

April 24, 2019

Ms. Alicia Barraza
Project Manager, Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway, 12th Floor
Albany, New York 12233-7016

**Re: Supplemental Design Investigation Report
Former Watermark Designs Facility (BCP Site No. C224139)
491 Wortman Avenue, Brooklyn, NY 11208
Langan Project No.: 170329301**

Dear Ms. Barraza:

Langan Engineering, Environmental, Survey, Landscape Architecture and Geology, D.P.C. (Langan) prepared this Supplemental Design Investigation Report (SDIR) on behalf of J&H Holding Co. (the Participant) for the property located at 491 Wortman Avenue in Brooklyn, New York (the Site). Since issuance of a Certificate of Completion (COC) on October 24, 2017, the Participant has operated and maintained the air sparge/soil vapor extraction (AS/SVE) system in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). The existing AS/SVE system has proven to be an effective method of remediating chlorinated solvent impacts in soil and groundwater for the portion of the site affected by solvent use in relation to the former metal plating operations. With on-site groundwater concentrations of the chlorinated solvent contaminants of concern all below the applicable Ambient Water Quality Standards and Guidance Values for Class GA Water, Langan recommends replacing the AS/SVE system with a long-term vapor mitigation engineering control system.

The Supplemental Design Investigation (SDI) was completed in accordance with the NYSDEC-approved Supplemental Design Investigation Work Plan, dated February 26, 2019. The purpose of the SDI was to investigate the nature and extent of remaining off-site environmental impacts near the northwest portion of the site (i.e., around MW-6), to assess if and how the existing AS/SVE system could be modified to more effectively remediate this area, and to investigate if the observed impacts at MW-6 may be related to a potential offsite source. This SDIR includes a description of sampling methodology, field observations, laboratory analytical results, conclusions, and recommendations. Langan concludes that the remaining off-site impacts to groundwater existing around MW-6 are the result of an off-site source further to the north of MW-6 and not the former on-site source. As such, continuation of the AS/SVE system would not be an effective means of addressing that off-site source.

SITE BACKGROUND

The site consists of a rectangular-shaped lot that encompasses an area of about 19,000 square feet and is identified as Block 4384, Lots 31 and 36 on the Borough of Brooklyn Tax Map. A Site Location Plan is included as Figure 1. During previous environmental subsurface investigations, chlorinated volatile organic compounds (CVOCs) were detected in soil and groundwater samples collected from the western portion of the site (i.e., the warehouse). The CVOCs are associated with a known historical chlorinated solvent release. J&H Holding Co. enrolled the site into the New York State Brownfield Cleanup Program (NYSBCP) as a Participant in October 2012.

Quarterly monitoring data collected over a three-year period that began in April 2016 has demonstrated sustained remedial effectiveness and site-wide reduction of CVOCs. On February 24, 2018, the AS/SVE system was temporarily shut down and short- and long-term contaminant rebound tests were performed. The rebound tests demonstrated sustained reduction of CVOCs at the site. On November 12, 2018 a Remediation System Decommissioning Request Letter was sent to the NYSDEC requesting approval to decommission the AS/SVE system and transition to long-term engineering controls to manage residual contamination and mitigate vapor intrusion. On December 26, 2018, the NYSDEC responded recommending continued operation of the AS/SVE system and continued groundwater monitoring based on residual CVOC contamination in MW-6.

SCOPE OF WORK

The SDI was implemented between March 5 and 28, 2019 and consisted of the advancement of three soil borings, installation of four permanent monitoring wells, collection of two soil samples for visual assessment for AS/SVE design parameters, collection of 14 groundwater samples (including quality assurance/quality control [QA/QC] samples) for laboratory analysis, and surveying and/or gauging of existing and newly-installed monitoring wells to evaluate groundwater flow. A sample summary table is presented as Table 1.

Soil Investigation and Sampling Methodology

The soil investigation included the advancement of three soil borings (SB-17, SB-18, and SB-19). The borings were drilled by AARCO Environmental Services Corp of Lindenhurst, New York under Langan supervision. The soil boring locations are presented on Figure 2A.

Soil borings were hand-cleared to 5 feet below ground surface (bgs); AARCO advanced two borings using a track-mounted Geoprobe™ direct-push drill rig to 30 feet bgs and one boring to 40 feet bgs. Soil samples were continuously collected with a closed-point MacroCore sampler. Extracted soil was screened with a photoionization detector (PID) equipped with a 10.6 electron volt (eV) lamp, inspected for visual and olfactory evidence of contamination, and classified by Langan field staff. Soil boring logs are provided as Appendix A.

Soil samples from select intervals (2 to 7 feet bgs, 8 to 13 feet bgs, 15 to 20 feet bgs, and 25 to 30 feet bgs) were collected from borings SB-18 and SB-19 for visual assessment and interpretation of AS/SVE design parameters. No analytical soil samples were collected during the SDI.

Groundwater Investigation and Sampling Methodology

The groundwater investigation included the installation of four monitoring wells (MW-17, MW-18S, MW-18M, and MW-19). The monitoring wells were installed by AARCO under the supervision of Langan field staff.

The monitoring wells were installed with a track-mounted Geoprobe™ direct-push drill rig and constructed using 10-foot long, 2-inch diameter, 0.02-inch slotted polyvinyl chloride (PVC) well screen. Three monitoring wells (MW-17, MW-18S, and MW-19) were screened at or across the observed water table (approximately 10 to 12 feet bgs) from 10 to 20 or 12 to 22 feet bgs. Monitoring well MW-18M was screened from approximately 30 to 40 feet bgs. Within each monitoring well borehole, clean sand was used to fill the annulus around the screen to about two feet above the top of screen. A two-foot bentonite seal was installed above the sand pack; the remainder of the borehole was grouted to the surface with a bentonite/cement slurry. The wells were finished with flush-mount, bolt-down manholes set into the surrounding concrete sidewalk. After installation, the monitoring wells were developed via surging and purging with a submersible pump to agitate and remove fines. The monitoring wells were purged until water quality parameters (pH, conductivity, turbidity, dissolved oxygen, temperature, and oxidation-reduction potential) stabilized to an extent practicable. Groundwater samples were collected a minimum of 48 hours after well development. Monitoring well construction logs are provided as Appendix B.

Groundwater samples were collected in accordance with NYSDEC Division of Environmental Remediation (DER)-10 and United States Environmental Protection Agency (USEPA)'s Low Flow Purging and Sampling Procedures for the Collection of Groundwater Samples from Monitoring Wells. Prior to sampling, monitoring wells were gauged with an interface probe to determine depth to groundwater and thickness of any light non-aqueous phase liquid (LNAPL) or dense non-aqueous phase liquid (DNAPL). Groundwater samples were collected following stabilization of water quality parameters. A multi-parameter water quality system (Horiba U-52) was used to monitor and record groundwater quality parameters. Equipment was decontaminated with Alconox® and water between each sampling location. Development and purge water was containerized into United Nations/Department of Transportation (UN/DOT)-approved 55-gallon drums, labeled, and staged for off-site disposal.

The SDI groundwater sampling event was conducted concurrent to the March 2019 groundwater sampling event. In addition to the newly installed monitoring wells (MW-17, MW-18S, MW-18M, and MW-19), nine existing monitoring wells (MW-1, MW-2, MW-3AS, MW-6, MW-7, MW-9,

MW-10, MW-11, and PZ-2) were sampled. Monitoring well MW-16 (originally proposed to be sampled) was inaccessible at the time of groundwater sampling. The monitoring well locations are presented as Figures 2A through 2C.

Groundwater and QA/QC samples were collected into laboratory-supplied, batch-certified glassware and submitted to a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory (Alpha Analytical, Inc. of Westborough, MA [ELAP ID #11148]) via courier service under standard chain-of-custody protocol. Groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) by USEPA Methods 8260C. Groundwater sampling logs are provided as Appendix C.

Analytical data from the investigation was validated by a Langan data validator in accordance with USEPA and NYSDEC validation protocols. A copy of the data usability summary report (DUSR) is provided as Appendix D.

OBSERVATIONS AND ANALYTICAL RESULTS

Field Observations

Soil borings were completed to depths ranging from 30 to 40 feet bgs. Site stratigraphy consists of an about 5-foot thick layer of historic fill material composed of varying amounts of sand, gravel, clay, glass, wood, metal, concrete, and slag. Native soil, consisting of varying amounts of sand, silt, and gravel underlies the historic fill layer. No evidence of gross contamination was observed in soil borings completed during the SDI. No light non-aqueous phase liquid (LNAPL), dense non-aqueous phase liquid (DNAPL), or sheen was apparent during well gauging and sampling. Well headspace readings ranged from 0.0 to 995 ppm.

Depth to groundwater ranged from about elevation (el.) 2.17 feet¹ in MW-14M to el. 4.09 feet in MW-10 based on the synoptic gauging event on March 28, 2019. Groundwater elevation summary data is presented in Table 2; a groundwater contour map is presented as Figure 3. Based upon this gauging event, groundwater in the vicinity of the site flows to the south-southwest.

Groundwater Analytical Results

Four permanent monitoring wells (MW-17, MW-18S, MW-18M, and MW-19) were installed and 14 groundwater samples (including QA/QC) samples were collected from new and existing wells for laboratory analysis. The groundwater sample analytical results were compared to the NYSDEC Title 6 of the Official Compilation of New York Codes, Rules, and Regulations (NYCRR) Part 703.5 and the NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values for Class GA Water (herein referred to as

¹Datum referenced is the North American Vertical Datum of 1988 (NAVD88), which is approximately 1.1 feet above mean sea level datum at Sandy Hook, New Jersey, as defined by the United States Geologic Survey (USGS NGVD 1929).

“NYSDEC SGVs”). Groundwater analytical results are presented in Table 3 and on Figure 4. Laboratory reports are provided in Appendix E. A summary of the results exceeding one or more NYSDEC SGVs in sampled monitoring wells is provided below:

- Chloroform exceeded the NYSDEC SGV (7 micrograms per liter [µg/L]) in two monitoring wells (MW-10 and MW-11) at concentrations ranging from 20 to 44 µg/L.
- Cis-1,2-dichloroethene exceeded the NYSDEC SGV (5 µg/L) in two monitoring wells (MW-17 and MW-19) at concentrations ranging from 6 µg/L to 35 µg/L.
- Tetrachloroethene (PCE) exceeded the NYSDEC SGV (5 µg/L) in six monitoring wells (MW-6, MW-11, MW-17, MW-18S, MW-18M, and MW-19) at concentrations ranging from 5.6 µg/L to 2,600 µg/L.
- Trichloroethene (TCE) exceeded the NYSDEC SGV (5 µg/L) in six monitoring wells (MW-6, MW-11, MW-17, MW-18S, MW-18M, and MW-19) at concentrations ranging from 11 µg/L to 2,100 µg/L.

CONCLUSIONS AND RECOMMENDATIONS

Based on review of previous data and the findings of the SDI, we developed the following conclusions and recommendations:

- A surficial layer of historic fill, about 5 feet thick and composed of varying amounts of sand, gravel, clay, glass, wood, metal, concrete, and slag is present beneath the sidewalk and concrete slab at and adjacent to the site. Native soil, consisting of varying amounts of sand, silt, and gravel underlies the historic fill layer.
- The depth to groundwater ranges from about el. 2.17 feet² to el. 4.09 feet. Regional groundwater flow is presumed to flow to the south toward Jamaica Bay based on the general geography. Based on the March 28, 2019 gauging event, the groundwater gradient is relatively flat and in the vicinity of the site flows to the south-southwest.
- On-site groundwater analytical results:
 - Support and confirm the findings of previous environmental investigations and monitoring events – the AS/SVE system has proven effective for remediating CVOC contamination at the site.
 - Indicate no CVOCs were detected at concentrations exceeding TOGS SGVs in groundwater samples collected from on-site monitoring wells.
- Off-site groundwater analytical results indicate:

²Datum referenced is the North American Vertical Datum of 1988 (NAVD88), which is approximately 1.1 feet above mean sea level datum at Sandy Hook, New Jersey, as defined by the United States Geologic Survey (USGS NGVD 1929).

- One or more of four CVOCs (cis-1,2-dichloroethene, PCE, TCE, and chloroform) were detected at concentrations exceeding the NYSDEC SGVs in seven off-site monitoring wells;
- The highest CVOc concentrations were identified in monitoring well MW-19 where PCE and TCE were detected at concentrations at least one order of magnitude greater than any other sampled well. MW-19 is located about 50 feet to the north and upgradient of the site. The detected CVOc concentrations exceed those associated with the August 2015 on-site and near-field off-site baseline sampling event. Analytical laboratory results obtained during the baseline sampling event within the former on-site source area indicated maximum on-site concentrations of PCE and TCE of 480 and 1,800 µg/L (MW-2).
- Based on evaluation of the CVOc concentration observed at MW-19, the following conclusions were made.
 - Concentrations of PCE and TCE in the newly installed, upgradient MW-19 are greater than the baseline concentration of these compounds within the vicinity of the former on-site source of the release measured in August 2015.
 - An offsite and previously unidentified source area exists to the north of the site. This offsite source does not appear to be related to historic on-site activities.
 - In the June 21, 2016 Environmental Database Search and Surrounding Properties Survey Technical Memorandum prepared for the Participant and NYSDEC, Langan identified potential sources of CVOc contamination found in off-site well MW-13S. In support of this SDIR, Langan re-reviewed the off-site data relative to the newly installed off-site well MW-19. The following northern-adjointing and northern-surrounding properties and their associated historical uses are of note relative to the PCE and TCE concentrations identified in MW-19.

Property Address	Pertinent Information
920-930 Essex Street (997-1007 Linwood Street) [Block 4384; Lot 25]	• Current owner: Jubilee Equities, LLC • Current operator: unknown • Former uses: ○ Keystone foundry (per Sanborn map dated 1928) ○ Auto wrecking yard (per certificate of occupancy dated 1950) ○ Metal products and textile manufacturer (per certificates of occupancy dated 1955, 1964, 1968) ○ Machine shop (per Sanborn maps dated 1965 to 1968) ○ Textile manufacturer (per Sanborn maps dated 1968 to 1982) ○ Textile manufacturer, auto repair shop, medical oxygen tank storage (per certificate of occupancy dated 1983) ○ Ambulance service and maintenance shop (per Sanborn maps dated 1987 to 1989) ○ Plastics recycling and manufacturer (per certificates of occupancy dated 1990, 1991) ○ Unspecified manufacturing (per Sanborn maps dated 1991 to 2007)
985-995 Linwood Street [Block 4384; Lot 46]	• Current owner: T.B. Blessed LLC • Current operator: Adorable Pillows, Inc. (warehouse) • Former uses: ○ Manufacturer of non-combustible materials (per certificate of occupancy dated 1954) ○ Dry cleaning supplier (per Sanborn maps dated 1965 to 1968) ○ Unspecified manufacturing (per Sanborn maps dated 1977 to 2007)

- Langan recommends that the NYSDEC approve the Participant's proposal to replace the AS/SVE system at the site with long-term vapor mitigation.

CLOSING

Should you have any questions regarding the findings presented in this SDIR, please call me at 212-479-5413.

Sincerely,

**Langan Engineering, Environmental, Surveying,
Landscape Architecture and Geology, D.P.C.**



Gerald Nicholls, PE, CHMM
Associate

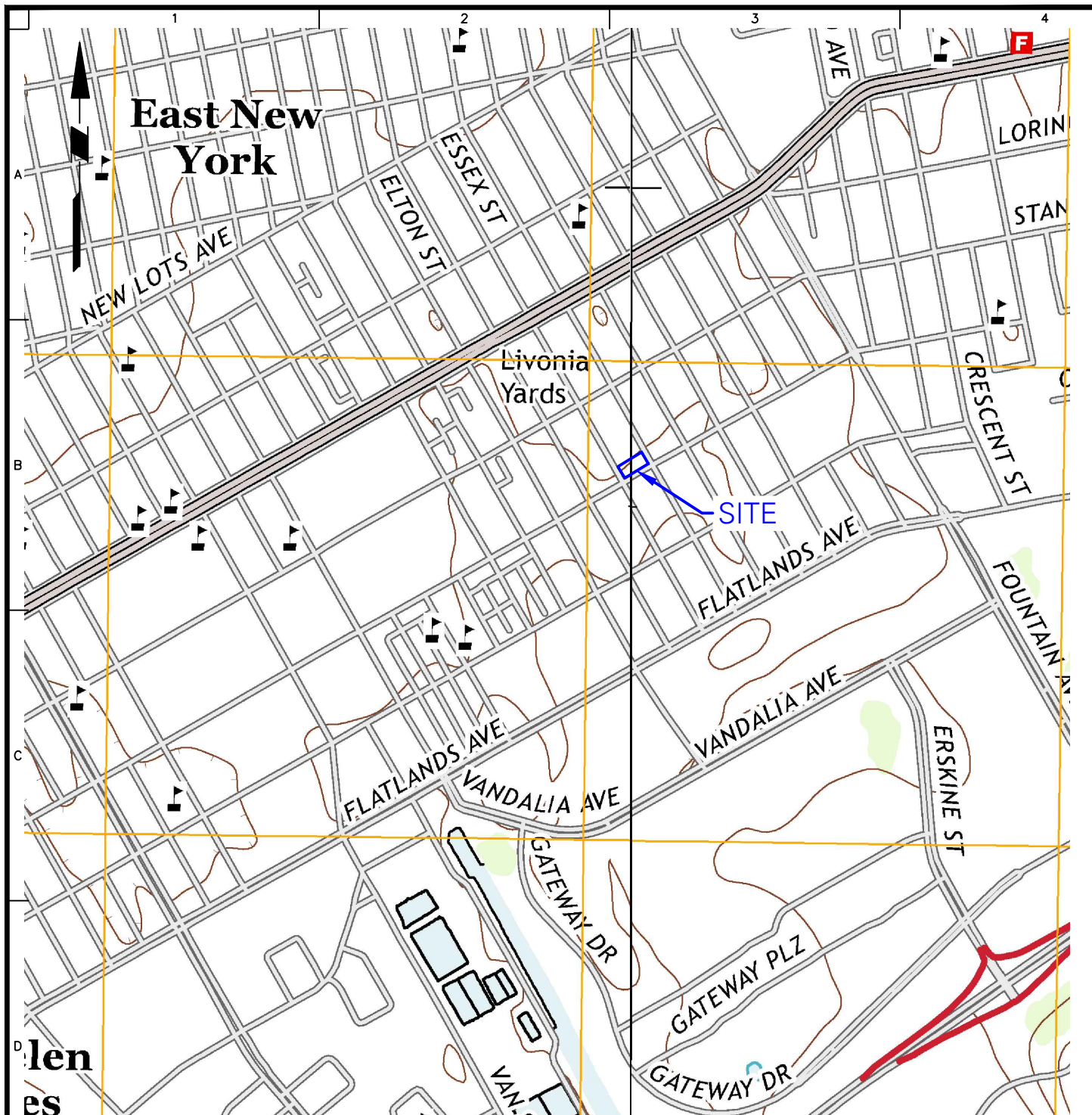


Michael D. Burke, PG, CHMM
Principal/Vice President

cc: J. Robinson (Langan)

Enclosures: Figure 1 – Site Location Map
Figure 2A – Sample Location Plan
Figure 2B – Sample Location Plan
Figure 2C – Sample Location Plan
Figure 3 – Groundwater Contour Map
Figure 4 – Groundwater Sample Analytical Results Map
Table 1 – Sample Summary
Table 2 – Groundwater Elevation Summary
Table 3 – Groundwater Sample Analytical Results Summary - VOCs
Appendix A – Soil Boring Logs
Appendix B – Monitoring Well Construction Logs
Appendix C – Groundwater Sampling Logs
Appendix D – Data Usability Summary Report
Appendix E – Laboratory Analytical Reports

FIGURES



LEGEND:



APPROXIMATE SITE BOUNDARY



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NOTE: BASE MAPS ARE REFERENCED FROM THE UNITED STATES GEOLOGICAL SURVEY (USGS) TOPOGRAPHIC QUADRANGLE MAPS FOR BROOKLYN AND JAMAICA.

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Project

**FORMER WATERMARK
DESIGNS FACILITY**

BLOCK No. 4384, LOT Nos. 31 & 36
BROOKLYN

KINGS COUNTY

NEW YORK

Figure Title

**SITE LOCATION
MAP**

Project No.
170329301

Date
03/25/2019

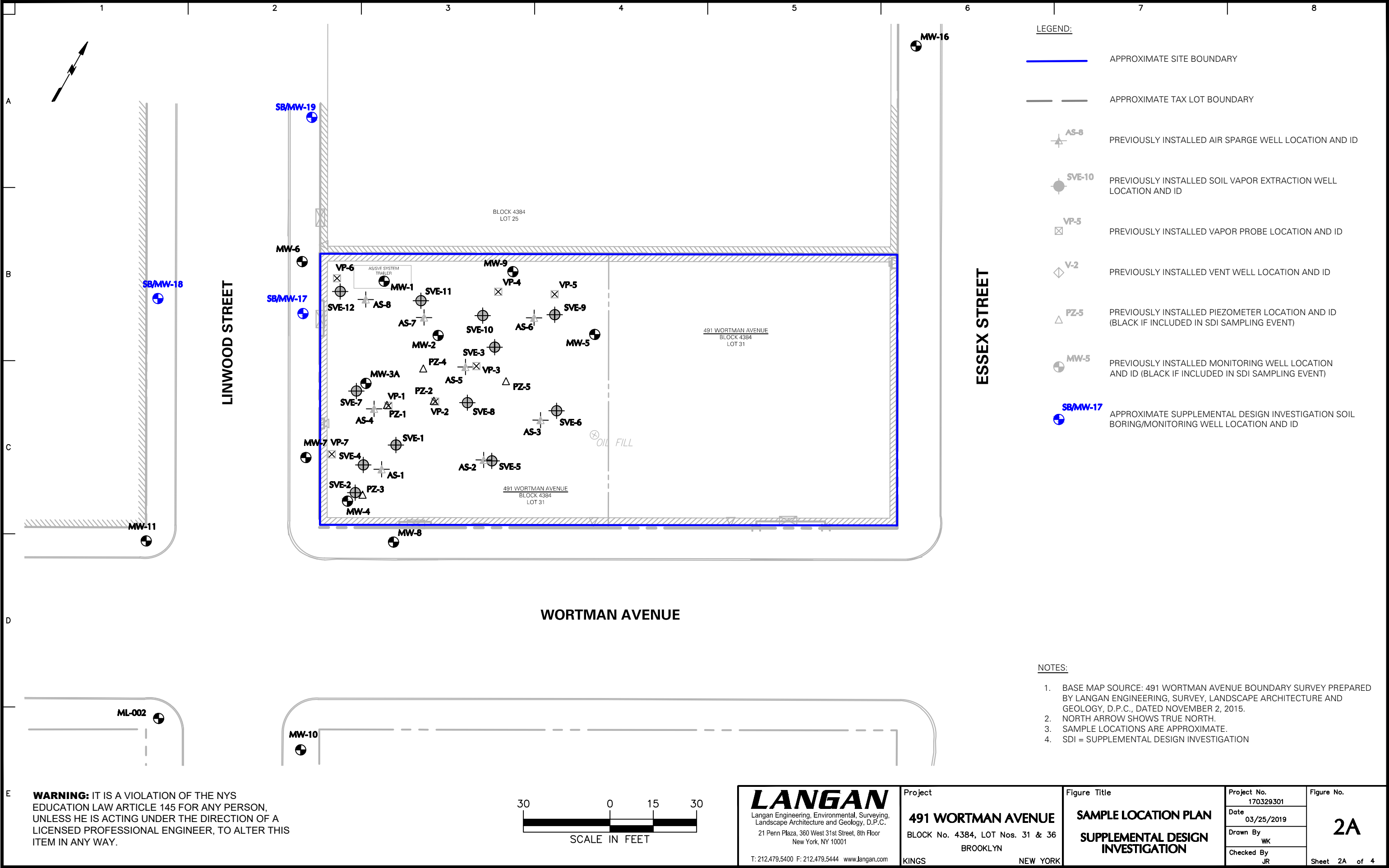
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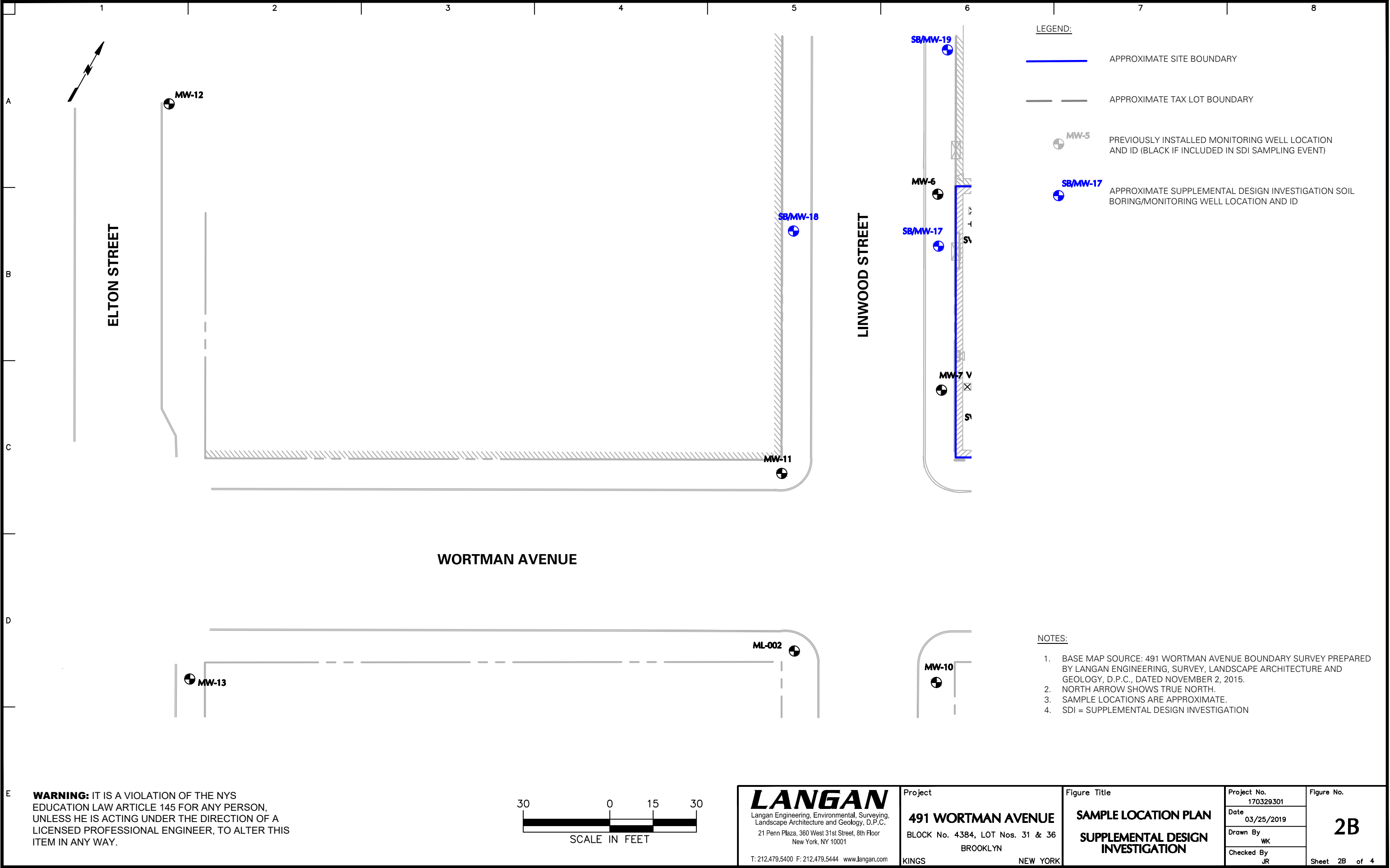
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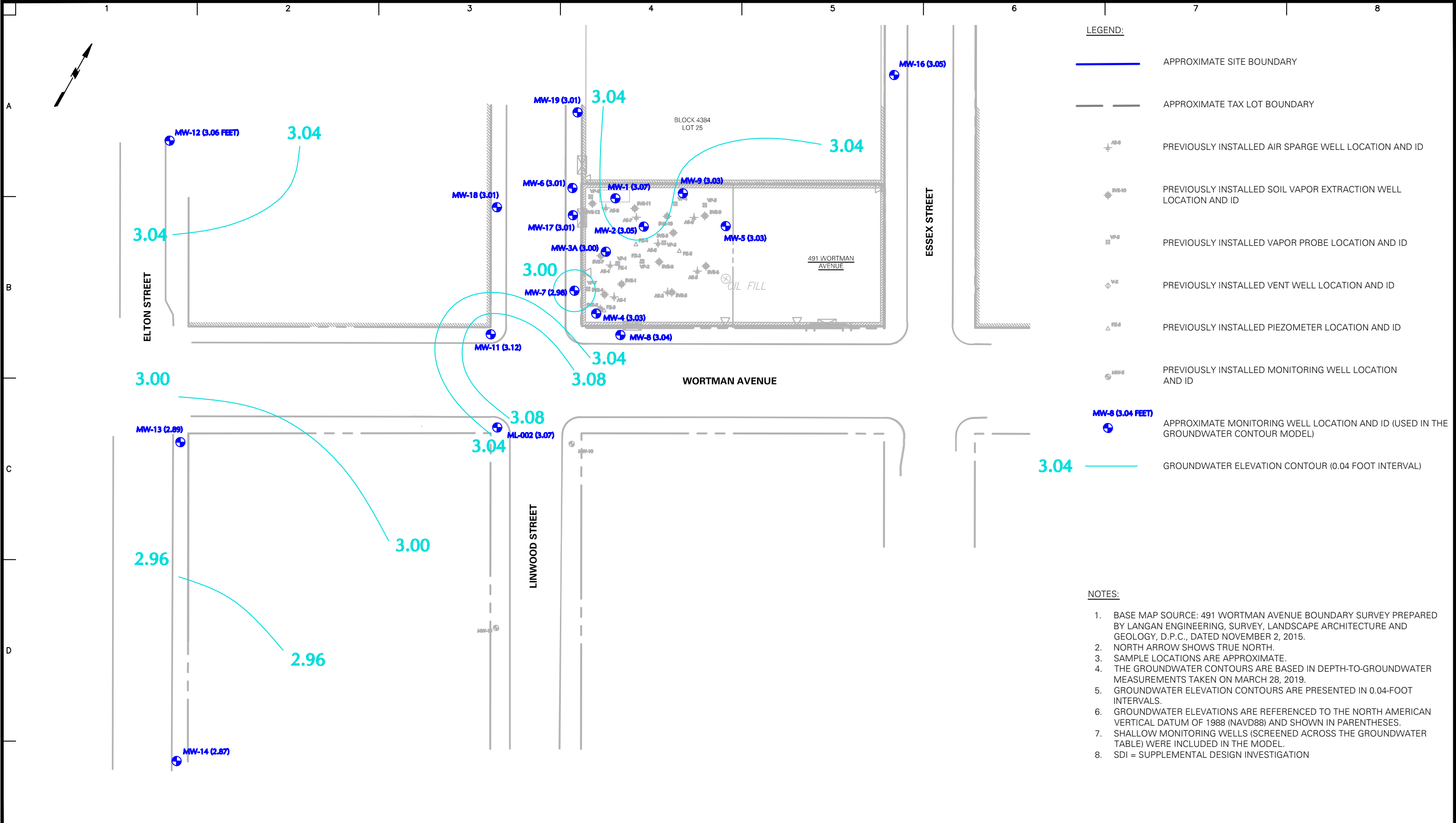
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1

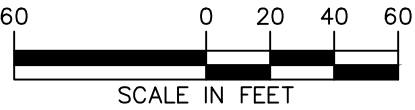
Sheet 1 of 4







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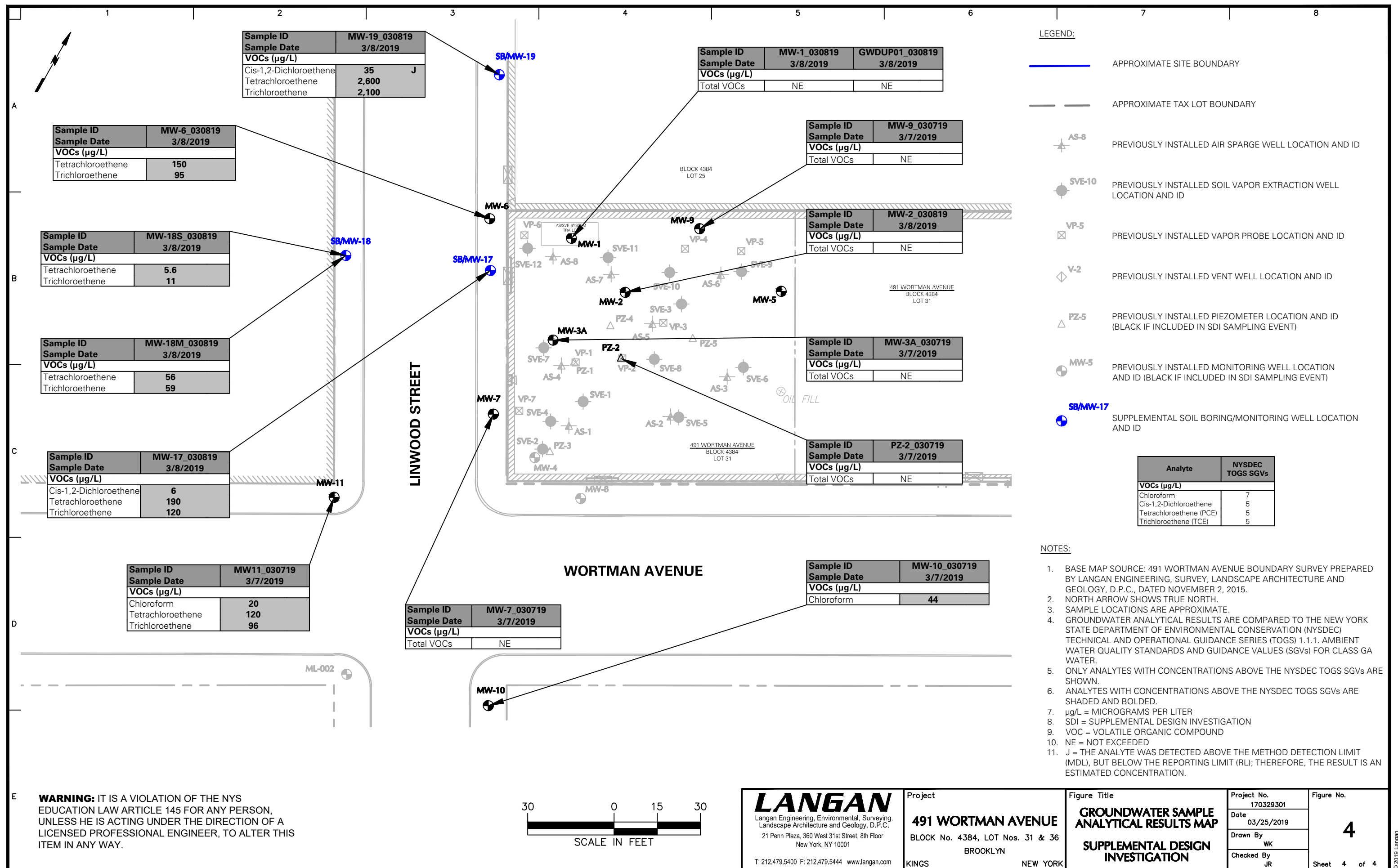
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Project
491 WORTMAN AVENUE
BLOCK No. 4384, LOT Nos. 31 & 36
BROOKLYN
KINGS NEW YORK

Figure Title
**GROUNDWATER CONTOUR
MAP**
**SUPPLEMENTAL DESIGN
INVESTIGATION**

Project No.
170329301
Date
04/04/2019
Drawn By
WK
Checked By
JR

Figure No.
3
Sheet 3 of 4



TABLES

Table 1
Sample Summary
Supplemental Design Investigation Report

491 Wortman Avenue
Brooklyn, New York
BCP Site No.: C224139
Langan Project No.: 170329301

Sample No.	Sample Location	Sample ID	Sample Type	Sample Depth Interval (feet bgs)	Sample Analysis
GROUNDWATER SAMPLES					
1	MW-1	MW-1_030819	Groundwater	Middle of observed water column	TCL VOCs
2	MW-2	MW-02_030819	Groundwater	Middle of observed water column	TCL VOCs
3	MW-3A-S	MW-3A_030719	Groundwater	Middle of observed water column	TCL VOCs
4	MW-6	MW-6_030819	Groundwater	Middle of observed water column	TCL VOCs
5	MW-7	MW-7_030719	Groundwater	Middle of observed water column	TCL VOCs
6	MW-9	MW-9_030719	Groundwater	Middle of observed water column	TCL VOCs
7	MW-10	MW-10_030719	Groundwater	Middle of observed water column	TCL VOCs
8	MW-11	MW11_030719	Groundwater	Middle of observed water column	TCL VOCs
9	MW-17	MW-17_030819	Groundwater	Middle of observed water column	TCL VOCs
10	MW-18M	MW-18M_030819	Groundwater	Middle of observed water column	TCL VOCs
11	MW-18S	MW-18S_030819	Groundwater	Middle of screened interval (30 to 40 feet bgs)	TCL VOCs
12	MW-19	MW-19_030819	Groundwater	Middle of observed water column	TCL VOCs
13	PZ-02	PZ-2_030719	Groundwater	Middle of observed water column	TCL VOCs
GROUNDWATER QA/QC SAMPLES					
1	MW-1	GWDUP01_030819	Groundwater Duplicate	Middle of observed water column	TCL VOCs
1	N/A	GWFB01_030717	Groundwater Field Blank	N/A	TCL VOCs
1	N/A	GWTB01_030719	Groundwater Trip Blank	N/A	TCL VOCs
2	N/A	GWTB02_030819	Groundwater Trip Blank	N/A	TCL VOCs

Notes:

1. VOC = Volatile Organic Compound
2. TCL = Target Compound List
3. N/A = Not Applicable
4. QA/QC = Quality Assurance/Quality Control
5. bgs = below ground surface

Table 2
Groundwater Elevation Summary
Supplemental Design Investigation Report

491 Wortman Avenue
 Brooklyn, New York
 BCP Site No.: C224139
 Langan Project No.: 170329301

Well ID	Depth to Water (feet bgs)	Well Casing Elevation (feet NAVD88)	Groundwater Gauging Date	Groundwater Elevation (feet NAVD88)
MW-1	9.54	12.61	3/28/2019	3.07
MW-2	9.39	12.44	3/28/2019	3.05
MW-3A-S	9.09	12.09	3/28/2019	3.00
MW-3A-M	9.02	12.09	3/28/2019	3.07
MW-3A-D	9.00	11.99	3/28/2019	2.99
MW-4	8.99	12.02	3/28/2019	3.03
MW-5	9.53	12.56	3/28/2019	3.03
MW-6	9.72	12.73	3/28/2019	3.01
MW-7	8.56	11.54	3/28/2019	2.98
MW-8	8.61	11.65	3/28/2019	3.04
MW-9	9.43	12.46	3/28/2019	3.03
MW-10	7.14	11.23	3/28/2019	4.09
MW-11	8.11	11.23	3/28/2019	3.12
MW-12-S	8.22	11.28	3/28/2019	3.06
MW-12-M	8.30	11.29	3/28/2019	2.99
MW-12-D	8.14	11.13	3/28/2019	2.99
MW-13-S	8.34	11.23	3/28/2019	2.89
MW-13-M	8.39	11.27	3/28/2019	2.88
MW-13-D	8.39	11.27	3/28/2019	2.88
MW-14-S	9.06	11.93	3/28/2019	2.87
MW-14-M	9.10	11.27	3/28/2019	2.17
MW-14-D	9.11	11.93	3/28/2019	2.82
MW-16-S	9.90	12.95	3/28/2019	3.05
MW-16-M	9.91	12.97	3/28/2019	3.06
MW-16-D	9.77	12.86	3/28/2019	3.09
MW-17	9.52	12.53	3/28/2019	3.01
MW-18-S	9.69	12.70	3/28/2019	3.01
MW-18-M	9.71	12.72	3/28/2019	3.01
MW-19	9.93	12.94	3/28/2019	3.01
ML-002-S	8.25	11.32	3/28/2019	3.07
ML-002-M	8.39	11.32	3/28/2019	2.93
ML-002-D	8.43	11.36	3/28/2019	2.93
PZ-1	9.23	12.36	3/28/2019	3.13
PZ-2	9.34	12.61	3/28/2019	3.27
PZ-3	9.05	12.07	3/28/2019	3.02
PZ-4	9.56	12.57	3/28/2019	3.01
PZ-5	9.31	12.32	3/28/2019	3.01

Notes:

1. Elevations are referenced to the North American Vertical Datum of 1988 (NAVD88), which is approximately 1.1 feet above mean sea level datum at Sandy Hook, New Jersey as defined by the United States Geologic Survey (USGS NVGD 1929).
2. BCP = Brownfield Cleanup Program
3. bgs = below ground surface

Table 3
Groundwater Sample Analytical Results Summary - VOCs
Supplemental Design Investigation Report

491 Wortman Avenue
Brooklyn, New York
BCP Site No.: C224139
Langan Project No.: 170329301

Location		MW-1	MW-1	MW-2	MW-3A-S	MW-6	MW-7	MW-9	MW-10	MW-11	MW-17	MW-18M	MW-18S	MW-19	PZ-02
Sample ID	NYSDEC	MW-1_030819	GWDUP01_030819	MW-02_030819	MW-3A_030719	MW-6_030819	MW-7_030719	MW-9_030719	MW-10_030719	MW11_030719	MW-17_030819	MW-18M_030819	MW-18S_030819	MW-19_030819	PZ-2_030719
Laboratory ID	SGVs	L1909107-03	L1909107-08	L1909107-07	L1908936-06	L1909107-01	L1908936-03	L1908936-04	L1908936-01	L1908936-02	L1909107-06	L1909107-04	L1909107-05	L1909107-02	L1908936-05
Sample Date		3/8/2019	3/8/2019	3/8/2019	3/7/2019	3/8/2019	3/7/2019	3/7/2019	3/7/2019	3/7/2019	3/8/2019	3/8/2019	3/8/2019	3/8/2019	3/7/2019
Volatile Organic Compounds (µg/L)															
1,1-Dichloroethene	5	0.5	U	0.5	U	0.5	U	0.2	J	0.5	U	0.5	U	12	U
1,2-Dichloropropane	1	1	U	1	U	1	U	0.32	J	1	U	0.15	J	25	U
Acetone	50	5	UJ	1.7	J	2.2	J	1.7	J	5	UJ	1.6	J	120	UJ
Bromodichloromethane	50	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	3.5	U	12	U
Chloroform	7	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	44	U	62	U
Cis-1,2-Dichloroethene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Tetrachloroethene (PCE)	5	0.54	U	0.18	J	0.41	J	0.72	J	150	U	0.5	U	120	U
1,2-Dichloroethene (Cis and Trans)	~	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Trans-1,2-Dichloroethene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Trichloroethene (TCE)	5	0.4	J	0.18	J	0.28	J	0.96	J	95	U	0.5	U	0.5	U
Vinyl Chloride	2	1	U	1	U	1	U	1	U	1	U	1	U	25	U

- Notes:**
- Groundwater sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official Compilation of New York Codes, Rules and Regulations (NYCRR) Part 703.5 and the NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values for Class GA Water (herein referred to as NYSDEC SGVs).
 - Only detected analytes are shown in the table.
 - Analytes detected with concentrations above NYSDEC SGVs are bolded and shaded.
 - Analytical results with reporting limits (RL) above NYSDEC SGVs are italicized.
 - Sample GWDUP01_030819 is a duplicate sample of MW-1_030819.
 - ~ = Regulatory limit for this analyte does not exist
 - µg/L = micrograms per liter
 - BCP = Brownfield Cleanup Program
 - VOCs = Volatile Organic Compounds

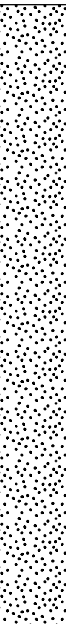
Qualifiers:
J = The analyte was detected above the Method Detection Limit (MDL), but below the reporting limit (RL); therefore, the result is an estimated concentration.
U = The analyte was analyzed for, but was not detected at a level greater than or equal to the RL; the value shown in the table is the RL.

APPENDIX A

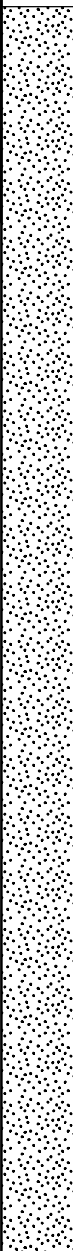
SOIL BORING LOGS

Project						Project No.									
491 Wortman Avenue						170329301									
Location						Elevation and Datum									
Brooklyn, NY						el. 12.53 feet (NAVD88)									
Drilling Company						Date Started			Date Finished						
AARCO Environmental Services, Corp.						3/5/19			3/5/19						
Drilling Equipment						Completion Depth			Rock Depth						
Geoprobe 7822DT						30 ft			N/A						
Size and Type of Bit						Number of Samples		Disturbed		Undisturbed		Core			
2 inch Direct Push								6		N/A		N/A			
Casing Diameter (in)				Casing Depth (ft)		Water Level (ft.)		First		Completion		24 HR.			
N/A				N/A		▽ 12		▼ N/A		▼ N/A		▼ N/A			
Casing Hammer			Weight (lbs)		Drop (in)		Drilling Foreman								
N/A			N/A		N/A		ShaRohn Dixon								
Sampler						Field Engineer									
5-foot Macrocore						K. Racanelli									
Sampler Hammer			Weight (lbs)		Drop (in)										
N/A			N/A		N/A										
MATERIAL SYMBOL	Elev. (ft)	Sample Description				Depth Scale	Sample Data						Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)		
							Number	Type	Recov. (in)	Penetr. resist BLU6in	PID Reading (ppm)				
	+12.5	(0-6") CONCRETE				0	R1	MACROCORE	31/60		0.3				
	+12.0					0.4									
		R1a (0-9") Grey brown medium SAND, trace fine gravel, glass (dry) [FILL] R1b (9-20") Black medium SAND, some coarse sand, wood, glass, metal fragment (dry) [FILL] R1c (20-25") Grey coarse GRAVEL, slag (dry) [FILL] R1d (25-31") Brown medium SAND, wood (dry) [FILL]				1					0.5				
						2					0.6				
						3						0.1			
						4									
						5	R2	MACROCORE	47/60		0.3				
						6					0.3				
		R2 (0-47") Light brown fine SAND, trace medium sand, trace fine gravel (moist)				7					0.5				
						8					0.7				
						9						0.6			
						10					0.3				
		R3a (0-6") Light brown fine SAND, some coarse sand (moist) R3b (6-10.5") Grey coarse SAND, some fine gravel (moist)				11	R3	MACROCORE	51/60		0.3				
						12					0.2				
		R3c (10.5-44") Light brown medium SAND, trace fine sand, red brown/light brown fine banding (wet)				13					0.3				
						14					0.3				
		R3d (44-51") Brown medium SAND, trace fine gravel (wet)				15						0.3			
						16					0.1				
		R4 (0-51") Grey brown medium SAND, trace fine gravel (wet)				17	R4	MACROCORE	51/60		1.0				
						18					0.0				
						19						0.0			
						20					0.0				
						21						0.0			
						22					0.0				
						23						0.0			
						24					0.0				
						25						0.0			
						26					0.0				
						27						0.0			
						28					0.0				
						29						0.0			
						30					0.0				
						31						0.0			
						32					0.0				
						33						0.0			
						34					0.0				
						35						0.0			
						36					0.0				
						37						0.0			
						38					0.0				
						39						0.0			
						40					0.0				
						41						0.0			
						42					0.0				
						43						0.0			
						44					0.0				
						45						0.0			
						46					0.0				
						47						0.0			
						48					0.0				
						49						0.0			
						50					0.0				
						51						0.0			
						52					0.0				
						53						0.0			
						54					0.0				
						55						0.0			
						56					0.0				
						57						0.0			
						58					0.0				
						59						0.0			
						60					0.0				
						61						0.0			
						62					0.0				
						63						0.0			
						64					0.0				
						65						0.0			
						66					0.0				
						67						0.0			
						68					0.0				
						69						0.0			
						70					0.0				
						71						0.0			
						72					0.0				
						73						0.0			
						74					0.0				
						75						0.0			
						76					0.0				
						77						0.0			
						78					0.0				
						79						0.0			
						80					0.0				
						81						0.0			
						82					0.0				
						83						0.0			
						84					0.0				
						85						0.0			
						86					0.0				
						87						0.0			
						88					0.0				
						89						0.0			
						90					0.0				
						91						0.0			
						92					0.0				
						93						0.0			
						94					0.0				
						95						0.0			
						96					0.0				
						97						0.0			
						98					0.0				
						99						0.0			
						100					0.0				
						101						0.0			
						102					0.0				
						103						0.0			
						104					0.0				
						105						0.0			
						106					0.0				
						107						0.0			
						108					0.0				
						109						0.0			
						110					0.0				
						111						0.0			
						112					0.0				
						113						0.0			
						114					0.0				
						115						0.0			
						116					0.0				

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Project			Project No.						
491 Wortman Avenue			170329301						
Location			Elevation and Datum						
Brooklyn, NY			el. 12.53 feet (NAVD88)						
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BL/6in	PID Reading (ppm)	
	-7.5	R5 (0-48") Brown fine SAND, trace medium sand (wet)	20	R5	MACROCORE	48/60			
	21								
	22								
	23								
	24								
	25								
	26								
	27								
	28								
	29								
	-17.5	R6 (0-46") Brown medium SAND, trace fine sand (wet)	30	R6	MACROCORE	46/60			
	31								
	32								
	33								
	34								
	35								
	36								
	37								
	38								
	39								
	40								
	41								
	42								
	43								
	44								
		End of boring at 30 feet bgs.	45						

Project						Project No.							
491 Wortman Avenue						170329301							
Location						Elevation and Datum							
Brooklyn, NY						el. 12.71 feet (NAVD88)							
Drilling Company						Date Started			Date Finished				
AARCO Environmental Services, Corp.						3/6/19			3/6/19				
Drilling Equipment						Completion Depth			Rock Depth				
Geoprobe 7822DT						40 ft			N/A				
Size and Type of Bit						Number of Samples		Disturbed		Undisturbed		Core	
2 inch Direct Push								8		N/A		N/A	
Casing Diameter (in)				Casing Depth (ft)		Water Level (ft.)		First		Completion		24 HR.	
N/A				N/A		▽ 12		▽ 12		▽ N/A		▽ N/A	
Casing Hammer			Weight (lbs)		Drop (in)		Drilling Foreman						
N/A			N/A		N/A		ShaRohn Dixon						
Sampler						Field Engineer							
5-foot Macrocore						K. Racanelli							
Sampler Hammer			Weight (lbs)		Drop (in)								
N/A			N/A		N/A								
MATERIAL SYMBOL	Elev. (ft)	Sample Description				Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
	+12.7						Number	Type	Recov. (in)	Penetr. resist BLU/in	PID Reading (ppm)		
	+12.3	(0-5") CONCRETE, rebar				0							
		R1 Dark grey to brown fine SAND, some fine gravel, glass, concrete (moist) [FILL]				1					0.0	Hand auger to 5 feet bgs	
						2	R1	HAND AUGER	N/A	0.0			
						3				0.0			
						4							
						5							
	+7.7	R2a (0-26") Dark grey to light brown fine SAND, trace fine gravel (moist)				6	R2	MACROCORE	36/60		0.0		
		R2b (26-36") Light brown medium SAND, some fine gravel, trace coarse sand (moist)				7				0.0			
						8				0.0			
						9				0.0			
						10				0.0			
		R3a (0-5") Light brown fine SAND (moist)				11							
		R3b (5-7") Grey fine SAND, some fine gravel (wet)				12	R3	MACROCORE	42/60	0.0			
		R3c (7-42") Brown fine SAND, trace medium sand, trace fine gravel (wet)				13				0.0			
						14				0.0			
						15				0.0			
		R4a (0-45") Brown fine SAND, trace medium sand (wet)				16	R4	MACROCORE	55/60	0.0			
						17				0.0			
						18				0.6			
						19				0.4			
		R4b (45-55") Brown medium SAND, trace fine sand, trace coarse sand (wet)				20				0.0			
										0.3			
										0.1			
										0.0			

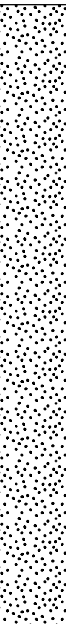
Project			Project No.						
491 Wortman Avenue			170329301						
Location			Elevation and Datum						
Brooklyn, NY			el. 12.71 feet (NAVD88)						
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BL/6in	PID Reading (ppm)	
	-7.3	R5 Brown fine SAND, trace coarse sand (wet) 							

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Project 491 Wortman Avenue				Project No. 170329301			
Location Brooklyn, NY				Elevation and Datum el. 12.94 feet (NAVD88)			
Drilling Company AARCO Environmental Services, Corp.				Date Started 3/5/19		Date Finished 3/5/19	
Drilling Equipment Geoprobe 7822DT				Completion Depth 30 ft		Rock Depth N/A	
Size and Type of Bit 2 inch Direct Push				Number of Samples 6		Disturbed N/A	
Casing Diameter (in) N/A		Casing Depth (ft) N/A		Water Level (ft.) First ∇ 12		Undisturbed N/A	
Casing Hammer N/A		Weight (lbs) N/A		Drop (in) N/A		Core N/A	
Sampler 5-foot Macrocore				Drilling Foreman ShaRohn Dixon			
Sampler Hammer N/A				Field Engineer K. Racanelli			

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist BLU6in	PID Reading (ppm)	
CONCRETE	+12.9	(0-5") CONCRETE	0						
	+12.5	R1 Brown fine SAND, trace clay, trace fine gravel, slag (moist) [FILL]	1	R1 HAND AUGER	N/A			0.0	Hand auger to 5 feet bgs
		2	0.0						
		3	0.0						
		4							
SAND	+7.9	R2 (0-49") Brown fine SAND, trace medium sand, trace fine gravel (moist)	5	R2 MACROCORE	49/60			0.0	
			6					0.0	
			7					0.0	
			8					0.0	
			9					0.0	
			10					0.0	
			11	R3 MACROCORE	46/60			0.1	
		R3a (0-4") Brown fine SAND (moist)	12					0.3	
		R3b (4-7") Grey coarse SAND, trace brown fine sand, trace fine gravel (moist)	13					1.2	
		R3c (7-37") Brown fine SAND, red brown/dark brown banding, trace silt (wet)	14					2.0	
		R3d (37-46") Brown medium SAND, some fine sand (wet)	15	0.3					
		16	0.6						
		17	1.0						
		18	R4 MACROCORE	53/60				0.1	
	R4 (0-53") Grey brown fine SAND, trace medium sand (wet)	19						0.2	
		20						0.1	
								0.1	

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Project			Project No.						
491 Wortman Avenue			170329301						
Location			Elevation and Datum						
Brooklyn, NY			el. 12.94 feet (NAVD88)						
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BL/6in	PID Reading (ppm)	
	-7.1	R5 Brown fine SAND, trace medium sand (wet)	20	R5	MACROCORE	N/A		0.2 0.3 5.0 10.0	Macrocore stuck in casing. Loose soil was screened and characterized
	21								
	22								
	23								
	24								
	25		R6	MACROCORE	43/60		0.0 0.1 0.1 0.1 0.1 0.1		
	26								
	27								
	28								
	29								
-17.1	End of boring at 30 feet bgs.	30					0.1	MW-19 installed with 10-foot screen from 12 to 22 feet bgs	
		31							
		32							
		33							
		34							
		35							
		36							
		37							
		38							
		39							
		40							
		41							
		42							
		43							
		44							
		45							

APPENDIX B

MONITORING WELL CONSTRUCTION LOGS

WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No. MW-17

PROJECT		PROJECT NO.	
491 Wortman Ave		170329301	
LOCATION		ELEVATION AND DATUM	
Brooklyn, NY		el. 12.53 feet (NAVD88)	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		3/5/2019	3/5/2019
DRILLING EQUIPMENT		DRILLER	
geoprobe 7822DT		ShaRhon Dixon	
SIZE AND TYPE OF BIT		INSPECTOR	
2 in direct push		K. Racanelli	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
2 in		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2 in	No. 2 sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC	2 in	No. 2 sand	bentonite
METHOD OF INSTALLATION			
AARCO Environmental Services, Corp. advanced MW-17 to approximately 22 feet below grade surface (bgs). After the borehole was completed, 10 feet of 2-inch diameter, 0.02-inch slotted polyvinyl chloride (PVC) well screen was installed from 12 to 22 feet bgs with 12 feet of riser to grade surface. Clean sand was used to fill the annulus around the screen to about 2 feet above the screened interval and sealed with bentonite to grade.			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	NA	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	NA
NUMBER OF SURGE CYCLES	NA	TOTAL VOLUME	NA
DEVELOPMENT CONFIRMATION		Yes	
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	12.53	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	The diagram illustrates the well construction from the surface down to 22 feet. It shows a casing starting at 0 feet depth (12.53 elevation). A riser extends to 8 feet depth. A seal is located at 10 feet depth. A screen is installed from 12 feet to 22 feet depth. The PVC section is located between the seal and the screen. The diagram also shows the groundwater level at 12 feet depth.
	NA	8	
TOP OF FILTER	ELEVATION	DEPTH (ft)	
	NA	10	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	
	NA	12.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	
	NA	22	
SCREEN LENGTH	10-foot		
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			SUMMARY SOIL CLASSIFICATION
ELEVATION	DATE	DEPTH TO WATER	
		12 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	DEPTH (FT)
LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology D.P.C.			
21 Penn Plaza, 360 West 31st Street, 8th Floor, New York			

WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No. MW-18S

PROJECT		PROJECT NO.	
491 Wortman Ave		170329301	
LOCATION		ELEVATION AND DATUM	
Brooklyn, NY		el. 12.7 feet (NAVD88)	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		3/6/2019	3/6/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Julio Galarza	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		K. Racanelli	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
2-Inch		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2-Inch	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2-Inch	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
AARCO Environmental Services, Corp. advanced MW-18S to approximately 20 feet below grade surface (bgs). After the borehole was completed, 10 feet of 2-inch diameter, 0.02-inch slotted polyvinyl chloride (PVC) well screen was installed from 10 to 20 feet bgs with 10 feet of riser to grade surface. Clean sand was used to fill the annulus around the screen to about 2 feet above the screened interval and sealed with bentonite to grade.			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	NA	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	NA
NUMBER OF SURGE CYCLES	NA	TOTAL VOLUME	NA
TOP OF CASING		ELEVATION	DEPTH (ft)
		12.7	0
TOP OF SEAL		ELEVATION	DEPTH (ft)
		NA	6
TOP OF FILTER		ELEVATION	DEPTH (ft)
		NA	8
TOP OF SCREEN		ELEVATION	DEPTH (ft)
		NA	10.0
BOTTOM OF BORING		ELEVATION	DEPTH (ft)
		NA	20
SCREEN LENGTH		10-Foot	
SLOT SIZE		No. 20 Slot; 0.020 Inches	
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
		10 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	

WELL DETAILS		SUMMARY SOIL CLASSIFICATION	DEPTH (FT)
		Asphalt	0
		Fill	
		Medium Sand	6
			8.00
			10.00
			20.00

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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No. MW-18M

PROJECT		PROJECT NO.	
491 Wortman Ave		170329301	
LOCATION		ELEVATION AND DATUM	
Brooklyn, NY		el. 12.72 feet (NAVD88)	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		3/6/2019	3/6/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Julio Galarza	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		K. Racanelli	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
2-Inch		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2-Inch	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2-Inch	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
AARCO Environmental Services, Corp. advanced MW-18M to approximately 40 feet below grade surface (bgs). After the borehole was completed, 10 feet of 2-inch diameter, 0.02-inch slotted polyvinyl chloride (PVC) well screen was installed from 30 to 40 feet bgs with 30 feet of riser to grade surface. Clean sand was used to fill the annulus around the screen to about 2 feet above the screened interval and sealed with bentonite to grade.			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	NA	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	NA
NUMBER OF SURGE CYCLES	NA	TOTAL VOLUME	NA
TOP OF CASING		ELEVATION	DEPTH (ft)
		12.72	0
TOP OF SEAL		ELEVATION	DEPTH (ft)
		NA	26
TOP OF FILTER		ELEVATION	DEPTH (ft)
		NA	28
TOP OF SCREEN		ELEVATION	DEPTH (ft)
		NA	30.0
BOTTOM OF BORING		ELEVATION	DEPTH (ft)
		NA	40
SCREEN LENGTH		10-Foot	
SLOT SIZE		No. 20 Slot; 0.020 Inches	
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
		10 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	

WELL DETAILS		SUMMARY SOIL CLASSIFICATION	DEPTH (FT)
		Asphalt	0
		Fill	
		Medium Sand	26
			28.00
			30.00
			40.00

LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology D.P.C.
21 Penn Plaza, 360 West 31st Street, 8th Floor, New York

WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No. MW-19

PROJECT		PROJECT NO.	
491 Wortman Ave		170329301	
LOCATION		ELEVATION AND DATUM	
Brooklyn, NY		el. 12.94 feet (NAVD88)	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		3/5/2019	3/5/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Julio Galarza	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		K. Racanelli	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
2-inch		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2-inch	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2-inch	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
AARCO Environmental Services, Corp. advanced MW-19 to approximately 22 feet below grade surface (bgs). After the borehole was completed, 10 feet of 2-inch diameter, 0.02-inch slotted polyvinyl chloride (PVC) well screen was installed from 12 to 22 feet bgs with 12 feet of riser to grade surface. Clean sand was used to fill the annulus around the screen to about 2 feet above the screened interval and sealed with bentonite to grade.			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	NA	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	NA
NUMBER OF SURGE CYCLES	NA	TOTAL VOLUME	NA
TOP OF CASING		ELEVATION	DEPTH (ft)
		12.94	0
TOP OF SEAL		ELEVATION	DEPTH (ft)
		NA	8
TOP OF FILTER		ELEVATION	DEPTH (ft)
		NA	10
TOP OF SCREEN		ELEVATION	DEPTH (ft)
		NA	12.0
BOTTOM OF BORING		ELEVATION	DEPTH (ft)
		NA	22
SCREEN LENGTH		10-foot	
SLOT SIZE		No. 20 Slot; 0.020 Inches	
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
		12 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	

The diagram illustrates the well construction. It shows a vertical casing with a riser extending to the surface. A seal is located at the top of the screen. The screen is installed from 12 to 22 feet below grade. The annulus is filled with sand and sealed with bentonite. The groundwater level is shown at 12 feet depth.

WELL DETAILS		SUMMARY SOIL CLASSIFICATION	DEPTH (FT)
		Asphalt	0
		Fill	
			8
			10.00
			12.00
		Medium Sand	
			22.00

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APPENDIX C

GROUNDWATER SAMPLING LOGS

GROUNDWATER SAMPLING LOG

[illegible]

GROUNDWATER SAMPLING LOG

[illegible]

GROUNDWATER SAMPLING LOG

[illegible]

GROUNDWATER SAMPLING LOG

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GROUNDWATER SAMPLING LOG

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GROUNDWATER SAMPLING LOG

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GROUNDWATER SAMPLING LOG

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GROUNDWATER SAMPLING LOG

[illegible]

GROUNDWATER SAMPLING LOG

[illegible]

GROUNDWATER SAMPLING LOG

[illegible]

GROUNDWATER SAMPLING LOG

[illegible]

GROUNDWATER SAMPLING LOG

[illegible]

GROUNDWATER SAMPLING LOG

[illegible]

APPENDIX D

DATA USABILITY SUMMARY REPORT

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To: Woo Kim, Langan Staff Geologist

From: Emily Strake, Langan Senior Project Chemist

Date: March 18, 2019

Re: Data Usability Summary Report
For 491 Wortman Avenue
Groundwater Samples Collected in March 2019
Langan Project No.: 170329301

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of groundwater samples collected in March 2019 by Langan Engineering and Environmental Services ("Langan") at the 491 Wortman Avenue site ("the Site"). The samples were analyzed by Alpha Analytical Laboratory (NYSDOH NELAC registration # 11148) for volatile organic compounds (VOCs) by the analytical methods listed below.

- VOCs by SW-846 Method 8260C

Table 1, below, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

TABLE 1: SAMPLE SUMMARY

<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1908936	L1908936-01	MW-10_030719	3/7/2019	VOCs
L1908936	L1908936-02	MW11_030719	3/7/2019	VOCs
L1908936	L1908936-03	MW-7_030719	3/7/2019	VOCs
L1908936	L1908936-04	MW-9_030719	3/7/2019	VOCs
L1908936	L1908936-05	PZ-2_030719	3/7/2019	VOCs
L1908936	L1908936-06	MW-3A_030719	3/7/2019	VOCs
L1908936	L1908936-07	GWFB01_030719	3/7/2019	VOCs
L1908936	L1908936-08	GWFB01_030719	3/7/2019	VOCs
L1909107	L1909107-01	MW-6_030819	3/8/2019	VOCs
L1909107	L1909107-02	MW-19_030819	3/8/2019	VOCs
L1909107	L1909107-03	MW-1_030819	3/8/2019	VOCs

Technical Memorandum

Data Usability Summary Report
For 491 Wortman Avenue
March 2019 Groundwater Samples
Langan Project No.: 170329301
March 18, 2019 Page 2 of 10

<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1909107	L1909107-04	MW-18M_030819	3/8/2019	VOCs
L1909107	L1909107-05	MW-18S_030819	3/8/2019	VOCs
L1909107	L1909107-06	MW-17_030819	3/8/2019	VOCs
L1909107	L1909107-07	MW-02_030819	3/8/2019	VOCs
L1909107	L1909107-08	GWDUP01_030819	3/8/2019	VOCs
L1909107	L1909107-09	GWTB02_030819	3/8/2019	VOCs
L1909107	L1909107-10	MW-9-030719	3/8/2019	VOCs

Validation Overview

This data validation was performed in accordance with USEPA Region II Standard Operating Procedure (SOP) #HW-34A, "Trace Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-33A, "Low/Medium Volatile Data Validation" (September 2016, Revision 1), the USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA-540-R-2017-002, January 2017), USEPA "National Functional Guidelines for Inorganic Superfund Methods Data Review" (EPA-540-R-2017-001, January 2017) and the specifics of the methods employed.

Validation includes review of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the originator. Items subject to review in this memorandum include holding times, sample preservation, instrument tuning, instrument calibration, laboratory blanks, laboratory control samples, system monitoring compounds, internal standard area counts, matrix spike/spike duplicate recoveries, target compound identification and quantification, chromatograms, overall system performance, field duplicate, and trip blank sample results.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

- R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

Technical Memorandum

Data Usability Summary Report
For 491 Wortman Avenue
March 2019 Groundwater Samples
Langan Project No.: 170329301
March 18, 2019 Page 3 of 10

NJ – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

If any validation qualifiers are assigned these qualifiers should supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on the basis of the items specified for review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified.

TABLE 2: VALIDATOR-APPLIED QUALIFICATION:

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
MW-10_030719	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
MW-10_030719	8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
MW-10_030719	8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
MW-10_030719	8260C	123-91-1	1,4-DIOXANE	UJ
MW-10_030719	8260C	67-64-1	ACETONE	J
MW-10_030719	8260C	74-83-9	BROMOMETHANE	UJ
MW-10_030719	8260C	91-20-3	NAPHTHALENE	UJ
MW11_030719	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
MW11_030719	8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
MW11_030719	8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
MW11_030719	8260C	123-91-1	1,4-DIOXANE	UJ
MW11_030719	8260C	78-93-3	2-BUTANONE	UJ
MW11_030719	8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
MW11_030719	8260C	67-64-1	ACETONE	J
MW11_030719	8260C	75-00-3	CHLOROETHANE	UJ
MW11_030719	8260C	91-20-3	NAPHTHALENE	UJ
MW-7_030719	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
MW-7_030719	8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
MW-7_030719	8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
MW-7_030719	8260C	123-91-1	1,4-DIOXANE	UJ
MW-7_030719	8260C	78-93-3	2-BUTANONE	UJ
MW-7_030719	8260C	591-78-6	2-HEXANONE	UJ
MW-7_030719	8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
MW-7_030719	8260C	67-64-1	ACETONE	UJ
MW-7_030719	8260C	75-00-3	CHLOROETHANE	UJ
MW-7_030719	8260C	91-20-3	NAPHTHALENE	UJ
MW-9_030719	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ

Technical Memorandum

Data Usability Summary Report
For 491 Wortman Avenue
March 2019 Groundwater Samples
Langan Project No.: 170329301
March 18, 2019 Page 4 of 10

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
MW-9_030719	8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
MW-9_030719	8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
MW-9_030719	8260C	123-91-1	1,4-DIOXANE	UJ
MW-9_030719	8260C	78-93-3	2-BUTANONE	UJ
MW-9_030719	8260C	591-78-6	2-HEXANONE	UJ
MW-9_030719	8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
MW-9_030719	8260C	67-64-1	ACETONE	UJ
MW-9_030719	8260C	75-00-3	CHLOROETHANE	UJ
MW-9_030719	8260C	91-20-3	NAPHTHALENE	UJ
PZ-2_030719	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
PZ-2_030719	8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
PZ-2_030719	8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
PZ-2_030719	8260C	123-91-1	1,4-DIOXANE	UJ
PZ-2_030719	8260C	78-93-3	2-BUTANONE	UJ
PZ-2_030719	8260C	591-78-6	2-HEXANONE	UJ
PZ-2_030719	8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
PZ-2_030719	8260C	67-64-1	ACETONE	J
PZ-2_030719	8260C	75-00-3	CHLOROETHANE	UJ
PZ-2_030719	8260C	91-20-3	NAPHTHALENE	UJ
MW-3A_030719	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
MW-3A_030719	8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
MW-3A_030719	8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
MW-3A_030719	8260C	123-91-1	1,4-DIOXANE	UJ
MW-3A_030719	8260C	78-93-3	2-BUTANONE	UJ
MW-3A_030719	8260C	591-78-6	2-HEXANONE	UJ
MW-3A_030719	8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
MW-3A_030719	8260C	67-64-1	ACETONE	J
MW-3A_030719	8260C	75-00-3	CHLOROETHANE	UJ
MW-3A_030719	8260C	91-20-3	NAPHTHALENE	UJ
GWFB01_030719	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
GWFB01_030719	8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
GWFB01_030719	8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
GWFB01_030719	8260C	123-91-1	1,4-DIOXANE	UJ
GWFB01_030719	8260C	78-93-3	2-BUTANONE	UJ
GWFB01_030719	8260C	591-78-6	2-HEXANONE	UJ
GWFB01_030719	8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
GWFB01_030719	8260C	67-64-1	ACETONE	UJ
GWFB01_030719	8260C	75-00-3	CHLOROETHANE	UJ

Technical Memorandum

Data Usability Summary Report
For 491 Wortman Avenue
March 2019 Groundwater Samples
Langan Project No.: 170329301
March 18, 2019 Page 5 of 10

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
GWFB01_030719	8260C	91-20-3	NAPHTHALENE	UJ
GWTB01_030719	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
GWTB01_030719	8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
GWTB01_030719	8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
GWTB01_030719	8260C	123-91-1	1,4-DIOXANE	UJ
GWTB01_030719	8260C	78-93-3	2-BUTANONE	UJ
GWTB01_030719	8260C	591-78-6	2-HEXANONE	UJ
GWTB01_030719	8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
GWTB01_030719	8260C	67-64-1	ACETONE	J
GWTB01_030719	8260C	75-00-3	CHLOROETHANE	UJ
GWTB01_030719	8260C	91-20-3	NAPHTHALENE	UJ
MW-6_030819	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
MW-6_030819	8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
MW-6_030819	8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
MW-6_030819	8260C	123-91-1	1,4-DIOXANE	UJ
MW-6_030819	8260C	78-93-3	2-BUTANONE	UJ
MW-6_030819	8260C	591-78-6	2-HEXANONE	UJ
MW-6_030819	8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
MW-6_030819	8260C	67-64-1	ACETONE	J
MW-6_030819	8260C	75-00-3	CHLOROETHANE	UJ
MW-6_030819	8260C	91-20-3	NAPHTHALENE	UJ
MW-19_030819	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
MW-19_030819	8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
MW-19_030819	8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
MW-19_030819	8260C	123-91-1	1,4-DIOXANE	UJ
MW-19_030819	8260C	78-93-3	2-BUTANONE	UJ
MW-19_030819	8260C	591-78-6	2-HEXANONE	UJ
MW-19_030819	8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
MW-19_030819	8260C	67-64-1	ACETONE	UJ
MW-19_030819	8260C	75-00-3	CHLOROETHANE	UJ
MW-19_030819	8260C	91-20-3	NAPHTHALENE	UJ
MW-1_030819	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
MW-1_030819	8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
MW-1_030819	8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
MW-1_030819	8260C	123-91-1	1,4-DIOXANE	UJ
MW-1_030819	8260C	78-93-3	2-BUTANONE	UJ
MW-1_030819	8260C	591-78-6	2-HEXANONE	UJ
MW-1_030819	8260C	108-10-1	4-METHYL-2-PENTANONE	UJ

Technical Memorandum

Data Usability Summary Report
For 491 Wortman Avenue
March 2019 Groundwater Samples
Langan Project No.: 170329301
March 18, 2019 Page 6 of 10

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
MW-1_030819	8260C	67-64-1	ACETONE	UJ
MW-1_030819	8260C	75-00-3	CHLOROETHANE	UJ
MW-1_030819	8260C	91-20-3	NAPHTHALENE	UJ
MW-18M_030819	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
MW-18M_030819	8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
MW-18M_030819	8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
MW-18M_030819	8260C	123-91-1	1,4-DIOXANE	UJ
MW-18M_030819	8260C	78-93-3	2-BUTANONE	UJ
MW-18M_030819	8260C	591-78-6	2-HEXANONE	UJ
MW-18M_030819	8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
MW-18M_030819	8260C	67-64-1	ACETONE	J
MW-18M_030819	8260C	75-00-3	CHLOROETHANE	UJ
MW-18M_030819	8260C	91-20-3	NAPHTHALENE	UJ
MW-18S_030819	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
MW-18S_030819	8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
MW-18S_030819	8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
MW-18S_030819	8260C	123-91-1	1,4-DIOXANE	UJ
MW-18S_030819	8260C	78-93-3	2-BUTANONE	UJ
MW-18S_030819	8260C	591-78-6	2-HEXANONE	UJ
MW-18S_030819	8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
MW-18S_030819	8260C	67-64-1	ACETONE	J
MW-18S_030819	8260C	75-00-3	CHLOROETHANE	UJ
MW-18S_030819	8260C	91-20-3	NAPHTHALENE	UJ
MW-17_030819	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
MW-17_030819	8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
MW-17_030819	8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
MW-17_030819	8260C	123-91-1	1,4-DIOXANE	UJ
MW-17_030819	8260C	78-93-3	2-BUTANONE	UJ
MW-17_030819	8260C	591-78-6	2-HEXANONE	UJ
MW-17_030819	8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
MW-17_030819	8260C	67-64-1	ACETONE	UJ
MW-17_030819	8260C	75-00-3	CHLOROETHANE	UJ
MW-17_030819	8260C	91-20-3	NAPHTHALENE	UJ
MW-02_030819	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
MW-02_030819	8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
MW-02_030819	8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
MW-02_030819	8260C	123-91-1	1,4-DIOXANE	UJ
MW-02_030819	8260C	78-93-3	2-BUTANONE	UJ

Technical Memorandum

Data Usability Summary Report
For 491 Wortman Avenue
March 2019 Groundwater Samples
Langan Project No.: 170329301
March 18, 2019 Page 7 of 10

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
MW-02_030819	8260C	591-78-6	2-HEXANONE	UJ
MW-02_030819	8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
MW-02_030819	8260C	67-64-1	ACETONE	J
MW-02_030819	8260C	75-00-3	CHLOROETHANE	UJ
MW-02_030819	8260C	91-20-3	NAPHTHALENE	UJ
GWDUP01_030819	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
GWDUP01_030819	8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
GWDUP01_030819	8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
GWDUP01_030819	8260C	123-91-1	1,4-DIOXANE	UJ
GWDUP01_030819	8260C	78-93-3	2-BUTANONE	UJ
GWDUP01_030819	8260C	591-78-6	2-HEXANONE	UJ
GWDUP01_030819	8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
GWDUP01_030819	8260C	67-64-1	ACETONE	J
GWDUP01_030819	8260C	75-00-3	CHLOROETHANE	UJ
GWDUP01_030819	8260C	91-20-3	NAPHTHALENE	UJ
GWTB02_030819	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
GWTB02_030819	8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
GWTB02_030819	8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
GWTB02_030819	8260C	123-91-1	1,4-DIOXANE	UJ
GWTB02_030819	8260C	78-93-3	2-BUTANONE	UJ
GWTB02_030819	8260C	591-78-6	2-HEXANONE	UJ
GWTB02_030819	8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
GWTB02_030819	8260C	67-64-1	ACETONE	J
GWTB02_030819	8260C	75-00-3	CHLOROETHANE	UJ
GWTB02_030819	8260C	91-20-3	NAPHTHALENE	UJ

MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. No major deficiencies were identified.

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. The section below describes the minor deficiencies that were identified.

Technical Memorandum

Data Usability Summary Report
For 491 Wortman Avenue
March 2019 Groundwater Samples
Langan Project No.: 170329301
March 18, 2019 Page 8 of 10

VOCs by SW-846 Method 8260C:

L1908936:

The LCS/LCSD for batch WG1215235 exhibited a percent recovery below the LCL for 1,2,3-trichlorobenzene (61%, 60%), and 1,2,4,5-tetramethylbenzene (36%, 35%), and 1,2,4-trichlorobenzene (64%, 62%), and naphthalene (62%, 62%). The associated results in sample MW-7_030719, MW-9_030719, PZ-2_030719, MW-3A_030719, GWFB01_030719, and GWTB01_030719 are qualified as "UJ" based on potential low bias.

The LCS/LCSD for batch WG1215584 exhibited a percent recovery below the LCL for 1,2,3-trichlorobenzene (54%, 66%), and 1,2,4,5-tetramethylbenzene (32%, 35%), and 1,2,4-trichlorobenzene (56%, 64%), and naphthalene (56%, 63%). The associated results in sample MW11_030719 are qualified as "UJ" based on potential low bias.

The ICAL for instrument VOA108 exhibited a RF below the control limit for acetone (0.039), and 2-butanone (0.068), and 1,4-dioxane (0.001), and 4-methyl-2-pentanone (0.088). The associated non-detections in sample MW11_030719, MW-7_030719, MW-9_030719, PZ-2_030719, MW-3A_030719, GWFB01_030719, and GWTB01_030719 are qualified as "J" or "UJ" based on potential indeterminate bias.

The CCV analyzed on 3/12/2019 at 8:32 exhibited a %D above the control limit for bromomethane (51.7%), and acetone (-30.8%), and 1,4-dioxane (37.1%). The associated results in sample MW-10_030719 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 3/12/2019 at 18:29 exhibited a %D above the control limit for chloroethane (-39%) and 2-hexanone (25.7%). The associated results in sample MW-7_030719, MW-9_030719, PZ-2_030719, MW-3A_030719, GWFB01_030719, and GWTB01_030719 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 3/13/2019 at 18:42 exhibited a %D above the control limit for chloroethane (-33.1%) and 2-hexanone (20.4%). The associated results in sample MW11_030719 are qualified as "UJ" based on potential indeterminate bias.

L1909107:

The LCS/LCSD for batch WG1215584 exhibited a percent recovery below the LCL for 1,2,3-trichlorobenzene (54%, 66%), 1,2,4,5-tetramethylbenzene (32%, 35%), and 1,2,4-trichlorobenzene (56%, 64%), and naphthalene (56%, 63%). The associated results in sample MW-6_030819, MW-19_030819, MW-1_030819, MW-18M_030819, MW-18S_030819, MW-

Technical Memorandum

Data Usability Summary Report
For 491 Wortman Avenue
March 2019 Groundwater Samples
Langan Project No.: 170329301
March 18, 2019 Page 9 of 10

17_030819, MW-02_030819, GWDUP01_030819, and GWTB02_030819 are qualified as "UJ" based on potential low bias.

The ICAL for instrument VOA108 exhibited a RF below the control limit for acetone (0.039), 2-butanone (0.068), and 1,4-dioxane (0.001), and 4-methyl-2-pentanone (0.088). The associated non-detections in sample MW-6_030819, MW-19_030819, MW-1_030819, MW-18M_030819, MW-18S_030819, MW-17_030819, MW-02_030819, GWDUP01_030819, and GWTB02_030819 are qualified as "J" or "UJ" based on potential indeterminate bias.

The CCV analyzed on 3/13/2019 at 18:42 exhibited a %D above the control limit for chloroethane (-33.1%) and 2-hexanone (20.4%). The associated results in sample MW-6_030819, MW-19_030819, MW-1_030819, MW-18M_030819, MW-18S_030819, MW-17_030819, MW-02_030819, GWDUP01_030819, and GWTB02_030819 are qualified as "UJ" based on potential indeterminate bias.

OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. The section below describes the other deficiencies that were identified.

VOCs by SW-846 Method 8260C:

L1908936:

The LCS/LCSD for batch WG1215235 exhibited a percent recovery above the UCL for chloroethane (140%, 140%). The associated results are non-detections. No qualification is necessary.

The LCSD for batch WG1215584 exhibited a percent recovery above the UCL for chloroethane (150%). The associated results are non-detections. No qualification is necessary.

L1909107:

The LCSD for batch WG1215584 exhibited a percent recovery above the UCL for chloroethane (150%). The associated results are non-detections. No qualification is necessary.

COMMENTS:

Field duplicate and parent sample pairs were collected and analyzed for all parameters. For results less than 5X the RL, analytes meet the precision criteria if the absolute difference is less than $\pm 1X$ the RL. For results greater than 5X the RL, analytes meet the precision criteria if the RPD is less than or equal to 30% for groundwater.

- GWDUP01_030819 and MW-1_030819: All analytes met the precision criteria.

Technical Memorandum

Data Usability Summary Report
For 491 Wortman Avenue
March 2019 Groundwater Samples
Langan Project No.: 170329301
March 18, 2019 Page 10 of 10

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All of the data packages met ASP Category B requirements.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Signed:



Emily Strake, CEP
Senior Project Chemist

APPENDIX E

LABORATORY ANALYTICAL REPORTS



www.alphalab.com



Alpha Analytical

Laboratory Code: 11148

SDG Number: L1909107

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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	15
Organics Analysis	16
GCMS 8260 Analysis	17
Volatiles QC Summary	18
Form 2 - Organics	19
Form 3 - Organics	20
Form 4 - Organics	23
Form 5 - Organics	24
Form 8 - Organics	26
MDL Study - Volatile Organics 8260	27
8260	27
8260 (2)	30
8260 (3)	33
Volatiles Sample Data	36
Form 1 - Organics	37
GWTB02_030819 (L1909107-09) Analyzed: 03/13/19 22:43	77
MW-6_030819 (L1909107-01) Analyzed: 03/13/19 23:49	83
MW-19_030819 (L1909107-02D) Analyzed: 03/14/19 00:10	98
MW-1_030819 (L1909107-03) Analyzed: 03/14/19 00:32	108
MW-18M_030819 (L1909107-04) Analyzed: 03/14/19 00:54	117
MW-18S_030819 (L1909107-05) Analyzed: 03/14/19 01:16	137
MW-17_030819 (L1909107-06D) Analyzed: 03/14/19 01:38	154
MW-02_030819 (L1909107-07) Analyzed: 03/14/19 02:00	165
GWDUP01_030819 (L1909107-08) Analyzed: 03/14/19 02:22	174
Volatile Standards Data	182
Initial Calibration	183
Form 6 - Organics	184
ICAL for VOA108 on 02/19/19 ICAL15519	187
Initial Calibration Summary - Cal Date: 02/19/19 00:00	187
BFB Injected on: 02/18/19 18:56	191
STD11 Injected on: 02/18/19 20:23	192
STD1 Injected on: 02/18/19 21:07	195
STD2 Injected on: 02/18/19 21:50	221
STD3 Injected on: 02/18/19 22:12	237
STD4 Injected on: 02/18/19 22:34	246
STD6 Injected on: 02/18/19 22:56	251
STD8 Injected on: 02/18/19 23:18	256
STD10 Injected on: 02/18/19 23:40	261

Table of Contents

ICV Summary Form Injected on: 02/19/19 02:13	266
ICV Quant Report Injected on: 02/19/19 02:13	269
Continuing Calibration	274
Form 7 - Organics	275
CC Summary - VOA108 Run: 03/13/19 18:42	278
CC Quant - VOA108 Run: 03/13/19 18:42	281
bfb tune - Inst. VOA108 03/13/19 18:00	286
Volatiles Raw QC Data	287
Laboratory Method BI (WG1215584-5) Analyzed: 03/13/19 19:48	288
Laboratory Control S (WG1215584-3) Analyzed: 03/13/19 18:42	293
LCS Duplicate (WG1215584-4) Analyzed: 03/13/19 19:04	370
Volatiles Calculations	448
QC Batch WG1215584	449
ICAL Sequence for VOA108 on 19-FEB-2019 00:00 ICAL15519	450
Sequence Log	451

Project Name: 491 WORTMAN
Project Number: 170329301

Lab Number: L1909107
Report Date: 03/14/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1909107-01	MW-6_030819	WATER	BROOKLYN	03/08/19 11:10	03/08/19
L1909107-02	MW-19_030819	WATER	BROOKLYN	03/08/19 10:16	03/08/19
L1909107-03	MW-1_030819	WATER	BROOKLYN	03/08/19 09:15	03/08/19
L1909107-04	MW-18M_030819	WATER	BROOKLYN	03/08/19 10:25	03/08/19
L1909107-05	MW-18S_030819	WATER	BROOKLYN	03/08/19 11:00	03/08/19
L1909107-06	MW-17_030819	WATER	BROOKLYN	03/08/19 11:45	03/08/19
L1909107-07	MW-02_030819	WATER	BROOKLYN	03/08/19 09:40	03/08/19
L1909107-08	GWDUP01_030819	WATER	BROOKLYN	03/08/19 00:00	03/08/19
L1909107-09	GWTB02_030819	WATER	BROOKLYN	03/08/19 00:00	03/08/19
L1909107-10	MW-9-030719	WATER	BROOKLYN	03/08/19 10:25	03/08/19

Project Name: 491 WORTMAN
Project Number: 170329301

Lab Number: L1909107
Report Date: 03/14/19

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: 491 WORTMAN
Project Number: 170329301

Lab Number: L1909107
Report Date: 03/14/19

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.

Sample Receipt

L1909107-10: A sample identified as "MW-9-030719" was received but not listed on the Chain of Custody. At the client's request, this sample was not analyzed.

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:



Report Date: 03/14/19

Title: Technical Director/Representative



GLOSSARY

Acronyms

DL	- 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
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.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
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

Report Format: DU Report with 'J' Qualifiers



Project Name: 491 WORTMAN
Project Number: 170329301

Lab Number: L1909107
Report Date: 03/14/19

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.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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 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 7890 GC/5975C MSD
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: EST Encon (or equivalent)
 Autosampler: EST Centurion (or equivalent)
 Purge time: 11 min

Columns (length x ID x df):
 RTX-VMS 20m x 0.18mm x 1um
 RTX-VMS 30m x 0.25mm x 1.4um
 RTX-502.2 40m x 0.18mm x 1um

Volatile Organics: VPH

Instrument: Agilent 6890 (or equivalent)
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: EST Encon (or equivalent)
 Autosampler: EST Centurion (or equivalent)

Column Type: Restek RTX 502.2
 Column Length: 105 Meters
 df: 3.00 um
 ID: 0.53mm

Volatile Organics: PIANO

Instrument: Agilent 7890 GC/5975C MSD
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: Tekmar Velocity / EST Encon
 Autosampler: Varian Archon / EST Centurion
 Purge time: 11 min

Column Type: DB-VRX
 Column Length: 60 Meters
 df: 1.40 um
 ID: 0.25 mm
 Desorb: 1 min

Volatile Organics: Dissolved Gas

Instrument: Agilent 7890 (or equivalent) with FID/TCD

Column Type: Haysep S Column
 Column Length: 2 Meters packed
 (100/200 mesh)

Autosampler: LEAP Headspace

Purge time: 0.6 min

Volatile Organics in Air Instruments

Volatile Organics in Air:

Instruments: Agilent 6890 GC / 5975 MSD Shimadzu QP2010-SE / QP2020

Concentrator: Entech 7100A or 7200
 Autosampler: Entech 7016CA or 7016D

Column Type: Restek RTX-1
 Column Length: 60 Meters
 df: 1.00 um
 ID: 0.25 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 μ L; 2 μ L LVI
Column Type: Restek RXI-5SILMS	df: 0.32 μ m
Column Length: 30 Meters	ID: 0.25 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM:

Instrument: Agilent 5973 MSD	Injection volume: 1 μ L; 2 μ L LVI
Column Type: Restek RXI-5SILMS	df: 0.25 μ m
Column Length: 30 Meters	ID: 0.25 mm

Pesticides/PCB/Herbicides:

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

Petroleum/EPH:

Instrument: Agilent 6890 w/FID / HP 5890 w/ FID	Injection Volume: 1 μ L
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	df: 0.25um, 0.18 um
Column Length: 30 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 (8081):

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 (8082):

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

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 : L1909107

Received : 08-MAR-2019

Reviewer : John Knoud

Account Name : Langan Engineering & Environmental

Project Number : 170329301

Project Name : 491 WORTMAN

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	3.0	

Condition Information

- | | |
|--|-----|
| 1) All samples on COC received? | YES |
| 2) Extra samples received? | YES |
| Following additional samples were received: -10 | |
| 3) Are there any sample container discrepancies? | NO |
| 4) Are there any discrepancies between sample labels & COC? | NO |
| 5) Are samples in appropriate containers for requested analysis? | YES |
| 6) Are samples properly preserved for requested analysis? | YES |
| 7) Are samples within holding time for requested analysis? | YES |
| 8) All sampling equipment returned? | NA |

Volatile Organics/VPH

- | | |
|--|----|
| 1) Reagent Water Vials Frozen by Client? | NO |
|--|----|

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Mar 14 2019, 05:08 pm

Login Number: L1909107

Account: LANGAN-NYC Langan Engineering & Environmental Project: 170329301

Received: 08MAR19 Due Date: 15MAR19

Sample #	Client ID	Mat	PR	Collected
L1909107-01 MW-6_030819		1	S0	08MAR19 11:10
ASP-B Package Due Date: 03/15/19				
ASP-B, NYTCL-8260				
L1909107-02 MW-19_030819		1	S0	08MAR19 10:16
Package Due Date: 03/15/19				
NYTCL-8260				
L1909107-03 MW-1_030819		1	S0	08MAR19 09:15
Package Due Date: 03/15/19				
NYTCL-8260				
L1909107-04 MW-18M_030819		1	S0	08MAR19 10:25
Package Due Date: 03/15/19				
NYTCL-8260				
L1909107-05 MW-18S_030819		1	S0	08MAR19 11:00
Package Due Date: 03/15/19				
NYTCL-8260				
L1909107-06 MW-17_030819		1	S0	08MAR19 11:45
Package Due Date: 03/15/19				
NYTCL-8260				
L1909107-07 MW-02_030819		1	S0	08MAR19 09:40
Package Due Date: 03/15/19				

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Mar 14 2019, 05:08 pm

Login Number: L1909107

Account: LANGAN-NYC Langan Engineering & Environmental Project: 170329301

Received: 08MAR19 Due Date: 15MAR19

Sample # Client ID Mat PR Collected

NYTCL-8260

L1909107-08 GWDUP01_030819

1 S0 08MAR19 00:00

| Package Due Date: 03/15/19

NYTCL-8260

L1909107-09 GWTB02_030819

1 S0 08MAR19 00:00

| Package Due Date: 03/15/19

NYTCL-8260

L1909107-10 MW-9-030719

1 S0 08MAR19 10:25

| Package Due Date: 03/15/19

HOLD-8260



NEW YORK CHAIN OF CUSTODY

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

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

3/8/19

ALPHA Job #

L1909107

Client Information Client: <u>Long</u> Address: <u>380 W 31st St Apt 1</u> <u>NY NY 10001</u> Phone: <u>212 479-5400</u> Fax: Email: <u>jrobinson@long.com</u>		Project Information Project Name: <u>491 Workman</u> Project Location: <u>Brooklyn</u> Project # <u>170329301</u> (Use Project name as Project #) ☐ Project Manager: <u>James Robinson</u> ALPHAQuote #: Turn-Around Time Standard ☐ Due Date: Rush (only if pre approved) ☐ # of Days:		Deliverables ☐ ASP-A ☒ ASP-B ☐ EQulS (1 File) ☐ EQulS (4 File) ☐ Other Regulatory Requirement ☐ NY TOGS ☐ NY Part 375 ☐ AWQ Standards ☐ NY CP-51 ☐ NY Restricted Use ☐ Other ☐ NY Unrestricted Use ☐ NYC Sewer Discharge		Billing Information ☒ Same as Client Info PO # 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:		ANALYSIS		Sample Filtration ☐ Done ☐ Lab to do ☐ Preservation ☐ Lab to do (Please Specify below) Sample Specific Comments			
Please specify Metals or TAL.		ANALYSIS Table Header: ALPHA Lab ID, Sample ID, Collection (Date, Time), Sample Matrix, Sampler's Initials		ANALYSIS Table Body: 9 rows of sample data			
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			
Relinquished By: <u>[Signature]</u> Date/Time: <u>3/8/19 1345</u>		Received By: <u>[Signature]</u> Date/Time: <u>3/8/19 1345</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.)			

Organics

GC/MS 8260

Analysis

Volatiles QC Summary

Surrogate Recovery Summary

Form 2

Volatiles

Client: Langan Engineering & Environmental
Project Name: 491 WORTMAN

Lab Number: L1909107
Project Number: 170329301
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	SMC1 DCA	SMC2 TOL	SMC3 BFB	SMC4 DBFM	TOT OUT
MW-6_030819 (L1909107-01)	116	95	110	112	0
MW-19_030819 (L1909107-02D)	123	98	117	115	0
MW-1_030819 (L1909107-03)	118	96	106	111	0
MW-18M_030819 (L1909107-04)	120	97	109	118	0
MW-18S_030819 (L1909107-05)	123	96	111	113	0
MW-17_030819 (L1909107-06D)	117	96	113	113	0
MW-02_030819 (L1909107-07)	119	94	117	114	0
GWDUP01_030819 (L1909107-08)	116	96	117	113	0
GWTB02_030819 (L1909107-09)	117	97	107	112	0
WG1215584-3LCS	108	100	92	105	0
WG1215584-4LCSD	107	101	94	105	0
WG1215584-5BLANK	113	95	109	108	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 Summary

Form 3

Volatiles

Client : Langan Engineering & Environmental Lab Number : L1909107
 Project Name : 491 WORTMAN Project Number : 170329301
 Matrix : WATER
 LCS Sample ID : WG1215584-3 Analysis Date : 03/13/19 18:42 File ID : V08190313N02
 LCSD Sample ID : WG1215584-4 Analysis Date : 03/13/19 19:04 File ID : V08190313N03

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	10	100	10	10	100	0	70-130	20
1,1-Dichloroethane	10	10	100	10	11	110	10	70-130	20
Chloroform	10	11	110	10	11	110	0	70-130	20
Carbon tetrachloride	10	11	110	10	11	110	0	63-132	20
1,2-Dichloropropane	10	10	100	10	10	100	0	70-130	20
Dibromochloromethane	10	10	100	10	11	110	10	63-130	20
1,1,2-Trichloroethane	10	11	110	10	12	120	9	70-130	20
Tetrachloroethene	10	10	100	10	11	110	10	70-130	20
Chlorobenzene	10	10	100	10	11	110	10	75-130	20
Trichlorofluoromethane	10	12	120	10	12	120	0	62-150	20
1,2-Dichloroethane	10	11	110	10	11	110	0	70-130	20
1,1,1-Trichloroethane	10	11	110	10	11	110	0	67-130	20
Bromodichloromethane	10	10	100	10	11	110	10	67-130	20
trans-1,3-Dichloropropene	10	10	100	10	10	100	0	70-130	20
cis-1,3-Dichloropropene	10	9.9	99	10	9.9	99	0	70-130	20
1,1-Dichloropropene	10	11	110	10	11	110	0	70-130	20
Bromoform	10	10	100	10	11	110	10	54-136	20
1,1,2,2-Tetrachloroethane	10	10	100	10	11	110	10	67-130	20
Benzene	10	11	110	10	11	110	0	70-130	20
Toluene	10	11	110	10	11	110	0	70-130	20
Ethylbenzene	10	10	100	10	10	100	0	70-130	20
Chloromethane	10	11	110	10	11	110	0	64-130	20
Bromomethane	10	10	100	10	10	100	0	39-139	20
Vinyl chloride	10	11	110	10	11	110	0	55-140	20
Chloroethane	10	13	130	10	15	150 Q	14	55-138	20
1,1-Dichloroethene	10	10	100	10	10	100	0	61-145	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Langan Engineering & Environmental Lab Number : L1909107
 Project Name : 491 WORTMAN Project Number : 170329301
 Matrix : WATER
 LCS Sample ID : WG1215584-3 Analysis Date : 03/13/19 18:42 File ID : V08190313N02
 LCSD Sample ID : WG1215584-4 Analysis Date : 03/13/19 19:04 File ID : V08190313N03

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			
trans-1,2-Dichloroethene	10	10	100	10	10	100	0	70-130	20
Trichloroethene	10	11	110	10	11	110	0	70-130	20
1,2-Dichlorobenzene	10	10	100	10	11	110	10	70-130	20
1,3-Dichlorobenzene	10	11	110	10	11	110	0	70-130	20
1,4-Dichlorobenzene	10	10	100	10	11	110	10	70-130	20
Methyl tert butyl ether	10	8.5	85	10	8.7	87	2	63-130	20
p/m-Xylene	20	20	100	20	21	105	5	70-130	20
o-Xylene	20	19	95	20	20	100	5	70-130	20
cis-1,2-Dichloroethene	10	10	100	10	10	100	0	70-130	20
Dibromomethane	10	11	110	10	11	110	0	70-130	20
1,2,3-Trichloropropane	10	11	110	10	12	120	9	64-130	20
Acrylonitrile	10	10	100	10	11	110	10	70-130	20
Styrene	20	20	100	20	22	110	10	70-130	20
Dichlorodifluoromethane	10	10	100	10	10	100	0	36-147	20
Acetone	10	12	120	10	12	120	0	58-148	20
Carbon disulfide	10	10	100	10	10	100	0	51-130	20
2-Butanone	10	9.9	99	10	10	100	1	63-138	20
Vinyl acetate	10	8.3	83	10	8.7	87	5	70-130	20
4-Methyl-2-pentanone	10	8.9	89	10	9.4	94	5	59-130	20
2-Hexanone	10	7.9	79	10	8.4	84	6	57-130	20
Bromochloromethane	10	11	110	10	11	110	0	70-130	20
2,2-Dichloropropane	10	9.1	91	10	9.2	92	1	63-133	20
1,2-Dibromoethane	10	10	100	10	11	110	10	70-130	20
1,3-Dichloropropane	10	11	110	10	11	110	0	70-130	20
1,1,1,2-Tetrachloroethane	10	10	100	10	11	110	10	64-130	20
Bromobenzene	10	9.7	97	10	11	110	13	70-130	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Langan Engineering & Environmental Lab Number : L1909107
 Project Name : 491 WORTMAN Project Number : 170329301
 Matrix : WATER
 LCS Sample ID : WG1215584-3 Analysis Date : 03/13/19 18:42 File ID : V08190313N02
 LCSD Sample ID : WG1215584-4 Analysis Date : 03/13/19 19:04 File ID : V08190313N03

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			
n-Butylbenzene	10	9.6	96	10	10	100	4	53-136	20
sec-Butylbenzene	10	10	100	10	11	110	10	70-130	20
tert-Butylbenzene	10	8.7	87	10	9.4	94	8	70-130	20
o-Chlorotoluene	10	9.8	98	10	11	110	12	70-130	20
p-Chlorotoluene	10	10	100	10	11	110	10	70-130	20
1,2-Dibromo-3-chloropropane	10	9.2	92	10	10	100	8	41-144	20
Hexachlorobutadiene	10	8.6	86	10	9.1	91	6	63-130	20
Isopropylbenzene	10	10	100	10	11	110	10	70-130	20
p-Isopropyltoluene	10	9.9	99	10	10	100	1	70-130	20
Naphthalene	10	5.6	56 Q	10	6.3	63 Q	12	70-130	20
n-Propylbenzene	10	11	110	10	12	120	9	69-130	20
1,2,3-Trichlorobenzene	10	5.4	54 Q	10	6.6	66 Q	20	70-130	20
1,2,4-Trichlorobenzene	10	5.6	56 Q	10	6.4	64 Q	13	70-130	20
1,3,5-Trimethylbenzene	10	10	100	10	11	110	10	64-130	20
1,2,4-Trimethylbenzene	10	9.6	96	10	10	100	4	70-130	20
1,4-Dioxane	500	640	128	500	760	152	17	56-162	20
p-Diethylbenzene	10	8.3	83	10	8.9	89	7	70-130	20
p-Ethyltoluene	10	10	100	10	11	110	10	70-130	20
1,2,4,5-Tetramethylbenzene	10	3.2	32 Q	10	3.5	35 Q	9	70-130	20
Ethyl ether	10	9.9	99	10	9.8	98	1	59-134	20
trans-1,4-Dichloro-2-butene	10	9.1	91	10	9.2	92	1	70-130	20



**Method Blank Summary
Form 4
Volatiles**

Client	: Langan Engineering & Environmental	Lab Number	: L1909107
Project Name	: 491 WORTMAN	Project Number	: 170329301
Lab Sample ID	: WG1215584-5	Lab File ID	: V08190313N05
Instrument ID	: VOA108		
Matrix	: WATER	Analysis Date	: 03/13/19 19:48

Client Sample No.	Lab Sample ID	Analysis Date
WG1215584-3LCS	WG1215584-3	03/13/19 18:42
WG1215584-4LCSD	WG1215584-4	03/13/19 19:04
GWTB02_030819	L1909107-09	03/13/19 22:43
MW-6_030819	L1909107-01	03/13/19 23:49
MW-19_030819	L1909107-02D	03/14/19 00:10
MW-1_030819	L1909107-03	03/14/19 00:32
MW-18M_030819	L1909107-04	03/14/19 00:54
MW-18S_030819	L1909107-05	03/14/19 01:16
MW-17_030819	L1909107-06D	03/14/19 01:38
MW-02_030819	L1909107-07	03/14/19 02:00
GWDUP01_030819	L1909107-08	03/14/19 02:22

Instrument Performance Check (Tune) Summary

Form 5

Volatiles

Bromofluorobenzene (BFB)

Client	: Langan Engineering & Environmental	Lab Number	: L1909107
Project Name	: 491 WORTMAN	Project Number	: 170329301
Instrument ID	: VOA108	Analysis Date	: 02/18/19 18:56
Tune Standard	: WG1208025-1	Tune File ID	: V08190218NBF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	21
75	30.0 - 60.0% of mass 95	51.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.9 (1.1)1
174	Greater than 50.0 of mass 95	77.1
175	5.0 - 9.0% of mass 174	5.5 (7.1)1
176	95.0 - 101% of mass 174	75.8 (98.3)1
177	5.0 - 9.0% of mass 176	4.9 (6.4)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	R1159340-1	V08190218N04	02/18/19 20:23
STD1	R1159340-2	V08190218N06	02/18/19 21:07
STD2	R1159340-3	V08190218N08	02/18/19 21:50
STD3	R1159340-5	V08190218N09	02/18/19 22:12
STD4	R1159340-4	V08190218N10	02/18/19 22:34
STD6	R1159340-6	V08190218N11	02/18/19 22:56
STD8	R1159340-7	V08190218N12	02/18/19 23:18
STD10	R1159340-8	V08190218N13	02/18/19 23:40
ICV Quant Report	R1159340-9	V08190218N20	02/19/19 02:13

Instrument Performance Check (Tune) Summary

Form 5

Volatiles

Bromofluorobenzene (BFB)

Client	: Langan Engineering & Environmental	Lab Number	: L1909107
Project Name	: 491 WORTMAN	Project Number	: 170329301
Instrument ID	: VOA108	Analysis Date	: 03/13/19 18:00
Tune Standard	: WG1215584-1	Tune File ID	: V08190313NBF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	21.3
75	30.0 - 60.0% of mass 95	52.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.8 (1)1
174	Greater than 50.0 of mass 95	80.2
175	5.0 - 9.0% of mass 174	6 (7.5)1
176	95.0 - 101% of mass 174	76.9 (95.9)1
177	5.0 - 9.0% of mass 176	5.1 (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
WG1215584-2CCAL	WG1215584-2	V08190313N02	03/13/19 18:42
WG1215584-3LCS	WG1215584-3	V08190313N02	03/13/19 18:42
WG1215584-4LCSD	WG1215584-4	V08190313N03	03/13/19 19:04
WG1215584-5BLANK	WG1215584-5	V08190313N05	03/13/19 19:48
GWTB02_030819	L1909107-09	V08190313N13	03/13/19 22:43
MW-6_030819	L1909107-01	V08190313N16	03/13/19 23:49
MW-19_030819	L1909107-02D	V08190313N17	03/14/19 00:10
MW-1_030819	L1909107-03	V08190313N18	03/14/19 00:32
MW-18M_030819	L1909107-04	V08190313N19	03/14/19 00:54
MW-18S_030819	L1909107-05	V08190313N20	03/14/19 01:16
MW-17_030819	L1909107-06D	V08190313N21	03/14/19 01:38
MW-02_030819	L1909107-07	V08190313N22	03/14/19 02:00
GWDUP01_030819	L1909107-08	V08190313N23	03/14/19 02:22

Internal Standard Area and RT Summary

Form 8a

Volatiles

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Instrument ID : VOA108
 Sample No : WG1215584-2

Lab Number : L1909107
 Project Number : 170329301
 Analysis Date : 03/13/19 18:42
 Lab File ID : V08190313N02

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG1215584-2	302021	5.55	206709	8.53	100898	10.01
Upper Limit	604042	6.05	413418	9.03	201796	10.51
Lower Limit	151011	5.05	103355	8.03	50449	9.51
Sample ID						
WG1215584-3 LCS	302021	5.55	206709	8.53	100898	10.01
WG1215584-4 LCSD	300956	5.55	199502	8.53	95596	10.01
WG1215584-5 BLANK	277807	5.55	182593	8.53	73611	10.01
GWTB02_030819	254587	5.55	170191	8.53	68920	10.01
MW-6_030819	261645	5.55	178793	8.53	68845	10.01
MW-19_030819	244423	5.55	171126	8.53	59915	10.01
MW-1_030819	259898	5.55	179333	8.53	70502	10.01
MW-18M_030819	251122	5.55	176447	8.53	66482	10.01
MW-18S_030819	248447	5.55	176866	8.53	68256	10.01
MW-17_030819	258765	5.55	178808	8.53	67063	10.01
MW-02_030819	254732	5.55	174844	8.53	62357	10.01
GWDUP01_030819	254743	5.55	169755	8.53	59533	10.01

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: 06/19/18
Created By: Jason Hebert
File: PM5049-1
Page: 1

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	0.210	ug/l	70-130	20	70-130	20	20			
Chloroform	67-66-3	0.75	0.222	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	0.240	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	0.203	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	0.200	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	0.392	ug/l	70-130	20	70-130	20	20			
Xylene (Total)	1330-20-7	1	0.330	ug/l				20	20			
Xylene (Total)	1330-20-7	1	0.330	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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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	0.430	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	0.525	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	0.196	ug/l	70-130	20	70-130	20	20			
o-Chlorotoluene	95-49-8	2.5	0.215	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	0.220	ug/l	70-130	20	70-130	20	20			
1,3,5-Trimethylbenzene	108-67-8	2.5	0.217	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	0.213	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			

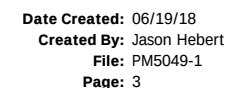
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Holding Time: 14 days
Container/Sample Preservation: 3 - Vial HCl preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
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Page: 1

Volatile Organics - EPA 8260C (SOIL-LOW)

Holding Time: 14 days
Container / Sample Preservation: 1 - Vial Large Septa unpreserved (4oz)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methylene chloride	75-09-2	5	2.29	ug/kg	70-130	30	70-130	30	30			
1,1-Dichloroethane	75-34-3	1	0.145	ug/kg	70-130	30	70-130	30	30			
Chloroform	67-66-3	1.5	0.140	ug/kg	70-130	30	70-130	30	30			
Carbon tetrachloride	56-23-5	1	0.230	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloropropane	78-87-5	1	0.125	ug/kg	70-130	30	70-130	30	30			
Dibromochloromethane	124-48-1	1	0.140	ug/kg	70-130	30	70-130	30	30			
1,1,2-Trichloroethane	79-00-5	1	0.267	ug/kg	70-130	30	70-130	30	30			
Tetrachloroethene	127-18-4	0.5	0.196	ug/kg	70-130	30	70-130	30	30			
Chlorobenzene	108-90-7	0.5	0.127	ug/kg	70-130	30	70-130	30	30			
Trichlorofluoromethane	75-69-4	4	0.695	ug/kg	70-139	30	70-139	30	30			
1,2-Dichloroethane	107-06-2	1	0.257	ug/kg	70-130	30	70-130	30	30			
1,1,1-Trichloroethane	71-55-6	0.5	0.167	ug/kg	70-130	30	70-130	30	30			
Bromodichloromethane	75-27-4	0.5	0.109	ug/kg	70-130	30	70-130	30	30			
trans-1,3-Dichloropropene	10061-02-6	1	0.273	ug/kg	70-130	30	70-130	30	30			
cis-1,3-Dichloropropene	10061-01-5	0.5	0.158	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropene, Total	542-75-6	0.5	0.158	ug/kg				30	30			
1,3-Dichloropropene, Total	542-75-6	0.5	0.158	ug/kg				30	30			
1,1-Dichloropropene	563-58-6	0.5	0.159	ug/kg	70-130	30	70-130	30	30			
Bromoform	75-25-2	4	0.246	ug/kg	70-130	30	70-130	30	30			
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.166	ug/kg	70-130	30	70-130	30	30			
Benzene	71-43-2	0.5	0.166	ug/kg	70-130	30	70-130	30	30			
Toluene	108-88-3	1	0.543	ug/kg	70-130	30	70-130	30	30			
Ethylbenzene	100-41-4	1	0.141	ug/kg	70-130	30	70-130	30	30			
Chloromethane	74-87-3	4	0.932	ug/kg	52-130	30	52-130	30	30			
Bromomethane	74-83-9	2	0.581	ug/kg	57-147	30	57-147	30	30			
Vinyl chloride	75-01-4	1	0.335	ug/kg	67-130	30	67-130	30	30			
Chloroethane	75-00-3	2	0.452	ug/kg	50-151	30	50-151	30	30			
1,1-Dichloroethene	75-35-4	1	0.238	ug/kg	65-135	30	65-135	30	30			
trans-1,2-Dichloroethene	156-60-5	1.5	0.137	ug/kg	70-130	30	70-130	30	30			
Trichloroethene	79-01-6	0.5	0.137	ug/kg	70-130	30	70-130	30	30			
1,2-Dichlorobenzene	95-50-1	2	0.144	ug/kg	70-130	30	70-130	30	30			
1,3-Dichlorobenzene	541-73-1	2	0.148	ug/kg	70-130	30	70-130	30	30			
1,4-Dichlorobenzene	106-46-7	2	0.171	ug/kg	70-130	30	70-130	30	30			
Methyl tert butyl ether	1634-04-4	2	0.201	ug/kg	66-130	30	66-130	30	30			
p/m-Xylene	179601-23-1	2	0.560	ug/kg	70-130	30	70-130	30	30			
o-Xylene	95-47-6	1	0.291	ug/kg	70-130	30	70-130	30	30			
Xylene (Total)	1330-20-7	1	0.291	ug/kg				30	30			
Xylene (Total)	1330-20-7	1	0.291	ug/kg				30	30			
cis-1,2-Dichloroethene	156-59-2	1	0.175	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloroethene (total)	540-59-0	1	0.137	ug/kg				30	30			
1,2-Dichloroethene (total)	540-59-0	1	0.137	ug/kg				30	30			
Dibromomethane	74-95-3	2	0.238	ug/kg	70-130	30	70-130	30	30			

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File: PM5047-1
Page: 2

Volatile Organics - EPA 8260C (SOIL-LOW)

Holding Time: 14 days
Container / Sample Preservation: 1 - Vial Large Septa unpreserved (4oz)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,4-Dichlorobutane	110-56-5	10	0.226	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichloropropane	96-18-4	2	0.127	ug/kg	68-130	30	68-130	30	30			
Styrene	100-42-5	1	0.196	ug/kg	70-130	30	70-130	30	30			
Dichlorodifluoromethane	75-71-8	10	0.915	ug/kg	30-146	30	30-146	30	30			
Acetone	67-64-1	10	4.81	ug/kg	54-140	30	54-140	30	30			
Carbon disulfide	75-15-0	10	4.55	ug/kg	59-130	30	59-130	30	30			
2-Butanone	78-93-3	10	2.22	ug/kg	70-130	30	70-130	30	30			
Vinyl acetate	108-05-4	10	2.15	ug/kg	70-130	30	70-130	30	30			
4-Methyl-2-pentanone	108-10-1	10	1.28	ug/kg	70-130	30	70-130	30	30			
2-Hexanone	591-78-6	10	1.18	ug/kg	70-130	30	70-130	30	30			
Ethyl methacrylate	97-63-2	10	1.58	ug/kg	70-130	30	70-130	30	30			
Acrylonitrile	107-13-1	4	1.15	ug/kg	70-130	30	70-130	30	30			
Bromochloromethane	74-97-5	2	0.205	ug/kg	70-130	30	70-130	30	30			
Tetrahydrofuran	109-99-9	4	1.59	ug/kg	66-130	30	66-130	30	30			
2,2-Dichloropropane	594-20-7	2	0.202	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromoethane	106-93-4	1	0.279	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropane	142-28-9	2	0.167	ug/kg	69-130	30	69-130	30	30			
1,1,1,2-Tetrachloroethane	630-20-6	0.5	0.132	ug/kg	70-130	30	70-130	30	30			
Bromobenzene	108-86-1	2	0.145	ug/kg	70-130	30	70-130	30	30			
n-Butylbenzene	104-51-8	1	0.167	ug/kg	70-130	30	70-130	30	30			
sec-Butylbenzene	135-98-8	1	0.146	ug/kg	70-130	30	70-130	30	30			
tert-Butylbenzene	98-06-6	2	0.118	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trichlorobenzene	108-70-3	2	0.173	ug/kg	70-139	30	70-130	30	30			
o-Chlorotoluene	95-49-8	2	0.191	ug/kg	70-130	30	70-130	30	30			
p-Chlorotoluene	106-43-4	2	0.108	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromo-3-chloropropane	96-12-8	3	0.998	ug/kg	68-130	30	68-130	30	30			
Hexachlorobutadiene	87-68-3	4	0.169	ug/kg	67-130	30	67-130	30	30			
Isopropylbenzene	98-82-8	1	0.109	ug/kg	70-130	30	70-130	30	30			
p-Isopropyltoluene	99-87-6	1	0.109	ug/kg	70-130	30	70-130	30	30			
Naphthalene	91-20-3	4	0.650	ug/kg	70-130	30	70-130	30	30			
n-Propylbenzene	103-65-1	1	0.171	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichlorobenzene	87-61-6	2	0.322	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trichlorobenzene	120-82-1	2	0.272	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trimethylbenzene	108-67-8	2	0.193	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trimethylbenzene	95-63-6	2	0.334	ug/kg	70-130	30	70-130	30	30			
trans-1,4-Dichloro-2-butene	110-57-6	5	1.42	ug/kg	70-130	30	70-130	30	30			
iso-Propyl Alcohol	67-63-0	100	100	ug/kg	70-130	20	70-130	20	20			
Ethyl ether	60-29-7	2	0.341	ug/kg	67-130	30	67-130	30	30			
Methyl Acetate	79-20-9	4	0.950	ug/kg	65-130	30	65-130	30	30			
Ethyl Acetate	141-78-6	10	1.21	ug/kg	70-130	30	70-130	30	30			
Isopropyl Ether	108-20-3	2	0.213	ug/kg	66-130	30	66-130	30	30			
Cyclohexane	110-82-7	10	0.544	ug/kg	70-130	30	70-130	30	30			

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Page: 3

Volatile Organics - EPA 8260C (SOIL-LOW)

Holding Time: 14 days
Container/Sample Preservation: 1 - Vial Large Septa unpreserved (4oz)

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Page: 1

Volatile Organics - EPA 8260C (SOIL-HIGH)

Holding Time: 14 days
Container / Sample Preservation: 1 - Vial Large Septa unpreserved (4oz)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methylene chloride	75-09-2	250	115	ug/kg	70-130	30	70-130	30	30			
1,1-Dichloroethane	75-34-3	50	7.25	ug/kg	70-130	30	70-130	30	30			
Chloroform	67-66-3	75	7.00	ug/kg	70-130	30	70-130	30	30			
Carbon tetrachloride	56-23-5	50	11.5	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloropropane	78-87-5	50	6.25	ug/kg	70-130	30	70-130	30	30			
Dibromochloromethane	124-48-1	50	7.00	ug/kg	70-130	30	70-130	30	30			
1,1,2-Trichloroethane	79-00-5	50	13.4	ug/kg	70-130	30	70-130	30	30			
Tetrachloroethene	127-18-4	25	9.80	ug/kg	70-130	30	70-130	30	30			
Chlorobenzene	108-90-7	25	6.35	ug/kg	70-130	30	70-130	30	30			
Trichlorofluoromethane	75-69-4	200	34.8	ug/kg	70-139	30	70-139	30	30			
1,2-Dichloroethane	107-06-2	50	12.9	ug/kg	70-130	30	70-130	30	30			
1,1,1-Trichloroethane	71-55-6	25	8.35	ug/kg	70-130	30	70-130	30	30			
Bromodichloromethane	75-27-4	25	5.45	ug/kg	70-130	30	70-130	30	30			
trans-1,3-Dichloropropene	10061-02-6	50	13.7	ug/kg	70-130	30	70-130	30	30			
cis-1,3-Dichloropropene	10061-01-5	25	7.90	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropene, Total	542-75-6	25	7.90	ug/kg				30	30			
1,3-Dichloropropene, Total	542-75-6	25	7.90	ug/kg				30	30			
1,1-Dichloropropene	563-58-6	25	7.95	ug/kg	70-130	30	70-130	30	30			
Bromoform	75-25-2	200	12.3	ug/kg	70-130	30	70-130	30	30			
1,1,2,2-Tetrachloroethane	79-34-5	25	8.30	ug/kg	70-130	30	70-130	30	30			
Benzene	71-43-2	25	8.30	ug/kg	70-130	30	70-130	30	30			
Toluene	108-88-3	50	27.2	ug/kg	70-130	30	70-130	30	30			
Ethylbenzene	100-41-4	50	7.05	ug/kg	70-130	30	70-130	30	30			
Chloromethane	74-87-3	200	46.6	ug/kg	52-130	30	52-130	30	30			
Bromomethane	74-83-9	100	29.1	ug/kg	57-147	30	57-147	30	30			
Vinyl chloride	75-01-4	50	16.8	ug/kg	67-130	30	67-130	30	30			
Chloroethane	75-00-3	100	22.6	ug/kg	50-151	30	50-151	30	30			
1,1-Dichloroethene	75-35-4	50	11.9	ug/kg	65-135	30	65-135	30	30			
trans-1,2-Dichloroethene	156-60-5	75	6.85	ug/kg	70-130	30	70-130	30	30			
Trichloroethene	79-01-6	25	6.85	ug/kg	70-130	30	70-130	30	30			
1,2-Dichlorobenzene	95-50-1	100	7.20	ug/kg	70-130	30	70-130	30	30			
1,3-Dichlorobenzene	541-73-1	100	7.40	ug/kg	70-130	30	70-130	30	30			
1,4-Dichlorobenzene	106-46-7	100	8.55	ug/kg	70-130	30	70-130	30	30			
Methyl tert butyl ether	1634-04-4	100	10.1	ug/kg	66-130	30	66-130	30	30			
p/m-Xylene	179601-23-1	100	28.0	ug/kg	70-130	30	70-130	30	30			
o-Xylene	95-47-6	50	14.6	ug/kg	70-130	30	70-130	30	30			
Xylene (Total)	1330-20-7	50	14.6	ug/kg				30	30			
Xylene (Total)	1330-20-7	50	14.6	ug/kg				30	30			
cis-1,2-Dichloroethene	156-59-2	50	8.75	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloroethene (total)	540-59-0	50	6.85	ug/kg				30	30			
1,2-Dichloroethene (total)	540-59-0	50	6.85	ug/kg				30	30			
Dibromomethane	74-95-3	100	11.9	ug/kg	70-130	30	70-130	30	30			

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
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Page: 2

Volatile Organics - EPA 8260C (SOIL-HIGH)

Holding Time: 14 days
Container / Sample Preservation: 1 - Vial Large Septa unpreserved (4oz)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,4-Dichlorobutane	110-56-5	500	11.3	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichloropropane	96-18-4	100	6.35	ug/kg	68-130	30	68-130	30	30			
Styrene	100-42-5	50	9.80	ug/kg	70-130	30	70-130	30	30			
Dichlorodifluoromethane	75-71-8	500	45.8	ug/kg	30-146	30	30-146	30	30			
Acetone	67-64-1	500	241	ug/kg	54-140	30	54-140	30	30			
Carbon disulfide	75-15-0	500	228	ug/kg	59-130	30	59-130	30	30			
2-Butanone	78-93-3	500	111	ug/kg	70-130	30	70-130	30	30			
Vinyl acetate	108-05-4	500	108	ug/kg	70-130	30	70-130	30	30			
4-Methyl-2-pentanone	108-10-1	500	64.0	ug/kg	70-130	30	70-130	30	30			
2-Hexanone	591-78-6	500	59.0	ug/kg	70-130	30	70-130	30	30			
Ethyl methacrylate	97-63-2	500	79.0	ug/kg	70-130	30	70-130	30	30			
Acrylonitrile	107-13-1	200	57.5	ug/kg	70-130	30	70-130	30	30			
Bromochloromethane	74-97-5	100	10.3	ug/kg	70-130	30	70-130	30	30			
Tetrahydrofuran	109-99-9	200	79.5	ug/kg	66-130	30	66-130	30	30			
2,2-Dichloropropane	594-20-7	100	10.1	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromoethane	106-93-4	50	14.0	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropane	142-28-9	100	8.35	ug/kg	69-130	30	69-130	30	30			
1,1,1,2-Tetrachloroethane	630-20-6	25	6.60	ug/kg	70-130	30	70-130	30	30			
Bromobenzene	108-86-1	100	7.25	ug/kg	70-130	30	70-130	30	30			
n-Butylbenzene	104-51-8	50	8.35	ug/kg	70-130	30	70-130	30	30			
sec-Butylbenzene	135-98-8	50	7.30	ug/kg	70-130	30	70-130	30	30			
tert-Butylbenzene	98-06-6	100	5.90	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trichlorobenzene	108-70-3	100	8.65	ug/kg	70-139	30	70-130	30	30			
o-Chlorotoluene	95-49-8	100	9.55	ug/kg	70-130	30	70-130	30	30			
p-Chlorotoluene	106-43-4	100	5.40	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromo-3-chloropropane	96-12-8	150	49.9	ug/kg	68-130	30	68-130	30	30			
Hexachlorobutadiene	87-68-3	200	8.45	ug/kg	67-130	30	67-130	30	30			
Isopropylbenzene	98-82-8	50	5.45	ug/kg	70-130	30	70-130	30	30			
p-Isopropyltoluene	99-87-6	50	5.45	ug/kg	70-130	30	70-130	30	30			
Naphthalene	91-20-3	200	32.5	ug/kg	70-130	30	70-130	30	30			
n-Propylbenzene	103-65-1	50	8.55	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichlorobenzene	87-61-6	100	16.1	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trichlorobenzene	120-82-1	100	13.6	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trimethylbenzene	108-67-8	100	9.65	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trimethylbenzene	95-63-6	100	16.7	ug/kg	70-130	30	70-130	30	30			
trans-1,4-Dichloro-2-butene	110-57-6	250	71.0	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	100	17.1	ug/kg	67-130	30	67-130	30	30			
Methyl Acetate	79-20-9	200	47.5	ug/kg	65-130	30	65-130	30	30			
Ethyl Acetate	141-78-6	500	60.5	ug/kg	70-130	30	70-130	30	30			
Isopropyl Ether	108-20-3	100	10.7	ug/kg	66-130	30	66-130	30	30			
Cyclohexane	110-82-7	500	27.2	ug/kg	70-130	30	70-130	30	30			

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Page: 3

Volatile Organics - EPA 8260C (SOIL-HIGH)

Holding Time: 14 days

Container/Sample Preservation: 1 - Vial Large Septa unpreserved (4oz)

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Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
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Volatiles Sample Data

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-01
 Client ID : MW-6_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N16
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 11:10
 Date Received : 03/08/19
 Date Analyzed : 03/13/19 23:49
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 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	0.32	1.0	0.14	J
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	150	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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-01
 Client ID : MW-6_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N16
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 11:10
 Date Received : 03/08/19
 Date Analyzed : 03/13/19 23:49
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	0.20	0.50	0.17	J
156-60-5	trans-1,2-Dichloroethene	0.91	2.5	0.70	J
79-01-6	Trichloroethene	95	0.50	0.18	
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	4.4	2.5	0.70	
540-59-0	1,2-Dichloroethene, Total	5.3	2.5	0.70	J
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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	2.8	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-01
 Client ID : MW-6_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N16
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 11:10
 Date Received : 03/08/19
 Date Analyzed : 03/13/19 23:49
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-01
 Client ID : MW-6_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N16
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 11:10
 Date Received : 03/08/19
 Date Analyzed : 03/13/19 23:49
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-02D
 Client ID : MW-19_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N17
 Sample Amount : 0.4 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 10:16
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 00:10
 Dilution Factor : 25
 Analyst : NLK
 Instrument ID : VOA108
 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	62	18.	U
75-34-3	1,1-Dichloroethane	ND	62	18.	U
67-66-3	Chloroform	ND	62	18.	U
56-23-5	Carbon tetrachloride	ND	12	3.4	U
78-87-5	1,2-Dichloropropane	ND	25	3.4	U
124-48-1	Dibromochloromethane	ND	12	3.7	U
79-00-5	1,1,2-Trichloroethane	ND	38	12.	U
127-18-4	Tetrachloroethene	2600	12	4.5	
108-90-7	Chlorobenzene	ND	62	18.	U
75-69-4	Trichlorofluoromethane	ND	62	18.	U
107-06-2	1,2-Dichloroethane	ND	12	3.3	U
71-55-6	1,1,1-Trichloroethane	ND	62	18.	U
75-27-4	Bromodichloromethane	ND	12	4.8	U
10061-02-6	trans-1,3-Dichloropropene	ND	12	4.1	U
10061-01-5	cis-1,3-Dichloropropene	ND	12	3.6	U
542-75-6	1,3-Dichloropropene, Total	ND	12	3.6	U
563-58-6	1,1-Dichloropropene	ND	62	18.	U
75-25-2	Bromoform	ND	50	16.	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	12	4.2	U
71-43-2	Benzene	ND	12	4.0	U
108-88-3	Toluene	ND	62	18.	U
100-41-4	Ethylbenzene	ND	62	18.	U
74-87-3	Chloromethane	ND	62	18.	U
74-83-9	Bromomethane	ND	62	18.	U
75-01-4	Vinyl chloride	ND	25	1.8	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-02D
 Client ID : MW-19_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N17
 Sample Amount : 0.4 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 10:16
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 00:10
 Dilution Factor : 25
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-00-3	Chloroethane	ND	62	18.	U
75-35-4	1,1-Dichloroethene	ND	12	4.2	U
156-60-5	trans-1,2-Dichloroethene	ND	62	18.	U
79-01-6	Trichloroethene	2100	12	4.4	
95-50-1	1,2-Dichlorobenzene	ND	62	18.	U
541-73-1	1,3-Dichlorobenzene	ND	62	18.	U
106-46-7	1,4-Dichlorobenzene	ND	62	18.	U
1634-04-4	Methyl tert butyl ether	ND	62	18.	U
179601-23-1	p/m-Xylene	ND	62	18.	U
95-47-6	o-Xylene	ND	62	18.	U
1330-20-7	Xylenes, Total	ND	62	18.	U
156-59-2	cis-1,2-Dichloroethene	35	62	18.	J
540-59-0	1,2-Dichloroethene, Total	35	62	18.	J
74-95-3	Dibromomethane	ND	120	25.	U
96-18-4	1,2,3-Trichloropropane	ND	62	18.	U
107-13-1	Acrylonitrile	ND	120	38.	U
100-42-5	Styrene	ND	62	18.	U
75-71-8	Dichlorodifluoromethane	ND	120	25.	U
67-64-1	Acetone	ND	120	36.	U
75-15-0	Carbon disulfide	ND	120	25.	U
78-93-3	2-Butanone	ND	120	48.	U
108-05-4	Vinyl acetate	ND	120	25.	U
108-10-1	4-Methyl-2-pentanone	ND	120	25.	U
591-78-6	2-Hexanone	ND	120	25.	U
74-97-5	Bromochloromethane	ND	62	18.	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-02D
 Client ID : MW-19_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N17
 Sample Amount : 0.4 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 10:16
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 00:10
 Dilution Factor : 25
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	62	18.	U
106-93-4	1,2-Dibromoethane	ND	50	16.	U
142-28-9	1,3-Dichloropropane	ND	62	18.	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	62	18.	U
108-86-1	Bromobenzene	ND	62	18.	U
104-51-8	n-Butylbenzene	ND	62	18.	U
135-98-8	sec-Butylbenzene	ND	62	18.	U
98-06-6	tert-Butylbenzene	ND	62	18.	U
95-49-8	o-Chlorotoluene	ND	62	18.	U
106-43-4	p-Chlorotoluene	ND	62	18.	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	62	18.	U
87-68-3	Hexachlorobutadiene	ND	62	18.	U
98-82-8	Isopropylbenzene	ND	62	18.	U
99-87-6	p-Isopropyltoluene	ND	62	18.	U
91-20-3	Naphthalene	ND	62	18.	U
103-65-1	n-Propylbenzene	ND	62	18.	U
87-61-6	1,2,3-Trichlorobenzene	ND	62	18.	U
120-82-1	1,2,4-Trichlorobenzene	ND	62	18.	U
108-67-8	1,3,5-Trimethylbenzene	ND	62	18.	U
95-63-6	1,2,4-Trimethylbenzene	ND	62	18.	U
123-91-1	1,4-Dioxane	ND	6200	1500	U
105-05-5	p-Diethylbenzene	ND	50	18.	U
622-96-8	p-Ethyltoluene	ND	50	18.	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	50	14.	U
60-29-7	Ethyl ether	ND	62	18.	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-02D
 Client ID : MW-19_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N17
 Sample Amount : 0.4 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 10:16
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 00:10
 Dilution Factor : 25
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	62	18.	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-03
 Client ID : MW-1_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N18
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 09:15
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 00:32
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 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	0.54	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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-03
 Client ID : MW-1_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N18
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 09:15
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 00:32
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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	0.40	0.50	0.18	J
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-03
 Client ID : MW-1_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N18
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 09:15
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 00:32
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-03
 Client ID : MW-1_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N18
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 09:15
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 00:32
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-04
 Client ID : MW-18M_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N19
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 10:25
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 00:54
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 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	56	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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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	0.10	1.0	0.07	J



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-04
 Client ID : MW-18M_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N19
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 10:25
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 00:54
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	0.28	0.50	0.17	J
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	59	0.50	0.18	
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	2.2	2.5	0.70	J
540-59-0	1,2-Dichloroethene, Total	2.2	2.5	0.70	J
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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	2.2	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-04
 Client ID : MW-18M_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N19
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 10:25
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 00:54
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-04
 Client ID : MW-18M_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N19
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 10:25
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 00:54
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-05
 Client ID : MW-18S_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N20
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 11:00
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 01:16
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 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	5.6	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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-05
 Client ID : MW-18S_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N20
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 11:00
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 01:16
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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	11	0.50	0.18	
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	1.7	2.5	0.70	J
540-59-0	1,2-Dichloroethene, Total	1.7	2.5	0.70	J
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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	5.0	5.0	1.5	
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-05
 Client ID : MW-18S_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N20
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 11:00
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 01:16
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-05
 Client ID : MW-18S_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N20
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 11:00
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 01:16
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-06D
 Client ID : MW-17_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N21
 Sample Amount : 5 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 11:45
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 01:38
 Dilution Factor : 2
 Analyst : NLK
 Instrument ID : VOA108
 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	5.0	1.4	U
75-34-3	1,1-Dichloroethane	ND	5.0	1.4	U
67-66-3	Chloroform	ND	5.0	1.4	U
56-23-5	Carbon tetrachloride	ND	1.0	0.27	U
78-87-5	1,2-Dichloropropane	ND	2.0	0.27	U
124-48-1	Dibromochloromethane	ND	1.0	0.30	U
79-00-5	1,1,2-Trichloroethane	ND	3.0	1.0	U
127-18-4	Tetrachloroethene	190	1.0	0.36	
108-90-7	Chlorobenzene	ND	5.0	1.4	U
75-69-4	Trichlorofluoromethane	ND	5.0	1.4	U
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	U
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.4	U
75-27-4	Bromodichloromethane	ND	1.0	0.38	U
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.33	U
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	U
542-75-6	1,3-Dichloropropene, Total	ND	1.0	0.29	U
563-58-6	1,1-Dichloropropene	ND	5.0	1.4	U
75-25-2	Bromoform	ND	4.0	1.3	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	U
71-43-2	Benzene	ND	1.0	0.32	U
108-88-3	Toluene	ND	5.0	1.4	U
100-41-4	Ethylbenzene	ND	5.0	1.4	U
74-87-3	Chloromethane	ND	5.0	1.4	U
74-83-9	Bromomethane	ND	5.0	1.4	U
75-01-4	Vinyl chloride	ND	2.0	0.14	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-06D
 Client ID : MW-17_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N21
 Sample Amount : 5 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 11:45
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 01:38
 Dilution Factor : 2
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-00-3	Chloroethane	ND	5.0	1.4	U
75-35-4	1,1-Dichloroethene	ND	1.0	0.34	U
156-60-5	trans-1,2-Dichloroethene	ND	5.0	1.4	U
79-01-6	Trichloroethene	120	1.0	0.35	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.4	U
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.4	U
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.4	U
1634-04-4	Methyl tert butyl ether	ND	5.0	1.4	U
179601-23-1	p/m-Xylene	ND	5.0	1.4	U
95-47-6	o-Xylene	ND	5.0	1.4	U
1330-20-7	Xylenes, Total	ND	5.0	1.4	U
156-59-2	cis-1,2-Dichloroethene	6.0	5.0	1.4	
540-59-0	1,2-Dichloroethene, Total	6.0	5.0	1.4	
74-95-3	Dibromomethane	ND	10	2.0	U
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.4	U
107-13-1	Acrylonitrile	ND	10	3.0	U
100-42-5	Styrene	ND	5.0	1.4	U
75-71-8	Dichlorodifluoromethane	ND	10	2.0	U
67-64-1	Acetone	ND	10	2.9	U
75-15-0	Carbon disulfide	ND	10	2.0	U
78-93-3	2-Butanone	ND	10	3.9	U
108-05-4	Vinyl acetate	ND	10	2.0	U
108-10-1	4-Methyl-2-pentanone	ND	10	2.0	U
591-78-6	2-Hexanone	ND	10	2.0	U
74-97-5	Bromochloromethane	ND	5.0	1.4	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-06D
 Client ID : MW-17_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N21
 Sample Amount : 5 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 11:45
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 01:38
 Dilution Factor : 2
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	5.0	1.4	U
106-93-4	1,2-Dibromoethane	ND	4.0	1.3	U
142-28-9	1,3-Dichloropropane	ND	5.0	1.4	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.4	U
108-86-1	Bromobenzene	ND	5.0	1.4	U
104-51-8	n-Butylbenzene	ND	5.0	1.4	U
135-98-8	sec-Butylbenzene	ND	5.0	1.4	U
98-06-6	tert-Butylbenzene	ND	5.0	1.4	U
95-49-8	o-Chlorotoluene	ND	5.0	1.4	U
106-43-4	p-Chlorotoluene	ND	5.0	1.4	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	U
87-68-3	Hexachlorobutadiene	ND	5.0	1.4	U
98-82-8	Isopropylbenzene	ND	5.0	1.4	U
99-87-6	p-Isopropyltoluene	ND	5.0	1.4	U
91-20-3	Naphthalene	ND	5.0	1.4	U
103-65-1	n-Propylbenzene	ND	5.0	1.4	U
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.4	U
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.4	U
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.4	U
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.4	U
123-91-1	1,4-Dioxane	ND	500	120	U
105-05-5	p-Diethylbenzene	ND	4.0	1.4	U
622-96-8	p-Ethyltoluene	ND	4.0	1.4	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	4.0	1.1	U
60-29-7	Ethyl ether	ND	5.0	1.4	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-06D
 Client ID : MW-17_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N21
 Sample Amount : 5 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 11:45
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 01:38
 Dilution Factor : 2
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	1.4	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-07
 Client ID : MW-02_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N22
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 09:40
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 02:00
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 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	0.41	0.50	0.18	J
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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-07
 Client ID : MW-02_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N22
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 09:40
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 02:00
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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	0.28	0.50	0.18	J
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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	2.2	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-07
 Client ID : MW-02_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N22
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 09:40
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 02:00
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-07
 Client ID : MW-02_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N22
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 09:40
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 02:00
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-08
 Client ID : GWDUP01_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N23
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 00:00
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 02:22
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 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	0.18	0.50	0.18	J
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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-08
 Client ID : GWDUP01_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N23
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 00:00
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 02:22
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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	0.18	0.50	0.18	J
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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	1.7	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-08
 Client ID : GWDUP01_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N23
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 00:00
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 02:22
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-08
 Client ID : GWDUP01_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N23
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 00:00
 Date Received : 03/08/19
 Date Analyzed : 03/14/19 02:22
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-09
 Client ID : GWTB02_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N13
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 00:00
 Date Received : 03/08/19
 Date Analyzed : 03/13/19 22:43
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-09
 Client ID : GWTB02_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N13
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 00:00
 Date Received : 03/08/19
 Date Analyzed : 03/13/19 22:43
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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	4.1	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-09
 Client ID : GWTB02_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N13
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 00:00
 Date Received : 03/08/19
 Date Analyzed : 03/13/19 22:43
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : L1909107-09
 Client ID : GWTB02_030819
 Sample Location : BROOKLYN
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N13
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : 03/08/19 00:00
 Date Received : 03/08/19
 Date Analyzed : 03/13/19 22:43
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : WG1215584-5
 Client ID : WG1215584-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/13/19 19:48
 Dilution Factor : 1
 Analyst : KJD
 Instrument ID : VOA108
 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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : WG1215584-5
 Client ID : WG1215584-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/13/19 19:48
 Dilution Factor : 1
 Analyst : KJD
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : WG1215584-5
 Client ID : WG1215584-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/13/19 19:48
 Dilution Factor : 1
 Analyst : KJD
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Lab ID : WG1215584-5
 Client ID : WG1215584-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1909107
 Project Number : 170329301
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/13/19 19:48
 Dilution Factor : 1
 Analyst : KJD
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N13.D
 Acq On : 13 Mar 2019 10:43 pm
 Operator : VOA108:NLK
 Sample : 11909107-09,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 14 12:33:42 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	254587	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery	=	84.29%	
59) Chlorobenzene-d5	8.526	117	170191	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery	=	82.33%	
79) 1,4-Dichlorobenzene-d4	10.010	152	68920	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery	=	68.31%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.575	113	72854	11.204	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	112.04%	
43) 1,2-Dichloroethane-d4	5.208	65	85211	11.659	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	116.59%	
60) Toluene-d8	7.241	98	225405	9.663	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	96.63%	
83) 4-Bromofluorobenzene	9.343	95	72176	10.703	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	107.03%	
Target Compounds						
2) Dichlorodifluoromethane	0.000		0		N.D.	Qvalue
3) Chloromethane	1.094	50	161		N.D.	
4) Vinyl chloride	0.000		0		N.D.	
5) Bromomethane	1.354	94	259		N.D.	
6) Chloroethane	1.426	64	89		N.D.	
7) Trichlorofluoromethane	0.000		0		N.D.	
8) Ethyl ether	0.000		0		N.D.	
10) 1,1-Dichloroethene	0.000		0		N.D.	
11) Carbon disulfide	1.925	76	26		N.D.	
15) Methylene chloride	0.000		0		N.D.	
17) Acetone	2.466	43	4072M1	4.115	ug/L	
18) trans-1,2-Dichloroethene	0.000		0		N.D.	
20) Methyl tert-butyl ether	0.000		0		N.D.	
23) 1,1-Dichloroethane	0.000		0		N.D.	
25) Acrylonitrile	0.000		0		N.D.	
27) Vinyl acetate	0.000		0		N.D.	
28) cis-1,2-Dichloroethene	0.000		0		N.D.	
29) 2,2-Dichloropropane	0.000		0		N.D.	
30) Bromochloromethane	0.000		0		N.D.	
32) Chloroform	0.000		0		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N13.D
 Acq On : 13 Mar 2019 10:43 pm
 Operator : VOA108:NLK
 Sample : 11909107-09,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 14 12:33:42 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0		N.D.	
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	d
40) 1,1-Dichloropropene	0.000		0		N.D.	
41) Benzene	5.038	78	25		N.D.	
44) 1,2-Dichloroethane	5.294	62	185		N.D.	
48) Trichloroethene	5.724	95	55		N.D.	
50) Dibromomethane	0.000		0		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.	
61) Toluene	0.000		0		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	0.000		0		N.D.	
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.	
70) 1,3-Dichloropropane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	8.526	43	122		N.D.	
73) Chlorobenzene	8.535	112	187		N.D.	
74) Ethylbenzene	8.576	91	56		N.D.	
75) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
76) p/m Xylene	0.000		0		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	9.343	105	59		N.D.	
84) Bromobenzene	0.000		0		N.D.	
85) n-Propylbenzene	9.340	91	249		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
88) 4-Ethyltoluene	9.343	105	59		N.D.	
89) 2-Chlorotoluene	9.340	91	249		N.D.	
90) 1,3,5-Trimethylbenzene	0.000		0		N.D.	
91) 1,2,3-Trichloropropane	0.000		0		N.D.	
92) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
93) 4-Chlorotoluene	0.000		0		N.D.	
94) tert-Butylbenzene	0.000		0		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N13.D
 Acq On : 13 Mar 2019 10:43 pm
 Operator : VOA108:NLK
 Sample : l1909107-09,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 14 12:33:42 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	0.000		0		N.D.	
98)	sec-Butylbenzene	0.000		0		N.D.	
99)	p-Isopropyltoluene	0.000		0		N.D.	
100)	1,3-Dichlorobenzene	9.965	146	84		N.D.	
101)	1,4-Dichlorobenzene	10.018	146	138		N.D.	
102)	p-Diethylbenzene	0.000		0		N.D.	
103)	n-Butylbenzene	10.007	91	190		N.D.	
104)	1,2-Dichlorobenzene	0.000		0		N.D.	
105)	1,2,4,5-Tetramethylben...	0.000		0		N.D.	
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	0.000		0		N.D.	
110)	Naphthalene	0.000		0		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

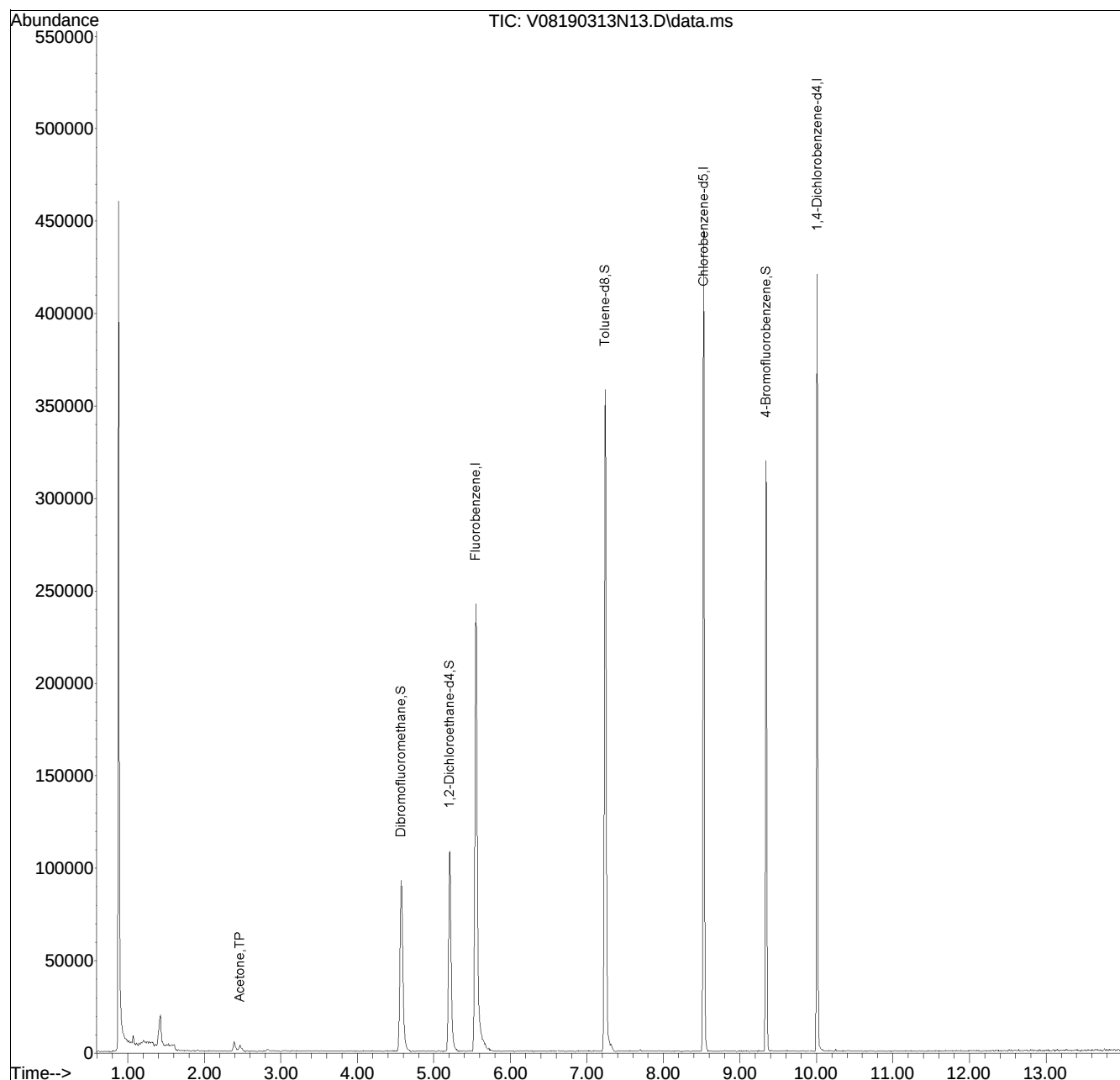
(#) = qualifier out of range (m) = manual integration (+) = signals summed

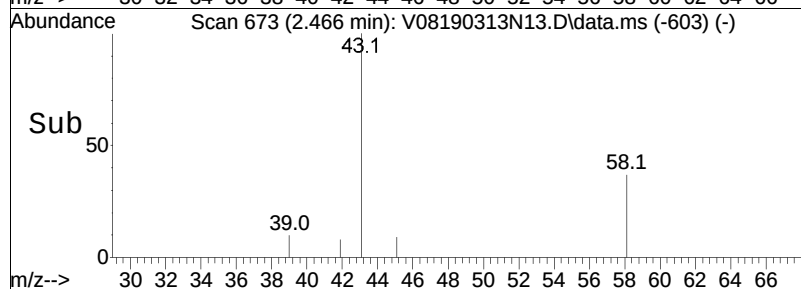
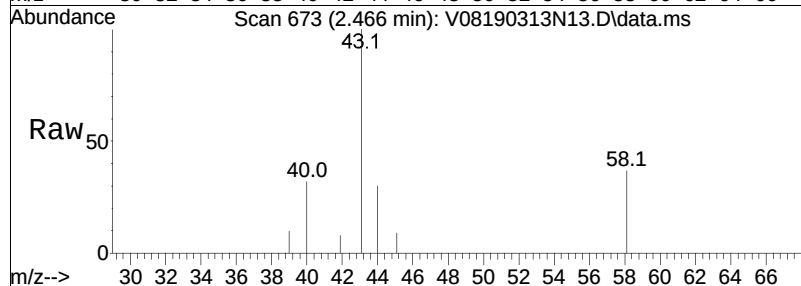
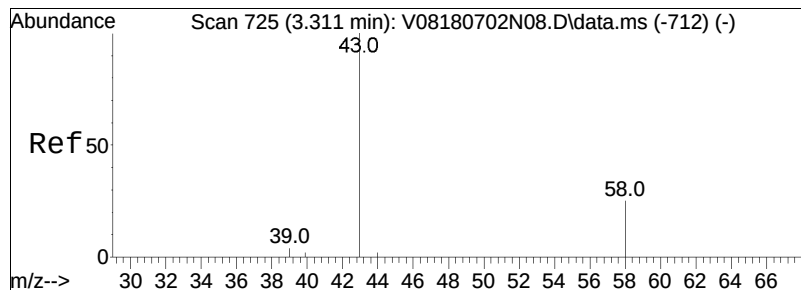
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N13.D
 Acq On : 13 Mar 2019 10:43 pm
 Operator : VOA108:NLK
 Sample : 11909107-09,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 14 12:33:42 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

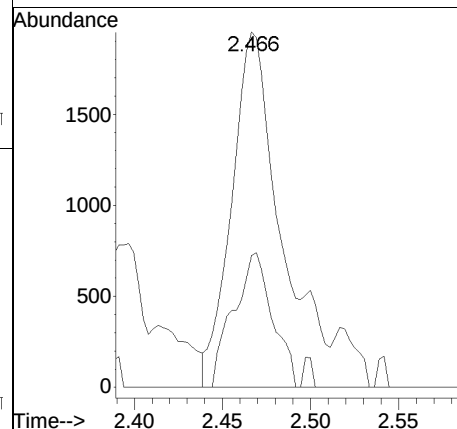
Sub List : 8260-NYTCL - Megamix plus Diox90313N\V08190313N02.D•





#17
 Acetone
 Concen: 4.11 ug/L M1
 RT: 2.466 min Scan# 673
 Delta R.T. -0.006 min
 Lab File: V08190313N13.D
 Acq: 13 Mar 2019 10:43 pm

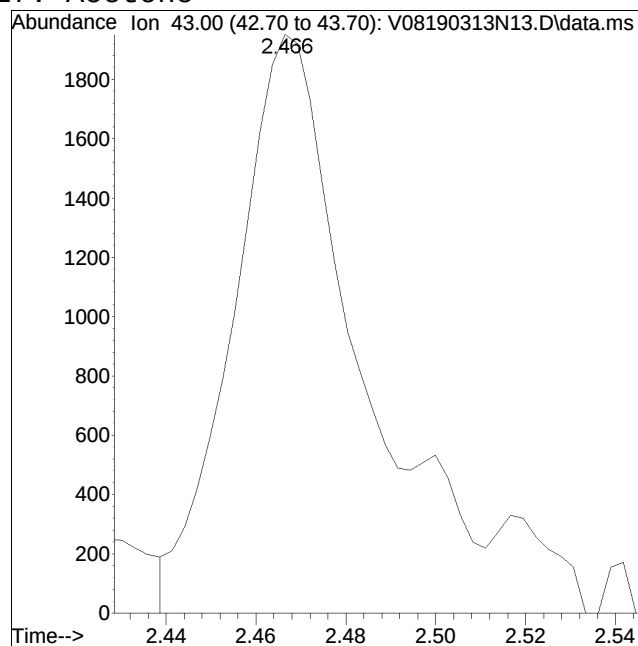
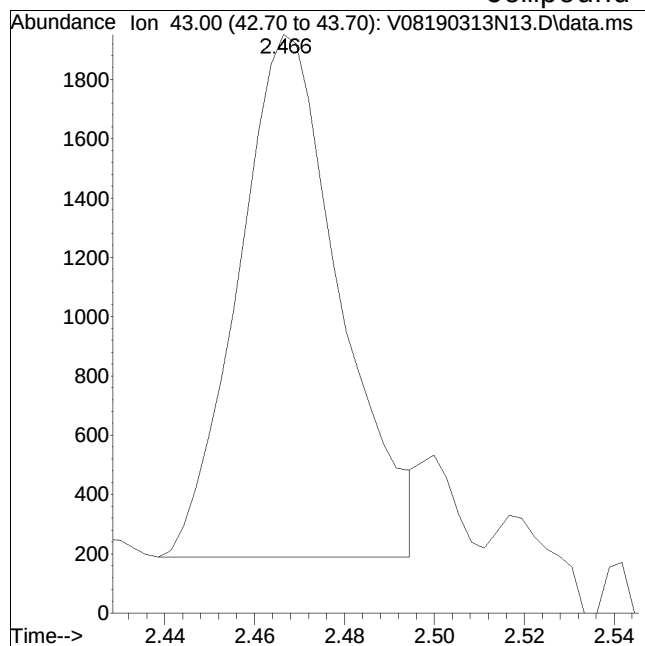
Tgt Ion	Ratio	Lower	Upper
43	100		
58	28.1	24.2	36.4



Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190313N13.D Operator : VOA108:NLK
Date Inj'd : 3/13/2019 10:43 pm Instrument : VOA 108
Sample : l1909107-09,31,10,10,,a Quant Date : 3/14/2019 11:43 am

Compound #17: Acetone



Original Peak Response = 2765

Manual Peak Response = 4072 M1

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N16.D
 Acq On : 13 Mar 2019 11:49 pm
 Operator : VOA108:NLK
 Sample : 11909107-01,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 14 12:35:33 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	261645	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery	=	86.63%	
59) Chlorobenzene-d5	8.526	117	178793	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery	=	86.50%	
79) 1,4-Dichlorobenzene-d4	10.010	152	68845	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery	=	68.23%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	74633	11.168	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	111.68%	
43) 1,2-Dichloroethane-d4	5.210	65	86886	11.567	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	115.67%	
60) Toluene-d8	7.241	98	233700	9.537	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	95.37%	
83) 4-Bromofluorobenzene	9.340	95	73768	10.951	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	109.51%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	1.092	50	211	N.D.		
4) Vinyl chloride	1.150	62	309	N.D.		
5) Bromomethane	1.359	94	421	0.089	ug/L	90
6) Chloroethane	1.440	64	259	N.D.		
7) Trichlorofluoromethane	1.552	101	53	N.D.		
8) Ethyl ether	0.000		0	N.D.		
10) 1,1-Dichloroethene	1.917	96	967	0.197	ug/L #	60
11) Carbon disulfide	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	2.478	43	2808	2.761	ug/L #	46
18) trans-1,2-Dichloroethene	2.561	96	5093	0.913	ug/L	74
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	3.208	63	1573	0.159	ug/L #	57
25) Acrylonitrile	0.000		0	N.D.		
27) Vinyl acetate	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	3.908	96	27798	4.389	ug/L #	72
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
32) Chloroform	4.340	83	1754M1	0.170	ug/L	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N16.D
 Acq On : 13 Mar 2019 11:49 pm
 Operator : VOA108:NLK
 Sample : 11909107-01,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 14 12:35:33 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0		N.D.	
37) 1,1,1-Trichloroethane	4.558	97	26		N.D.	
39) 2-Butanone	0.000		0		N.D.	
40) 1,1-Dichloropropene	0.000		0		N.D.	
41) Benzene	5.032	78	249		N.D.	
44) 1,2-Dichloroethane	5.286	62	104		N.D.	
48) Trichloroethene	5.743	95	568660	95.059	ug/L	95
50) Dibromomethane	0.000		0		N.D.	
51) 1,2-Dichloropropane	6.301	63	1876	0.322	ug/L #	86
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	7.291	92	51		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D. d	
63) Tetrachloroethene	7.642	166	918594	153.531	ug/L	93
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.	
70) 1,3-Dichloropropane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	8.518	43	67		N.D.	
73) Chlorobenzene	8.537	112	276		N.D.	
74) Ethylbenzene	8.526	91	284		N.D.	
75) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
76) p/m Xylene	8.685	106	106		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	
84) Bromobenzene	0.000		0		N.D.	
85) n-Propylbenzene	9.340	91	316		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
88) 4-Ethyltoluene	0.000		0		N.D.	
89) 2-Chlorotoluene	9.617	91	26		N.D.	
90) 1,3,5-Trimethylbenzene	0.000		0		N.D.	
91) 1,2,3-Trichloropropane	0.000		0		N.D.	
92) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
93) 4-Chlorotoluene	9.617	91	26		N.D.	
94) tert-Butylbenzene	0.000		0		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N16.D
 Acq On : 13 Mar 2019 11:49 pm
 Operator : VOA108:NLK
 Sample : l1909107-01,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 14 12:35:33 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	0.000		0		N.D.	
98)	sec-Butylbenzene	10.007	105	28		N.D.	
99)	p-Isopropyltoluene	0.000		0		N.D.	
100)	1,3-Dichlorobenzene	9.960	146	31		N.D.	
101)	1,4-Dichlorobenzene	10.012	146	377		N.D.	
102)	p-Diethylbenzene	0.000		0		N.D.	
103)	n-Butylbenzene	10.010	91	243		N.D.	
104)	1,2-Dichlorobenzene	10.258	146	348		N.D.	
105)	1,2,4,5-Tetramethylben...	0.000		0		N.D.	
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	0.000		0		N.D.	
110)	Naphthalene	0.000		0		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

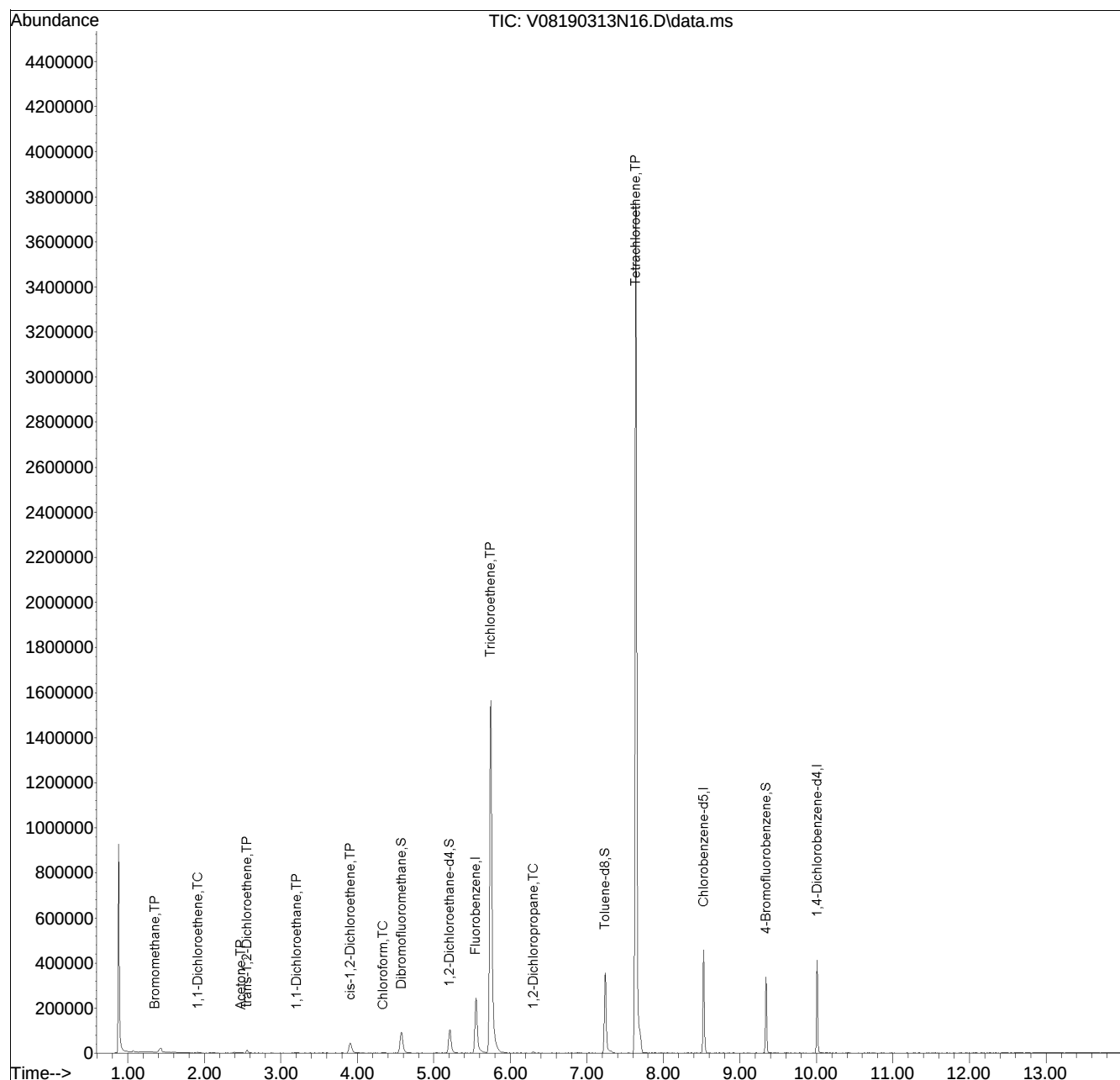
(#) = qualifier out of range (m) = manual integration (+) = signals summed

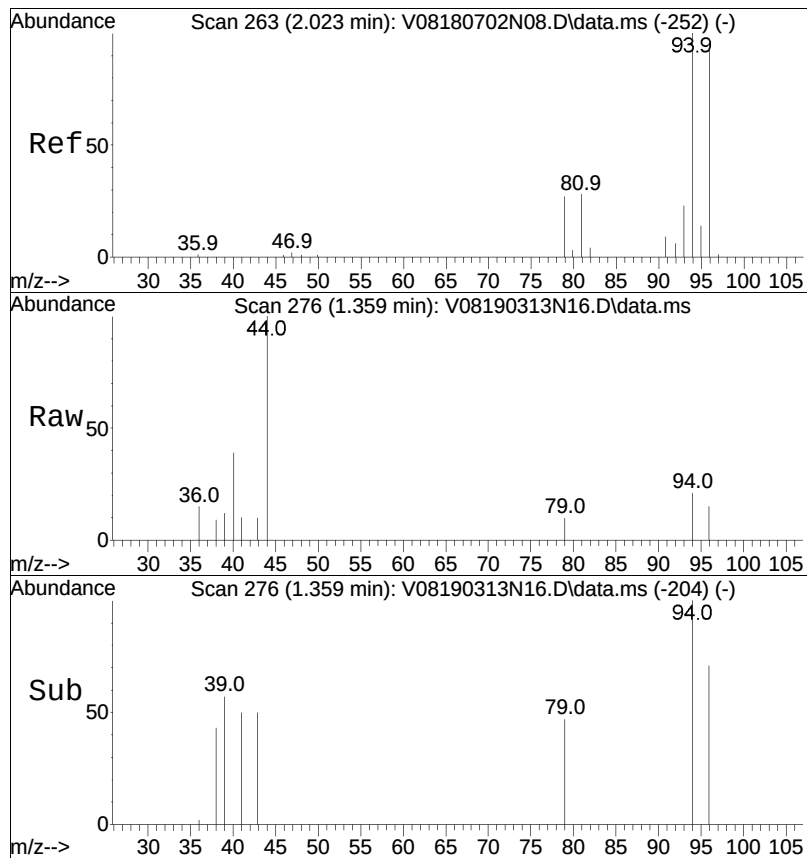
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N16.D
 Acq On : 13 Mar 2019 11:49 pm
 Operator : VOA108:NLK
 Sample : 11909107-01,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 14 12:35:33 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

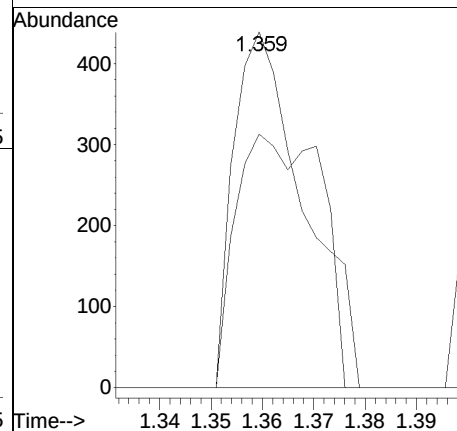
Sub List : 8260-NYTCL - Megamix plus Diox90313N\V08190313N02.D•

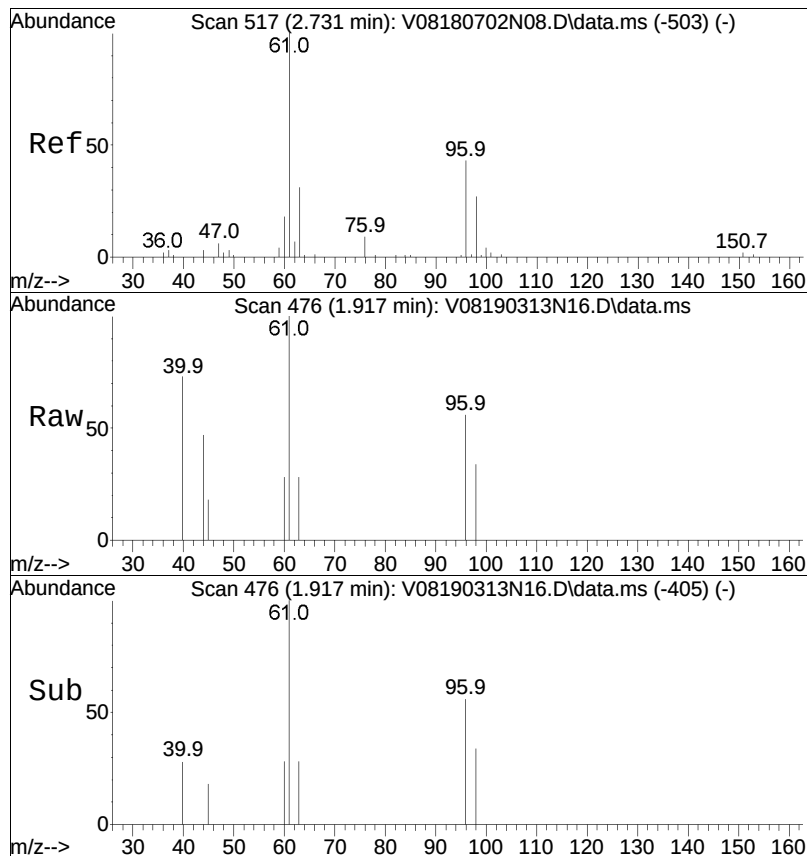




#5
 Bromomethane
 Concen: 0.09 ug/L
 RT: 1.359 min Scan# 276
 Delta R.T. 0.000 min
 Lab File: V08190313N16.D
 Acq: 13 Mar 2019 11:49 pm

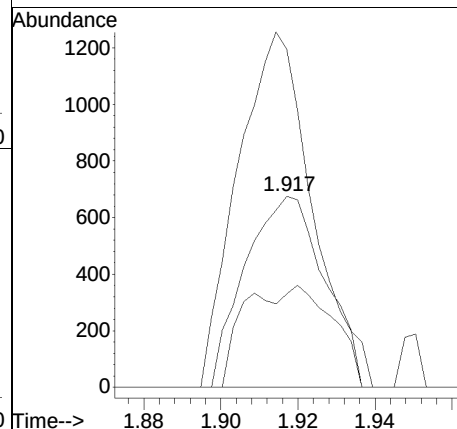
Tgt Ion: 94 Resp: 421
 Ion Ratio Lower Upper
 94 100
 96 85.5 75.6 115.6

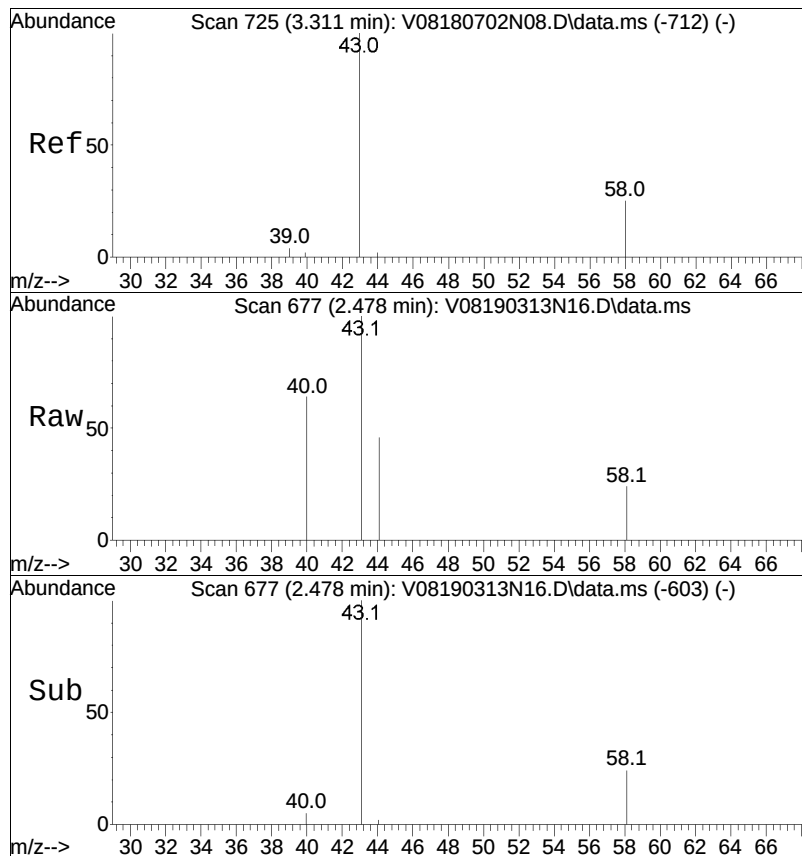




#10
 1,1-Dichloroethene
 Concen: 0.20 ug/L
 RT: 1.917 min Scan# 476
 Delta R.T. -0.003 min
 Lab File: V08190313N16.D
 Acq: 13 Mar 2019 11:49 pm

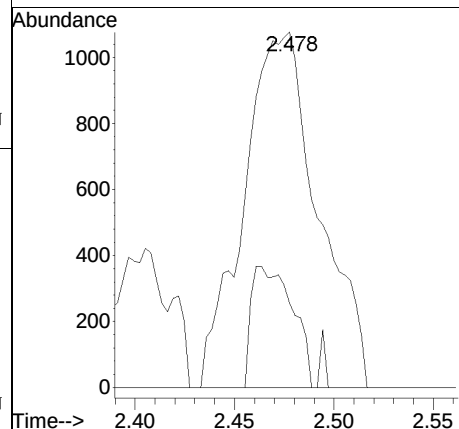
Tgt Ion:	96	Resp:	967
Ion Ratio	Lower	Upper	
96	100		
61	174.5	186.1	279.1#
63	25.0	57.6	86.4#

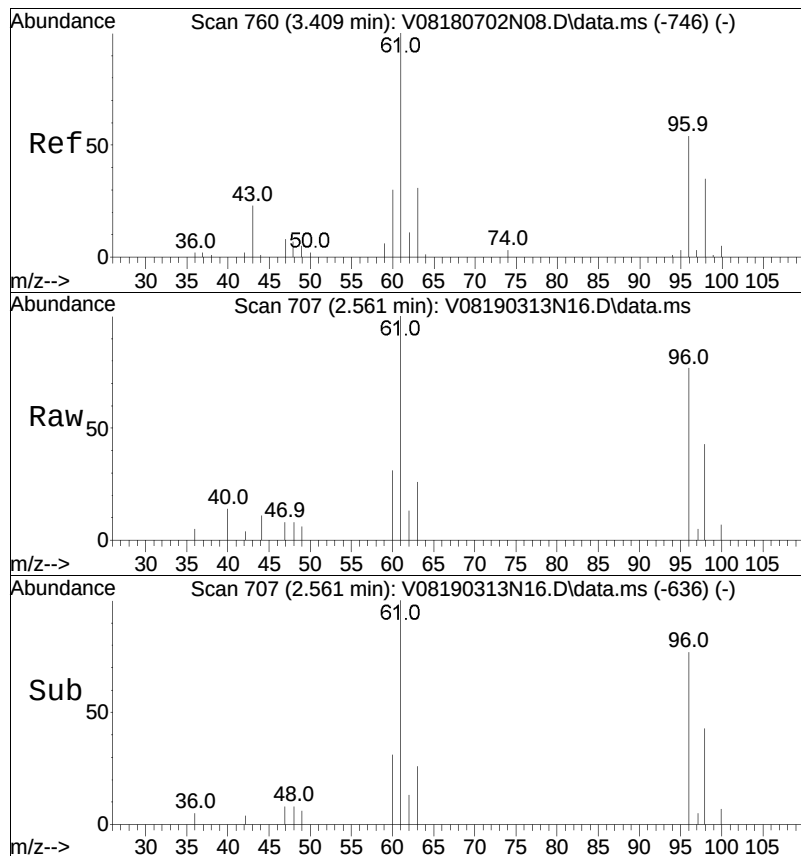




#17
 Acetone
 Concen: 2.76 ug/L
 RT: 2.478 min Scan# 677
 Delta R.T. 0.006 min
 Lab File: V08190313N16.D
 Acq: 13 Mar 2019 11:49 pm

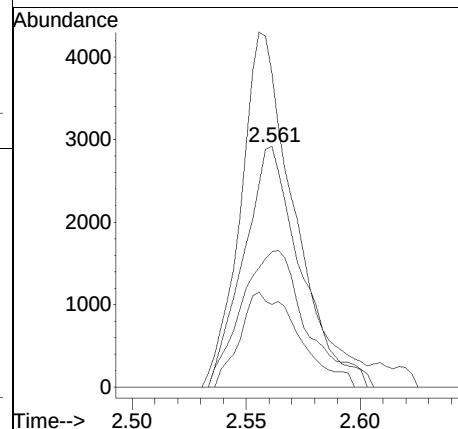
Tgt Ion	Ratio	Lower	Upper
43	100		
58	1.0	24.2	36.4#

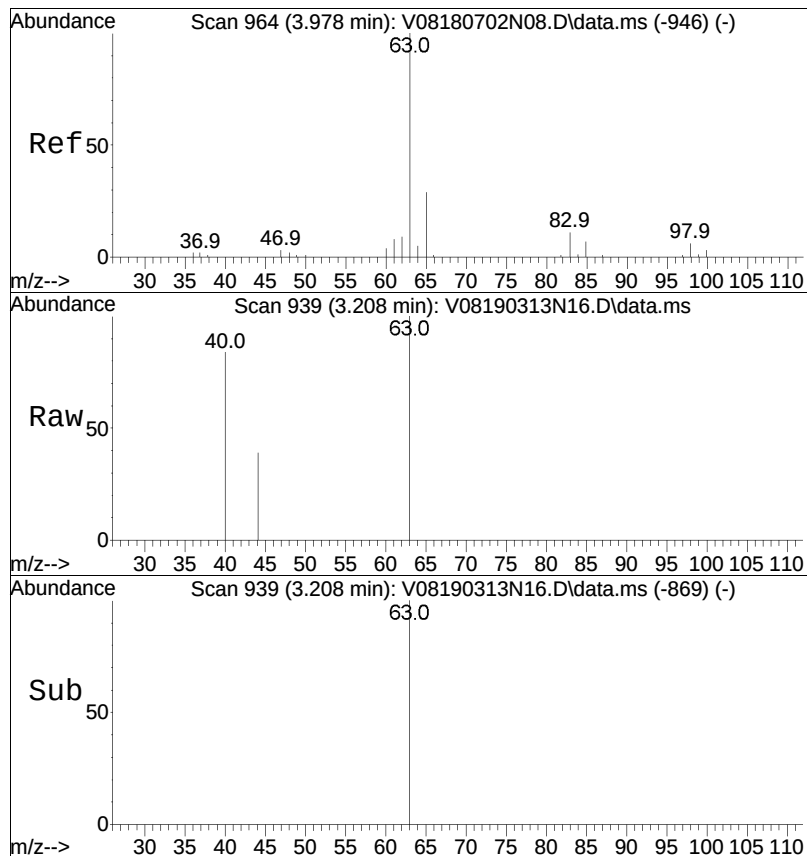




#18
trans-1,2-Dichloroethene
Concen: 0.91 ug/L
RT: 2.561 min Scan# 707
Delta R.T. -0.003 min
Lab File: V08190313N16.D
Acq: 13 Mar 2019 11:49 pm

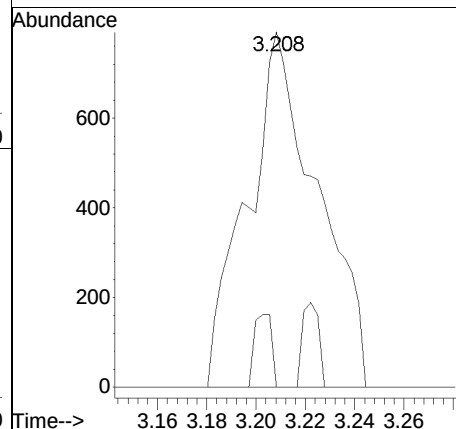
Tgt Ion:	96	Resp:	5093
Ion Ratio	Lower	Upper	
96	100		
61	139.2	124.0	257.6
98	65.5	41.2	85.6
63	40.9	38.4	79.7

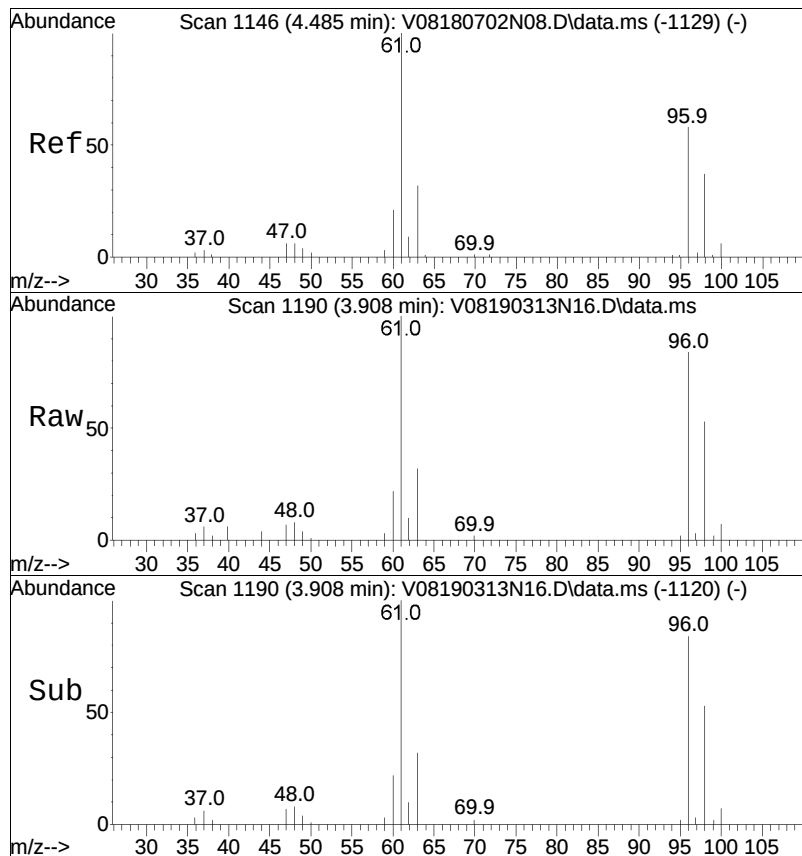




#23
 1,1-Dichloroethane
 Concen: 0.16 ug/L
 RT: 3.208 min Scan# 939
 Delta R.T. -0.006 min
 Lab File: V08190313N16.D
 Acq: 13 Mar 2019 11:49 pm

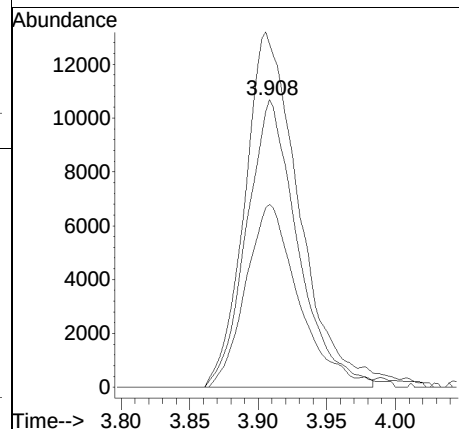
Tgt Ion	Ratio	Lower	Upper
63	100		
65	5.0	11.0	51.0#
83	0.0	0.0	31.8

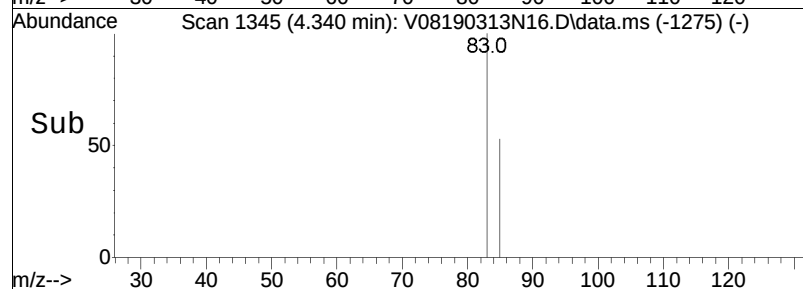
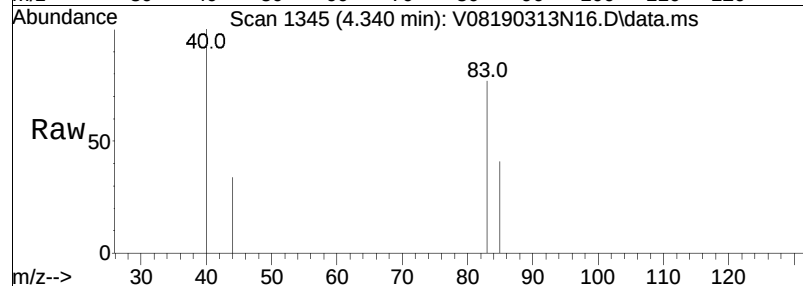
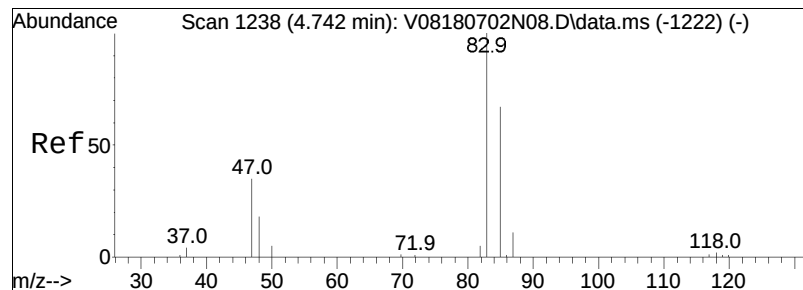




#28
 cis-1,2-Dichloroethene
 Concen: 4.39 ug/L
 RT: 3.908 min Scan# 1190
 Delta R.T. -0.006 min
 Lab File: V08190313N16.D
 Acq: 13 Mar 2019 11:49 pm

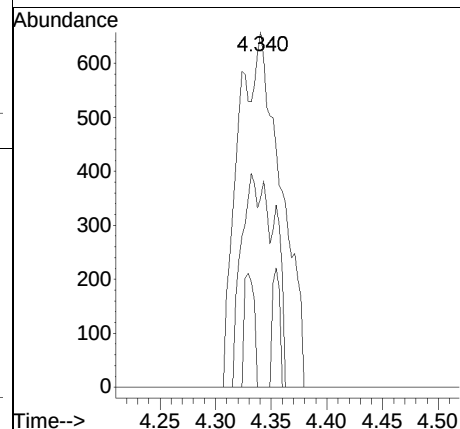
Tgt Ion:	96	Resp:	27798
Ion Ratio	Lower	Upper	
96	100		
61	132.6	149.4	224.2#
98	65.3	53.4	80.2

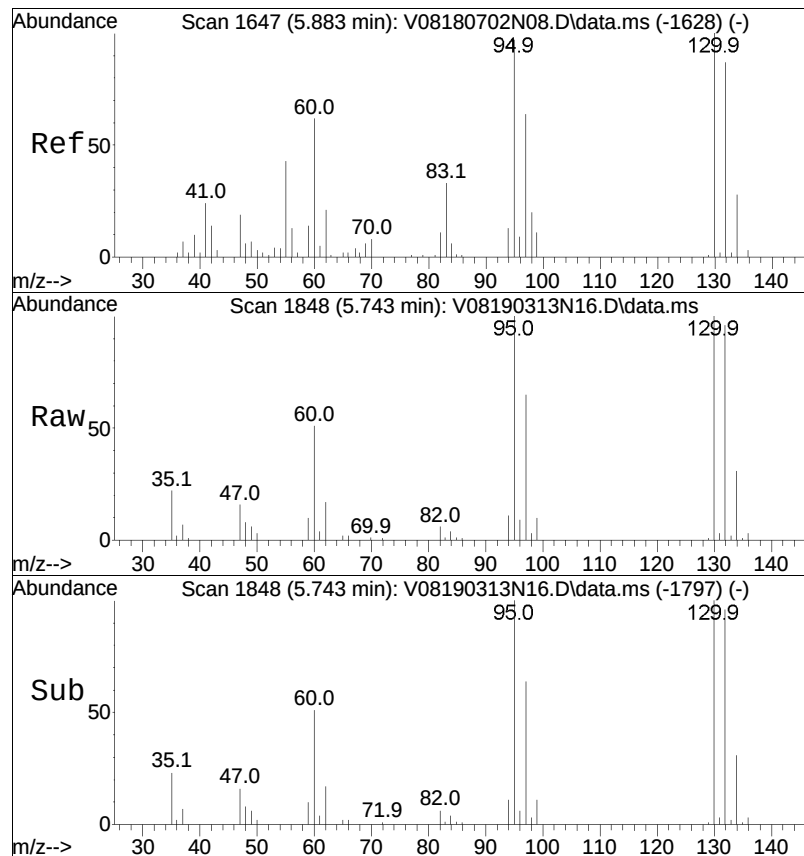




#32
 Chloroform
 Concen: 0.17 ug/L M1
 RT: 4.340 min Scan# 1345
 Delta R.T. -0.006 min
 Lab File: V08190313N16.D
 Acq: 13 Mar 2019 11:49 pm

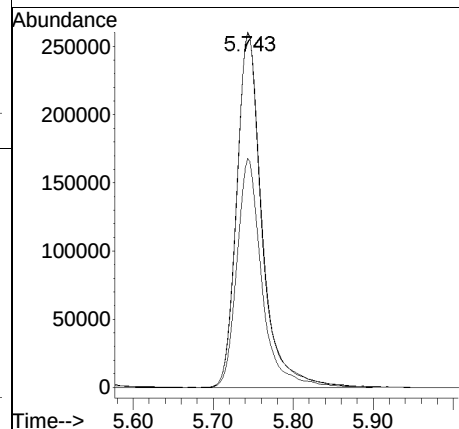
Tgt Ion:	83	Resp:	1754
Ion Ratio	Lower	Upper	
83	100		
85	23.3	41.5	86.1#
47	5.7	19.0	39.4#
48	7.4	9.9	20.5#

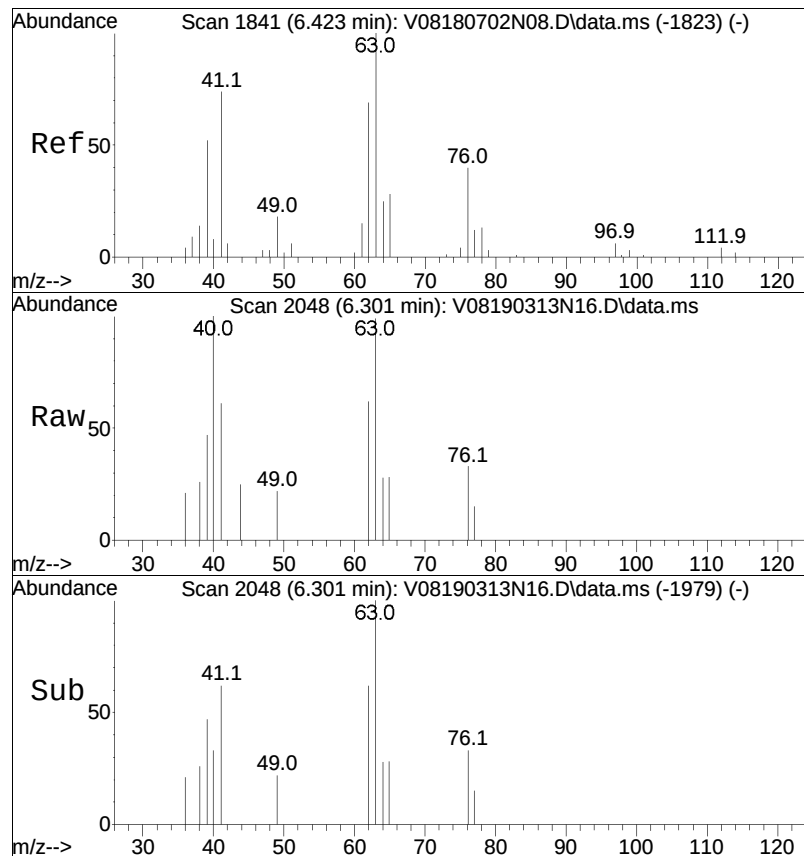




#48
 Trichloroethene
 Concen: 95.06 ug/L
 RT: 5.743 min Scan# 1848
 Delta R.T. -0.008 min
 Lab File: V08190313N16.D
 Acq: 13 Mar 2019 11:49 pm

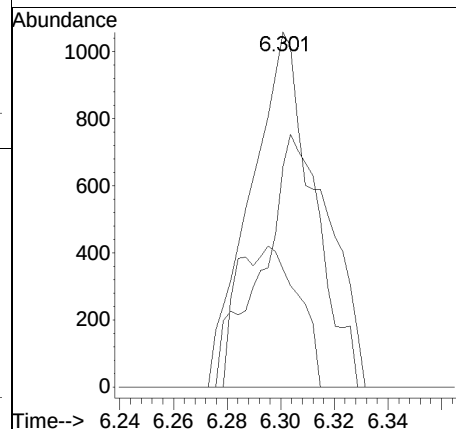
Tgt Ion:	95	Resp:	568660
Ion Ratio	Lower	Upper	
95	100		
97	64.4	55.5	83.3
130	100.7	76.6	115.0

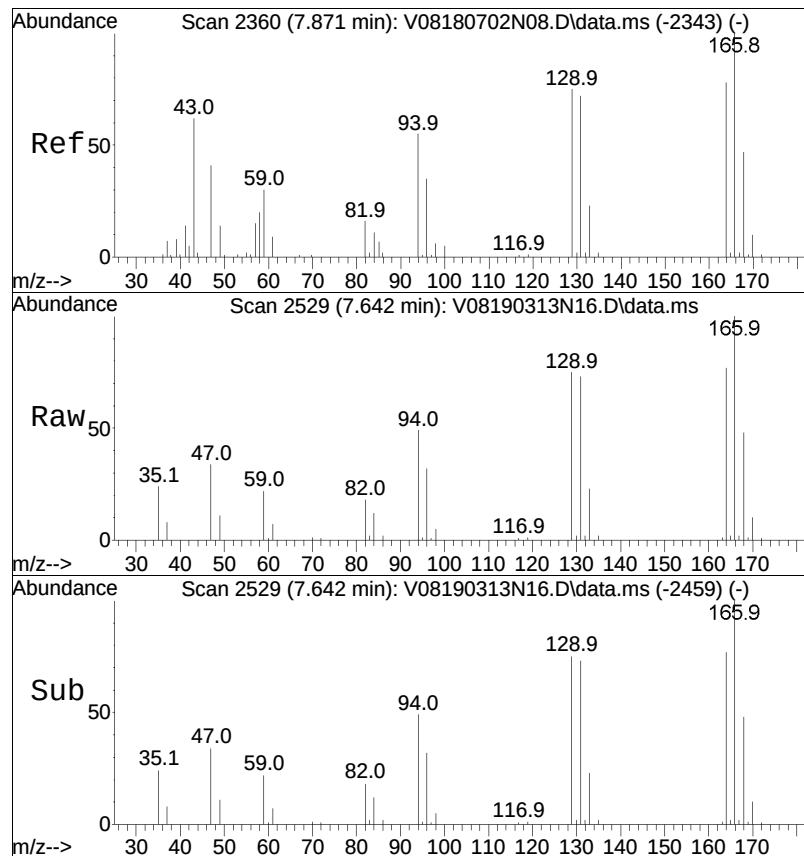




#51
 1,2-Dichloropropane
 Concen: 0.32 ug/L
 RT: 6.301 min Scan# 2048
 Delta R.T. -0.008 min
 Lab File: V08190313N16.D
 Acq: 13 Mar 2019 11:49 pm

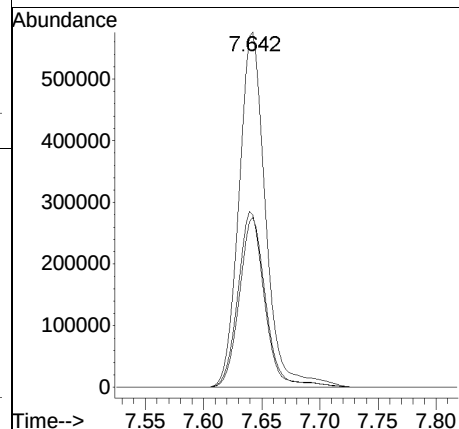
Tgt Ion	Ratio	Lower	Upper
63	100		
62	63.2	58.6	87.8
76	35.5	38.0	57.0#





#63
Tetrachloroethene
Concen: 153.53 ug/L
RT: 7.642 min Scan# 2529
Delta R.T. -0.006 min
Lab File: V08190313N16.D
Acq: 13 Mar 2019 11:49 pm

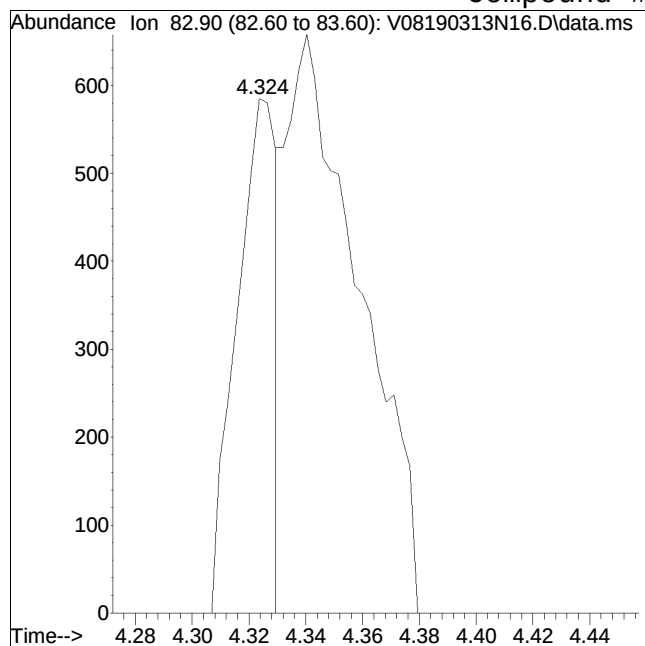
Tgt Ion:	166	Resp:	918594
Ion Ratio	Lower	Upper	
166	100		
168	47.8	28.2	68.2
94	49.6	38.4	78.4



Manual Integration Report

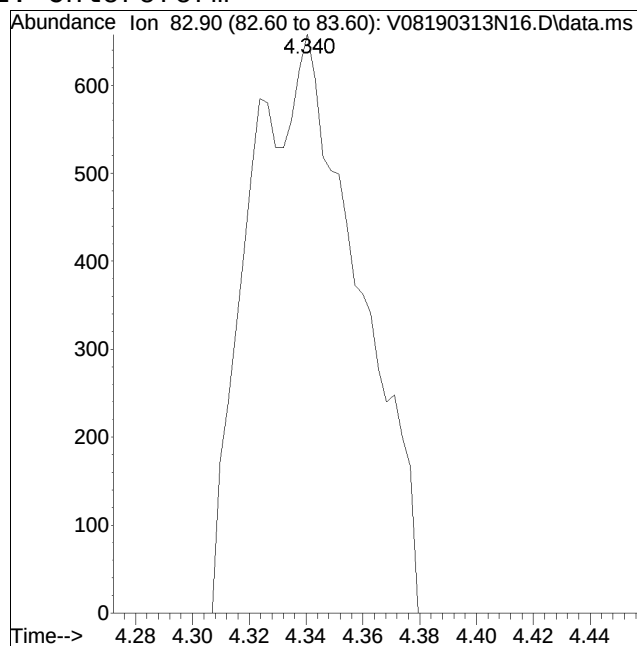
Data Path : I:\VOLATILES\VOA108\2019\1QMethod : V108_190218N_8260.m
Data File : V08190313N16.D Operator : VOA108:NLK
Date Inj'd : 3/13/2019 11:49 pm Instrument : VOA 108
Sample : l1909107-01,31,10,10,,a Quant Date : 3/14/2019 11:43 am

Compound #32: Chloroform



Original Peak Response = 559

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



Manual Peak Response = 1754 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N17.D
 Acq On : 14 Mar 2019 12:10 am
 Operator : VOA108:NLK
 Sample : 11909107-02D, 31, 0.4, 10,, a
 Misc : WG1215584, ICAL15519
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 14 12:36:04 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.550	96	244423	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery	=	80.93%	
59) Chlorobenzene-d5	8.526	117	171126	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery	=	82.79%	
79) 1,4-Dichlorobenzene-d4	10.009	152	59915	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery	=	59.38%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.574	113	71890	11.515	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	115.15%	
43) 1,2-Dichloroethane-d4	5.210	65	86297	12.298	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	122.98%	
60) Toluene-d8	7.240	98	228750	9.753	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.53%	
83) 4-Bromofluorobenzene	9.343	95	68671	11.713	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	117.13%	
Target Compounds						
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	1.097	50	66	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	1.356	94	222	N.D.		
6) Chloroethane	1.421	64	31	N.D.		
7) Trichlorofluoromethane	1.552	101	410	N.D.		
8) Ethyl ether	0.000		0	N.D.		
10) 1,1-Dichloroethene	1.922	96	28	N.D.		
11) Carbon disulfide	1.917	76	154	N.D.		
15) Methylene chloride	2.405	84	111	N.D.		
17) Acetone	0.000		0	N.D.		
18) trans-1,2-Dichloroethene	2.564	96	1285	0.246	ug/L	# 81
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	3.216	63	103	N.D.		
25) Acrylonitrile	0.000		0	N.D.		
27) Vinyl acetate	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	3.914	96	8374	1.415	ug/L	# 57
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
32) Chloroform	4.332	83	903M1	0.094	ug/L	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N17.D
 Acq On : 14 Mar 2019 12:10 am
 Operator : VOA108:NLK
 Sample : l1909107-02D, 31, 0.4, 10, , a
 Misc : WG1215584, ICAL15519
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 14 12:36:04 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0		N.D.	
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
40) 1,1-Dichloropropene	0.000		0		N.D.	
41) Benzene	0.000		0		N.D.	
44) 1,2-Dichloroethane	5.305	62	63		N.D.	
48) Trichloroethene	5.743	95	477311	85.410	ug/L	94
50) Dibromomethane	0.000		0		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.	
61) Toluene	0.000		0		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D. d	
63) Tetrachloroethene	7.642	166	602476	105.208	ug/L	93
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.	
70) 1,3-Dichloropropane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	8.518	43	172		N.D.	
73) Chlorobenzene	8.540	112	112		N.D.	
74) Ethylbenzene	8.582	91	28		N.D.	
75) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
76) p/m Xylene	0.000		0		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	
84) Bromobenzene	0.000		0		N.D.	
85) n-Propylbenzene	9.343	91	381		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
88) 4-Ethyltoluene	0.000		0		N.D.	
89) 2-Chlorotoluene	9.343	91	381		N.D.	
90) 1,3,5-Trimethylbenzene	0.000		0		N.D.	
91) 1,2,3-Trichloropropane	0.000		0		N.D.	
92) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
93) 4-Chlorotoluene	0.000		0		N.D.	
94) tert-Butylbenzene	0.000		0		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N17.D
 Acq On : 14 Mar 2019 12:10 am
 Operator : VOA108:NLK
 Sample : l1909107-02D,31,0.4,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 14 12:36:04 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	0.000		0		N.D.	
98)	sec-Butylbenzene	0.000		0		N.D.	
99)	p-Isopropyltoluene	0.000		0		N.D.	
100)	1,3-Dichlorobenzene	10.021	146	122		N.D.	
101)	1,4-Dichlorobenzene	10.021	146	122		N.D.	
102)	p-Diethylbenzene	0.000		0		N.D.	
103)	n-Butylbenzene	10.009	91	78		N.D.	
104)	1,2-Dichlorobenzene	10.258	146	88		N.D.	
105)	1,2,4,5-Tetramethylben...	0.000		0		N.D.	
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	0.000		0		N.D.	
110)	Naphthalene	0.000		0		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

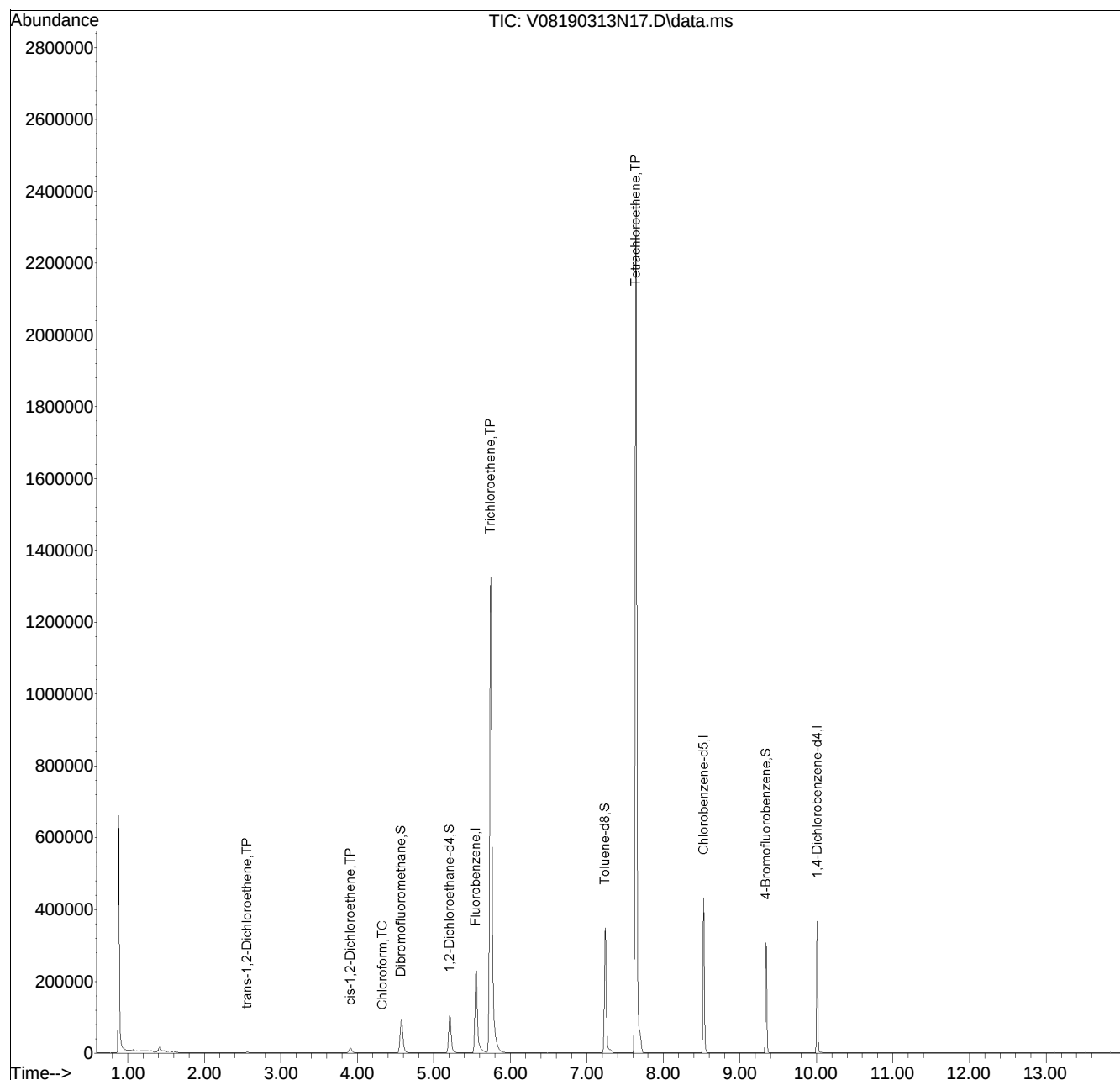
(#) = qualifier out of range (m) = manual integration (+) = signals summed

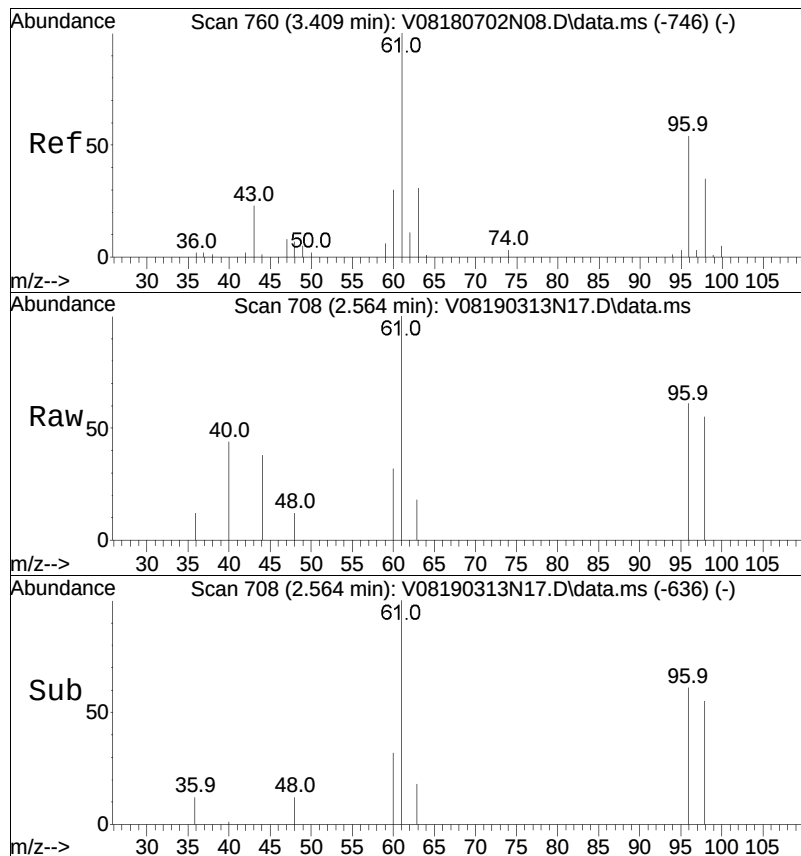
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N17.D
 Acq On : 14 Mar 2019 12:10 am
 Operator : VOA108:NLK
 Sample : l1909107-02D,31,0.4,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 14 12:36:04 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

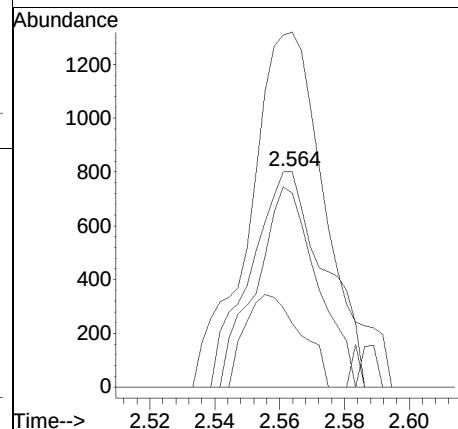
Sub List : 8260-NYTCL - Megamix plus Diox90313N\V08190313N02.D•

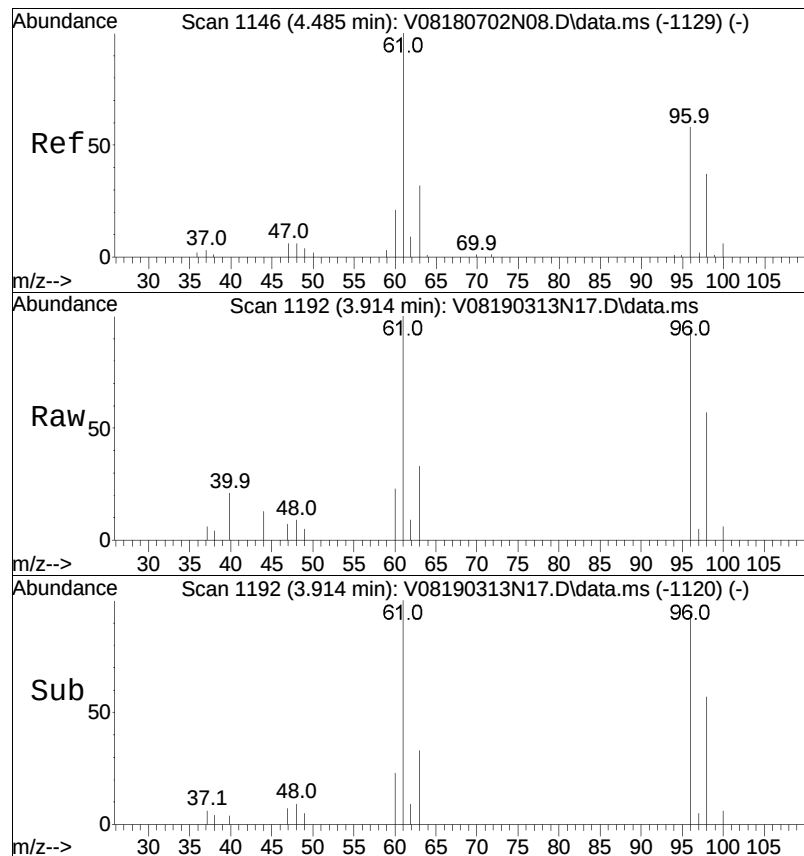




#18
 trans-1,2-Dichloroethene
 Concen: 0.25 ug/L
 RT: 2.564 min Scan# 708
 Delta R.T. -0.000 min
 Lab File: V08190313N17.D
 Acq: 14 Mar 2019 12:10 am

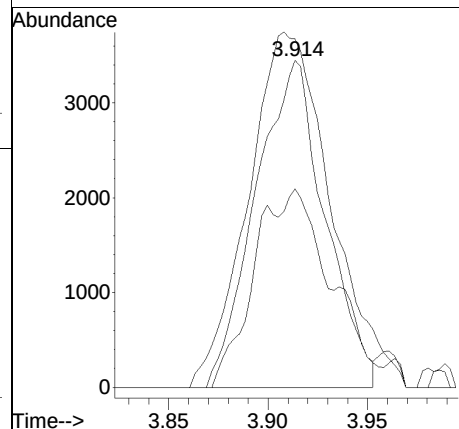
Tgt Ion:	96	Resp:	1285
Ion Ratio	Lower	Upper	
96	100		
61	170.4	124.0	257.6
98	76.0	41.2	85.6
63	32.1	38.4	79.7#

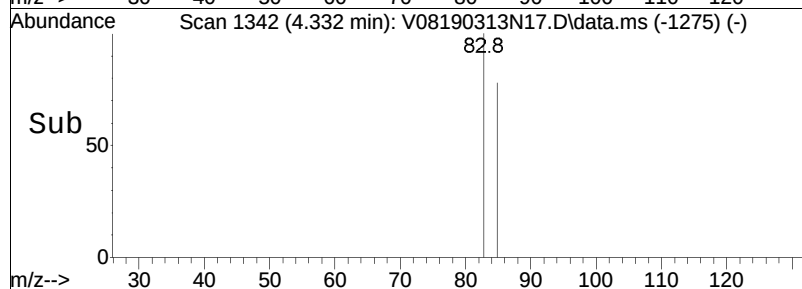
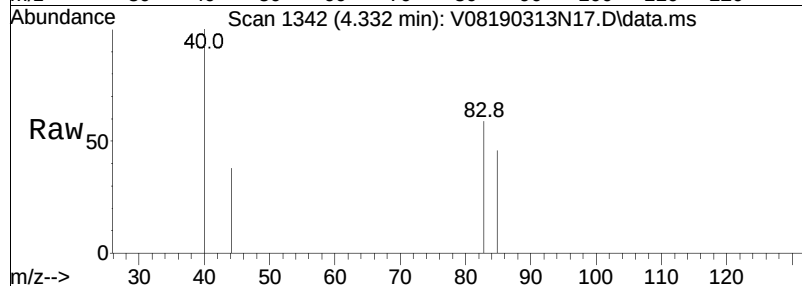
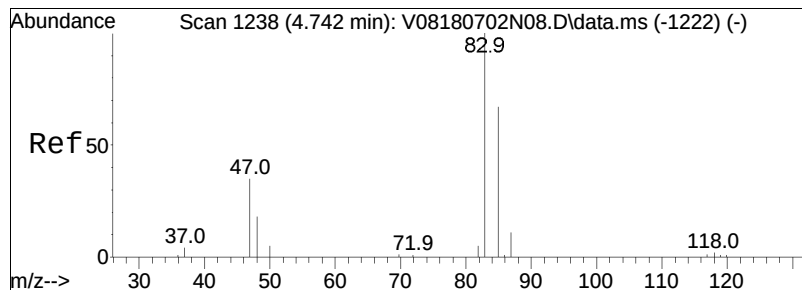




#28
 cis-1,2-Dichloroethene
 Concen: 1.42 ug/L
 RT: 3.914 min Scan# 1192
 Delta R.T. -0.000 min
 Lab File: V08190313N17.D
 Acq: 14 Mar 2019 12:10 am

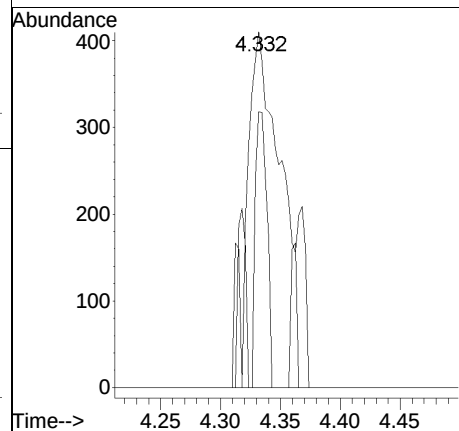
Tgt	Ion	Resp	Lower	Upper
96	100			
61	129.2	149.4	224.2#	
98	24.9	53.4	80.2#	

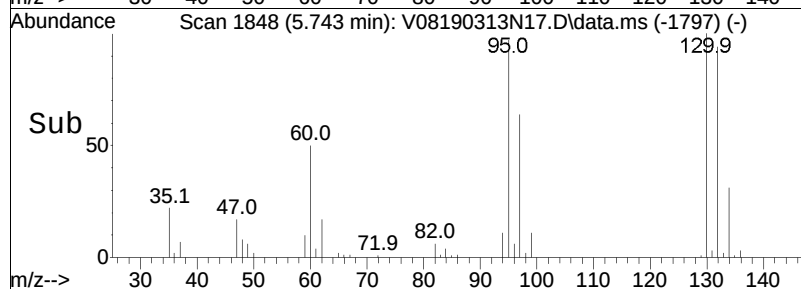
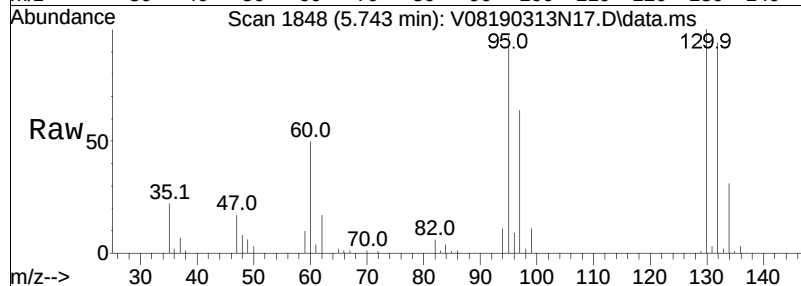
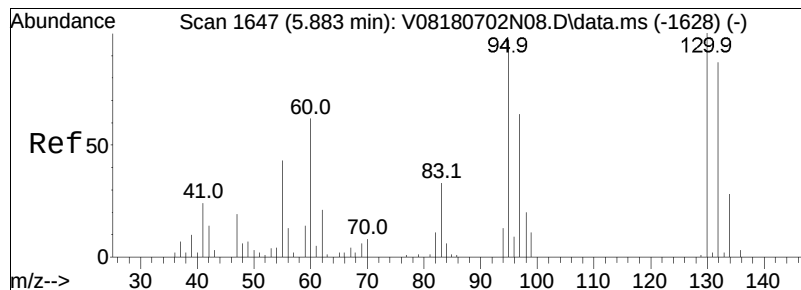




#32
 Chloroform
 Concen: 0.09 ug/L M1
 RT: 4.332 min Scan# 1342
 Delta R.T. -0.014 min
 Lab File: V08190313N17.D
 Acq: 14 Mar 2019 12:10 am

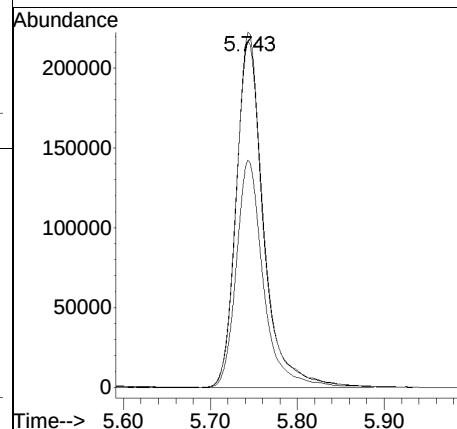
Tgt	Ion: 83	Resp:	903
Ion	Ratio	Lower	Upper
83	100		
85	23.9	41.5	86.1#
47	0.0	19.0	39.4#
48	0.0	9.9	20.5#

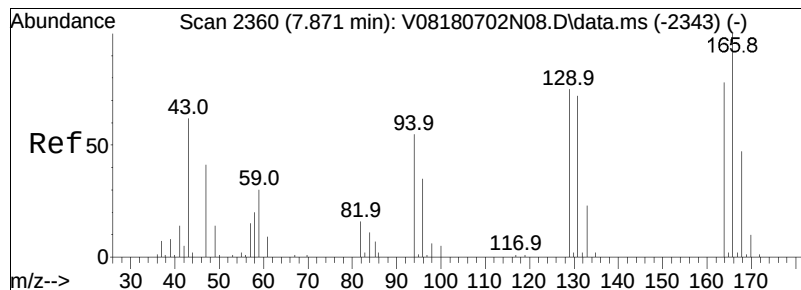




#48
 Trichloroethene
 Concen: 85.41 ug/L
 RT: 5.743 min Scan# 1848
 Delta R.T. -0.008 min
 Lab File: V08190313N17.D
 Acq: 14 Mar 2019 12:10 am

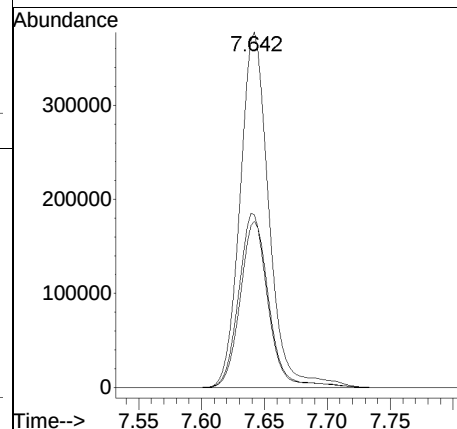
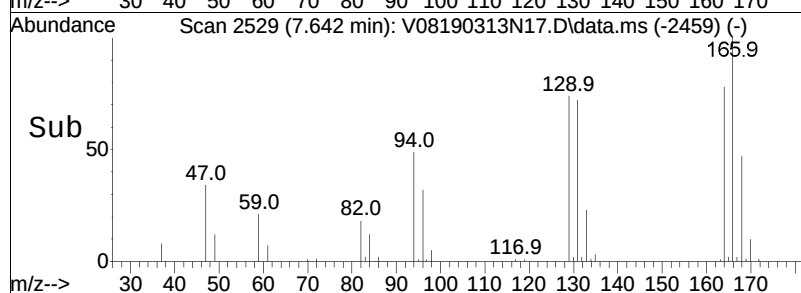
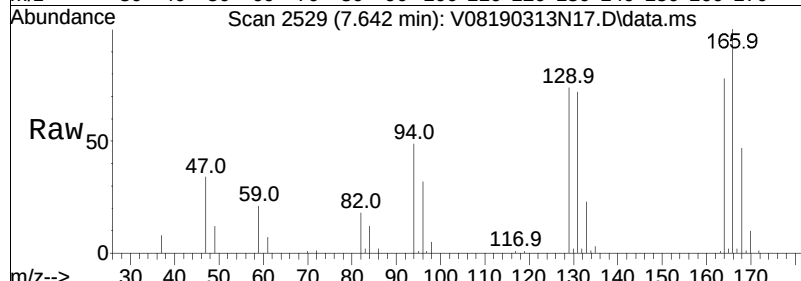
Tgt Ion	95	Resp	477311
Ion Ratio	Lower	Upper	
95	100		
97	64.7	55.5	83.3
130	101.8	76.6	115.0





#63
 Tetrachloroethene
 Concen: 105.21 ug/L
 RT: 7.642 min Scan# 2529
 Delta R.T. -0.006 min
 Lab File: V08190313N17.D
 Acq: 14 Mar 2019 12:10 am

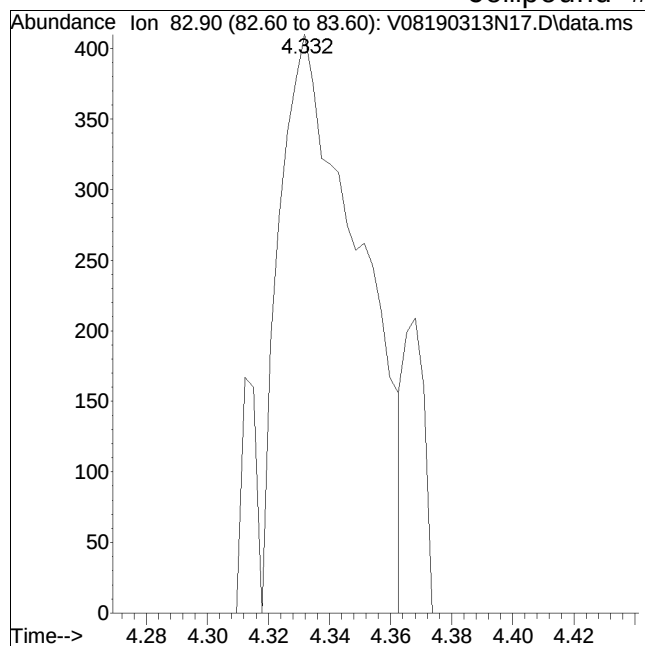
Tgt	Ion	Ratio	Lower	Upper
166	100			
168	47.2	28.2	68.2	
94	49.3	38.4	78.4	



Manual Integration Report

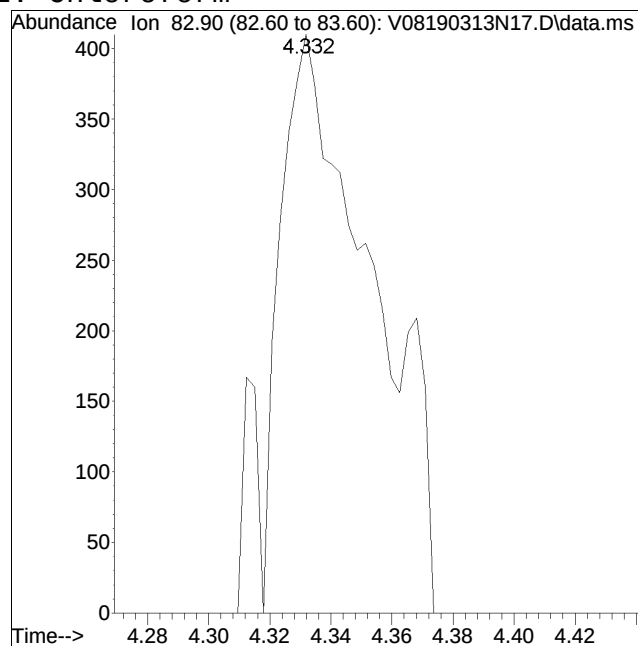
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190313N17.D Operator : VOA108:NLK
Date Inj'd : 3/14/2019 12:10 am Instrument : VOA 108
Sample : l1909107-02D,31,0.4,10,,a Quant Date : 3/14/2019 11:43 am

Compound #32: Chloroform



Original Peak Response = 754

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



Manual Peak Response = 903 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N18.D
 Acq On : 14 Mar 2019 12:32 am
 Operator : VOA108:NLK
 Sample : 11909107-03,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 14 12:36:23 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	259898	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery	=	86.05%	
59) Chlorobenzene-d5	8.526	117	179333	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery	=	86.76%	
79) 1,4-Dichlorobenzene-d4	10.010	152	70502	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery	=	69.87%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	73415	11.059	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	110.59%	
43) 1,2-Dichloroethane-d4	5.210	65	87841	11.773	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	117.73%	
60) Toluene-d8	7.241	98	234750	9.551	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	95.51%	
83) 4-Bromofluorobenzene	9.340	95	73056	10.590	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.90%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.000		0		N.D.	
3) Chloromethane	1.097	50	100		N.D.	
4) Vinyl chloride	0.000		0		N.D.	
5) Bromomethane	1.362	94	426	0.091	ug/L	85
6) Chloroethane	1.435	64	63		N.D.	
7) Trichlorofluoromethane	0.000		0		N.D.	
8) Ethyl ether	0.000		0		N.D.	
10) 1,1-Dichloroethene	0.000		0		N.D.	
11) Carbon disulfide	0.000		0		N.D.	
15) Methylene chloride	0.000		0		N.D.	
17) Acetone	2.469	43	1294M1	1.281	ug/L	
18) trans-1,2-Dichloroethene	0.000		0		N.D.	
20) Methyl tert-butyl ether	0.000		0		N.D.	
23) 1,1-Dichloroethane	0.000		0		N.D.	
25) Acrylonitrile	0.000		0		N.D.	
27) Vinyl acetate	0.000		0		N.D.	
28) cis-1,2-Dichloroethene	3.891	96	29		N.D.	
29) 2,2-Dichloropropane	0.000		0		N.D.	
30) Bromochloromethane	0.000		0		N.D.	
32) Chloroform	0.000		0		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N18.D
 Acq On : 14 Mar 2019 12:32 am
 Operator : VOA108:NLK
 Sample : 11909107-03,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 14 12:36:23 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0		N.D.	
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
40) 1,1-Dichloropropene	0.000		0		N.D.	
41) Benzene	0.000		0		N.D.	
44) 1,2-Dichloroethane	5.286	62	94		N.D.	
48) Trichloroethene	5.743	95	2409	0.405	ug/L #	65
50) Dibromomethane	0.000		0		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.	
61) Toluene	7.296	92	92		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	7.645	166	3229	0.538	ug/L	86
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.	
70) 1,3-Dichloropropane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	8.219	43	26		N.D.	
73) Chlorobenzene	8.540	112	81		N.D.	
74) Ethylbenzene	8.576	91	54		N.D.	
75) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
76) p/m Xylene	0.000		0		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	9.346	105	59		N.D.	
84) Bromobenzene	0.000		0		N.D.	
85) n-Propylbenzene	9.435	91	281		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
88) 4-Ethyltoluene	9.346	105	59		N.D.	
89) 2-Chlorotoluene	9.435	91	281		N.D.	
90) 1,3,5-Trimethylbenzene	0.000		0		N.D.	
91) 1,2,3-Trichloropropane	0.000		0		N.D.	
92) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
93) 4-Chlorotoluene	9.435	91	280		N.D.	
94) tert-Butylbenzene	0.000		0		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N18.D
 Acq On : 14 Mar 2019 12:32 am
 Operator : VOA108:NLK
 Sample : l1909107-03,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 14 12:36:23 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	0.000		0		N.D.	
98)	sec-Butylbenzene	0.000		0		N.D.	
99)	p-Isopropyltoluene	9.937	119	27		N.D.	
100)	1,3-Dichlorobenzene	10.018	146	64		N.D.	
101)	1,4-Dichlorobenzene	10.018	146	64		N.D.	
102)	p-Diethylbenzene	0.000		0		N.D.	
103)	n-Butylbenzene	10.010	91	217		N.D.	
104)	1,2-Dichlorobenzene	10.258	146	59		N.D.	
105)	1,2,4,5-Tetramethylben...	0.000		0		N.D.	
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	0.000		0		N.D.	
110)	Naphthalene	0.000		0		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

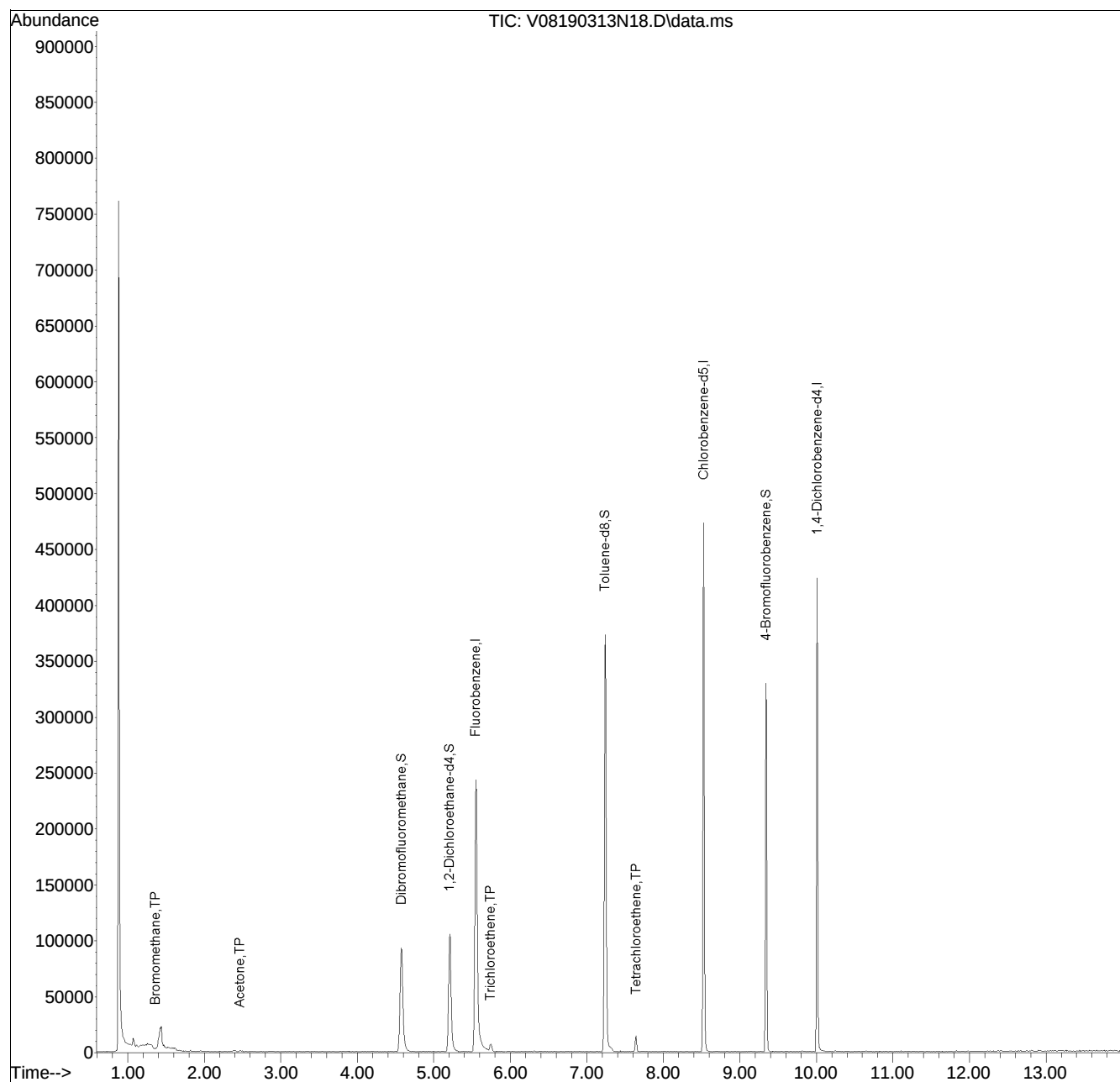
(#) = qualifier out of range (m) = manual integration (+) = signals summed

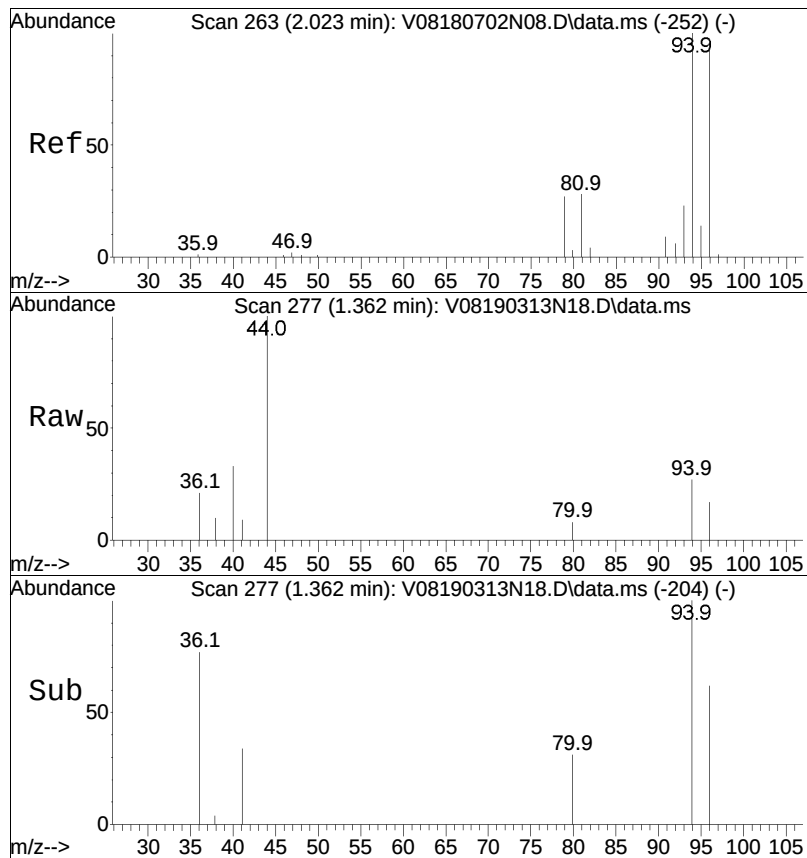
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N18.D
 Acq On : 14 Mar 2019 12:32 am
 Operator : VOA108:NLK
 Sample : 11909107-03,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 14 12:36:23 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

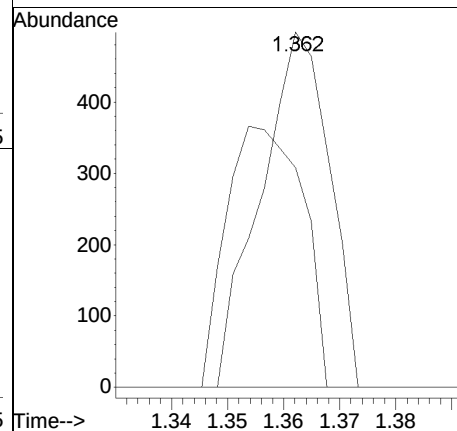
Sub List : 8260-NYTCL - Megamix plus Diox90313N\V08190313N02.D•

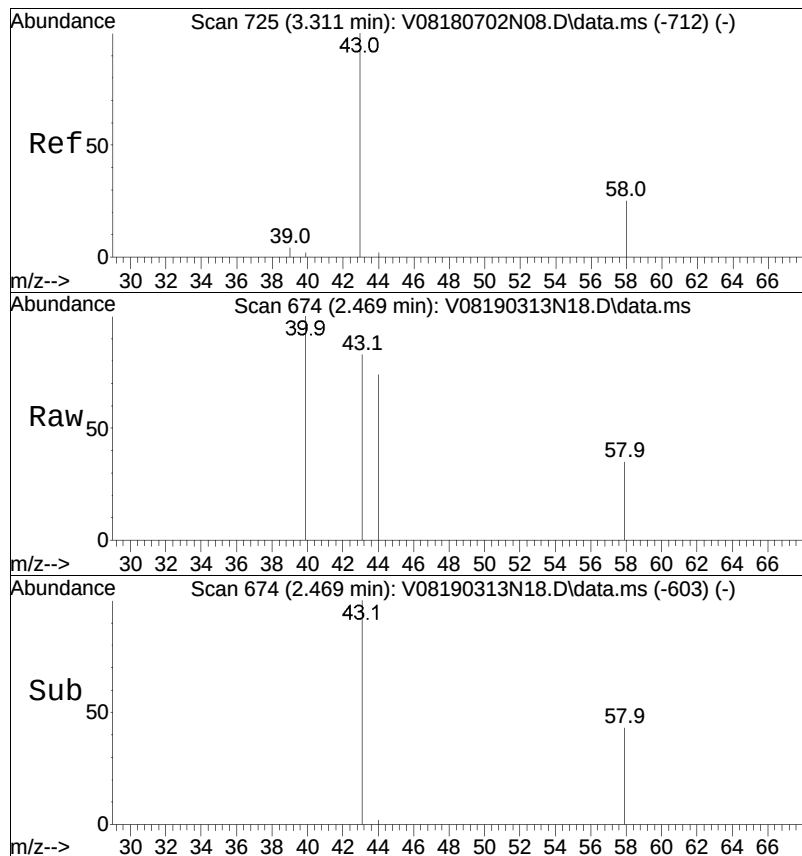




#5
 Bromomethane
 Concen: 0.09 ug/L
 RT: 1.362 min Scan# 277
 Delta R.T. 0.003 min
 Lab File: V08190313N18.D
 Acq: 14 Mar 2019 12:32 am

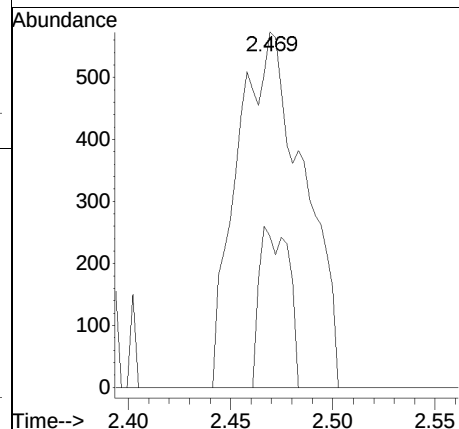
Tgt Ion: 94 Resp: 426
 Ion Ratio Lower Upper
 94 100
 96 81.2 75.6 115.6

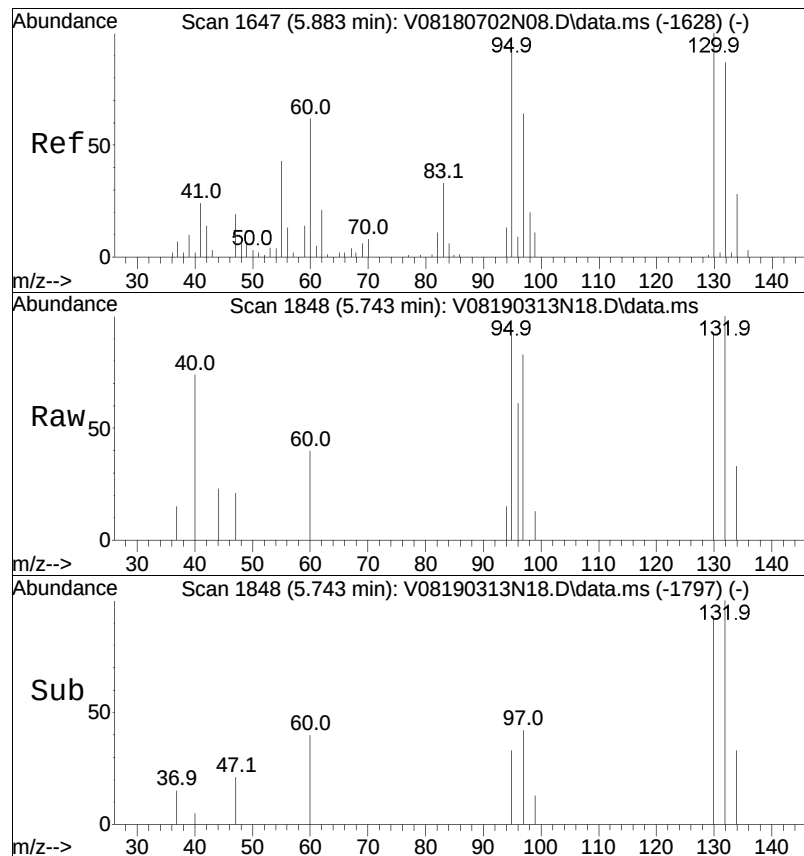




#17
Acetone
Concen: 1.28 ug/L M1
RT: 2.469 min Scan# 674
Delta R.T. -0.003 min
Lab File: V08190313N18.D
Acq: 14 Mar 2019 12:32 am

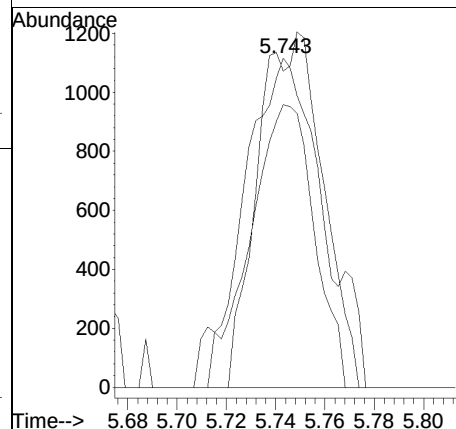
Tgt Ion:	43	58	Ratio	100	19.9	Resp:	1294	Lower	Upper
								24.2	36.4#

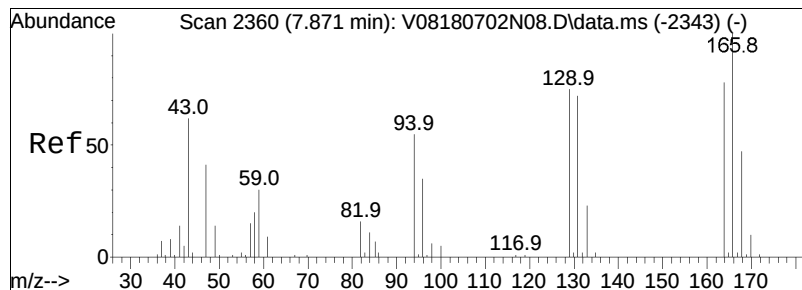




#48
 Trichloroethene
 Concen: 0.41 ug/L
 RT: 5.743 min Scan# 1848
 Delta R.T. -0.008 min
 Lab File: V08190313N18.D
 Acq: 14 Mar 2019 12:32 am

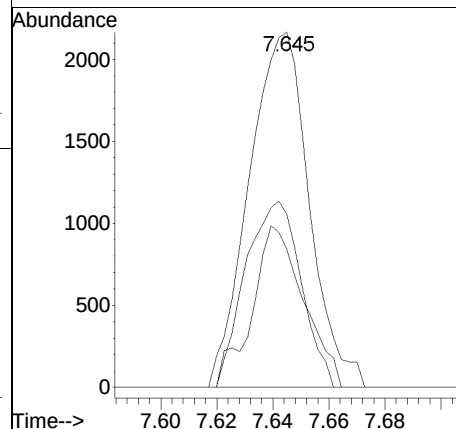
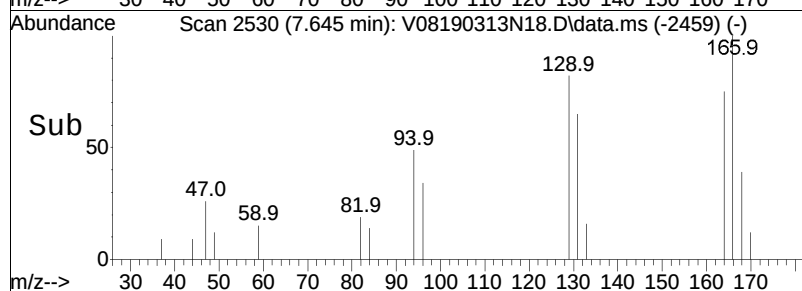
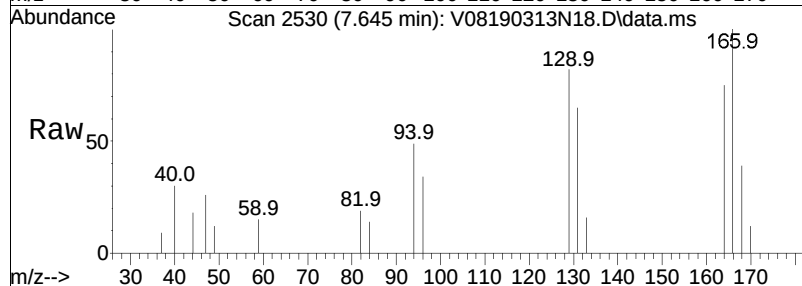
Tgt Ion:	95	Resp:	2409
Ion Ratio	Lower	Upper	
95	100		
97	74.2	55.5	83.3
130	41.3	76.6	115.0#





#63
Tetrachloroethene
Concen: 0.54 ug/L
RT: 7.645 min Scan# 2530
Delta R.T. -0.003 min
Lab File: V08190313N18.D
Acq: 14 Mar 2019 12:32 am

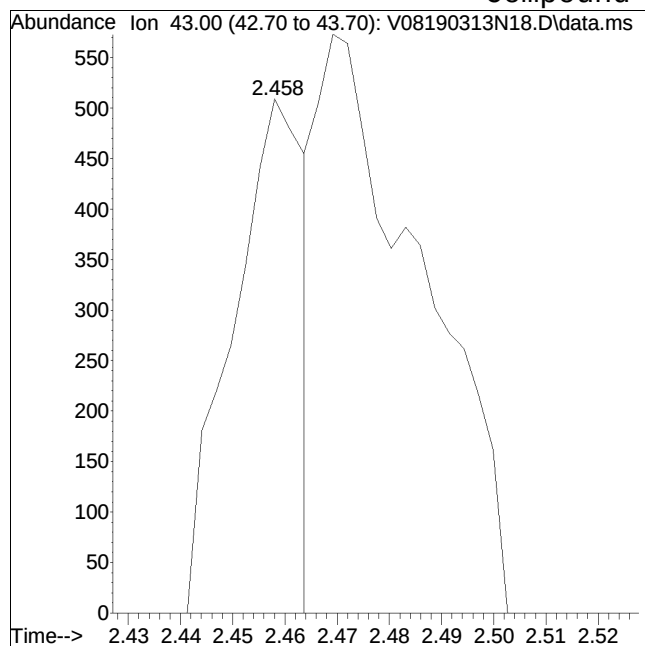
Tgt Ion	Ratio	Lower	Upper
166	100		
168	39.0	28.2	68.2
94	48.4	38.4	78.4



Manual Integration Report

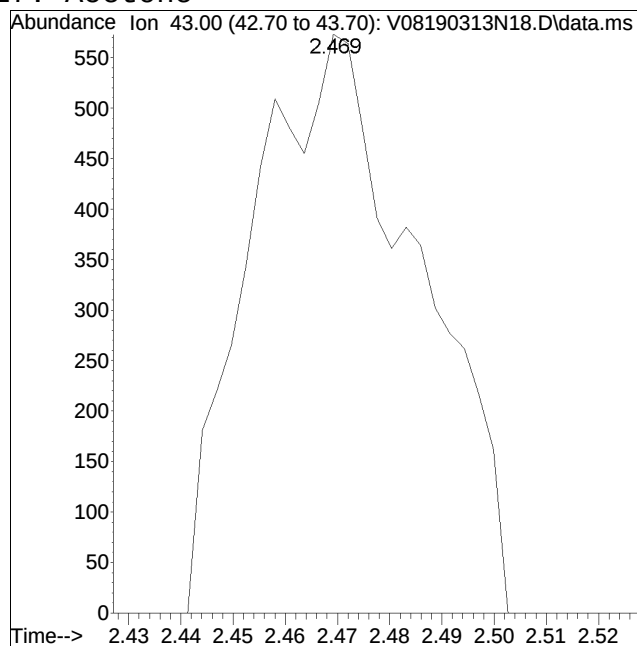
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190313N18.D Operator : VOA108:NLK
Date Inj'd : 3/14/2019 12:32 am Instrument : VOA 108
Sample : l1909107-03,31,10,10,,a Quant Date : 3/14/2019 11:43 am

Compound #17: Acetone



Original Peak Response = 485

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



Manual Peak Response = 1294 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N19.D
 Acq On : 14 Mar 2019 12:54 am
 Operator : VOA108:NLK
 Sample : 11909107-04,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 14 12:37:23 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.553	96	251122	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery	=	83.15%	
59) Chlorobenzene-d5	8.526	117	176447	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery	=	85.36%	
79) 1,4-Dichlorobenzene-d4	10.010	152	66482	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery	=	65.89%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	75418	11.758	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	117.58%	
43) 1,2-Dichloroethane-d4	5.208	65	86631	12.016	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	120.16%	
60) Toluene-d8	7.240	98	233817	9.668	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	96.68%	
83) 4-Bromofluorobenzene	9.340	95	71086	10.928	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	109.28%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	1.094	50	315	N.D.		
4) Vinyl chloride	1.153	62	538	0.102	ug/L	74
5) Bromomethane	1.356	94	522	0.115	ug/L	84
6) Chloroethane	1.432	64	181	N.D.		
7) Trichlorofluoromethane	1.546	101	1532	0.180	ug/L #	74
8) Ethyl ether	0.000		0	N.D.		
10) 1,1-Dichloroethene	1.917	96	1343	0.284	ug/L #	59
11) Carbon disulfide	1.928	76	100	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	2.469	43	2144M1	2.196	ug/L	
18) trans-1,2-Dichloroethene	2.564	96	3672M1	0.686	ug/L	
20) Methyl tert-butyl ether	2.692	73	2545M1	0.181	ug/L	
23) 1,1-Dichloroethane	3.208	63	2021	0.213	ug/L #	91
25) Acrylonitrile	0.000		0	N.D.		
27) Vinyl acetate	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	3.908	96	13204	2.172	ug/L #	66
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
32) Chloroform	4.340	83	1911	0.193	ug/L #	33

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N19.D
 Acq On : 14 Mar 2019 12:54 am
 Operator : VOA108:NLK
 Sample : 11909107-04,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 14 12:37:23 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0	N.D.		
37) 1,1,1-Trichloroethane	4.566	97	1520	0.176	ug/L	# 52
39) 2-Butanone	4.753	43	26	N.D.		
40) 1,1-Dichloropropene	0.000		0	N.D.		
41) Benzene	5.032	78	1047	N.D.		
44) 1,2-Dichloroethane	5.288	62	166	N.D.		
48) Trichloroethene	5.743	95	337026	58.699	ug/L	94
50) Dibromomethane	0.000		0	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.		
61) Toluene	7.288	92	632	N.D.		
62) 4-Methyl-2-pentanone	7.648	58	83	N.D.		
63) Tetrachloroethene	7.642	166	328532	55.640	ug/L	94
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.		
70) 1,3-Dichloropropane	0.000		0	N.D.		
71) 1,2-Dibromoethane	0.000		0	N.D.		
72) 2-Hexanone	8.367	43	26	N.D.		
73) Chlorobenzene	8.537	112	206	N.D.		
74) Ethylbenzene	8.576	91	449	N.D.		
75) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
76) p/m Xylene	8.688	106	403	N.D.		
77) o Xylene	8.969	106	194	N.D.		
78) Styrene	8.997	104	27	N.D.		
80) Bromoform	0.000		0	N.D.		
82) Isopropylbenzene	9.179	105	199	N.D.		
84) Bromobenzene	0.000		0	N.D.		
85) n-Propylbenzene	9.435	91	475	N.D.		
87) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
88) 4-Ethyltoluene	9.499	105	804	N.D.		
89) 2-Chlorotoluene	9.435	91	475	N.D.		
90) 1,3,5-Trimethylbenzene	9.563	105	290	N.D.		
91) 1,2,3-Trichloropropane	0.000		0	N.D.		
92) trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
93) 4-Chlorotoluene	9.742	91	164	N.D.		
94) tert-Butylbenzene	9.742	119	158	N.D.		

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N19.D
 Acq On : 14 Mar 2019 12:54 am
 Operator : VOA108:NLK
 Sample : l1909107-04,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 14 12:37:23 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	9.786	105	778		N.D.	
98)	sec-Butylbenzene	9.786	105	778		N.D.	
99)	p-Isopropyltoluene	10.104	119	54		N.D.	
100)	1,3-Dichlorobenzene	9.968	146	63		N.D.	
101)	1,4-Dichlorobenzene	10.015	146	81		N.D.	
102)	p-Diethylbenzene	10.160	119	211		N.D.	
103)	n-Butylbenzene	10.177	91	207		N.D.	
104)	1,2-Dichlorobenzene	10.263	146	295		N.D.	
105)	1,2,4,5-Tetramethylben...	0.000		0		N.D.	d
106)	1,2-Dibromo-3-chloropr...	10.673	155	27		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	0.000		0		N.D.	
110)	Naphthalene	11.270	128	542		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

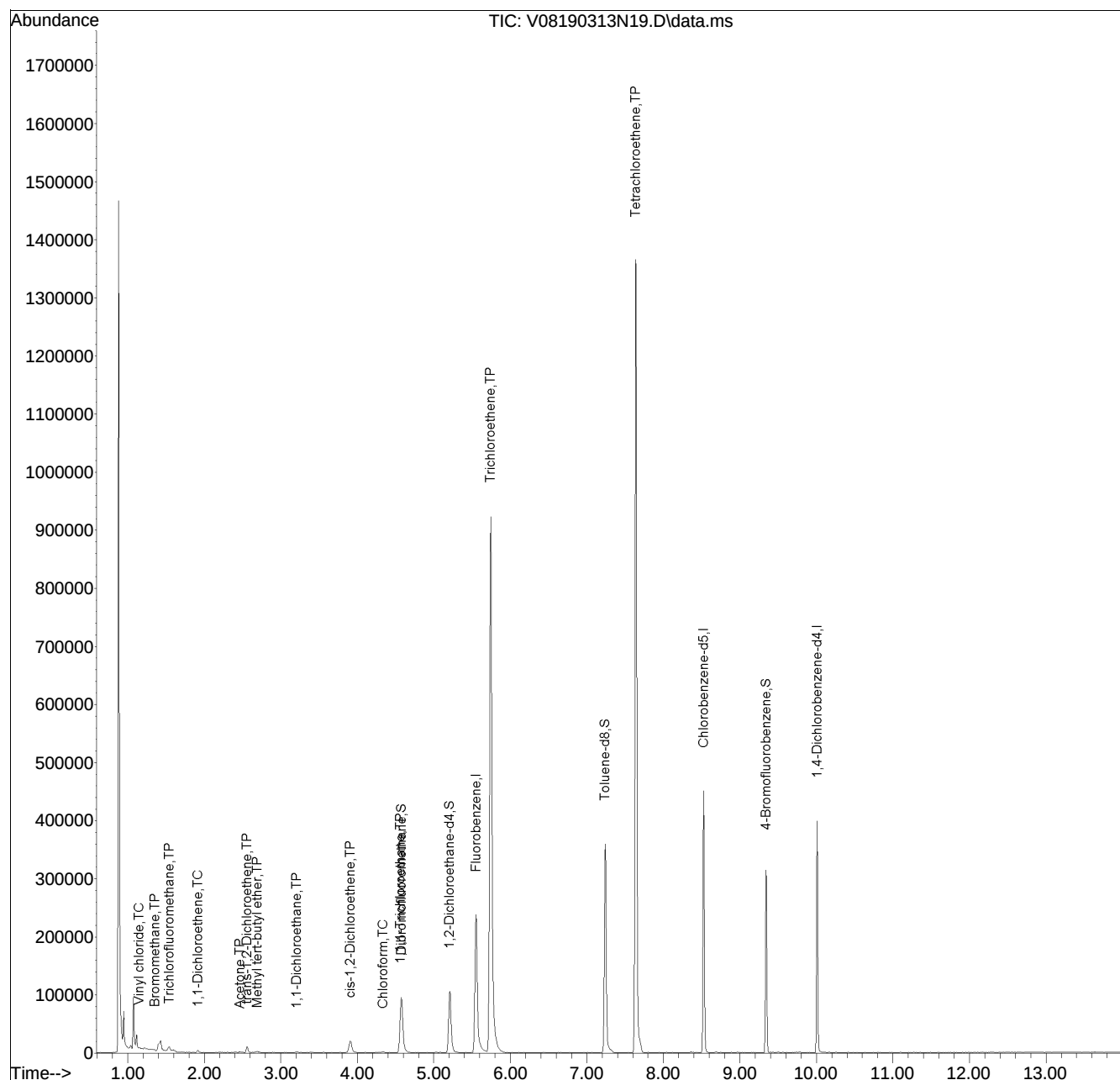
(#) = qualifier out of range (m) = manual integration (+) = signals summed

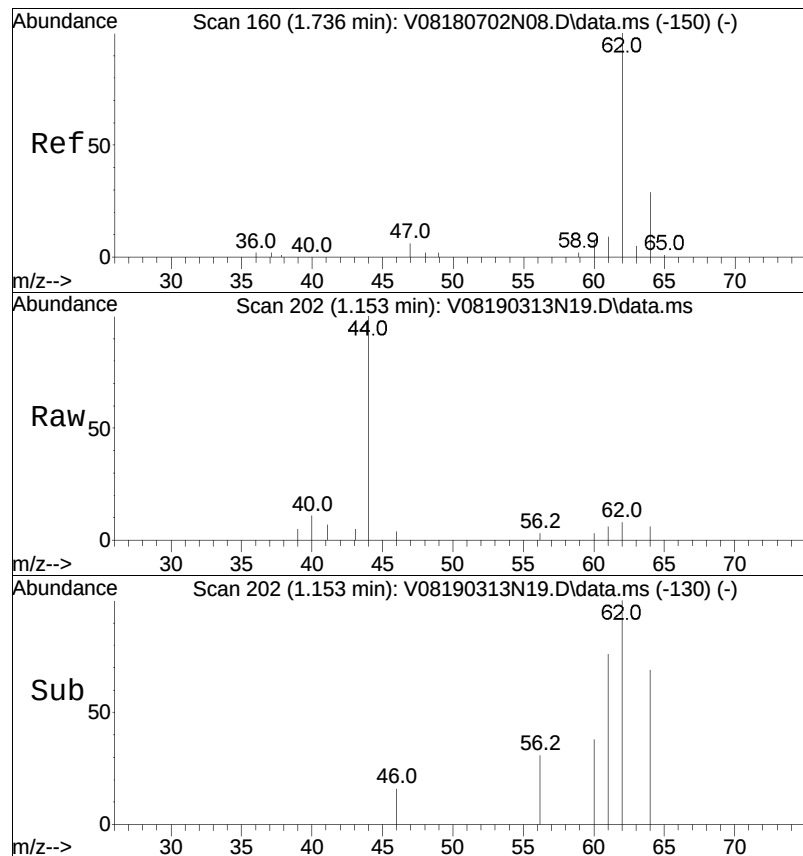
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N19.D
 Acq On : 14 Mar 2019 12:54 am
 Operator : VOA108:NLK
 Sample : 11909107-04,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 14 12:37:23 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

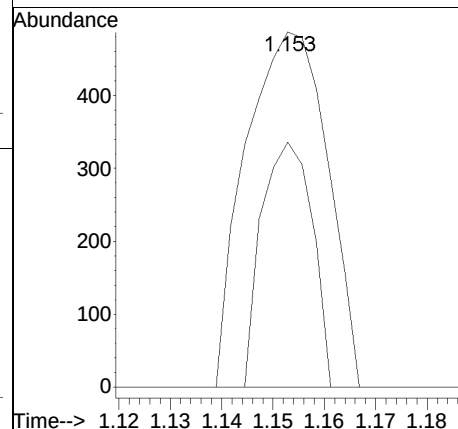
Sub List : 8260-NYTCL - Megamix plus Diox90313N\V08190313N02.D•

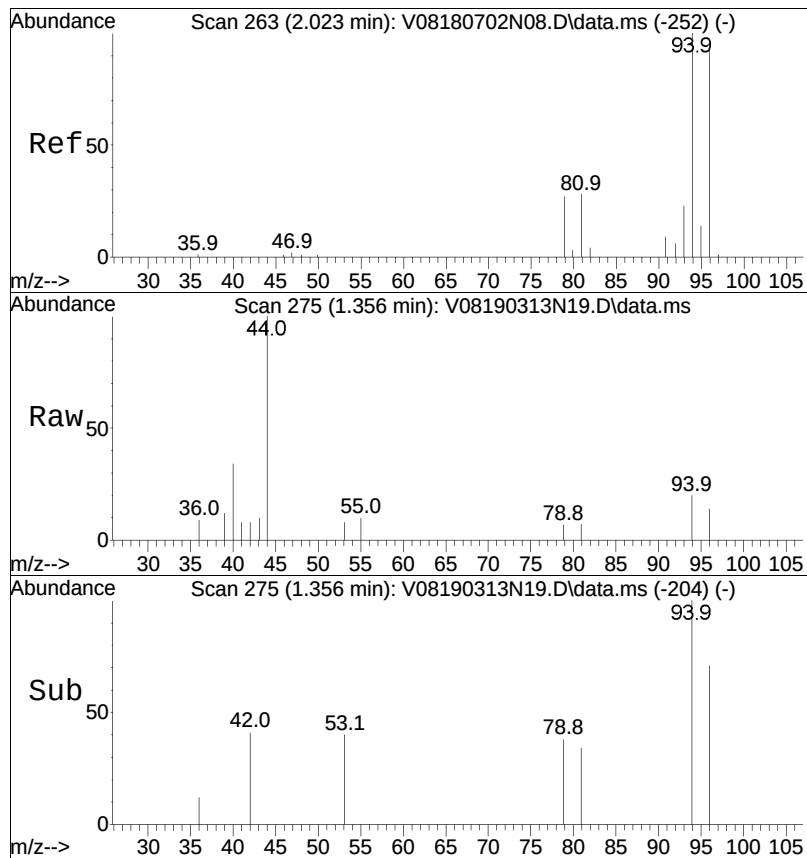




#4
 Vinyl chloride
 Concen: 0.10 ug/L
 RT: 1.153 min Scan# 202
 Delta R.T. -0.000 min
 Lab File: V08190313N19.D
 Acq: 14 Mar 2019 12:54 am

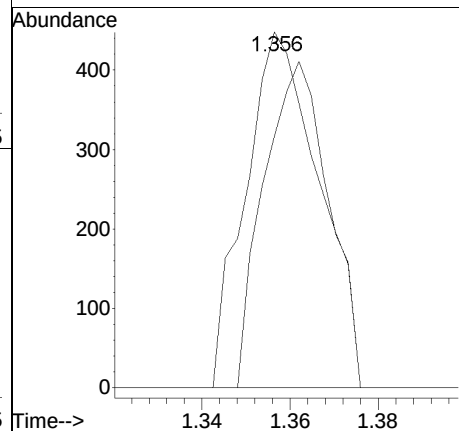
Tgt Ion	Ratio	Lower	Upper
62	100		
64	42.8	9.1	49.1

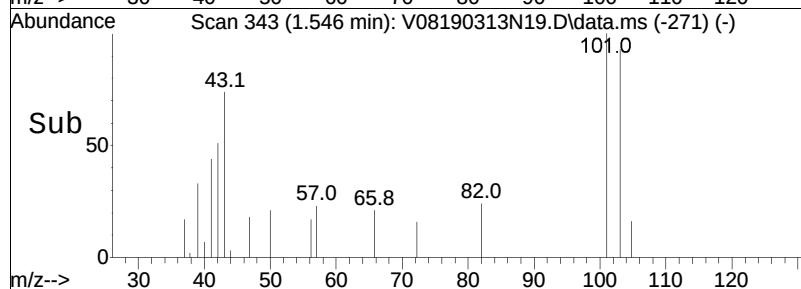
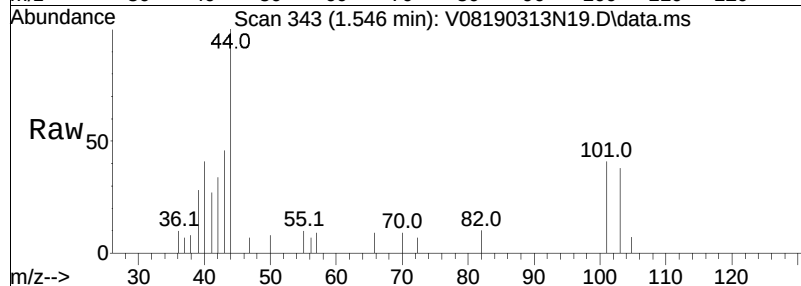
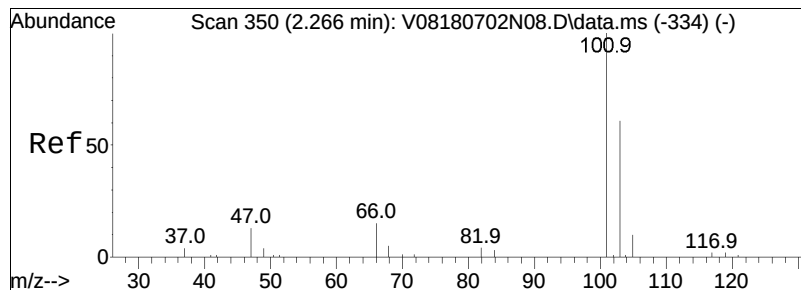




#5
 Bromomethane
 Concen: 0.11 ug/L
 RT: 1.356 min Scan# 275
 Delta R.T. -0.003 min
 Lab File: V08190313N19.D
 Acq: 14 Mar 2019 12:54 am

Tgt Ion	Ratio	Lower	Upper
94	100		
96	80.5	75.6	115.6





#7

Trichlorofluoromethane

Concen: 0.18 ug/L

RT: 1.546 min Scan# 343

Delta R.T. 0.000 min

Lab File: V08190313N19.D

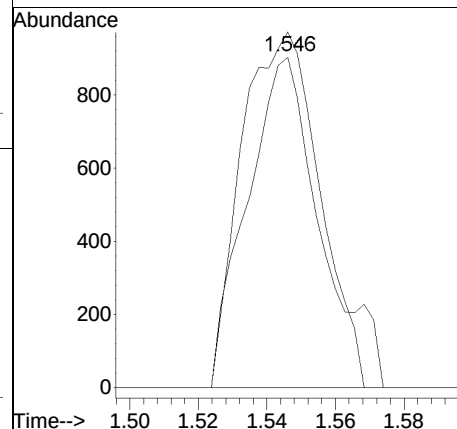
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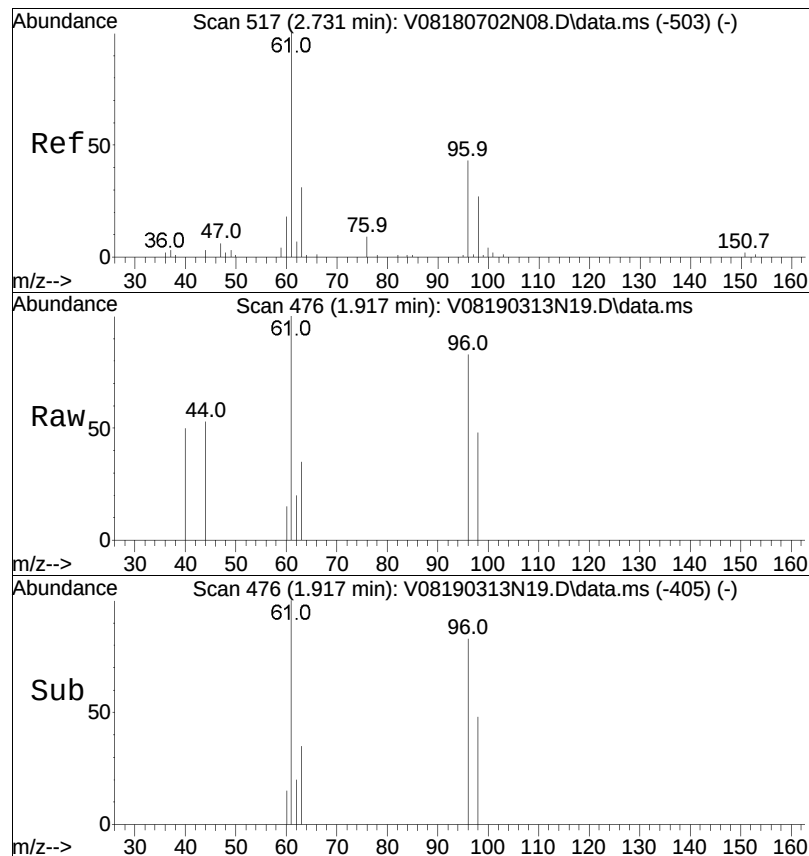
Tgt Ion:101 Resp: 1532

Ion Ratio Lower Upper

101 100

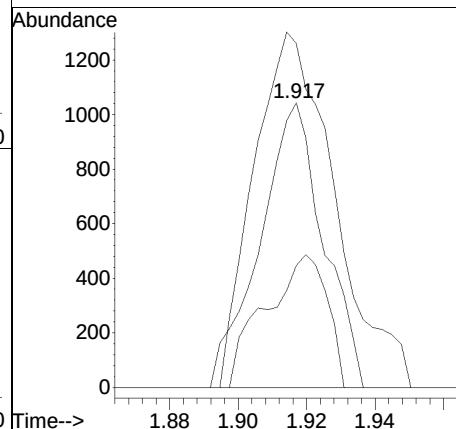
103 88.1 53.8 80.6#

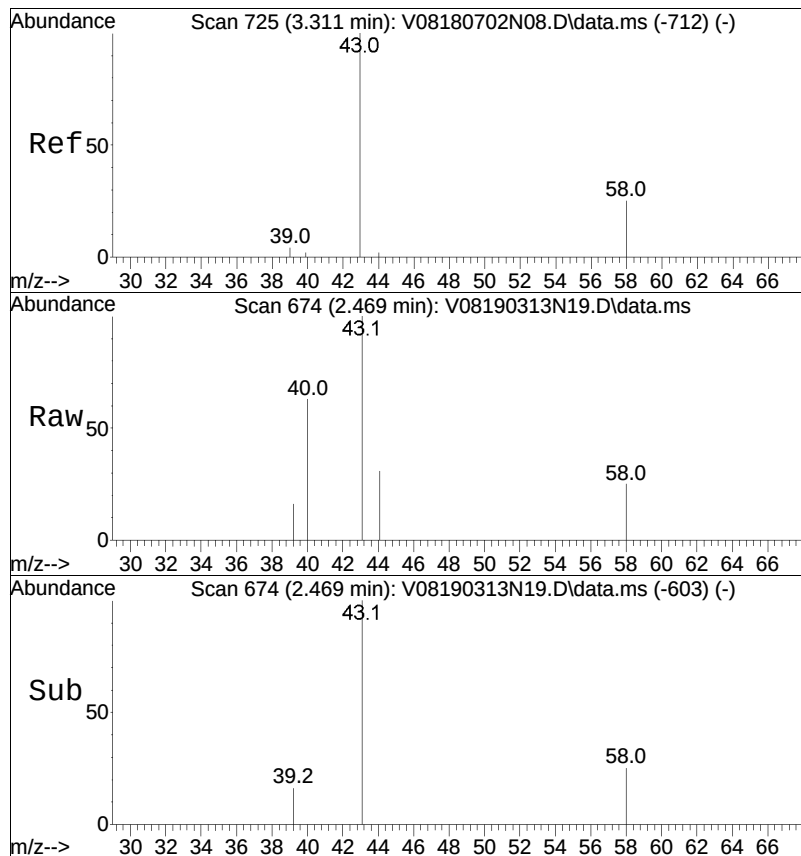




#10
 1,1-Dichloroethene
 Concen: 0.28 ug/L
 RT: 1.917 min Scan# 476
 Delta R.T. -0.003 min
 Lab File: V08190313N19.D
 Acq: 14 Mar 2019 12:54 am

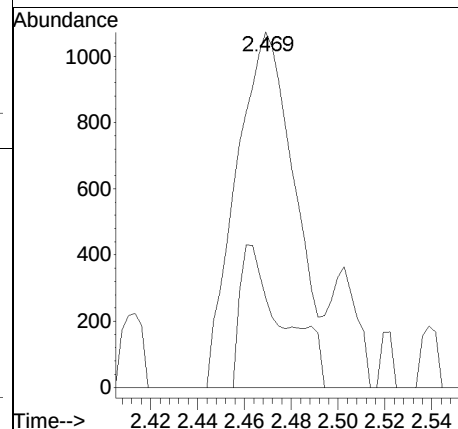
Tgt Ion:	96	Resp:	1343
Ion Ratio	Lower	Upper	
96	100		
61	159.0	186.1	279.1#
63	45.2	57.6	86.4#

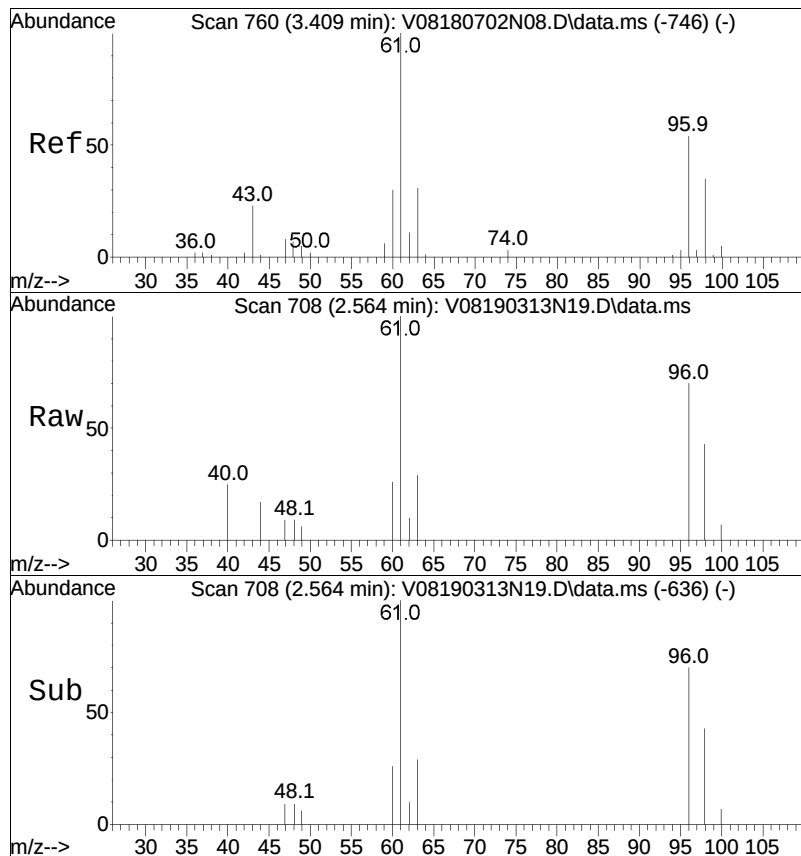




#17
 Acetone
 Concen: 2.20 ug/L M1
 RT: 2.469 min Scan# 674
 Delta R.T. -0.003 min
 Lab File: V08190313N19.D
 Acq: 14 Mar 2019 12:54 am

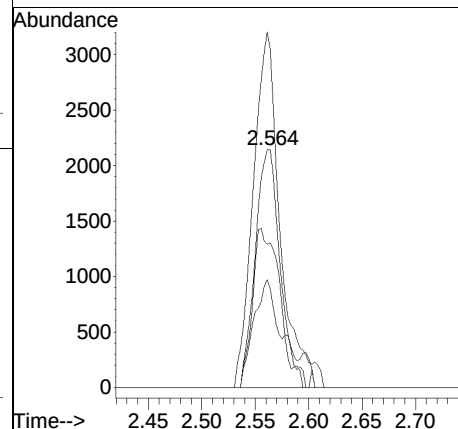
Tgt Ion: 43 Resp: 2144
 Ion Ratio Lower Upper
 43 100
 58 25.2 24.2 36.4

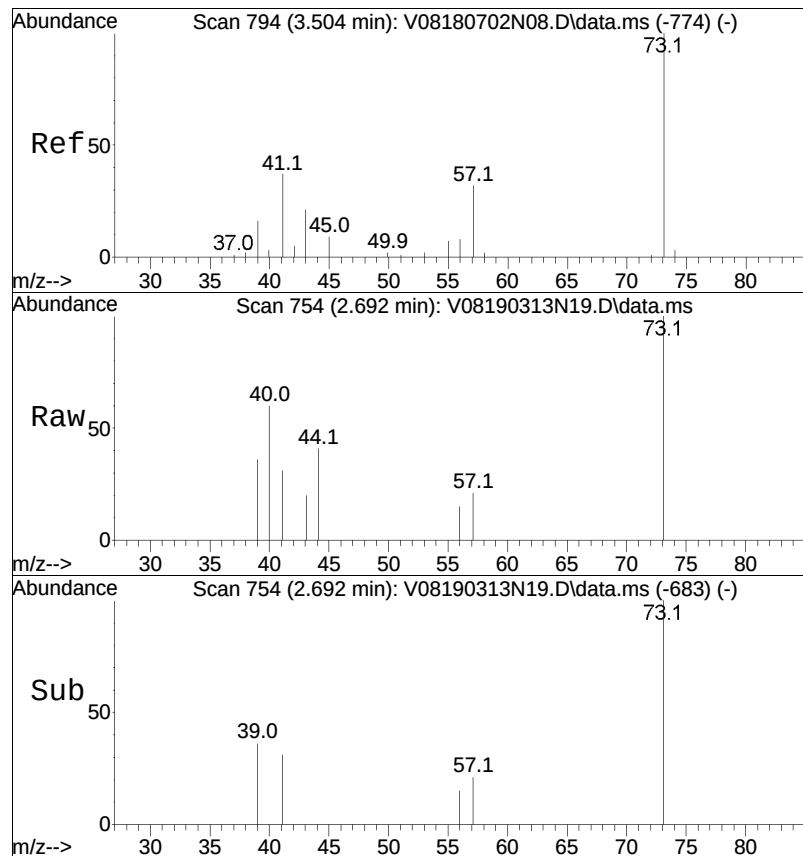




#18
 trans-1,2-Dichloroethene
 Concen: 0.69 ug/L M1
 RT: 2.564 min Scan# 708
 Delta R.T. -0.000 min
 Lab File: V08190313N19.D
 Acq: 14 Mar 2019 12:54 am

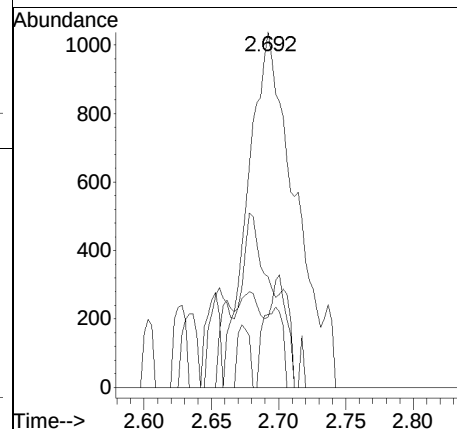
Tgt Ion:	96	Resp:	3672
Ion Ratio	Lower	Upper	
96	100		
61	153.4	124.0	257.6
98	68.8	41.2	85.6
63	48.0	38.4	79.7

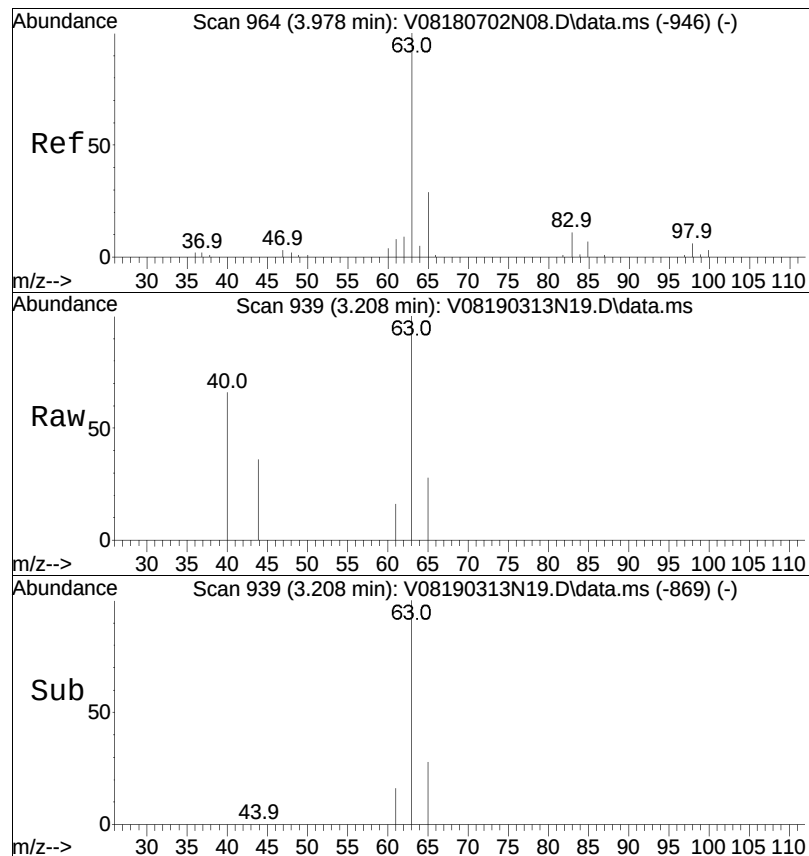




#20
Methyl tert-butyl ether
Concen: 0.18 ug/L M1
RT: 2.692 min Scan# 754
Delta R.T. -0.003 min
Lab File: V08190313N19.D
Acq: 14 Mar 2019 12:54 am

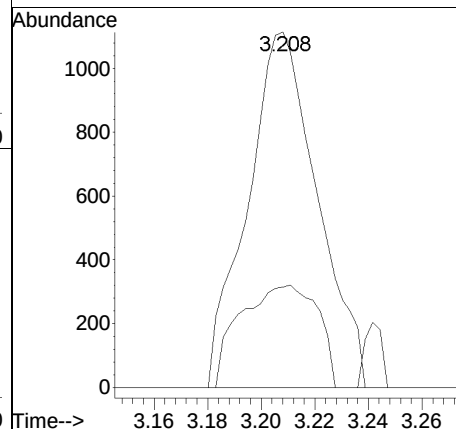
Tgt Ion: 73	Resp: 2545
Ion Ratio	Lower Upper
73 100	
57 9.4	17.5 36.3#
43 11.2	15.3 31.9#
41 0.0	15.3 31.7#

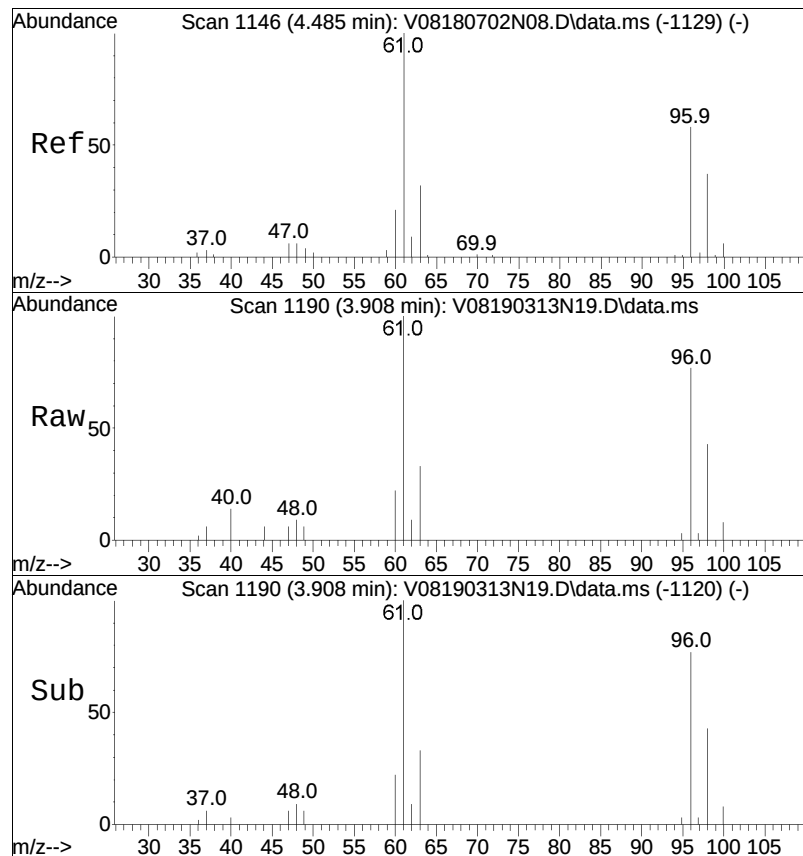




#23
 1,1-Dichloroethane
 Concen: 0.21 ug/L
 RT: 3.208 min Scan# 939
 Delta R.T. -0.006 min
 Lab File: V08190313N19.D
 Acq: 14 Mar 2019 12:54 am

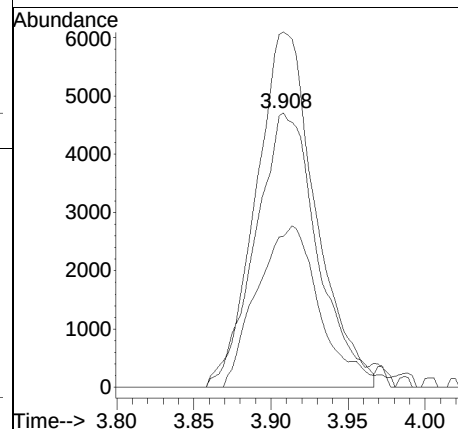
Tgt Ion: 63	Resp: 2021
Ion Ratio	Lower Upper
63 100	
65 31.8	11.0 51.0
83 0.0	0.0 31.8

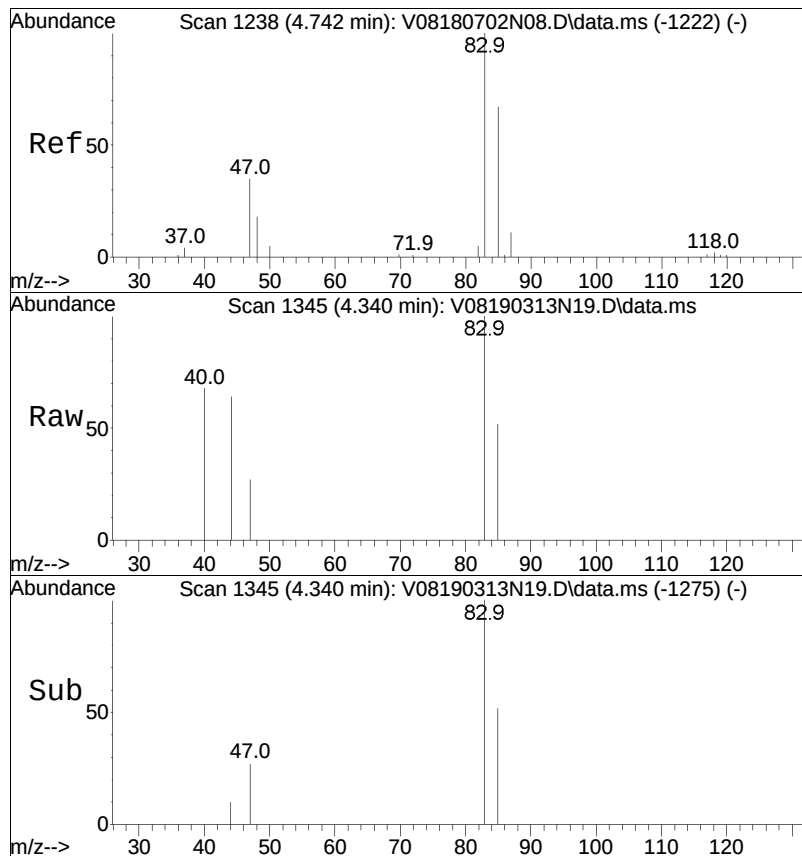




#28
 cis-1,2-Dichloroethene
 Concen: 2.17 ug/L
 RT: 3.908 min Scan# 1190
 Delta R.T. -0.006 min
 Lab File: V08190313N19.D
 Acq: 14 Mar 2019 12:54 am

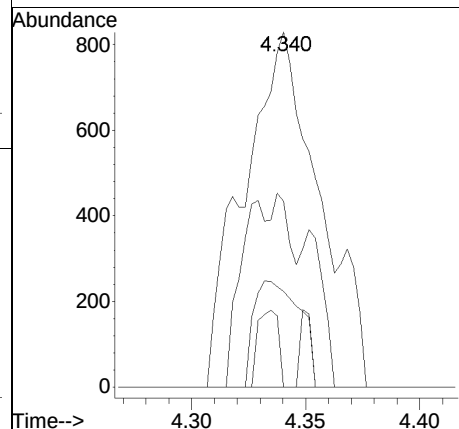
Tgt Ion:	96	Resp:	13204
Ion Ratio	Lower	Upper	
96	100		
61	123.7	149.4	224.2#
98	60.1	53.4	80.2

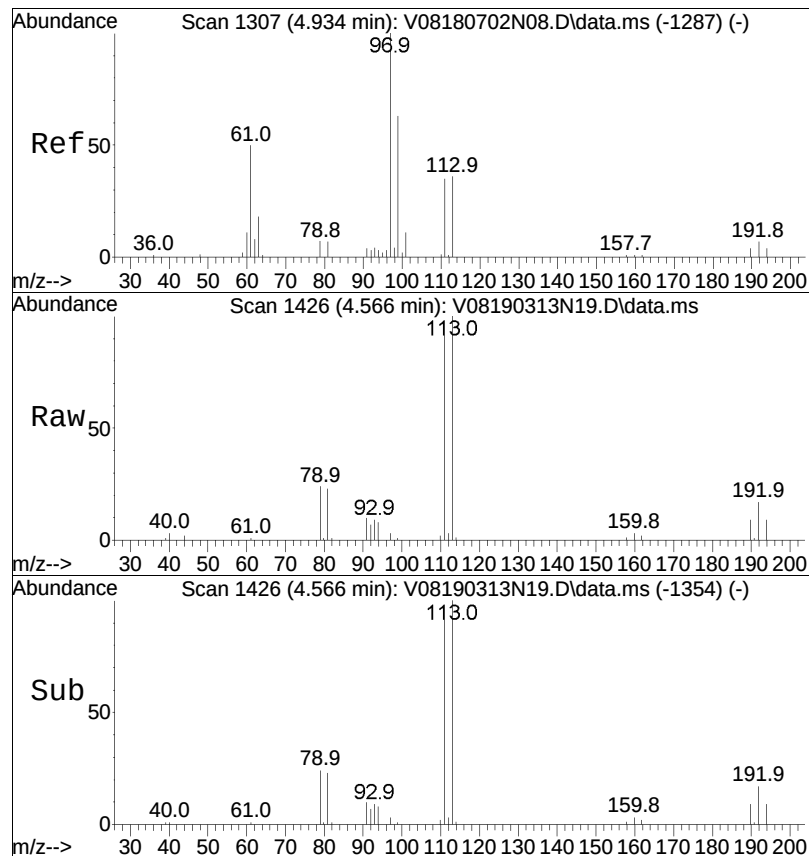




#32
 Chloroform
 Concen: 0.19 ug/L
 RT: 4.340 min Scan# 1345
 Delta R.T. -0.006 min
 Lab File: V08190313N19.D
 Acq: 14 Mar 2019 12:54 am

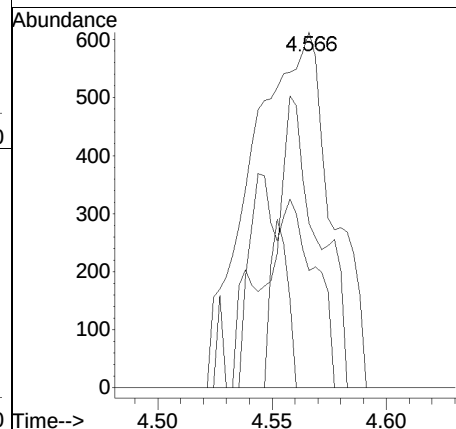
Tgt	Ion: 83	Resp:	1911
Ion	Ratio	Lower	Upper
83	100		
85	0.0	41.5	86.1#
47	0.0	19.0	39.4#
48	3.1	9.9	20.5#

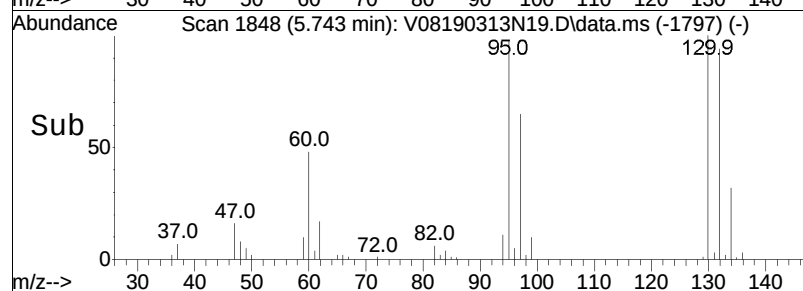
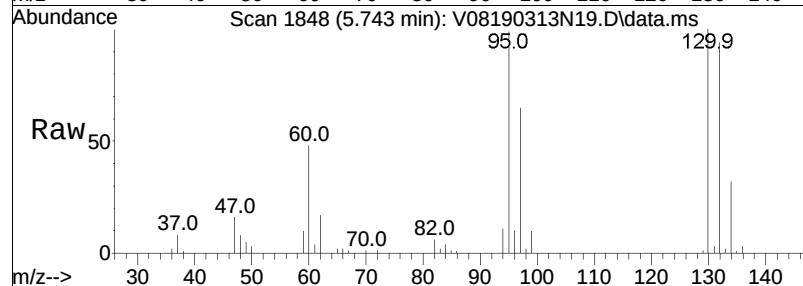
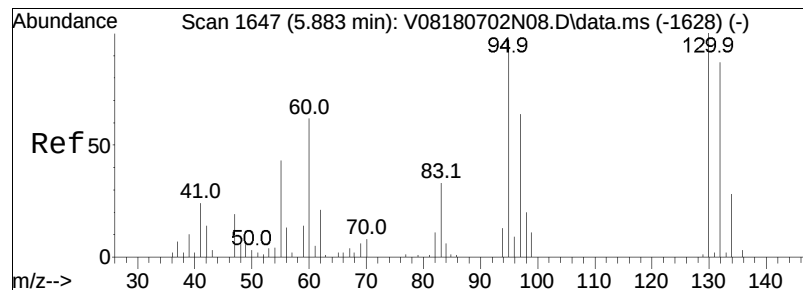




#37
 1,1,1-Trichloroethane
 Concen: 0.18 ug/L
 RT: 4.566 min Scan# 1426
 Delta R.T. 0.000 min
 Lab File: V08190313N19.D
 Acq: 14 Mar 2019 12:54 am

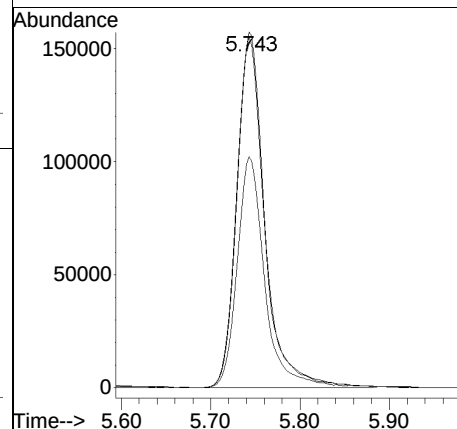
Tgt Ion: 97	Resp: 1520
Ion Ratio	Lower Upper
97 100	
99 39.8	40.7 84.5#
61 0.0	35.4 73.4#
63 9.9	5.0 10.4

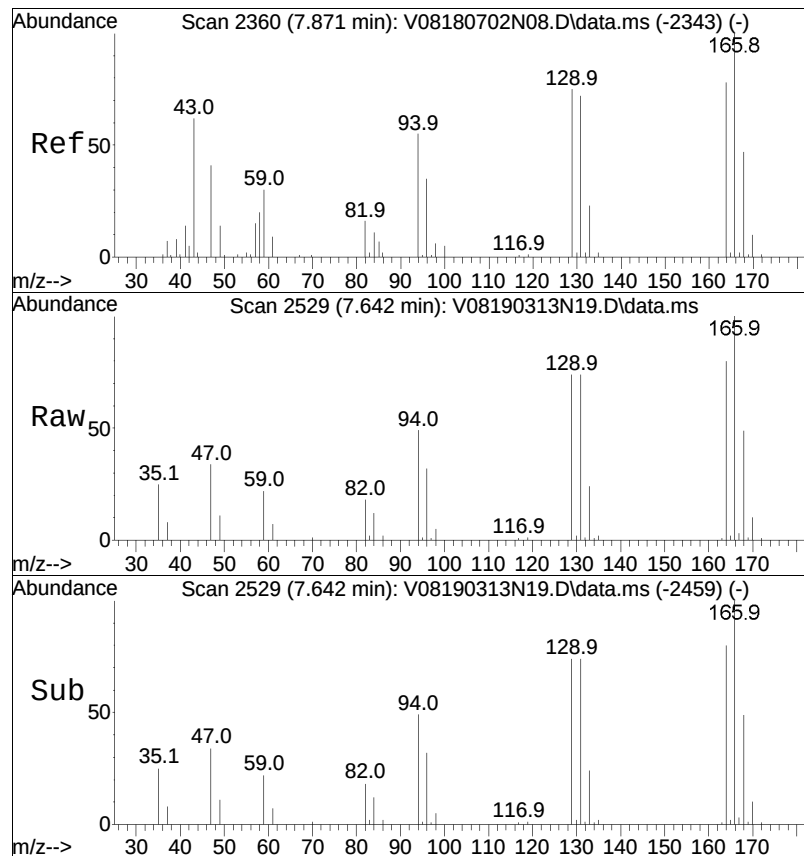




#48
 Trichloroethene
 Concen: 58.70 ug/L
 RT: 5.743 min Scan# 1848
 Delta R.T. -0.008 min
 Lab File: V08190313N19.D
 Acq: 14 Mar 2019 12:54 am

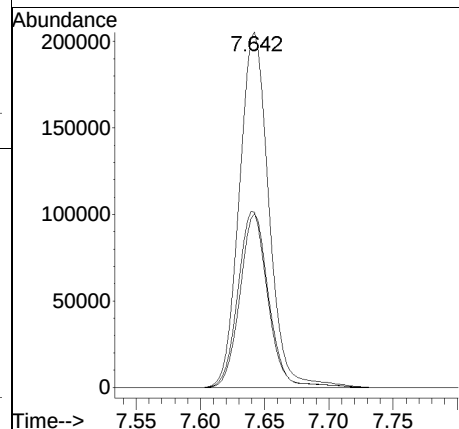
Tgt Ion	Ratio	Lower	Upper
95	100		
97	64.5	55.5	83.3
130	101.1	76.6	115.0





#63
Tetrachloroethene
Concen: 55.64 ug/L
RT: 7.642 min Scan# 2529
Delta R.T. -0.006 min
Lab File: V08190313N19.D
Acq: 14 Mar 2019 12:54 am

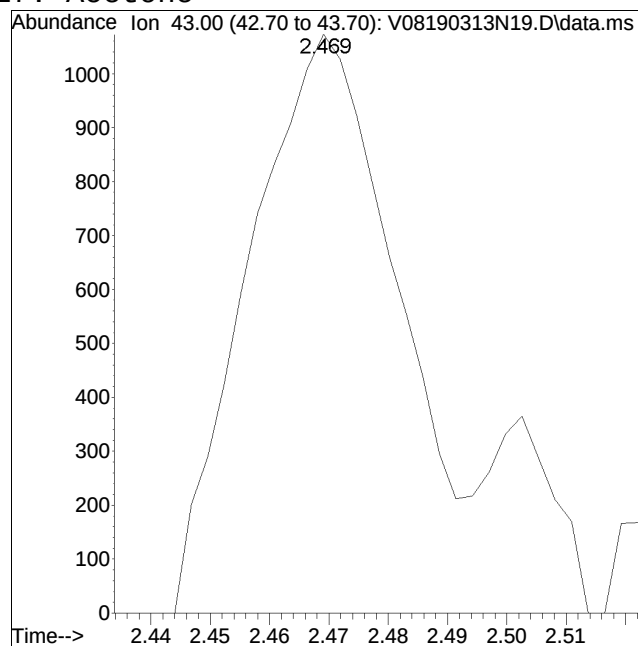
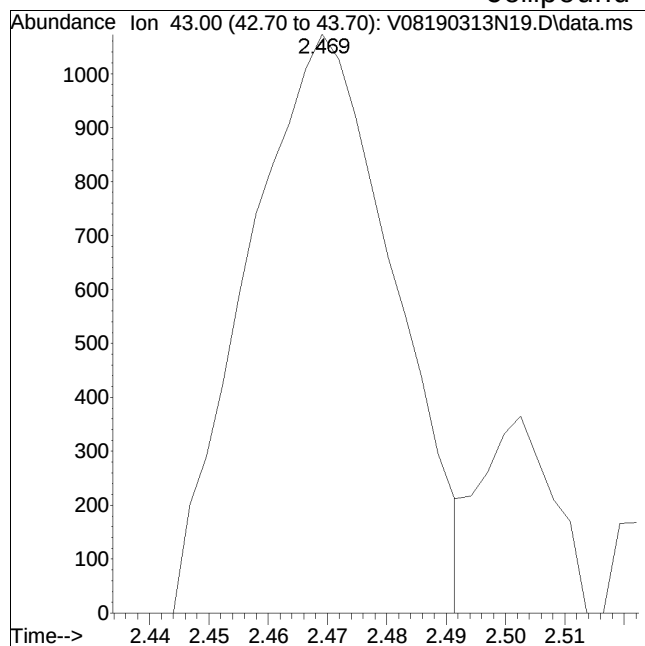
Tgt Ion:	166	Resp:	328532
Ion Ratio	Lower	Upper	
166	100		
168	48.0	28.2	68.2
94	50.0	38.4	78.4



Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190313N19.D Operator : VOA108:NLK
Date Inj'd : 3/14/2019 12:54 am Instrument : VOA 108
Sample : l1909107-04,31,10,10,,a Quant Date : 3/14/2019 11:43 am

Compound #17: Acetone

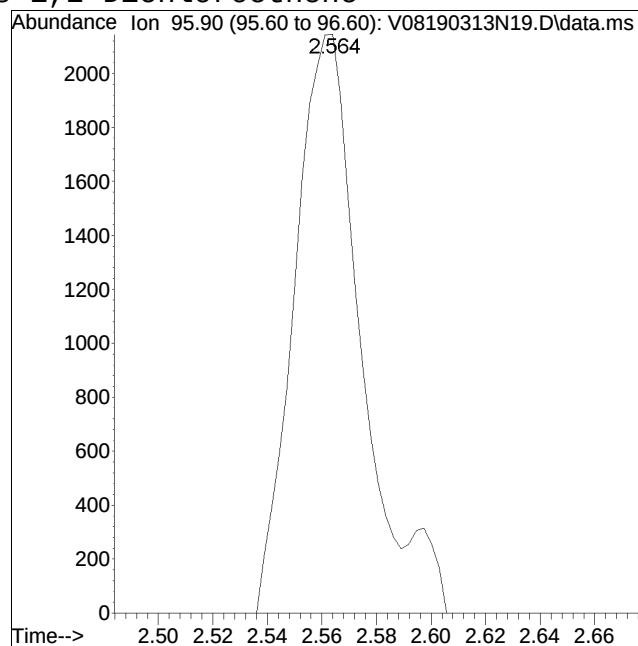
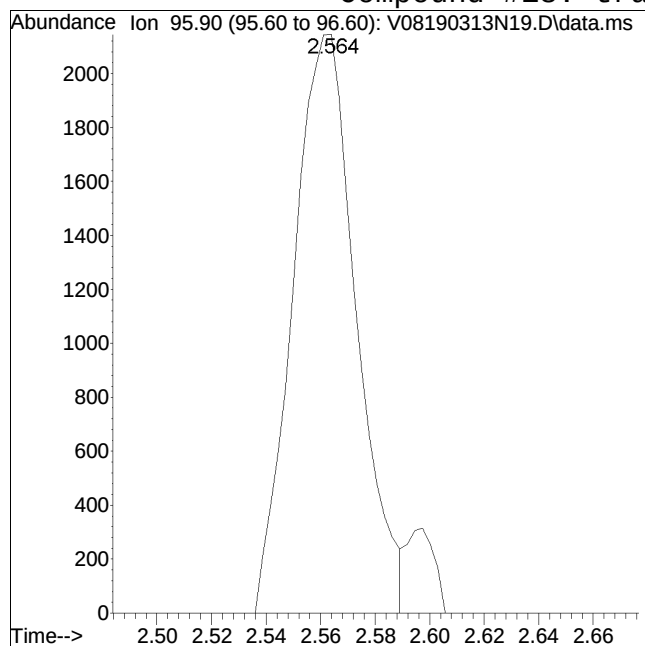


M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190313N19.D Operator : VOA108:NLK
Date Inj'd : 3/14/2019 12:54 am Instrument : VOA 108
Sample : l1909107-04,31,10,10,,a Quant Date : 3/14/2019 11:43 am

Compound #18: trans-1,2-Dichloroethene



Original Peak Response = 3454

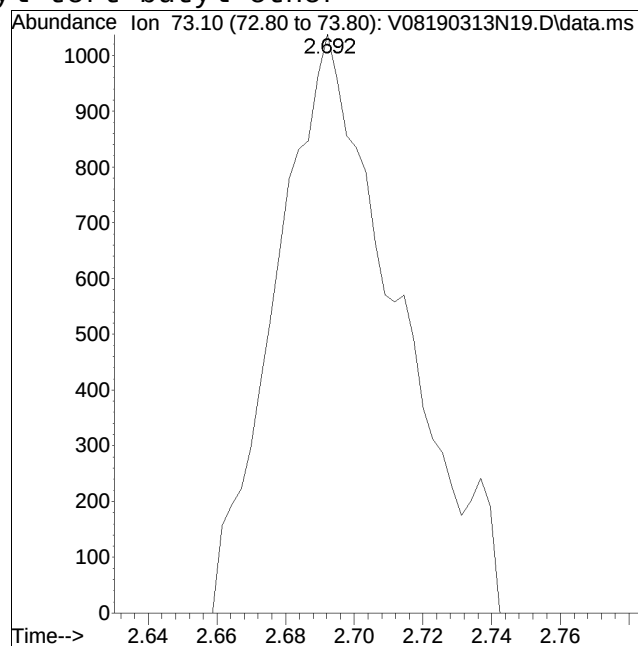
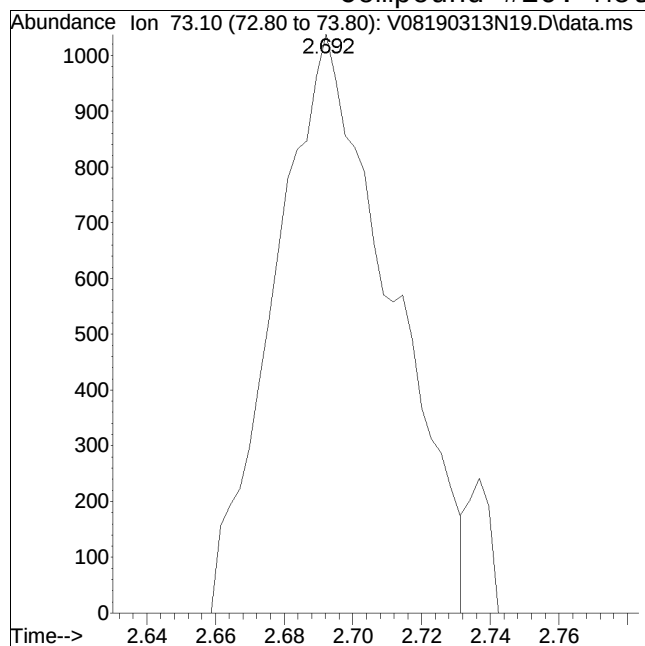
Manual Peak Response = 3672 M1

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

Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190313N19.D Operator : VOA108:NLK
Date Inj'd : 3/14/2019 12:54 am Instrument : VOA 108
Sample : l1909107-04,31,10,10,,a Quant Date : 3/14/2019 11:43 am

Compound #20: Methyl tert-butyl ether



Original Peak Response = 2438

Manual Peak Response = 2545 M1

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N20.D
 Acq On : 14 Mar 2019 1:16 am
 Operator : VOA108:NLK
 Sample : 11909107-05,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 14 12:38:02 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	248447	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery	=	82.26%	
59) Chlorobenzene-d5	8.526	117	176866	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery	=	85.56%	
79) 1,4-Dichlorobenzene-d4	10.010	152	68256	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery	=	67.65%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	71878	11.327	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	113.27%	
43) 1,2-Dichloroethane-d4	5.208	65	87489	12.266	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	122.66%	
60) Toluene-d8	7.240	98	233390	9.628	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	96.28%	
83) 4-Bromofluorobenzene	9.340	95	74231	11.114	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	111.14%	
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	1.362	94	817	0.182	ug/L	96
6) Chloroethane	1.443	64	163		N.D.	
7) Trichlorofluoromethane	0.000		0		N.D.	
8) Ethyl ether	0.000		0		N.D.	
10) 1,1-Dichloroethene	0.000		0		N.D.	
11) Carbon disulfide	0.000		0		N.D.	
15) Methylene chloride	0.000		0		N.D.	
17) Acetone	2.464	43	4804M1	4.974	ug/L	
18) trans-1,2-Dichloroethene	0.000		0		N.D.	
20) Methyl tert-butyl ether	0.000		0		N.D.	
23) 1,1-Dichloroethane	3.211	63	214		N.D.	
25) Acrylonitrile	0.000		0		N.D.	
27) Vinyl acetate	0.000		0		N.D.	
28) cis-1,2-Dichloroethene	3.911	96	10073	1.675	ug/L #	67
29) 2,2-Dichloropropane	0.000		0		N.D.	
30) Bromochloromethane	0.000		0		N.D.	
32) Chloroform	4.335	83	2813M1	0.287	ug/L	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N20.D
 Acq On : 14 Mar 2019 1:16 am
 Operator : VOA108:NLK
 Sample : 11909107-05,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 14 12:38:02 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0	N.D.		
37) 1,1,1-Trichloroethane	4.569	97	132	N.D.		
39) 2-Butanone	4.770	43	1111	0.658	ug/L	94
40) 1,1-Dichloropropene	0.000		0	N.D.		
41) Benzene	5.032	78	743	N.D.		
44) 1,2-Dichloroethane	5.297	62	80	N.D.		
48) Trichloroethene	5.743	95	60618	10.671	ug/L	93
50) Dibromomethane	0.000		0	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.		
61) Toluene	7.288	92	842	N.D.		
62) 4-Methyl-2-pentanone	0.000		0	N.D.		
63) Tetrachloroethene	7.642	166	33315	5.629	ug/L	93
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.		
70) 1,3-Dichloropropane	0.000		0	N.D.		
71) 1,2-Dibromoethane	0.000		0	N.D.		
72) 2-Hexanone	8.518	43	119	N.D.		
73) Chlorobenzene	0.000		0	N.D.		
74) Ethylbenzene	8.582	91	676	N.D.		
75) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
76) p/m Xylene	8.691	106	841	0.086	ug/L	85
77) o Xylene	8.969	106	430	N.D.		
78) Styrene	0.000		0	N.D.		
80) Bromoform	0.000		0	N.D.		
82) Isopropylbenzene	9.179	105	377	N.D.		
84) Bromobenzene	0.000		0	N.D.		
85) n-Propylbenzene	9.432	91	352	N.D.		
87) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
88) 4-Ethyltoluene	9.499	105	1707	0.090	ug/L	89
89) 2-Chlorotoluene	9.510	91	108	N.D.		
90) 1,3,5-Trimethylbenzene	9.561	105	565	N.D.		
91) 1,2,3-Trichloropropane	0.000		0	N.D.		
92) trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
93) 4-Chlorotoluene	9.510	91	108	N.D.		
94) tert-Butylbenzene	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N20.D
 Acq On : 14 Mar 2019 1:16 am
 Operator : VOA108:NLK
 Sample : 11909107-05,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 14 12:38:02 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	9.787	105	1791	0.110	ug/L	90
98)	sec-Butylbenzene	9.842	105	150	N.D.		
99)	p-Isopropyltoluene	9.940	119	146	N.D.		
100)	1,3-Dichlorobenzene	10.012	146	99	N.D.		
101)	1,4-Dichlorobenzene	10.012	146	99	N.D.		
102)	p-Diethylbenzene	10.157	119	400	N.D.		
103)	n-Butylbenzene	10.174	91	126	N.D.		
104)	1,2-Dichlorobenzene	0.000		0	N.D.		
105)	1,2,4,5-Tetramethylben...	0.000		0	N.D.	d	
106)	1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
108)	Hexachlorobutadiene	0.000		0	N.D.		
109)	1,2,4-Trichlorobenzene	0.000		0	N.D.		
110)	Naphthalene	11.270	128	7502	0.589	ug/L	100
111)	1,2,3-Trichlorobenzene	0.000		0	N.D.		

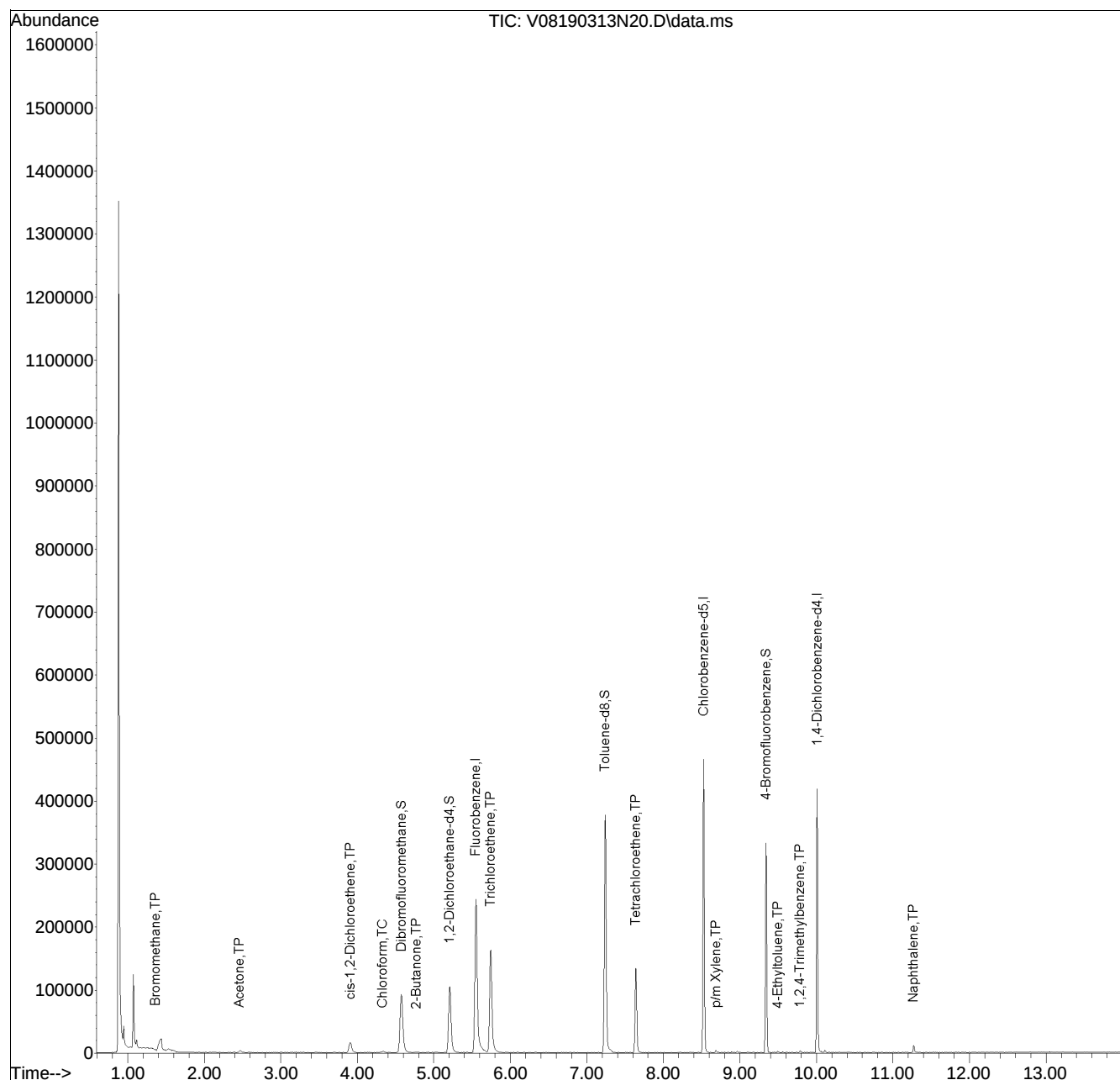
(#) = qualifier out of range (m) = manual integration (+) = signals summed

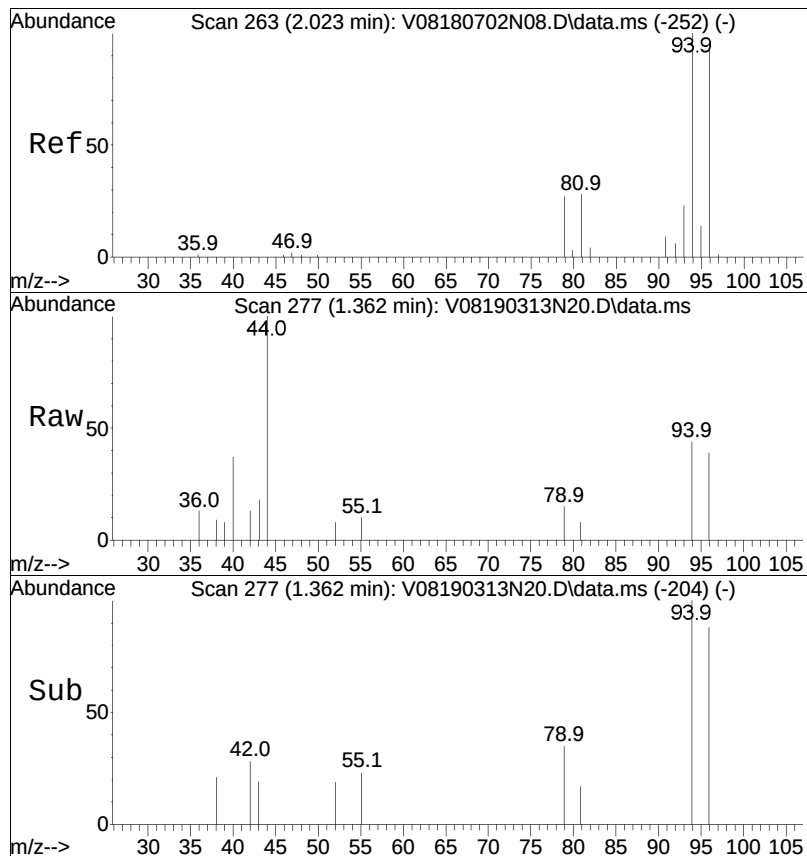
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N20.D
 Acq On : 14 Mar 2019 1:16 am
 Operator : VOA108:NLK
 Sample : 11909107-05,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 14 12:38:02 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

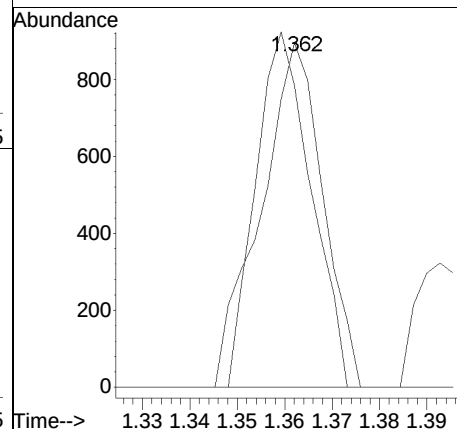
Sub List : 8260-NYTCL - Megamix plus Diox90313N\V08190313N02.D•

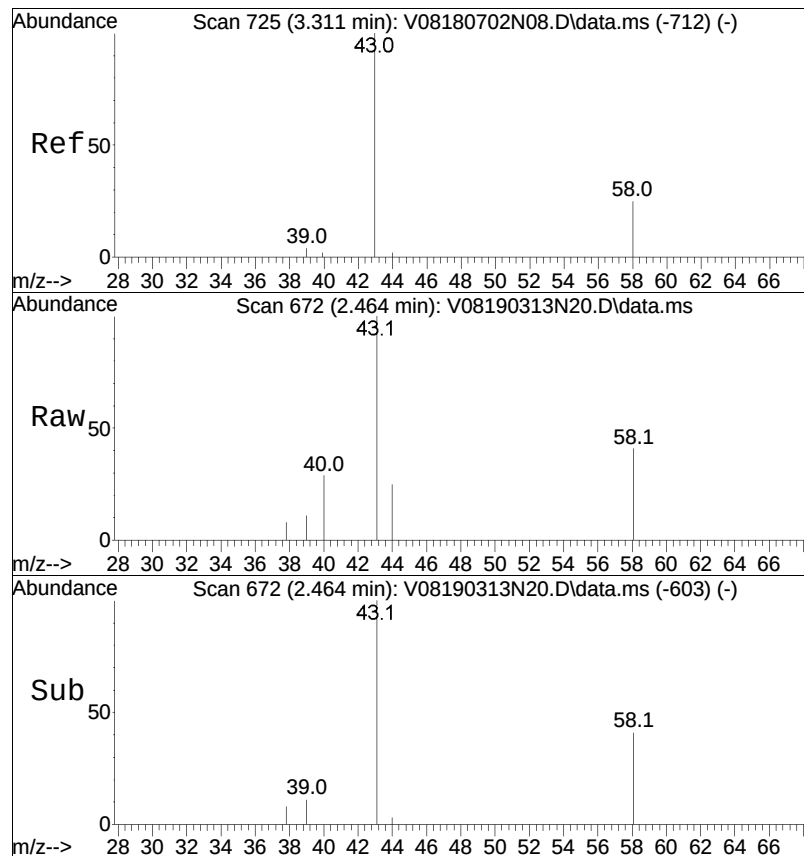




#5
 Bromomethane
 Concen: 0.18 ug/L
 RT: 1.362 min Scan# 277
 Delta R.T. 0.003 min
 Lab File: V08190313N20.D
 Acq: 14 Mar 2019 1:16 am

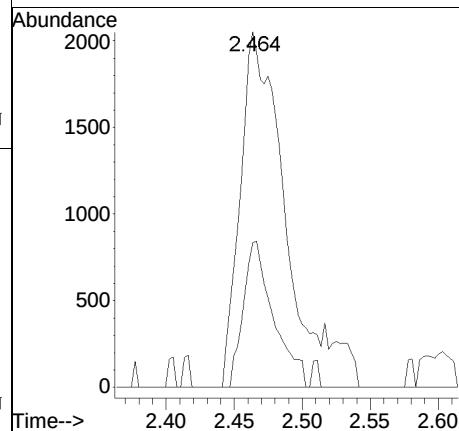
Tgt Ion: 94 Resp: 817
 Ion Ratio Lower Upper
 94 100
 96 91.7 75.6 115.6

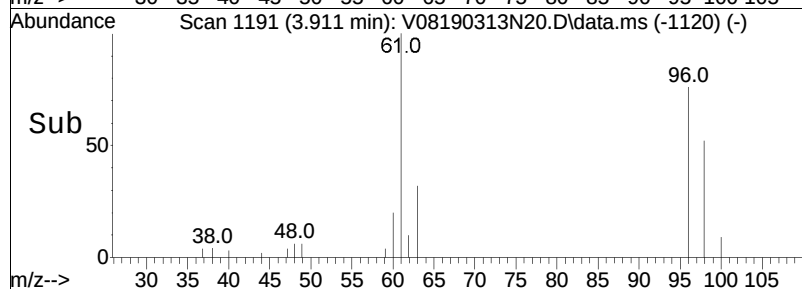
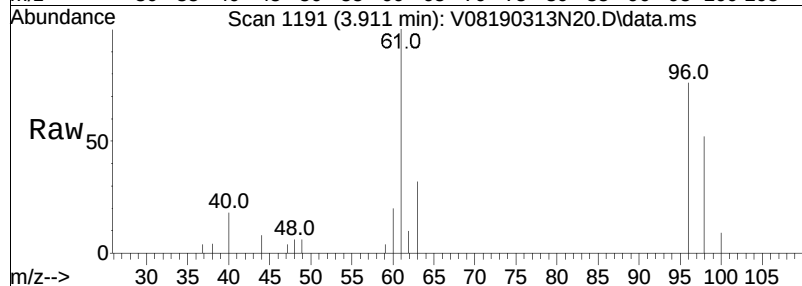
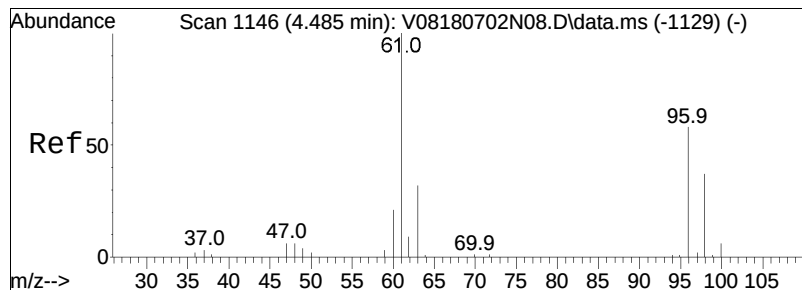




#17
 Acetone
 Concen: 4.97 ug/L M1
 RT: 2.464 min Scan# 672
 Delta R.T. -0.008 min
 Lab File: V08190313N20.D
 Acq: 14 Mar 2019 1:16 am

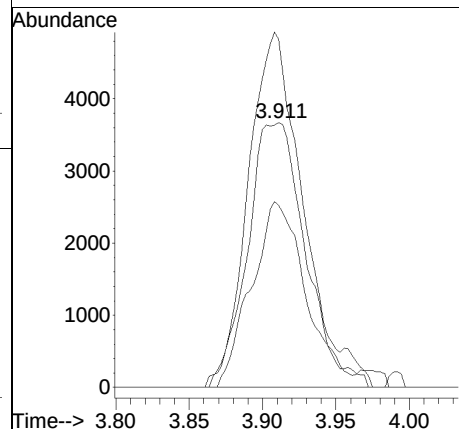
Tgt Ion: 43 Resp: 4804
 Ion Ratio Lower Upper
 43 100
 58 27.2 24.2 36.4

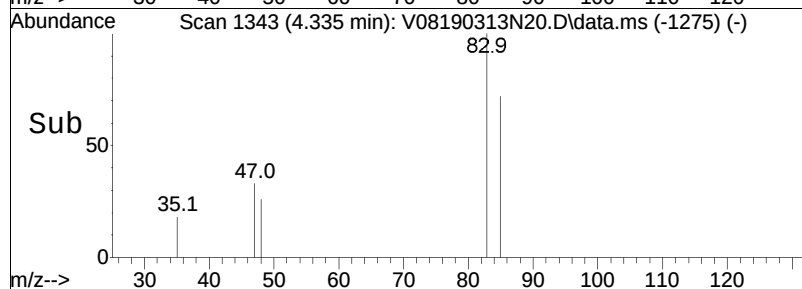
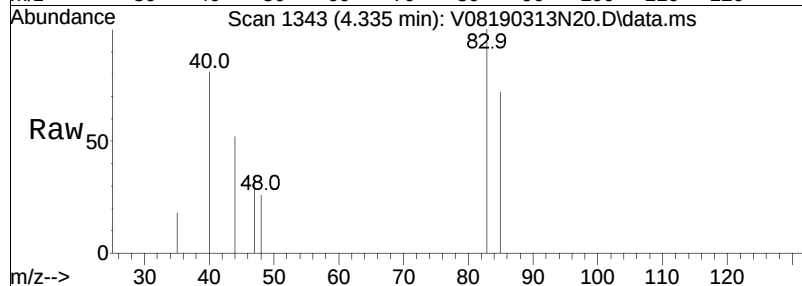
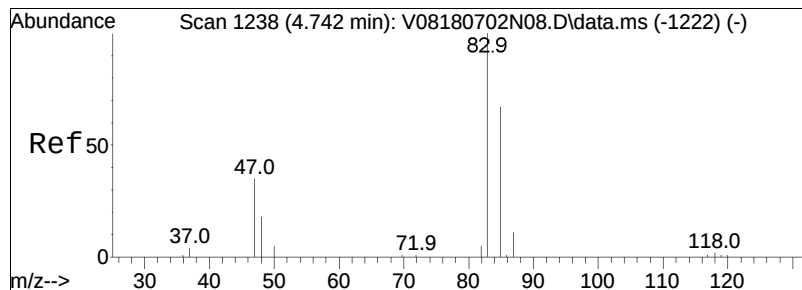




#28
 cis-1,2-Dichloroethene
 Concen: 1.67 ug/L
 RT: 3.911 min Scan# 1191
 Delta R.T. -0.003 min
 Lab File: V08190313N20.D
 Acq: 14 Mar 2019 1:16 am

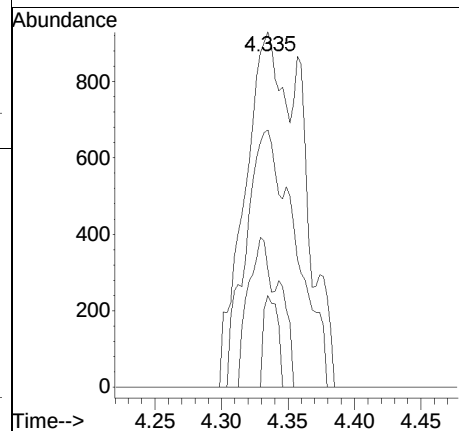
Tgt Ion:	96	Resp:	10073
Ion Ratio	Lower	Upper	
96	100		
61	122.9	149.4	224.2#
98	66.0	53.4	80.2

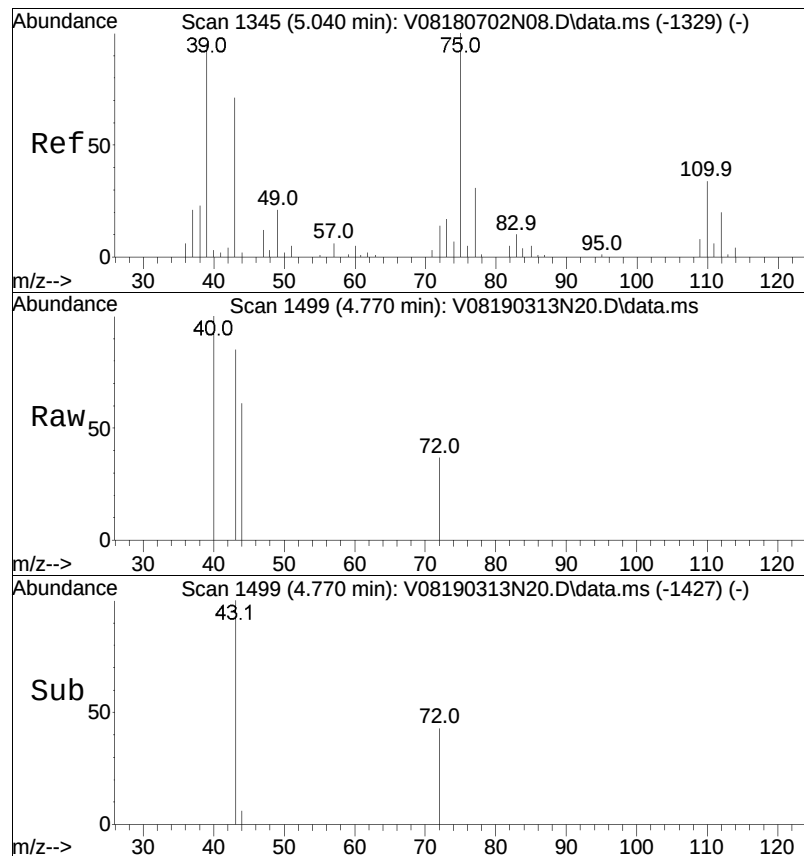




#32
 Chloroform
 Concen: 0.29 ug/L M1
 RT: 4.335 min Scan# 1343
 Delta R.T. -0.011 min
 Lab File: V08190313N20.D
 Acq: 14 Mar 2019 1:16 am

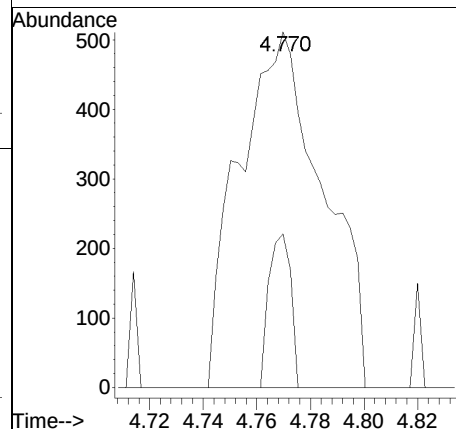
Tgt	Ion: 83	Resp:	2813
Ion	Ratio	Lower	Upper
83	100		
85	62.1	41.5	86.1
47	17.2	19.0	39.4#
48	6.2	9.9	20.5#

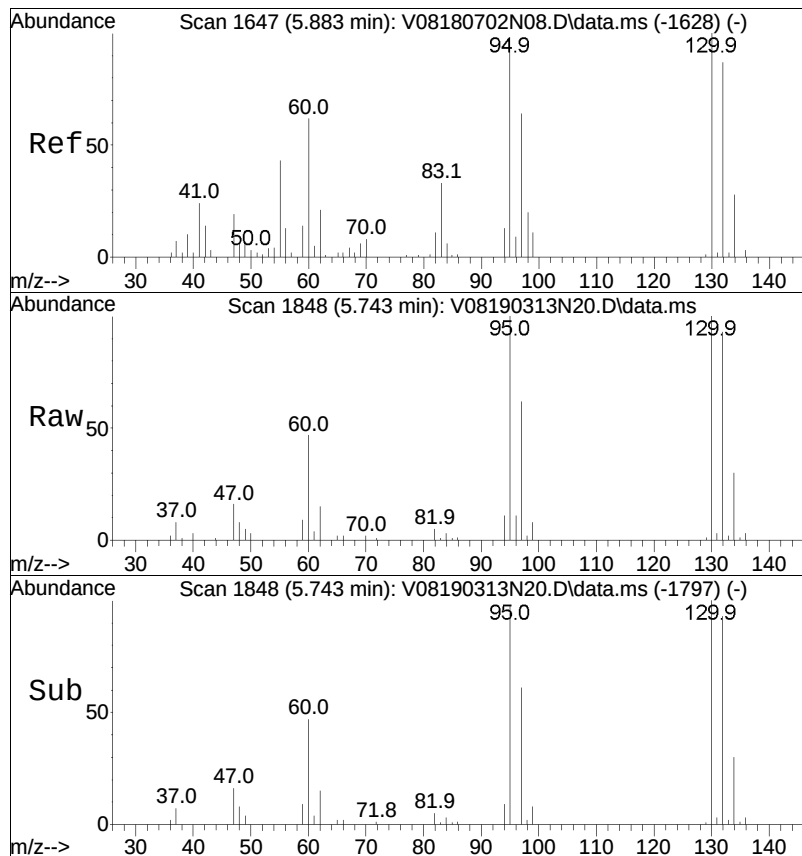




#39
 2-Butanone
 Concen: 0.66 ug/L
 RT: 4.770 min Scan# 1499
 Delta R.T. -0.000 min
 Lab File: V08190313N20.D
 Acq: 14 Mar 2019 1:16 am

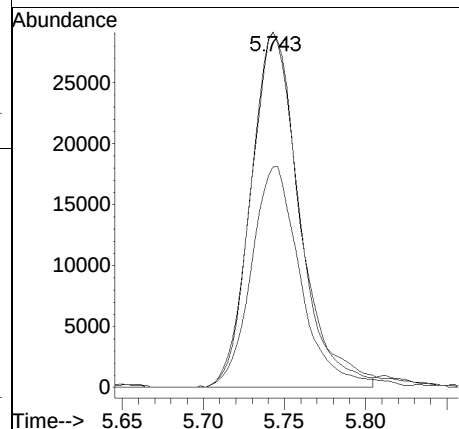
Tgt Ion: 43 Resp: 1111
 Ion Ratio Lower Upper
 43 100
 72 11.3 10.9 16.3

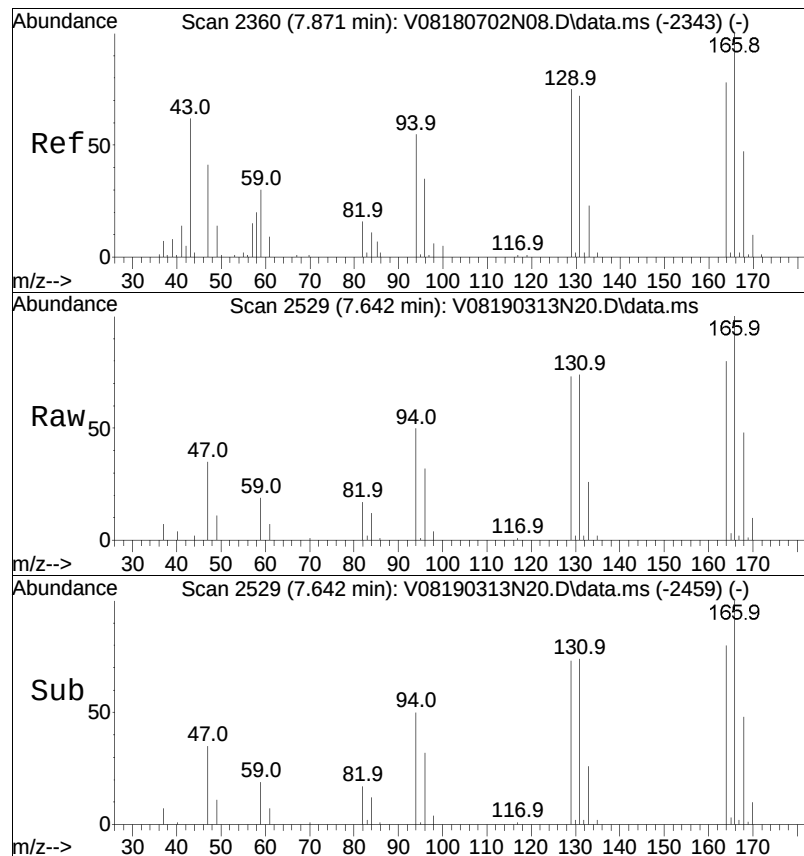




#48
 Trichloroethene
 Concen: 10.67 ug/L
 RT: 5.743 min Scan# 1848
 Delta R.T. -0.008 min
 Lab File: V08190313N20.D
 Acq: 14 Mar 2019 1:16 am

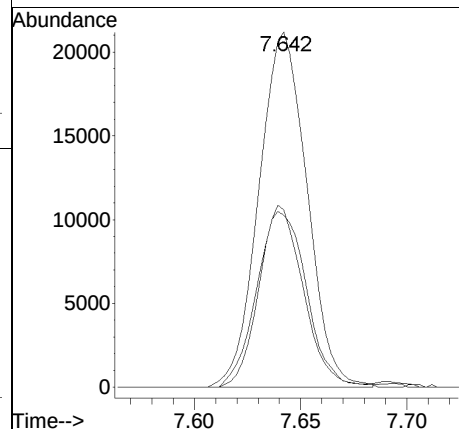
Tgt Ion:	95	Resp:	60618
Ion Ratio	Lower	Upper	
95	100		
97	63.7	55.5	83.3
130	103.1	76.6	115.0

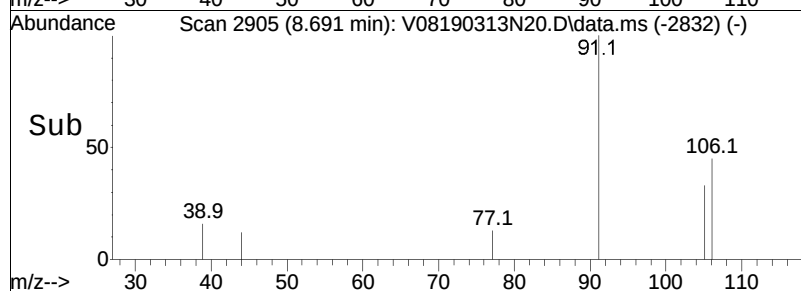
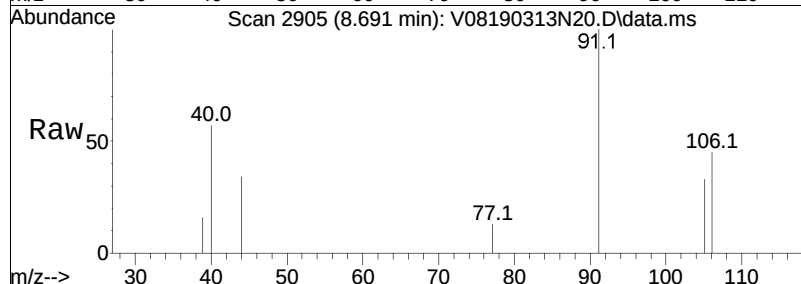
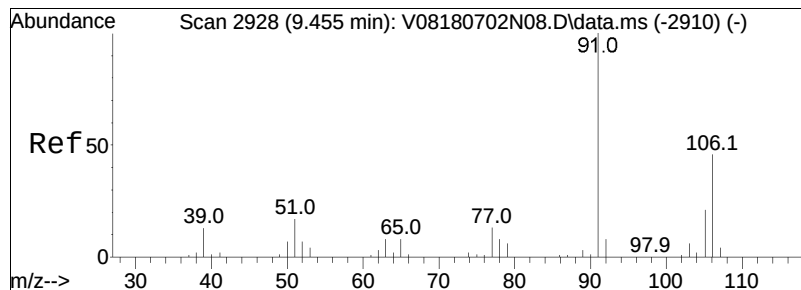




#63
Tetrachloroethene
Concen: 5.63 ug/L
RT: 7.642 min Scan# 2529
Delta R.T. -0.006 min
Lab File: V08190313N20.D
Acq: 14 Mar 2019 1:16 am

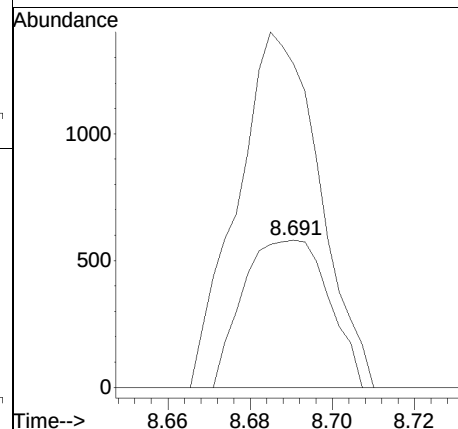
Tgt	Ion:166	Resp:	33315
Ion	Ratio	Lower	Upper
166	100		
168	49.4	28.2	68.2
94	49.4	38.4	78.4

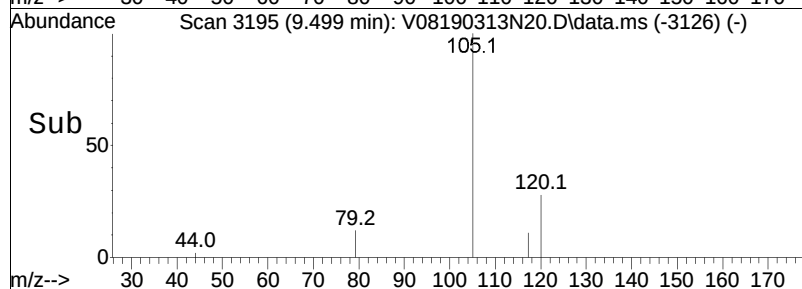
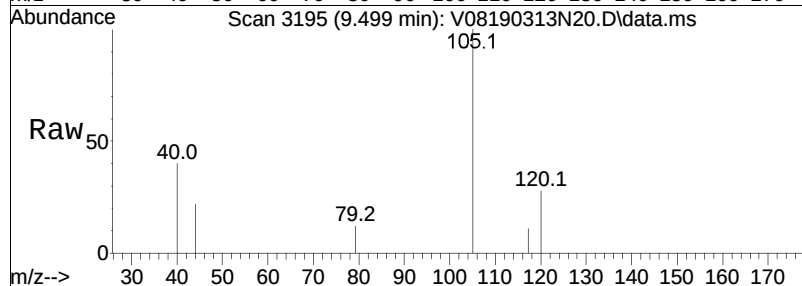
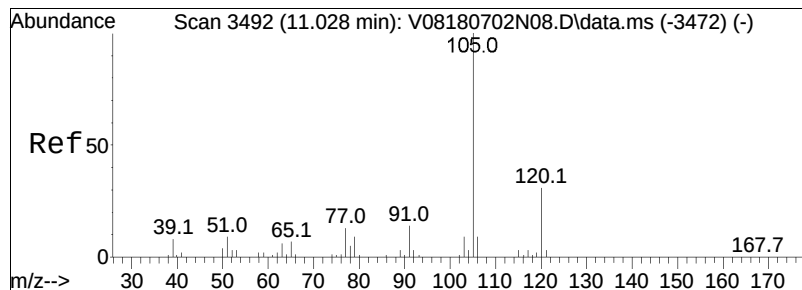




#76
 p/m Xylene
 Concen: 0.09 ug/L
 RT: 8.691 min Scan# 2905
 Delta R.T. 0.003 min
 Lab File: V08190313N20.D
 Acq: 14 Mar 2019 1:16 am

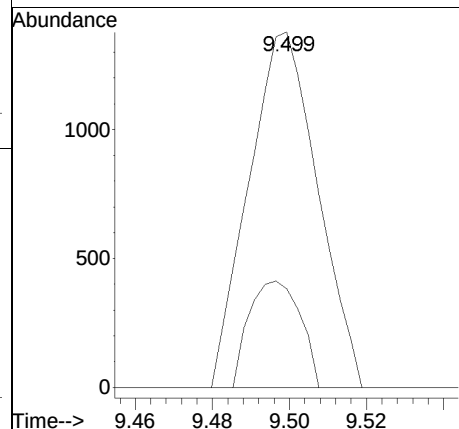
Tgt	Ion	Ratio	Lower	Upper
106	100			
91	230.6	166.4	249.6	

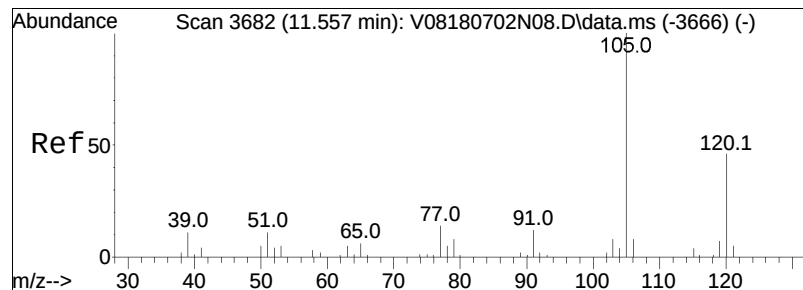




#88
 4-Ethyltoluene
 Concen: 0.09 ug/L
 RT: 9.499 min Scan# 3195
 Delta R.T. -0.009 min
 Lab File: V08190313N20.D
 Acq: 14 Mar 2019 1:16 am

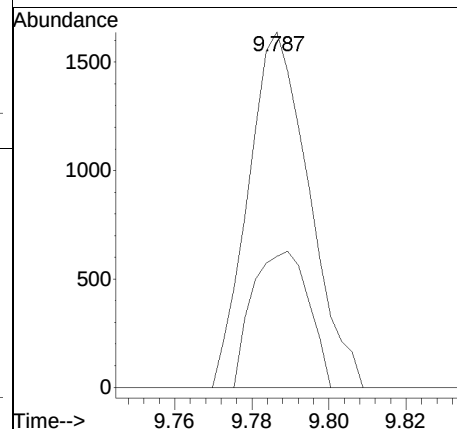
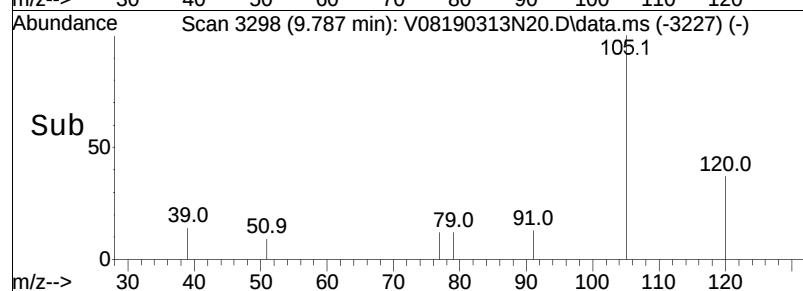
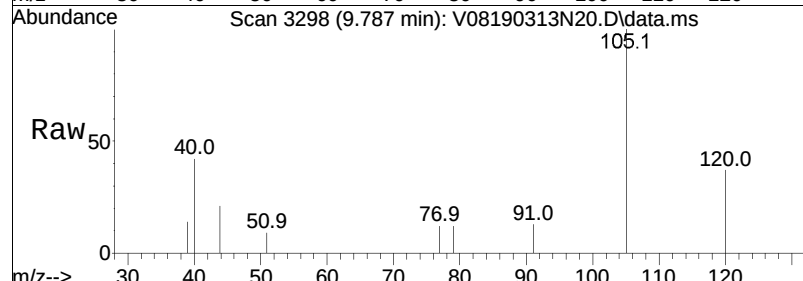
Tgt Ion	Ratio	Lower	Upper
105	100		
120	22.3	18.1	37.7

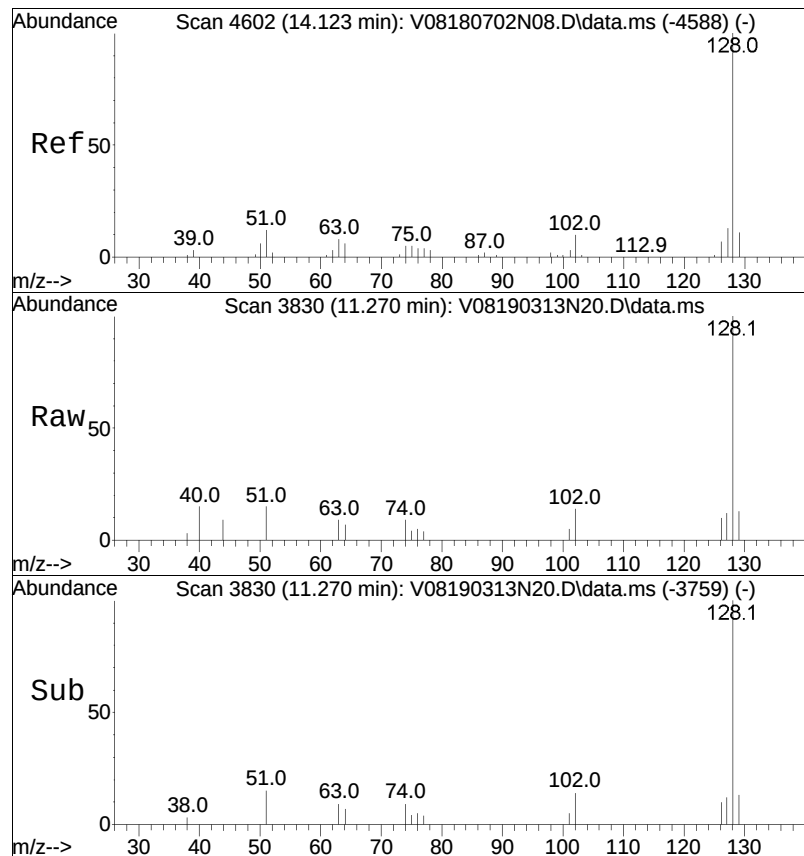




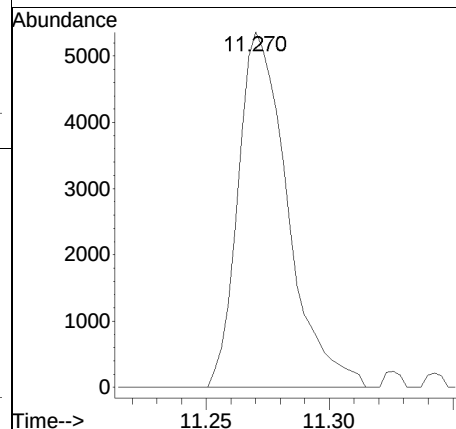
#97
 1,2,4-Trimethylbenzene
 Concen: 0.11 ug/L
 RT: 9.787 min Scan# 3298
 Delta R.T. -0.002 min
 Lab File: V08190313N20.D
 Acq: 14 Mar 2019 1:16 am

Tgt Ion	Ratio	Lower	Upper
105	100		
120	35.6	33.4	50.0





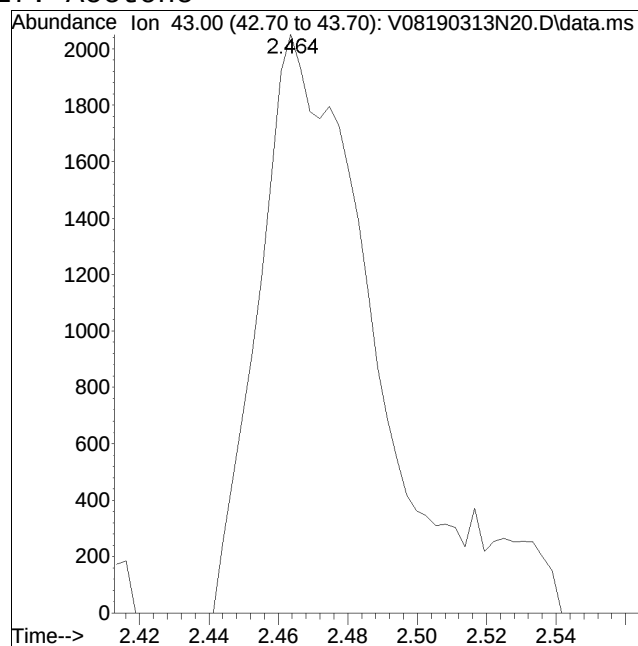
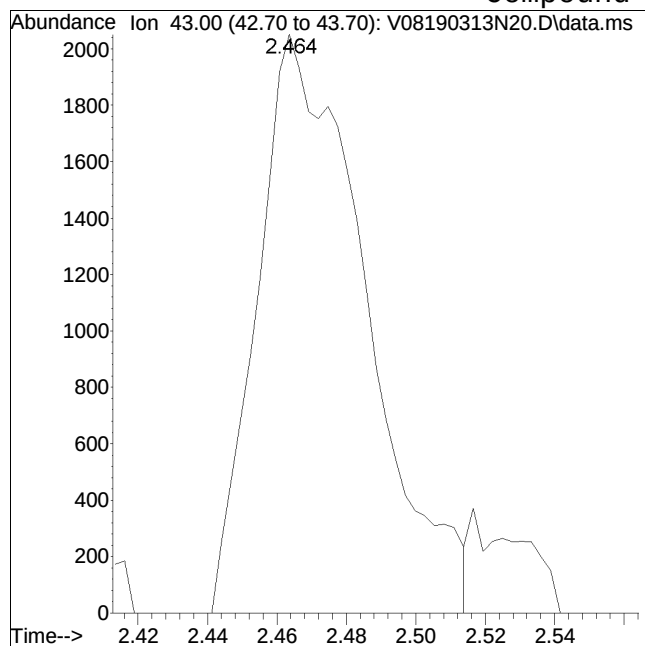
#110
 Naphthalene
 Concen: 0.59 ug/L
 RT: 11.270 min Scan# 3830
 Delta R.T. -0.003 min
 Lab File: V08190313N20.D
 Acq: 14 Mar 2019 1:16 am
 Tgt Ion:128 Resp: 7502



Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190313N20.D Operator : VOA108:NLK
Date Inj'd : 3/14/2019 1:16 am Instrument : VOA 108
Sample : l1909107-05,31,10,10,,a Quant Date : 3/14/2019 11:43 am

Compound #17: Acetone



Original Peak Response = 4433

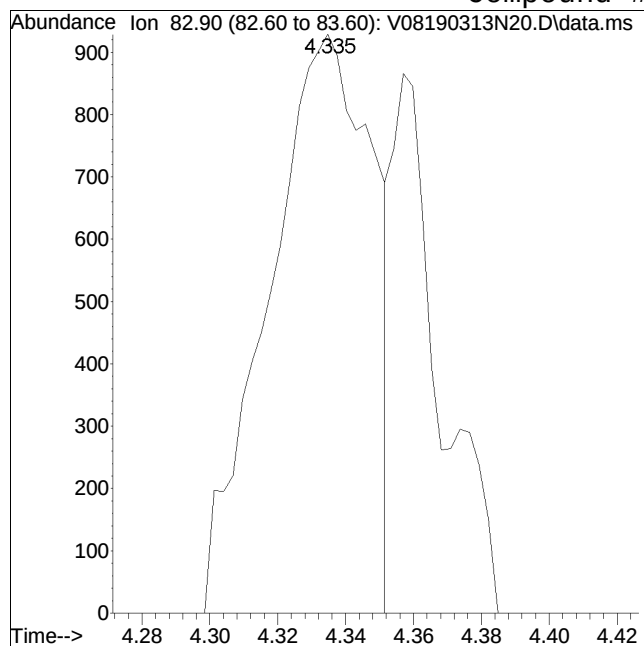
Manual Peak Response = 4804 M1

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

Manual Integration Report

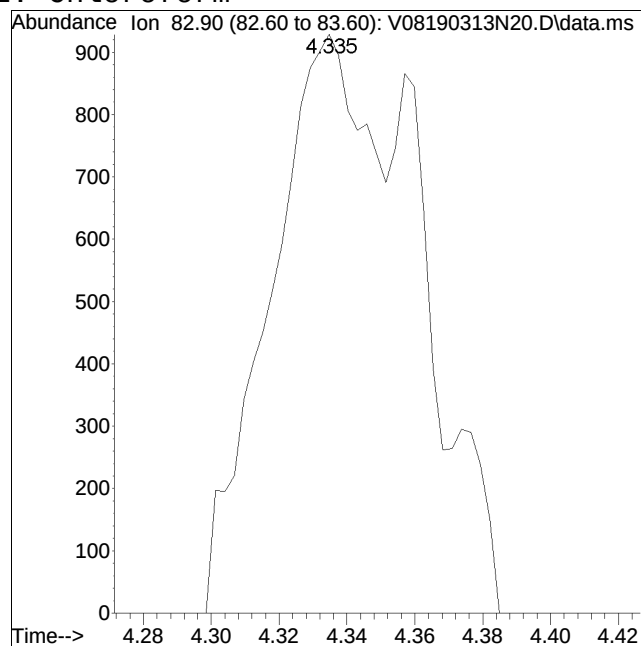
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190313N20.D Operator : VOA108:NLK
Date Inj'd : 3/14/2019 1:16 am Instrument : VOA 108
Sample : l1909107-05,31,10,10,,a Quant Date : 3/14/2019 11:43 am

Compound #32: Chloroform



Original Peak Response = 1978

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



Manual Peak Response = 2813 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N21.D
 Acq On : 14 Mar 2019 1:38 am
 Operator : VOA108:NLK
 Sample : 11909107-06D, 31, 5.0, 10, , a
 Misc : WG1215584, ICAL15519
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 14 12:38:23 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	258765	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery	=	85.68%	
59) Chlorobenzene-d5	8.526	117	178808	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery	=	86.50%	
79) 1,4-Dichlorobenzene-d4	10.010	152	67063	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery	=	66.47%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.575	113	74684	11.300	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	113.00%	
43) 1,2-Dichloroethane-d4	5.208	65	86965	11.706	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	117.06%	
60) Toluene-d8	7.240	98	234999	9.589	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	95.89%	
83) 4-Bromofluorobenzene	9.340	95	74025	11.281	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	112.81%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	1.094	50	251	N.D.		
4) Vinyl chloride	1.153	62	334	N.D.		
5) Bromomethane	1.362	94	620	0.132	ug/L #	61
6) Chloroethane	1.440	64	348	0.087	ug/L #	40
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
10) 1,1-Dichloroethene	1.914	96	258	N.D.		
11) Carbon disulfide	1.920	76	163	N.D.		
15) Methylene chloride	2.408	84	60	N.D.		
17) Acetone	0.000		0	N.D.	d	
18) trans-1,2-Dichloroethene	2.556	96	3069	0.556	ug/L #	75
20) Methyl tert-butyl ether	2.687	73	52	N.D.		
23) 1,1-Dichloroethane	3.211	63	565	N.D.		
25) Acrylonitrile	0.000		0	N.D.		
27) Vinyl acetate	3.426	43	57	N.D.		
28) cis-1,2-Dichloroethene	3.911	96	18778	2.998	ug/L #	72
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
32) Chloroform	4.343	83	366	N.D.		

