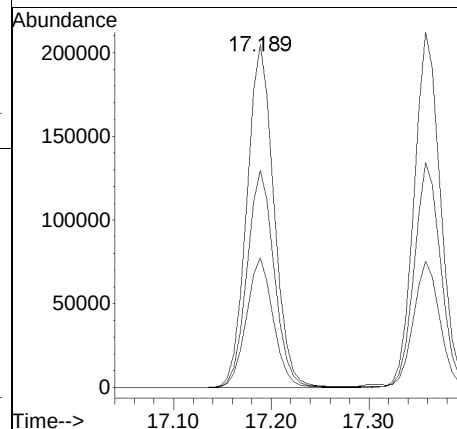
Tgt Ion:	83	Resp:	131712
Ion Ratio	Lower	Upper	
83	100		
131	10.7	0.0	28.6
85	65.8	43.4	83.4

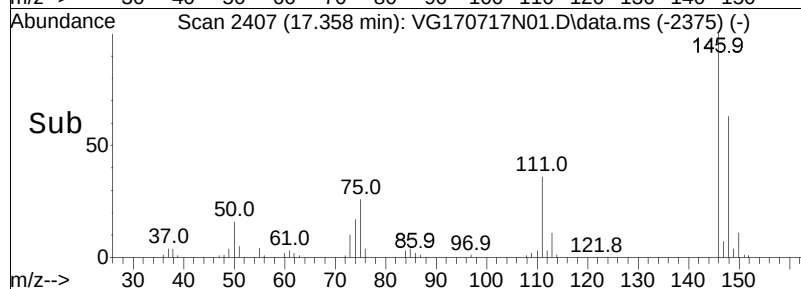
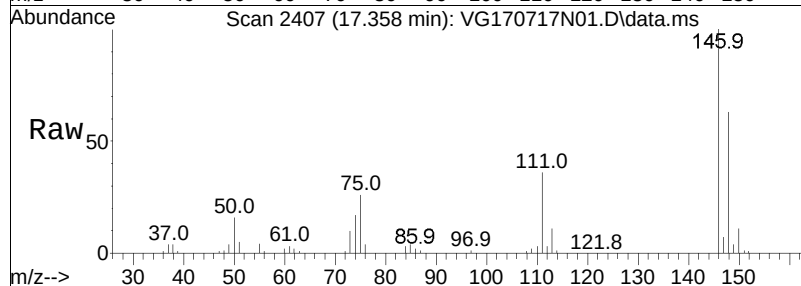
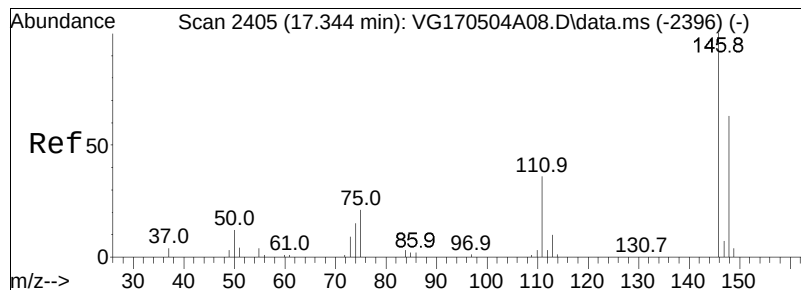




#100
 1,3-Dichlorobenzene
 Concen: 9.60 ug/L
 RT: 17.189 min Scan# 2382
 Delta R.T. 0.014 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

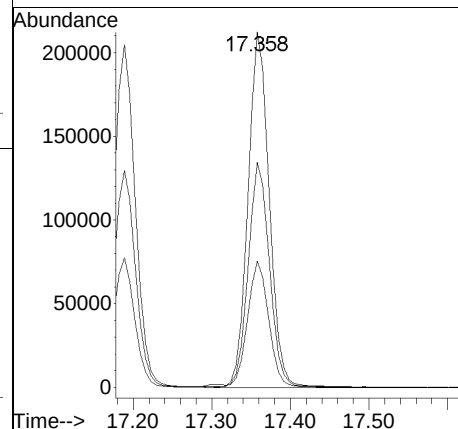
Tgt Ion	Ratio	Resp	Lower	Upper
146	100	394659		
111	37.3		30.8	64.0
148	63.3		42.0	87.2

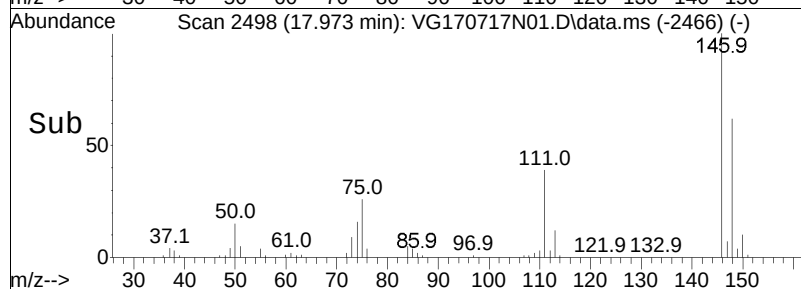
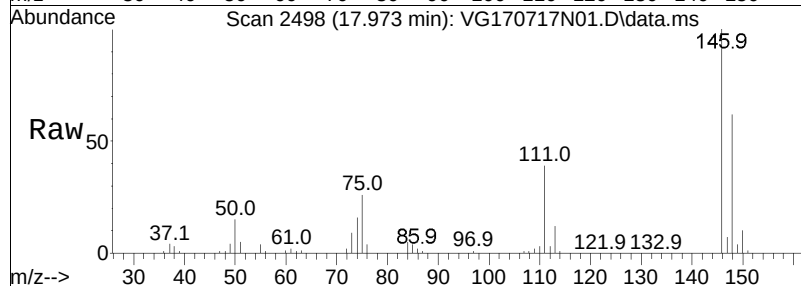
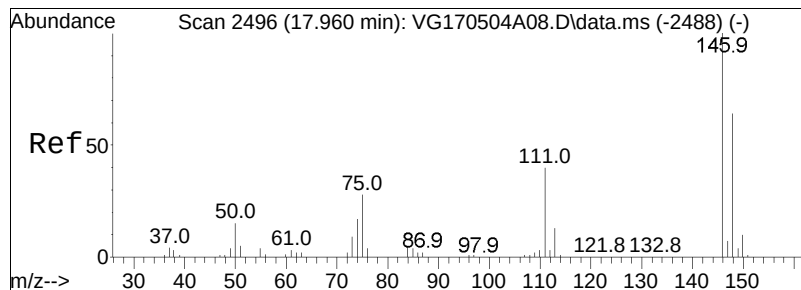




#101
 1,4-Dichlorobenzene
 Concen: 9.56 ug/L M2
 RT: 17.358 min Scan# 2407
 Delta R.T. 0.014 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

Tgt Ion	Ratio	Lower	Upper
146	100		
111	33.1	36.2	54.4#
148	57.1	50.8	76.2





#104

1,2-Dichlorobenzene

Concen: 9.70 ug/L

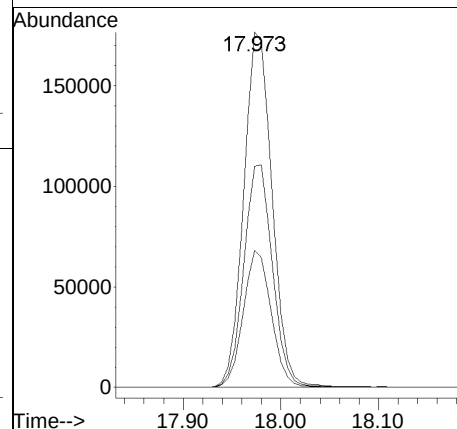
RT: 17.973 min Scan# 2498

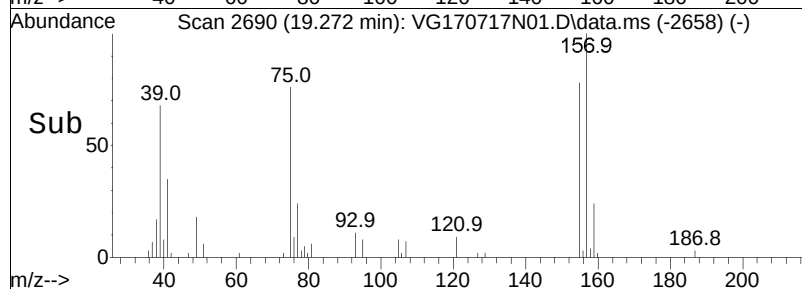
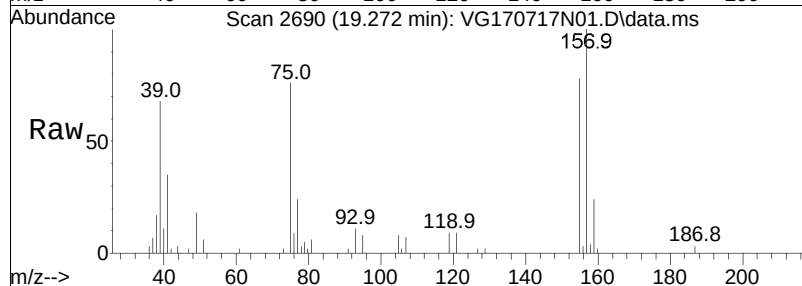
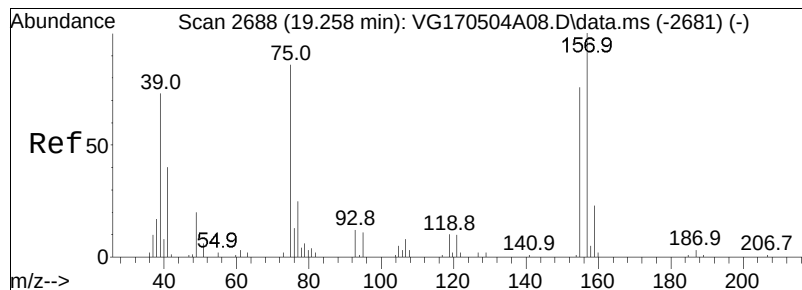
Delta R.T. 0.013 min

Lab File: VG170717N01.D

Acq: 17 Jul 2017 12:59 pm

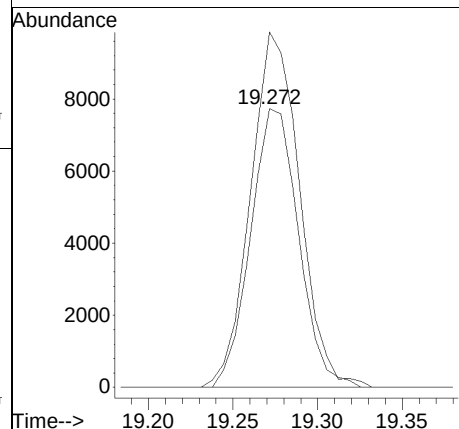
Tgt Ion:	146	Resp:	357062
Ion Ratio	Lower	Upper	
146	100		
111	38.1	30.9	64.1
148	63.3	41.7	86.5

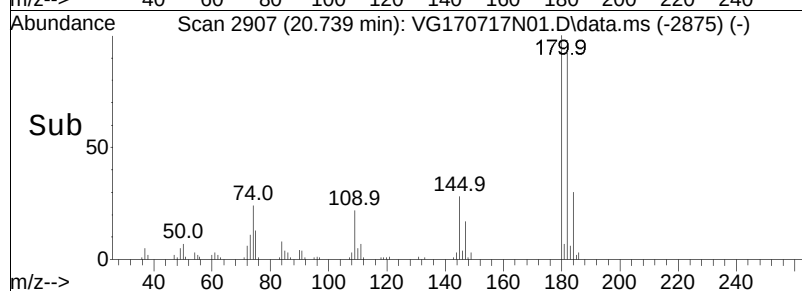
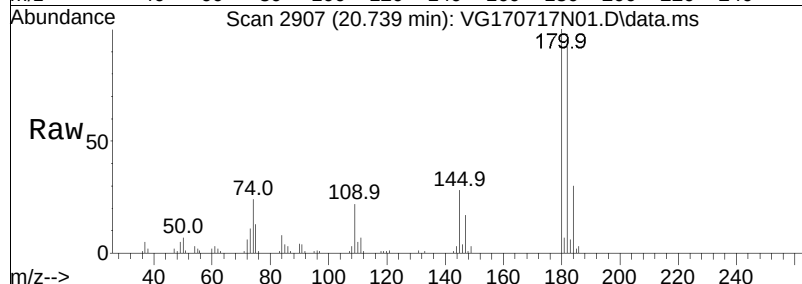
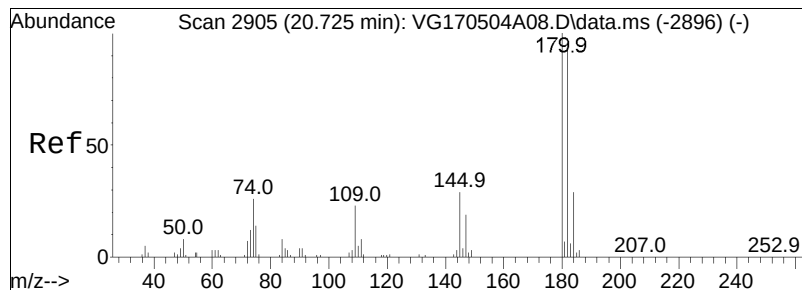




#106
 1,2-Dibromo-3-chloropropane
 Concen: 9.58 ug/L
 RT: 19.272 min Scan# 2690
 Delta R.T. 0.014 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

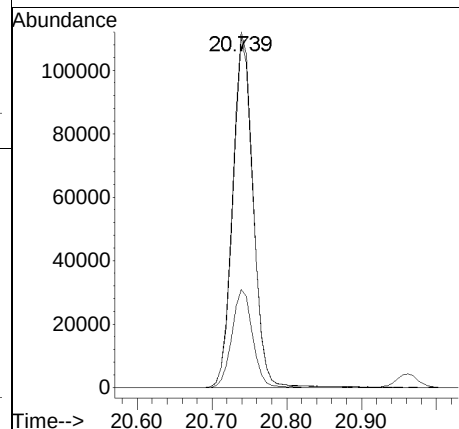
Tgt	Ion	Ratio	Lower	Upper
155	100			
157	130.2	101.3	151.9	

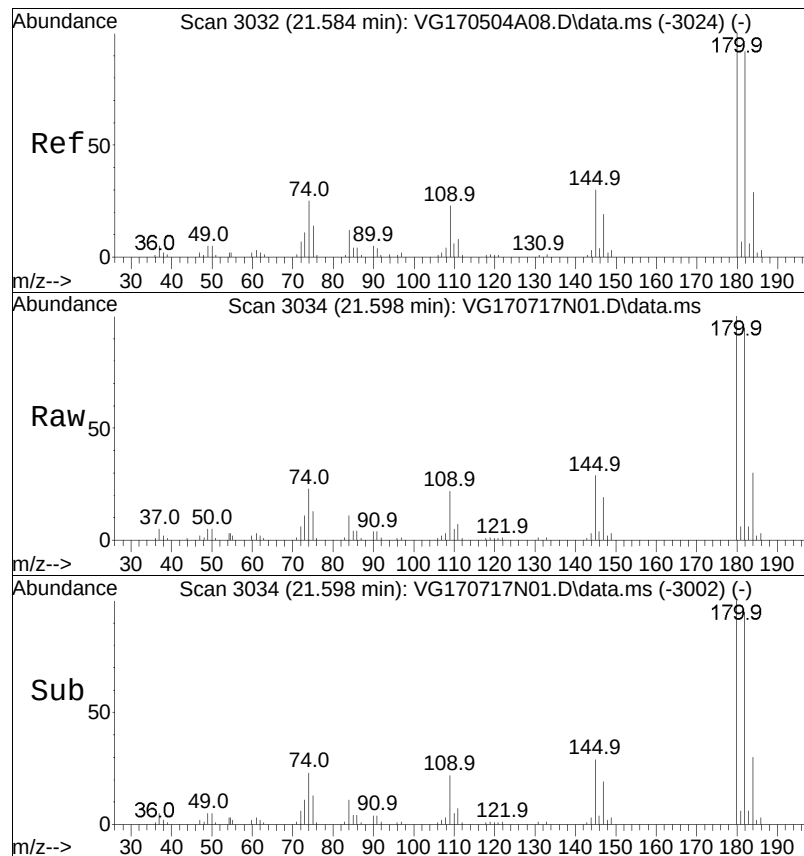




#109
 1,2,4-Trichlorobenzene
 Concen: 10.04 ug/L
 RT: 20.739 min Scan# 2907
 Delta R.T. 0.014 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

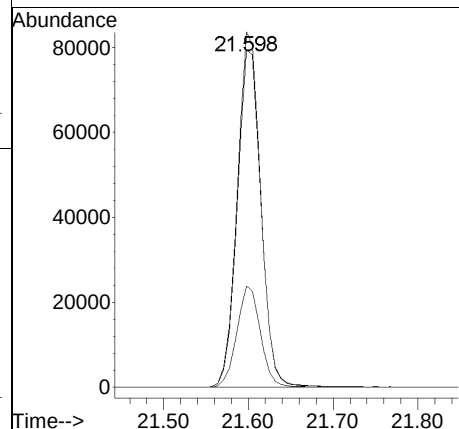
Tgt Ion	Ratio	Lower	Upper
180	100		
182	96.6	75.7	113.5
145	27.5	23.0	34.4





#111
 1,2,3-Trichlorobenzene
 Concen: 12.00 ug/L
 RT: 21.598 min Scan# 3034
 Delta R.T. 0.014 min
 Lab File: VG170717N01.D
 Acq: 17 Jul 2017 12:59 pm

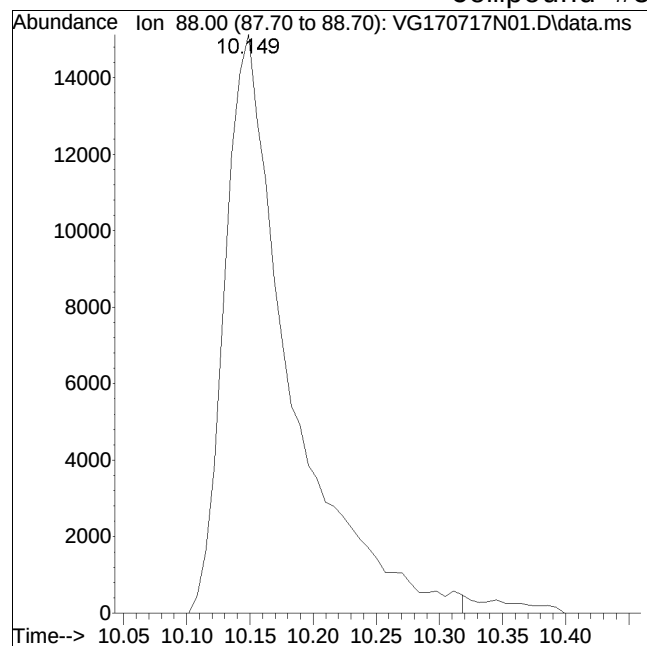
Tgt Ion:	180	Resp:	161224
Ion Ratio	Lower	Upper	
180	100		
182	96.2	73.8	110.6
145	28.6	23.4	35.2



Manual Integration Report

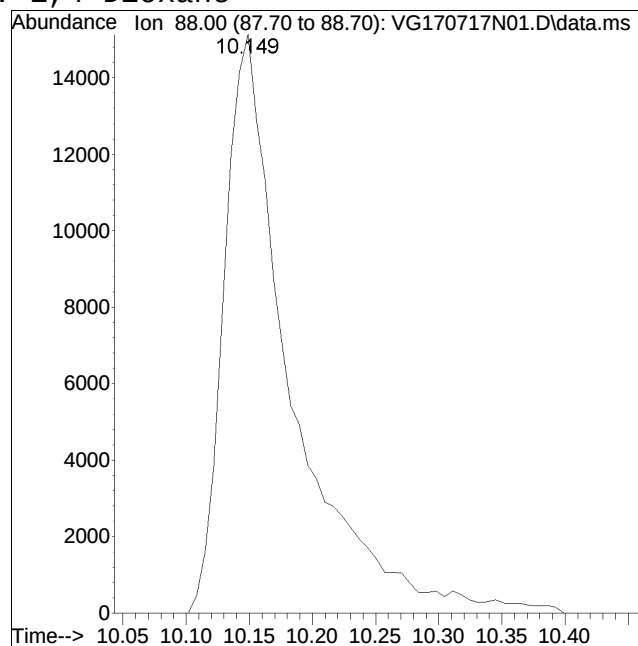
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170717N01.D Operator : GONZO:PD
Date Inj'd : 7/17/2017 12:59 pm Instrument : Gonzo
Sample : WG1023505-3,31,10,10 Quant Date : 7/17/2017 1:24 pm

Compound #57: 1,4-Dioxane



Original Peak Response = 54955

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

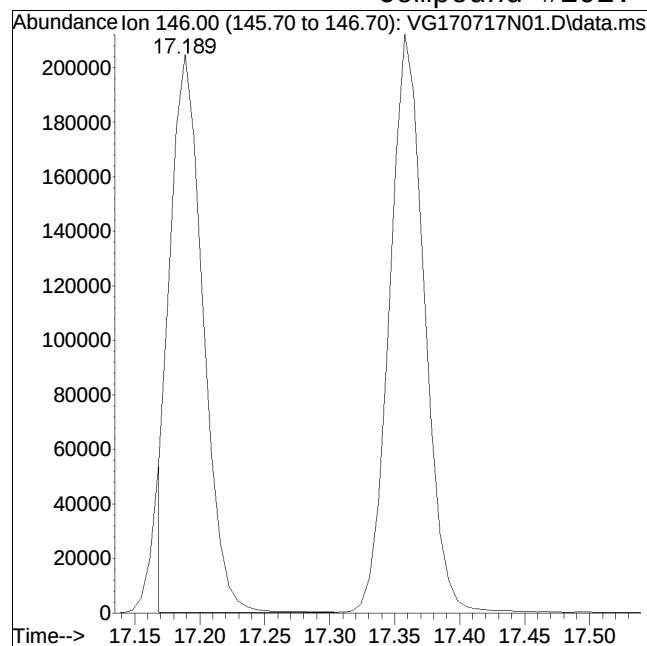


Manual Peak Response = 56076 M1

Manual Integration Report

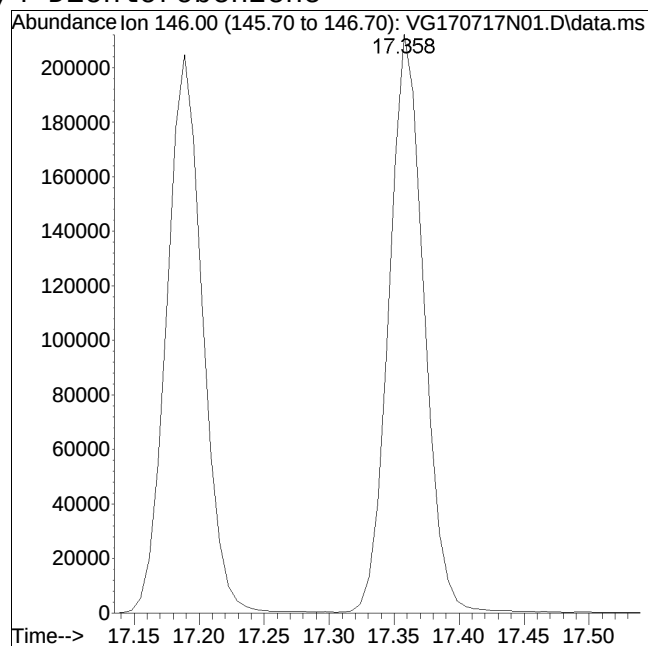
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170717N01.D Operator : GONZO:PD
Date Inj'd : 7/17/2017 12:59 pm Instrument : Gonzo
Sample : WG1023505-3,31,10,10 Quant Date : 7/17/2017 1:24 pm

Compound #101: 1,4-Dichlorobenzene



Original Peak Response = 358782

M2 = Peak not found by automatic integration algorithm.



Manual Peak Response = 399291 M2

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
 Data File : VG170717N02.D
 Acq On : 17 Jul 2017 1:32 pm
 Operator : GONZO:PD
 Sample : WG1023505-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1023505,ICAL13686 (Sig #1); WG,ICAL13686 (Sig #2)
 ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 17 14:33:43 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:09:01 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170717N\VG170717N01.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.033	96	734808	10.000	ug/L	0.01
Standard Area 1 = 698045			Recovery = 105.27%			
59) Chlorobenzene-d5	13.496	117	550817	10.000	ug/L	# 0.02
Standard Area 1 = 530469			Recovery = 103.84%			
79) 1,4-Dichlorobenzene-d4	17.310	152	272216	10.000	ug/L	0.02
Standard Area 1 = 270453			Recovery = 100.65%			
System Monitoring Compounds						
36) Dibromofluoromethane	7.971	113	175223	10.104	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.04%			
43) 1,2-Dichloroethane-d4	8.614	65	174656	9.647	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.47%			
60) Toluene-d8	11.231	98	711846	9.976	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.76%			
83) 4-Bromofluorobenzene	15.383	95	252262	9.907	ug/L	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.07%			
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.825	85	135308	7.010	ug/L	98
3) Chloromethane	3.177	50	86331	6.197	ug/L	100
4) Vinyl chloride	3.339	62	177467	8.198	ug/L	97
5) Bromomethane	3.954	94	95585	8.674	ug/L	99
6) Chloroethane	4.056	64	98639	8.835	ug/L	98
7) Trichlorofluoromethane	4.394	101	269563	8.742	ug/L	99
10) 1,1-Dichloroethene	5.199	96	149221	9.103	ug/L	84
11) Carbon disulfide	5.861	76	386694	6.891	ug/L	99
12) Freon-113	4.949	101	136910	8.923	ug/L	# 84
15) Methylene chloride	5.807	84	167737	9.407	ug/L	90
17) Acetone	5.030	43	30350	10.202	ug/L	# 82
18) trans-1,2-Dichloroethene	6.186	96	170221	9.105	ug/L	88
19) Methyl acetate	5.598	43	80811	9.192	ug/L	# 88
20) Methyl tert-butyl ether	5.976	73	374891	10.879	ug/L	# 88
23) 1,1-Dichloroethane	6.713	63	321954	9.127	ug/L	100
28) cis-1,2-Dichloroethene	7.491	96	193760	9.322	ug/L	86
30) Bromochloromethane	7.917	128	83591	9.408	ug/L	91
31) Cyclohexane	8.242	56	276747	8.531	ug/L	88
32) Chloroform	7.687	83	308042	9.376	ug/L	97
34) Carbon tetrachloride	8.553	117	216807	9.191	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
 Data File : VG170717N02.D
 Acq On : 17 Jul 2017 1:32 pm
 Operator : GONZO:PD
 Sample : WG1023505-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1023505,ICAL13686 (Sig #1); WG,ICAL13686 (Sig #2)
 ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 17 14:33:43 2017
 Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 25 10:09:01 2017
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2017\170717N\VG170717N01.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37)	1,1,1-Trichloroethane	8.208	97	251657	9.229	ug/L	99
39)	2-Butanone	7.227	43	48694	9.891	ug/L	90
41)	Benzene	8.776	78	747233	9.325	ug/L	99
44)	1,2-Dichloroethane	8.742	62	212030	9.022	ug/L	98
47)	Methylcyclohexane	9.662	83	236574	8.918	ug/L	97
48)	Trichloroethene	9.574	95	180515	8.888	ug/L #	79
51)	1,2-Dichloropropane	9.811	63	185949	9.464	ug/L #	90
54)	Bromodichloromethane	10.142	83	220403	9.749	ug/L #	99
57)	1,4-Dioxane	10.149	88	57835M1	550.755	ug/L	
58)	cis-1,3-Dichloropropene	10.872	75	238895	8.966	ug/L	95
61)	Toluene	11.353	92	463310	9.303	ug/L	99
62)	4-Methyl-2-pentanone	10.541	58	41046	9.401	ug/L #	54
63)	Tetrachloroethene	12.313	166	206500	9.405	ug/L #	81
65)	trans-1,3-Dichloropropene	11.583	75	182249	8.848	ug/L	92
68)	1,1,2-Trichloroethane	11.819	83	110316	9.435	ug/L	93
69)	Chlorodibromomethane	12.624	129	143719	9.027	ug/L	98
71)	1,2-Dibromoethane	12.935	107	121881	9.955	ug/L	97
72)	2-Hexanone	11.792	43	70554	9.477	ug/L	98
73)	Chlorobenzene	13.550	112	518104	9.315	ug/L #	82
74)	Ethylbenzene	13.611	91	866317	9.642	ug/L	92
76)	p/m Xylene	13.726	106	682019	19.222	ug/L	76
77)	o Xylene	14.416	106	639497	18.926	ug/L	75
78)	Styrene	14.470	104	1103687	19.810	ug/L #	74
80)	Bromoform	15.038	173	78303	9.266	ug/L	98
82)	Isopropylbenzene	14.964	105	854047	9.761	ug/L	92
87)	1,1,2,2-Tetrachloroethane	15.241	83	131652	9.702	ug/L	97
100)	1,3-Dichlorobenzene	17.189	146	384921	9.300	ug/L	93
101)	1,4-Dichlorobenzene	17.358	146	387401M2	9.219	ug/L	
104)	1,2-Dichlorobenzene	17.980	146	349928	9.445	ug/L	93
106)	1,2-Dibromo-3-chloropr...	19.278	155	14075	8.846	ug/L	95
109)	1,2,4-Trichlorobenzene	20.746	180	203740	9.482	ug/L	98
111)	1,2,3-Trichlorobenzene	21.605	180	151716	11.199	ug/L	96

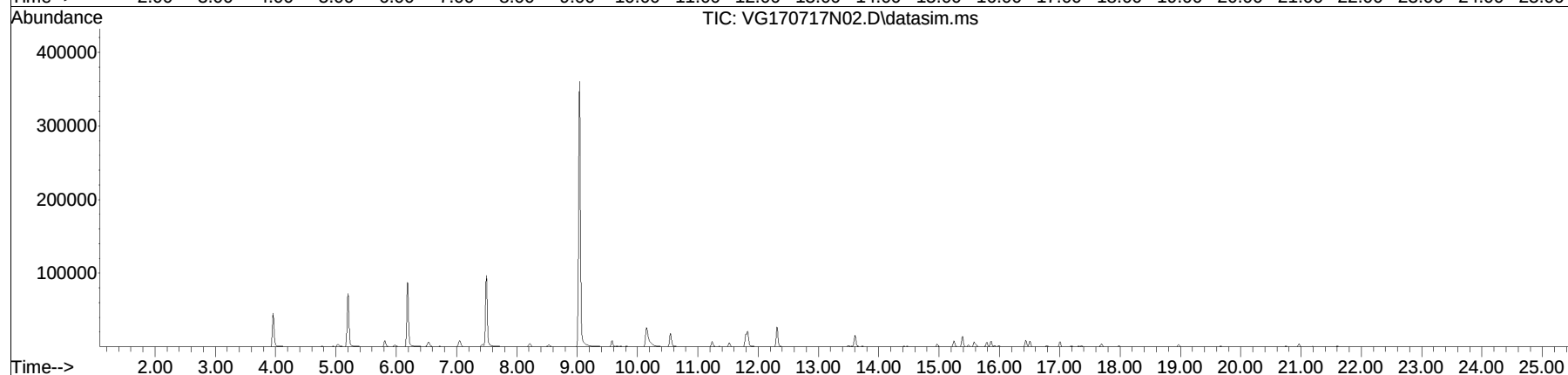
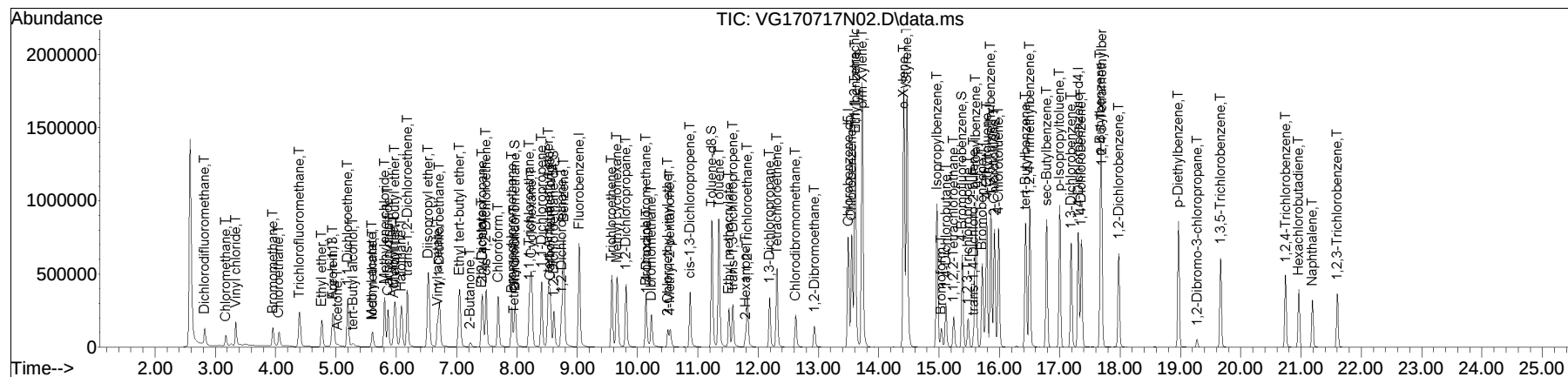
(#) = qualifier out of range (m) = manual integration (+) = signals summed

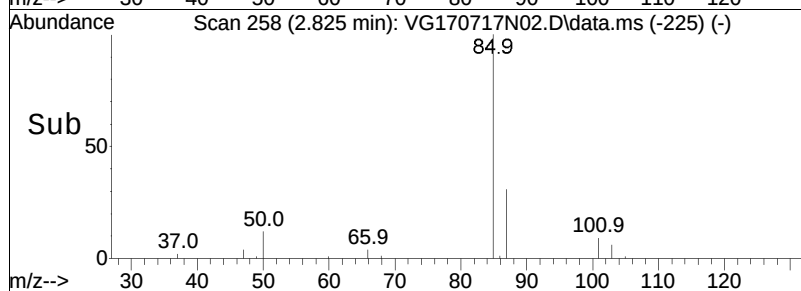
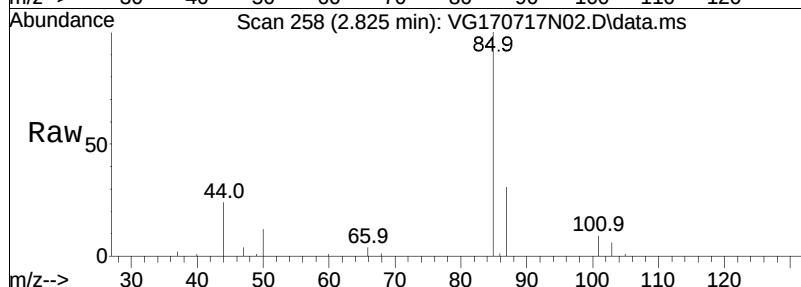
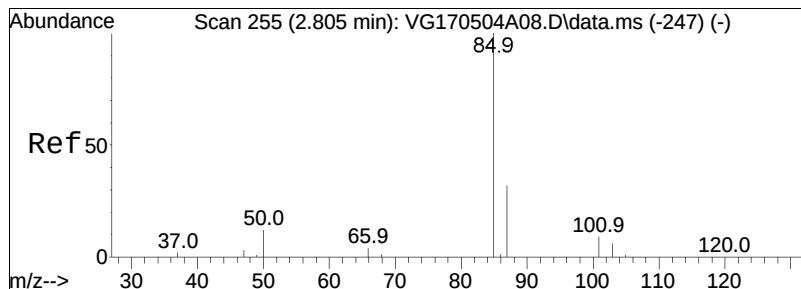
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2017\170717N\
Data File : VG170717N02.D
Acq On : 17 Jul 2017 1:32 pm
Operator : GONZO:PD
Sample : WG1023505-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1023505,ICAL13686 (Sig #1); WG,ICAL13686 (Sig #2)
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 17 14:33:43 2017
Quant Method : I:\VOLATILES\Gonzo\2017\170717N\G_170523N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu May 25 10:09:01 2017
Response via : Initial Calibration

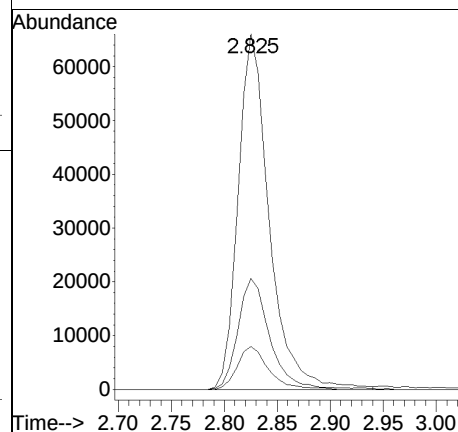
Sub List : 8260-Curve - Megamix plus Diox0717N\VG170717N01.D•

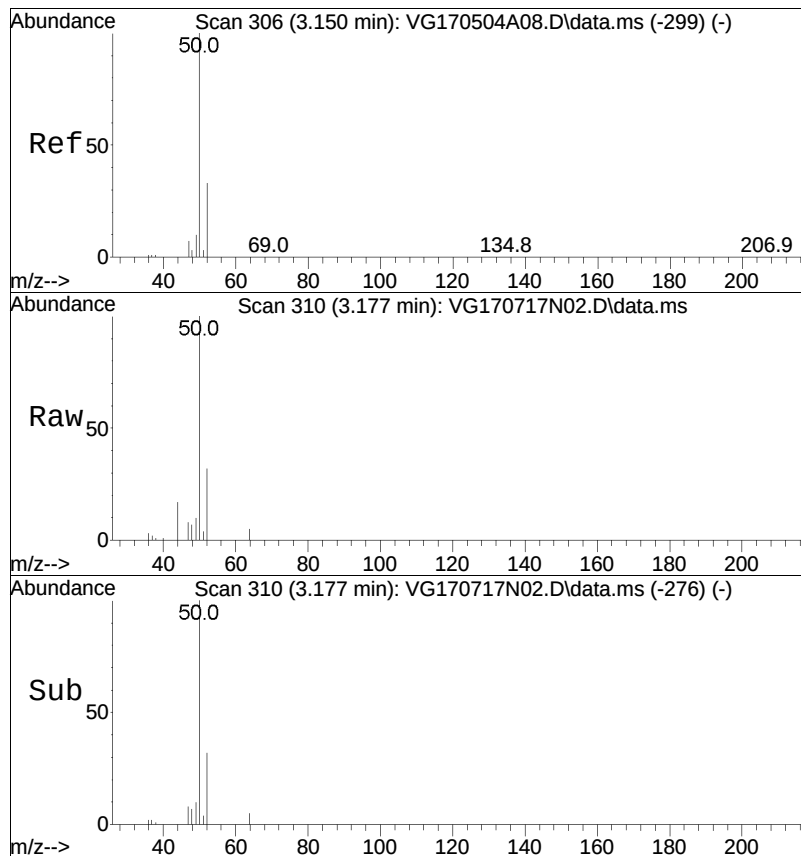




#2
 Dichlorodifluoromethane
 Concen: 7.01 ug/L
 RT: 2.825 min Scan# 258
 Delta R.T. 0.020 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

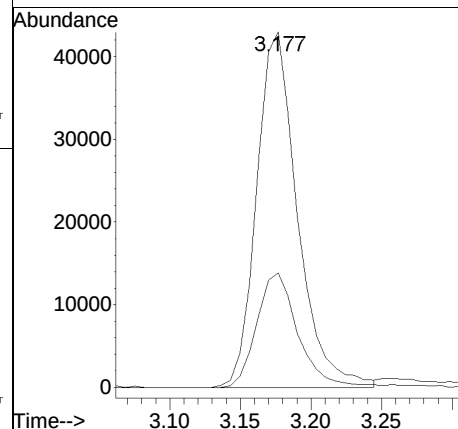
Tgt Ion	85	Ratio	100	Resp:	135308
85	100			Lower	Upper
87	32.0		21.3		44.3
50	12.1		7.2		15.0

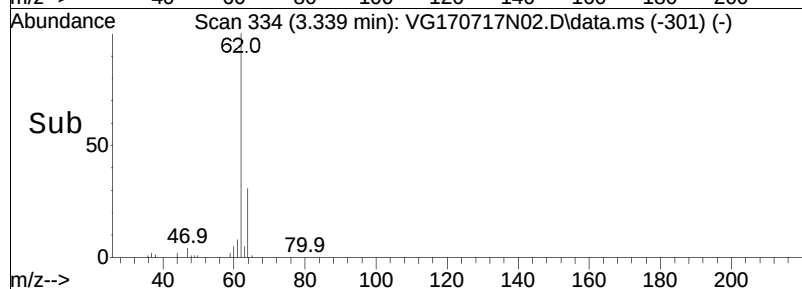
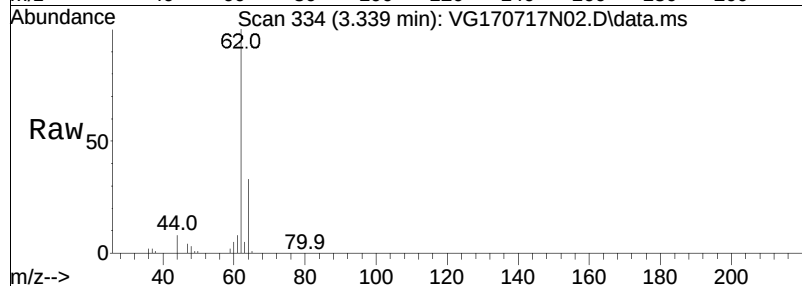
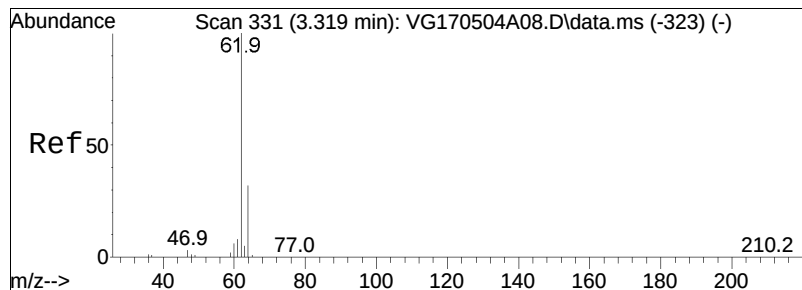




#3
 Chloromethane
 Concen: 6.20 ug/L
 RT: 3.177 min Scan# 310
 Delta R.T. 0.027 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

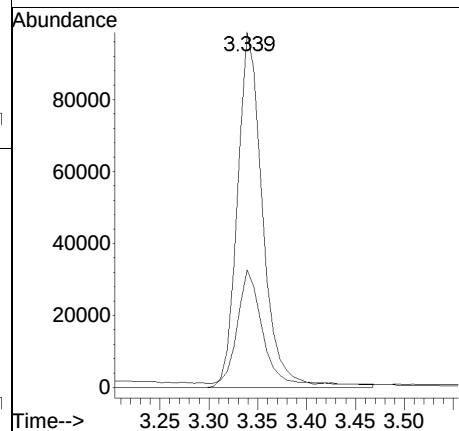
Tgt	Ion	Ratio	Lower	Upper
50	100			
52	33.3	13.5	53.5	

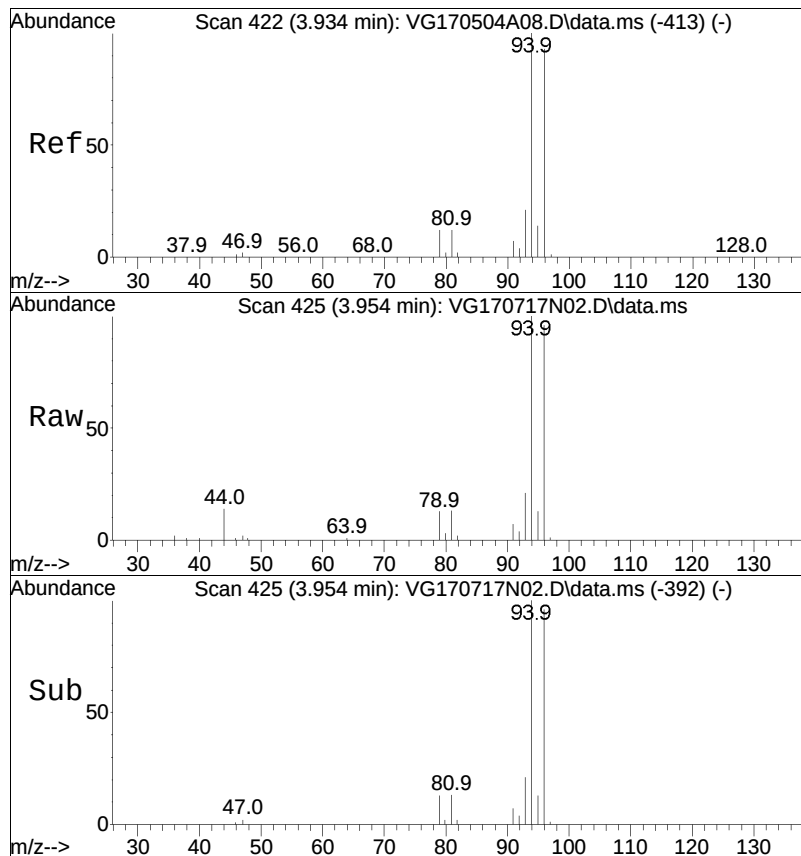




#4
 Vinyl chloride
 Concen: 8.20 ug/L
 RT: 3.339 min Scan# 334
 Delta R.T. 0.020 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

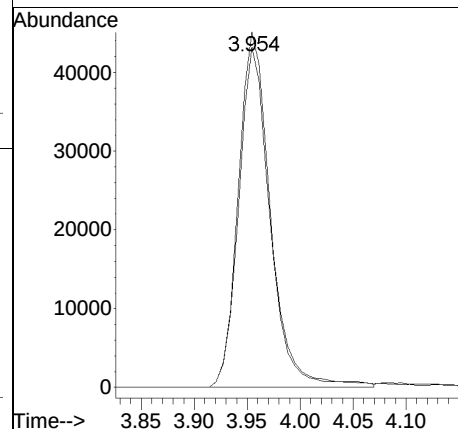
Tgt	Ion	Ratio	Lower	Upper
62	100			
64	29.8	11.4	51.4	

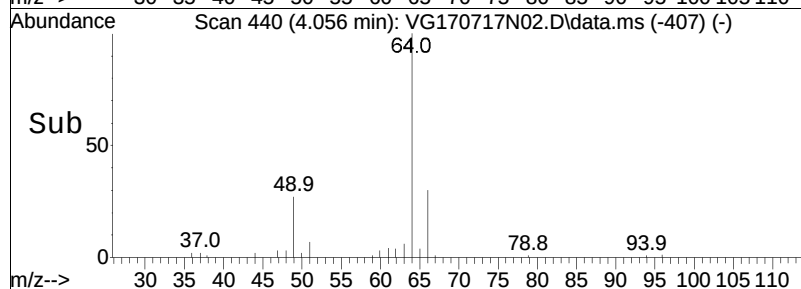
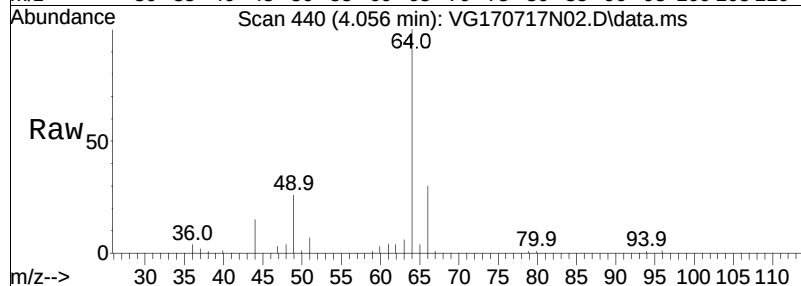
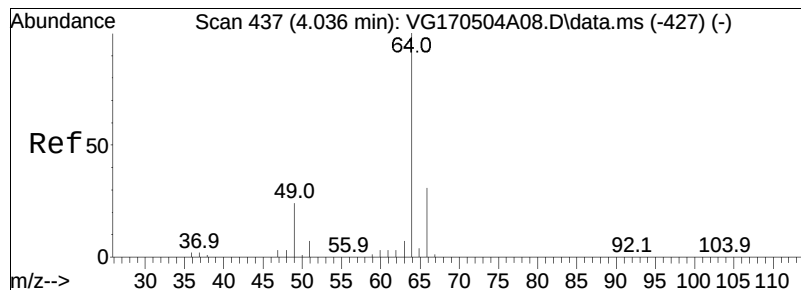




#5
 Bromomethane
 Concen: 8.67 ug/L
 RT: 3.954 min Scan# 425
 Delta R.T. 0.020 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

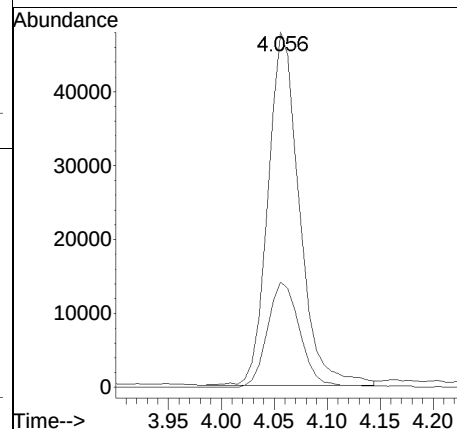
Tgt Ion	Ratio	Lower	Upper
94	100		
96	94.5	75.4	115.4

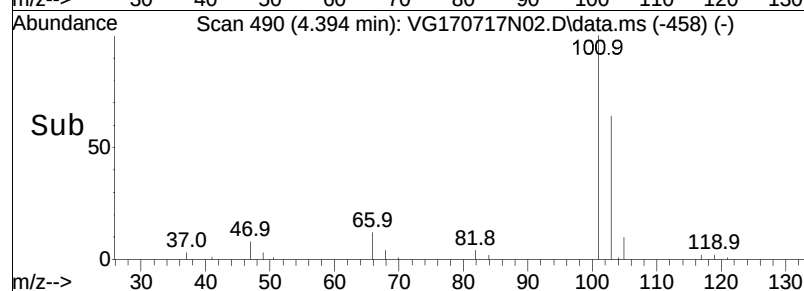
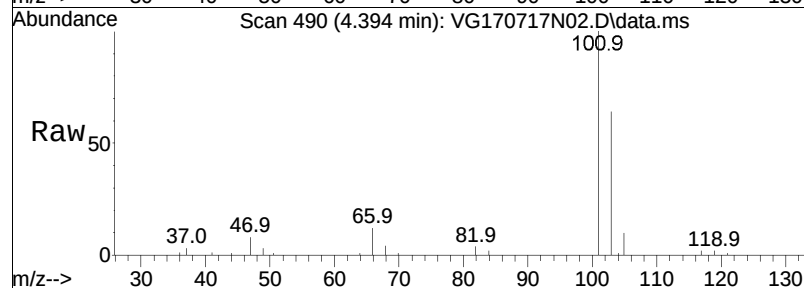
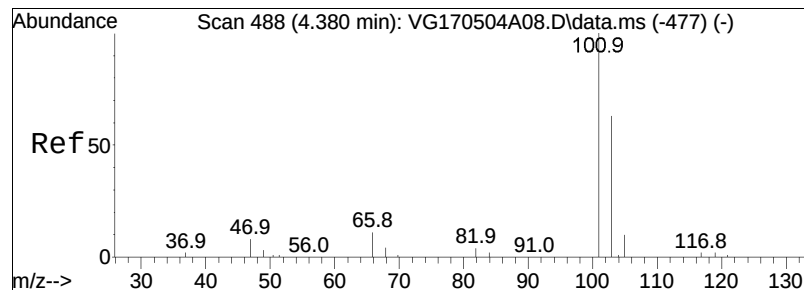




#6
 Chloroethane
 Concen: 8.84 ug/L
 RT: 4.056 min Scan# 440
 Delta R.T. 0.020 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

Tgt Ion	Ratio	Lower	Upper
64	100		
66	31.3	12.6	52.6





#7

Trichlorofluoromethane

Concen: 8.74 ug/L

RT: 4.394 min Scan# 490

Delta R.T. 0.014 min

Lab File: VG170717N02.D

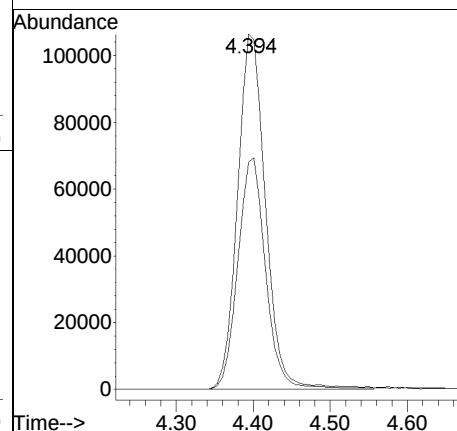
Acq: 17 Jul 2017 1:32 pm

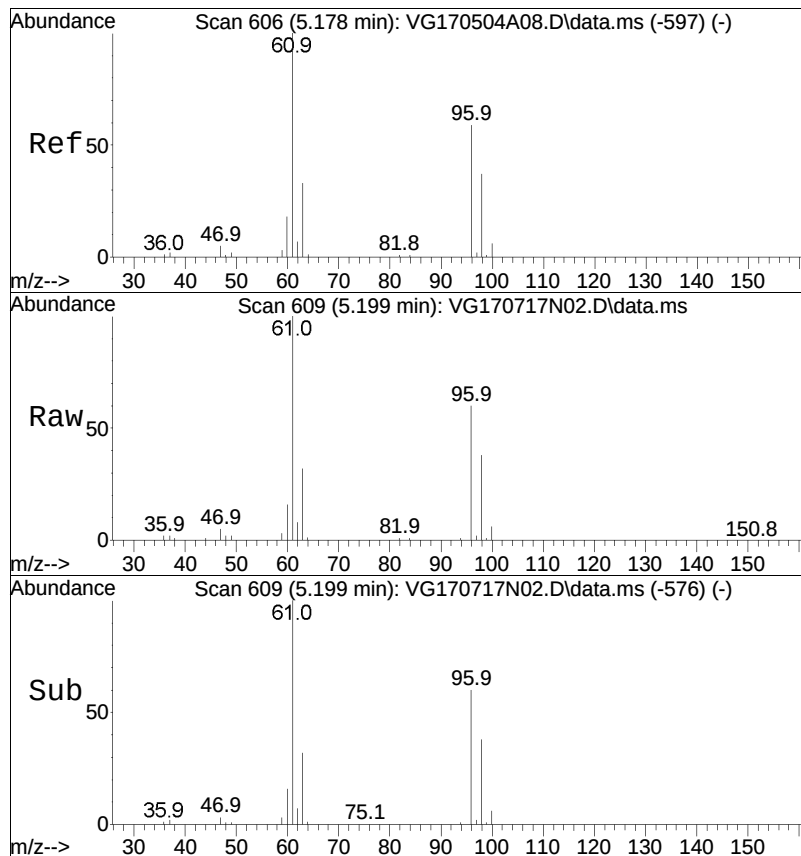
Tgt Ion:101 Resp: 269563

Ion Ratio Lower Upper

101 100

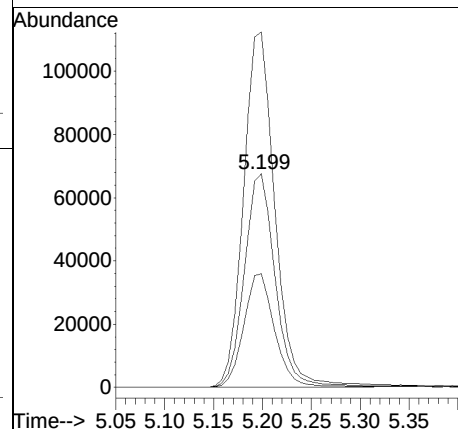
103 64.4 51.0 76.4

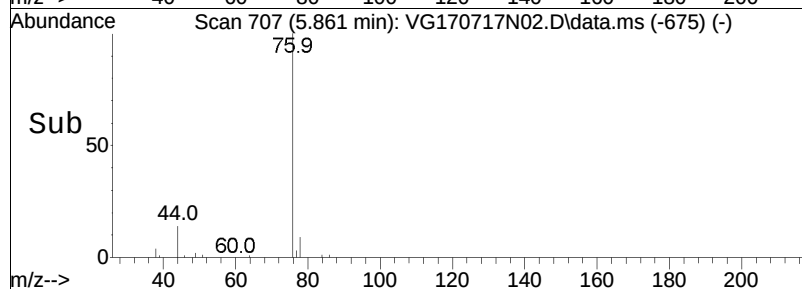
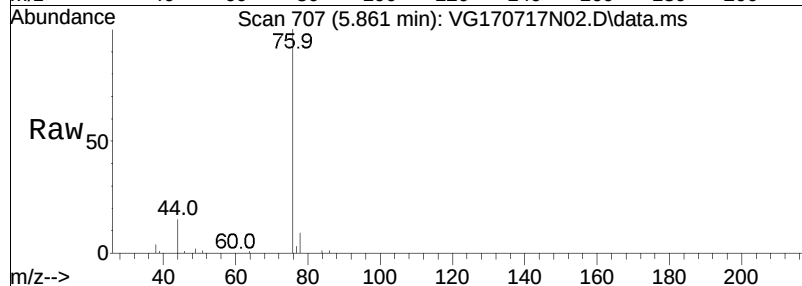
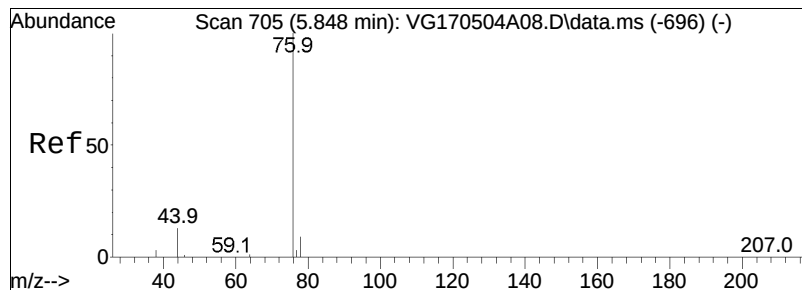




#10
 1,1-Dichloroethene
 Concen: 9.10 ug/L
 RT: 5.199 min Scan# 609
 Delta R.T. 0.021 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

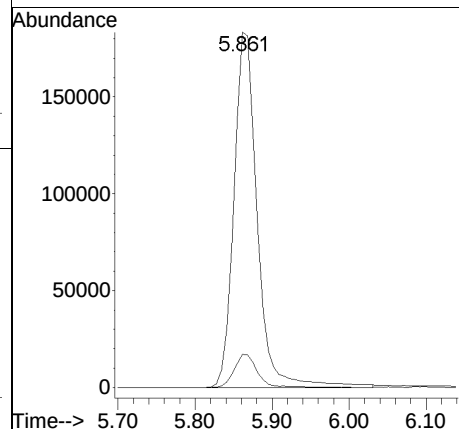
Tgt Ion:	96	Resp:	149221
Ion Ratio	Lower	Upper	
96	100		
61	169.8	157.3	235.9
63	53.2	50.1	75.1

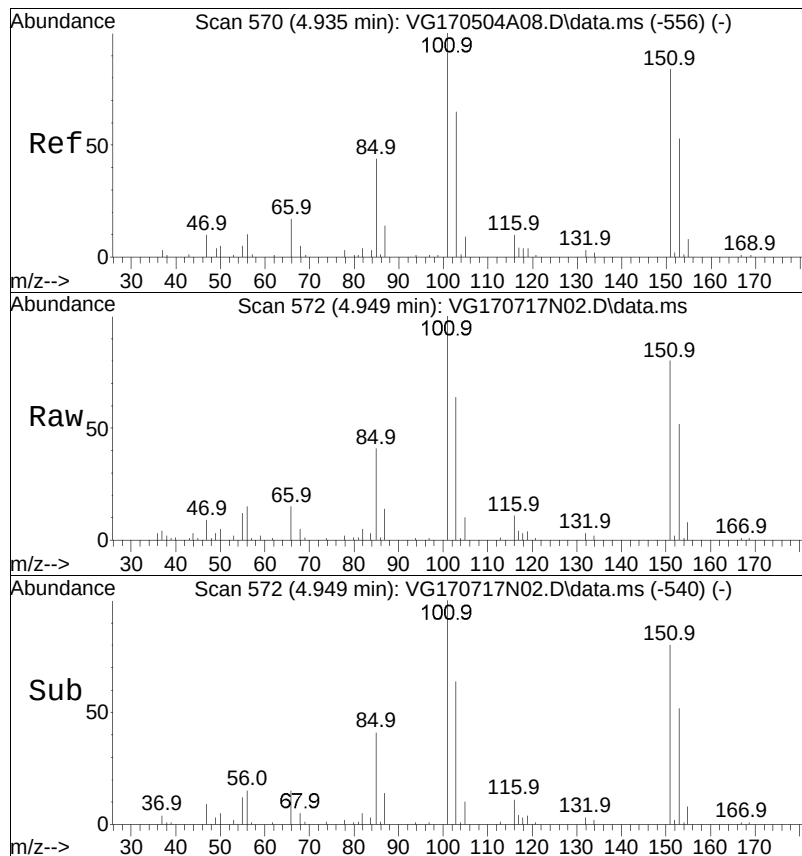




#11
Carbon disulfide
Concen: 6.89 ug/L
RT: 5.861 min Scan# 707
Delta R.T. 0.013 min
Lab File: VG170717N02.D
Acq: 17 Jul 2017 1:32 pm

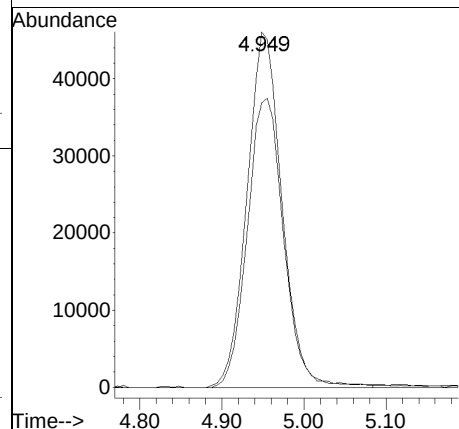
Tgt Ion	Ratio	Lower	Upper
76	100		
78	9.2	5.8	12.0

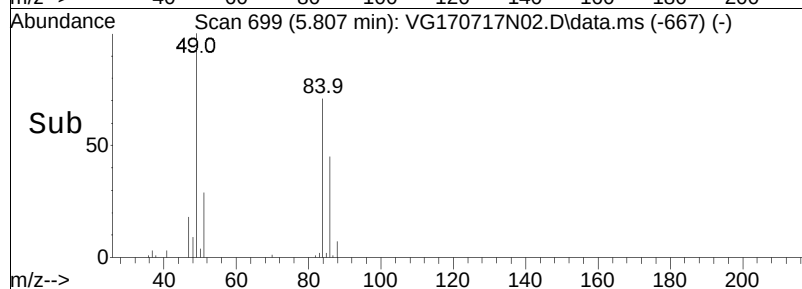
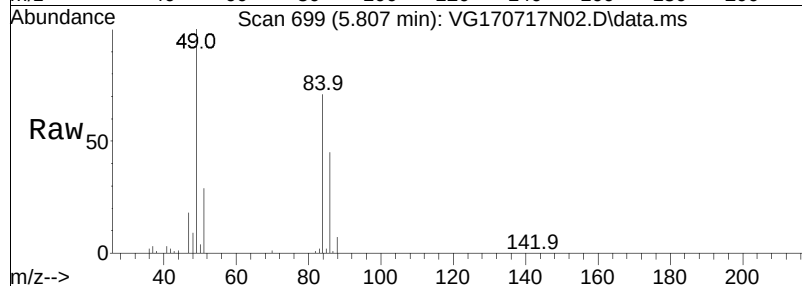
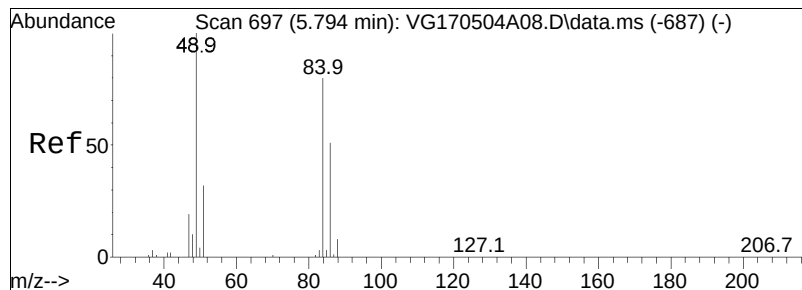




#12
 Freon-113
 Concen: 8.92 ug/L
 RT: 4.949 min Scan# 572
 Delta R.T. 0.014 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

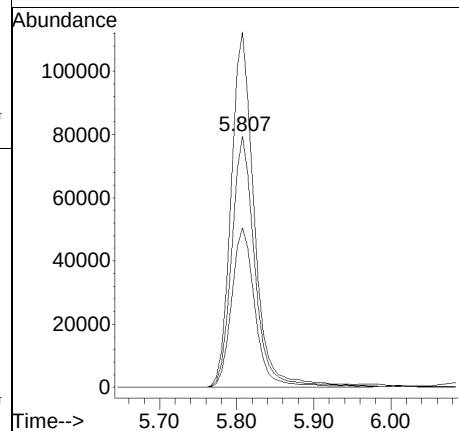
Tgt	Ion	Ratio	Resp	Lower	Upper
101	100		136910		
151	84.6	57.1	85.7		
76	0.0	0.0	0.0		

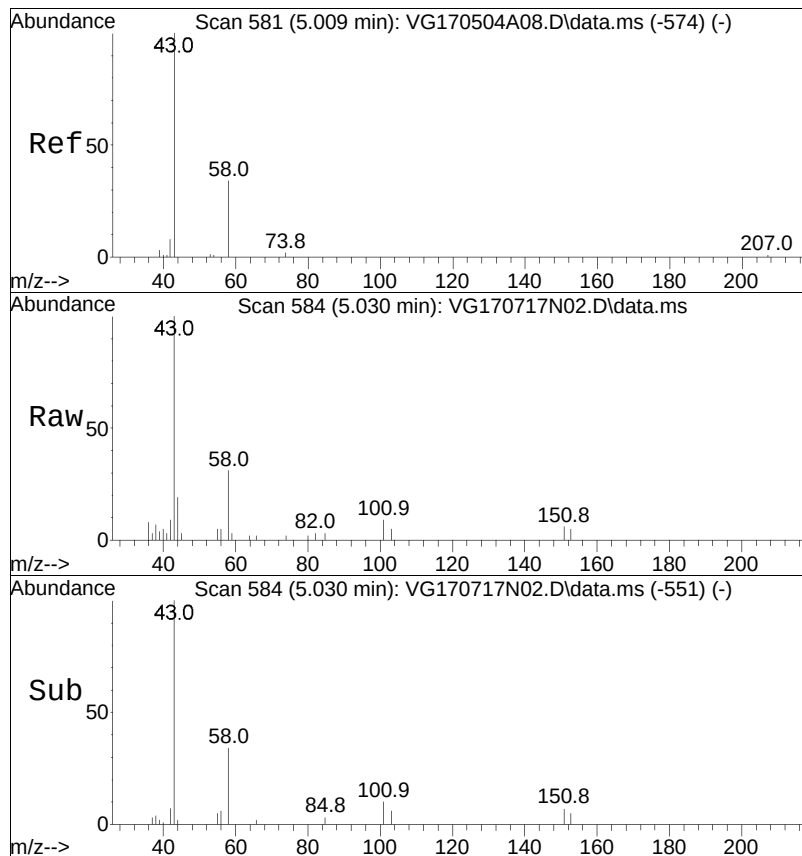




#15
Methylene chloride
Concen: 9.41 ug/L
RT: 5.807 min Scan# 699
Delta R.T. 0.013 min
Lab File: VG170717N02.D
Acq: 17 Jul 2017 1:32 pm

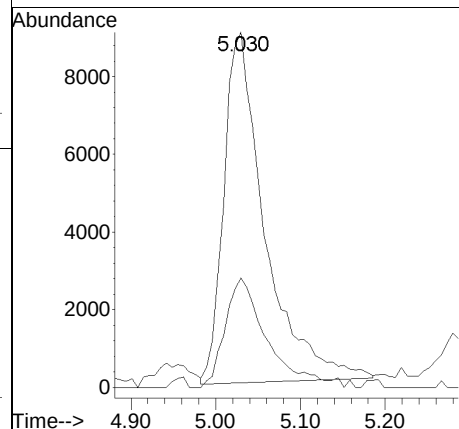
Tgt	Ion	Ratio	Lower	Upper
84	100			
86	64.1	43.1	89.5	
49	140.4	80.7	167.5	

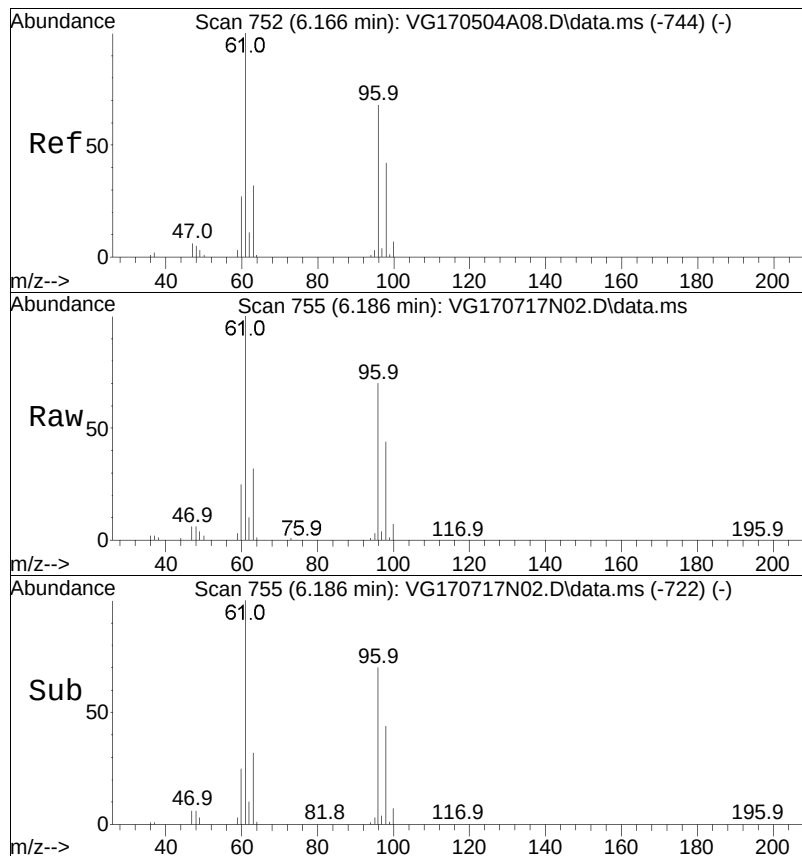




#17
 Acetone
 Concen: 10.20 ug/L
 RT: 5.030 min Scan# 584
 Delta R.T. 0.021 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

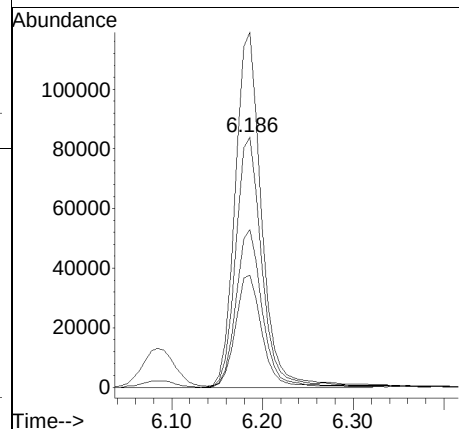
Tgt	Ion	Ratio	Lower	Upper
43	100			
58	32.3	18.6	28.0#	

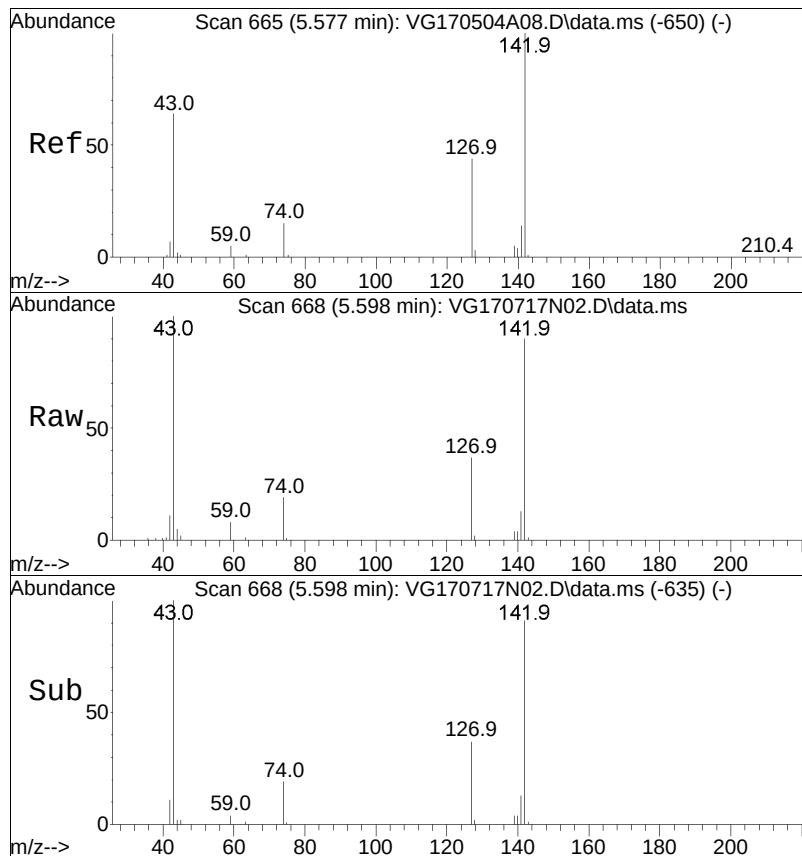




#18
 trans-1,2-Dichloroethene
 Concen: 9.10 ug/L
 RT: 6.186 min Scan# 755
 Delta R.T. 0.020 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

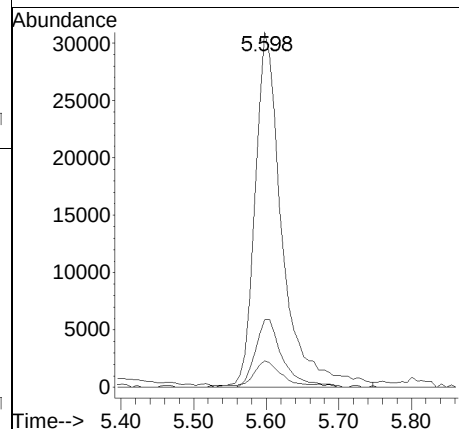
Tgt Ion:	96	Resp:	170221
Ion Ratio	Lower	Upper	
96	100		
61	143.2	107.5	223.3
98	61.0	40.0	83.0
63	45.6	33.9	70.3

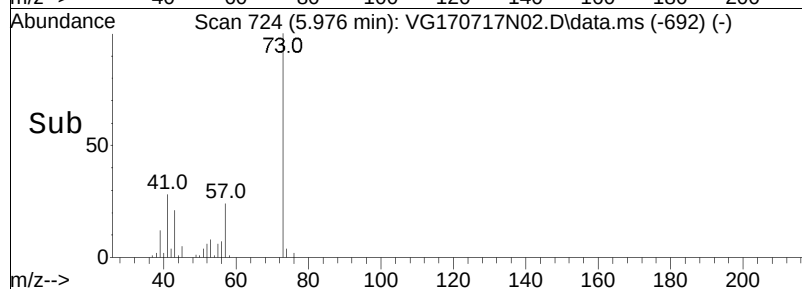
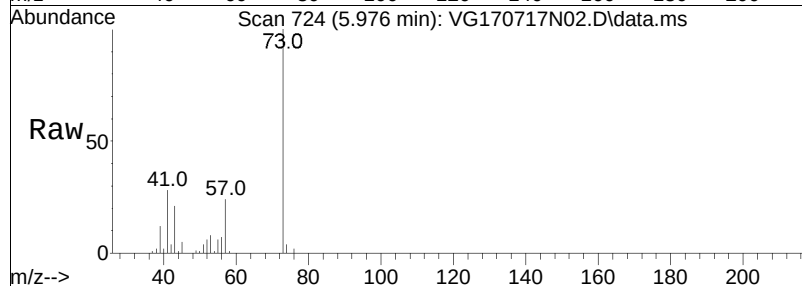
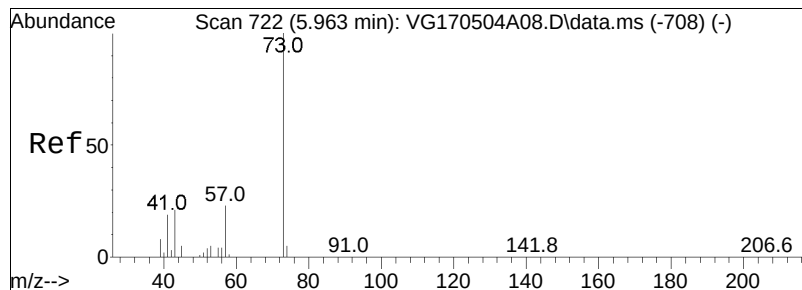




#19
Methyl acetate
Concen: 9.19 ug/L
RT: 5.598 min Scan# 668
Delta R.T. 0.021 min
Lab File: VG170717N02.D
Acq: 17 Jul 2017 1:32 pm

Tgt	Ion	Ratio	Resp	Lower	Upper
43	100		80811		
74	19.3	21.1		31.7#	
59	6.3	7.1		10.7#	





#20

Methyl tert-butyl ether

Concen: 10.88 ug/L

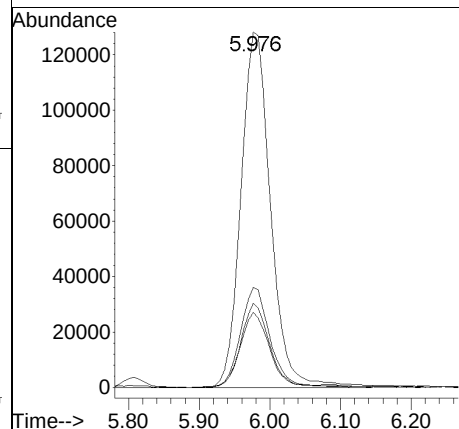
RT: 5.976 min Scan# 724

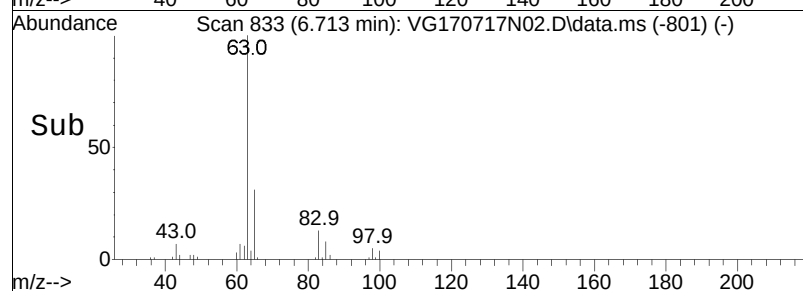
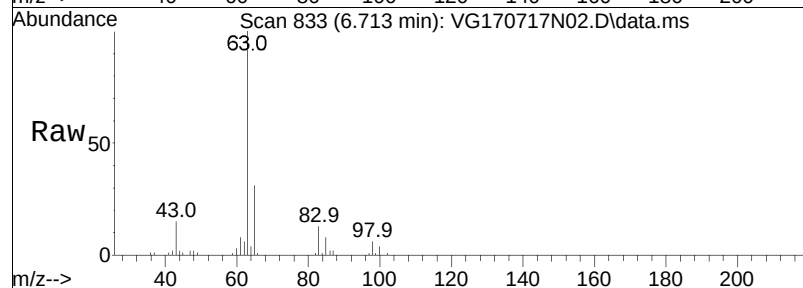
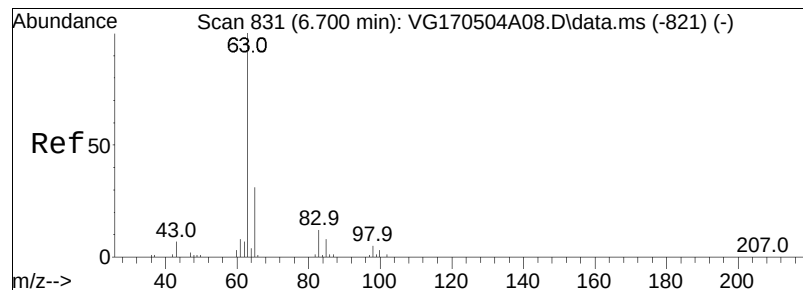
Delta R.T. 0.013 min

Lab File: VG170717N02.D

Acq: 17 Jul 2017 1:32 pm

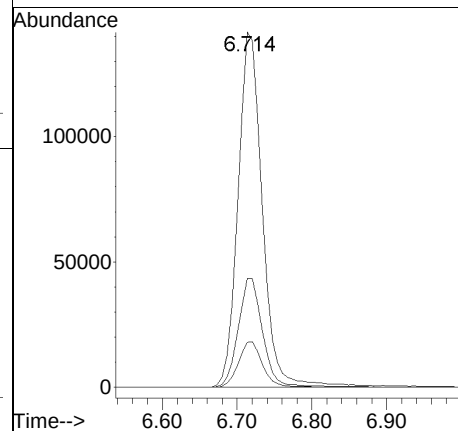
Tgt	Ion: 73	Resp:	374891
Ion	Ratio	Lower	Upper
73	100		
57	23.0	11.4	23.8
43	20.8	12.5	25.9
41	28.3	12.7	26.5#

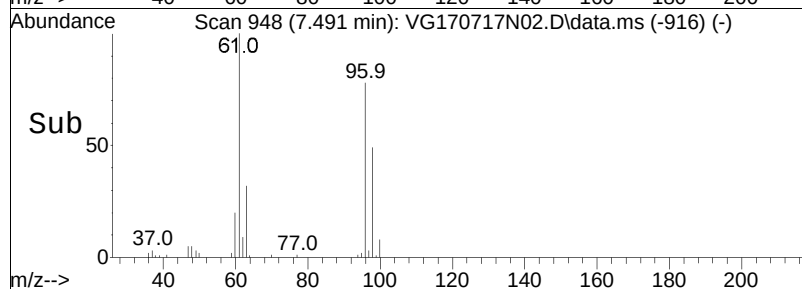
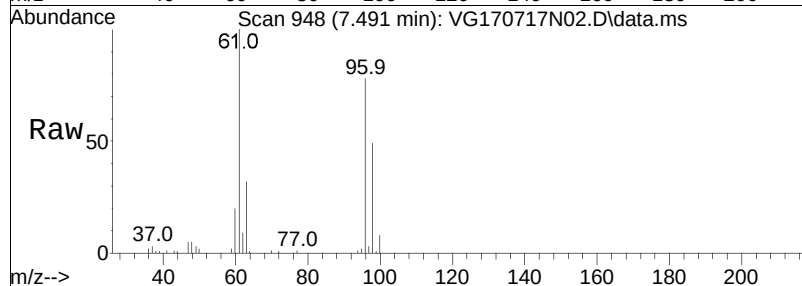
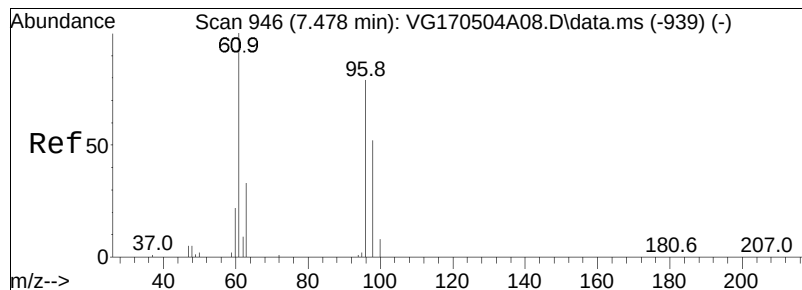




#23
 1,1-Dichloroethane
 Concen: 9.13 ug/L
 RT: 6.713 min Scan# 833
 Delta R.T. 0.013 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

Tgt	Ion: 63	Resp:	321954
Ion	Ratio	Lower	Upper
63	100		
65	30.8	11.0	51.0
83	12.8	0.0	32.6





#28

cis-1,2-Dichloroethene

Concen: 9.32 ug/L

RT: 7.491 min Scan# 948

Delta R.T. 0.013 min

Lab File: VG170717N02.D

Acq: 17 Jul 2017 1:32 pm

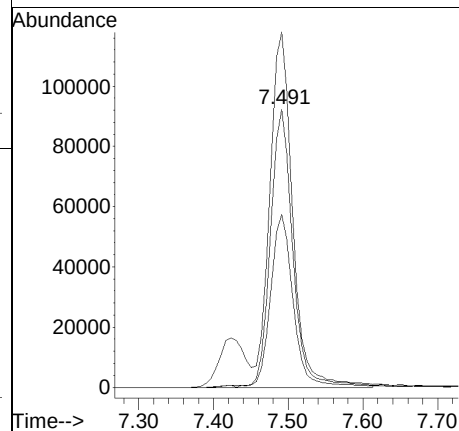
Tgt Ion: 96 Resp: 193760

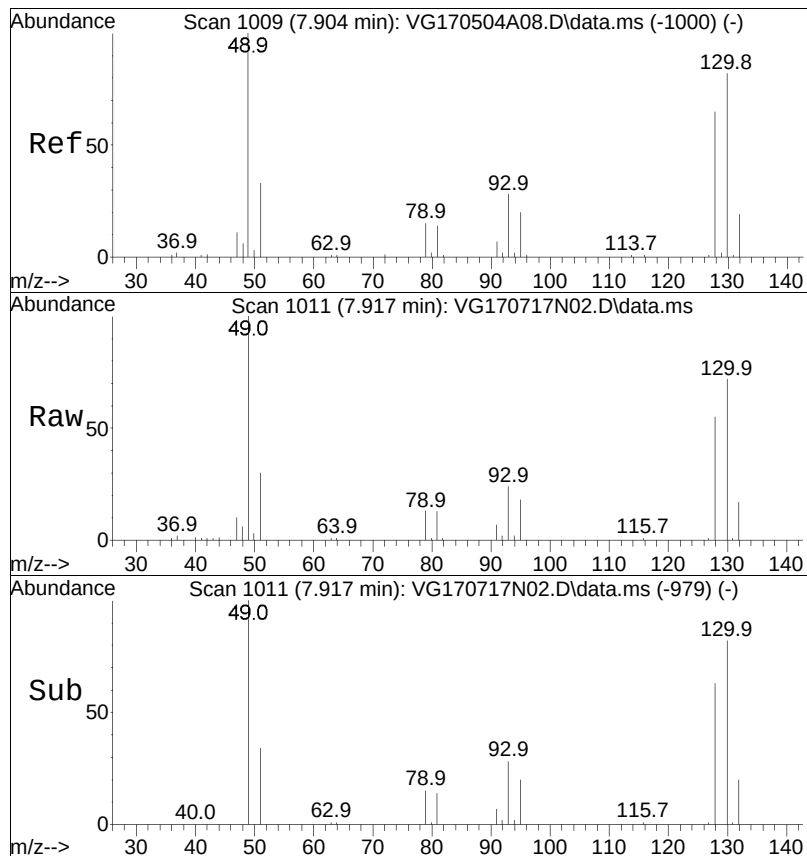
Ion Ratio Lower Upper

96 100

61 128.4 121.2 181.8

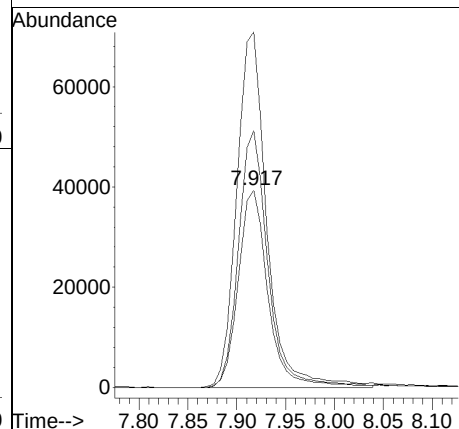
98 63.1 48.7 73.1

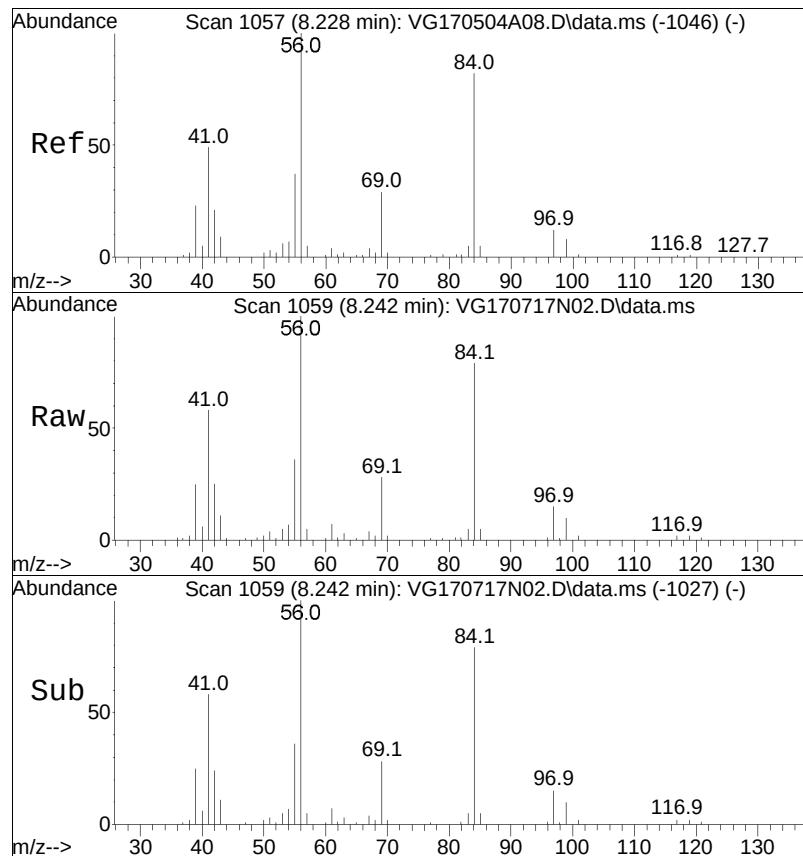




#30
 Bromochloromethane
 Concen: 9.41 ug/L
 RT: 7.917 min Scan# 1011
 Delta R.T. 0.013 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

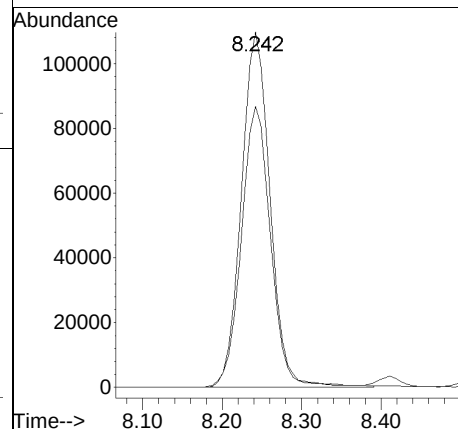
Tgt Ion	Ratio	Lower	Upper
128	100		
49	183.8	164.3	246.5
130	128.5	103.7	155.5

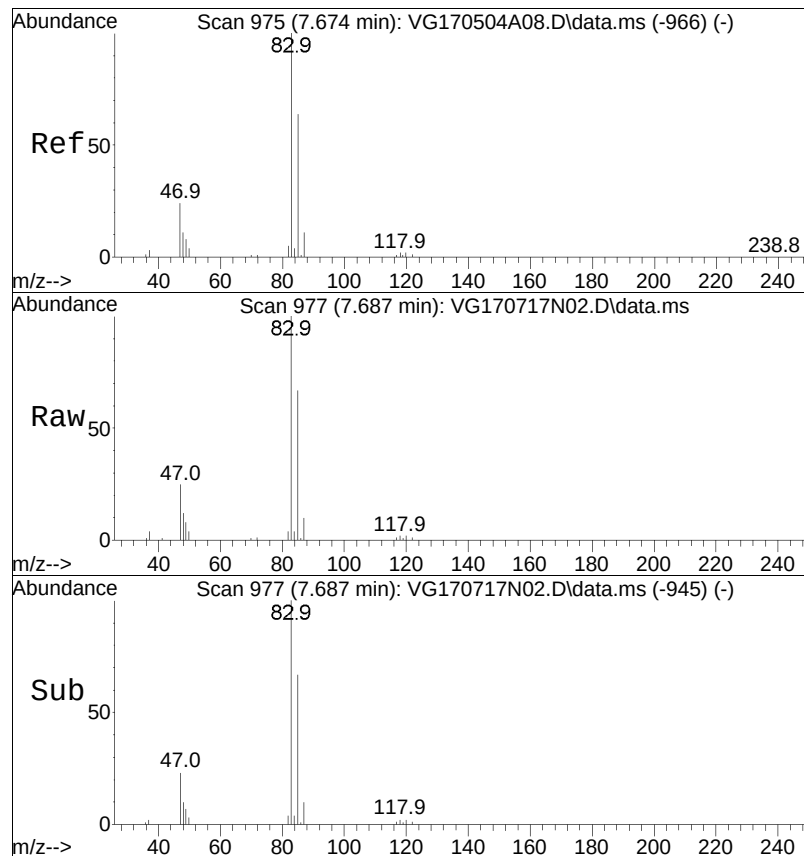




#31
Cyclohexane
Concen: 8.53 ug/L
RT: 8.242 min Scan# 1059
Delta R.T. 0.014 min
Lab File: VG170717N02.D
Acq: 17 Jul 2017 1:32 pm

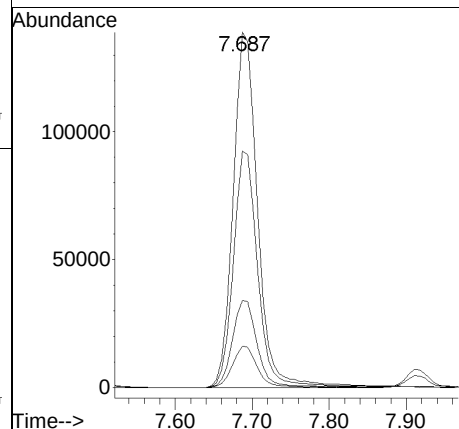
Tgt	Ion	Ratio	Lower	Upper
56	100			
84	80.2	59.9	124.3	

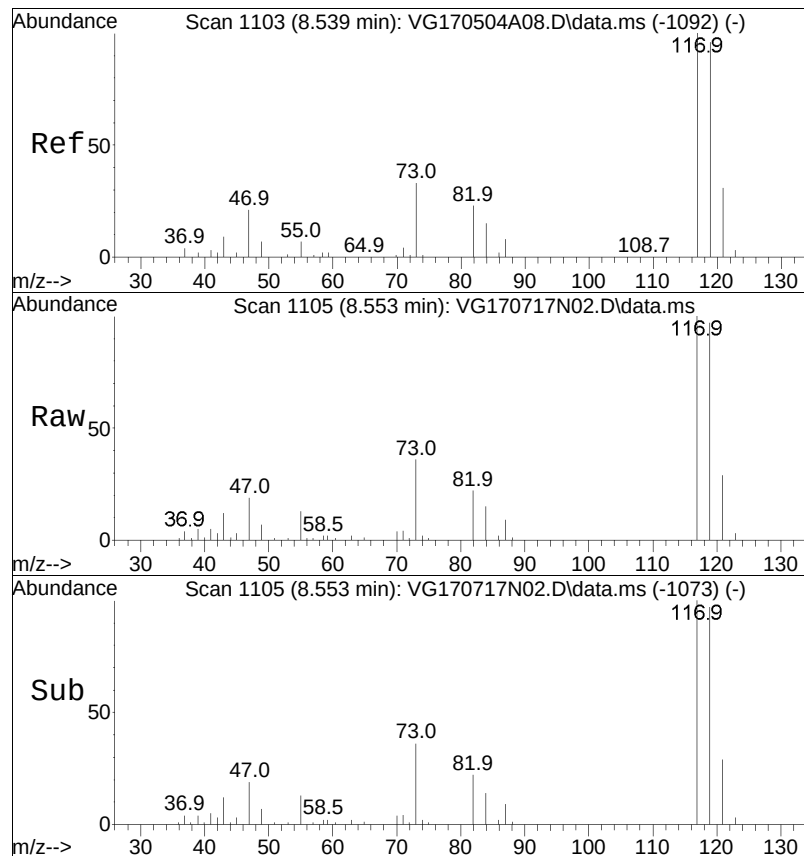




#32
 Chloroform
 Concen: 9.38 ug/L
 RT: 7.687 min Scan# 977
 Delta R.T. 0.013 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

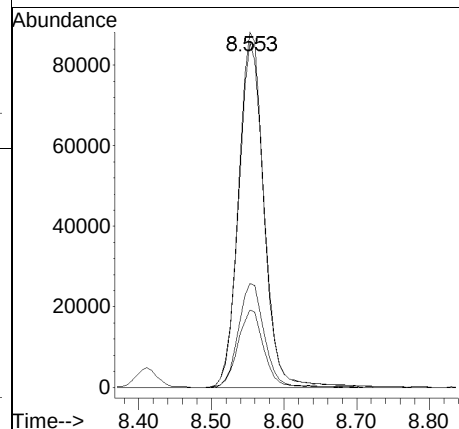
Tgt	Ion: 83	Resp:	308042
Ion	Ratio	Lower	Upper
83	100		
85	65.8	41.4	86.0
47	25.0	15.0	31.2
48	11.6	6.9	14.3

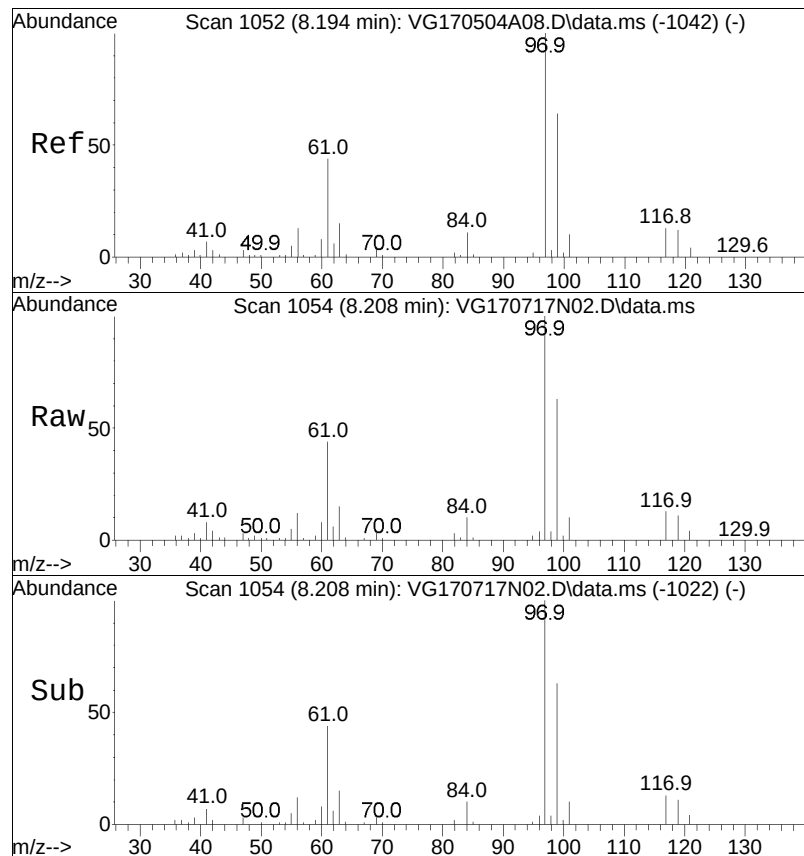




#34
 Carbon tetrachloride
 Concen: 9.19 ug/L
 RT: 8.553 min Scan# 1105
 Delta R.T. 0.014 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

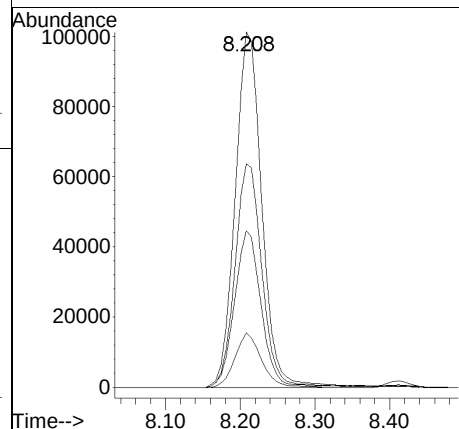
Tgt Ion:	117	Resp:	216807
Ion Ratio	Lower	Upper	
117	100		
119	95.8	60.0	124.6
121	29.5	19.4	40.2
82	21.9	17.3	35.9

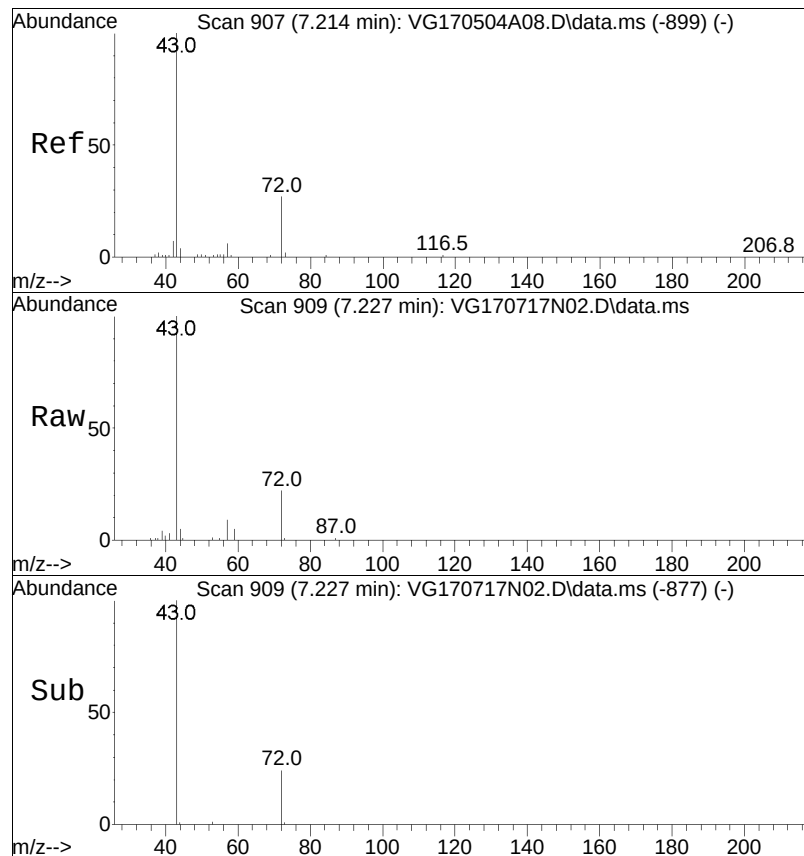




#37
 1,1,1-Trichloroethane
 Concen: 9.23 ug/L
 RT: 8.208 min Scan# 1054
 Delta R.T. 0.014 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

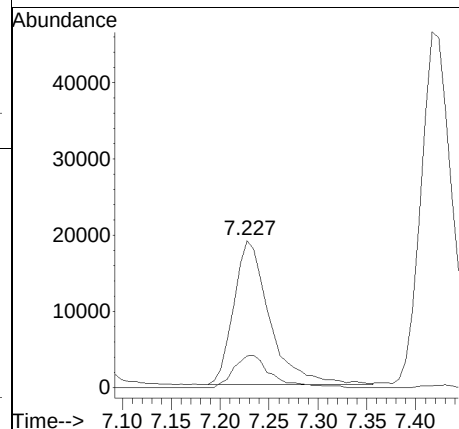
Tgt Ion: 97	Resp: 251657
Ion Ratio	Lower Upper
97 100	
99 63.8	41.3 85.7
61 43.9	29.4 61.0
63 15.2	10.3 21.5

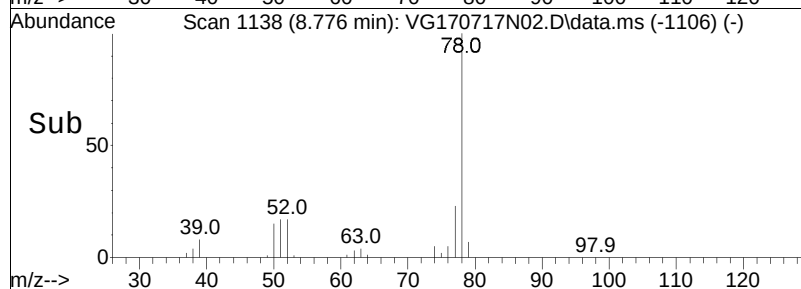
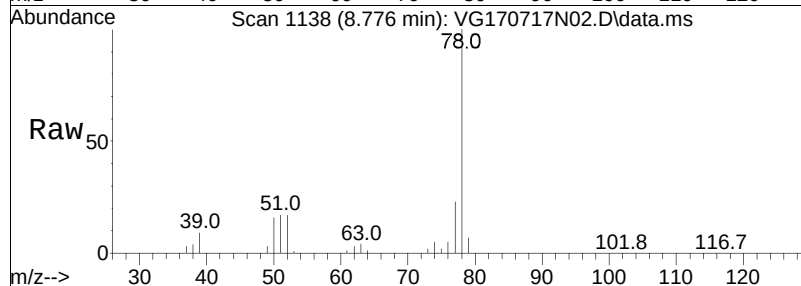
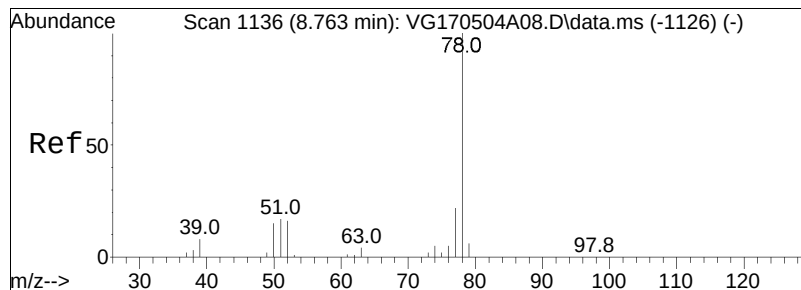




#39
 2-Butanone
 Concen: 9.89 ug/L
 RT: 7.227 min Scan# 909
 Delta R.T. 0.013 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