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N21.D
 Acq On : 14 Mar 2019 1:38 am
 Operator : VOA108:NLK
 Sample : 11909107-06D, 31, 5.0, 10,, a
 Misc : WG1215584, ICAL15519
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 14 12:38:23 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0		N.D.	
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
40) 1,1-Dichloropropene	0.000		0		N.D.	
41) Benzene	5.029	78	51		N.D.	
44) 1,2-Dichloroethane	5.286	62	95		N.D.	
48) Trichloroethene	5.743	95	362344	61.244	ug/L	94
50) Dibromomethane	0.000		0		N.D.	
51) 1,2-Dichloropropane	6.306	63	84		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	0.000		0		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D. d	
63) Tetrachloroethene	7.642	166	580227	96.969	ug/L	93
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.	
70) 1,3-Dichloropropane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	0.000		0		N.D. d	
73) Chlorobenzene	8.534	112	304		N.D.	
74) Ethylbenzene	8.582	91	94		N.D.	
75) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
76) p/m Xylene	0.000		0		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	9.343	105	93		N.D.	
84) Bromobenzene	9.343	156	28		N.D.	
85) n-Propylbenzene	9.430	91	118		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
88) 4-Ethyltoluene	9.502	105	124		N.D.	
89) 2-Chlorotoluene	9.430	91	118		N.D.	
90) 1,3,5-Trimethylbenzene	9.502	105	124		N.D.	
91) 1,2,3-Trichloropropane	9.605	75	133		N.D.	
92) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
93) 4-Chlorotoluene	9.430	91	118		N.D.	
94) tert-Butylbenzene	0.000		0		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N21.D
 Acq On : 14 Mar 2019 1:38 am
 Operator : VOA108:NLK
 Sample : l1909107-06D, 31, 5.0, 10,, a
 Misc : WG1215584, ICAL15519
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 14 12:38:23 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	0.000		0		N.D.	
98)	sec-Butylbenzene	0.000		0		N.D.	
99)	p-Isopropyltoluene	0.000		0		N.D.	
100)	1,3-Dichlorobenzene	10.018	146	492		N.D.	
101)	1,4-Dichlorobenzene	10.018	146	492		N.D.	
102)	p-Diethylbenzene	0.000		0		N.D.	
103)	n-Butylbenzene	10.004	91	152		N.D.	
104)	1,2-Dichlorobenzene	10.258	146	338		N.D.	
105)	1,2,4,5-Tetramethylben...	0.000		0		N.D.	
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	0.000		0		N.D.	
110)	Naphthalene	11.276	128	28		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

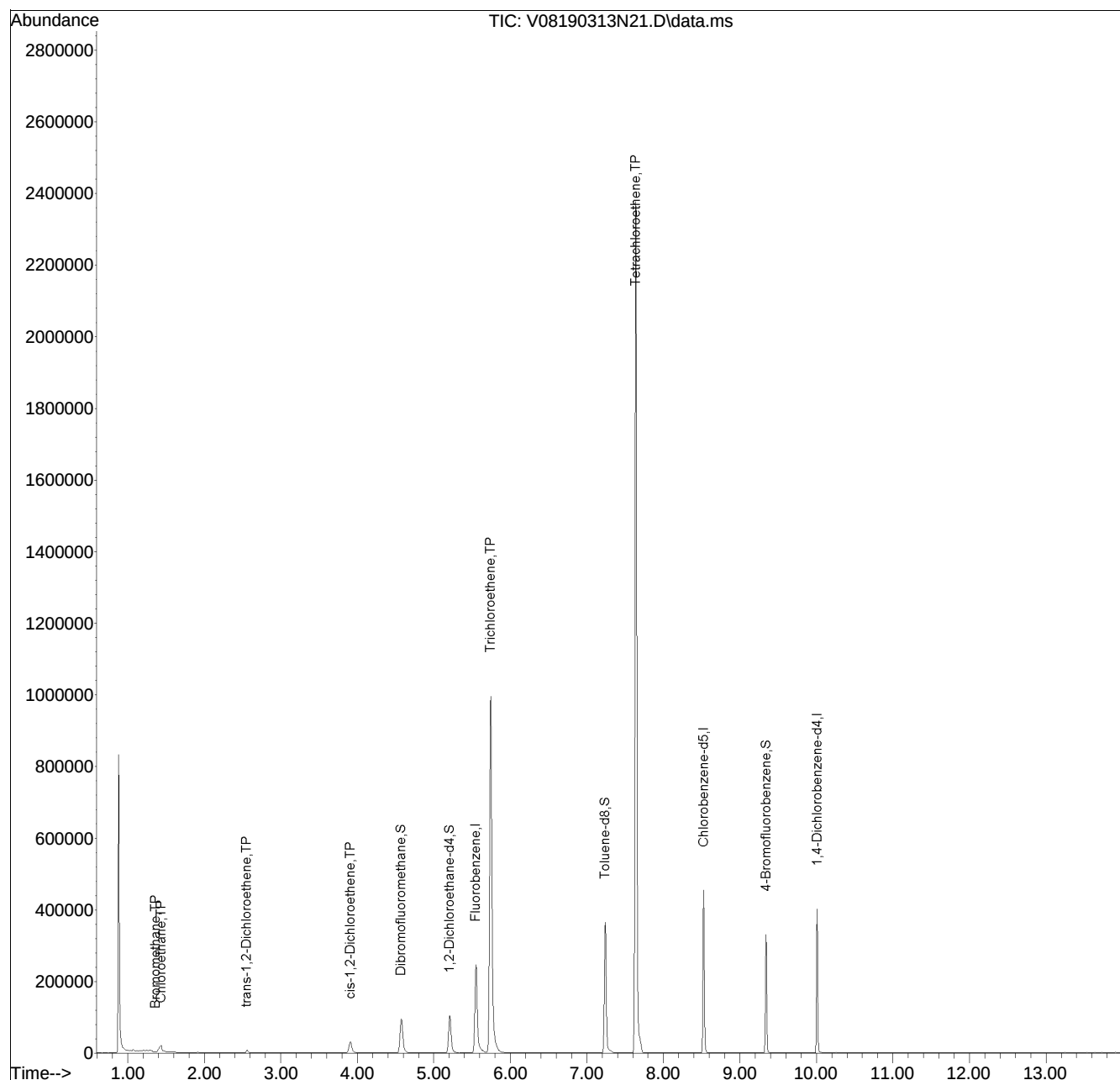
(#) = qualifier out of range (m) = manual integration (+) = signals summed

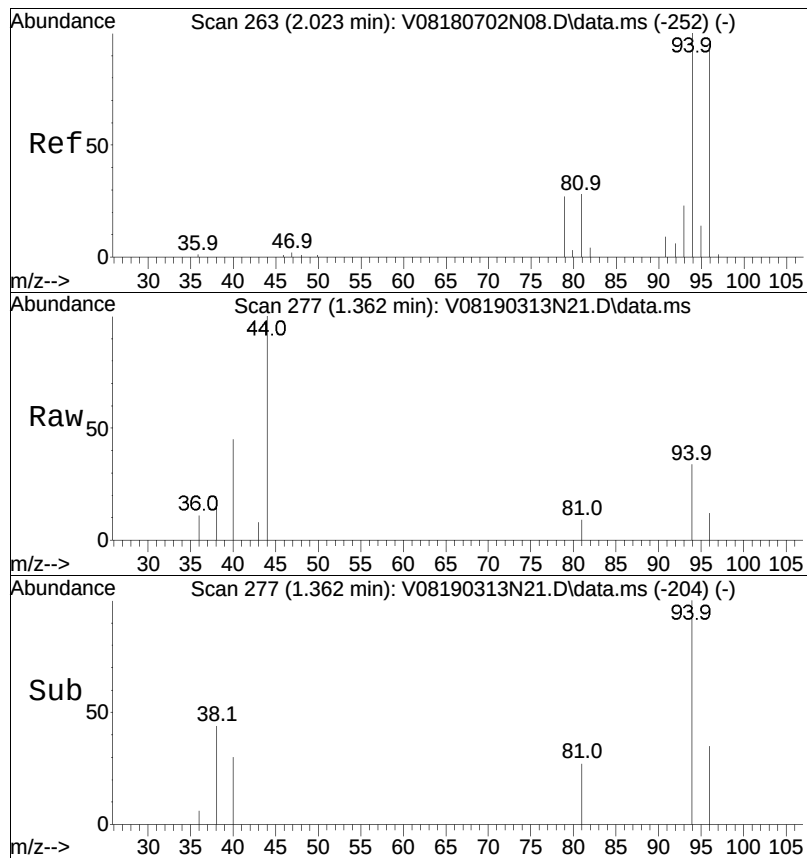
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N21.D
 Acq On : 14 Mar 2019 1:38 am
 Operator : VOA108:NLK
 Sample : 11909107-06D,31,5.0,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 14 12:38:23 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

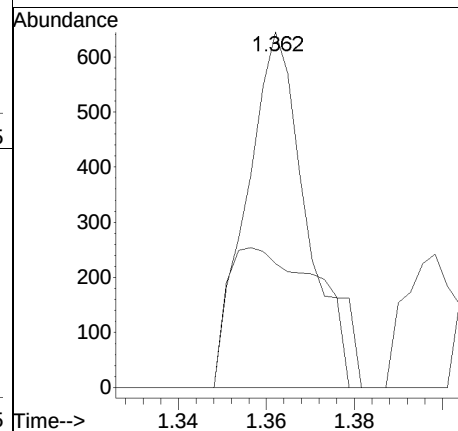
Sub List : 8260-NYTCL - Megamix plus Diox90313N\V08190313N02.D•

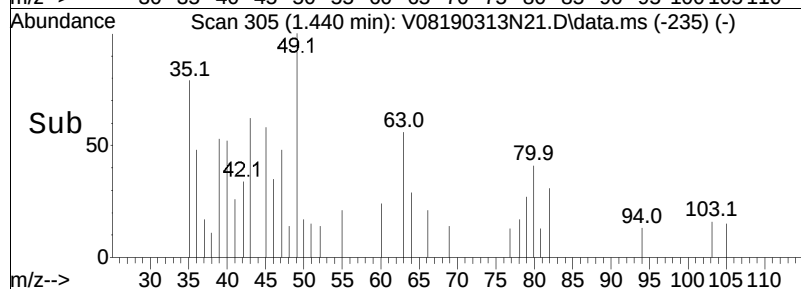
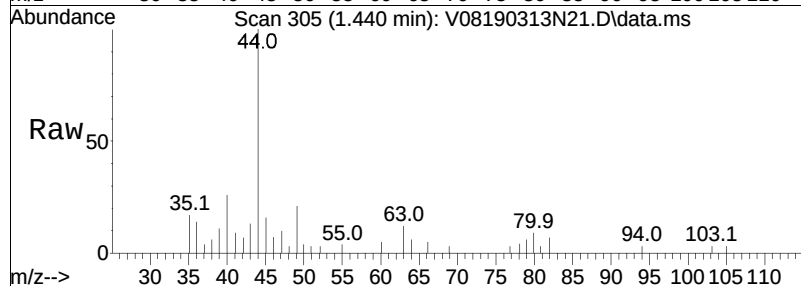
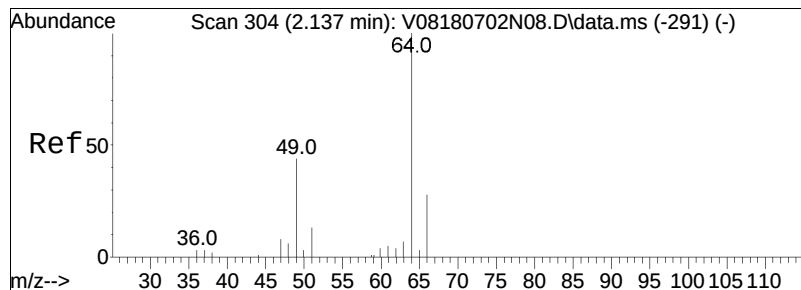




#5
 Bromomethane
 Concen: 0.13 ug/L
 RT: 1.362 min Scan# 277
 Delta R.T. 0.003 min
 Lab File: V08190313N21.D
 Acq: 14 Mar 2019 1:38 am

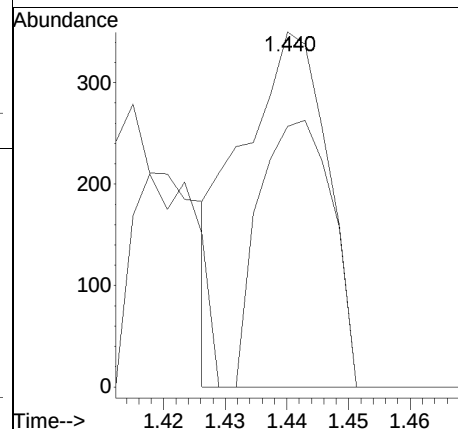
Tgt Ion: 94 Resp: 620
 Ion Ratio Lower Upper
 94 100
 96 58.1 75.6 115.6#

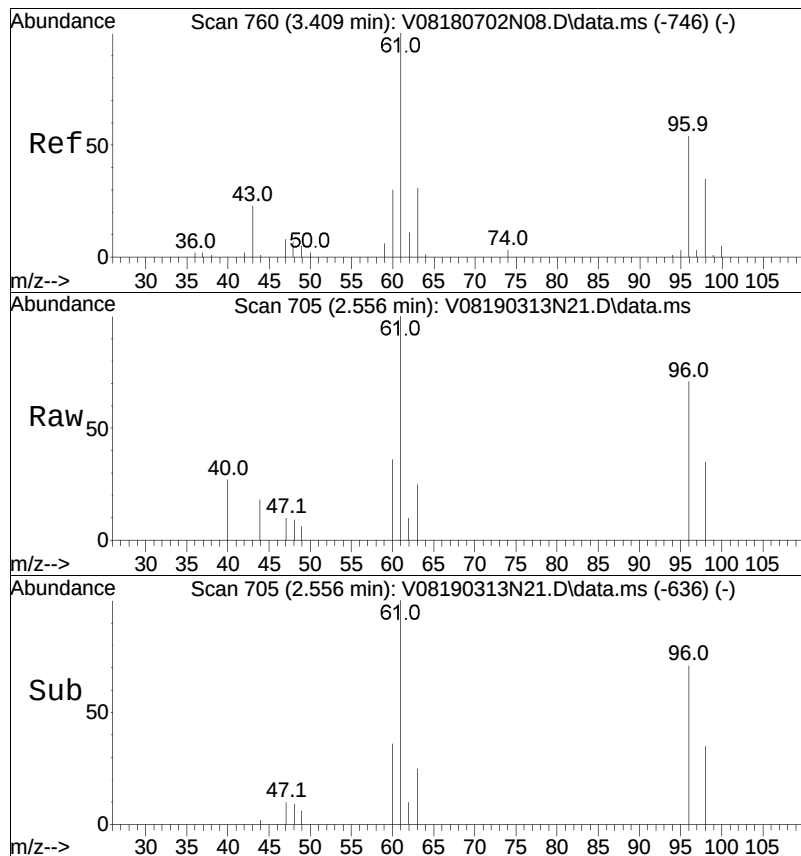




#6
Chloroethane
Concen: 0.09 ug/L
RT: 1.440 min Scan# 305
Delta R.T. -0.006 min
Lab File: V08190313N21.D
Acq: 14 Mar 2019 1:38 am

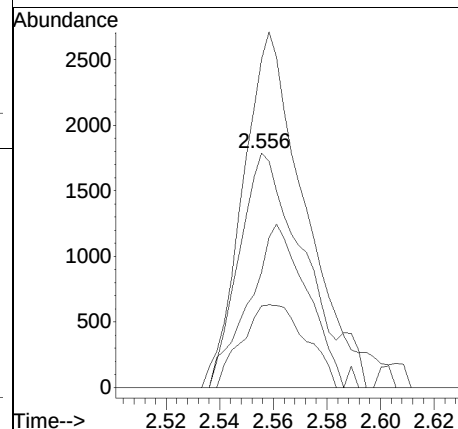
Tgt Ion	Ratio	Lower	Upper
64	100		
66	62.4	9.8	49.8#

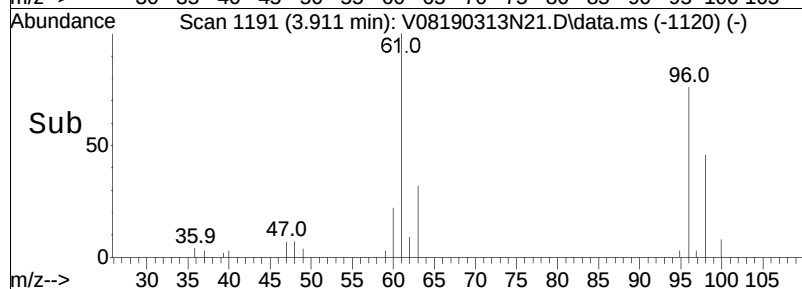
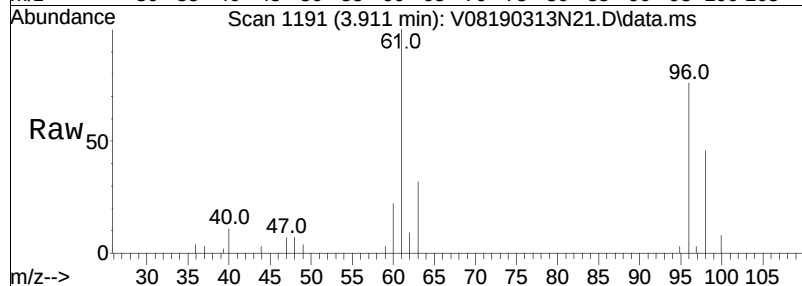
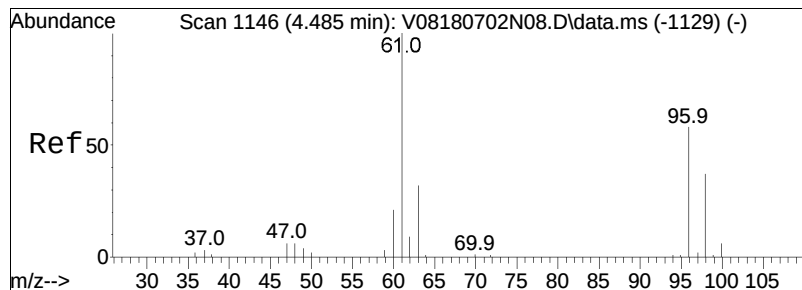




#18
 trans-1,2-Dichloroethene
 Concen: 0.56 ug/L
 RT: 2.556 min Scan# 705
 Delta R.T. -0.008 min
 Lab File: V08190313N21.D
 Acq: 14 Mar 2019 1:38 am

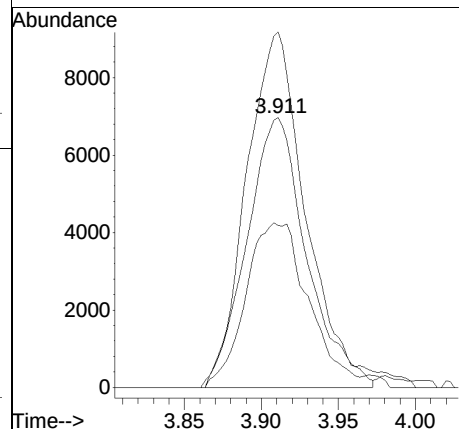
Tgt Ion:	96	Resp:	3069
Ion Ratio	Lower	Upper	
96	100		
61	147.2	124.0	257.6
98	62.5	41.2	85.6
63	34.0	38.4	79.7#

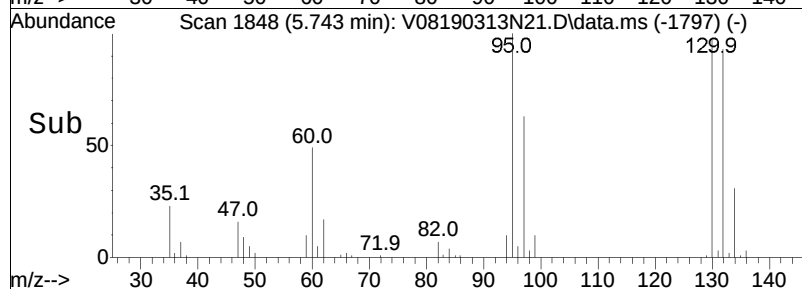
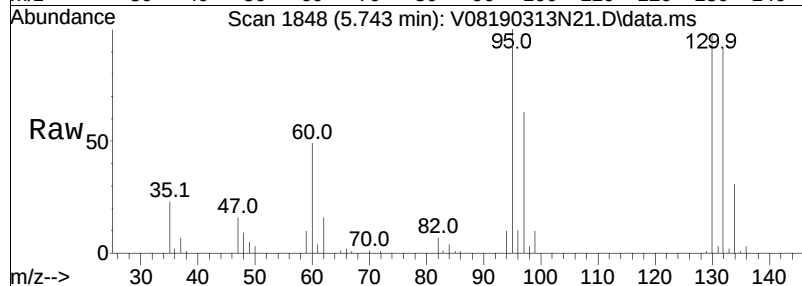
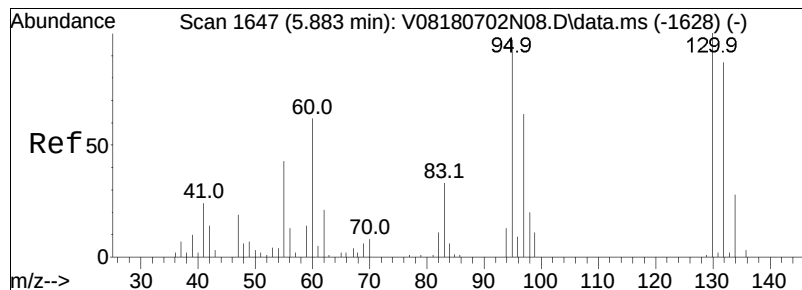




#28
 cis-1,2-Dichloroethene
 Concen: 3.00 ug/L
 RT: 3.911 min Scan# 1191
 Delta R.T. -0.003 min
 Lab File: V08190313N21.D
 Acq: 14 Mar 2019 1:38 am

Tgt Ion:	96	Resp:	18778
Ion Ratio	Lower	Upper	
96	100		
61	132.9	149.4	224.2#
98	63.9	53.4	80.2





#48

Trichloroethene

Concen: 61.24 ug/L

RT: 5.743 min Scan# 1848

Delta R.T. -0.008 min

Lab File: V08190313N21.D

Acq: 14 Mar 2019 1:38 am

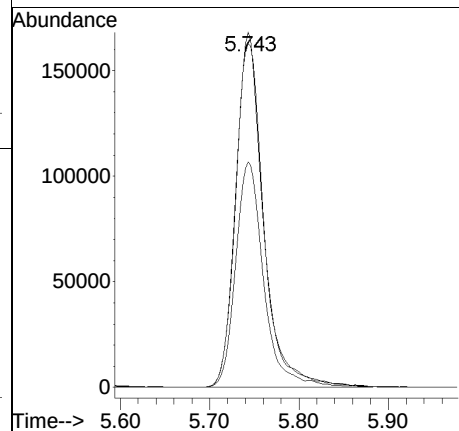
Tgt Ion: 95 Resp: 362344

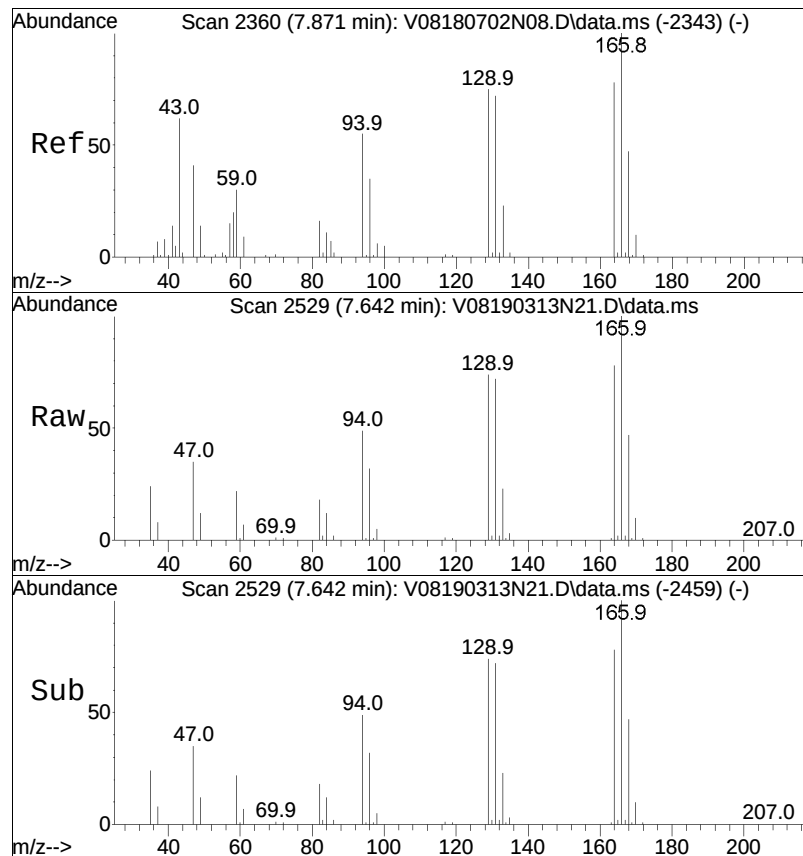
Ion Ratio Lower Upper

95 100

97 63.2 55.5 83.3

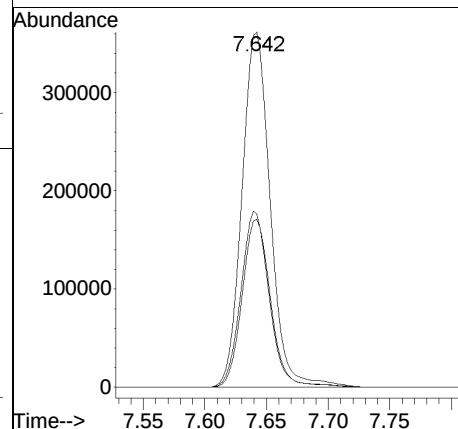
130 100.0 76.6 115.0





#63
 Tetrachloroethene
 Concen: 96.97 ug/L
 RT: 7.642 min Scan# 2529
 Delta R.T. -0.006 min
 Lab File: V08190313N21.D
 Acq: 14 Mar 2019 1:38 am

Tgt	Ion:166	Resp:	580227
Ion	Ratio	Lower	Upper
166	100		
168	47.6	28.2	68.2
94	49.6	38.4	78.4



Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\1QMethod : V108_190218N_8260.m
Data File : V08190313N21.D Operator : VOA108:NLK
Date Inj'd : 3/14/2019 1:38 am Instrument : VOA 108
Sample : l1909107-06D,31,5.0,10,,a Quant Date : 3/14/2019 11:43 am

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N22.D
 Acq On : 14 Mar 2019 2:00 am
 Operator : VOA108:NLK
 Sample : 11909107-07,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 14 12:38:53 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	254732	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery	=	84.34%	
59) Chlorobenzene-d5	8.526	117	174844	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery	=	84.58%	
79) 1,4-Dichlorobenzene-d4	10.010	152	62357	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery	=	61.80%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.575	113	74299	11.419	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	114.19%	
43) 1,2-Dichloroethane-d4	5.208	65	86971	11.893	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	118.93%	
60) Toluene-d8	7.241	98	225895	9.427	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	94.27%	
83) 4-Bromofluorobenzene	9.340	95	71105	11.654	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	116.54%	
Target Compounds						
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	1.094	50	267	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	1.362	94	477	0.103	ug/L #	68
6) Chloroethane	1.426	64	116	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	1.925	76	57	N.D.		
15) Methylene chloride	2.411	84	54	N.D.		
17) Acetone	2.472	43	2173	2.194	ug/L #	74
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
20) Methyl tert-butyl ether	2.689	73	93	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
25) Acrylonitrile	0.000		0	N.D.		
27) Vinyl acetate	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N22.D
 Acq On : 14 Mar 2019 2:00 am
 Operator : VOA108:NLK
 Sample : 11909107-07,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 14 12:38:53 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0		N.D.	
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
40) 1,1-Dichloropropene	0.000		0		N.D.	
41) Benzene	0.000		0		N.D.	
44) 1,2-Dichloroethane	5.280	62	137		N.D.	
48) Trichloroethene	5.743	95	1643M1	0.282	ug/L	
50) Dibromomethane	0.000		0		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.	
61) Toluene	7.285	92	57		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	7.639	166	2407	0.411	ug/L	85
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.	
70) 1,3-Dichloropropane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	0.000		0		N.D.	d
73) Chlorobenzene	8.534	112	26		N.D.	
74) Ethylbenzene	8.526	91	226		N.D.	
75) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
76) p/m Xylene	0.000		0		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	
84) Bromobenzene	0.000		0		N.D.	
85) n-Propylbenzene	9.343	91	280		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
88) 4-Ethyltoluene	9.499	105	94		N.D.	
89) 2-Chlorotoluene	9.343	91	280		N.D.	
90) 1,3,5-Trimethylbenzene	9.519	105	28		N.D.	
91) 1,2,3-Trichloropropane	0.000		0		N.D.	
92) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
93) 4-Chlorotoluene	0.000		0		N.D.	
94) tert-Butylbenzene	0.000		0		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N22.D
 Acq On : 14 Mar 2019 2:00 am
 Operator : VOA108:NLK
 Sample : 11909107-07,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 14 12:38:53 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	0.000		0		N.D.	
98)	sec-Butylbenzene	0.000		0		N.D.	
99)	p-Isopropyltoluene	0.000		0		N.D.	
100)	1,3-Dichlorobenzene	10.012	146	140		N.D.	
101)	1,4-Dichlorobenzene	10.012	146	140		N.D.	
102)	p-Diethylbenzene	0.000		0		N.D.	
103)	n-Butylbenzene	10.007	91	150		N.D.	
104)	1,2-Dichlorobenzene	0.000		0		N.D.	
105)	1,2,4,5-Tetramethylben...	0.000		0		N.D.	
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	0.000		0		N.D.	
110)	Naphthalene	0.000		0		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

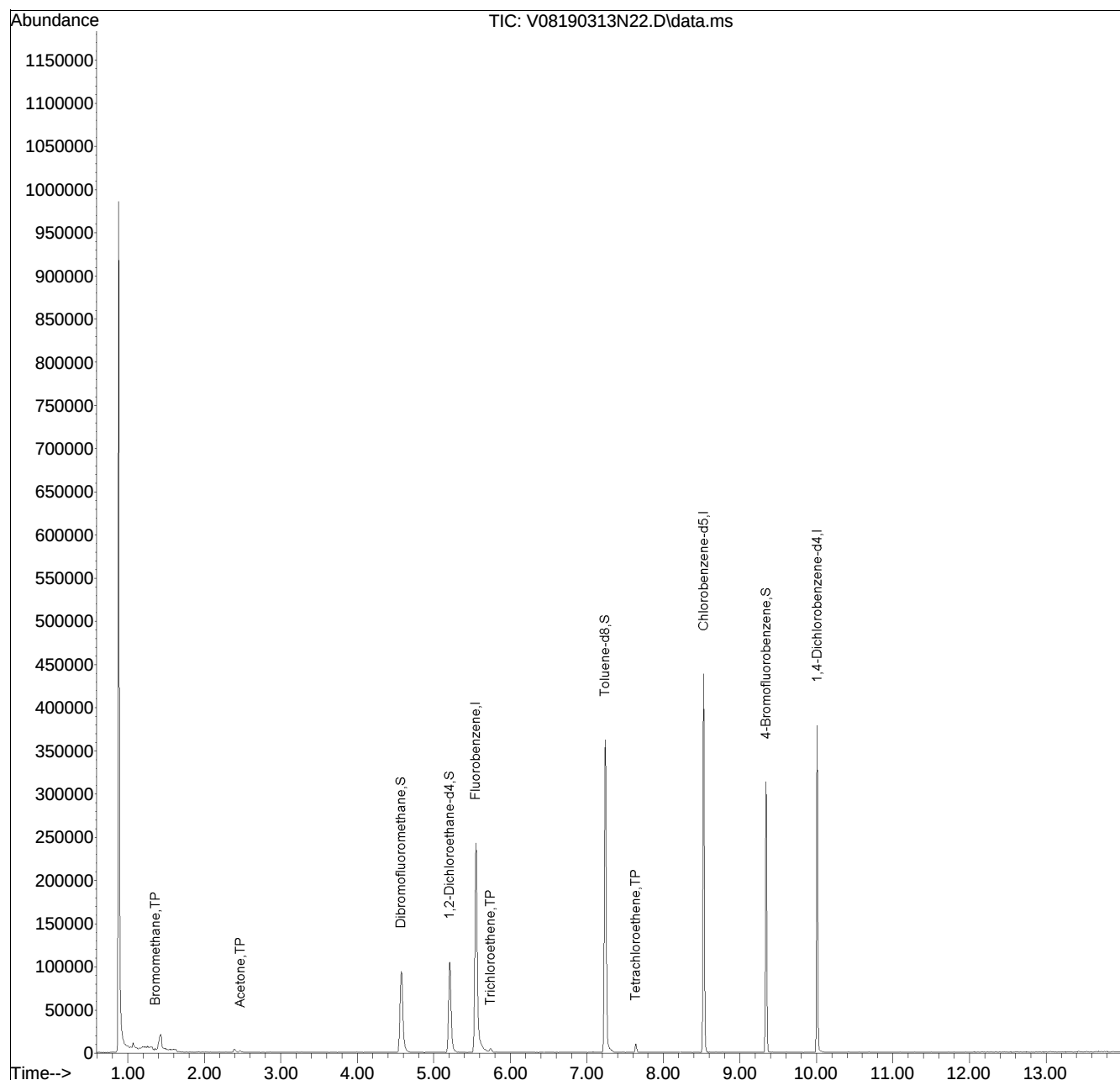
(#) = qualifier out of range (m) = manual integration (+) = signals summed

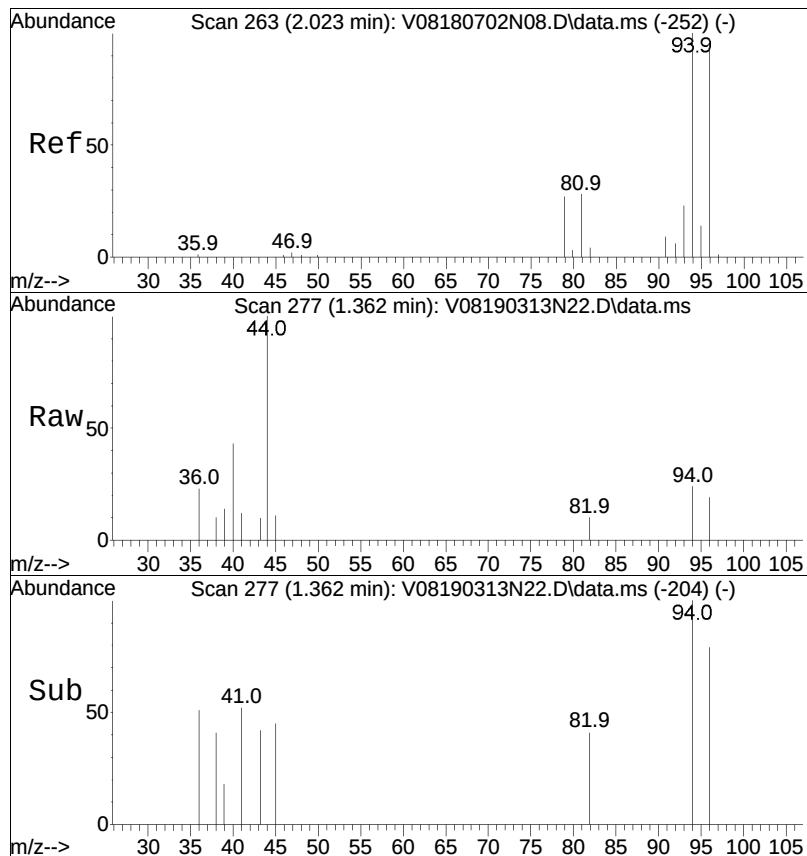
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N22.D
 Acq On : 14 Mar 2019 2:00 am
 Operator : VOA108:NLK
 Sample : 11909107-07,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 14 12:38:53 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

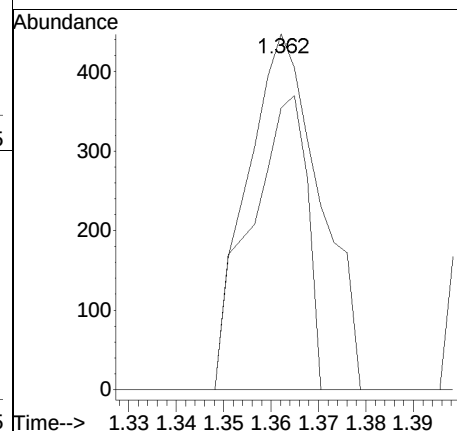
Sub List : 8260-NYTCL - Megamix plus Diox90313N\V08190313N02.D•

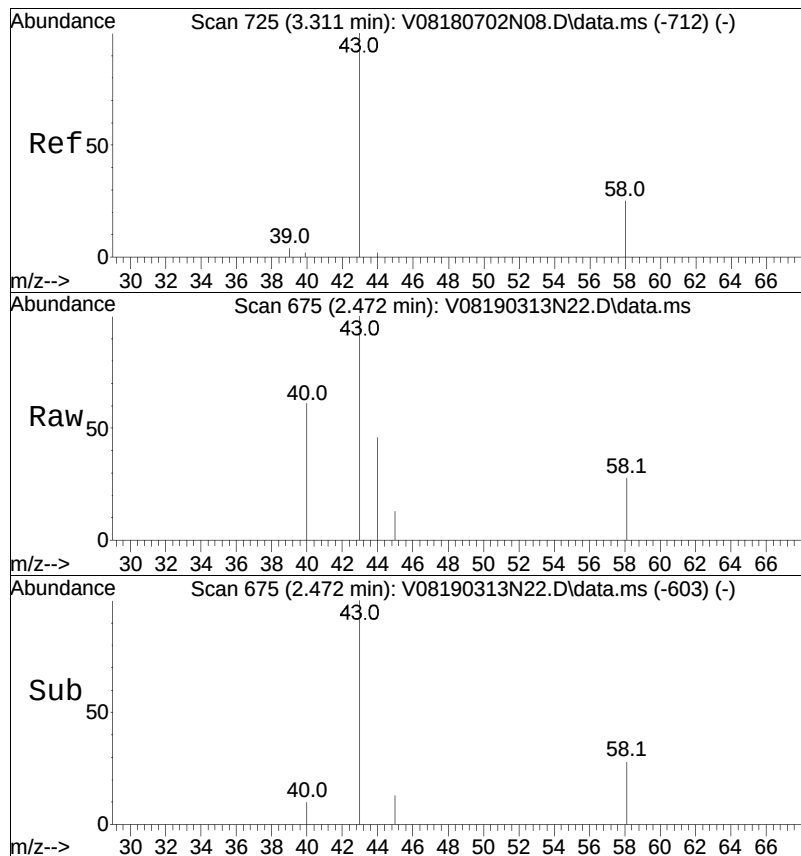




#5
 Bromomethane
 Concen: 0.10 ug/L
 RT: 1.362 min Scan# 277
 Delta R.T. 0.003 min
 Lab File: V08190313N22.D
 Acq: 14 Mar 2019 2:00 am

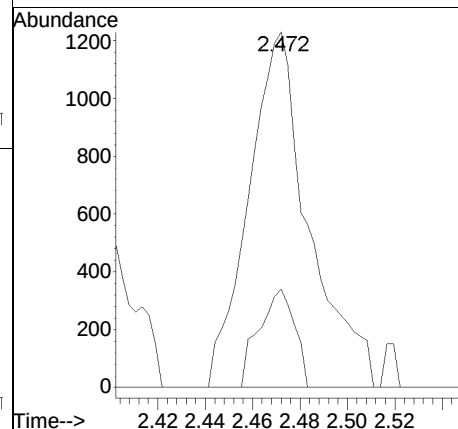
Tgt Ion: 94 Resp: 477
 Ion Ratio Lower Upper
 94 100
 96 64.4 75.6 115.6#

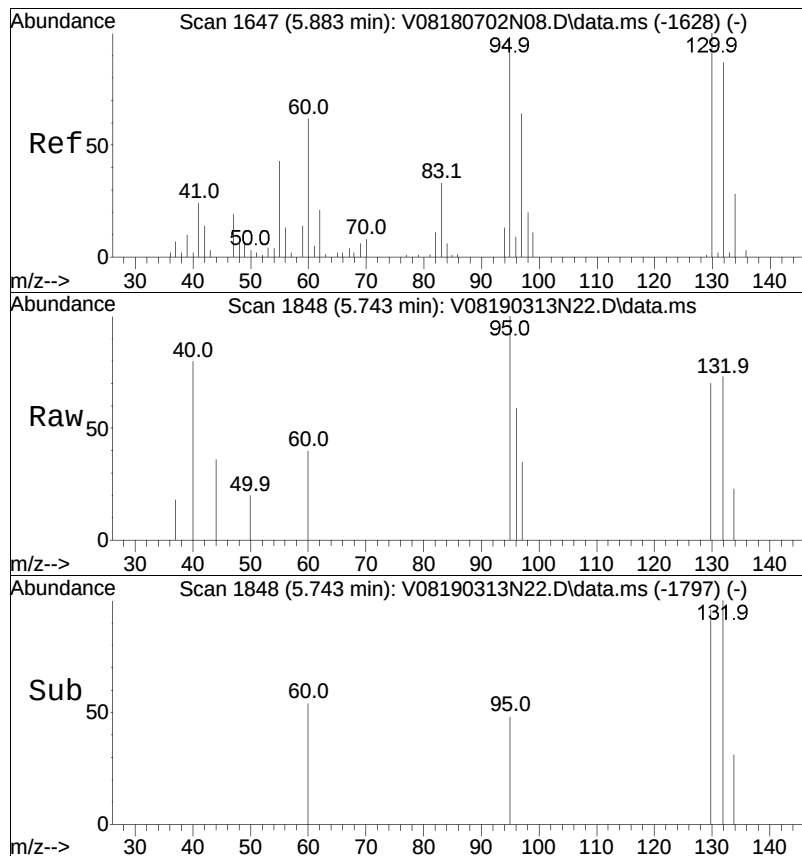




#17
 Acetone
 Concen: 2.19 ug/L
 RT: 2.472 min Scan# 675
 Delta R.T. 0.000 min
 Lab File: V08190313N22.D
 Acq: 14 Mar 2019 2:00 am

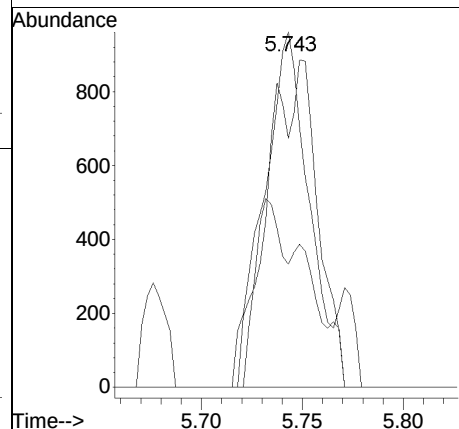
Tgt Ion:	43	Resp:	2173
Ion Ratio	Lower	Upper	
43	100		
58	16.3	24.2	36.4#

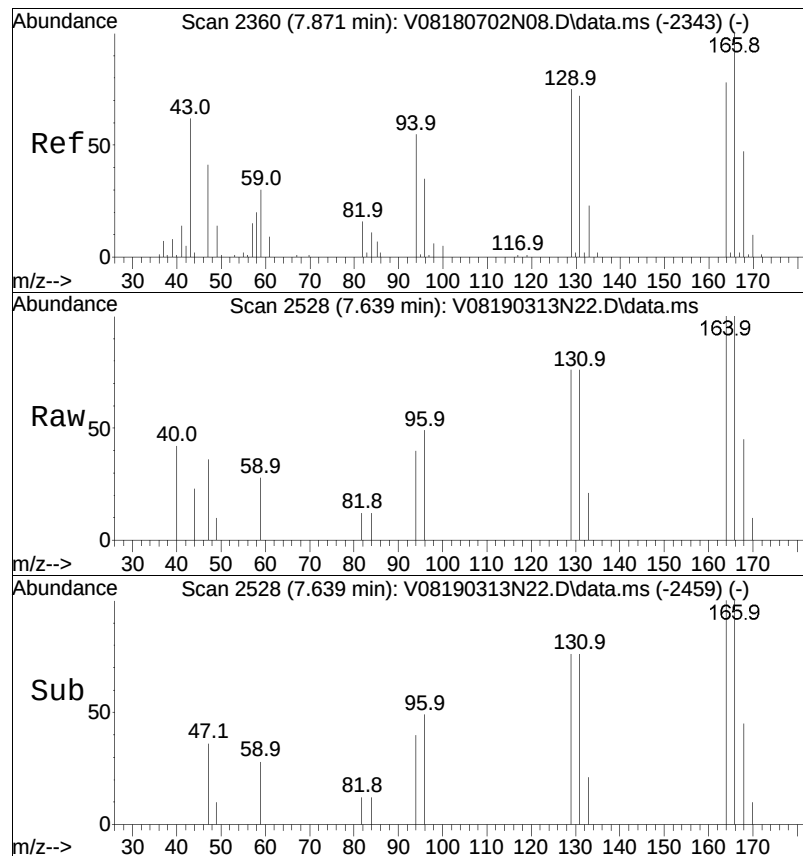




#48
 Trichloroethene
 Concen: 0.28 ug/L M1
 RT: 5.743 min Scan# 1848
 Delta R.T. -0.008 min
 Lab File: V08190313N22.D
 Acq: 14 Mar 2019 2:00 am

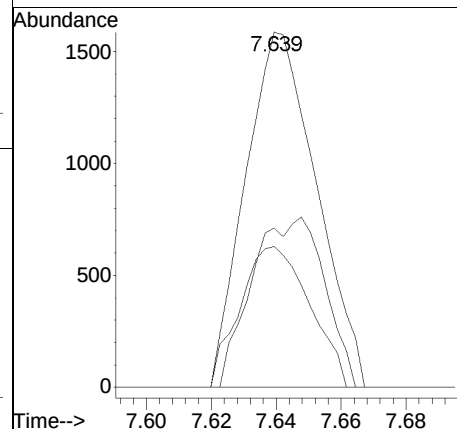
Tgt Ion	Ratio	Lower	Upper
95	100		
97	30.8	55.5	83.3#
130	45.1	76.6	115.0#





#63
Tetrachloroethene
Concen: 0.41 ug/L
RT: 7.639 min Scan# 2528
Delta R.T. -0.009 min
Lab File: V08190313N22.D
Acq: 14 Mar 2019 2:00 am

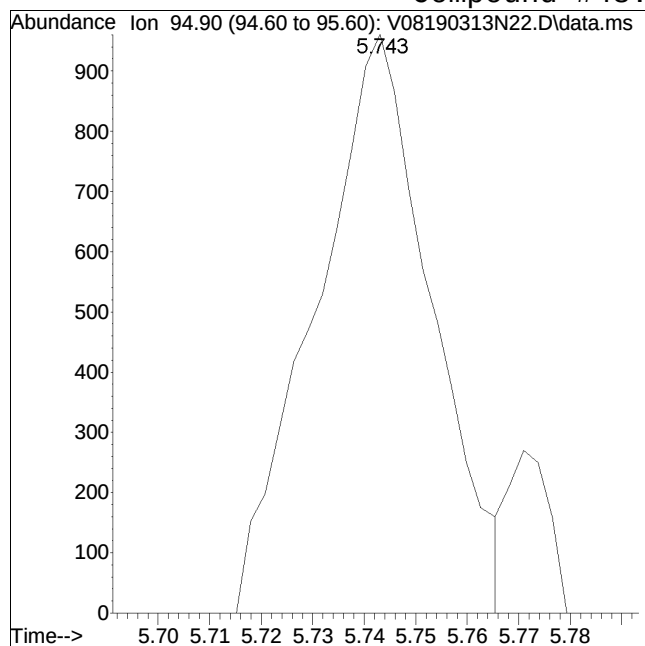
Tgt Ion:	166	Resp:	2407
Ion Ratio	Lower	Upper	
166	100		
168	49.2	28.2	68.2
94	39.0	38.4	78.4



Manual Integration Report

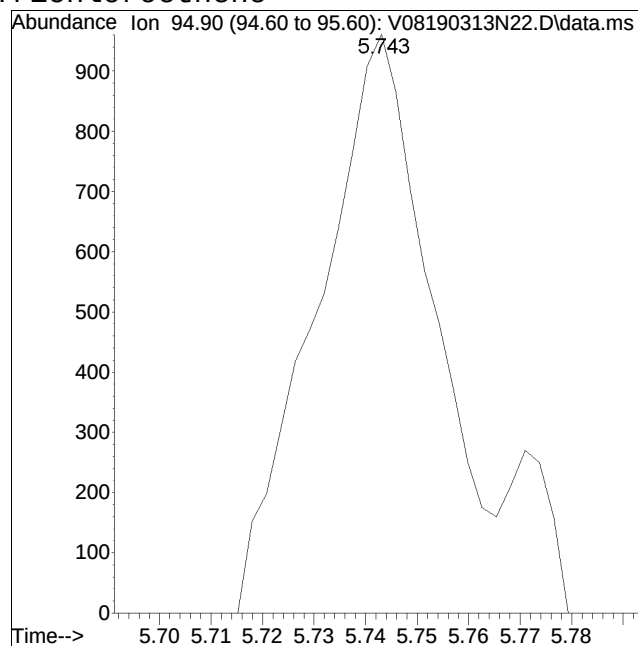
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190313N22.D Operator : VOA108:NLK
Date Inj'd : 3/14/2019 2:00 am Instrument : VOA 108
Sample : l1909107-07,31,10,10,,a Quant Date : 3/14/2019 11:44 am

Compound #48: Trichloroethene



Original Peak Response = 1494

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



Manual Peak Response = 1643 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N23.D
 Acq On : 14 Mar 2019 2:22 am
 Operator : VOA108:NLK
 Sample : 11909107-08,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 14 11:44:11 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	254743	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery	=	84.35%	
59) Chlorobenzene-d5	8.526	117	169755	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery	=	82.12%	
79) 1,4-Dichlorobenzene-d4	10.010	152	59533	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery	=	59.00%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.575	113	73586	11.309	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	113.09%	
43) 1,2-Dichloroethane-d4	5.208	65	85108	11.637	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	116.37%	
60) Toluene-d8	7.241	98	223489	9.606	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	96.06%	
83) 4-Bromofluorobenzene	9.340	95	68158	11.700	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	117.00%	
Target Compounds						
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	1.094	50	206	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	1.365	94	210	N.D.		
6) Chloroethane	1.449	64	80	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	2.466	43	1682	1.699	ug/L	92
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
25) Acrylonitrile	0.000		0	N.D.		
27) Vinyl acetate	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N23.D
 Acq On : 14 Mar 2019 2:22 am
 Operator : VOA108:NLK
 Sample : 11909107-08,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 14 11:44:11 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0		N.D.	
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
40) 1,1-Dichloropropene	0.000		0		N.D.	
41) Benzene	0.000		0		N.D.	
44) 1,2-Dichloroethane	0.000		0		N.D.	
48) Trichloroethene	5.735	95	1053	0.181	ug/L #	26
50) Dibromomethane	0.000		0		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.	
61) Toluene	7.285	92	96		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	7.642	166	1022	0.180	ug/L #	67
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.	
70) 1,3-Dichloropropane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	8.521	43	147		N.D.	
73) Chlorobenzene	0.000		0		N.D.	
74) Ethylbenzene	8.526	91	296		N.D.	
75) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
76) p/m Xylene	8.685	106	30		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	
84) Bromobenzene	0.000		0		N.D.	
85) n-Propylbenzene	9.340	91	367		N.D.	
87) 1,1,2,2-Tetrachloroethane	9.346	83	26		N.D.	
88) 4-Ethyltoluene	0.000		0		N.D.	
89) 2-Chlorotoluene	9.340	91	367		N.D.	
90) 1,3,5-Trimethylbenzene	0.000		0		N.D.	
91) 1,2,3-Trichloropropane	0.000		0		N.D.	
92) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
93) 4-Chlorotoluene	0.000		0		N.D.	
94) tert-Butylbenzene	0.000		0		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N23.D
 Acq On : 14 Mar 2019 2:22 am
 Operator : VOA108:NLK
 Sample : l1909107-08,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 14 11:44:11 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	0.000		0		N.D.	
98)	sec-Butylbenzene	0.000		0		N.D.	
99)	p-Isopropyltoluene	0.000		0		N.D.	
100)	1,3-Dichlorobenzene	10.021	146	56		N.D.	
101)	1,4-Dichlorobenzene	10.021	146	56		N.D.	
102)	p-Diethylbenzene	0.000		0		N.D.	
103)	n-Butylbenzene	0.000		0		N.D.	
104)	1,2-Dichlorobenzene	10.261	146	26		N.D.	
105)	1,2,4,5-Tetramethylben...	0.000		0		N.D.	
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	0.000		0		N.D.	
110)	Naphthalene	0.000		0		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

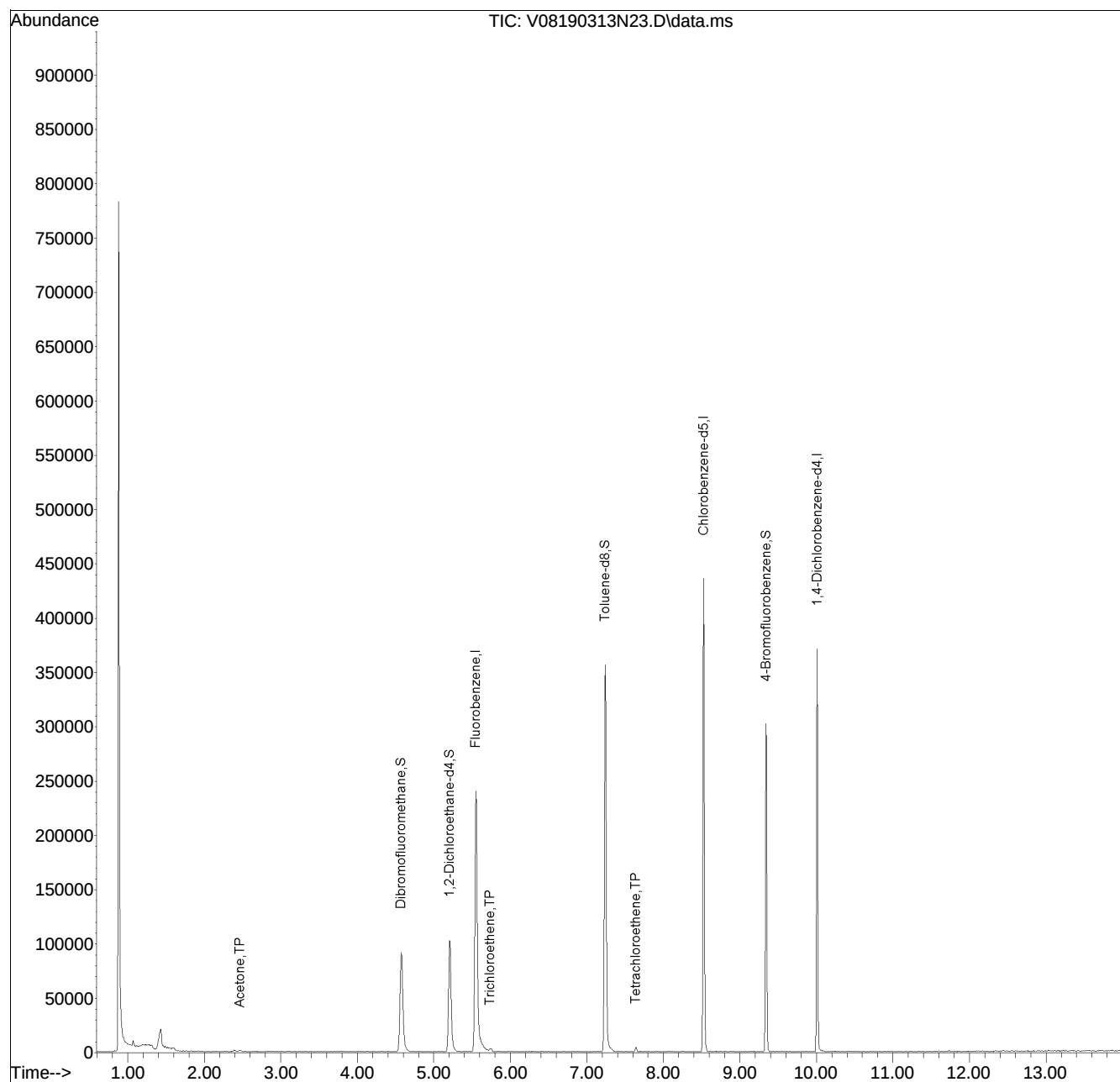
(#) = qualifier out of range (m) = manual integration (+) = signals summed

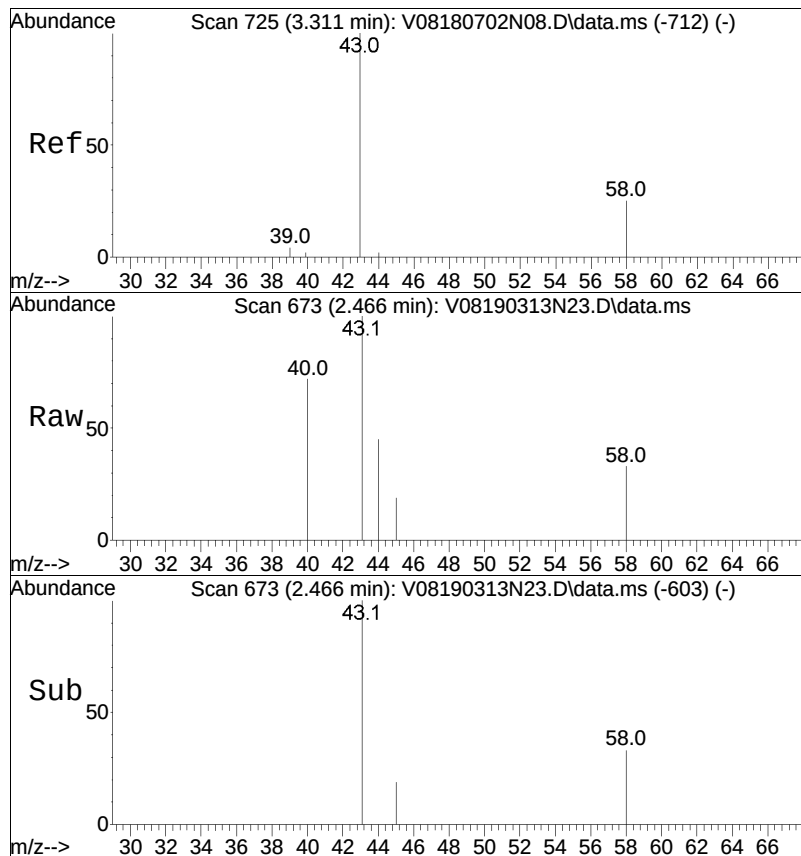
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N23.D
 Acq On : 14 Mar 2019 2:22 am
 Operator : VOA108:NLK
 Sample : 11909107-08,31,10,10,,a
 Misc : WG1215584,ICAL15519
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 14 11:44:11 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

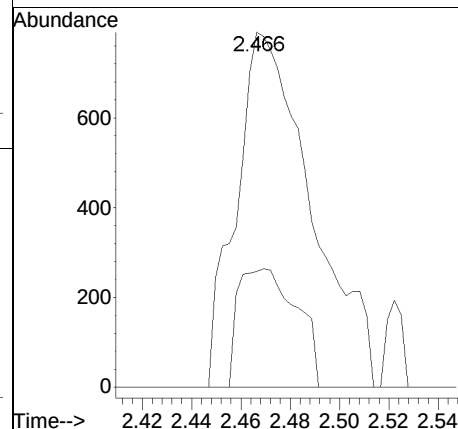
Sub List : 8260-NYTCL - Megamix plus Diox90313N\V08190313N02.D•

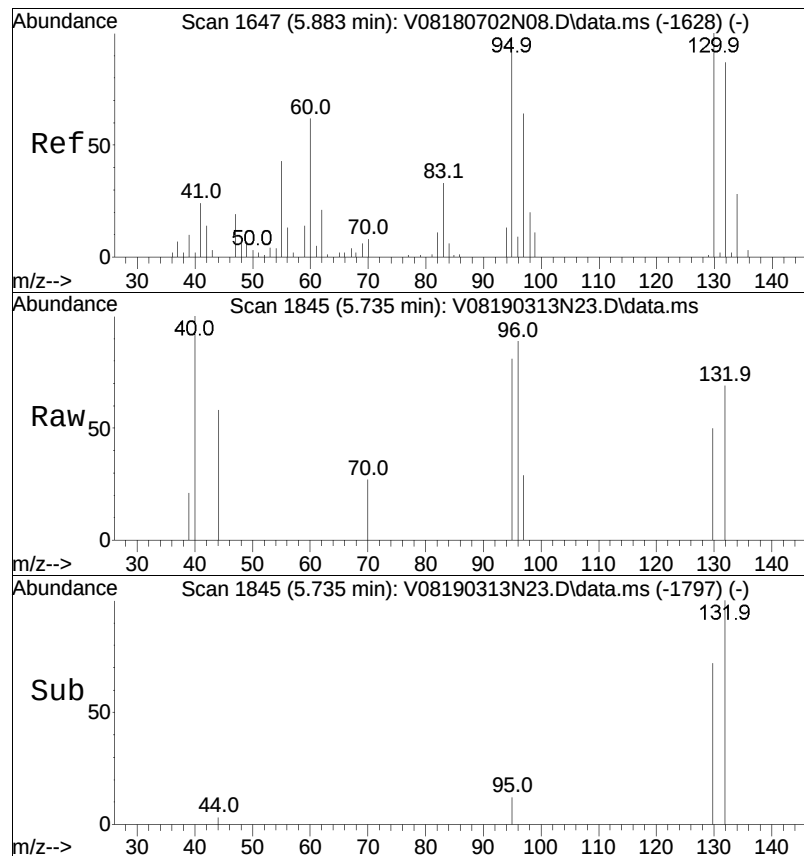




#17
 Acetone
 Concen: 1.70 ug/L
 RT: 2.466 min Scan# 673
 Delta R.T. -0.006 min
 Lab File: V08190313N23.D
 Acq: 14 Mar 2019 2:22 am

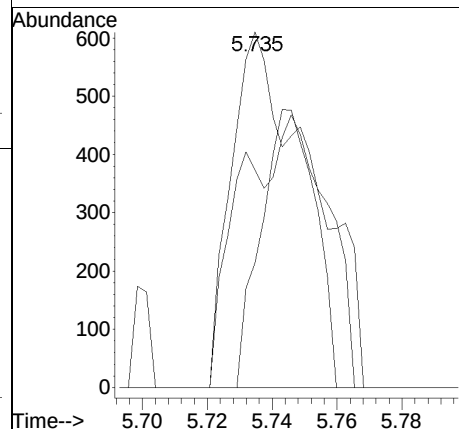
Tgt Ion	Ratio	Lower	Upper
43	100		
58	25.9	24.2	36.4

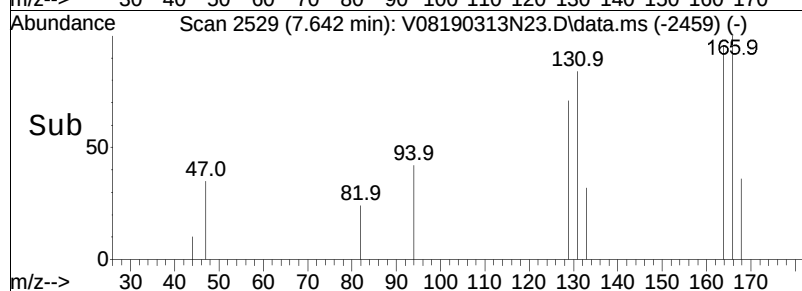
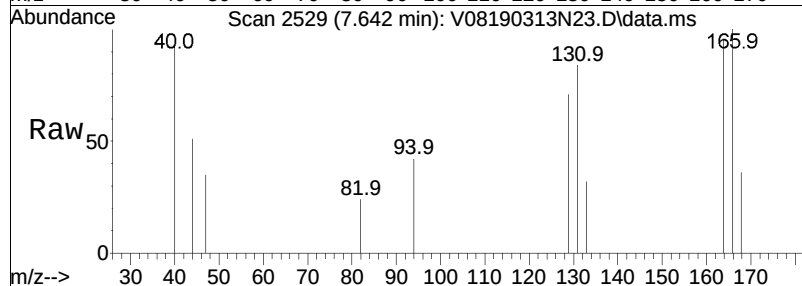
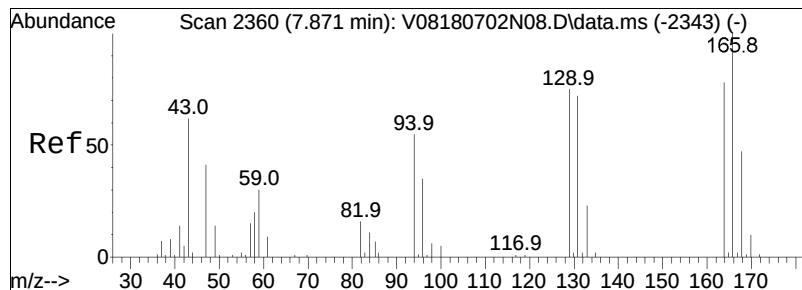




#48
 Trichloroethene
 Concen: 0.18 ug/L
 RT: 5.735 min Scan# 1845
 Delta R.T. -0.016 min
 Lab File: V08190313N23.D
 Acq: 14 Mar 2019 2:22 am

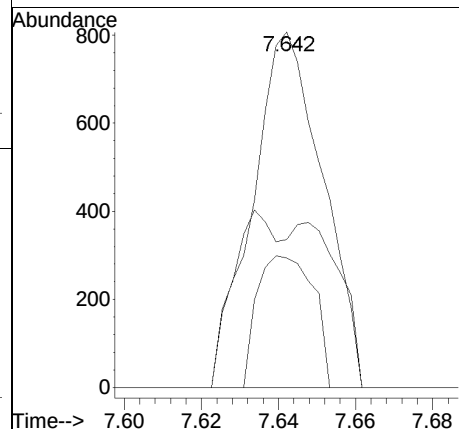
Tgt Ion:	95	Resp:	1053
Ion Ratio	Lower	Upper	
95	100		
97	0.0	55.5	83.3#
130	30.6	76.6	115.0#





#63
 Tetrachloroethene
 Concen: 0.18 ug/L
 RT: 7.642 min Scan# 2529
 Delta R.T. -0.006 min
 Lab File: V08190313N23.D
 Acq: 14 Mar 2019 2:22 am

Tgt Ion	Ratio	Lower	Upper
166	100		
168	29.5	28.2	68.2
94	30.7	38.4	78.4



Manual Integration Report

Data Path	: I:\VOLATILES\VOA108\2019\10	Method	: V108_190218N_8260.m
Data File	: V08190313N23.D	Operator	: VOA108:NLK
Date Inj'd	: 3/14/2019 2:22 am	Instrument	: VOA 108
Sample	: l1909107-08,31,10,10,,a	Quant Date	: 3/14/2019 11:44 am

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

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary

Form 6

Volatiles

Client : Langan Engineering & Environmental
Project Name : 491 WORTMAN
Instrument ID : VOA108
Calibration dates : 02/18/19 20:23 02/18/19 23:40
Lab Number : L1909107
Project Number : 170329301
Ical Ref : ICAL15519

Calibration Files

L11 =V08190218N04.D L1 =V08190218N06.D L2 =V08190218N08.D L3 =V08190218N09.D L4 =V08190218N10.D
 L6 =V08190218N11.D L8 =V08190218N12.D L10 =V08190218N13.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----									
2) TP Dichlorodifluo		0.162	0.178	0.191	0.189	0.222	0.231	0.226	0.200	13.29
3) TP Chloromethane		0.195	0.202	0.198	0.190	0.194	0.202	0.197	0.197	2.28
4) TC Vinyl chloride	0.180	0.181	0.212	0.210	0.206	0.228	0.236	0.229	0.210	10.07
5) TP Bromomethane		0.238	0.212	0.175	0.158	0.156	0.164	0.165	0.181	17.39
6) TP Chloroethane		0.171	0.152	0.138	0.137	0.164	0.161	0.154	0.154	8.50
7) TP Trichlorofluor		0.286	0.313	0.320	0.320	0.370	0.388	0.378	0.339	11.46
8) TP Ethyl ether		0.106	0.119	0.107	0.110	0.115	0.118	0.117	0.113	4.93
10) TC 1,1-Dichloroet		0.171	0.183	0.180	0.177	0.198	0.206	0.202	0.188	7.28
11) TP Carbon disulfide		0.554	0.567	0.570	0.559	0.619	0.642	0.625	0.591	6.16
12) TP Freon-113		0.142	0.156	0.164	0.162	0.192	0.200	0.197	0.173	13.17
13) TP Iodomethane			0.092	0.138	0.198	0.260	0.279	0.274	*Q	0.9955
14) TP Acrolein		0.023	0.022	0.021	0.021	0.025	0.026	0.026	0.023#	9.11
15) TP Methylene chlo		0.254	0.222	0.214	0.210	0.219	0.226	0.222	0.224	6.45
17) TP Acetone			0.046	0.036	0.034	0.038	0.040	0.040	0.039#	11.16
18) TP trans-1,2-Dich		0.193	0.208	0.208	0.207	0.222	0.230	0.225	0.213	6.08
19) TP Methyl acetate		0.080	0.093	0.096	0.098	0.103	0.107	0.107	0.098#	9.75
20) TP Methyl tert butyl ether		0.554	0.554	0.537	0.537	0.570	0.592	0.578	0.560	3.70
21) TP tert-Butyl alc			0.012	0.010	0.011	0.012	0.013	0.013	0.012#	9.44
22) TP Diisopropyl ether		0.651	0.645	0.618	0.617	0.647	0.674	0.664	0.645	3.30
23) TP 1,1-Dichloroet		0.353	0.374	0.371	0.363	0.388	0.400	0.391	0.377	4.40
24) TP Halothane		0.147	0.156	0.156	0.158	0.174	0.183	0.178	0.165	8.25
25) TP Acrylonitrile		0.073	0.054	0.055	0.052	0.058	0.059	0.059	0.058	11.63
26) TP Ethyl tert-but		0.570	0.599	0.607	0.608	0.649	0.676	0.671	0.626	6.38
27) TP Vinyl acetate			0.343	0.387	0.433	0.487	0.515	0.519	0.447	16.13
28) TP cis-1,2-Dichlo		0.232	0.246	0.238	0.233	0.245	0.252	0.248	0.242	3.18
29) TP 2,2-Dichloropr		0.284	0.299	0.300	0.297	0.324	0.335	0.330	0.310	6.32
30) TP Bromochloromet		0.104	0.112	0.110	0.110	0.115	0.119	0.113	0.112	4.23
31) TP Cyclohexane		0.267	0.290	0.290	0.287	0.341	0.355	0.347	0.311	11.46
32) TC Chloroform		0.365	0.385	0.383	0.389	0.404	0.420	0.412	0.394	4.80
33) TP Ethyl acetate			0.228	0.144	0.146	0.156	0.162	0.158	0.166	18.82
34) TP Carbon tetrachloride	0.262	0.258	0.276	0.285	0.279	0.324	0.339	0.332	0.294	10.92
35) TP Tetrahydrofuran			0.040	0.037	0.038	0.040	0.042	0.044	0.040#	6.40
36) S Dibromofluoromethane	0.243	0.248	0.250	0.253	0.255	0.259	0.269	0.267	0.255	3.52
37) TP 1,1,1-Trichlor		0.288	0.327	0.336	0.329	0.367	0.384	0.375	0.344	9.76
39) TP 2-Butanone			0.086	0.056	0.061	0.066	0.069	0.069	0.068#	15.43

Initial Calibration Summary

Form 6

Volatiles

Client : Langan Engineering & Environmental
Project Name : 491 WORTMAN
Instrument ID : VOA108
Calibration dates : 02/18/19 20:23 02/18/19 23:40
Lab Number : L1909107
Project Number : 170329301
Ical Ref : ICAL15519

Calibration Files

L11 =V08190218N04.D L1 =V08190218N06.D L2 =V08190218N08.D L3 =V08190218N09.D L4 =V08190218N10.D
 L6 =V08190218N11.D L8 =V08190218N12.D L10 =V08190218N13.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
40) TP 1,1-Dichloropr		0.257	0.259	0.268	0.258	0.288	0.301	0.295	0.275	6.88
41) TP Benzene	0.854	0.809	0.861	0.847	0.830	0.882	0.906	0.881	0.859	3.59
42) TP Tertiary-Amyl Methyl Ether		0.574	0.553	0.542	0.556	0.590	0.611	0.603	0.576	4.62
43) S 1,2-Dichloroethane-d4	0.281	0.290	0.283	0.281	0.285	0.289	0.290	0.297	0.287	1.90
44) TP 1,2-Dichloroet		0.309	0.289	0.280	0.282	0.297	0.307	0.304	0.295	4.01
47) TP Methyl cyclohe		0.261	0.306	0.327	0.307	0.363	0.376	0.369	0.330	12.69
48) TP Trichloroethene	0.226	0.222	0.224	0.224	0.219	0.235	0.242	0.238	0.229	3.71
50) TP Dibromomethane		0.129	0.130	0.131	0.131	0.137	0.142	0.139	0.134	3.84
51) TC 1,2-Dichloropr		0.225	0.230	0.214	0.213	0.222	0.231	0.224	0.223	3.16
53) TP 2-Chloroethyl		0.105	0.122	0.124	0.127	0.134	0.139	0.137	0.127	9.24
54) TP Bromodichlorom		0.282	0.299	0.307	0.304	0.324	0.337	0.332	0.312	6.30
57) TP 1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	3.94
58) TP cis-1,3-Dichlo		0.316	0.329	0.338	0.345	0.366	0.380	0.376	0.350	7.05
59) I Chlorobenzene-d5	-----ISTD-----									
60) S Toluene-d8	1.434	1.386	1.388	1.353	1.341	1.345	1.364	1.355	1.371	2.26
61) TC Toluene		0.742	0.788	0.761	0.747	0.783	0.828	0.808	0.779	4.06
62) TP 4-Methyl-2-pen		0.078	0.081	0.085	0.088	0.092	0.097	0.094	0.088#	8.17
63) TP Tetrachloroethene		0.297	0.318	0.329	0.321	0.349	0.372	0.357	0.335	7.68
65) TP trans-1,3-Dich		0.406	0.419	0.417	0.426	0.455	0.483	0.473	0.440	6.92
67) TP Ethyl methacry		0.330	0.304	0.330	0.341	0.367	0.391	0.379	0.349	8.91
68) TP 1,1,2-Trichlor		0.226	0.228	0.216	0.212	0.221	0.233	0.226	0.223	3.27
69) TP Chlorodibromom		0.300	0.324	0.314	0.316	0.338	0.359	0.349	0.329	6.40
70) TP 1,3-Dichloropr		0.488	0.453	0.435	0.427	0.441	0.464	0.448	0.451	4.51
71) TP 1,2-Dibromoethane		0.260	0.265	0.259	0.253	0.267	0.282	0.272	0.266	3.62
72) TP 2-Hexanone		0.133	0.159	0.140	0.144	0.156	0.169	0.164	0.152	8.77
73) TP Chlorobenzene		0.851	0.876	0.857	0.838	0.868	0.910	0.870	0.867	2.64
74) TC Ethylbenzene		1.362	1.418	1.451	1.427	1.505	1.575	1.433	1.453	4.71
75) TP 1,1,1,2-Tetrac		0.339	0.309	0.314	0.311	0.324	0.342	0.333	0.325	4.22
76) TP p/m Xylene		0.452	0.516	0.560	0.551	0.584	0.617	0.588	0.553	9.86
77) TP o Xylene		0.481	0.513	0.550	0.542	0.569	0.599	0.576	0.547	7.25
78) TP Styrene		0.777	0.827	0.911	0.904	0.952	0.985	0.762	0.874	9.89
79) I 1,4-Dichlorobenzene-d4	-----ISTD-----									
80) TP Bromoform		0.408	0.408	0.409	0.391	0.420	0.451	0.428	0.416	4.57
82) TP Isopropylbenzene		2.897	2.937	3.056	2.870	2.996	3.109	2.570	2.919	6.03
83) S 4-Bromofluorobenzene	0.968	0.972	0.988	1.024	0.996	0.983	0.972	0.926	0.978	2.87
84) TP Bromobenzene		0.833	0.753	0.772	0.717	0.724	0.762	0.699	0.751	5.92



Initial Calibration Summary

Form 6

Volatiles

Client : Langan Engineering & Environmental
Project Name : 491 WORTMAN
Instrument ID : VOA108
Calibration dates : 02/18/19 20:23 02/18/19 23:40
Lab Number : L1909107
Project Number : 170329301
Ical Ref : ICAL15519

Calibration Files

L11 =V08190218N04.D L1 =V08190218N06.D L2 =V08190218N08.D L3 =V08190218N09.D L4 =V08190218N10.D
 L6 =V08190218N11.D L8 =V08190218N12.D L10 =V08190218N13.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
85) TP n-Propylbenzene	3.313	3.353	3.536	3.336	3.508	3.612	2.670	3.333	9.41	
86) TP 1,4-Dichlorobu	0.942	0.926	0.887	0.850	0.875	0.916	0.849	0.892	4.15	
87) TP 1,1,2,2-Tetrac	0.736	0.706	0.685	0.645	0.658	0.686	0.629	0.678	5.44	
88) TP 4-Ethyltoluene	2.513	2.744	2.881	2.772	2.918	3.038	2.562	2.776	6.83	
89) TP 2-Chlorotoluene	2.451	2.342	2.498	2.360	2.458	2.580	2.338	2.432	3.73	
90) TP 1,3,5-Trimethy	2.202	2.335	2.415	2.355	2.509	2.636	2.326	2.397	5.87	
91) TP 1,2,3-Trichlor	0.606	0.546	0.521	0.491	0.500	0.533	0.491	0.527	7.79	
92) TP trans-1,4-Dich	0.224	0.178	0.163	0.174	0.180	0.196	0.185	0.186	10.66	
93) TP 4-Chlorotoluene	2.055	2.098	2.173	2.073	2.141	2.244	2.029	2.116	3.54	
94) TP tert-Butylbenzene	2.363	2.451	2.499	2.370	2.508	2.647	2.403	2.463	4.05	
95) TP Pentachloroethane	0.461	0.434	0.474	0.477	0.479	0.498	0.476	0.471	4.17	
97) TP 1,2,4-Trimethy	2.110	2.399	2.375	2.367	2.515	2.648	2.280	2.385	7.12	
98) TP sec-Butylbenzene	2.820	3.051	3.206	2.912	3.186	3.313	2.633	3.017	8.01	
99) TP p-Isopropyltol	2.413	2.605	2.679	2.486	2.712	2.862	2.374	2.590	6.80	
100) TP 1,3-Dichlorobe	1.355	1.343	1.414	1.337	1.378	1.479	1.390	1.385	3.58	
101) TP 1,4-Dichlorobe	1.552	1.402	1.409	1.357	1.402	1.503	1.418	1.435	4.73	
102) TP p-Diethylbenzene	1.153	1.465	1.534	1.454	1.614	1.752	1.639	1.516	12.60	
103) TP n-Butylbenzene	2.124	2.356	2.459	2.280	2.572	2.728	2.298	2.402	8.39	
104) TP 1,2-Dichlorobe	1.469	1.325	1.339	1.270	1.313	1.408	1.333	1.351	4.89	
105) TP 1,2,4,5-Tetram	1.045	1.400	2.103	2.208	2.557	2.759	2.344	*L	0.9935	
106) TP 1,2-Dibromo-3-	0.100	0.095	0.098	0.096	0.103	0.111	0.107	0.102	5.69	
107) TP 1,3,5-Trichlor	0.679	0.851	0.950	0.898	1.008	1.089	1.038	0.930	14.80	
108) TP Hexachlorobuta	0.439	0.455	0.438	0.377	0.435	0.468	0.440	0.436	6.57	
109) TP 1,2,4-Trichlor	0.640	0.695	0.838	0.833	0.934	1.021	0.974	0.848	16.72	
110) TP Naphthalene	1.224	1.591	1.868	1.915	2.113	2.288	2.068	1.867	19.19	
111) TP 1,2,3-Trichlor	0.542	0.641	0.762	0.755	0.857	0.931	0.877	0.766	17.94	

Response Factor Report VOA 108

Method Path : I:\VOLATILES\VOA108\2019\190218N\
 Method File : V108_190218N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Tue Feb 19 00:08:39 2019
 Response Via : Initial Calibration

Calibration Files

L11 =V08190218N04.D L1 =V08190218N06.D L2 =V08190218N08.D L3 =V08190218N09.D L4 =V08190218N10.D
 L6 =V08190218N11.D L8 =V08190218N12.D L10 =V08190218N13.D

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

1) I	Fluorobenzene	-----ISTD-----									
2) TP	Dichlorodifluo...	0.162	0.178	0.191	0.189	0.222	0.231	0.226	0.200	13.29	
3) TP	Chloromethane	0.195	0.202	0.198	0.190	0.194	0.202	0.197	0.197	2.28	
4) TC	Vinyl chloride	0.180	0.181	0.212	0.210	0.206	0.228	0.236	0.229	10.07	
5) TP	Bromomethane	0.238	0.212	0.175	0.158	0.156	0.164	0.165	0.181	17.39	
6) TP	Chloroethane	0.171	0.152	0.138	0.137	0.164	0.161	0.154	0.154	8.50	
7) TP	Trichlorofluor...	0.286	0.313	0.320	0.320	0.370	0.388	0.378	0.339	11.46	
8) TP	Ethyl ether	0.106	0.119	0.107	0.110	0.115	0.118	0.117	0.113	4.93	
10) TC	1,1-Dichloroet...	0.171	0.183	0.180	0.177	0.198	0.206	0.202	0.188	7.28	
11) TP	Carbon disulfide	0.554	0.567	0.570	0.559	0.619	0.642	0.625	0.591	6.16	
12) TP	Freon-113	0.142	0.156	0.164	0.162	0.192	0.200	0.197	0.173	13.17	
13) TP	Iodomethane		0.092	0.138	0.198	0.260	0.279	0.274	*Q	0.9955	
14) TP	Acrolein	0.023	0.022	0.021	0.021	0.025	0.026	0.026	0.023#	9.11	
15) TP	Methylene chlo...	0.254	0.222	0.214	0.210	0.219	0.226	0.222	0.224	6.45	
17) TP	Acetone		0.046	0.036	0.034	0.038	0.040	0.040	0.039#	11.16	
18) TP	trans-1,2-Dich...	0.193	0.208	0.208	0.207	0.222	0.230	0.225	0.213	6.08	
19) TP	Methyl acetate	0.080	0.093	0.096	0.098	0.103	0.107	0.107	0.098#	9.75	
20) TP	Methyl tert-bu...	0.554	0.554	0.537	0.537	0.570	0.592	0.578	0.560	3.70	
21) TP	tert-Butyl alc...		0.012	0.010	0.011	0.012	0.013	0.013	0.012#	9.44	
22) TP	Diisopropyl ether	0.651	0.645	0.618	0.617	0.647	0.674	0.664	0.645	3.30	
23) TP	1,1-Dichloroet...	0.353	0.374	0.371	0.363	0.388	0.400	0.391	0.377	4.40	
24) TP	Halothane	0.147	0.156	0.156	0.158	0.174	0.183	0.178	0.165	8.25	
25) TP	Acrylonitrile	0.073	0.054	0.055	0.052	0.058	0.059	0.059	0.058	11.63	
26) TP	Ethyl tert-but...	0.570	0.599	0.607	0.608	0.649	0.676	0.671	0.626	6.38	
27) TP	Vinyl acetate		0.343	0.387	0.433	0.487	0.515	0.519	0.447	16.13	
28) TP	cis-1,2-Dichlo...	0.232	0.246	0.238	0.233	0.245	0.252	0.248	0.242	3.18	
29) TP	2,2-Dichloropr...	0.284	0.299	0.300	0.297	0.324	0.335	0.330	0.310	6.32	
30) TP	Bromochloromet...	0.104	0.112	0.110	0.110	0.115	0.119	0.113	0.112	4.23	
31) TP	Cyclohexane	0.267	0.290	0.290	0.287	0.341	0.355	0.347	0.311	11.46	
32) TC	Chloroform	0.365	0.385	0.383	0.389	0.404	0.420	0.412	0.394	4.80	
33) TP	Ethyl acetate		0.228	0.144	0.146	0.156	0.162	0.158	0.166	18.82	

Response Factor Report VOA 108

Method Path : I:\VOLATILES\VOA108\2019\190218N\
 Method File : V108_190218N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Tue Feb 19 00:08:39 2019
 Response Via : Initial Calibration

Calibration Files

L11 =V08190218N04.D L1 =V08190218N06.D L2 =V08190218N08.D L3 =V08190218N09.D L4 =V08190218N10.D
 L6 =V08190218N11.D L8 =V08190218N12.D L10 =V08190218N13.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
34)	TP Carbon tetrach...	0.262	0.258	0.276	0.285	0.279	0.324	0.339	0.332	0.294	10.92
35)	TP Tetrahydrofuran		0.040	0.037	0.038	0.040	0.042	0.044	0.040#		6.40
36)	S Dibromofluorom...	0.243	0.248	0.250	0.253	0.255	0.259	0.269	0.267	0.255	3.52
37)	TP 1,1,1-Trichlor...		0.288	0.327	0.336	0.329	0.367	0.384	0.375	0.344	9.76
39)	TP 2-Butanone		0.086	0.056	0.061	0.066	0.069	0.069	0.068#		15.43
40)	TP 1,1-Dichloropr...		0.257	0.259	0.268	0.258	0.288	0.301	0.295	0.275	6.88
41)	TP Benzene	0.854	0.809	0.861	0.847	0.830	0.882	0.906	0.881	0.859	3.59
42)	TP tert-Amyl meth...		0.574	0.553	0.542	0.556	0.590	0.611	0.603	0.576	4.62
43)	S 1,2-Dichloroet...	0.281	0.290	0.283	0.281	0.285	0.289	0.290	0.297	0.287	1.90
44)	TP 1,2-Dichloroet...		0.309	0.289	0.280	0.282	0.297	0.307	0.304	0.295	4.01
47)	TP Methyl cyclohe...		0.261	0.306	0.327	0.307	0.363	0.376	0.369	0.330	12.69
48)	TP Trichloroethene	0.226	0.222	0.224	0.224	0.219	0.235	0.242	0.238	0.229	3.71
50)	TP Dibromomethane		0.129	0.130	0.131	0.131	0.137	0.142	0.139	0.134	3.84
51)	TC 1,2-Dichloropr...		0.225	0.230	0.214	0.213	0.222	0.231	0.224	0.223	3.16
53)	TP 2-Chloroethyl ...		0.105	0.122	0.124	0.127	0.134	0.139	0.137	0.127	9.24
54)	TP Bromodichlorom...		0.282	0.299	0.307	0.304	0.324	0.337	0.332	0.312	6.30
57)	TP 1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	3.94
58)	TP cis-1,3-Dichlo...		0.316	0.329	0.338	0.345	0.366	0.380	0.376	0.350	7.05
59)	I Chlorobenzene-d5	-----ISTD-----									
60)	S Toluene-d8	1.434	1.386	1.388	1.353	1.341	1.345	1.364	1.355	1.371	2.26
61)	TC Toluene		0.742	0.788	0.761	0.747	0.783	0.828	0.808	0.779	4.06
62)	TP 4-Methyl-2-pen...		0.078	0.081	0.085	0.088	0.092	0.097	0.094	0.088#	8.17
63)	TP Tetrachloroethene		0.297	0.318	0.329	0.321	0.349	0.372	0.357	0.335	7.68
65)	TP trans-1,3-Dich...		0.406	0.419	0.417	0.426	0.455	0.483	0.473	0.440	6.92
67)	TP Ethyl methacry...		0.330	0.304	0.330	0.341	0.367	0.391	0.379	0.349	8.91
68)	TP 1,1,2-Trichlor...		0.226	0.228	0.216	0.212	0.221	0.233	0.226	0.223	3.27
69)	TP Chlorodibromom...		0.300	0.324	0.314	0.316	0.338	0.359	0.349	0.329	6.40
70)	TP 1,3-Dichloropr...		0.488	0.453	0.435	0.427	0.441	0.464	0.448	0.451	4.51
71)	TP 1,2-Dibromoethane		0.260	0.265	0.259	0.253	0.267	0.282	0.272	0.266	3.62
72)	TP 2-Hexanone		0.133	0.159	0.140	0.144	0.156	0.169	0.164	0.152	8.77
73)	TP Chlorobenzene		0.851	0.876	0.857	0.838	0.868	0.910	0.870	0.867	2.64

Response Factor Report VOA 108

Method Path : I:\VOLATILES\VOA108\2019\190218N\
 Method File : V108_190218N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Tue Feb 19 00:08:39 2019
 Response Via : Initial Calibration

Calibration Files

L11 =V08190218N04.D L1 =V08190218N06.D L2 =V08190218N08.D L3 =V08190218N09.D L4 =V08190218N10.D
 L6 =V08190218N11.D L8 =V08190218N12.D L10 =V08190218N13.D

Compound		L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
74)	TC Ethylbenzene	1.362	1.418	1.451	1.427	1.505	1.575	1.433	1.453	4.71	
75)	TP 1,1,1,2-Tetrac...	0.339	0.309	0.314	0.311	0.324	0.342	0.333	0.325	4.22	
76)	TP p/m Xylene	0.452	0.516	0.560	0.551	0.584	0.617	0.588	0.553	9.86	
77)	TP o Xylene	0.481	0.513	0.550	0.542	0.569	0.599	0.576	0.547	7.25	
78)	TP Styrene	0.777	0.827	0.911	0.904	0.952	0.985	0.762	0.874	9.89	
79)	I 1,4-Dichlorobenzene-d4	-----ISTD-----									
80)	TP Bromoform	0.408	0.408	0.409	0.391	0.420	0.451	0.428	0.416	4.57	
82)	TP Isopropylbenzene	2.897	2.937	3.056	2.870	2.996	3.109	2.570	2.919	6.03	
83)	S 4-Bromofluorob...	0.968	0.972	0.988	1.024	0.996	0.983	0.972	0.926	0.978	2.87
84)	TP Bromobenzene	0.833	0.753	0.772	0.717	0.724	0.762	0.699	0.751	5.92	
85)	TP n-Propylbenzene	3.313	3.353	3.536	3.336	3.508	3.612	2.670	3.333	9.41	
86)	TP 1,4-Dichlorobu...	0.942	0.926	0.887	0.850	0.875	0.916	0.849	0.892	4.15	
87)	TP 1,1,2,2-Tetrac...	0.736	0.706	0.685	0.645	0.658	0.686	0.629	0.678	5.44	
88)	TP 4-Ethyltoluene	2.513	2.744	2.881	2.772	2.918	3.038	2.562	2.776	6.83	
89)	TP 2-Chlorotoluene	2.451	2.342	2.498	2.360	2.458	2.580	2.338	2.432	3.73	
90)	TP 1,3,5-Trimethy...	2.202	2.335	2.415	2.355	2.509	2.636	2.326	2.397	5.87	
91)	TP 1,2,3-Trichlor...	0.606	0.546	0.521	0.491	0.500	0.533	0.491	0.527	7.79	
92)	TP trans-1,4-Dich...	0.224	0.178	0.163	0.174	0.180	0.196	0.185	0.186	10.66	
93)	TP 4-Chlorotoluene	2.055	2.098	2.173	2.073	2.141	2.244	2.029	2.116	3.54	
94)	TP tert-Butylbenzene	2.363	2.451	2.499	2.370	2.508	2.647	2.403	2.463	4.05	
95)	TP Pentachloroethane	0.461	0.434	0.474	0.477	0.479	0.498	0.476	0.471	4.17	
97)	TP 1,2,4-Trimethy...	2.110	2.399	2.375	2.367	2.515	2.648	2.280	2.385	7.12	
98)	TP sec-Butylbenzene	2.820	3.051	3.206	2.912	3.186	3.313	2.633	3.017	8.01	
99)	TP p-Isopropyltol...	2.413	2.605	2.679	2.486	2.712	2.862	2.374	2.590	6.80	
100)	TP 1,3-Dichlorobe...	1.355	1.343	1.414	1.337	1.378	1.479	1.390	1.385	3.58	
101)	TP 1,4-Dichlorobe...	1.552	1.402	1.409	1.357	1.402	1.503	1.418	1.435	4.73	
102)	TP p-Diethylbenzene	1.153	1.465	1.534	1.454	1.614	1.752	1.639	1.516	12.60	
103)	TP n-Butylbenzene	2.124	2.356	2.459	2.280	2.572	2.728	2.298	2.402	8.39	
104)	TP 1,2-Dichlorobe...	1.469	1.325	1.339	1.270	1.313	1.408	1.333	1.351	4.89	
105)	TP 1,2,4,5-Tetram...	1.045	1.400	2.103	2.208	2.557	2.759	2.344	*L	0.9935	
106)	TP 1,2-Dibromo-3-...	0.100	0.095	0.098	0.096	0.103	0.111	0.107	0.102	5.69	

Response Factor Report VOA 108

Method Path : I:\VOLATILES\VOA108\2019\190218N\
Method File : V108_190218N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Tue Feb 19 00:08:39 2019
Response Via : Initial Calibration

Calibration Files

L11 =V08190218N04.D L1 =V08190218N06.D L2 =V08190218N08.D L3 =V08190218N09.D L4 =V08190218N10.D
L6 =V08190218N11.D L8 =V08190218N12.D L10 =V08190218N13.D

Compound		L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
107)	TP 1,3,5-Trichlor...	0.679	0.851	0.950	0.898	1.008	1.089	1.038	0.930	14.80	
108)	TP Hexachlorobuta...	0.439	0.455	0.438	0.377	0.435	0.468	0.440	0.436	6.57	
109)	TP 1,2,4-Trichlor...	0.640	0.695	0.838	0.833	0.934	1.021	0.974	0.848	16.72	
110)	TP Naphthalene	1.224	1.591	1.868	1.915	2.113	2.288	2.068	1.867	19.19	
111)	TP 1,2,3-Trichlor...	0.542	0.641	0.762	0.755	0.857	0.931	0.877	0.766	17.94	

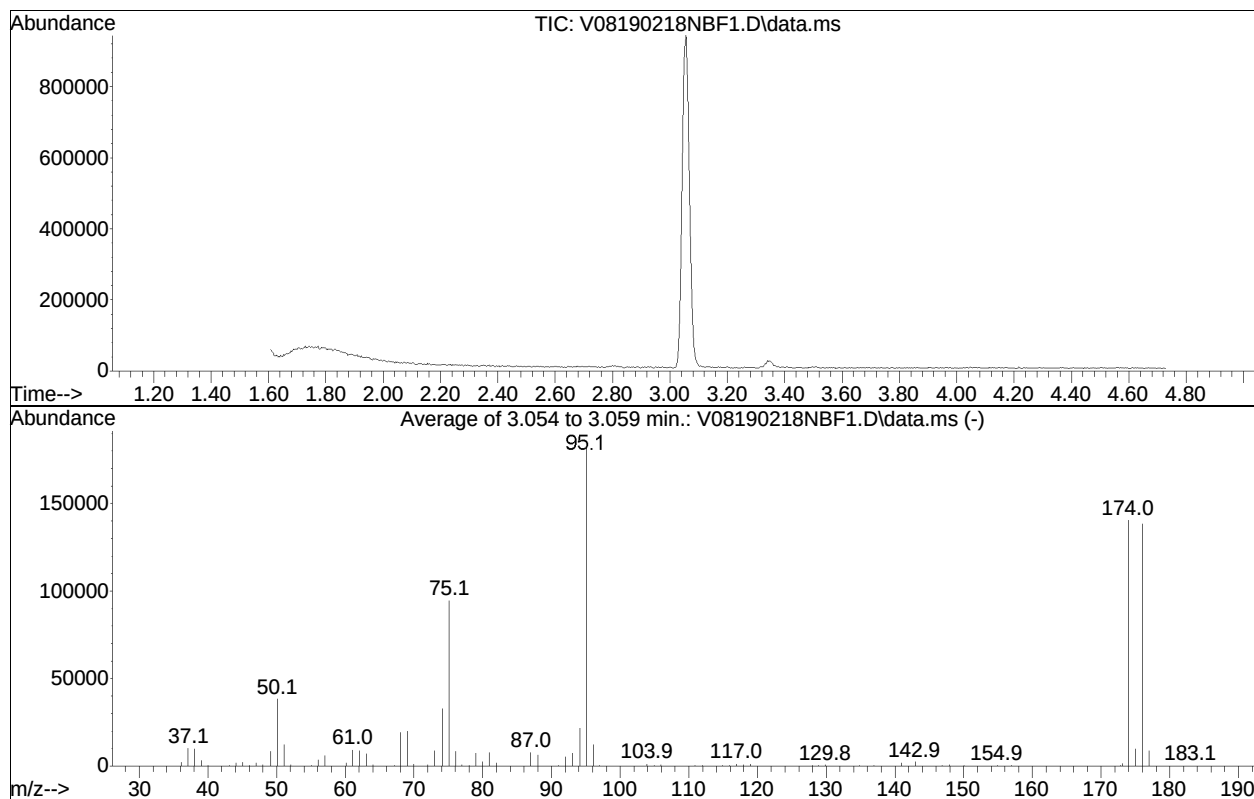
(#) = Out of Range

BFB

Data Path : I:\VOLATILES\VOA108\2019\190218N\
Data File : V08190218NBF1.D
Acq On : 18 Feb 2019 6:56 pm
Operator : VOA108:NLK
Sample : WG1208025-1
Misc : WG1208025
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Tue Feb 19 00:08:39 2019



AutoFind: Scans 520, 521, 522; Background Corrected with Scan 504

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.0	38297	PASS
75	95	30	60	51.7	94424	PASS
95	95	100	100	100.0	182485	PASS
96	95	5	9	6.8	12347	PASS
173	174	0.00	2	1.1	1568	PASS
174	95	50	100	77.1	140619	PASS
175	174	5	9	7.1	10040	PASS
176	174	95	101	98.3	138277	PASS
177	176	5	9	6.4	8898	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N04.D
 Acq On : 18 Feb 2019 8:23 pm
 Operator : VOA108:NLK
 Sample : I8260STD11
 Misc : WG1208025
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 18 23:45:14 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-L11 - Level 11 for 8260-LRR product

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

Internal Standards						
1) Fluorobenzene	5.551	96	543381	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery	=	103.14%	
59) Chlorobenzene-d5	8.526	117	353845	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery	=	96.55%	
79) 1,4-Dichlorobenzene-d4	10.010	152	164653	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery	=	97.01%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.575	113	132110	9.627	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	96.27%	
43) 1,2-Dichloroethane-d4	5.210	65	152734	10.005	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.05%	
60) Toluene-d8	7.241	98	507353	10.598	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.98%	
83) 4-Bromofluorobenzene	9.340	95	159321	9.447	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	94.47%	
Target Compounds						Qvalue
4) Vinyl chloride	1.150	62	1955	0.171	ug/L	90
34) Carbon tetrachloride	4.458	117	2851M1	0.184	ug/L	
41) Benzene	5.038	78	9279	0.202	ug/L #	83
48) Trichloroethene	5.746	95	2454	0.202	ug/L #	50

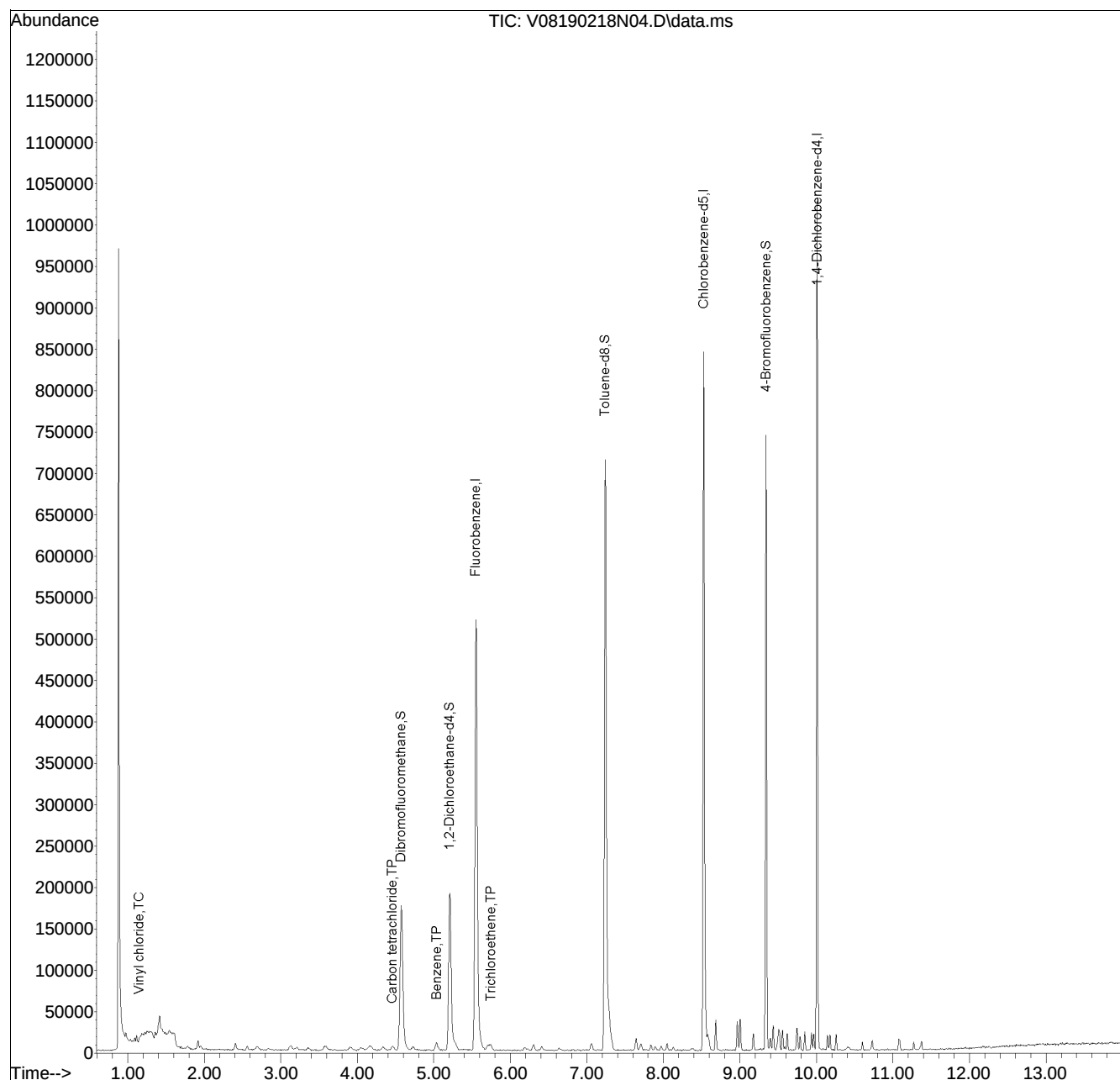
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N04.D
 Acq On : 18 Feb 2019 8:23 pm
 Operator : VOA108:NLK
 Sample : I8260STD11
 Misc : WG1208025
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 18 23:45:14 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

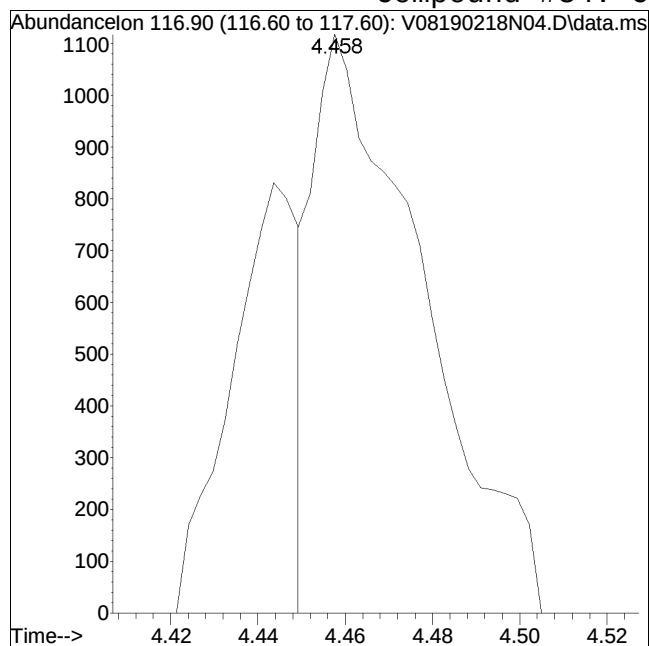
Sub List : 8260-L11 - Level 11 for 8260-LRR product190218N09.D•



Manual Integration Report

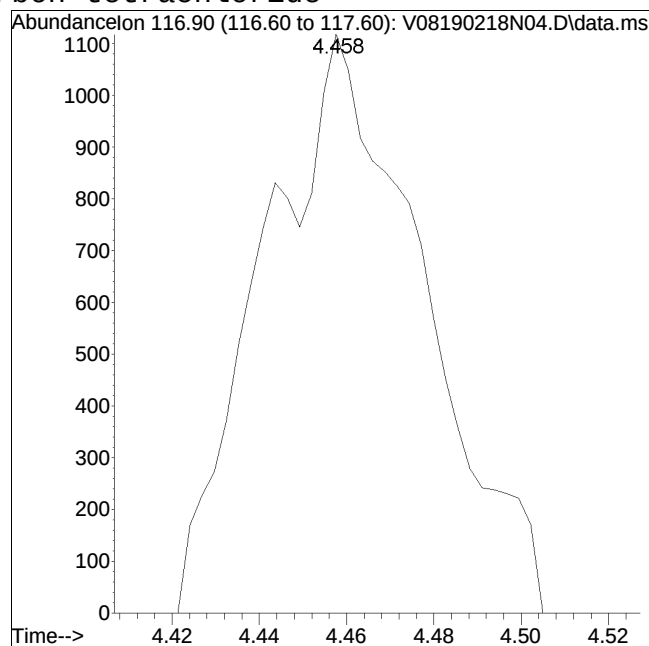
Data Path : I:\VOLATILES\VOA108\2019\10 Method : V108_190218N_8260.m
Data File : V08190218N04.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 8:23 pm Instrument : VOA 108
Sample : I8260STD11 Quant Date : 2/18/2019 11:43 pm

Compound #34: Carbon tetrachloride



Original Peak Response = 1961

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



Manual Peak Response = 2851 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N06.D
 Acq On : 18 Feb 2019 9:07 pm
 Operator : VOA108:NLK
 Sample : I8260STD1
 Misc : WG1208025
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 19 00:07:10 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:06:55 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

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

Internal Standards						
1) Fluorobenzene	5.553	96	528629	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery	=	100.34%	
59) Chlorobenzene-d5	8.529	117	354189	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery	=	96.65%	
79) 1,4-Dichlorobenzene-d4	10.010	152	157729	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery	=	92.93%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	131321	9.726	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.26%	
43) 1,2-Dichloroethane-d4	5.208	65	153435	10.110	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.10%	
60) Toluene-d8	7.243	98	490757	10.109	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.09%	
83) 4-Bromofluorobenzene	9.340	95	153328	9.935	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.35%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.975	85	4281	0.405	ug/L	96
3) Chloromethane	1.094	50	5153	0.495	ug/L	90
4) Vinyl chloride	1.150	62	4785	0.431	ug/L	91
5) Bromomethane	1.359	94	6291M1	0.657	ug/L	
6) Chloroethane	1.446	64	4531M1	0.558	ug/L	
7) Trichlorofluoromethane	1.546	101	7557	0.421	ug/L	95
8) Ethyl ether	1.786	74	2790	0.467	ug/L	72
10) 1,1-Dichloroethene	1.917	96	4517	0.454	ug/L #	49
11) Carbon disulfide	1.923	76	14640M1	0.469	ug/L	
12) Freon-113	1.953	101	3762	0.411	ug/L	90
13) Iodomethane	2.018	142	1683	0.814	ug/L	88
14) Acrolein	2.193	56	601M1	0.487	ug/L	
15) Methylene chloride	2.413	84	6721	0.568	ug/L #	63
17) Acetone	2.472	43	2659M1	1.294	ug/L	
18) trans-1,2-Dichloroethene	2.561	96	5113	0.453	ug/L	76
19) Methyl acetate	2.603	43	2109	0.408	ug/L #	90
20) Methyl tert-butyl ether	2.692	73	14633	0.494	ug/L #	84
21) tert-Butyl alcohol	2.826	59	2599M1	4.109	ug/L	
22) Diisopropyl ether	3.130	45	17211M1	0.504	ug/L	
23) 1,1-Dichloroethane	3.205	63	9339M1	0.468	ug/L	
24) Halothane	3.350	117	3881M1	0.446	ug/L	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N06.D
 Acq On : 18 Feb 2019 9:07 pm
 Operator : VOA108:NLK
 Sample : I8260STD1
 Misc : WG1208025
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 19 00:07:10 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:06:55 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	3.281	53	1918M1	0.620	ug/L	
26) Ethyl tert-butyl ether	3.579	59	15063M1	0.455	ug/L	
27) Vinyl acetate	3.587	43	6092M1	0.258	ug/L	
28) cis-1,2-Dichloroethene	3.911	96	6132	0.479	ug/L #	56
29) 2,2-Dichloropropane	4.059	77	7502M1	0.458	ug/L	
30) Bromochloromethane	4.190	128	2754	0.466	ug/L #	55
31) Cyclohexane	4.159	56	7044M1	0.428	ug/L	
32) Chloroform	4.338	83	9651	0.463	ug/L #	72
33) Ethyl acetate	4.589	43	7048M1	0.804	ug/L	
34) Carbon tetrachloride	4.449	117	6826M1	0.439	ug/L	
35) Tetrahydrofuran	4.552	42	2184M1	1.031	ug/L	
37) 1,1,1-Trichloroethane	4.558	97	7620	0.420	ug/L #	81
39) 2-Butanone	4.770	43	3393M1	0.945	ug/L	
40) 1,1-Dichloropropene	4.734	75	6786	0.467	ug/L #	73
41) Benzene	5.035	78	21382M1	0.471	ug/L	
42) tert-Amyl methyl ether	5.261	73	15179M1	0.499	ug/L	
44) 1,2-Dichloroethane	5.294	62	8169	0.523	ug/L	84
47) Methyl cyclohexane	5.710	83	6899M1	0.396	ug/L	
48) Trichloroethene	5.746	95	5865	0.485	ug/L	97
50) Dibromomethane	6.187	93	3416	0.482	ug/L	100
51) 1,2-Dichloropropane	6.306	63	5943	0.505	ug/L	93
53) 2-Chloroethyl vinyl ether	7.051	63	2773	0.413	ug/L #	70
54) Bromodichloromethane	6.410	83	7453	0.451	ug/L #	96
57) 1,4-Dioxane	6.633	88	5199	100.993	ug/L #	61
58) cis-1,3-Dichloropropene	7.065	75	8345	0.451	ug/L #	90
61) Toluene	7.291	92	13145	0.476	ug/L	94
62) 4-Methyl-2-pentanone	7.698	58	1381	0.444	ug/L #	89
63) Tetrachloroethene	7.642	166	5263	0.444	ug/L	96
65) trans-1,3-Dichloropropene	7.712	75	7182	0.461	ug/L	92
67) Ethyl methacrylate	7.899	69	5847	0.473	ug/L	90
68) 1,1,2-Trichloroethane	7.837	83	4002	0.506	ug/L	88
69) Chlorodibromomethane	7.971	129	5305	0.456	ug/L	97
70) 1,3-Dichloropropane	8.047	76	8643	0.541	ug/L	96
71) 1,2-Dibromoethane	8.133	107	4601	0.489	ug/L	98
72) 2-Hexanone	8.367	43	2349M4	0.436	ug/L	
73) Chlorobenzene	8.537	112	15069	0.491	ug/L	89
74) Ethylbenzene	8.576	91	24127	0.469	ug/L	99
75) 1,1,1,2-Tetrachloroethane	8.599	131	5995	0.522	ug/L	90
76) p/m Xylene	8.685	106	16027	0.819	ug/L	99
77) o Xylene	8.967	106	17043	0.879	ug/L	91

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N06.D
 Acq On : 18 Feb 2019 9:07 pm
 Operator : VOA108:NLK
 Sample : I8260STD1
 Misc : WG1208025
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 19 00:07:10 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:06:55 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.006	104	27514	0.889	ug/L	90
80)	Bromoform	9.009	173	3218	0.490	ug/L	85
82)	Isopropylbenzene	9.176	105	22845	0.496	ug/L	96
84)	Bromobenzene	9.399	156	6569	0.554	ug/L	91
85)	n-Propylbenzene	9.432	91	26124	0.497	ug/L	100
86)	1,4-Dichlorobutane	9.438	55	7432	0.528	ug/L	95
87)	1,1,2,2-Tetrachloroethane	9.485	83	5805	0.543	ug/L	96
88)	4-Ethyltoluene	9.505	105	19820	0.453	ug/L	93
89)	2-Chlorotoluene	9.516	91	19331	0.504	ug/L	97
90)	1,3,5-Trimethylbenzene	9.558	105	17364	0.459	ug/L	99
91)	1,2,3-Trichloropropane	9.555	75	4782	0.576	ug/L	97
92)	trans-1,4-Dichloro-2-b...	9.586	53	1769	0.604	ug/L #	94
93)	4-Chlorotoluene	9.619	91	16204	0.486	ug/L	92
94)	tert-Butylbenzene	9.745	119	18633	0.480	ug/L	93
95)	Pentachloroethane	9.753	167	3634	0.489	ug/L	93
97)	1,2,4-Trimethylbenzene	9.787	105	16644	0.442	ug/L	99
98)	sec-Butylbenzene	9.851	105	22236	0.467	ug/L	96
99)	p-Isopropyltoluene	9.934	119	19027	0.466	ug/L	95
100)	1,3-Dichlorobenzene	9.965	146	10687	0.489	ug/L	99
101)	1,4-Dichlorobenzene	10.018	146	12239	0.541	ug/L #	91
102)	p-Diethylbenzene	10.144	119	9095	0.380	ug/L	100
103)	n-Butylbenzene	10.177	91	16750	0.442	ug/L	92
104)	1,2-Dichlorobenzene	10.258	146	11582	0.543	ug/L	91
105)	1,2,4,5-Tetramethylben...	10.601	119	8240	0.667	ug/L	96
106)	1,2-Dibromo-3-chloropr...	10.715	155	792	0.495	ug/L	87
107)	1,3,5-Trichlorobenzene	10.729	180	5355	0.365	ug/L	97
108)	Hexachlorobutadiene	11.075	225	3461	0.504	ug/L	97
109)	1,2,4-Trichlorobenzene	11.092	180	5046	0.377	ug/L	89
110)	Naphthalene	11.270	128	9654	0.328	ug/L	100
111)	1,2,3-Trichlorobenzene	11.373	180	4277	0.354	ug/L	94

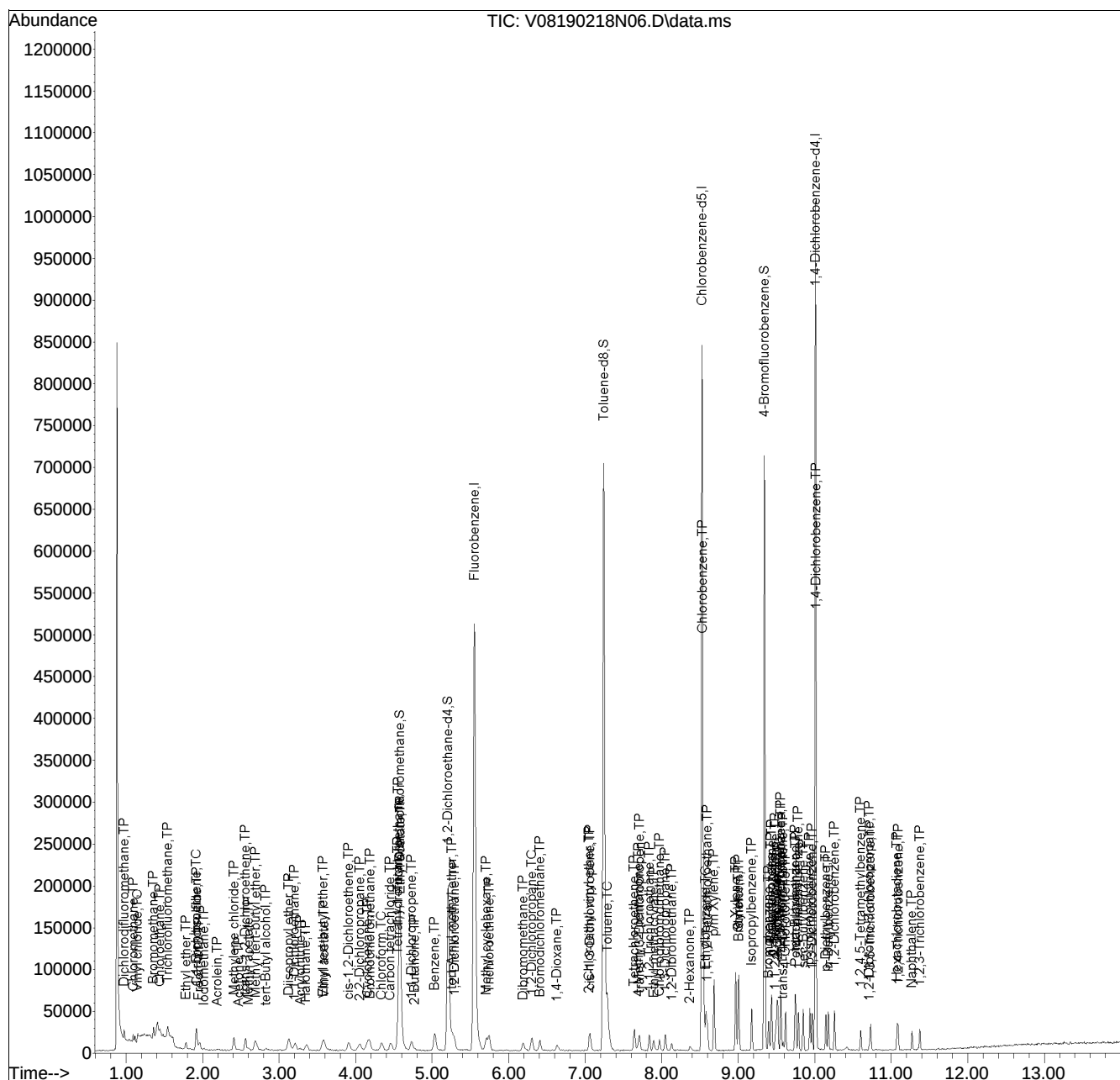
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
Data File : V08190218N06.D
Acq On : 18 Feb 2019 9:07 pm
Operator : VOA108:NLK
Sample : I8260STD1
Misc : WG1208025
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 19 00:07:10 2019
Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Feb 19 00:06:55 2019
Response via : Initial Calibration

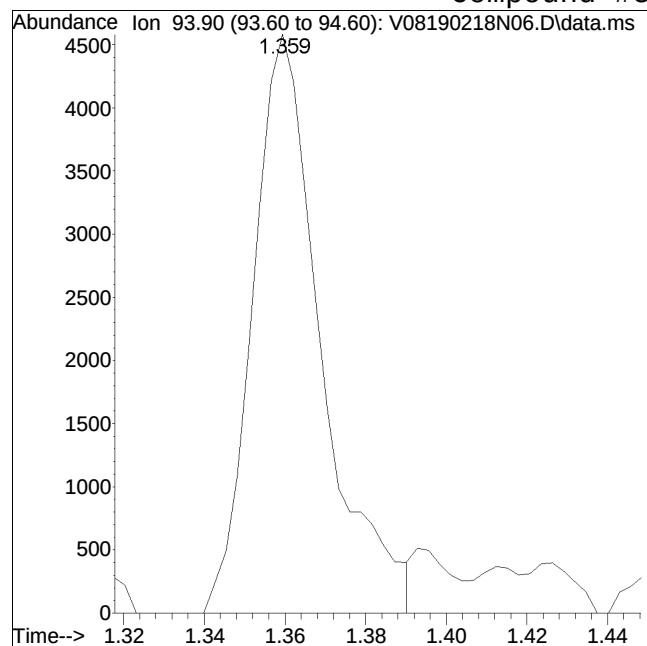
Sub List : 8260-CurvePenta - All compounds listed08190218N09.D•



Manual Integration Report

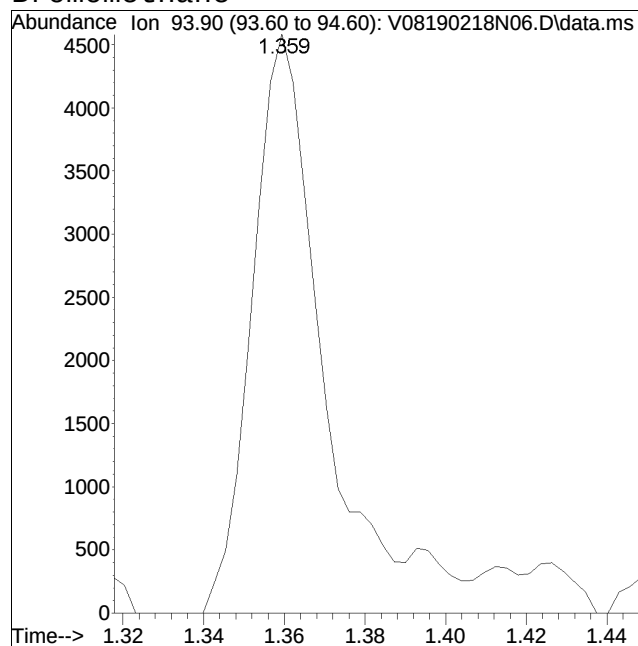
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #5: Bromomethane



Original Peak Response = 5386

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

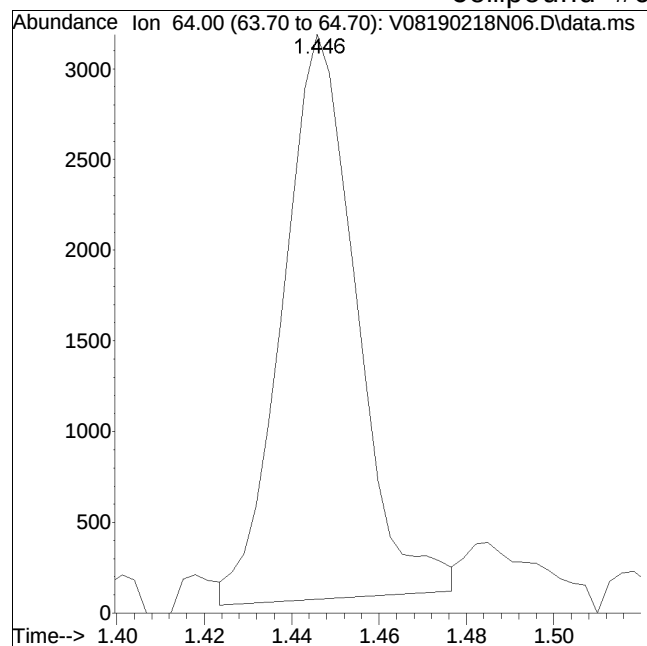


Manual Peak Response = 6291 M1

Manual Integration Report

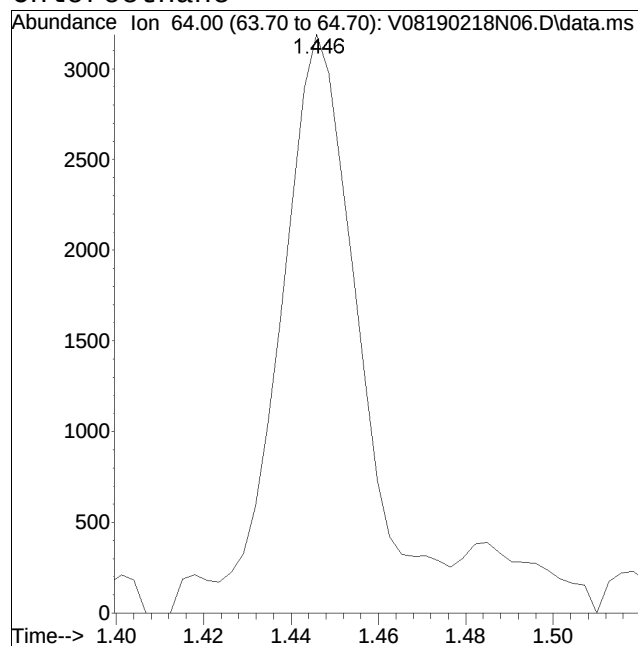
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #6: Chloroethane



Original Peak Response = 3644

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

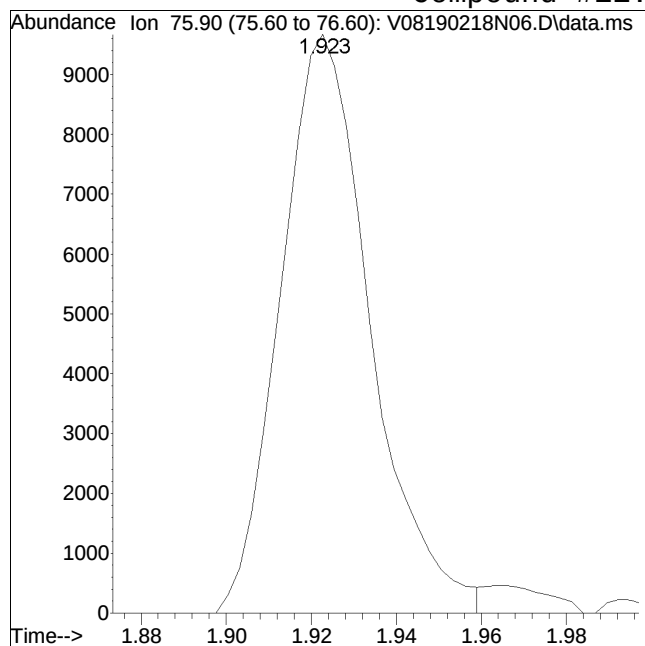


Manual Peak Response = 4531 M1

Manual Integration Report

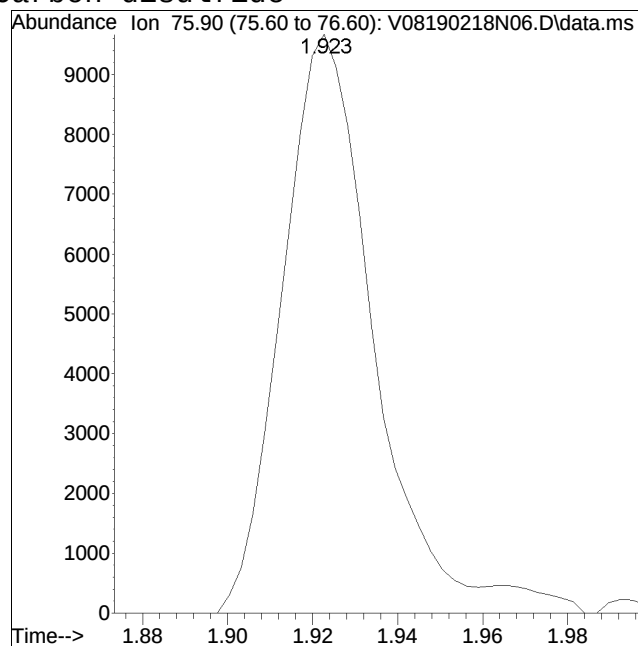
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #11: Carbon disulfide



Original Peak Response = 14161

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

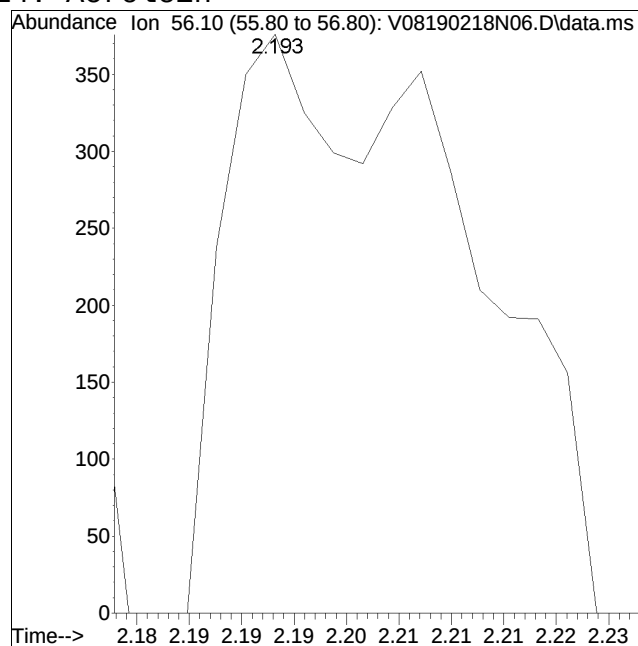
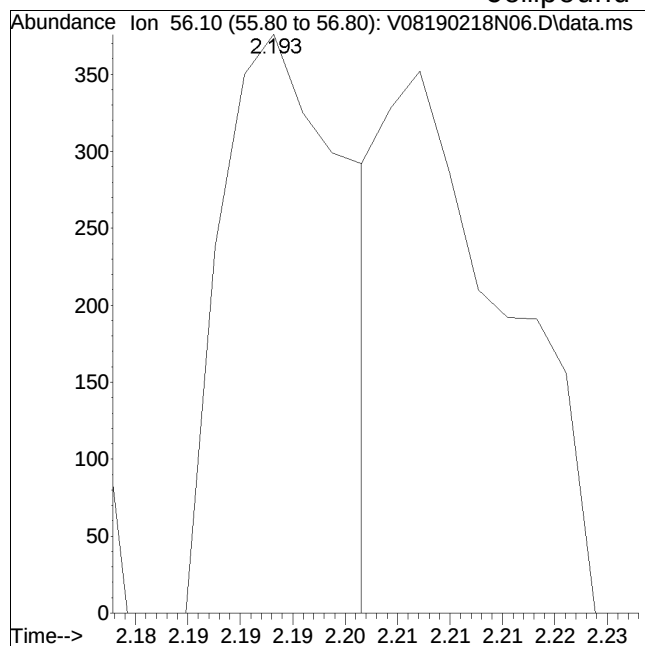


Manual Peak Response = 14640 M1

Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #14: Acrolein



Original Peak Response = 315

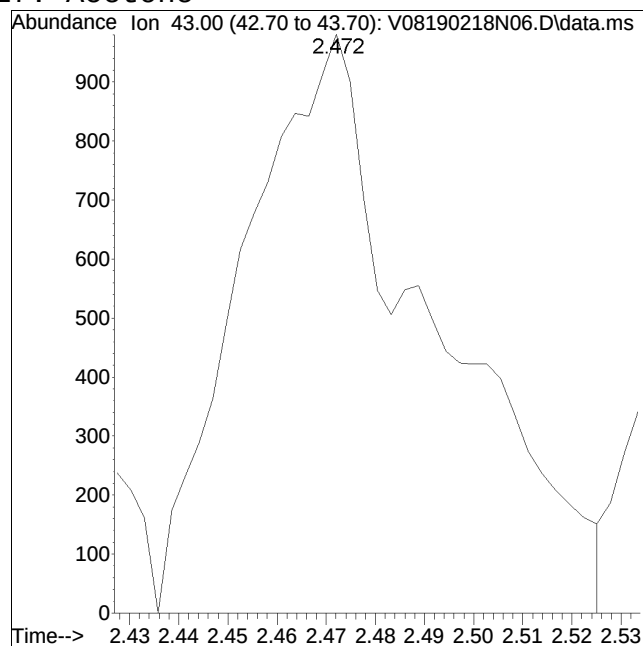
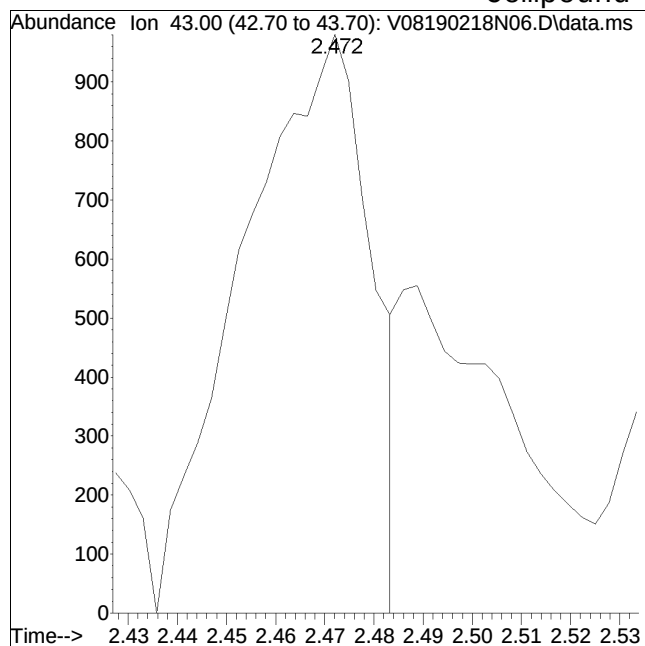
Manual Peak Response = 601 M1

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

Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #17: Acetone



Original Peak Response = 1778

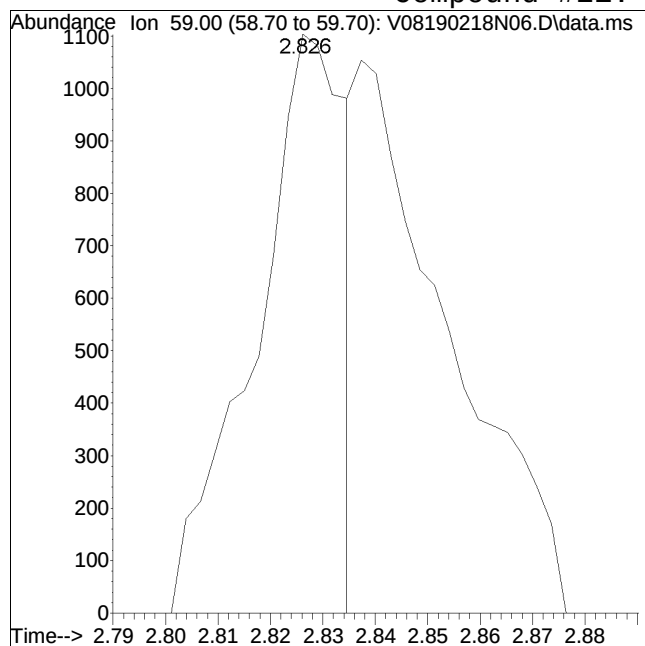
Manual Peak Response = 2659 M1

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

Manual Integration Report

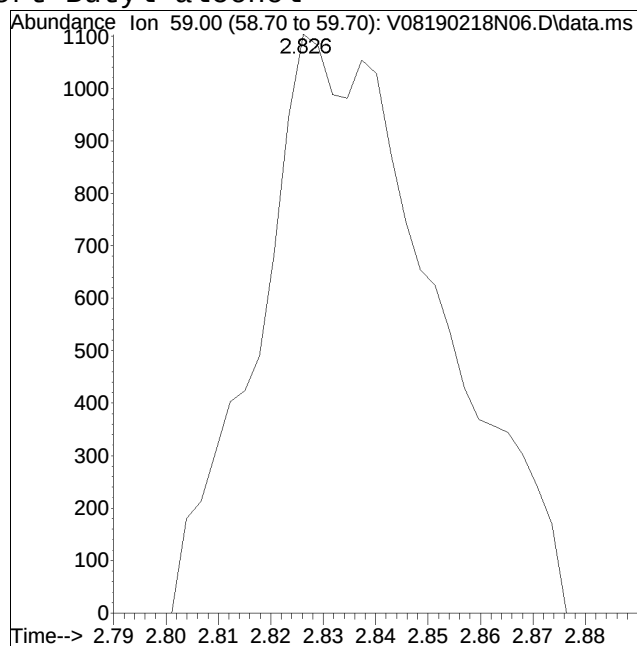
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #21: tert-Butyl alcohol



Original Peak Response = 1305

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

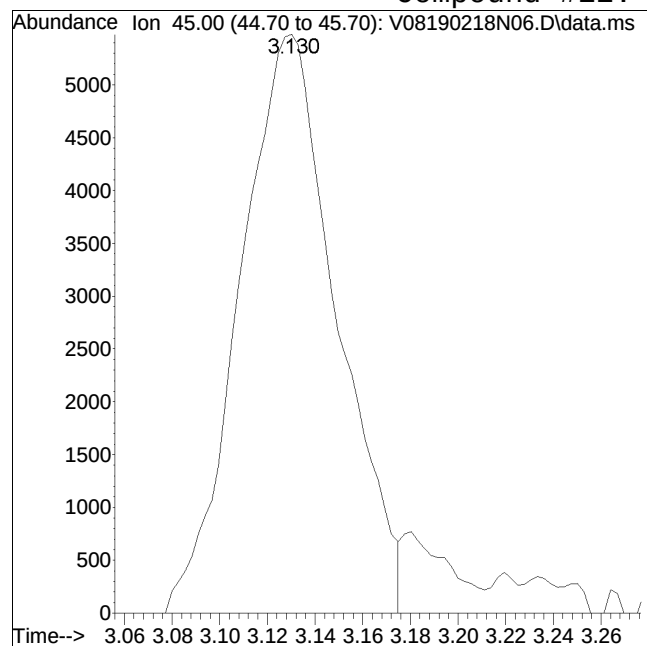


Manual Peak Response = 2599 M1

Manual Integration Report

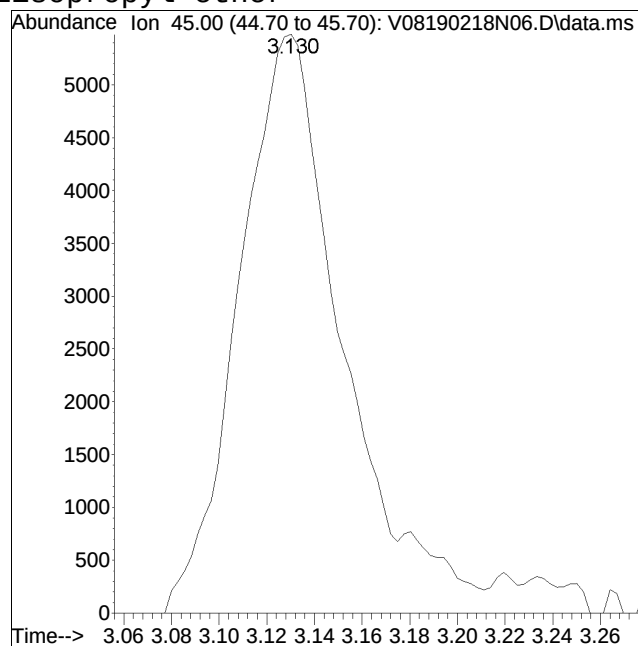
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #22: Diisopropyl ether



Original Peak Response = 15442

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

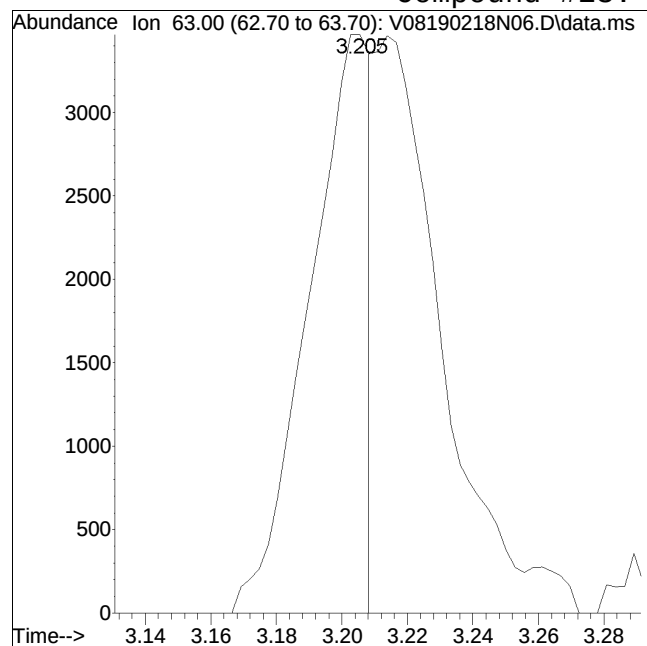


Manual Peak Response = 17211 M1

Manual Integration Report

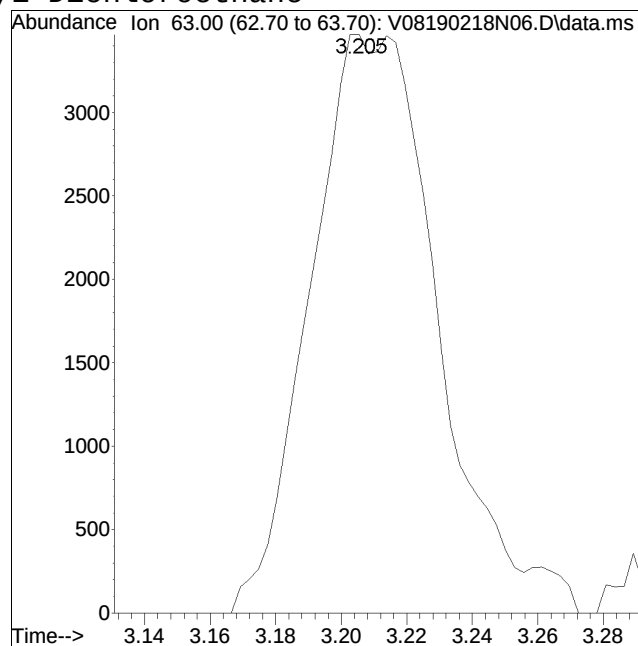
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #23: 1,1-Dichloroethane



Original Peak Response = 4453

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

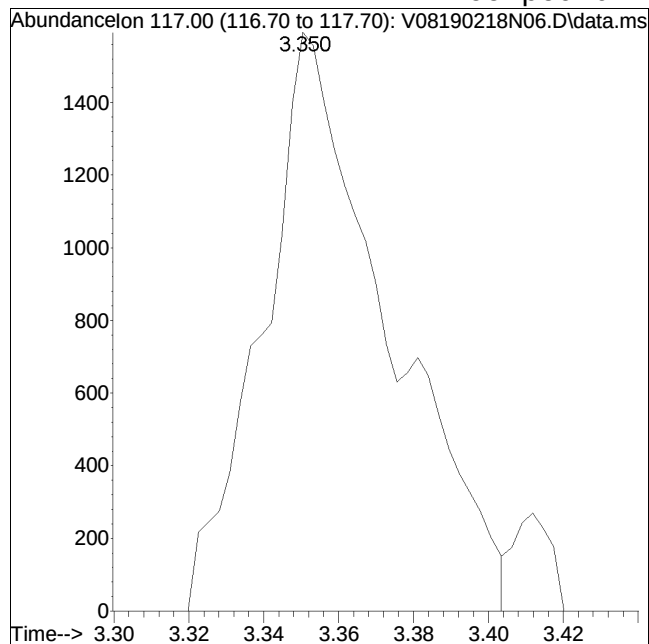


Manual Peak Response = 9339 M1

Manual Integration Report

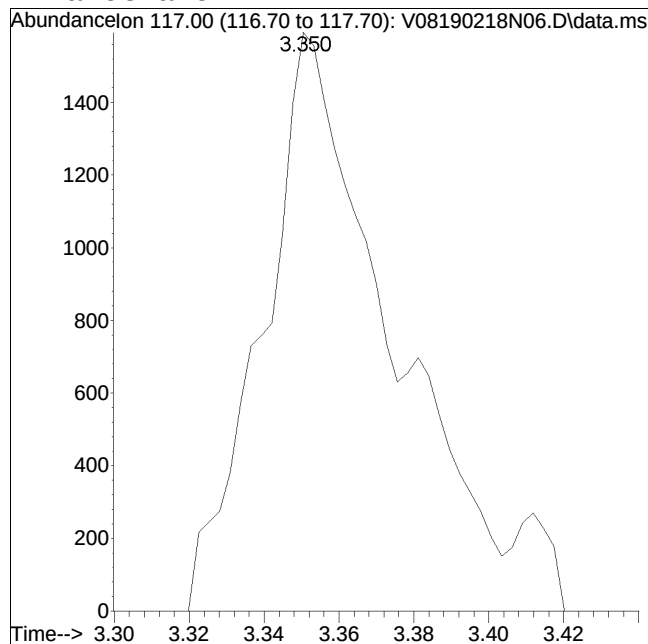
Data Path : I:\VOLATILES\VOA108\2019\1QMethod : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #24: Halothane



Original Peak Response = 3698

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

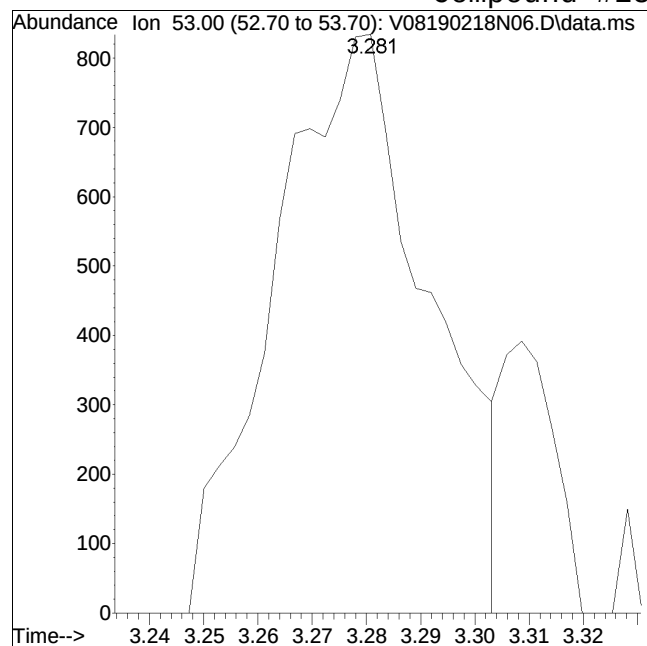


Manual Peak Response = 3881 M1

Manual Integration Report

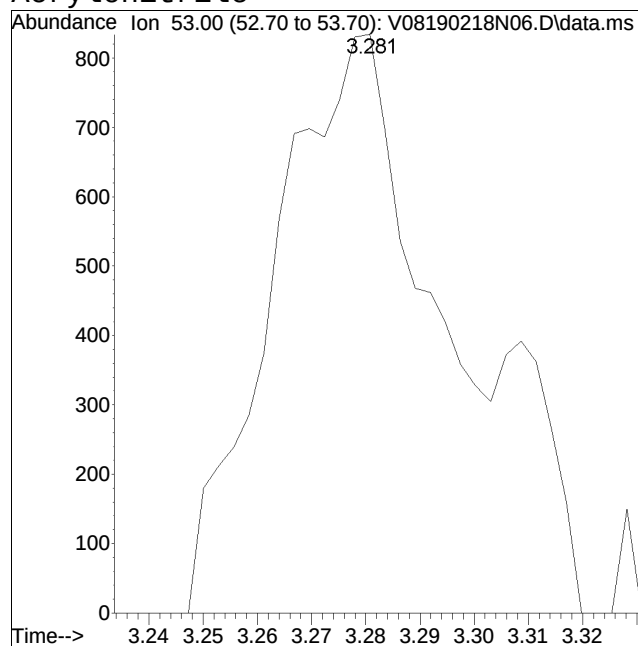
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #25: Acrylonitrile



Original Peak Response = 1657

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

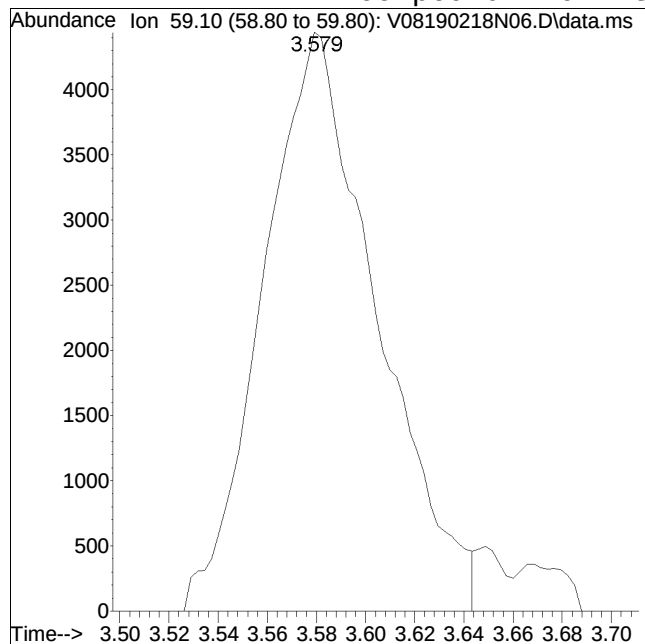


Manual Peak Response = 1918 M1

Manual Integration Report

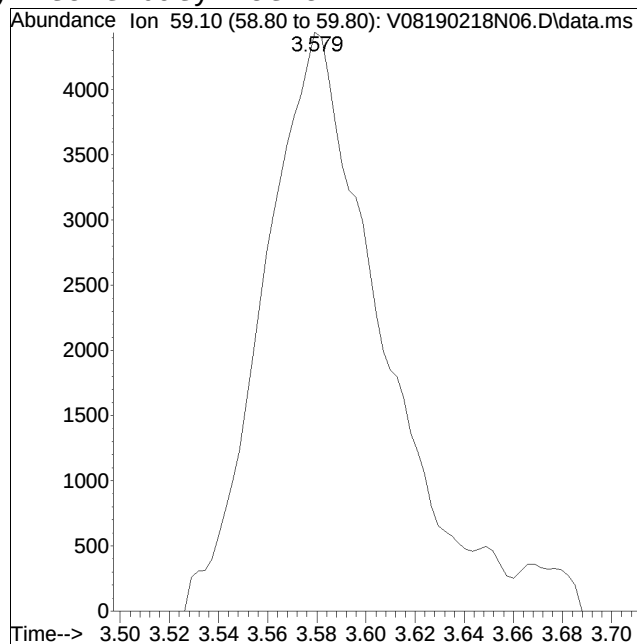
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #26: Ethyl tert-butyl ether



Original Peak Response = 14206

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

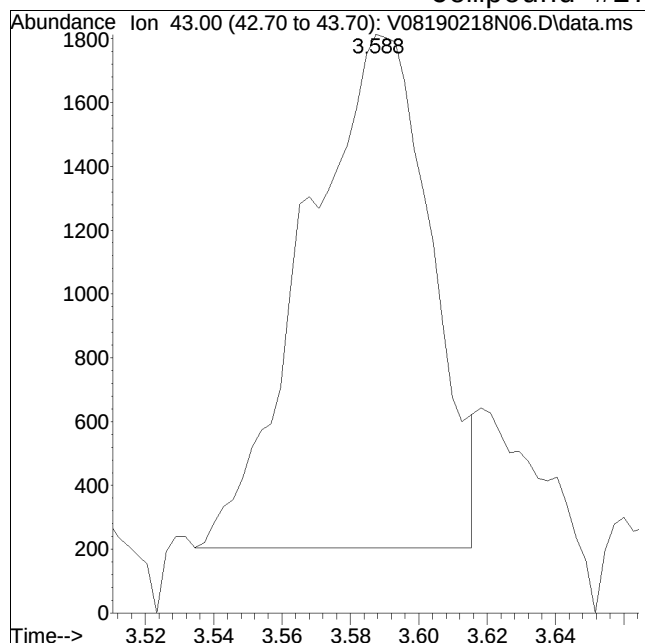


Manual Peak Response = 15063 M1

Manual Integration Report

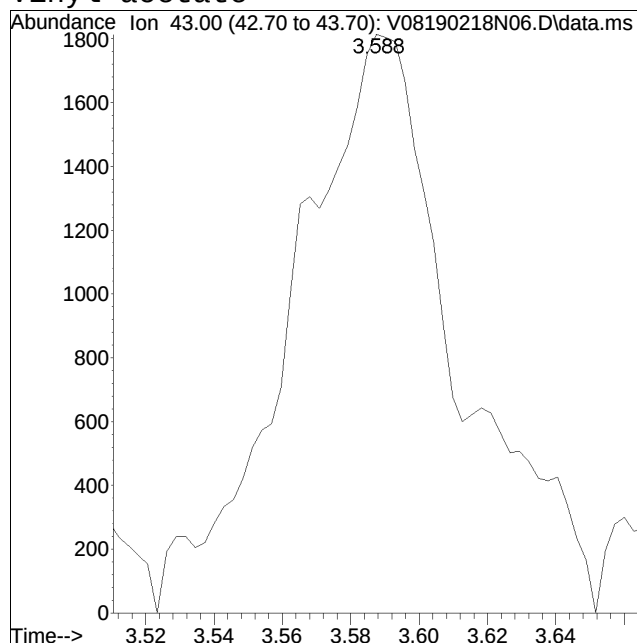
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #27: Vinyl acetate



Original Peak Response = 4060

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

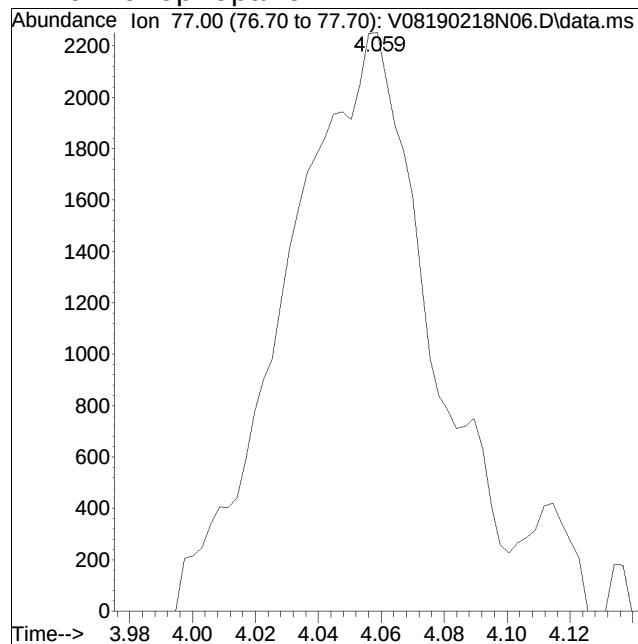
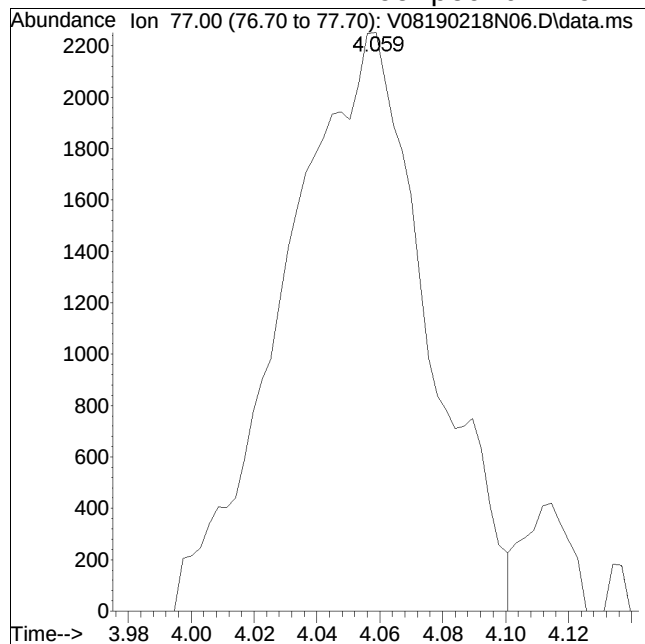


Manual Peak Response = 6092 M1

Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #29: 2,2-Dichloropropane



Original Peak Response = 7082

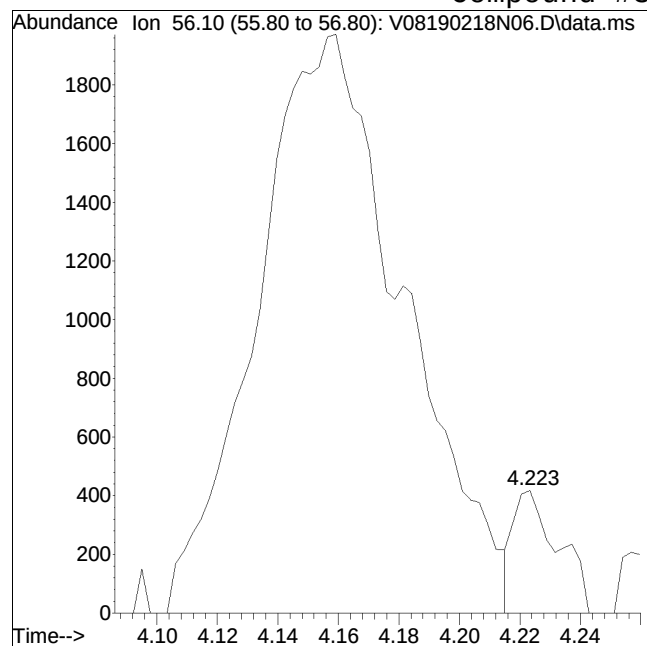
Manual Peak Response = 7502 M1

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

Manual Integration Report

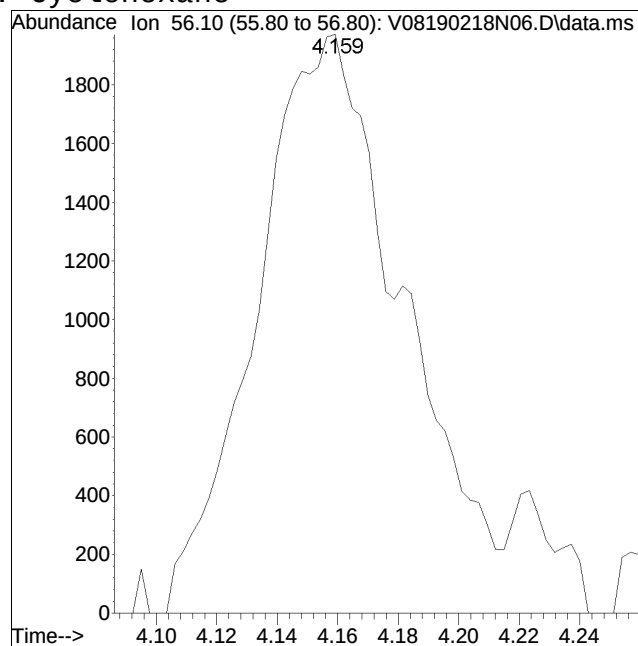
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #31: Cyclohexane



Original Peak Response = 428

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

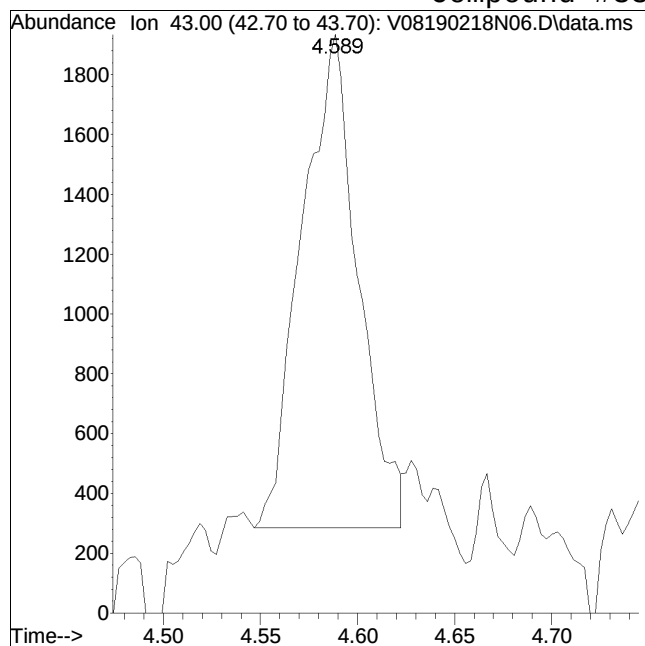


Manual Peak Response = 7044 M1

Manual Integration Report

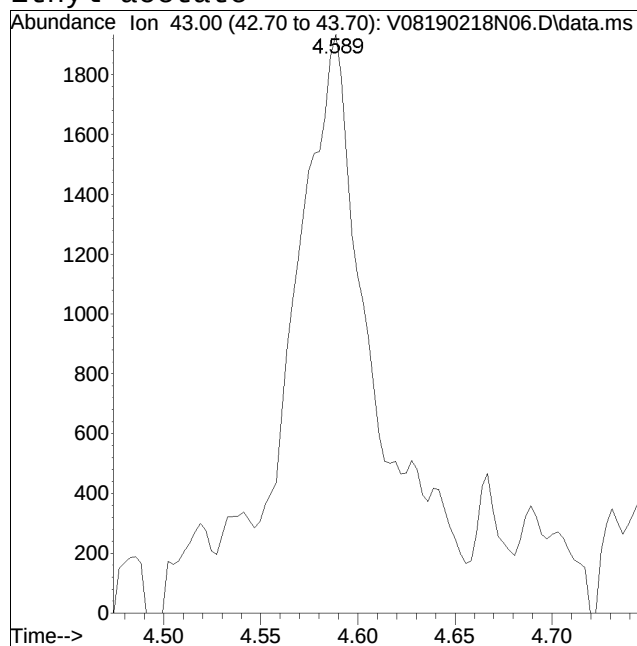
Data Path : I:\VOLATILES\VOA108\2019\1QMethod : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #33: Ethyl acetate



Original Peak Response = 3335

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

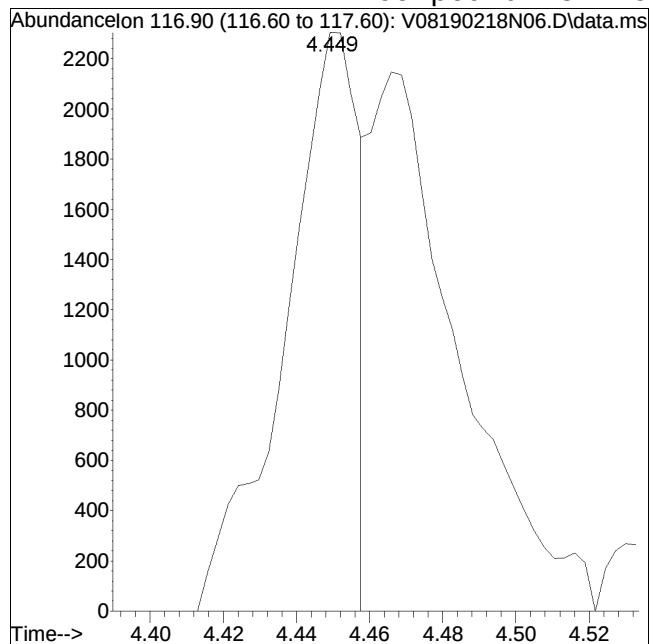


Manual Peak Response = 7048 M1

Manual Integration Report

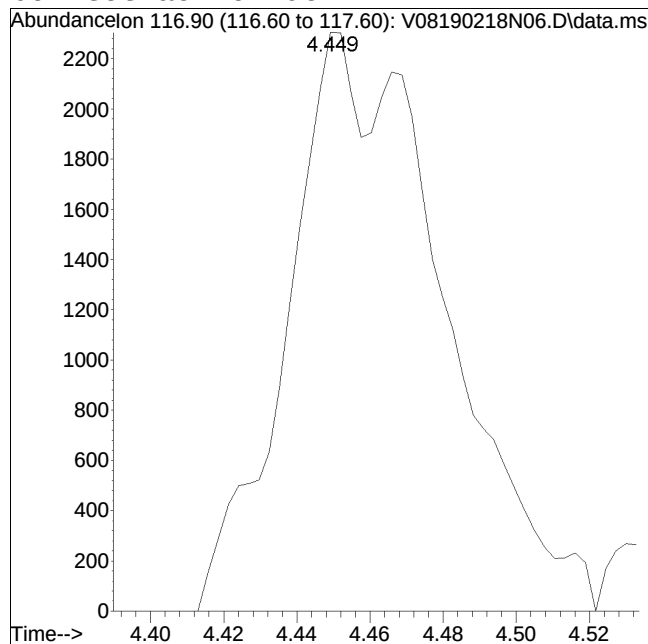
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #34: Carbon tetrachloride



Original Peak Response = 3200

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

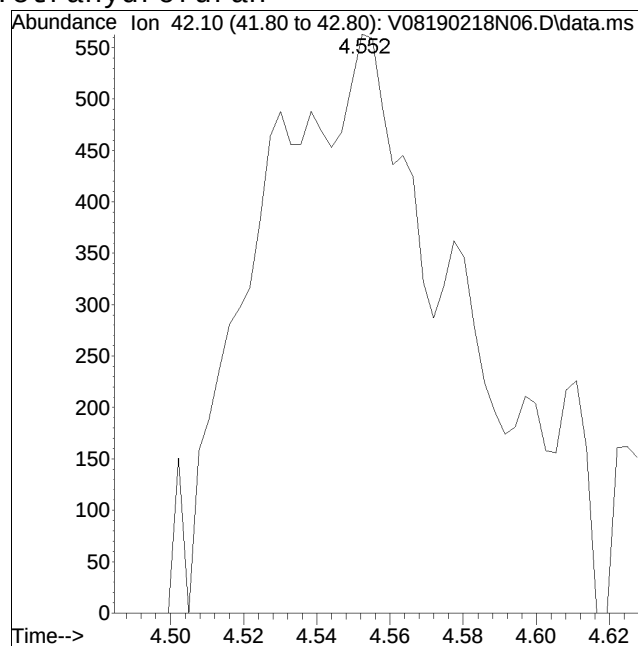
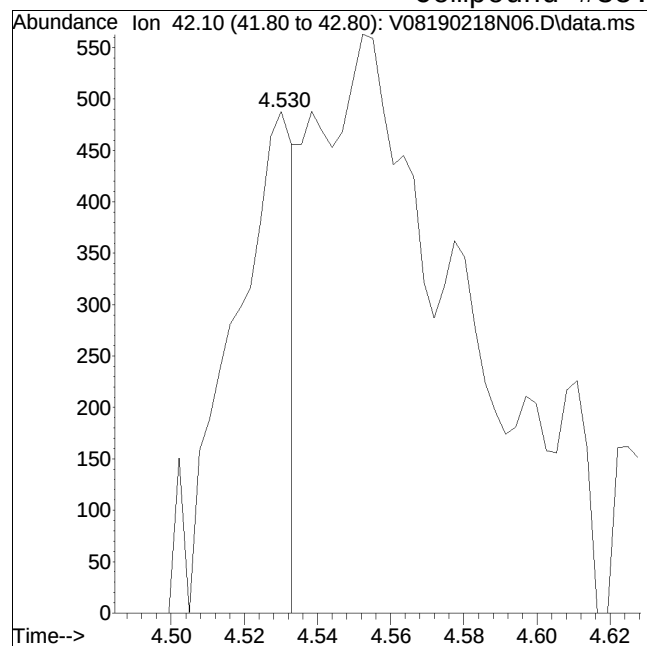


Manual Peak Response = 6826 M1

Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #35: Tetrahydrofuran



Original Peak Response = 572

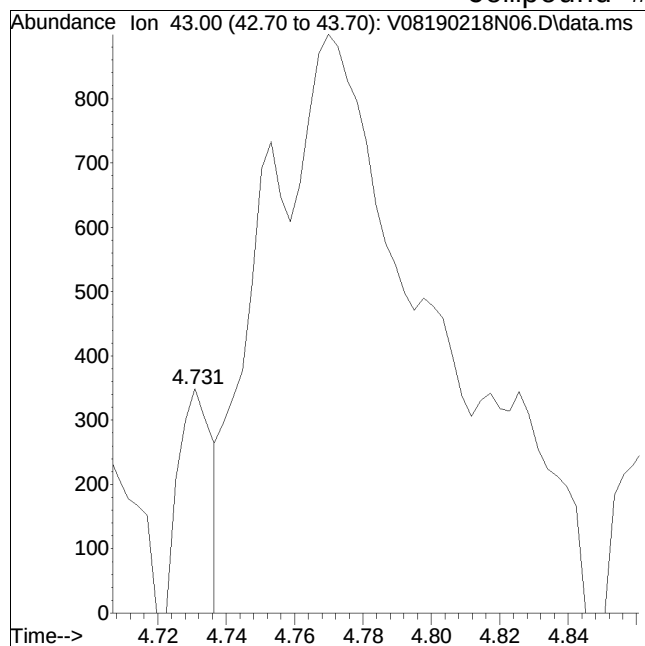
Manual Peak Response = 2184 M1

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

Manual Integration Report

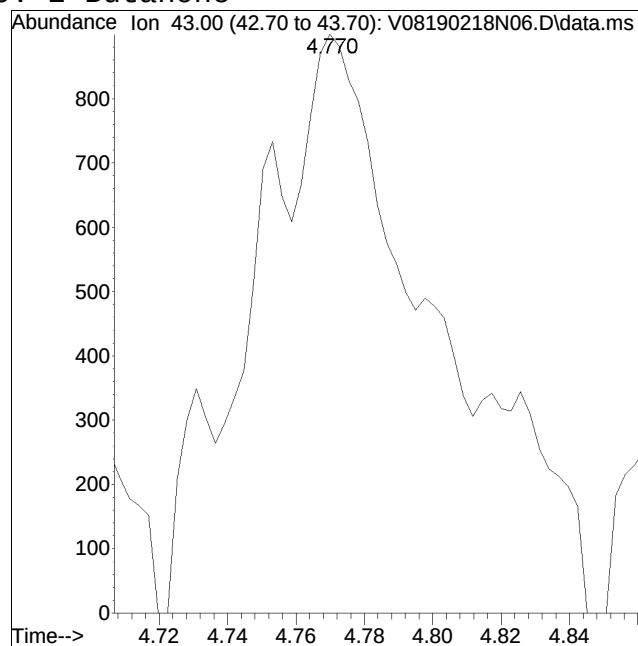
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #39: 2-Butanone



Original Peak Response = 239

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

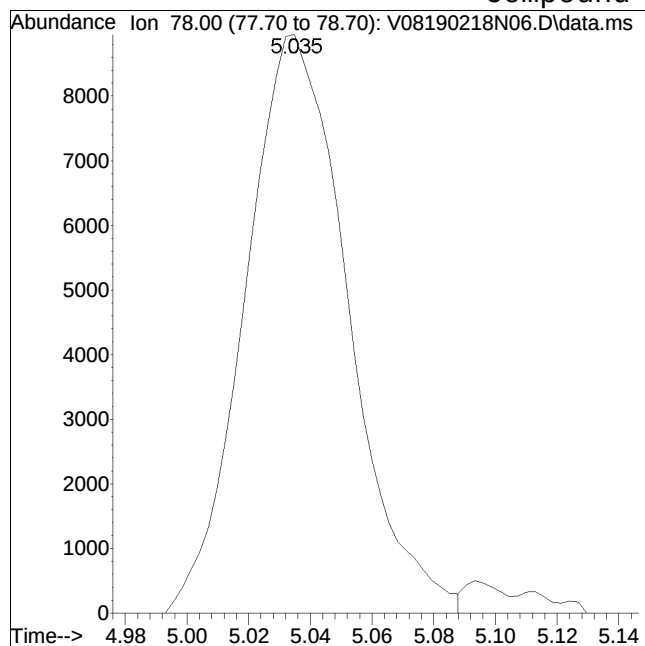


Manual Peak Response = 3393 M1

Manual Integration Report

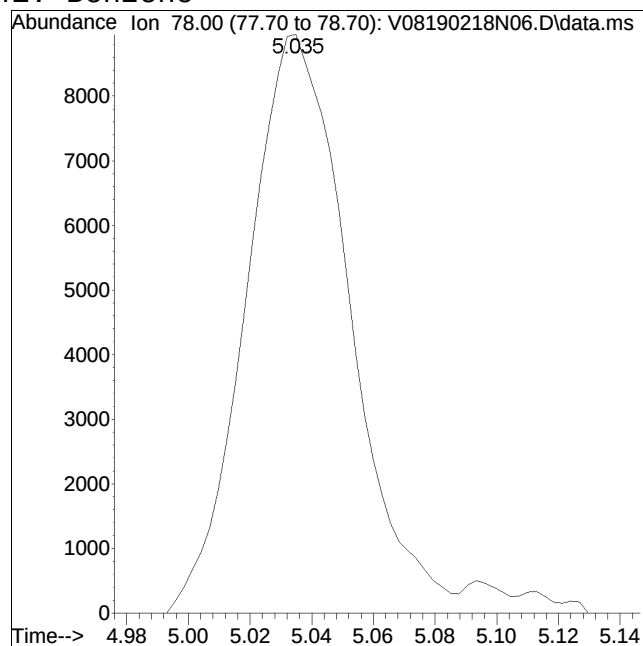
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #41: Benzene



Original Peak Response = 20673

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

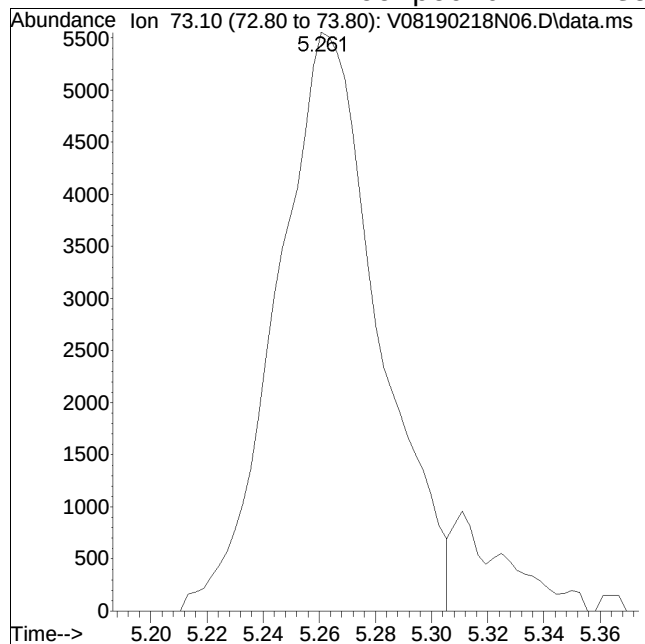


Manual Peak Response = 21382 M1

Manual Integration Report

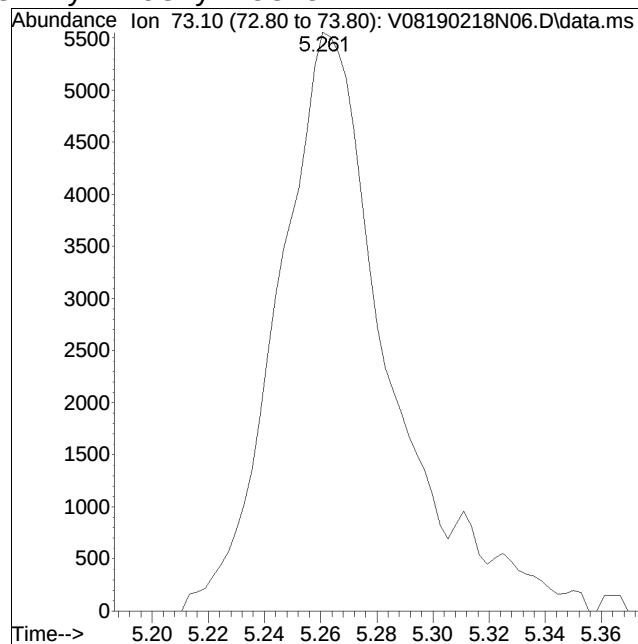
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #42: tert-Amyl methyl ether



Original Peak Response = 13934

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

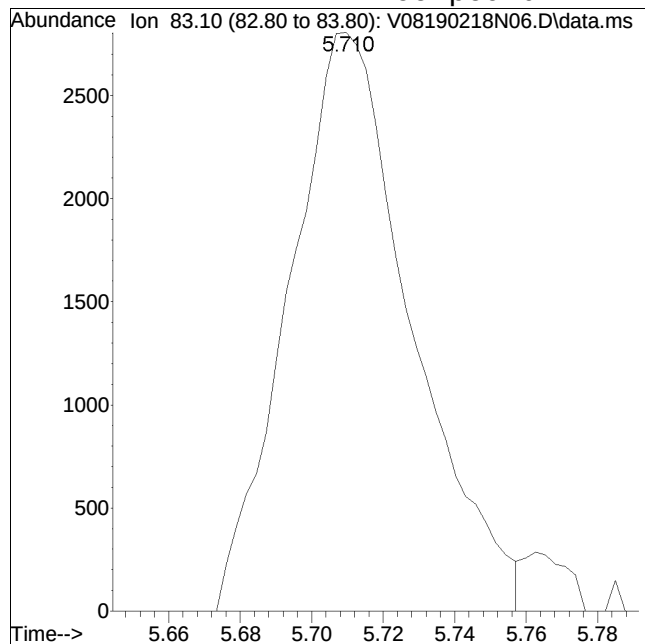


Manual Peak Response = 15179 M1

Manual Integration Report

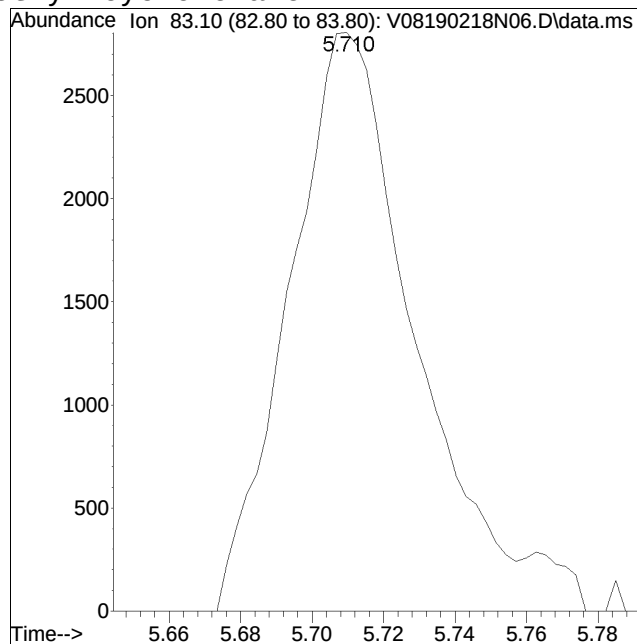
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #47: Methyl cyclohexane



Original Peak Response = 6659

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

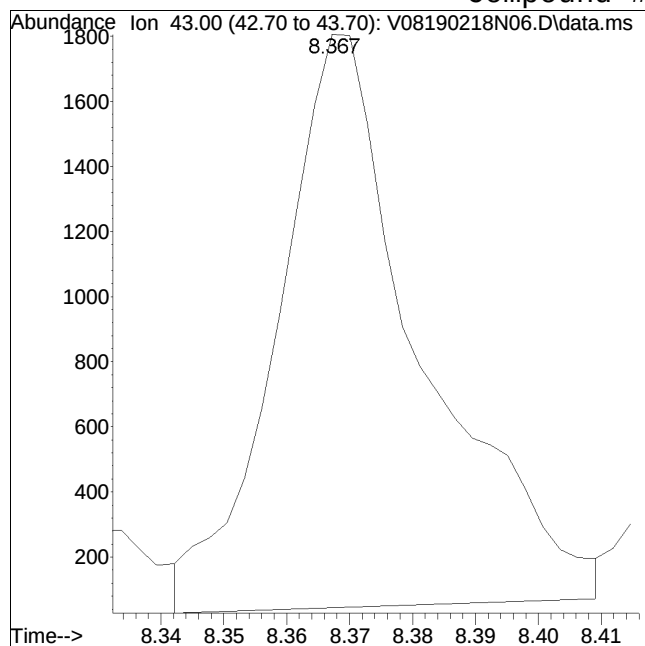


Manual Peak Response = 6899 M1

Manual Integration Report

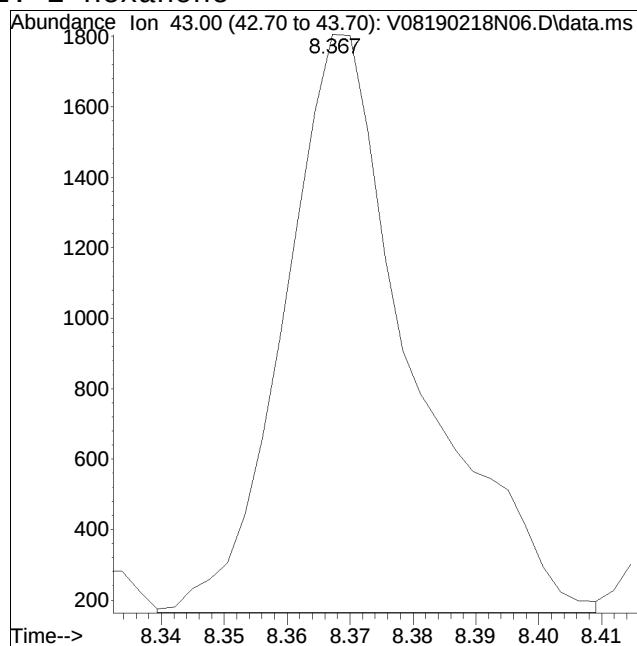
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #72: 2-Hexanone



Original Peak Response = 2808

M4 = Poor automated baseline construction.



Manual Peak Response = 2349 M4

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N08.D
 Acq On : 18 Feb 2019 9:50 pm
 Operator : VOA108:NLK
 Sample : I8260STD2
 Misc : WG1208025
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 19 07:22:47 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 07:22:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

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

Internal Standards						
1) Fluorobenzene	5.551	96	526413	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery	=	99.92%	
59) Chlorobenzene-d5	8.526	117	360724	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery	=	98.43%	
79) 1,4-Dichlorobenzene-d4	10.010	152	163524	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery	=	96.34%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	131486	9.779	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.79%	
43) 1,2-Dichloroethane-d4	5.208	65	148966	9.857	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.57%	
60) Toluene-d8	7.243	98	500734	10.128	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.28%	
83) 4-Bromofluorobenzene	9.340	95	161542	10.096	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.96%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.974	85	18772	1.784	ug/L	97
3) Chloromethane	1.094	50	21313	2.057	ug/L	99
4) Vinyl chloride	1.150	62	22348	2.019	ug/L	99
5) Bromomethane	1.359	94	22296M1	2.340	ug/L	
6) Chloroethane	1.446	64	15982	1.975	ug/L	95
7) Trichlorofluoromethane	1.546	101	32957	1.845	ug/L	98
8) Ethyl ether	1.783	74	12575M1	2.113	ug/L	
10) 1,1-Dichloroethene	1.917	96	19216M1	1.942	ug/L	
11) Carbon disulfide	1.923	76	59730	1.920	ug/L	99
12) Freon-113	1.962	101	16416M1	1.799	ug/L	
13) Iodomethane	2.017	142	9672	2.607	ug/L	87
14) Acrolein	2.199	56	2285	1.859	ug/L	96
15) Methylene chloride	2.411	84	23396	1.984	ug/L	69
17) Acetone	2.464	43	4884	2.387	ug/L #	84
18) trans-1,2-Dichloroethene	2.561	96	21850	1.946	ug/L	74
19) Methyl acetate	2.603	43	9827	1.909	ug/L #	85
20) Methyl tert-butyl ether	2.689	73	58274M1	1.976	ug/L	
21) tert-Butyl alcohol	2.837	59	6519	10.350	ug/L #	76
22) Diisopropyl ether	3.125	45	67952M1	2.000	ug/L	
23) 1,1-Dichloroethane	3.211	63	39371	1.982	ug/L	98
24) Halothane	3.359	117	16420	1.895	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N08.D
 Acq On : 18 Feb 2019 9:50 pm
 Operator : VOA108:NLK
 Sample : I8260STD2
 Misc : WG1208025
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 19 07:22:47 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 07:22:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	3.281	53	5639	1.831	ug/L	96
26) Ethyl tert-butyl ether	3.582	59	63104	1.916	ug/L #	80
27) Vinyl acetate	3.582	43	36119M1	1.534	ug/L	
28) cis-1,2-Dichloroethene	3.908	96	25895	2.032	ug/L #	65
29) 2,2-Dichloropropane	4.048	77	31500M1	1.930	ug/L	
30) Bromochloromethane	4.190	128	11817	2.006	ug/L #	49
31) Cyclohexane	4.159	56	30558	1.867	ug/L #	62
32) Chloroform	4.340	83	40541	1.955	ug/L	96
33) Ethyl acetate	4.577	43	23993M1	2.748	ug/L	
34) Carbon tetrachloride	4.457	117	29009	1.872	ug/L	98
35) Tetrahydrofuran	4.533	42	4174	1.978	ug/L #	51
37) 1,1,1-Trichloroethane	4.555	97	34375	1.901	ug/L	99
39) 2-Butanone	4.767	43	9098M1	2.544	ug/L	
40) 1,1-Dichloropropene	4.725	75	27286M1	1.885	ug/L	
41) Benzene	5.035	78	90686	2.006	ug/L #	89
42) tert-Amyl methyl ether	5.258	73	58170	1.920	ug/L	91
44) 1,2-Dichloroethane	5.289	62	30475	1.960	ug/L	95
47) Methyl cyclohexane	5.710	83	32261	1.858	ug/L #	65
48) Trichloroethene	5.743	95	23595	1.960	ug/L	95
50) Dibromomethane	6.186	93	13659	1.935	ug/L	96
51) 1,2-Dichloropropane	6.304	63	24222	2.066	ug/L	92
53) 2-Chloroethyl vinyl ether	7.051	63	12854	1.924	ug/L	97
54) Bromodichloromethane	6.410	83	31497	1.916	ug/L	96
57) 1,4-Dioxane	6.630	88	22093	430.973	ug/L #	67
58) cis-1,3-Dichloropropene	7.062	75	34619	1.879	ug/L	90
61) Toluene	7.291	92	56842	2.022	ug/L	99
62) 4-Methyl-2-pentanone	7.692	58	5829	1.839	ug/L #	74
63) Tetrachloroethene	7.642	166	22959	1.902	ug/L	91
65) trans-1,3-Dichloropropene	7.709	75	30203	1.903	ug/L	95
67) Ethyl methacrylate	7.893	69	21942	1.743	ug/L	97
68) 1,1,2-Trichloroethane	7.837	83	16434	2.041	ug/L	96
69) Chlorodibromomethane	7.971	129	23380	1.973	ug/L	97
70) 1,3-Dichloropropane	8.046	76	32684	2.010	ug/L	97
71) 1,2-Dibromoethane	8.130	107	19146	1.998	ug/L	98
72) 2-Hexanone	8.367	43	11459M1	2.088	ug/L	
73) Chlorobenzene	8.537	112	63171	2.020	ug/L	94
74) Ethylbenzene	8.579	91	102318	1.952	ug/L	99
75) 1,1,1,2-Tetrachloroethane	8.596	131	22292	1.904	ug/L	95
76) p/m Xylene	8.685	106	74443	3.734	ug/L	92
77) o Xylene	8.967	106	74086	3.753	ug/L	85

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N08.D
 Acq On : 18 Feb 2019 9:50 pm
 Operator : VOA108:NLK
 Sample : I8260STD2
 Misc : WG1208025
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 19 07:22:47 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 07:22:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.003	104	119344	3.785	ug/L	88
80)	Bromoform	9.006	173	13335	1.959	ug/L	98
82)	Isopropylbenzene	9.176	105	96068	2.012	ug/L	95
84)	Bromobenzene	9.399	156	24611	2.003	ug/L	99
85)	n-Propylbenzene	9.432	91	109669	2.012	ug/L	97
86)	1,4-Dichlorobutane	9.438	55	30298	2.077	ug/L	95
87)	1,1,2,2-Tetrachloroethane	9.485	83	23105	2.084	ug/L	99
88)	4-Ethyltoluene	9.502	105	89754	1.978	ug/L	96
89)	2-Chlorotoluene	9.516	91	76580	1.925	ug/L	93
90)	1,3,5-Trimethylbenzene	9.558	105	76358	1.948	ug/L	91
91)	1,2,3-Trichloropropane	9.552	75	17847	2.072	ug/L	99
92)	trans-1,4-Dichloro-2-b...	9.589	53	5811	1.915	ug/L	88
93)	4-Chlorotoluene	9.619	91	68605	1.983	ug/L	95
94)	tert-Butylbenzene	9.745	119	80150	1.990	ug/L	93
95)	Pentachloroethane	9.753	167	14206	1.843	ug/L	88
97)	1,2,4-Trimethylbenzene	9.784	105	78463	2.012	ug/L	98
98)	sec-Butylbenzene	9.848	105	99774	2.022	ug/L	98
99)	p-Isopropyltoluene	9.934	119	85208	2.012	ug/L	97
100)	1,3-Dichlorobenzene	9.965	146	43919	1.939	ug/L	97
101)	1,4-Dichlorobenzene	10.018	146	45859	1.955	ug/L	96
102)	p-Diethylbenzene	10.144	119	47901	1.932	ug/L	93
103)	n-Butylbenzene	10.177	91	77064	1.962	ug/L	98
104)	1,2-Dichlorobenzene	10.258	146	43321	1.961	ug/L	97
105)	1,2,4,5-Tetramethylben...	10.601	119	45795	1.581	ug/L	96
106)	1,2-Dibromo-3-chloropr...	10.712	155	3116	1.877	ug/L	98
107)	1,3,5-Trichlorobenzene	10.729	180	27827	1.829	ug/L	92
108)	Hexachlorobutadiene	11.078	225	14874	2.087	ug/L	90
109)	1,2,4-Trichlorobenzene	11.092	180	22723	1.639	ug/L	98
110)	Naphthalene	11.270	128	52037	1.705	ug/L	100
111)	1,2,3-Trichlorobenzene	11.373	180	20976	1.674	ug/L	99

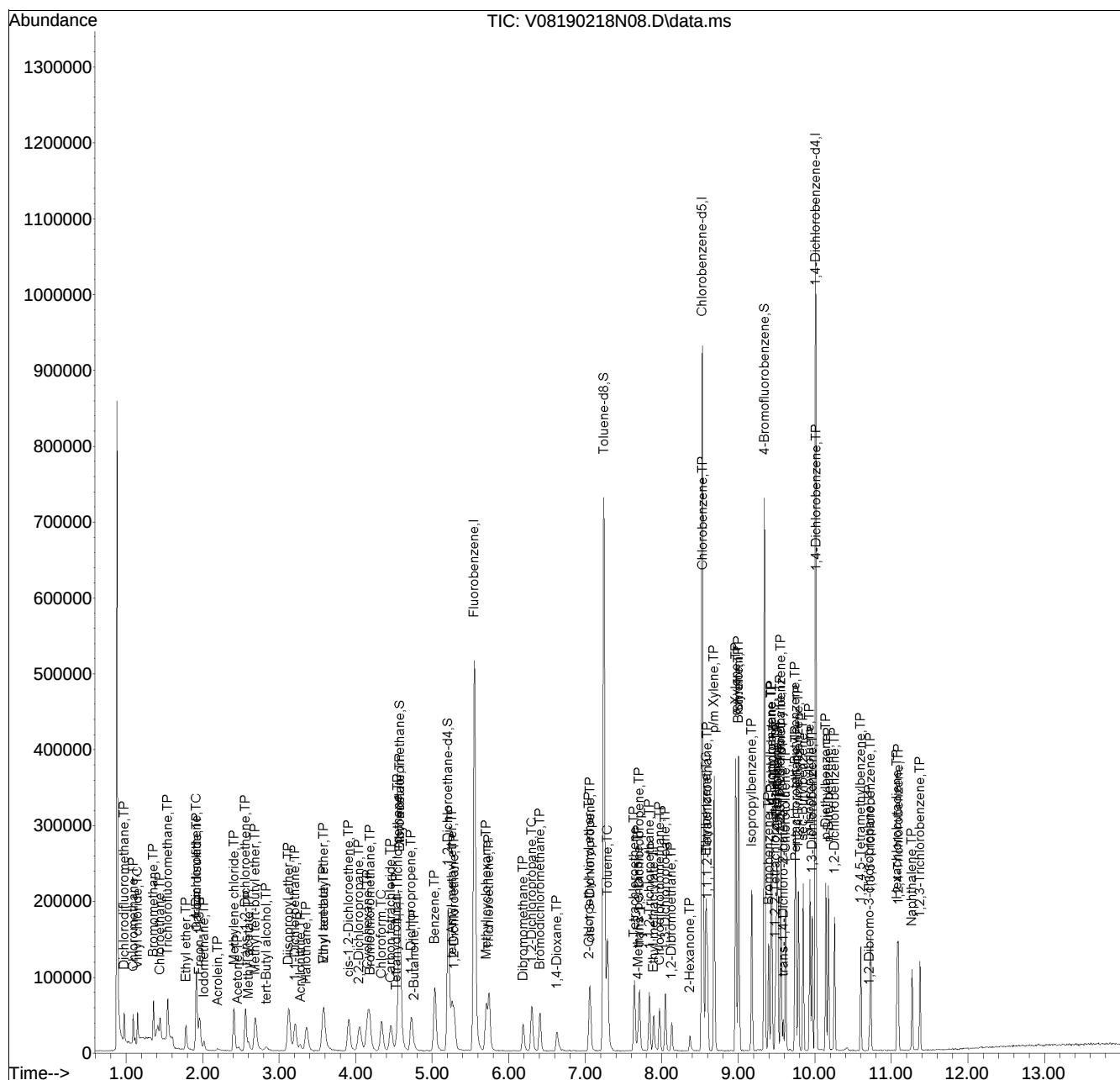
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
Data File : V08190218N08.D
Acq On : 18 Feb 2019 9:50 pm
Operator : VOA108:NLK
Sample : I8260STDL2
Misc : WG1208025
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 19 07:22:47 2019
Quant Method : I:\VOLATILES\V0A108\2019\190218N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Feb 19 07:22:07 2019
Response via : Initial Calibration

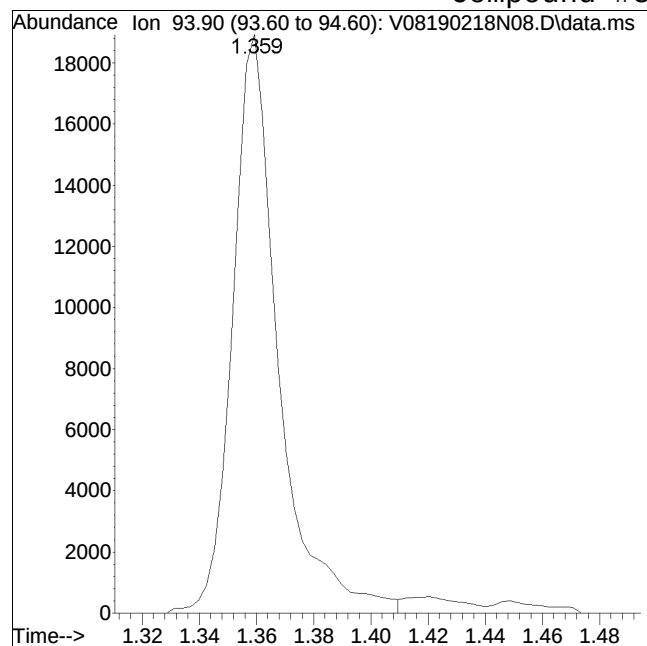
Sub List : 8260-CurvePenta - All compounds listed08190218N09.D•



Manual Integration Report

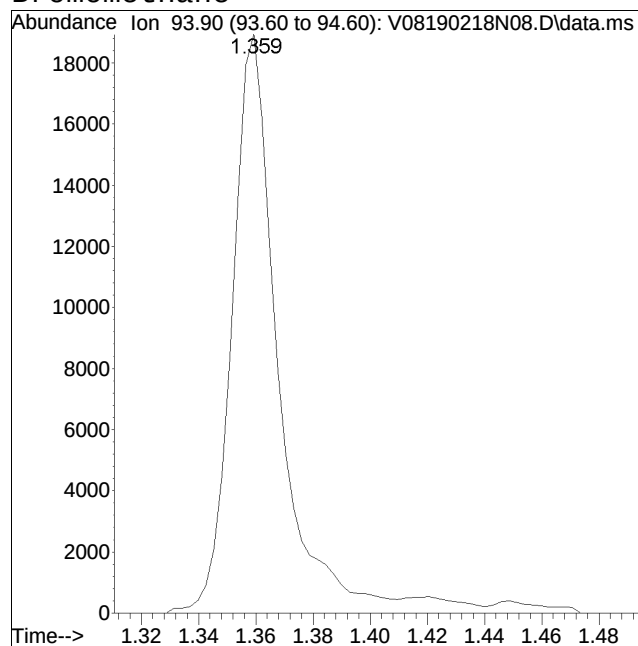
Data Path : I:\VOLATILES\VOA108\2019\1QMethod : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STD L2 Quant Date : 2/19/2019 7:22 am

Compound #5: Bromomethane



Original Peak Response = 21053

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

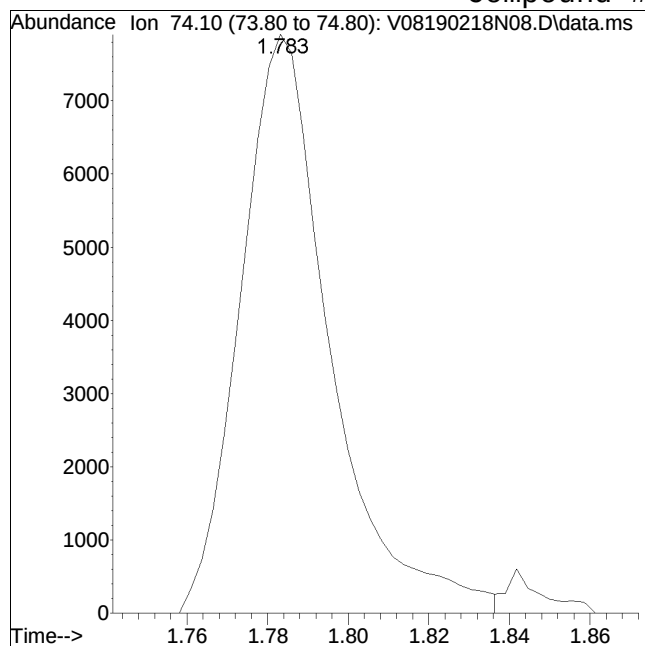


Manual Peak Response = 22296 M1

Manual Integration Report

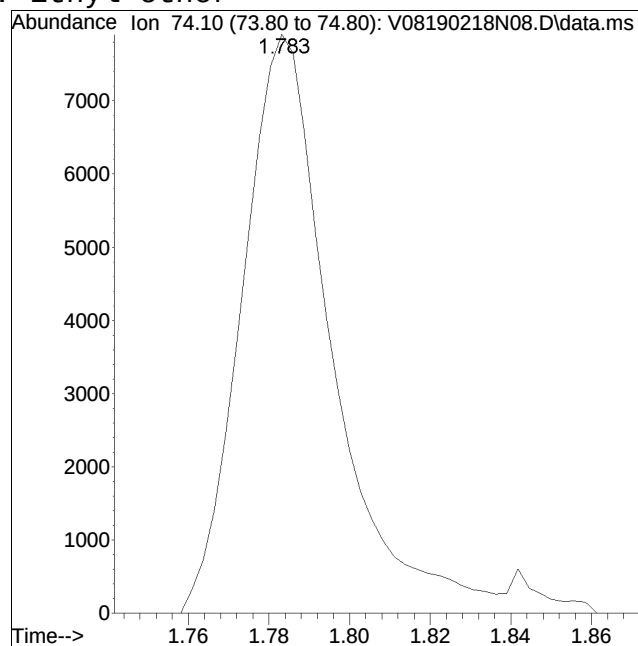
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Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STD L2 Quant Date : 2/19/2019 7:22 am

Compound #8: Ethyl ether



Original Peak Response = 12218

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

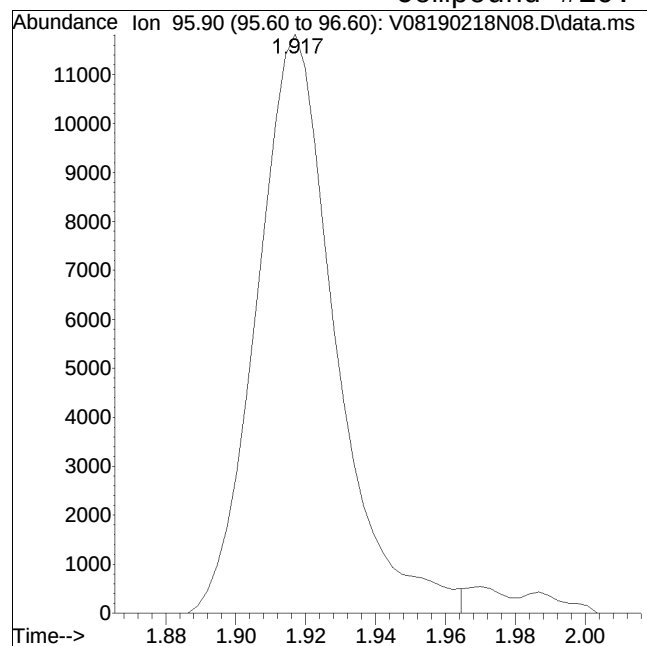


Manual Peak Response = 12575 M1

Manual Integration Report

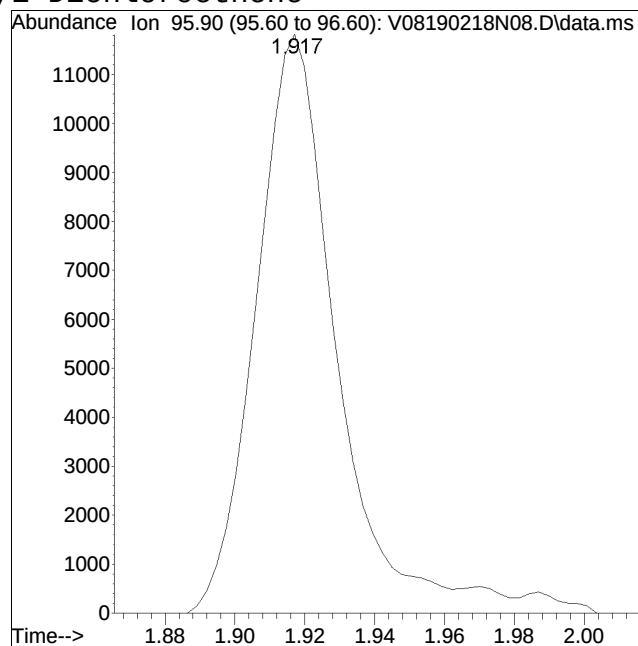
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STD L2 Quant Date : 2/19/2019 7:22 am

Compound #10: 1,1-Dichloroethene



Original Peak Response = 18449

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

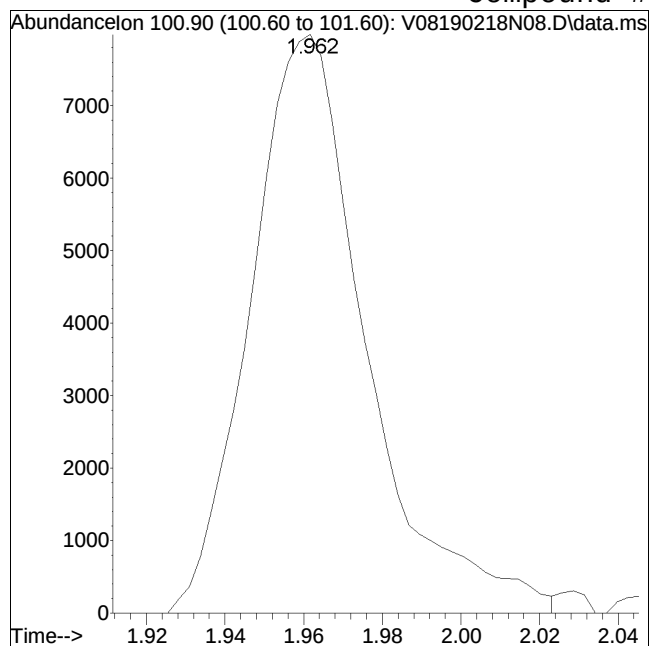


Manual Peak Response = 19216 M1

Manual Integration Report

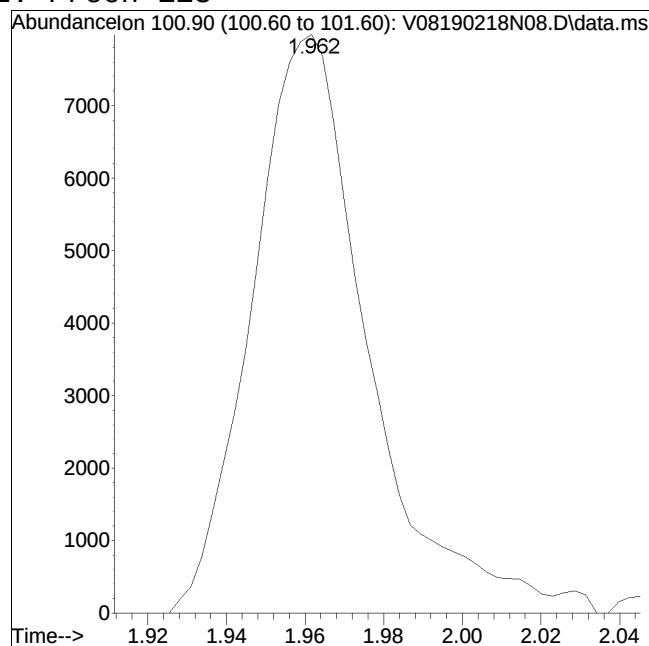
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STDL2 Quant Date : 2/19/2019 7:22 am

Compound #12: Freon-113



Original Peak Response = 16276

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

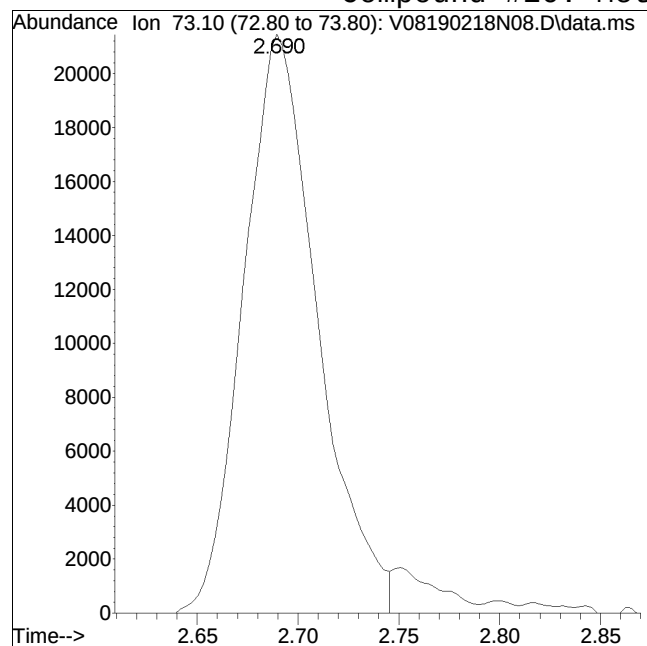


Manual Peak Response = 16416 M1

Manual Integration Report

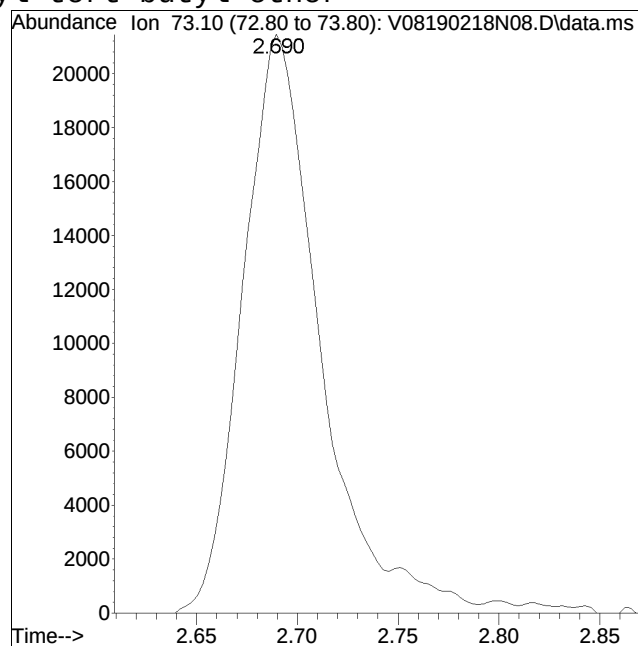
Data Path : I:\VOLATILES\VOA108\2019\1QMethod : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STD L2 Quant Date : 2/19/2019 7:22 am

Compound #20: Methyl tert-butyl ether



Original Peak Response = 54632

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

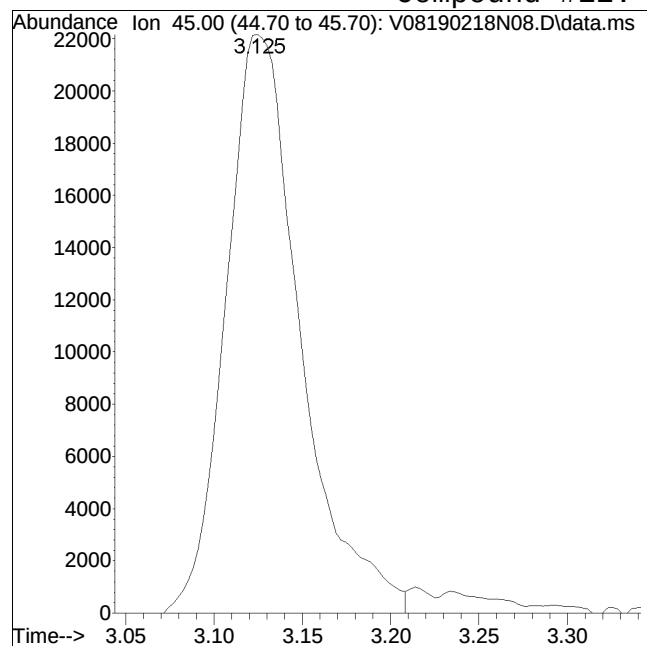


Manual Peak Response = 58274 M1

Manual Integration Report

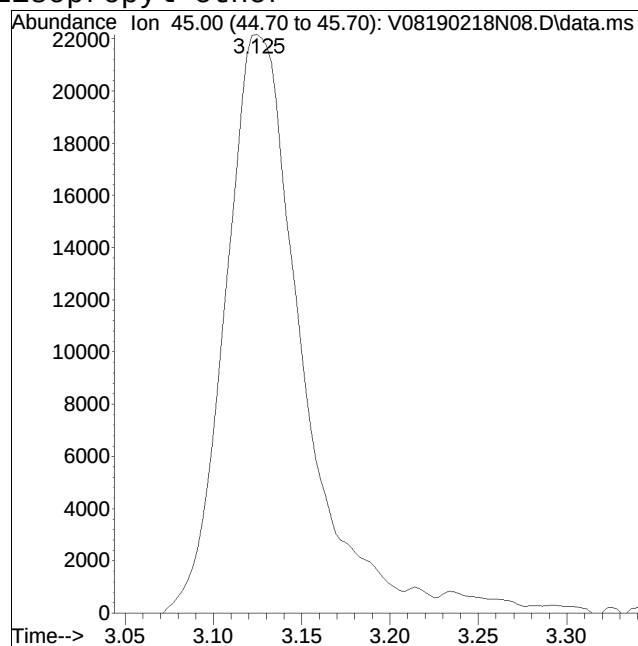
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STD2 Quant Date : 2/19/2019 7:22 am

Compound #22: Diisopropyl ether



Original Peak Response = 64801

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

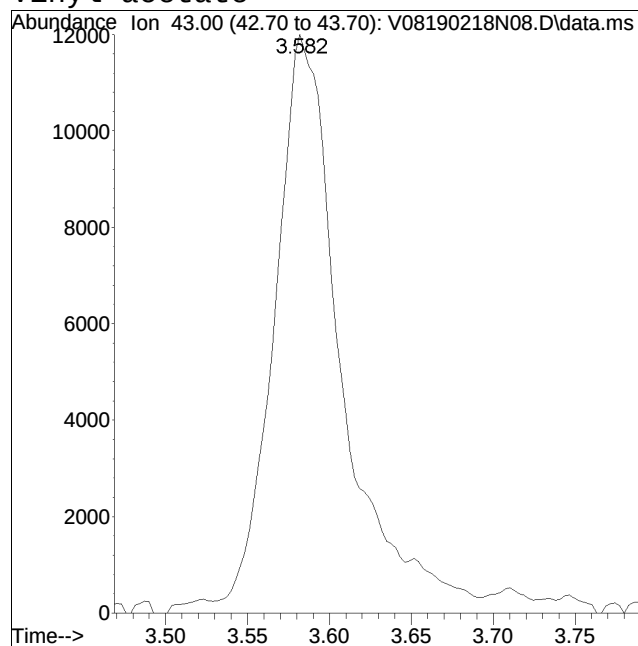
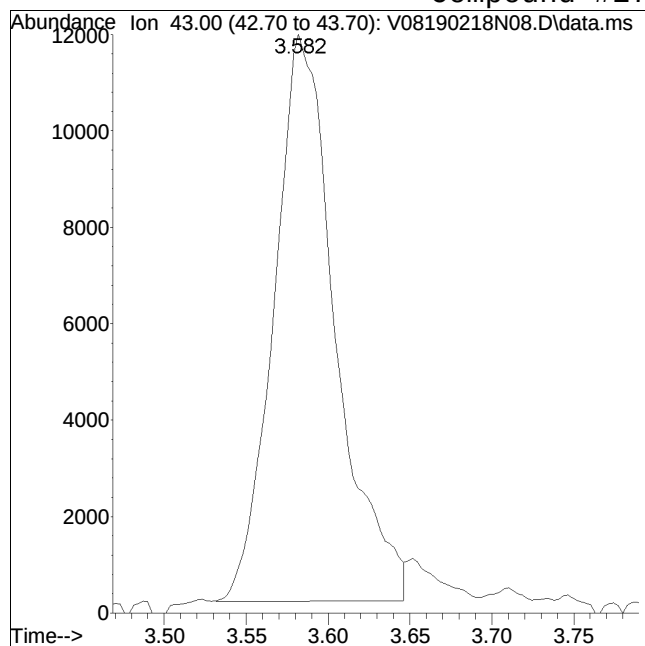


Manual Peak Response = 67952 M1

Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STD L2 Quant Date : 2/19/2019 7:22 am

Compound #27: Vinyl acetate



Original Peak Response = 30755

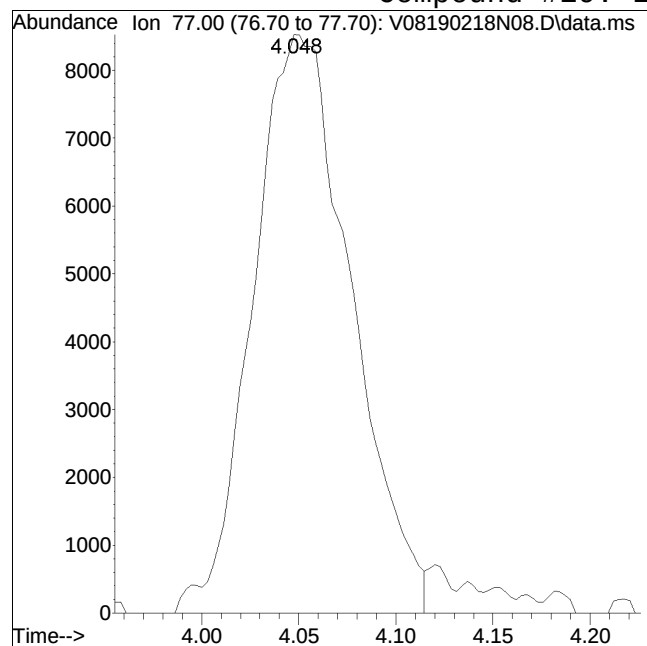
Manual Peak Response = 36119 M1

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

Manual Integration Report

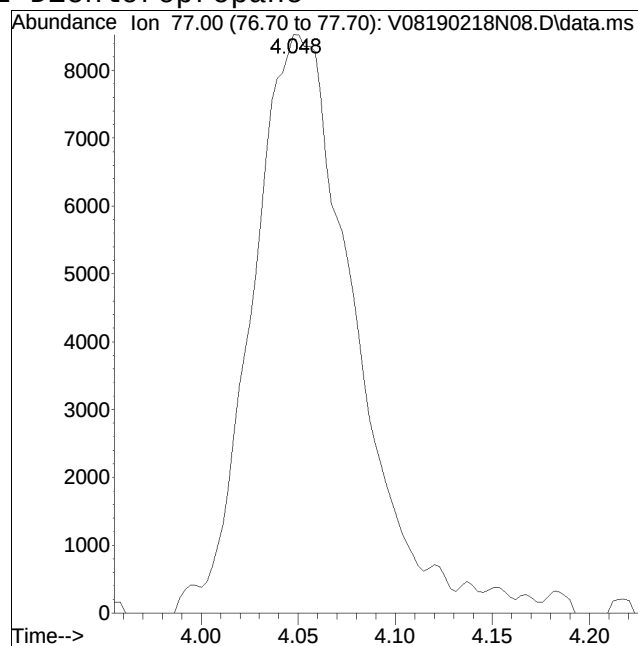
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STDL2 Quant Date : 2/19/2019 7:22 am

Compound #29: 2,2-Dichloropropane



Original Peak Response = 29922

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

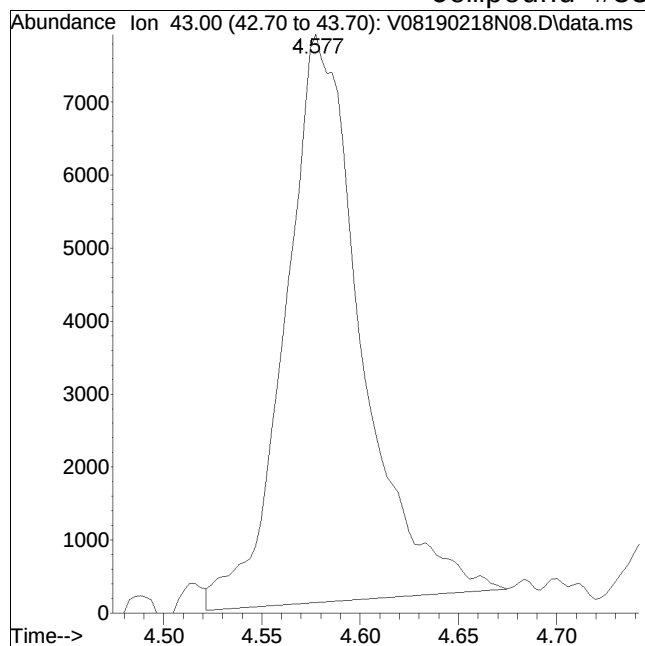


Manual Peak Response = 31500 M1

Manual Integration Report

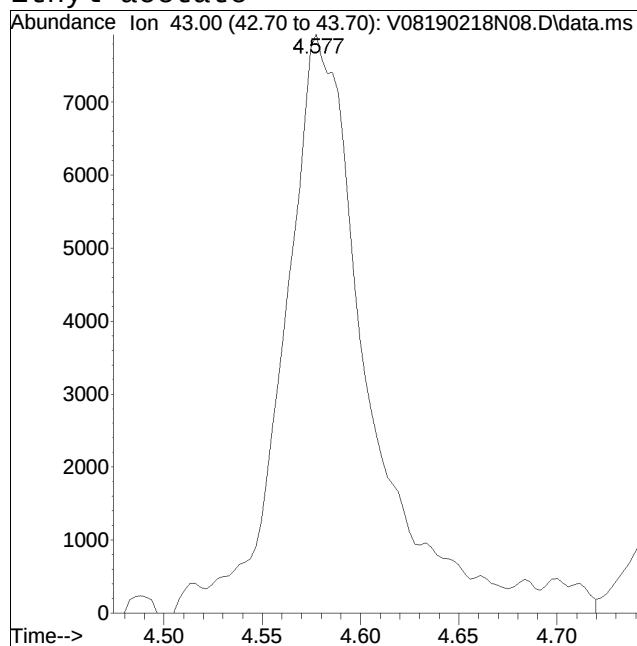
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STDL2 Quant Date : 2/19/2019 7:22 am

Compound #33: Ethyl acetate



Original Peak Response = 20963

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

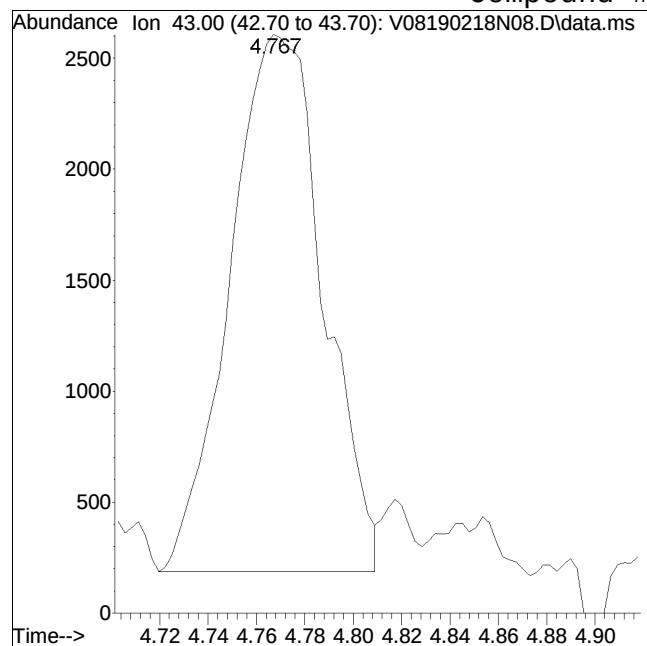


Manual Peak Response = 23993 M1

Manual Integration Report

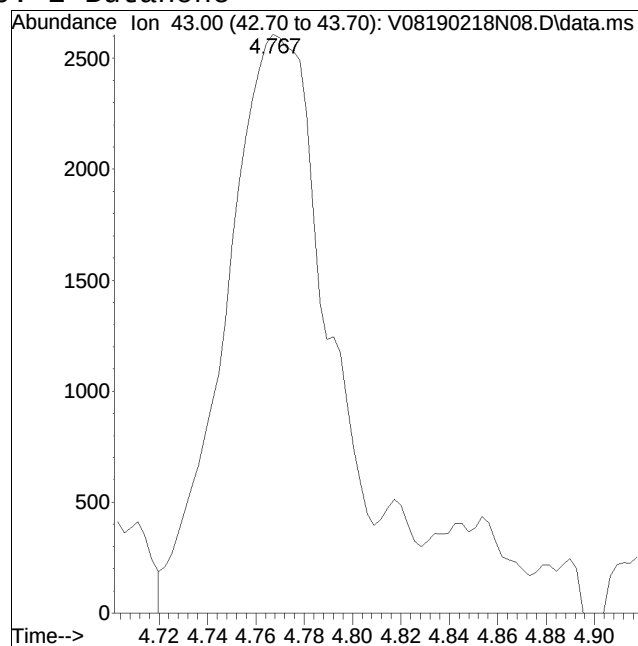
Data Path : I:\VOLATILES\VOA108\2019\1QMethod : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STDL2 Quant Date : 2/19/2019 7:22 am

Compound #39: 2-Butanone



Original Peak Response = 6491

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

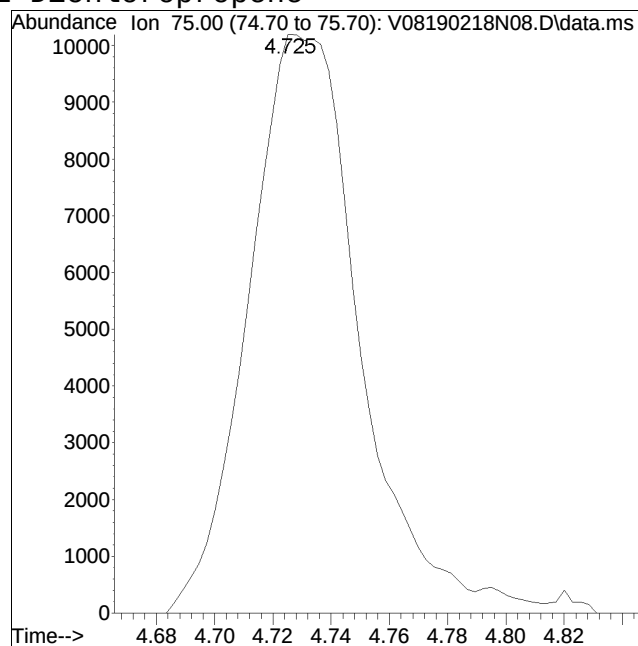
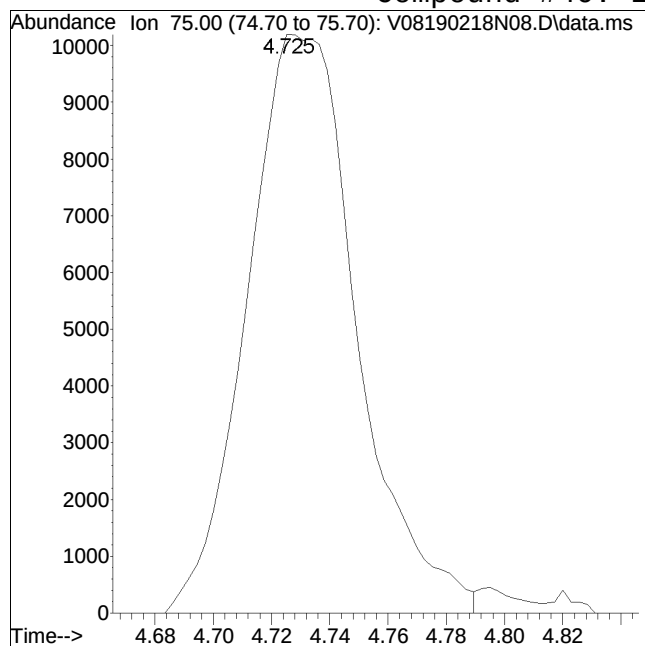


Manual Peak Response = 9098 M1

Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STDL2 Quant Date : 2/19/2019 7:22 am

Compound #40: 1,1-Dichloropropene



Original Peak Response = 26659

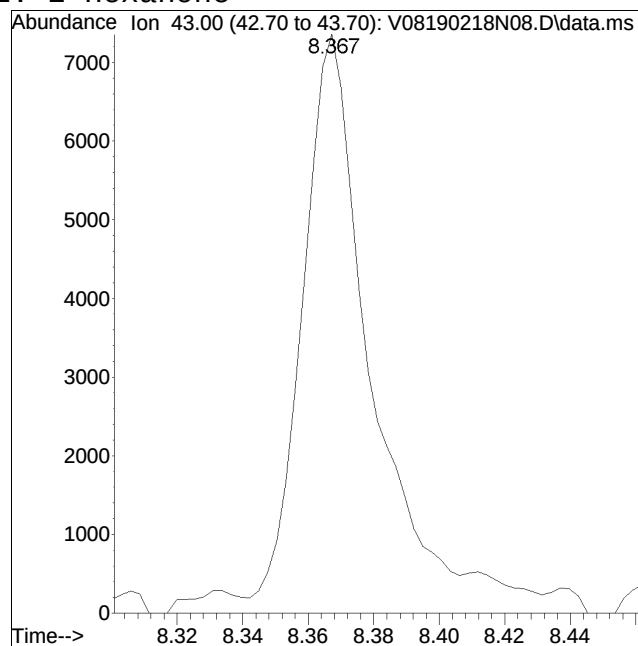
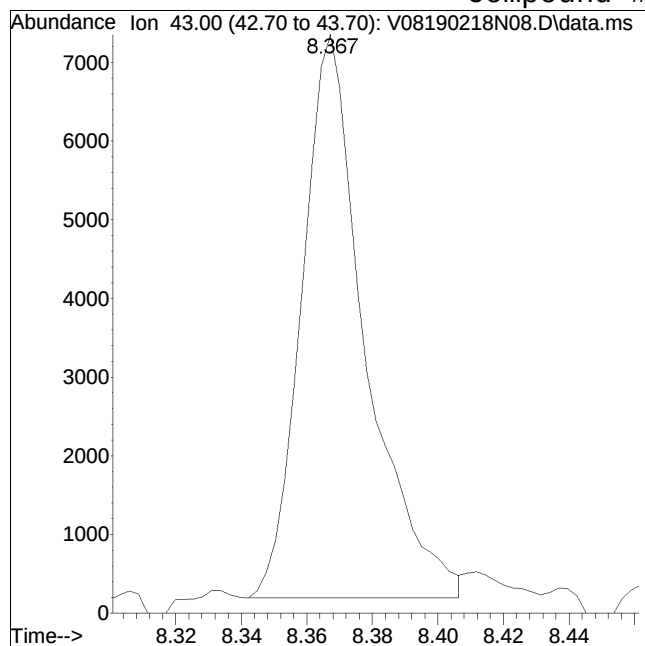
Manual Peak Response = 27286 M1

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

Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STDL2 Quant Date : 2/19/2019 7:22 am

Compound #72: 2-Hexanone



Original Peak Response = 9640

Manual Peak Response = 11459 M1

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N09.D
 Acq On : 18 Feb 2019 10:12 pm
 Operator : VOA108:NLK
 Sample : I8260STD3
 Misc : WG1208025
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 18 23:42:19 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:14 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

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

Internal Standards						
1) Fluorobenzene	5.553	96	526854	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery	=	100.00%	
59) Chlorobenzene-d5	8.526	117	366483	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery	=	100.00%	
79) 1,4-Dichlorobenzene-d4	10.010	152	169731	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery	=	100.00%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	133054	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.00%	
43) 1,2-Dichloroethane-d4	5.210	65	148018	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.00%	
60) Toluene-d8	7.241	98	495804	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.00%	
83) 4-Bromofluorobenzene	9.340	95	173853	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.00%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.974	85	100370	10.000	ug/L	98
3) Chloromethane	1.094	50	104444	10.000	ug/L	99
4) Vinyl chloride	1.150	62	110582	10.000	ug/L	95
5) Bromomethane	1.359	94	92029	10.000	ug/L	99
6) Chloroethane	1.446	64	72486	10.000	ug/L	95
7) Trichlorofluoromethane	1.543	101	168652	10.000	ug/L	97
8) Ethyl ether	1.783	74	56412	10.000	ug/L	66
10) 1,1-Dichloroethene	1.914	96	94963	10.000	ug/L	# 63
11) Carbon disulfide	1.923	76	300223	10.000	ug/L	97
12) Freon-113	1.959	101	86405	10.000	ug/L	97
13) Iodomethane	2.017	142	72637	10.000	ug/L	87
14) Acrolein	2.196	56	11323M1	10.000	ug/L	
15) Methylene chloride	2.411	84	112516	10.000	ug/L	68
17) Acetone	2.464	43	18747M4	10.000	ug/L	
18) trans-1,2-Dichloroethene	2.561	96	109540	10.000	ug/L	74
19) Methyl acetate	2.597	43	50463	10.000	ug/L	# 87
20) Methyl tert-butyl ether	2.689	73	283099	10.000	ug/L	92
21) tert-Butyl alcohol	2.832	59	27369	50.000	ug/L	# 72
22) Diisopropyl ether	3.124	45	325782	10.000	ug/L	# 90
23) 1,1-Dichloroethane	3.208	63	195640	10.000	ug/L	98
24) Halothane	3.359	117	82406	10.000	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N09.D
 Acq On : 18 Feb 2019 10:12 pm
 Operator : VOA108:NLK
 Sample : I8260STD3
 Misc : WG1208025
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 18 23:42:19 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:14 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	3.272	53	29214M1	10.000	ug/L	
26) Ethyl tert-butyl ether	3.576	59	319860	10.000	ug/L	91
27) Vinyl acetate	3.582	43	203707	10.000	ug/L #	94
28) cis-1,2-Dichloroethene	3.911	96	125487	10.000	ug/L #	67
29) 2,2-Dichloropropane	4.048	77	158063M1	10.000	ug/L	
30) Bromochloromethane	4.181	128	57838M1	10.000	ug/L	
31) Cyclohexane	4.156	56	152737	10.000	ug/L #	56
32) Chloroform	4.340	83	201606	10.000	ug/L	97
33) Ethyl acetate	4.575	43	75892	10.000	ug/L #	93
34) Carbon tetrachloride	4.457	117	150354	10.000	ug/L	99
35) Tetrahydrofuran	4.522	42	19402	10.000	ug/L #	47
37) 1,1,1-Trichloroethane	4.555	97	177222	10.000	ug/L #	95
39) 2-Butanone	4.759	43	29358	10.000	ug/L #	6
40) 1,1-Dichloropropene	4.728	75	140978	10.000	ug/L	95
41) Benzene	5.035	78	446072	10.000	ug/L	90
42) tert-Amyl methyl ether	5.255	73	285590	10.000	ug/L	91
44) 1,2-Dichloroethane	5.288	62	147681	10.000	ug/L	95
47) Methyl cyclohexane	5.710	83	172345	10.000	ug/L #	65
48) Trichloroethene	5.746	95	117856	10.000	ug/L	94
50) Dibromomethane	6.189	93	69030	10.000	ug/L	98
51) 1,2-Dichloropropane	6.301	63	112884	10.000	ug/L	98
53) 2-Chloroethyl vinyl ether	7.051	63	65392	10.000	ug/L #	87
54) Bromodichloromethane	6.407	83	161999	10.000	ug/L	97
57) 1,4-Dioxane	6.630	88	25716	500.000	ug/L #	70
58) cis-1,3-Dichloropropene	7.065	75	178090	10.000	ug/L	92
61) Toluene	7.291	92	278822	10.000	ug/L	98
62) 4-Methyl-2-pentanone	7.692	58	30975	10.000	ug/L #	93
63) Tetrachloroethene	7.642	166	120445	10.000	ug/L	92
65) trans-1,3-Dichloropropene	7.709	75	152979	10.000	ug/L	95
67) Ethyl methacrylate	7.893	69	121063	10.000	ug/L	99
68) 1,1,2-Trichloroethane	7.837	83	79328	10.000	ug/L	94
69) Chlorodibromomethane	7.971	129	114999	10.000	ug/L	98
70) 1,3-Dichloropropane	8.046	76	159358	10.000	ug/L	99
71) 1,2-Dibromoethane	8.130	107	94962	10.000	ug/L	100
72) 2-Hexanone	8.367	43	51431	10.000	ug/L	91
73) Chlorobenzene	8.537	112	313923	10.000	ug/L	91
74) Ethylbenzene	8.579	91	531852	10.000	ug/L	98
75) 1,1,1,2-Tetrachloroethane	8.596	131	115074	10.000	ug/L	95
76) p/m Xylene	8.685	106	410555	20.000	ug/L	96
77) o Xylene	8.967	106	403460	20.000	ug/L	91

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N09.D
 Acq On : 18 Feb 2019 10:12 pm
 Operator : VOA108:NLK
 Sample : I8260STD3
 Misc : WG1208025
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 18 23:42:19 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:14 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.003	104	667512	20.000	ug/L	89
80)	Bromoform	9.006	173	69344	10.000	ug/L	96
82)	Isopropylbenzene	9.176	105	518756	10.000	ug/L	96
84)	Bromobenzene	9.396	156	131034	10.000	ug/L	95
85)	n-Propylbenzene	9.432	91	600149	10.000	ug/L	96
86)	1,4-Dichlorobutane	9.438	55	150470	10.000	ug/L	96
87)	1,1,2,2-Tetrachloroethane	9.485	83	116255	10.000	ug/L	99
88)	4-Ethyltoluene	9.502	105	489039	10.000	ug/L	96
89)	2-Chlorotoluene	9.516	91	423956	10.000	ug/L	96
90)	1,3,5-Trimethylbenzene	9.558	105	409890	10.000	ug/L	91
91)	1,2,3-Trichloropropane	9.555	75	88442	10.000	ug/L	96
92)	trans-1,4-Dichloro-2-b...	9.586	53	27673	10.000	ug/L #	74
93)	4-Chlorotoluene	9.619	91	368761	10.000	ug/L	94
94)	tert-Butylbenzene	9.745	119	424087	10.000	ug/L	94
95)	Pentachloroethane	9.753	167	80449	10.000	ug/L	96
97)	1,2,4-Trimethylbenzene	9.784	105	403192	10.000	ug/L	93
98)	sec-Butylbenzene	9.848	105	544105	10.000	ug/L	98
99)	p-Isopropyltoluene	9.934	119	454687	10.000	ug/L	96
100)	1,3-Dichlorobenzene	9.965	146	240078	10.000	ug/L	97
101)	1,4-Dichlorobenzene	10.018	146	239196	10.000	ug/L	98
102)	p-Diethylbenzene	10.144	119	260363	10.000	ug/L	95
103)	n-Butylbenzene	10.177	91	417305	10.000	ug/L	99
104)	1,2-Dichlorobenzene	10.258	146	227286	10.000	ug/L	98
105)	1,2,4,5-Tetramethylben...	10.601	119	356993	10.000	ug/L	98
106)	1,2-Dibromo-3-chloropr...	10.712	155	16637	10.000	ug/L	93
107)	1,3,5-Trichlorobenzene	10.729	180	161181	10.000	ug/L	94
108)	Hexachlorobutadiene	11.078	225	74327	10.000	ug/L	97
109)	1,2,4-Trichlorobenzene	11.092	180	142289	10.000	ug/L	98
110)	Naphthalene	11.270	128	317081	10.000	ug/L	100
111)	1,2,3-Trichlorobenzene	11.373	180	129271	10.000	ug/L	99

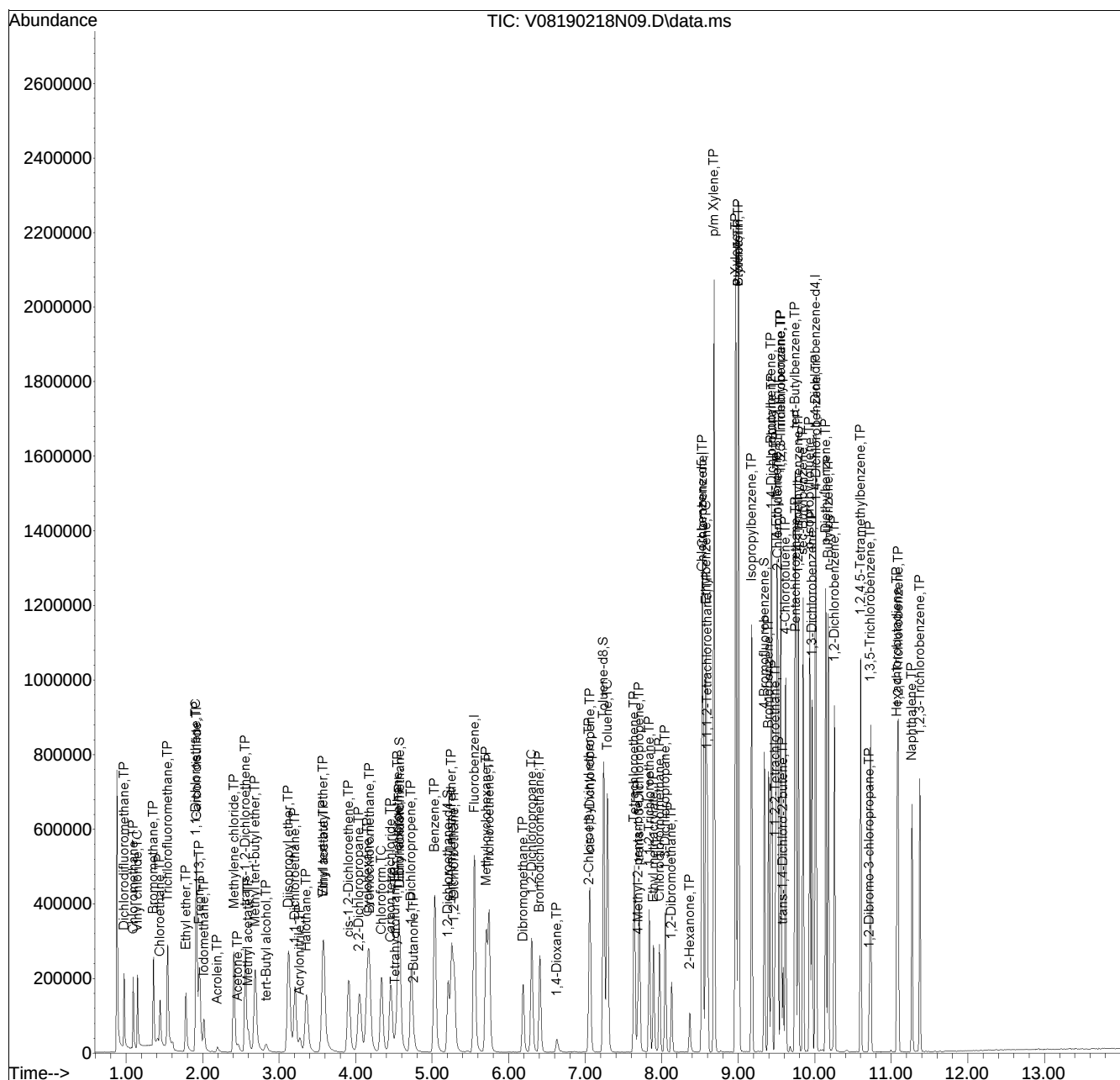
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N09.D
 Acq On : 18 Feb 2019 10:12 pm
 Operator : VOA108:NLK
 Sample : I8260STD3
 Misc : WG1208025
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 18 23:42:19 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:14 2019
 Response via : Initial Calibration

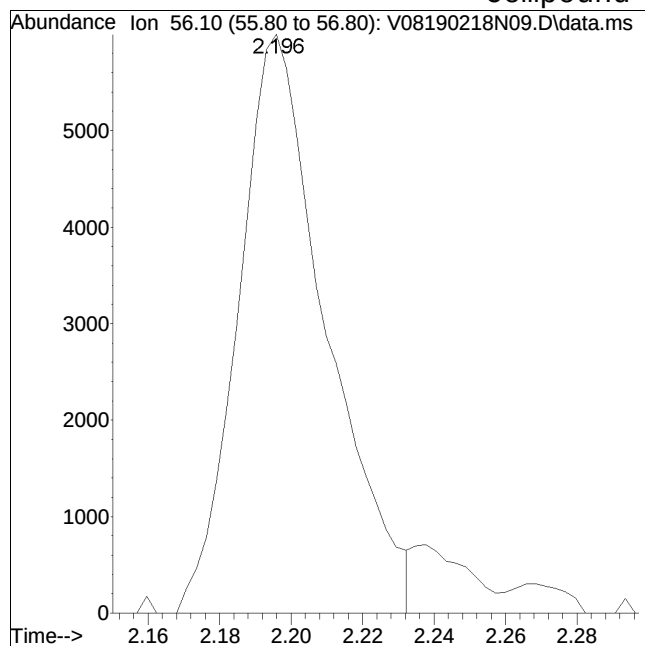
Sub List : 8260-CurvePenta - All compounds listed08190218N09.D•



Manual Integration Report

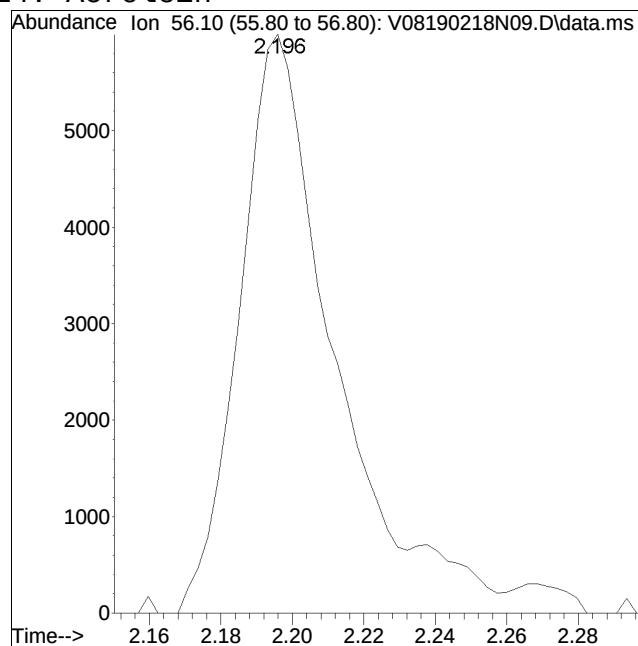
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N09.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 10:12 pm Instrument : VOA 108
Sample : I8260STD3 Quant Date : 2/18/2019 11:42 pm

Compound #14: Acrolein



Original Peak Response = 10247

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

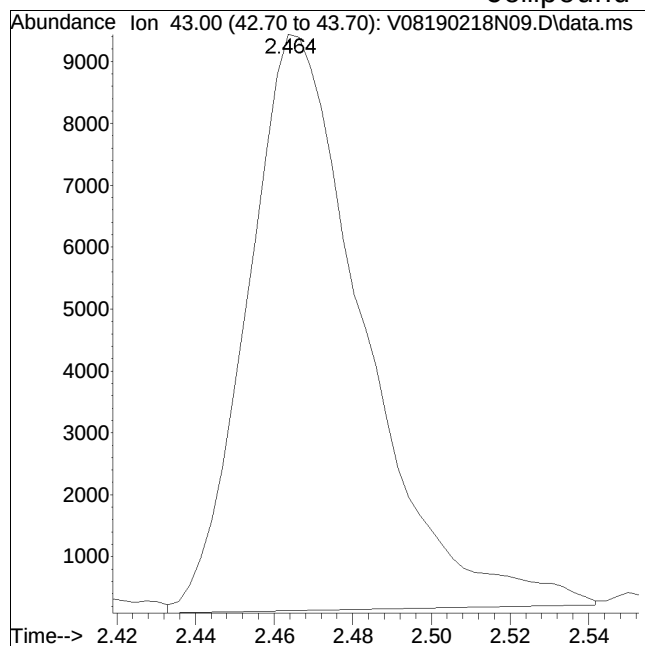


Manual Peak Response = 11323 M1

Manual Integration Report

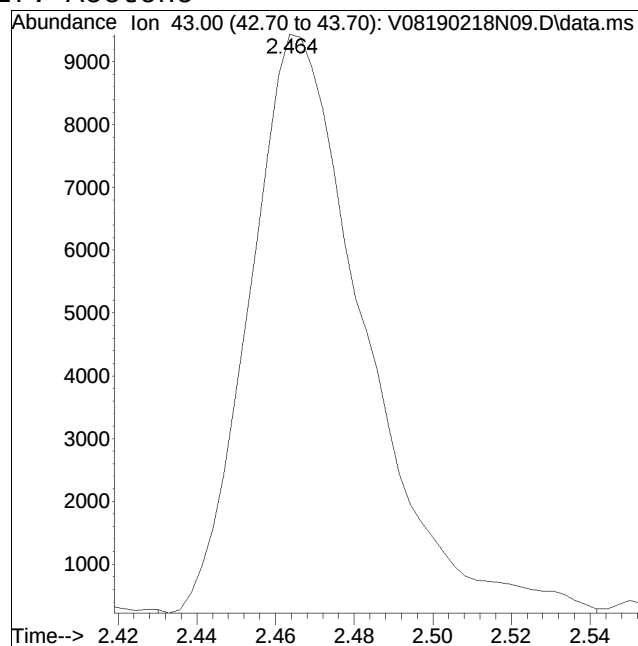
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N09.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 10:12 pm Instrument : VOA 108
Sample : I8260STDL3 Quant Date : 2/18/2019 11:42 pm

Compound #17: Acetone



Original Peak Response = 19185

M4 = Poor automated baseline construction.

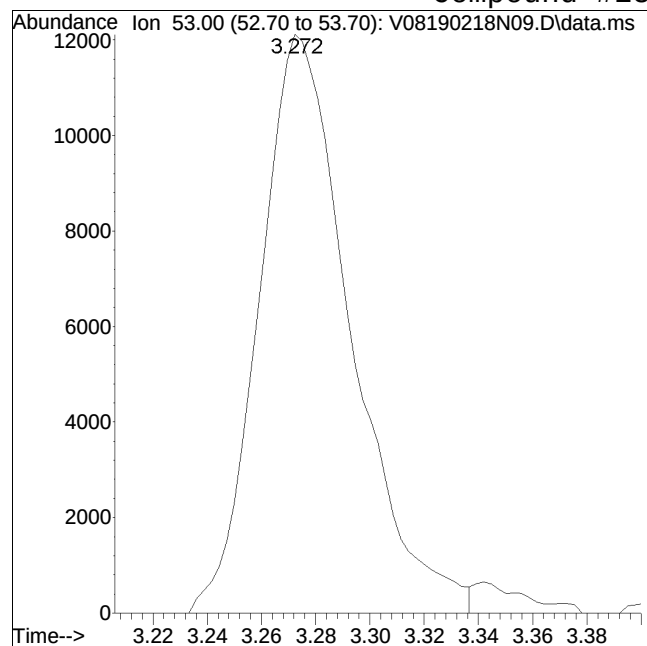


Manual Peak Response = 18747 M4

Manual Integration Report

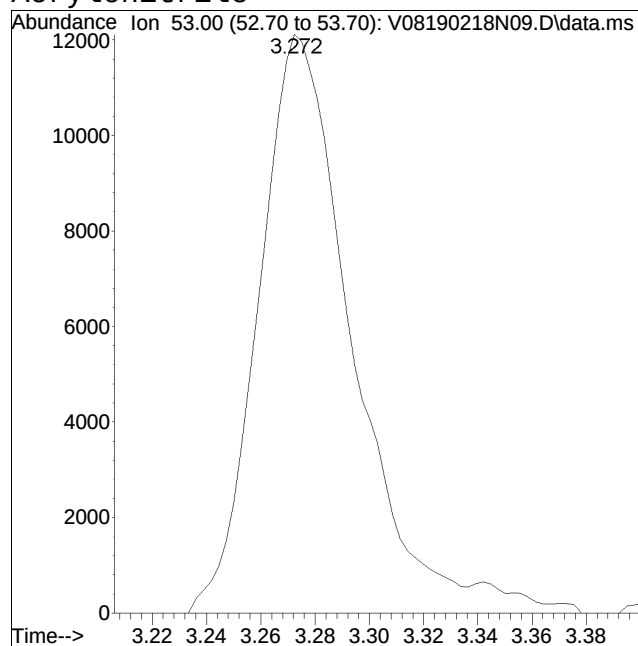
Data Path : I:\VOLATILES\VOA108\2019\10 Method : V108_190218N_8260.m
Data File : V08190218N09.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 10:12 pm Instrument : VOA 108
Sample : I8260STD L3 Quant Date : 2/18/2019 11:42 pm

Compound #25: Acrylonitrile



Original Peak Response = 28355

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

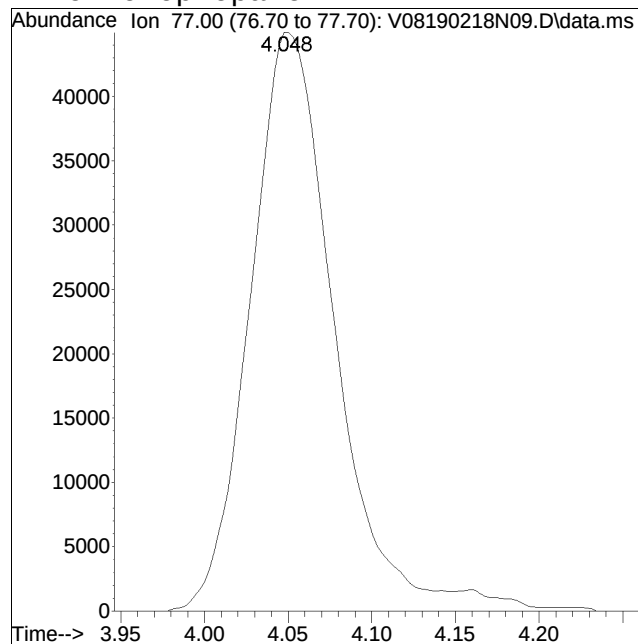
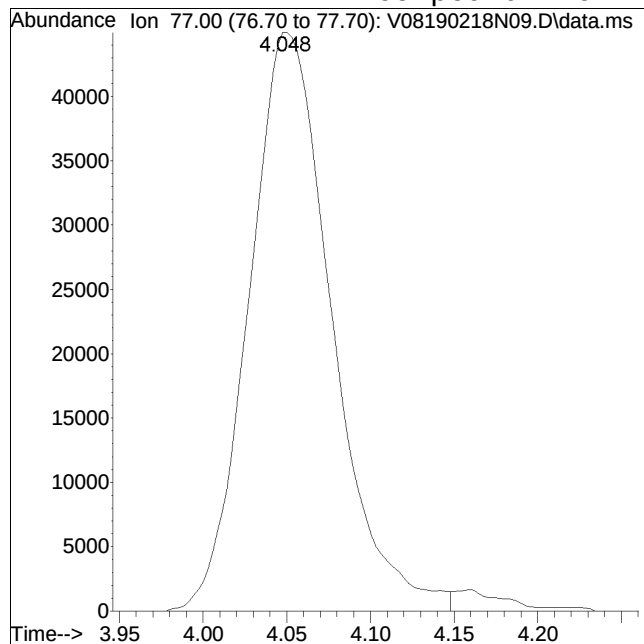


Manual Peak Response = 29214 M1

Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N09.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 10:12 pm Instrument : VOA 108
Sample : I8260STDL3 Quant Date : 2/18/2019 11:42 pm

Compound #29: 2,2-Dichloropropane



Original Peak Response = 154359

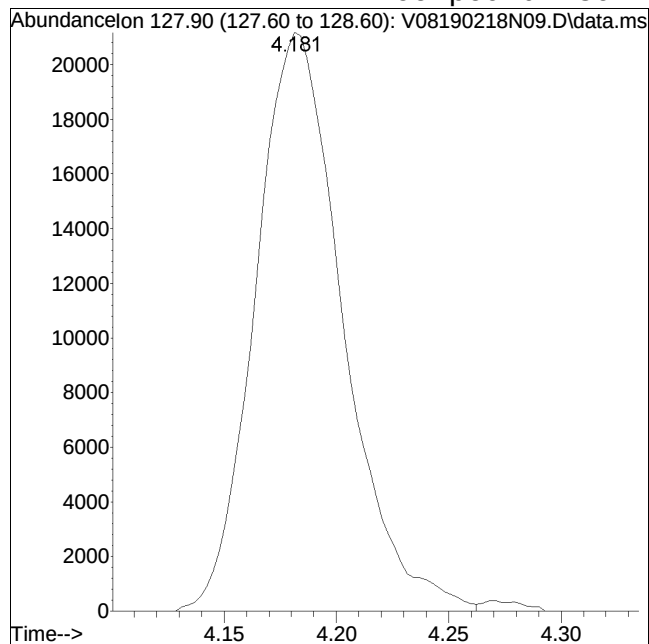
Manual Peak Response = 158063 M1

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

Manual Integration Report

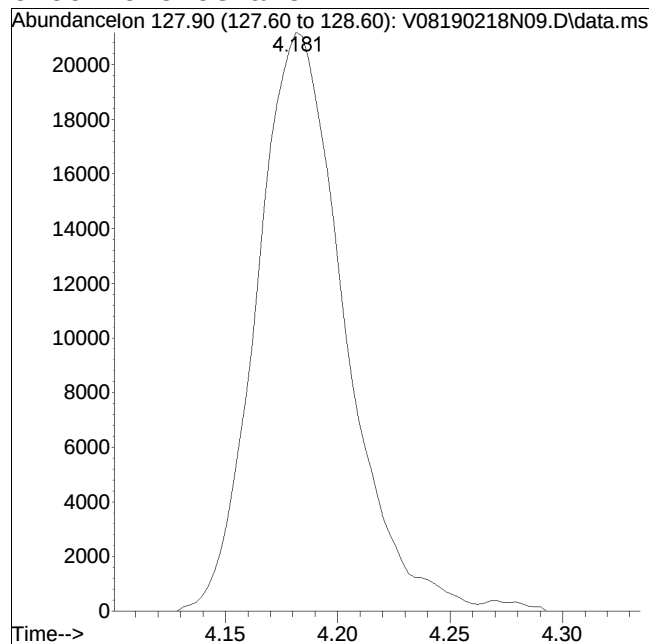
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N09.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 10:12 pm Instrument : VOA 108
Sample : I8260STDL3 Quant Date : 2/18/2019 11:42 pm

Compound #30: Bromochloromethane



Original Peak Response = 57375

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



Manual Peak Response = 57838 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N10.D
 Acq On : 18 Feb 2019 10:34 pm
 Operator : VOA108:NLK
 Sample : I8260STD4
 Misc : WG1208025
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 18 23:52:51 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

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

Internal Standards						
1) Fluorobenzene	5.551	96	525667	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery	=	99.77%	
59) Chlorobenzene-d5	8.526	117	371731	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery	=	101.43%	
79) 1,4-Dichlorobenzene-d4	10.010	152	179507	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery	=	105.76%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.575	113	133855	10.083	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.83%	
43) 1,2-Dichloroethane-d4	5.210	65	150075	10.162	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.62%	
60) Toluene-d8	7.240	98	498549	9.913	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.13%	
83) 4-Bromofluorobenzene	9.340	95	178835	9.726	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.26%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.974	85	298712	29.828	ug/L	98
3) Chloromethane	1.094	50	299104	28.702	ug/L	99
4) Vinyl chloride	1.150	62	324130	29.377	ug/L	95
5) Bromomethane	1.359	94	248545	27.068	ug/L	99
6) Chloroethane	1.443	64	215741	29.830	ug/L	96
7) Trichlorofluoromethane	1.543	101	505361	30.032	ug/L	95
8) Ethyl ether	1.783	74	173003	30.737	ug/L #	64
10) 1,1-Dichloroethene	1.917	96	278738	29.419	ug/L #	61
11) Carbon disulfide	1.923	76	882293	29.454	ug/L	97
12) Freon-113	1.959	101	255024	29.582	ug/L	95
13) Iodomethane	2.017	142	312206	43.079	ug/L	87
14) Acrolein	2.196	56	33104	29.302	ug/L	95
15) Methylene chloride	2.411	84	331564	29.535	ug/L	67
17) Acetone	2.464	43	53734	28.727	ug/L	96
18) trans-1,2-Dichloroethene	2.561	96	325720	29.802	ug/L	73
19) Methyl acetate	2.597	43	155288	30.842	ug/L #	87
20) Methyl tert-butyl ether	2.687	73	846694	29.976	ug/L	93
21) tert-Butyl alcohol	2.826	59	85024	155.680	ug/L #	75
22) Diisopropyl ether	3.122	45	973321	29.944	ug/L #	89
23) 1,1-Dichloroethane	3.208	63	572354	29.322	ug/L	97
24) Halothane	3.359	117	249184	30.307	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N10.D
 Acq On : 18 Feb 2019 10:34 pm
 Operator : VOA108:NLK
 Sample : I8260STD4
 Misc : WG1208025
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 18 23:52:51 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	3.275	53	81730	28.039	ug/L	96
26) Ethyl tert-butyl ether	3.576	59	959152	30.054	ug/L	87
27) Vinyl acetate	3.582	43	683351	33.622	ug/L #	92
28) cis-1,2-Dichloroethene	3.908	96	367965	29.389	ug/L #	68
29) 2,2-Dichloropropane	4.050	77	469050	29.742	ug/L	97
30) Bromochloromethane	4.184	128	172689	29.925	ug/L #	53
31) Cyclohexane	4.153	56	452115	29.668	ug/L #	59
32) Chloroform	4.338	83	613915	30.520	ug/L	97
33) Ethyl acetate	4.572	43	230545	30.447	ug/L #	91
34) Carbon tetrachloride	4.460	117	440276	29.349	ug/L	99
35) Tetrahydrofuran	4.516	42	59812	30.897	ug/L #	44
37) 1,1,1-Trichloroethane	4.558	97	518141	29.303	ug/L #	95
39) 2-Butanone	4.759	43	95702	32.672	ug/L #	16
40) 1,1-Dichloropropene	4.728	75	407120	28.943	ug/L	95
41) Benzene	5.035	78	1309457	29.422	ug/L	90
42) tert-Amyl methyl ether	5.255	73	877338	30.790	ug/L	90
44) 1,2-Dichloroethane	5.291	62	444136	30.142	ug/L	97
47) Methyl cyclohexane	5.710	83	484367	28.168	ug/L #	66
48) Trichloroethene	5.743	95	344859	29.327	ug/L	96
50) Dibromomethane	6.189	93	205828	29.885	ug/L	96
51) 1,2-Dichloropropane	6.301	63	335479	29.786	ug/L	98
53) 2-Chloroethyl vinyl ether	7.051	63	200196	30.684	ug/L #	87
54) Bromodichloromethane	6.407	83	480108	29.703	ug/L	99
57) 1,4-Dioxane	6.633	88	30637	597.025	ug/L #	72
58) cis-1,3-Dichloropropene	7.062	75	544252	30.630	ug/L	92
61) Toluene	7.291	92	832701	29.443	ug/L	97
62) 4-Methyl-2-pentanone	7.689	58	98074	31.215	ug/L #	96
63) Tetrachloroethene	7.642	166	358019	29.305	ug/L	91
65) trans-1,3-Dichloropropene	7.709	75	475614	30.651	ug/L	96
67) Ethyl methacrylate	7.893	69	379921	30.939	ug/L	99
68) 1,1,2-Trichloroethane	7.837	83	236286	29.365	ug/L	93
69) Chlorodibromomethane	7.971	129	352587	30.227	ug/L	98
70) 1,3-Dichloropropane	8.046	76	476301	29.467	ug/L	98
71) 1,2-Dibromoethane	8.130	107	282351	29.313	ug/L	98
72) 2-Hexanone	8.364	43	160573	30.780	ug/L	94
73) Chlorobenzene	8.537	112	934033	29.334	ug/L	90
74) Ethylbenzene	8.579	91	1591548	29.502	ug/L	98
75) 1,1,1,2-Tetrachloroethane	8.596	131	346547	29.690	ug/L	96
76) p/m Xylene	8.685	106	1229421	59.045	ug/L	96
77) o Xylene	8.967	106	1209765	59.123	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N10.D
 Acq On : 18 Feb 2019 10:34 pm
 Operator : VOA108:NLK
 Sample : I8260STD4
 Misc : WG1208025
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 18 23:52:51 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.003	104	2016339	59.561	ug/L	90
80)	Bromoform	9.008	173	210503	28.703	ug/L	96
82)	Isopropylbenzene	9.176	105	1545470	28.169	ug/L	96
84)	Bromobenzene	9.396	156	386052	27.857	ug/L	97
85)	n-Propylbenzene	9.432	91	1796395	28.302	ug/L	97
86)	1,4-Dichlorobutane	9.438	55	457991	28.780	ug/L	98
87)	1,1,2,2-Tetrachloroethane	9.485	83	347315	28.248	ug/L	99
88)	4-Ethyltoluene	9.502	105	1492778	28.862	ug/L	97
89)	2-Chlorotoluene	9.516	91	1270799	28.342	ug/L	96
90)	1,3,5-Trimethylbenzene	9.558	105	1267974	29.250	ug/L	92
91)	1,2,3-Trichloropropane	9.555	75	264251	28.251	ug/L	98
92)	trans-1,4-Dichloro-2-b...	9.586	53	93488	31.943	ug/L #	77
93)	4-Chlorotoluene	9.619	91	1116241	28.622	ug/L	96
94)	tert-Butylbenzene	9.745	119	1276237	28.455	ug/L	93
95)	Pentachloroethane	9.753	167	256889	30.193	ug/L	96
97)	1,2,4-Trimethylbenzene	9.787	105	1274437	29.887	ug/L	94
98)	sec-Butylbenzene	9.848	105	1568238	27.253	ug/L	98
99)	p-Isopropyltoluene	9.934	119	1338643	27.838	ug/L	97
100)	1,3-Dichlorobenzene	9.965	146	719739	28.347	ug/L	98
101)	1,4-Dichlorobenzene	10.018	146	730676	28.884	ug/L	99
102)	p-Diethylbenzene	10.143	119	783242	28.444	ug/L	95
103)	n-Butylbenzene	10.177	91	1227566	27.814	ug/L	98
104)	1,2-Dichlorobenzene	10.258	146	684175	28.463	ug/L	98
105)	1,2,4,5-Tetramethylben...	10.601	119	1189305	31.500	ug/L	98
106)	1,2-Dibromo-3-chloropr...	10.712	155	51760	29.417	ug/L	95
107)	1,3,5-Trichlorobenzene	10.729	180	483424	28.359	ug/L	95
108)	Hexachlorobutadiene	11.078	225	202776	25.796	ug/L	95
109)	1,2,4-Trichlorobenzene	11.092	180	448442	29.800	ug/L	98
110)	Naphthalene	11.270	128	1031283	30.753	ug/L	100
111)	1,2,3-Trichlorobenzene	11.373	180	406744	29.751	ug/L	100

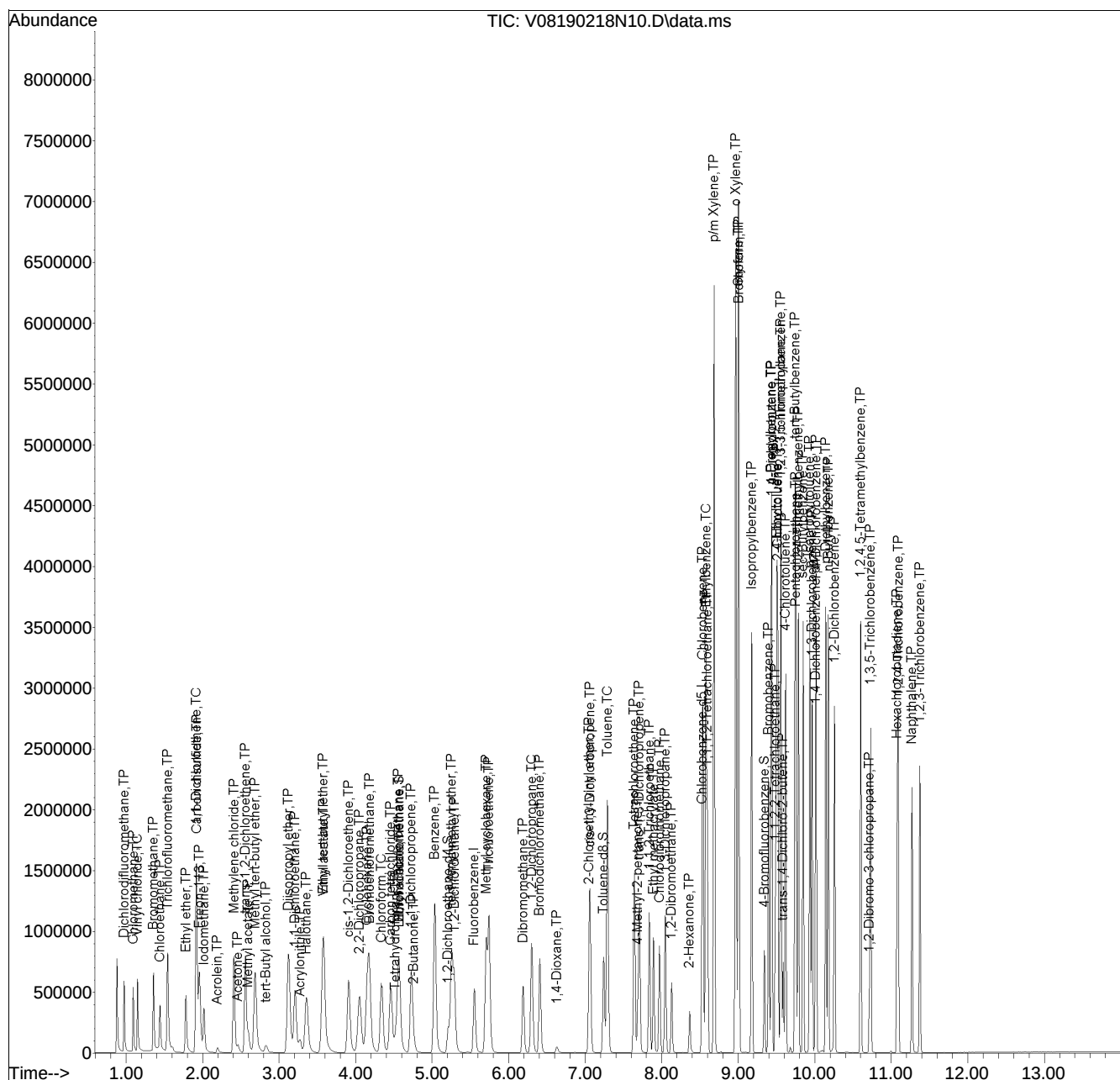
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N10.D
 Acq On : 18 Feb 2019 10:34 pm
 Operator : VOA108:NLK
 Sample : I8260STD4
 Misc : WG1208025
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 18 23:52:51 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

Sub List : 8260-CurvePenta - All compounds listed08190218N09.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA108\2019\10	Method	: V108_190218N_8260.m
Data File	: V08190218N10.D	Operator	: VOA108:NLK
Date Inj'd	: 2/18/2019 10:34 pm	Instrument	: VOA 108
Sample	: I8260STD4	Quant Date	: 2/18/2019 11:44 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N11.D
 Acq On : 18 Feb 2019 10:56 pm
 Operator : VOA108:NLK
 Sample : I8260STD6
 Misc : WG1208025
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 18 23:53:39 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

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

Internal Standards						
1) Fluorobenzene	5.553	96	531711	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery	=	100.92%	
59) Chlorobenzene-d5	8.529	117	377859	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery	=	103.10%	
79) 1,4-Dichlorobenzene-d4	10.010	152	187608	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery	=	110.53%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	137826	10.264	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	102.64%	
43) 1,2-Dichloroethane-d4	5.210	65	153757	10.293	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	102.93%	
60) Toluene-d8	7.241	98	508042	9.938	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.38%	
83) 4-Bromofluorobenzene	9.340	95	184358	9.594	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	95.94%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.975	85	943034	93.098	ug/L	99
3) Chloromethane	1.094	50	824176	78.190	ug/L	98
4) Vinyl chloride	1.150	62	969544	86.876	ug/L	94
5) Bromomethane	1.359	94	665687	71.674	ug/L	98
6) Chloroethane	1.443	64	699235	95.584	ug/L	98
7) Trichlorofluoromethane	1.541	101	1575952	92.590	ug/L	96
8) Ethyl ether	1.783	74	487585	85.643	ug/L #	63
10) 1,1-Dichloroethene	1.914	96	841316	87.785	ug/L #	61
11) Carbon disulfide	1.920	76	2634402	86.947	ug/L	96
12) Freon-113	1.959	101	816790	93.667	ug/L	96
13) Iodomethane	2.018	142	1105370	150.787	ug/L	88
14) Acrolein	2.196	56	104592	91.527	ug/L	93
15) Methylene chloride	2.408	84	932853	82.151	ug/L	67
17) Acetone	2.464	43	159604	84.358	ug/L	97
18) trans-1,2-Dichloroethene	2.559	96	946133	85.584	ug/L	73
19) Methyl acetate	2.598	43	438724	86.146	ug/L #	84
20) Methyl tert-butyl ether	2.687	73	2426388	84.925	ug/L	92
21) tert-Butyl alcohol	2.829	59	259424	469.608	ug/L #	68
22) Diisopropyl ether	3.125	45	2753567	83.750	ug/L #	87
23) 1,1-Dichloroethane	3.208	63	1652285	83.684	ug/L	98
24) Halothane	3.359	117	739550	88.925	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N11.D
 Acq On : 18 Feb 2019 10:56 pm
 Operator : VOA108:NLK
 Sample : I8260STD6
 Misc : WG1208025
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 18 23:53:39 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	3.272	53	245597	83.300	ug/L	97
26) Ethyl tert-butyl ether	3.574	59	2759104	85.472	ug/L	85
27) Vinyl acetate	3.582	43	2069484	100.663	ug/L #	91
28) cis-1,2-Dichloroethene	3.911	96	1041089	82.206	ug/L #	67
29) 2,2-Dichloropropane	4.050	77	1379869	86.501	ug/L	98
30) Bromochloromethane	4.184	128	490224	83.984	ug/L #	53
31) Cyclohexane	4.156	56	1451675	94.176	ug/L #	60
32) Chloroform	4.338	83	1717374	84.407	ug/L	96
33) Ethyl acetate	4.572	43	664313	86.734	ug/L #	91
34) Carbon tetrachloride	4.460	117	1376309	90.702	ug/L	99
35) Tetrahydrofuran	4.513	42	170737	87.196	ug/L #	44
37) 1,1,1-Trichloroethane	4.558	97	1561705	87.316	ug/L #	95
39) 2-Butanone	4.756	43	282018	95.184	ug/L #	18
40) 1,1-Dichloropropene	4.728	75	1224323	86.052	ug/L	94
41) Benzene	5.035	78	3750372	83.307	ug/L	89
42) tert-Amyl methyl ether	5.255	73	2509013	87.051	ug/L	89
44) 1,2-Dichloroethane	5.291	62	1262477	84.706	ug/L	97
47) Methyl cyclohexane	5.707	83	1542707	88.695	ug/L #	67
48) Trichloroethene	5.743	95	997889	83.897	ug/L	96
50) Dibromomethane	6.189	93	582237	83.575	ug/L	96
51) 1,2-Dichloropropane	6.301	63	943522	82.820	ug/L	98
53) 2-Chloroethyl vinyl ether	7.051	63	569761	86.334	ug/L #	89
54) Bromodichloromethane	6.407	83	1376987	84.223	ug/L	98
57) 1,4-Dioxane	6.630	88	40407	778.463	ug/L #	69
58) cis-1,3-Dichloropropene	7.062	75	1557571	86.661	ug/L	93
61) Toluene	7.291	92	2365616	82.289	ug/L	97
62) 4-Methyl-2-pentanone	7.690	58	279482	87.512	ug/L #	96
63) Tetrachloroethene	7.642	166	1055038	84.958	ug/L	91
65) trans-1,3-Dichloropropene	7.709	75	1374780	87.162	ug/L	97
67) Ethyl methacrylate	7.893	69	1109005	88.848	ug/L	99
68) 1,1,2-Trichloroethane	7.837	83	668696	81.757	ug/L	95
69) Chlorodibromomethane	7.971	129	1021930	86.189	ug/L	98
70) 1,3-Dichloropropane	8.047	76	1332226	81.083	ug/L	98
71) 1,2-Dibromoethane	8.130	107	807874	82.512	ug/L	99
72) 2-Hexanone	8.364	43	471884	88.989	ug/L	94
73) Chlorobenzene	8.540	112	2623623	81.059	ug/L	90
74) Ethylbenzene	8.579	91	4549654	82.968	ug/L	98
75) 1,1,1,2-Tetrachloroethane	8.596	131	978848	82.502	ug/L	95
76) p/m Xylene	8.685	106	3533662	166.958	ug/L	95
77) o Xylene	8.970	106	3440772	165.428	ug/L	90

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N11.D
 Acq On : 18 Feb 2019 10:56 pm
 Operator : VOA108:NLK
 Sample : I8260STD6
 Misc : WG1208025
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 18 23:53:39 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.006	104	5756969	167.297	ug/L	92
80)	Bromoform	9.009	173	630635	82.277	ug/L	95
82)	Isopropylbenzene	9.176	105	4496090	78.412	ug/L	97
84)	Bromobenzene	9.396	156	1086134	74.991	ug/L	97
85)	n-Propylbenzene	9.435	91	5265588	79.378	ug/L	97
86)	1,4-Dichlorobutane	9.438	55	1313195	78.957	ug/L	99
87)	1,1,2,2-Tetrachloroethane	9.485	83	987952	76.884	ug/L	100
88)	4-Ethyltoluene	9.505	105	4379501	81.020	ug/L	97
89)	2-Chlorotoluene	9.516	91	3689439	78.732	ug/L	97
90)	1,3,5-Trimethylbenzene	9.558	105	3765438	83.111	ug/L	92
91)	1,2,3-Trichloropropane	9.555	75	750293	76.751	ug/L	98
92)	trans-1,4-Dichloro-2-b...	9.589	53	270309	88.372	ug/L #	72
93)	4-Chlorotoluene	9.619	91	3213335	78.835	ug/L	96
94)	tert-Butylbenzene	9.745	119	3764109	80.300	ug/L	95
95)	Pentachloroethane	9.753	167	719361	80.898	ug/L	96
97)	1,2,4-Trimethylbenzene	9.787	105	3774368	84.692	ug/L	94
98)	sec-Butylbenzene	9.848	105	4781882	79.511	ug/L	99
99)	p-Isopropyltoluene	9.937	119	4070748	80.997	ug/L	97
100)	1,3-Dichlorobenzene	9.965	146	2068552	77.951	ug/L	99
101)	1,4-Dichlorobenzene	10.018	146	2103663	79.567	ug/L	99
102)	p-Diethylbenzene	10.146	119	2422475	84.176	ug/L	96
103)	n-Butylbenzene	10.177	91	3859719	83.678	ug/L	98
104)	1,2-Dichlorobenzene	10.258	146	1971143	78.461	ug/L	98
105)	1,2,4,5-Tetramethylben...	10.601	119	3837819	97.260	ug/L	98
106)	1,2-Dibromo-3-chloropr...	10.712	155	154793	84.176	ug/L	91
107)	1,3,5-Trichlorobenzene	10.729	180	1512217	84.881	ug/L	96
108)	Hexachlorobutadiene	11.078	225	653017	79.485	ug/L	95
109)	1,2,4-Trichlorobenzene	11.092	180	1402397	89.168	ug/L	98
110)	Naphthalene	11.270	128	3170837	90.472	ug/L	100
111)	1,2,3-Trichlorobenzene	11.373	180	1285674	89.979	ug/L	99

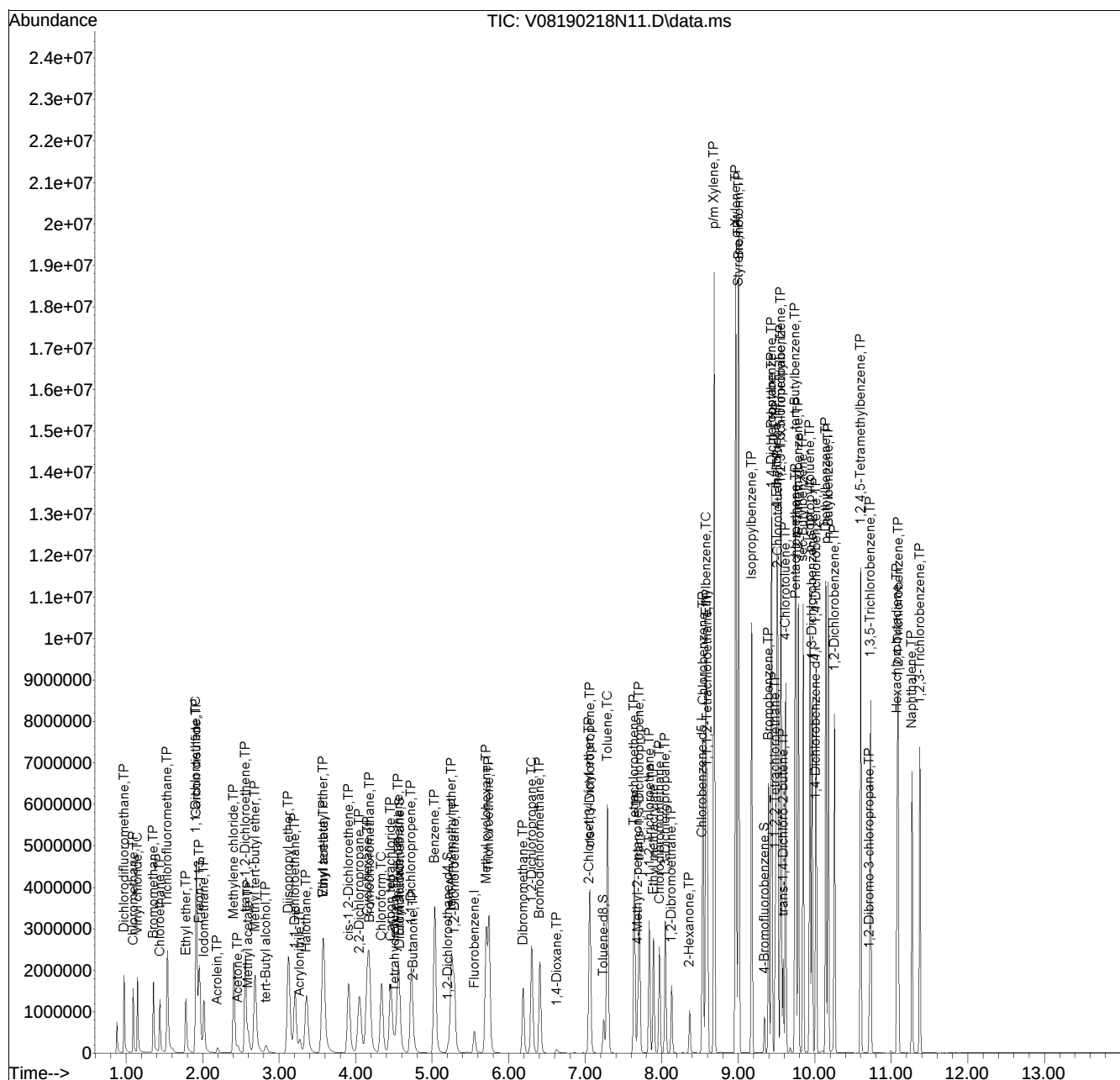
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
Data File : V08190218N11.D
Acq On : 18 Feb 2019 10:56 pm
Operator : VOA108:NLK
Sample : I8260STDL6
Misc : WG1208025
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 18 23:53:39 2019
Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Feb 18 23:42:05 2019
Response via : Initial Calibration

Sub List : 8260-CurvePenta - All compounds listed08190218N09.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA108\2019\10	Method	: V108_190218N_8260.m
Data File	: V08190218N11.D	Operator	: VOA108:NLK
Date Inj'd	: 2/18/2019 10:56 pm	Instrument	: VOA 108
Sample	: I8260STD6	Quant Date	: 2/18/2019 11:44 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N12.D
 Acq On : 18 Feb 2019 11:18 pm
 Operator : VOA108:NLK
 Sample : I8260STD18
 Misc : WG1208025
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 18 23:54:34 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

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

Internal Standards						
1) Fluorobenzene	5.553	96	531339	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery	=	100.85%	
59) Chlorobenzene-d5	8.529	117	369396	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery	=	100.79%	
79) 1,4-Dichlorobenzene-d4	10.010	152	184748	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery	=	108.85%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	142715	10.636	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	106.36%	
43) 1,2-Dichloroethane-d4	5.210	65	154118	10.324	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.24%	
60) Toluene-d8	7.240	98	503759	10.080	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.80%	
83) 4-Bromofluorobenzene	9.343	95	179500	9.486	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	94.86%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.974	85	1475020	145.718	ug/L	99
3) Chloromethane	1.094	50	1285326	122.025	ug/L	99
4) Vinyl chloride	1.150	62	1503515	134.816	ug/L	95
5) Bromomethane	1.359	94	1042593	112.333	ug/L	98
6) Chloroethane	1.440	64	1023658	140.029	ug/L	97
7) Trichlorofluoromethane	1.538	101	2472602	145.372	ug/L	96
8) Ethyl ether	1.783	74	751143	132.029	ug/L #	64
10) 1,1-Dichloroethene	1.914	96	1315266	137.334	ug/L #	62
11) Carbon disulfide	1.920	76	4095301	135.257	ug/L	96
12) Freon-113	1.959	101	1278164	146.678	ug/L	96
13) Iodomethane	2.017	142	1779859	242.966	ug/L	88
14) Acrolein	2.196	56	164770	144.290	ug/L	92
15) Methylene chloride	2.411	84	1443193	127.183	ug/L	67
17) Acetone	2.464	43	253415	134.035	ug/L	96
18) trans-1,2-Dichloroethene	2.558	96	1468395	132.920	ug/L	73
19) Methyl acetate	2.597	43	683237	134.251	ug/L #	85
20) Methyl tert-butyl ether	2.687	73	3772824	132.144	ug/L	93
21) tert-Butyl alcohol	2.832	59	420339	761.429	ug/L #	66
22) Diisopropyl ether	3.124	45	4295643	130.743	ug/L #	87
23) 1,1-Dichloroethane	3.208	63	2551430	129.314	ug/L	97
24) Halothane	3.359	117	1166500	140.360	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N12.D
 Acq On : 18 Feb 2019 11:18 pm
 Operator : VOA108:NLK
 Sample : I8260STD18
 Misc : WG1208025
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 18 23:54:34 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	3.275	53	378727	128.545	ug/L	97
26) Ethyl tert-butyl ether	3.573	59	4310415	133.622	ug/L	84
27) Vinyl acetate	3.582	43	3285635	159.931	ug/L #	92
28) cis-1,2-Dichloroethene	3.908	96	1608772	127.120	ug/L #	68
29) 2,2-Dichloropropane	4.050	77	2137163	134.068	ug/L	98
30) Bromochloromethane	4.184	128	759361	130.183	ug/L #	52
31) Cyclohexane	4.156	56	2264843	147.032	ug/L #	61
32) Chloroform	4.340	83	2674778	131.554	ug/L	97
33) Ethyl acetate	4.572	43	1034205	135.123	ug/L #	92
34) Carbon tetrachloride	4.460	117	2158860	142.373	ug/L	99
35) Tetrahydrofuran	4.513	42	269760	137.864	ug/L #	44
37) 1,1,1-Trichloroethane	4.558	97	2446099	136.860	ug/L #	95
39) 2-Butanone	4.756	43	441784	149.211	ug/L #	16
40) 1,1-Dichloropropene	4.728	75	1918868	134.962	ug/L	94
41) Benzene	5.035	78	5773701	128.342	ug/L	90
42) tert-Amyl methyl ether	5.255	73	3893954	135.197	ug/L	89
44) 1,2-Dichloroethane	5.291	62	1955116	131.270	ug/L	97
47) Methyl cyclohexane	5.710	83	2396386	137.872	ug/L #	67
48) Trichloroethene	5.746	95	1542009	129.734	ug/L	96
50) Dibromomethane	6.189	93	904120	129.869	ug/L	96
51) 1,2-Dichloropropane	6.301	63	1471164	129.225	ug/L	97
53) 2-Chloroethyl vinyl ether	7.051	63	889209	134.834	ug/L #	89
54) Bromodichloromethane	6.409	83	2150575	131.632	ug/L	98
57) 1,4-Dioxane	6.630	88	59036	1138.157	ug/L #	74
58) cis-1,3-Dichloropropene	7.065	75	2424476	134.989	ug/L	94
61) Toluene	7.291	92	3669229	130.560	ug/L	97
62) 4-Methyl-2-pentanone	7.689	58	432045	138.382	ug/L #	95
63) Tetrachloroethene	7.642	166	1647946	135.743	ug/L	92
65) trans-1,3-Dichloropropene	7.709	75	2143081	138.985	ug/L	97
67) Ethyl methacrylate	7.893	69	1734340	142.130	ug/L	99
68) 1,1,2-Trichloroethane	7.837	83	1034622	129.395	ug/L	95
69) Chlorodibromomethane	7.971	129	1589418	137.122	ug/L	98
70) 1,3-Dichloropropane	8.049	76	2055005	127.938	ug/L	99
71) 1,2-Dibromoethane	8.130	107	1251544	130.755	ug/L	99
72) 2-Hexanone	8.364	43	748650	144.416	ug/L	94
73) Chlorobenzene	8.540	112	4032743	127.450	ug/L	91
74) Ethylbenzene	8.579	91	6982007	130.242	ug/L	98
75) 1,1,1,2-Tetrachloroethane	8.599	131	1517040	130.792	ug/L	95
76) p/m Xylene	8.688	106	5468939	264.316	ug/L	87
77) o Xylene	8.969	106	5306496	260.975	ug/L	80

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N12.D
 Acq On : 18 Feb 2019 11:18 pm
 Operator : VOA108:NLK
 Sample : I8260STD18
 Misc : WG1208025
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 18 23:54:34 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.006	104	8736855	259.709	ug/L	95
80)	Bromoform	9.008	173	999337	132.399	ug/L	95
82)	Isopropylbenzene	9.176	105	6892732	122.070	ug/L	96
84)	Bromobenzene	9.399	156	1688605	118.393	ug/L	98
85)	n-Propylbenzene	9.435	91	8007483	122.580	ug/L	95
86)	1,4-Dichlorobutane	9.441	55	2031059	124.009	ug/L	100
87)	1,1,2,2-Tetrachloroethane	9.485	83	1521143	120.210	ug/L	100
88)	4-Ethyltoluene	9.505	105	6735150	126.528	ug/L	96
89)	2-Chlorotoluene	9.519	91	5719716	123.947	ug/L	97
90)	1,3,5-Trimethylbenzene	9.561	105	5843888	130.983	ug/L	91
91)	1,2,3-Trichloropropane	9.555	75	1182125	122.797	ug/L	99
92)	trans-1,4-Dichloro-2-b...	9.588	53	434156	144.136	ug/L #	76
93)	4-Chlorotoluene	9.622	91	4974587	123.935	ug/L	96
94)	tert-Butylbenzene	9.745	119	5868104	127.123	ug/L	95
95)	Pentachloroethane	9.753	167	1104071	126.083	ug/L	95
97)	1,2,4-Trimethylbenzene	9.786	105	5870694	133.770	ug/L	93
98)	sec-Butylbenzene	9.851	105	7345734	124.032	ug/L	97
99)	p-Isopropyltoluene	9.937	119	6345724	128.218	ug/L	97
100)	1,3-Dichlorobenzene	9.965	146	3278048	125.442	ug/L	99
101)	1,4-Dichlorobenzene	10.018	146	3332639	128.002	ug/L	99
102)	p-Diethylbenzene	10.146	119	3884910	137.083	ug/L	96
103)	n-Butylbenzene	10.177	91	6047988	133.149	ug/L	98
104)	1,2-Dichlorobenzene	10.261	146	3121822	126.188	ug/L	98
105)	1,2,4,5-Tetramethylben...	10.601	119	6116685	157.412	ug/L	98
106)	1,2-Dibromo-3-chloropr...	10.715	155	245801	135.734	ug/L	90
107)	1,3,5-Trichlorobenzene	10.732	180	2415145	137.661	ug/L	96
108)	Hexachlorobutadiene	11.078	225	1036742	128.146	ug/L	95
109)	1,2,4-Trichlorobenzene	11.092	180	2264423	146.207	ug/L	98
110)	Naphthalene	11.273	128	5072909	146.983	ug/L	100
111)	1,2,3-Trichlorobenzene	11.376	180	2064091	146.693	ug/L	99

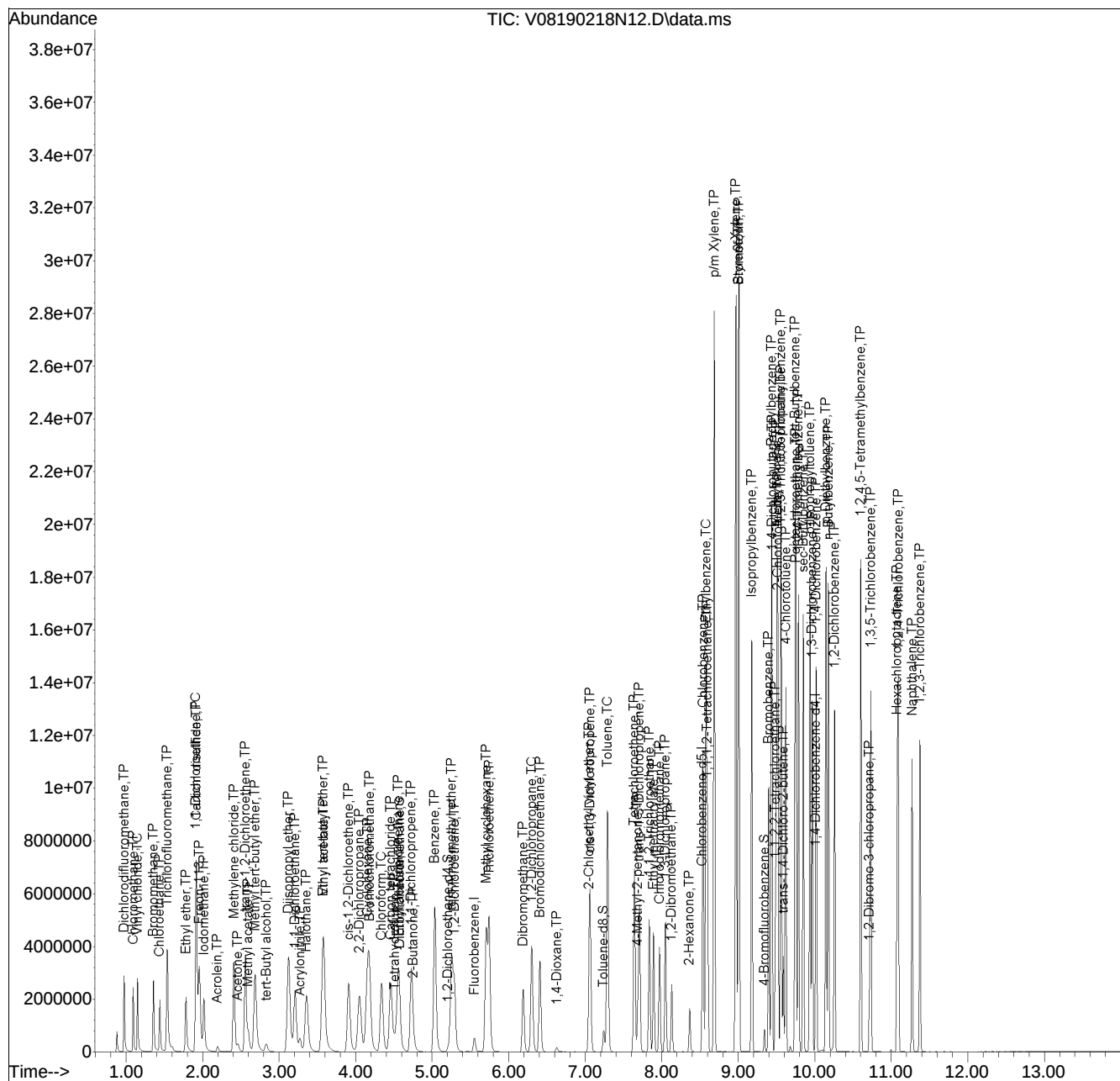
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
Data File : V08190218N12.D
Acq On : 18 Feb 2019 11:18 pm
Operator : VOA108:NLK
Sample : I8260STDL8
Misc : WG1208025
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 18 23:54:34 2019
Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Feb 18 23:42:05 2019
Response via : Initial Calibration

Sub List : 8260-CurvePenta - All compounds listed08190218N09.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA108\2019\10	Method	: V108_190218N_8260.m
Data File	: V08190218N12.D	Operator	: VOA108:NLK
Date Inj'd	: 2/18/2019 11:18 pm	Instrument	: VOA 108
Sample	: I8260STD8	Quant Date	: 2/18/2019 11:44 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N13.D
 Acq On : 18 Feb 2019 11:40 pm
 Operator : VOA108:NLK
 Sample : I8260STD10
 Misc : WG1208025
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 18 23:57:46 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:54:41 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

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

Internal Standards						
1) Fluorobenzene	5.551	96	543838	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery	=	103.22%	
59) Chlorobenzene-d5	8.529	117	379745	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery	=	103.62%	
79) 1,4-Dichlorobenzene-d4	10.010	152	203132	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery	=	119.68%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	145243	10.525	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.25%	
43) 1,2-Dichloroethane-d4	5.210	65	161370	10.385	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.85%	
60) Toluene-d8	7.243	98	514485	9.869	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.69%	
83) 4-Bromofluorobenzene	9.343	95	188008	9.386	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	93.86%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.974	85	2455216	230.881	ug/L	99
3) Chloromethane	1.094	50	2146086	200.544	ug/L	99
4) Vinyl chloride	1.150	62	2495771	221.187	ug/L	95
5) Bromomethane	1.359	94	1795958	179.790	ug/L	98
6) Chloroethane	1.440	64	1670913	199.825	ug/L	96
7) Trichlorofluoromethane	1.535	101	4108975	226.915	ug/L	96
8) Ethyl ether	1.783	74	1274794	208.607	ug/L #	64
10) 1,1-Dichloroethene	1.914	96	2192589	217.054	ug/L #	62
11) Carbon disulfide	1.920	76	6793534	213.405	ug/L	96
12) Freon-113	1.956	101	2141809	232.475	ug/L	96
13) Iodomethane	2.017	142	2977093	318.765	ug/L	88
14) Acrolein	2.196	56	283334	227.580	ug/L	90
15) Methylene chloride	2.408	84	2411802	197.693	ug/L	68
17) Acetone	2.464	43	434245	163.004	ug/L	96
18) trans-1,2-Dichloroethene	2.558	96	2445844	212.782	ug/L	74
19) Methyl acetate	2.597	43	1161154	221.761	ug/L #	85
20) Methyl tert-butyl ether	2.687	73	6291184	207.593	ug/L	93
21) tert-Butyl alcohol	2.834	59	698759	980.753	ug/L #	65
22) Diisopropyl ether	3.124	45	7225462	206.884	ug/L #	87
23) 1,1-Dichloroethane	3.208	63	4250576	208.410	ug/L	97
24) Halothane	3.359	117	1937307	219.437	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N13.D
 Acq On : 18 Feb 2019 11:40 pm
 Operator : VOA108:NLK
 Sample : I8260STD10
 Misc : WG1208025
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 18 23:57:46 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:54:41 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	3.275	53	641282	201.835	ug/L	97
26) Ethyl tert-butyl ether	3.576	59	7297715	217.061	ug/L	83
27) Vinyl acetate	3.582	43	5644929	259.999	ug/L #	92
28) cis-1,2-Dichloroethene	3.911	96	2697699	205.754	ug/L #	68
29) 2,2-Dichloropropane	4.050	77	3589699	215.234	ug/L	98
30) Bromochloromethane	4.184	128	1230807	202.655	ug/L #	53
31) Cyclohexane	4.156	56	3776110	227.675	ug/L #	61
32) Chloroform	4.340	83	4485494	210.997	ug/L	97
33) Ethyl acetate	4.572	43	1723680	172.386	ug/L #	92
34) Carbon tetrachloride	4.460	117	3612820	229.887	ug/L	99
35) Tetrahydrofuran	4.510	42	474367	187.263	ug/L #	47
37) 1,1,1-Trichloroethane	4.558	97	4074158	221.367	ug/L #	95
39) 2-Butanone	4.756	43	752305	177.812	ug/L #	20
40) 1,1-Dichloropropene	4.728	75	3204769	216.859	ug/L	95
41) Benzene	5.035	78	9581738	205.952	ug/L	90
42) tert-Amyl methyl ether	5.255	73	6563381	211.375	ug/L	89
44) 1,2-Dichloroethane	5.291	62	3306845	206.835	ug/L	97
47) Methyl cyclohexane	5.710	83	4009400	227.987	ug/L #	68
48) Trichloroethene	5.746	95	2593834	209.895	ug/L	96
50) Dibromomethane	6.189	93	1514788	209.113	ug/L	96
51) 1,2-Dichloropropane	6.301	63	2439332	201.674	ug/L	98
53) 2-Chloroethyl vinyl ether	7.054	63	1490658	218.850	ug/L #	90
54) Bromodichloromethane	6.409	83	3611296	214.891	ug/L	98
57) 1,4-Dioxane	6.633	88	104484	1968.438	ug/L #	72
58) cis-1,3-Dichloropropene	7.065	75	4091450	217.635	ug/L	94
61) Toluene	7.293	92	6133280	208.492	ug/L	95
62) 4-Methyl-2-pentanone	7.692	58	713395	216.280	ug/L #	95
63) Tetrachloroethene	7.642	166	2708194	215.468	ug/L	92
65) trans-1,3-Dichloropropene	7.709	75	3596046	217.997	ug/L	98
67) Ethyl methacrylate	7.896	69	2879184	220.463	ug/L	99
68) 1,1,2-Trichloroethane	7.840	83	1717590	203.019	ug/L	95
69) Chlorodibromomethane	7.971	129	2653255	214.959	ug/L	98
70) 1,3-Dichloropropane	8.049	76	3402032	198.544	ug/L	99
71) 1,2-Dibromoethane	8.130	107	2067155	205.794	ug/L	99
72) 2-Hexanone	8.364	43	1245275	218.424	ug/L	95
73) Chlorobenzene	8.540	112	6608583	200.865	ug/L	92
74) Ethylbenzene	8.579	91	10884203	196.782	ug/L	94
75) 1,1,1,2-Tetrachloroethane	8.599	131	2530691	206.289	ug/L	94
76) p/m Xylene	8.688	106	8930834	430.058	ug/L #	1
77) o Xylene	8.972	106	8742074	424.327	ug/L #	1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N13.D
 Acq On : 18 Feb 2019 11:40 pm
 Operator : VOA108:NLK
 Sample : I8260STD10
 Misc : WG1208025
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 18 23:57:46 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:54:41 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.003	104	11581402M3	341.624	ug/L	
80)	Bromoform	9.011	173	1736789	206.343	ug/L	96
82)	Isopropylbenzene	9.176	105	10439648	172.605	ug/L	90
84)	Bromobenzene	9.399	156	2840186	183.986	ug/L	98
85)	n-Propylbenzene	9.432	91	10846211	155.084	ug/L #	82
86)	1,4-Dichlorobutane	9.441	55	3447648	188.692	ug/L	100
87)	1,1,2,2-Tetrachloroethane	9.488	83	2556395	183.417	ug/L	99
88)	4-Ethyltoluene	9.505	105	10407772	182.263	ug/L	90
89)	2-Chlorotoluene	9.519	91	9499129	191.020	ug/L	95
90)	1,3,5-Trimethylbenzene	9.558	105	9451075	193.180	ug/L #	86
91)	1,2,3-Trichloropropane	9.558	75	1992962	184.135	ug/L	98
92)	trans-1,4-Dichloro-2-b...	9.589	53	750201	198.813	ug/L #	73
93)	4-Chlorotoluene	9.622	91	8244158	190.502	ug/L	94
94)	tert-Butylbenzene	9.745	119	9761282	194.331	ug/L	97
95)	Pentachloroethane	9.753	167	1933270	202.247	ug/L	95
97)	1,2,4-Trimethylbenzene	9.787	105	9264455	189.843	ug/L #	87
98)	sec-Butylbenzene	9.845	105	10696064	170.890	ug/L	89
99)	p-Isopropyltoluene	9.934	119	9646348	180.824	ug/L	92
100)	1,3-Dichlorobenzene	9.968	146	5648252	200.865	ug/L	100
101)	1,4-Dichlorobenzene	10.021	146	5759118	197.227	ug/L	98
102)	p-Diethylbenzene	10.146	119	6657661	219.165	ug/L	97
103)	n-Butylbenzene	10.177	91	9333918	189.901	ug/L #	89
104)	1,2-Dichlorobenzene	10.261	146	5417289	196.957	ug/L	99
105)	1,2,4,5-Tetramethylben...	10.601	119	9521007	232.939	ug/L	92
106)	1,2-Dibromo-3-chloropr...	10.715	155	434037	212.312	ug/L	91
107)	1,3,5-Trichlorobenzene	10.732	180	4215189	227.444	ug/L	96
108)	Hexachlorobutadiene	11.078	225	1786566	202.122	ug/L	96
109)	1,2,4-Trichlorobenzene	11.092	180	3958105	235.641	ug/L	98
110)	Naphthalene	11.273	128	8401671	225.618	ug/L	100
111)	1,2,3-Trichlorobenzene	11.373	180	3563675	234.526	ug/L	99

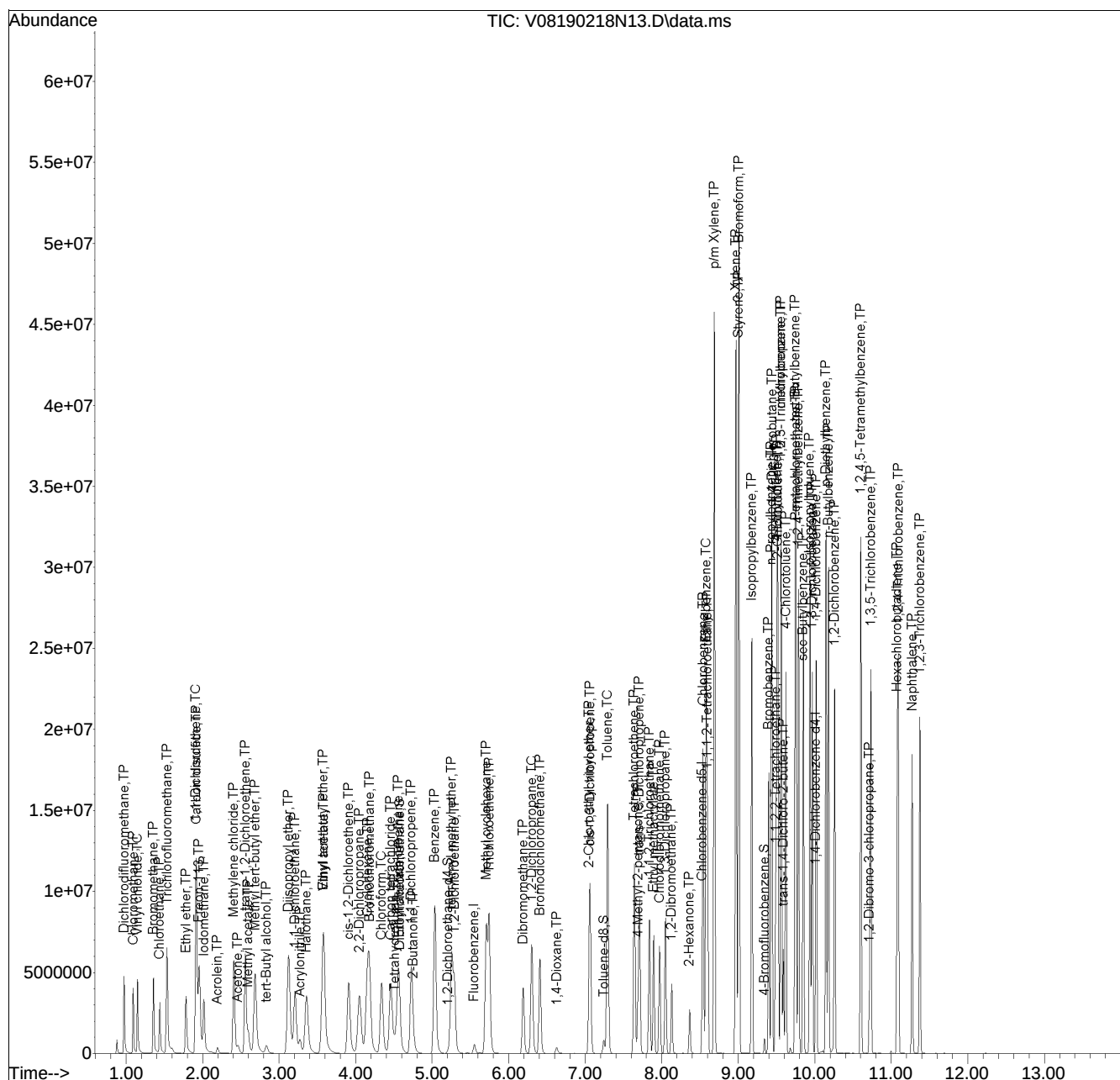
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N13.D
 Acq On : 18 Feb 2019 11:40 pm
 Operator : VOA108:NLK
 Sample : I8260STD10
 Misc : WG1208025
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 18 23:57:46 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:54:41 2019
 Response via : Initial Calibration

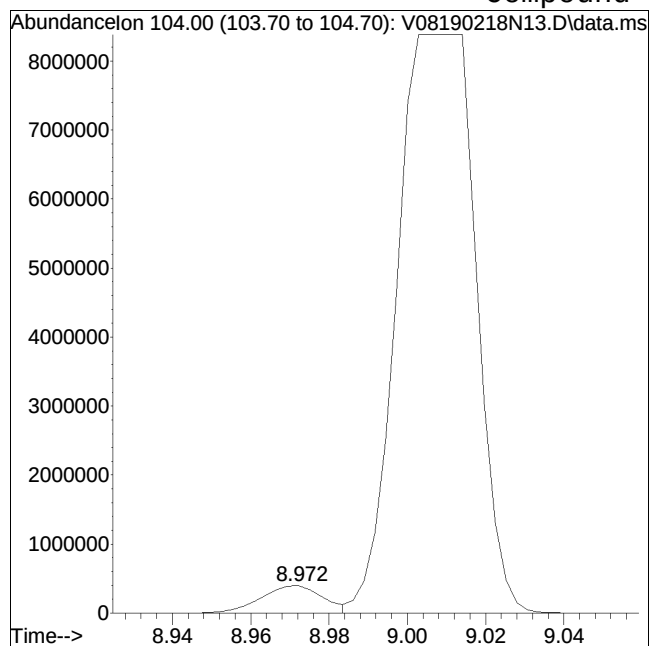
Sub List : 8260-CurvePenta - All compounds listed08190218N09.D•



Manual Integration Report

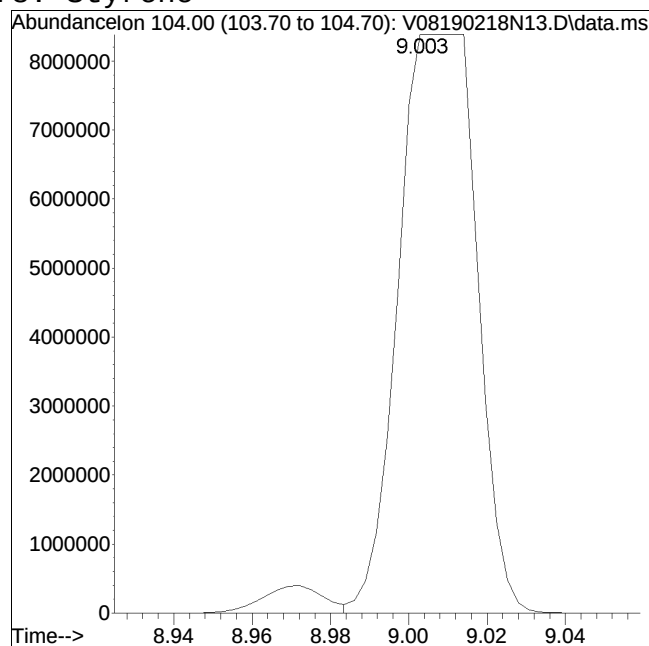
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N13.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 11:40 pm Instrument : VOA 108
Sample : I8260STDL10 Quant Date : 2/18/2019 11:55 pm

Compound #78: Styrene



Original Peak Response = 440247

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.



Manual Peak Response = 11581402 M3

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N20.D
 Acq On : 19 Feb 2019 2:13 am
 Operator : VOA108:NLK
 Sample : C8260STD3
 Misc : WG1208025
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 19 07:17:17 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 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	98	0.00
2 TP	Dichlorodifluoromethane	0.200	0.219	-9.5	112	0.00
3 TP	Chloromethane	0.197	0.211	-7.1	104	0.00
4 TC	Vinyl chloride	0.210	0.223	-6.2	104	0.00
5 TP	Bromomethane	0.181	0.196	-8.3	110	0.00
6 TP	Chloroethane	0.154	0.151	1.9	107	0.00
7 TP	Trichlorofluoromethane	0.339	0.329	2.9	100	0.00
8 TP	Ethyl ether	0.113	0.120	-6.2	109	0.00
10 TC	1,1-Dichloroethene	0.188	0.172	8.5	93	0.00
11 TP	Carbon disulfide	0.591	0.558	5.6	96	0.00
12 TP	Freon-113	0.173	0.174	-0.6	104	0.00
13 TP	Iodomethane	* 10.000	7.796	22.0#	102	0.00
14 TP	Acrolein	0.023	0.025#	-8.7	114	0.00
15 TP	Methylene chloride	0.224	0.222	0.9	102	0.00
17 TP	Acetone	0.039	0.039#	0.0	107	0.00
18 TP	trans-1,2-Dichloroethene	0.213	0.208	2.3	98	0.00
19 TP	Methyl acetate	0.098	0.104	-6.1	106	0.00
20 TP	Methyl tert-butyl ether	0.560	0.559	0.2	102	0.00
21 TP	tert-Butyl alcohol	0.012	0.013#	-8.3	125	0.00
22 TP	Diisopropyl ether	0.645	0.614	4.8	97	0.00
23 TP	1,1-Dichloroethane	0.377	0.377	0.0	99	0.00
24 TP	Halothane	0.165	0.152	7.9	95	0.00
25 TP	Acrylonitrile	0.058	0.057	1.7	100	0.00
26 TP	Ethyl tert-butyl ether	0.626	0.637	-1.8	102	-0.01
27 TP	Vinyl acetate	0.447	0.391	12.5	99	0.00
28 TP	cis-1,2-Dichloroethene	0.242	0.249	-2.9	102	0.00
29 TP	2,2-Dichloropropane	0.310	0.252	18.7	82	0.00
30 TP	Bromochloromethane	0.112	0.116	-3.6	103	0.00
31 TP	Cyclohexane	0.311	0.286	8.0	96	-0.01
32 TC	Chloroform	0.394	0.398	-1.0	102	0.00
33 TP	Ethyl acetate	0.166	0.159	4.2	108	0.00
34 TP	Carbon tetrachloride	0.294	0.281	4.4	96	0.00
35 TP	Tetrahydrofuran	0.040	0.045#	-12.5	118	0.00
36 S	Dibromofluoromethane	0.255	0.259	-1.6	100	0.00
37 TP	1,1,1-Trichloroethane	0.344	0.331	3.8	96	0.00
39 TP	2-Butanone	0.068	0.063#	7.4	111	0.00
40 TP	1,1-Dichloropropene	0.275	0.268	2.5	98	0.00
41 TP	Benzene	0.859	0.848	1.3	98	0.00
42 TP	tert-Amyl methyl ether	0.576	0.568	1.4	102	0.00

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N20.D
 Acq On : 19 Feb 2019 2:13 am
 Operator : VOA108:NLK
 Sample : C8260STD3
 Misc : WG1208025
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 19 07:17:17 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 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	0.287	0.284	1.0	99	0.00
44 TP	1,2-Dichloroethane	0.295	0.292	1.0	102	0.00
47 TP	Methyl cyclohexane	0.330	0.292	11.5	87	0.00
48 TP	Trichloroethene	0.229	0.223	2.6	98	0.00
50 TP	Dibromomethane	0.134	0.134	0.0	100	0.00
51 TC	1,2-Dichloropropane	0.223	0.218	2.2	100	0.00
53 TP	2-Chloroethyl vinyl ether	0.127	0.118	7.1	93	0.00
54 TP	Bromodichloromethane	0.312	0.323	-3.5	103	0.00
57 TP	1,4-Dioxane	0.00097	0.00105#	-8.2	105	0.00
58 TP	cis-1,3-Dichloropropene	0.350	0.337	3.7	97	0.00
59 I	Chlorobenzene-d5	1.000	1.000	0.0	97	0.00
60 S	Toluene-d8	1.371	1.355	1.2	97	0.00
61 TC	Toluene	0.779	0.810	-4.0	103	0.00
62 TP	4-Methyl-2-pentanone	0.088	0.088#	0.0	101	0.00
63 TP	Tetrachloroethene	0.335	0.332	0.9	98	0.00
65 TP	trans-1,3-Dichloropropene	0.440	0.445	-1.1	104	0.00
67 TP	Ethyl methacrylate	0.349	0.352	-0.9	104	0.00
68 TP	1,1,2-Trichloroethane	0.223	0.236	-5.8	106	0.00
69 TP	Chlorodibromomethane	0.329	0.348	-5.8	108	0.00
70 TP	1,3-Dichloropropane	0.451	0.474	-5.1	106	0.00
71 TP	1,2-Dibromoethane	0.266	0.278	-4.5	104	0.00
72 TP	2-Hexanone	0.152	0.146	3.9	101	0.00
73 TP	Chlorobenzene	0.867	0.932	-7.5	106	0.00
74 TC	Ethylbenzene	1.453	1.542	-6.1	103	0.00
75 TP	1,1,1,2-Tetrachloroethane	0.325	0.343	-5.5	106	0.00
76 TP	p/m Xylene	0.553	0.591	-6.9	103	0.00
77 TP	o Xylene	0.547	0.577	-5.5	102	0.00
78 TP	Styrene	0.874	1.003	-14.8	107	0.00
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00
80 TP	Bromoform	0.416	0.434	-4.3	105	0.00
82 TP	Isopropylbenzene	2.919	3.132	-7.3	102	0.00
83 S	4-Bromofluorobenzene	0.978	0.995	-1.7	96	0.00
84 TP	Bromobenzene	0.751	0.845	-12.5	108	0.00
85 TP	n-Propylbenzene	3.333	3.619	-8.6	101	0.00
86 TP	1,4-Dichlorobutane	0.892	0.962	-7.8	108	0.00
87 TP	1,1,2,2-Tetrachloroethane	0.678	0.738	-8.8	107	0.00
88 TP	4-Ethyltoluene	2.776	2.922	-5.3	100	0.00

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N20.D
 Acq On : 19 Feb 2019 2:13 am
 Operator : VOA108:NLK
 Sample : C8260STD3
 Misc : WG1208025
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 19 07:17:17 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 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 TP	2-Chlorotoluene	2.432	2.539	-4.4	101	0.00
90 TP	1,3,5-Trimethylbenzene	2.397	2.499	-4.3	103	0.00
91 TP	1,2,3-Trichloropropane	0.527	0.562	-6.6	107	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.186	0.168	9.7	102	0.00
93 TP	4-Chlorotoluene	2.116	2.302	-8.8	105	0.00
94 TP	tert-Butylbenzene	2.463	2.568	-4.3	102	0.00
95 TP	Pentachloroethane	0.471	0.519	-10.2	108	0.00
97 TP	1,2,4-Trimethylbenzene	2.385	2.521	-5.7	105	0.00
98 TP	sec-Butylbenzene	3.017	3.102	-2.8	96	0.00
99 TP	p-Isopropyltoluene	2.590	2.653	-2.4	98	0.00
100 TP	1,3-Dichlorobenzene	1.385	1.513	-9.2	106	0.00
101 TP	1,4-Dichlorobenzene	1.435	1.514	-5.5	106	0.00
102 TP	p-Diethylbenzene	1.516	1.461	3.6	94	0.00
103 TP	n-Butylbenzene	2.402	2.381	0.9	96	0.00
104 TP	1,2-Dichlorobenzene	1.351	1.427	-5.6	106	0.00
105 TP	1,2,4,5-Tetramethylbenzene *	10.000	9.025	9.7	101	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.102	0.109	-6.9	110	0.00
107 TP	1,3,5-Trichlorobenzene	0.930	0.978	-5.2	102	0.00
108 TP	Hexachlorobutadiene	0.436	0.412	5.5	93	0.00
109 TP	1,2,4-Trichlorobenzene	0.848	0.906	-6.8	107	0.00
110 TP	Naphthalene	1.867	2.082	-11.5	110	0.00
111 TP	1,2,3-Trichlorobenzene	0.766	0.830	-8.4	108	0.00

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 7 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N20.D
 Acq On : 19 Feb 2019 2:13 am
 Operator : VOA108:NLK
 Sample : C8260STD3
 Misc : WG1208025
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 19 07:17:17 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

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

Internal Standards						
1) Fluorobenzene	5.553	96	514843	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery	=	97.72%	
59) Chlorobenzene-d5	8.526	117	356124	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery	=	97.17%	
79) 1,4-Dichlorobenzene-d4	10.010	152	168202	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery	=	99.10%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	133237	10.132	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.32%	
43) 1,2-Dichloroethane-d4	5.210	65	146342	9.901	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.01%	
60) Toluene-d8	7.240	98	482704	9.890	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.90%	
83) 4-Bromofluorobenzene	9.340	95	167417	10.172	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.72%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.974	85	112597	10.943	ug/L	95
3) Chloromethane	1.094	50	108803	10.736	ug/L	100
4) Vinyl chloride	1.150	62	114686	10.596	ug/L	94
5) Bromomethane	1.359	94	100852	10.821	ug/L	100
6) Chloroethane	1.443	64	77901	9.842	ug/L	97
7) Trichlorofluoromethane	1.543	101	169214	9.685	ug/L	99
8) Ethyl ether	1.783	74	61714	10.602	ug/L #	62
10) 1,1-Dichloroethene	1.917	96	88374	9.130	ug/L #	63
11) Carbon disulfide	1.922	76	287211	9.440	ug/L	99
12) Freon-113	1.959	101	89834	10.066	ug/L	98
13) Iodomethane	2.017	142	73963	7.796	ug/L	87
14) Acrolein	2.199	56	12890	10.725	ug/L	100
15) Methylene chloride	2.408	84	114454	9.926	ug/L #	65
17) Acetone	2.466	43	19969	9.978	ug/L	89
18) trans-1,2-Dichloroethene	2.558	96	107309	9.772	ug/L	73
19) Methyl acetate	2.597	43	53352	10.598	ug/L #	84
20) Methyl tert-butyl ether	2.689	73	287838	9.979	ug/L	92
21) tert-Butyl alcohol	2.832	59	34318	55.712	ug/L #	80
22) Diisopropyl ether	3.124	45	316061	9.513	ug/L #	89
23) 1,1-Dichloroethane	3.208	63	194060	9.991	ug/L	98
24) Halothane	3.359	117	78093	9.216	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N20.D
 Acq On : 19 Feb 2019 2:13 am
 Operator : VOA108:NLK
 Sample : C8260STD3
 Misc : WG1208025
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 19 07:17:17 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
25) Acrylonitrile	3.275	53	29094	9.660	ug/L	#	91
26) Ethyl tert-butyl ether	3.573	59	327785	10.175	ug/L		94
27) Vinyl acetate	3.582	43	201066	8.731	ug/L	#	93
28) cis-1,2-Dichloroethene	3.911	96	128220	10.288	ug/L	#	65
29) 2,2-Dichloropropane	4.050	77	129907	8.139	ug/L	#	90
30) Bromochloromethane	4.184	128	59829	10.386	ug/L	#	54
31) Cyclohexane	4.153	56	147126	9.189	ug/L	#	60
32) Chloroform	4.337	83	204893	10.102	ug/L		97
33) Ethyl acetate	4.577	43	82098	9.616	ug/L	#	93
34) Carbon tetrachloride	4.460	117	144568	9.539	ug/L		97
35) Tetrahydrofuran	4.524	42	22941	11.119	ug/L	#	53
37) 1,1,1-Trichloroethane	4.561	97	170558	9.642	ug/L	#	96
39) 2-Butanone	4.761	43	32560	9.310	ug/L	#	18
40) 1,1-Dichloropropene	4.728	75	137982	9.745	ug/L		95
41) Benzene	5.035	78	436806	9.881	ug/L		89
42) tert-Amyl methyl ether	5.255	73	292422	9.868	ug/L		92
44) 1,2-Dichloroethane	5.288	62	150563	9.899	ug/L		98
47) Methyl cyclohexane	5.709	83	150542	8.865	ug/L	#	66
48) Trichloroethene	5.743	95	115010	9.770	ug/L		94
50) Dibromomethane	6.189	93	68928	9.986	ug/L		95
51) 1,2-Dichloropropane	6.301	63	112467	9.810	ug/L		99
53) 2-Chloroethyl vinyl ether	7.051	63	60556	9.266	ug/L	#	89
54) Bromodichloromethane	6.407	83	166209	10.337	ug/L		98
57) 1,4-Dioxane	6.630	88	27020	538.930	ug/L	#	69
58) cis-1,3-Dichloropropene	7.062	75	173272	9.615	ug/L		91
61) Toluene	7.291	92	288356	10.389	ug/L		96
62) 4-Methyl-2-pentanone	7.692	58	31291	9.999	ug/L	#	94
63) Tetrachloroethene	7.642	166	118241	9.922	ug/L		91
65) trans-1,3-Dichloropropene	7.709	75	158368	10.107	ug/L		95
67) Ethyl methacrylate	7.893	69	125339	10.087	ug/L		99
68) 1,1,2-Trichloroethane	7.837	83	84005	10.565	ug/L		94
69) Chlorodibromomethane	7.971	129	123888	10.590	ug/L		98
70) 1,3-Dichloropropane	8.046	76	168871	10.520	ug/L		99
71) 1,2-Dibromoethane	8.130	107	98882	10.454	ug/L		97
72) 2-Hexanone	8.367	43	51988	9.597	ug/L		91
73) Chlorobenzene	8.537	112	331791	10.747	ug/L		90
74) Ethylbenzene	8.579	91	549276	10.614	ug/L		98
75) 1,1,1,2-Tetrachloroethane	8.596	131	122195	10.574	ug/L		95
76) p/m Xylene	8.685	106	421211	21.399	ug/L		96
77) o Xylene	8.967	106	411054	21.092	ug/L		90

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N20.D
 Acq On : 19 Feb 2019 2:13 am
 Operator : VOA108:NLK
 Sample : C8260STD3
 Misc : WG1208025
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 19 07:17:17 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.003	104	714444	22.951	ug/L	89
80)	Bromoform	9.008	173	73048	10.434	ug/L	95
82)	Isopropylbenzene	9.176	105	526827	10.729	ug/L	96
84)	Bromobenzene	9.396	156	142132	11.248	ug/L	98
85)	n-Propylbenzene	9.432	91	608746	10.860	ug/L	96
86)	1,4-Dichlorobutane	9.438	55	161788	10.781	ug/L	97
87)	1,1,2,2-Tetrachloroethane	9.485	83	124206	10.891	ug/L	99
88)	4-Ethyltoluene	9.502	105	491473	10.527	ug/L	96
89)	2-Chlorotoluene	9.516	91	427135	10.440	ug/L	94
90)	1,3,5-Trimethylbenzene	9.558	105	420318	10.426	ug/L	91
91)	1,2,3-Trichloropropane	9.555	75	94556	10.671	ug/L	97
92)	trans-1,4-Dichloro-2-b...	9.586	53	28312	9.069	ug/L #	73
93)	4-Chlorotoluene	9.619	91	387261	10.881	ug/L	94
94)	tert-Butylbenzene	9.745	119	431958	10.428	ug/L	93
95)	Pentachloroethane	9.750	167	87270	11.008	ug/L	96
97)	1,2,4-Trimethylbenzene	9.784	105	424005	10.570	ug/L	92
98)	sec-Butylbenzene	9.848	105	521806	10.282	ug/L	97
99)	p-Isopropyltoluene	9.934	119	446300	10.244	ug/L	96
100)	1,3-Dichlorobenzene	9.965	146	254547	10.925	ug/L	99
101)	1,4-Dichlorobenzene	10.018	146	254645	10.552	ug/L	98
102)	p-Diethylbenzene	10.143	119	245697	9.636	ug/L	95
103)	n-Butylbenzene	10.177	91	400563	9.913	ug/L	98
104)	1,2-Dichlorobenzene	10.258	146	240105	10.565	ug/L	98
105)	1,2,4,5-Tetramethylben...	10.601	119	359200	9.025	ug/L	98
106)	1,2-Dibromo-3-chloropr...	10.712	155	18271	10.699	ug/L	87
107)	1,3,5-Trichlorobenzene	10.729	180	164532	10.515	ug/L	95
108)	Hexachlorobutadiene	11.078	225	69297	9.454	ug/L	94
109)	1,2,4-Trichlorobenzene	11.089	180	152414	10.686	ug/L	99
110)	Naphthalene	11.270	128	350272	11.155	ug/L	100
111)	1,2,3-Trichlorobenzene	11.373	180	139554	10.824	ug/L	98

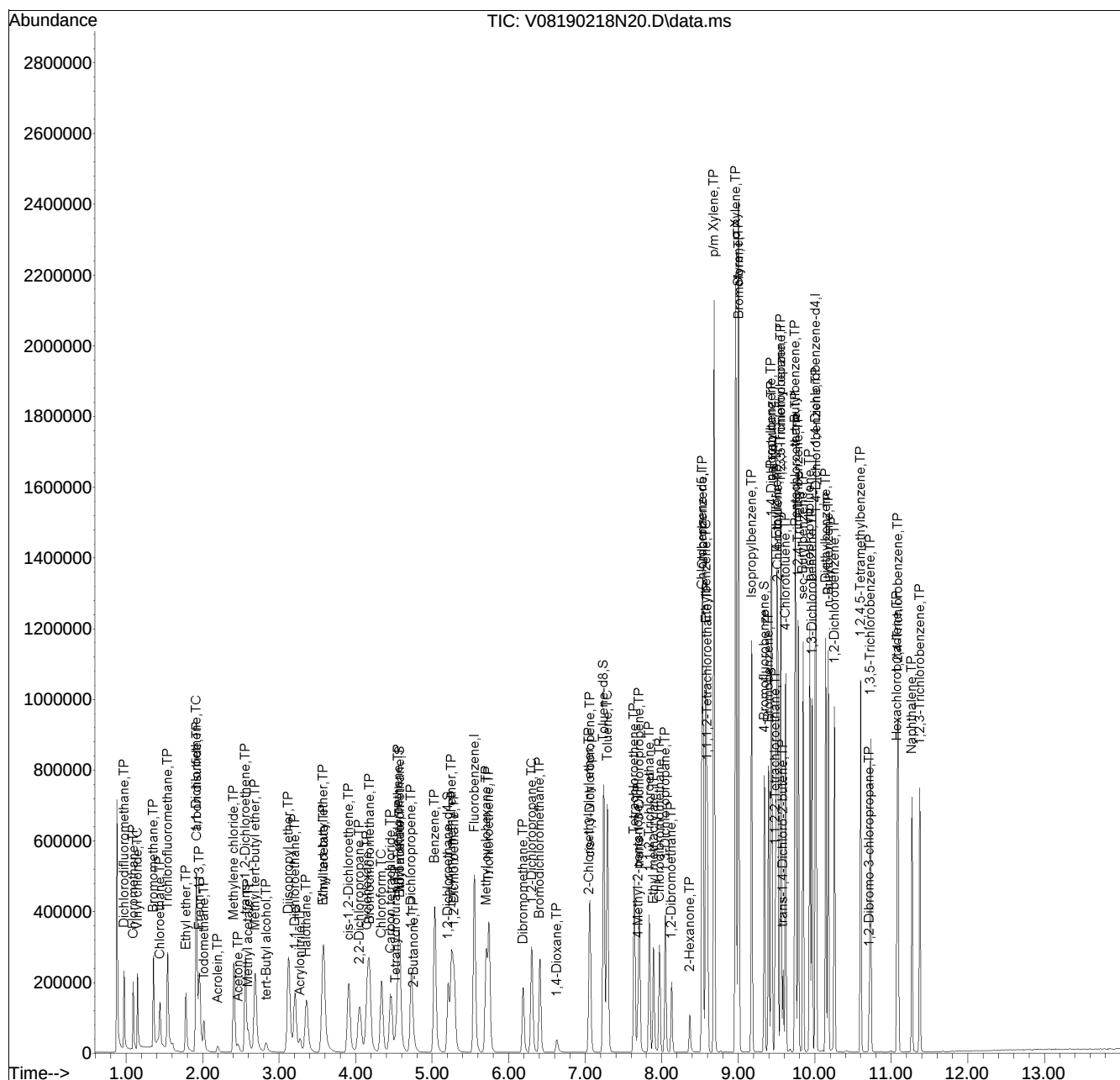
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N20.D
 Acq On : 19 Feb 2019 2:13 am
 Operator : VOA108:NLK
 Sample : C8260STD3
 Misc : WG1208025
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 19 07:17:17 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

Sub List : 8260-CurvePenta - All compounds listed08190218N09.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA108\2019\10	Method	: V108_190218N_8260.m
Data File	: V08190218N20.D	Operator	: VOA108:NLK
Date Inj'd	: 2/19/2019 2:13 am	Instrument	: VOA 108
Sample	: C8260STD3	Quant Date	: 2/19/2019 7:16 am

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

Continuing Calibration

Calibration Verification Summary

Form 7

Volatiles

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Instrument ID : VOA108
 Lab File ID : V08190313N02
 Sample No : WG1215584-2
 Channel :

Lab Number : L1909107
 Project Number : 170329301
 Calibration Date : 03/13/19 18:42
 Init. Calib. Date(s) : 02/18/19 02/18/19
 Init. Calib. Times : 20:23 23:40

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	57	0
Dichlorodifluoromethane	0.2	0.201	-	-0.5	20	61	0
Chloromethane	0.197	0.21	-	-6.6	20	61	0
Vinyl chloride	0.21	0.237	-	-12.9	20	65	0
Bromomethane	0.181	0.186	-	-2.8	20	61	0
Chloroethane	0.154	0.205	-	-33.1*	20	86	0
Trichlorofluoromethane	0.339	0.403	-	-18.9	20	72	0
Ethyl ether	0.113	0.112	-	0.9	20	60	0
1,1-Dichloroethene	0.188	0.19	-	-1.1	20	60	0
Carbon disulfide	0.591	0.607	-	-2.7	20	61	0
Freon-113	0.173	0.21	-	-21.4*	20	73	0
Iodomethane	10	8.4	-	16	20	66	0
Acrolein	0.023	0.032*	-	-39.1*	20	85	0
Methylene chloride	0.224	0.236	-	-5.4	20	63	0
Acetone	0.039	0.046*	-	-17.9	20	74	0
trans-1,2-Dichloroethene	0.213	0.214	-	-0.5	20	59	0
Methyl acetate	0.098	0.108	-	-10.2	20	65	0
Methyl tert-butyl ether	0.56	0.478	-	14.6	20	51	0
tert-Butyl alcohol	0.012	0.013*	-	-8.3	20	70	0
Diisopropyl ether	0.645	0.608	-	5.7	20	56	0
1,1-Dichloroethane	0.377	0.4	-	-6.1	20	62	0
Halothane	0.165	0.175	-	-6.1	20	64	0
Acrylonitrile	0.058	0.059	-	-1.7	20	61	-.01
Ethyl tert-butyl ether	0.626	0.588	-	6.1	20	56	0
Vinyl acetate	0.447	0.373	-	16.6	20	55	0
cis-1,2-Dichloroethene	0.242	0.249	-	-2.9	20	60	0
2,2-Dichloropropane	0.31	0.282	-	9	20	54	-.01
Bromochloromethane	0.112	0.125	-	-11.6	20	65	-.01
Cyclohexane	0.311	0.355	-	-14.1	20	70	-.01
Chloroform	0.394	0.431	-	-9.4	20	65	0
Ethyl acetate	0.166	0.154	-	7.2	20	61	0
Carbon tetrachloride	0.294	0.322	-	-9.5	20	65	0
Tetrahydrofuran	0.04	0.04*	-	0	20	62	-.01
Dibromofluoromethane	0.255	0.268	-	-5.1	20	61	-.01
1,1,1-Trichloroethane	0.344	0.369	-	-7.3	20	63	-.01
2-Butanone	0.068	0.067*	-	1.5	20	69	-.01
1,1-Dichloropropene	0.275	0.296	-	-7.6	20	63	0
Benzene	0.859	0.914	-	-6.4	20	62	0
tert-Amyl methyl ether	0.576	0.485	-	15.8	20	51	0
1,2-Dichloroethane-d4	0.287	0.309	-	-7.7	20	63	0
1,2-Dichloroethane	0.295	0.327	-	-10.8	20	67	0
Methyl cyclohexane	0.33	0.357	-	-8.2	20	62	0
Trichloroethene	0.229	0.253	-	-10.5	20	65	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Instrument ID : VOA108
 Lab File ID : V08190313N02
 Sample No : WG1215584-2
 Channel :

Lab Number : L1909107
 Project Number : 170329301
 Calibration Date : 03/13/19 18:42
 Init. Calib. Date(s) : 02/18/19 02/18/19
 Init. Calib. Times : 20:23 23:40

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Dibromomethane	0.134	0.145	-	-8.2	20	63	0
1,2-Dichloropropane	0.223	0.229	-	-2.7	20	61	-.01
2-Chloroethyl vinyl ether	0.127	0.106	-	16.5	20	49	0
Bromodichloromethane	0.312	0.326	-	-4.5	20	61	-.01
1,4-Dioxane	0.00097	0.00124*	-	-27.8*	20	73	0
cis-1,3-Dichloropropene	0.35	0.346	-	1.1	20	59	0
Chlorobenzene-d5	1	1	-	0	20	56	0
Toluene-d8	1.371	1.367	-	0.3	20	57	0
Toluene	0.779	0.829	-	-6.4	20	61	0
4-Methyl-2-pentanone	0.088	0.079*	-	10.2	20	52	0
Tetrachloroethene	0.335	0.341	-	-1.8	20	59	0
trans-1,3-Dichloropropene	0.44	0.448	-	-1.8	20	60	0
Ethyl methacrylate	0.349	0.251	-	28.1*	20	43	0
1,1,2-Trichloroethane	0.223	0.254	-	-13.9	20	66	0
Chlorodibromomethane	0.329	0.345	-	-4.9	20	62	0
1,3-Dichloropropane	0.451	0.504	-	-11.8	20	65	0
1,2-Dibromoethane	0.266	0.278	-	-4.5	20	61	0
2-Hexanone	0.152	0.121	-	20.4*	20	49	0
Chlorobenzene	0.867	0.907	-	-4.6	20	60	0
Ethylbenzene	1.453	1.451	-	0.1	20	56	0
1,1,1,2-Tetrachloroethane	0.325	0.339	-	-4.3	20	61	0
p/m Xylene	0.553	0.552	-	0.2	20	56	0
o Xylene	0.547	0.527	-	3.7	20	54	0
Styrene	0.874	0.897	-	-2.6	20	56	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	59	0
Bromoform	0.416	0.426	-	-2.4	20	62	0
Isopropylbenzene	2.919	2.989	-	-2.4	20	58	0
4-Bromofluorobenzene	0.978	0.898	-	8.2	20	52	0
Bromobenzene	0.751	0.726	-	3.3	20	56	0
n-Propylbenzene	3.333	3.537	-	-6.1	20	59	0
1,4-Dichlorobutane	0.892	0.865	-	3	20	58	0
1,1,2,2-Tetrachloroethane	0.678	0.687	-	-1.3	20	60	0
4-Ethyltoluene	2.776	2.885	-	-3.9	20	60	0
2-Chlorotoluene	2.432	2.395	-	1.5	20	57	0
1,3,5-Trimethylbenzene	2.397	2.393	-	0.2	20	59	0
1,2,3-Trichloropropane	0.527	0.58	-	-10.1	20	66	0
trans-1,4-Dichloro-2-buten	0.186	0.169	-	9.1	20	62	0
4-Chlorotoluene	2.116	2.235	-	-5.6	20	61	0
tert-Butylbenzene	2.463	2.14	-	13.1	20	51	0
1,2,4-Trimethylbenzene	2.385	2.284	-	4.2	20	57	0
sec-Butylbenzene	3.017	3.195	-	-5.9	20	59	0
p-Isopropyltoluene	2.59	2.56	-	1.2	20	57	0
1,3-Dichlorobenzene	1.385	1.469	-	-6.1	20	62	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN
 Instrument ID : VOA108
 Lab File ID : V08190313N02
 Sample No : WG1215584-2
 Channel :

Lab Number : L1909107
 Project Number : 170329301
 Calibration Date : 03/13/19 18:42
 Init. Calib. Date(s) : 02/18/19 02/18/19
 Init. Calib. Times : 20:23 23:40

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene	1.435	1.496	-	-4.3	20	63	0
p-Diethylbenzene	1.516	1.256	-	17.2	20	49	0
n-Butylbenzene	2.402	2.296	-	4.4	20	56	0
1,2-Dichlorobenzene	1.351	1.395	-	-3.3	20	62	0
1,2,4,5-Tetramethylbenzene	10	3.204	-	68*	20	19	0
1,2-Dibromo-3-chloropropan	0.102	0.093	-	8.8	20	57	0
1,3,5-Trichlorobenzene	0.93	0.653	-	29.8*	20	41	0
Hexachlorobutadiene	0.436	0.377	-	13.5	20	51	0
1,2,4-Trichlorobenzene	0.848	0.477	-	43.8*	20	34	0
Naphthalene	1.867	1.048	-	43.9*	20	33	0
1,2,3-Trichlorobenzene	0.766	0.417	-	45.6*	20	33	0

* Value outside of QC limits.



Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-2
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 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	57	0.00
2 TP	Dichlorodifluoromethane	0.200	0.201	-0.5	61	0.00
3 TP	Chloromethane	0.197	0.210	-6.6	61	0.00
4 TC	Vinyl chloride	0.210	0.237	-12.9	65	0.00
5 TP	Bromomethane	0.181	0.186	-2.8	61	0.00
6 TP	Chloroethane	0.154	0.205	-33.1#	86	0.00
7 TP	Trichlorofluoromethane	0.339	0.403	-18.9	72	0.00
8 TP	Ethyl ether	0.113	0.112	0.9	60	0.00
10 TC	1,1-Dichloroethene	0.188	0.190	-1.1	60	0.00
11 TP	Carbon disulfide	0.591	0.607	-2.7	61	0.00
12 TP	Freon-113	0.173	0.210	-21.4#	73	0.00
13 TP	Iodomethane	* 10.000	8.400	16.0	66	0.00
14 TP	Acrolein	0.023	0.032#	-39.1#	85	0.00
15 TP	Methylene chloride	0.224	0.236	-5.4	63	0.00
17 TP	Acetone	0.039	0.046#	-17.9	74	0.00
18 TP	trans-1,2-Dichloroethene	0.213	0.214	-0.5	59	0.00
19 TP	Methyl acetate	0.098	0.108	-10.2	65	0.00
20 TP	Methyl tert-butyl ether	0.560	0.478	14.6	51	0.00
21 TP	tert-Butyl alcohol	0.012	0.013#	-8.3	70	0.00
22 TP	Diisopropyl ether	0.645	0.608	5.7	56	0.00
23 TP	1,1-Dichloroethane	0.377	0.400	-6.1	62	0.00
24 TP	Halothane	0.165	0.175	-6.1	64	0.00
25 TP	Acrylonitrile	0.058	0.059	-1.7	61	-0.01
26 TP	Ethyl tert-butyl ether	0.626	0.588	6.1	56	0.00
27 TP	Vinyl acetate	0.447	0.373	16.6	55	0.00
28 TP	cis-1,2-Dichloroethene	0.242	0.249	-2.9	60	0.00
29 TP	2,2-Dichloropropane	0.310	0.282	9.0	54	-0.01
30 TP	Bromochloromethane	0.112	0.125	-11.6	65	-0.01
31 TP	Cyclohexane	0.311	0.355	-14.1	70	-0.01
32 TC	Chloroform	0.394	0.431	-9.4	65	0.00
33 TP	Ethyl acetate	0.166	0.154	7.2	61	0.00
34 TP	Carbon tetrachloride	0.294	0.322	-9.5	65	0.00
35 TP	Tetrahydrofuran	0.040	0.040#	0.0	62	-0.01
36 S	Dibromofluoromethane	0.255	0.268	-5.1	61	-0.01
37 TP	1,1,1-Trichloroethane	0.344	0.369	-7.3	63	-0.01
39 TP	2-Butanone	0.068	0.067#	1.5	69	-0.01
40 TP	1,1-Dichloropropene	0.275	0.296	-7.6	63	0.00
41 TP	Benzene	0.859	0.914	-6.4	62	0.00
42 TP	tert-Amyl methyl ether	0.576	0.485	15.8	51	0.00

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-2
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 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	0.287	0.309	-7.7	63	0.00
44 TP	1,2-Dichloroethane	0.295	0.327	-10.8	67	0.00
47 TP	Methyl cyclohexane	0.330	0.357	-8.2	62	0.00
48 TP	Trichloroethene	0.229	0.253	-10.5	65	0.00
50 TP	Dibromomethane	0.134	0.145	-8.2	63	0.00
51 TC	1,2-Dichloropropane	0.223	0.229	-2.7	61	-0.01
53 TP	2-Chloroethyl vinyl ether	0.127	0.106	16.5	49#	0.00
54 TP	Bromodichloromethane	0.312	0.326	-4.5	61	-0.01
57 TP	1,4-Dioxane	0.00097	0.00124#	-27.8#	73	0.00
58 TP	cis-1,3-Dichloropropene	0.350	0.346	1.1	59	0.00
59 I	Chlorobenzene-d5	1.000	1.000	0.0	56	0.00
60 S	Toluene-d8	1.371	1.367	0.3	57	0.00
61 TC	Toluene	0.779	0.829	-6.4	61	0.00
62 TP	4-Methyl-2-pentanone	0.088	0.079#	10.2	52	0.00
63 TP	Tetrachloroethene	0.335	0.341	-1.8	59	0.00
65 TP	trans-1,3-Dichloropropene	0.440	0.448	-1.8	60	0.00
67 TP	Ethyl methacrylate	0.349	0.251	28.1#	43#	0.00
68 TP	1,1,2-Trichloroethane	0.223	0.254	-13.9	66	0.00
69 TP	Chlorodibromomethane	0.329	0.345	-4.9	62	0.00
70 TP	1,3-Dichloropropane	0.451	0.504	-11.8	65	0.00
71 TP	1,2-Dibromoethane	0.266	0.278	-4.5	61	0.00
72 TP	2-Hexanone	0.152	0.121	20.4#	49#	0.00
73 TP	Chlorobenzene	0.867	0.907	-4.6	60	0.00
74 TC	Ethylbenzene	1.453	1.451	0.1	56	0.00
75 TP	1,1,1,2-Tetrachloroethane	0.325	0.339	-4.3	61	0.00
76 TP	p/m Xylene	0.553	0.552	0.2	56	0.00
77 TP	o Xylene	0.547	0.527	3.7	54	0.00
78 TP	Styrene	0.874	0.897	-2.6	56	0.00
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	59	0.00
80 TP	Bromoform	0.416	0.426	-2.4	62	0.00
82 TP	Isopropylbenzene	2.919	2.989	-2.4	58	0.00
83 S	4-Bromofluorobenzene	0.978	0.898	8.2	52	0.00
84 TP	Bromobenzene	0.751	0.726	3.3	56	0.00
85 TP	n-Propylbenzene	3.333	3.537	-6.1	59	0.00
86 TP	1,4-Dichlorobutane	0.892	0.865	3.0	58	0.00
87 TP	1,1,2,2-Tetrachloroethane	0.678	0.687	-1.3	60	0.00
88 TP	4-Ethyltoluene	2.776	2.885	-3.9	60	0.00

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-2
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 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 TP	2-Chlorotoluene	2.432	2.395	1.5	57	0.00
90 TP	1,3,5-Trimethylbenzene	2.397	2.393	0.2	59	0.00
91 TP	1,2,3-Trichloropropane	0.527	0.580	-10.1	66	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.186	0.169	9.1	62	0.00
93 TP	4-Chlorotoluene	2.116	2.235	-5.6	61	0.00
94 TP	tert-Butylbenzene	2.463	2.140	13.1	51	0.00
97 TP	1,2,4-Trimethylbenzene	2.385	2.284	4.2	57	0.00
98 TP	sec-Butylbenzene	3.017	3.195	-5.9	59	0.00
99 TP	p-Isopropyltoluene	2.590	2.560	1.2	57	0.00
100 TP	1,3-Dichlorobenzene	1.385	1.469	-6.1	62	0.00
101 TP	1,4-Dichlorobenzene	1.435	1.496	-4.3	63	0.00
102 TP	p-Diethylbenzene	1.516	1.256	17.2	49#	0.00
103 TP	n-Butylbenzene	2.402	2.296	4.4	56	0.00
104 TP	1,2-Dichlorobenzene	1.351	1.395	-3.3	62	0.00
105 TP	1,2,4,5-Tetramethylbenzene *	10.000	3.204	68.0#	19#	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.102	0.093	8.8	57	0.00
107 TP	1,3,5-Trichlorobenzene	0.930	0.653	29.8#	41#	0.00
108 TP	Hexachlorobutadiene	0.436	0.377	13.5	51	0.00
109 TP	1,2,4-Trichlorobenzene	0.848	0.477	43.8#	34#	0.00
110 TP	Naphthalene	1.867	1.048	43.9#	33#	0.00
111 TP	1,2,3-Trichlorobenzene	0.766	0.417	45.6#	33#	0.00

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 7 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-2
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	302021	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery	=	100.00%	
59) Chlorobenzene-d5	8.526	117	206709	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery	=	100.00%	
79) 1,4-Dichlorobenzene-d4	10.007	152	100898	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery	=	100.00%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.572	113	81069	10.509	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.09%	
43) 1,2-Dichloroethane-d4	5.208	65	93402	10.772	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	107.72%	
60) Toluene-d8	7.241	98	282582	9.974	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.74%	
83) 4-Bromofluorobenzene	9.340	95	90653	9.182	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	91.82%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.975	85	60779	10.070	ug/L	98
3) Chloromethane	1.094	50	63363	10.658	ug/L	99
4) Vinyl chloride	1.150	62	71701	11.293	ug/L	96
5) Bromomethane	1.359	94	56273	10.292	ug/L	95
6) Chloroethane	1.443	64	61991	13.351	ug/L	96
7) Trichlorofluoromethane	1.543	101	121795	11.883	ug/L	97
8) Ethyl ether	1.783	74	33730	9.878	ug/L	68
10) 1,1-Dichloroethene	1.914	96	57329	10.096	ug/L	# 67
11) Carbon disulfide	1.920	76	183477	10.280	ug/L	96
12) Freon-113	1.959	101	63432	12.116	ug/L	97
13) Iodomethane	2.017	142	47815	8.400	ug/L	90
14) Acrolein	2.196	56	9590	13.602	ug/L	96
15) Methylene chloride	2.408	84	71404	10.556	ug/L	70
17) Acetone	2.466	43	13863	11.808	ug/L	# 72
18) trans-1,2-Dichloroethene	2.558	96	64734	10.049	ug/L	75
19) Methyl acetate	2.598	43	32581	11.033	ug/L	# 88
20) Methyl tert-butyl ether	2.690	73	144331	8.530	ug/L	92
21) tert-Butyl alcohol	2.829	59	19104	52.868	ug/L	# 78
22) Diisopropyl ether	3.125	45	183560	9.418	ug/L	# 87
23) 1,1-Dichloroethane	3.208	63	120748	10.597	ug/L	97
24) Halothane	3.356	117	52952	10.652	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-2
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	3.270	53	17919	10.142	ug/L	94
26) Ethyl tert-butyl ether	3.576	59	177736	9.405	ug/L	92
27) Vinyl acetate	3.582	43	112677	8.340	ug/L #	92
28) cis-1,2-Dichloroethene	3.908	96	75253	10.293	ug/L #	69
29) 2,2-Dichloropropane	4.048	77	85062	9.085	ug/L	92
30) Bromochloromethane	4.181	128	37729	11.165	ug/L #	54
31) Cyclohexane	4.154	56	107155	11.408	ug/L #	65
32) Chloroform	4.340	83	130091	10.933	ug/L	97
33) Ethyl acetate	4.577	43	46589M1	9.302	ug/L	
34) Carbon tetrachloride	4.460	117	97282	10.942	ug/L	99
35) Tetrahydrofuran	4.519	42	11994	9.909	ug/L #	71
37) 1,1,1-Trichloroethane	4.552	97	111528	10.748	ug/L #	97
39) 2-Butanone	4.759	43	20302	9.896	ug/L #	82
40) 1,1-Dichloropropene	4.728	75	89405	10.764	ug/L	95
41) Benzene	5.035	78	276186	10.650	ug/L	90
42) tert-Amyl methyl ether	5.255	73	146490	8.427	ug/L	88
44) 1,2-Dichloroethane	5.289	62	98737	11.066	ug/L	96
47) Methyl cyclohexane	5.707	83	107685	10.810	ug/L #	71
48) Trichloroethene	5.743	95	76395	11.063	ug/L	96
50) Dibromomethane	6.186	93	43678	10.787	ug/L	97
51) 1,2-Dichloropropane	6.298	63	69057	10.268	ug/L	97
53) 2-Chloroethyl vinyl ether	7.048	63	32133	8.382	ug/L	88
54) Bromodichloromethane	6.404	83	98548	10.448	ug/L	99
57) 1,4-Dioxane	6.630	88	18782	638.596	ug/L #	77
58) cis-1,3-Dichloropropene	7.062	75	104424	9.878	ug/L	92
61) Toluene	7.288	92	171435	10.641	ug/L	97
62) 4-Methyl-2-pentanone	7.687	58	16247	8.945	ug/L #	97
63) Tetrachloroethene	7.639	166	70586	10.204	ug/L	91
65) trans-1,3-Dichloropropene	7.706	75	92516	10.172	ug/L	94
67) Ethyl methacrylate	7.893	69	51963	7.204	ug/L	98
68) 1,1,2-Trichloroethane	7.835	83	52416	11.357	ug/L	94
69) Chlorodibromomethane	7.968	129	71380	10.512	ug/L	98
70) 1,3-Dichloropropane	8.044	76	104234	11.187	ug/L	100
71) 1,2-Dibromoethane	8.127	107	57526	10.478	ug/L	96
72) 2-Hexanone	8.364	43	24970	7.942	ug/L	94
73) Chlorobenzene	8.537	112	187460	10.461	ug/L	90
74) Ethylbenzene	8.576	91	299929	9.985	ug/L	98
75) 1,1,1,2-Tetrachloroethane	8.596	131	70061	10.445	ug/L	94
76) p/m Xylene	8.682	106	228345	19.986	ug/L	97
77) o Xylene	8.964	106	217748	19.249	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-2
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.003	104	370863	20.525	ug/L	89
80)	Bromoform	9.006	173	42957	10.228	ug/L	95
82)	Isopropylbenzene	9.173	105	301620	10.240	ug/L	96
84)	Bromobenzene	9.396	156	73271	9.666	ug/L	97
85)	n-Propylbenzene	9.432	91	356917	10.615	ug/L	96
86)	1,4-Dichlorobutane	9.435	55	87271	9.694	ug/L	98
87)	1,1,2,2-Tetrachloroethane	9.483	83	69307	10.131	ug/L	98
88)	4-Ethyltoluene	9.502	105	291106	10.395	ug/L	97
89)	2-Chlorotoluene	9.513	91	241642	9.846	ug/L	94
90)	1,3,5-Trimethylbenzene	9.555	105	241486	9.986	ug/L	93
91)	1,2,3-Trichloropropane	9.552	75	58561	11.018	ug/L	99
92)	trans-1,4-Dichloro-2-b...	9.583	53	17067	9.114	ug/L	93
93)	4-Chlorotoluene	9.617	91	225476	10.561	ug/L	95
94)	tert-Butylbenzene	9.742	119	215895	8.688	ug/L	96
97)	1,2,4-Trimethylbenzene	9.784	105	230470	9.577	ug/L	95
98)	sec-Butylbenzene	9.845	105	322416	10.591	ug/L	99
99)	p-Isopropyltoluene	9.932	119	258281	9.883	ug/L	96
100)	1,3-Dichlorobenzene	9.962	146	148192	10.603	ug/L	98
101)	1,4-Dichlorobenzene	10.015	146	150989	10.431	ug/L	99
102)	p-Diethylbenzene	10.144	119	126695	8.283	ug/L	95
103)	n-Butylbenzene	10.174	91	231697	9.559	ug/L	99
104)	1,2-Dichlorobenzene	10.255	146	140796	10.328	ug/L	96
105)	1,2,4,5-Tetramethylben...	10.598	119	69079	3.204	ug/L	94
106)	1,2-Dibromo-3-chloropr...	10.710	155	9430	9.206	ug/L	87
107)	1,3,5-Trichlorobenzene	10.726	180	65885	7.020	ug/L	95
108)	Hexachlorobutadiene	11.075	225	38059	8.655	ug/L	98
109)	1,2,4-Trichlorobenzene	11.089	180	48079	5.619	ug/L	96
110)	Naphthalene	11.270	128	105744	5.614	ug/L	100
111)	1,2,3-Trichlorobenzene	11.371	180	42031	5.435	ug/L	98

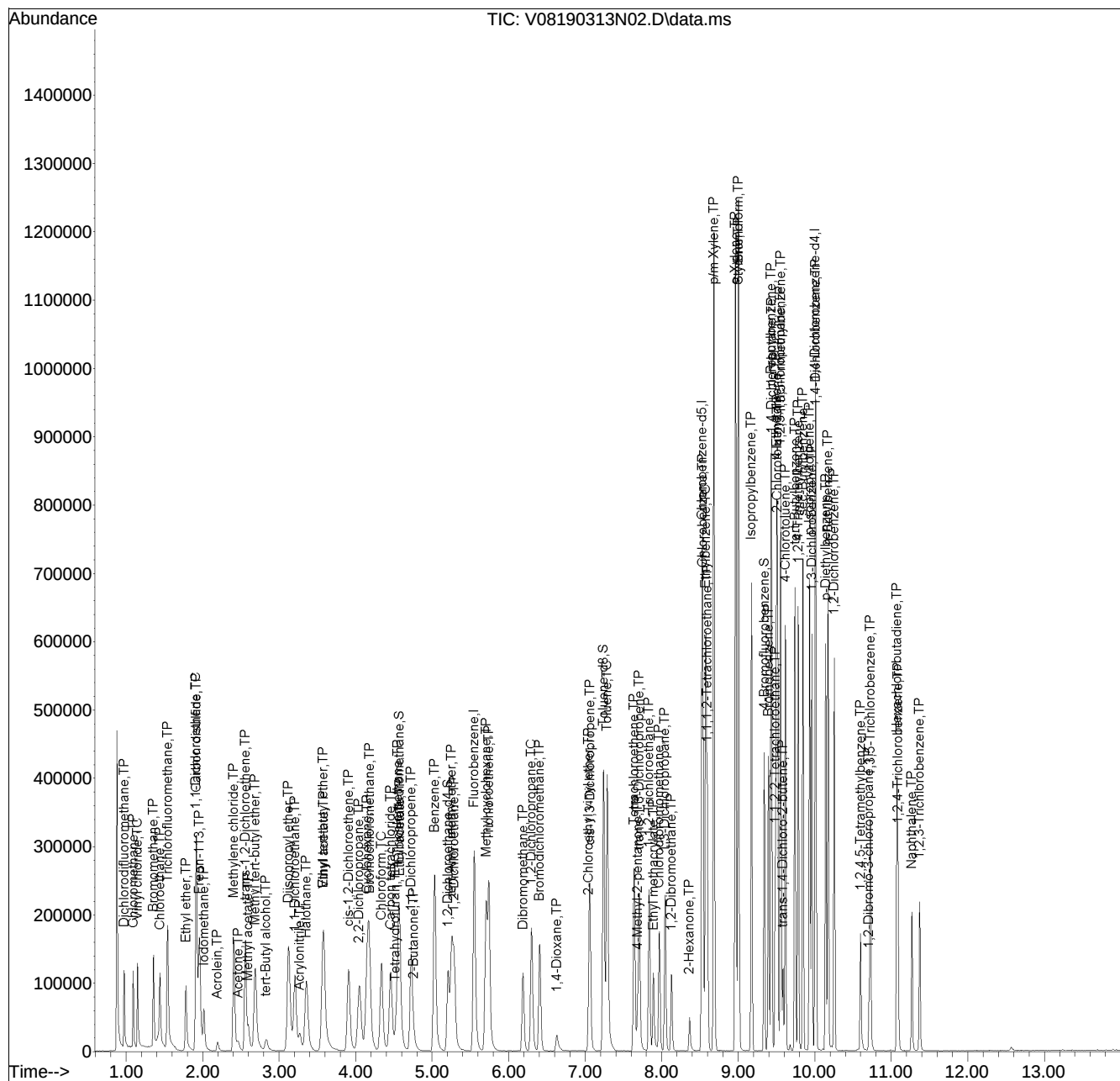
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
Data File : V08190313N02.D
Acq On : 13 Mar 2019 6:42 pm
Operator : VOA108:KJD
Sample : WG1215584-2
Misc : WG1215584,ICAL15519
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Feb 19 00:08:39 2019
Response via : Initial Calibration

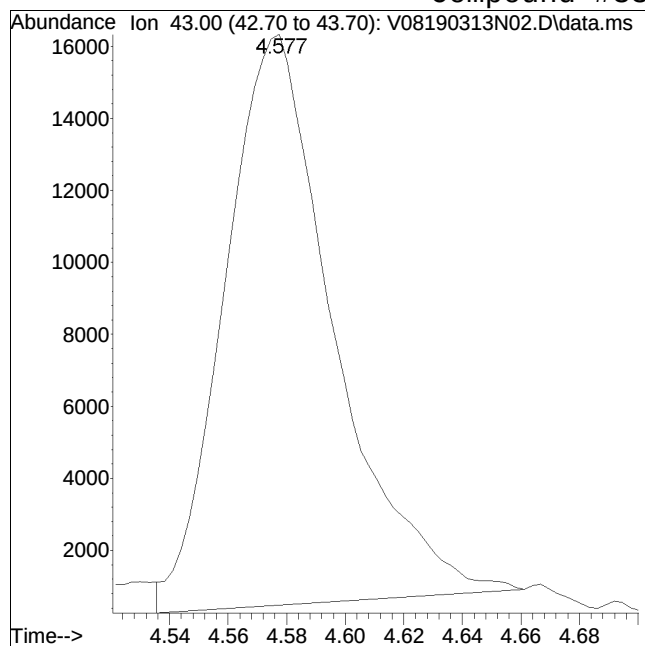
Sub List : 8260-Curve - Megamix plus Diox90313N\V08190313N02.D•



Manual Integration Report

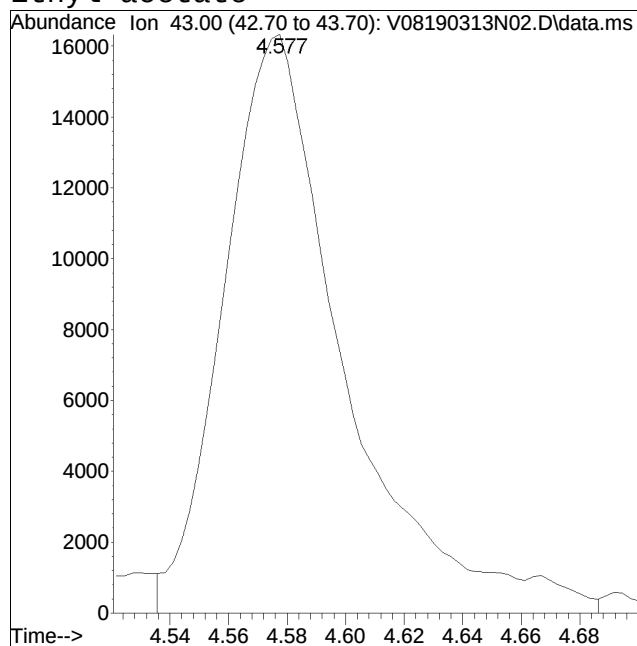
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190313N02.D Operator : VOA108:KJD
Date Inj'd : 3/13/2019 6:42 pm Instrument : VOA 108
Sample : WG1215584-2 Quant Date : 3/13/2019 6:57 pm

Compound #33: Ethyl acetate



Original Peak Response = 41049

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



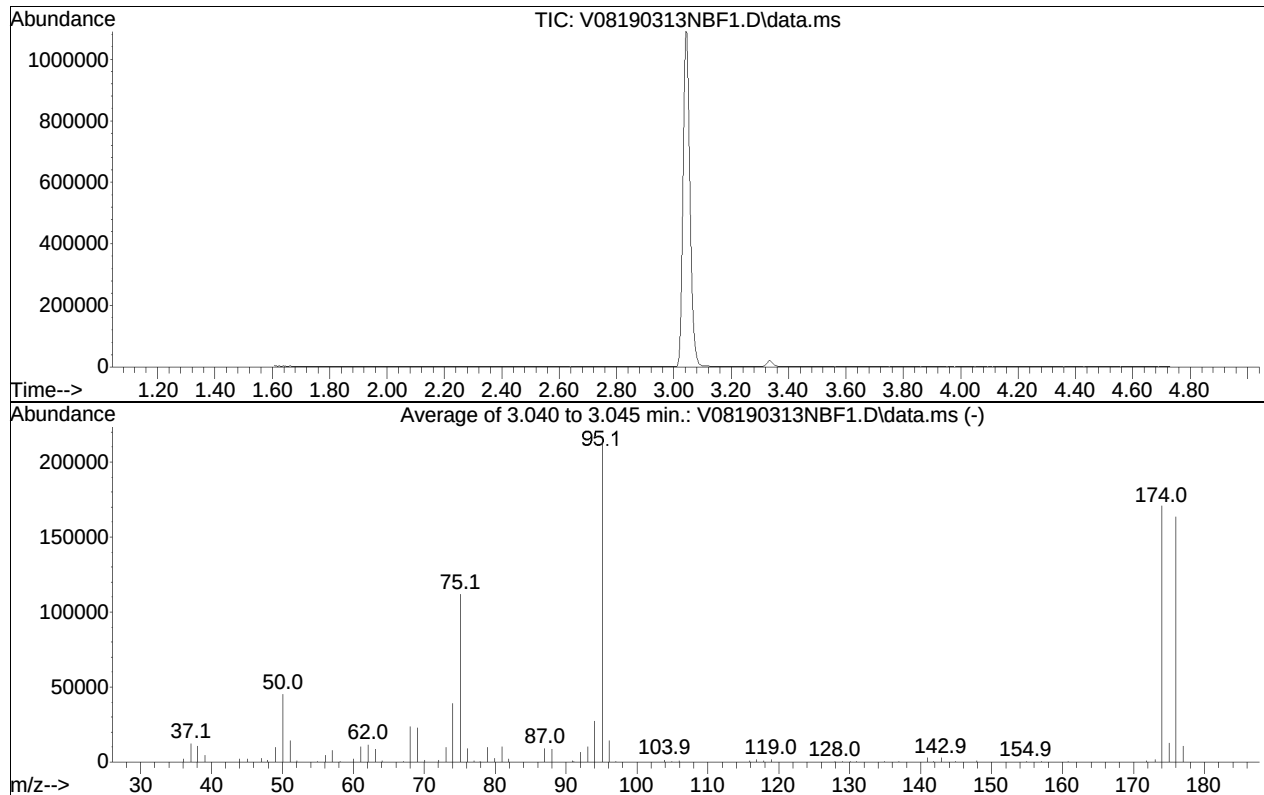
Manual Peak Response = 46589 M1

BFB

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313NBF1.D
 Acq On : 13 Mar 2019 6:00 pm
 Operator : VOA108:KJD
 Sample : WG1215584-1
 Misc : WG1215584
 ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Tue Feb 19 00:08:39 2019



AutoFind: Scans 515, 516, 517; Background Corrected with Scan 501

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.3	45328	PASS
75	95	30	60	52.6	112059	PASS
95	95	100	100	100.0	212907	PASS
96	95	5	9	6.8	14529	PASS
173	174	0.00	2	1.0	1754	PASS
174	95	50	100	80.2	170667	PASS
175	174	5	9	7.5	12772	PASS
176	174	95	101	95.9	163691	PASS
177	176	5	9	6.6	10835	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N05.D
 Acq On : 13 Mar 2019 7:48 pm
 Operator : VOA108:KJD
 Sample : WG1215584-5,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 13 20:16:52 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	277807	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery	=	91.98%	
59) Chlorobenzene-d5	8.526	117	182593	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery	=	88.33%	
79) 1,4-Dichlorobenzene-d4	10.010	152	73611	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery	=	72.96%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	76733	10.814	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	108.14%	
43) 1,2-Dichloroethane-d4	5.208	65	90412	11.336	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	113.36%	
60) Toluene-d8	7.240	98	238694	9.538	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	95.38%	
83) 4-Bromofluorobenzene	9.343	95	78262	10.866	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	108.66%	
Target Compounds						
2) Dichlorodifluoromethane	0.000		0		N.D.	
3) Chloromethane	0.000		0		N.D. d	
4) Vinyl chloride	0.000		0		N.D.	
5) Bromomethane	1.362	94	277		N.D.	
6) Chloroethane	0.000		0		N.D. d	
7) Trichlorofluoromethane	0.000		0		N.D. d	
8) Ethyl ether	0.000		0		N.D.	
10) 1,1-Dichloroethene	0.000		0		N.D.	
11) Carbon disulfide	0.000		0		N.D. d	
15) Methylene chloride	0.000		0		N.D. d	
17) Acetone	0.000		0		N.D. d	
18) trans-1,2-Dichloroethene	0.000		0		N.D.	
20) Methyl tert-butyl ether	0.000		0		N.D.	
23) 1,1-Dichloroethane	0.000		0		N.D.	
25) Acrylonitrile	0.000		0		N.D.	
27) Vinyl acetate	0.000		0		N.D.	
28) cis-1,2-Dichloroethene	0.000		0		N.D.	
29) 2,2-Dichloropropane	0.000		0		N.D.	
30) Bromochloromethane	0.000		0		N.D.	
32) Chloroform	0.000		0		N.D. d	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N05.D
 Acq On : 13 Mar 2019 7:48 pm
 Operator : VOA108:KJD
 Sample : WG1215584-5,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 13 20:16:52 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0		N.D.	
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
40) 1,1-Dichloropropene	0.000		0		N.D.	
41) Benzene	0.000		0		N.D.	
44) 1,2-Dichloroethane	0.000		0		N.D.	d
48) Trichloroethene	0.000		0		N.D.	d
50) Dibromomethane	0.000		0		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.	
61) Toluene	0.000		0		N.D.	d
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	0.000		0		N.D.	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.	
70) 1,3-Dichloropropane	0.000		0		N.D.	d
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	0.000		0		N.D.	d
73) Chlorobenzene	0.000		0		N.D.	d
74) Ethylbenzene	8.576	91	568		N.D.	
75) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
76) p/m Xylene	8.677	106	354		N.D.	
77) o Xylene	8.964	106	83		N.D.	
78) Styrene	9.006	104	574		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	d
84) Bromobenzene	0.000		0		N.D.	
85) n-Propylbenzene	9.432	91	787		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
88) 4-Ethyltoluene	9.502	105	504		N.D.	
89) 2-Chlorotoluene	0.000		0		N.D.	d
90) 1,3,5-Trimethylbenzene	0.000		0		N.D.	d
91) 1,2,3-Trichloropropane	0.000		0		N.D.	
92) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
93) 4-Chlorotoluene	9.619	91	604		N.D.	
94) tert-Butylbenzene	0.000		0		N.D.	d

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N05.D
 Acq On : 13 Mar 2019 7:48 pm
 Operator : VOA108:KJD
 Sample : WG1215584-5,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 13 20:16:52 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	0.000		0		N.D.	d
98)	sec-Butylbenzene	0.000		0		N.D.	d
99)	p-Isopropyltoluene	0.000		0		N.D.	d
100)	1,3-Dichlorobenzene	9.962	146	558		N.D.	
101)	1,4-Dichlorobenzene	10.015	146	633		N.D.	
102)	p-Diethylbenzene	10.149	119	185		N.D.	
103)	n-Butylbenzene	10.174	91	607		N.D.	
104)	1,2-Dichlorobenzene	10.258	146	318		N.D.	
105)	1,2,4,5-Tetramethylben...	0.000		0		N.D.	d
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	11.094	180	101		N.D.	
110)	Naphthalene	11.278	128	242		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

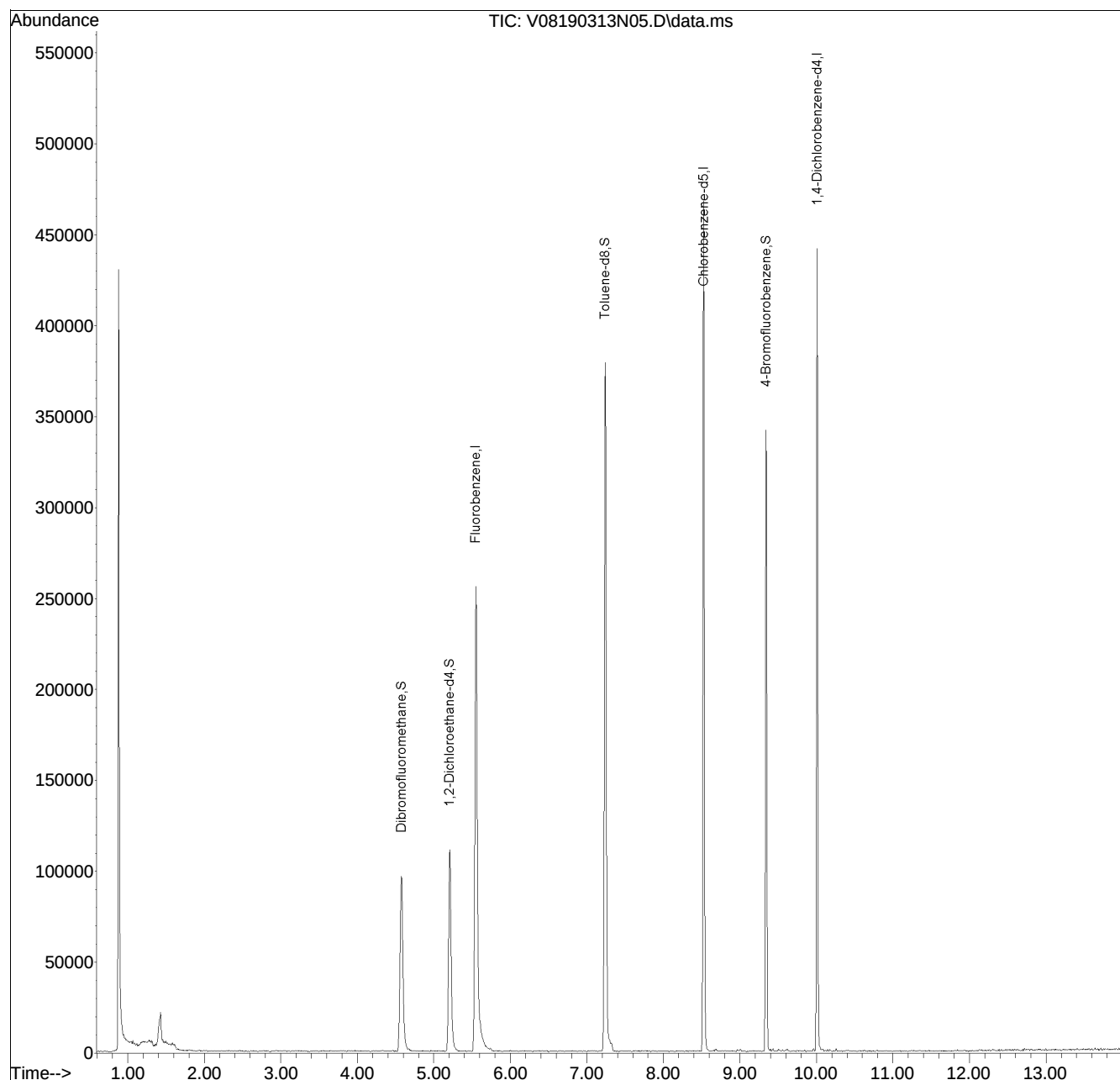
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N05.D
 Acq On : 13 Mar 2019 7:48 pm
 Operator : VOA108:KJD
 Sample : WG1215584-5,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 13 20:16:52 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox90313N\V08190313N02.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA108\2019\10	Method	: V108_190218N_8260.m
Data File	: V08190313N05.D	Operator	: VOA108:KJD
Date Inj'd	: 3/13/2019 7:48 pm	Instrument	: VOA 108
Sample	: WG1215584-5,31,10,10	Quant Date	: 3/13/2019 8:15 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-3,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	302021	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery	=	100.00%	
59) Chlorobenzene-d5	8.526	117	206709	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery	=	100.00%	
79) 1,4-Dichlorobenzene-d4	10.007	152	100898	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery	=	100.00%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.572	113	81069	10.509	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.09%	
43) 1,2-Dichloroethane-d4	5.208	65	93402	10.772	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	107.72%	
60) Toluene-d8	7.241	98	282582	9.974	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.74%	
83) 4-Bromofluorobenzene	9.340	95	90653	9.182	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	91.82%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.975	85	60779	10.070	ug/L	98
3) Chloromethane	1.094	50	63363	10.658	ug/L	99
4) Vinyl chloride	1.150	62	71701	11.293	ug/L	96
5) Bromomethane	1.359	94	56273	10.292	ug/L	95
6) Chloroethane	1.443	64	61991	13.351	ug/L	96
7) Trichlorofluoromethane	1.543	101	121795	11.883	ug/L	97
8) Ethyl ether	1.783	74	33730	9.878	ug/L	68
10) 1,1-Dichloroethene	1.914	96	57329	10.096	ug/L	# 67
11) Carbon disulfide	1.920	76	183477	10.280	ug/L	96
15) Methylene chloride	2.408	84	71404	10.556	ug/L	70
17) Acetone	2.466	43	13863	11.808	ug/L	# 72
18) trans-1,2-Dichloroethene	2.558	96	64734	10.049	ug/L	75
20) Methyl tert-butyl ether	2.690	73	144331	8.530	ug/L	92
23) 1,1-Dichloroethane	3.208	63	120748	10.597	ug/L	97
25) Acrylonitrile	3.270	53	17919	10.142	ug/L	94
27) Vinyl acetate	3.582	43	112677	8.340	ug/L	# 92
28) cis-1,2-Dichloroethene	3.908	96	75253	10.293	ug/L	# 69
29) 2,2-Dichloropropane	4.048	77	85062	9.085	ug/L	92
30) Bromochloromethane	4.181	128	37729	11.165	ug/L	# 54
32) Chloroform	4.340	83	130091	10.933	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-3,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34)	Carbon tetrachloride	4.460	117	97282	10.942	ug/L	99
37)	1,1,1-Trichloroethane	4.552	97	111528	10.748	ug/L #	97
39)	2-Butanone	4.759	43	20302	9.896	ug/L #	82
40)	1,1-Dichloropropene	4.728	75	89405	10.764	ug/L	95
41)	Benzene	5.035	78	276186	10.650	ug/L	90
44)	1,2-Dichloroethane	5.289	62	98737	11.066	ug/L	96
48)	Trichloroethene	5.743	95	76395	11.063	ug/L	96
50)	Dibromomethane	6.186	93	43678	10.787	ug/L	97
51)	1,2-Dichloropropane	6.298	63	69057	10.268	ug/L	97
54)	Bromodichloromethane	6.404	83	98548	10.448	ug/L	99
57)	1,4-Dioxane	6.630	88	18782	638.596	ug/L #	77
58)	cis-1,3-Dichloropropene	7.062	75	104424	9.878	ug/L	92
61)	Toluene	7.288	92	171435	10.641	ug/L	97
62)	4-Methyl-2-pentanone	7.687	58	16247	8.945	ug/L #	97
63)	Tetrachloroethene	7.639	166	70586	10.204	ug/L	91
65)	trans-1,3-Dichloropropene	7.706	75	92516	10.172	ug/L	94
68)	1,1,2-Trichloroethane	7.835	83	52416	11.357	ug/L	94
69)	Chlorodibromomethane	7.968	129	71380	10.512	ug/L	98
70)	1,3-Dichloropropane	8.044	76	104234	11.187	ug/L	100
71)	1,2-Dibromoethane	8.127	107	57526	10.478	ug/L	96
72)	2-Hexanone	8.364	43	24970	7.942	ug/L	94
73)	Chlorobenzene	8.537	112	187460	10.461	ug/L	90
74)	Ethylbenzene	8.576	91	299929	9.985	ug/L	98
75)	1,1,1,2-Tetrachloroethane	8.596	131	70061	10.445	ug/L	94
76)	p/m Xylene	8.682	106	228345	19.986	ug/L	97
77)	o Xylene	8.964	106	217748	19.249	ug/L	92
78)	Styrene	9.003	104	370863	20.525	ug/L	89
80)	Bromoform	9.006	173	42957	10.228	ug/L	95
82)	Isopropylbenzene	9.173	105	301620	10.240	ug/L	96
84)	Bromobenzene	9.396	156	73271	9.666	ug/L	97
85)	n-Propylbenzene	9.432	91	356917	10.615	ug/L	96
87)	1,1,2,2-Tetrachloroethane	9.483	83	69307	10.131	ug/L	98
88)	4-Ethyltoluene	9.502	105	291106	10.395	ug/L	97
89)	2-Chlorotoluene	9.513	91	241642	9.846	ug/L	94
90)	1,3,5-Trimethylbenzene	9.555	105	241486	9.986	ug/L	93
91)	1,2,3-Trichloropropane	9.552	75	58561	11.018	ug/L	99
92)	trans-1,4-Dichloro-2-b...	9.583	53	17067	9.114	ug/L	93
93)	4-Chlorotoluene	9.617	91	225476	10.561	ug/L	95
94)	tert-Butylbenzene	9.742	119	215895	8.688	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-3,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	9.784	105	230470	9.577	ug/L	95
98)	sec-Butylbenzene	9.845	105	322416	10.591	ug/L	99
99)	p-Isopropyltoluene	9.932	119	258281	9.883	ug/L	96
100)	1,3-Dichlorobenzene	9.962	146	148192	10.603	ug/L	98
101)	1,4-Dichlorobenzene	10.015	146	150989	10.431	ug/L	99
102)	p-Diethylbenzene	10.144	119	126695	8.283	ug/L	95
103)	n-Butylbenzene	10.174	91	231697	9.559	ug/L	99
104)	1,2-Dichlorobenzene	10.255	146	140796	10.328	ug/L	96
105)	1,2,4,5-Tetramethylben...	10.598	119	69079	3.204	ug/L	94
106)	1,2-Dibromo-3-chloropr...	10.710	155	9430	9.206	ug/L	87
108)	Hexachlorobutadiene	11.075	225	38059	8.655	ug/L	98
109)	1,2,4-Trichlorobenzene	11.089	180	48079	5.619	ug/L	96
110)	Naphthalene	11.270	128	105744	5.614	ug/L	100
111)	1,2,3-Trichlorobenzene	11.371	180	42031	5.435	ug/L	98

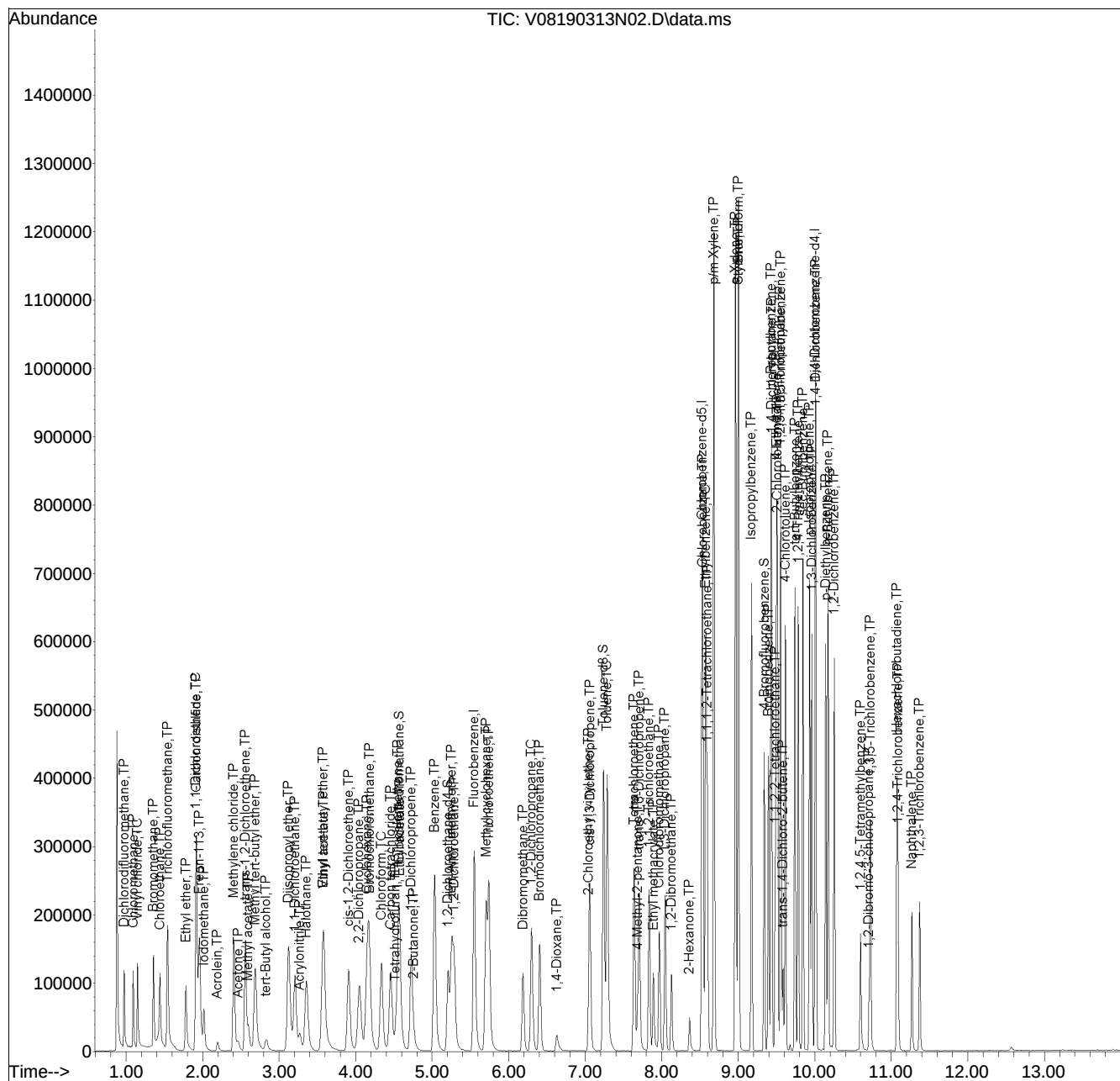
 (#) = qualifier out of range (m) = manual integration (+) = signals summed

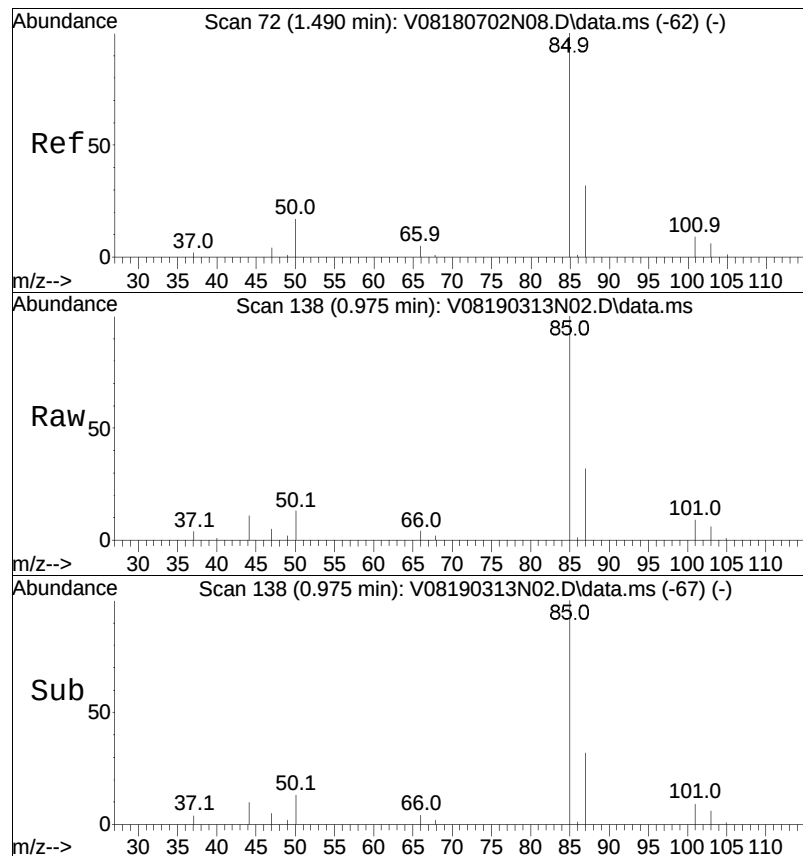
(QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
Data File : V08190313N02.D
Acq On : 13 Mar 2019 6:42 pm
Operator : VOA108:KJD
Sample : WG1215584-3, 31, 10, 10
Misc : WG1215584, ICAL15519
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Feb 19 00:08:39 2019
Response via : Initial Calibration

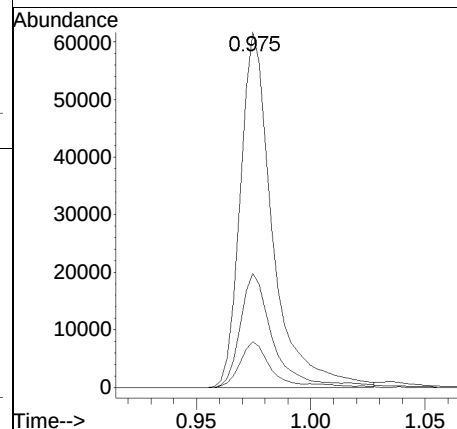
Sub List : 8260-Curve - Megamix plus Diox90313N\V08190313N02.D•

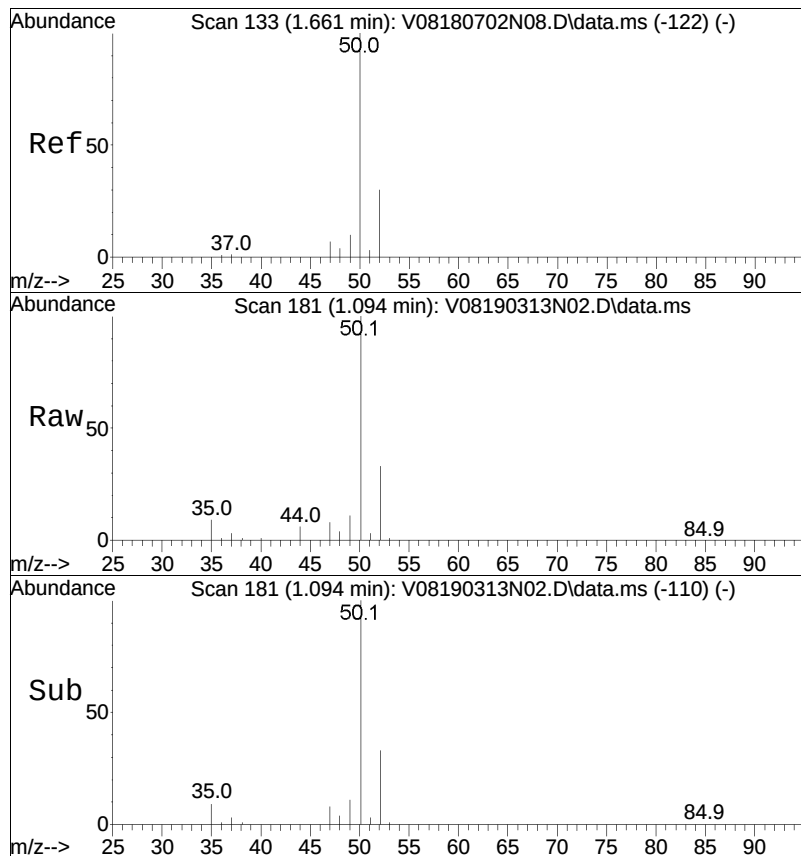




#2
 Dichlorodifluoromethane
 Concen: 10.07 ug/L
 RT: 0.975 min Scan# 138
 Delta R.T. -0.002 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

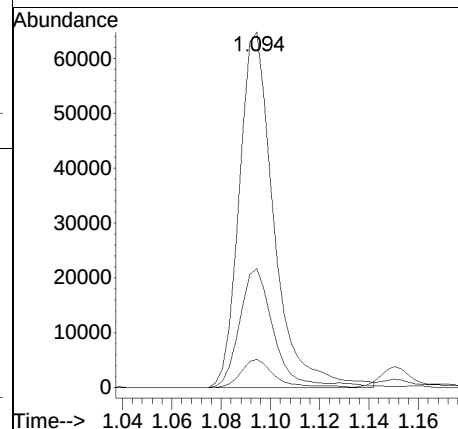
Tgt Ion:	85	Resp:	60779
Ion Ratio	Lower	Upper	
85	100		
87	33.2	21.0	43.6
50	12.8	8.9	18.5

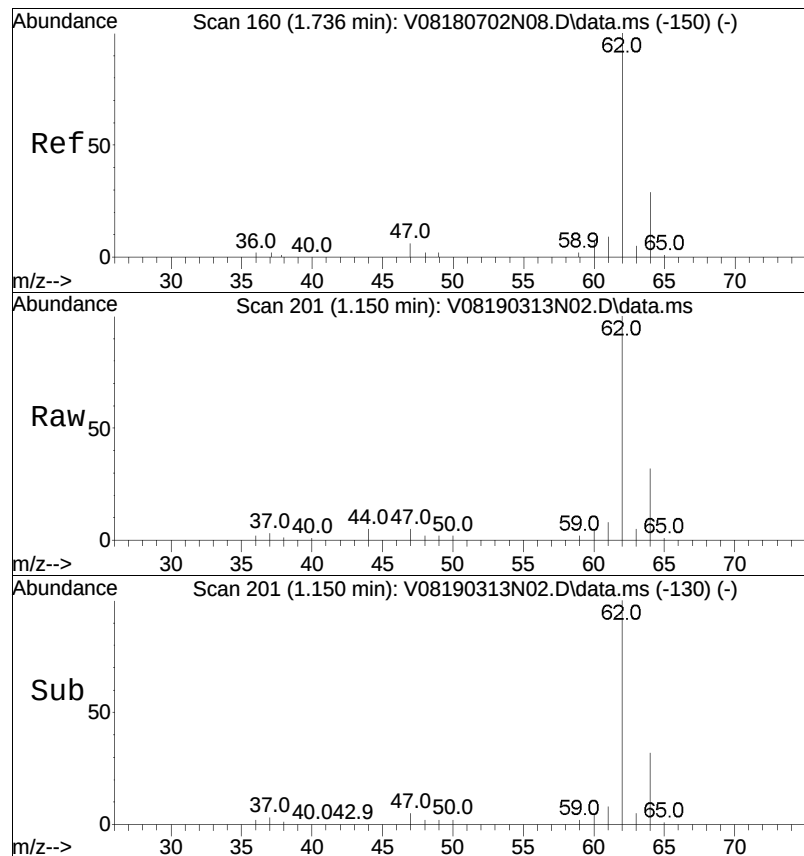




#3
 Chloromethane
 Concen: 10.66 ug/L
 RT: 1.094 min Scan# 181
 Delta R.T. -0.003 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

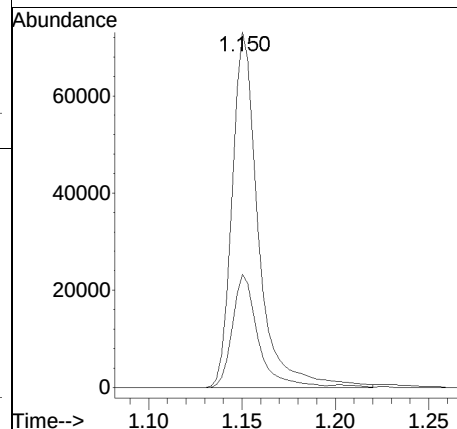
Tgt Ion:	50	Resp:	63363
Ion Ratio	Lower	Upper	
50	100		
52	33.3	12.9	52.9
47	7.6	0.0	28.3

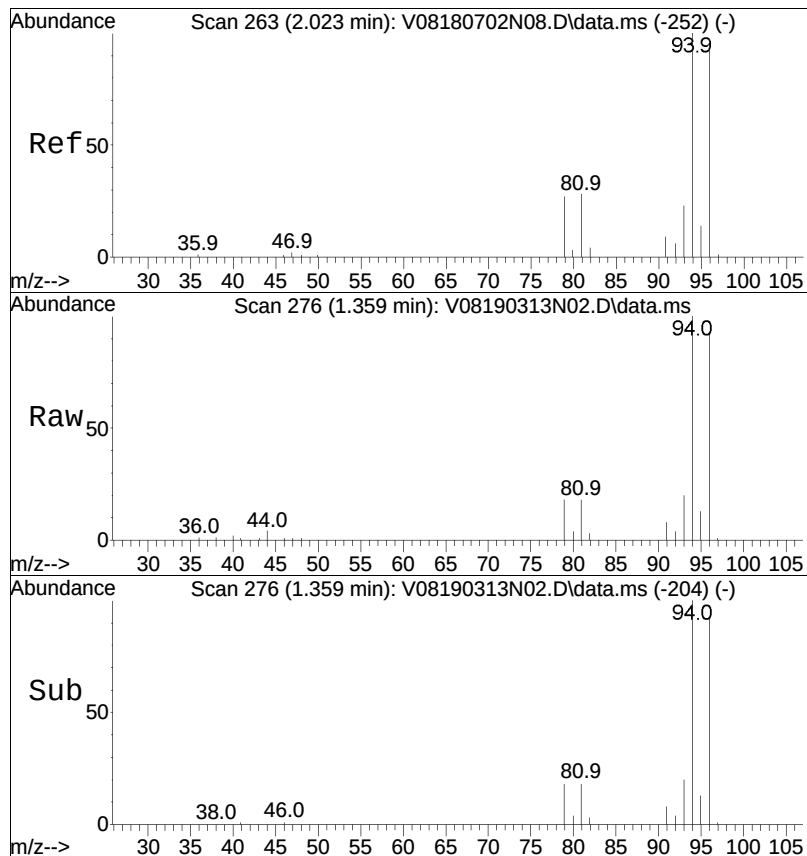




#4
 Vinyl chloride
 Concen: 11.29 ug/L
 RT: 1.150 min Scan# 201
 Delta R.T. -0.003 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

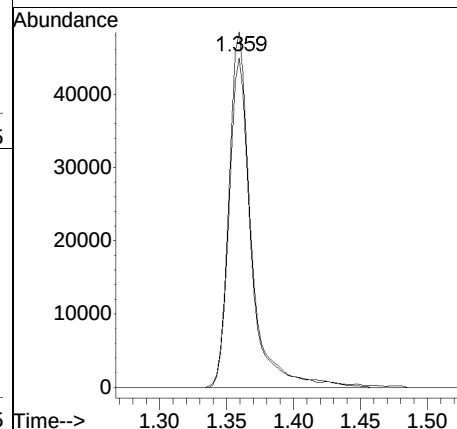
Tgt Ion	Ratio	Lower	Upper
62	100		
64	31.1	9.1	49.1

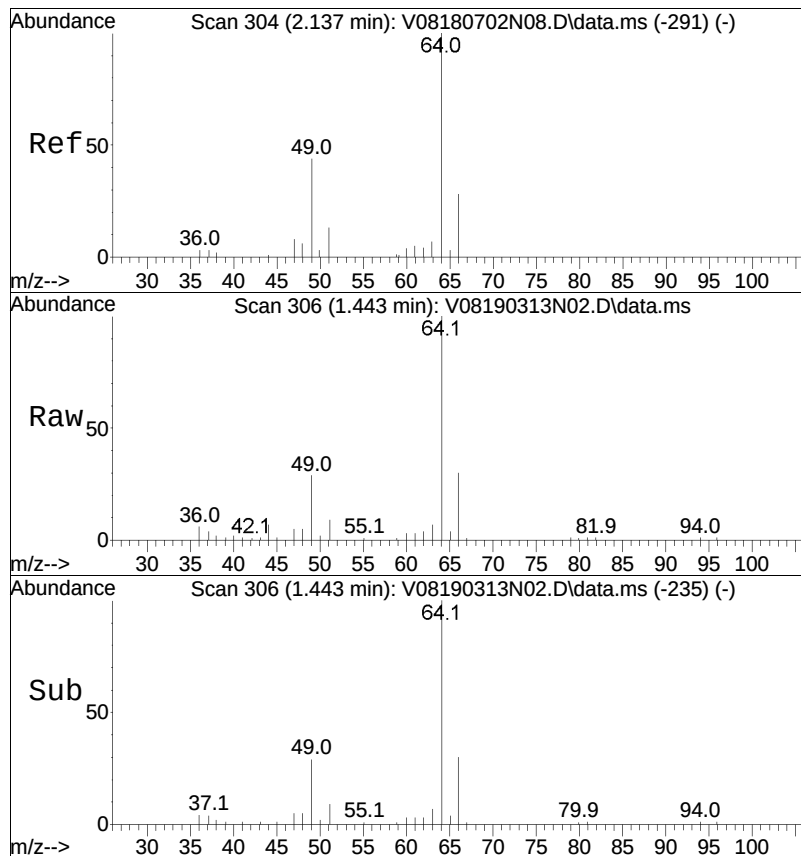




#5
 Bromomethane
 Concen: 10.29 ug/L
 RT: 1.359 min Scan# 276
 Delta R.T. 0.000 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

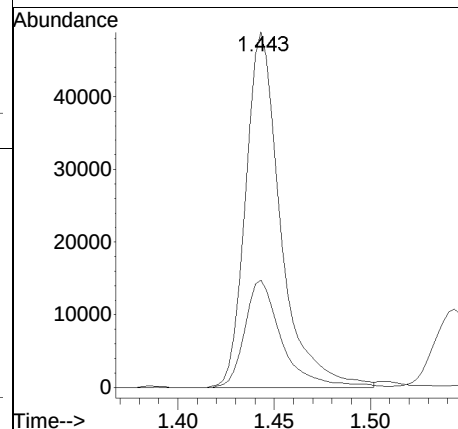
Tgt Ion: 94 Resp: 56273
 Ion Ratio Lower Upper
 94 100
 96 90.5 75.6 115.6

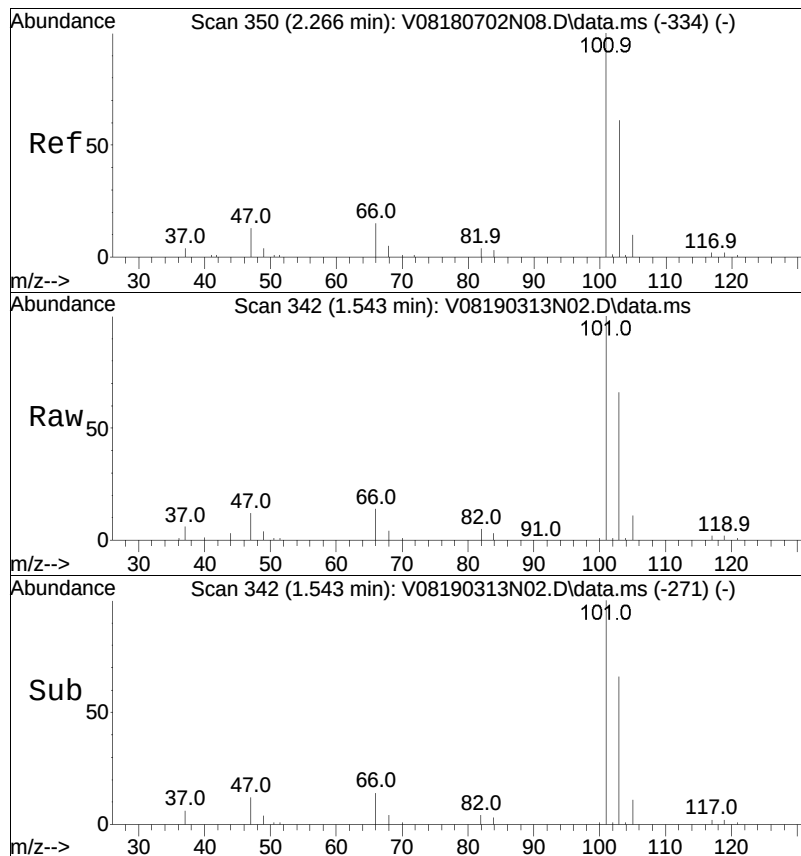




#6
 Chloroethane
 Concen: 13.35 ug/L
 RT: 1.443 min Scan# 306
 Delta R.T. -0.003 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

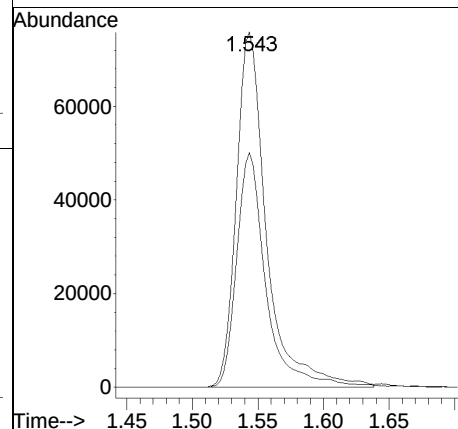
Tgt Ion	Ratio	Lower	Upper
64	100		
66	32.0	9.8	49.8

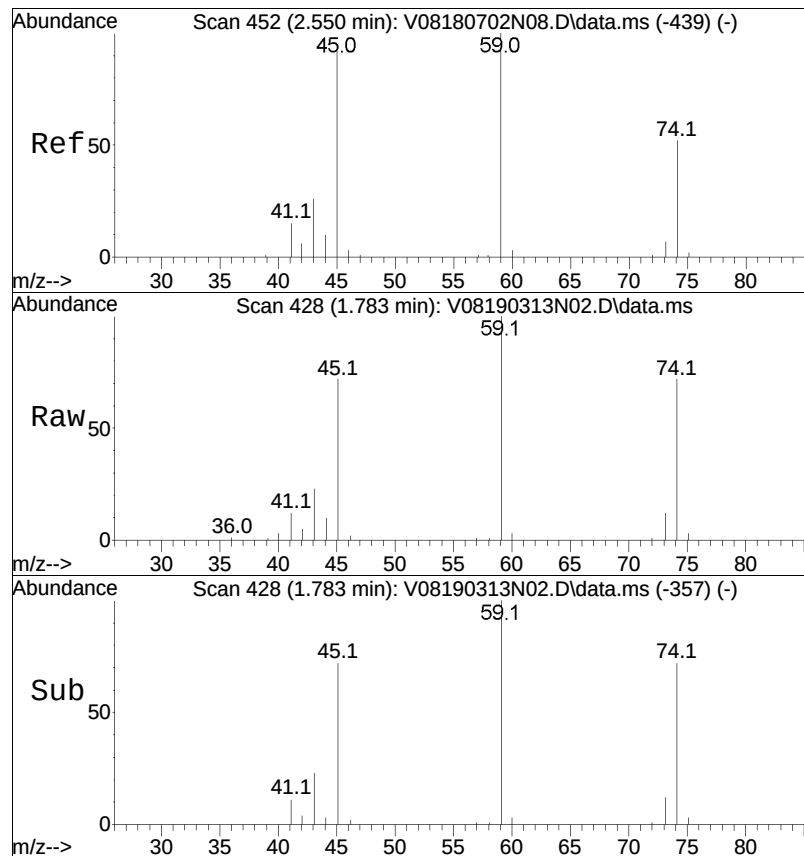




#7
 Trichlorofluoromethane
 Concen: 11.88 ug/L
 RT: 1.543 min Scan# 342
 Delta R.T. -0.003 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

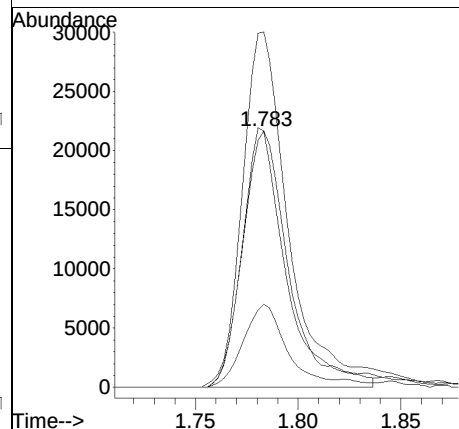
Tgt	Ion	Ratio	Lower	Upper
101	101	100		
103	64.6	53.8	80.6	

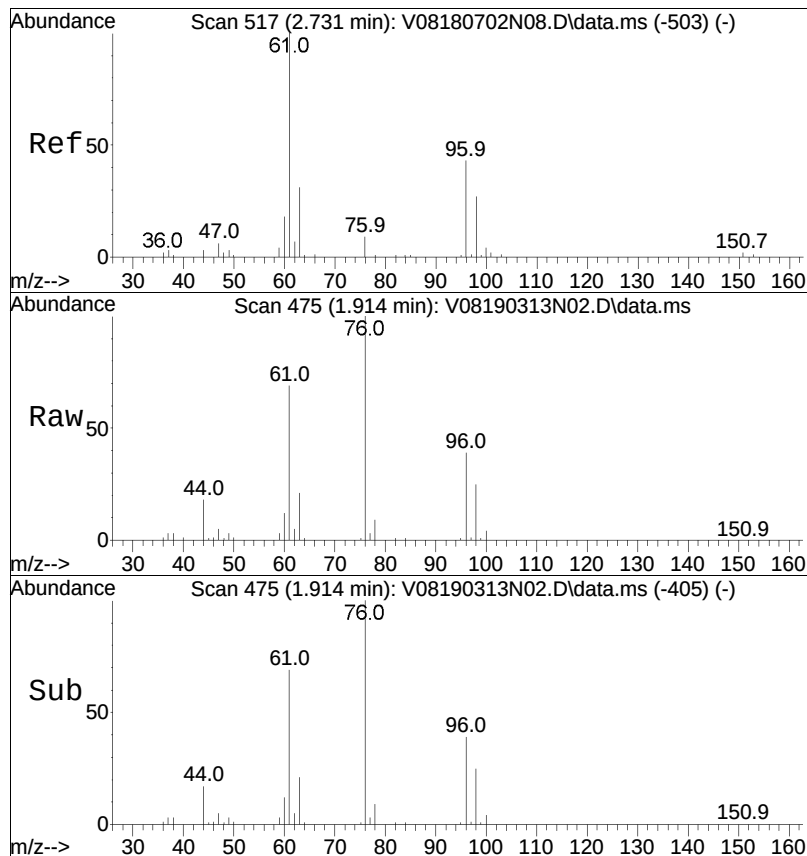




#8
 Ethyl ether
 Concen: 9.88 ug/L
 RT: 1.783 min Scan# 428
 Delta R.T. -0.003 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

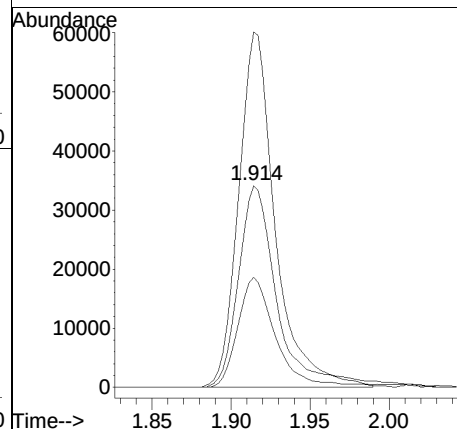
Tgt Ion:	74	Resp:	33730
Ion Ratio	Lower	Upper	
74	100		
59	143.3	122.2	253.8
45	95.0	91.9	190.9
43	30.6	25.2	52.2

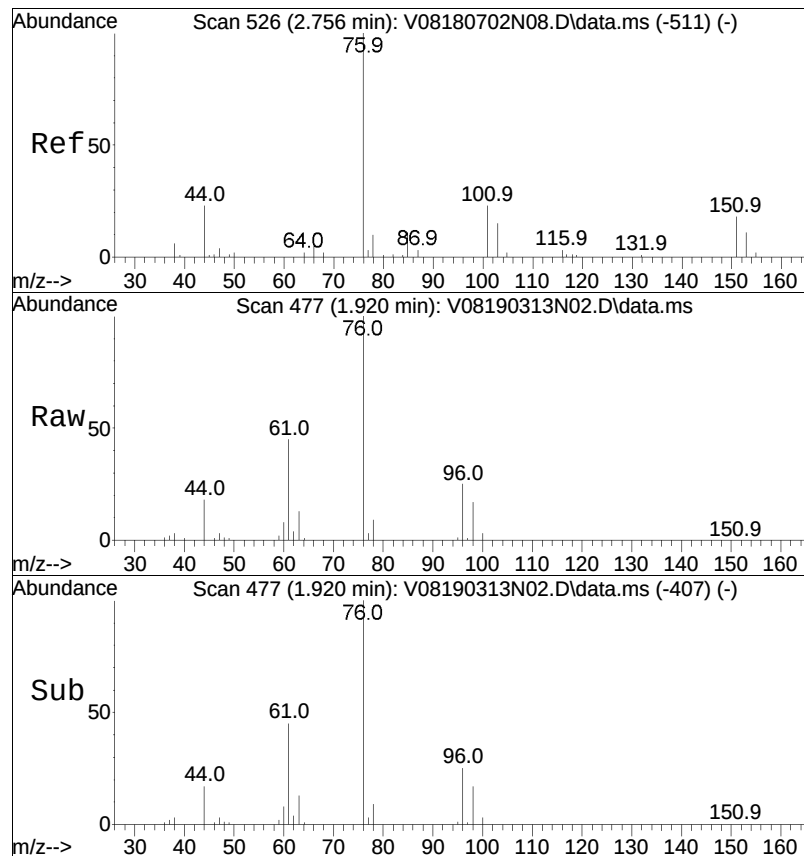




#10
 1,1-Dichloroethene
 Concen: 10.10 ug/L
 RT: 1.914 min Scan# 475
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

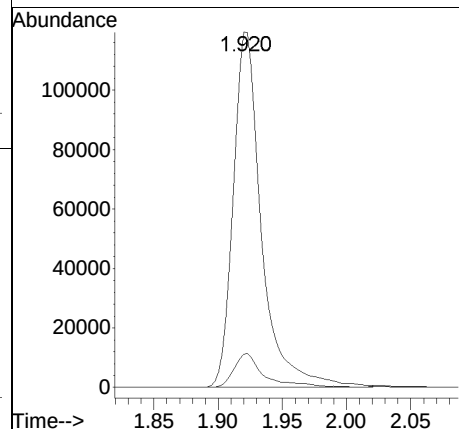
Tgt Ion:	96	Resp:	57329
Ion Ratio	Lower	Upper	
96	100		
61	172.5	186.1	279.1#
63	53.4	57.6	86.4#

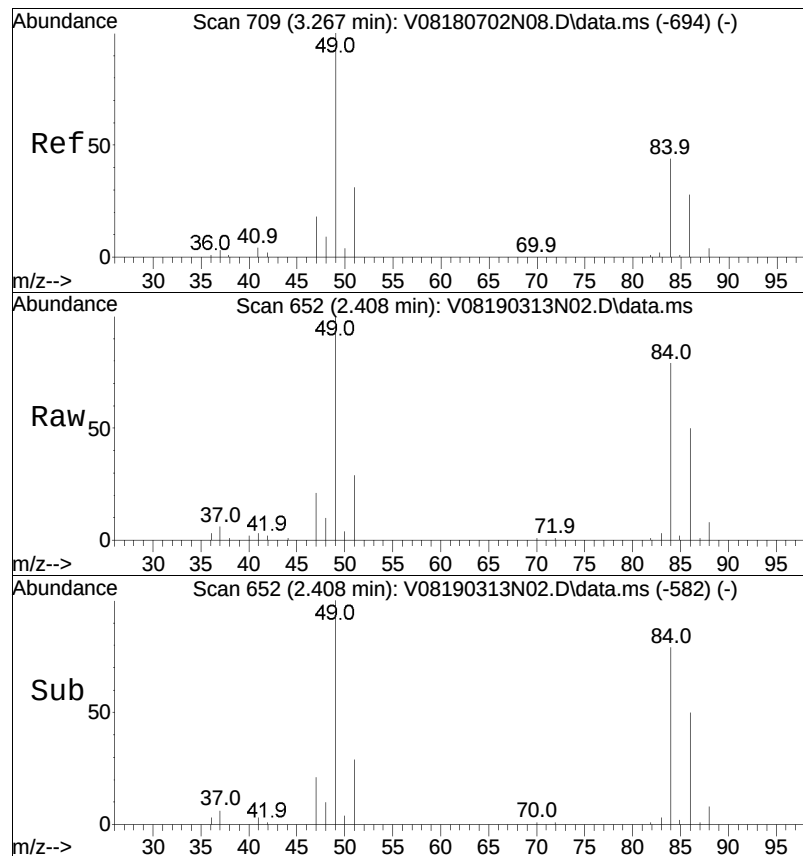




#11
 Carbon disulfide
 Concen: 10.28 ug/L
 RT: 1.920 min Scan# 477
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

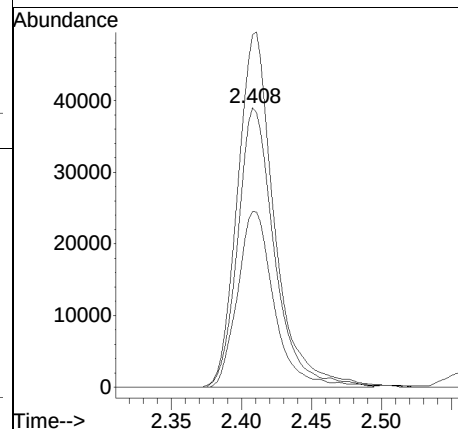
Tgt Ion:	76	78	Ratio	100	Lower	Upper
Resp:	183477					
Ion Ratio						

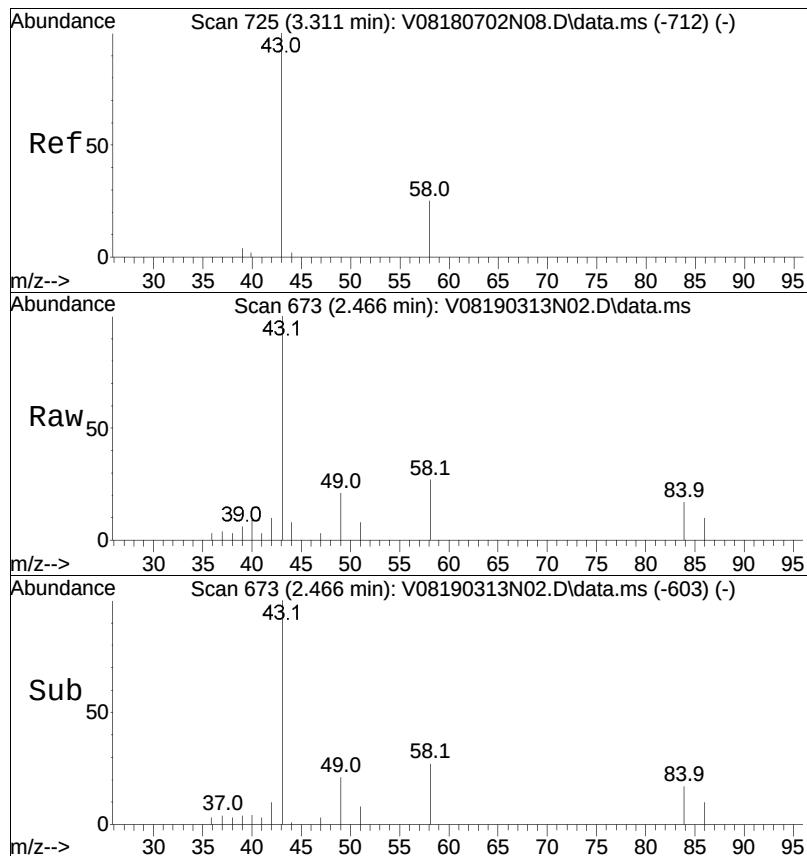




#15
Methylene chloride
Concen: 10.56 ug/L
RT: 2.408 min Scan# 652
Delta R.T. -0.005 min
Lab File: V08190313N02.D
Acq: 13 Mar 2019 6:42 pm

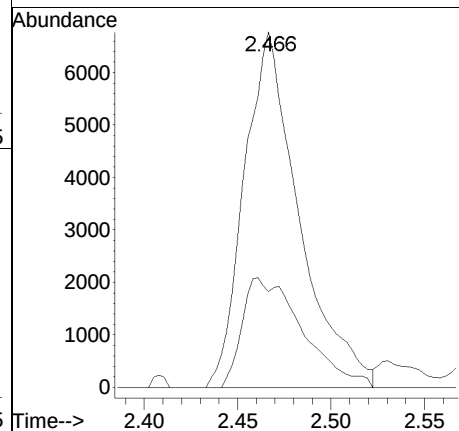
Tgt Ion:	84	Resp:	71404
Ion Ratio	Lower	Upper	
84	100		
86	62.8	40.4	83.8
49	127.6	120.0	249.2

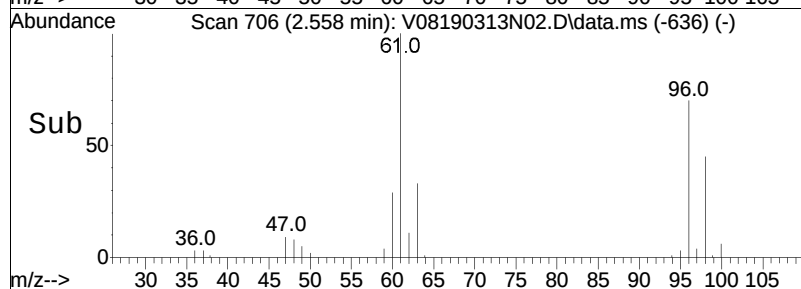
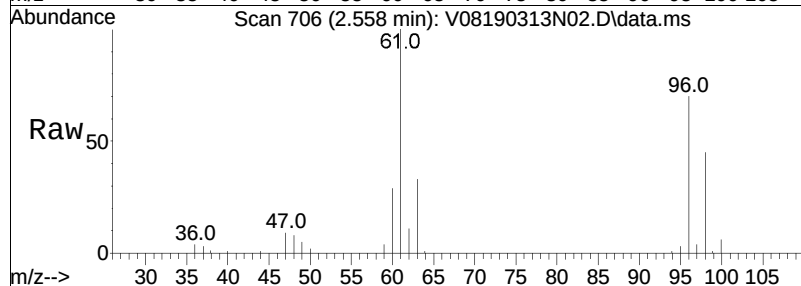
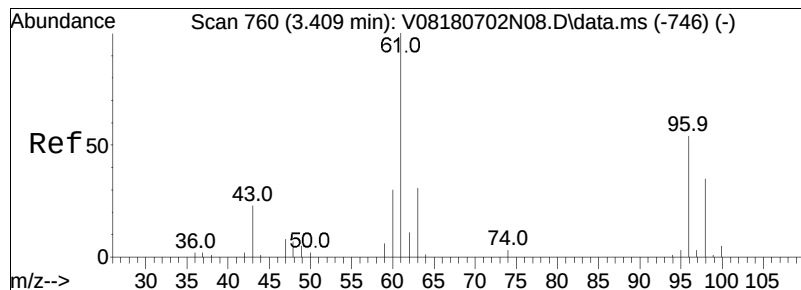




#17
 Acetone
 Concen: 11.81 ug/L
 RT: 2.466 min Scan# 673
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

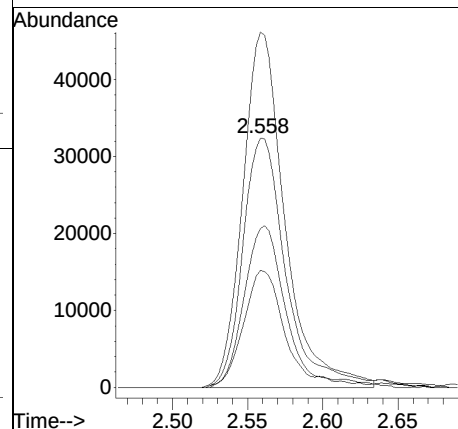
Tgt Ion:	43	58	Ratio	100	14.9	Resp:	13863	Lower	Upper
								24.2	36.4#

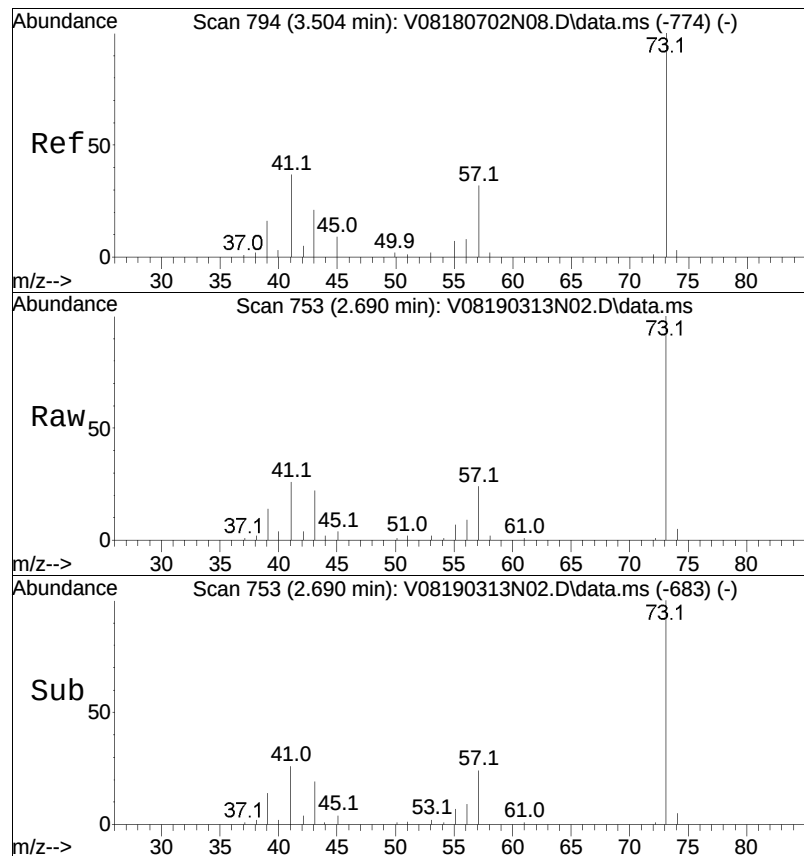




#18
 trans-1,2-Dichloroethene
 Concen: 10.05 ug/L
 RT: 2.558 min Scan# 706
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

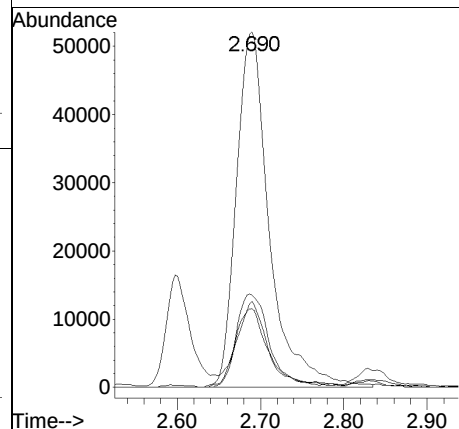
Tgt Ion: 96	Resp: 64734
Ion Ratio	Lower Upper
96 100	
61 139.4	124.0 257.6
98 61.2	41.2 85.6
63 45.3	38.4 79.7

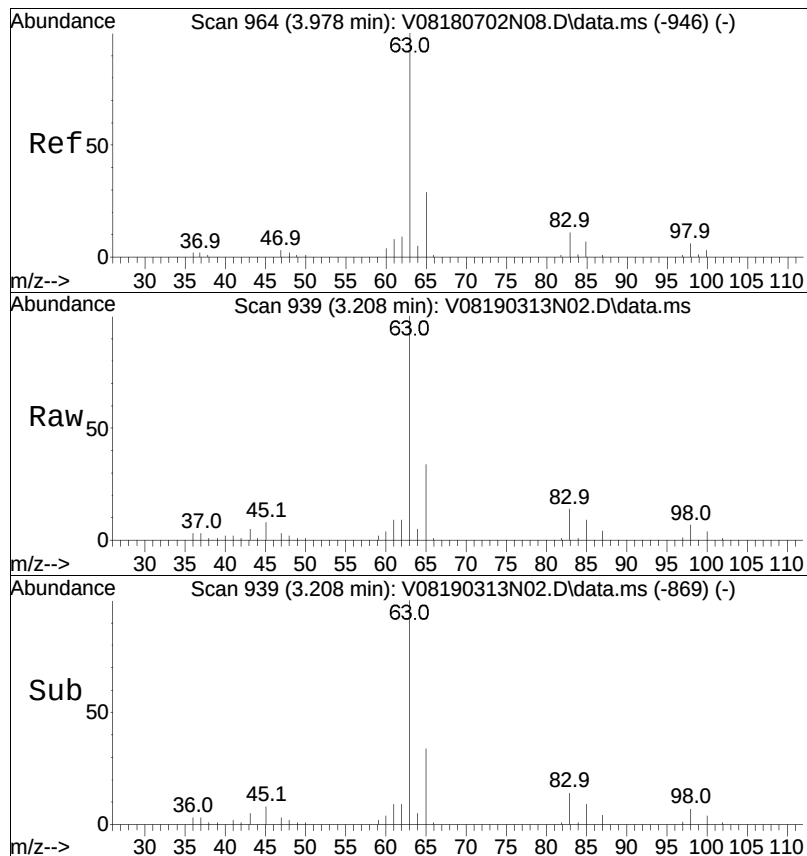




#20
Methyl tert-butyl ether
Concen: 8.53 ug/L
RT: 2.690 min Scan# 753
Delta R.T. -0.005 min
Lab File: V08190313N02.D
Acq: 13 Mar 2019 6:42 pm

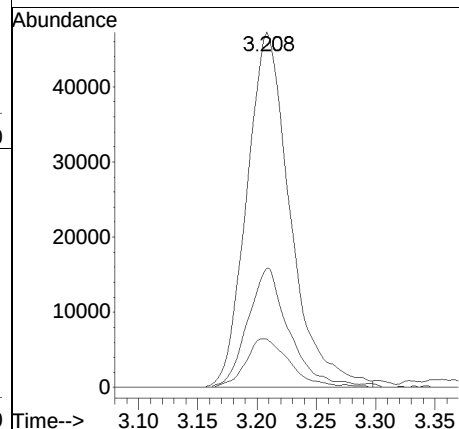
Tgt Ion:	73	Resp:	144331
Ion Ratio	Lower	Upper	
73	100		
57	22.2	17.5	36.3
43	19.8	15.3	31.9
41	26.5	15.3	31.7

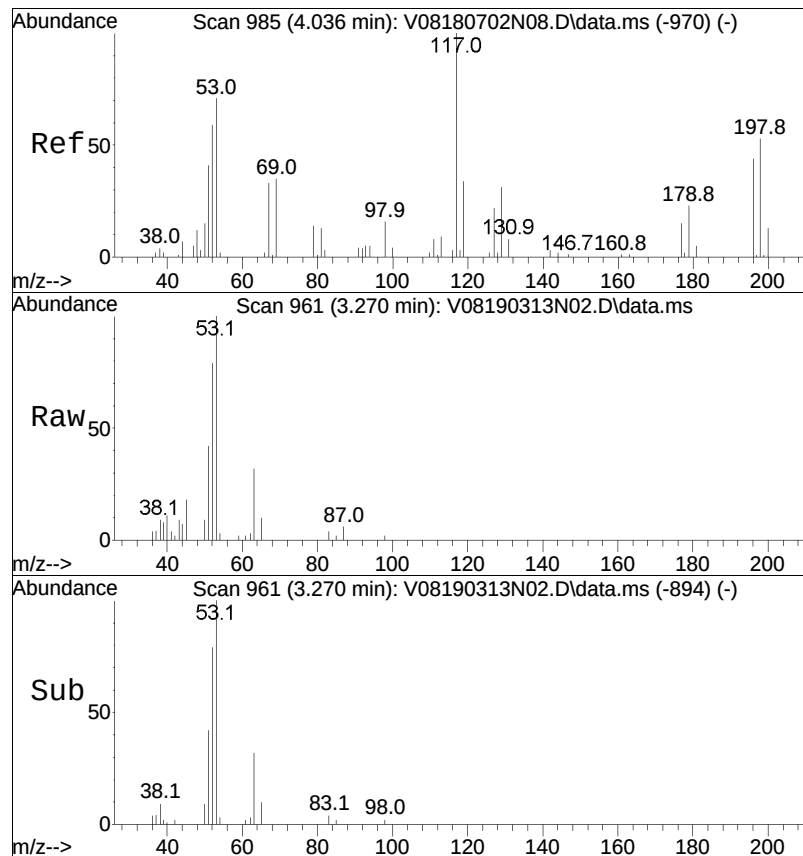




#23
 1,1-Dichloroethane
 Concen: 10.60 ug/L
 RT: 3.208 min Scan# 939
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

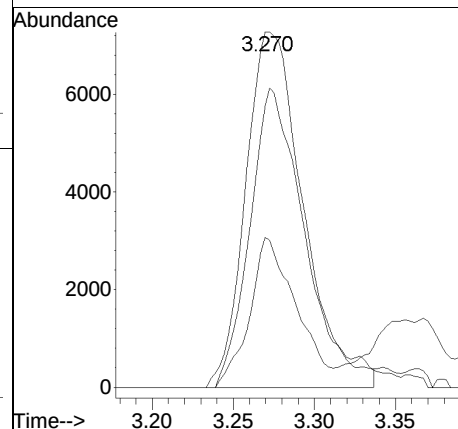
Tgt Ion:	63	Resp:	120748
Ion Ratio	Lower	Upper	
63	100		
65	32.0	11.0	51.0
83	13.8	0.0	31.8

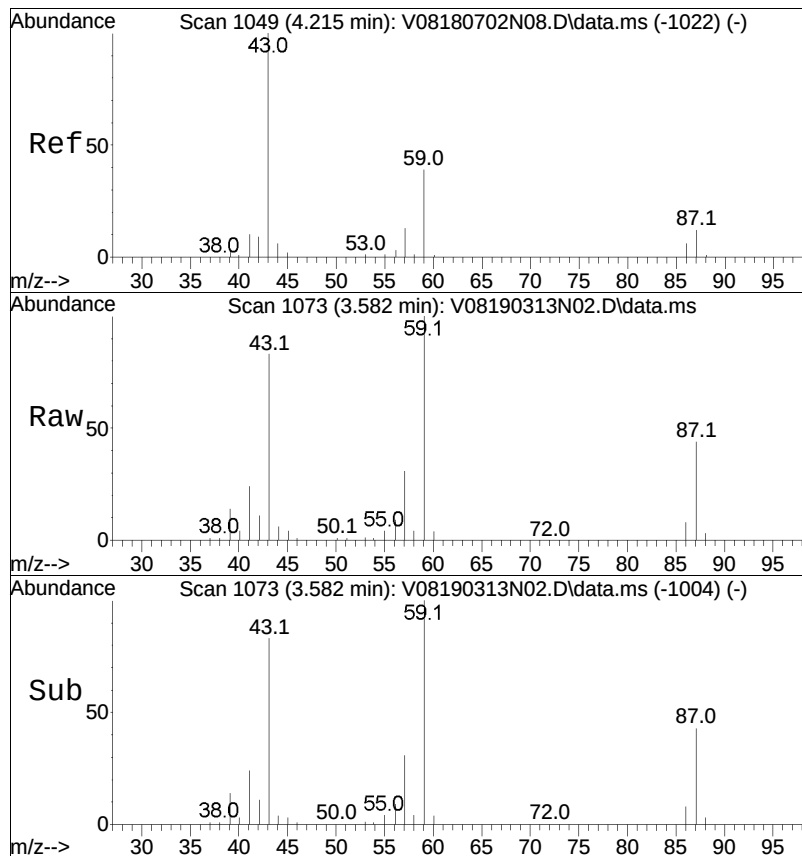




#25
 Acrylonitrile
 Concen: 10.14 ug/L
 RT: 3.270 min Scan# 961
 Delta R.T. -0.013 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

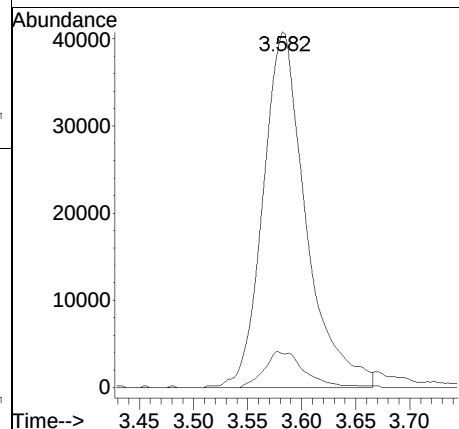
Tgt Ion:	53	Resp:	17919
Ion Ratio	Lower	Upper	
53	100		
52	78.4	66.7	100.1
51	34.3	30.6	46.0

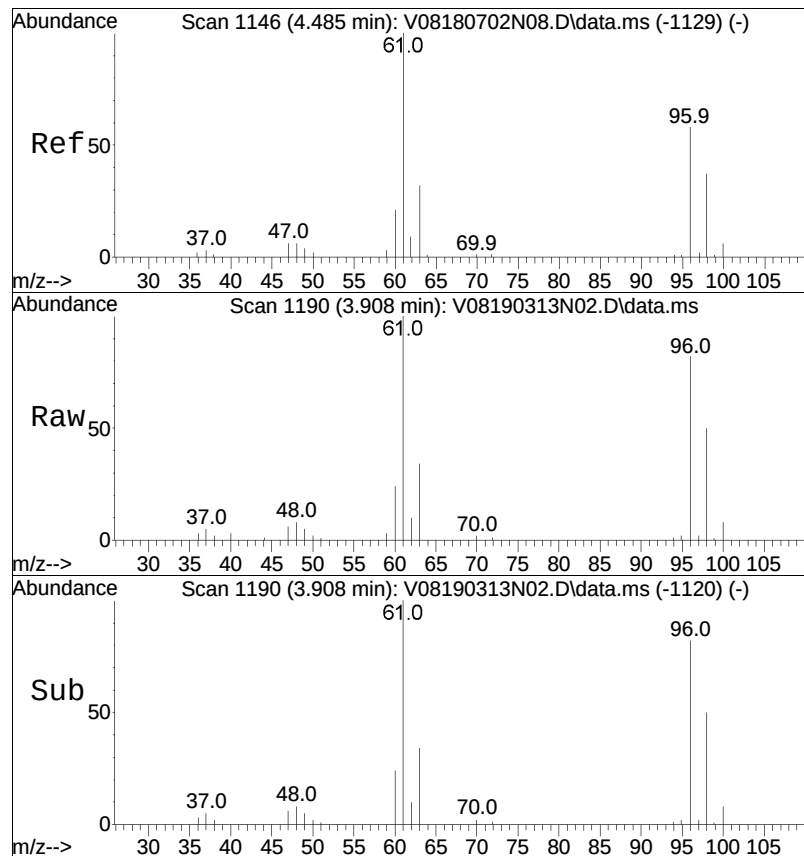




#27
 Vinyl acetate
 Concen: 8.34 ug/L
 RT: 3.582 min Scan# 1073
 Delta R.T. -0.008 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

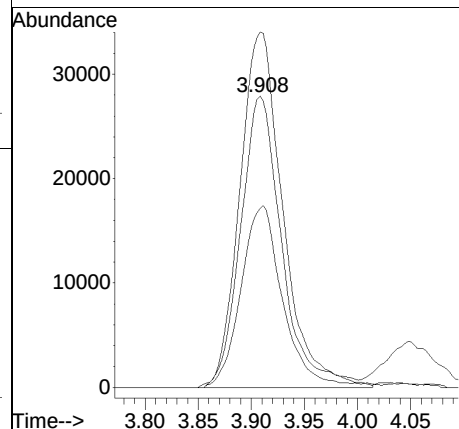
Tgt Ion	Ratio	Lower	Upper
43	100		
86	9.2	5.2	7.8#

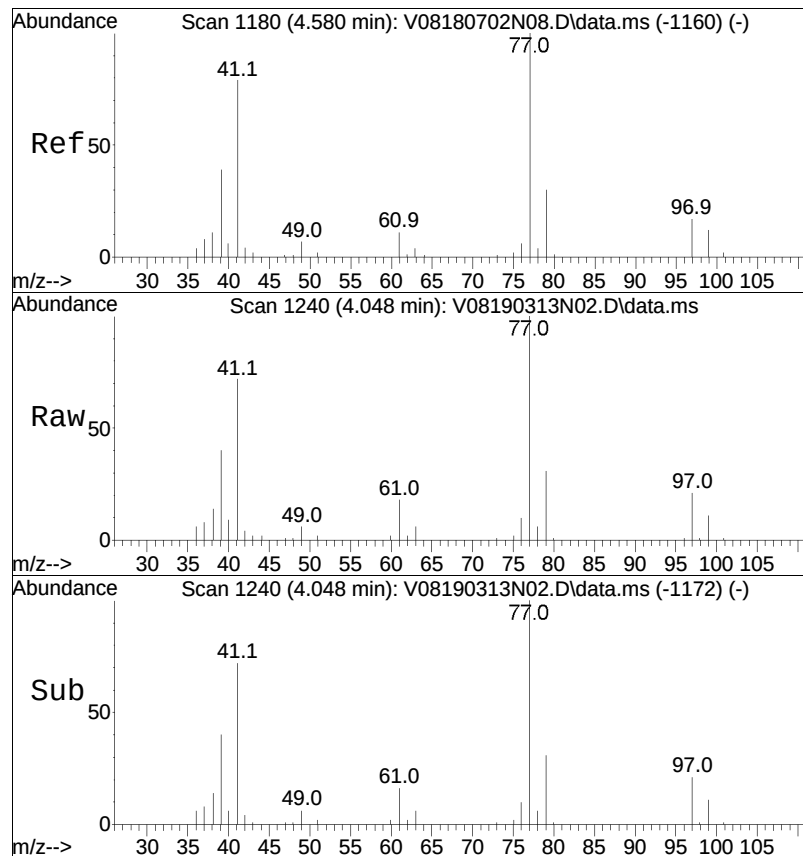




#28
 cis-1,2-Dichloroethene
 Concen: 10.29 ug/L
 RT: 3.908 min Scan# 1190
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

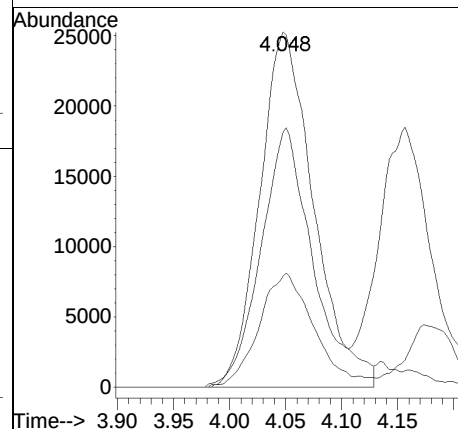
Tgt Ion: 96	Resp: 75253
Ion Ratio	Lower Upper
96 100	
61 127.3	149.4 224.2#
98 63.0	53.4 80.2

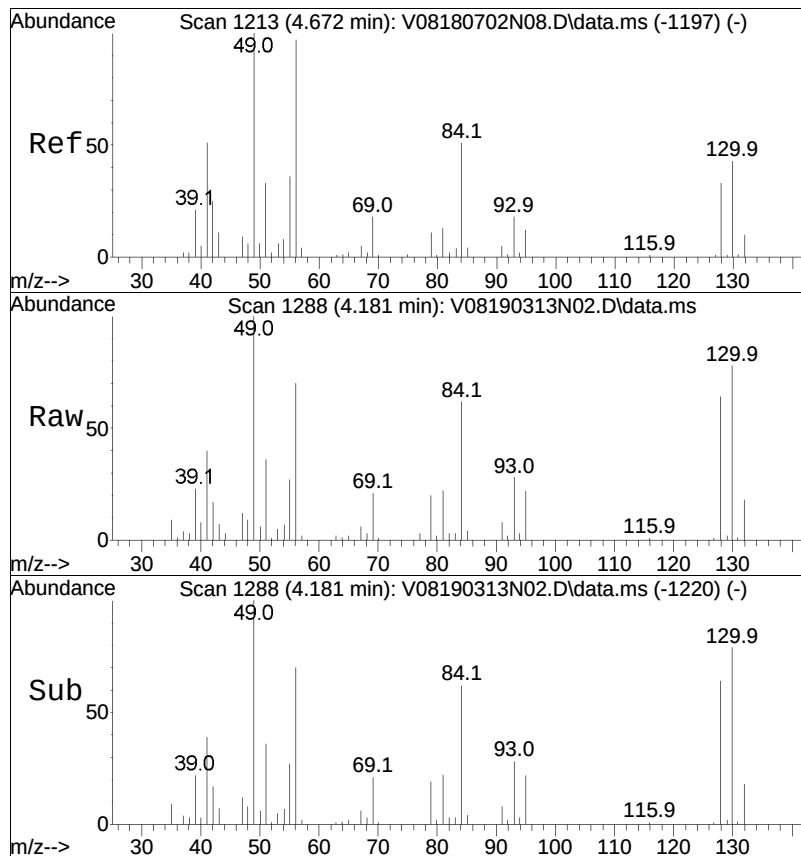




#29
 2,2-Dichloropropane
 Concen: 9.08 ug/L
 RT: 4.048 min Scan# 1240
 Delta R.T. -0.011 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

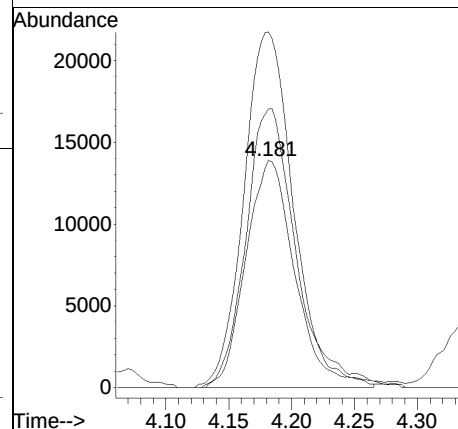
Tgt Ion:	77	Resp:	85062
Ion Ratio	Lower	Upper	
77	100		
41	67.7	38.0	78.8
79	32.2	20.5	42.5

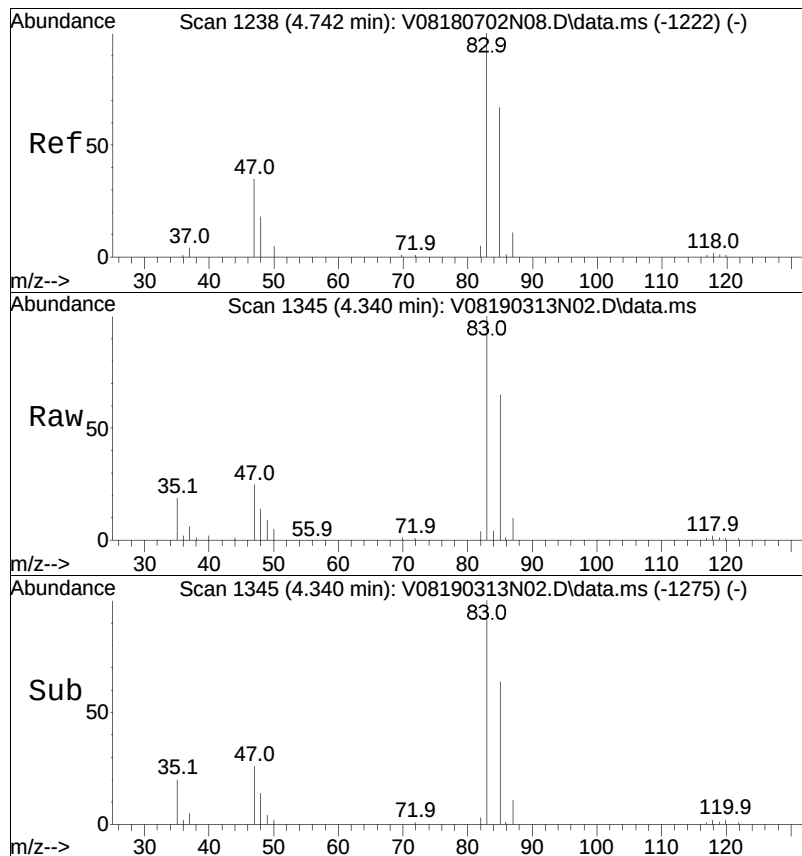




#30
 Bromochloromethane
 Concen: 11.16 ug/L
 RT: 4.181 min Scan# 1288
 Delta R.T. -0.011 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

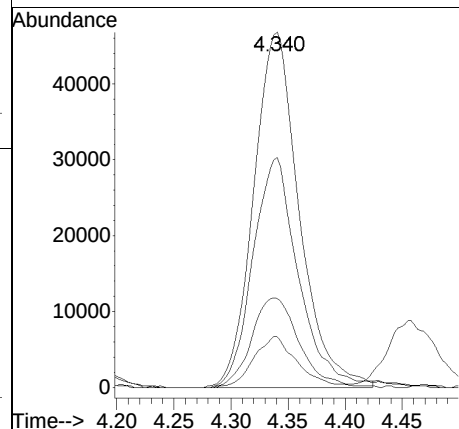
Tgt Ion:	128	Resp:	37729
Ion Ratio	Lower	Upper	
128	100		
49	161.0	223.0	334.4#
130	123.8	111.4	167.0

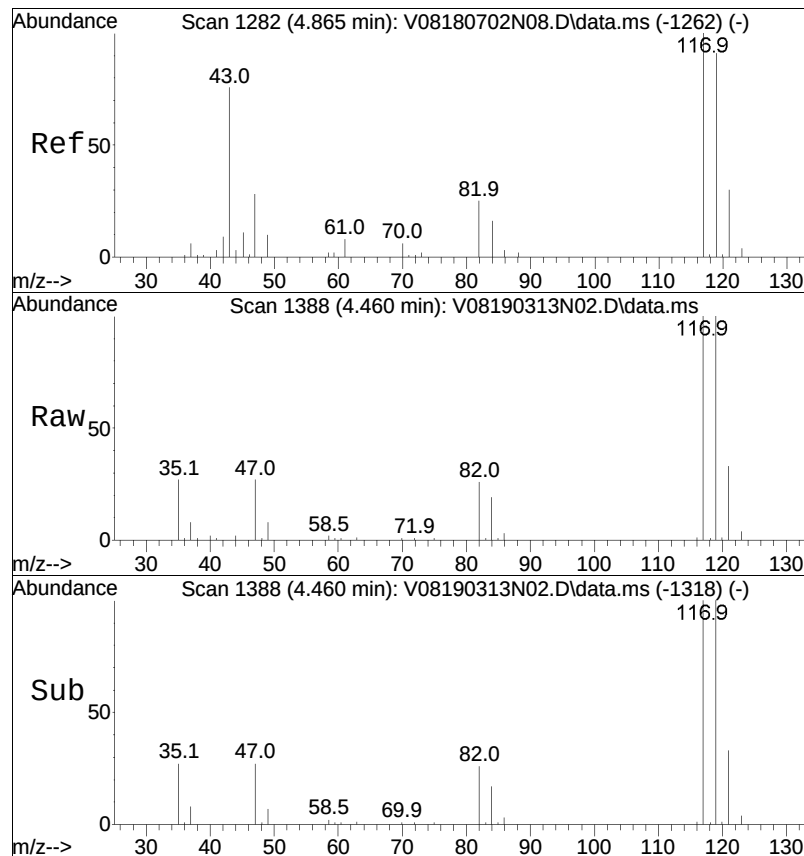




#32
 Chloroform
 Concen: 10.93 ug/L
 RT: 4.340 min Scan# 1345
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

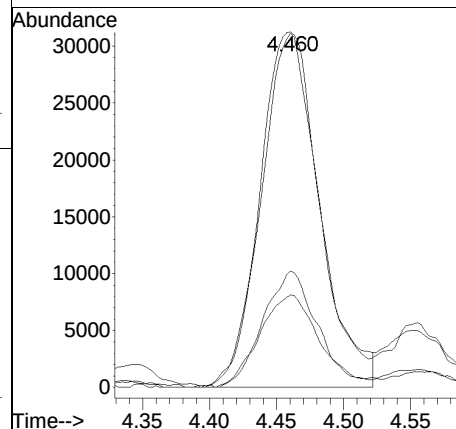
Tgt Ion:	83	Resp:	130091
Ion Ratio	Lower	Upper	
83	100		
85	64.4	41.5	86.1
47	26.1	19.0	39.4
48	13.7	9.9	20.5

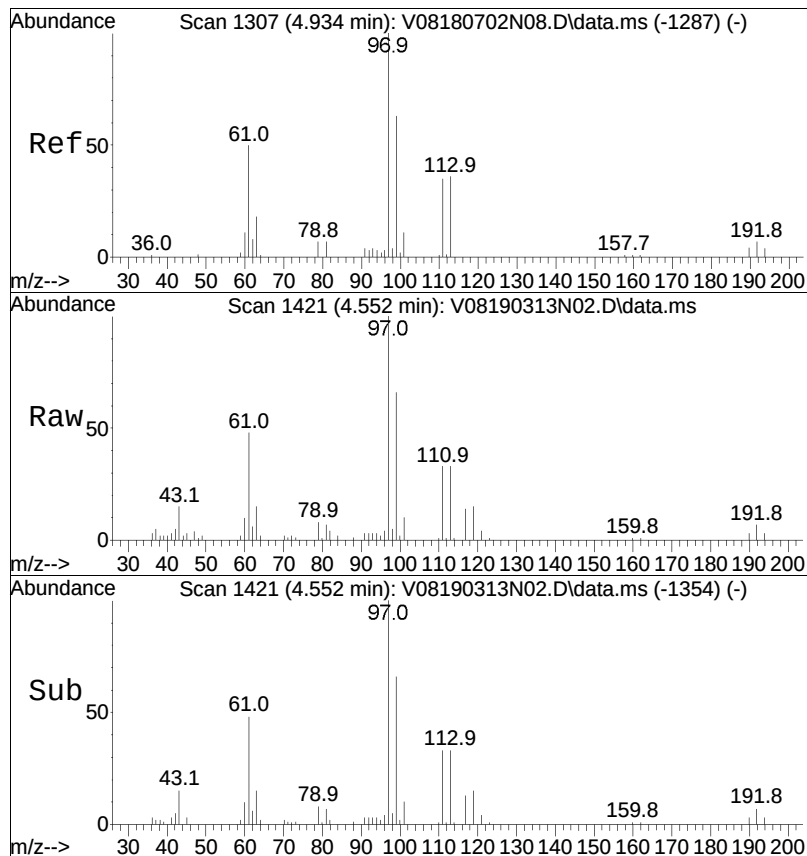




#34
 Carbon tetrachloride
 Concen: 10.94 ug/L
 RT: 4.460 min Scan# 1388
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

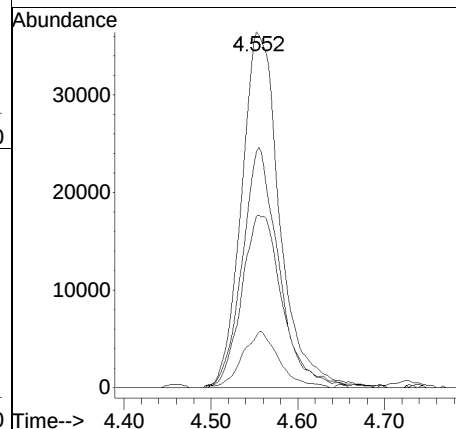
Tgt Ion:	117	Resp:	97282
Ion Ratio	Lower	Upper	
117	100		
119	95.4	62.4	129.6
121	29.8	19.5	40.5
82	25.9	17.0	35.4

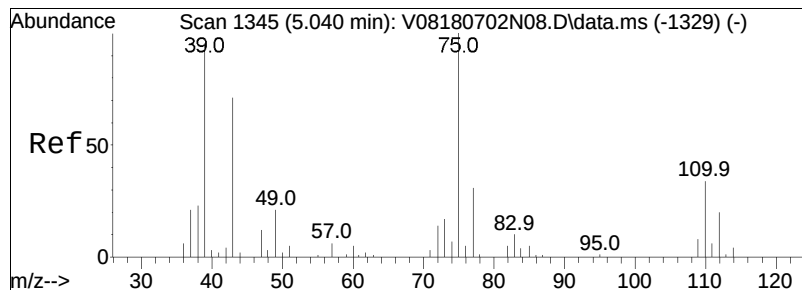




#37
 1,1,1-Trichloroethane
 Concen: 10.75 ug/L
 RT: 4.552 min Scan# 1421
 Delta R.T. -0.014 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

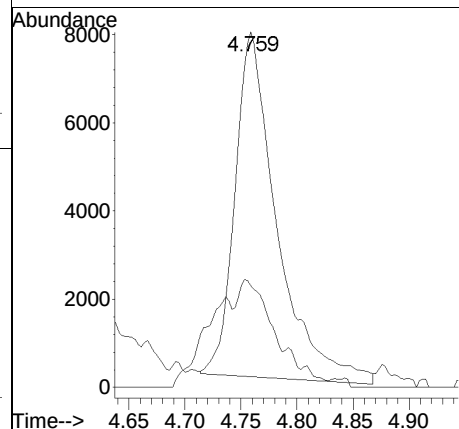
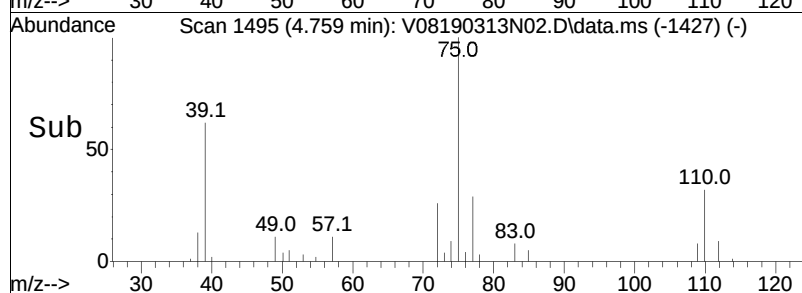
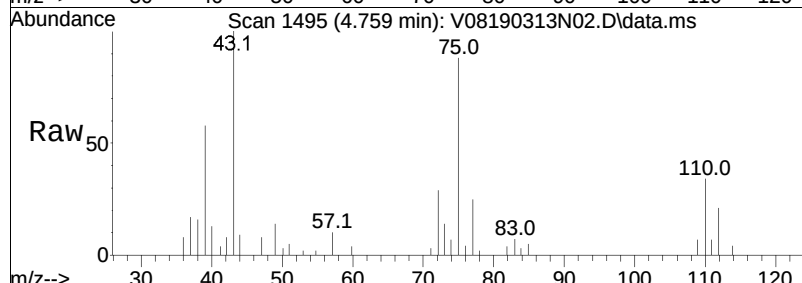
Tgt Ion:	97	Resp:	111528
Ion Ratio	Lower	Upper	
97	100		
99	63.7	40.7	84.5
61	51.9	35.4	73.4
63	15.0	5.0	10.4#

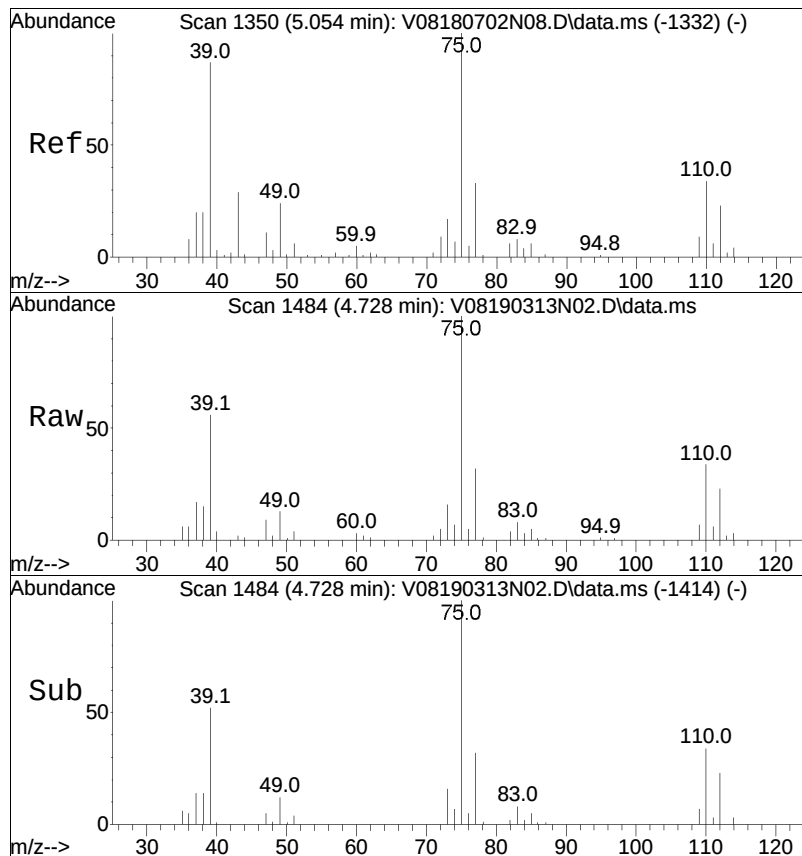




#39
 2-Butanone
 Concen: 9.90 ug/L
 RT: 4.759 min Scan# 1495
 Delta R.T. -0.011 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

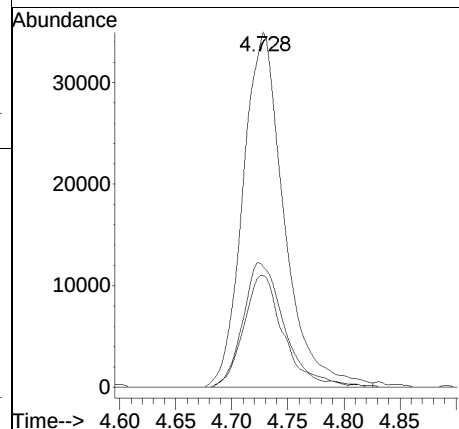
Tgt Ion: 43 Resp: 20302
 Ion Ratio Lower Upper
 43 100
 72 20.8 10.9 16.3#

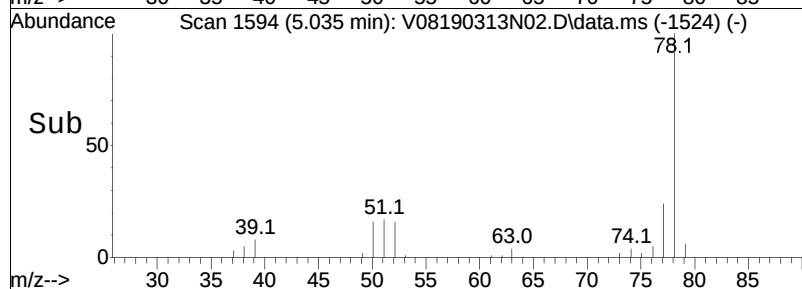
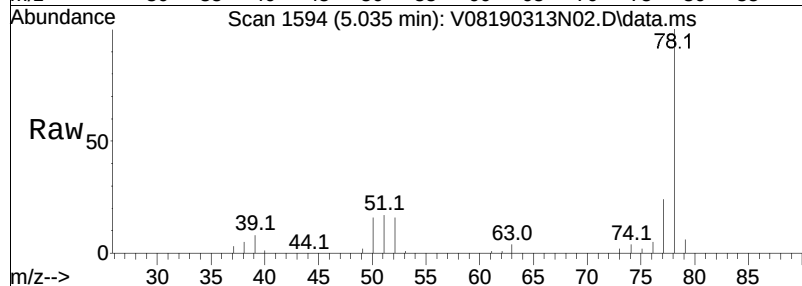
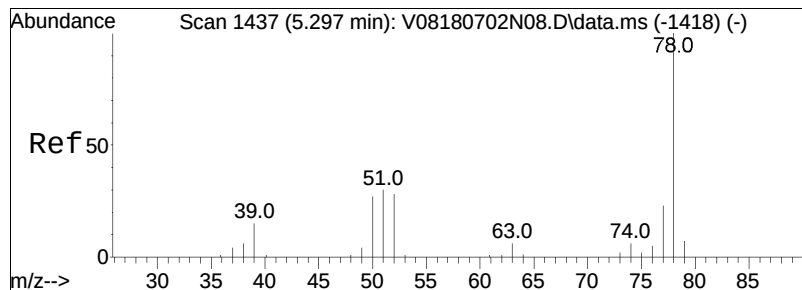




#40
 1,1-Dichloropropene
 Concen: 10.76 ug/L
 RT: 4.728 min Scan# 1484
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

Tgt Ion:	75	Resp:	89405
Ion Ratio	Lower	Upper	
75	100		
110	35.7	20.2	41.9
77	30.0	20.1	41.7





#41

Benzene

Concen: 10.65 ug/L

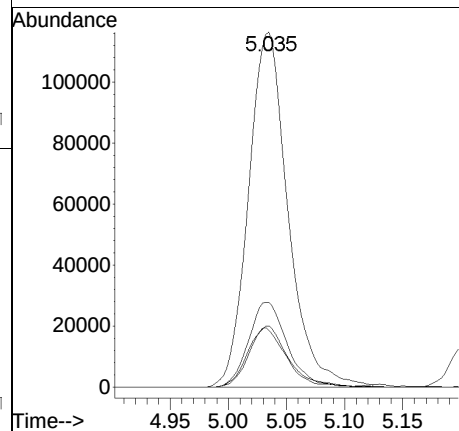
RT: 5.035 min Scan# 1594

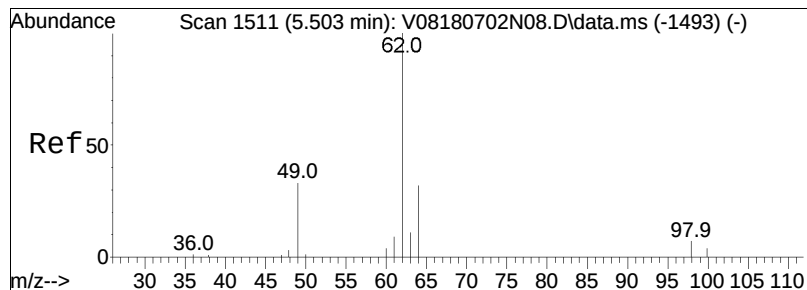
Delta R.T. -0.005 min

Lab File: V08190313N02.D

Acq: 13 Mar 2019 6:42 pm

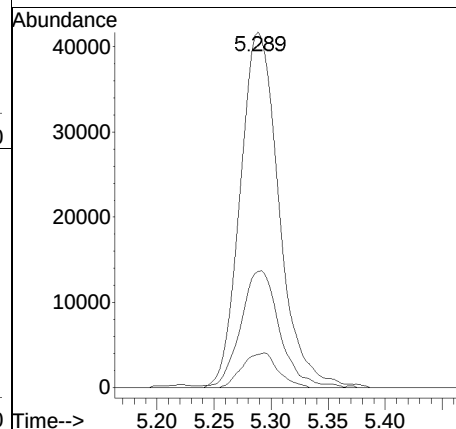
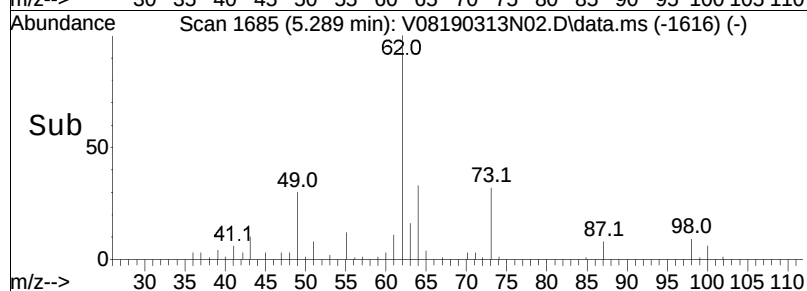
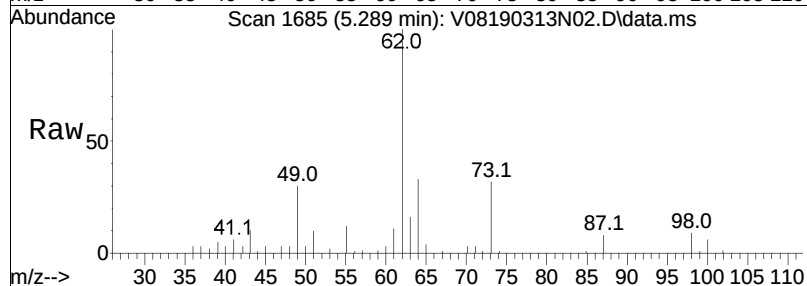
Tgt Ion: 78	Resp: 276186
Ion Ratio	Lower Upper
78 100	
77 23.8	15.7 32.7
51 17.6	16.0 33.2
52 16.2	15.3 31.9

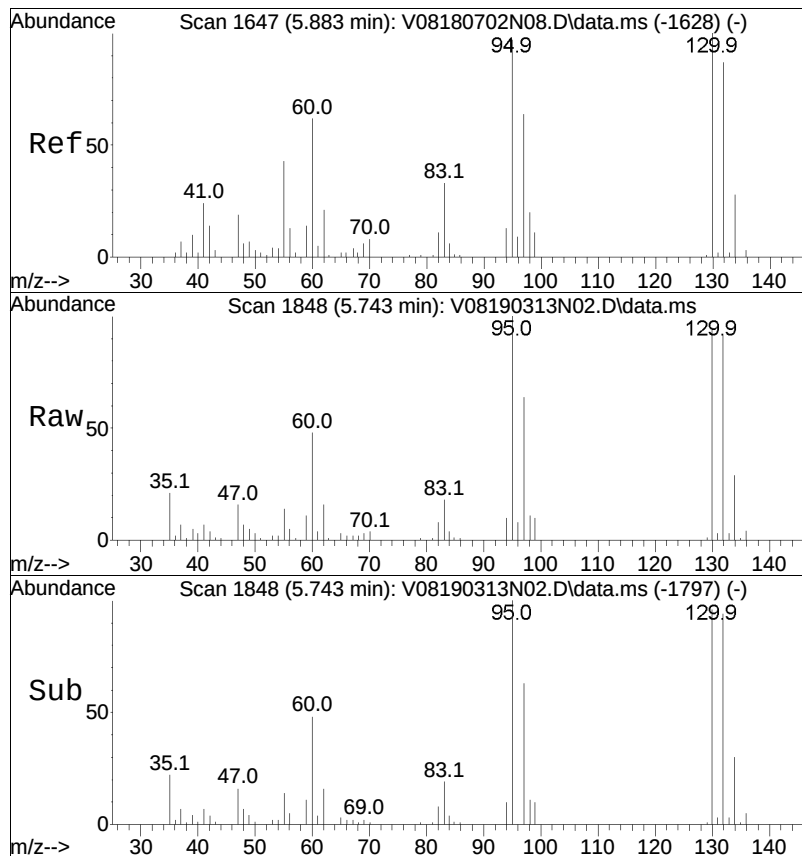




#44
 1,2-Dichloroethane
 Concen: 11.07 ug/L
 RT: 5.289 min Scan# 1685
 Delta R.T. -0.008 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

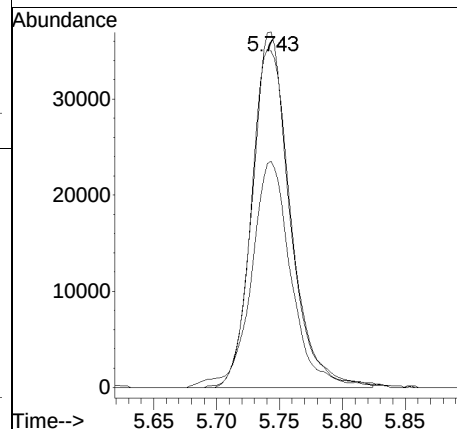
Tgt Ion	Ratio	Lower	Upper
62	100		
64	33.0	11.2	51.2
98	8.9	0.0	26.1

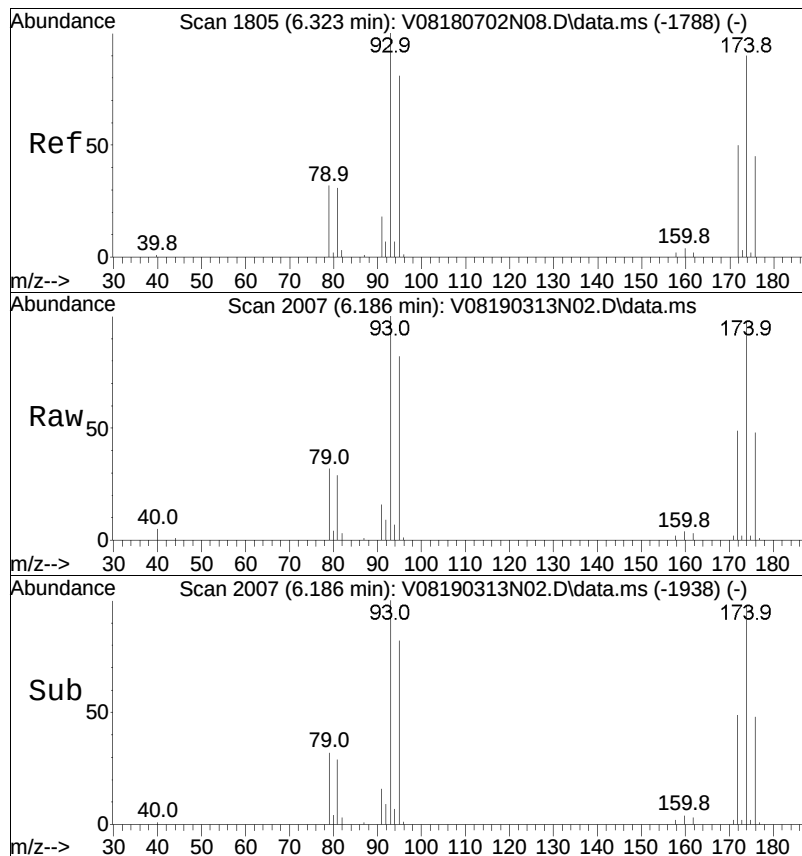




#48
 Trichloroethene
 Concen: 11.06 ug/L
 RT: 5.743 min Scan# 1848
 Delta R.T. -0.008 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

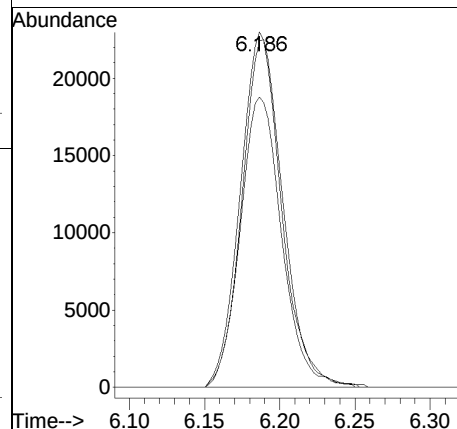
Tgt Ion:	95	Resp:	76395
Ion Ratio	Lower	Upper	
95	100		
97	67.3	55.5	83.3
130	101.4	76.6	115.0

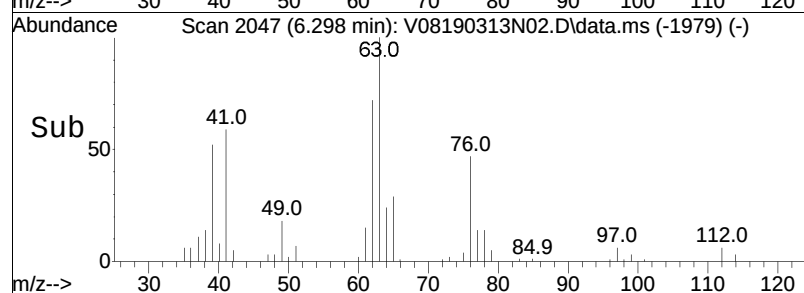
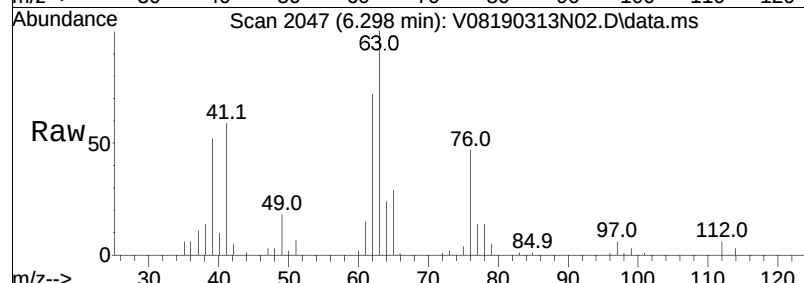
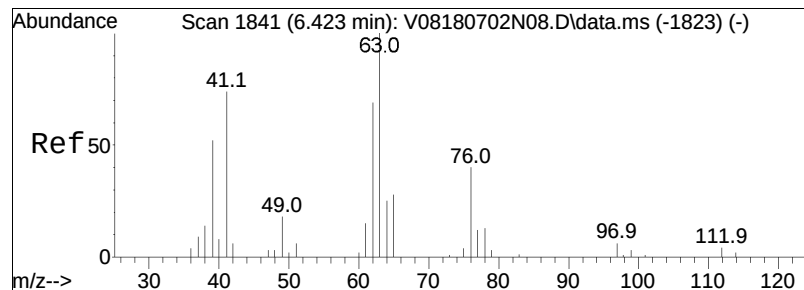




#50
 Dibromomethane
 Concen: 10.79 ug/L
 RT: 6.186 min Scan# 2007
 Delta R.T. -0.009 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

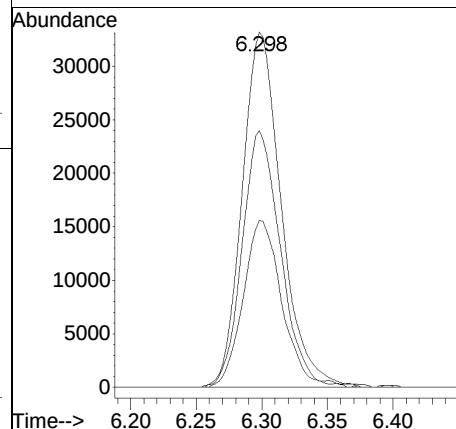
Tgt Ion:	93	Resp:	43678
Ion Ratio	Lower	Upper	
93	100		
95	82.7	67.0	100.4
174	98.1	75.0	112.4

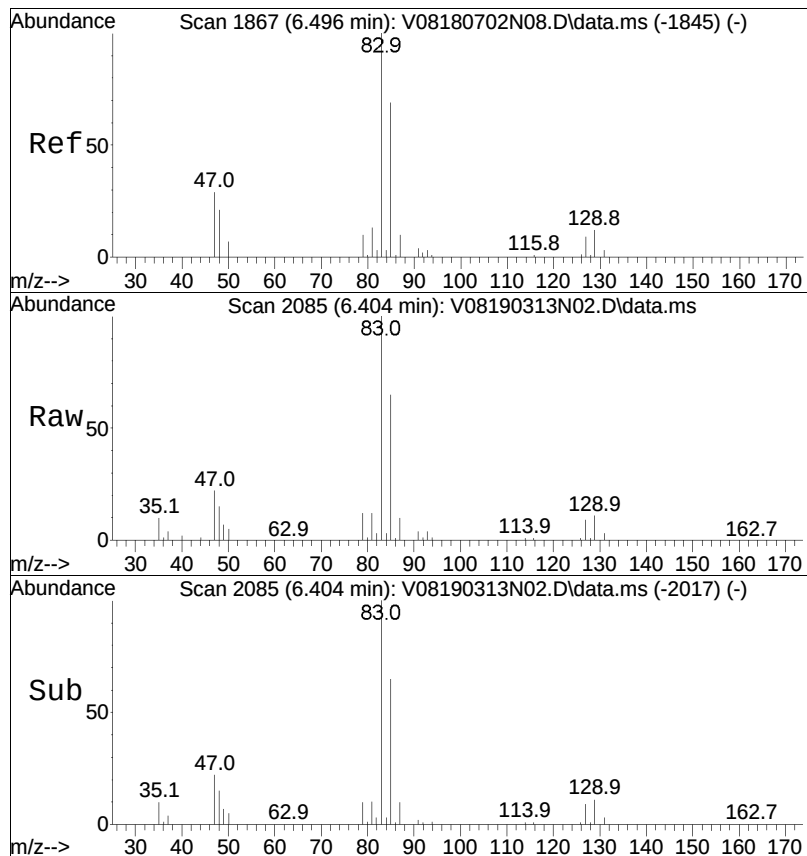




#51
 1,2-Dichloropropane
 Concen: 10.27 ug/L
 RT: 6.298 min Scan# 2047
 Delta R.T. -0.011 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

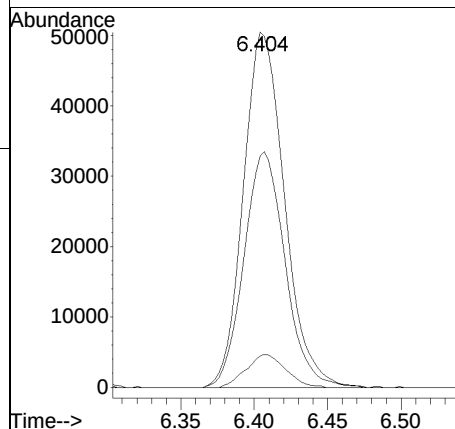
Tgt Ion:	63	Resp:	69057
Ion Ratio	Lower	Upper	
63	100		
62	70.4	58.6	87.8
76	46.5	38.0	57.0

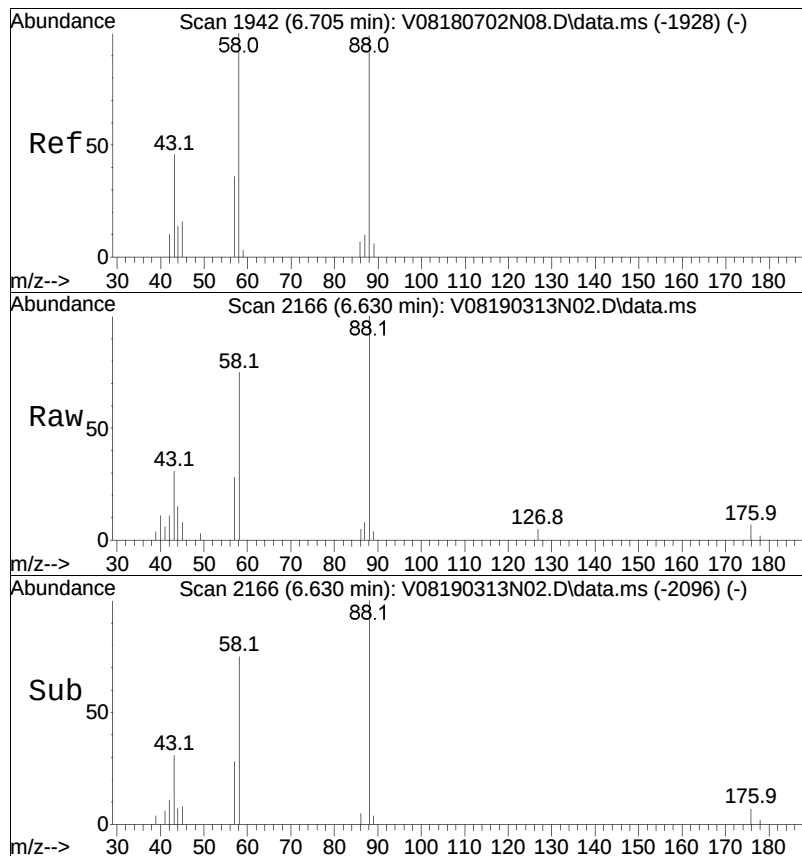




#54
 Bromodichloromethane
 Concen: 10.45 ug/L
 RT: 6.404 min Scan# 2085
 Delta R.T. -0.011 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

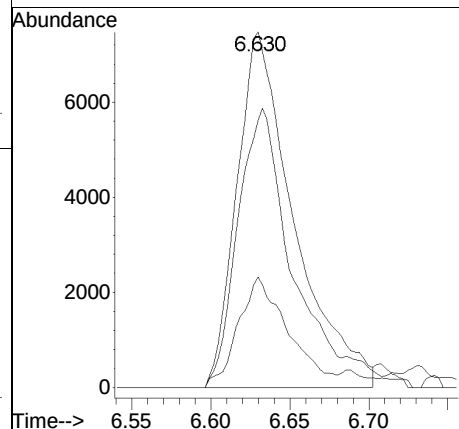
Tgt Ion:	83	Resp:	98548
Ion Ratio	Lower	Upper	
83	100		
85	66.4	52.3	78.5
127	8.9	6.2	9.4

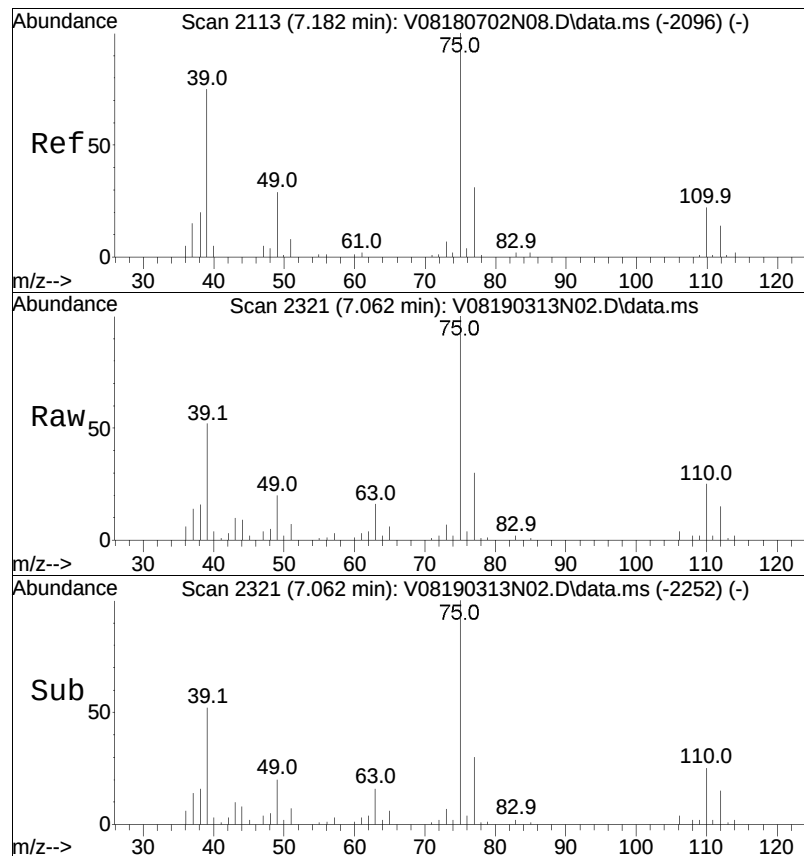




#57
 1,4-Dioxane
 Concen: 638.60 ug/L
 RT: 6.630 min Scan# 2166
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

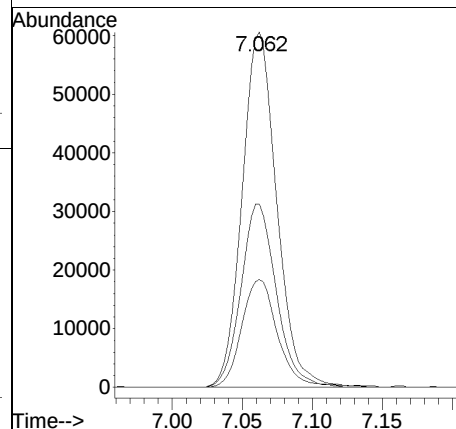
Tgt Ion:	88	Resp:	18782
Ion Ratio	Lower	Upper	
88	100		
58	75.8	76.7	115.1#
43	27.4	36.2	54.2#

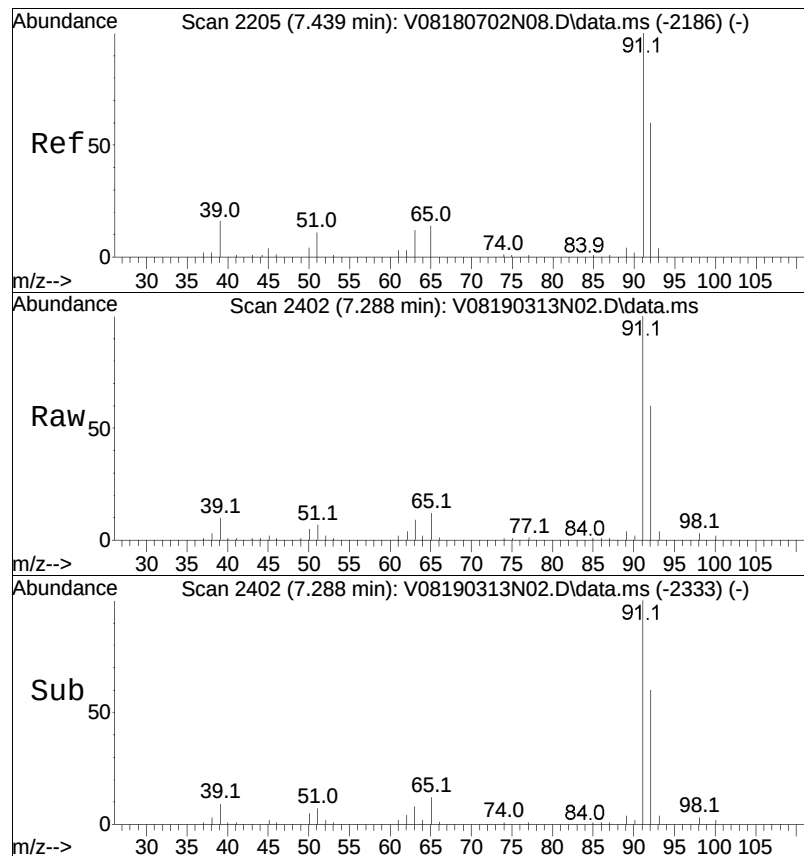




#58
 cis-1,3-Dichloropropene
 Concen: 9.88 ug/L
 RT: 7.062 min Scan# 2321
 Delta R.T. -0.008 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

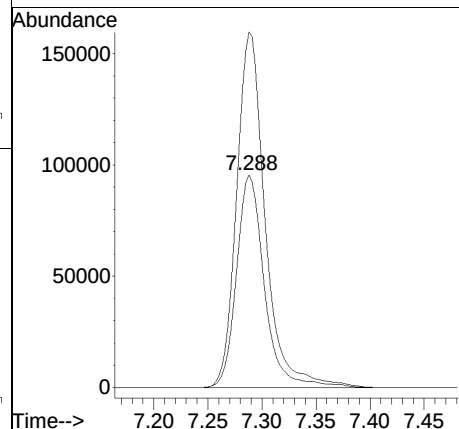
Tgt Ion:	75	Resp:	104424
Ion Ratio	Lower	Upper	
75	100		
77	31.4	25.0	37.4
39	53.1	50.1	75.1

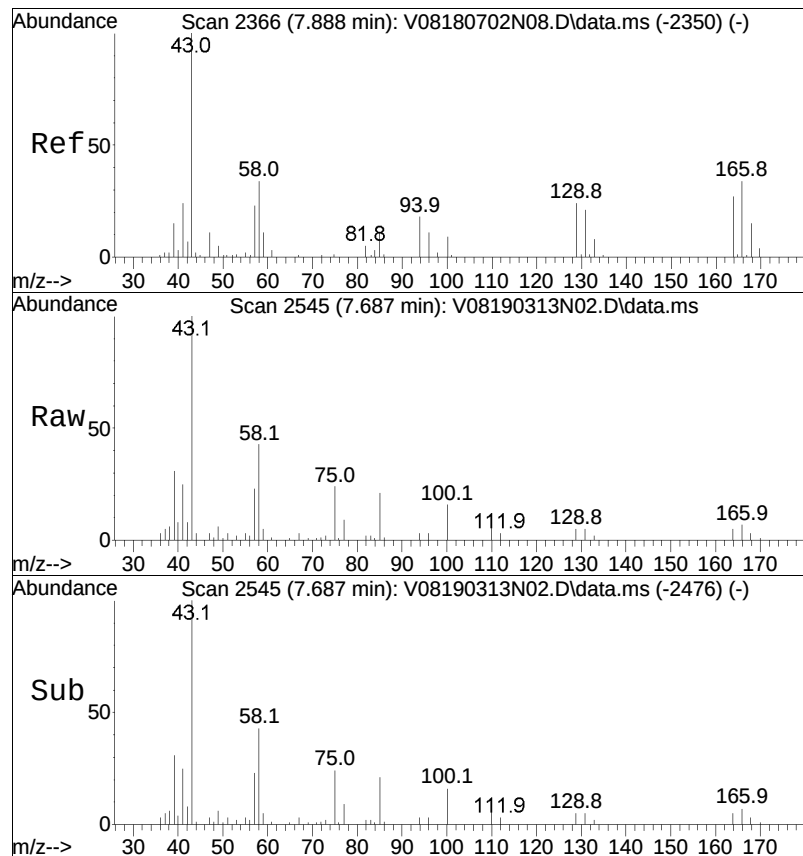




#61
 Toluene
 Concen: 10.64 ug/L
 RT: 7.288 min Scan# 2402
 Delta R.T. -0.008 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

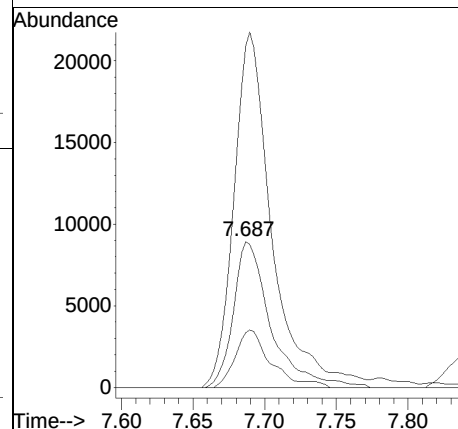
Tgt Ion:	92	Resp:	171435
Ion Ratio	Lower	Upper	
92	100		
91	170.6	139.8	209.6

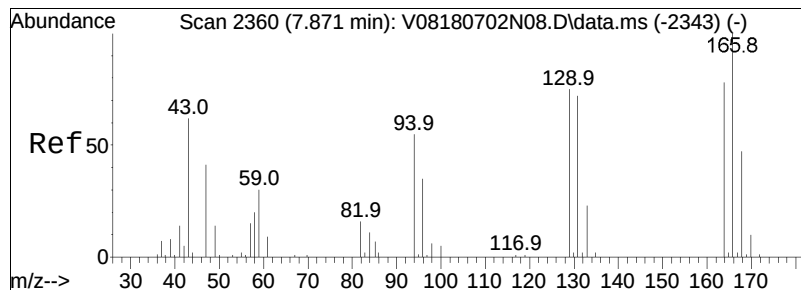




#62
 4-Methyl-2-pentanone
 Concen: 8.94 ug/L
 RT: 7.687 min Scan# 2545
 Delta R.T. -0.008 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

Tgt	Ion	Ratio	Lower	Upper
58	100			
100	35.6	20.2	30.2	
43	247.6	196.6	295.0	





#63

Tetrachloroethene

Concen: 10.20 ug/L

RT: 7.639 min Scan# 2528

Delta R.T. -0.009 min

Lab File: V08190313N02.D

Acq: 13 Mar 2019 6:42 pm

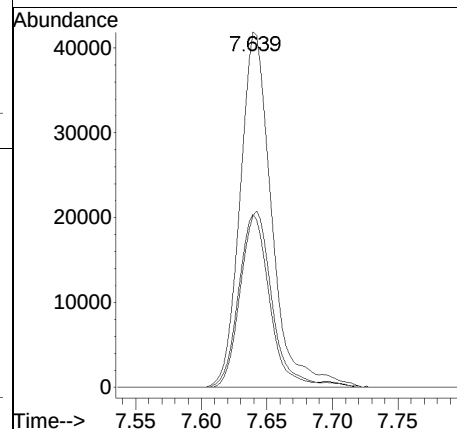
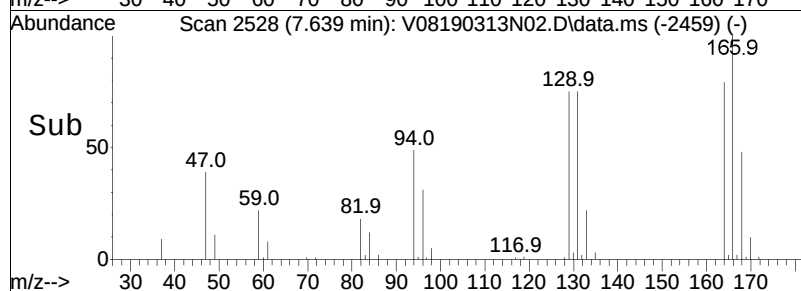
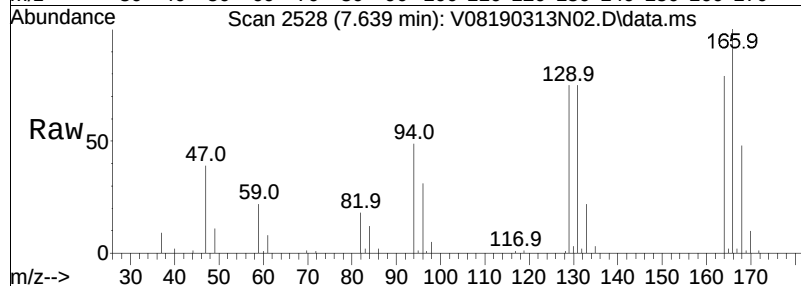
Tgt Ion:166 Resp: 70586

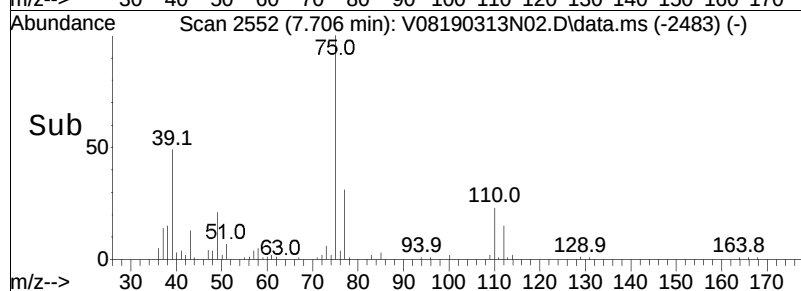
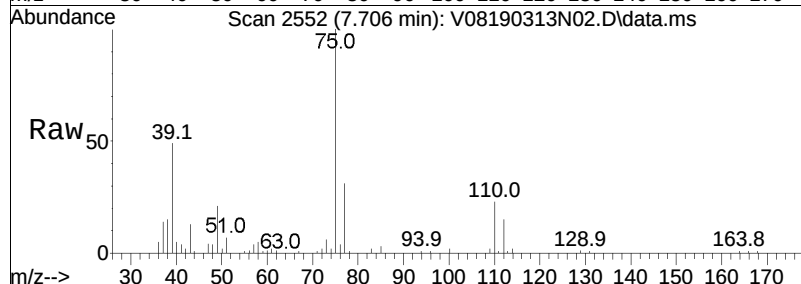
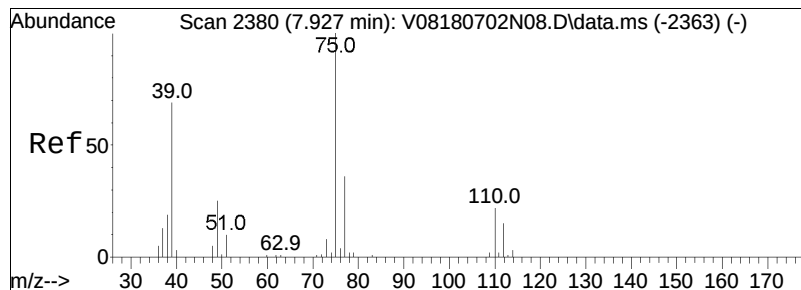
Ion Ratio Lower Upper

166 100

168 49.8 28.2 68.2

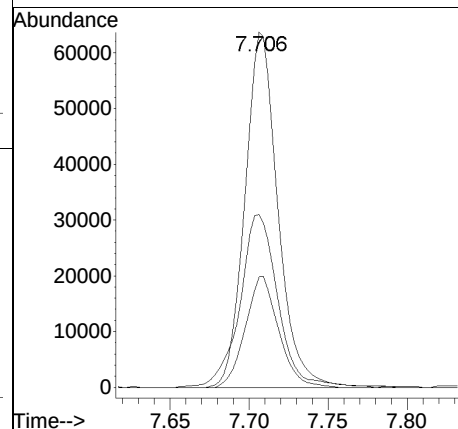
94 47.4 38.4 78.4

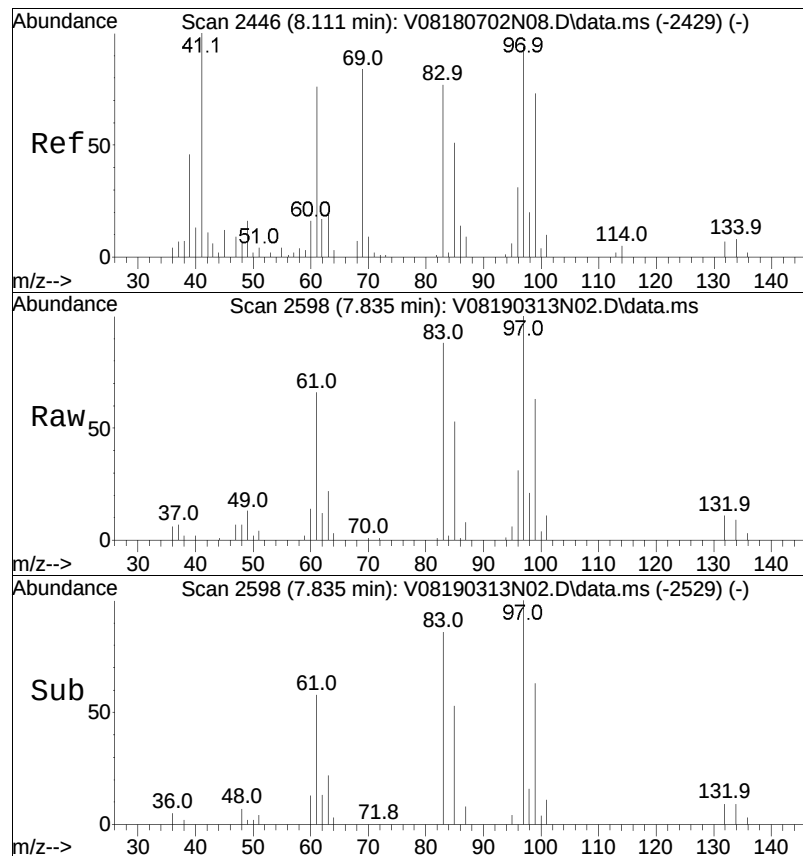




#65
 trans-1,3-Dichloropropene
 Concen: 10.17 ug/L
 RT: 7.706 min Scan# 2552
 Delta R.T. -0.009 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

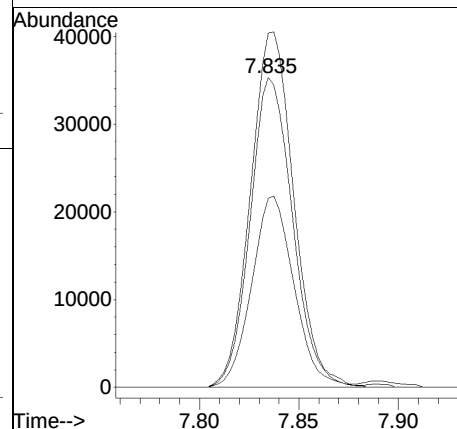
Tgt Ion	Ratio	Lower	Upper
75	100		
77	31.5	12.4	52.4
39	56.4	42.8	82.8

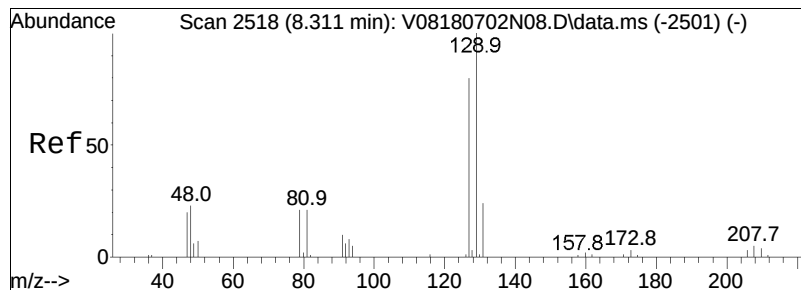




#68
 1,1,2-Trichloroethane
 Concen: 11.36 ug/L
 RT: 7.835 min Scan# 2598
 Delta R.T. -0.008 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

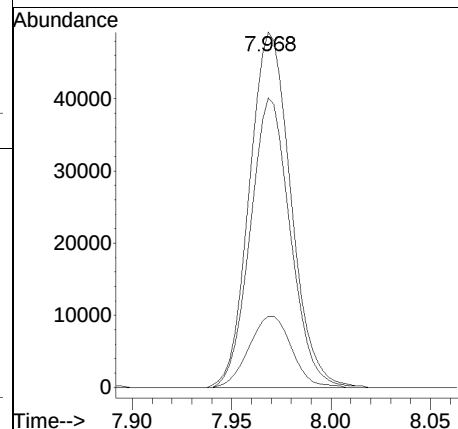
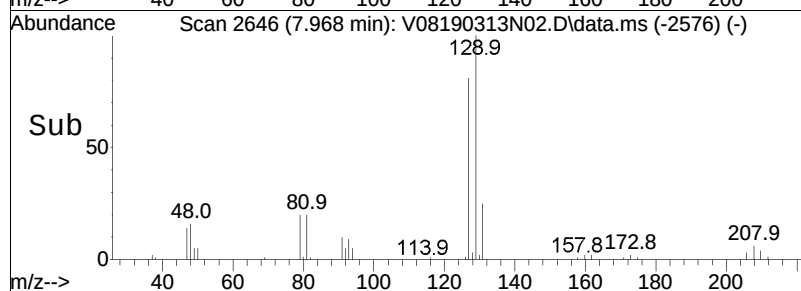
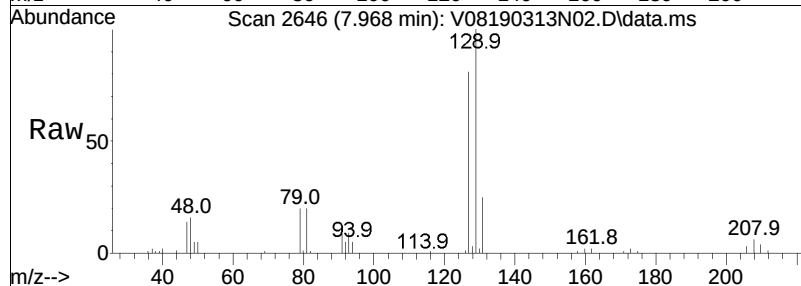
Tgt Ion:	83	Resp:	52416
Ion Ratio	Lower	Upper	
83	100		
97	117.2	89.8	129.8
85	61.7	44.4	84.4

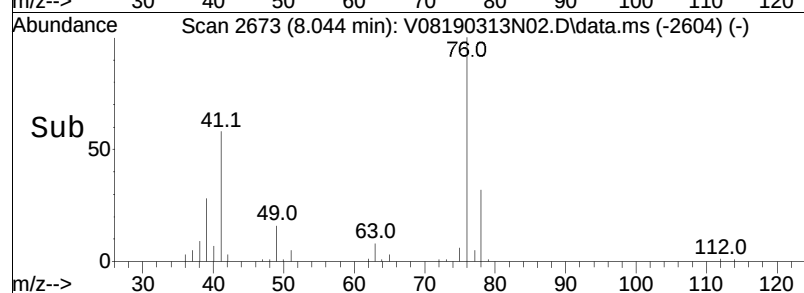
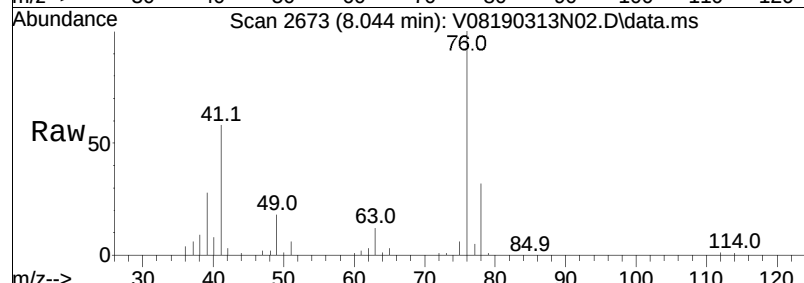
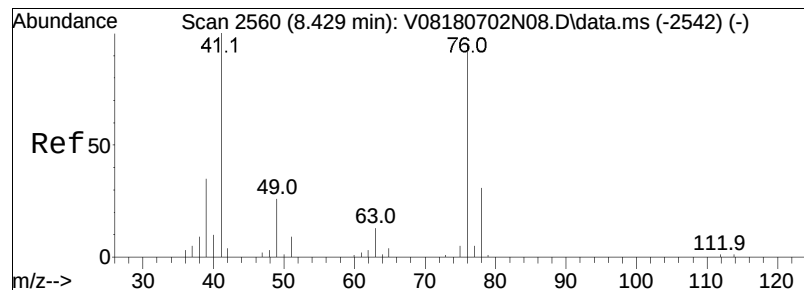




#69
 Chlorodibromomethane
 Concen: 10.51 ug/L
 RT: 7.968 min Scan# 2646
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

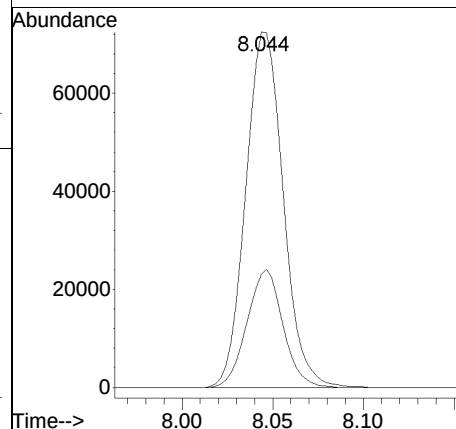
Tgt Ion	Ratio	Lower	Upper
129	100		
81	20.6	2.9	42.9
127	78.7	57.8	97.8

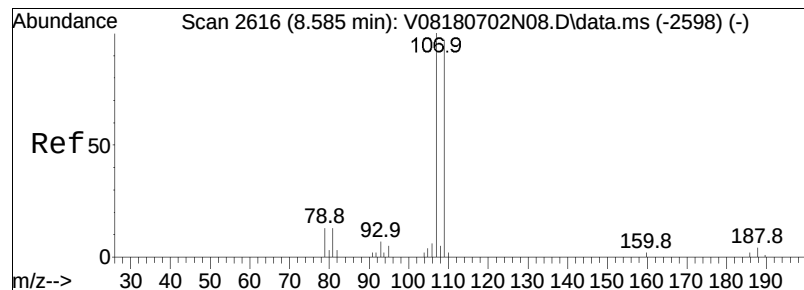




#70
 1,3-Dichloropropane
 Concen: 11.19 ug/L
 RT: 8.044 min Scan# 2673
 Delta R.T. -0.008 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

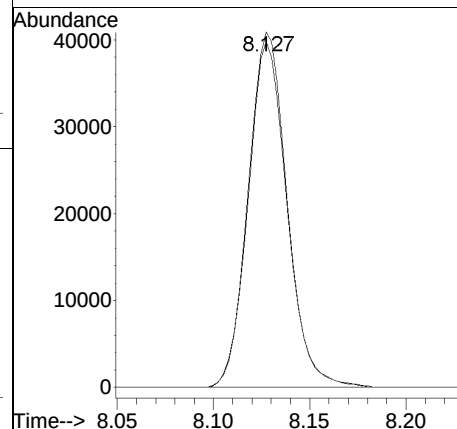
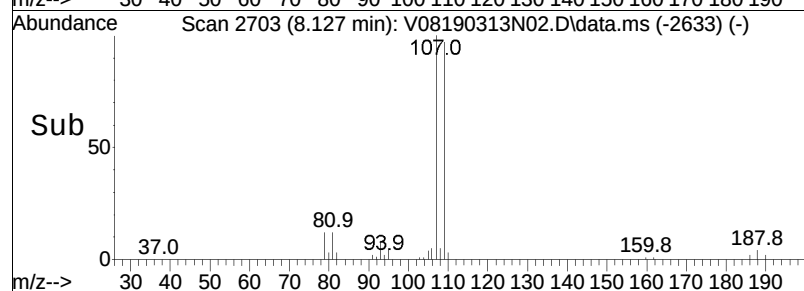
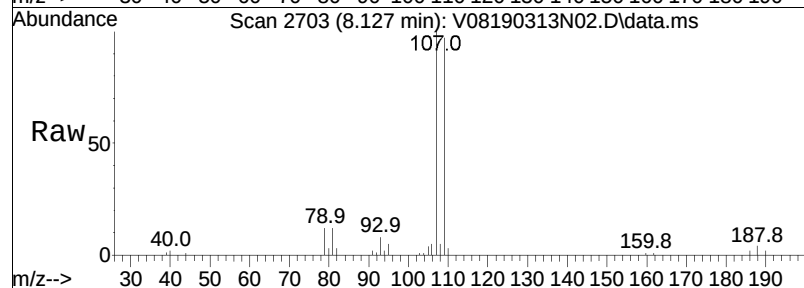
Tgt Ion	Ratio	Lower	Upper
76	100		
78	31.7	25.5	38.3

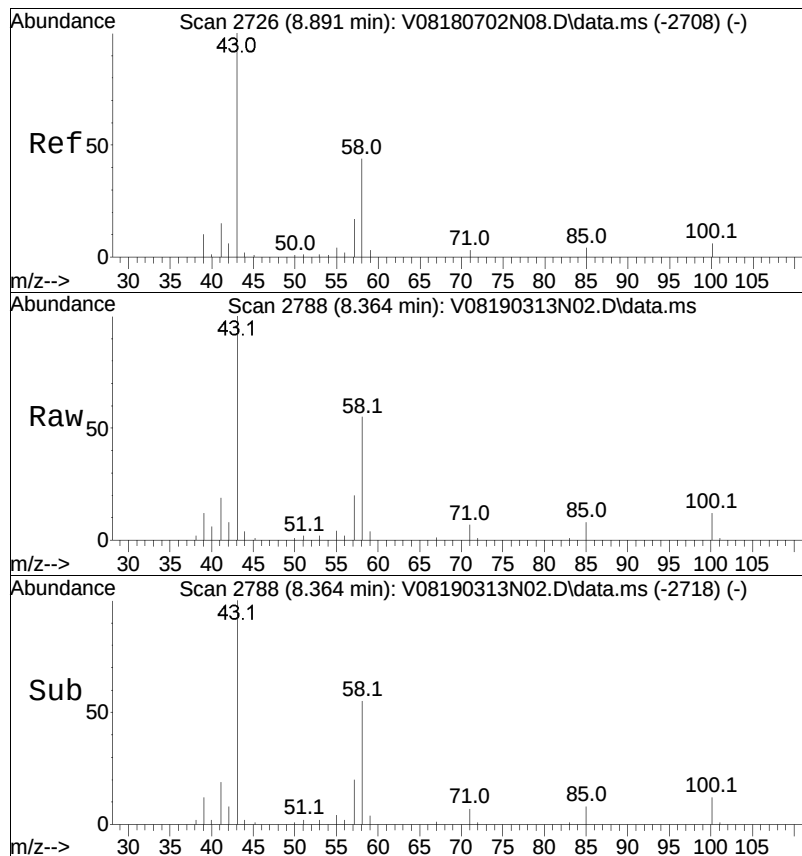




#71
 1,2-Dibromoethane
 Concen: 10.48 ug/L
 RT: 8.127 min Scan# 2703
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

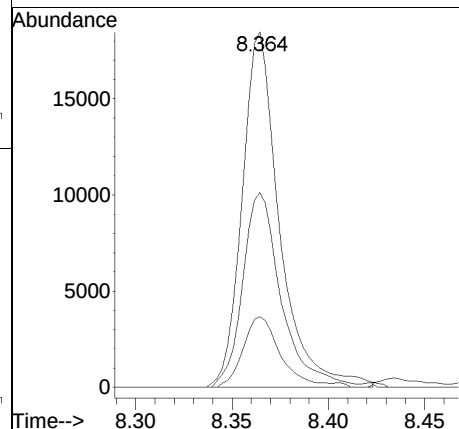
Tgt Ion	Ratio	Lower	Upper
107	100		
109	96.9	74.3	111.5

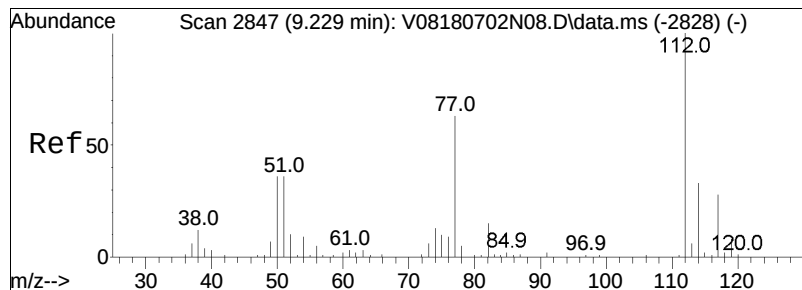




#72
 2-Hexanone
 Concen: 7.94 ug/L
 RT: 8.364 min Scan# 2788
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

Tgt Ion:	43	Resp:	24970
Ion Ratio	100	Lower	Upper
58	56.5	41.2	61.8
57	20.3	17.2	25.8





#73

Chlorobenzene

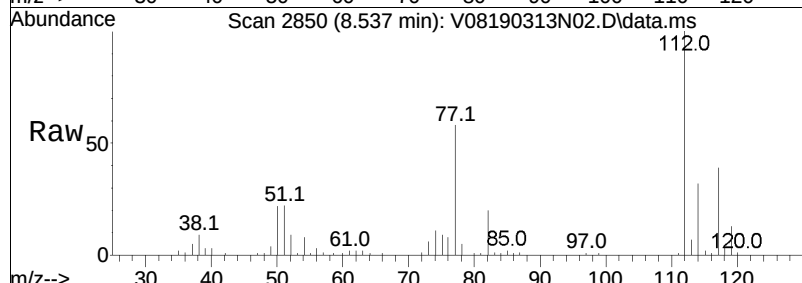
Concen: 10.46 ug/L

RT: 8.537 min Scan# 2850

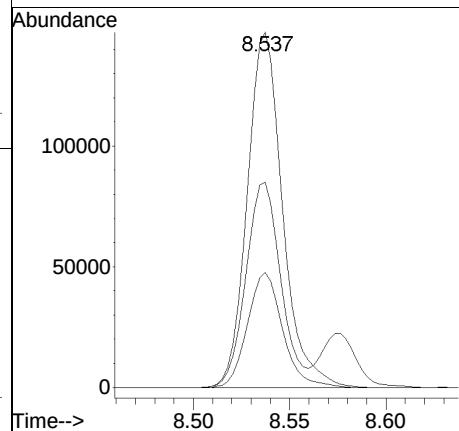
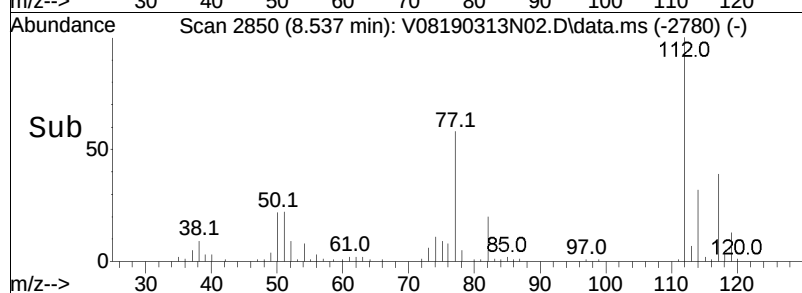
Delta R.T. -0.006 min

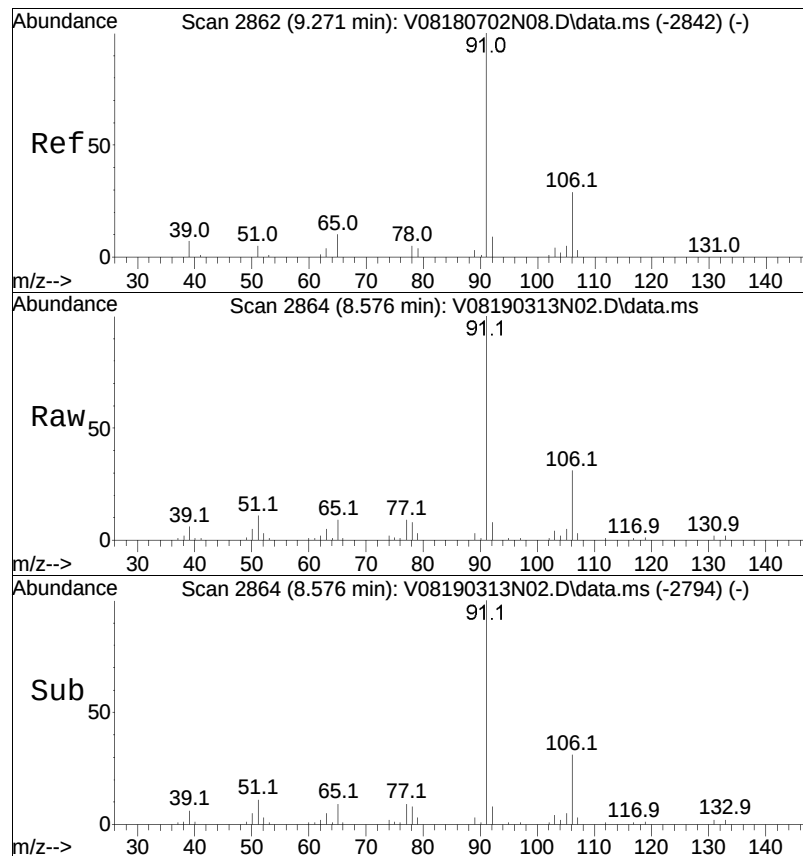
Lab File: V08190313N02.D

Acq: 13 Mar 2019 6:42 pm



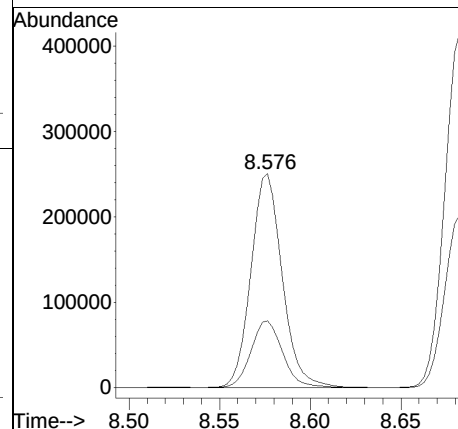
Tgt	Ion:112	Resp:	187460
Ion	Ratio	Lower	Upper
112	100		
77	57.2	55.4	83.0
114	32.1	25.4	38.2

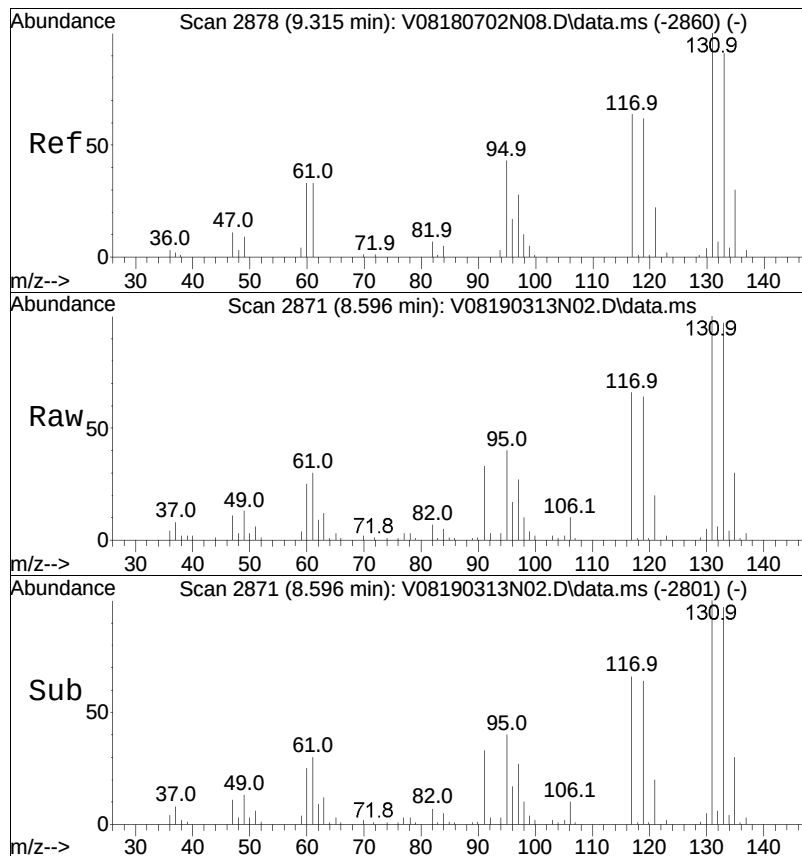




#74
 Ethylbenzene
 Concen: 9.98 ug/L
 RT: 8.576 min Scan# 2864
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

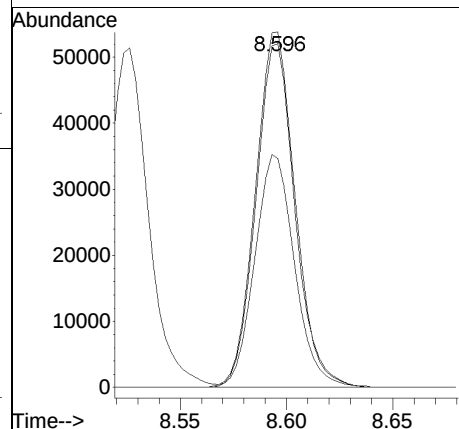
Tgt	Ion	Resp	Lower	Upper
91	100	299929		
106	31.3	24.3	36.5	

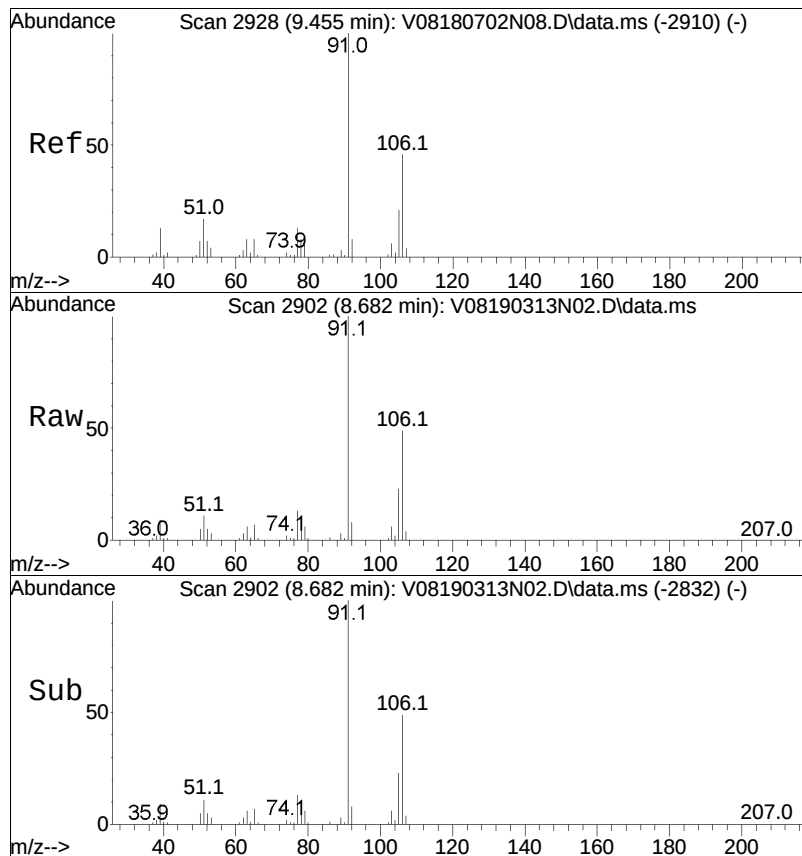




#75
 1,1,1,2-Tetrachloroethane
 Concen: 10.44 ug/L
 RT: 8.596 min Scan# 2871
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

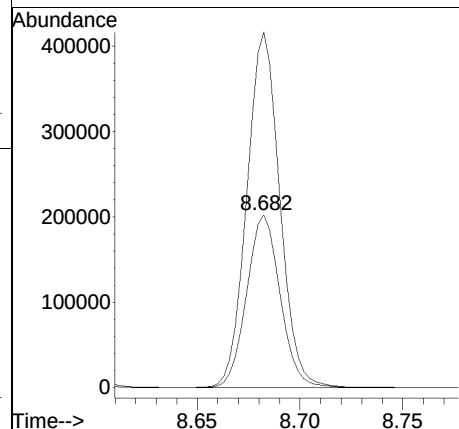
Tgt Ion:	131	Resp:	70061
Ion Ratio	Lower	Upper	
131	100		
133	95.1	81.0	121.0
119	65.6	41.3	81.3

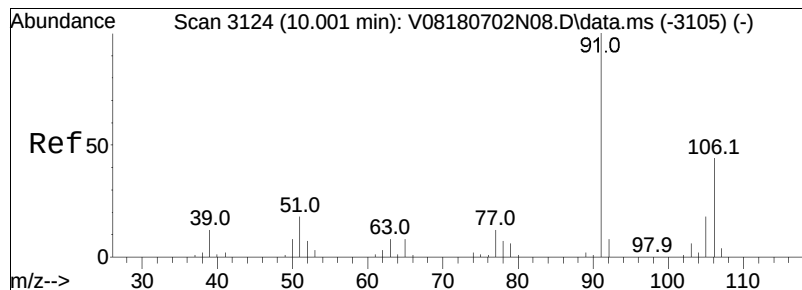




#76
 p/m Xylene
 Concen: 19.99 ug/L
 RT: 8.682 min Scan# 2902
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

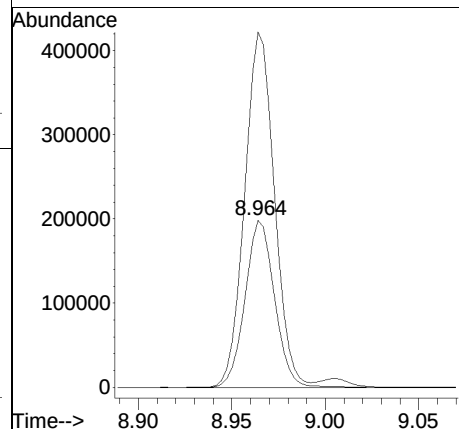
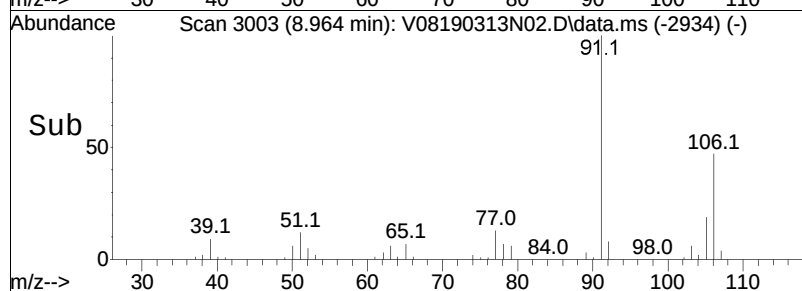
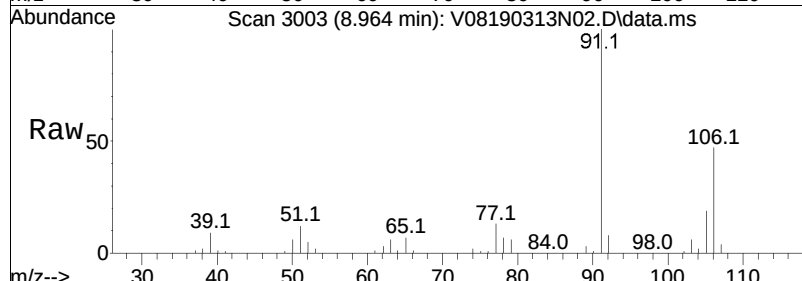
Tgt Ion	Ratio	Lower	Upper
106	100		
91	202.7	166.4	249.6

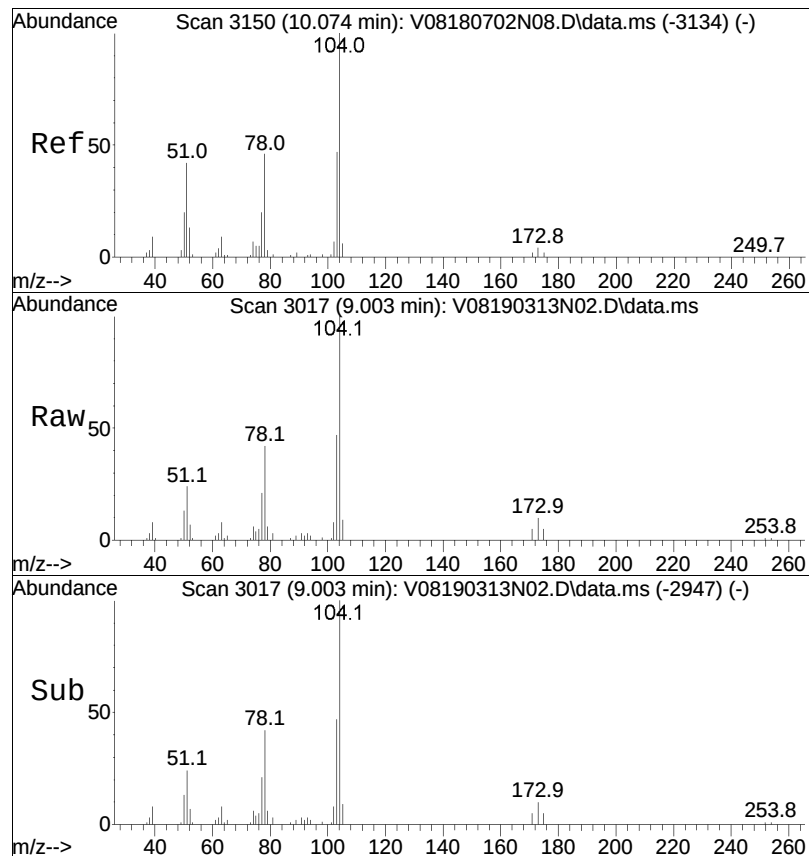




#77
o Xylene
Concen: 19.25 ug/L
RT: 8.964 min Scan# 3003
Delta R.T. -0.008 min
Lab File: V08190313N02.D
Acq: 13 Mar 2019 6:42 pm

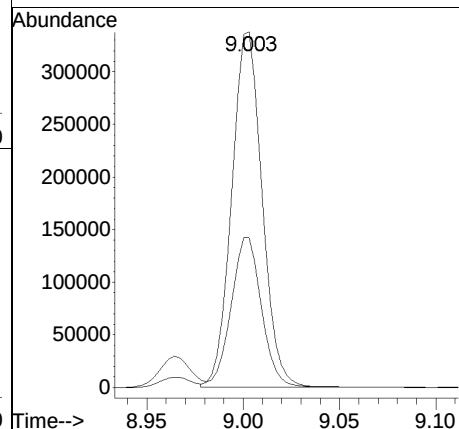
Tgt Ion	Ratio	Lower	Upper
106	100		
91	214.5	182.6	273.8

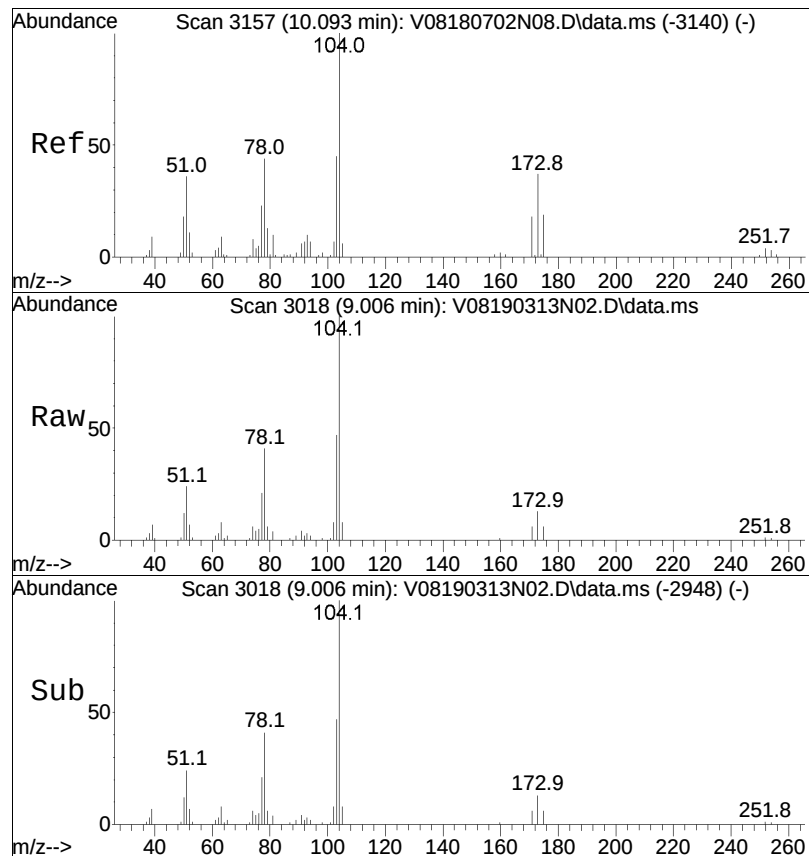




#78
 Styrene
 Concen: 20.53 ug/L
 RT: 9.003 min Scan# 3017
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

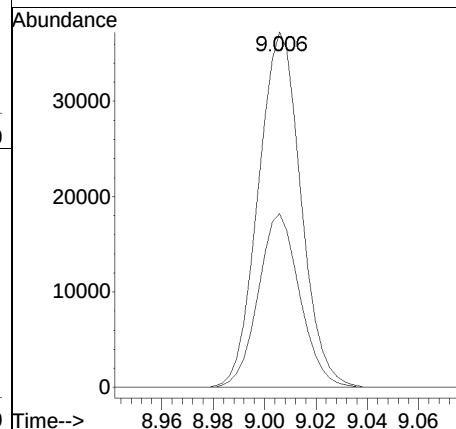
Tgt Ion	Ratio	Lower	Upper
104	100		
78	42.1	39.8	59.6

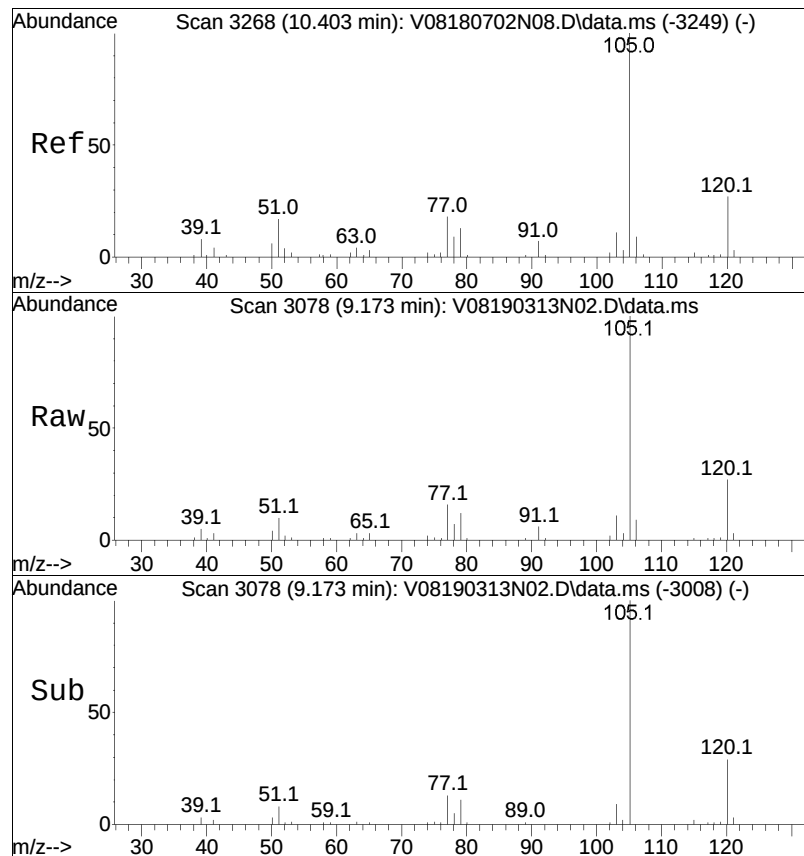




#80
 Bromoform
 Concen: 10.23 ug/L
 RT: 9.006 min Scan# 3018
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

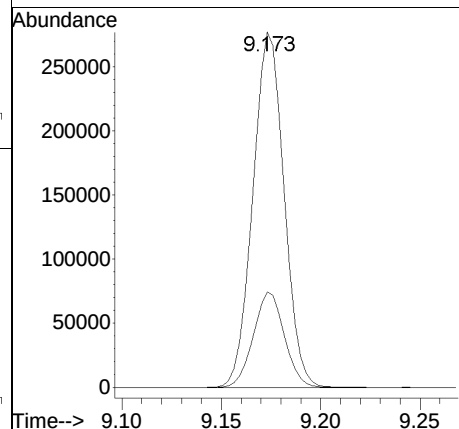
Tgt Ion	Ratio	Lower	Upper
173	100		
175	47.7	31.5	71.5

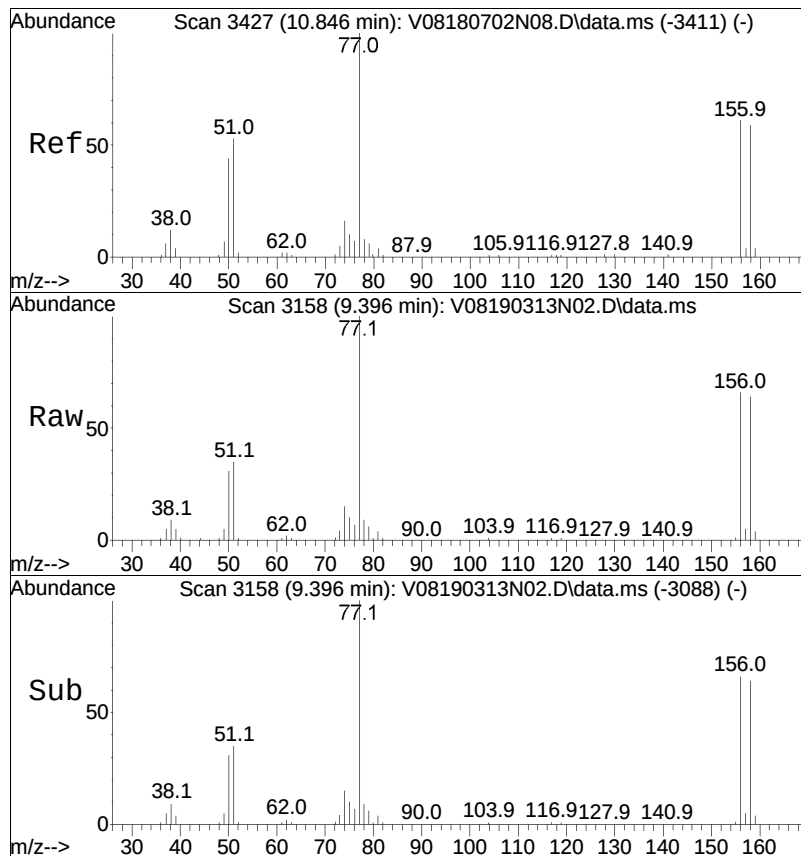




#82
 Isopropylbenzene
 Concen: 10.24 ug/L
 RT: 9.173 min Scan# 3078
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

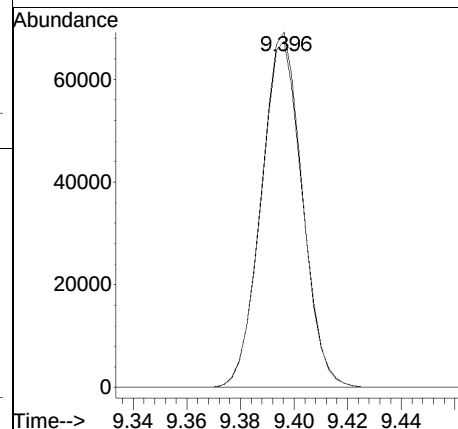
Tgt Ion	Ratio	Lower	Upper
105	100		
120	26.6	4.8	44.8

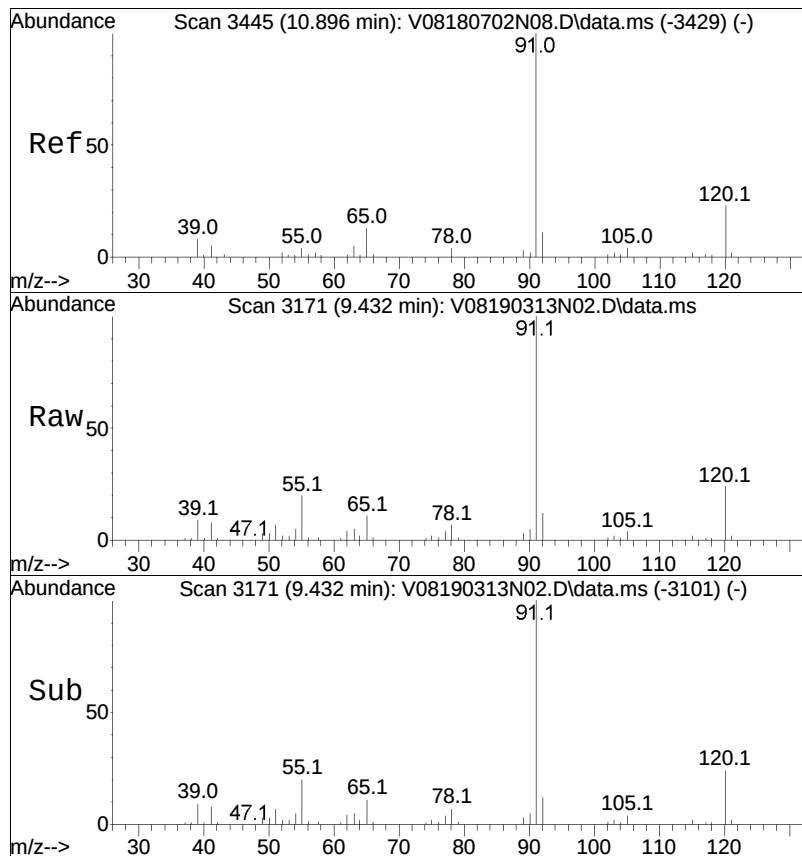




#84
 Bromobenzene
 Concen: 9.67 ug/L
 RT: 9.396 min Scan# 3158
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

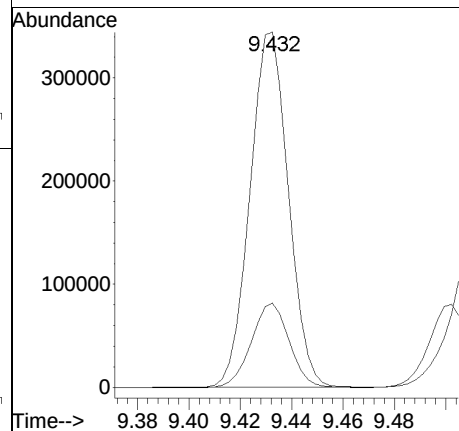
Tgt Ion	Ratio	Lower	Upper
156	100		
158	98.2	75.9	113.9

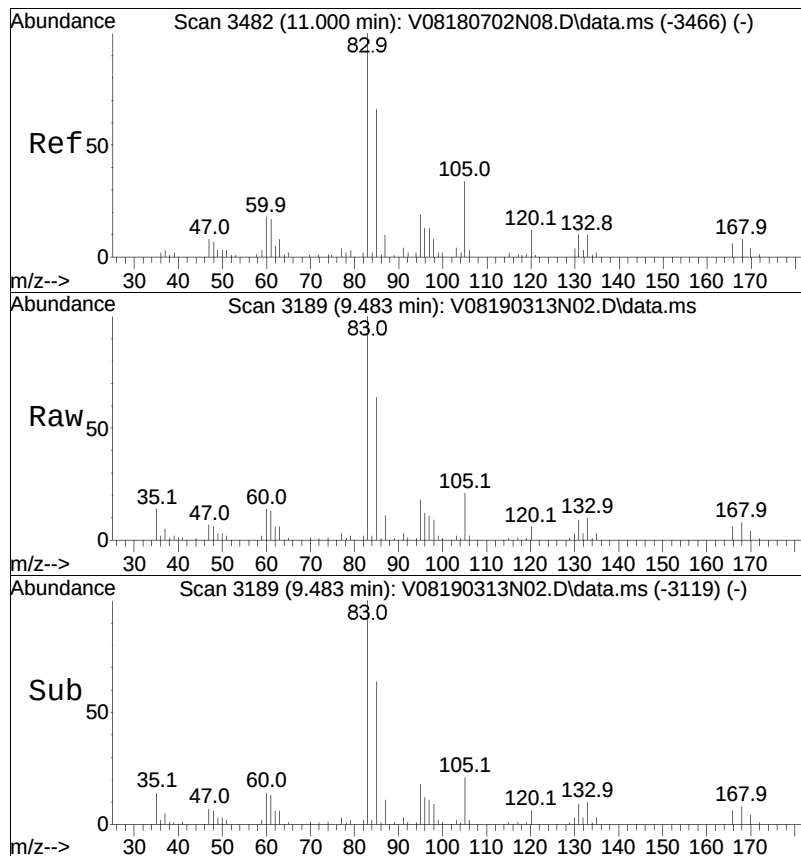




#85
 n-Propylbenzene
 Concen: 10.61 ug/L
 RT: 9.432 min Scan# 3171
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

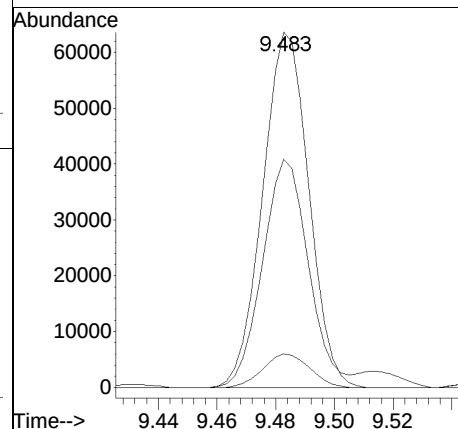
Tgt Ion:	91	120	Ratio	Lower	Upper
91	100				
120	23.4		17.0	25.6	

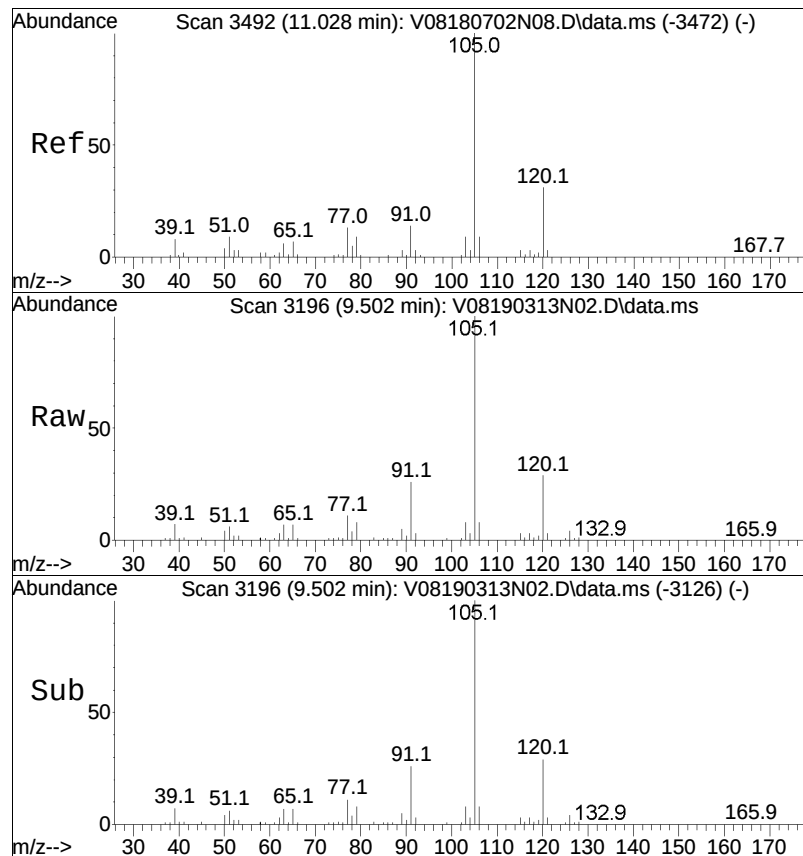




#87
 1,1,2,2-Tetrachloroethane
 Concen: 10.13 ug/L
 RT: 9.483 min Scan# 3189
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

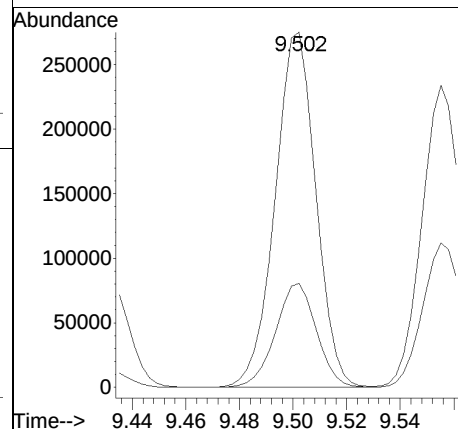
Tgt Ion:	83	Resp:	69307
Ion Ratio	Lower	Upper	
83	100		
131	9.6	0.0	30.4
85	64.2	45.4	85.4

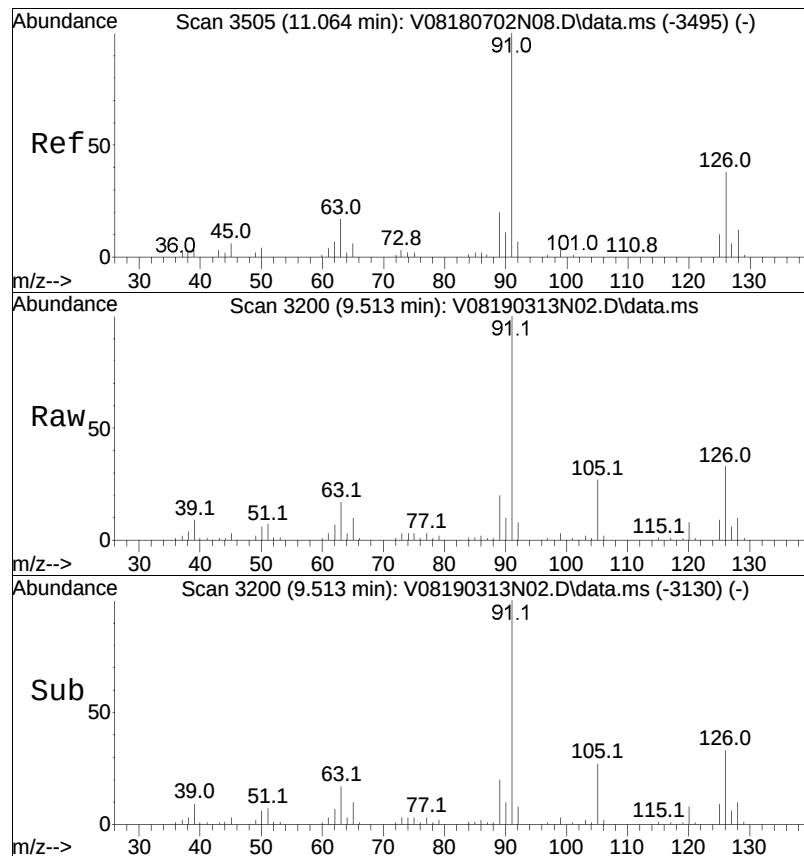




#88
 4-Ethyltoluene
 Concen: 10.40 ug/L
 RT: 9.502 min Scan# 3196
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

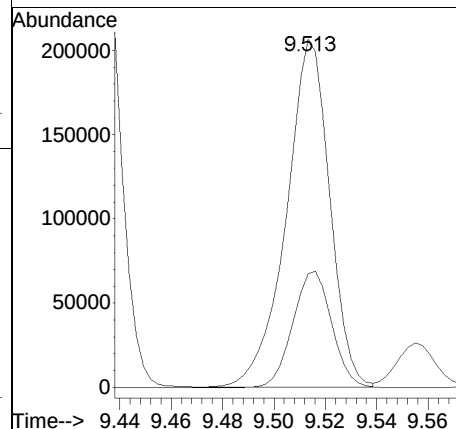
Tgt Ion	Ratio	Lower	Upper
105	100		
120	29.4	18.1	37.7

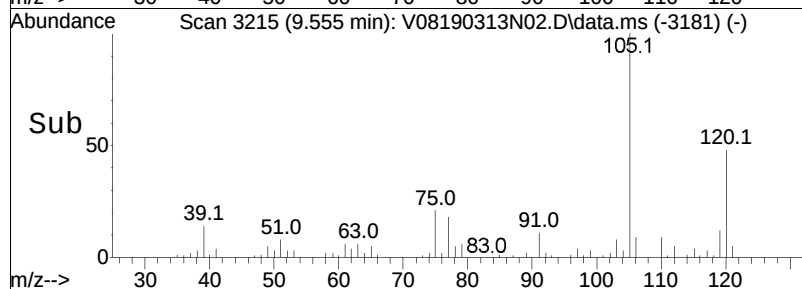
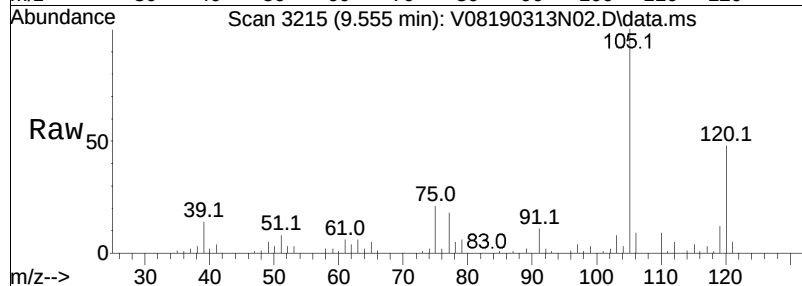
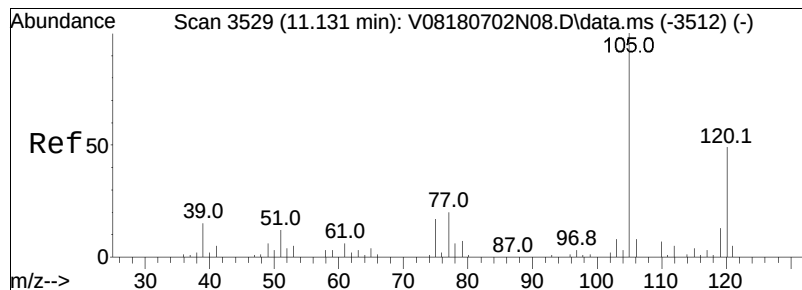




#89
 2-Chlorotoluene
 Concen: 9.85 ug/L
 RT: 9.513 min Scan# 3200
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

Tgt Ion:	91	Resp:	241642
Ion Ratio	Lower	Upper	
91	100		
126	29.9	21.5	32.3





#90

1,3,5-Trimethylbenzene

Concen: 9.99 ug/L

RT: 9.555 min Scan# 3215

Delta R.T. -0.006 min

Lab File: V08190313N02.D

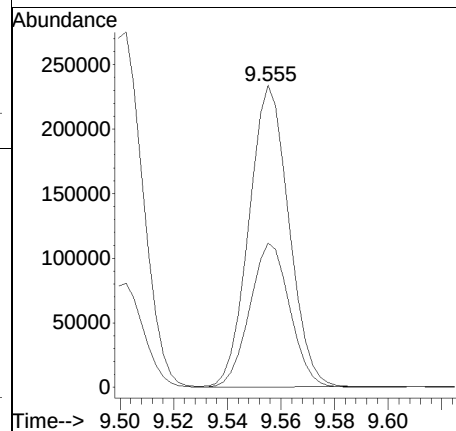
Acq: 13 Mar 2019 6:42 pm

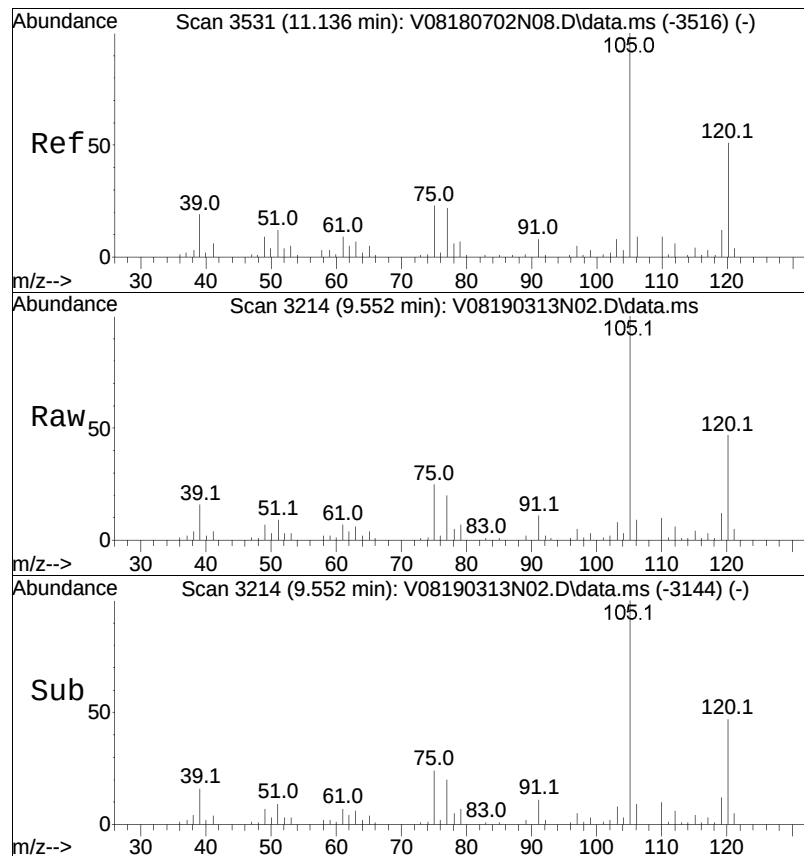
Tgt Ion:105 Resp: 241486

Ion Ratio Lower Upper

105 100

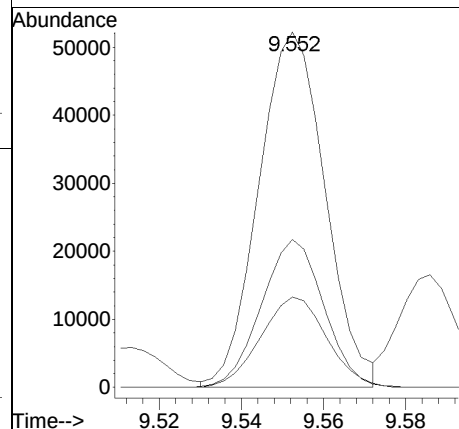
120 47.9 34.8 52.2

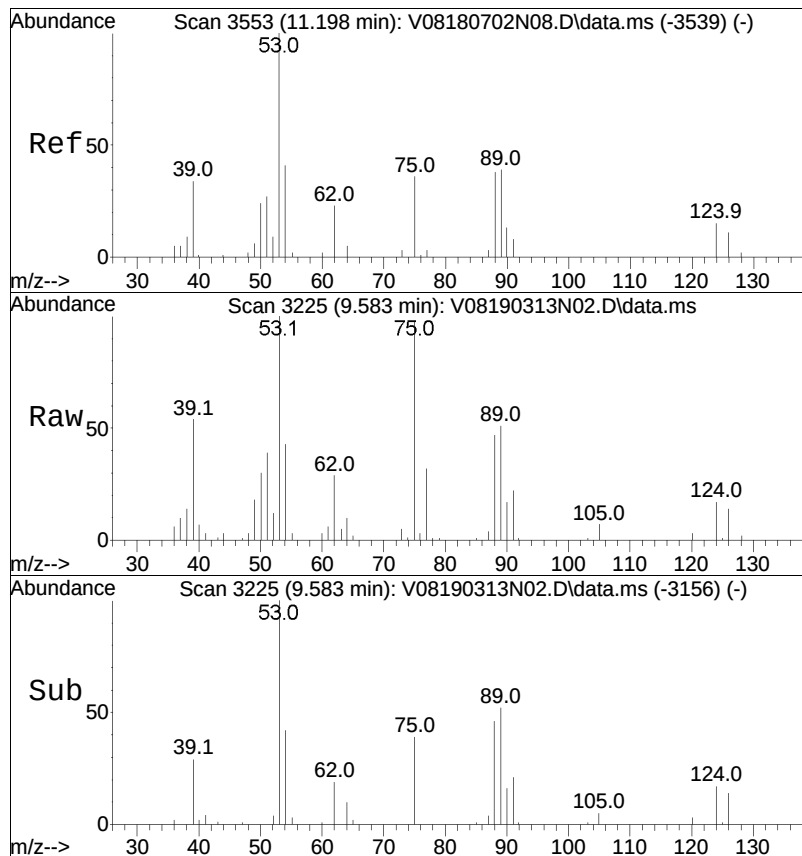




#91
 1,2,3-Trichloropropane
 Concen: 11.02 ug/L
 RT: 9.552 min Scan# 3214
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

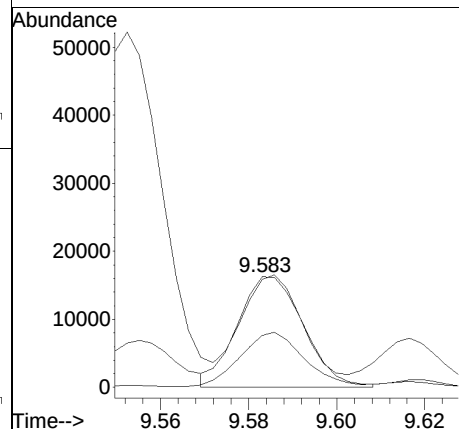
Tgt Ion:	75	Resp:	58561
Ion Ratio	Lower	Upper	
75	100		
110	39.2	25.4	52.8
112	25.4	15.6	32.4

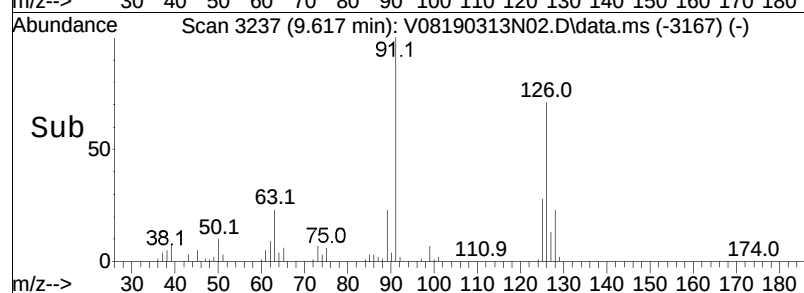
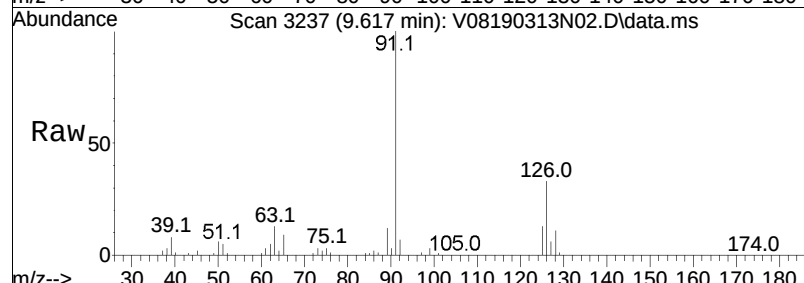
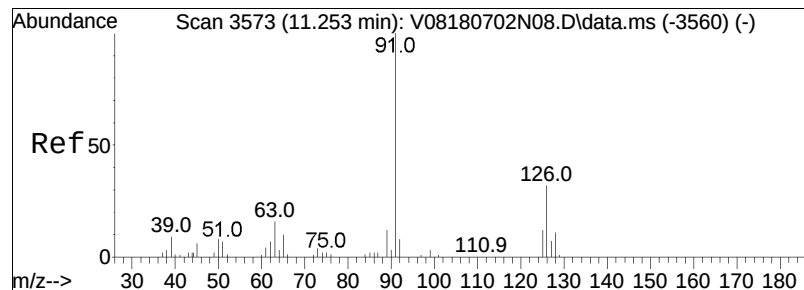




#92
 trans-1,4-Dichloro-2-butene
 Concen: 9.11 ug/L
 RT: 9.583 min Scan# 3225
 Delta R.T. -0.008 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

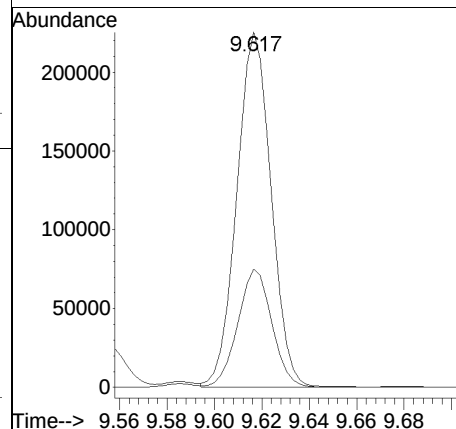
Tgt Ion	Ratio	Lower	Upper
53	100		
88	47.0	39.6	59.4
75	96.7	70.2	105.4

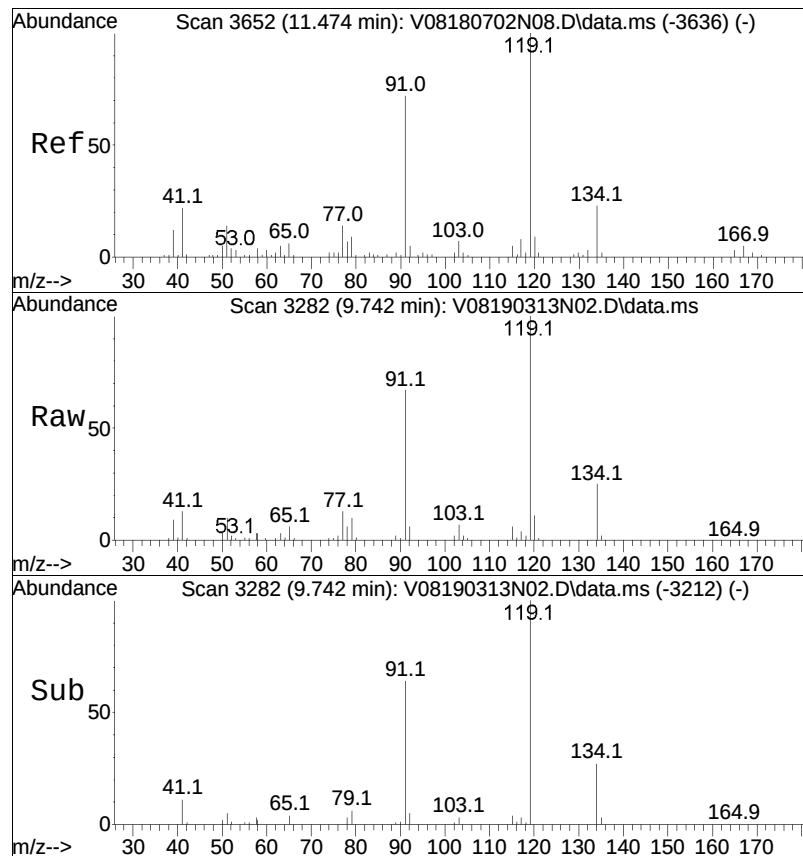




#93
 4-Chlorotoluene
 Concen: 10.56 ug/L
 RT: 9.617 min Scan# 3237
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

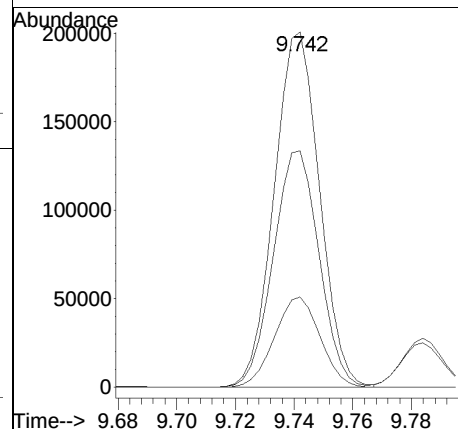
Tgt Ion:	91	Resp:	225476
Ion Ratio	100	Lower	Upper
126	33.2	24.6	36.8

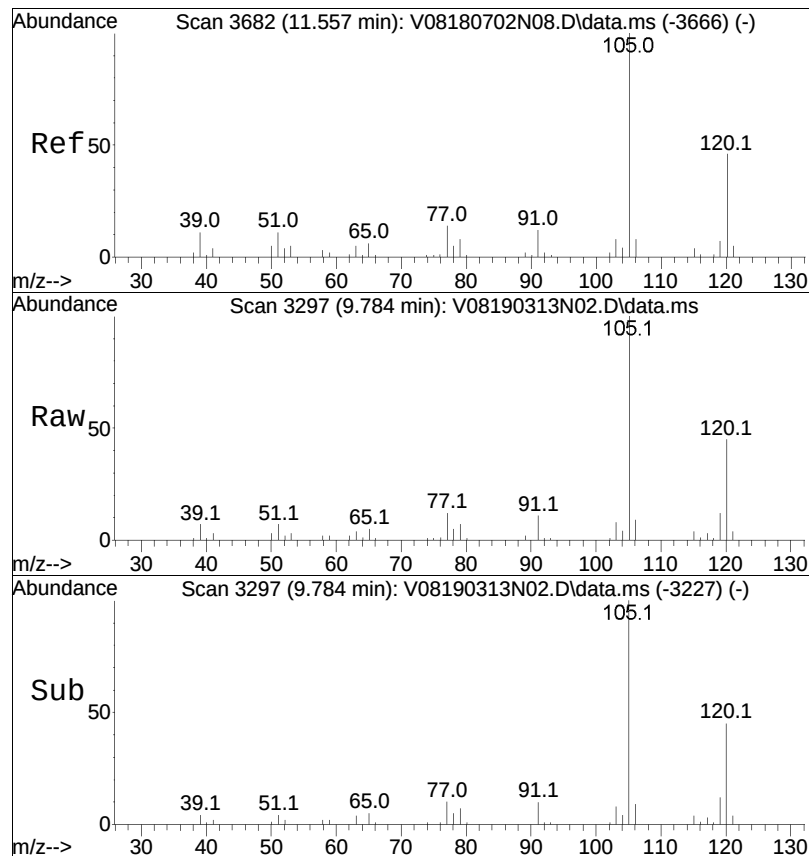




#94
 tert-Butylbenzene
 Concen: 8.69 ug/L
 RT: 9.742 min Scan# 3282
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

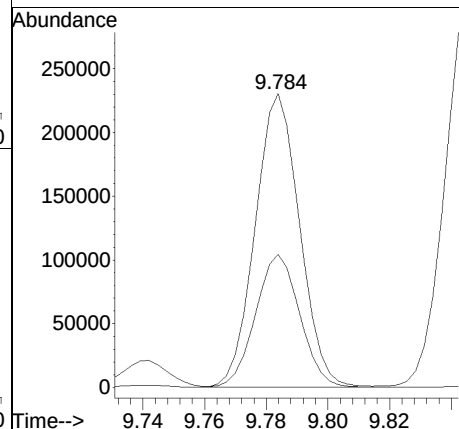
Tgt Ion:	119	Resp:	215895
Ion Ratio	Lower	Upper	
119	100		
91	66.9	51.4	77.2
134	25.6	18.3	27.5

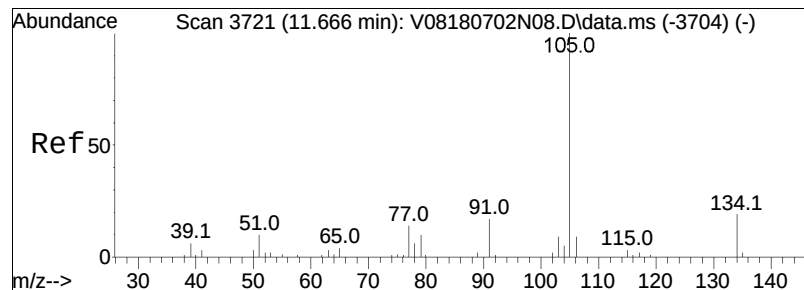




#97
 1,2,4-Trimethylbenzene
 Concen: 9.58 ug/L
 RT: 9.784 min Scan# 3297
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

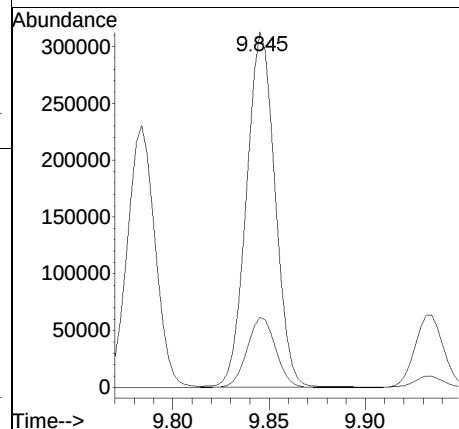
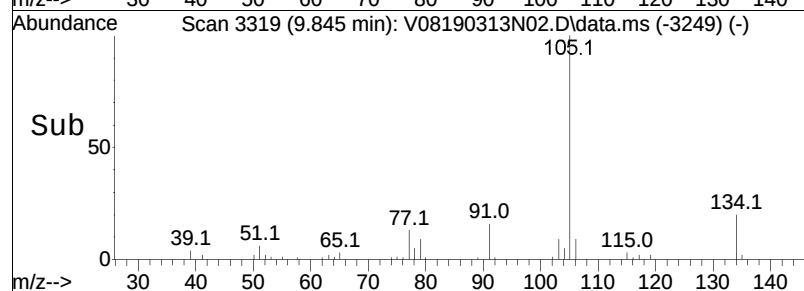
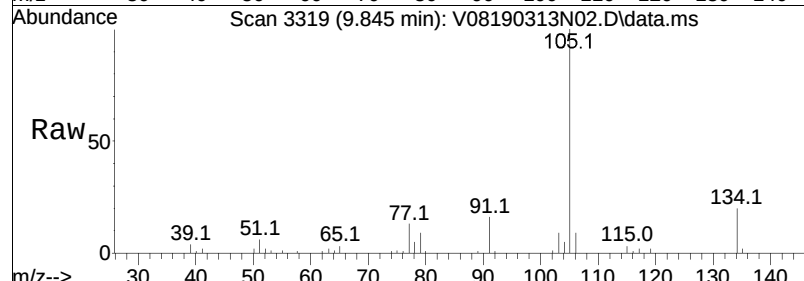
Tgt	Ion	Ratio	Lower	Upper
105	100			
120	44.8	33.4	50.0	

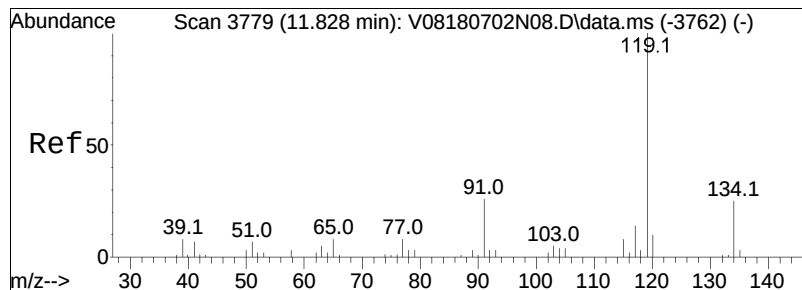




#98
 sec-Butylbenzene
 Concen: 10.59 ug/L
 RT: 9.845 min Scan# 3319
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

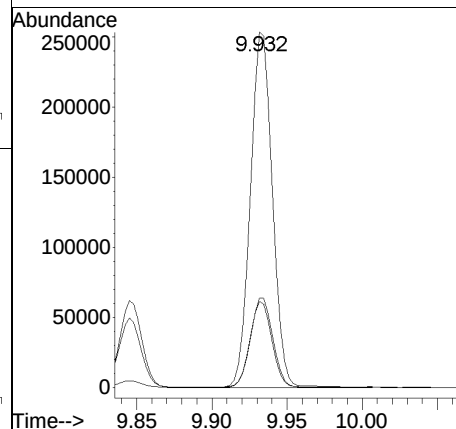
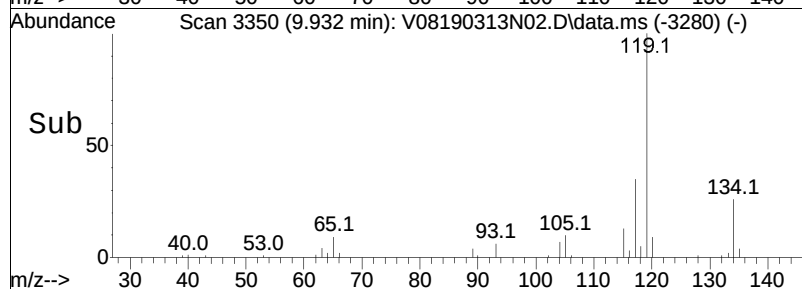
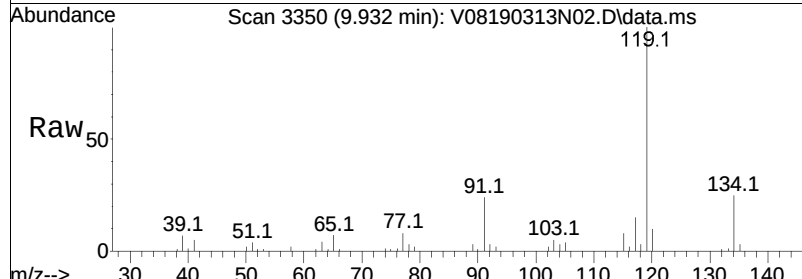
Tgt Ion	Ratio	Lower	Upper
105	100		
134	19.6	12.5	26.1

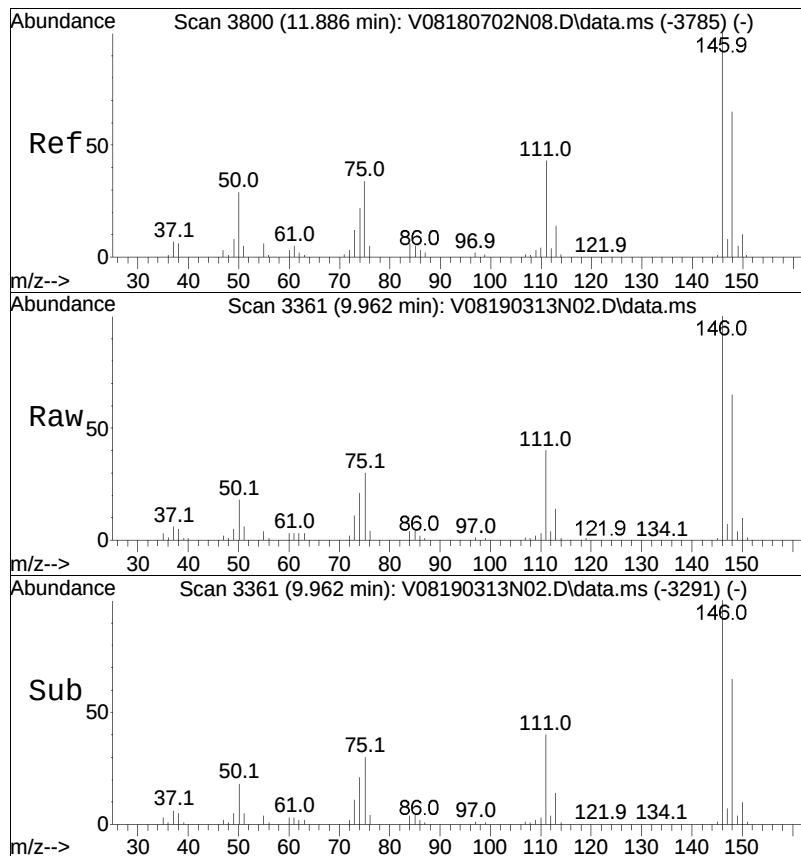




#99
 p-Isopropyltoluene
 Concen: 9.88 ug/L
 RT: 9.932 min Scan# 3350
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

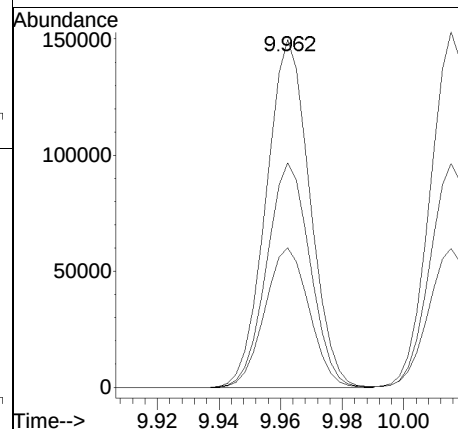
Tgt Ion:	119	Resp:	258281
Ion Ratio	Lower	Upper	
119	100		
134	25.5	16.1	33.3
91	23.8	17.3	35.9

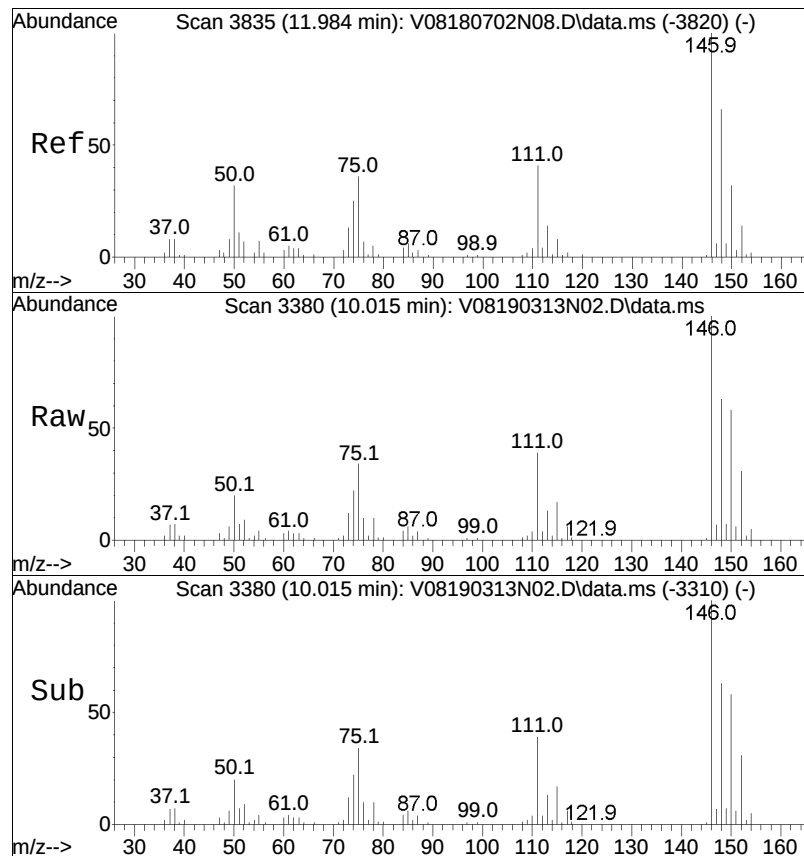




#100
 1,3-Dichlorobenzene
 Concen: 10.60 ug/L
 RT: 9.962 min Scan# 3361
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

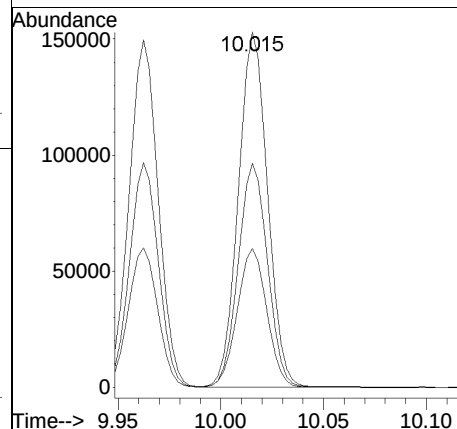
Tgt Ion:	146	Resp:	148192
Ion Ratio	Lower	Upper	
146	100		
111	40.5	27.5	57.1
148	63.8	41.9	86.9

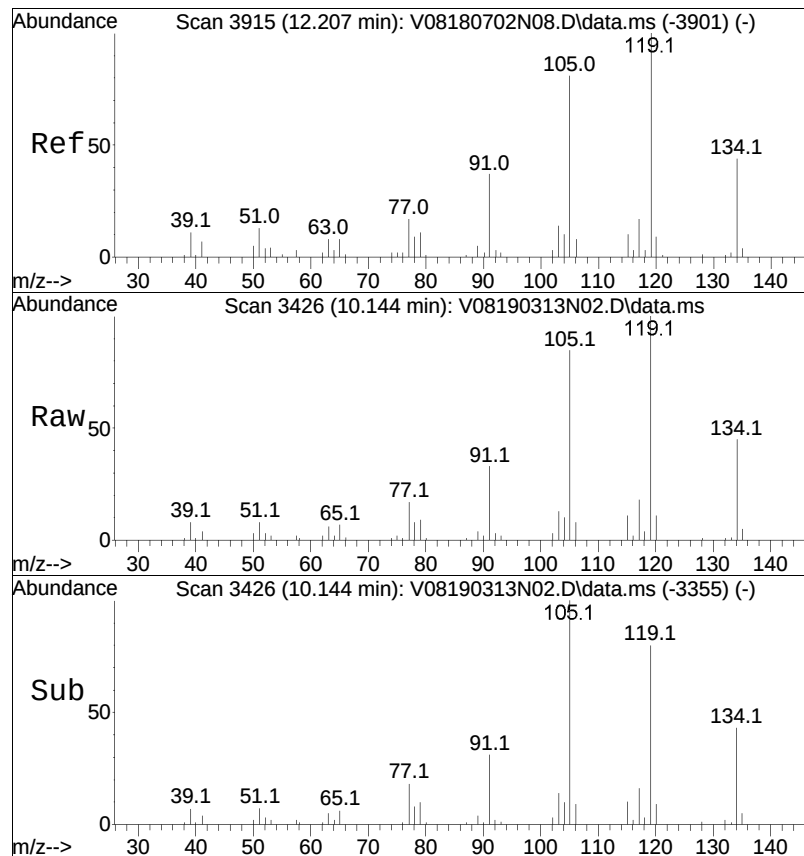




#101
 1,4-Dichlorobenzene
 Concen: 10.43 ug/L
 RT: 10.015 min Scan# 3380
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

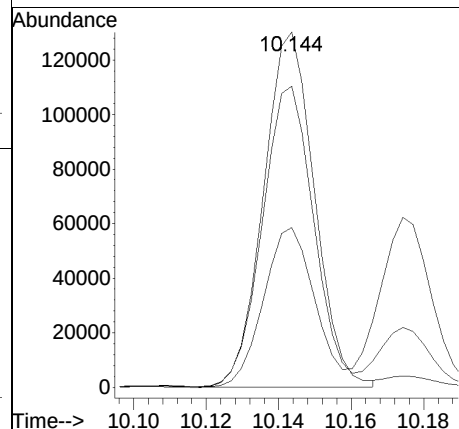
Tgt Ion:	146	Resp:	150989
Ion Ratio	Lower	Upper	
146	100		
111	39.4	32.3	48.5
148	63.1	49.9	74.9

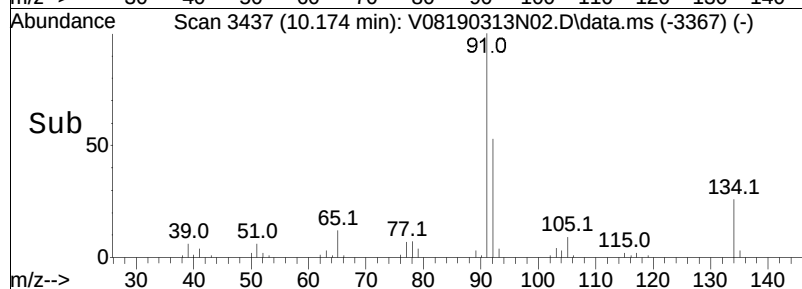
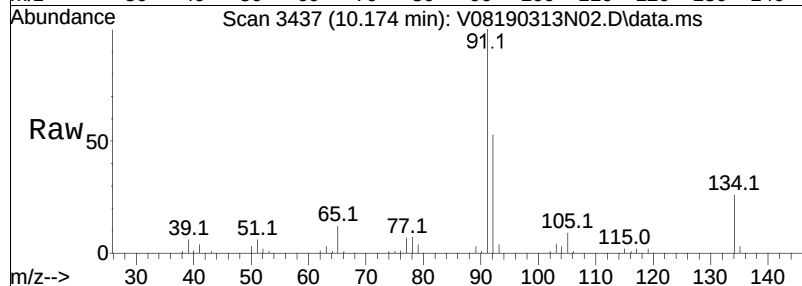
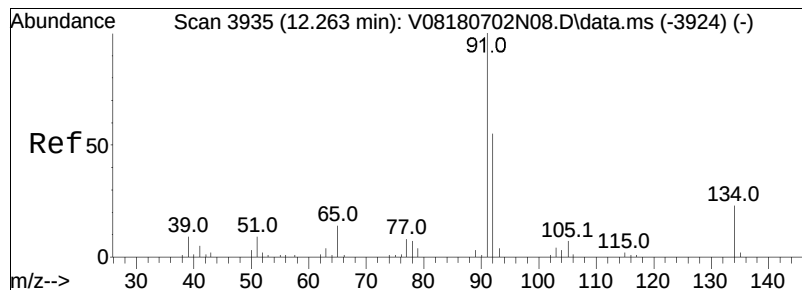




#102
 p-Diethylbenzene
 Concen: 8.28 ug/L
 RT: 10.144 min Scan# 3426
 Delta R.T. -0.002 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

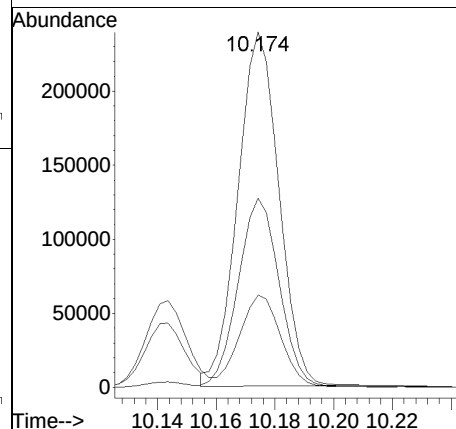
Tgt Ion:	119	Resp:	126695
Ion Ratio	Lower	Upper	
119	100		
105	85.4	59.5	123.7
134	45.2	30.2	62.6

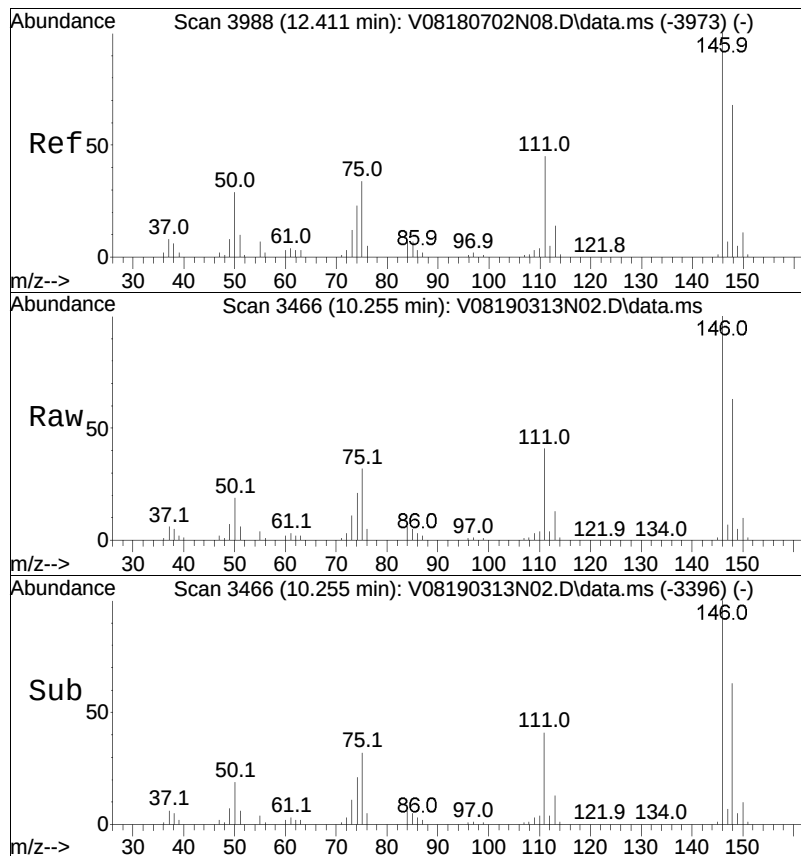




#103
 n-Butylbenzene
 Concen: 9.56 ug/L
 RT: 10.174 min Scan# 3437
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

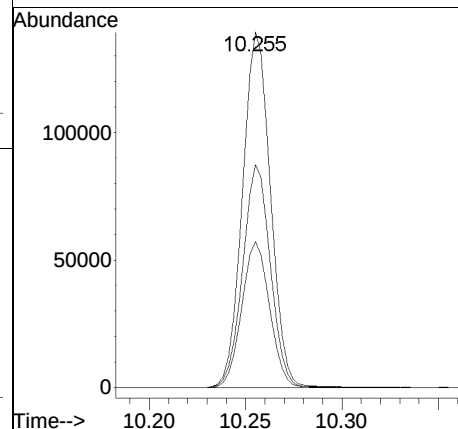
Tgt Ion:	91	Resp:	231697
Ion Ratio	Lower	Upper	
91	100		
92	53.8	43.0	64.4
134	26.5	19.6	29.4

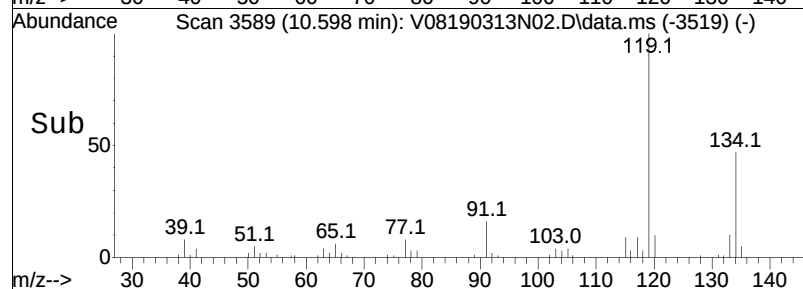
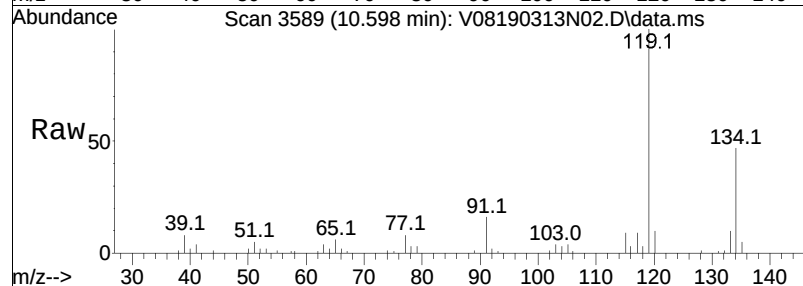
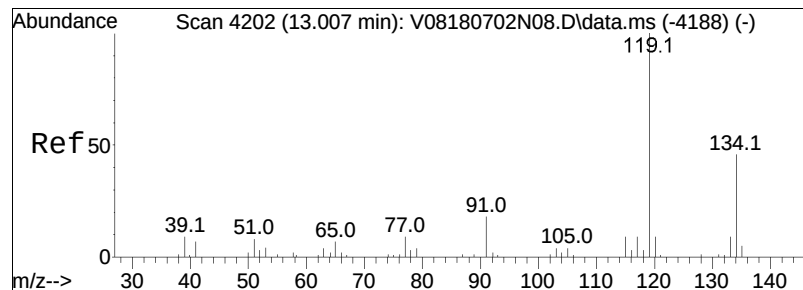




#104
 1,2-Dichlorobenzene
 Concen: 10.33 ug/L
 RT: 10.255 min Scan# 3466
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

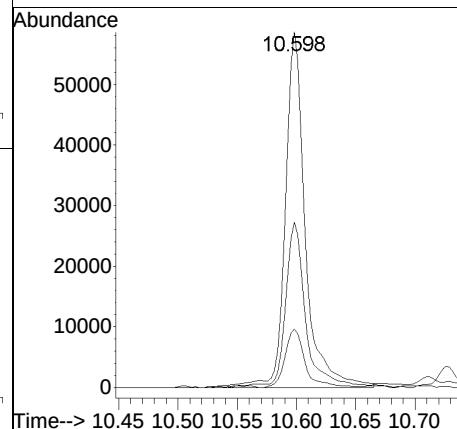
Tgt Ion:	146	Resp:	140796
Ion Ratio	Lower	Upper	
146	100		
111	40.8	28.3	58.7
148	61.9	42.3	87.8

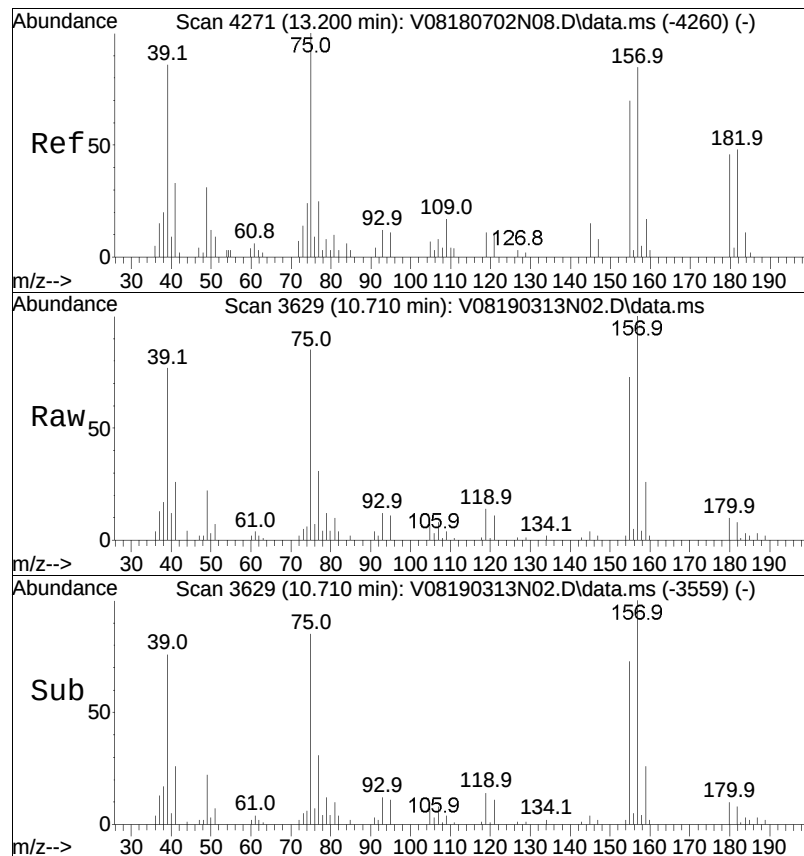




#105
 1,2,4,5-Tetramethylbenzene
 Concen: 3.20 ug/L
 RT: 10.598 min Scan# 3589
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

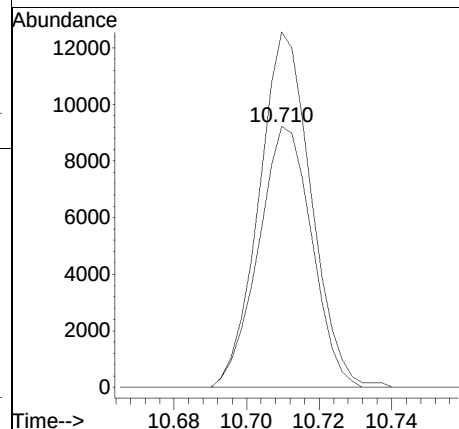
Tgt Ion	Ratio	Lower	Upper
119	100		
134	42.6	30.5	63.3
91	16.4	12.4	25.7

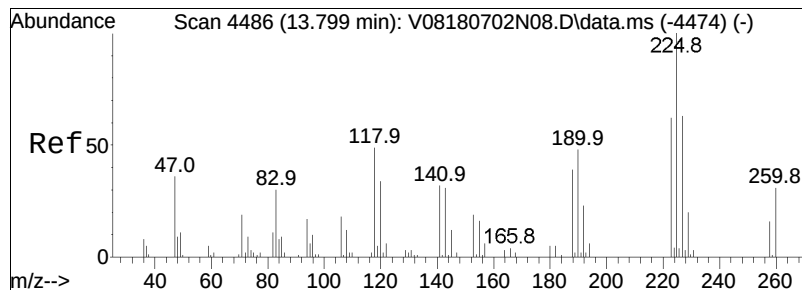




#106
 1,2-Dibromo-3-chloropropane
 Concen: 9.21 ug/L
 RT: 10.710 min Scan# 3629
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

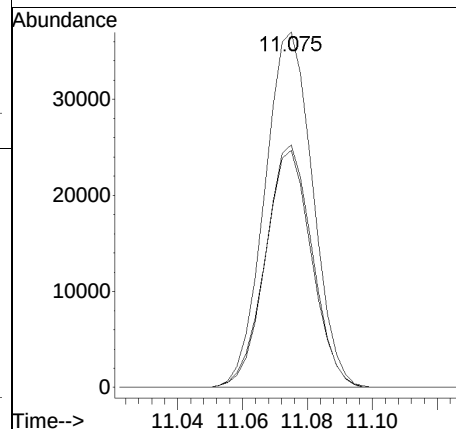
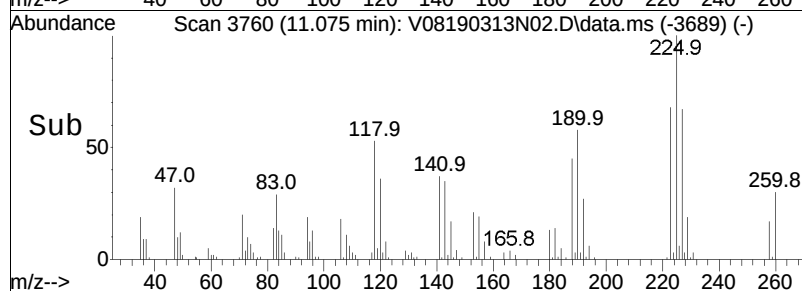
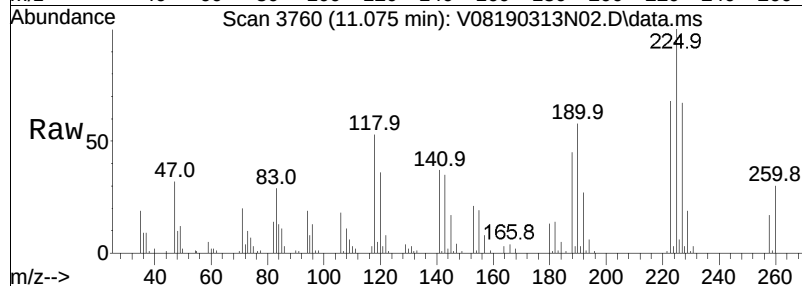
Tgt Ion	Ratio	Lower	Upper
155	100		
157	133.2	94.8	142.2

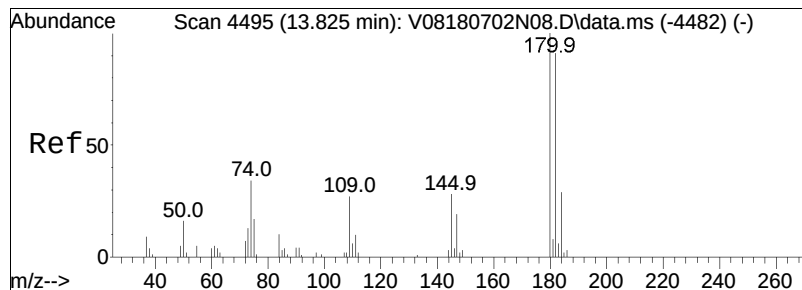




#108
 Hexachlorobutadiene
 Concen: 8.66 ug/L
 RT: 11.075 min Scan# 3760
 Delta R.T. -0.003 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

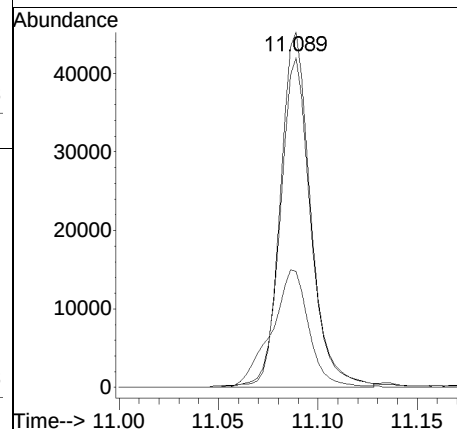
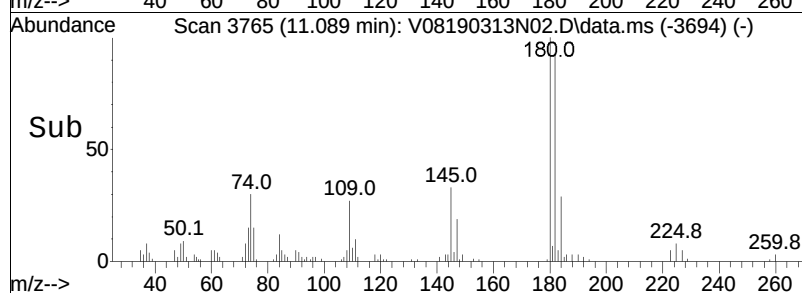
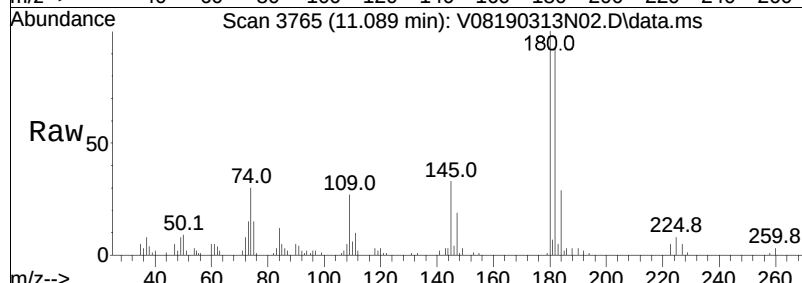
Tgt Ion	Ratio	Lower	Upper
225	100		
223	66.7	54.3	81.5
227	64.2	52.4	78.6

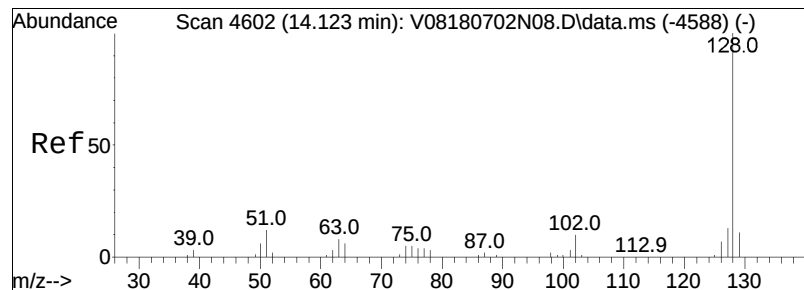




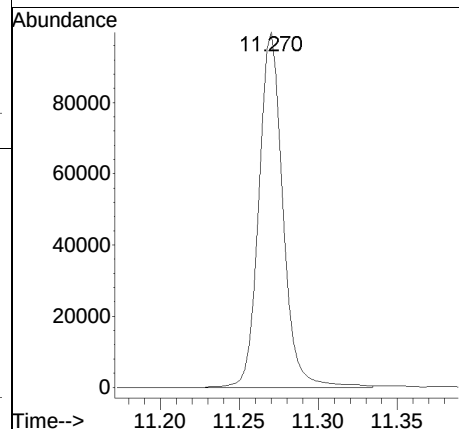
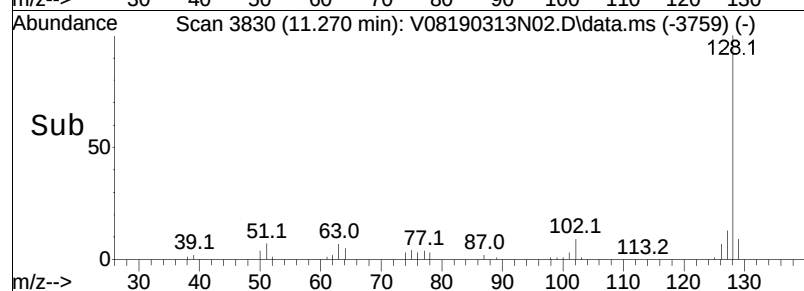
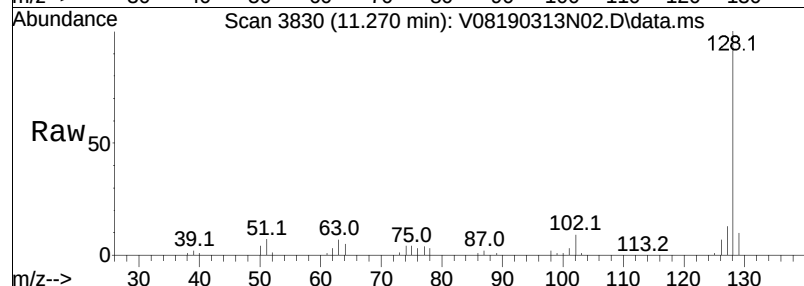
#109
 1,2,4-Trichlorobenzene
 Concen: 5.62 ug/L
 RT: 11.089 min Scan# 3765
 Delta R.T. -0.003 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

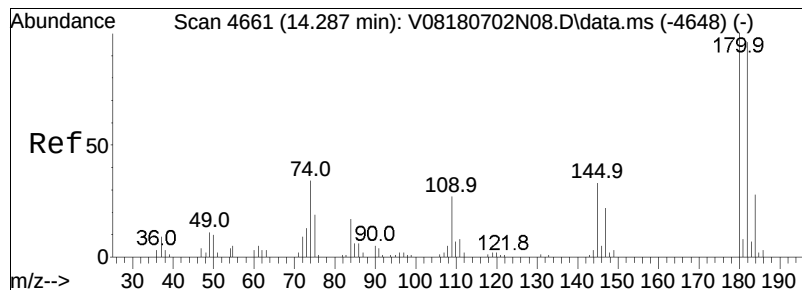
Tgt Ion	Ratio	Lower	Upper
180	100		
182	94.2	77.3	115.9
145	40.9	28.1	42.1





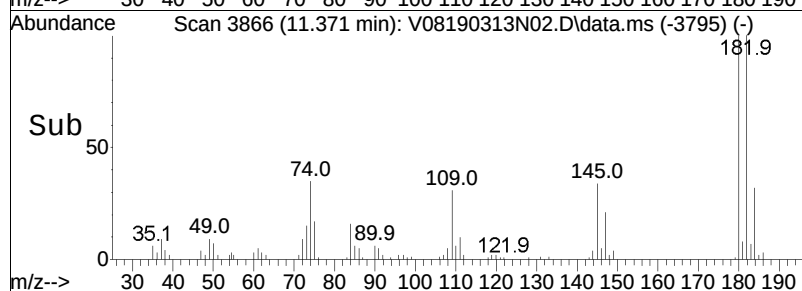
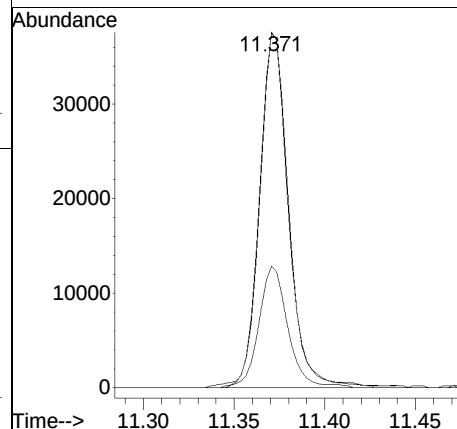
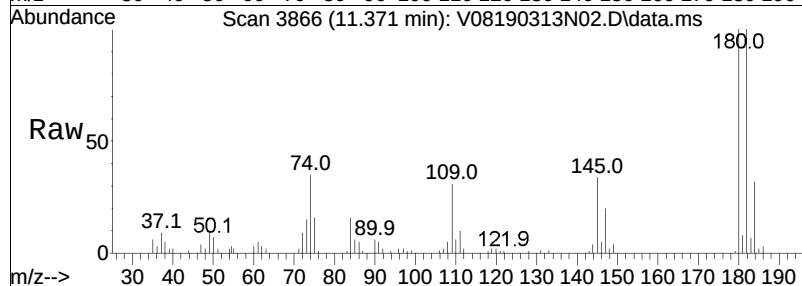
#110
Naphthalene
Concen: 5.61 ug/L
RT: 11.270 min Scan# 3830
Delta R.T. -0.003 min
Lab File: V08190313N02.D
Acq: 13 Mar 2019 6:42 pm
Tgt Ion:128 Resp: 105744





#111
 1,2,3-Trichlorobenzene
 Concen: 5.43 ug/L
 RT: 11.371 min Scan# 3866
 Delta R.T. -0.002 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

Tgt Ion	Ratio	Lower	Upper
180	100		
182	97.5	76.4	114.6
145	33.7	26.4	39.6



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N03.D
 Acq On : 13 Mar 2019 7:04 pm
 Operator : VOA108:KJD
 Sample : WG1215584-4,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 13 20:12:35 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.550	96	300956	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery	=	99.65%	
59) Chlorobenzene-d5	8.526	117	199502	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery	=	96.51%	
79) 1,4-Dichlorobenzene-d4	10.007	152	95596	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery	=	94.75%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.574	113	80961	10.532	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.32%	
43) 1,2-Dichloroethane-d4	5.210	65	92639	10.722	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	107.22%	
60) Toluene-d8	7.240	98	277378	10.144	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.44%	
83) 4-Bromofluorobenzene	9.340	95	87514	9.356	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	93.56%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.974	85	61321	10.195	ug/L	98
3) Chloromethane	1.094	50	63722	10.756	ug/L	100
4) Vinyl chloride	1.150	62	72079	11.392	ug/L	95
5) Bromomethane	1.359	94	55096	10.113	ug/L	98
6) Chloroethane	1.440	64	69022	14.918	ug/L	98
7) Trichlorofluoromethane	1.543	101	123704	12.112	ug/L	95
8) Ethyl ether	1.783	74	33427	9.824	ug/L	70
10) 1,1-Dichloroethene	1.914	96	59678	10.547	ug/L	# 65
11) Carbon disulfide	1.920	76	187897	10.565	ug/L	97
15) Methylene chloride	2.408	84	69599	10.326	ug/L	71
17) Acetone	2.466	43	13490	11.531	ug/L	96
18) trans-1,2-Dichloroethene	2.558	96	65663	10.229	ug/L	75
20) Methyl tert-butyl ether	2.687	73	147492	8.747	ug/L	91
23) 1,1-Dichloroethane	3.208	63	124845	10.995	ug/L	97
25) Acrylonitrile	3.278	53	18697	10.620	ug/L	96
27) Vinyl acetate	3.579	43	116666	8.666	ug/L	# 92
28) cis-1,2-Dichloroethene	3.905	96	75311	10.337	ug/L	# 69
29) 2,2-Dichloropropane	4.047	77	86065	9.225	ug/L	94
30) Bromochloromethane	4.184	128	37747	11.210	ug/L	# 55
32) Chloroform	4.335	83	131490	11.090	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N03.D
 Acq On : 13 Mar 2019 7:04 pm
 Operator : VOA108:KJD
 Sample : WG1215584-4,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 13 20:12:35 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	4.460	117	98654	11.136	ug/L	98
37) 1,1,1-Trichloroethane	4.555	97	113693	10.995	ug/L #	97
39) 2-Butanone	4.761	43	20478	10.017	ug/L #	93
40) 1,1-Dichloropropene	4.728	75	90228	10.902	ug/L	96
41) Benzene	5.035	78	281838	10.906	ug/L	89
44) 1,2-Dichloroethane	5.288	62	100426	11.296	ug/L	97
48) Trichloroethene	5.743	95	76388	11.101	ug/L	96
50) Dibromomethane	6.189	93	45108	11.180	ug/L	98
51) 1,2-Dichloropropane	6.301	63	69012	10.298	ug/L	98
54) Bromodichloromethane	6.407	83	102725	10.930	ug/L	96
57) 1,4-Dioxane	6.624	88	22141	755.468	ug/L #	68
58) cis-1,3-Dichloropropene	7.062	75	104151	9.887	ug/L	91
61) Toluene	7.288	92	172458	11.092	ug/L	98
62) 4-Methyl-2-pentanone	7.689	58	16494	9.409	ug/L #	95
63) Tetrachloroethene	7.642	166	72918	10.922	ug/L	90
65) trans-1,3-Dichloropropene	7.709	75	92336	10.519	ug/L	95
68) 1,1,2-Trichloroethane	7.837	83	53137	11.930	ug/L	95
69) Chlorodibromomethane	7.971	129	73198	11.169	ug/L	97
70) 1,3-Dichloropropane	8.046	76	102469	11.395	ug/L	98
71) 1,2-Dibromoethane	8.127	107	57665	10.882	ug/L	98
72) 2-Hexanone	8.364	43	25556	8.422	ug/L	94
73) Chlorobenzene	8.537	112	189613	10.963	ug/L	90
74) Ethylbenzene	8.576	91	305866	10.550	ug/L	97
75) 1,1,1,2-Tetrachloroethane	8.596	131	70883	10.949	ug/L	95
76) p/m Xylene	8.682	106	232800	21.112	ug/L	94
77) o Xylene	8.964	106	222768	20.405	ug/L	89
78) Styrene	9.003	104	376307	21.579	ug/L	88
80) Bromoform	9.006	173	43890	11.030	ug/L	92
82) Isopropylbenzene	9.173	105	305041	10.931	ug/L	96
84) Bromobenzene	9.396	156	76423	10.641	ug/L	98
85) n-Propylbenzene	9.432	91	367910	11.549	ug/L	96
87) 1,1,2,2-Tetrachloroethane	9.482	83	69043	10.652	ug/L	99
88) 4-Ethyltoluene	9.502	105	297710	11.220	ug/L	97
89) 2-Chlorotoluene	9.513	91	250171	10.759	ug/L	96
90) 1,3,5-Trimethylbenzene	9.555	105	245566	10.718	ug/L	91
91) 1,2,3-Trichloropropane	9.552	75	58102	11.538	ug/L	98
92) trans-1,4-Dichloro-2-b...	9.586	53	16420	9.254	ug/L	93
93) 4-Chlorotoluene	9.616	91	225084	11.127	ug/L	94
94) tert-Butylbenzene	9.742	119	220372	9.360	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N03.D
 Acq On : 13 Mar 2019 7:04 pm
 Operator : VOA108:KJD
 Sample : WG1215584-4,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 13 20:12:35 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

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

97)	1,2,4-Trimethylbenzene	9.784	105	235510	10.330	ug/L	93
98)	sec-Butylbenzene	9.845	105	323966	11.232	ug/L	99
99)	p-Isopropyltoluene	9.934	119	259852	10.494	ug/L	96
100)	1,3-Dichlorobenzene	9.962	146	152170	11.492	ug/L	97
101)	1,4-Dichlorobenzene	10.015	146	150382	10.965	ug/L	99
102)	p-Diethylbenzene	10.143	119	129590	8.942	ug/L	96
103)	n-Butylbenzene	10.174	91	241304	10.508	ug/L	99
104)	1,2-Dichlorobenzene	10.255	146	143281	11.093	ug/L	98
105)	1,2,4,5-Tetramethylben...	10.598	119	73130	3.526	ug/L	95
106)	1,2-Dibromo-3-chloropr...	10.709	155	9722	10.017	ug/L	90
108)	Hexachlorobutadiene	11.075	225	38013	9.124	ug/L	97
109)	1,2,4-Trichlorobenzene	11.089	180	52330	6.456	ug/L	97
110)	Naphthalene	11.270	128	113101	6.338	ug/L	100
111)	1,2,3-Trichlorobenzene	11.373	180	48110	6.566	ug/L	96

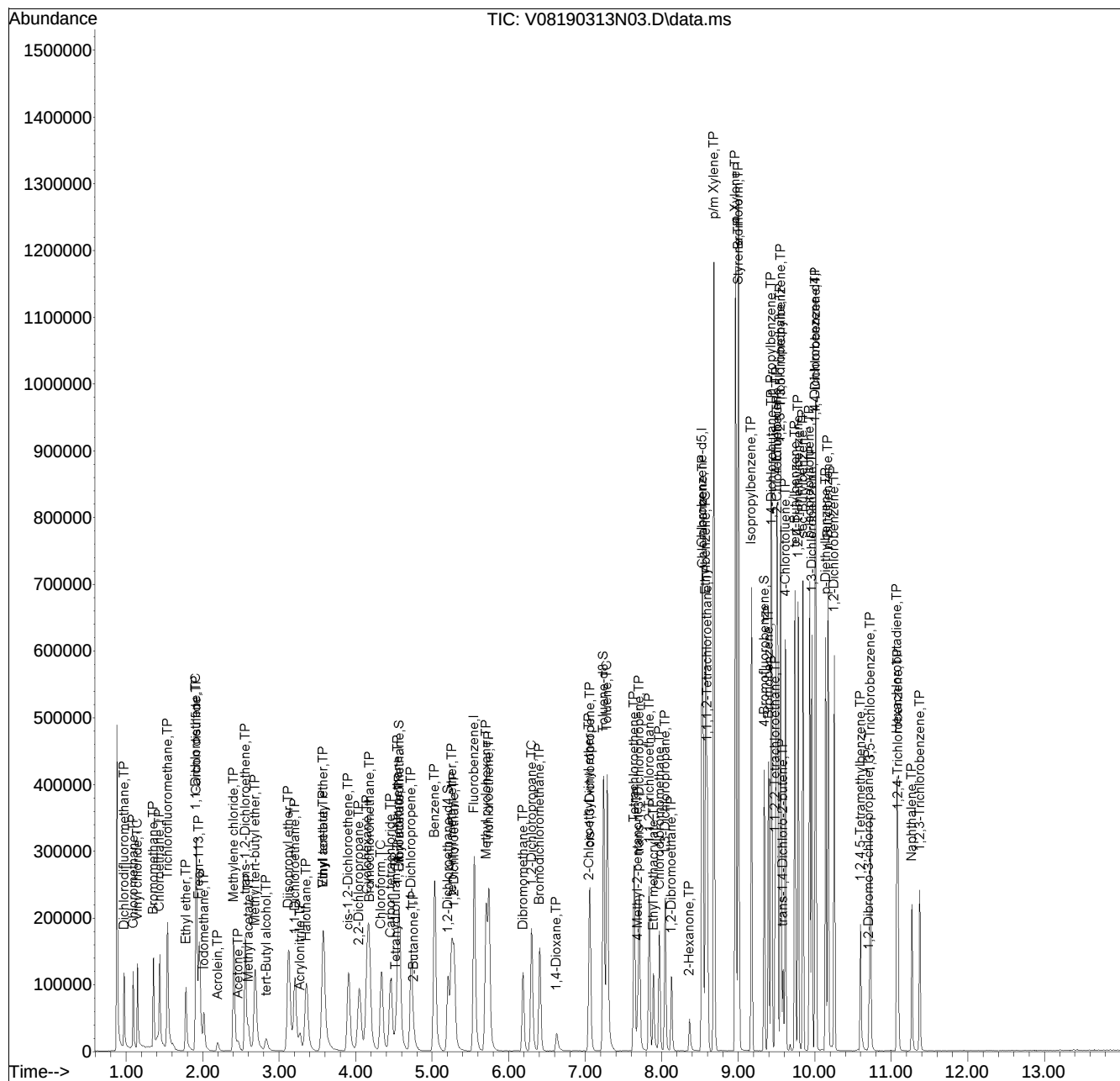
(#) = qualifier out of range (m) = manual integration (+) = signals summed

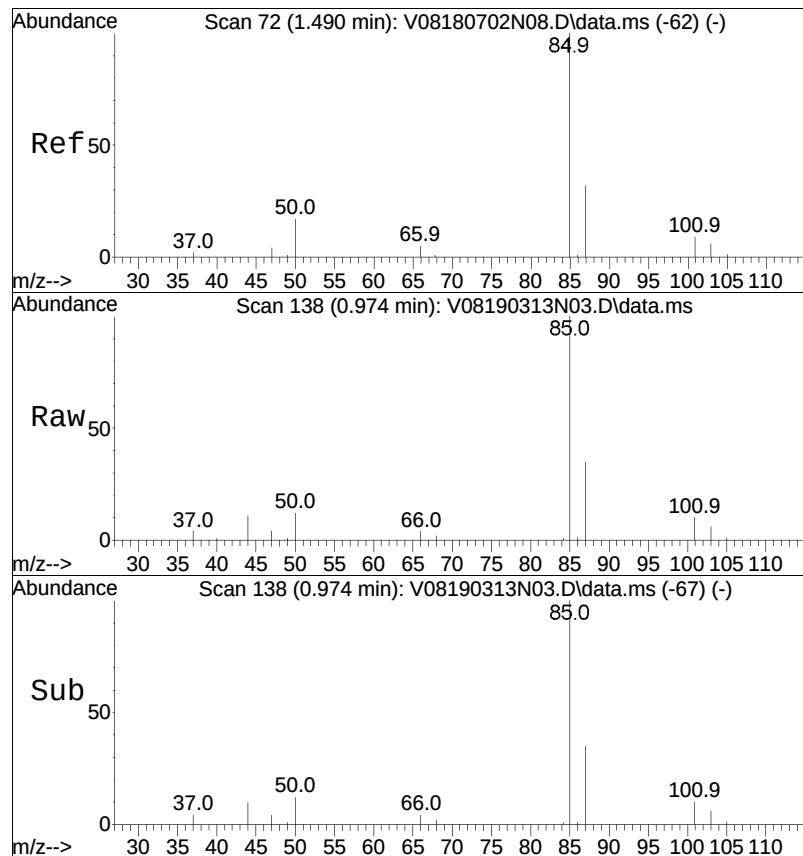
(QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
Data File : V08190313N03.D
Acq On : 13 Mar 2019 7:04 pm
Operator : VOA108:KJD
Sample : WG1215584-4, 31, 10, 10
Misc : WG1215584, ICAL15519
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 13 20:12:35 2019
Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Feb 19 00:08:39 2019
Response via : Initial Calibration

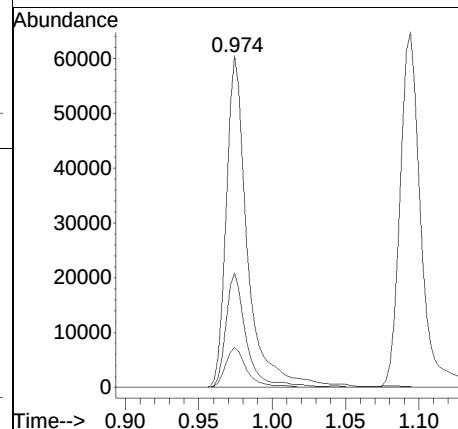
Sub List : 8260-Curve - Megamix plus Diox90313N\V08190313N02.D•

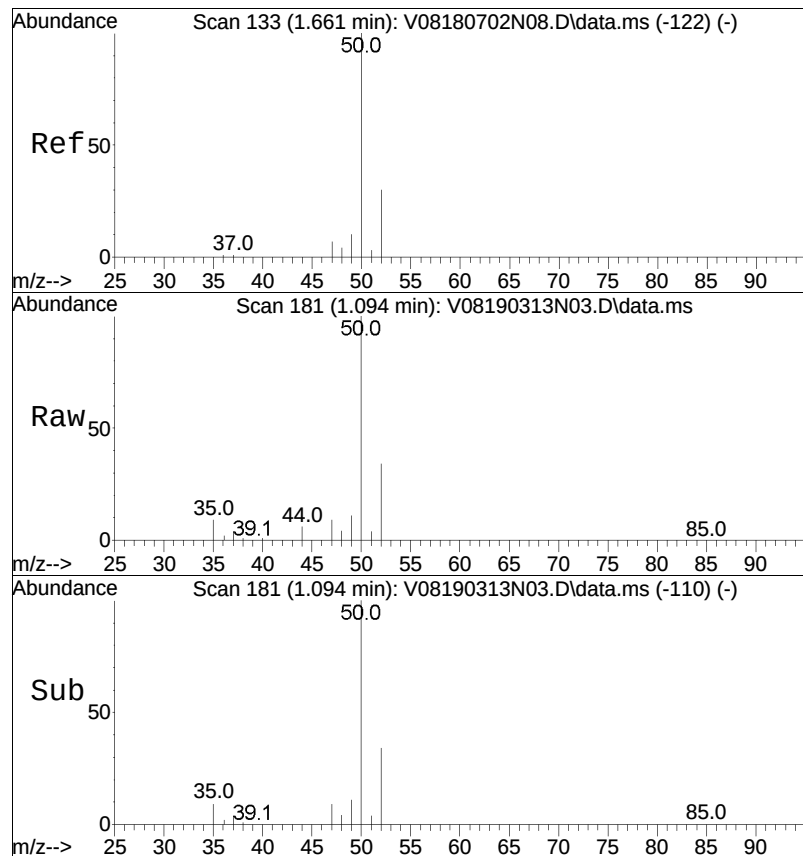




#2
 Dichlorodifluoromethane
 Concen: 10.20 ug/L
 RT: 0.974 min Scan# 138
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

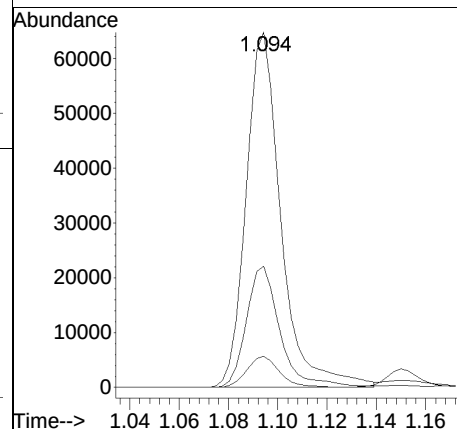
Tgt Ion:	85	Resp:	61321
Ion Ratio	Lower	Upper	
85	100		
87	32.7	21.0	43.6
50	12.1	8.9	18.5

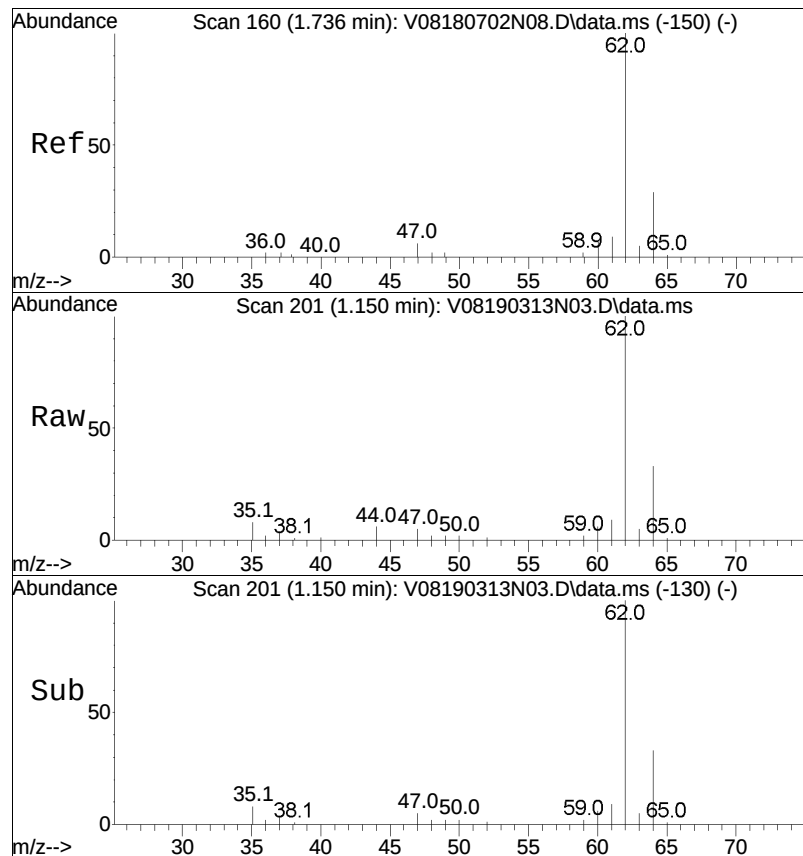




#3
 Chloromethane
 Concen: 10.76 ug/L
 RT: 1.094 min Scan# 181
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

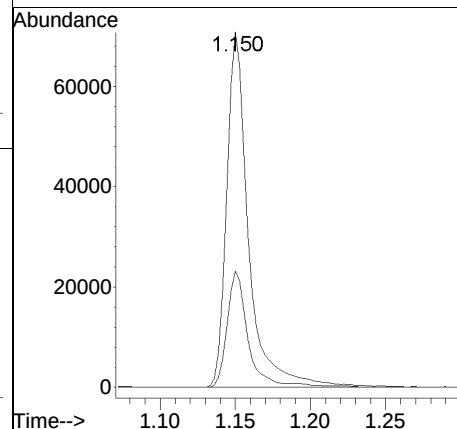
Tgt Ion:	50	Resp:	63722
Ion Ratio	Lower	Upper	
50	100		
52	33.0	12.9	52.9
47	8.2	0.0	28.3

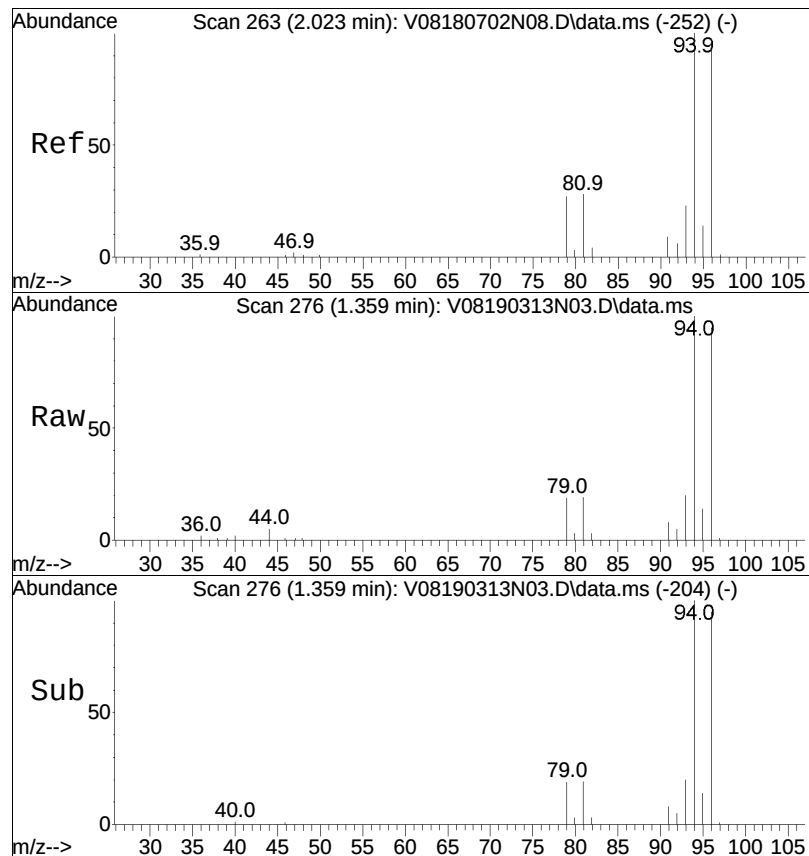




#4
 Vinyl chloride
 Concen: 11.39 ug/L
 RT: 1.150 min Scan# 201
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

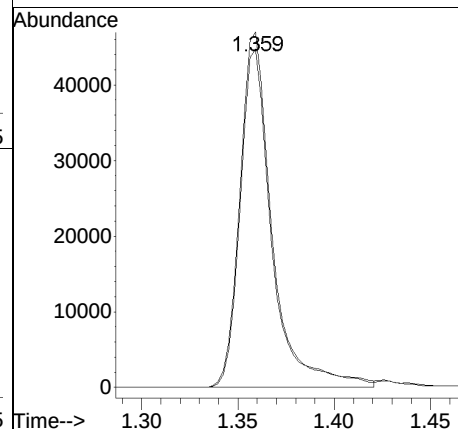
Tgt Ion	Ratio	Lower	Upper
62	100		
64	31.8	9.1	49.1

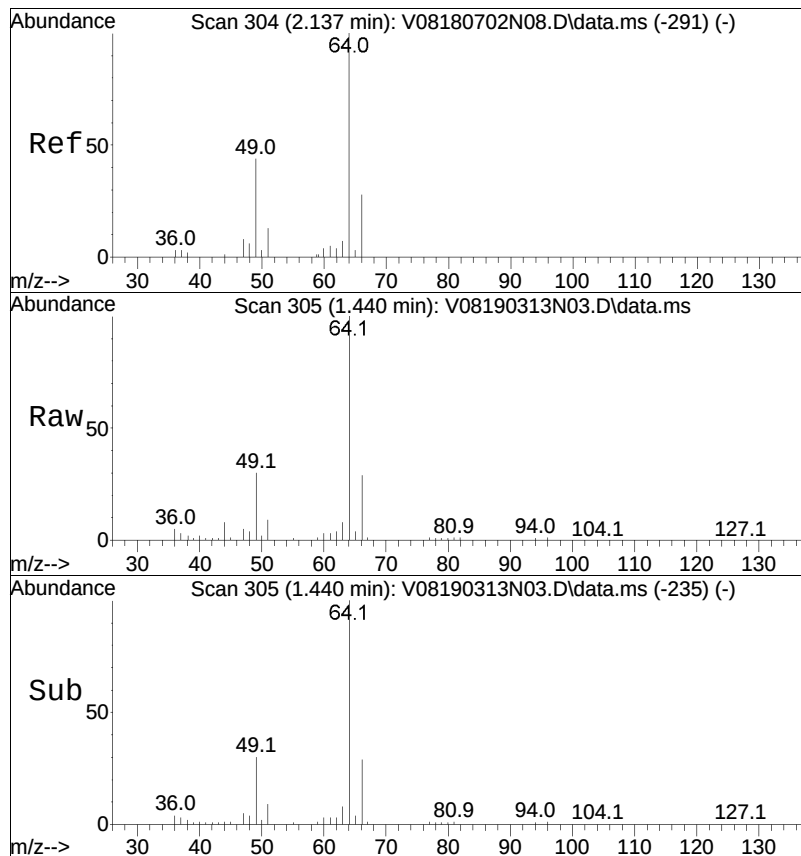




#5
 Bromomethane
 Concen: 10.11 ug/L
 RT: 1.359 min Scan# 276
 Delta R.T. 0.000 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

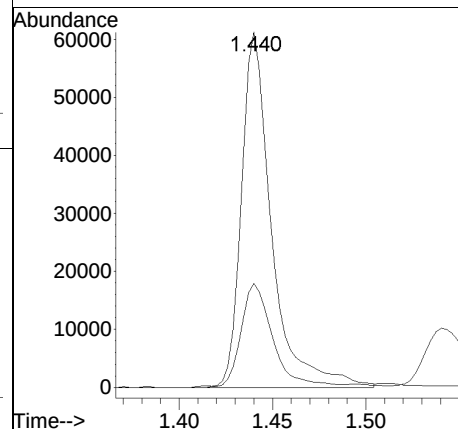
Tgt Ion: 94 Resp: 55096
 Ion Ratio Lower Upper
 94 100
 96 93.5 75.6 115.6

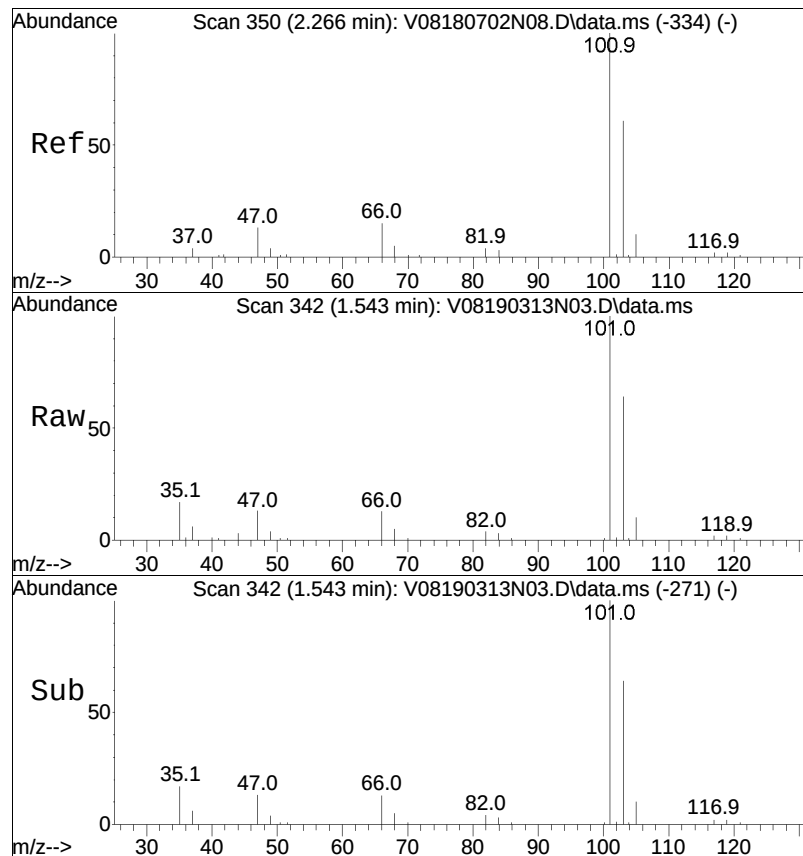




#6
 Chloroethane
 Concen: 14.92 ug/L
 RT: 1.440 min Scan# 305
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

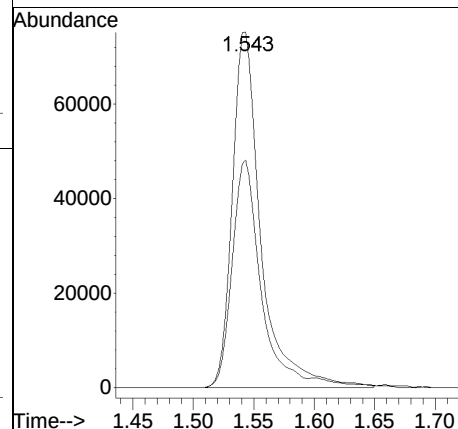
Tgt Ion	Ratio	Lower	Upper
64	100		
66	30.9	9.8	49.8

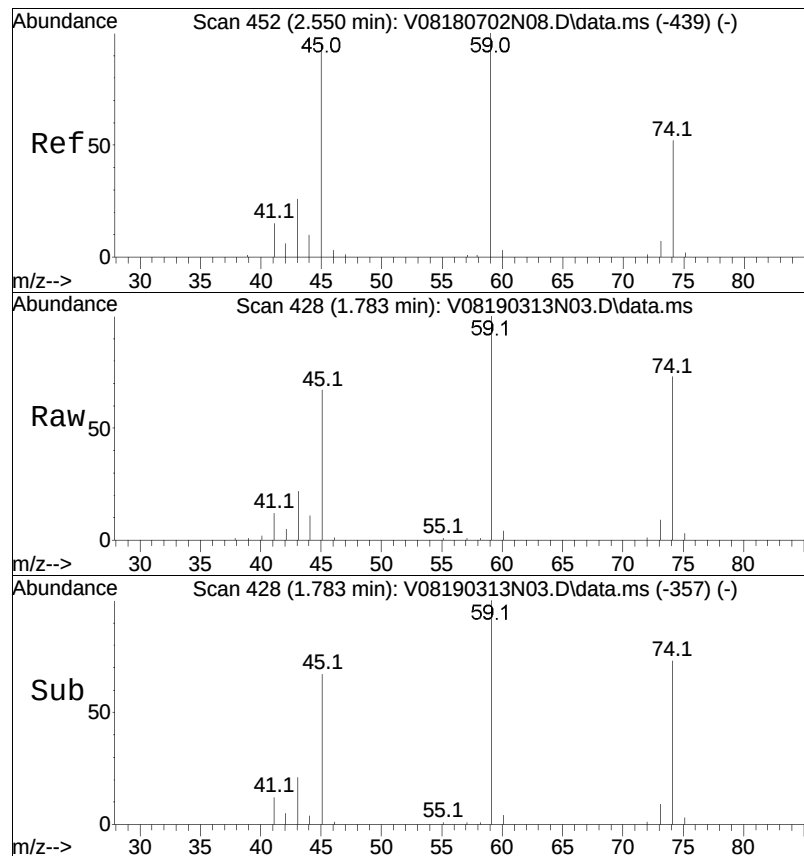




#7
 Trichlorofluoromethane
 Concen: 12.11 ug/L
 RT: 1.543 min Scan# 342
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

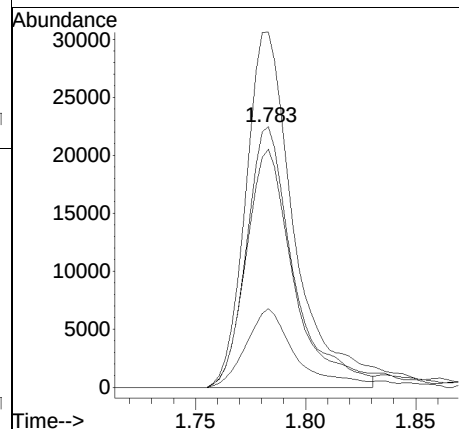
Tgt	Ion	Ratio	Lower	Upper
101	101	100		
103	62.9	53.8	80.6	

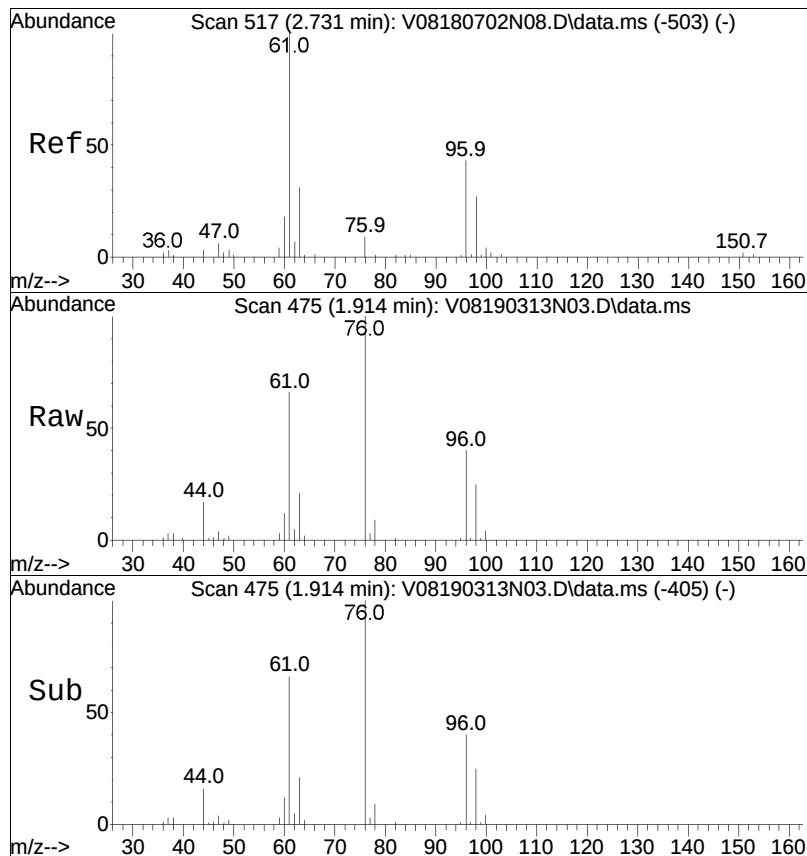




#8
 Ethyl ether
 Concen: 9.82 ug/L
 RT: 1.783 min Scan# 428
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

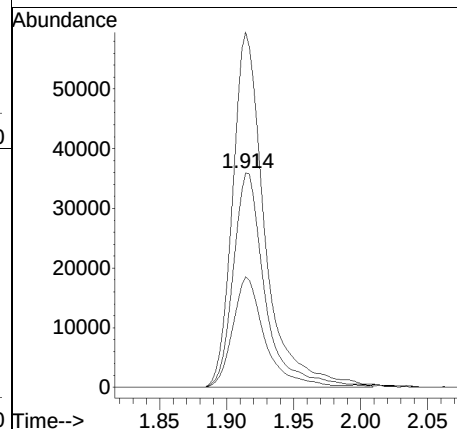
Tgt Ion:	74	Resp:	33427
Ion Ratio	Lower	Upper	
74	100		
59	145.1	122.2	253.8
45	97.0	91.9	190.9
43	31.7	25.2	52.2

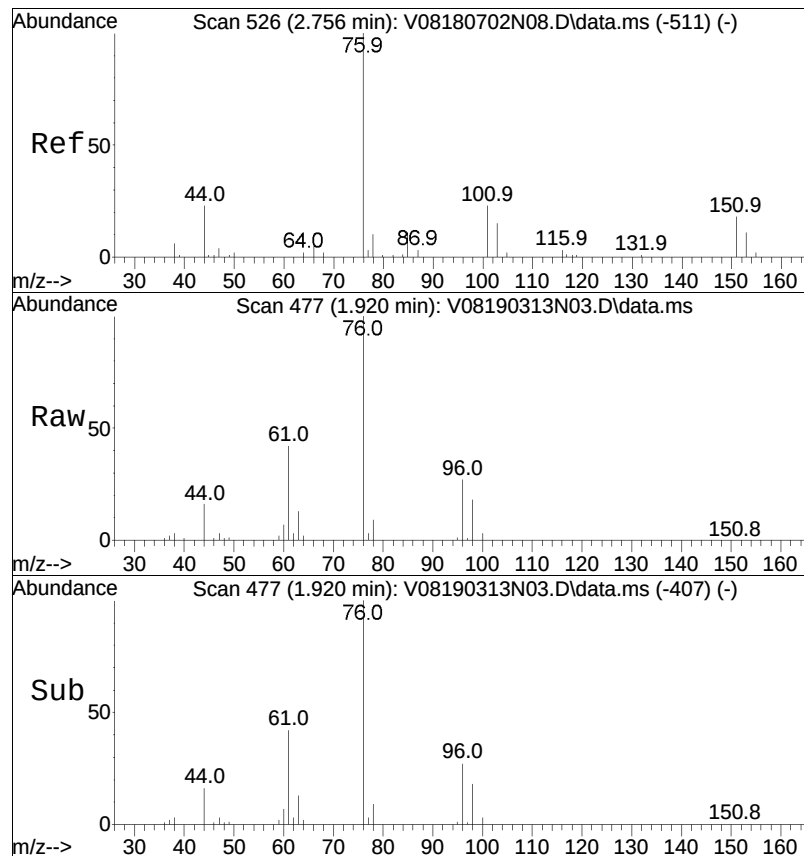




#10
 1,1-Dichloroethene
 Concen: 10.55 ug/L
 RT: 1.914 min Scan# 475
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

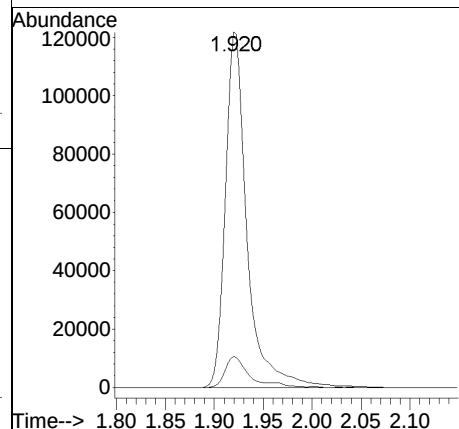
Tgt Ion:	96	Resp:	59678
Ion Ratio	Lower	Upper	
96	100		
61	168.0	186.1	279.1#
63	52.4	57.6	86.4#

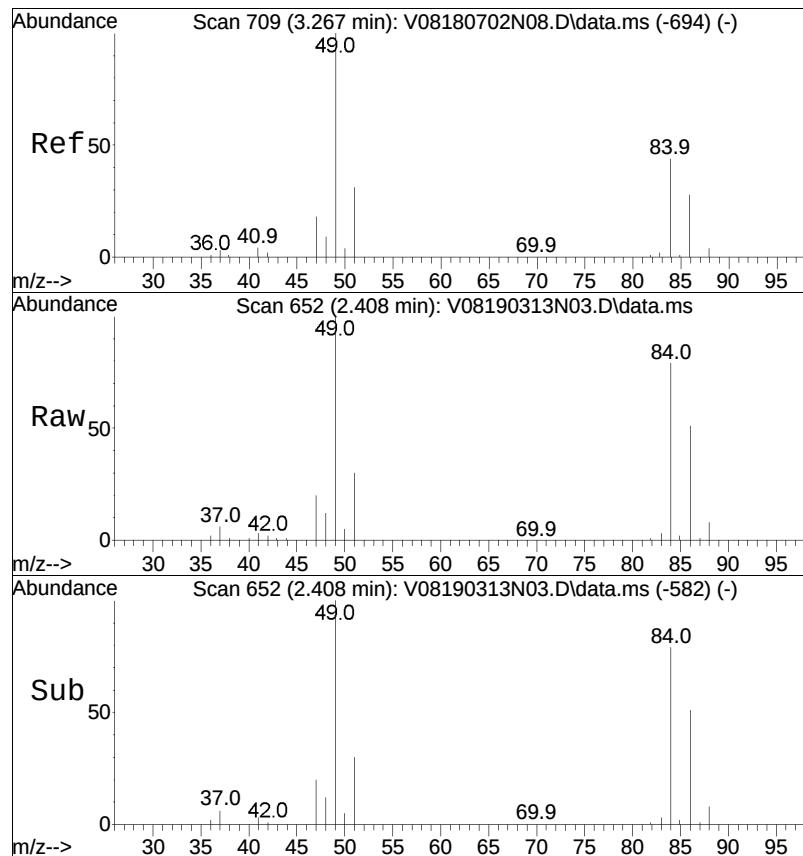




#11
Carbon disulfide
Concen: 10.56 ug/L
RT: 1.920 min Scan# 477
Delta R.T. -0.005 min
Lab File: V08190313N03.D
Acq: 13 Mar 2019 7:04 pm

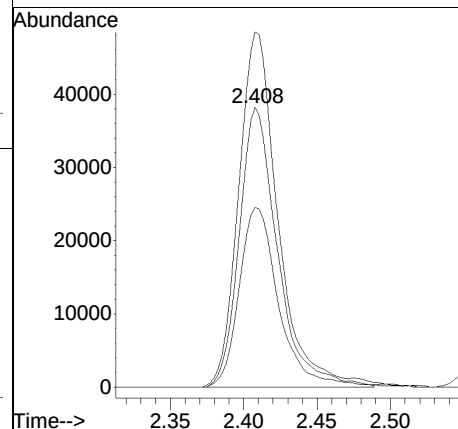
Tgt	Ion	Resp	Lower	Upper
76	100	187897		
78	9.8	5.7	11.7	

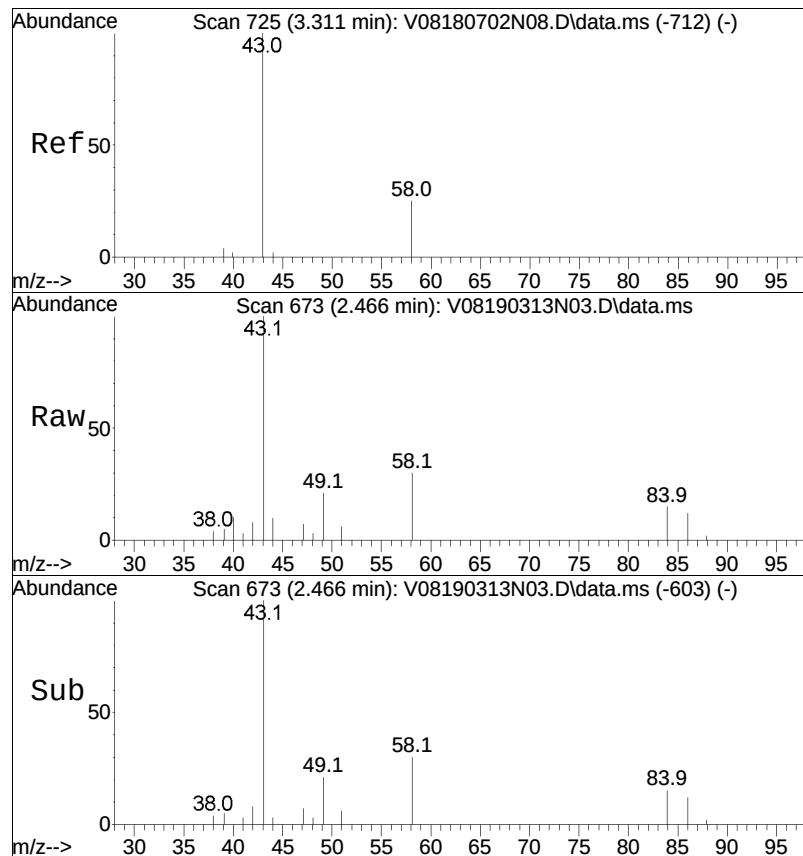




#15
Methylene chloride
Concen: 10.33 ug/L
RT: 2.408 min Scan# 652
Delta R.T. -0.005 min
Lab File: V08190313N03.D
Acq: 13 Mar 2019 7:04 pm

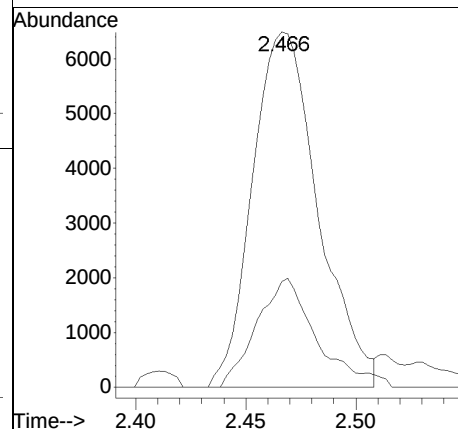
Tgt Ion:	84	Resp:	69599
Ion Ratio	Lower	Upper	
84	100		
86	66.1	40.4	83.8
49	131.1	120.0	249.2

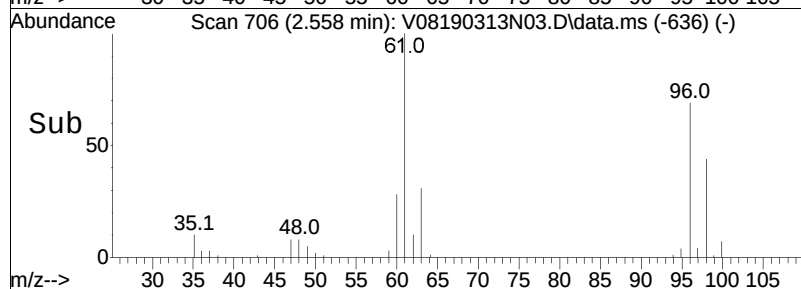
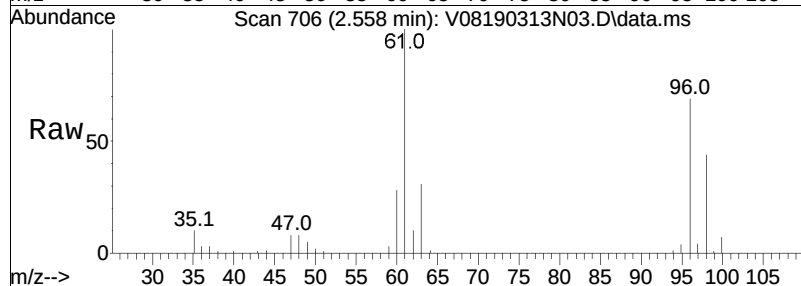
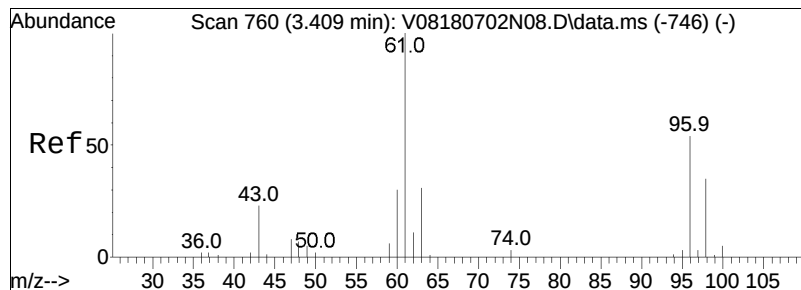




#17
 Acetone
 Concen: 11.53 ug/L
 RT: 2.466 min Scan# 673
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

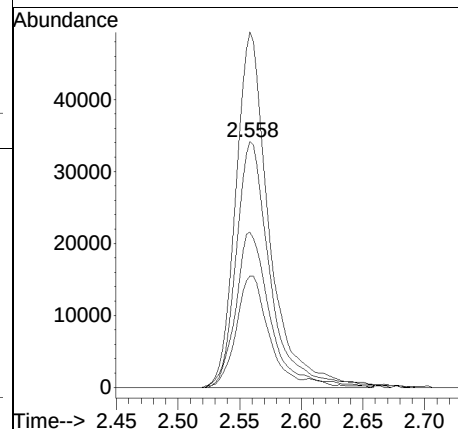
Tgt Ion:	43	58	Ratio	100	28.0	Resp:	13490	Lower	Upper
								24.2	36.4

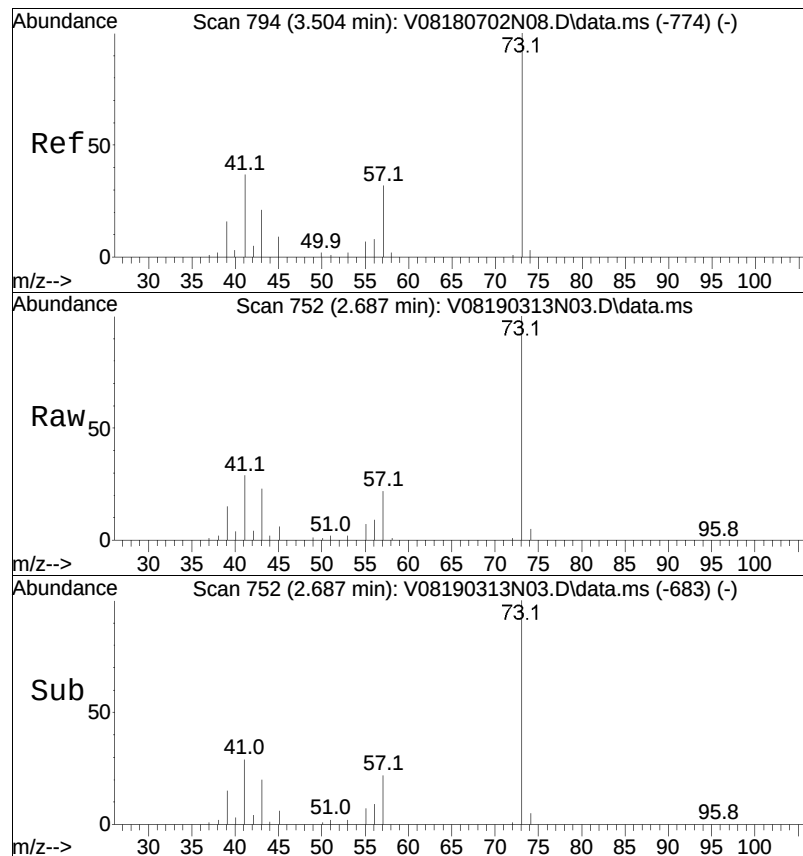




#18
 trans-1,2-Dichloroethene
 Concen: 10.23 ug/L
 RT: 2.558 min Scan# 706
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

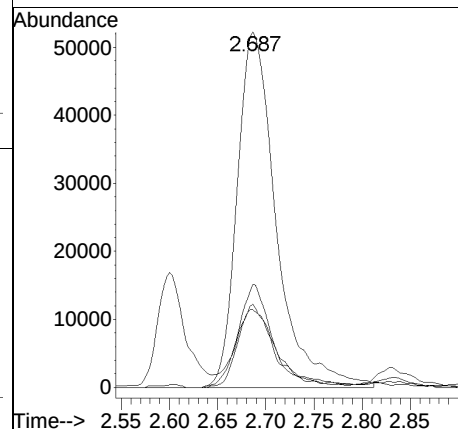
Tgt Ion: 96	Resp: 65663
Ion Ratio	Lower Upper
96 100	
61 141.0	124.0 257.6
98 62.6	41.2 85.6
63 42.8	38.4 79.7

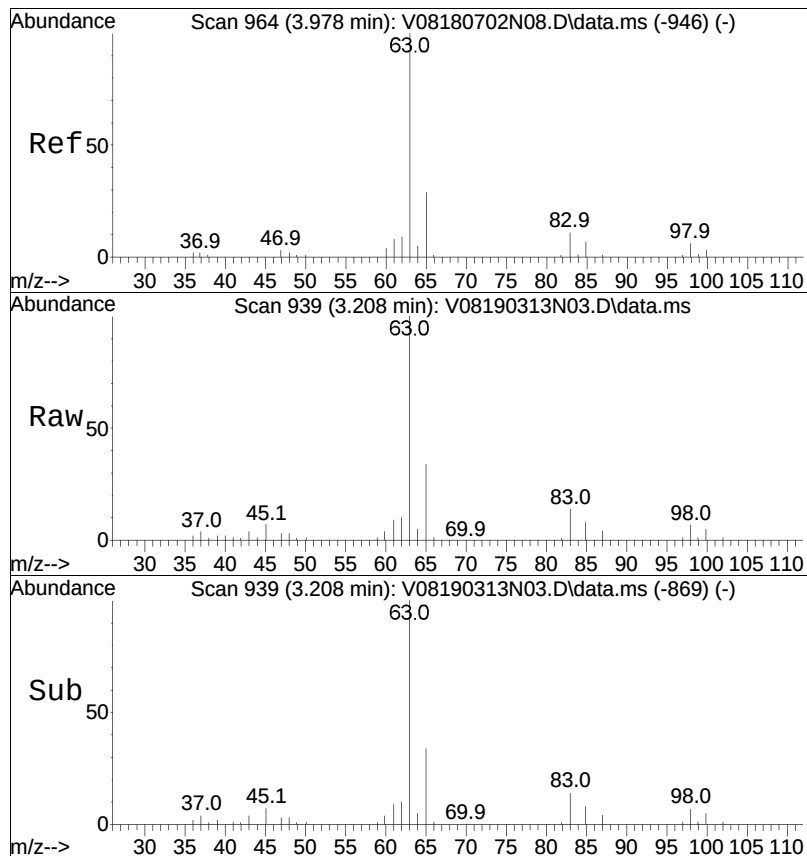




#20
Methyl tert-butyl ether
Concen: 8.75 ug/L
RT: 2.687 min Scan# 752
Delta R.T. -0.008 min
Lab File: V08190313N03.D
Acq: 13 Mar 2019 7:04 pm

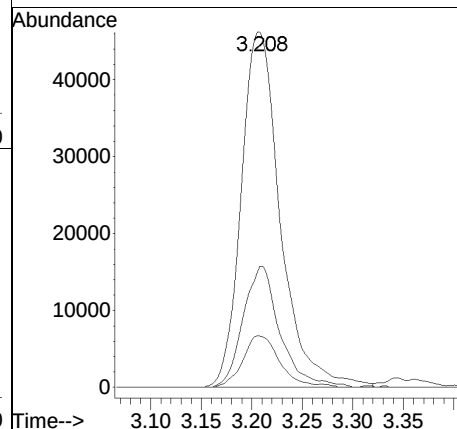
Tgt Ion:	73	Resp:	147492
Ion Ratio	Lower	Upper	
73	100		
57	20.5	17.5	36.3
43	20.3	15.3	31.9
41	26.8	15.3	31.7

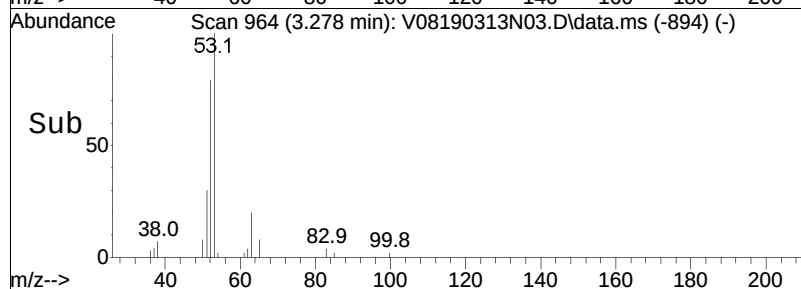
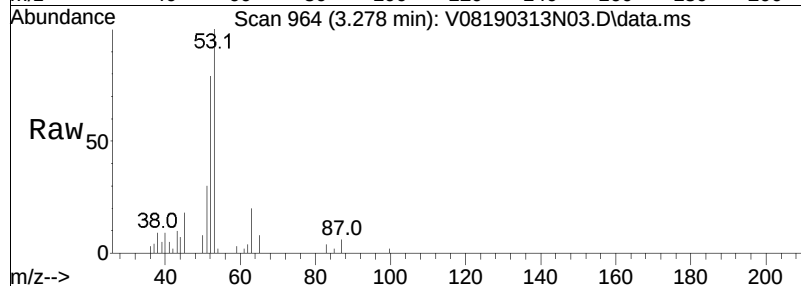
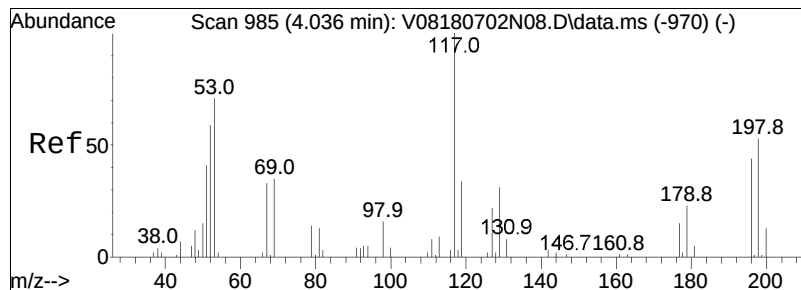




#23
 1,1-Dichloroethane
 Concen: 11.00 ug/L
 RT: 3.208 min Scan# 939
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

Tgt Ion:	63	Resp:	124845
Ion Ratio	Lower	Upper	
63	100		
65	32.2	11.0	51.0
83	13.6	0.0	31.8





#25

Acrylonitrile

Concen: 10.62 ug/L

RT: 3.278 min Scan# 964

Delta R.T. -0.005 min

Lab File: V08190313N03.D

Acq: 13 Mar 2019 7:04 pm

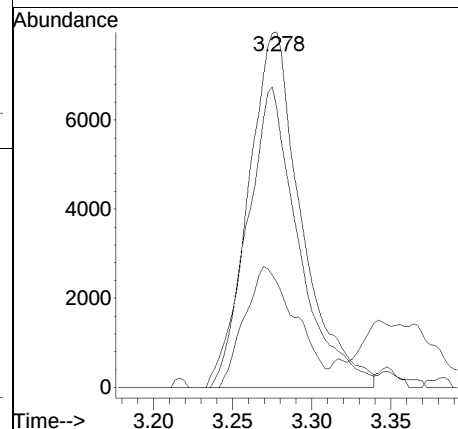
Tgt Ion: 53 Resp: 18697

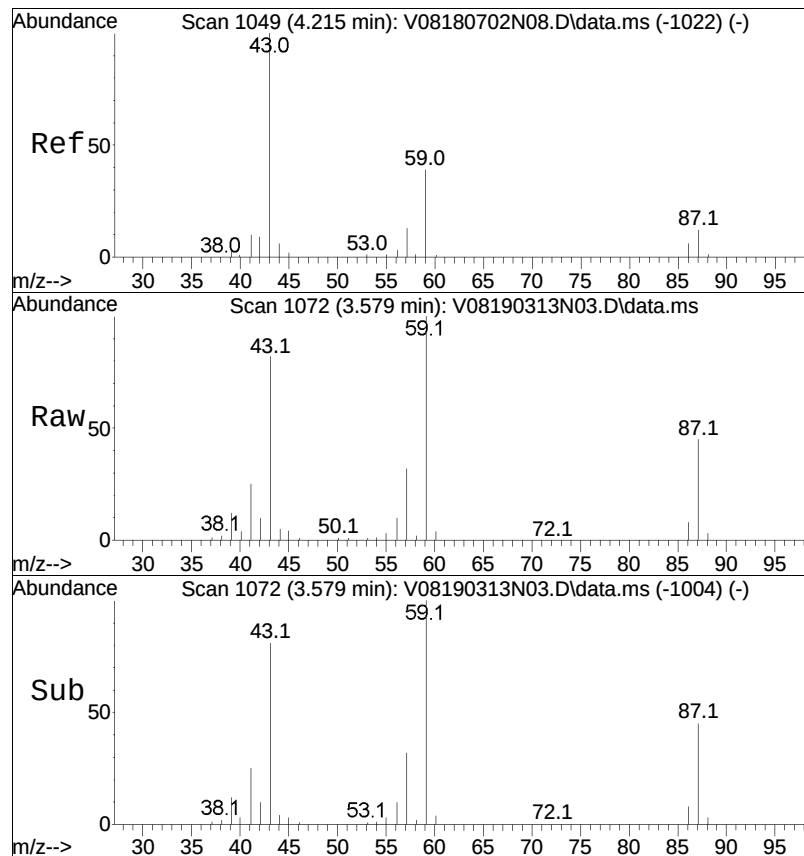
Ion Ratio Lower Upper

53 100

52 81.4 66.7 100.1

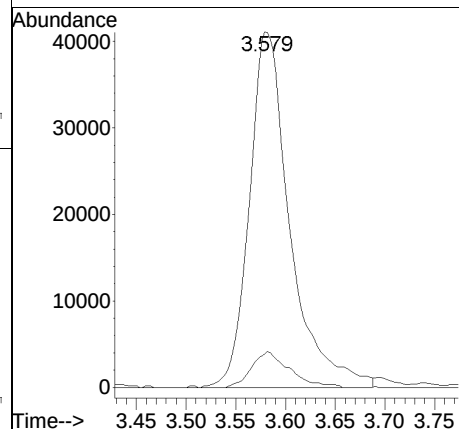
51 32.7 30.6 46.0

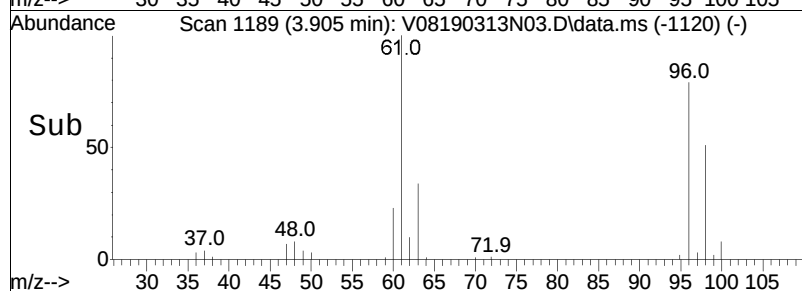
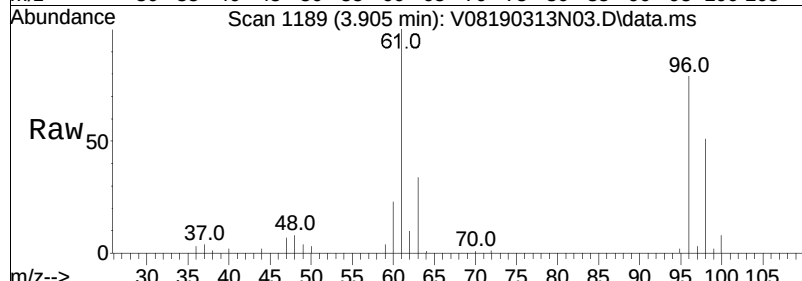
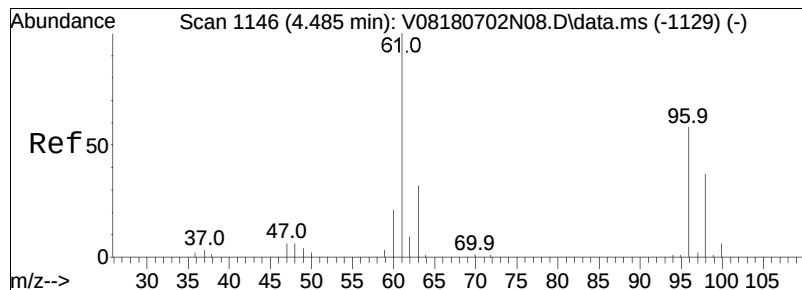




#27
 Vinyl acetate
 Concen: 8.67 ug/L
 RT: 3.579 min Scan# 1072
 Delta R.T. -0.011 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

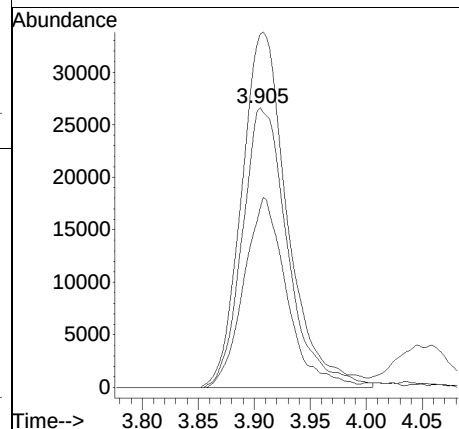
Tgt Ion	Ratio	Lower	Upper
43	100		
86	9.2	5.2	7.8#

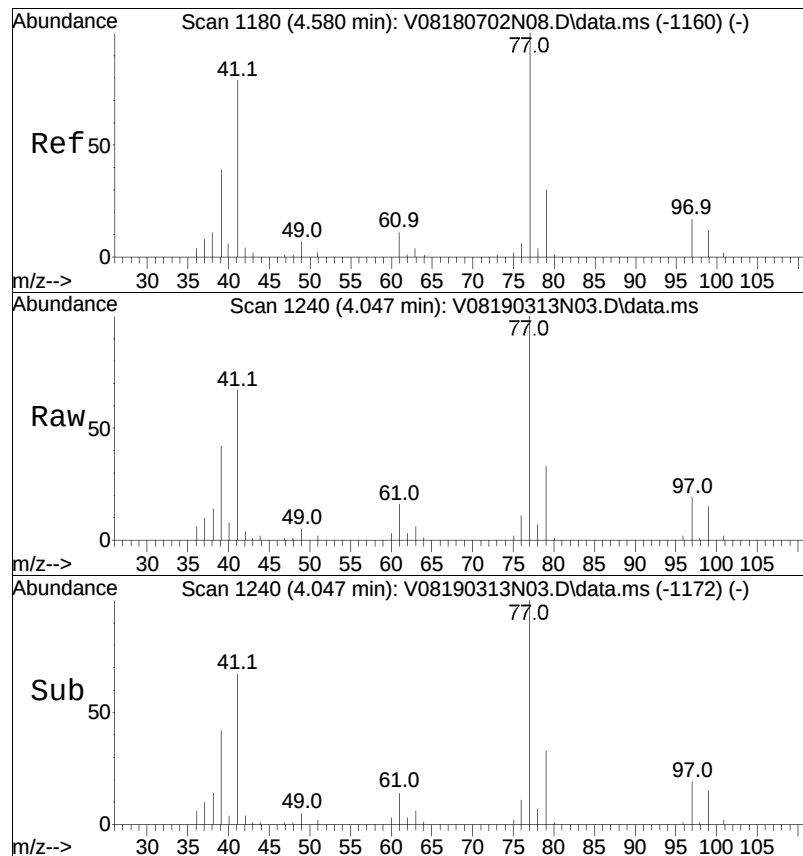




#28
 cis-1,2-Dichloroethene
 Concen: 10.34 ug/L
 RT: 3.905 min Scan# 1189
 Delta R.T. -0.009 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

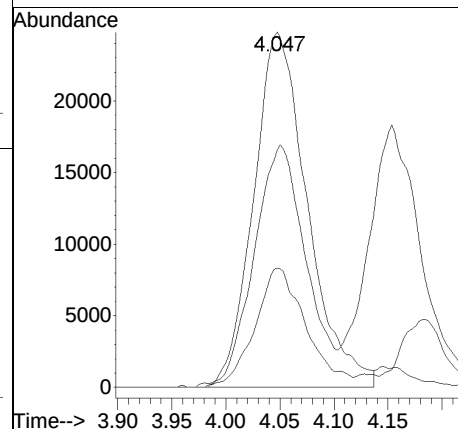
Tgt Ion	Ratio	Lower	Upper
96	100		
61	128.0	149.4	224.2#
98	63.9	53.4	80.2

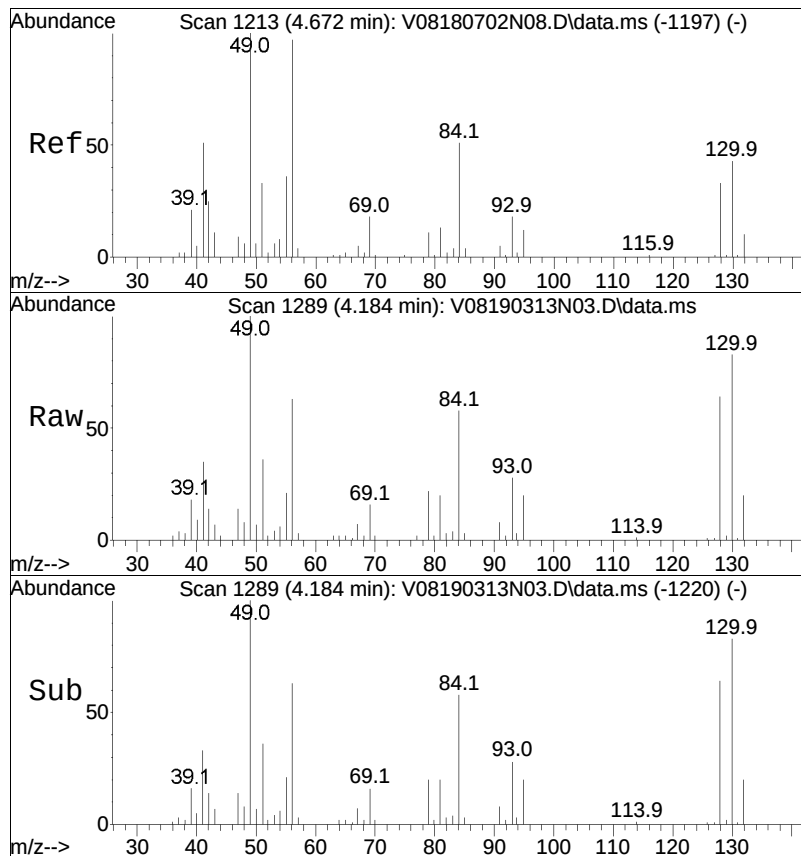




#29
 2,2-Dichloropropane
 Concen: 9.22 ug/L
 RT: 4.047 min Scan# 1240
 Delta R.T. -0.012 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

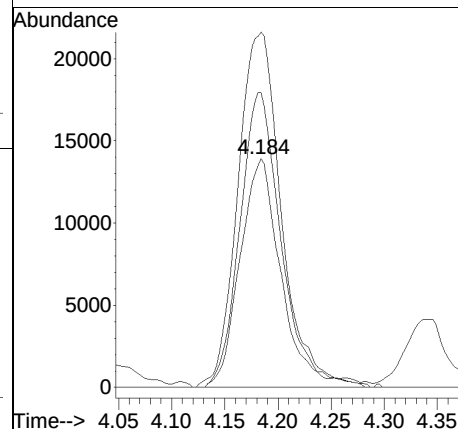
Tgt Ion:	77	Resp:	86065
Ion Ratio	Lower	Upper	
77	100		
41	65.6	38.0	78.8
79	31.8	20.5	42.5

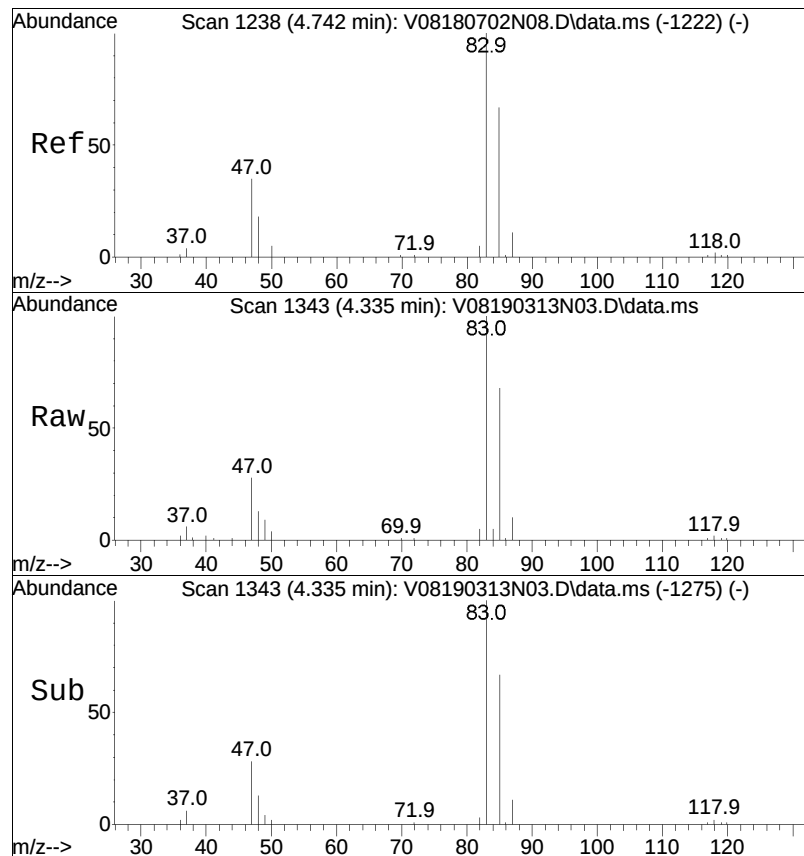




#30
 Bromochloromethane
 Concen: 11.21 ug/L
 RT: 4.184 min Scan# 1289
 Delta R.T. -0.008 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

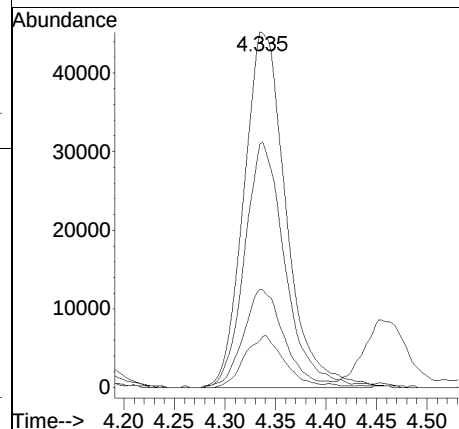
Tgt	Ion:128	Resp:	37747
Ion	Ratio	Lower	Upper
128	100		
49	162.2	223.0	334.4#
130	126.5	111.4	167.0

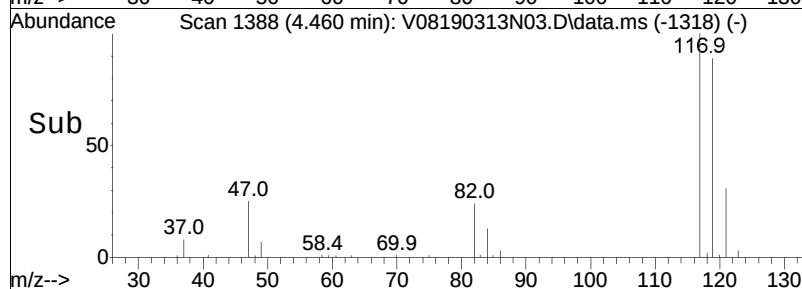
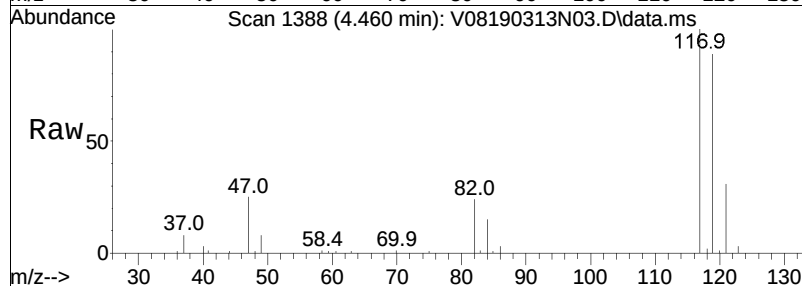
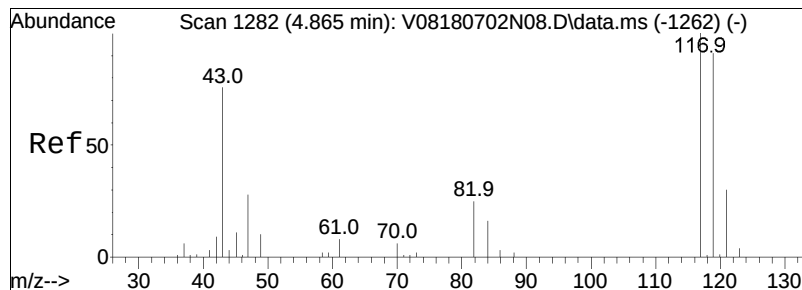




#32
 Chloroform
 Concen: 11.09 ug/L
 RT: 4.335 min Scan# 1343
 Delta R.T. -0.011 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

Tgt	Ion: 83	Resp:	131490
Ion	Ratio	Lower	Upper
83	100		
85	66.0	41.5	86.1
47	26.9	19.0	39.4
48	13.6	9.9	20.5





#34

Carbon tetrachloride

Concen: 11.14 ug/L

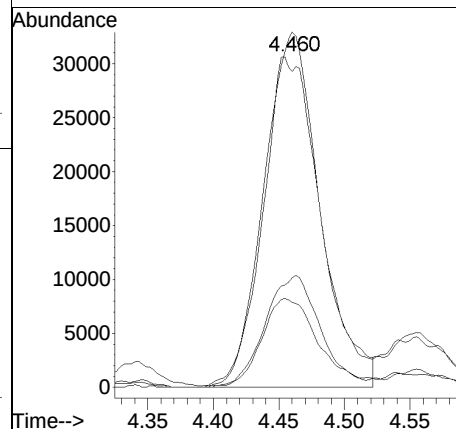
RT: 4.460 min Scan# 1388

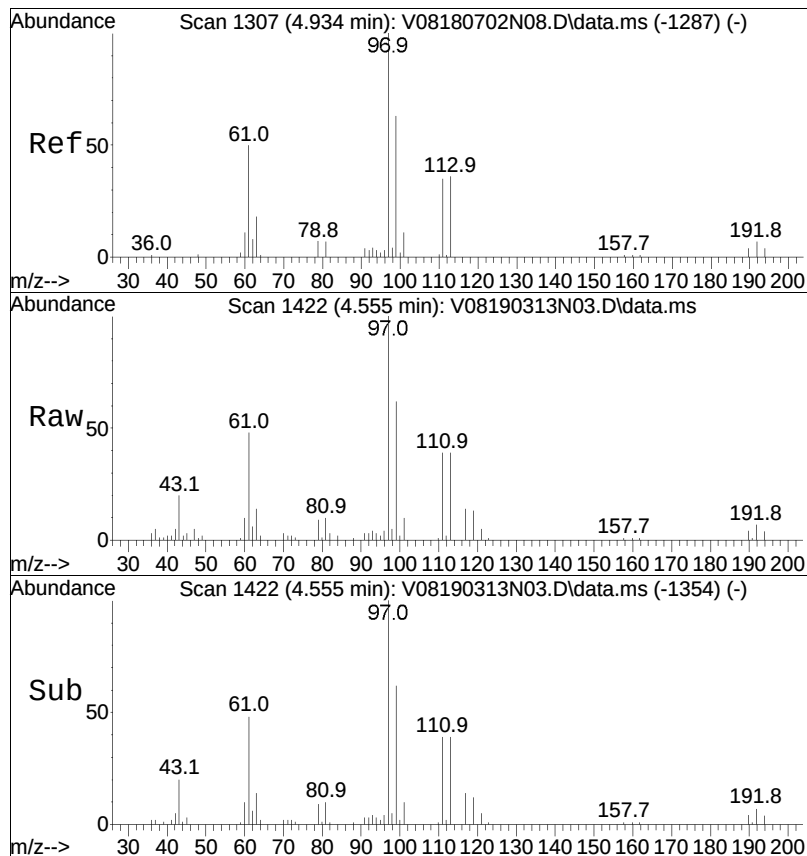
Delta R.T. -0.006 min

Lab File: V08190313N03.D

Acq: 13 Mar 2019 7:04 pm

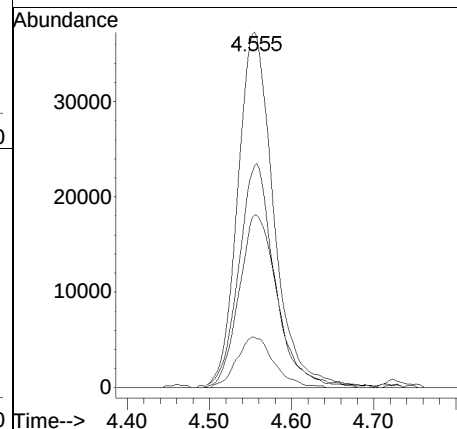
Tgt Ion:	117	Resp:	98654
Ion Ratio	Lower	Upper	
117	100		
119	94.8	62.4	129.6
121	30.8	19.5	40.5
82	23.9	17.0	35.4

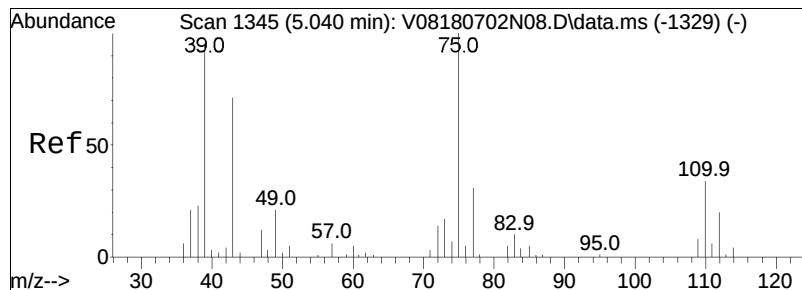




#37
 1,1,1-Trichloroethane
 Concen: 11.00 ug/L
 RT: 4.555 min Scan# 1422
 Delta R.T. -0.011 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

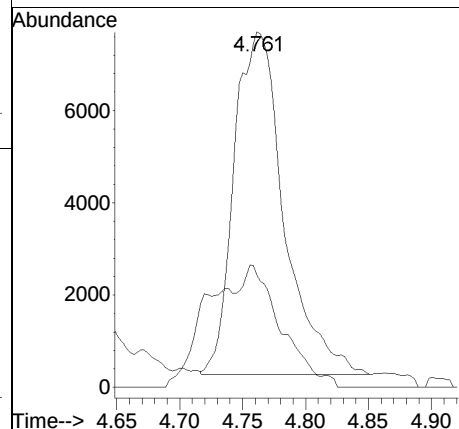
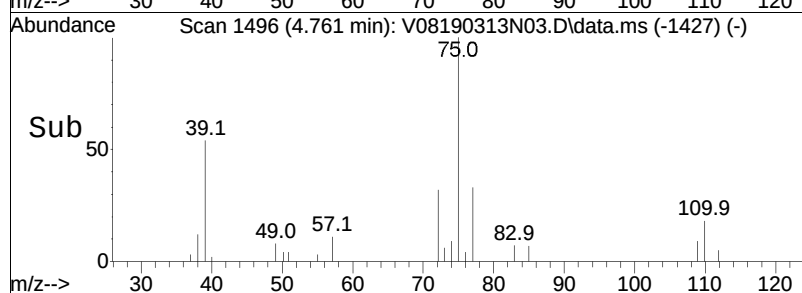
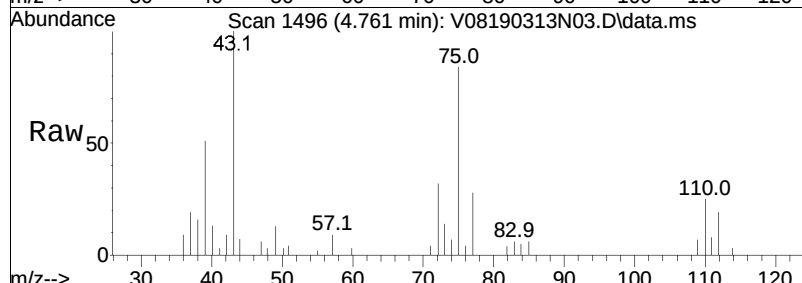
Tgt Ion:	97	Resp:	113693
Ion Ratio	Lower	Upper	
97	100		
99	63.0	40.7	84.5
61	51.9	35.4	73.4
63	14.4	5.0	10.4#

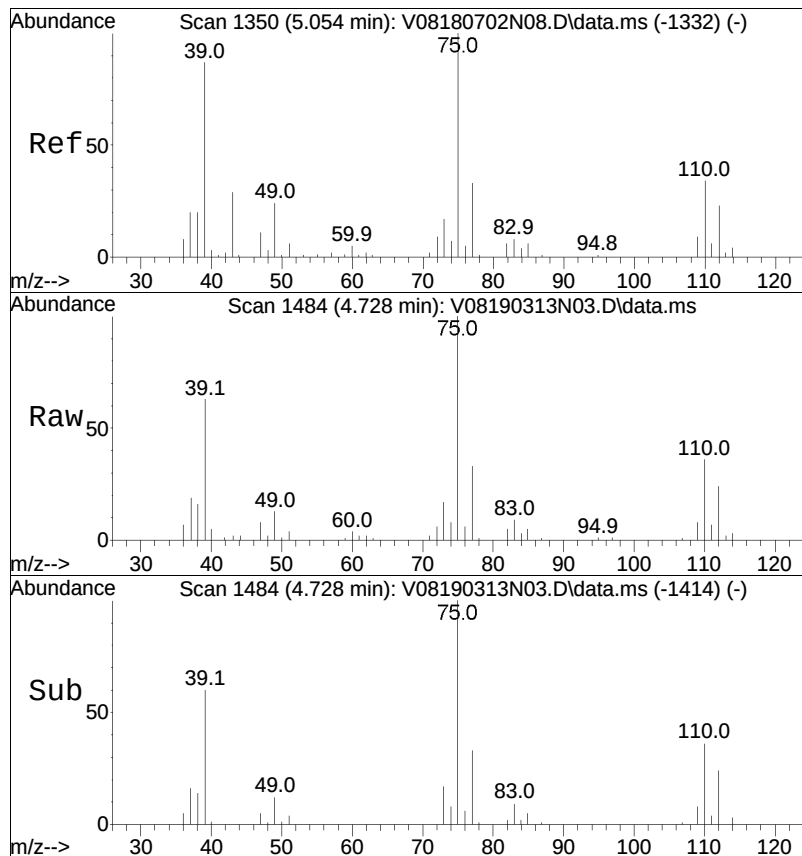




#39
 2-Butanone
 Concen: 10.02 ug/L
 RT: 4.761 min Scan# 1496
 Delta R.T. -0.009 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

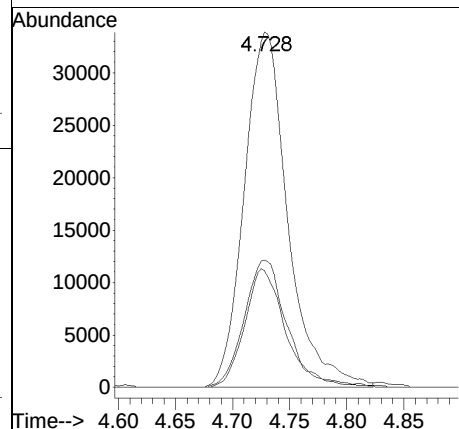
Tgt Ion: 43 Resp: 20478
 Ion Ratio Lower Upper
 43 100
 72 10.8 10.9 16.3#

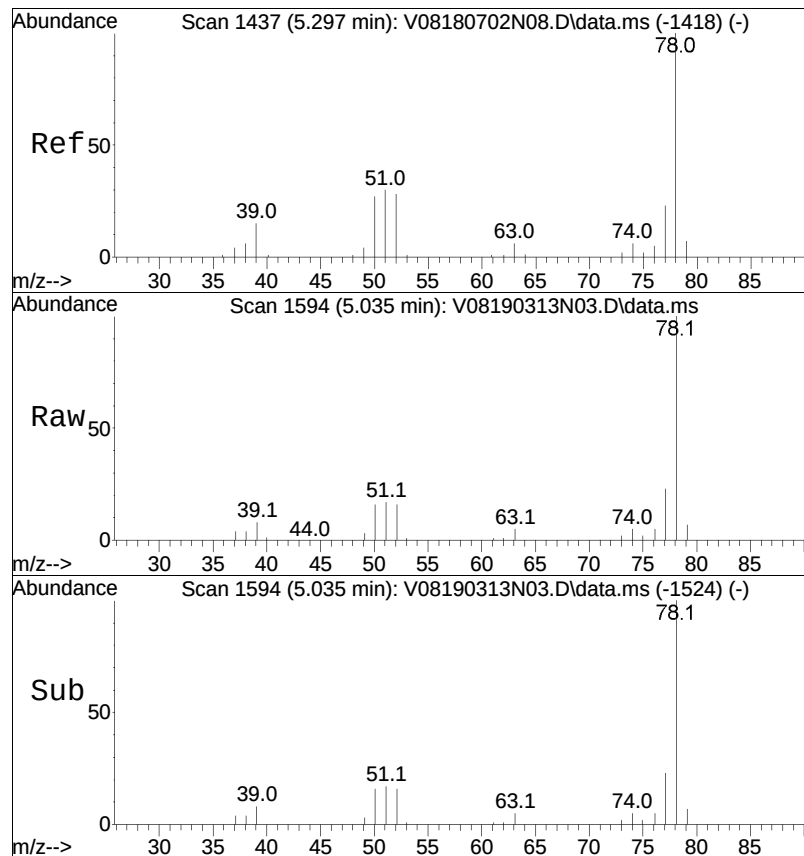




#40
 1,1-Dichloropropene
 Concen: 10.90 ug/L
 RT: 4.728 min Scan# 1484
 Delta R.T. -0.005 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

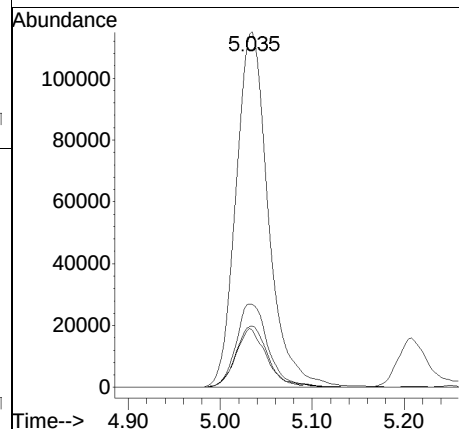
Tgt Ion	Ratio	Lower	Upper
75	100		
110	34.9	20.2	41.9
77	31.4	20.1	41.7

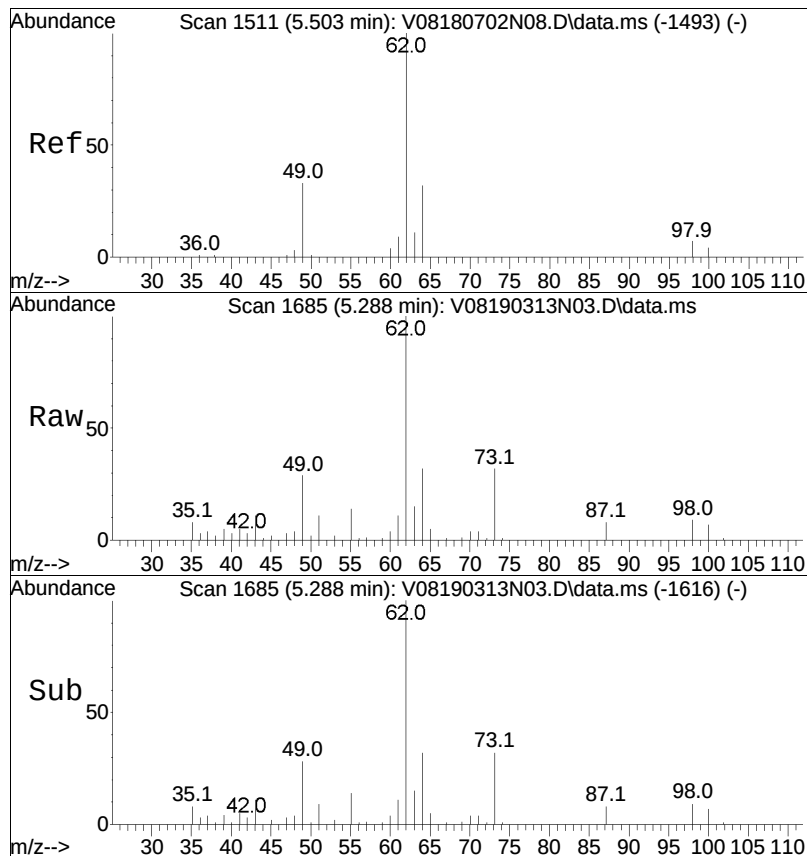




#41
Benzene
Concen: 10.91 ug/L
RT: 5.035 min Scan# 1594
Delta R.T. -0.005 min
Lab File: V08190313N03.D
Acq: 13 Mar 2019 7:04 pm

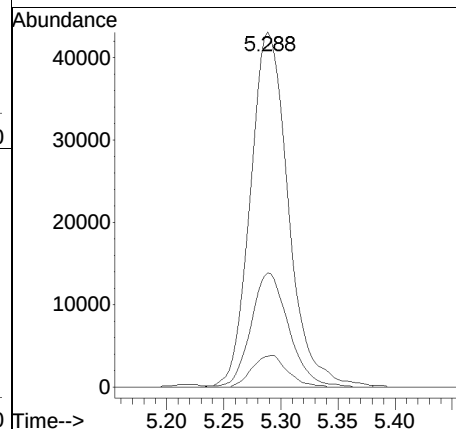
Tgt Ion: 78	Resp: 281838
Ion Ratio	Lower Upper
78 100	
77 23.4	15.7 32.7
51 17.3	16.0 33.2
52 15.7	15.3 31.9

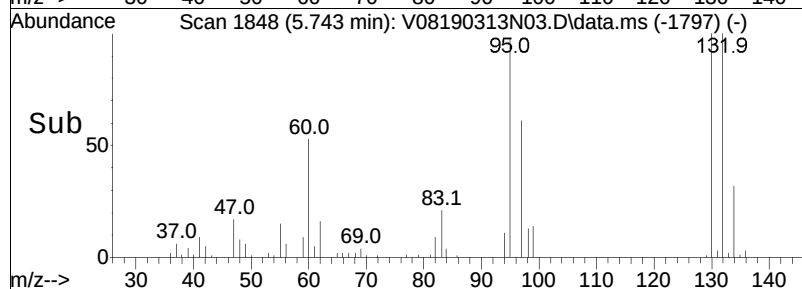
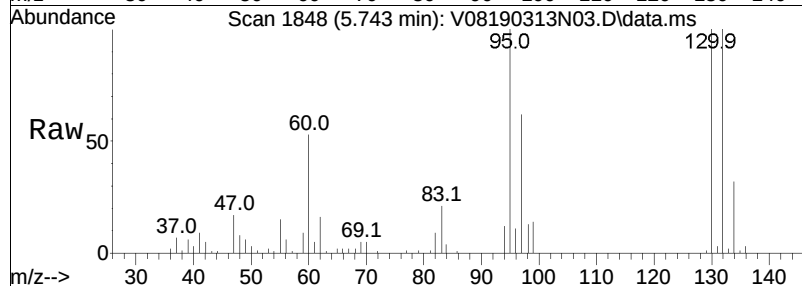
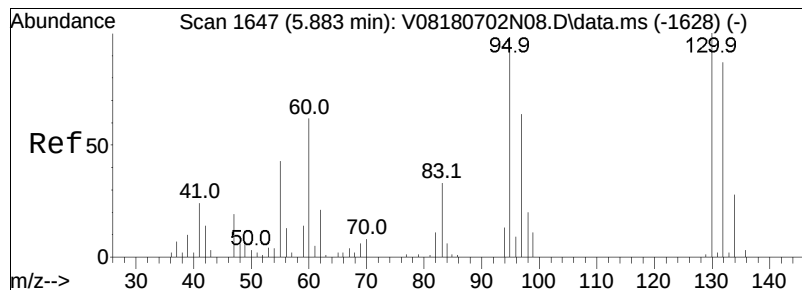




#44
 1,2-Dichloroethane
 Concen: 11.30 ug/L
 RT: 5.288 min Scan# 1685
 Delta R.T. -0.009 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

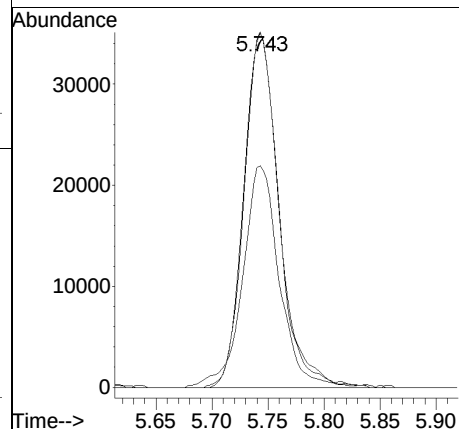
Tgt	Ion: 62	Resp:	100426
Ion	Ratio	Lower	Upper
62	100		
64	32.1	11.2	51.2
98	8.5	0.0	26.1

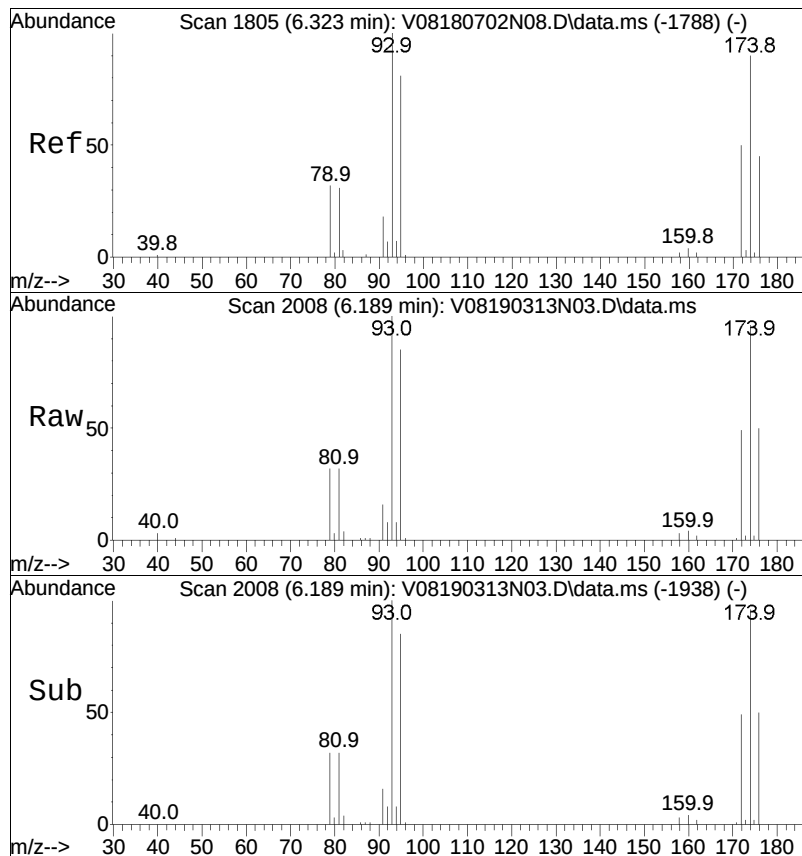




#48
 Trichloroethene
 Concen: 11.10 ug/L
 RT: 5.743 min Scan# 1848
 Delta R.T. -0.008 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

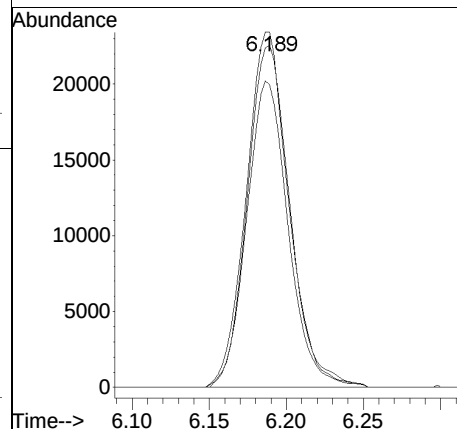
Tgt Ion:	95	Resp:	76388
Ion Ratio	Lower	Upper	
95	100		
97	65.3	55.5	83.3
130	99.2	76.6	115.0

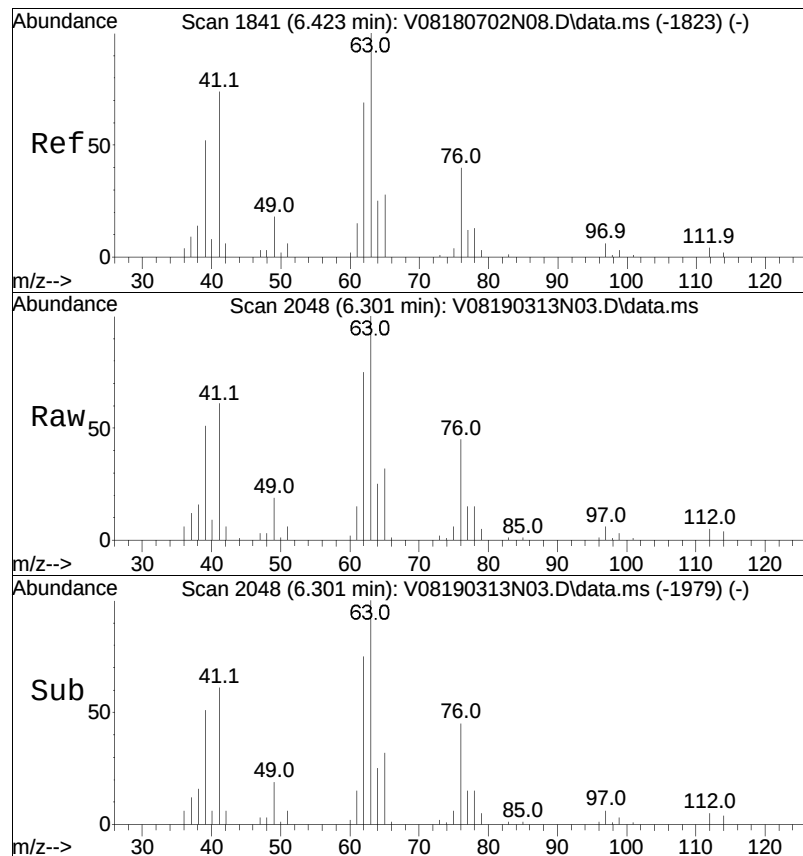




#50
 Dibromomethane
 Concen: 11.18 ug/L
 RT: 6.189 min Scan# 2008
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

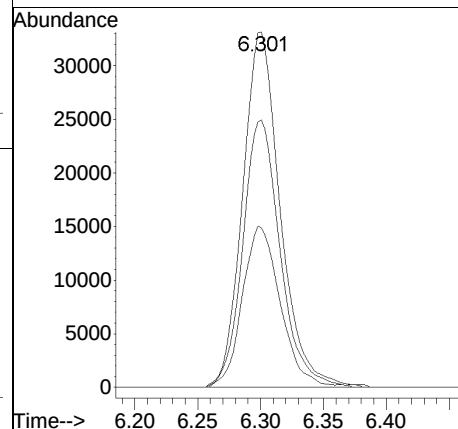
Tgt Ion:	93	Resp:	45108
Ion Ratio	Lower	Upper	
93	100		
95	84.3	67.0	100.4
174	96.7	75.0	112.4

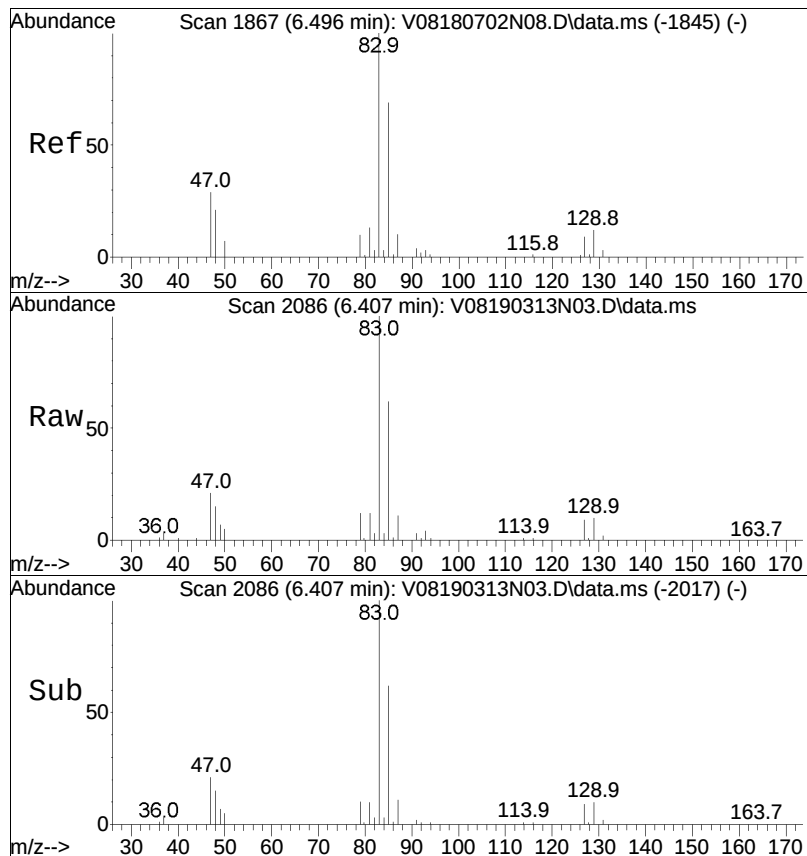




#51
 1,2-Dichloropropane
 Concen: 10.30 ug/L
 RT: 6.301 min Scan# 2048
 Delta R.T. -0.008 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

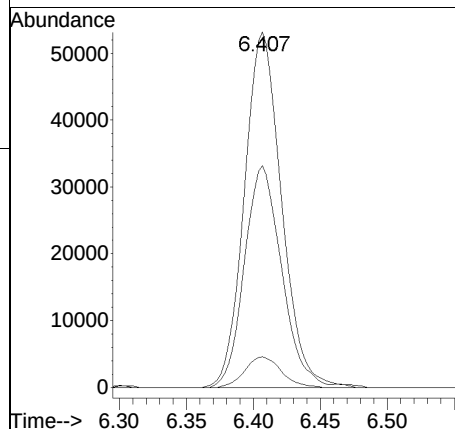
Tgt Ion:	63	Resp:	69012
Ion Ratio	Lower	Upper	
63	100		
62	74.8	58.6	87.8
76	45.7	38.0	57.0

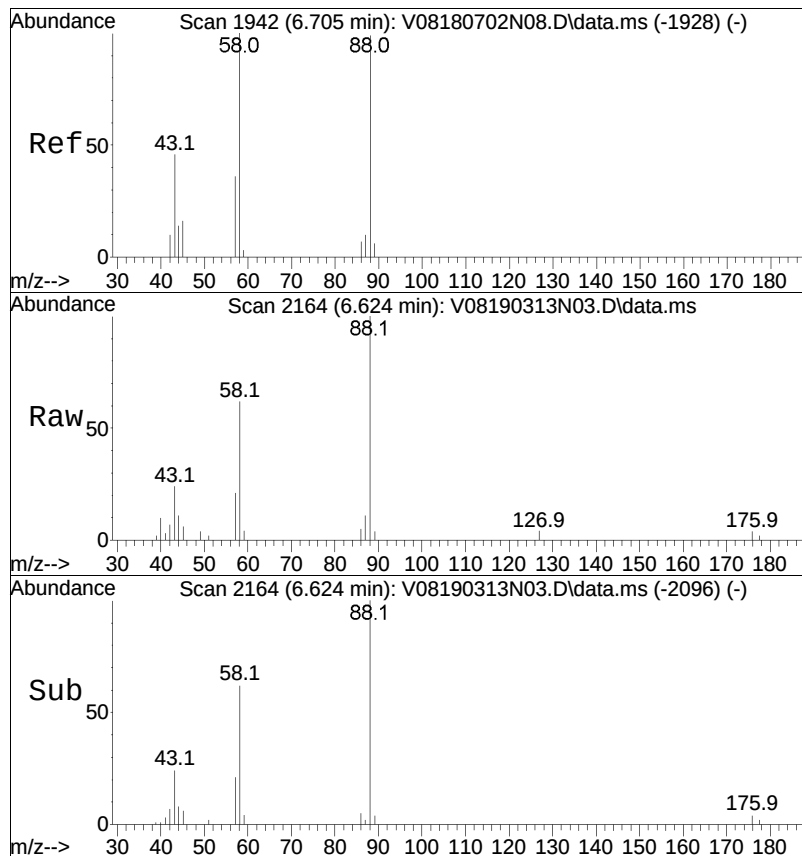




#54
 Bromodichloromethane
 Concen: 10.93 ug/L
 RT: 6.407 min Scan# 2086
 Delta R.T. -0.008 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

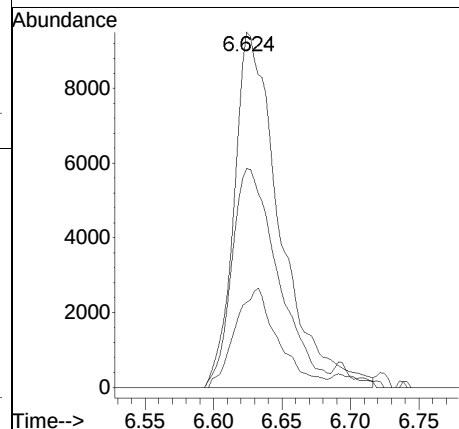
Tgt Ion	Ratio	Lower	Upper
83	100		
85	62.2	52.3	78.5
127	8.4	6.2	9.4

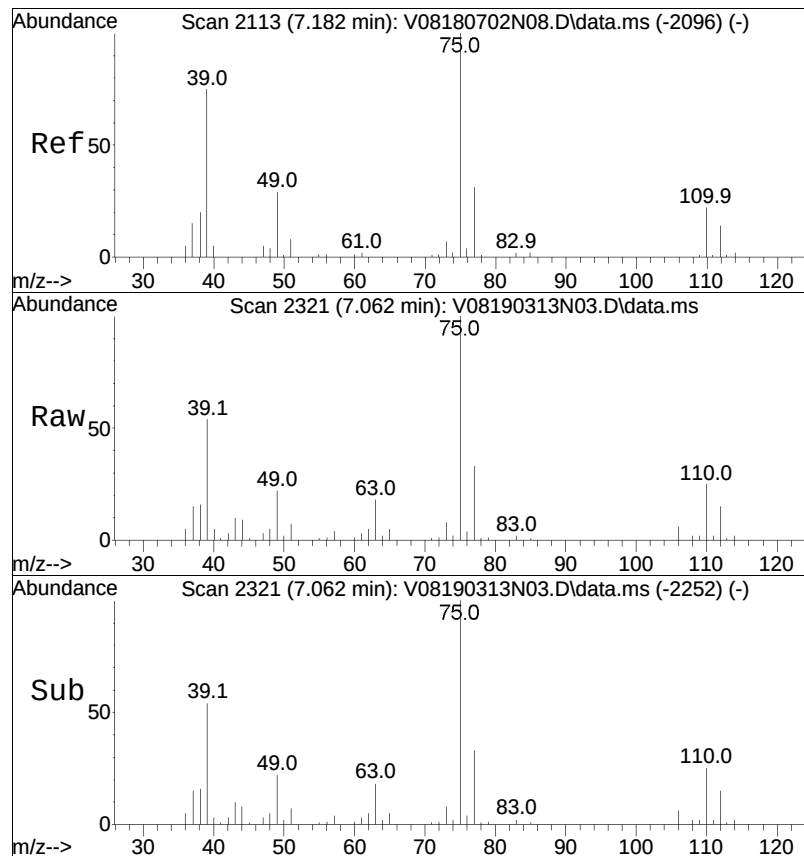




#57
 1,4-Dioxane
 Concen: 755.47 ug/L
 RT: 6.624 min Scan# 2164
 Delta R.T. -0.011 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

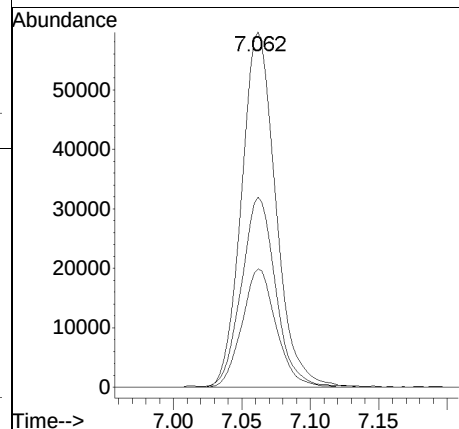
Tgt Ion	Ratio	Lower	Upper
88	100		
58	62.7	76.7	115.1#
43	26.5	36.2	54.2#

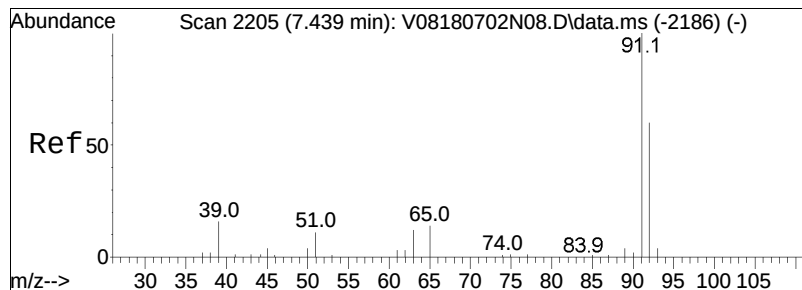




#58
 cis-1,3-Dichloropropene
 Concen: 9.89 ug/L
 RT: 7.062 min Scan# 2321
 Delta R.T. -0.008 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

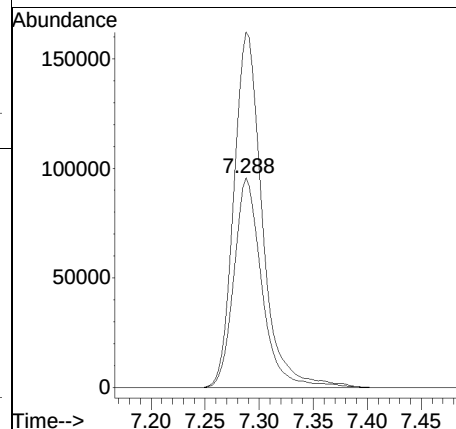
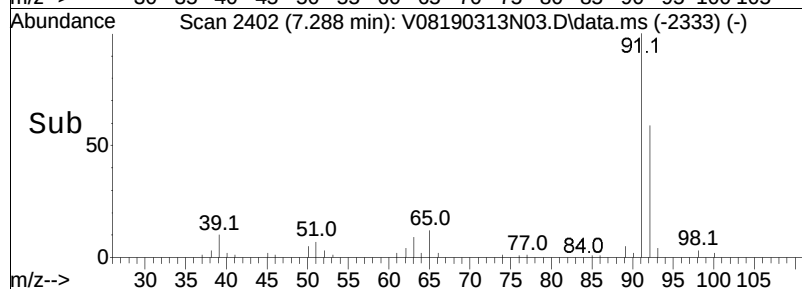
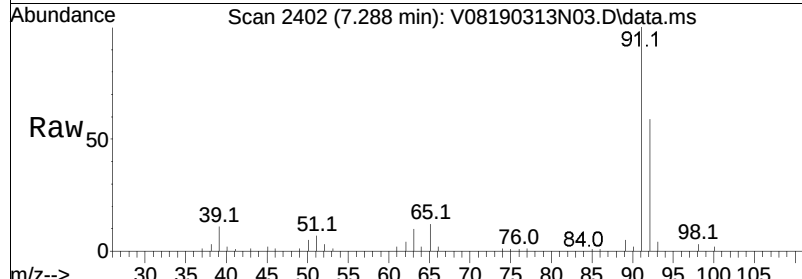
Tgt Ion:	75	Resp:	104151
Ion Ratio	Lower	Upper	
75	100		
77	33.3	25.0	37.4
39	53.7	50.1	75.1

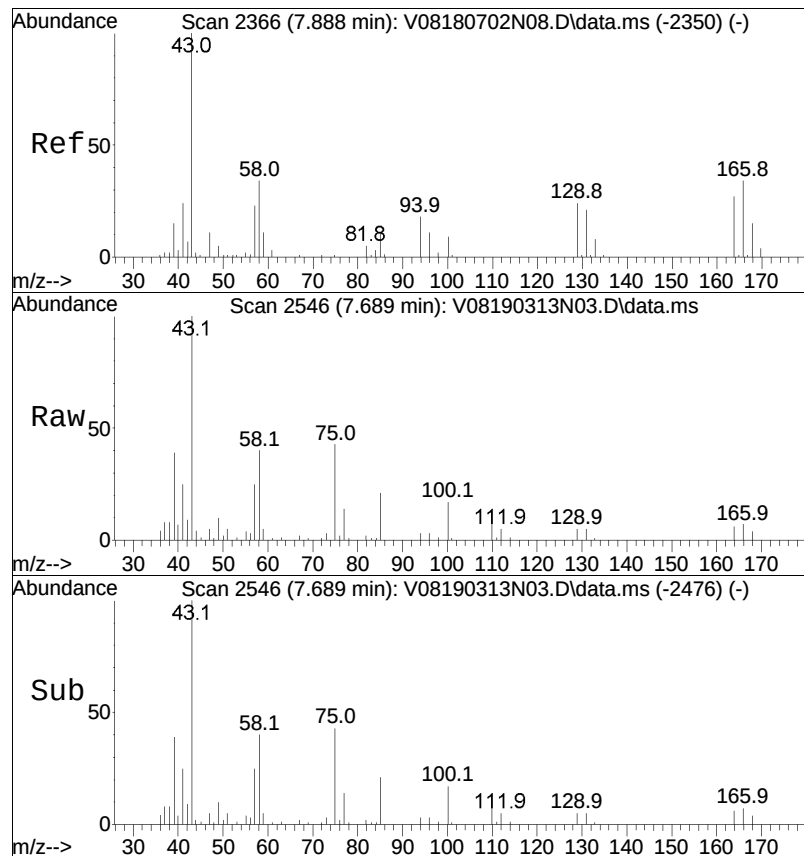




#61
Toluene
Concen: 11.09 ug/L
RT: 7.288 min Scan# 2402
Delta R.T. -0.008 min
Lab File: V08190313N03.D
Acq: 13 Mar 2019 7:04 pm

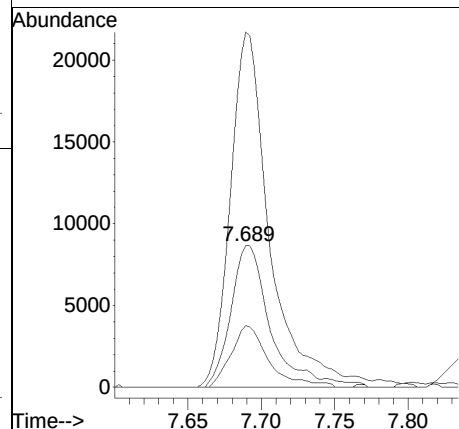
Tgt Ion	Ratio	Lower	Upper
92	100		
91	171.8	139.8	209.6

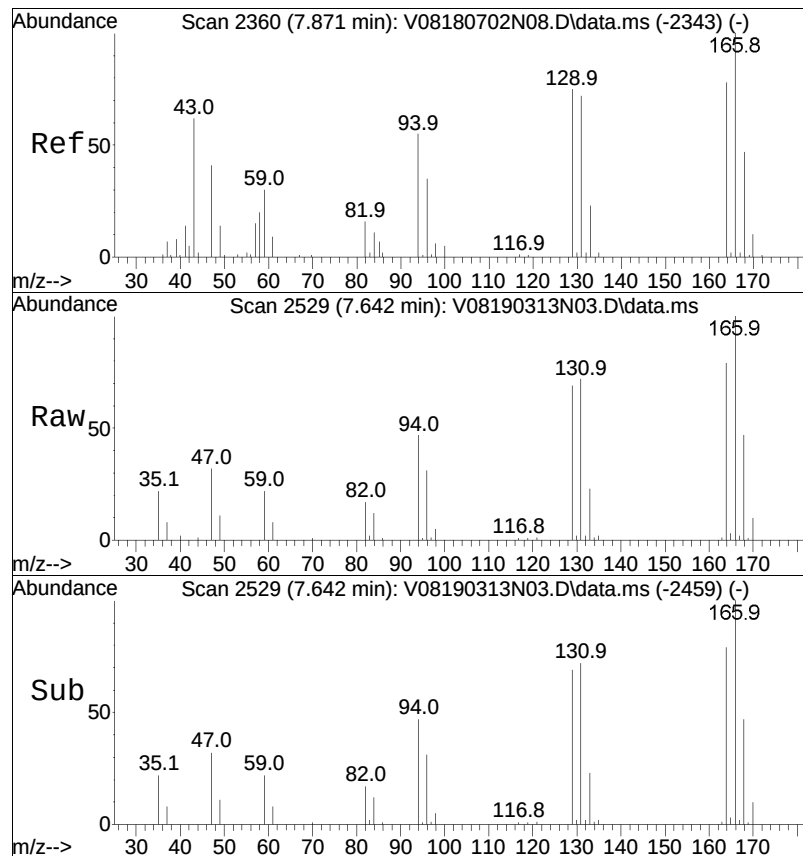




#62
 4-Methyl-2-pentanone
 Concen: 9.41 ug/L
 RT: 7.689 min Scan# 2546
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

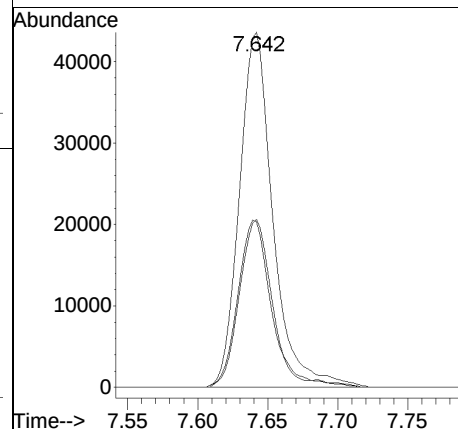
Tgt	Ion	Resp	Lower	Upper
58	100			
100	41.3	20.2	30.2#	
43	242.9	196.6	295.0	

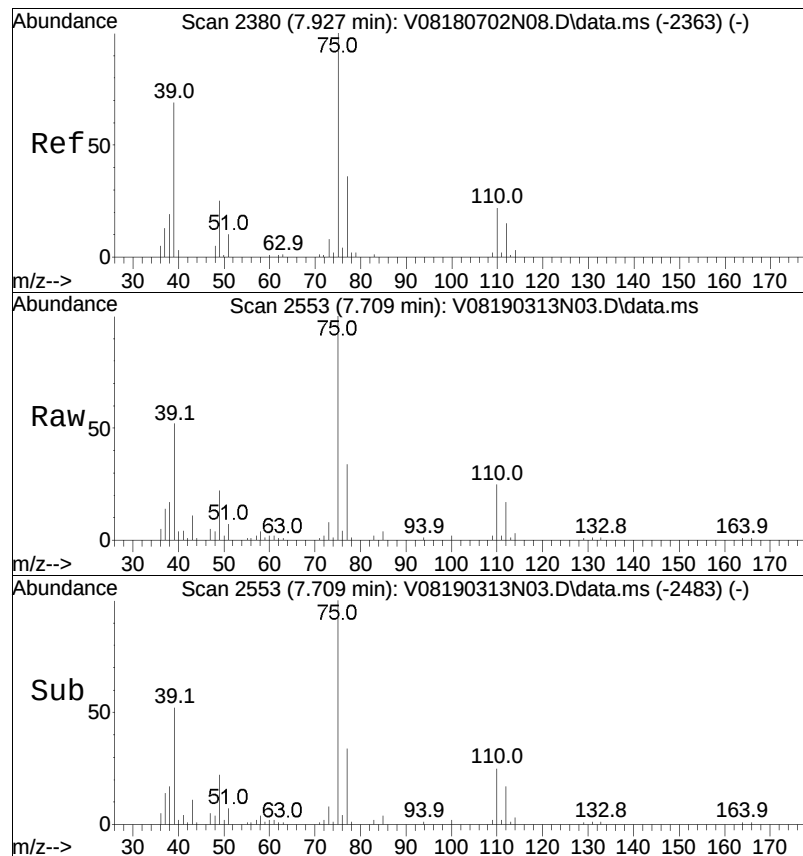




#63
Tetrachloroethene
Concen: 10.92 ug/L
RT: 7.642 min Scan# 2529
Delta R.T. -0.006 min
Lab File: V08190313N03.D
Acq: 13 Mar 2019 7:04 pm

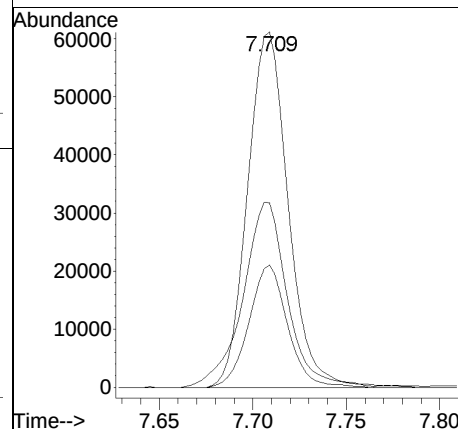
Tgt Ion:	166	Resp:	72918
Ion Ratio	Lower	Upper	
166	100		
168	45.5	28.2	68.2
94	47.6	38.4	78.4