Tgt	Ion	Resp	Lower	Upper
43	100			
72	23.0	48694	22.6	33.8





#41

Benzene

Concen: 9.32 ug/L

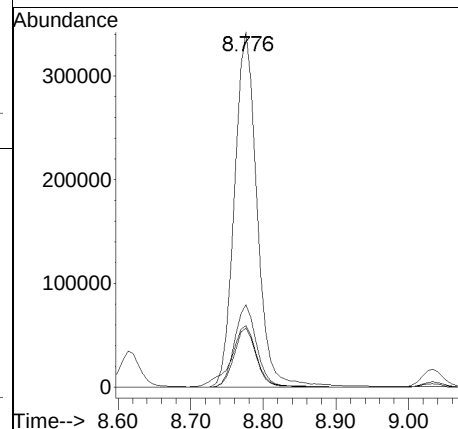
RT: 8.776 min Scan# 1138

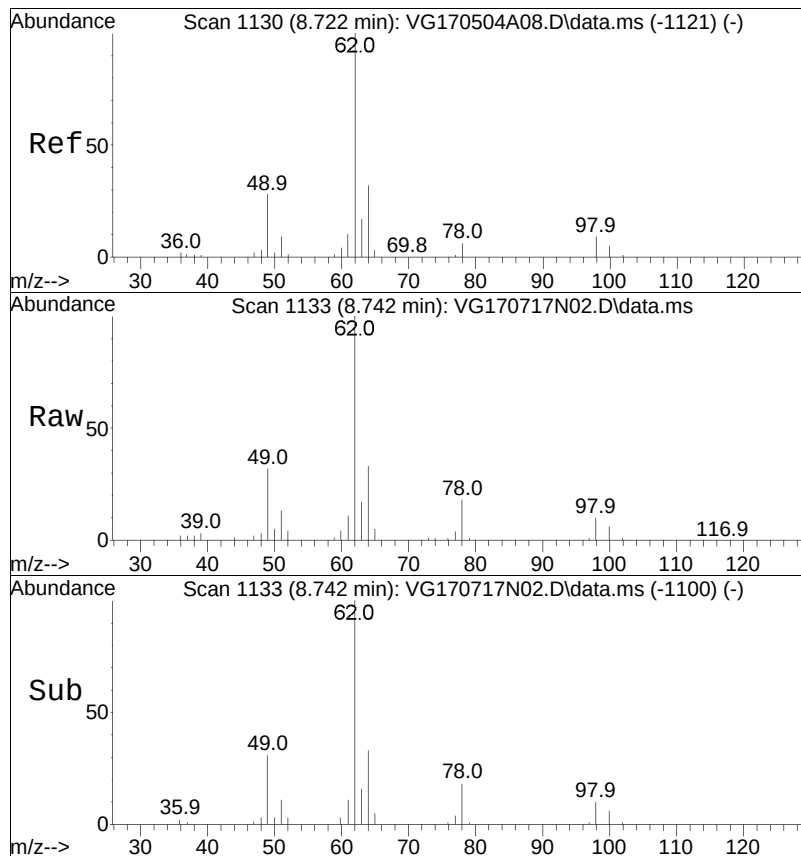
Delta R.T. 0.013 min

Lab File: VG170717N02.D

Acq: 17 Jul 2017 1:32 pm

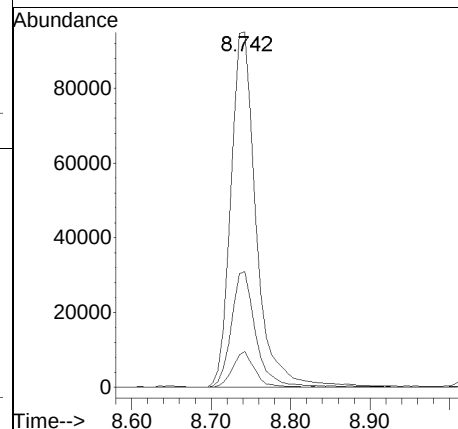
Tgt	Ion: 78	Resp:	747233
Ion	Ratio	Lower	Upper
78	100		
77	23.2	15.0	31.2
51	19.8	12.7	26.3
52	16.7	9.9	20.7

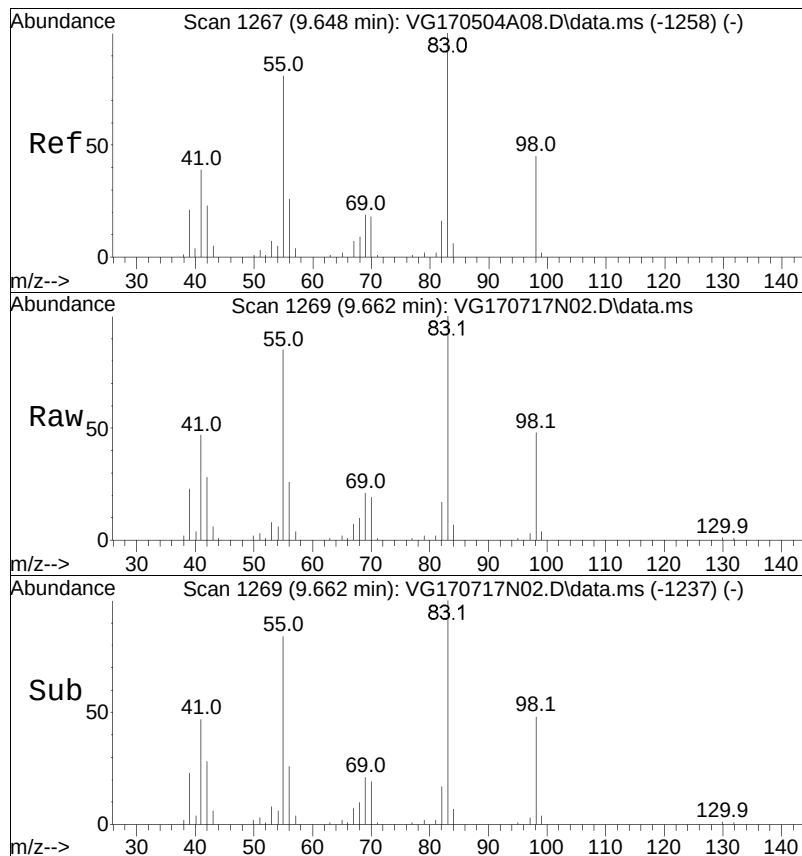




#44
 1,2-Dichloroethane
 Concen: 9.02 ug/L
 RT: 8.742 min Scan# 1133
 Delta R.T. 0.020 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

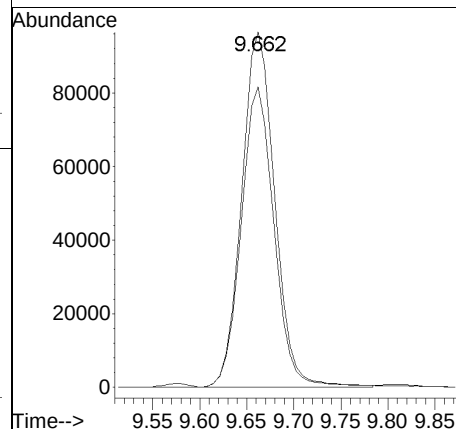
Tgt Ion:	62	Resp:	212030
Ion Ratio	Lower	Upper	
62	100		
64	31.5	11.5	51.5
98	8.9	0.0	25.6

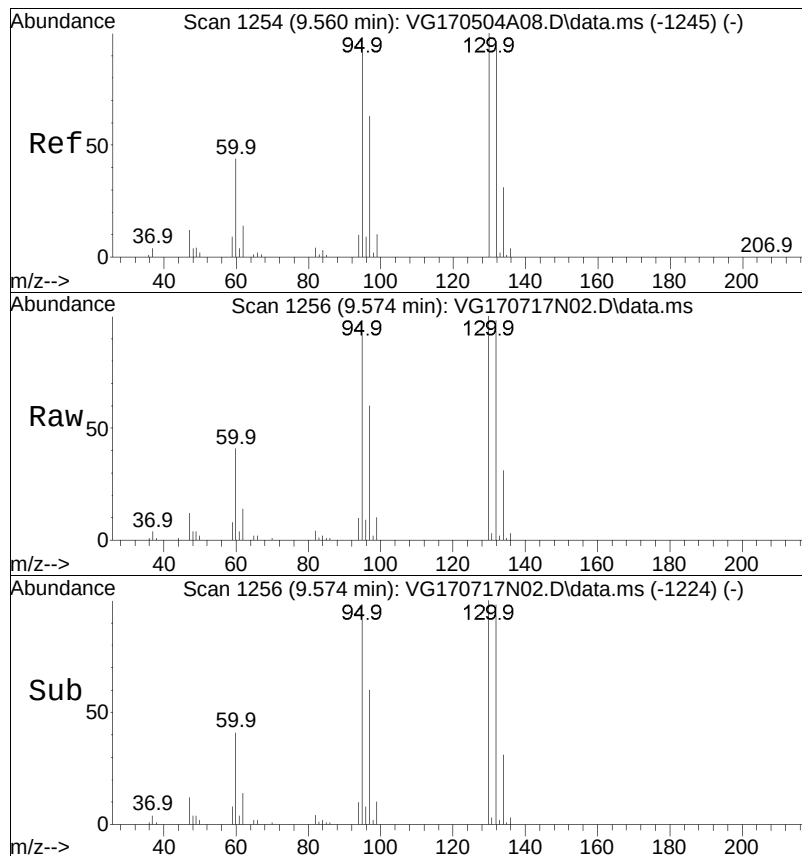




#47
Methyl cyclohexane
Concen: 8.92 ug/L
RT: 9.662 min Scan# 1269
Delta R.T. 0.014 min
Lab File: VG170717N02.D
Acq: 17 Jul 2017 1:32 pm

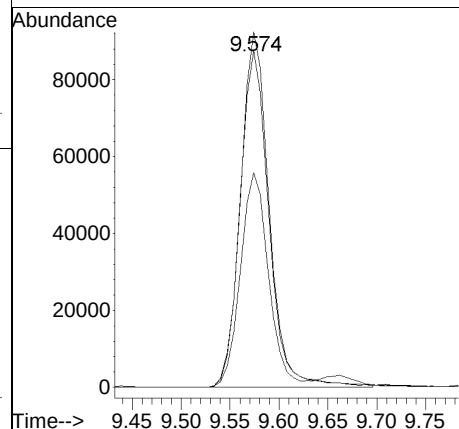
Tgt	Ion	Ratio	Lower	Upper
83	100			
55	84.6	65.3	97.9	

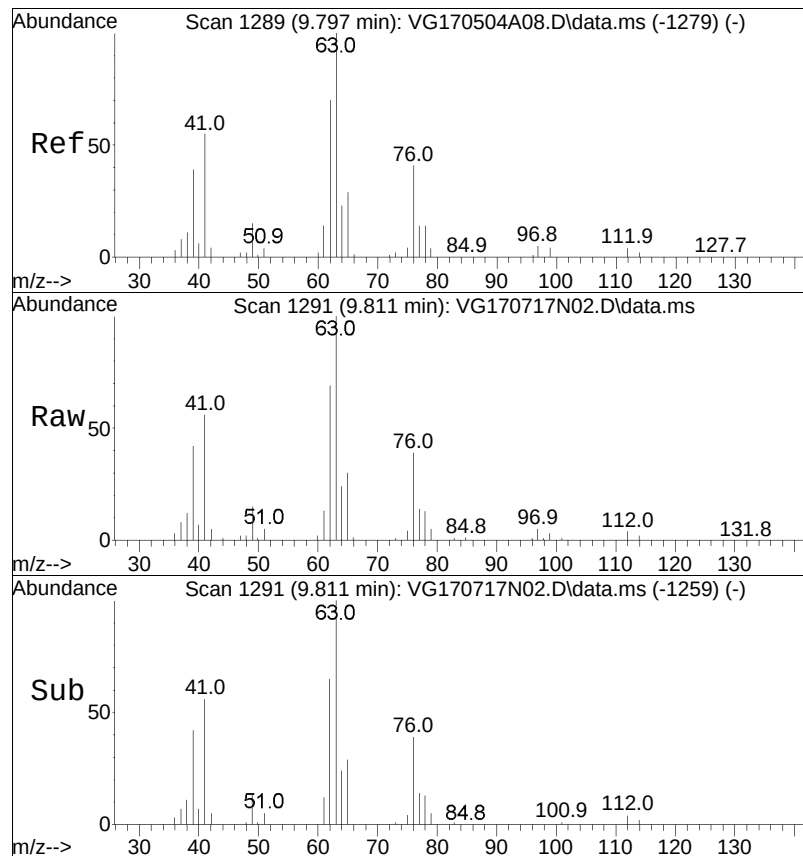




#48
 Trichloroethene
 Concen: 8.89 ug/L
 RT: 9.574 min Scan# 1256
 Delta R.T. 0.014 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

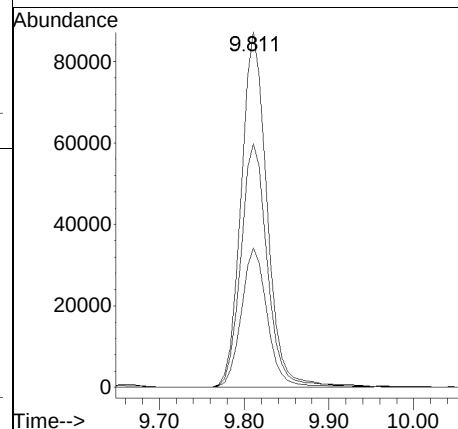
Tgt Ion	Ratio	Lower	Upper
95	100		
97	62.6	47.6	71.4
130	104.1	60.4	90.6#

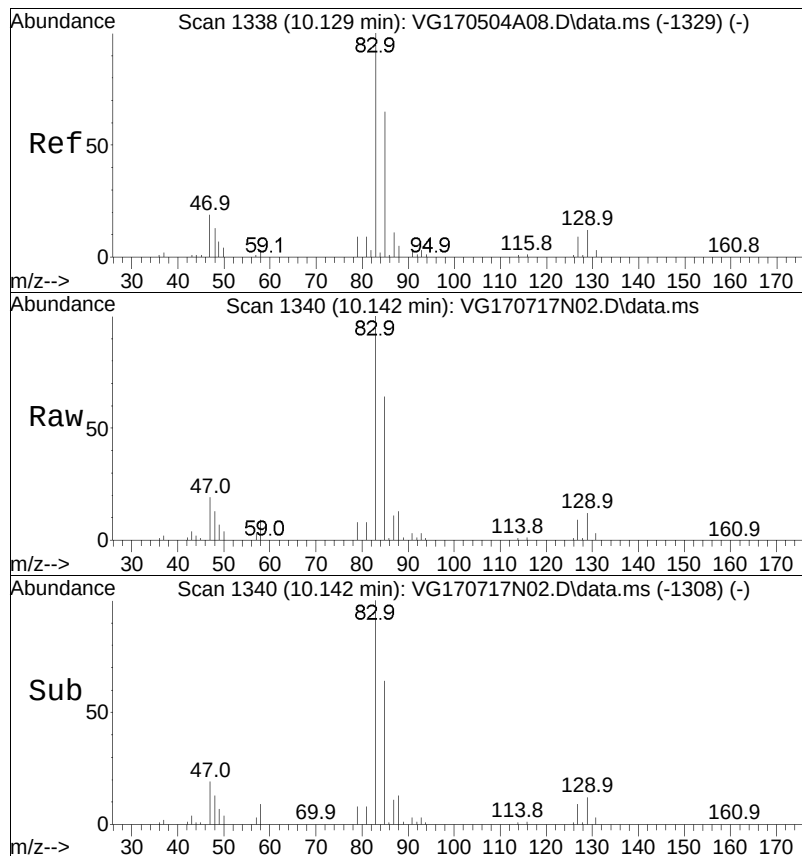




#51
 1,2-Dichloropropane
 Concen: 9.46 ug/L
 RT: 9.811 min Scan# 1291
 Delta R.T. 0.014 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

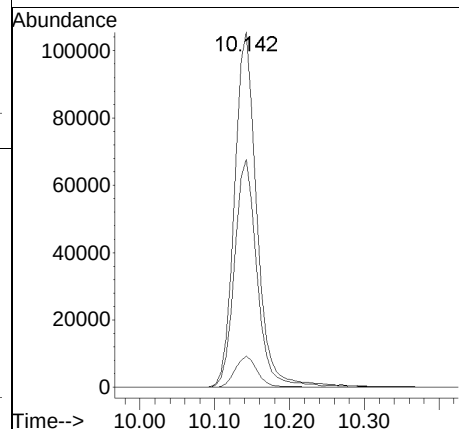
Tgt Ion:	63	Resp:	185949
Ion Ratio	Lower	Upper	
63	100		
62	70.5	56.3	84.5
76	39.8	45.3	67.9#

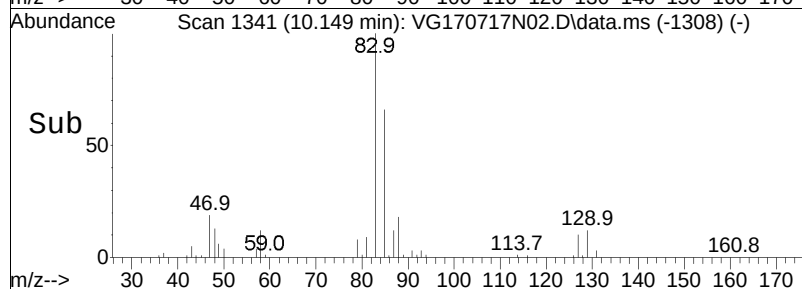
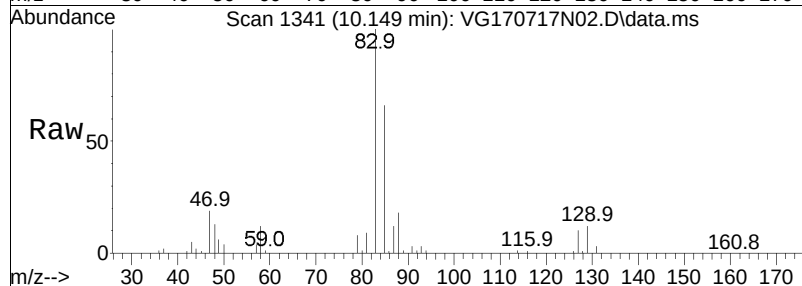
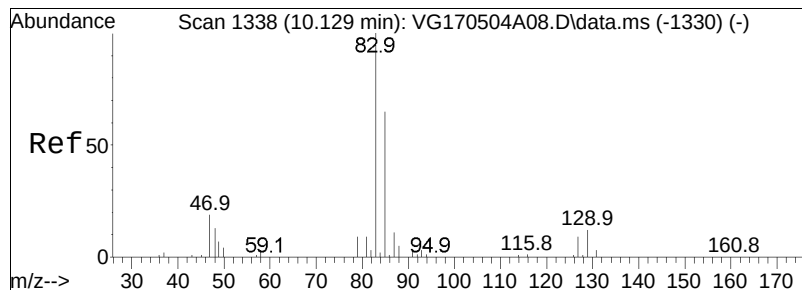




#54
 Bromodichloromethane
 Concen: 9.75 ug/L
 RT: 10.142 min Scan# 1340
 Delta R.T. 0.013 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

Tgt Ion	83	Resp	220403
Ion Ratio	Lower	Upper	
83	100		
85	65.1	51.5	77.3
127	8.9	5.4	8.2#





#57

1,4-Dioxane

Concen: 550.75 ug/L M1

RT: 10.149 min Scan# 1341

Delta R.T. 0.020 min

Lab File: VG170717N02.D

Acq: 17 Jul 2017 1:32 pm

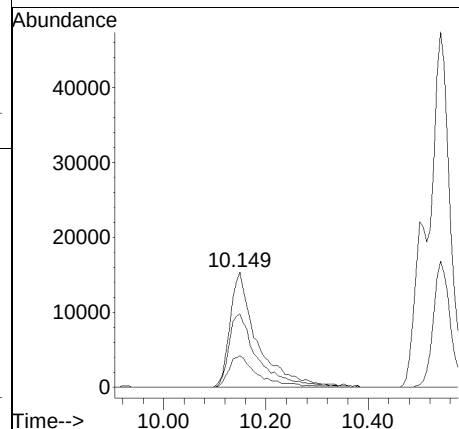
Tgt Ion: 88 Resp: 57835

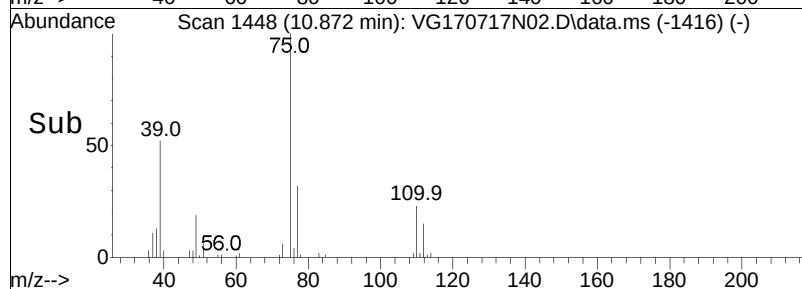
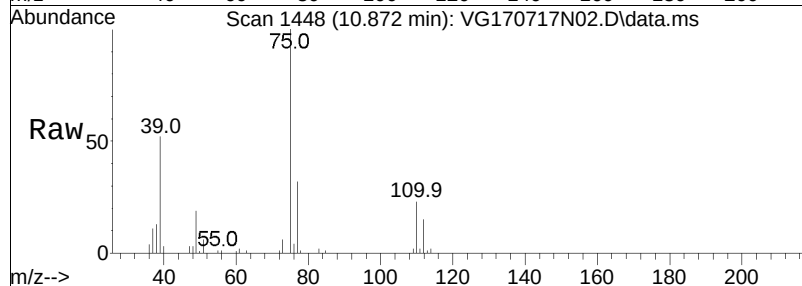
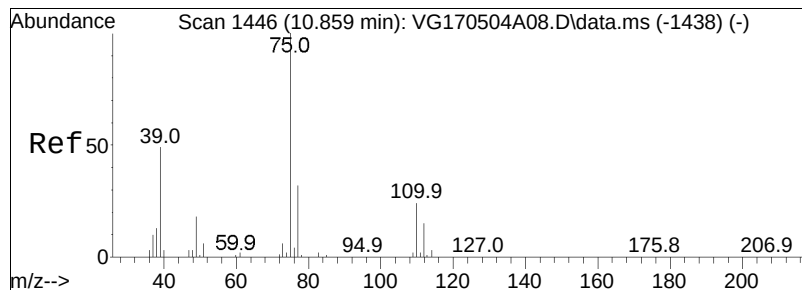
Ion Ratio Lower Upper

88 100

58 66.2 54.8 82.2

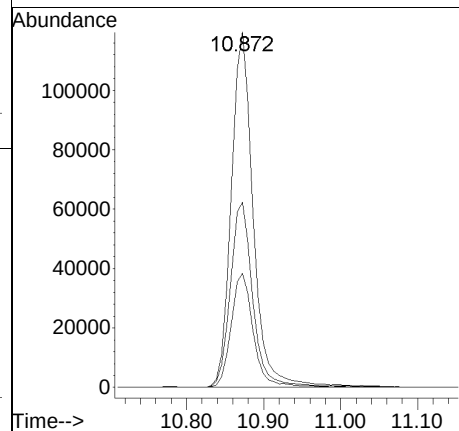
43 29.5 25.4 38.2

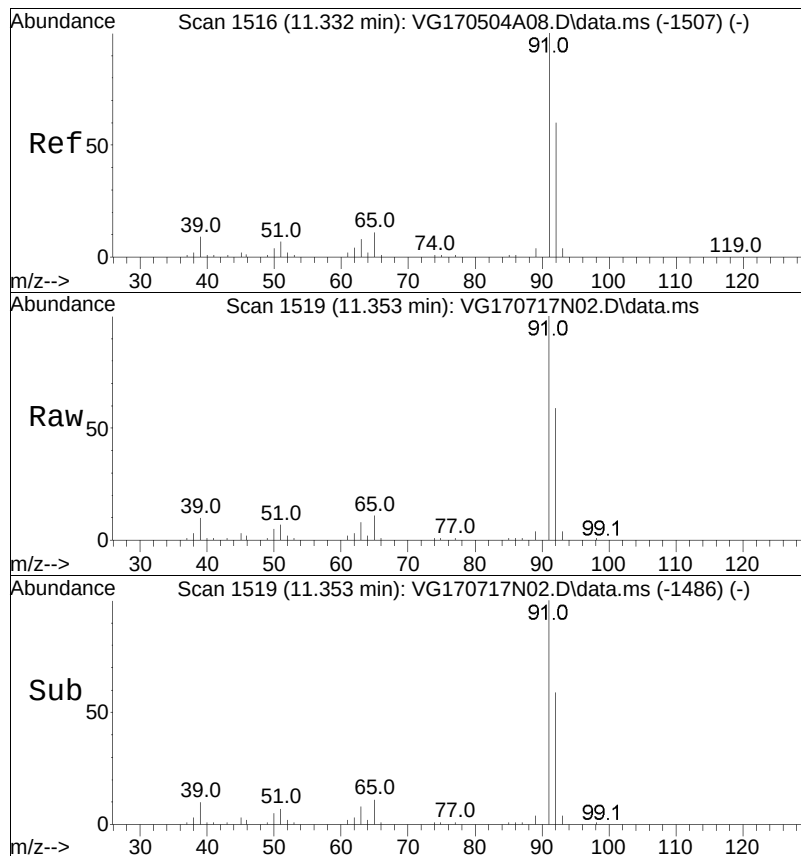




#58
 cis-1,3-Dichloropropene
 Concen: 8.97 ug/L
 RT: 10.872 min Scan# 1448
 Delta R.T. 0.013 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

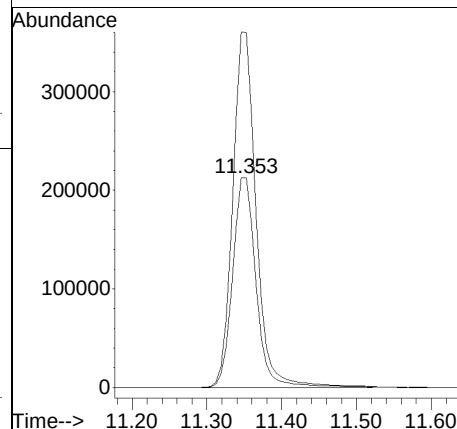
Tgt Ion	Ratio	Lower	Upper
75	100		
77	32.2	23.9	35.9
39	53.4	39.7	59.5

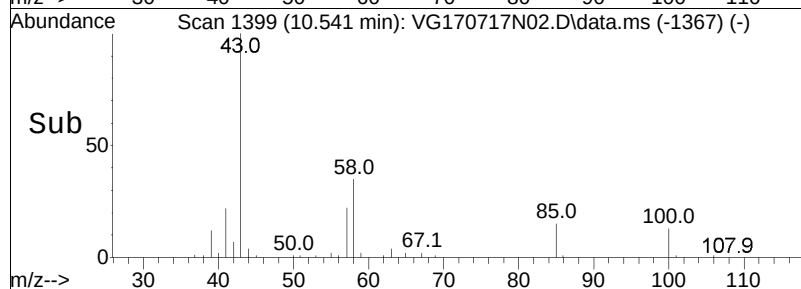
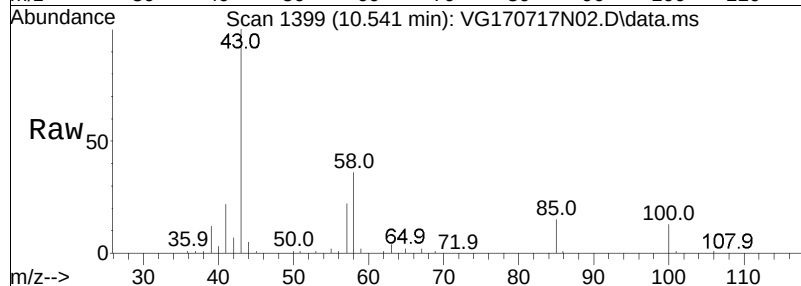
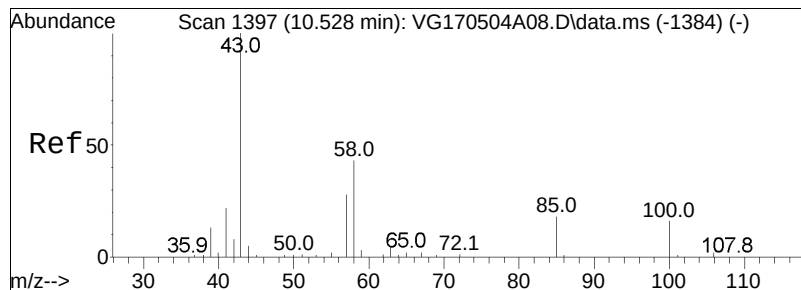




#61
 Toluene
 Concen: 9.30 ug/L
 RT: 11.353 min Scan# 1519
 Delta R.T. 0.021 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

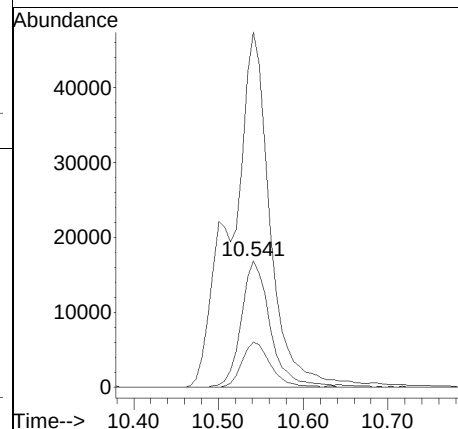
Tgt Ion:	92	Resp:	463310
Ion Ratio	Lower	Upper	
92	100		
91	168.5	133.8	200.8

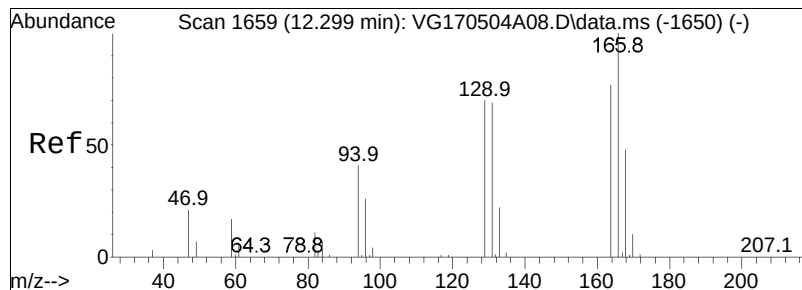




#62
 4-Methyl-2-pentanone
 Concen: 9.40 ug/L
 RT: 10.541 min Scan# 1399
 Delta R.T. 0.013 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

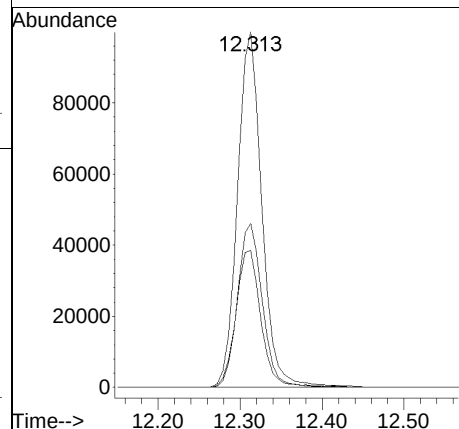
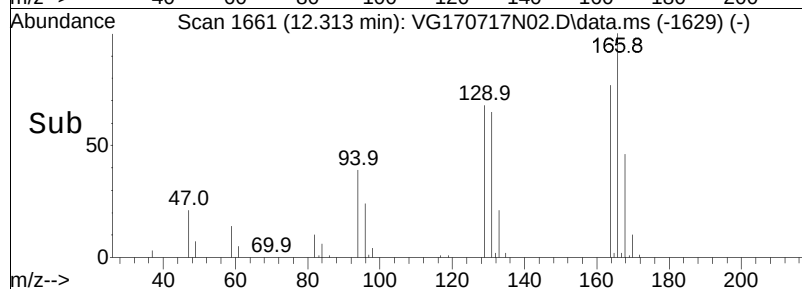
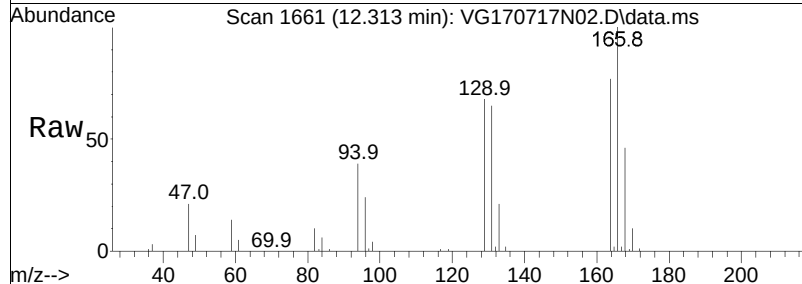
Tgt Ion	Ratio	Lower	Upper
58	100		
100	34.8	27.5	41.3
43	369.3	219.3	328.9

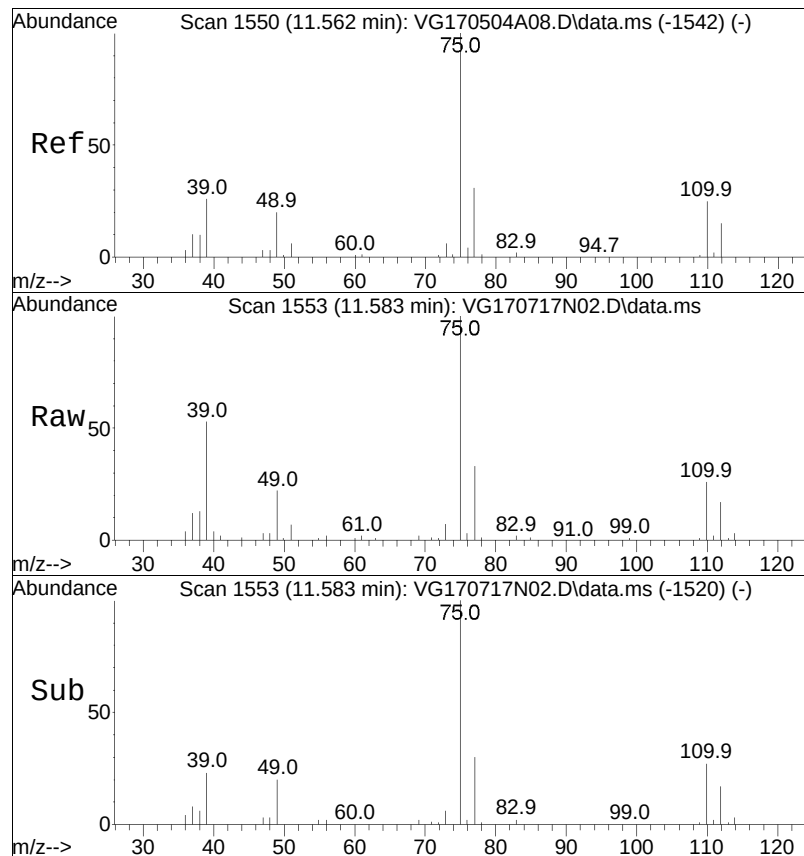




#63
 Tetrachloroethene
 Concen: 9.41 ug/L
 RT: 12.313 min Scan# 1661
 Delta R.T. 0.014 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

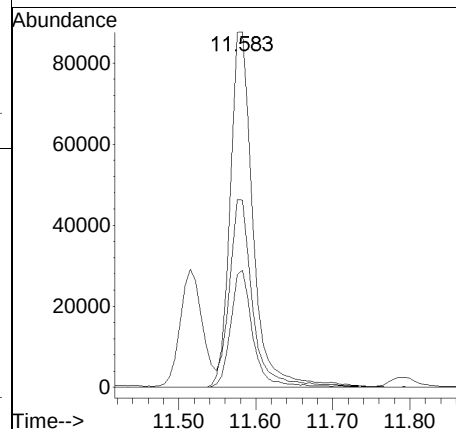
Tgt	Ion:166	Resp:	206500
Ion	Ratio	Lower	Upper
166	100		
168	47.2	30.3	70.3
94	39.7	43.6	83.6#

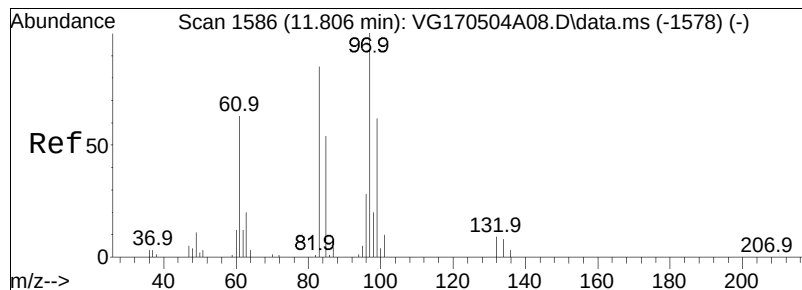




#65
 trans-1,3-Dichloropropene
 Concen: 8.85 ug/L
 RT: 11.583 min Scan# 1553
 Delta R.T. 0.021 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

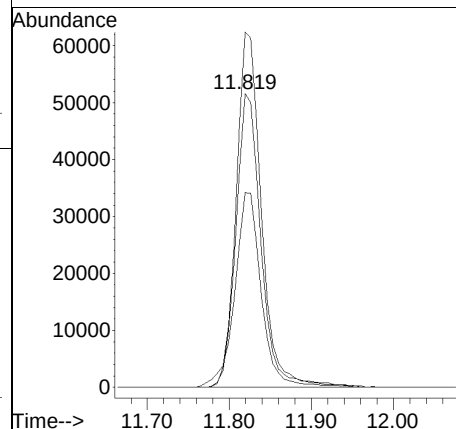
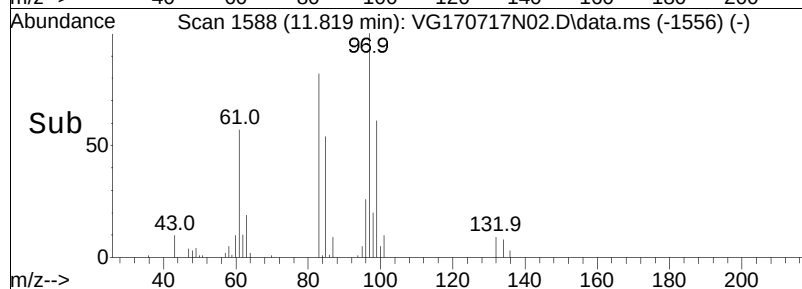
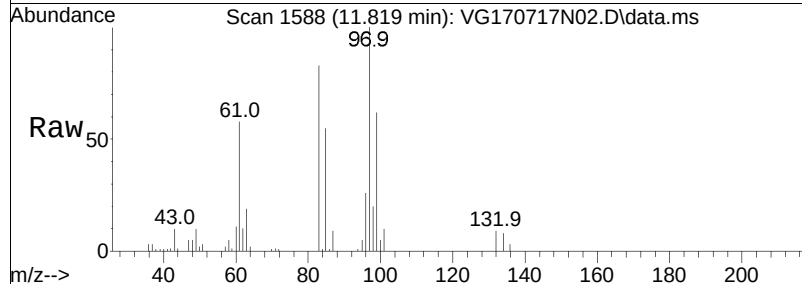
Tgt Ion:	75	Resp:	182249
Ion Ratio	Lower	Upper	
75	100		
77	31.8	10.9	50.9
39	53.8	26.2	66.2

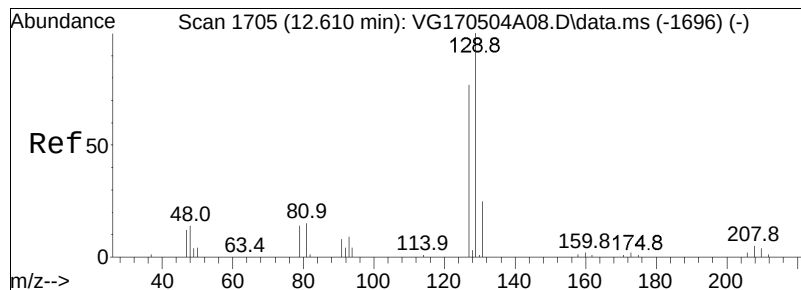




#68
 1,1,2-Trichloroethane
 Concen: 9.44 ug/L
 RT: 11.819 min Scan# 1588
 Delta R.T. 0.013 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

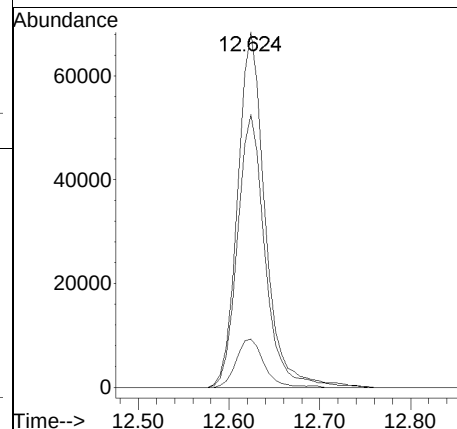
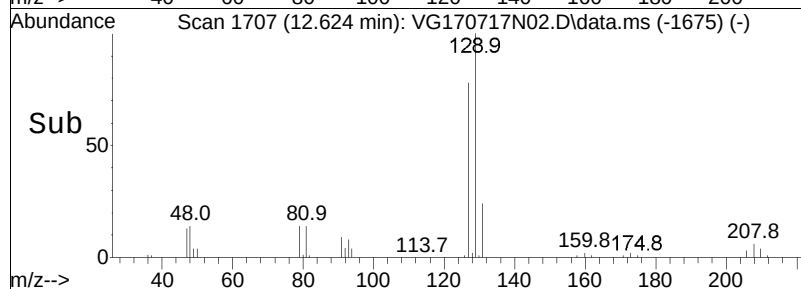
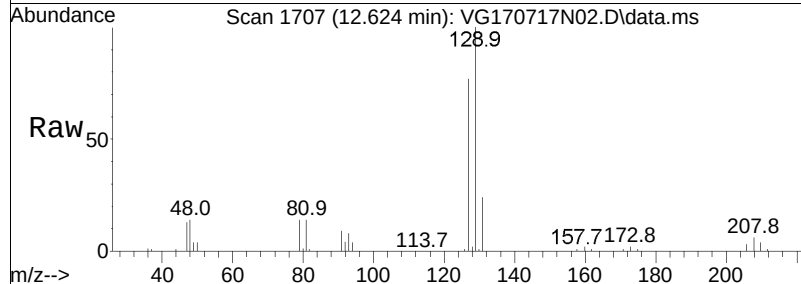
Tgt Ion	Ratio	Lower	Upper
83	100		
97	121.3	90.3	130.3
85	70.1	49.8	89.8

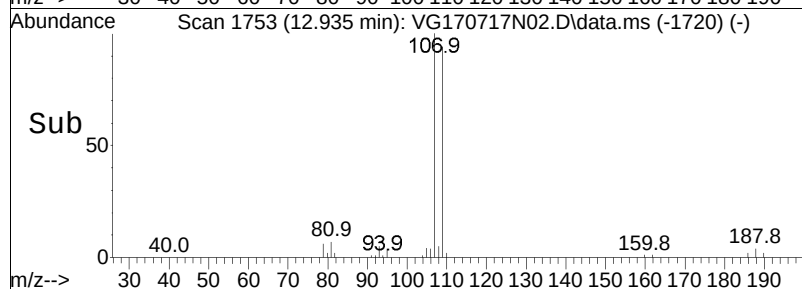
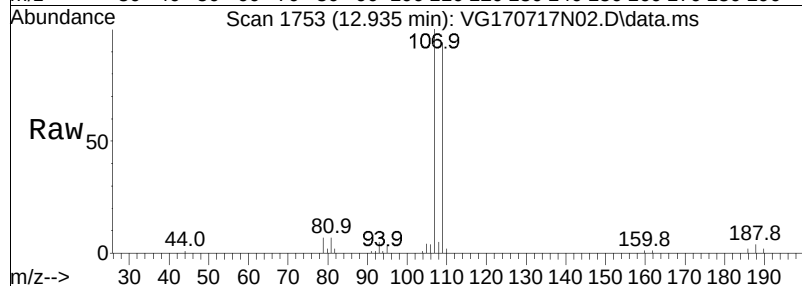
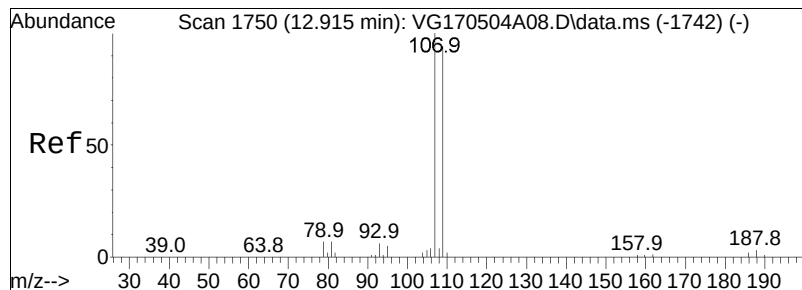




#69
 Chlorodibromomethane
 Concen: 9.03 ug/L
 RT: 12.624 min Scan# 1707
 Delta R.T. 0.014 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

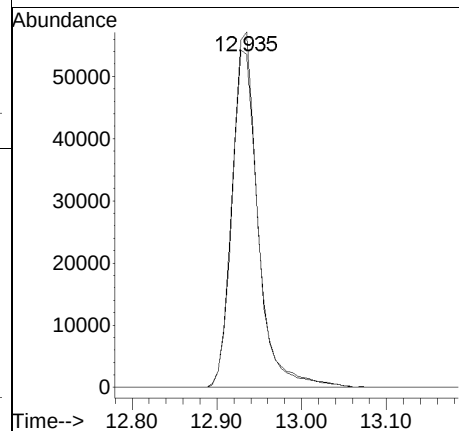
Tgt Ion	Ratio	Lower	Upper
129	100		
81	13.8	0.0	39.1
127	77.4	57.6	97.6

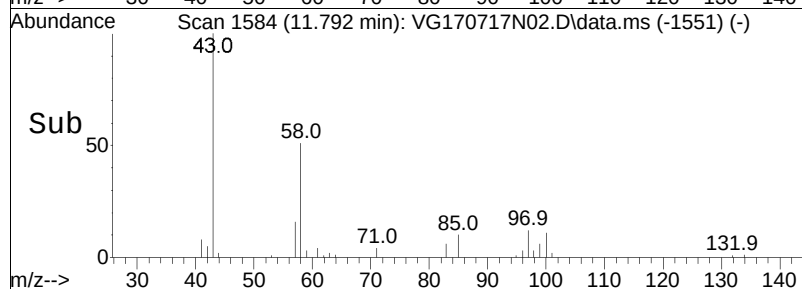
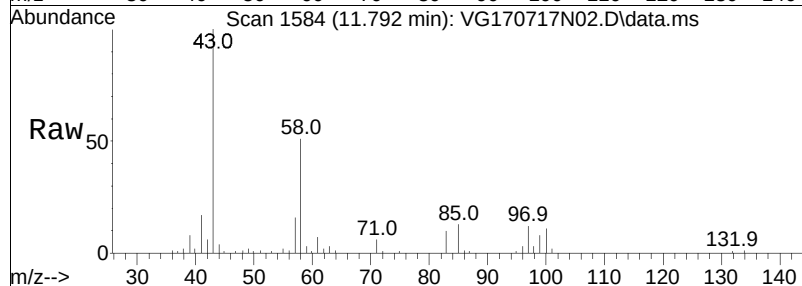
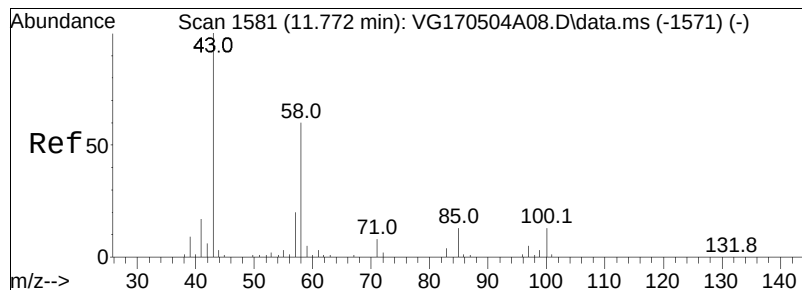




#71
 1,2-Dibromoethane
 Concen: 9.96 ug/L
 RT: 12.935 min Scan# 1753
 Delta R.T. 0.020 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

Tgt Ion	Ratio	Lower	Upper
107	100		
109	96.2	74.8	112.2





#72

2-Hexanone

Concen: 9.48 ug/L

RT: 11.792 min Scan# 1584

Delta R.T. 0.020 min

Lab File: VG170717N02.D

Acq: 17 Jul 2017 1:32 pm

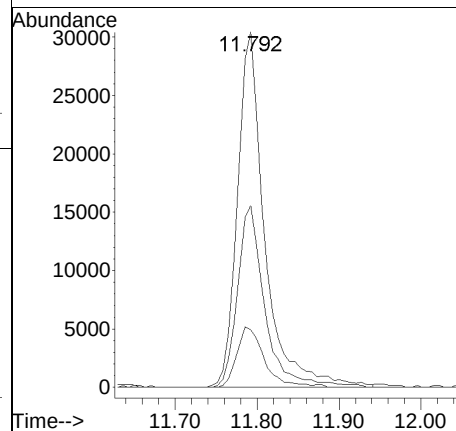
Tgt Ion: 43 Resp: 70554

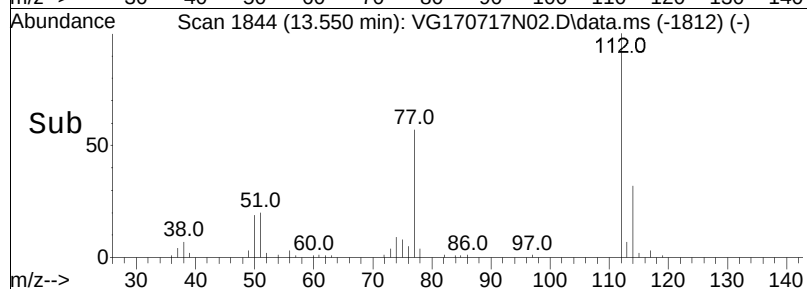
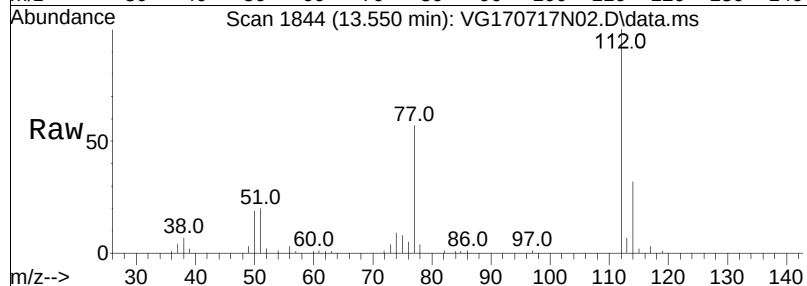
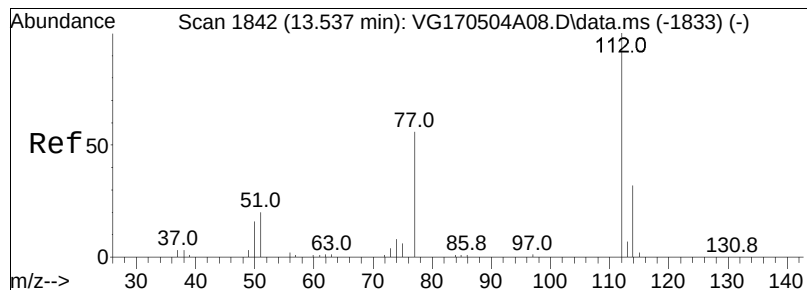
Ion Ratio Lower Upper

43 100

58 51.2 41.7 62.5

57 17.3 15.1 22.7





#73

Chlorobenzene

Concen: 9.31 ug/L

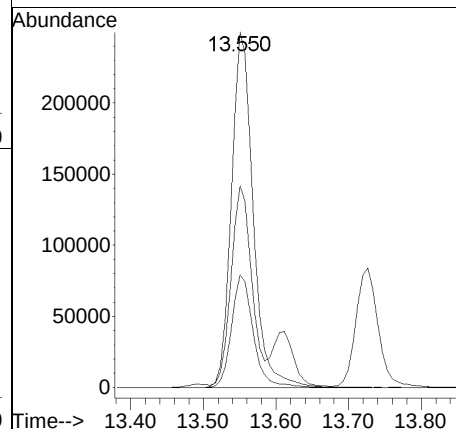
RT: 13.550 min Scan# 1844

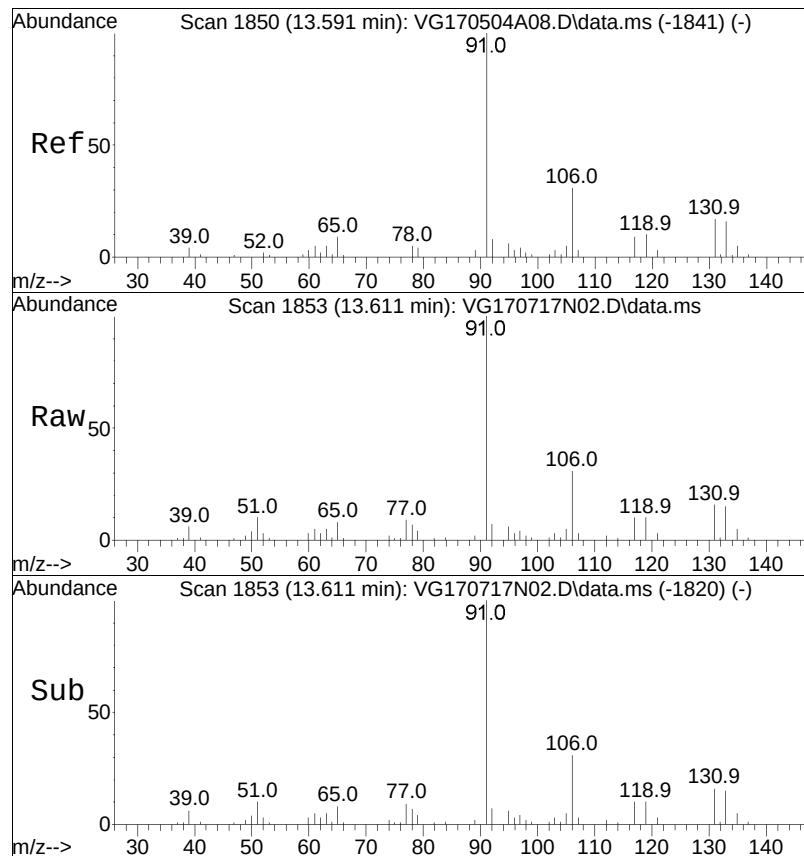
Delta R.T. 0.013 min

Lab File: VG170717N02.D

Acq: 17 Jul 2017 1:32 pm

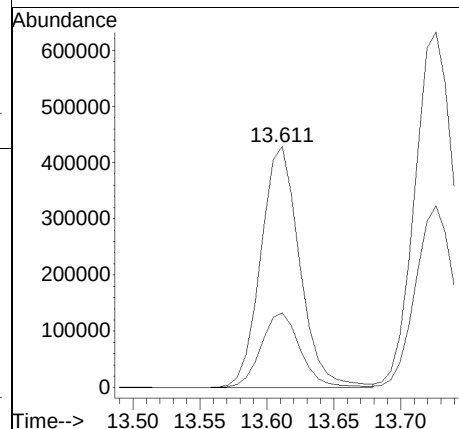
Tgt	Ion:112	Resp:	518104
Ion	Ratio	Lower	Upper
112	100		
77	52.9	59.8	89.8#
114	31.6	25.2	37.8

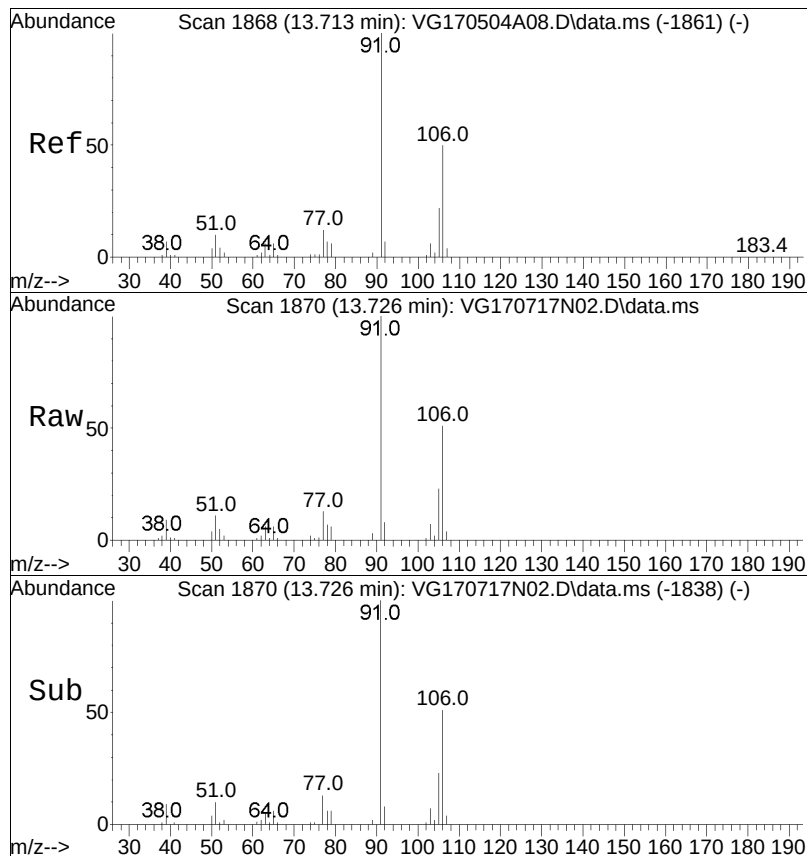




#74
 Ethylbenzene
 Concen: 9.64 ug/L
 RT: 13.611 min Scan# 1853
 Delta R.T. 0.020 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

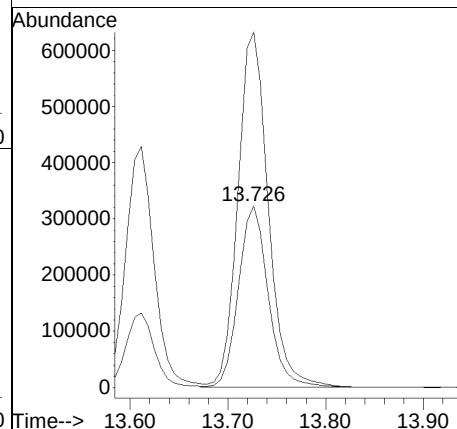
Tgt Ion	Ratio	Lower	Upper
91	100		
106	31.0	21.5	32.3

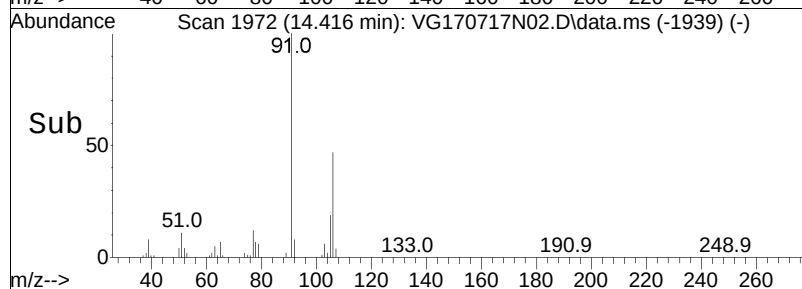
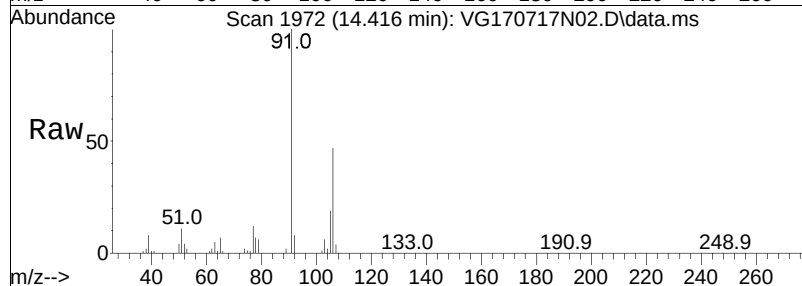
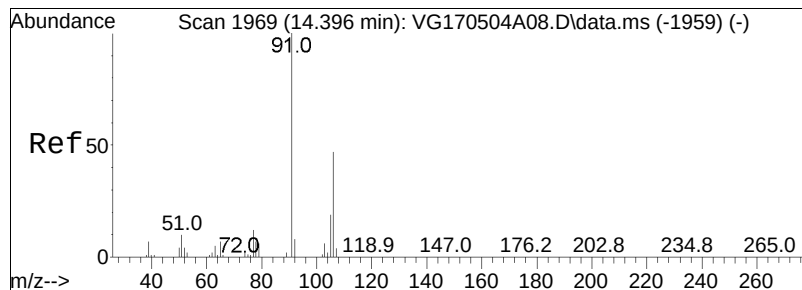




#76
 p/m Xylene
 Concen: 19.22 ug/L
 RT: 13.726 min Scan# 1870
 Delta R.T. 0.013 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

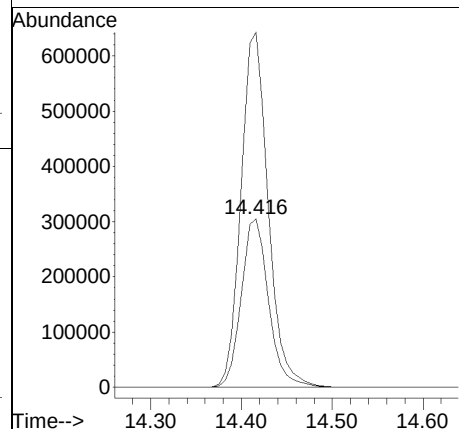
Tgt	Ion	Ratio	Lower	Upper
106	100			
91	199.0	192.4	288.6	

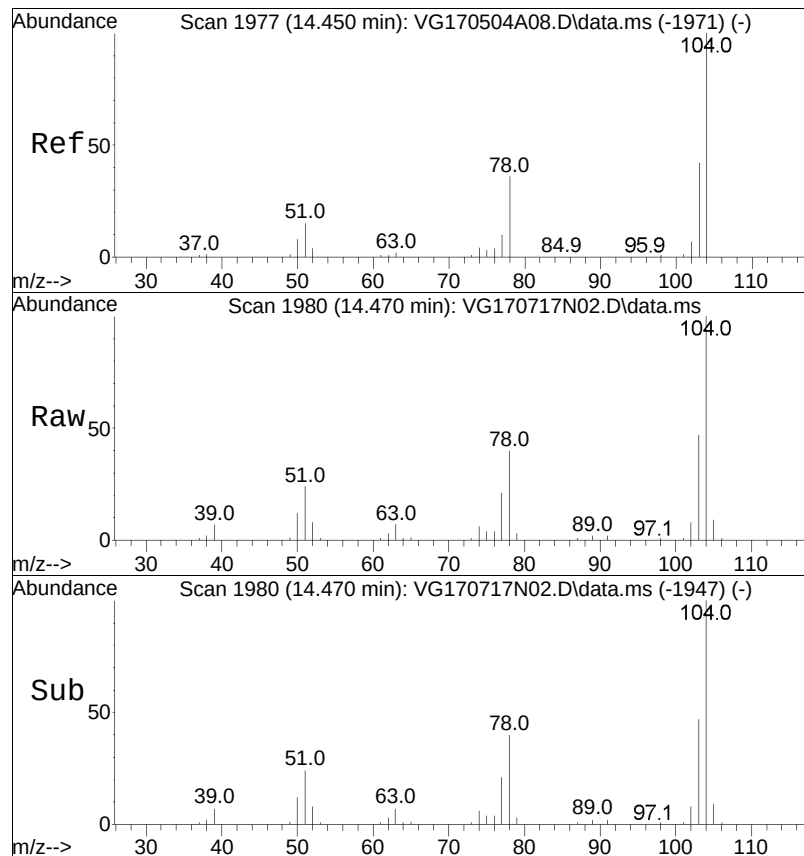




#77
o Xylene
Concen: 18.93 ug/L
RT: 14.416 min Scan# 1972
Delta R.T. 0.020 min
Lab File: VG170717N02.D
Acq: 17 Jul 2017 1:32 pm

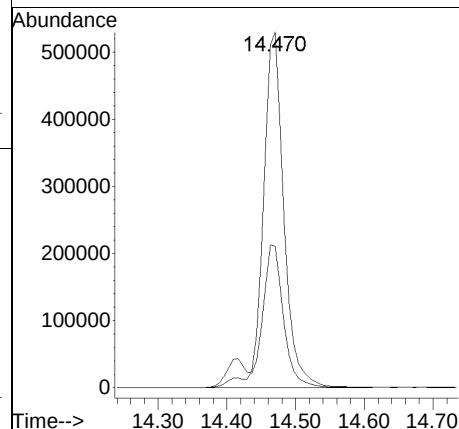
Tgt Ion	Ratio	Lower	Upper
106	100		
91	209.2	202.3	303.5

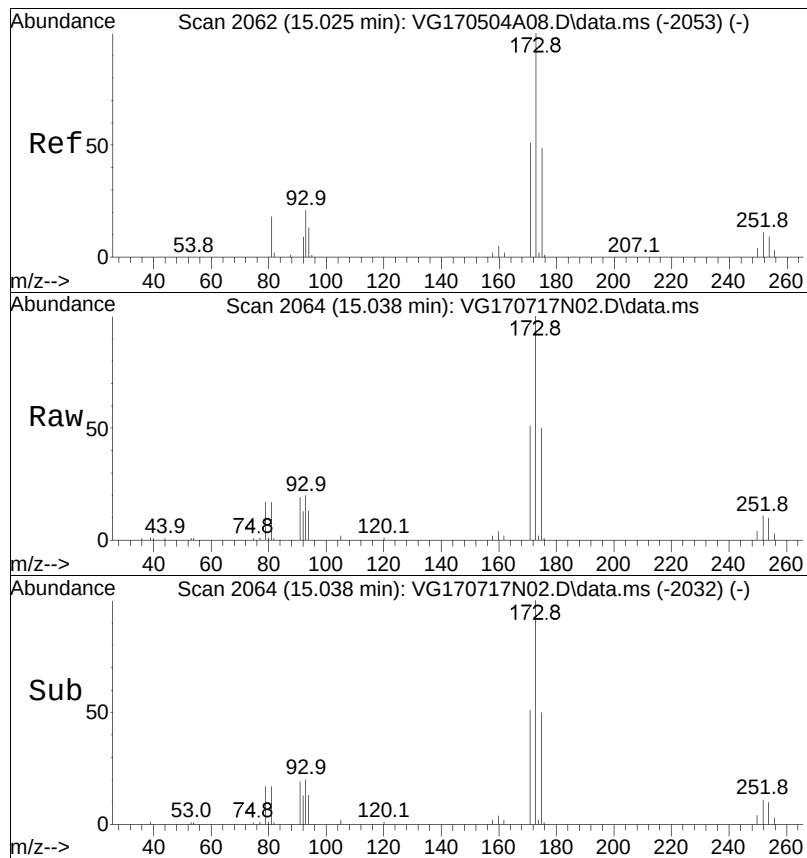




#78
 Styrene
 Concen: 19.81 ug/L
 RT: 14.470 min Scan# 1980
 Delta R.T. 0.020 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

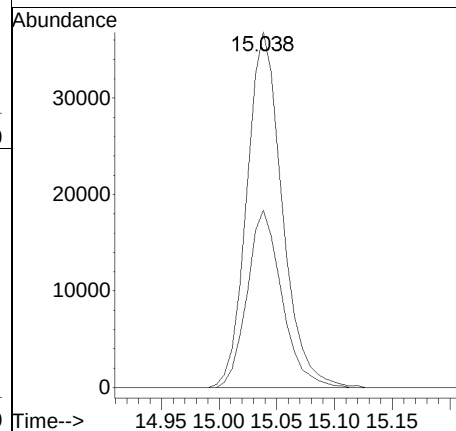
Tgt Ion	Ion	Ratio	Lower	Upper
104	100			
78	39.1	46.6	69.8	

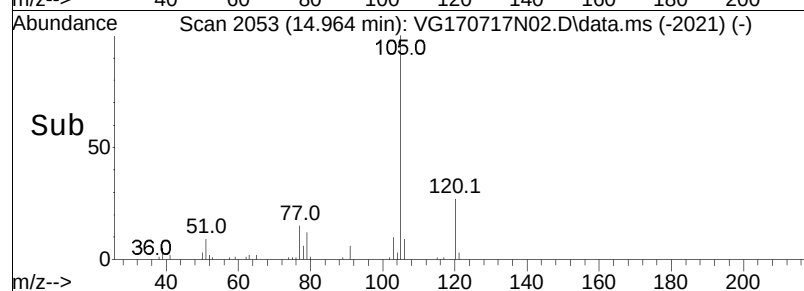
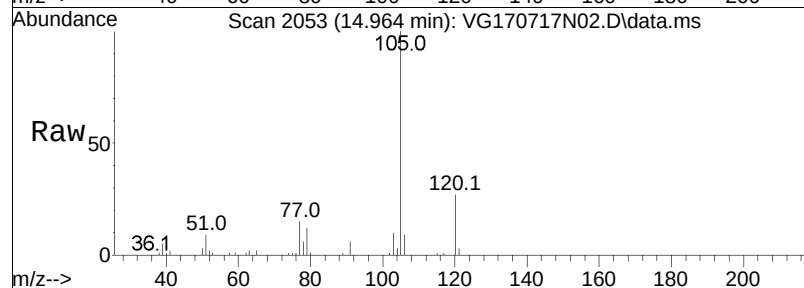
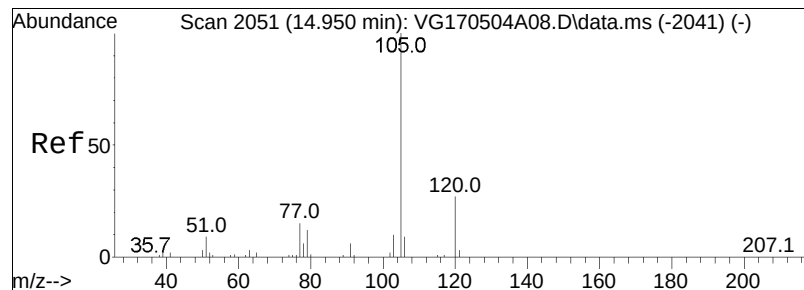




#80
 Bromoform
 Concen: 9.27 ug/L
 RT: 15.038 min Scan# 2064
 Delta R.T. 0.013 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

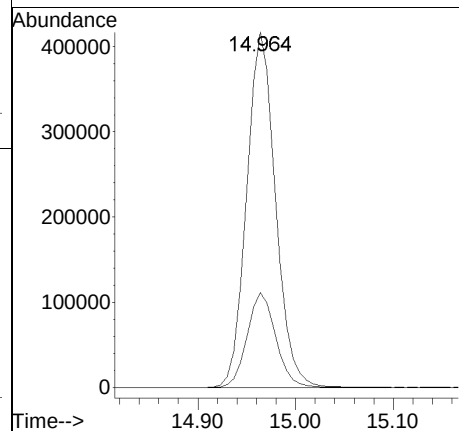
Tgt Ion	Ratio	Lower	Upper
173	100		
175	48.9	27.9	67.9

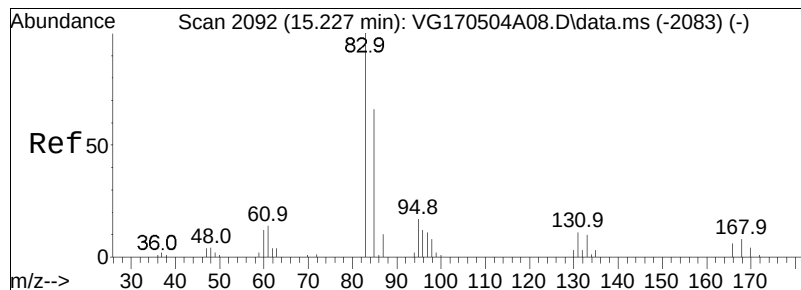




#82
 Isopropylbenzene
 Concen: 9.76 ug/L
 RT: 14.964 min Scan# 2053
 Delta R.T. 0.014 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

Tgt Ion	Ratio	Lower	Upper
105	100		
120	26.4	2.4	42.4





#87

1,1,2,2-Tetrachloroethane

Concen: 9.70 ug/L

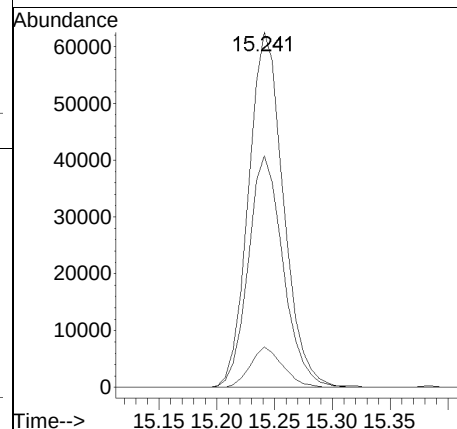
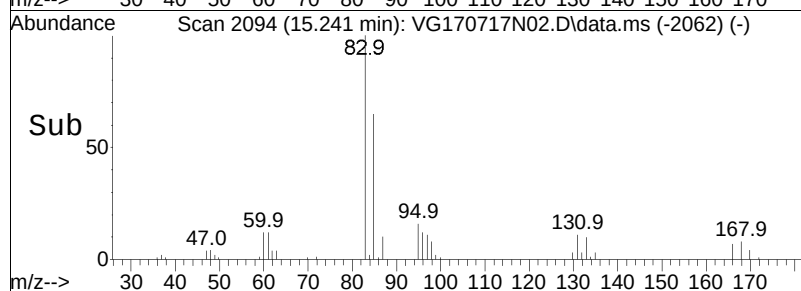
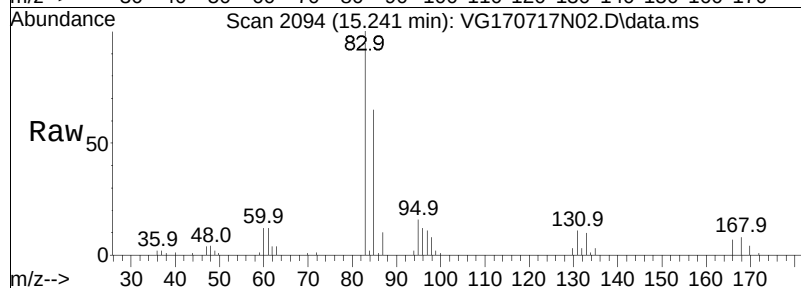
RT: 15.241 min Scan# 2094

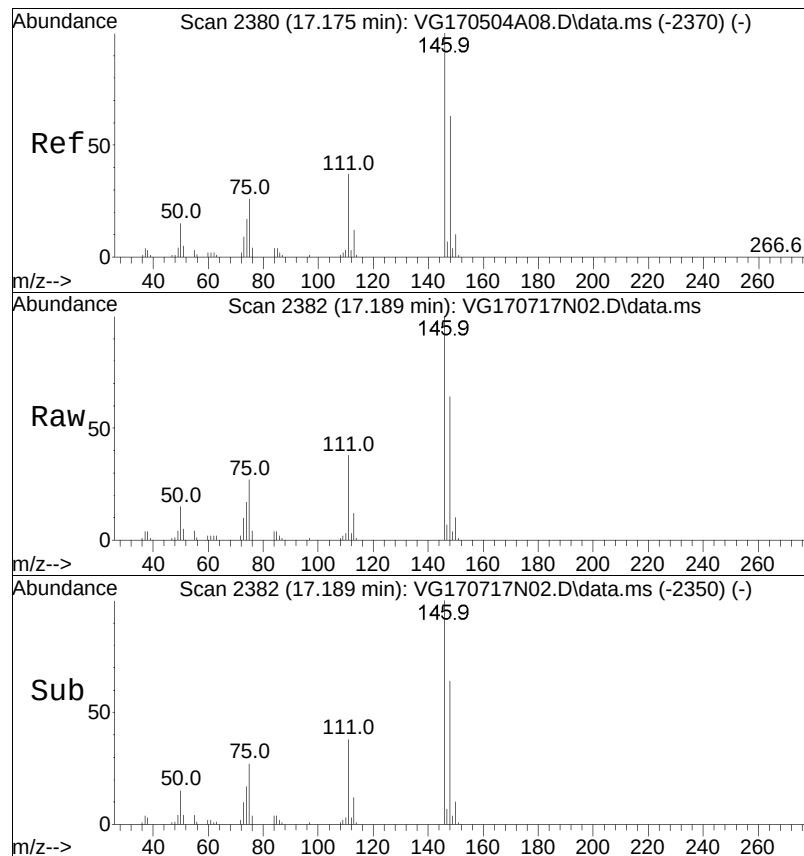
Delta R.T. 0.014 min

Lab File: VG170717N02.D

Acq: 17 Jul 2017 1:32 pm

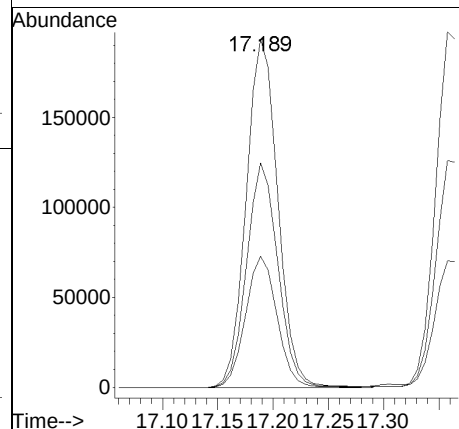
Tgt Ion:	83	Resp:	131652
Ion Ratio	Lower	Upper	
83	100		
131	10.6	0.0	28.6
85	65.1	43.4	83.4

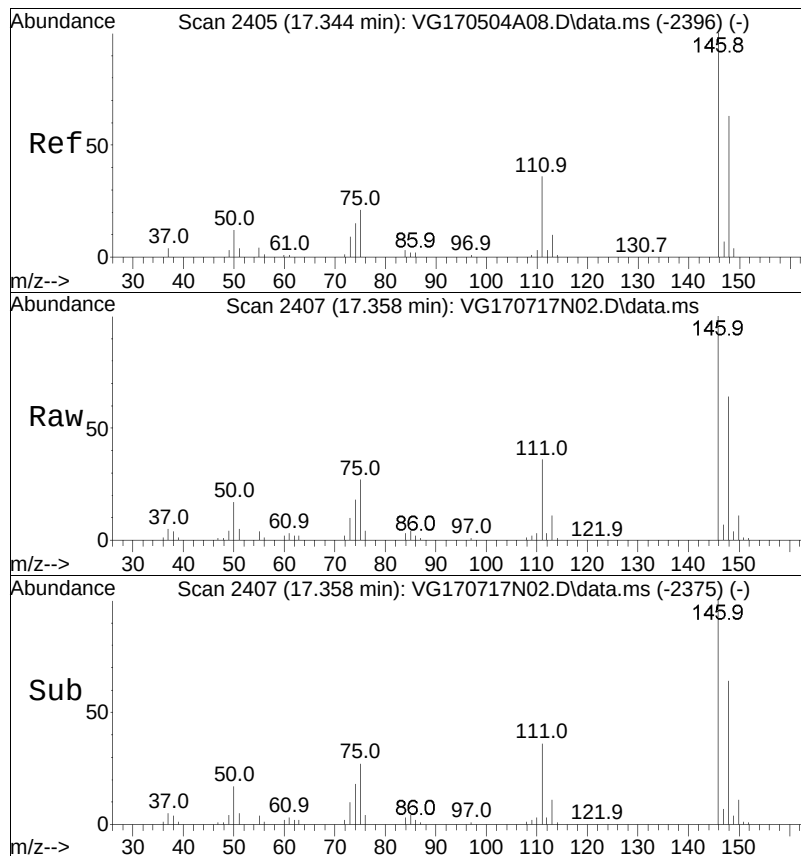




#100
 1,3-Dichlorobenzene
 Concen: 9.30 ug/L
 RT: 17.189 min Scan# 2382
 Delta R.T. 0.014 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

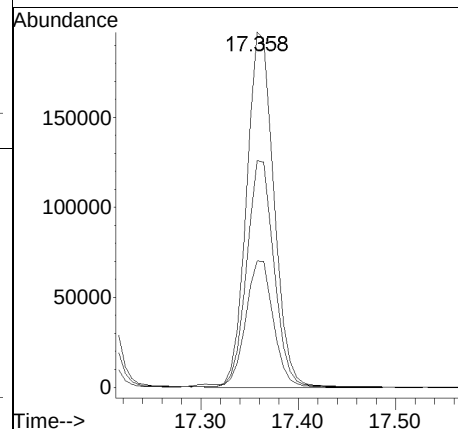
Tgt Ion	Ratio	Lower	Upper
146	100		
111	37.4	30.8	64.0
148	63.8	42.0	87.2

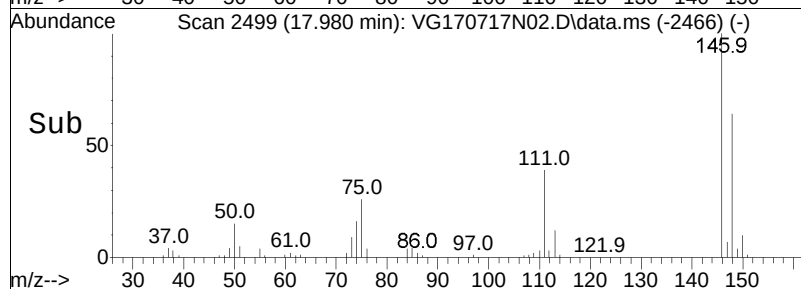
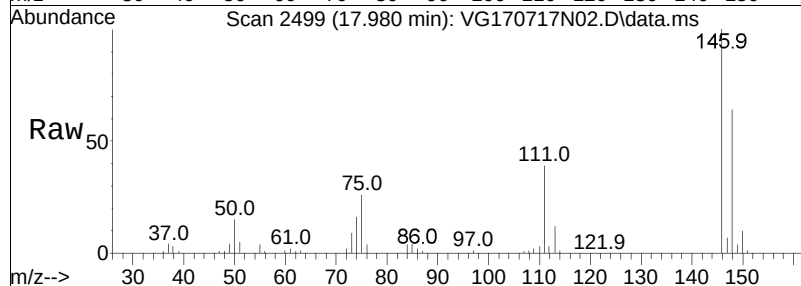
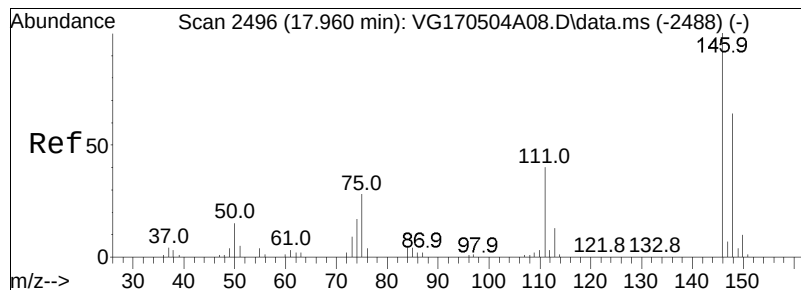




#101
 1,4-Dichlorobenzene
 Concen: 9.22 ug/L M2
 RT: 17.358 min Scan# 2407
 Delta R.T. 0.014 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

Tgt Ion:	146	Resp:	387401
Ion Ratio	Lower	Upper	
146	100		
111	29.6	36.2	54.4#
148	51.8	50.8	76.2





#104

1,2-Dichlorobenzene

Concen: 9.44 ug/L

RT: 17.980 min Scan# 2499

Delta R.T. 0.020 min

Lab File: VG170717N02.D

Acq: 17 Jul 2017 1:32 pm

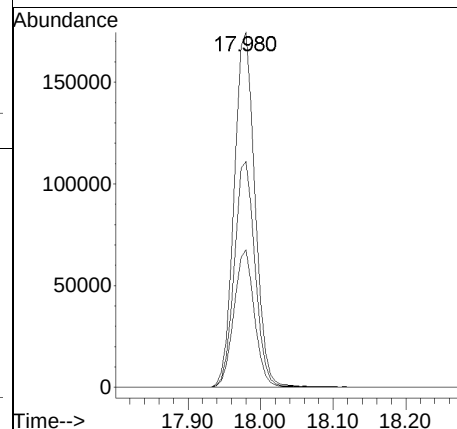
Tgt Ion:146 Resp: 349928

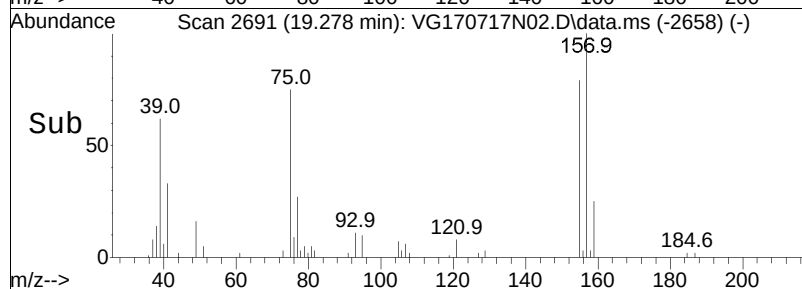
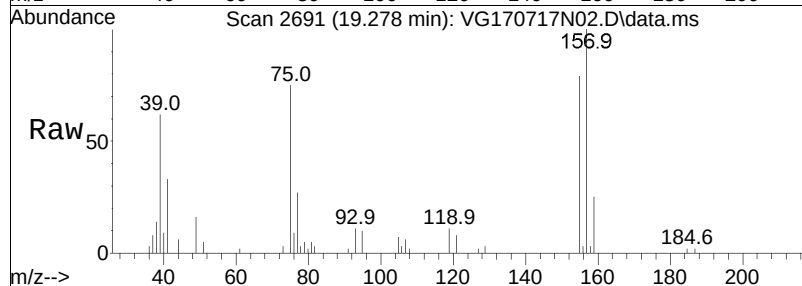
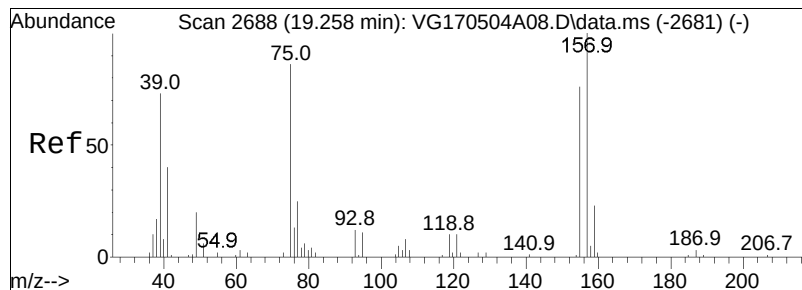
Ion Ratio Lower Upper

146 100

111 38.2 30.9 64.1

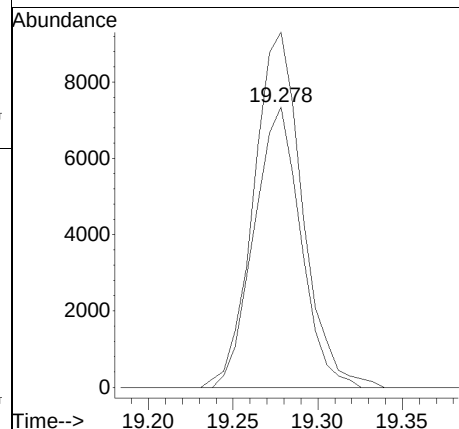
148 63.1 41.7 86.5

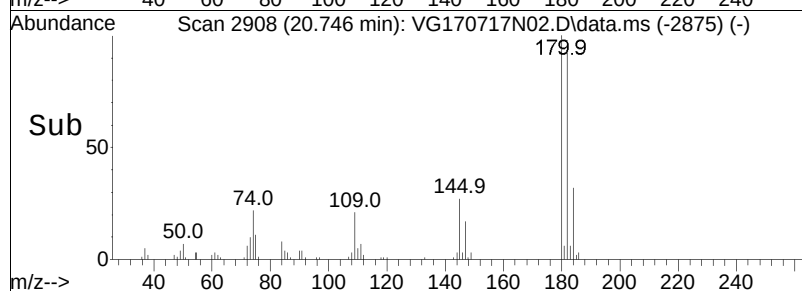
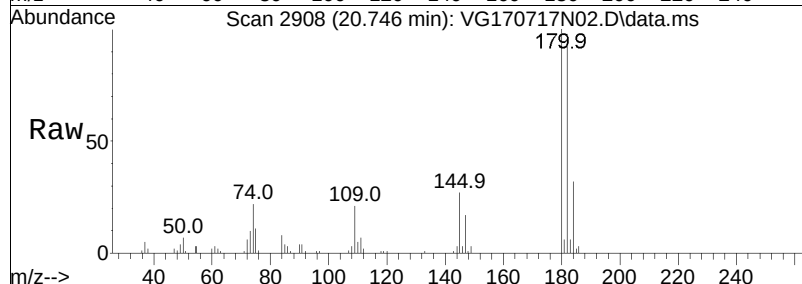
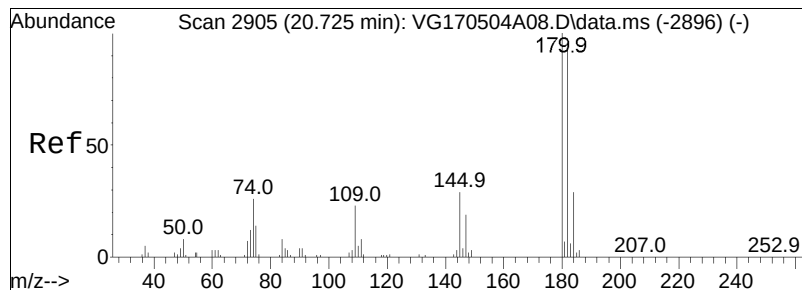




#106
 1,2-Dibromo-3-chloropropane
 Concen: 8.85 ug/L
 RT: 19.278 min Scan# 2691
 Delta R.T. 0.020 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

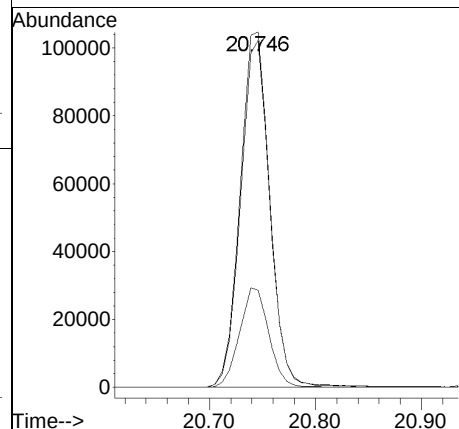
Tgt	Ion	Ratio	Lower	Upper
155	100			
157	132.4	101.3	151.9	

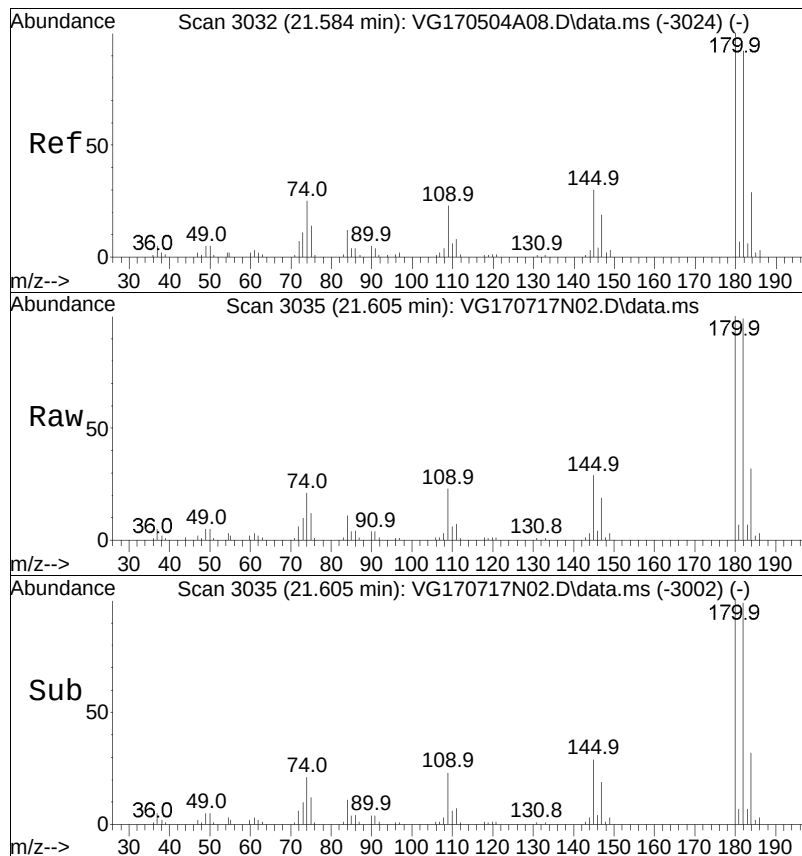




#109
 1,2,4-Trichlorobenzene
 Concen: 9.48 ug/L
 RT: 20.746 min Scan# 2908
 Delta R.T. 0.021 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

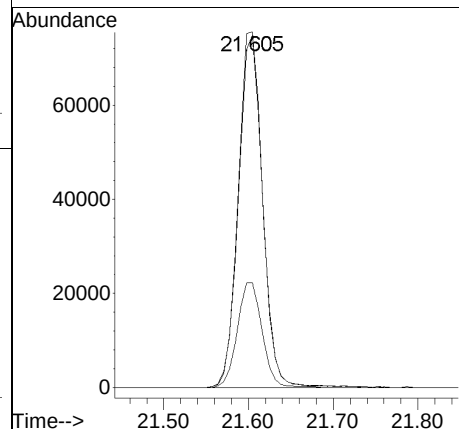
Tgt Ion	Ratio	Lower	Upper
180	100		
182	96.4	75.7	113.5
145	27.7	23.0	34.4





#111
 1,2,3-Trichlorobenzene
 Concen: 11.20 ug/L
 RT: 21.605 min Scan# 3035
 Delta R.T. 0.021 min
 Lab File: VG170717N02.D
 Acq: 17 Jul 2017 1:32 pm

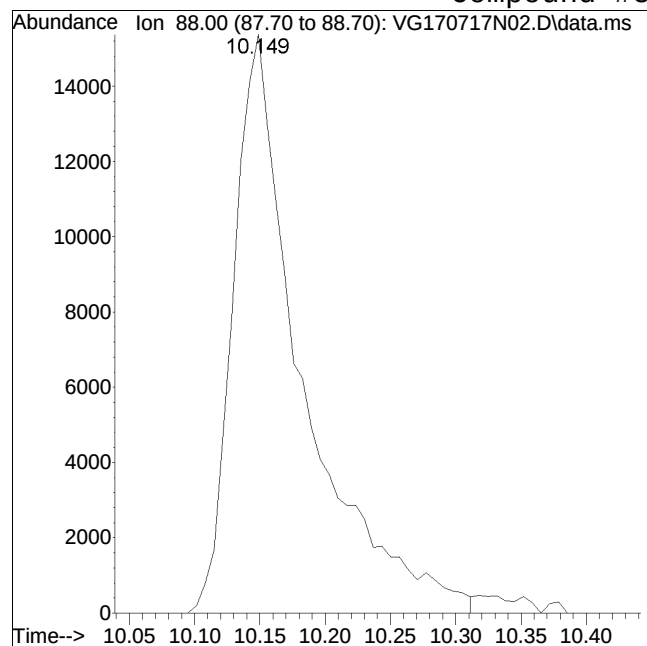
Tgt Ion:	180	Resp:	151716
Ion Ratio	Lower	Upper	
180	100		
182	97.0	73.8	110.6
145	29.8	23.4	35.2



Manual Integration Report

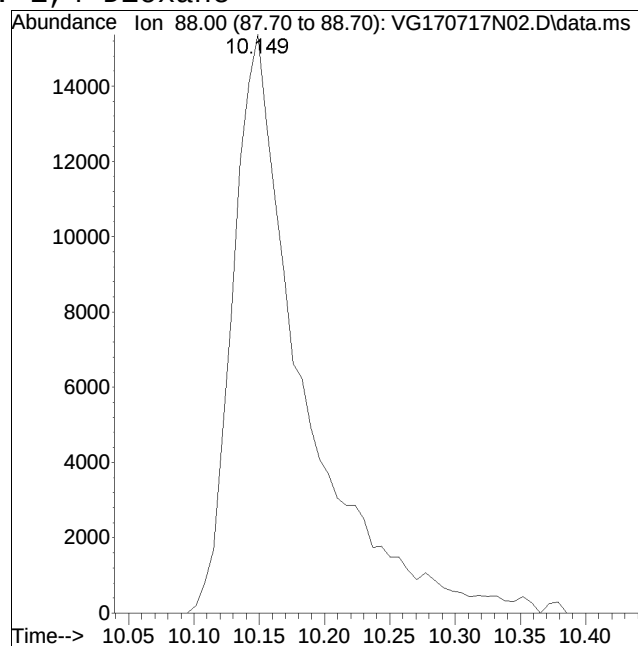
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170717N02.D Operator : GONZO:PD
Date Inj'd : 7/17/2017 1:32 pm Instrument : Gonzo
Sample : WG1023505-4,31,10,10 Quant Date : 7/17/2017 2:32 pm

Compound #57: 1,4-Dioxane



Original Peak Response = 56506

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

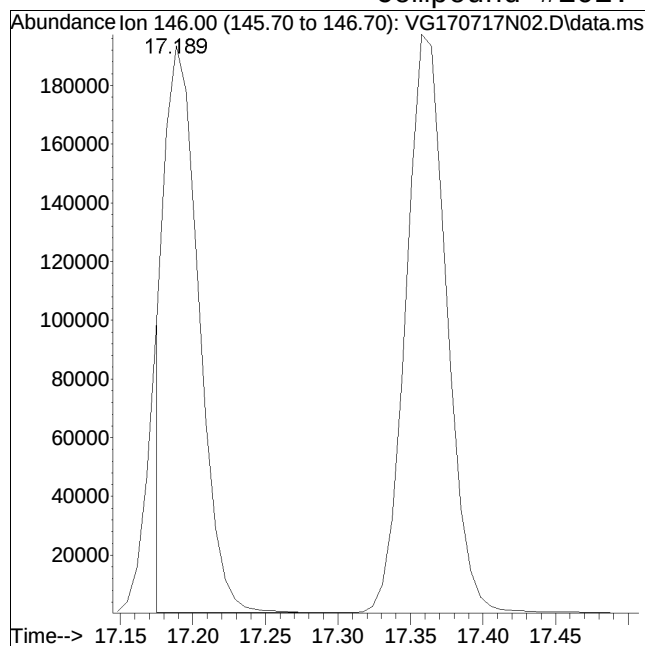


Manual Peak Response = 57835 M1

Manual Integration Report

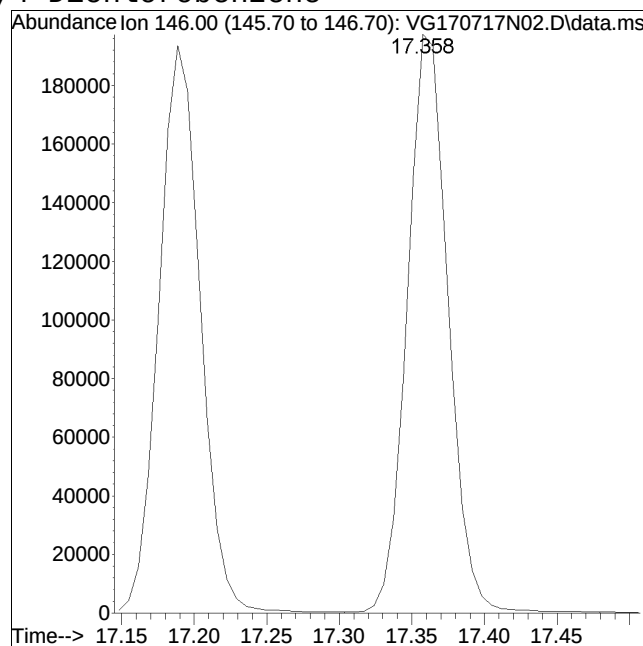
Data Path : I:\VOLATILES\Gonzo\2017\17QMethod : G_170523N_8260.m
Data File : VG170717N02.D Operator : GONZO:PD
Date Inj'd : 7/17/2017 1:32 pm Instrument : Gonzo
Sample : WG1023505-4,31,10,10 Quant Date : 7/17/2017 2:32 pm

Compound #101: 1,4-Dichlorobenzene



Original Peak Response = 313887

M2 = Peak not found by automatic integration algorithm.