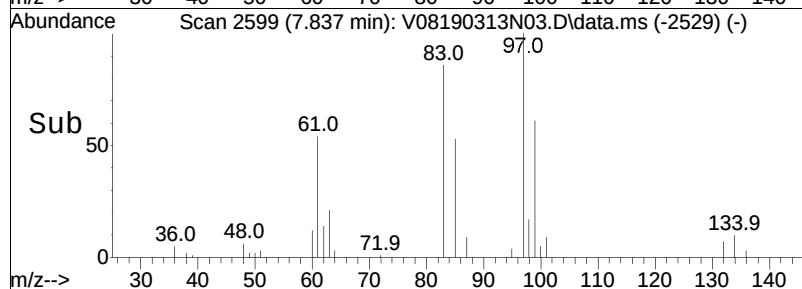
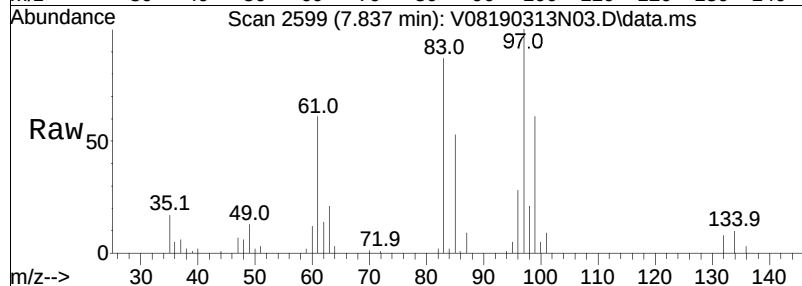
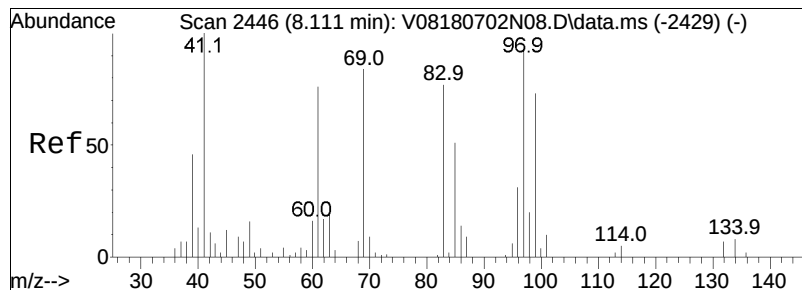




#65
 trans-1,3-Dichloropropene
 Concen: 10.52 ug/L
 RT: 7.709 min Scan# 2553
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

Tgt Ion:	75	Resp:	92336
Ion Ratio	Lower	Upper	
75	100		
77	32.8	12.4	52.4
39	57.3	42.8	82.8





#68

1,1,2-Trichloroethane

Concen: 11.93 ug/L

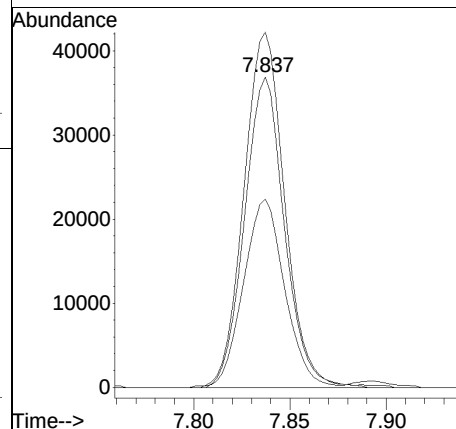
RT: 7.837 min Scan# 2599

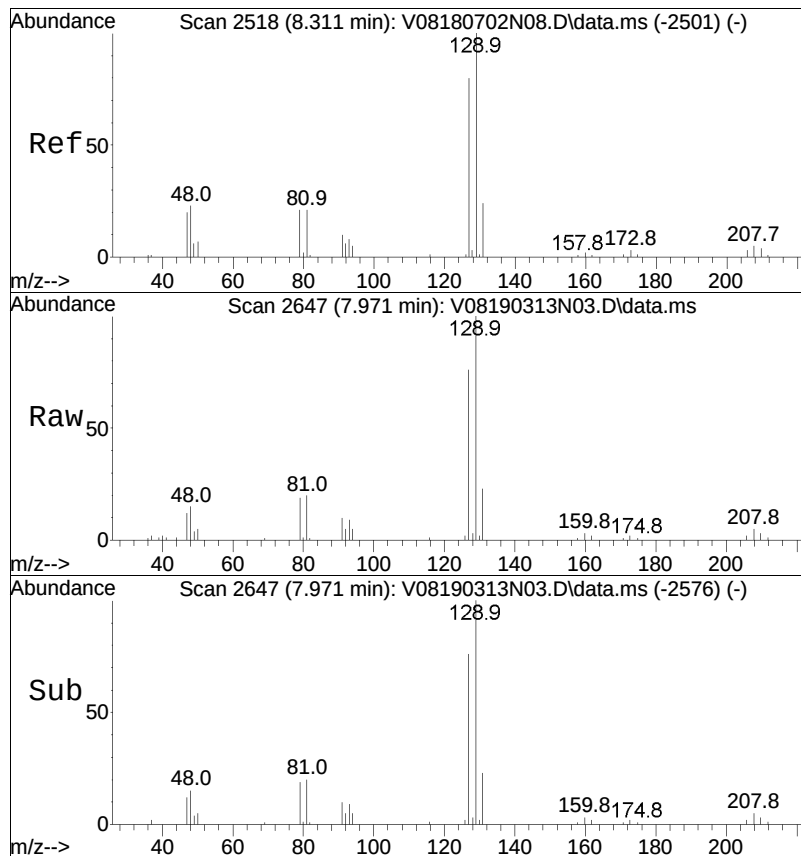
Delta R.T. -0.006 min

Lab File: V08190313N03.D

Acq: 13 Mar 2019 7:04 pm

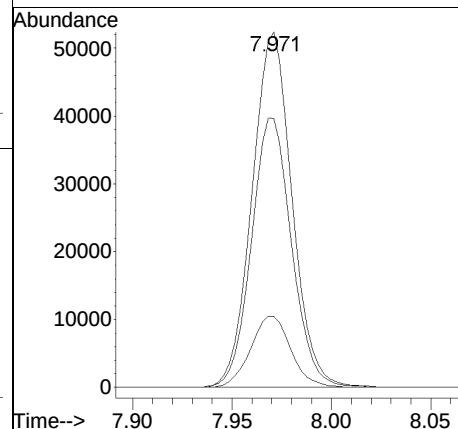
Tgt Ion:	83	Resp:	53137
Ion Ratio	Lower	Upper	
83	100		
97	117.1	89.8	129.8
85	62.7	44.4	84.4

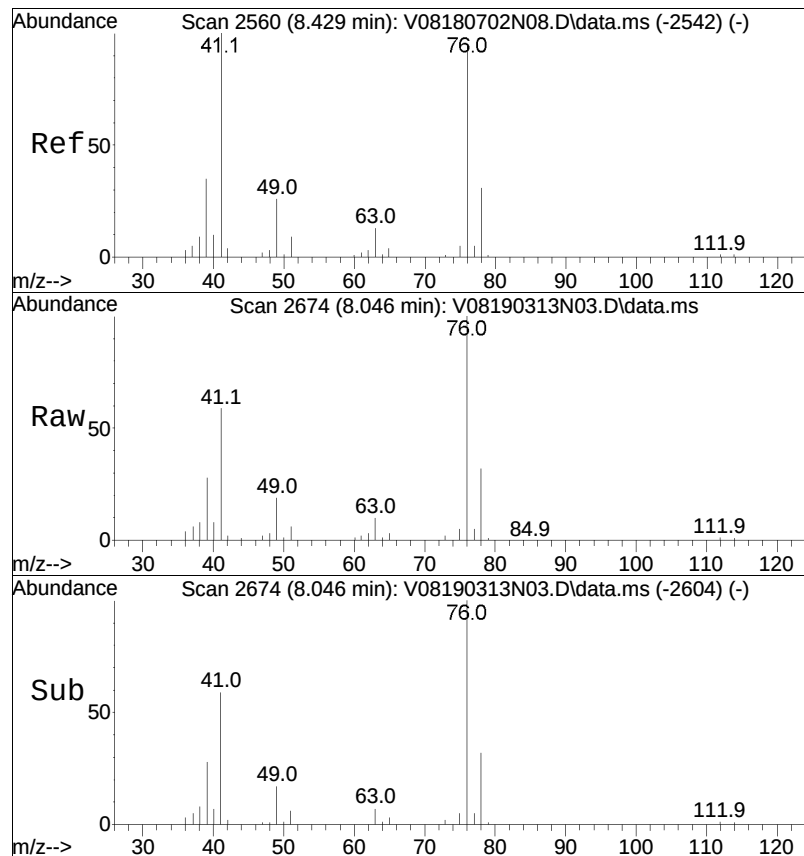




#69
 Chlorodibromomethane
 Concen: 11.17 ug/L
 RT: 7.971 min Scan# 2647
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

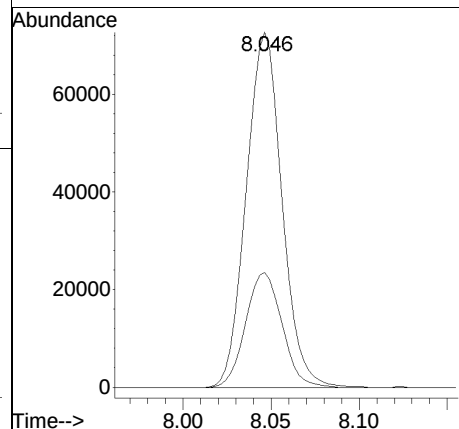
Tgt Ion:	129	Resp:	73198
Ion Ratio	Lower	Upper	
129	100		
81	20.3	2.9	42.9
127	76.3	57.8	97.8

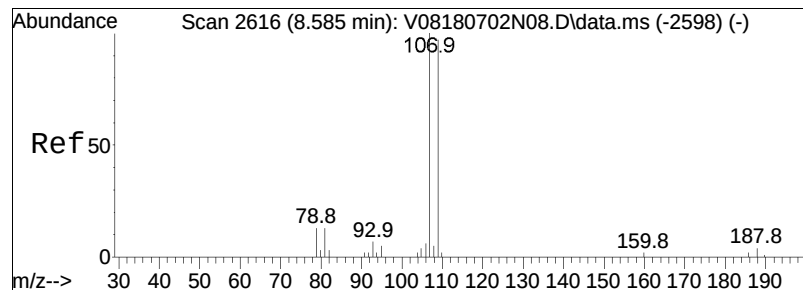




#70
 1,3-Dichloropropane
 Concen: 11.39 ug/L
 RT: 8.046 min Scan# 2674
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

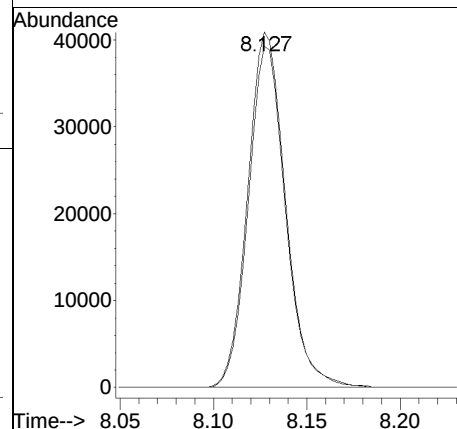
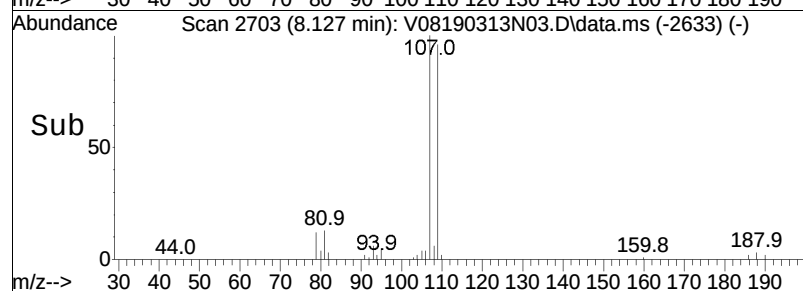
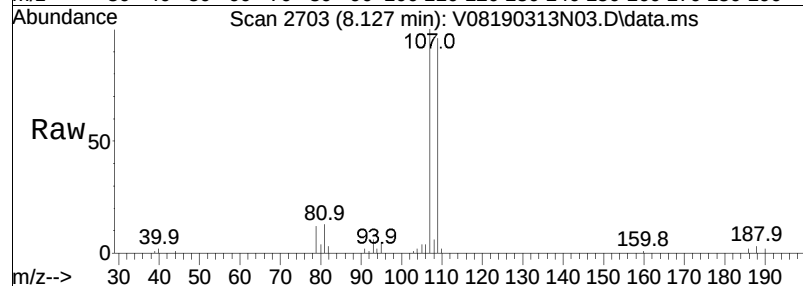
Tgt Ion	Ratio	Lower	Upper
76	100		
78	33.0	25.5	38.3

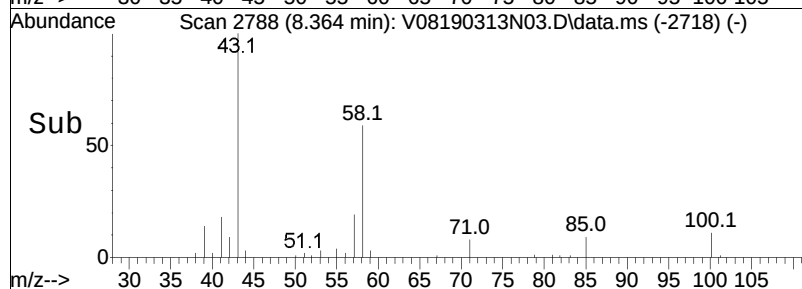
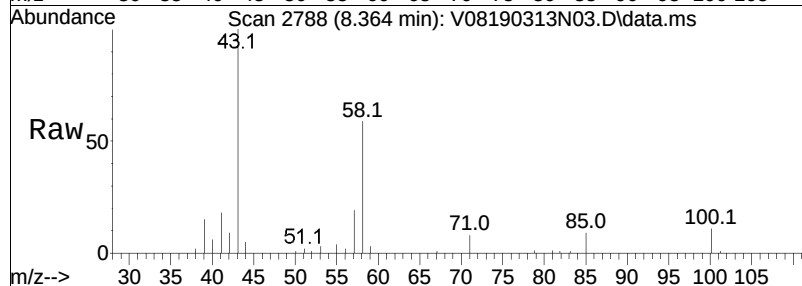
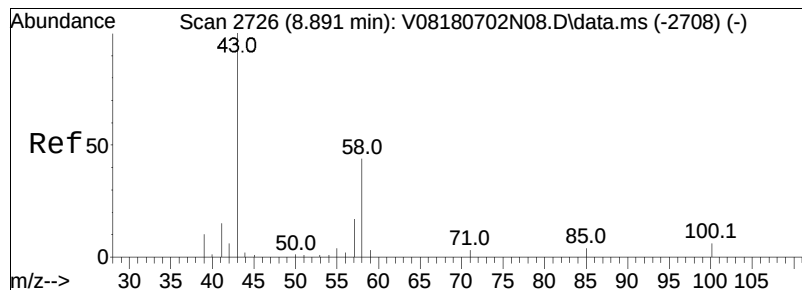




#71
 1,2-Dibromoethane
 Concen: 10.88 ug/L
 RT: 8.127 min Scan# 2703
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

Tgt Ion	Ratio	Lower	Upper
107	100		
109	94.4	74.3	111.5





#72

2-Hexanone

Concen: 8.42 ug/L

RT: 8.364 min Scan# 2788

Delta R.T. -0.006 min

Lab File: V08190313N03.D

Acq: 13 Mar 2019 7:04 pm

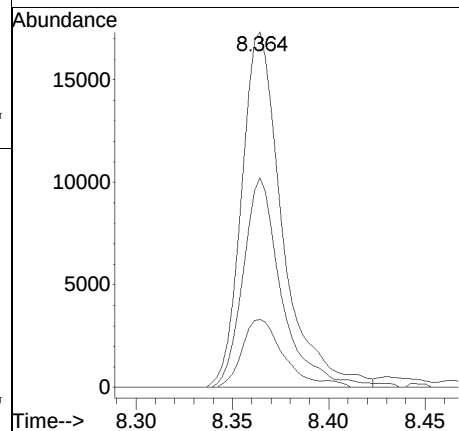
Tgt Ion: 43 Resp: 25556

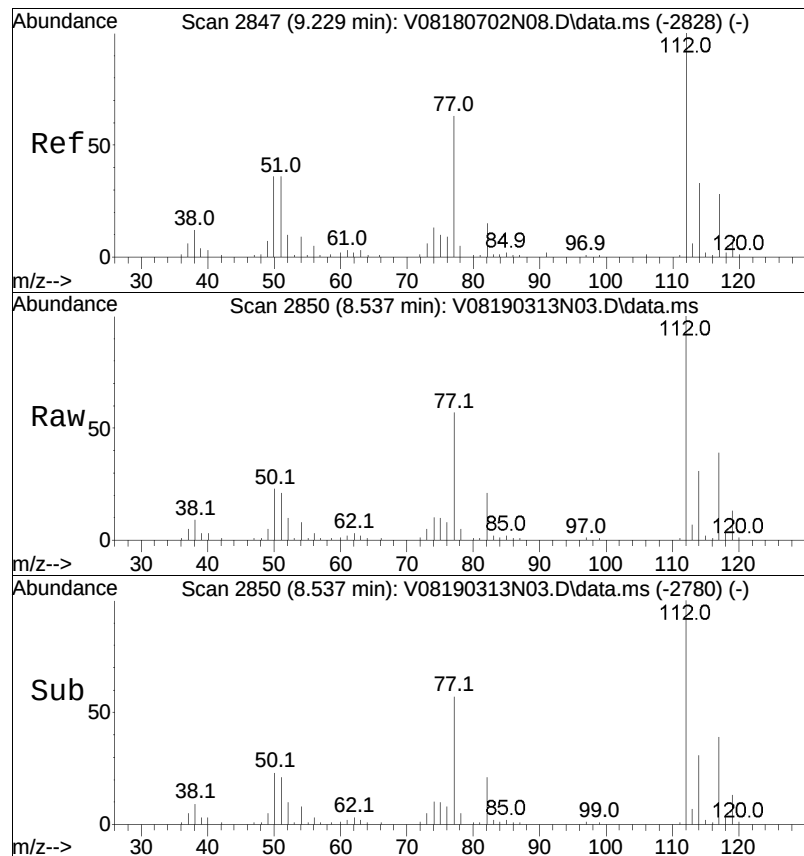
Ion Ratio Lower Upper

43 100

58 56.4 41.2 61.8

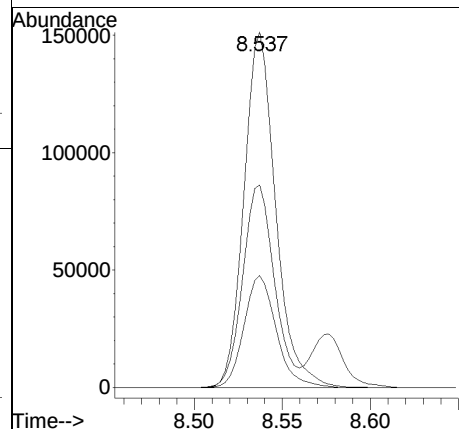
57 19.8 17.2 25.8

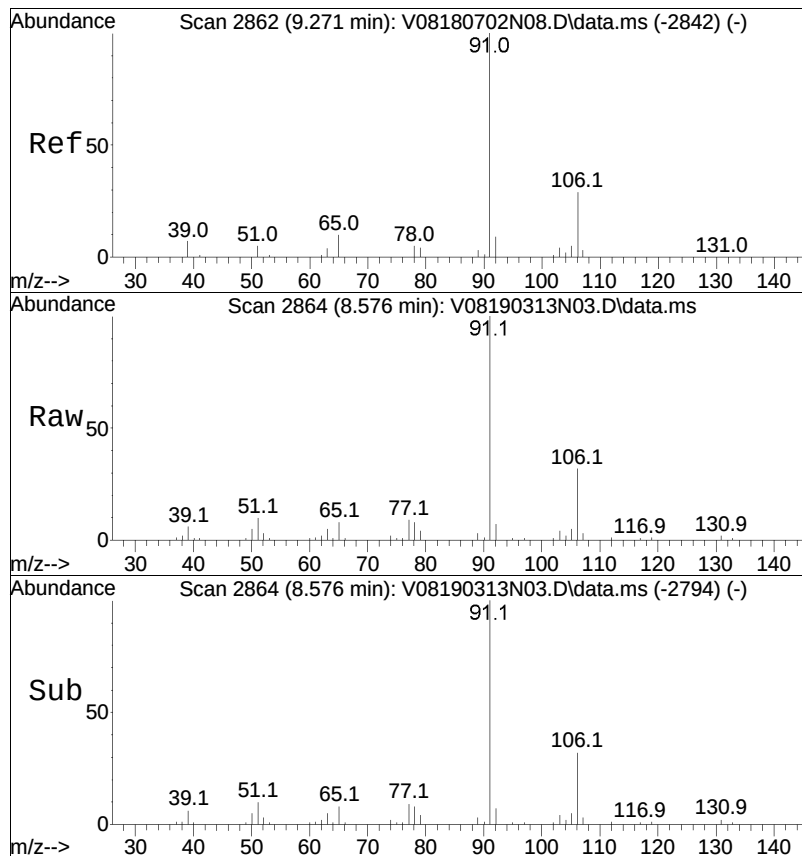




#73
 Chlorobenzene
 Concen: 10.96 ug/L
 RT: 8.537 min Scan# 2850
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

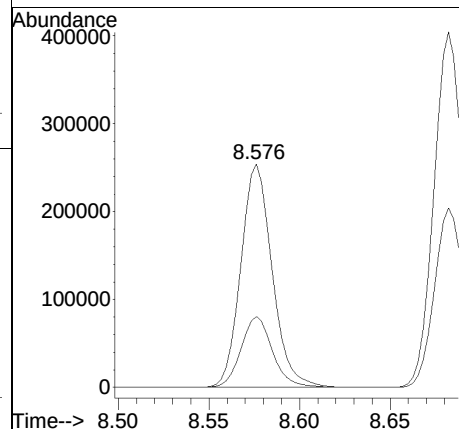
Tgt Ion	Ratio	Lower	Upper
112	100		
77	57.2	55.4	83.0
114	32.0	25.4	38.2

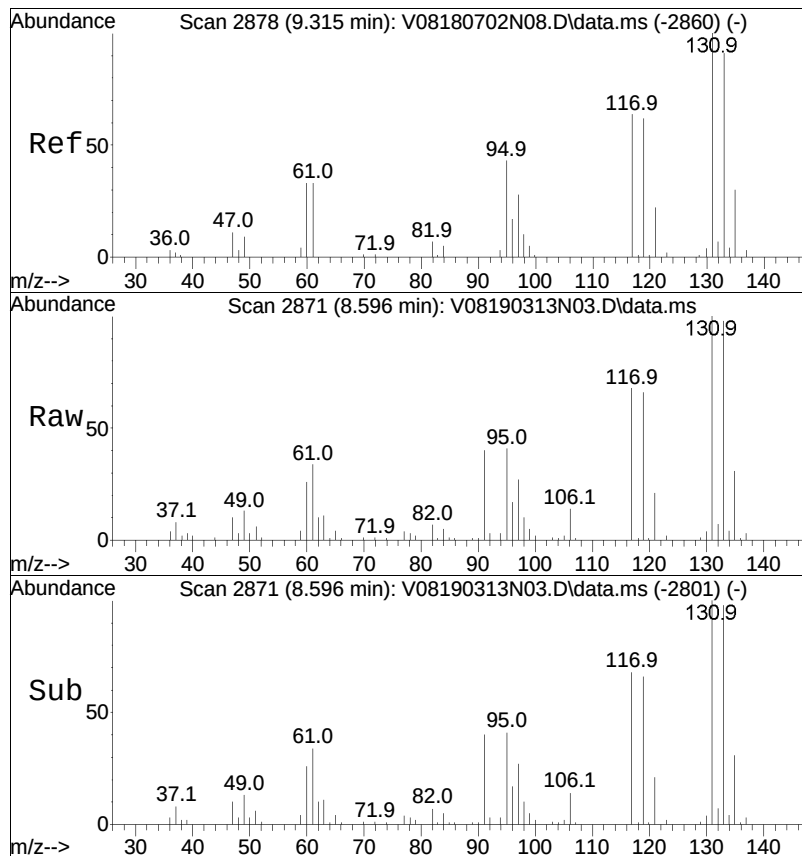




#74
 Ethylbenzene
 Concen: 10.55 ug/L
 RT: 8.576 min Scan# 2864
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

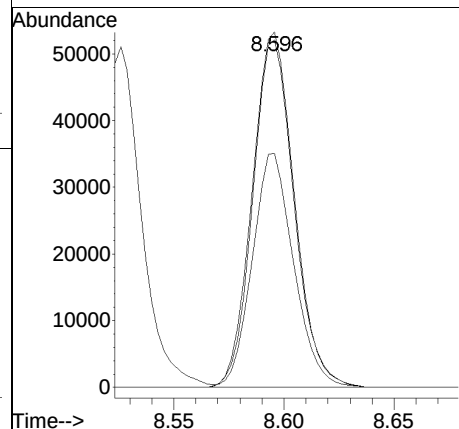
Tgt Ion	Ratio	Lower	Upper
91	100		
106	31.8	24.3	36.5

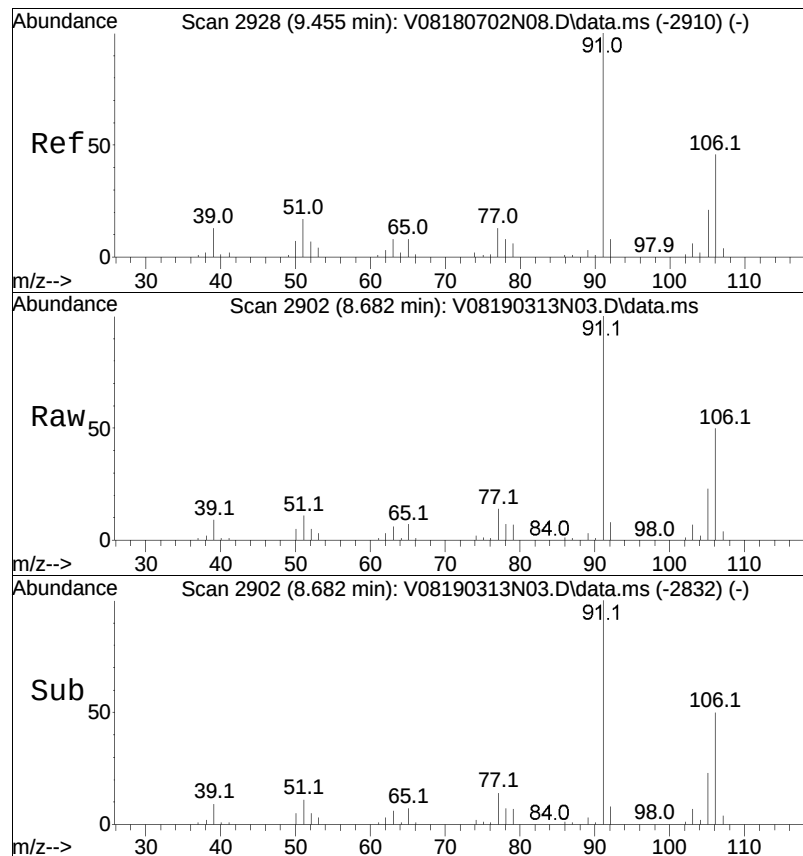




#75
 1,1,1,2-Tetrachloroethane
 Concen: 10.95 ug/L
 RT: 8.596 min Scan# 2871
 Delta R.T. -0.005 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

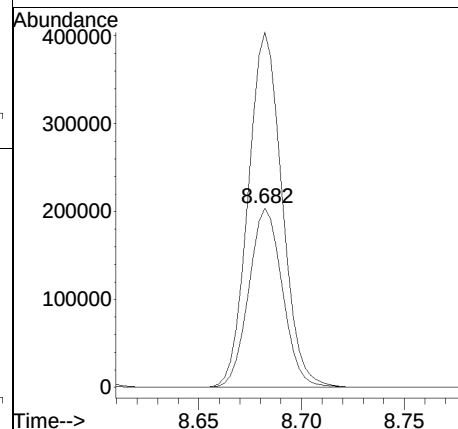
Tgt Ion:	131	Resp:	70883
Ion Ratio	Lower	Upper	
131	100		
133	95.9	81.0	121.0
119	64.9	41.3	81.3

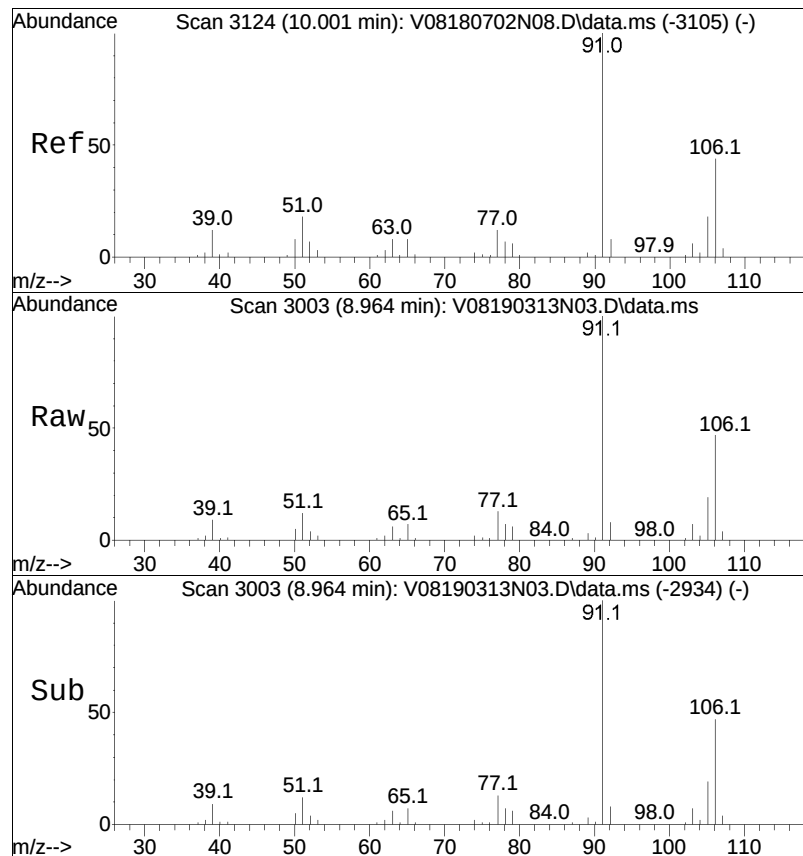




#76
 p/m Xylene
 Concen: 21.11 ug/L
 RT: 8.682 min Scan# 2902
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

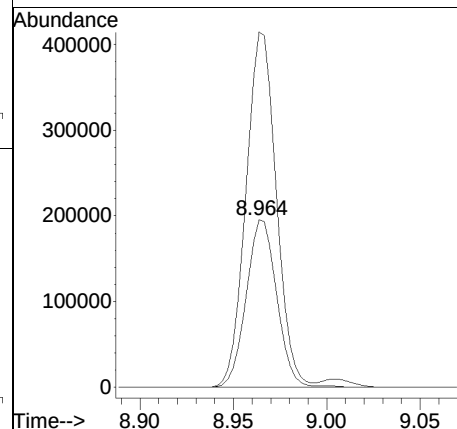
Tgt Ion	Ratio	Lower	Upper
106	100		
91	199.0	166.4	249.6

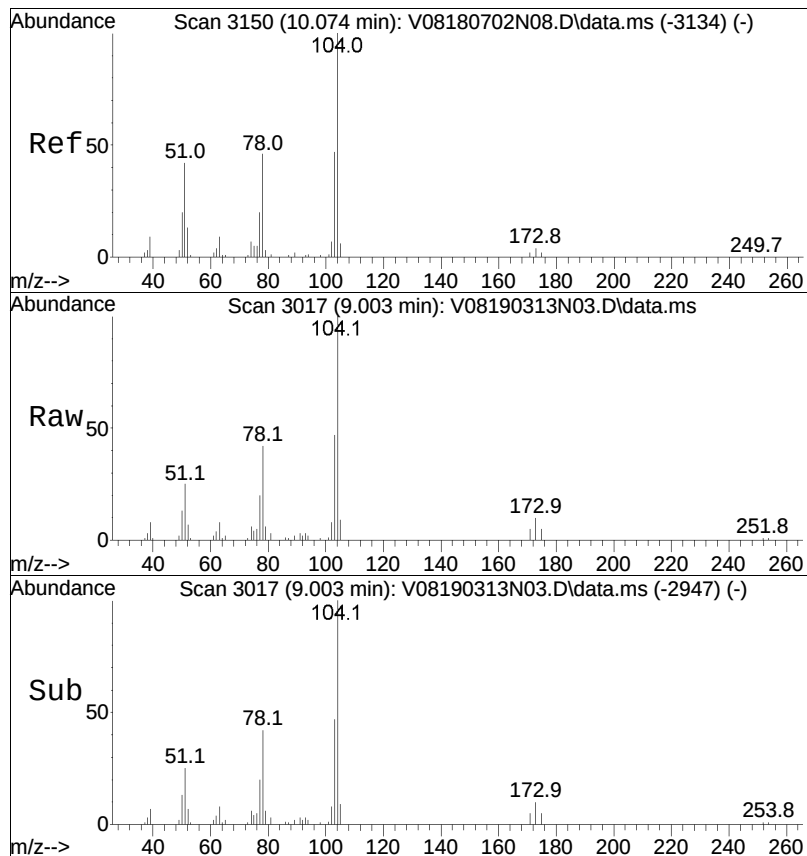




#77
 o Xylene
 Concen: 20.40 ug/L
 RT: 8.964 min Scan# 3003
 Delta R.T. -0.008 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

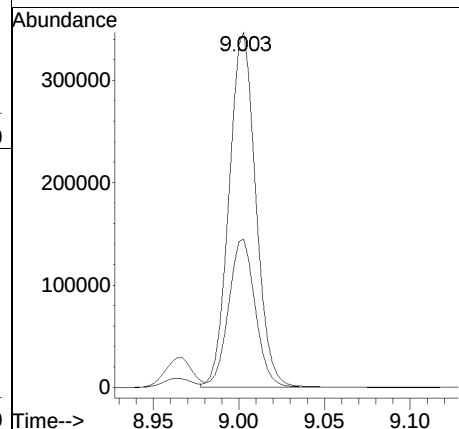
Tgt Ion	Ratio	Lower	Upper
106	100		
91	210.1	182.6	273.8

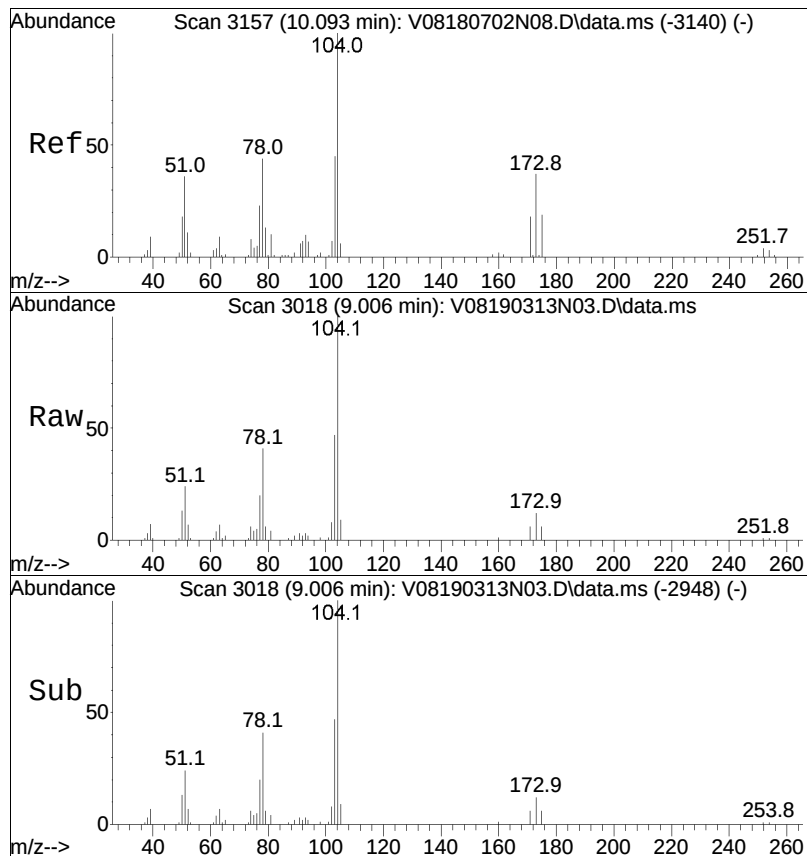




#78
 Styrene
 Concen: 21.58 ug/L
 RT: 9.003 min Scan# 3017
 Delta R.T. -0.005 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

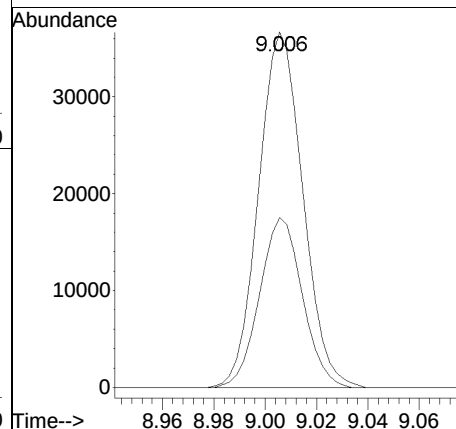
Tgt Ion	Ratio	Lower	Upper
104	100		
78	41.6	39.8	59.6

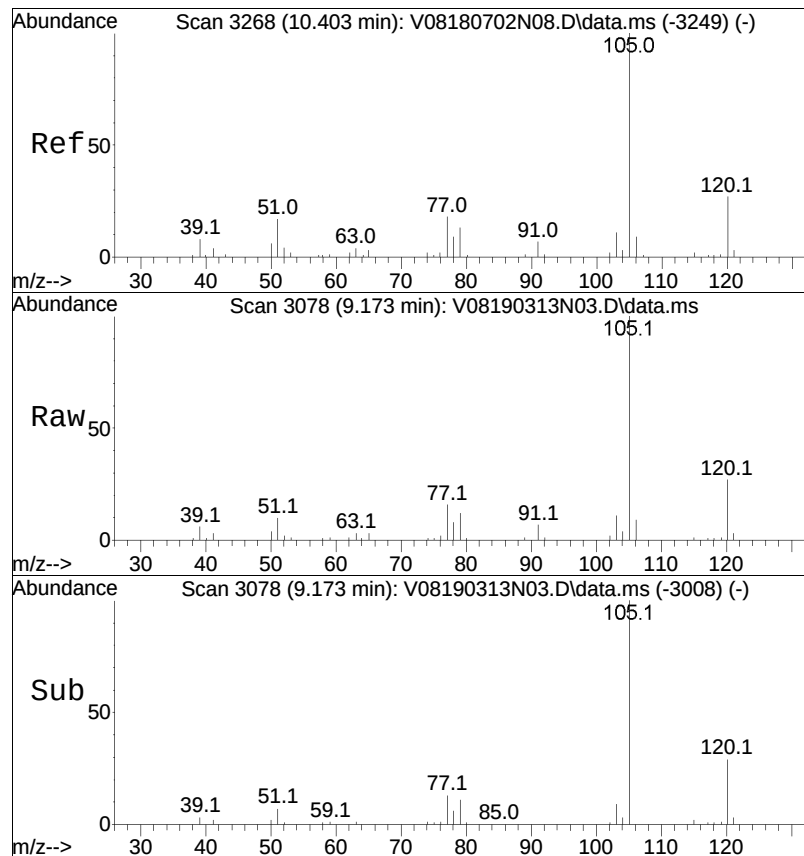




#80
 Bromoform
 Concen: 11.03 ug/L
 RT: 9.006 min Scan# 3018
 Delta R.T. -0.005 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

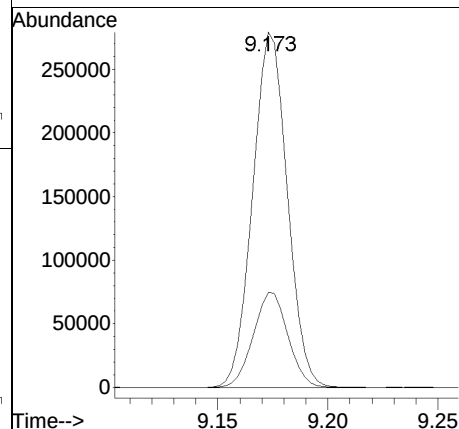
Tgt Ion	Ratio	Lower	Upper
173	100		
175	46.1	31.5	71.5

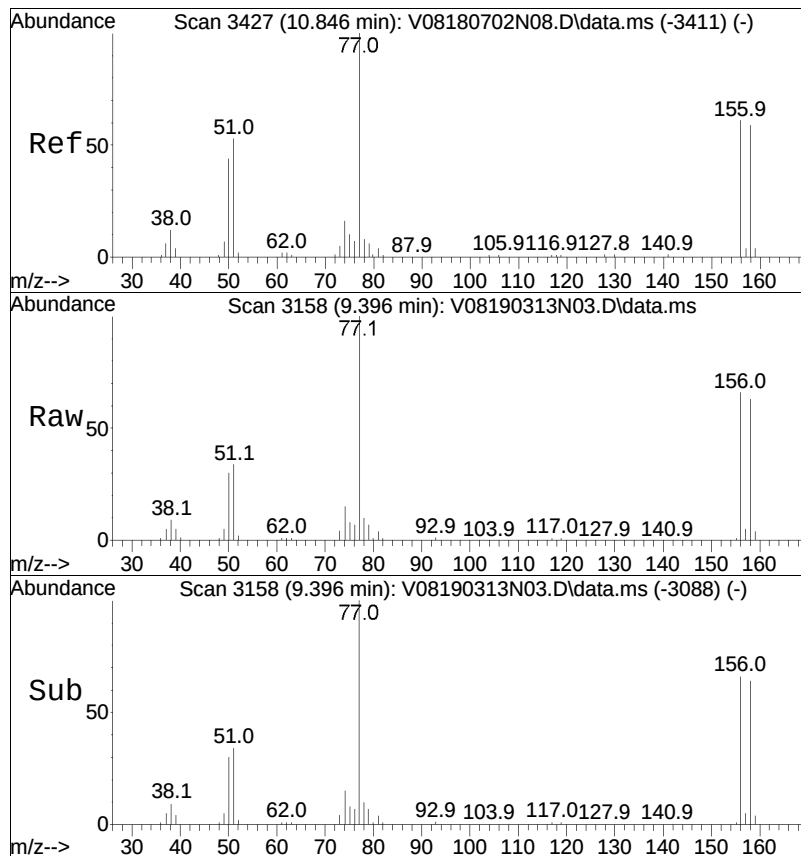




#82
 Isopropylbenzene
 Concen: 10.93 ug/L
 RT: 9.173 min Scan# 3078
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

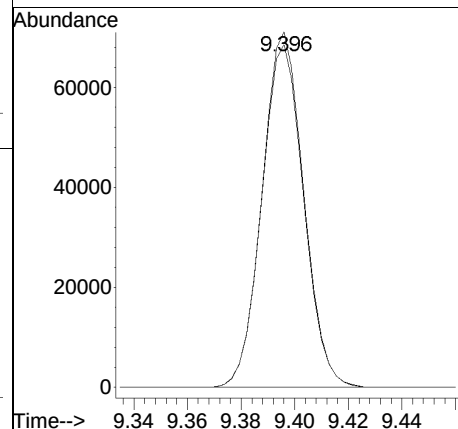
Tgt Ion	Ratio	Lower	Upper
105	100		
120	26.8	4.8	44.8

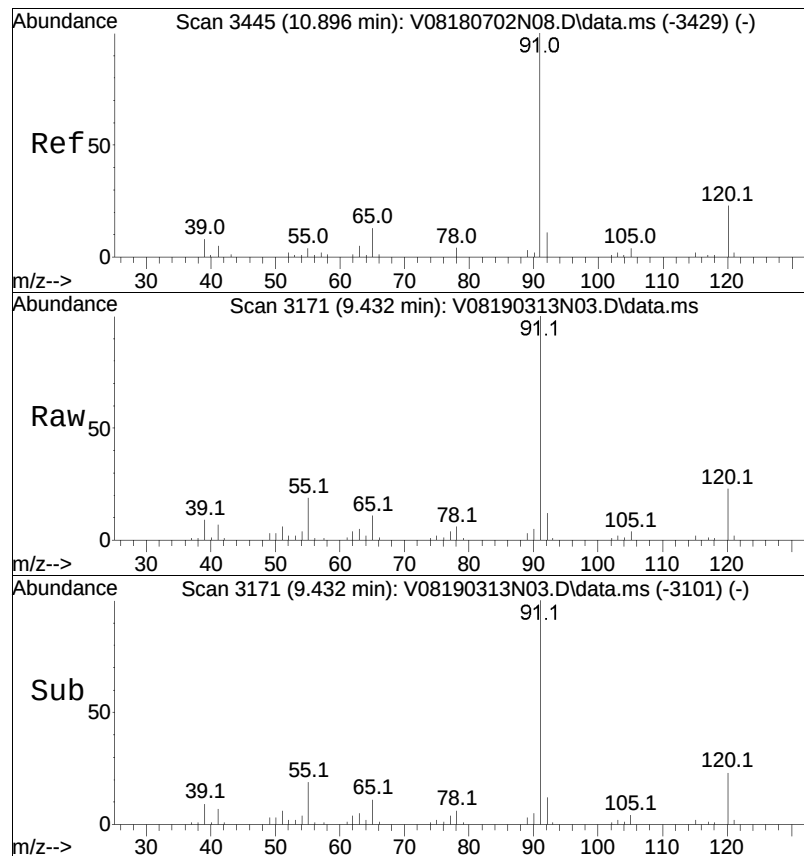




#84
 Bromobenzene
 Concen: 10.64 ug/L
 RT: 9.396 min Scan# 3158
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

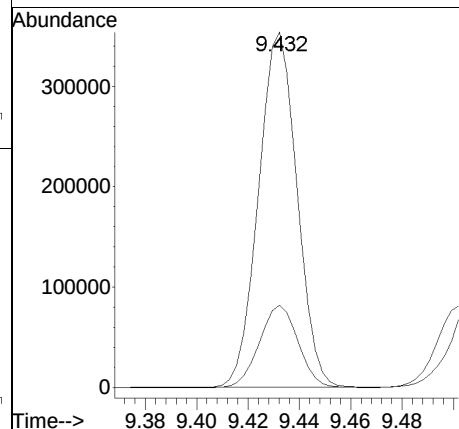
Tgt Ion	Ratio	Lower	Upper
156	100		
158	97.2	75.9	113.9

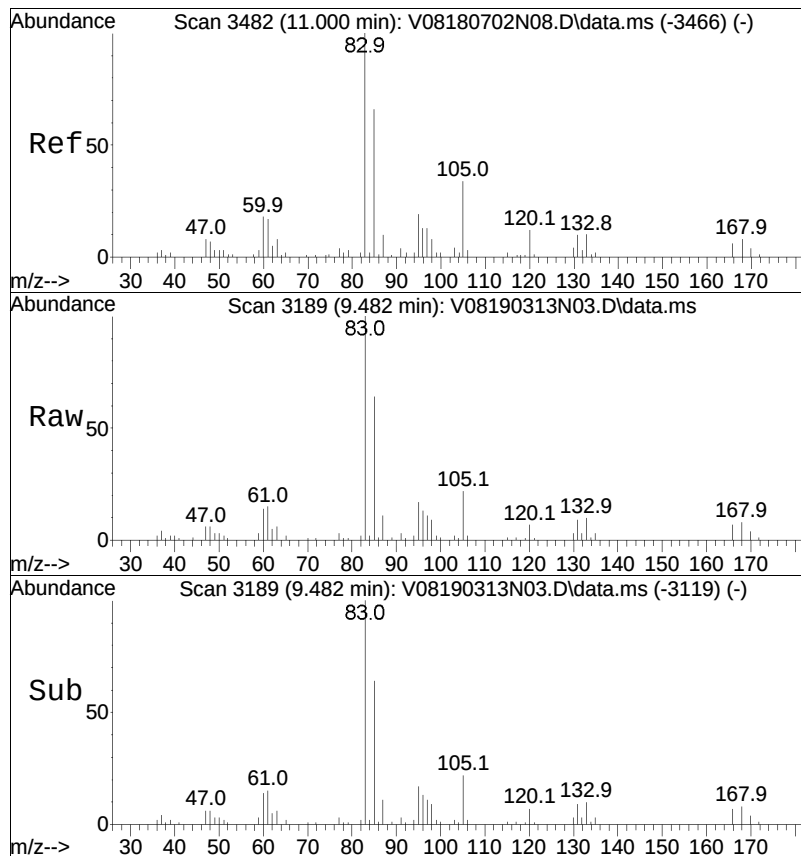




#85
 n-Propylbenzene
 Concen: 11.55 ug/L
 RT: 9.432 min Scan# 3171
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

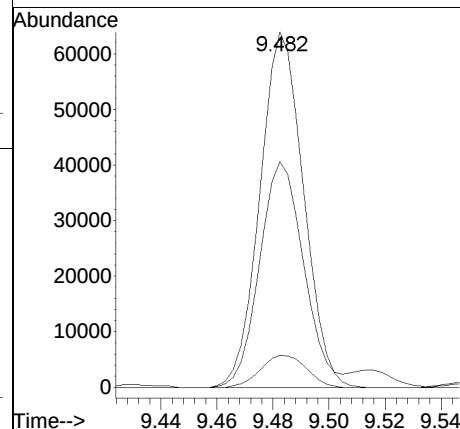
Tgt Ion	Ratio	Lower	Upper
91	100		
120	23.2	17.0	25.6

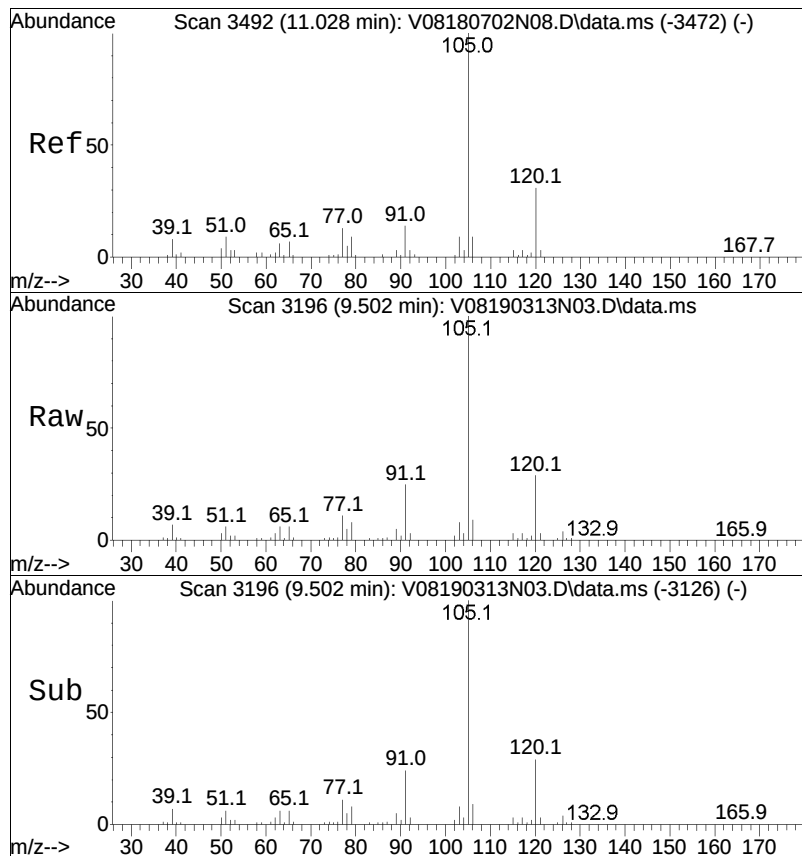




#87
 1,1,2,2-Tetrachloroethane
 Concen: 10.65 ug/L
 RT: 9.482 min Scan# 3189
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

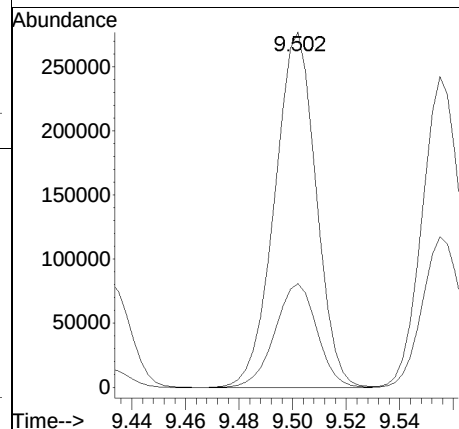
Tgt	Ion: 83	Resp:	69043
Ion	Ratio	Lower	Upper
83	100		
131	9.5	0.0	30.4
85	64.6	45.4	85.4

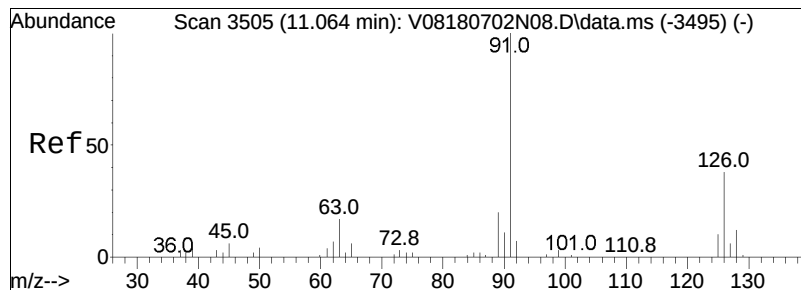




#88
 4-Ethyltoluene
 Concen: 11.22 ug/L
 RT: 9.502 min Scan# 3196
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

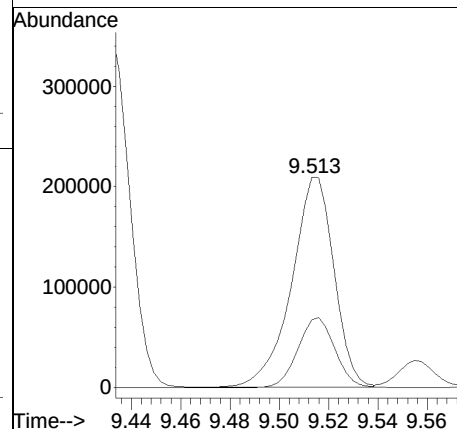
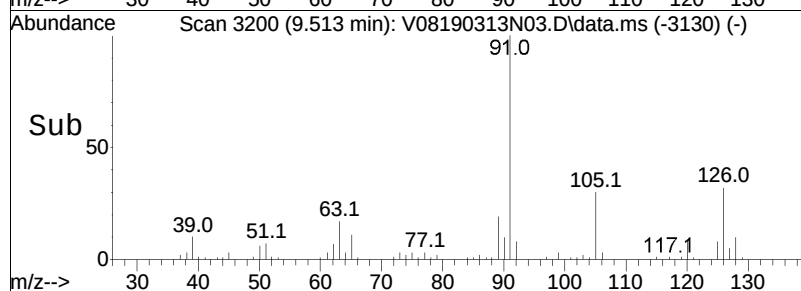
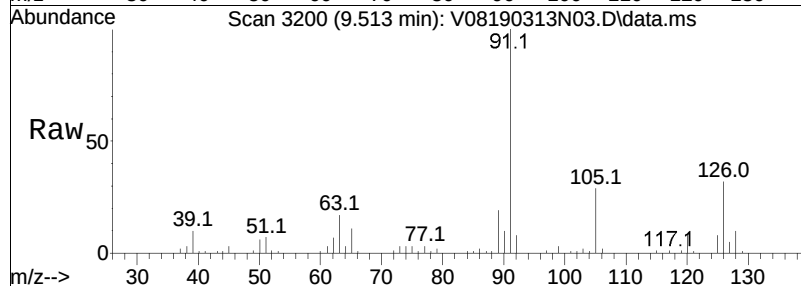
Tgt Ion	Ratio	Lower	Upper
105	100		
120	29.6	18.1	37.7

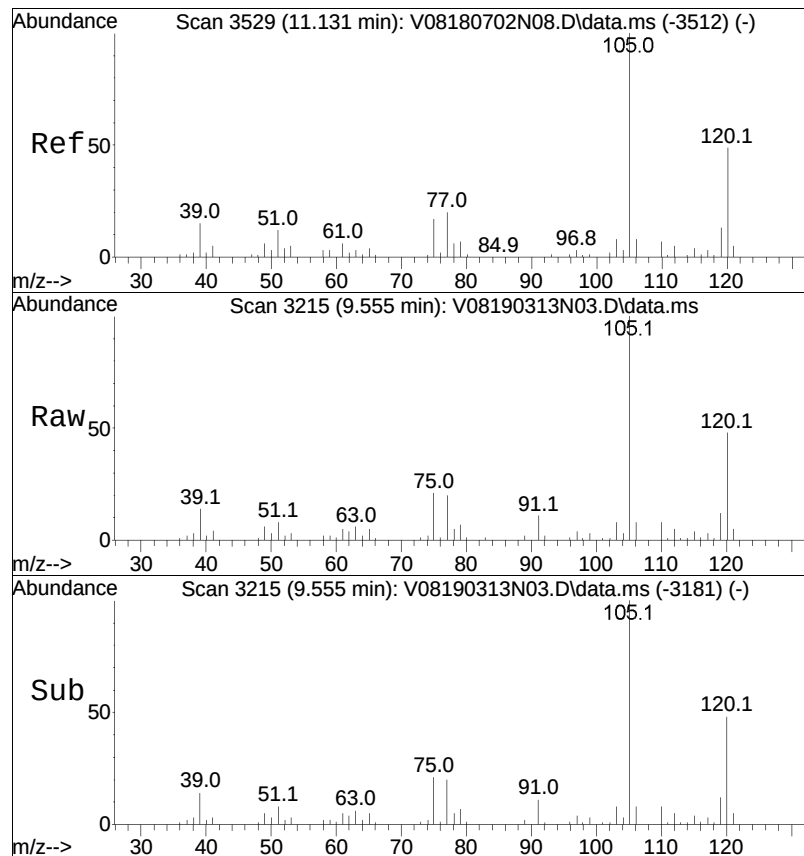




#89
 2-Chlorotoluene
 Concen: 10.76 ug/L
 RT: 9.513 min Scan# 3200
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

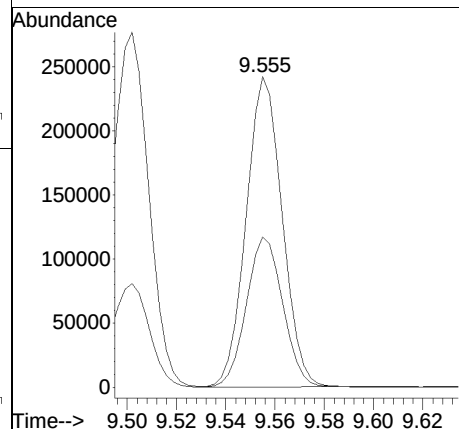
Tgt Ion	Ratio	Lower	Upper
91	100		
126	28.8	21.5	32.3

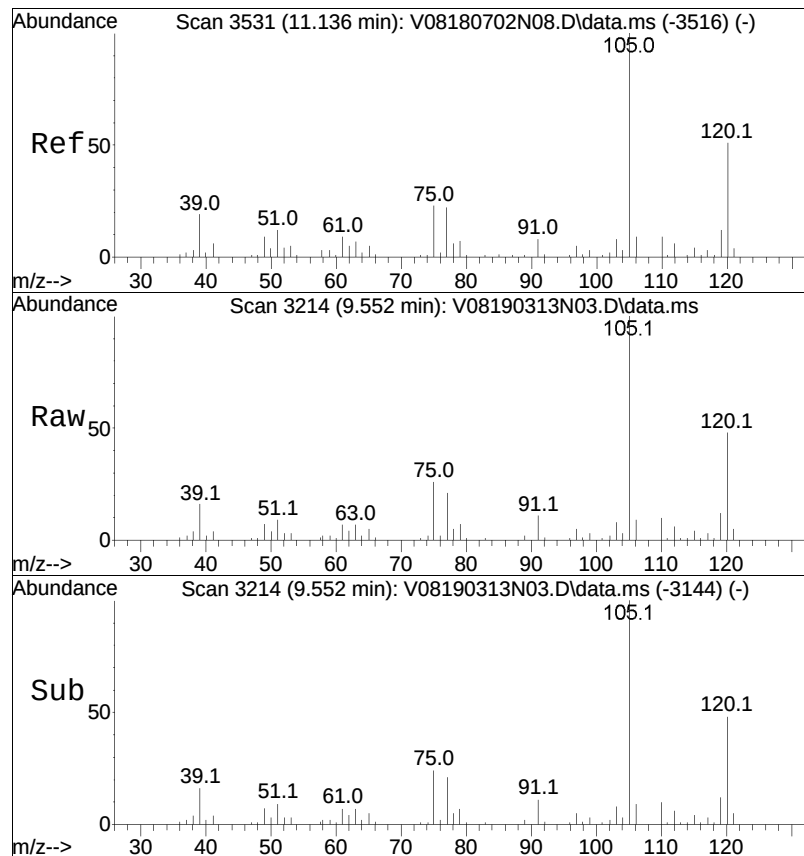




#90
 1,3,5-Trimethylbenzene
 Concen: 10.72 ug/L
 RT: 9.555 min Scan# 3215
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

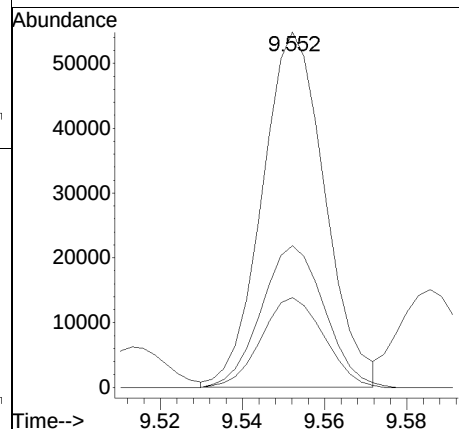
Tgt Ion	Ratio	Lower	Upper
105	100		
120	49.0	34.8	52.2

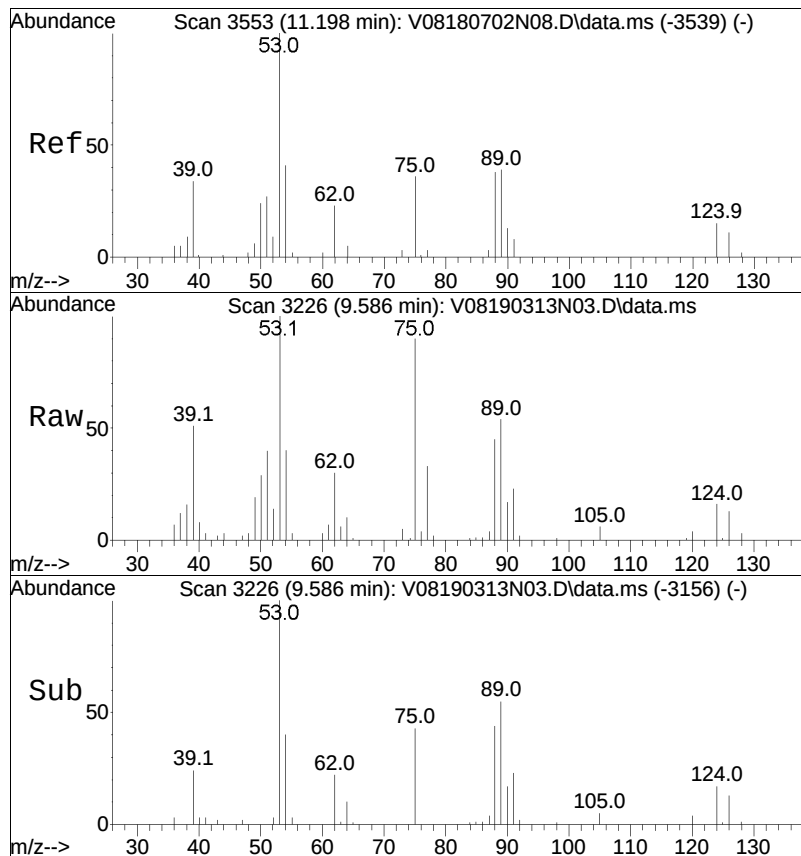




#91
 1,2,3-Trichloropropane
 Concen: 11.54 ug/L
 RT: 9.552 min Scan# 3214
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

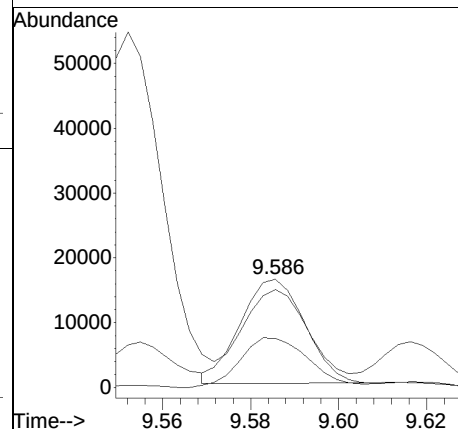
Tgt Ion:	75	Resp:	58102
Ion Ratio	Lower	Upper	
75	100		
110	40.2	25.4	52.8
112	25.3	15.6	32.4

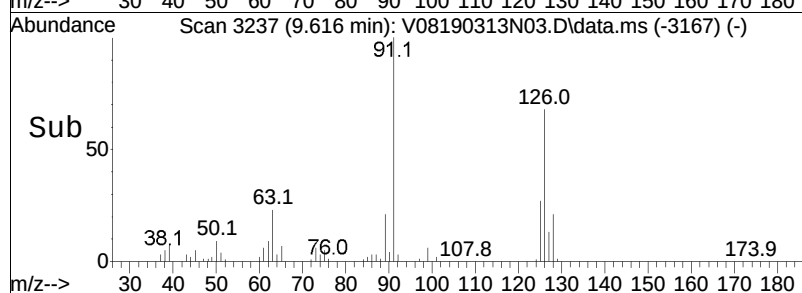
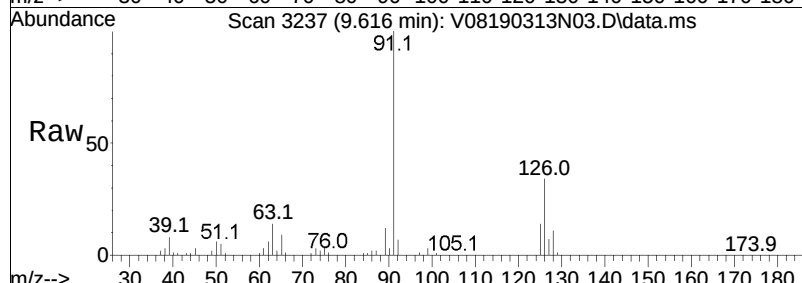
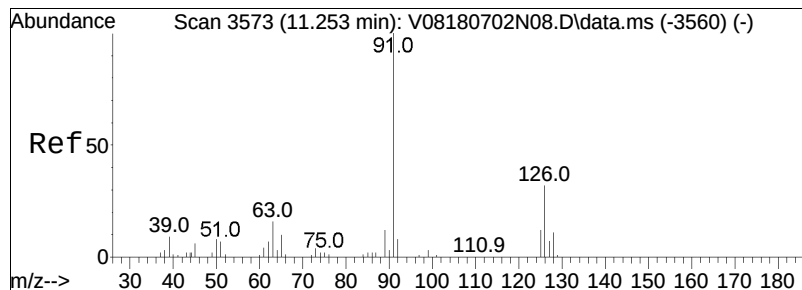




#92
trans-1,4-Dichloro-2-butene
Concen: 9.25 ug/L
RT: 9.586 min Scan# 3226
Delta R.T. -0.005 min
Lab File: V08190313N03.D
Acq: 13 Mar 2019 7:04 pm

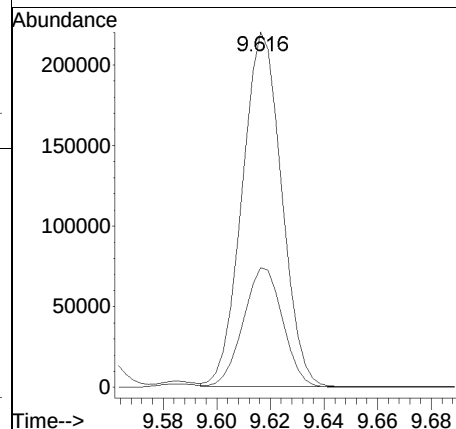
Tgt Ion:	53	Resp:	16420
Ion Ratio	Lower	Upper	
53	100		
88	50.5	39.6	59.4
75	97.4	70.2	105.4

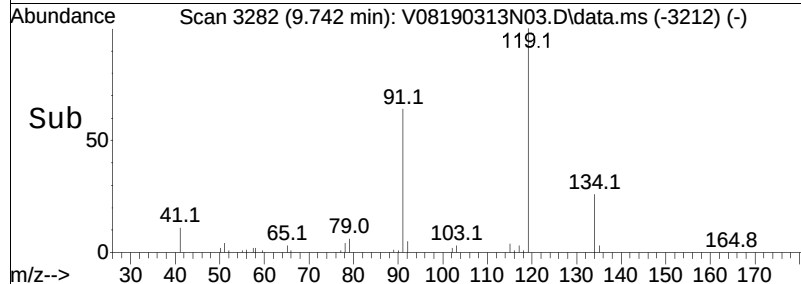
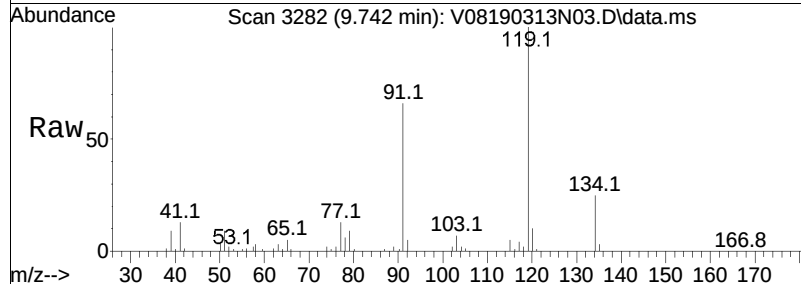
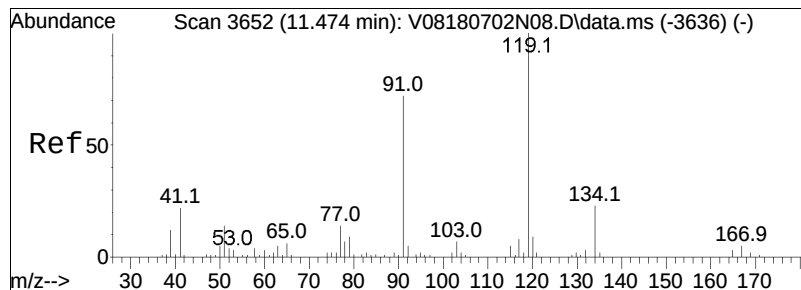




#93
 4-Chlorotoluene
 Concen: 11.13 ug/L
 RT: 9.616 min Scan# 3237
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

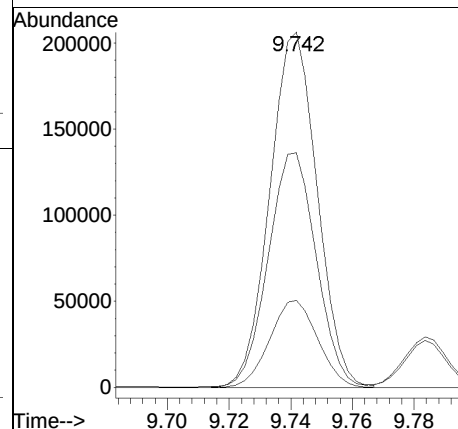
Tgt Ion:	91	Resp:	225084
Ion Ratio	Lower	Upper	
91	100		
126	33.9	24.6	36.8

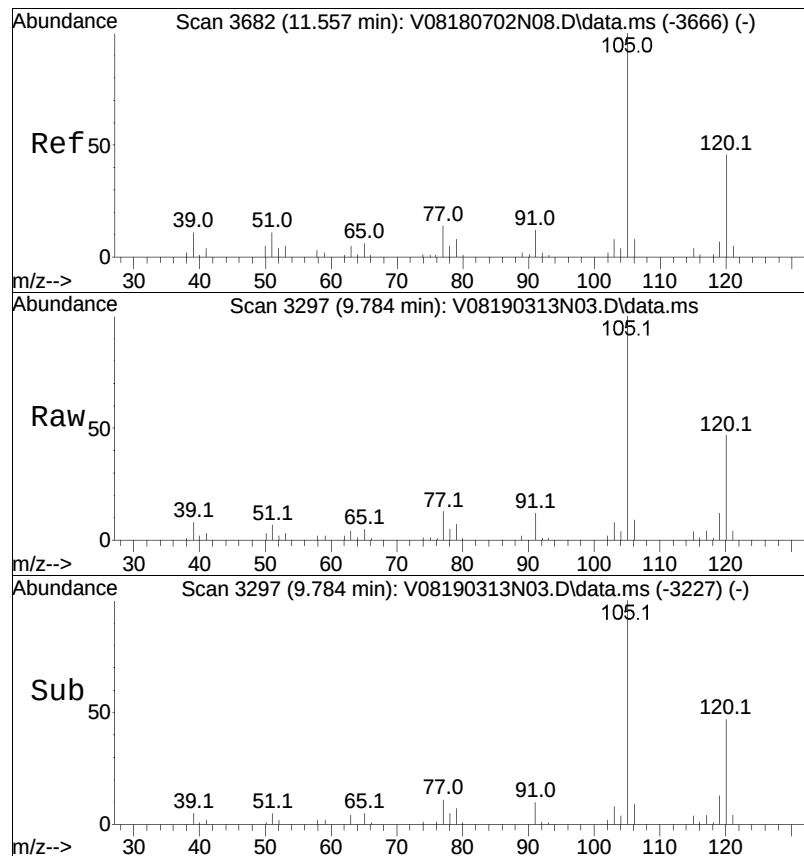




#94
 tert-Butylbenzene
 Concen: 9.36 ug/L
 RT: 9.742 min Scan# 3282
 Delta R.T. -0.005 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

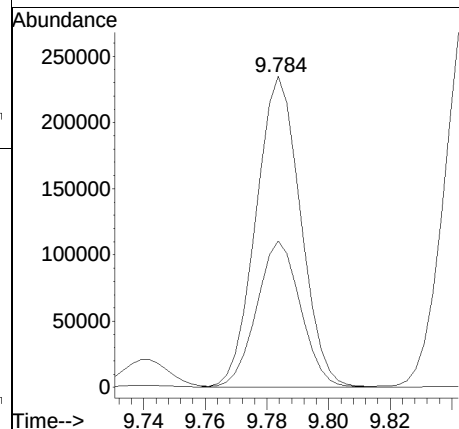
Tgt Ion:	119	Resp:	220372
Ion Ratio	Lower	Upper	
119	100		
91	66.8	51.4	77.2
134	24.8	18.3	27.5

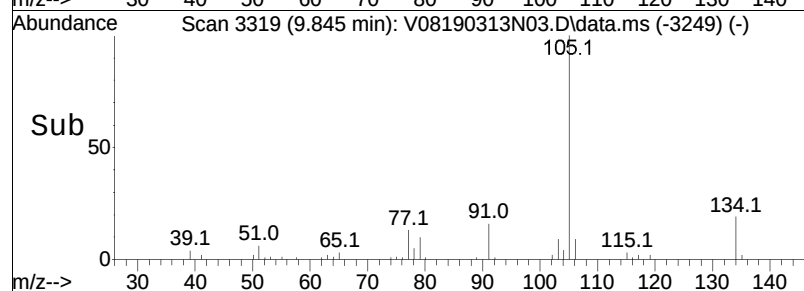
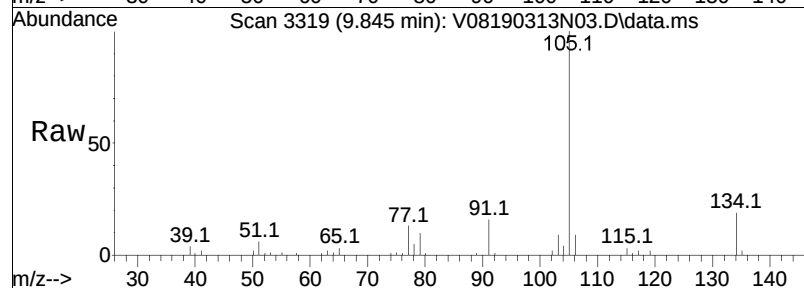
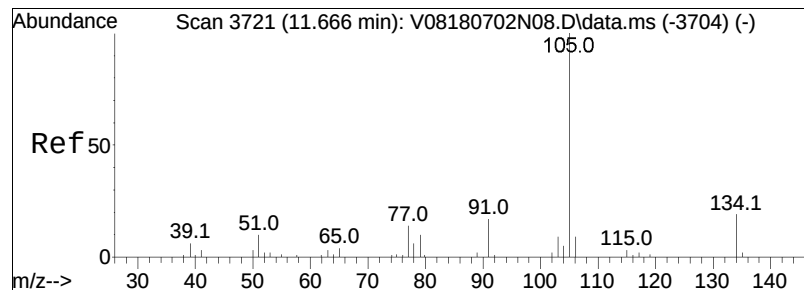




#97
 1,2,4-Trimethylbenzene
 Concen: 10.33 ug/L
 RT: 9.784 min Scan# 3297
 Delta R.T. -0.005 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

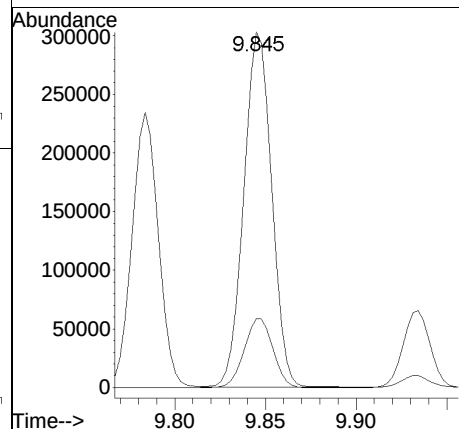
Tgt Ion	Ratio	Lower	Upper
105	100		
120	46.2	33.4	50.0

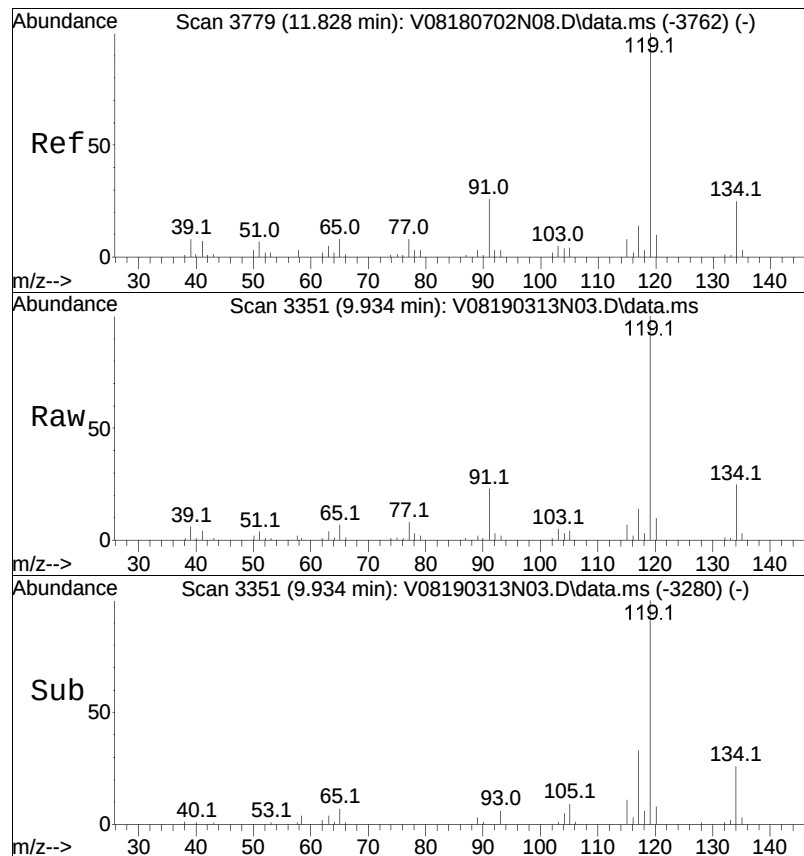




#98
 sec-Butylbenzene
 Concen: 11.23 ug/L
 RT: 9.845 min Scan# 3319
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

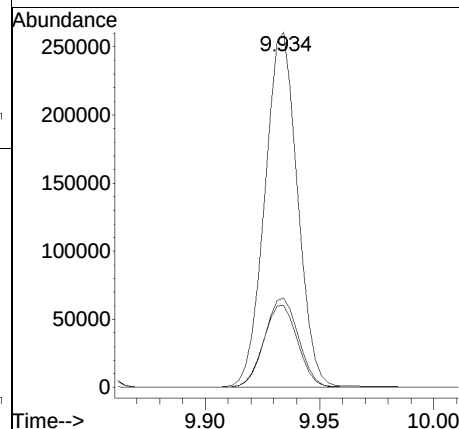
Tgt Ion	Ratio	Lower	Upper
105	100		
134	19.7	12.5	26.1

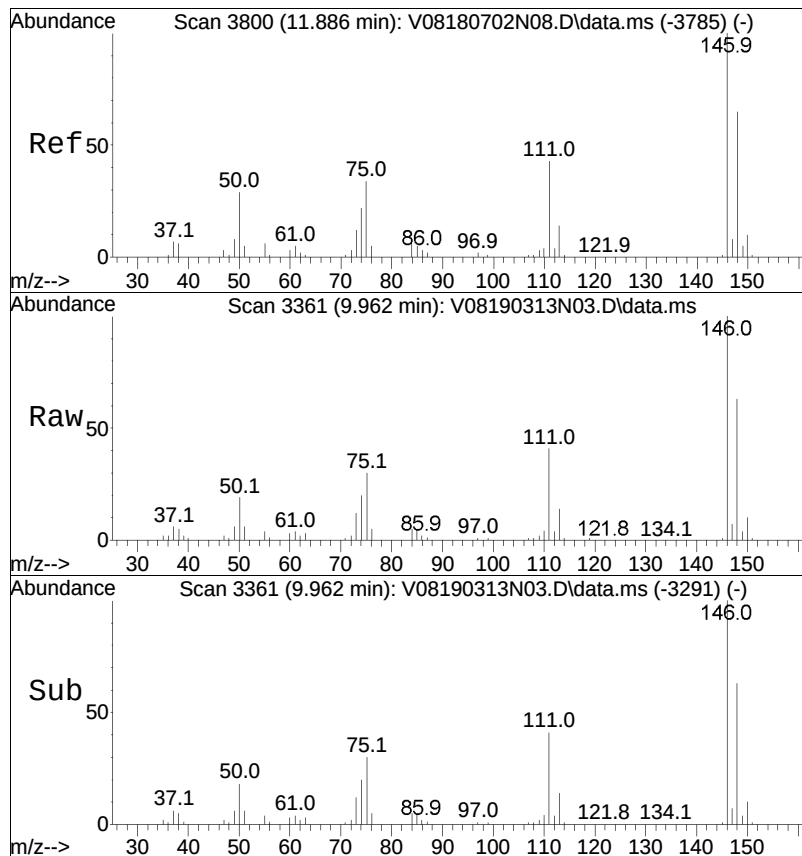




#99
 p-Isopropyltoluene
 Concen: 10.49 ug/L
 RT: 9.934 min Scan# 3351
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

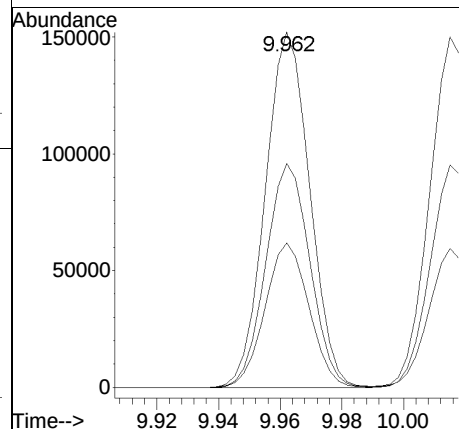
Tgt Ion:	119	Resp:	259852
Ion Ratio	Lower	Upper	
119	100		
134	26.0	16.1	33.3
91	24.4	17.3	35.9

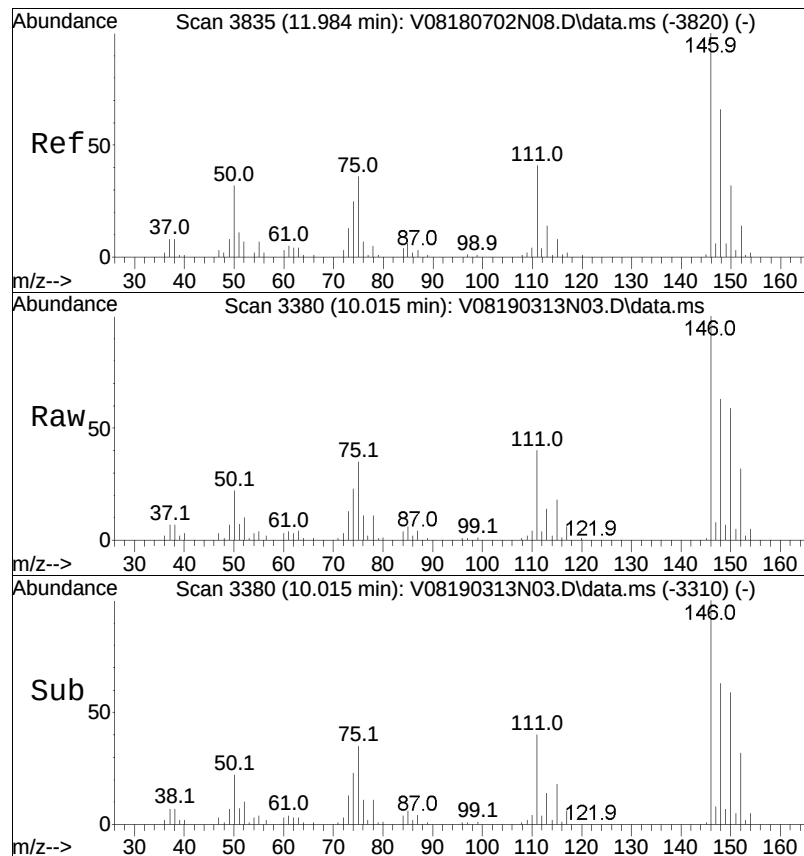




#100
 1,3-Dichlorobenzene
 Concen: 11.49 ug/L
 RT: 9.962 min Scan# 3361
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

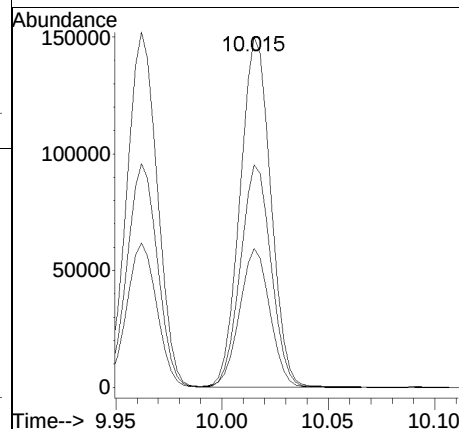
Tgt Ion:	146	Resp:	152170
Ion Ratio	Lower	Upper	
146	100		
111	40.2	27.5	57.1
148	62.7	41.9	86.9

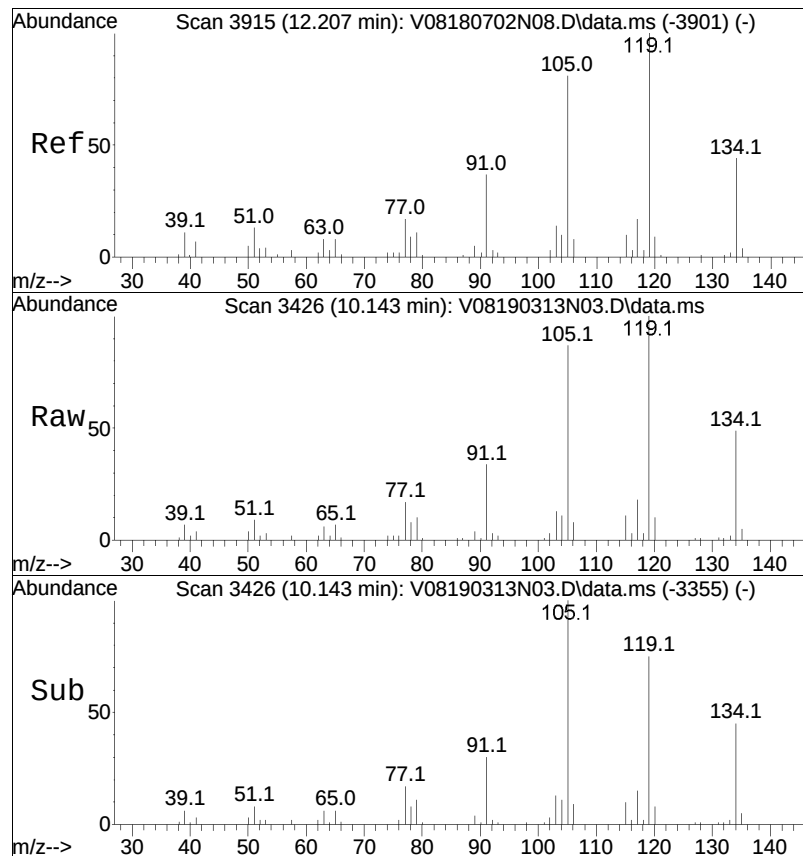




#101
 1,4-Dichlorobenzene
 Concen: 10.96 ug/L
 RT: 10.015 min Scan# 3380
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

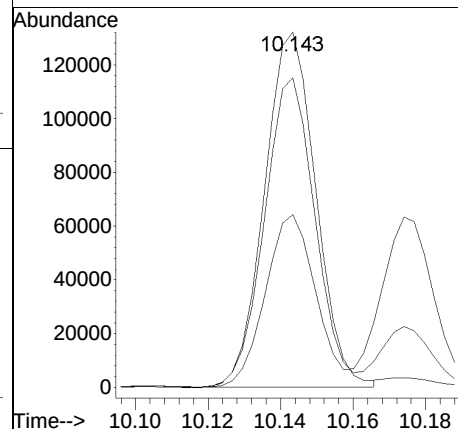
Tgt Ion:	146	Resp:	150382
Ion Ratio	Lower	Upper	
146	100		
111	39.4	32.3	48.5
148	63.4	49.9	74.9

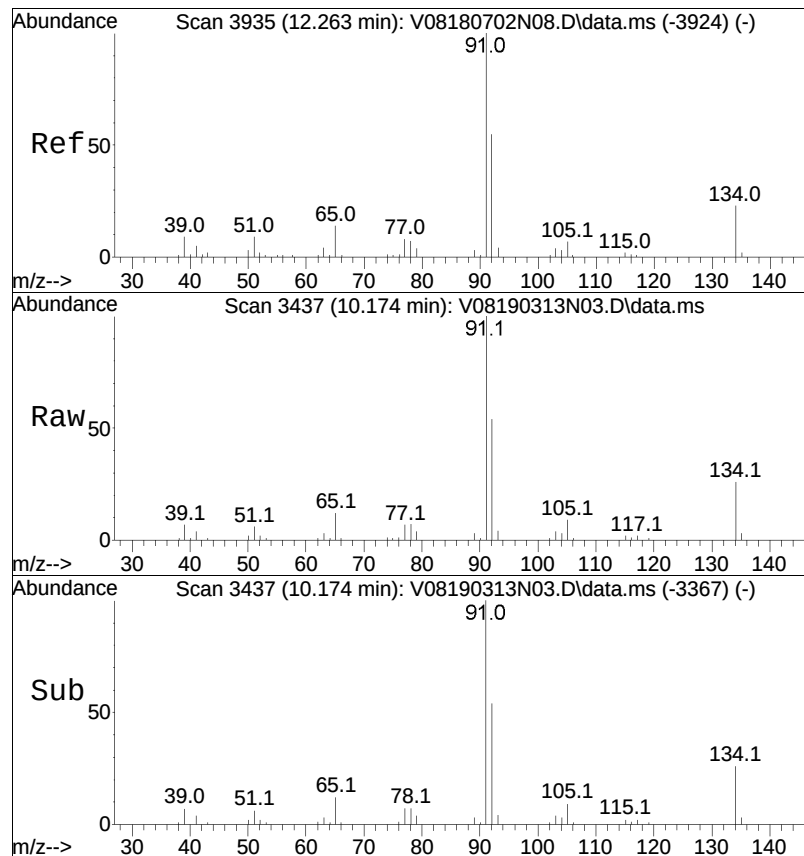




#102
 p-Diethylbenzene
 Concen: 8.94 ug/L
 RT: 10.143 min Scan# 3426
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

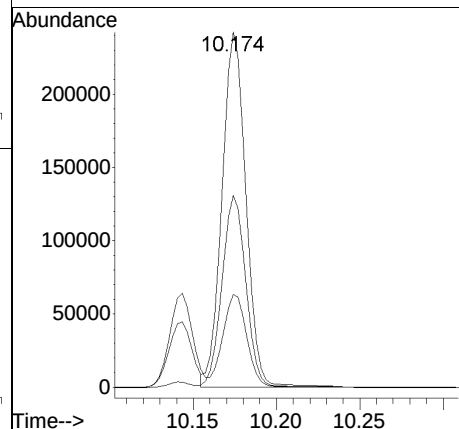
Tgt Ion:	119	Resp:	129590
Ion Ratio	Lower	Upper	
119	100		
105	86.2	59.5	123.7
134	47.6	30.2	62.6

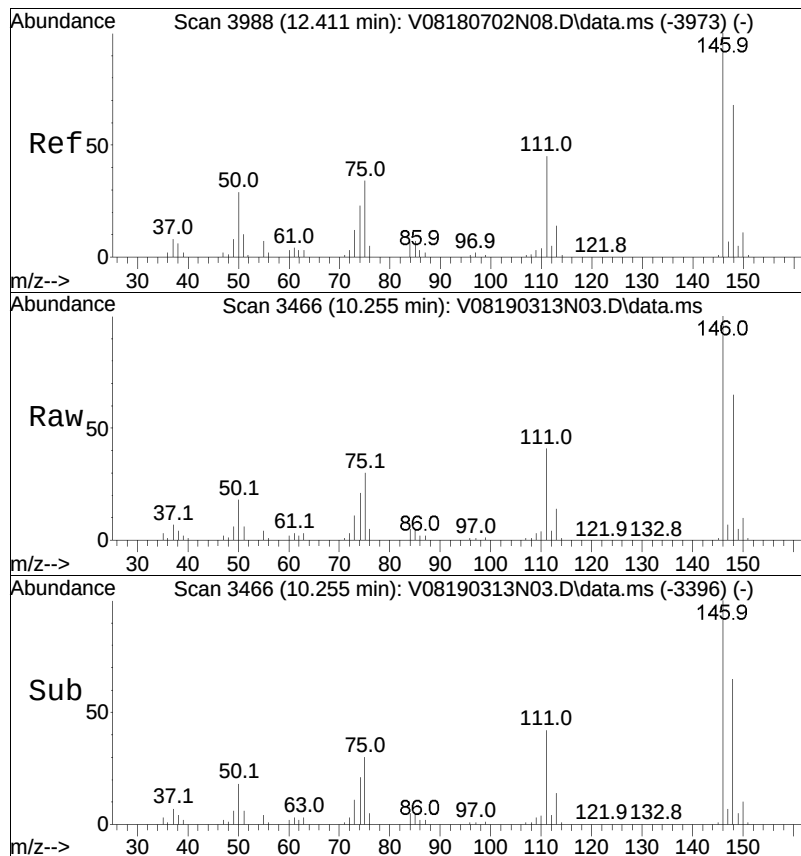




#103
 n-Butylbenzene
 Concen: 10.51 ug/L
 RT: 10.174 min Scan# 3437
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

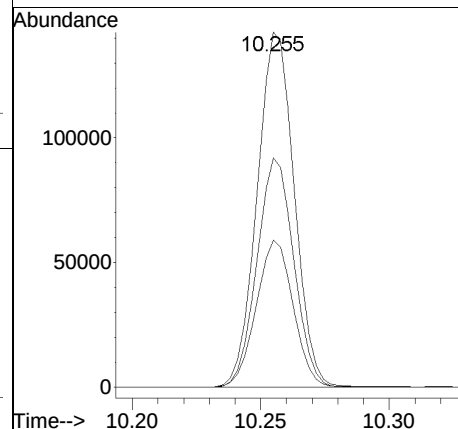
Tgt Ion:	91	Resp:	241304
Ion Ratio	Lower	Upper	
91	100		
92	53.9	43.0	64.4
134	26.3	19.6	29.4

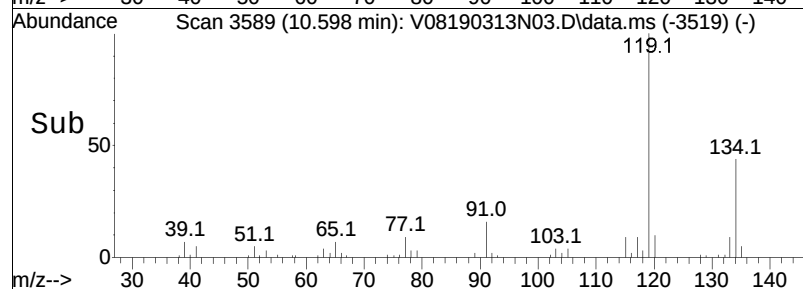
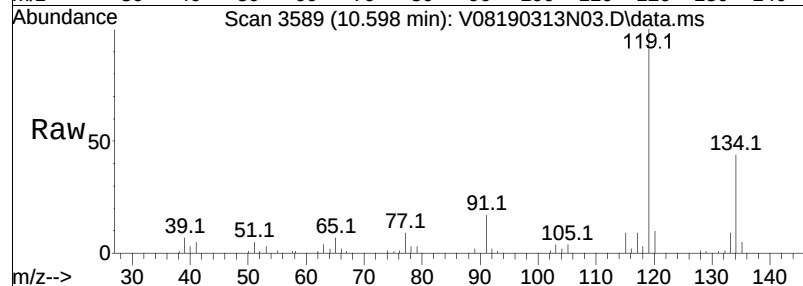
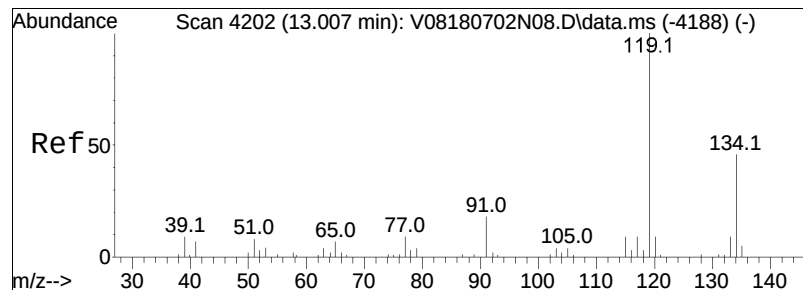




#104
 1,2-Dichlorobenzene
 Concen: 11.09 ug/L
 RT: 10.255 min Scan# 3466
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

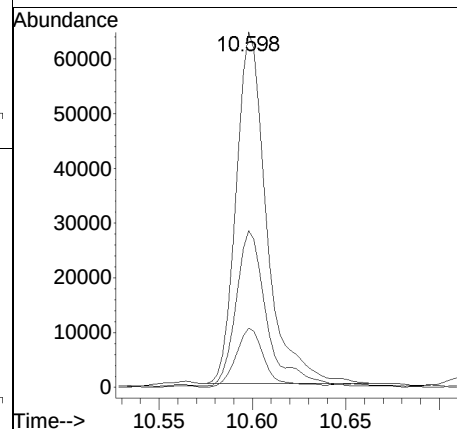
Tgt Ion:	146	Resp:	143281
Ion Ratio	Lower	Upper	
146	100		
111	41.4	28.3	58.7
148	64.0	42.3	87.8

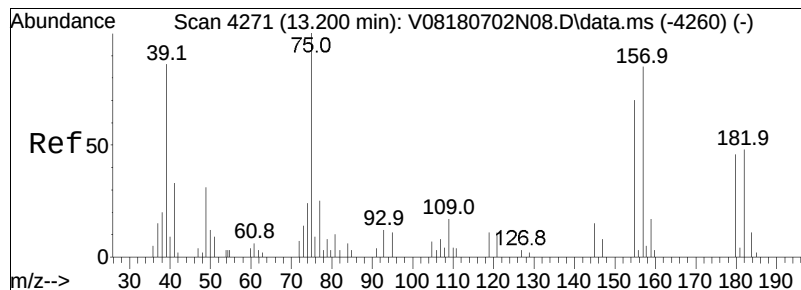




#105
 1,2,4,5-Tetramethylbenzene
 Concen: 3.53 ug/L
 RT: 10.598 min Scan# 3589
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

Tgt Ion	Ratio	Lower	Upper
119	100		
134	43.8	30.5	63.3
91	16.3	12.4	25.7





#106

1,2-Dibromo-3-chloropropane

Concen: 10.02 ug/L

RT: 10.709 min Scan# 3629

Delta R.T. -0.006 min

Lab File: V08190313N03.D

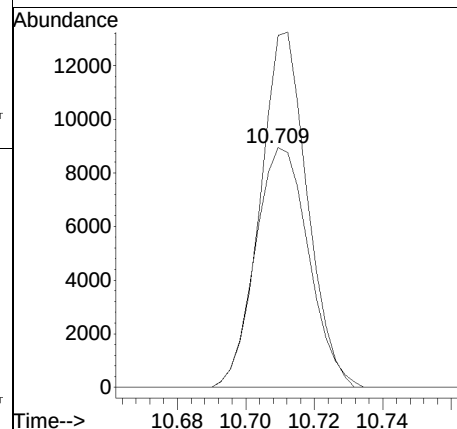
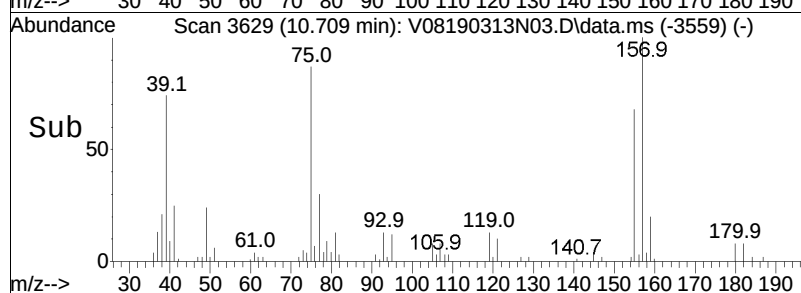
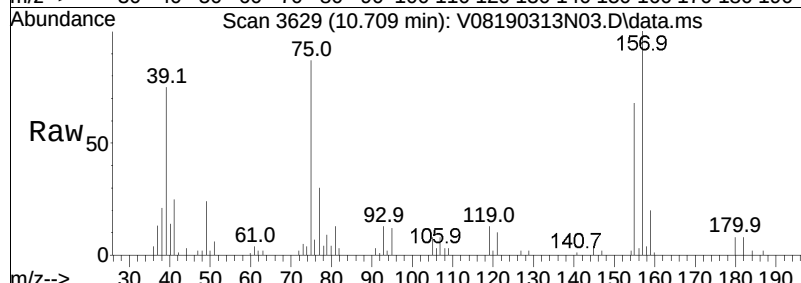
Acq: 13 Mar 2019 7:04 pm

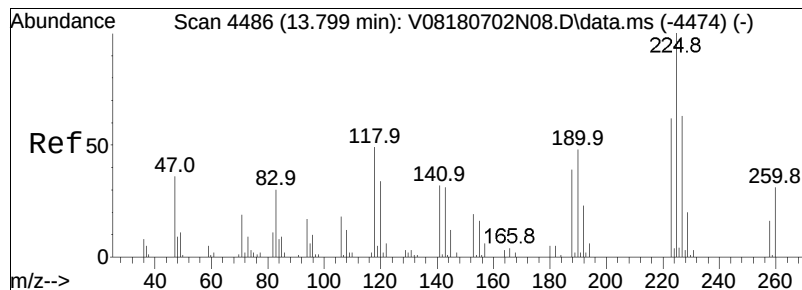
Tgt Ion:155 Resp: 9722

Ion Ratio Lower Upper

155 100

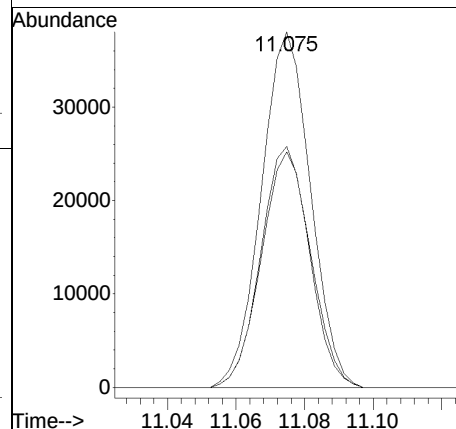
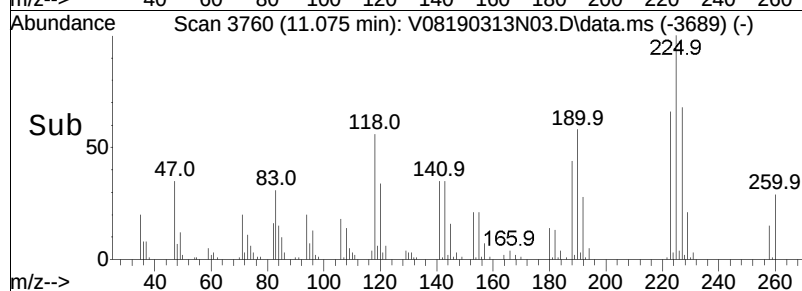
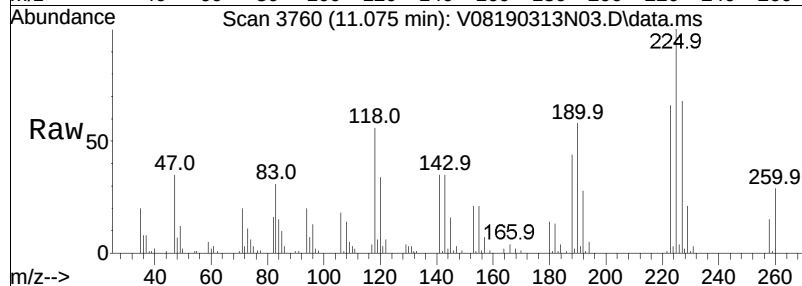
157 129.8 94.8 142.2

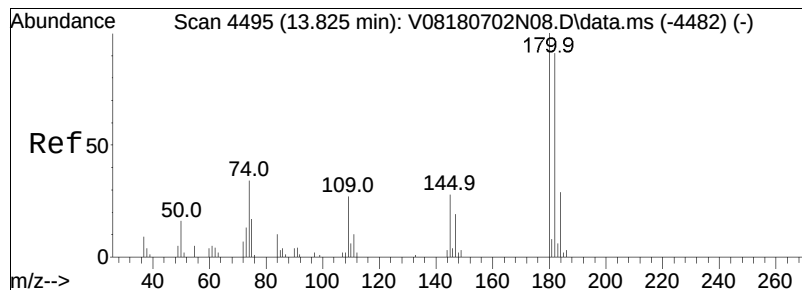




#108
 Hexachlorobutadiene
 Concen: 9.12 ug/L
 RT: 11.075 min Scan# 3760
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

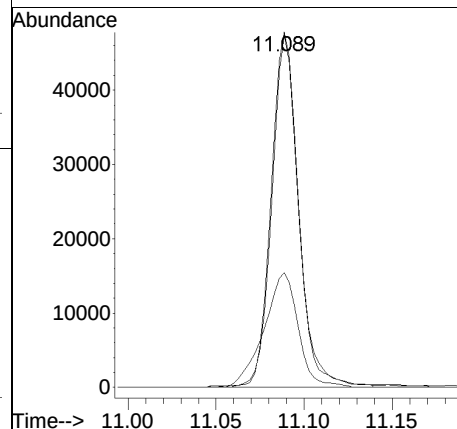
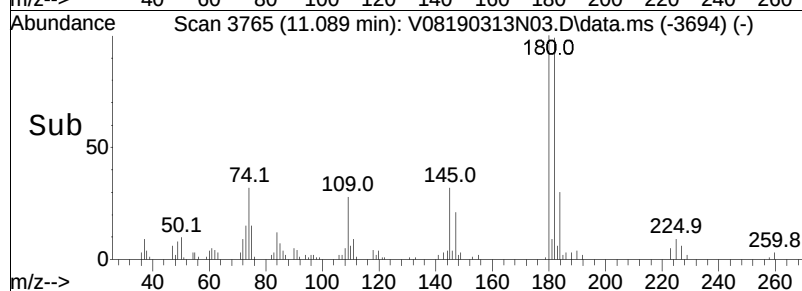
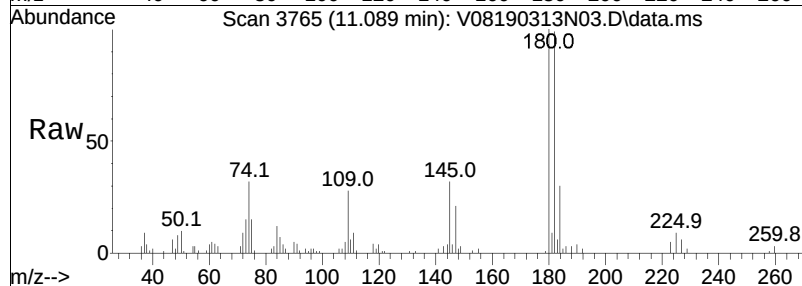
Tgt	Ion:225	Resp:	38013
Ion	Ratio	Lower	Upper
225	100		
223	65.4	54.3	81.5
227	68.3	52.4	78.6

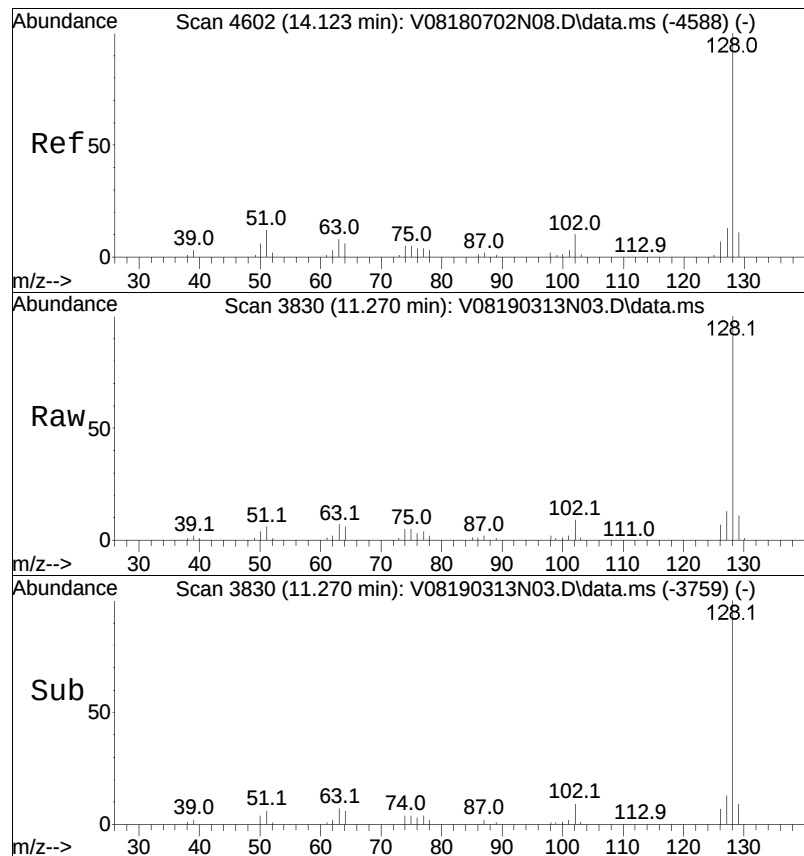




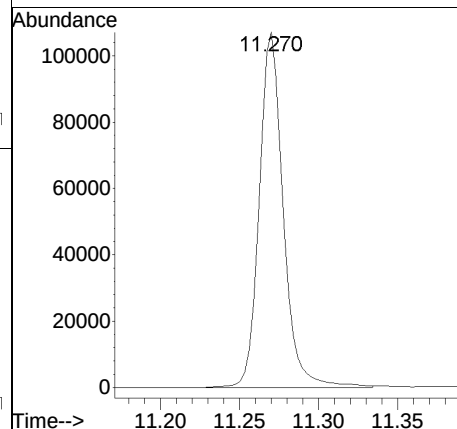
#109
 1,2,4-Trichlorobenzene
 Concen: 6.46 ug/L
 RT: 11.089 min Scan# 3765
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

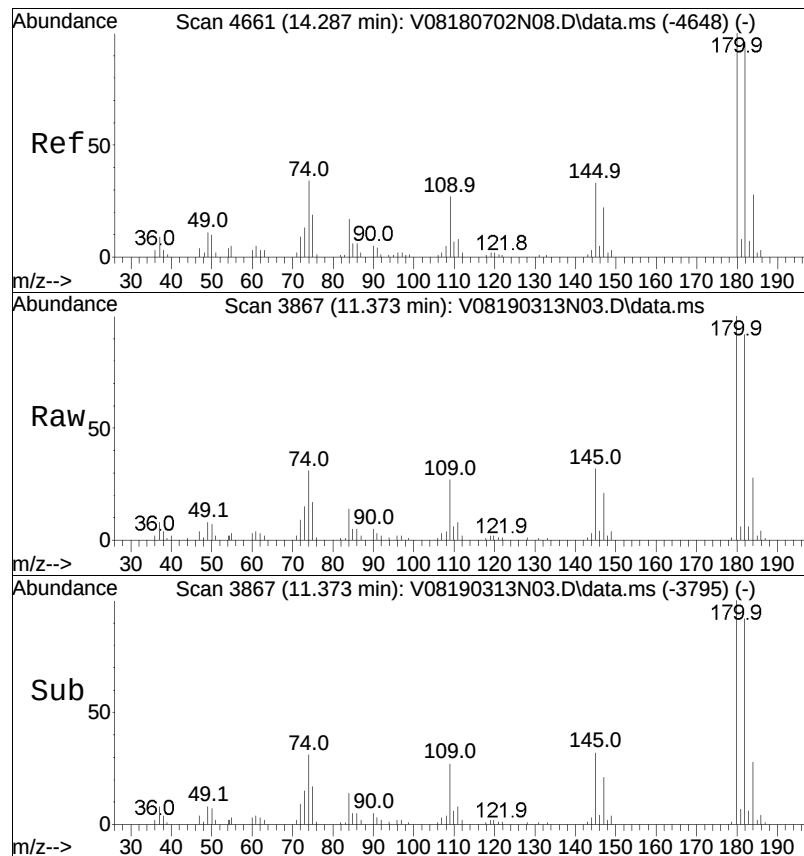
Tgt Ion	Ratio	Lower	Upper
180	100		
182	95.5	77.3	115.9
145	39.9	28.1	42.1





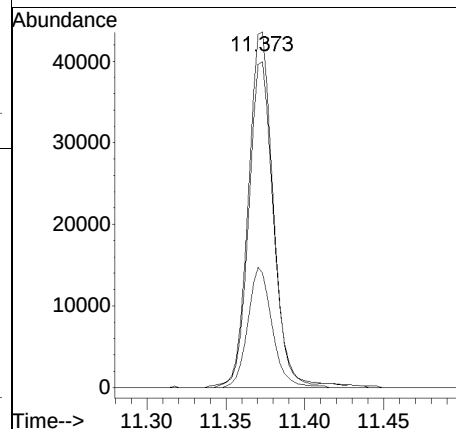
#110
 Naphthalene
 Concen: 6.34 ug/L
 RT: 11.270 min Scan# 3830
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm
 Tgt Ion:128 Resp: 113101





#111
 1,2,3-Trichlorobenzene
 Concen: 6.57 ug/L
 RT: 11.373 min Scan# 3867
 Delta R.T. 0.000 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

Tgt Ion:	180	Resp:	48110
Ion Ratio	Lower	Upper	
180	100		
182	90.0	76.4	114.6
145	32.6	26.4	39.6



Manual Integration Report

Data Path	: I:\VOLATILES\VOA108\2019\10	Method	: V108_190218N_8260.m
Data File	: V08190313N03.D	Operator	: VOA108:KJD
Date Inj'd	: 3/13/2019 7:04 pm	Instrument	: VOA 108
Sample	: WG1215584-4,31,10,10	Quant Date	: 3/13/2019 8:12 pm

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



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)

Mar 14 2019, 01:20 pm

Work Group: WG1215584 for Department: 31 GC/MS - Volatiles

Created: 14-MAR-19 Due: Operator: NLK

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1908936-02	MW11_030719	S NYTCL-8260	WATER	DONE	U	0321	0314	S0	Vial-B
L1909107-01	MW-6_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909107-02	MW-19_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909107-03	MW-1_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909107-04	MW-18M_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909107-05	MW-18S_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909107-06	MW-17_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909107-07	MW-02_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909107-08	GWDUP01_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909107-09	GWTB02_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909110-27	FB 030719	S NYTCL-8260	WATER	DONE	U	0321	0315	S0	Vial-B
L1909110-28	FB 030719	S NYTCL-8260	WATER	DONE	U	0321	0315	S0	Vial-B
L1909110-29	TB 030719A	S NYTCL-8260	WATER	DONE	U	0321	0315	S0	Vial-B
L1909110-30	TB 030719B	S NYTCL-8260	WATER	DONE	U	0321	0315	S0	Vial-B
L1909144-01	TRIP BLANK	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909363-05	DUP-030819	S NYTCL-8260	WATER	SENT	U	0322	0315	S0	Vial-B
L1909363-06	FB-030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909363-07	TRIP BLANK-030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
WG1215584-1	MS BFB Tune Standard	S NYTCL-8260	WATER	DONE	U				
WG1215584-2	Continuing Calibrati	S NYTCL-8260	WATER	DONE	U				
WG1215584-3	Laboratory Control S	S NYTCL-8260	WATER	DONE	U				
WG1215584-4	LCS Duplicate	S NYTCL-8260	WATER	DONE	U				
WG1215584-5	Laboratory Method Bl	S NYTCL-8260	WATER	DONE	U				

Comments:

WG1215584-4 WG1215584-3

Inst: VOA108
 Initials: KJD
 Date: 02/18/19
 Run: N

BFB: V7193
 IS/SS: V7204
 ICAL: V7160E, V7206, V7164
 ICV: V7134, V7142, V7158, V7133, V7170, V7122, V7207

Method
 GC: 8260_ATOMX
 Autosampler: 8260
 Concentrator: 8260



QC: _____ Seq: _____

Vial	DATA FILE	SAMPLE
1	V08190218NBF1	BFB TUNE
1	V08190218N01	BLANK
2	V08190218N02	BLANK
3	V08190218N03	BLANK
4	V08190218N04	I8260STDL11
5	V08190218N05	I8260STDL1
6	V08190218N06	I8260STDL1
7	V08190218N07	I8260STDL2
8	V08190218N08	I8260STDL2
9	V08190218N09	I8260STDL3
10	V08190218N10	I8260STDL4
11	V08190218N11	I8260STDL6
12	V08190218N12	I8260STDL8
13	V08190218N13	I8260STDL10
14	V08190218N14	BLANK
15	V08190218N15	BLANK
16	V08190218N16	BLANK
17	V08190218N17	BLANK
18	V08190218N18	BLANK
19	V08190218N19	C8260STDL3
20	V08190218N20	C8260STDL3
21	V08190218N21	BLANK
22	V08190218N22	BLK
23	V08190218N23	L1903060-59,31,10,10,, MDL-0.2PPB
24	V08190218N24	L1903060-60,31,10,10,, MDL-0.5PPB
25	V08190218N25	L1903060-61,31,10,10,, MDL-2PPB
26	V08190218N26	BLK

Inst: VOA108
 Initials: KJD
 Date: 03/13/19
 Run: N

BFB: V7193
 IS/SS: V7204
 ICAL: V7160E, V7234
 ICV: V7134, V7142, V7158, V7133, V7170, V7122, V7207

Method
 GC: 8260_ATOMX
 Autosampler: 8260
 Concentrator: 8260



QC: _____ Seq: _____

Vial	DATA FILE	SAMPLE	
1	V08190313NBF1	BFB TUNE	18:00
1	V08190313N01	8260 CCAL	
2	V08190313N02	8260 CCAL	LCS
3	V08190313N03	8260 CCAL	LCSD
4	V08190313N04	BLK	
5	V08190313N05	METHOD BLK	
6	V08190313N06	I1909110-27,31,10,10,,a	NYTCL pH<2
7	V08190313N07	I1909110-28,31,10,10,,a	NYTCL pH<2
8	V08190313N08	I1909110-29,31,10,10,,a	NYTCL pH<2
9	V08190313N09	I1909110-30,31,10,10,,a	NYTCL pH<2
10	V08190313N10	I1909144-01,31,10,10,,a	NYTCL pH<2
11	V08190313N11	I1909363-06,31,10,10,,a	NYTCL pH<2
12	V08190313N12	I1909363-07,31,10,10,,a	NYTCL pH<2
13	V08190313N13	I1909107-09,31,10,10,,a	NYTCL pH<2
14	V08190313N14	I1908936-02,31,10,10,,c	NYTCL pH<2
15	V08190313N15	I1909168-17D,31,2.0,10,,c	8260 pH<2
16	V08190313N16	I1909107-01,31,10,10,,a	NYTCL pH<2
17	V08190313N17	I1909107-02D,31,0.4,10,,a	NYTCL pH<2
18	V08190313N18	I1909107-03,31,10,10,,a	NYTCL pH<2
19	V08190313N19	I1909107-04,31,10,10,,a	NYTCL pH<2
20	V08190313N20	I1909107-05,31,10,10,,a	NYTCL pH<2
21	V08190313N21	I1909107-06D,31,5.0,10,,a	NYTCL pH<2
22	V08190313N22	I1909107-07,31,10,10,,a	NYTCL pH<2
23	V08190313N23	I1909107-08,31,10,10,,a	NYTCL pH<2
24	V08190313N24	I1909363-01D,31,2.5,10,,a	NYTCL pH<2
25	V08190313N25	I1909363-05,31,10,10,,a	NYTCL pH<2



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Alpha Analytical

Laboratory Code: 11148

SDG Number: L1908936

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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	15
Organics Analysis	16
GCMS 8260 Analysis	17
Volatiles QC Summary	18
Form 2 - Organics	19
Form 3 - Organics	20
Form 4 - Organics	29
Form 5 - Organics	32
Form 8 - Organics	37
MDL Study - Volatile Organics 8260	40
8260	40
8260 (2)	43
8260 (3)	46
Volatiles Sample Data	49
Form 1 - Organics	50
MW-10_030719 (L1908936-01) Analyzed: 03/12/19 13:37	94
GWFB01_030719 (L1908936-07) Analyzed: 03/12/19 19:56	104
GWTB01_030719 (L1908936-08) Analyzed: 03/12/19 20:18	111
MW-7_030719 (L1908936-03) Analyzed: 03/12/19 21:46	118
MW-9_030719 (L1908936-04) Analyzed: 03/12/19 22:08	124
PZ-2_030719 (L1908936-05) Analyzed: 03/12/19 22:30	133
MW-3A_030719 (L1908936-06) Analyzed: 03/12/19 22:52	142
MW11_030719 (L1908936-02) Analyzed: 03/13/19 23:05	150
Volatile Standards Data	165
Initial Calibration	166
Form 6 - Organics	167
ICAL for VOA108 on 02/19/19 ICAL15519	173
Initial Calibration Summary - Cal Date: 02/19/19 00:00	173
BFB Injected on: 02/18/19 18:56	177
STD11 Injected on: 02/18/19 20:23	178
STD1 Injected on: 02/18/19 21:07	181
STD2 Injected on: 02/18/19 21:50	207
STD3 Injected on: 02/18/19 22:12	223
STD4 Injected on: 02/18/19 22:34	232
STD6 Injected on: 02/18/19 22:56	237
STD8 Injected on: 02/18/19 23:18	242
STD10 Injected on: 02/18/19 23:40	247
ICV Summary Form Injected on: 02/19/19 02:13	252

Table of Contents

ICV Quant Report Injected on: 02/19/19 02:13	255
ICAL for GONZO on 02/28/19 ICAL15541	260
Initial Calibration Summary - Cal Date: 02/28/19 00:00	260
BFB Injected on: 02/27/19 19:28	264
STD11 Injected on: 02/27/19 20:36	265
STD1 Injected on: 02/27/19 21:27	268
STD2 Injected on: 02/27/19 22:18	275
STD3 Injected on: 02/27/19 22:44	283
STD4 Injected on: 02/27/19 23:09	289
STD6 Injected on: 02/27/19 23:34	296
STD8 Injected on: 02/27/19 23:59	303
STD10 Injected on: 02/28/19 00:24	310
ICV Summary Form Injected on: 02/28/19 03:23	317
ICV Quant Report Injected on: 02/28/19 03:23	320
Continuing Calibration	327
Form 7 - Organics	328
CC Summary - GONZO Run: 03/12/19 08:32	337
CC Quant - GONZO Run: 03/12/19 08:32	340
CC Summary - VOA108 Run: 03/12/19 18:29	348
CC Quant - VOA108 Run: 03/12/19 18:29	351
CC Summary - VOA108 Run: 03/13/19 18:42	356
CC Quant - VOA108 Run: 03/13/19 18:42	359
bfb tune - Inst. GONZO 03/12/19 07:52	364
bfb tune - Inst. VOA108 03/12/19 17:46	365
bfb tune - Inst. VOA108 03/13/19 18:00	366
Volatiles Raw QC Data	367
Laboratory Method BI (WG1214926-5) Analyzed: 03/12/19 09:48	368
Laboratory Method BI (WG1215235-5) Analyzed: 03/12/19 19:35	374
Laboratory Method BI (WG1215584-5) Analyzed: 03/13/19 19:48	380
Laboratory Control S (WG1214926-3) Analyzed: 03/12/19 08:32	385
Laboratory Control S (WG1215235-3) Analyzed: 03/12/19 18:29	465
Laboratory Control S (WG1215584-3) Analyzed: 03/13/19 18:42	542
LCS Duplicate (WG1214926-4) Analyzed: 03/12/19 08:57	619
LCS Duplicate (WG1215235-4) Analyzed: 03/12/19 18:51	699
LCS Duplicate (WG1215584-4) Analyzed: 03/13/19 19:04	776
Volatiles Calculations	854
QC Batch WG1214926	855
QC Batch WG1215235	856
QC Batch WG1215584	857
ICAL Sequence for VOA108 on 19-FEB-2019 00:00 ICAL15519	858
ICAL Sequence for GONZO on 28-FEB-2019 00:00 ICAL15541	859
Sequence Log	860

Project Name: 491 WORTMAN AVE.
Project Number: 170329301

Lab Number: L1908936
Report Date: 03/14/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1908936-01	MW-10_030719	WATER	BROOKLYN, NY	03/07/19 12:43	03/07/19
L1908936-02	MW11_030719	WATER	BROOKLYN, NY	03/07/19 09:43	03/07/19
L1908936-03	MW-7_030719	WATER	BROOKLYN, NY	03/07/19 13:59	03/07/19
L1908936-04	MW-9_030719	WATER	BROOKLYN, NY	03/07/19 12:00	03/07/19
L1908936-05	PZ-2_030719	WATER	BROOKLYN, NY	03/07/19 13:20	03/07/19
L1908936-06	MW-3A_030719	WATER	BROOKLYN, NY	03/07/19 14:30	03/07/19
L1908936-07	GWFB01_030719	WATER	BROOKLYN, NY	03/07/19 15:10	03/07/19
L1908936-08	GWTB01_030719	WATER	BROOKLYN, NY	03/07/19 00:00	03/07/19

Project Name: 491 WORTMAN AVE.
Project Number: 170329301

Lab Number: L1908936
Report Date: 03/14/19

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: 491 WORTMAN AVE.
Project Number: 170329301

Lab Number: L1908936
Report Date: 03/14/19

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: 03/14/19

Title: Technical Director/Representative

GLOSSARY

Acronyms

DL	- 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
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.
LCS D	- 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.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
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

Report Format: DU Report with 'J' Qualifiers



Project Name: 491 WORTMAN AVE.
Project Number: 170329301

Lab Number: L1908936
Report Date: 03/14/19

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.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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 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 7890 GC/5975C MSD
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: EST Encon (or equivalent)
 Autosampler: EST Centurion (or equivalent)
 Purge time: 11 min

Columns (length x ID x df):
 RTX-VMS 20m x 0.18mm x 1um
 RTX-VMS 30m x 0.25mm x 1.4um
 RTX-502.2 40m x 0.18mm x 1um

Volatile Organics: VPH

Instrument: Agilent 6890 (or equivalent)
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: EST Encon (or equivalent)
 Autosampler: EST Centurion (or equivalent)

Column Type: Restek RTX 502.2
 Column Length: 105 Meters
 df: 3.00 um
 ID: 0.53mm

Volatile Organics: PIANO

Instrument: Agilent 7890 GC/5975C MSD
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: Tekmar Velocity / EST Encon
 Autosampler: Varian Archon / EST Centurion
 Purge time: 11 min

Column Type: DB-VRX
 Column Length: 60 Meters
 df: 1.40 um
 ID: 0.25 mm
 Desorb: 1 min

Volatile Organics: Dissolved Gas

Instrument: Agilent 7890 (or equivalent) with FID/TCD

Column Type: Haysep S Column
 Column Length: 2 Meters packed
 (100/200 mesh)

Autosampler: LEAP Headspace

Purge time: 0.6 min

Volatile Organics in Air Instruments

Volatile Organics in Air:

Instruments: Agilent 6890 GC / 5975 MSD Shimadzu QP2010-SE / QP2020

Concentrator: Entech 7100A or 7200
 Autosampler: Entech 7016CA or 7016D

Column Type: Restek RTX-1
 Column Length: 60 Meters
 df: 1.00 um
 ID: 0.25 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 μ L; 2 μ L LVI
Column Type: Restek RXI-5SILMS	df: 0.32 μ m
Column Length: 30 Meters	ID: 0.25 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM:

Instrument: Agilent 5973 MSD	Injection volume: 1 μ L; 2 μ L LVI
Column Type: Restek RXI-5SILMS	df: 0.25 μ m
Column Length: 30 Meters	ID: 0.25 mm

Pesticides/PCB/Herbicides:

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

Petroleum/EPH:

Instrument: Agilent 6890 w/FID / HP 5890 w/ FID	Injection Volume: 1 μ L
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	df: 0.25um, 0.18 um
Column Length: 30 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 (8081):

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 (8082):

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

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 : L1908936

Received : 07-MAR-2019

Reviewer : Richard Scott

Account Name : Langan Engineering & Environmental

Project Number : 170329301

Project Name : 491 WORTMAN AVE.

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

- | | |
|--|-----|
| 1) All samples on COC received? | YES |
| 2) Extra samples received? | NO |
| 3) Are there any sample container discrepancies? | NO |
| 4) Are there any discrepancies between sample labels & COC? | NO |
| 5) Are samples in appropriate containers for requested analysis? | YES |
| 6) Are samples properly preserved for requested analysis? | YES |
| 7) Are samples within holding time for requested analysis? | YES |
| 8) All sampling equipment returned? | NA |

Volatile Organics/VPH

- | | |
|--|----|
| 1) Reagent Water Vials Frozen by Client? | NO |
|--|----|

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Mar 14 2019, 02:09 pm

Login Number: L1908936

Account: LANGAN-NYC Langan Engineering & Environmental Project: 170329301

Received: 07MAR19 Due Date: 14MAR19

Sample #	Client ID	Mat PR Collected
L1908936-01 MW-10_030719		1 S0 07MAR19 12:43
ASP-B Package Due Date: 03/14/19		
ASP-B, NYTCL-8260		
L1908936-02 MW11_030719		1 S0 07MAR19 09:43
Package Due Date: 03/14/19		
NYTCL-8260		
L1908936-03 MW-7_030719		1 S0 07MAR19 13:59
Package Due Date: 03/14/19		
NYTCL-8260		
L1908936-04 MW-9_030719		1 S0 07MAR19 12:00
Package Due Date: 03/14/19		
NYTCL-8260		
L1908936-05 PZ-2_030719		1 S0 07MAR19 13:20
Package Due Date: 03/14/19		
NYTCL-8260		
L1908936-06 MW-3A_030719		1 S0 07MAR19 14:30
Package Due Date: 03/14/19		
NYTCL-8260		
L1908936-07 GWFB01_030719		1 S0 07MAR19 15:10
Package Due Date: 03/14/19		

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Mar 14 2019, 02:09 pm

Login Number: L1908936

Account: LANGAN-NYC Langan Engineering & Environmental Project: 170329301

Received: 07MAR19 Due Date: 14MAR19

Mat PR Collected

Sample #	Client ID		
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NYTCL-8260

L1908936-08 GWTB01_030719

1 S0 07MAR19 00:00

| Package Due Date: 03/14/19

NYTCL-8260

Page 2

Logged By: Richard Scott

 ALPHA ANALYTICAL	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 <u>1</u> of <u>1</u>	Date Rec'd In Lab <u>3/8/19</u>	ALPHA Job # <u>L1908936</u>
		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		Deliverables		Billing Information	
Project Name: <u>H91 Worthman Ave</u> Project Location: <u>Brooklyn, NY</u> Project # <u>170329301</u> (Use Project name as Project #) ☐		☐ ASP-A ☒ ASP-B ☐ EQUIS (1 File) ☐ EQUIS (4 File) ☐ Other		☒ Same as Client Info PO #	
Client Information		Regulatory Requirement		Disposal Site Information	
Client: <u>LAMMAN Engineering</u> Address: <u>3100 W 31st St</u> <u>New York, NY 10001</u> Phone: <u>212 479 5400</u> Fax: <u>JRobinson@lamman.com</u> Email: <u>datamanagement@lamman.com</u>		☐ NY TOGS ☐ NY Part 375 ☐ AWQ Standards ☐ NY CP-51 ☐ NY Restricted Use ☐ Other ☐ NY Unrestricted Use ☐ NYC Sewer Discharge		Please identify below location of applicable disposal facilities. Disposal Facility: ☐ NJ ☐ NY ☐ Other:	
Project Manager: <u>James Robinson</u> ALPHAQuote #: Turn-Around Time Standard ☒ Due Date: Rush (only if pre approved) ☐ # of Days:					
These samples have been previously analyzed by Alpha ☐		ANALYSIS		Sample Filtration	
Other project specific requirements/comments: Please specify Metals or TAL.		TCL VOCs		☐ Done ☐ Lab to do Preservation ☐ Lab to do (Please Specify below)	
				Sample Specific Comments	
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date Time	Sample Matrix	Sampler's Initials	
<u>08936.01</u>	<u>MW-10-030719</u>	<u>3/7/19</u> <u>1243</u>	<u>GW</u>	<u>KG</u>	<u>X</u>
<u>02</u>	<u>MW11-030719</u>	<u>943</u>		<u>KG</u>	<u>X</u>
<u>03</u>	<u>MW-7-030719</u>	<u>1359</u>		<u>KG</u>	<u>X</u>
<u>04</u>	<u>MW-9-030719</u>	<u>1200</u>		<u>KR</u>	<u>X</u>
<u>05</u>	<u>PZ-2-030719</u>	<u>1320</u>		<u>KR</u>	<u>X</u>
<u>06</u>	<u>MW-3A-030719</u>	<u>1430</u>	<u>↓</u>	<u>KR</u>	<u>X</u>
<u>07</u>	<u>GWFB01-030719</u>	<u>1510</u>	<u>aq</u>	<u>KG</u>	<u>X</u>
<u>08</u>	<u>GWFB01-030719</u>	<u>↓</u>	<u>↓</u>	<u>-</u>	<u>X</u>
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>KG</u> <u>Paul Mayella</u>		Date/Time: <u>3/7/19 1605</u> <u>3/8/19 00:27</u>		Received By: <u>David Kim</u> <u>Paul Mayella</u> <u>Paul Mayella</u>	
		Date/Time: <u>3/8/19 1605</u> <u>3/8/19 00:27</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.)					

Organics

GC/MS 8260

Analysis

Volatiles QC Summary

Surrogate Recovery Summary

Form 2

Volatiles

Client: Langan Engineering & Environmental
Project Name: 491 WORTMAN AVE.

Lab Number: L1908936
Project Number: 170329301
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	SMC1 DCA	SMC2 TOL	SMC3 BFB	SMC4 DBFM	TOT OUT
MW-10_030719 (L1908936-01)	109	109	112	93	0
MW11_030719 (L1908936-02)	117	94	110	111	0
MW-7_030719 (L1908936-03)	113	94	103	109	0
MW-9_030719 (L1908936-04)	114	97	102	108	0
PZ-2_030719 (L1908936-05)	116	94	103	108	0
MW-3A_030719 (L1908936-06)	113	96	102	107	0
GWFB01_030719 (L1908936-07)	111	97	108	107	0
GWTB01_030719 (L1908936-08)	113	99	107	107	0
WG1214926-3LCS	106	105	108	94	0
WG1214926-4LCSD	105	107	107	93	0
WG1214926-5BLANK	106	109	114	90	0
WG1215235-3LCS	103	101	92	103	0
WG1215235-4LCSD	106	101	90	104	0
WG1215235-5BLANK	114	94	102	107	0
WG1215584-3LCS	108	100	92	105	0
WG1215584-4LCSD	107	101	94	105	0
WG1215584-5BLANK	113	95	109	108	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 Summary

Form 3

Volatiles

Client : Langan Engineering & Environmental Lab Number : L1908936
 Project Name : 491 WORTMAN AVE. Project Number : 170329301
 Matrix : WATER
 LCS Sample ID : WG1214926-3 Analysis Date : 03/12/19 08:32 File ID : VG190312A02
 LCSD Sample ID : WG1214926-4 Analysis Date : 03/12/19 08:57 File ID : VG190312A03

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	9.5	95	3	70-130	20
1,1-Dichloroethane	10	11	110	10	11	110	0	70-130	20
Chloroform	10	10	100	10	9.8	98	2	70-130	20
Carbon tetrachloride	10	9.2	92	10	8.8	88	4	63-132	20
1,2-Dichloropropane	10	11	110	10	10	100	10	70-130	20
Dibromochloromethane	10	10	100	10	10	100	0	63-130	20
1,1,2-Trichloroethane	10	11	110	10	11	110	0	70-130	20
Tetrachloroethene	10	9.1	91	10	9.0	90	1	70-130	20
Chlorobenzene	10	10	100	10	10	100	0	75-130	20
Trichlorofluoromethane	10	9.0	90	10	8.8	88	2	62-150	20
1,2-Dichloroethane	10	10	100	10	10	100	0	70-130	20
1,1,1-Trichloroethane	10	9.4	94	10	9.4	94	0	67-130	20
Bromodichloromethane	10	10	100	10	10	100	0	67-130	20
trans-1,3-Dichloropropene	10	11	110	10	11	110	0	70-130	20
cis-1,3-Dichloropropene	10	10	100	10	10	100	0	70-130	20
1,1-Dichloropropene	10	10	100	10	9.8	98	2	70-130	20
Bromoform	10	10	100	10	10	100	0	54-136	20
1,1,2,2-Tetrachloroethane	10	12	120	10	12	120	0	67-130	20
Benzene	10	10	100	10	9.9	99	1	70-130	20
Toluene	10	10	100	10	10	100	0	70-130	20
Ethylbenzene	10	10	100	10	10	100	0	70-130	20
Chloromethane	10	9.2	92	10	9.2	92	0	64-130	20
Bromomethane	10	4.8	48	10	4.8	48	0	39-139	20
Vinyl chloride	10	10	100	10	9.8	98	2	55-140	20
Chloroethane	10	9.5	95	10	9.5	95	0	55-138	20
1,1-Dichloroethene	10	9.1	91	10	8.8	88	3	61-145	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Langan Engineering & Environmental Lab Number : L1908936
 Project Name : 491 WORTMAN AVE. Project Number : 170329301
 Matrix : WATER
 LCS Sample ID : WG1214926-3 Analysis Date : 03/12/19 08:32 File ID : VG190312A02
 LCSD Sample ID : WG1214926-4 Analysis Date : 03/12/19 08:57 File ID : VG190312A03

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			
trans-1,2-Dichloroethene	10	9.4	94	10	9.2	92	2	70-130	20
Trichloroethene	10	9.2	92	10	9.1	91	1	70-130	20
1,2-Dichlorobenzene	10	11	110	10	11	110	0	70-130	20
1,3-Dichlorobenzene	10	11	110	10	11	110	0	70-130	20
1,4-Dichlorobenzene	10	11	110	10	10	100	10	70-130	20
Methyl tert butyl ether	10	10	100	10	10	100	0	63-130	20
p/m-Xylene	20	20	100	20	20	100	0	70-130	20
o-Xylene	20	20	100	20	20	100	0	70-130	20
cis-1,2-Dichloroethene	10	9.6	96	10	9.6	96	0	70-130	20
Dibromomethane	10	10	100	10	10	100	0	70-130	20
1,2,3-Trichloropropane	10	12	120	10	12	120	0	64-130	20
Acrylonitrile	10	11	110	10	11	110	0	70-130	20
Styrene	20	20	100	20	20	100	0	70-130	20
Dichlorodifluoromethane	10	9.1	91	10	8.9	89	2	36-147	20
Acetone	10	13	130	10	12	120	8	58-148	20
Carbon disulfide	10	9.0	90	10	8.8	88	2	51-130	20
2-Butanone	10	11	110	10	12	120	9	63-138	20
Vinyl acetate	10	11	110	10	11	110	0	70-130	20
4-Methyl-2-pentanone	10	11	110	10	11	110	0	59-130	20
2-Hexanone	10	12	120	10	12	120	0	57-130	20
Bromochloromethane	10	9.7	97	10	9.4	94	3	70-130	20
2,2-Dichloropropane	10	9.9	99	10	9.5	95	4	63-133	20
1,2-Dibromoethane	10	10	100	10	10	100	0	70-130	20
1,3-Dichloropropane	10	11	110	10	11	110	0	70-130	20
1,1,1,2-Tetrachloroethane	10	10	100	10	10	100	0	64-130	20
Bromobenzene	10	10	100	10	10	100	0	70-130	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Langan Engineering & Environmental Lab Number : L1908936
 Project Name : 491 WORTMAN AVE. Project Number : 170329301
 Matrix : WATER
 LCS Sample ID : WG1214926-3 Analysis Date : 03/12/19 08:32 File ID : VG190312A02
 LCSD Sample ID : WG1214926-4 Analysis Date : 03/12/19 08:57 File ID : VG190312A03

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			
n-Butylbenzene	10	10	100	10	10	100	0	53-136	20
sec-Butylbenzene	10	10	100	10	10	100	0	70-130	20
tert-Butylbenzene	10	10	100	10	10	100	0	70-130	20
o-Chlorotoluene	10	11	110	10	11	110	0	70-130	20
p-Chlorotoluene	10	11	110	10	11	110	0	70-130	20
1,2-Dibromo-3-chloropropane	10	10	100	10	9.9	99	1	41-144	20
Hexachlorobutadiene	10	8.6	86	10	8.5	85	1	63-130	20
Isopropylbenzene	10	10	100	10	10	100	0	70-130	20
p-Isopropyltoluene	10	10	100	10	10	100	0	70-130	20
Naphthalene	10	11	110	10	11	110	0	70-130	20
n-Propylbenzene	10	10	100	10	10	100	0	69-130	20
1,2,3-Trichlorobenzene	10	10	100	10	10	100	0	70-130	20
1,2,4-Trichlorobenzene	10	9.9	99	10	10	100	1	70-130	20
1,3,5-Trimethylbenzene	10	10	100	10	10	100	0	64-130	20
1,2,4-Trimethylbenzene	10	11	110	10	10	100	10	70-130	20
1,4-Dioxane	500	320	64	500	370	74	14	56-162	20
p-Diethylbenzene	10	10	100	10	10	100	0	70-130	20
p-Ethyltoluene	10	10	100	10	10	100	0	70-130	20
1,2,4,5-Tetramethylbenzene	10	10	100	10	10	100	0	70-130	20
Ethyl ether	10	9.9	99	10	9.9	99	0	59-134	20
trans-1,4-Dichloro-2-butene	10	12	120	10	12	120	0	70-130	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Langan Engineering & Environmental Lab Number : L1908936
 Project Name : 491 WORTMAN AVE. Project Number : 170329301
 Matrix : WATER
 LCS Sample ID : WG1215235-3 Analysis Date : 03/12/19 18:29 File ID : V08190312N02
 LCSD Sample ID : WG1215235-4 Analysis Date : 03/12/19 18:51 File ID : V08190312N03

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	9.9	99	10	9.8	98	1	70-130	20
1,1-Dichloroethane	10	10	100	10	10	100	0	70-130	20
Chloroform	10	10	100	10	10	100	0	70-130	20
Carbon tetrachloride	10	10	100	10	10	100	0	63-132	20
1,2-Dichloropropane	10	9.5	95	10	9.7	97	2	70-130	20
Dibromochloromethane	10	10	100	10	10	100	0	63-130	20
1,1,2-Trichloroethane	10	10	100	10	10	100	0	70-130	20
Tetrachloroethene	10	9.8	98	10	9.7	97	1	70-130	20
Chlorobenzene	10	10	100	10	10	100	0	75-130	20
Trichlorofluoromethane	10	12	120	10	12	120	0	62-150	20
1,2-Dichloroethane	10	10	100	10	10	100	0	70-130	20
1,1,1-Trichloroethane	10	9.9	99	10	9.6	96	3	67-130	20
Bromodichloromethane	10	10	100	10	10	100	0	67-130	20
trans-1,3-Dichloropropene	10	8.9	89	10	9.1	91	2	70-130	20
cis-1,3-Dichloropropene	10	9.1	91	10	9.2	92	1	70-130	20
1,1-Dichloropropene	10	9.8	98	10	9.8	98	0	70-130	20
Bromoform	10	9.6	96	10	9.5	95	1	54-136	20
1,1,2,2-Tetrachloroethane	10	9.9	99	10	10	100	1	67-130	20
Benzene	10	10	100	10	10	100	0	70-130	20
Toluene	10	9.8	98	10	10	100	2	70-130	20
Ethylbenzene	10	9.6	96	10	9.7	97	1	70-130	20
Chloromethane	10	10	100	10	9.6	96	4	64-130	20
Bromomethane	10	9.7	97	10	9.7	97	0	39-139	20
Vinyl chloride	10	11	110	10	11	110	0	55-140	20
Chloroethane	10	14	140 Q	10	14	140 Q	0	55-138	20
1,1-Dichloroethene	10	10	100	10	9.9	99	1	61-145	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Langan Engineering & Environmental Lab Number : L1908936
 Project Name : 491 WORTMAN AVE. Project Number : 170329301
 Matrix : WATER
 LCS Sample ID : WG1215235-3 Analysis Date : 03/12/19 18:29 File ID : V08190312N02
 LCSD Sample ID : WG1215235-4 Analysis Date : 03/12/19 18:51 File ID : V08190312N03

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			
trans-1,2-Dichloroethene	10	9.9	99	10	9.9	99	0	70-130	20
Trichloroethene	10	10	100	10	10	100	0	70-130	20
1,2-Dichlorobenzene	10	9.7	97	10	9.7	97	0	70-130	20
1,3-Dichlorobenzene	10	10	100	10	10	100	0	70-130	20
1,4-Dichlorobenzene	10	10	100	10	9.8	98	2	70-130	20
Methyl tert butyl ether	10	8.5	85	10	8.5	85	0	63-130	20
p/m-Xylene	20	19	95	20	19	95	0	70-130	20
o-Xylene	20	19	95	20	19	95	0	70-130	20
cis-1,2-Dichloroethene	10	9.7	97	10	9.7	97	0	70-130	20
Dibromomethane	10	10	100	10	10	100	0	70-130	20
1,2,3-Trichloropropane	10	10	100	10	10	100	0	64-130	20
Acrylonitrile	10	10	100	10	9.4	94	6	70-130	20
Styrene	20	19	95	20	20	100	5	70-130	20
Dichlorodifluoromethane	10	9.0	90	10	9.1	91	1	36-147	20
Acetone	10	9.8	98	10	9.8	98	0	58-148	20
Carbon disulfide	10	9.8	98	10	9.7	97	1	51-130	20
2-Butanone	10	9.2	92	10	9.0	90	2	63-138	20
Vinyl acetate	10	8.5	85	10	8.4	84	1	70-130	20
4-Methyl-2-pentanone	10	8.7	87	10	8.4	84	4	59-130	20
2-Hexanone	10	7.4	74	10	8.0	80	8	57-130	20
Bromochloromethane	10	10	100	10	10	100	0	70-130	20
2,2-Dichloropropane	10	9.0	90	10	8.9	89	1	63-133	20
1,2-Dibromoethane	10	9.9	99	10	9.9	99	0	70-130	20
1,3-Dichloropropane	10	10	100	10	10	100	0	70-130	20
1,1,1,2-Tetrachloroethane	10	9.8	98	10	10	100	2	64-130	20
Bromobenzene	10	9.4	94	10	9.0	90	4	70-130	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Langan Engineering & Environmental Lab Number : L1908936
 Project Name : 491 WORTMAN AVE. Project Number : 170329301
 Matrix : WATER
 LCS Sample ID : WG1215235-3 Analysis Date : 03/12/19 18:29 File ID : V08190312N02
 LCSD Sample ID : WG1215235-4 Analysis Date : 03/12/19 18:51 File ID : V08190312N03

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			
n-Butylbenzene	10	9.8	98	10	9.7	97	1	53-136	20
sec-Butylbenzene	10	11	110	10	10	100	10	70-130	20
tert-Butylbenzene	10	8.6	86	10	8.5	85	1	70-130	20
o-Chlorotoluene	10	9.7	97	10	9.4	94	3	70-130	20
p-Chlorotoluene	10	9.7	97	10	9.4	94	3	70-130	20
1,2-Dibromo-3-chloropropane	10	8.2	82	10	8.4	84	2	41-144	20
Hexachlorobutadiene	10	9.1	91	10	8.8	88	3	63-130	20
Isopropylbenzene	10	9.8	98	10	9.6	96	2	70-130	20
p-Isopropyltoluene	10	9.9	99	10	9.6	96	3	70-130	20
Naphthalene	10	6.2	62 Q	10	6.2	62 Q	0	70-130	20
n-Propylbenzene	10	10	100	10	10	100	0	69-130	20
1,2,3-Trichlorobenzene	10	6.1	61 Q	10	6.0	60 Q	2	70-130	20
1,2,4-Trichlorobenzene	10	6.4	64 Q	10	6.2	62 Q	3	70-130	20
1,3,5-Trimethylbenzene	10	9.8	98	10	9.6	96	2	64-130	20
1,2,4-Trimethylbenzene	10	9.4	94	10	9.2	92	2	70-130	20
1,4-Dioxane	500	810	162	500	810	162	0	56-162	20
p-Diethylbenzene	10	8.7	87	10	8.5	85	2	70-130	20
p-Ethyltoluene	10	10	100	10	9.8	98	2	70-130	20
1,2,4,5-Tetramethylbenzene	10	3.6	36 Q	10	3.5	35 Q	3	70-130	20
Ethyl ether	10	10	100	10	9.6	96	4	59-134	20
trans-1,4-Dichloro-2-butene	10	9.4	94	10	8.1	81	15	70-130	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Langan Engineering & Environmental Lab Number : L1908936
 Project Name : 491 WORTMAN AVE. Project Number : 170329301
 Matrix : WATER
 LCS Sample ID : WG1215584-3 Analysis Date : 03/13/19 18:42 File ID : V08190313N02
 LCSD Sample ID : WG1215584-4 Analysis Date : 03/13/19 19:04 File ID : V08190313N03

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	10	100	10	10	100	0	70-130	20
1,1-Dichloroethane	10	10	100	10	11	110	10	70-130	20
Chloroform	10	11	110	10	11	110	0	70-130	20
Carbon tetrachloride	10	11	110	10	11	110	0	63-132	20
1,2-Dichloropropane	10	10	100	10	10	100	0	70-130	20
Dibromochloromethane	10	10	100	10	11	110	10	63-130	20
1,1,2-Trichloroethane	10	11	110	10	12	120	9	70-130	20
Tetrachloroethene	10	10	100	10	11	110	10	70-130	20
Chlorobenzene	10	10	100	10	11	110	10	75-130	20
Trichlorofluoromethane	10	12	120	10	12	120	0	62-150	20
1,2-Dichloroethane	10	11	110	10	11	110	0	70-130	20
1,1,1-Trichloroethane	10	11	110	10	11	110	0	67-130	20
Bromodichloromethane	10	10	100	10	11	110	10	67-130	20
trans-1,3-Dichloropropene	10	10	100	10	10	100	0	70-130	20
cis-1,3-Dichloropropene	10	9.9	99	10	9.9	99	0	70-130	20
1,1-Dichloropropene	10	11	110	10	11	110	0	70-130	20
Bromoform	10	10	100	10	11	110	10	54-136	20
1,1,2,2-Tetrachloroethane	10	10	100	10	11	110	10	67-130	20
Benzene	10	11	110	10	11	110	0	70-130	20
Toluene	10	11	110	10	11	110	0	70-130	20
Ethylbenzene	10	10	100	10	10	100	0	70-130	20
Chloromethane	10	11	110	10	11	110	0	64-130	20
Bromomethane	10	10	100	10	10	100	0	39-139	20
Vinyl chloride	10	11	110	10	11	110	0	55-140	20
Chloroethane	10	13	130	10	15	150 Q	14	55-138	20
1,1-Dichloroethene	10	10	100	10	10	100	0	61-145	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Langan Engineering & Environmental Lab Number : L1908936
 Project Name : 491 WORTMAN AVE. Project Number : 170329301
 Matrix : WATER
 LCS Sample ID : WG1215584-3 Analysis Date : 03/13/19 18:42 File ID : V08190313N02
 LCSD Sample ID : WG1215584-4 Analysis Date : 03/13/19 19:04 File ID : V08190313N03

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			
trans-1,2-Dichloroethene	10	10	100	10	10	100	0	70-130	20
Trichloroethene	10	11	110	10	11	110	0	70-130	20
1,2-Dichlorobenzene	10	10	100	10	11	110	10	70-130	20
1,3-Dichlorobenzene	10	11	110	10	11	110	0	70-130	20
1,4-Dichlorobenzene	10	10	100	10	11	110	10	70-130	20
Methyl tert butyl ether	10	8.5	85	10	8.7	87	2	63-130	20
p/m-Xylene	20	20	100	20	21	105	5	70-130	20
o-Xylene	20	19	95	20	20	100	5	70-130	20
cis-1,2-Dichloroethene	10	10	100	10	10	100	0	70-130	20
Dibromomethane	10	11	110	10	11	110	0	70-130	20
1,2,3-Trichloropropane	10	11	110	10	12	120	9	64-130	20
Acrylonitrile	10	10	100	10	11	110	10	70-130	20
Styrene	20	20	100	20	22	110	10	70-130	20
Dichlorodifluoromethane	10	10	100	10	10	100	0	36-147	20
Acetone	10	12	120	10	12	120	0	58-148	20
Carbon disulfide	10	10	100	10	10	100	0	51-130	20
2-Butanone	10	9.9	99	10	10	100	1	63-138	20
Vinyl acetate	10	8.3	83	10	8.7	87	5	70-130	20
4-Methyl-2-pentanone	10	8.9	89	10	9.4	94	5	59-130	20
2-Hexanone	10	7.9	79	10	8.4	84	6	57-130	20
Bromochloromethane	10	11	110	10	11	110	0	70-130	20
2,2-Dichloropropane	10	9.1	91	10	9.2	92	1	63-133	20
1,2-Dibromoethane	10	10	100	10	11	110	10	70-130	20
1,3-Dichloropropane	10	11	110	10	11	110	0	70-130	20
1,1,1,2-Tetrachloroethane	10	10	100	10	11	110	10	64-130	20
Bromobenzene	10	9.7	97	10	11	110	13	70-130	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Langan Engineering & Environmental Lab Number : L1908936
 Project Name : 491 WORTMAN AVE. Project Number : 170329301
 Matrix : WATER
 LCS Sample ID : WG1215584-3 Analysis Date : 03/13/19 18:42 File ID : V08190313N02
 LCSD Sample ID : WG1215584-4 Analysis Date : 03/13/19 19:04 File ID : V08190313N03

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			
n-Butylbenzene	10	9.6	96	10	10	100	4	53-136	20
sec-Butylbenzene	10	10	100	10	11	110	10	70-130	20
tert-Butylbenzene	10	8.7	87	10	9.4	94	8	70-130	20
o-Chlorotoluene	10	9.8	98	10	11	110	12	70-130	20
p-Chlorotoluene	10	10	100	10	11	110	10	70-130	20
1,2-Dibromo-3-chloropropane	10	9.2	92	10	10	100	8	41-144	20
Hexachlorobutadiene	10	8.6	86	10	9.1	91	6	63-130	20
Isopropylbenzene	10	10	100	10	11	110	10	70-130	20
p-Isopropyltoluene	10	9.9	99	10	10	100	1	70-130	20
Naphthalene	10	5.6	56 Q	10	6.3	63 Q	12	70-130	20
n-Propylbenzene	10	11	110	10	12	120	9	69-130	20
1,2,3-Trichlorobenzene	10	5.4	54 Q	10	6.6	66 Q	20	70-130	20
1,2,4-Trichlorobenzene	10	5.6	56 Q	10	6.4	64 Q	13	70-130	20
1,3,5-Trimethylbenzene	10	10	100	10	11	110	10	64-130	20
1,2,4-Trimethylbenzene	10	9.6	96	10	10	100	4	70-130	20
1,4-Dioxane	500	640	128	500	760	152	17	56-162	20
p-Diethylbenzene	10	8.3	83	10	8.9	89	7	70-130	20
p-Ethyltoluene	10	10	100	10	11	110	10	70-130	20
1,2,4,5-Tetramethylbenzene	10	3.2	32 Q	10	3.5	35 Q	9	70-130	20
Ethyl ether	10	9.9	99	10	9.8	98	1	59-134	20
trans-1,4-Dichloro-2-butene	10	9.1	91	10	9.2	92	1	70-130	20



**Method Blank Summary
Form 4
Volatiles**

Client	: Langan Engineering & Environmental	Lab Number	: L1908936
Project Name	: 491 WORTMAN AVE.	Project Number	: 170329301
Lab Sample ID	: WG1214926-5	Lab File ID	: VG190312A05
Instrument ID	: GONZO		
Matrix	: WATER	Analysis Date	: 03/12/19 09:48

Client Sample No.	Lab Sample ID	Analysis Date
WG1214926-3LCS	WG1214926-3	03/12/19 08:32
WG1214926-4LCSD	WG1214926-4	03/12/19 08:57
MW-10_030719	L1908936-01	03/12/19 13:37

**Method Blank Summary
Form 4
Volatiles**

Client	: Langan Engineering & Environmental	Lab Number	: L1908936
Project Name	: 491 WORTMAN AVE.	Project Number	: 170329301
Lab Sample ID	: WG1215235-5	Lab File ID	: V08190312N05
Instrument ID	: VOA108		
Matrix	: WATER	Analysis Date	: 03/12/19 19:35

Client Sample No.	Lab Sample ID	Analysis Date
WG1215235-3LCS	WG1215235-3	03/12/19 18:29
WG1215235-4LCSD	WG1215235-4	03/12/19 18:51
GWFB01_030719	L1908936-07	03/12/19 19:56
GWTB01_030719	L1908936-08	03/12/19 20:18
MW-7_030719	L1908936-03	03/12/19 21:46
MW-9_030719	L1908936-04	03/12/19 22:08
PZ-2_030719	L1908936-05	03/12/19 22:30
MW-3A_030719	L1908936-06	03/12/19 22:52

**Method Blank Summary
Form 4
Volatiles**

Client	: Langan Engineering & Environmental	Lab Number	: L1908936
Project Name	: 491 WORTMAN AVE.	Project Number	: 170329301
Lab Sample ID	: WG1215584-5	Lab File ID	: V08190313N05
Instrument ID	: VOA108		
Matrix	: WATER	Analysis Date	: 03/13/19 19:48

Client Sample No.	Lab Sample ID	Analysis Date
WG1215584-3LCS	WG1215584-3	03/13/19 18:42
WG1215584-4LCSD	WG1215584-4	03/13/19 19:04
MW11_030719	L1908936-02	03/13/19 23:05

Instrument Performance Check (Tune) Summary

Form 5

Volatiles

Bromofluorobenzene (BFB)

Client : Langan Engineering & Environmental	Lab Number : L1908936
Project Name : 491 WORTMAN AVE.	Project Number : 170329301
Instrument ID : VOA108	Analysis Date : 02/18/19 18:56
Tune Standard : WG1208025-1	Tune File ID : V08190218NBF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	21
75	30.0 - 60.0% of mass 95	51.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.9 (1.1)1
174	Greater than 50.0 of mass 95	77.1
175	5.0 - 9.0% of mass 174	5.5 (7.1)1
176	95.0 - 101% of mass 174	75.8 (98.3)1
177	5.0 - 9.0% of mass 176	4.9 (6.4)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	R1159340-1	V08190218N04	02/18/19 20:23
STD1	R1159340-2	V08190218N06	02/18/19 21:07
STD2	R1159340-3	V08190218N08	02/18/19 21:50
STD3	R1159340-5	V08190218N09	02/18/19 22:12
STD4	R1159340-4	V08190218N10	02/18/19 22:34
STD6	R1159340-6	V08190218N11	02/18/19 22:56
STD8	R1159340-7	V08190218N12	02/18/19 23:18
STD10	R1159340-8	V08190218N13	02/18/19 23:40
ICV Quant Report	R1159340-9	V08190218N20	02/19/19 02:13

Instrument Performance Check (Tune) Summary

Form 5

Volatiles

Bromofluorobenzene (BFB)

Client : Langan Engineering & Environmental	Lab Number : L1908936
Project Name : 491 WORTMAN AVE.	Project Number : 170329301
Instrument ID : VOA108	Analysis Date : 03/12/19 17:46
Tune Standard : WG1215235-1	Tune File ID : V08190312NBF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	20.3
75	30.0 - 60.0% of mass 95	51.4
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	0.7 (.8)1
174	Greater than 50.0 of mass 95	79
175	5.0 - 9.0% of mass 174	6.5 (8.2)1
176	95.0 - 101% of mass 174	78.5 (99.3)1
177	5.0 - 9.0% of mass 176	5.1 (6.5)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
WG1215235-2CCAL	WG1215235-2	V08190312N02	03/12/19 18:29
WG1215235-3LCS	WG1215235-3	V08190312N02	03/12/19 18:29
WG1215235-4LCSD	WG1215235-4	V08190312N03	03/12/19 18:51
WG1215235-5BLANK	WG1215235-5	V08190312N05	03/12/19 19:35
GWFB01_030719	L1908936-07	V08190312N06	03/12/19 19:56
GWTB01_030719	L1908936-08	V08190312N07	03/12/19 20:18
MW-7_030719	L1908936-03	V08190312N11	03/12/19 21:46
MW-9_030719	L1908936-04	V08190312N12	03/12/19 22:08
PZ-2_030719	L1908936-05	V08190312N13	03/12/19 22:30
MW-3A_030719	L1908936-06	V08190312N14	03/12/19 22:52

Instrument Performance Check (Tune) Summary

Form 5

Volatiles

Bromofluorobenzene (BFB)

Client : Langan Engineering & Environmental	Lab Number : L1908936
Project Name : 491 WORTMAN AVE.	Project Number : 170329301
Instrument ID : VOA108	Analysis Date : 03/13/19 18:00
Tune Standard : WG1215584-1	Tune File ID : V08190313NBF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	21.3
75	30.0 - 60.0% of mass 95	52.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.8 (1)1
174	Greater than 50.0 of mass 95	80.2
175	5.0 - 9.0% of mass 174	6 (7.5)1
176	95.0 - 101% of mass 174	76.9 (95.9)1
177	5.0 - 9.0% of mass 176	5.1 (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
WG1215584-2CCAL	WG1215584-2	V08190313N02	03/13/19 18:42
WG1215584-3LCS	WG1215584-3	V08190313N02	03/13/19 18:42
WG1215584-4LCSD	WG1215584-4	V08190313N03	03/13/19 19:04
WG1215584-5BLANK	WG1215584-5	V08190313N05	03/13/19 19:48
MW11_030719	L1908936-02	V08190313N14	03/13/19 23:05

Instrument Performance Check (Tune) Summary

Form 5

Volatiles

Bromofluorobenzene (BFB)

Client : Langan Engineering & Environmental	Lab Number : L1908936
Project Name : 491 WORTMAN AVE.	Project Number : 170329301
Instrument ID : GONZO	Analysis Date : 02/27/19 19:28
Tune Standard : WG1211255-1	Tune File ID : VG190227ABF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	16.8
75	30.0 - 60.0% of mass 95	47.9
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	0.7 (.7)1
174	Greater than 50.0 of mass 95	97.3
175	5.0 - 9.0% of mass 174	6.9 (7.1)1
176	95.0 - 101% of mass 174	96.9 (99.5)1
177	5.0 - 9.0% of mass 176	6.4 (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	R1162384-1	VG190227A03	02/27/19 20:36
STD1	R1162384-2	VG190227A05	02/27/19 21:27
STD2	R1162384-3	VG190227A07	02/27/19 22:18
STD3	R1162384-4	VG190227A08	02/27/19 22:44
STD4	R1162384-6	VG190227A09	02/27/19 23:09
STD6	R1162384-5	VG190227A10	02/27/19 23:34
STD8	R1162384-7	VG190227A11	02/27/19 23:59
STD10	R1162384-8	VG190227A12	02/28/19 00:24
ICV Quant Report	R1162384-9	VG190227A19	02/28/19 03:23

Instrument Performance Check (Tune) Summary

Form 5

Volatiles

Bromofluorobenzene (BFB)

Client : Langan Engineering & Environmental	Lab Number : L1908936
Project Name : 491 WORTMAN AVE.	Project Number : 170329301
Instrument ID : GONZO	Analysis Date : 03/12/19 07:52
Tune Standard : WG1214926-1	Tune File ID : VG190312ABF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	18.2
75	30.0 - 60.0% of mass 95	48.7
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 (.6)1
174	Greater than 50.0 of mass 95	91.1
175	5.0 - 9.0% of mass 174	6.5 (7.1)1
176	95.0 - 101% of mass 174	89.9 (98.7)1
177	5.0 - 9.0% of mass 176	5.6 (6.3)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
WG1214926-2CCAL	WG1214926-2	VG190312A02	03/12/19 08:32
WG1214926-3LCS	WG1214926-3	VG190312A02	03/12/19 08:32
WG1214926-4LCSD	WG1214926-4	VG190312A03	03/12/19 08:57
WG1214926-5BLANK	WG1214926-5	VG190312A05	03/12/19 09:48
MW-10_030719	L1908936-01	VG190312A14	03/12/19 13:37

Internal Standard Area and RT Summary

Form 8a

Volatiles

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Instrument ID : GONZO
 Sample No : WG1214926-2

Lab Number : L1908936
 Project Number : 170329301
 Analysis Date : 03/12/19 08:32
 Lab File ID : VG190312A02

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG1214926-2	385122	6.55	297531	10.13	151374	12.70
Upper Limit	770244	7.05	595062	10.63	302748	13.20
Lower Limit	192561	6.05	148766	9.63	75687	12.20
Sample ID						
WG1214926-3 LCS	385122	6.55	297531	10.13	151374	12.70
WG1214926-4 LCSD	388506	6.55	295537	10.13	151442	12.70
WG1214926-5 BLANK	370911	6.55	274166	10.13	125436	12.71
MW-10_030719	353556	6.55	259274	10.13	122108	12.70

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



Internal Standard Area and RT Summary

Form 8a

Volatiles

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Instrument ID : VOA108
 Sample No : WG1215235-2

Lab Number : L1908936
 Project Number : 170329301
 Analysis Date : 03/12/19 18:29
 Lab File ID : V08190312N02

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG1215235-2	304926	5.55	209940	8.53	100075	10.01
Upper Limit	609852	6.05	419880	9.03	200150	10.51
Lower Limit	152463	5.05	104970	8.03	50038	9.51
Sample ID						
WG1215235-3 LCS	304926	5.55	209940	8.53	100075	10.01
WG1215235-4 LCSD	305813	5.55	208759	8.53	103366	10.01
WG1215235-5 BLANK	285430	5.55	194883	8.53	85279	10.01
GWFB01_030719	278766	5.55	184746	8.53	75062	10.01
GWTB01_030719	270539	5.55	181203	8.53	75021	10.01
MW-7_030719	278487	5.55	193390	8.53	82248	10.01
MW-9_030719	272553	5.55	180369	8.53	76901	10.01
PZ-2_030719	273004	5.55	186913	8.53	80737	10.01
MW-3A_030719	278402	5.55	184966	8.53	81721	10.01

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



Internal Standard Area and RT Summary

Form 8a

Volatiles

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Instrument ID : VOA108
 Sample No : WG1215584-2

Lab Number : L1908936
 Project Number : 170329301
 Analysis Date : 03/13/19 18:42
 Lab File ID : V08190313N02

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG1215584-2	302021	5.55	206709	8.53	100898	10.01
Upper Limit	604042	6.05	413418	9.03	201796	10.51
Lower Limit	151011	5.05	103355	8.03	50449	9.51
Sample ID						
WG1215584-3 LCS	302021	5.55	206709	8.53	100898	10.01
WG1215584-4 LCSD	300956	5.55	199502	8.53	95596	10.01
WG1215584-5 BLANK	277807	5.55	182593	8.53	73611	10.01
MW11_030719	267867	5.55	185119	8.53	72202	10.01

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: 06/19/18
Created By: Jason Hebert
File: PM5049-1
Page: 1

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	0.210	ug/l	70-130	20	70-130	20	20			
Chloroform	67-66-3	0.75	0.222	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	0.240	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	0.203	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	0.200	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	0.392	ug/l	70-130	20	70-130	20	20			
Xylene (Total)	1330-20-7	1	0.330	ug/l				20	20			
Xylene (Total)	1330-20-7	1	0.330	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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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	0.430	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	0.525	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	0.196	ug/l	70-130	20	70-130	20	20			
o-Chlorotoluene	95-49-8	2.5	0.215	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	0.220	ug/l	70-130	20	70-130	20	20			
1,3,5-Trimethylbenzene	108-67-8	2.5	0.217	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	0.213	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			

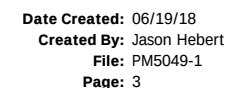
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Holding Time: 14 days
Container/Sample Preservation: 3 - Vial HCl preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
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File: PM5047-1
Page: 1

Volatile Organics - EPA 8260C (SOIL-LOW)

Holding Time: 14 days
Container / Sample Preservation: 1 - Vial Large Septa unpreserved (4oz)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methylene chloride	75-09-2	5	2.29	ug/kg	70-130	30	70-130	30	30			
1,1-Dichloroethane	75-34-3	1	0.145	ug/kg	70-130	30	70-130	30	30			
Chloroform	67-66-3	1.5	0.140	ug/kg	70-130	30	70-130	30	30			
Carbon tetrachloride	56-23-5	1	0.230	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloropropane	78-87-5	1	0.125	ug/kg	70-130	30	70-130	30	30			
Dibromochloromethane	124-48-1	1	0.140	ug/kg	70-130	30	70-130	30	30			
1,1,2-Trichloroethane	79-00-5	1	0.267	ug/kg	70-130	30	70-130	30	30			
Tetrachloroethene	127-18-4	0.5	0.196	ug/kg	70-130	30	70-130	30	30			
Chlorobenzene	108-90-7	0.5	0.127	ug/kg	70-130	30	70-130	30	30			
Trichlorofluoromethane	75-69-4	4	0.695	ug/kg	70-139	30	70-139	30	30			
1,2-Dichloroethane	107-06-2	1	0.257	ug/kg	70-130	30	70-130	30	30			
1,1,1-Trichloroethane	71-55-6	0.5	0.167	ug/kg	70-130	30	70-130	30	30			
Bromodichloromethane	75-27-4	0.5	0.109	ug/kg	70-130	30	70-130	30	30			
trans-1,3-Dichloropropene	10061-02-6	1	0.273	ug/kg	70-130	30	70-130	30	30			
cis-1,3-Dichloropropene	10061-01-5	0.5	0.158	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropene, Total	542-75-6	0.5	0.158	ug/kg				30	30			
1,3-Dichloropropene, Total	542-75-6	0.5	0.158	ug/kg				30	30			
1,1-Dichloropropene	563-58-6	0.5	0.159	ug/kg	70-130	30	70-130	30	30			
Bromoform	75-25-2	4	0.246	ug/kg	70-130	30	70-130	30	30			
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.166	ug/kg	70-130	30	70-130	30	30			
Benzene	71-43-2	0.5	0.166	ug/kg	70-130	30	70-130	30	30			
Toluene	108-88-3	1	0.543	ug/kg	70-130	30	70-130	30	30			
Ethylbenzene	100-41-4	1	0.141	ug/kg	70-130	30	70-130	30	30			
Chloromethane	74-87-3	4	0.932	ug/kg	52-130	30	52-130	30	30			
Bromomethane	74-83-9	2	0.581	ug/kg	57-147	30	57-147	30	30			
Vinyl chloride	75-01-4	1	0.335	ug/kg	67-130	30	67-130	30	30			
Chloroethane	75-00-3	2	0.452	ug/kg	50-151	30	50-151	30	30			
1,1-Dichloroethene	75-35-4	1	0.238	ug/kg	65-135	30	65-135	30	30			
trans-1,2-Dichloroethene	156-60-5	1.5	0.137	ug/kg	70-130	30	70-130	30	30			
Trichloroethene	79-01-6	0.5	0.137	ug/kg	70-130	30	70-130	30	30			
1,2-Dichlorobenzene	95-50-1	2	0.144	ug/kg	70-130	30	70-130	30	30			
1,3-Dichlorobenzene	541-73-1	2	0.148	ug/kg	70-130	30	70-130	30	30			
1,4-Dichlorobenzene	106-46-7	2	0.171	ug/kg	70-130	30	70-130	30	30			
Methyl tert butyl ether	1634-04-4	2	0.201	ug/kg	66-130	30	66-130	30	30			
p/m-Xylene	179601-23-1	2	0.560	ug/kg	70-130	30	70-130	30	30			
o-Xylene	95-47-6	1	0.291	ug/kg	70-130	30	70-130	30	30			
Xylene (Total)	1330-20-7	1	0.291	ug/kg				30	30			
Xylene (Total)	1330-20-7	1	0.291	ug/kg				30	30			
cis-1,2-Dichloroethene	156-59-2	1	0.175	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloroethene (total)	540-59-0	1	0.137	ug/kg				30	30			
1,2-Dichloroethene (total)	540-59-0	1	0.137	ug/kg				30	30			
Dibromomethane	74-95-3	2	0.238	ug/kg	70-130	30	70-130	30	30			

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File: PM5047-1
Page: 2

Volatile Organics - EPA 8260C (SOIL-LOW)

Holding Time: 14 days
Container / Sample Preservation: 1 - Vial Large Septa unpreserved (4oz)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,4-Dichlorobutane	110-56-5	10	0.226	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichloropropane	96-18-4	2	0.127	ug/kg	68-130	30	68-130	30	30			
Styrene	100-42-5	1	0.196	ug/kg	70-130	30	70-130	30	30			
Dichlorodifluoromethane	75-71-8	10	0.915	ug/kg	30-146	30	30-146	30	30			
Acetone	67-64-1	10	4.81	ug/kg	54-140	30	54-140	30	30			
Carbon disulfide	75-15-0	10	4.55	ug/kg	59-130	30	59-130	30	30			
2-Butanone	78-93-3	10	2.22	ug/kg	70-130	30	70-130	30	30			
Vinyl acetate	108-05-4	10	2.15	ug/kg	70-130	30	70-130	30	30			
4-Methyl-2-pentanone	108-10-1	10	1.28	ug/kg	70-130	30	70-130	30	30			
2-Hexanone	591-78-6	10	1.18	ug/kg	70-130	30	70-130	30	30			
Ethyl methacrylate	97-63-2	10	1.58	ug/kg	70-130	30	70-130	30	30			
Acrylonitrile	107-13-1	4	1.15	ug/kg	70-130	30	70-130	30	30			
Bromochloromethane	74-97-5	2	0.205	ug/kg	70-130	30	70-130	30	30			
Tetrahydrofuran	109-99-9	4	1.59	ug/kg	66-130	30	66-130	30	30			
2,2-Dichloropropane	594-20-7	2	0.202	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromoethane	106-93-4	1	0.279	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropane	142-28-9	2	0.167	ug/kg	69-130	30	69-130	30	30			
1,1,1,2-Tetrachloroethane	630-20-6	0.5	0.132	ug/kg	70-130	30	70-130	30	30			
Bromobenzene	108-86-1	2	0.145	ug/kg	70-130	30	70-130	30	30			
n-Butylbenzene	104-51-8	1	0.167	ug/kg	70-130	30	70-130	30	30			
sec-Butylbenzene	135-98-8	1	0.146	ug/kg	70-130	30	70-130	30	30			
tert-Butylbenzene	98-06-6	2	0.118	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trichlorobenzene	108-70-3	2	0.173	ug/kg	70-139	30	70-130	30	30			
o-Chlorotoluene	95-49-8	2	0.191	ug/kg	70-130	30	70-130	30	30			
p-Chlorotoluene	106-43-4	2	0.108	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromo-3-chloropropane	96-12-8	3	0.998	ug/kg	68-130	30	68-130	30	30			
Hexachlorobutadiene	87-68-3	4	0.169	ug/kg	67-130	30	67-130	30	30			
Isopropylbenzene	98-82-8	1	0.109	ug/kg	70-130	30	70-130	30	30			
p-Isopropyltoluene	99-87-6	1	0.109	ug/kg	70-130	30	70-130	30	30			
Naphthalene	91-20-3	4	0.650	ug/kg	70-130	30	70-130	30	30			
n-Propylbenzene	103-65-1	1	0.171	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichlorobenzene	87-61-6	2	0.322	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trichlorobenzene	120-82-1	2	0.272	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trimethylbenzene	108-67-8	2	0.193	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trimethylbenzene	95-63-6	2	0.334	ug/kg	70-130	30	70-130	30	30			
trans-1,4-Dichloro-2-butene	110-57-6	5	1.42	ug/kg	70-130	30	70-130	30	30			
iso-Propyl Alcohol	67-63-0	100	100	ug/kg	70-130	20	70-130	20	20			
Ethyl ether	60-29-7	2	0.341	ug/kg	67-130	30	67-130	30	30			
Methyl Acetate	79-20-9	4	0.950	ug/kg	65-130	30	65-130	30	30			
Ethyl Acetate	141-78-6	10	1.21	ug/kg	70-130	30	70-130	30	30			
Isopropyl Ether	108-20-3	2	0.213	ug/kg	66-130	30	66-130	30	30			
Cyclohexane	110-82-7	10	0.544	ug/kg	70-130	30	70-130	30	30			

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File: PM5047-1
Page: 3

Volatile Organics - EPA 8260C (SOIL-LOW)

Holding Time: 14 days
Container/Sample Preservation: 1 - Vial Large Septa unpreserved (4oz)

[illegible]

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
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File: PM5048-1
Page: 1

Volatile Organics - EPA 8260C (SOIL-HIGH)

Holding Time: 14 days
Container / Sample Preservation: 1 - Vial Large Septa unpreserved (4oz)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methylene chloride	75-09-2	250	115	ug/kg	70-130	30	70-130	30	30			
1,1-Dichloroethane	75-34-3	50	7.25	ug/kg	70-130	30	70-130	30	30			
Chloroform	67-66-3	75	7.00	ug/kg	70-130	30	70-130	30	30			
Carbon tetrachloride	56-23-5	50	11.5	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloropropane	78-87-5	50	6.25	ug/kg	70-130	30	70-130	30	30			
Dibromochloromethane	124-48-1	50	7.00	ug/kg	70-130	30	70-130	30	30			
1,1,2-Trichloroethane	79-00-5	50	13.4	ug/kg	70-130	30	70-130	30	30			
Tetrachloroethene	127-18-4	25	9.80	ug/kg	70-130	30	70-130	30	30			
Chlorobenzene	108-90-7	25	6.35	ug/kg	70-130	30	70-130	30	30			
Trichlorofluoromethane	75-69-4	200	34.8	ug/kg	70-139	30	70-139	30	30			
1,2-Dichloroethane	107-06-2	50	12.9	ug/kg	70-130	30	70-130	30	30			
1,1,1-Trichloroethane	71-55-6	25	8.35	ug/kg	70-130	30	70-130	30	30			
Bromodichloromethane	75-27-4	25	5.45	ug/kg	70-130	30	70-130	30	30			
trans-1,3-Dichloropropene	10061-02-6	50	13.7	ug/kg	70-130	30	70-130	30	30			
cis-1,3-Dichloropropene	10061-01-5	25	7.90	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropene, Total	542-75-6	25	7.90	ug/kg				30	30			
1,3-Dichloropropene, Total	542-75-6	25	7.90	ug/kg				30	30			
1,1-Dichloropropene	563-58-6	25	7.95	ug/kg	70-130	30	70-130	30	30			
Bromoform	75-25-2	200	12.3	ug/kg	70-130	30	70-130	30	30			
1,1,2,2-Tetrachloroethane	79-34-5	25	8.30	ug/kg	70-130	30	70-130	30	30			
Benzene	71-43-2	25	8.30	ug/kg	70-130	30	70-130	30	30			
Toluene	108-88-3	50	27.2	ug/kg	70-130	30	70-130	30	30			
Ethylbenzene	100-41-4	50	7.05	ug/kg	70-130	30	70-130	30	30			
Chloromethane	74-87-3	200	46.6	ug/kg	52-130	30	52-130	30	30			
Bromomethane	74-83-9	100	29.1	ug/kg	57-147	30	57-147	30	30			
Vinyl chloride	75-01-4	50	16.8	ug/kg	67-130	30	67-130	30	30			
Chloroethane	75-00-3	100	22.6	ug/kg	50-151	30	50-151	30	30			
1,1-Dichloroethene	75-35-4	50	11.9	ug/kg	65-135	30	65-135	30	30			
trans-1,2-Dichloroethene	156-60-5	75	6.85	ug/kg	70-130	30	70-130	30	30			
Trichloroethene	79-01-6	25	6.85	ug/kg	70-130	30	70-130	30	30			
1,2-Dichlorobenzene	95-50-1	100	7.20	ug/kg	70-130	30	70-130	30	30			
1,3-Dichlorobenzene	541-73-1	100	7.40	ug/kg	70-130	30	70-130	30	30			
1,4-Dichlorobenzene	106-46-7	100	8.55	ug/kg	70-130	30	70-130	30	30			
Methyl tert butyl ether	1634-04-4	100	10.1	ug/kg	66-130	30	66-130	30	30			
p/m-Xylene	179601-23-1	100	28.0	ug/kg	70-130	30	70-130	30	30			
o-Xylene	95-47-6	50	14.6	ug/kg	70-130	30	70-130	30	30			
Xylene (Total)	1330-20-7	50	14.6	ug/kg				30	30			
Xylene (Total)	1330-20-7	50	14.6	ug/kg				30	30			
cis-1,2-Dichloroethene	156-59-2	50	8.75	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloroethene (total)	540-59-0	50	6.85	ug/kg				30	30			
1,2-Dichloroethene (total)	540-59-0	50	6.85	ug/kg				30	30			
Dibromomethane	74-95-3	100	11.9	ug/kg	70-130	30	70-130	30	30			

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Page: 2

Volatile Organics - EPA 8260C (SOIL-HIGH)

Holding Time: 14 days
Container / Sample Preservation: 1 - Vial Large Septa unpreserved (4oz)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,4-Dichlorobutane	110-56-5	500	11.3	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichloropropane	96-18-4	100	6.35	ug/kg	68-130	30	68-130	30	30			
Styrene	100-42-5	50	9.80	ug/kg	70-130	30	70-130	30	30			
Dichlorodifluoromethane	75-71-8	500	45.8	ug/kg	30-146	30	30-146	30	30			
Acetone	67-64-1	500	241	ug/kg	54-140	30	54-140	30	30			
Carbon disulfide	75-15-0	500	228	ug/kg	59-130	30	59-130	30	30			
2-Butanone	78-93-3	500	111	ug/kg	70-130	30	70-130	30	30			
Vinyl acetate	108-05-4	500	108	ug/kg	70-130	30	70-130	30	30			
4-Methyl-2-pentanone	108-10-1	500	64.0	ug/kg	70-130	30	70-130	30	30			
2-Hexanone	591-78-6	500	59.0	ug/kg	70-130	30	70-130	30	30			
Ethyl methacrylate	97-63-2	500	79.0	ug/kg	70-130	30	70-130	30	30			
Acrylonitrile	107-13-1	200	57.5	ug/kg	70-130	30	70-130	30	30			
Bromochloromethane	74-97-5	100	10.3	ug/kg	70-130	30	70-130	30	30			
Tetrahydrofuran	109-99-9	200	79.5	ug/kg	66-130	30	66-130	30	30			
2,2-Dichloropropane	594-20-7	100	10.1	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromoethane	106-93-4	50	14.0	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropane	142-28-9	100	8.35	ug/kg	69-130	30	69-130	30	30			
1,1,1,2-Tetrachloroethane	630-20-6	25	6.60	ug/kg	70-130	30	70-130	30	30			
Bromobenzene	108-86-1	100	7.25	ug/kg	70-130	30	70-130	30	30			
n-Butylbenzene	104-51-8	50	8.35	ug/kg	70-130	30	70-130	30	30			
sec-Butylbenzene	135-98-8	50	7.30	ug/kg	70-130	30	70-130	30	30			
tert-Butylbenzene	98-06-6	100	5.90	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trichlorobenzene	108-70-3	100	8.65	ug/kg	70-130	30	70-130	30	30			
o-Chlorotoluene	95-49-8	100	9.55	ug/kg	70-130	30	70-130	30	30			
p-Chlorotoluene	106-43-4	100	5.40	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromo-3-chloropropane	96-12-8	150	49.9	ug/kg	68-130	30	68-130	30	30			
Hexachlorobutadiene	87-68-3	200	8.45	ug/kg	67-130	30	67-130	30	30			
Isopropylbenzene	98-82-8	50	5.45	ug/kg	70-130	30	70-130	30	30			
p-Isopropyltoluene	99-87-6	50	5.45	ug/kg	70-130	30	70-130	30	30			
Naphthalene	91-20-3	200	32.5	ug/kg	70-130	30	70-130	30	30			
n-Propylbenzene	103-65-1	50	8.55	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichlorobenzene	87-61-6	100	16.1	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trichlorobenzene	120-82-1	100	13.6	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trimethylbenzene	108-67-8	100	9.65	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trimethylbenzene	95-63-6	100	16.7	ug/kg	70-130	30	70-130	30	30			
trans-1,4-Dichloro-2-butene	110-57-6	250	71.0	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	100	17.1	ug/kg	67-130	30	67-130	30	30			
Methyl Acetate	79-20-9	200	47.5	ug/kg	65-130	30	65-130	30	30			
Ethyl Acetate	141-78-6	500	60.5	ug/kg	70-130	30	70-130	30	30			
Isopropyl Ether	108-20-3	100	10.7	ug/kg	66-130	30	66-130	30	30			
Cyclohexane	110-82-7	500	27.2	ug/kg	70-130	30	70-130	30	30			

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Page: 3

Volatile Organics - EPA 8260C (SOIL-HIGH)

Holding Time: 14 days
Container/Sample Preservation: 1 - Vial Large Septa unpreserved (4oz)

[illegible]

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
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Volatiles Sample Data

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-01
 Client ID : MW-10_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG190312A14
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 12:43
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 13:37
 Dilution Factor : 1
 Analyst : PK
 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	44	2.5	0.70	
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	3.5	0.50	0.19	
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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-01
 Client ID : MW-10_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG190312A14
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 12:43
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 13:37
 Dilution Factor : 1
 Analyst : PK
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-00-3	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
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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	2.4	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-01
 Client ID : MW-10_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG190312A14
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 12:43
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 13:37
 Dilution Factor : 1
 Analyst : PK
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-01
 Client ID : MW-10_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG190312A14
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 12:43
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 13:37
 Dilution Factor : 1
 Analyst : PK
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-02
 Client ID : MW11_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N14
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 09:43
 Date Received : 03/07/19
 Date Analyzed : 03/13/19 23:05
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 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	20	2.5	0.70	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	0.15	1.0	0.14	J
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	120	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	1.3	0.50	0.19	
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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-02
 Client ID : MW11_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N14
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 09:43
 Date Received : 03/07/19
 Date Analyzed : 03/13/19 23:05
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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	96	0.50	0.18	
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	2.9	2.5	0.70	
540-59-0	1,2-Dichloroethene, Total	2.9	2.5	0.70	
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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	1.6	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-02
 Client ID : MW11_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N14
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 09:43
 Date Received : 03/07/19
 Date Analyzed : 03/13/19 23:05
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-02
 Client ID : MW11_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N14
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 09:43
 Date Received : 03/07/19
 Date Analyzed : 03/13/19 23:05
 Dilution Factor : 1
 Analyst : NLK
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-03
 Client ID : MW-7_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N11
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 13:59
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 21:46
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-03
 Client ID : MW-7_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N11
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 13:59
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 21:46
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-03
 Client ID : MW-7_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N11
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 13:59
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 21:46
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client	: Langan Engineering & Environmental	Lab Number	: L1908936
Project Name	: 491 WORTMAN AVE.	Project Number	: 170329301
Lab ID	: L1908936-03	Date Collected	: 03/07/19 13:59
Client ID	: MW-7_030719	Date Received	: 03/07/19
Sample Location	: BROOKLYN, NY	Date Analyzed	: 03/12/19 21:46
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V08190312N11	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-04
 Client ID : MW-9_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N12
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 12:00
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 22:08
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-04
 Client ID : MW-9_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N12
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 12:00
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 22:08
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-04
 Client ID : MW-9_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N12
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 12:00
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 22:08
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-04
 Client ID : MW-9_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N12
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 12:00
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 22:08
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-05
 Client ID : PZ-2_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N13
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 13:20
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 22:30
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 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	0.59	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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-05
 Client ID : PZ-2_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N13
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 13:20
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 22:30
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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	0.29	0.50	0.18	J
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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	2.6	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-05
 Client ID : PZ-2_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N13
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 13:20
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 22:30
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-05
 Client ID : PZ-2_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N13
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 13:20
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 22:30
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-06
 Client ID : MW-3A_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N14
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 14:30
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 22:52
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 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	0.72	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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-06
 Client ID : MW-3A_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N14
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 14:30
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 22:52
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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	0.96	0.50	0.18	
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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	1.7	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-06
 Client ID : MW-3A_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N14
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 14:30
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 22:52
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-06
 Client ID : MW-3A_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N14
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 14:30
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 22:52
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-07
 Client ID : GWFB01_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N06
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 15:10
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 19:56
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-07
 Client ID : GWFB01_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N06
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 15:10
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 19:56
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-07
 Client ID : GWFB01_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N06
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 15:10
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 19:56
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-07
 Client ID : GWFB01_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N06
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 15:10
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 19:56
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-08
 Client ID : GWTB01_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N07
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 00:00
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 20:18
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-08
 Client ID : GWTB01_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N07
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 00:00
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 20:18
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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	1.5	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : L1908936-08
 Client ID : GWTB01_030719
 Sample Location : BROOKLYN, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N07
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : 03/07/19 00:00
 Date Received : 03/07/19
 Date Analyzed : 03/12/19 20:18
 Dilution Factor : 1
 Analyst : MKS
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client	: Langan Engineering & Environmental	Lab Number	: L1908936
Project Name	: 491 WORTMAN AVE.	Project Number	: 170329301
Lab ID	: L1908936-08	Date Collected	: 03/07/19 00:00
Client ID	: GWTB01_030719	Date Received	: 03/07/19
Sample Location	: BROOKLYN, NY	Date Analyzed	: 03/12/19 20:18
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V08190312N07	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : WG1214926-5
 Client ID : WG1214926-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG190312A05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/12/19 09:48
 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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : WG1214926-5
 Client ID : WG1214926-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG190312A05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/12/19 09:48
 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	
75-00-3	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
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : WG1214926-5
 Client ID : WG1214926-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG190312A05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/12/19 09:48
 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	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : WG1214926-5
 Client ID : WG1214926-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : VG190312A05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/12/19 09:48
 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	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : WG1215235-5
 Client ID : WG1215235-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/12/19 19:35
 Dilution Factor : 1
 Analyst : KJD
 Instrument ID : VOA108
 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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : WG1215235-5
 Client ID : WG1215235-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/12/19 19:35
 Dilution Factor : 1
 Analyst : KJD
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : WG1215235-5
 Client ID : WG1215235-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/12/19 19:35
 Dilution Factor : 1
 Analyst : KJD
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : WG1215235-5
 Client ID : WG1215235-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190312N05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/12/19 19:35
 Dilution Factor : 1
 Analyst : KJD
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : WG1215584-5
 Client ID : WG1215584-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/13/19 19:48
 Dilution Factor : 1
 Analyst : KJD
 Instrument ID : VOA108
 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
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : WG1215584-5
 Client ID : WG1215584-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/13/19 19:48
 Dilution Factor : 1
 Analyst : KJD
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
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
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
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	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
108-05-4	Vinyl acetate	ND	5.0	1.0	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



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : WG1215584-5
 Client ID : WG1215584-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/13/19 19:48
 Dilution Factor : 1
 Analyst : KJD
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	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
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Lab ID : WG1215584-5
 Client ID : WG1215584-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260C
 Lab File ID : V08190313N05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L1908936
 Project Number : 170329301
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/13/19 19:48
 Dilution Factor : 1
 Analyst : KJD
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A14.D
 Acq On : 12 Mar 2019 13:37
 Operator : GONZO:PK
 Sample : 11908936-01,31,10,10,,a
 Misc : WG1214926,ICAL15541 (Sig #1); WG,ICAL15541 (Sig #2)
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 12 20:26:51 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190312A\VG190312A02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.545	96	353556	10.000	ug/L	0.00
Standard Area 1 = 385122			Recovery =	91.80%		
59) Chlorobenzene-d5	10.127	117	259274	10.000	ug/L	0.00
Standard Area 1 = 297531			Recovery =	87.14%		
79) 1,4-Dichlorobenzene-d4	12.703	152	122108	10.000	ug/L	0.00
Standard Area 1 = 151374			Recovery =	80.67%		
System Monitoring Compounds						
36) Dibromofluoromethane	5.714	113	83102	9.304	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	93.04%		
43) 1,2-Dichloroethane-d4	6.261	65	95791	10.890	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	108.90%		
60) Toluene-d8	8.257	98	348700	10.946	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	109.46%		
83) 4-Bromofluorobenzene	11.538	95	115068	11.166	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	111.66%		
Target Compounds						
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	2.603	94	197	N.D.		
6) Chloroethane	2.672	64	107	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	3.396	76	236	N.D.		
15) Methylene chloride	3.953	84	231	N.D.		
17) Acetone	4.012	43	2209	2.366	ug/L	# 78
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
25) Acrylonitrile	0.000		0	N.D.		
27) Vinyl acetate	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	5.264	96	422	N.D.		
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
32) Chloroform	5.528	83	585259	44.278	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A14.D
 Acq On : 12 Mar 2019 13:37
 Operator : GONZO:PK
 Sample : 11908936-01,31,10,10,,a
 Misc : WG1214926,ICAL15541 (Sig #1); WG,ICAL15541 (Sig #2)
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 12 20:26:51 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190312A\VG190312A02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0	N.D.	d	
37) 1,1,1-Trichloroethane	0.000		0	N.D.		
39) 2-Butanone	0.000		0	N.D.		
40) 1,1-Dichloropropene	0.000		0	N.D.		
41) Benzene	0.000		0	N.D.		
44) 1,2-Dichloroethane	0.000		0	N.D.	d	
48) Trichloroethene	0.000		0	N.D.	d	
50) Dibromomethane	0.000		0	N.D.	d	
51) 1,2-Dichloropropane	0.000		0	N.D.		
54) Bromodichloromethane	7.347	83	35146	3.496	ug/L	99
57) 1,4-Dioxane	0.000		0	N.D.		
58) cis-1,3-Dichloropropene	0.000		0	N.D.		
61) Toluene	8.325	92	570	N.D.		
62) 4-Methyl-2-pentanone	0.000		0	N.D.		
63) Tetrachloroethene	8.765	166	987	0.105	ug/L #	78
65) trans-1,3-Dichloropropene	0.000		0	N.D.		
68) 1,1,2-Trichloroethane	0.000		0	N.D.		
69) Chlorodibromomethane	9.206	129	837	0.125	ug/L #	86
70) 1,3-Dichloropropane	0.000		0	N.D.		
71) 1,2-Dibromoethane	0.000		0	N.D.		
72) 2-Hexanone	0.000		0	N.D.		
73) Chlorobenzene	0.000		0	N.D.		
74) Ethylbenzene	10.176	91	139	N.D.		
75) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
76) p/m Xylene	10.352	106	343	N.D.		
77) o Xylene	0.000		0	N.D.		
78) Styrene	0.000		0	N.D.		
80) Bromoform	0.000		0	N.D.		
82) Isopropylbenzene	0.000		0	N.D.		
84) Bromobenzene	0.000		0	N.D.		
85) n-Propylbenzene	11.538	91	476	N.D.		
87) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
88) 4-Ethyltoluene	0.000		0	N.D.		
89) 2-Chlorotoluene	0.000		0	N.D.		
90) 1,3,5-Trimethylbenzene	0.000		0	N.D.		
91) 1,2,3-Trichloropropane	0.000		0	N.D.		
92) trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
93) 4-Chlorotoluene	0.000		0	N.D.		
94) tert-Butylbenzene	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A14.D
 Acq On : 12 Mar 2019 13:37
 Operator : GONZO:PK
 Sample : l1908936-01,31,10,10,,a
 Misc : WG1214926,ICAL15541 (Sig #1); WG,ICAL15541 (Sig #2)
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 12 20:26:51 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190312A\VG190312A02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	12.302	105	324		N.D.	
98)	sec-Butylbenzene	12.302	105	324		N.D.	
99)	p-Isopropyltoluene	0.000		0		N.D.	
100)	1,3-Dichlorobenzene	12.723	146	103		N.D.	
101)	1,4-Dichlorobenzene	12.723	146	103		N.D.	
102)	p-Diethylbenzene	0.000		0		N.D.	
103)	n-Butylbenzene	0.000		0		N.D.	
104)	1,2-Dichlorobenzene	0.000		0		N.D.	
105)	1,2,4,5-Tetramethylben...	0.000		0		N.D.	
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	0.000		0		N.D.	
110)	Naphthalene	0.000		0		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

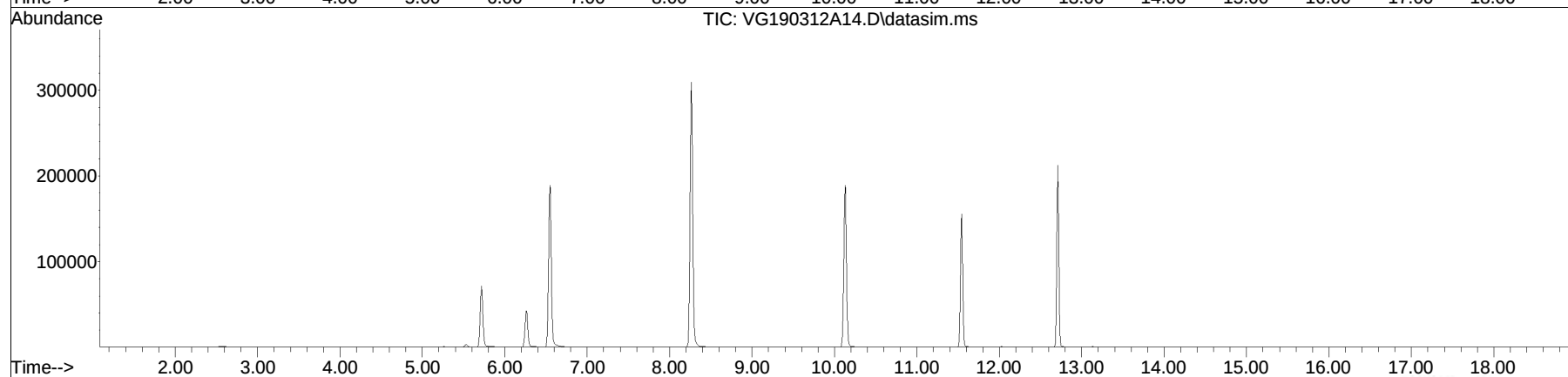
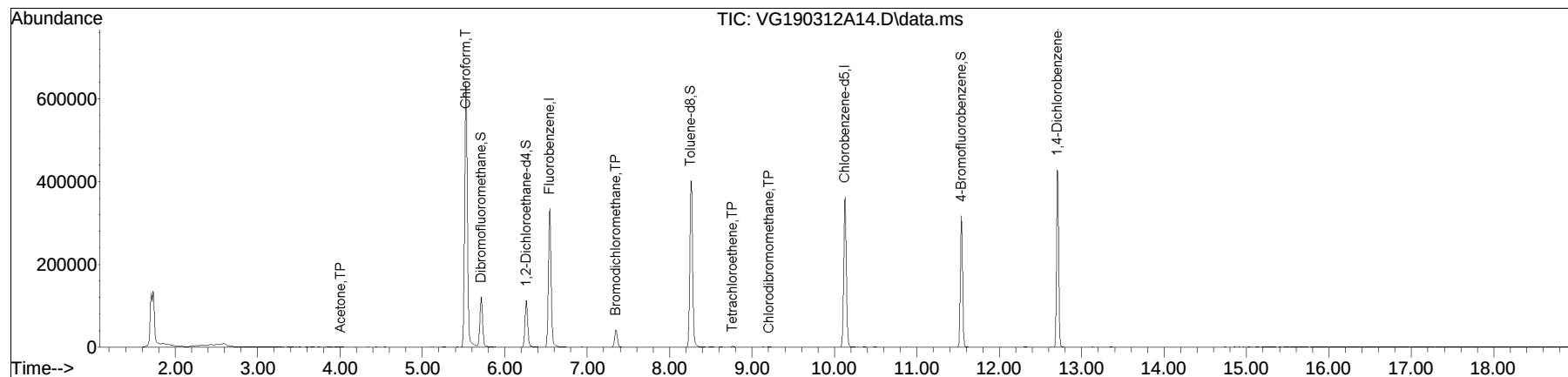
(#) = qualifier out of range (m) = manual integration (+) = signals summed

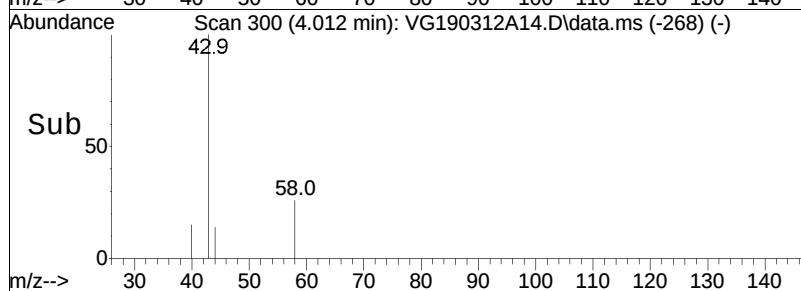
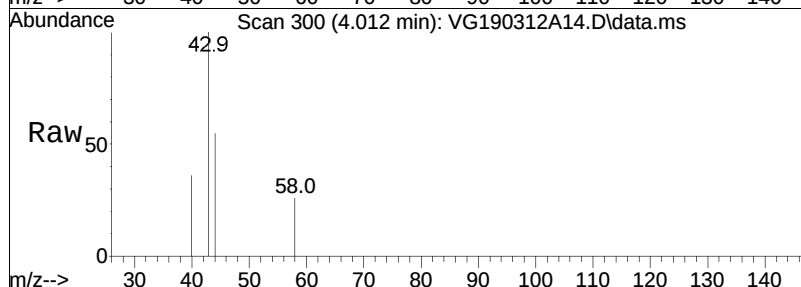
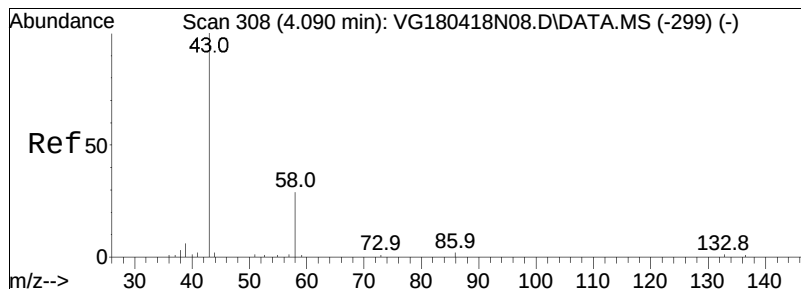
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A14.D
 Acq On : 12 Mar 2019 13:37
 Operator : GONZO:PK
 Sample : l1908936-01,31,10,10,,a
 Misc : WG1214926,ICAL15541 (Sig #1); WG,ICAL15541 (Sig #2)
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 12 20:26:51 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

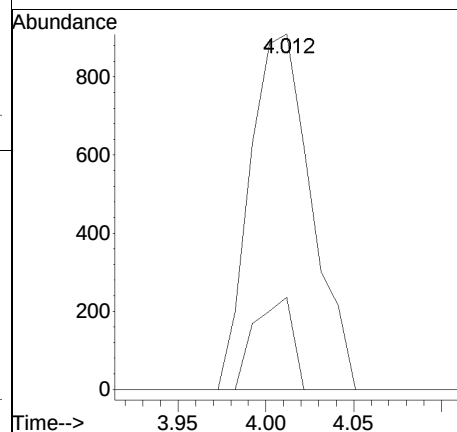
Sub List : 8260-NYTCL - Megamix plus Diox0312A\VG190312A02.D•

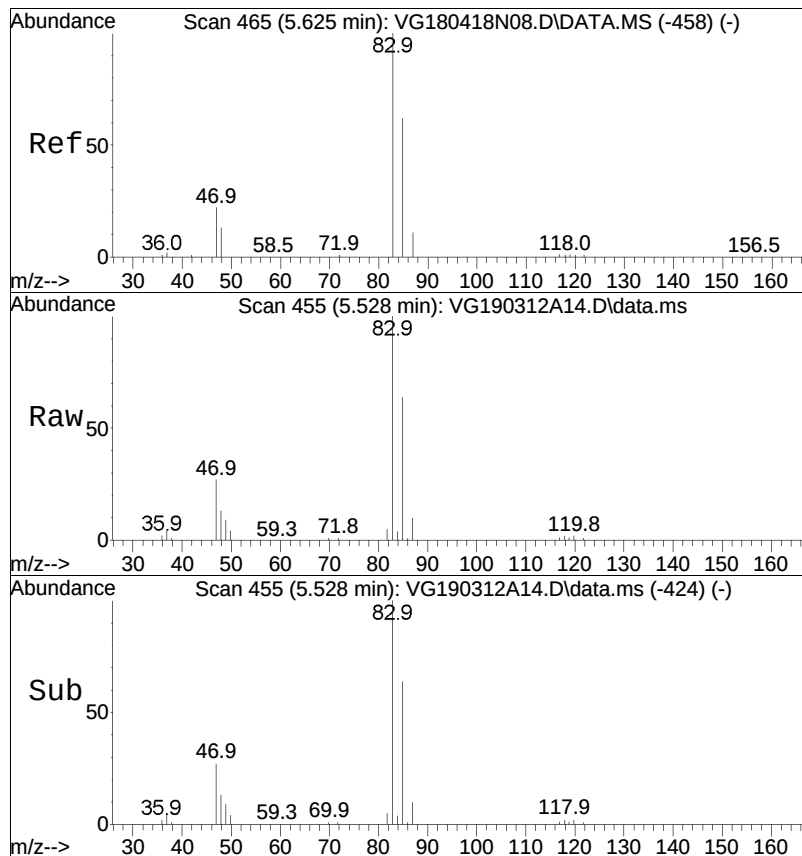




#17
 Acetone
 Concen: 2.37 ug/L
 RT: 4.012 min Scan# 300
 Delta R.T. 0.010 min
 Lab File: VG190312A14.D
 Acq: 12 Mar 2019 13:37

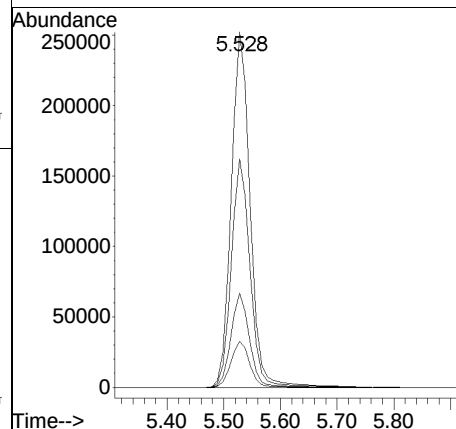
Tgt Ion: 43 Resp: 2209
 Ion Ratio Lower Upper
 43 100
 58 16.1 22.2 33.4#

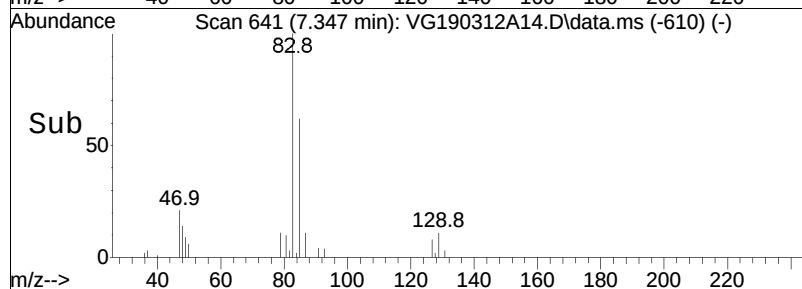
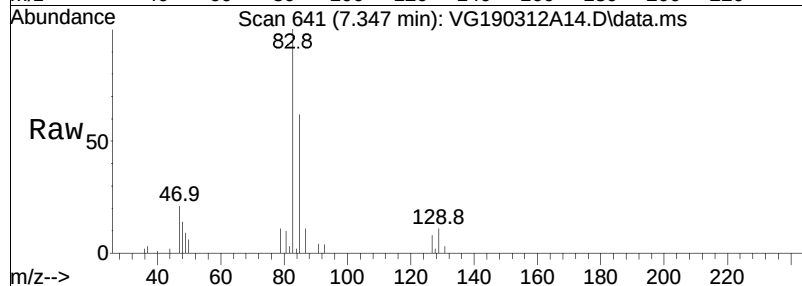
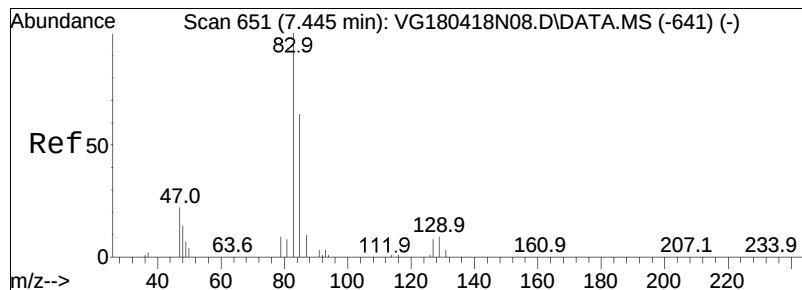




#32
 Chloroform
 Concen: 44.28 ug/L
 RT: 5.528 min Scan# 455
 Delta R.T. -0.000 min
 Lab File: VG190312A14.D
 Acq: 12 Mar 2019 13:37

Tgt Ion:	83	Resp:	585259
Ion Ratio	Lower	Upper	
83	100		
85	63.9	41.4	86.0
47	26.3	15.1	31.3
48	13.1	7.7	16.1





#54

Bromodichloromethane

Concen: 3.50 ug/L

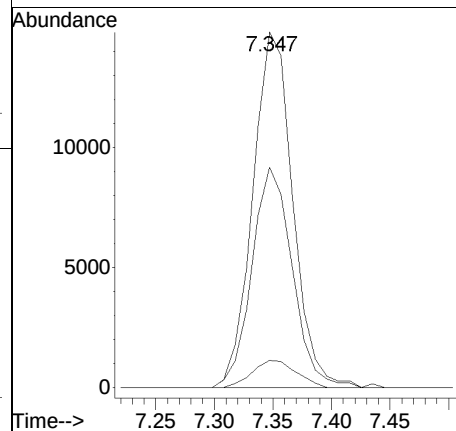
RT: 7.347 min Scan# 641

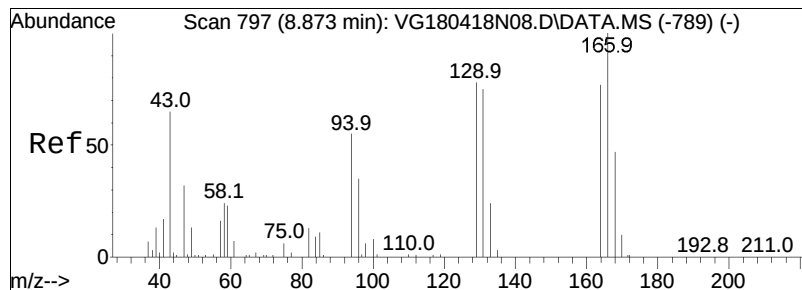
Delta R.T. 0.000 min

Lab File: VG190312A14.D

Acq: 12 Mar 2019 13:37

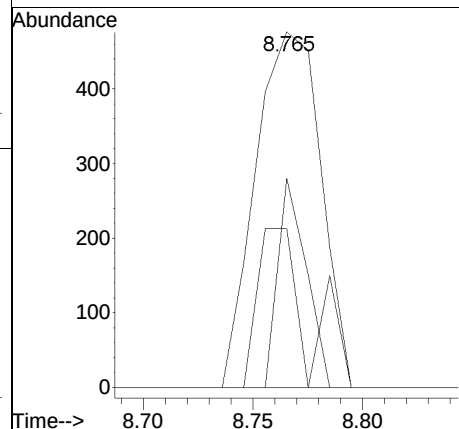
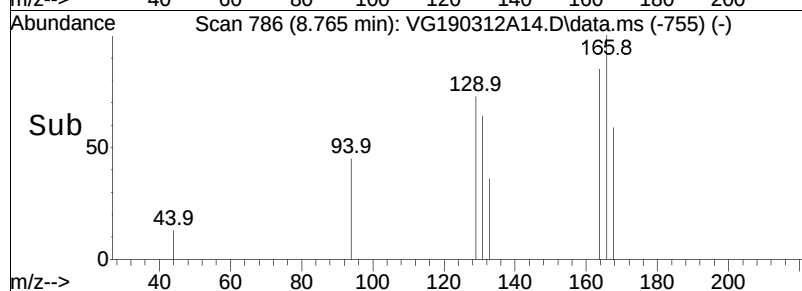
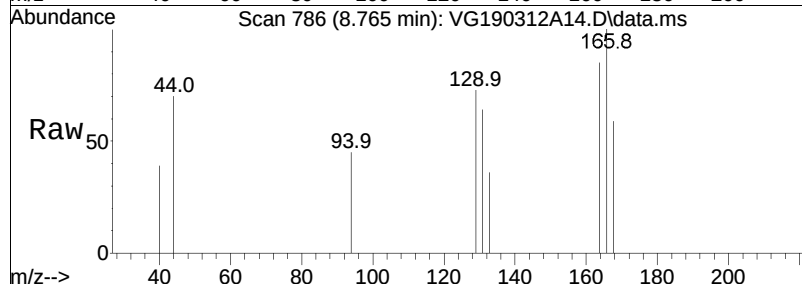
Tgt	Ion: 83	Resp:	35146
Ion	Ratio	Lower	Upper
83	100		
85	62.8	50.8	76.2
127	8.3	7.4	11.2

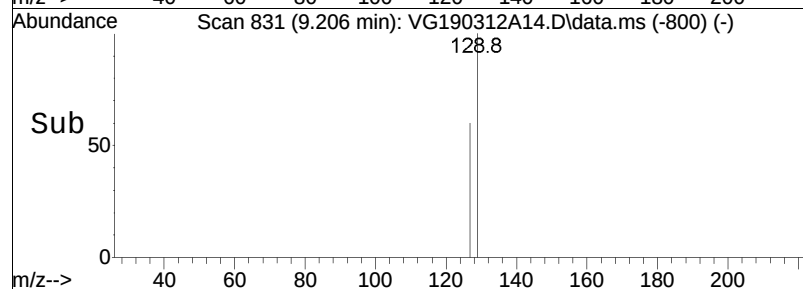
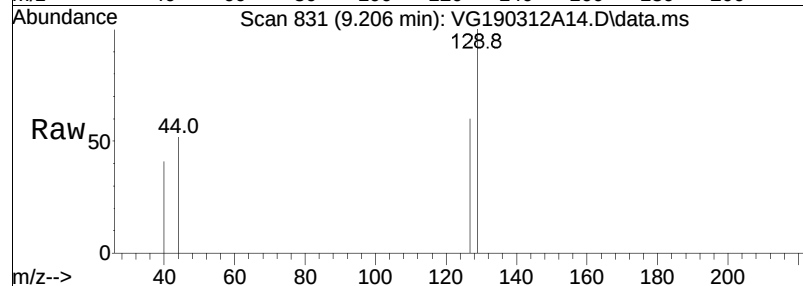
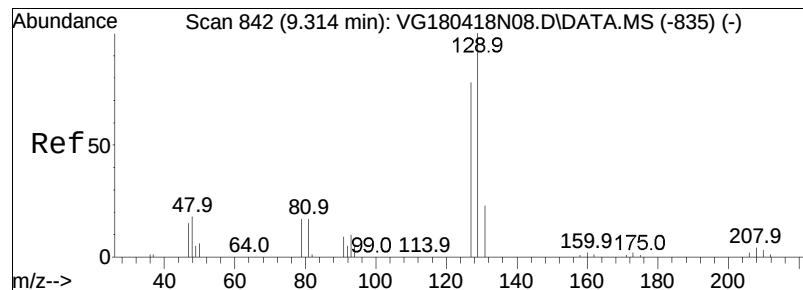




#63
 Tetrachloroethene
 Concen: 0.11 ug/L
 RT: 8.765 min Scan# 786
 Delta R.T. 0.000 min
 Lab File: VG190312A14.D
 Acq: 12 Mar 2019 13:37

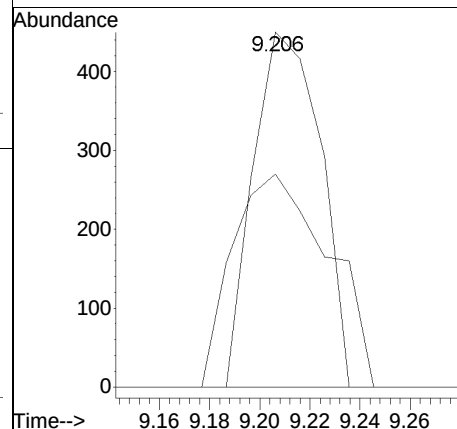
Tgt	Ion	Ratio	Resp	Lower	Upper
166	100		987		
168	25.6	27.3	67.3#		
94	34.3	20.5	60.5		





#69
 Chlorodibromomethane
 Concen: 0.13 ug/L
 RT: 9.206 min Scan# 831
 Delta R.T. 0.000 min
 Lab File: VG190312A14.D
 Acq: 12 Mar 2019 13:37

Tgt Ion	Ratio	Lower	Upper
129	100		
81	0.0	0.0	35.0
127	85.7	57.1	97.1



Manual Integration Report

Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190312A14.D Operator : GONZO:PK
Date Inj'd : 3/12/2019 13:37 Instrument : Gonzo
Sample : l1908936-01,31,10,10,,a Quant Date : 3/12/2019 7:46 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N06.D
 Acq On : 12 Mar 2019 7:56 pm
 Operator : VOA108:MKS
 Sample : 11908936-07,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 13 13:46:14 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.553	96	278766	10.000	ug/L	0.00
Standard Area 1 = 304926			Recovery =	91.42%		
59) Chlorobenzene-d5	8.526	117	184746	10.000	ug/L	0.00
Standard Area 1 = 209940			Recovery =	88.00%		
79) 1,4-Dichlorobenzene-d4	10.009	152	75062	10.000	ug/L	0.00
Standard Area 1 = 100075			Recovery =	75.01%		
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	75988	10.672	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	106.72%		
43) 1,2-Dichloroethane-d4	5.207	65	88912	11.110	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	111.10%		
60) Toluene-d8	7.240	98	246820	9.748	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	97.48%		
83) 4-Bromofluorobenzene	9.340	95	79095	10.769	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	107.69%		
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.		
5) Bromomethane	1.362	94	476	0.094	ug/L	86
6) Chloroethane	1.401	64	125	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	1.917	76	260	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	2.461	43	1375M1	1.269	ug/L	
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
25) Acrylonitrile	0.000		0	N.D.		
27) Vinyl acetate	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N06.D
 Acq On : 12 Mar 2019 7:56 pm
 Operator : VOA108:MKS
 Sample : 11908936-07,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 13 13:46:14 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0		N.D.	
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
40) 1,1-Dichloropropene	0.000		0		N.D.	
41) Benzene	5.032	78	56		N.D.	
44) 1,2-Dichloroethane	5.291	62	55		N.D.	
48) Trichloroethene	5.648	95	95		N.D.	
50) Dibromomethane	0.000		0		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.	
61) Toluene	7.285	92	297		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	0.000		0		N.D.	
65) trans-1,3-Dichloropropene	7.709	75	69		N.D.	
68) 1,1,2-Trichloroethane	0.000		0		N.D.	
69) Chlorodibromomethane	0.000		0		N.D.	
70) 1,3-Dichloropropane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	0.000		0		N.D.	d
73) Chlorobenzene	8.537	112	541		N.D.	
74) Ethylbenzene	8.576	91	260		N.D.	
75) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
76) p/m Xylene	8.685	106	100		N.D.	
77) o Xylene	8.969	106	59		N.D.	
78) Styrene	9.008	104	58		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	9.178	105	216		N.D.	
84) Bromobenzene	0.000		0		N.D.	
85) n-Propylbenzene	9.435	91	558		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
88) 4-Ethyltoluene	9.508	105	235		N.D.	
89) 2-Chlorotoluene	9.519	91	155		N.D.	
90) 1,3,5-Trimethylbenzene	9.508	105	235		N.D.	
91) 1,2,3-Trichloropropane	0.000		0		N.D.	
92) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
93) 4-Chlorotoluene	9.619	91	128		N.D.	
94) tert-Butylbenzene	0.000		0		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N06.D
 Acq On : 12 Mar 2019 7:56 pm
 Operator : VOA108:MKS
 Sample : l1908936-07,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 13 13:46:14 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	9.786	105	95		N.D.	
98)	sec-Butylbenzene	9.786	105	95		N.D.	
99)	p-Isopropyltoluene	9.934	119	162		N.D.	
100)	1,3-Dichlorobenzene	9.962	146	138		N.D.	
101)	1,4-Dichlorobenzene	10.021	146	753		N.D.	
102)	p-Diethylbenzene	10.146	119	55		N.D.	
103)	n-Butylbenzene	10.177	91	424		N.D.	
104)	1,2-Dichlorobenzene	10.260	146	294		N.D.	
105)	1,2,4,5-Tetramethylben...	0.000		0		N.D.	
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	0.000		0		N.D.	
110)	Naphthalene	11.281	128	54		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

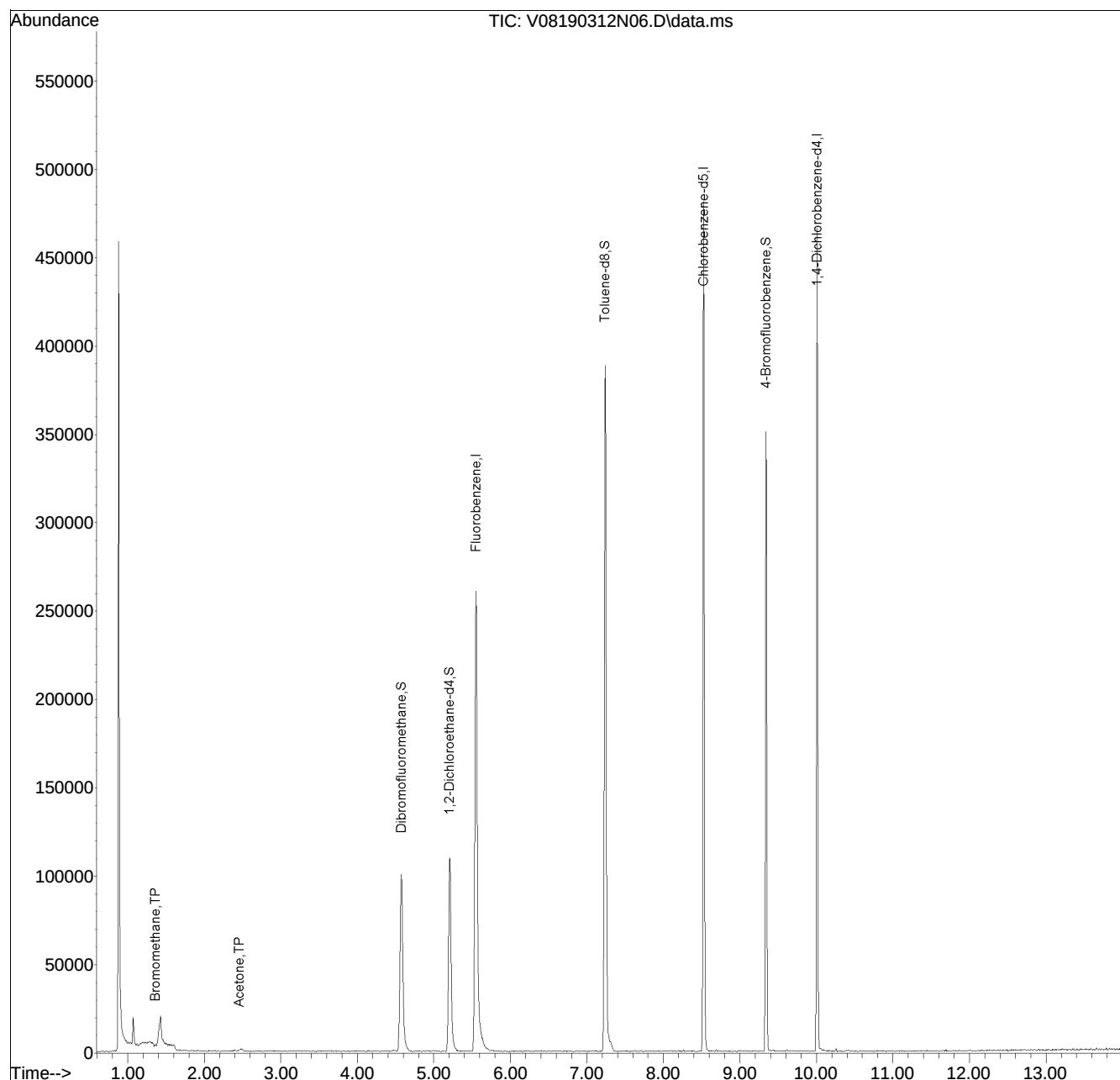
(#) = qualifier out of range (m) = manual integration (+) = signals summed

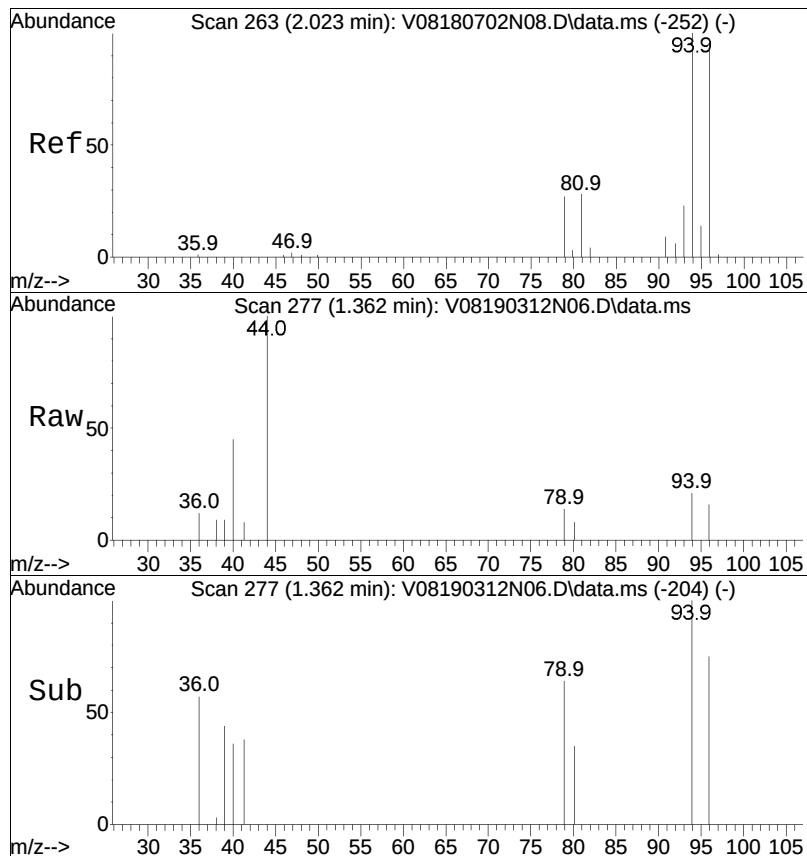
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N06.D
 Acq On : 12 Mar 2019 7:56 pm
 Operator : VOA108:MKS
 Sample : 11908936-07,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 13 13:46:14 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

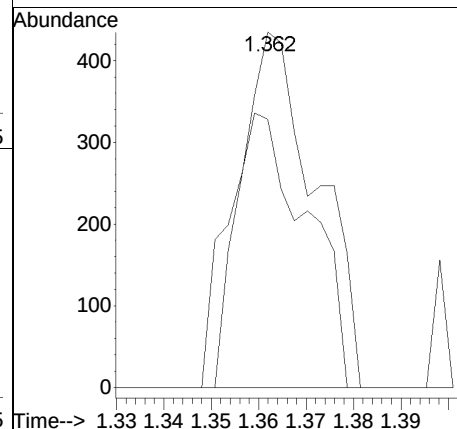
Sub List : 8260-NYTCL - Megamix plus Diox90312N\V08190312N02.D•

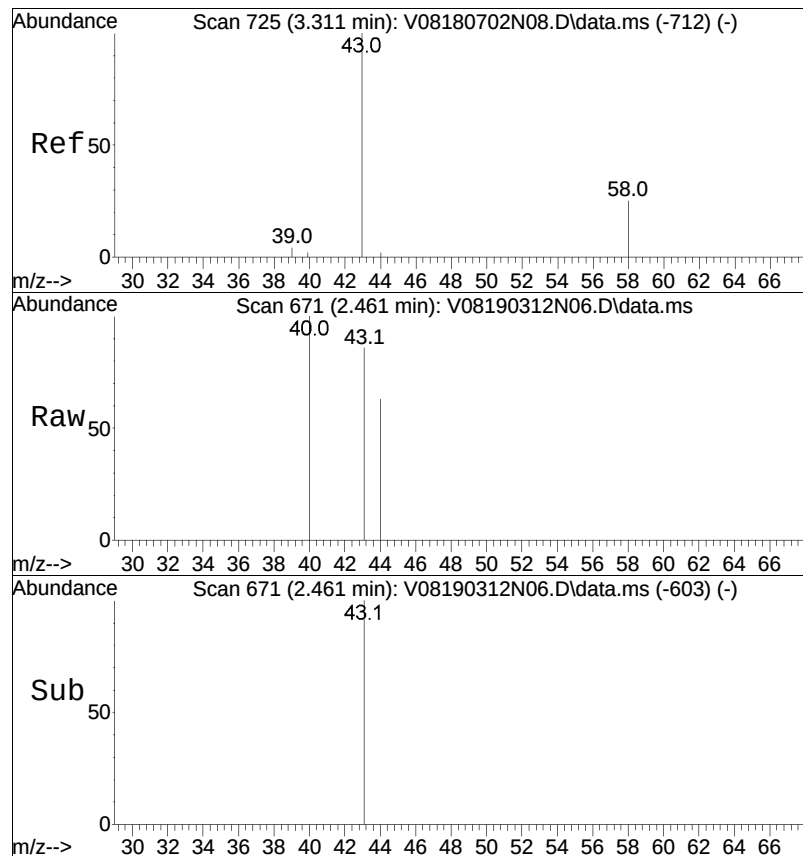




#5
 Bromomethane
 Concen: 0.09 ug/L
 RT: 1.362 min Scan# 277
 Delta R.T. 0.003 min
 Lab File: V08190312N06.D
 Acq: 12 Mar 2019 7:56 pm

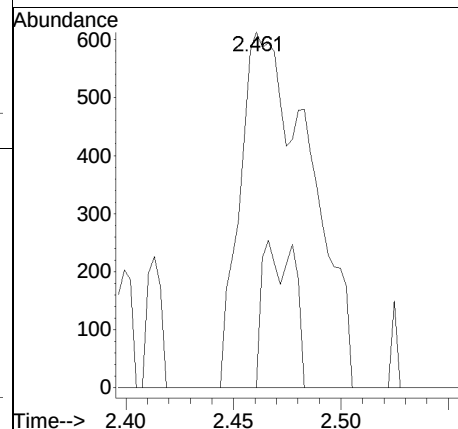
Tgt Ion: 94 Resp: 476
 Ion Ratio Lower Upper
 94 100
 96 82.1 75.6 115.6





#17
 Acetone
 Concen: 1.27 ug/L M1
 RT: 2.461 min Scan# 671
 Delta R.T. -0.011 min
 Lab File: V08190312N06.D
 Acq: 12 Mar 2019 7:56 pm

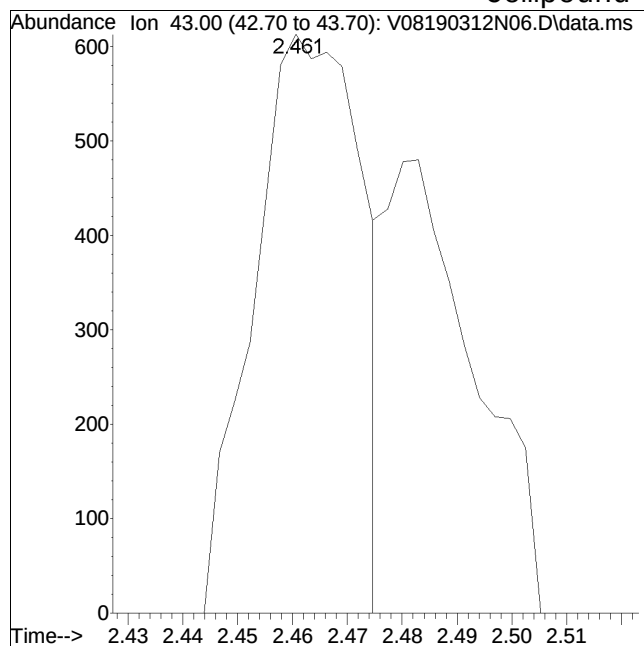
Tgt Ion:	43	58	Ratio	100	10.6	Resp:	1375	Lower	Upper
								24.2	36.4#



Manual Integration Report

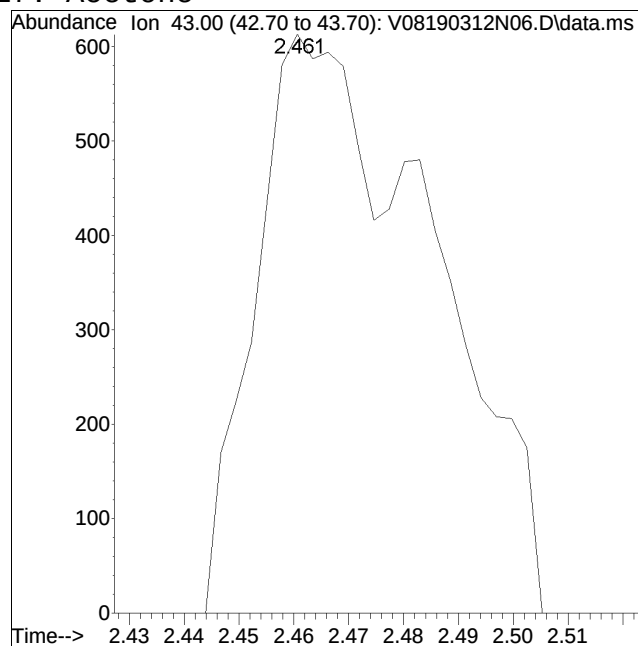
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190312N06.D Operator : VOA108:MKS
Date Inj'd : 3/12/2019 7:56 pm Instrument : VOA 108
Sample : l1908936-07,31,10,10,,a Quant Date : 3/13/2019 1:21 pm

Compound #17: Acetone



Original Peak Response = 832

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



Manual Peak Response = 1375 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N07.D
 Acq On : 12 Mar 2019 8:18 pm
 Operator : VOA108:MKS
 Sample : 11908936-08,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 13 13:46:46 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	270539	10.000	ug/L	0.00
Standard Area 1 = 304926			Recovery =	88.72%		
59) Chlorobenzene-d5	8.526	117	181203	10.000	ug/L	0.00
Standard Area 1 = 209940			Recovery =	86.31%		
79) 1,4-Dichlorobenzene-d4	10.010	152	75021	10.000	ug/L	0.00
Standard Area 1 = 100075			Recovery =	74.96%		
System Monitoring Compounds						
36) Dibromofluoromethane	4.574	113	74212	10.740	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	107.40%		
43) 1,2-Dichloroethane-d4	5.208	65	88071	11.339	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	113.39%		
60) Toluene-d8	7.240	98	245859	9.900	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	99.00%		
83) 4-Bromofluorobenzene	9.340	95	78454	10.687	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	106.87%		
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	1.094	50	100	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	1.368	94	419	0.086	ug/L	85
6) Chloroethane	1.412	64	249	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	2.469	43	1621M1	1.541	ug/L	
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
25) Acrylonitrile	0.000		0	N.D.		
27) Vinyl acetate	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N07.D
 Acq On : 12 Mar 2019 8:18 pm
 Operator : VOA108:MKS
 Sample : l1908936-08,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 13 13:46:46 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0		N.D.	
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	d
40) 1,1-Dichloropropene	0.000		0		N.D.	
41) Benzene	5.043	78	53		N.D.	
44) 1,2-Dichloroethane	5.286	62	178		N.D.	
48) Trichloroethene	5.696	95	103		N.D.	
50) Dibromomethane	0.000		0		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.	
61) Toluene	7.296	92	120		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	0.000		0		N.D.	
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.	
70) 1,3-Dichloropropane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	8.520	43	154		N.D.	
73) Chlorobenzene	8.540	112	467		N.D.	
74) Ethylbenzene	8.576	91	155		N.D.	
75) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
76) p/m Xylene	0.000		0		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	8.997	104	27		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	9.176	105	25		N.D.	
84) Bromobenzene	0.000		0		N.D.	
85) n-Propylbenzene	9.432	91	173		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
88) 4-Ethyltoluene	9.508	105	135		N.D.	
89) 2-Chlorotoluene	9.513	91	202		N.D.	
90) 1,3,5-Trimethylbenzene	9.508	105	135		N.D.	
91) 1,2,3-Trichloropropane	0.000		0		N.D.	
92) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
93) 4-Chlorotoluene	9.622	91	289		N.D.	
94) tert-Butylbenzene	9.742	119	87		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N07.D
 Acq On : 12 Mar 2019 8:18 pm
 Operator : VOA108:MKS
 Sample : l1908936-08,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 13 13:46:46 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	9.786	105	27		N.D.	
98)	sec-Butylbenzene	9.842	105	66		N.D.	
99)	p-Isopropyltoluene	9.742	119	59		N.D.	
100)	1,3-Dichlorobenzene	9.962	146	212		N.D.	
101)	1,4-Dichlorobenzene	10.021	146	486		N.D.	
102)	p-Diethylbenzene	0.000		0		N.D.	
103)	n-Butylbenzene	10.182	91	181		N.D.	
104)	1,2-Dichlorobenzene	10.263	146	376		N.D.	
105)	1,2,4,5-Tetramethylben...	0.000		0		N.D.	
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	0.000		0		N.D.	
110)	Naphthalene	0.000		0		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

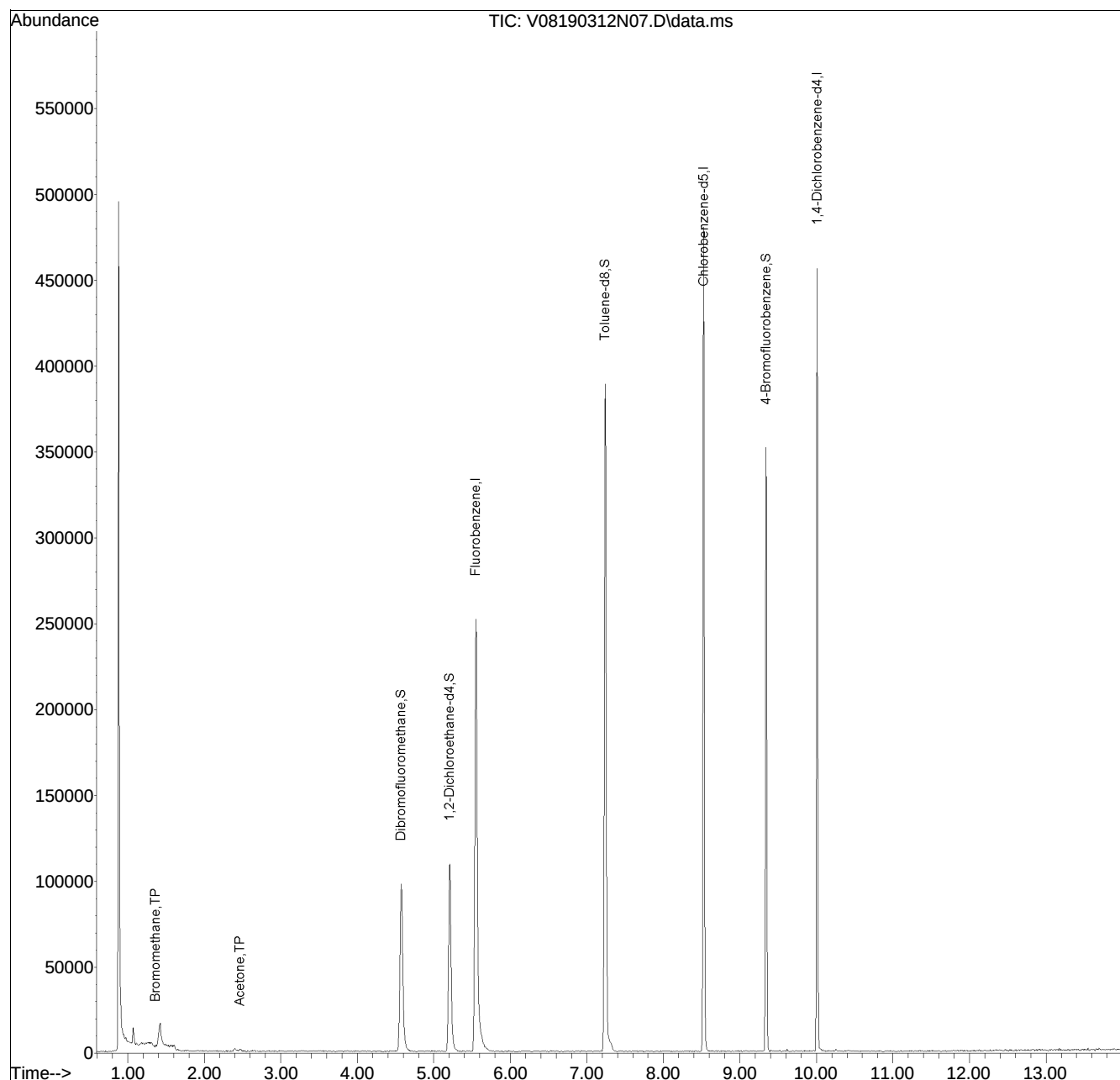
(#) = qualifier out of range (m) = manual integration (+) = signals summed

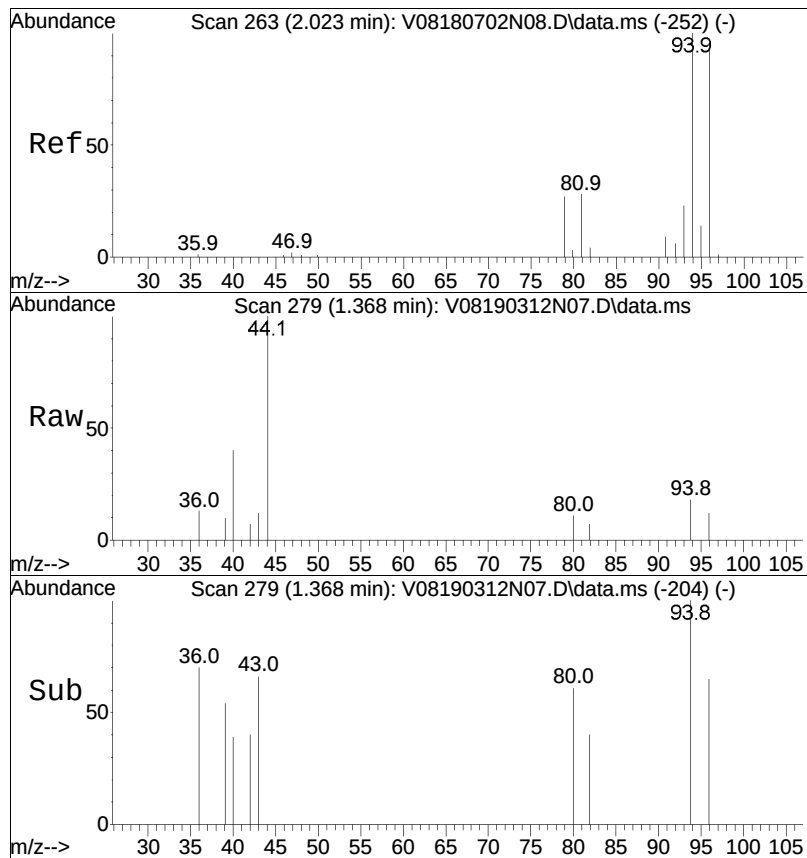
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N07.D
 Acq On : 12 Mar 2019 8:18 pm
 Operator : VOA108:MKS
 Sample : 11908936-08,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 13 13:46:46 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

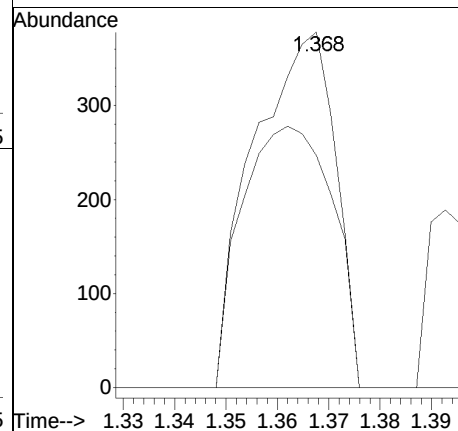
Sub List : 8260-NYTCL - Megamix plus Diox90312N\V08190312N02.D•

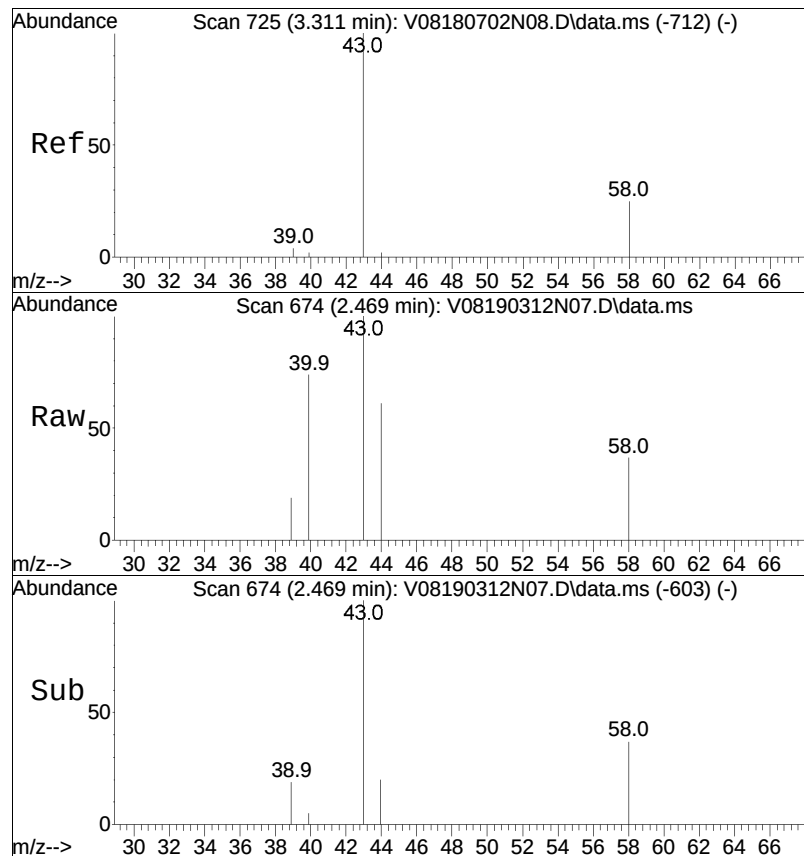




#5
 Bromomethane
 Concen: 0.09 ug/L
 RT: 1.368 min Scan# 279
 Delta R.T. 0.009 min
 Lab File: V08190312N07.D
 Acq: 12 Mar 2019 8:18 pm

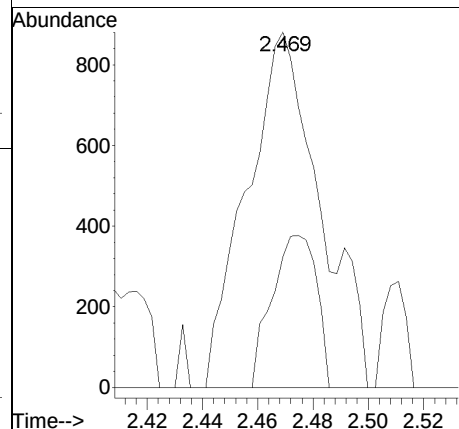
Tgt Ion: 94 Resp: 419
 Ion Ratio Lower Upper
 94 100
 96 81.4 75.6 115.6





#17
 Acetone
 Concen: 1.54 ug/L M1
 RT: 2.469 min Scan# 674
 Delta R.T. -0.003 min
 Lab File: V08190312N07.D
 Acq: 12 Mar 2019 8:18 pm

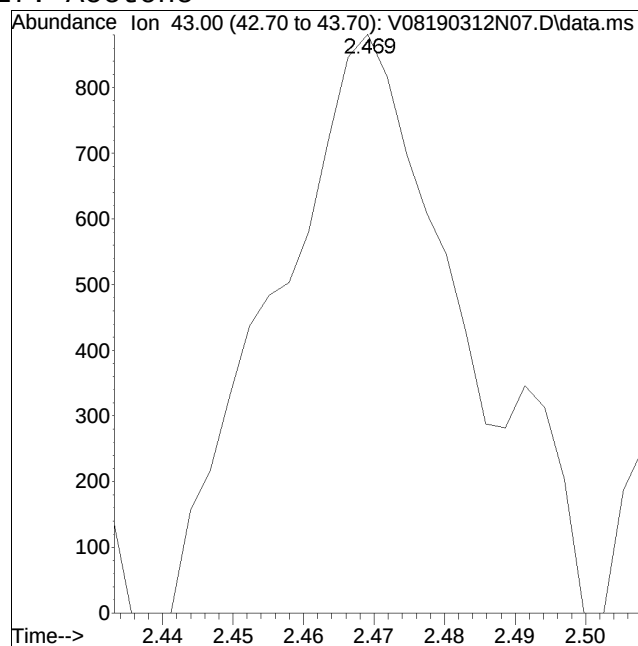
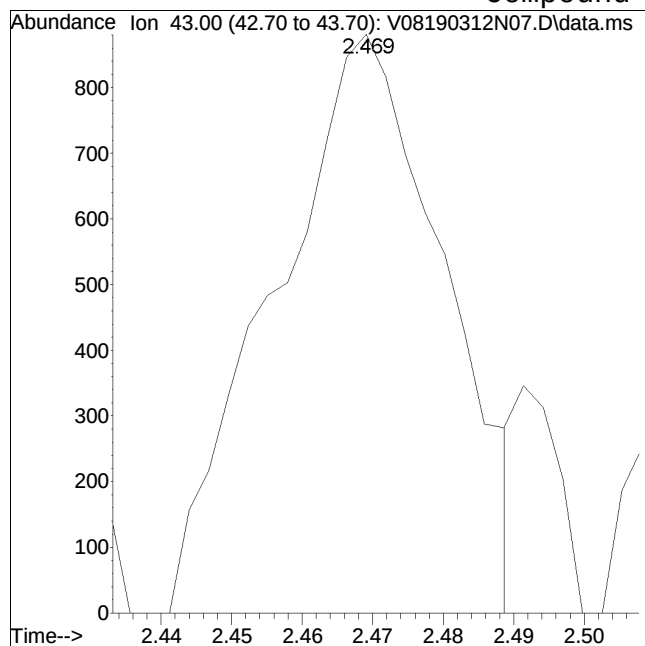
Tgt Ion	Ratio	Lower	Upper
43	100		
58	26.2	24.2	36.4



Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190312N07.D Operator : VOA108:MKS
Date Inj'd : 3/12/2019 8:18 pm Instrument : VOA 108
Sample : l1908936-08,31,10,10,,a Quant Date : 3/13/2019 1:21 pm

Compound #17: Acetone



Original Peak Response = 1476

Manual Peak Response = 1621 M1

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N11.D
 Acq On : 12 Mar 2019 9:46 pm
 Operator : VOA108:MKS
 Sample : 11908936-03,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 13 14:03:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.553	96	278487	10.000	ug/L	0.00
Standard Area 1 = 304926			Recovery =	91.33%		
59) Chlorobenzene-d5	8.526	117	193390	10.000	ug/L	0.00
Standard Area 1 = 209940			Recovery =	92.12%		
79) 1,4-Dichlorobenzene-d4	10.010	152	82248	10.000	ug/L	0.00
Standard Area 1 = 100075			Recovery =	82.19%		
System Monitoring Compounds						
36) Dibromofluoromethane	4.574	113	77833	10.942	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	109.42%		
43) 1,2-Dichloroethane-d4	5.208	65	90073	11.266	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	112.66%		
60) Toluene-d8	7.240	98	250385	9.446	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	94.46%		
83) 4-Bromofluorobenzene	9.340	95	83056	10.320	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	103.20%		
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	1.097	50	310	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	1.359	94	460	0.091	ug/L	99
6) Chloroethane	1.443	64	96	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	1.917	76	28	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	0.000		0	N.D.	d	
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
25) Acrylonitrile	0.000		0	N.D.		
27) Vinyl acetate	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N11.D
 Acq On : 12 Mar 2019 9:46 pm
 Operator : VOA108:MKS
 Sample : l1908936-03,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 13 14:03:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0		N.D.	
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
40) 1,1-Dichloropropene	0.000		0		N.D.	
41) Benzene	5.040	78	889		N.D.	
44) 1,2-Dichloroethane	5.283	62	25		N.D.	
48) Trichloroethene	5.729	95	413		N.D.	
50) Dibromomethane	0.000		0		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.	
61) Toluene	7.288	92	475		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	7.650	166	87		N.D.	
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.	
70) 1,3-Dichloropropane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	0.000		0		N.D.	d
73) Chlorobenzene	8.534	112	1047		N.D.	
74) Ethylbenzene	8.576	91	325		N.D.	
75) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
76) p/m Xylene	0.000		0		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	
84) Bromobenzene	0.000		0		N.D.	
85) n-Propylbenzene	9.435	91	143		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
88) 4-Ethyltoluene	0.000		0		N.D.	
89) 2-Chlorotoluene	9.435	91	143		N.D.	
90) 1,3,5-Trimethylbenzene	0.000		0		N.D.	
91) 1,2,3-Trichloropropane	0.000		0		N.D.	
92) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
93) 4-Chlorotoluene	9.619	91	105		N.D.	
94) tert-Butylbenzene	9.929	119	62		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N11.D
 Acq On : 12 Mar 2019 9:46 pm
 Operator : VOA108:MKS
 Sample : l1908936-03,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 13 14:03:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	9.786	105	85		N.D.	
98)	sec-Butylbenzene	9.786	105	85		N.D.	
99)	p-Isopropyltoluene	9.929	119	62		N.D.	
100)	1,3-Dichlorobenzene	9.973	146	90		N.D.	
101)	1,4-Dichlorobenzene	10.018	146	545		N.D.	
102)	p-Diethylbenzene	0.000		0		N.D.	
103)	n-Butylbenzene	10.177	91	62		N.D.	
104)	1,2-Dichlorobenzene	10.261	146	605		N.D.	
105)	1,2,4,5-Tetramethylben...	0.000		0		N.D.	
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	0.000		0		N.D.	
110)	Naphthalene	11.273	128	294		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

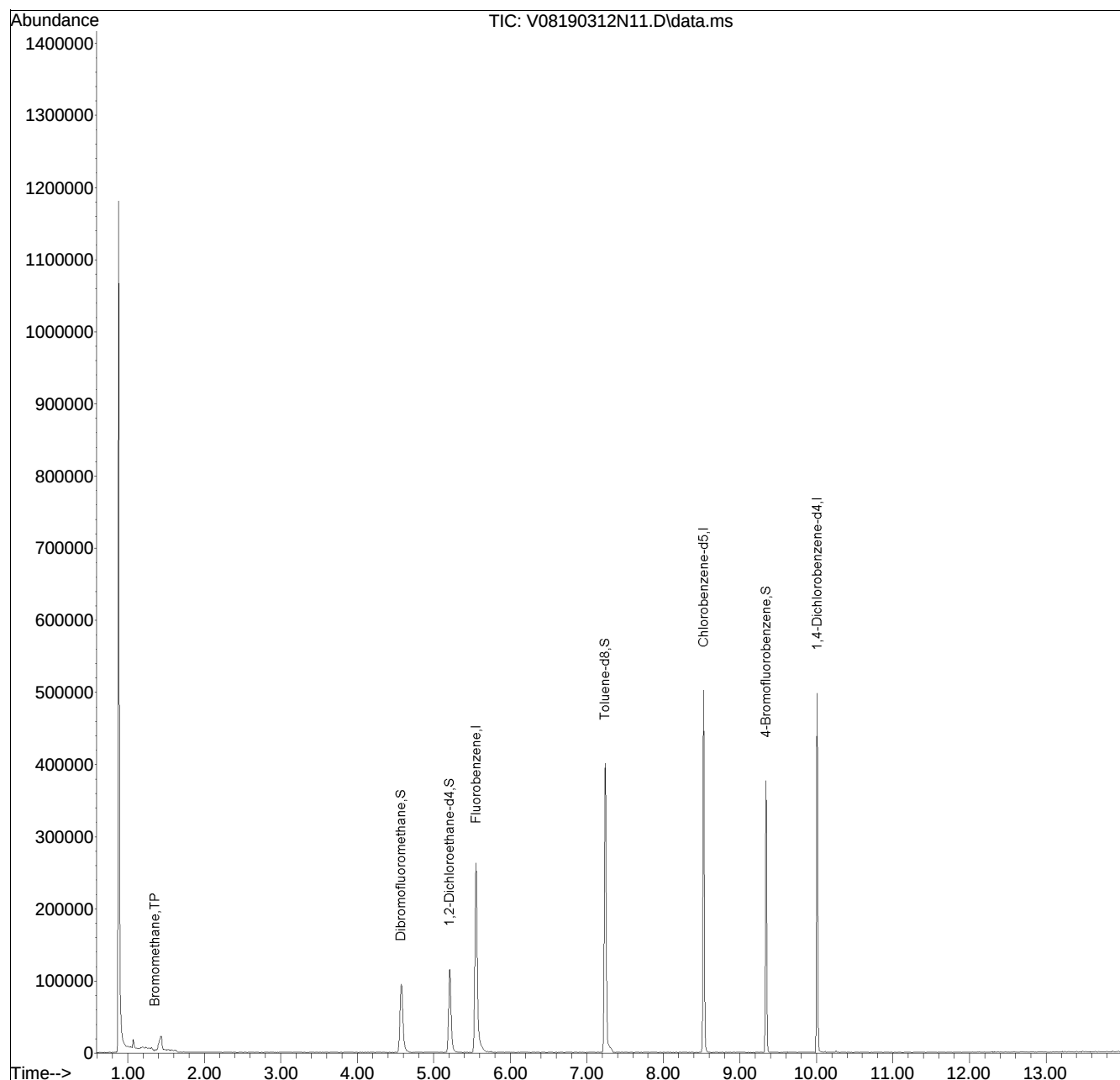
(#) = qualifier out of range (m) = manual integration (+) = signals summed

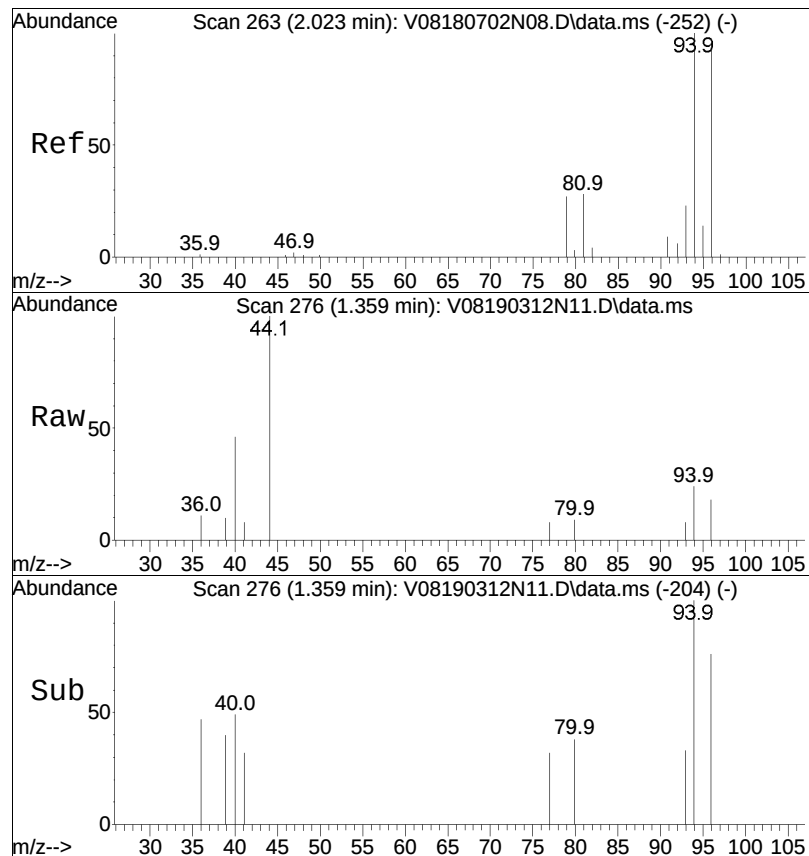
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N11.D
 Acq On : 12 Mar 2019 9:46 pm
 Operator : VOA108:MKS
 Sample : 11908936-03,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 13 14:03:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

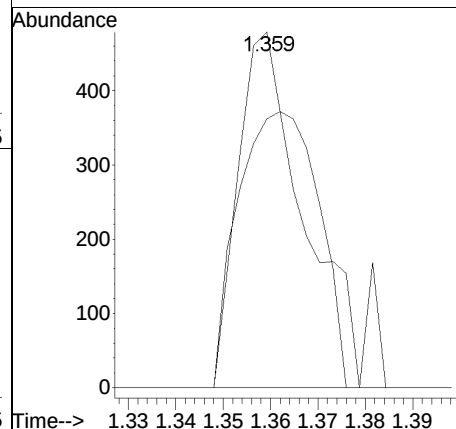
Sub List : 8260-NYTCL - Megamix plus Diox90312N\V08190312N02.D•





#5
 Bromomethane
 Concen: 0.09 ug/L
 RT: 1.359 min Scan# 276
 Delta R.T. 0.000 min
 Lab File: V08190312N11.D
 Acq: 12 Mar 2019 9:46 pm

Tgt Ion: 94 Resp: 460
 Ion Ratio Lower Upper
 94 100
 96 95.0 75.6 115.6



Manual Integration Report

Data Path	: I:\VOLATILES\VOA108\2019\10	Method	: V108_190218N_8260.m
Data File	: V08190312N11.D	Operator	: VOA108:MKS
Date Inj'd	: 3/12/2019 9:46 pm	Instrument	: VOA 108
Sample	: l1908936-03,31,10,10,,a	Quant Date	: 3/13/2019 1:21 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N12.D
 Acq On : 12 Mar 2019 10:08 pm
 Operator : VOA108:MKS
 Sample : 11908936-04,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 13 14:04:28 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	272553	10.000	ug/L	0.00
Standard Area 1 = 304926			Recovery =	89.38%		
59) Chlorobenzene-d5	8.526	117	180369	10.000	ug/L	0.00
Standard Area 1 = 209940			Recovery =	85.91%		
79) 1,4-Dichlorobenzene-d4	10.010	152	76901	10.000	ug/L	0.00
Standard Area 1 = 100075			Recovery =	76.84%		
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	74968	10.769	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	107.69%		
43) 1,2-Dichloroethane-d4	5.208	65	89406	11.426	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	114.26%		
60) Toluene-d8	7.241	98	239274	9.679	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	96.79%		
83) 4-Bromofluorobenzene	9.340	95	76801	10.206	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.06%		
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	1.097	50	253	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	1.359	94	408	0.083	ug/L #	49
6) Chloroethane	1.323	64	57	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	1.923	76	82	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	2.464	43	1331	1.256	ug/L #	66
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
25) Acrylonitrile	0.000		0	N.D.		
27) Vinyl acetate	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	3.900	96	641M1	0.097	ug/L	
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N12.D
 Acq On : 12 Mar 2019 10:08 pm
 Operator : VOA108:MKS
 Sample : 11908936-04,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 13 14:04:28 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0		N.D.	
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	4.619	43	32		N.D.	
40) 1,1-Dichloropropene	0.000		0		N.D.	
41) Benzene	5.032	78	418		N.D.	
44) 1,2-Dichloroethane	5.302	62	62		N.D.	
48) Trichloroethene	5.735	95	425		N.D.	
50) Dibromomethane	0.000		0		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.	
61) Toluene	7.285	92	168		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	7.645	166	865	0.143	ug/L #	75
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.	
70) 1,3-Dichloropropane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	8.529	43	151		N.D.	
73) Chlorobenzene	8.537	112	664		N.D.	
74) Ethylbenzene	8.576	91	175		N.D.	
75) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
76) p/m Xylene	8.688	106	86		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	
84) Bromobenzene	0.000		0		N.D.	
85) n-Propylbenzene	9.432	91	178		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
88) 4-Ethyltoluene	9.502	105	53		N.D.	
89) 2-Chlorotoluene	9.519	91	56		N.D.	
90) 1,3,5-Trimethylbenzene	9.502	105	53		N.D.	
91) 1,2,3-Trichloropropane	0.000		0		N.D.	
92) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
93) 4-Chlorotoluene	9.519	91	56		N.D.	
94) tert-Butylbenzene	0.000		0		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N12.D
 Acq On : 12 Mar 2019 10:08 pm
 Operator : VOA108:MKS
 Sample : l1908936-04,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 13 14:04:28 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	9.789	105	56		N.D.	
98)	sec-Butylbenzene	9.789	105	56		N.D.	
99)	p-Isopropyltoluene	0.000		0		N.D.	
100)	1,3-Dichlorobenzene	9.968	146	181		N.D.	
101)	1,4-Dichlorobenzene	10.015	146	251		N.D.	
102)	p-Diethylbenzene	0.000		0		N.D.	
103)	n-Butylbenzene	10.010	91	128		N.D.	
104)	1,2-Dichlorobenzene	10.255	146	289		N.D.	
105)	1,2,4,5-Tetramethylben...	0.000		0		N.D.	
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	0.000		0		N.D.	
110)	Naphthalene	0.000		0		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

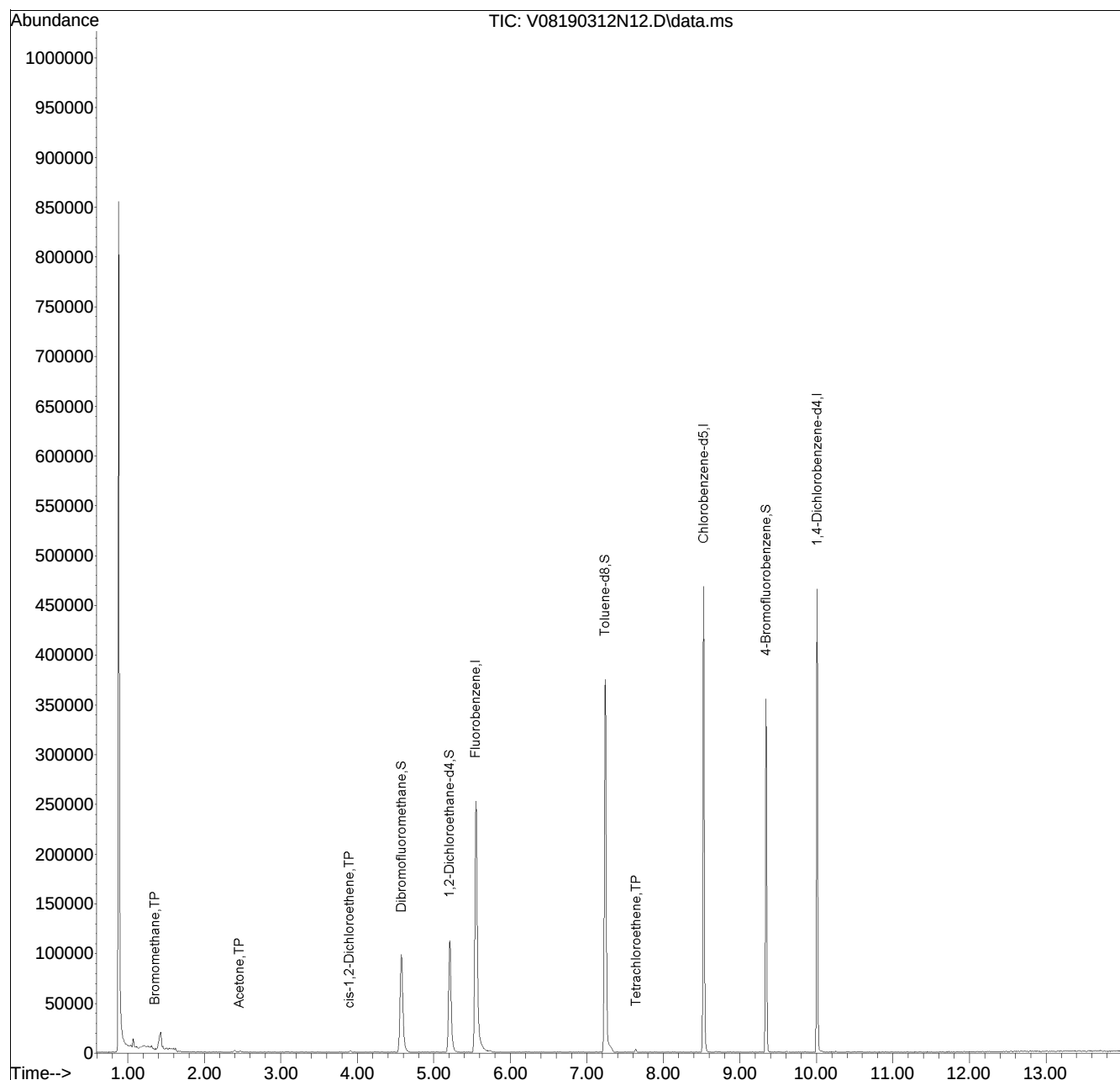
(#) = qualifier out of range (m) = manual integration (+) = signals summed

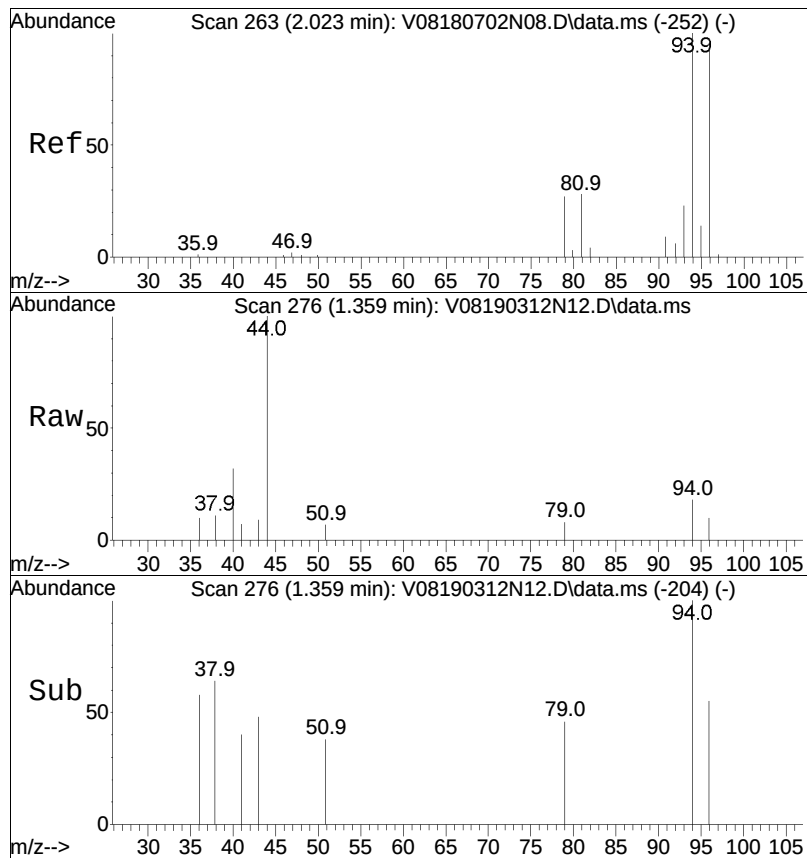
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N12.D
 Acq On : 12 Mar 2019 10:08 pm
 Operator : VOA108:MKS
 Sample : 11908936-04,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 13 14:04:28 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

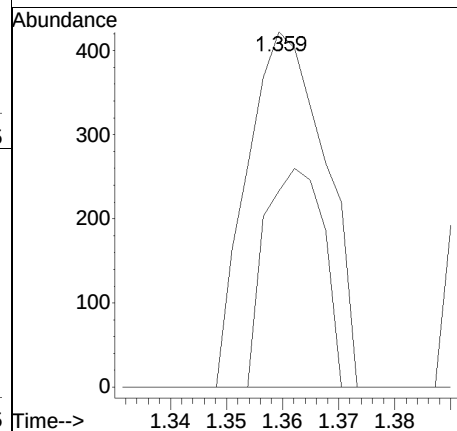
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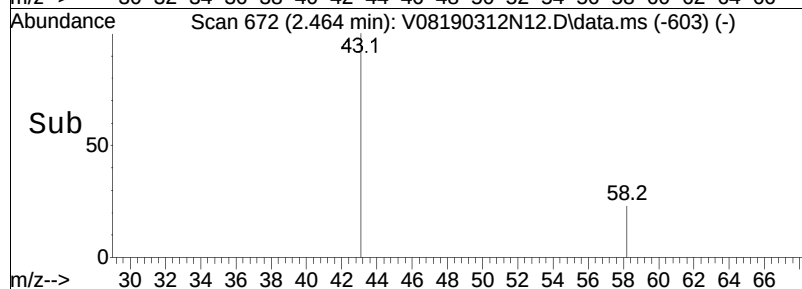
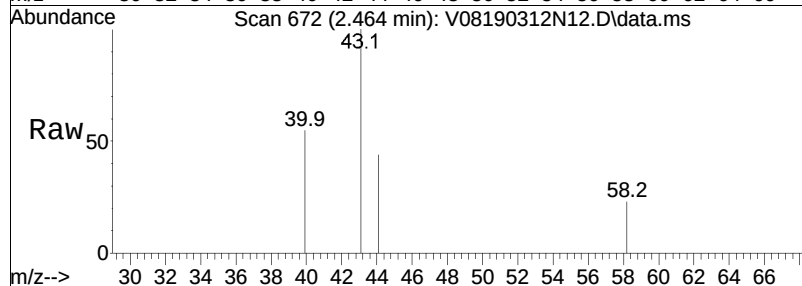
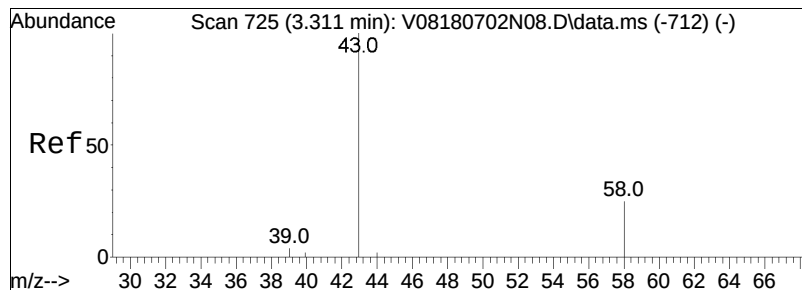




#5
 Bromomethane
 Concen: 0.08 ug/L
 RT: 1.359 min Scan# 276
 Delta R.T. 0.000 min
 Lab File: V08190312N12.D
 Acq: 12 Mar 2019 10:08 pm

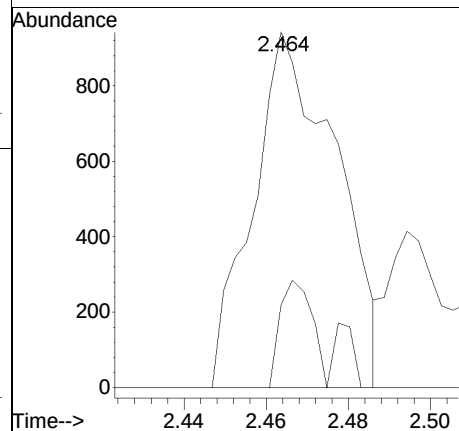
Tgt Ion: 94 Resp: 408
 Ion Ratio Lower Upper
 94 100
 96 46.3 75.6 115.6#

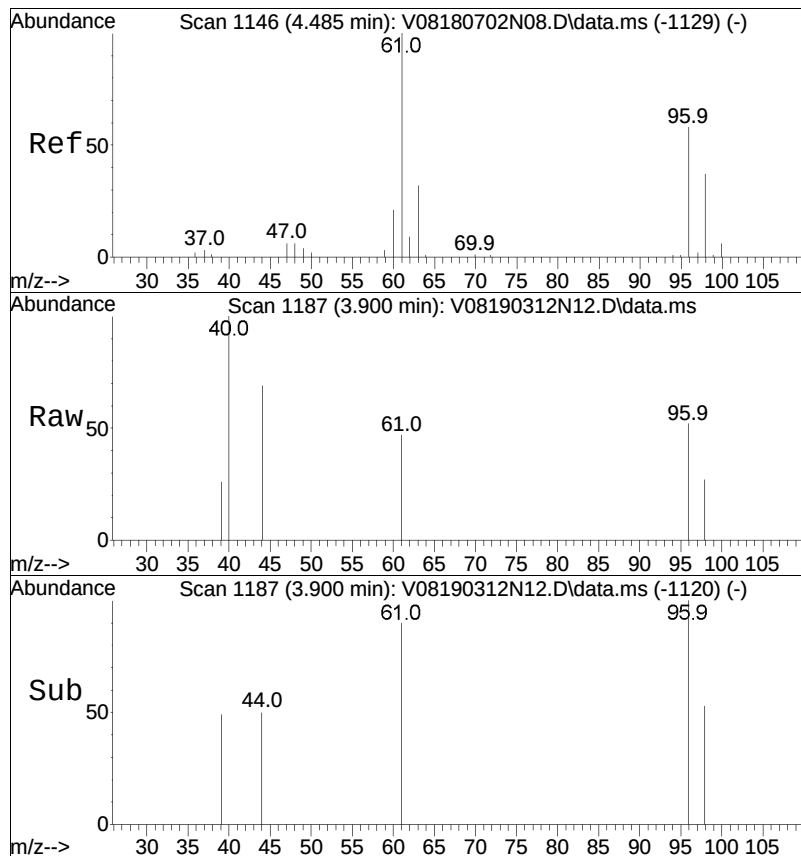




#17
Acetone
Concen: 1.26 ug/L
RT: 2.464 min Scan# 672
Delta R.T. -0.008 min
Lab File: V08190312N12.D
Acq: 12 Mar 2019 10:08 pm

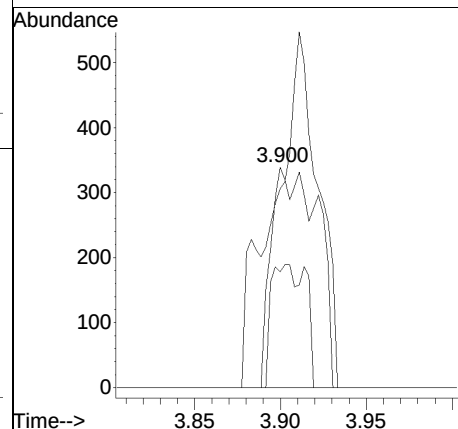
Tgt Ion	Ratio	Lower	Upper
43	100		
58	11.6	24.2	36.4#

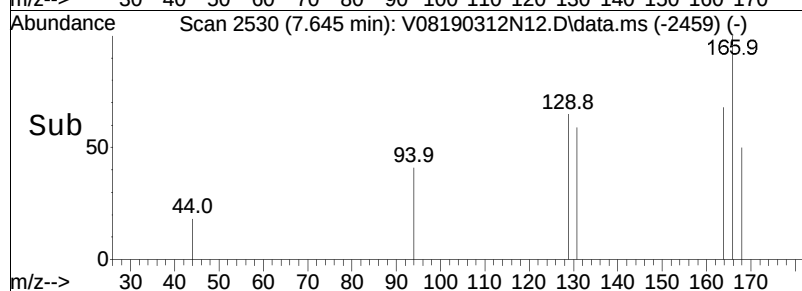
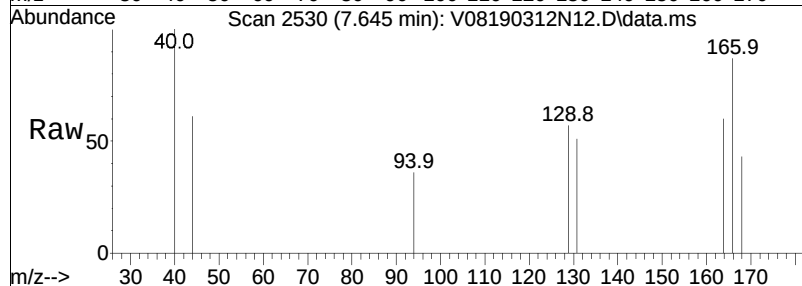
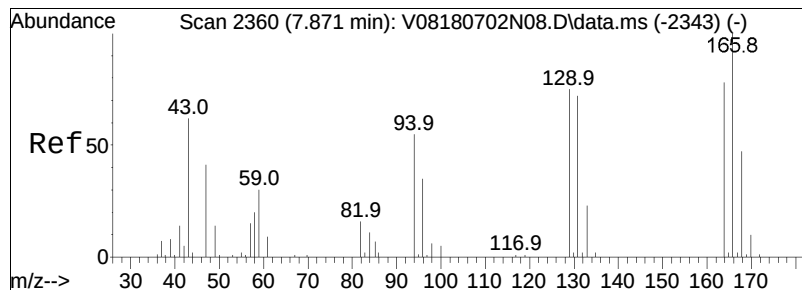




#28
 cis-1,2-Dichloroethene
 Concen: 0.10 ug/L M1
 RT: 3.900 min Scan# 1187
 Delta R.T. -0.014 min
 Lab File: V08190312N12.D
 Acq: 12 Mar 2019 10:08 pm

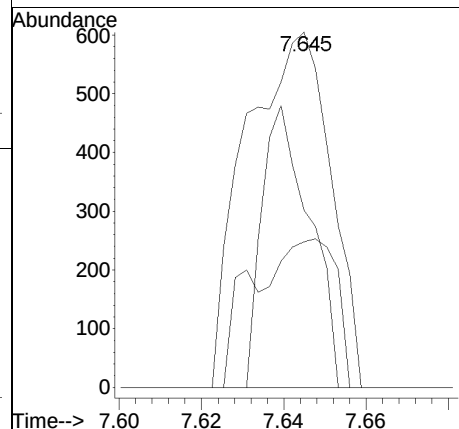
Tgt Ion	Ratio	Lower	Upper
96	100		
61	130.6	149.4	224.2#
98	27.6	53.4	80.2#





#63
Tetrachloroethene
Concen: 0.14 ug/L
RT: 7.645 min Scan# 2530
Delta R.T. -0.003 min
Lab File: V08190312N12.D
Acq: 12 Mar 2019 10:08 pm

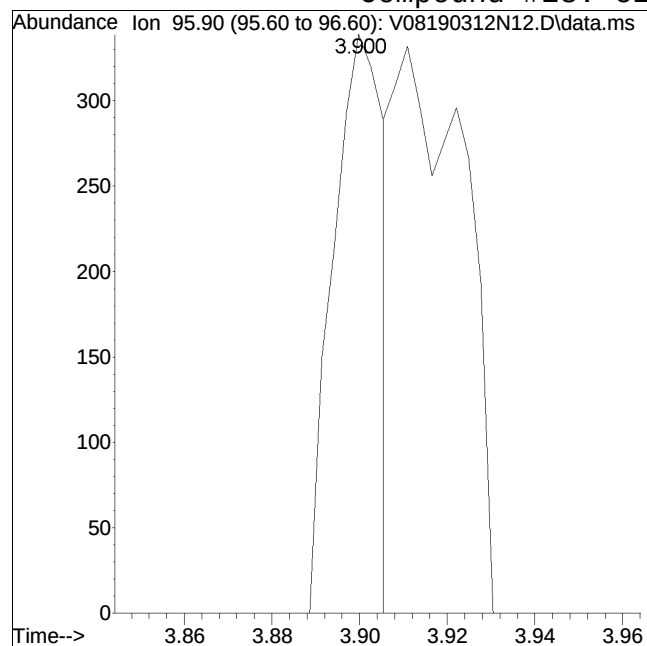
Tgt Ion	Ratio	Lower	Upper
166	100		
168	44.7	28.2	68.2
94	26.9	38.4	78.4



Manual Integration Report

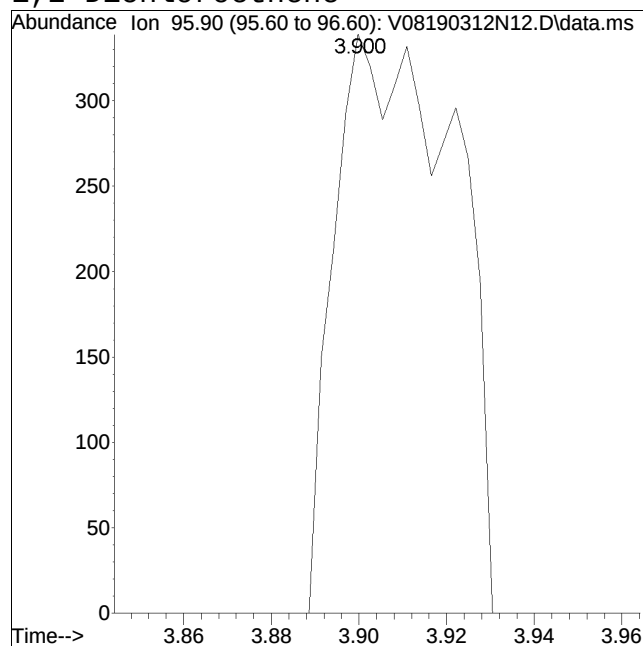
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190312N12.D Operator : VOA108:MKS
Date Inj'd : 3/12/2019 10:08 pm Instrument : VOA 108
Sample : l1908936-04,31,10,10,,a Quant Date : 3/13/2019 1:21 pm

Compound #28: cis-1,2-Dichloroethene



Original Peak Response = 268

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



Manual Peak Response = 641 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N13.D
 Acq On : 12 Mar 2019 10:30 pm
 Operator : VOA108:MKS
 Sample : 11908936-05,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 13 14:07:15 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	273004	10.000	ug/L	0.00
Standard Area 1 = 304926			Recovery	=	89.53%	
59) Chlorobenzene-d5	8.526	117	186913	10.000	ug/L	0.00
Standard Area 1 = 209940			Recovery	=	89.03%	
79) 1,4-Dichlorobenzene-d4	10.010	152	80737	10.000	ug/L	0.00
Standard Area 1 = 100075			Recovery	=	80.68%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.572	113	75600	10.842	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	108.42%	
43) 1,2-Dichloroethane-d4	5.207	65	90689	11.571	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	115.71%	
60) Toluene-d8	7.240	98	241105	9.412	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	94.12%	
83) 4-Bromofluorobenzene	9.343	95	81120	10.268	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	102.68%	
Target Compounds						
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	1.094	50	93	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	1.362	94	385	0.078	ug/L	# 74
6) Chloroethane	1.426	64	116	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	2.472	43	2725M1	2.568	ug/L	
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
20) Methyl tert-butyl ether	2.689	73	377	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
25) Acrylonitrile	0.000		0	N.D.		
27) Vinyl acetate	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	3.916	96	25	N.D.		
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N13.D
 Acq On : 12 Mar 2019 10:30 pm
 Operator : VOA108:MKS
 Sample : 11908936-05,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 13 14:07:15 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0		N.D.	
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	4.602	43	82		N.D.	
40) 1,1-Dichloropropene	0.000		0		N.D.	
41) Benzene	5.018	78	28		N.D.	
44) 1,2-Dichloroethane	5.288	62	140		N.D.	
48) Trichloroethene	5.740	95	1796	0.288	ug/L	89
50) Dibromomethane	0.000		0		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.	
61) Toluene	7.285	92	298		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	7.642	166	3687	0.589	ug/L	95
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.	
70) 1,3-Dichloropropane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	8.222	43	28		N.D.	
73) Chlorobenzene	8.537	112	477		N.D.	
74) Ethylbenzene	8.682	91	528		N.D.	
75) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
76) p/m Xylene	8.685	106	141		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	
84) Bromobenzene	0.000		0		N.D.	
85) n-Propylbenzene	9.441	91	54		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
88) 4-Ethyltoluene	9.510	105	54		N.D.	
89) 2-Chlorotoluene	9.441	91	54		N.D.	
90) 1,3,5-Trimethylbenzene	9.510	105	54		N.D.	
91) 1,2,3-Trichloropropane	0.000		0		N.D.	
92) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
93) 4-Chlorotoluene	9.619	91	30		N.D.	
94) tert-Butylbenzene	9.931	119	27		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N13.D
 Acq On : 12 Mar 2019 10:30 pm
 Operator : VOA108:MKS
 Sample : l1908936-05,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 13 14:07:15 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	9.853	105	62		N.D.	
98)	sec-Butylbenzene	9.853	105	62		N.D.	
99)	p-Isopropyltoluene	9.931	119	27		N.D.	
100)	1,3-Dichlorobenzene	9.962	146	142		N.D.	
101)	1,4-Dichlorobenzene	10.018	146	576		N.D.	
102)	p-Diethylbenzene	0.000		0		N.D.	
103)	n-Butylbenzene	10.177	91	55		N.D.	
104)	1,2-Dichlorobenzene	10.252	146	62		N.D.	
105)	1,2,4,5-Tetramethylben...	0.000		0		N.D.	
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	0.000		0		N.D.	
110)	Naphthalene	11.281	128	28		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

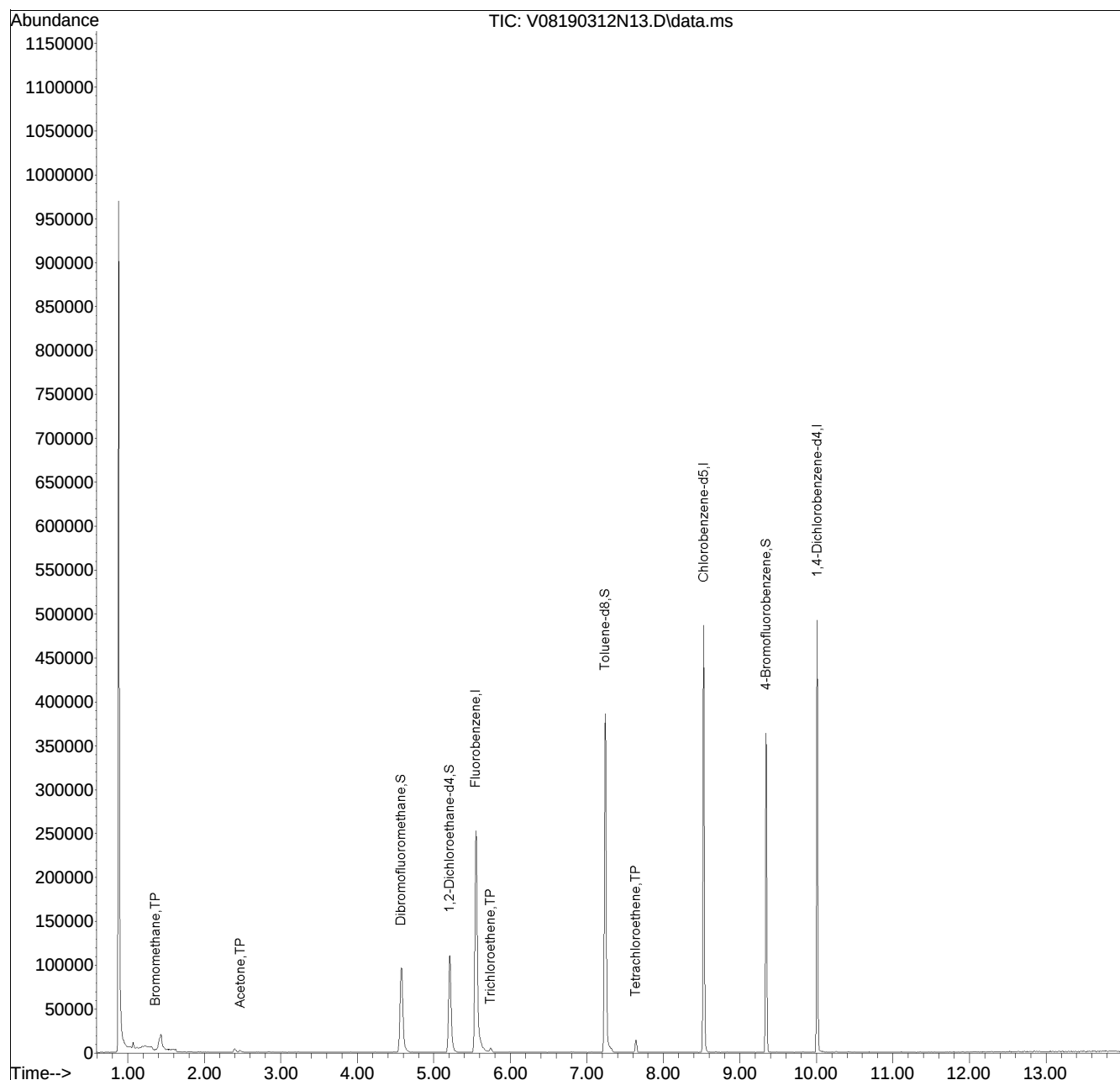
(#) = qualifier out of range (m) = manual integration (+) = signals summed

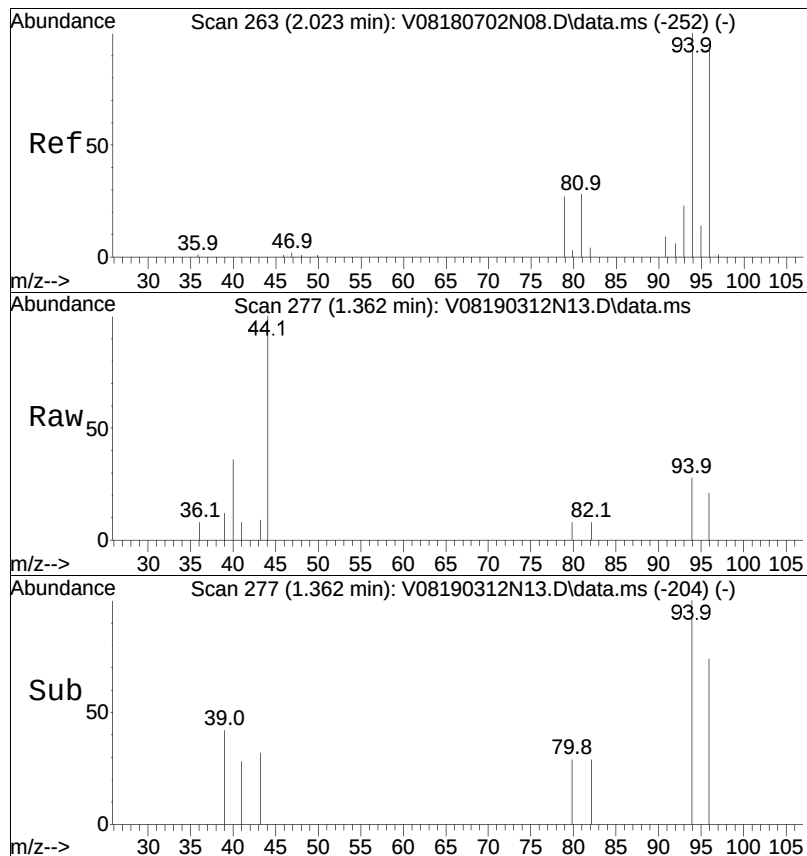
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N13.D
 Acq On : 12 Mar 2019 10:30 pm
 Operator : VOA108:MKS
 Sample : 11908936-05,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 13 14:07:15 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

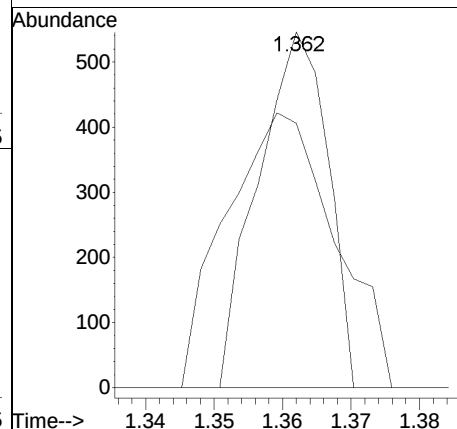
Sub List : 8260-NYTCL - Megamix plus Diox90312N\V08190312N02.D•

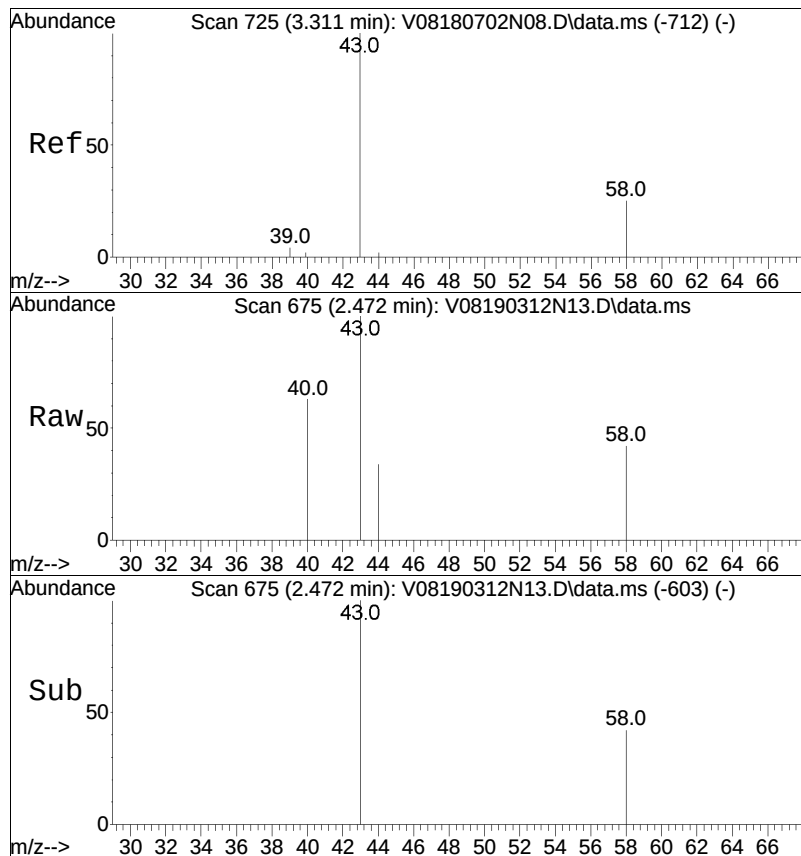




#5
 Bromomethane
 Concen: 0.08 ug/L
 RT: 1.362 min Scan# 277
 Delta R.T. 0.003 min
 Lab File: V08190312N13.D
 Acq: 12 Mar 2019 10:30 pm

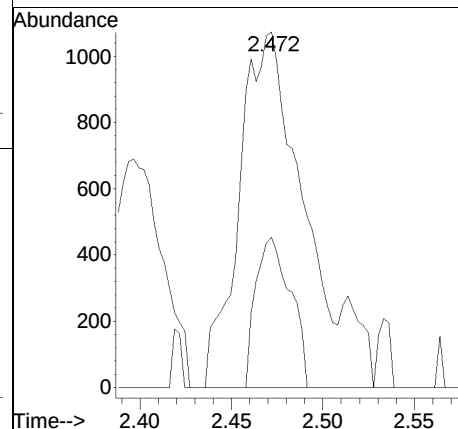
Tgt Ion	Ratio	Lower	Upper
94	100		
96	121.0	75.6	115.6#

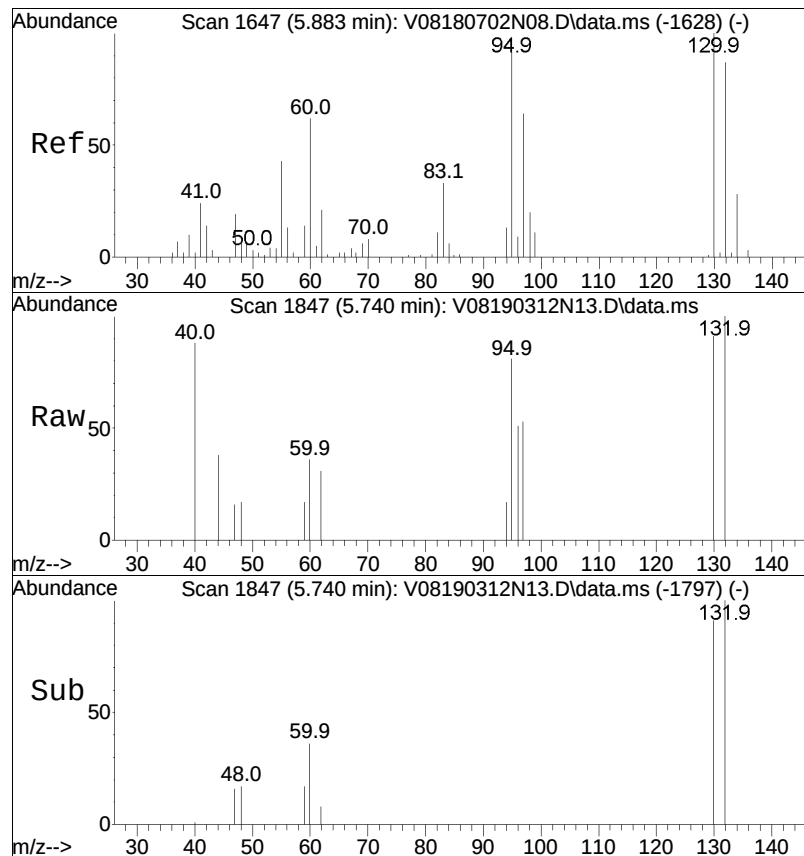




#17
 Acetone
 Concen: 2.57 ug/L M1
 RT: 2.472 min Scan# 675
 Delta R.T. -0.000 min
 Lab File: V08190312N13.D
 Acq: 12 Mar 2019 10:30 pm

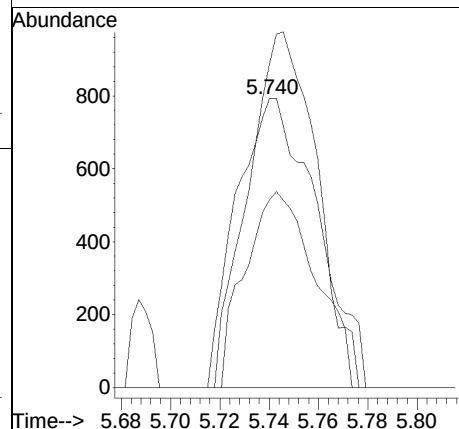
Tgt Ion	Ratio	Lower	Upper
43	100		
58	22.0	24.2	36.4#

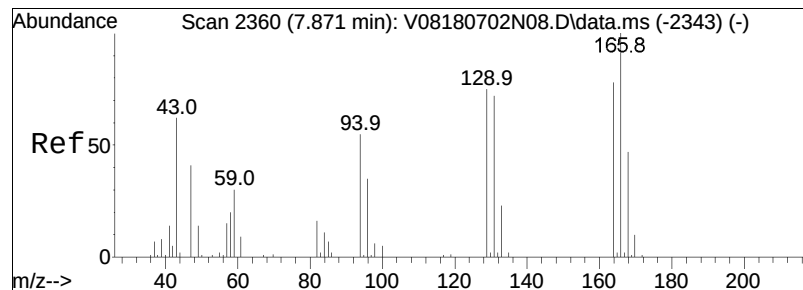




#48
 Trichloroethene
 Concen: 0.29 ug/L
 RT: 5.740 min Scan# 1847
 Delta R.T. -0.011 min
 Lab File: V08190312N13.D
 Acq: 12 Mar 2019 10:30 pm

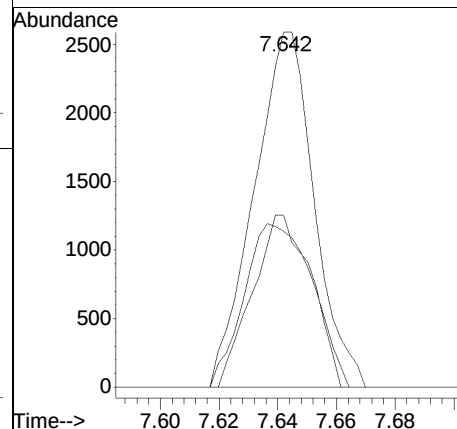
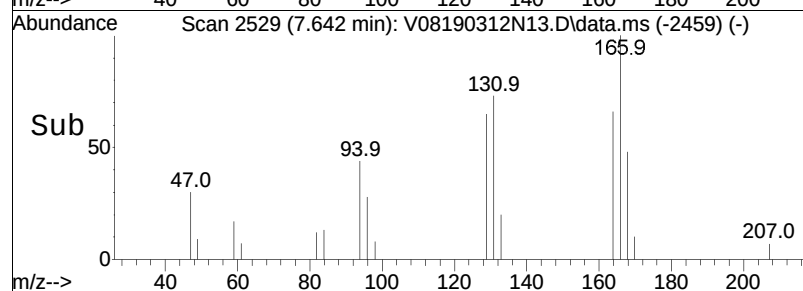
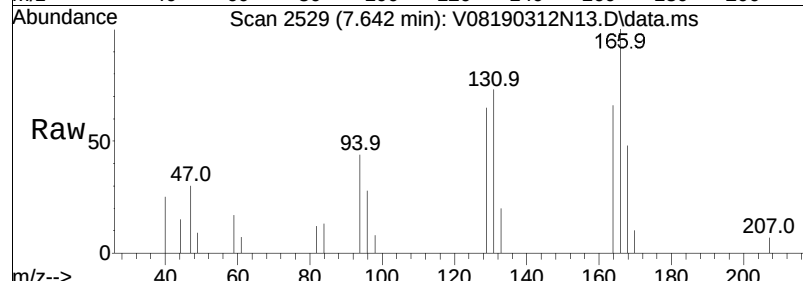
Tgt Ion	Ratio	Lower	Upper
95	100		
97	59.5	55.5	83.3
130	105.0	76.6	115.0





#63
Tetrachloroethene
Concen: 0.59 ug/L
RT: 7.642 min Scan# 2529
Delta R.T. -0.006 min
Lab File: V08190312N13.D
Acq: 12 Mar 2019 10:30 pm

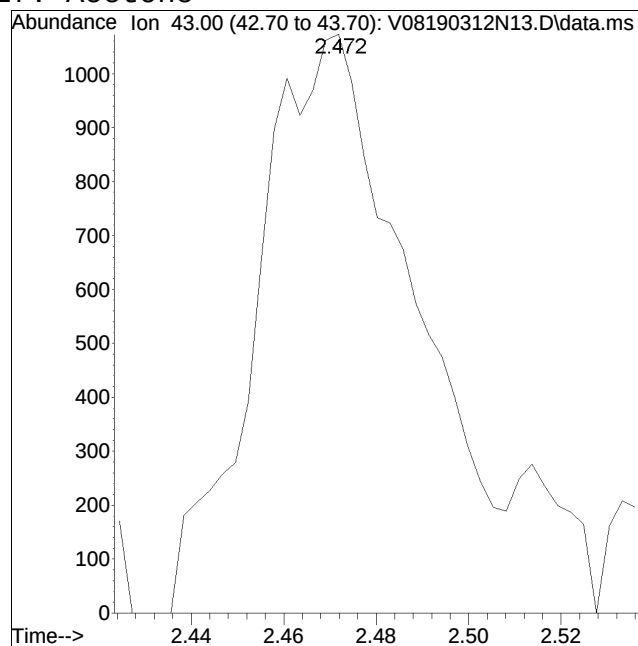
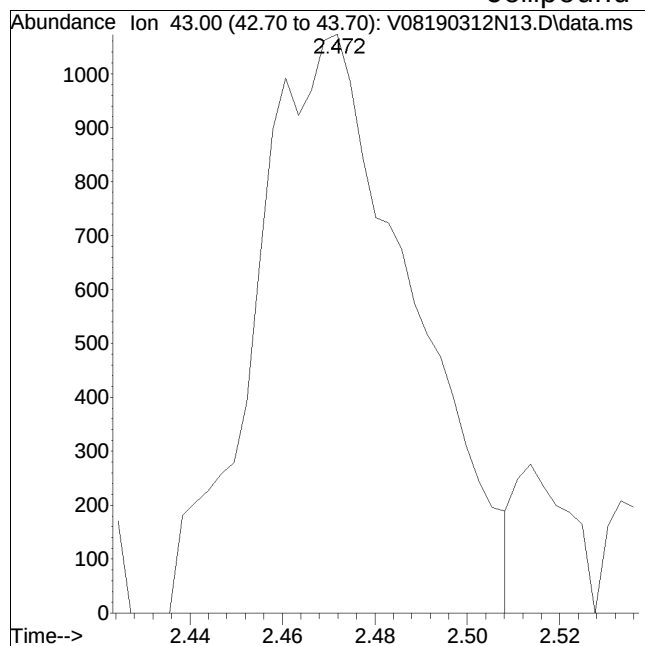
Tgt Ion	Ratio	Lower	Upper
166	100		
168	47.4	28.2	68.2
94	52.4	38.4	78.4



Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190312N13.D Operator : VOA108:MKS
Date Inj'd : 3/12/2019 10:30 pm Instrument : VOA 108
Sample : l1908936-05,31,10,10,,a Quant Date : 3/13/2019 1:21 pm

Compound #17: Acetone



Original Peak Response = 2505

Manual Peak Response = 2725 M1

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N14.D
 Acq On : 12 Mar 2019 10:52 pm
 Operator : VOA108:MKS
 Sample : 11908936-06,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 13 14:08:02 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	278402	10.000	ug/L	0.00
Standard Area 1 = 304926			Recovery	=	91.30%	
59) Chlorobenzene-d5	8.526	117	184966	10.000	ug/L	0.00
Standard Area 1 = 209940			Recovery	=	88.10%	
79) 1,4-Dichlorobenzene-d4	10.010	152	81721	10.000	ug/L	0.00
Standard Area 1 = 100075			Recovery	=	81.66%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.575	113	76318	10.732	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	107.32%	
43) 1,2-Dichloroethane-d4	5.208	65	90246	11.291	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	112.91%	
60) Toluene-d8	7.241	98	244521	9.645	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	96.45%	
83) 4-Bromofluorobenzene	9.343	95	81301	10.167	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.67%	
Target Compounds						
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	1.092	50	248	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	1.418	94	143	N.D.		
6) Chloroethane	1.443	64	61	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	2.472	43	1828	1.689	ug/L	# 72
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
20) Methyl tert-butyl ether	2.701	73	432	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
25) Acrylonitrile	0.000		0	N.D.		
27) Vinyl acetate	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	3.914	96	301	N.D.		
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N14.D
 Acq On : 12 Mar 2019 10:52 pm
 Operator : VOA108:MKS
 Sample : 11908936-06,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 13 14:08:02 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0		N.D.	
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
40) 1,1-Dichloropropene	0.000		0		N.D.	
41) Benzene	0.000		0		N.D.	
44) 1,2-Dichloroethane	5.291	62	81		N.D.	
48) Trichloroethene	5.743	95	6140	0.965	ug/L	92
50) Dibromomethane	0.000		0		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.	
61) Toluene	7.288	92	57		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	7.642	166	4433	0.716	ug/L	94
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.	
70) 1,3-Dichloropropane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	0.000		0		N.D.	d
73) Chlorobenzene	8.537	112	325		N.D.	
74) Ethylbenzene	8.576	91	55		N.D.	
75) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
76) p/m Xylene	8.688	106	26		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	
84) Bromobenzene	0.000		0		N.D.	
85) n-Propylbenzene	9.435	91	102		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
88) 4-Ethyltoluene	9.499	105	173		N.D.	
89) 2-Chlorotoluene	9.435	91	102		N.D.	
90) 1,3,5-Trimethylbenzene	9.499	105	173		N.D.	
91) 1,2,3-Trichloropropane	0.000		0		N.D.	
92) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
93) 4-Chlorotoluene	9.622	91	153		N.D.	
94) tert-Butylbenzene	0.000		0		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N14.D
 Acq On : 12 Mar 2019 10:52 pm
 Operator : VOA108:MKS
 Sample : l1908936-06,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 13 14:08:02 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

97)	1,2,4-Trimethylbenzene	9.784	105	86		N.D.	
98)	sec-Butylbenzene	9.784	105	86		N.D.	
99)	p-Isopropyltoluene	0.000		0		N.D.	
100)	1,3-Dichlorobenzene	10.013	146	328		N.D.	
101)	1,4-Dichlorobenzene	10.013	146	328		N.D.	
102)	p-Diethylbenzene	0.000		0		N.D.	
103)	n-Butylbenzene	10.010	91	220		N.D.	
104)	1,2-Dichlorobenzene	10.252	146	200		N.D.	
105)	1,2,4,5-Tetramethylben...	0.000		0		N.D.	
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	0.000		0		N.D.	
110)	Naphthalene	0.000		0		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

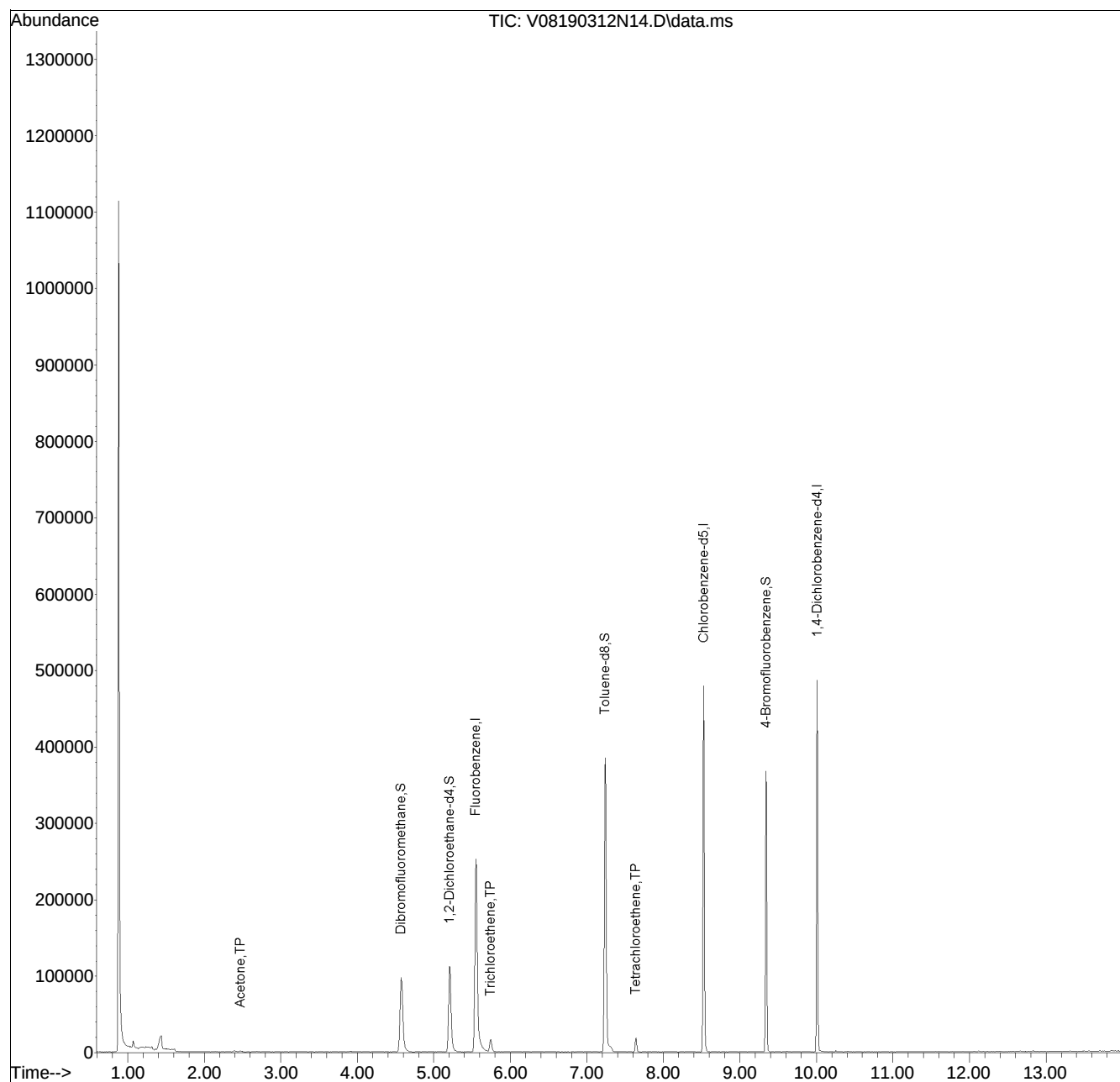
(#) = qualifier out of range (m) = manual integration (+) = signals summed

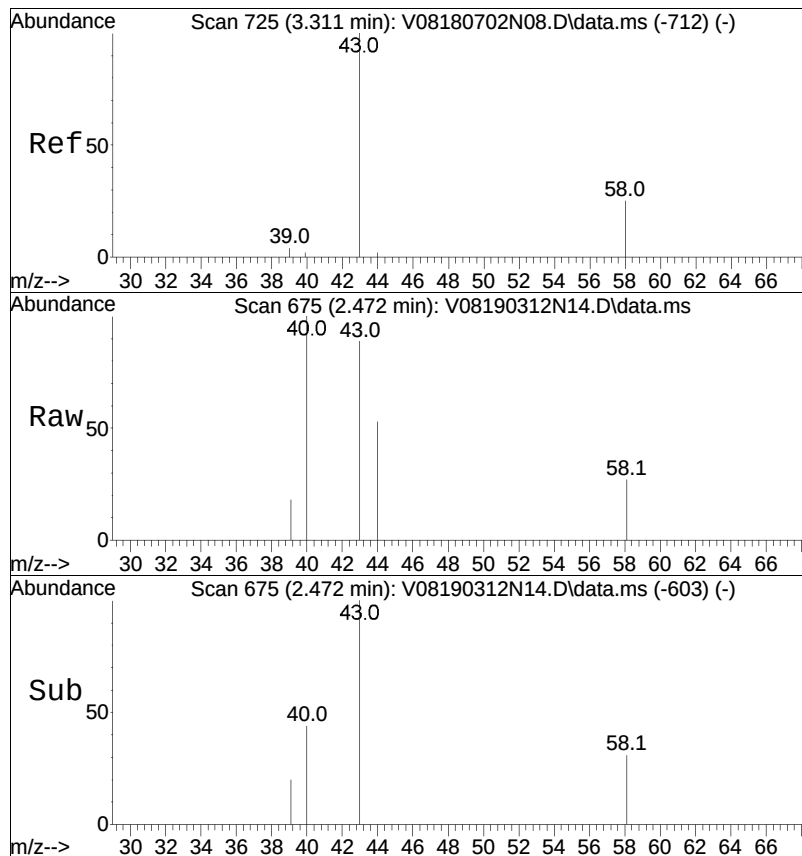
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N14.D
 Acq On : 12 Mar 2019 10:52 pm
 Operator : VOA108:MKS
 Sample : 11908936-06,31,10,10,,a
 Misc : WG1215235,ICAL15519
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 13 14:08:02 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

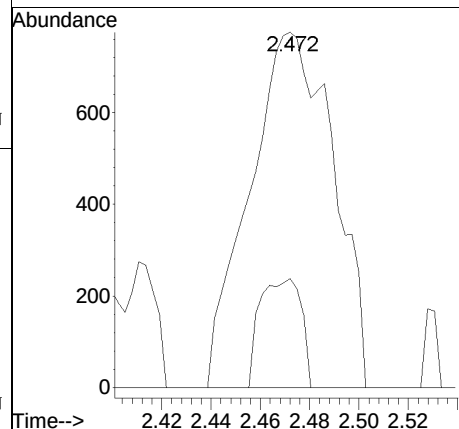
Sub List : 8260-NYTCL - Megamix plus Diox90312N\V08190312N02.D•

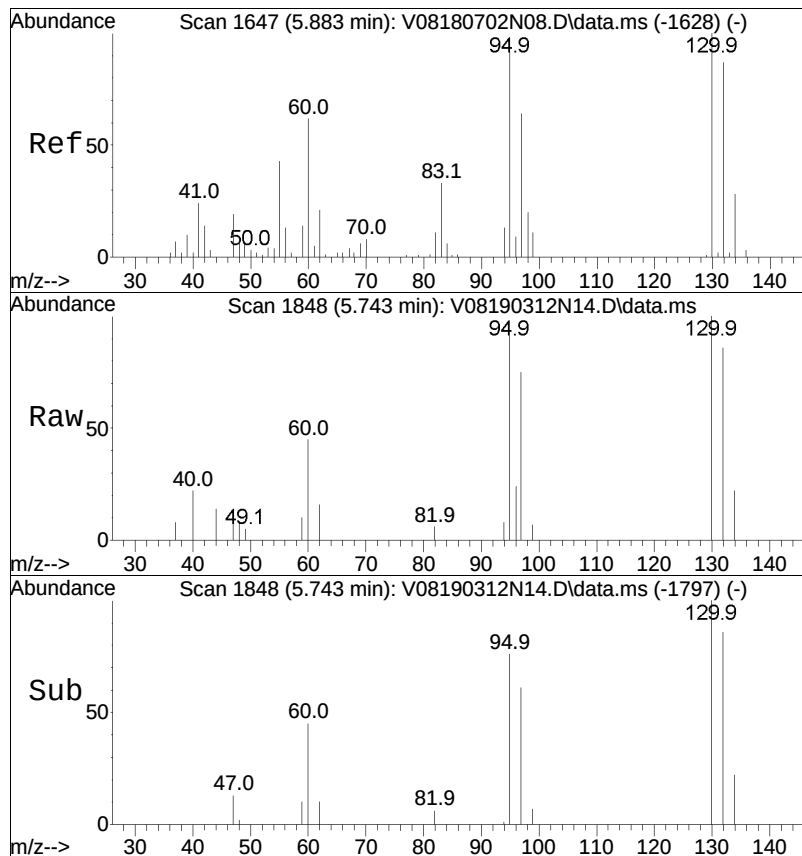




#17
 Acetone
 Concen: 1.69 ug/L
 RT: 2.472 min Scan# 675
 Delta R.T. 0.000 min
 Lab File: V08190312N14.D
 Acq: 12 Mar 2019 10:52 pm

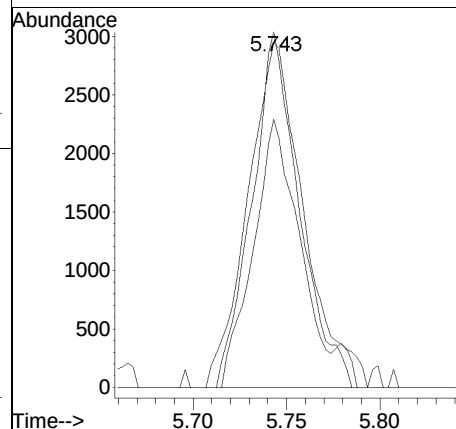
Tgt Ion	Ratio	Lower	Upper
43	100		
58	15.1	24.2	36.4

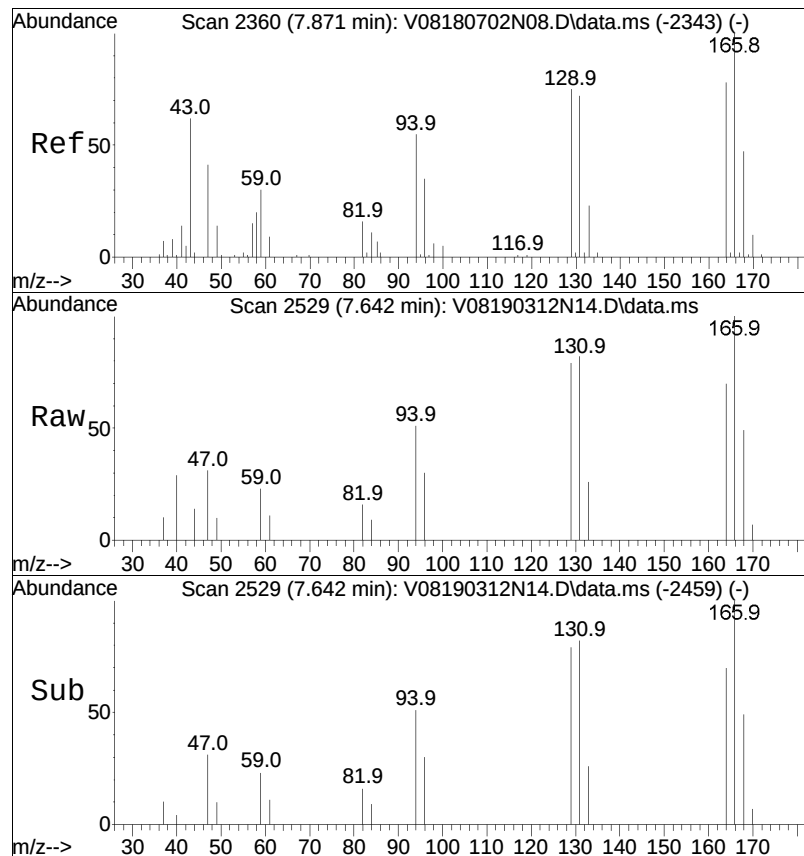




#48
 Trichloroethene
 Concen: 0.96 ug/L
 RT: 5.743 min Scan# 1848
 Delta R.T. -0.008 min
 Lab File: V08190312N14.D
 Acq: 12 Mar 2019 10:52 pm

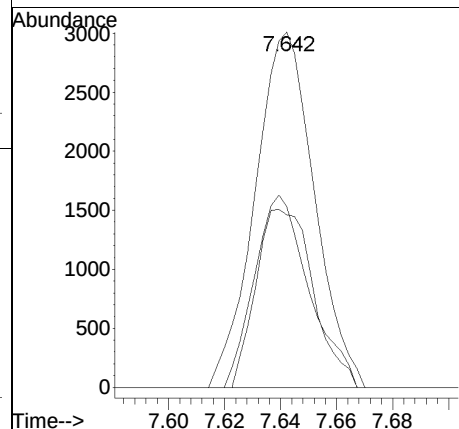
Tgt Ion:	95	Resp:	6140
Ion Ratio	Lower	Upper	
95	100		
97	64.0	55.5	83.3
130	87.3	76.6	115.0





#63
Tetrachloroethene
Concen: 0.72 ug/L
RT: 7.642 min Scan# 2529
Delta R.T. -0.006 min
Lab File: V08190312N14.D
Acq: 12 Mar 2019 10:52 pm

Tgt Ion:	166	Resp:	4433
Ion Ratio	Lower	Upper	
166	100		
168	48.2	28.2	68.2
94	49.9	38.4	78.4



Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190312N14.D Operator : VOA108:MKS
Date Inj'd : 3/12/2019 10:52 pm Instrument : VOA 108
Sample : l1908936-06,31,10,10,,a Quant Date : 3/13/2019 1:21 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N14.D
 Acq On : 13 Mar 2019 11:05 pm
 Operator : VOA108:NLK
 Sample : 11908936-02,31,10,10,,c
 Misc : WG1215584,ICAL15519
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 14 12:34:20 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	267867	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery	=	88.69%	
59) Chlorobenzene-d5	8.526	117	185119	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery	=	89.56%	
79) 1,4-Dichlorobenzene-d4	10.010	152	72202	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery	=	71.56%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.574	113	75673	11.060	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	110.60%	
43) 1,2-Dichloroethane-d4	5.208	65	90298	11.742	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	117.42%	
60) Toluene-d8	7.240	98	239318	9.432	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	94.32%	
83) 4-Bromofluorobenzene	9.340	95	77629	10.988	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	109.88%	
Target Compounds						
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	1.091	50	193	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	1.359	94	286	N.D.		
6) Chloroethane	0.000		0	N.D.	d	
7) Trichlorofluoromethane	1.538	101	631	N.D.		
8) Ethyl ether	0.000		0	N.D.		
10) 1,1-Dichloroethene	1.920	96	337	N.D.		
11) Carbon disulfide	0.000		0	N.D.		
15) Methylene chloride	2.408	84	1444	0.241	ug/L	66
17) Acetone	2.469	43	1727	1.659	ug/L #	75
18) trans-1,2-Dichloroethene	2.561	96	1245	0.218	ug/L	85
20) Methyl tert-butyl ether	2.695	73	56	N.D.		
23) 1,1-Dichloroethane	3.216	63	1336	0.132	ug/L #	60
25) Acrylonitrile	0.000		0	N.D.		
27) Vinyl acetate	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	3.908	96	18717	2.886	ug/L #	69
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
32) Chloroform	4.337	83	206436	19.562	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N14.D
 Acq On : 13 Mar 2019 11:05 pm
 Operator : VOA108:NLK
 Sample : 11908936-02,31,10,10,,c
 Misc : WG1215584,ICAL15519
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 14 12:34:20 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0	N.D.	d	
37) 1,1,1-Trichloroethane	4.552	97	25	N.D.		
39) 2-Butanone	0.000		0	N.D.		
40) 1,1-Dichloropropene	0.000		0	N.D.		
41) Benzene	5.035	78	298	N.D.		
44) 1,2-Dichloroethane	5.283	62	314	N.D.		
48) Trichloroethene	5.743	95	591023	96.502	ug/L	95
50) Dibromomethane	0.000		0	N.D.		
51) 1,2-Dichloropropane	6.298	63	902M1	0.151	ug/L	
54) Bromodichloromethane	6.407	83	10908	1.304	ug/L	92
57) 1,4-Dioxane	0.000		0	N.D.		
58) cis-1,3-Dichloropropene	0.000		0	N.D.		
61) Toluene	7.296	92	693	N.D.		
62) 4-Methyl-2-pentanone	0.000		0	N.D.	d	
63) Tetrachloroethene	7.642	166	741816	119.748	ug/L	94
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.		
70) 1,3-Dichloropropane	0.000		0	N.D.		
71) 1,2-Dibromoethane	0.000		0	N.D.		
72) 2-Hexanone	0.000		0	N.D.	d	
73) Chlorobenzene	8.540	112	231	N.D.		
74) Ethylbenzene	8.579	91	168	N.D.		
75) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
76) p/m Xylene	8.682	106	226	N.D.		
77) o Xylene	0.000		0	N.D.		
78) Styrene	0.000		0	N.D.		
80) Bromoform	0.000		0	N.D.		
82) Isopropylbenzene	0.000		0	N.D.		
84) Bromobenzene	0.000		0	N.D.		
85) n-Propylbenzene	9.435	91	195	N.D.		
87) 1,1,2,2-Tetrachloroethane	9.343	83	53	N.D.		
88) 4-Ethyltoluene	9.505	105	315	N.D.		
89) 2-Chlorotoluene	9.513	91	70	N.D.		
90) 1,3,5-Trimethylbenzene	9.505	105	315	N.D.		
91) 1,2,3-Trichloropropane	0.000		0	N.D.		
92) trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
93) 4-Chlorotoluene	9.627	91	62	N.D.		
94) tert-Butylbenzene	9.931	119	57	N.D.		

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N14.D
 Acq On : 13 Mar 2019 11:05 pm
 Operator : VOA108:NLK
 Sample : l1908936-02,31,10,10,,c
 Misc : WG1215584,ICAL15519
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 14 12:34:20 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-NYTCL - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	0.000		0		N.D.	
98)	sec-Butylbenzene	0.000		0		N.D.	
99)	p-Isopropyltoluene	9.931	119	57		N.D.	
100)	1,3-Dichlorobenzene	9.965	146	57		N.D.	
101)	1,4-Dichlorobenzene	10.015	146	431		N.D.	
102)	p-Diethylbenzene	0.000		0		N.D.	
103)	n-Butylbenzene	10.180	91	26		N.D.	
104)	1,2-Dichlorobenzene	10.252	146	537		N.D.	
105)	1,2,4,5-Tetramethylben...	0.000		0		N.D.	
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	0.000		0		N.D.	
110)	Naphthalene	0.000		0		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

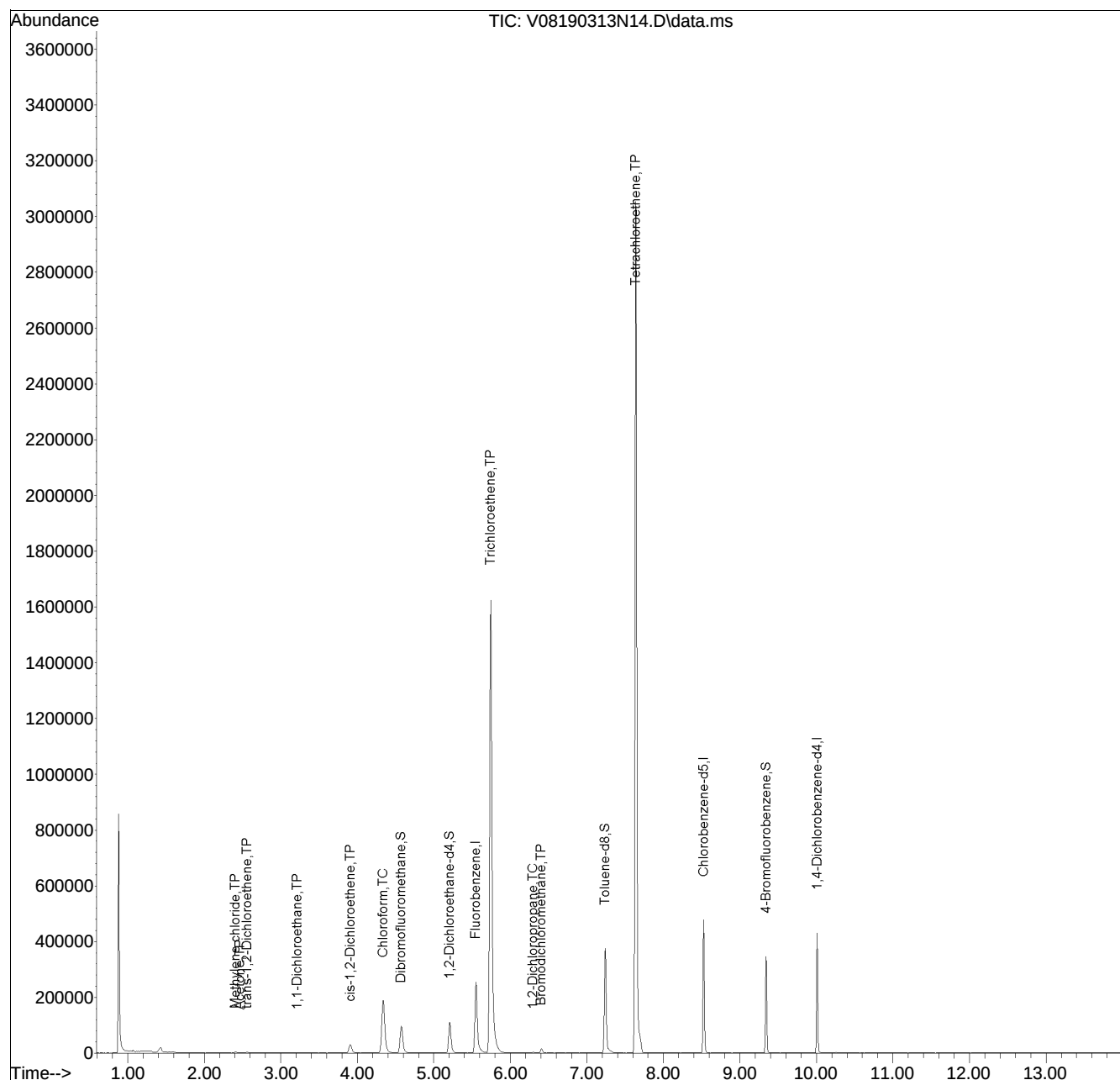
(#) = qualifier out of range (m) = manual integration (+) = signals summed

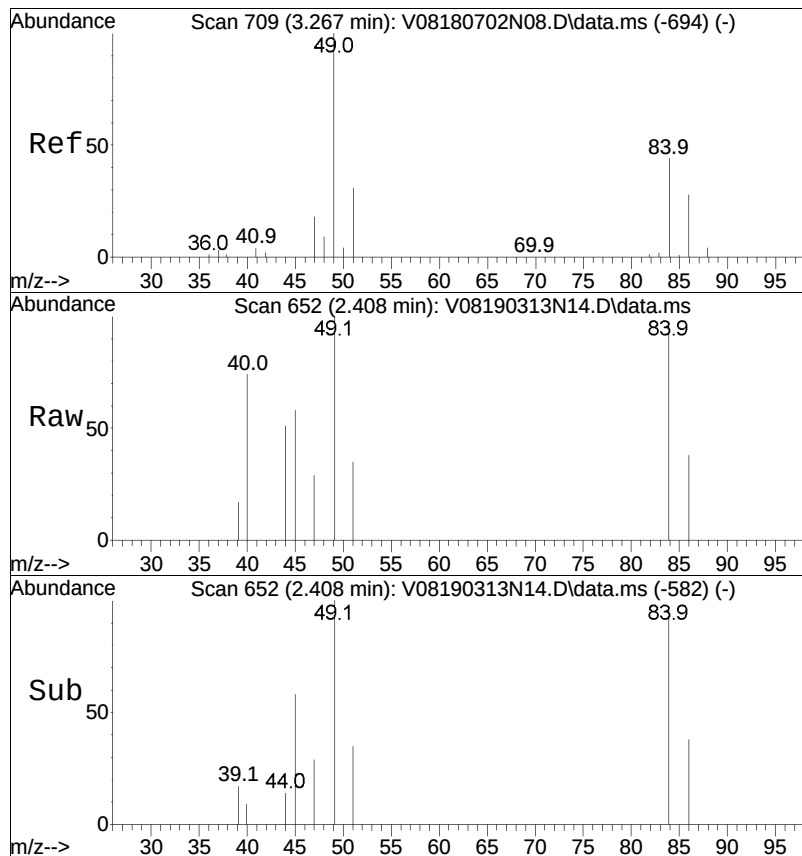
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N14.D
 Acq On : 13 Mar 2019 11:05 pm
 Operator : VOA108:NLK
 Sample : 11908936-02,31,10,10,,c
 Misc : WG1215584,ICAL15519
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 14 12:34:20 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

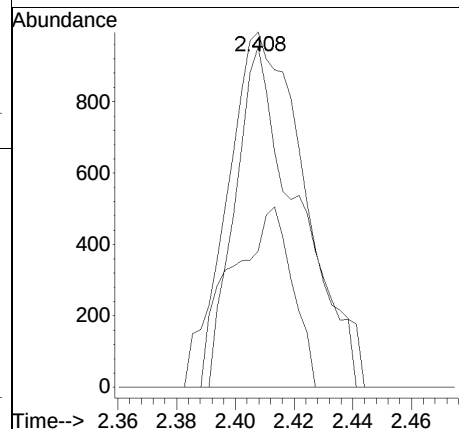
Sub List : 8260-NYTCL - Megamix plus Diox90313N\V08190313N02.D•

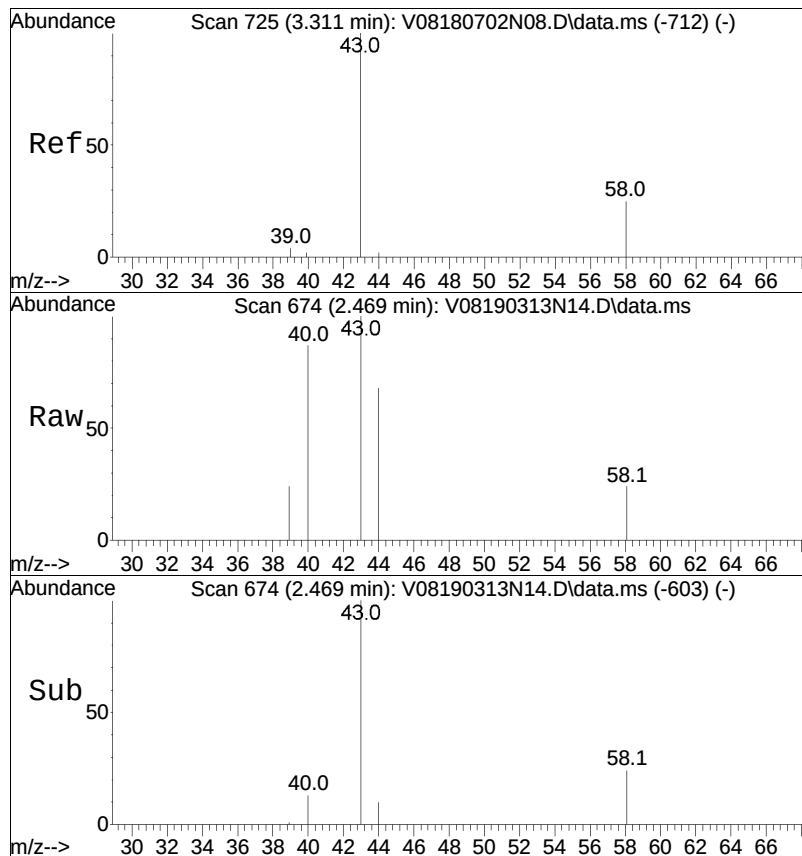




#15
 Methylene chloride
 Concen: 0.24 ug/L
 RT: 2.408 min Scan# 652
 Delta R.T. -0.005 min
 Lab File: V08190313N14.D
 Acq: 13 Mar 2019 11:05 pm

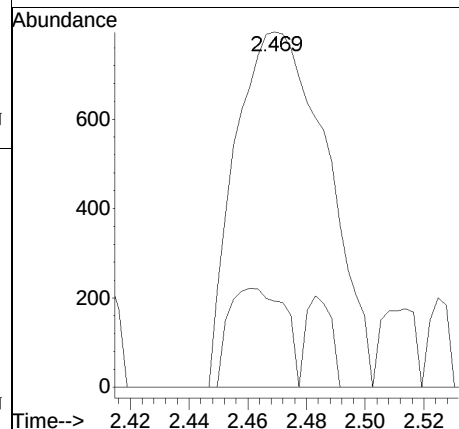
Tgt	Ion	Ratio	Lower	Upper
84	100			
86	50.2	40.4	83.8	
49	125.9	120.0	249.2	

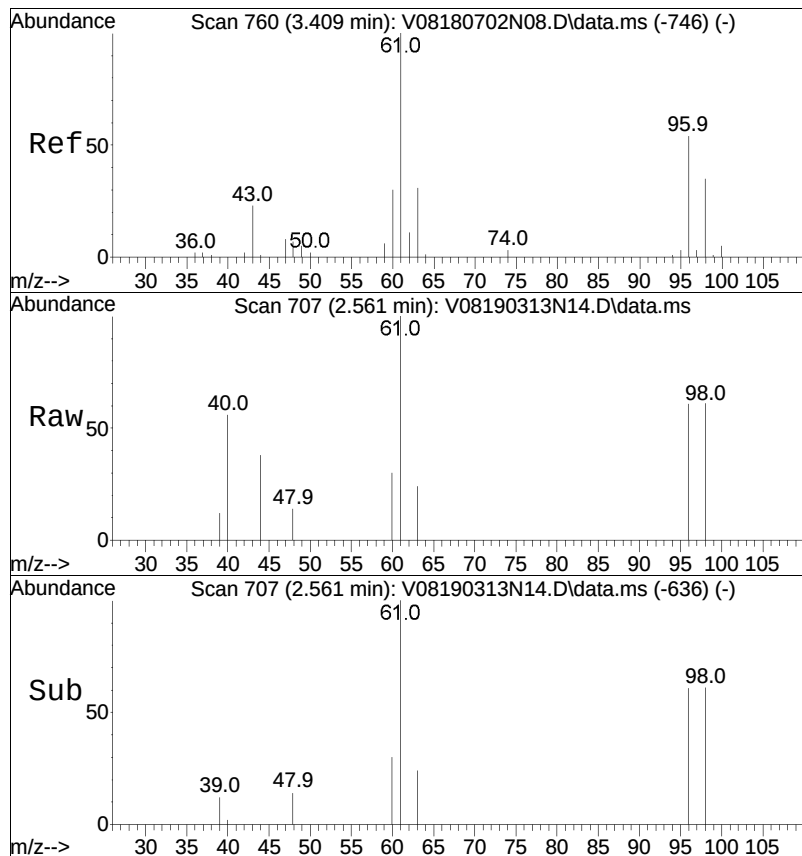




#17
Acetone
Concen: 1.66 ug/L
RT: 2.469 min Scan# 674
Delta R.T. -0.003 min
Lab File: V08190313N14.D
Acq: 13 Mar 2019 11:05 pm

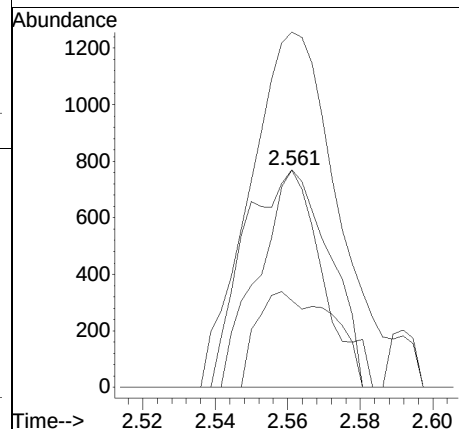
Tgt Ion: 43 Resp: 1727
Ion Ratio Lower Upper
43 100
58 17.0 24.2 36.4#

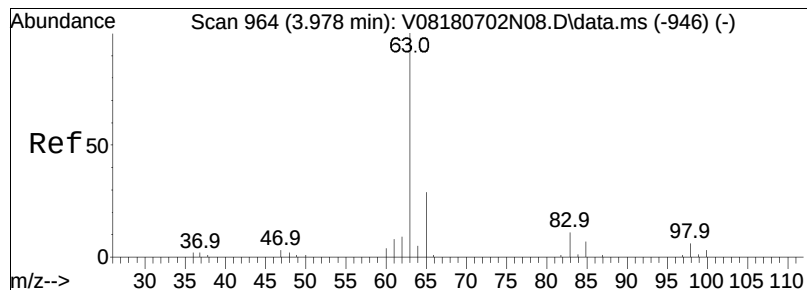




#18
 trans-1,2-Dichloroethene
 Concen: 0.22 ug/L
 RT: 2.561 min Scan# 707
 Delta R.T. -0.003 min
 Lab File: V08190313N14.D
 Acq: 13 Mar 2019 11:05 pm

Tgt Ion:	96	Resp:	1245
Ion Ratio	Lower	Upper	
96	100		
61	174.2	124.0	257.6
98	76.1	41.2	85.6
63	39.2	38.4	79.7





#23

1,1-Dichloroethane

Concen: 0.13 ug/L

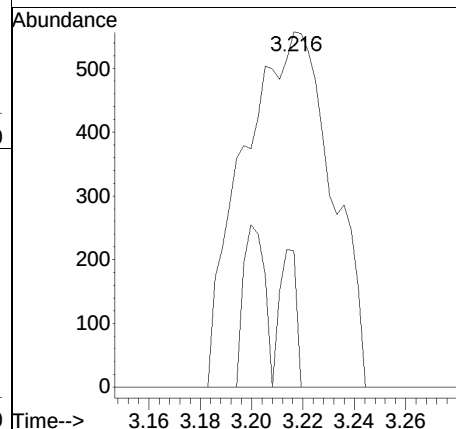
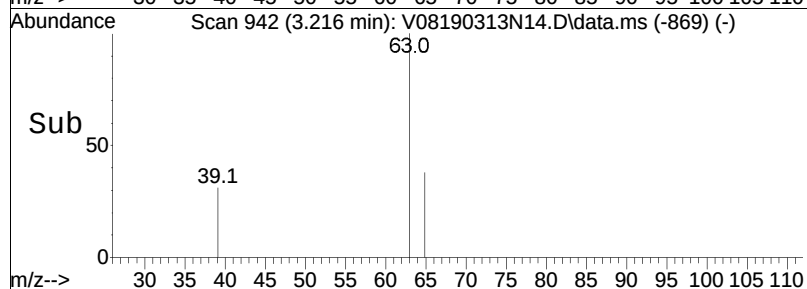
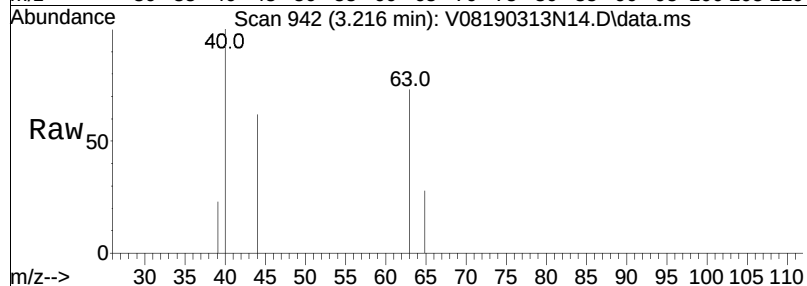
RT: 3.216 min Scan# 942

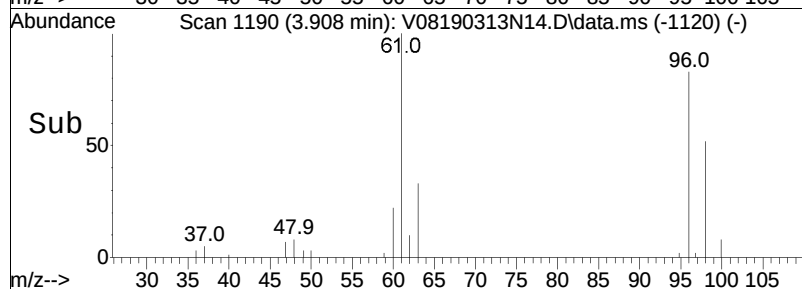
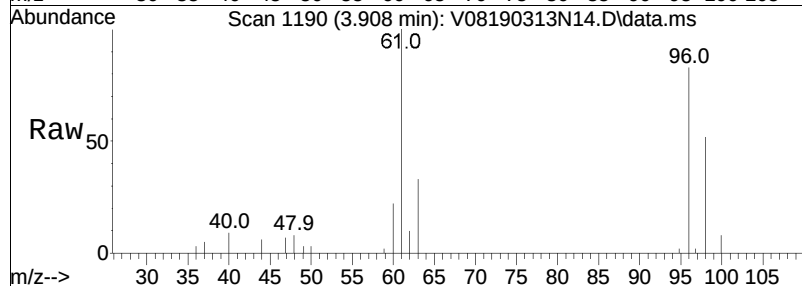
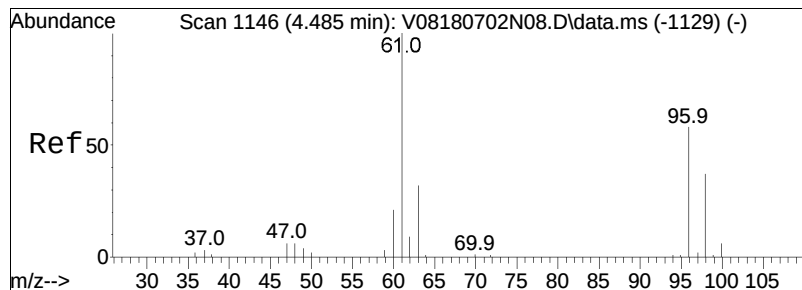
Delta R.T. 0.002 min

Lab File: V08190313N14.D

Acq: 13 Mar 2019 11:05 pm

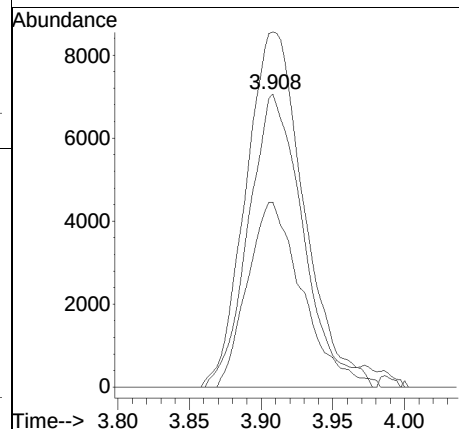
Tgt Ion:	63	Resp:	1336
Ion Ratio	Lower	Upper	
63	100		
65	7.3	11.0	51.0#
83	0.0	0.0	31.8

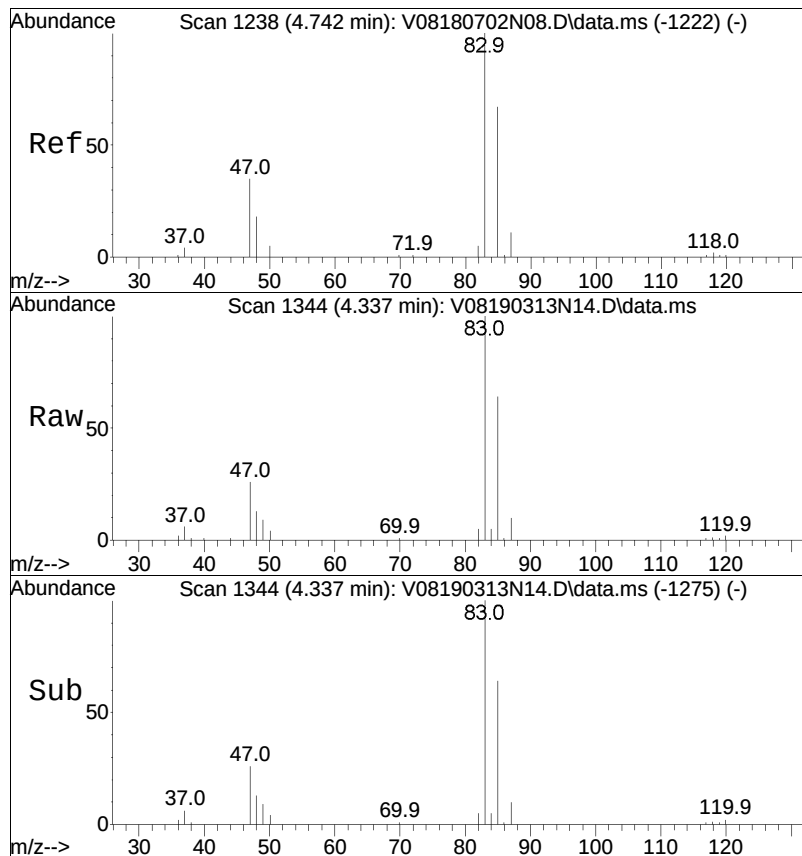




#28
 cis-1,2-Dichloroethene
 Concen: 2.89 ug/L
 RT: 3.908 min Scan# 1190
 Delta R.T. -0.006 min
 Lab File: V08190313N14.D
 Acq: 13 Mar 2019 11:05 pm

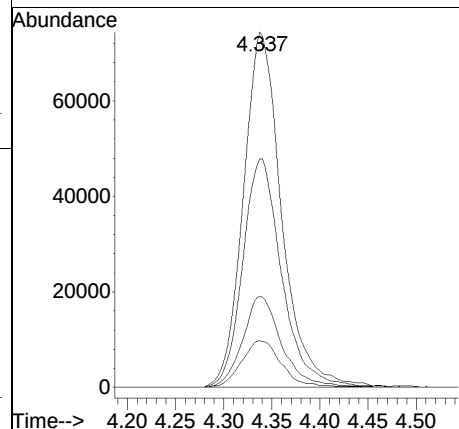
Tgt	Ion	Resp	Lower	Upper
96	100			
61	128.2	149.4	224.2#	
98	63.8	53.4	80.2	

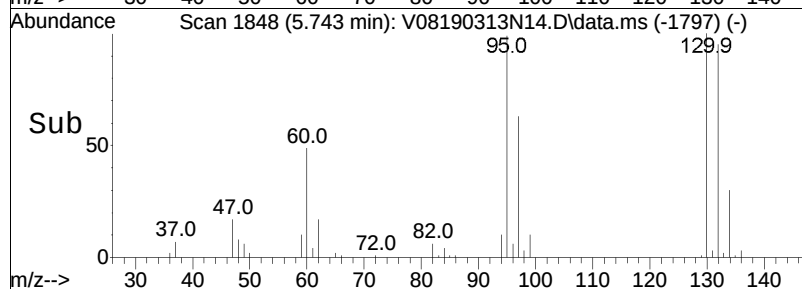
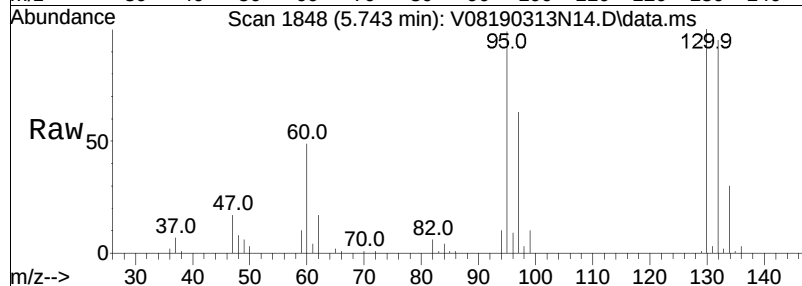
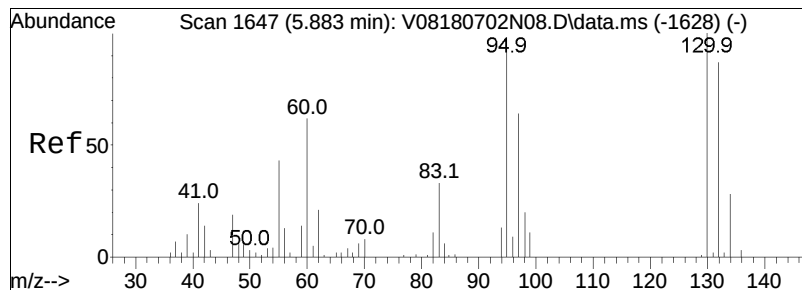




#32
 Chloroform
 Concen: 19.56 ug/L
 RT: 4.337 min Scan# 1344
 Delta R.T. -0.009 min
 Lab File: V08190313N14.D
 Acq: 13 Mar 2019 11:05 pm

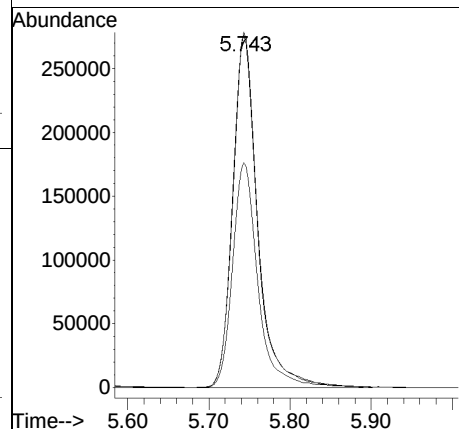
Tgt	Ion: 83	Resp:	206436
Ion	Ratio	Lower	Upper
83	100		
85	65.3	41.5	86.1
47	26.0	19.0	39.4
48	13.5	9.9	20.5

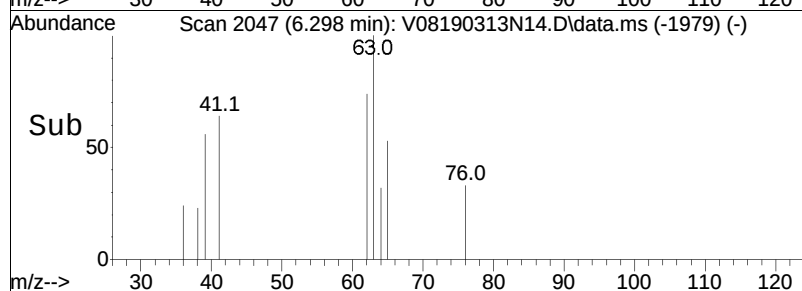
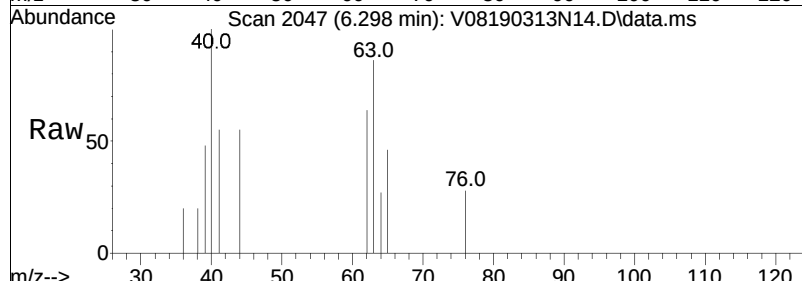
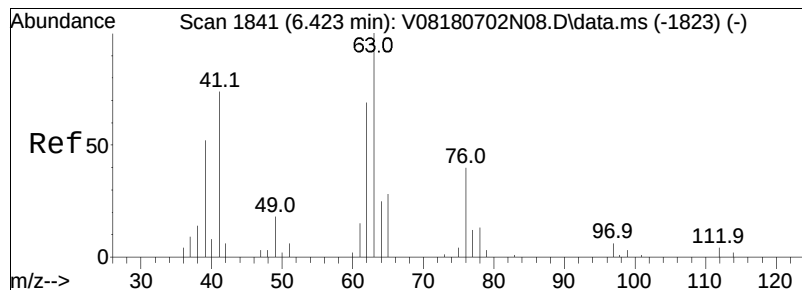




#48
 Trichloroethene
 Concen: 96.50 ug/L
 RT: 5.743 min Scan# 1848
 Delta R.T. -0.008 min
 Lab File: V08190313N14.D
 Acq: 13 Mar 2019 11:05 pm

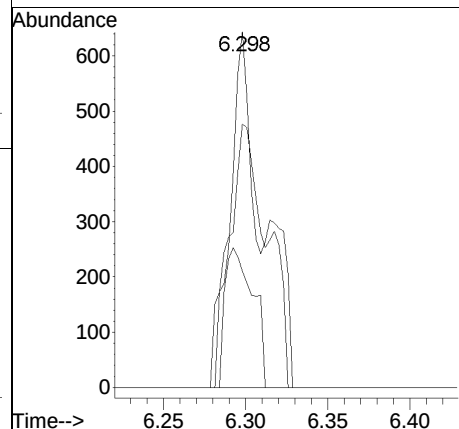
Tgt Ion	Ratio	Lower	Upper
95	100		
97	64.4	55.5	83.3
130	100.7	76.6	115.0

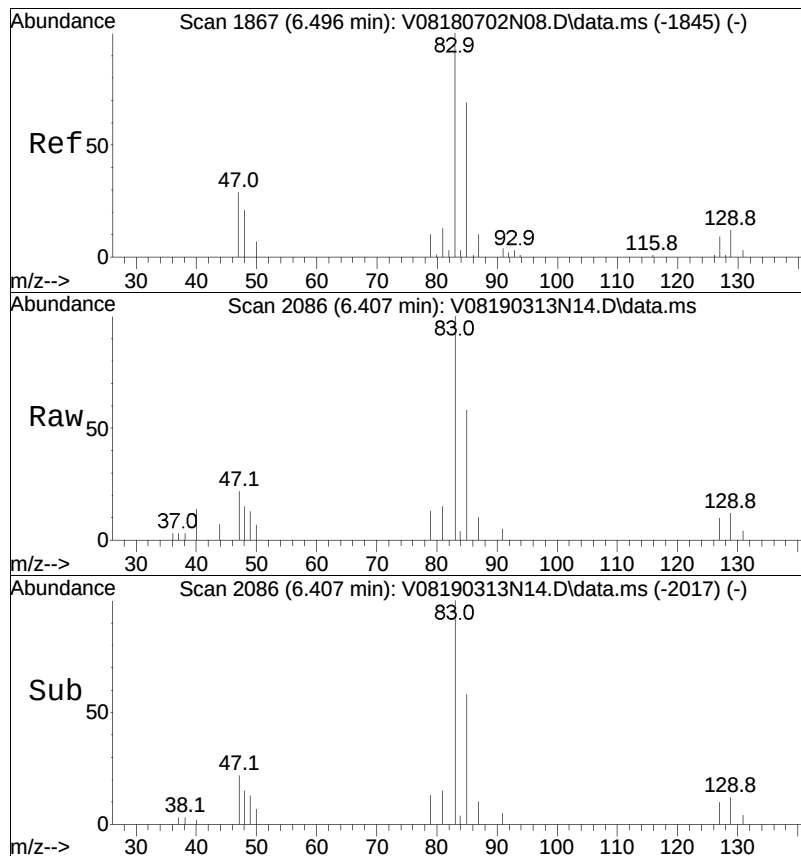




#51
 1,2-Dichloropropane
 Concen: 0.15 ug/L M1
 RT: 6.298 min Scan# 2047
 Delta R.T. -0.011 min
 Lab File: V08190313N14.D
 Acq: 13 Mar 2019 11:05 pm

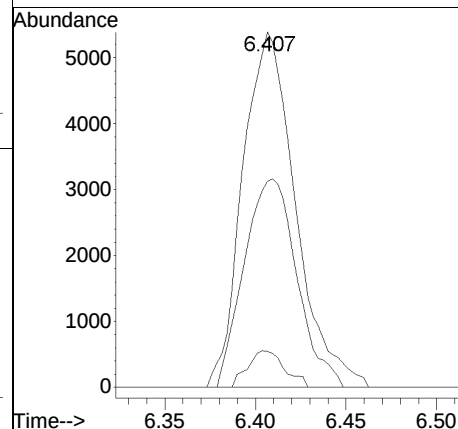
Tgt Ion	Ratio	Lower	Upper
63	100		
62	66.5	58.6	87.8
76	33.3	38.0	57.0

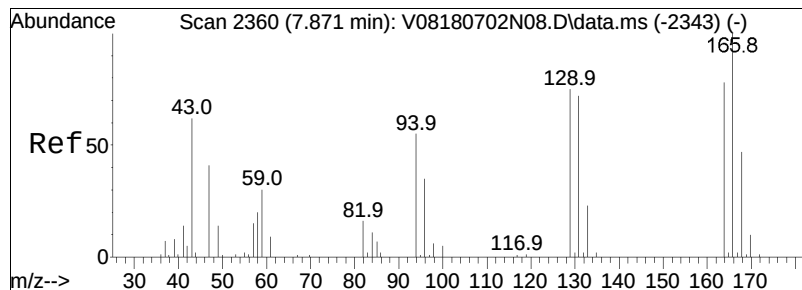




#54
 Bromodichloromethane
 Concen: 1.30 ug/L
 RT: 6.407 min Scan# 2086
 Delta R.T. -0.008 min
 Lab File: V08190313N14.D
 Acq: 13 Mar 2019 11:05 pm

Tgt Ion:	83	Resp:	10908
Ion Ratio	Lower	Upper	
83	100		
85	58.6	52.3	78.5
127	7.2	6.2	9.4





#63

Tetrachloroethene

Concen: 119.75 ug/L

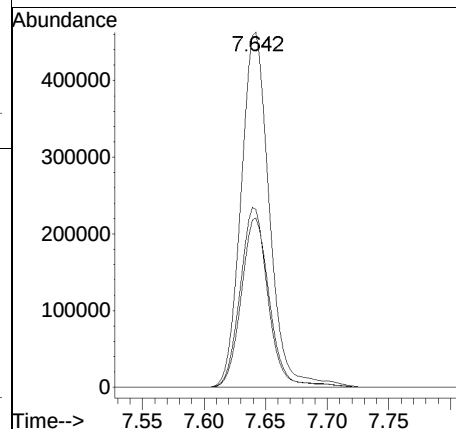
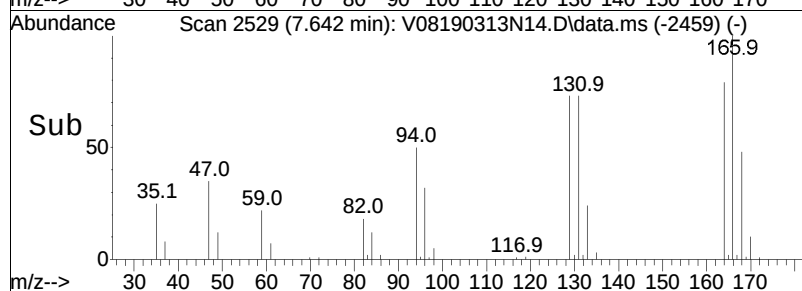
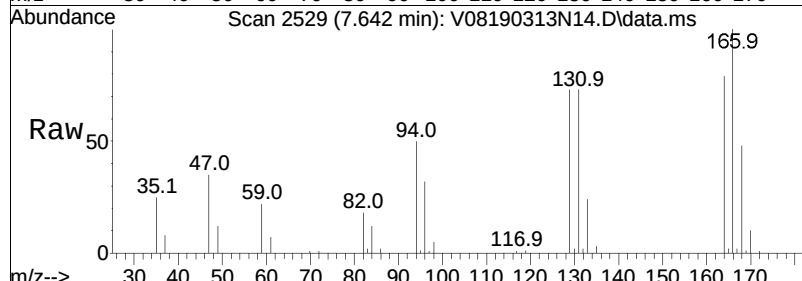
RT: 7.642 min Scan# 2529

Delta R.T. -0.006 min

Lab File: V08190313N14.D

Acq: 13 Mar 2019 11:05 pm

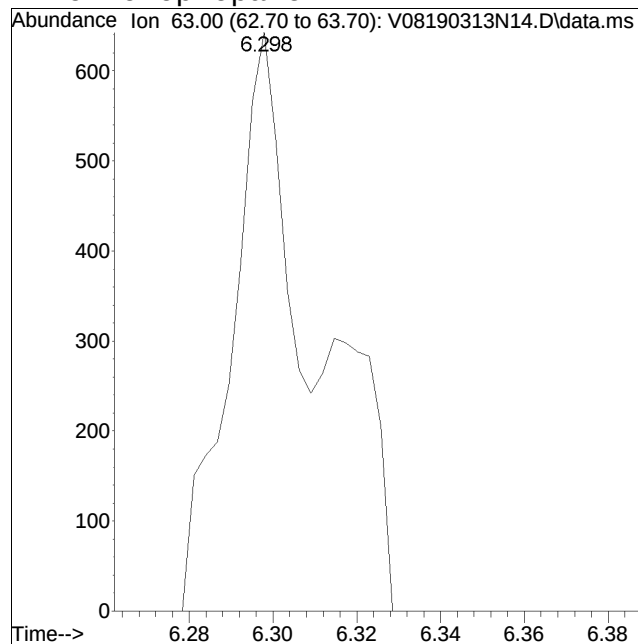
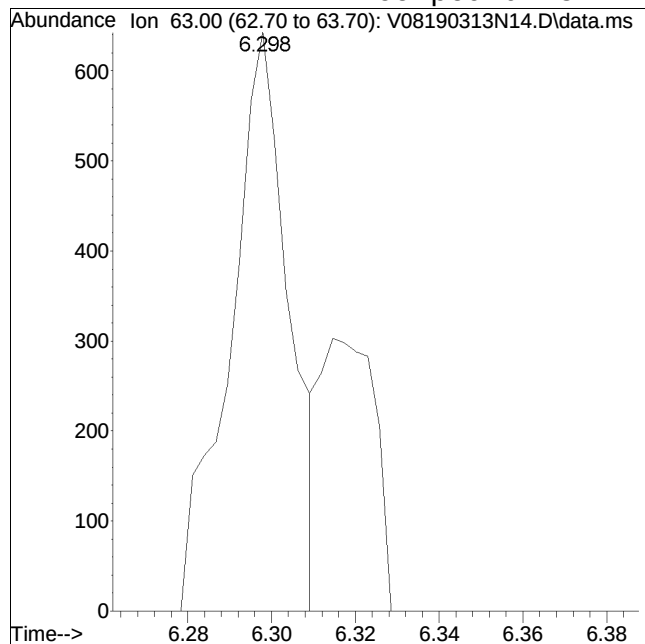
Tgt	Ion:166	Resp:	741816
Ion	Ratio	Lower	Upper
166	100		
168	47.9	28.2	68.2
94	50.0	38.4	78.4



Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190313N14.D Operator : VOA108:NLK
Date Inj'd : 3/13/2019 11:05 pm Instrument : VOA 108
Sample : l1908936-02,31,10,10,,c Quant Date : 3/14/2019 11:43 am

Compound #51: 1,2-Dichloropropane



Original Peak Response = 628

Manual Peak Response = 902 M1

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

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary

Form 6

Volatiles

Client : Langan Engineering & Environmental
Project Name : 491 WORTMAN AVE.
Instrument ID : VOA108
Calibration dates : 02/18/19 20:23 02/18/19 23:40
Lab Number : L1908936
Project Number : 170329301
Ical Ref : ICAL15519

Calibration Files

L11 =V08190218N04.D L1 =V08190218N06.D L2 =V08190218N08.D L3 =V08190218N09.D L4 =V08190218N10.D
 L6 =V08190218N11.D L8 =V08190218N12.D L10 =V08190218N13.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----									
2) TP Dichlorodifluo		0.162	0.178	0.191	0.189	0.222	0.231	0.226	0.200	13.29
3) TP Chloromethane		0.195	0.202	0.198	0.190	0.194	0.202	0.197	0.197	2.28
4) TC Vinyl chloride	0.180	0.181	0.212	0.210	0.206	0.228	0.236	0.229	0.210	10.07
5) TP Bromomethane		0.238	0.212	0.175	0.158	0.156	0.164	0.165	0.181	17.39
6) TP Chloroethane		0.171	0.152	0.138	0.137	0.164	0.161	0.154	0.154	8.50
7) TP Trichlorofluor		0.286	0.313	0.320	0.320	0.370	0.388	0.378	0.339	11.46
8) TP Ethyl ether		0.106	0.119	0.107	0.110	0.115	0.118	0.117	0.113	4.93
10) TC 1,1-Dichloroet		0.171	0.183	0.180	0.177	0.198	0.206	0.202	0.188	7.28
11) TP Carbon disulfide		0.554	0.567	0.570	0.559	0.619	0.642	0.625	0.591	6.16
12) TP Freon-113		0.142	0.156	0.164	0.162	0.192	0.200	0.197	0.173	13.17
13) TP Iodomethane			0.092	0.138	0.198	0.260	0.279	0.274	*Q	0.9955
14) TP Acrolein		0.023	0.022	0.021	0.021	0.025	0.026	0.026	0.023#	9.11
15) TP Methylene chlo		0.254	0.222	0.214	0.210	0.219	0.226	0.222	0.224	6.45
17) TP Acetone			0.046	0.036	0.034	0.038	0.040	0.040	0.039#	11.16
18) TP trans-1,2-Dich		0.193	0.208	0.208	0.207	0.222	0.230	0.225	0.213	6.08
19) TP Methyl acetate		0.080	0.093	0.096	0.098	0.103	0.107	0.107	0.098#	9.75
20) TP Methyl tert butyl ether		0.554	0.554	0.537	0.537	0.570	0.592	0.578	0.560	3.70
21) TP tert-Butyl alc			0.012	0.010	0.011	0.012	0.013	0.013	0.012#	9.44
22) TP Diisopropyl ether		0.651	0.645	0.618	0.617	0.647	0.674	0.664	0.645	3.30
23) TP 1,1-Dichloroet		0.353	0.374	0.371	0.363	0.388	0.400	0.391	0.377	4.40
24) TP Halothane		0.147	0.156	0.156	0.158	0.174	0.183	0.178	0.165	8.25
25) TP Acrylonitrile		0.073	0.054	0.055	0.052	0.058	0.059	0.059	0.058	11.63
26) TP Ethyl tert-but		0.570	0.599	0.607	0.608	0.649	0.676	0.671	0.626	6.38
27) TP Vinyl acetate			0.343	0.387	0.433	0.487	0.515	0.519	0.447	16.13
28) TP cis-1,2-Dichlo		0.232	0.246	0.238	0.233	0.245	0.252	0.248	0.242	3.18
29) TP 2,2-Dichloropr		0.284	0.299	0.300	0.297	0.324	0.335	0.330	0.310	6.32
30) TP Bromochloromet		0.104	0.112	0.110	0.110	0.115	0.119	0.113	0.112	4.23
31) TP Cyclohexane		0.267	0.290	0.290	0.287	0.341	0.355	0.347	0.311	11.46
32) TC Chloroform		0.365	0.385	0.383	0.389	0.404	0.420	0.412	0.394	4.80
33) TP Ethyl acetate			0.228	0.144	0.146	0.156	0.162	0.158	0.166	18.82
34) TP Carbon tetrachloride	0.262	0.258	0.276	0.285	0.279	0.324	0.339	0.332	0.294	10.92
35) TP Tetrahydrofuran			0.040	0.037	0.038	0.040	0.042	0.044	0.040#	6.40
36) S Dibromofluoromethane	0.243	0.248	0.250	0.253	0.255	0.259	0.269	0.267	0.255	3.52
37) TP 1,1,1-Trichlor		0.288	0.327	0.336	0.329	0.367	0.384	0.375	0.344	9.76
39) TP 2-Butanone			0.086	0.056	0.061	0.066	0.069	0.069	0.068#	15.43

Initial Calibration Summary

Form 6

Volatiles

Client : Langan Engineering & Environmental
Project Name : 491 WORTMAN AVE.
Instrument ID : VOA108
Calibration dates : 02/18/19 20:23 02/18/19 23:40
Lab Number : L1908936
Project Number : 170329301
Ical Ref : ICAL15519

Calibration Files

L11 =V08190218N04.D L1 =V08190218N06.D L2 =V08190218N08.D L3 =V08190218N09.D L4 =V08190218N10.D
 L6 =V08190218N11.D L8 =V08190218N12.D L10 =V08190218N13.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
40) TP 1,1-Dichloropr		0.257	0.259	0.268	0.258	0.288	0.301	0.295	0.275	6.88
41) TP Benzene	0.854	0.809	0.861	0.847	0.830	0.882	0.906	0.881	0.859	3.59
42) TP Tertiary-Amyl Methyl Ether		0.574	0.553	0.542	0.556	0.590	0.611	0.603	0.576	4.62
43) S 1,2-Dichloroethane-d4	0.281	0.290	0.283	0.281	0.285	0.289	0.290	0.297	0.287	1.90
44) TP 1,2-Dichloroet		0.309	0.289	0.280	0.282	0.297	0.307	0.304	0.295	4.01
47) TP Methyl cyclohe		0.261	0.306	0.327	0.307	0.363	0.376	0.369	0.330	12.69
48) TP Trichloroethene	0.226	0.222	0.224	0.224	0.219	0.235	0.242	0.238	0.229	3.71
50) TP Dibromomethane		0.129	0.130	0.131	0.131	0.137	0.142	0.139	0.134	3.84
51) TC 1,2-Dichloropr		0.225	0.230	0.214	0.213	0.222	0.231	0.224	0.223	3.16
53) TP 2-Chloroethyl		0.105	0.122	0.124	0.127	0.134	0.139	0.137	0.127	9.24
54) TP Bromodichlorom		0.282	0.299	0.307	0.304	0.324	0.337	0.332	0.312	6.30
57) TP 1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	3.94
58) TP cis-1,3-Dichlo		0.316	0.329	0.338	0.345	0.366	0.380	0.376	0.350	7.05
59) I Chlorobenzene-d5	-----ISTD-----									
60) S Toluene-d8	1.434	1.386	1.388	1.353	1.341	1.345	1.364	1.355	1.371	2.26
61) TC Toluene		0.742	0.788	0.761	0.747	0.783	0.828	0.808	0.779	4.06
62) TP 4-Methyl-2-pen		0.078	0.081	0.085	0.088	0.092	0.097	0.094	0.088#	8.17
63) TP Tetrachloroethene		0.297	0.318	0.329	0.321	0.349	0.372	0.357	0.335	7.68
65) TP trans-1,3-Dich		0.406	0.419	0.417	0.426	0.455	0.483	0.473	0.440	6.92
67) TP Ethyl methacry		0.330	0.304	0.330	0.341	0.367	0.391	0.379	0.349	8.91
68) TP 1,1,2-Trichlor		0.226	0.228	0.216	0.212	0.221	0.233	0.226	0.223	3.27
69) TP Chlorodibromom		0.300	0.324	0.314	0.316	0.338	0.359	0.349	0.329	6.40
70) TP 1,3-Dichloropr		0.488	0.453	0.435	0.427	0.441	0.464	0.448	0.451	4.51
71) TP 1,2-Dibromoethane		0.260	0.265	0.259	0.253	0.267	0.282	0.272	0.266	3.62
72) TP 2-Hexanone		0.133	0.159	0.140	0.144	0.156	0.169	0.164	0.152	8.77
73) TP Chlorobenzene		0.851	0.876	0.857	0.838	0.868	0.910	0.870	0.867	2.64
74) TC Ethylbenzene		1.362	1.418	1.451	1.427	1.505	1.575	1.433	1.453	4.71
75) TP 1,1,1,2-Tetrac		0.339	0.309	0.314	0.311	0.324	0.342	0.333	0.325	4.22
76) TP p/m Xylene		0.452	0.516	0.560	0.551	0.584	0.617	0.588	0.553	9.86
77) TP o Xylene		0.481	0.513	0.550	0.542	0.569	0.599	0.576	0.547	7.25
78) TP Styrene		0.777	0.827	0.911	0.904	0.952	0.985	0.762	0.874	9.89
79) I 1,4-Dichlorobenzene-d4	-----ISTD-----									
80) TP Bromoform		0.408	0.408	0.409	0.391	0.420	0.451	0.428	0.416	4.57
82) TP Isopropylbenzene		2.897	2.937	3.056	2.870	2.996	3.109	2.570	2.919	6.03
83) S 4-Bromofluorobenzene	0.968	0.972	0.988	1.024	0.996	0.983	0.972	0.926	0.978	2.87
84) TP Bromobenzene		0.833	0.753	0.772	0.717	0.724	0.762	0.699	0.751	5.92



Initial Calibration Summary

Form 6

Volatiles

Client : Langan Engineering & Environmental
Project Name : 491 WORTMAN AVE.
Instrument ID : VOA108
Calibration dates : 02/18/19 20:23 02/18/19 23:40
Lab Number : L1908936
Project Number : 170329301
Ical Ref : ICAL15519

Calibration Files

L11 =V08190218N04.D L1 =V08190218N06.D L2 =V08190218N08.D L3 =V08190218N09.D L4 =V08190218N10.D
 L6 =V08190218N11.D L8 =V08190218N12.D L10 =V08190218N13.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
85) TP n-Propylbenzene	3.313	3.353	3.536	3.336	3.508	3.612	2.670	3.333	9.41	
86) TP 1,4-Dichlorobu	0.942	0.926	0.887	0.850	0.875	0.916	0.849	0.892	4.15	
87) TP 1,1,2,2-Tetrac	0.736	0.706	0.685	0.645	0.658	0.686	0.629	0.678	5.44	
88) TP 4-Ethyltoluene	2.513	2.744	2.881	2.772	2.918	3.038	2.562	2.776	6.83	
89) TP 2-Chlorotoluene	2.451	2.342	2.498	2.360	2.458	2.580	2.338	2.432	3.73	
90) TP 1,3,5-Trimethy	2.202	2.335	2.415	2.355	2.509	2.636	2.326	2.397	5.87	
91) TP 1,2,3-Trichlor	0.606	0.546	0.521	0.491	0.500	0.533	0.491	0.527	7.79	
92) TP trans-1,4-Dich	0.224	0.178	0.163	0.174	0.180	0.196	0.185	0.186	10.66	
93) TP 4-Chlorotoluene	2.055	2.098	2.173	2.073	2.141	2.244	2.029	2.116	3.54	
94) TP tert-Butylbenzene	2.363	2.451	2.499	2.370	2.508	2.647	2.403	2.463	4.05	
95) TP Pentachloroethane	0.461	0.434	0.474	0.477	0.479	0.498	0.476	0.471	4.17	
97) TP 1,2,4-Trimethy	2.110	2.399	2.375	2.367	2.515	2.648	2.280	2.385	7.12	
98) TP sec-Butylbenzene	2.820	3.051	3.206	2.912	3.186	3.313	2.633	3.017	8.01	
99) TP p-Isopropyltol	2.413	2.605	2.679	2.486	2.712	2.862	2.374	2.590	6.80	
100) TP 1,3-Dichlorobe	1.355	1.343	1.414	1.337	1.378	1.479	1.390	1.385	3.58	
101) TP 1,4-Dichlorobe	1.552	1.402	1.409	1.357	1.402	1.503	1.418	1.435	4.73	
102) TP p-Diethylbenzene	1.153	1.465	1.534	1.454	1.614	1.752	1.639	1.516	12.60	
103) TP n-Butylbenzene	2.124	2.356	2.459	2.280	2.572	2.728	2.298	2.402	8.39	
104) TP 1,2-Dichlorobe	1.469	1.325	1.339	1.270	1.313	1.408	1.333	1.351	4.89	
105) TP 1,2,4,5-Tetram	1.045	1.400	2.103	2.208	2.557	2.759	2.344	*L	0.9935	
106) TP 1,2-Dibromo-3-	0.100	0.095	0.098	0.096	0.103	0.111	0.107	0.102	5.69	
107) TP 1,3,5-Trichlor	0.679	0.851	0.950	0.898	1.008	1.089	1.038	0.930	14.80	
108) TP Hexachlorobuta	0.439	0.455	0.438	0.377	0.435	0.468	0.440	0.436	6.57	
109) TP 1,2,4-Trichlor	0.640	0.695	0.838	0.833	0.934	1.021	0.974	0.848	16.72	
110) TP Naphthalene	1.224	1.591	1.868	1.915	2.113	2.288	2.068	1.867	19.19	
111) TP 1,2,3-Trichlor	0.542	0.641	0.762	0.755	0.857	0.931	0.877	0.766	17.94	

Initial Calibration Summary

Form 6

Volatiles

Client : Langan Engineering & Environmental
Project Name : 491 WORTMAN AVE.
Instrument ID : GONZO
Calibration dates : 02/27/19 20:36 02/28/19 00:24
Lab Number : L1908936
Project Number : 170329301
Ical Ref : ICAL15541

Calibration Files

L11 =VG190227A03.D L1 =VG190227A05.D L2 =VG190227A07.D L3 =VG190227A08.D L4 =VG190227A09.D
 L6 =VG190227A10.D L8 =VG190227A11.D L10 =VG190227A12.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----									
2) TP Dichlorodifluo		0.168	0.183	0.186	0.199	0.204	0.202	0.202	0.192	7.00
3) TP Chloromethane		0.219	0.176	0.182	0.189	0.189	0.184	0.188	0.190	7.34
4) TC Vinyl chloride	0.311	0.272	0.274	0.282	0.286	0.289	0.287	0.283	0.286	4.24
5) TP Bromomethane		0.237	0.186	0.159	0.152	0.157	0.163	0.165	0.174	16.96
6) TP Chloroethane		0.167	0.155	0.165	0.170	0.174	0.171	0.173	0.168	3.87
7) TP Trichlorofluor		0.336	0.325	0.355	0.377	0.384	0.383	0.395	0.365	7.27
8) TP Ethyl ether		0.087	0.092	0.089	0.092	0.096	0.098	0.104	0.094	6.19
10) TC 1,1-Dichloroet		0.158	0.161	0.172	0.184	0.198	0.208	0.221	0.186	12.85
11) TP Carbon disulfide		0.482	0.471	0.502	0.534	0.584	0.635	0.694	0.557	15.04
12) TP Freon-113		0.173	0.192	0.196	0.218	0.234	0.247	0.261	0.217	14.72
13) TP Iodomethane		0.196	0.183	0.204	0.247	0.269	0.267	0.263	0.233	16.02
14) TP Acrolein		0.020	0.018	0.019	0.021	0.021	0.022	0.023	0.020	8.28
15) TP Methylene chlo		0.216	0.186	0.187	0.188	0.196	0.200	0.210	0.198	6.00
17) TP Acetone			0.031	0.026	0.025	0.026	0.024	0.025	0.026	8.78
18) TP trans-1,2-Dich		0.176	0.179	0.190	0.202	0.213	0.221	0.233	0.202	10.62
19) TP Methyl acetate		0.090	0.092	0.085	0.086	0.091	0.090	0.095	0.090	4.10
20) TP Methyl tert butyl ether		0.439	0.432	0.450	0.465	0.489	0.501	0.536	0.473	7.95
21) TP tert-Butyl alc		0.006	0.005	0.005	0.006	0.007	0.005	0.006	0.006	8.79
22) TP Diisopropyl ether		0.539	0.562	0.577	0.597	0.623	0.650	0.698	0.607	9.04
23) TP 1,1-Dichloroet		0.338	0.344	0.351	0.362	0.378	0.390	0.408	0.367	6.99
24) TP Halothane		0.154	0.161	0.164	0.181	0.195	0.203	0.214	0.182	12.65
25) TP Acrylonitrile		0.030	0.037	0.036	0.036	0.039	0.039	0.043	0.037	10.97
26) TP Ethyl tert-but		0.487	0.519	0.531	0.562	0.601	0.633	0.690	0.575	12.35
27) TP Vinyl acetate		0.317	0.343	0.361	0.375	0.391	0.420	0.460	0.381	12.61
28) TP cis-1,2-Dichlo		0.204	0.210	0.210	0.219	0.229	0.235	0.248	0.222	7.13
29) TP 2,2-Dichloropr		0.282	0.289	0.288	0.308	0.324	0.332	0.347	0.310	8.07
30) TP Bromochloromet		0.099	0.099	0.102	0.106	0.113	0.116	0.125	0.109	9.06
31) TP Cyclohexane		0.300	0.302	0.317	0.344	0.371	0.397	0.428	0.351	14.11
32) TC Chloroform		0.345	0.354	0.351	0.380	0.382	0.393	0.412	0.374	6.61
33) TP Ethyl acetate			0.161	0.130	0.129	0.136	0.135	0.145	0.139	8.81
34) TP Carbon tetrachloride	0.276	0.285	0.277	0.305	0.331	0.357	0.371	0.390	0.324	13.91
35) TP Tetrahydrofuran		0.034	0.036	0.032	0.032	0.034	0.033	0.035	0.034	4.38
36) S Dibromofluoromethane	0.242	0.240	0.240	0.247	0.252	0.257	0.266	0.277	0.253	5.28
37) TP 1,1,1-Trichlor		0.330	0.326	0.355	0.370	0.390	0.408	0.419	0.371	9.80
39) TP 2-Butanone		0.057	0.055	0.050	0.048	0.052	0.049	0.052	0.052	6.32



Initial Calibration Summary

Form 6

Volatiles

Client : Langan Engineering & Environmental
Project Name : 491 WORTMAN AVE.
Instrument ID : GONZO
Calibration dates : 02/27/19 20:36 02/28/19 00:24

Lab Number : L1908936
Project Number : 170329301
Ical Ref : ICAL15541

Calibration Files

L11 =VG190227A03.D L1 =VG190227A05.D L2 =VG190227A07.D L3 =VG190227A08.D L4 =VG190227A09.D
 L6 =VG190227A10.D L8 =VG190227A11.D L10 =VG190227A12.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
40) TP 1,1-Dichloropr		0.263	0.269	0.280	0.295	0.311	0.322	0.340	0.297	9.65
41) TP Benzene	0.897	0.821	0.835	0.846	0.866	0.921	0.963	1.033	0.898	8.04
42) TP Tertiary-Amyl Methyl Ether		0.477	0.485	0.511	0.538	0.579	0.605	0.661	0.551	12.31
43) S 1,2-Dichloroethane-d4	0.242	0.242	0.245	0.242	0.245	0.247	0.257	0.269	0.249	3.86
44) TP 1,2-Dichloroethane	0.303	0.259	0.249	0.236	0.241	0.248	0.255	0.267	0.257	8.08
47) TP Methyl cyclohe		0.349	0.372	0.397	0.434	0.484	0.520	0.560	0.445	17.74
48) TP Trichloroethene	0.228	0.211	0.216	0.218	0.235	0.263	0.282	0.298	0.244	13.44
50) TP Dibromomethane		0.105	0.114	0.110	0.115	0.121	0.124	0.133	0.117	7.79
51) TC 1,2-Dichloropr		0.180	0.186	0.187	0.193	0.203	0.209	0.225	0.198	7.96
53) TP 2-Chloroethyl		0.074	0.078	0.085	0.085	0.093	0.094	0.103	0.088	11.42
54) TP Bromodichlorom		0.235	0.252	0.263	0.288	0.305	0.314	0.333	0.284	12.55
57) TP 1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	19.12
58) TP cis-1,3-Dichlo		0.272	0.292	0.309	0.330	0.353	0.366	0.395	0.331	13.07
59) I Chlorobenzene-d5	-----ISTD-----									
60) S Toluene-d8	1.276	1.285	1.287	1.259	1.236	1.192	1.172	1.122	1.229	4.94
61) TC Toluene		0.723	0.716	0.709	0.719	0.748	0.771	0.799	0.741	4.54
62) TP 4-Methyl-2-pen		0.053	0.052	0.059	0.061	0.066	0.068	0.074	0.062	13.01
63) TP Tetrachloroethene		0.320	0.342	0.348	0.367	0.379	0.386	0.393	0.362	7.34
65) TP trans-1,3-Dich		0.306	0.316	0.346	0.367	0.378	0.388	0.410	0.359	10.63
67) TP Ethyl methacry		0.201	0.218	0.239	0.255	0.273	0.283	0.310	0.254	14.83
68) TP 1,1,2-Trichlor		0.173	0.174	0.173	0.175	0.179	0.183	0.197	0.179	4.94
69) TP Chlorodibromom		0.205	0.235	0.250	0.270	0.277	0.279	0.287	0.258	11.48
70) TP 1,3-Dichloropr		0.361	0.356	0.343	0.345	0.348	0.349	0.362	0.352	2.17
71) TP 1,2-Dibromoethane		0.196	0.203	0.201	0.207	0.208	0.207	0.212	0.205	2.54
72) TP 2-Hexanone		0.104	0.094	0.102	0.101	0.104	0.099	0.102	0.101	3.59
73) TP Chlorobenzene		0.818	0.786	0.799	0.816	0.854	0.876	0.909	0.837	5.31
74) TC Ethylbenzene		1.309	1.349	1.374	1.421	1.527	1.577	1.625	1.454	8.38
75) TP 1,1,1,2-Tetrac		0.253	0.261	0.281	0.296	0.303	0.310	0.319	0.289	8.63
76) TP p/m Xylene		0.491	0.540	0.558	0.595	0.655	0.661	0.623	0.589	10.64
77) TP o Xylene		0.486	0.495	0.518	0.556	0.614	0.617	0.580	0.552	9.84
78) TP Styrene		0.753	0.817	0.854	0.936	1.033	1.046	0.941	0.912	12.00
79) I 1,4-Dichlorobenzene-d4	-----ISTD-----									
80) TP Bromoform		0.211	0.270	0.307	0.336	0.369	0.368	0.383	0.320	19.50
82) TP Isopropylbenzene		2.580	2.725	2.714	2.820	3.017	3.040	3.089	2.855	6.84
83) S 4-Bromofluorobenzene	0.899	0.903	0.895	0.855	0.831	0.818	0.783	0.768	0.844	6.29
84) TP Bromobenzene		0.704	0.685	0.678	0.692	0.727	0.724	0.750	0.709	3.68



Initial Calibration Summary

Form 6

Volatiles

Client : Langan Engineering & Environmental
Project Name : 491 WORTMAN AVE.
Instrument ID : GONZO
Calibration dates : 02/27/19 20:36 02/28/19 00:24
Lab Number : L1908936
Project Number : 170329301
Ical Ref : ICAL15541

Calibration Files

L11 =VG190227A03.D L1 =VG190227A05.D L2 =VG190227A07.D L3 =VG190227A08.D L4 =VG190227A09.D
 L6 =VG190227A10.D L8 =VG190227A11.D L10 =VG190227A12.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
85) TP n-Propylbenzene	2.965	3.104	3.106	3.242	3.566	3.572	3.386	3.277	7.26	
86) TP 1,4-Dichlorobu	0.545	0.553	0.532	0.532	0.571	0.568	0.604	0.558	4.60	
87) TP 1,1,2,2-Tetrac	0.435	0.449	0.428	0.429	0.444	0.437	0.468	0.441	3.18	
88) TP 4-Ethyltoluene	2.400	2.540	2.601	2.679	2.896	2.868	2.962	2.707	7.70	
89) TP 2-Chlorotoluene	1.715	1.747	1.703	1.761	1.871	1.892	2.026	1.816	6.51	
90) TP 1,3,5-Trimethy	2.042	2.151	2.204	2.332	2.554	2.555	2.544	2.340	9.18	
91) TP 1,2,3-Trichlor	0.374	0.383	0.351	0.368	0.409	0.404	0.417	0.386	6.23	
92) TP trans-1,4-Dich	0.094	0.093	0.096	0.101	0.106	0.103	0.111	0.100	6.65	
93) TP 4-Chlorotoluene	1.820	1.775	1.786	1.815	1.962	1.963	2.041	1.880	5.63	
94) TP tert-Butylbenzene	1.874	1.922	1.997	2.049	2.186	2.184	2.228	2.063	6.78	
97) TP 1,2,4-Trimethy	2.007	2.053	2.147	2.244	2.441	2.421	2.468	2.254	8.53	
98) TP sec-Butylbenzene	2.454	2.633	2.722	2.865	3.037	3.030	2.984	2.818	7.92	
99) TP p-Isopropyltol	2.167	2.371	2.497	2.659	2.810	2.807	2.796	2.587	9.71	
100) TP 1,3-Dichlorobe	1.276	1.273	1.247	1.295	1.349	1.329	1.386	1.308	3.74	
101) TP 1,4-Dichlorobe	1.375	1.306	1.284	1.318	1.370	1.354	1.405	1.345	3.21	
102) TP p-Diethylbenzene	1.166	1.316	1.417	1.543	1.635	1.647	1.667	1.485	12.90	
103) TP n-Butylbenzene	1.882	1.991	2.099	2.221	2.389	2.399	2.438	2.203	9.93	
104) TP 1,2-Dichlorobe	1.137	1.122	1.130	1.168	1.200	1.195	1.237	1.170	3.67	
105) TP 1,2,4,5-Tetram	1.717	1.847	2.004	2.148	2.323	2.362	2.441	2.120	12.97	
106) TP 1,2-Dibromo-3-	0.043	0.053	0.064	0.068	0.073	0.072	0.077	0.064	18.86	
107) TP 1,3,5-Trichlor	0.878	0.867	0.911	0.954	0.990	0.991	1.030	0.946	6.58	
108) TP Hexachlorobuta	0.341	0.357	0.392	0.421	0.447	0.454	0.478	0.413	12.46	
109) TP 1,2,4-Trichlor	0.744	0.735	0.778	0.819	0.854	0.859	0.892	0.811	7.50	
110) TP Naphthalene	1.242	1.316	1.385	1.413	1.473	1.452	1.530	1.401	6.97	
111) TP 1,2,3-Trichlor	0.616	0.626	0.659	0.673	0.700	0.693	0.708	0.668	5.38	

Response Factor Report VOA 108

Method Path : I:\VOLATILES\VOA108\2019\190218N\
 Method File : V108_190218N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Tue Feb 19 00:08:39 2019
 Response Via : Initial Calibration

Calibration Files

L11 =V08190218N04.D L1 =V08190218N06.D L2 =V08190218N08.D L3 =V08190218N09.D L4 =V08190218N10.D
 L6 =V08190218N11.D L8 =V08190218N12.D L10 =V08190218N13.D

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

1) I	Fluorobenzene	-----ISTD-----									
2) TP	Dichlorodifluo...	0.162	0.178	0.191	0.189	0.222	0.231	0.226	0.200	13.29	
3) TP	Chloromethane	0.195	0.202	0.198	0.190	0.194	0.202	0.197	0.197	2.28	
4) TC	Vinyl chloride	0.180	0.181	0.212	0.210	0.206	0.228	0.236	0.229	10.07	
5) TP	Bromomethane	0.238	0.212	0.175	0.158	0.156	0.164	0.165	0.181	17.39	
6) TP	Chloroethane	0.171	0.152	0.138	0.137	0.164	0.161	0.154	0.154	8.50	
7) TP	Trichlorofluor...	0.286	0.313	0.320	0.320	0.370	0.388	0.378	0.339	11.46	
8) TP	Ethyl ether	0.106	0.119	0.107	0.110	0.115	0.118	0.117	0.113	4.93	
10) TC	1,1-Dichloroet...	0.171	0.183	0.180	0.177	0.198	0.206	0.202	0.188	7.28	
11) TP	Carbon disulfide	0.554	0.567	0.570	0.559	0.619	0.642	0.625	0.591	6.16	
12) TP	Freon-113	0.142	0.156	0.164	0.162	0.192	0.200	0.197	0.173	13.17	
13) TP	Iodomethane		0.092	0.138	0.198	0.260	0.279	0.274	*Q	0.9955	
14) TP	Acrolein	0.023	0.022	0.021	0.021	0.025	0.026	0.026	0.023#	9.11	
15) TP	Methylene chlo...	0.254	0.222	0.214	0.210	0.219	0.226	0.222	0.224	6.45	
17) TP	Acetone		0.046	0.036	0.034	0.038	0.040	0.040	0.039#	11.16	
18) TP	trans-1,2-Dich...	0.193	0.208	0.208	0.207	0.222	0.230	0.225	0.213	6.08	
19) TP	Methyl acetate	0.080	0.093	0.096	0.098	0.103	0.107	0.107	0.098#	9.75	
20) TP	Methyl tert-bu...	0.554	0.554	0.537	0.537	0.570	0.592	0.578	0.560	3.70	
21) TP	tert-Butyl alc...		0.012	0.010	0.011	0.012	0.013	0.013	0.012#	9.44	
22) TP	Diisopropyl ether	0.651	0.645	0.618	0.617	0.647	0.674	0.664	0.645	3.30	
23) TP	1,1-Dichloroet...	0.353	0.374	0.371	0.363	0.388	0.400	0.391	0.377	4.40	
24) TP	Halothane	0.147	0.156	0.156	0.158	0.174	0.183	0.178	0.165	8.25	
25) TP	Acrylonitrile	0.073	0.054	0.055	0.052	0.058	0.059	0.059	0.058	11.63	
26) TP	Ethyl tert-but...	0.570	0.599	0.607	0.608	0.649	0.676	0.671	0.626	6.38	
27) TP	Vinyl acetate		0.343	0.387	0.433	0.487	0.515	0.519	0.447	16.13	
28) TP	cis-1,2-Dichlo...	0.232	0.246	0.238	0.233	0.245	0.252	0.248	0.242	3.18	
29) TP	2,2-Dichloropr...	0.284	0.299	0.300	0.297	0.324	0.335	0.330	0.310	6.32	
30) TP	Bromochloromet...	0.104	0.112	0.110	0.110	0.115	0.119	0.113	0.112	4.23	
31) TP	Cyclohexane	0.267	0.290	0.290	0.287	0.341	0.355	0.347	0.311	11.46	
32) TC	Chloroform	0.365	0.385	0.383	0.389	0.404	0.420	0.412	0.394	4.80	
33) TP	Ethyl acetate		0.228	0.144	0.146	0.156	0.162	0.158	0.166	18.82	

Response Factor Report VOA 108

Method Path : I:\VOLATILES\VOA108\2019\190218N\
 Method File : V108_190218N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Tue Feb 19 00:08:39 2019
 Response Via : Initial Calibration

Calibration Files

L11 =V08190218N04.D L1 =V08190218N06.D L2 =V08190218N08.D L3 =V08190218N09.D L4 =V08190218N10.D
 L6 =V08190218N11.D L8 =V08190218N12.D L10 =V08190218N13.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
34)	TP Carbon tetrach...	0.262	0.258	0.276	0.285	0.279	0.324	0.339	0.332	0.294	10.92
35)	TP Tetrahydrofuran		0.040	0.037	0.038	0.040	0.042	0.044	0.040#		6.40
36)	S Dibromofluorom...	0.243	0.248	0.250	0.253	0.255	0.259	0.269	0.267	0.255	3.52
37)	TP 1,1,1-Trichlor...		0.288	0.327	0.336	0.329	0.367	0.384	0.375	0.344	9.76
39)	TP 2-Butanone		0.086	0.056	0.061	0.066	0.069	0.069	0.068#		15.43
40)	TP 1,1-Dichloropr...		0.257	0.259	0.268	0.258	0.288	0.301	0.295	0.275	6.88
41)	TP Benzene	0.854	0.809	0.861	0.847	0.830	0.882	0.906	0.881	0.859	3.59
42)	TP tert-Amyl meth...		0.574	0.553	0.542	0.556	0.590	0.611	0.603	0.576	4.62
43)	S 1,2-Dichloroet...	0.281	0.290	0.283	0.281	0.285	0.289	0.290	0.297	0.287	1.90
44)	TP 1,2-Dichloroet...		0.309	0.289	0.280	0.282	0.297	0.307	0.304	0.295	4.01
47)	TP Methyl cyclohe...		0.261	0.306	0.327	0.307	0.363	0.376	0.369	0.330	12.69
48)	TP Trichloroethene	0.226	0.222	0.224	0.224	0.219	0.235	0.242	0.238	0.229	3.71
50)	TP Dibromomethane		0.129	0.130	0.131	0.131	0.137	0.142	0.139	0.134	3.84
51)	TC 1,2-Dichloropr...		0.225	0.230	0.214	0.213	0.222	0.231	0.224	0.223	3.16
53)	TP 2-Chloroethyl ...		0.105	0.122	0.124	0.127	0.134	0.139	0.137	0.127	9.24
54)	TP Bromodichlorom...		0.282	0.299	0.307	0.304	0.324	0.337	0.332	0.312	6.30
57)	TP 1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	3.94
58)	TP cis-1,3-Dichlo...		0.316	0.329	0.338	0.345	0.366	0.380	0.376	0.350	7.05
59)	I Chlorobenzene-d5	-----ISTD-----									
60)	S Toluene-d8	1.434	1.386	1.388	1.353	1.341	1.345	1.364	1.355	1.371	2.26
61)	TC Toluene		0.742	0.788	0.761	0.747	0.783	0.828	0.808	0.779	4.06
62)	TP 4-Methyl-2-pen...		0.078	0.081	0.085	0.088	0.092	0.097	0.094	0.088#	8.17
63)	TP Tetrachloroethene		0.297	0.318	0.329	0.321	0.349	0.372	0.357	0.335	7.68
65)	TP trans-1,3-Dich...		0.406	0.419	0.417	0.426	0.455	0.483	0.473	0.440	6.92
67)	TP Ethyl methacry...		0.330	0.304	0.330	0.341	0.367	0.391	0.379	0.349	8.91
68)	TP 1,1,2-Trichlor...		0.226	0.228	0.216	0.212	0.221	0.233	0.226	0.223	3.27
69)	TP Chlorodibromom...		0.300	0.324	0.314	0.316	0.338	0.359	0.349	0.329	6.40
70)	TP 1,3-Dichloropr...		0.488	0.453	0.435	0.427	0.441	0.464	0.448	0.451	4.51
71)	TP 1,2-Dibromoethane		0.260	0.265	0.259	0.253	0.267	0.282	0.272	0.266	3.62
72)	TP 2-Hexanone		0.133	0.159	0.140	0.144	0.156	0.169	0.164	0.152	8.77
73)	TP Chlorobenzene		0.851	0.876	0.857	0.838	0.868	0.910	0.870	0.867	2.64

Response Factor Report VOA 108

Method Path : I:\VOLATILES\VOA108\2019\190218N\
 Method File : V108_190218N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Tue Feb 19 00:08:39 2019
 Response Via : Initial Calibration

Calibration Files

L11 =V08190218N04.D L1 =V08190218N06.D L2 =V08190218N08.D L3 =V08190218N09.D L4 =V08190218N10.D
 L6 =V08190218N11.D L8 =V08190218N12.D L10 =V08190218N13.D

Compound		L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
74)	TC Ethylbenzene	1.362	1.418	1.451	1.427	1.505	1.575	1.433	1.453	4.71	
75)	TP 1,1,1,2-Tetrac...	0.339	0.309	0.314	0.311	0.324	0.342	0.333	0.325	4.22	
76)	TP p/m Xylene	0.452	0.516	0.560	0.551	0.584	0.617	0.588	0.553	9.86	
77)	TP o Xylene	0.481	0.513	0.550	0.542	0.569	0.599	0.576	0.547	7.25	
78)	TP Styrene	0.777	0.827	0.911	0.904	0.952	0.985	0.762	0.874	9.89	
79)	I 1,4-Dichlorobenzene-d4	-----ISTD-----									
80)	TP Bromoform	0.408	0.408	0.409	0.391	0.420	0.451	0.428	0.416	4.57	
82)	TP Isopropylbenzene	2.897	2.937	3.056	2.870	2.996	3.109	2.570	2.919	6.03	
83)	S 4-Bromofluorob...	0.968	0.972	0.988	1.024	0.996	0.983	0.972	0.926	0.978	2.87
84)	TP Bromobenzene	0.833	0.753	0.772	0.717	0.724	0.762	0.699	0.751	5.92	
85)	TP n-Propylbenzene	3.313	3.353	3.536	3.336	3.508	3.612	2.670	3.333	9.41	
86)	TP 1,4-Dichlorobu...	0.942	0.926	0.887	0.850	0.875	0.916	0.849	0.892	4.15	
87)	TP 1,1,2,2-Tetrac...	0.736	0.706	0.685	0.645	0.658	0.686	0.629	0.678	5.44	
88)	TP 4-Ethyltoluene	2.513	2.744	2.881	2.772	2.918	3.038	2.562	2.776	6.83	
89)	TP 2-Chlorotoluene	2.451	2.342	2.498	2.360	2.458	2.580	2.338	2.432	3.73	
90)	TP 1,3,5-Trimethy...	2.202	2.335	2.415	2.355	2.509	2.636	2.326	2.397	5.87	
91)	TP 1,2,3-Trichlor...	0.606	0.546	0.521	0.491	0.500	0.533	0.491	0.527	7.79	
92)	TP trans-1,4-Dich...	0.224	0.178	0.163	0.174	0.180	0.196	0.185	0.186	10.66	
93)	TP 4-Chlorotoluene	2.055	2.098	2.173	2.073	2.141	2.244	2.029	2.116	3.54	
94)	TP tert-Butylbenzene	2.363	2.451	2.499	2.370	2.508	2.647	2.403	2.463	4.05	
95)	TP Pentachloroethane	0.461	0.434	0.474	0.477	0.479	0.498	0.476	0.471	4.17	
97)	TP 1,2,4-Trimethy...	2.110	2.399	2.375	2.367	2.515	2.648	2.280	2.385	7.12	
98)	TP sec-Butylbenzene	2.820	3.051	3.206	2.912	3.186	3.313	2.633	3.017	8.01	
99)	TP p-Isopropyltol...	2.413	2.605	2.679	2.486	2.712	2.862	2.374	2.590	6.80	
100)	TP 1,3-Dichlorobe...	1.355	1.343	1.414	1.337	1.378	1.479	1.390	1.385	3.58	
101)	TP 1,4-Dichlorobe...	1.552	1.402	1.409	1.357	1.402	1.503	1.418	1.435	4.73	
102)	TP p-Diethylbenzene	1.153	1.465	1.534	1.454	1.614	1.752	1.639	1.516	12.60	
103)	TP n-Butylbenzene	2.124	2.356	2.459	2.280	2.572	2.728	2.298	2.402	8.39	
104)	TP 1,2-Dichlorobe...	1.469	1.325	1.339	1.270	1.313	1.408	1.333	1.351	4.89	
105)	TP 1,2,4,5-Tetram...	1.045	1.400	2.103	2.208	2.557	2.759	2.344	*L	0.9935	
106)	TP 1,2-Dibromo-3-...	0.100	0.095	0.098	0.096	0.103	0.111	0.107	0.102	5.69	

Response Factor Report VOA 108

Method Path : I:\VOLATILES\VOA108\2019\190218N\
Method File : V108_190218N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Tue Feb 19 00:08:39 2019
Response Via : Initial Calibration

Calibration Files

L11 =V08190218N04.D L1 =V08190218N06.D L2 =V08190218N08.D L3 =V08190218N09.D L4 =V08190218N10.D
L6 =V08190218N11.D L8 =V08190218N12.D L10 =V08190218N13.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
107)	TP 1,3,5-Trichlor...	0.679	0.851	0.950	0.898	1.008	1.089	1.038	0.930	14.80	
108)	TP Hexachlorobuta...	0.439	0.455	0.438	0.377	0.435	0.468	0.440	0.436	6.57	
109)	TP 1,2,4-Trichlor...	0.640	0.695	0.838	0.833	0.934	1.021	0.974	0.848	16.72	
110)	TP Naphthalene	1.224	1.591	1.868	1.915	2.113	2.288	2.068	1.867	19.19	
111)	TP 1,2,3-Trichlor...	0.542	0.641	0.762	0.755	0.857	0.931	0.877	0.766	17.94	

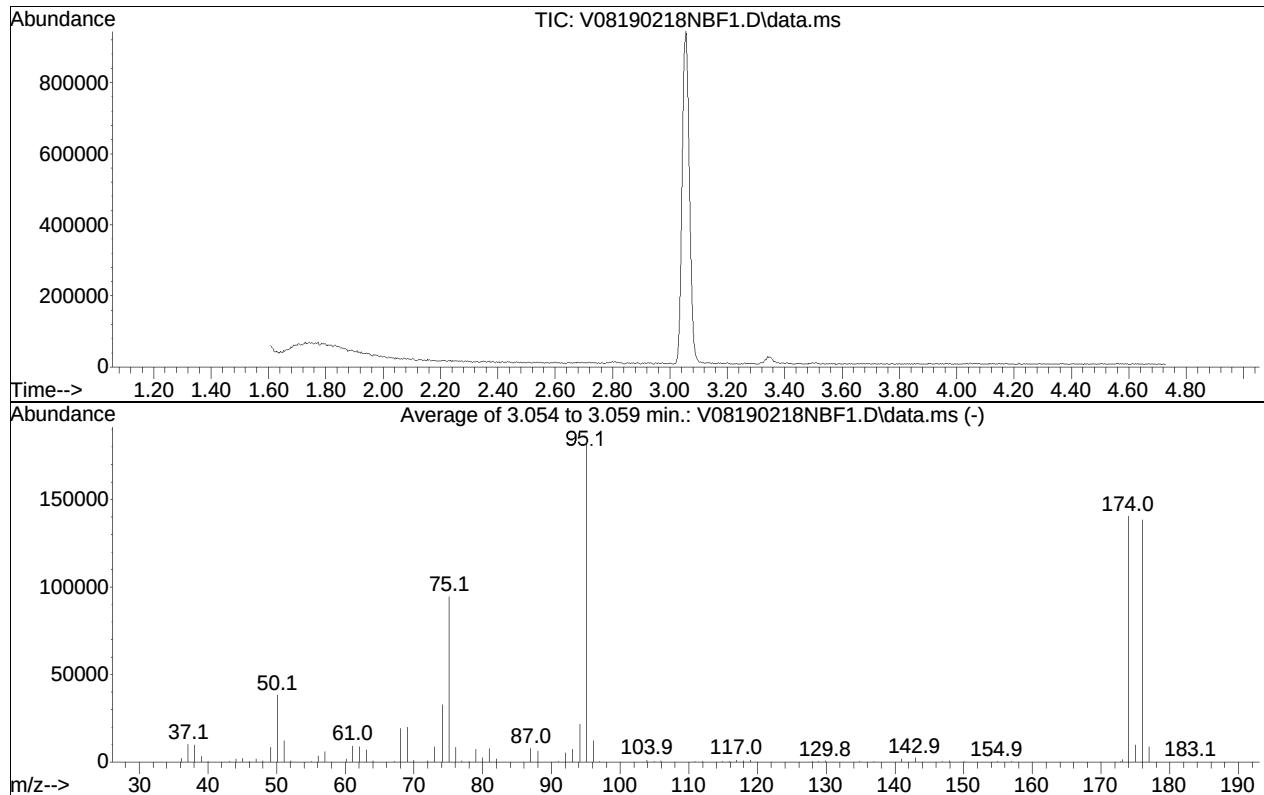
(#) = Out of Range

BFB

Data Path : I:\VOLATILES\VOA108\2019\190218N\
Data File : V08190218NBF1.D
Acq On : 18 Feb 2019 6:56 pm
Operator : VOA108:NLK
Sample : WG1208025-1
Misc : WG1208025
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Tue Feb 19 00:08:39 2019



AutoFind: Scans 520, 521, 522; Background Corrected with Scan 504

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.0	38297	PASS
75	95	30	60	51.7	94424	PASS
95	95	100	100	100.0	182485	PASS
96	95	5	9	6.8	12347	PASS
173	174	0.00	2	1.1	1568	PASS
174	95	50	100	77.1	140619	PASS
175	174	5	9	7.1	10040	PASS
176	174	95	101	98.3	138277	PASS
177	176	5	9	6.4	8898	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N04.D
 Acq On : 18 Feb 2019 8:23 pm
 Operator : VOA108:NLK
 Sample : I8260STD11
 Misc : WG1208025
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 18 23:45:14 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-L11 - Level 11 for 8260-LRR product

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

Internal Standards						
1) Fluorobenzene	5.551	96	543381	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery = 103.14%			
59) Chlorobenzene-d5	8.526	117	353845	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery = 96.55%			
79) 1,4-Dichlorobenzene-d4	10.010	152	164653	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery = 97.01%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.575	113	132110	9.627	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.27%			
43) 1,2-Dichloroethane-d4	5.210	65	152734	10.005	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.05%			
60) Toluene-d8	7.241	98	507353	10.598	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 105.98%			
83) 4-Bromofluorobenzene	9.340	95	159321	9.447	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.47%			
Target Compounds						
4) Vinyl chloride	1.150	62	1955	0.171	ug/L	90
34) Carbon tetrachloride	4.458	117	2851M1	0.184	ug/L	
41) Benzene	5.038	78	9279	0.202	ug/L #	83
48) Trichloroethene	5.746	95	2454	0.202	ug/L #	50

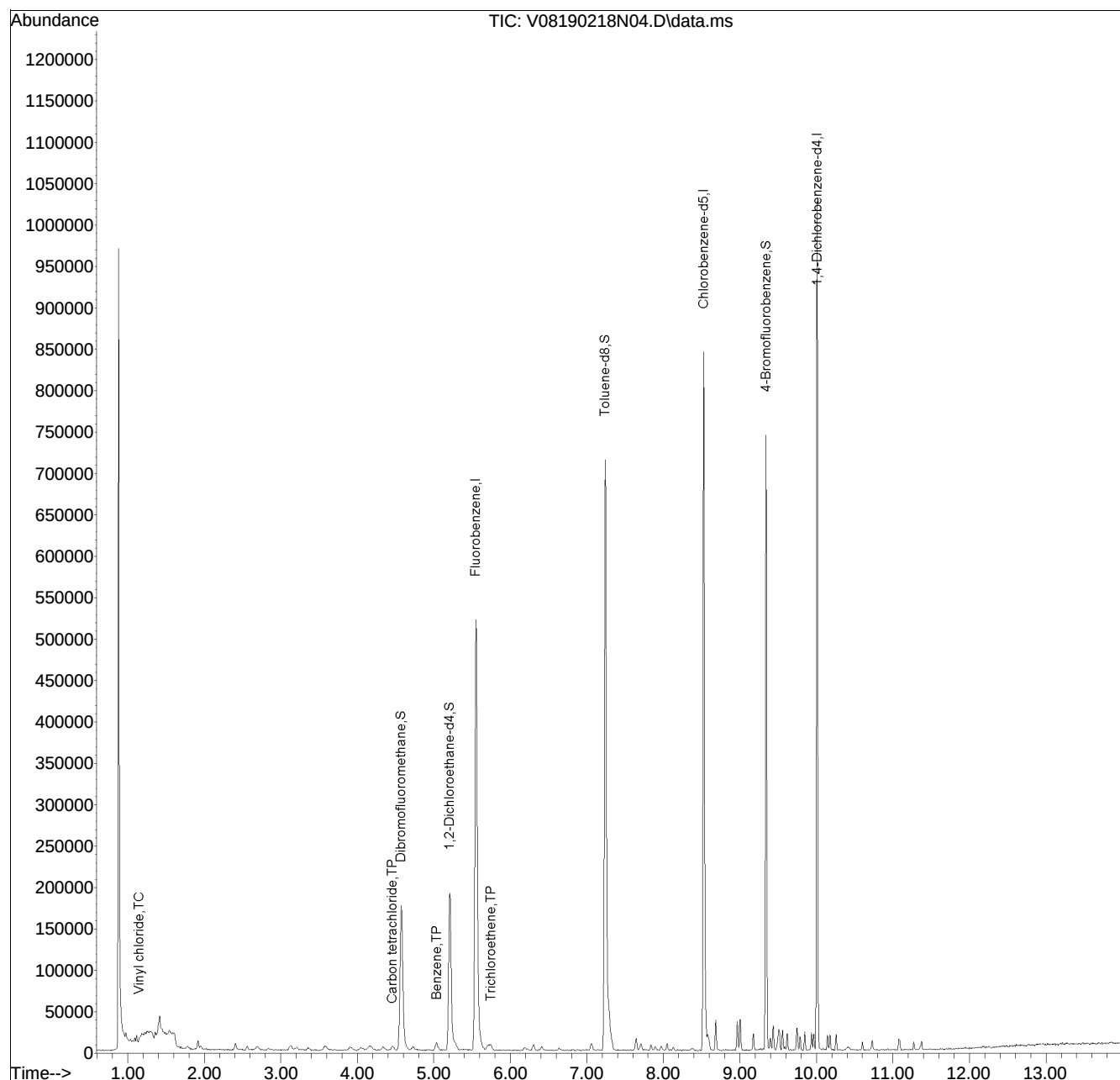
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N04.D
 Acq On : 18 Feb 2019 8:23 pm
 Operator : VOA108:NLK
 Sample : I8260STD11
 Misc : WG1208025
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 18 23:45:14 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

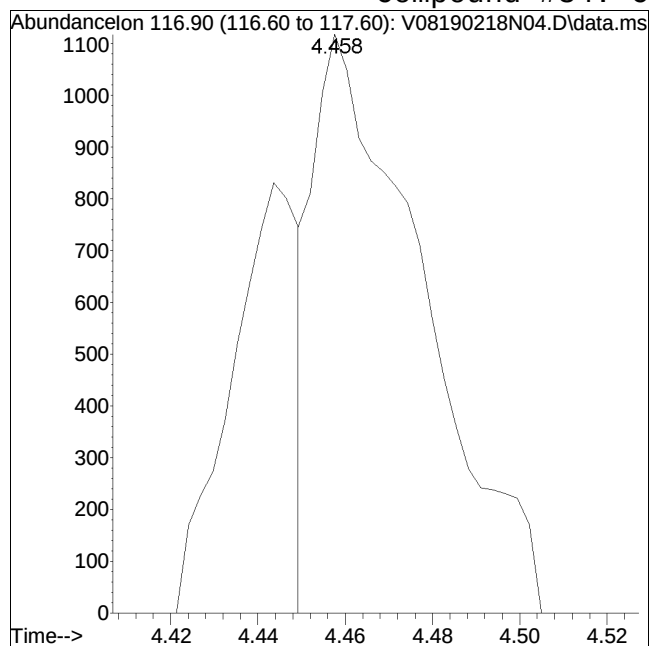
Sub List : 8260-L11 - Level 11 for 8260-LRR product190218N09.D•



Manual Integration Report

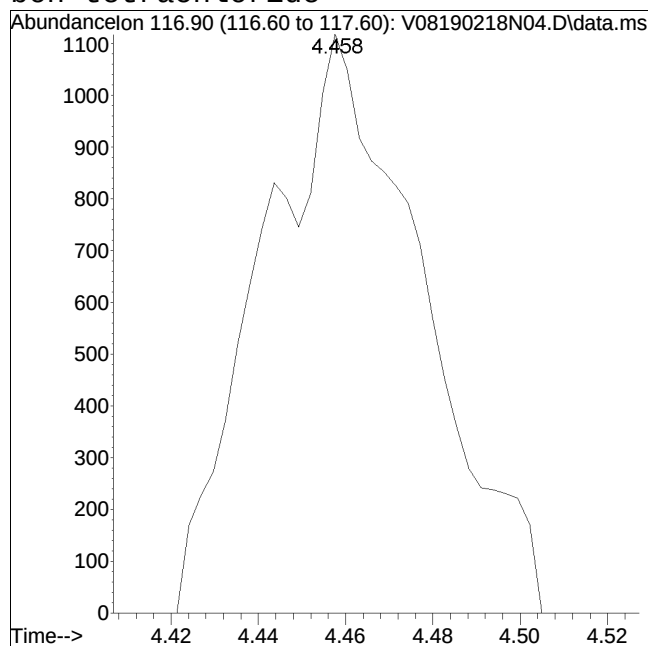
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N04.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 8:23 pm Instrument : VOA 108
Sample : I8260STDL11 Quant Date : 2/18/2019 11:43 pm

Compound #34: Carbon tetrachloride



Original Peak Response = 1961

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



Manual Peak Response = 2851 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N06.D
 Acq On : 18 Feb 2019 9:07 pm
 Operator : VOA108:NLK
 Sample : I8260STD1
 Misc : WG1208025
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 19 00:07:10 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:06:55 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

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

Internal Standards						
1) Fluorobenzene	5.553	96	528629	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery	=	100.34%	
59) Chlorobenzene-d5	8.529	117	354189	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery	=	96.65%	
79) 1,4-Dichlorobenzene-d4	10.010	152	157729	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery	=	92.93%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	131321	9.726	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.26%	
43) 1,2-Dichloroethane-d4	5.208	65	153435	10.110	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.10%	
60) Toluene-d8	7.243	98	490757	10.109	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.09%	
83) 4-Bromofluorobenzene	9.340	95	153328	9.935	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.35%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.975	85	4281	0.405	ug/L	96
3) Chloromethane	1.094	50	5153	0.495	ug/L	90
4) Vinyl chloride	1.150	62	4785	0.431	ug/L	91
5) Bromomethane	1.359	94	6291M1	0.657	ug/L	
6) Chloroethane	1.446	64	4531M1	0.558	ug/L	
7) Trichlorofluoromethane	1.546	101	7557	0.421	ug/L	95
8) Ethyl ether	1.786	74	2790	0.467	ug/L	72
10) 1,1-Dichloroethene	1.917	96	4517	0.454	ug/L #	49
11) Carbon disulfide	1.923	76	14640M1	0.469	ug/L	
12) Freon-113	1.953	101	3762	0.411	ug/L	90
13) Iodomethane	2.018	142	1683	0.814	ug/L	88
14) Acrolein	2.193	56	601M1	0.487	ug/L	
15) Methylene chloride	2.413	84	6721	0.568	ug/L #	63
17) Acetone	2.472	43	2659M1	1.294	ug/L	
18) trans-1,2-Dichloroethene	2.561	96	5113	0.453	ug/L	76
19) Methyl acetate	2.603	43	2109	0.408	ug/L #	90
20) Methyl tert-butyl ether	2.692	73	14633	0.494	ug/L #	84
21) tert-Butyl alcohol	2.826	59	2599M1	4.109	ug/L	
22) Diisopropyl ether	3.130	45	17211M1	0.504	ug/L	
23) 1,1-Dichloroethane	3.205	63	9339M1	0.468	ug/L	
24) Halothane	3.350	117	3881M1	0.446	ug/L	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N06.D
 Acq On : 18 Feb 2019 9:07 pm
 Operator : VOA108:NLK
 Sample : I8260STD1
 Misc : WG1208025
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 19 00:07:10 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:06:55 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	3.281	53	1918M1	0.620	ug/L	
26) Ethyl tert-butyl ether	3.579	59	15063M1	0.455	ug/L	
27) Vinyl acetate	3.587	43	6092M1	0.258	ug/L	
28) cis-1,2-Dichloroethene	3.911	96	6132	0.479	ug/L #	56
29) 2,2-Dichloropropane	4.059	77	7502M1	0.458	ug/L	
30) Bromochloromethane	4.190	128	2754	0.466	ug/L #	55
31) Cyclohexane	4.159	56	7044M1	0.428	ug/L	
32) Chloroform	4.338	83	9651	0.463	ug/L #	72
33) Ethyl acetate	4.589	43	7048M1	0.804	ug/L	
34) Carbon tetrachloride	4.449	117	6826M1	0.439	ug/L	
35) Tetrahydrofuran	4.552	42	2184M1	1.031	ug/L	
37) 1,1,1-Trichloroethane	4.558	97	7620	0.420	ug/L #	81
39) 2-Butanone	4.770	43	3393M1	0.945	ug/L	
40) 1,1-Dichloropropene	4.734	75	6786	0.467	ug/L #	73
41) Benzene	5.035	78	21382M1	0.471	ug/L	
42) tert-Amyl methyl ether	5.261	73	15179M1	0.499	ug/L	
44) 1,2-Dichloroethane	5.294	62	8169	0.523	ug/L	84
47) Methyl cyclohexane	5.710	83	6899M1	0.396	ug/L	
48) Trichloroethene	5.746	95	5865	0.485	ug/L	97
50) Dibromomethane	6.187	93	3416	0.482	ug/L	100
51) 1,2-Dichloropropane	6.306	63	5943	0.505	ug/L	93
53) 2-Chloroethyl vinyl ether	7.051	63	2773	0.413	ug/L #	70
54) Bromodichloromethane	6.410	83	7453	0.451	ug/L #	96
57) 1,4-Dioxane	6.633	88	5199	100.993	ug/L #	61
58) cis-1,3-Dichloropropene	7.065	75	8345	0.451	ug/L #	90
61) Toluene	7.291	92	13145	0.476	ug/L	94
62) 4-Methyl-2-pentanone	7.698	58	1381	0.444	ug/L #	89
63) Tetrachloroethene	7.642	166	5263	0.444	ug/L	96
65) trans-1,3-Dichloropropene	7.712	75	7182	0.461	ug/L	92
67) Ethyl methacrylate	7.899	69	5847	0.473	ug/L	90
68) 1,1,2-Trichloroethane	7.837	83	4002	0.506	ug/L	88
69) Chlorodibromomethane	7.971	129	5305	0.456	ug/L	97
70) 1,3-Dichloropropane	8.047	76	8643	0.541	ug/L	96
71) 1,2-Dibromoethane	8.133	107	4601	0.489	ug/L	98
72) 2-Hexanone	8.367	43	2349M4	0.436	ug/L	
73) Chlorobenzene	8.537	112	15069	0.491	ug/L	89
74) Ethylbenzene	8.576	91	24127	0.469	ug/L	99
75) 1,1,1,2-Tetrachloroethane	8.599	131	5995	0.522	ug/L	90
76) p/m Xylene	8.685	106	16027	0.819	ug/L	99
77) o Xylene	8.967	106	17043	0.879	ug/L	91

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N06.D
 Acq On : 18 Feb 2019 9:07 pm
 Operator : VOA108:NLK
 Sample : I8260STD1
 Misc : WG1208025
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 19 00:07:10 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:06:55 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.006	104	27514	0.889	ug/L	90
80)	Bromoform	9.009	173	3218	0.490	ug/L	85
82)	Isopropylbenzene	9.176	105	22845	0.496	ug/L	96
84)	Bromobenzene	9.399	156	6569	0.554	ug/L	91
85)	n-Propylbenzene	9.432	91	26124	0.497	ug/L	100
86)	1,4-Dichlorobutane	9.438	55	7432	0.528	ug/L	95
87)	1,1,2,2-Tetrachloroethane	9.485	83	5805	0.543	ug/L	96
88)	4-Ethyltoluene	9.505	105	19820	0.453	ug/L	93
89)	2-Chlorotoluene	9.516	91	19331	0.504	ug/L	97
90)	1,3,5-Trimethylbenzene	9.558	105	17364	0.459	ug/L	99
91)	1,2,3-Trichloropropane	9.555	75	4782	0.576	ug/L	97
92)	trans-1,4-Dichloro-2-b...	9.586	53	1769	0.604	ug/L #	94
93)	4-Chlorotoluene	9.619	91	16204	0.486	ug/L	92
94)	tert-Butylbenzene	9.745	119	18633	0.480	ug/L	93
95)	Pentachloroethane	9.753	167	3634	0.489	ug/L	93
97)	1,2,4-Trimethylbenzene	9.787	105	16644	0.442	ug/L	99
98)	sec-Butylbenzene	9.851	105	22236	0.467	ug/L	96
99)	p-Isopropyltoluene	9.934	119	19027	0.466	ug/L	95
100)	1,3-Dichlorobenzene	9.965	146	10687	0.489	ug/L	99
101)	1,4-Dichlorobenzene	10.018	146	12239	0.541	ug/L #	91
102)	p-Diethylbenzene	10.144	119	9095	0.380	ug/L	100
103)	n-Butylbenzene	10.177	91	16750	0.442	ug/L	92
104)	1,2-Dichlorobenzene	10.258	146	11582	0.543	ug/L	91
105)	1,2,4,5-Tetramethylben...	10.601	119	8240	0.667	ug/L	96
106)	1,2-Dibromo-3-chloropr...	10.715	155	792	0.495	ug/L	87
107)	1,3,5-Trichlorobenzene	10.729	180	5355	0.365	ug/L	97
108)	Hexachlorobutadiene	11.075	225	3461	0.504	ug/L	97
109)	1,2,4-Trichlorobenzene	11.092	180	5046	0.377	ug/L	89
110)	Naphthalene	11.270	128	9654	0.328	ug/L	100
111)	1,2,3-Trichlorobenzene	11.373	180	4277	0.354	ug/L	94

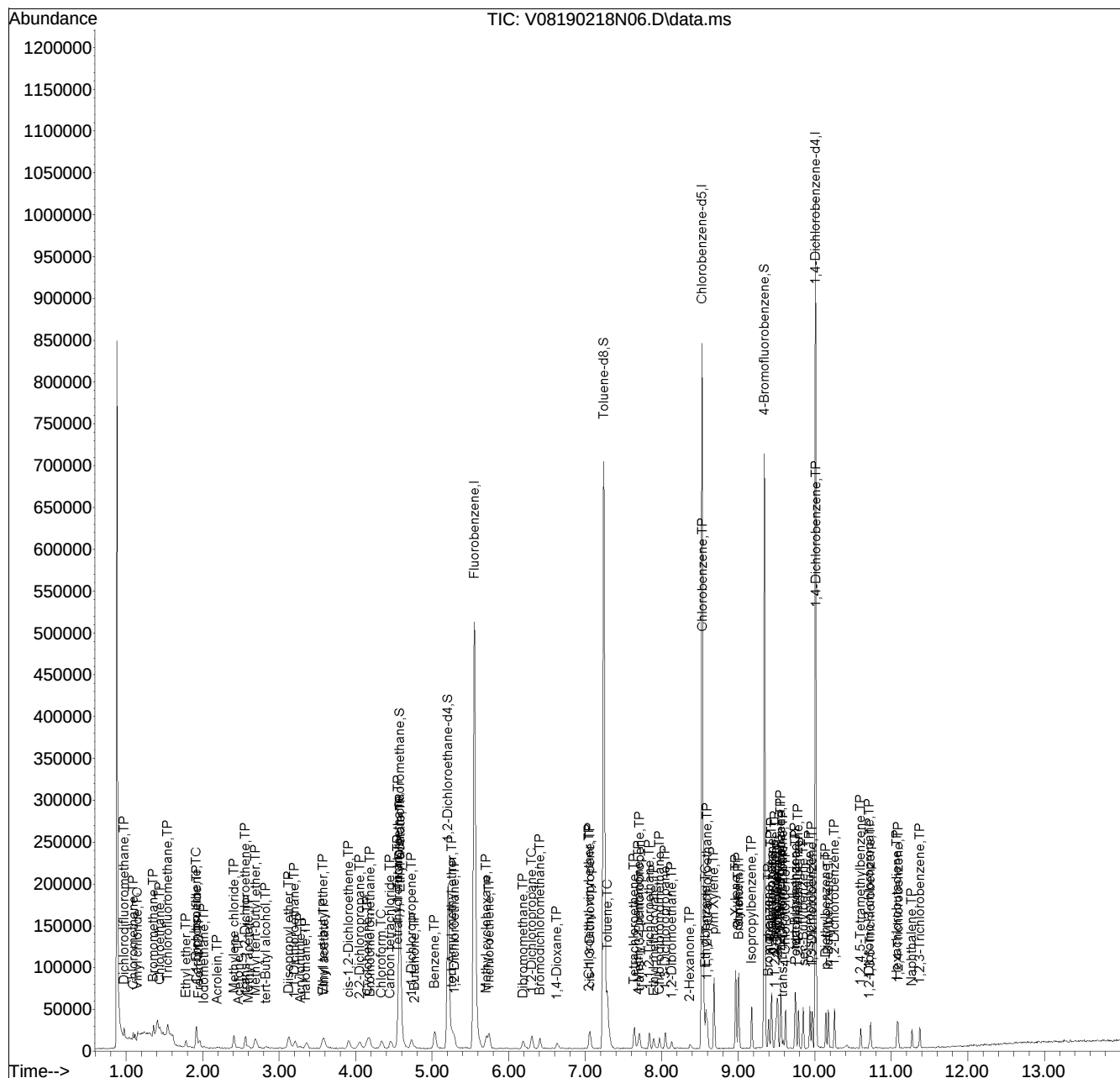
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
Data File : V08190218N06.D
Acq On : 18 Feb 2019 9:07 pm
Operator : VOA108:NLK
Sample : I8260STD1
Misc : WG1208025
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 19 00:07:10 2019
Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Feb 19 00:06:55 2019
Response via : Initial Calibration

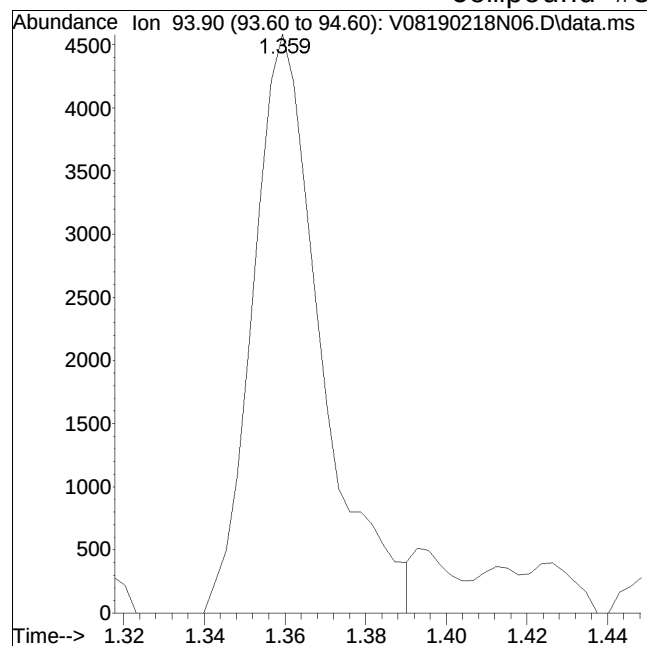
Sub List : 8260-CurvePenta - All compounds listed08190218N09.D•



Manual Integration Report

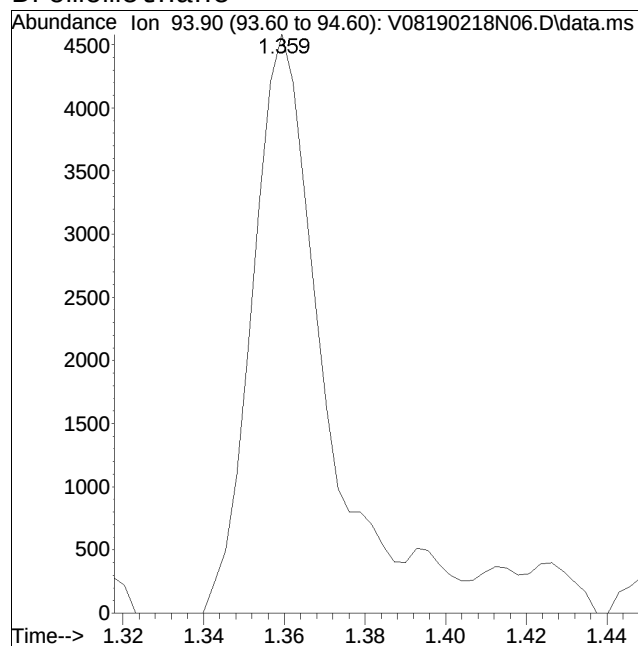
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Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #5: Bromomethane



Original Peak Response = 5386

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

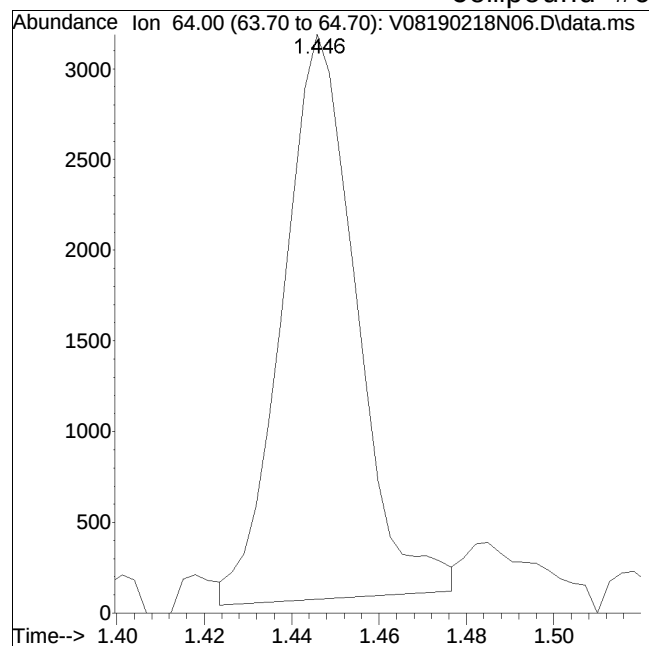


Manual Peak Response = 6291 M1

Manual Integration Report

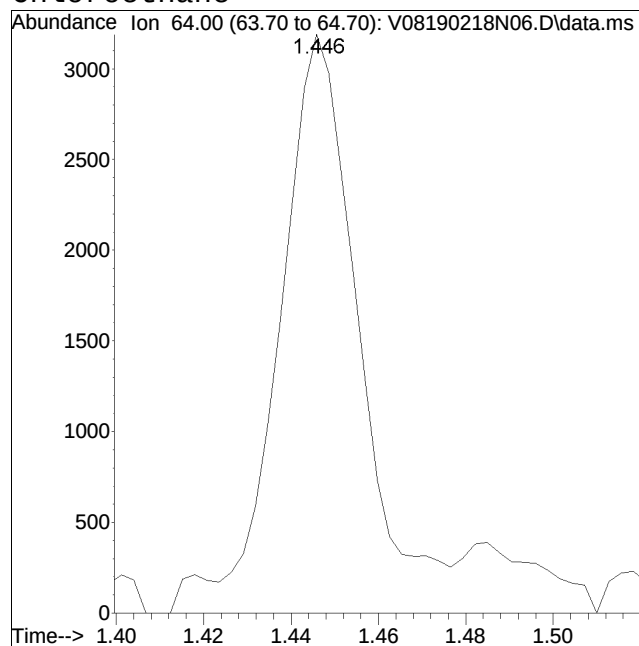
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Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #6: Chloroethane



Original Peak Response = 3644

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

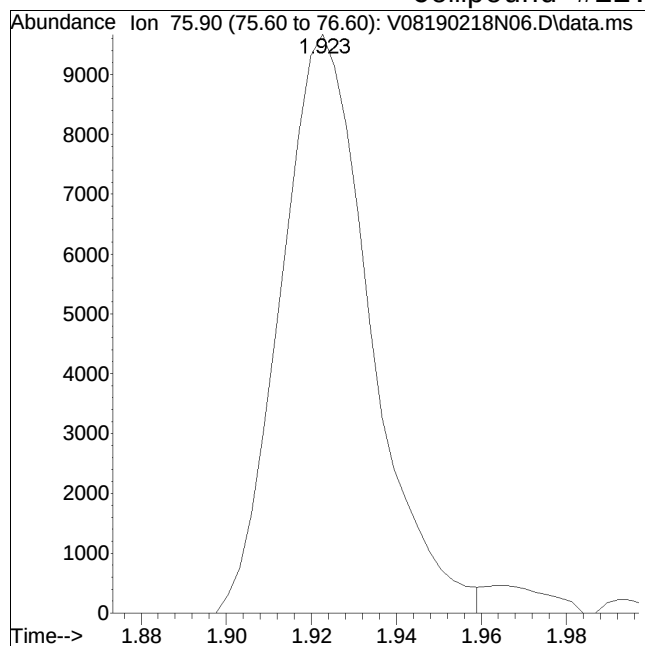


Manual Peak Response = 4531 M1

Manual Integration Report

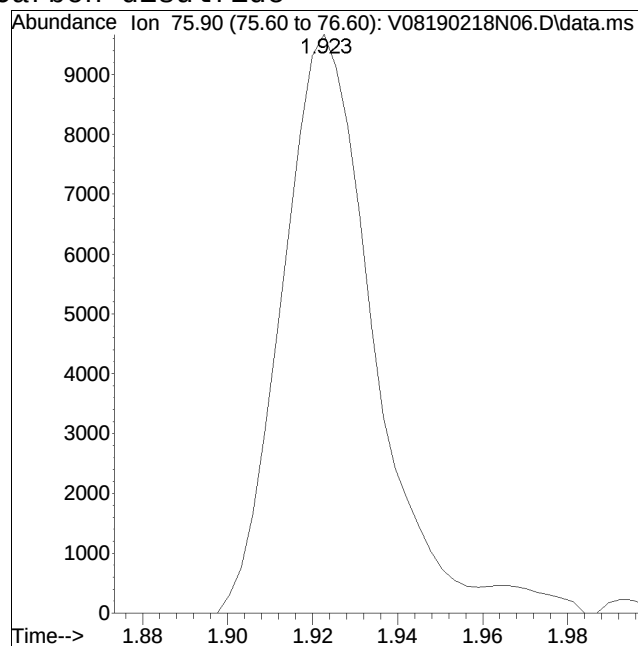
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Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #11: Carbon disulfide



Original Peak Response = 14161

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

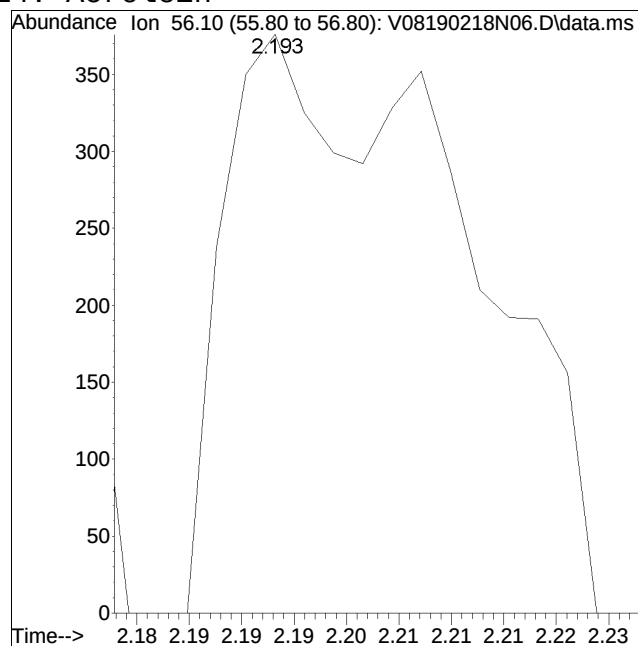
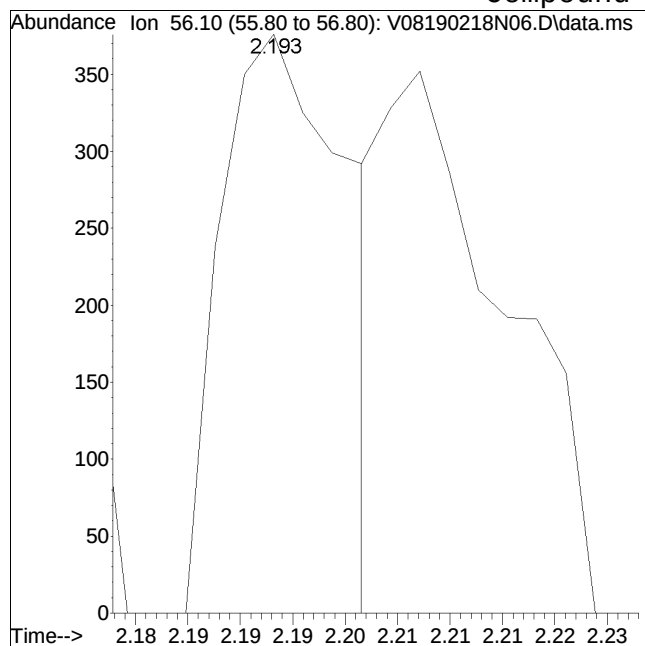


Manual Peak Response = 14640 M1

Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #14: Acrolein



Original Peak Response = 315

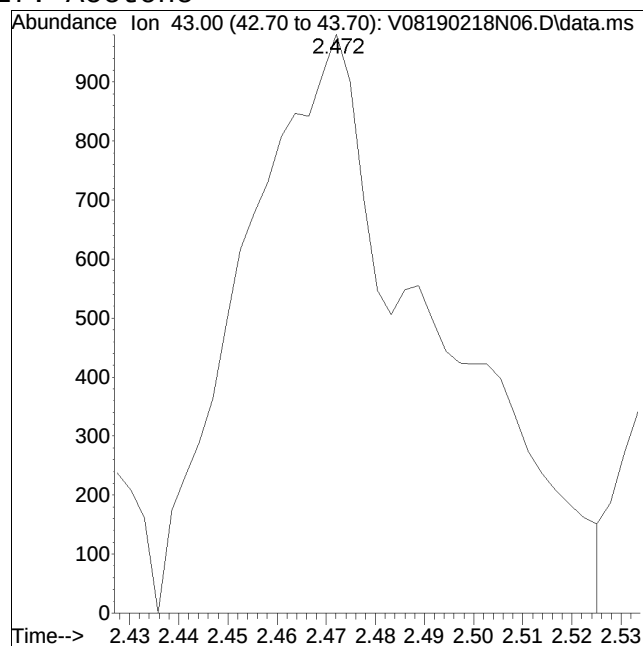
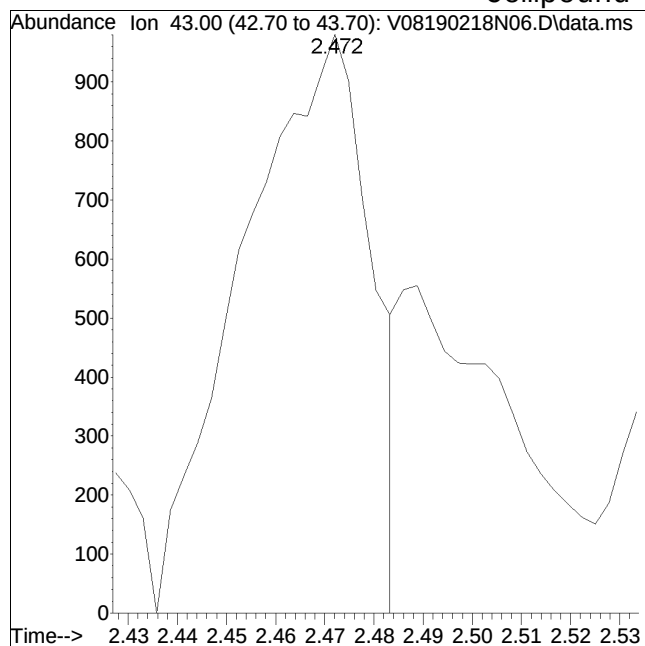
Manual Peak Response = 601 M1

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

Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #17: Acetone



Original Peak Response = 1778

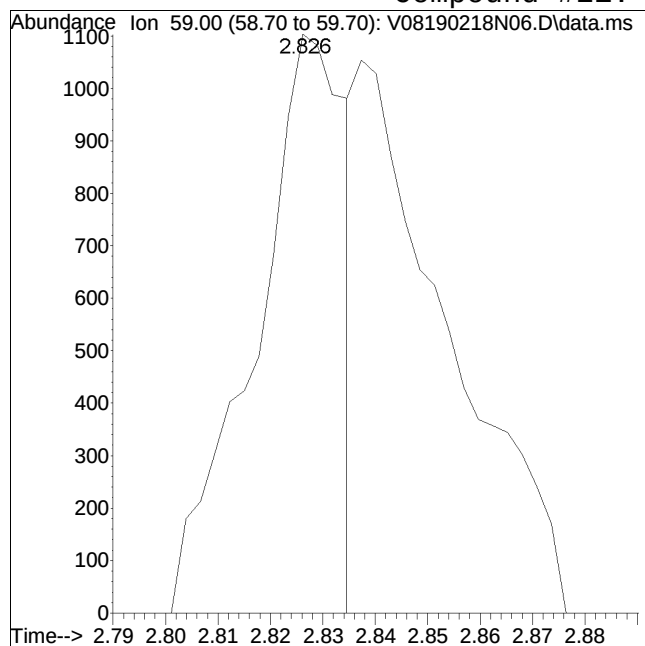
Manual Peak Response = 2659 M1

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

Manual Integration Report

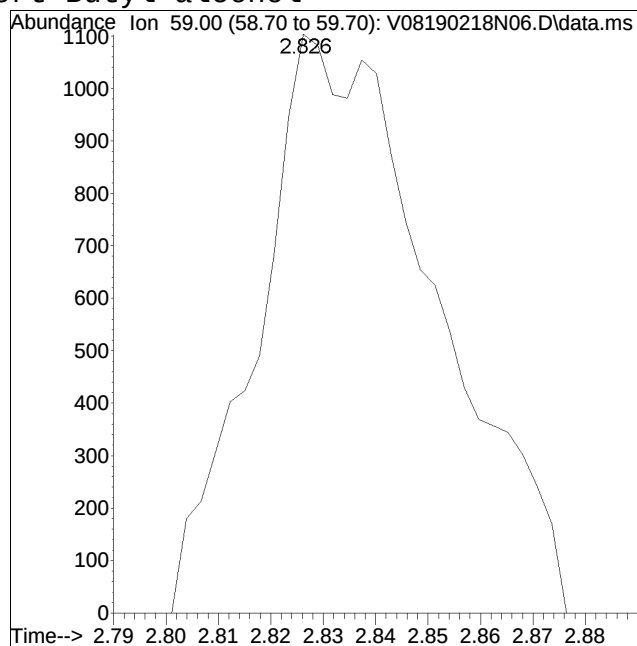
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Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #21: tert-Butyl alcohol



Original Peak Response = 1305

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

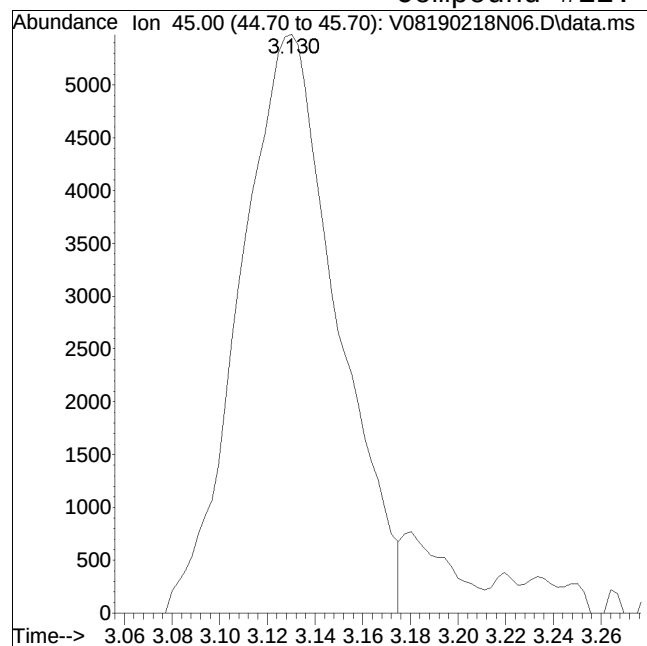


Manual Peak Response = 2599 M1

Manual Integration Report

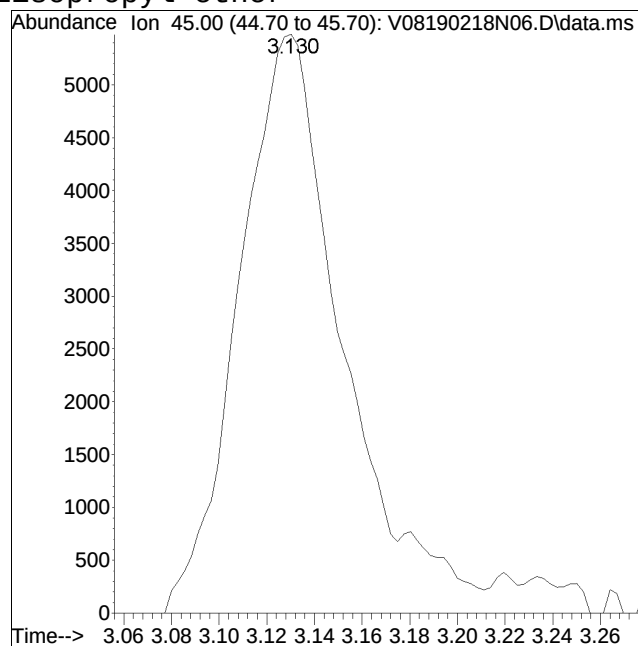
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Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #22: Diisopropyl ether



Original Peak Response = 15442

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

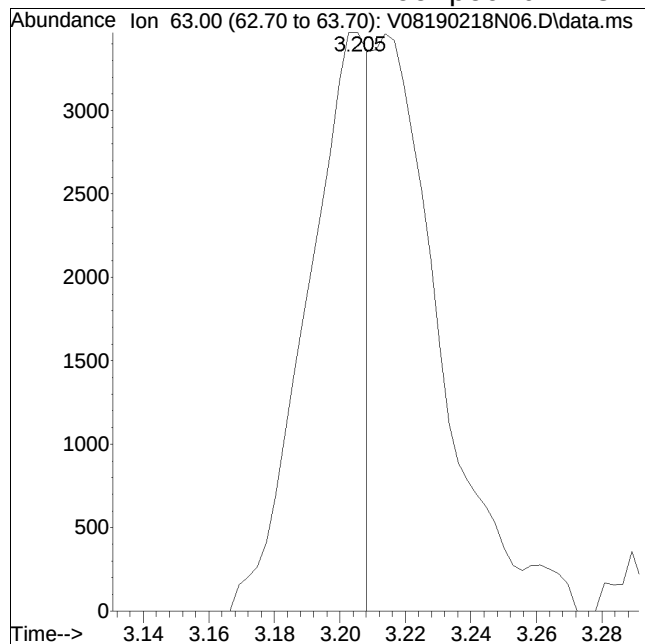


Manual Peak Response = 17211 M1

Manual Integration Report

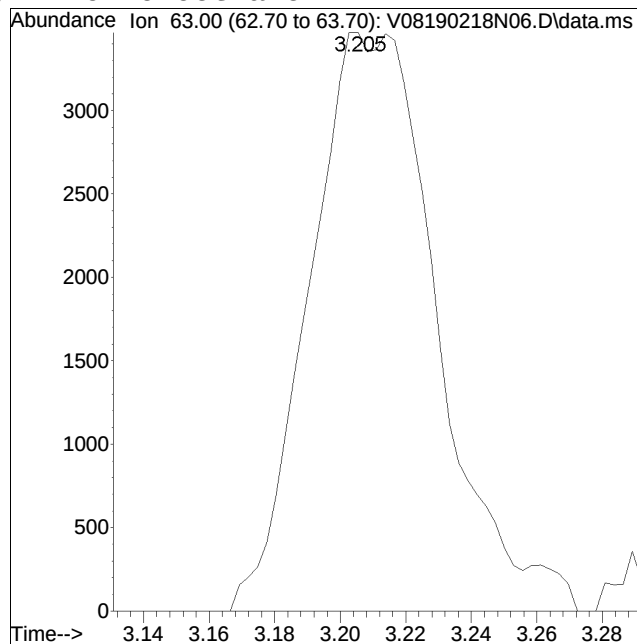
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Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #23: 1,1-Dichloroethane



Original Peak Response = 4453

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

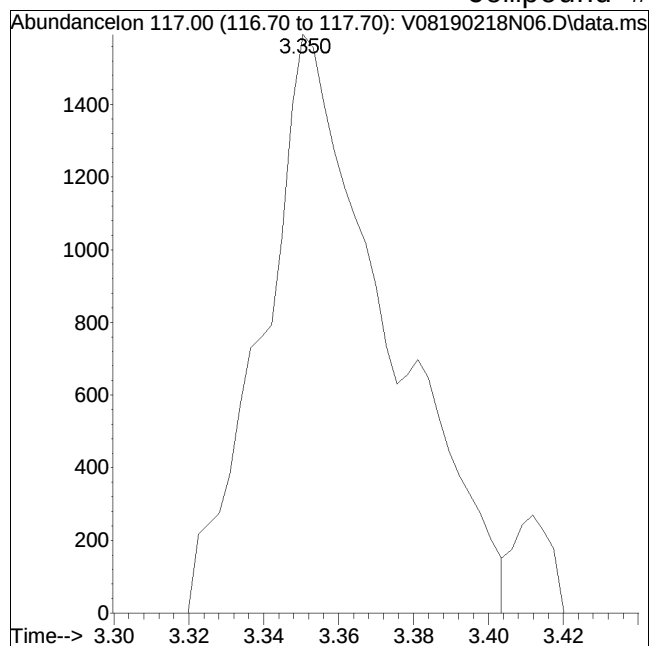


Manual Peak Response = 9339 M1

Manual Integration Report

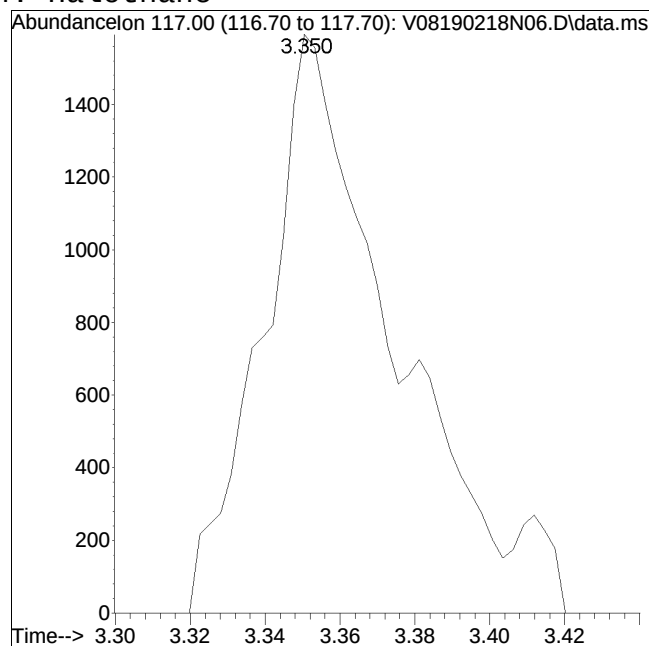
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Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #24: Halothane



Original Peak Response = 3698

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

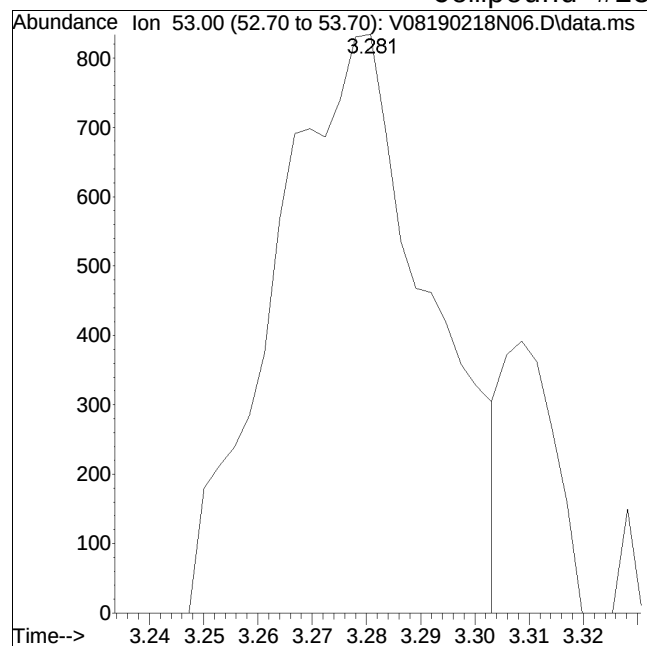


Manual Peak Response = 3881 M1

Manual Integration Report

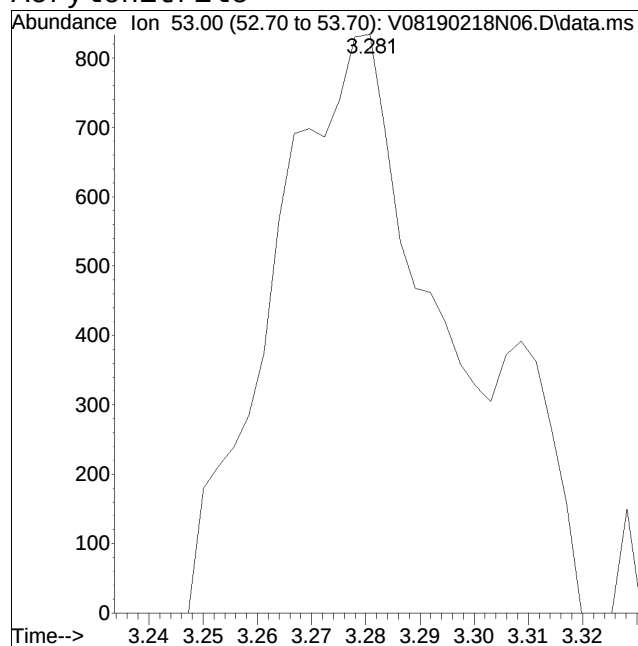
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Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #25: Acrylonitrile



Original Peak Response = 1657

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

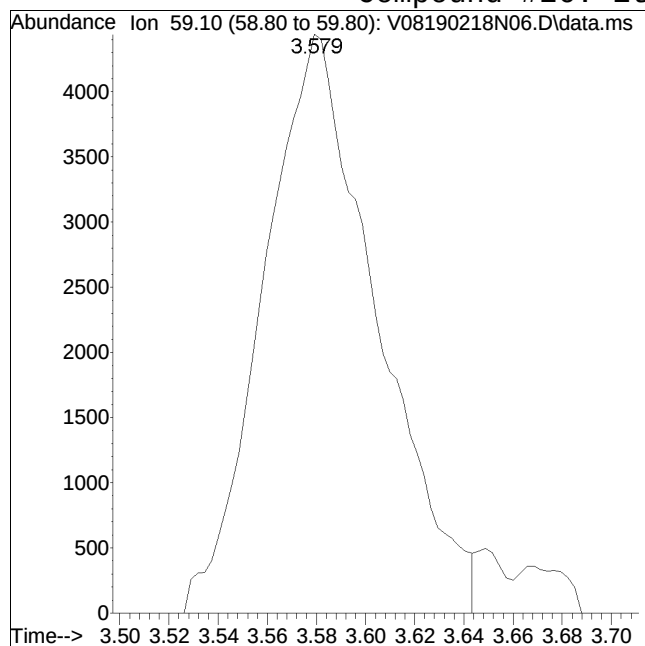


Manual Peak Response = 1918 M1

Manual Integration Report

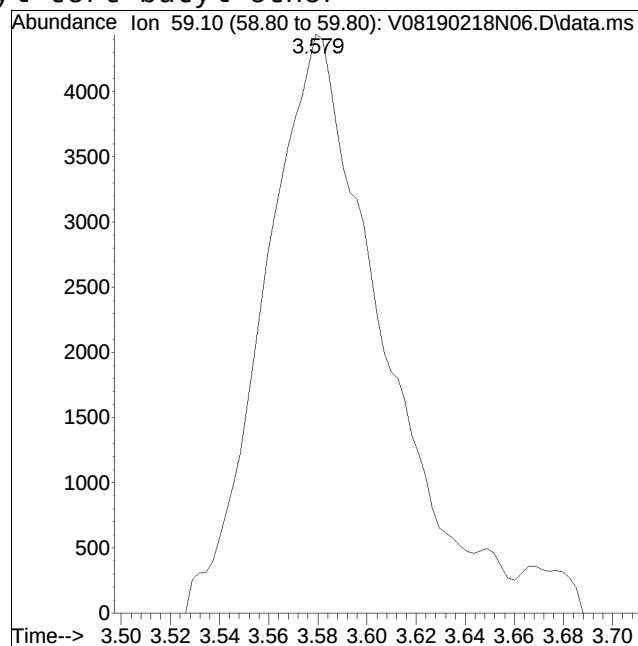
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Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #26: Ethyl tert-butyl ether



Original Peak Response = 14206

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

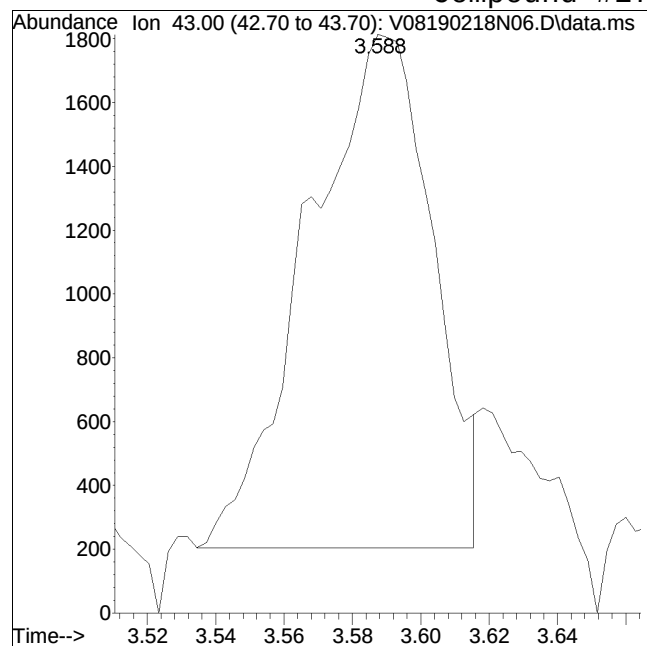


Manual Peak Response = 15063 M1

Manual Integration Report

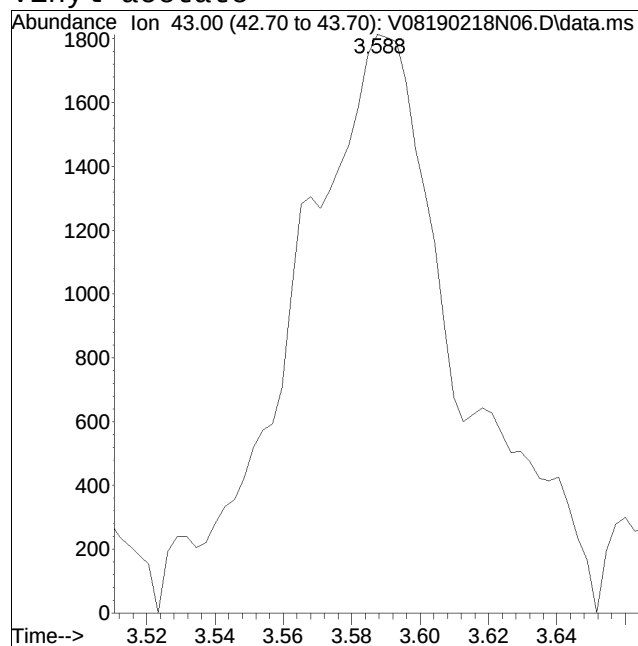
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Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #27: Vinyl acetate



Original Peak Response = 4060

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

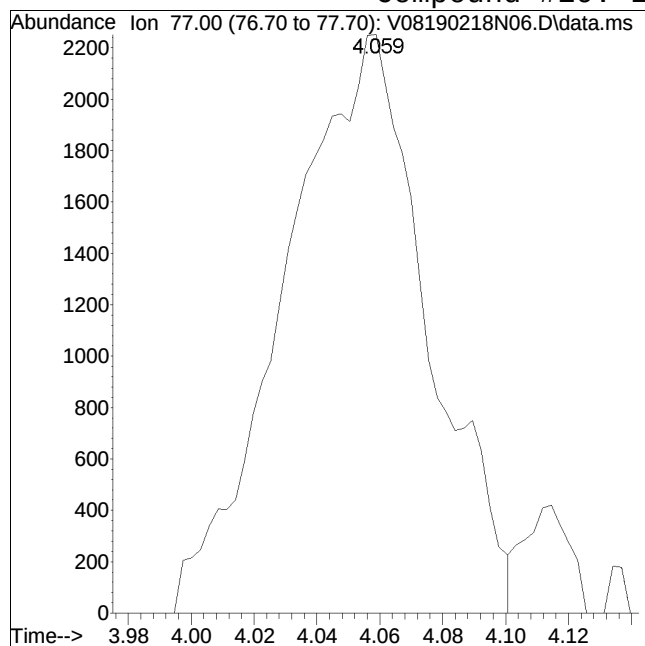


Manual Peak Response = 6092 M1

Manual Integration Report

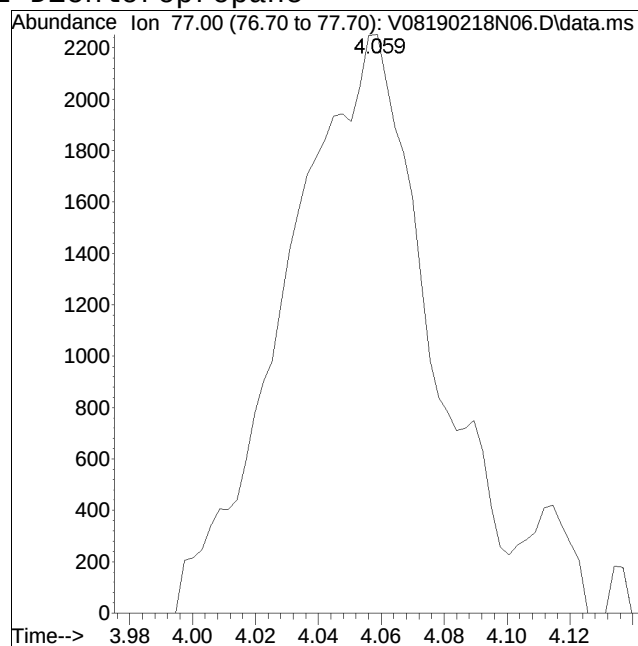
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #29: 2,2-Dichloropropane



Original Peak Response = 7082

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

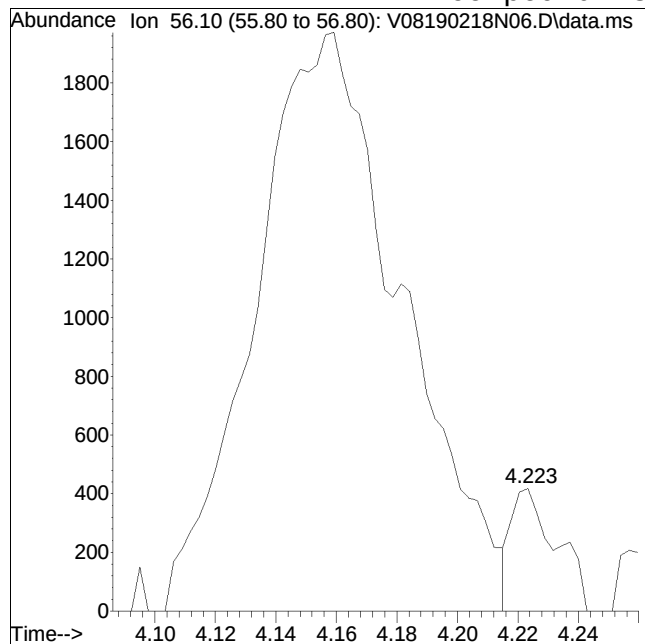


Manual Peak Response = 7502 M1

Manual Integration Report

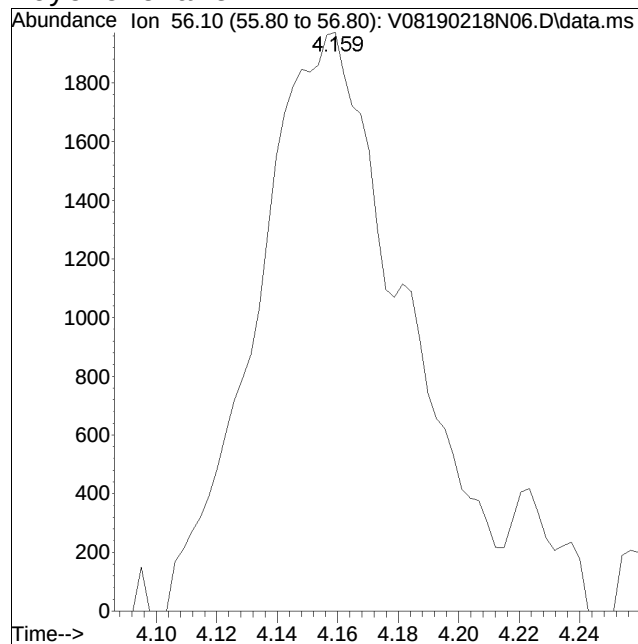
Data Path : I:\VOLATILES\VOA108\2019\1QMethod : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #31: Cyclohexane



Original Peak Response = 428

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

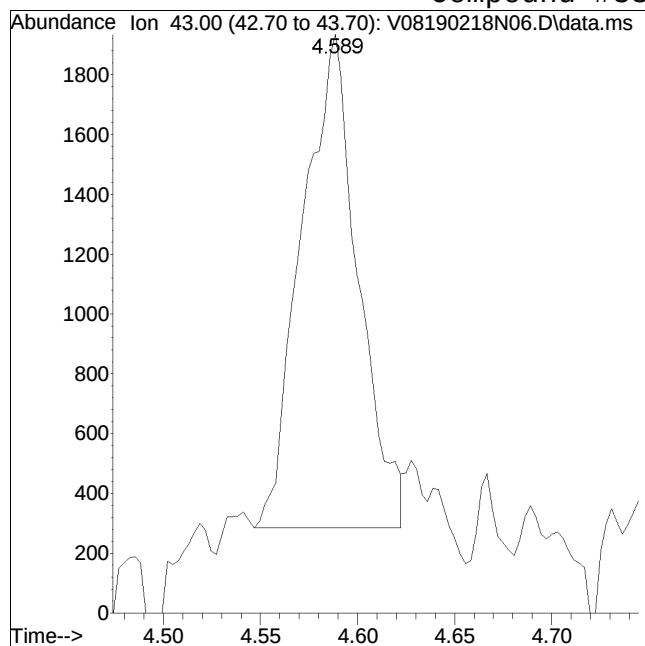


Manual Peak Response = 7044 M1

Manual Integration Report

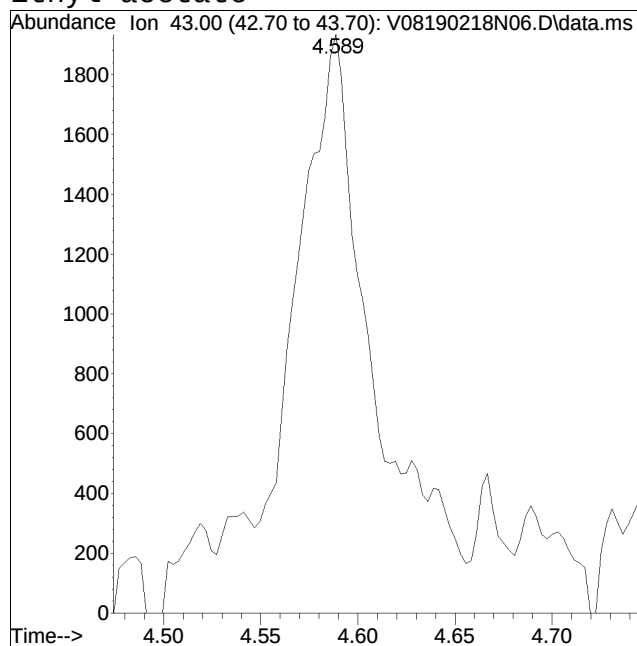
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #33: Ethyl acetate



Original Peak Response = 3335

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

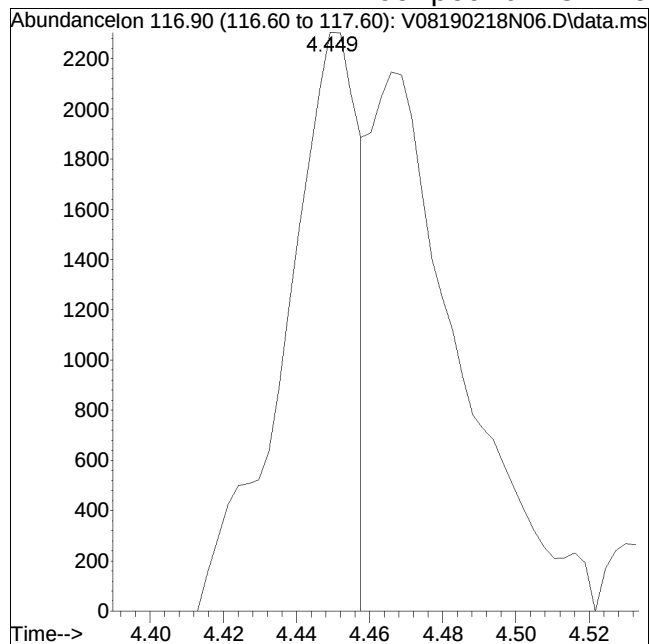


Manual Peak Response = 7048 M1

Manual Integration Report

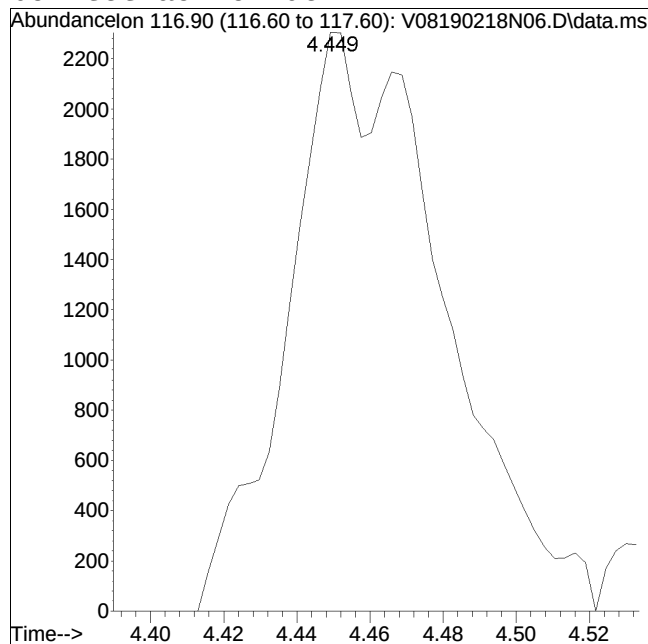
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #34: Carbon tetrachloride



Original Peak Response = 3200

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

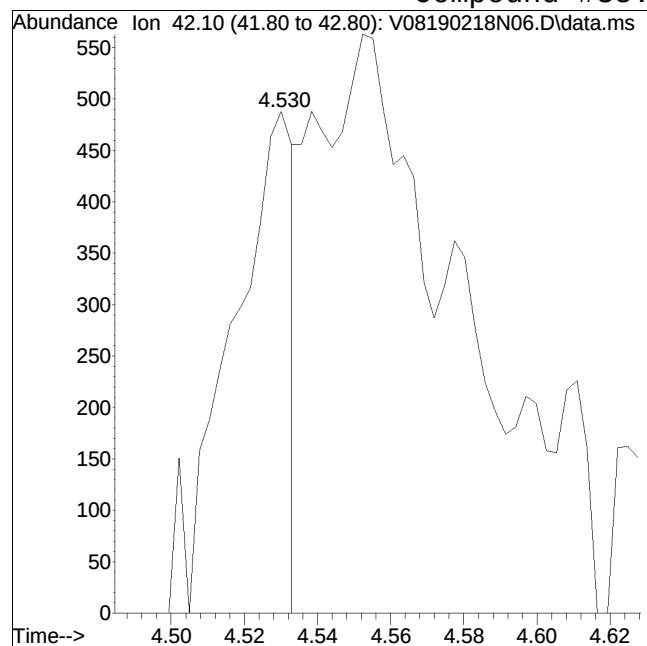


Manual Peak Response = 6826 M1

Manual Integration Report

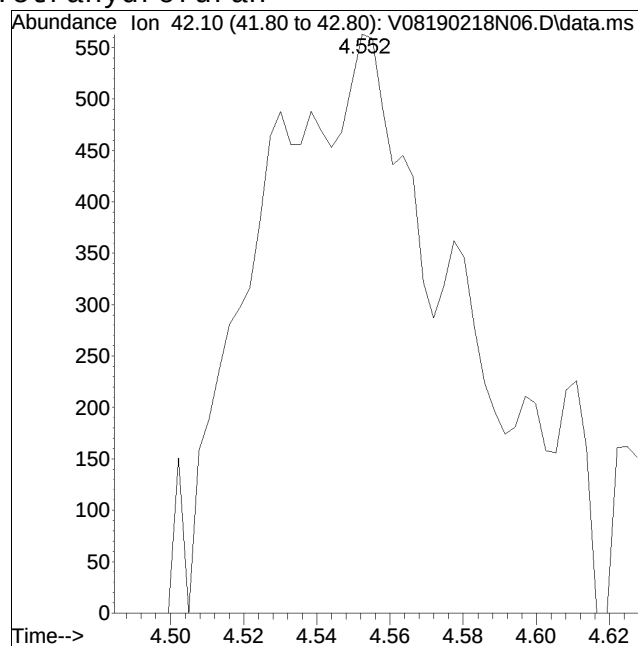
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #35: Tetrahydrofuran



Original Peak Response = 572

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

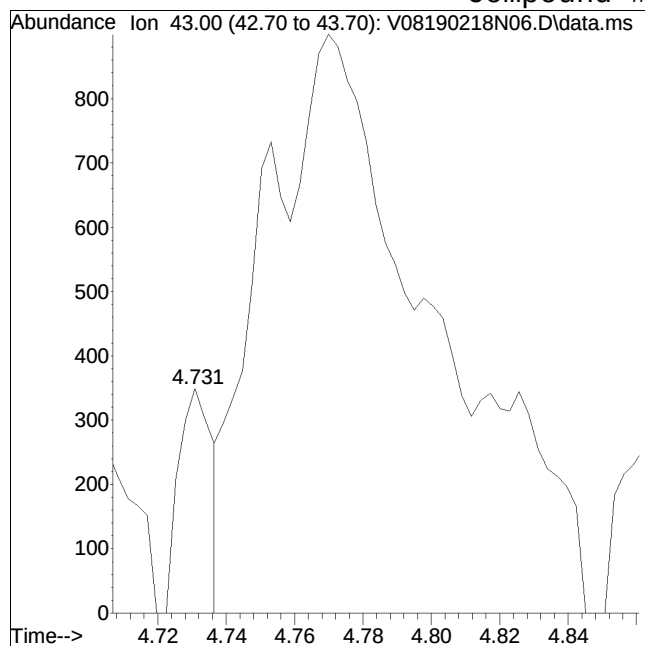


Manual Peak Response = 2184 M1

Manual Integration Report

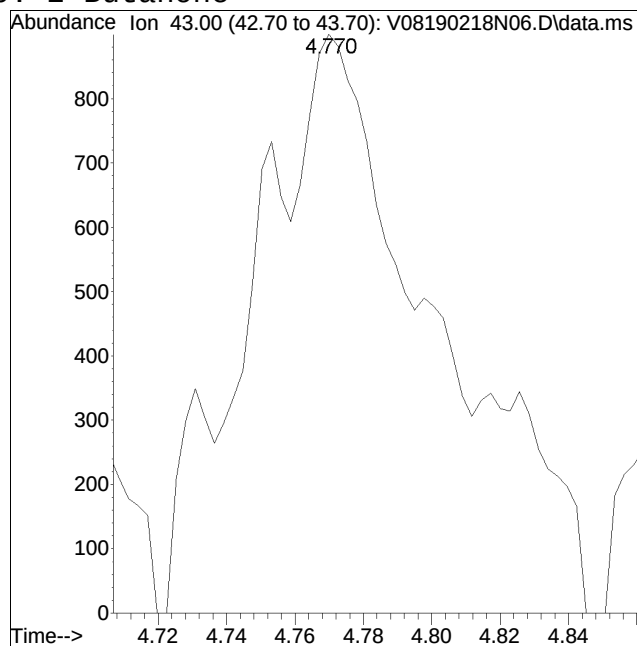
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #39: 2-Butanone



Original Peak Response = 239

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

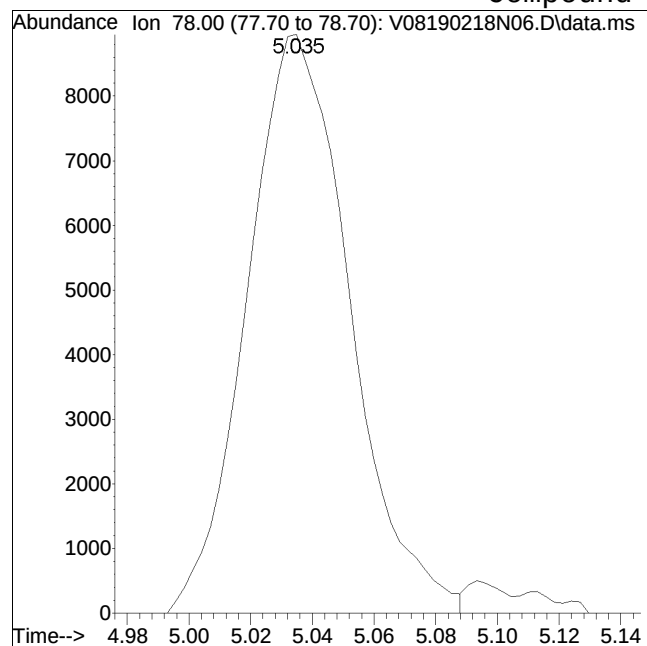


Manual Peak Response = 3393 M1

Manual Integration Report

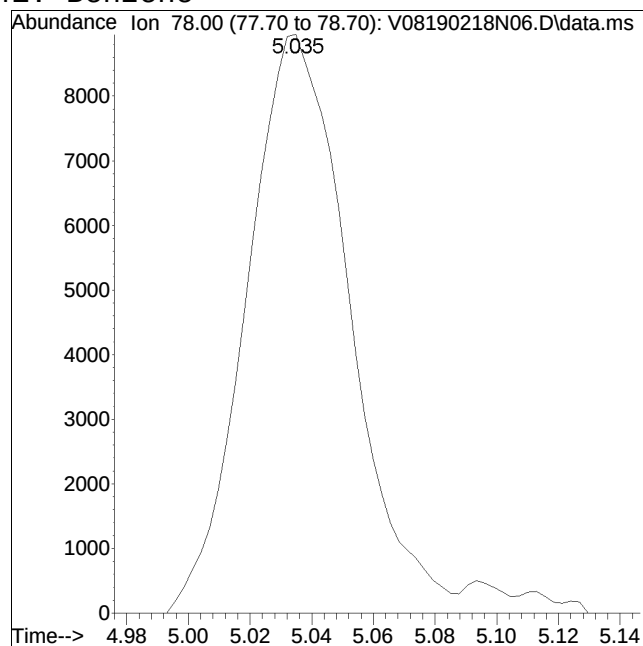
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #41: Benzene



Original Peak Response = 20673

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

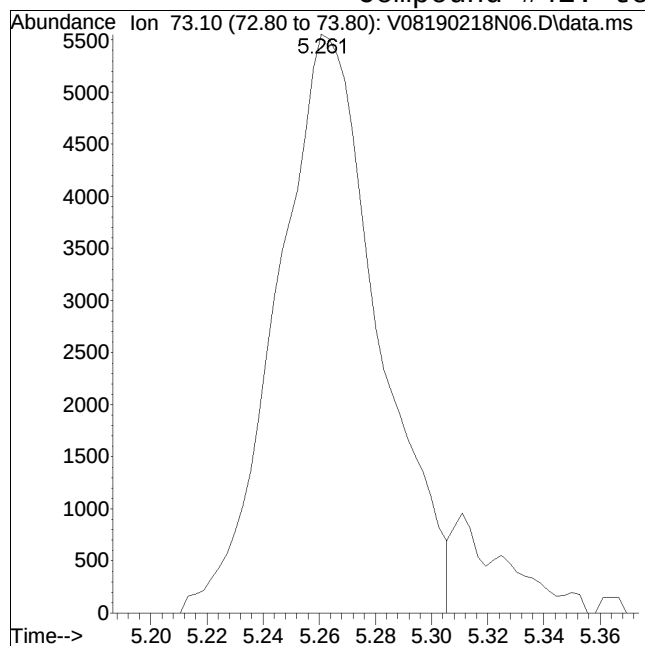


Manual Peak Response = 21382 M1

Manual Integration Report

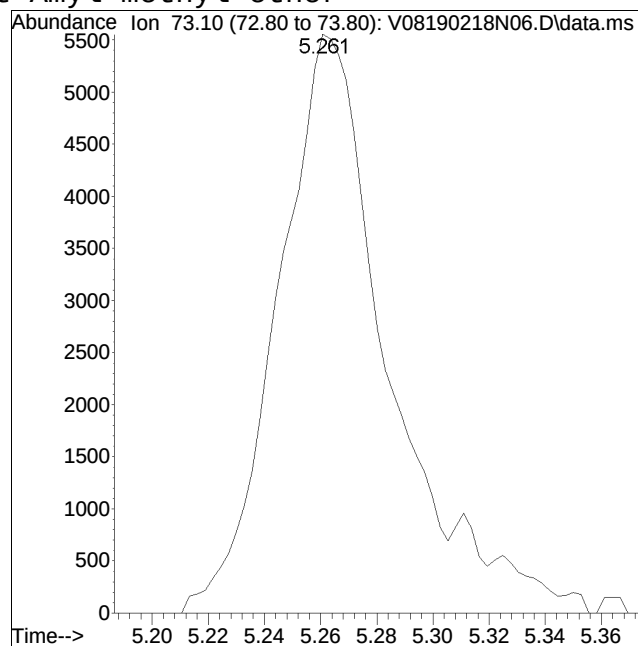
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #42: tert-Amyl methyl ether



Original Peak Response = 13934

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

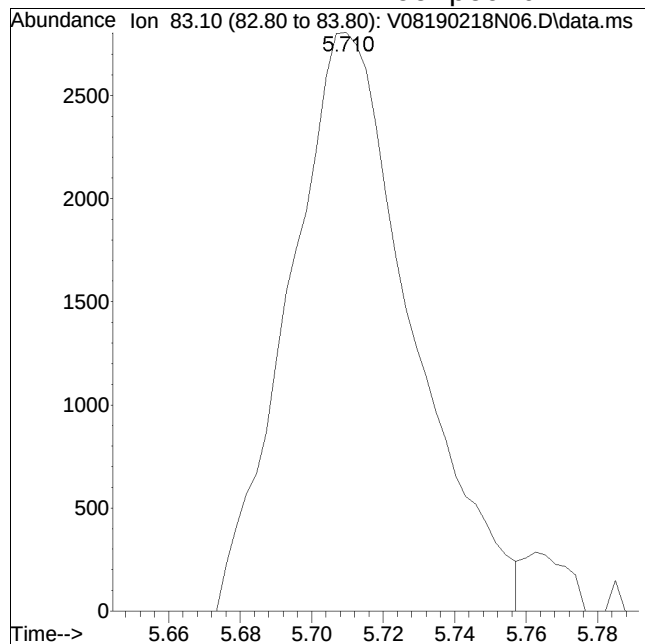


Manual Peak Response = 15179 M1

Manual Integration Report

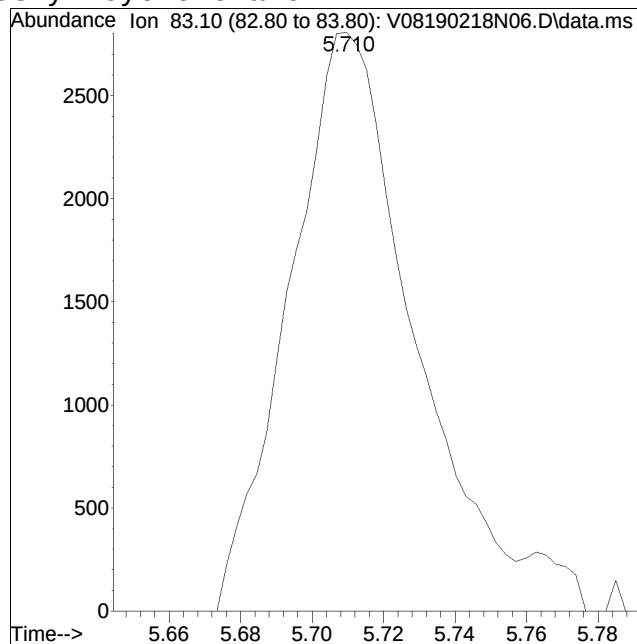
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STDL1 Quant Date : 2/19/2019 0:07 am

Compound #47: Methyl cyclohexane



Original Peak Response = 6659

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

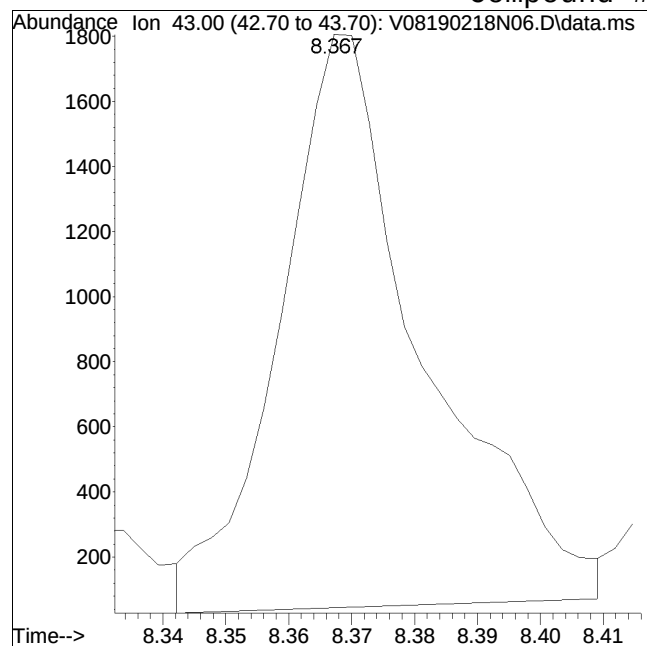


Manual Peak Response = 6899 M1

Manual Integration Report

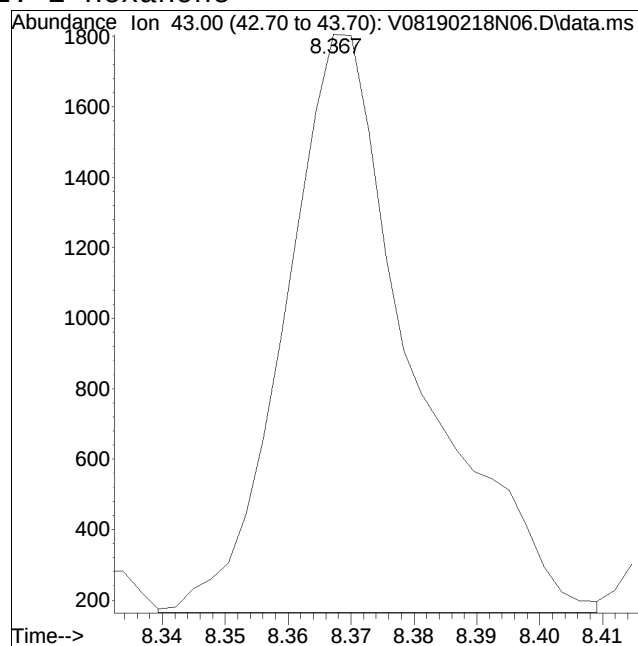
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N06.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:07 pm Instrument : VOA 108
Sample : I8260STD1 Quant Date : 2/19/2019 0:07 am

Compound #72: 2-Hexanone



Original Peak Response = 2808

M4 = Poor automated baseline construction.



Manual Peak Response = 2349 M4

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N08.D
 Acq On : 18 Feb 2019 9:50 pm
 Operator : VOA108:NLK
 Sample : I8260STD2
 Misc : WG1208025
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 19 07:22:47 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 07:22:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

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

Internal Standards						
1) Fluorobenzene	5.551	96	526413	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery	=	99.92%	
59) Chlorobenzene-d5	8.526	117	360724	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery	=	98.43%	
79) 1,4-Dichlorobenzene-d4	10.010	152	163524	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery	=	96.34%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	131486	9.779	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.79%	
43) 1,2-Dichloroethane-d4	5.208	65	148966	9.857	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.57%	
60) Toluene-d8	7.243	98	500734	10.128	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.28%	
83) 4-Bromofluorobenzene	9.340	95	161542	10.096	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.96%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.974	85	18772	1.784	ug/L	97
3) Chloromethane	1.094	50	21313	2.057	ug/L	99
4) Vinyl chloride	1.150	62	22348	2.019	ug/L	99
5) Bromomethane	1.359	94	22296M1	2.340	ug/L	
6) Chloroethane	1.446	64	15982	1.975	ug/L	95
7) Trichlorofluoromethane	1.546	101	32957	1.845	ug/L	98
8) Ethyl ether	1.783	74	12575M1	2.113	ug/L	
10) 1,1-Dichloroethene	1.917	96	19216M1	1.942	ug/L	
11) Carbon disulfide	1.923	76	59730	1.920	ug/L	99
12) Freon-113	1.962	101	16416M1	1.799	ug/L	
13) Iodomethane	2.017	142	9672	2.607	ug/L	87
14) Acrolein	2.199	56	2285	1.859	ug/L	96
15) Methylene chloride	2.411	84	23396	1.984	ug/L	69
17) Acetone	2.464	43	4884	2.387	ug/L #	84
18) trans-1,2-Dichloroethene	2.561	96	21850	1.946	ug/L	74
19) Methyl acetate	2.603	43	9827	1.909	ug/L #	85
20) Methyl tert-butyl ether	2.689	73	58274M1	1.976	ug/L	
21) tert-Butyl alcohol	2.837	59	6519	10.350	ug/L #	76
22) Diisopropyl ether	3.125	45	67952M1	2.000	ug/L	
23) 1,1-Dichloroethane	3.211	63	39371	1.982	ug/L	98
24) Halothane	3.359	117	16420	1.895	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N08.D
 Acq On : 18 Feb 2019 9:50 pm
 Operator : VOA108:NLK
 Sample : I8260STD2
 Misc : WG1208025
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 19 07:22:47 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 07:22:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	3.281	53	5639	1.831	ug/L	96
26) Ethyl tert-butyl ether	3.582	59	63104	1.916	ug/L #	80
27) Vinyl acetate	3.582	43	36119M1	1.534	ug/L	
28) cis-1,2-Dichloroethene	3.908	96	25895	2.032	ug/L #	65
29) 2,2-Dichloropropane	4.048	77	31500M1	1.930	ug/L	
30) Bromochloromethane	4.190	128	11817	2.006	ug/L #	49
31) Cyclohexane	4.159	56	30558	1.867	ug/L #	62
32) Chloroform	4.340	83	40541	1.955	ug/L	96
33) Ethyl acetate	4.577	43	23993M1	2.748	ug/L	
34) Carbon tetrachloride	4.457	117	29009	1.872	ug/L	98
35) Tetrahydrofuran	4.533	42	4174	1.978	ug/L #	51
37) 1,1,1-Trichloroethane	4.555	97	34375	1.901	ug/L	99
39) 2-Butanone	4.767	43	9098M1	2.544	ug/L	
40) 1,1-Dichloropropene	4.725	75	27286M1	1.885	ug/L	
41) Benzene	5.035	78	90686	2.006	ug/L #	89
42) tert-Amyl methyl ether	5.258	73	58170	1.920	ug/L	91
44) 1,2-Dichloroethane	5.289	62	30475	1.960	ug/L	95
47) Methyl cyclohexane	5.710	83	32261	1.858	ug/L #	65
48) Trichloroethene	5.743	95	23595	1.960	ug/L	95
50) Dibromomethane	6.186	93	13659	1.935	ug/L	96
51) 1,2-Dichloropropane	6.304	63	24222	2.066	ug/L	92
53) 2-Chloroethyl vinyl ether	7.051	63	12854	1.924	ug/L	97
54) Bromodichloromethane	6.410	83	31497	1.916	ug/L	96
57) 1,4-Dioxane	6.630	88	22093	430.973	ug/L #	67
58) cis-1,3-Dichloropropene	7.062	75	34619	1.879	ug/L	90
61) Toluene	7.291	92	56842	2.022	ug/L	99
62) 4-Methyl-2-pentanone	7.692	58	5829	1.839	ug/L #	74
63) Tetrachloroethene	7.642	166	22959	1.902	ug/L	91
65) trans-1,3-Dichloropropene	7.709	75	30203	1.903	ug/L	95
67) Ethyl methacrylate	7.893	69	21942	1.743	ug/L	97
68) 1,1,2-Trichloroethane	7.837	83	16434	2.041	ug/L	96
69) Chlorodibromomethane	7.971	129	23380	1.973	ug/L	97
70) 1,3-Dichloropropane	8.046	76	32684	2.010	ug/L	97
71) 1,2-Dibromoethane	8.130	107	19146	1.998	ug/L	98
72) 2-Hexanone	8.367	43	11459M1	2.088	ug/L	
73) Chlorobenzene	8.537	112	63171	2.020	ug/L	94
74) Ethylbenzene	8.579	91	102318	1.952	ug/L	99
75) 1,1,1,2-Tetrachloroethane	8.596	131	22292	1.904	ug/L	95
76) p/m Xylene	8.685	106	74443	3.734	ug/L	92
77) o Xylene	8.967	106	74086	3.753	ug/L	85

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N08.D
 Acq On : 18 Feb 2019 9:50 pm
 Operator : VOA108:NLK
 Sample : I8260STD.L2
 Misc : WG1208025
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 19 07:22:47 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 07:22:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.003	104	119344	3.785	ug/L	88
80)	Bromoform	9.006	173	13335	1.959	ug/L	98
82)	Isopropylbenzene	9.176	105	96068	2.012	ug/L	95
84)	Bromobenzene	9.399	156	24611	2.003	ug/L	99
85)	n-Propylbenzene	9.432	91	109669	2.012	ug/L	97
86)	1,4-Dichlorobutane	9.438	55	30298	2.077	ug/L	95
87)	1,1,2,2-Tetrachloroethane	9.485	83	23105	2.084	ug/L	99
88)	4-Ethyltoluene	9.502	105	89754	1.978	ug/L	96
89)	2-Chlorotoluene	9.516	91	76580	1.925	ug/L	93
90)	1,3,5-Trimethylbenzene	9.558	105	76358	1.948	ug/L	91
91)	1,2,3-Trichloropropane	9.552	75	17847	2.072	ug/L	99
92)	trans-1,4-Dichloro-2-b...	9.589	53	5811	1.915	ug/L	88
93)	4-Chlorotoluene	9.619	91	68605	1.983	ug/L	95
94)	tert-Butylbenzene	9.745	119	80150	1.990	ug/L	93
95)	Pentachloroethane	9.753	167	14206	1.843	ug/L	88
97)	1,2,4-Trimethylbenzene	9.784	105	78463	2.012	ug/L	98
98)	sec-Butylbenzene	9.848	105	99774	2.022	ug/L	98
99)	p-Isopropyltoluene	9.934	119	85208	2.012	ug/L	97
100)	1,3-Dichlorobenzene	9.965	146	43919	1.939	ug/L	97
101)	1,4-Dichlorobenzene	10.018	146	45859	1.955	ug/L	96
102)	p-Diethylbenzene	10.144	119	47901	1.932	ug/L	93
103)	n-Butylbenzene	10.177	91	77064	1.962	ug/L	98
104)	1,2-Dichlorobenzene	10.258	146	43321	1.961	ug/L	97
105)	1,2,4,5-Tetramethylben...	10.601	119	45795	1.581	ug/L	96
106)	1,2-Dibromo-3-chloropr...	10.712	155	3116	1.877	ug/L	98
107)	1,3,5-Trichlorobenzene	10.729	180	27827	1.829	ug/L	92
108)	Hexachlorobutadiene	11.078	225	14874	2.087	ug/L	90
109)	1,2,4-Trichlorobenzene	11.092	180	22723	1.639	ug/L	98
110)	Naphthalene	11.270	128	52037	1.705	ug/L	100
111)	1,2,3-Trichlorobenzene	11.373	180	20976	1.674	ug/L	99

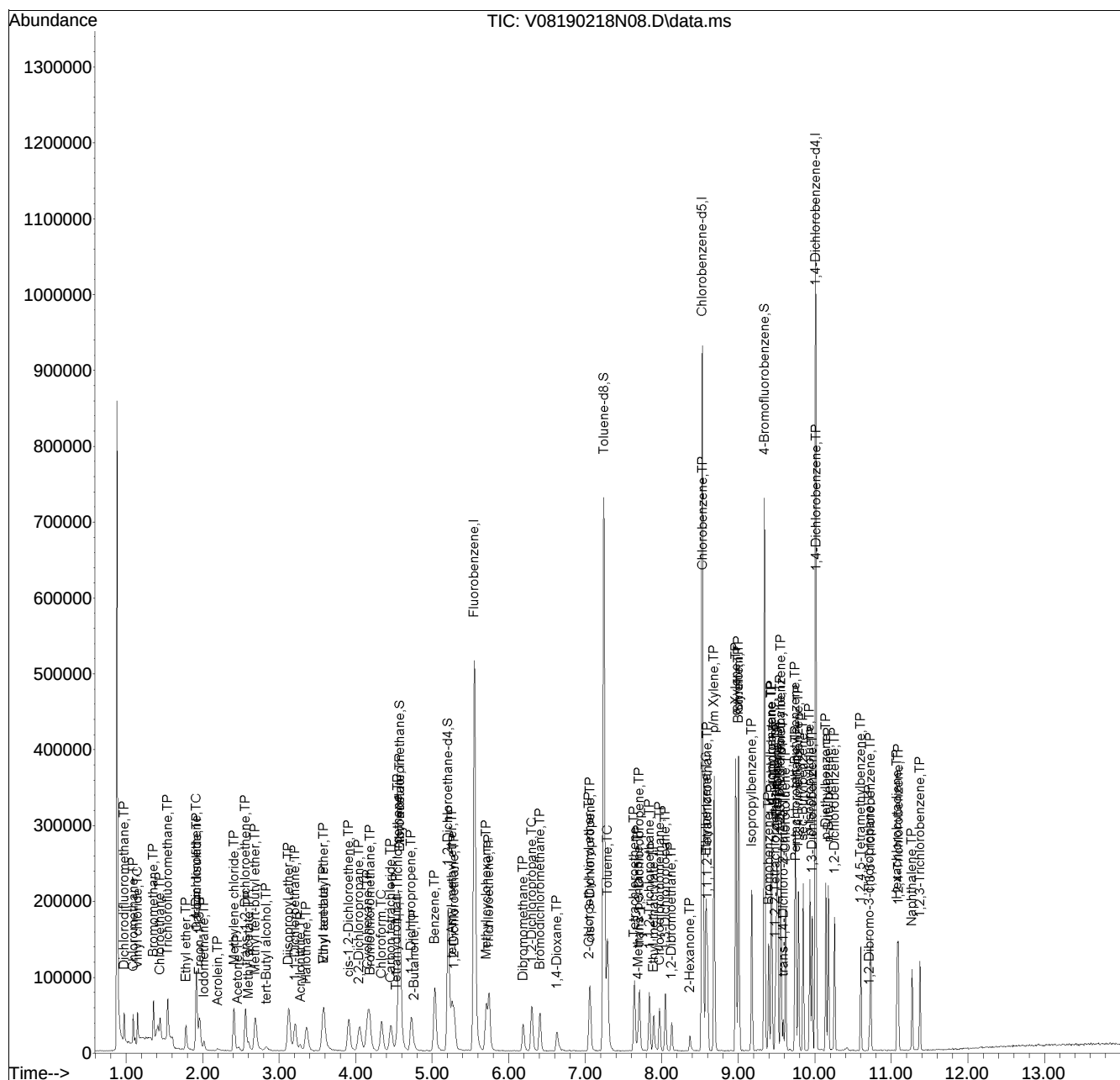
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
Data File : V08190218N08.D
Acq On : 18 Feb 2019 9:50 pm
Operator : VOA108:NLK
Sample : I8260STDL2
Misc : WG1208025
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 19 07:22:47 2019
Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Feb 19 07:22:07 2019
Response via : Initial Calibration

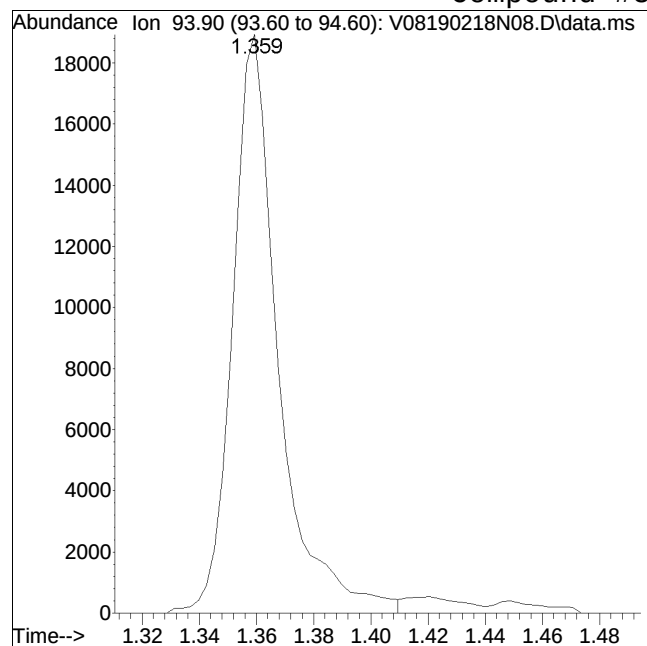
Sub List : 8260-CurvePenta - All compounds listed08190218N09.D•



Manual Integration Report

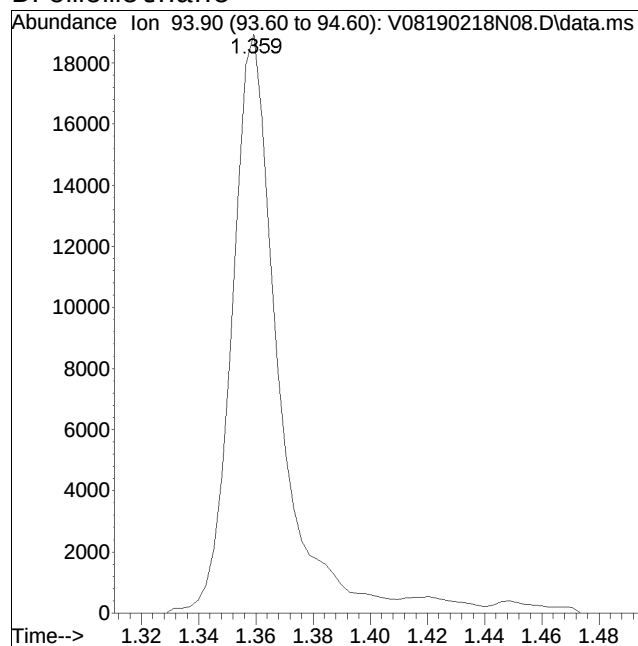
Data Path : I:\VOLATILES\VOA108\2019\1QMethod : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STD L2 Quant Date : 2/19/2019 7:22 am

Compound #5: Bromomethane



Original Peak Response = 21053

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

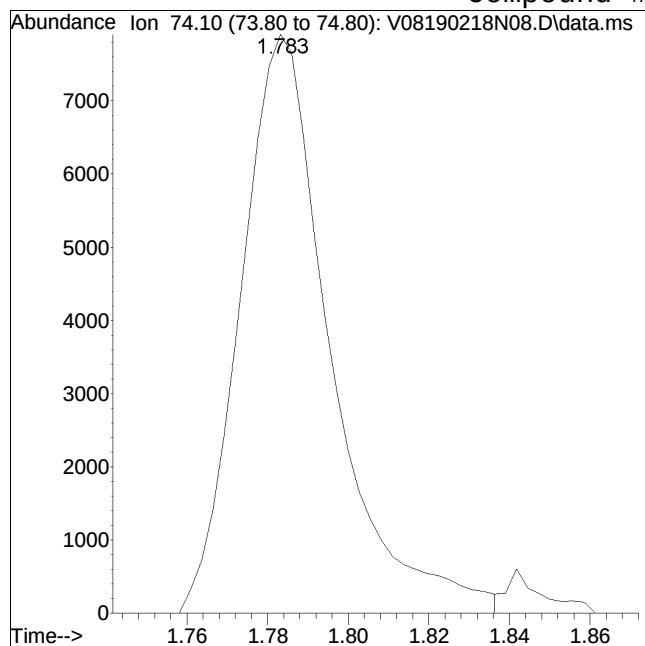


Manual Peak Response = 22296 M1

Manual Integration Report

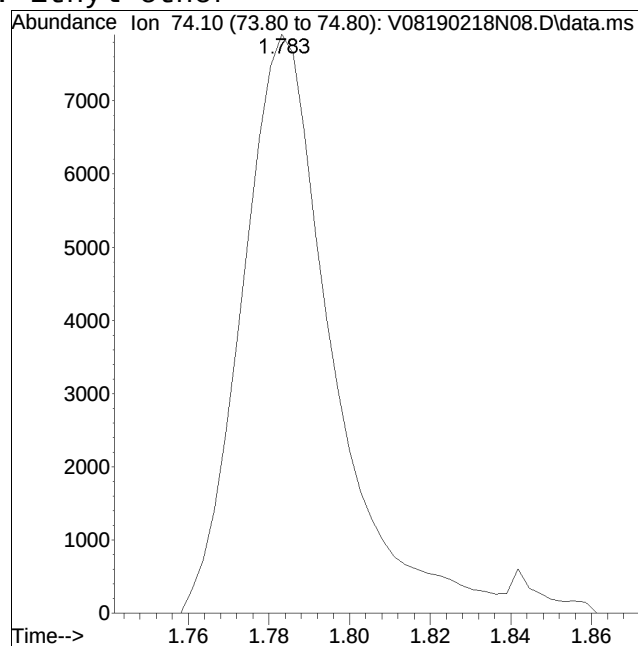
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STD L2 Quant Date : 2/19/2019 7:22 am

Compound #8: Ethyl ether



Original Peak Response = 12218

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

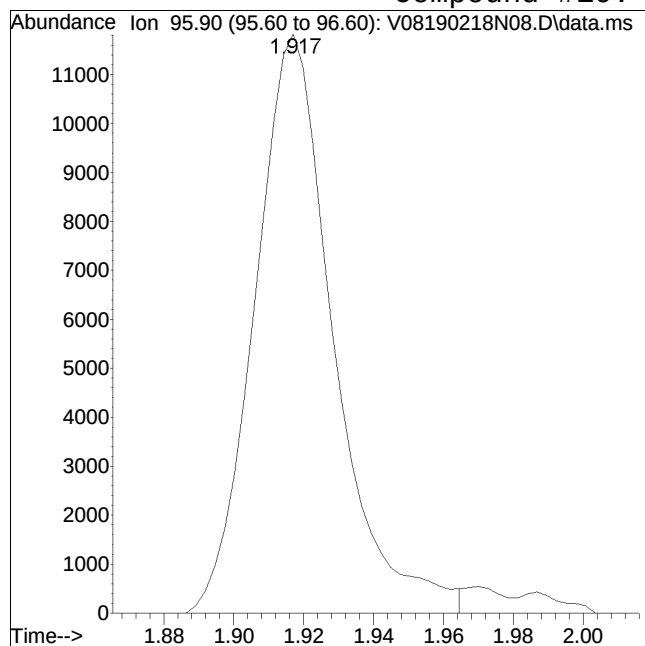


Manual Peak Response = 12575 M1

Manual Integration Report

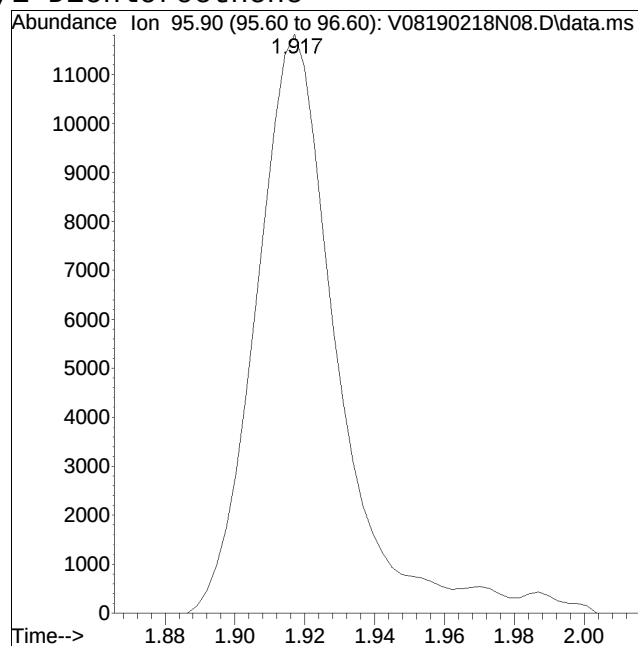
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STDL2 Quant Date : 2/19/2019 7:22 am

Compound #10: 1,1-Dichloroethene



Original Peak Response = 18449

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

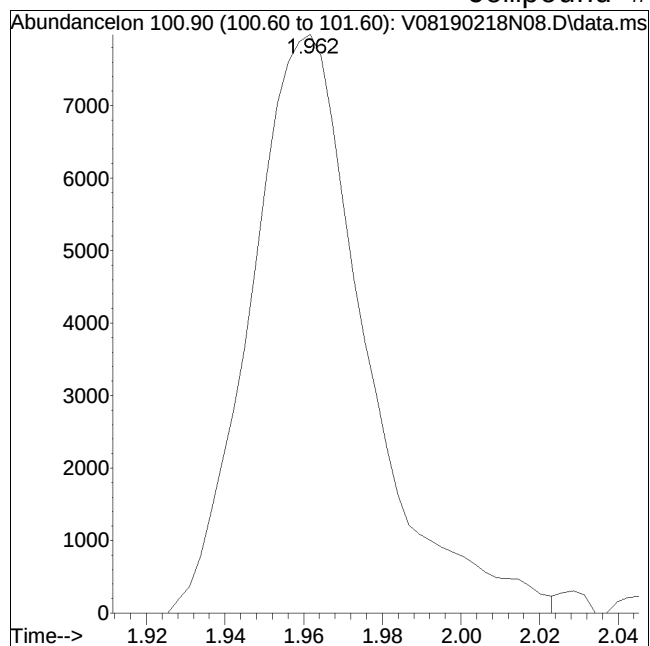


Manual Peak Response = 19216 M1

Manual Integration Report

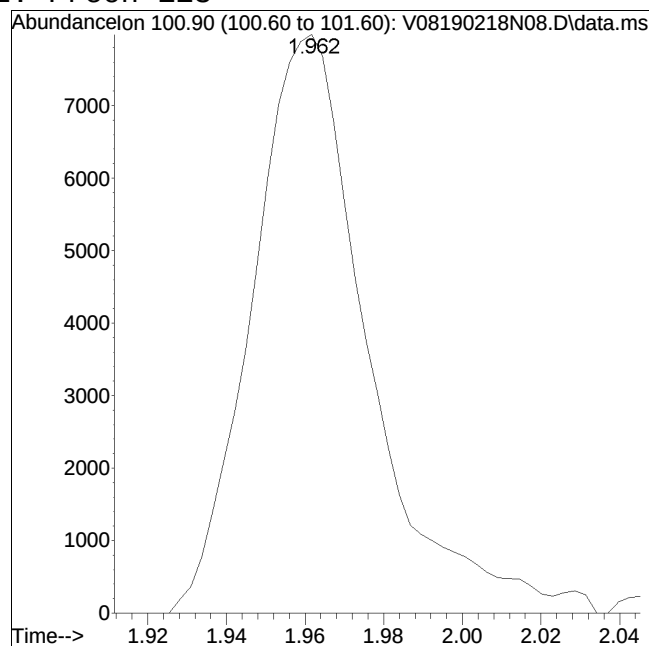
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STDL2 Quant Date : 2/19/2019 7:22 am

Compound #12: Freon-113



Original Peak Response = 16276

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

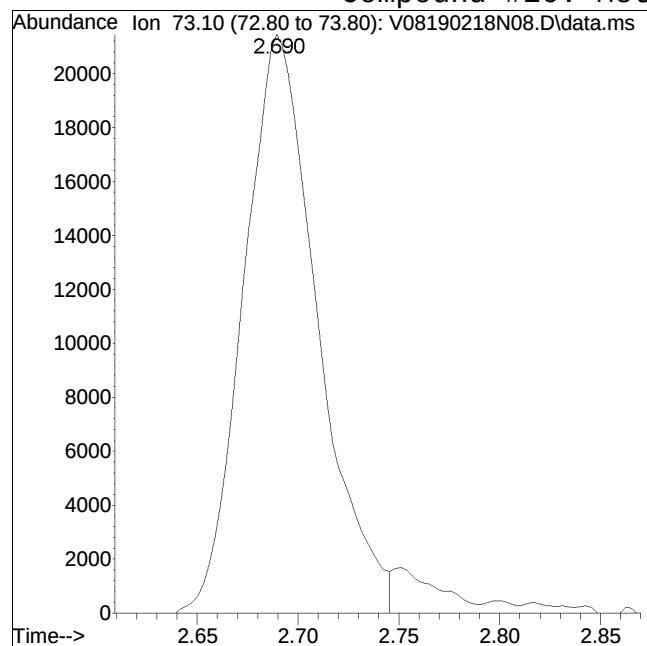


Manual Peak Response = 16416 M1

Manual Integration Report

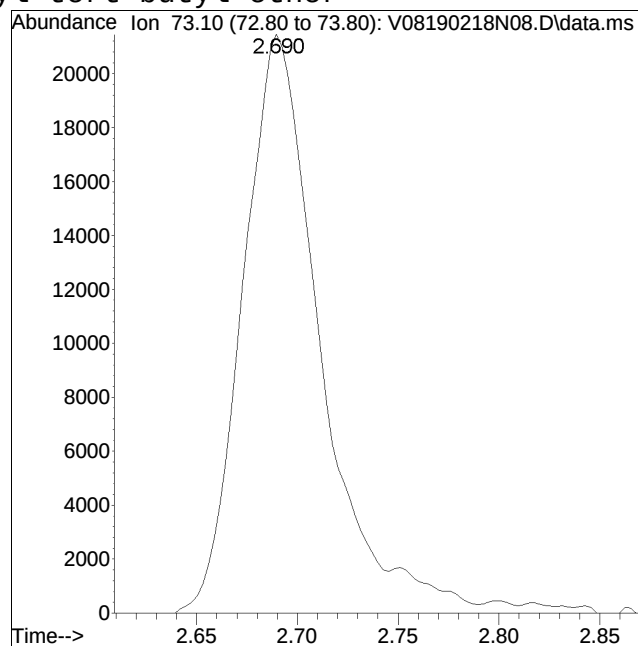
Data Path : I:\VOLATILES\VOA108\2019\1QMethod : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STD L2 Quant Date : 2/19/2019 7:22 am

Compound #20: Methyl tert-butyl ether



Original Peak Response = 54632

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

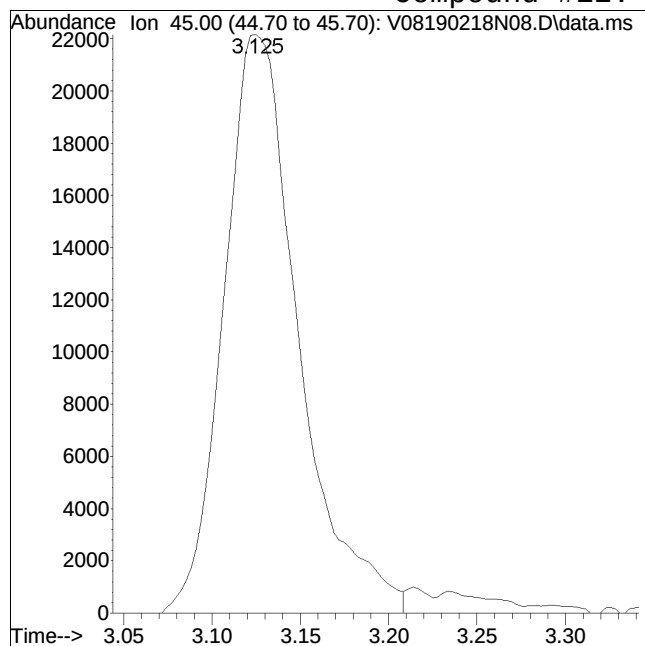


Manual Peak Response = 58274 M1

Manual Integration Report

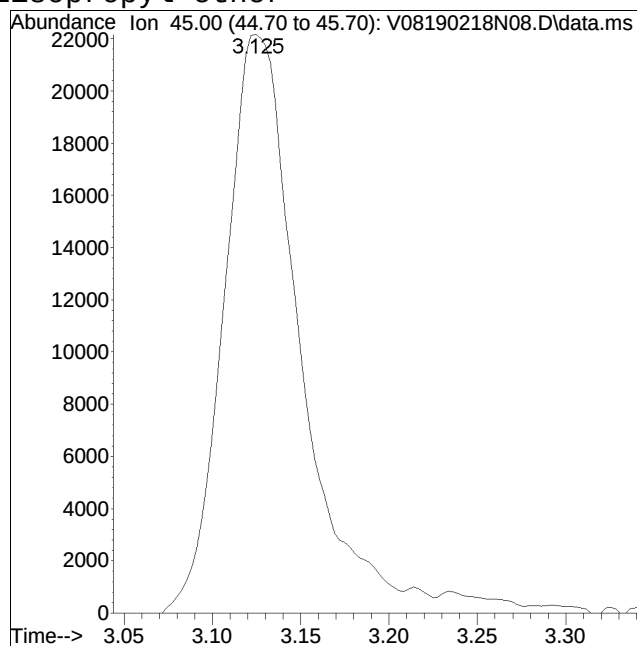
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STD L2 Quant Date : 2/19/2019 7:22 am

Compound #22: Diisopropyl ether



Original Peak Response = 64801

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

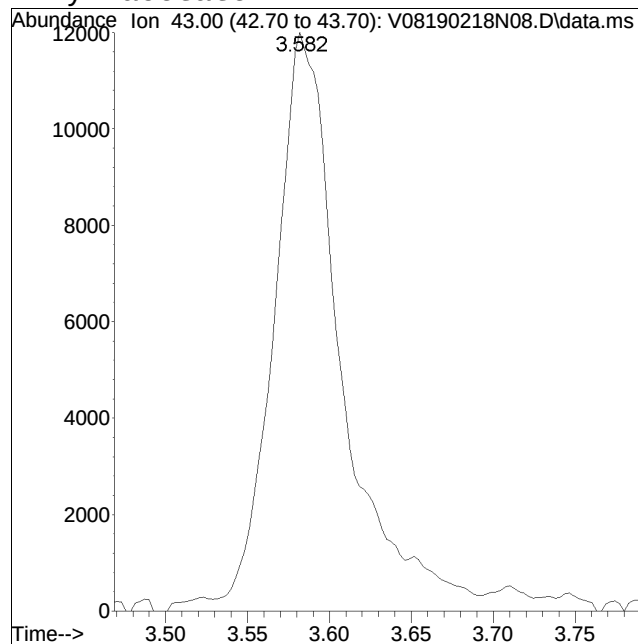
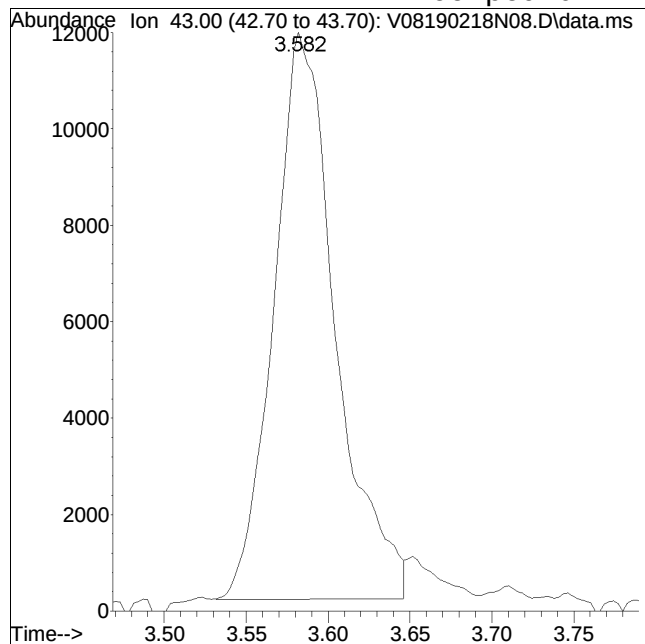


Manual Peak Response = 67952 M1

Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STD L2 Quant Date : 2/19/2019 7:22 am

Compound #27: Vinyl acetate



Original Peak Response = 30755

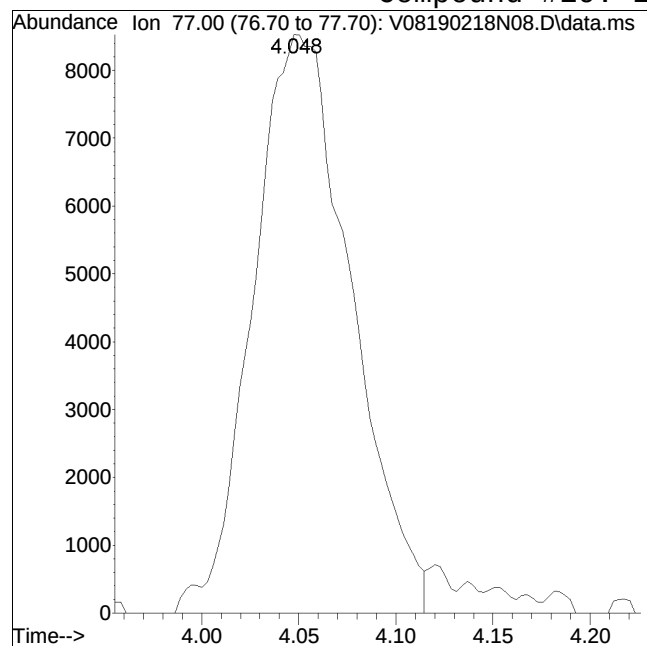
Manual Peak Response = 36119 M1

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

Manual Integration Report

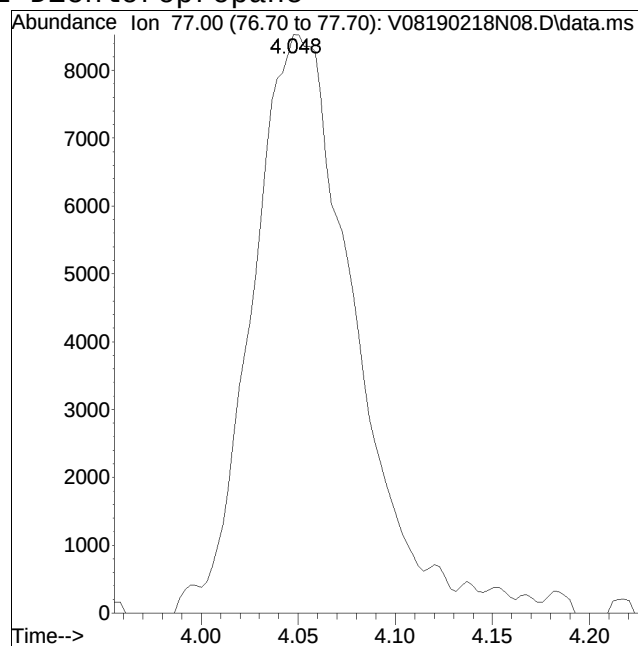
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STDL2 Quant Date : 2/19/2019 7:22 am

Compound #29: 2,2-Dichloropropane



Original Peak Response = 29922

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

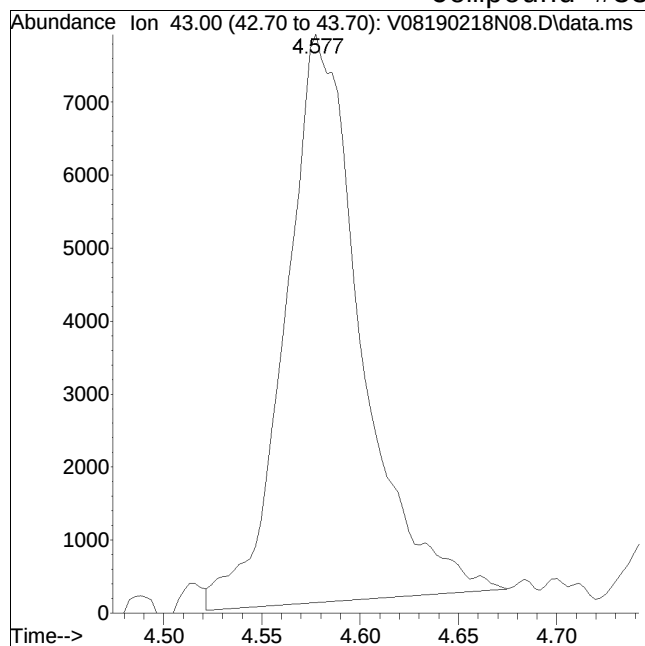


Manual Peak Response = 31500 M1

Manual Integration Report

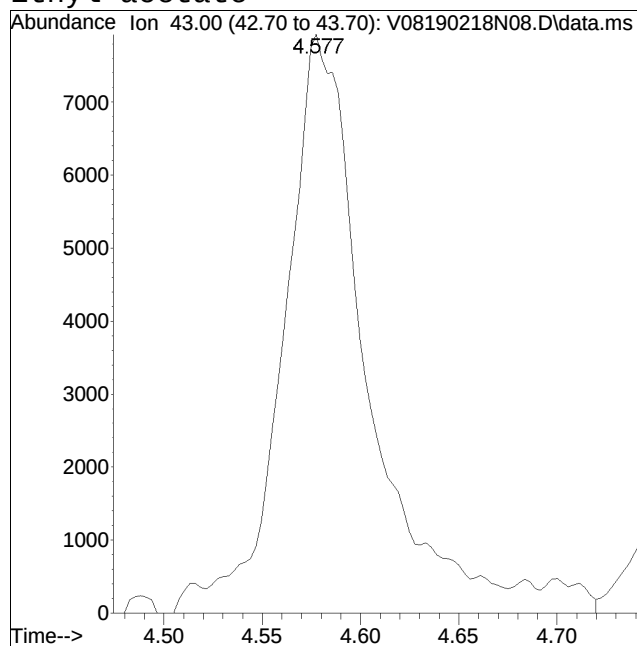
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STDL2 Quant Date : 2/19/2019 7:22 am

Compound #33: Ethyl acetate



Original Peak Response = 20963

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

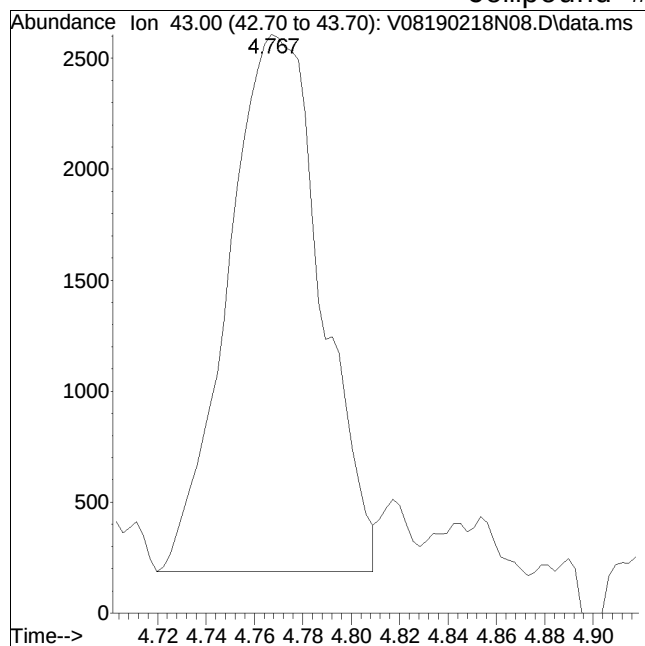


Manual Peak Response = 23993 M1

Manual Integration Report

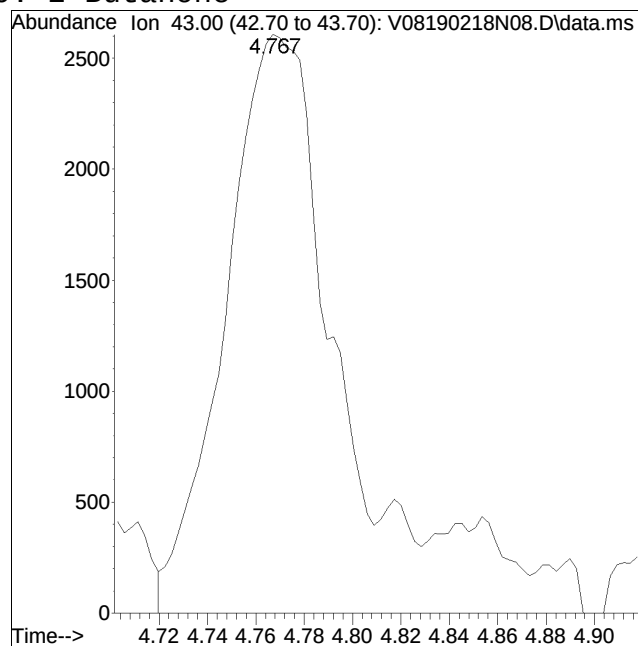
Data Path : I:\VOLATILES\VOA108\2019\1QMethod : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STDL2 Quant Date : 2/19/2019 7:22 am

Compound #39: 2-Butanone



Original Peak Response = 6491

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

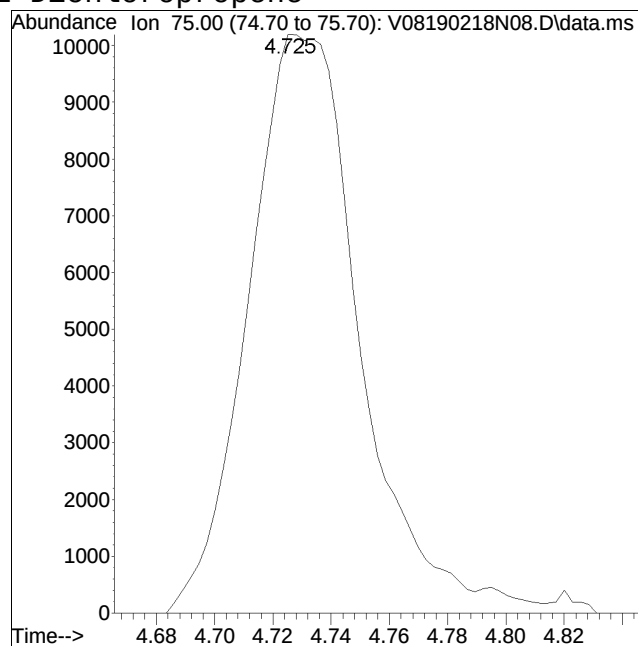
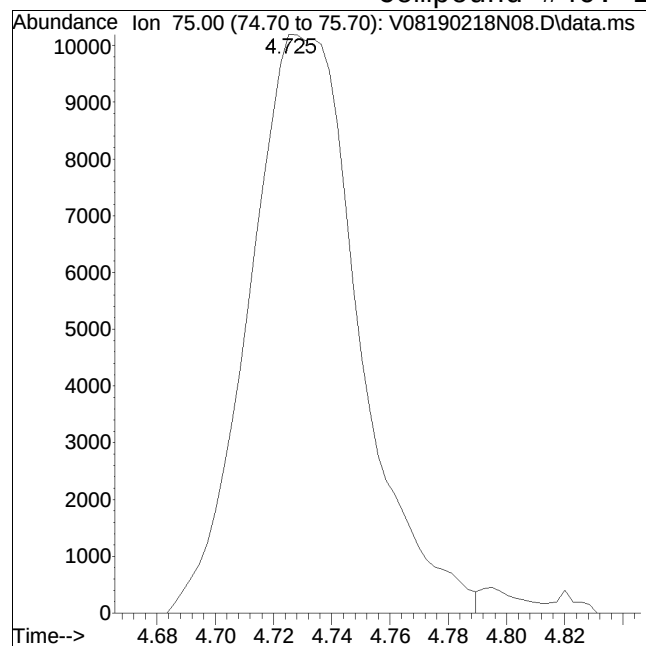


Manual Peak Response = 9098 M1

Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STDL2 Quant Date : 2/19/2019 7:22 am

Compound #40: 1,1-Dichloropropene



Original Peak Response = 26659

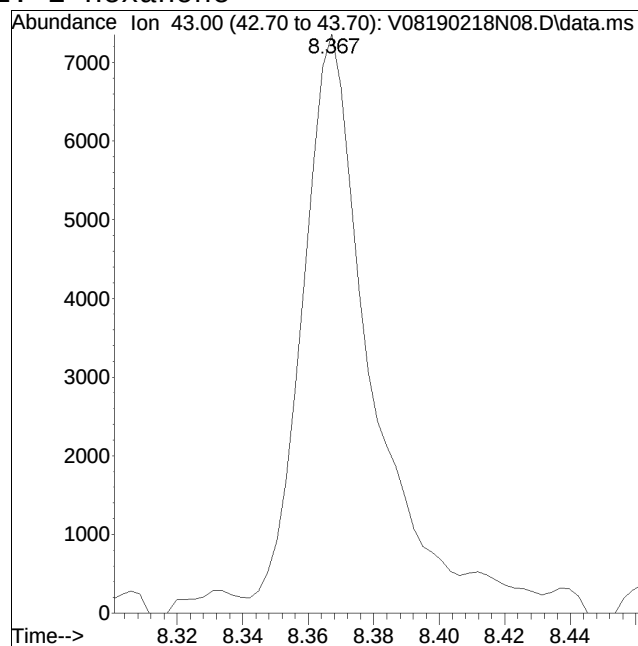
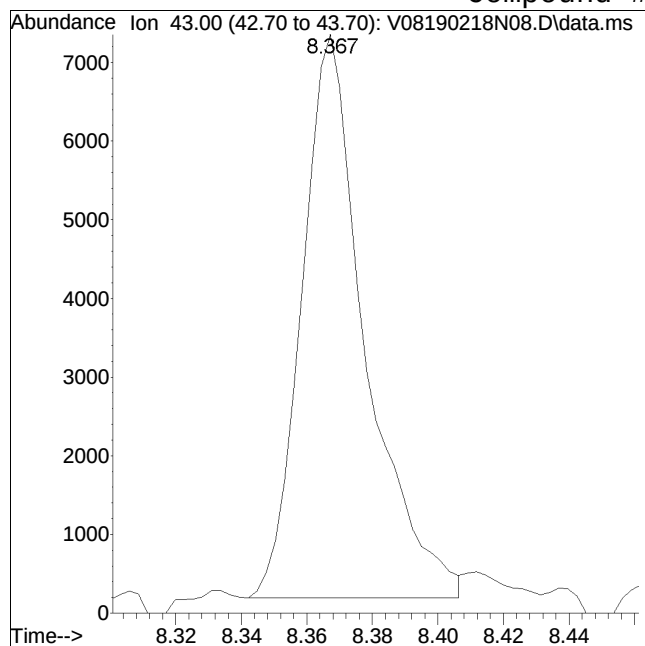
Manual Peak Response = 27286 M1

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

Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N08.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 9:50 pm Instrument : VOA 108
Sample : I8260STDL2 Quant Date : 2/19/2019 7:22 am

Compound #72: 2-Hexanone



Original Peak Response = 9640

Manual Peak Response = 11459 M1

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N09.D
 Acq On : 18 Feb 2019 10:12 pm
 Operator : VOA108:NLK
 Sample : I8260STD3
 Misc : WG1208025
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 18 23:42:19 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:14 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

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

Internal Standards						
1) Fluorobenzene	5.553	96	526854	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery	=	100.00%	
59) Chlorobenzene-d5	8.526	117	366483	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery	=	100.00%	
79) 1,4-Dichlorobenzene-d4	10.010	152	169731	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery	=	100.00%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	133054	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.00%	
43) 1,2-Dichloroethane-d4	5.210	65	148018	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.00%	
60) Toluene-d8	7.241	98	495804	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.00%	
83) 4-Bromofluorobenzene	9.340	95	173853	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.00%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.974	85	100370	10.000	ug/L	98
3) Chloromethane	1.094	50	104444	10.000	ug/L	99
4) Vinyl chloride	1.150	62	110582	10.000	ug/L	95
5) Bromomethane	1.359	94	92029	10.000	ug/L	99
6) Chloroethane	1.446	64	72486	10.000	ug/L	95
7) Trichlorofluoromethane	1.543	101	168652	10.000	ug/L	97
8) Ethyl ether	1.783	74	56412	10.000	ug/L	66
10) 1,1-Dichloroethene	1.914	96	94963	10.000	ug/L	# 63
11) Carbon disulfide	1.923	76	300223	10.000	ug/L	97
12) Freon-113	1.959	101	86405	10.000	ug/L	97
13) Iodomethane	2.017	142	72637	10.000	ug/L	87
14) Acrolein	2.196	56	11323M1	10.000	ug/L	
15) Methylene chloride	2.411	84	112516	10.000	ug/L	68
17) Acetone	2.464	43	18747M4	10.000	ug/L	
18) trans-1,2-Dichloroethene	2.561	96	109540	10.000	ug/L	74
19) Methyl acetate	2.597	43	50463	10.000	ug/L	# 87
20) Methyl tert-butyl ether	2.689	73	283099	10.000	ug/L	92
21) tert-Butyl alcohol	2.832	59	27369	50.000	ug/L	# 72
22) Diisopropyl ether	3.124	45	325782	10.000	ug/L	# 90
23) 1,1-Dichloroethane	3.208	63	195640	10.000	ug/L	98
24) Halothane	3.359	117	82406	10.000	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N09.D
 Acq On : 18 Feb 2019 10:12 pm
 Operator : VOA108:NLK
 Sample : I8260STD3
 Misc : WG1208025
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 18 23:42:19 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:14 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	3.272	53	29214M1	10.000	ug/L	
26) Ethyl tert-butyl ether	3.576	59	319860	10.000	ug/L	91
27) Vinyl acetate	3.582	43	203707	10.000	ug/L #	94
28) cis-1,2-Dichloroethene	3.911	96	125487	10.000	ug/L #	67
29) 2,2-Dichloropropane	4.048	77	158063M1	10.000	ug/L	
30) Bromochloromethane	4.181	128	57838M1	10.000	ug/L	
31) Cyclohexane	4.156	56	152737	10.000	ug/L #	56
32) Chloroform	4.340	83	201606	10.000	ug/L	97
33) Ethyl acetate	4.575	43	75892	10.000	ug/L #	93
34) Carbon tetrachloride	4.457	117	150354	10.000	ug/L	99
35) Tetrahydrofuran	4.522	42	19402	10.000	ug/L #	47
37) 1,1,1-Trichloroethane	4.555	97	177222	10.000	ug/L #	95
39) 2-Butanone	4.759	43	29358	10.000	ug/L #	6
40) 1,1-Dichloropropene	4.728	75	140978	10.000	ug/L	95
41) Benzene	5.035	78	446072	10.000	ug/L	90
42) tert-Amyl methyl ether	5.255	73	285590	10.000	ug/L	91
44) 1,2-Dichloroethane	5.288	62	147681	10.000	ug/L	95
47) Methyl cyclohexane	5.710	83	172345	10.000	ug/L #	65
48) Trichloroethene	5.746	95	117856	10.000	ug/L	94
50) Dibromomethane	6.189	93	69030	10.000	ug/L	98
51) 1,2-Dichloropropane	6.301	63	112884	10.000	ug/L	98
53) 2-Chloroethyl vinyl ether	7.051	63	65392	10.000	ug/L #	87
54) Bromodichloromethane	6.407	83	161999	10.000	ug/L	97
57) 1,4-Dioxane	6.630	88	25716	500.000	ug/L #	70
58) cis-1,3-Dichloropropene	7.065	75	178090	10.000	ug/L	92
61) Toluene	7.291	92	278822	10.000	ug/L	98
62) 4-Methyl-2-pentanone	7.692	58	30975	10.000	ug/L #	93
63) Tetrachloroethene	7.642	166	120445	10.000	ug/L	92
65) trans-1,3-Dichloropropene	7.709	75	152979	10.000	ug/L	95
67) Ethyl methacrylate	7.893	69	121063	10.000	ug/L	99
68) 1,1,2-Trichloroethane	7.837	83	79328	10.000	ug/L	94
69) Chlorodibromomethane	7.971	129	114999	10.000	ug/L	98
70) 1,3-Dichloropropane	8.046	76	159358	10.000	ug/L	99
71) 1,2-Dibromoethane	8.130	107	94962	10.000	ug/L	100
72) 2-Hexanone	8.367	43	51431	10.000	ug/L	91
73) Chlorobenzene	8.537	112	313923	10.000	ug/L	91
74) Ethylbenzene	8.579	91	531852	10.000	ug/L	98
75) 1,1,1,2-Tetrachloroethane	8.596	131	115074	10.000	ug/L	95
76) p/m Xylene	8.685	106	410555	20.000	ug/L	96
77) o Xylene	8.967	106	403460	20.000	ug/L	91

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N09.D
 Acq On : 18 Feb 2019 10:12 pm
 Operator : VOA108:NLK
 Sample : I8260STD3
 Misc : WG1208025
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 18 23:42:19 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:14 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.003	104	667512	20.000	ug/L	89
80)	Bromoform	9.006	173	69344	10.000	ug/L	96
82)	Isopropylbenzene	9.176	105	518756	10.000	ug/L	96
84)	Bromobenzene	9.396	156	131034	10.000	ug/L	95
85)	n-Propylbenzene	9.432	91	600149	10.000	ug/L	96
86)	1,4-Dichlorobutane	9.438	55	150470	10.000	ug/L	96
87)	1,1,2,2-Tetrachloroethane	9.485	83	116255	10.000	ug/L	99
88)	4-Ethyltoluene	9.502	105	489039	10.000	ug/L	96
89)	2-Chlorotoluene	9.516	91	423956	10.000	ug/L	96
90)	1,3,5-Trimethylbenzene	9.558	105	409890	10.000	ug/L	91
91)	1,2,3-Trichloropropane	9.555	75	88442	10.000	ug/L	96
92)	trans-1,4-Dichloro-2-b...	9.586	53	27673	10.000	ug/L #	74
93)	4-Chlorotoluene	9.619	91	368761	10.000	ug/L	94
94)	tert-Butylbenzene	9.745	119	424087	10.000	ug/L	94
95)	Pentachloroethane	9.753	167	80449	10.000	ug/L	96
97)	1,2,4-Trimethylbenzene	9.784	105	403192	10.000	ug/L	93
98)	sec-Butylbenzene	9.848	105	544105	10.000	ug/L	98
99)	p-Isopropyltoluene	9.934	119	454687	10.000	ug/L	96
100)	1,3-Dichlorobenzene	9.965	146	240078	10.000	ug/L	97
101)	1,4-Dichlorobenzene	10.018	146	239196	10.000	ug/L	98
102)	p-Diethylbenzene	10.144	119	260363	10.000	ug/L	95
103)	n-Butylbenzene	10.177	91	417305	10.000	ug/L	99
104)	1,2-Dichlorobenzene	10.258	146	227286	10.000	ug/L	98
105)	1,2,4,5-Tetramethylben...	10.601	119	356993	10.000	ug/L	98
106)	1,2-Dibromo-3-chloropr...	10.712	155	16637	10.000	ug/L	93
107)	1,3,5-Trichlorobenzene	10.729	180	161181	10.000	ug/L	94
108)	Hexachlorobutadiene	11.078	225	74327	10.000	ug/L	97
109)	1,2,4-Trichlorobenzene	11.092	180	142289	10.000	ug/L	98
110)	Naphthalene	11.270	128	317081	10.000	ug/L	100
111)	1,2,3-Trichlorobenzene	11.373	180	129271	10.000	ug/L	99

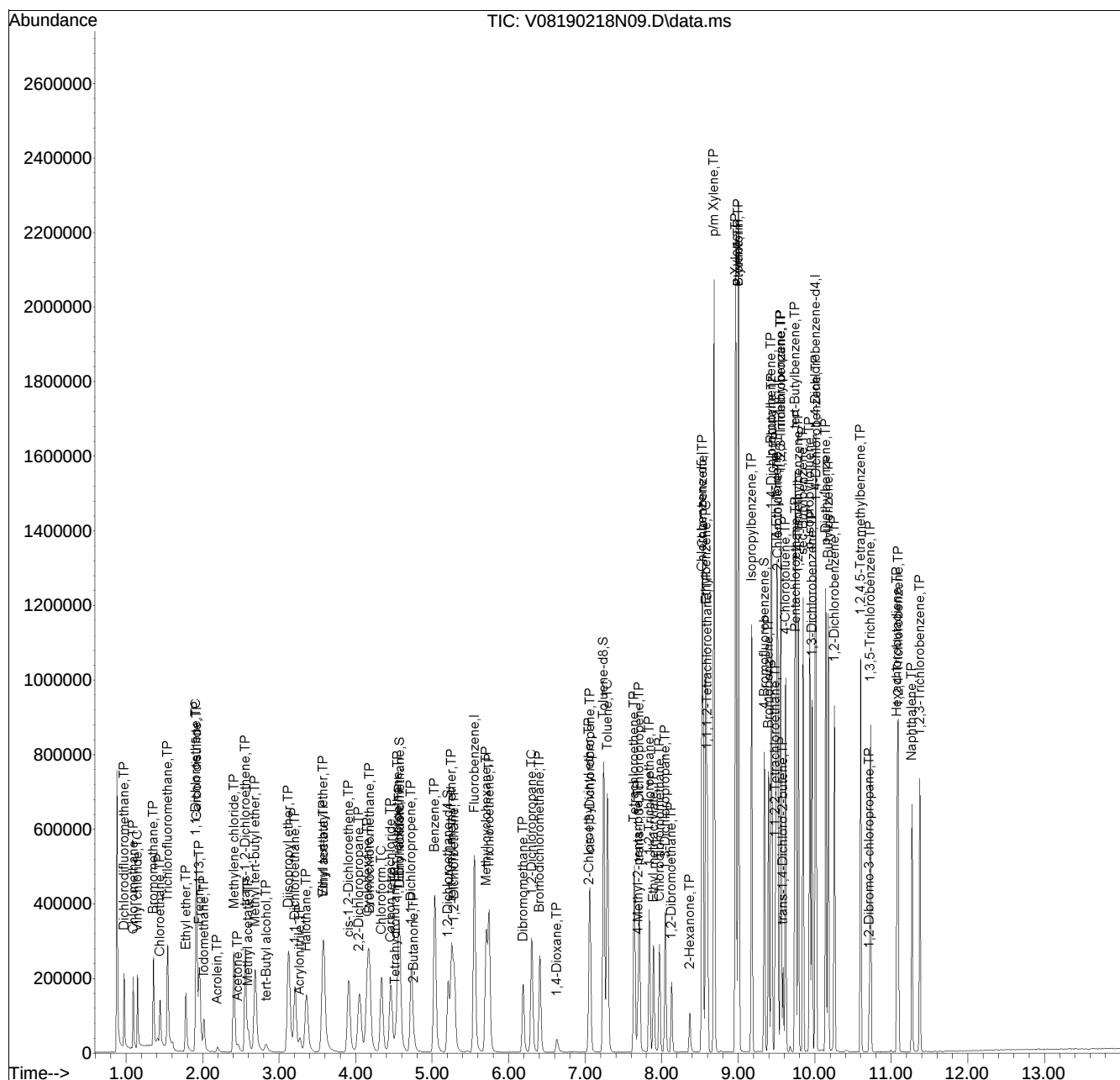
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N09.D
 Acq On : 18 Feb 2019 10:12 pm
 Operator : VOA108:NLK
 Sample : I8260STDL3
 Misc : WG1208025
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 18 23:42:19 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:14 2019
 Response via : Initial Calibration

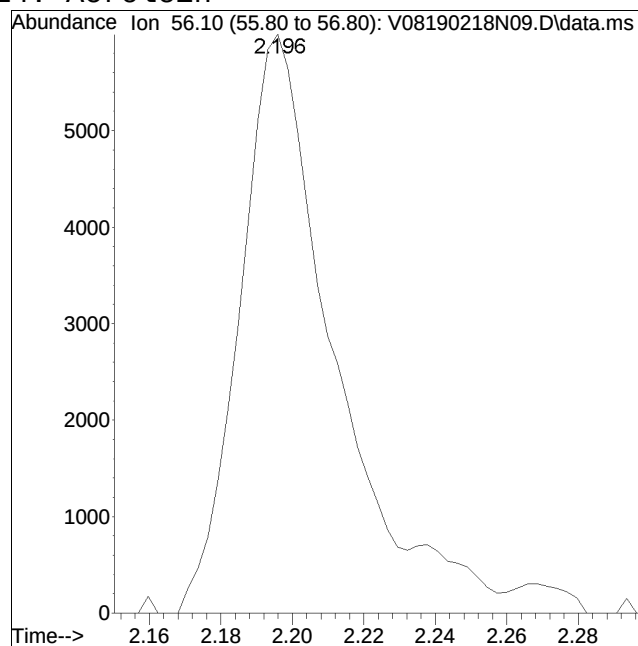
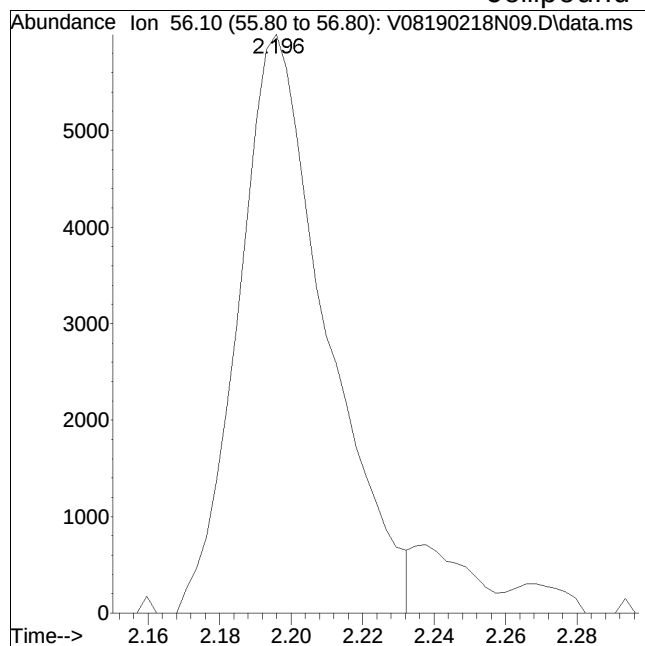
Sub List : 8260-CurvePenta - All compounds listed08190218N09.D•



Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N09.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 10:12 pm Instrument : VOA 108
Sample : I8260STD3 Quant Date : 2/18/2019 11:42 pm

Compound #14: Acrolein



Original Peak Response = 10247

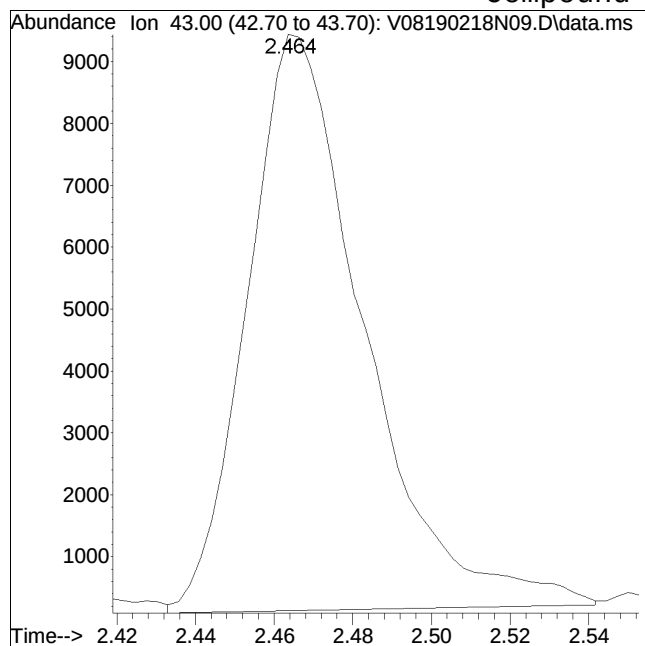
Manual Peak Response = 11323 M1

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

Manual Integration Report

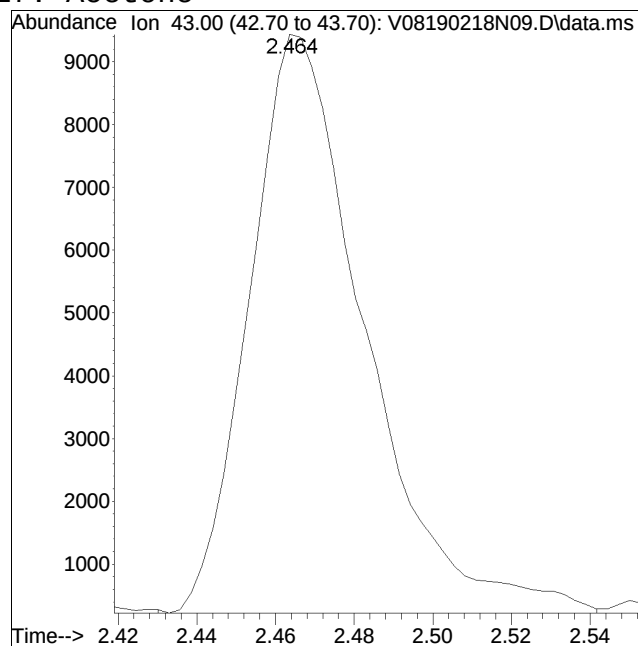
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N09.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 10:12 pm Instrument : VOA 108
Sample : I8260STD3 Quant Date : 2/18/2019 11:42 pm

Compound #17: Acetone



Original Peak Response = 19185

M4 = Poor automated baseline construction.

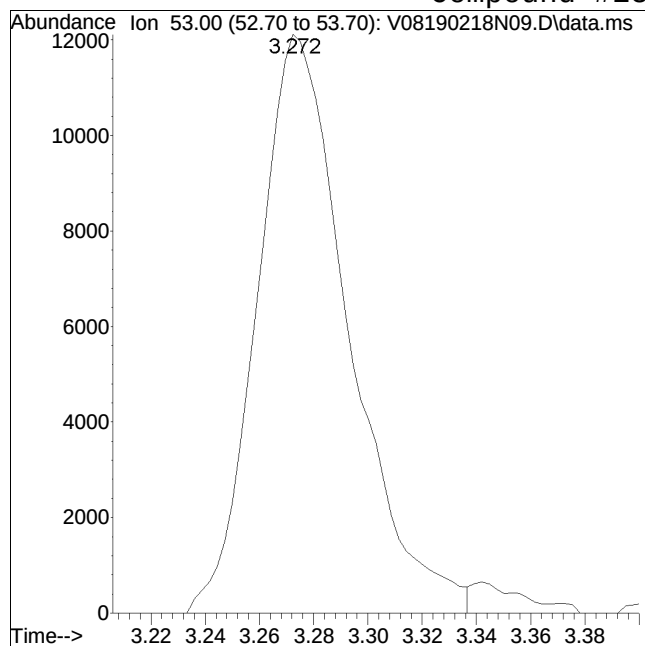


Manual Peak Response = 18747 M4

Manual Integration Report

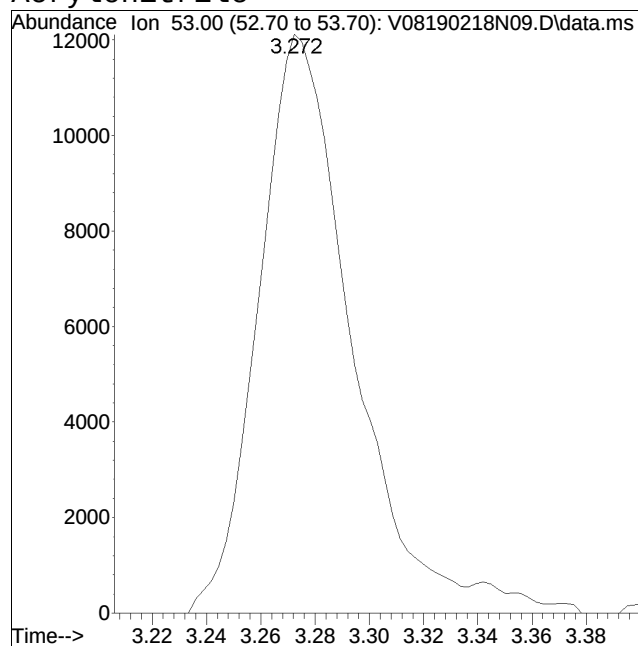
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N09.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 10:12 pm Instrument : VOA 108
Sample : I8260STD L3 Quant Date : 2/18/2019 11:42 pm

Compound #25: Acrylonitrile



Original Peak Response = 28355

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

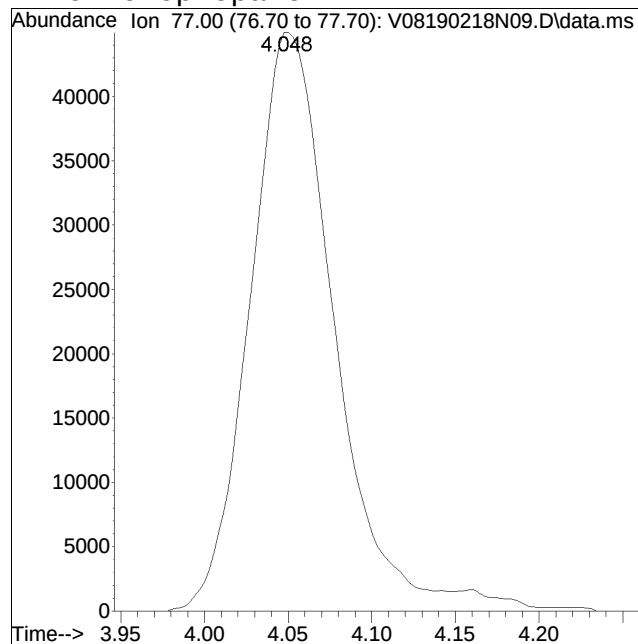
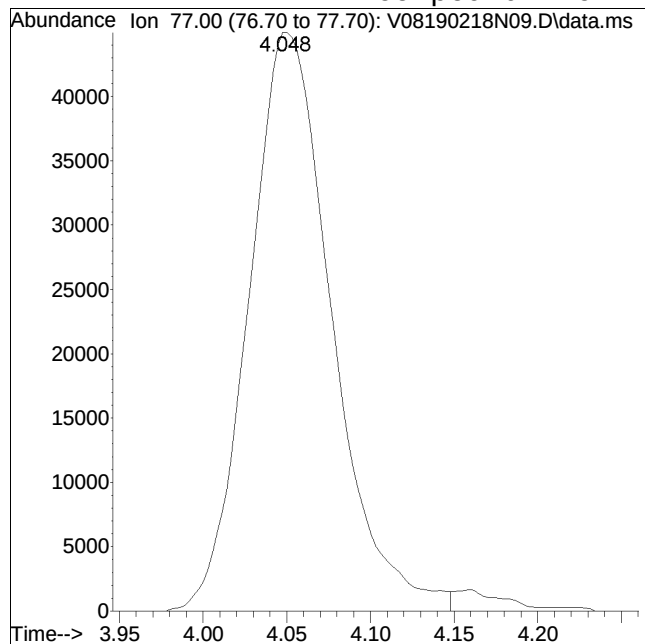


Manual Peak Response = 29214 M1

Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N09.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 10:12 pm Instrument : VOA 108
Sample : I8260STDL3 Quant Date : 2/18/2019 11:42 pm

Compound #29: 2,2-Dichloropropane



Original Peak Response = 154359

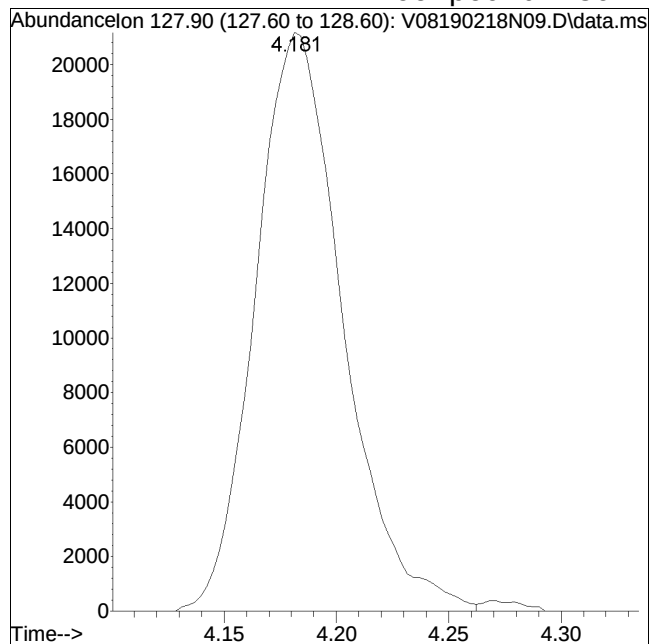
Manual Peak Response = 158063 M1

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

Manual Integration Report

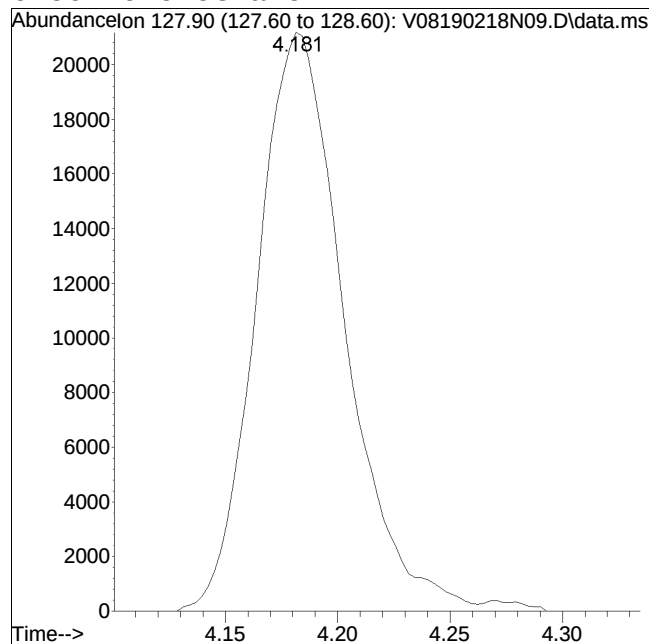
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N09.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 10:12 pm Instrument : VOA 108
Sample : I8260STDL3 Quant Date : 2/18/2019 11:42 pm

Compound #30: Bromochloromethane



Original Peak Response = 57375

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



Manual Peak Response = 57838 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N10.D
 Acq On : 18 Feb 2019 10:34 pm
 Operator : VOA108:NLK
 Sample : I8260STD4
 Misc : WG1208025
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 18 23:52:51 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

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

Internal Standards						
1) Fluorobenzene	5.551	96	525667	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery	=	99.77%	
59) Chlorobenzene-d5	8.526	117	371731	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery	=	101.43%	
79) 1,4-Dichlorobenzene-d4	10.010	152	179507	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery	=	105.76%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.575	113	133855	10.083	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.83%	
43) 1,2-Dichloroethane-d4	5.210	65	150075	10.162	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.62%	
60) Toluene-d8	7.240	98	498549	9.913	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.13%	
83) 4-Bromofluorobenzene	9.340	95	178835	9.726	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.26%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.974	85	298712	29.828	ug/L	98
3) Chloromethane	1.094	50	299104	28.702	ug/L	99
4) Vinyl chloride	1.150	62	324130	29.377	ug/L	95
5) Bromomethane	1.359	94	248545	27.068	ug/L	99
6) Chloroethane	1.443	64	215741	29.830	ug/L	96
7) Trichlorofluoromethane	1.543	101	505361	30.032	ug/L	95
8) Ethyl ether	1.783	74	173003	30.737	ug/L #	64
10) 1,1-Dichloroethene	1.917	96	278738	29.419	ug/L #	61
11) Carbon disulfide	1.923	76	882293	29.454	ug/L	97
12) Freon-113	1.959	101	255024	29.582	ug/L	95
13) Iodomethane	2.017	142	312206	43.079	ug/L	87
14) Acrolein	2.196	56	33104	29.302	ug/L	95
15) Methylene chloride	2.411	84	331564	29.535	ug/L	67
17) Acetone	2.464	43	53734	28.727	ug/L	96
18) trans-1,2-Dichloroethene	2.561	96	325720	29.802	ug/L	73
19) Methyl acetate	2.597	43	155288	30.842	ug/L #	87
20) Methyl tert-butyl ether	2.687	73	846694	29.976	ug/L	93
21) tert-Butyl alcohol	2.826	59	85024	155.680	ug/L #	75
22) Diisopropyl ether	3.122	45	973321	29.944	ug/L #	89
23) 1,1-Dichloroethane	3.208	63	572354	29.322	ug/L	97
24) Halothane	3.359	117	249184	30.307	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N10.D
 Acq On : 18 Feb 2019 10:34 pm
 Operator : VOA108:NLK
 Sample : I8260STD4
 Misc : WG1208025
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 18 23:52:51 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	3.275	53	81730	28.039	ug/L	96
26) Ethyl tert-butyl ether	3.576	59	959152	30.054	ug/L	87
27) Vinyl acetate	3.582	43	683351	33.622	ug/L #	92
28) cis-1,2-Dichloroethene	3.908	96	367965	29.389	ug/L #	68
29) 2,2-Dichloropropane	4.050	77	469050	29.742	ug/L	97
30) Bromochloromethane	4.184	128	172689	29.925	ug/L #	53
31) Cyclohexane	4.153	56	452115	29.668	ug/L #	59
32) Chloroform	4.338	83	613915	30.520	ug/L	97
33) Ethyl acetate	4.572	43	230545	30.447	ug/L #	91
34) Carbon tetrachloride	4.460	117	440276	29.349	ug/L	99
35) Tetrahydrofuran	4.516	42	59812	30.897	ug/L #	44
37) 1,1,1-Trichloroethane	4.558	97	518141	29.303	ug/L #	95
39) 2-Butanone	4.759	43	95702	32.672	ug/L #	16
40) 1,1-Dichloropropene	4.728	75	407120	28.943	ug/L	95
41) Benzene	5.035	78	1309457	29.422	ug/L	90
42) tert-Amyl methyl ether	5.255	73	877338	30.790	ug/L	90
44) 1,2-Dichloroethane	5.291	62	444136	30.142	ug/L	97
47) Methyl cyclohexane	5.710	83	484367	28.168	ug/L #	66
48) Trichloroethene	5.743	95	344859	29.327	ug/L	96
50) Dibromomethane	6.189	93	205828	29.885	ug/L	96
51) 1,2-Dichloropropane	6.301	63	335479	29.786	ug/L	98
53) 2-Chloroethyl vinyl ether	7.051	63	200196	30.684	ug/L #	87
54) Bromodichloromethane	6.407	83	480108	29.703	ug/L	99
57) 1,4-Dioxane	6.633	88	30637	597.025	ug/L #	72
58) cis-1,3-Dichloropropene	7.062	75	544252	30.630	ug/L	92
61) Toluene	7.291	92	832701	29.443	ug/L	97
62) 4-Methyl-2-pentanone	7.689	58	98074	31.215	ug/L #	96
63) Tetrachloroethene	7.642	166	358019	29.305	ug/L	91
65) trans-1,3-Dichloropropene	7.709	75	475614	30.651	ug/L	96
67) Ethyl methacrylate	7.893	69	379921	30.939	ug/L	99
68) 1,1,2-Trichloroethane	7.837	83	236286	29.365	ug/L	93
69) Chlorodibromomethane	7.971	129	352587	30.227	ug/L	98
70) 1,3-Dichloropropane	8.046	76	476301	29.467	ug/L	98
71) 1,2-Dibromoethane	8.130	107	282351	29.313	ug/L	98
72) 2-Hexanone	8.364	43	160573	30.780	ug/L	94
73) Chlorobenzene	8.537	112	934033	29.334	ug/L	90
74) Ethylbenzene	8.579	91	1591548	29.502	ug/L	98
75) 1,1,1,2-Tetrachloroethane	8.596	131	346547	29.690	ug/L	96
76) p/m Xylene	8.685	106	1229421	59.045	ug/L	96
77) o Xylene	8.967	106	1209765	59.123	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N10.D
 Acq On : 18 Feb 2019 10:34 pm
 Operator : VOA108:NLK
 Sample : I8260STD4
 Misc : WG1208025
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 18 23:52:51 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.003	104	2016339	59.561	ug/L	90
80)	Bromoform	9.008	173	210503	28.703	ug/L	96
82)	Isopropylbenzene	9.176	105	1545470	28.169	ug/L	96
84)	Bromobenzene	9.396	156	386052	27.857	ug/L	97
85)	n-Propylbenzene	9.432	91	1796395	28.302	ug/L	97
86)	1,4-Dichlorobutane	9.438	55	457991	28.780	ug/L	98
87)	1,1,2,2-Tetrachloroethane	9.485	83	347315	28.248	ug/L	99
88)	4-Ethyltoluene	9.502	105	1492778	28.862	ug/L	97
89)	2-Chlorotoluene	9.516	91	1270799	28.342	ug/L	96
90)	1,3,5-Trimethylbenzene	9.558	105	1267974	29.250	ug/L	92
91)	1,2,3-Trichloropropane	9.555	75	264251	28.251	ug/L	98
92)	trans-1,4-Dichloro-2-b...	9.586	53	93488	31.943	ug/L #	77
93)	4-Chlorotoluene	9.619	91	1116241	28.622	ug/L	96
94)	tert-Butylbenzene	9.745	119	1276237	28.455	ug/L	93
95)	Pentachloroethane	9.753	167	256889	30.193	ug/L	96
97)	1,2,4-Trimethylbenzene	9.787	105	1274437	29.887	ug/L	94
98)	sec-Butylbenzene	9.848	105	1568238	27.253	ug/L	98
99)	p-Isopropyltoluene	9.934	119	1338643	27.838	ug/L	97
100)	1,3-Dichlorobenzene	9.965	146	719739	28.347	ug/L	98
101)	1,4-Dichlorobenzene	10.018	146	730676	28.884	ug/L	99
102)	p-Diethylbenzene	10.143	119	783242	28.444	ug/L	95
103)	n-Butylbenzene	10.177	91	1227566	27.814	ug/L	98
104)	1,2-Dichlorobenzene	10.258	146	684175	28.463	ug/L	98
105)	1,2,4,5-Tetramethylben...	10.601	119	1189305	31.500	ug/L	98
106)	1,2-Dibromo-3-chloropr...	10.712	155	51760	29.417	ug/L	95
107)	1,3,5-Trichlorobenzene	10.729	180	483424	28.359	ug/L	95
108)	Hexachlorobutadiene	11.078	225	202776	25.796	ug/L	95
109)	1,2,4-Trichlorobenzene	11.092	180	448442	29.800	ug/L	98
110)	Naphthalene	11.270	128	1031283	30.753	ug/L	100
111)	1,2,3-Trichlorobenzene	11.373	180	406744	29.751	ug/L	100

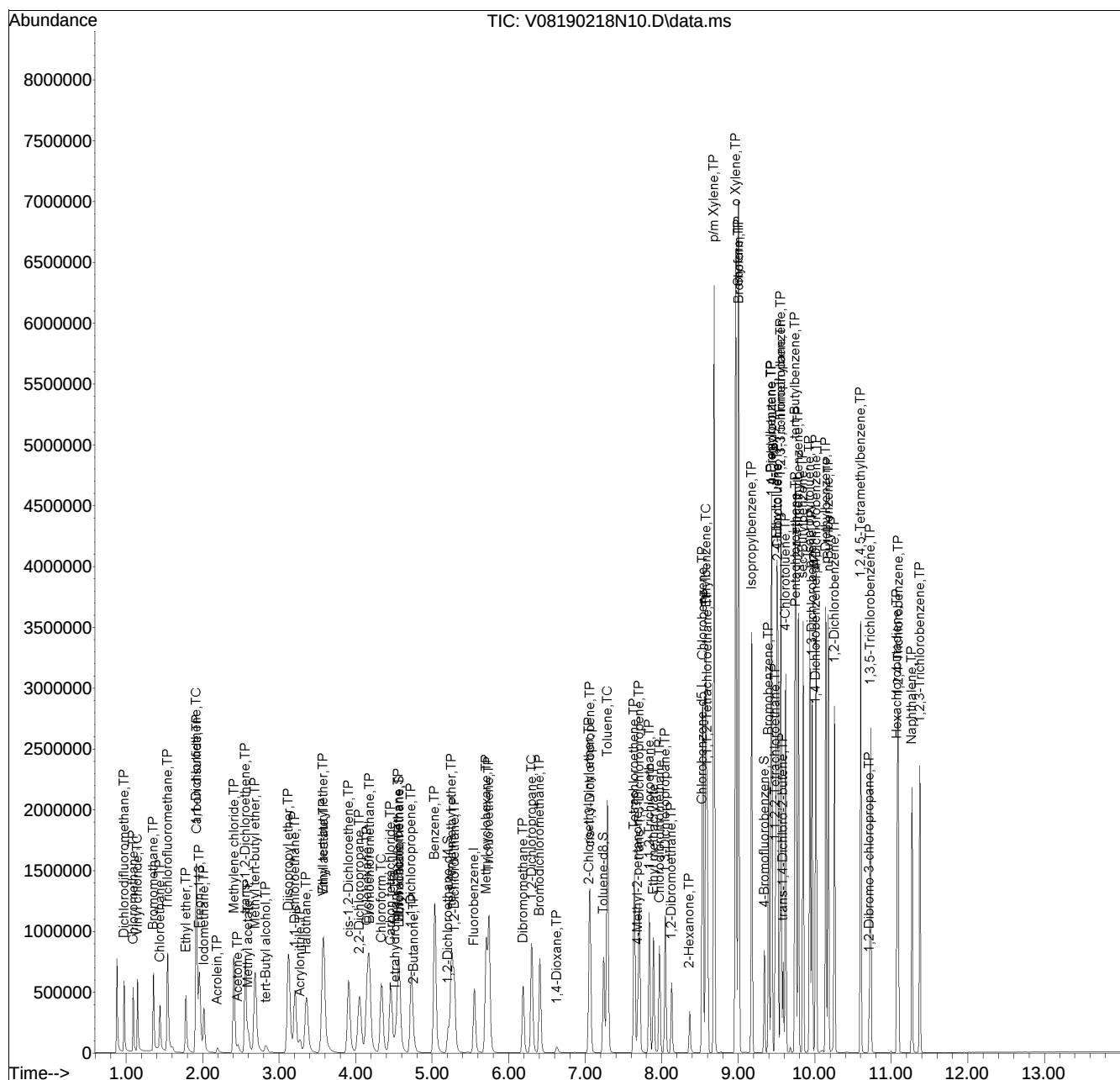
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N10.D
 Acq On : 18 Feb 2019 10:34 pm
 Operator : VOA108:NLK
 Sample : I8260STDL4
 Misc : WG1208025
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 18 23:52:51 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

Sub List : 8260-CurvePenta - All compounds listed08190218N09.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA108\2019\10	Method	: V108_190218N_8260.m
Data File	: V08190218N10.D	Operator	: VOA108:NLK
Date Inj'd	: 2/18/2019 10:34 pm	Instrument	: VOA 108
Sample	: I8260STD4	Quant Date	: 2/18/2019 11:44 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N11.D
 Acq On : 18 Feb 2019 10:56 pm
 Operator : VOA108:NLK
 Sample : I8260STD16
 Misc : WG1208025
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 18 23:53:39 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

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

Internal Standards						
1) Fluorobenzene	5.553	96	531711	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery	=	100.92%	
59) Chlorobenzene-d5	8.529	117	377859	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery	=	103.10%	
79) 1,4-Dichlorobenzene-d4	10.010	152	187608	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery	=	110.53%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	137826	10.264	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	102.64%	
43) 1,2-Dichloroethane-d4	5.210	65	153757	10.293	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	102.93%	
60) Toluene-d8	7.241	98	508042	9.938	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.38%	
83) 4-Bromofluorobenzene	9.340	95	184358	9.594	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	95.94%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.975	85	943034	93.098	ug/L	99
3) Chloromethane	1.094	50	824176	78.190	ug/L	98
4) Vinyl chloride	1.150	62	969544	86.876	ug/L	94
5) Bromomethane	1.359	94	665687	71.674	ug/L	98
6) Chloroethane	1.443	64	699235	95.584	ug/L	98
7) Trichlorofluoromethane	1.541	101	1575952	92.590	ug/L	96
8) Ethyl ether	1.783	74	487585	85.643	ug/L #	63
10) 1,1-Dichloroethene	1.914	96	841316	87.785	ug/L #	61
11) Carbon disulfide	1.920	76	2634402	86.947	ug/L	96
12) Freon-113	1.959	101	816790	93.667	ug/L	96
13) Iodomethane	2.018	142	1105370	150.787	ug/L	88
14) Acrolein	2.196	56	104592	91.527	ug/L	93
15) Methylene chloride	2.408	84	932853	82.151	ug/L	67
17) Acetone	2.464	43	159604	84.358	ug/L	97
18) trans-1,2-Dichloroethene	2.559	96	946133	85.584	ug/L	73
19) Methyl acetate	2.598	43	438724	86.146	ug/L #	84
20) Methyl tert-butyl ether	2.687	73	2426388	84.925	ug/L	92
21) tert-Butyl alcohol	2.829	59	259424	469.608	ug/L #	68
22) Diisopropyl ether	3.125	45	2753567	83.750	ug/L #	87
23) 1,1-Dichloroethane	3.208	63	1652285	83.684	ug/L	98
24) Halothane	3.359	117	739550	88.925	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N11.D
 Acq On : 18 Feb 2019 10:56 pm
 Operator : VOA108:NLK
 Sample : I8260STD6
 Misc : WG1208025
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 18 23:53:39 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	3.272	53	245597	83.300	ug/L	97
26) Ethyl tert-butyl ether	3.574	59	2759104	85.472	ug/L	85
27) Vinyl acetate	3.582	43	2069484	100.663	ug/L #	91
28) cis-1,2-Dichloroethene	3.911	96	1041089	82.206	ug/L #	67
29) 2,2-Dichloropropane	4.050	77	1379869	86.501	ug/L	98
30) Bromochloromethane	4.184	128	490224	83.984	ug/L #	53
31) Cyclohexane	4.156	56	1451675	94.176	ug/L #	60
32) Chloroform	4.338	83	1717374	84.407	ug/L	96
33) Ethyl acetate	4.572	43	664313	86.734	ug/L #	91
34) Carbon tetrachloride	4.460	117	1376309	90.702	ug/L	99
35) Tetrahydrofuran	4.513	42	170737	87.196	ug/L #	44
37) 1,1,1-Trichloroethane	4.558	97	1561705	87.316	ug/L #	95
39) 2-Butanone	4.756	43	282018	95.184	ug/L #	18
40) 1,1-Dichloropropene	4.728	75	1224323	86.052	ug/L	94
41) Benzene	5.035	78	3750372	83.307	ug/L	89
42) tert-Amyl methyl ether	5.255	73	2509013	87.051	ug/L	89
44) 1,2-Dichloroethane	5.291	62	1262477	84.706	ug/L	97
47) Methyl cyclohexane	5.707	83	1542707	88.695	ug/L #	67
48) Trichloroethene	5.743	95	997889	83.897	ug/L	96
50) Dibromomethane	6.189	93	582237	83.575	ug/L	96
51) 1,2-Dichloropropane	6.301	63	943522	82.820	ug/L	98
53) 2-Chloroethyl vinyl ether	7.051	63	569761	86.334	ug/L #	89
54) Bromodichloromethane	6.407	83	1376987	84.223	ug/L	98
57) 1,4-Dioxane	6.630	88	40407	778.463	ug/L #	69
58) cis-1,3-Dichloropropene	7.062	75	1557571	86.661	ug/L	93
61) Toluene	7.291	92	2365616	82.289	ug/L	97
62) 4-Methyl-2-pentanone	7.690	58	279482	87.512	ug/L #	96
63) Tetrachloroethene	7.642	166	1055038	84.958	ug/L	91
65) trans-1,3-Dichloropropene	7.709	75	1374780	87.162	ug/L	97
67) Ethyl methacrylate	7.893	69	1109005	88.848	ug/L	99
68) 1,1,2-Trichloroethane	7.837	83	668696	81.757	ug/L	95
69) Chlorodibromomethane	7.971	129	1021930	86.189	ug/L	98
70) 1,3-Dichloropropane	8.047	76	1332226	81.083	ug/L	98
71) 1,2-Dibromoethane	8.130	107	807874	82.512	ug/L	99
72) 2-Hexanone	8.364	43	471884	88.989	ug/L	94
73) Chlorobenzene	8.540	112	2623623	81.059	ug/L	90
74) Ethylbenzene	8.579	91	4549654	82.968	ug/L	98
75) 1,1,1,2-Tetrachloroethane	8.596	131	978848	82.502	ug/L	95
76) p/m Xylene	8.685	106	3533662	166.958	ug/L	95
77) o Xylene	8.970	106	3440772	165.428	ug/L	90

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N11.D
 Acq On : 18 Feb 2019 10:56 pm
 Operator : VOA108:NLK
 Sample : I8260STD6
 Misc : WG1208025
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 18 23:53:39 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.006	104	5756969	167.297	ug/L	92
80)	Bromoform	9.009	173	630635	82.277	ug/L	95
82)	Isopropylbenzene	9.176	105	4496090	78.412	ug/L	97
84)	Bromobenzene	9.396	156	1086134	74.991	ug/L	97
85)	n-Propylbenzene	9.435	91	5265588	79.378	ug/L	97
86)	1,4-Dichlorobutane	9.438	55	1313195	78.957	ug/L	99
87)	1,1,2,2-Tetrachloroethane	9.485	83	987952	76.884	ug/L	100
88)	4-Ethyltoluene	9.505	105	4379501	81.020	ug/L	97
89)	2-Chlorotoluene	9.516	91	3689439	78.732	ug/L	97
90)	1,3,5-Trimethylbenzene	9.558	105	3765438	83.111	ug/L	92
91)	1,2,3-Trichloropropane	9.555	75	750293	76.751	ug/L	98
92)	trans-1,4-Dichloro-2-b...	9.589	53	270309	88.372	ug/L #	72
93)	4-Chlorotoluene	9.619	91	3213335	78.835	ug/L	96
94)	tert-Butylbenzene	9.745	119	3764109	80.300	ug/L	95
95)	Pentachloroethane	9.753	167	719361	80.898	ug/L	96
97)	1,2,4-Trimethylbenzene	9.787	105	3774368	84.692	ug/L	94
98)	sec-Butylbenzene	9.848	105	4781882	79.511	ug/L	99
99)	p-Isopropyltoluene	9.937	119	4070748	80.997	ug/L	97
100)	1,3-Dichlorobenzene	9.965	146	2068552	77.951	ug/L	99
101)	1,4-Dichlorobenzene	10.018	146	2103663	79.567	ug/L	99
102)	p-Diethylbenzene	10.146	119	2422475	84.176	ug/L	96
103)	n-Butylbenzene	10.177	91	3859719	83.678	ug/L	98
104)	1,2-Dichlorobenzene	10.258	146	1971143	78.461	ug/L	98
105)	1,2,4,5-Tetramethylben...	10.601	119	3837819	97.260	ug/L	98
106)	1,2-Dibromo-3-chloropr...	10.712	155	154793	84.176	ug/L	91
107)	1,3,5-Trichlorobenzene	10.729	180	1512217	84.881	ug/L	96
108)	Hexachlorobutadiene	11.078	225	653017	79.485	ug/L	95
109)	1,2,4-Trichlorobenzene	11.092	180	1402397	89.168	ug/L	98
110)	Naphthalene	11.270	128	3170837	90.472	ug/L	100
111)	1,2,3-Trichlorobenzene	11.373	180	1285674	89.979	ug/L	99

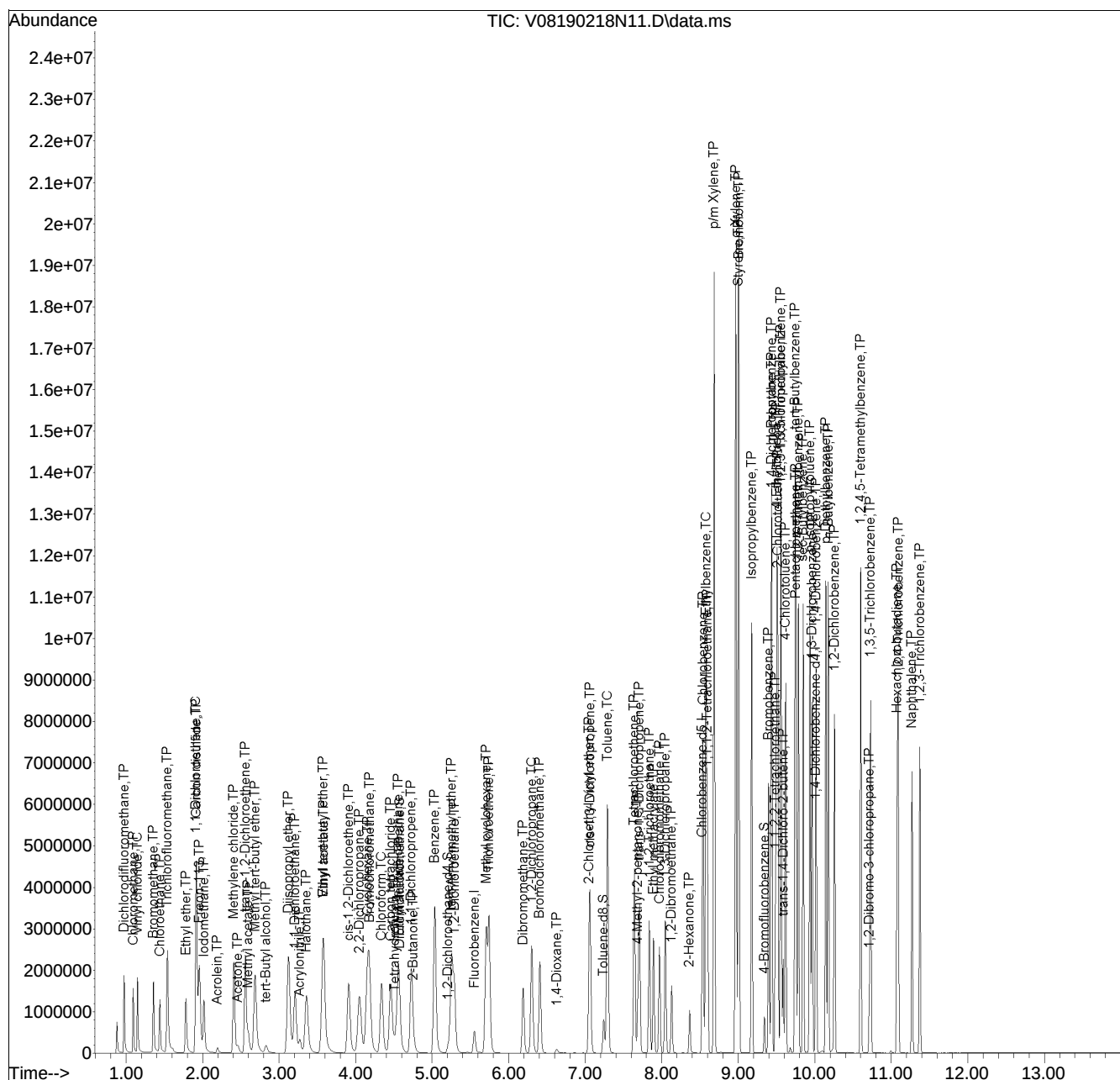
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
Data File : V08190218N11.D
Acq On : 18 Feb 2019 10:56 pm
Operator : VOA108:NLK
Sample : I8260STDL6
Misc : WG1208025
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 18 23:53:39 2019
Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Feb 18 23:42:05 2019
Response via : Initial Calibration

Sub List : 8260-CurvePenta - All compounds listed08190218N09.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA108\2019\10	Method	: V108_190218N_8260.m
Data File	: V08190218N11.D	Operator	: VOA108:NLK
Date Inj'd	: 2/18/2019 10:56 pm	Instrument	: VOA 108
Sample	: I8260STD6	Quant Date	: 2/18/2019 11:44 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N12.D
 Acq On : 18 Feb 2019 11:18 pm
 Operator : VOA108:NLK
 Sample : I8260STD18
 Misc : WG1208025
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 18 23:54:34 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

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

Internal Standards						
1) Fluorobenzene	5.553	96	531339	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery	=	100.85%	
59) Chlorobenzene-d5	8.529	117	369396	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery	=	100.79%	
79) 1,4-Dichlorobenzene-d4	10.010	152	184748	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery	=	108.85%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	142715	10.636	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	106.36%	
43) 1,2-Dichloroethane-d4	5.210	65	154118	10.324	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.24%	
60) Toluene-d8	7.240	98	503759	10.080	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.80%	
83) 4-Bromofluorobenzene	9.343	95	179500	9.486	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	94.86%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.974	85	1475020	145.718	ug/L	99
3) Chloromethane	1.094	50	1285326	122.025	ug/L	99
4) Vinyl chloride	1.150	62	1503515	134.816	ug/L	95
5) Bromomethane	1.359	94	1042593	112.333	ug/L	98
6) Chloroethane	1.440	64	1023658	140.029	ug/L	97
7) Trichlorofluoromethane	1.538	101	2472602	145.372	ug/L	96
8) Ethyl ether	1.783	74	751143	132.029	ug/L #	64
10) 1,1-Dichloroethene	1.914	96	1315266	137.334	ug/L #	62
11) Carbon disulfide	1.920	76	4095301	135.257	ug/L	96
12) Freon-113	1.959	101	1278164	146.678	ug/L	96
13) Iodomethane	2.017	142	1779859	242.966	ug/L	88
14) Acrolein	2.196	56	164770	144.290	ug/L	92
15) Methylene chloride	2.411	84	1443193	127.183	ug/L	67
17) Acetone	2.464	43	253415	134.035	ug/L	96
18) trans-1,2-Dichloroethene	2.558	96	1468395	132.920	ug/L	73
19) Methyl acetate	2.597	43	683237	134.251	ug/L #	85
20) Methyl tert-butyl ether	2.687	73	3772824	132.144	ug/L	93
21) tert-Butyl alcohol	2.832	59	420339	761.429	ug/L #	66
22) Diisopropyl ether	3.124	45	4295643	130.743	ug/L #	87
23) 1,1-Dichloroethane	3.208	63	2551430	129.314	ug/L	97
24) Halothane	3.359	117	1166500	140.360	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N12.D
 Acq On : 18 Feb 2019 11:18 pm
 Operator : VOA108:NLK
 Sample : I8260STD18
 Misc : WG1208025
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 18 23:54:34 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	3.275	53	378727	128.545	ug/L	97
26) Ethyl tert-butyl ether	3.573	59	4310415	133.622	ug/L	84
27) Vinyl acetate	3.582	43	3285635	159.931	ug/L #	92
28) cis-1,2-Dichloroethene	3.908	96	1608772	127.120	ug/L #	68
29) 2,2-Dichloropropane	4.050	77	2137163	134.068	ug/L	98
30) Bromochloromethane	4.184	128	759361	130.183	ug/L #	52
31) Cyclohexane	4.156	56	2264843	147.032	ug/L #	61
32) Chloroform	4.340	83	2674778	131.554	ug/L	97
33) Ethyl acetate	4.572	43	1034205	135.123	ug/L #	92
34) Carbon tetrachloride	4.460	117	2158860	142.373	ug/L	99
35) Tetrahydrofuran	4.513	42	269760	137.864	ug/L #	44
37) 1,1,1-Trichloroethane	4.558	97	2446099	136.860	ug/L #	95
39) 2-Butanone	4.756	43	441784	149.211	ug/L #	16
40) 1,1-Dichloropropene	4.728	75	1918868	134.962	ug/L	94
41) Benzene	5.035	78	5773701	128.342	ug/L	90
42) tert-Amyl methyl ether	5.255	73	3893954	135.197	ug/L	89
44) 1,2-Dichloroethane	5.291	62	1955116	131.270	ug/L	97
47) Methyl cyclohexane	5.710	83	2396386	137.872	ug/L #	67
48) Trichloroethene	5.746	95	1542009	129.734	ug/L	96
50) Dibromomethane	6.189	93	904120	129.869	ug/L	96
51) 1,2-Dichloropropane	6.301	63	1471164	129.225	ug/L	97
53) 2-Chloroethyl vinyl ether	7.051	63	889209	134.834	ug/L #	89
54) Bromodichloromethane	6.409	83	2150575	131.632	ug/L	98
57) 1,4-Dioxane	6.630	88	59036	1138.157	ug/L #	74
58) cis-1,3-Dichloropropene	7.065	75	2424476	134.989	ug/L	94
61) Toluene	7.291	92	3669229	130.560	ug/L	97
62) 4-Methyl-2-pentanone	7.689	58	432045	138.382	ug/L #	95
63) Tetrachloroethene	7.642	166	1647946	135.743	ug/L	92
65) trans-1,3-Dichloropropene	7.709	75	2143081	138.985	ug/L	97
67) Ethyl methacrylate	7.893	69	1734340	142.130	ug/L	99
68) 1,1,2-Trichloroethane	7.837	83	1034622	129.395	ug/L	95
69) Chlorodibromomethane	7.971	129	1589418	137.122	ug/L	98
70) 1,3-Dichloropropane	8.049	76	2055005	127.938	ug/L	99
71) 1,2-Dibromoethane	8.130	107	1251544	130.755	ug/L	99
72) 2-Hexanone	8.364	43	748650	144.416	ug/L	94
73) Chlorobenzene	8.540	112	4032743	127.450	ug/L	91
74) Ethylbenzene	8.579	91	6982007	130.242	ug/L	98
75) 1,1,1,2-Tetrachloroethane	8.599	131	1517040	130.792	ug/L	95
76) p/m Xylene	8.688	106	5468939	264.316	ug/L	87
77) o Xylene	8.969	106	5306496	260.975	ug/L	80

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N12.D
 Acq On : 18 Feb 2019 11:18 pm
 Operator : VOA108:NLK
 Sample : I8260STD18
 Misc : WG1208025
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 18 23:54:34 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:42:05 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.006	104	8736855	259.709	ug/L	95
80)	Bromoform	9.008	173	999337	132.399	ug/L	95
82)	Isopropylbenzene	9.176	105	6892732	122.070	ug/L	96
84)	Bromobenzene	9.399	156	1688605	118.393	ug/L	98
85)	n-Propylbenzene	9.435	91	8007483	122.580	ug/L	95
86)	1,4-Dichlorobutane	9.441	55	2031059	124.009	ug/L	100
87)	1,1,2,2-Tetrachloroethane	9.485	83	1521143	120.210	ug/L	100
88)	4-Ethyltoluene	9.505	105	6735150	126.528	ug/L	96
89)	2-Chlorotoluene	9.519	91	5719716	123.947	ug/L	97
90)	1,3,5-Trimethylbenzene	9.561	105	5843888	130.983	ug/L	91
91)	1,2,3-Trichloropropane	9.555	75	1182125	122.797	ug/L	99
92)	trans-1,4-Dichloro-2-b...	9.588	53	434156	144.136	ug/L #	76
93)	4-Chlorotoluene	9.622	91	4974587	123.935	ug/L	96
94)	tert-Butylbenzene	9.745	119	5868104	127.123	ug/L	95
95)	Pentachloroethane	9.753	167	1104071	126.083	ug/L	95
97)	1,2,4-Trimethylbenzene	9.786	105	5870694	133.770	ug/L	93
98)	sec-Butylbenzene	9.851	105	7345734	124.032	ug/L	97
99)	p-Isopropyltoluene	9.937	119	6345724	128.218	ug/L	97
100)	1,3-Dichlorobenzene	9.965	146	3278048	125.442	ug/L	99
101)	1,4-Dichlorobenzene	10.018	146	3332639	128.002	ug/L	99
102)	p-Diethylbenzene	10.146	119	3884910	137.083	ug/L	96
103)	n-Butylbenzene	10.177	91	6047988	133.149	ug/L	98
104)	1,2-Dichlorobenzene	10.261	146	3121822	126.188	ug/L	98
105)	1,2,4,5-Tetramethylben...	10.601	119	6116685	157.412	ug/L	98
106)	1,2-Dibromo-3-chloropr...	10.715	155	245801	135.734	ug/L	90
107)	1,3,5-Trichlorobenzene	10.732	180	2415145	137.661	ug/L	96
108)	Hexachlorobutadiene	11.078	225	1036742	128.146	ug/L	95
109)	1,2,4-Trichlorobenzene	11.092	180	2264423	146.207	ug/L	98
110)	Naphthalene	11.273	128	5072909	146.983	ug/L	100
111)	1,2,3-Trichlorobenzene	11.376	180	2064091	146.693	ug/L	99

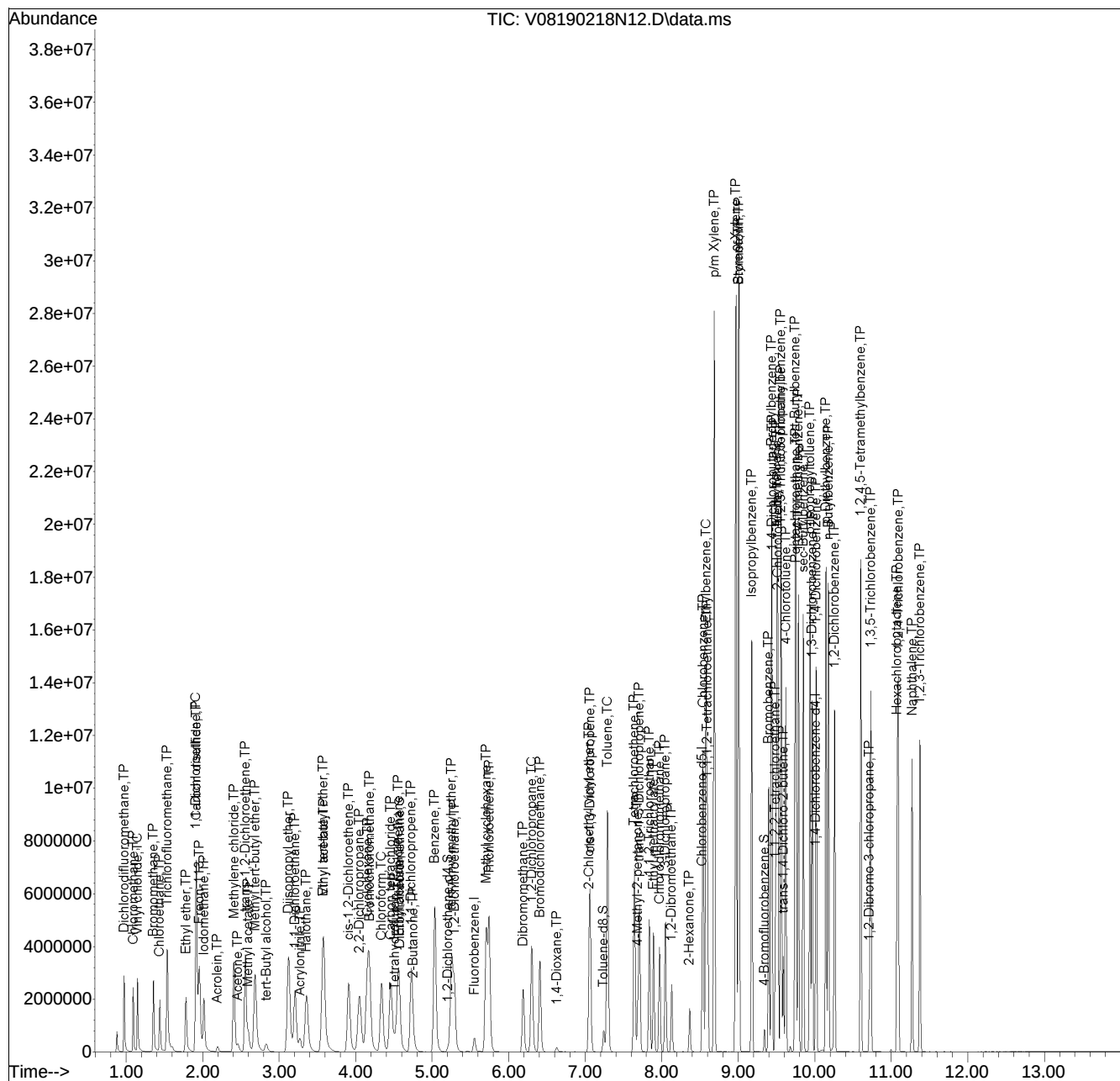
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
Data File : V08190218N12.D
Acq On : 18 Feb 2019 11:18 pm
Operator : VOA108:NLK
Sample : I8260STDL8
Misc : WG1208025
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 18 23:54:34 2019
Quant Method : I:\VOLATILES\V0A108\2019\190218N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Feb 18 23:42:05 2019
Response via : Initial Calibration

Sub List : 8260-CurvePenta - All compounds listed08190218N09.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA108\2019\10	Method	: V108_190218N_8260.m
Data File	: V08190218N12.D	Operator	: VOA108:NLK
Date Inj'd	: 2/18/2019 11:18 pm	Instrument	: VOA 108
Sample	: I8260STD8	Quant Date	: 2/18/2019 11:44 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N13.D
 Acq On : 18 Feb 2019 11:40 pm
 Operator : VOA108:NLK
 Sample : I8260STD10
 Misc : WG1208025
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 18 23:57:46 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:54:41 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

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

Internal Standards						
1) Fluorobenzene	5.551	96	543838	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery	=	103.22%	
59) Chlorobenzene-d5	8.529	117	379745	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery	=	103.62%	
79) 1,4-Dichlorobenzene-d4	10.010	152	203132	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery	=	119.68%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	145243	10.525	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.25%	
43) 1,2-Dichloroethane-d4	5.210	65	161370	10.385	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.85%	
60) Toluene-d8	7.243	98	514485	9.869	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.69%	
83) 4-Bromofluorobenzene	9.343	95	188008	9.386	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	93.86%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.974	85	2455216	230.881	ug/L	99
3) Chloromethane	1.094	50	2146086	200.544	ug/L	99
4) Vinyl chloride	1.150	62	2495771	221.187	ug/L	95
5) Bromomethane	1.359	94	1795958	179.790	ug/L	98
6) Chloroethane	1.440	64	1670913	199.825	ug/L	96
7) Trichlorofluoromethane	1.535	101	4108975	226.915	ug/L	96
8) Ethyl ether	1.783	74	1274794	208.607	ug/L #	64
10) 1,1-Dichloroethene	1.914	96	2192589	217.054	ug/L #	62
11) Carbon disulfide	1.920	76	6793534	213.405	ug/L	96
12) Freon-113	1.956	101	2141809	232.475	ug/L	96
13) Iodomethane	2.017	142	2977093	318.765	ug/L	88
14) Acrolein	2.196	56	283334	227.580	ug/L	90
15) Methylene chloride	2.408	84	2411802	197.693	ug/L	68
17) Acetone	2.464	43	434245	163.004	ug/L	96
18) trans-1,2-Dichloroethene	2.558	96	2445844	212.782	ug/L	74
19) Methyl acetate	2.597	43	1161154	221.761	ug/L #	85
20) Methyl tert-butyl ether	2.687	73	6291184	207.593	ug/L	93
21) tert-Butyl alcohol	2.834	59	698759	980.753	ug/L #	65
22) Diisopropyl ether	3.124	45	7225462	206.884	ug/L #	87
23) 1,1-Dichloroethane	3.208	63	4250576	208.410	ug/L	97
24) Halothane	3.359	117	1937307	219.437	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N13.D
 Acq On : 18 Feb 2019 11:40 pm
 Operator : VOA108:NLK
 Sample : I8260STD10
 Misc : WG1208025
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 18 23:57:46 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:54:41 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	3.275	53	641282	201.835	ug/L	97
26) Ethyl tert-butyl ether	3.576	59	7297715	217.061	ug/L	83
27) Vinyl acetate	3.582	43	5644929	259.999	ug/L #	92
28) cis-1,2-Dichloroethene	3.911	96	2697699	205.754	ug/L #	68
29) 2,2-Dichloropropane	4.050	77	3589699	215.234	ug/L	98
30) Bromochloromethane	4.184	128	1230807	202.655	ug/L #	53
31) Cyclohexane	4.156	56	3776110	227.675	ug/L #	61
32) Chloroform	4.340	83	4485494	210.997	ug/L	97
33) Ethyl acetate	4.572	43	1723680	172.386	ug/L #	92
34) Carbon tetrachloride	4.460	117	3612820	229.887	ug/L	99
35) Tetrahydrofuran	4.510	42	474367	187.263	ug/L #	47
37) 1,1,1-Trichloroethane	4.558	97	4074158	221.367	ug/L #	95
39) 2-Butanone	4.756	43	752305	177.812	ug/L #	20
40) 1,1-Dichloropropene	4.728	75	3204769	216.859	ug/L	95
41) Benzene	5.035	78	9581738	205.952	ug/L	90
42) tert-Amyl methyl ether	5.255	73	6563381	211.375	ug/L	89
44) 1,2-Dichloroethane	5.291	62	3306845	206.835	ug/L	97
47) Methyl cyclohexane	5.710	83	4009400	227.987	ug/L #	68
48) Trichloroethene	5.746	95	2593834	209.895	ug/L	96
50) Dibromomethane	6.189	93	1514788	209.113	ug/L	96
51) 1,2-Dichloropropane	6.301	63	2439332	201.674	ug/L	98
53) 2-Chloroethyl vinyl ether	7.054	63	1490658	218.850	ug/L #	90
54) Bromodichloromethane	6.409	83	3611296	214.891	ug/L	98
57) 1,4-Dioxane	6.633	88	104484	1968.438	ug/L #	72
58) cis-1,3-Dichloropropene	7.065	75	4091450	217.635	ug/L	94
61) Toluene	7.293	92	6133280	208.492	ug/L	95
62) 4-Methyl-2-pentanone	7.692	58	713395	216.280	ug/L #	95
63) Tetrachloroethene	7.642	166	2708194	215.468	ug/L	92
65) trans-1,3-Dichloropropene	7.709	75	3596046	217.997	ug/L	98
67) Ethyl methacrylate	7.896	69	2879184	220.463	ug/L	99
68) 1,1,2-Trichloroethane	7.840	83	1717590	203.019	ug/L	95
69) Chlorodibromomethane	7.971	129	2653255	214.959	ug/L	98
70) 1,3-Dichloropropane	8.049	76	3402032	198.544	ug/L	99
71) 1,2-Dibromoethane	8.130	107	2067155	205.794	ug/L	99
72) 2-Hexanone	8.364	43	1245275	218.424	ug/L	95
73) Chlorobenzene	8.540	112	6608583	200.865	ug/L	92
74) Ethylbenzene	8.579	91	10884203	196.782	ug/L	94
75) 1,1,1,2-Tetrachloroethane	8.599	131	2530691	206.289	ug/L	94
76) p/m Xylene	8.688	106	8930834	430.058	ug/L #	1
77) o Xylene	8.972	106	8742074	424.327	ug/L #	1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N13.D
 Acq On : 18 Feb 2019 11:40 pm
 Operator : VOA108:NLK
 Sample : I8260STD10
 Misc : WG1208025
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 18 23:57:46 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:54:41 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.003	104	11581402M3	341.624	ug/L	
80)	Bromoform	9.011	173	1736789	206.343	ug/L	96
82)	Isopropylbenzene	9.176	105	10439648	172.605	ug/L	90
84)	Bromobenzene	9.399	156	2840186	183.986	ug/L	98
85)	n-Propylbenzene	9.432	91	10846211	155.084	ug/L #	82
86)	1,4-Dichlorobutane	9.441	55	3447648	188.692	ug/L	100
87)	1,1,2,2-Tetrachloroethane	9.488	83	2556395	183.417	ug/L	99
88)	4-Ethyltoluene	9.505	105	10407772	182.263	ug/L	90
89)	2-Chlorotoluene	9.519	91	9499129	191.020	ug/L	95
90)	1,3,5-Trimethylbenzene	9.558	105	9451075	193.180	ug/L #	86
91)	1,2,3-Trichloropropane	9.558	75	1992962	184.135	ug/L	98
92)	trans-1,4-Dichloro-2-b...	9.589	53	750201	198.813	ug/L #	73
93)	4-Chlorotoluene	9.622	91	8244158	190.502	ug/L	94
94)	tert-Butylbenzene	9.745	119	9761282	194.331	ug/L	97
95)	Pentachloroethane	9.753	167	1933270	202.247	ug/L	95
97)	1,2,4-Trimethylbenzene	9.787	105	9264455	189.843	ug/L #	87
98)	sec-Butylbenzene	9.845	105	10696064	170.890	ug/L	89
99)	p-Isopropyltoluene	9.934	119	9646348	180.824	ug/L	92
100)	1,3-Dichlorobenzene	9.968	146	5648252	200.865	ug/L	100
101)	1,4-Dichlorobenzene	10.021	146	5759118	197.227	ug/L	98
102)	p-Diethylbenzene	10.146	119	6657661	219.165	ug/L	97
103)	n-Butylbenzene	10.177	91	9333918	189.901	ug/L #	89
104)	1,2-Dichlorobenzene	10.261	146	5417289	196.957	ug/L	99
105)	1,2,4,5-Tetramethylben...	10.601	119	9521007	232.939	ug/L	92
106)	1,2-Dibromo-3-chloropr...	10.715	155	434037	212.312	ug/L	91
107)	1,3,5-Trichlorobenzene	10.732	180	4215189	227.444	ug/L	96
108)	Hexachlorobutadiene	11.078	225	1786566	202.122	ug/L	96
109)	1,2,4-Trichlorobenzene	11.092	180	3958105	235.641	ug/L	98
110)	Naphthalene	11.273	128	8401671	225.618	ug/L	100
111)	1,2,3-Trichlorobenzene	11.373	180	3563675	234.526	ug/L	99

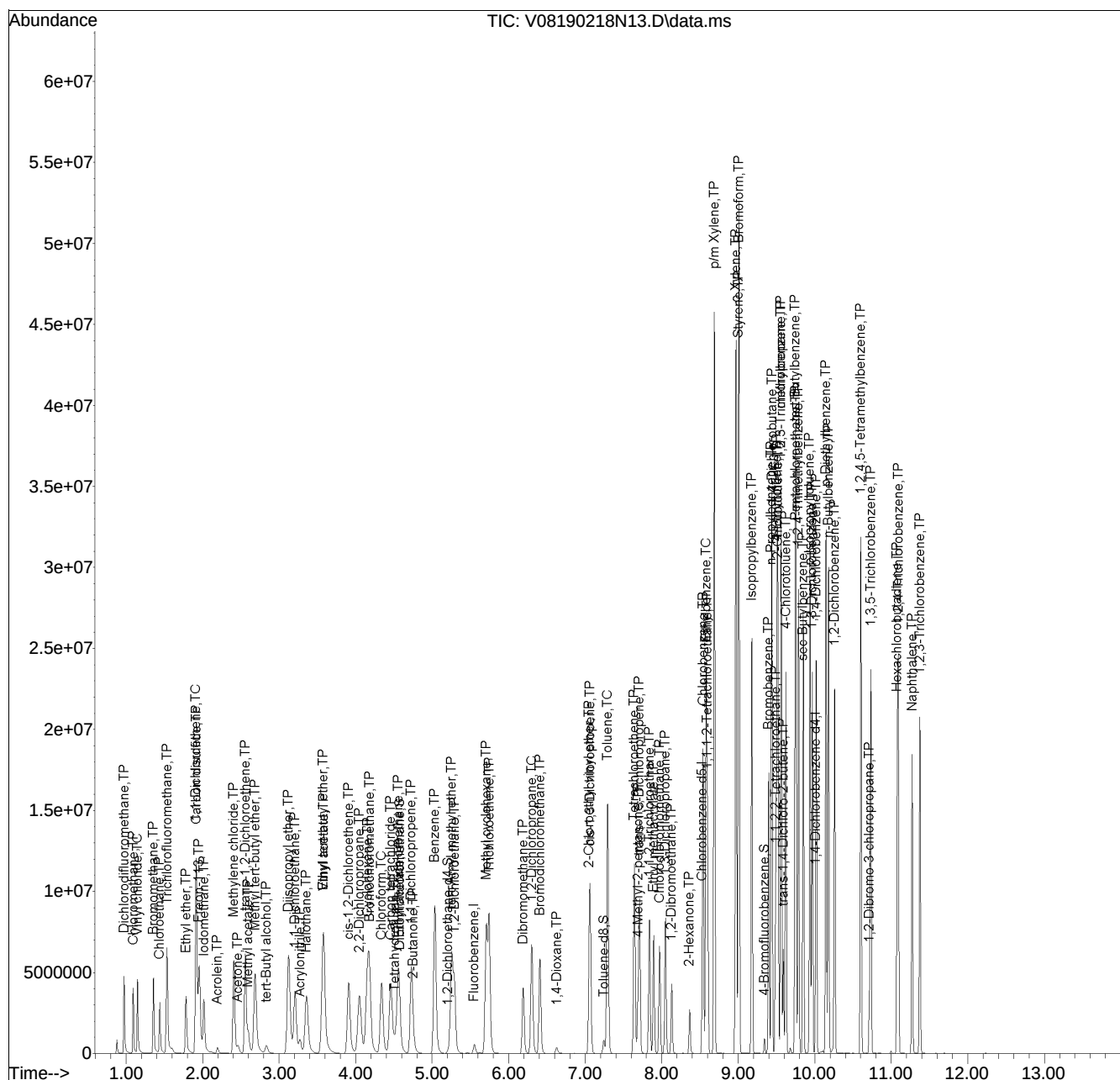
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N13.D
 Acq On : 18 Feb 2019 11:40 pm
 Operator : VOA108:NLK
 Sample : I8260STD10
 Misc : WG1208025
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 18 23:57:46 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Mon Feb 18 23:54:41 2019
 Response via : Initial Calibration

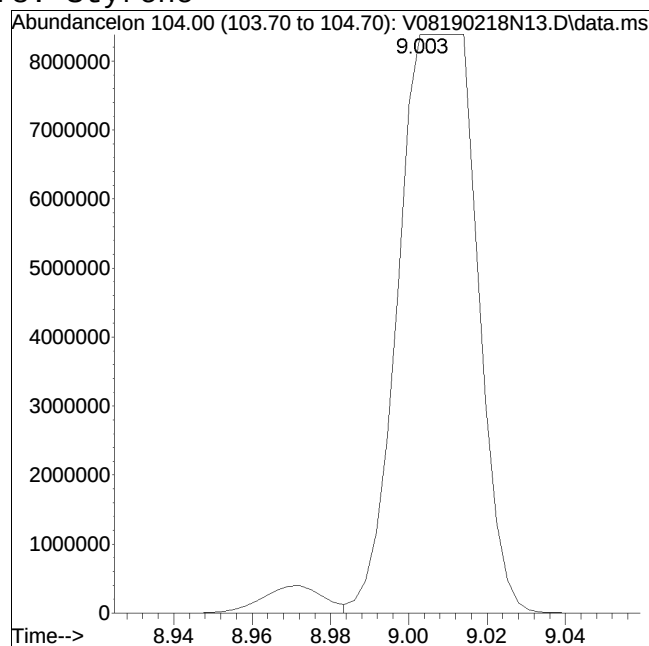
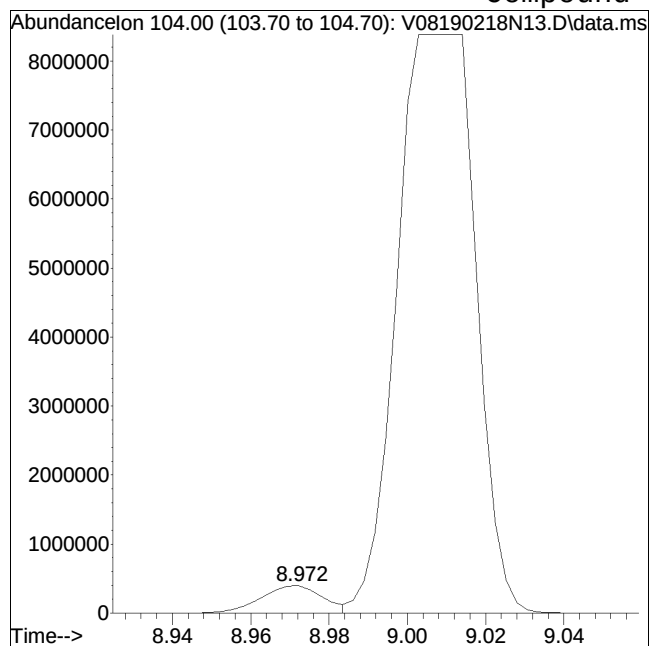
Sub List : 8260-CurvePenta - All compounds listed08190218N09.D•



Manual Integration Report

Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190218N13.D Operator : VOA108:NLK
Date Inj'd : 2/18/2019 11:40 pm Instrument : VOA 108
Sample : I8260STDL10 Quant Date : 2/18/2019 11:55 pm

Compound #78: Styrene



Original Peak Response = 440247

Manual Peak Response = 11581402 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\VOA108\2019\190218N\
 Data File : V08190218N20.D
 Acq On : 19 Feb 2019 2:13 am
 Operator : VOA108:NLK
 Sample : C8260STD3
 Misc : WG1208025
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 19 07:17:17 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 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	98	0.00
2 TP	Dichlorodifluoromethane	0.200	0.219	-9.5	112	0.00
3 TP	Chloromethane	0.197	0.211	-7.1	104	0.00
4 TC	Vinyl chloride	0.210	0.223	-6.2	104	0.00
5 TP	Bromomethane	0.181	0.196	-8.3	110	0.00
6 TP	Chloroethane	0.154	0.151	1.9	107	0.00
7 TP	Trichlorofluoromethane	0.339	0.329	2.9	100	0.00
8 TP	Ethyl ether	0.113	0.120	-6.2	109	0.00
10 TC	1,1-Dichloroethene	0.188	0.172	8.5	93	0.00
11 TP	Carbon disulfide	0.591	0.558	5.6	96	0.00
12 TP	Freon-113	0.173	0.174	-0.6	104	0.00
13 TP	Iodomethane	* 10.000	7.796	22.0#	102	0.00
14 TP	Acrolein	0.023	0.025#	-8.7	114	0.00
15 TP	Methylene chloride	0.224	0.222	0.9	102	0.00
17 TP	Acetone	0.039	0.039#	0.0	107	0.00
18 TP	trans-1,2-Dichloroethene	0.213	0.208	2.3	98	0.00
19 TP	Methyl acetate	0.098	0.104	-6.1	106	0.00
20 TP	Methyl tert-butyl ether	0.560	0.559	0.2	102	0.00
21 TP	tert-Butyl alcohol	0.012	0.013#	-8.3	125	0.00
22 TP	Diisopropyl ether	0.645	0.614	4.8	97	0.00
23 TP	1,1-Dichloroethane	0.377	0.377	0.0	99	0.00
24 TP	Halothane	0.165	0.152	7.9	95	0.00
25 TP	Acrylonitrile	0.058	0.057	1.7	100	0.00
26 TP	Ethyl tert-butyl ether	0.626	0.637	-1.8	102	-0.01
27 TP	Vinyl acetate	0.447	0.391	12.5	99	0.00
28 TP	cis-1,2-Dichloroethene	0.242	0.249	-2.9	102	0.00
29 TP	2,2-Dichloropropane	0.310	0.252	18.7	82	0.00
30 TP	Bromochloromethane	0.112	0.116	-3.6	103	0.00
31 TP	Cyclohexane	0.311	0.286	8.0	96	-0.01
32 TC	Chloroform	0.394	0.398	-1.0	102	0.00
33 TP	Ethyl acetate	0.166	0.159	4.2	108	0.00
34 TP	Carbon tetrachloride	0.294	0.281	4.4	96	0.00
35 TP	Tetrahydrofuran	0.040	0.045#	-12.5	118	0.00
36 S	Dibromofluoromethane	0.255	0.259	-1.6	100	0.00
37 TP	1,1,1-Trichloroethane	0.344	0.331	3.8	96	0.00
39 TP	2-Butanone	0.068	0.063#	7.4	111	0.00
40 TP	1,1-Dichloropropene	0.275	0.268	2.5	98	0.00
41 TP	Benzene	0.859	0.848	1.3	98	0.00
42 TP	tert-Amyl methyl ether	0.576	0.568	1.4	102	0.00

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N20.D
 Acq On : 19 Feb 2019 2:13 am
 Operator : VOA108:NLK
 Sample : C8260STD3
 Misc : WG1208025
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 19 07:17:17 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 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	0.287	0.284	1.0	99	0.00
44 TP	1,2-Dichloroethane	0.295	0.292	1.0	102	0.00
47 TP	Methyl cyclohexane	0.330	0.292	11.5	87	0.00
48 TP	Trichloroethene	0.229	0.223	2.6	98	0.00
50 TP	Dibromomethane	0.134	0.134	0.0	100	0.00
51 TC	1,2-Dichloropropane	0.223	0.218	2.2	100	0.00
53 TP	2-Chloroethyl vinyl ether	0.127	0.118	7.1	93	0.00
54 TP	Bromodichloromethane	0.312	0.323	-3.5	103	0.00
57 TP	1,4-Dioxane	0.00097	0.00105#	-8.2	105	0.00
58 TP	cis-1,3-Dichloropropene	0.350	0.337	3.7	97	0.00
59 I	Chlorobenzene-d5	1.000	1.000	0.0	97	0.00
60 S	Toluene-d8	1.371	1.355	1.2	97	0.00
61 TC	Toluene	0.779	0.810	-4.0	103	0.00
62 TP	4-Methyl-2-pentanone	0.088	0.088#	0.0	101	0.00
63 TP	Tetrachloroethene	0.335	0.332	0.9	98	0.00
65 TP	trans-1,3-Dichloropropene	0.440	0.445	-1.1	104	0.00
67 TP	Ethyl methacrylate	0.349	0.352	-0.9	104	0.00
68 TP	1,1,2-Trichloroethane	0.223	0.236	-5.8	106	0.00
69 TP	Chlorodibromomethane	0.329	0.348	-5.8	108	0.00
70 TP	1,3-Dichloropropane	0.451	0.474	-5.1	106	0.00
71 TP	1,2-Dibromoethane	0.266	0.278	-4.5	104	0.00
72 TP	2-Hexanone	0.152	0.146	3.9	101	0.00
73 TP	Chlorobenzene	0.867	0.932	-7.5	106	0.00
74 TC	Ethylbenzene	1.453	1.542	-6.1	103	0.00
75 TP	1,1,1,2-Tetrachloroethane	0.325	0.343	-5.5	106	0.00
76 TP	p/m Xylene	0.553	0.591	-6.9	103	0.00
77 TP	o Xylene	0.547	0.577	-5.5	102	0.00
78 TP	Styrene	0.874	1.003	-14.8	107	0.00
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00
80 TP	Bromoform	0.416	0.434	-4.3	105	0.00
82 TP	Isopropylbenzene	2.919	3.132	-7.3	102	0.00
83 S	4-Bromofluorobenzene	0.978	0.995	-1.7	96	0.00
84 TP	Bromobenzene	0.751	0.845	-12.5	108	0.00
85 TP	n-Propylbenzene	3.333	3.619	-8.6	101	0.00
86 TP	1,4-Dichlorobutane	0.892	0.962	-7.8	108	0.00
87 TP	1,1,2,2-Tetrachloroethane	0.678	0.738	-8.8	107	0.00
88 TP	4-Ethyltoluene	2.776	2.922	-5.3	100	0.00

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N20.D
 Acq On : 19 Feb 2019 2:13 am
 Operator : VOA108:NLK
 Sample : C8260STD3
 Misc : WG1208025
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 19 07:17:17 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 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 TP	2-Chlorotoluene	2.432	2.539	-4.4	101	0.00
90 TP	1,3,5-Trimethylbenzene	2.397	2.499	-4.3	103	0.00
91 TP	1,2,3-Trichloropropane	0.527	0.562	-6.6	107	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.186	0.168	9.7	102	0.00
93 TP	4-Chlorotoluene	2.116	2.302	-8.8	105	0.00
94 TP	tert-Butylbenzene	2.463	2.568	-4.3	102	0.00
95 TP	Pentachloroethane	0.471	0.519	-10.2	108	0.00
97 TP	1,2,4-Trimethylbenzene	2.385	2.521	-5.7	105	0.00
98 TP	sec-Butylbenzene	3.017	3.102	-2.8	96	0.00
99 TP	p-Isopropyltoluene	2.590	2.653	-2.4	98	0.00
100 TP	1,3-Dichlorobenzene	1.385	1.513	-9.2	106	0.00
101 TP	1,4-Dichlorobenzene	1.435	1.514	-5.5	106	0.00
102 TP	p-Diethylbenzene	1.516	1.461	3.6	94	0.00
103 TP	n-Butylbenzene	2.402	2.381	0.9	96	0.00
104 TP	1,2-Dichlorobenzene	1.351	1.427	-5.6	106	0.00
105 TP	1,2,4,5-Tetramethylbenzene *	10.000	9.025	9.7	101	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.102	0.109	-6.9	110	0.00
107 TP	1,3,5-Trichlorobenzene	0.930	0.978	-5.2	102	0.00
108 TP	Hexachlorobutadiene	0.436	0.412	5.5	93	0.00
109 TP	1,2,4-Trichlorobenzene	0.848	0.906	-6.8	107	0.00
110 TP	Naphthalene	1.867	2.082	-11.5	110	0.00
111 TP	1,2,3-Trichlorobenzene	0.766	0.830	-8.4	108	0.00

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 7 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N20.D
 Acq On : 19 Feb 2019 2:13 am
 Operator : VOA108:NLK
 Sample : C8260STD3
 Misc : WG1208025
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 19 07:17:17 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

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

Internal Standards						
1) Fluorobenzene	5.553	96	514843	10.000	ug/L	0.00
Standard Area 1 = 526854			Recovery	=	97.72%	
59) Chlorobenzene-d5	8.526	117	356124	10.000	ug/L	0.00
Standard Area 1 = 366483			Recovery	=	97.17%	
79) 1,4-Dichlorobenzene-d4	10.010	152	168202	10.000	ug/L	0.00
Standard Area 1 = 169731			Recovery	=	99.10%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	133237	10.132	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.32%	
43) 1,2-Dichloroethane-d4	5.210	65	146342	9.901	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.01%	
60) Toluene-d8	7.240	98	482704	9.890	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.90%	
83) 4-Bromofluorobenzene	9.340	95	167417	10.172	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.72%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.974	85	112597	10.943	ug/L	95
3) Chloromethane	1.094	50	108803	10.736	ug/L	100
4) Vinyl chloride	1.150	62	114686	10.596	ug/L	94
5) Bromomethane	1.359	94	100852	10.821	ug/L	100
6) Chloroethane	1.443	64	77901	9.842	ug/L	97
7) Trichlorofluoromethane	1.543	101	169214	9.685	ug/L	99
8) Ethyl ether	1.783	74	61714	10.602	ug/L #	62
10) 1,1-Dichloroethene	1.917	96	88374	9.130	ug/L #	63
11) Carbon disulfide	1.922	76	287211	9.440	ug/L	99
12) Freon-113	1.959	101	89834	10.066	ug/L	98
13) Iodomethane	2.017	142	73963	7.796	ug/L	87
14) Acrolein	2.199	56	12890	10.725	ug/L	100
15) Methylene chloride	2.408	84	114454	9.926	ug/L #	65
17) Acetone	2.466	43	19969	9.978	ug/L	89
18) trans-1,2-Dichloroethene	2.558	96	107309	9.772	ug/L	73
19) Methyl acetate	2.597	43	53352	10.598	ug/L #	84
20) Methyl tert-butyl ether	2.689	73	287838	9.979	ug/L	92
21) tert-Butyl alcohol	2.832	59	34318	55.712	ug/L #	80
22) Diisopropyl ether	3.124	45	316061	9.513	ug/L #	89
23) 1,1-Dichloroethane	3.208	63	194060	9.991	ug/L	98
24) Halothane	3.359	117	78093	9.216	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N20.D
 Acq On : 19 Feb 2019 2:13 am
 Operator : VOA108:NLK
 Sample : C8260STD3
 Misc : WG1208025
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 19 07:17:17 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
25) Acrylonitrile	3.275	53	29094	9.660	ug/L	#	91
26) Ethyl tert-butyl ether	3.573	59	327785	10.175	ug/L		94
27) Vinyl acetate	3.582	43	201066	8.731	ug/L	#	93
28) cis-1,2-Dichloroethene	3.911	96	128220	10.288	ug/L	#	65
29) 2,2-Dichloropropane	4.050	77	129907	8.139	ug/L	#	90
30) Bromochloromethane	4.184	128	59829	10.386	ug/L	#	54
31) Cyclohexane	4.153	56	147126	9.189	ug/L	#	60
32) Chloroform	4.337	83	204893	10.102	ug/L		97
33) Ethyl acetate	4.577	43	82098	9.616	ug/L	#	93
34) Carbon tetrachloride	4.460	117	144568	9.539	ug/L		97
35) Tetrahydrofuran	4.524	42	22941	11.119	ug/L	#	53
37) 1,1,1-Trichloroethane	4.561	97	170558	9.642	ug/L	#	96
39) 2-Butanone	4.761	43	32560	9.310	ug/L	#	18
40) 1,1-Dichloropropene	4.728	75	137982	9.745	ug/L		95
41) Benzene	5.035	78	436806	9.881	ug/L		89
42) tert-Amyl methyl ether	5.255	73	292422	9.868	ug/L		92
44) 1,2-Dichloroethane	5.288	62	150563	9.899	ug/L		98
47) Methyl cyclohexane	5.709	83	150542	8.865	ug/L	#	66
48) Trichloroethene	5.743	95	115010	9.770	ug/L		94
50) Dibromomethane	6.189	93	68928	9.986	ug/L		95
51) 1,2-Dichloropropane	6.301	63	112467	9.810	ug/L		99
53) 2-Chloroethyl vinyl ether	7.051	63	60556	9.266	ug/L	#	89
54) Bromodichloromethane	6.407	83	166209	10.337	ug/L		98
57) 1,4-Dioxane	6.630	88	27020	538.930	ug/L	#	69
58) cis-1,3-Dichloropropene	7.062	75	173272	9.615	ug/L		91
61) Toluene	7.291	92	288356	10.389	ug/L		96
62) 4-Methyl-2-pentanone	7.692	58	31291	9.999	ug/L	#	94
63) Tetrachloroethene	7.642	166	118241	9.922	ug/L		91
65) trans-1,3-Dichloropropene	7.709	75	158368	10.107	ug/L		95
67) Ethyl methacrylate	7.893	69	125339	10.087	ug/L		99
68) 1,1,2-Trichloroethane	7.837	83	84005	10.565	ug/L		94
69) Chlorodibromomethane	7.971	129	123888	10.590	ug/L		98
70) 1,3-Dichloropropane	8.046	76	168871	10.520	ug/L		99
71) 1,2-Dibromoethane	8.130	107	98882	10.454	ug/L		97
72) 2-Hexanone	8.367	43	51988	9.597	ug/L		91
73) Chlorobenzene	8.537	112	331791	10.747	ug/L		90
74) Ethylbenzene	8.579	91	549276	10.614	ug/L		98
75) 1,1,1,2-Tetrachloroethane	8.596	131	122195	10.574	ug/L		95
76) p/m Xylene	8.685	106	421211	21.399	ug/L		96
77) o Xylene	8.967	106	411054	21.092	ug/L		90

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
 Data File : V08190218N20.D
 Acq On : 19 Feb 2019 2:13 am
 Operator : VOA108:NLK
 Sample : C8260STD3
 Misc : WG1208025
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 19 07:17:17 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190218N\V08190218N09.D
 Sub List : 8260-CurvePenta - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.003	104	714444	22.951	ug/L	89
80)	Bromoform	9.008	173	73048	10.434	ug/L	95
82)	Isopropylbenzene	9.176	105	526827	10.729	ug/L	96
84)	Bromobenzene	9.396	156	142132	11.248	ug/L	98
85)	n-Propylbenzene	9.432	91	608746	10.860	ug/L	96
86)	1,4-Dichlorobutane	9.438	55	161788	10.781	ug/L	97
87)	1,1,2,2-Tetrachloroethane	9.485	83	124206	10.891	ug/L	99
88)	4-Ethyltoluene	9.502	105	491473	10.527	ug/L	96
89)	2-Chlorotoluene	9.516	91	427135	10.440	ug/L	94
90)	1,3,5-Trimethylbenzene	9.558	105	420318	10.426	ug/L	91
91)	1,2,3-Trichloropropane	9.555	75	94556	10.671	ug/L	97
92)	trans-1,4-Dichloro-2-b...	9.586	53	28312	9.069	ug/L #	73
93)	4-Chlorotoluene	9.619	91	387261	10.881	ug/L	94
94)	tert-Butylbenzene	9.745	119	431958	10.428	ug/L	93
95)	Pentachloroethane	9.750	167	87270	11.008	ug/L	96
97)	1,2,4-Trimethylbenzene	9.784	105	424005	10.570	ug/L	92
98)	sec-Butylbenzene	9.848	105	521806	10.282	ug/L	97
99)	p-Isopropyltoluene	9.934	119	446300	10.244	ug/L	96
100)	1,3-Dichlorobenzene	9.965	146	254547	10.925	ug/L	99
101)	1,4-Dichlorobenzene	10.018	146	254645	10.552	ug/L	98
102)	p-Diethylbenzene	10.143	119	245697	9.636	ug/L	95
103)	n-Butylbenzene	10.177	91	400563	9.913	ug/L	98
104)	1,2-Dichlorobenzene	10.258	146	240105	10.565	ug/L	98
105)	1,2,4,5-Tetramethylben...	10.601	119	359200	9.025	ug/L	98
106)	1,2-Dibromo-3-chloropr...	10.712	155	18271	10.699	ug/L	87
107)	1,3,5-Trichlorobenzene	10.729	180	164532	10.515	ug/L	95
108)	Hexachlorobutadiene	11.078	225	69297	9.454	ug/L	94
109)	1,2,4-Trichlorobenzene	11.089	180	152414	10.686	ug/L	99
110)	Naphthalene	11.270	128	350272	11.155	ug/L	100
111)	1,2,3-Trichlorobenzene	11.373	180	139554	10.824	ug/L	98

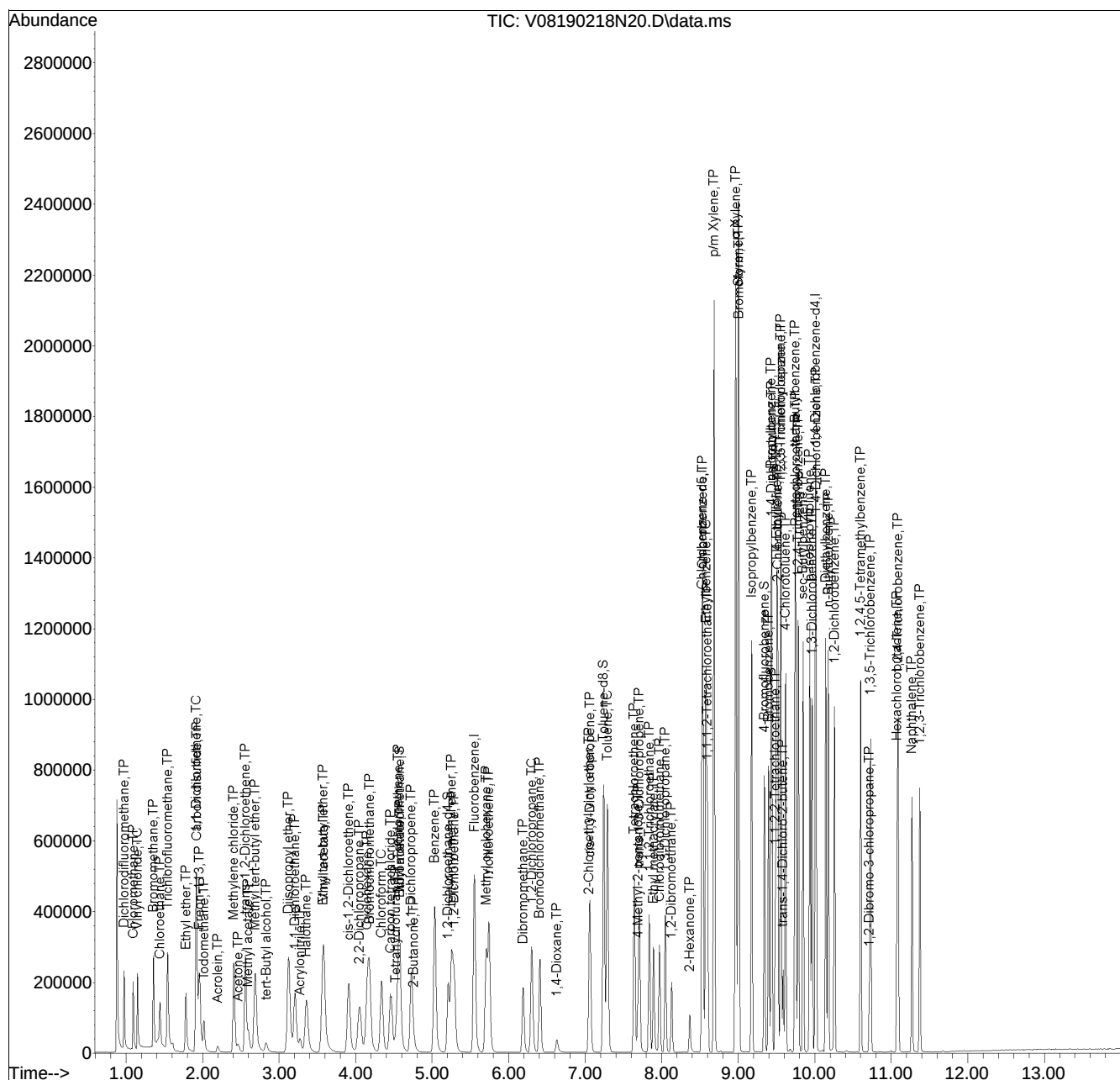
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190218N\
Data File : V08190218N20.D
Acq On : 19 Feb 2019 2:13 am
Operator : VOA108:NLK
Sample : C8260STD3
Misc : WG1208025
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 19 07:17:17 2019
Quant Method : I:\VOLATILES\VOA108\2019\190218N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Feb 19 00:08:39 2019
Response via : Initial Calibration

Sub List : 8260-CurvePenta - All compounds listed08190218N09.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA108\2019\10	Method	: V108_190218N_8260.m
Data File	: V08190218N20.D	Operator	: VOA108:NLK
Date Inj'd	: 2/19/2019 2:13 am	Instrument	: VOA 108
Sample	: C8260STD3	Quant Date	: 2/19/2019 7:16 am

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

Response Factor Report Gonzo

Method Path : I:\VOLATILES\Gonzo\2019\190227A\
 Method File : G_190227N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Thu Feb 28 12:19:42 2019
 Response Via : Initial Calibration

Calibration Files

L11 =VG190227A03.D L1 =VG190227A05.D L2 =VG190227A07.D L3 =VG190227A08.D L4 =VG190227A09.D
 L6 =VG190227A10.D L8 =VG190227A11.D L10 =VG190227A12.D

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

1) I	Fluorobenzene	-----ISTD-----									
2) TP	Dichlorodifluo...	0.168	0.183	0.186	0.199	0.204	0.202	0.202	0.192	7.00	
3) TP	Chloromethane	0.219	0.176	0.182	0.189	0.189	0.184	0.188	0.190	7.34	
4) TC	Vinyl chloride	0.311	0.272	0.274	0.282	0.286	0.289	0.287	0.283	0.286	4.24
5) TP	Bromomethane	0.237	0.186	0.159	0.152	0.157	0.163	0.165	0.174	16.96	
6) TP	Chloroethane	0.167	0.155	0.165	0.170	0.174	0.171	0.173	0.168	3.87	
7) TP	Trichlorofluor...	0.336	0.325	0.355	0.377	0.384	0.383	0.395	0.365	7.27	
8) TP	Ethyl ether	0.087	0.092	0.089	0.092	0.096	0.098	0.104	0.094	6.19	
10) TC	1,1-Dichloroet...	0.158	0.161	0.172	0.184	0.198	0.208	0.221	0.186	12.85	
11) TP	Carbon disulfide	0.482	0.471	0.502	0.534	0.584	0.635	0.694	0.557	15.04	
12) TP	Freon-113	0.173	0.192	0.196	0.218	0.234	0.247	0.261	0.217	14.72	
13) TP	Iodomethane	0.196	0.183	0.204	0.247	0.269	0.267	0.263	0.233	16.02	
14) TP	Acrolein	0.020	0.018	0.019	0.021	0.021	0.022	0.023	0.020	8.28	
15) TP	Methylene chlo...	0.216	0.186	0.187	0.188	0.196	0.200	0.210	0.198	6.00	
17) TP	Acetone		0.031	0.026	0.025	0.026	0.024	0.025	0.026	8.78	
18) TP	trans-1,2-Dich...	0.176	0.179	0.190	0.202	0.213	0.221	0.233	0.202	10.62	
19) TP	Methyl acetate	0.090	0.092	0.085	0.086	0.091	0.090	0.095	0.090	4.10	
20) TP	Methyl tert-bu...	0.439	0.432	0.450	0.465	0.489	0.501	0.536	0.473	7.95	
21) TP	tert-Butyl alc...	0.006	0.005	0.005	0.006	0.007	0.005	0.006	0.006	8.79	
22) TP	Diisopropyl ether	0.539	0.562	0.577	0.597	0.623	0.650	0.698	0.607	9.04	
23) TP	1,1-Dichloroet...	0.338	0.344	0.351	0.362	0.378	0.390	0.408	0.367	6.99	
24) TP	Halothane	0.154	0.161	0.164	0.181	0.195	0.203	0.214	0.182	12.65	
25) TP	Acrylonitrile	0.030	0.037	0.036	0.036	0.039	0.039	0.043	0.037	10.97	
26) TP	Ethyl tert-but...	0.487	0.519	0.531	0.562	0.601	0.633	0.690	0.575	12.35	
27) TP	Vinyl acetate	0.317	0.343	0.361	0.375	0.391	0.420	0.460	0.381	12.61	
28) TP	cis-1,2-Dichlo...	0.204	0.210	0.210	0.219	0.229	0.235	0.248	0.222	7.13	
29) TP	2,2-Dichloropr...	0.282	0.289	0.288	0.308	0.324	0.332	0.347	0.310	8.07	
30) TP	Bromochloromet...	0.099	0.099	0.102	0.106	0.113	0.116	0.125	0.109	9.06	
31) TP	Cyclohexane	0.300	0.302	0.317	0.344	0.371	0.397	0.428	0.351	14.11	
32) TC	Chloroform	0.345	0.354	0.351	0.380	0.382	0.393	0.412	0.374	6.61	
33) TP	Ethyl acetate		0.161	0.130	0.129	0.136	0.135	0.145	0.139	8.81	

Response Factor Report Gonzo

Method Path : I:\VOLATILES\Gonzo\2019\190227A\
 Method File : G_190227N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Thu Feb 28 12:19:42 2019
 Response Via : Initial Calibration

Calibration Files

L11 =VG190227A03.D L1 =VG190227A05.D L2 =VG190227A07.D L3 =VG190227A08.D L4 =VG190227A09.D
 L6 =VG190227A10.D L8 =VG190227A11.D L10 =VG190227A12.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
34)	TP Carbon tetrach...	0.276	0.285	0.277	0.305	0.331	0.357	0.371	0.390	0.324	13.91
35)	TP Tetrahydrofuran	0.034	0.036	0.032	0.032	0.034	0.033	0.035	0.034		4.38
36)	S Dibromofluorom...	0.242	0.240	0.240	0.247	0.252	0.257	0.266	0.277	0.253	5.28
37)	TP 1,1,1-Trichlor...	0.330	0.326	0.355	0.370	0.390	0.408	0.419	0.371		9.80
39)	TP 2-Butanone	0.057	0.055	0.050	0.048	0.052	0.049	0.052	0.052		6.32
40)	TP 1,1-Dichloropr...	0.263	0.269	0.280	0.295	0.311	0.322	0.340	0.297		9.65
41)	TP Benzene	0.897	0.821	0.835	0.846	0.866	0.921	0.963	1.033	0.898	8.04
42)	TP tert-Amyl meth...	0.477	0.485	0.511	0.538	0.579	0.605	0.661	0.551		12.31
43)	S 1,2-Dichloroet...	0.242	0.242	0.245	0.242	0.245	0.247	0.257	0.269	0.249	3.86
44)	TP 1,2-Dichloroet...	0.303	0.259	0.249	0.236	0.241	0.248	0.255	0.267	0.257	8.08
47)	TP Methyl cyclohe...	0.349	0.372	0.397	0.434	0.484	0.520	0.560	0.445		17.74
48)	TP Trichloroethene	0.228	0.211	0.216	0.218	0.235	0.263	0.282	0.298	0.244	13.44
50)	TP Dibromomethane	0.105	0.114	0.110	0.115	0.121	0.124	0.133	0.117		7.79
51)	TC 1,2-Dichloropr...	0.180	0.186	0.187	0.193	0.203	0.209	0.225	0.198		7.96
53)	TP 2-Chloroethyl ...	0.074	0.078	0.085	0.085	0.093	0.094	0.103	0.088		11.42
54)	TP Bromodichlorom...	0.235	0.252	0.263	0.288	0.305	0.314	0.333	0.284		12.55
57)	TP 1,4-Dioxane	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001		19.12
58)	TP cis-1,3-Dichlo...	0.272	0.292	0.309	0.330	0.353	0.366	0.395	0.331		13.07
59)	I Chlorobenzene-d5	-----ISTD-----									
60)	S Toluene-d8	1.276	1.285	1.287	1.259	1.236	1.192	1.172	1.122	1.229	4.94
61)	TC Toluene	0.723	0.716	0.709	0.719	0.748	0.771	0.799	0.741		4.54
62)	TP 4-Methyl-2-pen...	0.053	0.052	0.059	0.061	0.066	0.068	0.074	0.062		13.01
63)	TP Tetrachloroethene	0.320	0.342	0.348	0.367	0.379	0.386	0.393	0.362		7.34
65)	TP trans-1,3-Dich...	0.306	0.316	0.346	0.367	0.378	0.388	0.410	0.359		10.63
67)	TP Ethyl methacry...	0.201	0.218	0.239	0.255	0.273	0.283	0.310	0.254		14.83
68)	TP 1,1,2-Trichlor...	0.173	0.174	0.173	0.175	0.179	0.183	0.197	0.179		4.94
69)	TP Chlorodibromom...	0.205	0.235	0.250	0.270	0.277	0.279	0.287	0.258		11.48
70)	TP 1,3-Dichloropr...	0.361	0.356	0.343	0.345	0.348	0.349	0.362	0.352		2.17
71)	TP 1,2-Dibromoethane	0.196	0.203	0.201	0.207	0.208	0.207	0.212	0.205		2.54
72)	TP 2-Hexanone	0.104	0.094	0.102	0.101	0.104	0.099	0.102	0.101		3.59
73)	TP Chlorobenzene	0.818	0.786	0.799	0.816	0.854	0.876	0.909	0.837		5.31

Response Factor Report Gonzo

Method Path : I:\VOLATILES\Gonzo\2019\190227A\
 Method File : G_190227N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Thu Feb 28 12:19:42 2019
 Response Via : Initial Calibration

Calibration Files

L11 =VG190227A03.D L1 =VG190227A05.D L2 =VG190227A07.D L3 =VG190227A08.D L4 =VG190227A09.D
 L6 =VG190227A10.D L8 =VG190227A11.D L10 =VG190227A12.D

Compound		L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
74)	TC Ethylbenzene	1.309	1.349	1.374	1.421	1.527	1.577	1.625	1.454	8.38	
75)	TP 1,1,1,2-Tetrac...	0.253	0.261	0.281	0.296	0.303	0.310	0.319	0.289	8.63	
76)	TP p/m Xylene	0.491	0.540	0.558	0.595	0.655	0.661	0.623	0.589	10.64	
77)	TP o Xylene	0.486	0.495	0.518	0.556	0.614	0.617	0.580	0.552	9.84	
78)	TP Styrene	0.753	0.817	0.854	0.936	1.033	1.046	0.941	0.912	12.00	
79)	I 1,4-Dichlorobenzene-d4	-----ISTD-----									
80)	TP Bromoform	0.211	0.270	0.307	0.336	0.369	0.368	0.383	0.320	19.50	
82)	TP Isopropylbenzene	2.580	2.725	2.714	2.820	3.017	3.040	3.089	2.855	6.84	
83)	S 4-Bromofluorob...	0.899	0.903	0.895	0.855	0.831	0.818	0.783	0.768	6.29	
84)	TP Bromobenzene	0.704	0.685	0.678	0.692	0.727	0.724	0.750	0.709	3.68	
85)	TP n-Propylbenzene	2.965	3.104	3.106	3.242	3.566	3.572	3.386	3.277	7.26	
86)	TP 1,4-Dichlorobu...	0.545	0.553	0.532	0.532	0.571	0.568	0.604	0.558	4.60	
87)	TP 1,1,2,2-Tetrac...	0.435	0.449	0.428	0.429	0.444	0.437	0.468	0.441	3.18	
88)	TP 4-Ethyltoluene	2.400	2.540	2.601	2.679	2.896	2.868	2.962	2.707	7.70	
89)	TP 2-Chlorotoluene	1.715	1.747	1.703	1.761	1.871	1.892	2.026	1.816	6.51	
90)	TP 1,3,5-Trimethy...	2.042	2.151	2.204	2.332	2.554	2.555	2.544	2.340	9.18	
91)	TP 1,2,3-Trichlor...	0.374	0.383	0.351	0.368	0.409	0.404	0.417	0.386	6.23	
92)	TP trans-1,4-Dich...	0.094	0.093	0.096	0.101	0.106	0.103	0.111	0.100	6.65	
93)	TP 4-Chlorotoluene	1.820	1.775	1.786	1.815	1.962	1.963	2.041	1.880	5.63	
94)	TP tert-Butylbenzene	1.874	1.922	1.997	2.049	2.186	2.184	2.228	2.063	6.78	
97)	TP 1,2,4-Trimethy...	2.007	2.053	2.147	2.244	2.441	2.421	2.468	2.254	8.53	
98)	TP sec-Butylbenzene	2.454	2.633	2.722	2.865	3.037	3.030	2.984	2.818	7.92	
99)	TP p-Isopropyltol...	2.167	2.371	2.497	2.659	2.810	2.807	2.796	2.587	9.71	
100)	TP 1,3-Dichlorobe...	1.276	1.273	1.247	1.295	1.349	1.329	1.386	1.308	3.74	
101)	TP 1,4-Dichlorobe...	1.375	1.306	1.284	1.318	1.370	1.354	1.405	1.345	3.21	
102)	TP p-Diethylbenzene	1.166	1.316	1.417	1.543	1.635	1.647	1.667	1.485	12.90	
103)	TP n-Butylbenzene	1.882	1.991	2.099	2.221	2.389	2.399	2.438	2.203	9.93	
104)	TP 1,2-Dichlorobe...	1.137	1.122	1.130	1.168	1.200	1.195	1.237	1.170	3.67	
105)	TP 1,2,4,5-Tetram...	1.717	1.847	2.004	2.148	2.323	2.362	2.441	2.120	12.97	
106)	TP 1,2-Dibromo-3-...	0.043	0.053	0.064	0.068	0.073	0.072	0.077	0.064	18.86	
107)	TP 1,3,5-Trichlor...	0.878	0.867	0.911	0.954	0.990	0.991	1.030	0.946	6.58	

Response Factor Report Gonzo

Method Path : I:\VOLATILES\Gonzo\2019\190227A\
Method File : G_190227N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Thu Feb 28 12:19:42 2019
Response Via : Initial Calibration

Calibration Files

L11 =VG190227A03.D L1 =VG190227A05.D L2 =VG190227A07.D L3 =VG190227A08.D L4 =VG190227A09.D
L6 =VG190227A10.D L8 =VG190227A11.D L10 =VG190227A12.D

Compound		L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
108)	TP Hexachlorobuta...	0.341	0.357	0.392	0.421	0.447	0.454	0.478	0.413	12.46	
109)	TP 1,2,4-Trichlor...	0.744	0.735	0.778	0.819	0.854	0.859	0.892	0.811	7.50	
110)	TP Naphthalene	1.242	1.316	1.385	1.413	1.473	1.452	1.530	1.401	6.97	
111)	TP 1,2,3-Trichlor...	0.616	0.626	0.659	0.673	0.700	0.693	0.708	0.668	5.38	

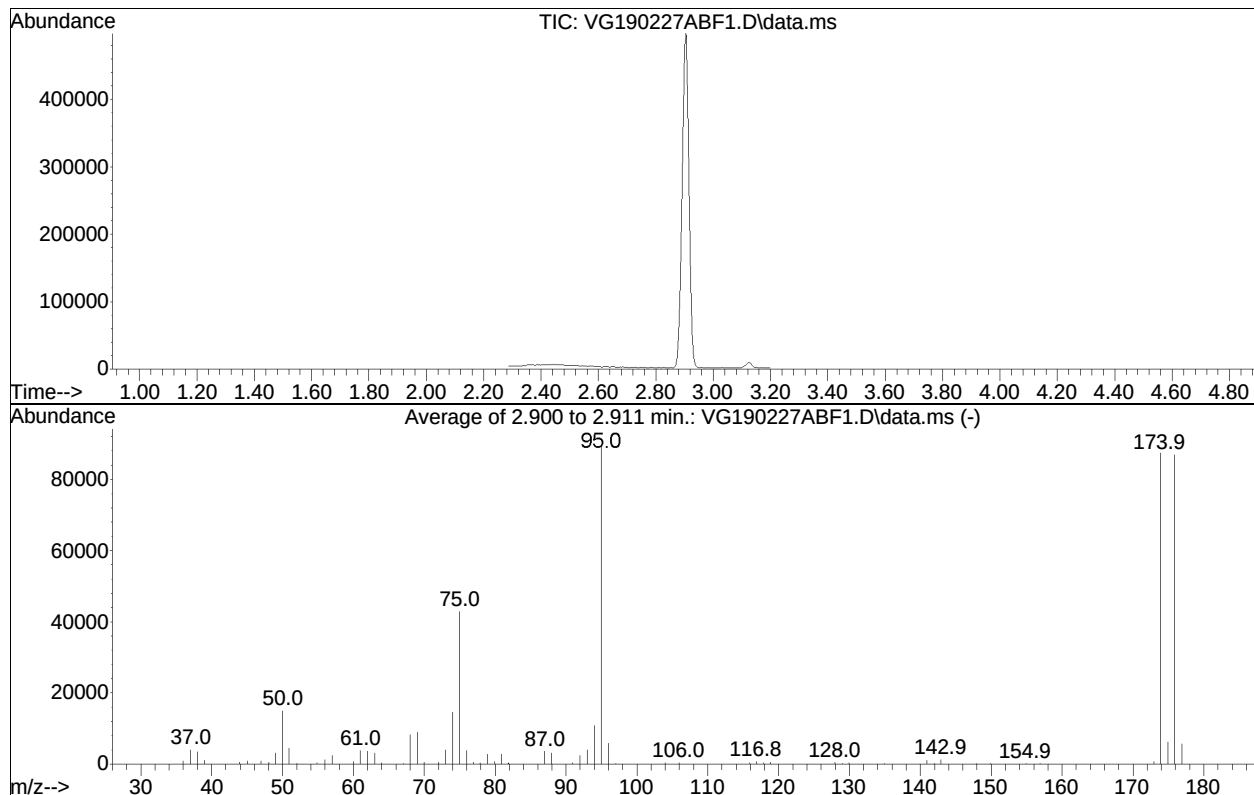
(#) = Out of Range

BFB

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
Data File : VG190227ABF1.D
Acq On : 27 Feb 2019 7:28 pm
Operator : GONZO:KJD
Sample : WG1211255-1
Misc : WG1211255
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Thu Feb 28 12:19:42 2019



AutoFind: Scans 118, 119, 120; Background Corrected with Scan 109

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.8	15058	PASS
75	95	30	60	47.9	42976	PASS
95	95	100	100	100.0	89771	PASS
96	95	5	9	6.5	5874	PASS
173	174	0.00	2	0.7	616	PASS
174	95	50	100	97.3	87347	PASS
175	174	5	9	7.1	6220	PASS
176	174	95	101	99.5	86952	PASS
177	176	5	9	6.6	5713	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A03.D
 Acq On : 27 Feb 2019 8:36 pm
 Operator : GONZO:NLK
 Sample : I8260STD11
 Misc : WG1211255
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 28 12:10:58 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-L11 - Level 11 for 8260-LRR product

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

Internal Standards						
1) Fluorobenzene	6.545	96	477293	10.000	ug/L	0.00
Standard Area 1 = 486223			Recovery	=	98.16%	
59) Chlorobenzene-d5	10.127	117	372737	10.000	ug/L	0.00
Standard Area 1 = 385045			Recovery	=	96.80%	
79) 1,4-Dichlorobenzene-d4	12.703	152	183543	10.000	ug/L	0.00
Standard Area 1 = 201296			Recovery	=	91.18%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.714	113	115591	9.808	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.08%	
43) 1,2-Dichloroethane-d4	6.261	65	115725	10.007	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.07%	
60) Toluene-d8	8.257	98	475671	10.139	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.39%	
83) 4-Bromofluorobenzene	11.538	95	165062	10.515	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.15%	
Target Compounds						
						Qvalue
4) Vinyl chloride	2.183	62	2971	0.221	ug/L	96
34) Carbon tetrachloride	5.675	117	2630	0.181	ug/L #	86
41) Benzene	6.124	78	8567	0.212	ug/L	97
44) 1,2-Dichloroethane	6.330	62	2889	0.256	ug/L	88
48) Trichloroethene	6.721	95	2179	0.210	ug/L	94

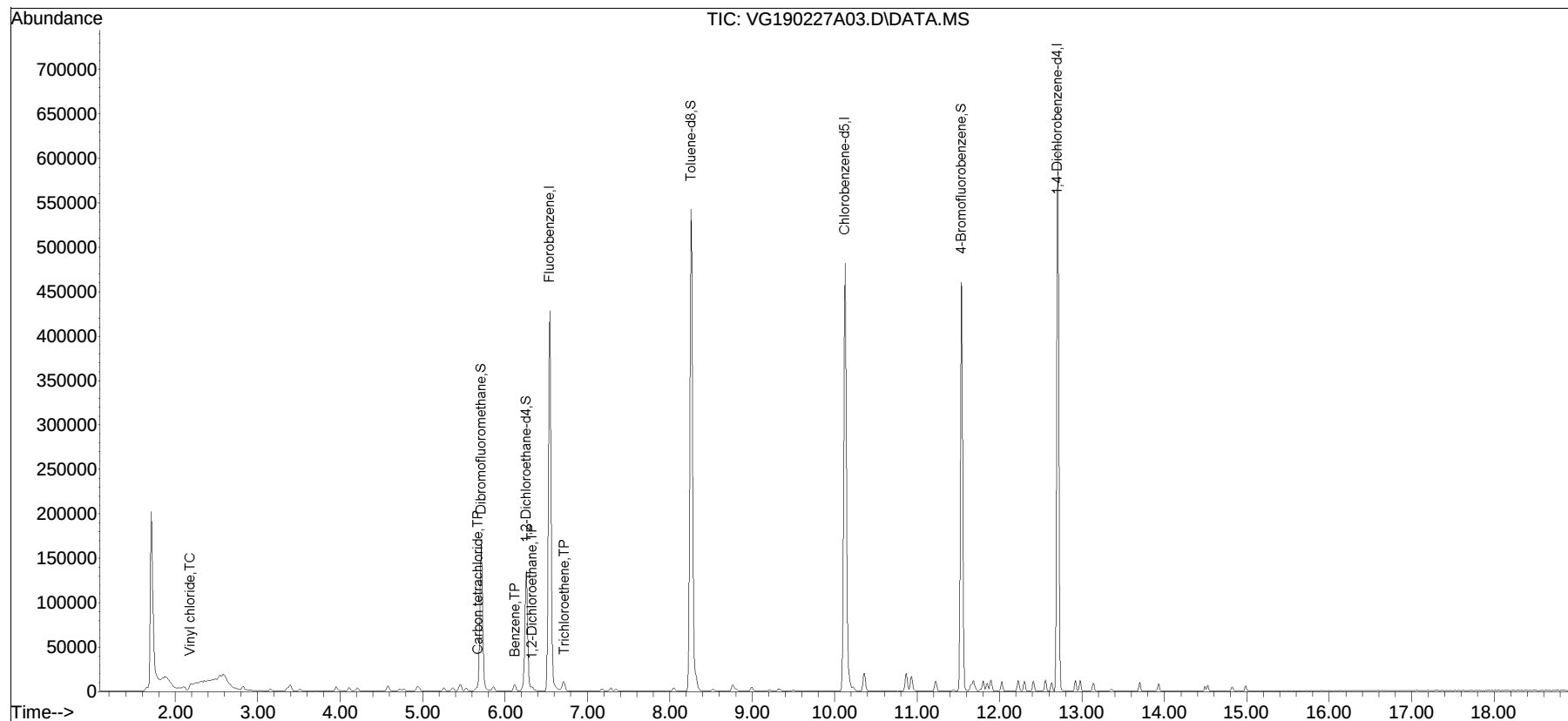
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A03.D
 Acq On : 27 Feb 2019 8:36 pm
 Operator : GONZO:NLK
 Sample : I8260STD11
 Misc : WG1211255
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 28 12:10:58 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

Sub List : 8260-L11 - Level 11 for 8260-LRR product0227A08.D•



Manual Integration Report

Data Path	: I:\VOLATILES\Gonzo\2019\19Q	Method	: G_190227N_8260.m
Data File	: VG190227A03.D	Operator	: GONZO:NLK
Date Inj'd	: 2/27/2019 8:36 pm	Instrument	: Gonzo
Sample	: I8260STD11	Quant Date	: 2/28/2019 12:09 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A05.D
 Acq On : 27 Feb 2019 9:27 pm
 Operator : GONZO:NLK
 Sample : I8260STD1
 Misc : WG1211255
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 28 12:11:52 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.545	96	488271	10.000	ug/L	0.00
Standard Area 1 = 486223			Recovery	=	100.42%	
59) Chlorobenzene-d5	10.127	117	378072	10.000	ug/L	0.00
Standard Area 1 = 385045			Recovery	=	98.19%	
79) 1,4-Dichlorobenzene-d4	12.703	152	185772	10.000	ug/L	0.00
Standard Area 1 = 201296			Recovery	=	92.29%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.714	113	117129	9.715	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.15%	
43) 1,2-Dichloroethane-d4	6.261	65	118270	9.998	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.98%	
60) Toluene-d8	8.257	98	485937	10.212	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	102.12%	
83) 4-Bromofluorobenzene	11.538	95	167770	10.560	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.60%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.879	85	4108	0.453	ug/L	# 96
3) Chloromethane	2.114	50	5358M1	0.601	ug/L	
4) Vinyl chloride	2.183	62	6638	0.482	ug/L	94
5) Bromomethane	2.535	94	5776	0.743	ug/L	92
6) Chloroethane	2.672	64	4068	0.504	ug/L	99
7) Trichlorofluoromethane	2.818	101	8206	0.474	ug/L	88
8) Ethyl ether	3.151	74	2136	0.494	ug/L	90
10) 1,1-Dichloroethene	3.366	96	3863	0.461	ug/L	98
11) Carbon disulfide	3.396	76	11764	0.480	ug/L	97
12) Freon-113	3.396	101	4216	0.441	ug/L	# 76
13) Iodomethane	3.513	142	4777	0.480	ug/L	97
14) Acrolein	3.699	56	482	0.507	ug/L	# 76
15) Methylene chloride	3.953	84	5278	0.578	ug/L	99
17) Acetone	4.012	43	1414	1.098	ug/L	# 77
18) trans-1,2-Dichloroethene	4.110	96	4307	0.465	ug/L	96
19) Methyl acetate	4.129	43	2207	0.534	ug/L	# 71
20) Methyl tert-butyl ether	4.217	73	10706	0.487	ug/L	# 93
21) tert-Butyl alcohol	4.305	59	695	2.765	ug/L	# 78
22) Diisopropyl ether	4.579	45	13166	0.467	ug/L	97
23) 1,1-Dichloroethane	4.726	63	8259	0.482	ug/L	98
24) Halothane	4.775	117	3769	0.469	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A05.D
 Acq On : 27 Feb 2019 9:27 pm
 Operator : GONZO:NLK
 Sample : I8260STD1
 Misc : WG1211255
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 28 12:11:52 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	4.784	53	722	0.406	ug/L	83
26) Ethyl tert-butyl ether	4.941	59	11893	0.459	ug/L	95
27) Vinyl acetate	4.970	43	7734	0.439	ug/L	99
28) cis-1,2-Dichloroethene	5.264	96	4974	0.484	ug/L	99
29) 2,2-Dichloropropane	5.371	77	6891	0.490	ug/L	91
30) Bromochloromethane	5.459	128	2413	0.484	ug/L	98
31) Cyclohexane	5.459	56	7321	0.473	ug/L	97
32) Chloroform	5.528	83	8432	0.493	ug/L	95
33) Ethyl acetate	5.645	43	5201	0.820	ug/L #	91
34) Carbon tetrachloride	5.665	117	6949	0.467	ug/L	93
35) Tetrahydrofuran	5.704	42	819	0.524	ug/L #	67
37) 1,1,1-Trichloroethane	5.743	97	8066	0.466	ug/L	98
39) 2-Butanone	5.841	43	1402	0.570	ug/L #	76
40) 1,1-Dichloropropene	5.860	75	6431	0.471	ug/L	97
41) Benzene	6.115	78	20054	0.486	ug/L	98
42) tert-Amyl methyl ether	6.222	73	11642	0.467	ug/L	95
44) 1,2-Dichloroethane	6.330	62	6331	0.549	ug/L	98
47) Methyl cyclohexane	6.711	83	8528	0.440	ug/L	98
48) Trichloroethene	6.721	95	5157	0.485	ug/L	99
50) Dibromomethane	7.181	93	2574	0.479	ug/L	94
51) 1,2-Dichloropropane	7.288	63	4404	0.481	ug/L	97
53) 2-Chloroethyl vinyl ether	7.973	63	1801	0.433	ug/L	93
54) Bromodichloromethane	7.347	83	5731	0.446	ug/L #	96
57) 1,4-Dioxane	7.562	88	4022	100.249	ug/L	94
58) cis-1,3-Dichloropropene	8.051	75	6649	0.440	ug/L #	90
61) Toluene	8.315	92	13672	0.510	ug/L	97
62) 4-Methyl-2-pentanone	8.755	58	997	0.448	ug/L #	90
63) Tetrachloroethene	8.775	166	6044	0.459	ug/L	100
65) trans-1,3-Dichloropropene	8.804	75	5776	0.442	ug/L	92
67) Ethyl methacrylate	8.991	69	3808	0.421	ug/L	90
68) 1,1,2-Trichloroethane	9.000	83	3267	0.500	ug/L	94
69) Chlorodibromomethane	9.206	129	3870	0.409	ug/L	95
70) 1,3-Dichloropropane	9.324	76	6829	0.526	ug/L	99
71) 1,2-Dibromoethane	9.500	107	3707	0.489	ug/L	99
72) 2-Hexanone	9.784	43	1969	0.511	ug/L #	73
73) Chlorobenzene	10.147	112	15469	0.512	ug/L #	85
74) Ethylbenzene	10.186	91	24748	0.477	ug/L	99
75) 1,1,1,2-Tetrachloroethane	10.225	131	4786	0.451	ug/L #	64
76) p/m Xylene	10.362	106	18582	0.881	ug/L	95
77) o Xylene	10.871	106	18357	0.937	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A05.D
 Acq On : 27 Feb 2019 9:27 pm
 Operator : GONZO:NLK
 Sample : I8260STD1
 Misc : WG1211255
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 28 12:11:52 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	10.930	104	28465	0.881	ug/L	96
80)	Bromoform	10.960	173	1959	0.343	ug/L	83
82)	Isopropylbenzene	11.224	105	23961	0.475	ug/L	98
84)	Bromobenzene	11.655	156	6540	0.519	ug/L	97
85)	n-Propylbenzene	11.684	91	27545	0.477	ug/L	98
86)	1,4-Dichlorobutane	11.704	55	5063	0.512	ug/L	100
87)	1,1,2,2-Tetrachloroethane	11.763	83	4041	0.509	ug/L	99
88)	4-Ethyltoluene	11.802	105	22296	0.461	ug/L	100
89)	2-Chlorotoluene	11.851	91	15928M1	0.503	ug/L	
90)	1,3,5-Trimethylbenzene	11.890	105	18964	0.463	ug/L	97
91)	1,2,3-Trichloropropane	11.910	75	3476M1	0.533	ug/L	
92)	trans-1,4-Dichloro-2-b...	11.949	53	871	0.490	ug/L #	83
93)	4-Chlorotoluene	12.027	91	16906	0.510	ug/L	98
94)	tert-Butylbenzene	12.223	119	17403	0.469	ug/L	96
97)	1,2,4-Trimethylbenzene	12.302	105	18641	0.467	ug/L	99
98)	sec-Butylbenzene	12.409	105	22795	0.451	ug/L	95
99)	p-Isopropyltoluene	12.556	119	20129	0.434	ug/L	99
100)	1,3-Dichlorobenzene	12.635	146	11851	0.511	ug/L	98
101)	1,4-Dichlorobenzene	12.723	146	12775	0.536	ug/L #	88
102)	p-Diethylbenzene	12.919	119	10835	0.411	ug/L	94
103)	n-Butylbenzene	12.978	91	17483	0.448	ug/L	98
104)	1,2-Dichlorobenzene	13.144	146	10564	0.503	ug/L	94
105)	1,2,4,5-Tetramethylben...	13.702	119	15952	0.428	ug/L	97
106)	1,2-Dibromo-3-chloropr...	13.908	155	403	0.341	ug/L	82
107)	1,3,5-Trichlorobenzene	13.928	180	8153	0.482	ug/L	98
108)	Hexachlorobutadiene	14.486	225	3166	0.435	ug/L	98
109)	1,2,4-Trichlorobenzene	14.525	180	6907	0.478	ug/L	93
110)	Naphthalene	14.819	128	11539	0.448	ug/L	100
111)	1,2,3-Trichlorobenzene	14.986	180	5723	0.467	ug/L	97