Manual Peak Response = 387401 M2



Calculation of Volatile Organic Compounds

Aqueous Concentration Formula: $Amt * DF * Uf * (1/Vo)$

Where:

DF = Dilution Factor

Vo = Sample Volume Purged (mL)

Uf = ng Unit Correction Factor (mL)

Soil Concentration Formula: $Amt * DF * (1/Wt)$

Where:

DF = Dilution Factor

Wt = Weight of Sample (g)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Jul 18 2017, 05:28 pm

Work Group: WG1023505 for Department: 31 GC/MS - Volatiles

Created: 18-JUL-17 Due: Operator: PD

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1723775-01	NFTA-W1	S NYTCL-8260-R2	WATER	DONE	U	0726	0719	S0	Vial-B
L1723775-02	TRIP BLANK	S NYTCL-8260-R2	WATER	DONE	U	0726	0719	S0	Vial-B
L1723818-01	PMW-1	S NYTCL-8260-R2	WATER	DONE	U	0726	0719	S0	Vial-B
L1723822-10	TRIP BLANK-071117	S NYTCL-8260	WATER	DONE	U	0725	0719	S0	Vial-B
L1723822-11	TOWNWELL-071217	S NYTCL-8260	WATER	DONE	U	0726	0719	S0	Vial-B
L1723822-12	MW-4S-071217	S NYTCL-8260	WATER	DONE	U	0726	0719	S0	Vial-B
L1723822-13	MW-5S-071217	S NYTCL-8260	WATER	DONE	U	0726	0719	S0	Vial-B
L1723822-14	TRIP BLANK-071217	S NYTCL-8260	WATER	DONE	U	0726	0719	S0	Vial-B
L1723956-01	EW-1.25-071317	S NYTCL-8260	WATER	DONE	U	0727	0720	S0	Vial-B
L1724084-26	TB03_071317	S NYTCL-8260	WATER	DONE	U	0727	0720	S0	Vial-B
WG1023505-1	MS BFB Tune Standard	S NYTCL-8260	WATER	DONE	U				
WG1023505-1	MS BFB Tune Standard	S NYTCL-8260-R2	WATER	DONE	U				
WG1023505-2	Continuing Calibrati	S NYTCL-8260	WATER	DONE	U				
WG1023505-2	Continuing Calibrati	S NYTCL-8260-R2	WATER	DONE	U				
WG1023505-3	Laboratory Control S	S NYTCL-8260	WATER	DONE	U				
WG1023505-3	Laboratory Control S	S NYTCL-8260-R2	WATER	DACQ	U				
WG1023505-4	LCS Duplicate	S NYTCL-8260	WATER	DONE	U				
WG1023505-4	LCS Duplicate	S NYTCL-8260-R2	WATER	DACQ	U				
WG1023505-5	Laboratory Method Bl	S NYTCL-8260	WATER	DONE	U				
WG1023505-5	Laboratory Method Bl	S NYTCL-8260-R2	WATER	DACQ	U				
WG1023505-6	Matrix Spike	S NYTCL-8260	WATER	DONE	U				
WG1023505-6	Matrix Spike	S NYTCL-8260-R2	WATER	DACQ	U				
WG1023505-7	Matrix Spike Duplica	S NYTCL-8260	WATER	DONE	U				
WG1023505-7	Matrix Spike Duplica	S NYTCL-8260-R2	WATER	DACQ	U				
Comments:									
WG1023505-4	WG1023505-3								
WG1023505-6	L1723822-12								
WG1023505-7	L1723822-12								

Inst: Gonzo

BFB: V6126

Initials: NL

IS/SS: V6136

Date: 05/23/17

ICAL: V6150, V6151

Run: N

ICV: V6104, V6093, V6090, V6131, V6133, V6092

Method

GC: 8260

Autosampler: 8260purge

Concentrator: 8260purge



QC: _____ Seq: _____

Vial	obs
37 VG170523NBF3 BFB	
38 VG170523N01 BLK	
37 VG170523N02 ISTD11	
38 VG170523N03 ISTD1	
39 VG170523N04 ISTD1	
40 VG170523N05 ISTD2	
41 VG170523N06 ISTD2	
42 VG170523N07 ISTD3	
43 VG170523N08 ISTD4	
44 VG170523N09 ISTD6	
45 VG170523N10 ISTD8	
46 VG170523N11 ISTD10	
47 VG170523N12 BLK	
48 VG170523N13 BLK	
49 VG170523N14 BLK	
50 VG170523N15 BLK	
51 VG170523N16 CSTDL3	
52 VG170523N17 CSTDL3	
53 VG170523N18 BLK	
54 VG170523N19 BLK	

Inst: Gonzo

BFB: V6213

Initials: AD

IS/SS: V6230

Date: 07/17/17

ICAL: V6150, V6151

Run: N

ICV: V6104, V6093, V6090, V6131, V6133, V6092

Method

GC: 8260

Autosampler: 8260purge

Concentrator: 8260purge



QC: _____ Seq: _____

Vial				obs
1	VG170717NBF1 BFB TUNE			
37	VG170717N01 8260 CCAL			
38	VG170717N02 8260 CCAL			
39	VG170717N03 BLK			
40	VG170717N04 METHOD BLK			
41	VG170717N05	I1723613-26D,31,1,10,,a	NYCURVE	pH>2
42	VG170717N06	I1723598-01D2,31,0.2,10,,c	NYCURVE	pH<2
43	VG170717N07	I1723818-01,31,10,10,,a	NYCURVE	pH<2
44	VG170717N08	I1723775-01,31,10,10,,a	NYCURVE	pH<2
45	VG170717N09	I1723775-02,31,10,10,,a	NYCURVE	pH<2
46	VG170717N10	I1723822-10,31,10,10,,a	NYCURVE	pH<2
47	VG170717N11	I1723822-11,31,10,10,,a	NYCURVE	pH<2
48	VG170717N12	I1723822-12,31,10,10,,a	NYCURVE	pH<2
49	VG170717N13	I1723822-13,31,10,10,,a	NYCURVE	pH<2
50	VG170717N14	I1723822-14,31,10,10,,a	NYCURVE	pH<2
51	VG170717N15	I1723714-06,31,10,10,,a	NJ/15	pH<2
52	VG170717N16	I1723714-07,31,10,10,,a	NJ/15	pH<2
53	VG170717N17	I1723714-08,31,10,10,,a	NJ/15	pH<2
54	VG170717N18	I1724084-26,31,10,10,,a	NYCURVE	pH<2
55	VG170717N19	I1723956-01,31,10,10,,a	NYTCL	pH<2
56	VG170717N20	I1723822-12MS,31,10,10,,a2	NYCURVE	pH<2
57	VG170717N21	I1723822-12MSD,31,10,10,,a1	NYCURVE	pH<2



ANALYTICAL REPORT

Lab Number:	L1723821
Client:	GZA GeoEnvironmental 535 Washington St. Buffalo, NY 14203
ATTN:	James Richert
Phone:	(716) 685-2300
Project Name:	FORMER SIGNORE
Project Number:	21.0056367.63
Report Date:	07/19/17

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1723821-01	TP-11-071217	WATER	ELLCOTTVILLE	07/12/17 11:10	07/12/17
L1723821-02	SP-32-071217	WATER	ELLCOTTVILLE	07/12/17 12:15	07/12/17
L1723821-03	SP-38-071217	WATER	ELLCOTTVILLE	07/12/17 13:15	07/12/17
L1723821-04	SP-37-071217	WATER	ELLCOTTVILLE	07/12/17 13:55	07/12/17
L1723821-05	SP-43-071217	WATER	ELLCOTTVILLE	07/12/17 14:40	07/12/17
L1723821-06	TRIP BLANK-071217	WATER	ELLCOTTVILLE	07/12/17 00:00	07/12/17

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Cristin Walker

Title: Technical Director/Representative

Date: 07/19/17

ORGANICS

VOLATILES

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-01
Client ID: TP-11-071217
Sample Location: ELLICOTTVILLE

Date Collected: 07/12/17 11:10
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 13:44
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.25	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	40		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE**Lab Number:** L1723821**Project Number:** 21.0056367.63**Report Date:** 07/19/17**SAMPLE RESULTS****Lab ID:** L1723821-01**Date Collected:** 07/12/17 11:10**Client ID:** TP-11-071217**Date Received:** 07/12/17**Sample Location:** ELLICOTTVILLE**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	8.1		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	108		70-130

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-02
Client ID: SP-32-071217
Sample Location: ELLICOTTVILLE

Date Collected: 07/12/17 12:15
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 14:20
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.32	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.85		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-02
Client ID: SP-32-071217
Sample Location: ELLICOTTVILLE

Date Collected: 07/12/17 12:15
Date Received: 07/12/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	107		70-130

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-02
Client ID: SP-32-071217
Sample Location: ELLICOTTVILLE

Date Collected: 07/12/17 12:15
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/18/17 11:25
Analyst: LB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	0.549	J	ug/l	1.00	0.500	1	A
Ethene	ND		ug/l	0.500	0.500	1	A
Ethane	ND		ug/l	0.500	0.500	1	A

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-03
Client ID: SP-38-071217
Sample Location: ELLICOTTVILLE

Date Collected: 07/12/17 13:15
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 14:55
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.20	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	4.2		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	6.5		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-03
Client ID: SP-38-071217
Sample Location: ELLICOTTVILLE

Date Collected: 07/12/17 13:15
Date Received: 07/12/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	107		70-130

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-03
Client ID: SP-38-071217
Sample Location: ELLICOTTVILLE

Date Collected: 07/12/17 13:15
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/18/17 11:39
Analyst: LB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	10.1		ug/l	1.00	0.500	1	A
Ethene	0.652		ug/l	0.500	0.500	1	A
Ethane	ND		ug/l	0.500	0.500	1	A

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-04
Client ID: SP-37-071217
Sample Location: ELLICOTTVILLE

Date Collected: 07/12/17 13:55
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 15:31
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	12		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	7.8		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE**Lab Number:** L1723821**Project Number:** 21.0056367.63**Report Date:** 07/19/17**SAMPLE RESULTS****Lab ID:** L1723821-04**Date Collected:** 07/12/17 13:55**Client ID:** SP-37-071217**Date Received:** 07/12/17**Sample Location:** ELLICOTTVILLE**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	2.7		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	108		70-130

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-04
Client ID: SP-37-071217
Sample Location: ELLICOTTVILLE

Date Collected: 07/12/17 13:55
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/18/17 11:54
Analyst: LB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	ND		ug/l	1.00	0.500	1	A
Ethene	ND		ug/l	0.500	0.500	1	A
Ethane	ND		ug/l	0.500	0.500	1	A

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-05
Client ID: SP-43-071217
Sample Location: ELLICOTTVILLE

Date Collected: 07/12/17 14:40
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 16:06
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	6.9		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.24	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE

Lab Number: L1723821

Project Number: 21.0056367.63

Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-05

Date Collected: 07/12/17 14:40

Client ID: SP-43-071217

Date Received: 07/12/17

Sample Location: ELLICOTTVILLE

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	107		70-130

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-05
Client ID: SP-43-071217
Sample Location: ELLICOTTVILLE

Date Collected: 07/12/17 14:40
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/18/17 12:08
Analyst: LB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	0.619	J	ug/l	1.00	0.500	1	A
Ethene	ND		ug/l	0.500	0.500	1	A
Ethane	ND		ug/l	0.500	0.500	1	A

Project Name: FORMER SIGNORE

Lab Number: L1723821

Project Number: 21.0056367.63

Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-06
 Client ID: TRIP BLANK-071217
 Sample Location: ELLICOTTVILLE

Date Collected: 07/12/17 00:00
 Date Received: 07/12/17
 Field Prep: Not Specified

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/17/17 16:41
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE**Lab Number:** L1723821**Project Number:** 21.0056367.63**Report Date:** 07/19/17**SAMPLE RESULTS****Lab ID:** L1723821-06**Date Collected:** 07/12/17 00:00**Client ID:** TRIP BLANK-071217**Date Received:** 07/12/17**Sample Location:** ELLICOTTVILLE**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	109		70-130

Project Name: FORMER SIGNORE

Lab Number: L1723821

Project Number: 21.0056367.63

Report Date: 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/17/17 13:09
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1023291-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: FORMER SIGNORE

Lab Number: L1723821

Project Number: 21.0056367.63

Report Date: 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/17/17 13:09
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1023291-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: FORMER SIGNORE

Lab Number: L1723821

Project Number: 21.0056367.63

Report Date: 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 07/17/17 13:09

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1023291-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	107		70-130

Project Name: FORMER SIGNORE**Lab Number:** L1723821**Project Number:** 21.0056367.63**Report Date:** 07/19/17**Method Blank Analysis**
Batch Quality Control

Analytical Method: 117,-
Analytical Date: 07/18/17 10:43
Analyst: LB

Parameter	Result	Qualifier	Units	RL	MDL	
Dissolved Gases by GC - Mansfield Lab for sample(s): 02-05 Batch: WG1023466-3						
Methane	0.570	J	ug/l	1.00	0.500	A
Ethene	ND		ug/l	0.500	0.500	A
Ethane	ND		ug/l	0.500	0.500	A

Lab Control Sample Analysis Batch Quality Control

Project Name: FORMER SIGNORE

Lab Number: L1723821

Project Number: 21.0056367.63

Report Date: 07/19/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1023291-3 WG1023291-4								
Methylene chloride	95		81		70-130	16		20
1,1-Dichloroethane	99		85		70-130	15		20
Chloroform	110		100		70-130	10		20
Carbon tetrachloride	120		120		63-132	0		20
1,2-Dichloropropane	100		99		70-130	1		20
Dibromochloromethane	110		110		63-130	0		20
1,1,2-Trichloroethane	100		99		70-130	1		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	83		72		62-150	14		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	110		110		67-130	0		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	120		120		70-130	0		20
Bromoform	110		110		54-136	0		20
1,1,2,2-Tetrachloroethane	94		97		67-130	3		20
Benzene	100		99		70-130	1		20
Toluene	98		97		70-130	1		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	110		100		64-130	10		20
Bromomethane	62		57		39-139	8		20
Vinyl chloride	94		92		55-140	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER SIGNORE

Project Number: 21.0056367.63

Lab Number: L1723821

Report Date: 07/19/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1023291-3 WG1023291-4								
Chloroethane	82		68		55-138	19		20
1,1-Dichloroethene	77		69		61-145	11		20
trans-1,2-Dichloroethene	91		82		70-130	10		20
Trichloroethene	100		97		70-130	3		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	130		120		63-130	8		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	98		95		70-130	3		20
Styrene	110		110		70-130	0		20
Dichlorodifluoromethane	70		67		36-147	4		20
Acetone	120		100		58-148	18		20
Carbon disulfide	65		56		51-130	15		20
2-Butanone	100		100		63-138	0		20
4-Methyl-2-pentanone	97		100		59-130	3		20
2-Hexanone	95		94		57-130	1		20
Bromochloromethane	110		110		70-130	0		20
1,2-Dibromoethane	100		110		70-130	10		20
1,2-Dibromo-3-chloropropane	95		95		41-144	0		20
Isopropylbenzene	99		99		70-130	0		20
1,2,3-Trichlorobenzene	93		90		70-130	3		20

Lab Control Sample Analysis Batch Quality Control

Project Name: FORMER SIGNORE

Lab Number: L1723821

Project Number: 21.0056367.63

Report Date: 07/19/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1023291-3 WG1023291-4								
1,2,4-Trichlorobenzene	120		110		70-130	9		20
Methyl Acetate	92		79		70-130	15		20
Cyclohexane	80		75		70-130	6		20
1,4-Dioxane	142		130		56-162	9		20
Freon-113	75		65	Q	70-130	14		20
Methyl cyclohexane	88		84		70-130	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	114		116		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	96		99		70-130
Dibromofluoromethane	104		106		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: FORMER SIGNORE

Project Number: 21.0056367.63

Lab Number: L1723821

Report Date: 07/19/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 02-05 Batch: WG1023466-2									
Methane	118		-		80-120	-		25	A
Ethene	111		-		80-120	-		25	A
Ethane	110		-		80-120	-		25	A

Matrix Spike Analysis

Batch Quality Control

Project Name: FORMER SIGNORE

Project Number: 21.0056367.63

Lab Number: L1723821

Report Date: 07/19/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 02-05 QC Batch ID: WG1023466-5 QC Sample: L1723821-04 Client ID: SP-37-071217													
Methane	ND	54.6	63.6	116		-	-		80-120	-		25	A
Ethene	ND	95.5	102	107		-	-		80-120	-		25	A
Ethane	ND	102	110	107		-	-		80-120	-		25	A

METALS

Project Name: FORMER SIGNORE

Lab Number: L1723821

Project Number: 21.0056367.63

Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-02

Date Collected: 07/12/17 12:15

Client ID: SP-32-071217

Date Received: 07/12/17

Sample Location: ELLICOTTVILLE

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	07/18/17 11:40	07/19/17 09:13	EPA 3005A	1,6020A	AM
Manganese, Dissolved	0.01218		mg/l	0.00100	0.00044	1	07/18/17 11:40	07/19/17 09:13	EPA 3005A	1,6020A	AM



Project Name: FORMER SIGNORE

Lab Number: L1723821

Project Number: 21.0056367.63

Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-03

Date Collected: 07/12/17 13:15

Client ID: SP-38-071217

Date Received: 07/12/17

Sample Location: ELLICOTTVILLE

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	07/18/17 11:40	07/19/17 09:16	EPA 3005A	1,6020A	AM
Manganese, Dissolved	1.827		mg/l	0.00100	0.00044	1	07/18/17 11:40	07/19/17 09:16	EPA 3005A	1,6020A	AM



Project Name: FORMER SIGNORE

Lab Number: L1723821

Project Number: 21.0056367.63

Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-04

Date Collected: 07/12/17 13:55

Client ID: SP-37-071217

Date Received: 07/12/17

Sample Location: ELLICOTTVILLE

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	07/18/17 11:40	07/19/17 09:20	EPA 3005A	1,6020A	AM
Manganese, Dissolved	0.07316		mg/l	0.00100	0.00044	1	07/18/17 11:40	07/19/17 09:20	EPA 3005A	1,6020A	AM



Project Name: FORMER SIGNORE

Lab Number: L1723821

Project Number: 21.0056367.63

Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-05

Date Collected: 07/12/17 14:40

Client ID: SP-43-071217

Date Received: 07/12/17

Sample Location: ELLICOTTVILLE

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	07/18/17 11:40	07/19/17 09:23	EPA 3005A	1,6020A	AM
Manganese, Dissolved	0.00538		mg/l	0.00100	0.00044	1	07/18/17 11:40	07/19/17 09:23	EPA 3005A	1,6020A	AM



Project Name: FORMER SIGNORE

Lab Number: L1723821

Project Number: 21.0056367.63

Report Date: 07/19/17

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 02-05 Batch: WG1023463-1										
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	07/18/17 11:40	07/19/17 08:56	1,6020A	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	07/18/17 11:40	07/19/17 08:56	1,6020A	AM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER SIGNORE

Project Number: 21.0056367.63

Lab Number: L1723821

Report Date: 07/19/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 02-05 Batch: WG1023463-2								
Iron, Dissolved	106		-		80-120	-		
Manganese, Dissolved	103		-		80-120	-		

Matrix Spike Analysis

Batch Quality Control

Project Name: FORMER SIGNORE

Lab Number: L1723821

Project Number: 21.0056367.63

Report Date: 07/19/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 02-05 QC Batch ID: WG1023463-3 QC Sample: L1723821-02 Client ID: SP-32-071217												
Iron, Dissolved	ND	1	1.02	102		-	-		75-125	-		20
Manganese, Dissolved	0.01218	0.5	0.5089	99		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: FORMER SIGNORE

Project Number: 21.0056367.63

Lab Number: L1723821

Report Date: 07/19/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 02-05 QC Batch ID: WG1023463-4 QC Sample: L1723821-02 Client ID: SP-32-071217						
Iron, Dissolved	ND	ND	mg/l	NC		20
Manganese, Dissolved	0.01218	0.01137	mg/l	7		20

INORGANICS & MISCELLANEOUS

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-02
Client ID: SP-32-071217
Sample Location: ELLICOTTVILLE
Matrix: Water

Date Collected: 07/12/17 12:15
Date Received: 07/12/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Nitrate	1.4		mg/l	0.10	0.023	1	-	07/13/17 15:16	44,353.2	JO
Total Organic Carbon	1.08		mg/l	1.00	0.228	2	-	07/13/17 09:02	121,5310C	DW
Anions by Ion Chromatography - Westborough Lab										
Chloride	0.861		mg/l	0.500	0.083	1	-	07/13/17 20:18	44,300.0	AU
Sulfate	13.8		mg/l	1.00	0.160	1	-	07/13/17 20:18	44,300.0	AU



Project Name: FORMER SIGNORE

Project Number: 21.0056367.63

Lab Number: L1723821

Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-03

Client ID: SP-38-071217

Sample Location: ELLICOTTVILLE

Matrix: Water

Date Collected: 07/12/17 13:15

Date Received: 07/12/17

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Nitrate	0.24		mg/l	0.10	0.023	1	-	07/13/17 15:20	44,353.2	JO
Total Organic Carbon	1.05		mg/l	1.00	0.228	2	-	07/13/17 09:02	121,5310C	DW
Anions by Ion Chromatography - Westborough Lab										
Chloride	22.6		mg/l	0.500	0.083	1	-	07/13/17 20:30	44,300.0	AU
Sulfate	13.8		mg/l	1.00	0.160	1	-	07/13/17 20:30	44,300.0	AU

Project Name: FORMER SIGNORE

Project Number: 21.0056367.63

Lab Number: L1723821

Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-04

Client ID: SP-37-071217

Sample Location: ELLICOTTVILLE

Matrix: Water

Date Collected: 07/12/17 13:55

Date Received: 07/12/17

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Nitrate	1.3		mg/l	0.10	0.023	1	-	07/13/17 15:21	44,353.2	JO
Total Organic Carbon	1.93		mg/l	1.00	0.228	2	-	07/13/17 09:02	121,5310C	DW
Anions by Ion Chromatography - Westborough Lab										
Chloride	2.64		mg/l	0.500	0.083	1	-	07/13/17 20:42	44,300.0	AU
Sulfate	14.3		mg/l	1.00	0.160	1	-	07/13/17 20:42	44,300.0	AU



Project Name: FORMER SIGNORE

Project Number: 21.0056367.63

Lab Number: L1723821

Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723821-05

Client ID: SP-43-071217

Sample Location: ELLICOTTVILLE

Matrix: Water

Date Collected: 07/12/17 14:40

Date Received: 07/12/17

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Nitrate	3.7		mg/l	0.10	0.023	1	-	07/13/17 15:23	44,353.2	JO
Total Organic Carbon	1.58		mg/l	1.00	0.228	2	-	07/13/17 09:02	121,5310C	DW
Anions by Ion Chromatography - Westborough Lab										
Chloride	4.08		mg/l	0.500	0.083	1	-	07/13/17 20:54	44,300.0	AU
Sulfate	14.7		mg/l	1.00	0.160	1	-	07/13/17 20:54	44,300.0	AU



Project Name: FORMER SIGNORE

Lab Number: L1723821

Project Number: 21.0056367.63

Report Date: 07/19/17

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 02-05 Batch: WG1022083-1										
Total Organic Carbon	ND		mg/l	0.500	0.114	1	-	07/13/17 09:02	121,5310C	DW
General Chemistry - Westborough Lab for sample(s): 02-05 Batch: WG1022258-1										
Nitrogen, Nitrate	ND		mg/l	0.10	0.023	1	-	07/13/17 15:07	44,353.2	JO
Anions by Ion Chromatography - Westborough Lab for sample(s): 02-05 Batch: WG1022720-1										
Chloride	ND		mg/l	0.500	0.083	1	-	07/13/17 17:30	44,300.0	AU
Sulfate	ND		mg/l	1.00	0.160	1	-	07/13/17 17:30	44,300.0	AU

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-05 Batch: WG1022083-2								
Total Organic Carbon	100		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 02-05 Batch: WG1022258-2								
Nitrogen, Nitrate	102		-		90-110	-		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 02-05 Batch: WG1022720-2								
Chloride	102		-		90-110	-		
Sulfate	104		-		90-110	-		

Matrix Spike Analysis

Batch Quality Control

Project Name: FORMER SIGNORE

Lab Number: L1723821

Project Number: 21.0056367.63

Report Date: 07/19/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG1022083-4 QC Sample: L1723723-02 Client ID: MS Sample												
Total Organic Carbon	3.12	8	11.4	104		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG1022258-4 QC Sample: L1723821-02 Client ID: SP-32-071217												
Nitrogen, Nitrate	1.4	4	5.3	98		-	-		83-113	-		6
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG1022720-3 QC Sample: L1723309-01 Client ID: MS Sample												
Chloride	20.6	4	24.0	86	Q	-	-		90-110	-		18
Sulfate	30.4	8	37.5	89	Q	-	-		90-110	-		20

Lab Duplicate Analysis Batch Quality Control

Project Name: FORMER SIGNORE

Project Number: 21.0056367.63

Lab Number: L1723821

Report Date: 07/19/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG1022083-3 QC Sample: L1723723-01 Client ID: DUP Sample						
Total Organic Carbon	3.03	2.98	mg/l	2		20
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG1022258-3 QC Sample: L1723821-02 Client ID: SP-32-071217						
Nitrogen, Nitrate	1.4	1.4	mg/l	0		6
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG1022720-4 QC Sample: L1723309-01 Client ID: DUP Sample						
Chloride	20.6	20.5	mg/l	0		18
Sulfate	30.4	30.1	mg/l	1		20

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Serial_No:07191714:34
Lab Number: L1723821
Report Date: 07/19/17

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1723821-01A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723821-01B	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723821-01C	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723821-02A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723821-02B	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723821-02C	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723821-02D	20ml Vial HCl preserved	A	NA		5.6	Y	Absent		DISSGAS(14)
L1723821-02E	20ml Vial HCl preserved	A	NA		5.6	Y	Absent		DISSGAS(14)
L1723821-02F	Vial H2SO4 preserved	A	NA		5.6	Y	Absent		TOC-5310(28)
L1723821-02G	Vial H2SO4 preserved	A	NA		5.6	Y	Absent		TOC-5310(28)
L1723821-02H	Plastic 250ml unpreserved	A	7	7	5.6	Y	Absent		SO4-300(28),CL-300(28),NO3-353(2)
L1723821-02I	Plastic 250ml unpreserved	A	7	7	5.6	Y	Absent		-
L1723821-02X	Plastic 250ml HNO3 preserved Filtrates	A	NA		5.6	Y	Absent		MN-6020S(180),FE-6020S(180)
L1723821-03A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723821-03B	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723821-03C	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723821-03D	20ml Vial HCl preserved	A	NA		5.6	Y	Absent		DISSGAS(14)
L1723821-03E	20ml Vial HCl preserved	A	NA		5.6	Y	Absent		DISSGAS(14)
L1723821-03F	Vial H2SO4 preserved	A	NA		5.6	Y	Absent		TOC-5310(28)
L1723821-03G	Vial H2SO4 preserved	A	NA		5.6	Y	Absent		TOC-5310(28)
L1723821-03H	Plastic 250ml unpreserved	A	7	7	5.6	Y	Absent		SO4-300(28),CL-300(28),NO3-353(2)
L1723821-03I	Plastic 250ml unpreserved	A	7	7	5.6	Y	Absent		-
L1723821-03X	Plastic 250ml HNO3 preserved Filtrates	A	NA		5.6	Y	Absent		MN-6020S(180),FE-6020S(180)

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Serial_No:07191714:34
Lab Number: L1723821
Report Date: 07/19/17

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1723821-04A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723821-04B	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723821-04C	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723821-04D	20ml Vial HCl preserved	A	NA		5.6	Y	Absent		DISSGAS(14)
L1723821-04E	20ml Vial HCl preserved	A	NA		5.6	Y	Absent		DISSGAS(14)
L1723821-04F	Vial H2SO4 preserved	A	NA		5.6	Y	Absent		TOC-5310(28)
L1723821-04G	Vial H2SO4 preserved	A	NA		5.6	Y	Absent		TOC-5310(28)
L1723821-04H	Plastic 250ml unpreserved	A	7	7	5.6	Y	Absent		SO4-300(28),CL-300(28),NO3-353(2)
L1723821-04I	Plastic 250ml unpreserved	A	7	7	5.6	Y	Absent		-
L1723821-04X	Plastic 250ml HNO3 preserved Filtrates	A	NA		5.6	Y	Absent		MN-6020S(180),FE-6020S(180)
L1723821-05A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723821-05B	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723821-05C	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723821-05D	20ml Vial HCl preserved	A	NA		5.6	Y	Absent		DISSGAS(14)
L1723821-05E	20ml Vial HCl preserved	A	NA		5.6	Y	Absent		DISSGAS(14)
L1723821-05F	Vial H2SO4 preserved	A	NA		5.6	Y	Absent		TOC-5310(28)
L1723821-05G	Vial H2SO4 preserved	A	NA		5.6	Y	Absent		TOC-5310(28)
L1723821-05H	Plastic 250ml unpreserved	A	7	7	5.6	Y	Absent		SO4-300(28),CL-300(28),NO3-353(2)
L1723821-05I	Plastic 250ml unpreserved	A	7	7	5.6	Y	Absent		-
L1723821-05X	Plastic 250ml HNO3 preserved Filtrates	A	NA		5.6	Y	Absent		MN-6020S(180),FE-6020S(180)
L1723821-06A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers



Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723821
Report Date: 07/19/17

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.
- 117 Technical Guidance for the Natural Attenuation Indicators: Methane, Ethane, and Ethene, EPA-NE, Revision 1, February 21, 2002 and Sample Preparation & Calculations for Dissolved Gas Analysis in Water Samples using a GC Headspace Equilibration Technique, EPA RSKSOP-175, Revision 2, May 2004.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 10

Department: **Quality Assurance**

Published Date: 1/16/2017 11:00:05 AM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.**EPA 300:** DW: Bromide**EPA 6860:** NPW and SCM: Perchlorate**EPA 9010:** NPW and SCM: Amenable Cyanide Distillation**EPA 9012B:** NPW: Total Cyanide**EPA 9050A:** NPW: Specific Conductance**SM3500:** NPW: Ferrous Iron**SM4500:** NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.**SM5310C:** DW: Dissolved Organic Carbon**Mansfield Facility****SM 2540D:** TSS**EPA 3005A** NPW**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.****EPA 624:** Volatile Halocarbons & Aromatics,**EPA 608:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.****Mansfield Facility:****Drinking Water****EPA 200.7:** Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.**Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.**EPA 245.1** Hg.**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1 of 1	Date Rec'd in Lab 7/13/17	ALPHA Job # L1723821
	Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		

Project Information Project Name: <u>Former Signature</u> Project Location: <u>Ellingtonville</u> Project # <u>21.0056367.63</u> (Use Project name as Project #) ☐ Project Manager: <u>J. Richter</u> ALPHAQuote #: Turn-Around Time Standard ☒ Due Date: Rush (only if pre approved) ☐ # of Days:	Deliverables ☐ ASP-A ☒ ASP-B ☐ EQUIS (1 File) ☐ EQUIS (4 File) ☐ Other <u>Client NYSDEC EDD</u> Regulatory Requirement ☐ NY TOGS ☐ NY Part 375 ☐ AWQ Standards ☐ NY CP-51 ☐ NY Restricted Use ☐ Other ☐ NY Unrestricted Use ☐ NYC Sewer Discharge

Client Information Client: <u>GZA</u> Address: <u>535 Washington St</u> <u>Buffalo NY 14203</u> Phone: <u>716-685-2300</u> Fax: Email: <u>Peter.Nyzwyk@GZA.com</u>	Billing Information ☒ Same as Client Info PO # <u>21.0056367.63</u> Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: ☐ NJ ☐ NY ☐ Other:

These samples have been previously analyzed by Alpha ☐
 Other project specific requirements/comments:

Please specify Metals or TAL.

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	ANALYSIS										Sample Specific Comments		
		Date	Time			8260 TCL	TCL	CL, NO3, SO4 EPA 300	D-SS Metals FEIMn	D-SS GAS								
23821-01	TP-11-071217	7-12-17	1110	GW	DN	X												
02	SP-32-071217		1215			X	X	X	X	X								
03	SP-38-071217		1315			X	X	X	X	X								
04	SP-37-071217		1355			X	X	X	X	X								
05	SP-43-071217		1440			X	X	X	X	X								
06	TRIP BLANK-071217					X												

Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other	Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle	Westboro: Certification No: MA935 Mansfield: Certification No: MA015	Container Type Preservative	Relinquished By: <u>[Signature]</u> Date/Time: <u>7/12/17 1515</u>	Received By: <u>[Signature]</u> Date/Time: <u>7/12/17 1610</u>

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)



ANALYTICAL REPORT

Lab Number:	L1723955
Client:	GZA GeoEnvironmental 535 Washington St. Buffalo, NY 14203
ATTN:	James Richert
Phone:	(716) 685-2300
Project Name:	FORMER SIGNORE
Project Number:	21.0056367.63
Report Date:	07/20/17

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723955
Report Date: 07/20/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1723955-01	EW-1.25-071317	WATER	ELLCOTTVILLE	07/13/17 08:20	07/13/17
L1723955-02	SP-45-071317	WATER	ELLCOTTVILLE	07/13/17 09:25	07/13/17
L1723955-03	TRIP BLANK-071317	WATER	ELLCOTTVILLE	07/13/17 00:00	07/13/17

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723955
Report Date: 07/20/17

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723955
Report Date: 07/20/17

Case Narrative (continued)

Report Submission

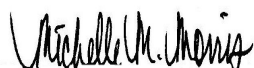
All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Nitrogen, Nitrate

L1723955-01 and -02: The sample was analyzed for Nitrite within the method required holding time. An aliquot of sample was then preserved and analyzed for Nitrate.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 07/20/17

ORGANICS

VOLATILES

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723955
Report Date: 07/20/17

SAMPLE RESULTS

Lab ID: L1723955-01
Client ID: EW-1.25-071317
Sample Location: ELLICOTTVILLE

Date Collected: 07/13/17 08:20
Date Received: 07/13/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/19/17 10:51
Analyst: LB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	402		ug/l	3.00	0.500	1	A
Ethene	0.828		ug/l	0.500	0.500	1	A
Ethane	0.977		ug/l	0.500	0.500	1	A

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723955
Report Date: 07/20/17

SAMPLE RESULTS

Lab ID: L1723955-02
Client ID: SP-45-071317
Sample Location: ELLICOTTVILLE

Date Collected: 07/13/17 09:25
Date Received: 07/13/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 23:59
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	45		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	1.7		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	10		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723955
Report Date: 07/20/17

SAMPLE RESULTS

Lab ID: L1723955-02
Client ID: SP-45-071317
Sample Location: ELLICOTTVILLE

Date Collected: 07/13/17 09:25
Date Received: 07/13/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	2.0	J	ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	107		70-130

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723955
Report Date: 07/20/17

SAMPLE RESULTS

Lab ID: L1723955-02
Client ID: SP-45-071317
Sample Location: ELLICOTTVILLE

Date Collected: 07/13/17 09:25
Date Received: 07/13/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/19/17 11:05
Analyst: LB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	1760		ug/l	3.00	0.500	1	A
Ethene	0.770		ug/l	0.500	0.500	1	A
Ethane	1.00		ug/l	0.500	0.500	1	A

Project Name: FORMER SIGNORE

Lab Number: L1723955

Project Number: 21.0056367.63

Report Date: 07/20/17

SAMPLE RESULTS

Lab ID: L1723955-03
 Client ID: TRIP BLANK-071317
 Sample Location: ELLICOTTVILLE

Date Collected: 07/13/17 00:00
 Date Received: 07/13/17
 Field Prep: Not Specified

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/18/17 00:27
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE**Lab Number:** L1723955**Project Number:** 21.0056367.63**Report Date:** 07/20/17**SAMPLE RESULTS****Lab ID:** L1723955-03**Date Collected:** 07/13/17 00:00**Client ID:** TRIP BLANK-071317**Date Received:** 07/13/17**Sample Location:** ELLICOTTVILLE**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	106		70-130

Project Name: FORMER SIGNORE

Lab Number: L1723955

Project Number: 21.0056367.63

Report Date: 07/20/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 07/17/17 22:05

Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG1023473-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: FORMER SIGNORE

Lab Number: L1723955

Project Number: 21.0056367.63

Report Date: 07/20/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/17/17 22:05
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG1023473-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: FORMER SIGNORE**Lab Number:** L1723955**Project Number:** 21.0056367.63**Report Date:** 07/20/17**Method Blank Analysis**
Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 07/17/17 22:05

Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG1023473-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	111		70-130

Project Name: FORMER SIGNORE**Lab Number:** L1723955**Project Number:** 21.0056367.63**Report Date:** 07/20/17**Method Blank Analysis**
Batch Quality Control

Analytical Method: 117,-
Analytical Date: 07/19/17 10:23
Analyst: LB

Parameter	Result	Qualifier	Units	RL	MDL	
Dissolved Gases by GC - Mansfield Lab for sample(s): 01-02 Batch: WG1023825-3						
Methane	0.551	J	ug/l	3.00	0.500	A
Ethene	ND		ug/l	0.500	0.500	A
Ethane	ND		ug/l	0.500	0.500	A

Lab Control Sample Analysis Batch Quality Control

Project Name: FORMER SIGNORE

Lab Number: L1723955

Project Number: 21.0056367.63

Report Date: 07/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG1023473-3 WG1023473-4								
Methylene chloride	99		97		70-130	2		20
1,1-Dichloroethane	98		95		70-130	3		20
Chloroform	110		100		70-130	10		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	94		93		70-130	1		20
Dibromochloromethane	100		100		63-130	0		20
1,1,2-Trichloroethane	91		91		70-130	0		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	97		94		75-130	3		20
Trichlorofluoromethane	110		100		62-150	10		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	110		100		67-130	10		20
trans-1,3-Dichloropropene	91		88		70-130	3		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
Bromoform	96		96		54-136	0		20
1,1,2,2-Tetrachloroethane	85		84		67-130	1		20
Benzene	97		94		70-130	3		20
Toluene	94		91		70-130	3		20
Ethylbenzene	94		92		70-130	2		20
Chloromethane	85		84		64-130	1		20
Bromomethane	93		94		39-139	1		20
Vinyl chloride	88		86		55-140	2		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FORMER SIGNORE

Lab Number: L1723955

Project Number: 21.0056367.63

Report Date: 07/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG1023473-3 WG1023473-4								
Chloroethane	94		93		55-138	1		20
1,1-Dichloroethene	99		95		61-145	4		20
trans-1,2-Dichloroethene	100		99		70-130	1		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	95		92		70-130	3		20
1,3-Dichlorobenzene	96		92		70-130	4		20
1,4-Dichlorobenzene	95		90		70-130	5		20
Methyl tert butyl ether	100		100		63-130	0		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	100		95		70-130	5		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Styrene	100		95		70-130	5		20
Dichlorodifluoromethane	89		87		36-147	2		20
Acetone	110		110		58-148	0		20
Carbon disulfide	93		90		51-130	3		20
2-Butanone	82		85		63-138	4		20
4-Methyl-2-pentanone	83		79		59-130	5		20
2-Hexanone	76		76		57-130	0		20
Bromochloromethane	110		110		70-130	0		20
1,2-Dibromoethane	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	84		84		41-144	0		20
Isopropylbenzene	92		87		70-130	6		20
1,2,3-Trichlorobenzene	86		95		70-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER SIGNORE

Lab Number: L1723955

Project Number: 21.0056367.63

Report Date: 07/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG1023473-3 WG1023473-4								
1,2,4-Trichlorobenzene	90		92		70-130	2		20
Methyl Acetate	88		79		70-130	11		20
Cyclohexane	85		82		70-130	4		20
1,4-Dioxane	106		112		56-162	6		20
Freon-113	97		94		70-130	3		20
Methyl cyclohexane	90		86		70-130	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	111		110		70-130
Toluene-d8	97		96		70-130
4-Bromofluorobenzene	95		94		70-130
Dibromofluoromethane	110		111		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: FORMER SIGNORE

Project Number: 21.0056367.63

Lab Number: L1723955

Report Date: 07/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 01-02 Batch: WG1023825-2									
Methane	116		-		80-120	-		25	A
Ethene	109		-		80-120	-		25	A
Ethane	108		-		80-120	-		25	A

METALS

Project Name: FORMER SIGNORE**Lab Number:** L1723955**Project Number:** 21.0056367.63**Report Date:** 07/20/17**SAMPLE RESULTS****Lab ID:** L1723955-01**Date Collected:** 07/13/17 08:20**Client ID:** EW-1.25-071317**Date Received:** 07/13/17**Sample Location:** ELLICOTTVILLE**Field Prep:** Not Specified**Matrix:** Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	07/19/17 14:50	07/20/17 09:22	EPA 3005A	1,6020A	AM
Manganese, Dissolved	1.256		mg/l	0.00100	0.00044	1	07/19/17 14:50	07/20/17 09:22	EPA 3005A	1,6020A	AM



Project Name: FORMER SIGNORE

Lab Number: L1723955

Project Number: 21.0056367.63

Report Date: 07/20/17

SAMPLE RESULTS

Lab ID: L1723955-02

Date Collected: 07/13/17 09:25

Client ID: SP-45-071317

Date Received: 07/13/17

Sample Location: ELLICOTTVILLE

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	07/19/17 14:50	07/20/17 09:26	EPA 3005A	1,6020A	AM
Manganese, Dissolved	0.2408		mg/l	0.00100	0.00044	1	07/19/17 14:50	07/20/17 09:26	EPA 3005A	1,6020A	AM



Project Name: FORMER SIGNORE

Lab Number: L1723955

Project Number: 21.0056367.63

Report Date: 07/20/17

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1023901-1										
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	07/19/17 14:50	07/20/17 08:59	1,6020A	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	07/19/17 14:50	07/20/17 08:59	1,6020A	AM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER SIGNORE

Project Number: 21.0056367.63

Lab Number: L1723955

Report Date: 07/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1023901-2								
Iron, Dissolved	84		-		80-120	-		
Manganese, Dissolved	83		-		80-120	-		

Matrix Spike Analysis Batch Quality Control

Project Name: FORMER SIGNORE

Lab Number: L1723955

Project Number: 21.0056367.63

Report Date: 07/20/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1023901-3 QC Sample: L1723955-01 Client ID: EW-1.25-071317												
Iron, Dissolved	ND	1	1.03	103		-	-		75-125	-		20
Manganese, Dissolved	1.256	0.5	1.720	93		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: FORMER SIGNORE

Project Number: 21.0056367.63

Lab Number: L1723955

Report Date: 07/20/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1023901-4 QC Sample: L1723955-01 Client ID: EW-1.25-071317						
Iron, Dissolved	ND	ND	mg/l	NC		20
Manganese, Dissolved	1.256	1.131	mg/l	10		20

INORGANICS & MISCELLANEOUS

Project Name: FORMER SIGNORE

Project Number: 21.0056367.63

Lab Number: L1723955

Report Date: 07/20/17

SAMPLE RESULTS

Lab ID: L1723955-01

Client ID: EW-1.25-071317

Sample Location: ELLICOTTVILLE

Matrix: Water

Date Collected: 07/13/17 08:20

Date Received: 07/13/17

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Nitrate	ND		mg/l	0.10	0.023	1	-	07/15/17 19:37	44,353.2	MR
Total Organic Carbon	1.84		mg/l	1.00	0.228	2	-	07/14/17 07:42	121,5310C	DW
Anions by Ion Chromatography - Westborough Lab										
Chloride	46.6		mg/l	0.500	0.083	1	-	07/14/17 18:02	44,300.0	AU
Sulfate	8.86		mg/l	1.00	0.160	1	-	07/14/17 18:02	44,300.0	AU



Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723955
Report Date: 07/20/17

SAMPLE RESULTS

Lab ID: L1723955-02
Client ID: SP-45-071317
Sample Location: ELLICOTTVILLE
Matrix: Water

Date Collected: 07/13/17 09:25
Date Received: 07/13/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Nitrogen, Nitrate	0.79		mg/l	0.10	0.023	1	-	07/15/17 19:38	44,353.2	MR
Total Organic Carbon	1.23		mg/l	1.00	0.228	2	-	07/14/17 07:42	121,5310C	DW
Anions by Ion Chromatography - Westborough Lab										
Chloride	3.16		mg/l	0.500	0.083	1	-	07/14/17 18:14	44,300.0	AU
Sulfate	19.1		mg/l	1.00	0.160	1	-	07/14/17 18:14	44,300.0	AU



Project Name: FORMER SIGNORE

Lab Number: L1723955

Project Number: 21.0056367.63

Report Date: 07/20/17

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1022493-1										
Total Organic Carbon	ND		mg/l	0.500	0.114	1	-	07/14/17 07:42	121,5310C	DW
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1022749-1										
Nitrogen, Nitrate	ND		mg/l	0.10	0.023	1	-	07/15/17 18:33	44,353.2	MR
Anions by Ion Chromatography - Westborough Lab for sample(s): 01-02 Batch: WG1023261-1										
Chloride	ND		mg/l	0.500	0.083	1	-	07/14/17 17:38	44,300.0	AU
Sulfate	ND		mg/l	1.00	0.160	1	-	07/14/17 17:38	44,300.0	AU

Lab Control Sample Analysis**Batch Quality Control****Project Name:** FORMER SIGNORE**Project Number:** 21.0056367.63**Lab Number:** L1723955**Report Date:** 07/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1022493-2								
Total Organic Carbon	98		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1022749-2								
Nitrogen, Nitrate	100		-		90-110	-		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-02 Batch: WG1023261-2								
Chloride	102		-		90-110	-		
Sulfate	104		-		90-110	-		

Matrix Spike Analysis

Batch Quality Control

Project Name: FORMER SIGNORE

Lab Number: L1723955

Project Number: 21.0056367.63

Report Date: 07/20/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02				QC Batch ID: WG1022493-4			QC Sample: L1724010-01			Client ID: MS Sample		
Total Organic Carbon	6.00	20	26.2	101		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02				QC Batch ID: WG1022749-4			QC Sample: L1724153-03			Client ID: MS Sample		
Nitrogen, Nitrate	1.8	4	5.7	98		-	-		83-113	-		6
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-02				QC Batch ID: WG1023261-3			QC Sample: L1723955-02			Client ID: SP-45-071317		
Chloride	3.16	4	7.21	101		-	-		90-110	-		18
Sulfate	19.1	8	26.9	98		-	-		90-110	-		20

Lab Duplicate Analysis Batch Quality Control

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723955
Report Date: 07/20/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1022493-3 QC Sample: L1724010-01 Client ID: DUP Sample						
Total Organic Carbon	6.00	6.06	mg/l	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1022749-3 QC Sample: L1724153-03 Client ID: DUP Sample						
Nitrogen, Nitrate	1.8	2.0	mg/l	10	Q	6
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1023261-4 QC Sample: L1723955-02 Client ID: SP-45-071317						
Chloride	3.16	3.16	mg/l	0		18
Sulfate	19.1	19.1	mg/l	0		20

Project Name: FORMER SIGNORE**Lab Number:** L1723955**Project Number:** 21.0056367.63**Report Date:** 07/20/17**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1723955-01A	20ml Vial HCl preserved	A	NA		2.9	Y	Absent		DISSGAS(14)
L1723955-01B	20ml Vial HCl preserved	A	NA		2.9	Y	Absent		DISSGAS(14)
L1723955-01C	Vial H2SO4 preserved	A	NA		2.9	Y	Absent		TOC-5310(28)
L1723955-01D	Vial H2SO4 preserved	A	NA		2.9	Y	Absent		TOC-5310(28)
L1723955-01E	Plastic 250ml unpreserved	A	7	7	2.9	Y	Absent		SO4-300(28),CL-300(28),NO3-353(2)
L1723955-01F	Plastic 250ml unpreserved	A	7	7	2.9	Y	Absent		-
L1723955-01X	Plastic 250ml HNO3 preserved Filtrates	A	N/A	N/A	2.9	Y	Absent		MN-6020S(180),FE-6020S(180)
L1723955-02A	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1723955-02B	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1723955-02C	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1723955-02D	20ml Vial HCl preserved	A	NA		2.9	Y	Absent		DISSGAS(14)
L1723955-02E	20ml Vial HCl preserved	A	NA		2.9	Y	Absent		DISSGAS(14)
L1723955-02F	Vial H2SO4 preserved	A	NA		2.9	Y	Absent		TOC-5310(28)
L1723955-02G	Vial H2SO4 preserved	A	NA		2.9	Y	Absent		TOC-5310(28)
L1723955-02H	Plastic 250ml unpreserved	A	7	7	2.9	Y	Absent		SO4-300(28),CL-300(28),NO3-353(2)
L1723955-02I	Plastic 250ml unpreserved	A	7	7	2.9	Y	Absent		-
L1723955-02X	Plastic 250ml HNO3 preserved Filtrates	A	N/A	N/A	2.9	Y	Absent		MN-6020S(180),FE-6020S(180)
L1723955-03A	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)

Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723955
Report Date: 07/20/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers



Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723955
Report Date: 07/20/17

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: FORMER SIGNORE
Project Number: 21.0056367.63

Lab Number: L1723955
Report Date: 07/20/17

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.
- 117 Technical Guidance for the Natural Attenuation Indicators: Methane, Ethane, and Ethene, EPA-NE, Revision 1, February 21, 2002 and Sample Preparation & Calculations for Dissolved Gas Analysis in Water Samples using a GC Headspace Equilibration Technique, EPA RSKSOP-175, Revision 2, May 2004.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 10

Department: **Quality Assurance**

Published Date: 1/16/2017 11:00:05 AM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.**EPA 300:** DW: Bromide**EPA 6860:** NPW and SCM: Perchlorate**EPA 9010:** NPW and SCM: Amenable Cyanide Distillation**EPA 9012B:** NPW: Total Cyanide**EPA 9050A:** NPW: Specific Conductance**SM3500:** NPW: Ferrous Iron**SM4500:** NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.**SM5310C:** DW: Dissolved Organic Carbon**Mansfield Facility****SM 2540D:** TSS**EPA 3005A** NPW**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

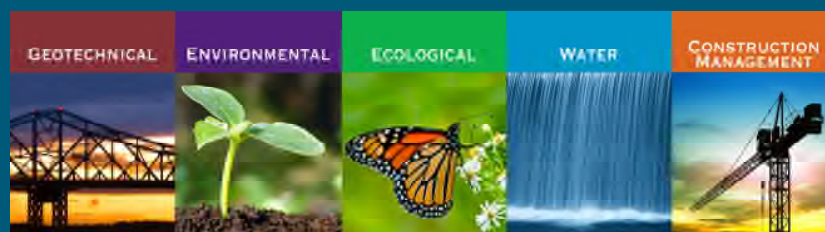
3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.****EPA 624:** Volatile Halocarbons & Aromatics,**EPA 608:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.****Mansfield Facility:****Drinking Water****EPA 200.7:** Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1 Hg.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.**EPA 245.1 Hg.****SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



GZA GeoEnvironmental, Inc.



Proactive by Design



JULY 2017 SEMI-ANNUAL GROUNDWATER MONITORING REPORT

**Former Signore Inc.
55-57 Jefferson Street
Ellicottville New York 14731**

August 30, 2017

File No. 21.0056491.78



PREPARED FOR:

**Iskalo Ellicottville Holdings LLC
Williamsville, New York**

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VIA EMAIL

August 30, 2017
File No. 21.0056491.78

Mr. David Chiazza
Iskalo Ellicottville Holdings LLC
Harbinger Square
5166 Main Street
Williamsville, NY 14221
email: dchiazza@iskalo.com

Re: July 2017 Semi-Annual Groundwater Monitoring Report
Former Signore, Inc. Facility
55-57 Jefferson Street
Ellicottville, NY 14731

Dear David:

GZA GeoEnvironmental of New York (GZA) is pleased to submit this semi-annual groundwater monitoring report to Iskalo Ellicottville Holdings LLC (Iskalo) summarizing the analytical results of the sampling event conducted in July 2017 at the above referenced Site. The semi-annual groundwater monitoring was performed as required by New York State Department of Environmental Conservation (NYSDEC) as specified in the Record of Decision (ROD) dated January 1992.

This report provides the analytical results of the ROD-required semi-annual monitoring (12 wells sampled). The analytical results of the groundwater sampling provide useful information for documentation of concentrations of volatile organic compounds (VOCs) present in the on-Site groundwater as well as the areal extent of these constituents. Both on-site and off-site monitoring wells have been sampled since 1994. Comparison of the over 20 years of groundwater data confirms that concentrations of tetrachloroethene (PCE) and trichloroethene (TCE) and their breakdown products cis-1,2-dichloroethene (cis-DCE) and vinyl chloride (VC) continue to decline with less exceedances of NYSDEC Class GA groundwater standards 1 being observed.

As discussed further in the attached report, GZA recommends reducing the frequency of monitoring from semi-annual to annual.



Should you have any questions or require additional information following your review, please contact Jim Richert at 716-844-7048 or Tom Bohlen at 716-844-7050.

Sincerely,

GZA GEOENVIRONMENTAL OF NEW YORK

A handwritten signature in blue ink that reads "Thomas Bohlen".

Thomas Bohlen
Project Manager

A handwritten signature in blue ink that reads "Karen Kinsella".

Karen Kinsella, Ph. D.
Senior Technical Specialist

A handwritten signature in blue ink that reads "Jim Richert".

James J. Richert, P.G. PA, C.P.G
Senior Project Manager

A handwritten signature in blue ink that reads "Bart A. Klettke".

Bart A. Klettke, P.E.
Principal



TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	1
1.1 BACKGROUND AND SITE HISTORY.....	1
2.0 PURPOSE AND SCOPE OF WORK	4
3.0 FIELD METHODS	4
3.1 GROUND WATER SAMPLING PROCEDURES	4
3.2 GROUNDWATER DATA COLLECTION	6
4.0 ANALYTICAL LABORATORY TESTING.....	7
5.0 ANALYTICAL TEST RESULTS.....	7
5.1 ON SITE WELLS	8
5.2 OFF SITE WELLS	9
6.0 SUMMARY	9

TABLES

TABLE 1 JULY 2017 ANALYTICAL PROGRAM SUMMARY

TABLE 2 JULY 2017 ANALYTICAL RESULTS SUMMARY

TABLE 3 HISTORICAL ANALYTICAL DATA SUMMARY

FIGURES

FIGURE 1 LOCUS PLAN

FIGURE 2 SITE PLAN/GROUNDWATER ELEVATION MAP

APPENDICES

APPENDIX A LIMITATIONS

APPENDIX B WELL DEVELOPMENT FORMS

APPENDIX C TCE AND PCE GROUNDWATER CONCENTRATION GRAPHS

APPENDIX D ANALYTICAL TEST RESULTS



1.0 INTRODUCTION

In accordance with our June 27, 2017 proposal, GZA GeoEnvironmental of New York (GZA) collected groundwater samples at eight on-Site and four off-site monitoring wells associated with the Former Signore, Inc. facility located at 55-57 Jefferson Street, Ellicottville, New York (Site). The sampling was performed on July 11 through July 13, 2017. A Locus Plan and Site Plan are attached as Figure 1 and Figure 2, respectively.

1.1 BACKGROUND AND SITE HISTORY

The Former Signore Inc. Site is currently listed as a Class 4 Site on the New York State Department of Environmental Conservation (NYSDEC), Inactive Hazardous Waste Site (IHWS) registry (Site #905023). As part of the Record of Decision (ROD) dated January 1992 issued by NYSDEC, 12 monitoring wells were to be sampled on a semi-annual basis. The former owner, Signore Inc., ceased sampling of these wells in October 2006.

In October 2007, GZA completed a Phase II ESA at the Site as part of due diligence services for Iskalo. During the Phase II activities, VOC contamination was identified in on-Site soil and groundwater. Three areas of concern (AOC) were identified where VOC concentrations in soil were greater than the NYSDEC Unrestricted Soil Cleanup Objectives (6 NYCRR Part 375¹ criteria).

Iskalo Ellicottville Holdings LLC (Iskalo) took ownership of the property in October 2007 and has conducted the semi-annual sampling activities since April 2009. The Site was accepted into the NYSDEC Brownfield Cleanup Program (BCP) as Site # C905034 in January 2011.

In late 2011, AOC-1 and the majority of AOC-2 were addressed under a NYSDEC-approved IRM work plan. VOC-impacted soils and underground storage tanks were removed for proper off-Site disposal. A portion of AOC-2 and AOC-3 were located beneath the former building during the time of the first IRM, which has since been demolished.

A Supplemental Remedial Investigation (SRI) was completed between January 2012 and January 2013. The activities included the following.

- Off-site soil vapor intrusion assessment of nine homes;
- Completion of 10 on-site test pits;
- Completion of 21 on-site soil probes;
- Collection and analysis of four on-site surface soil samples;
- Collection and analysis of 21 soil samples from the 21 soil probes; and
- Collection of 19 groundwater samples from the 14 new microwells installed as part of the SRI, and 5 existing wells.

¹ 6 New York Code Rules and Regulation (6 NYCRR) Part 375 Environmental Remediation Programs, effective December 14, 2006 (Part 375).



The magnitude and areal extent of groundwater contamination was further defined within the Signore BCP Site boundaries, during the SRI activities.

The remaining portion of AOC-2 and AOC-3 were addressed in summer 2013 as part of a 2nd IRM. Impacted soils at these locations were removed for off-site landfill disposal. A groundwater pilot test was also implemented as part of the 2nd IRM. The pilot test consisted of the injection of an electron donor compound (EDC) material that was mixed with water. A total of 2,500 pounds of EDC material was injected, 2,000 pounds in the vicinity of SP-3 and 500 pounds at SP-32.

The EDC material enhances the anaerobic breakdown of the “parent” chlorinated compounds present at the Site (TCE, PCE and TCA) via reductive dehalogenation to the “daughter” breakdown products (cis-dichloroethene (cis-DCE) and vinyl chloride (VC)), which degrade under both anaerobic and aerobic conditions.

The groundwater pilot test work plan included two post-injection sampling events:

- 1) 1st event: not more than 3 months (Fall 2013) after the pilot test injections; and
- 2) 2nd event: 9 to 12 months (late Spring 2014) after the pilot test injections.

Groundwater samples were collected from six locations (EW-1.25, SP-32, SP-37, SP-38, SP-43, and SP-45) in conjunction with the October 2013 and June 2014 semi-annual groundwater sampling events. The results from the first to second pilot sampling events were as follows.

- There was a decrease in parent compound concentrations at three of the six sampling locations: EW-1.25, SP-37, and SP-43.
- There was an increase in parent compound concentrations at the other three of six locations: SP-32, SP-38 and SP-45. The slight increase in concentration was not a concern at that time and may have been due to sample variability for this particular sample event.
- Results of the groundwater pilot test supported the use of a similar but larger scale in-situ injection program for Site groundwater remediation. A Remedial Action Work Plan, detailing the groundwater remedial program, was prepared and submitted to NYSDEC. NYSDEC approved the RAWP and the groundwater remedial injections were initiated on July 6, 2015.

The July 2015 remedial injection material consisted of Organic Carbon Electron Donor Substrate (OCEDS). The program consisted of the injection of approximately 7,000 pounds of OC material into groundwater over an approximately 12,000 ft² oval-shaped area of the Site. The OC material was composed of food-, feed-, and agricultural- grade additives consisting of an aqueous solution of approximately 53% lactose, 40% inactive brewer’s yeast or yeast extract, 4% sodium bicarbonate, and 3% trace nutrients (inorganic nitrate, phosphate, potassium, and vitamin B12) by mass. The following materials were mixed into an injectable slurry and injected into the subsurface groundwater, per each five injection locations (10 injections):



- Lactose: 264 pounds
- MicroBlend® Yeast Extract: 20 pounds
- Sensient® Yeast Extract: 143 pounds
- Sodium bicarbonate: 21 pounds
- Miracle-Gro®: 14 pounds

The additive slurry was injected in a grid pattern encompassing 70 injection locations. The 70 injection locations were spaced approximately 20 feet apart. One hundred pounds of OC material and 70 gallons of water were injected at each location. The slurry was injected in two intervals below the groundwater table at each location, for a total of 50 pounds of OC material and 35 gallons of water per interval. The deep injection was completed first at each location, at approximately 10 feet below the groundwater table. Groundwater levels were measured on-site in the morning prior to the start of injections, and were utilized to determine injection depths across the Site as groundwater levels varied across the area of injections. The deep injection occurred at ~18-20 ft. bgs. The direct push soil probe rod was then brought up approximately five feet, and the shallow injection was completed. Post-injection groundwater sampling events were conducted in August and October 2015, June and October 2016, and in July 2017 to assess the efficacy of the OCEDS injections in promoting continued natural attenuation of cVOCs at the Site. The efficacy of the remedy is being managed and reported under the NYSDEC BCP.

Reductive dechlorination is the biologically- or chemically- mediated replacement of chlorine (as chloride) on a chlorinated organic compound with elemental hydrogen, in the presence of a suitable electron donor. This causes transformation of the chlorinated VOC (cVOC) to a less chlorinated product. An electron donor is a substance capable of supplying electrons during oxidation-reduction reactions. In biological reductive dechlorination, microorganisms obtain energy by transferring electrons from electron donors to electron acceptors. Electron donors are chemically-reduced materials such as the OCEDS. Electron acceptors include oxygen, nitrate, ferric iron, sulfate, and cVOCs. Biological reductive dechlorination of cVOCs typically occurs sequentially from PCE to TCE, TCE to DCE, DCE to VC, VC to ethene, and ethene to carbon dioxide and water. Suitability for continued reductive dechlorination can be assessed by measuring groundwater biogeochemical parameters, including dissolved oxygen (DO), oxidation-reduction potential (ORP), reduced iron and manganese, methane, total organic carbon (TOC), nitrate, and sulfate, as well as PCE and TCE degradation products DCE, VC, ethene, and chloride. In the first few months following injection of an organic carbon additive, groundwater concentrations of PCE and TCE can increase, as their solubility is improved by additive fermentation products. The increased solubility makes the PCE and TCE more available to cVOC-degrading microorganisms, and is typically followed by decreasing PCE and TCE accompanied by an increase in degradation products DCE, VC, and ethene as bioremediation proceeds.

Groundwater cVOC concentrations measured at 24 months post-OCEDS injection (July 2017) follow trends typical for this stage of enhanced reductive dechlorination, with PCE and TCE concentrations decreasing in conjunction with production of DCE, VC, and ethene. As cVOC concentrations decline, biodegradation typically slows down due to less contact between cVOCs and dechlorination bacteria. Groundwater biogeochemical parameters are generally conducive to continued reductive dechlorination, with predominately low DO, ORP, nitrate, and sulfate in conjunction with elevated groundwater concentrations of methane, ethene, and reduced iron and manganese. The TOC concentrations are lower than they were at 15 months post-OCEDS injection. This is expected, as the OCEDS additive, by design, provides organic carbon for indigenous bacteria to consume while reducing electron acceptors that compete with cVOCs. Biomass generated by bacterial growth cycles provides a sustainable source of organic carbon, helping to maintain groundwater conditions conducive to reductive dechlorination as the injected OCEDS is consumed. In GZA's opinion, groundwater conditions are generally conducive to continued



reductive dechlorination. Monitoring will continue to more fully assess the long-term impacts of the OCEDS injections on groundwater quality at the Site and to continue to document the dechlorination process.

2.0 PURPOSE AND SCOPE OF WORK

The primary purpose of this sampling event was to collect groundwater samples from the eight on-Site and four off-site monitoring well locations to assess current conditions and provide an opinion regarding volatile organic compound (VOC) concentrations. To accomplish these goals the following activities were completed:

- Coordinated with Alpha Analytical Inc. located in Westborough, MA prior to commencement of field activities to obtain the analytical sample containers.
- Collected groundwater samples from each of the 12 monitoring wells for chemical analysis of VOCs via EPA Method 8260 Target Compound List.
- Prepared this report, which summarizes the data collected during this sampling event and compared the data to NYSDEC Class GA groundwater standards and historical data.

This report presents GZA's field observations, results, and opinions and is subject to the limitations presented in Appendix A and modifications if subsequent information is developed by GZA or another party.

3.0 FIELD METHODS

This section describes the field activities of GZA's groundwater sampling event.

3.1 GROUND WATER SAMPLING PROCEDURES

Equipment Cleaning

Prior to GZA's arrival to the Site, the sampling equipment (water level indicator, water quality meter and flow-through cell) were cleaned by rinsing with potable water, washing with a solution of laboratory detergent (alconox) and potable water, and rinsing with de-ionized water.

New, disposable polyethylene tubing (for placement down into the well and connecting to the water quality meter) and silicone tubing (for the peristaltic pump head) was used for groundwater sampling at each location. A variable speed peristaltic pump was used to purge groundwater from most monitoring wells. Groundwater remained within the polyethylene and silicone tubing and did not come in contact with the pump. Therefore, the tubing and pump did not require decontamination between sample locations.

Equipment Calibration



A water quality meter and organic vapor meter (OVM) were used during groundwater monitoring. Prior to use each day, the calibration of the water quality meter and OVM were checked to verify that the equipment was in working order.

Monitoring & Purging Methodologies

An OVM, equipped with photoionization detector (PID) and a 10.6 eV ultraviolet lamp, was used to screen for volatile organics in air at the top of the well riser immediately following the removal of each monitoring well riser cap. OVM readings were recorded on each respective monitoring well field sampling log. OVM readings were non-detect and no odors were noted at the top of each of the 12 monitoring wells sampled.

The purging and water quality measurements were completed using two different types of pumps depending on the depth to water surface measured at the well location.

Nine of the 12 monitoring wells had water surface depths less than 20 feet below top of well riser, (wells EW-1.25, EW-1.5, EW-2.5, EW-4.5, MW-1I, MW-2I, MW-4S, MW-5S, and MW-9I). These wells were sampled using a Geotech® Geopump II peristaltic pump. Wells IRM-1 and IRM-2I had water surface depths greater than 20 feet below top of well riser and were sampled using a Proactive® Monsoon down-hole centrifugal pump. The below grade portion of the Town Well was not accessible. This well is discussed in the next section.

Prior to initiation of each well purge event, a static water level was measured from the top of the monitoring well riser and recorded on the monitoring well sampling log. At each monitoring well location, (with the exception of Town Well) new polyethylene tubing was lowered into the monitoring well and positioned with the bottom of the tubing at the approximate vertical center of the well screen. Well construction information was taken from the monitoring well logs previously generated by others. Following the sampling efforts, GZA measured and documented the depth of each monitoring well, which were consistent with the information provided on the existing monitoring well logs.

The peristaltic pump/centrifugal pump was started and operated at a flow rate that minimized draw-down of the water column within the well. The first set of water quality readings were collected when the flow-through cell was full and water began to flow out. Once a constant head was established, the pumping flow rate was not altered. Sampling flow rates were kept consistent with purging/monitoring flow rates. Readings were recorded on well development forms in the field, once a constant head had been established. Readings were continuously recorded every five minutes, until water quality readings stabilized for three successive readings, which generally consisted of ± 0.1 for pH, $\pm 3\%$ for conductivity, ± 10 mV for oxidation reduction potential (ORP) and $\pm 10\%$ for turbidity and dissolved oxygen (DO). Copies of the well purging forms are included in Appendix B.

Groundwater samples were collected for lab analysis once a constant head was established, the water quality readings had stabilized and/or at least one well volume was removed. The polyethylene tubing from the pump to the water quality meter was disconnected and used to fill the appropriate groundwater sample containers provided by the laboratory. Groundwater collected for analysis did not enter the flow-through cell.

After the appropriate sample containers were filled, the pump was shut off and the tubing was removed from the monitoring well and pump-head. The tubing was then disposed as a solid waste. The flow-through cell and water quality meter were rinsed with de-ionized water prior to use at each well. Water generated during the



purging/monitoring and equipment decontamination was placed on the ground in the vicinity of the monitoring well from which it was generated.

Town Well:

The Town Well sample was collected from a spigot within the pump house shed at the well location, as the subsurface portion of this well is not accessible. The spigot was turned on to allow approximately five gallons of water to discharge into a graduated 5-gallon bucket, which was emptied into a floor drain within the shed. The flow-through cell was filled with water directly from the spigot for water quality readings. The sample was collected from the spigot after approximately five gallons were purged and water quality readings were recorded.

3.2 GROUNDWATER DATA COLLECTION

GZA collected groundwater samples from the eight on-site monitoring wells (MW-2I, MW-5S, MW-9I, MW-1I, MW-4S, EW-1.25, EW-1.5, and EW-2.5) and four off-site monitoring wells (EW-4.5, IRM-1, IRM-2I and the Town Well). In addition, a duplicate sample (from EW-2.5), and matrix spike/matrix spike duplicate (MS/MSD) sample (from MW-4S) were collected.

The following table shows the volume of water purged and the number of well volumes removed from the respective wells after a constant head was established. Constant head was not applicable at the Town Well location, as the well was not sampled using low-flow methodologies.

Monitoring Well ID	Volume Purged (gallons)	Well Volumes (#)
EW-1.25	1.25	0.26
EW-1.5	2.0	0.33
EW-2.5	1.80	0.31
EW-4.5	0.7	0.14
MW-1I	1.30	0.24
MW-2I	3.0	0.58
MW-4S	1.75	1.30
MW-5S	2.0	2.0
MW-9I	1.0	0.16
IRM-1	8.0	2.16
IRM-2I	10.0	3.3
Town Well	5.0	NA

Prior to sampling, static groundwater level measurements were recorded from the top of riser at the 11 accessible monitoring wells (see table below). Monitoring point elevation data was available from previous reports completed by others. This data is shown on Figure 2. Based on the available information, groundwater flow is generally in a south to southeasterly direction consistent with previous monitoring events.



Monitoring Well Location	Top of Riser Elevation (ft.)	Depth to Groundwater (ft.)	Groundwater Elevation (ft.)
EW-1.25	1531.96	9.51	1522.45
EW-1.5	1533.92	10.09	1523.83
EW-2.5	1533.92	12.42	1521.50
EW-4.5	1535.65	16.21	1519.44
MW-1I	1531.79	9.79	1522.0
MW-2I	1540.87	14.61	1526.26
MW-4S	1535.42	7.91	1527.51
MW-5S	1534.16	8.96	1525.20
MW-9I	1532.30	10.23	1522.07
IRM-1	1534.75	22.32	1512.43
IRM-2I	1535.99	22.62	1513.37

4.0 ANALYTICAL LABORATORY TESTING

Twelve groundwater samples, one duplicate sample (EW-2.5), one matrix spike/matrix spike duplicate (MW-4S), and one trip blank, were submitted for analytical testing. The samples were packed in an ice-filled cooler and, following typical chain-of-custody procedures, sent to Alpha Analytical Laboratories in Westborough, MA. Table 1 presents a summary of the samples collected, dates of sample collection, and analyses completed.

5.0 ANALYTICAL TEST RESULTS

Discussion of the laboratory results for the groundwater samples is presented below. The laboratory report is provided in Appendix D and summarized on Table 2. Analytical data that was available from January 1989 to July 2017 (specifically trichloroethene (TCE) and tetrachloroethene (PCE)) is summarized on Table 3. This data is also provided graphically, per well location, in Appendix C.

The analytical test results for the groundwater samples were compared to NYSDEC Class GA standards presented in the Division of Water Technical and Operational Guidance Series (TOGS 1.1.1), dated October 1993, revised June 1998, errata January 1999 and amended April 2000.



The analytical data generated as part of the semi-annual monitoring program (the 12 wells) has also been provided to NYSDEC electronically for their Environmental Information Management System (EIMS). The data was provided in a standardized electronic data deliverable (EDD) format that uses the database software application EQuIS™ (EQuIS) from EarthSoft® Inc. The laboratory data and required information were imported into the [EQuIS Data Processor](#) (EDP) and submitted to NYSDEC.

5.1 ON SITE WELLS

- EW-1.25: Six VOCs were detected above method detection limits. Cis-DCE (57 parts per billion (ppb)) and TCE (35 ppb) were detected above their respective Class GA criteria of 5 ppb. Since the semi-annual groundwater sampling was reinitiated in 2009, there has been a general downward trend of total VOC concentrations detected at this location. EW-1.25 total VOC mass was similar in June 2016 and July 2017 (86 and 97 µg/L, respectively).
- EW-1.5: Four VOCs were detected above method detection limits. TCE (10 ppb) was detected above its Class GA criteria of 5 ppb. The remaining detections were below their respective class GA criteria. Since 2009, there has been a slight general downward trend of total VOC concentrations detected at this location.
- EW-2.5: No VOCs were detected above method detection limits. Historically, the VOC results have been either below method detection limits and/or the Class GA criteria since 2002.
- MW-1I: One VOC, Acetone (1.9 ppb), was detected above method detection limits. Since 2009, there has been a downward trend of VOC concentrations detected at this location and the results have generally been at or below the Class GA criteria since 1996.
- MW-2I: No VOCs were detected above method detection limits. Historically, the results have been either below method detection limits or the Class GA criteria since 1994.
- MW-4S: No VOCs were detected above method detection limits. Historically, the results have been either below method detection limits and/or the Class GA criteria since 1998.
- MW-5S: No VOCs were detected above method detection limits. Since 2009, there has been a downward trend of VOC concentrations detected at this location.

This location (MW-5S) is approximately 30 feet southeast and downgradient of AOC-2 and AOC-3 which were addressed as part of IRM activities in 2011 and 2013.

- MW-9I: Two VOCs, (PCE and TCE) were detected above method detection limits but below their respective NYSDEC Class GA criteria. VOCs have been below Class GA criteria and indicating a downward trend since sampling was reinitiated in 2009.



5.2 OFF SITE WELLS

- EW-4.5: Two VOCs (TCE, and PCE) were detected above method detection limits but below their respective NYSDEC Class GA criteria of 5.0 ppb. The VOC concentrations detected this round are consistent with previous samples collected since 2004.
- IRM-1: Two VOCs (PCE and TCE) were detected above their method detection limits but below their respective Class GA criteria of 5 ppb. Historically, TCE and PCE concentrations have been below the Class GA criteria since 1996.
- IRM-2I: Two VOCs (PCE and TCE) were detected above method detection limits but below their respective NYSDEC Class GA criteria. TCE and PCE concentrations have been below the Class GA criteria since 1994.
- Town Well: One VOC (TCE) was detected above method detection limits but below their respective Class GA criteria. Historically, TCE and TCA concentrations have had downward trends since 1990 and both have been below the Class GA criteria since 1993.

6.0 SUMMARY

A summary of GZAs findings follows:

- Static groundwater level measurements indicate that groundwater flows toward the south/southeast, consistent with previous monitoring events.
- VOCs were detected at concentrations above NYSDEC Class GA criteria in the groundwater samples collected from two on-site wells (EW-1.25 and EW 1.5). VOCs were not detected above NYSDEC Class GA criteria in any of the remaining five on-Site and four off-site wells sampled.
- A general downward trend in VOC concentrations since 2009 is noted in monitoring wells EW-1.5, MW-5S and MW-9I.
- The total VOC mass in well EW-1.25 was similar in June 2016 and July 2017 (86 and 97 µg/L, respectively); however, the October 2016 VOC mass is predominantly daughter products, with both PCE and TCE concentrations very low (<0.5 µg/L). This dominance of daughter products downgradient of the OCEDS injection area provides evidence for the efficacy of enhanced natural attenuation via reductive dechlorination.
- In general, the concentrations of VOCs at monitoring wells EW-2.5, MW-1I, MW-2I, MW-4S, and MW-9I have predominantly been below NYSDEC Class GA criteria.
- Off-site monitoring well results for locations, IRM-1, IRM-2 and the Town Well, have consistently been non-detect or at concentrations below Class GA criteria since 1994.



Groundwater monitoring has been conducted semi-annually for over 20 years. The body of data collected since remedial injections indicate that reductive dichlorination is continuing to reduce the CVOC concentrations as intended, and that a slow and steady overall trend of CVOC reduction has been established. Two of the 12 wells monitored have CVOCs at concentrations slightly greater than the Class GA groundwater standards.

Considering the above findings and the rate of CVOC reduction observed, GZA requests NYSDEC approval of a modification of the frequency of groundwater monitoring from semi-annual to annual. An annual monitoring frequency would continue to provide the necessary data for monitoring the long-term impacts of the injections and natural attenuation on groundwater quality and documentation of the dechlorination process. The next groundwater monitoring event is scheduled for October of 2017 but GZA proposes changing that to July of 2018. We respectfully request NYSDEC response to this proposed change of sample frequency before September 30, 2017.



TABLES

TABLE 1
 July 2017 Analytical Testing Program Summary
 Former Signore Facility
 55-57 Jefferson Street
 Ellicottville, New York

Location	Date Collected	Screened Interval (ft bgs)	VOCs EPA Method 8260-TCL
Groundwater Samples			
EW-1.25	7/13/2017	15-25	X
EW-1.5	7/11/2017	40-50	X
EW-2.5	7/11/2017	40-50	X
EW-4.5	7/11/2017	40-50	X
MW-1I	7/11/2017	30-50	X
MW-2I	7/11/2017	29-49	X
MW-4S(MS/MSD)	7/12/2017	7-17	X
MW-5S	7/12/2017	7.5-17.5	X
MW-9I	7/11/2017	29.5-49.5	X
IRM-1	7/11/2017	40-50	X
IRM-2I	7/11/2017	40-50	X
TOWN WELL	7/12/2017	40-50	X
GW Duplicate (EW-2.5)	7/11/2017	30-50	X

Notes:

1. NA = not applicable.
2. ft bgs = feet below ground surface
3. VOCs = Volatile Organic Compounds
4. EPA = Environmental Protection Agency

TABLE 2
July 2017 Groundwater Analytical Testing Results Summary
Former Signore Facility
55-57 Jefferson Street
Ellicottville, New York

Parameter	Class GA Criteria	EW-1-25																EW-1-5															
		4/23/09	10/22/09	6/3/10	4/14/11	10/14/11	5/9/12	10/31/12	6/25/13	10/16/13	6/10/14	10/14/14	6/4/15	10/21/15	6/15/16	10/25/16	7/13/17	4/23/09	10/22/09	6/2/10	4/14/11	10/14/11	5/9/12	10/31/12	6/25/13	10/16/13	6/9/14	10/14/14	6/2/15	10/21/15	6/14/16	10/25/16	7/11/17
Volatile Organic Compounds - EPA Method 8260 TCL (ug/L)																																	
Methylene chloride	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	50	<	<	<	<	<	<	<	<	<	<	<	<	3.8	2.3 J	<1.5	<1.5	<	<	<	<	<	<	<	<	<	<	<	<	1.5 J	<1.5	<1.5	<1.5
2-Butanone	50	<	<	<	<	4.2 J	<5	<5	<5	<5	<5	<2	<2	<2	<2	<2	<2	<	<	<	<	<	<5	<5	<5	<5	<2	<2	<2	<2	<2	<2	
Bromodichloromethane	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Dibromochloromethane	50	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloromethane	NV	<	<	<	<	<	<1	<1	0.77 J	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloroform	7	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromoform	50	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Carbon disulfide	NV	<	<	1.4	<	1.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.8 J	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Iodomethane	NV	<	<	<	<	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT	NT	<	<	<	<	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT	
Vinyl Chloride	2	9.7	9.1	8.4	6.3	6	3.8	16	4.6	5	2.4	4.7	2.6	3.3	3.2	6.6	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethene	5*	<	0.88	0.85	.86 J	<	<1	1.4	<1	<1	<1	0.34 J	0.25 J	0.36 J	0.24 J	0.48 J	0.39 J	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethane	5	8.6	8.7	6.0	6.1	6.7	4.8	5.9	4.1	4.1	2.9	3.8	3	4.2	2.9	3.9	3.0	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
trans-1, 2-Dichloroethene	5	<	0.92	0.66	.91 J	.81 J	<1	<1	<1	<1	<1	<1	<1	<1	0.79 J	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
cis-1,2-Dichloroethene	5	60	69	39	45	44	32	98	31	32	23	32	29	44	28	98	57	2.1	4.6	2.2	3.3	1.7	2.1	2.9	1.3	<1	1.6	2.7	2.0 J	2.1 J	1.6 J	1.2 J	
1,1,1-Trichloroethane	5	1.5	0.82	0.65	.78 J	.64 J	<1	2	<1	<1	<1	0.80 J	<1	<1	<1	0.70 J	<1	4.1	2.7	1.9	2.6	1.3	1.7	<1	1.2	<1	<1	1.4 J	1.2 J	1.2 J	<1	0.90 J	
Trichloroethene	5	88	90	73	56	90	59	1.7	51	59	41	54	47	58	47	0.27 J	35	18	20	14	19	9.5	13.0	9.0	8.4	3.9	10	13	13	11	6.4	10	
Tetrachloroethene	5	7.5	5.6	5.6	4.2	8.3	5.9	<1	3.3	3.8	3.6	5.0	3.1	1.8	3.1	<1	0.73	<	<	<	<	<	<1	<1	<1	<1	<1	0.22 J	0.20 J	0.22 J	<1	0.24 J	
Naphthalene	10	<	<	<	<	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT	NT	<	<	<	<	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT	
Total VOCs		175.3	185.0	135.6	120.15	161.85	105.50	125.00	94.77	103.90	72.90	100.64	84.95	115.46	86.74	110.74	97.92	24.2	27.3	18.1	24.9	12.5	16.8	11.9	10.9	3.9	11.6	17.32	16.30	16.02	8.00	12.34	

Parameter	Class GA Criteria	MW-4S																MW-5S															
		4/23/09	10/22/09	6/2/10	4/14/11	10/13/11	5/10/12	10/31/12	6/25/13	10/15/13	6/6/14	10/15/14	6/3/15	10/21/15	6/15/16	10/25/16	7/12/17	4/23/09	10/22/09	6/3/10	4/14/11	10/13/11	5/9/12	10/31/12	6/25/13	10/15/13	6/6/14	10/14/14	6/2/15	10/22/15	6/15/16	10/24/16	7/12/17
Volatile Organic Compounds - EPA Method 8260 TCL (ug/L)																																	
Methylene chloride	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Acetone	50	<	<	<	<	<	<	<	<	<	<	<	<	2.3 J	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	4 J	3.4 J	<1.5	<
2-Butanone	50	<	<	<	<	<	<5	<5	<5	<5	<5	<2	<2	<2	<2	<2	<2	<	<	<	<	<	<5	<5	<5	<5	<2	<2	<2	<2	<2	<2	
Bromodichloromethane	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Dibromochloromethane	50	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloromethane	NV	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	0.99 J	<1	<1	<1	<1	<1	1.2 J	<1	
Chloroform	7	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromoform	50	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Carbon Disulfide	NV	<	<	1.3	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Iodomethane	NV	<	<	<	<	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT	NT	<	<	<	<	<	<1	<1	<1	<1	<1	<1	NT	NT	NT	NT	
Vinyl Chloride	2	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethene	5*	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethane	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
trans-1, 2-Dichloroethene	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
cis-1,2-Dichloroethene	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	.72 J	<	0.9 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,1-Trichloroethane	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	3.4	3.1	1.7	.61 J	2.9	0.59 J	<1	0.52 J	2.0	<1	0.94 J	<1	<1	<1	<1	
Trichloroethene	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	30.0	22.0	14.0	12.0	15.0	17.0	3.1	6.9	8.1	2.7	4.0	0.75	1.60	2.70	0.72	
Tetrachloroethene	5	<	<	<	<	<	<1	<1	<1	<1	<1	0.36 J	0.22 J	0.32 J	0.18 J	<1	<1	5.6	3.3	2.2	13.0	4.4	9.5	2.6	3.5	3.9	4.6	3.7	3.8	5.8	4.9	3.8	
Naphthalene	10	<	<	<	<	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT	NT	<	<	<	<	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT	
Total VOCs				1.3								0.36	0.22	2.62	0.18			39.0	28.4	17.9	26.3	22.3	27.7	5.7	11.9	14.0	7.3	8.64	4.55	11.40	12.20	4.52	

Notes:
1. Compounds detected in one or more samples are presented on this table.
2. Analytical testing completed by Alpha Analytical.
3. NYSDEC Class GA criteria obtained from Division of Water Technical and Operational Guidance Series (TOGS 1.1.1), dated October 1993, revised June 1998, January 1999

TABLE 2
July 2017 Groundwater Analytical Testing Results Summary
Former Signore Facility
55-57 Jefferson Street
Ellicottville, New York

Parameter	Class GA Criteria	EW-2.5															EW-4.5																
		4/23/09	10/22/09	6/2/10	4/13/11	10/13/11	5/9/12	11/1/12	6/26/13	10/17/13	6/9/14	10/15/14	6/2/15	10/21/15	6/14/16	10/24/16	7/11/17	4/23/09	10/22/09	6/3/10	4/13/11	10/14/11	5/10/12	11/1/12	6/26/13	10/16/13	6/9/14	10/14/14	6/2/15	10/21/15	6/14/16	10/24/16	7/11/17
Volatile Organic Compounds - EPA Method 8260 TCL (ug/L)																																	
Methylene chloride	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	50	<	<	<	<	<	<	<	<	<	<	<	<	2.4 J	1.7 J	<1.5	<1.5	<	<	<	<	<	<	<	<	<	<	<	<	<	4.1 J	<1.5	<1.5
2-Butanone	NV	<	<	<	<	<	<5	<5	<5	<5	<5	<2	<2	<2	<2	<2	<2	<	<	<	<	<	<5	<5	<5	<5	<2	<2	<2	<2	<2	<2	
Bromodichloromethane	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Dibromochloromethane	50	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloromethane	NV	<	<	<	<	<	<1	<1	1.4	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	2.5	<1	<1	<1	<1	<1	<1	<1	
Chloroform	7	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromoform	50	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Carbon disulfide	NV	<	<	<	0.94 J	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	.63J	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Iodomethane	NV	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	0.83J	<1	<1	NT	NT	NT	NT	NT	
Vinyl Chloride	2	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethene	5*	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethane	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
trans-1, 2-Dichloroethene	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
cis-1,2-Dichloroethene	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	0.72	<	1.2	.51J	0.61J	<1	0.76J	<1	<1	<1	<1	<1	0.81 J	<1	
1,1,1-Trichloroethane	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.5	1.3	0.97	1.9	1.3	1.2	1.2	1.1	<1	0.76 J	0.77 J	<1	<1	<1	<1	
Trichloroethene	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	8.0	7.9	5.5	10	6.9	7.6	7.0	6.8	5.8	5.0	5.4	5.4	3.9	4.6	4.6	
Tetrachloroethene	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.0	1.7	1.1	2.5	1.5	1.5	1.6	1.6	1.4	1.7	1.5	1.7	1.2	1.3	1.6	
Naphthalene	10	<	<	<	1.3	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT	NT	2.0	<	<	<	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT	
Total VOCs					2.2				1.4					2.4	1.7			12.5	11.6	7.6	16.2	10.2	10.9	9.8	13.6	7.2	6.7	7.66	7.86	5.10	10.00	7.01	2.36
Parameter	Class GA Criteria	MW-91															IRM-1																
		4/23/09	10/22/09	6/2/10	4/14/11	10/13/11	5/9/12	11/1/12	6/25/13	10/15/13	6/9/14	10/15/14	6/3/15	10/22/15	6/14/16	10/24/16	7/11/17	4/23/09	10/22/09	6/3/10	4/13/11	10/14/11	5/10/12	11/1/12	6/26/13	10/16/13	6/6/14	10/14/14	6/2/15	10/21/15	6/14/16	10/24/16	7/11/17
Volatile Organic Compounds - EPA Method 8260 TCL (ug/L)																																	
Methylene chloride	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Acetone	50	<	<	<	<	<	<	<	<	<	<	<	<	2.7 J	1.6 J	<1.5	<1.5	<	<	<	<	<	<	<	<	<	<	<	<	<	3.0 J	<1.5	<1.5
2-Butanone	NV	<	<	<	<	<	<5	<5	<5	<5	<5	<2	<2	<2	<2	<2	<2	<	<	<	<	<	<5	<5	<5	<5	<2	<2	<2	<2	<2	<2	
Bromodichloromethane	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Dibromochloromethane	50	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloromethane	NV	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	1.4	<1	<1	<1	<1	<1	<1	<1	
Chloroform	7	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromoform	50	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Carbon Disulfide	NV	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Iodomethane	NV	<	<	<	<	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT	NT	<	<	<	<	<	<1	<1	0.66J	<1	<1	NT	NT	NT	NT	NT	
Vinyl Chloride	2	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethene	5*	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethane	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
trans-1, 2-Dichloroethene	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
cis-1,2-Dichloroethene	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,1-Trichloroethane	5	2.2	1.6	0.9	1.4	1.4	0.89J	1.3	0.84J	<1	<1	0.85 J	0.72 J	0.73 J	<1	<1	<1	<	<	<	<	0.54J	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Trichloroethene	5	4.6	4.5	2.9	3.6	3.7	2.7	3.1	2.4	3.4	2.3	3.0	2.7	3.0	1.5	2.4	2.4	<	<	<	<	0.69J	.52J	<1	<1	0.52J	<1	<1	0.34 J	0.35 J	0.38 J	0.32 J	0.36 J
Tetrachloroethene	5	1.0	0.86	0.6	1.0	0.8	<1	<1	<1	<1	0.99J	0.82	0.72	0.96	0.34 J	0.71	0.73	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	0.25 J	<1	0.23 J	
Naphthalene	10	<	<	<	<	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT	NT	<	<	<	<	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT	
Total VOCs		7.8	7.0	4.4	6.0	5.9	3.6	4.4	3.2	3.4	3.29	4.67	4.27	7.39	3.44	3.11	3.13					1.23	0.52		2.58			0.34	0.35	0.63	3.32	0.59	0.52

TABLE 2
July 2017 Groundwater Analytical Testing Results Summary
Former Signore Facility
55-57 Jefferson Street
Ellicottville, New York

Parameter	Class GA Criteria	MW-1I																MW-2I																
		4/23/09	10/22/09	6/2/10	4/14/11	10/14/11	5/9/12	10/5/12	6/25/13	10/15/13	6/9/14	10/15/14	6/2/15	10/22/15	6/14/16	10/25/16	7/11/17	4/23/09	10/22/09	6/3/10	4/13/11	10/13/11	5/9/12	10/31/12	6/25/13	10/15/13	6/6/14	10/14/14	6/3/15	10/22/15	6/15/16	10/24/16	7/11/17	
Volatile Organic Compounds - EPA Method 8260 TCL (ug/L)																																		
Methylene chloride	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Acetone	50	<	<	<	<	<	<	<	<	<	<	<	<	<1.5	<1.5	<1.5	1.9 J	<	<	<	<	<	<	<	<	<	<	<	<1.5	<1.5	<1.5	<1.5	<1.5	
2-Butanone	NV	<	<	<	<	<	<5	<5	<5	<5	<5	<2	<2	<2	<2	<2	<2	<	<	<	<	<	<5	<5	<5	<5	<2	<2	<2	<2	<2	<2	<2	
Bromodichloromethane	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Dibromochloromethane	50	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloromethane	NV	<	<	0.62	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloroform	7	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromoform	50	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Carbon disulfide	NV	<	<	<	<	1.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	12.0	0.90J	1.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Iodomethane	NV	<	<	<	<	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT	NT	<	<	<	<	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT		
Vinyl Chloride	2	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.53 J	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethene	5*	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethane	5	4.7	4.7	3.5	3.4	3.8	2.8	2.6	2.0	2.1	1.6	2.3 J	1.9 J	2.5	1.7 J	1.2 J	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
trans-1, 2-Dichloroethene	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
cis-1,2-Dichloroethene	5	4.2	5.7	2.2	2.5	2.2	1.2	3.1	2.9	1.8	<1	1.8 J	0.87 J	0.80 J	1.6 J	7.1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,1-Trichloroethane	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Trichloroethene	5	<	<	<	<	<	<1	<1	<1	<1	<1	2.8	2	<1	3	11	<1	<	<	<	<	<	0.83J	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Tetrachloroethene	5	<	<	<	<	<	<1	<1	<1	<1	<1	2.4	1.3	<1	1.9	7.1	<1	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Naphthalene	10	<	<	<	<	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT	NT	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Total VOCs		8.9	10.4	6.3	5.9	7.1	4.0	5.7	4.9	3.9	1.6	9.0	6.1	3.3	8.2	26.9	1.9			12.0	0.9	1.3	0.83											
Parameter	Class GA Criteria	IRM-2I																TOWN WELL																
		4/23/09	10/22/09	6/3/10	4/13/11	10/14/11	5/10/12	11/1/12	6/26/13	10/16/13	6/6/14	10/14/14	6/2/15	10/21/15	6/14/16	10/24/16	7/11/17	4/23/09	10/22/09	6/2/10	4/13/11	10/14/11	5/10/12	11/1/12	6/26/13	10/16/13	6/9/14	10/14/14	6/2/15	10/22/15	6/14/16	10/24/16	7/12/17	
Volatile Organic Compounds - EPA Method 8260 TCL (ug/L)																																		
Methylene chloride	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	NT	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Acetone	50	<	<	<	<	<	<	<	<	<	<	<	<	<	<1.5	2.9 J	<1.5	<	<	<	<	<	<	<	<	<	<	<	<	<	<1.5	2.4 J	<1.5	<1.5
2-Butanone	NV	<	<	<	<	<	<5	<5	<5	<5	<5	<2	<2	<2	<2	<2	<2	<	<	<	<	<	<5	<5	<5	<5	<2	<2	<2	<2	<2	<2	<2	
Bromodichloromethane	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	53J	1.4	0.67J	0.96J	<1	<1	<1	<1	0.52	0.27 J	0.45 J	0.53	<1	
Dibromochloromethane	50	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	<	<	1.2	1.7	1.2	<1	<1	<1	<1	0.99	0.54	3	0.97	<1	<1	
Chloromethane	NV	<	<	0.56	<	<	<1	<1	0.59J	<1	<1	<1	<1	<1	<1	<1	<1	<	NT	0.56	<	<	<	<1	<1	1.3	<1	<1	<1	<1	<1	<1	<1	
Chloroform	7	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	NT	0.62	<	1.1	<	0.82J	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromoform	50	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	NT	0.51	1.7	1.4	0.88J	1.6	<1	<1	<1	<1	<1	1.2 J	<1	1.3 J	<1	
Carbon Disulfide	NV	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	NT	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Iodomethane	NV	<	<	<	<	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT	NT	<	<	<	<	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT		
Vinyl Chloride	2	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	NT	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethene	5*	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	NT	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethane	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	NT	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
trans-1, 2-Dichloroethene	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	NT	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
cis-1,2-Dichloroethene	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	NT	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,1-Trichloroethane	5	<	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<	NT	<	<	<	<	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Trichloroethene	5	<	0.89	0.85	.88J	.86J	0.74J	0.60J	0.72J	<1	<1	0.60	0.60	0.63	0.59	0.59	0.58	<	NT	<	0.69J	0.55J	<1	0.58J	0.63J	<1	<1	0.45 J	0.48 J	0.44 J	0.45 J	0.50	0.37	
Tetrachloroethene	5	<	<	<	<	<	<1	<1	<1	<1	<1	0.20 J	<1	0.28 J	<1	0.26 J	0.20 J	<	NT	<	<	<	<	<1	<1	<1	<1	<1	<1	0.24 J	<1	0.23 J	<1	
Naphthalene	10	<	<	<	<	<	<1	<1	<1	<1	<1	NT	NT	NT	NT	NT	NT	<	<	<	<	<	<	<1	<1	<1	<1	NT	NT	NT	NT	NT	NT	
Total VOCs			0.9	1.4	0.88	0.86	0.74	0.60	1.30			0.80	0.60	0.91	3.49	0.85	0.78			1.69	4.12	6.15	2.75	3.96	1.93			0.45	3.19	1.49	7.60	3.53	0.37	

Notes:
1. Compounds detected in one or more samples are presented on this table.
2. Analytical testing completed by Alpha Analytical.
3. NYSDEC Class GA criteria obtained from Division of Water Technical and Operational Guidance Series (TOGS 1.1.1), dated October 1993, revised June 1998, January 1999 errata sheet, and April 2000 addendum. * Guidance value (not a standard) for 1,1-Dichloroethene = 0.07 ug/L as per the January 1999 update.
4. ug/L = part per billion (ppb).
5. < indicates compound was not detected; < 1 indicates compound was not detected above its respective reporting limit.
6. Shading indicates exceedance of Class GA Criteria.
7. NT = not tested.
8. NV = no value.
9. Results shown for EW-2.5 for the July 2017 sampling

TABLE 3
Historical Analytical Data Summary
Former Signore Facility
55-57 Jefferson Street
Ellicottville, New York

Well I.D.	Analyte	Sample Date 7/11/2017	Sample Date 10/25/2016	Sample Date 6/15/2016	Sample Date 10/21/2015	Sample Date 6/2/2015	Sample Date 10/14/2014	Sample Date 6/6/2014	Sample Date 10/15/2013	Sample Date 6/25/2013	Sample Date 10/31/2012	Sample Date 5/10/2012	Sample Date 10/13/2011	Sample Date 4/13/2011	Sample Date 6/2/2010	Sample Date 10/22/2009
EW-1.25	PCE	0.7	<	3.1	1.8	3.1	5	3.6	3.8	3.3	2	<	0.64J	0.78J	0.65	0.82
	TCE	35	0.27 J	47	58	47	54	41	59	51	1.7	59	90	56	73	90
EW-1.5	PCE	0.23 J	0.24 J	<	0.22 J	0.2 J	0.22 J	<	<	<	<	1.7	1.3	2.6	1.9	2.7
	TCE	10	10	6.4	11	13	13	10	3.9	8.4	9	13	9.5	19	14	20
EW-2.5	PCE	<	<	<	<	<	<	<	<	<	<	<	0	0	0	0
	TCE	<	<	<	<	<	<	<	<	<	<	<	0	0	0	0
EW-3.5	PCE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	TCE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
EW-4.5	PCE	0.8 J	1.6	1.3	1.2	1.7	1.5	1.7	1.4	1.6	1.2	1.2	1.3	1.9	0.97	1.3
	TCE	1.6	4.6	4.6	3.9	5.4	5.4	5	5.8	6.8	7	7.6	6.9	10	5.5	7.9
MW-1I	PCE	<	7.1	1.9	<	1.3	2.4	<	<	<	<	<	<	<	<	<
	TCE	<	11	3	<	2	2.8	<	<	<	<	<	<	<	<	<
MW-2I	PCE	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
	TCE	<	<	<	<	<	<	<	<	<	<	0.83J	<	<	<	<
MW-9I	PCE	0.73	0.71	0.34J	1	0.72	0.82	0.99	<	<	1.3	0.89J	1.4	1.4	0.9	1.6
	TCE	2.4	2.4	1.5	3	2.7	3	2.3	3.4	2.4	3.1	2.7	3.7	3.6	2.9	4.5
MW-4S	PCE	<	<	0.18J	0.32	0.22 J	0.36 J	<	<	<	<	<	<	<	<	<
	TCE	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
MW-5S	PCE	<	0.38	4.9	5.8	3.8	3.7	4.6	3.9	3.5	2.6	0.59J	2.9	.61J	1.7	3.1
	TCE	<	0.72	2.7	1.6	0.75	4	2.7	8.1	6.9	3.1	17	15	12	14	22
IRM-1	PCE	0.19 J	0.23 J	<	0.25 J	<	<	<	<	<	<	<	<	.54J	<	<
	TCE	0.33 J	0.36 J	0.32J	0.38 J	0.35 J	0.34 J	<	0.52J	<	<	<	.52J	.69J	<	<
IRM-2I	PCE	0.20 J	0.26 J	<	0.28 J	<	0.2 J	<	<	<	<	<	<	<	<	<
	TCE	0.58	0.59	0.59	0.63	0.6	0.6	<	0.72J	0.60J	0.74J	<	.86J	.88J	0.85	0.89
MAIN SCHOOL WELL	PCE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	TCE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TOWN WELL	PCE	<	0.23 J	<	0.24 J	<	<	<	<	<	<	<	<	<	<	NT
	TCE	0.37	0.5	0.45J	0.44 J	0.48 J	0.45 J	<	<	0.63J	0.58J	<	.55J	.69J	<	NT

Notes:

1. NT = Not Tested.

2. < = not detected above method detection limits.

3. Values shown are in ug/L (part per billion (ppb)).

4. Shading indicates exceedance of its respective Class GA Criteria (5 ppb) for both PCE and TCE).

* - Historical data provided date of 10/21/2004 - However, based on historical sampling trend, sample was likely from April 2005 (sample date unknown).

TABLE 3
Historical Analytical Data Summary
Former Signore Facility
55-57 Jefferson Street
Ellicottville, New York

Well I.D.	Analyte	Sample Date 4/23/2009	Sample Date 10/2/2007	Sample Date 10/30/2006	Sample Date 4/25/2006	Sample Date 11/14/2005	Sample Date 4/1/2005*	Sample Date 10/21/2004	Sample Date 4/29/2004	Sample Date 10/16/2003	Sample Date 4/11/2003	Sample Date 10/23/2002	Sample Date 4/12/2002	Sample Date 11/9/2001	Sample Date 4/27/2001
EW-1.25	PCE	1.5	<	1.5	<	1.6	2	2	6.3	3	11	4	3	4	3
	TCE	88	5.1	45.1	66	27.9	66.9	31	53	22	110	40	30	11	39
EW-1.5	PCE	4.1	NT	3.1	3	2.9	5	6	<	5	<	4	2	<	3
	TCE	18	NT	16.7	18	15.6	25.3	28	1	20	<	13	6	<	8
EW-2.5	PCE	0	NT	<	<	<	<	<	<	<	<	<	<	<	<
	TCE	0	NT	<	<	<	<	<	<	<	<	<	<	6	<
EW-3.5	PCE	NT	NT	<	5	<	1.2	<	6	<	2	<	4	<	8
	TCE	NT	NT	<	NT	<	NT	<	NT	0.8	NT	1	NT	2	NT
EW-4.5	PCE	2.5	NT	1.5	NT	1.2	NT	2	NT	2	NT	<	NT	<	NT
	TCE	8	NT	5.9	NT	4.6	NT	5	NT	3	NT	<	NT	<	NT
MW-1I	PCE	<	<	<	<	<	<	<	5.1	<	<	<	<	<	<
	TCE	<	<	<	<	<	<	<	NT	0.6	NT	<	<	<	<
MW-2I	PCE	<	NT	<	NT	<	NT	<	NT	<	NT	<	NT	<	NT
	TCE	<	NT	<	NT	<	NT	<	28	1	NT	1	NT	<	NT
MW-9I	PCE	2.2	1.1	1.4	NT	1.5	NT	2	NT	3	NT	2	NT	<	NT
	TCE	4.6	3.8	3.5	NT	3.3	NT	3	NT	5	NT	3	NT	2	NT
MW-4S	PCE	<	<	<	NT	<	NT	<	NT	<	NT	<	NT	<	NT
	TCE	<	<	<	NT	<	NT	<	NT	<	NT	<	NT	<	NT
MW-5S	PCE	3.4	4.8	2.3	NT	4.1	NT	10	NT	10	NT	10	NT	8	NT
	TCE	30	19	30.5	NT	1	NT	26	NT	29	NT	26	NT	21	NT
IRM-1	PCE	<	NT	<	NT	<	NT	0.5	NT	<	NT	<	NT	<	NT
	TCE	<	NT	<	NT	<	NT	0.7	NT	0.7	NT	1	NT	NT	NT
IRM-2I	PCE	<	NT	<	<	0.71	<	0.5	<	<	<	NT	<	NT	<
	TCE	<	NT	1.2	<	<	1	1	<	<	<	NT	<	<	2
MAIN SCHOOL WELL	PCE	NT	NT	<	NT	<	NT	<	NT	<	NT	<	NT	NT	NT
	TCE	NT	NT	<	NT	<	NT	<	NT	<	NT	<	NT	NT	NT
TOWN WELL	PCE	<	NT	<	<	<	<	<	<	<	<	<	<	<	<
	TCE	<	NT	0.52	<	0.62	0.8	0.9	0.9	1	<	1	1	<	2

Notes:

1. NT = Not Tested.

2. < = not detected above method detection limits.

3. Values shown are in ug/L (part per billion (ppb)).

4. Shading indicates exceedance of its respective Class GA Criteria (5 ppb) for both PCE and TCE).

* - Historical data provided date of 10/21/2004 - However, based on historical sampling trend, sample was likely from April 2005 (sample date unknown).

TABLE 3
Historical Analytical Data Summary
Former Signore Facility
55-57 Jefferson Street
Ellicottville, New York

Well I.D.	Analyte	Sample Date 10/25/2000	Sample Date 5/30/2000	Sample Date 10/15/1999	Sample Date 4/27/1999	Sample Date 11/5/1998	Sample Date 4/16/1998	Sample Date 10/30/1997	Sample Date 4/8/1997	Sample Date 10/17/1996	Sample Date 4/16/1996	Sample Date 2/8/1996	Sample Date 10/13/1994	Sample Date 7/11/1994
EW-1.25	PCE	3	2	32	ND	8	6	5	5	14	39	26	23	NT
	TCE	35	31	25	55	63	66	120	78	78	86	83	100	NT
EW-1.5	PCE	3	2	3	2	1	4	2	3	7	9	10	16	<
	TCE	7	4	6	6	6	8	8	10	10	10	9	10	1
EW-2.5	PCE	<	<	<	<	<	NT	<	<	<	<	<	<	NT
	TCE	<	<	<	<	<	NT	<	<	<	2	<	<	NT
EW-3.5	PCE	<	2	<	2	<	3	<	4	<	NT	<	<	NT
	TCE	2	NT	2	<	1	NT	2	NT	1	NT	4	1	NT
EW-4.5	PCE	<	<	<	NT	<	NT	<	NT	<	NT	<	<	<
	TCE	<	NT	<	NT	<	NT	<	NT	1	NT	2	2	<
MW-1i	PCE	<	<	<	NT	<	NT	<	<	<	<	1	<	<
	TCE	<	<	<	NT	<	1	<	3	4	2	12	17	2
MW-2i	PCE	NT	NT	<	NT	<	NT	<	NT	<	NT	<	2	NT
	TCE	<	NT	<	NT	<	NT	<	NT	<	NT	<	NT	NT
MW-9i	PCE	2	NT	<	NT	<	NT	NT	NT	NT	NT	4	3	NT
	TCE	3	NT	<	NT	2	NT	3	NT	2	NT	5	6	NT
MW-4S	PCE	<	NT	<	NT	<	NT	25	NT	30	NT	2	2	NT
	TCE	1	NT	<	NT	<	NT	<	NT	71	NT	2	2	NT
MW-5S	PCE	12	NT	12	NT	19	NT	<	NT	<	NT	50	NT	NT
	TCE	30	NT	18	NT	36	NT	80	NT	3	NT	63	NT	NT
IRM-1	PCE	<	NT	<	<	<	NT	<	NT	<	NT	4	1	4
	TCE	1	NT	<	<	<	NT	2	NT	2	NT	5	4	5
IRM-2i	PCE	<	<	<	<	<	NT	<	<	<	2	2	2	2
	TCE	2	1	<	<	<	2	2	3	2	4	4	4	5
MAIN SCHOOL WELL	PCE	NT	NT	<	NT	<	NT	<	NT	<	<	1	<	NT
	TCE	NT	<	<	NT	<	<	<	NT	<	1	2	1	NT
TOWN WELL	PCE	<	<	<	<	<	NT	<	<	<	1	2	1	NT
	TCE	2	1	<	<	<	2	2	3	1	3	4	4	NT

Notes:

1. NT = Not Tested.

2. < = not detected above method detection limits.

3. Values shown are in ug/L (part per billion (ppb)).

4. Shading indicates exceedance of its respective Class GA Criteria (5 ppb) for both PCE and TCE).

* - Historical data provided date of 10/21/2004 - However, based on historical sampling trend, sample was likely from April 2005 (sample date unknown).

TABLE 3
Historical Analytical Data Summary
Former Signore Facility
55-57 Jefferson Street
Ellicottville, New York

Well I.D.	Analyte	Sample Date 4/26/1994	Sample Date 2/14/1994	Sample Date 11/1/1993	Sample Date 7/13/1993	Sample Date 4/26/1993	Sample Date 1/26/1993	Sample Date 12/21/1992	Sample Date 1/7/1992	Sample Date 6/11/1991	Sample Date 6/28/1990	Sample Date 12/5/1990	Sample Date 6/25/1990	Sample Date 1/15/1989
EW-1.25	PCE	NT	NT	7	NT	NT	NT	140	NT	NT	NT	NT	NT	NT
	TCE	NT	NT	6	NT	NT	NT	67	NT	NT	NT	NT	NT	NT
EW-1.5	PCE	3	2	<	<	9	<	14	NT	NT	NT	NT	NT	NT
	TCE	2	2	<	<	7	<	7	NT	NT	NT	NT	NT	NT
EW-2.5	PCE	NT	NT	<	NT	NT	NT	<	NT	NT	NT	NT	NT	NT
	TCE	NT	NT	<	NT	NT	NT	2	NT	NT	NT	NT	NT	NT
EW-3.5	PCE	NT	NT	<	NT	NT	NT	<	NT	NT	NT	NT	NT	NT
	TCE	NT	NT	<	NT	NT	NT	<	NT	NT	NT	NT	NT	NT
EW-4.5	PCE	<	<	<	<	2	2	4	NT	NT	NT	NT	NT	NT
	TCE	<	<	2	<	2	<	8	NT	NT	NT	NT	NT	NT
MW-1i	PCE	<	<	<	<	1	1	2	NT	NT	6	NT	NT	19
	TCE	5	5	1	6	36	54	66	NT	NT	55	NT	NT	110
MW-2i	PCE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	TCE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-9i	PCE	2	NT	3	NT	<	NT	<	NT	NT	10	NT	NT	<
	TCE	4	NT	7	NT	3	NT	<	NT	NT	28	NT	NT	20
MW-4S	PCE	NT	NT	2	NT	NT	NT	2	NT	NT	10	NT	NT	15
	TCE	NT	NT	4	NT	NT	NT	1	NT	NT	27	NT	NT	53
MW-5S	PCE	NT	NT	<	NT	NT	NT	<	NT	NT	99	NT	NT	<
	TCE	NT	NT	6	NT	NT	NT	74	NT	NT	100	NT	NT	150
IRM-1	PCE	2	3	5	4	3	4	5	NT	NT	4	NT	NT	NT
	TCE	4	5	6	5	5	6	5	NT	NT	6	NT	NT	NT
IRM-2i	PCE	2	2	3	2	2	3	3	NT	NT	5	NT	NT	NT
	TCE	4	5	6	4	4	5	4	NT	NT	9	NT	NT	NT
MAIN SCHOOL WELL	PCE	<	NT	<	NT	<	NT	0.6	1	0.8	NT	<	<	NT
	TCE	1.5	NT	2	NT	1	NT	1.9	3	1.7	NT	2.2	2	NT
TOWN WELL	PCE	2	NT	1	2	NT	NT	3.5	4	5	NT	5	NT	NT
	TCE	4.6	NT	5	4	NT	NT	6.1	7	6.3	NT	8	NT	NT

Notes:

1. NT = Not Tested.

2. < = not detected above method detection limits.

3. Values shown are in ug/L (part per billion (ppb)).

4. Shading indicates exceedance of its respective Class GA Criteria (5 ppb) for both PCE and TCE).

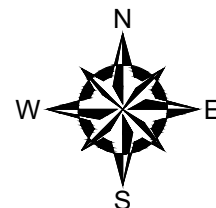
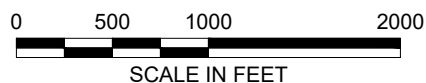
* - Historical data provided date of 10/21/2004 - However, based on historical sampling trend, sample was likely from April 2005 (sample date unknown).



FIGURES



BASE MAP ADAPTED FROM U.S.G.S.
TOPOGRAPHIC MAPS DOWNLOADED
FROM  r  c 



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PREPARED BY: **GZA GeoEnvironmental of N.Y.
Engineers and Scientists**
535 WASHINGTON STREET 11TH FLOOR
BUFFALO, NEW YORK 14203
(716) 685-2300

PREPARED FOR:

**ISKALO ELLICOTTVILLE
HOLDINGS, LLC**

PROJ MGR:	TB
DESIGNED BY:	PJN

REVIEWED BY:	JJR
DRAWN BY:	DEW

CHECKED BY:	BAK
SCALE:	AS SHOWN

DATE
JULY 2017

PROJECT NO.
21.0056491.78

REVISION NO.

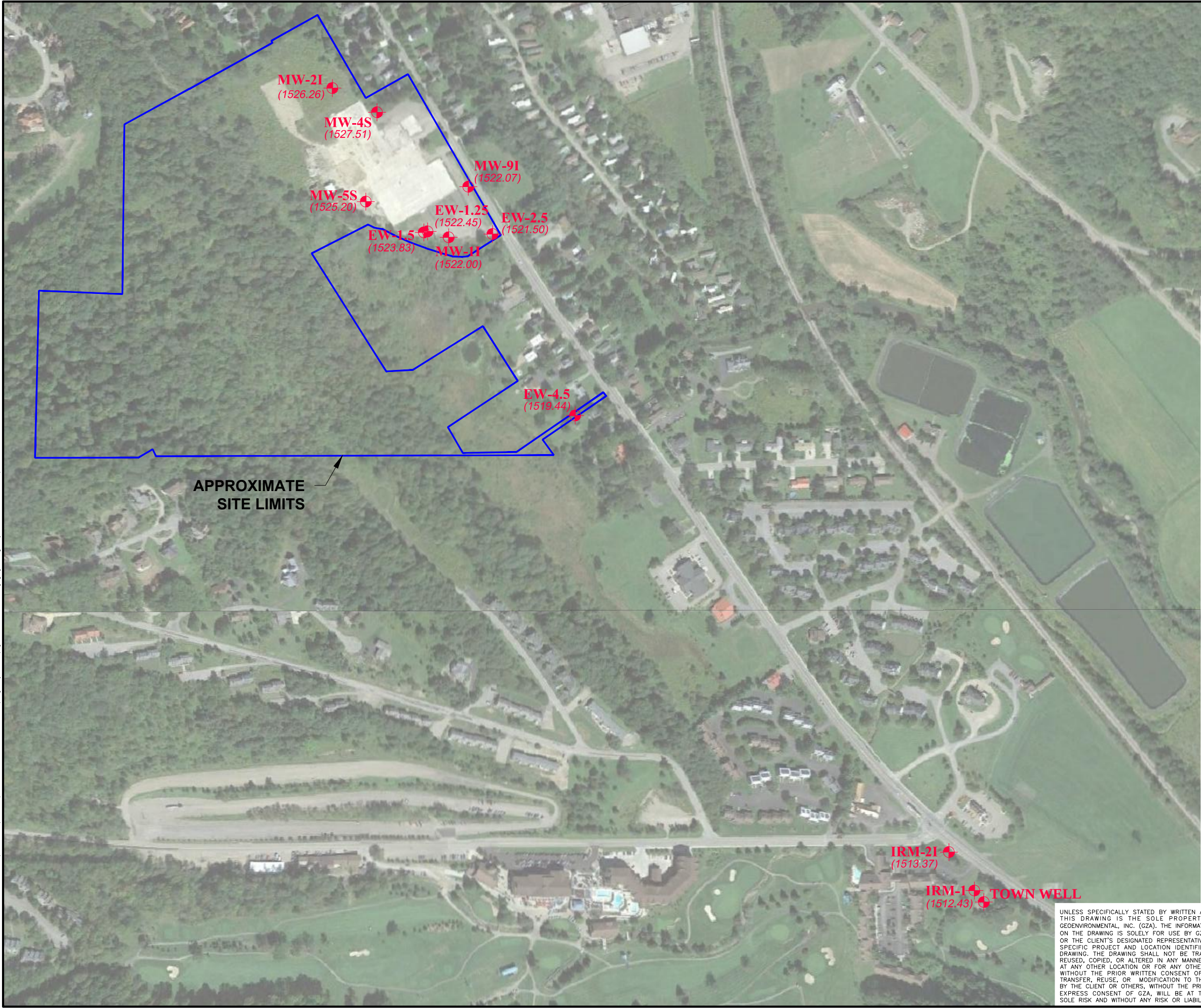
FORMER SIGNORE FACILITY
55 JEFFERSON STREET
ELLCOTTVILLE, NEW YORK

GROUNDWATER MONITORING WELL SAMPLING JULY 2017
LOCUS PLAN

FIGURE

1

©2017 GZA GeoEnvironmental of N.Y. GZA-K:\PROJECTS\56491.78 Ellicottville Well Sampling July 2017\Figure 2 Site Plan.dwg [Figure 2] July 14, 2017 12:14pm daniel.wulf



LEGEND:

 **MW-9I**
(1522.07)

APPROXIMATE LOCATION AND DESIGNATION OF GROUNDWATER MONITORING WELL INSTALLED BY OTHERS, SHOWN WITH GROUNDWATER ELEVATION MEASURED ON JULY 11-13, 2017.