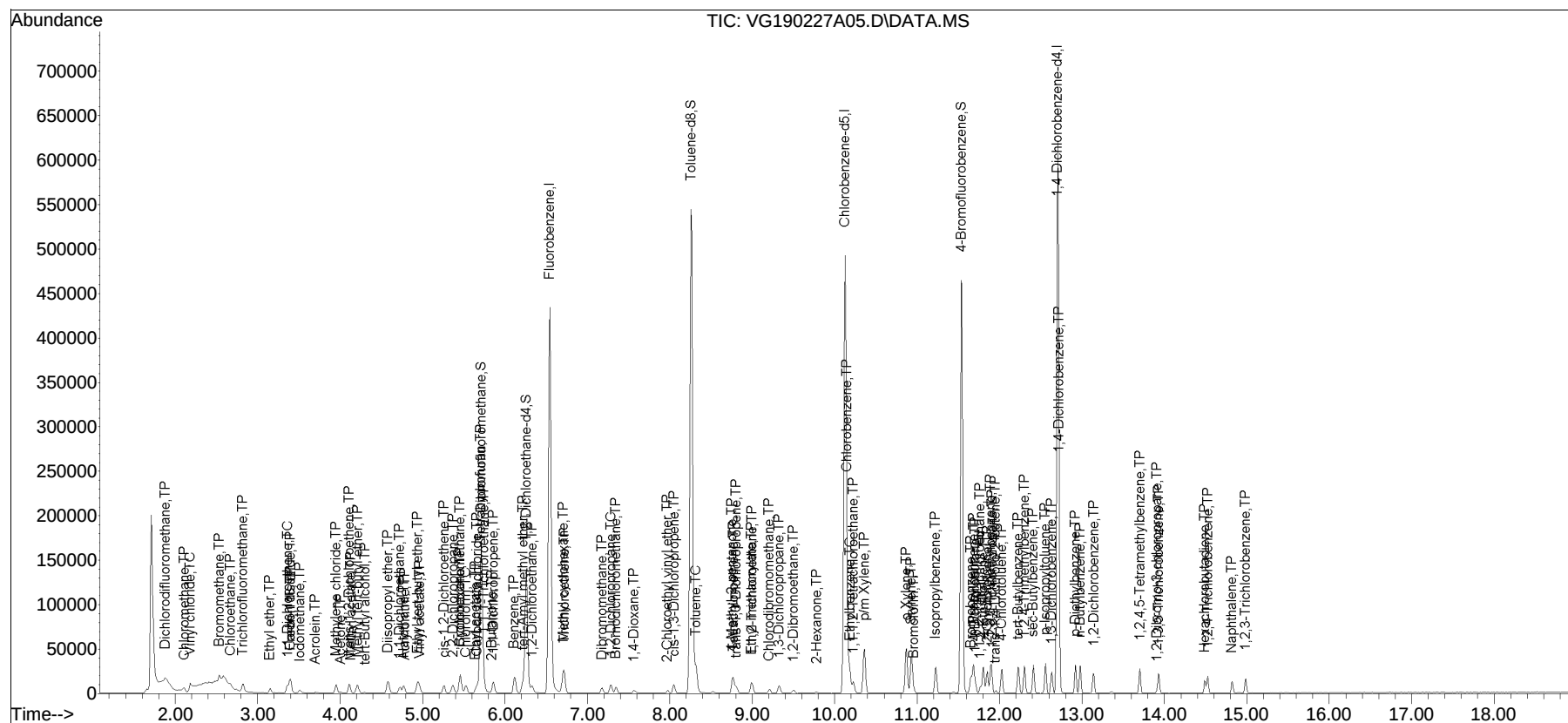
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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Data Path   : I:\VOLATILES\Gonzo\2019\190227A\  
Data File  : VG190227A05.D  
Acq On     : 27 Feb 2019    9:27 pm  
Operator   : GONZO:NLK  
Sample     : I8260STD1  
Misc       : WG1211255  
ALS Vial   : 5    Sample Multiplier: 1
```

Quant Time: Feb 28 12:11:52 2019
Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Feb 28 12:09:07 2019
Response via : Initial Calibration

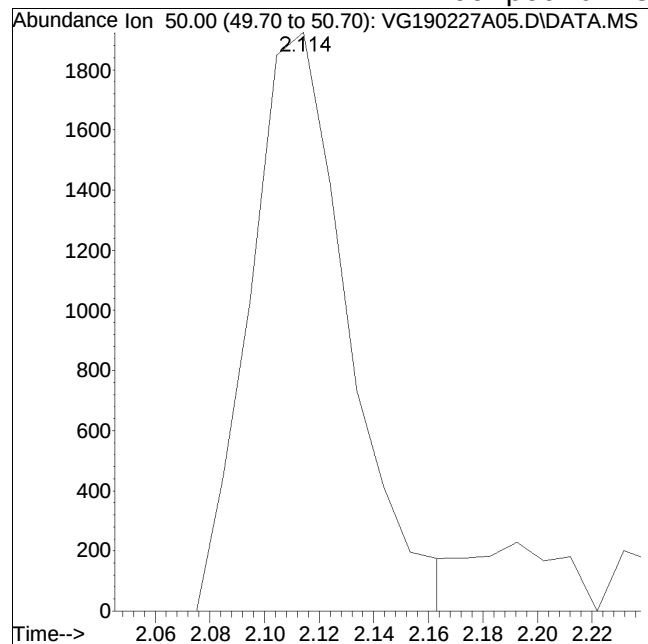
Sub List : 8260-Curve - Megamix plus Diox0227A\VG190227A08.D•



Manual Integration Report

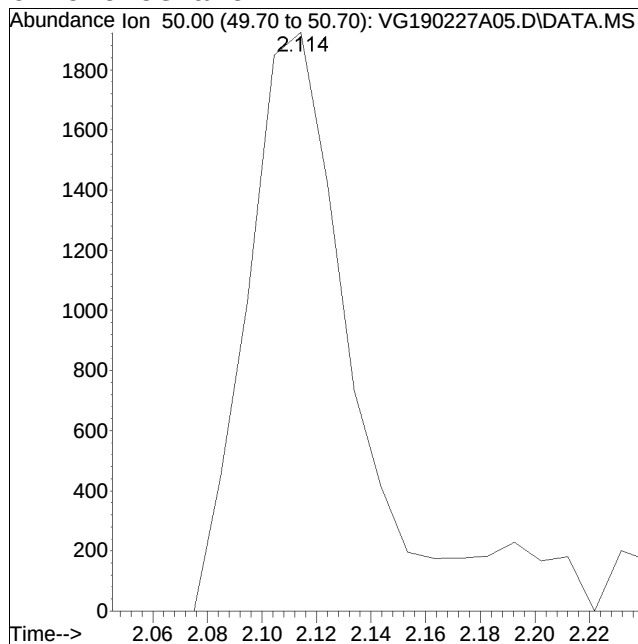
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190227A05.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 9:27 pm Instrument : Gonzo
Sample : I8260STD1 Quant Date : 2/28/2019 12:09 pm

Compound #3: Chloromethane



Original Peak Response = 4809

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

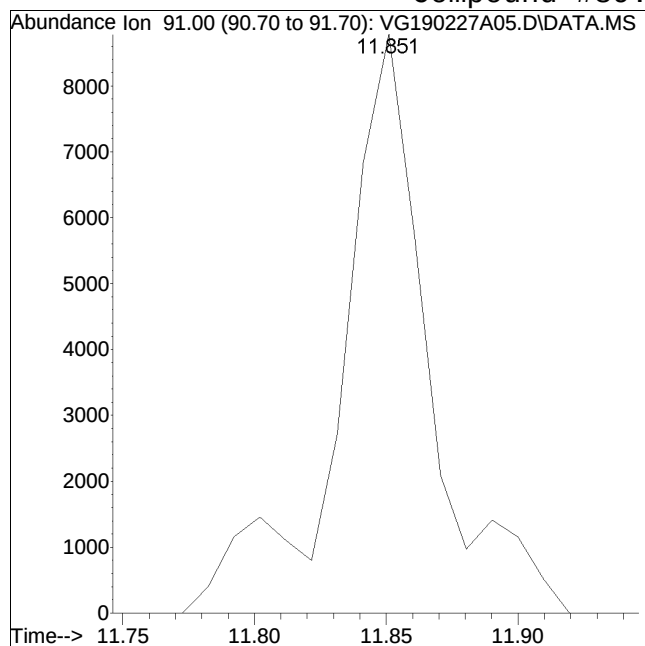


Manual Peak Response = 5358 M1

Manual Integration Report

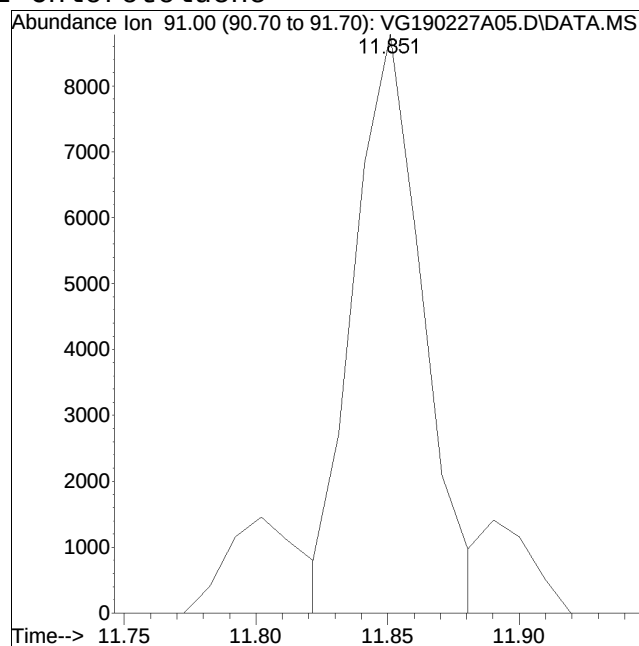
Data Path : I:\VOLATILES\Gonzo\2019\190Method : G_190227N_8260.m
Data File : VG190227A05.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 9:27 pm Instrument : Gonzo
Sample : I8260STDL1 Quant Date : 2/28/2019 12:09 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 20633

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

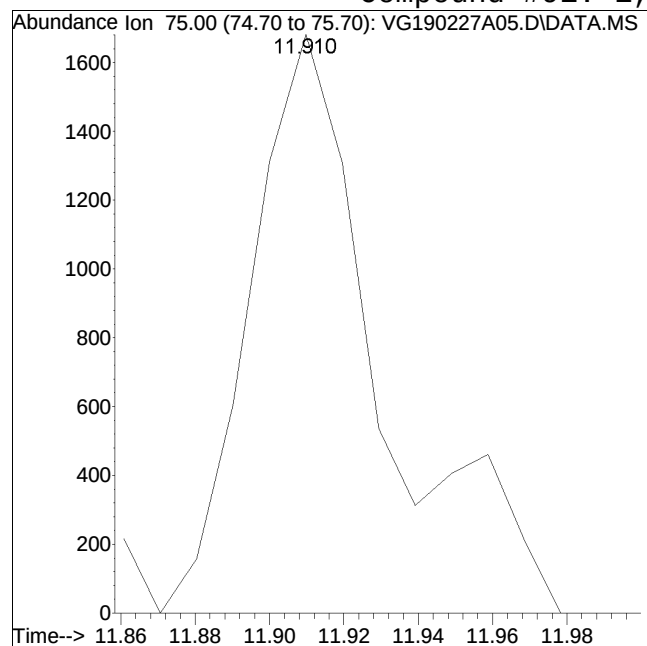


Manual Peak Response = 15928 M1

Manual Integration Report

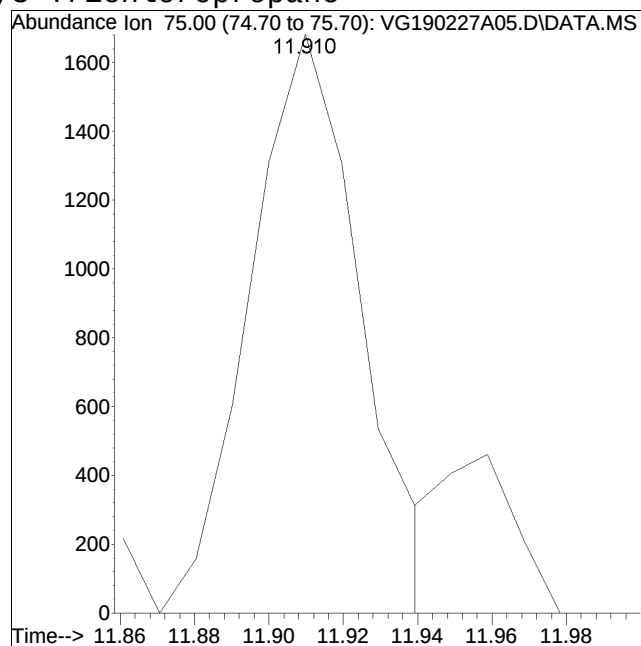
Data Path : I:\VOLATILES\Gonzo\2019\190Method : G_190227N_8260.m
Data File : VG190227A05.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 9:27 pm Instrument : Gonzo
Sample : I8260STD1 Quant Date : 2/28/2019 12:09 pm

Compound #91: 1,2,3-Trichloropropane



Original Peak Response = 4110

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



Manual Peak Response = 3476 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A07.D
 Acq On : 27 Feb 2019 10:18 pm
 Operator : GONZO:NLK
 Sample : I8260STD12
 Misc : WG1211255
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 28 12:13:04 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.545	96	480848	10.000	ug/L	0.00
Standard Area 1 = 486223			Recovery	=	98.89%	
59) Chlorobenzene-d5	10.127	117	371696	10.000	ug/L	0.00
Standard Area 1 = 385045			Recovery	=	96.53%	
79) 1,4-Dichlorobenzene-d4	12.703	152	188419	10.000	ug/L	0.00
Standard Area 1 = 201296			Recovery	=	93.60%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.714	113	115614	9.737	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.37%	
43) 1,2-Dichloroethane-d4	6.261	65	117740	10.106	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.06%	
60) Toluene-d8	8.257	98	478410	10.226	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	102.26%	
83) 4-Bromofluorobenzene	11.538	95	168600	10.463	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	104.63%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.880	85	17594	1.969	ug/L	99
3) Chloromethane	2.114	50	16920	1.929	ug/L	100
4) Vinyl chloride	2.183	62	26310	1.941	ug/L	97
5) Bromomethane	2.535	94	17868M1	2.333	ug/L	
6) Chloroethane	2.672	64	14883	1.874	ug/L	95
7) Trichlorofluoromethane	2.828	101	31284	1.833	ug/L	97
8) Ethyl ether	3.151	74	8881	2.087	ug/L	96
10) 1,1-Dichloroethene	3.356	96	15483	1.874	ug/L	98
11) Carbon disulfide	3.396	76	45321	1.878	ug/L	99
12) Freon-113	3.405	101	18427	1.959	ug/L	93
13) Iodomethane	3.513	142	17601	1.796	ug/L	97
14) Acrolein	3.709	56	1700	1.815	ug/L #	69
15) Methylene chloride	3.953	84	17842	1.982	ug/L	98
17) Acetone	4.002	43	2968	2.341	ug/L	92
18) trans-1,2-Dichloroethene	4.110	96	17250	1.890	ug/L	97
19) Methyl acetate	4.119	43	8826	2.170	ug/L	91
20) Methyl tert-butyl ether	4.207	73	41547	1.919	ug/L	94
21) tert-Butyl alcohol	4.295	59	2634	10.641	ug/L #	72
22) Diisopropyl ether	4.579	45	54022	1.947	ug/L	96
23) 1,1-Dichloroethane	4.726	63	33060	1.958	ug/L	98
24) Halothane	4.775	117	15484	1.958	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A07.D
 Acq On : 27 Feb 2019 10:18 pm
 Operator : GONZO:NLK
 Sample : I8260STD2
 Misc : WG1211255
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 28 12:13:04 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	4.784	53	3511	2.003	ug/L	94
26) Ethyl tert-butyl ether	4.941	59	49952	1.957	ug/L	95
27) Vinyl acetate	4.960	43	32954	1.901	ug/L	99
28) cis-1,2-Dichloroethene	5.264	96	20239	2.001	ug/L	99
29) 2,2-Dichloropropane	5.371	77	27760	2.005	ug/L	97
30) Bromochloromethane	5.459	128	9523	1.942	ug/L	99
31) Cyclohexane	5.459	56	29032	1.906	ug/L	93
32) Chloroform	5.528	83	34063	2.021	ug/L	99
33) Ethyl acetate	5.645	43	15530	2.487	ug/L #	95
34) Carbon tetrachloride	5.674	117	26629	1.817	ug/L #	96
35) Tetrahydrofuran	5.694	42	3415M3	2.220	ug/L	
37) 1,1,1-Trichloroethane	5.743	97	31343	1.837	ug/L	98
39) 2-Butanone	5.841	43	5289	2.184	ug/L #	80
40) 1,1-Dichloropropene	5.860	75	25823	1.921	ug/L	97
41) Benzene	6.115	78	80291	1.974	ug/L	98
42) tert-Amyl methyl ether	6.212	73	46623	1.899	ug/L	95
44) 1,2-Dichloroethane	6.330	62	23931	2.108	ug/L	99
47) Methyl cyclohexane	6.711	83	35730	1.871	ug/L	98
48) Trichloroethene	6.721	95	20797	1.986	ug/L	97
50) Dibromomethane	7.181	93	11010	2.080	ug/L	97
51) 1,2-Dichloropropane	7.288	63	17921	1.988	ug/L	96
53) 2-Chloroethyl vinyl ether	7.973	63	7502	1.830	ug/L	99
54) Bromodichloromethane	7.347	83	24256	1.915	ug/L	99
57) 1,4-Dioxane	7.562	88	12543	317.461	ug/L	93
58) cis-1,3-Dichloropropene	8.051	75	28071	1.888	ug/L	95
61) Toluene	8.315	92	53205	2.019	ug/L	100
62) 4-Methyl-2-pentanone	8.755	58	3865	1.765	ug/L	88
63) Tetrachloroethene	8.765	166	25440	1.965	ug/L	98
65) trans-1,3-Dichloropropene	8.804	75	23517	1.830	ug/L	94
67) Ethyl methacrylate	8.981	69	16243	1.829	ug/L	84
68) 1,1,2-Trichloroethane	9.000	83	12901	2.009	ug/L	96
69) Chlorodibromomethane	9.206	129	17469	1.878	ug/L	97
70) 1,3-Dichloropropane	9.324	76	26440	2.072	ug/L	99
71) 1,2-Dibromoethane	9.500	107	15082	2.023	ug/L	100
72) 2-Hexanone	9.784	43	6956	1.837	ug/L	92
73) Chlorobenzene	10.147	112	58442	1.968	ug/L	96
74) Ethylbenzene	10.176	91	100251	1.964	ug/L	100
75) 1,1,1,2-Tetrachloroethane	10.225	131	19393	1.858	ug/L	98
76) p/m Xylene	10.362	106	80320	3.873	ug/L	99
77) o Xylene	10.871	106	73543	3.818	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A07.D
 Acq On : 27 Feb 2019 10:18 pm
 Operator : GONZO:NLK
 Sample : I8260STD2
 Misc : WG1211255
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 28 12:13:04 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	10.930	104	121432	3.824	ug/L	96
80)	Bromoform	10.960	173	10166	1.756	ug/L	98
82)	Isopropylbenzene	11.224	105	102707	2.008	ug/L	99
84)	Bromobenzene	11.655	156	25809	2.019	ug/L	99
85)	n-Propylbenzene	11.685	91	116973	1.999	ug/L	99
86)	1,4-Dichlorobutane	11.714	55	20830	2.076	ug/L	98
87)	1,1,2,2-Tetrachloroethane	11.763	83	16938	2.102	ug/L	99
88)	4-Ethyltoluene	11.802	105	95728	1.953	ug/L	99
89)	2-Chlorotoluene	11.851	91	65837M1	2.052	ug/L	
90)	1,3,5-Trimethylbenzene	11.890	105	81063	1.952	ug/L	100
91)	1,2,3-Trichloropropane	11.910	75	14420M1	2.180	ug/L	
92)	trans-1,4-Dichloro-2-b...	11.949	53	3503	1.942	ug/L #	88
93)	4-Chlorotoluene	12.027	91	66872	1.987	ug/L	97
94)	tert-Butylbenzene	12.223	119	72426	1.925	ug/L	99
97)	1,2,4-Trimethylbenzene	12.302	105	77349	1.912	ug/L	98
98)	sec-Butylbenzene	12.409	105	99215	1.934	ug/L	100
99)	p-Isopropyltoluene	12.556	119	89333	1.899	ug/L	99
100)	1,3-Dichlorobenzene	12.635	146	47973	2.041	ug/L	98
101)	1,4-Dichlorobenzene	12.723	146	49216	2.034	ug/L	98
102)	p-Diethylbenzene	12.919	119	49585	1.857	ug/L	99
103)	n-Butylbenzene	12.978	91	75038	1.897	ug/L	97
104)	1,2-Dichlorobenzene	13.134	146	42269	1.986	ug/L	99
105)	1,2,4,5-Tetramethylben...	13.702	119	69591	1.843	ug/L	98
106)	1,2-Dibromo-3-chloropr...	13.908	155	1998	1.669	ug/L	86
107)	1,3,5-Trichlorobenzene	13.928	180	32678	1.903	ug/L	97
108)	Hexachlorobutadiene	14.496	225	13455	1.824	ug/L	98
109)	1,2,4-Trichlorobenzene	14.525	180	27694	1.890	ug/L	99
110)	Naphthalene	14.819	128	49583	1.900	ug/L	100
111)	1,2,3-Trichlorobenzene	14.986	180	23608	1.900	ug/L	100

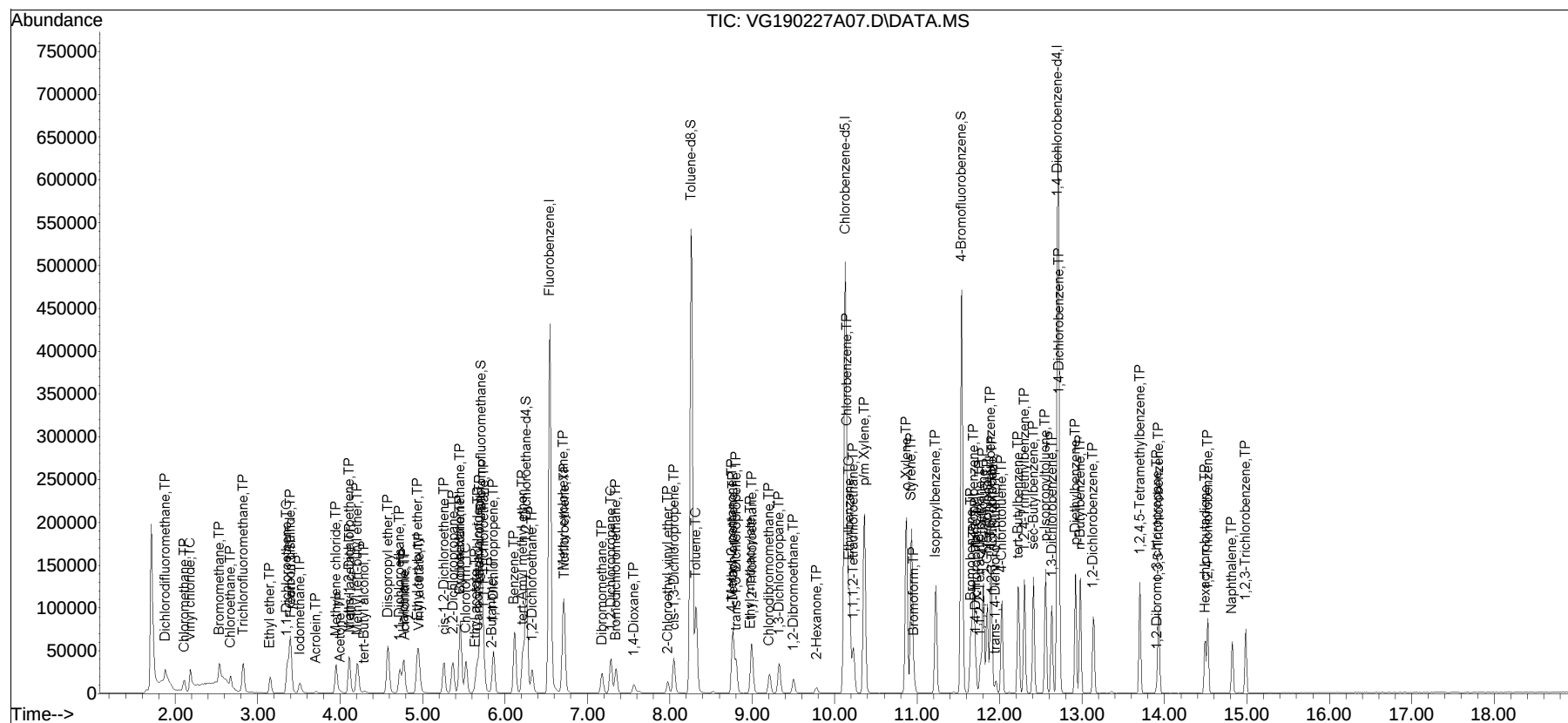
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
Data File : VG190227A07.D
Acq On : 27 Feb 2019 10:18 pm
Operator : GONZO:NLK
Sample : I8260STD2
Misc : WG1211255
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 28 12:13:04 2019
Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Feb 28 12:09:07 2019
Response via : Initial Calibration

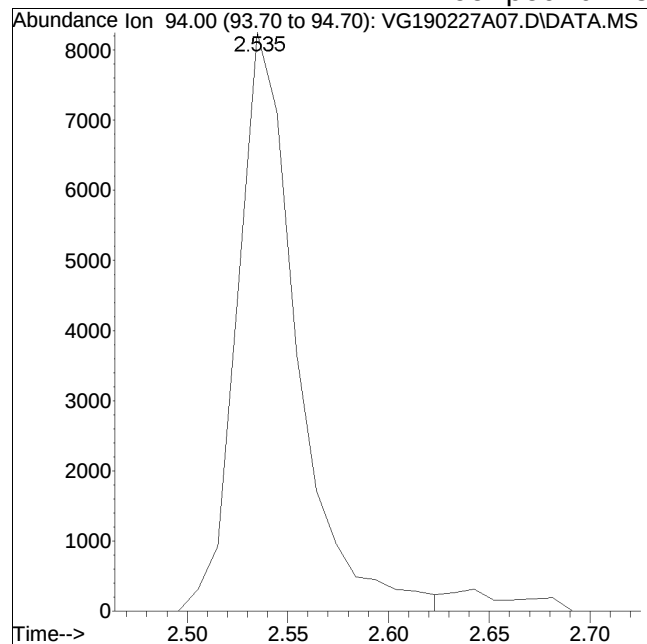
Sub List : 8260-Curve - Megamix plus Diox0227A\VG190227A08.D•



Manual Integration Report

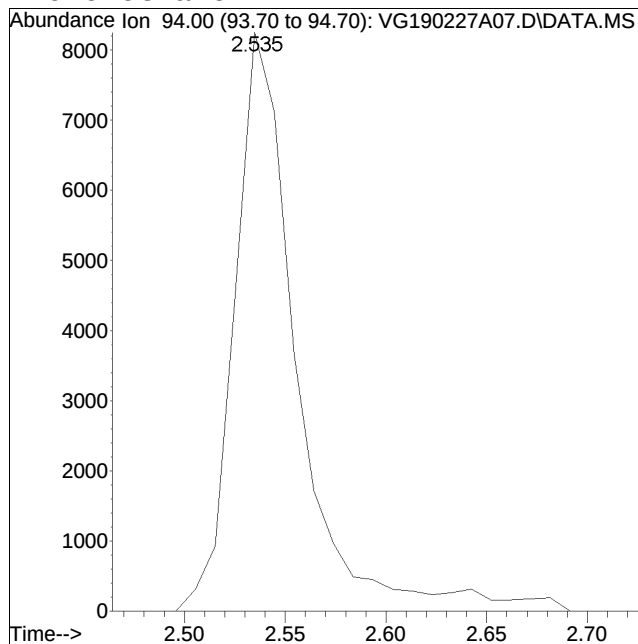
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190227A07.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 10:18 pm Instrument : Gonzo
Sample : I8260STD2 Quant Date : 2/28/2019 12:09 pm

Compound #5: Bromomethane



Original Peak Response = 17130

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

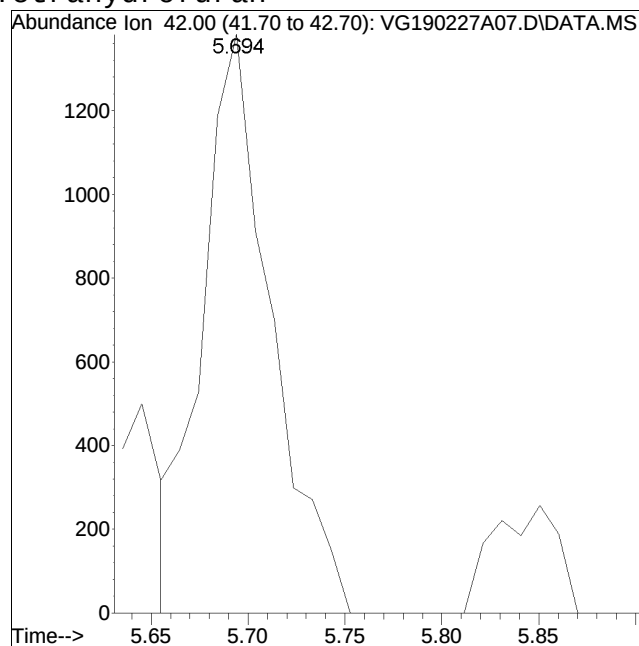
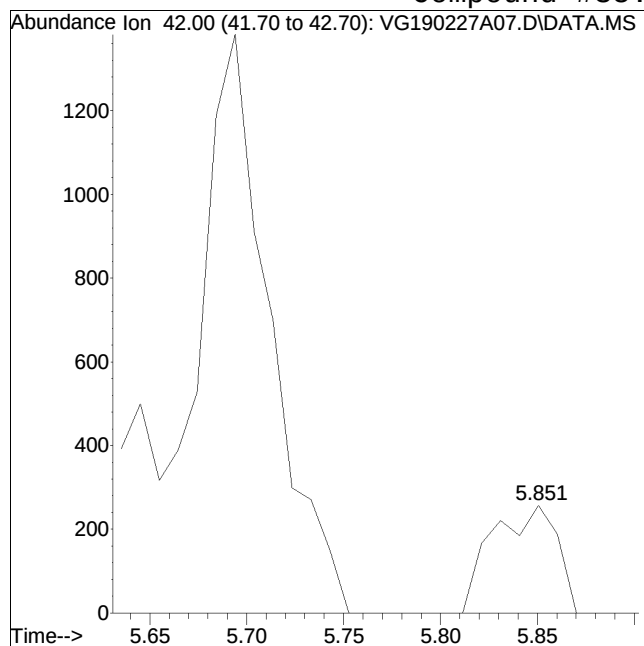


Manual Peak Response = 17868 M1

Manual Integration Report

Data Path : I:\VOLATILES\Gonzo\2019\190Method : G_190227N_8260.m
Data File : VG190227A07.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 10:18 pm Instrument : Gonzo
Sample : I8260STD2 Quant Date : 2/28/2019 12:09 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 597

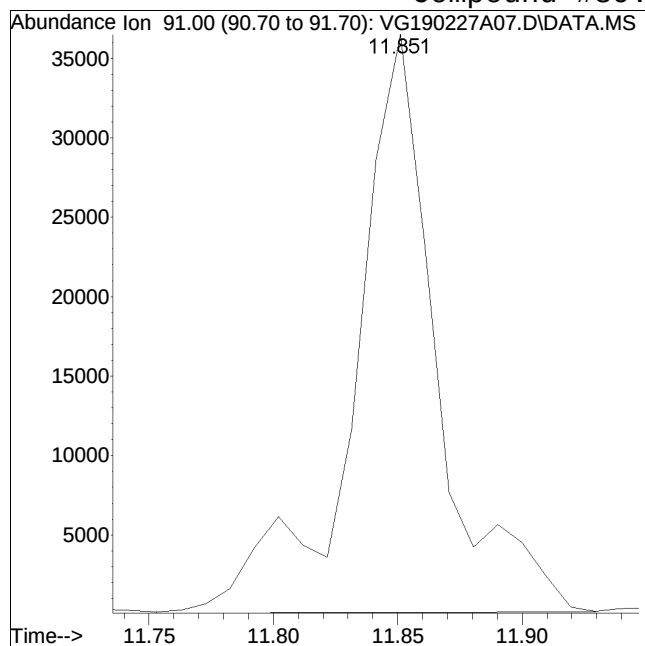
Manual Peak Response = 3415 M3

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.

Manual Integration Report

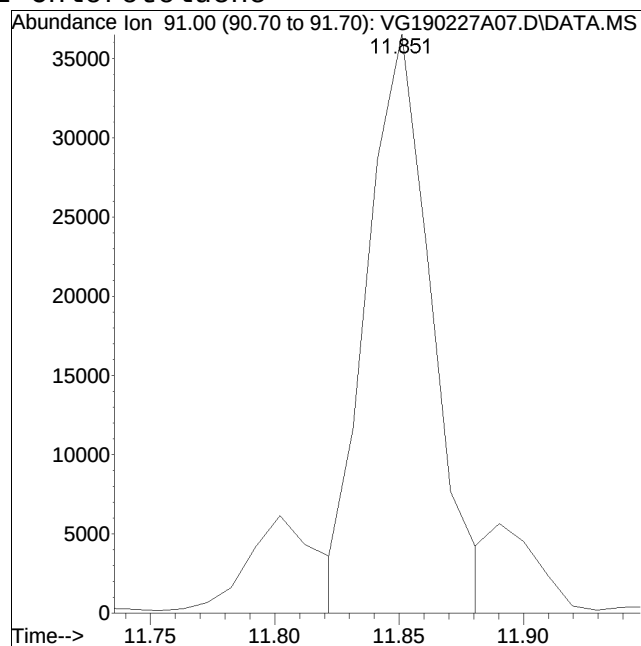
Data Path : I:\VOLATILES\Gonzo\2019\190Method : G_190227N_8260.m
Data File : VG190227A07.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 10:18 pm Instrument : Gonzo
Sample : I8260STDL2 Quant Date : 2/28/2019 12:09 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 84577

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

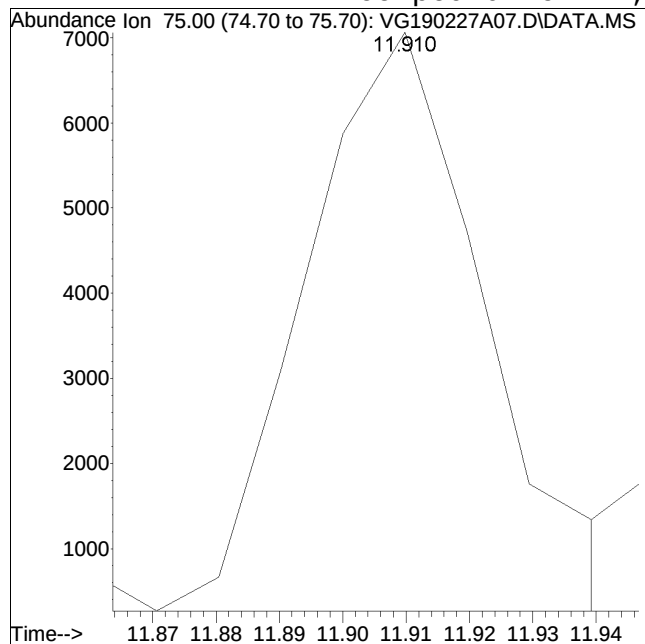


Manual Peak Response = 65837 M1

Manual Integration Report

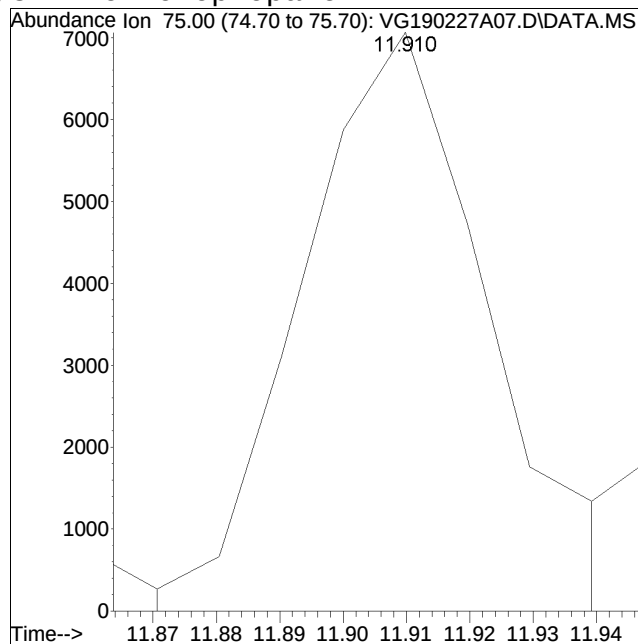
Data Path : I:\VOLATILES\Gonzo\2019\190Method : G_190227N_8260.m
Data File : VG190227A07.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 10:18 pm Instrument : Gonzo
Sample : I8260STDL2 Quant Date : 2/28/2019 12:09 pm

Compound #91: 1,2,3-Trichloropropane



Original Peak Response = 13308

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



Manual Peak Response = 14420 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A08.D
 Acq On : 27 Feb 2019 10:44 pm
 Operator : GONZO:NLK
 Sample : I8260STD3
 Misc : WG1211255
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 28 12:43:39 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.545	96	486223	10.000	ug/L	0.00
Standard Area 1 = 486223			Recovery	=	100.00%	
59) Chlorobenzene-d5	10.127	117	385045	10.000	ug/L	0.00
Standard Area 1 = 385045			Recovery	=	100.00%	
79) 1,4-Dichlorobenzene-d4	12.703	152	201296	10.000	ug/L	0.00
Standard Area 1 = 201296			Recovery	=	100.00%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.714	113	120061	9.774	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.74%	
43) 1,2-Dichloroethane-d4	6.261	65	117802	9.738	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.38%	
60) Toluene-d8	8.257	98	484626	10.244	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	102.44%	
83) 4-Bromofluorobenzene	11.538	95	172156	10.134	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.34%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.880	85	90346	9.673	ug/L	99
3) Chloromethane	2.114	50	88706	9.622	ug/L	98
4) Vinyl chloride	2.183	62	137082	9.874	ug/L	98
5) Bromomethane	2.535	94	77432	9.143	ug/L	99
6) Chloroethane	2.672	64	80305	9.849	ug/L	97
7) Trichlorofluoromethane	2.819	101	172532	9.723	ug/L	99
8) Ethyl ether	3.151	74	43032	9.400	ug/L	98
10) 1,1-Dichloroethene	3.357	96	83530	9.240	ug/L	99
11) Carbon disulfide	3.396	76	244083	9.005	ug/L	100
12) Freon-113	3.396	101	95099	9.012	ug/L	88
13) Iodomethane	3.513	142	99087	8.756	ug/L	99
14) Acrolein	3.709	56	9472	9.511	ug/L	97
15) Methylene chloride	3.953	84	91008	9.470	ug/L	97
17) Acetone	4.002	43	12821	9.985	ug/L	98
18) trans-1,2-Dichloroethene	4.110	96	92275	9.397	ug/L	99
19) Methyl acetate	4.119	43	41016	9.394	ug/L	99
20) Methyl tert-butyl ether	4.207	73	218884	9.517	ug/L	98
21) tert-Butyl alcohol	4.295	59	12515	45.378	ug/L	87
22) Diisopropyl ether	4.579	45	280603	9.514	ug/L	99
23) 1,1-Dichloroethane	4.726	63	170769	9.563	ug/L	99
24) Halothane	4.775	117	79982	9.038	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A08.D
 Acq On : 27 Feb 2019 10:44 pm
 Operator : GONZO:NLK
 Sample : I8260STD3
 Misc : WG1211255
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 28 12:43:39 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	4.785	53	17727	9.857	ug/L	99
26) Ethyl tert-butyl ether	4.941	59	258042	9.234	ug/L	95
27) Vinyl acetate	4.961	43	175285	9.466	ug/L	99
28) cis-1,2-Dichloroethene	5.264	96	102296	9.467	ug/L	98
29) 2,2-Dichloropropane	5.371	77	139980	9.288	ug/L	99
30) Bromochloromethane	5.459	128	49597	9.399	ug/L	95
31) Cyclohexane	5.459	56	154044	9.020	ug/L	96
32) Chloroform	5.528	83	170452	9.377	ug/L	99
33) Ethyl acetate	5.635	43	63135	9.317	ug/L	98
34) Carbon tetrachloride	5.665	117	148204	9.411	ug/L	99
35) Tetrahydrofuran	5.694	42	15553	9.524	ug/L	93
37) 1,1,1-Trichloroethane	5.743	97	172546	9.561	ug/L	98
39) 2-Butanone	5.841	43	24485	9.676	ug/L	92
40) 1,1-Dichloropropene	5.860	75	135940	9.410	ug/L	99
41) Benzene	6.115	78	411259	9.421	ug/L	99
42) tert-Amyl methyl ether	6.222	73	248275	9.269	ug/L	98
44) 1,2-Dichloroethane	6.330	62	114805	9.180	ug/L	97
47) Methyl cyclohexane	6.711	83	193077	8.920	ug/L	96
48) Trichloroethene	6.721	95	105901	8.931	ug/L	96
50) Dibromomethane	7.181	93	53520	9.376	ug/L	96
51) 1,2-Dichloropropane	7.288	63	91133	9.469	ug/L	98
53) 2-Chloroethyl vinyl ether	7.973	63	41449	9.737	ug/L	96
54) Bromodichloromethane	7.347	83	128079	9.265	ug/L	100
57) 1,4-Dioxane	7.572	88	19976	586.839	ug/L	95
58) cis-1,3-Dichloropropene	8.051	75	150334	9.341	ug/L	96
61) Toluene	8.315	92	273000	9.572	ug/L	99
62) 4-Methyl-2-pentanone	8.756	58	22686	9.556	ug/L	98
63) Tetrachloroethene	8.765	166	134114	9.615	ug/L	98
65) trans-1,3-Dichloropropene	8.805	75	133104	9.638	ug/L	98
67) Ethyl methacrylate	8.981	69	92014	9.403	ug/L	93
68) 1,1,2-Trichloroethane	8.991	83	66519	9.647	ug/L	99
69) Chlorodibromomethane	9.206	129	96345	9.712	ug/L	99
70) 1,3-Dichloropropane	9.324	76	132197	9.752	ug/L	100
71) 1,2-Dibromoethane	9.500	107	77224	9.798	ug/L	99
72) 2-Hexanone	9.774	43	39230	10.112	ug/L	94
73) Chlorobenzene	10.147	112	307619	9.546	ug/L	99
74) Ethylbenzene	10.176	91	528882	9.444	ug/L	99
75) 1,1,1,2-Tetrachloroethane	10.225	131	108106	9.714	ug/L	98
76) p/m Xylene	10.362	106	429669	18.945	ug/L	97
77) o Xylene	10.872	106	399028	18.768	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A08.D
 Acq On : 27 Feb 2019 10:44 pm
 Operator : GONZO:NLK
 Sample : I8260STD3
 Misc : WG1211255
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 28 12:43:39 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	10.930	104	657959	18.745	ug/L	98
80)	Bromoform	10.960	173	61855	9.590	ug/L	100
82)	Isopropylbenzene	11.224	105	546317	9.506	ug/L	99
84)	Bromobenzene	11.655	156	136541	9.570	ug/L	99
85)	n-Propylbenzene	11.685	91	625171	9.477	ug/L	98
86)	1,4-Dichlorobutane	11.704	55	107180	9.542	ug/L	97
87)	1,1,2,2-Tetrachloroethane	11.763	83	86088	9.691	ug/L	99
88)	4-Ethyltoluene	11.802	105	523577	9.609	ug/L	100
89)	2-Chlorotoluene	11.851	91	342839M1	9.376	ug/L	
90)	1,3,5-Trimethylbenzene	11.890	105	443615	9.417	ug/L	98
91)	1,2,3-Trichloropropane	11.910	75	70680M1	9.087	ug/L	
92)	trans-1,4-Dichloro-2-b...	11.959	53	19274	9.532	ug/L #	97
93)	4-Chlorotoluene	12.027	91	359463	9.498	ug/L	97
94)	tert-Butylbenzene	12.223	119	402013	9.681	ug/L	97
97)	1,2,4-Trimethylbenzene	12.302	105	431882	9.517	ug/L	98
98)	sec-Butylbenzene	12.410	105	547934	9.660	ug/L	99
99)	p-Isopropyltoluene	12.556	119	502631	9.653	ug/L	99
100)	1,3-Dichlorobenzene	12.635	146	251109	9.538	ug/L	98
101)	1,4-Dichlorobenzene	12.723	146	258462	9.550	ug/L	99
102)	p-Diethylbenzene	12.919	119	285311	9.548	ug/L	99
103)	n-Butylbenzene	12.978	91	422563	9.530	ug/L	98
104)	1,2-Dichlorobenzene	13.144	146	227416	9.657	ug/L	98
105)	1,2,4,5-Tetramethylben...	13.703	119	403479	9.453	ug/L	99
106)	1,2-Dibromo-3-chloropr...	13.908	155	12788	9.880	ug/L	100
107)	1,3,5-Trichlorobenzene	13.928	180	183436	9.633	ug/L	98
108)	Hexachlorobutadiene	14.496	225	78817	9.487	ug/L	99
109)	1,2,4-Trichlorobenzene	14.525	180	156578	9.585	ug/L	99
110)	Naphthalene	14.819	128	278780	9.882	ug/L	100
111)	1,2,3-Trichlorobenzene	14.986	180	132745	9.871	ug/L	99

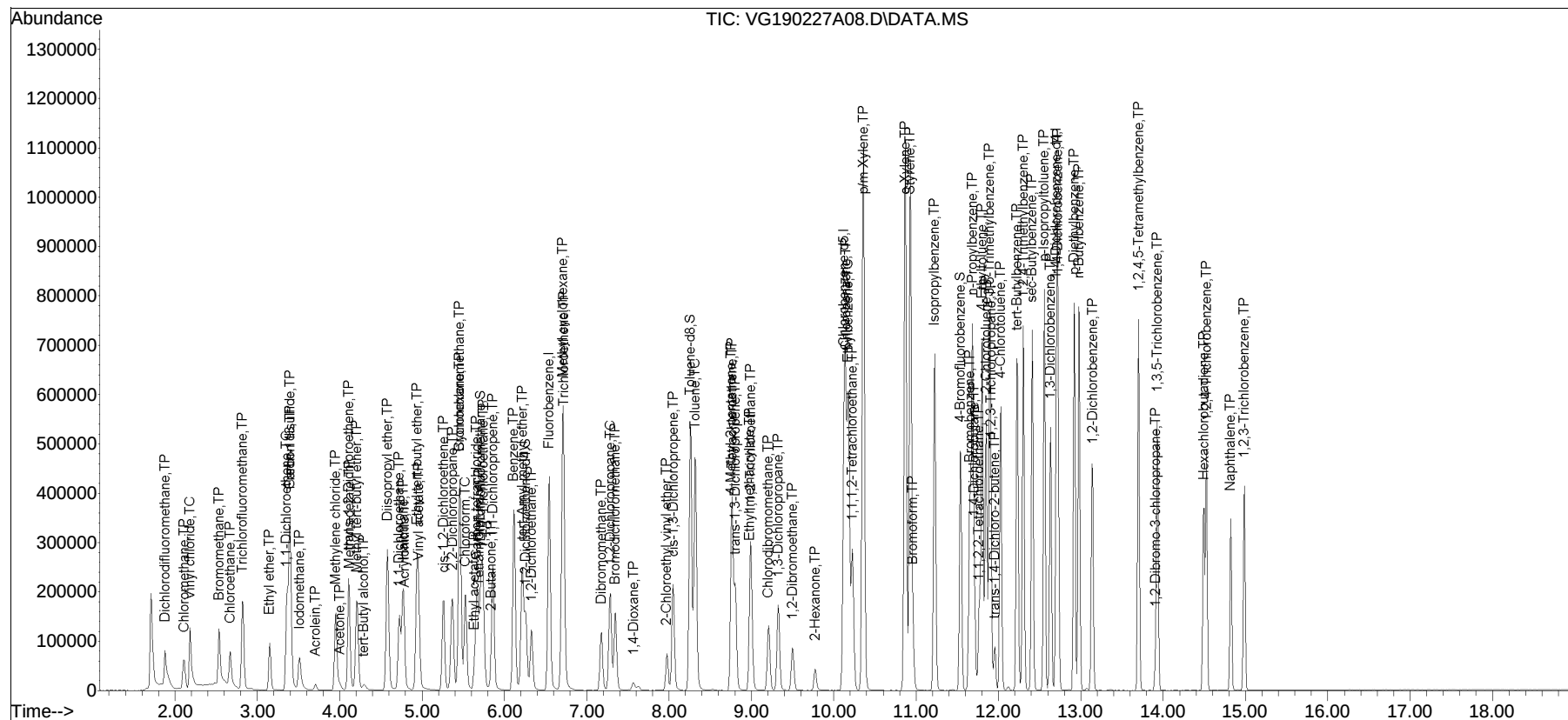
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A08.D
 Acq On : 27 Feb 2019 10:44 pm
 Operator : GONZO:NLK
 Sample : I8260STD3
 Misc : WG1211255
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 28 12:43:39 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

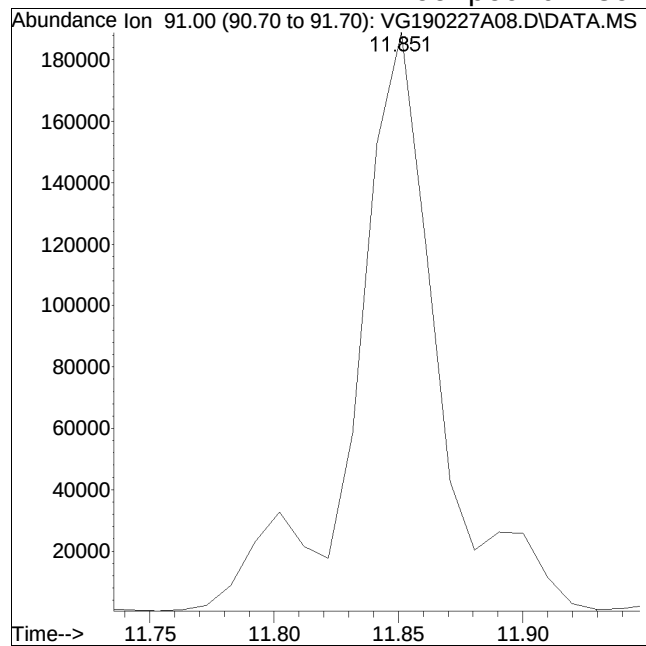
Sub List : 8260-Curve - Megamix plus Diox0227A\VG190227A08.D•



Manual Integration Report

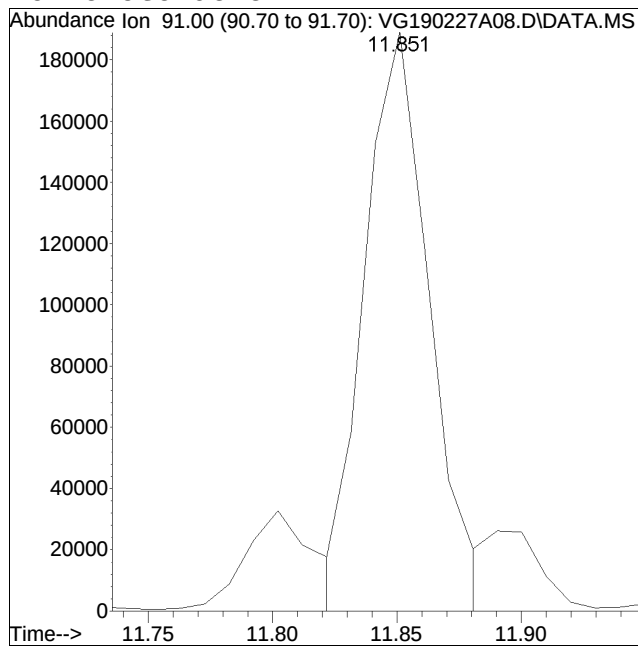
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190227A08.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 10:44 pm Instrument : Gonzo
Sample : I8260STD3 Quant Date : 2/28/2019 12:43 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 439976

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

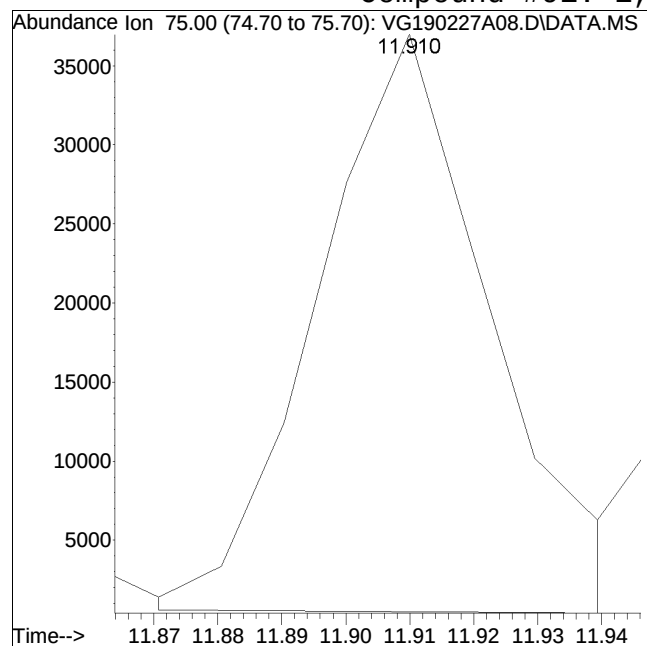


Manual Peak Response = 342839 M1

Manual Integration Report

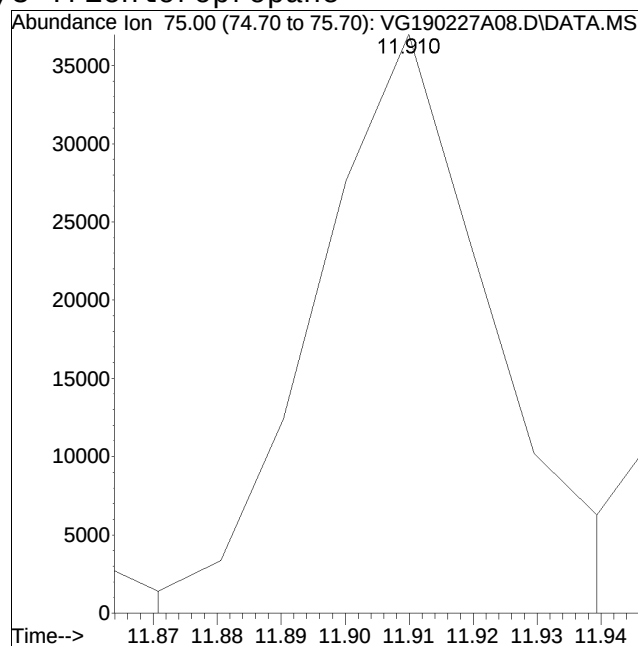
Data Path : I:\VOLATILES\Gonzo\2019\190Method : G_190227N_8260.m
Data File : VG190227A08.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 10:44 pm Instrument : Gonzo
Sample : I8260STD3 Quant Date : 2/28/2019 12:43 pm

Compound #91: 1,2,3-Trichloropropane



Original Peak Response = 68645

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



Manual Peak Response = 70680 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A09.D
 Acq On : 27 Feb 2019 11:09 pm
 Operator : GONZO:NLK
 Sample : I8260STD4
 Misc : WG1211255
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 28 12:14:37 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.545	96	499993	10.000	ug/L	0.00
Standard Area 1 = 486223			Recovery	=	102.83%	
59) Chlorobenzene-d5	10.127	117	405605	10.000	ug/L	0.00
Standard Area 1 = 385045			Recovery	=	105.34%	
79) 1,4-Dichlorobenzene-d4	12.713	152	215912	10.000	ug/L	0.00
Standard Area 1 = 201296			Recovery	=	107.26%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.713	113	125855	10.194	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	101.94%	
43) 1,2-Dichloroethane-d4	6.261	65	122710	10.130	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	101.30%	
60) Toluene-d8	8.257	98	501252	9.819	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	98.19%	
83) 4-Bromofluorobenzene	11.537	95	179343	9.712	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	97.12%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.879	85	299238	32.209	ug/L	100
3) Chloromethane	2.114	50	282813	31.004	ug/L	100
4) Vinyl chloride	2.183	62	429257	30.451	ug/L	98
5) Bromomethane	2.535	94	228029	28.638	ug/L	100
6) Chloroethane	2.672	64	254579	30.828	ug/L	98
7) Trichlorofluoromethane	2.828	101	565051	31.849	ug/L	98
8) Ethyl ether	3.151	74	138330	31.261	ug/L	99
10) 1,1-Dichloroethene	3.356	96	275949	32.126	ug/L	99
11) Carbon disulfide	3.395	76	800592	31.897	ug/L	100
12) Freon-113	3.395	101	327658	33.506	ug/L	94
13) Iodomethane	3.513	142	370287	36.341	ug/L	99
14) Acrolein	3.708	56	31106	31.936	ug/L	96
15) Methylene chloride	3.953	84	282310	30.166	ug/L	97
17) Acetone	4.002	43	37591	28.512	ug/L	99
18) trans-1,2-Dichloroethene	4.109	96	302329	31.862	ug/L	97
19) Methyl acetate	4.119	43	128480	30.385	ug/L	99
20) Methyl tert-butyl ether	4.207	73	696777	30.956	ug/L	100
21) tert-Butyl alcohol	4.295	59	43430	168.733	ug/L	96
22) Diisopropyl ether	4.579	45	895368	31.030	ug/L	99
23) 1,1-Dichloroethane	4.726	63	542466	30.891	ug/L	99
24) Halothane	4.775	117	272099	33.083	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A09.D
 Acq On : 27 Feb 2019 11:09 pm
 Operator : GONZO:NLK
 Sample : I8260STD4
 Misc : WG1211255
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 28 12:14:37 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	4.784	53	53475	29.335	ug/L	96
26) Ethyl tert-butyl ether	4.941	59	842616	31.755	ug/L	95
27) Vinyl acetate	4.960	43	562714	31.219	ug/L	98
28) cis-1,2-Dichloroethene	5.264	96	328350	31.214	ug/L	98
29) 2,2-Dichloropropane	5.371	77	461830	32.084	ug/L	99
30) Bromochloromethane	5.459	128	158660	31.109	ug/L	94
31) Cyclohexane	5.459	56	515265	32.528	ug/L	94
32) Chloroform	5.528	83	570484	32.547	ug/L	99
33) Ethyl acetate	5.635	43	193648	29.827	ug/L	99
34) Carbon tetrachloride	5.665	117	495923	32.541	ug/L	99
35) Tetrahydrofuran	5.684	42	47844M1	29.915	ug/L	
37) 1,1,1-Trichloroethane	5.743	97	555303	31.297	ug/L	99
39) 2-Butanone	5.841	43	72151	28.656	ug/L	97
40) 1,1-Dichloropropene	5.860	75	442679	31.667	ug/L	97
41) Benzene	6.115	78	1299294	30.723	ug/L	99
42) tert-Amyl methyl ether	6.222	73	806816	31.602	ug/L	99
44) 1,2-Dichloroethane	6.330	62	361845	30.650	ug/L	98
47) Methyl cyclohexane	6.711	83	650270	32.752	ug/L	96
48) Trichloroethene	6.721	95	352867	32.403	ug/L	96
50) Dibromomethane	7.181	93	171785	31.213	ug/L	96
51) 1,2-Dichloropropane	7.288	63	289986	30.944	ug/L	97
53) 2-Chloroethyl vinyl ether	7.973	63	128076	30.049	ug/L	98
54) Bromodichloromethane	7.347	83	431419	32.756	ug/L	99
57) 1,4-Dioxane	7.562	88	24613	599.098	ug/L	98
58) cis-1,3-Dichloropropene	8.051	75	495034	32.022	ug/L	98
61) Toluene	8.315	92	874449	30.407	ug/L	100
62) 4-Methyl-2-pentanone	8.755	58	73640	30.815	ug/L	95
63) Tetrachloroethene	8.765	166	446693	31.619	ug/L	99
65) trans-1,3-Dichloropropene	8.804	75	447094	31.887	ug/L	100
67) Ethyl methacrylate	8.981	69	310395	32.024	ug/L	95
68) 1,1,2-Trichloroethane	9.000	83	213103	30.412	ug/L	99
69) Chlorodibromomethane	9.206	129	328233	32.342	ug/L	100
70) 1,3-Dichloropropane	9.324	76	419777	30.144	ug/L	100
71) 1,2-Dibromoethane	9.500	107	252042	30.983	ug/L	99
72) 2-Hexanone	9.774	43	123256	29.826	ug/L	97
73) Chlorobenzene	10.146	112	992326	30.623	ug/L	99
74) Ethylbenzene	10.176	91	1729005	31.035	ug/L	99
75) 1,1,1,2-Tetrachloroethane	10.225	131	360324	31.641	ug/L	99
76) p/m Xylene	10.362	106	1447914	63.980	ug/L	98
77) o Xylene	10.871	106	1352463	64.352	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A09.D
 Acq On : 27 Feb 2019 11:09 pm
 Operator : GONZO:NLK
 Sample : I8260STD4
 Misc : WG1211255
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 28 12:14:37 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	10.930	104	2279085	65.766	ug/L	99
80)	Bromoform	10.960	173	217473	32.778	ug/L	99
82)	Isopropylbenzene	11.224	105	1826364	31.167	ug/L	100
84)	Bromobenzene	11.655	156	448474	30.622	ug/L	99
85)	n-Propylbenzene	11.684	91	2100183	31.320	ug/L	98
86)	1,4-Dichlorobutane	11.714	55	344508	29.967	ug/L	99
87)	1,1,2,2-Tetrachloroethane	11.763	83	277583	30.061	ug/L	100
88)	4-Ethyltoluene	11.802	105	1735359	30.901	ug/L	99
89)	2-Chlorotoluene	11.851	91	1140407M1	31.012	ug/L	
90)	1,3,5-Trimethylbenzene	11.900	105	1510423	31.743	ug/L	99
91)	1,2,3-Trichloropropane	11.910	75	238159M1	31.414	ug/L	
92)	trans-1,4-Dichloro-2-b...	11.959	53	65227	31.551	ug/L #	94
93)	4-Chlorotoluene	12.027	91	1175318	30.483	ug/L	97
94)	tert-Butylbenzene	12.223	119	1327412	30.784	ug/L	98
97)	1,2,4-Trimethylbenzene	12.302	105	1453229	31.352	ug/L	98
98)	sec-Butylbenzene	12.409	105	1855865	31.577	ug/L	98
99)	p-Isopropyltoluene	12.556	119	1722160	31.944	ug/L	99
100)	1,3-Dichlorobenzene	12.635	146	838708	31.139	ug/L	99
101)	1,4-Dichlorobenzene	12.723	146	853610	30.791	ug/L	98
102)	p-Diethylbenzene	12.919	119	999260	32.653	ug/L	98
103)	n-Butylbenzene	12.977	91	1438360	31.735	ug/L	98
104)	1,2-Dichlorobenzene	13.144	146	756872	31.028	ug/L	99
105)	1,2,4,5-Tetramethylben...	13.702	119	1391588	32.155	ug/L	99
106)	1,2-Dibromo-3-chloropr...	13.908	155	43789	31.924	ug/L	97
107)	1,3,5-Trichlorobenzene	13.928	180	618008	31.410	ug/L	98
108)	Hexachlorobutadiene	14.496	225	272745	32.262	ug/L	99
109)	1,2,4-Trichlorobenzene	14.525	180	530447	31.584	ug/L	98
110)	Naphthalene	14.819	128	915029	30.601	ug/L	100
111)	1,2,3-Trichlorobenzene	14.986	180	436241	30.638	ug/L	100

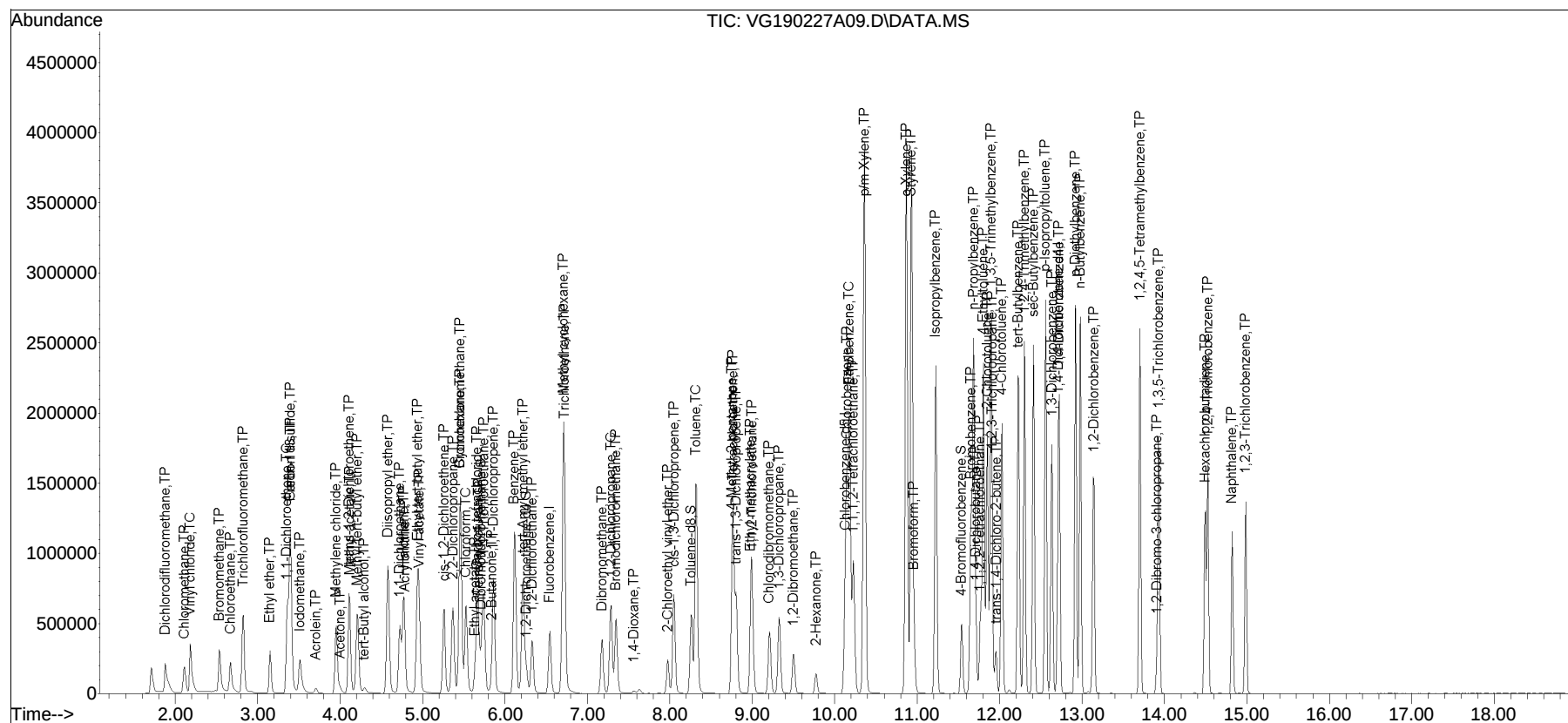
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A09.D
 Acq On : 27 Feb 2019 11:09 pm
 Operator : GONZO:NLK
 Sample : I8260STD4
 Misc : WG1211255
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 28 12:14:37 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

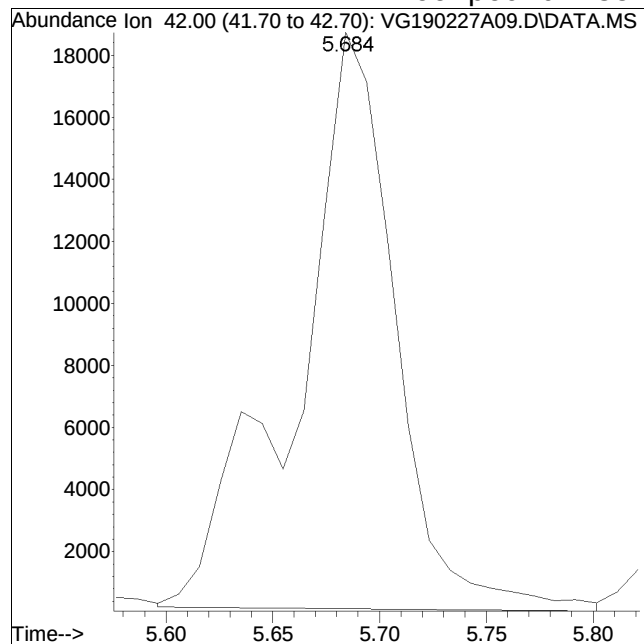
Sub List : 8260-Curve - Megamix plus Diox0227A\VG190227A08.D•



Manual Integration Report

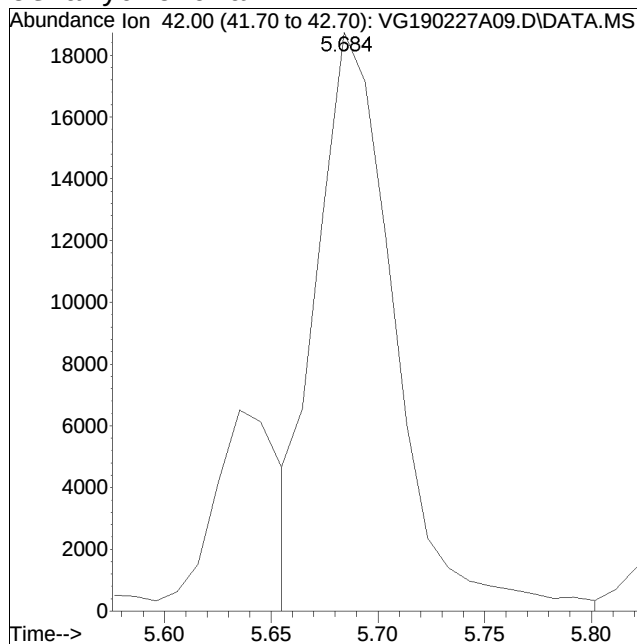
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190227A09.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 11:09 pm Instrument : Gonzo
Sample : I8260STD4 Quant Date : 2/28/2019 12:09 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 59932

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

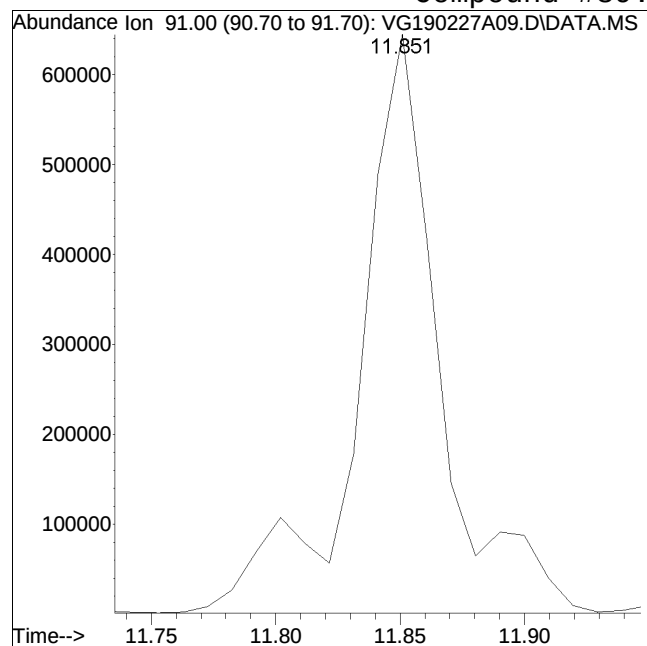


Manual Peak Response = 47844 M1

Manual Integration Report

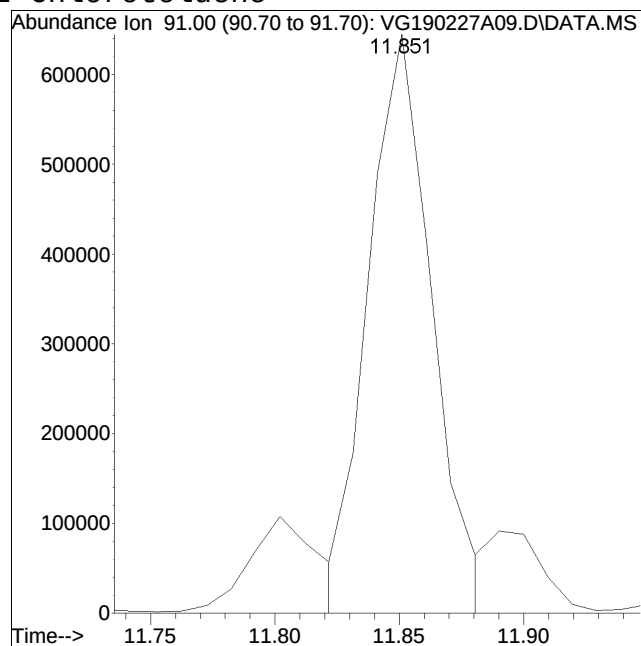
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190227A09.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 11:09 pm Instrument : Gonzo
Sample : I8260STDL4 Quant Date : 2/28/2019 12:09 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 1467401

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

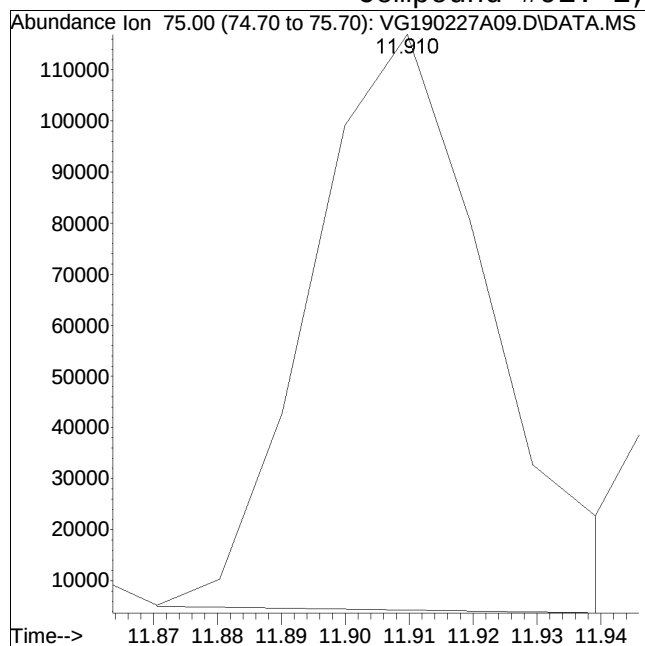


Manual Peak Response = 1140407 M1

Manual Integration Report

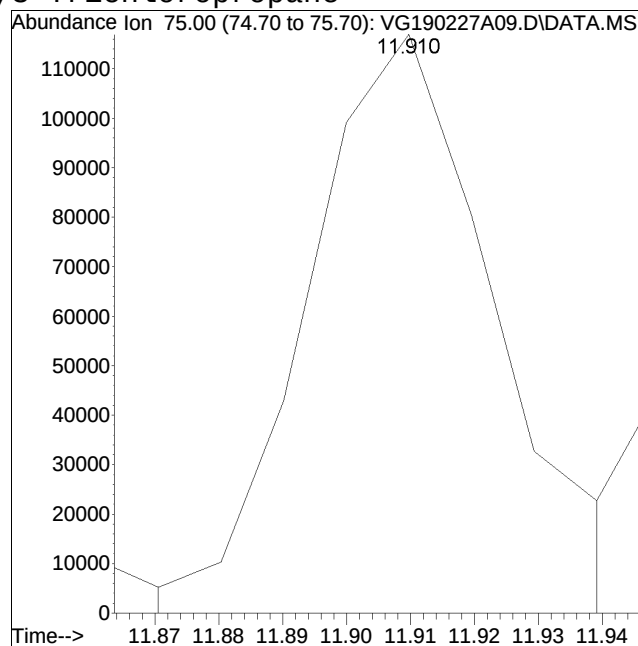
Data Path : I:\VOLATILES\Gonzo\2019\190Method : G_190227N_8260.m
Data File : VG190227A09.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 11:09 pm Instrument : Gonzo
Sample : I8260STDL4 Quant Date : 2/28/2019 12:09 pm

Compound #91: 1,2,3-Trichloropropane



Original Peak Response = 220191

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



Manual Peak Response = 238159 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A10.D
 Acq On : 27 Feb 2019 11:34 pm
 Operator : GONZO:NLK
 Sample : I8260STD16
 Misc : WG1211255
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 28 12:15:35 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.545	96	503894	10.000	ug/L	0.00
Standard Area 1 = 486223			Recovery	=	103.63%	
59) Chlorobenzene-d5	10.127	117	429531	10.000	ug/L	0.00
Standard Area 1 = 385045			Recovery	=	111.55%	
79) 1,4-Dichlorobenzene-d4	12.713	152	225914	10.000	ug/L	0.00
Standard Area 1 = 201296			Recovery	=	112.23%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.714	113	129342	10.395	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.95%	
43) 1,2-Dichloroethane-d4	6.261	65	124343	10.185	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.85%	
60) Toluene-d8	8.257	98	512076	9.472	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	94.72%	
83) 4-Bromofluorobenzene	11.538	95	184806	9.565	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	95.65%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.879	85	820500	87.633	ug/L	99
3) Chloromethane	2.114	50	760959	82.776	ug/L	100
4) Vinyl chloride	2.183	62	1166242	82.093	ug/L	98
5) Bromomethane	2.535	94	634156	79.026	ug/L	98
6) Chloroethane	2.672	64	700689	84.194	ug/L	98
7) Trichlorofluoromethane	2.828	101	1547292	86.536	ug/L	99
8) Ethyl ether	3.151	74	386682	86.708	ug/L	98
10) 1,1-Dichloroethene	3.356	96	798290	92.218	ug/L	98
11) Carbon disulfide	3.396	76	2355321	93.113	ug/L	100
12) Freon-113	3.396	101	942307	95.612	ug/L	91
13) Iodomethane	3.513	142	1085554	105.714	ug/L	99
14) Acrolein	3.708	56	85674	87.278	ug/L	96
15) Methylene chloride	3.953	84	791573	83.928	ug/L	96
17) Acetone	4.002	43	106319	80.018	ug/L	97
18) trans-1,2-Dichloroethene	4.110	96	856986	89.616	ug/L	96
19) Methyl acetate	4.119	43	365876	85.859	ug/L	99
20) Methyl tert-butyl ether	4.207	73	1971176	86.898	ug/L	100
21) tert-Butyl alcohol	4.295	59	132229	509.756	ug/L	97
22) Diisopropyl ether	4.579	45	2510364	86.326	ug/L	99
23) 1,1-Dichloroethane	4.726	63	1523512	86.086	ug/L	99
24) Halothane	4.775	117	786898	94.934	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A10.D
 Acq On : 27 Feb 2019 11:34 pm
 Operator : GONZO:NLK
 Sample : I8260STD16
 Misc : WG1211255
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 28 12:15:35 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	4.784	53	156121	84.981	ug/L	98
26) Ethyl tert-butyl ether	4.941	59	2424071	90.647	ug/L	95
27) Vinyl acetate	4.960	43	1577743	86.854	ug/L	97
28) cis-1,2-Dichloroethene	5.264	96	923676	87.128	ug/L	97
29) 2,2-Dichloropropane	5.371	77	1307696	90.144	ug/L	97
30) Bromochloromethane	5.459	128	455065	88.535	ug/L	94
31) Cyclohexane	5.459	56	1496953	93.769	ug/L	94
32) Chloroform	5.528	83	1537999	87.066	ug/L	99
33) Ethyl acetate	5.635	43	546841	83.577	ug/L	99
34) Carbon tetrachloride	5.665	117	1441132	93.830	ug/L	99
35) Tetrahydrofuran	5.684	42	136149M1	84.469	ug/L	
37) 1,1,1-Trichloroethane	5.743	97	1573790	88.011	ug/L	98
39) 2-Butanone	5.831	43	208937	82.340	ug/L	99
40) 1,1-Dichloropropene	5.860	75	1254432	89.042	ug/L	97
41) Benzene	6.115	78	3711611	87.085	ug/L	99
42) tert-Amyl methyl ether	6.222	73	2335750	90.780	ug/L	97
44) 1,2-Dichloroethane	6.330	62	1000036	84.053	ug/L	98
47) Methyl cyclohexane	6.711	83	1952213	97.565	ug/L	95
48) Trichloroethene	6.721	95	1059148	96.506	ug/L	96
50) Dibromomethane	7.181	93	487091	87.819	ug/L	96
51) 1,2-Dichloropropane	7.288	63	819128	86.731	ug/L	97
53) 2-Chloroethyl vinyl ether	7.973	63	376396	87.625	ug/L	97
54) Bromodichloromethane	7.347	83	1228605	92.562	ug/L	100
57) 1,4-Dioxane	7.572	88	29307	707.830	ug/L	96
58) cis-1,3-Dichloropropene	8.051	75	1421808	91.260	ug/L	98
61) Toluene	8.325	92	2571338	84.433	ug/L	99
62) 4-Methyl-2-pentanone	8.755	58	226404	89.463	ug/L	99
63) Tetrachloroethene	8.765	166	1303431	87.123	ug/L	99
65) trans-1,3-Dichloropropene	8.804	75	1297219	87.365	ug/L	99
67) Ethyl methacrylate	8.981	69	936813	91.267	ug/L	97
68) 1,1,2-Trichloroethane	9.000	83	615156	82.900	ug/L	99
69) Chlorodibromomethane	9.206	129	952031	88.581	ug/L	100
70) 1,3-Dichloropropane	9.324	76	1196870	81.160	ug/L	100
71) 1,2-Dibromoethane	9.500	107	713724	82.850	ug/L	99
72) 2-Hexanone	9.774	43	356503	81.463	ug/L	98
73) Chlorobenzene	10.147	112	2935206	85.535	ug/L	99
74) Ethylbenzene	10.186	91	5247373	88.941	ug/L	99
75) 1,1,1,2-Tetrachloroethane	10.225	131	1042655	86.459	ug/L	99
76) p/m Xylene	10.362	106	4498438	187.705	ug/L	100
77) o Xylene	10.871	106	4221087	189.657	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A10.D
 Acq On : 27 Feb 2019 11:34 pm
 Operator : GONZO:NLK
 Sample : I8260STD6
 Misc : WG1211255
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 28 12:15:35 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	10.930	104	7102654	193.539	ug/L	99
80)	Bromoform	10.960	173	666543	96.016	ug/L	99
82)	Isopropylbenzene	11.224	105	5453142	88.939	ug/L	100
84)	Bromobenzene	11.655	156	1313705	85.729	ug/L	99
85)	n-Propylbenzene	11.684	91	6444377	91.849	ug/L	99
86)	1,4-Dichlorobutane	11.714	55	1032799	85.861	ug/L	99
87)	1,1,2,2-Tetrachloroethane	11.763	83	802078	83.017	ug/L	100
88)	4-Ethyltoluene	11.802	105	5233796	89.069	ug/L	100
89)	2-Chlorotoluene	11.851	91	3381592M1	87.887	ug/L	
90)	1,3,5-Trimethylbenzene	11.900	105	4616364	92.723	ug/L	99
91)	1,2,3-Trichloropropane	11.910	75	738898M1	93.149	ug/L	
92)	trans-1,4-Dichloro-2-b...	11.959	53	192001	88.761	ug/L #	88
93)	4-Chlorotoluene	12.027	91	3545292	87.880	ug/L	98
94)	tert-Butylbenzene	12.233	119	3951185	87.575	ug/L	99
97)	1,2,4-Trimethylbenzene	12.302	105	4412250	90.975	ug/L	99
98)	sec-Butylbenzene	12.409	105	5489263	89.264	ug/L	99
99)	p-Isopropyltoluene	12.556	119	5079087	90.039	ug/L	100
100)	1,3-Dichlorobenzene	12.635	146	2437962	86.508	ug/L	99
101)	1,4-Dichlorobenzene	12.723	146	2476580	85.378	ug/L	99
102)	p-Diethylbenzene	12.929	119	2955046	92.286	ug/L	98
103)	n-Butylbenzene	12.978	91	4318448	91.060	ug/L	99
104)	1,2-Dichlorobenzene	13.144	146	2168631	84.968	ug/L	99
105)	1,2,4,5-Tetramethylben...	13.702	119	4198605	92.721	ug/L	99
106)	1,2-Dibromo-3-chloropr...	13.908	155	132480	92.308	ug/L	96
107)	1,3,5-Trichlorobenzene	13.928	180	1789080	86.903	ug/L	99
108)	Hexachlorobutadiene	14.496	225	807789	91.321	ug/L	99
109)	1,2,4-Trichlorobenzene	14.525	180	1544204	87.875	ug/L	99
110)	Naphthalene	14.819	128	2661742	85.074	ug/L	100
111)	1,2,3-Trichlorobenzene	14.986	180	1265397	84.938	ug/L	100

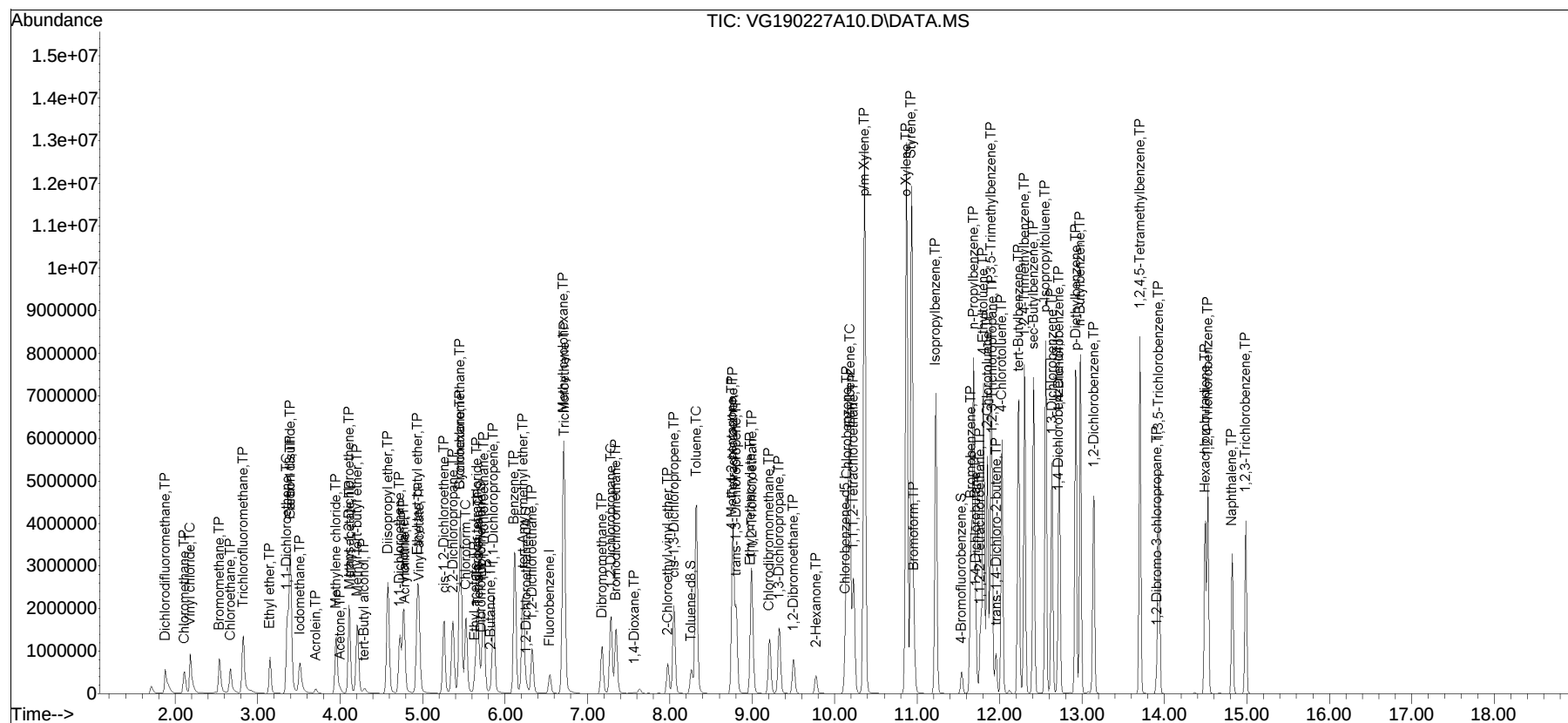
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
Data File : VG190227A10.D
Acq On : 27 Feb 2019 11:34 pm
Operator : GONZO:NLK
Sample : I8260STD6
Misc : WG1211255
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 28 12:15:35 2019
Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Feb 28 12:09:07 2019
Response via : Initial Calibration

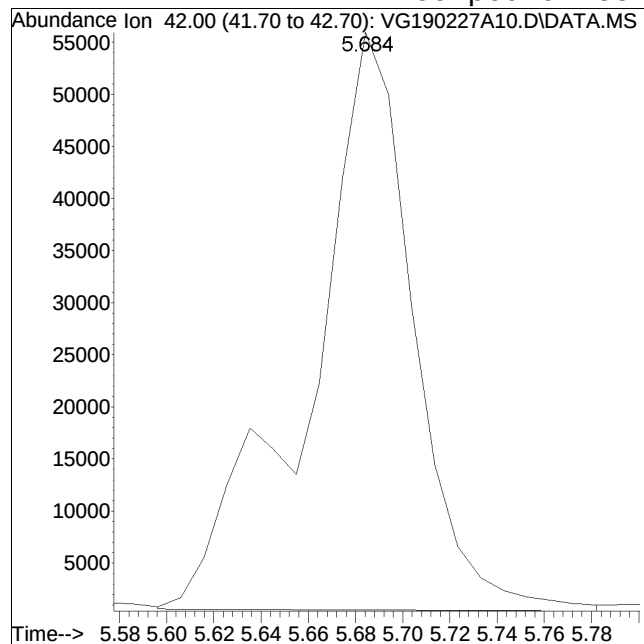
Sub List : 8260-Curve - Megamix plus Diox0227A\VG190227A08.D•



Manual Integration Report

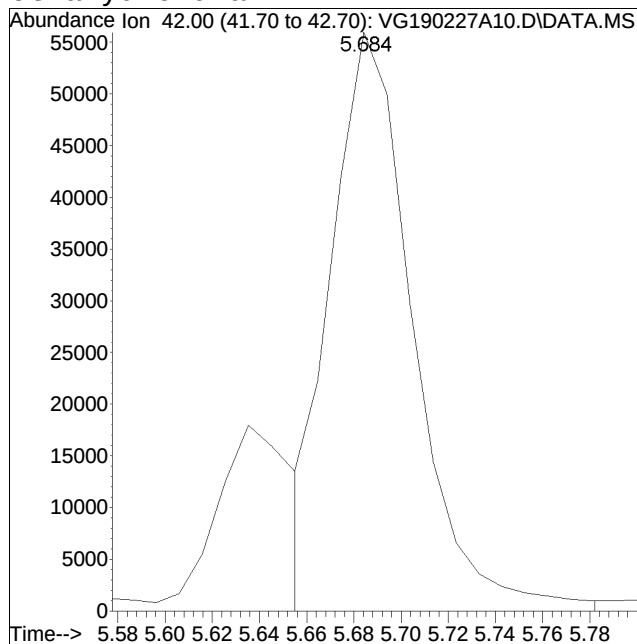
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190227A10.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 11:34 pm Instrument : Gonzo
Sample : I8260STD6 Quant Date : 2/28/2019 12:10 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 169922

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

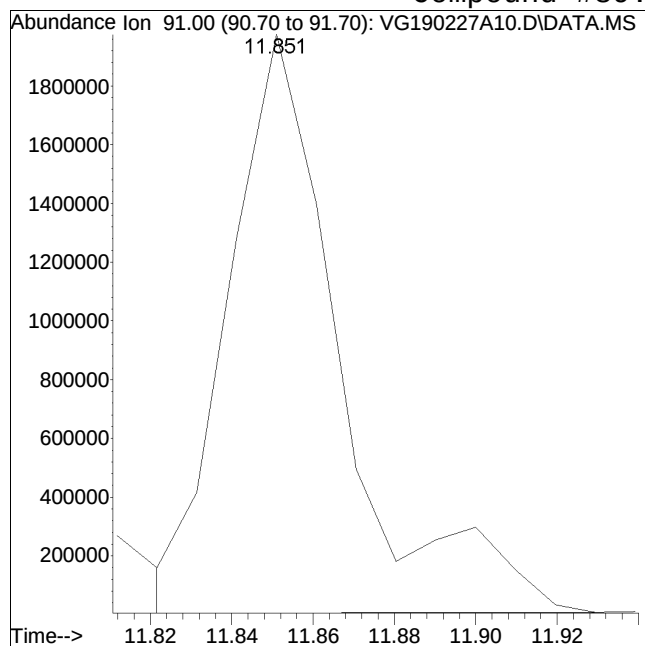


Manual Peak Response = 136149 M1

Manual Integration Report

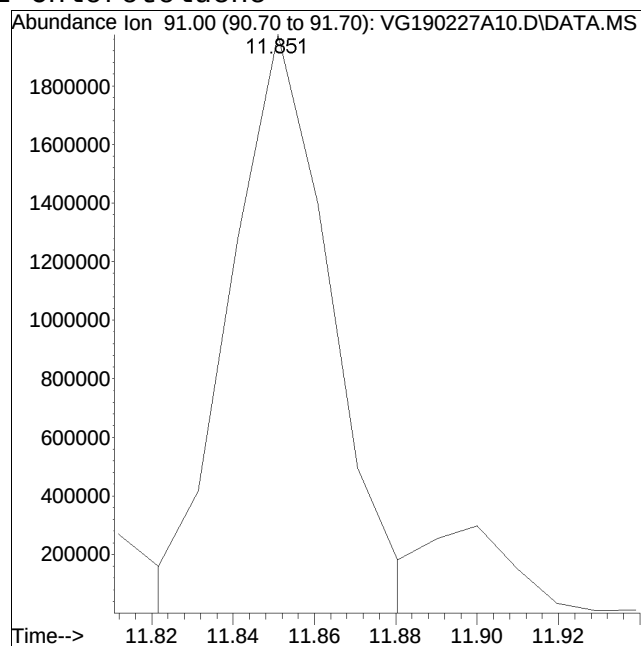
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190227A10.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 11:34 pm Instrument : Gonzo
Sample : I8260STDL6 Quant Date : 2/28/2019 12:10 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 3777511

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

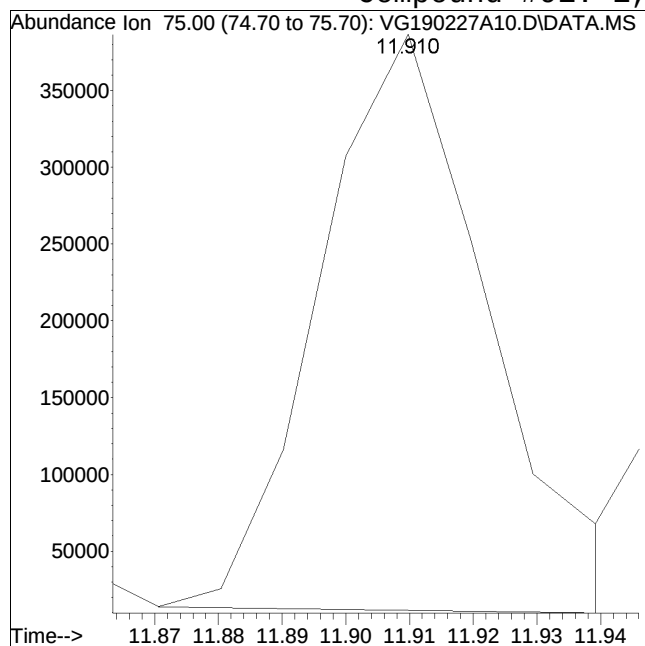


Manual Peak Response = 3381592 M1

Manual Integration Report

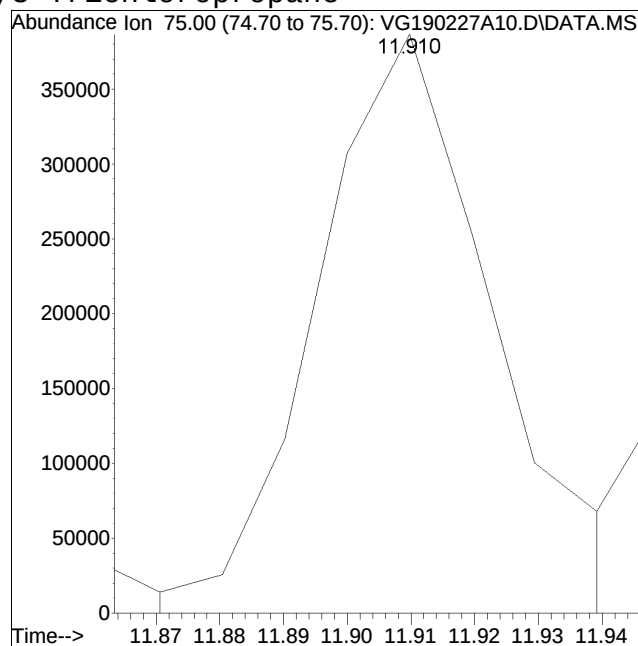
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190227A10.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 11:34 pm Instrument : Gonzo
Sample : I8260STD6 Quant Date : 2/28/2019 12:10 pm

Compound #91: 1,2,3-Trichloropropane



Original Peak Response = 690026

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



Manual Peak Response = 738898 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A11.D
 Acq On : 27 Feb 2019 11:59 pm
 Operator : GONZO:NLK
 Sample : I8260STD18
 Misc : WG1211255
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 28 12:16:30 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.545	96	520440	10.000	ug/L	0.00
Standard Area 1 = 486223			Recovery	=	107.04%	
59) Chlorobenzene-d5	10.127	117	452285	10.000	ug/L	0.00
Standard Area 1 = 385045			Recovery	=	117.46%	
79) 1,4-Dichlorobenzene-d4	12.713	152	238688	10.000	ug/L	0.00
Standard Area 1 = 201296			Recovery	=	118.58%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.714	113	138669	10.791	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	107.91%	
43) 1,2-Dichloroethane-d4	6.261	65	133816	10.613	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	106.13%	
60) Toluene-d8	8.266	98	530213	9.314	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	93.14%	
83) 4-Bromofluorobenzene	11.538	95	186830	9.152	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	91.52%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.880	85	1263238	130.629	ug/L	99
3) Chloromethane	2.114	50	1152241	121.354	ug/L	99
4) Vinyl chloride	2.183	62	1794527	122.302	ug/L	97
5) Bromomethane	2.535	94	1016858	122.689	ug/L	99
6) Chloroethane	2.672	64	1069244	124.394	ug/L	97
7) Trichlorofluoromethane	2.828	101	2392222	129.538	ug/L	99
8) Ethyl ether	3.151	74	614811	133.480	ug/L	99
10) 1,1-Dichloroethene	3.366	96	1298038	145.181	ug/L	98
11) Carbon disulfide	3.396	76	3966557	151.824	ug/L	100
12) Freon-113	3.396	101	1539876	151.278	ug/L	88
13) Iodomethane	3.513	142	1668311	157.299	ug/L	99
14) Acrolein	3.709	56	134463	132.625	ug/L	100
15) Methylene chloride	3.953	84	1251737	128.499	ug/L	96
17) Acetone	4.002	43	151925	110.706	ug/L	100
18) trans-1,2-Dichloroethene	4.110	96	1377849	139.503	ug/L	97
19) Methyl acetate	4.119	43	562145	127.723	ug/L	99
20) Methyl tert-butyl ether	4.207	73	3125797	133.417	ug/L	99
21) tert-Butyl alcohol	4.295	59	159623	595.799	ug/L	96
22) Diisopropyl ether	4.579	45	4061032	135.210	ug/L	99
23) 1,1-Dichloroethane	4.726	63	2436985	133.324	ug/L	99
24) Halothane	4.775	117	1268861	148.213	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A11.D
 Acq On : 27 Feb 2019 11:59 pm
 Operator : GONZO:NLK
 Sample : I8260STD18
 Misc : WG1211255
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 28 12:16:30 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	4.784	53	245015	129.129	ug/L	96
26) Ethyl tert-butyl ether	4.941	59	3950727	143.038	ug/L	95
27) Vinyl acetate	4.961	43	2620138	139.651	ug/L	97
28) cis-1,2-Dichloroethene	5.264	96	1467431	134.018	ug/L	97
29) 2,2-Dichloropropane	5.371	77	2073512	138.390	ug/L	96
30) Bromochloromethane	5.459	128	727039	136.952	ug/L	94
31) Cyclohexane	5.459	56	2478742	150.332	ug/L	94
32) Chloroform	5.528	83	2454342	134.523	ug/L	99
33) Ethyl acetate	5.635	43	842347	124.648	ug/L	99
34) Carbon tetrachloride	5.675	117	2320062	146.253	ug/L	99
35) Tetrahydrofuran	5.684	42	205736M1	123.584	ug/L	
37) 1,1,1-Trichloroethane	5.743	97	2545400	137.821	ug/L	98
39) 2-Butanone	5.831	43	306804	117.065	ug/L	96
40) 1,1-Dichloropropene	5.860	75	2010095	138.145	ug/L	97
41) Benzene	6.124	78	6014145	136.623	ug/L	99
42) tert-Amyl methyl ether	6.222	73	3781096	142.282	ug/L	97
44) 1,2-Dichloroethane	6.330	62	1590524	129.433	ug/L	98
47) Methyl cyclohexane	6.711	83	3249813	157.251	ug/L	95
48) Trichloroethene	6.721	95	1760267	155.290	ug/L	97
50) Dibromomethane	7.181	93	772434	134.837	ug/L	95
51) 1,2-Dichloropropane	7.288	63	1308056	134.096	ug/L	97
53) 2-Chloroethyl vinyl ether	7.973	63	589477	132.867	ug/L	97
54) Bromodichloromethane	7.347	83	1962687	143.165	ug/L	100
57) 1,4-Dioxane	7.572	88	31878	745.448	ug/L	95
58) cis-1,3-Dichloropropene	8.051	75	2285668	142.043	ug/L	99
61) Toluene	8.325	92	4183764	130.468	ug/L	99
62) 4-Methyl-2-pentanone	8.765	58	366766	137.635	ug/L	98
63) Tetrachloroethene	8.765	166	2093403	132.886	ug/L	99
65) trans-1,3-Dichloropropene	8.805	75	2105284	134.654	ug/L	98
67) Ethyl methacrylate	8.991	69	1533804	141.911	ug/L	98
68) 1,1,2-Trichloroethane	9.000	83	993344	127.132	ug/L	99
69) Chlorodibromomethane	9.216	129	1516192	133.975	ug/L	100
70) 1,3-Dichloropropane	9.334	76	1893251	121.923	ug/L	100
71) 1,2-Dibromoethane	9.500	107	1122695	123.768	ug/L	99
72) 2-Hexanone	9.774	43	536513	116.429	ug/L	98
73) Chlorobenzene	10.147	112	4755170	131.599	ug/L	100
74) Ethylbenzene	10.186	91	8557334	137.746	ug/L	99
75) 1,1,1,2-Tetrachloroethane	10.235	131	1681576	132.424	ug/L	99
76) p/m Xylene	10.362	106	7178876	284.480	ug/L	100
77) o Xylene	10.871	106	6693650	285.620	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A11.D
 Acq On : 27 Feb 2019 11:59 pm
 Operator : GONZO:NLK
 Sample : I8260STD18
 Misc : WG1211255
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 28 12:16:30 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	10.940	104	11351556	293.755	ug/L	99
80)	Bromoform	10.960	173	1053281	143.606	ug/L	99
82)	Isopropylbenzene	11.224	105	8706176	134.396	ug/L	100
84)	Bromobenzene	11.655	156	2074710	128.144	ug/L	99
85)	n-Propylbenzene	11.685	91	10231222	138.017	ug/L	99
86)	1,4-Dichlorobutane	11.714	55	1627140	128.031	ug/L	100
87)	1,1,2,2-Tetrachloroethane	11.773	83	1251012	122.553	ug/L	100
88)	4-Ethyltoluene	11.802	105	8215167	132.325	ug/L	100
89)	2-Chlorotoluene	11.851	91	5419046M1	133.302	ug/L	
90)	1,3,5-Trimethylbenzene	11.900	105	7319047	139.140	ug/L	99
91)	1,2,3-Trichloropropane	11.910	75	1156043M1	137.937	ug/L	
92)	trans-1,4-Dichloro-2-b...	11.959	53	295140	129.140	ug/L #	87
93)	4-Chlorotoluene	12.027	91	5622424	131.909	ug/L	98
94)	tert-Butylbenzene	12.233	119	6254839	131.214	ug/L	99
97)	1,2,4-Trimethylbenzene	12.302	105	6934889	135.337	ug/L	99
98)	sec-Butylbenzene	12.409	105	8679233	133.585	ug/L	99
99)	p-Isopropyltoluene	12.556	119	8040244	134.904	ug/L	99
100)	1,3-Dichlorobenzene	12.635	146	3805423	127.804	ug/L	99
101)	1,4-Dichlorobenzene	12.723	146	3877197	126.510	ug/L	100
102)	p-Diethylbenzene	12.929	119	4718041	139.459	ug/L	99
103)	n-Butylbenzene	12.978	91	6869996	137.110	ug/L	99
104)	1,2-Dichlorobenzene	13.144	146	3424046	126.976	ug/L	100
105)	1,2,4,5-Tetramethylben...	13.703	119	6764801	141.396	ug/L	99
106)	1,2-Dibromo-3-chloropr...	13.908	155	206854	136.416	ug/L	96
107)	1,3,5-Trichlorobenzene	13.938	180	2839879	130.563	ug/L	99
108)	Hexachlorobutadiene	14.496	225	1299855	139.085	ug/L	99
109)	1,2,4-Trichlorobenzene	14.525	180	2459994	132.498	ug/L	99
110)	Naphthalene	14.819	128	4158111	125.788	ug/L	100
111)	1,2,3-Trichlorobenzene	14.986	180	1985608	126.148	ug/L	99

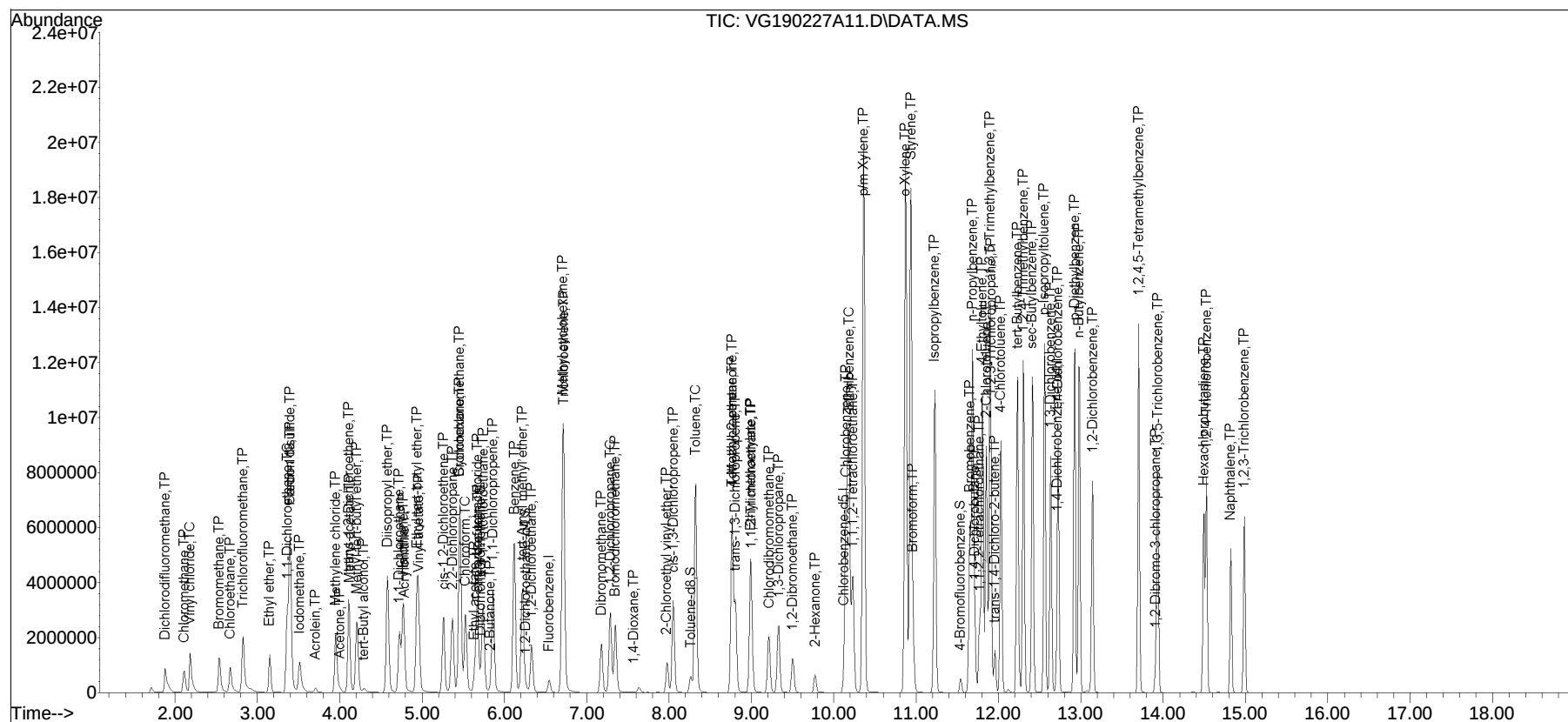
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A11.D
 Acq On : 27 Feb 2019 11:59 pm
 Operator : GONZO:NLK
 Sample : I8260STD L8
 Misc : WG1211255
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 28 12:16:30 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

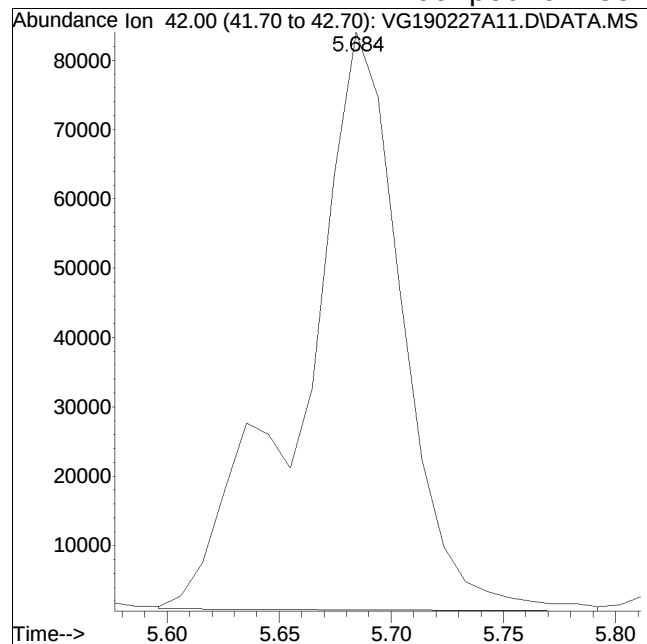
Sub List : 8260-Curve - Megamix plus Diox0227A\VG190227A08.D•



Manual Integration Report

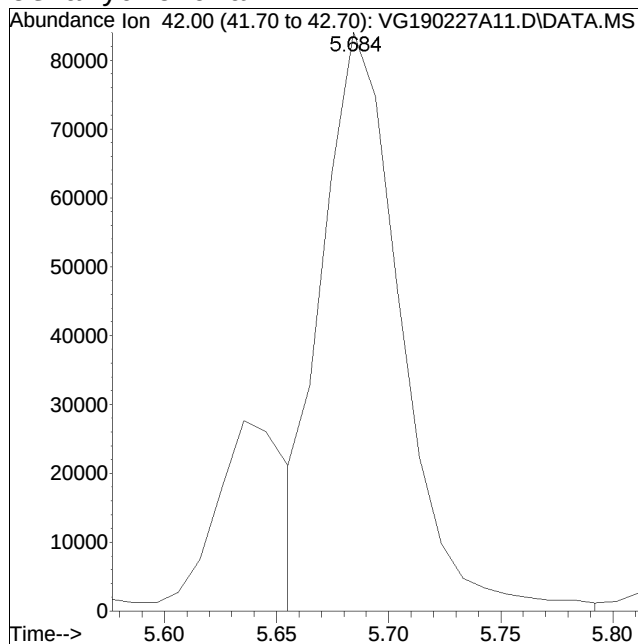
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190227A11.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 11:59 pm Instrument : Gonzo
Sample : I8260STD8 Quant Date : 2/28/2019 12:10 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 257796

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

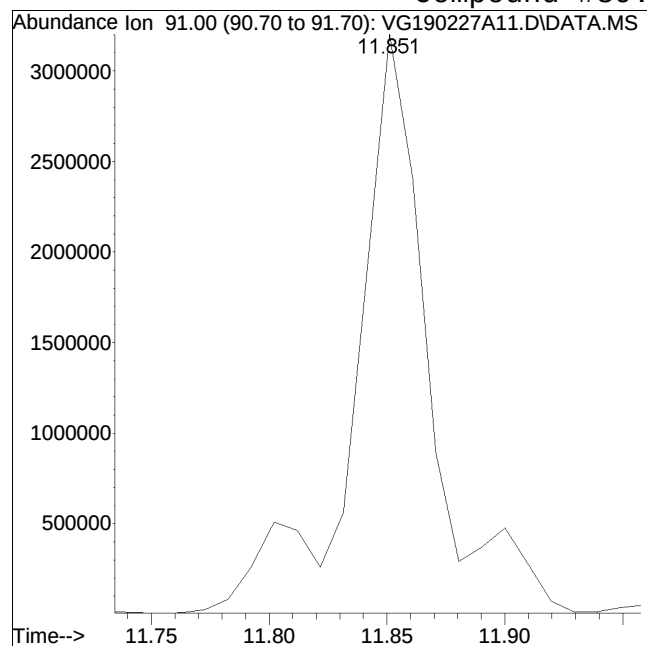


Manual Peak Response = 205736 M1

Manual Integration Report

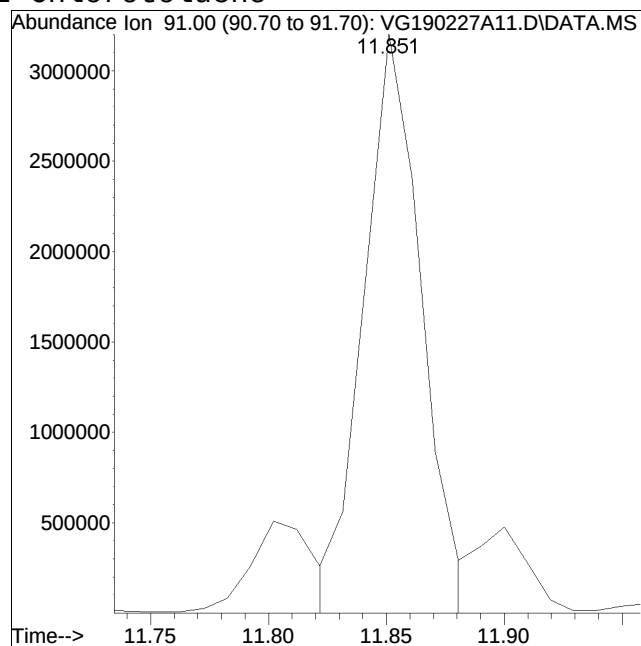
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190227A11.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 11:59 pm Instrument : Gonzo
Sample : I8260STDL8 Quant Date : 2/28/2019 12:10 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 7012644

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

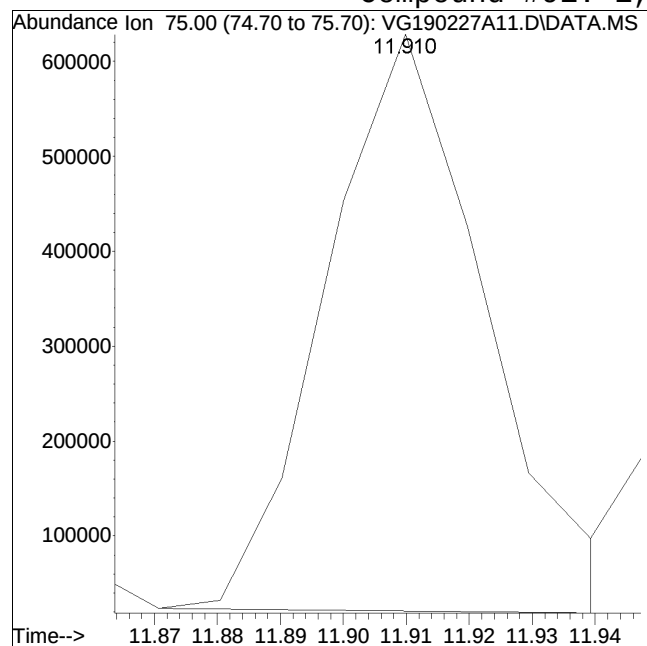


Manual Peak Response = 5419046 M1

Manual Integration Report

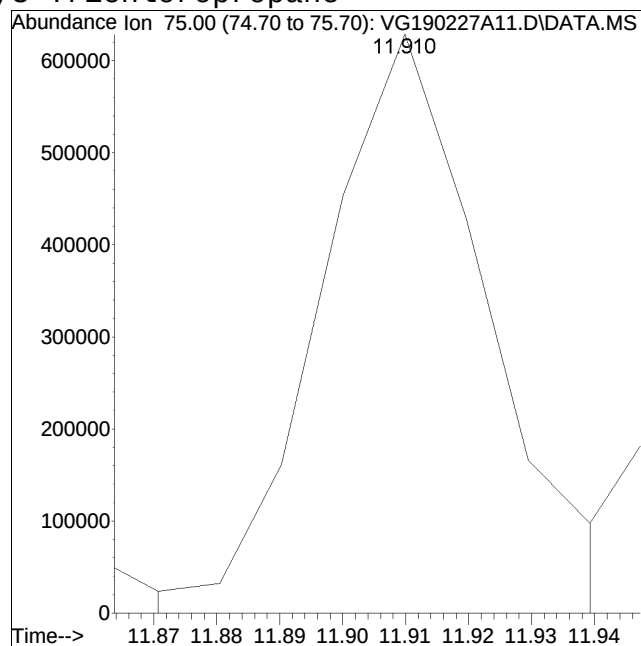
Data Path : I:\VOLATILES\Gonzo\2019\190Method : G_190227N_8260.m
Data File : VG190227A11.D Operator : GONZO:NLK
Date Inj'd : 2/27/2019 11:59 pm Instrument : Gonzo
Sample : I8260STDL8 Quant Date : 2/28/2019 12:10 pm

Compound #91: 1,2,3-Trichloropropane



Original Peak Response = 1068333

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



Manual Peak Response = 1156043 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A12.D
 Acq On : 28 Feb 2019 12:24 am
 Operator : GONZO:NLK
 Sample : I8260STD10
 Misc : WG1211255
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 28 12:17:19 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.545	96	522574	10.000	ug/L	0.00
Standard Area 1 = 486223			Recovery	=	107.48%	
59) Chlorobenzene-d5	10.137	117	472156	10.000	ug/L	0.00
Standard Area 1 = 385045			Recovery	=	122.62%	
79) 1,4-Dichlorobenzene-d4	12.713	152	244918	10.000	ug/L	0.00
Standard Area 1 = 201296			Recovery	=	121.67%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.714	113	144670	11.212	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	112.12%	
43) 1,2-Dichloroethane-d4	6.261	65	140723	11.115	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	111.15%	
60) Toluene-d8	8.266	98	529665	8.913	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	89.13%	
83) 4-Bromofluorobenzene	11.538	95	187996	8.975	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	89.75%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.880	85	2114069	217.720	ug/L	99
3) Chloromethane	2.114	50	1960718	205.660	ug/L	99
4) Vinyl chloride	2.183	62	2955094	200.576	ug/L	98
5) Bromomethane	2.535	94	1728895	207.748	ug/L	98
6) Chloroethane	2.662	64	1803930	209.009	ug/L	97
7) Trichlorofluoromethane	2.819	101	4126799	222.552	ug/L	99
8) Ethyl ether	3.151	74	1088139	235.278	ug/L	99
10) 1,1-Dichloroethene	3.357	96	2305765	256.839	ug/L	96
11) Carbon disulfide	3.396	76	7253924	276.518	ug/L	100
12) Freon-113	3.396	101	2724013	266.515	ug/L	84
13) Iodomethane	3.513	142	2752889	258.500	ug/L	99
14) Acrolein	3.709	56	239855	235.611	ug/L	97
15) Methylene chloride	3.953	84	2191155	224.017	ug/L	95
17) Acetone	4.002	43	266107	193.118	ug/L	99
18) trans-1,2-Dichloroethene	4.110	96	2439615	245.994	ug/L	97
19) Methyl acetate	4.119	43	997224	225.651	ug/L	99
20) Methyl tert-butyl ether	4.207	73	5605662	238.287	ug/L	99
21) tert-Butyl alcohol	4.295	59	309541	1150.655	ug/L	94
22) Diisopropyl ether	4.579	45	7295048	241.893	ug/L	98
23) 1,1-Dichloroethane	4.726	63	4261011	232.162	ug/L	99
24) Halothane	4.775	117	2240130	260.597	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A12.D
 Acq On : 28 Feb 2019 12:24 am
 Operator : GONZO:NLK
 Sample : I8260STD10
 Misc : WG1211255
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 28 12:17:19 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	4.775	53	446948	234.590	ug/L	97
26) Ethyl tert-butyl ether	4.941	59	7214899	260.152	ug/L	95
27) Vinyl acetate	4.961	43	4805236	255.069	ug/L	97
28) cis-1,2-Dichloroethene	5.264	96	2592313	235.785	ug/L	98
29) 2,2-Dichloropropane	5.371	77	3622748	240.802	ug/L	95
30) Bromochloromethane	5.459	128	1304089	244.647	ug/L	94
31) Cyclohexane	5.459	56	4475890	270.347	ug/L	94
32) Chloroform	5.528	83	4305824	235.040	ug/L	99
33) Ethyl acetate	5.635	43	1518330	223.761	ug/L	99
34) Carbon tetrachloride	5.665	117	4072122	255.652	ug/L	100
35) Tetrahydrofuran	5.684	42	370390M1	221.581	ug/L	
37) 1,1,1-Trichloroethane	5.743	97	4377596	236.058	ug/L	98
39) 2-Butanone	5.831	43	548211	208.322	ug/L	97
40) 1,1-Dichloropropene	5.860	75	3555178	243.333	ug/L	98
41) Benzene	6.115	78	10792446	244.170	ug/L	99
42) tert-Amyl methyl ether	6.222	73	6910234	258.969	ug/L	97
44) 1,2-Dichloroethane	6.330	62	2788273	225.976	ug/L	98
47) Methyl cyclohexane	6.711	83	5852846	282.049	ug/L	93
48) Trichloroethene	6.721	95	3111278	273.355	ug/L	97
50) Dibromomethane	7.181	93	1387751	241.259	ug/L	97
51) 1,2-Dichloropropane	7.288	63	2355852	240.525	ug/L	97
53) 2-Chloroethyl vinyl ether	7.973	63	1072943	240.852	ug/L	97
54) Bromodichloromethane	7.347	83	3481631	252.925	ug/L	100
57) 1,4-Dioxane	7.572	88	56982	1327.049	ug/L	96
58) cis-1,3-Dichloropropene	8.051	75	4127445	255.453	ug/L	98
61) Toluene	8.325	92	7545522	225.399	ug/L	98
62) 4-Methyl-2-pentanone	8.765	58	698316	251.027	ug/L	94
63) Tetrachloroethene	8.765	166	3714938	225.893	ug/L	99
65) trans-1,3-Dichloropropene	8.805	75	3873850	237.344	ug/L	96
67) Ethyl methacrylate	8.991	69	2924816	259.221	ug/L	100
68) 1,1,2-Trichloroethane	9.000	83	1862164	228.296	ug/L	100
69) Chlorodibromomethane	9.216	129	2713784	229.706	ug/L	99
70) 1,3-Dichloropropane	9.334	76	3419273	210.930	ug/L	100
71) 1,2-Dibromoethane	9.500	107	1998761	211.074	ug/L	99
72) 2-Hexanone	9.774	43	961082	199.787	ug/L	98
73) Chlorobenzene	10.156	112	8584102	227.566	ug/L	99
74) Ethylbenzene	10.186	91	15340848	236.547	ug/L	100
75) 1,1,1,2-Tetrachloroethane	10.235	131	3012150	227.223	ug/L	99
76) p/m Xylene	10.362	106	11757433	446.308	ug/L	86
77) o Xylene	10.872	106	10959879	447.980	ug/L	86

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A12.D
 Acq On : 28 Feb 2019 12:24 am
 Operator : GONZO:NLK
 Sample : I8260STD10
 Misc : WG1211255
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 28 12:17:19 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:09:07 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	10.940	104	17778521	440.710	ug/L	97
80)	Bromoform	10.969	173	1874723	249.102	ug/L	99
82)	Isopropylbenzene	11.234	105	15129615	227.613	ug/L	100
84)	Bromobenzene	11.655	156	3675700	221.254	ug/L	99
85)	n-Propylbenzene	11.685	91	16583826	218.022	ug/L	95
86)	1,4-Dichlorobutane	11.714	55	2959512	226.945	ug/L	99
87)	1,1,2,2-Tetrachloroethane	11.773	83	2291544	218.776	ug/L	99
88)	4-Ethyltoluene	11.812	105	14511071	227.789	ug/L	100
89)	2-Chlorotoluene	11.851	91	9925330M1	237.941	ug/L	
90)	1,3,5-Trimethylbenzene	11.900	105	12461115	230.869	ug/L	99
91)	1,2,3-Trichloropropane	11.910	75	2040882M1	237.321	ug/L	
92)	trans-1,4-Dichloro-2-b...	11.959	53	542213	231.213	ug/L #	87
93)	4-Chlorotoluene	12.037	91	9997137	228.579	ug/L	98
94)	tert-Butylbenzene	12.233	119	10914630	223.143	ug/L	99
97)	1,2,4-Trimethylbenzene	12.312	105	12089597	229.931	ug/L	100
98)	sec-Butylbenzene	12.419	105	14615564	219.231	ug/L	97
99)	p-Isopropyltoluene	12.566	119	13697995	223.987	ug/L	100
100)	1,3-Dichlorobenzene	12.635	146	6790707	222.263	ug/L	99
101)	1,4-Dichlorobenzene	12.723	146	6880240	218.787	ug/L	99
102)	p-Diethylbenzene	12.929	119	8165315	235.217	ug/L	98
103)	n-Butylbenzene	12.987	91	11943050	232.294	ug/L	98
104)	1,2-Dichlorobenzene	13.144	146	6058813	218.968	ug/L	99
105)	1,2,4,5-Tetramethylben...	13.703	119	11958407	243.594	ug/L	99
106)	1,2-Dibromo-3-chloropr...	13.908	155	377417	242.568	ug/L	96
107)	1,3,5-Trichlorobenzene	13.938	180	5047412	226.151	ug/L	99
108)	Hexachlorobutadiene	14.496	225	2340339	244.047	ug/L	99
109)	1,2,4-Trichlorobenzene	14.525	180	4368588	229.311	ug/L	99
110)	Naphthalene	14.819	128	7493658	220.926	ug/L	100
111)	1,2,3-Trichlorobenzene	14.986	180	3466641	214.637	ug/L	99

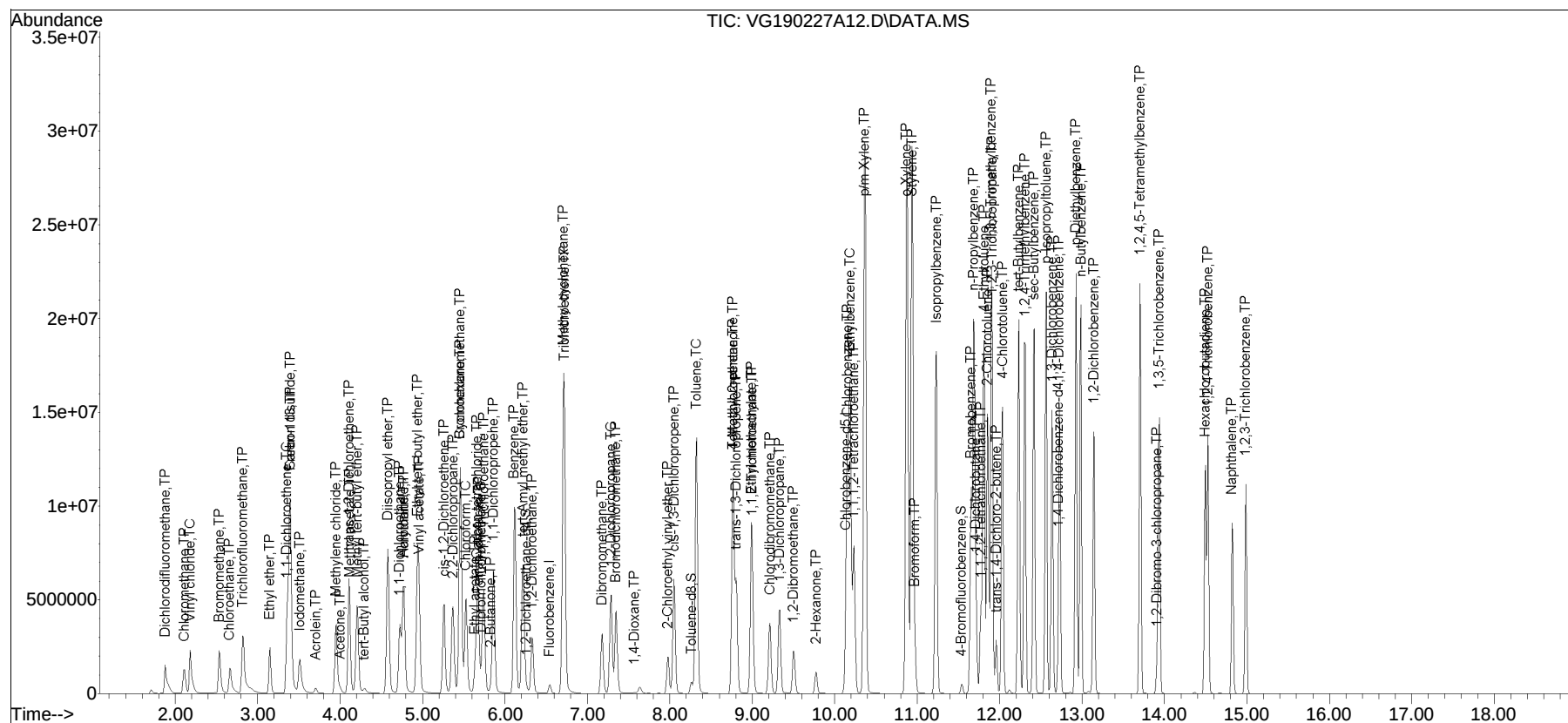
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
Data File : VG190227A12.D
Acq On : 28 Feb 2019 12:24 am
Operator : GONZO:NLK
Sample : I8260STDL10
Misc : WG1211255
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 28 12:17:19 2019
Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Feb 28 12:09:07 2019
Response via : Initial Calibration

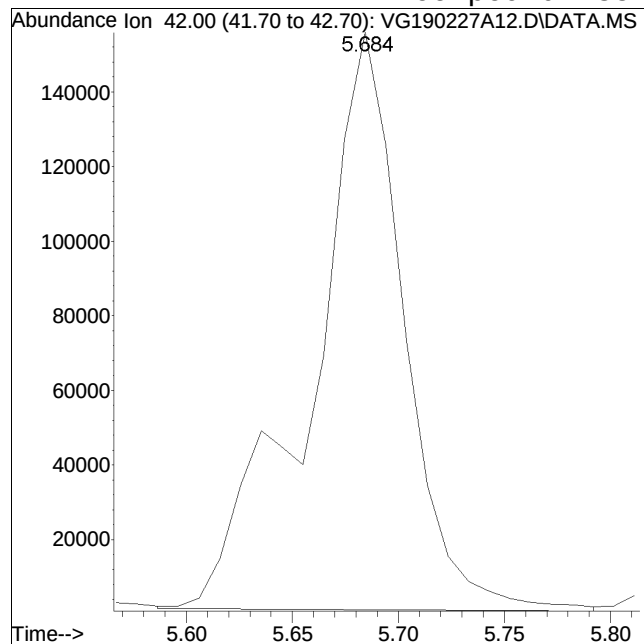
Sub List : 8260-Curve - Megamix plus Diox0227A\VG190227A08.D•



Manual Integration Report

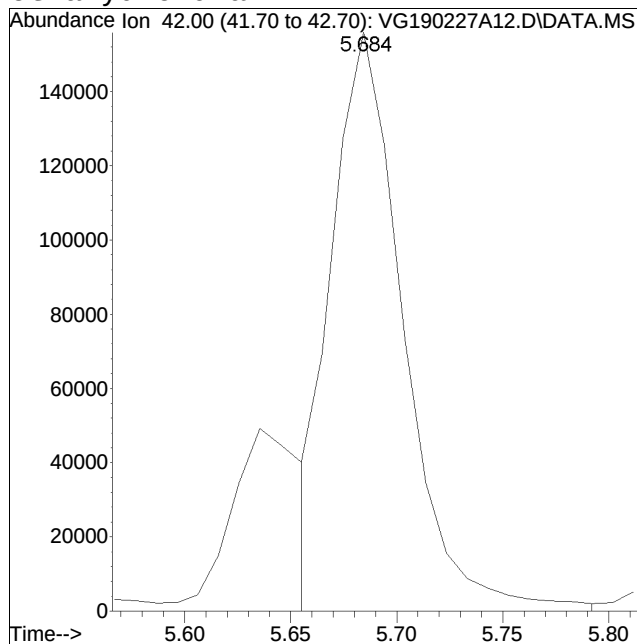
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190227A12.D Operator : GONZO:NLK
Date Inj'd : 2/28/2019 12:24 am Instrument : Gonzo
Sample : I8260STD10 Quant Date : 2/28/2019 12:10 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 466694

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

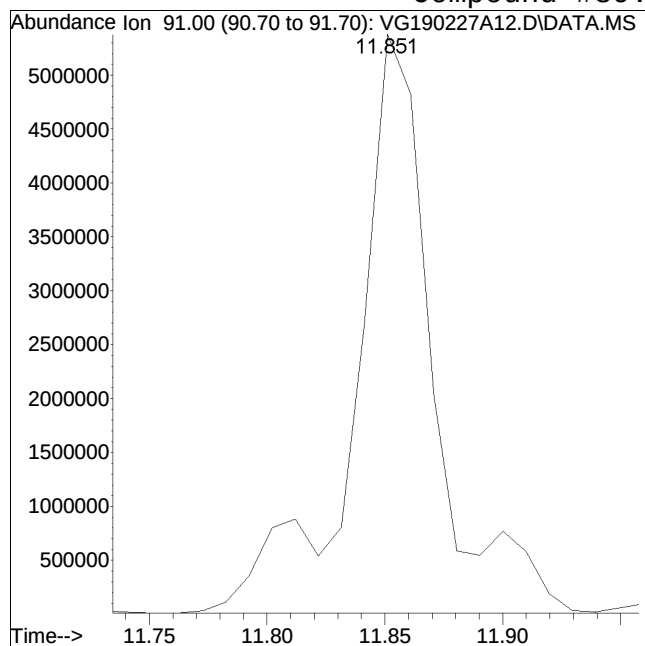


Manual Peak Response = 370390 M1

Manual Integration Report

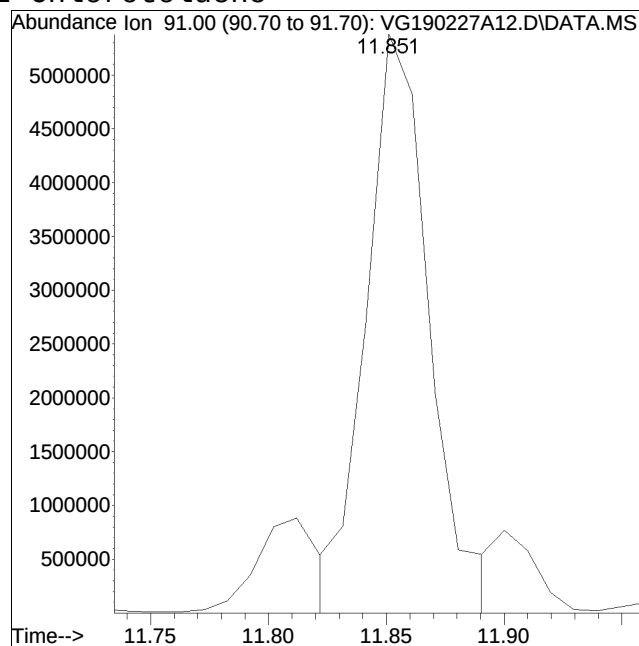
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190227A12.D Operator : GONZO:NLK
Date Inj'd : 2/28/2019 12:24 am Instrument : Gonzo
Sample : I8260STDL10 Quant Date : 2/28/2019 12:10 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 12355031

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

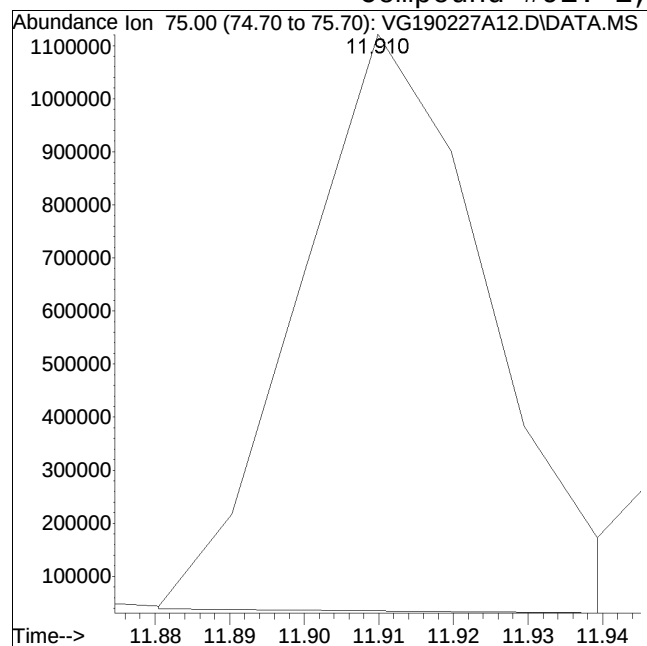


Manual Peak Response = 9925330 M1

Manual Integration Report

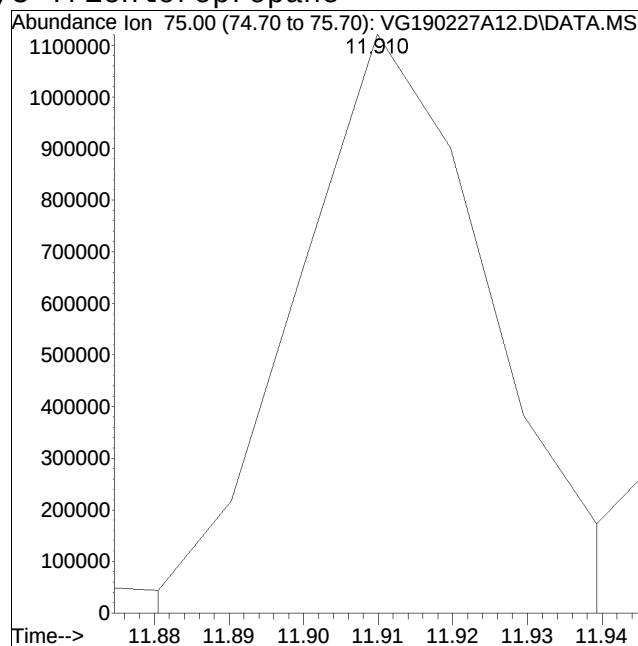
Data Path : I:\VOLATILES\Gonzo\2019\190Method : G_190227N_8260.m
Data File : VG190227A12.D Operator : GONZO:NLK
Date Inj'd : 2/28/2019 12:24 am Instrument : Gonzo
Sample : I8260STD10 Quant Date : 2/28/2019 12:10 pm

Compound #91: 1,2,3-Trichloropropane



Original Peak Response = 1917356

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



Manual Peak Response = 2040882 M1

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A19.D
 Acq On : 28 Feb 2019 3:23 am
 Operator : GONZO:NLK
 Sample : C8260STD13
 Misc : WG1211255
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 12:22:13 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 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	103	0.00
2 TP	Dichlorodifluoromethane	0.192	0.296	-54.2#	165	0.00
3 TP	Chloromethane	0.190	0.237	-24.7#	134	0.00
4 TC	Vinyl chloride	0.286	0.323	-12.9	118	0.00
5 TP	Bromomethane	0.174	0.200	-14.9	130	0.00
6 TP	Chloroethane	0.168	0.182	-8.3	114	0.00
7 TP	Trichlorofluoromethane	0.365	0.382	-4.7	112	0.00
8 TP	Ethyl ether	0.094	0.096	-2.1	112	0.00
10 TC	1,1-Dichloroethene	0.186	0.177	4.8	106	0.00
11 TP	Carbon disulfide	0.557	0.462	17.1	95	0.00
12 TP	Freon-113	0.217	0.190	12.4	101	0.00
13 TP	Iodomethane	0.233	0.193	17.2	98	0.00
14 TP	Acrolein	0.020	0.018	10.0	96	0.00
15 TP	Methylene chloride	0.198	0.193	2.5	107	0.00
17 TP	Acetone	0.026	0.027	-3.8	106	0.00
18 TP	trans-1,2-Dichloroethene	0.202	0.192	5.0	105	0.00
19 TP	Methyl acetate	0.090	0.084	6.7	103	0.00
20 TP	Methyl tert-butyl ether	0.473	0.470	0.6	108	0.00
21 TP	tert-Butyl alcohol	0.00567	0.00649	-14.5	131	0.01
22 TP	Diisopropyl ether	0.607	0.551	9.2	99	0.00
23 TP	1,1-Dichloroethane	0.367	0.348	5.2	103	0.00
24 TP	Halothane	0.182	0.157	13.7	99	0.00
25 TP	Acrylonitrile	0.037	0.039	-5.4	110	0.00
26 TP	Ethyl tert-butyl ether	0.575	0.514	10.6	100	0.00
27 TP	Vinyl acetate	0.381	0.362	5.0	104	0.00
28 TP	cis-1,2-Dichloroethene	0.222	0.210	5.4	103	0.00
29 TP	2,2-Dichloropropane	0.310	0.256	17.4	92	0.00
30 TP	Bromochloromethane	0.109	0.102	6.4	104	0.00
31 TP	Cyclohexane	0.351	0.291	17.1	95	0.00
32 TC	Chloroform	0.374	0.345	7.8	102	0.00
33 TP	Ethyl acetate	0.139	0.125	10.1	100	0.00
34 TP	Carbon tetrachloride	0.324	0.299	7.7	102	0.00
35 TP	Tetrahydrofuran	0.034	0.035	-2.9	112	0.00
36 S	Dibromofluoromethane	0.253	0.246	2.8	103	0.00
37 TP	1,1,1-Trichloroethane	0.371	0.338	8.9	98	0.00
39 TP	2-Butanone	0.052	0.045	13.5	93	0.00
40 TP	1,1-Dichloropropene	0.297	0.278	6.4	103	0.00
41 TP	Benzene	0.898	0.815	9.2	100	0.00
42 TP	tert-Amyl methyl ether	0.551	0.481	12.7	98	0.00

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A19.D
 Acq On : 28 Feb 2019 3:23 am
 Operator : GONZO:NLK
 Sample : C8260STD13
 Misc : WG1211255
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 12:22:13 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 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	0.249	0.240	3.6	103	0.00
44 TP	1,2-Dichloroethane	0.257	0.236	8.2	103	0.00
47 TP	Methyl cyclohexane	0.445	0.349	21.6#	91	0.00
48 TP	Trichloroethene	0.244	0.215	11.9	102	0.00
50 TP	Dibromomethane	0.117	0.108	7.7	102	0.00
51 TC	1,2-Dichloropropane	0.198	0.185	6.6	102	0.00
53 TP	2-Chloroethyl vinyl ether	0.088	0.083	5.7	101	0.00
54 TP	Bromodichloromethane	0.284	0.268	5.6	105	0.00
57 TP	1,4-Dioxane	0.00070	0.00073	-4.3	92	0.00
58 TP	cis-1,3-Dichloropropene	0.331	0.286	13.6	96	0.00
59 I	Chlorobenzene-d5	1.000	1.000	0.0	105	0.00
60 S	Toluene-d8	1.229	1.244	-1.2	104	0.00
61 TC	Toluene	0.741	0.681	8.1	101	0.00
62 TP	4-Methyl-2-pentanone	0.062	0.057	8.1	101	0.00
63 TP	Tetrachloroethene	0.362	0.331	8.6	100	0.00
65 TP	trans-1,3-Dichloropropene	0.359	0.325	9.5	99	0.00
67 TP	Ethyl methacrylate	0.254	0.248	2.4	109	0.00
68 TP	1,1,2-Trichloroethane	0.179	0.166	7.3	100	0.00
69 TP	Chlorodibromomethane	0.258	0.253	1.9	106	0.00
70 TP	1,3-Dichloropropane	0.352	0.343	2.6	105	0.00
71 TP	1,2-Dibromoethane	0.205	0.198	3.4	104	0.00
72 TP	2-Hexanone	0.101	0.096	5.0	98	0.00
73 TP	Chlorobenzene	0.837	0.771	7.9	101	0.00
74 TC	Ethylbenzene	1.454	1.306	10.2	100	0.00
75 TP	1,1,1,2-Tetrachloroethane	0.289	0.273	5.5	102	0.00
76 TP	p/m Xylene	0.589	0.533	9.5	100	0.00
77 TP	o Xylene	0.552	0.492	10.9	100	0.00
78 TP	Styrene	0.912	0.831	8.9	102	0.00
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	0.00
80 TP	Bromoform	0.320	0.305	4.7	102	0.00
82 TP	Isopropylbenzene	2.855	2.604	8.8	98	0.00
83 S	4-Bromofluorobenzene	0.844	0.864	-2.4	104	0.00
84 TP	Bromobenzene	0.709	0.683	3.7	103	0.00
85 TP	n-Propylbenzene	3.277	3.011	8.1	100	0.00
86 TP	1,4-Dichlorobutane	0.558	0.568	-1.8	109	0.00
87 TP	1,1,2,2-Tetrachloroethane	0.441	0.443	-0.5	106	0.00
88 TP	4-Ethyltoluene	2.707	2.424	10.5	96	0.00

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A19.D
 Acq On : 28 Feb 2019 3:23 am
 Operator : GONZO:NLK
 Sample : C8260STD13
 Misc : WG1211255
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 12:22:13 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 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 TP	2-Chlorotoluene	1.816	1.680	7.5	101	0.00
90 TP	1,3,5-Trimethylbenzene	2.340	2.148	8.2	100	0.00
91 TP	1,2,3-Trichloropropane	0.386	0.367	4.9	107	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.100	0.099	1.0	106	0.00
93 TP	4-Chlorotoluene	1.880	1.750	6.9	101	0.00
94 TP	tert-Butylbenzene	2.063	1.933	6.3	99	0.00
97 TP	1,2,4-Trimethylbenzene	2.254	2.135	5.3	102	0.00
98 TP	sec-Butylbenzene	2.818	2.763	2.0	104	0.00
99 TP	p-Isopropyltoluene	2.587	2.419	6.5	99	0.00
100 TP	1,3-Dichlorobenzene	1.308	1.254	4.1	103	0.00
101 TP	1,4-Dichlorobenzene	1.345	1.294	3.8	103	0.00
102 TP	p-Diethylbenzene	1.485	1.261	15.1	91	0.00
103 TP	n-Butylbenzene	2.203	2.008	8.9	98	0.00
104 TP	1,2-Dichlorobenzene	1.170	1.153	1.5	105	0.00
105 TP	1,2,4,5-Tetramethylbenzene	2.120	1.894	10.7	97	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.064	0.066	-3.1	106	0.00
107 TP	1,3,5-Trichlorobenzene	0.946	0.901	4.8	101	0.00
108 TP	Hexachlorobutadiene	0.413	0.388	6.1	102	0.00
109 TP	1,2,4-Trichlorobenzene	0.811	0.783	3.5	103	0.00
110 TP	Naphthalene	1.401	1.431	-2.1	106	0.00
111 TP	1,2,3-Trichlorobenzene	0.668	0.678	-1.5	105	0.00

* 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\2019\190227A\
 Data File : VG190227A19.D
 Acq On : 28 Feb 2019 3:23 am
 Operator : GONZO:NLK
 Sample : C8260STD13
 Misc : WG1211255
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 12:22:13 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.545	96	503093	10.000	ug/L	0.00
Standard Area 1 = 486223			Recovery	=	103.47%	
59) Chlorobenzene-d5	10.127	117	403478	10.000	ug/L	0.00
Standard Area 1 = 385045			Recovery	=	104.79%	
79) 1,4-Dichlorobenzene-d4	12.703	152	206641	10.000	ug/L	0.00
Standard Area 1 = 201296			Recovery	=	102.66%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.714	113	123653	9.729	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.29%	
43) 1,2-Dichloroethane-d4	6.261	65	120982	9.665	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	96.65%	
60) Toluene-d8	8.257	98	502025	10.127	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.27%	
83) 4-Bromofluorobenzene	11.538	95	178479	10.234	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	102.34%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.880	85	149067	15.425	ug/L	100
3) Chloromethane	2.105	50	119222	12.498	ug/L	99
4) Vinyl chloride	2.183	62	162389	11.305	ug/L	97
5) Bromomethane	2.535	94	100425	11.461	ug/L	97
6) Chloroethane	2.672	64	91318	10.824	ug/L	98
7) Trichlorofluoromethane	2.819	101	192417	10.480	ug/L	99
8) Ethyl ether	3.151	74	48096	10.154	ug/L	96
10) 1,1-Dichloroethene	3.357	96	88815	9.495	ug/L	99
11) Carbon disulfide	3.396	76	232600	8.293	ug/L	99
12) Freon-113	3.396	101	95769	8.771	ug/L	95
13) Iodomethane	3.513	142	97017	8.286	ug/L	99
14) Acrolein	3.709	56	9103	8.834	ug/L	99
15) Methylene chloride	3.953	84	97087	9.764	ug/L	97
17) Acetone	4.002	43	13592	10.230	ug/L	99
18) trans-1,2-Dichloroethene	4.110	96	96590	9.506	ug/L	97
19) Methyl acetate	4.119	43	42216	9.345	ug/L	98
20) Methyl tert-butyl ether	4.207	73	236600	9.942	ug/L	99
21) tert-Butyl alcohol	4.305	59	16335	57.242	ug/L	90
22) Diisopropyl ether	4.579	45	277013	9.077	ug/L	99
23) 1,1-Dichloroethane	4.726	63	175233	9.484	ug/L	99
24) Halothane	4.775	117	79049	8.633	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A19.D
 Acq On : 28 Feb 2019 3:23 am
 Operator : GONZO:NLK
 Sample : C8260STD3
 Misc : WG1211255
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 12:22:13 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	4.785	53	19530	10.495	ug/L	96
26) Ethyl tert-butyl ether	4.941	59	258660	8.945	ug/L	93
27) Vinyl acetate	4.961	43	181977	9.498	ug/L	99
28) cis-1,2-Dichloroethene	5.264	96	105708	9.455	ug/L	98
29) 2,2-Dichloropropane	5.371	77	128714	8.254	ug/L	99
30) Bromochloromethane	5.459	128	51531	9.438	ug/L	96
31) Cyclohexane	5.459	56	146272	8.278	ug/L	92
32) Chloroform	5.528	83	173336	9.216	ug/L	99
33) Ethyl acetate	5.635	43	63107	9.000	ug/L	99
34) Carbon tetrachloride	5.665	117	150510	9.237	ug/L	99
35) Tetrahydrofuran	5.694	42	17398M1	10.297	ug/L	
37) 1,1,1-Trichloroethane	5.743	97	169881	9.097	ug/L	99
39) 2-Butanone	5.841	43	22744	8.687	ug/L	96
40) 1,1-Dichloropropene	5.860	75	140033	9.368	ug/L	98
41) Benzene	6.115	78	410223	9.083	ug/L	99
42) tert-Amyl methyl ether	6.222	73	242167	8.738	ug/L	98
44) 1,2-Dichloroethane	6.330	62	118553	9.162	ug/L	97
47) Methyl cyclohexane	6.711	83	175385	7.831	ug/L	95
48) Trichloroethene	6.721	95	108292	8.826	ug/L	97
50) Dibromomethane	7.181	93	54367	9.205	ug/L	97
51) 1,2-Dichloropropane	7.288	63	93282	9.368	ug/L	97
53) 2-Chloroethyl vinyl ether	7.973	63	41734	9.475	ug/L	96
54) Bromodichloromethane	7.347	83	135063	9.443	ug/L	99
57) 1,4-Dioxane	7.562	88	18454	523.948	ug/L	97
58) cis-1,3-Dichloropropene	8.051	75	143869	8.639	ug/L	97
61) Toluene	8.315	92	274954	9.200	ug/L	100
62) 4-Methyl-2-pentanone	8.756	58	23011	9.250	ug/L	97
63) Tetrachloroethene	8.765	166	133503	9.134	ug/L	99
65) trans-1,3-Dichloropropene	8.805	75	131118	9.061	ug/L	98
67) Ethyl methacrylate	8.981	69	100221	9.774	ug/L	95
68) 1,1,2-Trichloroethane	9.001	83	66832	9.250	ug/L	98
69) Chlorodibromomethane	9.206	129	101960	9.808	ug/L	99
70) 1,3-Dichloropropane	9.324	76	138378	9.741	ug/L	99
71) 1,2-Dibromoethane	9.500	107	79970	9.683	ug/L	100
72) 2-Hexanone	9.774	43	38534	9.479	ug/L	96
73) Chlorobenzene	10.147	112	311100	9.213	ug/L	99
74) Ethylbenzene	10.176	91	526945	8.980	ug/L	99
75) 1,1,1,2-Tetrachloroethane	10.225	131	110076	9.439	ug/L	99
76) p/m Xylene	10.362	106	429728	18.082	ug/L	97
77) o Xylene	10.872	106	397201	17.828	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A19.D
 Acq On : 28 Feb 2019 3:23 am
 Operator : GONZO:NLK
 Sample : C8260STD3
 Misc : WG1211255
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 12:22:13 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190227A\VG190227A08.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	10.930	104	670670	18.234	ug/L	98
80)	Bromoform	10.960	173	62997	9.514	ug/L	97
82)	Isopropylbenzene	11.224	105	538095	9.121	ug/L	99
84)	Bromobenzene	11.655	156	141135	9.637	ug/L	98
85)	n-Propylbenzene	11.685	91	622294	9.189	ug/L	98
86)	1,4-Dichlorobutane	11.704	55	117316	10.175	ug/L	96
87)	1,1,2,2-Tetrachloroethane	11.763	83	91505	10.034	ug/L	100
88)	4-Ethyltoluene	11.802	105	500832	8.954	ug/L	100
89)	2-Chlorotoluene	11.851	91	347254M1	9.252	ug/L	
90)	1,3,5-Trimethylbenzene	11.890	105	443905	9.179	ug/L	97
91)	1,2,3-Trichloropropane	11.910	75	75847M1	9.499	ug/L	
92)	trans-1,4-Dichloro-2-b...	11.949	53	20425	9.840	ug/L #	95
93)	4-Chlorotoluene	12.028	91	361710	9.311	ug/L	98
94)	tert-Butylbenzene	12.223	119	399482	9.371	ug/L	98
97)	1,2,4-Trimethylbenzene	12.302	105	441162	9.470	ug/L	98
98)	sec-Butylbenzene	12.410	105	570867	9.804	ug/L	99
99)	p-Isopropyltoluene	12.556	119	499831	9.351	ug/L	99
100)	1,3-Dichlorobenzene	12.635	146	259175	9.590	ug/L	99
101)	1,4-Dichlorobenzene	12.723	146	267429	9.625	ug/L	99
102)	p-Diethylbenzene	12.919	119	260640	8.497	ug/L	98
103)	n-Butylbenzene	12.978	91	414984	9.117	ug/L	98
104)	1,2-Dichlorobenzene	13.144	146	238228	9.854	ug/L	99
105)	1,2,4,5-Tetramethylben...	13.703	119	391424	8.933	ug/L	99
106)	1,2-Dibromo-3-chloropr...	13.908	155	13578	10.219	ug/L	99
107)	1,3,5-Trichlorobenzene	13.928	180	186103	9.520	ug/L	98
108)	Hexachlorobutadiene	14.496	225	80280	9.413	ug/L	99
109)	1,2,4-Trichlorobenzene	14.525	180	161875	9.653	ug/L	99
110)	Naphthalene	14.819	128	295631	10.209	ug/L	100
111)	1,2,3-Trichlorobenzene	14.986	180	140042	10.144	ug/L	98

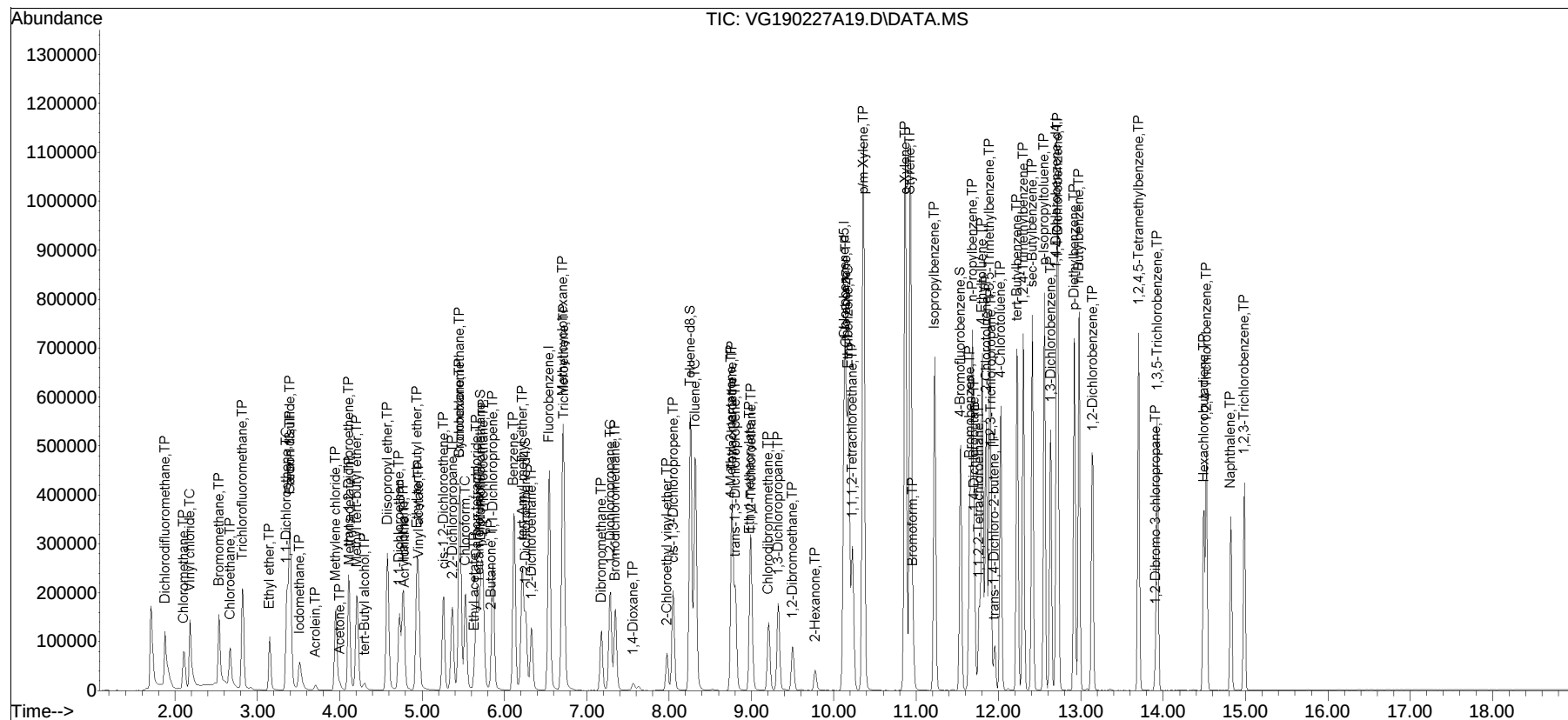
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190227A\
 Data File : VG190227A19.D
 Acq On : 28 Feb 2019 3:23 am
 Operator : GONZO:NLK
 Sample : C8260STD13
 Misc : WG1211255
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 12:22:13 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190227A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

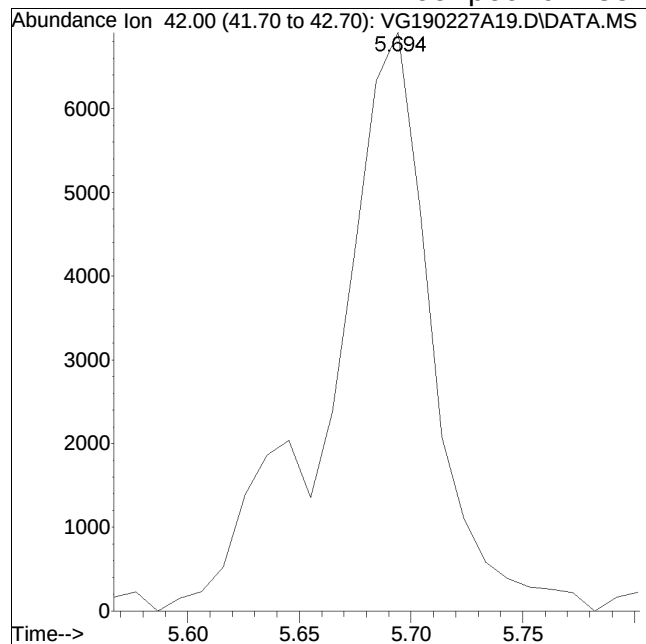
Sub List : 8260-Curve - Megamix plus Diox0227A\VG190227A08.D•



Manual Integration Report

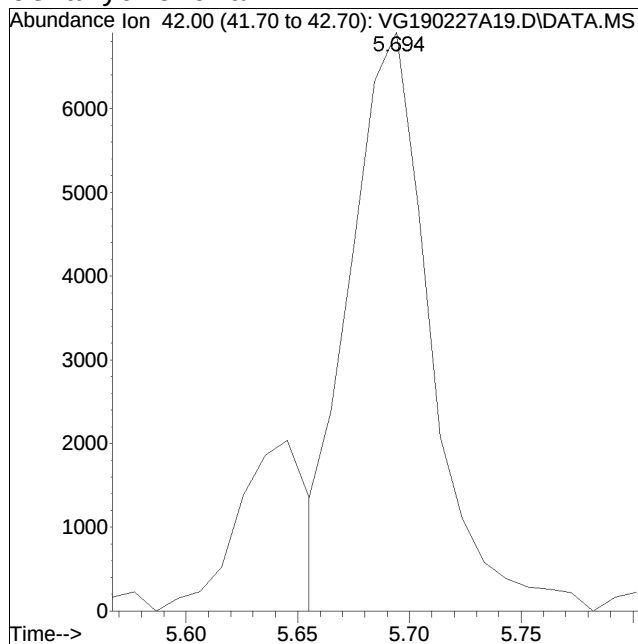
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190227A19.D Operator : GONZO:NLK
Date Inj'd : 2/28/2019 3:23 am Instrument : Gonzo
Sample : C8260STD3 Quant Date : 2/28/2019 12:21 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 21830

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

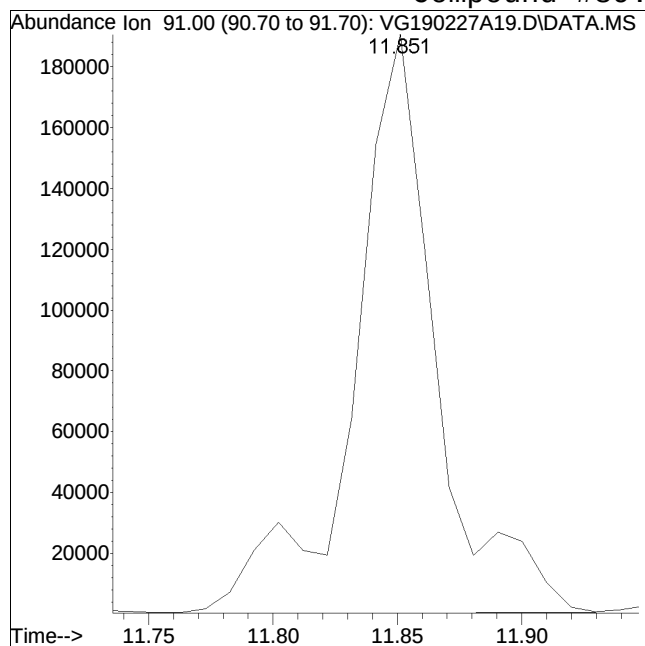


Manual Peak Response = 17398 M1

Manual Integration Report

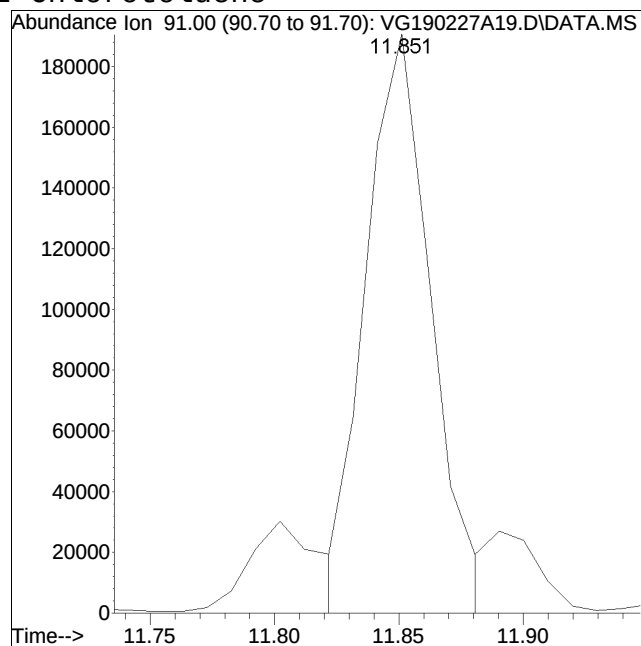
Data Path : I:\VOLATILES\Gonzo\2019\190Method : G_190227N_8260.m
Data File : VG190227A19.D Operator : GONZO:NLK
Date Inj'd : 2/28/2019 3:23 am Instrument : Gonzo
Sample : C8260STD3 Quant Date : 2/28/2019 12:21 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 439956

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

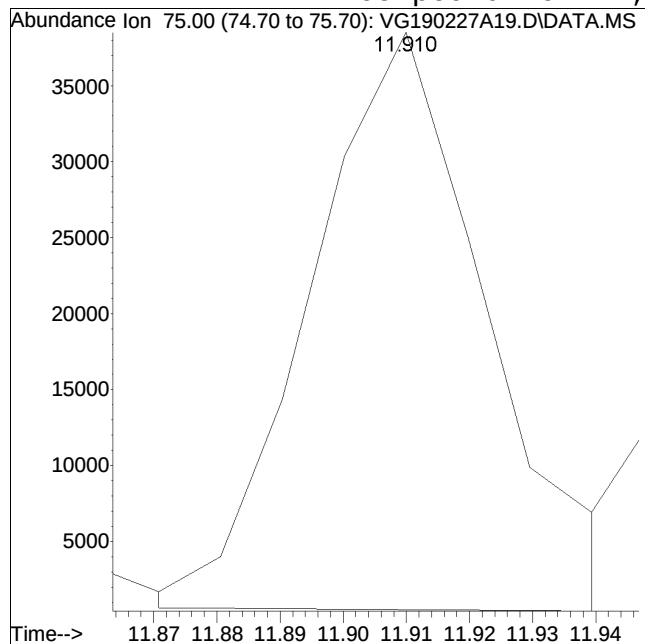


Manual Peak Response = 347254 M1

Manual Integration Report

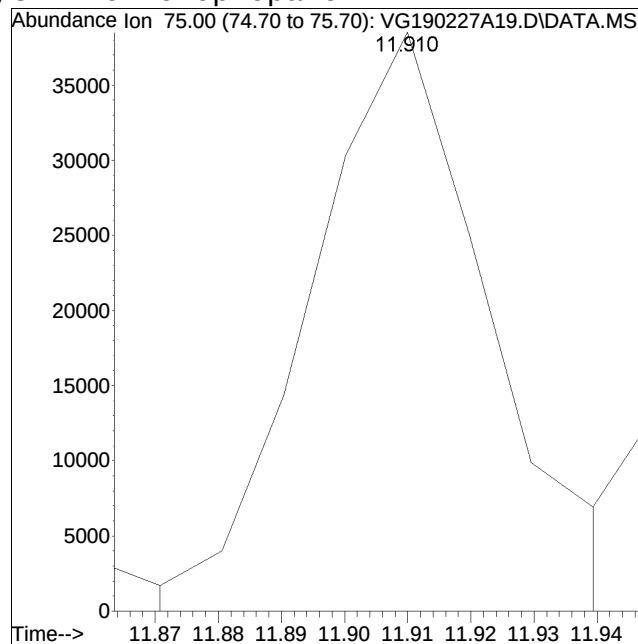
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190227A19.D Operator : GONZO:NLK
Date Inj'd : 2/28/2019 3:23 am Instrument : Gonzo
Sample : C8260STD3 Quant Date : 2/28/2019 12:21 pm

Compound #91: 1,2,3-Trichloropropane



Original Peak Response = 73651

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



Manual Peak Response = 75847 M1

Continuing Calibration

Calibration Verification Summary

Form 7

Volatiles

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Instrument ID : GONZO
 Lab File ID : VG190312A02
 Sample No : WG1214926-2
 Channel :

Lab Number : L1908936
 Project Number : 170329301
 Calibration Date : 03/12/19 08:32
 Init. Calib. Date(s) : 02/27/19 02/28/19
 Init. Calib. Times : 20:36 00:24

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	79	0
Dichlorodifluoromethane	0.192	0.174	-	9.4	20	74	0
Chloromethane	0.19	0.175	-	7.9	20	76	0
Vinyl chloride	0.286	0.288	-	-0.7	20	81	0
Bromomethane	0.174	0.084	-	51.7*	20	42	0
Chloroethane	0.168	0.159	-	5.4	20	76	0
Trichlorofluoromethane	0.365	0.327	-	10.4	20	73	0
Ethyl ether	0.094	0.093	-	1.1	20	83	0
1,1-Dichloroethene	0.186	0.169	-	9.1	20	78	0
Carbon disulfide	0.557	0.504	-	9.5	20	80	0
Freon-113	0.217	0.181	-	16.6	20	73	0
Acrolein	0.02	0.022	-	-10	20	90	0
Methylene chloride	0.198	0.194	-	2	20	82	0
Acetone	0.026	0.034	-	-30.8*	20	103	0
trans-1,2-Dichloroethene	0.202	0.19	-	5.9	20	79	0
Methyl acetate	0.09	0.1	-	-11.1	20	94	0
Methyl tert-butyl ether	0.473	0.476	-	-0.6	20	84	0
tert-Butyl alcohol	0.00567	0.00749	-	-32.1*	20	115	0
Diisopropyl ether	0.607	0.674	-	-11	20	92	0
1,1-Dichloroethane	0.367	0.391	-	-6.5	20	88	0
Halothane	0.182	0.163	-	10.4	20	78	-0.01
Acrylonitrile	0.037	0.042	-	-13.5	20	92	-0.01
Ethyl tert-butyl ether	0.575	0.591	-	-2.8	20	88	0
Vinyl acetate	0.381	0.437	-	-14.7	20	96	0
cis-1,2-Dichloroethene	0.222	0.214	-	3.6	20	81	-0.01
2,2-Dichloropropane	0.31	0.306	-	1.3	20	84	0
Bromochloromethane	0.109	0.105	-	3.7	20	82	0
Cyclohexane	0.351	0.329	-	6.3	20	82	0
Chloroform	0.374	0.373	-	0.3	20	84	0
Ethyl acetate	0.139	0.152	-	-9.4	20	93	0
Carbon tetrachloride	0.324	0.299	-	7.7	20	78	0
Tetrahydrofuran	0.034	0.04	-	-17.6	20	99	0
Dibromofluoromethane	0.253	0.237	-	6.3	20	76	0
1,1,1-Trichloroethane	0.371	0.35	-	5.7	20	78	0
2-Butanone	0.052	0.059	-	-13.5	20	93	-0.01
1,1-Dichloropropene	0.297	0.297	-	0	20	84	0
Benzene	0.898	0.903	-	-0.6	20	85	0
tert-Amyl methyl ether	0.551	0.551	-	0	20	86	0
1,2-Dichloroethane-d4	0.249	0.265	-	-6.4	20	87	0
1,2-Dichloroethane	0.257	0.271	-	-5.4	20	91	0
Methyl cyclohexane	0.445	0.378	-	15.1	20	75	0
Trichloroethene	0.244	0.226	-	7.4	20	82	0
Dibromomethane	0.117	0.119	-	-1.7	20	86	-0.01

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Instrument ID : GONZO
 Lab File ID : VG190312A02
 Sample No : WG1214926-2
 Channel :

Lab Number : L1908936
 Project Number : 170329301
 Calibration Date : 03/12/19 08:32
 Init. Calib. Date(s) : 02/27/19 02/28/19
 Init. Calib. Times : 20:36 00:24

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.198	0.21	-	-6.1	20	89	0
2-Chloroethyl vinyl ether	0.088	0.093	-	-5.7	20	87	0
Bromodichloromethane	0.284	0.284	-	0	20	85	0
1,4-Dioxane	0.0007	0.00044	-	37.1*	20	43	0
cis-1,3-Dichloropropene	0.331	0.339	-	-2.4	20	87	0
Chlorobenzene-d5	1	1	-	0	20	77	0
Toluene-d8	1.229	1.291	-	-5	20	79	0
Toluene	0.741	0.773	-	-4.3	20	84	0
4-Methyl-2-pentanone	0.062	0.068	-	-9.7	20	89	0
Tetrachloroethene	0.362	0.331	-	8.6	20	73	0
trans-1,3-Dichloropropene	0.359	0.4	-	-11.4	20	90	0
Ethyl methacrylate	0.254	0.268	-	-5.5	20	87	0
1,1,2-Trichloroethane	0.179	0.192	-	-7.3	20	86	0
Chlorodibromomethane	0.258	0.263	-	-1.9	20	81	0
1,3-Dichloropropane	0.352	0.399	-	-13.4	20	90	0
1,2-Dibromoethane	0.205	0.216	-	-5.4	20	83	0
2-Hexanone	0.101	0.12	-	-18.8	20	91	0
Chlorobenzene	0.837	0.855	-	-2.2	20	83	0
Ethylbenzene	1.454	1.489	-	-2.4	20	84	0
1,1,1,2-Tetrachloroethane	0.289	0.297	-	-2.8	20	82	0
p/m Xylene	0.589	0.592	-	-0.5	20	82	0
o Xylene	0.552	0.562	-	-1.8	20	84	-.01
Styrene	0.912	0.926	-	-1.5	20	84	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	75	0
Bromoform	0.32	0.327	-	-2.2	20	80	0
Isopropylbenzene	2.855	2.953	-	-3.4	20	82	0
4-Bromofluorobenzene	0.844	0.909	-	-7.7	20	80	0
Bromobenzene	0.709	0.731	-	-3.1	20	81	0
n-Propylbenzene	3.277	3.472	-	-6	20	84	0
1,4-Dichlorobutane	0.558	0.674	-	-20.8*	20	95	0
1,1,2,2-Tetrachloroethane	0.441	0.524	-	-18.8	20	92	0
4-Ethyltoluene	2.707	2.858	-	-5.6	20	83	0
2-Chlorotoluene	1.816	2.024	-	-11.5	20	89	0
1,3,5-Trimethylbenzene	2.34	2.443	-	-4.4	20	83	0
1,2,3-Trichloropropane	0.386	0.451	-	-16.8	20	97	0
trans-1,4-Dichloro-2-buten	0.1	0.116	-	-16	20	91	-.01
4-Chlorotoluene	1.88	2.053	-	-9.2	20	86	0
tert-Butylbenzene	2.063	2.122	-	-2.9	20	80	0
1,2,4-Trimethylbenzene	2.254	2.41	-	-6.9	20	84	0
sec-Butylbenzene	2.818	2.909	-	-3.2	20	80	0
p-Isopropyltoluene	2.587	2.67	-	-3.2	20	80	0
1,3-Dichlorobenzene	1.308	1.392	-	-6.4	20	84	0
1,4-Dichlorobenzene	1.345	1.446	-	-7.5	20	85	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Instrument ID : GONZO
 Lab File ID : VG190312A02
 Sample No : WG1214926-2
 Channel :

Lab Number : L1908936
 Project Number : 170329301
 Calibration Date : 03/12/19 08:32
 Init. Calib. Date(s) : 02/27/19 02/28/19
 Init. Calib. Times : 20:36 00:24

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.485	1.527	-	-2.8	20	81	0
n-Butylbenzene	2.203	2.312	-	-4.9	20	83	0
1,2-Dichlorobenzene	1.17	1.257	-	-7.4	20	84	0
1,2,4,5-Tetramethylbenzene	2.12	2.203	-	-3.9	20	83	0
1,2-Dibromo-3-chloropropan	0.064	0.065	-	-1.6	20	77	0
1,3,5-Trichlorobenzene	0.946	0.961	-	-1.6	20	79	0
Hexachlorobutadiene	0.413	0.355	-	14	20	68	0
1,2,4-Trichlorobenzene	0.811	0.802	-	1.1	20	78	0
Naphthalene	1.401	1.528	-	-9.1	20	83	0
1,2,3-Trichlorobenzene	0.668	0.684	-	-2.4	20	78	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Instrument ID : VOA108
 Lab File ID : V08190312N02
 Sample No : WG1215235-2
 Channel :

Lab Number : L1908936
 Project Number : 170329301
 Calibration Date : 03/12/19 18:29
 Init. Calib. Date(s) : 02/18/19 02/18/19
 Init. Calib. Times : 20:23 23:40

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	58	-.01
Dichlorodifluoromethane	0.2	0.18	-	10	20	55	0
Chloromethane	0.197	0.199	-	-1	20	58	0
Vinyl chloride	0.21	0.226	-	-7.6	20	62	0
Bromomethane	0.181	0.176	-	2.8	20	58	0
Chloroethane	0.154	0.214	-	-39*	20	90	0
Trichlorofluoromethane	0.339	0.396	-	-16.8	20	72	0
Ethyl ether	0.113	0.113	-	0	20	61	0
1,1-Dichloroethene	0.188	0.188	-	0	20	60	0
Carbon disulfide	0.591	0.58	-	1.9	20	59	0
Freon-113	0.173	0.187	-	-8.1	20	66	0
Iodomethane	10	7.602	-	24*	20	58	0
Acrolein	0.023	0.025*	-	-8.7	20	69	0
Methylene chloride	0.224	0.222	-	0.9	20	60	0
Acetone	0.039	0.038*	-	2.6	20	62	0
trans-1,2-Dichloroethene	0.213	0.211	-	0.9	20	59	0
Methyl acetate	0.098	0.099*	-	-1	20	60	0
Methyl tert-butyl ether	0.56	0.479	-	14.5	20	52	0
tert-Butyl alcohol	0.012	0.013*	-	-8.3	20	70	0
Diisopropyl ether	0.645	0.558	-	13.5	20	52	-.01
1,1-Dichloroethane	0.377	0.383	-	-1.6	20	60	0
Halothane	0.165	0.164	-	0.6	20	61	-.01
Acrylonitrile	0.058	0.058	-	0	20	61	0
Ethyl tert-butyl ether	0.626	0.541	-	13.6	20	52	0
Vinyl acetate	0.447	0.382	-	14.5	20	57	-.01
cis-1,2-Dichloroethene	0.242	0.234	-	3.3	20	57	0
2,2-Dichloropropane	0.31	0.279	-	10	20	54	-.01
Bromochloromethane	0.112	0.115	-	-2.7	20	60	-.01
Cyclohexane	0.311	0.324	-	-4.2	20	65	-.01
Chloroform	0.394	0.404	-	-2.5	20	61	0
Ethyl acetate	0.166	0.133	-	19.9	20	54	-.01
Carbon tetrachloride	0.294	0.309	-	-5.1	20	63	0
Tetrahydrofuran	0.04	0.035*	-	12.5	20	55	0
Dibromofluoromethane	0.255	0.264	-	-3.5	20	60	-.01
1,1,1-Trichloroethane	0.344	0.342	-	0.6	20	59	-.01
2-Butanone	0.068	0.063*	-	7.4	20	65	-.01
1,1-Dichloropropene	0.275	0.271	-	1.5	20	59	0
Benzene	0.859	0.855	-	0.5	20	58	0
tert-Amyl methyl ether	0.576	0.438	-	24*	20	47	0
1,2-Dichloroethane-d4	0.287	0.296	-	-3.1	20	61	0
1,2-Dichloroethane	0.295	0.306	-	-3.7	20	63	0
Methyl cyclohexane	0.33	0.326	-	1.2	20	58	0
Trichloroethene	0.229	0.237	-	-3.5	20	61	-.01

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Instrument ID : VOA108
 Lab File ID : V08190312N02
 Sample No : WG1215235-2
 Channel :

Lab Number : L1908936
 Project Number : 170329301
 Calibration Date : 03/12/19 18:29
 Init. Calib. Date(s) : 02/18/19 02/18/19
 Init. Calib. Times : 20:23 23:40

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Dibromomethane	0.134	0.139	-	-3.7	20	61	0
1,2-Dichloropropane	0.223	0.211	-	5.4	20	57	-.01
2-Chloroethyl vinyl ether	0.127	0.111	-	12.6	20	52	0
Bromodichloromethane	0.312	0.317	-	-1.6	20	60	-.01
1,4-Dioxane	0.00097	0.00157*	-	-61.9*	20	93	0
cis-1,3-Dichloropropene	0.35	0.32	-	8.6	20	55	0
Chlorobenzene-d5	1	1	-	0	20	57	0
Toluene-d8	1.371	1.382	-	-0.8	20	59	0
Toluene	0.779	0.767	-	1.5	20	58	0
4-Methyl-2-pentanone	0.088	0.076*	-	13.6	20	52	0
Tetrachloroethene	0.335	0.327	-	2.4	20	57	0
trans-1,3-Dichloropropene	0.44	0.392	-	10.9	20	54	0
Ethyl methacrylate	0.349	0.267	-	23.5*	20	46	0
1,1,2-Trichloroethane	0.223	0.232	-	-4	20	61	0
Chlorodibromomethane	0.329	0.331	-	-0.6	20	61	0
1,3-Dichloropropane	0.451	0.458	-	-1.6	20	60	0
1,2-Dibromoethane	0.266	0.263	-	1.1	20	58	0
2-Hexanone	0.152	0.113	-	25.7*	20	46	0
Chlorobenzene	0.867	0.863	-	0.5	20	58	0
Ethylbenzene	1.453	1.395	-	4	20	55	0
1,1,1,2-Tetrachloroethane	0.325	0.318	-	2.2	20	58	0
p/m Xylene	0.553	0.522	-	5.6	20	53	0
o Xylene	0.547	0.512	-	6.4	20	53	0
Styrene	0.874	0.847	-	3.1	20	53	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	59	0
Bromoform	0.416	0.401	-	3.6	20	58	0
Isopropylbenzene	2.919	2.869	-	1.7	20	55	0
4-Bromofluorobenzene	0.978	0.899	-	8.1	20	52	0
Bromobenzene	0.751	0.71	-	5.5	20	54	0
n-Propylbenzene	3.333	3.46	-	-3.8	20	58	0
1,4-Dichlorobutane	0.892	0.866	-	2.9	20	58	0
1,1,2,2-Tetrachloroethane	0.678	0.674	-	0.6	20	58	0
4-Ethyltoluene	2.776	2.823	-	-1.7	20	58	0
2-Chlorotoluene	2.432	2.359	-	3	20	56	0
1,3,5-Trimethylbenzene	2.397	2.35	-	2	20	57	0
1,2,3-Trichloropropane	0.527	0.547	-	-3.8	20	62	0
trans-1,4-Dichloro-2-buten	0.186	0.175	-	5.9	20	63	0
4-Chlorotoluene	2.116	2.049	-	3.2	20	56	0
tert-Butylbenzene	2.463	2.127	-	13.6	20	50	0
1,2,4-Trimethylbenzene	2.385	2.252	-	5.6	20	56	0
sec-Butylbenzene	3.017	3.221	-	-6.8	20	59	0
p-Isopropyltoluene	2.59	2.562	-	1.1	20	56	0
1,3-Dichlorobenzene	1.385	1.408	-	-1.7	20	59	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Instrument ID : VOA108
 Lab File ID : V08190312N02
 Sample No : WG1215235-2
 Channel :

Lab Number : L1908936
 Project Number : 170329301
 Calibration Date : 03/12/19 18:29
 Init. Calib. Date(s) : 02/18/19 02/18/19
 Init. Calib. Times : 20:23 23:40

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene	1.435	1.446	-	-0.8	20	61	0
p-Diethylbenzene	1.516	1.319	-	13	20	51	0
n-Butylbenzene	2.402	2.36	-	1.7	20	57	0
1,2-Dichlorobenzene	1.351	1.313	-	2.8	20	58	0
1,2,4,5-Tetramethylbenzene	10	3.644	-	63.6*	20	22	0
1,2-Dibromo-3-chloropropan	0.102	0.083	-	18.6	20	50	0
1,3,5-Trichlorobenzene	0.93	0.7	-	24.7*	20	43	0
Hexachlorobutadiene	0.436	0.398	-	8.7	20	54	0
1,2,4-Trichlorobenzene	0.848	0.547	-	35.5*	20	38	0
Naphthalene	1.867	1.151	-	38.4*	20	36	0
1,2,3-Trichlorobenzene	0.766	0.47	-	38.6*	20	36	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Instrument ID : VOA108
 Lab File ID : V08190313N02
 Sample No : WG1215584-2
 Channel :

Lab Number : L1908936
 Project Number : 170329301
 Calibration Date : 03/13/19 18:42
 Init. Calib. Date(s) : 02/18/19 02/18/19
 Init. Calib. Times : 20:23 23:40

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	57	0
Dichlorodifluoromethane	0.2	0.201	-	-0.5	20	61	0
Chloromethane	0.197	0.21	-	-6.6	20	61	0
Vinyl chloride	0.21	0.237	-	-12.9	20	65	0
Bromomethane	0.181	0.186	-	-2.8	20	61	0
Chloroethane	0.154	0.205	-	-33.1*	20	86	0
Trichlorofluoromethane	0.339	0.403	-	-18.9	20	72	0
Ethyl ether	0.113	0.112	-	0.9	20	60	0
1,1-Dichloroethene	0.188	0.19	-	-1.1	20	60	0
Carbon disulfide	0.591	0.607	-	-2.7	20	61	0
Freon-113	0.173	0.21	-	-21.4*	20	73	0
Iodomethane	10	8.4	-	16	20	66	0
Acrolein	0.023	0.032*	-	-39.1*	20	85	0
Methylene chloride	0.224	0.236	-	-5.4	20	63	0
Acetone	0.039	0.046*	-	-17.9	20	74	0
trans-1,2-Dichloroethene	0.213	0.214	-	-0.5	20	59	0
Methyl acetate	0.098	0.108	-	-10.2	20	65	0
Methyl tert-butyl ether	0.56	0.478	-	14.6	20	51	0
tert-Butyl alcohol	0.012	0.013*	-	-8.3	20	70	0
Diisopropyl ether	0.645	0.608	-	5.7	20	56	0
1,1-Dichloroethane	0.377	0.4	-	-6.1	20	62	0
Halothane	0.165	0.175	-	-6.1	20	64	0
Acrylonitrile	0.058	0.059	-	-1.7	20	61	-0.01
Ethyl tert-butyl ether	0.626	0.588	-	6.1	20	56	0
Vinyl acetate	0.447	0.373	-	16.6	20	55	0
cis-1,2-Dichloroethene	0.242	0.249	-	-2.9	20	60	0
2,2-Dichloropropane	0.31	0.282	-	9	20	54	-0.01
Bromochloromethane	0.112	0.125	-	-11.6	20	65	-0.01
Cyclohexane	0.311	0.355	-	-14.1	20	70	-0.01
Chloroform	0.394	0.431	-	-9.4	20	65	0
Ethyl acetate	0.166	0.154	-	7.2	20	61	0
Carbon tetrachloride	0.294	0.322	-	-9.5	20	65	0
Tetrahydrofuran	0.04	0.04*	-	0	20	62	-0.01
Dibromofluoromethane	0.255	0.268	-	-5.1	20	61	-0.01
1,1,1-Trichloroethane	0.344	0.369	-	-7.3	20	63	-0.01
2-Butanone	0.068	0.067*	-	1.5	20	69	-0.01
1,1-Dichloropropene	0.275	0.296	-	-7.6	20	63	0
Benzene	0.859	0.914	-	-6.4	20	62	0
tert-Amyl methyl ether	0.576	0.485	-	15.8	20	51	0
1,2-Dichloroethane-d4	0.287	0.309	-	-7.7	20	63	0
1,2-Dichloroethane	0.295	0.327	-	-10.8	20	67	0
Methyl cyclohexane	0.33	0.357	-	-8.2	20	62	0
Trichloroethene	0.229	0.253	-	-10.5	20	65	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Instrument ID : VOA108
 Lab File ID : V08190313N02
 Sample No : WG1215584-2
 Channel :

Lab Number : L1908936
 Project Number : 170329301
 Calibration Date : 03/13/19 18:42
 Init. Calib. Date(s) : 02/18/19 02/18/19
 Init. Calib. Times : 20:23 23:40

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Dibromomethane	0.134	0.145	-	-8.2	20	63	0
1,2-Dichloropropane	0.223	0.229	-	-2.7	20	61	-.01
2-Chloroethyl vinyl ether	0.127	0.106	-	16.5	20	49	0
Bromodichloromethane	0.312	0.326	-	-4.5	20	61	-.01
1,4-Dioxane	0.00097	0.00124*	-	-27.8*	20	73	0
cis-1,3-Dichloropropene	0.35	0.346	-	1.1	20	59	0
Chlorobenzene-d5	1	1	-	0	20	56	0
Toluene-d8	1.371	1.367	-	0.3	20	57	0
Toluene	0.779	0.829	-	-6.4	20	61	0
4-Methyl-2-pentanone	0.088	0.079*	-	10.2	20	52	0
Tetrachloroethene	0.335	0.341	-	-1.8	20	59	0
trans-1,3-Dichloropropene	0.44	0.448	-	-1.8	20	60	0
Ethyl methacrylate	0.349	0.251	-	28.1*	20	43	0
1,1,2-Trichloroethane	0.223	0.254	-	-13.9	20	66	0
Chlorodibromomethane	0.329	0.345	-	-4.9	20	62	0
1,3-Dichloropropane	0.451	0.504	-	-11.8	20	65	0
1,2-Dibromoethane	0.266	0.278	-	-4.5	20	61	0
2-Hexanone	0.152	0.121	-	20.4*	20	49	0
Chlorobenzene	0.867	0.907	-	-4.6	20	60	0
Ethylbenzene	1.453	1.451	-	0.1	20	56	0
1,1,1,2-Tetrachloroethane	0.325	0.339	-	-4.3	20	61	0
p/m Xylene	0.553	0.552	-	0.2	20	56	0
o Xylene	0.547	0.527	-	3.7	20	54	0
Styrene	0.874	0.897	-	-2.6	20	56	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	59	0
Bromoform	0.416	0.426	-	-2.4	20	62	0
Isopropylbenzene	2.919	2.989	-	-2.4	20	58	0
4-Bromofluorobenzene	0.978	0.898	-	8.2	20	52	0
Bromobenzene	0.751	0.726	-	3.3	20	56	0
n-Propylbenzene	3.333	3.537	-	-6.1	20	59	0
1,4-Dichlorobutane	0.892	0.865	-	3	20	58	0
1,1,2,2-Tetrachloroethane	0.678	0.687	-	-1.3	20	60	0
4-Ethyltoluene	2.776	2.885	-	-3.9	20	60	0
2-Chlorotoluene	2.432	2.395	-	1.5	20	57	0
1,3,5-Trimethylbenzene	2.397	2.393	-	0.2	20	59	0
1,2,3-Trichloropropane	0.527	0.58	-	-10.1	20	66	0
trans-1,4-Dichloro-2-buten	0.186	0.169	-	9.1	20	62	0
4-Chlorotoluene	2.116	2.235	-	-5.6	20	61	0
tert-Butylbenzene	2.463	2.14	-	13.1	20	51	0
1,2,4-Trimethylbenzene	2.385	2.284	-	4.2	20	57	0
sec-Butylbenzene	3.017	3.195	-	-5.9	20	59	0
p-Isopropyltoluene	2.59	2.56	-	1.2	20	57	0
1,3-Dichlorobenzene	1.385	1.469	-	-6.1	20	62	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Langan Engineering & Environmental
 Project Name : 491 WORTMAN AVE.
 Instrument ID : VOA108
 Lab File ID : V08190313N02
 Sample No : WG1215584-2
 Channel :

Lab Number : L1908936
 Project Number : 170329301
 Calibration Date : 03/13/19 18:42
 Init. Calib. Date(s) : 02/18/19 02/18/19
 Init. Calib. Times : 20:23 23:40

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene	1.435	1.496	-	-4.3	20	63	0
p-Diethylbenzene	1.516	1.256	-	17.2	20	49	0
n-Butylbenzene	2.402	2.296	-	4.4	20	56	0
1,2-Dichlorobenzene	1.351	1.395	-	-3.3	20	62	0
1,2,4,5-Tetramethylbenzene	10	3.204	-	68*	20	19	0
1,2-Dibromo-3-chloropropan	0.102	0.093	-	8.8	20	57	0
1,3,5-Trichlorobenzene	0.93	0.653	-	29.8*	20	41	0
Hexachlorobutadiene	0.436	0.377	-	13.5	20	51	0
1,2,4-Trichlorobenzene	0.848	0.477	-	43.8*	20	34	0
Naphthalene	1.867	1.048	-	43.9*	20	33	0
1,2,3-Trichlorobenzene	0.766	0.417	-	45.6*	20	33	0

* Value outside of QC limits.



Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A02.D
 Acq On : 12 Mar 2019 8:32
 Operator : GONZO:PD
 Sample : WG1214926-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1214926, ICAL15541 (Sig #1); WG, ICAL15541 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 09:02:19 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 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	79	0.00
2 TP	Dichlorodifluoromethane	0.192	0.174	9.4	74	0.00
3 TP	Chloromethane	0.190	0.175	7.9	76	0.00
4 TC	Vinyl chloride	0.286	0.288	-0.7	81	0.00
5 TP	Bromomethane	0.174	0.084	51.7#	42#	0.00
6 TP	Chloroethane	0.168	0.159	5.4	76	0.00
7 TP	Trichlorofluoromethane	0.365	0.327	10.4	73	0.00
8 TP	Ethyl ether	0.094	0.093	1.1	83	0.00
10 TC	1,1-Dichloroethene	0.186	0.169	9.1	78	0.00
11 TP	Carbon disulfide	0.557	0.504	9.5	80	0.00
12 TP	Freon-113	0.217	0.181	16.6	73	0.00
14 TP	Acrolein	0.020	0.022	-10.0	90	0.00
15 TP	Methylene chloride	0.198	0.194	2.0	82	0.00
17 TP	Acetone	0.026	0.034	-30.8#	103	0.00
18 TP	trans-1,2-Dichloroethene	0.202	0.190	5.9	79	0.00
19 TP	Methyl acetate	0.090	0.100	-11.1	94	0.00
20 TP	Methyl tert-butyl ether	0.473	0.476	-0.6	84	0.00
21 TP	tert-Butyl alcohol	0.00567	0.00749	-32.1#	115	0.00
22 TP	Diisopropyl ether	0.607	0.674	-11.0	92	0.00