NOTES:

1. BASE MAP ADAPTED FROM A 2013 AERIAL PHOTO DOWNLOADED FROM GOOGLE EARTH PRO AND FIELD OBSERVATIONS.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.
3. GROUNDWATER ELEVATIONS WILL VARY DUE TO PRECIPITATION, BAROMETRIC PRESSURE AND OTHER FACTORS.



NO.	ISSUE/DESCRIPTION	BY	DATE
FORMER SIGNORE FACILITY 55 JEFFERSON STREET ELLICOTTVILLE, NEW YORK			
GROUNDWATER MONITORING WELL SAMPLING JULY 2017 SITE PLAN □ GROUNDWATER ELEVATION MAP			
PREPARED BY:  GZA GeoEnvironmental of N.Y. Engineers and Scientists 535 WASHINGTON STREET 11 TH FLOOR BUFFALO, NEW YORK 14203 (716) 685-2300		PREPARED FOR: ISKALO ELLICOTTVILLE HOLDINGS, LLC	
PROJ MGR: TB	REVIEWED BY: JJR	CHECKED BY: BAK	FIGURE 2
DESIGNED BY: PJN	DRAWN BY: DEW	SCALE: AS SHOWN	
DATE JULY 2017	PROJECT NO. 21.0056491.78	REVISION NO.	

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APPENDIX A LIMITATIONS



USE OF REPORT

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

STANDARD OF CARE

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).
3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state or federal agency.
4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

SUBSURFACE CONDITIONS

5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs. The nature and extent of variations between these explorations may not become evident until further exploration or construction. If variations or other latent conditions then become evident, it will be necessary to reevaluate the conclusions and recommendations of this report.
6. Water level readings have been made, as described in this Report, in and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater however occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the Report.

COMPLIANCE WITH CODES AND REGULATIONS

7. We used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various, and possibly contradictory, interpretations. Interpretations and compliance with codes and regulations by other parties is beyond our control.



SCREENING AND ANALYTICAL TESTING

8. GZA collected environmental samples at the locations identified in the Report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future Site activities and uses may result in a requirement for additional testing.
9. Our interpretation of field screening and laboratory data is presented in the Report. Unless otherwise noted, we relied upon the laboratory's QA/QC program to validate these data.
10. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the Report.

INTERPRETATION OF DATA

11. Our opinions are based on available information as described in the Report, and on our professional judgment. Additional observations made over time, and/or space, may not support the opinions provided in the Report.

ADDITIONAL INFORMATION

12. In the event that the Client or others authorized to use this report obtain additional information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

ADDITIONAL SERVICES

13. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction, and/or property development/ redevelopment at the Site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.



APPENDIX B WELL DEVELOPMENT FORMS

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLICOTTVILLE, NEW YORK**

Historic Information

Boring Log Available (yes/no/attached):

Installation Log Available (yes/no/attached)

Summary

Monitoring Well :	EW-1.25	Ground Surface Elevation:	1532.29	Riser/Screen Material:	Steel/Stainless Steel
Installation Date:	7/90	Protective Casing Elevation:	1532.29 ft.	Top of Screen Depth:	15 ft.
Installed By:	Empire Soils	Monitoring Point Elevation:	1531.96 ft.	Bottom of Screen Depth:	25 ft.
		Elevation Datum:			

Previous Field measurement Information Available (yes/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color

Notes:

Field Observations**Parameters +/-****Sampling Information**

Exterior Observations: <u>well cap missing</u>	pH +/- 0.1	Sample ID: EW-1.25 - 87812
	Conductivity +/- 3%	Sample Time: 8:20
Interior Observations: <u>screen flooded w/ water</u>	Temperature +/- 10%	# of Sample Containers: 9
	Turbidity +/- 10%	Duplicate Sample ID: NA
	ORP +/- 10mV	Sample Analysis: VOCs 8260
Signs of Damage/Tampering: <u>Yes</u>	DO +/- 10%	MNA PARAMETERS

Locked (yes/no)

Well Cap (yes/no)

Surface Seal Intact (yes/no)

PID Measurement: 0.0 ppm

Odors: none

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
7-13-13	802	9.56	0	6.77	166	14.9	55.2	NA	.41	-162.4	Depth of Water: 9.51
	810	9.58	0.25	6.77	166	14.6	16.4		.17	-167.2	Length of Water Column: 14.39
	815	9.58	0.40	6.76	165	14.8	12.76		.15	-168.5	Depth of Well: 23.90
	820	9.58	0.60	6.77	165	14.7	13.13		.13	-169.7	Screen Observed: Y (N)
											DNAPL Observed: Y (N)
											Did Well Go Dry: Y (N)
											Other:
											Pump inlet ~20'

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLCOTTVILLE, NEW YORK**

Historic Information

Boring Log Available (yes/no/attached):

Installation Log Available (yes/no/attached)

Summary

Monitoring Well : Town Well Ground Surface Elevation: _____ Riser/Screen Material: Steel/Stainless Steel
 Installation Date: 1982 Protective Casing Elevation: _____ Top of Screen Depth: 41.5 ft.
 Installed By: _____ Monitoring Point Elevation: _____ Bottom of Screen Depth: 51.5 ft.
 Elevation Datum: _____

Previous Field measurement Information Available (yes/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color

Notes:

Field Observations**Parameters +/-****Sampling Information**

Exterior Observations: All good pH +/- 0.1 Sample ID: TOWN WELL - 071219
 Conductivity +/- 3% Sample Time: 0735
 Interior Observations: All good Temperature +/- 10% # of Sample Containers: 3
 Turbidity +/- 10% Duplicate Sample ID: NA
 ORP +/- 10mV Sample Analysis: VOCs 8260
 DO +/- 10% _____

Signs of Damage/Tampering: NA

Locked (yes/no) _____ Well Cap (yes/no) NA Surface Seal Intact (yes/no) NA PID Measurement: 0.02ppm Odors: None

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
<u>7-12-17</u>	<u>0735</u>	<u>NA</u>	<u>5</u>	<u>7.32</u>	<u>1566</u>	<u>16.2</u>	<u>2.02</u>	<u>Clear</u>	<u>32.1</u>	<u>367.7</u>	Depth of Water: <u>NA</u>
											Length of Water Column: <u>NA</u>
											Depth of Well: <u>NA</u>
											Screen Observed: <u>Y</u> ~~AP~~
											DNAPL Observed: <u>Y</u> ~~N~~
											Did Well Go Dry: <u>Y</u> ~~N~~
											Other:
											<u>Purged 5 gallons</u>

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLICOTTVILLE, NEW YORK**

Historic Information

Boring Log Available (yes/no/attached):

Installation Log Available (yes/no/attached)

Summary

Monitoring Well :	IRM-1	Ground Surface Elevation:	Riser/Screen Material: Steel/Stainless Steel
Installation Date:	1990	Protective Casing Elevation:	Top of Screen Depth: 40 ft.
Installed By:	Empire Soils	Monitoring Point Elevation: 1534.75 ft.	Bottom of Screen Depth: 50 ft.
Elevation Datum:			

Previous Field measurement Information Available (yes/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color

Notes:

Field Observations**Parameters +/-****Sampling Information**Exterior Observations: All good.

pH +/- 0.1

Sample ID: IRM-1 - 071117

Conductivity +/- 3%

Sample Time: 0945

Interior Observations: All good

Temperature +/- 10%

of Sample Containers: 3

Turbidity +/- 10%

Duplicate Sample ID: NA

ORP +/- 10mV

Sample Analysis: VOCs 8260

DO +/- 10%

Signs of Damage/Tampering: None

Locked (yes/no)

Well Cap (yes/no)

Surface Seal Intact (yes/no)

PID Measurement: 0.0 ppm

Odors: None**Well Quality Data**

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen mg/L	Oxygen Reduction Potential	Notes
7-11-17	0924	22.37	0	8.35	1529	11.1	22.6	NA	0.86	-254.8	Depth of Water: 22.32
	0935	22.37	4	7.49	1652	11.1	11.5	NA	0.63	-91.2	Length of Water Column: 22.61
	0940	22.37	6	7.49	1652	11.1	9.84	NA	0.63	-84.3	Depth of Well: 44.93
	0945	22.37	8	7.49	1652	11.1	8.32	NA	0.61	-76.5	Sheen Observed: Y (N)
											DNAPL Observed: Y (N)
											Did Well Go Dry: Y (N)
											Other:
											Pump inlet ~ 42
											Well vol. ~ 3.75

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLICOTTVILLE, NEW YORK**

Historic Information

Boring Log Available (yes/no/attached):

Installation Log Available (yes/no/attached)

Summary

Monitoring Well:	IRM-2 I	Ground Surface Elevation:	Riser/Screen Material: Steel/Stainless Steel
Installation Date:	1990	Protective Casing Elevation:	Top of Screen Depth: 40 ft.
Installed By:	Empire Soils	Monitoring Point Elevation: 1535.99 ft.	Bottom of Screen Depth: 50 ft.
		Elevation Datum:	

Previous Field measurement Information Available (yes/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color

Notes:

Field Observations

Parameters +/-

Sampling Information

Exterior Observations: All Good

pH +/- 0.1 Sample ID: IRM-2 I - 071117

Conductivity +/- 3% Sample Time: 0850

Interior Observations: All good

Temperature +/- 10% # of Sample Containers: 3

Turbidity +/- 10% Duplicate Sample ID: NA

ORP +/- 10mV Sample Analysis: VOCs 8260

DO +/- 10%

Signs of Damage/Tampering: None

Locked (yes/no)

Well Cap (yes/no)

Surface Seal Intact (yes/no)

PID Measurement: 0.0ppm

Odors: None

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen mg/L	Oxygen Reduction Potential	Notes
7-11-13	0827	22.73	0	10.22	.337	10.9	17.9	NA	.28	-7.2	Depth of Water: 22.62
	0840	22.93	6	7.64	.549	10.9	32.4	NA	.93	-70.1	Length of Water Column: 18.26
	0845	22.93	8	7.64	.546	10.9	26.1	NA	.95	-22.0	Depth of Well: 41.48
	0850	22.93	10	7.64	.547	10.9	22.8	NA	.96	-22.6	Screen Observed: Y (N)
											DNAPL Observed: Y (N)
											Did Well Go Dry: Y (N)
											Other:
											Pump inlet ~39'
											ODI - 0.0ppm
											1 well vol ~3.0g

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLICOTTVILLE, NEW YORK**

Historic InformationBoring Log Available (**yes/no/attached**):Installation Log Available (**yes/no/attached**)**Summary**

Monitoring Well : **EW-1.5** Ground Surface Elevation: 1531.45 Riser/Screen Material: Steel/Stainless Steel
 Installation Date: 7/90 Protective Casing Elevation: 1534.32 ft. Top of Screen Depth: 40 ft.
 Installed By: Empire Soils Monitoring Point Elevation: 1533.92 ft. Bottom of Screen Depth: 50 ft.
 Elevation Datum:

Previous Field measurement Information Available (**yes/no/attached**)**Ranges of Previous Field Measurements**

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color

Notes:

Field ObservationsExterior Observations: All goodInterior Observations: Road box flooded w/ waterSigns of Damage/Tampering: None

Locked (**yes/no**) Well Cap (**yes/no**) Surface Seal Intact (**yes/no**) PID Measurement: 0.000 Odors: None

Well Quality Data											
Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
7-11-17	1346	10.13	0	7.27	1571	14.3	24.8	NA	1.74	-151.4	Depth of Water: 10.09
	1400	10.13	1.00	7.73	1545	14.1	7.34	NA	1.70	-122.0	Length of Water Column: 36.54
	1405	10.13	1.20	7.52	1569	14.0	6.99	NA	1.28	-91.0	Depth of Well: 46.63
	1415	10.13	1.40	7.49	1574	13.9	7.18	NA	1.46	-72.9	Screen Observed: Y N
	1420	10.13	1.60	7.51	1573	14.0	6.67	NA	1.47	-79.5	DNAPL Observed: Y N
	1425	10.13	1.80	7.49	1574	14.2	6.57	NA	1.47	-71.1	Did Well Go Dry: Y N
✓	1430	10.13	2.00	7.49	1575	14.1	6.51	NA	1.50	-71.0	Other:
											Pump inlet ~ 43'
											Well not ~ 50 gal

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLICOTTVILLE, NEW YORK**

Historic Information

Boring Log Available (yes/no/attached):

Installation Log Available (yes/no/attached)

Summary

Monitoring Well : **MW-1 I** Ground Surface Elevation: Riser/Screen Material: PVC
 Installation Date: **2/87** Protective Casing Elevation: 1531.93 ft. Top of Screen Depth: 30 ft.
 Installed By: **Rochester Drilling Co.** Monitoring Point Elevation: 1531.79 ft. Bottom of Screen Depth: 50 ft.
 Elevation Datum:

Previous Field measurement Information Available (yes/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color

Notes:

Field Observations**Parameters +/-****Sampling Information**

Exterior Observations: <u>All good</u>	pH +/- 0.1	Sample ID: MW-1 I - 031112
	Conductivity +/- 3%	Sample Time: 1325
Interior Observations: <u>All good</u>	Temperature +/- 10%	# of Sample Containers: 3
	Turbidity +/- 10%	Duplicate Sample ID: N/A
	ORP +/- 10mV	Sample Analysis: VOCs 8260
	DO +/- 10%	
Signs of Damage/Tampering: <u>None</u>		
Locked (yes/no)	Well Cap (yes/no)	Surface Seal Intact (yes/no)
		PID Measurement: 0.0ppm
		Odors: <u>None</u>

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
7-11-17	1250	9.81	0	6.77	1467	14.7	122	51.0mg/L	1.30	-118.8	Depth of Water: 9.79
	1305	10.01	0.50	6.87	1339	16.5	33.1	NA	1.20	-105.7	Length of Water Column: 32.99
	1310	10.01	0.70	6.90	1192	16.3	14.0	NA	1.20	-78.7	Depth of Well: 42.73
	1315	10.01	0.70	6.87	1140	16.5	12.71	NA	1.18	-72.8	Screen Observed: Y (N)
	1320	10.01	1.1	6.88	1139	16.7	10.32	NA	1.17	-76.6	DNAPL Observed: Y (N)
	1325	10.01	1.3	6.87	1140	16.7	10.36	NA	1.16	-76.4	Did Well Go Dry: Y (N)
											Other:
											Pump inlet ~42'
											1 well vol. 5.4gal

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLICOTTVILLE, NEW YORK**

Historic Information

Boring Log Available (yes/no/attached):

Installation Log Available (yes/no/attached)

Summary

Monitoring Well :	MW-2 I	Ground Surface Elevation:	Riser/Screen Material: PVC
Installation Date:	2/87	Protective Casing Elevation: 1540.97 ft.	Top of Screen Depth: 29 ft.
Installed By:	Rochester Drilling Co.	Monitoring Point Elevation: 1540.87 ft.	Bottom of Screen Depth: 49 ft.
Elevation Datum:			

Previous Field measurement Information Available (yes/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color

Notes:

Field Observations**Parameters +/-****Sampling Information**

Exterior Observations: <u>All good</u>	pH +/- 0.1	Sample ID: MW-2 I - 031117
	Conductivity +/- 3%	Sample Time: 1555
Interior Observations: <u>All good</u>	Temperature +/- 10%	# of Sample Containers: 3
	Turbidity +/- 10%	Duplicate Sample ID: NA
	ORP +/- 10mV	Sample Analysis: VOCs 8260
Signs of Damage/Tampering: <u>None</u>	DO +/- 10%	

Locked (yes/no)

Well Cap (yes/no)

Surface Seal Intact (yes/no)

PID Measurement: 0.05 ppmOdors: None**Well Quality Data**

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen mg/L	Oxygen Reduction Potential	Notes
7-11-17	1524	14.63	0	6.77	1224	12.5	2.02	NA	3.95	11.0	Depth of Water: 14.61
	1535	14.63	1.0	6.51	1504	12.0	2.12	NA	3.58	7.9	Length of Water Column: 32.06
	1545	14.63	2.0	7.44	1572	11.9	1.97	NA	3.30	-31.7	Depth of Well: 46.67
	1550	14.63	2.5	7.24	1573	12.0	2.07	NA	3.27	-32.0	Sheen Observed: Y (N)
	1555	14.63	3.0	7.44	1573	12.0	1.91	NA	3.27	-32.8	DNAPL Observed: Y (N)
											Did Well Go Dry: Y (N)
											Other:
											Pump inlet ~39'
											1 well vol ~5.2 gal

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLICOTTVILLE, NEW YORK**

Historic InformationBoring Log Available (**yes/no/attached**):Installation Log Available (**yes/no/attached**)**Summary**

Monitoring Well :	EW-2.5	Ground Surface Elevation: 1531.45	Riser/Screen Material: Steel/Stainless Steel
Installation Date:	7/90	Protective Casing Elevation: 1534.32 ft.	Top of Screen Depth: 40 ft.
Installed By:	Empire Soils	Monitoring Point Elevation: 1533.92 ft.	Bottom of Screen Depth: 50 ft.
Elevation Datum:			

Previous Field measurement Information Available (**yes/no/attached**)**Ranges of Previous Field Measurements**

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color

Notes:

Field Observations**Parameters +/-****Sampling Information**Exterior Observations: *All good*

pH +/- 0.1 Sample ID: EW-2.5 - 071117

Conductivity +/- 3% Sample Time: 1225

Interior Observations: *All good*

Temperature +/- 10% # of Sample Containers: 6

Turbidity +/- 10% Duplicate Sample ID: Yes

ORP +/- 10mV Sample Analysis: VOCs 8260

DO +/- 10%

Signs of Damage/Tampering: *None*Locked (**yes/no**)Well Cap (**yes/no**)Surface Seal Intact (**yes/no**)

PID Measurement: 0.0 ppm

Odors: *None***Well Quality Data**

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
7-11-17	1128	12.43	0	8.54	1221	14.6	39.6	NA	1.90	-150.2	Depth of Water: 12.42
	1140	12.44	0.25	8.88	1218	13.6	11.15	NA	1.16	-341.7	Length of Water Column: 35.38
	1145	12.44	0.50	8.75	1220	13.7	10.21	NA	1.11	-331.0	Depth of Well: 47.80
	1200	12.44	1.00	7.56	1622	13.6	5.86	NA	1.64	-101.6	Sheen Observed: Y (N)
	1210	12.44	1.25	7.53	1622	14.2	5.26	NA	1.76	-86.8	DNAPL Observed: Y (N)
	1215	12.44	1.40	7.54	1627	14.3	4.97	NA	1.79	-84.1	Did Well Go Dry: Y (N)
	1220	12.44	1.60	7.53	1629	14.0	5.17	NA	1.82	-79.0	Other:
	1225	12.44	1.80	7.54	1629	14.0	5.06	NA	1.85	-81.8	Sum of water ~44'
											1 well vol. 5.8 gal

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLICOTTVILLE, NEW YORK**

Historic InformationBoring Log Available (**yes/no/attached**):Installation Log Available (**yes/no/attached**)**Summary**

Monitoring Well :	MW-4 S	Ground Surface Elevation:	Riser/Screen Material: PVC
Installation Date:	11/86	Protective Casing Elevation: 1535.47 ft.	Top of Screen Depth: 7 ft.
Installed By:	<u>Rochester Drilling Co.</u>	Monitoring Point Elevation: 1535.42 ft.	Bottom of Screen Depth: 17 ft.
Elevation Datum:			

Previous Field measurement Information Available (**yes/no/attached**)**Ranges of Previous Field Measurements**

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color

Notes:

Field Observations**Parameters +/-****Sampling Information**

Exterior Observations:	<u>All good</u>	pH	+/- 0.1	Sample ID: MW-4S - <u>071217</u>
Interior Observations:	<u>Roadbox flooded w/ water</u>	Conductivity	+/- 3%	Sample Time: <u>0925</u>
		Temperature	+/- 10%	# of Sample Containers: <u>9</u>
		Turbidity	+/- 10%	Duplicate Sample ID: <u>N/A</u>
		ORP	+/- 10mV	Sample Analysis: VOCs 8260
		DO	+/- 10%	

Signs of Damage/Tampering:

Locked (yes/no)	Well Cap (yes/no)	Surface Seal Intact (yes/no)	PID Measurement: <u>0.02m</u>	Odors: <u>None</u>

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen mg/L	Oxygen Reduction Potential	Notes
7-12-17	845	8.00	0	6.03	1298	16.7	1.96	N/A	3.09	58.0	Depth of Water: 7.91
	900	8.03	.5	5.97	1272	15.9	1.32		3.20	55.8	Length of Water Column: 8.24
	905	8.03	.75	5.93	1275	15.9	1.24		2.77	54.8	Depth of Well: 16.15
	910	8.03	1.0	6.06	1278	16.5	1.12		3.16	51.6	Sheen Observed: Y (N)
	915	8.03	1.25	6.09	1238	16.6	1.20		2.88	54.6	DNAPL Observed: Y (N)
	920	8.03	1.50	6.11	1280	16.7	1.39		2.90	51.1	Did Well Go Dry: Y (N)
	925	8.03	1.75	6.10	1280	16.7	1.36		3.80	51.4	Other:
											<u>Pumped 12.62 - 14"</u>
											<u>M5/MSD 1.34</u>
											<u>1 well 101: 1.34 0.1</u>

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLICOTTVILLE, NEW YORK**

Historic Information

Boring Log Available (yes/no/attached):

Installation Log Available (yes/no/attached)

Summary

Monitoring Well :	EW-4.5	Ground Surface Elevation: 1533.55	Riser/Screen Material: Steel/Stainless Steel
Installation Date:	7/90	Protective Casing Elevation: 1535.97 ft.	Top of Screen Depth: 40 ft.
Installed By:	Empire Soils	Monitoring Point Elevation: 1535.65 ft.	Bottom of Screen Depth: 50 ft.
		Elevation Datum:	

Previous Field measurement Information Available (yes/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color

Notes:

Field Observations

Parameters +/-

Sampling Information

Exterior Observations:	<u>All good</u>	pH	+/- 0.1	Sample ID: EW-4.5 - 071117
Interior Observations:	<u>All good.</u>	Conductivity	+/- 3%	Sample Time: 1100
		Temperature	+/- 10%	# of Sample Containers: 3
		Turbidity	+/- 10%	Duplicate Sample ID: NA
		ORP	+/- 10mV	Sample Analysis: VOCs 8260
Signs of Damage/Tampering:	<u>None</u>	DO	+/- 10%	

Locked (yes/no)

Well Cap (yes/no)

Surface Seal Intact (yes/no)

PID Measurement: 0.0 ppm

Odors: None

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged G	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
7-11-17	1040	16.22	0	7.71	1542	13.9	26.0	NA	1.16	-234.7	Depth of Water: 16.21
	1050	16.24	0.3	7.51	1575	13.7	11.73	NA	1.15	-263.6	Length of Water Column: 30.21
	1055	16.24	0.5	7.52	1580	13.9	9.27	NA	1.12	-268.9	Depth of Well: 46.42
	1100	16.24	0.7	7.49	1581	13.7	9.12	NA	1.10	-267.7	Screen Observed: Y (N)
											DNAPL Observed: Y (N)
											Did Well Go Dry: Y (N)
											Other:
											Pump inlet ~ 42'
											1 inch well ~ 9.9 gal

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLCOTTVILLE, NEW YORK**

Historic Information

Boring Log Available (yes/no/attached):

Installation Log Available (yes/no/attached)

Summary

Monitoring Well :	MW-5 S	Ground Surface Elevation:	Riser/Screen Material: PVC
Installation Date:	11/86	Protective Casing Elevation: 1534.35 ft.	Top of Screen Depth: 7.5 ft.
Installed By:	Rochester Drilling Co.	Monitoring Point Elevation: 1534.16 ft.	Bottom of Screen Depth: 17.5 ft.
		Elevation Datum:	

Previous Field measurement Information Available (yes/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color

Notes:

Field Observations**Parameters +/-****Sampling Information**

Exterior Observations:	<i>All good</i>	pH	+/- 0.1	Sample ID: MW-5S - 091217
Interior Observations:	<i>Cap off riser but present in riser</i>	Conductivity	+/- 3%	Sample Time: 1030
		Temperature	+/- 10%	# of Sample Containers: 3
		Turbidity	+/- 10%	Duplicate Sample ID: NA
		ORP	+/- 10mV	Sample Analysis: VOCs 8260
Signs of Damage/Tampering:		DO	+/- 10%	

Locked (yes/no)

Well Cap (yes/no)

Surface Seal Intact (yes/no)

PID Measurement: 0.0 ppm

Odors: None

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
7-12-13	951	8.98	0	6.92	1278	17.4	6.49	NA	2.43	33.9	Depth of Water: 8.98
	1005	8.98	.75	6.96	1372	14.0	4.26		.15	17.0	Length of Water Column: 6.15
	1010	8.98	1.0	7.13	1423	14.9	3.12		.16	-0.1	Depth of Well: 15.11
	1020	8.98	1.5	7.43	1586	13.9	3.28		1.53	-11.8	Screen Observed: Y N
	1025	8.98	1.75	7.44	1591	13.9	3.20		1.51	-11.2	DNAPL Observed: Y N
	1030	8.98	2.0	7.47	1595	13.9	2.12	N	1.55	-12.0	Did Well Go Dry: Y N
											Other:
											Riser inlet ~12'
											Level vol. ~10 gal

**FORMER SIGNORE, INC. FACILITY
WELL DEVELOPMENT FORM
55-57 JEFFERSON STREET
ELLICOTTVILLE, NEW YORK**

Historic Information

Boring Log Available (yes/no/attached):

Installation Log Available (yes/no/attached)

Summary

Monitoring Well :	MW-9 I	Ground Surface Elevation:	Riser/Screen Material: PVC
Installation Date:	1/87	Protective Casing Elevation: 1532.69 ft.	Top of Screen Depth: 29.5 ft.
Installed By:	Rochester Drilling Co.	Monitoring Point Elevation: 1532.3 ft.	Bottom of Screen Depth: 49.5 ft.
		Elevation Datum:	

Previous Field measurement Information Available (yes/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color

Notes:

Field Observations**Parameters +/-****Sampling Information**Exterior Observations: All good

pH +/- 0.1

Sample ID: MW-9 I - 031117

Conductivity +/- 3%

Sample Time: 1505

Interior Observations: Rebar flooded w/ water

Temperature +/- 10%

of Sample Containers: 3

Turbidity +/- 10%

Duplicate Sample ID: NA

ORP +/- 10mV

Sample Analysis: VOCs 8260

DO +/- 10%

Signs of Damage/Tampering: None

Locked (yes/no)

Well Cap (yes/no)

Surface Seal Intact (yes/no)

PID Measurement: 0.02mOdors: None**Well Quality Data**

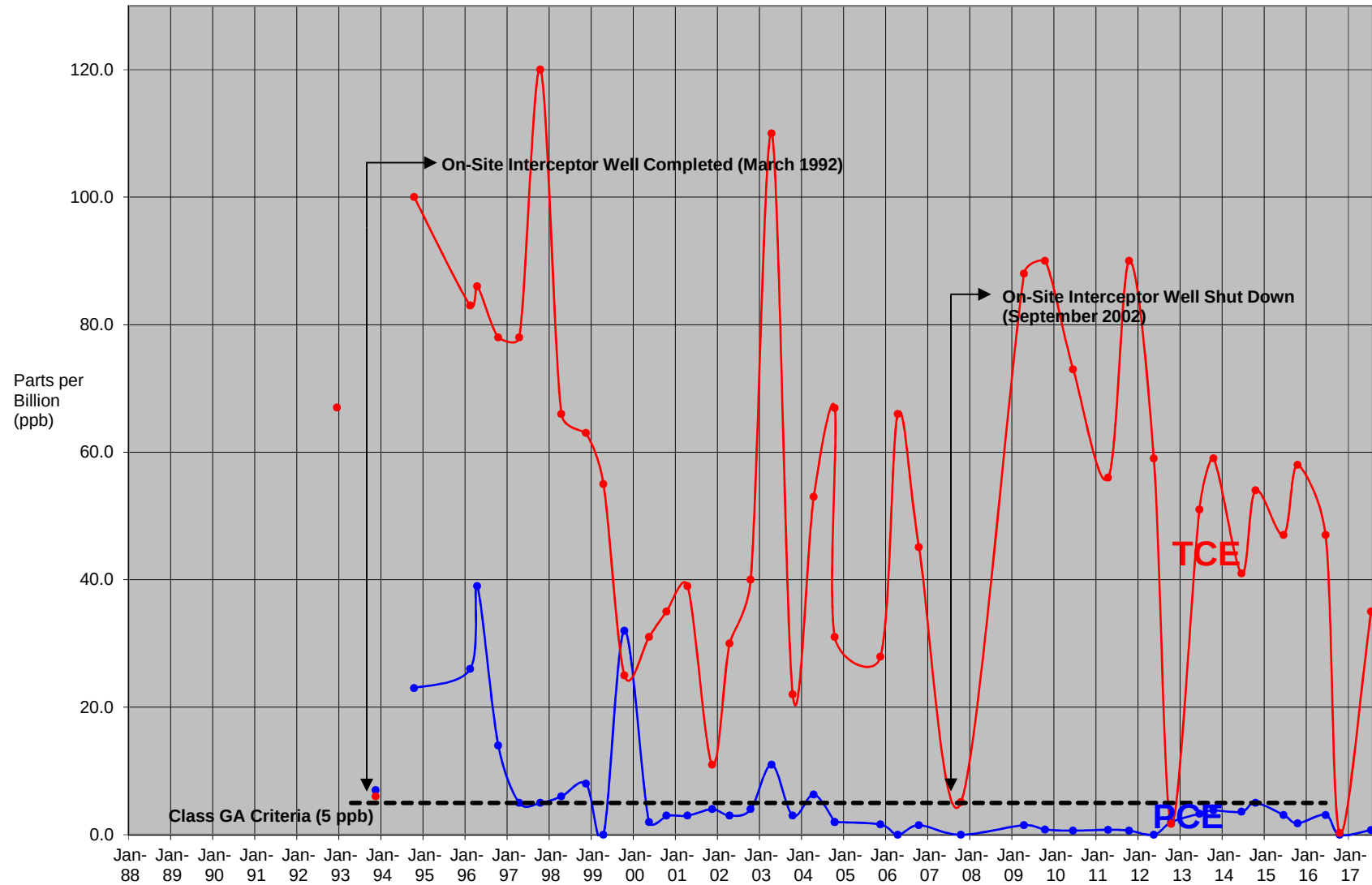
Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
7-11-17	1446	10.25	0	7.65	1621	14.7	10.31	NA	2.60	-41.8	Depth of Water: 10.23
	1455	10.26	0.5	7.52	1618	13.9	6.66	NA	1.97	-53.5	Length of Water Column: 37.34
	1500	10.26	0.75	7.51	1618	13.7	6.51	NA	2.01	-54.8	Depth of Well: 47.57
	1505	10.26	1.0	7.54	1618	13.5	6.37	NA	2.02	-55.2	Screen Observed: Y ☒
											DNAPL Observed: Y ☒
											Did Well Go Dry: Y ☒
											Other:
											Dump inside ~ 39'
											1 well out ~ 6-1 gal



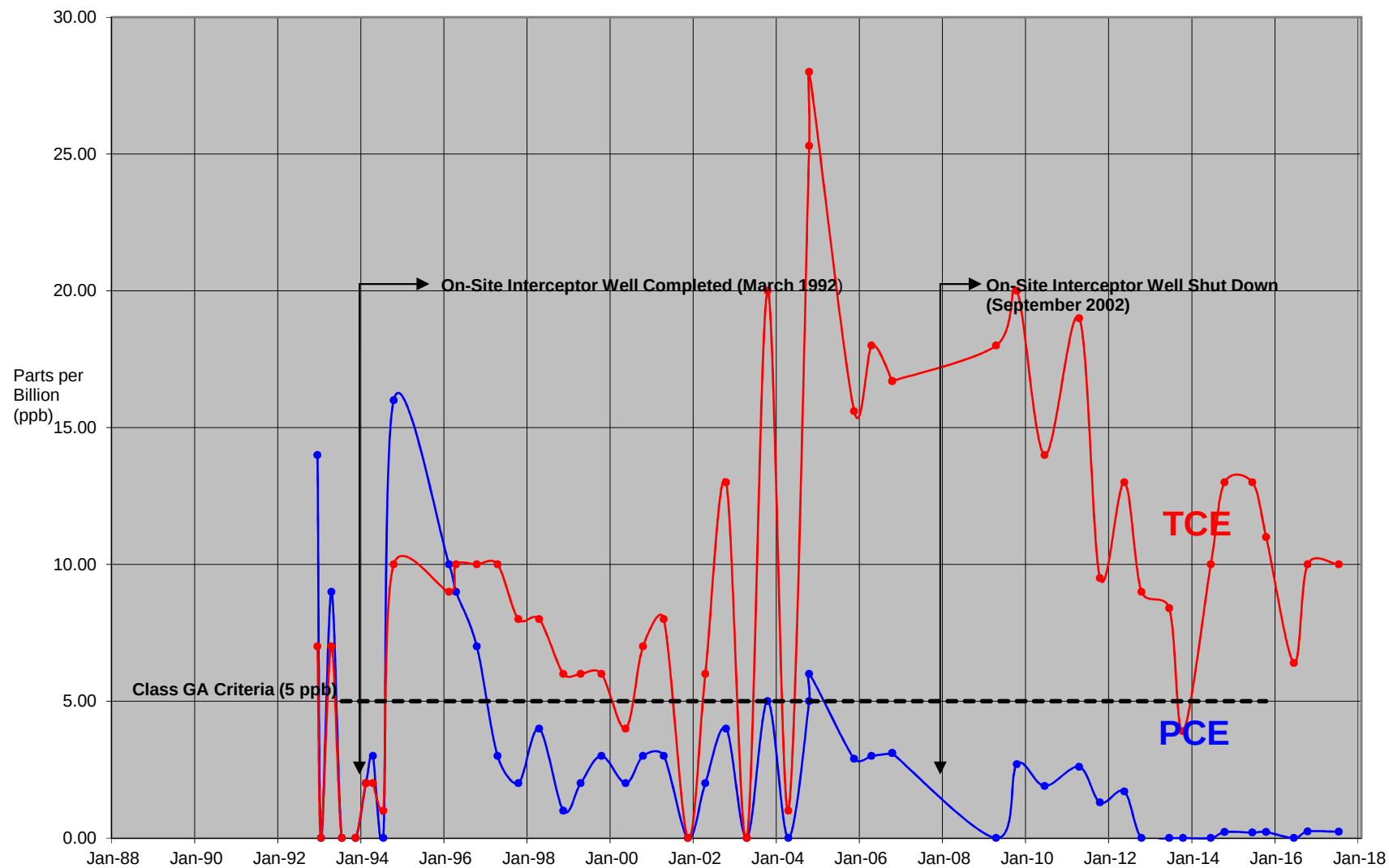
APPENDIX C TCE AND PCE CONCENTRATION GRAPHS

TCE and PCE Groundwater Concentrations

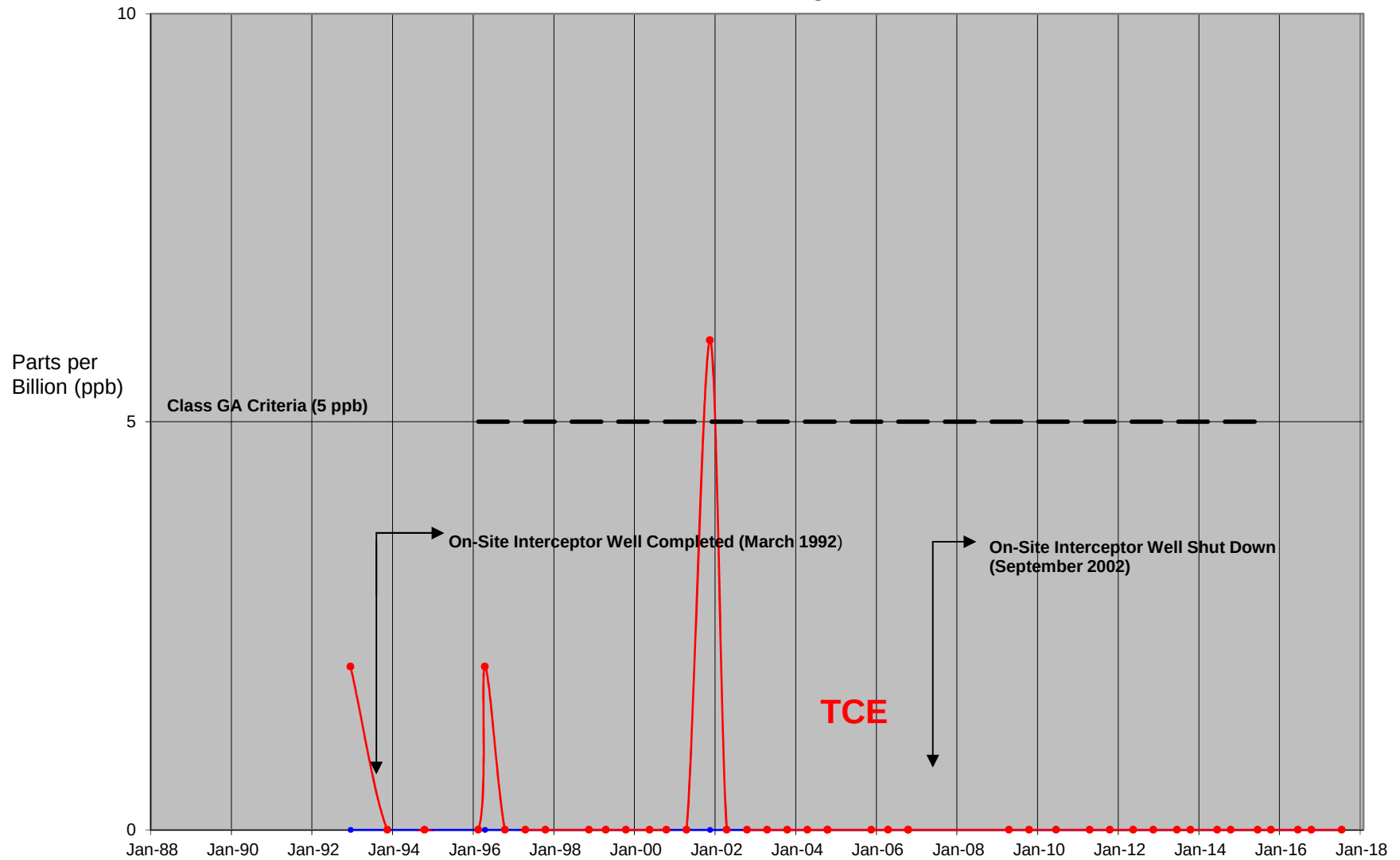
EW-1.25



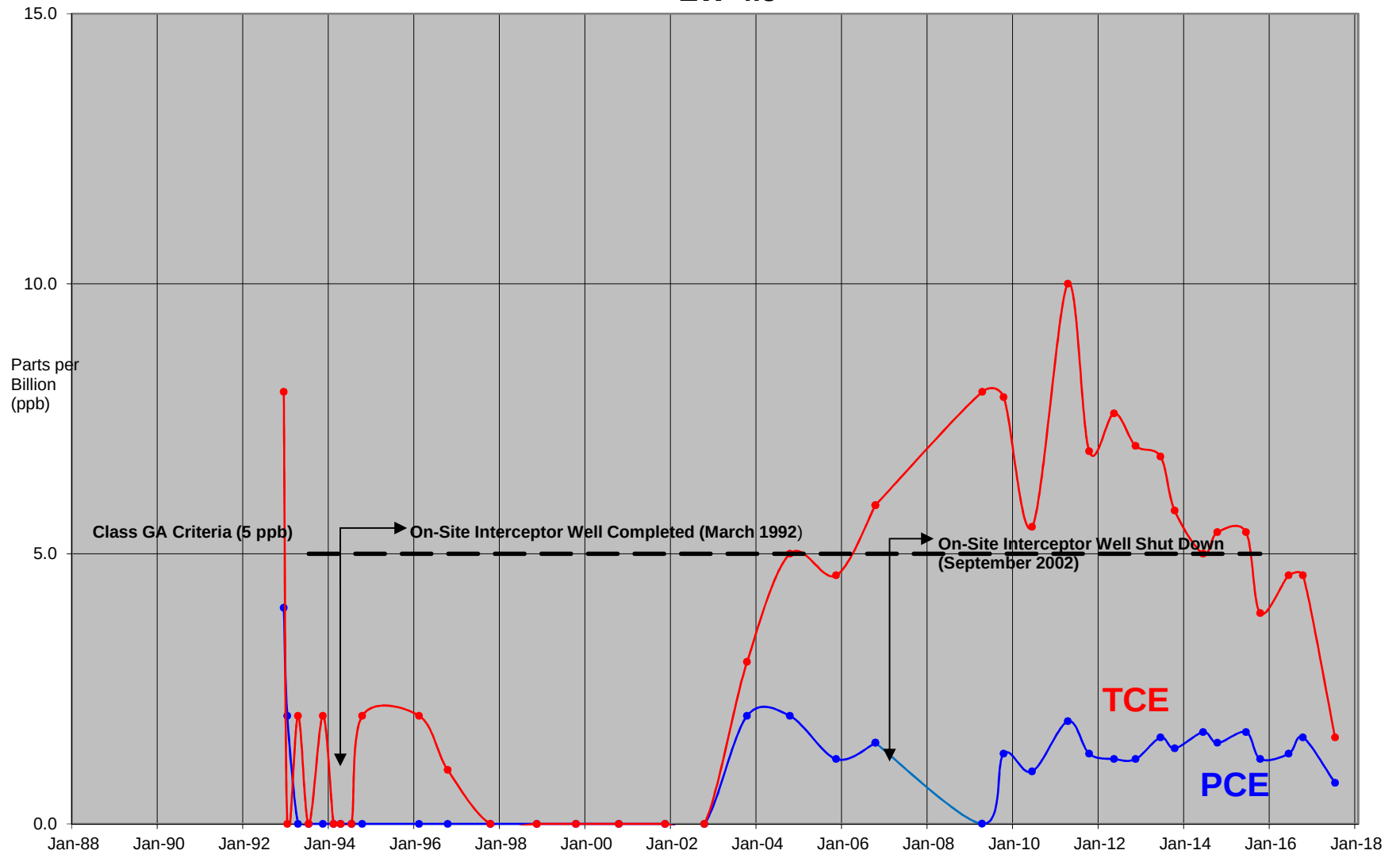
TCE and PCE Groundwater Concentrations EW-1.5