23 TP	1,1-Dichloroethane	0.367	0.391	-6.5	88	0.00
24 TP	Halothane	0.182	0.163	10.4	78	-0.01
25 TP	Acrylonitrile	0.037	0.042	-13.5	92	-0.01
26 TP	Ethyl tert-butyl ether	0.575	0.591	-2.8	88	0.00
27 TP	Vinyl acetate	0.381	0.437	-14.7	96	0.00
28 TP	cis-1,2-Dichloroethene	0.222	0.214	3.6	81	-0.01
29 TP	2,2-Dichloropropane	0.310	0.306	1.3	84	0.00
30 TP	Bromochloromethane	0.109	0.105	3.7	82	0.00
31 TP	Cyclohexane	0.351	0.329	6.3	82	0.00
32 TC	Chloroform	0.374	0.373	0.3	84	0.00
33 TP	Ethyl acetate	0.139	0.152	-9.4	93	0.00
34 TP	Carbon tetrachloride	0.324	0.299	7.7	78	0.00
35 TP	Tetrahydrofuran	0.034	0.040	-17.6	99	0.00
36 S	Dibromofluoromethane	0.253	0.237	6.3	76	0.00
37 TP	1,1,1-Trichloroethane	0.371	0.350	5.7	78	0.00
39 TP	2-Butanone	0.052	0.059	-13.5	93	-0.01
40 TP	1,1-Dichloropropene	0.297	0.297	0.0	84	0.00
41 TP	Benzene	0.898	0.903	-0.6	85	0.00
42 TP	tert-Amyl methyl ether	0.551	0.551	0.0	86	0.00
43 S	1,2-Dichloroethane-d4	0.249	0.265	-6.4	87	0.00

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A02.D
 Acq On : 12 Mar 2019 8:32
 Operator : GONZO:PD
 Sample : WG1214926-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1214926, ICAL15541 (Sig #1); WG, ICAL15541 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 09:02:19 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 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)
44 TP	1,2-Dichloroethane	0.257	0.271	-5.4	91	0.00
47 TP	Methyl cyclohexane	0.445	0.378	15.1	75	0.00
48 TP	Trichloroethene	0.244	0.226	7.4	82	0.00
50 TP	Dibromomethane	0.117	0.119	-1.7	86	-0.01
51 TC	1,2-Dichloropropane	0.198	0.210	-6.1	89	0.00
53 TP	2-Chloroethyl vinyl ether	0.088	0.093	-5.7	87	0.00
54 TP	Bromodichloromethane	0.284	0.284	0.0	85	0.00
57 TP	1,4-Dioxane	0.00070	0.00044	37.1#	43#	0.00
58 TP	cis-1,3-Dichloropropene	0.331	0.339	-2.4	87	0.00
59 I	Chlorobenzene-d5	1.000	1.000	0.0	77	0.00
60 S	Toluene-d8	1.229	1.291	-5.0	79	0.00
61 TC	Toluene	0.741	0.773	-4.3	84	0.00
62 TP	4-Methyl-2-pentanone	0.062	0.068	-9.7	89	0.00
63 TP	Tetrachloroethene	0.362	0.331	8.6	73	0.00
65 TP	trans-1,3-Dichloropropene	0.359	0.400	-11.4	90	0.00
67 TP	Ethyl methacrylate	0.254	0.268	-5.5	87	0.00
68 TP	1,1,2-Trichloroethane	0.179	0.192	-7.3	86	0.00
69 TP	Chlorodibromomethane	0.258	0.263	-1.9	81	0.00
70 TP	1,3-Dichloropropane	0.352	0.399	-13.4	90	0.00
71 TP	1,2-Dibromoethane	0.205	0.216	-5.4	83	0.00
72 TP	2-Hexanone	0.101	0.120	-18.8	91	0.00
73 TP	Chlorobenzene	0.837	0.855	-2.2	83	0.00
74 TC	Ethylbenzene	1.454	1.489	-2.4	84	0.00
75 TP	1,1,1,2-Tetrachloroethane	0.289	0.297	-2.8	82	0.00
76 TP	p/m Xylene	0.589	0.592	-0.5	82	0.00
77 TP	o Xylene	0.552	0.562	-1.8	84	-0.01
78 TP	Styrene	0.912	0.926	-1.5	84	0.00
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	75	0.00
80 TP	Bromoform	0.320	0.327	-2.2	80	0.00
82 TP	Isopropylbenzene	2.855	2.953	-3.4	82	0.00
83 S	4-Bromofluorobenzene	0.844	0.909	-7.7	80	0.00
84 TP	Bromobenzene	0.709	0.731	-3.1	81	0.00
85 TP	n-Propylbenzene	3.277	3.472	-6.0	84	0.00
86 TP	1,4-Dichlorobutane	0.558	0.674	-20.8#	95	0.00
87 TP	1,1,2,2-Tetrachloroethane	0.441	0.524	-18.8	92	0.00
88 TP	4-Ethyltoluene	2.707	2.858	-5.6	83	0.00
89 TP	2-Chlorotoluene	1.816	2.024	-11.5	89	0.00

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A02.D
 Acq On : 12 Mar 2019 8:32
 Operator : GONZO:PD
 Sample : WG1214926-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1214926, ICAL15541 (Sig #1); WG, ICAL15541 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 09:02:19 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 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)
90 TP	1,3,5-Trimethylbenzene	2.340	2.443	-4.4	83	0.00
91 TP	1,2,3-Trichloropropane	0.386	0.451	-16.8	97	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.100	0.116	-16.0	91	-0.01
93 TP	4-Chlorotoluene	1.880	2.053	-9.2	86	0.00
94 TP	tert-Butylbenzene	2.063	2.122	-2.9	80	0.00
97 TP	1,2,4-Trimethylbenzene	2.254	2.410	-6.9	84	0.00
98 TP	sec-Butylbenzene	2.818	2.909	-3.2	80	0.00
99 TP	p-Isopropyltoluene	2.587	2.670	-3.2	80	0.00
100 TP	1,3-Dichlorobenzene	1.308	1.392	-6.4	84	0.00
101 TP	1,4-Dichlorobenzene	1.345	1.446	-7.5	85	0.00
102 TP	p-Diethylbenzene	1.485	1.527	-2.8	81	0.00
103 TP	n-Butylbenzene	2.203	2.312	-4.9	83	0.00
104 TP	1,2-Dichlorobenzene	1.170	1.257	-7.4	84	0.00
105 TP	1,2,4,5-Tetramethylbenzene	2.120	2.203	-3.9	83	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.064	0.065	-1.6	77	0.00
107 TP	1,3,5-Trichlorobenzene	0.946	0.961	-1.6	79	0.00
108 TP	Hexachlorobutadiene	0.413	0.355	14.0	68	0.00
109 TP	1,2,4-Trichlorobenzene	0.811	0.802	1.1	78	0.00
110 TP	Naphthalene	1.401	1.528	-9.1	83	0.00
111 TP	1,2,3-Trichlorobenzene	0.668	0.684	-2.4	78	0.00

* 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\2019\190312A\
 Data File : VG190312A02.D
 Acq On : 12 Mar 2019 8:32
 Operator : GONZO:PD
 Sample : WG1214926-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1214926, ICAL15541 (Sig #1); WG, ICAL15541 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 09:02:19 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190312A\VG190312A02.D
 Sub List : 8260-Curve-Iodomethane - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	6.545	96	385122	10.000	ug/L	0.00
Standard Area 1 = 385122			Recovery	=	100.00%	
59) Chlorobenzene-d5	10.127	117	297531	10.000	ug/L	0.00
Standard Area 1 = 297531			Recovery	=	100.00%	
79) 1,4-Dichlorobenzene-d4	12.703	152	151374	10.000	ug/L	0.00
Standard Area 1 = 151374			Recovery	=	100.00%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.714	113	91175	9.371	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	93.71%	
43) 1,2-Dichloroethane-d4	6.261	65	101993	10.644	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	106.44%	
60) Toluene-d8	8.257	98	383968	10.503	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.03%	
83) 4-Bromofluorobenzene	11.538	95	137560	10.768	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	107.68%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.879	85	67161	9.079	ug/L	99
3) Chloromethane	2.104	50	67323	9.219	ug/L	100
4) Vinyl chloride	2.183	62	110857	10.081	ug/L	97
5) Bromomethane	2.535	94	32202M1	4.801	ug/L	
6) Chloroethane	2.672	64	61096	9.460	ug/L	97
7) Trichlorofluoromethane	2.828	101	125881	8.956	ug/L	99
8) Ethyl ether	3.151	74	35862	9.891	ug/L	91
10) 1,1-Dichloroethene	3.356	96	65130	9.096	ug/L	91
11) Carbon disulfide	3.396	76	194114	9.041	ug/L	100
12) Freon-113	3.396	101	69527	8.318	ug/L	# 79
14) Acrolein	3.708	56	8548	10.837	ug/L	100
15) Methylene chloride	3.953	84	74721	9.816	ug/L	93
17) Acetone	4.002	43	13203	12.981	ug/L	91
18) trans-1,2-Dichloroethene	4.110	96	73081	9.396	ug/L	92
19) Methyl acetate	4.119	43	38540	11.144	ug/L	97
20) Methyl tert-butyl ether	4.207	73	183469	10.071	ug/L	94
21) tert-Butyl alcohol	4.295	59	14426	66.038	ug/L	# 68
22) Diisopropyl ether	4.579	45	259551	11.111	ug/L	96
23) 1,1-Dichloroethane	4.726	63	150767	10.660	ug/L	99
24) Halothane	4.765	117	62771	8.955	ug/L	100
25) Acrylonitrile	4.775	53	16293	11.438	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A02.D
 Acq On : 12 Mar 2019 8:32
 Operator : GONZO:PD
 Sample : WG1214926-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1214926, ICAL15541 (Sig #1); WG, ICAL15541 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 09:02:19 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190312A\VG190312A02.D
 Sub List : 8260-Curve-Iodomethane - Megamix plus Diox-Iodomethane

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Ethyl tert-butyl ether	4.941	59	227647	10.284	ug/L	91
27) Vinyl acetate	4.960	43	168297	11.475	ug/L	99
28) cis-1,2-Dichloroethene	5.254	96	82560	9.646	ug/L	93
29) 2,2-Dichloropropane	5.361	77	117952	9.881	ug/L	95
30) Bromochloromethane	5.459	128	40539	9.699	ug/L	92
31) Cyclohexane	5.459	56	126749	9.370	ug/L	94
32) Chloroform	5.528	83	143680	9.979	ug/L	97
33) Ethyl acetate	5.635	43	58606	10.919	ug/L	98
34) Carbon tetrachloride	5.665	117	115160	9.232	ug/L	97
35) Tetrahydrofuran	5.684	42	15404M1	11.909	ug/L	
37) 1,1,1-Trichloroethane	5.733	97	134884	9.436	ug/L	97
39) 2-Butanone	5.831	43	22821	11.386	ug/L	92
40) 1,1-Dichloropropene	5.860	75	114305	9.989	ug/L	98
41) Benzene	6.115	78	347905	10.062	ug/L	99
42) tert-Amyl methyl ether	6.212	73	212340	10.009	ug/L	96
44) 1,2-Dichloroethane	6.330	62	104467	10.546	ug/L	98
47) Methyl cyclohexane	6.701	83	145441	8.483	ug/L	97
48) Trichloroethene	6.721	95	86848	9.246	ug/L	99
50) Dibromomethane	7.171	93	45909	10.154	ug/L	93
51) 1,2-Dichloropropane	7.279	63	80977	10.623	ug/L	98
53) 2-Chloroethyl vinyl ether	7.973	63	35943	10.660	ug/L	98
54) Bromodichloromethane	7.347	83	109243	9.977	ug/L	100
57) 1,4-Dioxane	7.562	88	8517	315.889	ug/L	99
58) cis-1,3-Dichloropropene	8.041	75	130612	10.246	ug/L	93
61) Toluene	8.315	92	229929	10.433	ug/L	100
62) 4-Methyl-2-pentanone	8.755	58	20173	10.997	ug/L	89
63) Tetrachloroethene	8.765	166	98521	9.141	ug/L	97
65) trans-1,3-Dichloropropene	8.804	75	119140	11.164	ug/L	95
67) Ethyl methacrylate	8.981	69	79801	10.554	ug/L	97
68) 1,1,2-Trichloroethane	8.991	83	57055	10.709	ug/L	99
69) Chlorodibromomethane	9.206	129	78191	10.200	ug/L	99
70) 1,3-Dichloropropane	9.324	76	118571	11.319	ug/L	100
71) 1,2-Dibromoethane	9.500	107	64222	10.545	ug/L	98
72) 2-Hexanone	9.774	43	35674	11.900	ug/L	93
73) Chlorobenzene	10.147	112	254272	10.212	ug/L	97
74) Ethylbenzene	10.176	91	442896	10.235	ug/L	99
75) 1,1,1,2-Tetrachloroethane	10.225	131	88336	10.272	ug/L	98
76) p/m Xylene	10.352	106	352309	20.103	ug/L	99
77) o Xylene	10.862	106	334279	20.347	ug/L	99
78) Styrene	10.930	104	550746	20.306	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A02.D
 Acq On : 12 Mar 2019 8:32
 Operator : GONZO:PD
 Sample : WG1214926-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1214926, ICAL15541 (Sig #1); WG, ICAL15541 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 09:02:19 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190312A\VG190312A02.D
 Sub List : 8260-Curve-Iodomethane - Megamix plus Diox-Iodomethane

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
80)	Bromoform	10.960	173	49465	10.198	ug/L	97
82)	Isopropylbenzene	11.224	105	446937	10.342	ug/L	100
84)	Bromobenzene	11.655	156	110635	10.312	ug/L	98
85)	n-Propylbenzene	11.684	91	525498	10.593	ug/L	99
86)	1,4-Dichlorobutane	11.704	55	102001	12.076	ug/L	99
87)	1,1,2,2-Tetrachloroethane	11.763	83	79259	11.865	ug/L	100
88)	4-Ethyltoluene	11.802	105	432636	10.559	ug/L	100
89)	2-Chlorotoluene	11.851	91	306401M1	11.144	ug/L	
90)	1,3,5-Trimethylbenzene	11.890	105	369816	10.439	ug/L	100
91)	1,2,3-Trichloropropane	11.910	75	68293M1	11.676	ug/L	
92)	trans-1,4-Dichloro-2-b...	11.949	53	17618	11.587	ug/L #	100
93)	4-Chlorotoluene	12.027	91	310740	10.919	ug/L	99
94)	tert-Butylbenzene	12.223	119	321192	10.286	ug/L	99
97)	1,2,4-Trimethylbenzene	12.302	105	364777	10.689	ug/L	99
98)	sec-Butylbenzene	12.409	105	440346	10.323	ug/L	100
99)	p-Isopropyltoluene	12.556	119	404227	10.323	ug/L	99
100)	1,3-Dichlorobenzene	12.635	146	210719	10.644	ug/L	99
101)	1,4-Dichlorobenzene	12.723	146	218952	10.758	ug/L	99
102)	p-Diethylbenzene	12.919	119	231178	10.288	ug/L	98
103)	n-Butylbenzene	12.978	91	349924	10.494	ug/L	100
104)	1,2-Dichlorobenzene	13.134	146	190255	10.743	ug/L	99
105)	1,2,4,5-Tetramethylben...	13.702	119	333415	10.387	ug/L	99
106)	1,2-Dibromo-3-chloropr...	13.908	155	9792	10.060	ug/L	99
107)	1,3,5-Trichlorobenzene	13.928	180	145476	10.159	ug/L	99
108)	Hexachlorobutadiene	14.486	225	53807	8.612	ug/L	99
109)	1,2,4-Trichlorobenzene	14.525	180	121363	9.880	ug/L	99
110)	Naphthalene	14.819	128	231302	10.903	ug/L	100
111)	1,2,3-Trichlorobenzene	14.986	180	103540	10.238	ug/L	100

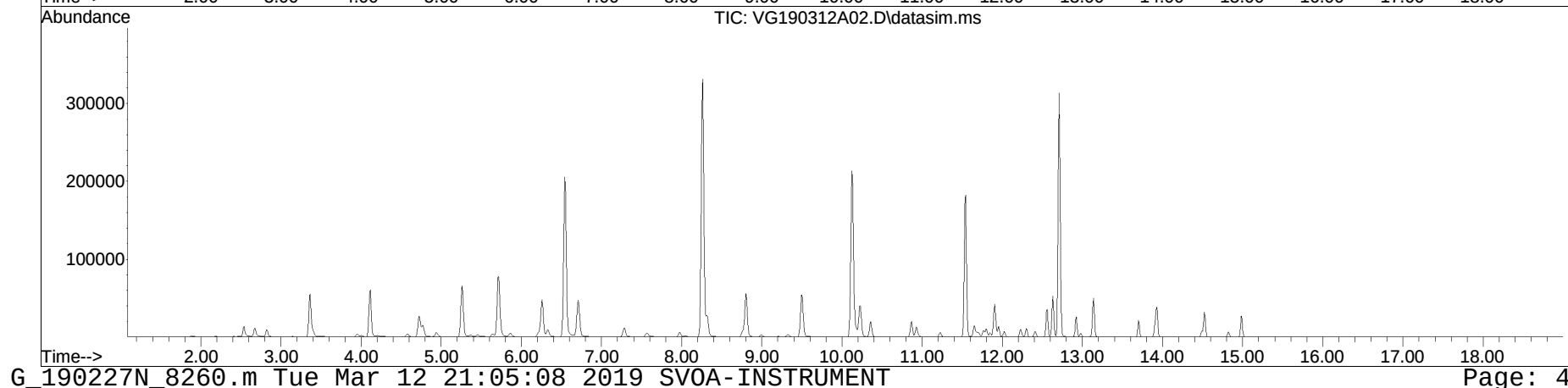
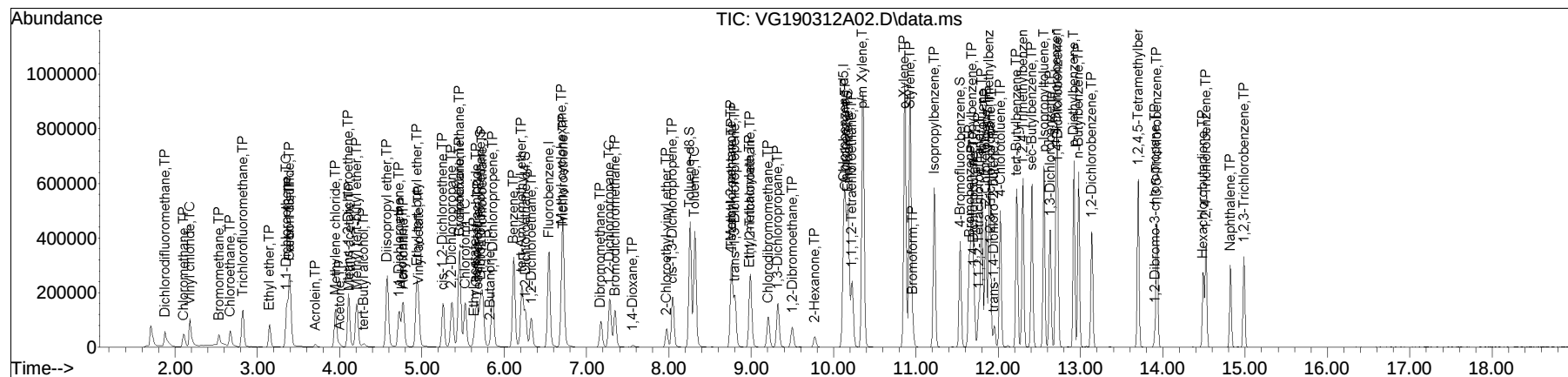
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A02.D
 Acq On : 12 Mar 2019 8:32
 Operator : GONZO:PD
 Sample : WG1214926-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1214926,ICAL15541 (Sig #1); WG,ICAL15541 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 09:02:19 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

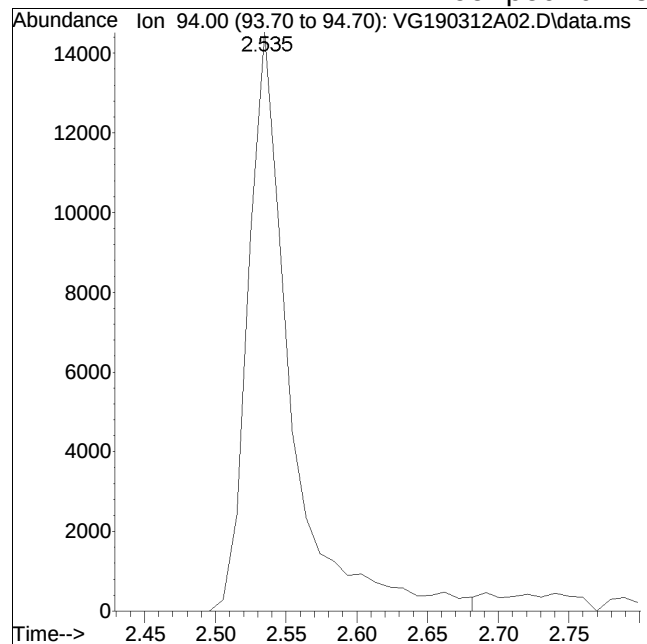
Sub List : 8260-Curve-Iodomethane - Megamix plus Diox-Iodomethane



Manual Integration Report

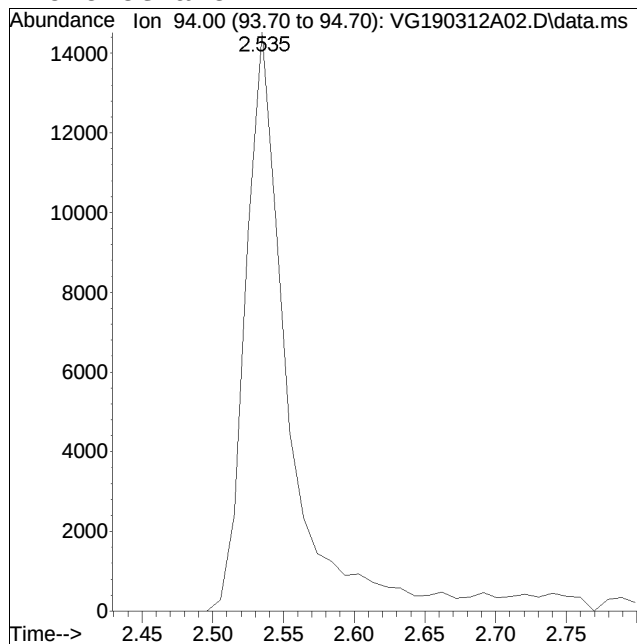
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190312A02.D Operator : GONZO:PD
Date Inj'd : 3/12/2019 8:32 Instrument : Gonzo
Sample : WG1214926-2 Quant Date : 3/12/2019 9:00 am

Compound #5: Bromomethane



Original Peak Response = 30377

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

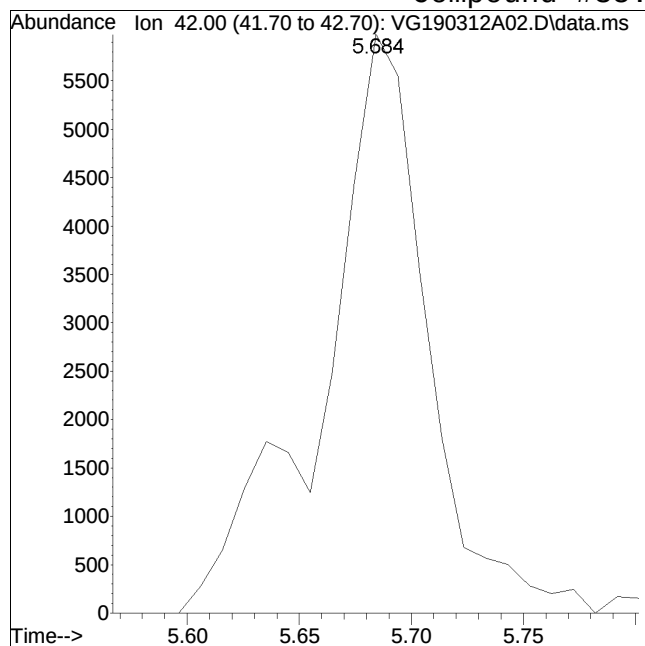


Manual Peak Response = 32202 M1

Manual Integration Report

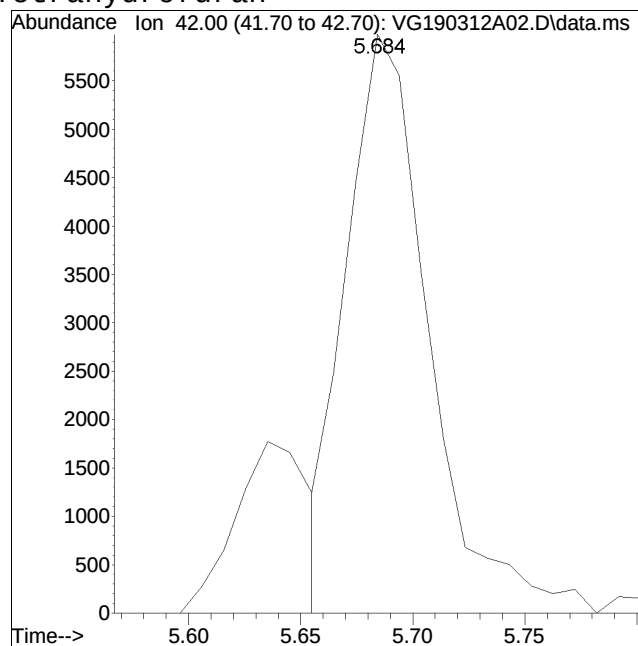
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Data File : VG190312A02.D Operator : GONZO:PD
Date Inj'd : 3/12/2019 8:32 Instrument : Gonzo
Sample : WG1214926-2 Quant Date : 3/12/2019 9:00 am

Compound #35: Tetrahydrofuran



Original Peak Response = 19451

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

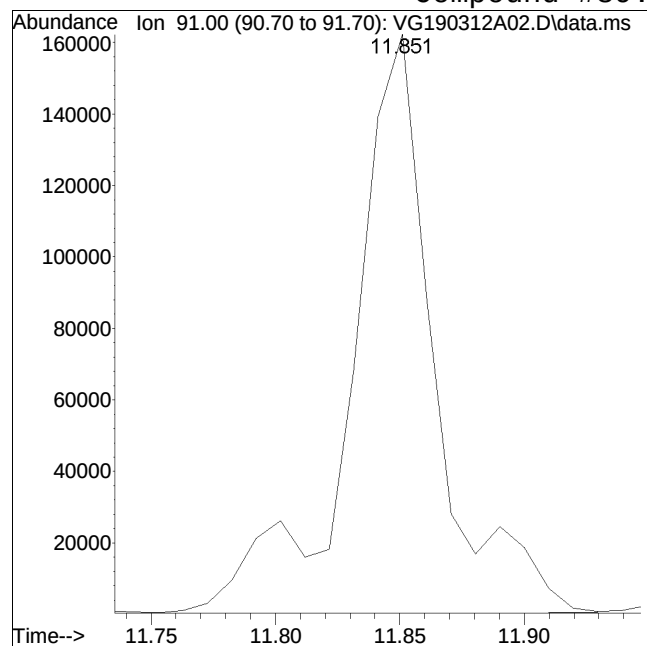


Manual Peak Response = 15404 M1

Manual Integration Report

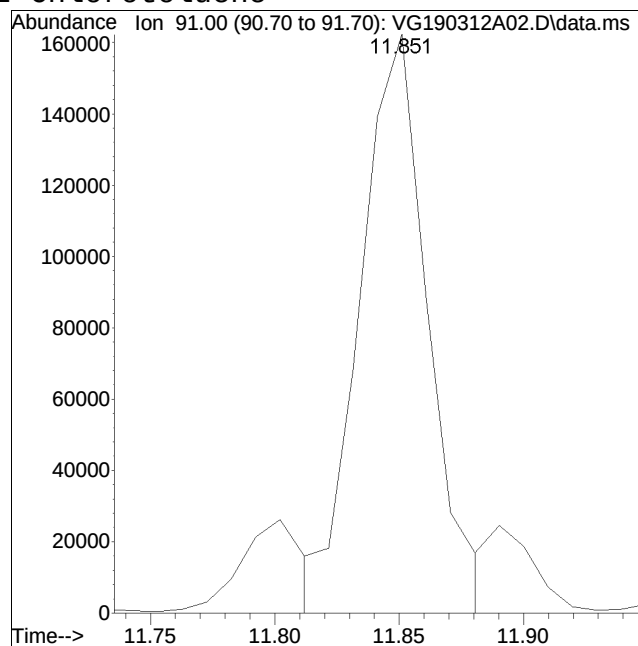
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190312A02.D Operator : GONZO:PD
Date Inj'd : 3/12/2019 8:32 Instrument : Gonzo
Sample : WG1214926-2 Quant Date : 3/12/2019 9:00 am

Compound #89: 2-Chlorotoluene



Original Peak Response = 378853

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

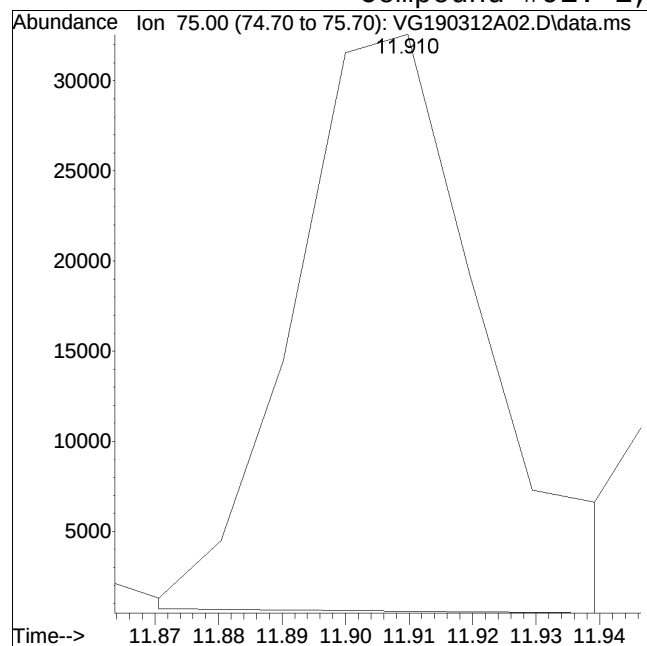


Manual Peak Response = 306401 M1

Manual Integration Report

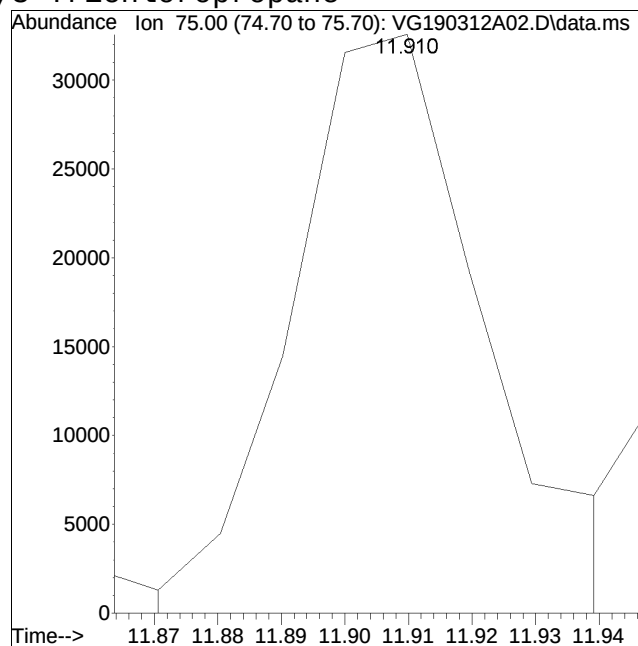
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Data File : VG190312A02.D Operator : GONZO:PD
Date Inj'd : 3/12/2019 8:32 Instrument : Gonzo
Sample : WG1214926-2 Quant Date : 3/12/2019 9:00 am

Compound #91: 1,2,3-Trichloropropane



Original Peak Response = 65866

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



Manual Peak Response = 68293 M1

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N02.D
 Acq On : 12 Mar 2019 6:29 pm
 Operator : VOA108:KJD
 Sample : WG1215235-2
 Misc : WG1215235,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 18:44:24 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 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	58	-0.01
2 TP	Dichlorodifluoromethane	0.200	0.180	10.0	55	0.00
3 TP	Chloromethane	0.197	0.199	-1.0	58	0.00
4 TC	Vinyl chloride	0.210	0.226	-7.6	62	0.00
5 TP	Bromomethane	0.181	0.176	2.8	58	0.00
6 TP	Chloroethane	0.154	0.214	-39.0#	90	0.00
7 TP	Trichlorofluoromethane	0.339	0.396	-16.8	72	0.00
8 TP	Ethyl ether	0.113	0.113	0.0	61	0.00
10 TC	1,1-Dichloroethene	0.188	0.188	0.0	60	0.00
11 TP	Carbon disulfide	0.591	0.580	1.9	59	0.00
12 TP	Freon-113	0.173	0.187	-8.1	66	0.00
13 TP	Iodomethane	* 10.000	7.602	24.0#	58	0.00
14 TP	Acrolein	0.023	0.025#	-8.7	69	0.00
15 TP	Methylene chloride	0.224	0.222	0.9	60	0.00
17 TP	Acetone	0.039	0.038#	2.6	62	0.00
18 TP	trans-1,2-Dichloroethene	0.213	0.211	0.9	59	0.00
19 TP	Methyl acetate	0.098	0.099#	-1.0	60	0.00
20 TP	Methyl tert-butyl ether	0.560	0.479	14.5	52	0.00
21 TP	tert-Butyl alcohol	0.012	0.013#	-8.3	70	0.00
22 TP	Diisopropyl ether	0.645	0.558	13.5	52	-0.01
23 TP	1,1-Dichloroethane	0.377	0.383	-1.6	60	0.00
24 TP	Halothane	0.165	0.164	0.6	61	-0.01
25 TP	Acrylonitrile	0.058	0.058	0.0	61	0.00
26 TP	Ethyl tert-butyl ether	0.626	0.541	13.6	52	0.00
27 TP	Vinyl acetate	0.447	0.382	14.5	57	-0.01
28 TP	cis-1,2-Dichloroethene	0.242	0.234	3.3	57	0.00
29 TP	2,2-Dichloropropane	0.310	0.279	10.0	54	-0.01
30 TP	Bromochloromethane	0.112	0.115	-2.7	60	-0.01
31 TP	Cyclohexane	0.311	0.324	-4.2	65	-0.01
32 TC	Chloroform	0.394	0.404	-2.5	61	0.00
33 TP	Ethyl acetate	0.166	0.133	19.9	54	-0.01
34 TP	Carbon tetrachloride	0.294	0.309	-5.1	63	0.00
35 TP	Tetrahydrofuran	0.040	0.035#	12.5	55	0.00
36 S	Dibromofluoromethane	0.255	0.264	-3.5	60	-0.01
37 TP	1,1,1-Trichloroethane	0.344	0.342	0.6	59	-0.01
39 TP	2-Butanone	0.068	0.063#	7.4	65	-0.01
40 TP	1,1-Dichloropropene	0.275	0.271	1.5	59	0.00
41 TP	Benzene	0.859	0.855	0.5	58	0.00
42 TP	tert-Amyl methyl ether	0.576	0.438	24.0#	47#	0.00

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N02.D
 Acq On : 12 Mar 2019 6:29 pm
 Operator : VOA108:KJD
 Sample : WG1215235-2
 Misc : WG1215235,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 18:44:24 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 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	0.287	0.296	-3.1	61	0.00
44 TP	1,2-Dichloroethane	0.295	0.306	-3.7	63	0.00
47 TP	Methyl cyclohexane	0.330	0.326	1.2	58	0.00
48 TP	Trichloroethene	0.229	0.237	-3.5	61	-0.01
50 TP	Dibromomethane	0.134	0.139	-3.7	61	0.00
51 TC	1,2-Dichloropropane	0.223	0.211	5.4	57	-0.01
53 TP	2-Chloroethyl vinyl ether	0.127	0.111	12.6	52	0.00
54 TP	Bromodichloromethane	0.312	0.317	-1.6	60	-0.01
57 TP	1,4-Dioxane	0.00097	0.00157#	-61.9#	93	0.00
58 TP	cis-1,3-Dichloropropene	0.350	0.320	8.6	55	0.00
59 I	Chlorobenzene-d5	1.000	1.000	0.0	57	0.00
60 S	Toluene-d8	1.371	1.382	-0.8	59	0.00
61 TC	Toluene	0.779	0.767	1.5	58	0.00
62 TP	4-Methyl-2-pentanone	0.088	0.076#	13.6	52	0.00
63 TP	Tetrachloroethene	0.335	0.327	2.4	57	0.00
65 TP	trans-1,3-Dichloropropene	0.440	0.392	10.9	54	0.00
67 TP	Ethyl methacrylate	0.349	0.267	23.5#	46#	0.00
68 TP	1,1,2-Trichloroethane	0.223	0.232	-4.0	61	0.00
69 TP	Chlorodibromomethane	0.329	0.331	-0.6	61	0.00
70 TP	1,3-Dichloropropane	0.451	0.458	-1.6	60	0.00
71 TP	1,2-Dibromoethane	0.266	0.263	1.1	58	0.00
72 TP	2-Hexanone	0.152	0.113	25.7#	46#	0.00
73 TP	Chlorobenzene	0.867	0.863	0.5	58	0.00
74 TC	Ethylbenzene	1.453	1.395	4.0	55	0.00
75 TP	1,1,1,2-Tetrachloroethane	0.325	0.318	2.2	58	0.00
76 TP	p/m Xylene	0.553	0.522	5.6	53	0.00
77 TP	o Xylene	0.547	0.512	6.4	53	0.00
78 TP	Styrene	0.874	0.847	3.1	53	0.00
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	59	0.00
80 TP	Bromoform	0.416	0.401	3.6	58	0.00
82 TP	Isopropylbenzene	2.919	2.869	1.7	55	0.00
83 S	4-Bromofluorobenzene	0.978	0.899	8.1	52	0.00
84 TP	Bromobenzene	0.751	0.710	5.5	54	0.00
85 TP	n-Propylbenzene	3.333	3.460	-3.8	58	0.00
86 TP	1,4-Dichlorobutane	0.892	0.866	2.9	58	0.00
87 TP	1,1,2,2-Tetrachloroethane	0.678	0.674	0.6	58	0.00
88 TP	4-Ethyltoluene	2.776	2.823	-1.7	58	0.00

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N02.D
 Acq On : 12 Mar 2019 6:29 pm
 Operator : VOA108:KJD
 Sample : WG1215235-2
 Misc : WG1215235,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 18:44:24 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 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 TP	2-Chlorotoluene	2.432	2.359	3.0	56	0.00
90 TP	1,3,5-Trimethylbenzene	2.397	2.350	2.0	57	0.00
91 TP	1,2,3-Trichloropropane	0.527	0.547	-3.8	62	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.186	0.175	5.9	63	0.00
93 TP	4-Chlorotoluene	2.116	2.049	3.2	56	0.00
94 TP	tert-Butylbenzene	2.463	2.127	13.6	50	0.00
97 TP	1,2,4-Trimethylbenzene	2.385	2.252	5.6	56	0.00
98 TP	sec-Butylbenzene	3.017	3.221	-6.8	59	0.00
99 TP	p-Isopropyltoluene	2.590	2.562	1.1	56	0.00
100 TP	1,3-Dichlorobenzene	1.385	1.408	-1.7	59	0.00
101 TP	1,4-Dichlorobenzene	1.435	1.446	-0.8	61	0.00
102 TP	p-Diethylbenzene	1.516	1.319	13.0	51	0.00
103 TP	n-Butylbenzene	2.402	2.360	1.7	57	0.00
104 TP	1,2-Dichlorobenzene	1.351	1.313	2.8	58	0.00
105 TP	1,2,4,5-Tetramethylbenzene *	10.000	3.644	63.6#	22#	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.102	0.083	18.6	50	0.00
107 TP	1,3,5-Trichlorobenzene	0.930	0.700	24.7#	43#	0.00
108 TP	Hexachlorobutadiene	0.436	0.398	8.7	54	0.00
109 TP	1,2,4-Trichlorobenzene	0.848	0.547	35.5#	38#	0.00
110 TP	Naphthalene	1.867	1.151	38.4#	36#	0.00
111 TP	1,2,3-Trichlorobenzene	0.766	0.470	38.6#	36#	0.00

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 8 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N02.D
 Acq On : 12 Mar 2019 6:29 pm
 Operator : VOA108:KJD
 Sample : WG1215235-2
 Misc : WG1215235,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 18:44:24 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.548	96	304926	10.000	ug/L	-0.01
Standard Area 1 = 304926			Recovery	=	100.00%	
59) Chlorobenzene-d5	8.526	117	209940	10.000	ug/L	0.00
Standard Area 1 = 209940			Recovery	=	100.00%	
79) 1,4-Dichlorobenzene-d4	10.007	152	100075	10.000	ug/L	0.00
Standard Area 1 = 100075			Recovery	=	100.00%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.572	113	80446	10.329	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.29%	
43) 1,2-Dichloroethane-d4	5.208	65	90336	10.319	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.19%	
60) Toluene-d8	7.241	98	290239	10.087	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.87%	
83) 4-Bromofluorobenzene	9.340	95	89964	9.187	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	91.87%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.974	85	54898	9.009	ug/L	96
3) Chloromethane	1.094	50	60672	10.108	ug/L	98
4) Vinyl chloride	1.150	62	69001	10.764	ug/L	94
5) Bromomethane	1.359	94	53561	9.703	ug/L	99
6) Chloroethane	1.440	64	65277	13.925	ug/L	99
7) Trichlorofluoromethane	1.543	101	120802	11.674	ug/L	96
8) Ethyl ether	1.783	74	34433	9.988	ug/L	# 62
10) 1,1-Dichloroethene	1.914	96	57231	9.983	ug/L	# 66
11) Carbon disulfide	1.920	76	176879	9.816	ug/L	98
12) Freon-113	1.956	101	57168	10.816	ug/L	95
13) Iodomethane	2.015	142	42371	7.602	ug/L	89
14) Acrolein	2.199	56	7770	10.916	ug/L	82
15) Methylene chloride	2.408	84	67807	9.929	ug/L	70
17) Acetone	2.466	43	11642	9.822	ug/L	90
18) trans-1,2-Dichloroethene	2.558	96	64291	9.885	ug/L	73
19) Methyl acetate	2.597	43	30100	10.096	ug/L	# 87
20) Methyl tert-butyl ether	2.687	73	146008	8.546	ug/L	91
21) tert-Butyl alcohol	2.832	59	19086	52.315	ug/L	# 55
22) Diisopropyl ether	3.122	45	170096	8.644	ug/L	# 87
23) 1,1-Dichloroethane	3.205	63	116933	10.164	ug/L	98
24) Halothane	3.353	117	50148	9.992	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N02.D
 Acq On : 12 Mar 2019 6:29 pm
 Operator : VOA108:KJD
 Sample : WG1215235-2
 Misc : WG1215235,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 18:44:24 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	3.278	53	17755	9.953	ug/L	96
26) Ethyl tert-butyl ether	3.576	59	165055	8.650	ug/L	88
27) Vinyl acetate	3.579	43	116520	8.543	ug/L #	93
28) cis-1,2-Dichloroethene	3.908	96	71459	9.681	ug/L #	69
29) 2,2-Dichloropropane	4.045	77	85150	9.008	ug/L	92
30) Bromochloromethane	4.179	128	34944	10.242	ug/L #	55
31) Cyclohexane	4.151	56	98839	10.423	ug/L #	63
32) Chloroform	4.340	83	123241	10.259	ug/L	97
33) Ethyl acetate	4.575	43	40663M4	8.042	ug/L	
34) Carbon tetrachloride	4.457	117	94084	10.481	ug/L	98
35) Tetrahydrofuran	4.522	42	10592	8.667	ug/L #	55
37) 1,1,1-Trichloroethane	4.555	97	104189	9.945	ug/L #	97
39) 2-Butanone	4.756	43	19138	9.239	ug/L #	66
40) 1,1-Dichloropropene	4.728	75	82602	9.850	ug/L	97
41) Benzene	5.032	78	260651	9.955	ug/L	90
42) tert-Amyl methyl ether	5.258	73	133558	7.610	ug/L	92
44) 1,2-Dichloroethane	5.289	62	93321	10.360	ug/L	98
47) Methyl cyclohexane	5.707	83	99500	9.893	ug/L #	72
48) Trichloroethene	5.740	95	72348	10.377	ug/L	99
50) Dibromomethane	6.186	93	42255	10.336	ug/L	98
51) 1,2-Dichloropropane	6.298	63	64233	9.460	ug/L	99
53) 2-Chloroethyl vinyl ether	7.048	63	33892	8.757	ug/L #	87
54) Bromodichloromethane	6.404	83	96682	10.153	ug/L #	95
57) 1,4-Dioxane	6.630	88	23966	807.091	ug/L #	69
58) cis-1,3-Dichloropropene	7.062	75	97427	9.128	ug/L	91
61) Toluene	7.288	92	160925	9.835	ug/L	99
62) 4-Methyl-2-pentanone	7.690	58	16009	8.678	ug/L #	95
63) Tetrachloroethene	7.642	166	68696	9.778	ug/L	92
65) trans-1,3-Dichloropropene	7.706	75	82314	8.911	ug/L	96
67) Ethyl methacrylate	7.893	69	56030	7.649	ug/L	97
68) 1,1,2-Trichloroethane	7.837	83	48772	10.405	ug/L	95
69) Chlorodibromomethane	7.968	129	69590	10.090	ug/L	98
70) 1,3-Dichloropropane	8.046	76	96214	10.167	ug/L	99
71) 1,2-Dibromoethane	8.127	107	55163	9.893	ug/L	98
72) 2-Hexanone	8.364	43	23718	7.427	ug/L	92
73) Chlorobenzene	8.537	112	181173	9.954	ug/L	89
74) Ethylbenzene	8.576	91	292770	9.596	ug/L	99
75) 1,1,1,2-Tetrachloroethane	8.596	131	66754	9.799	ug/L	95
76) p/m Xylene	8.682	106	219089	18.881	ug/L	95
77) o Xylene	8.964	106	214963	18.711	ug/L	90

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N02.D
 Acq On : 12 Mar 2019 6:29 pm
 Operator : VOA108:KJD
 Sample : WG1215235-2
 Misc : WG1215235,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 18:44:24 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.000	104	355686	19.382	ug/L	88
80)	Bromoform	9.006	173	40093	9.625	ug/L	95
82)	Isopropylbenzene	9.173	105	287100	9.827	ug/L	97
84)	Bromobenzene	9.396	156	71007	9.445	ug/L	95
85)	n-Propylbenzene	9.430	91	346305	10.384	ug/L	98
86)	1,4-Dichlorobutane	9.435	55	86672	9.707	ug/L	99
87)	1,1,2,2-Tetrachloroethane	9.483	83	67447	9.940	ug/L	97
88)	4-Ethyltoluene	9.499	105	282494	10.170	ug/L	98
89)	2-Chlorotoluene	9.513	91	236078	9.698	ug/L	94
90)	1,3,5-Trimethylbenzene	9.555	105	235179	9.805	ug/L	92
91)	1,2,3-Trichloropropane	9.552	75	54759	10.387	ug/L	99
92)	trans-1,4-Dichloro-2-b...	9.586	53	17473	9.407	ug/L	94
93)	4-Chlorotoluene	9.616	91	205057	9.684	ug/L	94
94)	tert-Butylbenzene	9.739	119	212907	8.639	ug/L	97
97)	1,2,4-Trimethylbenzene	9.784	105	225369	9.442	ug/L	95
98)	sec-Butylbenzene	9.845	105	322336	10.675	ug/L	99
99)	p-Isopropyltoluene	9.932	119	256364	9.890	ug/L	97
100)	1,3-Dichlorobenzene	9.962	146	140861	10.162	ug/L	99
101)	1,4-Dichlorobenzene	10.015	146	144720	10.080	ug/L	99
102)	p-Diethylbenzene	10.141	119	131958	8.698	ug/L	95
103)	n-Butylbenzene	10.174	91	236200	9.825	ug/L	99
104)	1,2-Dichlorobenzene	10.255	146	131351	9.715	ug/L	99
105)	1,2,4,5-Tetramethylben...	10.598	119	79486	3.644	ug/L	98
106)	1,2-Dibromo-3-chloropr...	10.710	155	8328	8.197	ug/L	81
107)	1,3,5-Trichlorobenzene	10.726	180	70013	7.521	ug/L	95
108)	Hexachlorobutadiene	11.075	225	39783	9.122	ug/L	96
109)	1,2,4-Trichlorobenzene	11.089	180	54763	6.453	ug/L	96
110)	Naphthalene	11.270	128	115149	6.164	ug/L	100
111)	1,2,3-Trichlorobenzene	11.371	180	47082	6.138	ug/L	97

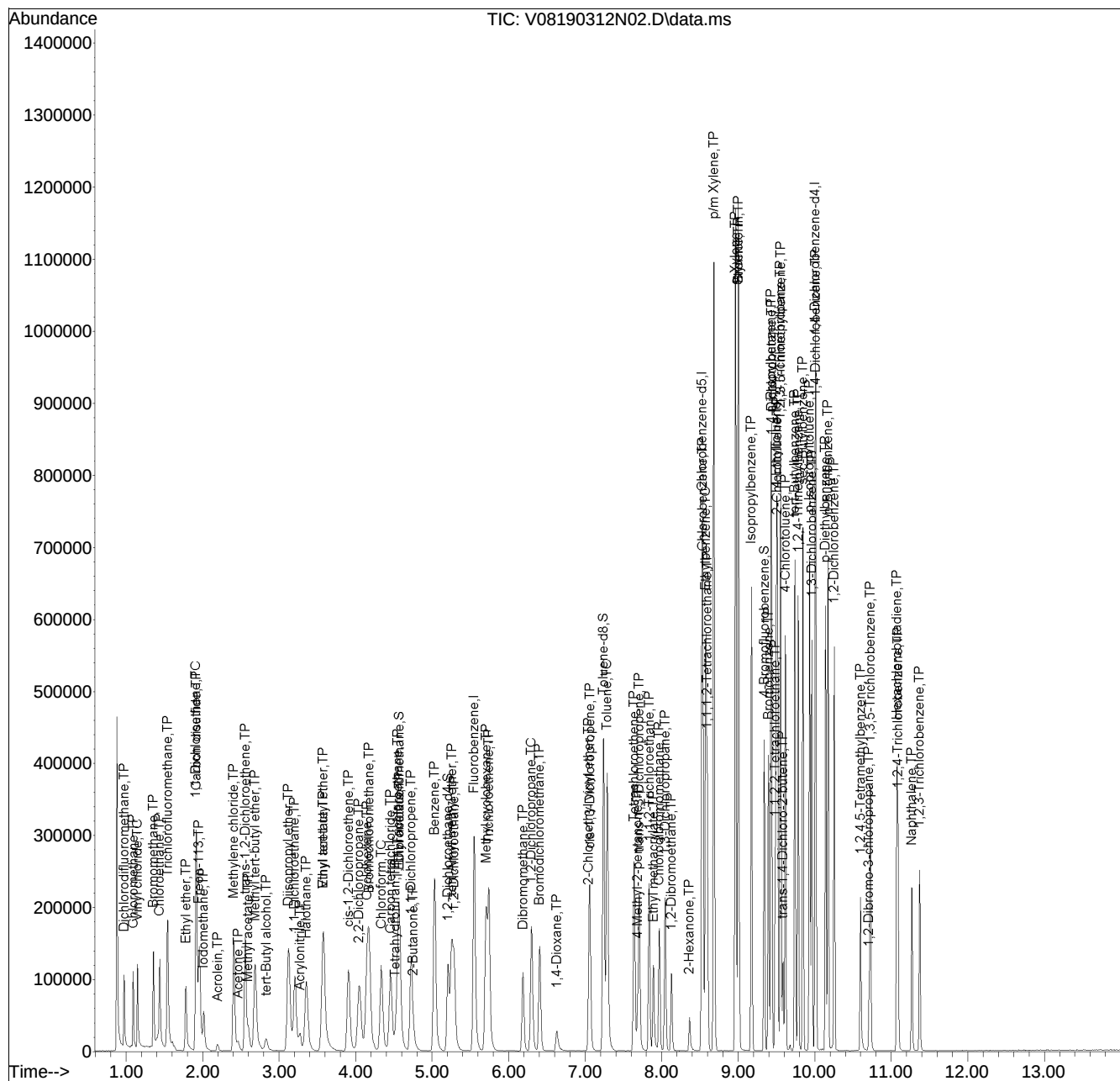
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
Data File : V08190312N02.D
Acq On : 12 Mar 2019 6:29 pm
Operator : VOA108:KJD
Sample : WG1215235-2
Misc : WG1215235,ICAL15519
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 18:44:24 2019
Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Feb 19 00:08:39 2019
Response via : Initial Calibration

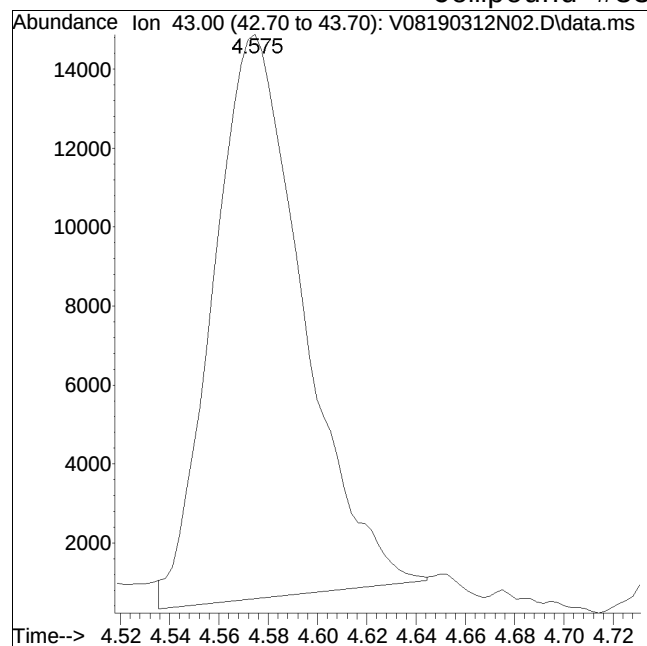
Sub List : 8260-Curve - Megamix plus Diox90312N\V08190312N02.D•



Manual Integration Report

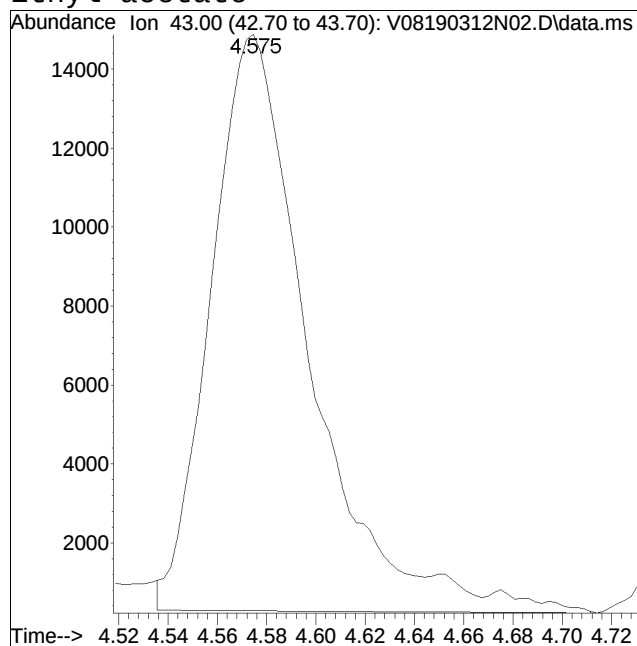
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190312N02.D Operator : VOA108:KJD
Date Inj'd : 3/12/2019 6:29 pm Instrument : VOA 108
Sample : WG1215235-2 Quant Date : 3/12/2019 6:43 pm

Compound #33: Ethyl acetate



Original Peak Response = 36226

M4 = Poor automated baseline construction.



Manual Peak Response = 40663 M4

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-2
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 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	57	0.00
2 TP	Dichlorodifluoromethane	0.200	0.201	-0.5	61	0.00
3 TP	Chloromethane	0.197	0.210	-6.6	61	0.00
4 TC	Vinyl chloride	0.210	0.237	-12.9	65	0.00
5 TP	Bromomethane	0.181	0.186	-2.8	61	0.00
6 TP	Chloroethane	0.154	0.205	-33.1#	86	0.00
7 TP	Trichlorofluoromethane	0.339	0.403	-18.9	72	0.00
8 TP	Ethyl ether	0.113	0.112	0.9	60	0.00
10 TC	1,1-Dichloroethene	0.188	0.190	-1.1	60	0.00
11 TP	Carbon disulfide	0.591	0.607	-2.7	61	0.00
12 TP	Freon-113	0.173	0.210	-21.4#	73	0.00
13 TP	Iodomethane	* 10.000	8.400	16.0	66	0.00
14 TP	Acrolein	0.023	0.032#	-39.1#	85	0.00
15 TP	Methylene chloride	0.224	0.236	-5.4	63	0.00
17 TP	Acetone	0.039	0.046#	-17.9	74	0.00
18 TP	trans-1,2-Dichloroethene	0.213	0.214	-0.5	59	0.00
19 TP	Methyl acetate	0.098	0.108	-10.2	65	0.00
20 TP	Methyl tert-butyl ether	0.560	0.478	14.6	51	0.00
21 TP	tert-Butyl alcohol	0.012	0.013#	-8.3	70	0.00
22 TP	Diisopropyl ether	0.645	0.608	5.7	56	0.00
23 TP	1,1-Dichloroethane	0.377	0.400	-6.1	62	0.00
24 TP	Halothane	0.165	0.175	-6.1	64	0.00
25 TP	Acrylonitrile	0.058	0.059	-1.7	61	-0.01
26 TP	Ethyl tert-butyl ether	0.626	0.588	6.1	56	0.00
27 TP	Vinyl acetate	0.447	0.373	16.6	55	0.00
28 TP	cis-1,2-Dichloroethene	0.242	0.249	-2.9	60	0.00
29 TP	2,2-Dichloropropane	0.310	0.282	9.0	54	-0.01
30 TP	Bromochloromethane	0.112	0.125	-11.6	65	-0.01
31 TP	Cyclohexane	0.311	0.355	-14.1	70	-0.01
32 TC	Chloroform	0.394	0.431	-9.4	65	0.00
33 TP	Ethyl acetate	0.166	0.154	7.2	61	0.00
34 TP	Carbon tetrachloride	0.294	0.322	-9.5	65	0.00
35 TP	Tetrahydrofuran	0.040	0.040#	0.0	62	-0.01
36 S	Dibromofluoromethane	0.255	0.268	-5.1	61	-0.01
37 TP	1,1,1-Trichloroethane	0.344	0.369	-7.3	63	-0.01
39 TP	2-Butanone	0.068	0.067#	1.5	69	-0.01
40 TP	1,1-Dichloropropene	0.275	0.296	-7.6	63	0.00
41 TP	Benzene	0.859	0.914	-6.4	62	0.00
42 TP	tert-Amyl methyl ether	0.576	0.485	15.8	51	0.00

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-2
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 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	0.287	0.309	-7.7	63	0.00
44 TP	1,2-Dichloroethane	0.295	0.327	-10.8	67	0.00
47 TP	Methyl cyclohexane	0.330	0.357	-8.2	62	0.00
48 TP	Trichloroethene	0.229	0.253	-10.5	65	0.00
50 TP	Dibromomethane	0.134	0.145	-8.2	63	0.00
51 TC	1,2-Dichloropropane	0.223	0.229	-2.7	61	-0.01
53 TP	2-Chloroethyl vinyl ether	0.127	0.106	16.5	49#	0.00
54 TP	Bromodichloromethane	0.312	0.326	-4.5	61	-0.01
57 TP	1,4-Dioxane	0.00097	0.00124#	-27.8#	73	0.00
58 TP	cis-1,3-Dichloropropene	0.350	0.346	1.1	59	0.00
59 I	Chlorobenzene-d5	1.000	1.000	0.0	56	0.00
60 S	Toluene-d8	1.371	1.367	0.3	57	0.00
61 TC	Toluene	0.779	0.829	-6.4	61	0.00
62 TP	4-Methyl-2-pentanone	0.088	0.079#	10.2	52	0.00
63 TP	Tetrachloroethene	0.335	0.341	-1.8	59	0.00
65 TP	trans-1,3-Dichloropropene	0.440	0.448	-1.8	60	0.00
67 TP	Ethyl methacrylate	0.349	0.251	28.1#	43#	0.00
68 TP	1,1,2-Trichloroethane	0.223	0.254	-13.9	66	0.00
69 TP	Chlorodibromomethane	0.329	0.345	-4.9	62	0.00
70 TP	1,3-Dichloropropane	0.451	0.504	-11.8	65	0.00
71 TP	1,2-Dibromoethane	0.266	0.278	-4.5	61	0.00
72 TP	2-Hexanone	0.152	0.121	20.4#	49#	0.00
73 TP	Chlorobenzene	0.867	0.907	-4.6	60	0.00
74 TC	Ethylbenzene	1.453	1.451	0.1	56	0.00
75 TP	1,1,1,2-Tetrachloroethane	0.325	0.339	-4.3	61	0.00
76 TP	p/m Xylene	0.553	0.552	0.2	56	0.00
77 TP	o Xylene	0.547	0.527	3.7	54	0.00
78 TP	Styrene	0.874	0.897	-2.6	56	0.00
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	59	0.00
80 TP	Bromoform	0.416	0.426	-2.4	62	0.00
82 TP	Isopropylbenzene	2.919	2.989	-2.4	58	0.00
83 S	4-Bromofluorobenzene	0.978	0.898	8.2	52	0.00
84 TP	Bromobenzene	0.751	0.726	3.3	56	0.00
85 TP	n-Propylbenzene	3.333	3.537	-6.1	59	0.00
86 TP	1,4-Dichlorobutane	0.892	0.865	3.0	58	0.00
87 TP	1,1,2,2-Tetrachloroethane	0.678	0.687	-1.3	60	0.00
88 TP	4-Ethyltoluene	2.776	2.885	-3.9	60	0.00

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-2
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 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 TP	2-Chlorotoluene	2.432	2.395	1.5	57	0.00
90 TP	1,3,5-Trimethylbenzene	2.397	2.393	0.2	59	0.00
91 TP	1,2,3-Trichloropropane	0.527	0.580	-10.1	66	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.186	0.169	9.1	62	0.00
93 TP	4-Chlorotoluene	2.116	2.235	-5.6	61	0.00
94 TP	tert-Butylbenzene	2.463	2.140	13.1	51	0.00
97 TP	1,2,4-Trimethylbenzene	2.385	2.284	4.2	57	0.00
98 TP	sec-Butylbenzene	3.017	3.195	-5.9	59	0.00
99 TP	p-Isopropyltoluene	2.590	2.560	1.2	57	0.00
100 TP	1,3-Dichlorobenzene	1.385	1.469	-6.1	62	0.00
101 TP	1,4-Dichlorobenzene	1.435	1.496	-4.3	63	0.00
102 TP	p-Diethylbenzene	1.516	1.256	17.2	49#	0.00
103 TP	n-Butylbenzene	2.402	2.296	4.4	56	0.00
104 TP	1,2-Dichlorobenzene	1.351	1.395	-3.3	62	0.00
105 TP	1,2,4,5-Tetramethylbenzene *	10.000	3.204	68.0#	19#	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.102	0.093	8.8	57	0.00
107 TP	1,3,5-Trichlorobenzene	0.930	0.653	29.8#	41#	0.00
108 TP	Hexachlorobutadiene	0.436	0.377	13.5	51	0.00
109 TP	1,2,4-Trichlorobenzene	0.848	0.477	43.8#	34#	0.00
110 TP	Naphthalene	1.867	1.048	43.9#	33#	0.00
111 TP	1,2,3-Trichlorobenzene	0.766	0.417	45.6#	33#	0.00

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 7 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-2
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	302021	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery	=	100.00%	
59) Chlorobenzene-d5	8.526	117	206709	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery	=	100.00%	
79) 1,4-Dichlorobenzene-d4	10.007	152	100898	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery	=	100.00%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.572	113	81069	10.509	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.09%	
43) 1,2-Dichloroethane-d4	5.208	65	93402	10.772	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	107.72%	
60) Toluene-d8	7.241	98	282582	9.974	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.74%	
83) 4-Bromofluorobenzene	9.340	95	90653	9.182	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	91.82%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.975	85	60779	10.070	ug/L	98
3) Chloromethane	1.094	50	63363	10.658	ug/L	99
4) Vinyl chloride	1.150	62	71701	11.293	ug/L	96
5) Bromomethane	1.359	94	56273	10.292	ug/L	95
6) Chloroethane	1.443	64	61991	13.351	ug/L	96
7) Trichlorofluoromethane	1.543	101	121795	11.883	ug/L	97
8) Ethyl ether	1.783	74	33730	9.878	ug/L	68
10) 1,1-Dichloroethene	1.914	96	57329	10.096	ug/L	# 67
11) Carbon disulfide	1.920	76	183477	10.280	ug/L	96
12) Freon-113	1.959	101	63432	12.116	ug/L	97
13) Iodomethane	2.017	142	47815	8.400	ug/L	90
14) Acrolein	2.196	56	9590	13.602	ug/L	96
15) Methylene chloride	2.408	84	71404	10.556	ug/L	70
17) Acetone	2.466	43	13863	11.808	ug/L	# 72
18) trans-1,2-Dichloroethene	2.558	96	64734	10.049	ug/L	75
19) Methyl acetate	2.598	43	32581	11.033	ug/L	# 88
20) Methyl tert-butyl ether	2.690	73	144331	8.530	ug/L	92
21) tert-Butyl alcohol	2.829	59	19104	52.868	ug/L	# 78
22) Diisopropyl ether	3.125	45	183560	9.418	ug/L	# 87
23) 1,1-Dichloroethane	3.208	63	120748	10.597	ug/L	97
24) Halothane	3.356	117	52952	10.652	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-2
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	3.270	53	17919	10.142	ug/L	94
26) Ethyl tert-butyl ether	3.576	59	177736	9.405	ug/L	92
27) Vinyl acetate	3.582	43	112677	8.340	ug/L #	92
28) cis-1,2-Dichloroethene	3.908	96	75253	10.293	ug/L #	69
29) 2,2-Dichloropropane	4.048	77	85062	9.085	ug/L	92
30) Bromochloromethane	4.181	128	37729	11.165	ug/L #	54
31) Cyclohexane	4.154	56	107155	11.408	ug/L #	65
32) Chloroform	4.340	83	130091	10.933	ug/L	97
33) Ethyl acetate	4.577	43	46589M1	9.302	ug/L	
34) Carbon tetrachloride	4.460	117	97282	10.942	ug/L	99
35) Tetrahydrofuran	4.519	42	11994	9.909	ug/L #	71
37) 1,1,1-Trichloroethane	4.552	97	111528	10.748	ug/L #	97
39) 2-Butanone	4.759	43	20302	9.896	ug/L #	82
40) 1,1-Dichloropropene	4.728	75	89405	10.764	ug/L	95
41) Benzene	5.035	78	276186	10.650	ug/L	90
42) tert-Amyl methyl ether	5.255	73	146490	8.427	ug/L	88
44) 1,2-Dichloroethane	5.289	62	98737	11.066	ug/L	96
47) Methyl cyclohexane	5.707	83	107685	10.810	ug/L #	71
48) Trichloroethene	5.743	95	76395	11.063	ug/L	96
50) Dibromomethane	6.186	93	43678	10.787	ug/L	97
51) 1,2-Dichloropropane	6.298	63	69057	10.268	ug/L	97
53) 2-Chloroethyl vinyl ether	7.048	63	32133	8.382	ug/L	88
54) Bromodichloromethane	6.404	83	98548	10.448	ug/L	99
57) 1,4-Dioxane	6.630	88	18782	638.596	ug/L #	77
58) cis-1,3-Dichloropropene	7.062	75	104424	9.878	ug/L	92
61) Toluene	7.288	92	171435	10.641	ug/L	97
62) 4-Methyl-2-pentanone	7.687	58	16247	8.945	ug/L #	97
63) Tetrachloroethene	7.639	166	70586	10.204	ug/L	91
65) trans-1,3-Dichloropropene	7.706	75	92516	10.172	ug/L	94
67) Ethyl methacrylate	7.893	69	51963	7.204	ug/L	98
68) 1,1,2-Trichloroethane	7.835	83	52416	11.357	ug/L	94
69) Chlorodibromomethane	7.968	129	71380	10.512	ug/L	98
70) 1,3-Dichloropropane	8.044	76	104234	11.187	ug/L	100
71) 1,2-Dibromoethane	8.127	107	57526	10.478	ug/L	96
72) 2-Hexanone	8.364	43	24970	7.942	ug/L	94
73) Chlorobenzene	8.537	112	187460	10.461	ug/L	90
74) Ethylbenzene	8.576	91	299929	9.985	ug/L	98
75) 1,1,1,2-Tetrachloroethane	8.596	131	70061	10.445	ug/L	94
76) p/m Xylene	8.682	106	228345	19.986	ug/L	97
77) o Xylene	8.964	106	217748	19.249	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-2
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	9.003	104	370863	20.525	ug/L	89
80)	Bromoform	9.006	173	42957	10.228	ug/L	95
82)	Isopropylbenzene	9.173	105	301620	10.240	ug/L	96
84)	Bromobenzene	9.396	156	73271	9.666	ug/L	97
85)	n-Propylbenzene	9.432	91	356917	10.615	ug/L	96
86)	1,4-Dichlorobutane	9.435	55	87271	9.694	ug/L	98
87)	1,1,2,2-Tetrachloroethane	9.483	83	69307	10.131	ug/L	98
88)	4-Ethyltoluene	9.502	105	291106	10.395	ug/L	97
89)	2-Chlorotoluene	9.513	91	241642	9.846	ug/L	94
90)	1,3,5-Trimethylbenzene	9.555	105	241486	9.986	ug/L	93
91)	1,2,3-Trichloropropane	9.552	75	58561	11.018	ug/L	99
92)	trans-1,4-Dichloro-2-b...	9.583	53	17067	9.114	ug/L	93
93)	4-Chlorotoluene	9.617	91	225476	10.561	ug/L	95
94)	tert-Butylbenzene	9.742	119	215895	8.688	ug/L	96
97)	1,2,4-Trimethylbenzene	9.784	105	230470	9.577	ug/L	95
98)	sec-Butylbenzene	9.845	105	322416	10.591	ug/L	99
99)	p-Isopropyltoluene	9.932	119	258281	9.883	ug/L	96
100)	1,3-Dichlorobenzene	9.962	146	148192	10.603	ug/L	98
101)	1,4-Dichlorobenzene	10.015	146	150989	10.431	ug/L	99
102)	p-Diethylbenzene	10.144	119	126695	8.283	ug/L	95
103)	n-Butylbenzene	10.174	91	231697	9.559	ug/L	99
104)	1,2-Dichlorobenzene	10.255	146	140796	10.328	ug/L	96
105)	1,2,4,5-Tetramethylben...	10.598	119	69079	3.204	ug/L	94
106)	1,2-Dibromo-3-chloropr...	10.710	155	9430	9.206	ug/L	87
107)	1,3,5-Trichlorobenzene	10.726	180	65885	7.020	ug/L	95
108)	Hexachlorobutadiene	11.075	225	38059	8.655	ug/L	98
109)	1,2,4-Trichlorobenzene	11.089	180	48079	5.619	ug/L	96
110)	Naphthalene	11.270	128	105744	5.614	ug/L	100
111)	1,2,3-Trichlorobenzene	11.371	180	42031	5.435	ug/L	98

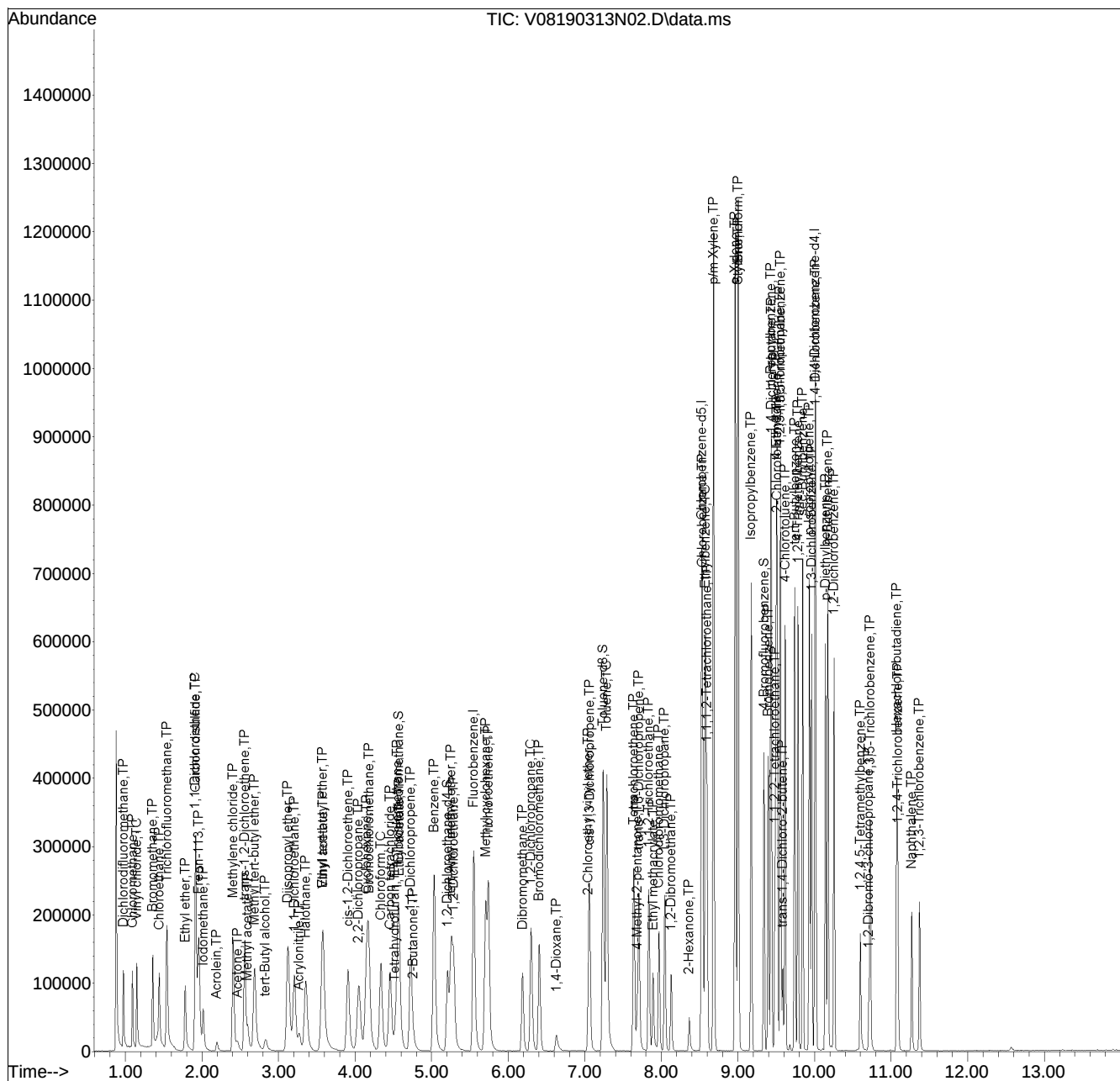
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
Data File : V08190313N02.D
Acq On : 13 Mar 2019 6:42 pm
Operator : VOA108:KJD
Sample : WG1215584-2
Misc : WG1215584,ICAL15519
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Feb 19 00:08:39 2019
Response via : Initial Calibration

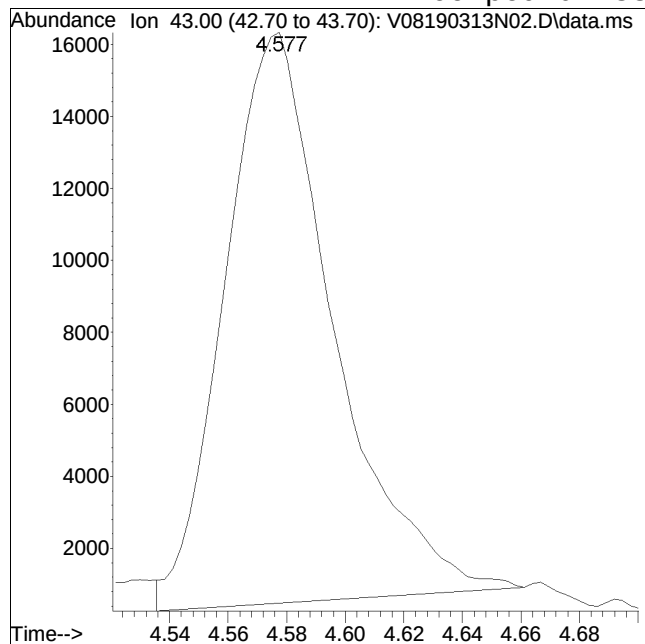
Sub List : 8260-Curve - Megamix plus Diox90313N\V08190313N02.D•



Manual Integration Report

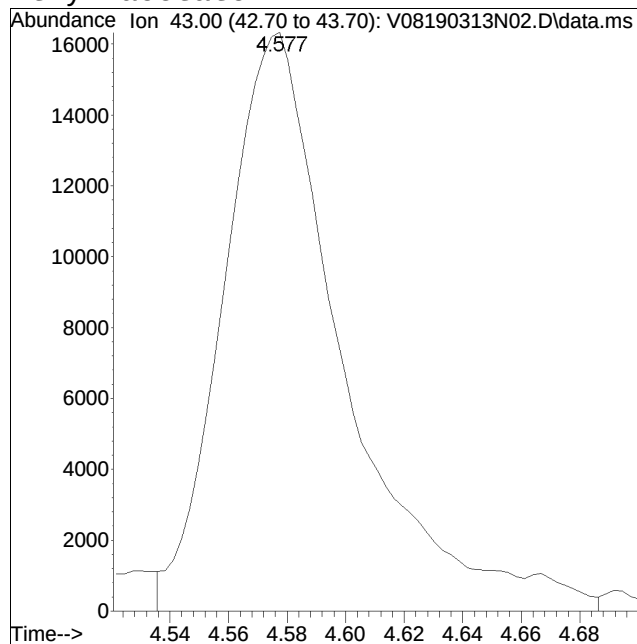
Data Path : I:\VOLATILES\VOA108\2019\10Method : V108_190218N_8260.m
Data File : V08190313N02.D Operator : VOA108:KJD
Date Inj'd : 3/13/2019 6:42 pm Instrument : VOA 108
Sample : WG1215584-2 Quant Date : 3/13/2019 6:57 pm

Compound #33: Ethyl acetate



Original Peak Response = 41049

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



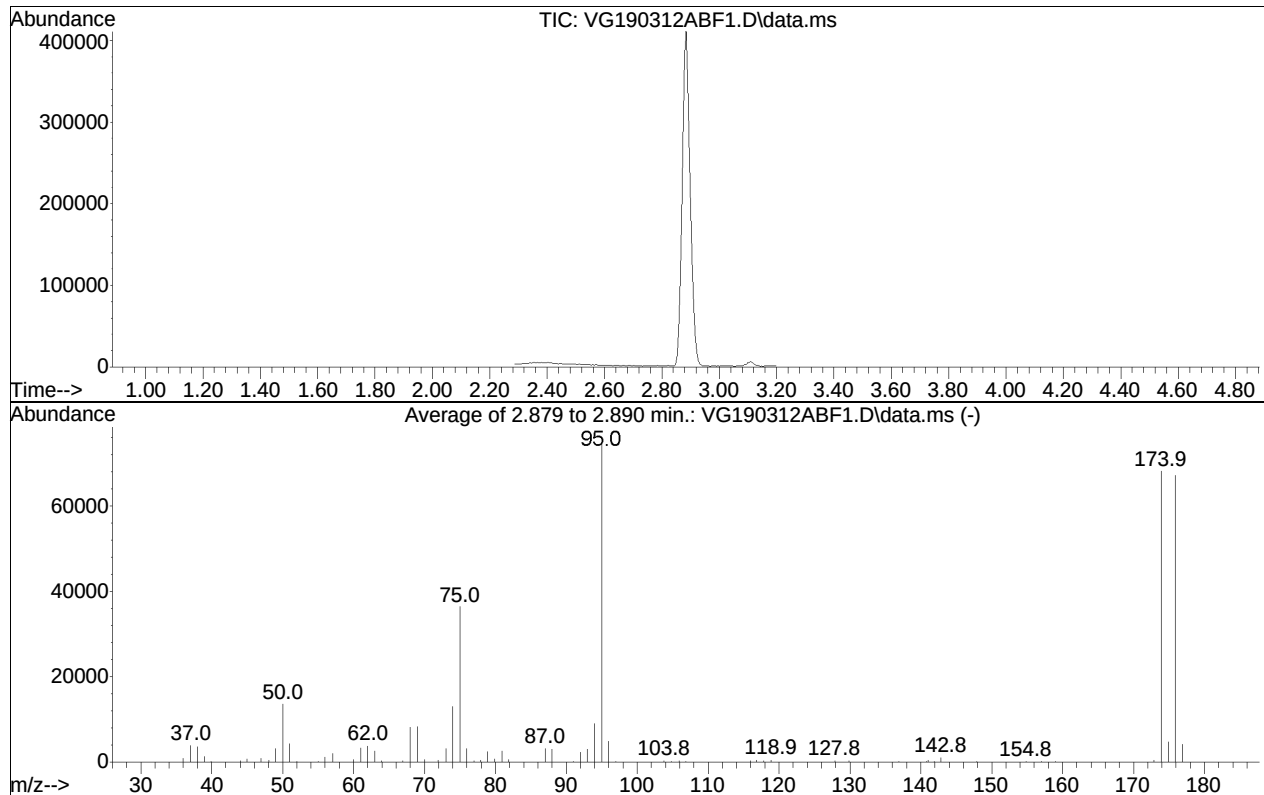
Manual Peak Response = 46589 M1

BFB

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
Data File : VG190312ABF1.D
Acq On : 12 Mar 2019 7:52
Operator : GONZO:PD
Sample : WG1214926-1
Misc : WG1214926,ICAL15541
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Thu Feb 28 12:19:42 2019



AutoFind: Scans 114, 115, 116; Background Corrected with Scan 105

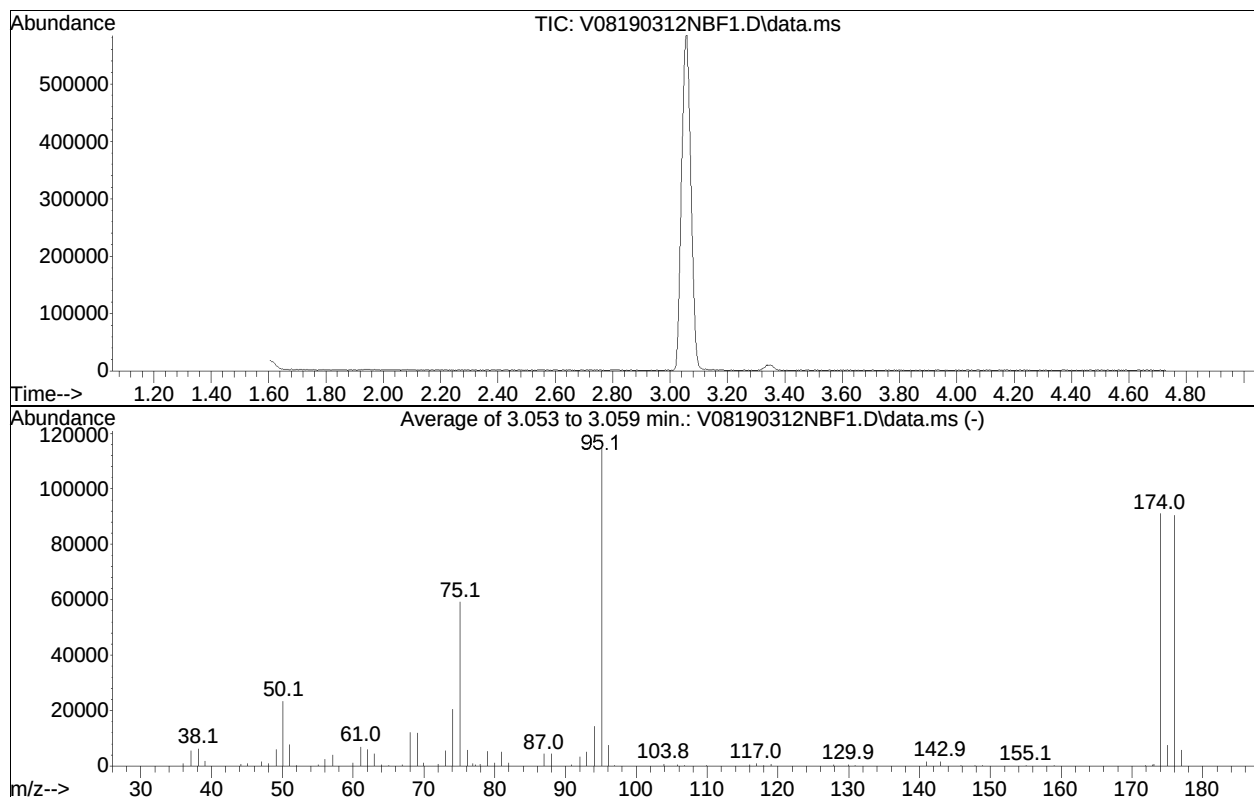
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.2	13599	PASS
75	95	30	60	48.7	36416	PASS
95	95	100	100	100.0	74816	PASS
96	95	5	9	6.6	4914	PASS
173	174	0.00	2	0.6	435	PASS
174	95	50	100	91.1	68147	PASS
175	174	5	9	7.1	4834	PASS
176	174	95	101	98.7	67253	PASS
177	176	5	9	6.3	4211	PASS

BFB

Data Path : I:\VOLATILES\VOA108\2019\190312N\
Data File : V08190312NBF1.D
Acq On : 12 Mar 2019 5:46 pm
Operator : VOA108:KJD
Sample : WG1215235-1
Misc : WG1215235
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Tue Feb 19 00:08:39 2019



AutoFind: Scans 520, 521, 522; Background Corrected with Scan 503

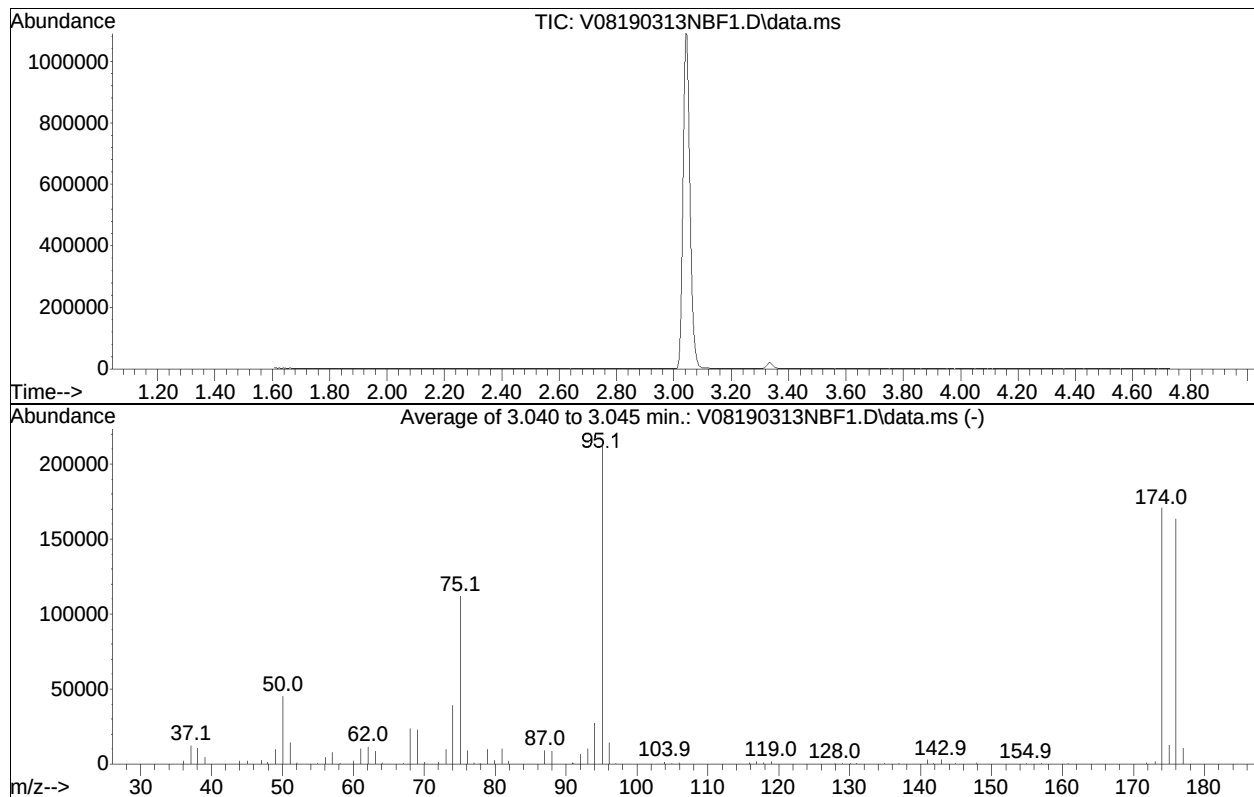
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.3	23397	PASS
75	95	30	60	51.4	59240	PASS
95	95	100	100	100.0	115256	PASS
96	95	5	9	6.5	7542	PASS
173	174	0.00	2	0.8	761	PASS
174	95	50	100	79.0	91104	PASS
175	174	5	9	8.2	7507	PASS
176	174	95	101	99.3	90451	PASS
177	176	5	9	6.5	5896	PASS

BFB

Data Path : I:\VOLATILES\VOA108\2019\190313N\
Data File : V08190313NBF1.D
Acq On : 13 Mar 2019 6:00 pm
Operator : VOA108:KJD
Sample : WG1215584-1
Misc : WG1215584
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Tue Feb 19 00:08:39 2019



AutoFind: Scans 515, 516, 517; Background Corrected with Scan 501

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.3	45328	PASS
75	95	30	60	52.6	112059	PASS
95	95	100	100	100.0	212907	PASS
96	95	5	9	6.8	14529	PASS
173	174	0.00	2	1.0	1754	PASS
174	95	50	100	80.2	170667	PASS
175	174	5	9	7.5	12772	PASS
176	174	95	101	95.9	163691	PASS
177	176	5	9	6.6	10835	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A05.D
 Acq On : 12 Mar 2019 9:48 am
 Operator : GONZO:PD
 Sample : WG1214926-5,31,10,10
 Misc : WG1214926,ICAL15541
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 10:10:37 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190312A\VG190312A02.D
 Sub List : 8260-Curve-Iodomethane - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	6.545	96	370911	10.000	ug/L	0.00
Standard Area 1 = 385122			Recovery = 96.31%			
59) Chlorobenzene-d5	10.127	117	274166	10.000	ug/L	0.00
Standard Area 1 = 297531			Recovery = 92.15%			
79) 1,4-Dichlorobenzene-d4	12.713	152	125436	10.000	ug/L	0.01
Standard Area 1 = 151374			Recovery = 82.86%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.714	113	84464	9.014	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 90.14%			
43) 1,2-Dichloroethane-d4	6.261	65	98123	10.633	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.33%			
60) Toluene-d8	8.257	98	366885	10.891	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 108.91%			
83) 4-Bromofluorobenzene	11.538	95	120237	11.358	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 113.58%			
Target Compounds						
2) Dichlorodifluoromethane	0.000		0	N.D.		Qvalue
3) Chloromethane	2.124	50	90	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	2.535	94	434	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	3.396	76	704	N.D.		
15) Methylene chloride	3.963	84	211	N.D.		
17) Acetone	0.000		0	N.D.	d	
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
25) Acrylonitrile	0.000		0	N.D.		
27) Vinyl acetate	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
32) Chloroform	5.518	83	550	N.D.		

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A05.D
 Acq On : 12 Mar 2019 9:48 am
 Operator : GONZO:PD
 Sample : WG1214926-5,31,10,10
 Misc : WG1214926,ICAL15541
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 10:10:37 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190312A\VG190312A02.D
 Sub List : 8260-Curve-Iodomethane - Megamix plus Diox-Iodomethane

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0		N.D.	
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
40) 1,1-Dichloropropene	0.000		0		N.D.	
41) Benzene	0.000		0		N.D.	
44) 1,2-Dichloroethane	0.000		0		N.D. d	
48) Trichloroethene	0.000		0		N.D. d	
50) Dibromomethane	0.000		0		N.D.	
51) 1,2-Dichloropropane	0.000		0		N.D.	
54) Bromodichloromethane	0.000		0		N.D.	
57) 1,4-Dioxane	7.562	88	1183	45.558	ug/L #	76
58) cis-1,3-Dichloropropene	0.000		0		N.D.	
61) Toluene	0.000		0		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	0.000		0		N.D.	
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.	
70) 1,3-Dichloropropane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	0.000		0		N.D.	
73) Chlorobenzene	0.000		0		N.D.	
74) Ethylbenzene	10.127	91	559		N.D.	
75) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
76) p/m Xylene	0.000		0		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	
84) Bromobenzene	0.000		0		N.D.	
85) n-Propylbenzene	11.547	91	336		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
88) 4-Ethyltoluene	0.000		0		N.D.	
89) 2-Chlorotoluene	12.027	91	104		N.D.	
90) 1,3,5-Trimethylbenzene	0.000		0		N.D.	
91) 1,2,3-Trichloropropane	0.000		0		N.D.	
92) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
93) 4-Chlorotoluene	12.027	91	104		N.D.	
94) tert-Butylbenzene	0.000		0		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A05.D
 Acq On : 12 Mar 2019 9:48 am
 Operator : GONZO:PD
 Sample : WG1214926-5,31,10,10
 Misc : WG1214926,ICAL15541
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 10:10:37 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190312A\VG190312A02.D
 Sub List : 8260-Curve-Iodomethane - Megamix plus Diox-Iodomethane

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	0.000		0		N.D.	
98)	sec-Butylbenzene	0.000		0		N.D.	
99)	p-Isopropyltoluene	12.556	119	120		N.D.	
100)	1,3-Dichlorobenzene	12.635	146	186		N.D.	
101)	1,4-Dichlorobenzene	12.713	146	454		N.D.	
102)	p-Diethylbenzene	0.000		0		N.D.	
103)	n-Butylbenzene	12.978	91	163		N.D.	
104)	1,2-Dichlorobenzene	0.000		0		N.D.	
105)	1,2,4,5-Tetramethylben...	13.703	119	91		N.D.	
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
108)	Hexachlorobutadiene	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	14.525	180	138		N.D.	
110)	Naphthalene	14.819	128	478		N.D.	
111)	1,2,3-Trichlorobenzene	14.986	180	188		N.D.	

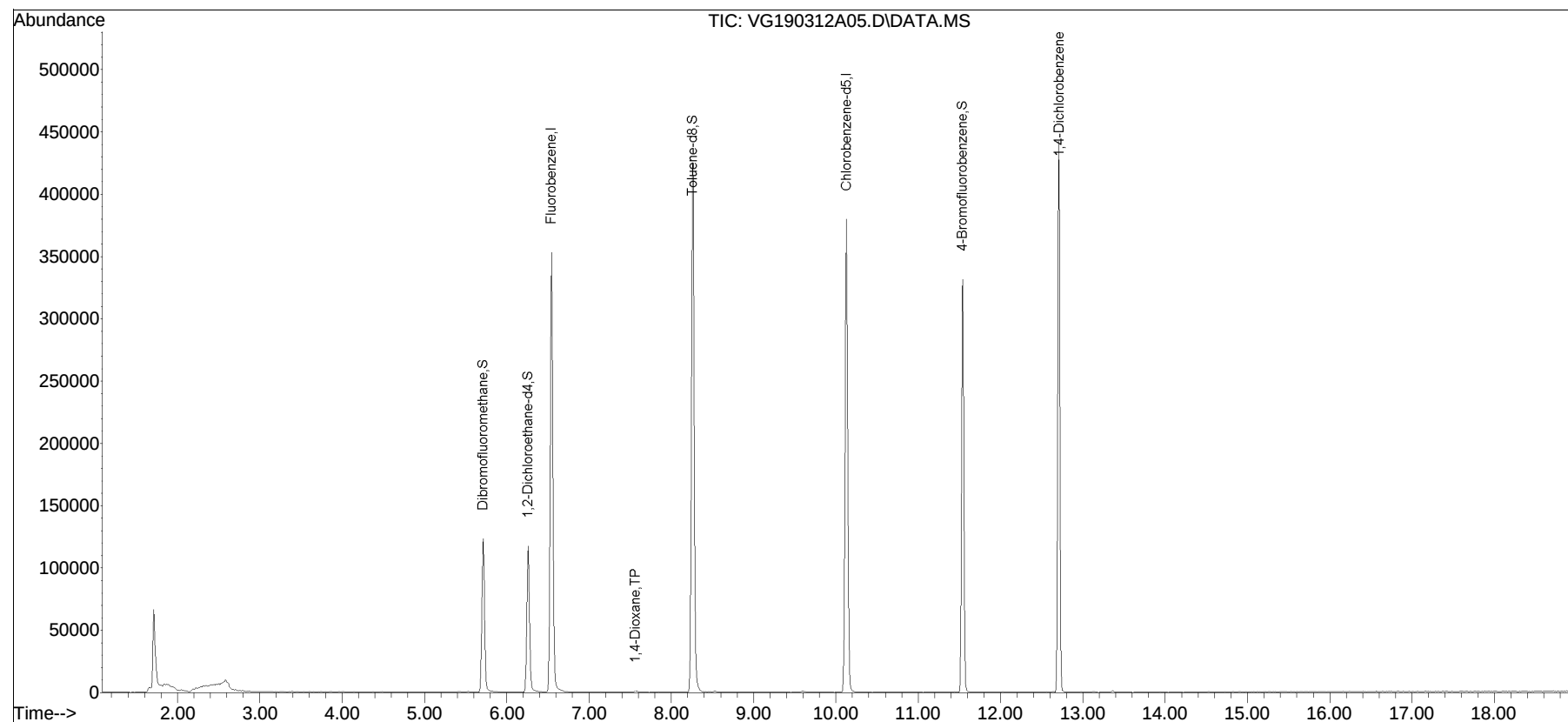
(#) = qualifier out of range (m) = manual integration (+) = signals summed

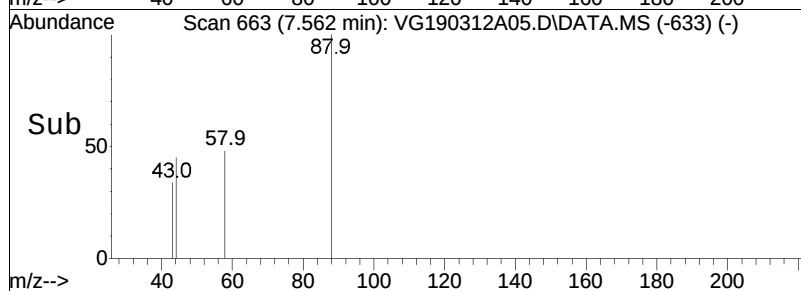
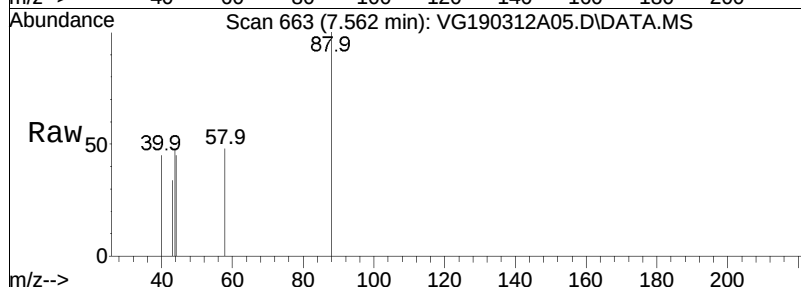
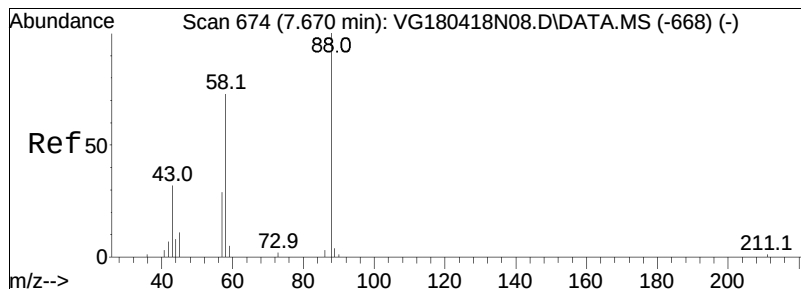
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A05.D
 Acq On : 12 Mar 2019 9:48 am
 Operator : GONZO:PD
 Sample : WG1214926-5,31,10,10
 Misc : WG1214926,ICAL15541
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 10:10:37 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

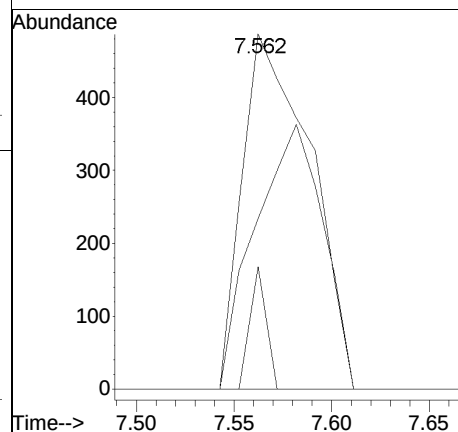
Sub List : 8260-Curve-Iodomethane - Megamix plus Diox-Iodomethane





#57
 1,4-Dioxane
 Concen: 45.56 ug/L
 RT: 7.562 min Scan# 663
 Delta R.T. -0.010 min
 Lab File: VG190312A05.D
 Acq: 12 Mar 2019 9:48 am

Tgt Ion	Ratio	Resp	Lower	Upper
88	100			
58	74.2	48.7	73.1#	
43	8.4	22.4	33.6#	



Manual Integration Report

Data Path	: I:\VOLATILES\Gonzo\2019\19Q	Method	: G_190227N_8260.m
Data File	: VG190312A05.D	Operator	: GONZO:PD
Date Inj'd	: 3/12/2019 9:48 am	Instrument	: Gonzo
Sample	: WG1214926-5,31,10,10	Quant Date	: 3/12/2019 10:10 am

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N05.D
 Acq On : 12 Mar 2019 7:35 pm
 Operator : VOA108:KJD
 Sample : WG1215235-5,31,10,10
 Misc : WG1215235,ICAL15519
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 19:51:41 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	285430	10.000	ug/L	0.00
Standard Area 1 = 304926			Recovery = 93.61%			
59) Chlorobenzene-d5	8.526	117	194883	10.000	ug/L	0.00
Standard Area 1 = 209940			Recovery = 92.83%			
79) 1,4-Dichlorobenzene-d4	10.010	152	85279	10.000	ug/L	0.00
Standard Area 1 = 100075			Recovery = 85.22%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	77745	10.664	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.64%			
43) 1,2-Dichloroethane-d4	5.208	65	93325	11.389	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 113.89%			
60) Toluene-d8	7.241	98	252079	9.438	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.38%			
83) 4-Bromofluorobenzene	9.340	95	85047	10.192	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.92%			
Target Compounds						
2) Dichlorodifluoromethane	0.000		0	N.D.		Qvalue
3) Chloromethane	0.000		0	N.D.	d	
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	1.359	94	357	N.D.		
6) Chloroethane	0.000		0	N.D.	d	
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	0.000		0	N.D.	d	
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	0.000		0	N.D.	d	
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
25) Acrylonitrile	0.000		0	N.D.		
27) Vinyl acetate	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N05.D
 Acq On : 12 Mar 2019 7:35 pm
 Operator : VOA108:KJD
 Sample : WG1215235-5,31,10,10
 Misc : WG1215235,ICAL15519
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 19:51:41 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0		N.D.	
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
40) 1,1-Dichloropropene	0.000		0		N.D.	
41) Benzene	0.000		0		N.D.	
44) 1,2-Dichloroethane	0.000		0		N.D.	d
48) Trichloroethene	0.000		0		N.D.	d
50) Dibromomethane	0.000		0		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.	
61) Toluene	7.294	92	25		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	0.000		0		N.D.	
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.	
70) 1,3-Dichloropropane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	0.000		0		N.D.	d
73) Chlorobenzene	0.000		0		N.D.	d
74) Ethylbenzene	0.000		0		N.D.	d
75) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
76) p/m Xylene	8.688	106	190		N.D.	
77) o Xylene	8.970	106	130		N.D.	
78) Styrene	9.003	104	410		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	d
84) Bromobenzene	9.402	156	135		N.D.	
85) n-Propylbenzene	0.000		0		N.D.	d
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
88) 4-Ethyltoluene	0.000		0		N.D.	d
89) 2-Chlorotoluene	0.000		0		N.D.	d
90) 1,3,5-Trimethylbenzene	0.000		0		N.D.	d
91) 1,2,3-Trichloropropane	0.000		0		N.D.	
92) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
93) 4-Chlorotoluene	9.619	91	740		N.D.	
94) tert-Butylbenzene	9.742	119	168		N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N05.D
 Acq On : 12 Mar 2019 7:35 pm
 Operator : VOA108:KJD
 Sample : WG1215235-5,31,10,10
 Misc : WG1215235,ICAL15519
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 19:51:41 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
97)	1,2,4-Trimethylbenzene	0.000		0	N.D.	d		
98)	sec-Butylbenzene	9.851	105	440	N.D.			
99)	p-Isopropyltoluene	0.000		0	N.D.	d		
100)	1,3-Dichlorobenzene	9.962	146	499	N.D.			
101)	1,4-Dichlorobenzene	10.018	146	1007	0.082	ug/L	#	1
102)	p-Diethylbenzene	10.144	119	298	N.D.			
103)	n-Butylbenzene	10.177	91	614	N.D.			
104)	1,2-Dichlorobenzene	10.258	146	500	N.D.			
105)	1,2,4,5-Tetramethylben...	0.000		0	N.D.	d		
106)	1,2-Dibromo-3-chloropr...	0.000		0	N.D.			
108)	Hexachlorobutadiene	0.000		0	N.D.			
109)	1,2,4-Trichlorobenzene	0.000		0	N.D.	d		
110)	Naphthalene	11.265	128	318	N.D.			
111)	1,2,3-Trichlorobenzene	11.376	180	94	N.D.			

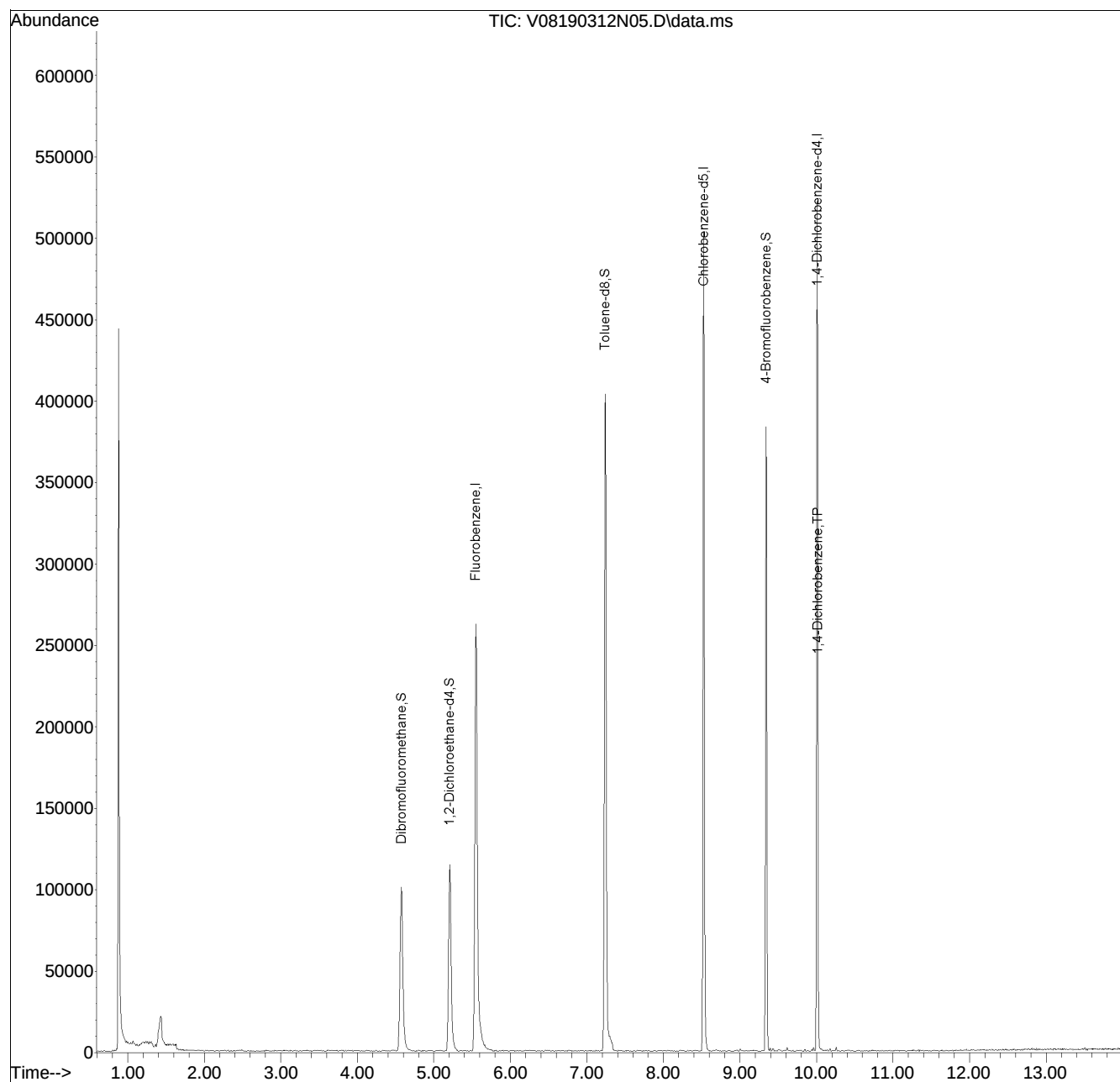
(#) = qualifier out of range (m) = manual integration (+) = signals summed

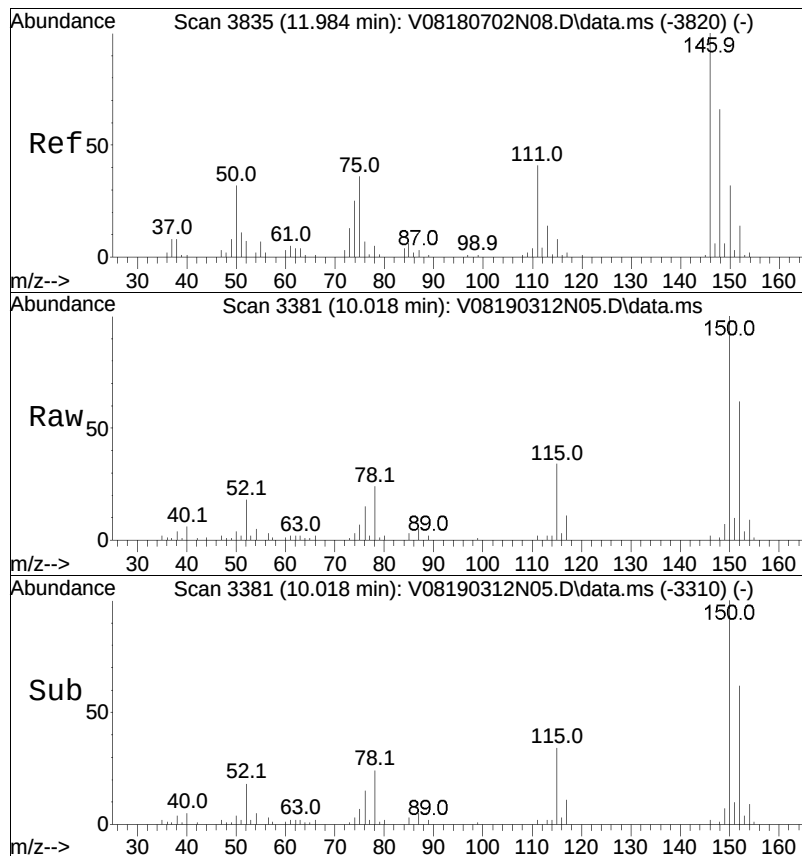
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
Data File : V08190312N05.D
Acq On : 12 Mar 2019 7:35 pm
Operator : VOA108:KJD
Sample : WG1215235-5,31,10,10
Misc : WG1215235,ICAL15519
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 19:51:41 2019
Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Feb 19 00:08:39 2019
Response via : Initial Calibration

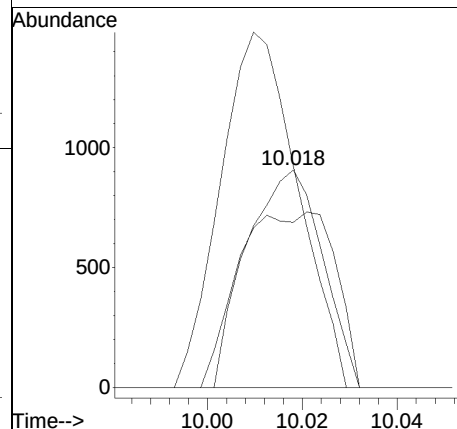
Sub List : 8260-Curve - Megamix plus Diox90312N\V08190312N02.D•





#101
 1,4-Dichlorobenzene
 Concen: 0.08 ug/L
 RT: 10.018 min Scan# 3381
 Delta R.T. -0.003 min
 Lab File: V08190312N05.D
 Acq: 12 Mar 2019 7:35 pm

Tgt Ion:	146	Resp:	1007
Ion Ratio	Lower	Upper	
146	100		
111	166.2	32.3	48.5#
148	102.5	49.9	74.9#



Manual Integration Report

Data Path	: I:\VOLATILES\VOA108\2019\10	Method	: V108_190218N_8260.m
Data File	: V08190312N05.D	Operator	: VOA108:KJD
Date Inj'd	: 3/12/2019 7:35 pm	Instrument	: VOA 108
Sample	: WG1215235-5,31,10,10	Quant Date	: 3/12/2019 7:50 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N05.D
 Acq On : 13 Mar 2019 7:48 pm
 Operator : VOA108:KJD
 Sample : WG1215584-5,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 13 20:16:52 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	277807	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery =	91.98%		
59) Chlorobenzene-d5	8.526	117	182593	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery =	88.33%		
79) 1,4-Dichlorobenzene-d4	10.010	152	73611	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery =	72.96%		
System Monitoring Compounds						
36) Dibromofluoromethane	4.577	113	76733	10.814	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	108.14%		
43) 1,2-Dichloroethane-d4	5.208	65	90412	11.336	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	113.36%		
60) Toluene-d8	7.240	98	238694	9.538	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	95.38%		
83) 4-Bromofluorobenzene	9.343	95	78262	10.866	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	108.66%		
Target Compounds						
2) Dichlorodifluoromethane	0.000		0	N.D.		Qvalue
3) Chloromethane	0.000		0	N.D.	d	
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	1.362	94	277	N.D.		
6) Chloroethane	0.000		0	N.D.	d	
7) Trichlorofluoromethane	0.000		0	N.D.	d	
8) Ethyl ether	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	0.000		0	N.D.	d	
15) Methylene chloride	0.000		0	N.D.	d	
17) Acetone	0.000		0	N.D.	d	
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
25) Acrylonitrile	0.000		0	N.D.		
27) Vinyl acetate	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N05.D
 Acq On : 13 Mar 2019 7:48 pm
 Operator : VOA108:KJD
 Sample : WG1215584-5,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 13 20:16:52 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	0.000		0		N.D.	
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
40) 1,1-Dichloropropene	0.000		0		N.D.	
41) Benzene	0.000		0		N.D.	
44) 1,2-Dichloroethane	0.000		0		N.D.	d
48) Trichloroethene	0.000		0		N.D.	d
50) Dibromomethane	0.000		0		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.	
61) Toluene	0.000		0		N.D.	d
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	0.000		0		N.D.	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.	
70) 1,3-Dichloropropane	0.000		0		N.D.	d
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	0.000		0		N.D.	d
73) Chlorobenzene	0.000		0		N.D.	d
74) Ethylbenzene	8.576	91	568		N.D.	
75) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
76) p/m Xylene	8.677	106	354		N.D.	
77) o Xylene	8.964	106	83		N.D.	
78) Styrene	9.006	104	574		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	d
84) Bromobenzene	0.000		0		N.D.	
85) n-Propylbenzene	9.432	91	787		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
88) 4-Ethyltoluene	9.502	105	504		N.D.	
89) 2-Chlorotoluene	0.000		0		N.D.	d
90) 1,3,5-Trimethylbenzene	0.000		0		N.D.	d
91) 1,2,3-Trichloropropane	0.000		0		N.D.	
92) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
93) 4-Chlorotoluene	9.619	91	604		N.D.	
94) tert-Butylbenzene	0.000		0		N.D.	d

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N05.D
 Acq On : 13 Mar 2019 7:48 pm
 Operator : VOA108:KJD
 Sample : WG1215584-5,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 13 20:16:52 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	0.000		0	N.D.	d	
98)	sec-Butylbenzene	0.000		0	N.D.	d	
99)	p-Isopropyltoluene	0.000		0	N.D.	d	
100)	1,3-Dichlorobenzene	9.962	146	558	N.D.		
101)	1,4-Dichlorobenzene	10.015	146	633	N.D.		
102)	p-Diethylbenzene	10.149	119	185	N.D.		
103)	n-Butylbenzene	10.174	91	607	N.D.		
104)	1,2-Dichlorobenzene	10.258	146	318	N.D.		
105)	1,2,4,5-Tetramethylben...	0.000		0	N.D.	d	
106)	1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
108)	Hexachlorobutadiene	0.000		0	N.D.		
109)	1,2,4-Trichlorobenzene	11.094	180	101	N.D.		
110)	Naphthalene	11.278	128	242	N.D.		
111)	1,2,3-Trichlorobenzene	0.000		0	N.D.		

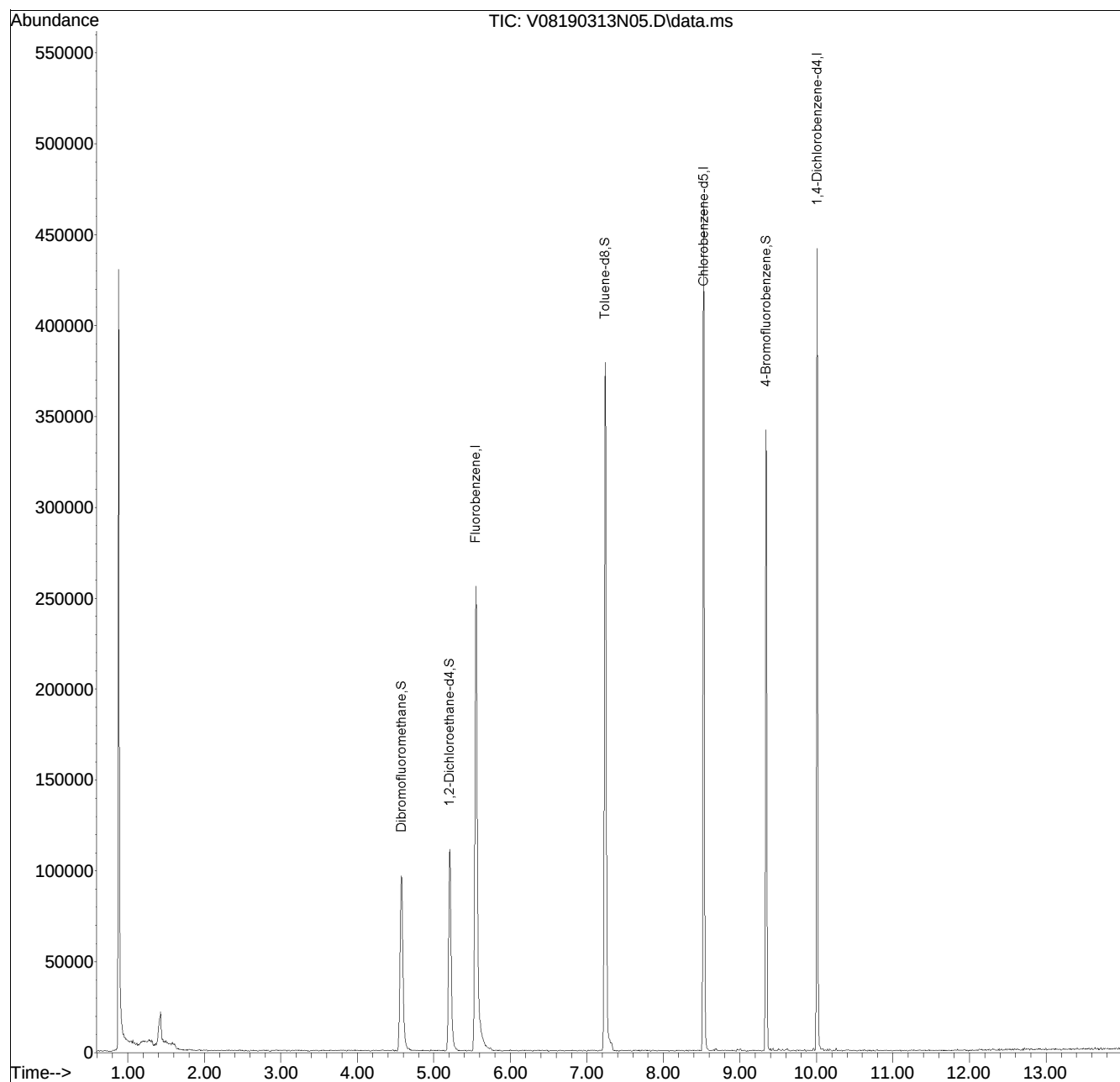
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
Data File : V08190313N05.D
Acq On : 13 Mar 2019 7:48 pm
Operator : VOA108:KJD
Sample : WG1215584-5,31,10,10
Misc : WG1215584,ICAL15519
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 13 20:16:52 2019
Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Feb 19 00:08:39 2019
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox90313N\V08190313N02.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA108\2019\10	Method	: V108_190218N_8260.m
Data File	: V08190313N05.D	Operator	: VOA108:KJD
Date Inj'd	: 3/13/2019 7:48 pm	Instrument	: VOA 108
Sample	: WG1215584-5,31,10,10	Quant Date	: 3/13/2019 8:15 pm

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

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A02.D
 Acq On : 12 Mar 2019 8:32
 Operator : GONZO:PD
 Sample : WG1214926-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1214926,ICAL15541 (Sig #1); WG,ICAL15541 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 09:02:19 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190312A\VG190312A02.D
 Sub List : 8260-Curve-Iodomethane - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	6.545	96	385122	10.000	ug/L	0.00
Standard Area 1 = 385122			Recovery	=	100.00%	
59) Chlorobenzene-d5	10.127	117	297531	10.000	ug/L	0.00
Standard Area 1 = 297531			Recovery	=	100.00%	
79) 1,4-Dichlorobenzene-d4	12.703	152	151374	10.000	ug/L	0.00
Standard Area 1 = 151374			Recovery	=	100.00%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.714	113	91175	9.371	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	93.71%	
43) 1,2-Dichloroethane-d4	6.261	65	101993	10.644	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	106.44%	
60) Toluene-d8	8.257	98	383968	10.503	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.03%	
83) 4-Bromofluorobenzene	11.538	95	137560	10.768	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	107.68%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.879	85	67161	9.079	ug/L	99
3) Chloromethane	2.104	50	67323	9.219	ug/L	100
4) Vinyl chloride	2.183	62	110857	10.081	ug/L	97
5) Bromomethane	2.535	94	32202M1	4.801	ug/L	
6) Chloroethane	2.672	64	61096	9.460	ug/L	97
7) Trichlorofluoromethane	2.828	101	125881	8.956	ug/L	99
8) Ethyl ether	3.151	74	35862	9.891	ug/L	91
10) 1,1-Dichloroethene	3.356	96	65130	9.096	ug/L	91
11) Carbon disulfide	3.396	76	194114	9.041	ug/L	100
15) Methylene chloride	3.953	84	74721	9.816	ug/L	93
17) Acetone	4.002	43	13203	12.981	ug/L	91
18) trans-1,2-Dichloroethene	4.110	96	73081	9.396	ug/L	92
20) Methyl tert-butyl ether	4.207	73	183469	10.071	ug/L	94
23) 1,1-Dichloroethane	4.726	63	150767	10.660	ug/L	99
25) Acrylonitrile	4.775	53	16293	11.438	ug/L	97
27) Vinyl acetate	4.960	43	168297	11.475	ug/L	99
28) cis-1,2-Dichloroethene	5.254	96	82560	9.646	ug/L	93
29) 2,2-Dichloropropane	5.361	77	117952	9.881	ug/L	95
30) Bromochloromethane	5.459	128	40539	9.699	ug/L	92
32) Chloroform	5.528	83	143680	9.979	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A02.D
 Acq On : 12 Mar 2019 8:32
 Operator : GONZO:PD
 Sample : WG1214926-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1214926,ICAL15541 (Sig #1); WG,ICAL15541 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 09:02:19 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190312A\VG190312A02.D
 Sub List : 8260-Curve-Iodomethane - Megamix plus Diox-Iodomethane

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	5.665	117	115160	9.232	ug/L	97
37) 1,1,1-Trichloroethane	5.733	97	134884	9.436	ug/L	97
39) 2-Butanone	5.831	43	22821	11.386	ug/L	92
40) 1,1-Dichloropropene	5.860	75	114305	9.989	ug/L	98
41) Benzene	6.115	78	347905	10.062	ug/L	99
44) 1,2-Dichloroethane	6.330	62	104467	10.546	ug/L	98
48) Trichloroethene	6.721	95	86848	9.246	ug/L	99
50) Dibromomethane	7.171	93	45909	10.154	ug/L	93
51) 1,2-Dichloropropane	7.279	63	80977	10.623	ug/L	98
54) Bromodichloromethane	7.347	83	109243	9.977	ug/L	100
57) 1,4-Dioxane	7.562	88	8517	315.889	ug/L	99
58) cis-1,3-Dichloropropene	8.041	75	130612	10.246	ug/L	93
61) Toluene	8.315	92	229929	10.433	ug/L	100
62) 4-Methyl-2-pentanone	8.755	58	20173	10.997	ug/L	89
63) Tetrachloroethene	8.765	166	98521	9.141	ug/L	97
65) trans-1,3-Dichloropropene	8.804	75	119140	11.164	ug/L	95
68) 1,1,2-Trichloroethane	8.991	83	57055	10.709	ug/L	99
69) Chlorodibromomethane	9.206	129	78191	10.200	ug/L	99
70) 1,3-Dichloropropane	9.324	76	118571	11.319	ug/L	100
71) 1,2-Dibromoethane	9.500	107	64222	10.545	ug/L	98
72) 2-Hexanone	9.774	43	35674	11.900	ug/L	93
73) Chlorobenzene	10.147	112	254272	10.212	ug/L	97
74) Ethylbenzene	10.176	91	442896	10.235	ug/L	99
75) 1,1,1,2-Tetrachloroethane	10.225	131	88336	10.272	ug/L	98
76) p/m Xylene	10.352	106	352309	20.103	ug/L	99
77) o Xylene	10.862	106	334279	20.347	ug/L	99
78) Styrene	10.930	104	550746	20.306	ug/L	99
80) Bromoform	10.960	173	49465	10.198	ug/L	97
82) Isopropylbenzene	11.224	105	446937	10.342	ug/L	100
84) Bromobenzene	11.655	156	110635	10.312	ug/L	98
85) n-Propylbenzene	11.684	91	525498	10.593	ug/L	99
87) 1,1,2,2-Tetrachloroethane	11.763	83	79259	11.865	ug/L	100
88) 4-Ethyltoluene	11.802	105	432636	10.559	ug/L	100
89) 2-Chlorotoluene	11.851	91	306401M1	11.144	ug/L	
90) 1,3,5-Trimethylbenzene	11.890	105	369816	10.439	ug/L	100
91) 1,2,3-Trichloropropane	11.910	75	68293M1	11.676	ug/L	
92) trans-1,4-Dichloro-2-b...	11.949	53	17618	11.587	ug/L #	100
93) 4-Chlorotoluene	12.027	91	310740	10.919	ug/L	99
94) tert-Butylbenzene	12.223	119	321192	10.286	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A02.D
 Acq On : 12 Mar 2019 8:32
 Operator : GONZO:PD
 Sample : WG1214926-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1214926,ICAL15541 (Sig #1); WG,ICAL15541 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 09:02:19 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190312A\VG190312A02.D
 Sub List : 8260-Curve-Iodomethane - Megamix plus Diox-Iodomethane

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	12.302	105	364777	10.689	ug/L	99
98)	sec-Butylbenzene	12.409	105	440346	10.323	ug/L	100
99)	p-Isopropyltoluene	12.556	119	404227	10.323	ug/L	99
100)	1,3-Dichlorobenzene	12.635	146	210719	10.644	ug/L	99
101)	1,4-Dichlorobenzene	12.723	146	218952	10.758	ug/L	99
102)	p-Diethylbenzene	12.919	119	231178	10.288	ug/L	98
103)	n-Butylbenzene	12.978	91	349924	10.494	ug/L	100
104)	1,2-Dichlorobenzene	13.134	146	190255	10.743	ug/L	99
105)	1,2,4,5-Tetramethylben...	13.702	119	333415	10.387	ug/L	99
106)	1,2-Dibromo-3-chloropr...	13.908	155	9792	10.060	ug/L	99
108)	Hexachlorobutadiene	14.486	225	53807	8.612	ug/L	99
109)	1,2,4-Trichlorobenzene	14.525	180	121363	9.880	ug/L	99
110)	Naphthalene	14.819	128	231302	10.903	ug/L	100
111)	1,2,3-Trichlorobenzene	14.986	180	103540	10.238	ug/L	100

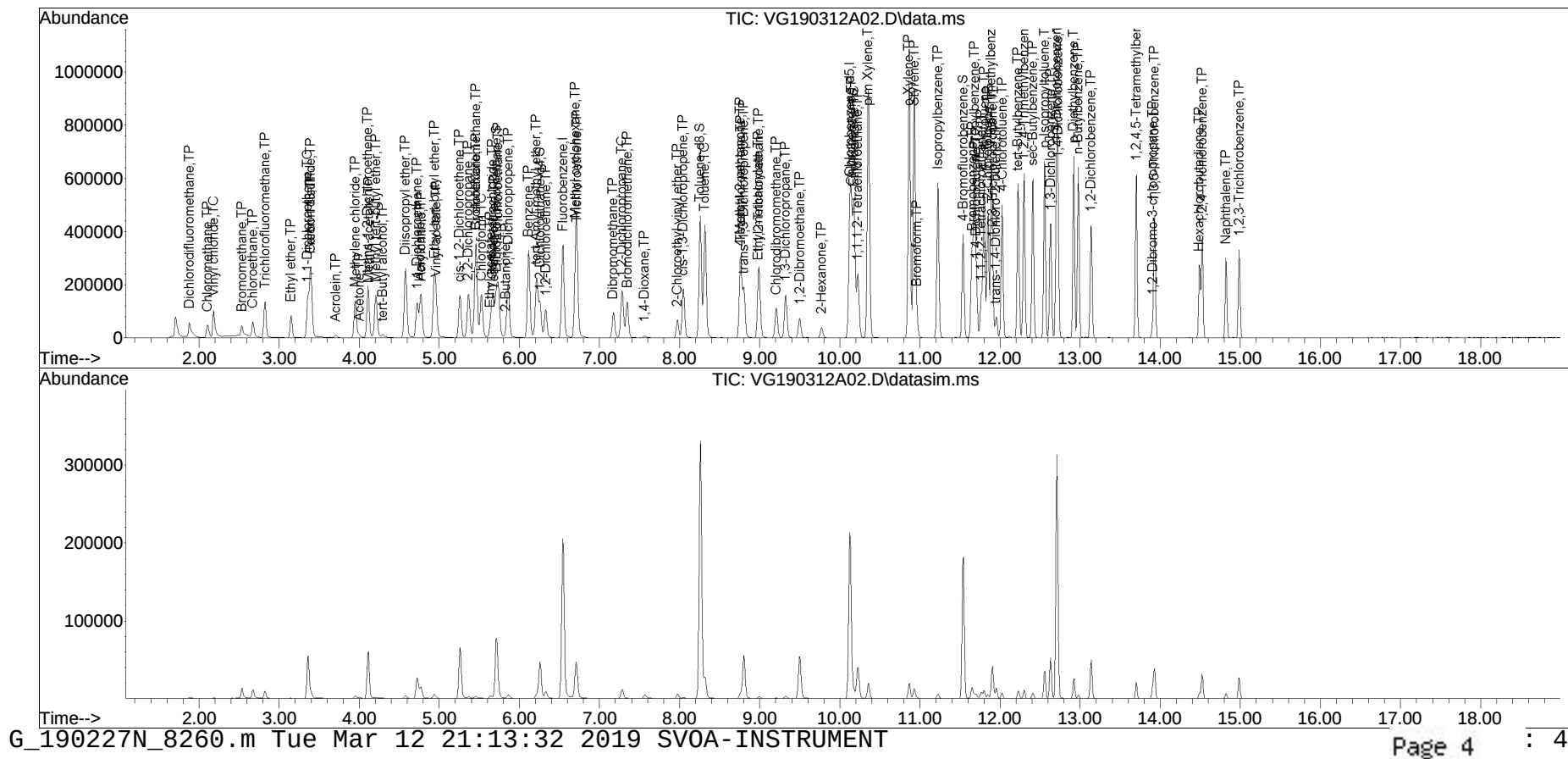
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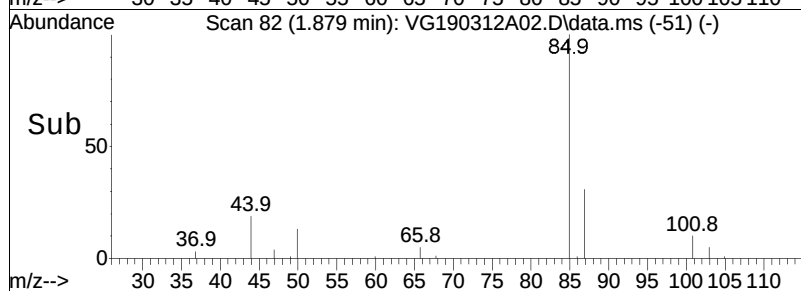
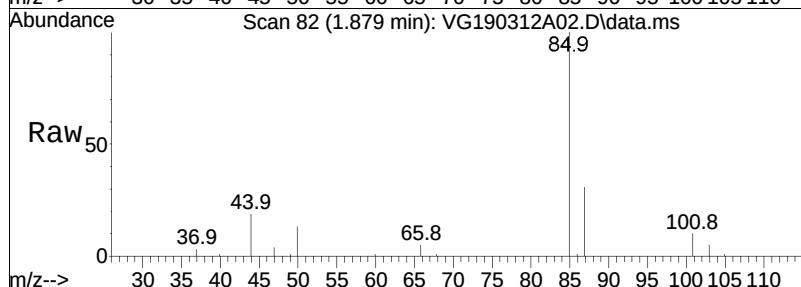
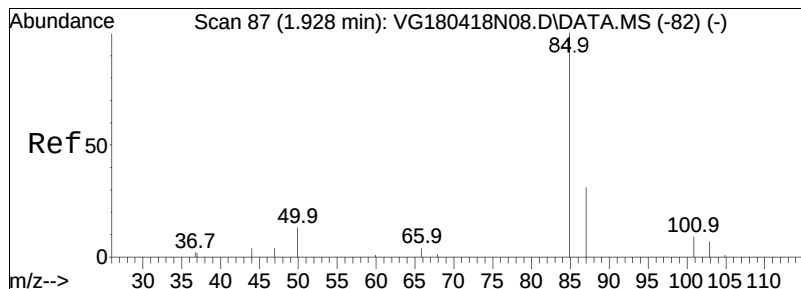
(QT Reviewed)

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Data Path   : I:\VOLATILES\Gonzo\2019\190312A\  
Data File  : VG190312A02.D  
Acq On     : 12 Mar 2019    8:32  
Operator   : GONZO:PD  
Sample     : WG1214926-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)  
Misc       : WG1214926,ICAL15541 (Sig #1); WG,ICAL15541 (Sig #2)  
ALS Vial   : 2    Sample Multiplier: 1
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Quant Time: Mar 12 09:02:19 2019
Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Feb 28 12:19:42 2019
Response via : Initial Calibration

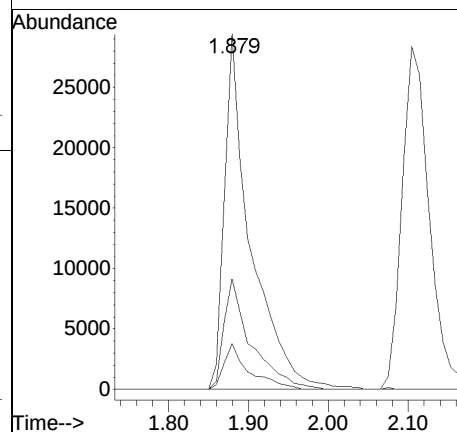
Sub List : 8260-Curve-Iodomethane - Megamix plus Diox-Iodomethane

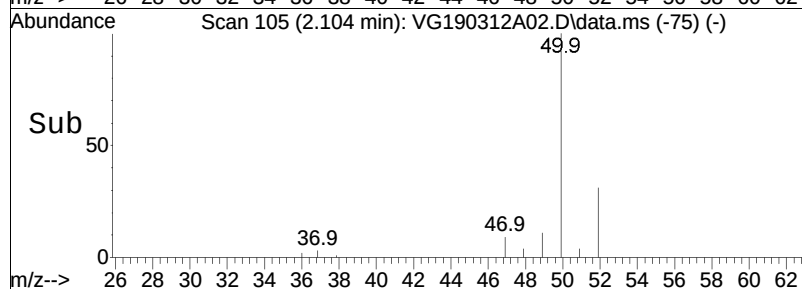
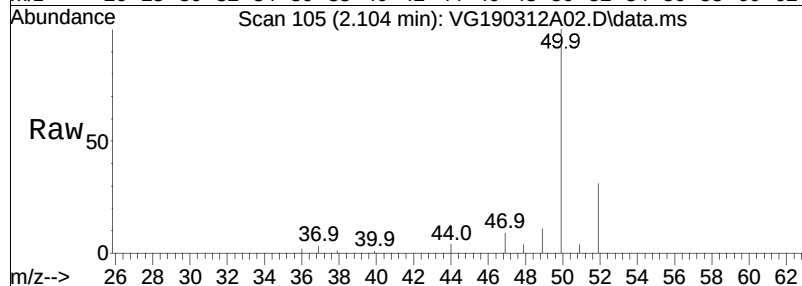
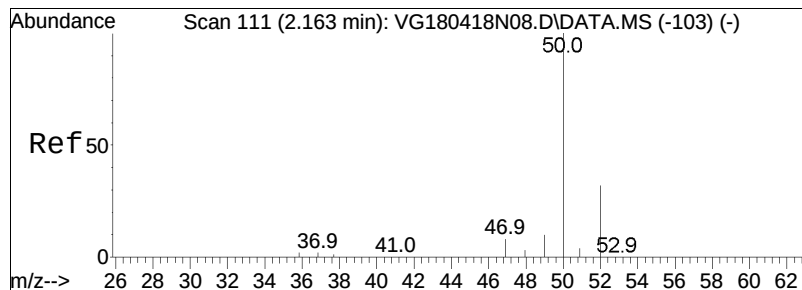




#2
 Dichlorodifluoromethane
 Concen: 9.08 ug/L
 RT: 1.879 min Scan# 82
 Delta R.T. -0.001 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

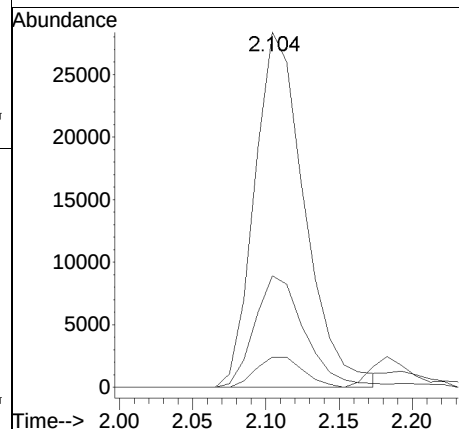
Tgt Ion	85	87	50	Ratio	100	32.4	20.7	7.5	Resp	67161	Lower	Upper
85	100											
87		32.4					20.7					42.9
50		12.4					7.5					15.5

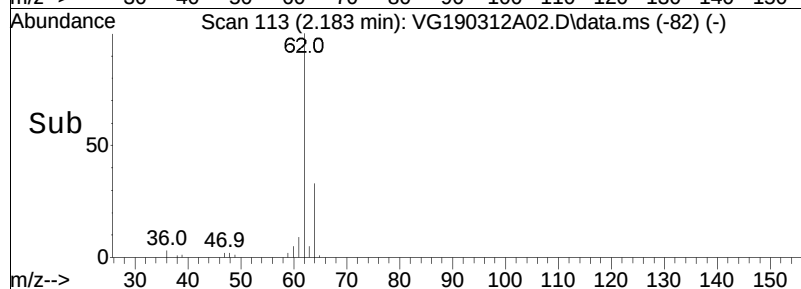
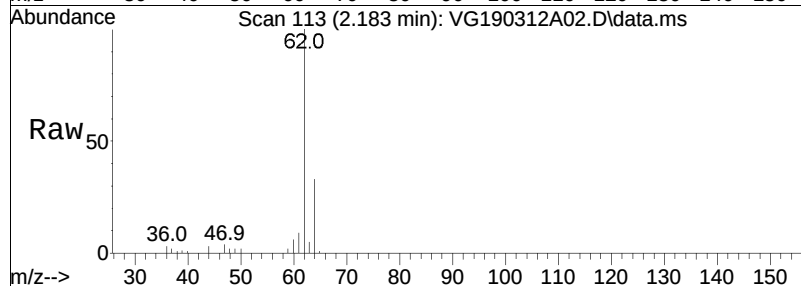
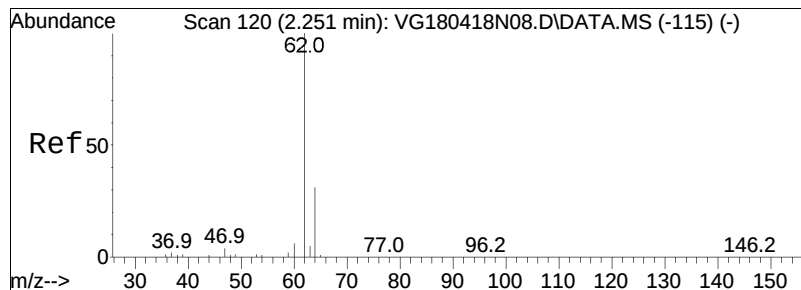




#3
 Chloromethane
 Concen: 9.22 ug/L
 RT: 2.104 min Scan# 105
 Delta R.T. -0.010 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

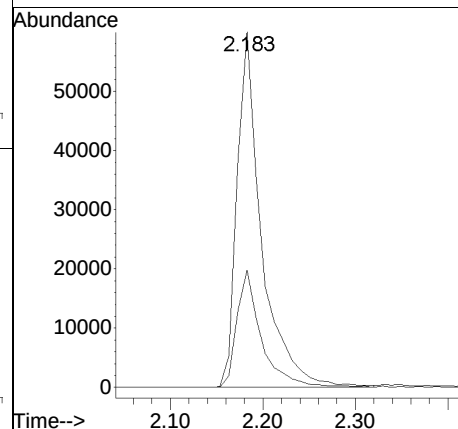
Tgt Ion	Ratio	Lower	Upper
50	100		
52	31.6	11.7	51.7
47	8.2	0.0	28.0

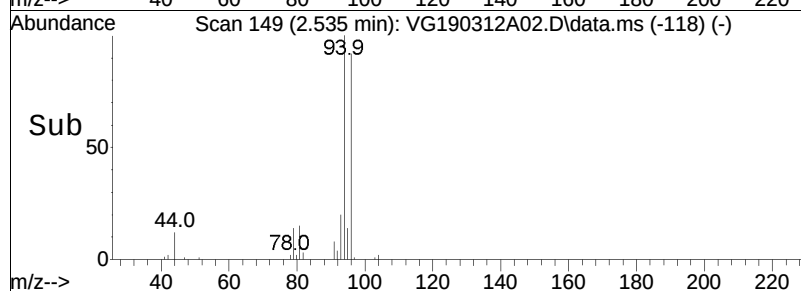
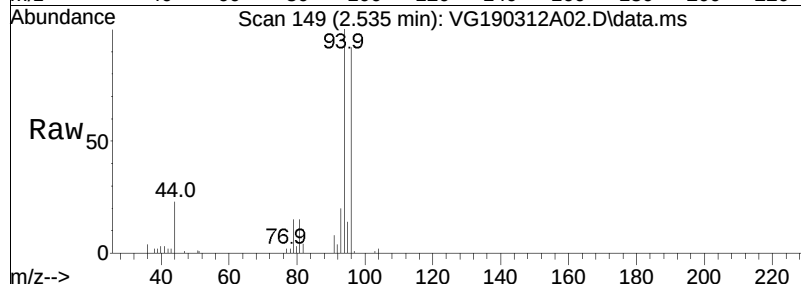
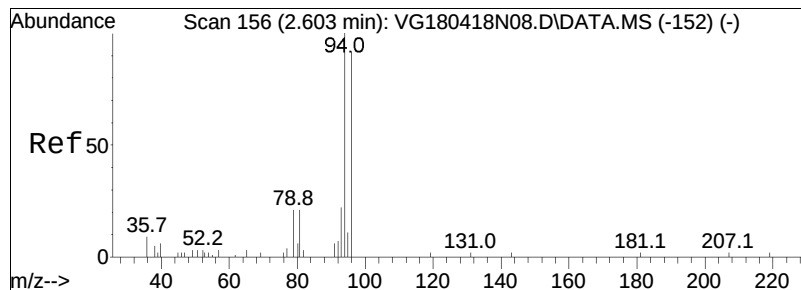




#4
 Vinyl chloride
 Concen: 10.08 ug/L
 RT: 2.183 min Scan# 113
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

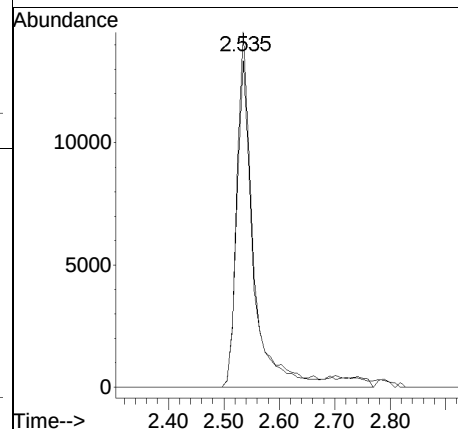
Tgt Ion	Ratio	Lower	Upper
62	100		
64	33.2	11.3	51.3

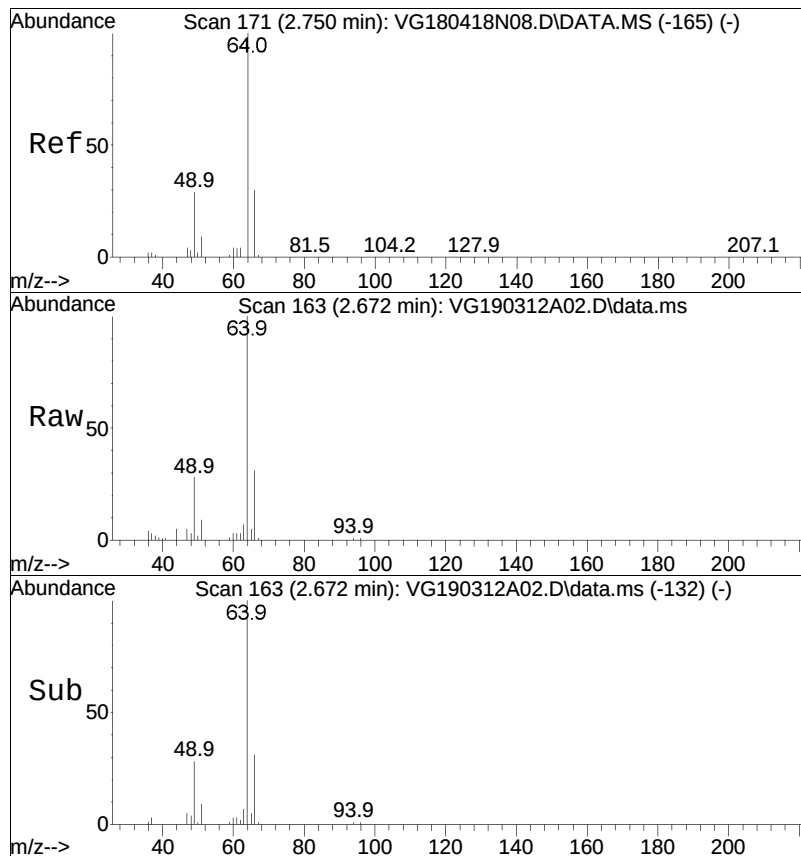




#5
 Bromomethane
 Concen: 4.80 ug/L M1
 RT: 2.535 min Scan# 149
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

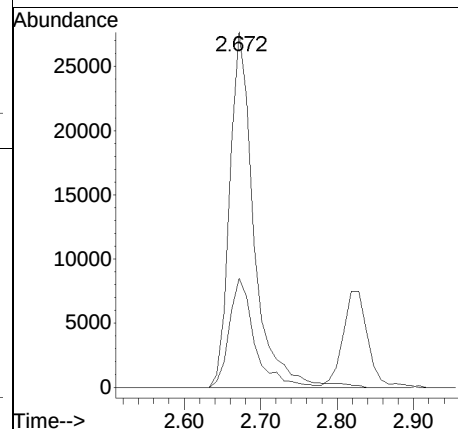
Tgt Ion: 94 Resp: 32202
 Ion Ratio Lower Upper
 94 100
 96 86.4 75.2 115.2

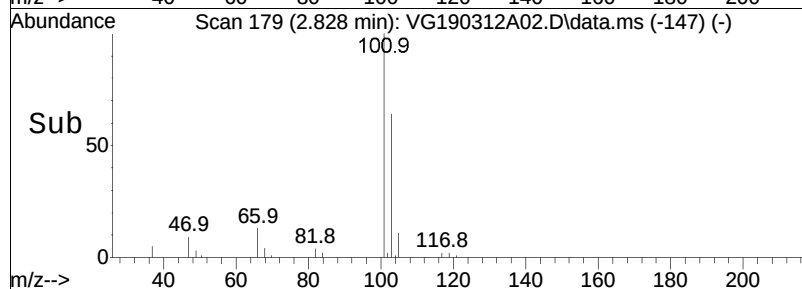
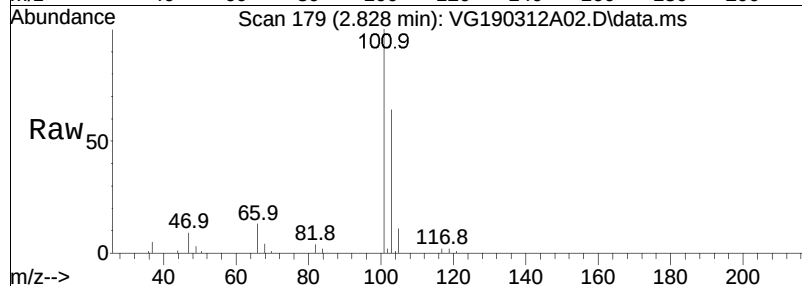
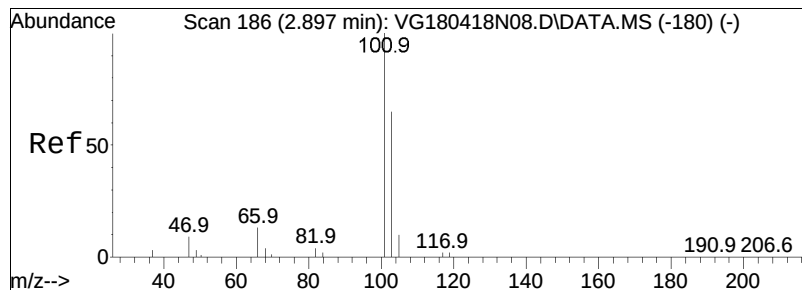




#6
 Chloroethane
 Concen: 9.46 ug/L
 RT: 2.672 min Scan# 163
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

Tgt Ion	Ratio	Lower	Upper
64	100		
66	32.0	13.7	53.7





#7

Trichlorofluoromethane

Concen: 8.96 ug/L

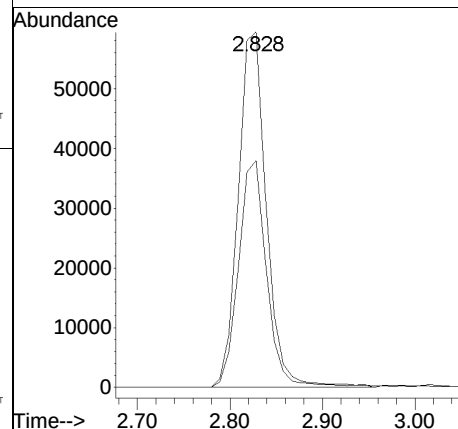
RT: 2.828 min Scan# 179

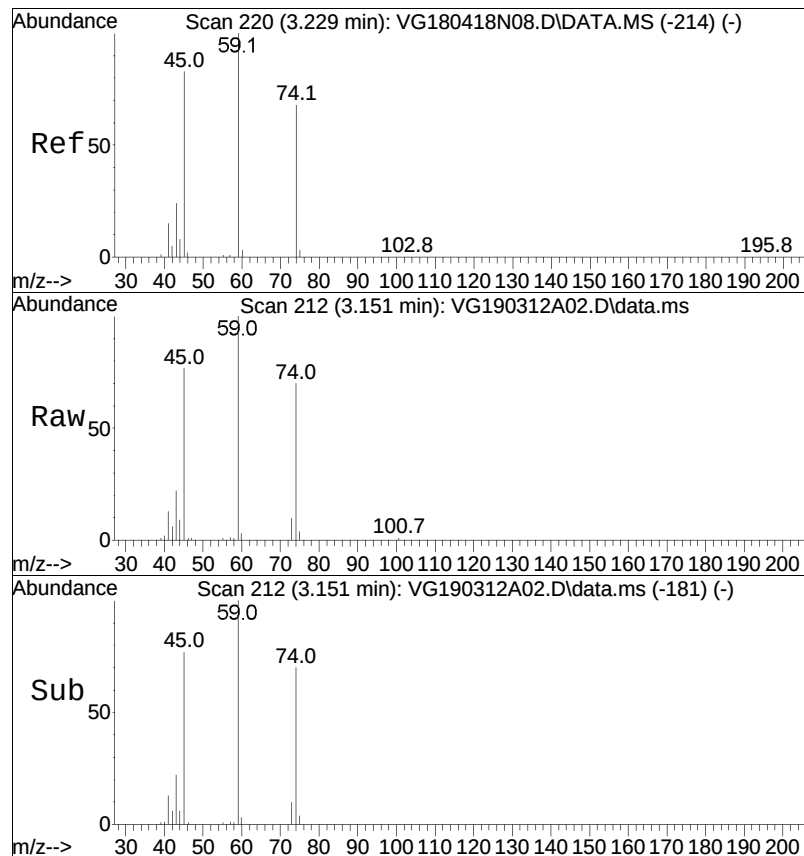
Delta R.T. 0.009 min

Lab File: VG190312A02.D

Acq: 12 Mar 2019 8:32

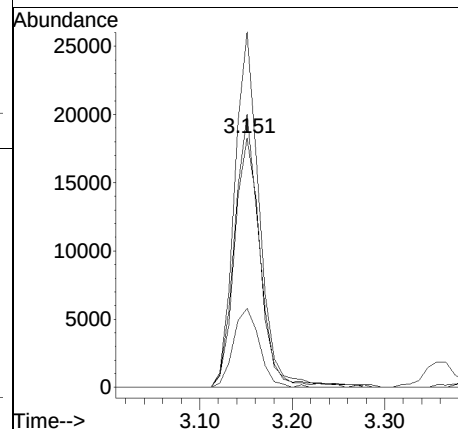
Tgt	Ion	Ratio	Lower	Upper
101	101	100		
103	103	64.4	52.2	78.2

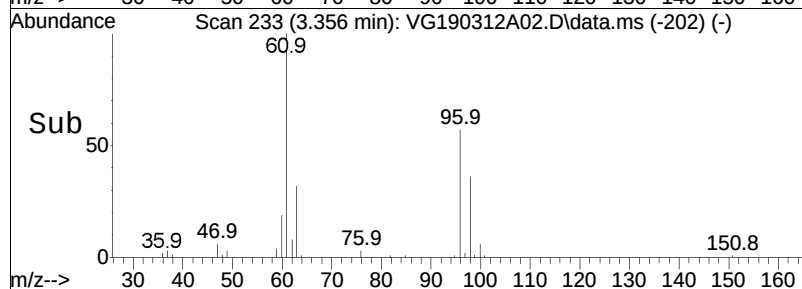
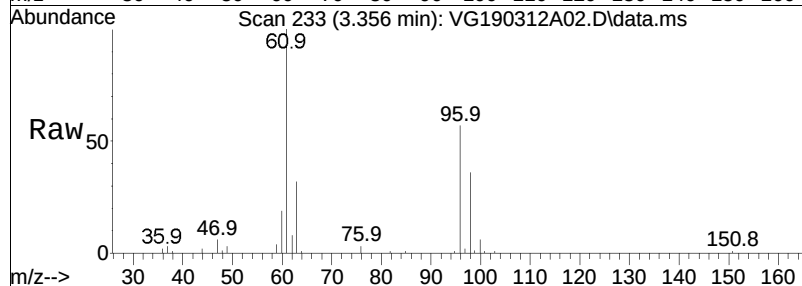
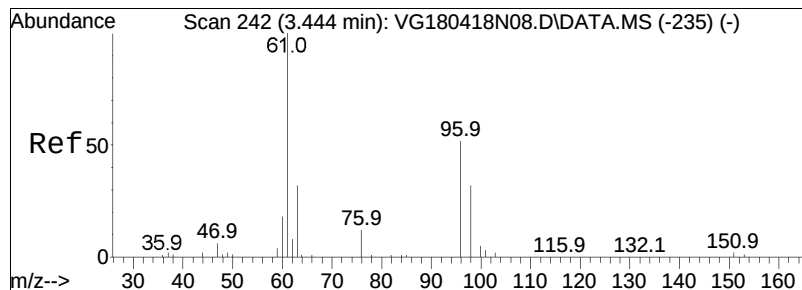




#8
Ethyl ether
Concen: 9.89 ug/L
RT: 3.151 min Scan# 212
Delta R.T. 0.000 min
Lab File: VG190312A02.D
Acq: 12 Mar 2019 8:32

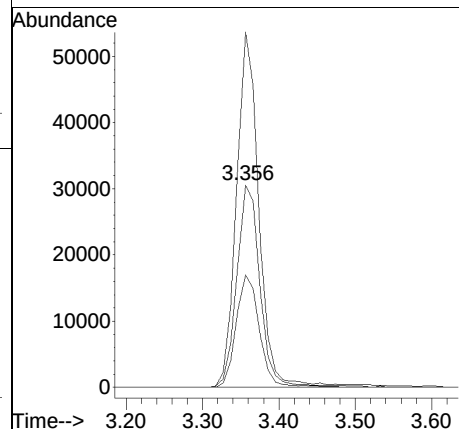
Tgt Ion	Ratio	Lower	Upper
74	100		
59	137.0	83.5	173.3
45	103.6	59.7	123.9
43	31.9	17.6	36.6

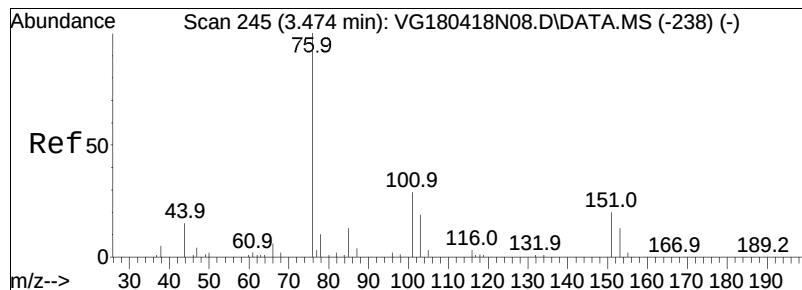




#10
 1,1-Dichloroethene
 Concen: 9.10 ug/L
 RT: 3.356 min Scan# 233
 Delta R.T. -0.001 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

Tgt Ion:	96	Resp:	65130
Ion Ratio	Lower	Upper	
96	100		
61	167.9	124.2	186.4
63	55.6	40.0	60.0





#11

Carbon disulfide

Concen: 9.04 ug/L

RT: 3.396 min Scan# 237

Delta R.T. -0.000 min

Lab File: VG190312A02.D

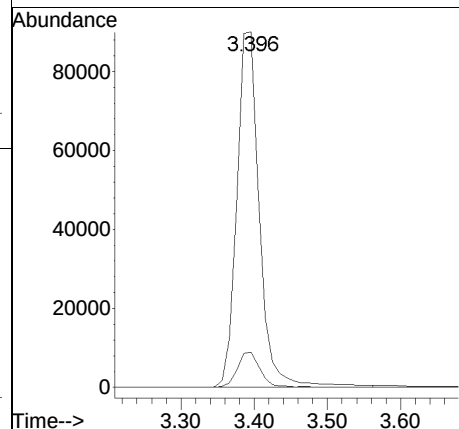
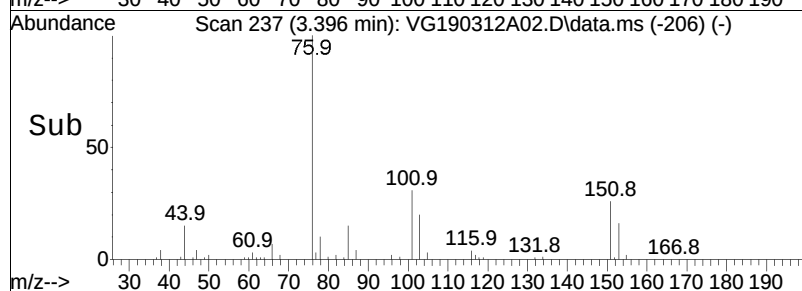
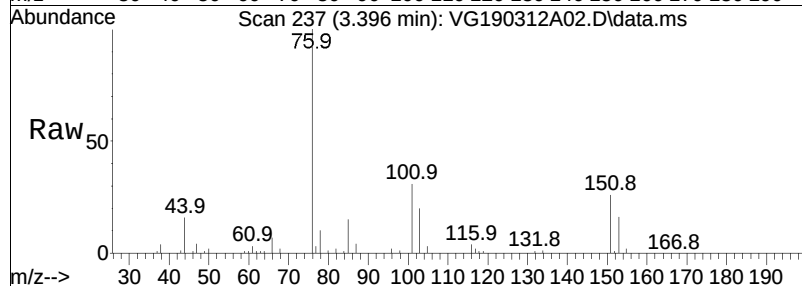
Acq: 12 Mar 2019 8:32

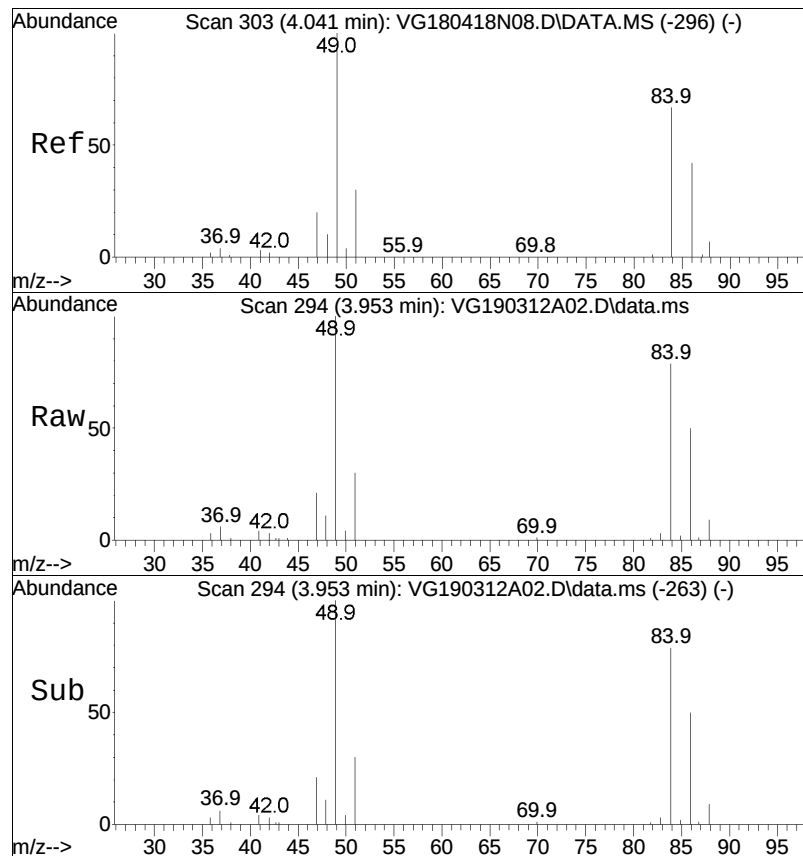
Tgt Ion: 76 Resp: 194114

Ion Ratio Lower Upper

76 100

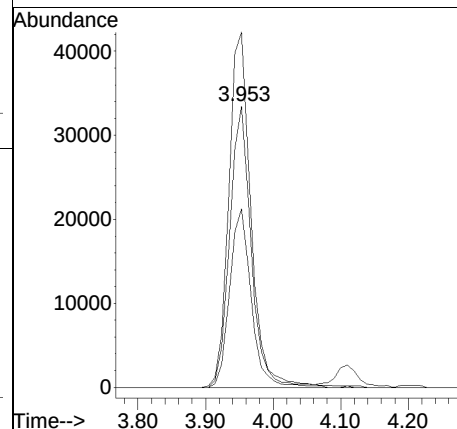
78 10.0 6.6 13.6

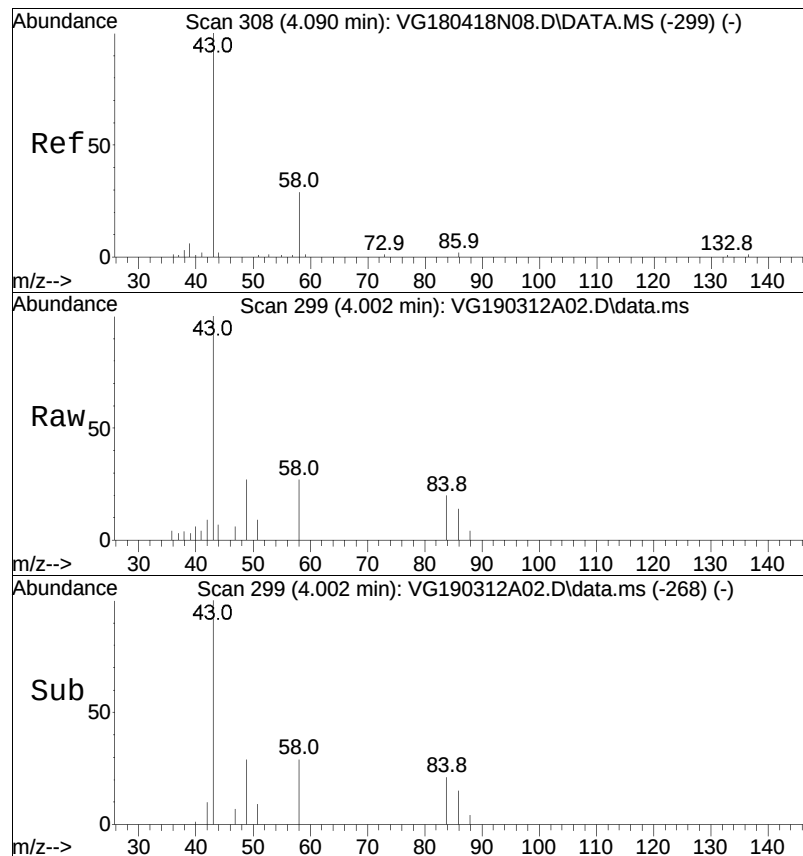




#15
Methylene chloride
Concen: 9.82 ug/L
RT: 3.953 min Scan# 294
Delta R.T. 0.000 min
Lab File: VG190312A02.D
Acq: 12 Mar 2019 8:32

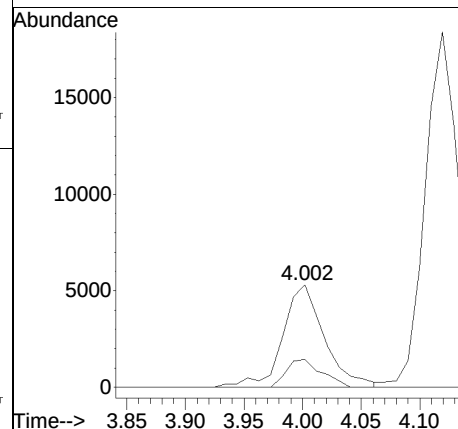
Tgt	Ion: 84	Resp:	74721
Ion	Ratio	Lower	Upper
84	100		
86	63.1	41.1	85.5
49	128.2	76.2	158.2

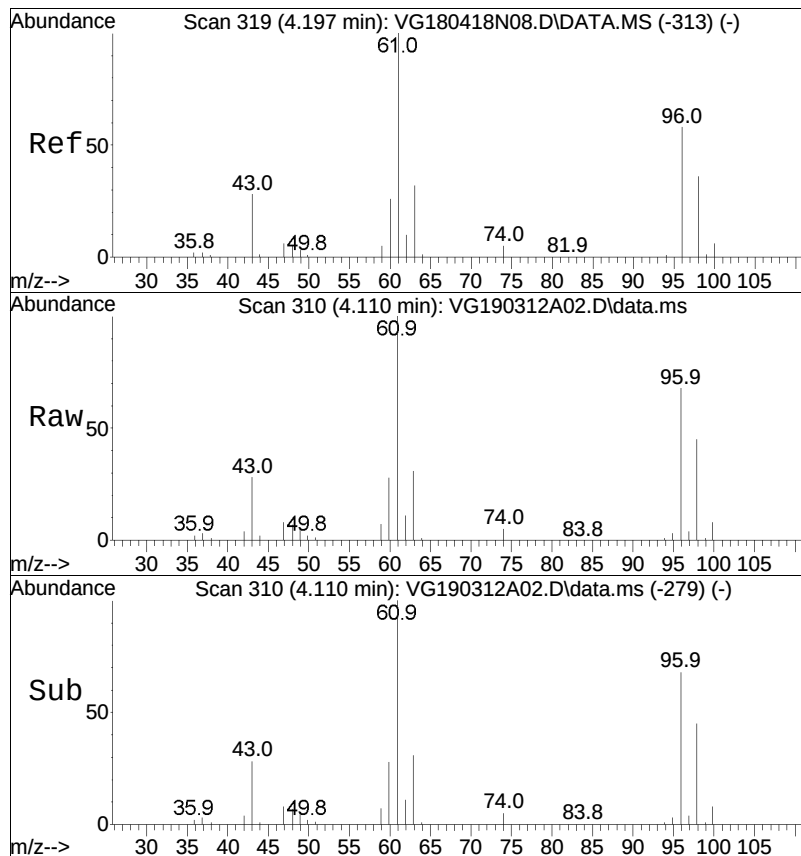




#17
 Acetone
 Concen: 12.98 ug/L
 RT: 4.002 min Scan# 299
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

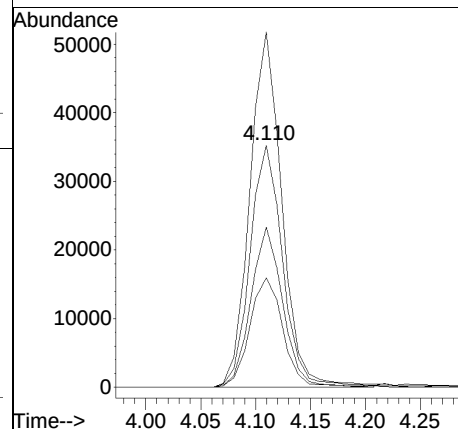
Tgt Ion	Ratio	Lower	Upper
43	100		
58	23.2	22.2	33.4

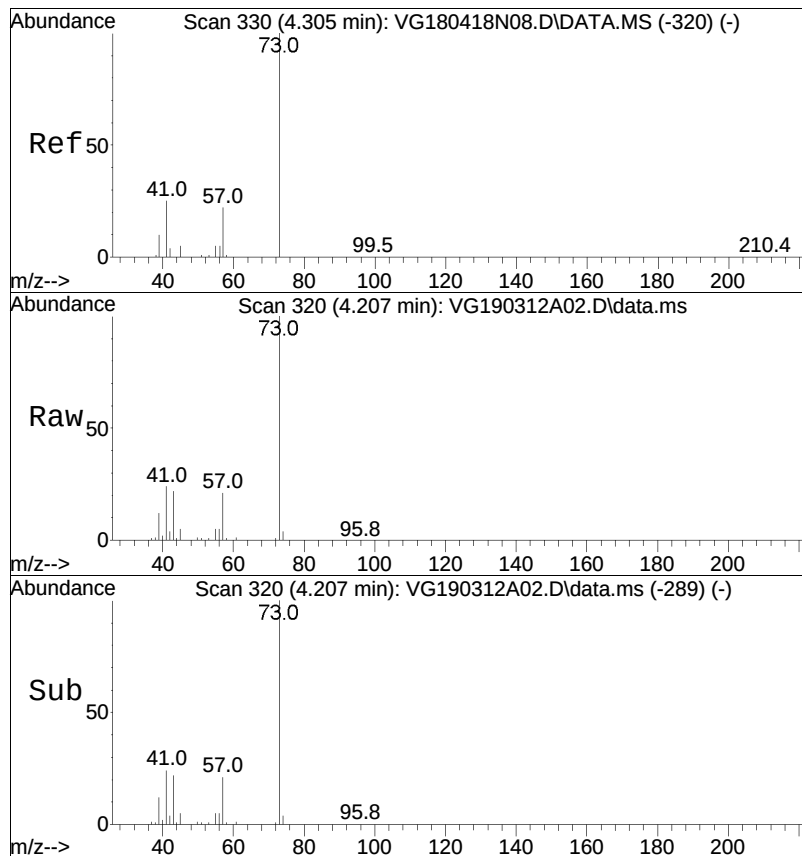




#18
trans-1,2-Dichloroethene
Concen: 9.40 ug/L
RT: 4.110 min Scan# 310
Delta R.T. -0.000 min
Lab File: VG190312A02.D
Acq: 12 Mar 2019 8:32

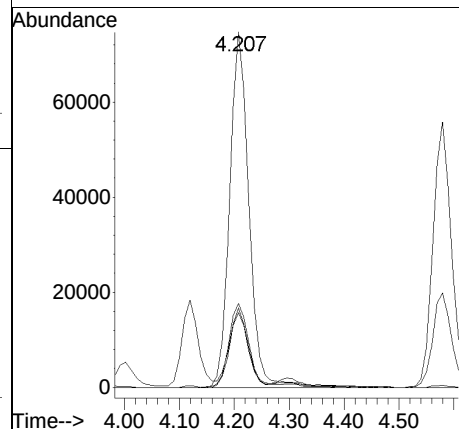
Tgt Ion:	96	Resp:	73081
Ion Ratio	Lower	Upper	
96	100		
61	144.8	85.7	178.1
98	64.4	40.2	83.4
63	46.5	28.0	58.2

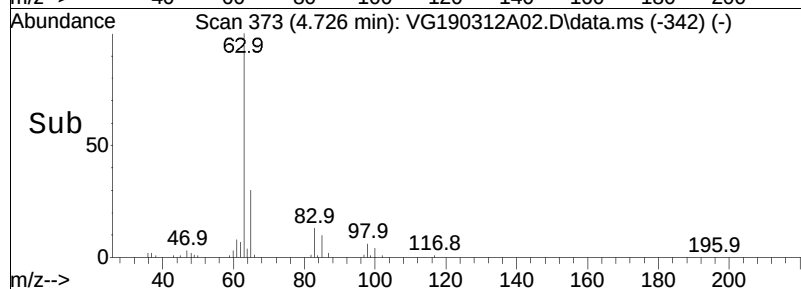
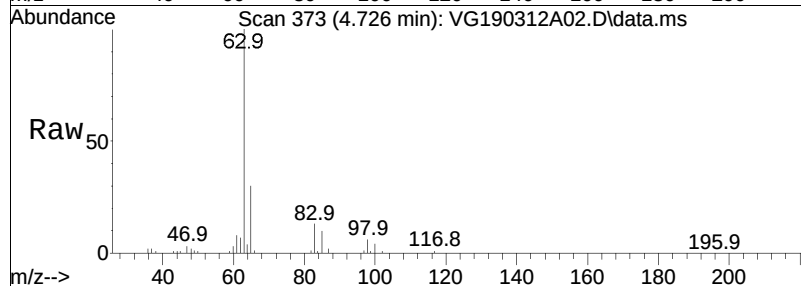
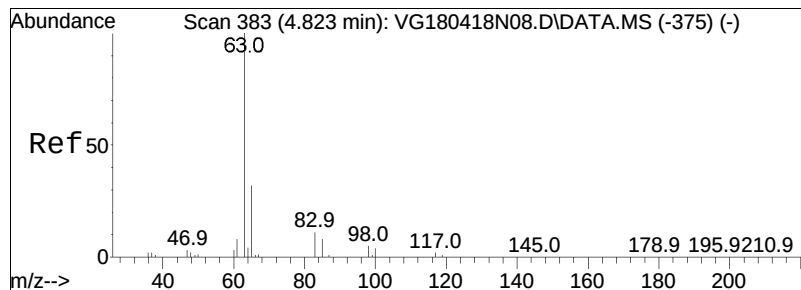




#20
Methyl tert-butyl ether
Concen: 10.07 ug/L
RT: 4.207 min Scan# 320
Delta R.T. 0.000 min
Lab File: VG190312A02.D
Acq: 12 Mar 2019 8:32

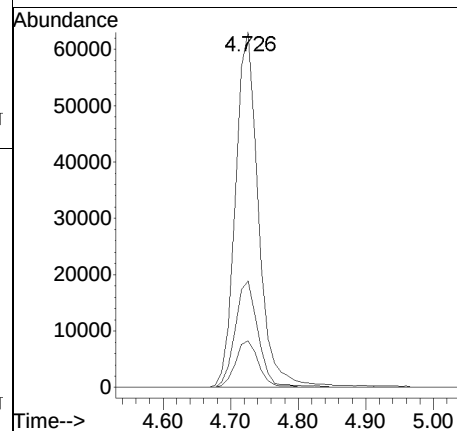
Tgt Ion:	73	Resp:	183469
Ion Ratio	Lower	Upper	
73	100		
57	20.5	12.5	26.1
43	22.0	13.0	27.0
41	23.7	12.5	26.1

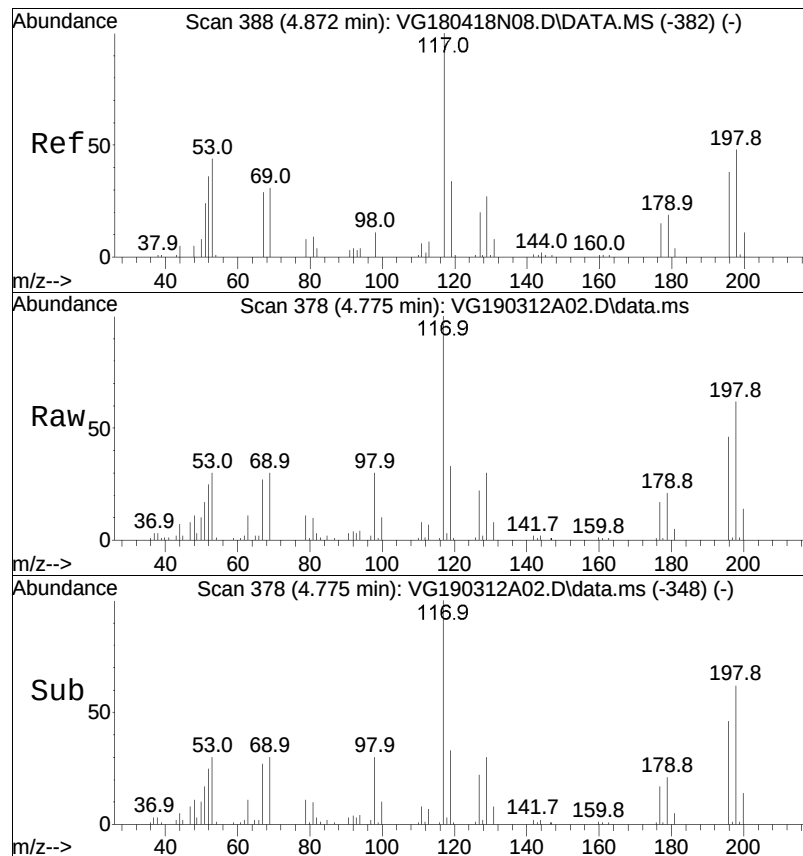




#23
 1,1-Dichloroethane
 Concen: 10.66 ug/L
 RT: 4.726 min Scan# 373
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

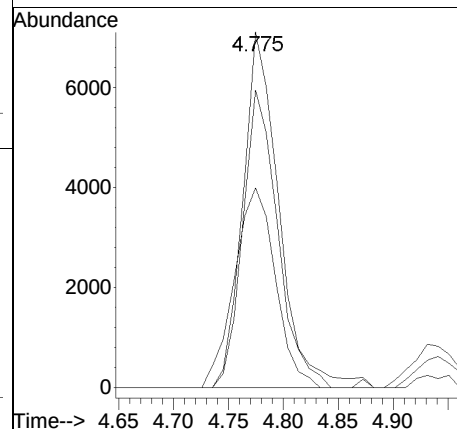
Tgt	Ion	Ratio	Lower	Upper
63	100			
65	29.8	10.4	50.4	
83	13.1	0.0	33.2	

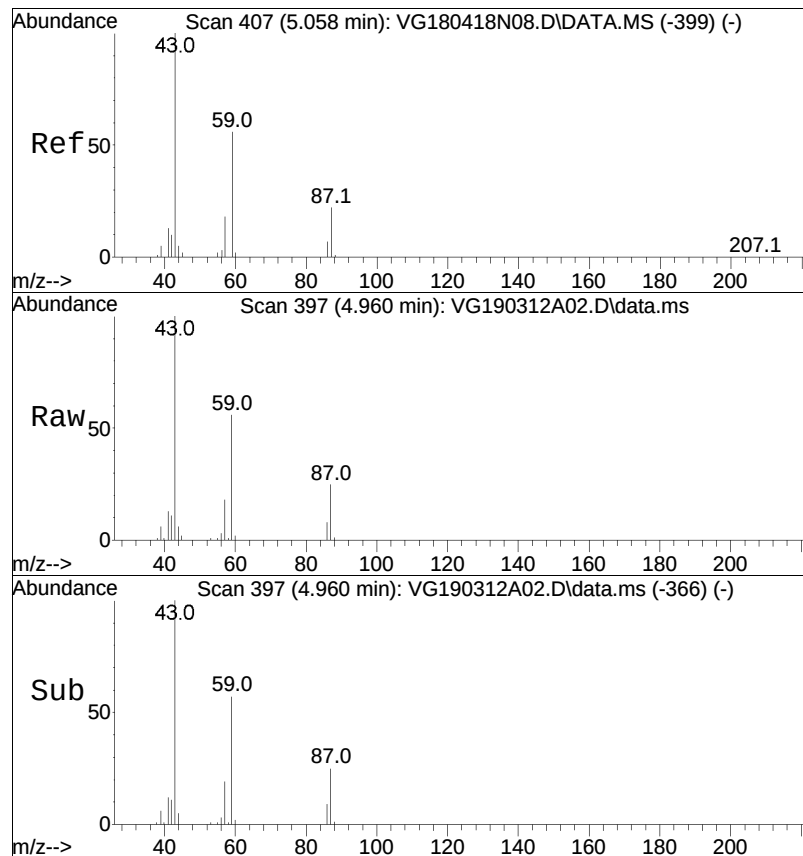




#25
 Acrylonitrile
 Concen: 11.44 ug/L
 RT: 4.775 min Scan# 378
 Delta R.T. -0.010 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

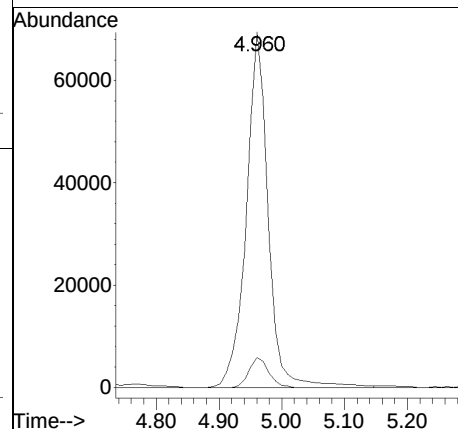
Tgt Ion:	53	Resp:	16293
Ion Ratio	Lower	Upper	
53	100		
52	81.1	68.3	102.5
51	63.7	51.9	77.9

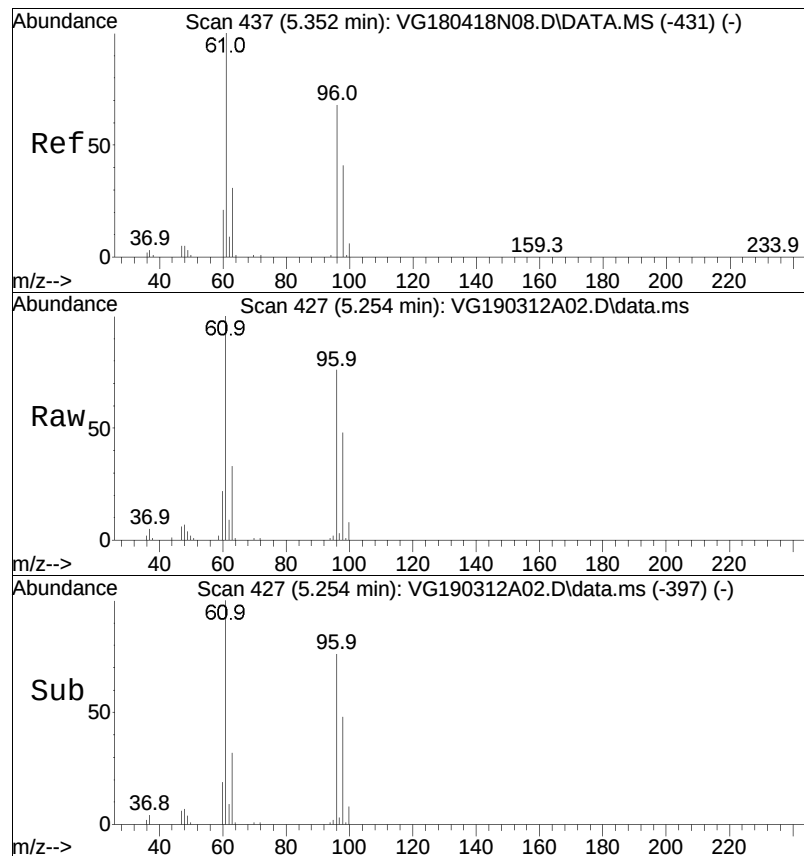




#27
 Vinyl acetate
 Concen: 11.47 ug/L
 RT: 4.960 min Scan# 397
 Delta R.T. -0.001 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

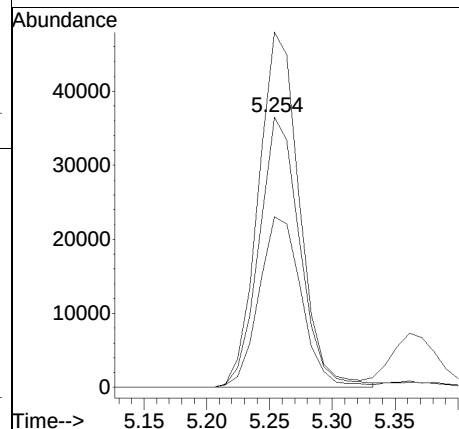
Tgt Ion	Ratio	Lower	Upper
43	100		
86	7.5	6.3	9.5

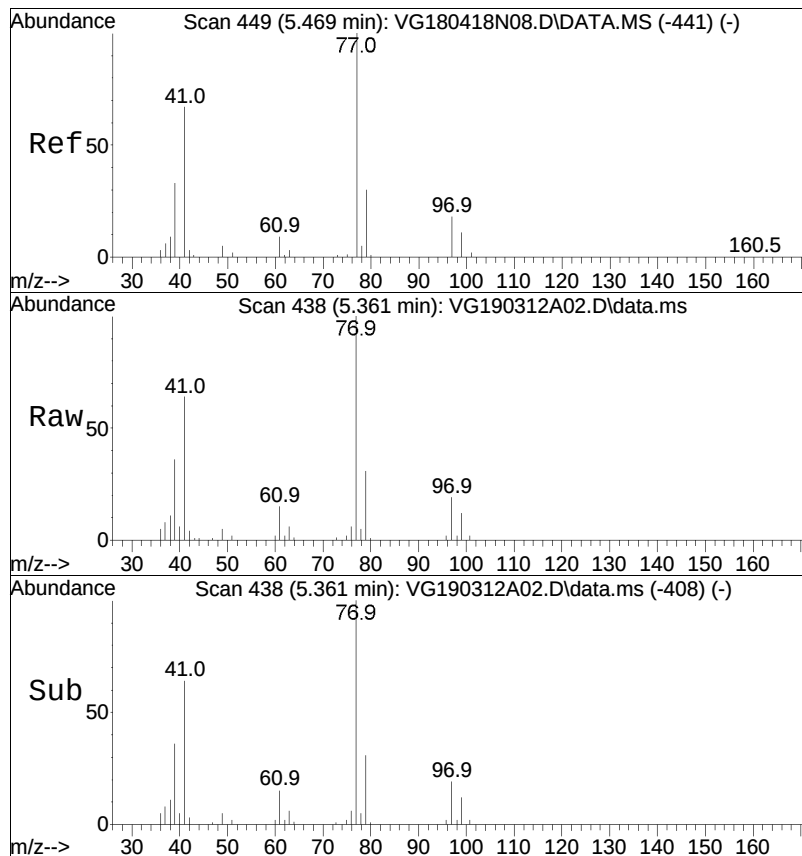




#28
 cis-1,2-Dichloroethene
 Concen: 9.65 ug/L
 RT: 5.254 min Scan# 427
 Delta R.T. -0.010 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

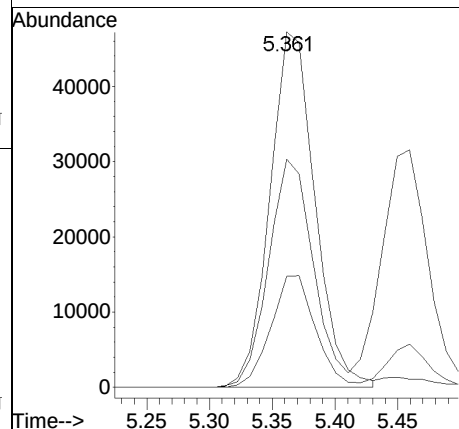
Tgt Ion:	96	Resp:	82560
Ion Ratio	Lower	Upper	
96	100		
61	131.9	96.6	144.8
98	65.6	51.3	76.9

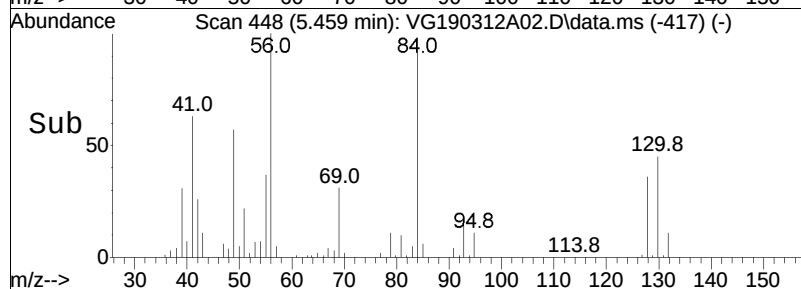
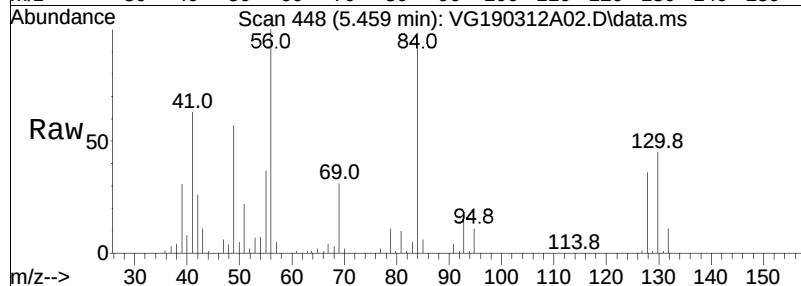
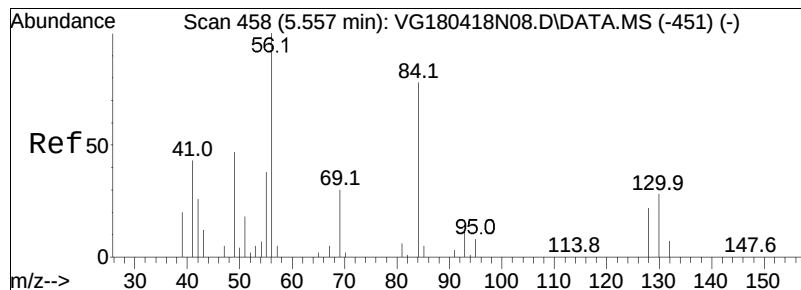




#29
 2,2-Dichloropropane
 Concen: 9.88 ug/L
 RT: 5.361 min Scan# 438
 Delta R.T. -0.010 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

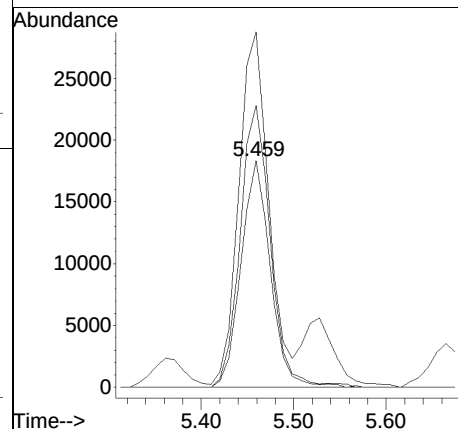
Tgt Ion:	77	Resp:	117952
Ion Ratio	Lower	Upper	
77	100		
41	63.9	38.1	79.1
79	31.4	20.6	42.8

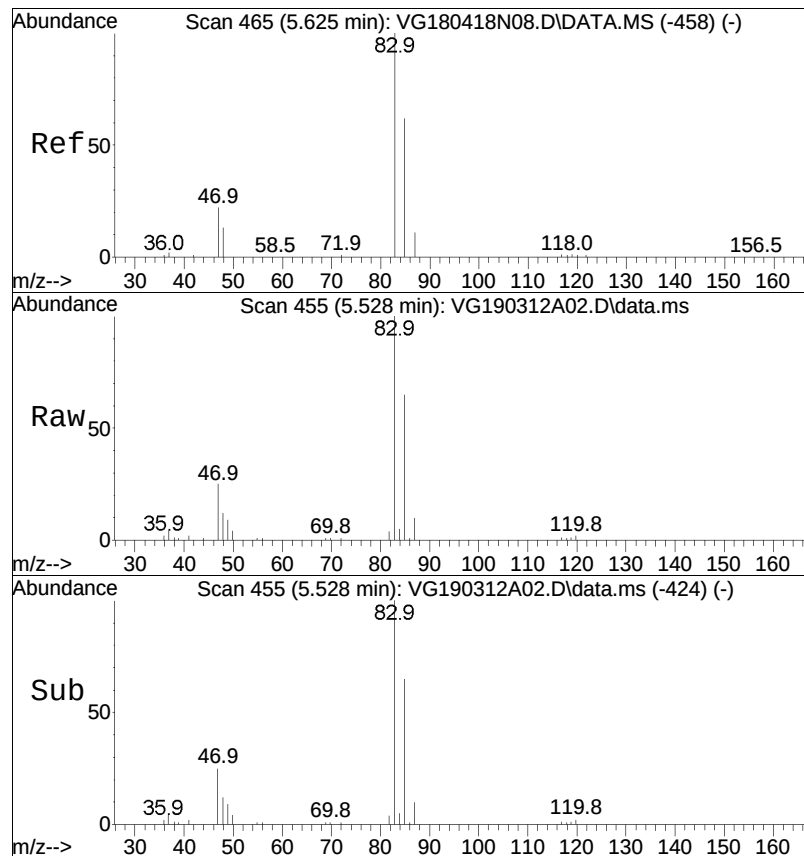




#30
 Bromochloromethane
 Concen: 9.70 ug/L
 RT: 5.459 min Scan# 448
 Delta R.T. 0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

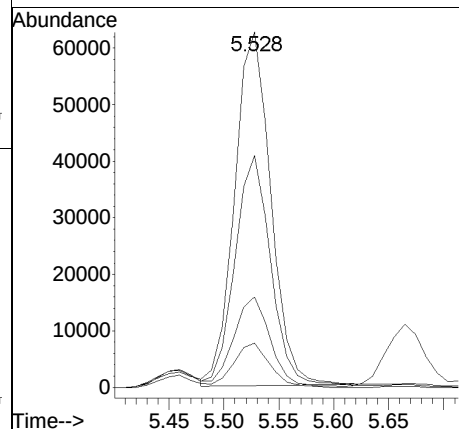
Tgt Ion	Ratio	Lower	Upper
128	100		
49	157.5	112.7	169.1
130	127.7	103.3	154.9

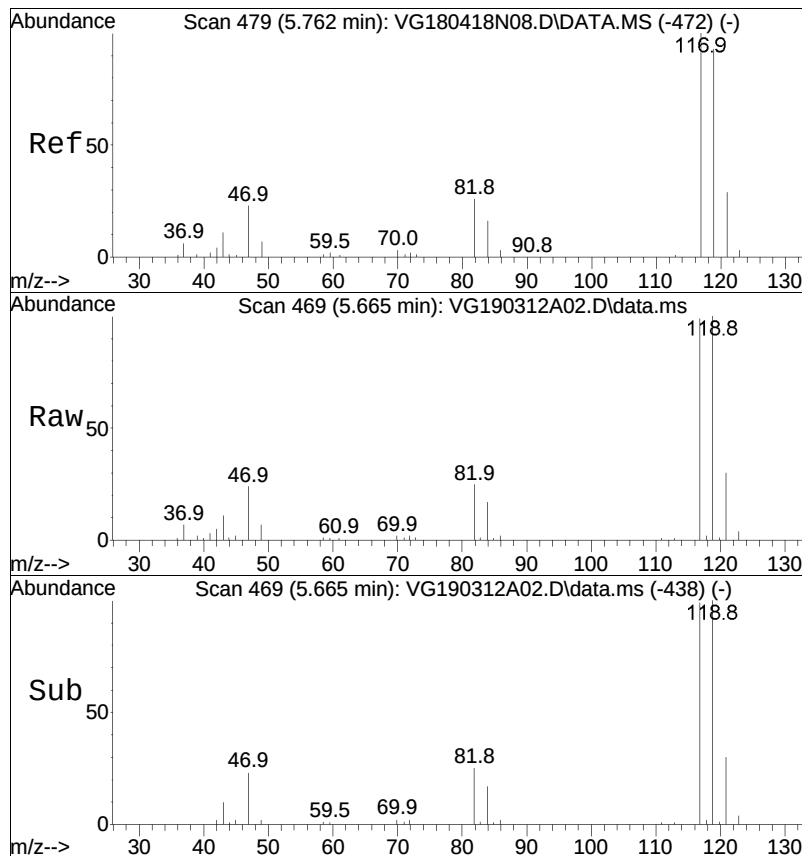




#32
 Chloroform
 Concen: 9.98 ug/L
 RT: 5.528 min Scan# 455
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

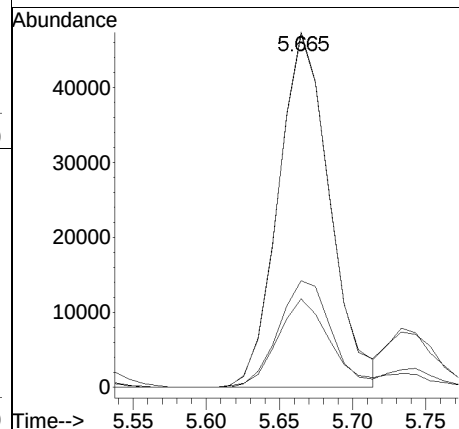
Tgt Ion:	83	Resp:	143680
Ion Ratio	Lower	Upper	
83	100		
85	66.5	41.4	86.0
47	25.3	15.1	31.3
48	12.4	7.7	16.1

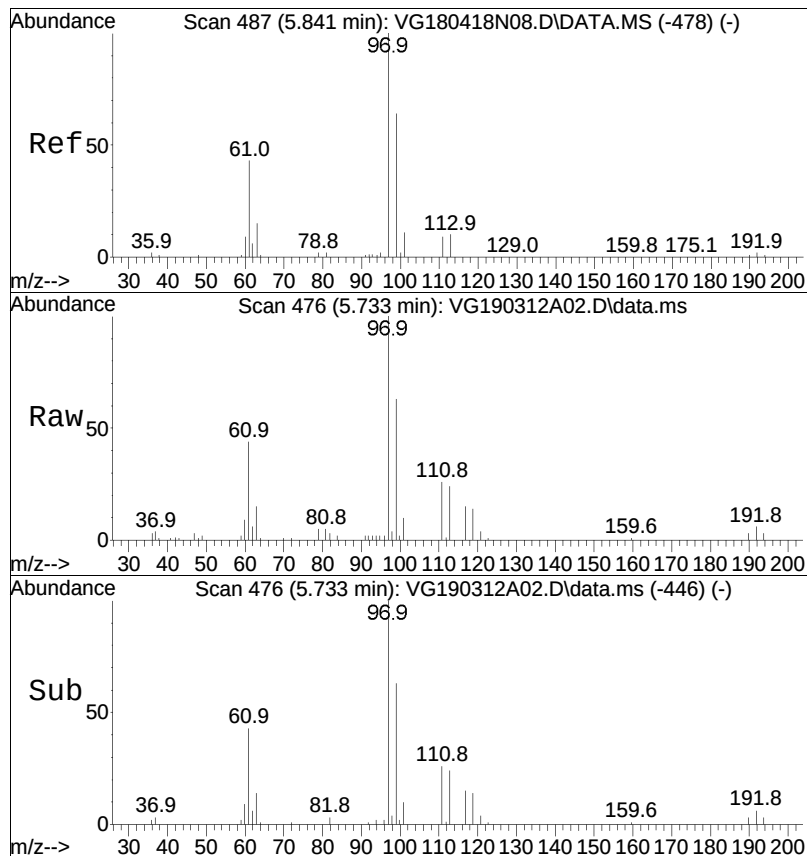




#34
 Carbon tetrachloride
 Concen: 9.23 ug/L
 RT: 5.665 min Scan# 469
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

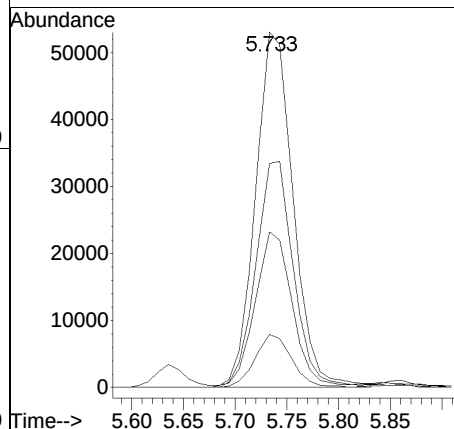
Tgt Ion:	117	Resp:	115160
Ion Ratio	Lower	Upper	
117	100		
119	100.2	63.2	131.2
121	31.0	20.4	42.4
82	25.8	15.4	32.0

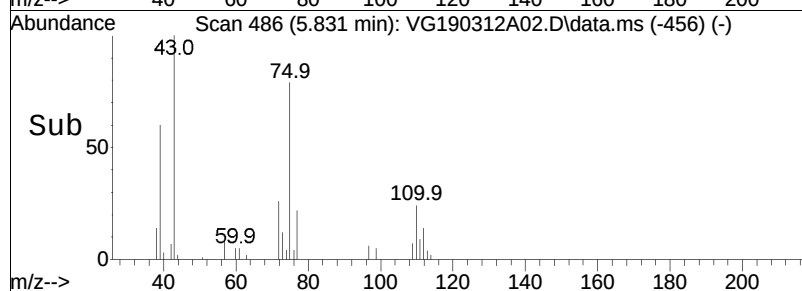
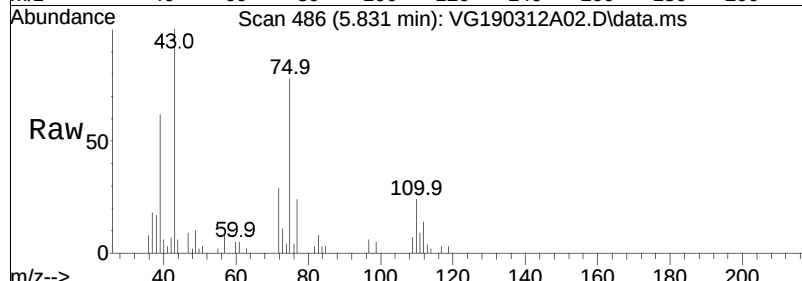
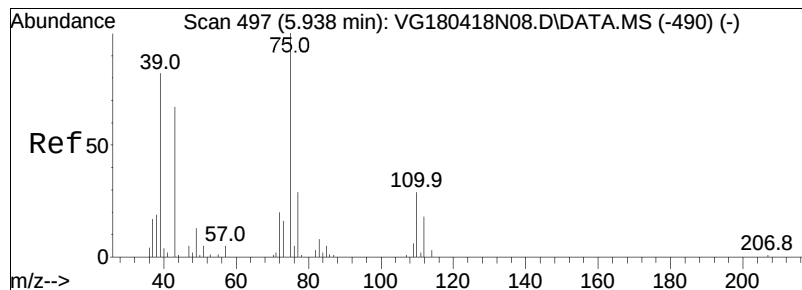




#37
 1,1,1-Trichloroethane
 Concen: 9.44 ug/L
 RT: 5.733 min Scan# 476
 Delta R.T. -0.010 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

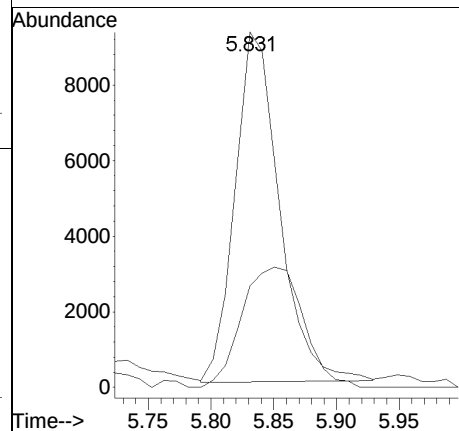
Tgt Ion:	97	Resp:	134884
Ion Ratio	Lower	Upper	
97	100		
99	64.3	41.3	85.7
61	43.4	26.0	54.0
63	14.5	8.6	18.0

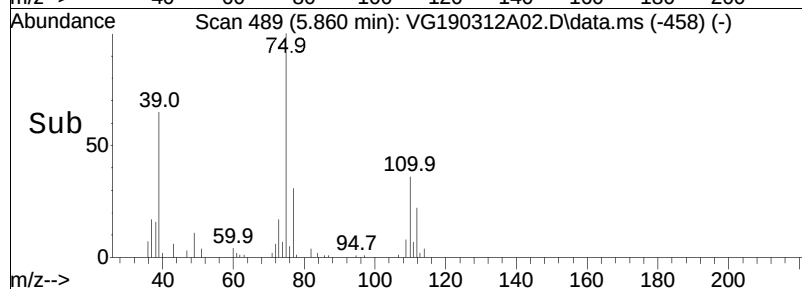
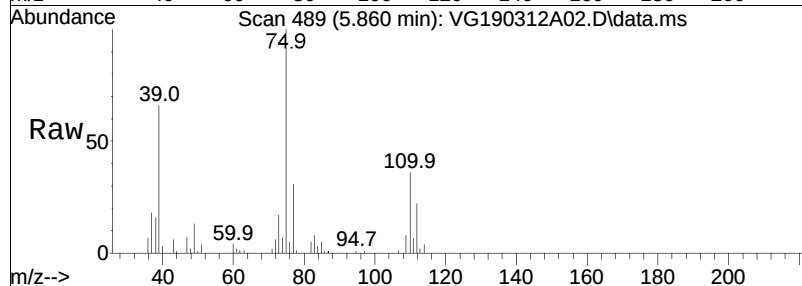
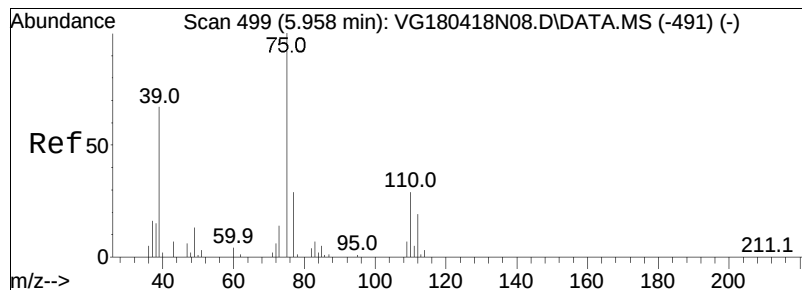




#39
 2-Butanone
 Concen: 11.39 ug/L
 RT: 5.831 min Scan# 486
 Delta R.T. -0.010 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

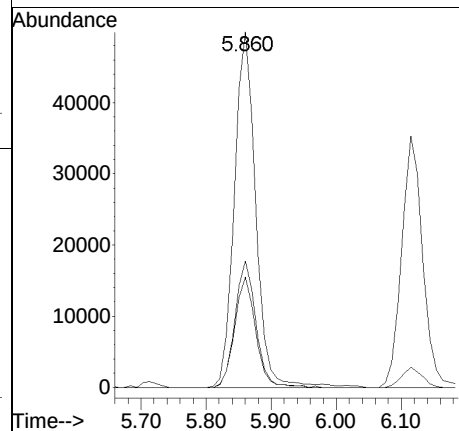
Tgt Ion:	43	Resp:	22821
Ion Ratio	100	Lower	Upper
72	47.6	42.6	63.8

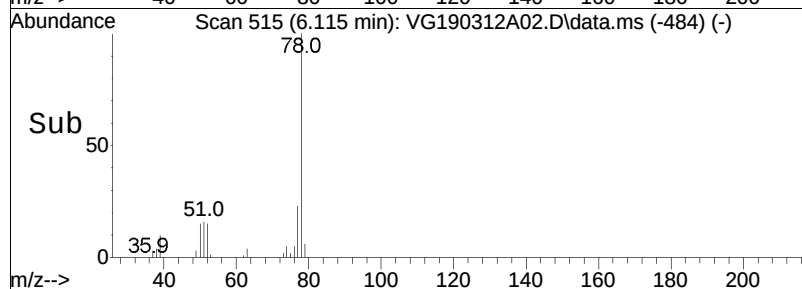
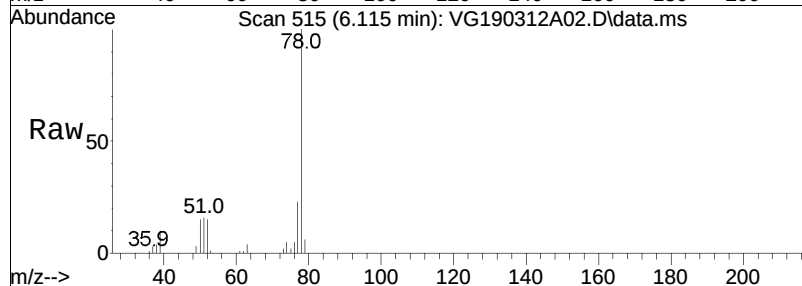
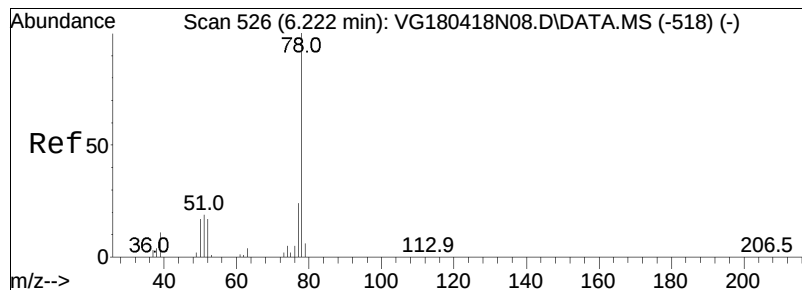




#40
 1,1-Dichloropropene
 Concen: 9.99 ug/L
 RT: 5.860 min Scan# 489
 Delta R.T. 0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

Tgt	Ion	Ratio	Lower	Upper
75	100			
110	34.7	24.1	50.1	
77	30.4	19.8	41.0	





#41

Benzene

Concen: 10.06 ug/L

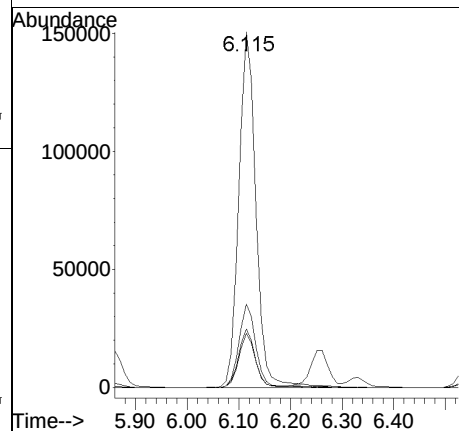
RT: 6.115 min Scan# 515

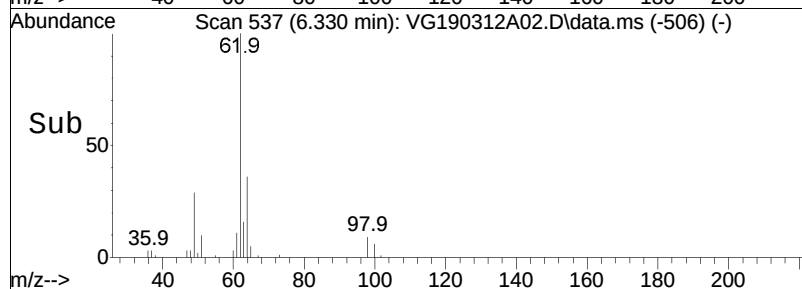
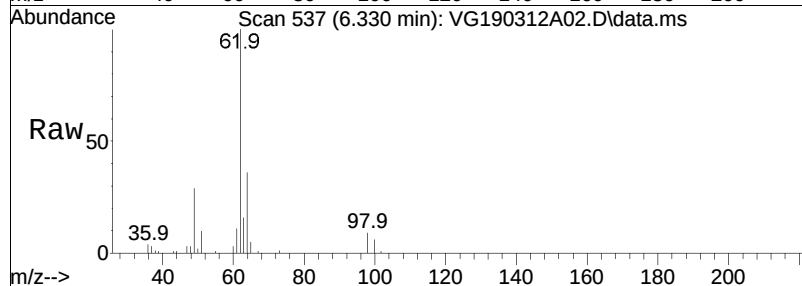
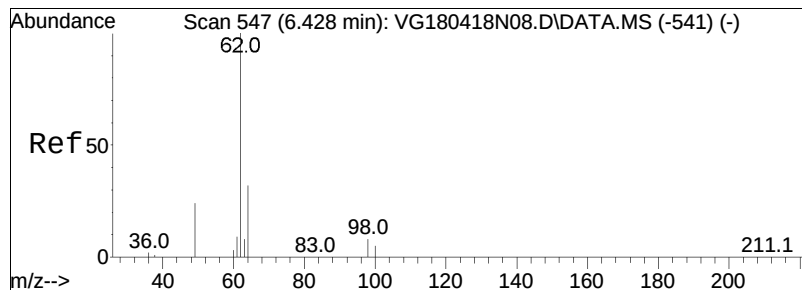
Delta R.T. -0.000 min

Lab File: VG190312A02.D

Acq: 12 Mar 2019 8:32

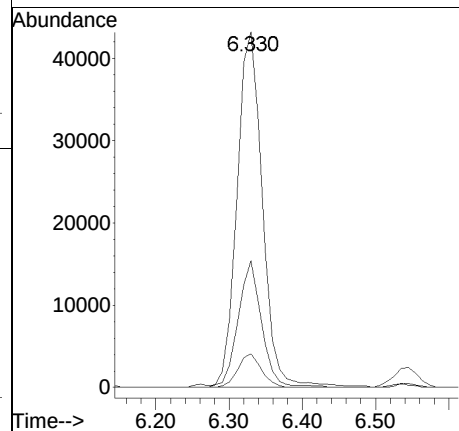
Tgt Ion: 78	Resp: 347905
Ion Ratio	Lower Upper
78 100	
77 23.1	15.5 32.1
51 15.7	9.9 20.7
52 14.6	9.2 19.2

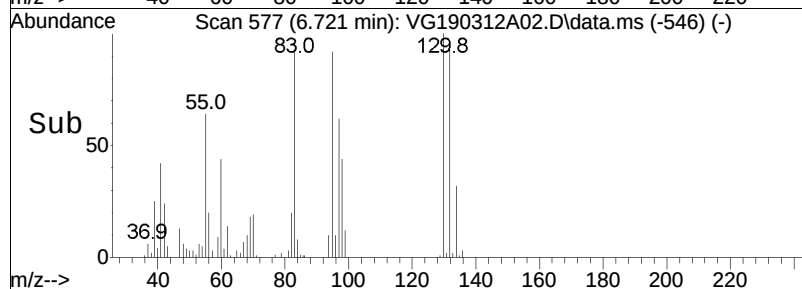
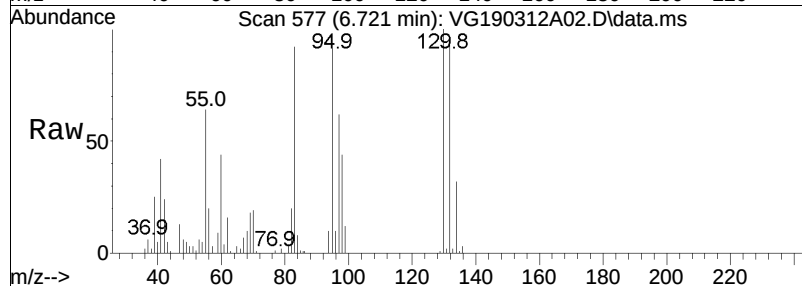
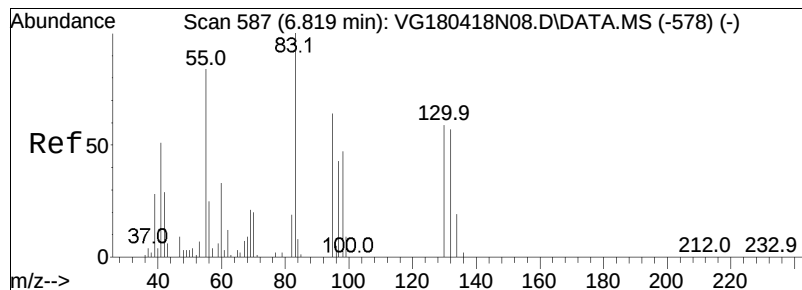




#44
 1,2-Dichloroethane
 Concen: 10.55 ug/L
 RT: 6.330 min Scan# 537
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

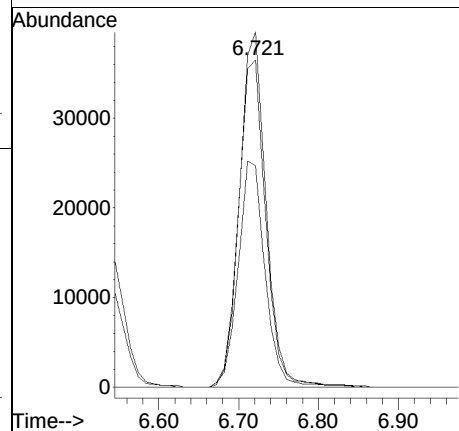
Tgt	Ion: 62	Resp:	104467
Ion	Ratio	Lower	Upper
62	100		
64	33.4	11.9	51.9
98	8.8	0.0	29.3

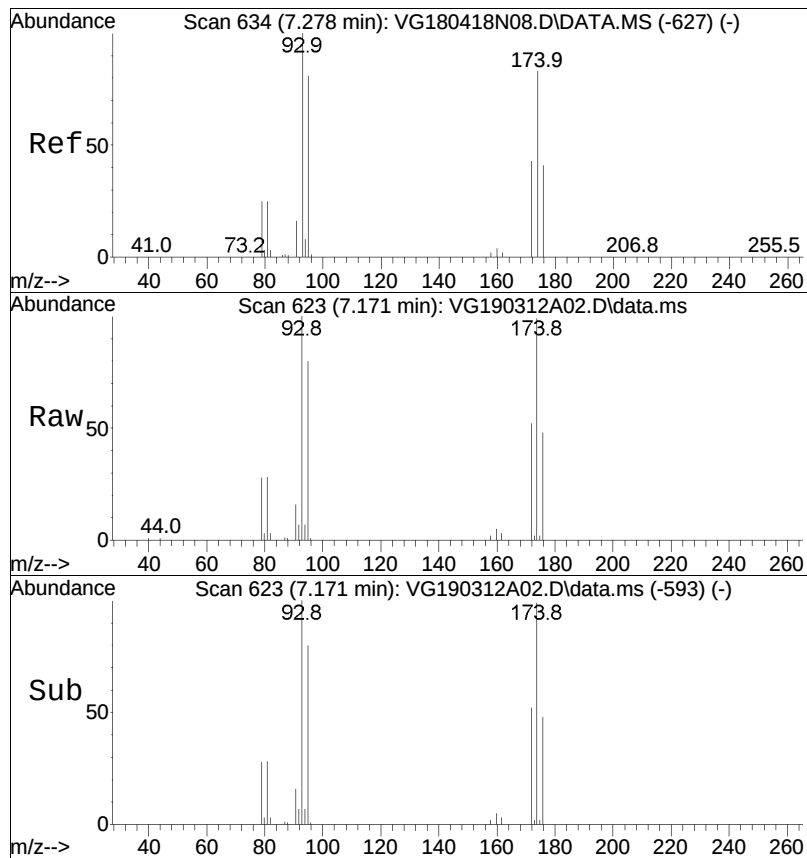




#48
 Trichloroethene
 Concen: 9.25 ug/L
 RT: 6.721 min Scan# 577
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

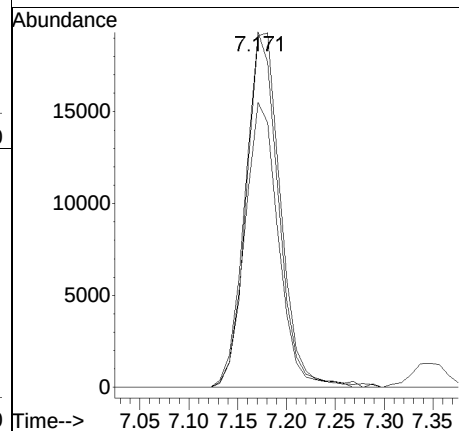
Tgt Ion	Ratio	Lower	Upper
95	100		
97	68.7	54.0	81.0
130	105.9	85.0	127.4

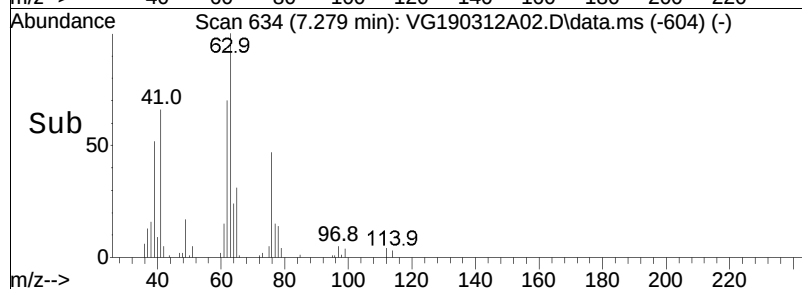
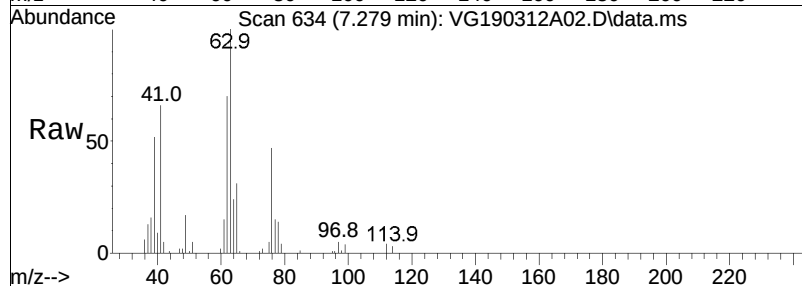
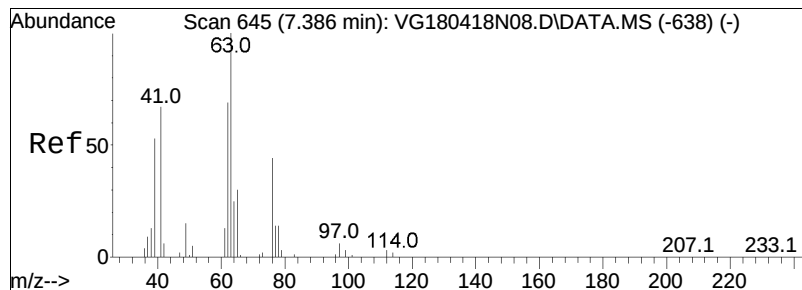




#50
 Dibromomethane
 Concen: 10.15 ug/L
 RT: 7.171 min Scan# 623
 Delta R.T. -0.010 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

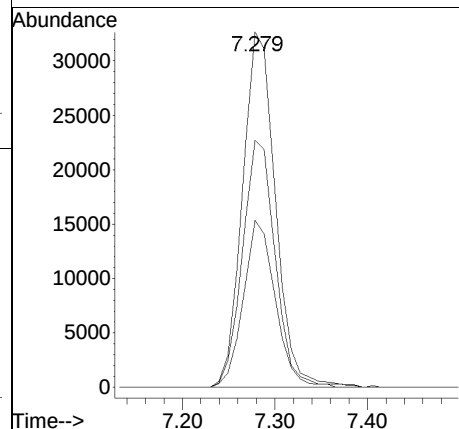
Tgt Ion	Ratio	Lower	Upper
93	100		
95	81.7	66.6	100.0
174	102.2	90.5	135.7

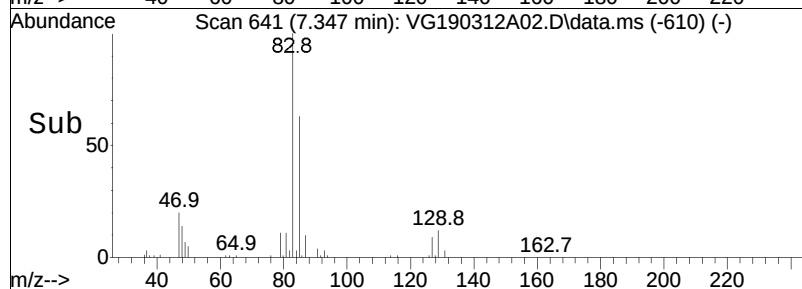
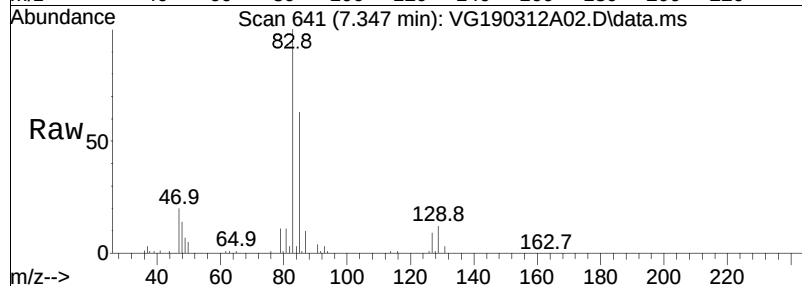
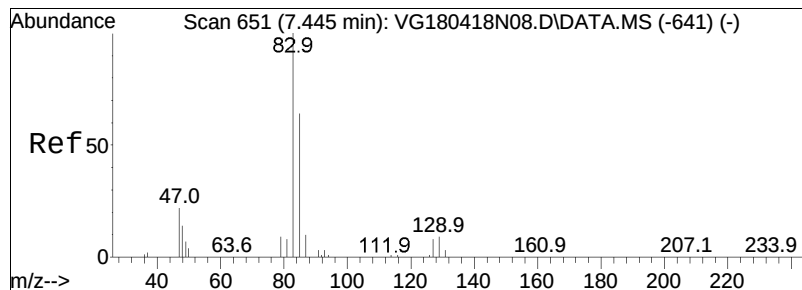




#51
 1,2-Dichloropropane
 Concen: 10.62 ug/L
 RT: 7.279 min Scan# 634
 Delta R.T. -0.010 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

Tgt Ion: 63	Resp: 80977
Ion Ratio	Lower Upper
63 100	
62 69.6	56.5 84.7
76 45.6	34.6 52.0





#54

Bromodichloromethane

Concen: 9.98 ug/L

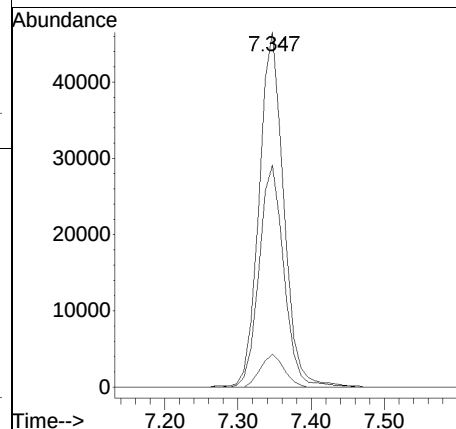
RT: 7.347 min Scan# 641

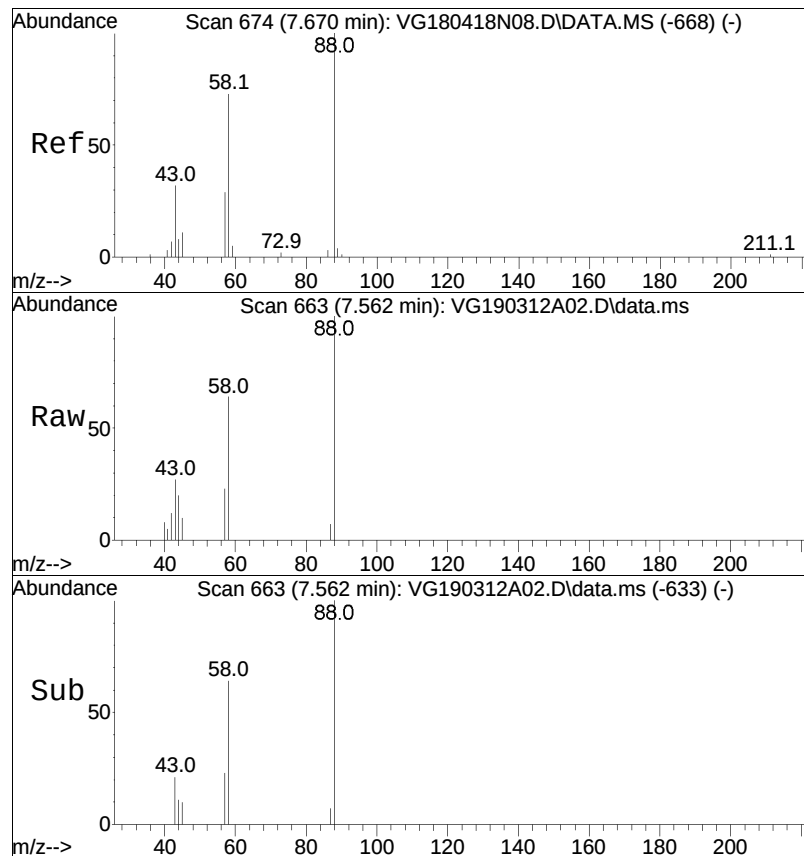
Delta R.T. -0.000 min

Lab File: VG190312A02.D

Acq: 12 Mar 2019 8:32

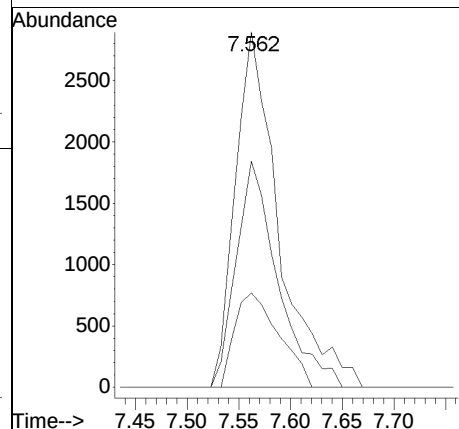
Tgt	Ion: 83	Resp:	109243
Ion	Ratio	Lower	Upper
83	100		
85	63.3	50.8	76.2
127	9.0	7.4	11.2

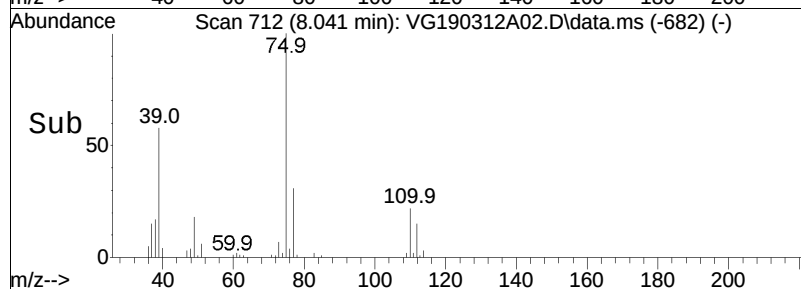
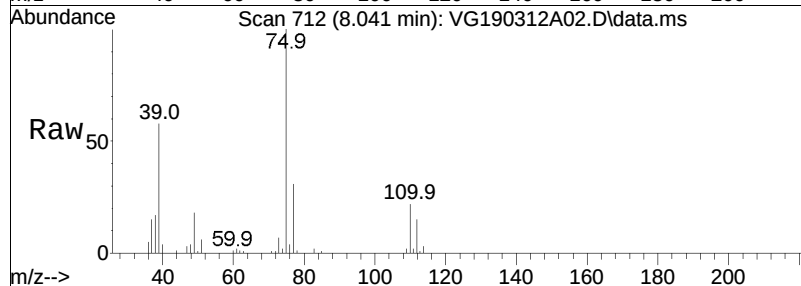
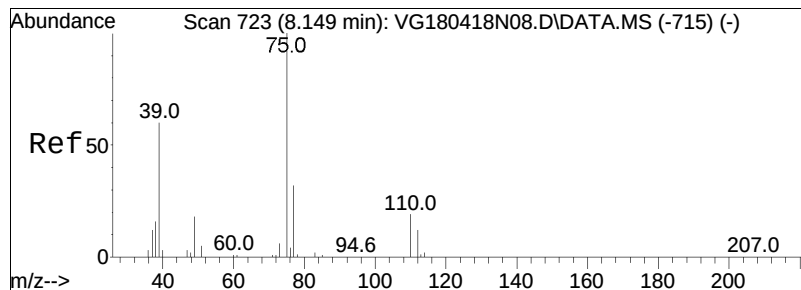




#57
 1,4-Dioxane
 Concen: 315.89 ug/L
 RT: 7.562 min Scan# 663
 Delta R.T. -0.010 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

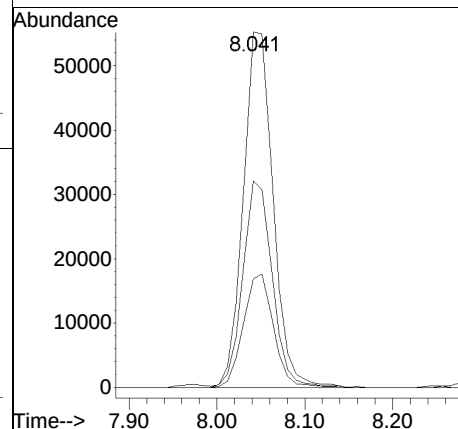
Tgt Ion:	88	Resp:	8517
Ion Ratio	Lower	Upper	
88	100		
58	61.0	48.7	73.1
43	27.0	22.4	33.6

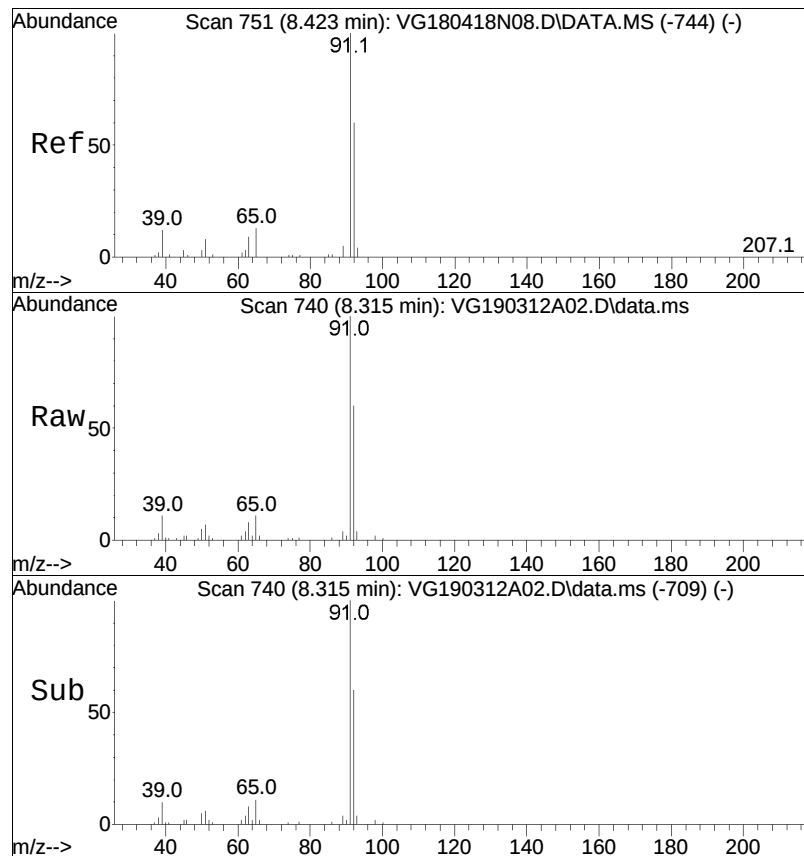




#58
 cis-1,3-Dichloropropene
 Concen: 10.25 ug/L
 RT: 8.041 min Scan# 712
 Delta R.T. -0.010 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

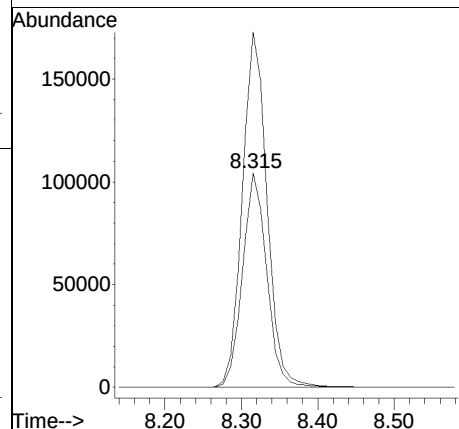
Tgt Ion	Ratio	Lower	Upper
75	100		
77	32.2	24.6	36.8
39	57.3	40.8	61.2

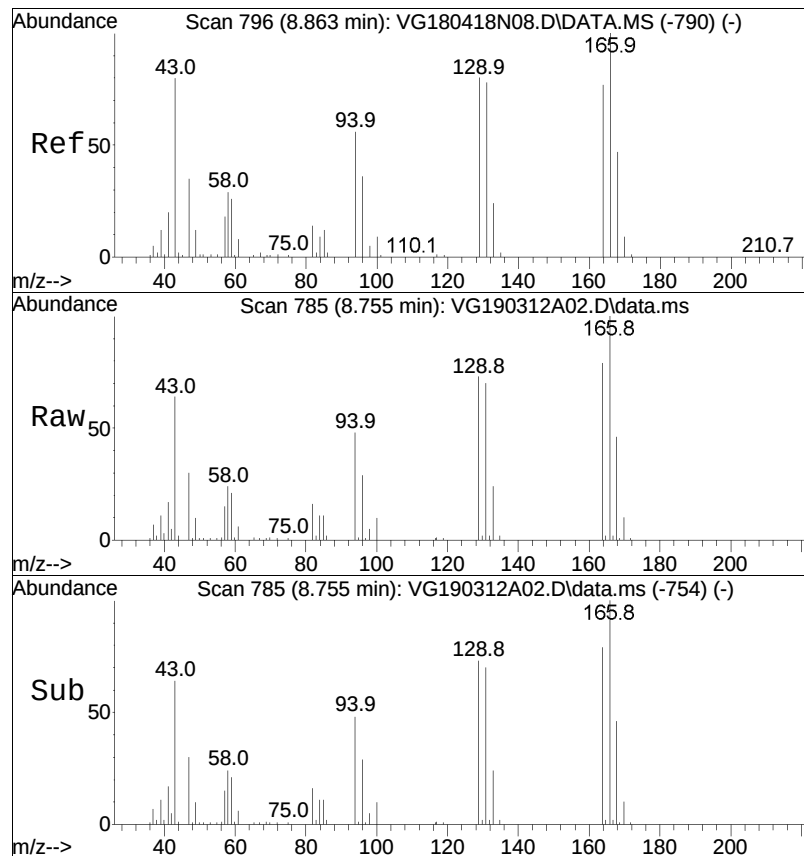




#61
 Toluene
 Concen: 10.43 ug/L
 RT: 8.315 min Scan# 740
 Delta R.T. 0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

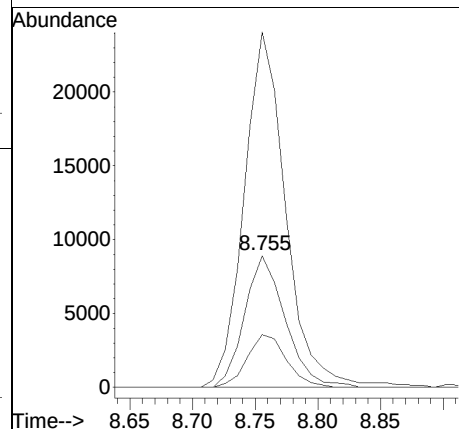
Tgt	Ion	Resp	Lower	Upper
92	100	229929		
91	168.7	134.8	202.2	

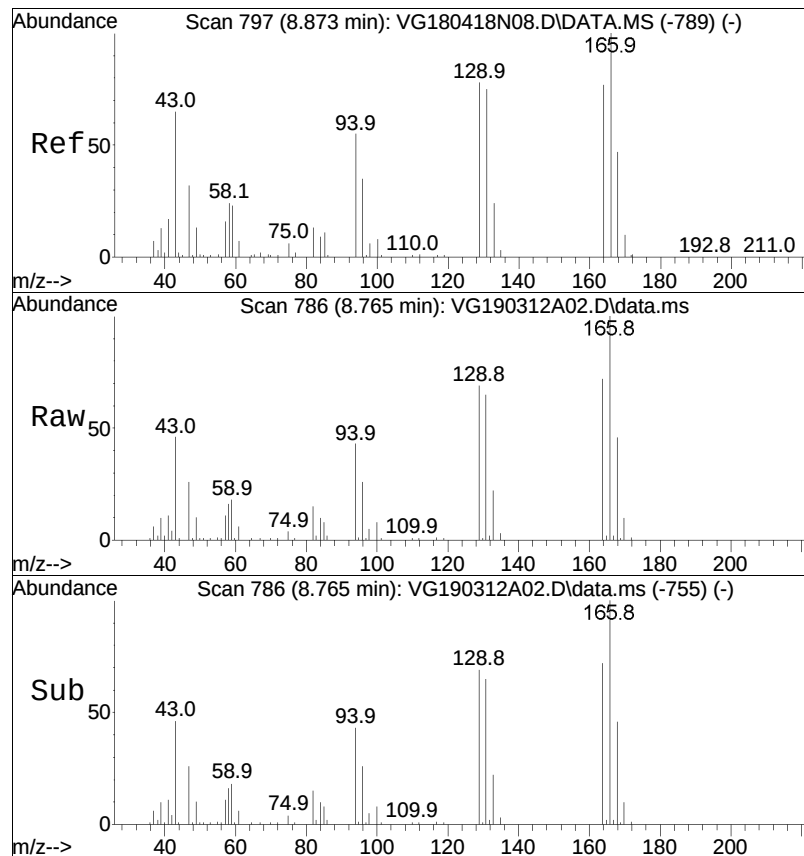




#62
 4-Methyl-2-pentanone
 Concen: 11.00 ug/L
 RT: 8.755 min Scan# 785
 Delta R.T. -0.001 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

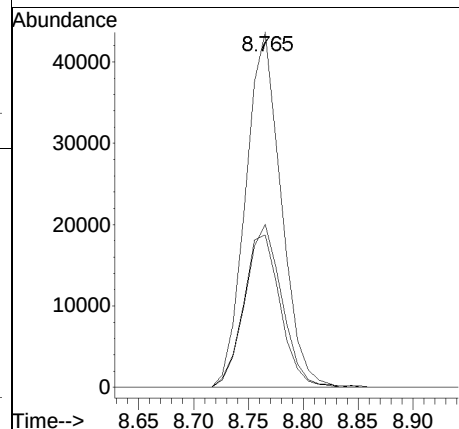
Tgt	Ion: 58	Resp:	20173
Ion	Ratio	Lower	Upper
58	100		
100	39.0	33.6	50.4
43	277.0	204.3	306.5

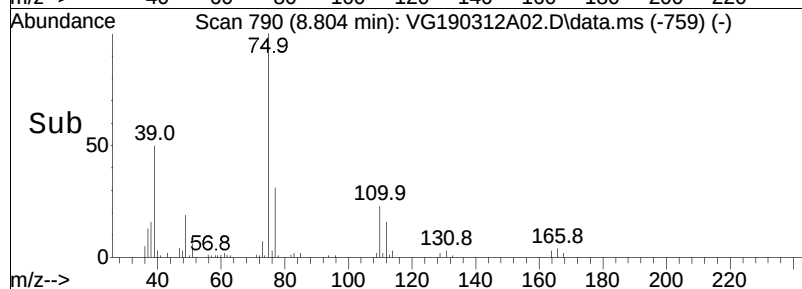
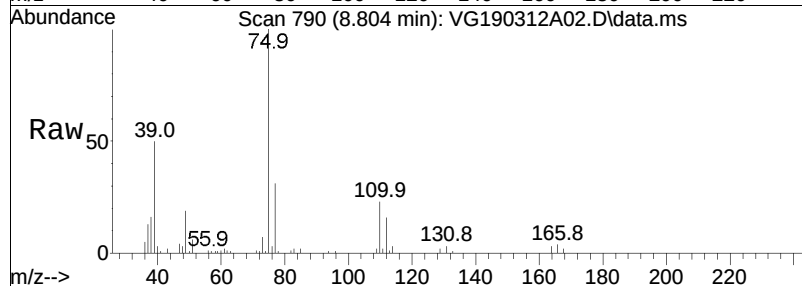
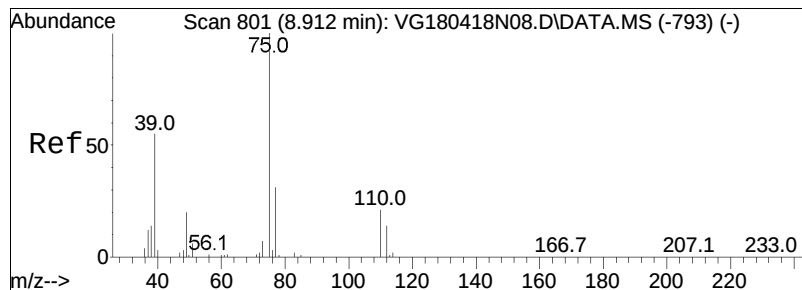




#63
 Tetrachloroethene
 Concen: 9.14 ug/L
 RT: 8.765 min Scan# 786
 Delta R.T. 0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

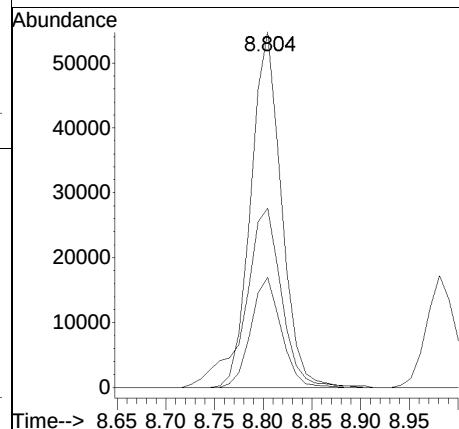
Tgt	Ion:166	Resp:	98521
Ion	Ratio	Lower	Upper
166	100		
168	47.7	27.3	67.3
94	44.7	20.5	60.5

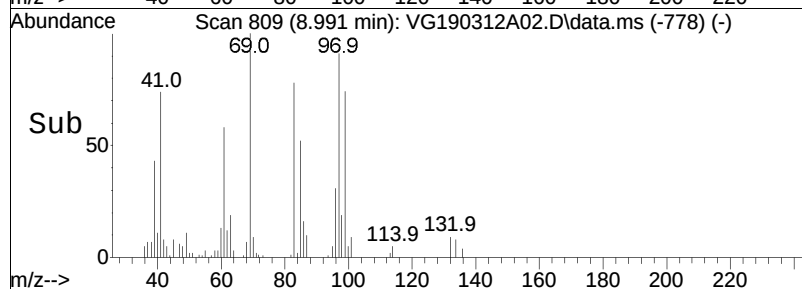
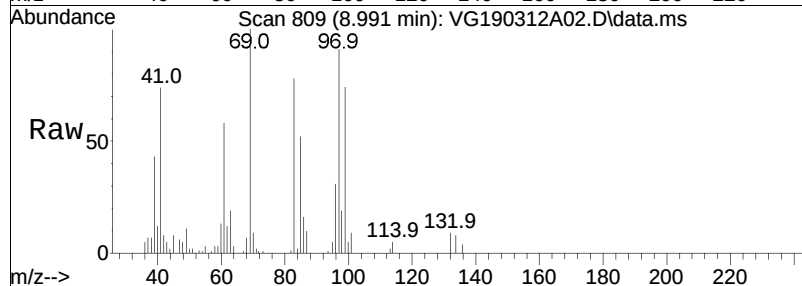
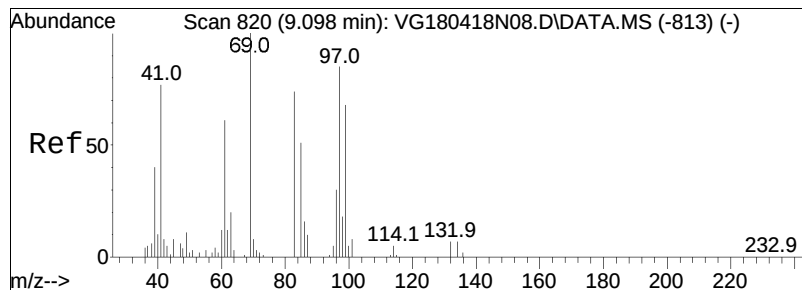




#65
 trans-1,3-Dichloropropene
 Concen: 11.16 ug/L
 RT: 8.804 min Scan# 790
 Delta R.T. -0.001 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

Tgt Ion	Ratio	Lower	Upper
75	100		
77	30.7	11.3	51.3
39	60.7	36.0	76.0





#68

1,1,2-Trichloroethane

Concen: 10.71 ug/L

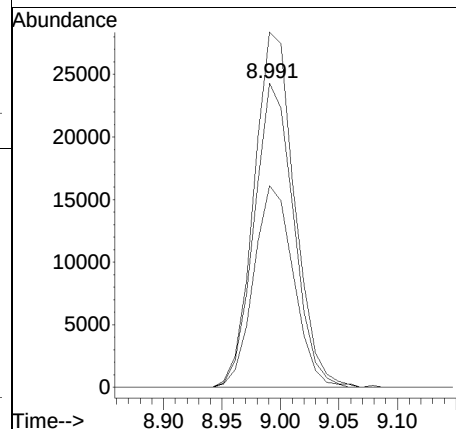
RT: 8.991 min Scan# 809

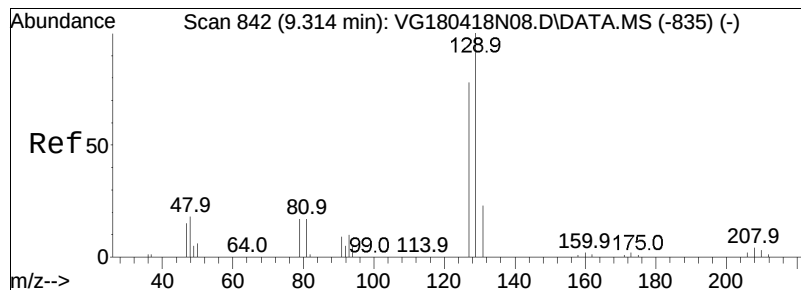
Delta R.T. -0.000 min

Lab File: VG190312A02.D

Acq: 12 Mar 2019 8:32

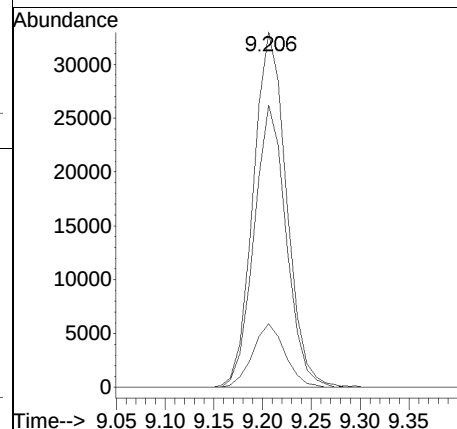
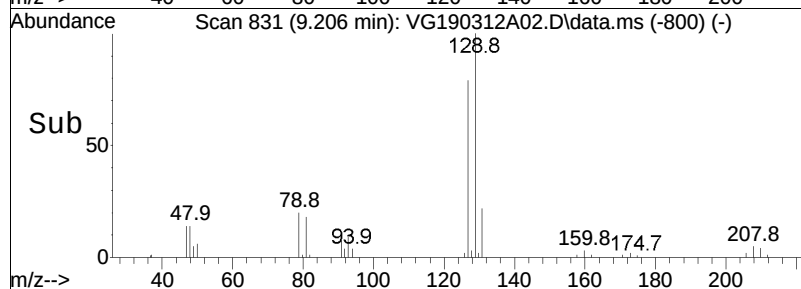
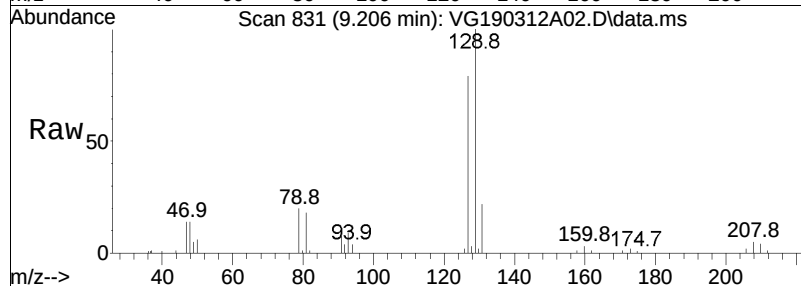
Tgt Ion:	83	Resp:	57055
Ion Ratio	Lower	Upper	
83	100		
97	120.4	101.0	141.0
85	66.9	47.9	87.9

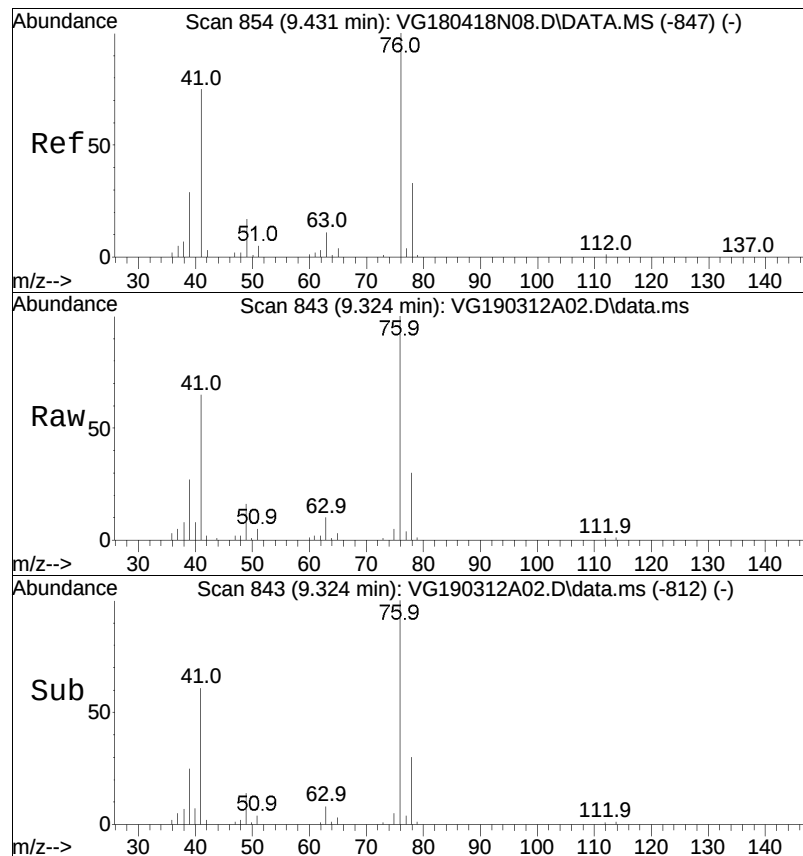




#69
 Chlorodibromomethane
 Concen: 10.20 ug/L
 RT: 9.206 min Scan# 831
 Delta R.T. 0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

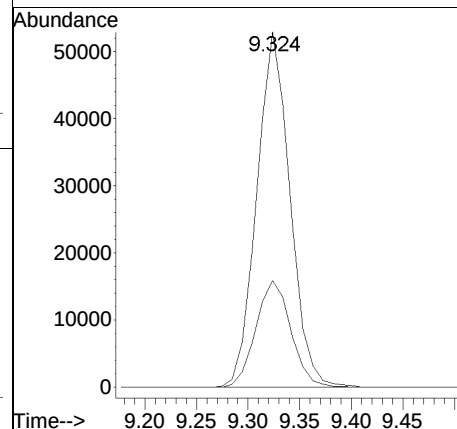
Tgt Ion	Ratio	Resp	Lower	Upper
129	100	78191		
81	17.6		0.0	35.0
127	77.1		57.1	97.1

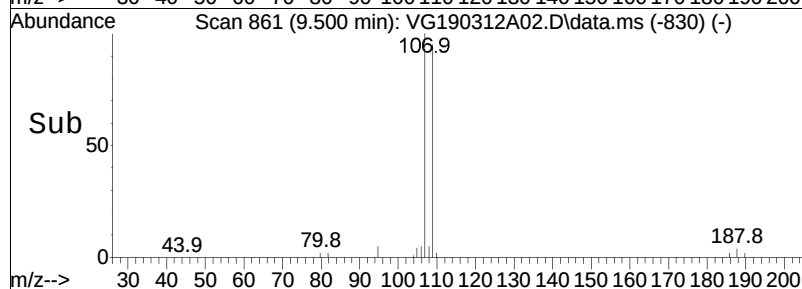
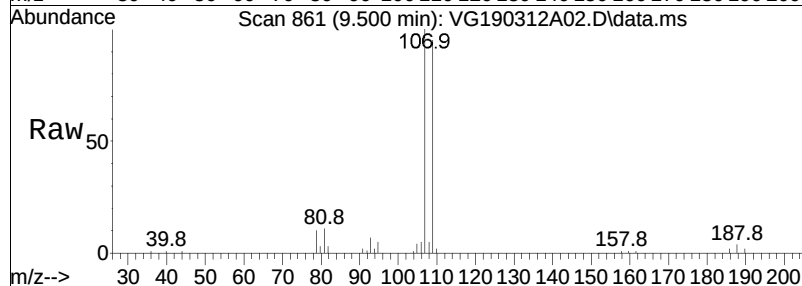
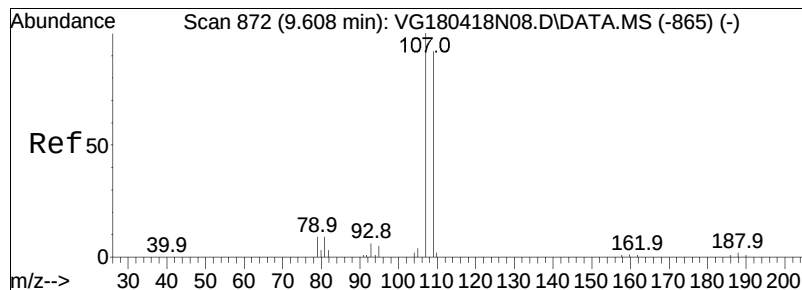




#70
 1,3-Dichloropropane
 Concen: 11.32 ug/L
 RT: 9.324 min Scan# 843
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

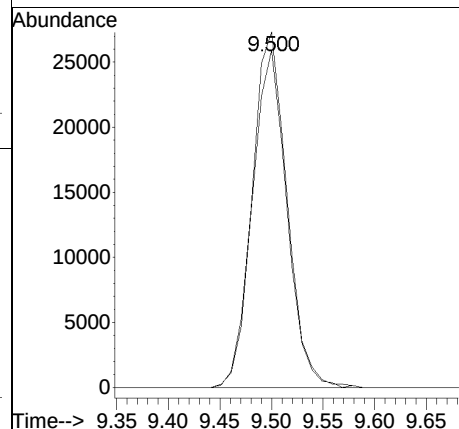
Tgt Ion	Ratio	Lower	Upper
76	100		
78	31.7	25.4	38.2

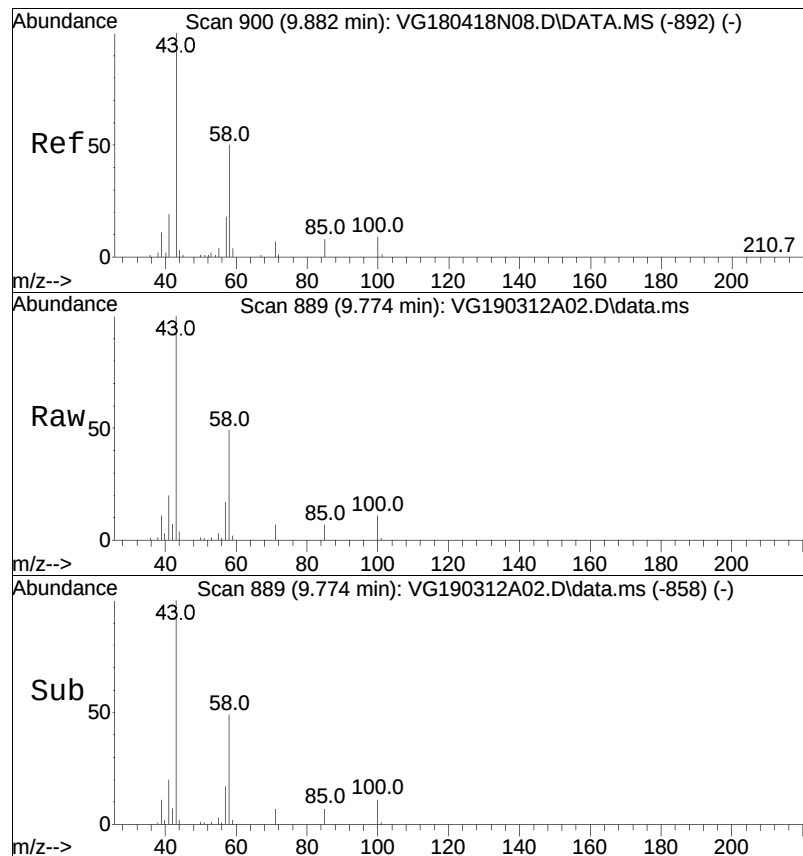




#71
 1,2-Dibromoethane
 Concen: 10.54 ug/L
 RT: 9.500 min Scan# 861
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

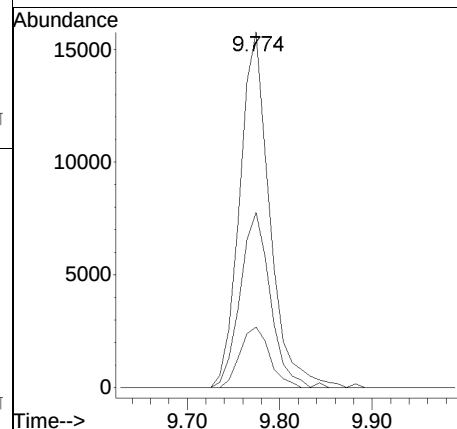
Tgt Ion	Ratio	Lower	Upper
107	100		
109	93.4	76.0	114.0

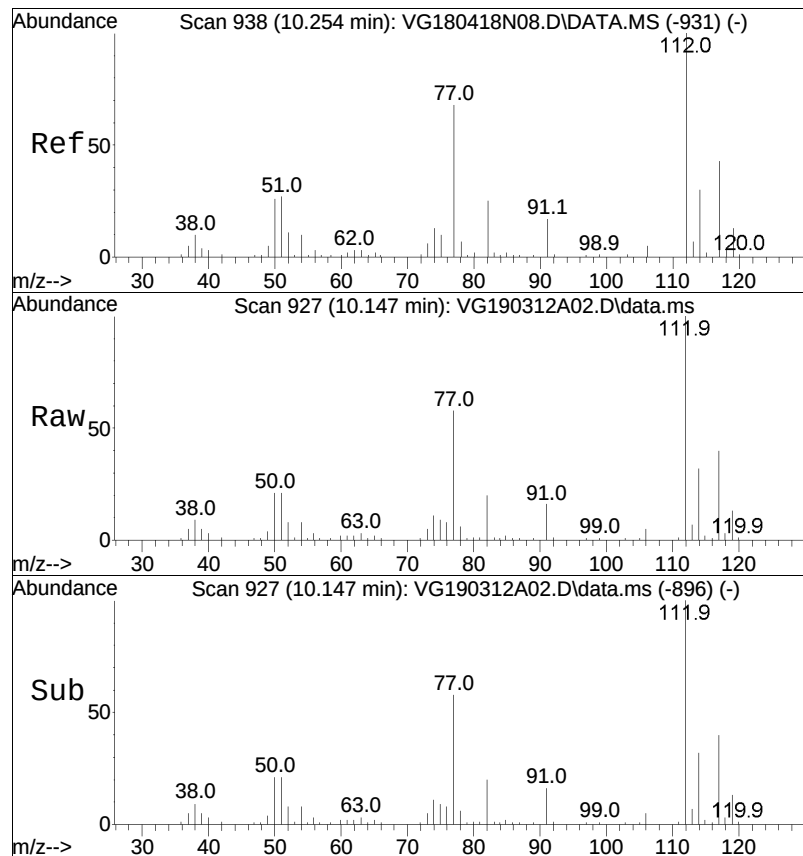




#72
 2-Hexanone
 Concen: 11.90 ug/L
 RT: 9.774 min Scan# 889
 Delta R.T. 0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

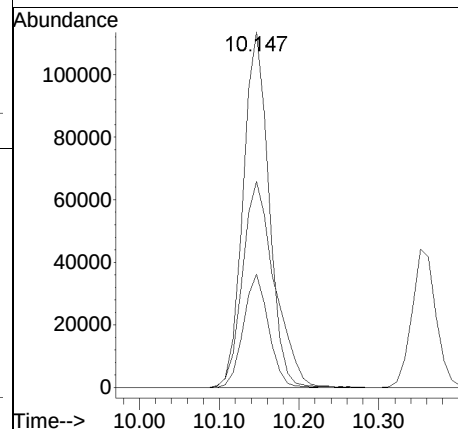
Tgt Ion:	43	Resp:	35674
Ion Ratio	Lower	Upper	
43	100		
58	49.4	43.8	65.6
57	16.7	15.2	22.8

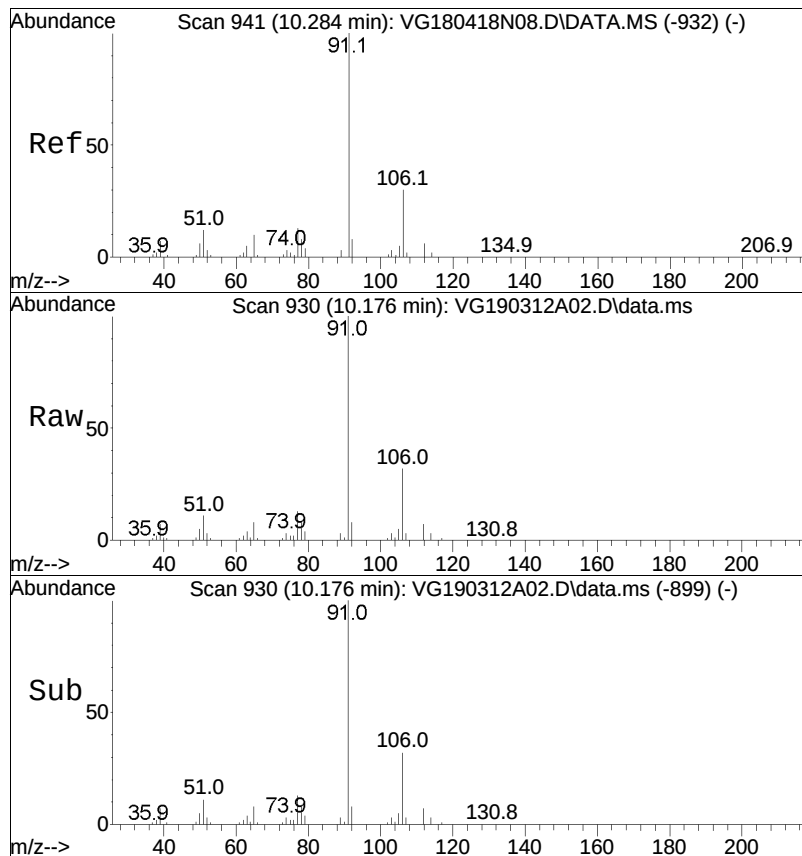




#73
 Chlorobenzene
 Concen: 10.21 ug/L
 RT: 10.147 min Scan# 927
 Delta R.T. -0.001 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

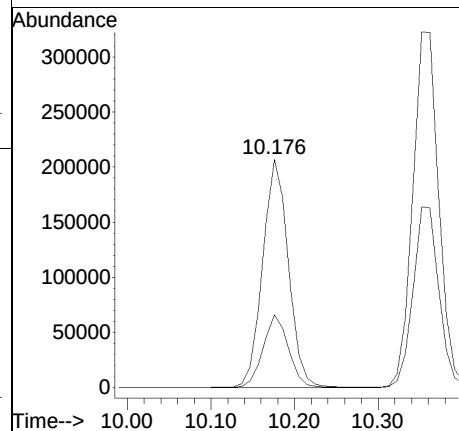
Tgt Ion	Ratio	Resp	Lower	Upper
112	100	254272		
77	72.8		55.9	83.9
114	31.1		25.4	38.0

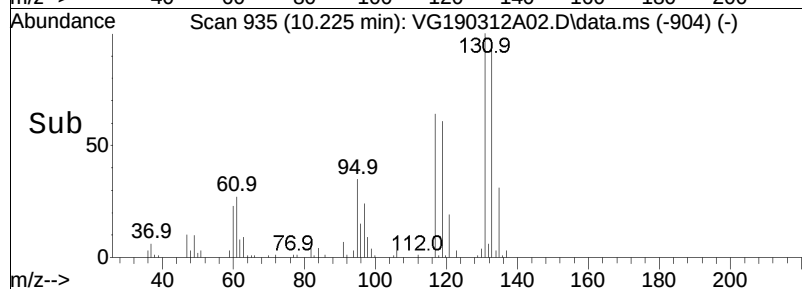
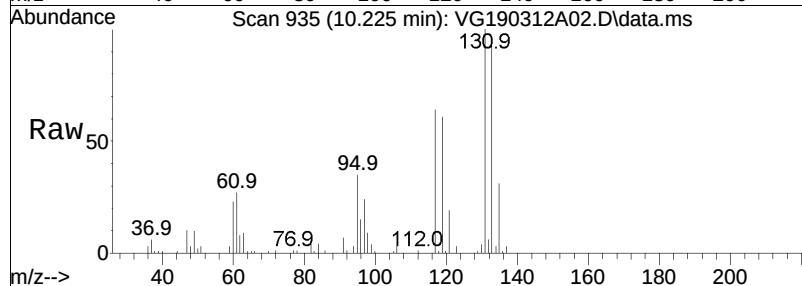
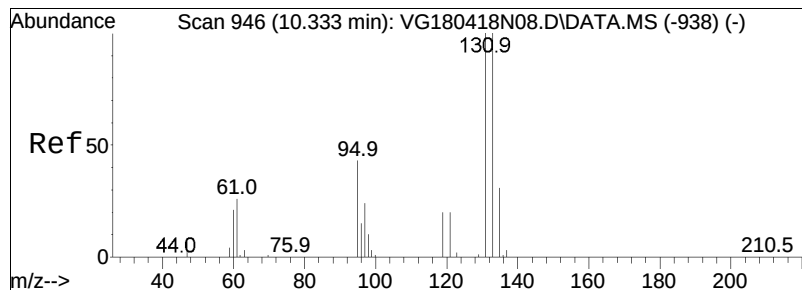




#74
Ethylbenzene
Concen: 10.24 ug/L
RT: 10.176 min Scan# 930
Delta R.T. -0.000 min
Lab File: VG190312A02.D
Acq: 12 Mar 2019 8:32

Tgt Ion	91	Resp	442896
Ion Ratio	Lower	Upper	
91	100		
106	31.2	25.3	37.9





#75

1,1,1,2-Tetrachloroethane

Concen: 10.27 ug/L

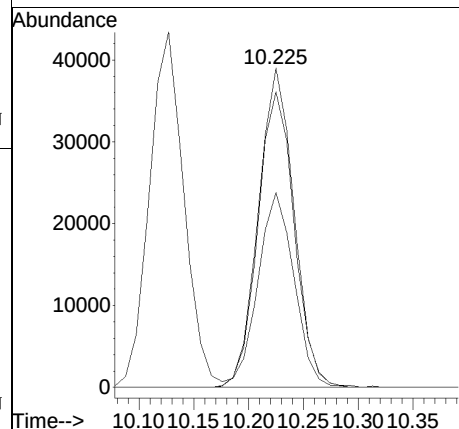
RT: 10.225 min Scan# 935

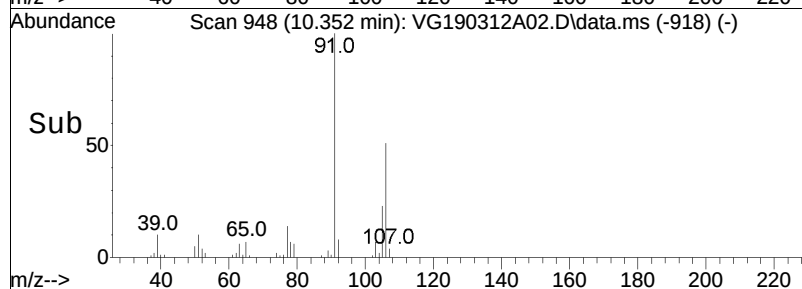
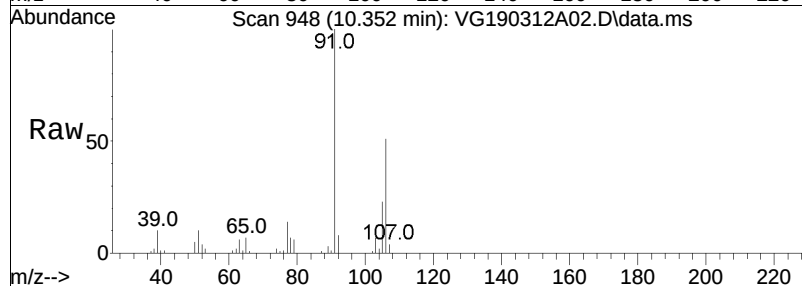
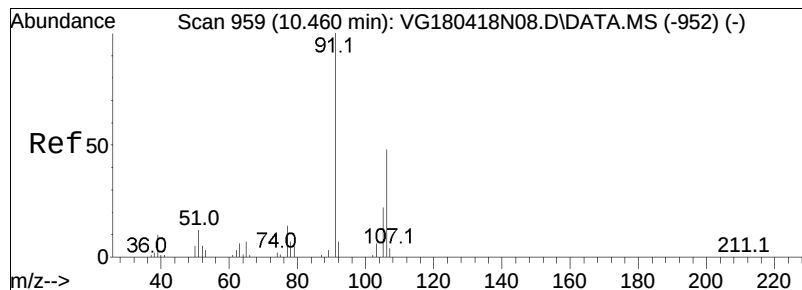
Delta R.T. -0.000 min

Lab File: VG190312A02.D

Acq: 12 Mar 2019 8:32

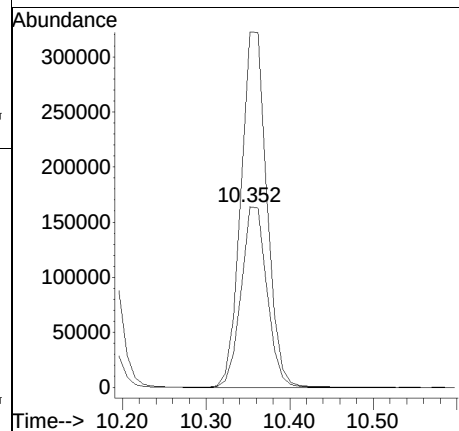
Tgt Ion:	131	Resp:	88336
Ion Ratio	Lower	Upper	
131	100		
133	94.4	77.3	117.3
119	61.7	42.7	82.7

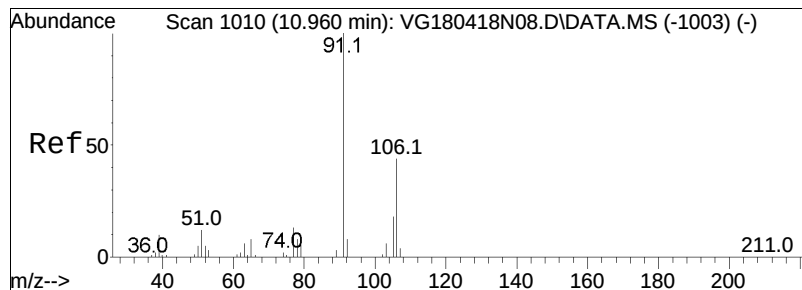




#76
p/m Xylene
Concen: 20.10 ug/L
RT: 10.352 min Scan# 948
Delta R.T. -0.010 min
Lab File: VG190312A02.D
Acq: 12 Mar 2019 8:32

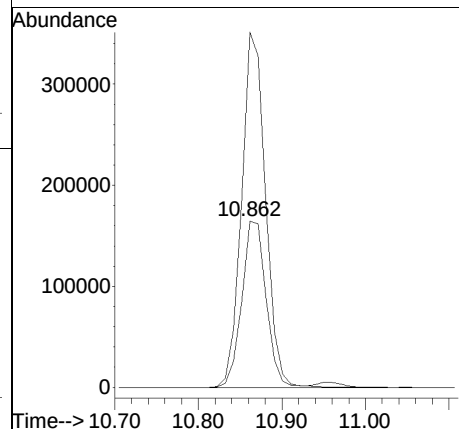
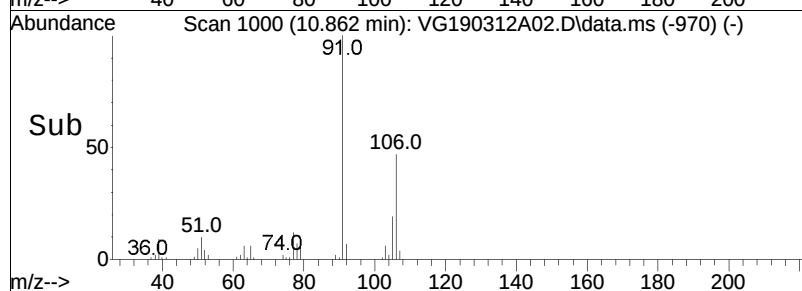
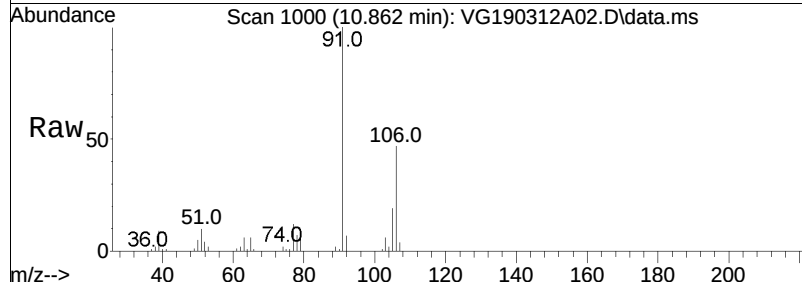
Tgt Ion	Ratio	Lower	Upper
106	100		
91	197.4	157.1	235.7

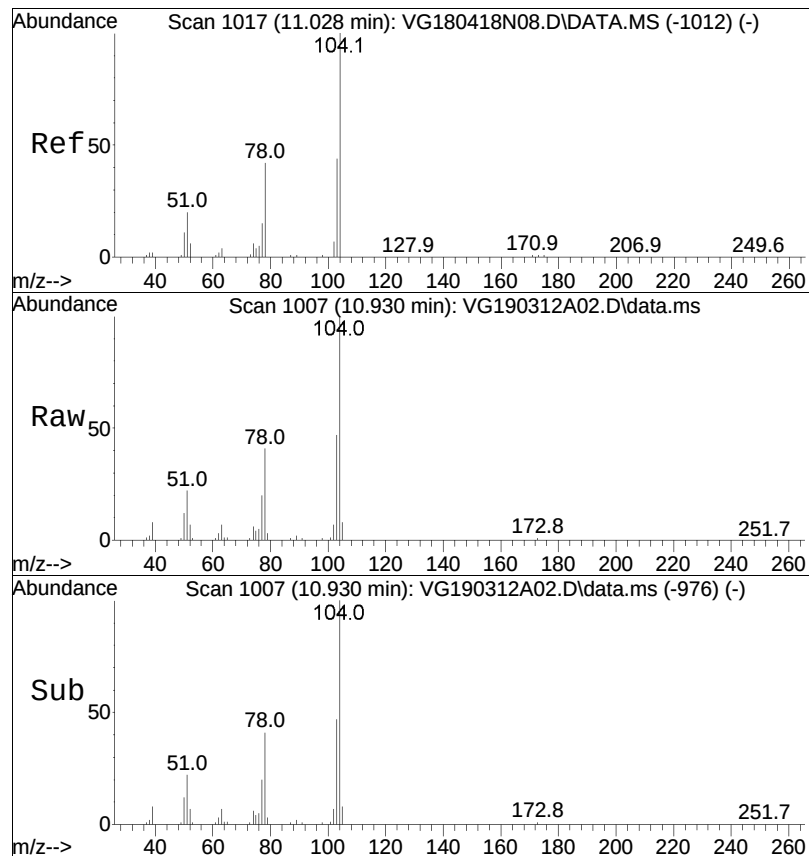




#77
o Xylene
Concen: 20.35 ug/L
RT: 10.862 min Scan# 1000
Delta R.T. -0.010 min
Lab File: VG190312A02.D
Acq: 12 Mar 2019 8:32

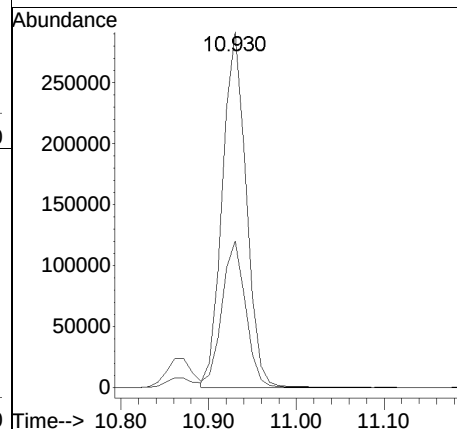
Tgt Ion	Ratio	Lower	Upper
106	100		
91	207.9	164.7	247.1

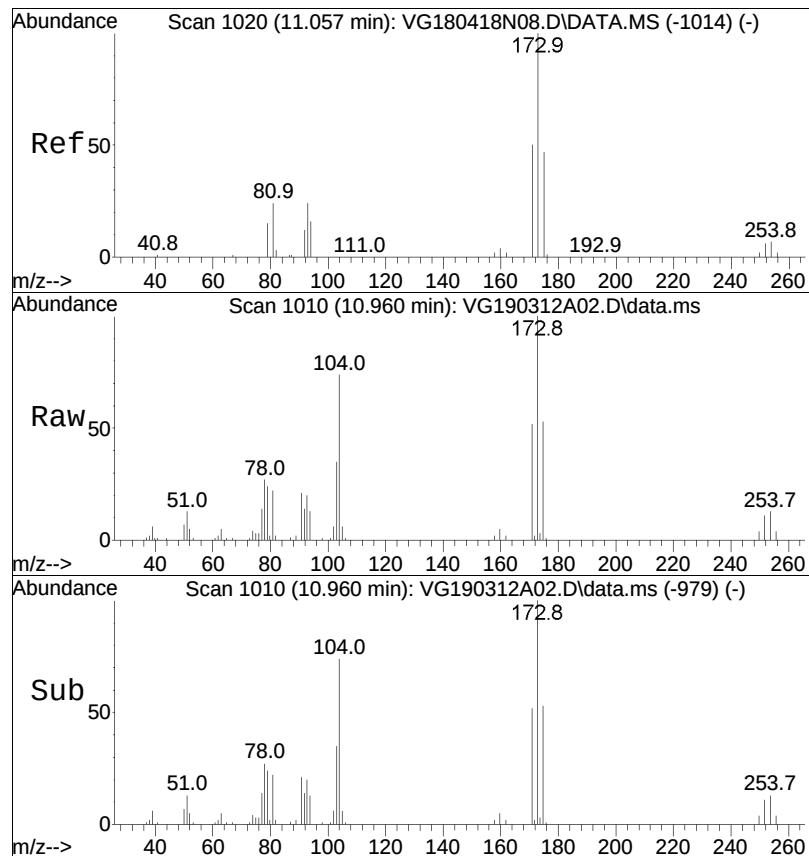




#78
 Styrene
 Concen: 20.31 ug/L
 RT: 10.930 min Scan# 1007
 Delta R.T. 0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

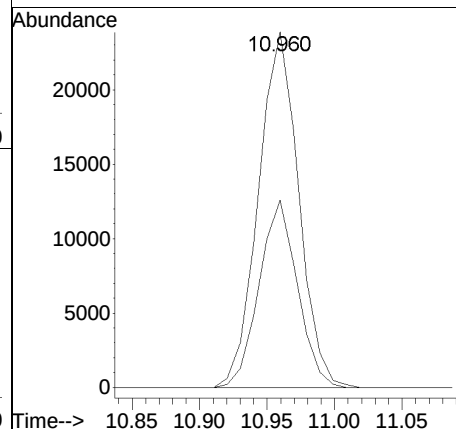
Tgt Ion	Ratio	Lower	Upper
104	100		
78	41.0	32.2	48.4

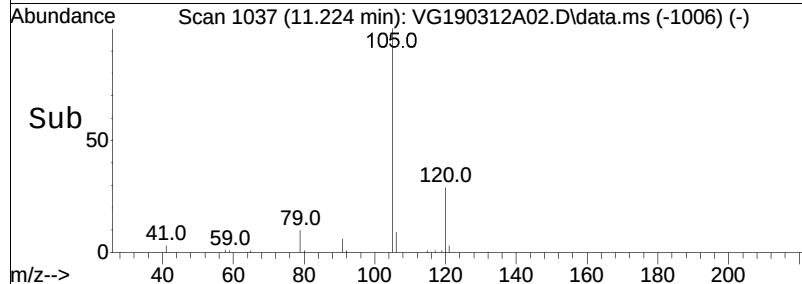
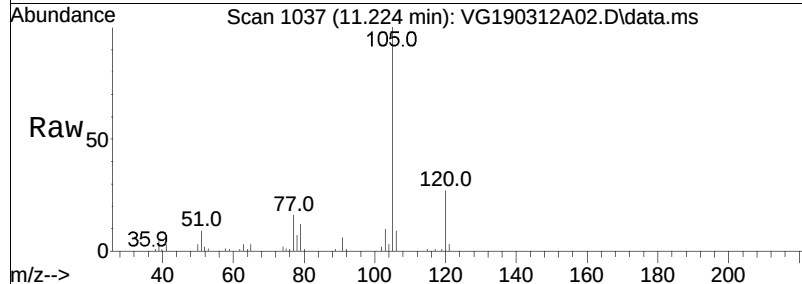
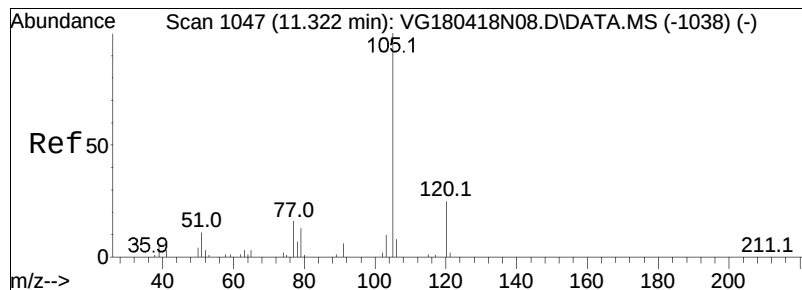




#80
 Bromoform
 Concen: 10.20 ug/L
 RT: 10.960 min Scan# 1010
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

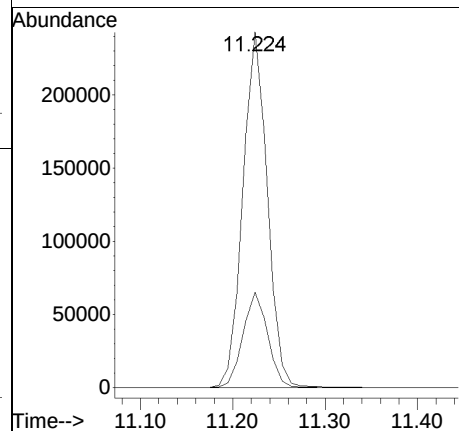
Tgt Ion:173 Resp: 49465
 Ion Ratio Lower Upper
 173 100
 175 50.0 28.0 68.0

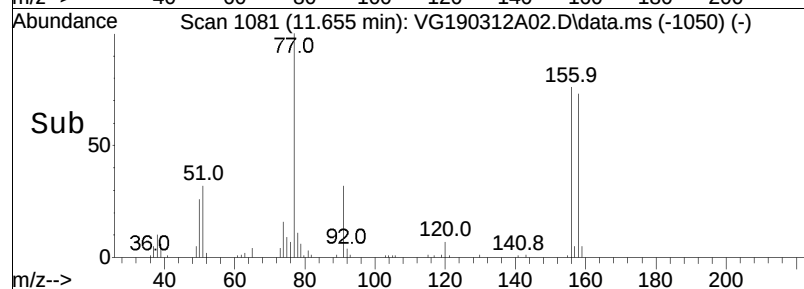
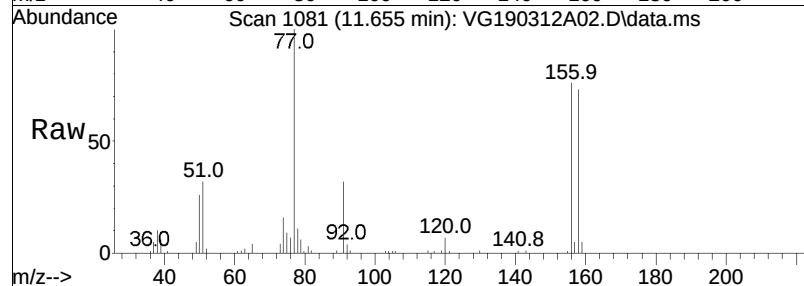
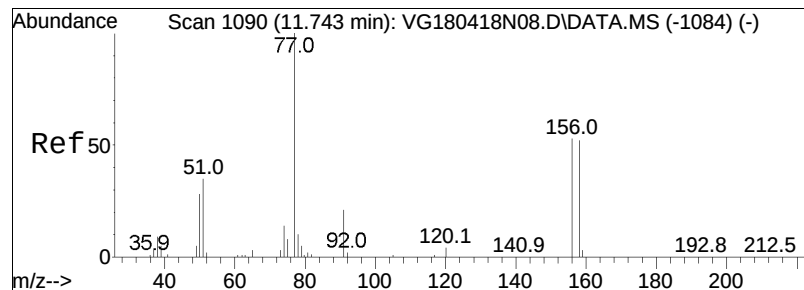




#82
 Isopropylbenzene
 Concen: 10.34 ug/L
 RT: 11.224 min Scan# 1037
 Delta R.T. 0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

Tgt Ion	Ratio	Lower	Upper
105	100		
120	26.9	7.0	47.0





#84

Bromobenzene

Concen: 10.31 ug/L

RT: 11.655 min Scan# 1081

Delta R.T. 0.000 min

Lab File: VG190312A02.D

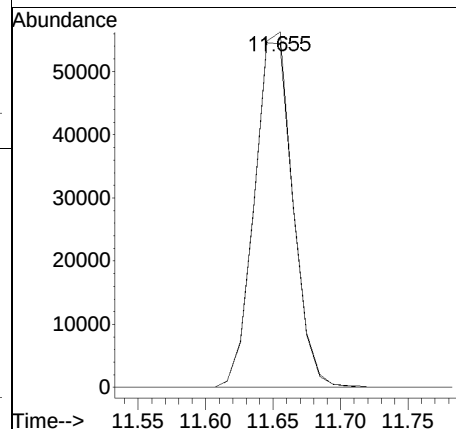
Acq: 12 Mar 2019 8:32

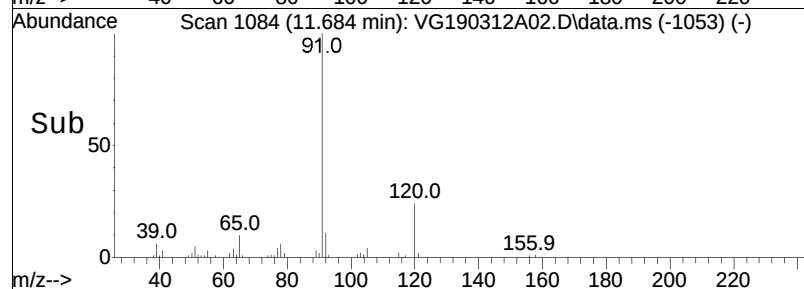
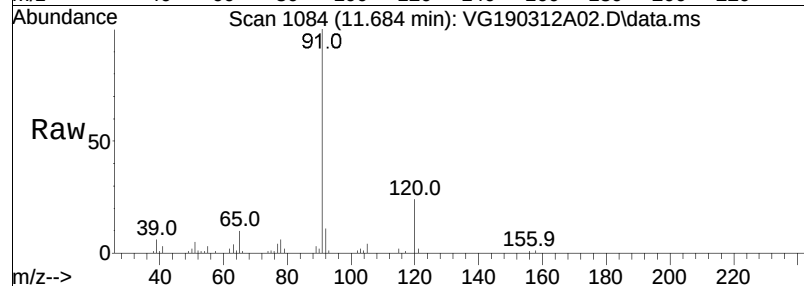
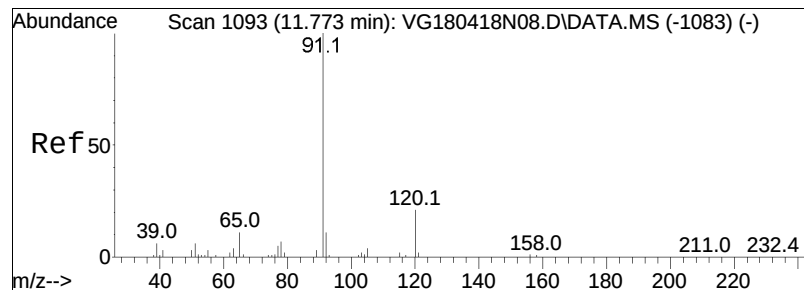
Tgt Ion:156 Resp: 110635

Ion Ratio Lower Upper

156 100

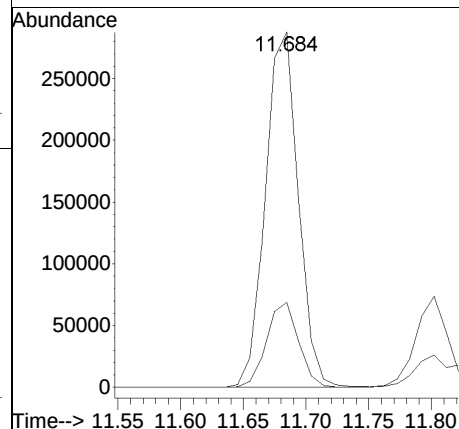
158 98.2 76.9 115.3

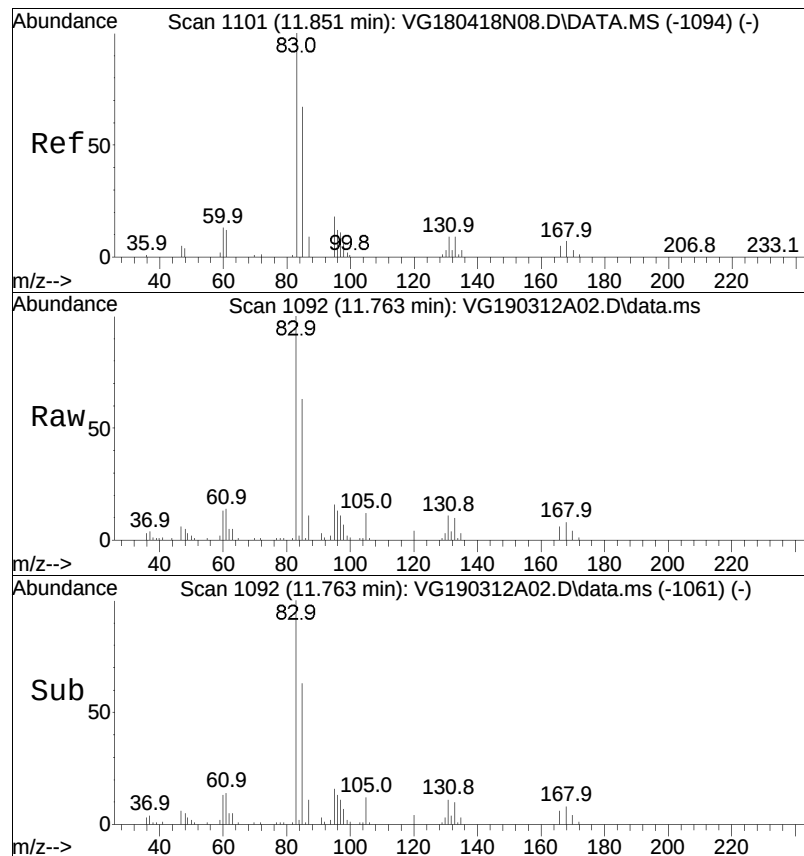




#85
 n-Propylbenzene
 Concen: 10.59 ug/L
 RT: 11.684 min Scan# 1084
 Delta R.T. -0.001 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

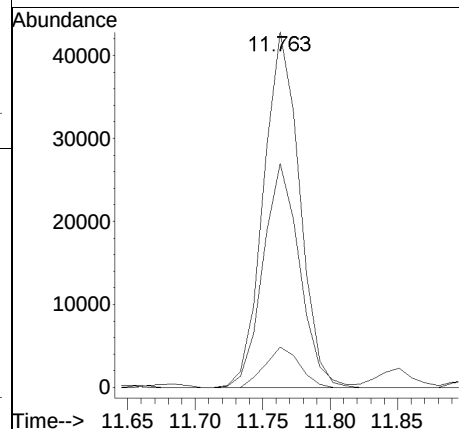
Tgt	Ion	Resp	Lower	Upper
91	100	525498		
120	23.3	19.0	28.6	

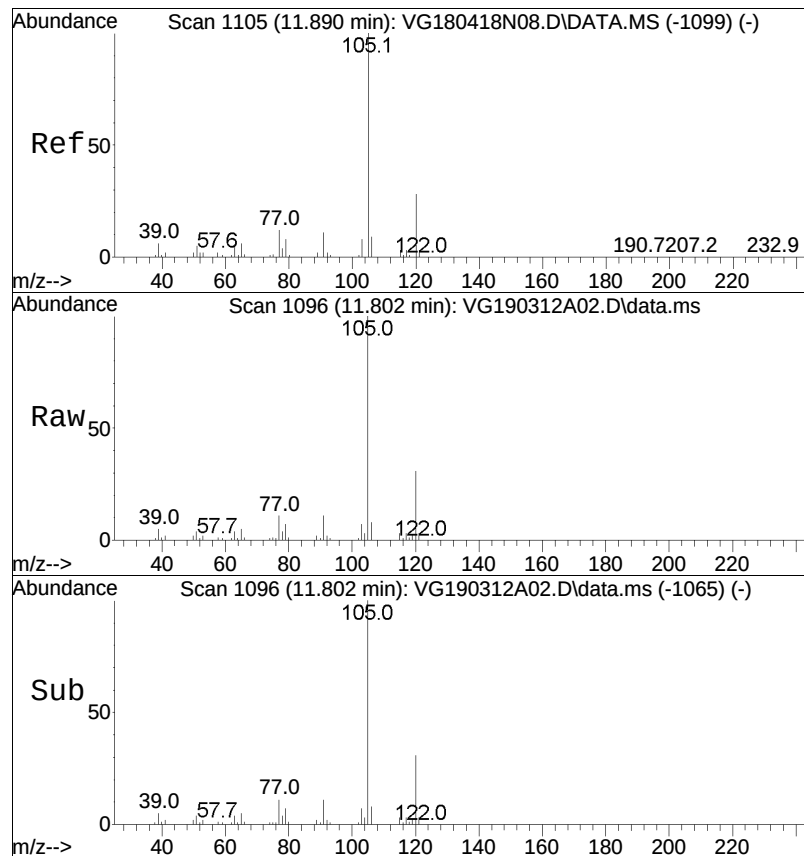




#87
 1,1,2,2-Tetrachloroethane
 Concen: 11.86 ug/L
 RT: 11.763 min Scan# 1092
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

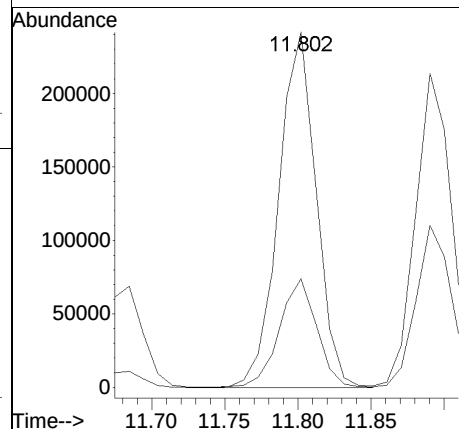
Tgt	Ion: 83	Resp:	79259
Ion	Ratio	Lower	Upper
83	100		
131	11.0	0.0	31.0
85	64.2	43.9	83.9

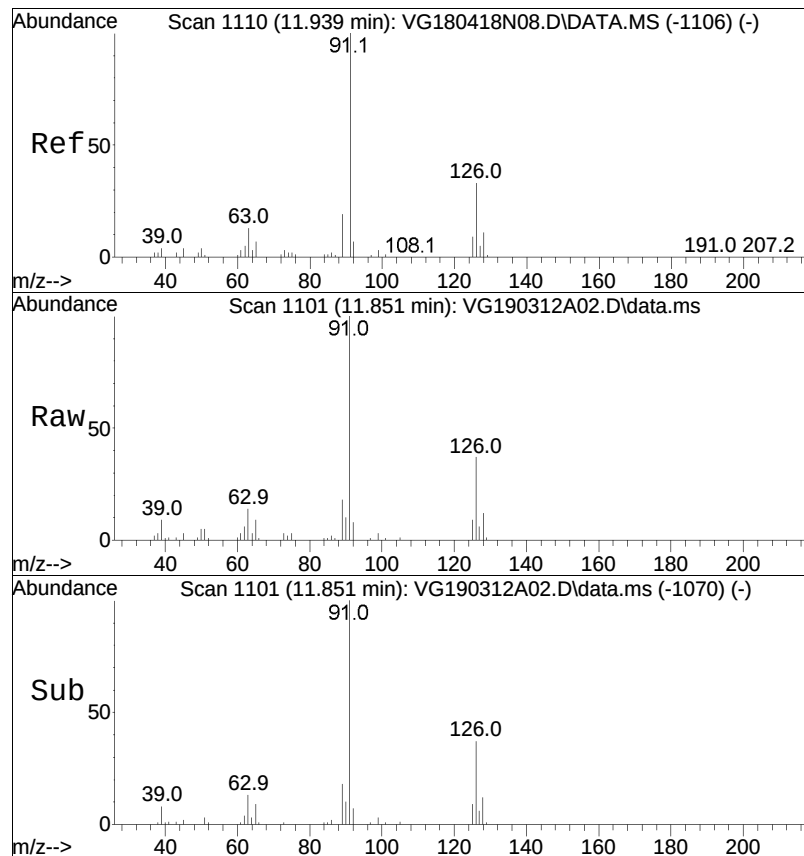




#88
 4-Ethyltoluene
 Concen: 10.56 ug/L
 RT: 11.802 min Scan# 1096
 Delta R.T. 0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

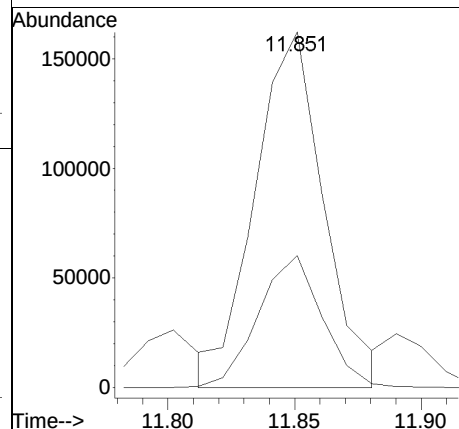
Tgt Ion:	105	Resp:	432636
Ion Ratio	Lower	Upper	
105	100		
120	30.4	19.9	41.3

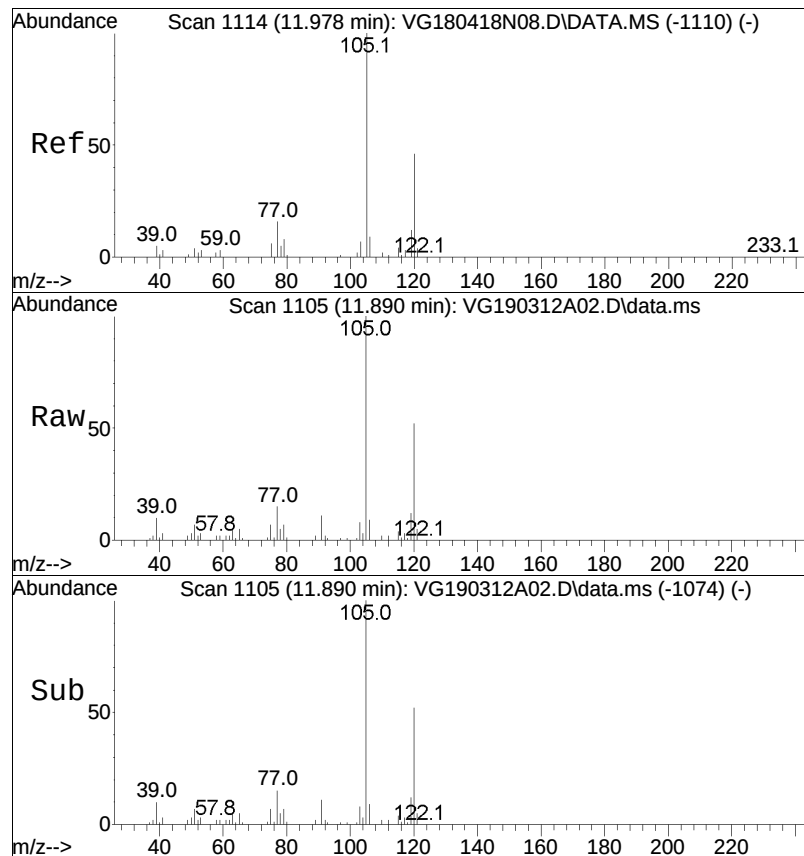




#89
 2-Chlorotoluene
 Concen: 11.14 ug/L M1
 RT: 11.851 min Scan# 1101
 Delta R.T. 0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

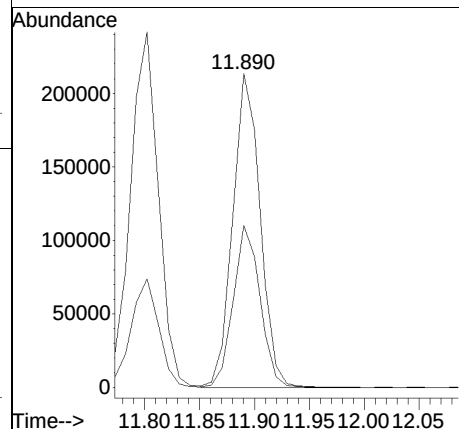
Tgt Ion:	91	Resp:	306401
Ion Ratio	Lower	Upper	
91	100		
126	34.6	27.4	41.2

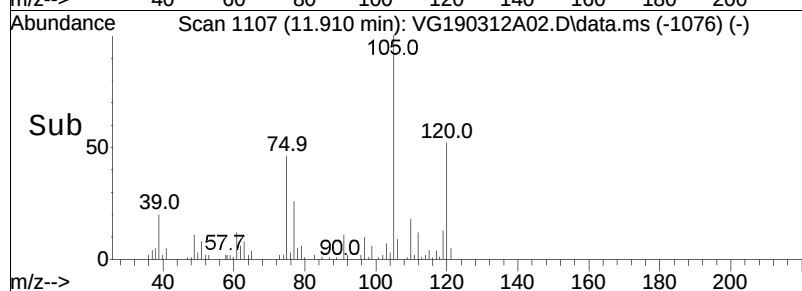
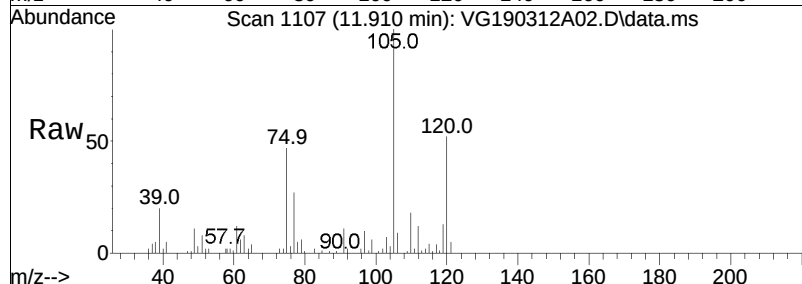
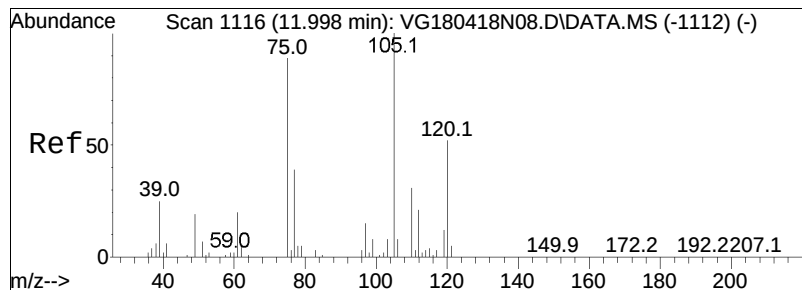




#90
 1,3,5-Trimethylbenzene
 Concen: 10.44 ug/L
 RT: 11.890 min Scan# 1105
 Delta R.T. 0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

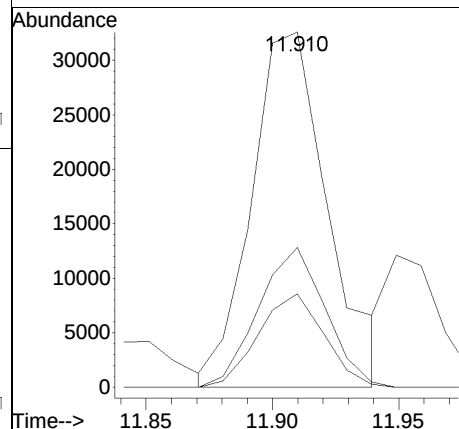
Tgt Ion	Ratio	Lower	Upper
105	100		
120	50.7	40.3	60.5

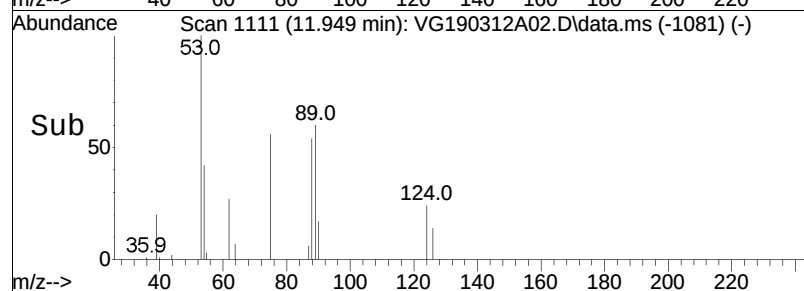
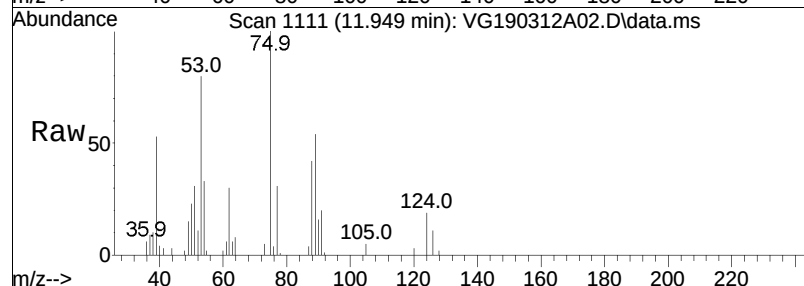
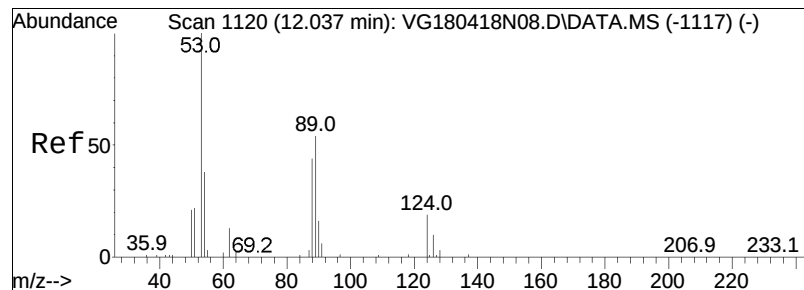




#91
 1,2,3-Trichloropropane
 Concen: 11.68 ug/L M1
 RT: 11.910 min Scan# 1107
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

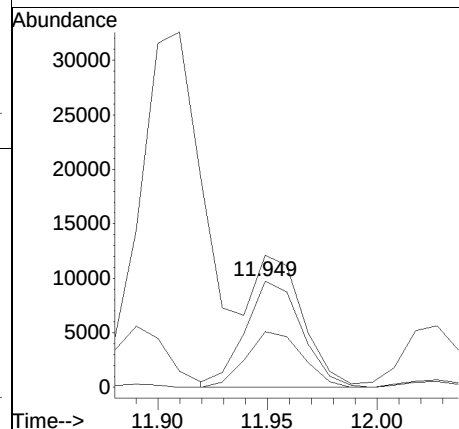
Tgt Ion	Ratio	Lower	Upper
75	100		
110	34.7	23.5	48.9
112	22.9	15.9	32.9

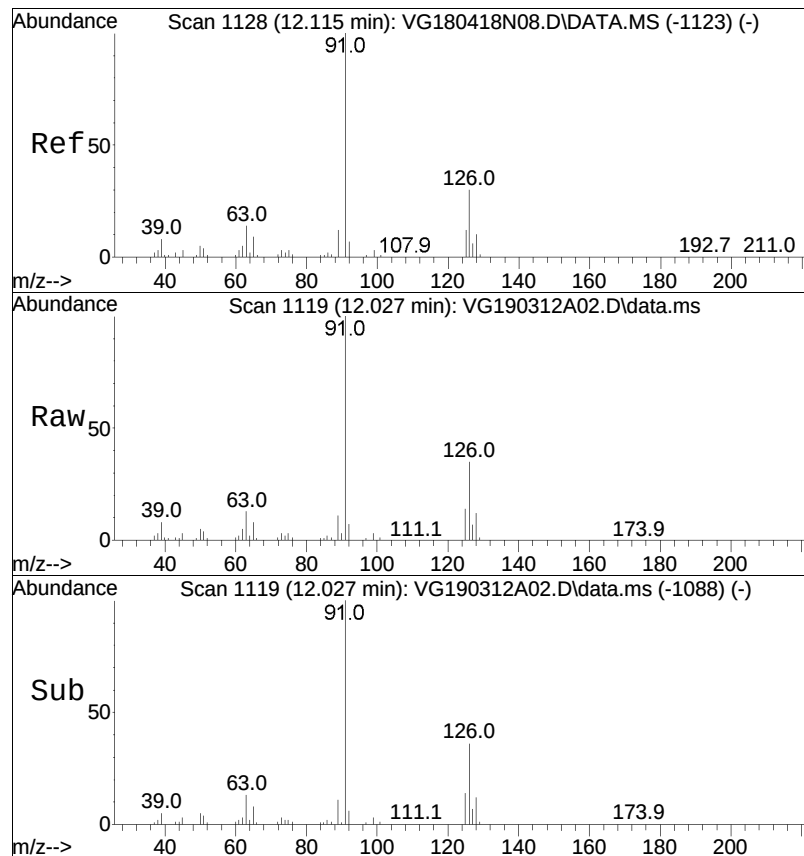




#92
 trans-1,4-Dichloro-2-butene
 Concen: 11.59 ug/L
 RT: 11.949 min Scan# 1111
 Delta R.T. -0.010 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

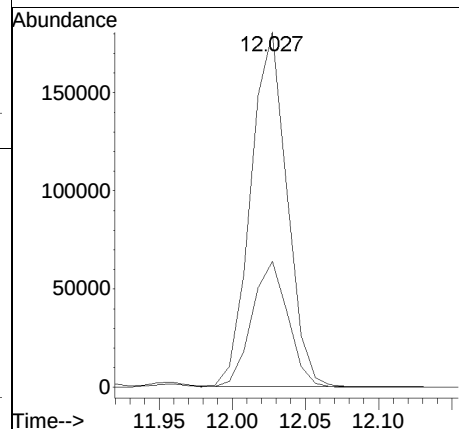
Tgt Ion	Ratio	Lower	Upper
53	100		
88	51.8	41.6	62.4
75	100.4	0.0	0.0#

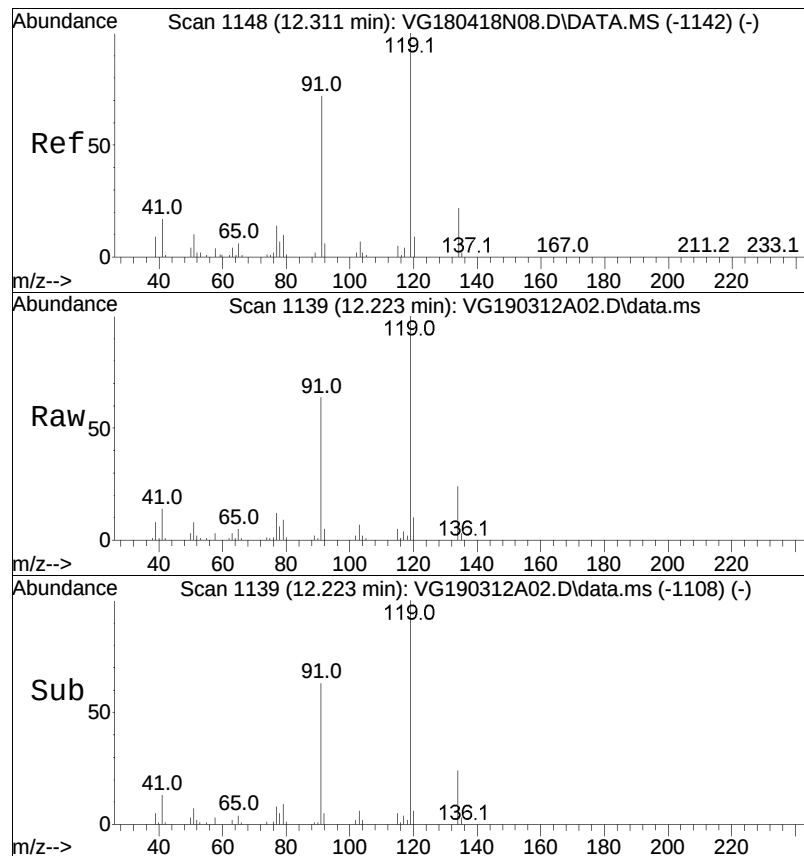




#93
 4-Chlorotoluene
 Concen: 10.92 ug/L
 RT: 12.027 min Scan# 1119
 Delta R.T. 0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

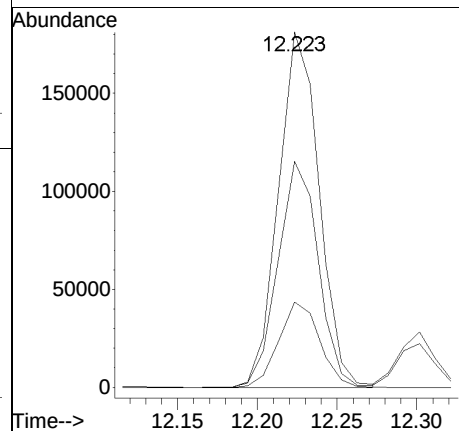