TCE and PCE Groundwater Concentrations EW-2.5

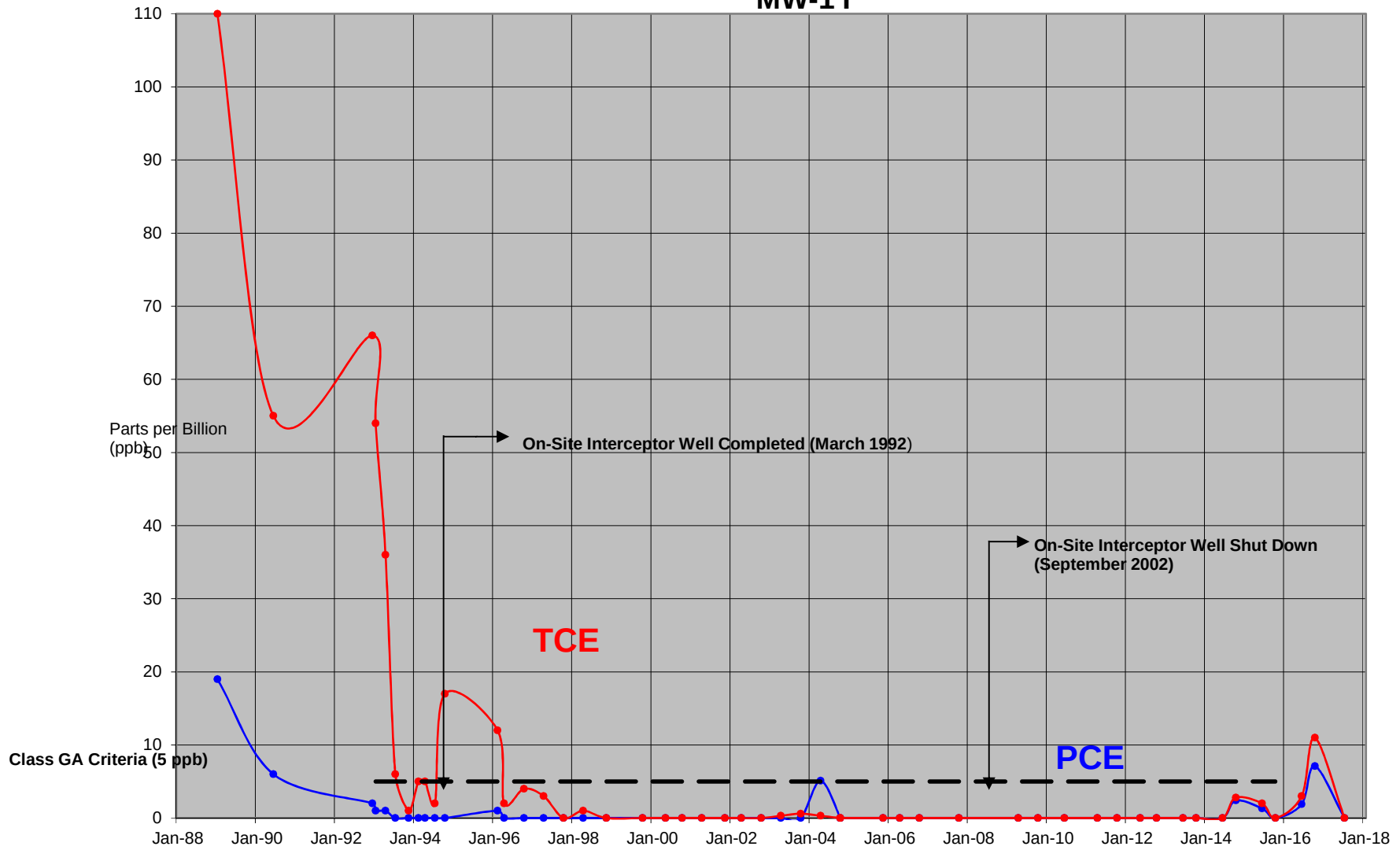


TCE and PCE Groundwater Concentrations EW-4.5

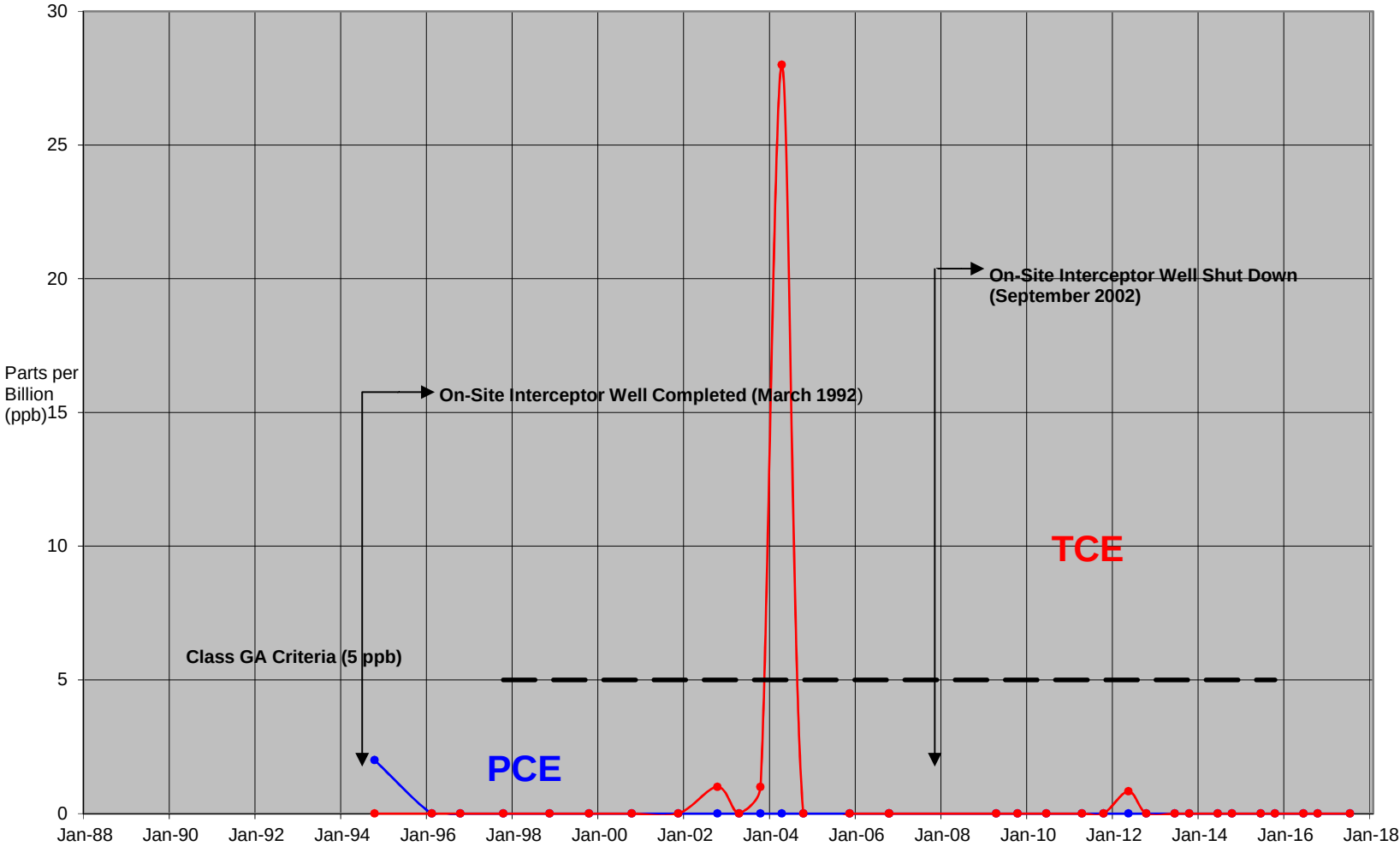


TCE and PCE Groundwater Concentrations

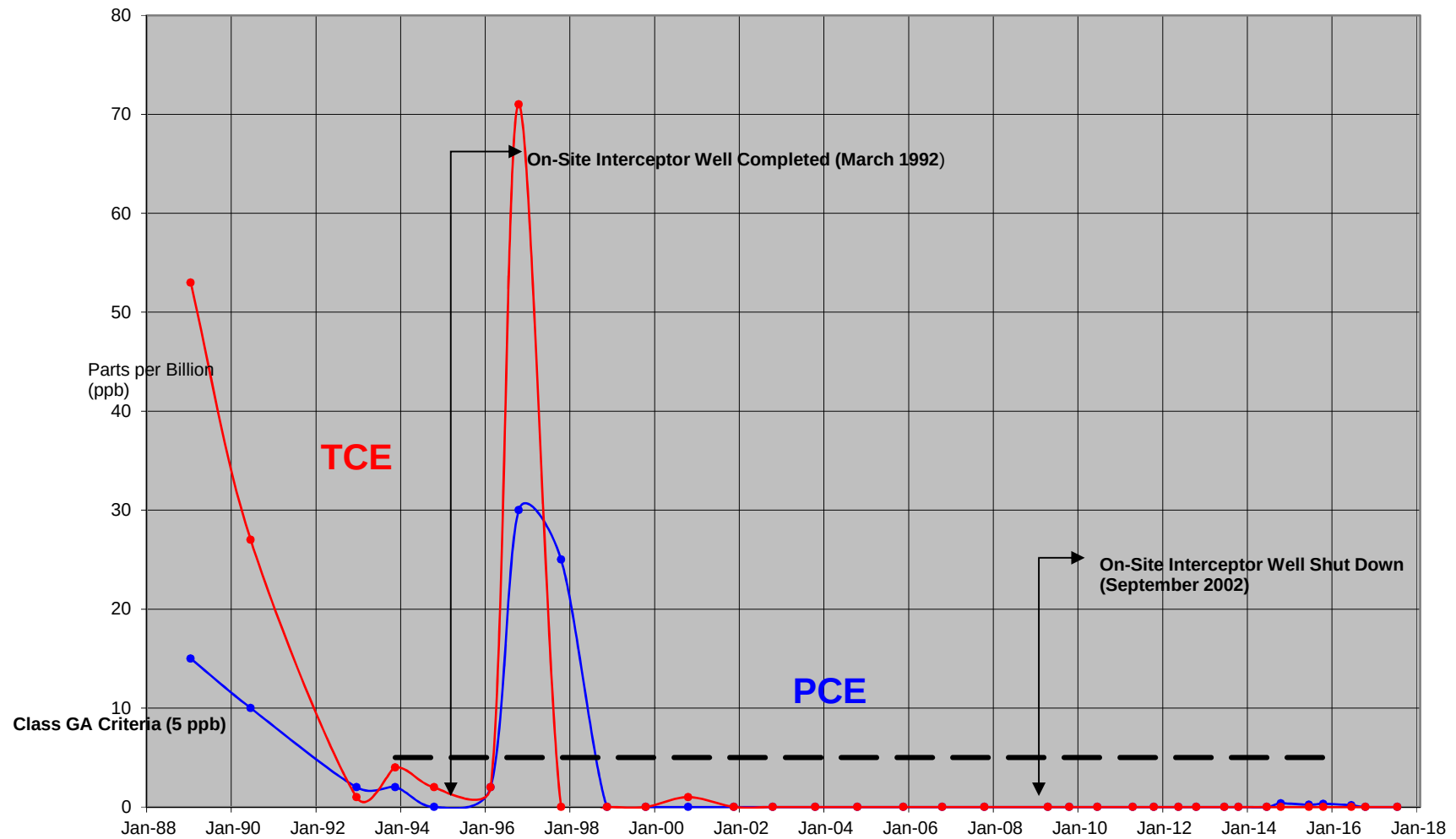
MW-1 I



TCE and PCE Groundwater Concentrations
MW-2 I

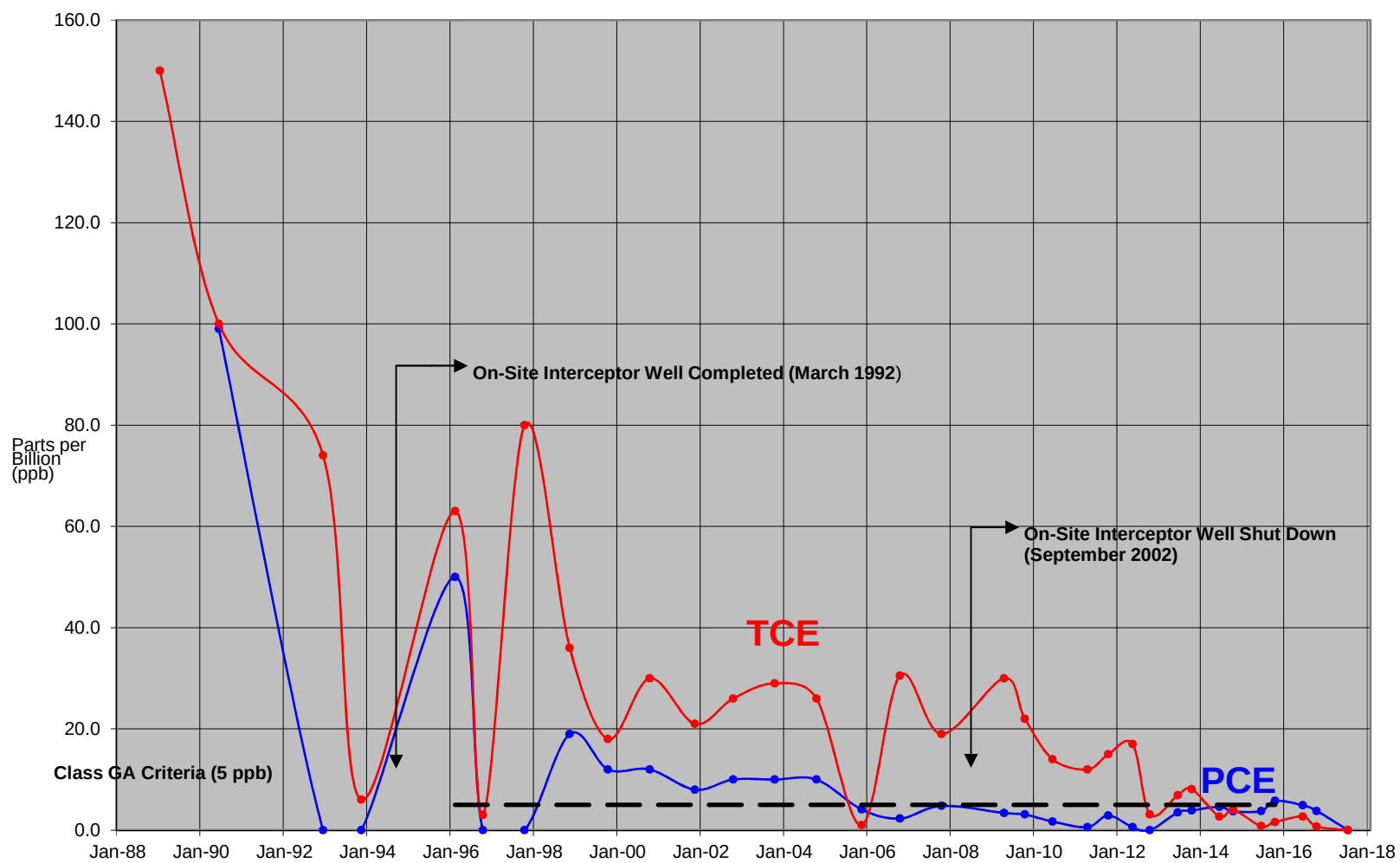


TCE and PCE Groundwater Concentrations MW-4S



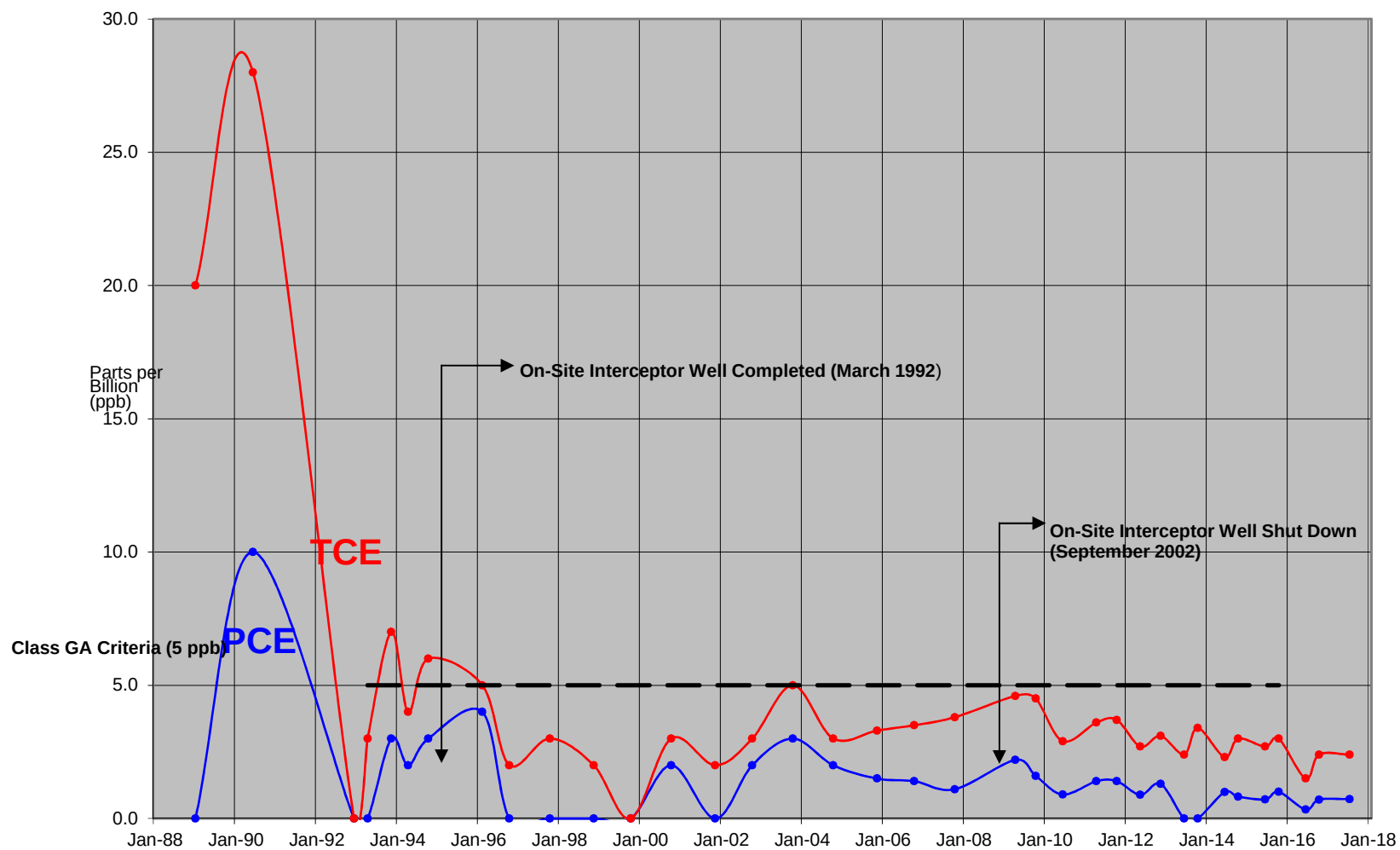
TCE and PCE Groundwater Concentrations

MW-5S



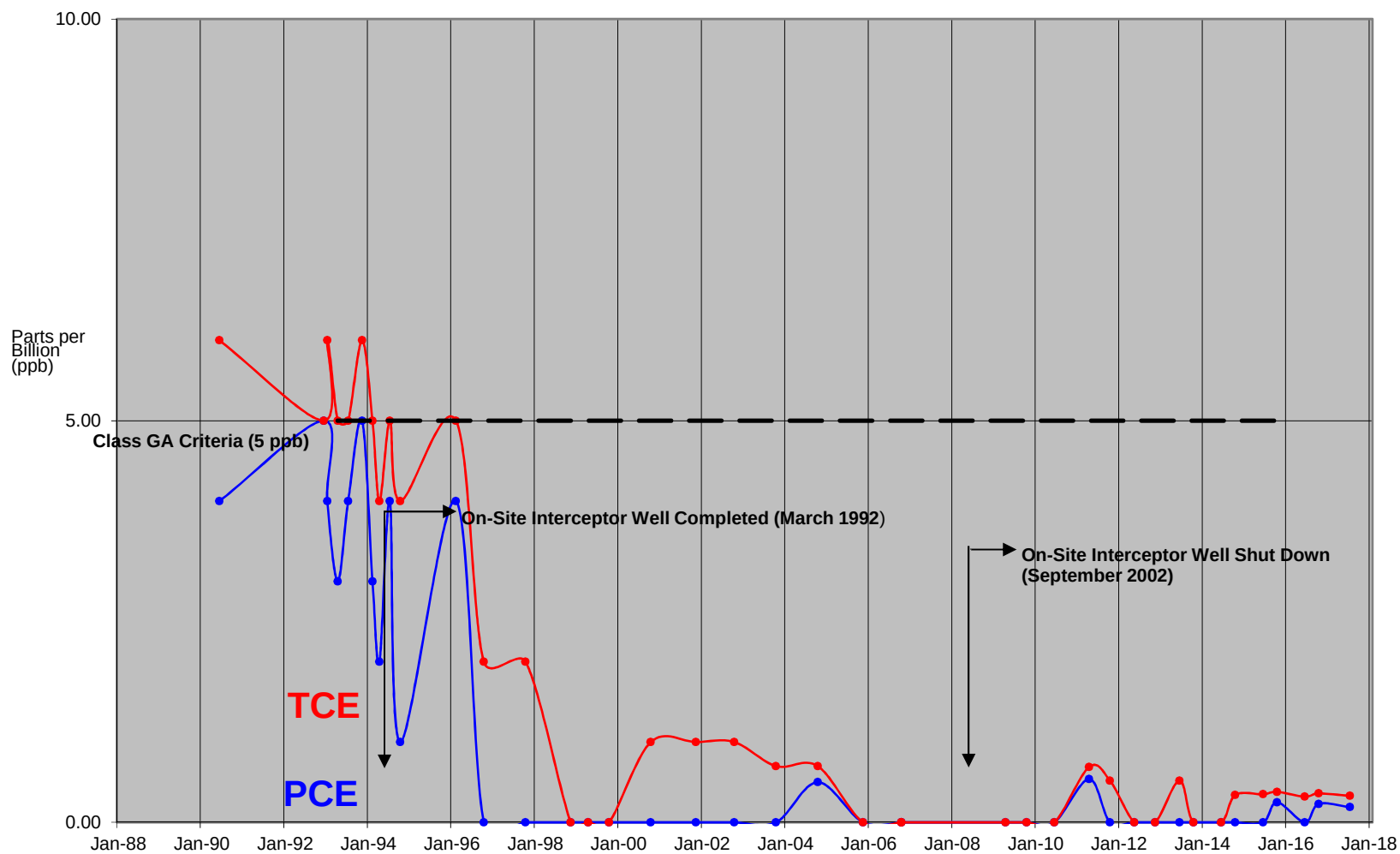
TCE and PCE Groundwater Concentrations

MW-9 I



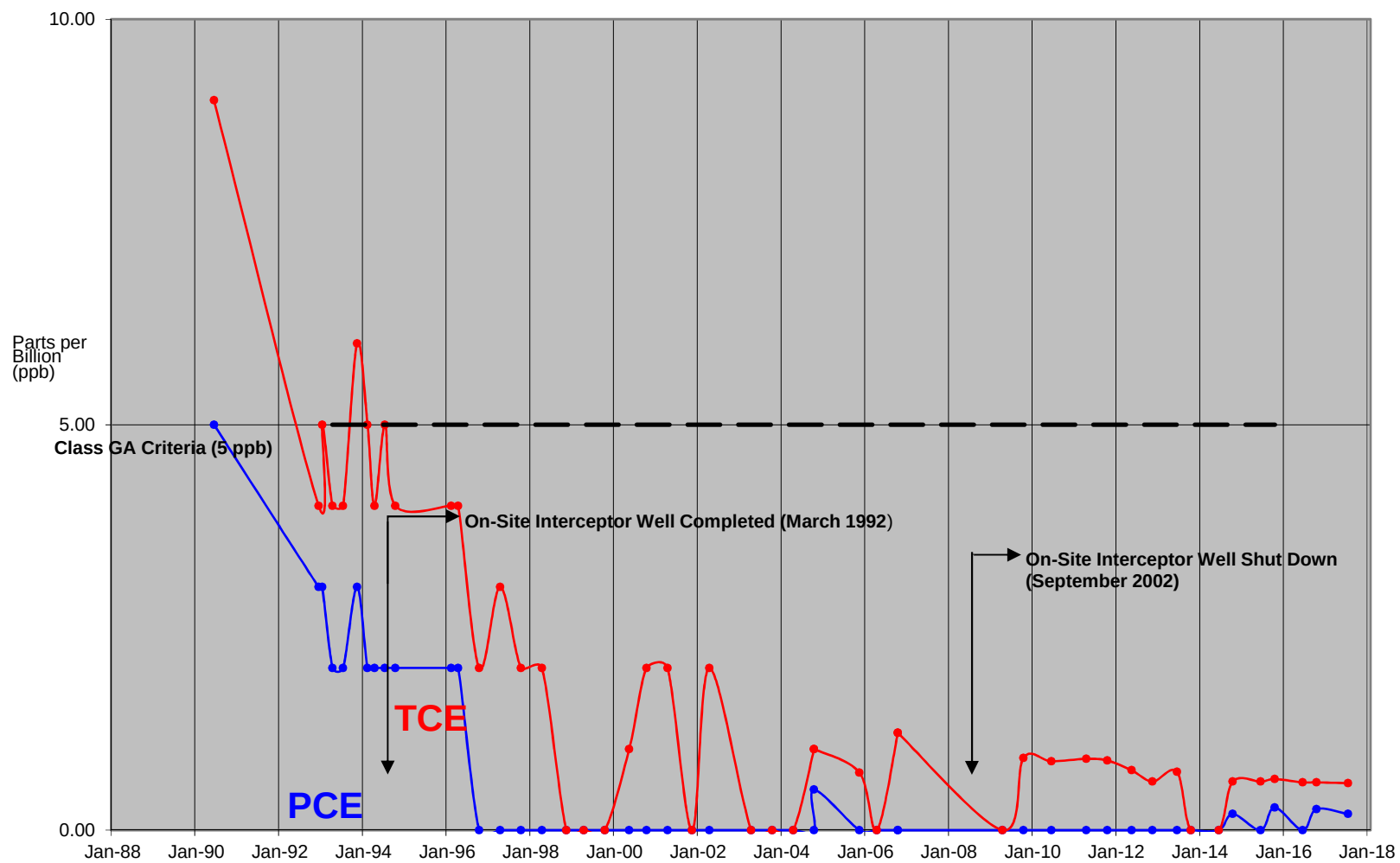
TCE and PCE Groundwater Concentrations

IRM-1



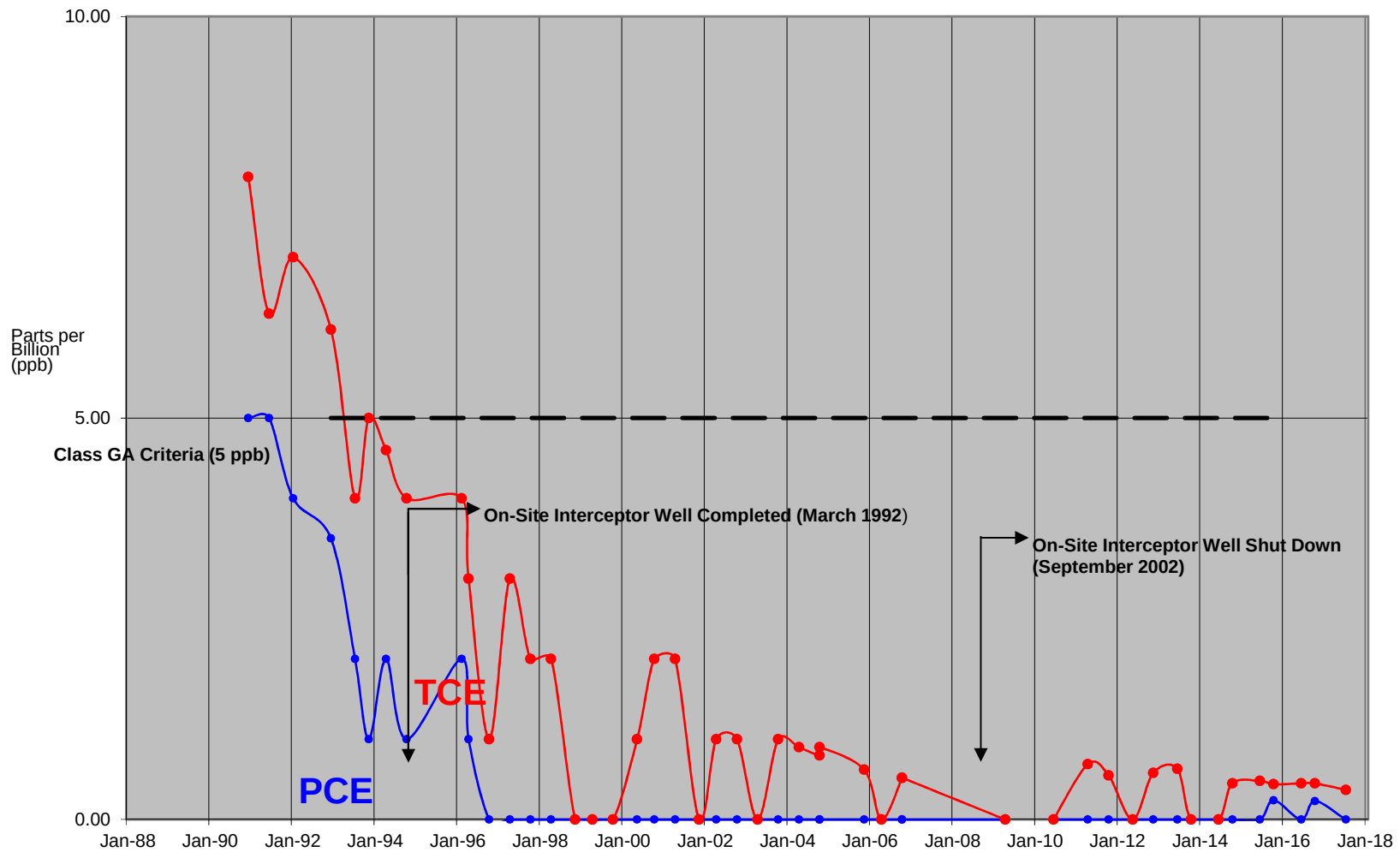
TCE and PCE Groundwater Concentrations

IRM-2 I



TCE and PCE Groundwater Concentrations

TOWN WELL





APPENDIX D ANALYTICAL TEST RESULTS



ANALYTICAL REPORT

Lab Number:	L1723956
Client:	GZA GeoEnvironmental 535 Washington St. Buffalo, NY 14203
ATTN:	James Richert
Phone:	(716) 685-2300
Project Name:	FORMER SIGNORE
Project Number:	21.0056491.78
Report Date:	07/18/17

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723956
Report Date: 07/18/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1723956-01	EW-1.25-071317	WATER	ELLCOTTVILLE	07/13/17 08:20	07/13/17

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723956
Report Date: 07/18/17

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723956
Report Date: 07/18/17

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Amita Naik

Title: Technical Director/Representative

Date: 07/18/17

ORGANICS

VOLATILES

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723956
Report Date: 07/18/17

SAMPLE RESULTS

Lab ID: L1723956-01
Client ID: EW-1.25-071317
Sample Location: ELLICOTTVILLE

Date Collected: 07/13/17 08:20
Date Received: 07/13/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 23:03
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	3.0		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.73		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	0.39	J	ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	35		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE**Lab Number:** L1723956**Project Number:** 21.0056491.78**Report Date:** 07/18/17**SAMPLE RESULTS****Lab ID:** L1723956-01**Date Collected:** 07/13/17 08:20**Client ID:** EW-1.25-071317**Date Received:** 07/13/17**Sample Location:** ELLICOTTVILLE**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	57		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	1.8	J	ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	104		70-130

Project Name: FORMER SIGNORE

Lab Number: L1723956

Project Number: 21.0056491.78

Report Date: 07/18/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/17/17 14:40
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1023505-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: FORMER SIGNORE

Lab Number: L1723956

Project Number: 21.0056491.78

Report Date: 07/18/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/17/17 14:40
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1023505-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: FORMER SIGNORE**Lab Number:** L1723956**Project Number:** 21.0056491.78**Report Date:** 07/18/17**Method Blank Analysis**
Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 07/17/17 14:40

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1023505-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FORMER SIGNORE

Project Number: 21.0056491.78

Lab Number: L1723956

Report Date: 07/18/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1023505-3 WG1023505-4								
Methylene chloride	98		94		70-130	4		20
1,1-Dichloroethane	94		91		70-130	3		20
Chloroform	97		94		70-130	3		20
Carbon tetrachloride	94		92		63-132	2		20
1,2-Dichloropropane	96		95		70-130	1		20
Dibromochloromethane	93		90		63-130	3		20
1,1,2-Trichloroethane	97		94		70-130	3		20
Tetrachloroethene	97		94		70-130	3		20
Chlorobenzene	95		93		75-130	2		20
Trichlorofluoromethane	90		87		62-150	3		20
1,2-Dichloroethane	93		90		70-130	3		20
1,1,1-Trichloroethane	96		92		67-130	4		20
Bromodichloromethane	100		97		67-130	3		20
trans-1,3-Dichloropropene	91		88		70-130	3		20
cis-1,3-Dichloropropene	93		90		70-130	3		20
Bromoform	95		93		54-136	2		20
1,1,2,2-Tetrachloroethane	98		97		67-130	1		20
Benzene	96		93		70-130	3		20
Toluene	95		93		70-130	2		20
Ethylbenzene	99		96		70-130	3		20
Chloromethane	68		62	Q	64-130	9		20
Bromomethane	96		87		39-139	10		20
Vinyl chloride	86		82		55-140	5		20

Lab Control Sample Analysis Batch Quality Control

Project Name: FORMER SIGNORE

Lab Number: L1723956

Project Number: 21.0056491.78

Report Date: 07/18/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1023505-3 WG1023505-4								
Chloroethane	95		88		55-138	8		20
1,1-Dichloroethene	94		91		61-145	3		20
trans-1,2-Dichloroethene	95		91		70-130	4		20
Trichloroethene	94		89		70-130	5		20
1,2-Dichlorobenzene	97		94		70-130	3		20
1,3-Dichlorobenzene	96		93		70-130	3		20
1,4-Dichlorobenzene	96		92		70-130	4		20
Methyl tert butyl ether	110		110		63-130	0		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	100		95		70-130	5		20
cis-1,2-Dichloroethene	97		93		70-130	4		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	74		70		36-147	6		20
Acetone	99		100		58-148	1		20
Carbon disulfide	74		69		51-130	7		20
2-Butanone	100		99		63-138	1		20
4-Methyl-2-pentanone	95		94		59-130	1		20
2-Hexanone	96		95		57-130	1		20
Bromochloromethane	97		94		70-130	3		20
1,2-Dibromoethane	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	96		88		41-144	9		20
Isopropylbenzene	98		98		70-130	0		20
1,2,3-Trichlorobenzene	120		110		70-130	9		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER SIGNORE

Lab Number: L1723956

Project Number: 21.0056491.78

Report Date: 07/18/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1023505-3 WG1023505-4								
1,2,4-Trichlorobenzene	100		95		70-130	5		20
Methyl Acetate	93		92		70-130	1		20
Cyclohexane	89		85		70-130	5		20
1,4-Dioxane	112		110		56-162	2		20
Freon-113	93		89		70-130	4		20
Methyl cyclohexane	93		89		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		96		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	98		99		70-130
Dibromofluoromethane	103		101		70-130

Project Name: FORMER SIGNORE**Lab Number:** L1723956**Project Number:** 21.0056491.78**Report Date:** 07/18/17**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1723956-01A	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1723956-01B	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1723956-01C	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723956
Report Date: 07/18/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers



Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723956
Report Date: 07/18/17

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723956
Report Date: 07/18/17

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 10

Department: **Quality Assurance**

Published Date: 1/16/2017 11:00:05 AM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.**EPA 300:** DW: Bromide**EPA 6860:** NPW and SCM: Perchlorate**EPA 9010:** NPW and SCM: Amenable Cyanide Distillation**EPA 9012B:** NPW: Total Cyanide**EPA 9050A:** NPW: Specific Conductance**SM3500:** NPW: Ferrous Iron**SM4500:** NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.**SM5310C:** DW: Dissolved Organic Carbon**Mansfield Facility****SM 2540D:** TSS**EPA 3005A** NPW**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.****EPA 624:** Volatile Halocarbons & Aromatics,**EPA 608:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.****Mansfield Facility:****Drinking Water****EPA 200.7:** Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.**Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.**EPA 245.1** Hg.**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

41723956

Total Bottle

PN

7/14/17-198

Page 20 of 20



ANALYTICAL REPORT

Lab Number:	L1723822
Client:	GZA GeoEnvironmental 535 Washington St. Buffalo, NY 14203
ATTN:	James Richert
Phone:	(716) 685-2300
Project Name:	FORMER SIGNORE
Project Number:	21.0056491.78
Report Date:	07/19/17

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1723822-01	IRM-2I-071117	WATER	ELLCOTTVILLE	07/11/17 08:50	07/12/17
L1723822-02	IRM-1-071117	WATER	ELLCOTTVILLE	07/11/17 09:45	07/12/17
L1723822-03	EW-4.5-071117	WATER	ELLCOTTVILLE	07/11/17 11:00	07/12/17
L1723822-04	EW-2.5-071117	WATER	ELLCOTTVILLE	07/11/17 12:25	07/12/17
L1723822-05	MW-1I-071117	WATER	ELLCOTTVILLE	07/11/17 13:25	07/12/17
L1723822-06	EW-1.5-071117	WATER	ELLCOTTVILLE	07/11/17 14:30	07/12/17
L1723822-07	MW-9I-071117	WATER	ELLCOTTVILLE	07/11/17 15:05	07/12/17
L1723822-08	MW-2I-071117	WATER	ELLCOTTVILLE	07/11/17 15:55	07/12/17
L1723822-09	DUPE-071117	WATER	ELLCOTTVILLE	07/11/17 00:00	07/12/17
L1723822-10	TRIP BLANK-071117	WATER	ELLCOTTVILLE	07/11/17 00:00	07/12/17
L1723822-11	TOWNWELL-071217	WATER	ELLCOTTVILLE	07/12/17 07:35	07/12/17
L1723822-12	MW-4S-071217	WATER	ELLCOTTVILLE	07/12/17 09:25	07/12/17
L1723822-13	MW-5S-071217	WATER	ELLCOTTVILLE	07/12/17 10:30	07/12/17
L1723822-14	TRIP BLANK-071217	WATER	ELLCOTTVILLE	07/12/17 00:00	07/12/17

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

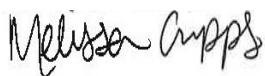
Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Melissa Cripps

Title: Technical Director/Representative

Date: 07/19/17

ORGANICS

VOLATILES

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723822-01
Client ID: IRM-2I-071117
Sample Location: ELLICOTTVILLE

Date Collected: 07/11/17 08:50
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 17:17
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.20	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.58		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE**Lab Number:** L1723822**Project Number:** 21.0056491.78**Report Date:** 07/19/17**SAMPLE RESULTS****Lab ID:** L1723822-01**Date Collected:** 07/11/17 08:50**Client ID:** IRM-2I-071117**Date Received:** 07/12/17**Sample Location:** ELLICOTTVILLE**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	109		70-130

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723822-02
Client ID: IRM-1-071117
Sample Location: ELLICOTTVILLE

Date Collected: 07/11/17 09:45
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 17:52
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.19	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.33	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE**Lab Number:** L1723822**Project Number:** 21.0056491.78**Report Date:** 07/19/17**SAMPLE RESULTS****Lab ID:** L1723822-02**Date Collected:** 07/11/17 09:45**Client ID:** IRM-1-071117**Date Received:** 07/12/17**Sample Location:** ELLICOTTVILLE**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	109		70-130

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723822-03
Client ID: EW-4.5-071117
Sample Location: ELLICOTTVILLE

Date Collected: 07/11/17 11:00
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 18:27
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.76		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	1.6		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE**Lab Number:** L1723822**Project Number:** 21.0056491.78**Report Date:** 07/19/17**SAMPLE RESULTS****Lab ID:** L1723822-03**Date Collected:** 07/11/17 11:00**Client ID:** EW-4.5-071117**Date Received:** 07/12/17**Sample Location:** ELLICOTTVILLE**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	108		70-130

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723822-04
Client ID: EW-2.5-071117
Sample Location: ELLICOTTVILLE

Date Collected: 07/11/17 12:25
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 19:02
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723822-04
Client ID: EW-2.5-071117
Sample Location: ELLICOTTVILLE

Date Collected: 07/11/17 12:25
Date Received: 07/12/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	111		70-130

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723822-05
Client ID: MW-1I-071117
Sample Location: ELLICOTTVILLE

Date Collected: 07/11/17 13:25
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 19:37
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE

Lab Number: L1723822

Project Number: 21.0056491.78

Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723822-05

Date Collected: 07/11/17 13:25

Client ID: MW-1I-071117

Date Received: 07/12/17

Sample Location: ELLICOTTVILLE

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.9	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	112		70-130

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723822-06
Client ID: EW-1.5-071117
Sample Location: ELLICOTTVILLE

Date Collected: 07/11/17 14:30
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 20:12
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.23	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	1.2	J	ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	10		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE**Lab Number:** L1723822**Project Number:** 21.0056491.78**Report Date:** 07/19/17**SAMPLE RESULTS****Lab ID:** L1723822-06**Date Collected:** 07/11/17 14:30**Client ID:** EW-1.5-071117**Date Received:** 07/12/17**Sample Location:** ELLICOTTVILLE**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	1.3	J	ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	126		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	108		70-130

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723822-07
Client ID: MW-9I-071117
Sample Location: ELLICOTTVILLE

Date Collected: 07/11/17 15:05
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 20:47
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.73		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	2.4		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE**Lab Number:** L1723822**Project Number:** 21.0056491.78**Report Date:** 07/19/17**SAMPLE RESULTS****Lab ID:** L1723822-07**Date Collected:** 07/11/17 15:05**Client ID:** MW-9I-071117**Date Received:** 07/12/17**Sample Location:** ELLICOTTVILLE**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	109		70-130

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723822-08
Client ID: MW-2I-071117
Sample Location: ELLICOTTVILLE

Date Collected: 07/11/17 15:55
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 21:22
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE**Lab Number:** L1723822**Project Number:** 21.0056491.78**Report Date:** 07/19/17**SAMPLE RESULTS****Lab ID:** L1723822-08**Date Collected:** 07/11/17 15:55**Client ID:** MW-2I-071117**Date Received:** 07/12/17**Sample Location:** ELLICOTTVILLE**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	109		70-130

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723822-09
Client ID: DUPE-071117
Sample Location: ELLICOTTVILLE

Date Collected: 07/11/17 00:00
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 21:57
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE**Lab Number:** L1723822**Project Number:** 21.0056491.78**Report Date:** 07/19/17**SAMPLE RESULTS****Lab ID:** L1723822-09**Date Collected:** 07/11/17 00:00**Client ID:** DUPE-071117**Date Received:** 07/12/17**Sample Location:** ELLICOTTVILLE**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	110		70-130

Project Name: FORMER SIGNORE**Lab Number:** L1723822**Project Number:** 21.0056491.78**Report Date:** 07/19/17**SAMPLE RESULTS**

Lab ID: L1723822-10
 Client ID: TRIP BLANK-071117
 Sample Location: ELLICOTTVILLE

Date Collected: 07/11/17 00:00
 Date Received: 07/12/17
 Field Prep: Not Specified

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/17/17 18:02
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE**Lab Number:** L1723822**Project Number:** 21.0056491.78**Report Date:** 07/19/17**SAMPLE RESULTS****Lab ID:** L1723822-10**Date Collected:** 07/11/17 00:00**Client ID:** TRIP BLANK-071117**Date Received:** 07/12/17**Sample Location:** ELLICOTTVILLE**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	101		70-130

Project Name: FORMER SIGNORE**Lab Number:** L1723822**Project Number:** 21.0056491.78**Report Date:** 07/19/17**SAMPLE RESULTS**

Lab ID: L1723822-11
 Client ID: TOWNWELL-071217
 Sample Location: ELLICOTTVILLE

Date Collected: 07/12/17 07:35
 Date Received: 07/12/17
 Field Prep: Not Specified

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/17/17 18:35
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.37	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE**Lab Number:** L1723822**Project Number:** 21.0056491.78**Report Date:** 07/19/17**SAMPLE RESULTS**

Lab ID: L1723822-11
 Client ID: TOWNWELL-071217
 Sample Location: ELLICOTTVILLE

Date Collected: 07/12/17 07:35
 Date Received: 07/12/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	100		70-130

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723822-12
Client ID: MW-4S-071217
Sample Location: ELLICOTTVILLE

Date Collected: 07/12/17 09:25
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 19:09
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE**Lab Number:** L1723822**Project Number:** 21.0056491.78**Report Date:** 07/19/17**SAMPLE RESULTS****Lab ID:** L1723822-12**Date Collected:** 07/12/17 09:25**Client ID:** MW-4S-071217**Date Received:** 07/12/17**Sample Location:** ELLICOTTVILLE**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	100		70-130

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723822-13
Client ID: MW-5S-071217
Sample Location: ELLICOTTVILLE

Date Collected: 07/12/17 10:30
Date Received: 07/12/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/17/17 19:42
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE**Lab Number:** L1723822**Project Number:** 21.0056491.78**Report Date:** 07/19/17**SAMPLE RESULTS****Lab ID:** L1723822-13**Date Collected:** 07/12/17 10:30**Client ID:** MW-5S-071217**Date Received:** 07/12/17**Sample Location:** ELLICOTTVILLE**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	100		70-130

Project Name: FORMER SIGNORE

Lab Number: L1723822

Project Number: 21.0056491.78

Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723822-14
 Client ID: TRIP BLANK-071217
 Sample Location: ELLICOTTVILLE

Date Collected: 07/12/17 00:00
 Date Received: 07/12/17
 Field Prep: Not Specified

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/17/17 20:16
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER SIGNORE**Lab Number:** L1723822**Project Number:** 21.0056491.78**Report Date:** 07/19/17**SAMPLE RESULTS****Lab ID:** L1723822-14**Date Collected:** 07/12/17 00:00**Client ID:** TRIP BLANK-071217**Date Received:** 07/12/17**Sample Location:** ELLICOTTVILLE**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	99		70-130

Project Name: FORMER SIGNORE

Lab Number: L1723822

Project Number: 21.0056491.78

Report Date: 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/17/17 13:09
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1023291-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: FORMER SIGNORE

Lab Number: L1723822

Project Number: 21.0056491.78

Report Date: 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/17/17 13:09
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1023291-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: FORMER SIGNORE**Lab Number:** L1723822**Project Number:** 21.0056491.78**Report Date:** 07/19/17**Method Blank Analysis**
Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 07/17/17 13:09

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1023291-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	107		70-130

Project Name: FORMER SIGNORE

Lab Number: L1723822

Project Number: 21.0056491.78

Report Date: 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/17/17 14:40
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10-14 Batch: WG1023505-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: FORMER SIGNORE

Lab Number: L1723822

Project Number: 21.0056491.78

Report Date: 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/17/17 14:40
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10-14 Batch: WG1023505-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: FORMER SIGNORE

Lab Number: L1723822

Project Number: 21.0056491.78

Report Date: 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 07/17/17 14:40

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10-14 Batch: WG1023505-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: FORMER SIGNORE

Project Number: 21.0056491.78

Lab Number: L1723822

Report Date: 07/19/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1023291-3 WG1023291-4								
Methylene chloride	95		81		70-130	16		20
1,1-Dichloroethane	99		85		70-130	15		20
Chloroform	110		100		70-130	10		20
Carbon tetrachloride	120		120		63-132	0		20
1,2-Dichloropropane	100		99		70-130	1		20
Dibromochloromethane	110		110		63-130	0		20
1,1,2-Trichloroethane	100		99		70-130	1		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	83		72		62-150	14		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	110		110		67-130	0		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	120		120		70-130	0		20
Bromoform	110		110		54-136	0		20
1,1,2,2-Tetrachloroethane	94		97		67-130	3		20
Benzene	100		99		70-130	1		20
Toluene	98		97		70-130	1		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	110		100		64-130	10		20
Bromomethane	62		57		39-139	8		20
Vinyl chloride	94		92		55-140	2		20

Lab Control Sample Analysis Batch Quality Control

Project Name: FORMER SIGNORE

Project Number: 21.0056491.78

Lab Number: L1723822

Report Date: 07/19/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1023291-3 WG1023291-4								
Chloroethane	82		68		55-138	19		20
1,1-Dichloroethene	77		69		61-145	11		20
trans-1,2-Dichloroethene	91		82		70-130	10		20
Trichloroethene	100		97		70-130	3		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	130		120		63-130	8		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	98		95		70-130	3		20
Styrene	110		110		70-130	0		20
Dichlorodifluoromethane	70		67		36-147	4		20
Acetone	120		100		58-148	18		20
Carbon disulfide	65		56		51-130	15		20
2-Butanone	100		100		63-138	0		20
4-Methyl-2-pentanone	97		100		59-130	3		20
2-Hexanone	95		94		57-130	1		20
Bromochloromethane	110		110		70-130	0		20
1,2-Dibromoethane	100		110		70-130	10		20
1,2-Dibromo-3-chloropropane	95		95		41-144	0		20
Isopropylbenzene	99		99		70-130	0		20
1,2,3-Trichlorobenzene	93		90		70-130	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER SIGNORE

Lab Number: L1723822

Project Number: 21.0056491.78

Report Date: 07/19/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1023291-3 WG1023291-4								
1,2,4-Trichlorobenzene	120		110		70-130	9		20
Methyl Acetate	92		79		70-130	15		20
Cyclohexane	80		75		70-130	6		20
1,4-Dioxane	142		130		56-162	9		20
Freon-113	75		65	Q	70-130	14		20
Methyl cyclohexane	88		84		70-130	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	114		116		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	96		99		70-130
Dibromofluoromethane	104		106		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: FORMER SIGNORE

Lab Number: L1723822

Project Number: 21.0056491.78

Report Date: 07/19/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-14 Batch: WG1023505-3 WG1023505-4								
Methylene chloride	98		94		70-130	4		20
1,1-Dichloroethane	94		91		70-130	3		20
Chloroform	97		94		70-130	3		20
Carbon tetrachloride	94		92		63-132	2		20
1,2-Dichloropropane	96		95		70-130	1		20
Dibromochloromethane	93		90		63-130	3		20
1,1,2-Trichloroethane	97		94		70-130	3		20
Tetrachloroethene	97		94		70-130	3		20
Chlorobenzene	95		93		75-130	2		20
Trichlorofluoromethane	90		87		62-150	3		20
1,2-Dichloroethane	93		90		70-130	3		20
1,1,1-Trichloroethane	96		92		67-130	4		20
Bromodichloromethane	100		97		67-130	3		20
trans-1,3-Dichloropropene	91		88		70-130	3		20
cis-1,3-Dichloropropene	93		90		70-130	3		20
Bromoform	95		93		54-136	2		20
1,1,2,2-Tetrachloroethane	98		97		67-130	1		20
Benzene	96		93		70-130	3		20
Toluene	95		93		70-130	2		20
Ethylbenzene	99		96		70-130	3		20
Chloromethane	68		62	Q	64-130	9		20
Bromomethane	96		87		39-139	10		20
Vinyl chloride	86		82		55-140	5		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FORMER SIGNORE

Lab Number: L1723822

Project Number: 21.0056491.78

Report Date: 07/19/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-14 Batch: WG1023505-3 WG1023505-4								
Chloroethane	95		88		55-138	8		20
1,1-Dichloroethene	94		91		61-145	3		20
trans-1,2-Dichloroethene	95		91		70-130	4		20
Trichloroethene	94		89		70-130	5		20
1,2-Dichlorobenzene	97		94		70-130	3		20
1,3-Dichlorobenzene	96		93		70-130	3		20
1,4-Dichlorobenzene	96		92		70-130	4		20
Methyl tert butyl ether	110		110		63-130	0		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	100		95		70-130	5		20
cis-1,2-Dichloroethene	97		93		70-130	4		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	74		70		36-147	6		20
Acetone	99		100		58-148	1		20
Carbon disulfide	74		69		51-130	7		20
2-Butanone	100		99		63-138	1		20
4-Methyl-2-pentanone	95		94		59-130	1		20
2-Hexanone	96		95		57-130	1		20
Bromochloromethane	97		94		70-130	3		20
1,2-Dibromoethane	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	96		88		41-144	9		20
Isopropylbenzene	98		98		70-130	0		20
1,2,3-Trichlorobenzene	120		110		70-130	9		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER SIGNORE

Project Number: 21.0056491.78

Lab Number: L1723822

Report Date: 07/19/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-14 Batch: WG1023505-3 WG1023505-4								
1,2,4-Trichlorobenzene	100		95		70-130	5		20
Methyl Acetate	93		92		70-130	1		20
Cyclohexane	89		85		70-130	5		20
1,4-Dioxane	112		110		56-162	2		20
Freon-113	93		89		70-130	4		20
Methyl cyclohexane	93		89		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		96		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	98		99		70-130
Dibromofluoromethane	103		101		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: FORMER SIGNORE

Project Number: 21.0056491.78

Lab Number: L1723822

Report Date: 07/19/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-14 QC Batch ID: WG1023505-6 WG1023505-7 QC Sample: L1723822-12 Client ID: MW-4S-071217												
Methylene chloride	ND	10	10	100		11	110		70-130	10		20
1,1-Dichloroethane	ND	10	9.9	99		10	100		70-130	1		20
Chloroform	ND	10	10	100		11	110		70-130	10		20
Carbon tetrachloride	ND	10	10	100		10	100		63-132	0		20
1,2-Dichloropropane	ND	10	10	100		10	100		70-130	0		20
Dibromochloromethane	ND	10	9.0	90		9.4	94		63-130	4		20
1,1,2-Trichloroethane	ND	10	10	100		10	100		70-130	0		20
Tetrachloroethene	ND	10	10	100		11	110		70-130	10		20
Chlorobenzene	ND	10	9.7	97		10	100		75-130	3		20
Trichlorofluoromethane	ND	10	10	100		10	100		62-150	0		20
1,2-Dichloroethane	ND	10	9.8	98		10	100		70-130	2		20
1,1,1-Trichloroethane	ND	10	10	100		10	100		67-130	0		20
Bromodichloromethane	ND	10	10	100		11	110		67-130	10		20
trans-1,3-Dichloropropene	ND	10	8.4	84		8.9	89		70-130	6		20
cis-1,3-Dichloropropene	ND	10	8.3	83		9.3	93		70-130	11		20
Bromoform	ND	10	8.2	82		8.8	88		54-136	7		20
1,1,2,2-Tetrachloroethane	ND	10	9.5	95		10	100		67-130	5		20
Benzene	ND	10	10	100		11	110		70-130	10		20
Toluene	ND	10	10	100		10	100		70-130	0		20
Ethylbenzene	ND	10	10	100		11	110		70-130	10		20
Chloromethane	ND	10	5.7	57	Q	6.1	61	Q	64-130	7		20
Bromomethane	ND	10	5.0	50		6.2	62		39-139	21	Q	20
Vinyl chloride	ND	10	8.6	86		8.6	86		55-140	0		20

Matrix Spike Analysis

Batch Quality Control

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-14 QC Batch ID: WG1023505-6 WG1023505-7 QC Sample: L1723822-12 Client ID: MW-4S-071217												
Chloroethane	ND	10	11	110		11	110		55-138	0		20
1,1-Dichloroethene	ND	10	10	100		11	110		61-145	10		20
trans-1,2-Dichloroethene	ND	10	10	100		10	100		70-130	0		20
Trichloroethene	ND	10	10	100		10	100		70-130	0		20
1,2-Dichlorobenzene	ND	10	9.2	92		10	100		70-130	8		20
1,3-Dichlorobenzene	ND	10	9.3	93		9.7	97		70-130	4		20
1,4-Dichlorobenzene	ND	10	9.2	92		9.6	96		70-130	4		20
Methyl tert butyl ether	ND	10	11	110		12	120		63-130	9		20
p/m-Xylene	ND	20	21	105		21	105		70-130	0		20
o-Xylene	ND	20	20	100		21	105		70-130	5		20
cis-1,2-Dichloroethene	ND	10	9.9	99		11	110		70-130	11		20
Styrene	ND	20	20	100		21	105		70-130	5		20
Dichlorodifluoromethane	ND	10	8.0	80		7.7	77		36-147	4		20
Acetone	ND	10	12	120		14	140		58-148	15		20
Carbon disulfide	ND	10	7.8	78		8.1	81		51-130	4		20
2-Butanone	ND	10	9.7	97		11	110		63-138	13		20
4-Methyl-2-pentanone	ND	10	8.9	89		10	100		59-130	12		20
2-Hexanone	ND	10	9.6	96		11	110		57-130	14		20
Bromochloromethane	ND	10	9.8	98		10	100		70-130	2		20
1,2-Dibromoethane	ND	10	10	100		11	110		70-130	10		20
1,2-Dibromo-3-chloropropane	ND	10	7.9	79		9.1	91		41-144	14		20
Isopropylbenzene	ND	10	9.7	97		10	100		70-130	3		20
1,2,3-Trichlorobenzene	ND	10	11	110		12	120		70-130	9		20

Matrix Spike Analysis

Batch Quality Control

Project Name: FORMER SIGNORE

Project Number: 21.0056491.78

Lab Number: L1723822

Report Date: 07/19/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-14 QC Batch ID: WG1023505-6 WG1023505-7 QC Sample: L1723822-12 Client ID: MW-4S-071217												
1,2,4-Trichlorobenzene	ND	10	9.0	90		9.9	99		70-130	10		20
Methyl Acetate	ND	10	8.8	88		9.8	98		70-130	11		20
Cyclohexane	ND	10	9.7J	97		10	100		70-130	3		20
1,4-Dioxane	ND	500	560	112		650	130		56-162	15		20
Freon-113	ND	10	10	100		10	100		70-130	0		20
Methyl cyclohexane	ND	10	9.6J	96		10	100		70-130	4		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		101		70-130
4-Bromofluorobenzene	95		95		70-130
Dibromofluoromethane	104		104		70-130
Toluene-d8	101		98		70-130

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Serial_No:07191711:47
Lab Number: L1723822
Report Date: 07/19/17

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1723822-01A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-01B	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-01C	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-02A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-02B	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-02C	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-03A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-03B	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-03C	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-04A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-04B	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-04C	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-05A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-05B	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-05C	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-06A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-06B	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-06C	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-07A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-07B	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-07C	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-08A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-08B	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Serial_No:07191711:47
Lab Number: L1723822
Report Date: 07/19/17

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1723822-08C	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-09A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-09B	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-09C	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-10A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-11A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-11B	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-11C	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-12A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-12A1	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-12A2	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-12B	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-12B1	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-12B2	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-12C	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-12C1	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-12C2	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-13A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-13B	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-13C	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)
L1723822-14A	Vial HCl preserved	A	NA		5.6	Y	Absent		NYTCL-8260(14)

Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers



Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: FORMER SIGNORE
Project Number: 21.0056491.78

Lab Number: L1723822
Report Date: 07/19/17

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 10

Department: **Quality Assurance**

Published Date: 1/16/2017 11:00:05 AM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.**EPA 300:** DW: Bromide**EPA 6860:** NPW and SCM: Perchlorate**EPA 9010:** NPW and SCM: Amenable Cyanide Distillation**EPA 9012B:** NPW: Total Cyanide**EPA 9050A:** NPW: Specific Conductance**SM3500:** NPW: Ferrous Iron**SM4500:** NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.**SM5310C:** DW: Dissolved Organic Carbon**Mansfield Facility****SM 2540D:** TSS**EPA 3005A** NPW**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

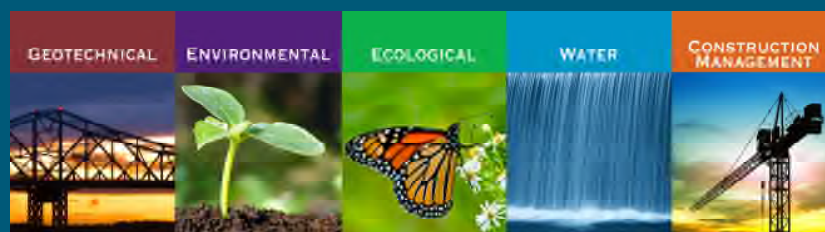
The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.****EPA 624:** Volatile Halocarbons & Aromatics,**EPA 608:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.****Mansfield Facility:****Drinking Water****EPA 200.7:** Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1 Hg.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.**EPA 245.1 Hg.****SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page 1 of 1		Date Rec'd in Lab 7/13/17		ALPHA Job # L1723822																																																																									
Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		Project Information Project Name: Former Signore Project Location: Ellingtonville Project # 21.0056491.78 (Use Project name as Project #) ☐				Deliverables ☐ ASP-A ☒ ASP-B ☐ EQUIS (1 File) ☐ EQUIS (4 File) ☐ Other <i>*Client NYSDEC EDD*</i>				Billing Information ☒ Same as Client Info PO # 21.0056491.78																																																																							
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GZA GeoEnvironmental, Inc.



APPENDIX D

IC/EC CERTIFICATION FORM



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site No. **C905034** **Site Details** **Box 1**

Site Name **Former Signore, Inc.**

Site Address: 55 Jefferson Street **Zip Code:** 14731
City/Town: Ellicottville
County: Cattaraugus
Site Acreage: 8.4

Reporting Period: March 12, 2017 to March 12, 2018

	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

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

YES NO

☐☒

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. C905034**Box 3****Description of Institutional Controls**Parcel

55.43-1-3.1

Owner

Iskalo Ellicottville Holdings, LLC

Institutional Control

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
IC/EC Plan

- i) Prohibition of use of groundwater.
ii) Site use restrictions.
iii) Implementation of the Site Management Plan.

Box 4**Description of Engineering Controls**

None Required

Not Applicable/No EC's

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. C905034

Box 6

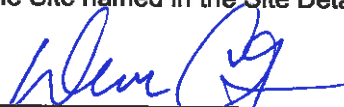
SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

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.

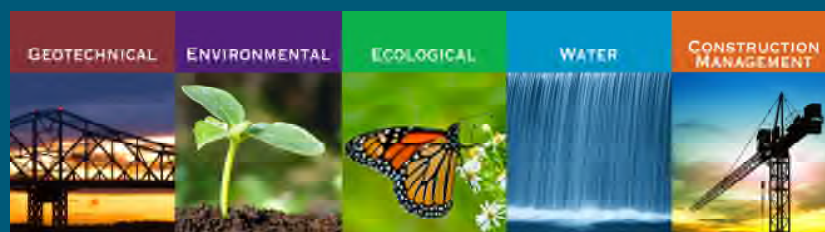
I David Chiazza at Iskalo Development Corp.
print name 5166 Main St., Williamsville, NY
print business address

am certifying as Manager for owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.


Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

3-30-10
Date



GZA GeoEnvironmental, Inc.