Tgt Ion	Ratio	Lower	Upper
91	100		
126	35.8	28.2	42.4

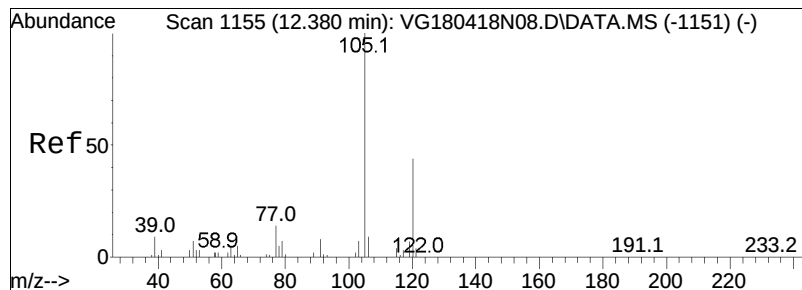




#94
 tert-Butylbenzene
 Concen: 10.29 ug/L
 RT: 12.223 min Scan# 1139
 Delta R.T. 0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

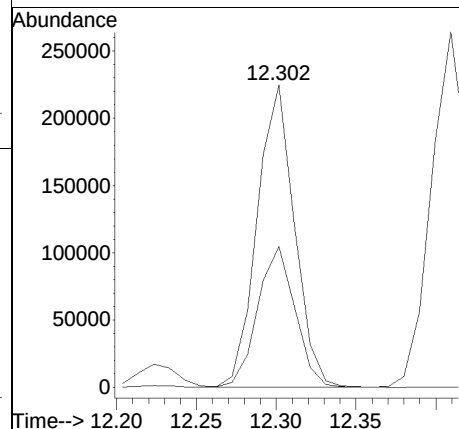
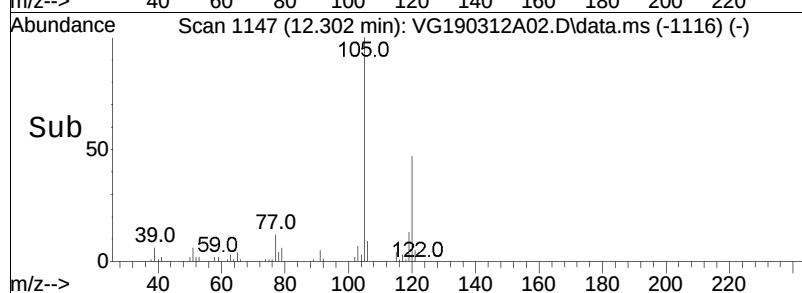
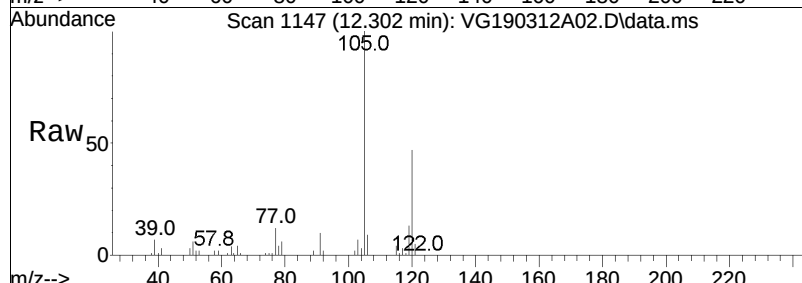
Tgt	Ion:119	Resp:	321192
Ion	Ratio	Lower	Upper
119	100		
91	63.3	50.8	76.2
134	24.2	20.2	30.4

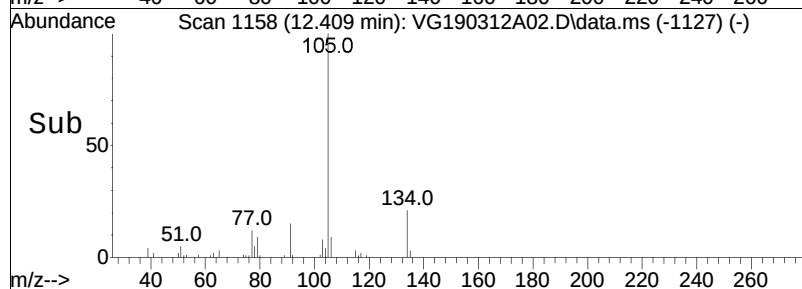
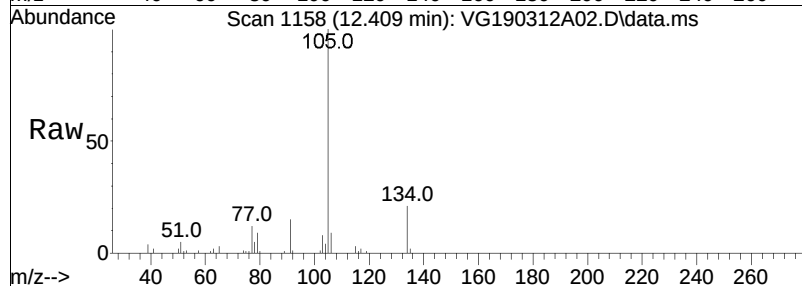
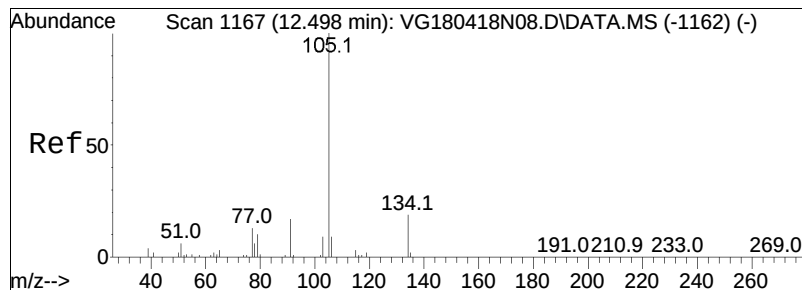




#97
 1,2,4-Trimethylbenzene
 Concen: 10.69 ug/L
 RT: 12.302 min Scan# 1147
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

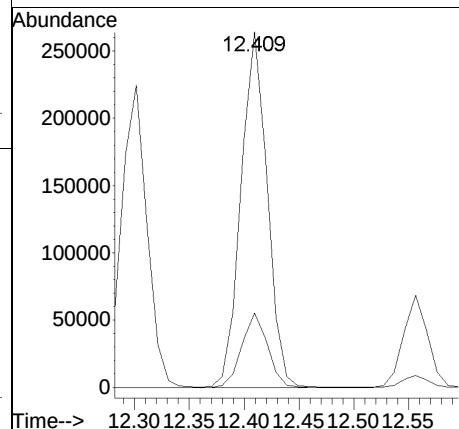
Tgt Ion	Ratio	Lower	Upper
105	100		
120	46.9	37.8	56.6

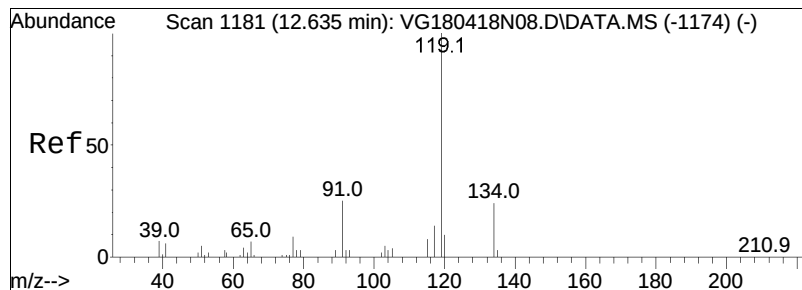




#98
 sec-Butylbenzene
 Concen: 10.32 ug/L
 RT: 12.409 min Scan# 1158
 Delta R.T. -0.001 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

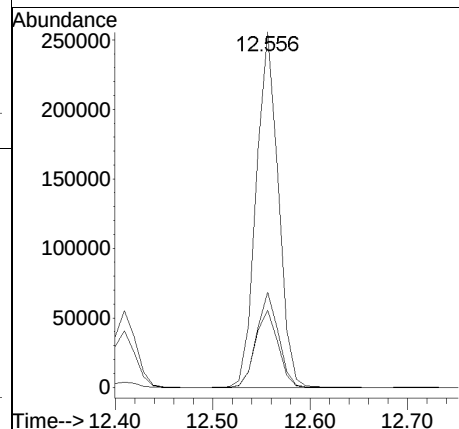
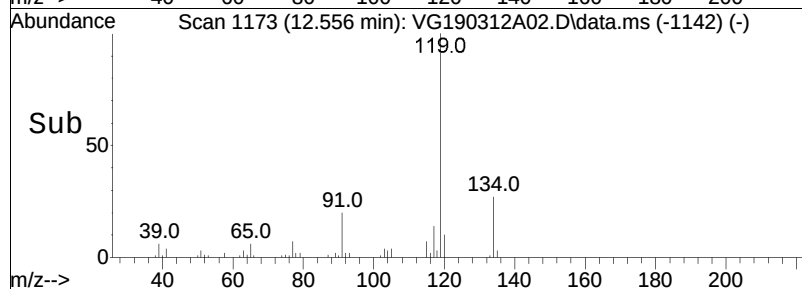
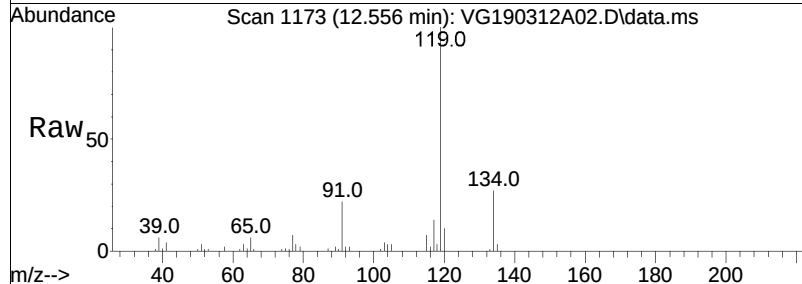
Tgt Ion	Ratio	Lower	Upper
105	100		
134	20.4	13.3	27.7

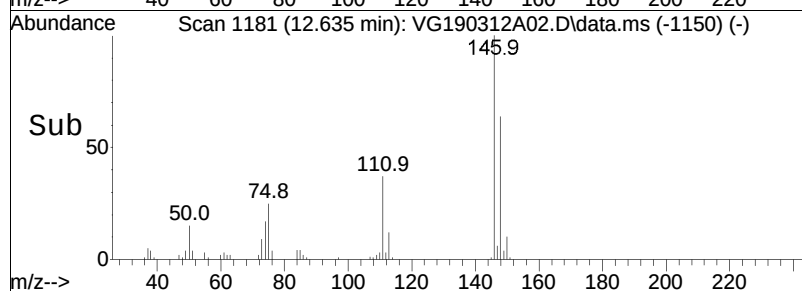
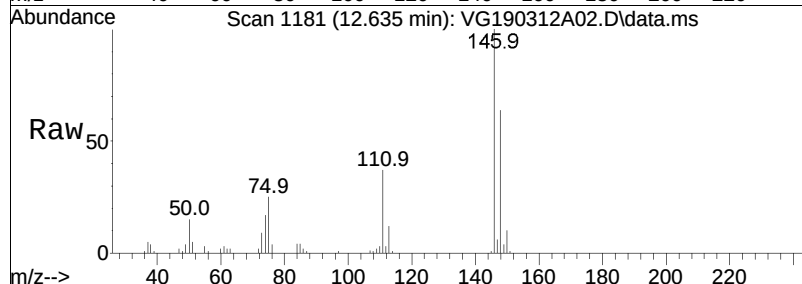
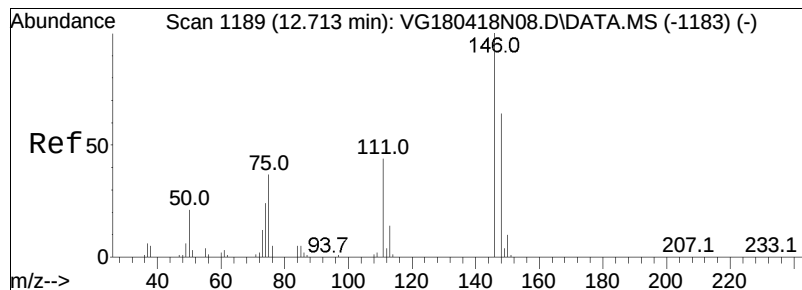




#99
 p-Isopropyltoluene
 Concen: 10.32 ug/L
 RT: 12.556 min Scan# 1173
 Delta R.T. 0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

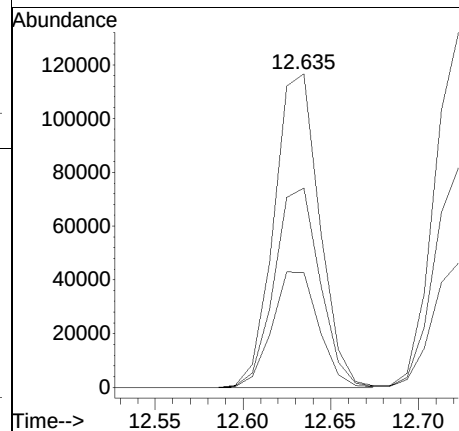
Tgt Ion	Ratio	Lower	Upper
119	100		
134	26.3	17.5	36.3
91	22.4	14.6	30.4

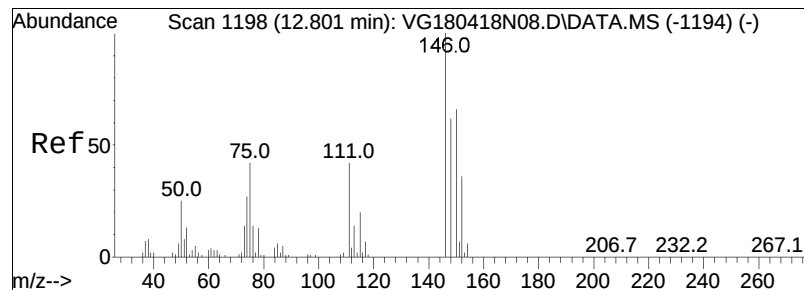




#100
 1,3-Dichlorobenzene
 Concen: 10.64 ug/L
 RT: 12.635 min Scan# 1181
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

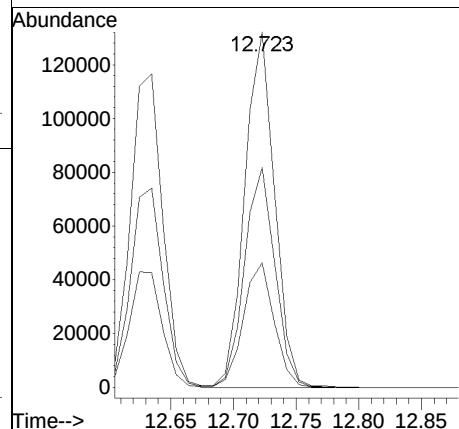
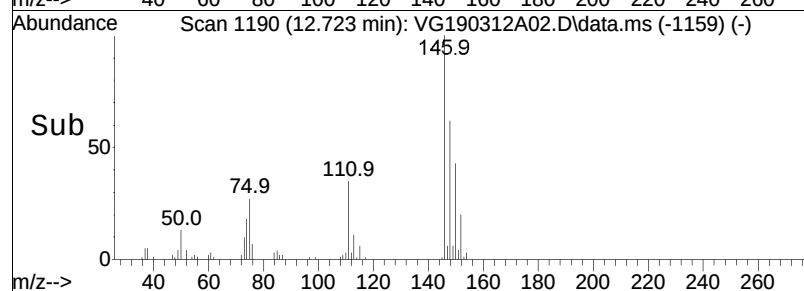
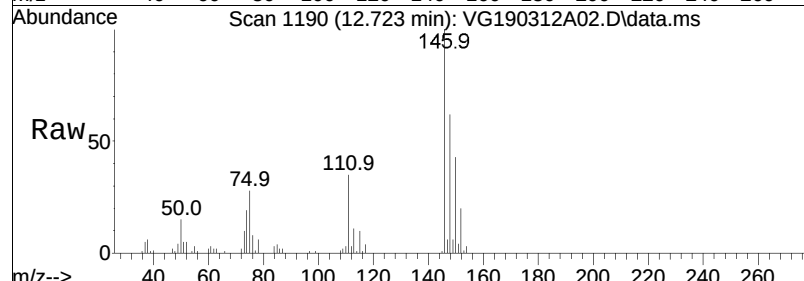
Tgt Ion	Ratio	Resp	Lower	Upper
146	100	210719		
111	37.7		24.4	50.6
148	63.8		41.0	85.2

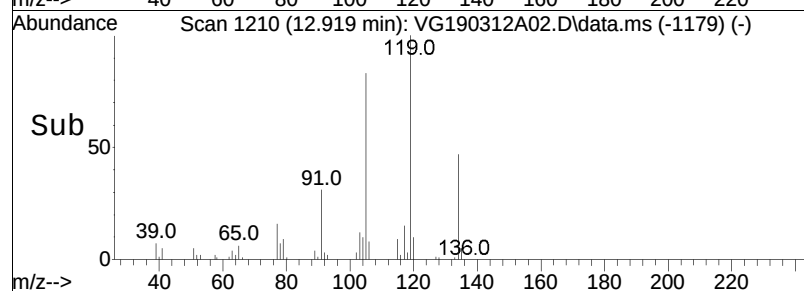
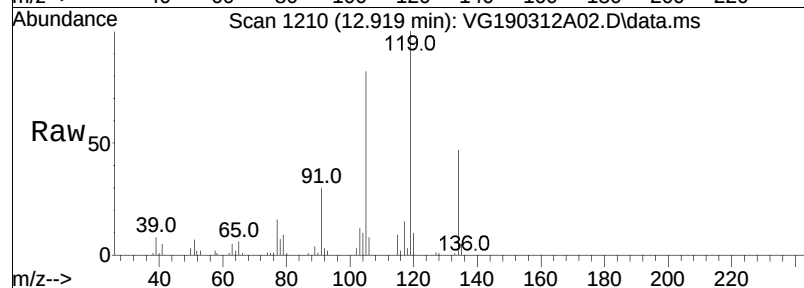
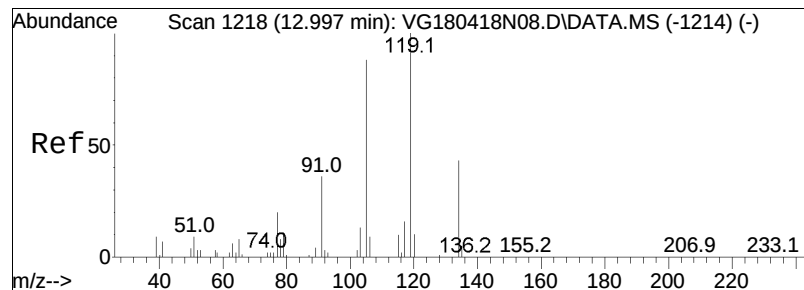




#101
 1,4-Dichlorobenzene
 Concen: 10.76 ug/L
 RT: 12.723 min Scan# 1190
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

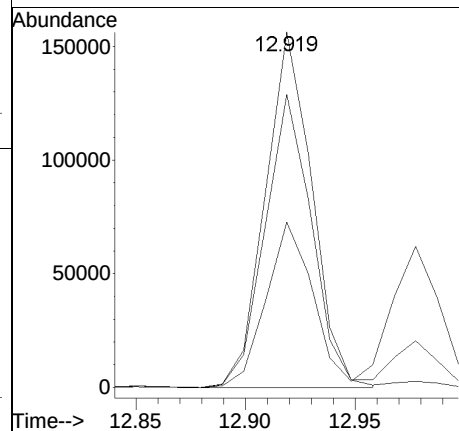
Tgt Ion	Ratio	Resp	Lower	Upper
146	100	218952		
111	36.3		29.3	43.9
148	63.2		51.2	76.8

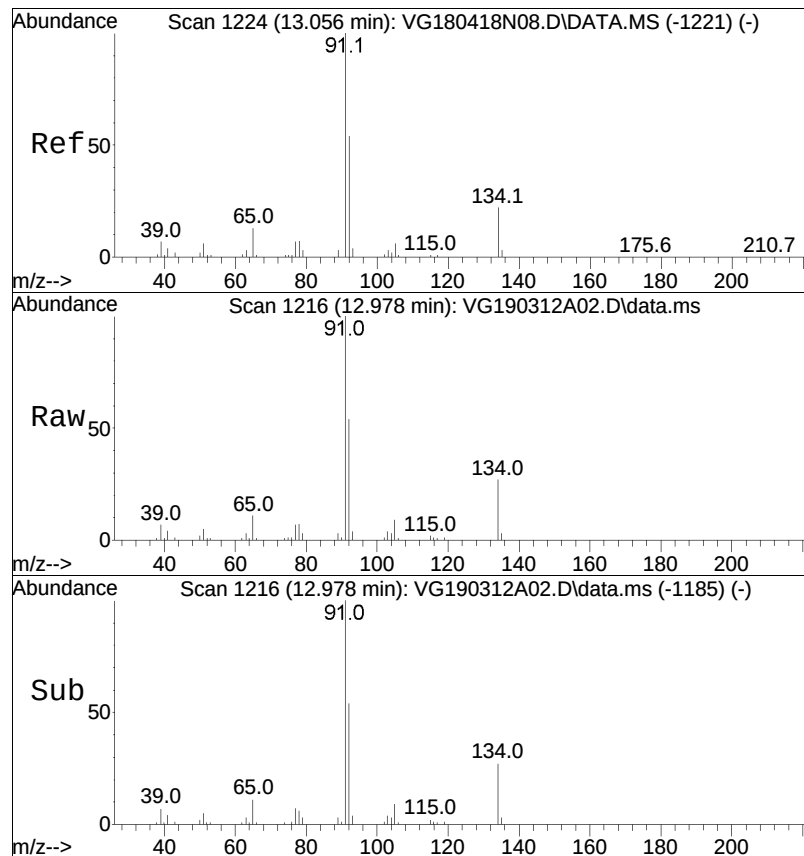




#102
 p-Diethylbenzene
 Concen: 10.29 ug/L
 RT: 12.919 min Scan# 1210
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

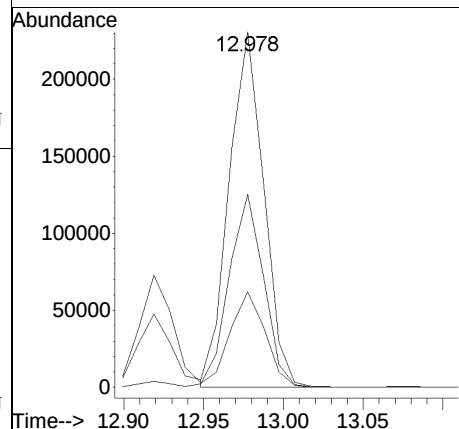
Tgt Ion	Ratio	Resp	Lower	Upper
119	100	231178		
105	82.2		53.9	112.1
134	46.8		32.0	66.6

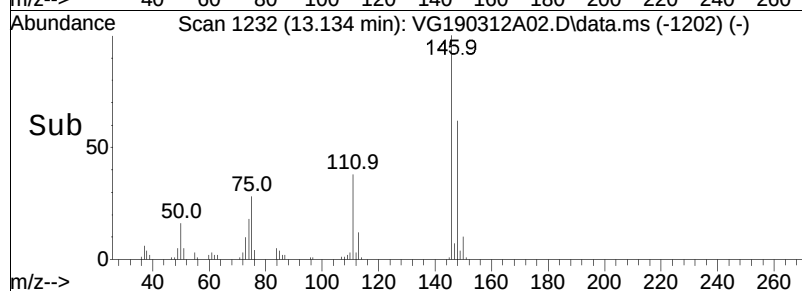
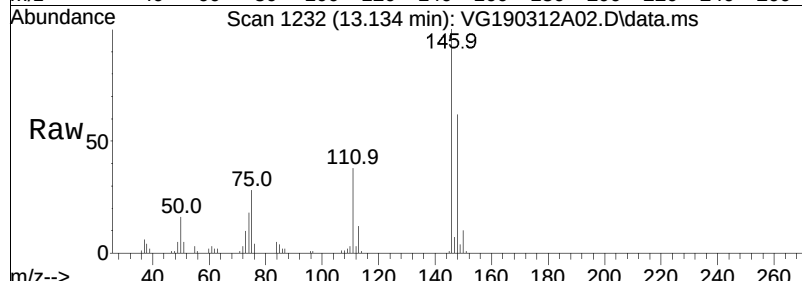
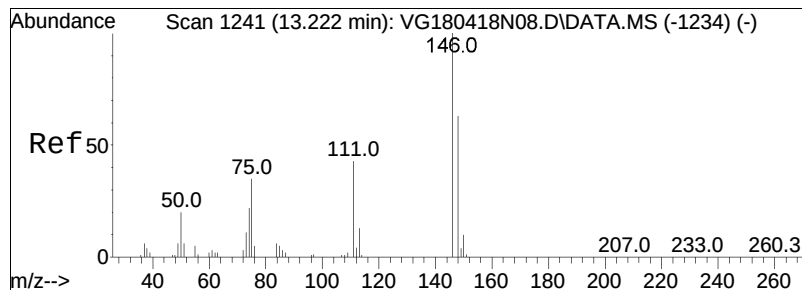




#103
 n-Butylbenzene
 Concen: 10.49 ug/L
 RT: 12.978 min Scan# 1216
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

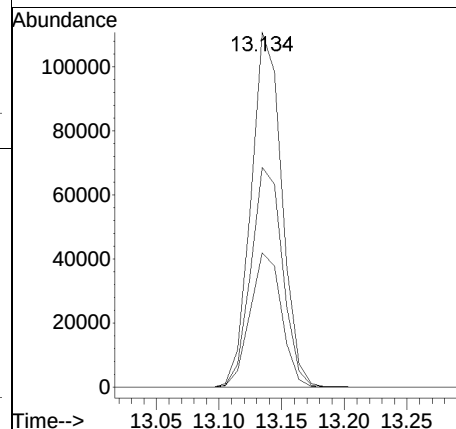
Tgt	Ion: 91	Resp:	349924
Ion	Ratio	Lower	Upper
91	100		
92	54.4	43.8	65.8
134	27.4	22.0	33.0

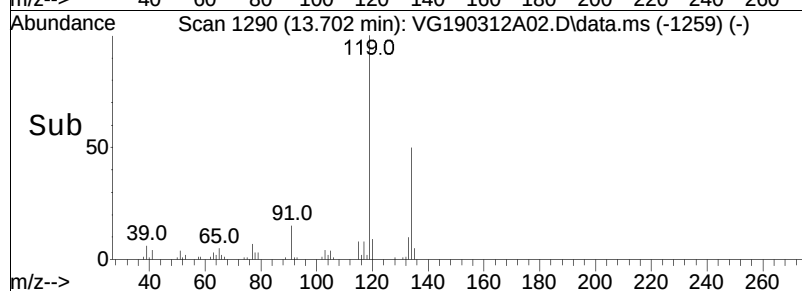
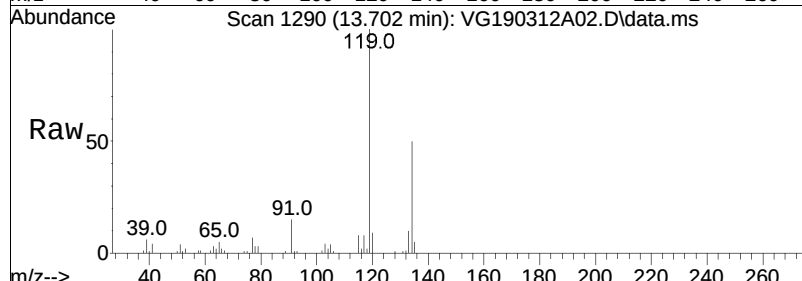
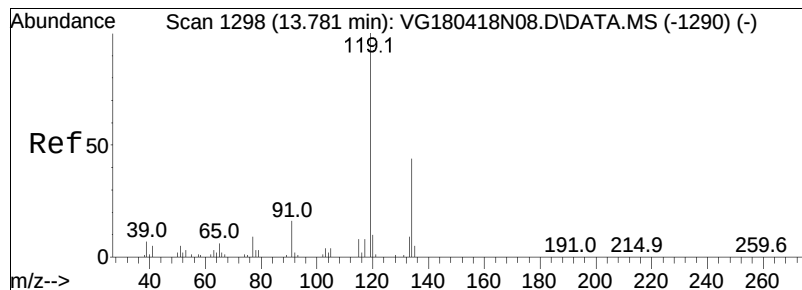




#104
 1,2-Dichlorobenzene
 Concen: 10.74 ug/L
 RT: 13.134 min Scan# 1232
 Delta R.T. -0.010 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

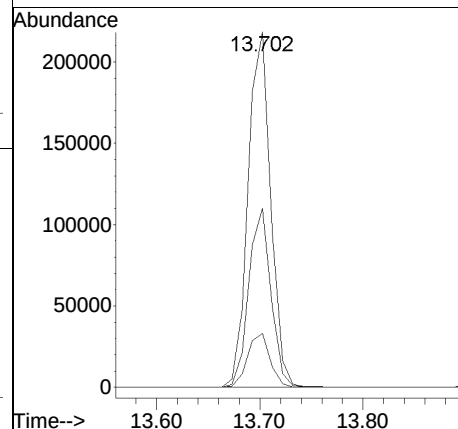
Tgt Ion	Ratio	Resp	Lower	Upper
146	100	190255		
111	38.7		25.4	52.8
148	63.6		41.7	86.5

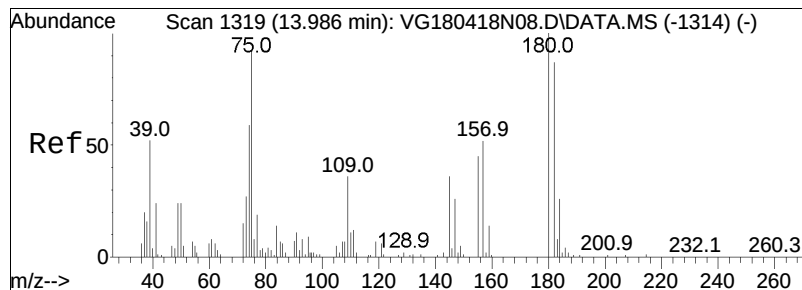




#105
 1,2,4,5-Tetramethylbenzene
 Concen: 10.39 ug/L
 RT: 13.702 min Scan# 1290
 Delta R.T. -0.001 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

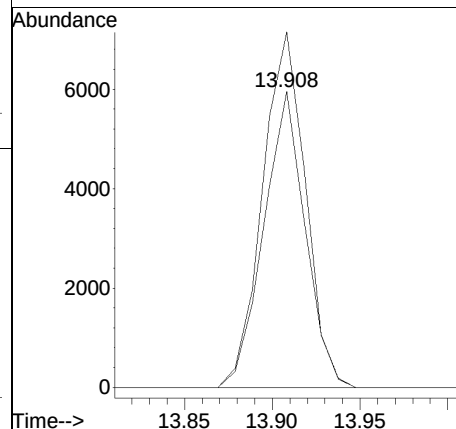
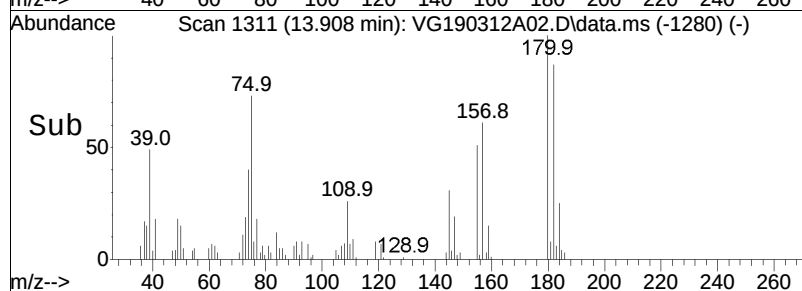
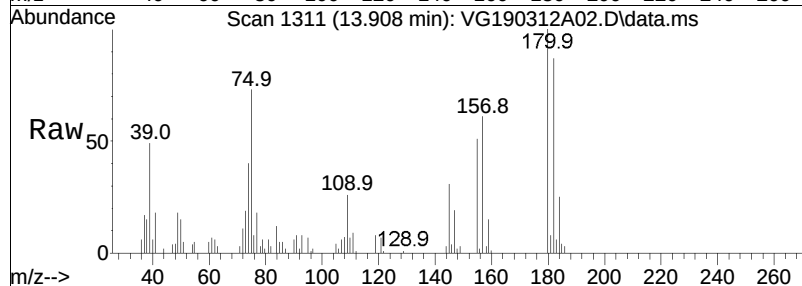
Tgt Ion	Ratio	Resp	Lower	Upper
119	100	333415		
134	49.3		32.7	67.9
91	15.3		9.9	20.7

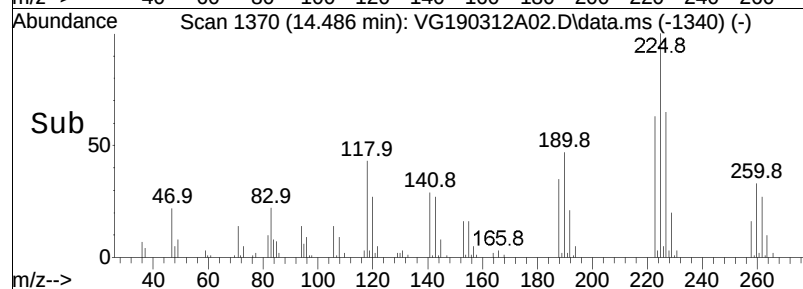
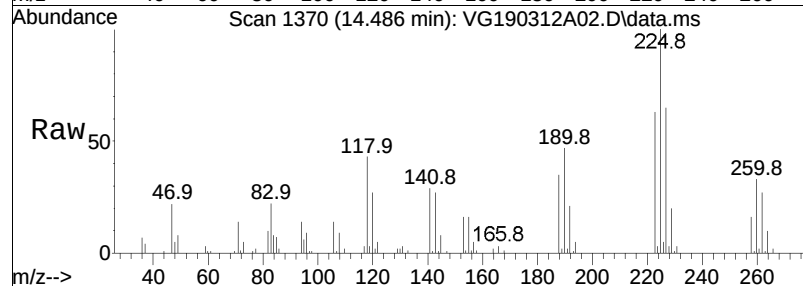
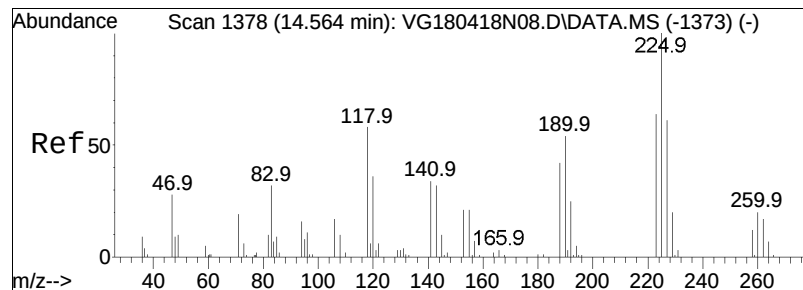




#106
 1,2-Dibromo-3-chloropropane
 Concen: 10.06 ug/L
 RT: 13.908 min Scan# 1311
 Delta R.T. 0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

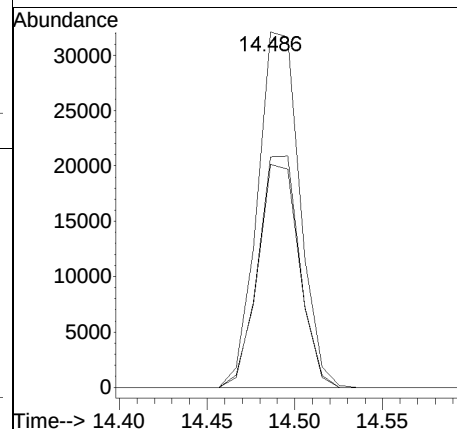
Tgt Ion	Ratio	Lower	Upper
155	100		
157	123.7	99.9	149.9

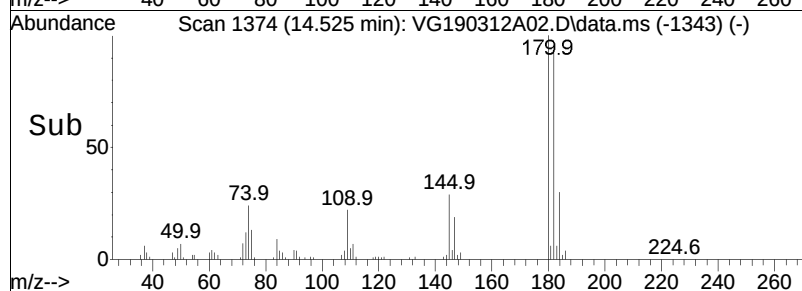
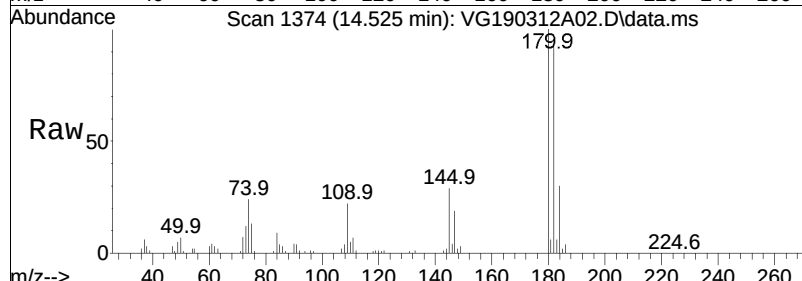
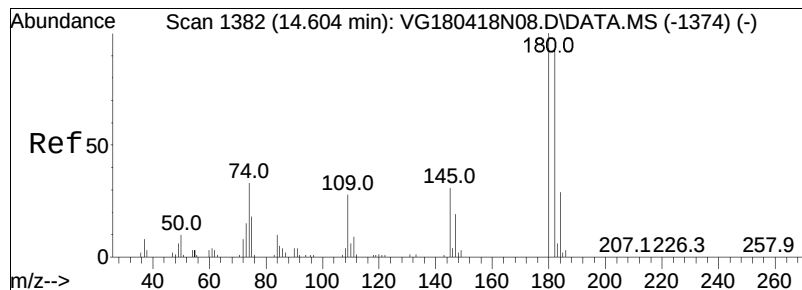




#108
 Hexachlorobutadiene
 Concen: 8.61 ug/L
 RT: 14.486 min Scan# 1370
 Delta R.T. -0.010 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

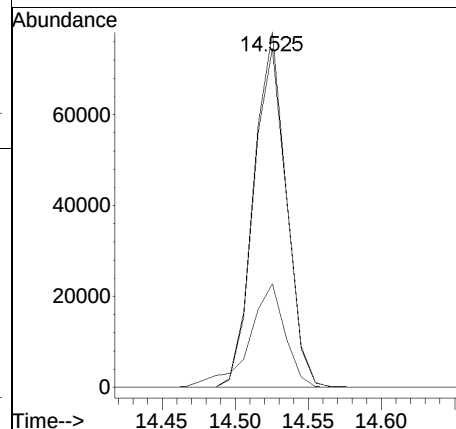
Tgt Ion	Ratio	Lower	Upper
225	100		
223	61.7	50.1	75.1
227	64.0	50.2	75.4

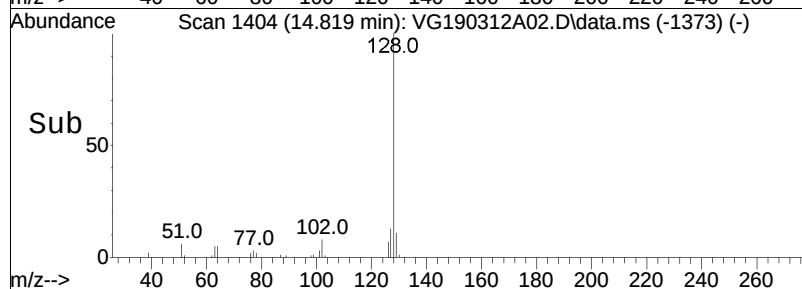
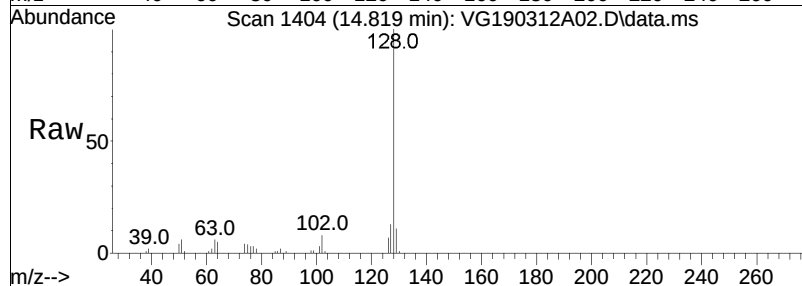
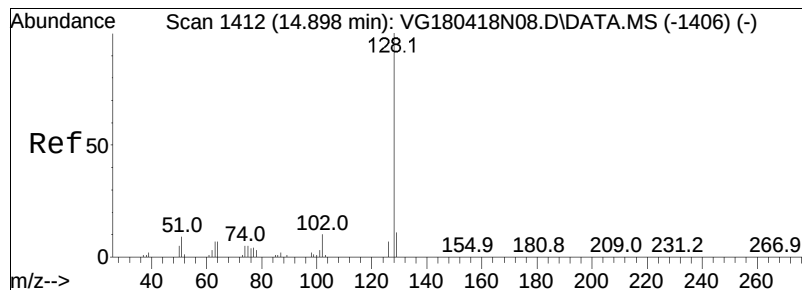




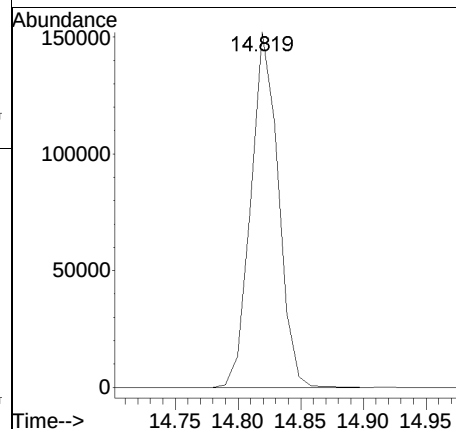
#109
 1,2,4-Trichlorobenzene
 Concen: 9.88 ug/L
 RT: 14.525 min Scan# 1374
 Delta R.T. 0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

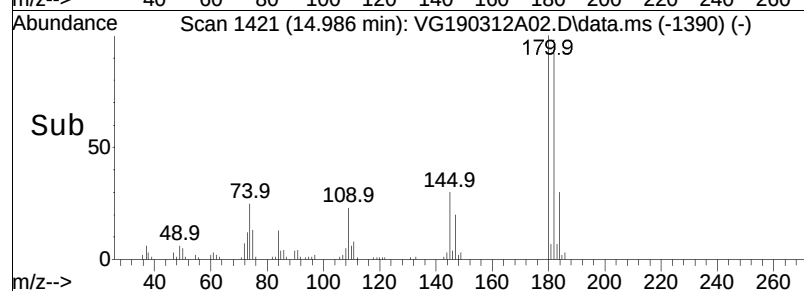
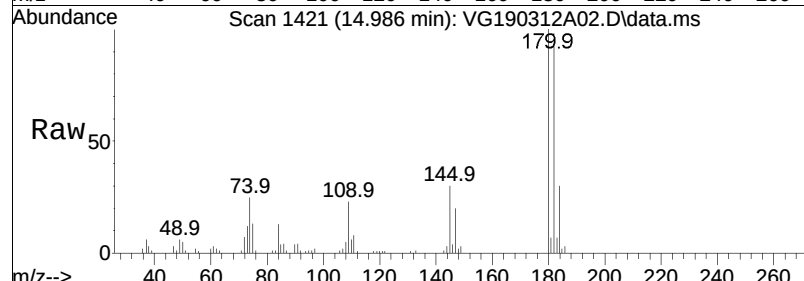
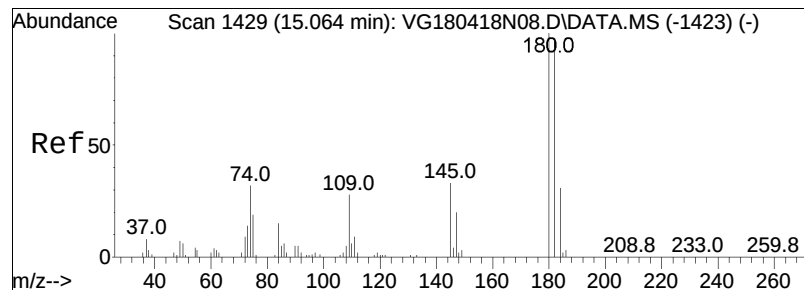
Tgt	Ion	Ratio	Resp	Lower	Upper
180	100		121363		
182	96.3	76.7	115.1		
145	32.2	26.5	39.7		





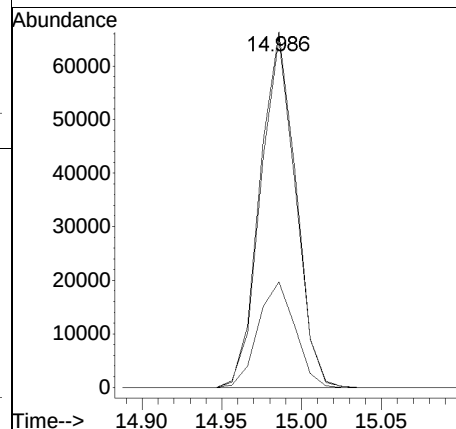
#110
Naphthalene
Concen: 10.90 ug/L
RT: 14.819 min Scan# 1404
Delta R.T. 0.000 min
Lab File: VG190312A02.D
Acq: 12 Mar 2019 8:32
Tgt Ion:128 Resp: 231302





#111
 1,2,3-Trichlorobenzene
 Concen: 10.24 ug/L
 RT: 14.986 min Scan# 1421
 Delta R.T. -0.000 min
 Lab File: VG190312A02.D
 Acq: 12 Mar 2019 8:32

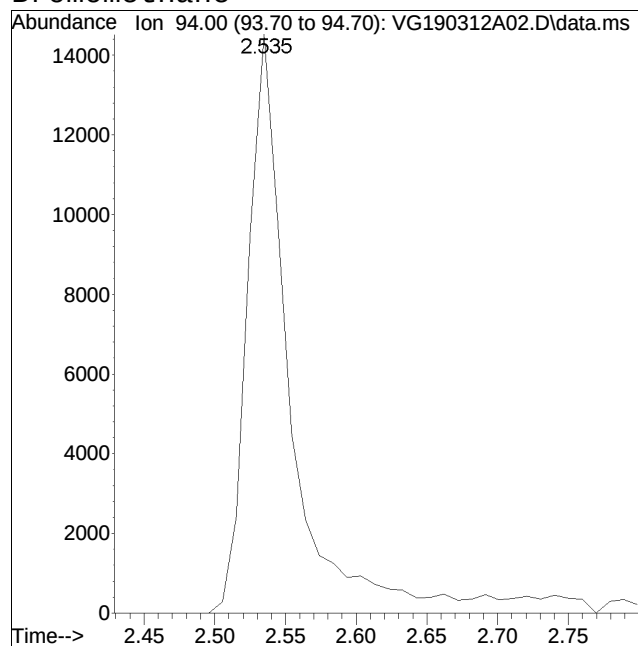
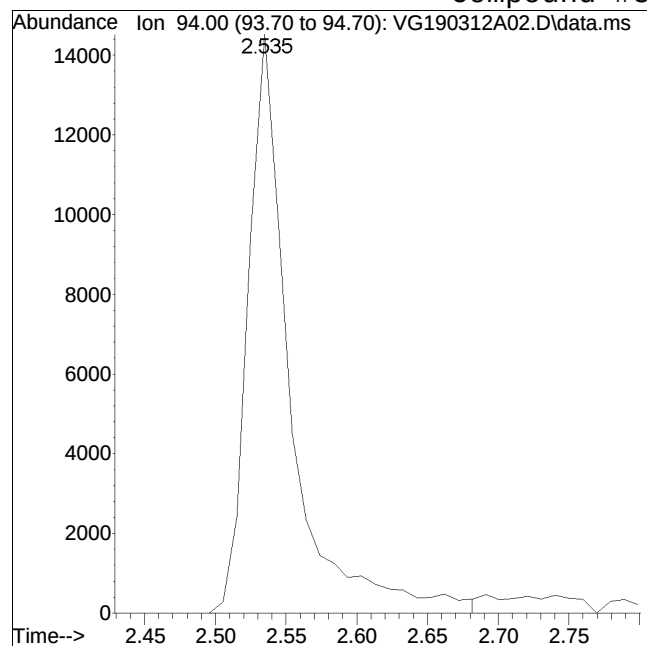
Tgt	Ion	Ratio	Resp	Lower	Upper
180	100		103540		
182	95.9	77.0	115.4		
145	30.5	24.1	36.1		



Manual Integration Report

Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190312A02.D Operator : GONZO:PD
Date Inj'd : 3/12/2019 8:32 Instrument : Gonzo
Sample : WG1214926-3,31,10,10 Quant Date : 3/12/2019 9:00 am

Compound #5: Bromomethane



Original Peak Response = 30377

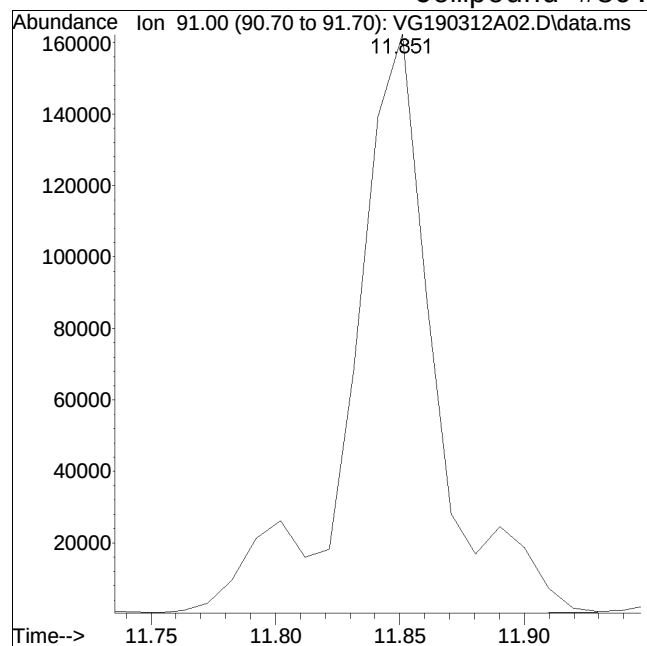
Manual Peak Response = 32202 M1

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

Manual Integration Report

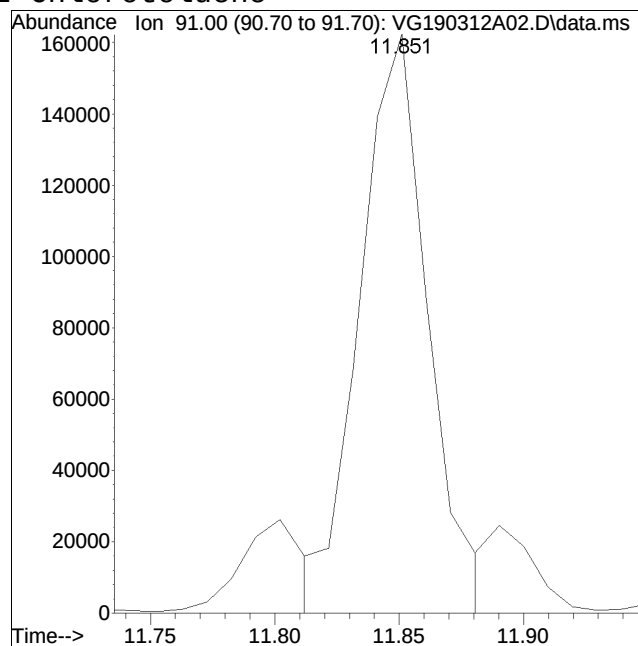
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190312A02.D Operator : GONZO:PD
Date Inj'd : 3/12/2019 8:32 Instrument : Gonzo
Sample : WG1214926-3,31,10,10 Quant Date : 3/12/2019 9:00 am

Compound #89: 2-Chlorotoluene



Original Peak Response = 378853

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

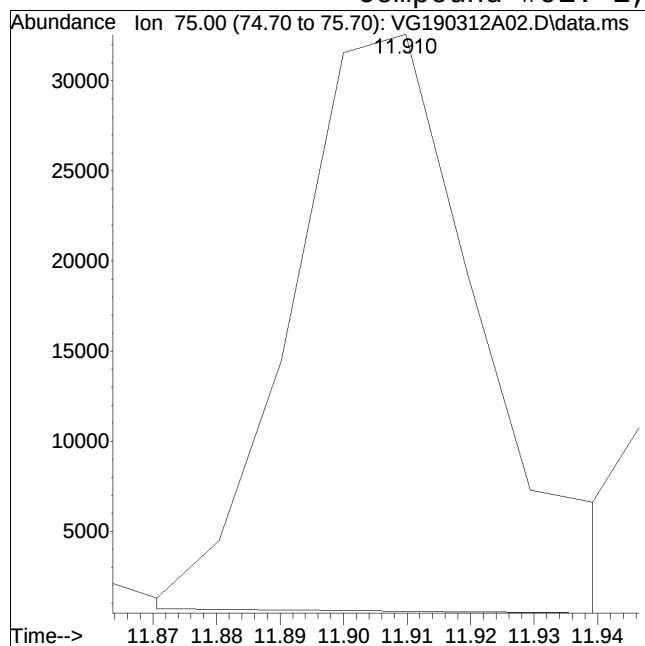


Manual Peak Response = 306401 M1

Manual Integration Report

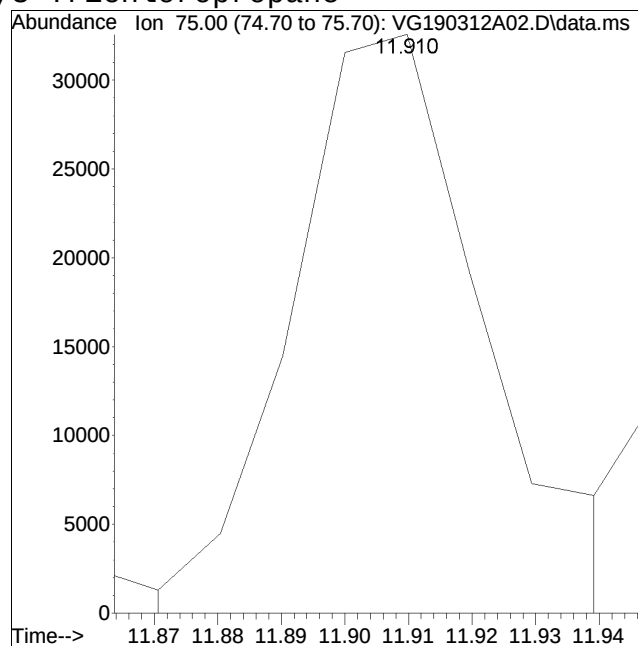
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190312A02.D Operator : GONZO:PD
Date Inj'd : 3/12/2019 8:32 Instrument : Gonzo
Sample : WG1214926-3,31,10,10 Quant Date : 3/12/2019 9:00 am

Compound #91: 1,2,3-Trichloropropane



Original Peak Response = 65866

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



Manual Peak Response = 68293 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N02.D
 Acq On : 12 Mar 2019 6:29 pm
 Operator : VOA108:KJD
 Sample : WG1215235-3,31,10,10
 Misc : WG1215235,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 18:44:24 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.548	96	304926	10.000	ug/L	-0.01
Standard Area 1 = 304926			Recovery	=	100.00%	
59) Chlorobenzene-d5	8.526	117	209940	10.000	ug/L	0.00
Standard Area 1 = 209940			Recovery	=	100.00%	
79) 1,4-Dichlorobenzene-d4	10.007	152	100075	10.000	ug/L	0.00
Standard Area 1 = 100075			Recovery	=	100.00%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.572	113	80446	10.329	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.29%	
43) 1,2-Dichloroethane-d4	5.208	65	90336	10.319	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.19%	
60) Toluene-d8	7.241	98	290239	10.087	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.87%	
83) 4-Bromofluorobenzene	9.340	95	89964	9.187	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	91.87%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.974	85	54898	9.009	ug/L	96
3) Chloromethane	1.094	50	60672	10.108	ug/L	98
4) Vinyl chloride	1.150	62	69001	10.764	ug/L	94
5) Bromomethane	1.359	94	53561	9.703	ug/L	99
6) Chloroethane	1.440	64	65277	13.925	ug/L	99
7) Trichlorofluoromethane	1.543	101	120802	11.674	ug/L	96
8) Ethyl ether	1.783	74	34433	9.988	ug/L #	62
10) 1,1-Dichloroethene	1.914	96	57231	9.983	ug/L #	66
11) Carbon disulfide	1.920	76	176879	9.816	ug/L	98
15) Methylene chloride	2.408	84	67807	9.929	ug/L	70
17) Acetone	2.466	43	11642	9.822	ug/L	90
18) trans-1,2-Dichloroethene	2.558	96	64291	9.885	ug/L	73
20) Methyl tert-butyl ether	2.687	73	146008	8.546	ug/L	91
23) 1,1-Dichloroethane	3.205	63	116933	10.164	ug/L	98
25) Acrylonitrile	3.278	53	17755	9.953	ug/L	96
27) Vinyl acetate	3.579	43	116520	8.543	ug/L #	93
28) cis-1,2-Dichloroethene	3.908	96	71459	9.681	ug/L #	69
29) 2,2-Dichloropropane	4.045	77	85150	9.008	ug/L	92
30) Bromochloromethane	4.179	128	34944	10.242	ug/L #	55
32) Chloroform	4.340	83	123241	10.259	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N02.D
 Acq On : 12 Mar 2019 6:29 pm
 Operator : VOA108:KJD
 Sample : WG1215235-3,31,10,10
 Misc : WG1215235,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 18:44:24 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
34)	Carbon tetrachloride	4.457	117	94084	10.481	ug/L		98
37)	1,1,1-Trichloroethane	4.555	97	104189	9.945	ug/L	#	97
39)	2-Butanone	4.756	43	19138	9.239	ug/L	#	66
40)	1,1-Dichloropropene	4.728	75	82602	9.850	ug/L		97
41)	Benzene	5.032	78	260651	9.955	ug/L		90
44)	1,2-Dichloroethane	5.289	62	93321	10.360	ug/L		98
48)	Trichloroethene	5.740	95	72348	10.377	ug/L		99
50)	Dibromomethane	6.186	93	42255	10.336	ug/L		98
51)	1,2-Dichloropropane	6.298	63	64233	9.460	ug/L		99
54)	Bromodichloromethane	6.404	83	96682	10.153	ug/L	#	95
57)	1,4-Dioxane	6.630	88	23966	807.091	ug/L	#	69
58)	cis-1,3-Dichloropropene	7.062	75	97427	9.128	ug/L		91
61)	Toluene	7.288	92	160925	9.835	ug/L		99
62)	4-Methyl-2-pentanone	7.690	58	16009	8.678	ug/L	#	95
63)	Tetrachloroethene	7.642	166	68696	9.778	ug/L		92
65)	trans-1,3-Dichloropropene	7.706	75	82314	8.911	ug/L		96
68)	1,1,2-Trichloroethane	7.837	83	48772	10.405	ug/L		95
69)	Chlorodibromomethane	7.968	129	69590	10.090	ug/L		98
70)	1,3-Dichloropropane	8.046	76	96214	10.167	ug/L		99
71)	1,2-Dibromoethane	8.127	107	55163	9.893	ug/L		98
72)	2-Hexanone	8.364	43	23718	7.427	ug/L		92
73)	Chlorobenzene	8.537	112	181173	9.954	ug/L		89
74)	Ethylbenzene	8.576	91	292770	9.596	ug/L		99
75)	1,1,1,2-Tetrachloroethane	8.596	131	66754	9.799	ug/L		95
76)	p/m Xylene	8.682	106	219089	18.881	ug/L		95
77)	o Xylene	8.964	106	214963	18.711	ug/L		90
78)	Styrene	9.000	104	355686	19.382	ug/L		88
80)	Bromoform	9.006	173	40093	9.625	ug/L		95
82)	Isopropylbenzene	9.173	105	287100	9.827	ug/L		97
84)	Bromobenzene	9.396	156	71007	9.445	ug/L		95
85)	n-Propylbenzene	9.430	91	346305	10.384	ug/L		98
87)	1,1,2,2-Tetrachloroethane	9.483	83	67447	9.940	ug/L		97
88)	4-Ethyltoluene	9.499	105	282494	10.170	ug/L		98
89)	2-Chlorotoluene	9.513	91	236078	9.698	ug/L		94
90)	1,3,5-Trimethylbenzene	9.555	105	235179	9.805	ug/L		92
91)	1,2,3-Trichloropropane	9.552	75	54759	10.387	ug/L		99
92)	trans-1,4-Dichloro-2-b...	9.586	53	17473	9.407	ug/L		94
93)	4-Chlorotoluene	9.616	91	205057	9.684	ug/L		94
94)	tert-Butylbenzene	9.739	119	212907	8.639	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N02.D
 Acq On : 12 Mar 2019 6:29 pm
 Operator : VOA108:KJD
 Sample : WG1215235-3,31,10,10
 Misc : WG1215235,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 18:44:24 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-Curve - Megamix plus Diox

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

97)	1,2,4-Trimethylbenzene	9.784	105	225369	9.442	ug/L	95
98)	sec-Butylbenzene	9.845	105	322336	10.675	ug/L	99
99)	p-Isopropyltoluene	9.932	119	256364	9.890	ug/L	97
100)	1,3-Dichlorobenzene	9.962	146	140861	10.162	ug/L	99
101)	1,4-Dichlorobenzene	10.015	146	144720	10.080	ug/L	99
102)	p-Diethylbenzene	10.141	119	131958	8.698	ug/L	95
103)	n-Butylbenzene	10.174	91	236200	9.825	ug/L	99
104)	1,2-Dichlorobenzene	10.255	146	131351	9.715	ug/L	99
105)	1,2,4,5-Tetramethylben...	10.598	119	79486	3.644	ug/L	98
106)	1,2-Dibromo-3-chloropr...	10.710	155	8328	8.197	ug/L	81
108)	Hexachlorobutadiene	11.075	225	39783	9.122	ug/L	96
109)	1,2,4-Trichlorobenzene	11.089	180	54763	6.453	ug/L	96
110)	Naphthalene	11.270	128	115149	6.164	ug/L	100
111)	1,2,3-Trichlorobenzene	11.371	180	47082	6.138	ug/L	97

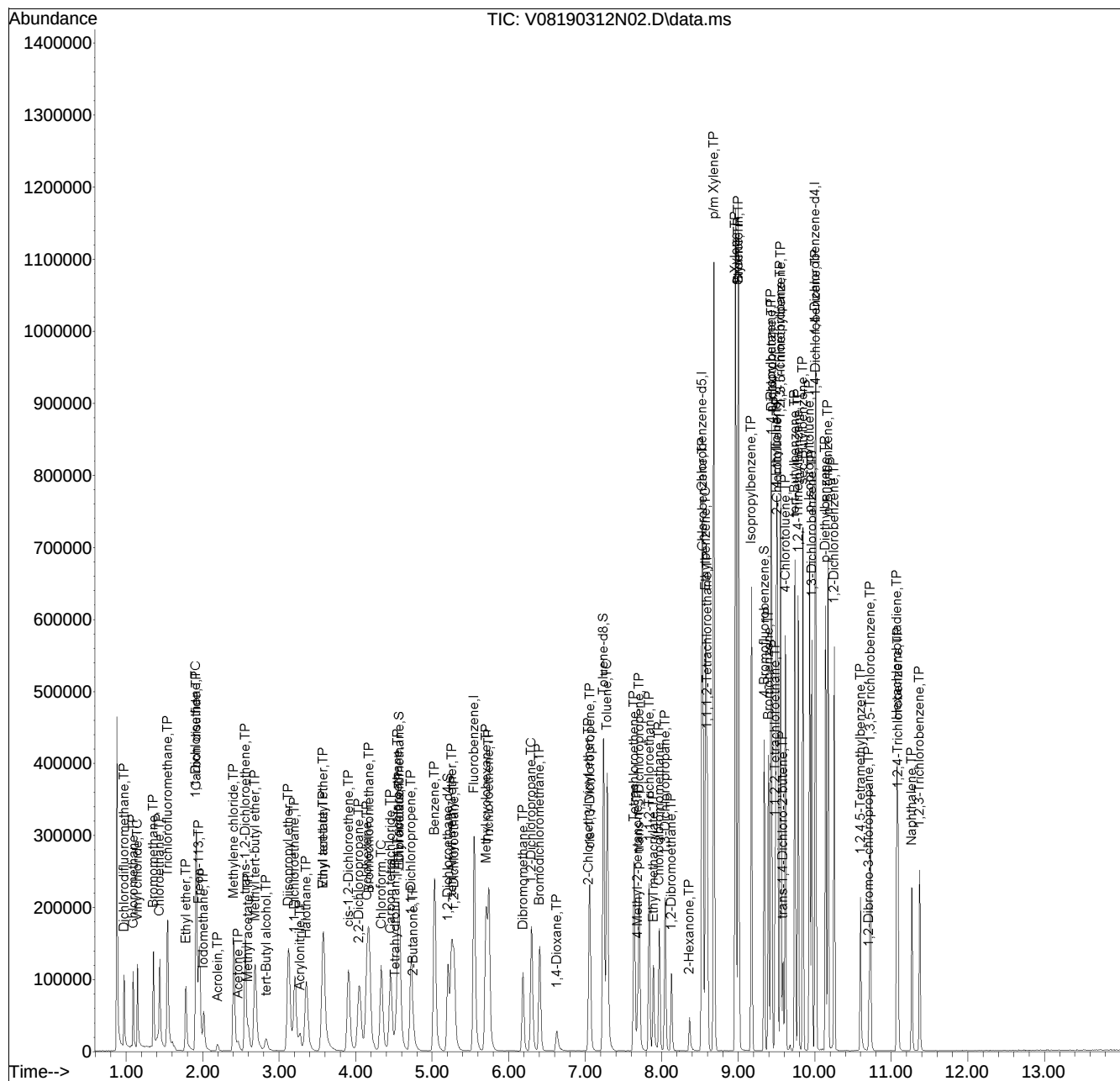
(#) = qualifier out of range (m) = manual integration (+) = signals summed

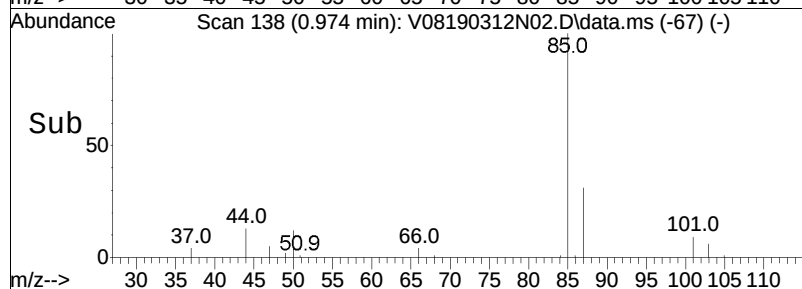
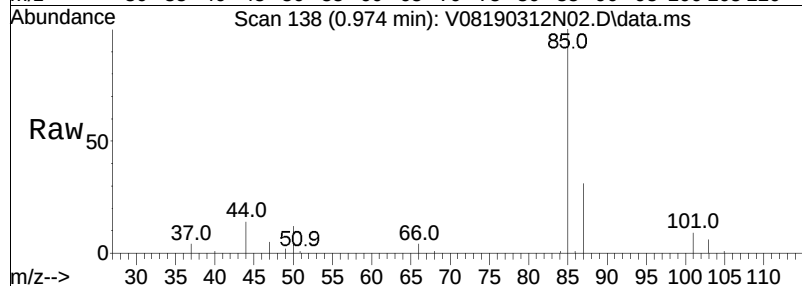
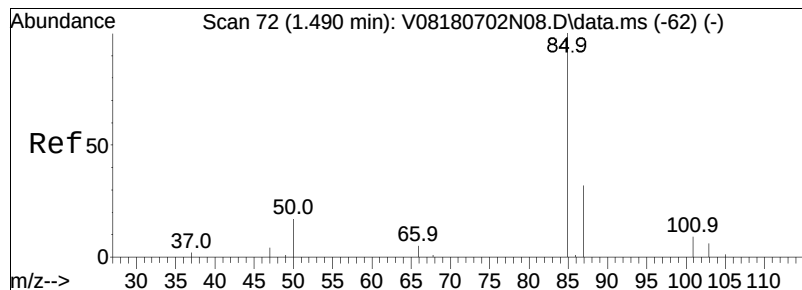
(QT Reviewed)

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Data Path : I:\VOLATILES\VOA108\2019\190312N\
Data File : V08190312N02.D
Acq On    : 12 Mar 2019    6:29 pm
Operator  : VOA108:KJD
Sample    : WG1215235-3, 31, 10, 10
Misc      : WG1215235, ICAL15519
ALS Vial  : 2    Sample Multiplier: 1
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Quant Time: Mar 12 18:44:24 2019
Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Feb 19 00:08:39 2019
Response via : Initial Calibration

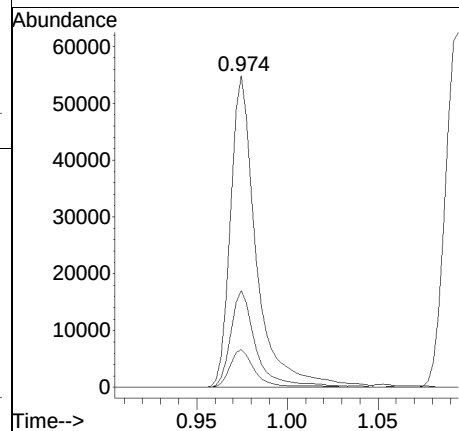
Sub List : 8260-Curve - Megamix plus Diox90312N\V08190312N02.D•

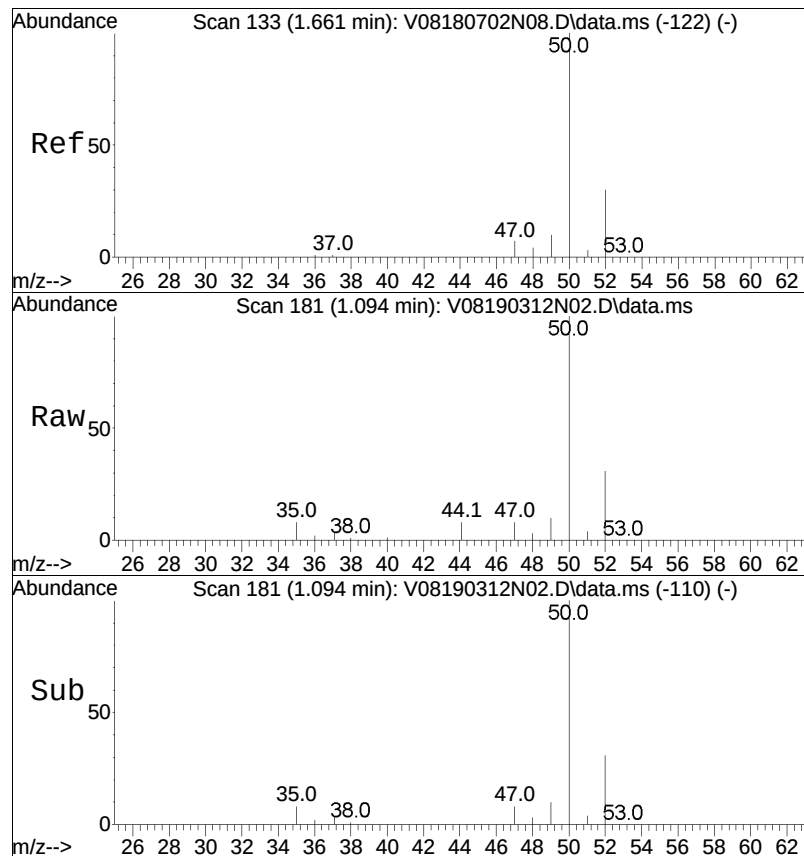




#2
 Dichlorodifluoromethane
 Concen: 9.01 ug/L
 RT: 0.974 min Scan# 138
 Delta R.T. -0.003 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

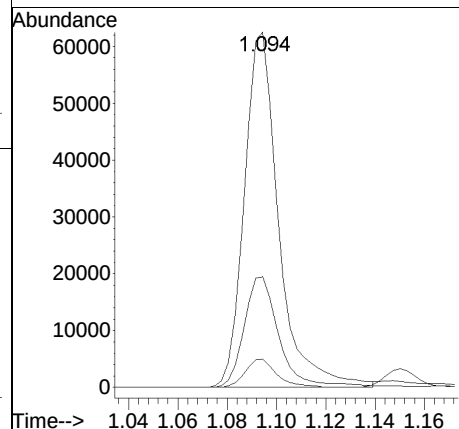
Tgt Ion:	85	Resp:	54898
Ion Ratio	Lower	Upper	
85	100		
87	30.5	21.0	43.6
50	11.4	8.9	18.5

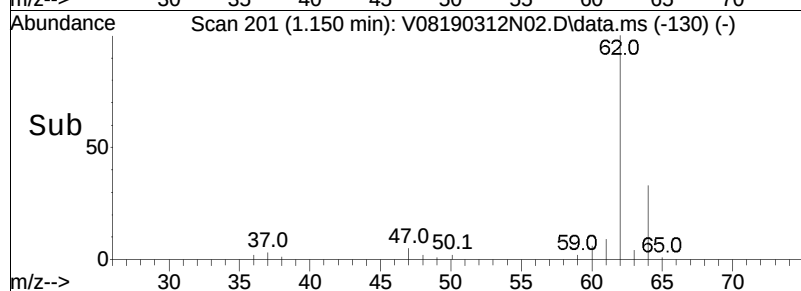
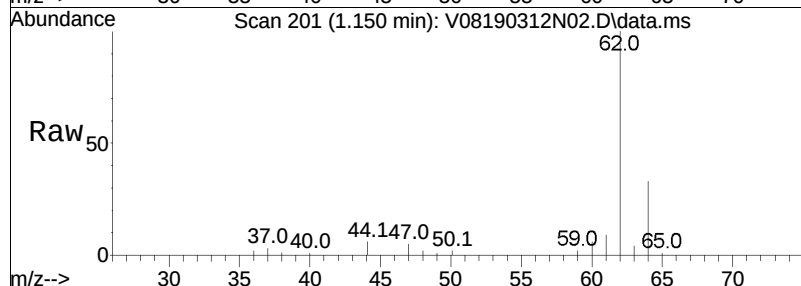
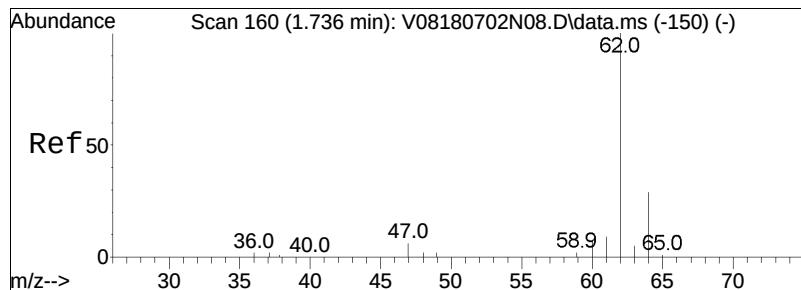




#3
 Chloromethane
 Concen: 10.11 ug/L
 RT: 1.094 min Scan# 181
 Delta R.T. -0.003 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

Tgt Ion:	50	Resp:	60672
Ion Ratio	Lower	Upper	
50	100		
52	32.0	12.9	52.9
47	7.3	0.0	28.3





#4

Vinyl chloride

Concen: 10.76 ug/L

RT: 1.150 min Scan# 201

Delta R.T. -0.003 min

Lab File: V08190312N02.D

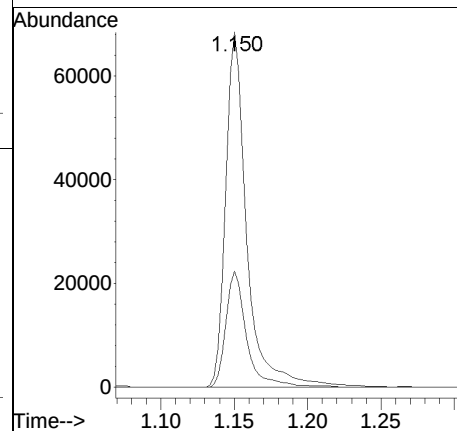
Acq: 12 Mar 2019 6:29 pm

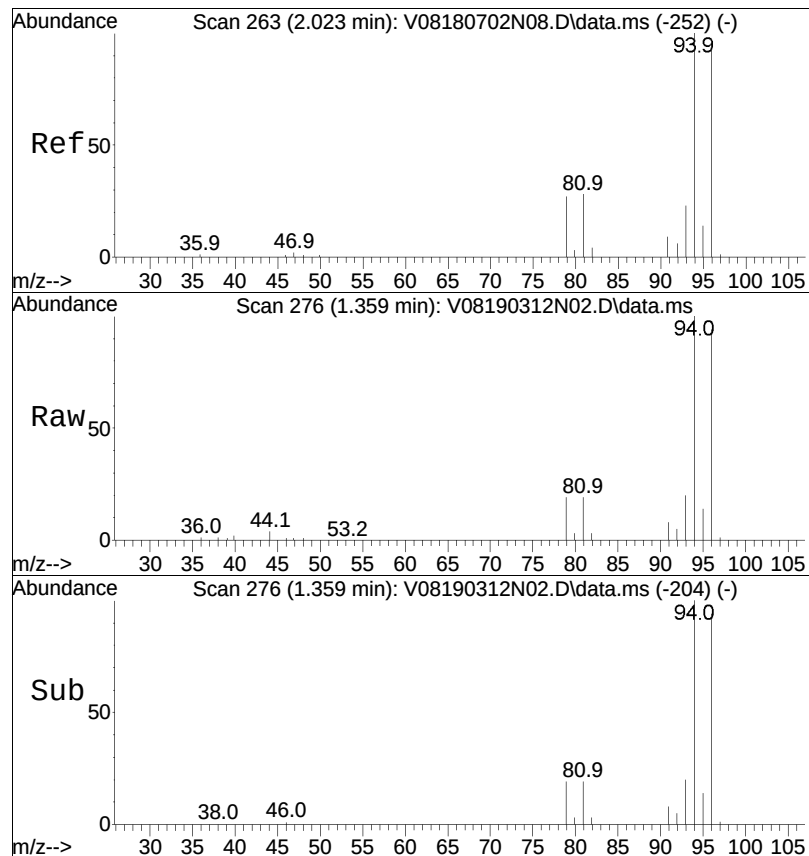
Tgt Ion: 62 Resp: 69001

Ion Ratio Lower Upper

62 100

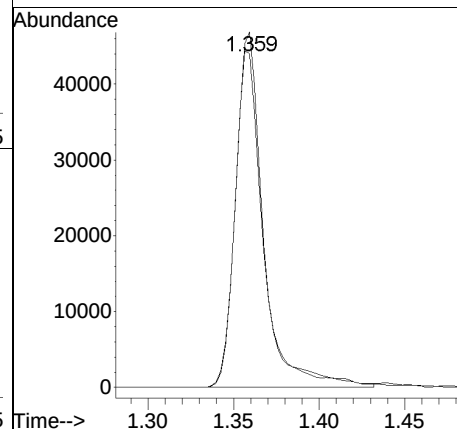
64 32.3 9.1 49.1

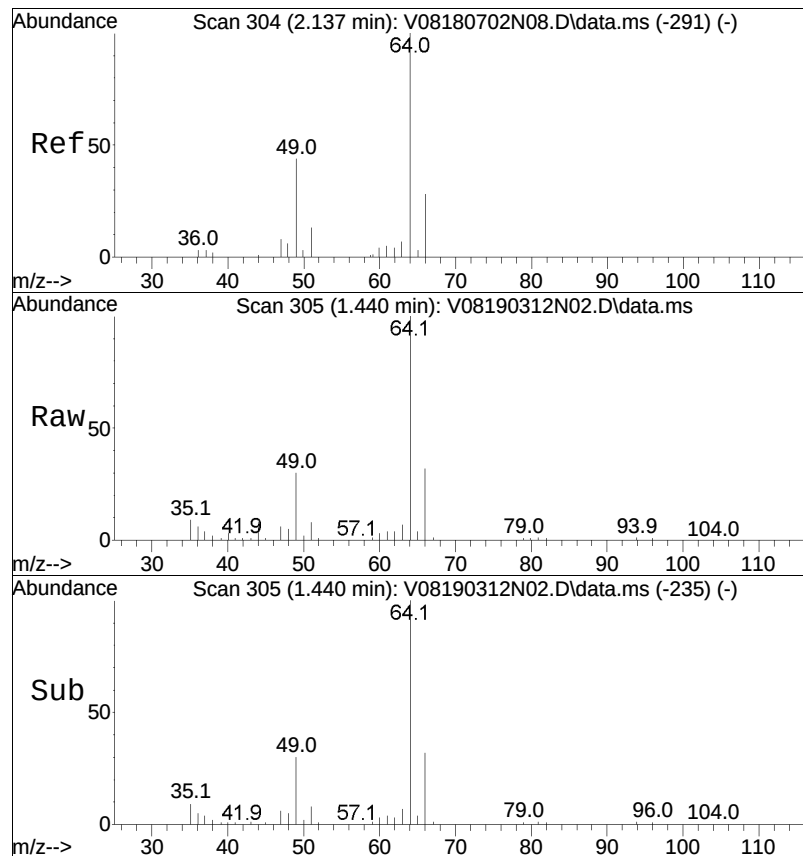




#5
 Bromomethane
 Concen: 9.70 ug/L
 RT: 1.359 min Scan# 276
 Delta R.T. 0.000 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

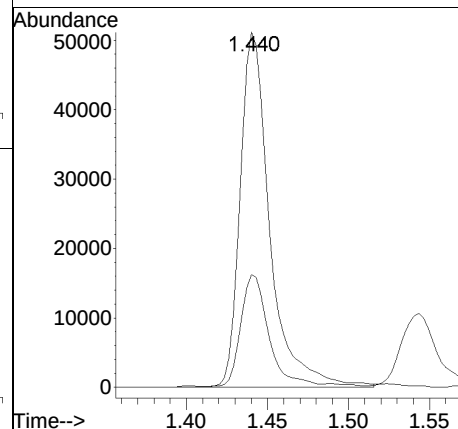
Tgt Ion	Ratio	Lower	Upper
94	100		
96	95.0	75.6	115.6

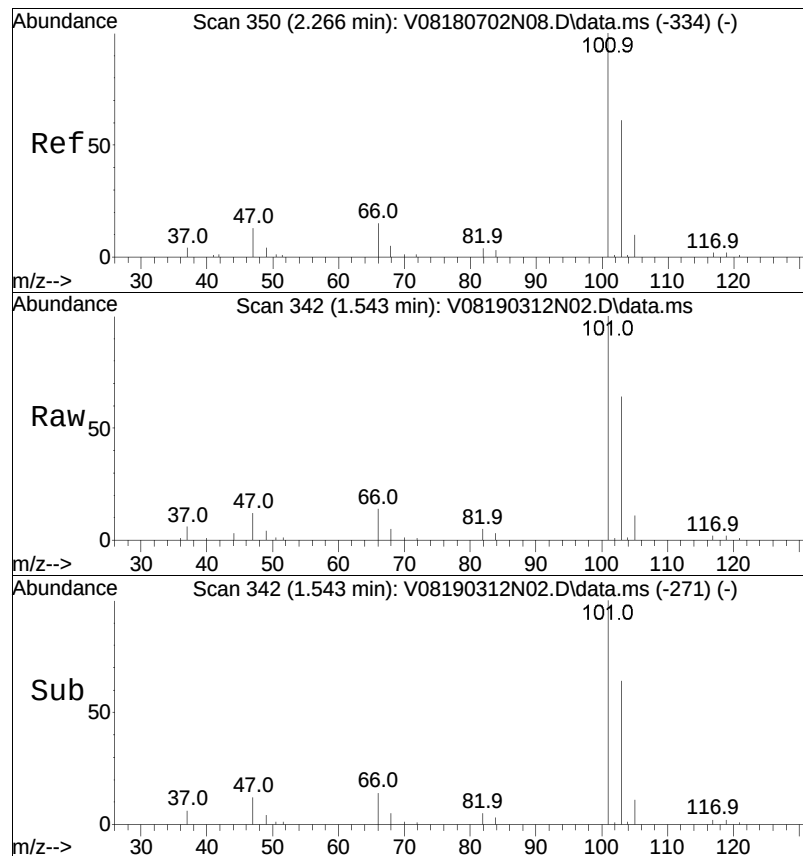




#6
 Chloroethane
 Concen: 13.92 ug/L
 RT: 1.440 min Scan# 305
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

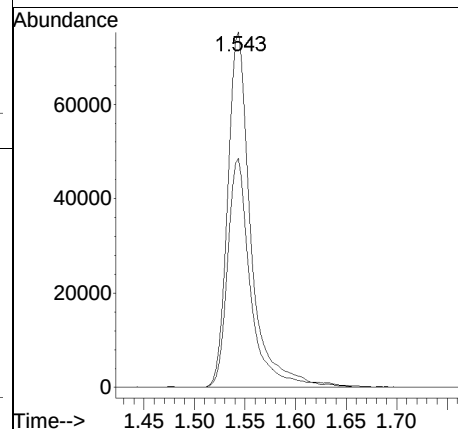
Tgt Ion	Ratio	Lower	Upper
64	100		
66	29.0	9.8	49.8

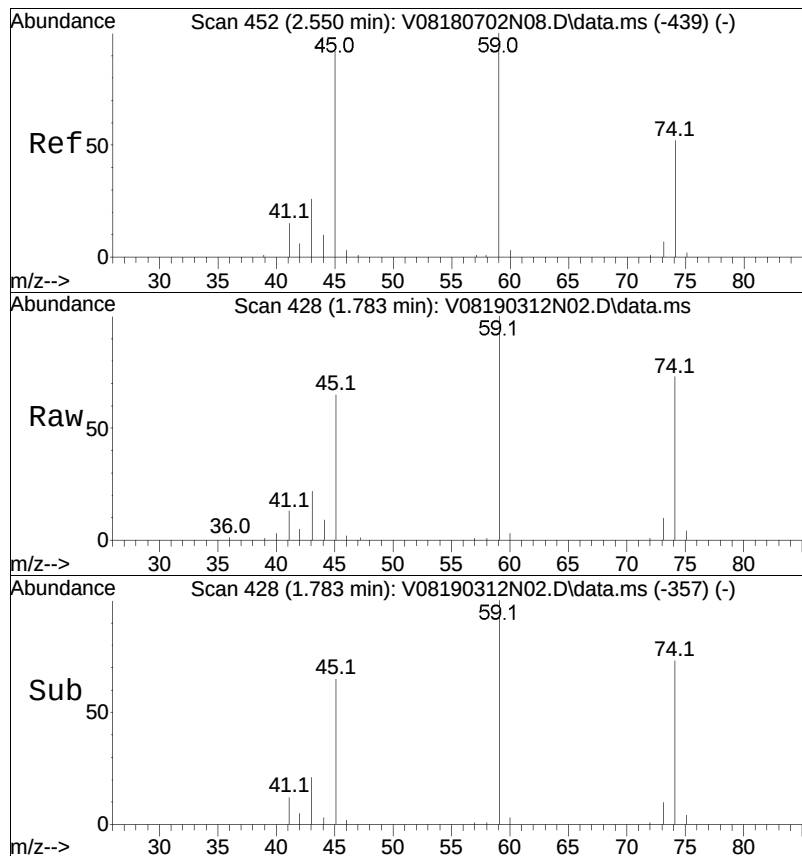




#7
 Trichlorofluoromethane
 Concen: 11.67 ug/L
 RT: 1.543 min Scan# 342
 Delta R.T. -0.003 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

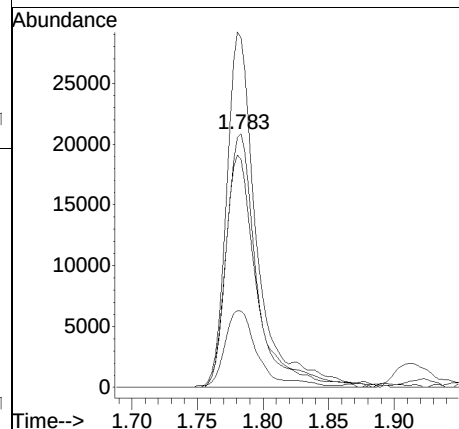
Tgt	Ion	Ratio	Lower	Upper
101	101	100		
103	63.6	53.8	80.6	

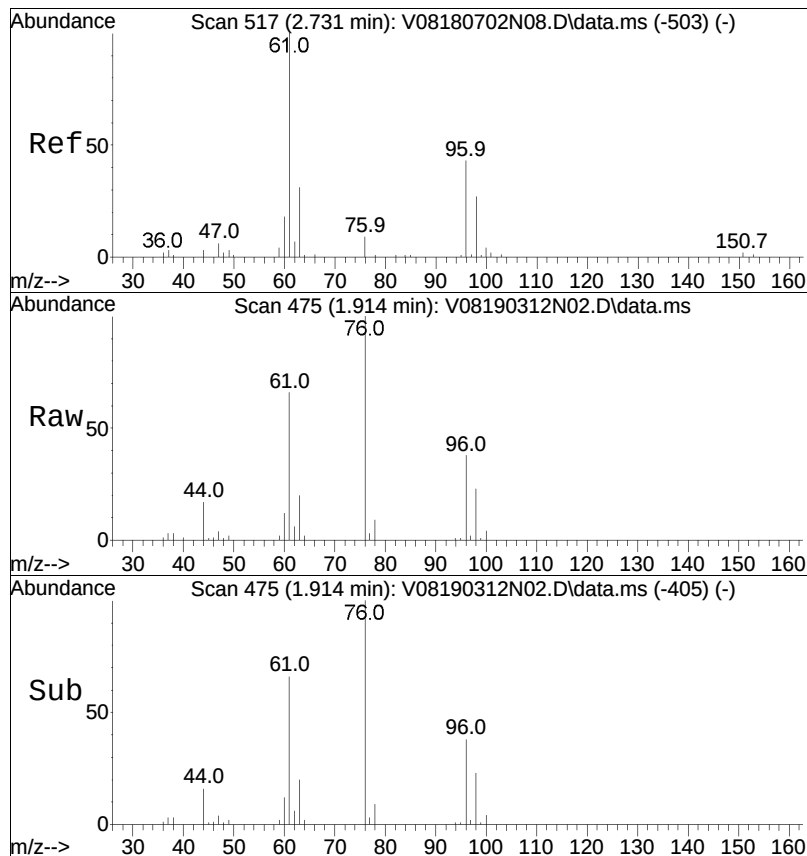




#8
 Ethyl ether
 Concen: 9.99 ug/L
 RT: 1.783 min Scan# 428
 Delta R.T. -0.003 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

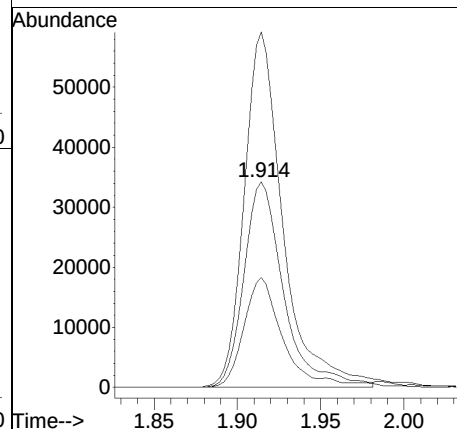
Tgt Ion:	74	Resp:	34433
Ion Ratio	Lower	Upper	
74	100		
59	126.1	122.2	253.8
45	91.7	91.9	190.9#
43	32.7	25.2	52.2

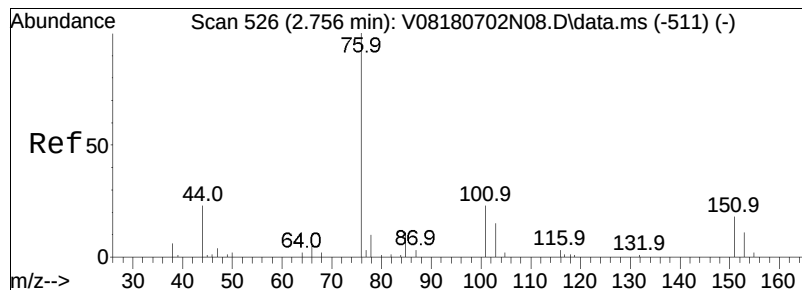




#10
 1,1-Dichloroethene
 Concen: 9.98 ug/L
 RT: 1.914 min Scan# 475
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

Tgt Ion:	96	Resp:	57231
Ion Ratio	Lower	Upper	
96	100		
61	170.6	186.1	279.1#
63	51.4	57.6	86.4#





#11

Carbon disulfide

Concen: 9.82 ug/L

RT: 1.920 min Scan# 477

Delta R.T. -0.005 min

Lab File: V08190312N02.D

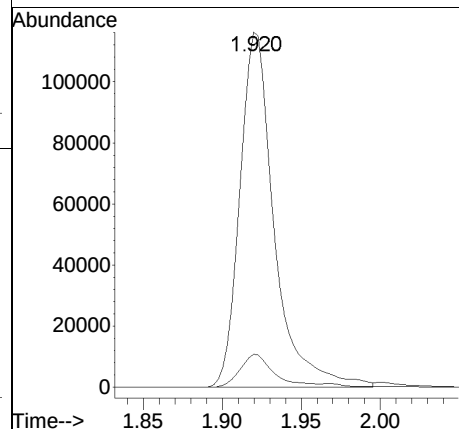
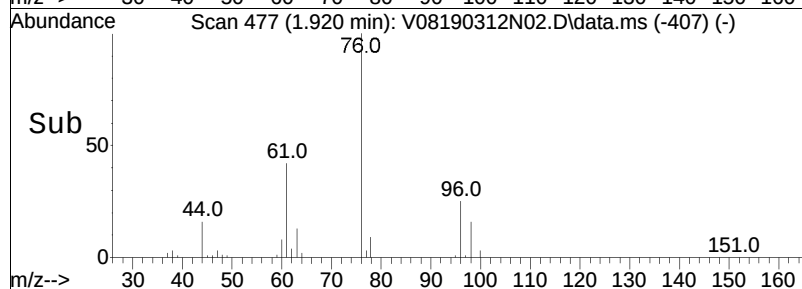
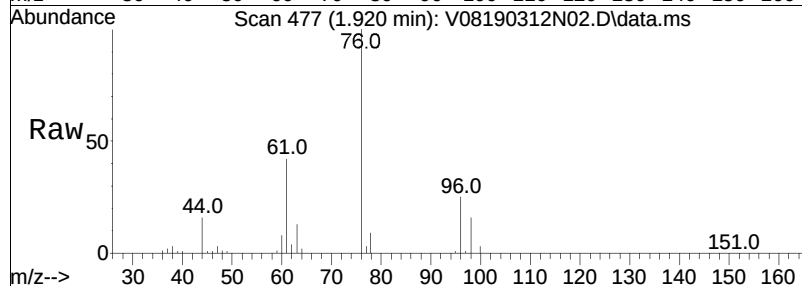
Acq: 12 Mar 2019 6:29 pm

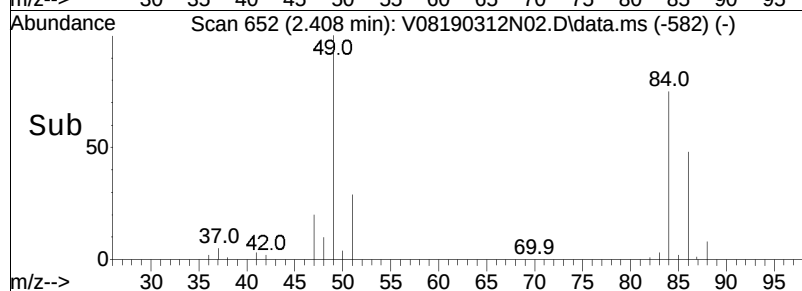
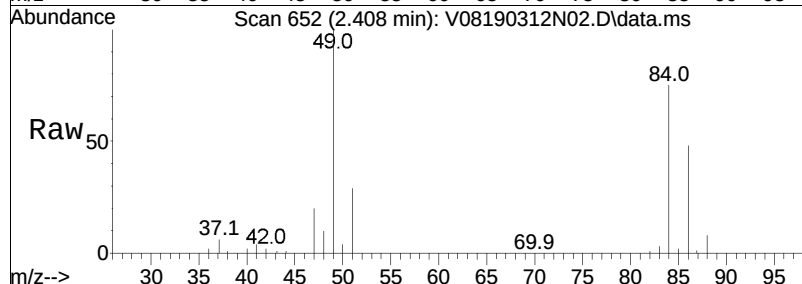
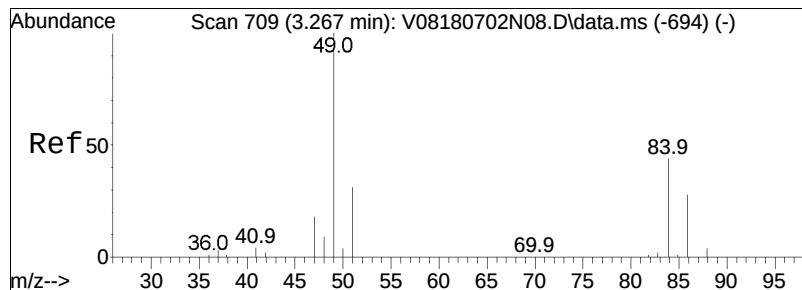
Tgt Ion: 76 Resp: 176879

Ion Ratio Lower Upper

76 100

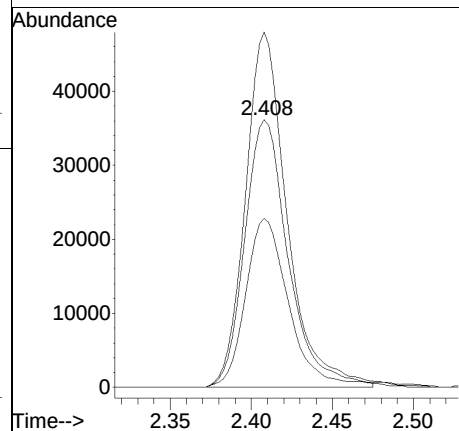
78 9.3 5.7 11.7

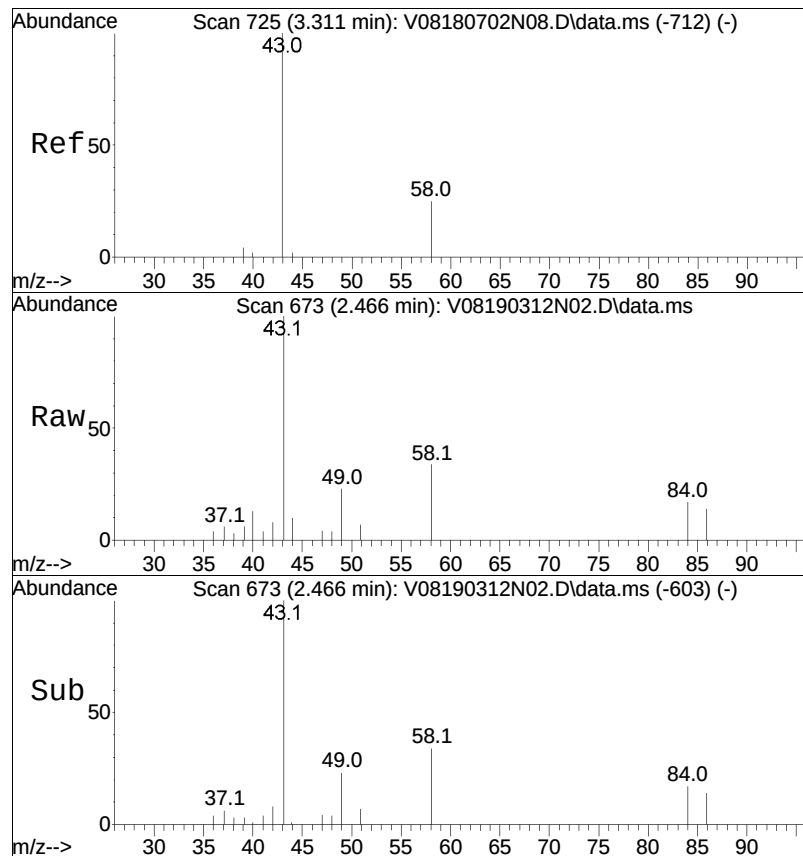




#15
Methylene chloride
Concen: 9.93 ug/L
RT: 2.408 min Scan# 652
Delta R.T. -0.005 min
Lab File: V08190312N02.D
Acq: 12 Mar 2019 6:29 pm

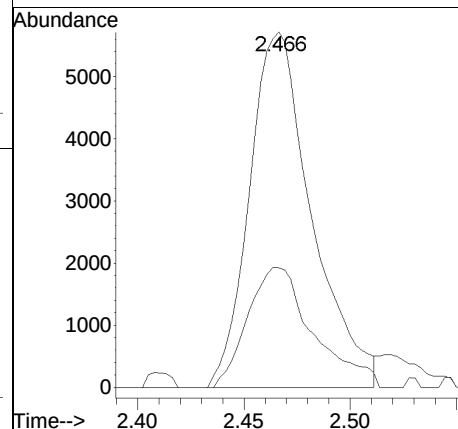
Tgt Ion:	84	Resp:	67807
Ion Ratio	Lower	Upper	
84	100		
86	62.9	40.4	83.8
49	127.5	120.0	249.2

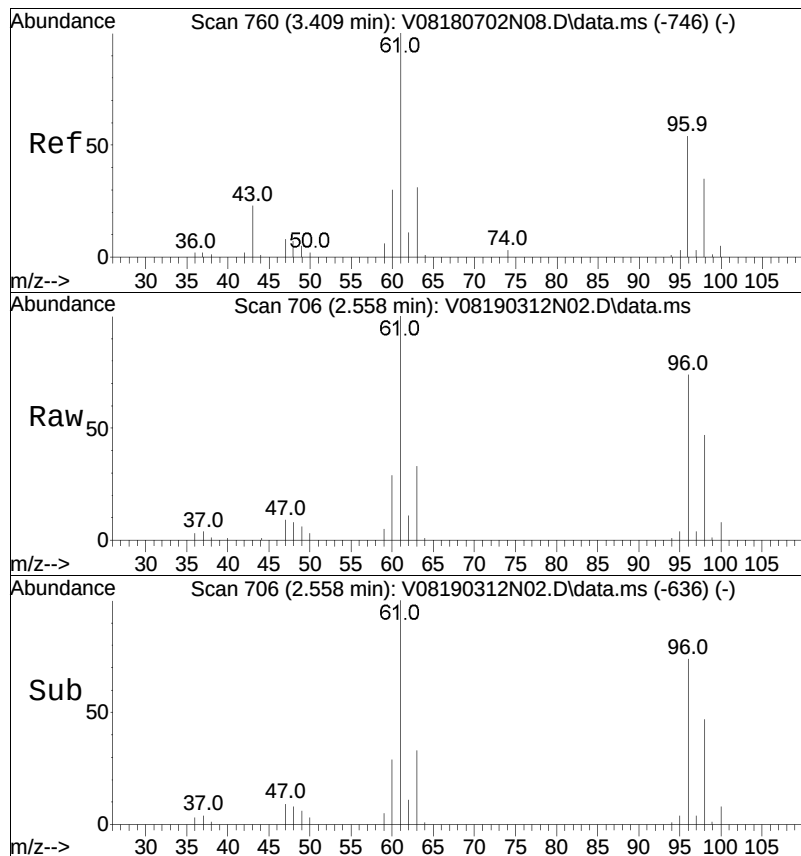




#17
 Acetone
 Concen: 9.82 ug/L
 RT: 2.466 min Scan# 673
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

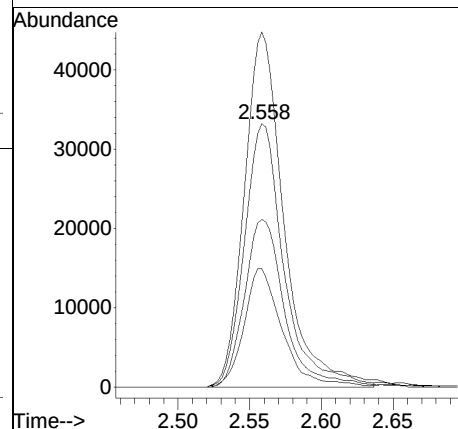
Tgt	Ion	Ratio	Lower	Upper
43	100			
58	35.6	24.2	36.4	

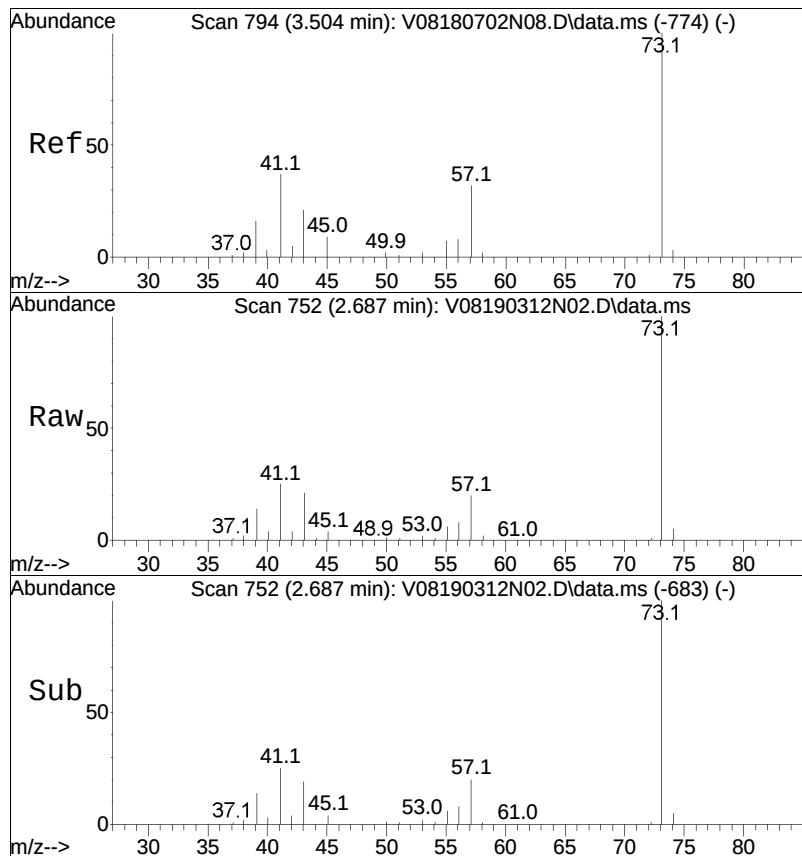




#18
 trans-1,2-Dichloroethene
 Concen: 9.89 ug/L
 RT: 2.558 min Scan# 706
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

Tgt Ion: 96	Resp: 64291
Ion Ratio	Lower Upper
96 100	
61 135.3	124.0 257.6
98 64.8	41.2 85.6
63 43.7	38.4 79.7





#20

Methyl tert-butyl ether

Concen: 8.55 ug/L

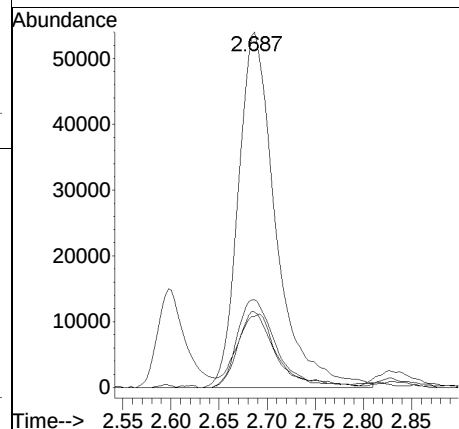
RT: 2.687 min Scan# 752

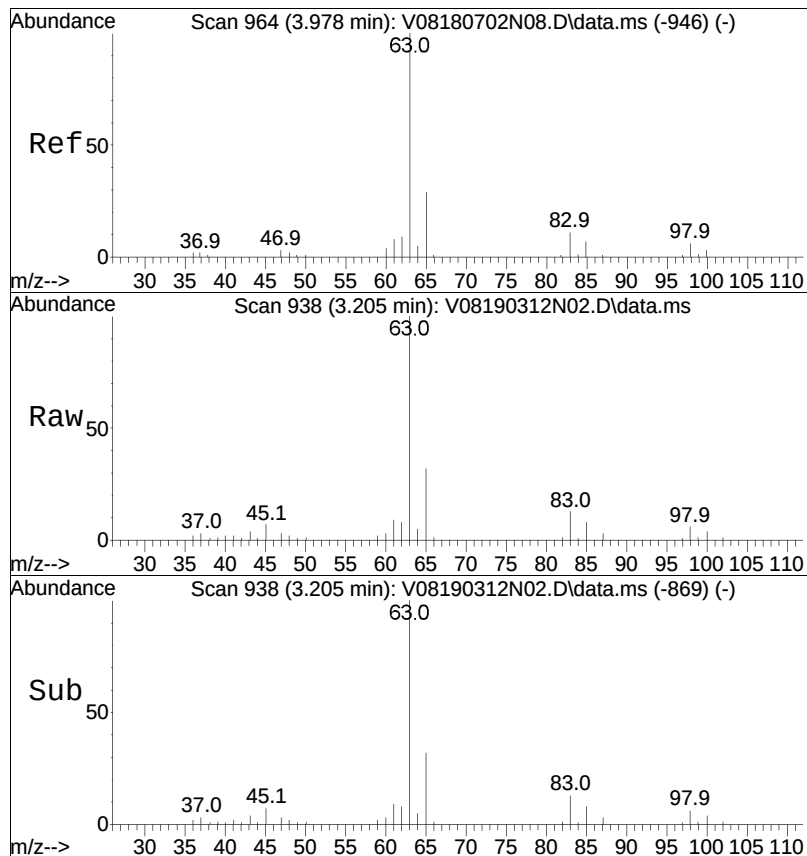
Delta R.T. -0.008 min

Lab File: V08190312N02.D

Acq: 12 Mar 2019 6:29 pm

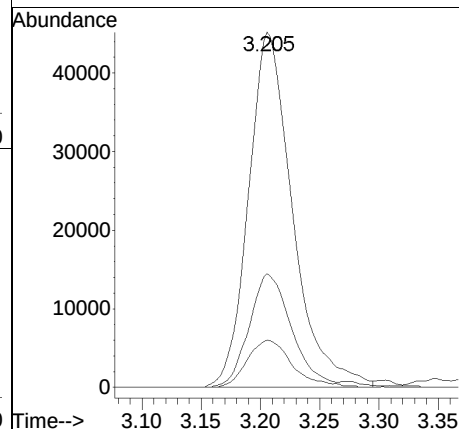
Tgt Ion:	73	Resp:	146008
Ion	Ratio	Lower	Upper
73	100		
57	21.0	17.5	36.3
43	18.1	15.3	31.9
41	24.8	15.3	31.7

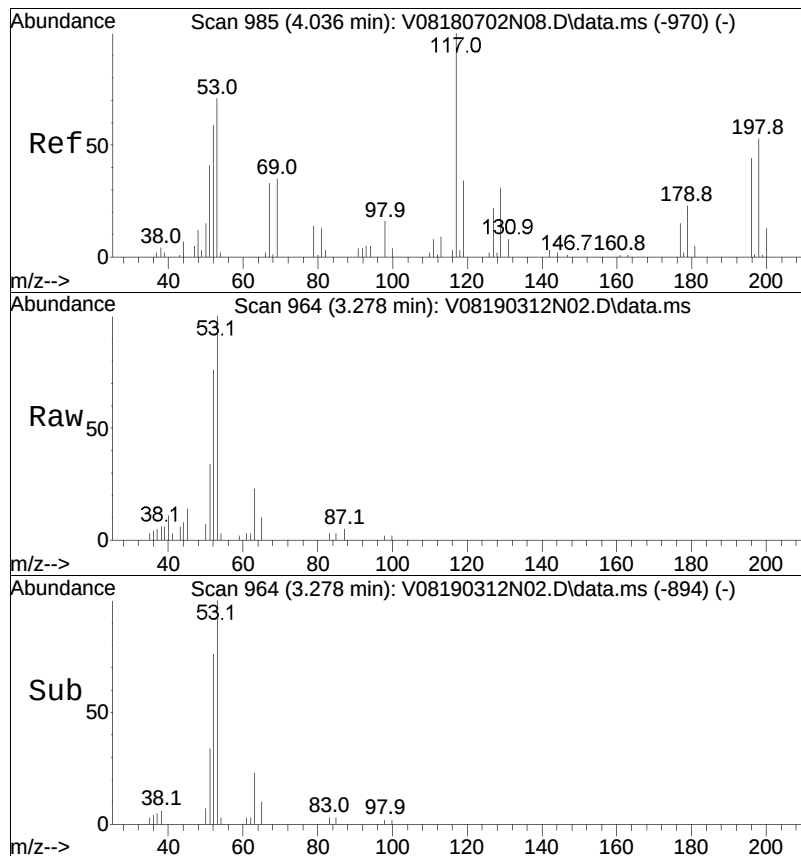




#23
 1,1-Dichloroethane
 Concen: 10.16 ug/L
 RT: 3.205 min Scan# 938
 Delta R.T. -0.009 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

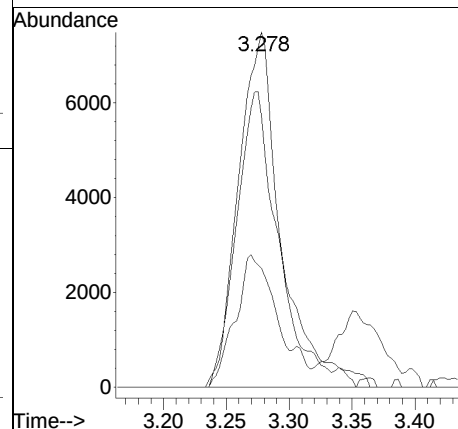
Tgt	Ion: 63	Resp:	116933
Ion	Ratio	Lower	Upper
63	100		
65	30.8	11.0	51.0
83	13.6	0.0	31.8

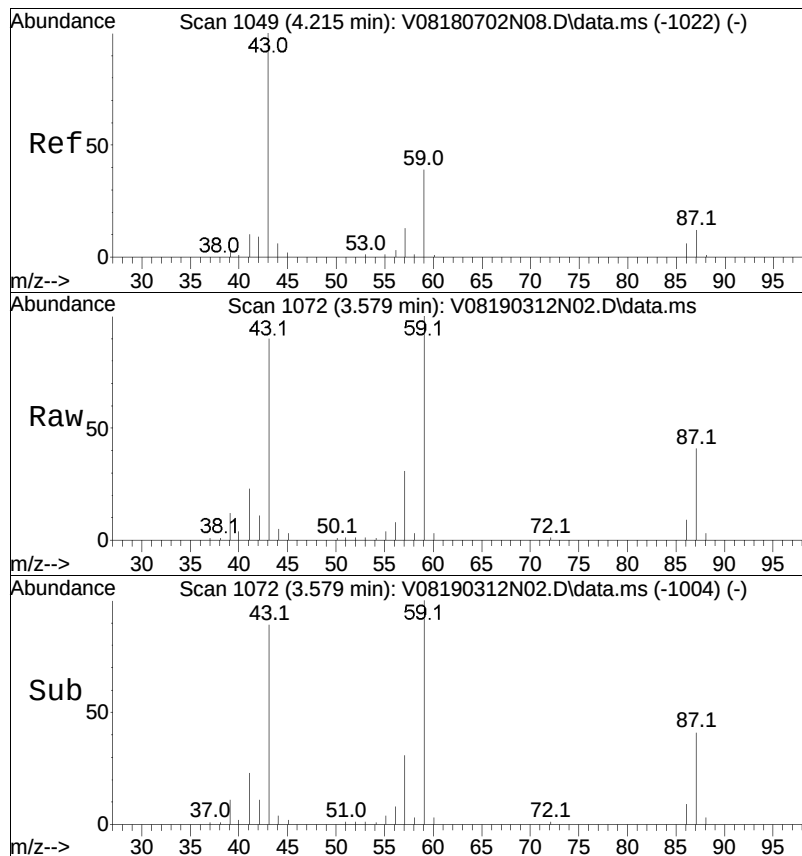




#25
 Acrylonitrile
 Concen: 9.95 ug/L
 RT: 3.278 min Scan# 964
 Delta R.T. -0.005 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

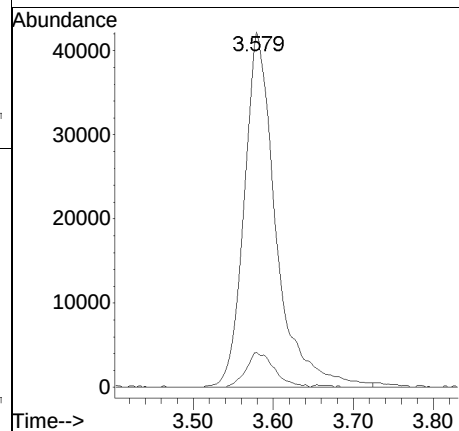
Tgt	Ion	Resp	Lower	Upper
53	100	17755		
52	80.8		66.7	100.1
51	33.8		30.6	46.0

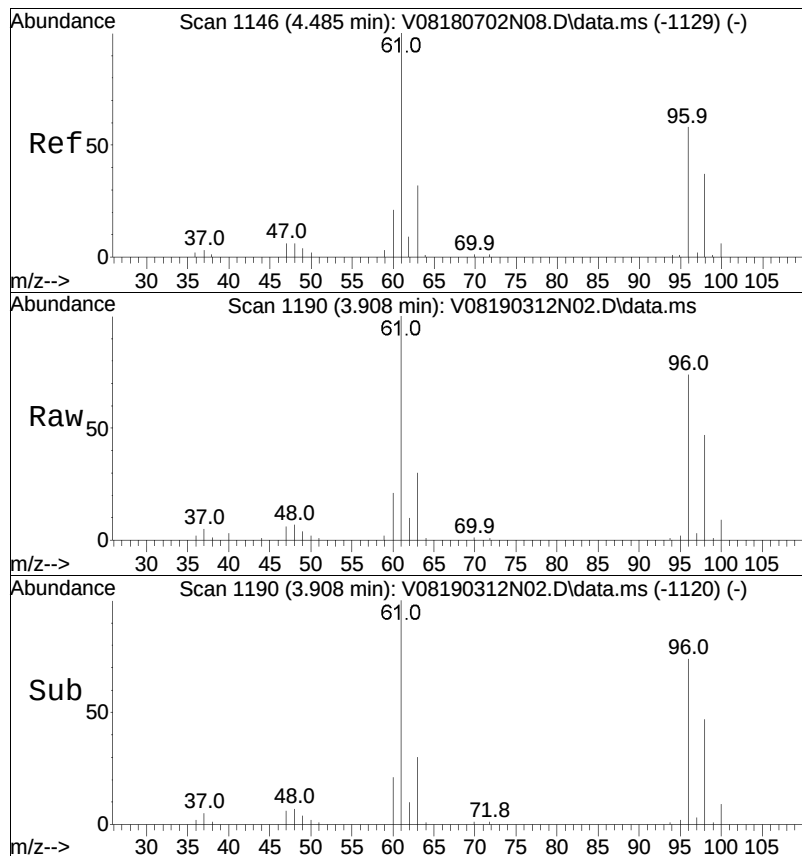




#27
 Vinyl acetate
 Concen: 8.54 ug/L
 RT: 3.579 min Scan# 1072
 Delta R.T. -0.011 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

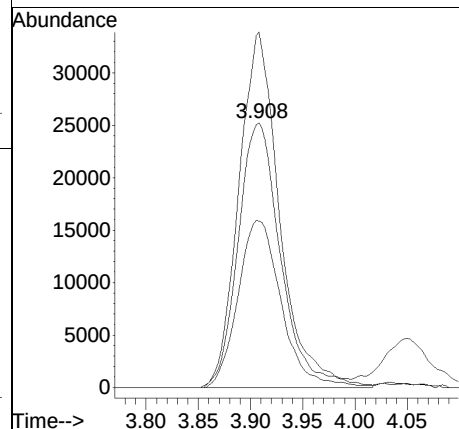
Tgt Ion	Ratio	Lower	Upper
43	100		
86	8.9	5.2	7.8#

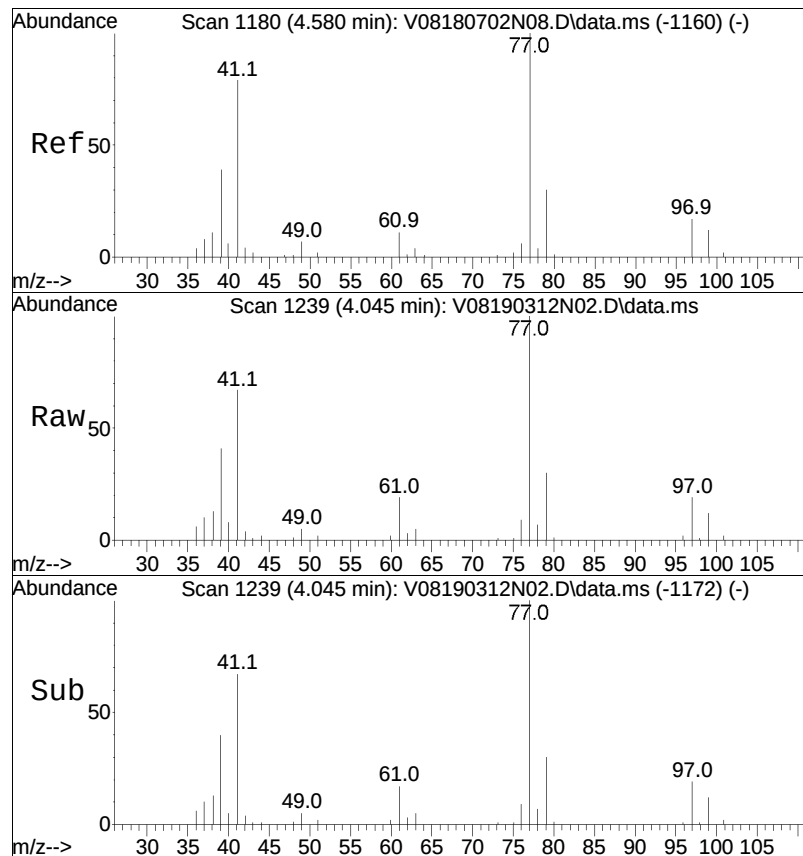




#28
 cis-1,2-Dichloroethene
 Concen: 9.68 ug/L
 RT: 3.908 min Scan# 1190
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

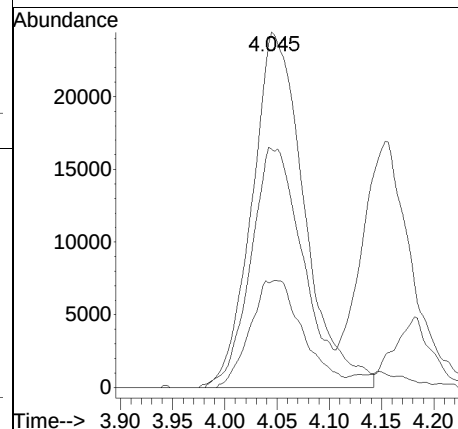
Tgt Ion:	96	Resp:	71459
Ion Ratio	Lower	Upper	
96	100		
61	127.6	149.4	224.2#
98	64.2	53.4	80.2

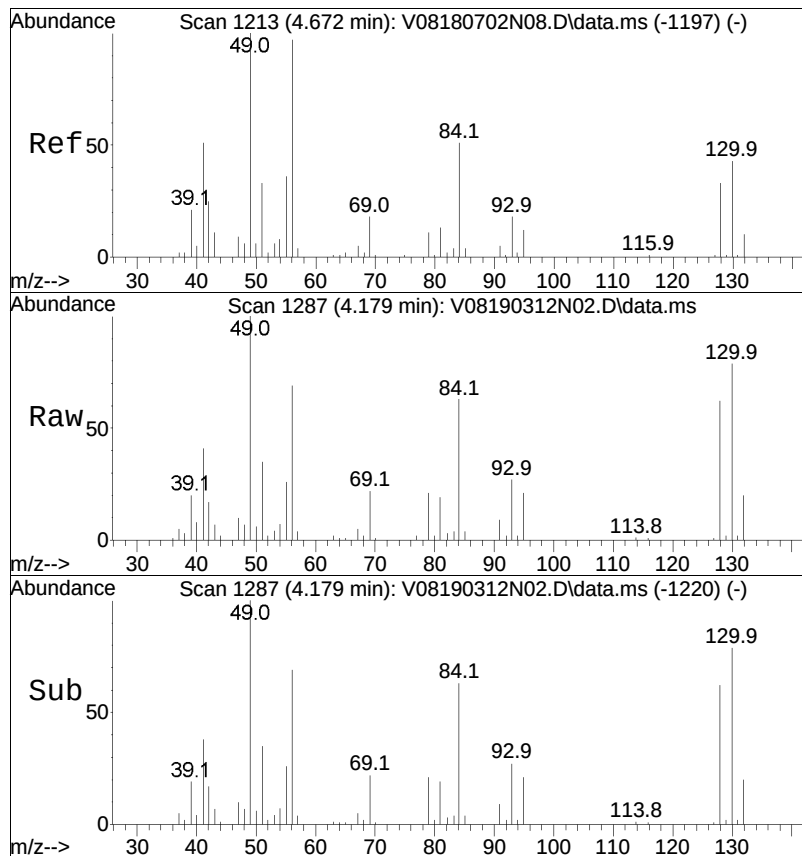




#29
 2,2-Dichloropropane
 Concen: 9.01 ug/L
 RT: 4.045 min Scan# 1239
 Delta R.T. -0.014 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

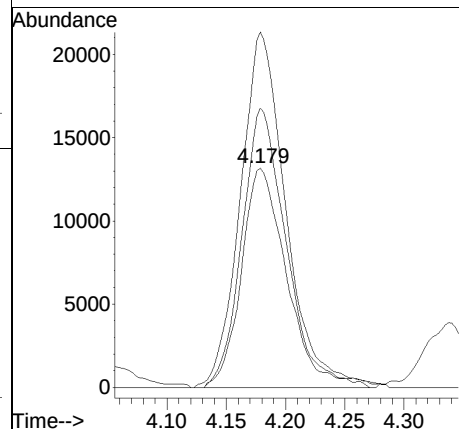
Tgt Ion:	77	Resp:	85150
Ion Ratio	Lower	Upper	
77	100		
41	66.6	38.0	78.8
79	30.4	20.5	42.5

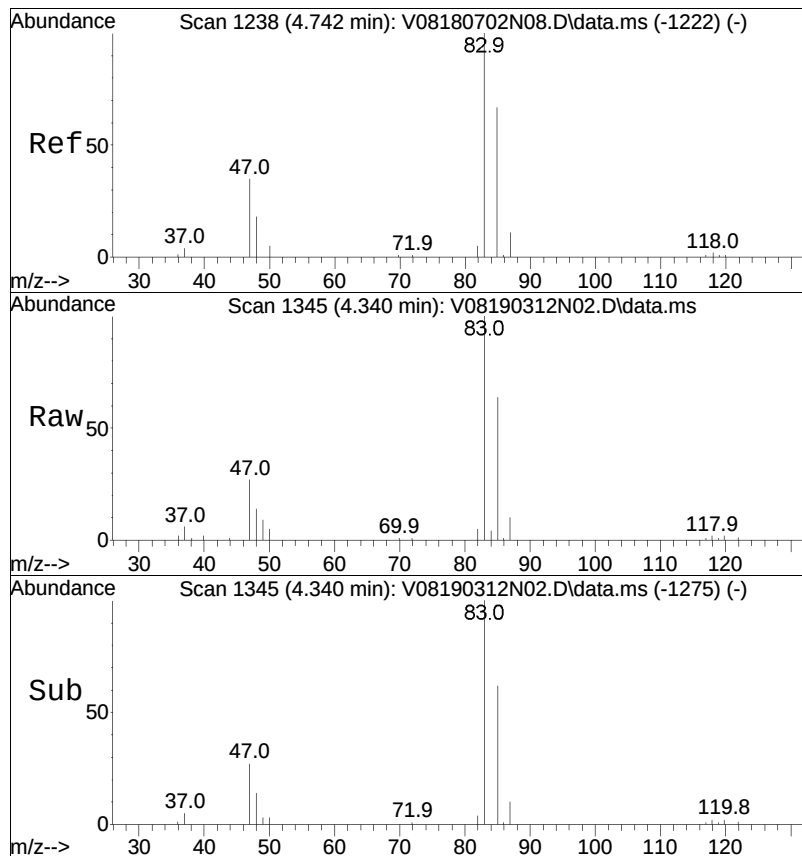




#30
 Bromochloromethane
 Concen: 10.24 ug/L
 RT: 4.179 min Scan# 1287
 Delta R.T. -0.013 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

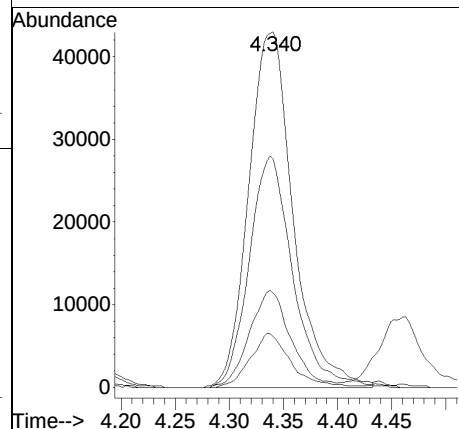
Tgt Ion:	128	Resp:	34944
Ion Ratio	Lower	Upper	
128	100		
49	163.2	223.0	334.4#
130	125.4	111.4	167.0

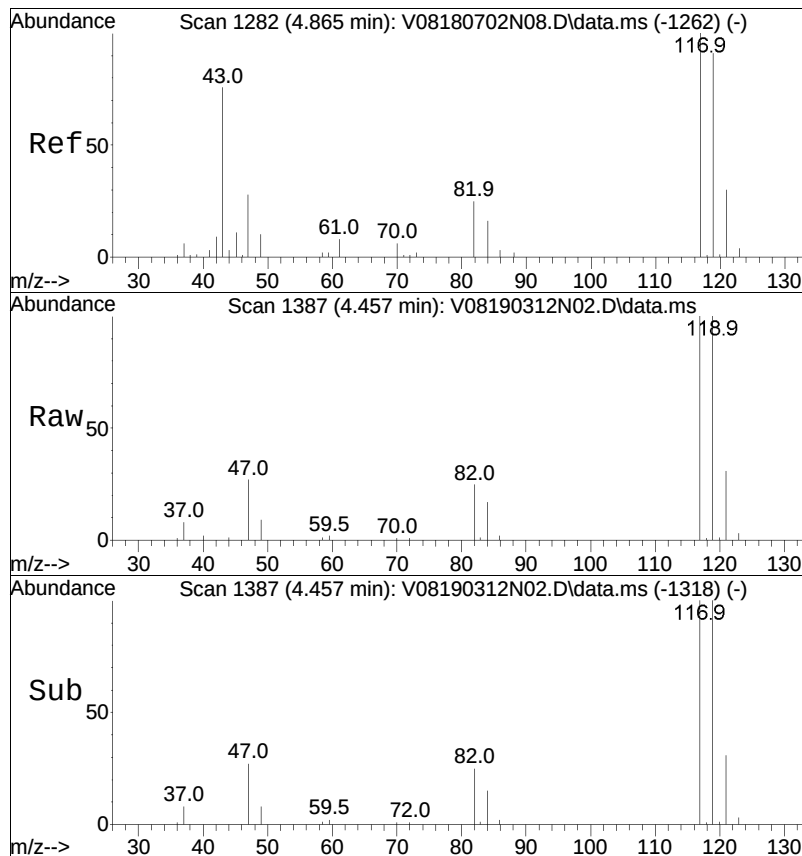




#32
 Chloroform
 Concen: 10.26 ug/L
 RT: 4.340 min Scan# 1345
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

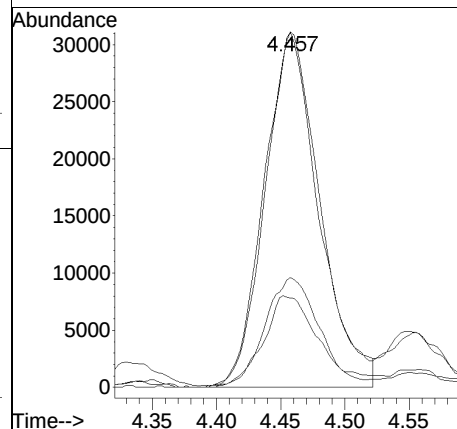
Tgt	Ion: 83	Resp:	123241
Ion	Ratio	Lower	Upper
83	100		
85	63.6	41.5	86.1
47	25.4	19.0	39.4
48	13.7	9.9	20.5

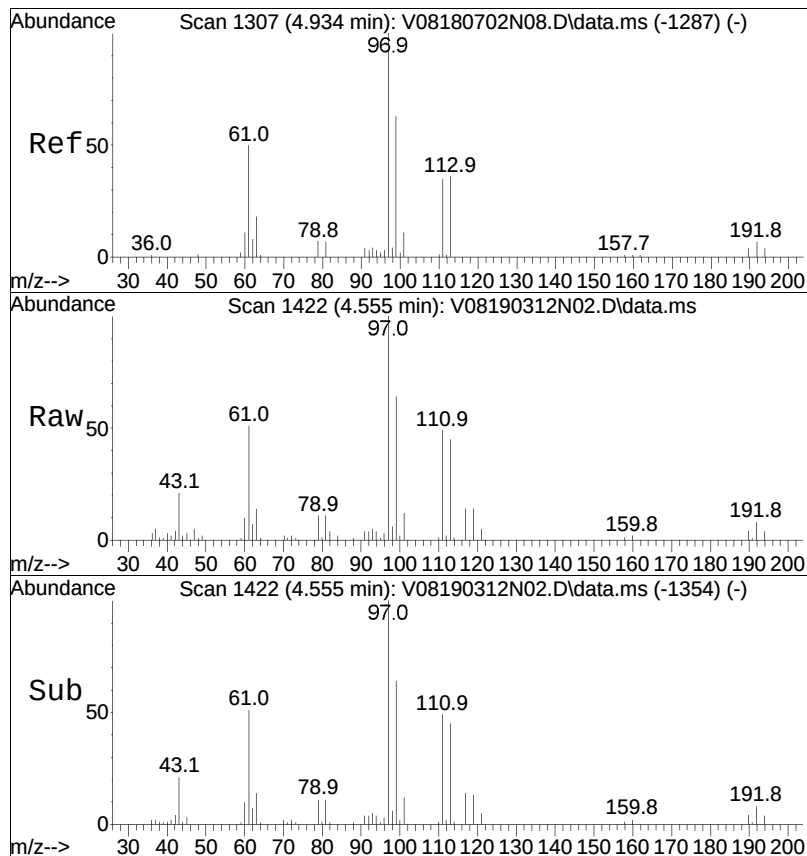




#34
 Carbon tetrachloride
 Concen: 10.48 ug/L
 RT: 4.457 min Scan# 1387
 Delta R.T. -0.009 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

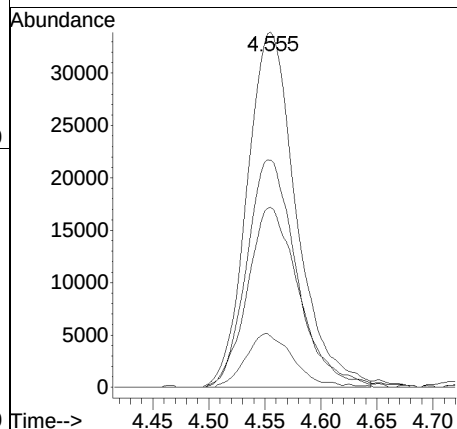
Tgt Ion:	117	Resp:	94084
Ion Ratio	Lower	Upper	
117	100		
119	95.1	62.4	129.6
121	31.8	19.5	40.5
82	24.1	17.0	35.4

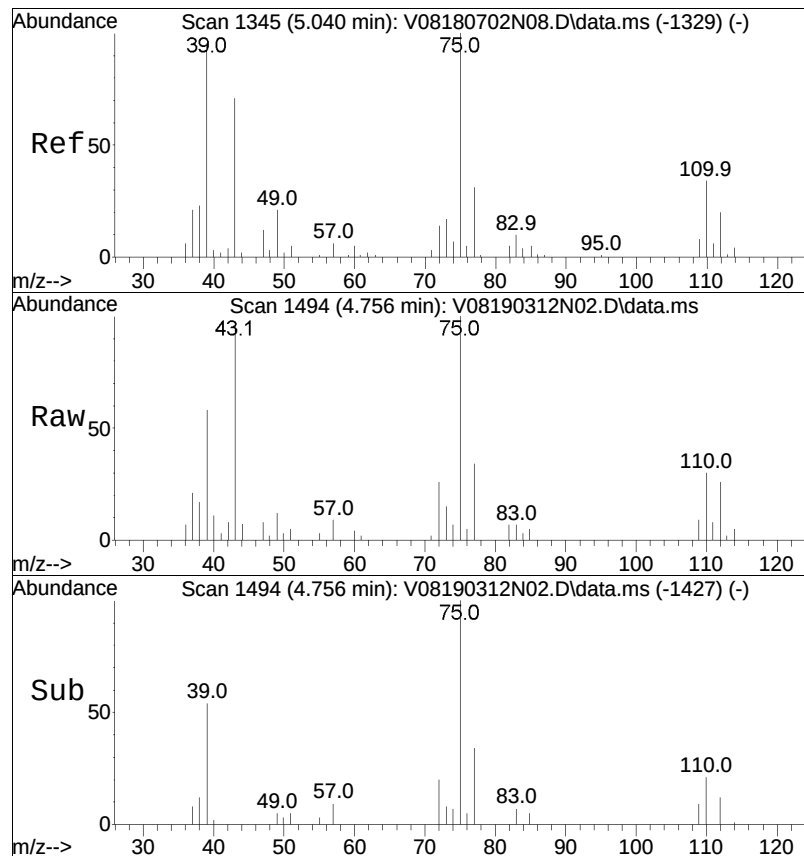




#37
 1,1,1-Trichloroethane
 Concen: 9.94 ug/L
 RT: 4.555 min Scan# 1422
 Delta R.T. -0.011 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

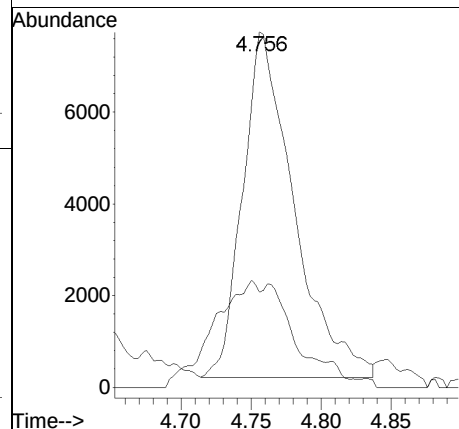
Tgt Ion:	97	Resp:	104189
Ion Ratio	Lower	Upper	
97	100		
99	64.6	40.7	84.5
61	53.4	35.4	73.4
63	14.6	5.0	10.4#

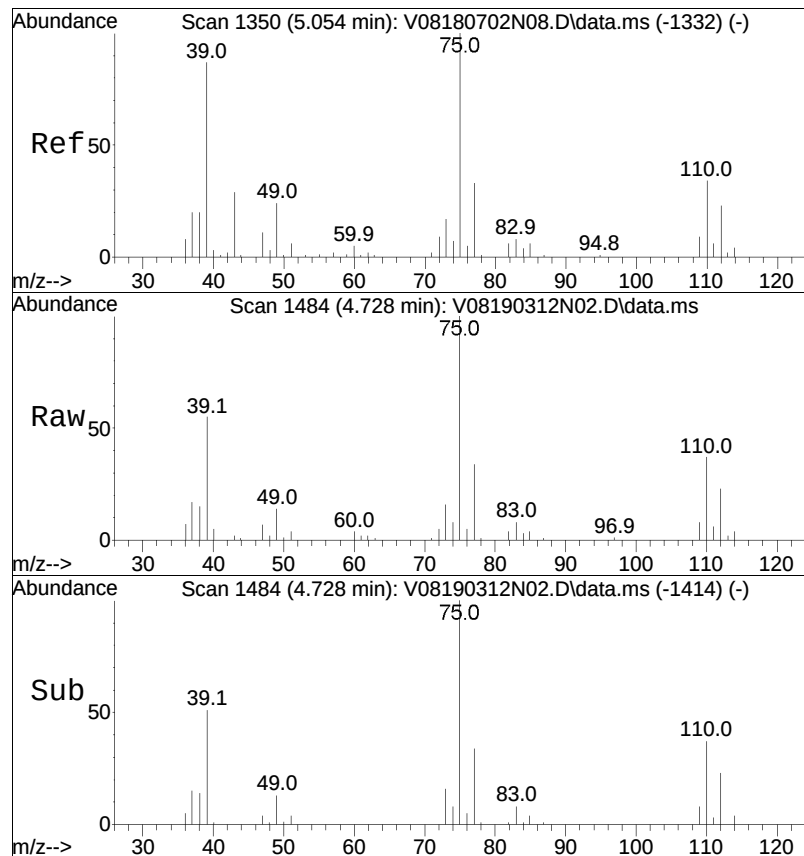




#39
 2-Butanone
 Concen: 9.24 ug/L
 RT: 4.756 min Scan# 1494
 Delta R.T. -0.014 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

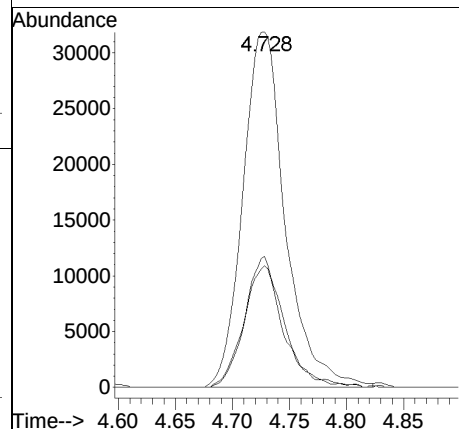
Tgt Ion:	43	72	Ratio	100	27.2	Resp:	19138	Lower	Upper
								10.9	16.3#

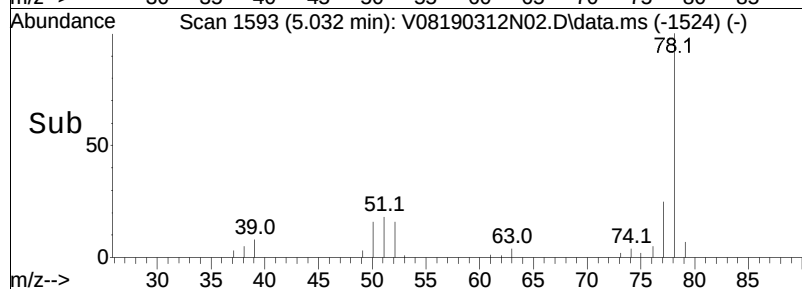
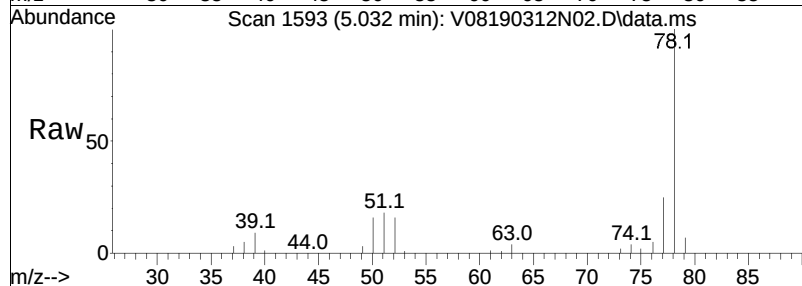
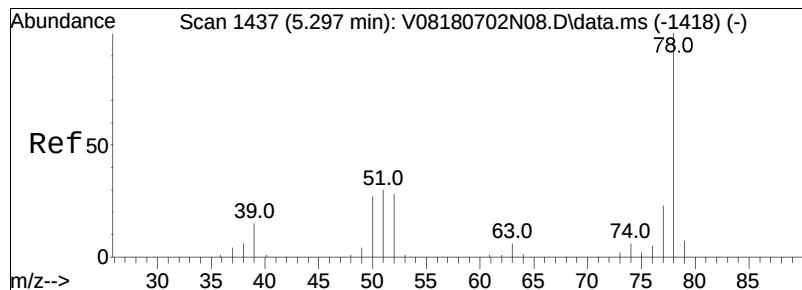




#40
 1,1-Dichloropropene
 Concen: 9.85 ug/L
 RT: 4.728 min Scan# 1484
 Delta R.T. -0.005 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

Tgt Ion:	75	Resp:	82602
Ion Ratio	Lower	Upper	
75	100		
110	33.4	20.2	41.9
77	31.6	20.1	41.7





#41

Benzene

Concen: 9.96 ug/L

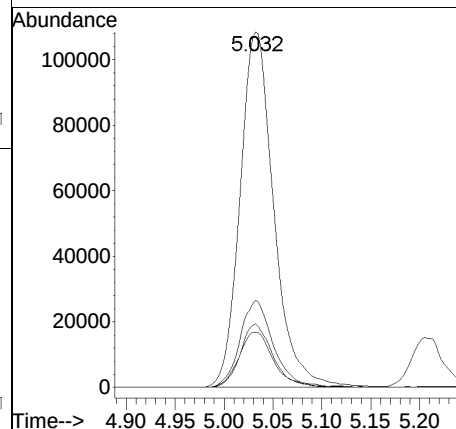
RT: 5.032 min Scan# 1593

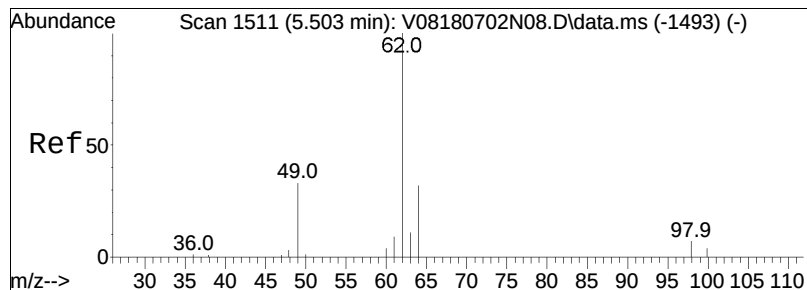
Delta R.T. -0.008 min

Lab File: V08190312N02.D

Acq: 12 Mar 2019 6:29 pm

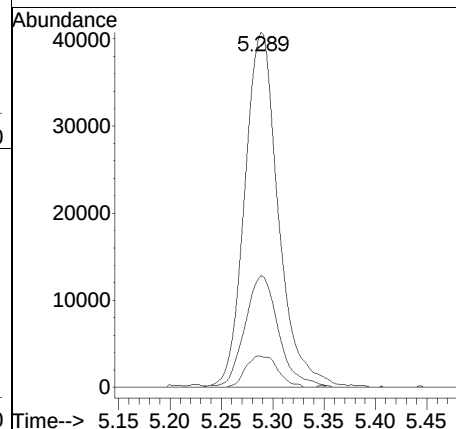
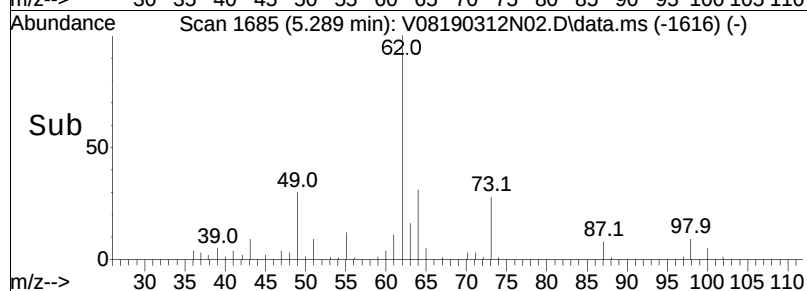
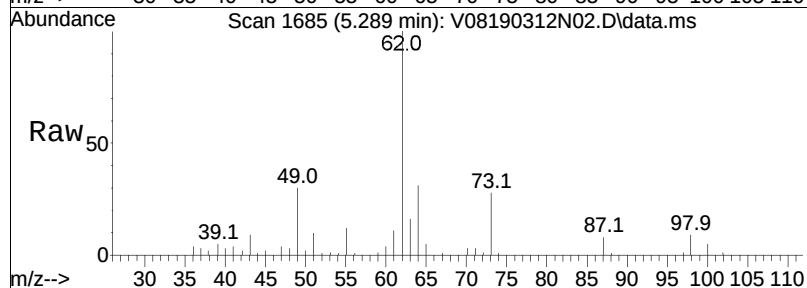
Tgt Ion: 78	Resp: 260651
Ion Ratio	Lower Upper
78 100	
77 24.1	15.7 32.7
51 17.4	16.0 33.2
52 15.8	15.3 31.9

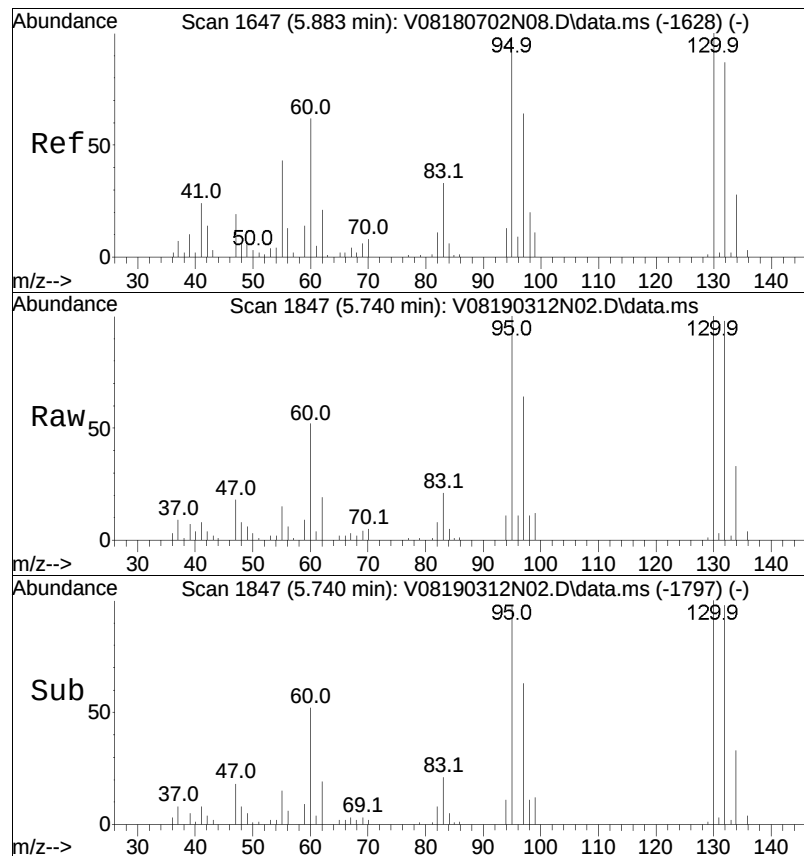




#44
 1,2-Dichloroethane
 Concen: 10.36 ug/L
 RT: 5.289 min Scan# 1685
 Delta R.T. -0.008 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

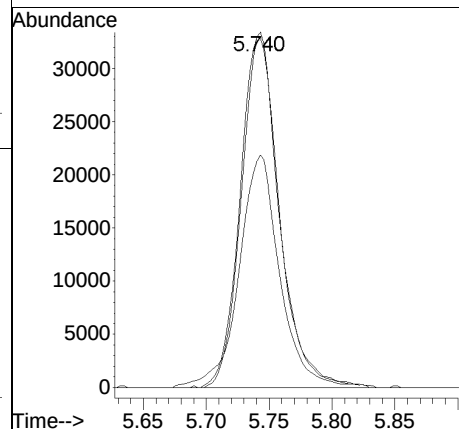
Tgt Ion	Ratio	Lower	Upper
62	100		
64	31.7	11.2	51.2
98	8.5	0.0	26.1

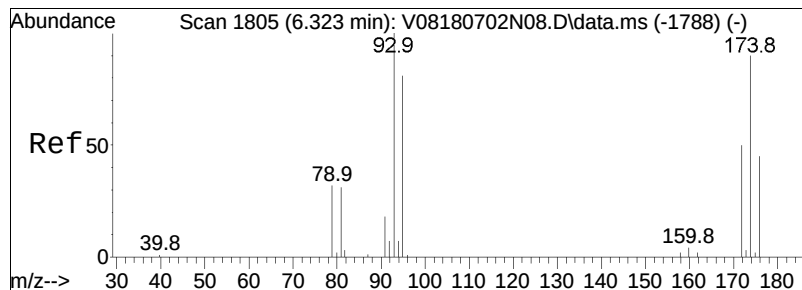




#48
 Trichloroethene
 Concen: 10.38 ug/L
 RT: 5.740 min Scan# 1847
 Delta R.T. -0.011 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

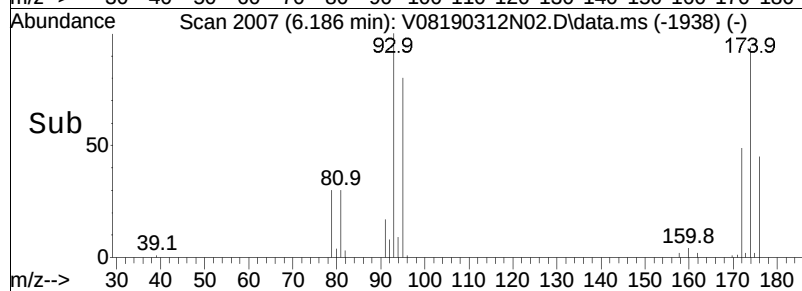
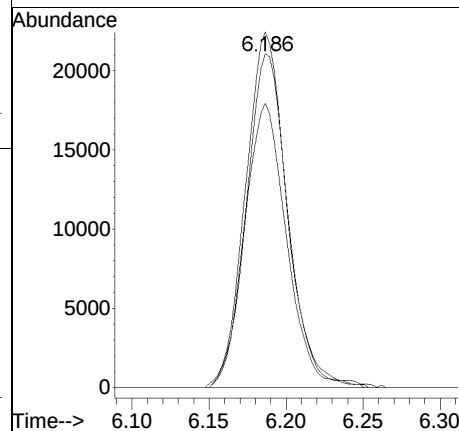
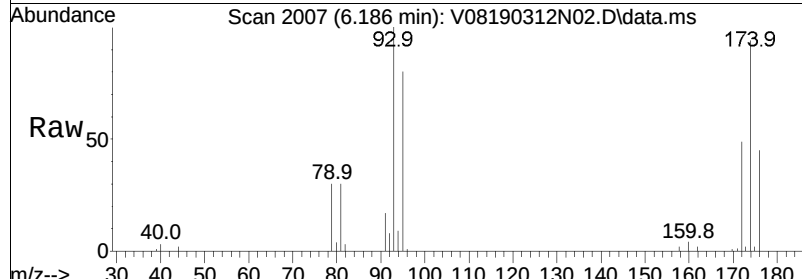
Tgt Ion:	95	Resp:	72348
Ion Ratio	Lower	Upper	
95	100		
97	67.6	55.5	83.3
130	96.2	76.6	115.0

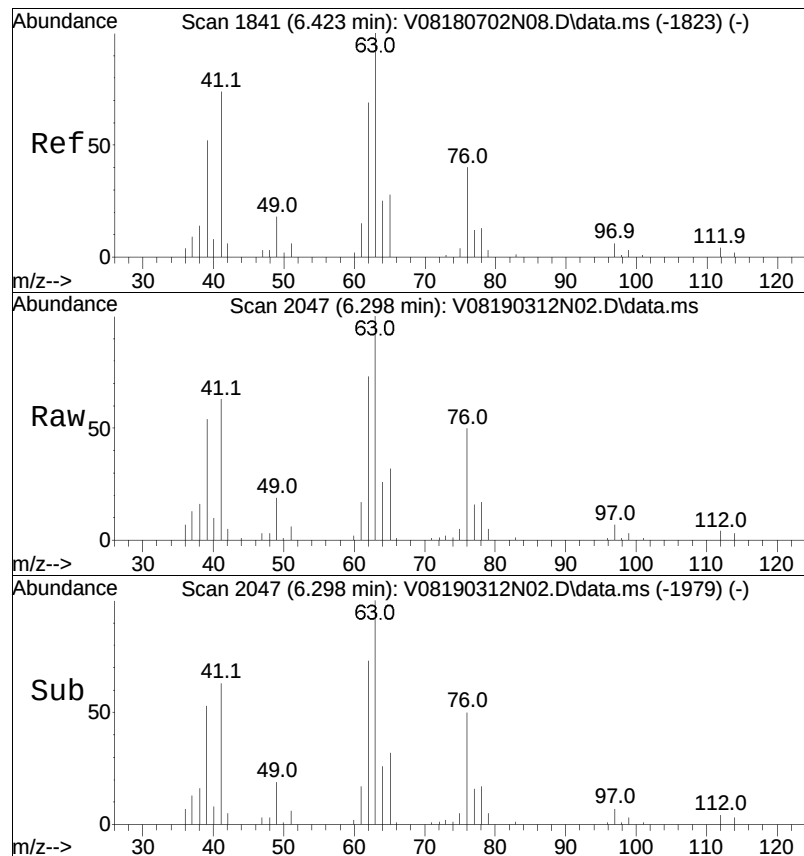




#50
 Dibromomethane
 Concen: 10.34 ug/L
 RT: 6.186 min Scan# 2007
 Delta R.T. -0.009 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

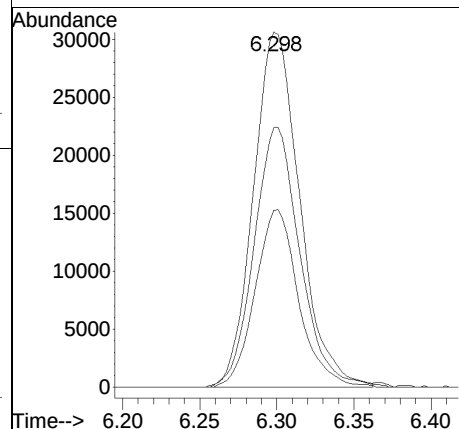
Tgt Ion:	93	Resp:	42255
Ion Ratio	Lower	Upper	
93	100		
95	80.3	67.0	100.4
174	93.7	75.0	112.4

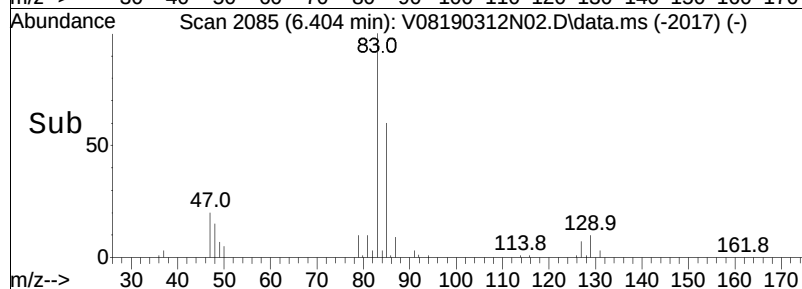
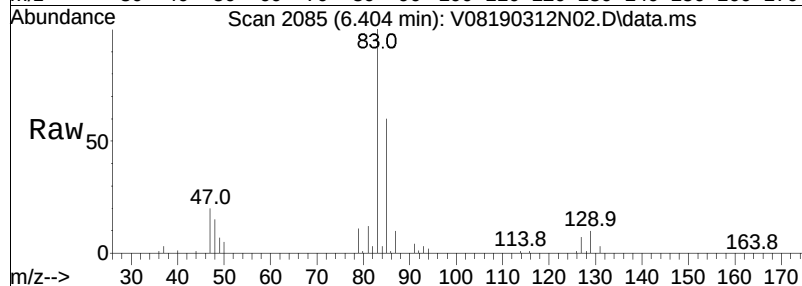
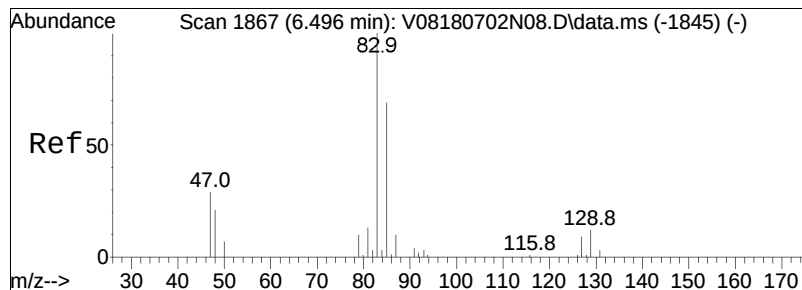




#51
 1,2-Dichloropropane
 Concen: 9.46 ug/L
 RT: 6.298 min Scan# 2047
 Delta R.T. -0.011 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

Tgt Ion:	63	Resp:	64233
Ion Ratio	Lower	Upper	
63	100		
62	72.5	58.6	87.8
76	47.1	38.0	57.0





#54

Bromodichloromethane

Concen: 10.15 ug/L

RT: 6.404 min Scan# 2085

Delta R.T. -0.011 min

Lab File: V08190312N02.D

Acq: 12 Mar 2019 6:29 pm

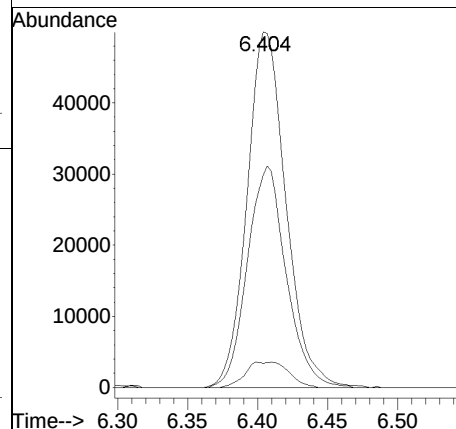
Tgt Ion: 83 Resp: 96682

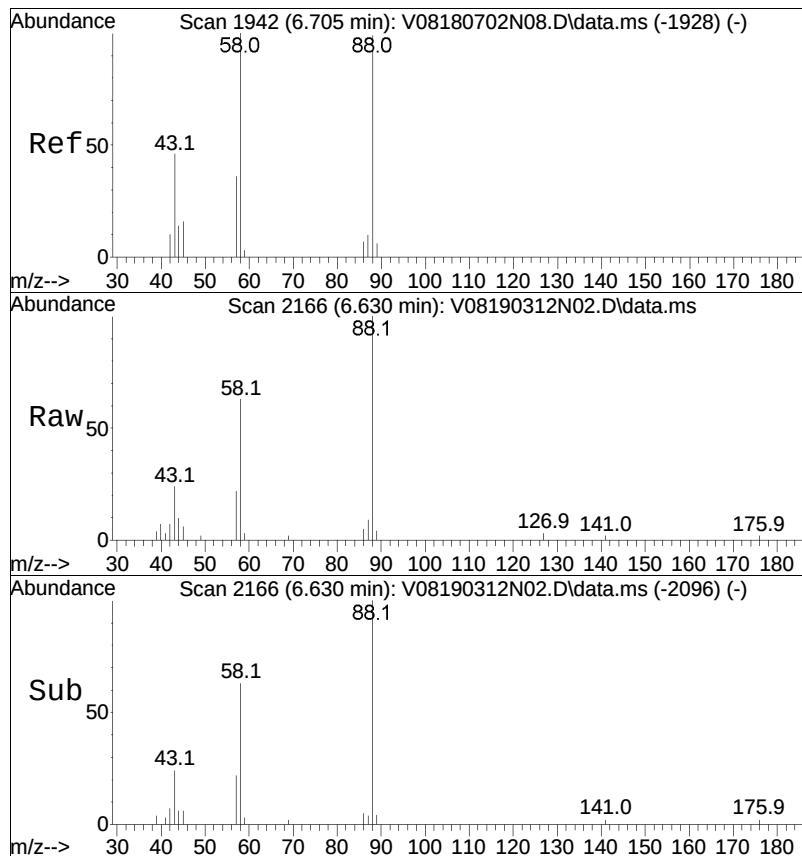
Ion Ratio Lower Upper

83 100

85 62.0 52.3 78.5

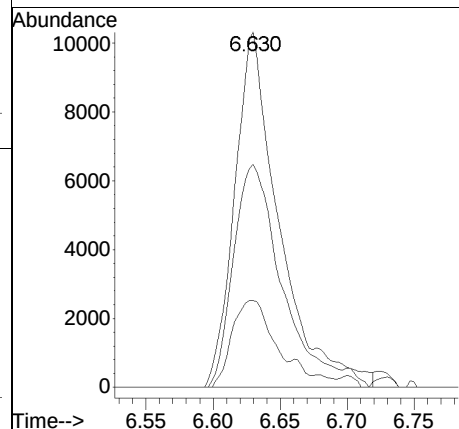
127 3.6 6.2 9.4#

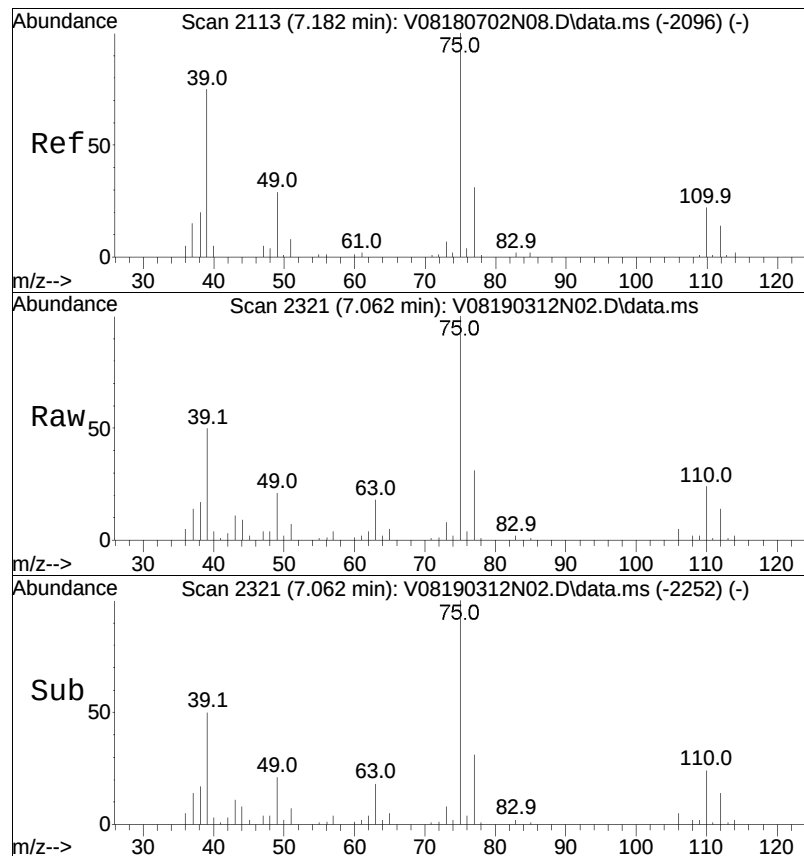




#57
 1,4-Dioxane
 Concen: 807.09 ug/L
 RT: 6.630 min Scan# 2166
 Delta R.T. -0.005 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

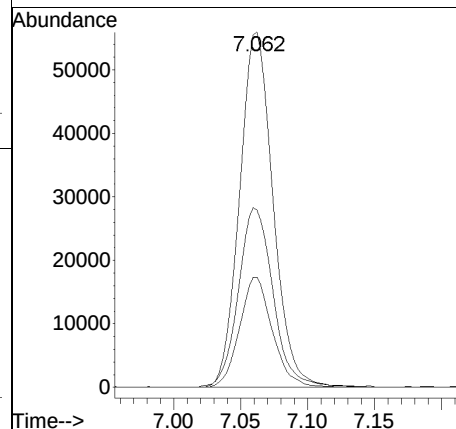
Tgt Ion	Ratio	Lower	Upper
88	100		
58	67.3	76.7	115.1#
43	22.2	36.2	54.2#

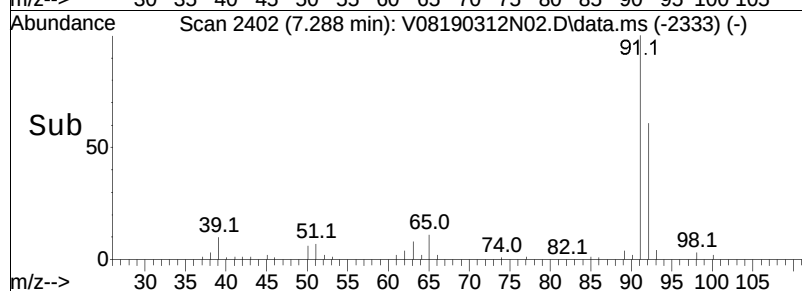
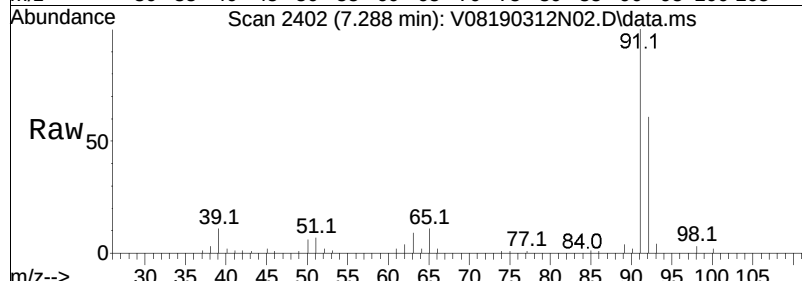
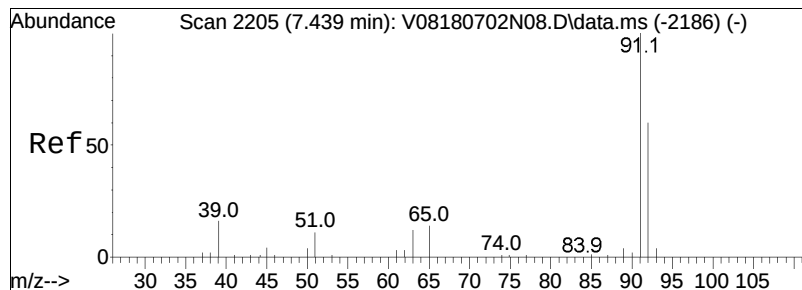




#58
 cis-1,3-Dichloropropene
 Concen: 9.13 ug/L
 RT: 7.062 min Scan# 2321
 Delta R.T. -0.008 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

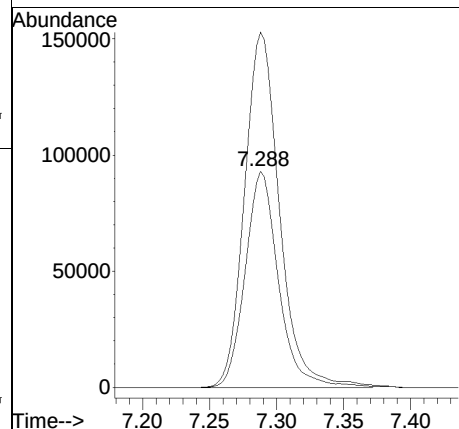
Tgt Ion:	75	Resp:	97427
Ion Ratio	Lower	Upper	
75	100		
77	30.4	25.0	37.4
39	52.5	50.1	75.1

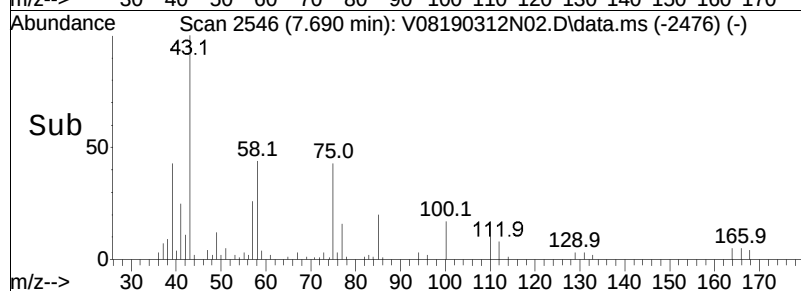
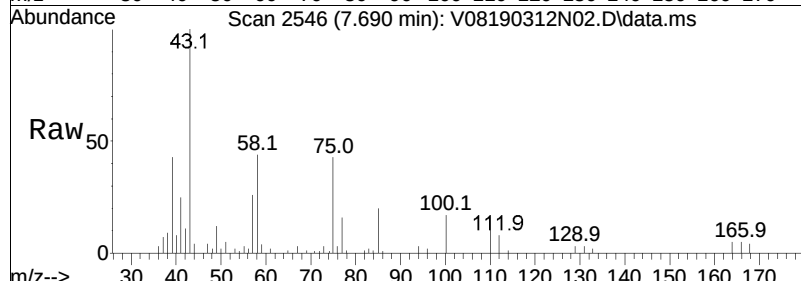
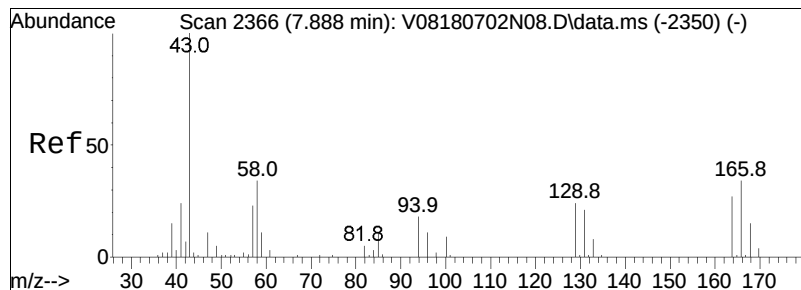




#61
Toluene
Concen: 9.84 ug/L
RT: 7.288 min Scan# 2402
Delta R.T. -0.008 min
Lab File: V08190312N02.D
Acq: 12 Mar 2019 6:29 pm

Tgt Ion	Ratio	Lower	Upper
92	100		
91	172.8	139.8	209.6





#62

4-Methyl-2-pentanone

Concen: 8.68 ug/L

RT: 7.690 min Scan# 2546

Delta R.T. -0.005 min

Lab File: V08190312N02.D

Acq: 12 Mar 2019 6:29 pm

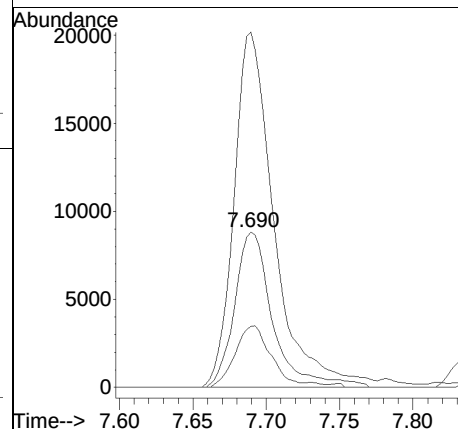
Tgt Ion: 58 Resp: 16009

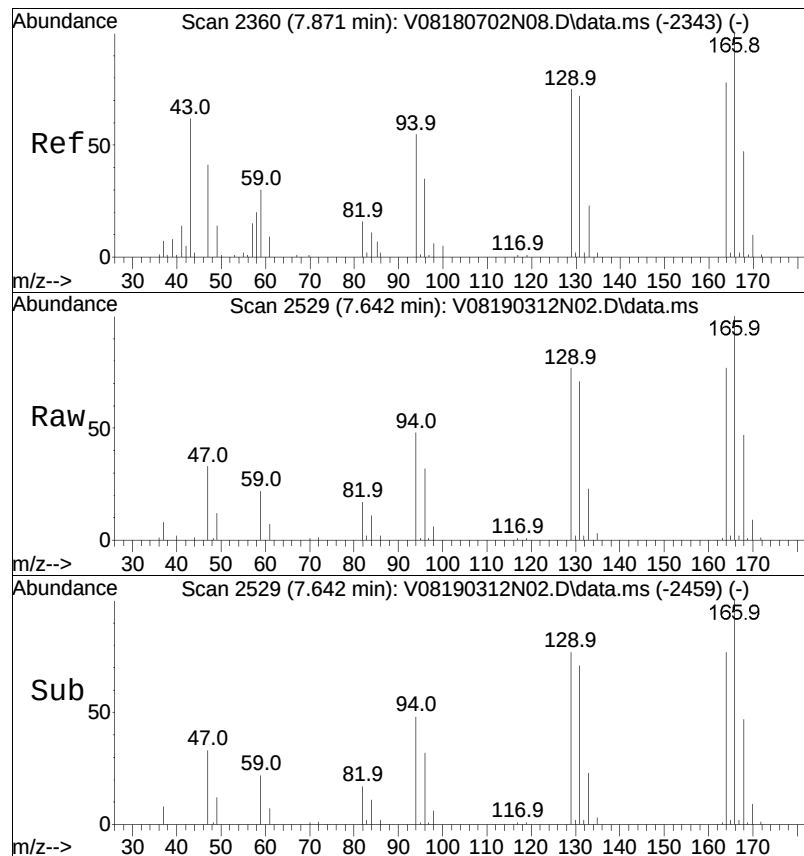
Ion Ratio Lower Upper

58 100

100 37.1 20.2 30.2#

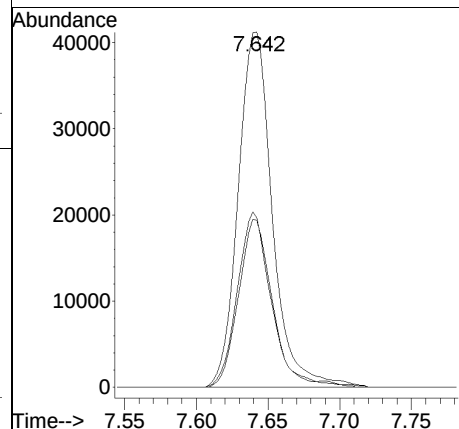
43 239.7 196.6 295.0

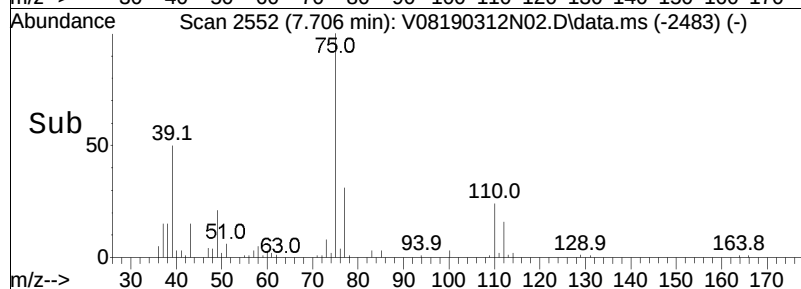
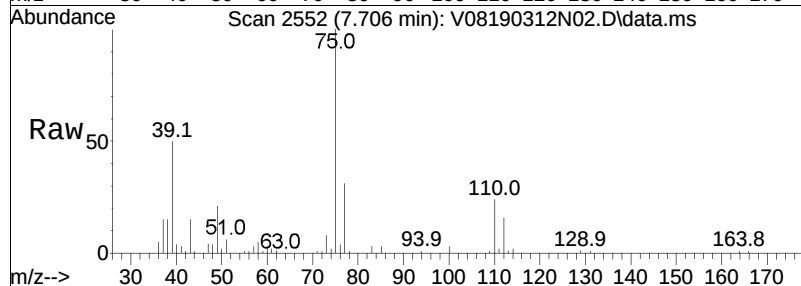
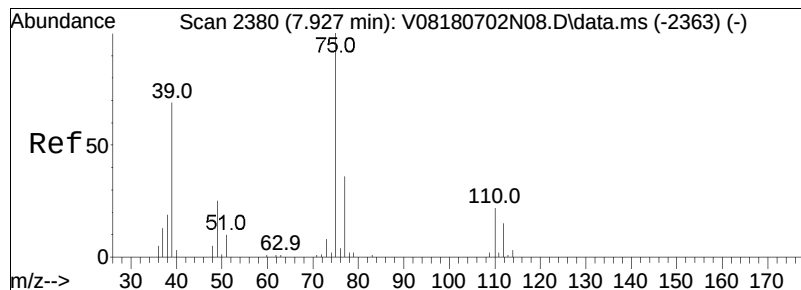




#63
Tetrachloroethene
Concen: 9.78 ug/L
RT: 7.642 min Scan# 2529
Delta R.T. -0.006 min
Lab File: V08190312N02.D
Acq: 12 Mar 2019 6:29 pm

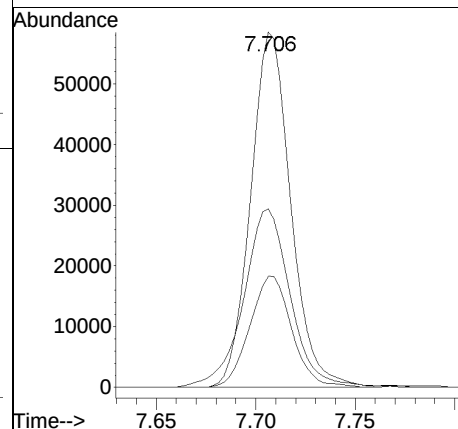
Tgt Ion:	166	Resp:	68696
Ion Ratio	Lower	Upper	
166	100		
168	46.1	28.2	68.2
94	48.8	38.4	78.4

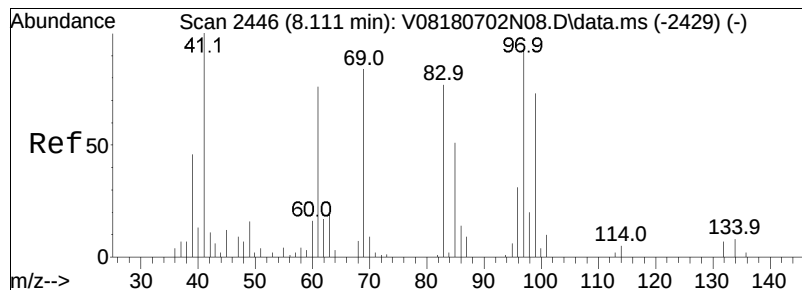




#65
 trans-1,3-Dichloropropene
 Concen: 8.91 ug/L
 RT: 7.706 min Scan# 2552
 Delta R.T. -0.009 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

Tgt Ion	Ratio	Lower	Upper
75	100		
77	32.8	12.4	52.4
39	58.4	42.8	82.8





#68

1,1,2-Trichloroethane

Concen: 10.41 ug/L

RT: 7.837 min Scan# 2599

Delta R.T. -0.006 min

Lab File: V08190312N02.D

Acq: 12 Mar 2019 6:29 pm

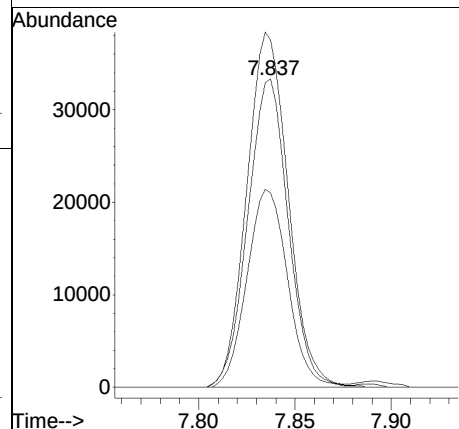
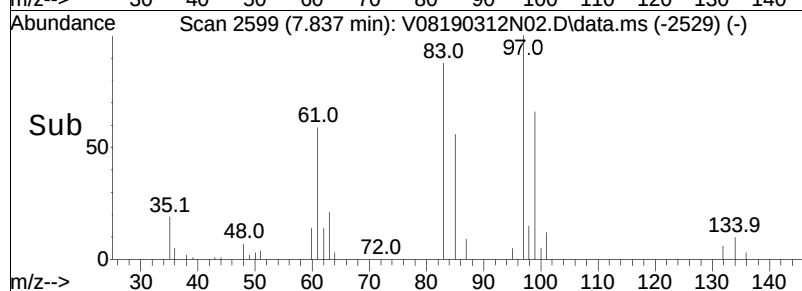
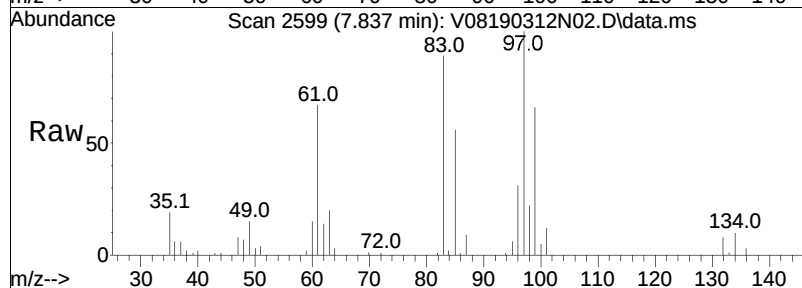
Tgt Ion: 83 Resp: 48772

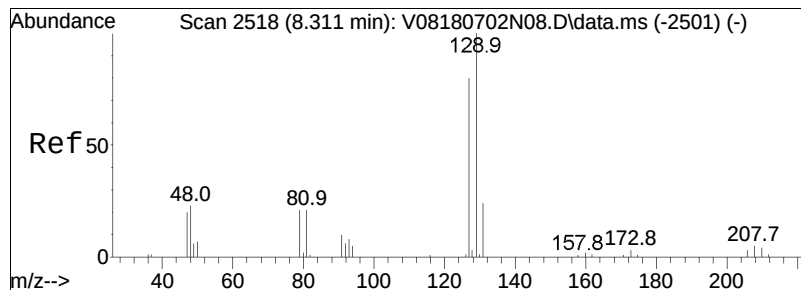
Ion Ratio Lower Upper

83 100

97 117.6 89.8 129.8

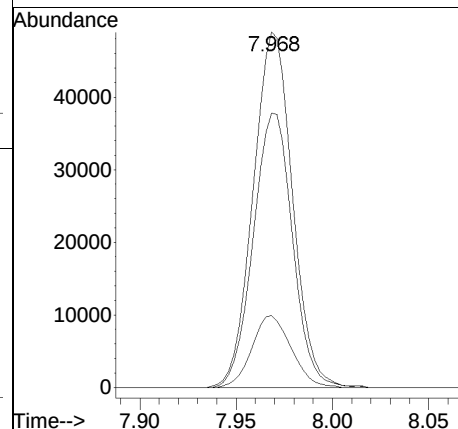
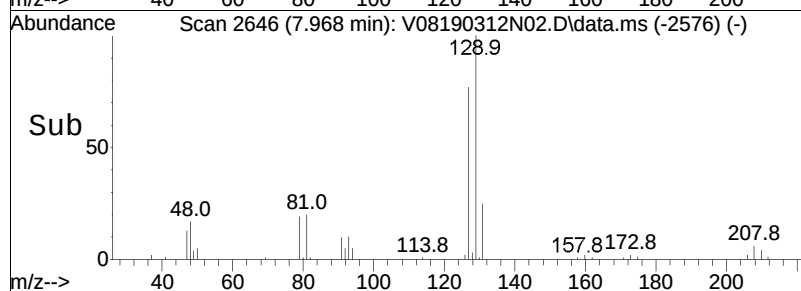
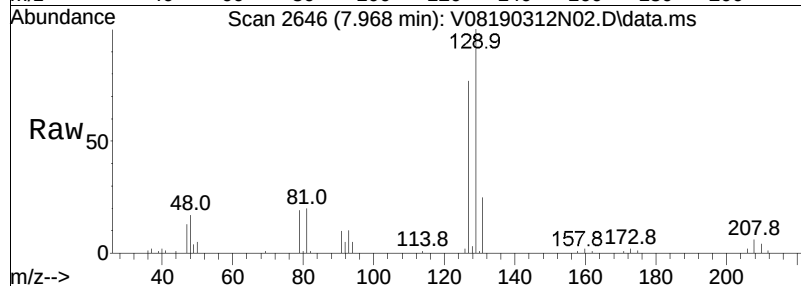
85 64.6 44.4 84.4

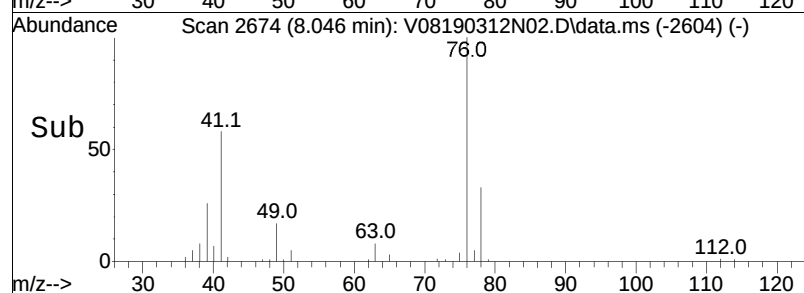
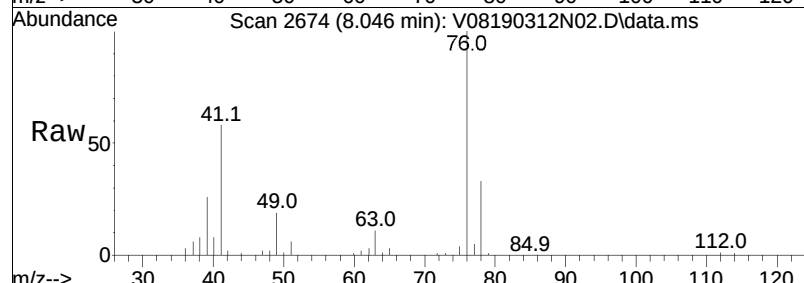
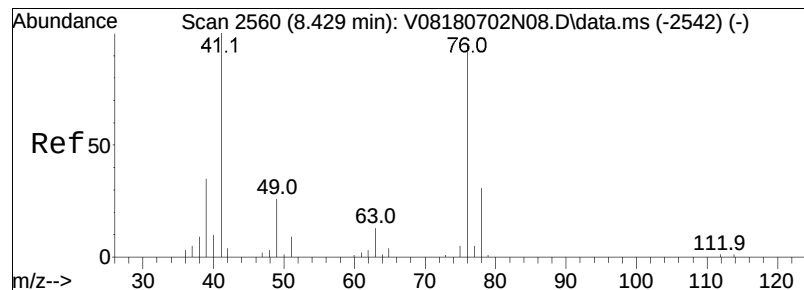




#69
 Chlorodibromomethane
 Concen: 10.09 ug/L
 RT: 7.968 min Scan# 2646
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

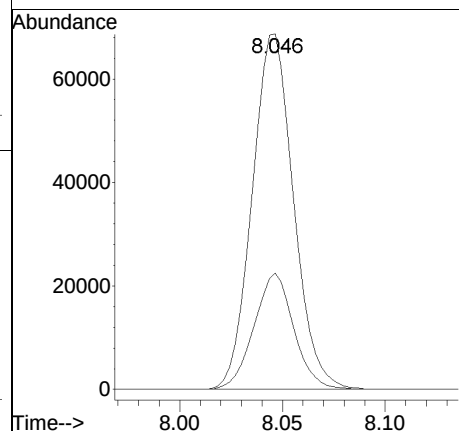
Tgt Ion	Ratio	Lower	Upper
129	100		
81	20.2	2.9	42.9
127	76.9	57.8	97.8

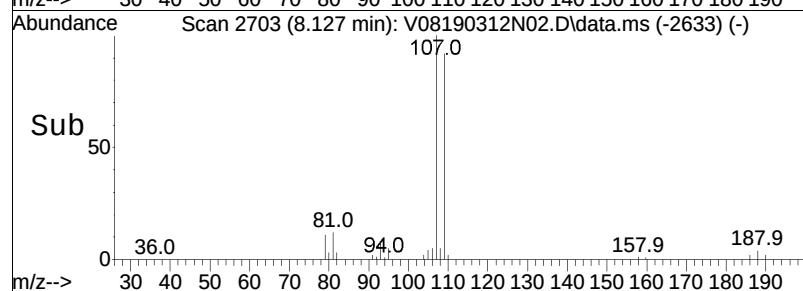
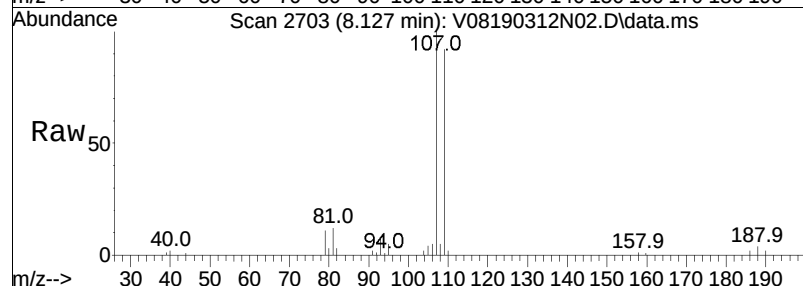
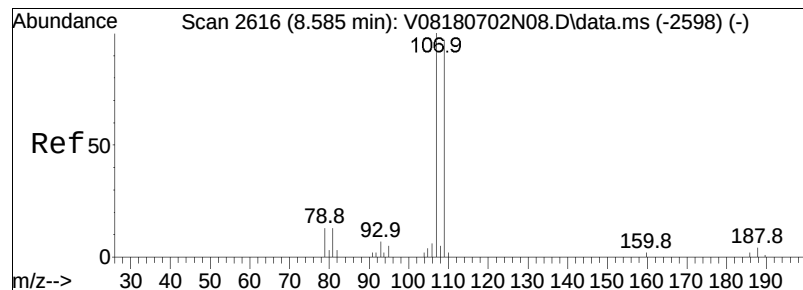




#70
 1,3-Dichloropropane
 Concen: 10.17 ug/L
 RT: 8.046 min Scan# 2674
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

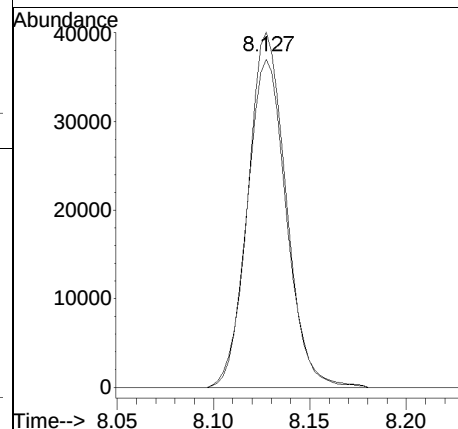
Tgt Ion	Ratio	Lower	Upper
76	100		
78	31.4	25.5	38.3

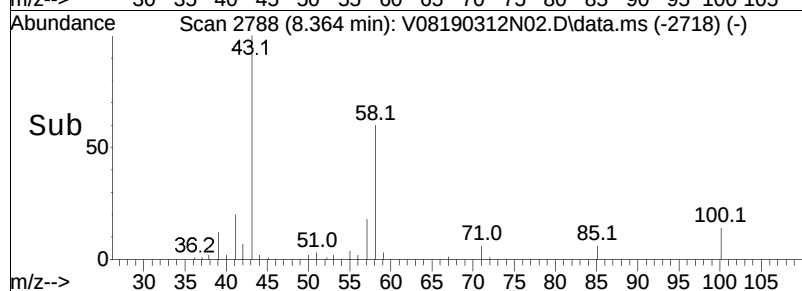
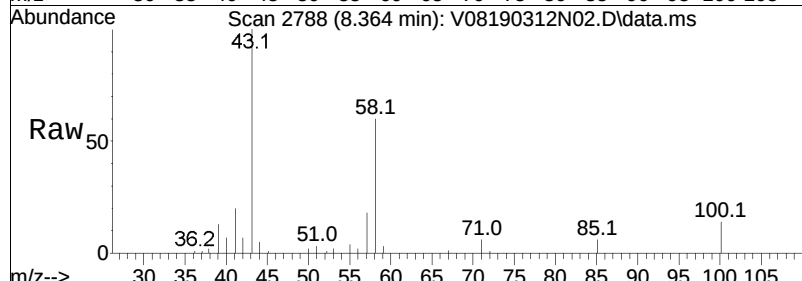
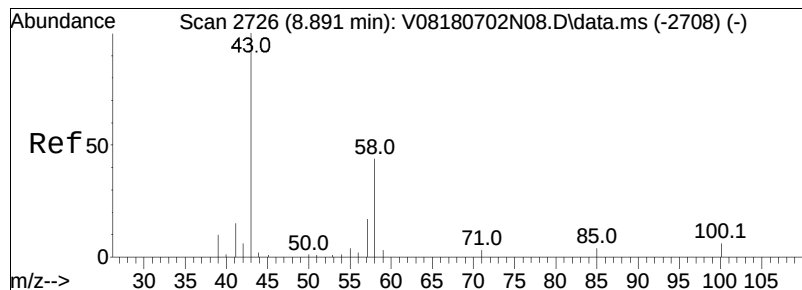




#71
 1,2-Dibromoethane
 Concen: 9.89 ug/L
 RT: 8.127 min Scan# 2703
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

Tgt Ion	Ratio	Lower	Upper
107	100		
109	94.6	74.3	111.5





#72

2-Hexanone

Concen: 7.43 ug/L

RT: 8.364 min Scan# 2788

Delta R.T. -0.006 min

Lab File: V08190312N02.D

Acq: 12 Mar 2019 6:29 pm

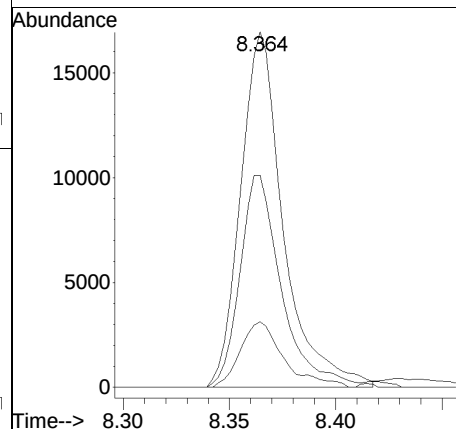
Tgt Ion: 43 Resp: 23718

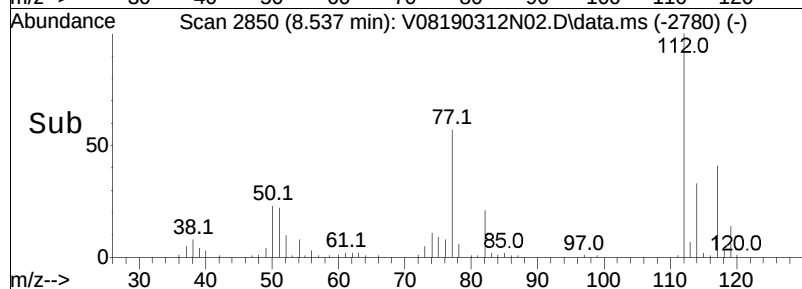
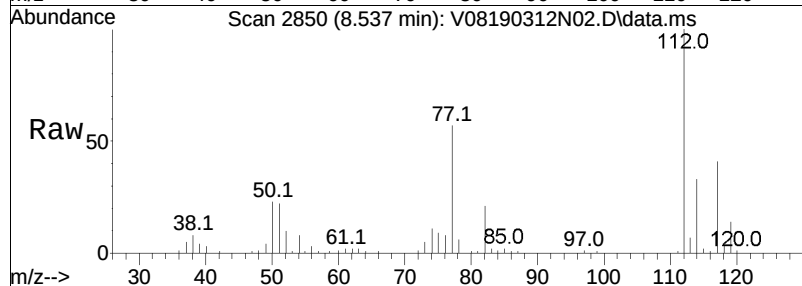
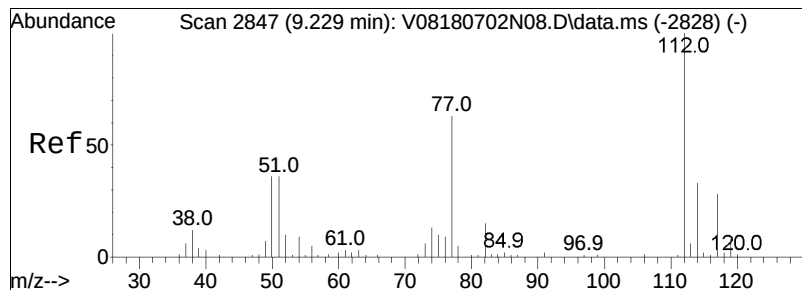
Ion Ratio Lower Upper

43 100

58 57.9 41.2 61.8

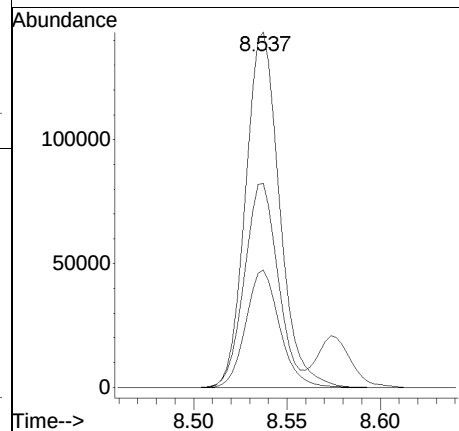
57 18.8 17.2 25.8

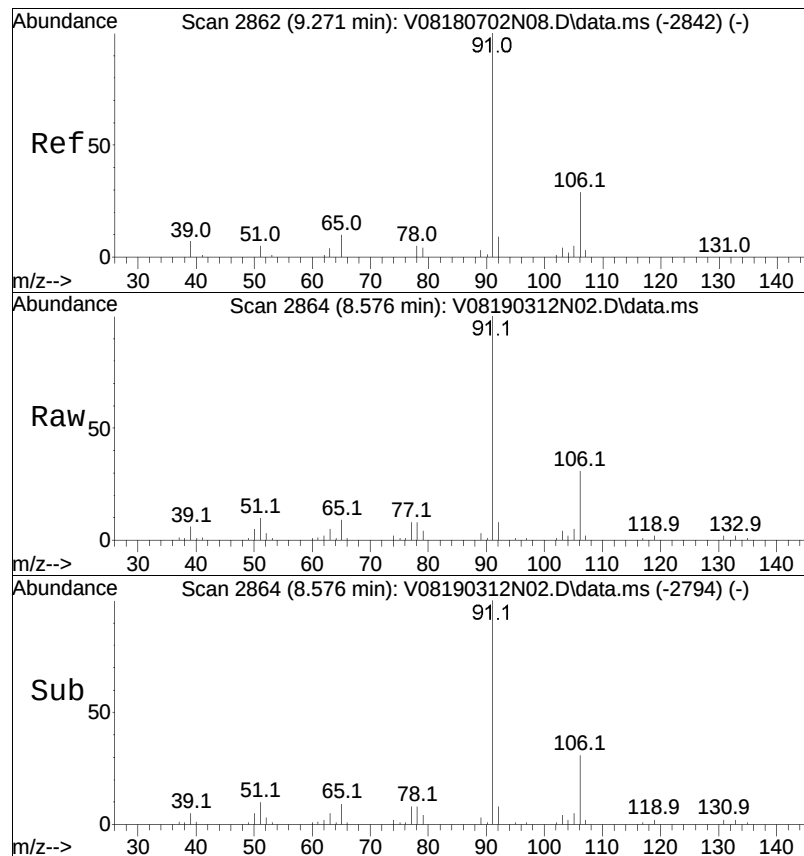




#73
 Chlorobenzene
 Concen: 9.95 ug/L
 RT: 8.537 min Scan# 2850
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

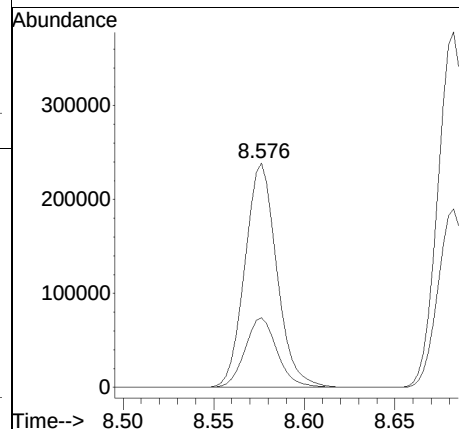
Tgt Ion	Ratio	Lower	Upper
112	100		
77	57.3	55.4	83.0
114	33.0	25.4	38.2

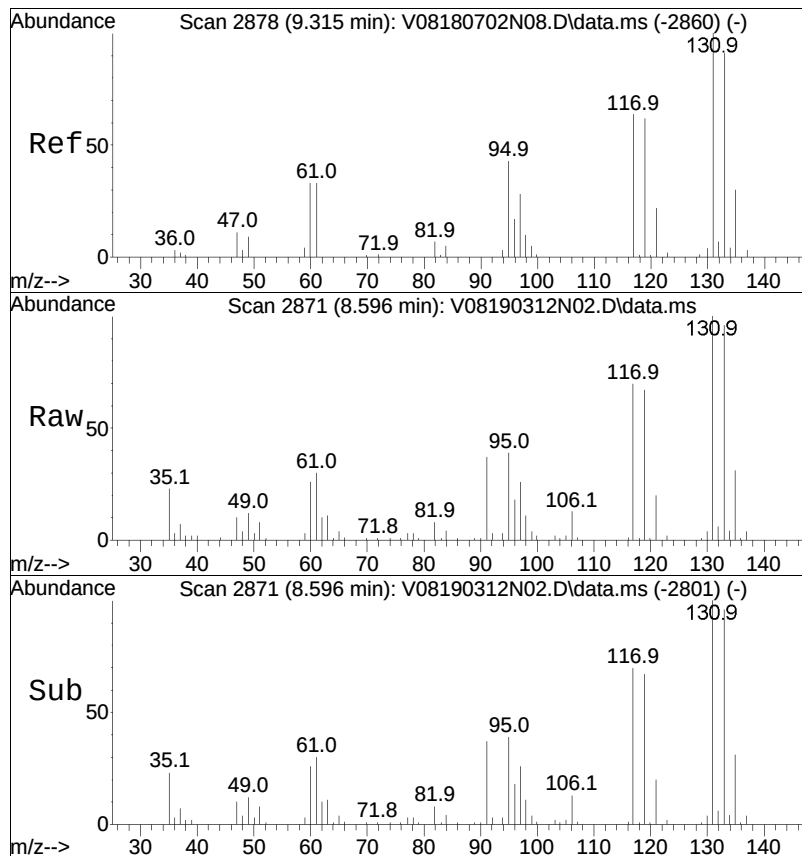




#74
 Ethylbenzene
 Concen: 9.60 ug/L
 RT: 8.576 min Scan# 2864
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

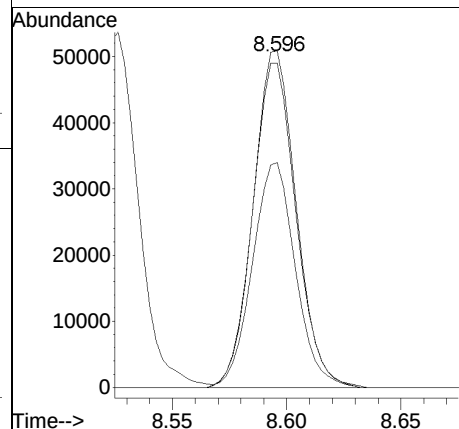
Tgt Ion	Ratio	Lower	Upper
91	100		
106	31.2	24.3	36.5

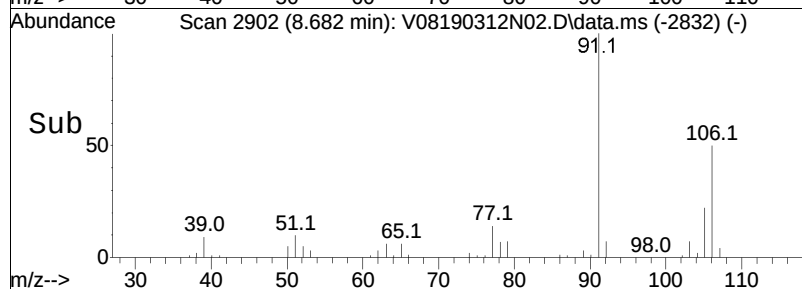
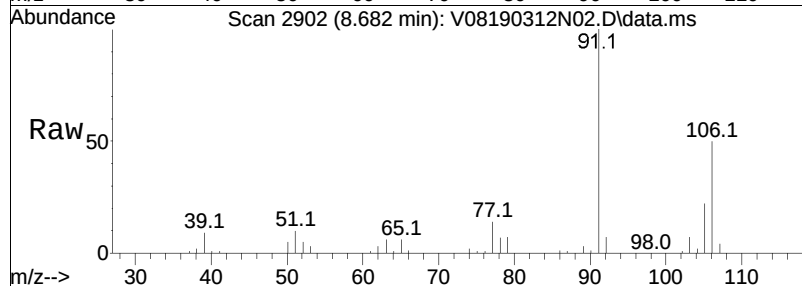
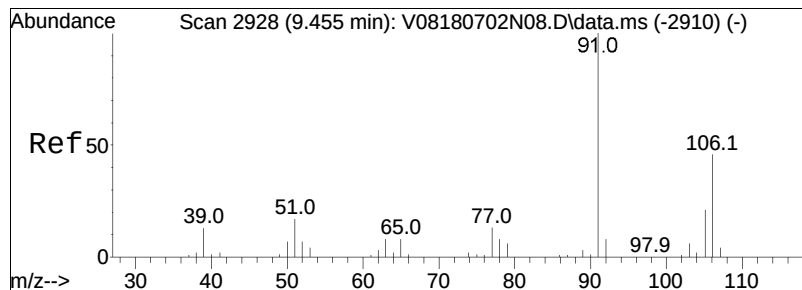




#75
 1,1,1,2-Tetrachloroethane
 Concen: 9.80 ug/L
 RT: 8.596 min Scan# 2871
 Delta R.T. -0.005 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

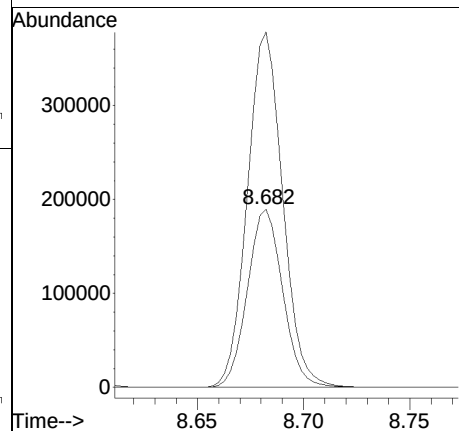
Tgt Ion:	131	Resp:	66754
Ion Ratio	Lower	Upper	
131	100		
133	96.7	81.0	121.0
119	66.5	41.3	81.3

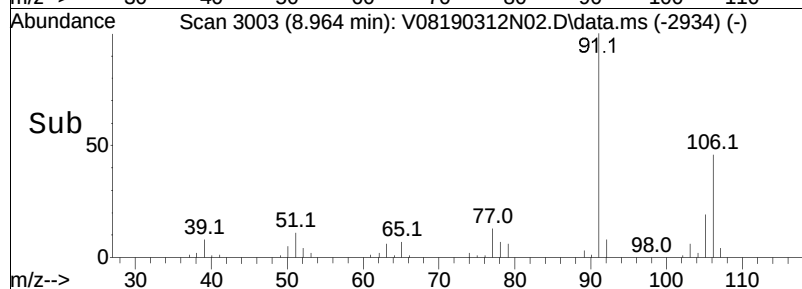
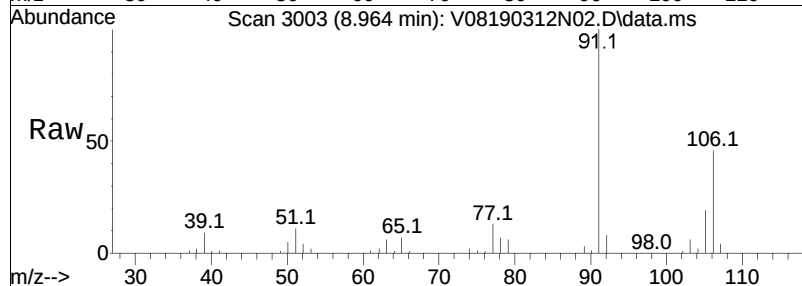
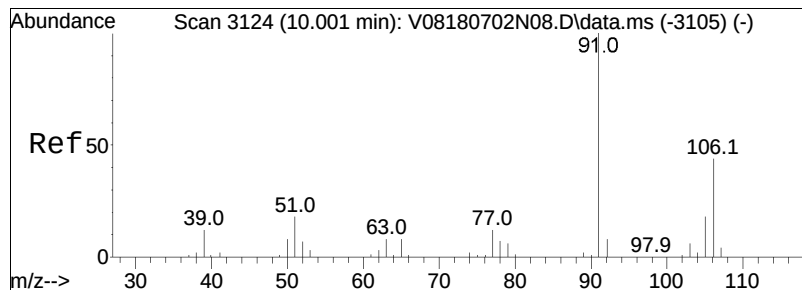




#76
 p/m Xylene
 Concen: 18.88 ug/L
 RT: 8.682 min Scan# 2902
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

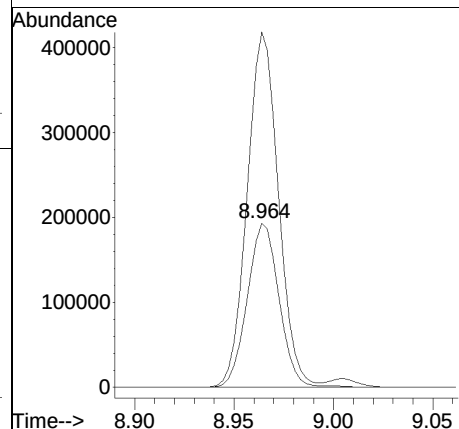
Tgt	Ion	Ratio	Lower	Upper
106	100			
91	199.8	166.4	249.6	

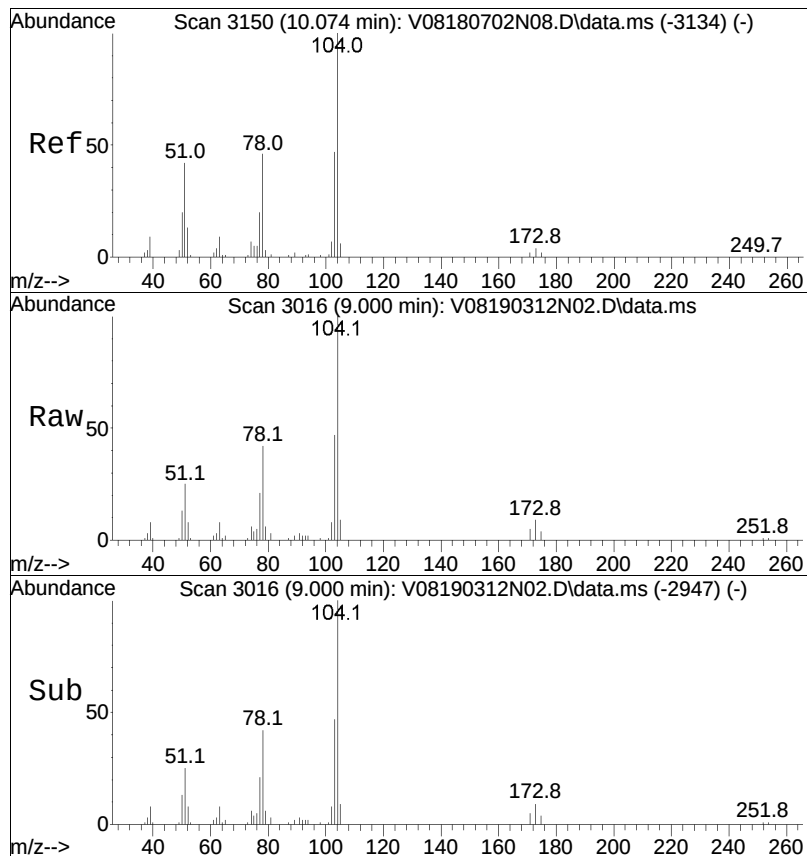




#77
o Xylene
Concen: 18.71 ug/L
RT: 8.964 min Scan# 3003
Delta R.T. -0.008 min
Lab File: V08190312N02.D
Acq: 12 Mar 2019 6:29 pm

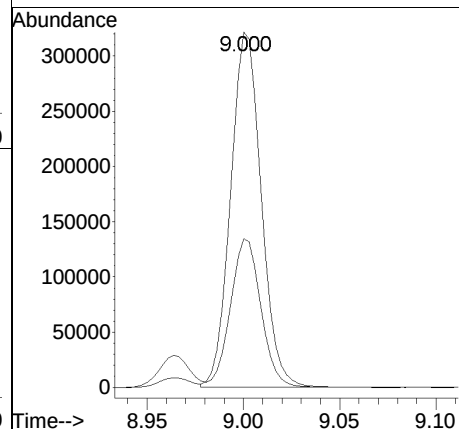
Tgt	Ion	Ratio	Lower	Upper
106	100			
91	212.4	182.6	273.8	

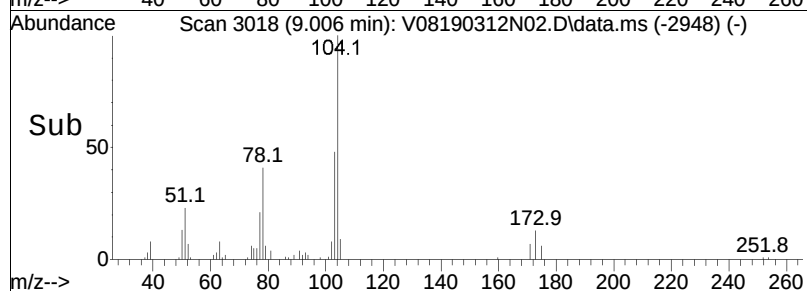
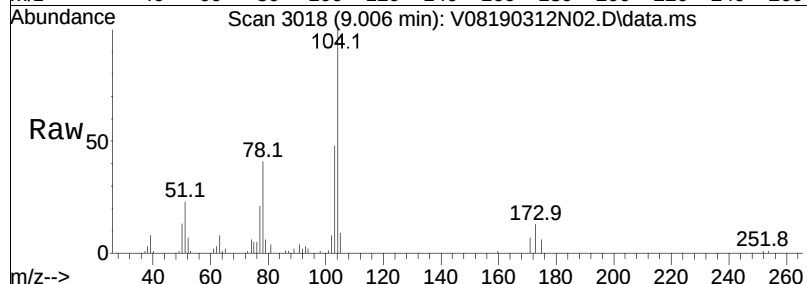
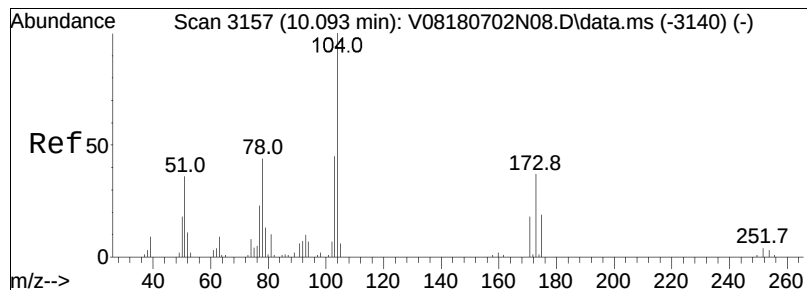




#78
 Styrene
 Concen: 19.38 ug/L
 RT: 9.000 min Scan# 3016
 Delta R.T. -0.008 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

Tgt Ion	Ratio	Lower	Upper
104	100		
78	41.4	39.8	59.6





#80

Bromoform

Concen: 9.62 ug/L

RT: 9.006 min Scan# 3018

Delta R.T. -0.005 min

Lab File: V08190312N02.D

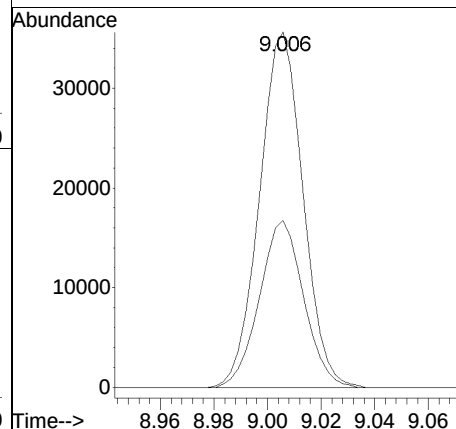
Acq: 12 Mar 2019 6:29 pm

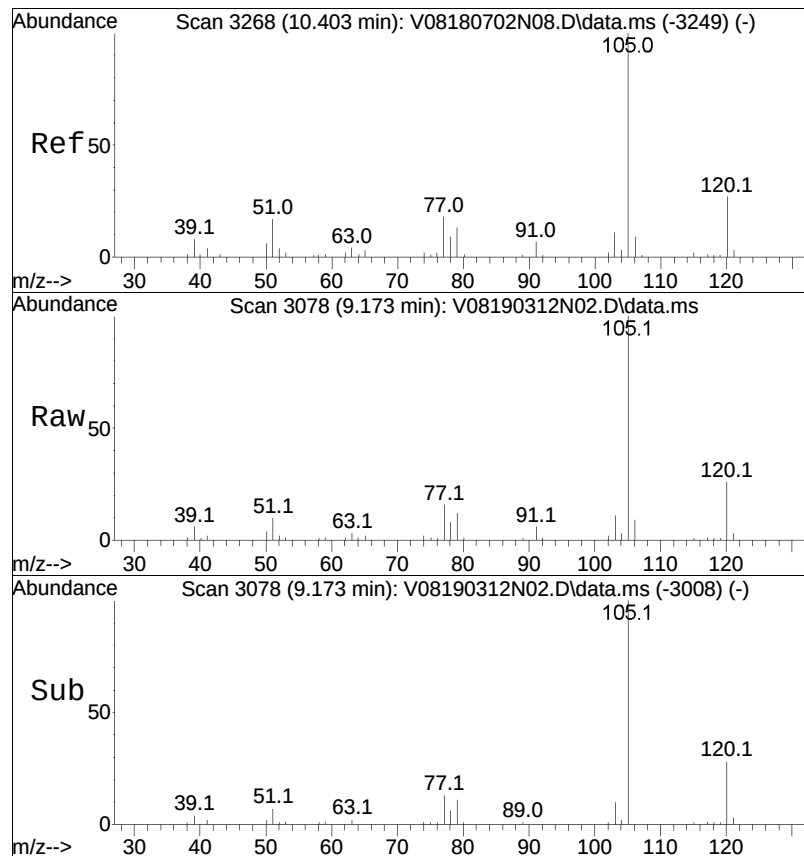
Tgt Ion:173 Resp: 40093

Ion Ratio Lower Upper

173 100

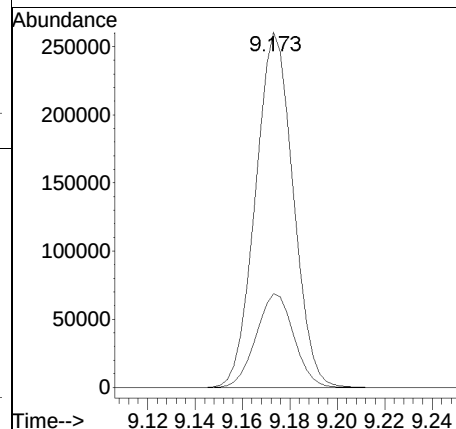
175 47.8 31.5 71.5

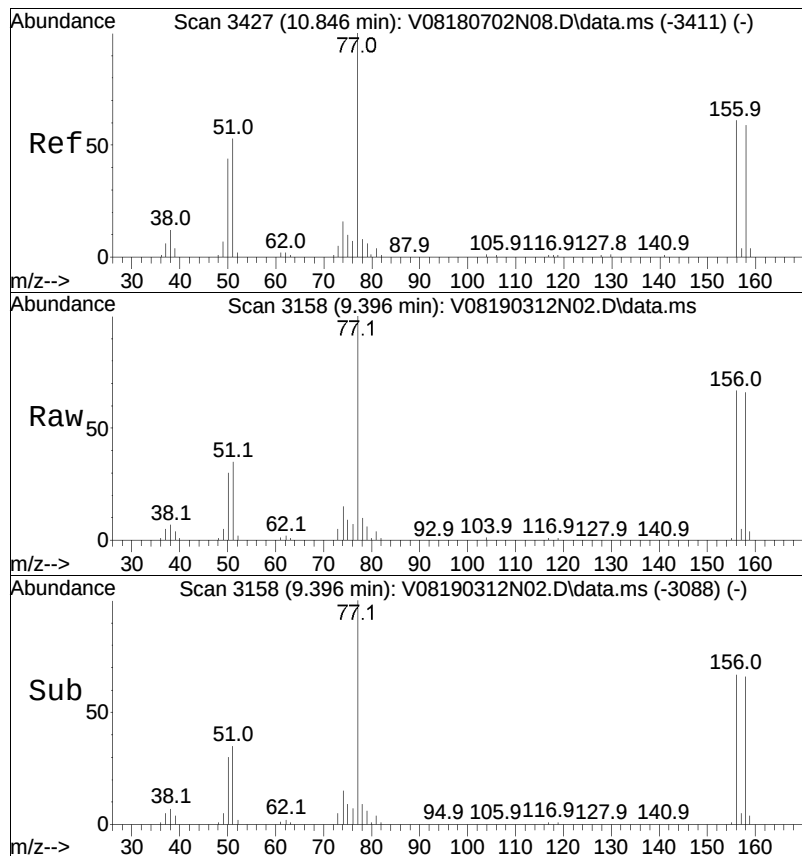




#82
 Isopropylbenzene
 Concen: 9.83 ug/L
 RT: 9.173 min Scan# 3078
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

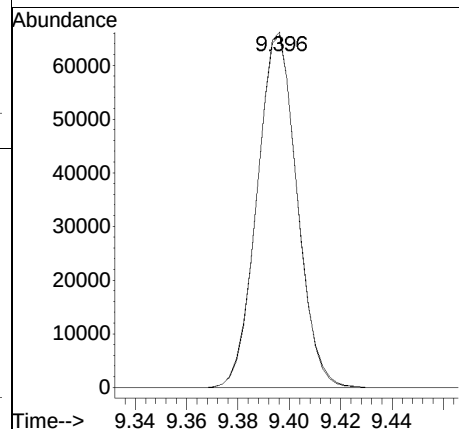
Tgt Ion	Ratio	Lower	Upper
105	100		
120	26.5	4.8	44.8

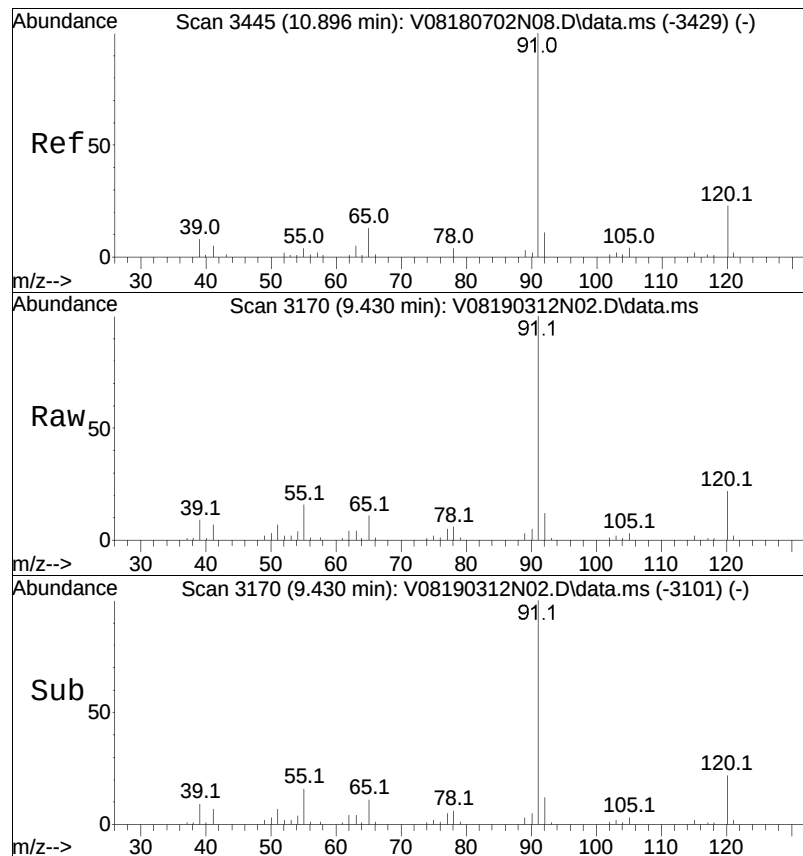




#84
 Bromobenzene
 Concen: 9.44 ug/L
 RT: 9.396 min Scan# 3158
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

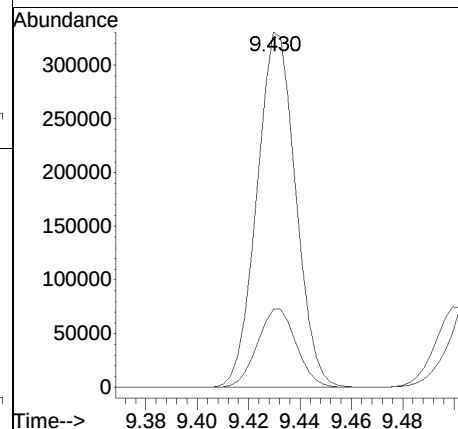
Tgt Ion	Ratio	Lower	Upper
156	100		
158	100.2	75.9	113.9

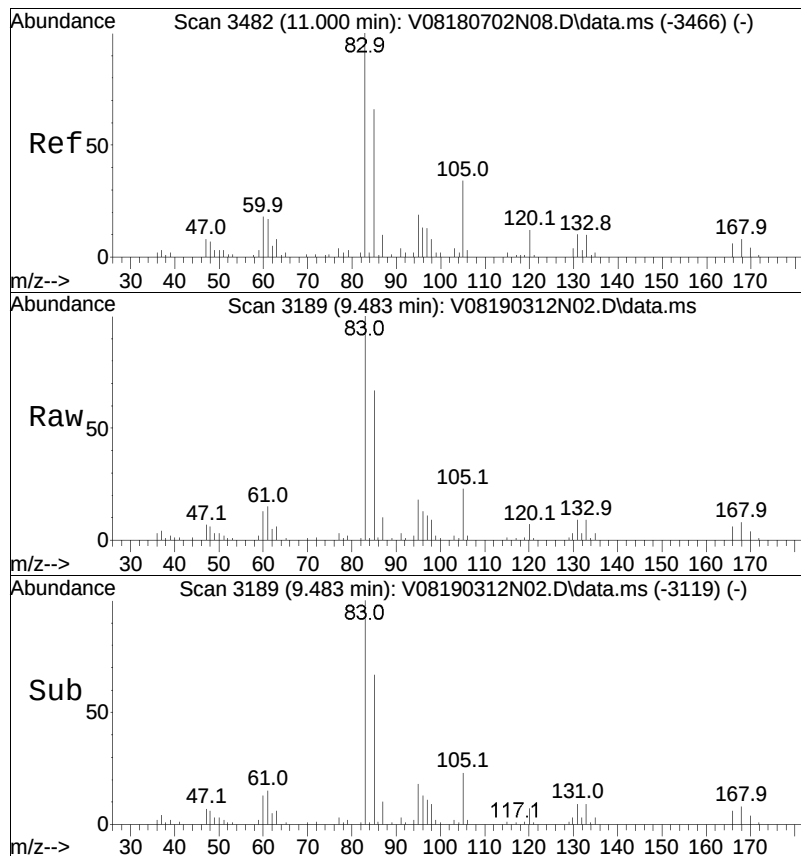




#85
 n-Propylbenzene
 Concen: 10.38 ug/L
 RT: 9.430 min Scan# 3170
 Delta R.T. -0.008 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

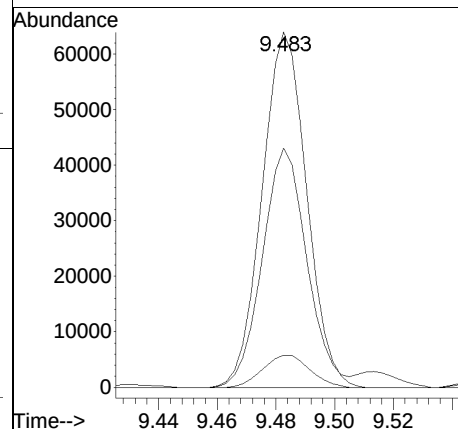
Tgt	Ion	Resp	346305
91	100	Lower	Upper
120	22.2	17.0	25.6

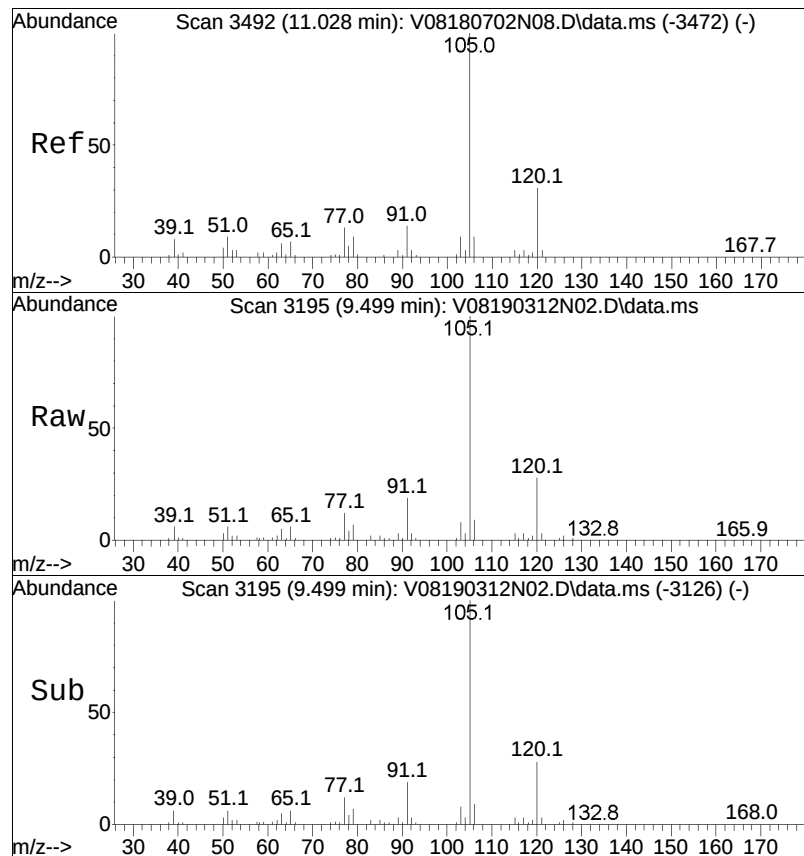




#87
 1,1,2,2-Tetrachloroethane
 Concen: 9.94 ug/L
 RT: 9.483 min Scan# 3189
 Delta R.T. -0.005 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

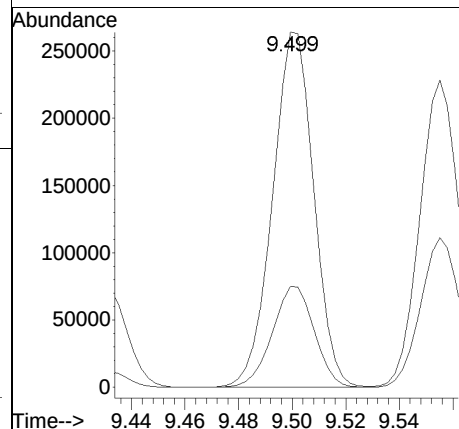
Tgt	Ion: 83	Resp:	67447
Ion	Ratio	Lower	Upper
83	100		
131	9.6	0.0	30.4
85	67.6	45.4	85.4

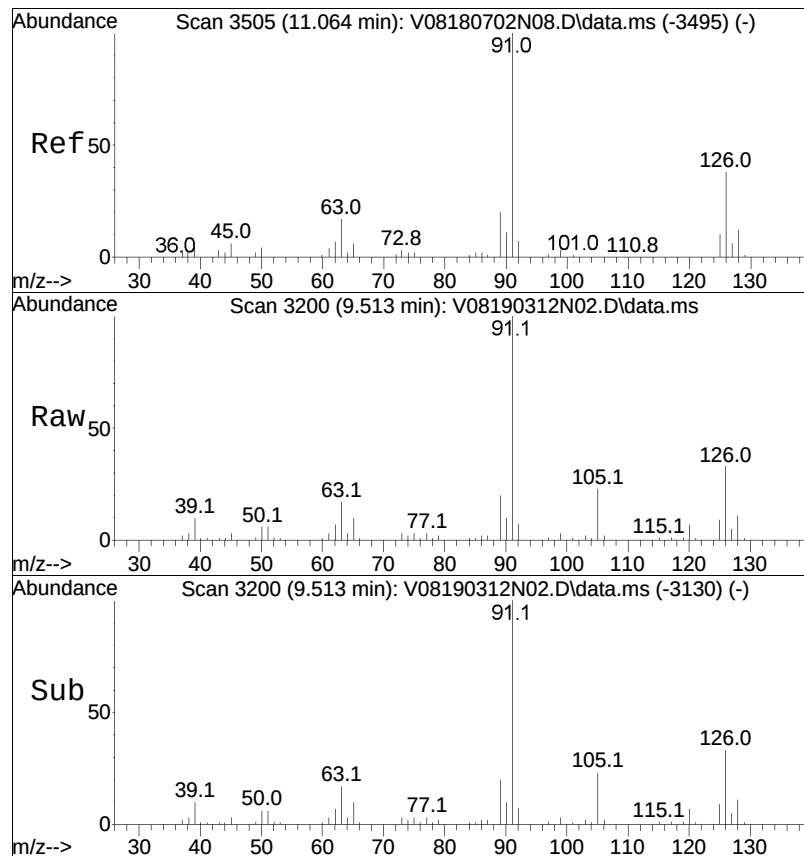




#88
 4-Ethyltoluene
 Concen: 10.17 ug/L
 RT: 9.499 min Scan# 3195
 Delta R.T. -0.009 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

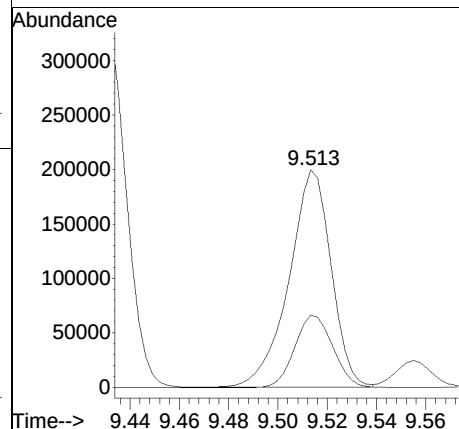
Tgt Ion	Ratio	Lower	Upper
105	100		
120	29.0	18.1	37.7

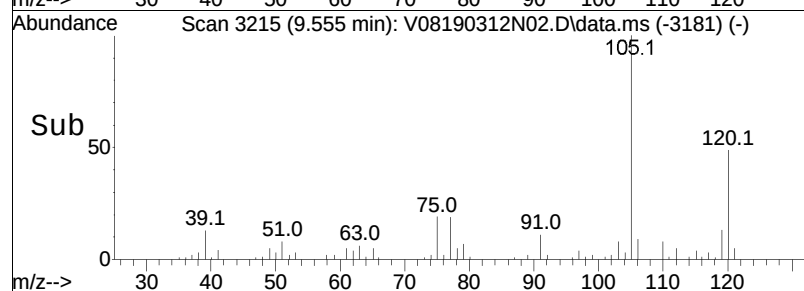
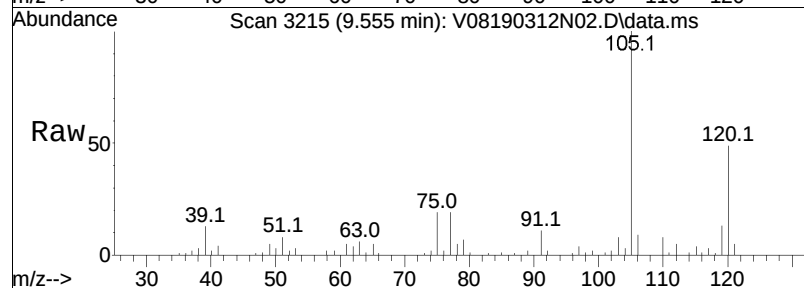
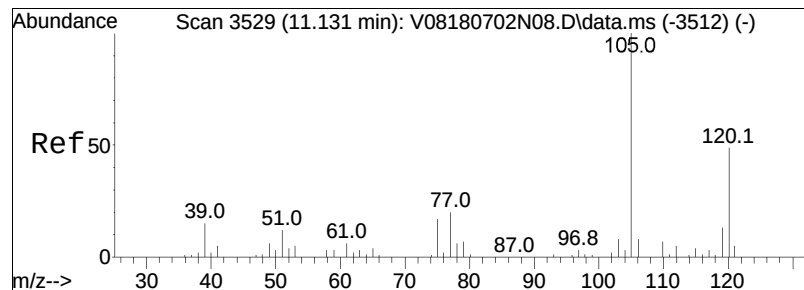




#89
 2-Chlorotoluene
 Concen: 9.70 ug/L
 RT: 9.513 min Scan# 3200
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

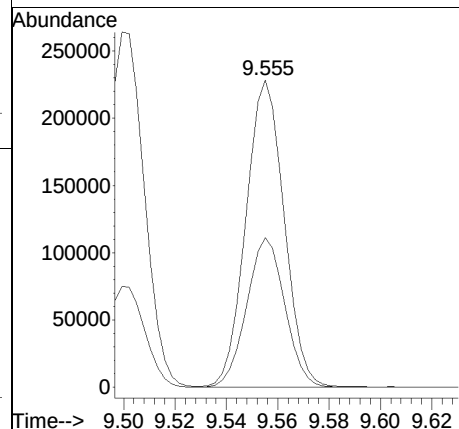
Tgt	Ion	Resp	Lower	Upper
91	100	236078		
126	30.0	21.5	32.3	

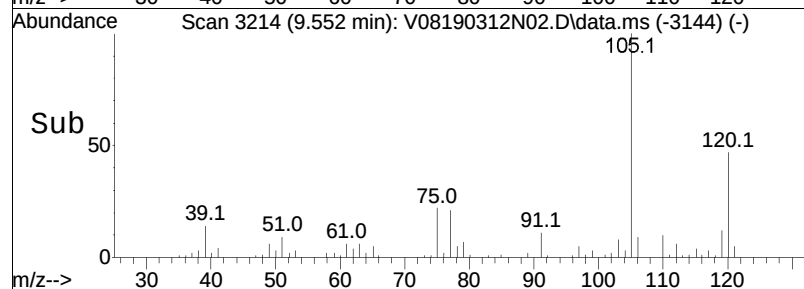
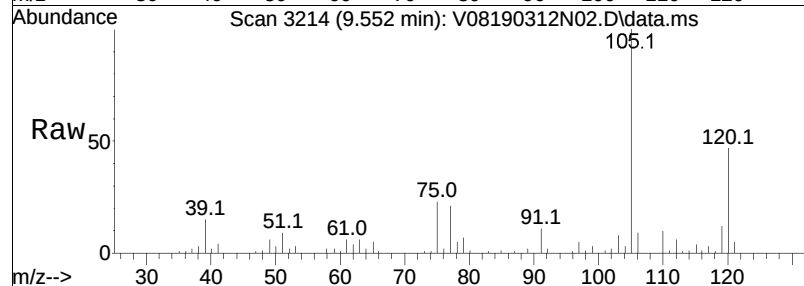
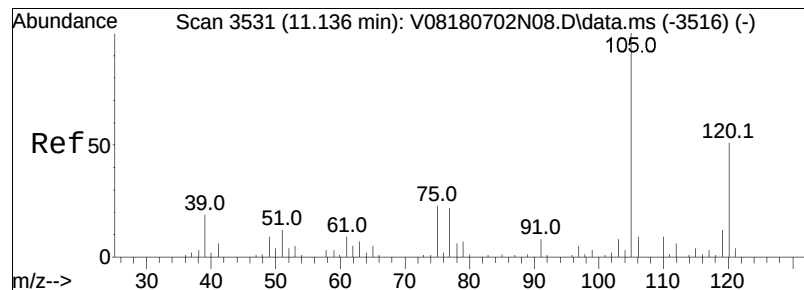




#90
 1,3,5-Trimethylbenzene
 Concen: 9.81 ug/L
 RT: 9.555 min Scan# 3215
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

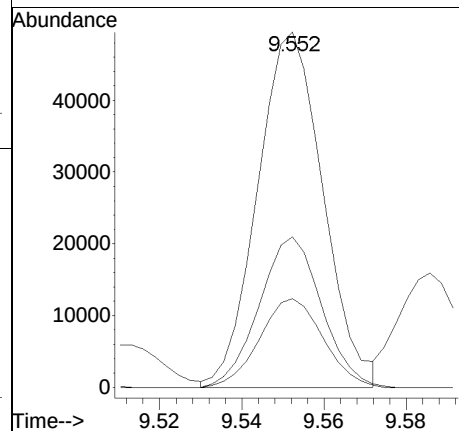
Tgt Ion	Ratio	Lower	Upper
105	100		
120	48.8	34.8	52.2

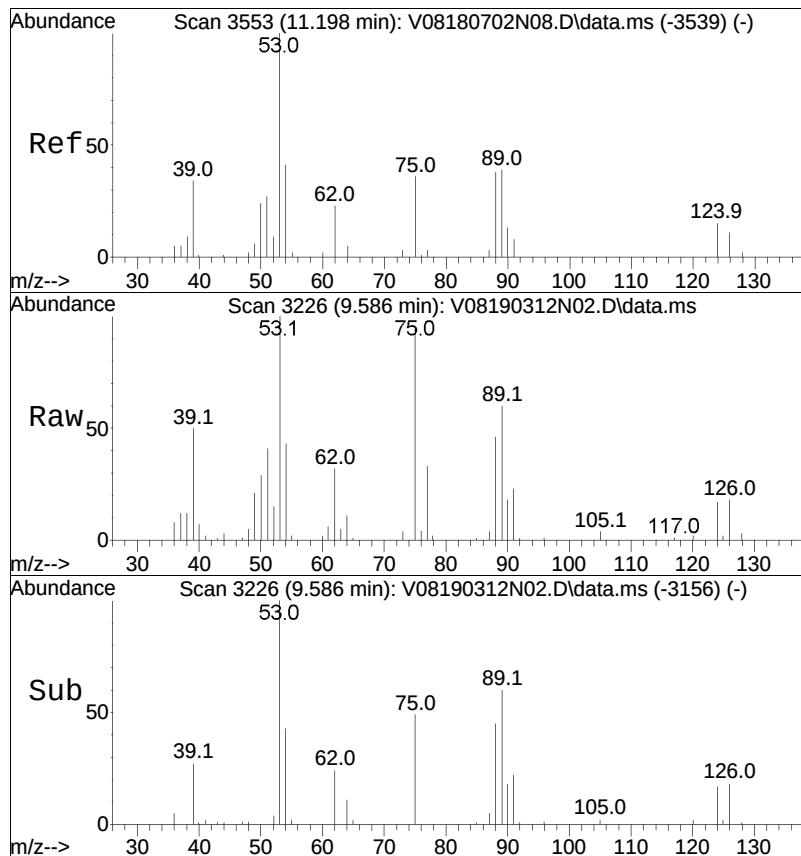




#91
 1,2,3-Trichloropropane
 Concen: 10.39 ug/L
 RT: 9.552 min Scan# 3214
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

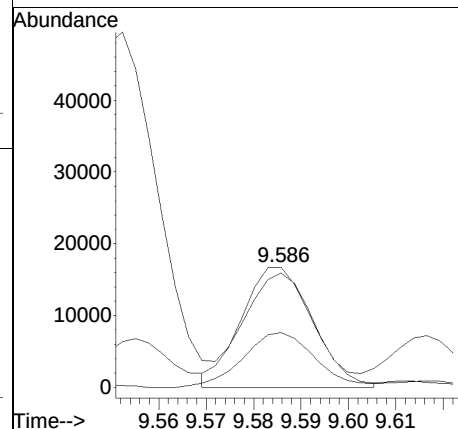
Tgt Ion:	75	Resp:	54759
Ion Ratio	Lower	Upper	
75	100		
110	40.3	25.4	52.8
112	24.3	15.6	32.4

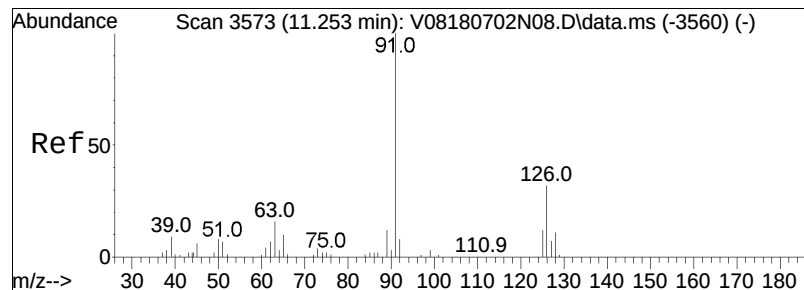




#92
trans-1,4-Dichloro-2-butene
Concen: 9.41 ug/L
RT: 9.586 min Scan# 3226
Delta R.T. -0.005 min
Lab File: V08190312N02.D
Acq: 12 Mar 2019 6:29 pm

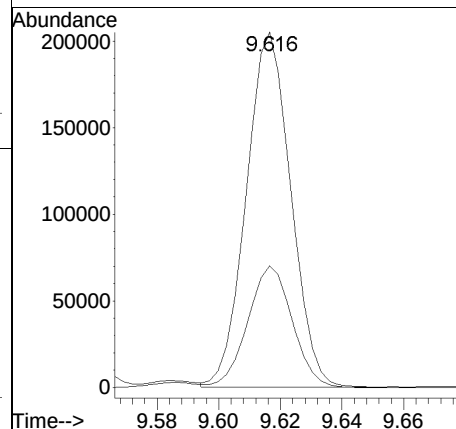
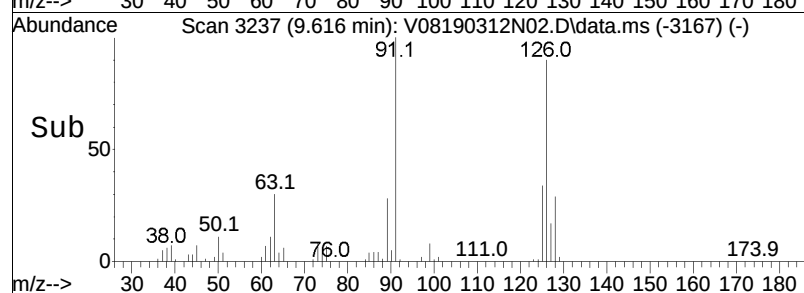
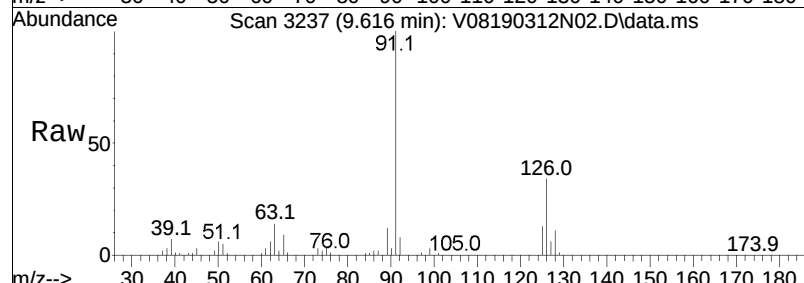
Tgt	Ion: 53	Resp:	17473
Ion	Ratio	Lower	Upper
53	100		
88	46.2	39.6	59.4
75	93.9	70.2	105.4

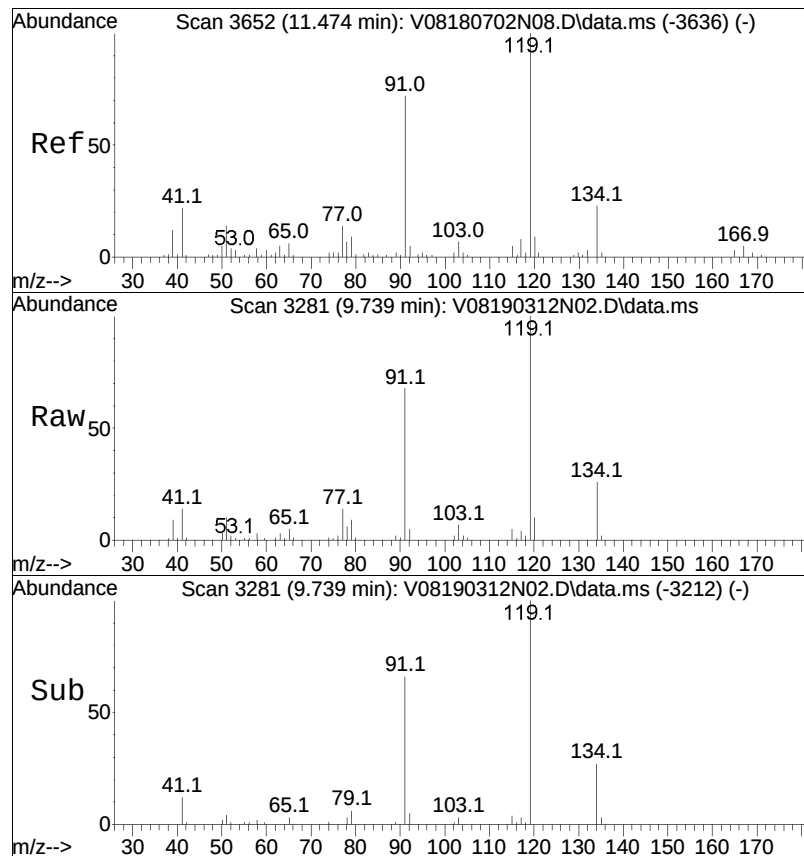




#93
 4-Chlorotoluene
 Concen: 9.68 ug/L
 RT: 9.616 min Scan# 3237
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

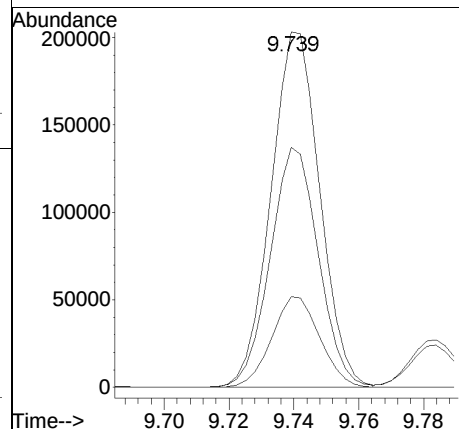
Tgt Ion:	91	Resp:	205057
Ion Ratio	Lower	Upper	
91	100		
126	34.2	24.6	36.8

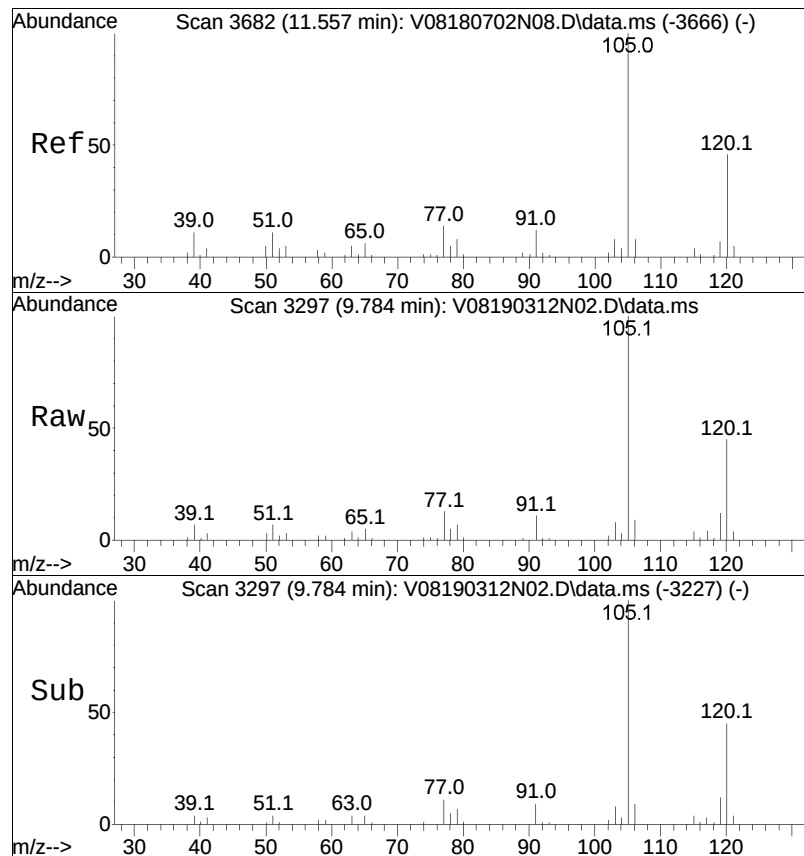




#94
 tert-Butylbenzene
 Concen: 8.64 ug/L
 RT: 9.739 min Scan# 3281
 Delta R.T. -0.008 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

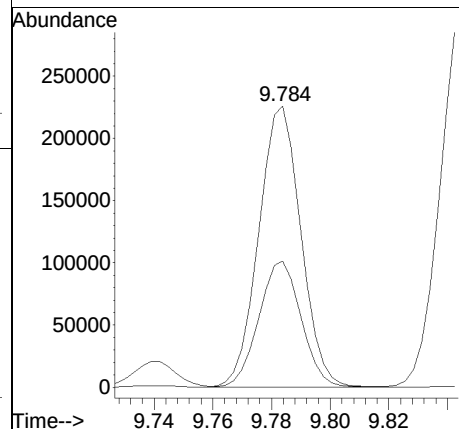
Tgt	Ion:119	Resp:	212907
Ion	Ratio	Lower	Upper
119	100		
91	66.5	51.4	77.2
134	25.1	18.3	27.5

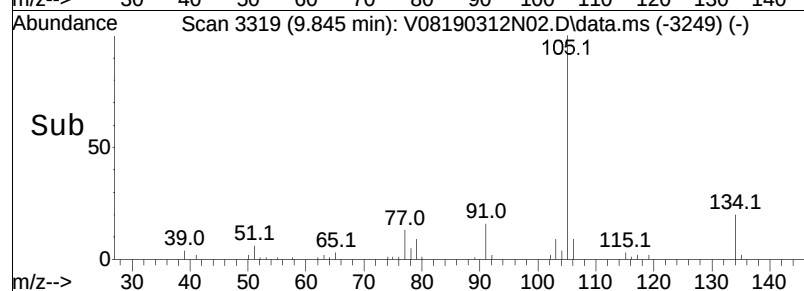
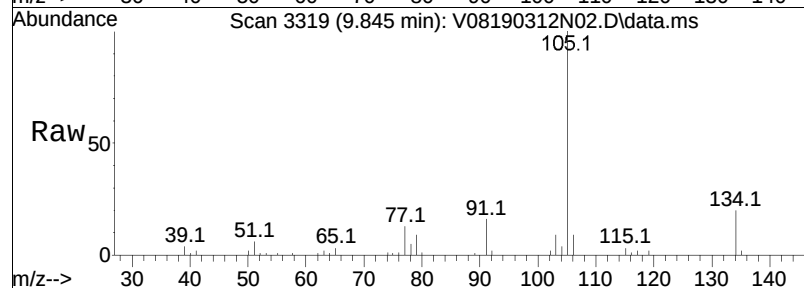
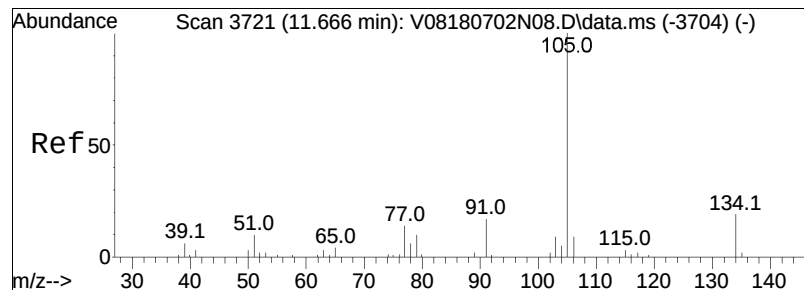




#97
 1,2,4-Trimethylbenzene
 Concen: 9.44 ug/L
 RT: 9.784 min Scan# 3297
 Delta R.T. -0.005 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

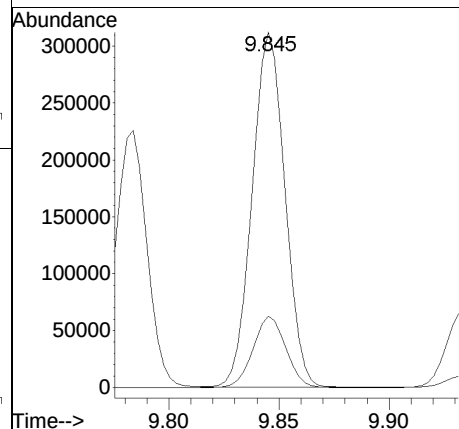
Tgt Ion	Ratio	Lower	Upper
105	100		
120	44.8	33.4	50.0

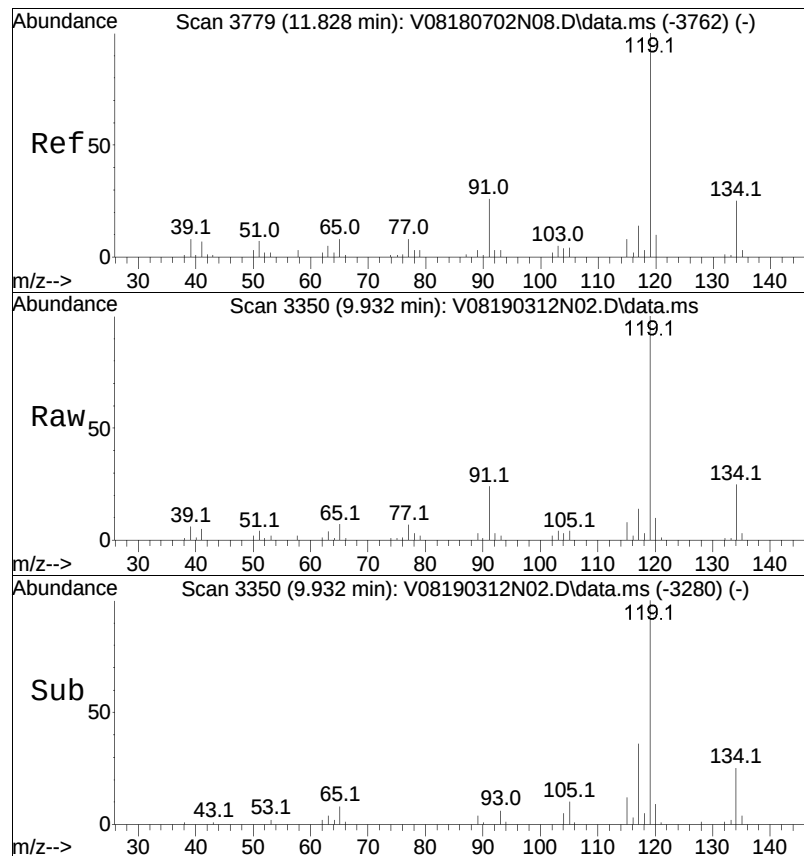




#98
 sec-Butylbenzene
 Concen: 10.68 ug/L
 RT: 9.845 min Scan# 3319
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

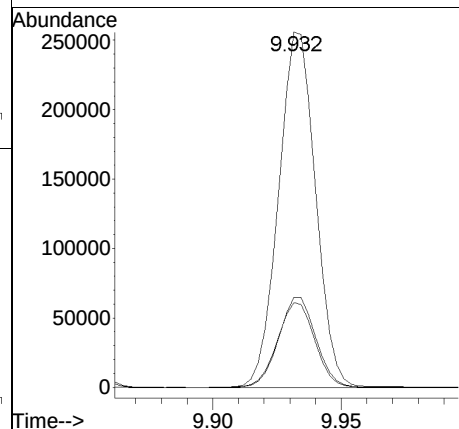
Tgt	Ion	Ratio	Lower	Upper
105	105	100		
134	134	19.9	12.5	26.1

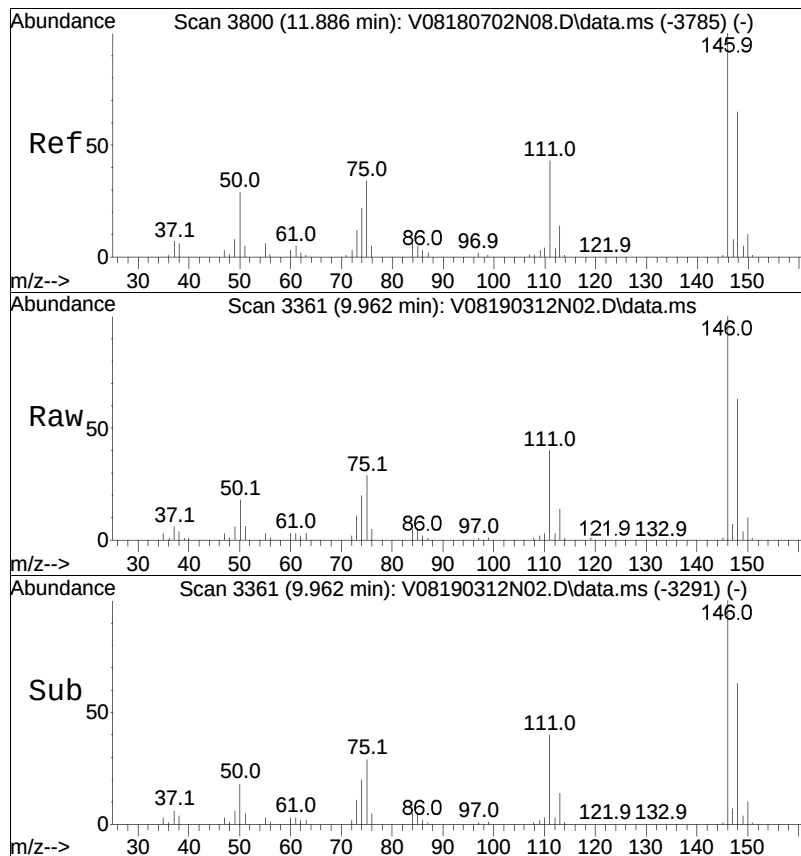




#99
 p-Isopropyltoluene
 Concen: 9.89 ug/L
 RT: 9.932 min Scan# 3350
 Delta R.T. -0.005 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

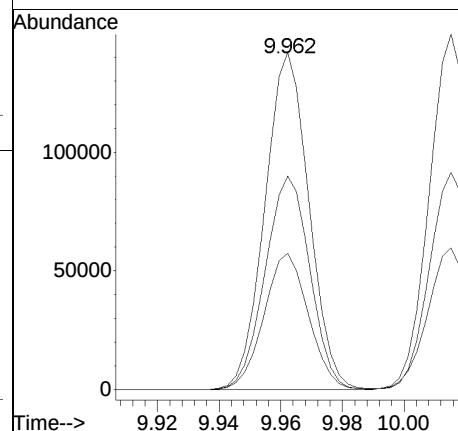
Tgt Ion:	119	Resp:	256364
Ion Ratio	Lower	Upper	
119	100		
134	25.5	16.1	33.3
91	24.3	17.3	35.9

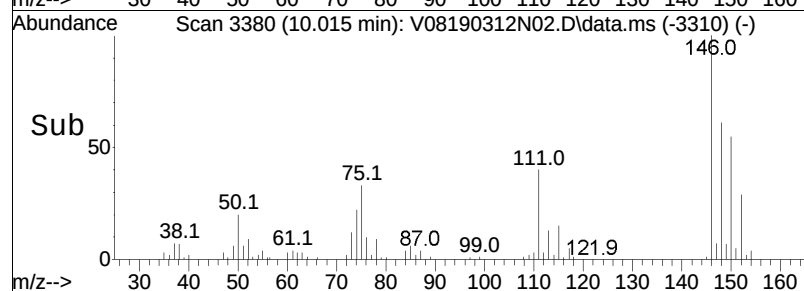
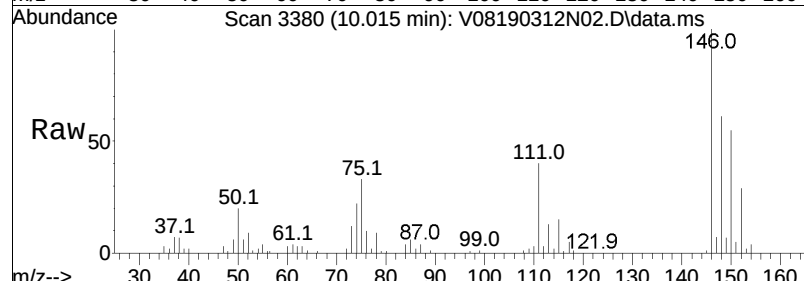
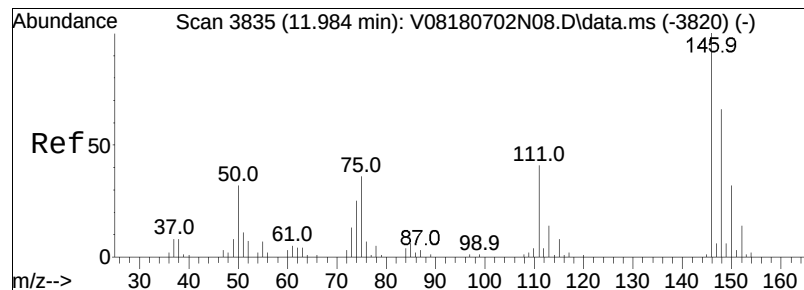




#100
 1,3-Dichlorobenzene
 Concen: 10.16 ug/L
 RT: 9.962 min Scan# 3361
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

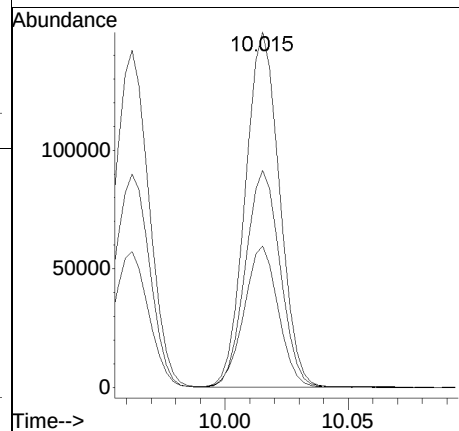
Tgt Ion:	146	Resp:	140861
Ion Ratio	Lower	Upper	
146	100		
111	40.9	27.5	57.1
148	64.3	41.9	86.9

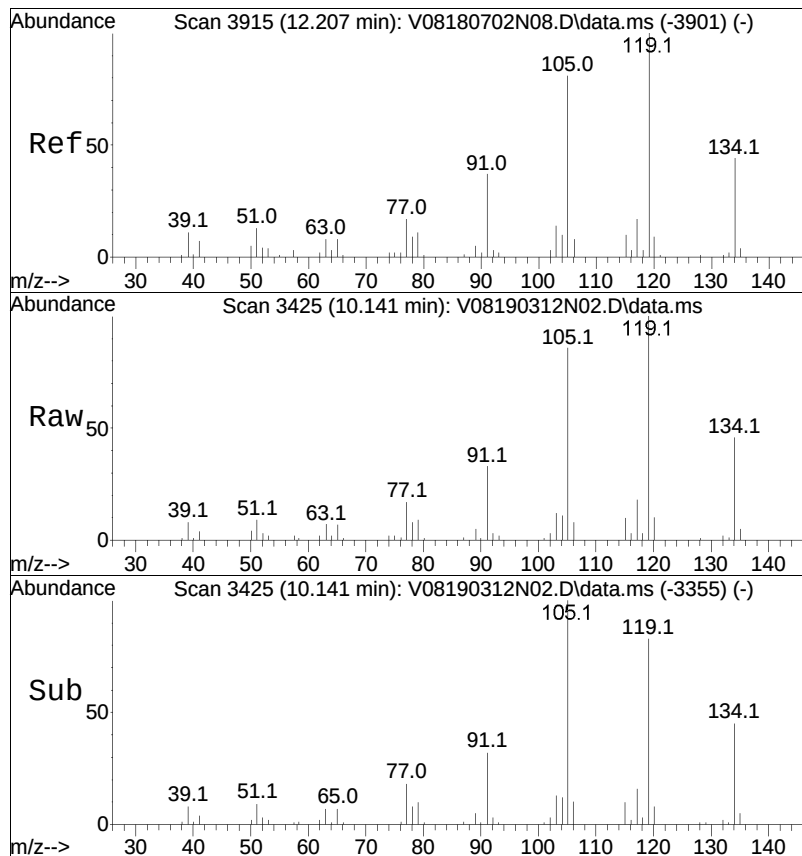




#101
 1,4-Dichlorobenzene
 Concen: 10.08 ug/L
 RT: 10.015 min Scan# 3380
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

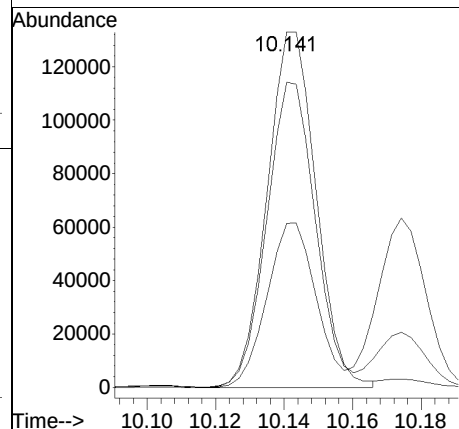
Tgt Ion	Ratio	Lower	Upper
146	100		
111	39.6	32.3	48.5
148	62.2	49.9	74.9

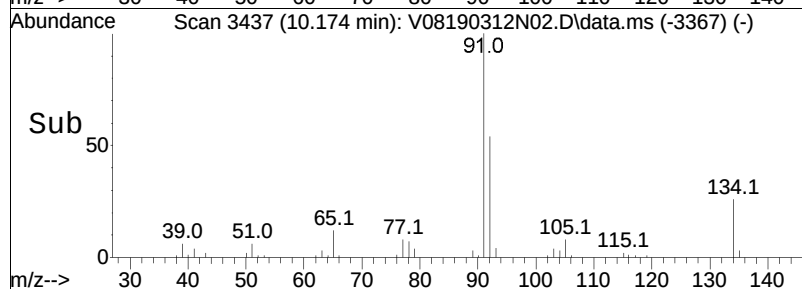
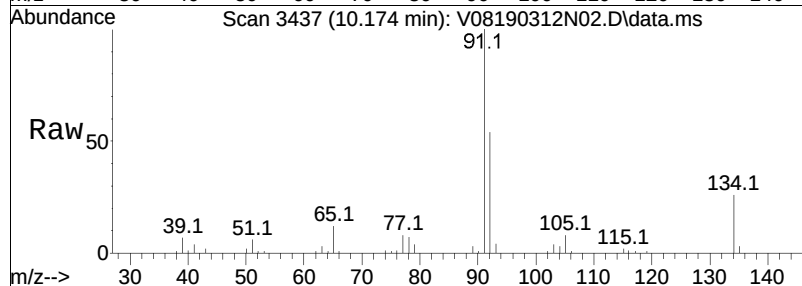
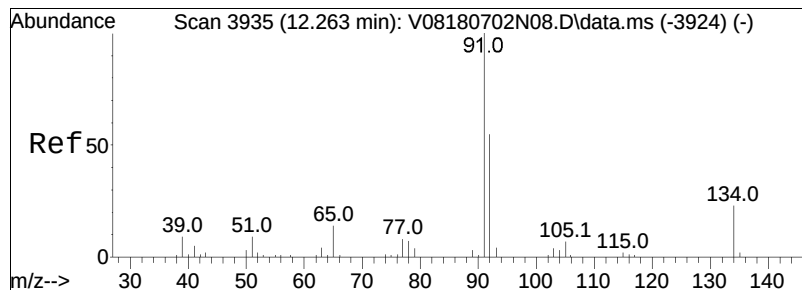




#102
 p-Diethylbenzene
 Concen: 8.70 ug/L
 RT: 10.141 min Scan# 3425
 Delta R.T. -0.005 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

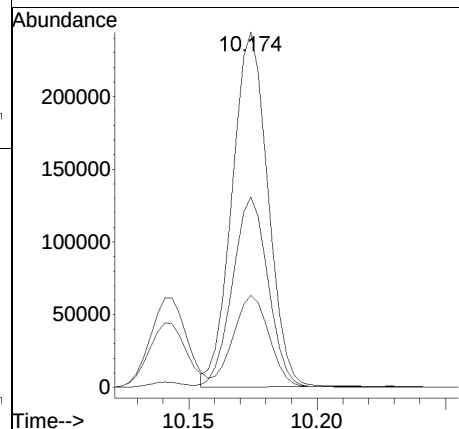
Tgt Ion:	119	Resp:	131958
Ion Ratio	Lower	Upper	
119	100		
105	84.9	59.5	123.7
134	46.4	30.2	62.6

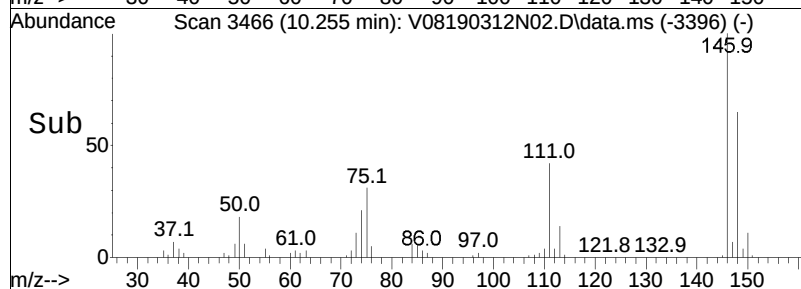
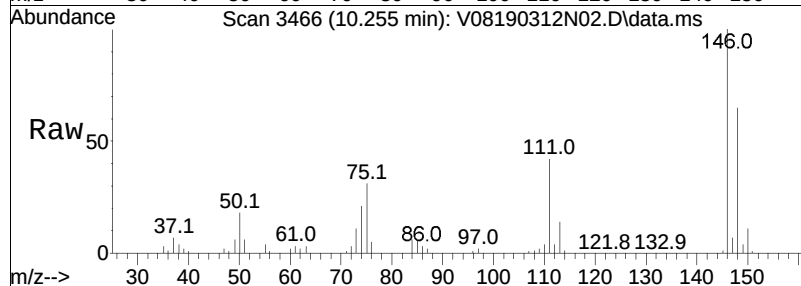
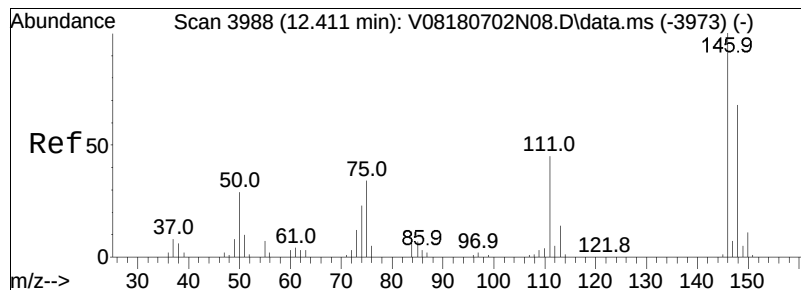




#103
 n-Butylbenzene
 Concen: 9.83 ug/L
 RT: 10.174 min Scan# 3437
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

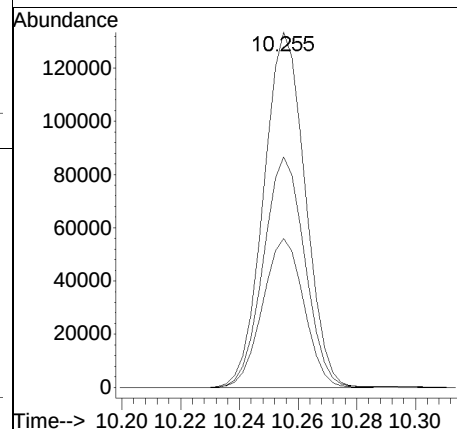
Tgt Ion:	91	Resp:	236200
Ion Ratio	Lower	Upper	
91	100		
92	53.4	43.0	64.4
134	26.1	19.6	29.4

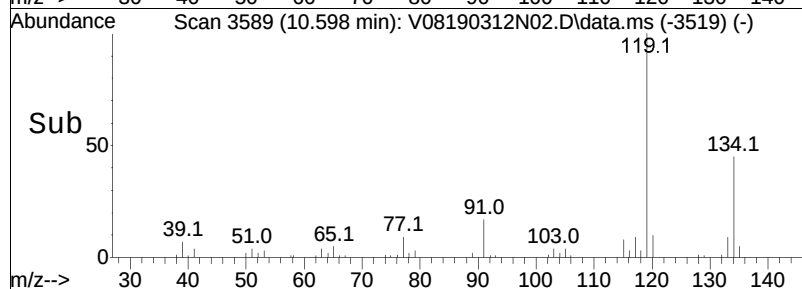
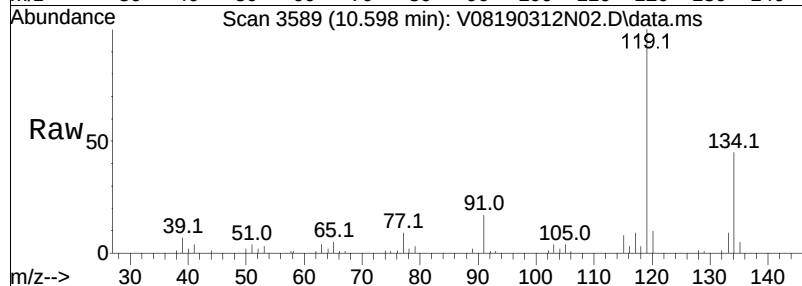
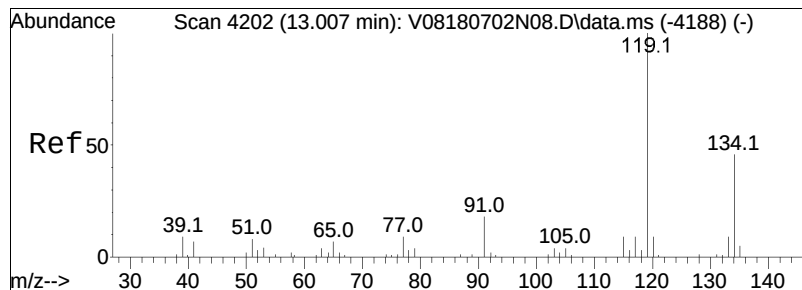




#104
 1,2-Dichlorobenzene
 Concen: 9.71 ug/L
 RT: 10.255 min Scan# 3466
 Delta R.T. -0.006 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

Tgt Ion	Ratio	Lower	Upper
146	100		
111	41.7	28.3	58.7
148	64.9	42.3	87.8





#105

1,2,4,5-Tetramethylbenzene

Concen: 3.64 ug/L

RT: 10.598 min Scan# 3589

Delta R.T. -0.006 min

Lab File: V08190312N02.D

Acq: 12 Mar 2019 6:29 pm

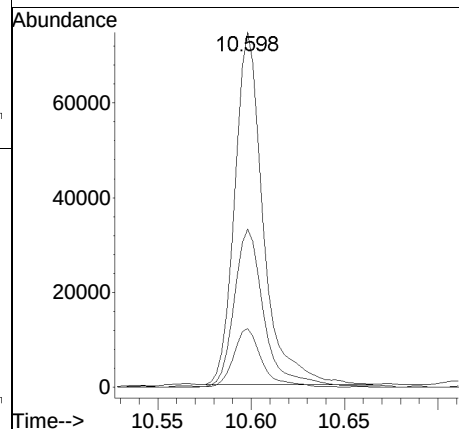
Tgt Ion:119 Resp: 79486

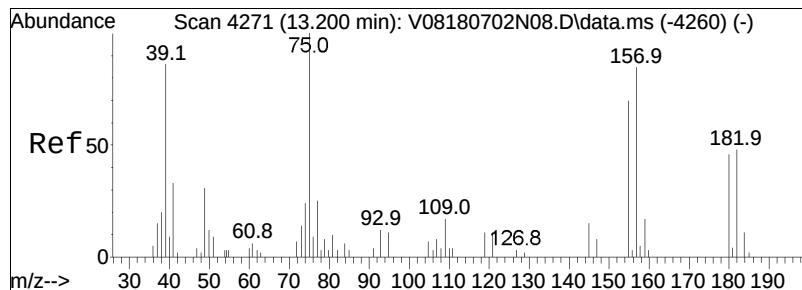
Ion Ratio Lower Upper

119 100

134 46.5 30.5 63.3

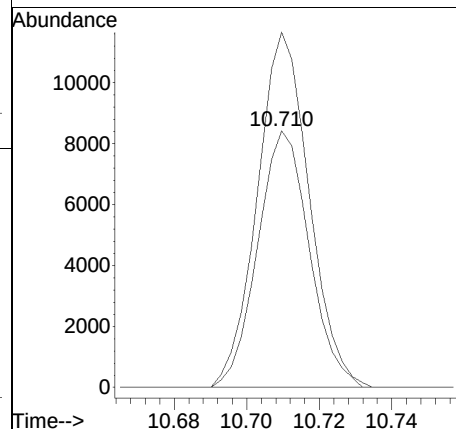
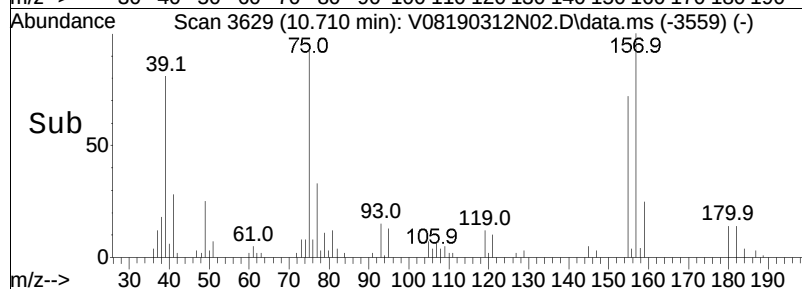
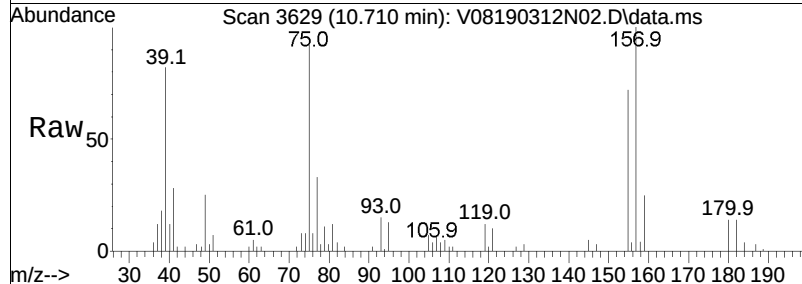
91 16.8 12.4 25.7

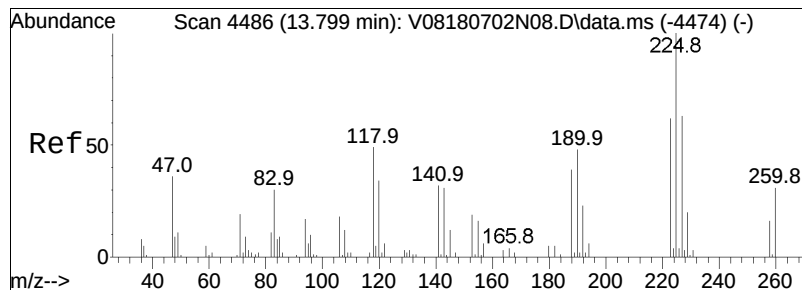




#106
 1,2-Dibromo-3-chloropropane
 Concen: 8.20 ug/L
 RT: 10.710 min Scan# 3629
 Delta R.T. -0.005 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

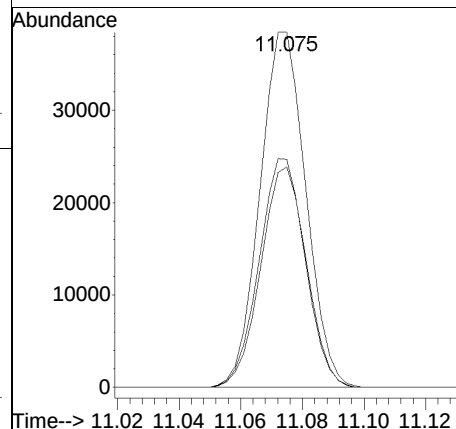
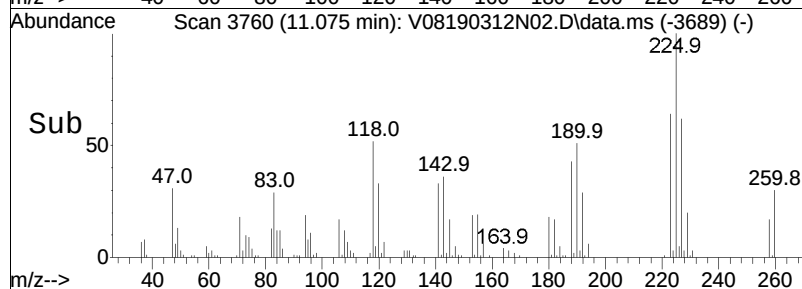
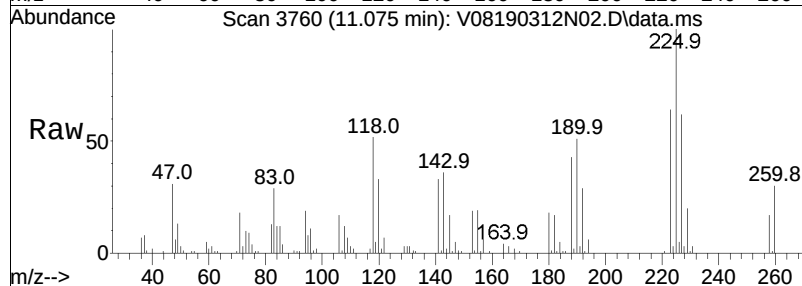
Tgt Ion	Ratio	Lower	Upper
155	100		
157	139.3	94.8	142.2

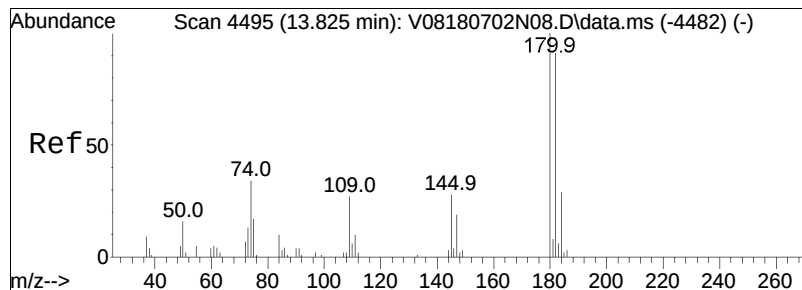




#108
 Hexachlorobutadiene
 Concen: 9.12 ug/L
 RT: 11.075 min Scan# 3760
 Delta R.T. -0.003 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

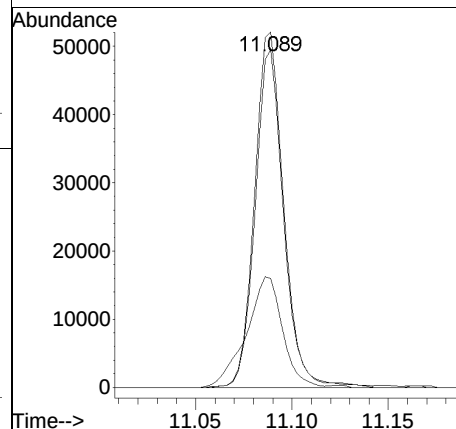
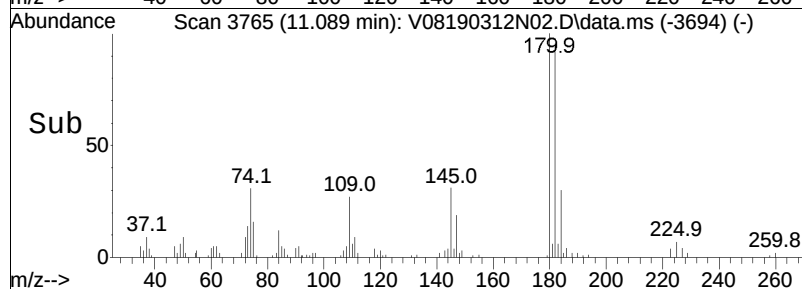
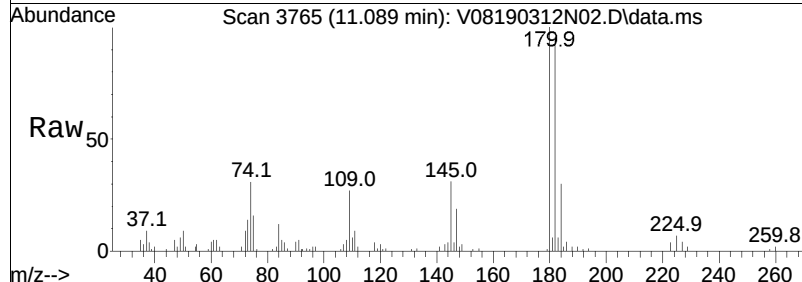
Tgt Ion	Ratio	Lower	Upper
225	100		
223	64.8	54.3	81.5
227	61.7	52.4	78.6

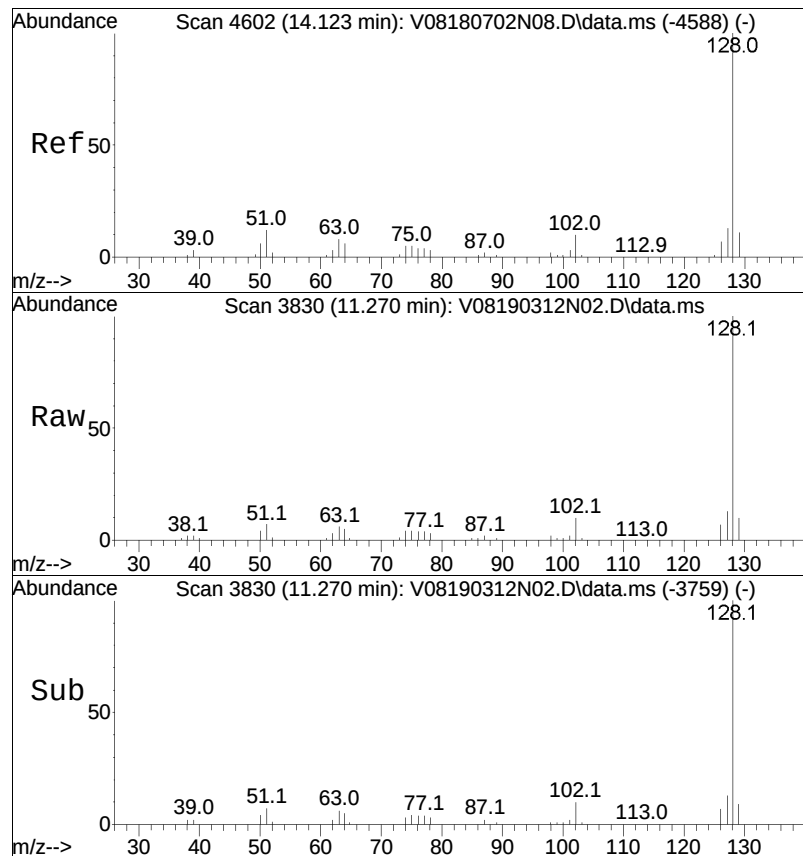




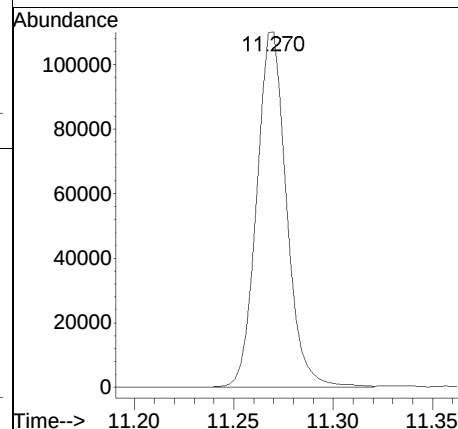
#109
 1,2,4-Trichlorobenzene
 Concen: 6.45 ug/L
 RT: 11.089 min Scan# 3765
 Delta R.T. -0.003 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

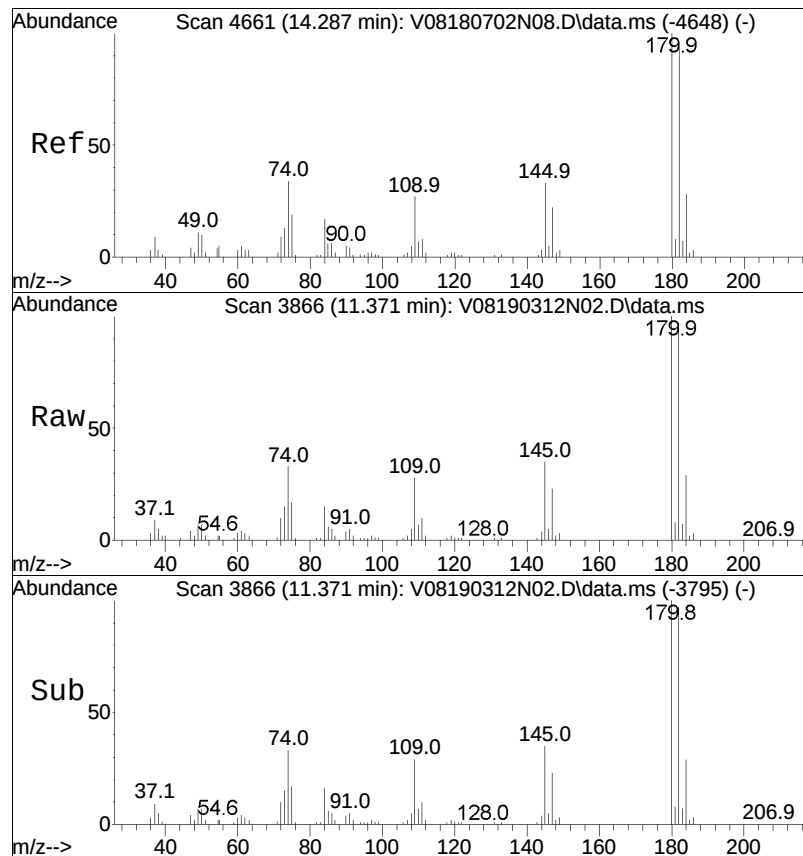
Tgt Ion	Ratio	Lower	Upper
180	100		
182	92.9	77.3	115.9
145	38.7	28.1	42.1





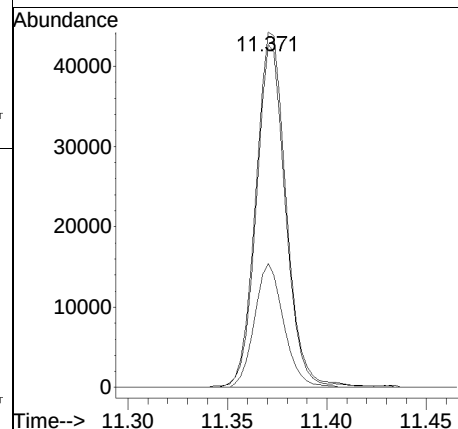
#110
 Naphthalene
 Concen: 6.16 ug/L
 RT: 11.270 min Scan# 3830
 Delta R.T. -0.003 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm
 Tgt Ion:128 Resp: 115149





#111
 1,2,3-Trichlorobenzene
 Concen: 6.14 ug/L
 RT: 11.371 min Scan# 3866
 Delta R.T. -0.002 min
 Lab File: V08190312N02.D
 Acq: 12 Mar 2019 6:29 pm

Tgt Ion:	180	Resp:	47082
Ion Ratio	Lower	Upper	
180	100		
182	92.5	76.4	114.6
145	33.5	26.4	39.6



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-3,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	302021	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery	=	100.00%	
59) Chlorobenzene-d5	8.526	117	206709	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery	=	100.00%	
79) 1,4-Dichlorobenzene-d4	10.007	152	100898	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery	=	100.00%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.572	113	81069	10.509	ug/L	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.09%	
43) 1,2-Dichloroethane-d4	5.208	65	93402	10.772	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	107.72%	
60) Toluene-d8	7.241	98	282582	9.974	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.74%	
83) 4-Bromofluorobenzene	9.340	95	90653	9.182	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	91.82%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.975	85	60779	10.070	ug/L	98
3) Chloromethane	1.094	50	63363	10.658	ug/L	99
4) Vinyl chloride	1.150	62	71701	11.293	ug/L	96
5) Bromomethane	1.359	94	56273	10.292	ug/L	95
6) Chloroethane	1.443	64	61991	13.351	ug/L	96
7) Trichlorofluoromethane	1.543	101	121795	11.883	ug/L	97
8) Ethyl ether	1.783	74	33730	9.878	ug/L	68
10) 1,1-Dichloroethene	1.914	96	57329	10.096	ug/L	# 67
11) Carbon disulfide	1.920	76	183477	10.280	ug/L	96
15) Methylene chloride	2.408	84	71404	10.556	ug/L	70
17) Acetone	2.466	43	13863	11.808	ug/L	# 72
18) trans-1,2-Dichloroethene	2.558	96	64734	10.049	ug/L	75
20) Methyl tert-butyl ether	2.690	73	144331	8.530	ug/L	92
23) 1,1-Dichloroethane	3.208	63	120748	10.597	ug/L	97
25) Acrylonitrile	3.270	53	17919	10.142	ug/L	94
27) Vinyl acetate	3.582	43	112677	8.340	ug/L	# 92
28) cis-1,2-Dichloroethene	3.908	96	75253	10.293	ug/L	# 69
29) 2,2-Dichloropropane	4.048	77	85062	9.085	ug/L	92
30) Bromochloromethane	4.181	128	37729	11.165	ug/L	# 54
32) Chloroform	4.340	83	130091	10.933	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-3,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34)	Carbon tetrachloride	4.460	117	97282	10.942	ug/L	99
37)	1,1,1-Trichloroethane	4.552	97	111528	10.748	ug/L #	97
39)	2-Butanone	4.759	43	20302	9.896	ug/L #	82
40)	1,1-Dichloropropene	4.728	75	89405	10.764	ug/L	95
41)	Benzene	5.035	78	276186	10.650	ug/L	90
44)	1,2-Dichloroethane	5.289	62	98737	11.066	ug/L	96
48)	Trichloroethene	5.743	95	76395	11.063	ug/L	96
50)	Dibromomethane	6.186	93	43678	10.787	ug/L	97
51)	1,2-Dichloropropane	6.298	63	69057	10.268	ug/L	97
54)	Bromodichloromethane	6.404	83	98548	10.448	ug/L	99
57)	1,4-Dioxane	6.630	88	18782	638.596	ug/L #	77
58)	cis-1,3-Dichloropropene	7.062	75	104424	9.878	ug/L	92
61)	Toluene	7.288	92	171435	10.641	ug/L	97
62)	4-Methyl-2-pentanone	7.687	58	16247	8.945	ug/L #	97
63)	Tetrachloroethene	7.639	166	70586	10.204	ug/L	91
65)	trans-1,3-Dichloropropene	7.706	75	92516	10.172	ug/L	94
68)	1,1,2-Trichloroethane	7.835	83	52416	11.357	ug/L	94
69)	Chlorodibromomethane	7.968	129	71380	10.512	ug/L	98
70)	1,3-Dichloropropane	8.044	76	104234	11.187	ug/L	100
71)	1,2-Dibromoethane	8.127	107	57526	10.478	ug/L	96
72)	2-Hexanone	8.364	43	24970	7.942	ug/L	94
73)	Chlorobenzene	8.537	112	187460	10.461	ug/L	90
74)	Ethylbenzene	8.576	91	299929	9.985	ug/L	98
75)	1,1,1,2-Tetrachloroethane	8.596	131	70061	10.445	ug/L	94
76)	p/m Xylene	8.682	106	228345	19.986	ug/L	97
77)	o Xylene	8.964	106	217748	19.249	ug/L	92
78)	Styrene	9.003	104	370863	20.525	ug/L	89
80)	Bromoform	9.006	173	42957	10.228	ug/L	95
82)	Isopropylbenzene	9.173	105	301620	10.240	ug/L	96
84)	Bromobenzene	9.396	156	73271	9.666	ug/L	97
85)	n-Propylbenzene	9.432	91	356917	10.615	ug/L	96
87)	1,1,2,2-Tetrachloroethane	9.483	83	69307	10.131	ug/L	98
88)	4-Ethyltoluene	9.502	105	291106	10.395	ug/L	97
89)	2-Chlorotoluene	9.513	91	241642	9.846	ug/L	94
90)	1,3,5-Trimethylbenzene	9.555	105	241486	9.986	ug/L	93
91)	1,2,3-Trichloropropane	9.552	75	58561	11.018	ug/L	99
92)	trans-1,4-Dichloro-2-b...	9.583	53	17067	9.114	ug/L	93
93)	4-Chlorotoluene	9.617	91	225476	10.561	ug/L	95
94)	tert-Butylbenzene	9.742	119	215895	8.688	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N02.D
 Acq On : 13 Mar 2019 6:42 pm
 Operator : VOA108:KJD
 Sample : WG1215584-3,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

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

97)	1,2,4-Trimethylbenzene	9.784	105	230470	9.577	ug/L	95
98)	sec-Butylbenzene	9.845	105	322416	10.591	ug/L	99
99)	p-Isopropyltoluene	9.932	119	258281	9.883	ug/L	96
100)	1,3-Dichlorobenzene	9.962	146	148192	10.603	ug/L	98
101)	1,4-Dichlorobenzene	10.015	146	150989	10.431	ug/L	99
102)	p-Diethylbenzene	10.144	119	126695	8.283	ug/L	95
103)	n-Butylbenzene	10.174	91	231697	9.559	ug/L	99
104)	1,2-Dichlorobenzene	10.255	146	140796	10.328	ug/L	96
105)	1,2,4,5-Tetramethylben...	10.598	119	69079	3.204	ug/L	94
106)	1,2-Dibromo-3-chloropr...	10.710	155	9430	9.206	ug/L	87
108)	Hexachlorobutadiene	11.075	225	38059	8.655	ug/L	98
109)	1,2,4-Trichlorobenzene	11.089	180	48079	5.619	ug/L	96
110)	Naphthalene	11.270	128	105744	5.614	ug/L	100
111)	1,2,3-Trichlorobenzene	11.371	180	42031	5.435	ug/L	98

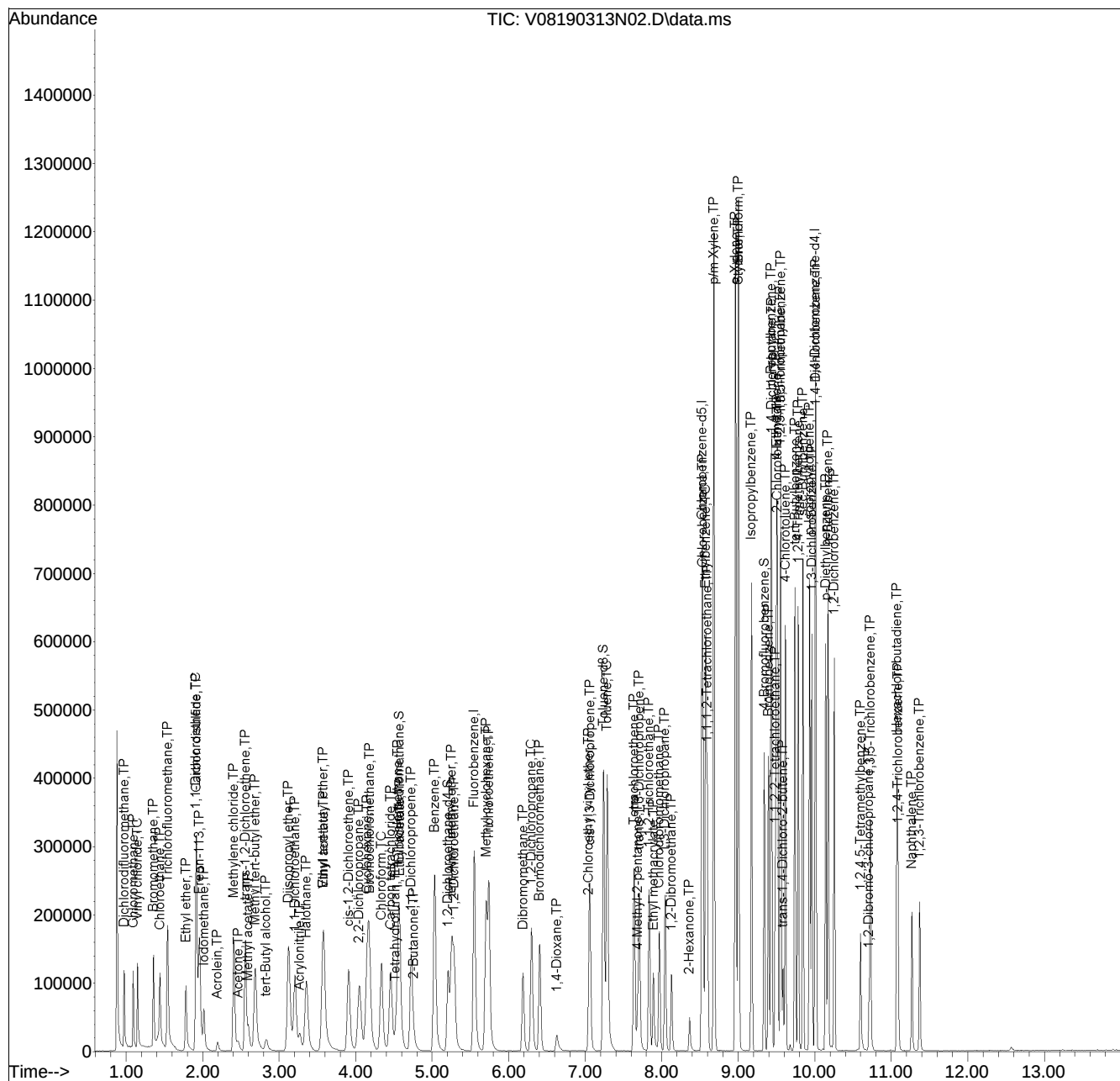
(#) = qualifier out of range (m) = manual integration (+) = signals summed

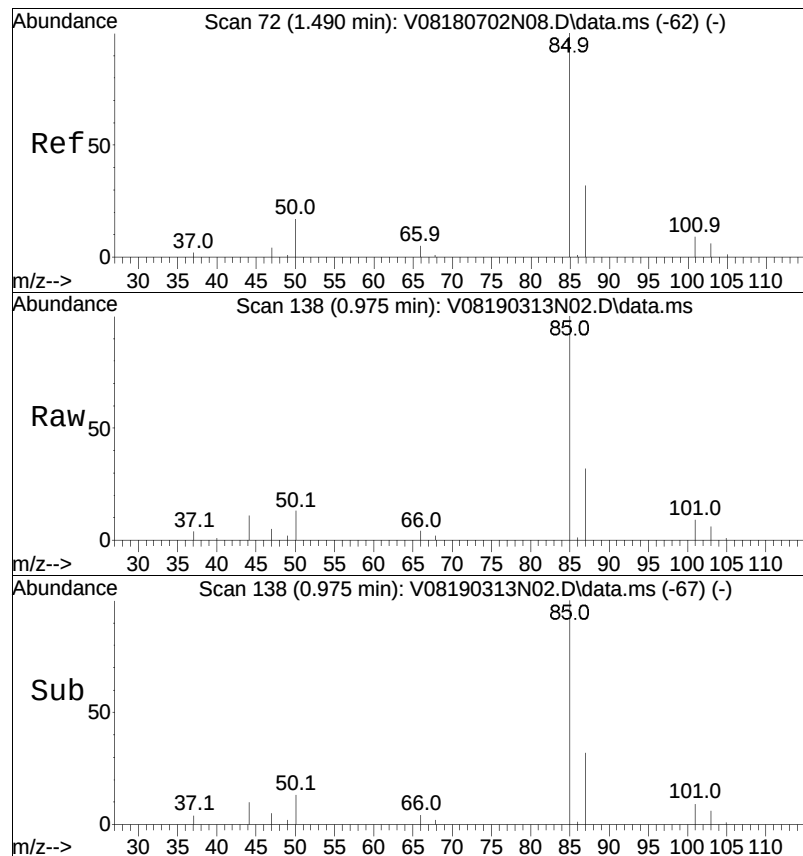
(QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
Data File : V08190313N02.D
Acq On : 13 Mar 2019 6:42 pm
Operator : VOA108:KJD
Sample : WG1215584-3, 31, 10, 10
Misc : WG1215584, ICAL15519
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 13 18:57:57 2019
Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Feb 19 00:08:39 2019
Response via : Initial Calibration

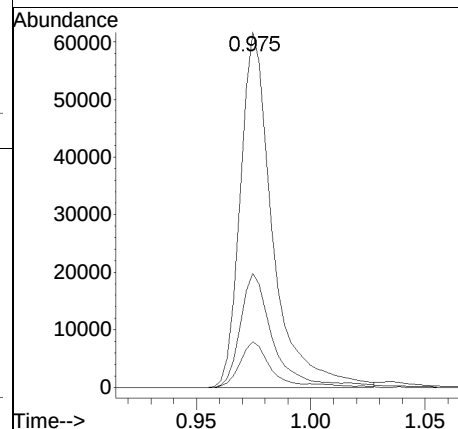
Sub List : 8260-Curve - Megamix plus Diox90313N\V08190313N02.D•

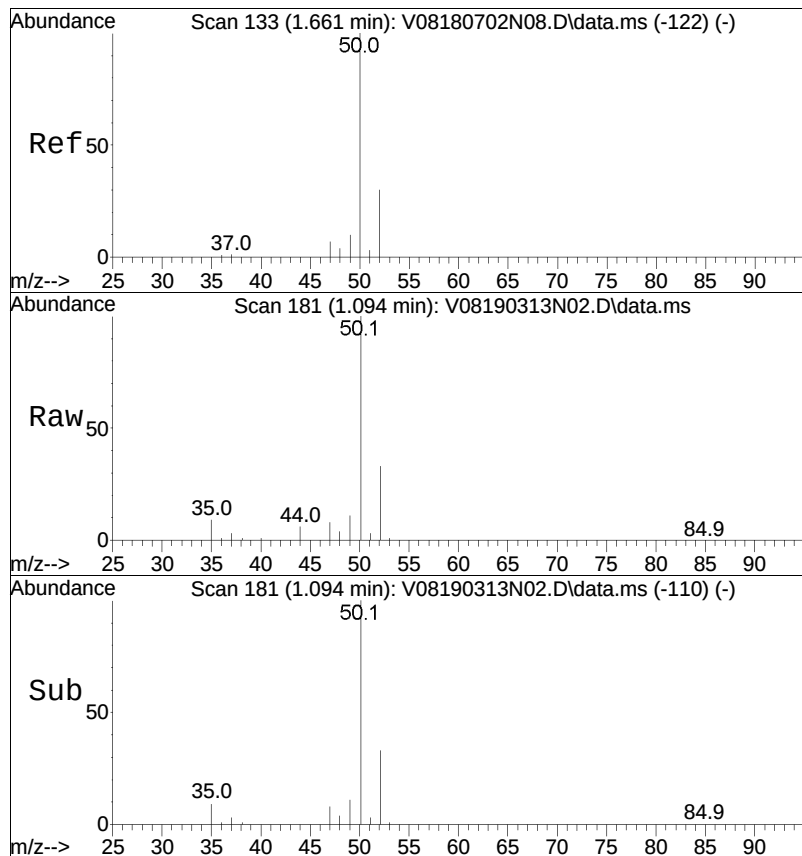




#2
 Dichlorodifluoromethane
 Concen: 10.07 ug/L
 RT: 0.975 min Scan# 138
 Delta R.T. -0.002 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

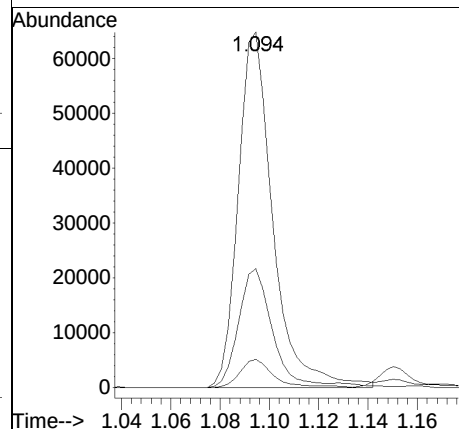
Tgt Ion:	85	Resp:	60779
Ion Ratio	Lower	Upper	
85	100		
87	33.2	21.0	43.6
50	12.8	8.9	18.5

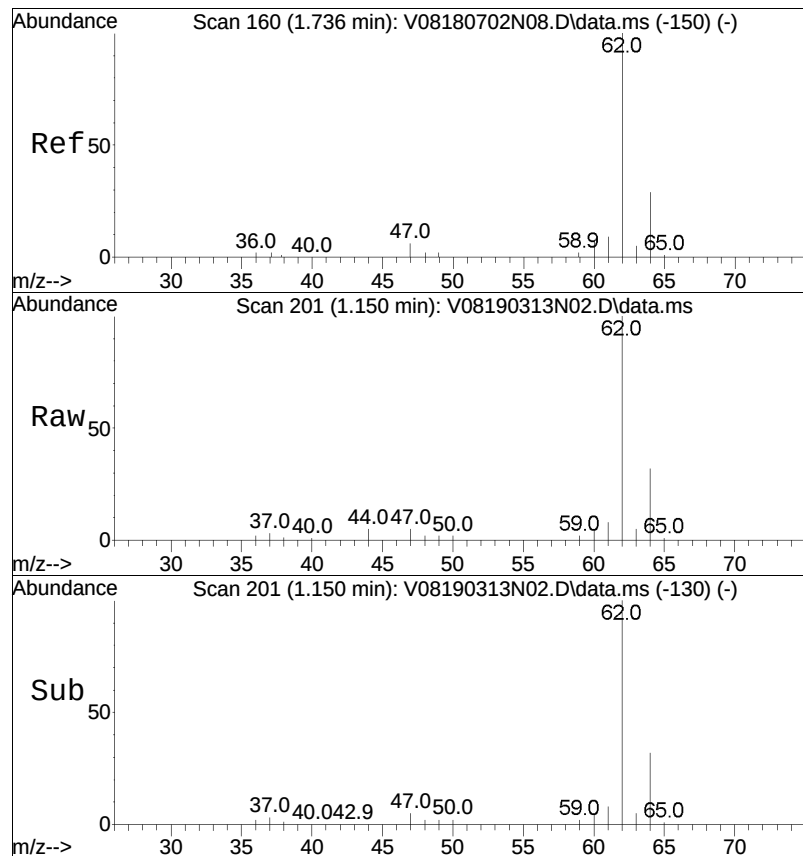




#3
 Chloromethane
 Concen: 10.66 ug/L
 RT: 1.094 min Scan# 181
 Delta R.T. -0.003 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

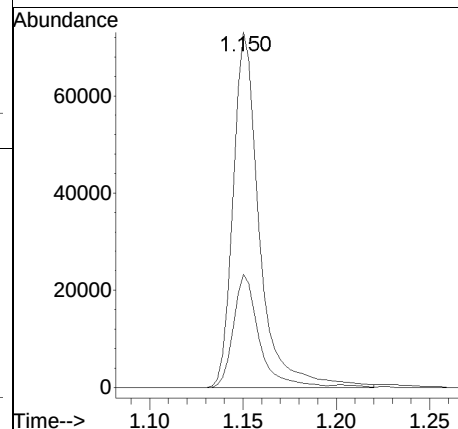
Tgt Ion:	50	Resp:	63363
Ion Ratio	Lower	Upper	
50	100		
52	33.3	12.9	52.9
47	7.6	0.0	28.3

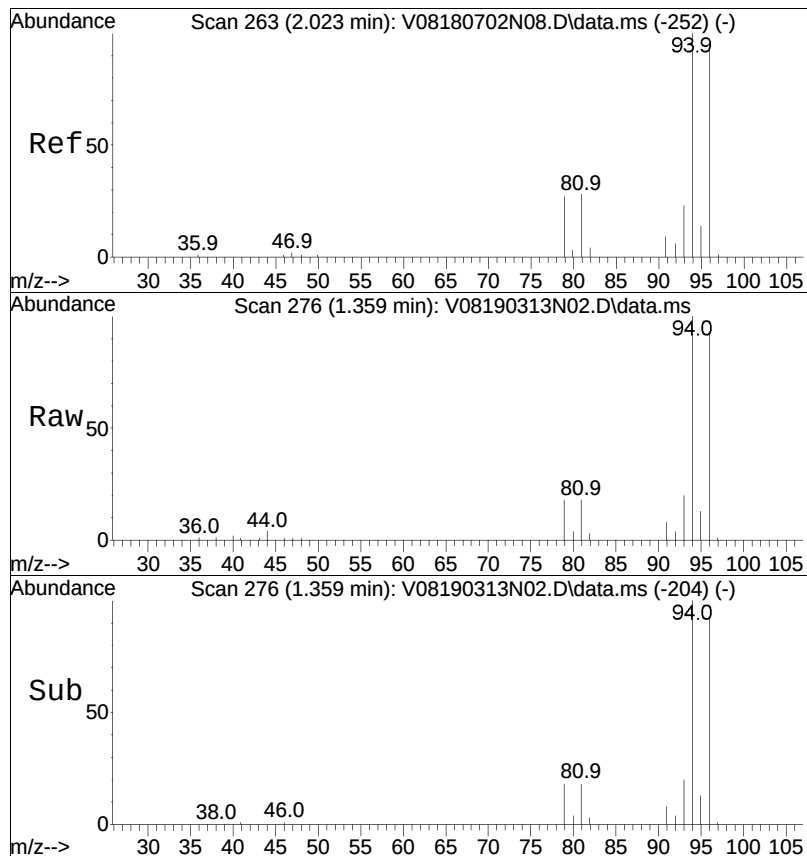




#4
 Vinyl chloride
 Concen: 11.29 ug/L
 RT: 1.150 min Scan# 201
 Delta R.T. -0.003 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

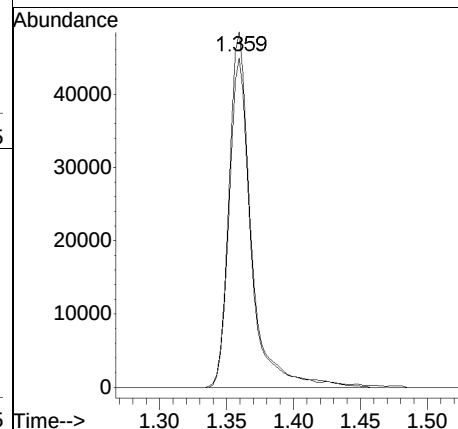
Tgt Ion	Ratio	Lower	Upper
62	100		
64	31.1	9.1	49.1

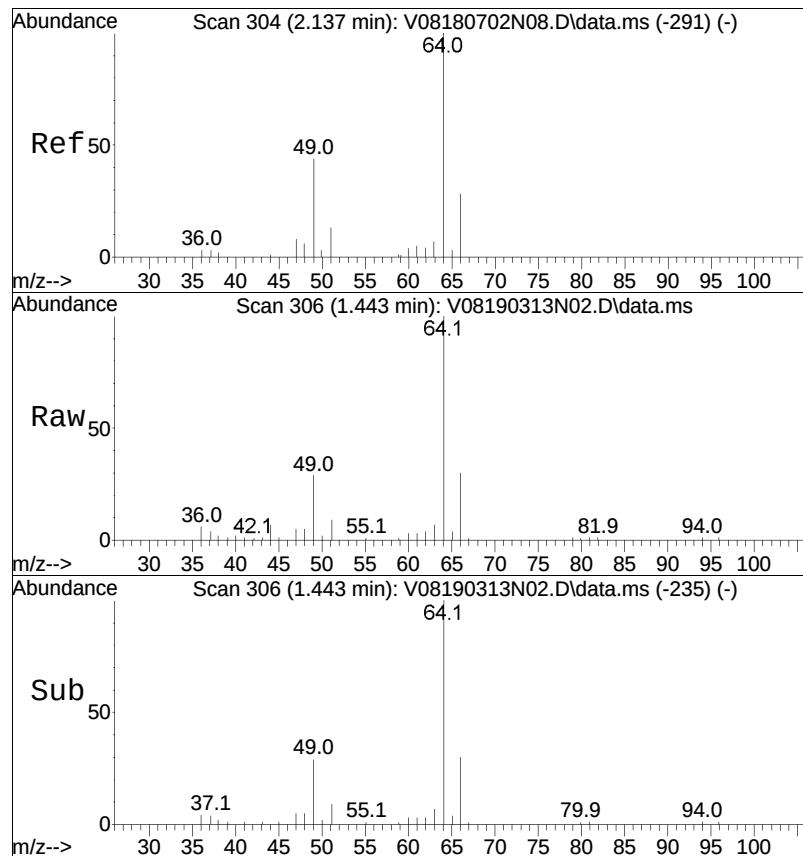




#5
 Bromomethane
 Concen: 10.29 ug/L
 RT: 1.359 min Scan# 276
 Delta R.T. 0.000 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

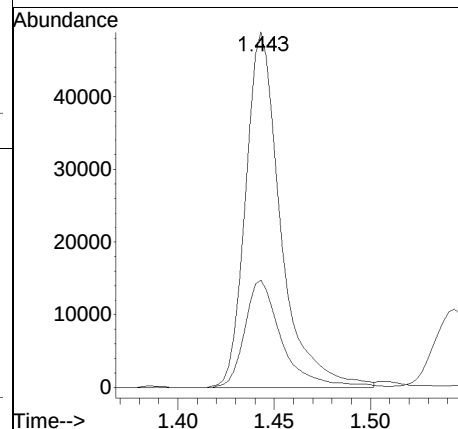
Tgt Ion	Ratio	Lower	Upper
94	100		
96	90.5	75.6	115.6

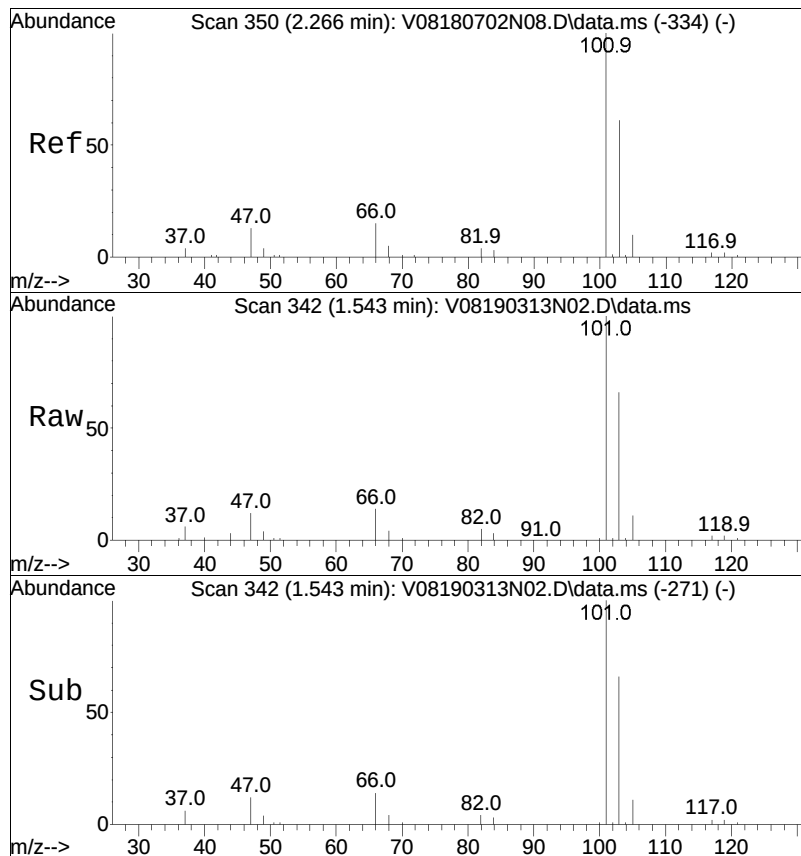




#6
 Chloroethane
 Concen: 13.35 ug/L
 RT: 1.443 min Scan# 306
 Delta R.T. -0.003 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

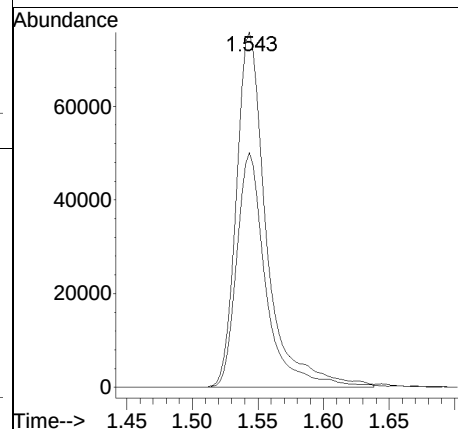
Tgt Ion	Ratio	Lower	Upper
64	100		
66	32.0	9.8	49.8

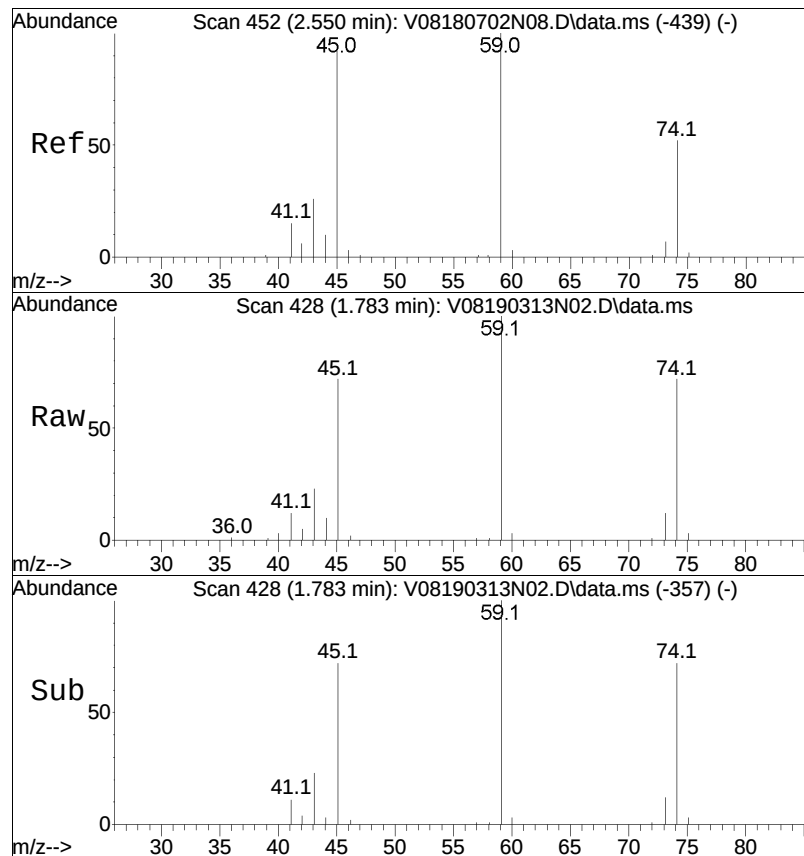




#7
 Trichlorofluoromethane
 Concen: 11.88 ug/L
 RT: 1.543 min Scan# 342
 Delta R.T. -0.003 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

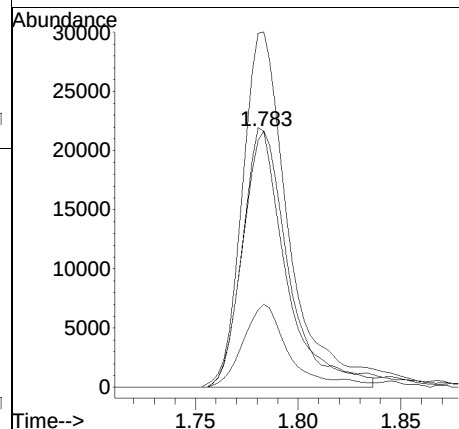
Tgt	Ion	Ratio	Lower	Upper
101	101	100		
103	103	64.6	53.8	80.6

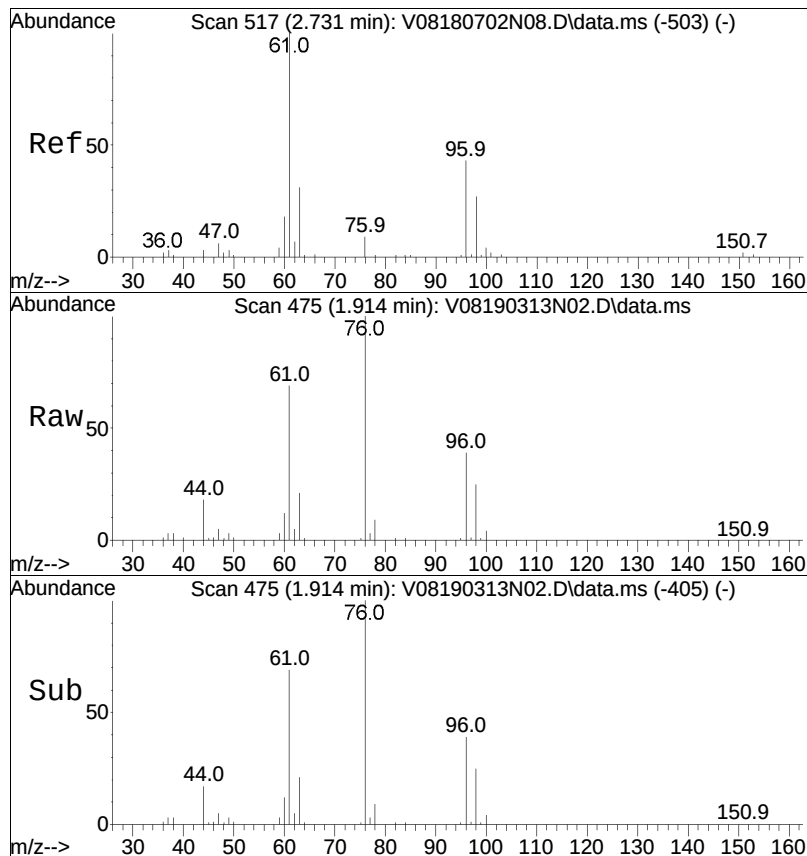




#8
 Ethyl ether
 Concen: 9.88 ug/L
 RT: 1.783 min Scan# 428
 Delta R.T. -0.003 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

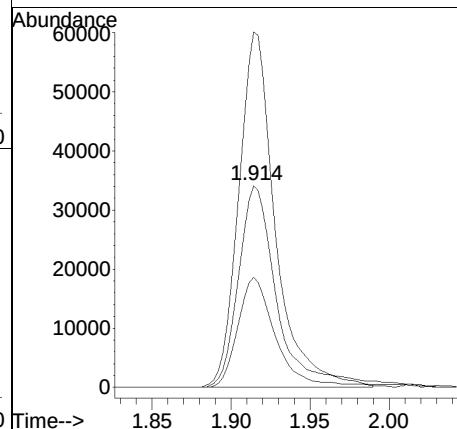
Tgt Ion:	74	Resp:	33730
Ion Ratio	Lower	Upper	
74	100		
59	143.3	122.2	253.8
45	95.0	91.9	190.9
43	30.6	25.2	52.2

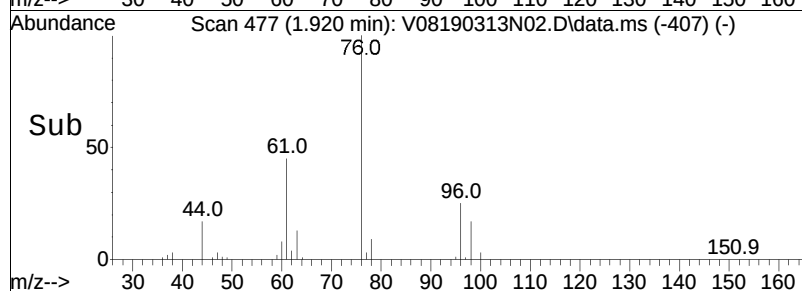
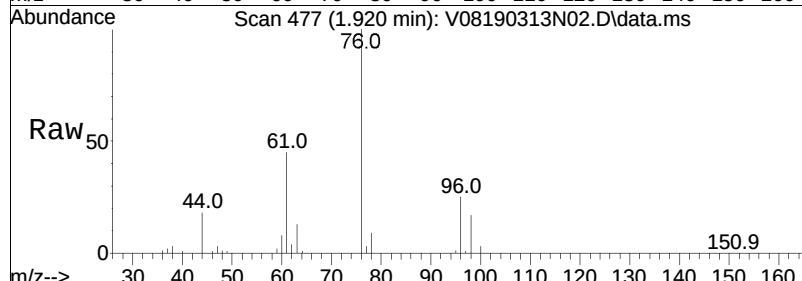
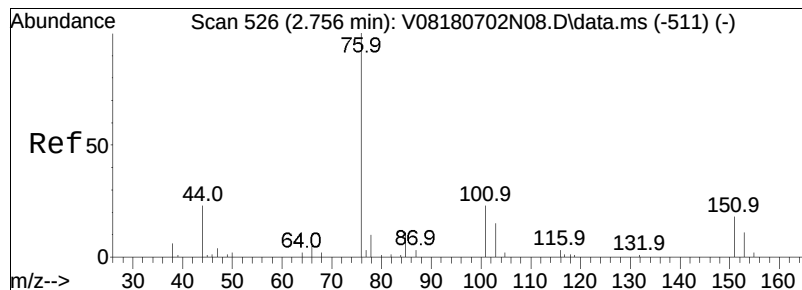




#10
 1,1-Dichloroethene
 Concen: 10.10 ug/L
 RT: 1.914 min Scan# 475
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

Tgt Ion:	96	Resp:	57329
Ion Ratio	Lower	Upper	
96	100		
61	172.5	186.1	279.1#
63	53.4	57.6	86.4#





#11

Carbon disulfide

Concen: 10.28 ug/L

RT: 1.920 min Scan# 477

Delta R.T. -0.005 min

Lab File: V08190313N02.D

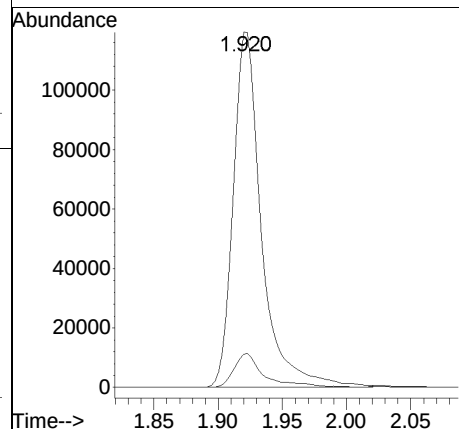
Acq: 13 Mar 2019 6:42 pm

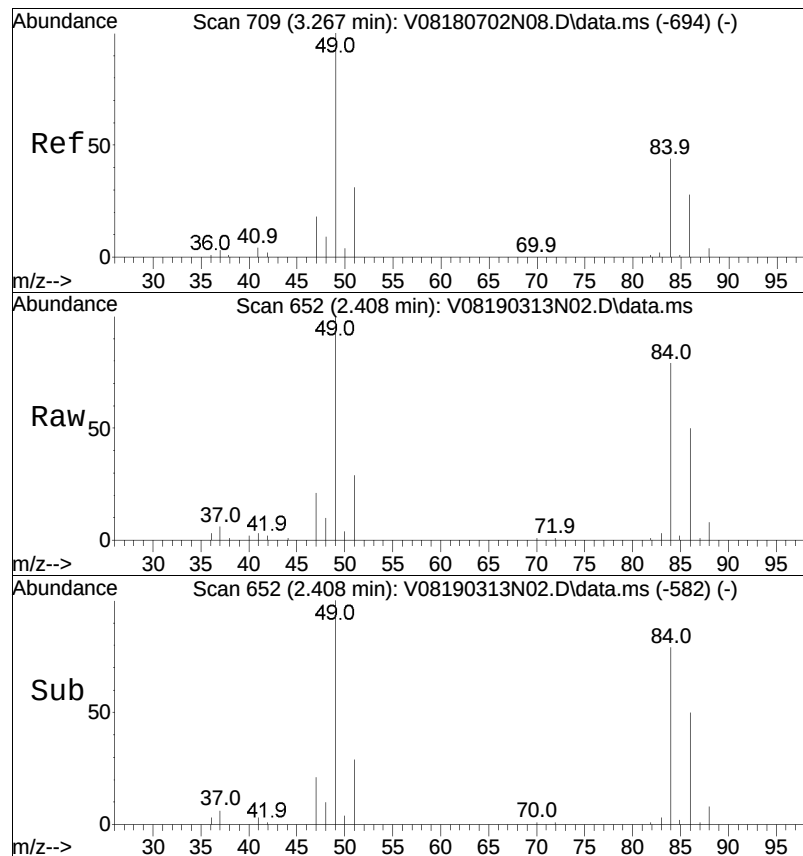
Tgt Ion: 76 Resp: 183477

Ion Ratio Lower Upper

76 100

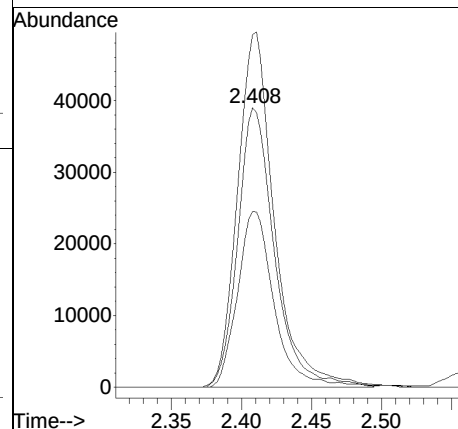
78 10.3 5.7 11.7

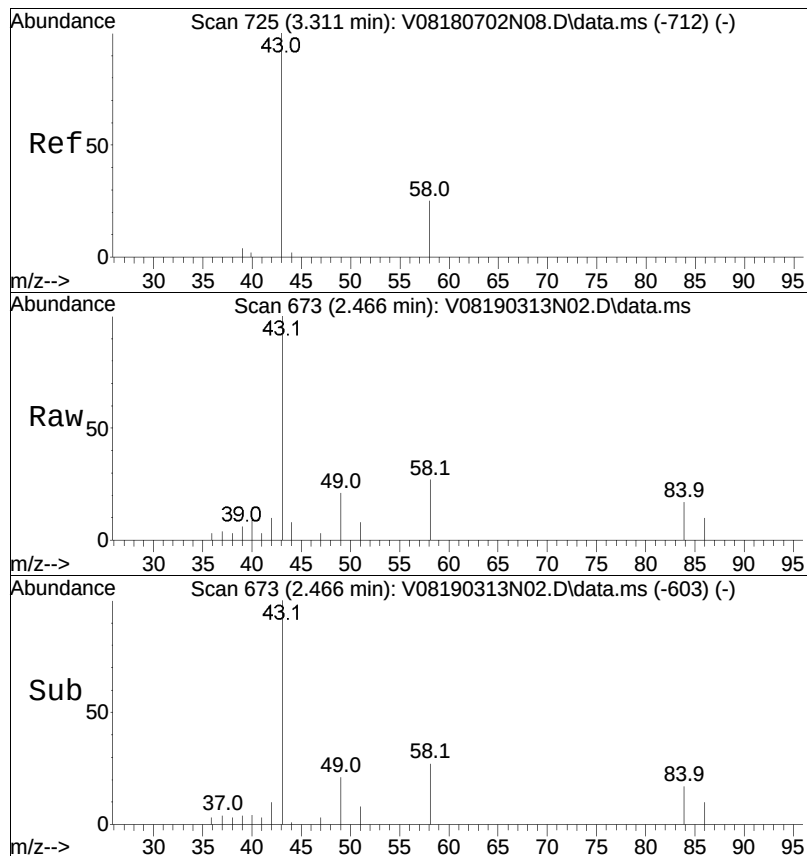




#15
 Methylene chloride
 Concen: 10.56 ug/L
 RT: 2.408 min Scan# 652
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

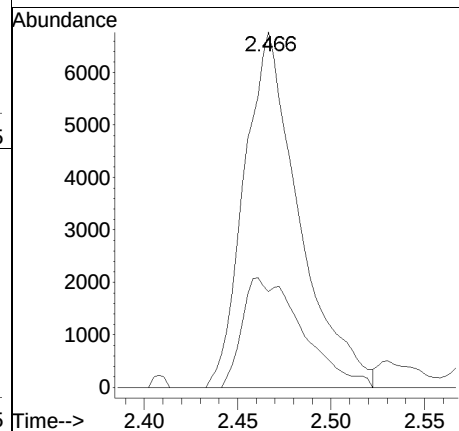
Tgt Ion	Ratio	Lower	Upper
84	100		
86	62.8	40.4	83.8
49	127.6	120.0	249.2

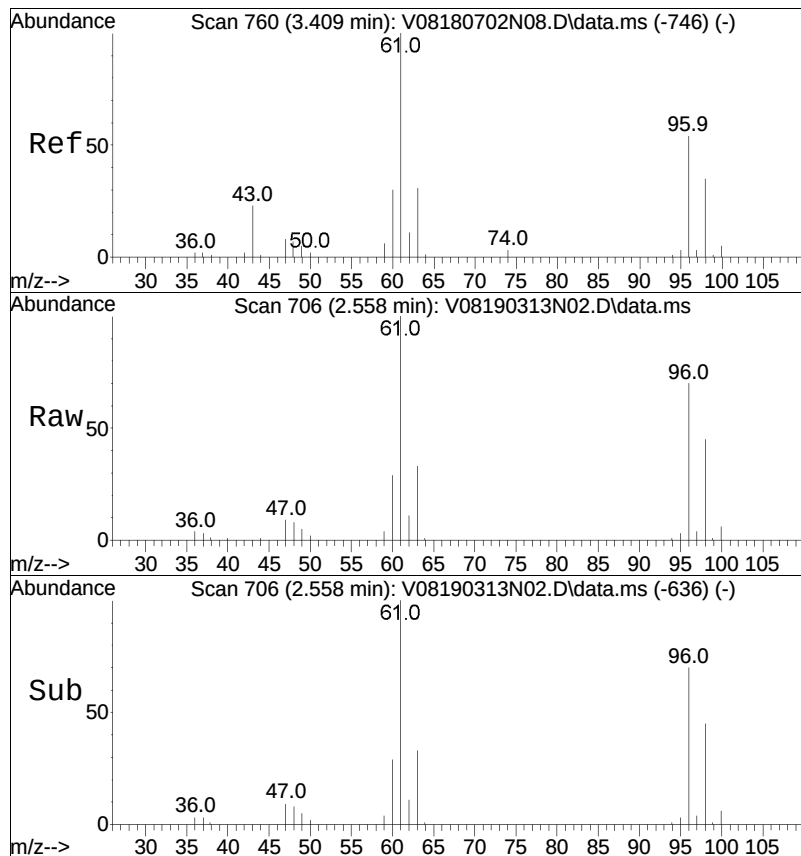




#17
 Acetone
 Concen: 11.81 ug/L
 RT: 2.466 min Scan# 673
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

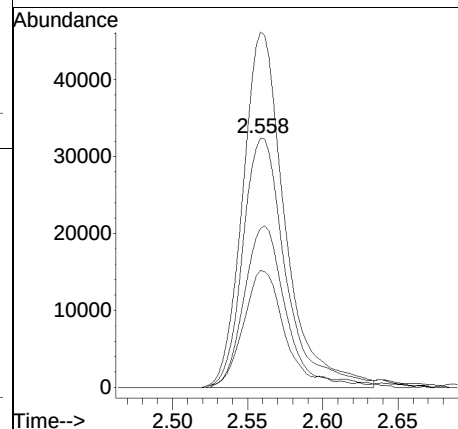
Tgt Ion:	43	58	Ratio	100	14.9	Resp:	13863	Lower	Upper
								24.2	36.4#

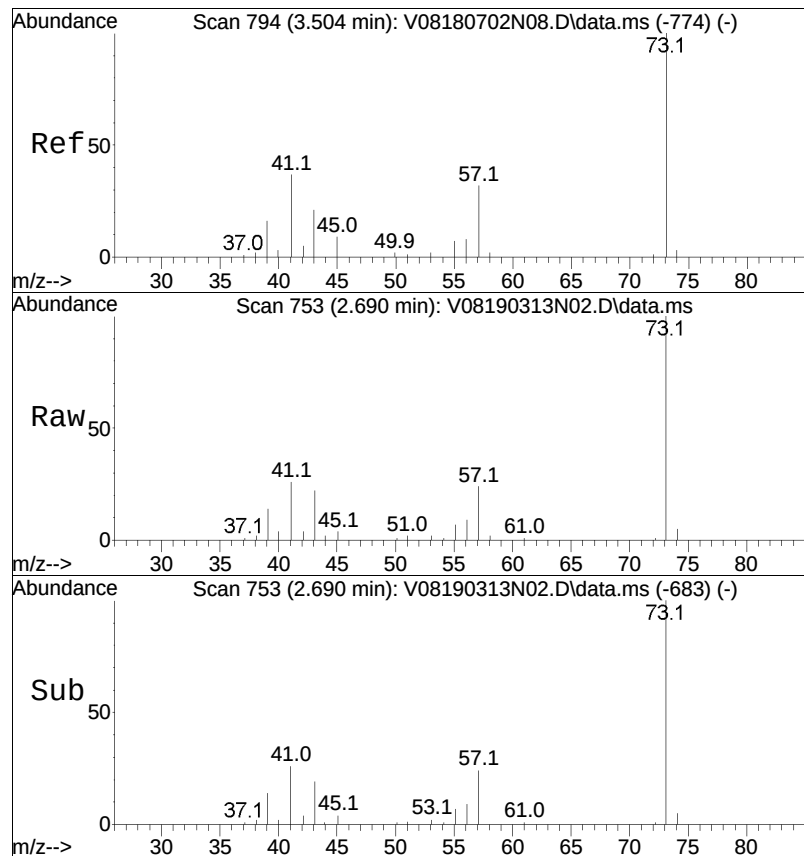




#18
trans-1,2-Dichloroethene
Concen: 10.05 ug/L
RT: 2.558 min Scan# 706
Delta R.T. -0.006 min
Lab File: V08190313N02.D
Acq: 13 Mar 2019 6:42 pm

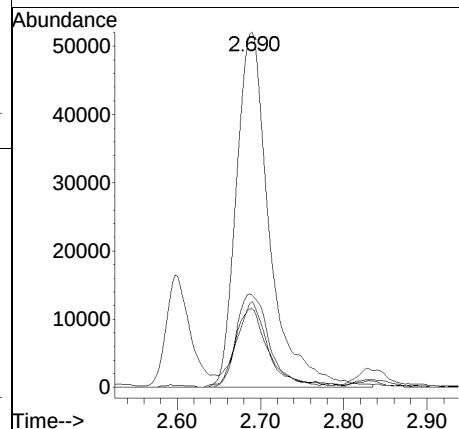
Tgt Ion:	96	Resp:	64734
Ion Ratio	Lower	Upper	
96	100		
61	139.4	124.0	257.6
98	61.2	41.2	85.6
63	45.3	38.4	79.7

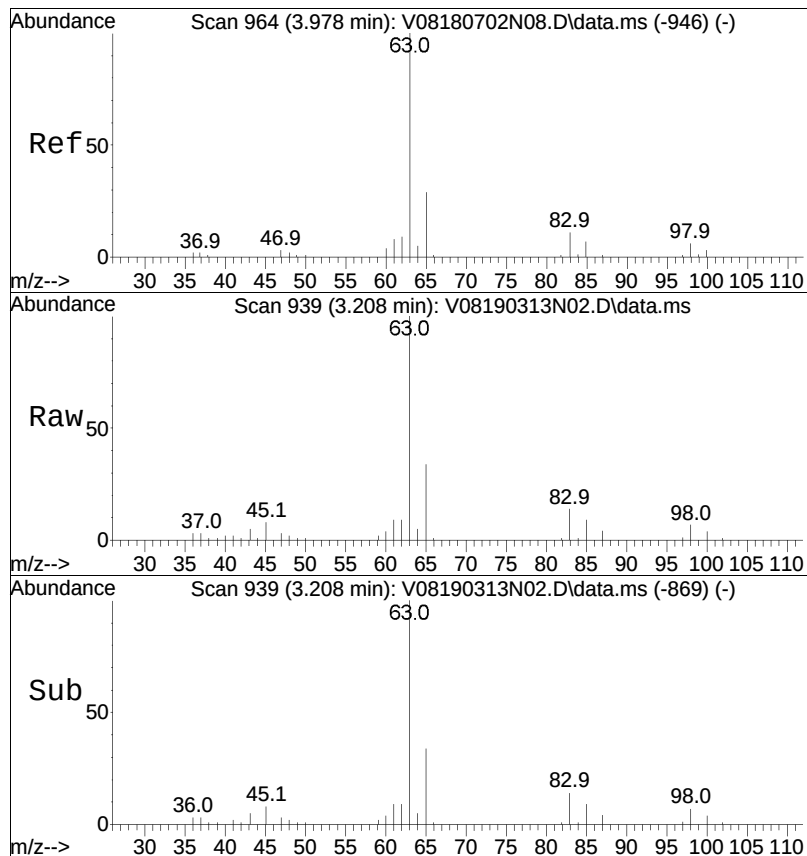




#20
Methyl tert-butyl ether
Concen: 8.53 ug/L
RT: 2.690 min Scan# 753
Delta R.T. -0.005 min
Lab File: V08190313N02.D
Acq: 13 Mar 2019 6:42 pm

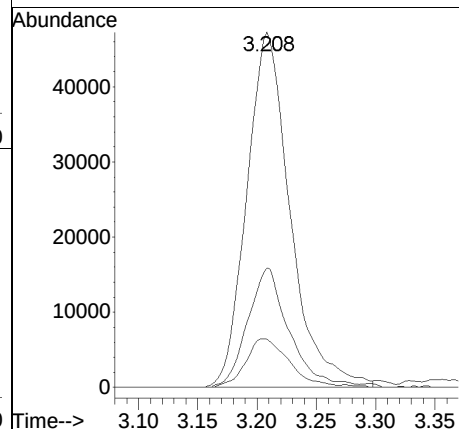
Tgt Ion: 73	Resp: 144331
Ion Ratio	Lower Upper
73 100	
57 22.2	17.5 36.3
43 19.8	15.3 31.9
41 26.5	15.3 31.7

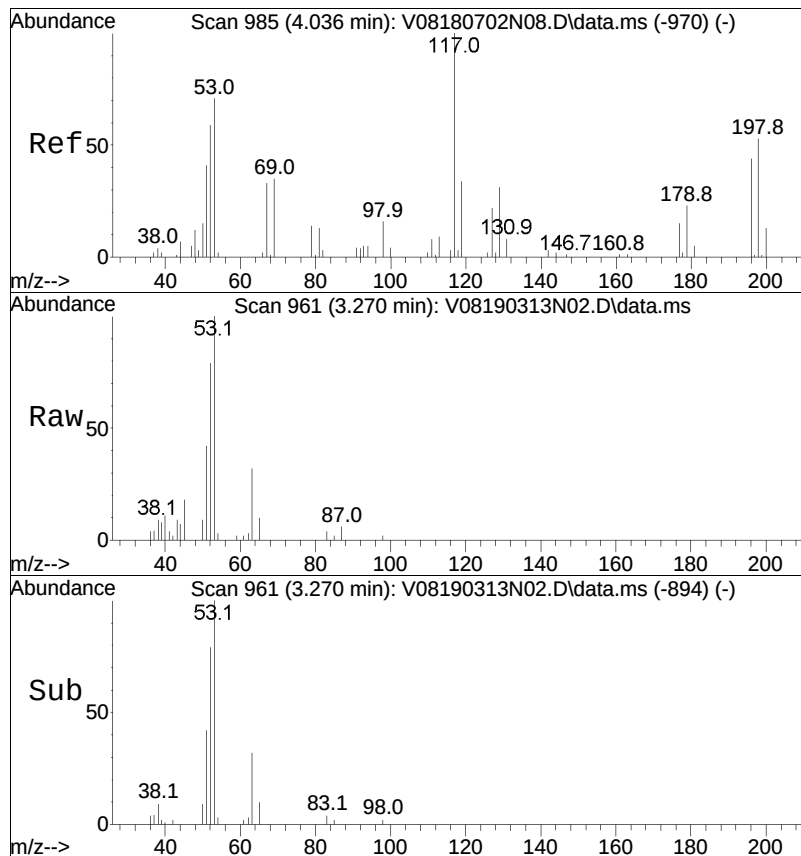




#23
 1,1-Dichloroethane
 Concen: 10.60 ug/L
 RT: 3.208 min Scan# 939
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

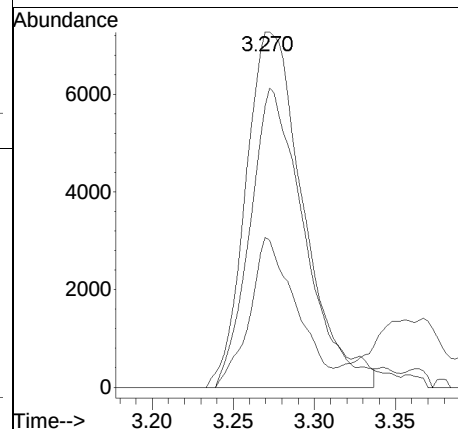
Tgt Ion:	63	Resp:	120748
Ion Ratio	Lower	Upper	
63	100		
65	32.0	11.0	51.0
83	13.8	0.0	31.8

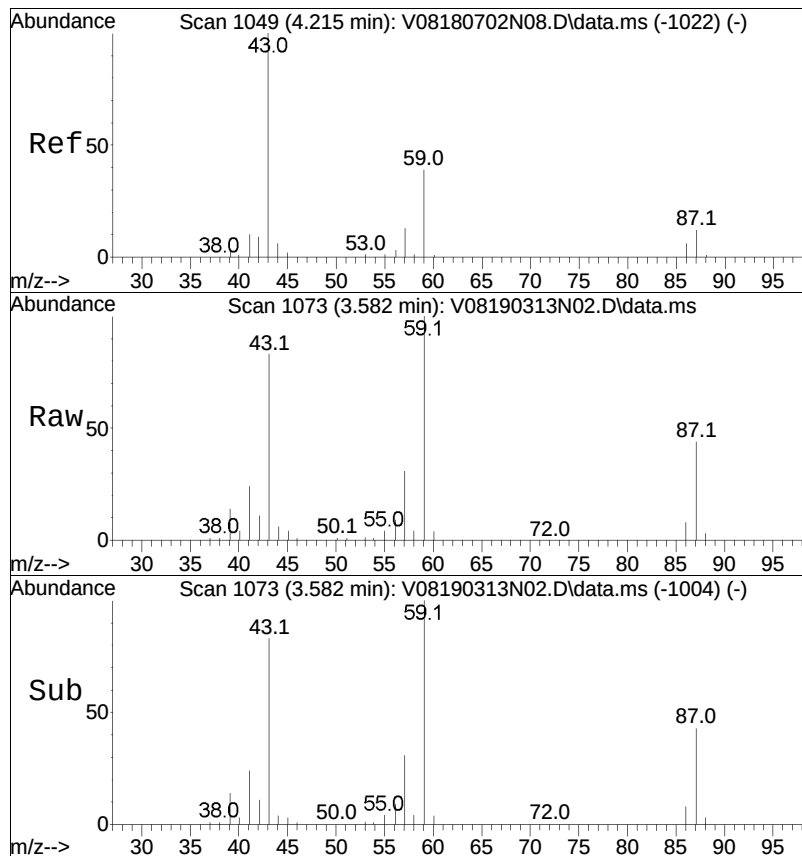




#25
 Acrylonitrile
 Concen: 10.14 ug/L
 RT: 3.270 min Scan# 961
 Delta R.T. -0.013 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

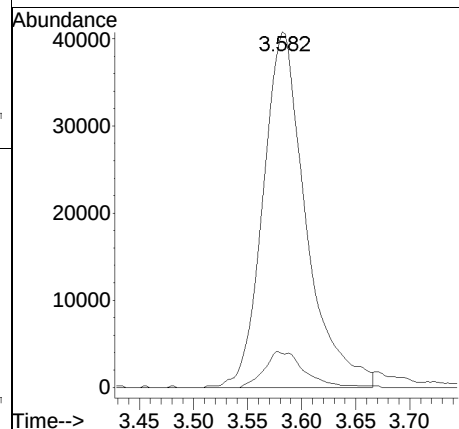
Tgt Ion:	53	Resp:	17919
Ion Ratio	Lower	Upper	
53	100		
52	78.4	66.7	100.1
51	34.3	30.6	46.0

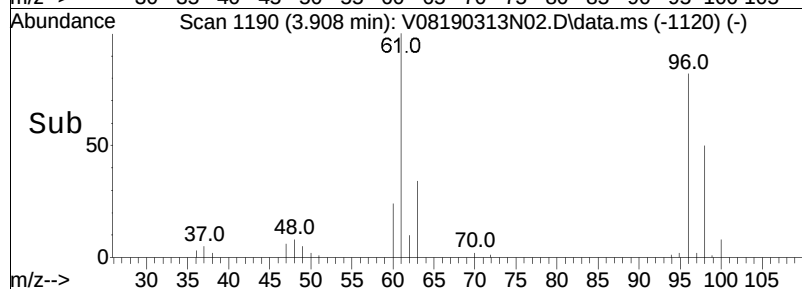
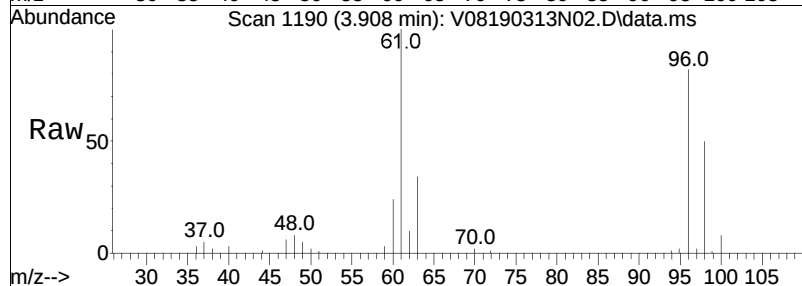
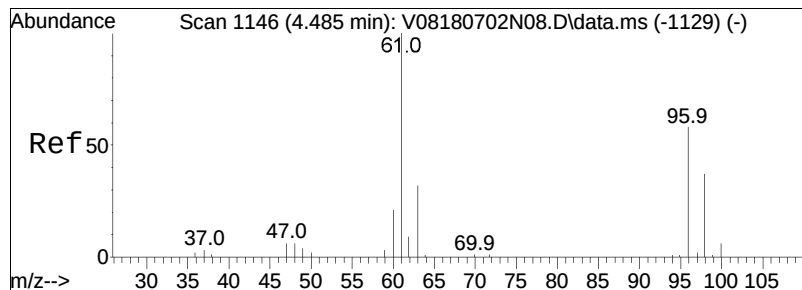




#27
 Vinyl acetate
 Concen: 8.34 ug/L
 RT: 3.582 min Scan# 1073
 Delta R.T. -0.008 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

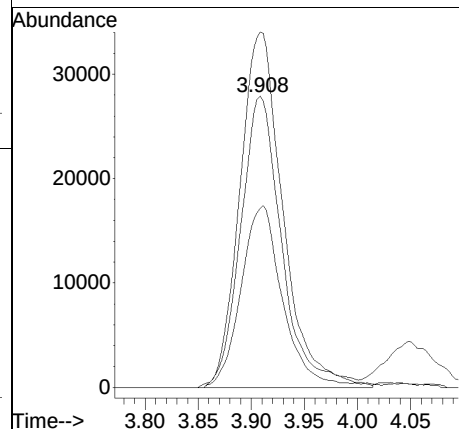
Tgt Ion	Ratio	Lower	Upper
43	100		
86	9.2	5.2	7.8#

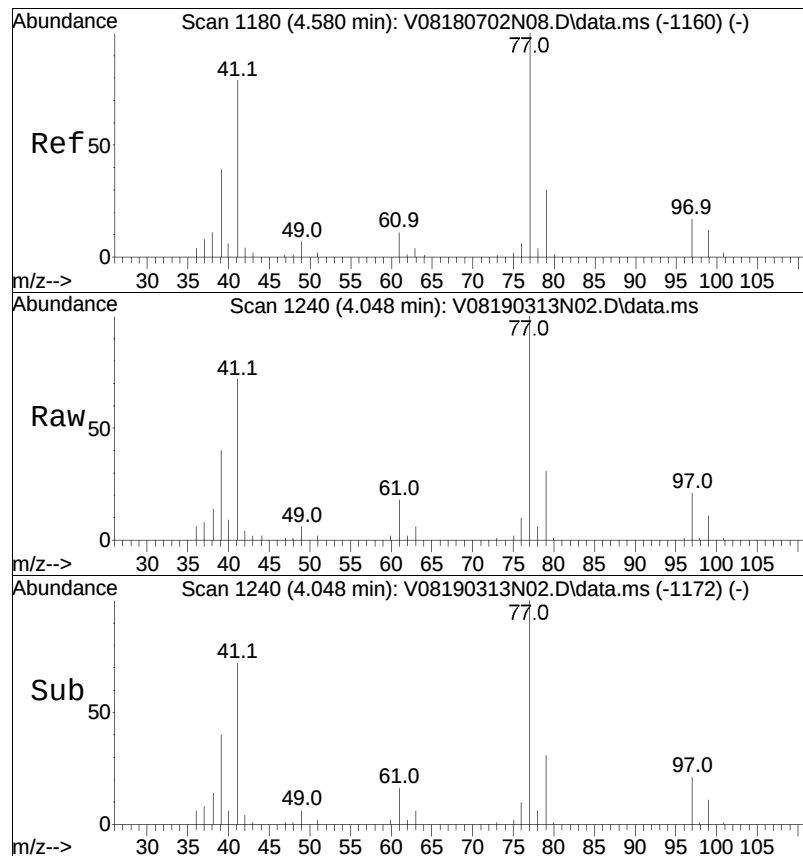




#28
 cis-1,2-Dichloroethene
 Concen: 10.29 ug/L
 RT: 3.908 min Scan# 1190
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

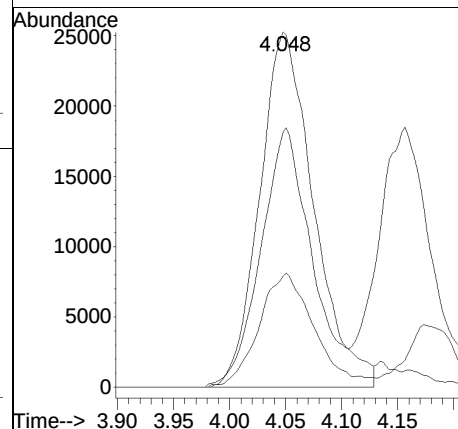
Tgt Ion	Ratio	Lower	Upper
96	100		
61	127.3	149.4	224.2#
98	63.0	53.4	80.2

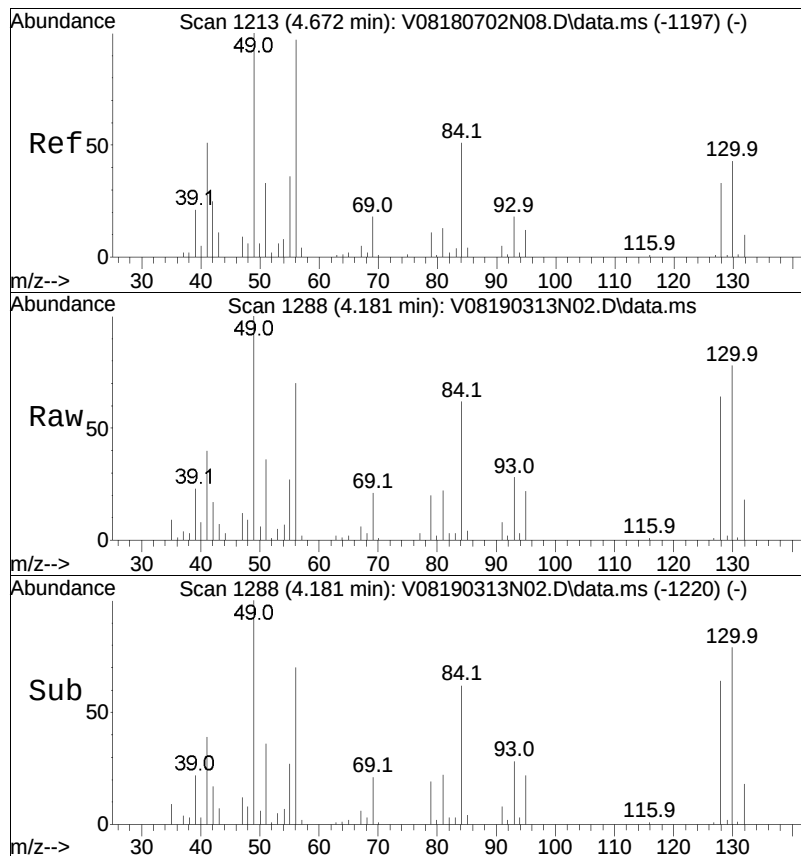




#29
 2,2-Dichloropropane
 Concen: 9.08 ug/L
 RT: 4.048 min Scan# 1240
 Delta R.T. -0.011 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

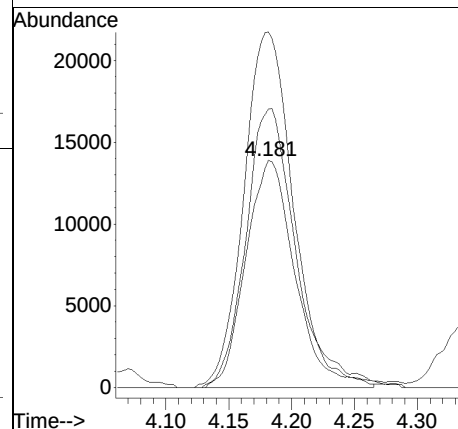
Tgt Ion:	77	Resp:	85062
Ion Ratio	Lower	Upper	
77	100		
41	67.7	38.0	78.8
79	32.2	20.5	42.5

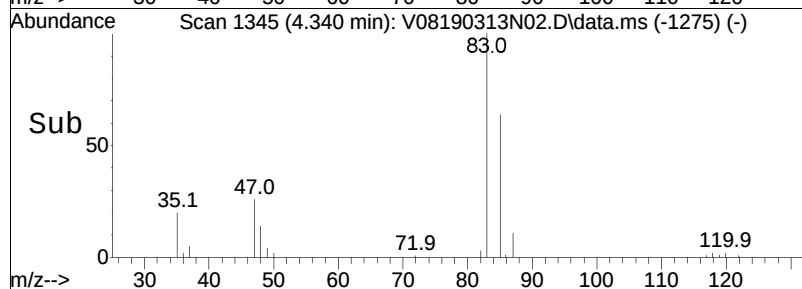
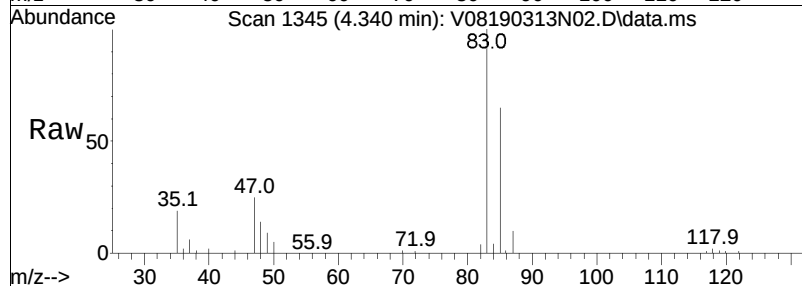
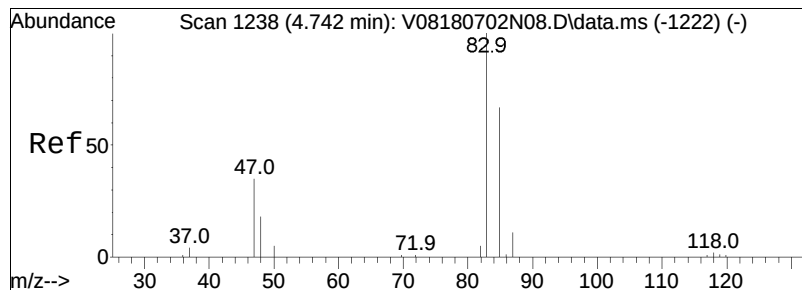




#30
 Bromochloromethane
 Concen: 11.16 ug/L
 RT: 4.181 min Scan# 1288
 Delta R.T. -0.011 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

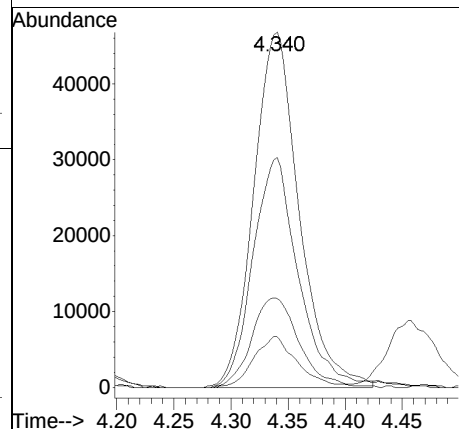
Tgt Ion	Ratio	Lower	Upper
128	100		
49	161.0	223.0	334.4#
130	123.8	111.4	167.0

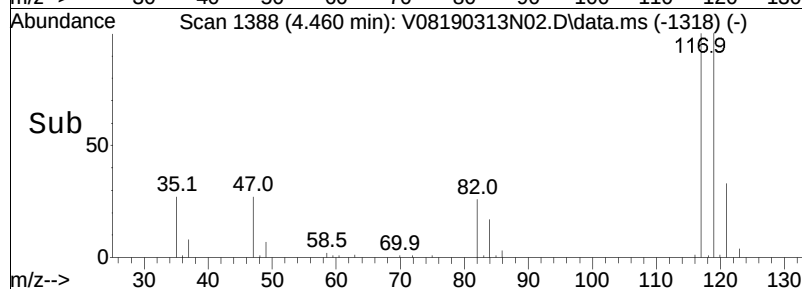
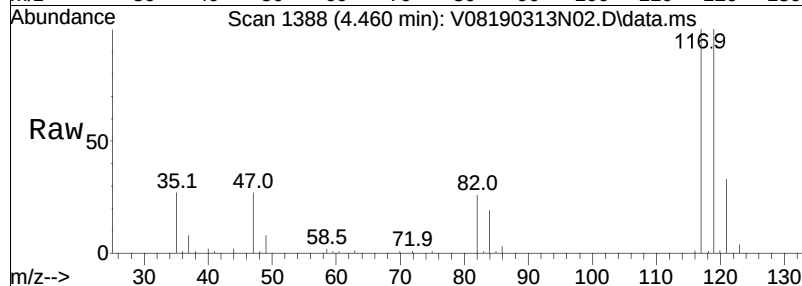
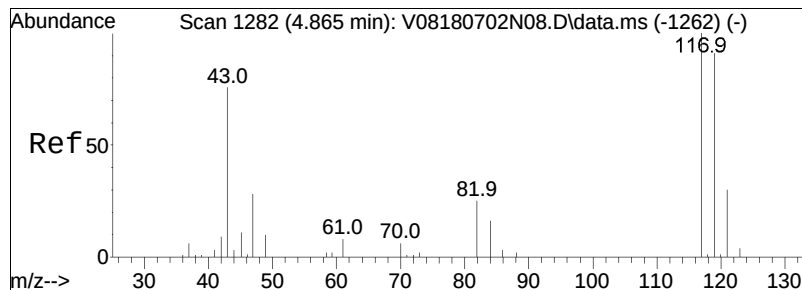




#32
 Chloroform
 Concen: 10.93 ug/L
 RT: 4.340 min Scan# 1345
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

Tgt	Ion: 83	Resp:	130091
Ion	Ratio	Lower	Upper
83	100		
85	64.4	41.5	86.1
47	26.1	19.0	39.4
48	13.7	9.9	20.5





#34

Carbon tetrachloride

Concen: 10.94 ug/L

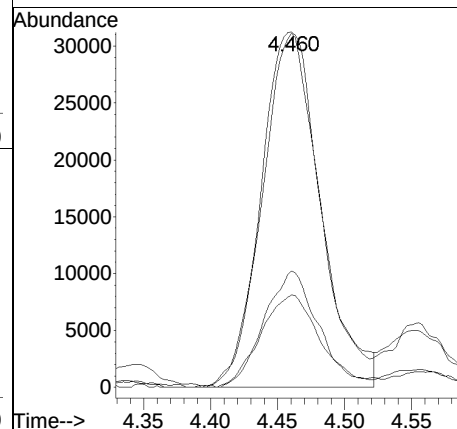
RT: 4.460 min Scan# 1388

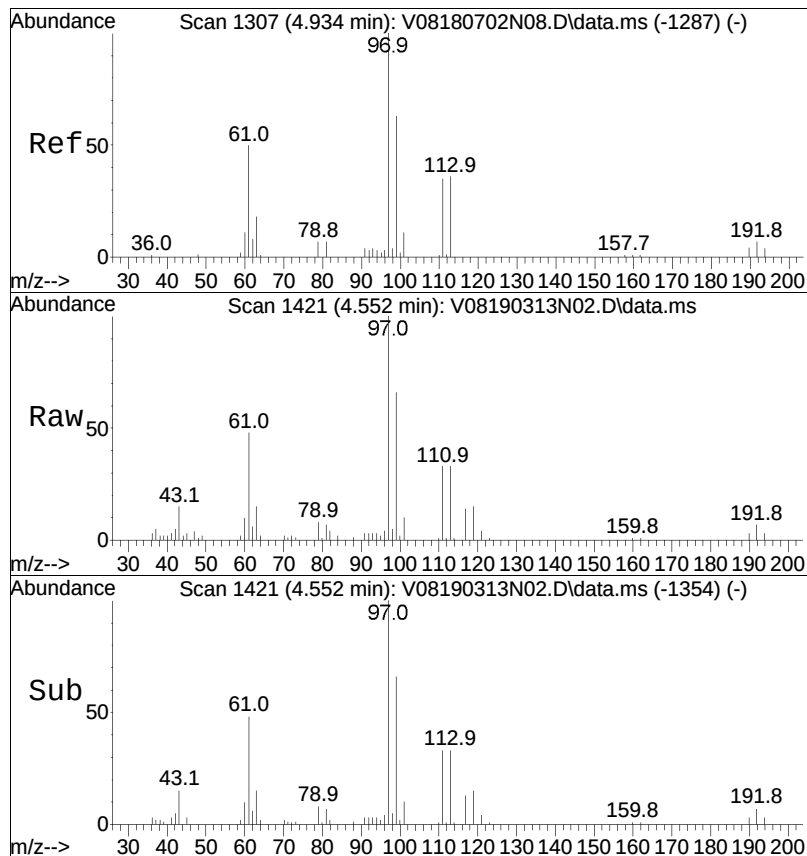
Delta R.T. -0.006 min

Lab File: V08190313N02.D

Acq: 13 Mar 2019 6:42 pm

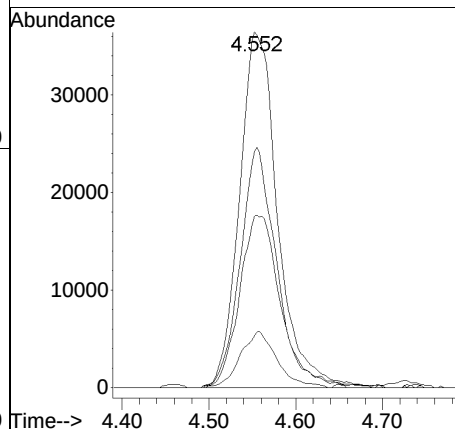
Tgt Ion:	117	Resp:	97282
Ion Ratio	Lower	Upper	
117	100		
119	95.4	62.4	129.6
121	29.8	19.5	40.5
82	25.9	17.0	35.4

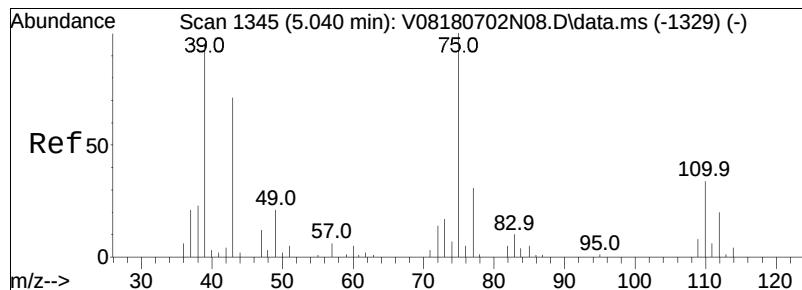




#37
 1,1,1-Trichloroethane
 Concen: 10.75 ug/L
 RT: 4.552 min Scan# 1421
 Delta R.T. -0.014 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

Tgt Ion:	97	Resp:	111528
Ion Ratio	Lower	Upper	
97	100		
99	63.7	40.7	84.5
61	51.9	35.4	73.4
63	15.0	5.0	10.4#





#39

2-Butanone

Concen: 9.90 ug/L

RT: 4.759 min Scan# 1495

Delta R.T. -0.011 min

Lab File: V08190313N02.D

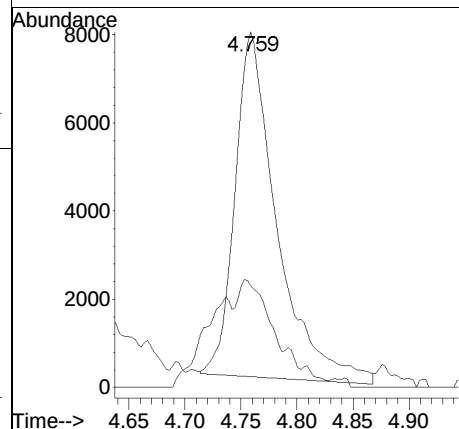
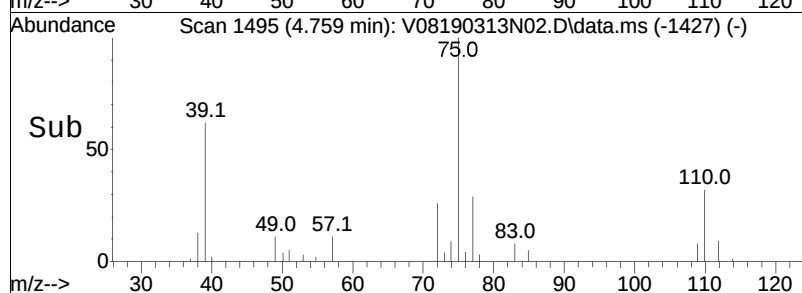
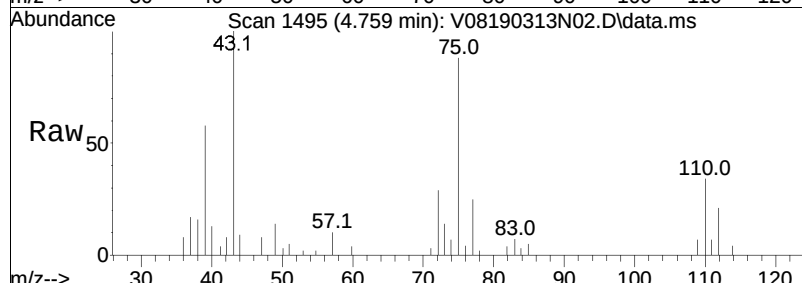
Acq: 13 Mar 2019 6:42 pm

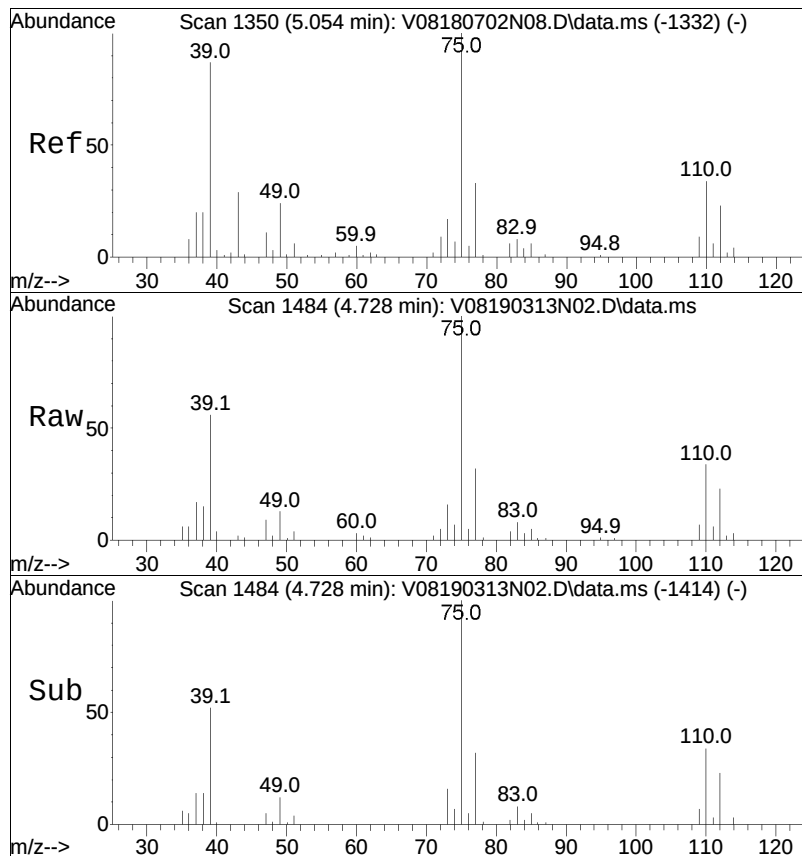
Tgt Ion: 43 Resp: 20302

Ion Ratio Lower Upper

43 100

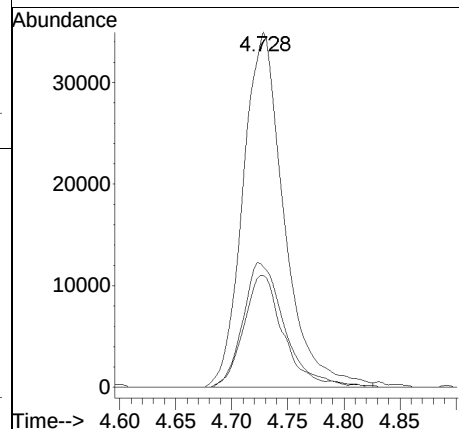
72 20.8 10.9 16.3#

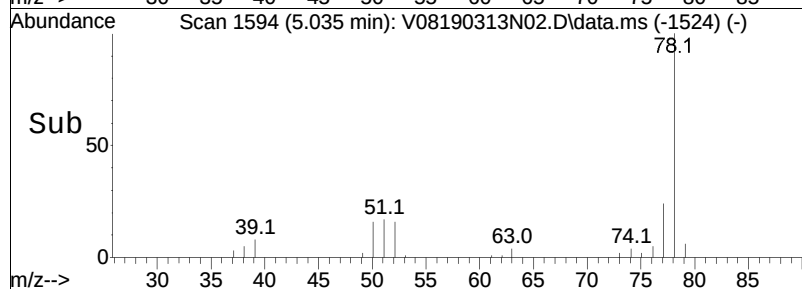
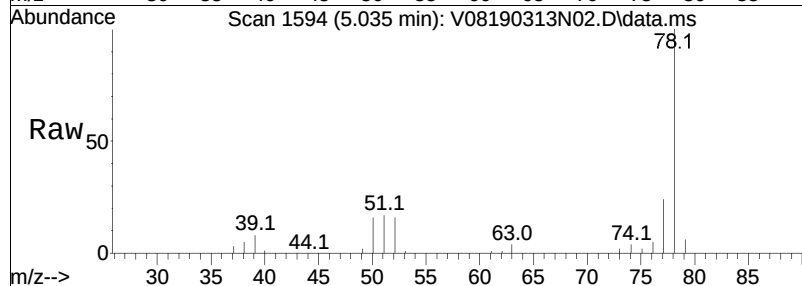
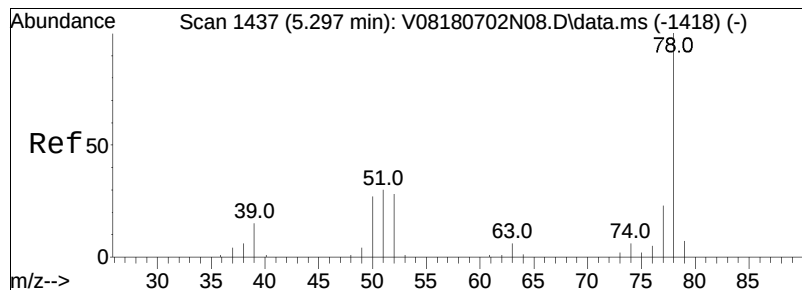




#40
 1,1-Dichloropropene
 Concen: 10.76 ug/L
 RT: 4.728 min Scan# 1484
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

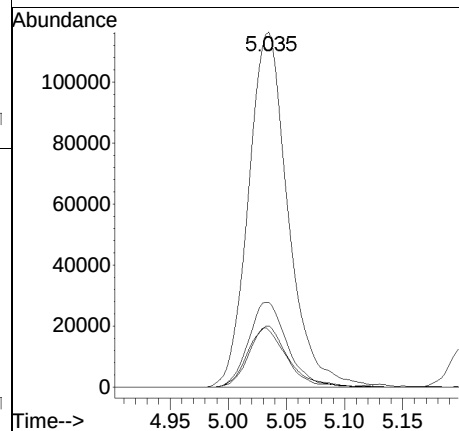
Tgt Ion	Ratio	Lower	Upper
75	100		
110	35.7	20.2	41.9
77	30.0	20.1	41.7

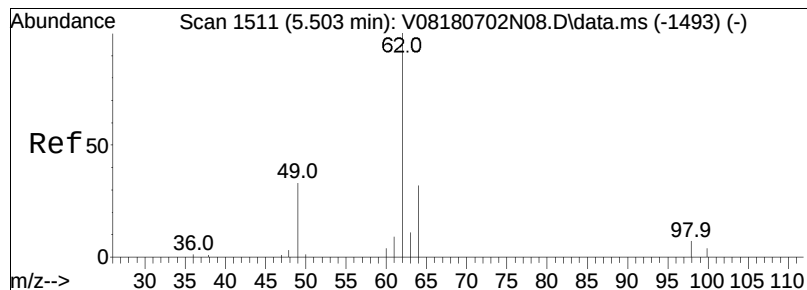




#41
Benzene
Concen: 10.65 ug/L
RT: 5.035 min Scan# 1594
Delta R.T. -0.005 min
Lab File: V08190313N02.D
Acq: 13 Mar 2019 6:42 pm

Tgt	Ion: 78	Resp:	276186
Ion	Ratio	Lower	Upper
78	100		
77	23.8	15.7	32.7
51	17.6	16.0	33.2
52	16.2	15.3	31.9





#44

1,2-Dichloroethane

Concen: 11.07 ug/L

RT: 5.289 min Scan# 1685

Delta R.T. -0.008 min

Lab File: V08190313N02.D

Acq: 13 Mar 2019 6:42 pm

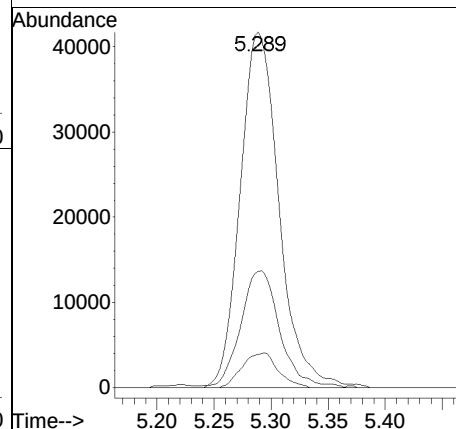
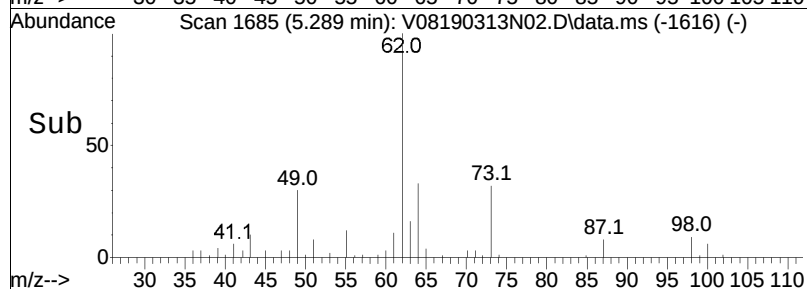
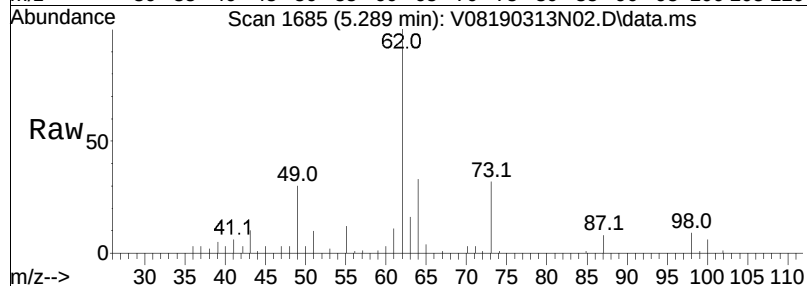
Tgt Ion: 62 Resp: 98737

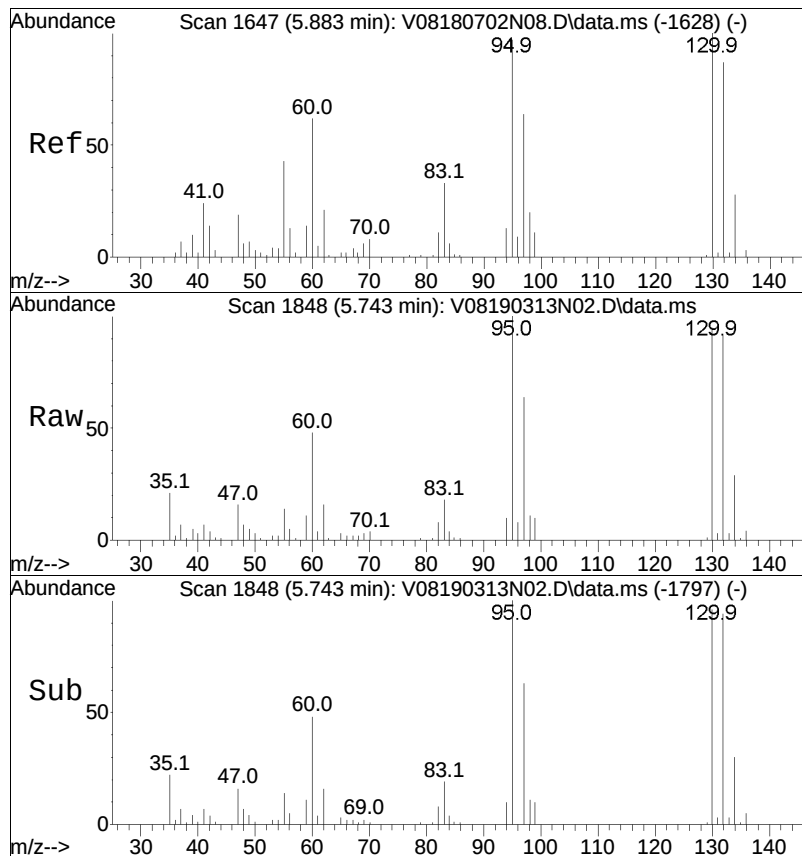
Ion Ratio Lower Upper

62 100

64 33.0 11.2 51.2

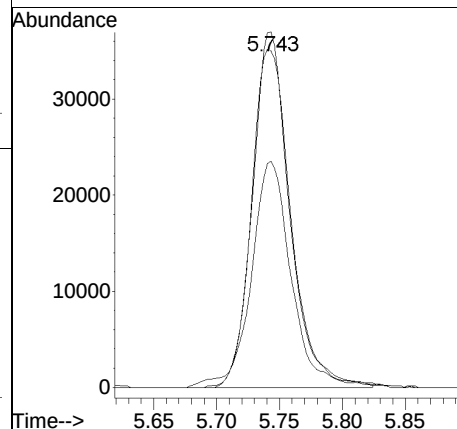
98 8.9 0.0 26.1

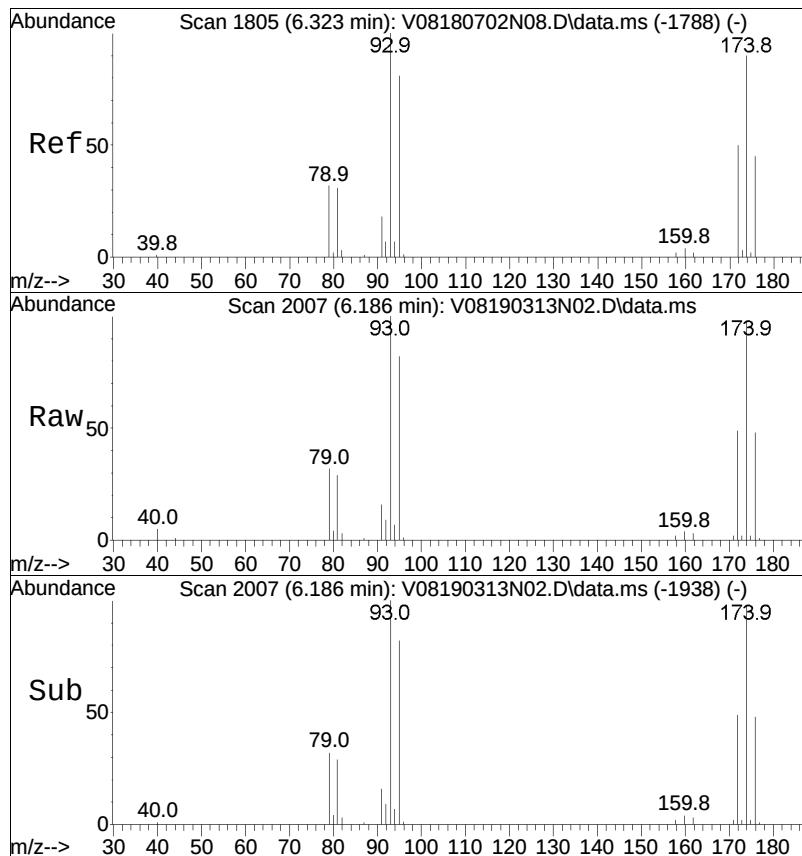




#48
 Trichloroethene
 Concen: 11.06 ug/L
 RT: 5.743 min Scan# 1848
 Delta R.T. -0.008 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

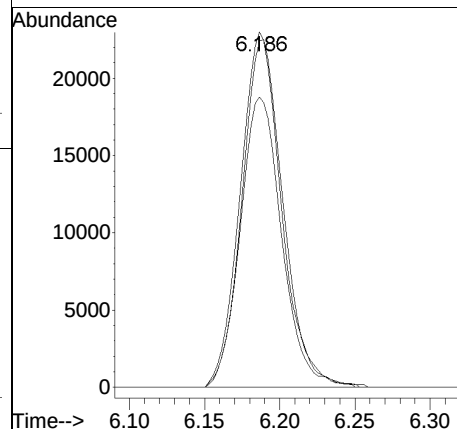
Tgt Ion:	95	Resp:	76395
Ion Ratio	Lower	Upper	
95	100		
97	67.3	55.5	83.3
130	101.4	76.6	115.0

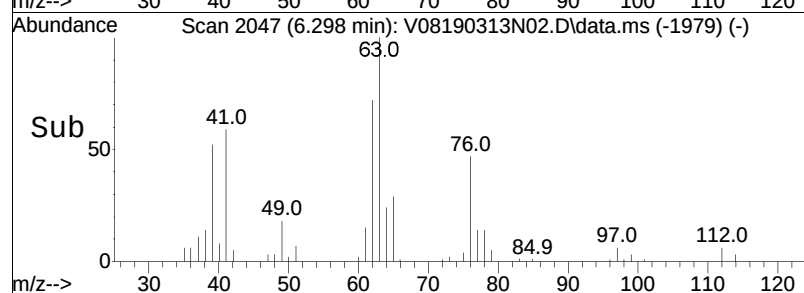
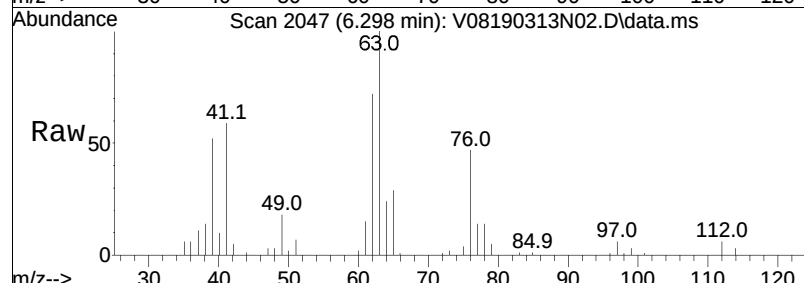
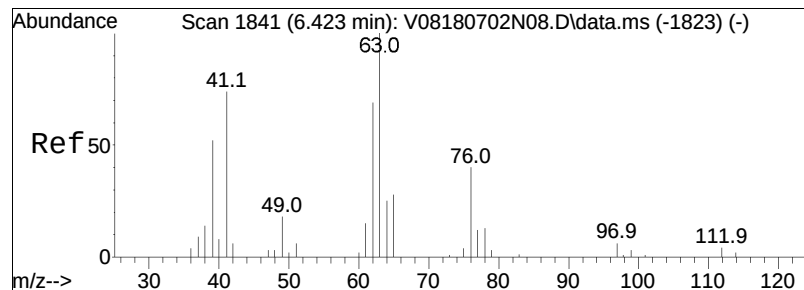




#50
 Dibromomethane
 Concen: 10.79 ug/L
 RT: 6.186 min Scan# 2007
 Delta R.T. -0.009 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

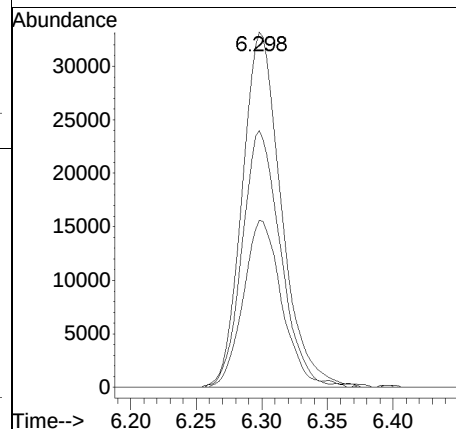
Tgt Ion:	93	Resp:	43678
Ion Ratio	Lower	Upper	
93	100		
95	82.7	67.0	100.4
174	98.1	75.0	112.4

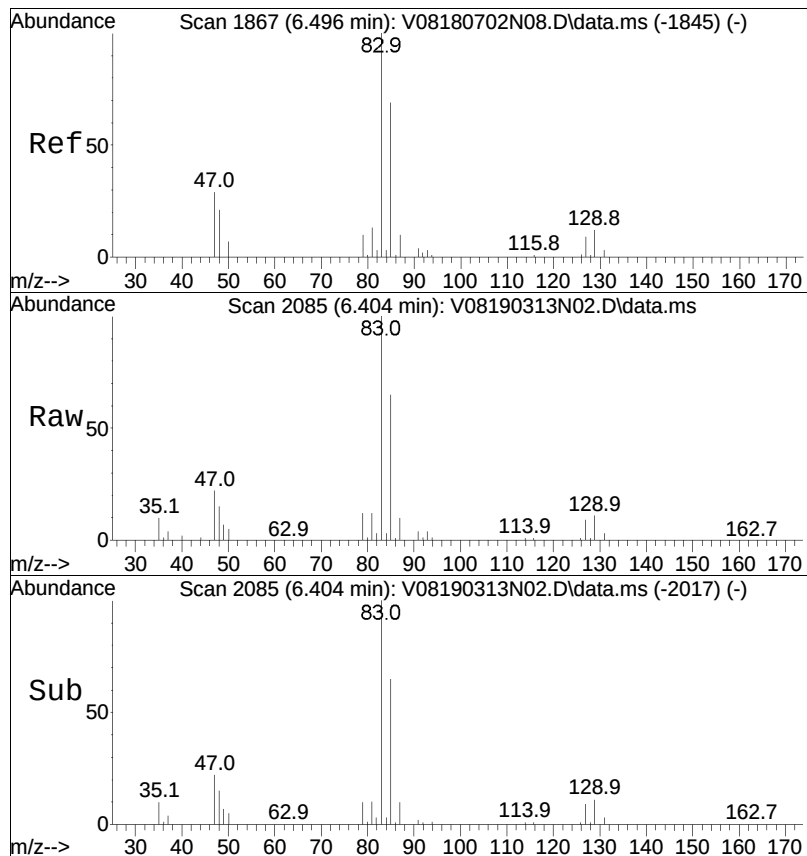




#51
 1,2-Dichloropropane
 Concen: 10.27 ug/L
 RT: 6.298 min Scan# 2047
 Delta R.T. -0.011 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

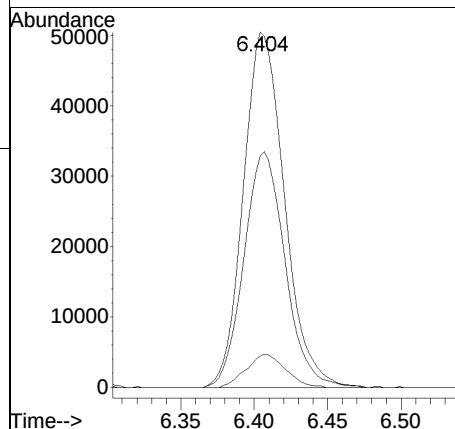
Tgt Ion:	63	Resp:	69057
Ion Ratio	Lower	Upper	
63	100		
62	70.4	58.6	87.8
76	46.5	38.0	57.0

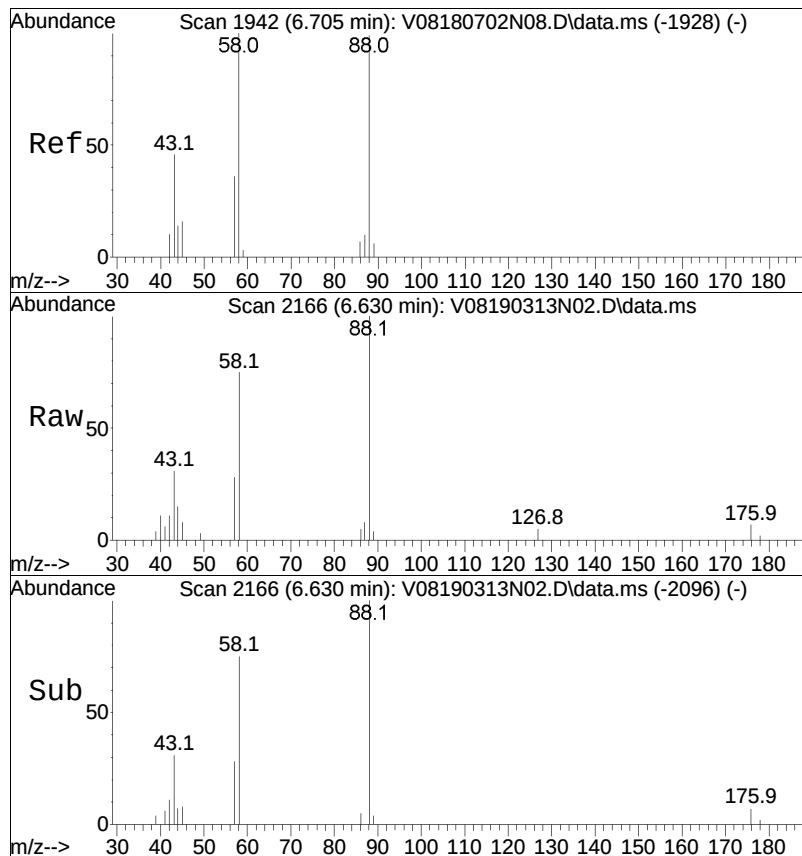




#54
 Bromodichloromethane
 Concen: 10.45 ug/L
 RT: 6.404 min Scan# 2085
 Delta R.T. -0.011 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

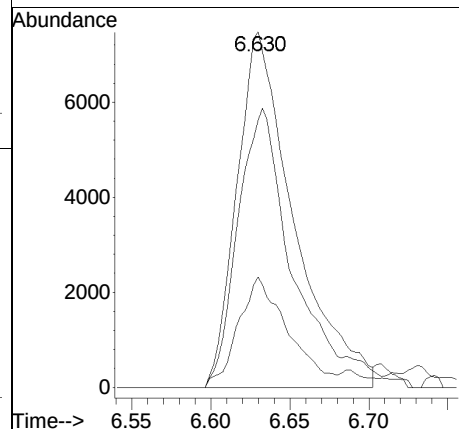
Tgt Ion:	83	Resp:	98548
Ion Ratio	Lower	Upper	
83	100		
85	66.4	52.3	78.5
127	8.9	6.2	9.4

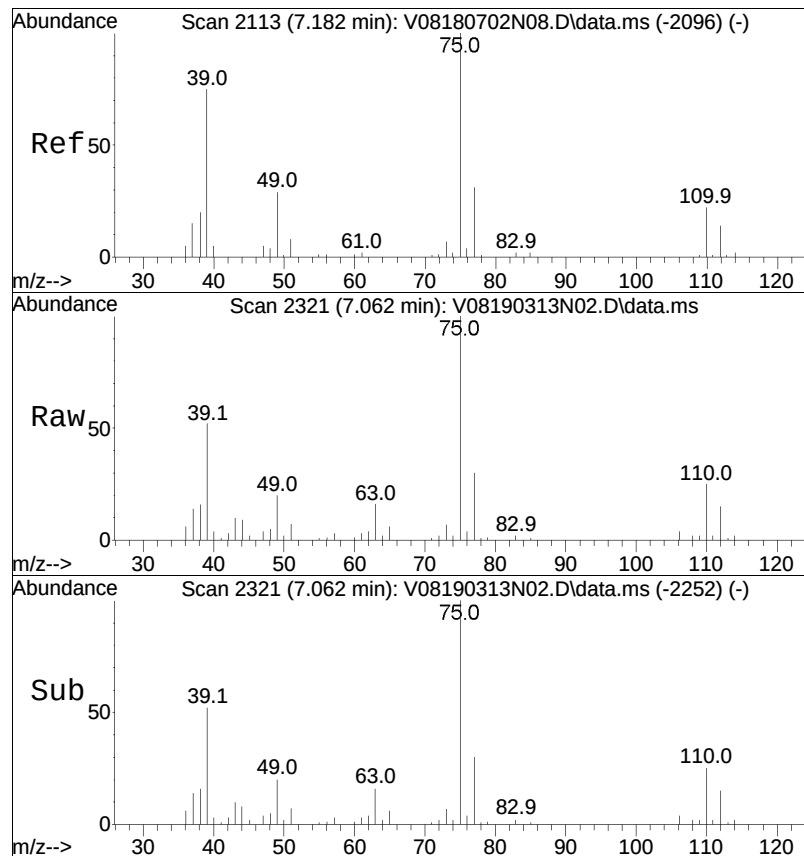




#57
 1,4-Dioxane
 Concen: 638.60 ug/L
 RT: 6.630 min Scan# 2166
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

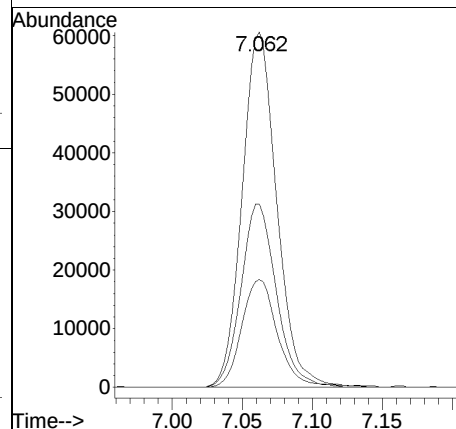
Tgt Ion:	88	Resp:	18782
Ion Ratio	Lower	Upper	
88	100		
58	75.8	76.7	115.1#
43	27.4	36.2	54.2#

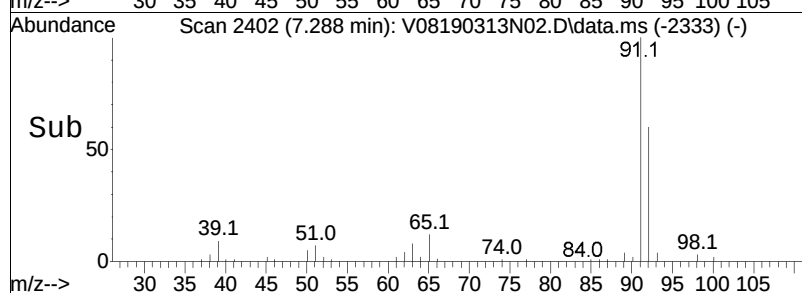
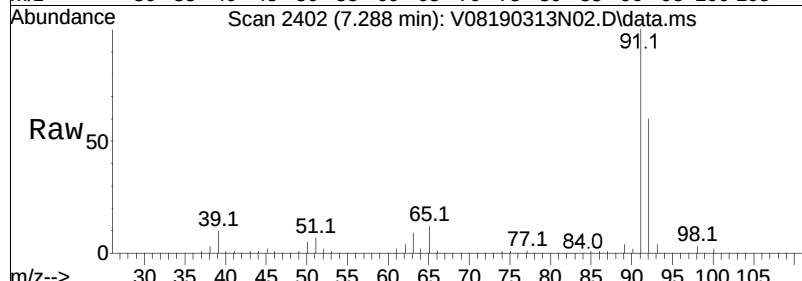
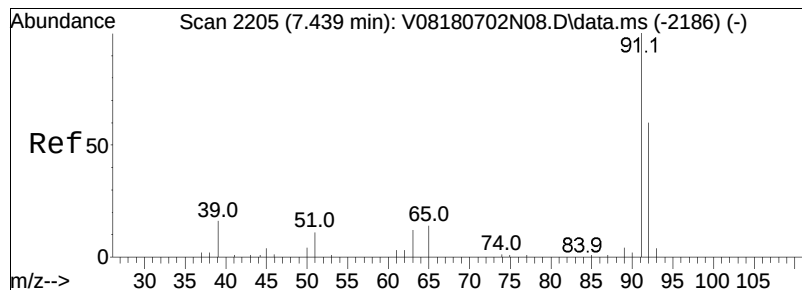




#58
 cis-1,3-Dichloropropene
 Concen: 9.88 ug/L
 RT: 7.062 min Scan# 2321
 Delta R.T. -0.008 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

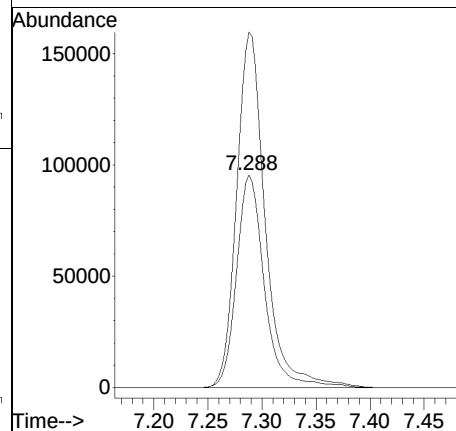
Tgt Ion:	75	Resp:	104424
Ion Ratio	Lower	Upper	
75	100		
77	31.4	25.0	37.4
39	53.1	50.1	75.1

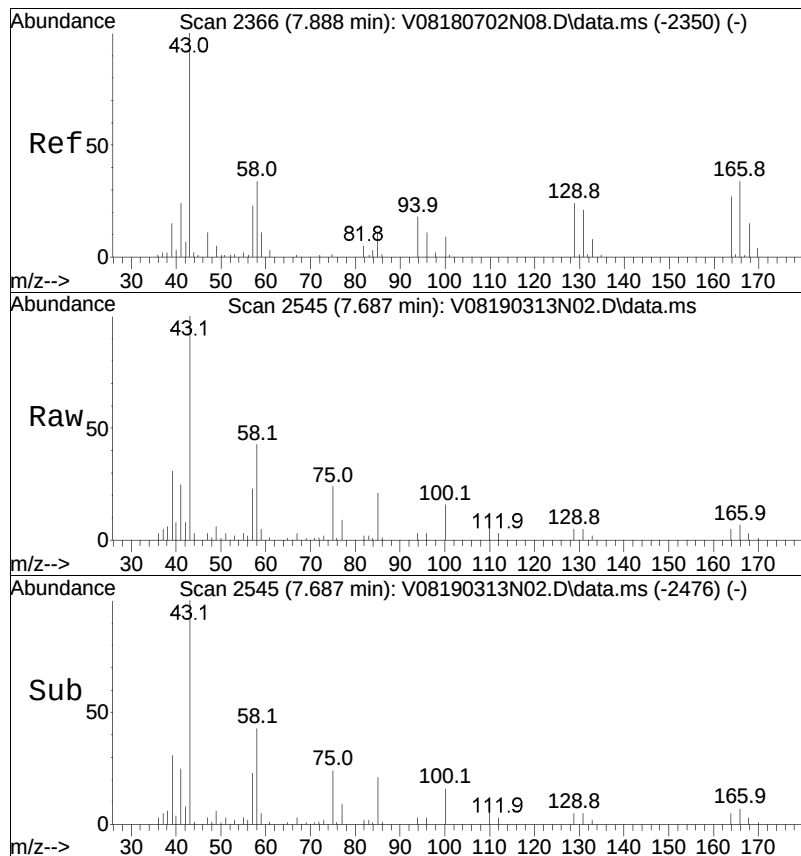




#61
Toluene
Concen: 10.64 ug/L
RT: 7.288 min Scan# 2402
Delta R.T. -0.008 min
Lab File: V08190313N02.D
Acq: 13 Mar 2019 6:42 pm

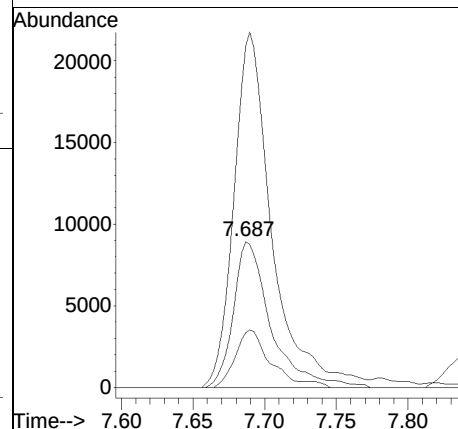
Tgt Ion	Ratio	Lower	Upper
92	100		
91	170.6	139.8	209.6

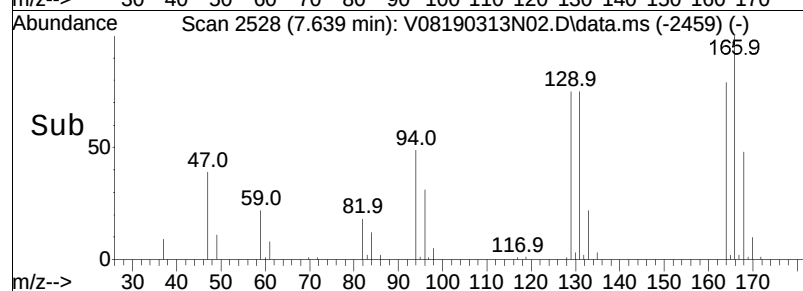
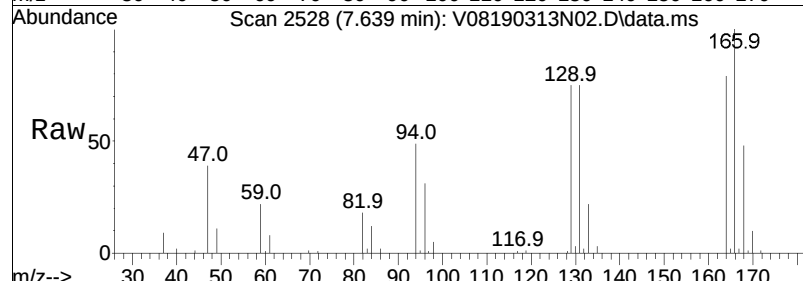
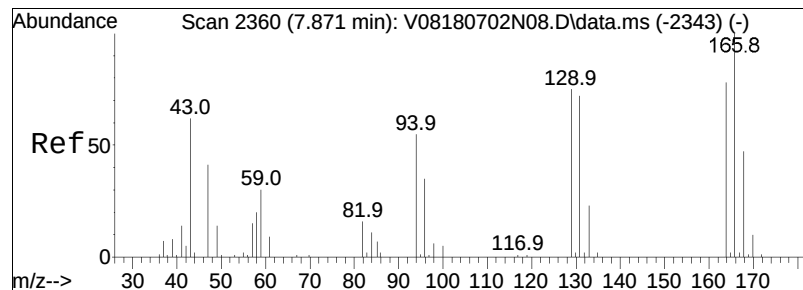




#62
 4-Methyl-2-pentanone
 Concen: 8.94 ug/L
 RT: 7.687 min Scan# 2545
 Delta R.T. -0.008 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

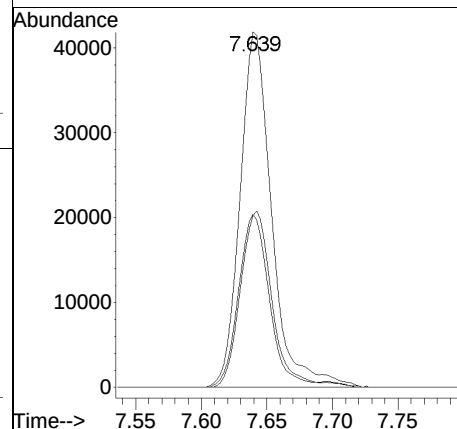
Tgt	Ion	Ratio	Lower	Upper
58	100			
100	35.6	20.2	30.2	
43	247.6	196.6	295.0	

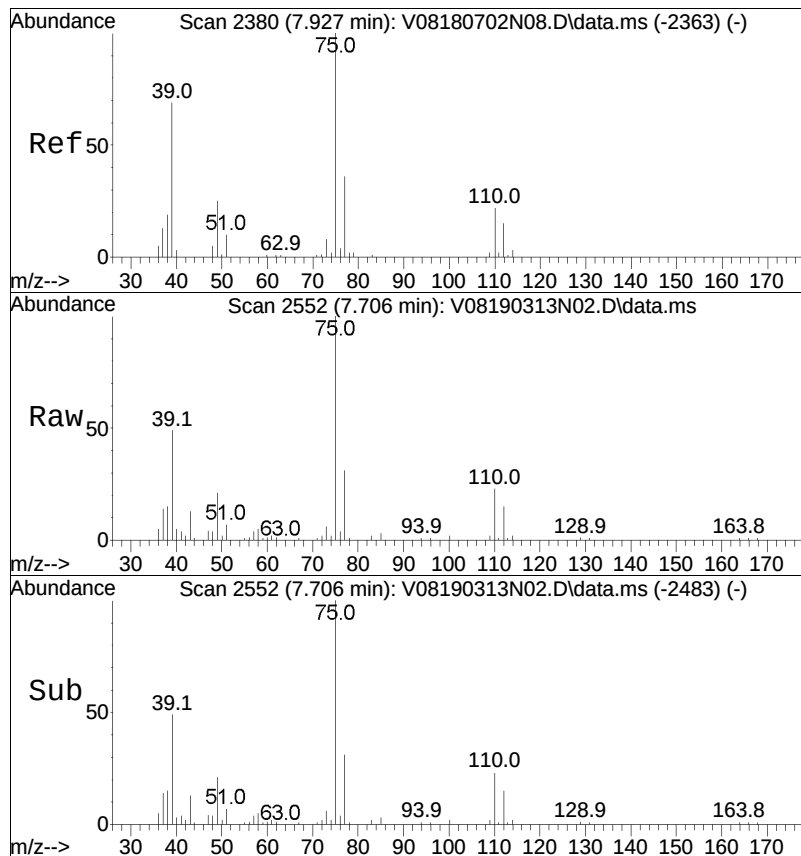




#63
 Tetrachloroethene
 Concen: 10.20 ug/L
 RT: 7.639 min Scan# 2528
 Delta R.T. -0.009 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

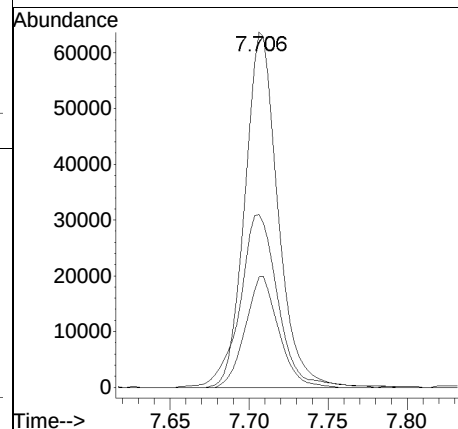
Tgt Ion	Ratio	Lower	Upper
166	100		
168	49.8	28.2	68.2
94	47.4	38.4	78.4

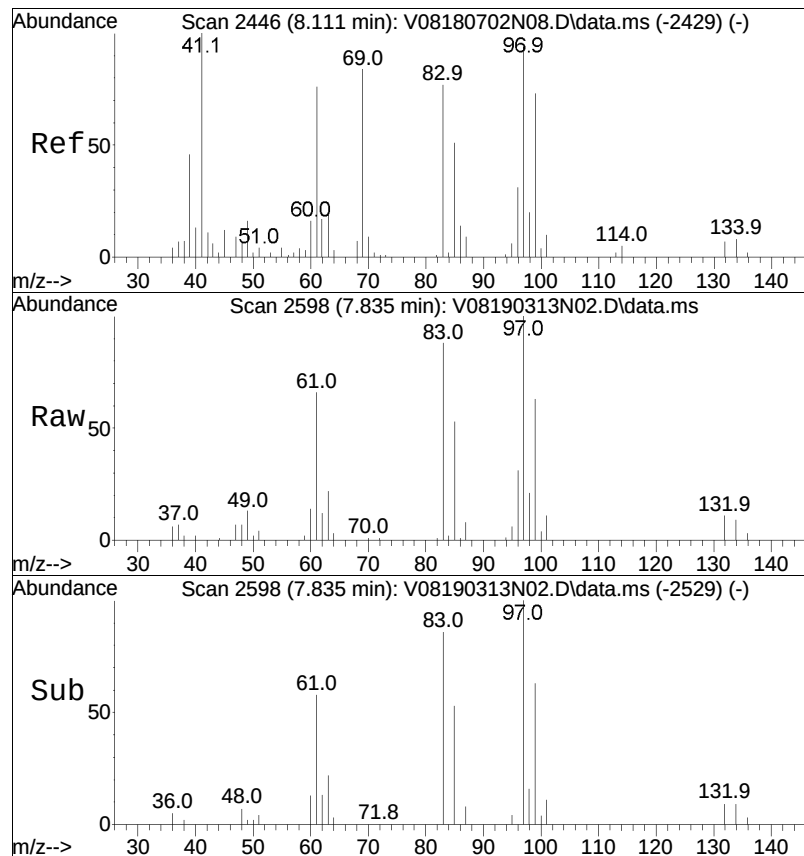




#65
trans-1,3-Dichloropropene
Concen: 10.17 ug/L
RT: 7.706 min Scan# 2552
Delta R.T. -0.009 min
Lab File: V08190313N02.D
Acq: 13 Mar 2019 6:42 pm

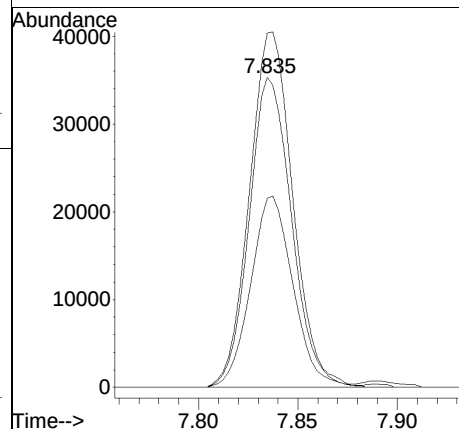
Tgt Ion:	75	Resp:	92516
Ion Ratio	Lower	Upper	
75	100		
77	31.5	12.4	52.4
39	56.4	42.8	82.8

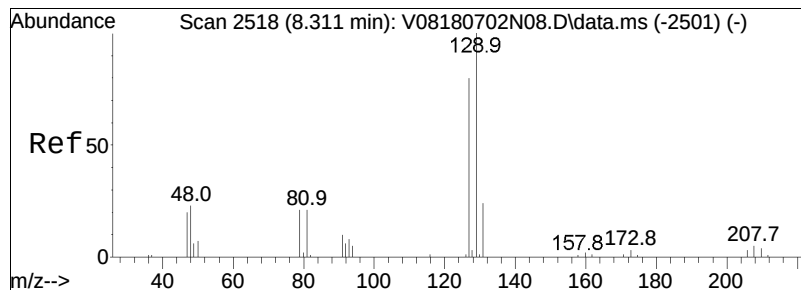




#68
 1,1,2-Trichloroethane
 Concen: 11.36 ug/L
 RT: 7.835 min Scan# 2598
 Delta R.T. -0.008 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

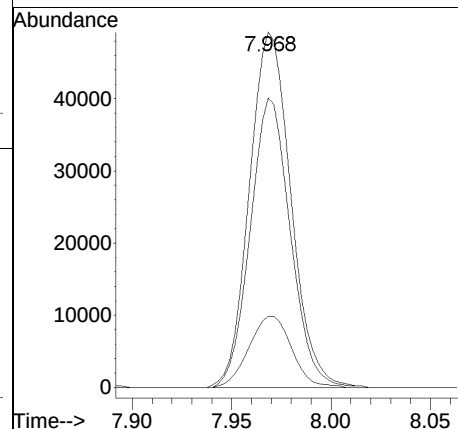
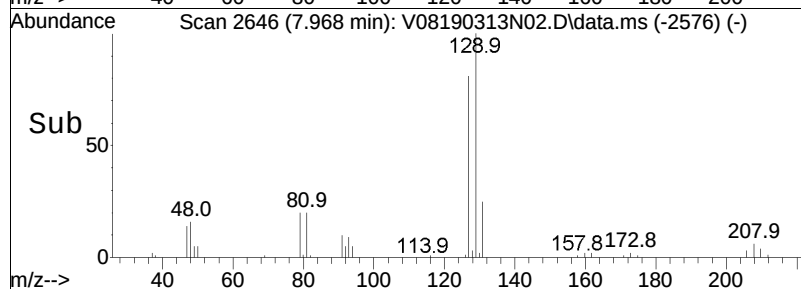
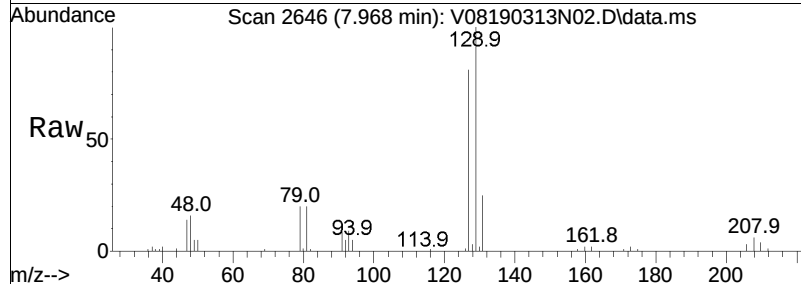
Tgt Ion:	83	Resp:	52416
Ion Ratio	Lower	Upper	
83	100		
97	117.2	89.8	129.8
85	61.7	44.4	84.4

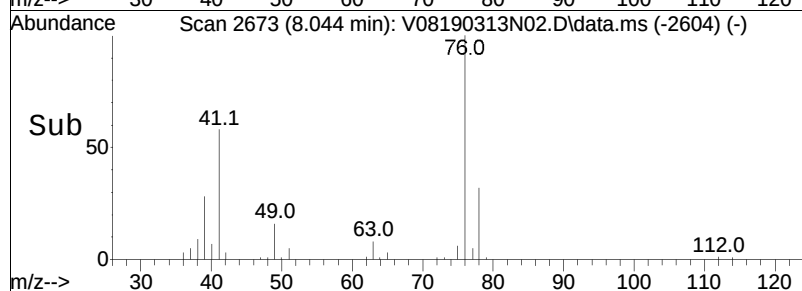
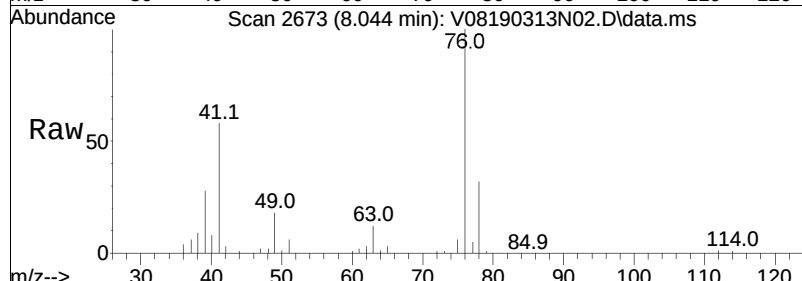
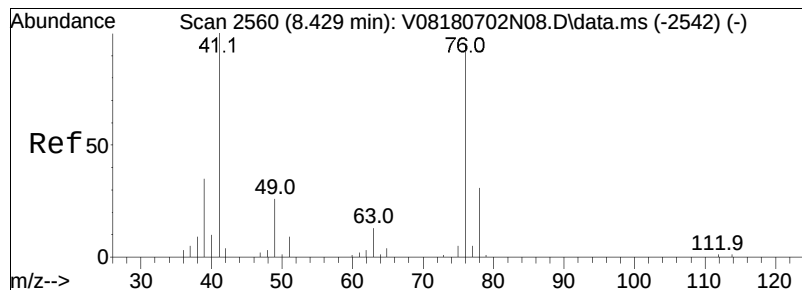




#69
 Chlorodibromomethane
 Concen: 10.51 ug/L
 RT: 7.968 min Scan# 2646
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

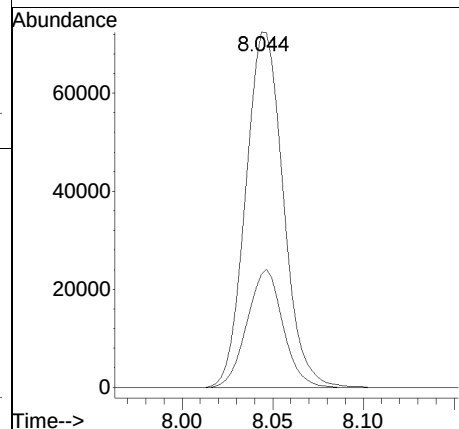
Tgt Ion	Ratio	Lower	Upper
129	100		
81	20.6	2.9	42.9
127	78.7	57.8	97.8

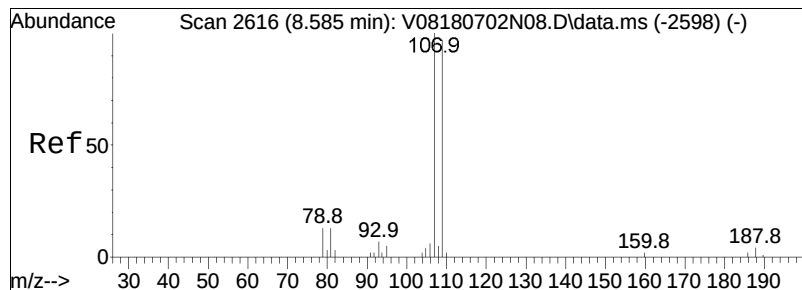




#70
 1,3-Dichloropropane
 Concen: 11.19 ug/L
 RT: 8.044 min Scan# 2673
 Delta R.T. -0.008 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

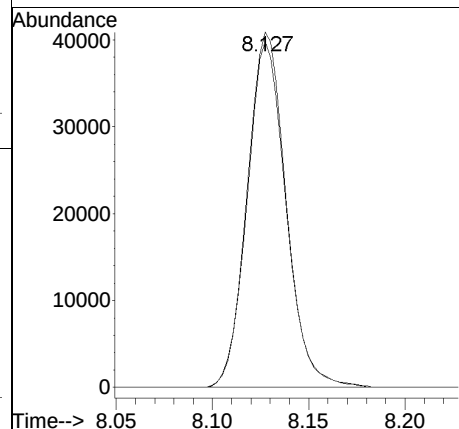
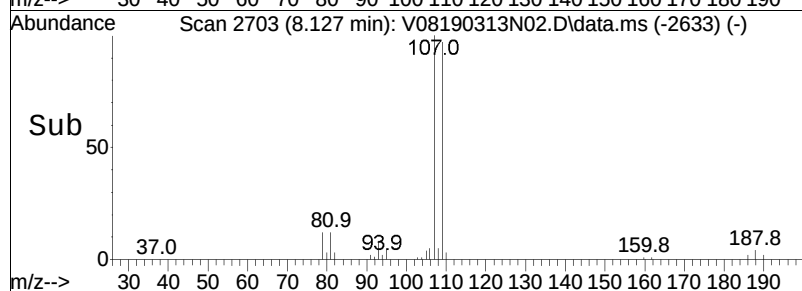
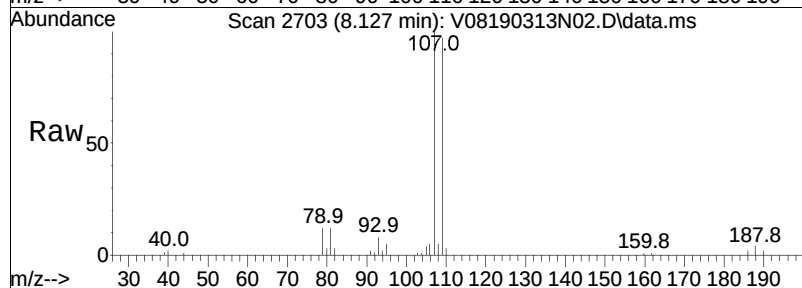
Tgt Ion	Ratio	Lower	Upper
76	100		
78	31.7	25.5	38.3

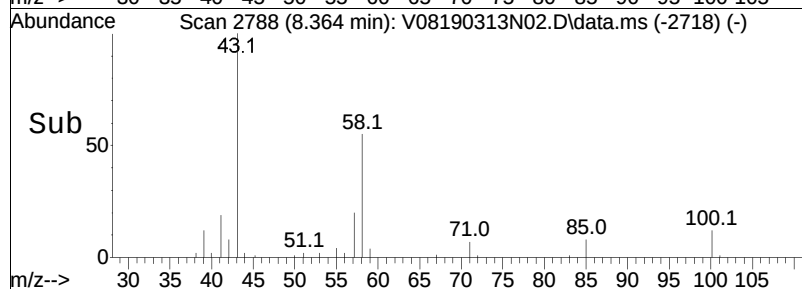
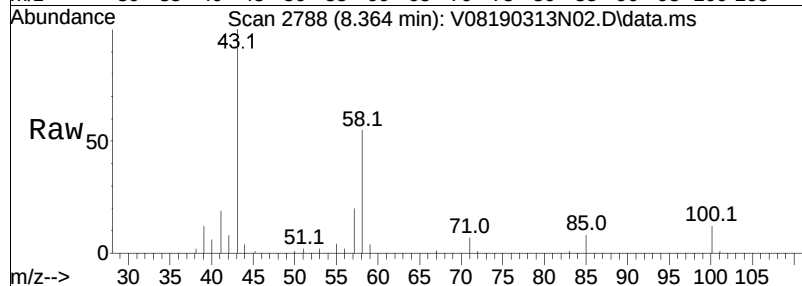
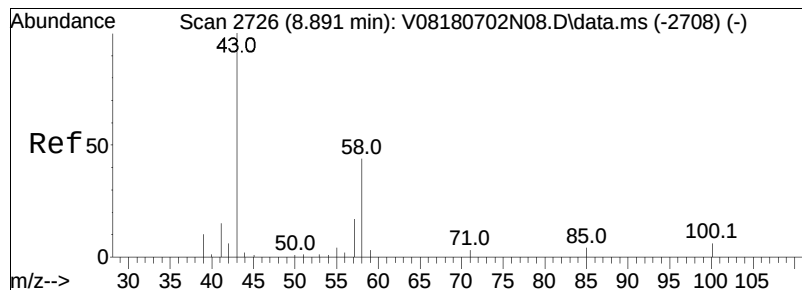




#71
 1,2-Dibromoethane
 Concen: 10.48 ug/L
 RT: 8.127 min Scan# 2703
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

Tgt Ion	Ratio	Lower	Upper
107	100		
109	96.9	74.3	111.5





#72

2-Hexanone

Concen: 7.94 ug/L

RT: 8.364 min Scan# 2788

Delta R.T. -0.006 min

Lab File: V08190313N02.D

Acq: 13 Mar 2019 6:42 pm

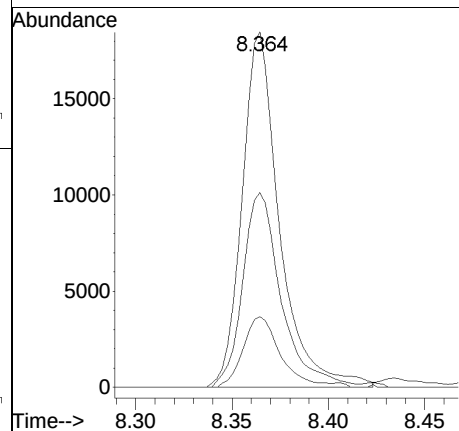
Tgt Ion: 43 Resp: 24970

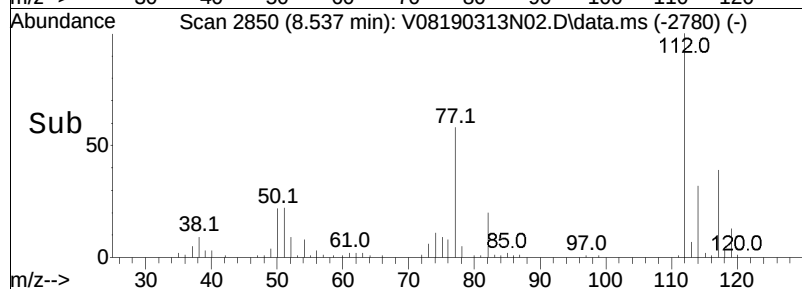
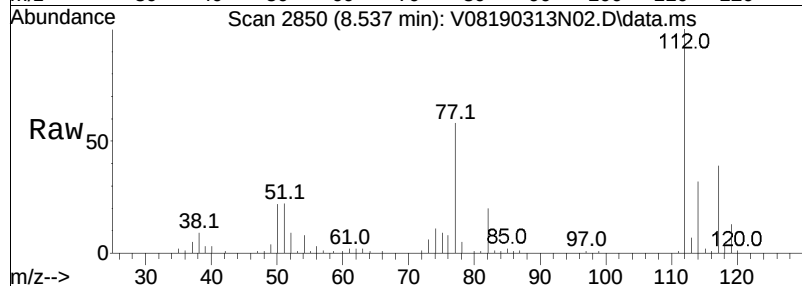
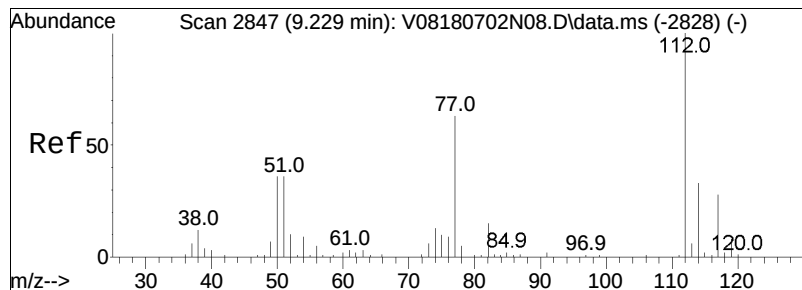
Ion Ratio Lower Upper

43 100

58 56.5 41.2 61.8

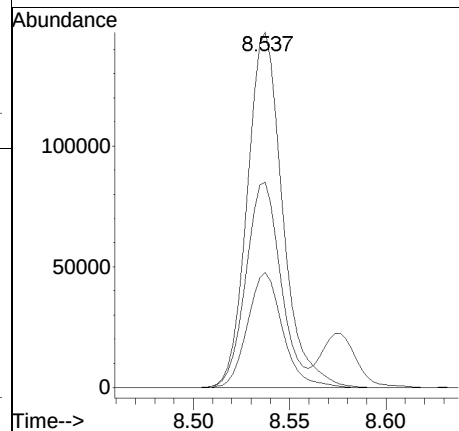
57 20.3 17.2 25.8

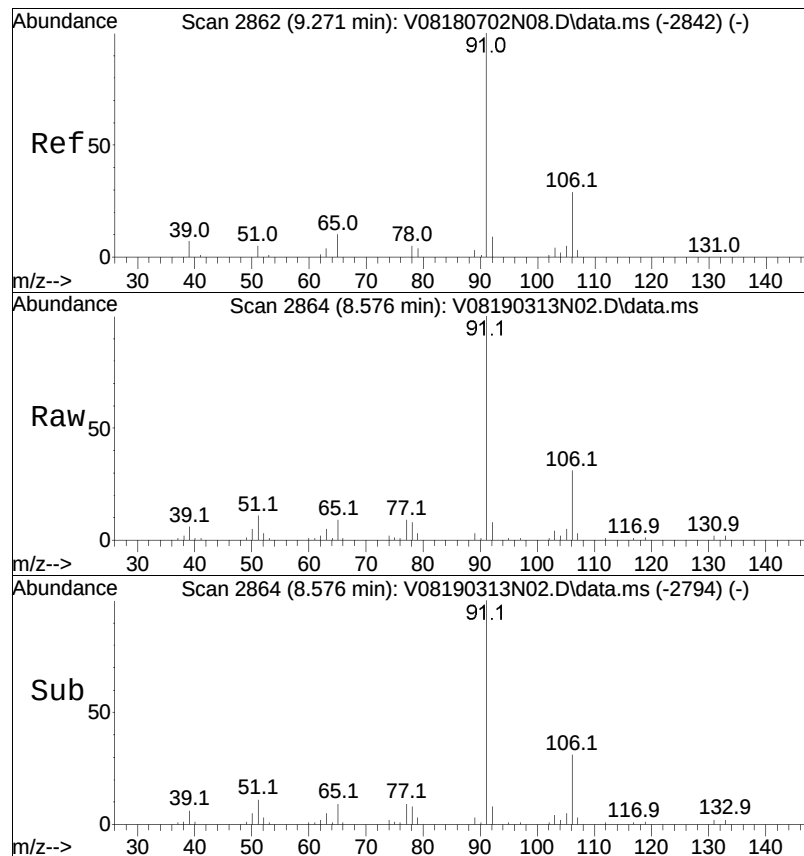




#73
 Chlorobenzene
 Concen: 10.46 ug/L
 RT: 8.537 min Scan# 2850
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

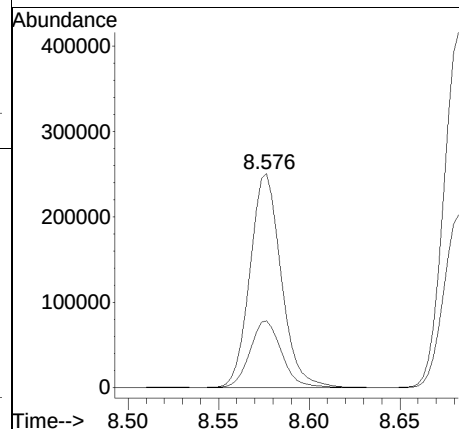
Tgt Ion	Ratio	Lower	Upper
112	100		
77	57.2	55.4	83.0
114	32.1	25.4	38.2

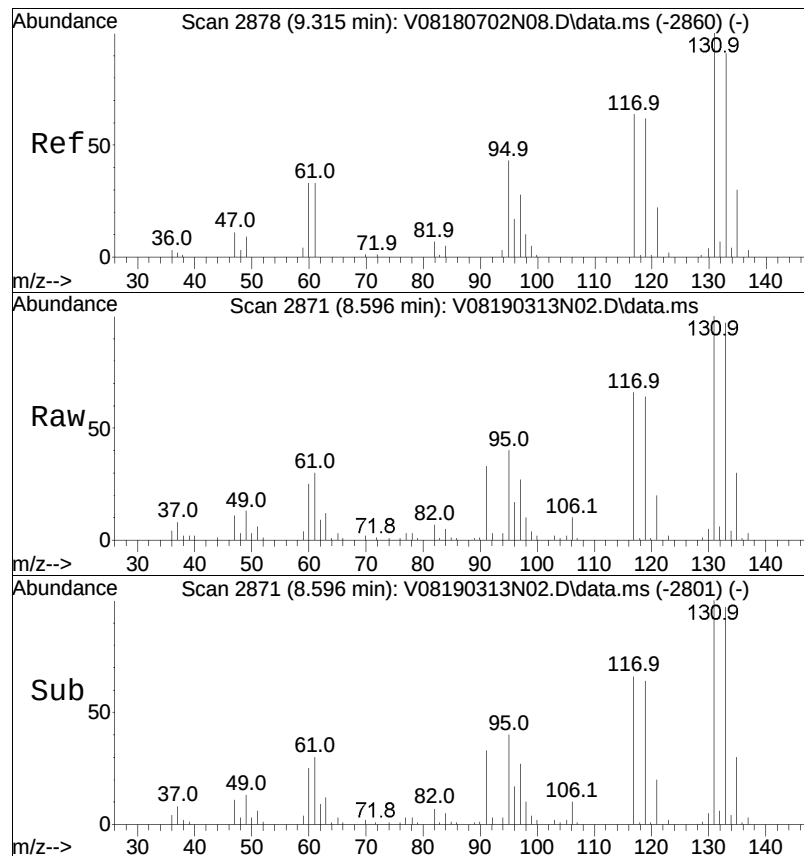




#74
 Ethylbenzene
 Concen: 9.98 ug/L
 RT: 8.576 min Scan# 2864
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

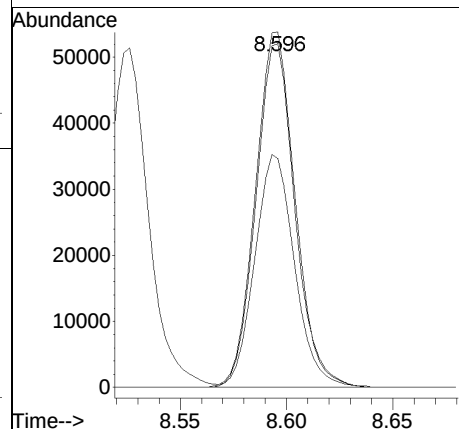
Tgt Ion	Ratio	Lower	Upper
91	100		
106	31.3	24.3	36.5

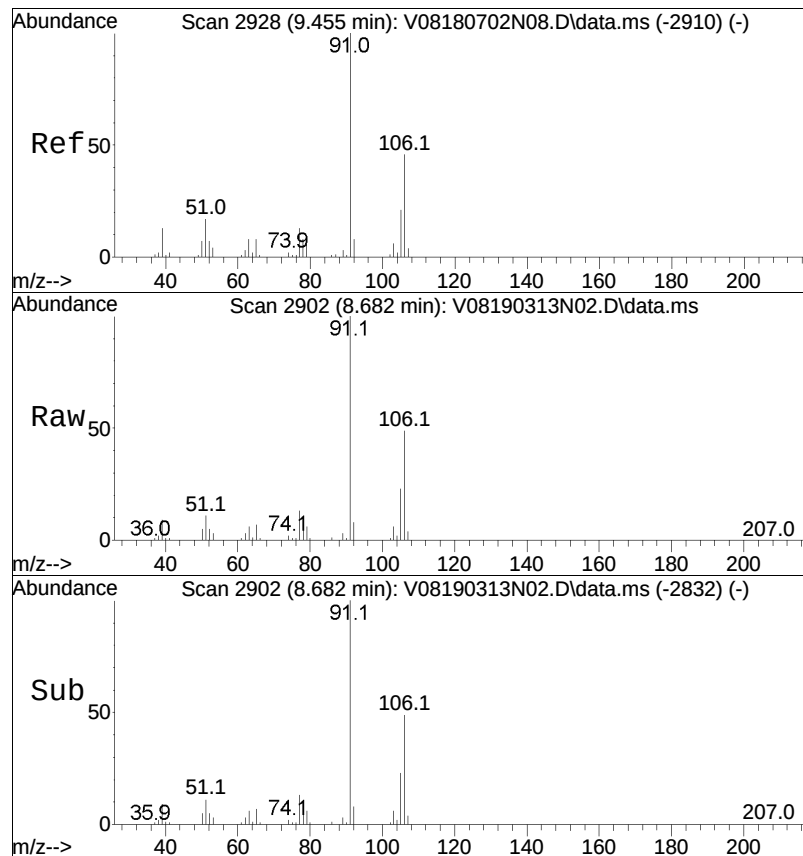




#75
 1,1,1,2-Tetrachloroethane
 Concen: 10.44 ug/L
 RT: 8.596 min Scan# 2871
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

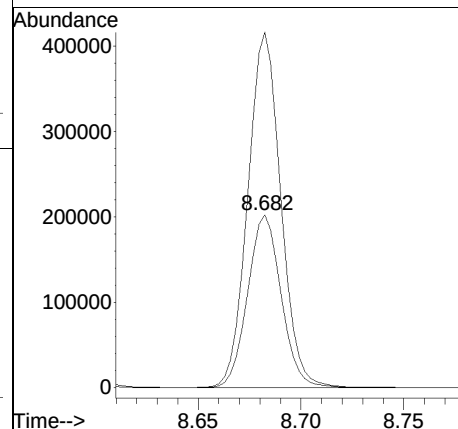
Tgt Ion:	131	Resp:	70061
Ion Ratio	Lower	Upper	
131	100		
133	95.1	81.0	121.0
119	65.6	41.3	81.3

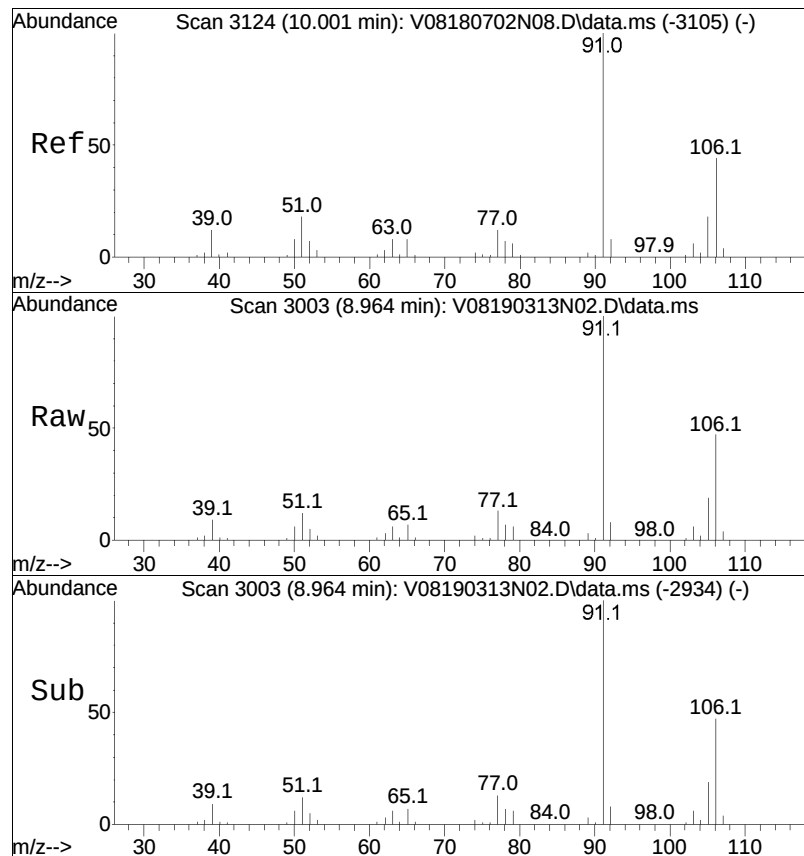




#76
 p/m Xylene
 Concen: 19.99 ug/L
 RT: 8.682 min Scan# 2902
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

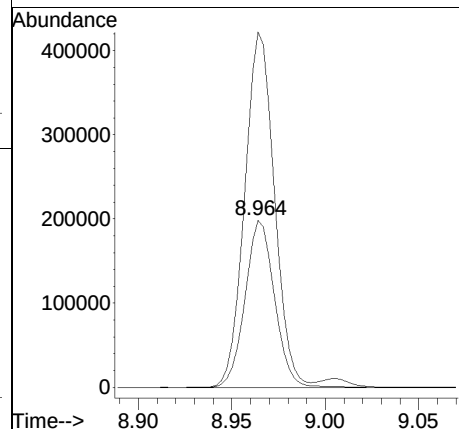
Tgt Ion	Ratio	Lower	Upper
106	100		
91	202.7	166.4	249.6

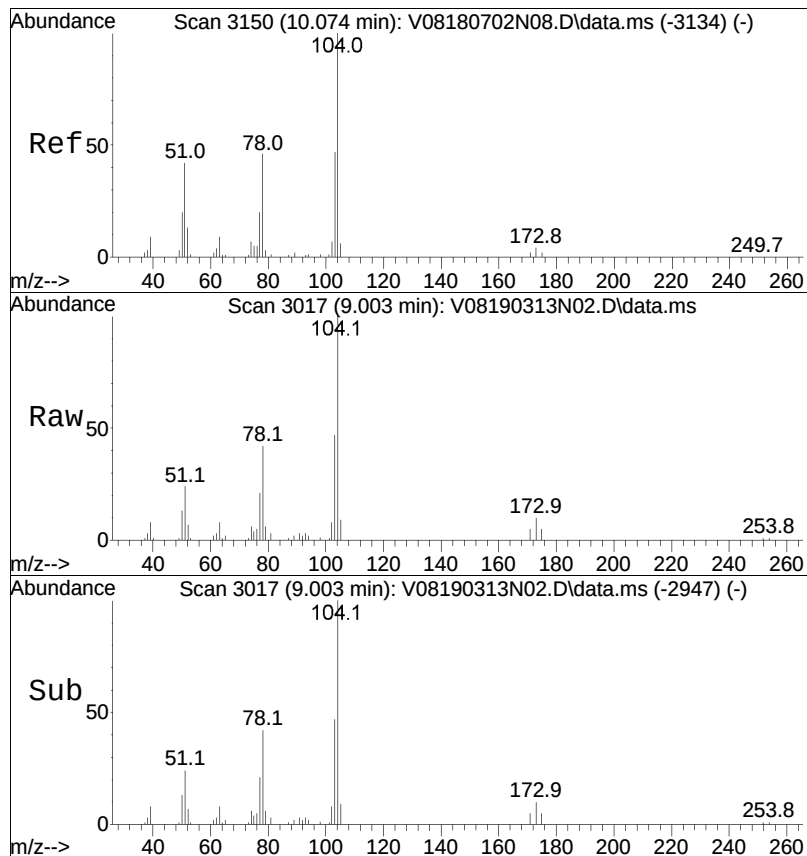




#77
 o Xylene
 Concen: 19.25 ug/L
 RT: 8.964 min Scan# 3003
 Delta R.T. -0.008 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

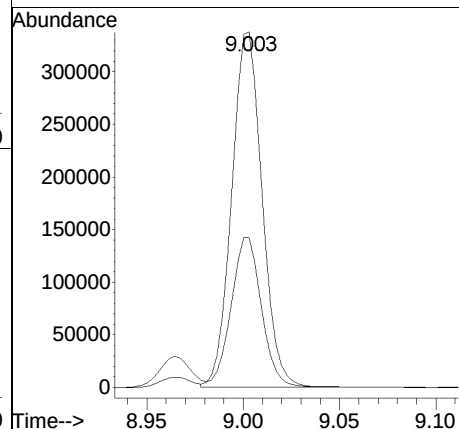
Tgt Ion	Ratio	Lower	Upper
106	100		
91	214.5	182.6	273.8

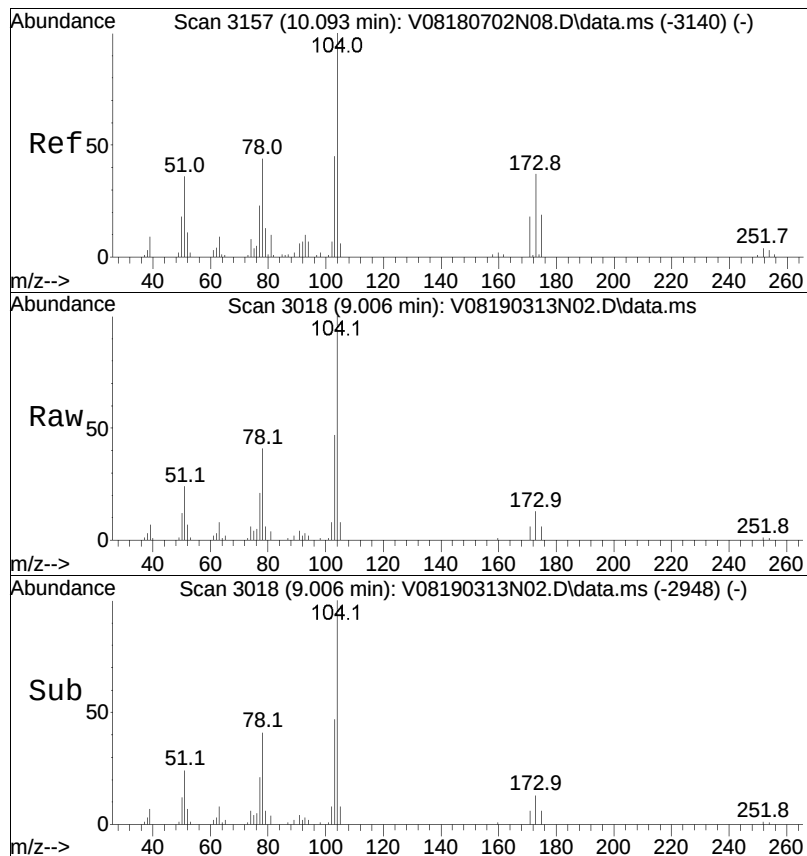




#78
 Styrene
 Concen: 20.53 ug/L
 RT: 9.003 min Scan# 3017
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

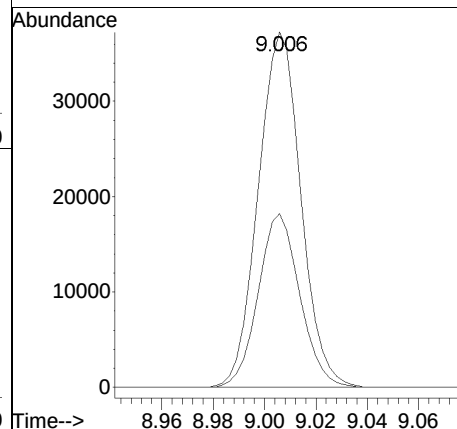
Tgt Ion	Ratio	Lower	Upper
104	100		
78	42.1	39.8	59.6

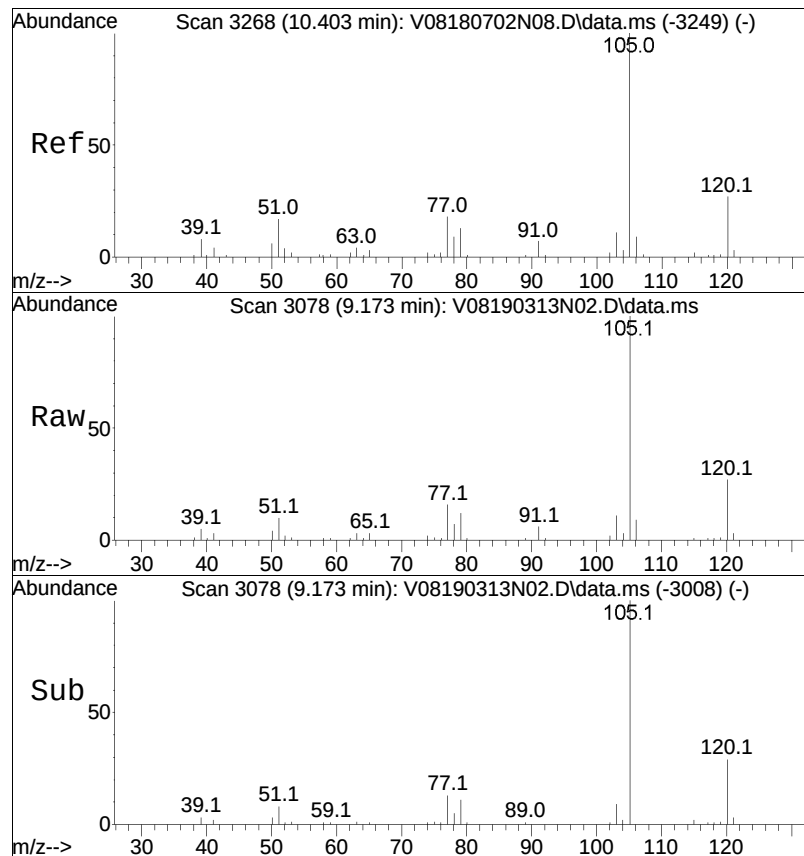




#80
 Bromoform
 Concen: 10.23 ug/L
 RT: 9.006 min Scan# 3018
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

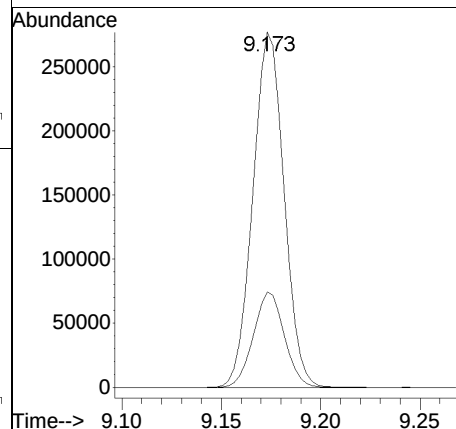
Tgt Ion	Ratio	Lower	Upper
173	100		
175	47.7	31.5	71.5

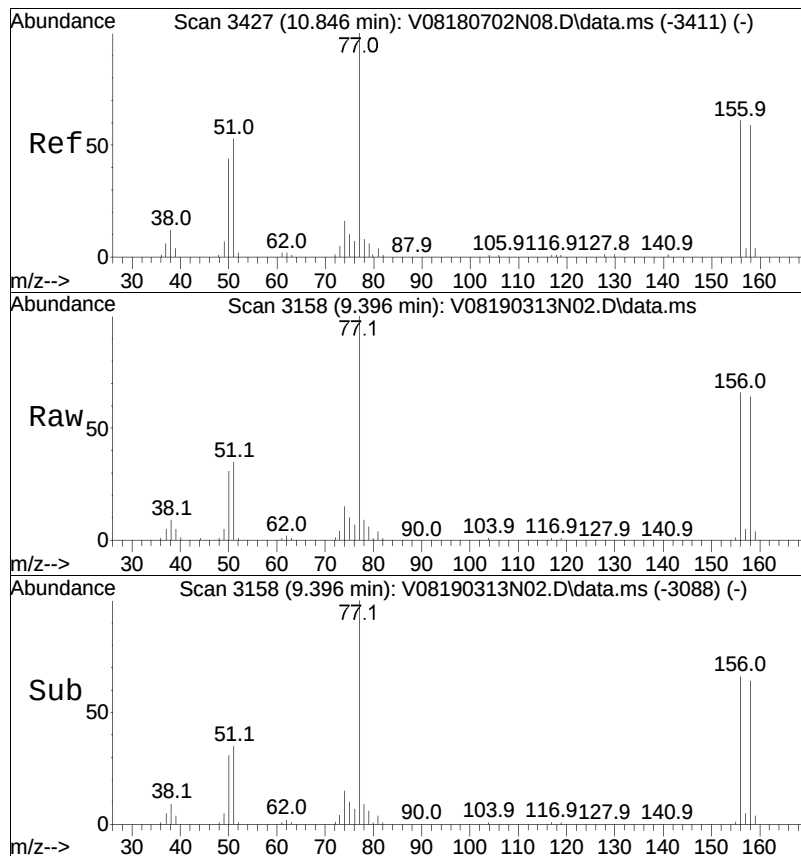




#82
 Isopropylbenzene
 Concen: 10.24 ug/L
 RT: 9.173 min Scan# 3078
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

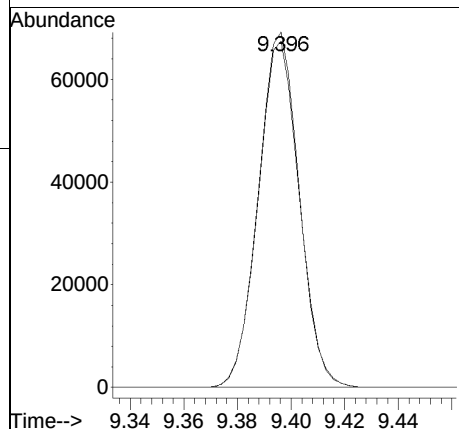
Tgt	Ion	Ratio	Lower	Upper
105	100			
120	26.6	4.8	44.8	

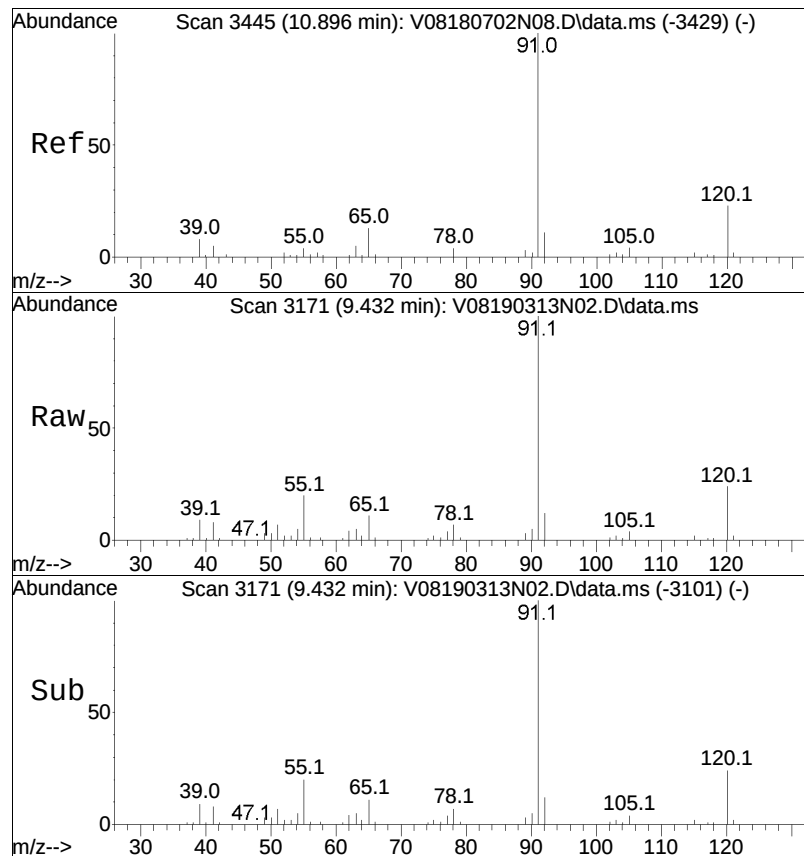




#84
 Bromobenzene
 Concen: 9.67 ug/L
 RT: 9.396 min Scan# 3158
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

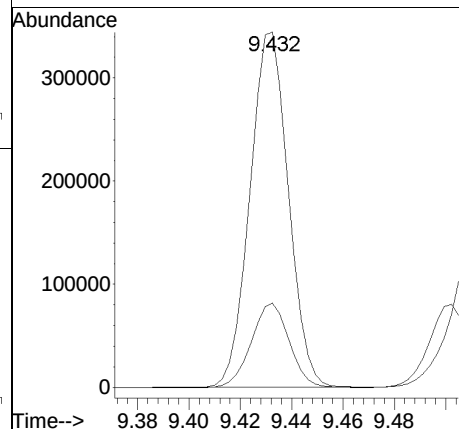
Tgt Ion	Ratio	Lower	Upper
156	100		
158	98.2	75.9	113.9

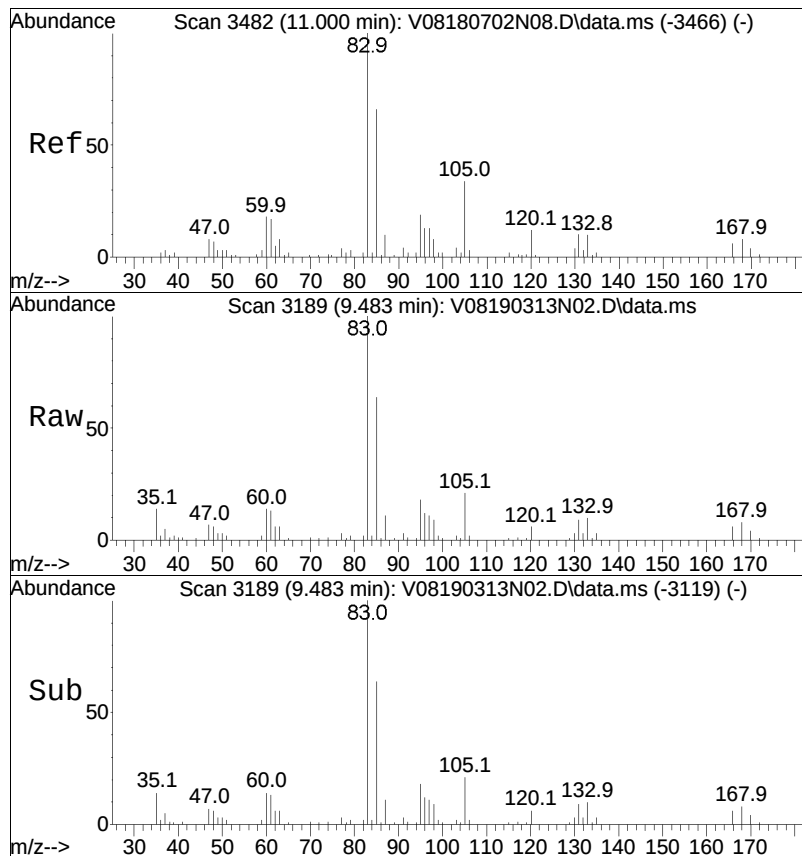




#85
 n-Propylbenzene
 Concen: 10.61 ug/L
 RT: 9.432 min Scan# 3171
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

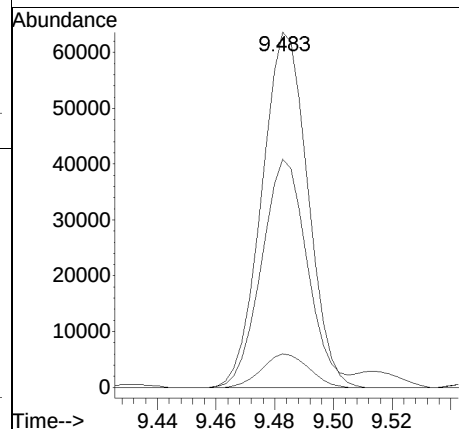
Tgt Ion	Ratio	Lower	Upper
91	100		
120	23.4	17.0	25.6

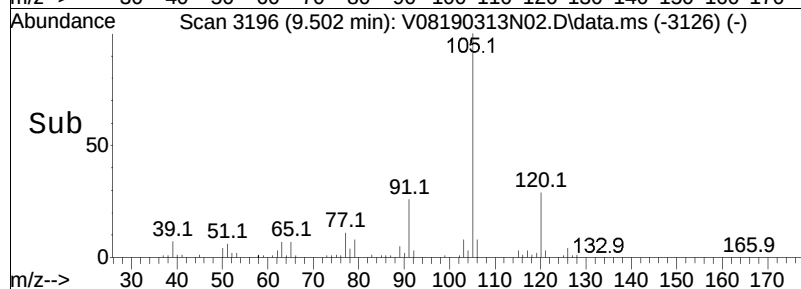
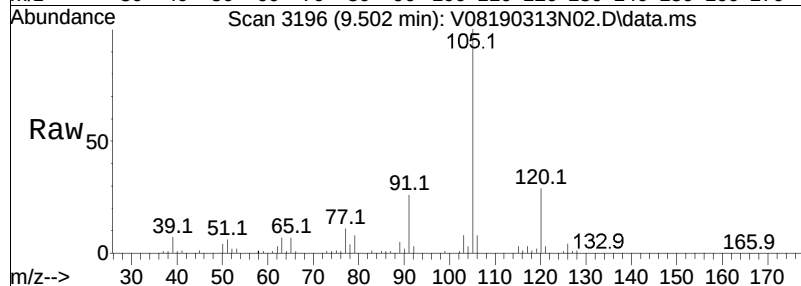
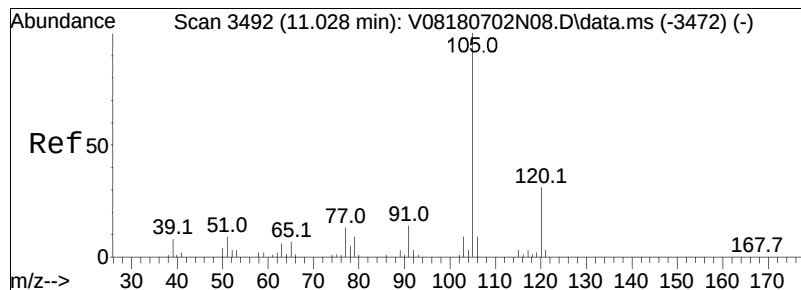




#87
 1,1,2,2-Tetrachloroethane
 Concen: 10.13 ug/L
 RT: 9.483 min Scan# 3189
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

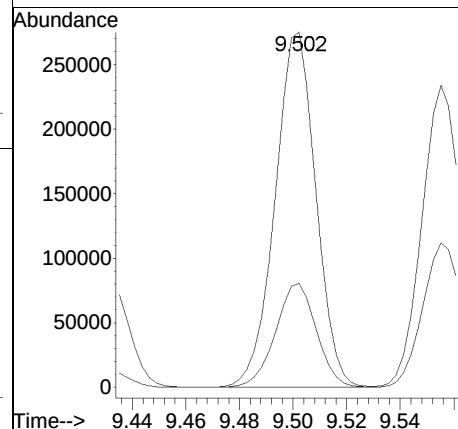
Tgt Ion:	83	Resp:	69307
Ion Ratio	Lower	Upper	
83	100		
131	9.6	0.0	30.4
85	64.2	45.4	85.4

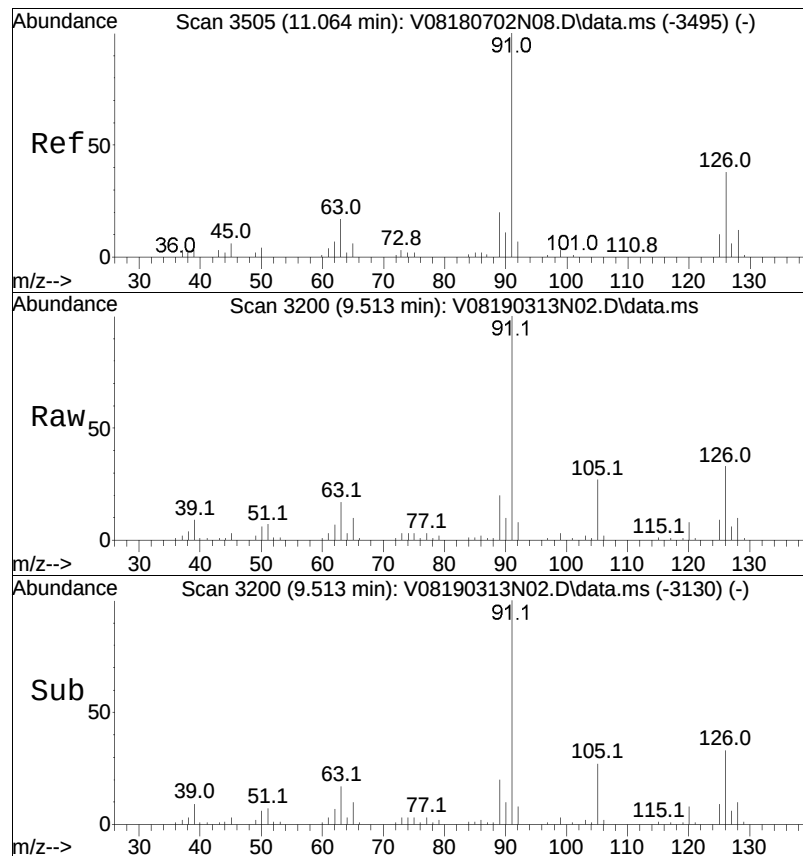




#88
 4-Ethyltoluene
 Concen: 10.40 ug/L
 RT: 9.502 min Scan# 3196
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

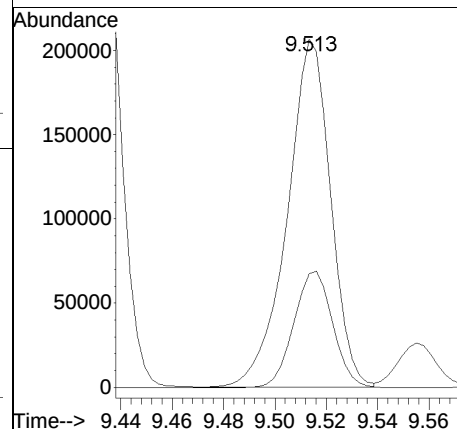
Tgt Ion	Ratio	Lower	Upper
105	100		
120	29.4	18.1	37.7

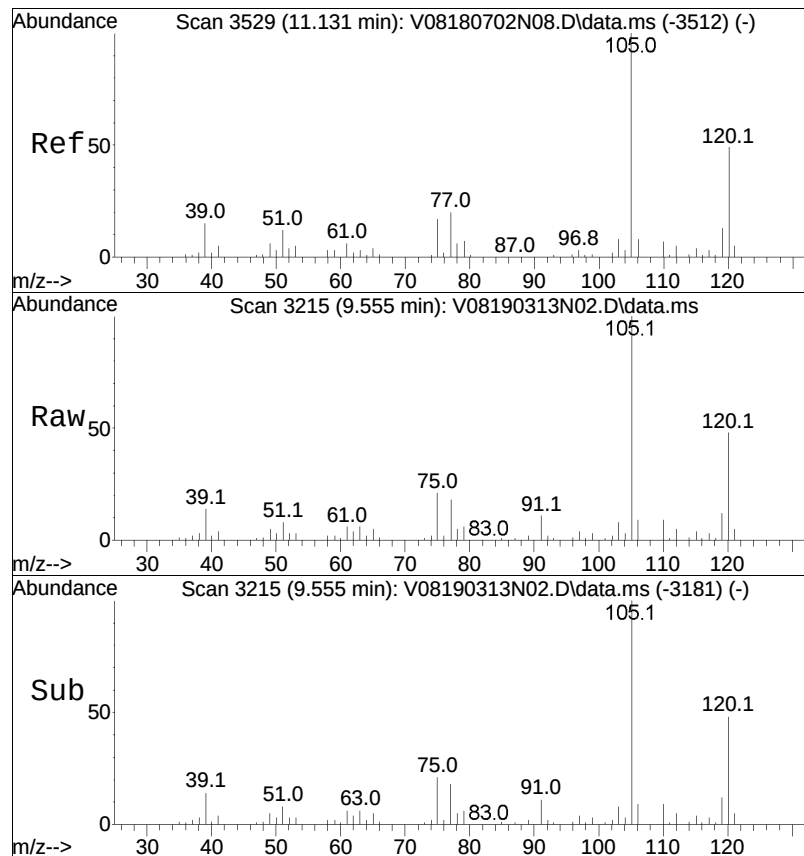




#89
 2-Chlorotoluene
 Concen: 9.85 ug/L
 RT: 9.513 min Scan# 3200
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

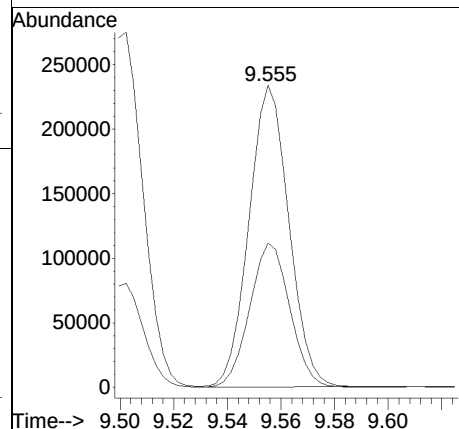
Tgt Ion	Ratio	Lower	Upper
91	100		
126	29.9	21.5	32.3

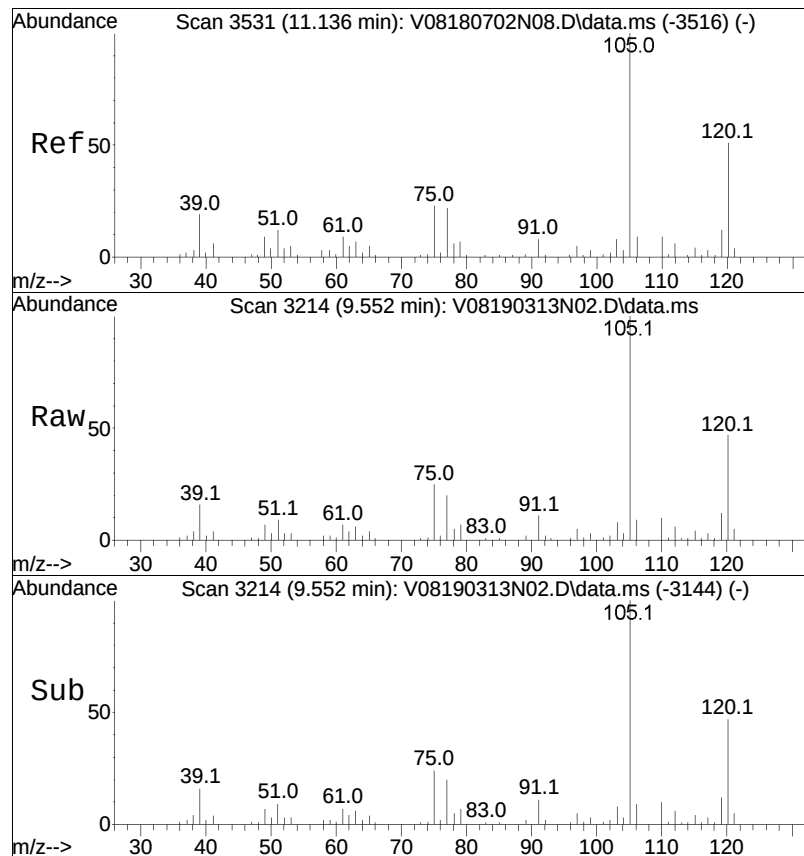




#90
 1,3,5-Trimethylbenzene
 Concen: 9.99 ug/L
 RT: 9.555 min Scan# 3215
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

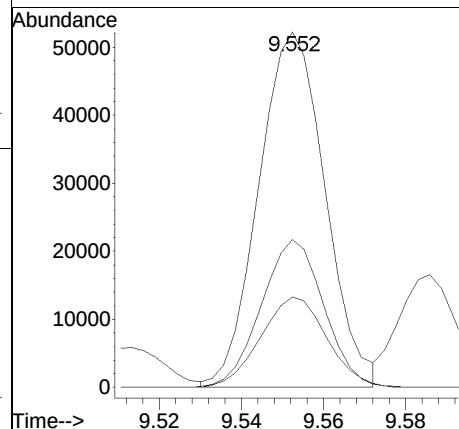
Tgt Ion	Ratio	Lower	Upper
105	100		
120	47.9	34.8	52.2

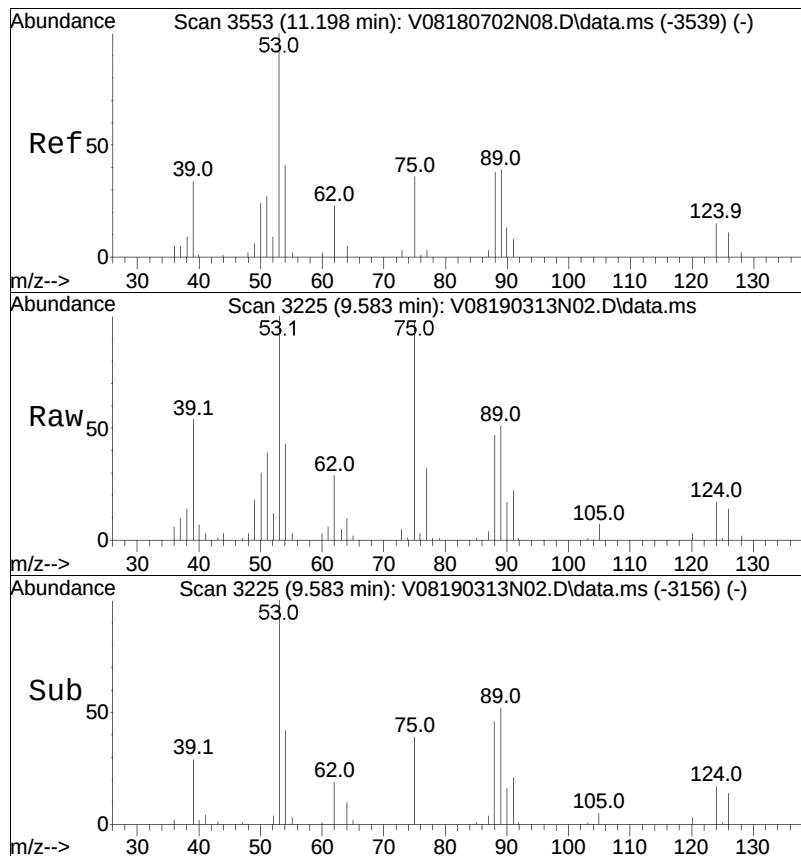




#91
 1,2,3-Trichloropropane
 Concen: 11.02 ug/L
 RT: 9.552 min Scan# 3214
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

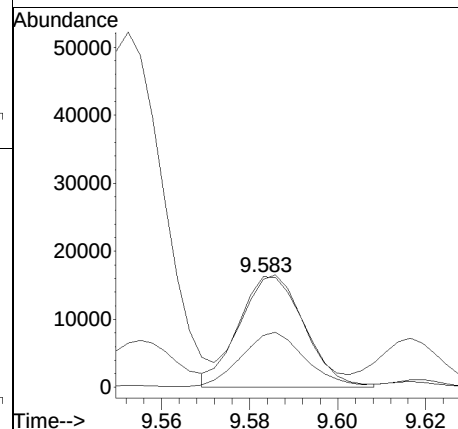
Tgt Ion:	75	Resp:	58561
Ion Ratio	Lower	Upper	
75	100		
110	39.2	25.4	52.8
112	25.4	15.6	32.4

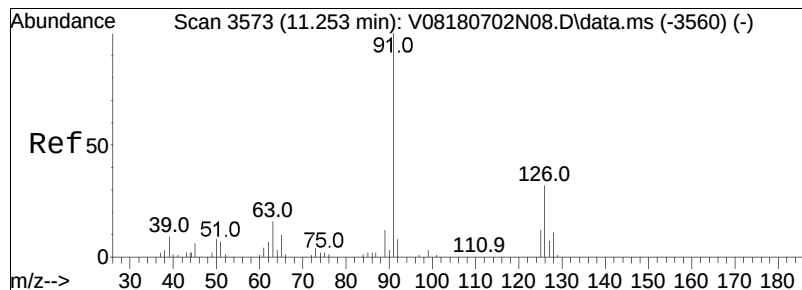




#92
 trans-1,4-Dichloro-2-butene
 Concen: 9.11 ug/L
 RT: 9.583 min Scan# 3225
 Delta R.T. -0.008 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

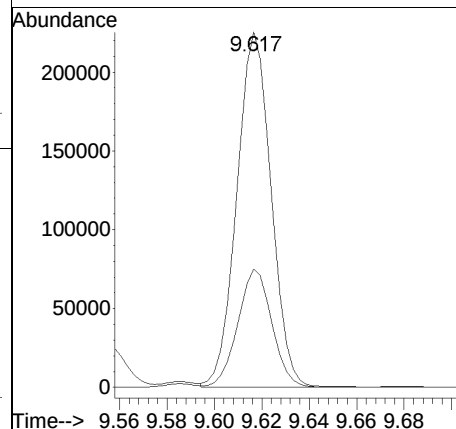
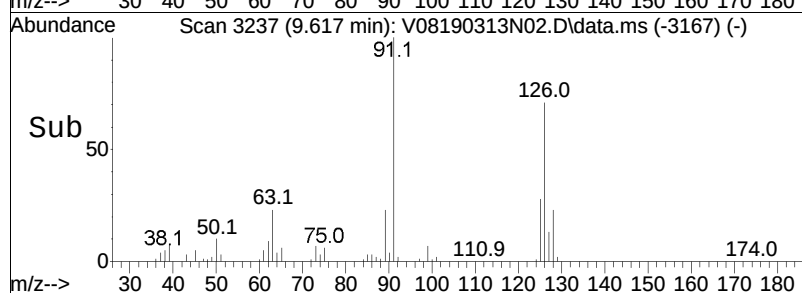
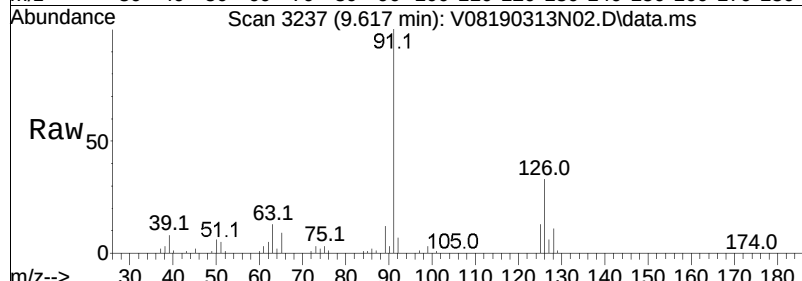
Tgt	Ion	Ratio	Lower	Upper
53	100			
88	47.0	39.6	59.4	
75	96.7	70.2	105.4	

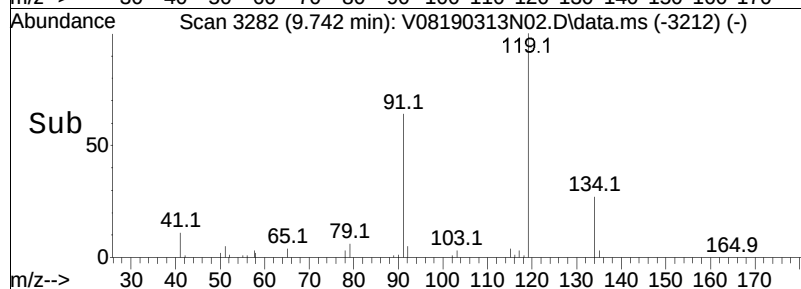
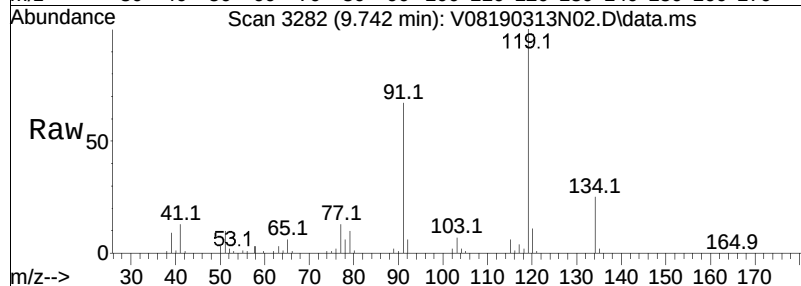
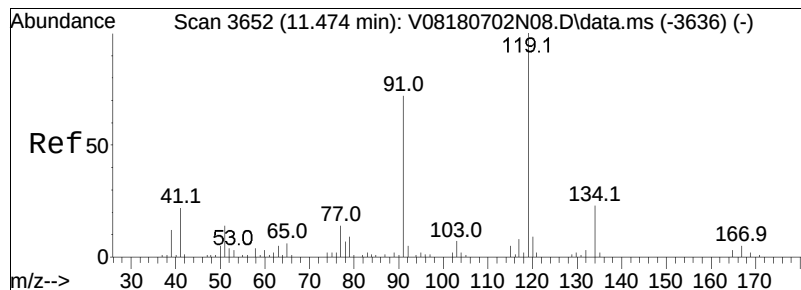




#93
 4-Chlorotoluene
 Concen: 10.56 ug/L
 RT: 9.617 min Scan# 3237
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

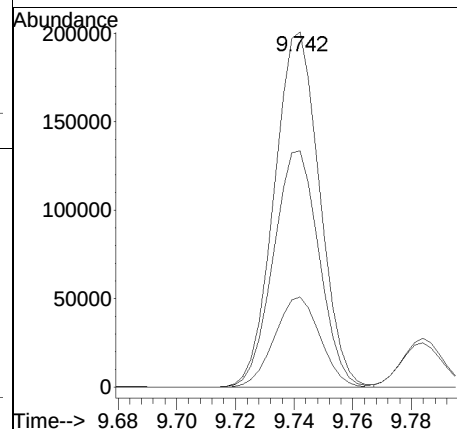
Tgt Ion: 91 Resp: 225476
 Ion Ratio Lower Upper
 91 100
 126 33.2 24.6 36.8

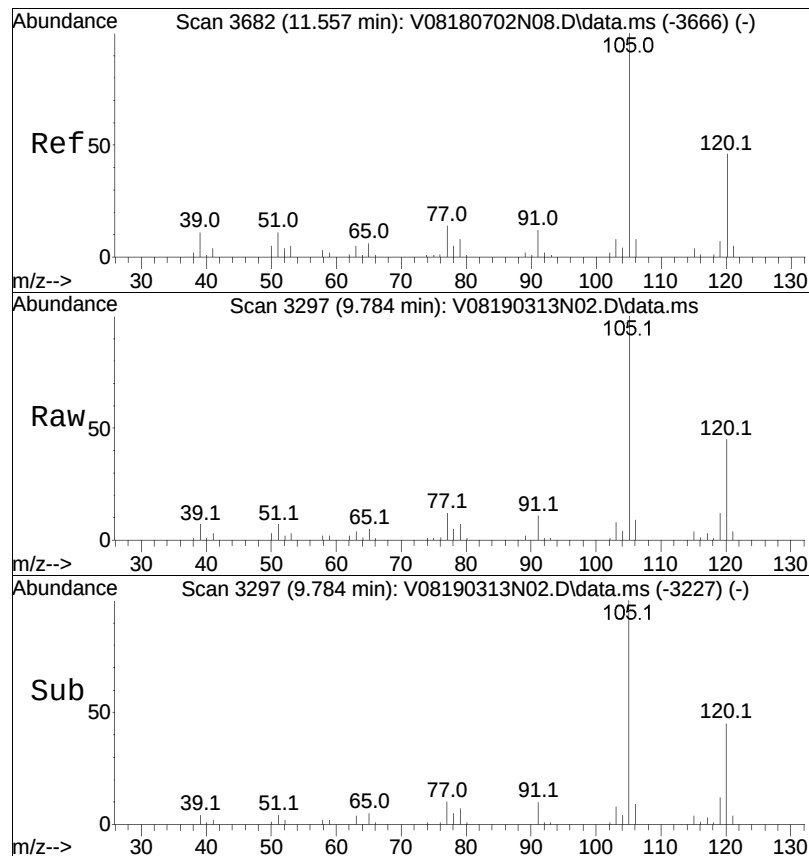




#94
 tert-Butylbenzene
 Concen: 8.69 ug/L
 RT: 9.742 min Scan# 3282
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

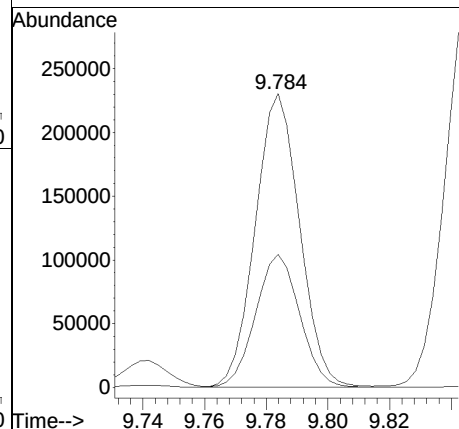
Tgt Ion	Ratio	Lower	Upper
119	100		
91	66.9	51.4	77.2
134	25.6	18.3	27.5

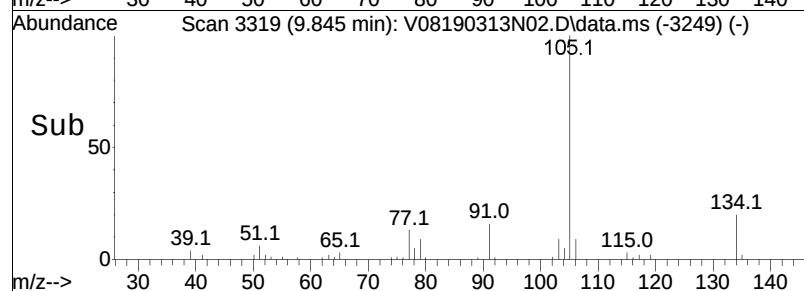
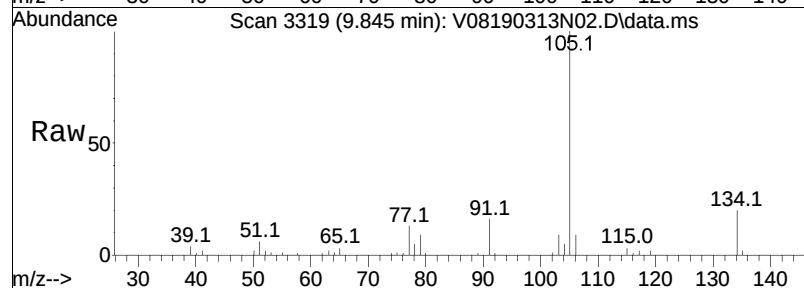
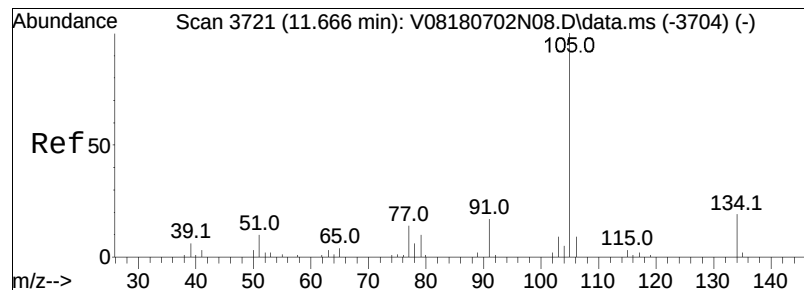




#97
 1,2,4-Trimethylbenzene
 Concen: 9.58 ug/L
 RT: 9.784 min Scan# 3297
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

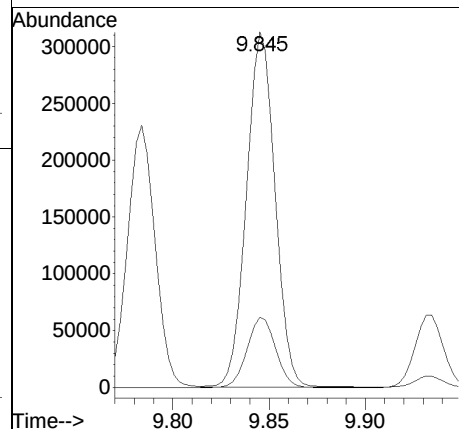
Tgt Ion	105	120	Ratio	Lower	Upper
105	100				
120	44.8		33.4	50.0	

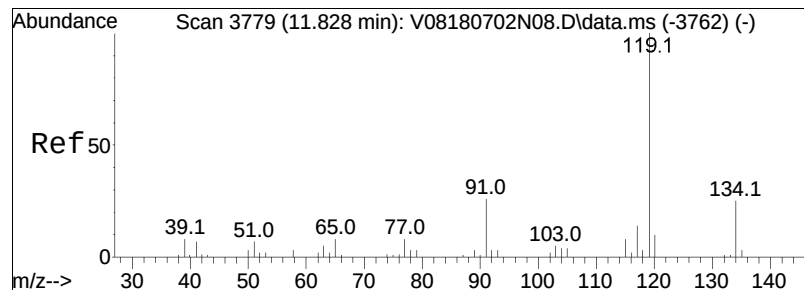




#98
 sec-Butylbenzene
 Concen: 10.59 ug/L
 RT: 9.845 min Scan# 3319
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

Tgt	Ion	Ratio	Lower	Upper
105	100			
134	19.6	12.5	26.1	





#99

p-Isopropyltoluene

Concen: 9.88 ug/L

RT: 9.932 min Scan# 3350

Delta R.T. -0.005 min

Lab File: V08190313N02.D

Acq: 13 Mar 2019 6:42 pm

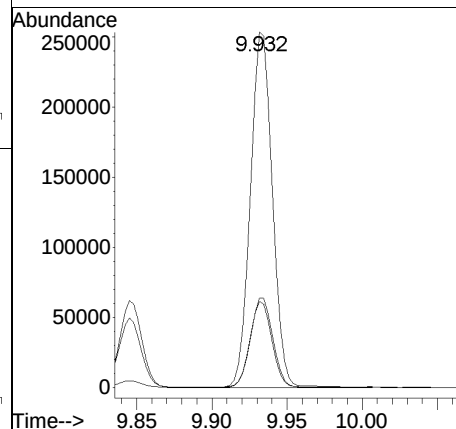
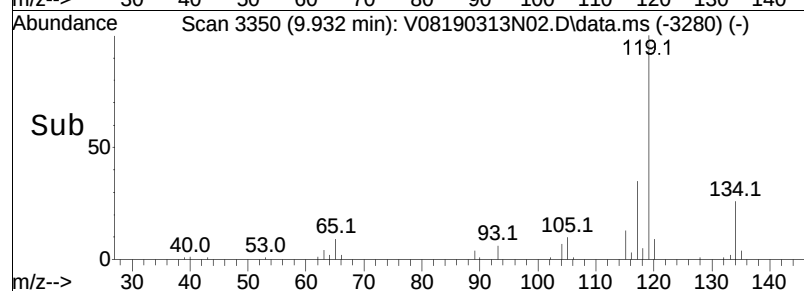
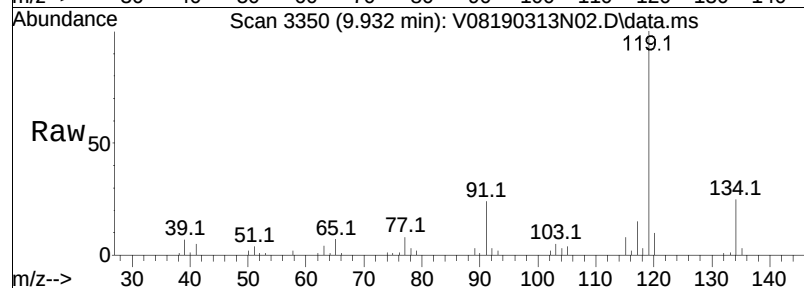
Tgt Ion:119 Resp: 258281

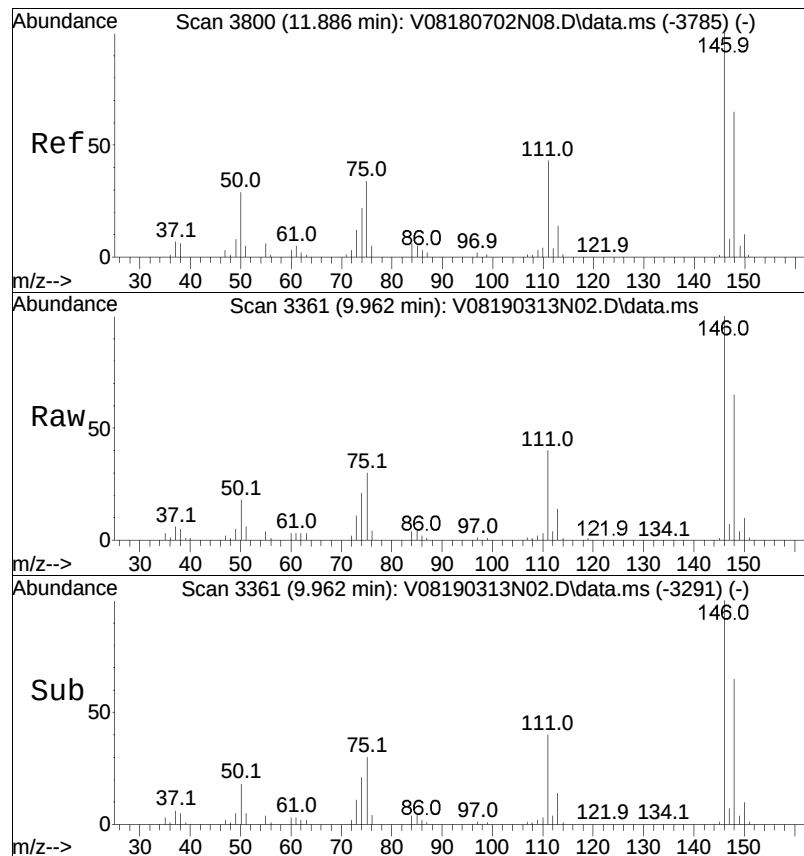
Ion Ratio Lower Upper

119 100

134 25.5 16.1 33.3

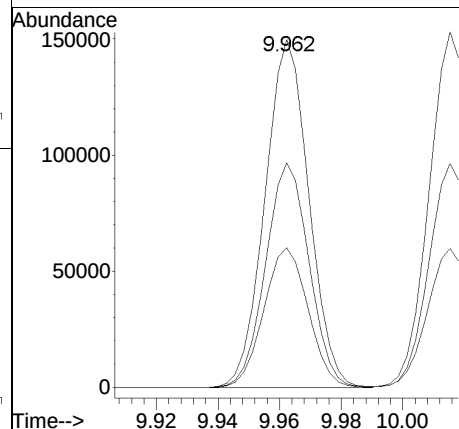
91 23.8 17.3 35.9

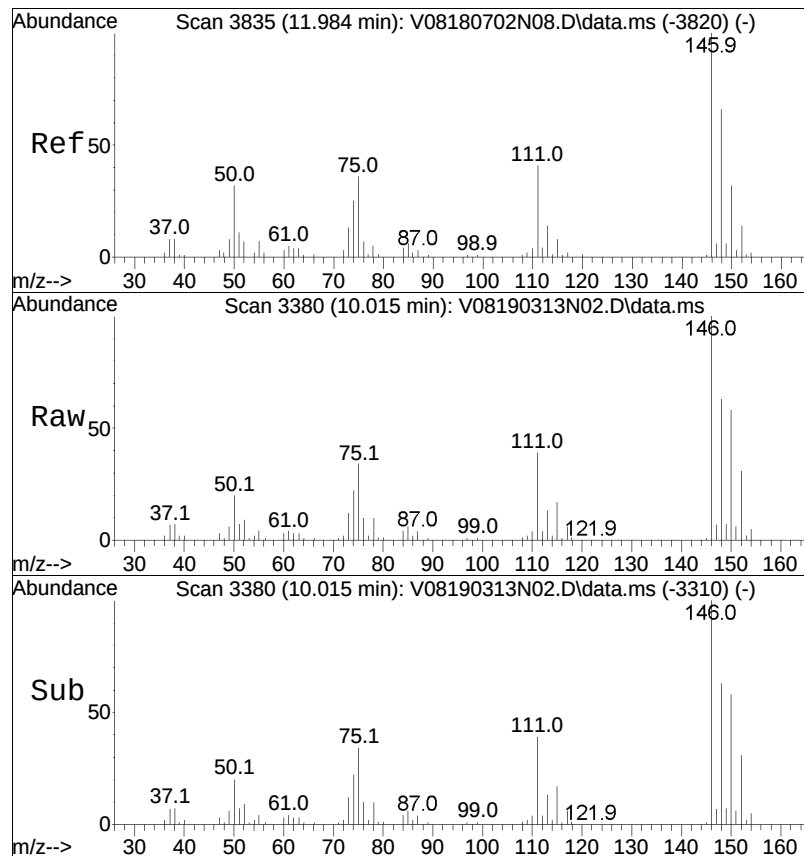




#100
 1,3-Dichlorobenzene
 Concen: 10.60 ug/L
 RT: 9.962 min Scan# 3361
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

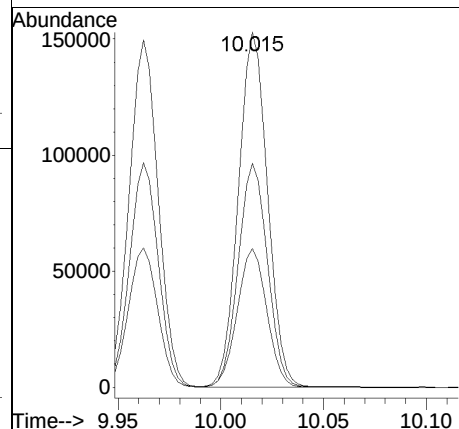
Tgt Ion:	146	Resp:	148192
Ion Ratio	Lower	Upper	
146	100		
111	40.5	27.5	57.1
148	63.8	41.9	86.9

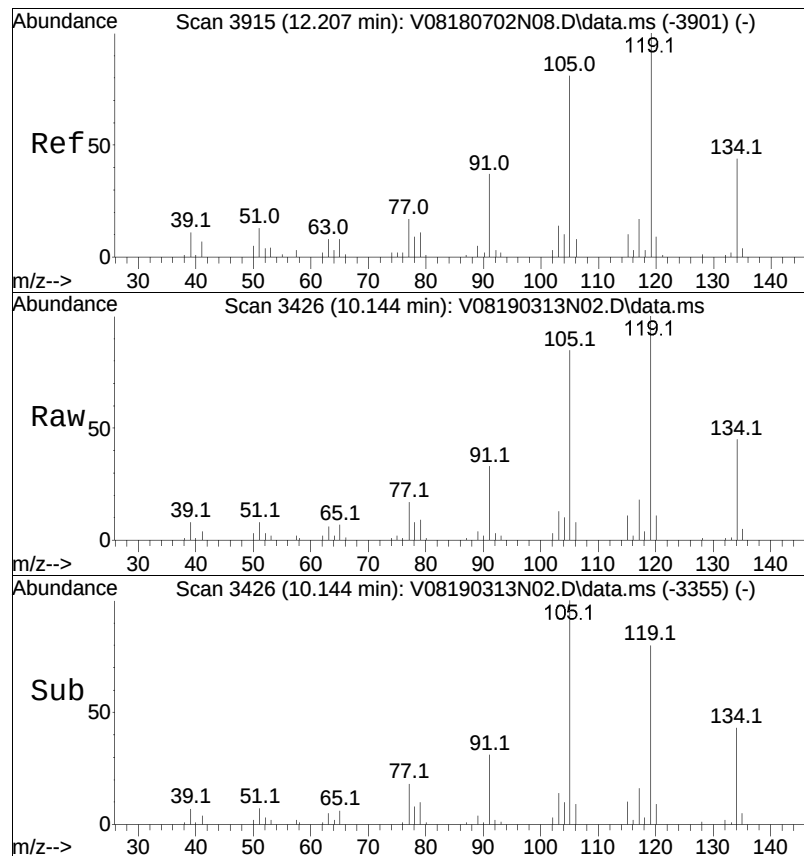




#101
 1,4-Dichlorobenzene
 Concen: 10.43 ug/L
 RT: 10.015 min Scan# 3380
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

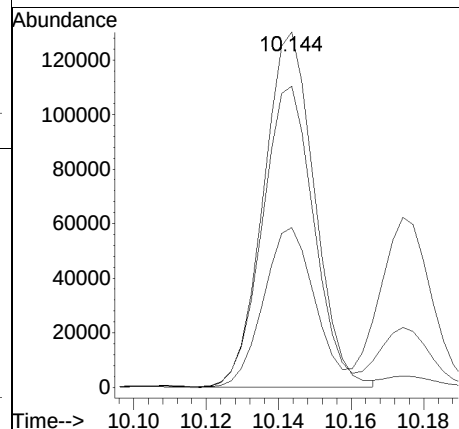
Tgt Ion:	146	Resp:	150989
Ion Ratio	Lower	Upper	
146	100		
111	39.4	32.3	48.5
148	63.1	49.9	74.9

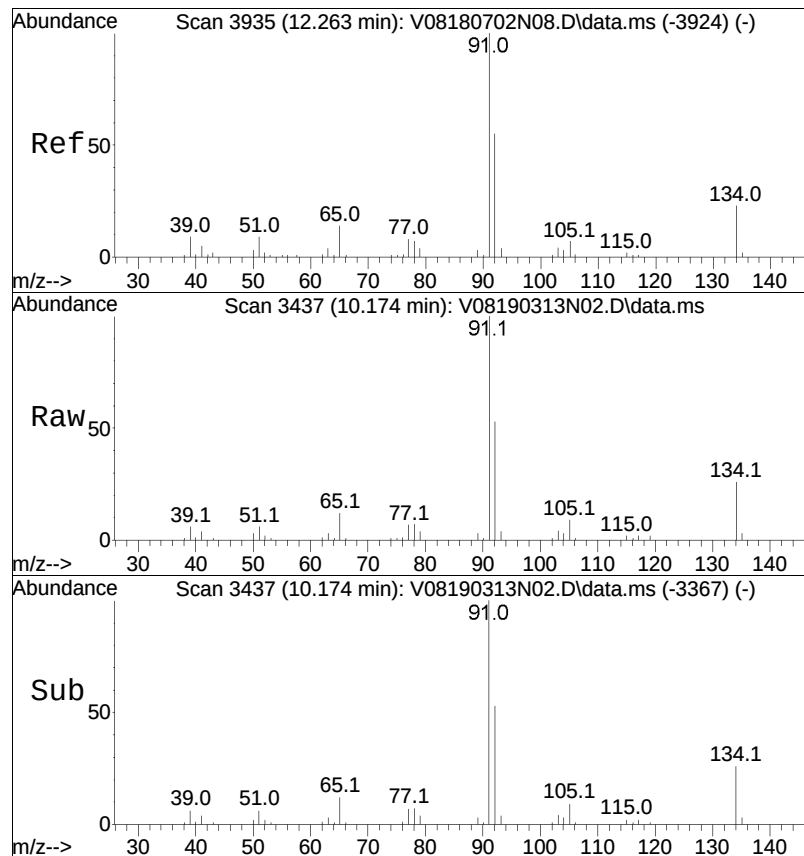




#102
 p-Diethylbenzene
 Concen: 8.28 ug/L
 RT: 10.144 min Scan# 3426
 Delta R.T. -0.002 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

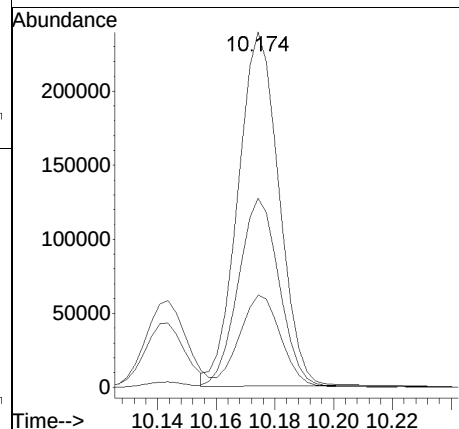
Tgt Ion:	119	Resp:	126695
Ion Ratio	Lower	Upper	
119	100		
105	85.4	59.5	123.7
134	45.2	30.2	62.6

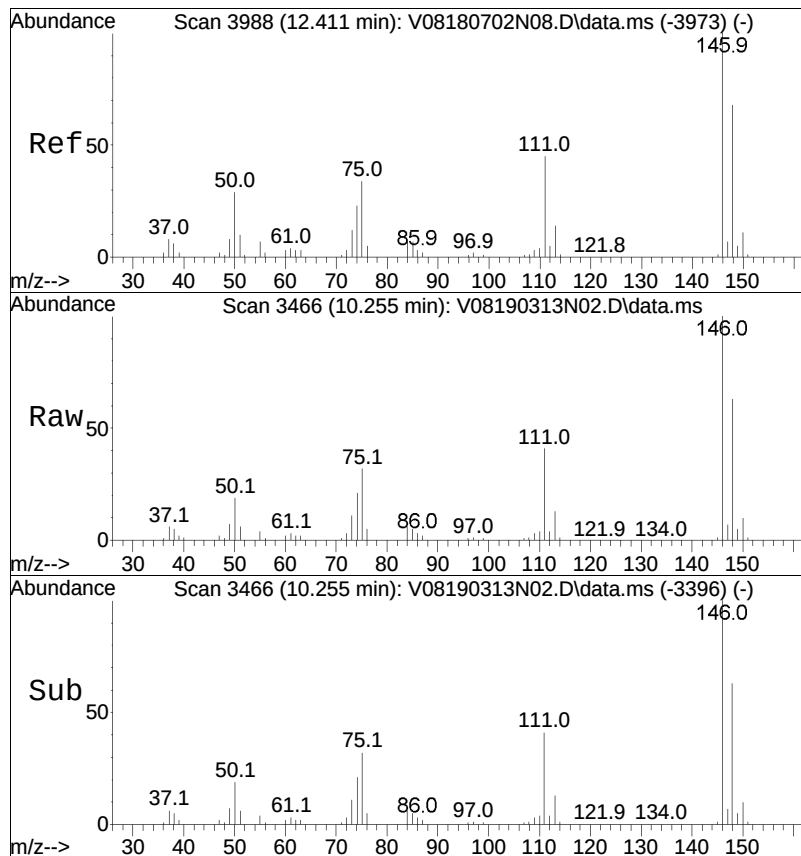




#103
 n-Butylbenzene
 Concen: 9.56 ug/L
 RT: 10.174 min Scan# 3437
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

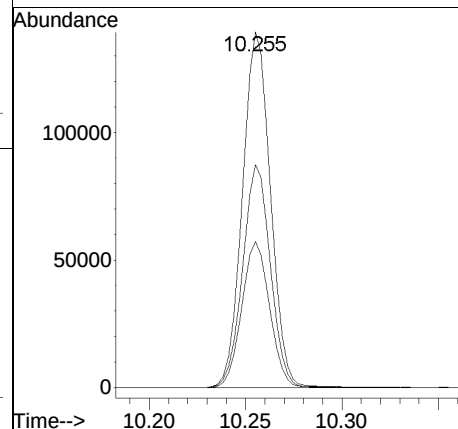
Tgt Ion: 91	Resp: 231697
Ion Ratio Lower Upper	
91 100	
92 53.8	43.0 64.4
134 26.5	19.6 29.4

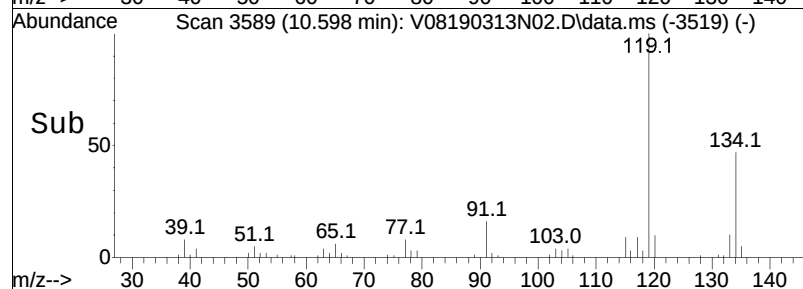
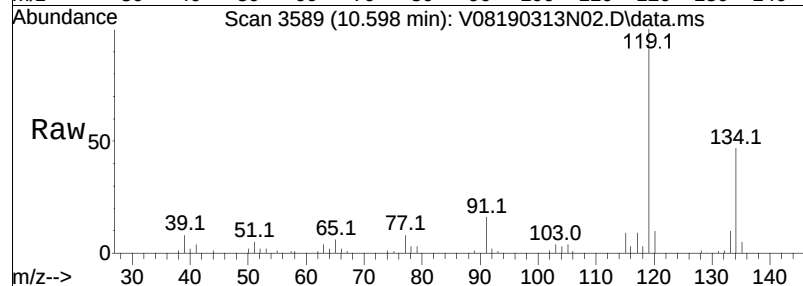
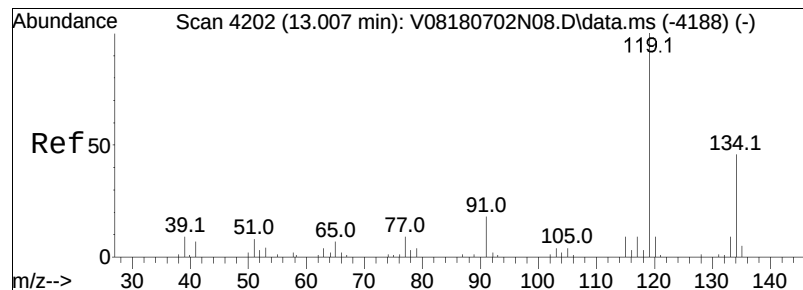




#104
 1,2-Dichlorobenzene
 Concen: 10.33 ug/L
 RT: 10.255 min Scan# 3466
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

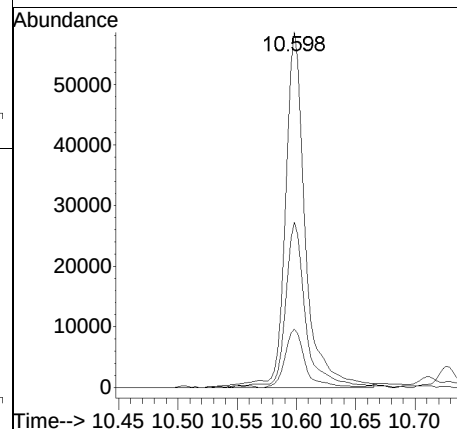
Tgt Ion:	146	Resp:	140796
Ion Ratio	Lower	Upper	
146	100		
111	40.8	28.3	58.7
148	61.9	42.3	87.8

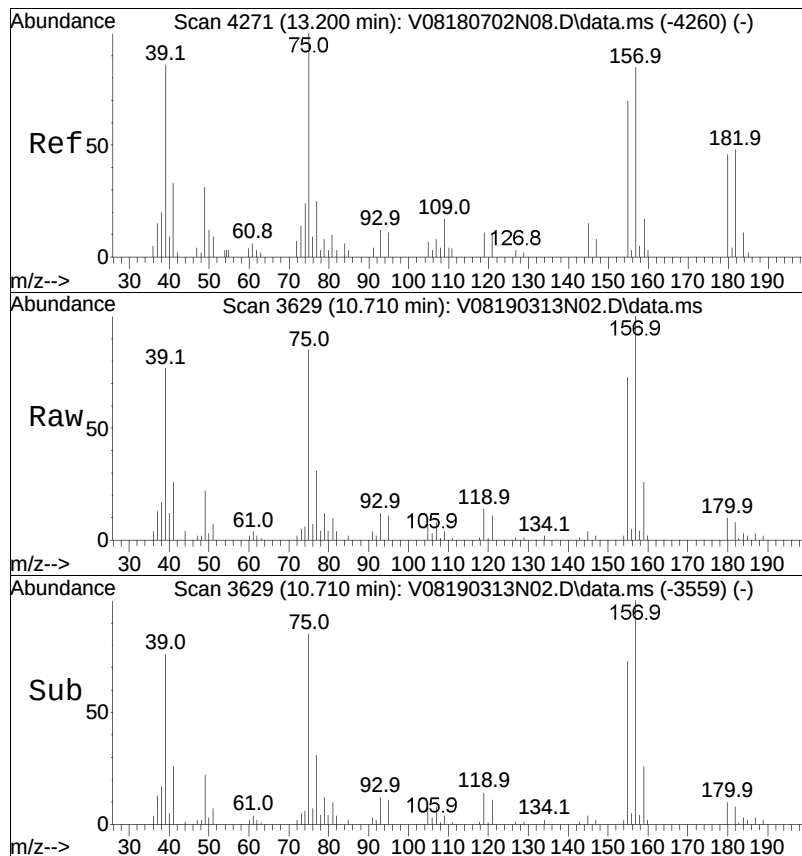




#105
 1,2,4,5-Tetramethylbenzene
 Concen: 3.20 ug/L
 RT: 10.598 min Scan# 3589
 Delta R.T. -0.006 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

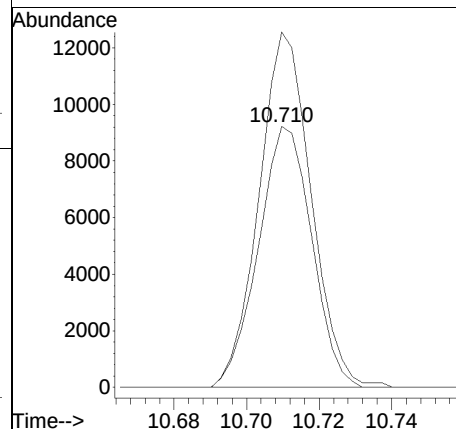
Tgt Ion	Ratio	Lower	Upper
119	100		
134	42.6	30.5	63.3
91	16.4	12.4	25.7

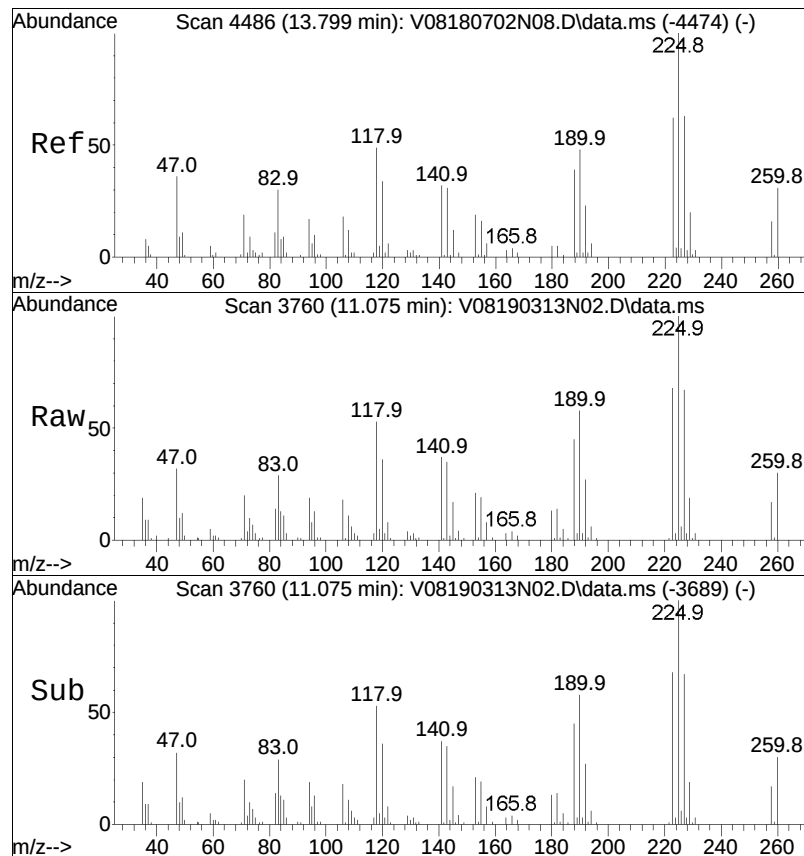




#106
 1,2-Dibromo-3-chloropropane
 Concen: 9.21 ug/L
 RT: 10.710 min Scan# 3629
 Delta R.T. -0.005 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

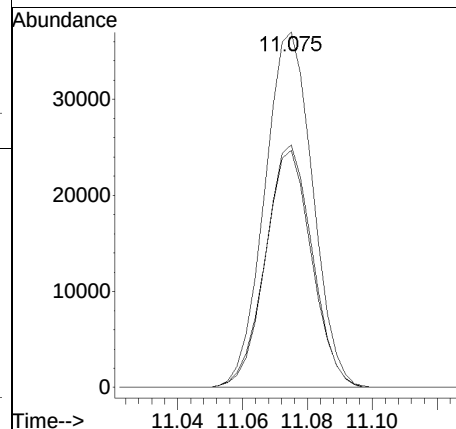
Tgt Ion	Ratio	Lower	Upper
155	100		
157	133.2	94.8	142.2

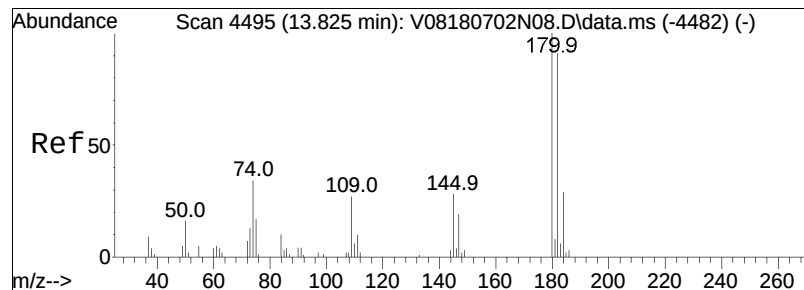




#108
 Hexachlorobutadiene
 Concen: 8.66 ug/L
 RT: 11.075 min Scan# 3760
 Delta R.T. -0.003 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

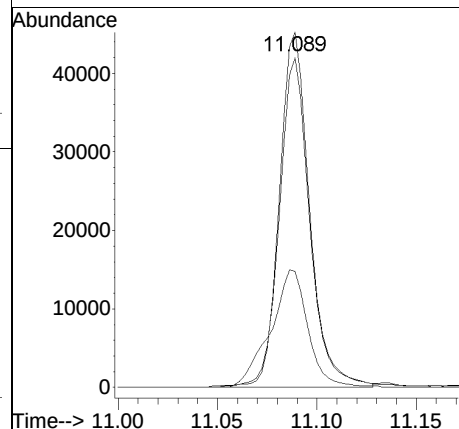
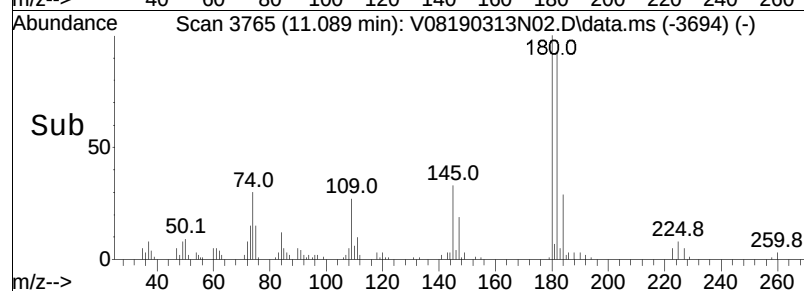
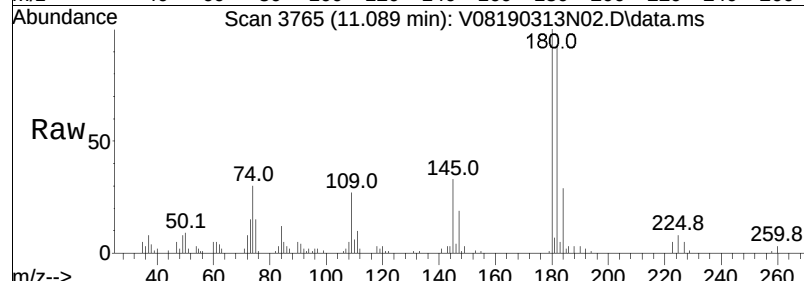
Tgt	Ion:225	Resp:	38059
Ion	Ratio	Lower	Upper
225	100		
223	66.7	54.3	81.5
227	64.2	52.4	78.6

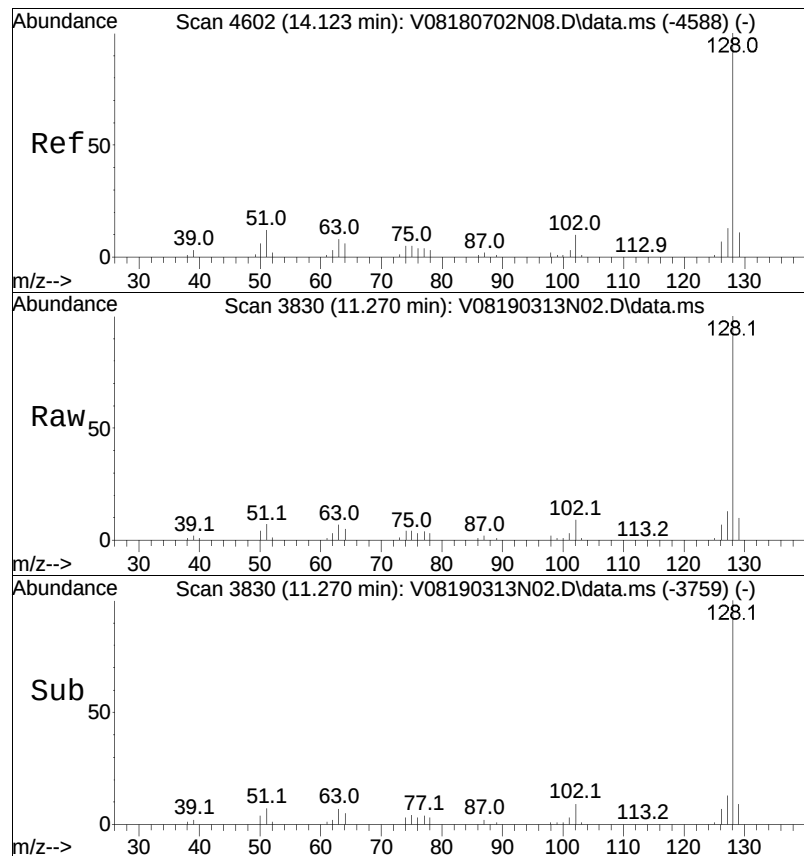




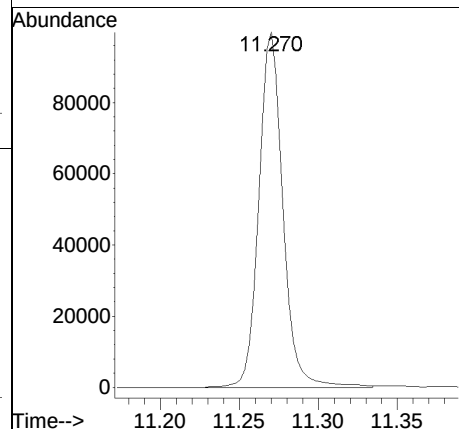
#109
 1,2,4-Trichlorobenzene
 Concen: 5.62 ug/L
 RT: 11.089 min Scan# 3765
 Delta R.T. -0.003 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

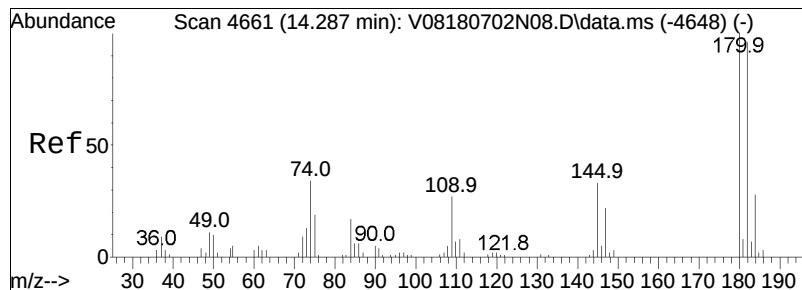
Tgt Ion	Ratio	Lower	Upper
180	100		
182	94.2	77.3	115.9
145	40.9	28.1	42.1





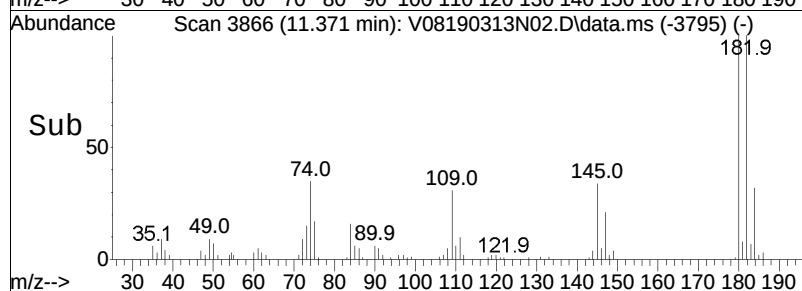
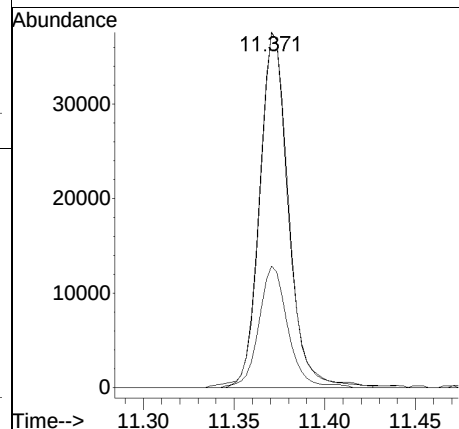
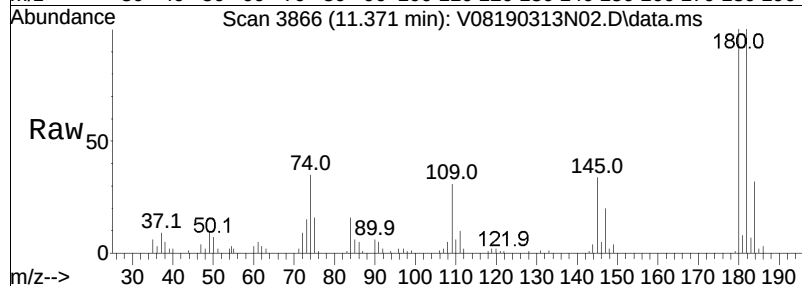
#110
 Naphthalene
 Concen: 5.61 ug/L
 RT: 11.270 min Scan# 3830
 Delta R.T. -0.003 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm
 Tgt Ion:128 Resp: 105744





#111
 1,2,3-Trichlorobenzene
 Concen: 5.43 ug/L
 RT: 11.371 min Scan# 3866
 Delta R.T. -0.002 min
 Lab File: V08190313N02.D
 Acq: 13 Mar 2019 6:42 pm

Tgt Ion	Ratio	Lower	Upper
180	100		
182	97.5	76.4	114.6
145	33.7	26.4	39.6



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A03.D
 Acq On : 12 Mar 2019 8:57
 Operator : GONZO:PD
 Sample : WG1214926-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1214926,ICAL15541 (Sig #1); WG,ICAL15541 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 09:45:15 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190312A\VG190312A02.D
 Sub List : 8260-Curve-Iodomethane - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	6.545	96	388506	10.000	ug/L	0.00
Standard Area 1 = 385122			Recovery	=	100.88%	
59) Chlorobenzene-d5	10.127	117	295537	10.000	ug/L	0.00
Standard Area 1 = 297531			Recovery	=	99.33%	
79) 1,4-Dichlorobenzene-d4	12.703	152	151442	10.000	ug/L	0.00
Standard Area 1 = 151374			Recovery	=	100.04%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.714	113	91068	9.278	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	92.78%	
43) 1,2-Dichloroethane-d4	6.261	65	101298	10.480	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	104.80%	
60) Toluene-d8	8.257	98	389249	10.720	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	107.20%	
83) 4-Bromofluorobenzene	11.538	95	136412	10.673	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	106.73%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.879	85	66433	8.902	ug/L	98
3) Chloromethane	2.104	50	67837	9.209	ug/L	100
4) Vinyl chloride	2.183	62	109209	9.845	ug/L	98
5) Bromomethane	2.535	94	32328M1	4.777	ug/L	
6) Chloroethane	2.672	64	61842	9.492	ug/L	98
7) Trichlorofluoromethane	2.828	101	125504	8.852	ug/L	98
8) Ethyl ether	3.151	74	36300	9.924	ug/L	90
10) 1,1-Dichloroethene	3.356	96	63839	8.838	ug/L	90
11) Carbon disulfide	3.395	76	190366	8.790	ug/L	99
15) Methylene chloride	3.953	84	73321	9.549	ug/L	91
17) Acetone	4.002	43	12861	12.535	ug/L	99
18) trans-1,2-Dichloroethene	4.109	96	72592	9.252	ug/L	92
20) Methyl tert-butyl ether	4.207	73	184967	10.065	ug/L	95
23) 1,1-Dichloroethane	4.726	63	151307	10.605	ug/L	99
25) Acrylonitrile	4.784	53	16015	11.145	ug/L	97
27) Vinyl acetate	4.960	43	170037	11.493	ug/L	98
28) cis-1,2-Dichloroethene	5.264	96	82543	9.560	ug/L	94
29) 2,2-Dichloropropane	5.371	77	114298	9.491	ug/L	93
30) Bromochloromethane	5.459	128	39842	9.449	ug/L	91
32) Chloroform	5.528	83	143100	9.852	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A03.D
 Acq On : 12 Mar 2019 8:57
 Operator : GONZO:PD
 Sample : WG1214926-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1214926,ICAL15541 (Sig #1); WG,ICAL15541 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 09:45:15 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190312A\VG190312A02.D
 Sub List : 8260-Curve-Iodomethane - Megamix plus Diox-Iodomethane

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	5.665	117	110639	8.793	ug/L	99
37) 1,1,1-Trichloroethane	5.743	97	135668	9.408	ug/L	98
39) 2-Butanone	5.831	43	25321	12.524	ug/L	85
40) 1,1-Dichloropropene	5.860	75	113486	9.831	ug/L	98
41) Benzene	6.115	78	345635	9.910	ug/L	99
44) 1,2-Dichloroethane	6.330	62	104693	10.477	ug/L	98
48) Trichloroethene	6.721	95	86117	9.089	ug/L	99
50) Dibromomethane	7.181	93	45886	10.060	ug/L	93
51) 1,2-Dichloropropane	7.288	63	81040	10.538	ug/L	98
54) Bromodichloromethane	7.347	83	110698	10.022	ug/L	98
57) 1,4-Dioxane	7.562	88	10131	372.478	ug/L	93
58) cis-1,3-Dichloropropene	8.051	75	130597	10.155	ug/L	93
61) Toluene	8.315	92	226497	10.347	ug/L	100
62) 4-Methyl-2-pentanone	8.755	58	20356	11.172	ug/L	90
63) Tetrachloroethene	8.765	166	96158	8.982	ug/L	96
65) trans-1,3-Dichloropropene	8.804	75	119158	11.241	ug/L	95
68) 1,1,2-Trichloroethane	9.000	83	57338	10.834	ug/L	98
69) Chlorodibromomethane	9.206	129	78787	10.347	ug/L	99
70) 1,3-Dichloropropane	9.324	76	119419	11.477	ug/L	99
71) 1,2-Dibromoethane	9.500	107	63617	10.516	ug/L	100
72) 2-Hexanone	9.774	43	36081	12.117	ug/L	91
73) Chlorobenzene	10.146	112	254725	10.299	ug/L	98
74) Ethylbenzene	10.176	91	437954	10.189	ug/L	99
75) 1,1,1,2-Tetrachloroethane	10.225	131	86320	10.106	ug/L	98
76) p/m Xylene	10.362	106	348162	20.001	ug/L	100
77) o Xylene	10.871	106	330160	20.232	ug/L	99
78) Styrene	10.930	104	552499	20.508	ug/L	100
80) Bromoform	10.960	173	49671	10.236	ug/L	97
82) Isopropylbenzene	11.224	105	439889	10.174	ug/L	99
84) Bromobenzene	11.655	156	110649	10.309	ug/L	100
85) n-Propylbenzene	11.684	91	516197	10.401	ug/L	99
87) 1,1,2,2-Tetrachloroethane	11.763	83	78706	11.777	ug/L	99
88) 4-Ethyltoluene	11.802	105	422006	10.295	ug/L	99
89) 2-Chlorotoluene	11.851	91	294608M1	10.710	ug/L	
90) 1,3,5-Trimethylbenzene	11.890	105	364438	10.283	ug/L	99
91) 1,2,3-Trichloropropane	11.910	75	68201M1	11.655	ug/L	
92) trans-1,4-Dichloro-2-b...	11.959	53	17996	11.830	ug/L #	100
93) 4-Chlorotoluene	12.027	91	303809	10.670	ug/L	99
94) tert-Butylbenzene	12.223	119	314939	10.081	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A03.D
 Acq On : 12 Mar 2019 8:57
 Operator : GONZO:PD
 Sample : WG1214926-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1214926,ICAL15541 (Sig #1); WG,ICAL15541 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 09:45:15 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Gonzo\2019\190312A\VG190312A02.D
 Sub List : 8260-Curve-Iodomethane - Megamix plus Diox-Iodomethane

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	12.302	105	354932	10.396	ug/L	98
98)	sec-Butylbenzene	12.409	105	433915	10.168	ug/L	99
99)	p-Isopropyltoluene	12.556	119	398577	10.174	ug/L	99
100)	1,3-Dichlorobenzene	12.635	146	209986	10.602	ug/L	99
101)	1,4-Dichlorobenzene	12.723	146	213408	10.481	ug/L	100
102)	p-Diethylbenzene	12.919	119	224287	9.976	ug/L	99
103)	n-Butylbenzene	12.978	91	340402	10.204	ug/L	99
104)	1,2-Dichlorobenzene	13.144	146	191016	10.781	ug/L	98
105)	1,2,4,5-Tetramethylben...	13.702	119	327838	10.209	ug/L	98
106)	1,2-Dibromo-3-chloropr...	13.908	155	9621	9.880	ug/L	97
108)	Hexachlorobutadiene	14.496	225	53235	8.517	ug/L	98
109)	1,2,4-Trichlorobenzene	14.525	180	122591	9.975	ug/L	99
110)	Naphthalene	14.819	128	231400	10.903	ug/L	100
111)	1,2,3-Trichlorobenzene	14.986	180	105010	10.379	ug/L	98

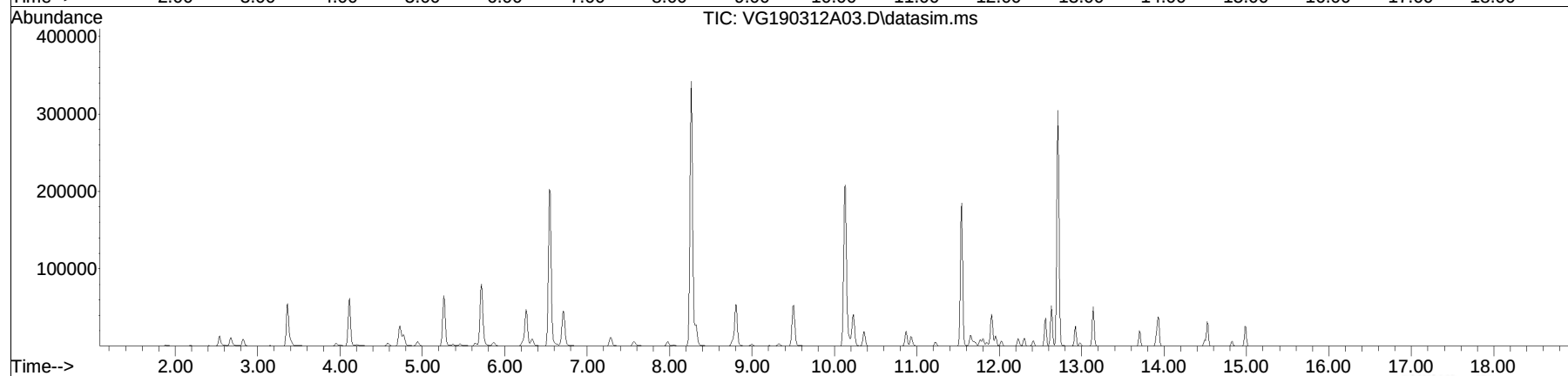
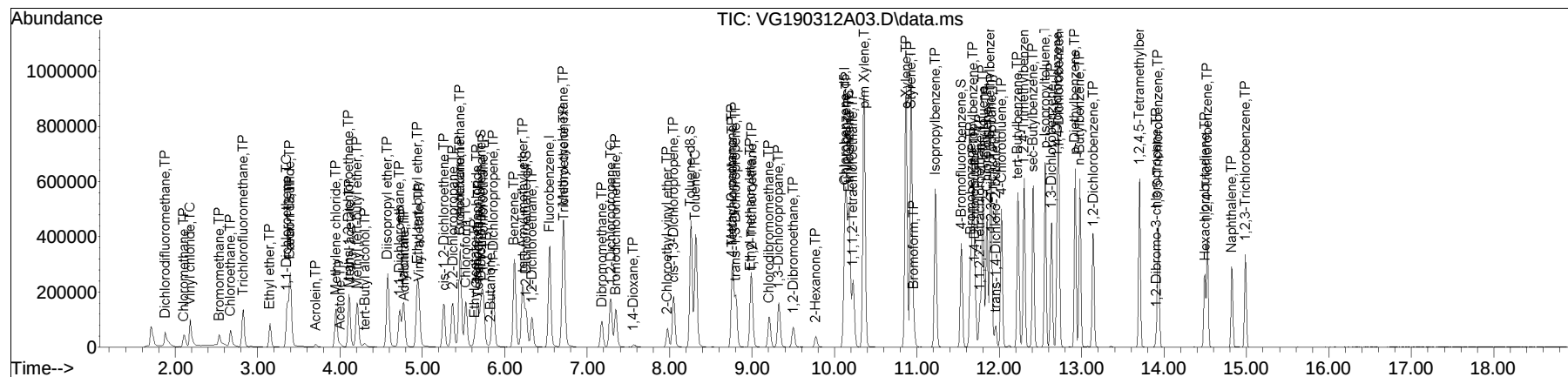
(#) = qualifier out of range (m) = manual integration (+) = signals summed

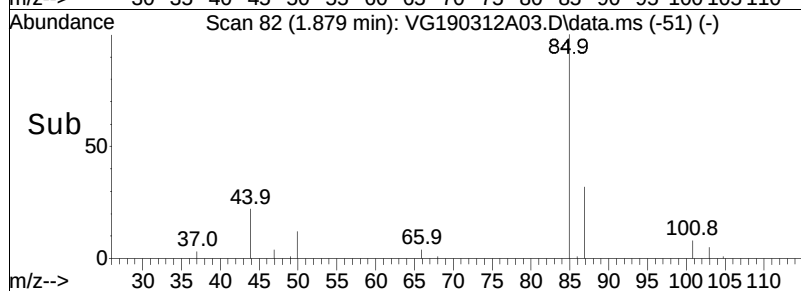
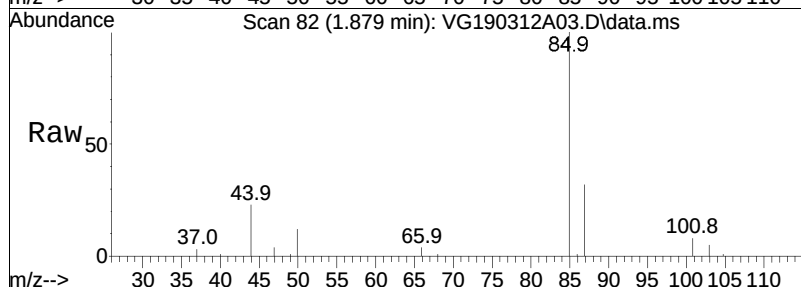
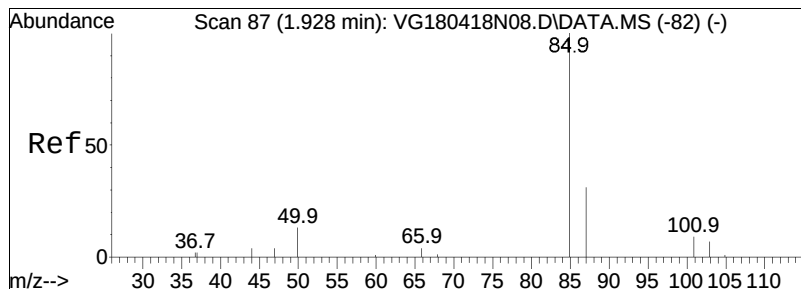
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Gonzo\2019\190312A\
 Data File : VG190312A03.D
 Acq On : 12 Mar 2019 8:57
 Operator : GONZO:PD
 Sample : WG1214926-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1214926,ICAL15541 (Sig #1); WG,ICAL15541 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 09:45:15 2019
 Quant Method : I:\VOLATILES\Gonzo\2019\190312A\G_190227N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Feb 28 12:19:42 2019
 Response via : Initial Calibration

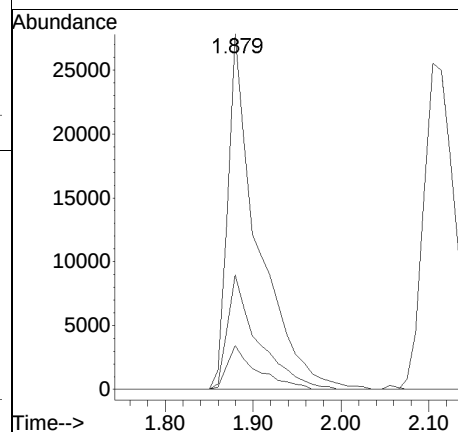
Sub List : 8260-Curve-Iodomethane - Megamix plus Diox-Iodomethane

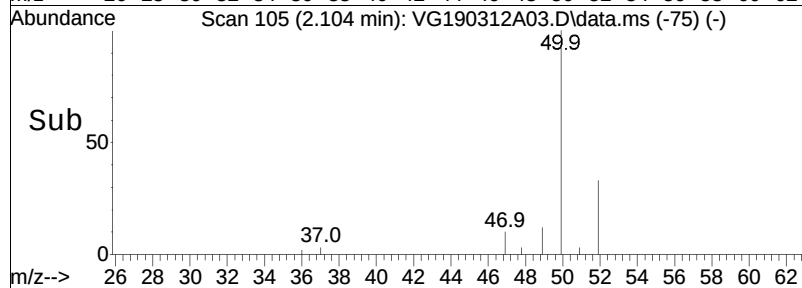
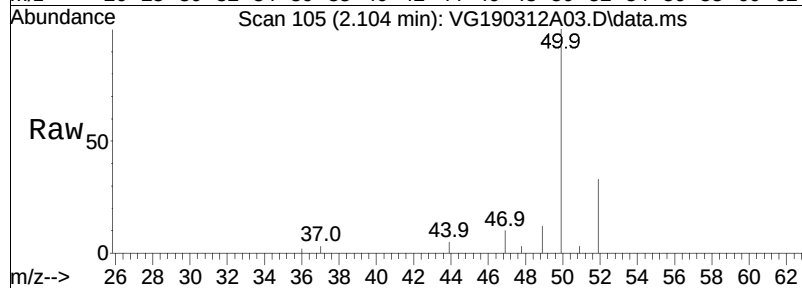
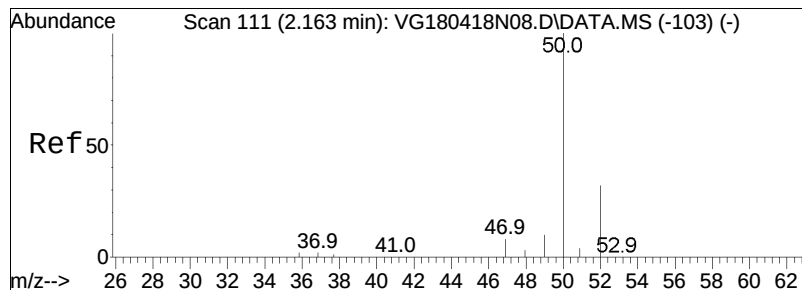




#2
 Dichlorodifluoromethane
 Concen: 8.90 ug/L
 RT: 1.879 min Scan# 82
 Delta R.T. -0.001 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

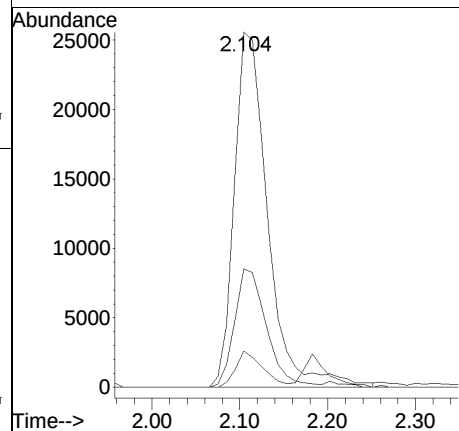
Tgt Ion	85	87	50	Ratio	100	32.7	20.7	7.5	Resp	66433	Lower	Upper
85	100											
87		32.7					20.7					42.9
50		12.4					7.5					15.5

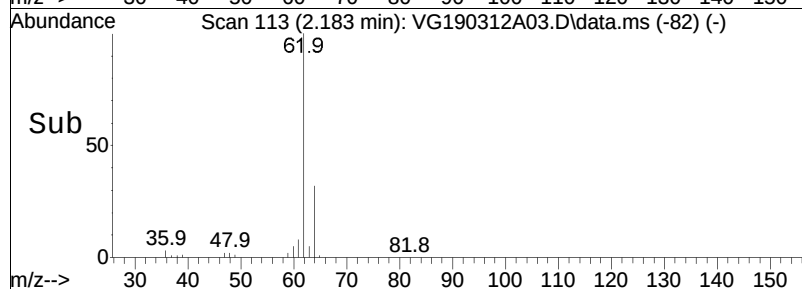
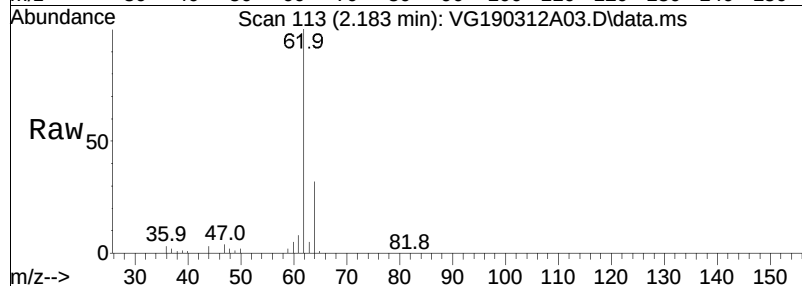
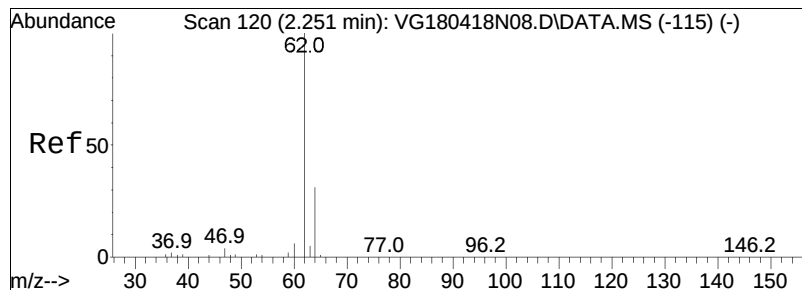




#3
 Chloromethane
 Concen: 9.21 ug/L
 RT: 2.104 min Scan# 105
 Delta R.T. -0.010 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

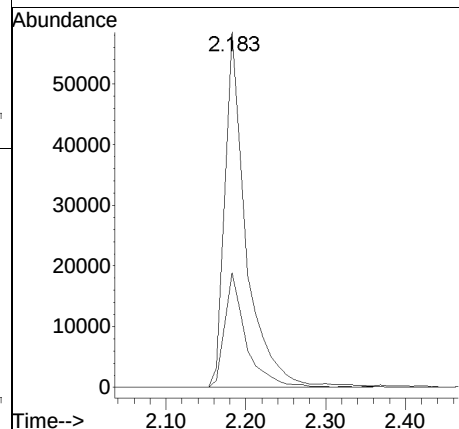
Tgt Ion	Ratio	Lower	Upper
50	100		
52	31.9	11.7	51.7
47	8.4	0.0	28.0

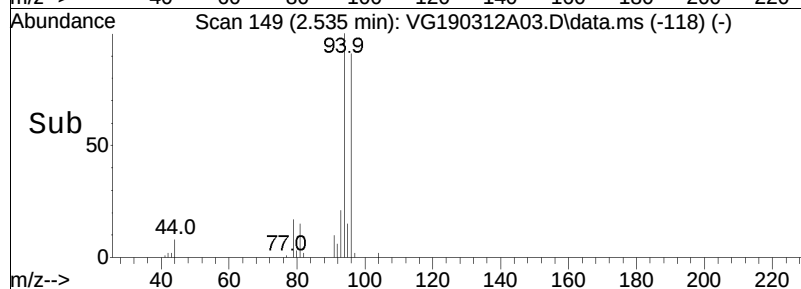
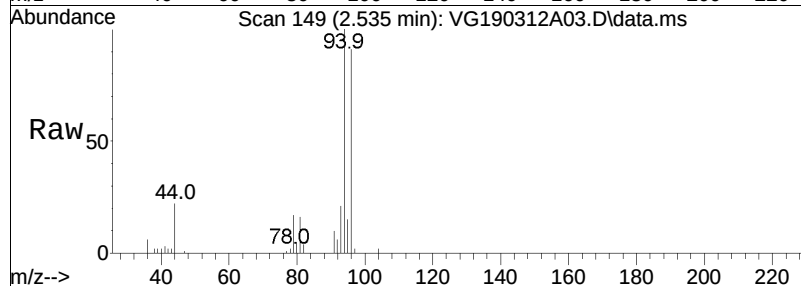
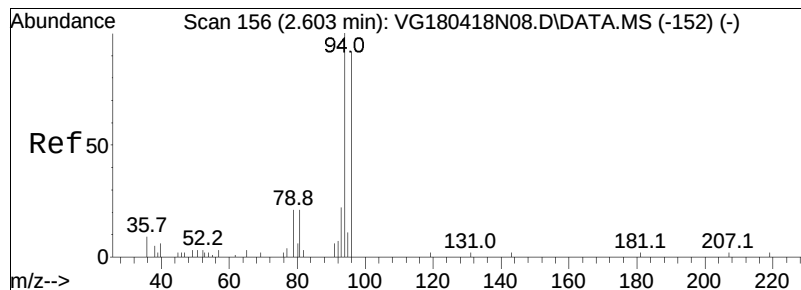




#4
 Vinyl chloride
 Concen: 9.84 ug/L
 RT: 2.183 min Scan# 113
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

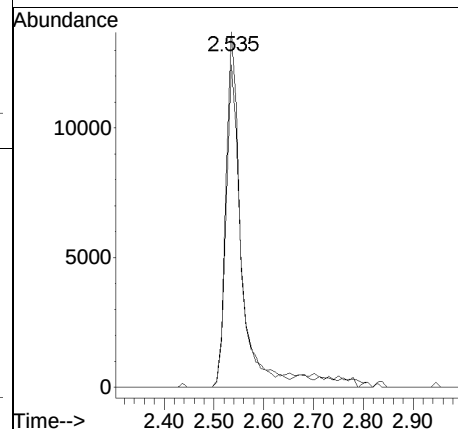
Tgt Ion	Ratio	Lower	Upper
62	100		
64	32.2	11.3	51.3

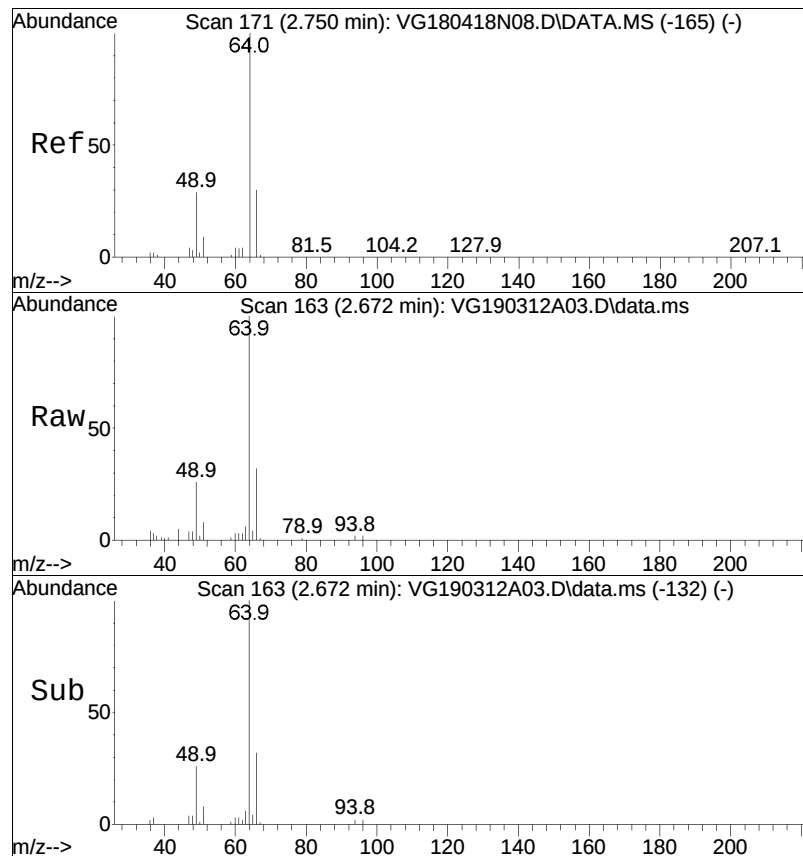




#5
 Bromomethane
 Concen: 4.78 ug/L M1
 RT: 2.535 min Scan# 149
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

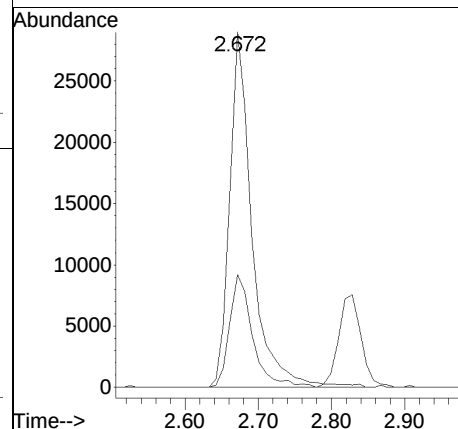
Tgt Ion	Ratio	Lower	Upper
94	100		
96	82.1	75.2	115.2

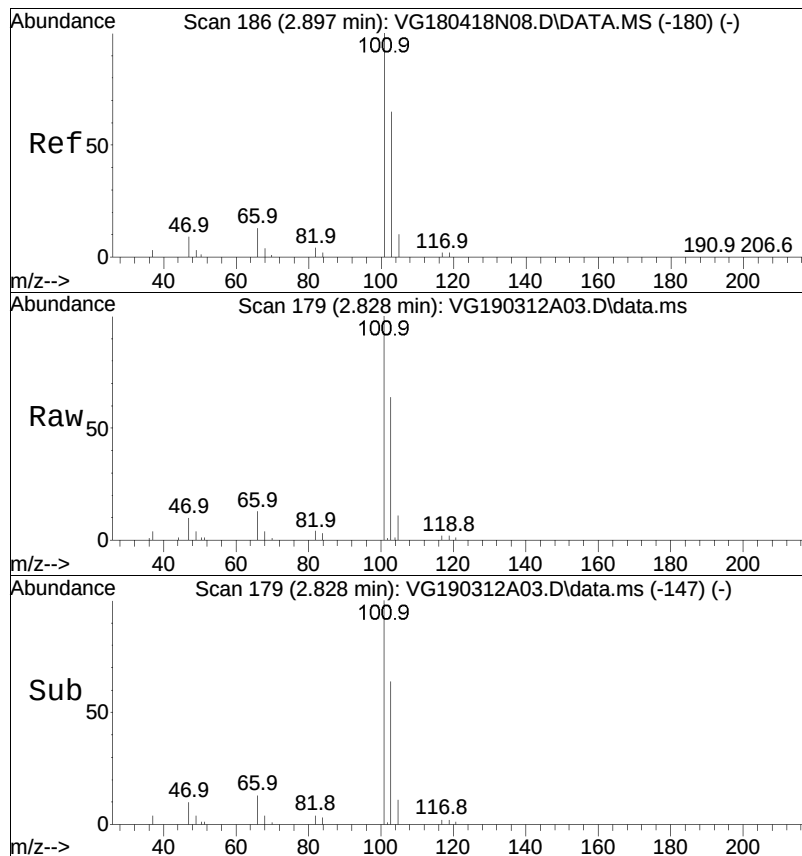




#6
 Chloroethane
 Concen: 9.49 ug/L
 RT: 2.672 min Scan# 163
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

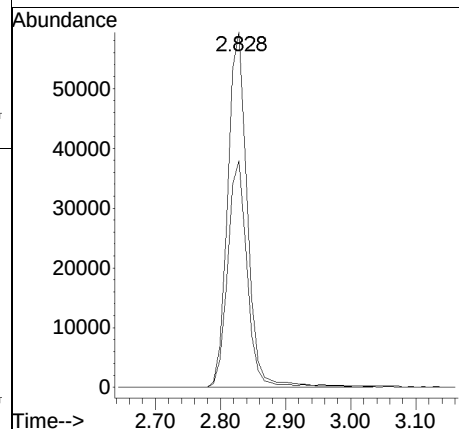
Tgt Ion	Ratio	Lower	Upper
64	100		
66	32.7	13.7	53.7

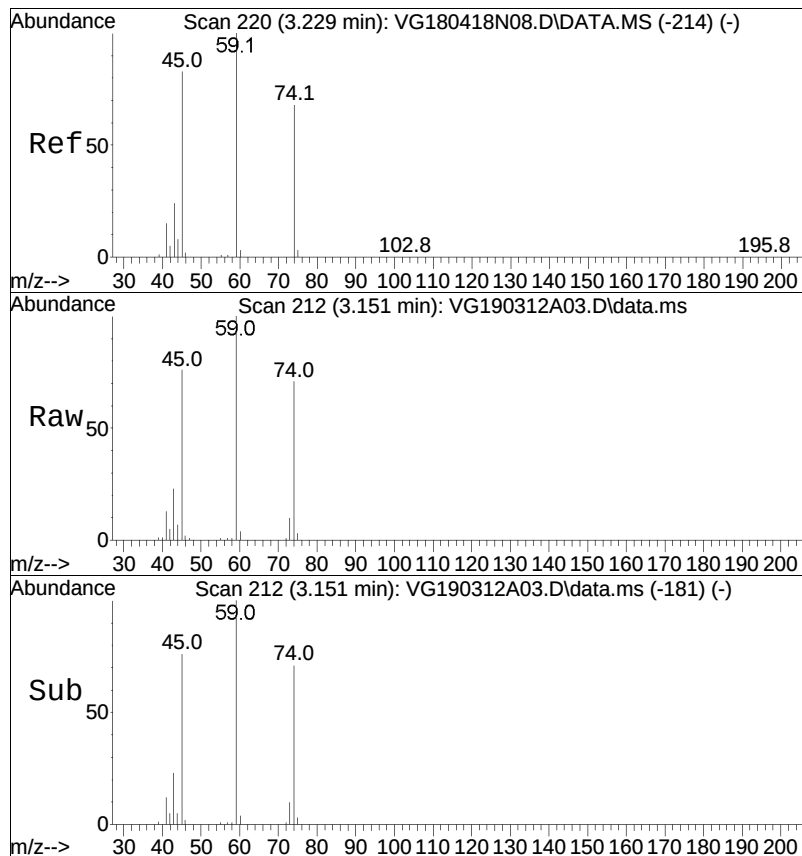




#7
 Trichlorofluoromethane
 Concen: 8.85 ug/L
 RT: 2.828 min Scan# 179
 Delta R.T. 0.009 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

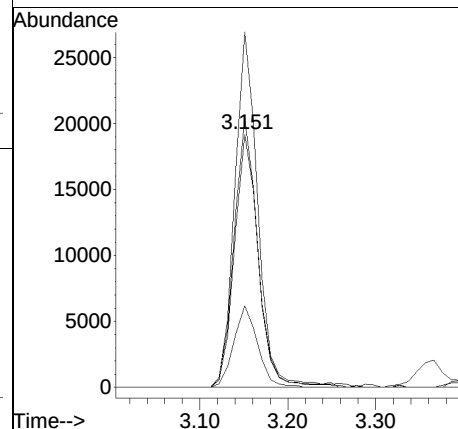
Tgt Ion	Ratio	Lower	Upper
101	100		
103	63.4	52.2	78.2

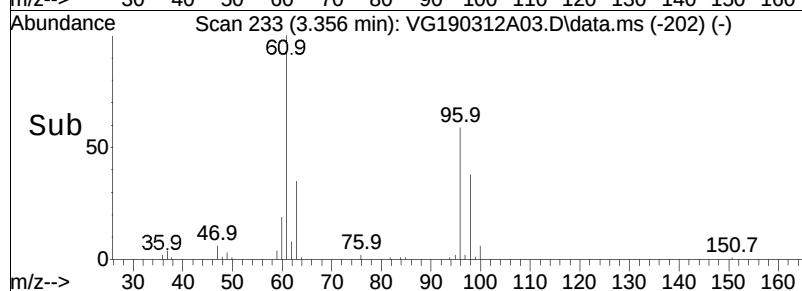
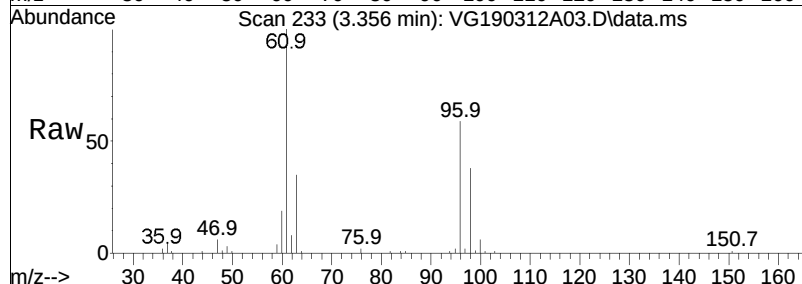
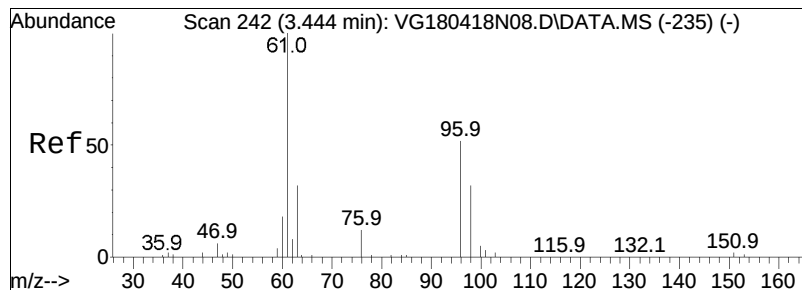




#8
 Ethyl ether
 Concen: 9.92 ug/L
 RT: 3.151 min Scan# 212
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

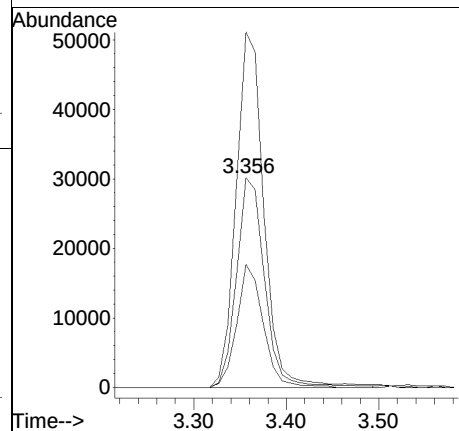
Tgt Ion:	74	Resp:	36300
Ion Ratio	Lower	Upper	
74	100		
59	136.4	83.5	173.3
45	106.4	59.7	123.9
43	32.3	17.6	36.6

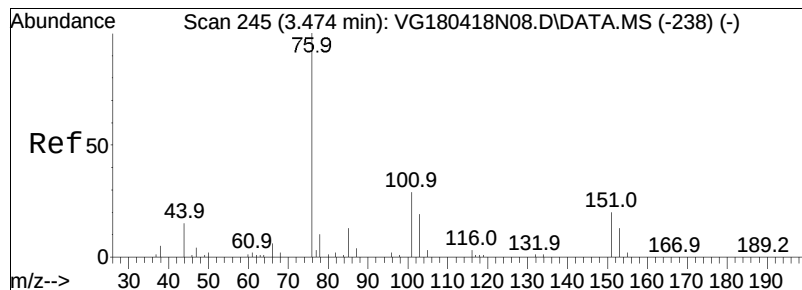




#10
 1,1-Dichloroethene
 Concen: 8.84 ug/L
 RT: 3.356 min Scan# 233
 Delta R.T. -0.001 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

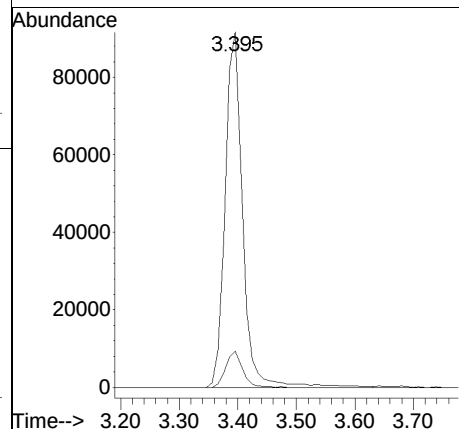
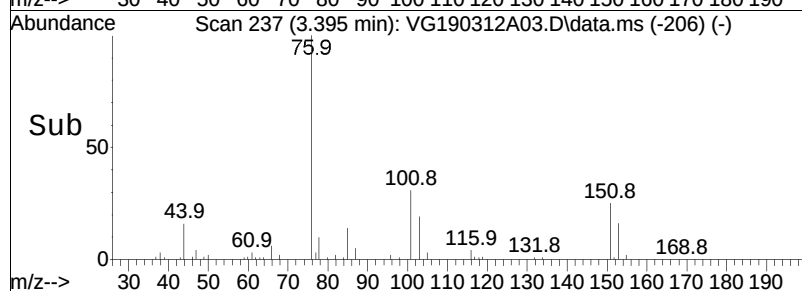
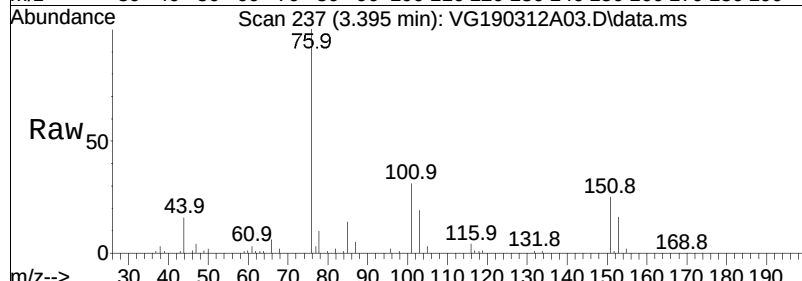
Tgt Ion:	96	Resp:	63839
Ion Ratio	Lower	Upper	
96	100		
61	168.5	124.2	186.4
63	55.1	40.0	60.0

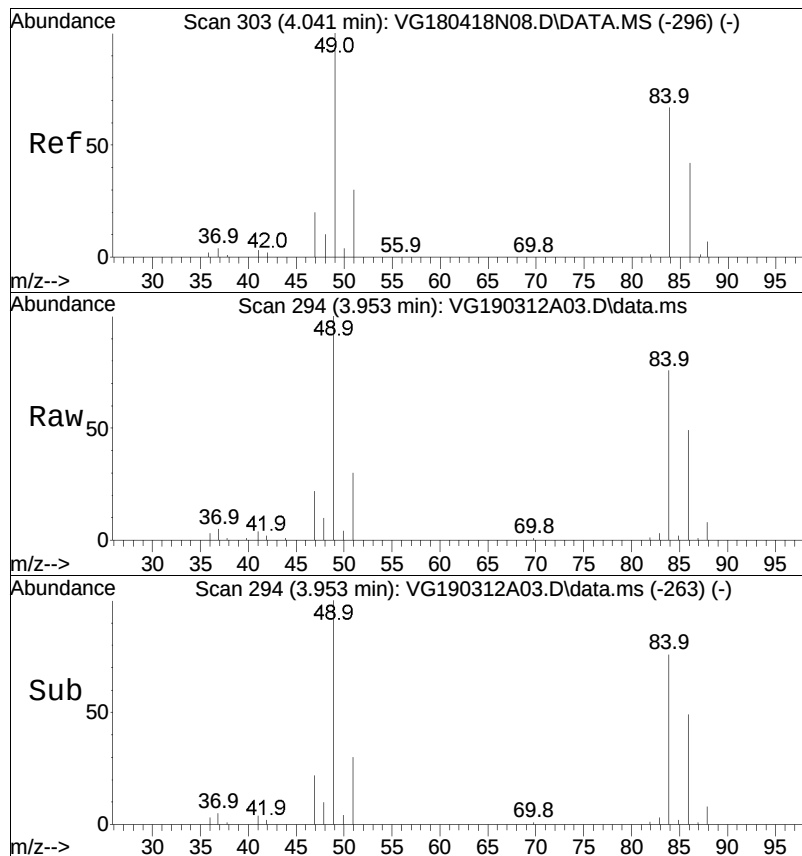




#11
Carbon disulfide
Concen: 8.79 ug/L
RT: 3.395 min Scan# 237
Delta R.T. -0.001 min
Lab File: VG190312A03.D
Acq: 12 Mar 2019 8:57

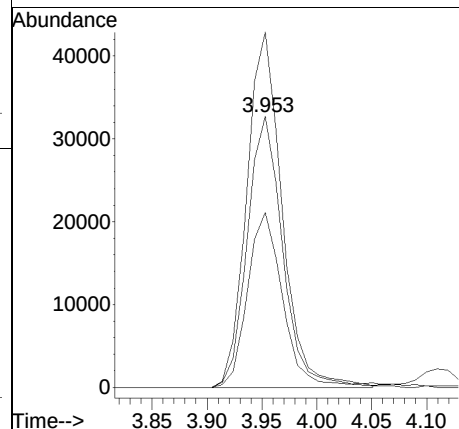
Tgt Ion	Ratio	Lower	Upper
76	100		
78	9.8	6.6	13.6

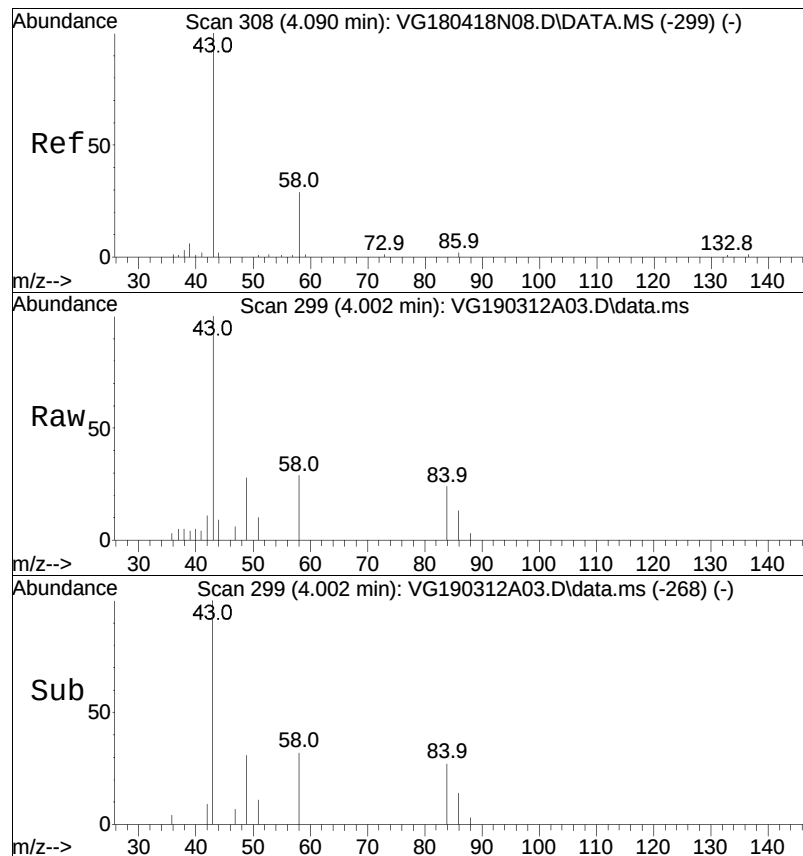




#15
Methylene chloride
Concen: 9.55 ug/L
RT: 3.953 min Scan# 294
Delta R.T. -0.000 min
Lab File: VG190312A03.D
Acq: 12 Mar 2019 8:57

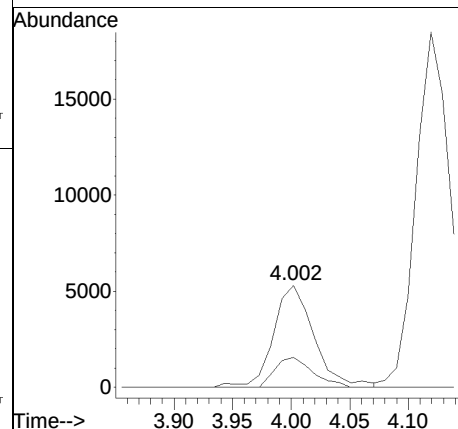
Tgt Ion:	84	Resp:	73321
Ion Ratio	Lower	Upper	
84	100		
86	64.4	41.1	85.5
49	131.5	76.2	158.2

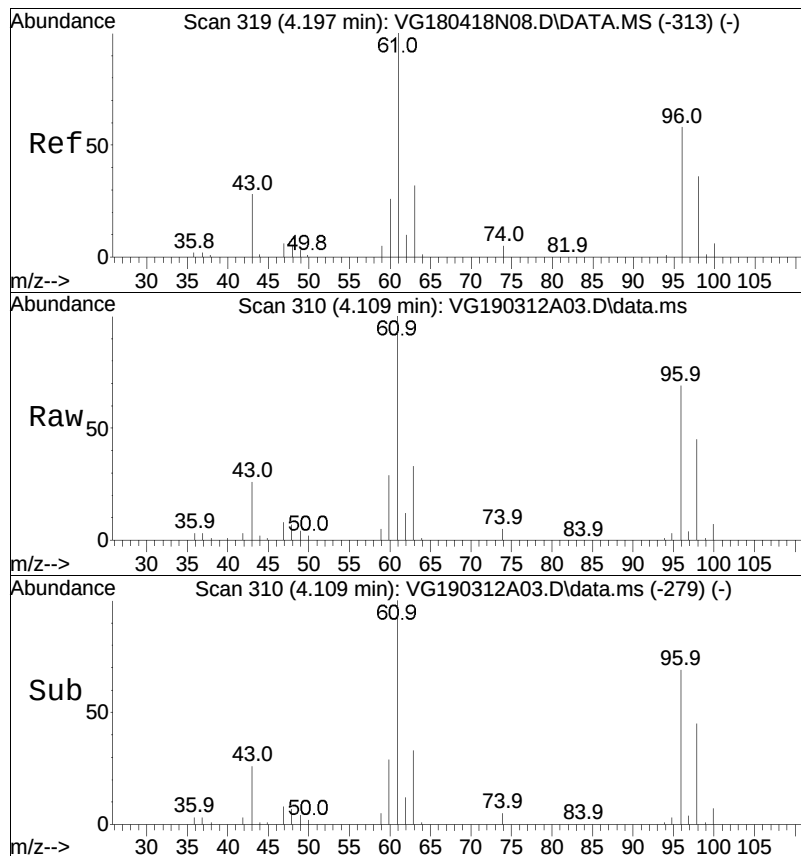




#17
 Acetone
 Concen: 12.54 ug/L
 RT: 4.002 min Scan# 299
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

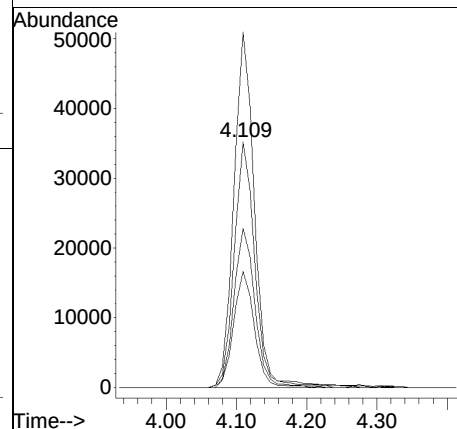
Tgt Ion	Ratio	Lower	Upper
43	100		
58	27.5	22.2	33.4

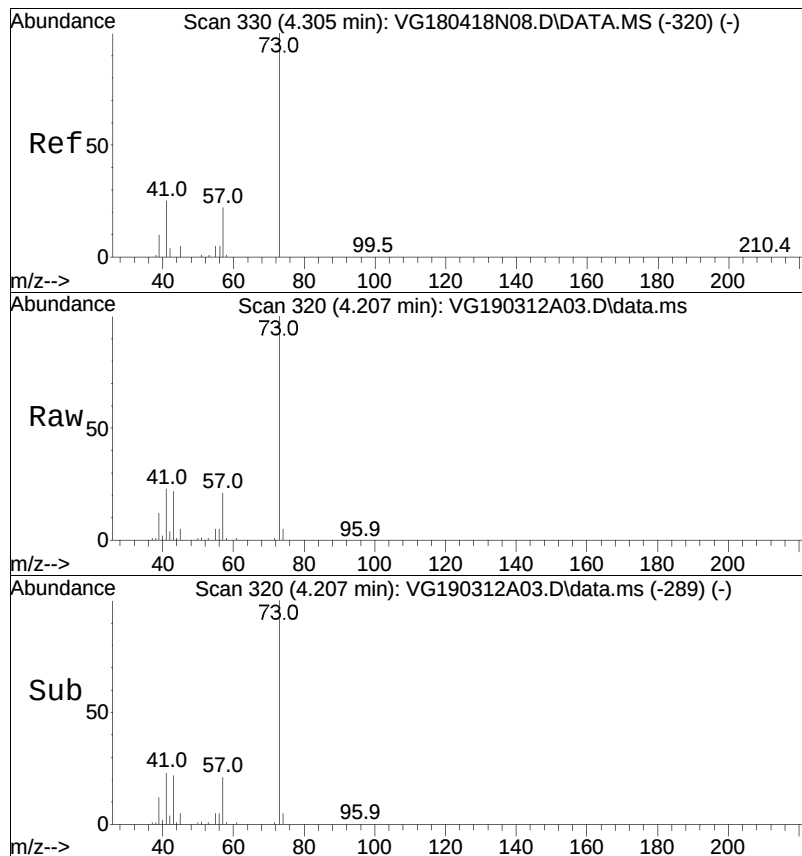




#18
 trans-1,2-Dichloroethene
 Concen: 9.25 ug/L
 RT: 4.109 min Scan# 310
 Delta R.T. -0.001 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

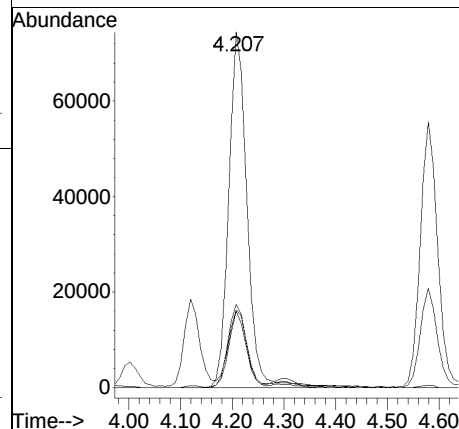
Tgt Ion:	96	Resp:	72592
Ion Ratio	Lower	Upper	
96	100		
61	143.2	85.7	178.1
98	65.2	40.2	83.4
63	47.0	28.0	58.2

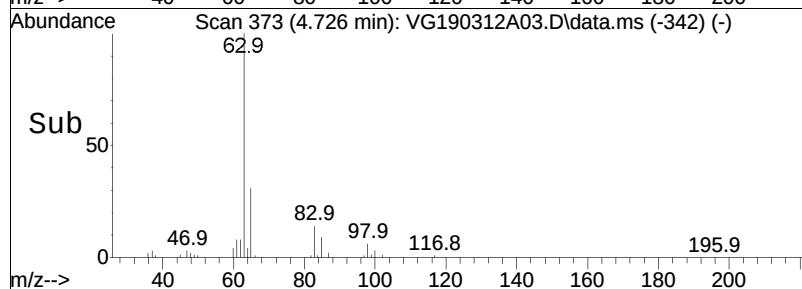
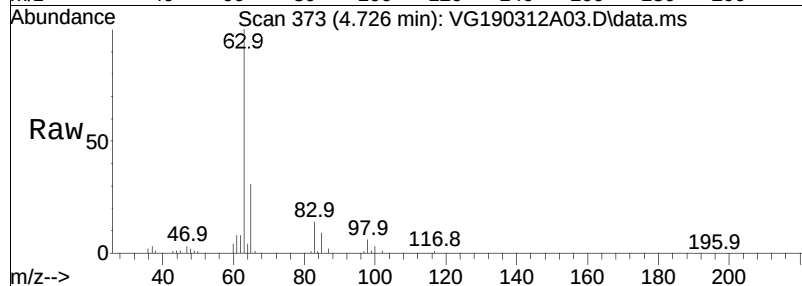
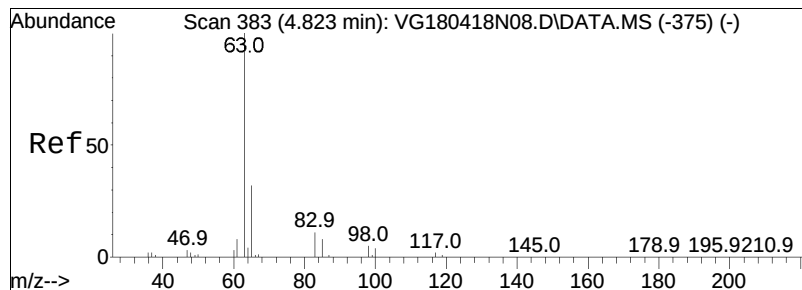




#20
Methyl tert-butyl ether
Concen: 10.07 ug/L
RT: 4.207 min Scan# 320
Delta R.T. 0.000 min
Lab File: VG190312A03.D
Acq: 12 Mar 2019 8:57

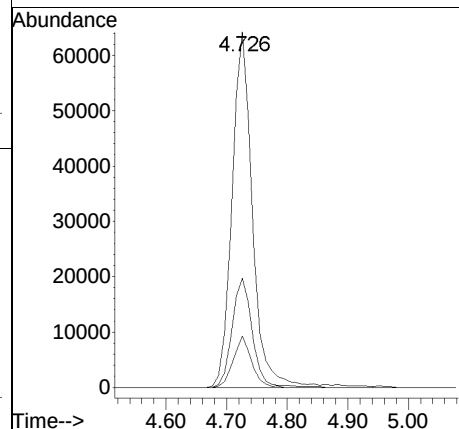
Tgt Ion:	73	Resp:	184967
Ion Ratio	Lower	Upper	
73	100		
57	20.0	12.5	26.1
43	22.2	13.0	27.0
41	23.5	12.5	26.1

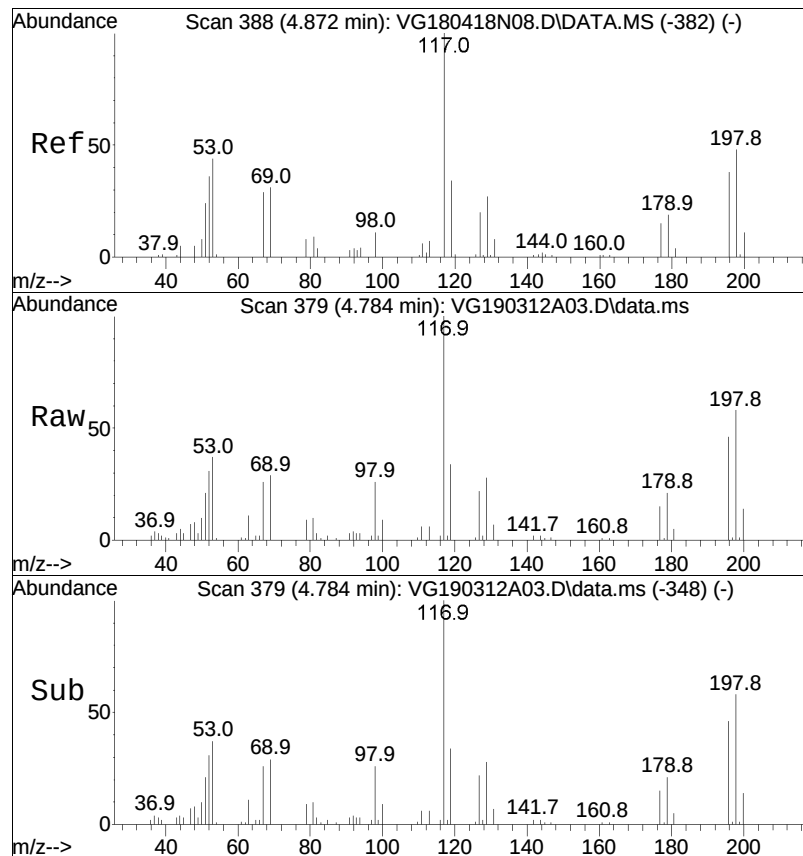




#23
 1,1-Dichloroethane
 Concen: 10.60 ug/L
 RT: 4.726 min Scan# 373
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

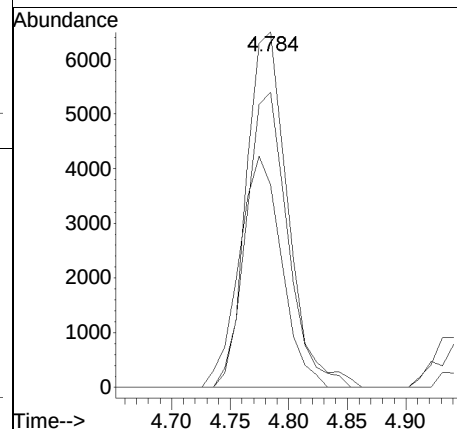
Tgt Ion	Ratio	Lower	Upper
63	100		
65	30.2	10.4	50.4
83	12.8	0.0	33.2

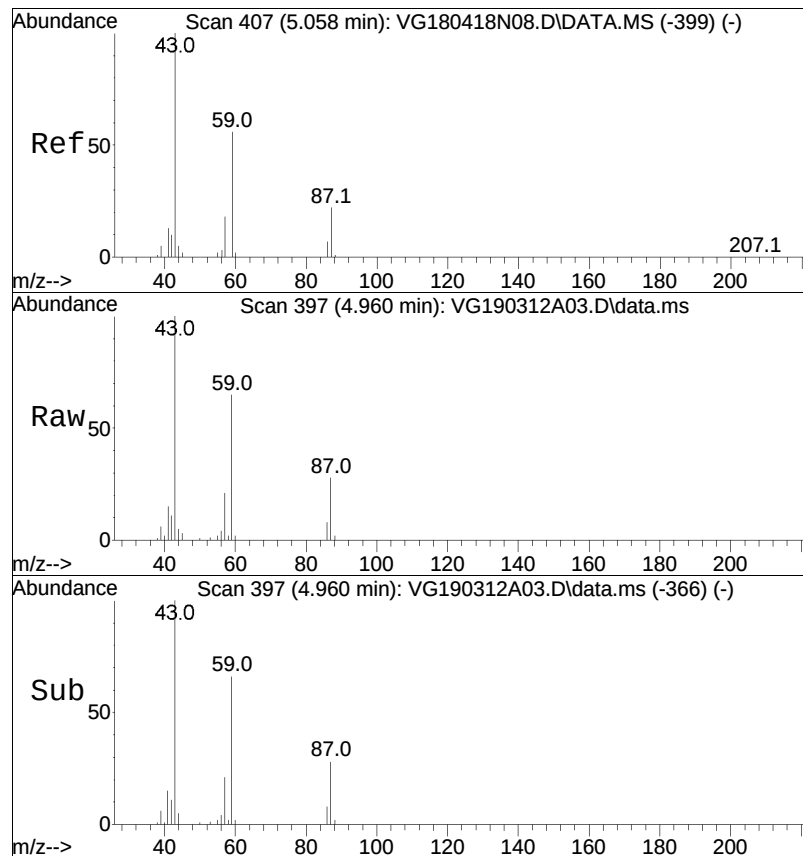




#25
 Acrylonitrile
 Concen: 11.14 ug/L
 RT: 4.784 min Scan# 379
 Delta R.T. -0.001 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

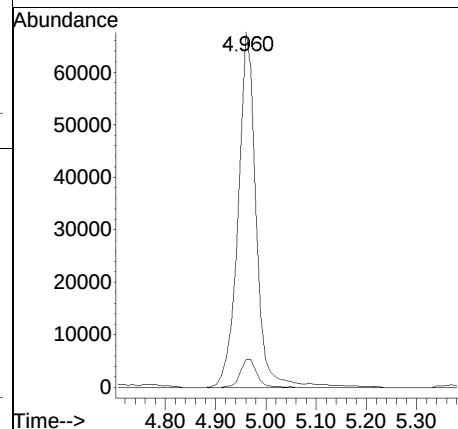
Tgt	Ion	Resp	Lower	Upper
53	100	16015		
52	82.7		68.3	102.5
51	67.0		51.9	77.9

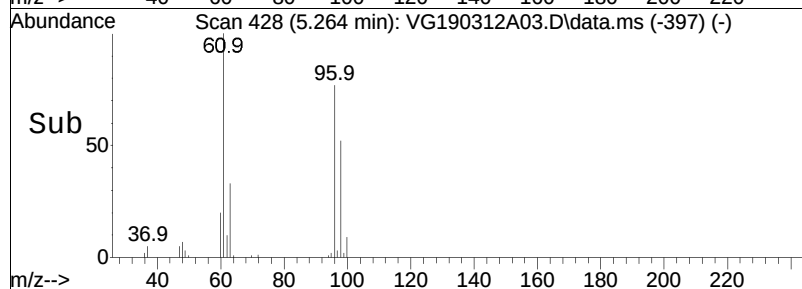
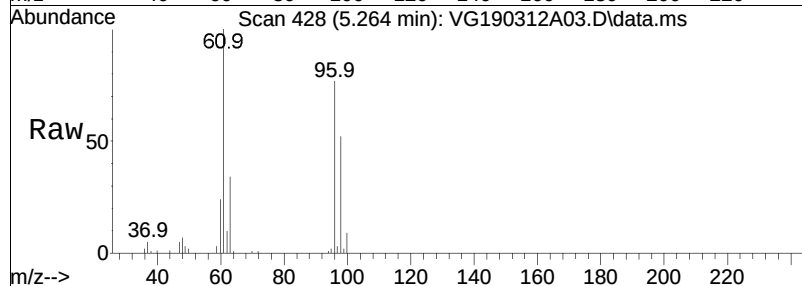
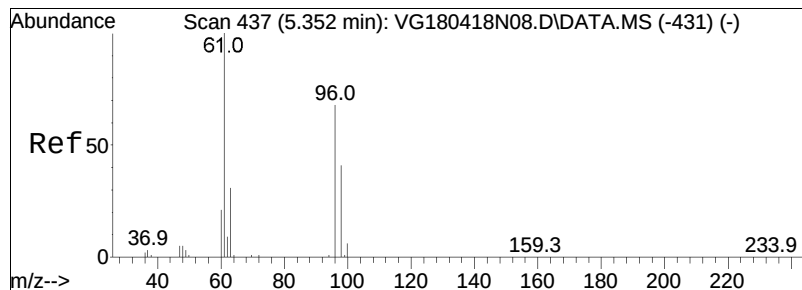




#27
 Vinyl acetate
 Concen: 11.49 ug/L
 RT: 4.960 min Scan# 397
 Delta R.T. -0.001 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

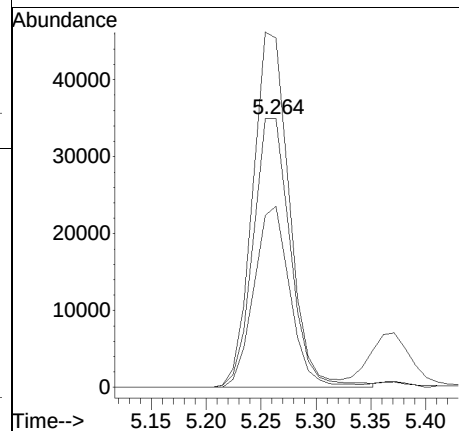
Tgt Ion	Ratio	Lower	Upper
43	100		
86	7.2	6.3	9.5

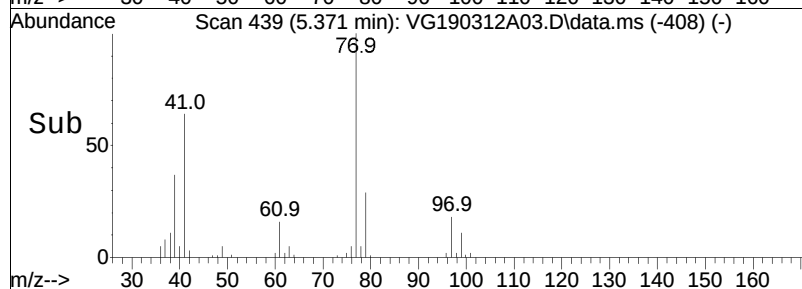
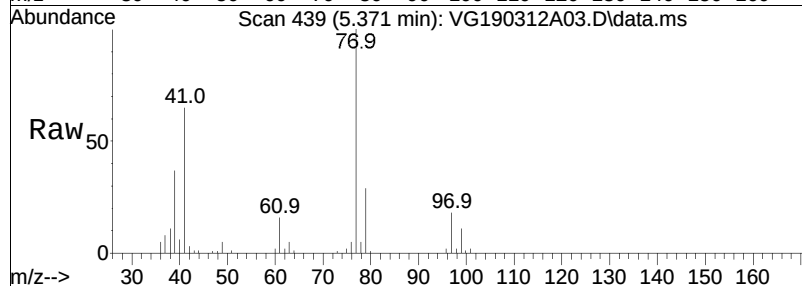
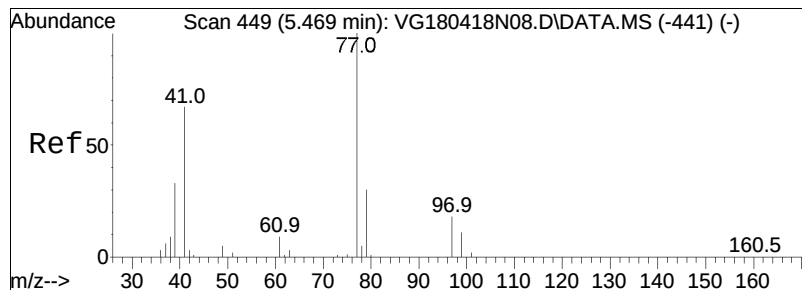




#28
 cis-1,2-Dichloroethene
 Concen: 9.56 ug/L
 RT: 5.264 min Scan# 428
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

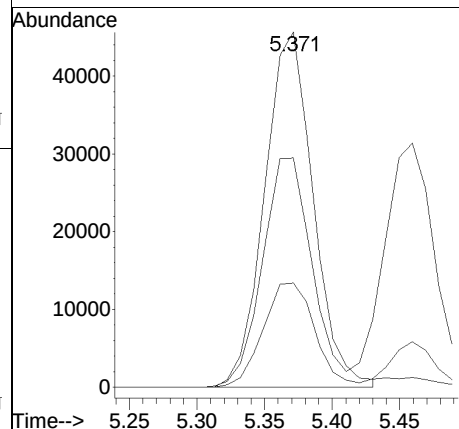
Tgt	Ion: 96	Resp:	82543
Ion	Ratio	Lower	Upper
96	100		
61	129.2	96.6	144.8
98	65.5	51.3	76.9

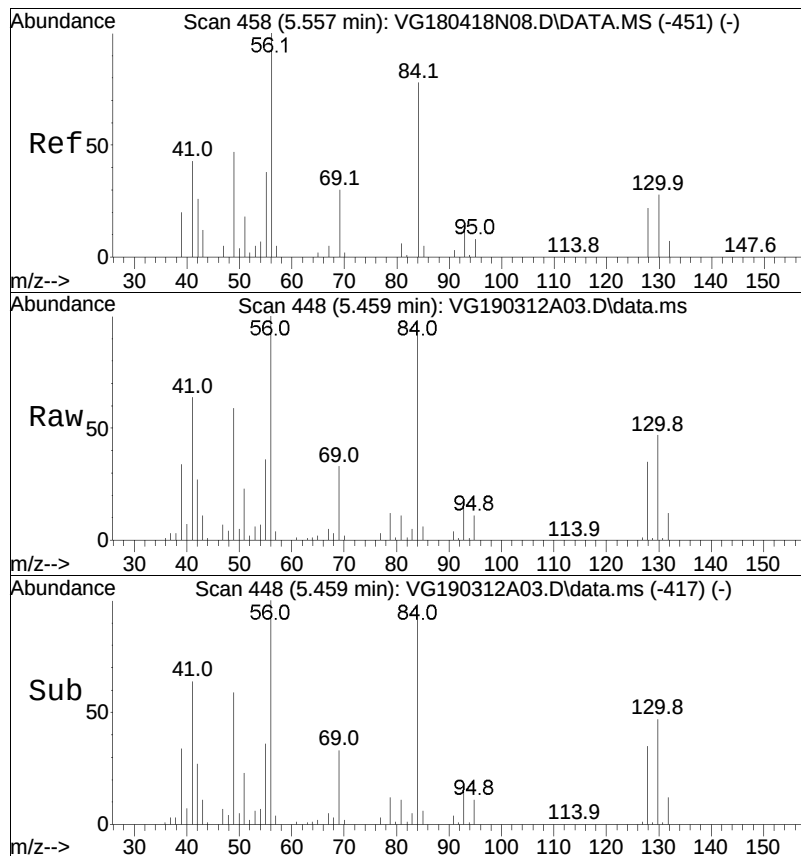




#29
 2,2-Dichloropropane
 Concen: 9.49 ug/L
 RT: 5.371 min Scan# 439
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

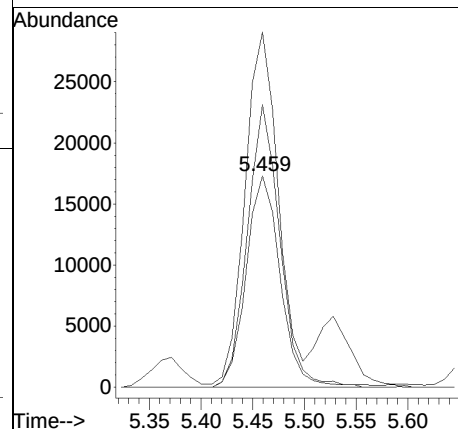
Tgt Ion:	77	Resp:	114298
Ion Ratio	100	Lower	Upper
41	65.9	38.1	79.1
79	31.4	20.6	42.8

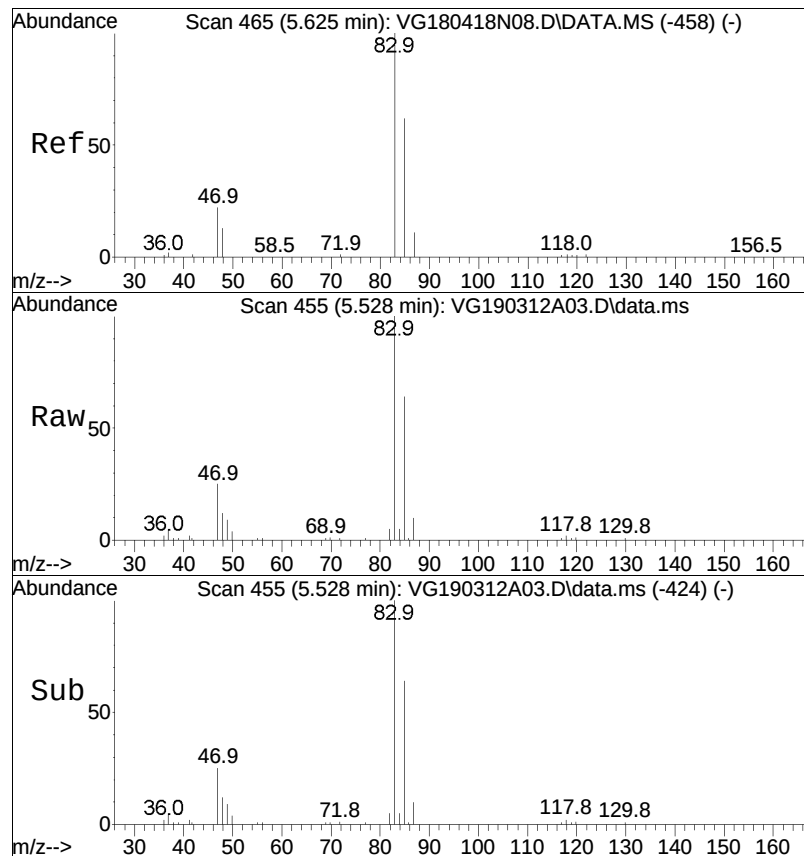




#30
 Bromochloromethane
 Concen: 9.45 ug/L
 RT: 5.459 min Scan# 448
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

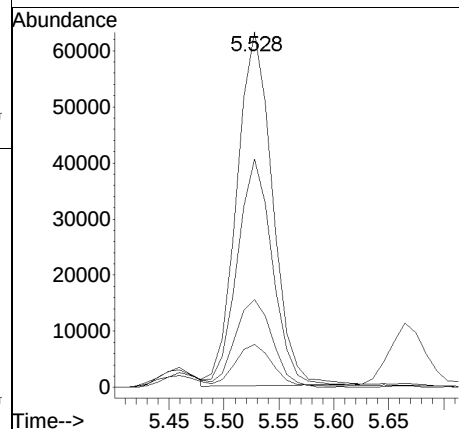
Tgt	Ion	Ratio	Resp	Lower	Upper
128	100		39842		
49	162.1	112.7		169.1	
130	128.7	103.3		154.9	

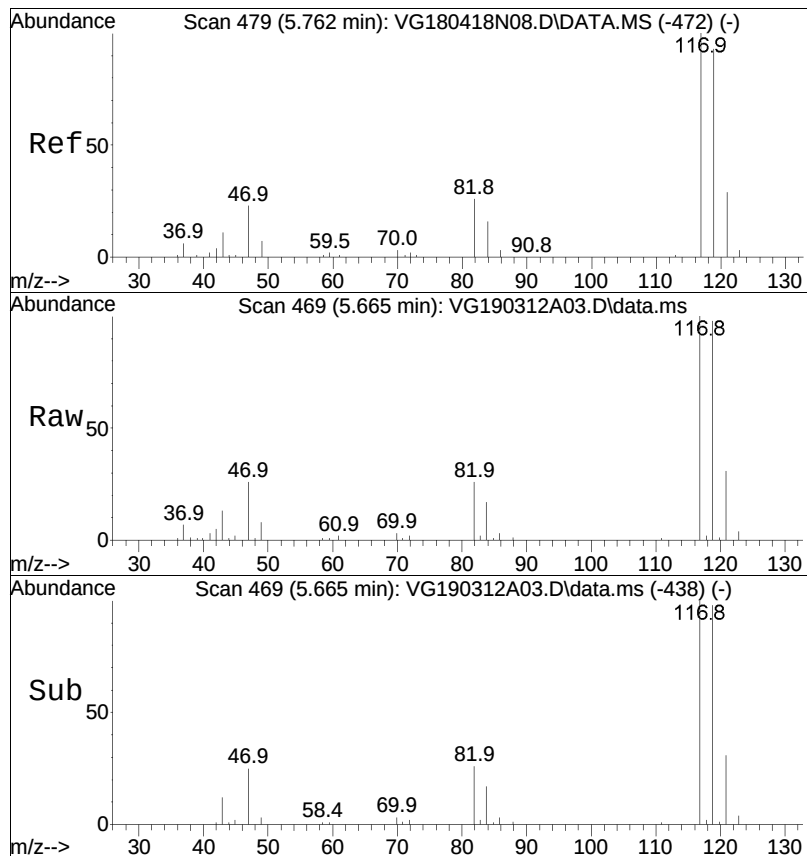




#32
 Chloroform
 Concen: 9.85 ug/L
 RT: 5.528 min Scan# 455
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

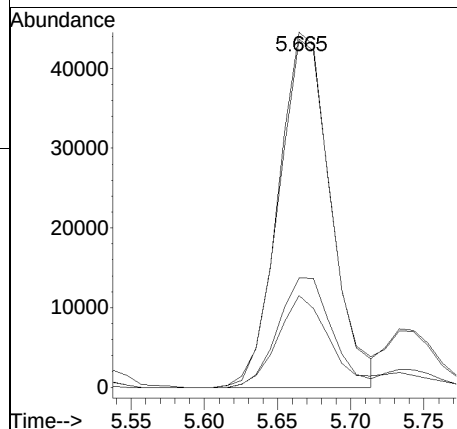
Tgt Ion:	83	Resp:	143100
Ion Ratio	Lower	Upper	
83	100		
85	64.1	41.4	86.0
47	25.7	15.1	31.3
48	12.8	7.7	16.1

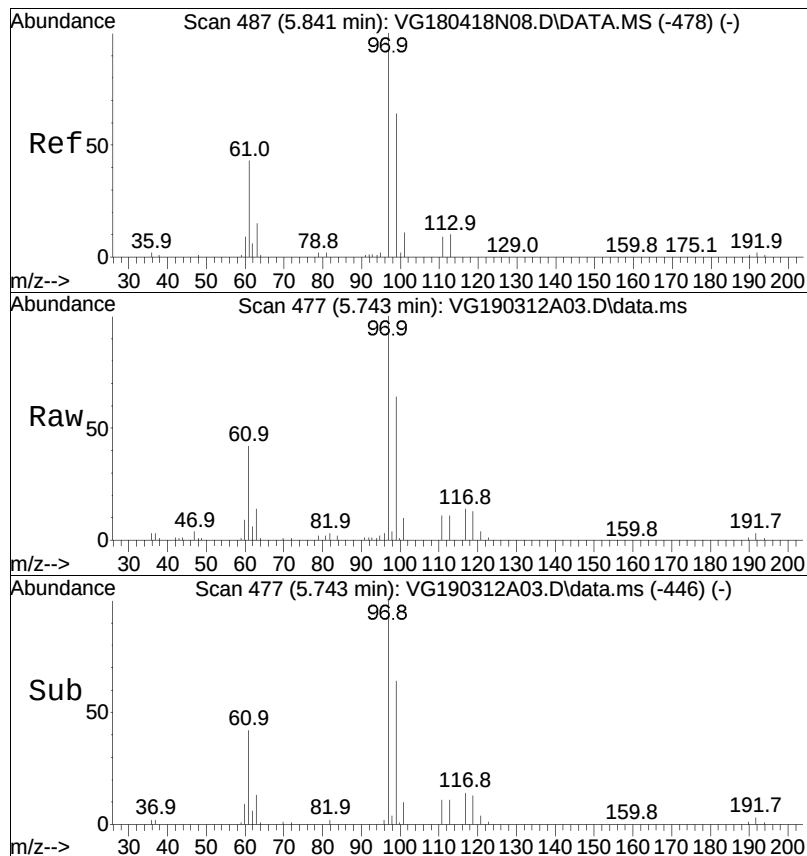




#34
 Carbon tetrachloride
 Concen: 8.79 ug/L
 RT: 5.665 min Scan# 469
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

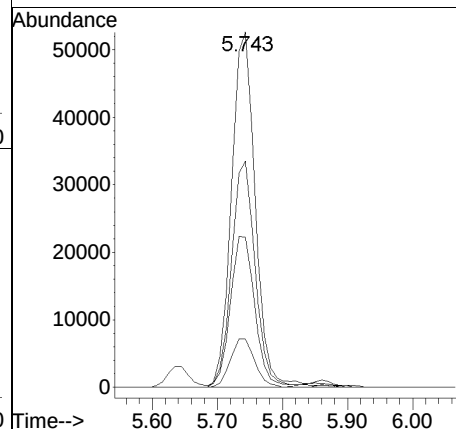
Tgt Ion:	117	Resp:	110639
Ion Ratio	Lower	Upper	
117	100		
119	98.3	63.2	131.2
121	31.7	20.4	42.4
82	25.6	15.4	32.0

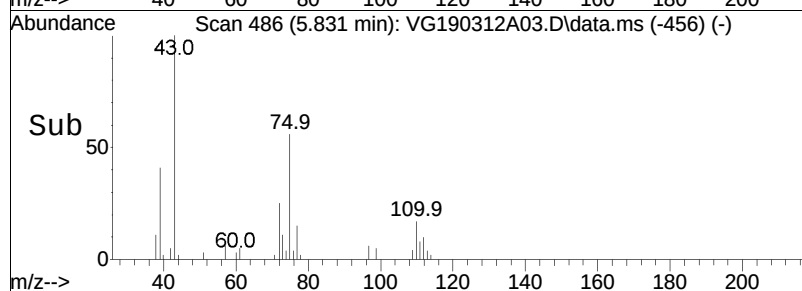
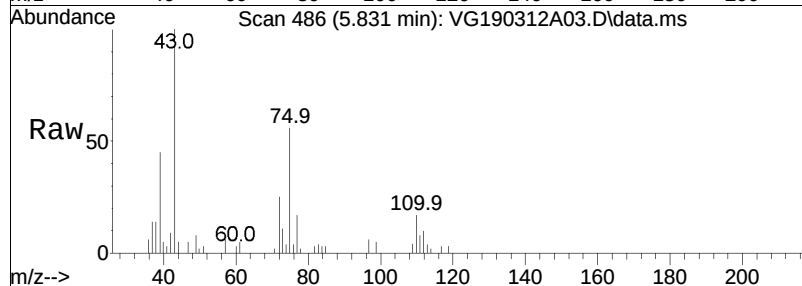
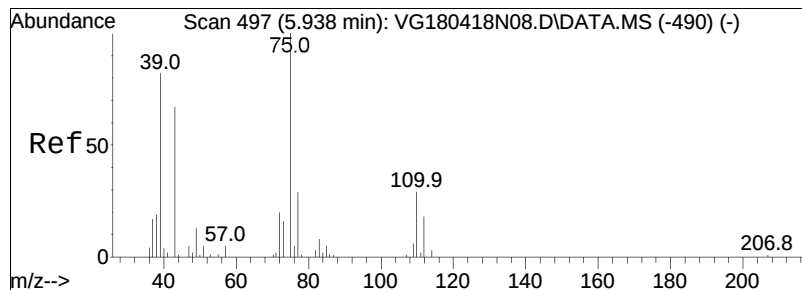




#37
 1,1,1-Trichloroethane
 Concen: 9.41 ug/L
 RT: 5.743 min Scan# 477
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

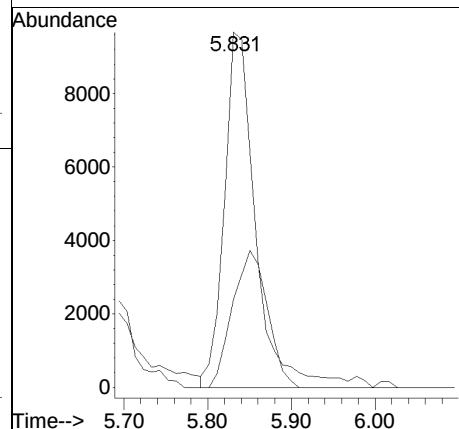
Tgt Ion:	97	Resp:	135668
Ion Ratio	Lower	Upper	
97	100		
99	63.4	41.3	85.7
61	43.4	26.0	54.0
63	14.0	8.6	18.0

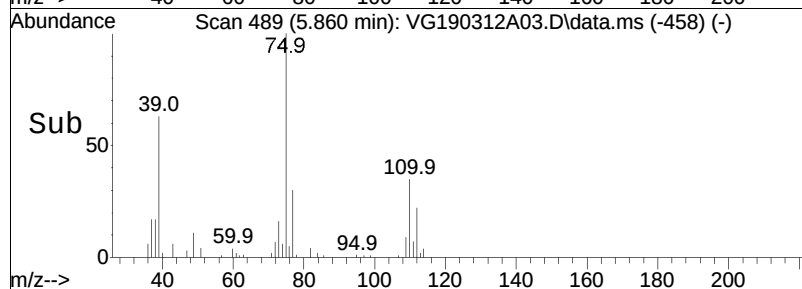
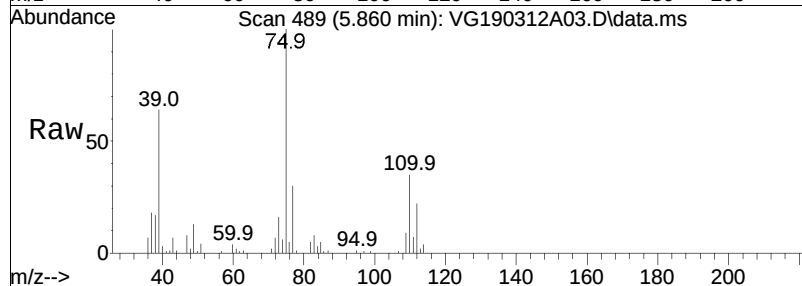
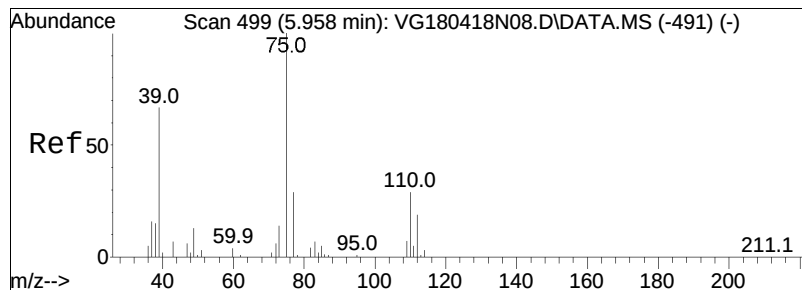




#39
 2-Butanone
 Concen: 12.52 ug/L
 RT: 5.831 min Scan# 486
 Delta R.T. -0.010 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

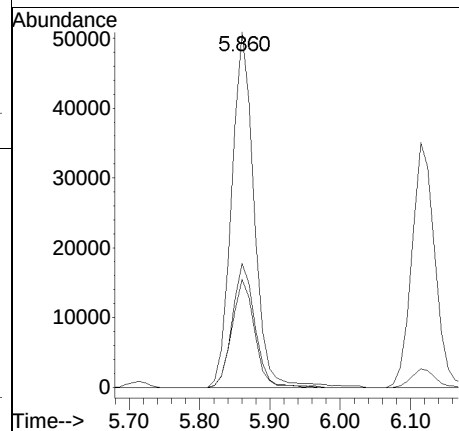
Tgt Ion: 43 Resp: 25321
 Ion Ratio Lower Upper
 43 100
 72 42.8 42.6 63.8

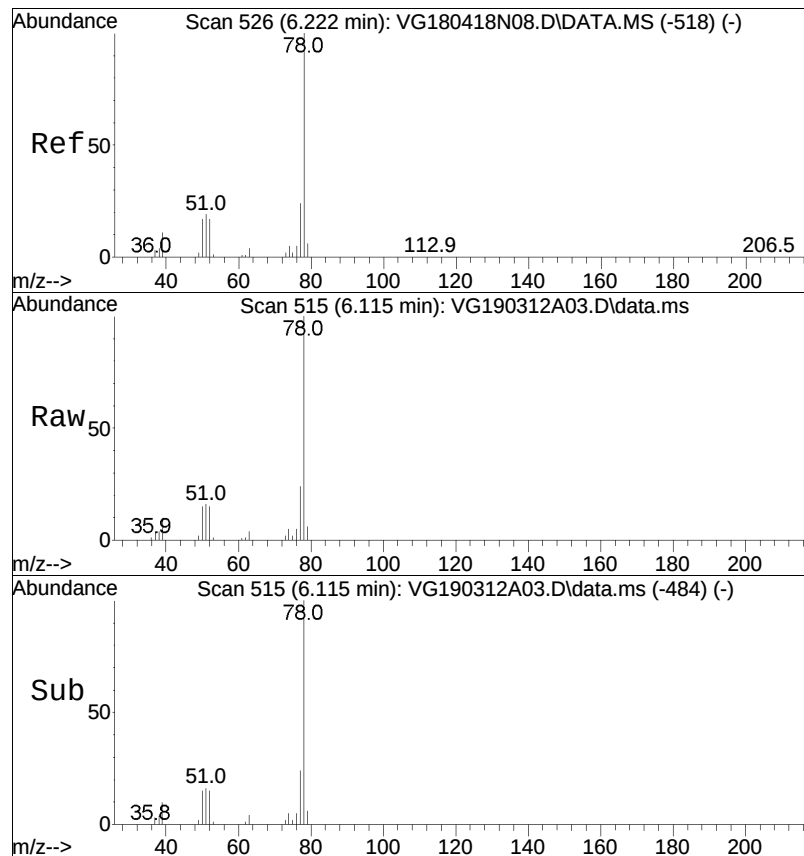




#40
 1,1-Dichloropropene
 Concen: 9.83 ug/L
 RT: 5.860 min Scan# 489
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

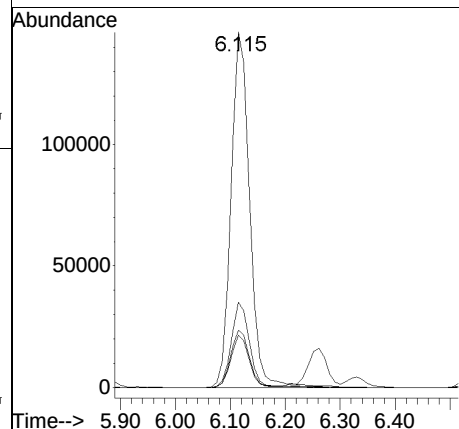
Tgt Ion	Ratio	Lower	Upper
75	100		
110	34.8	24.1	50.1
77	30.3	19.8	41.0

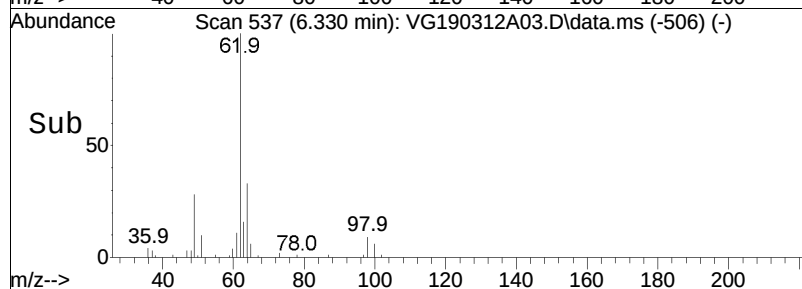
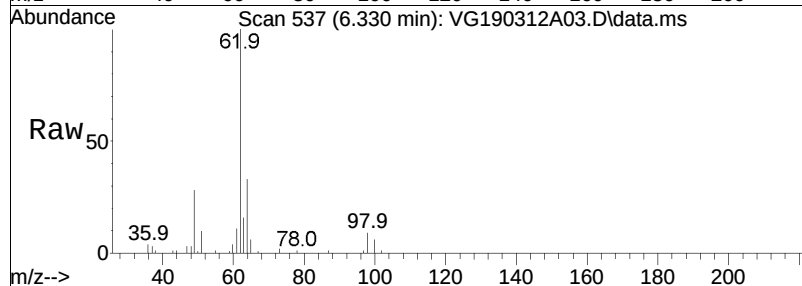
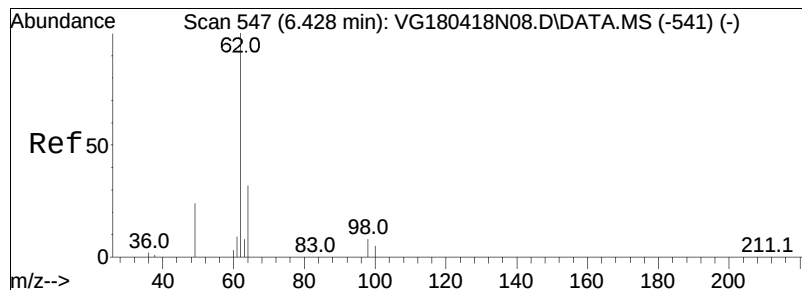




#41
Benzene
Concen: 9.91 ug/L
RT: 6.115 min Scan# 515
Delta R.T. -0.000 min
Lab File: VG190312A03.D
Acq: 12 Mar 2019 8:57

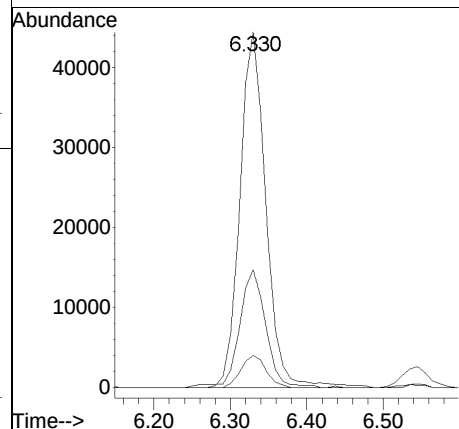
Tgt Ion: 78	Resp: 345635
Ion Ratio	Lower Upper
78 100	
77 23.4	15.5 32.1
51 16.0	9.9 20.7
52 14.3	9.2 19.2

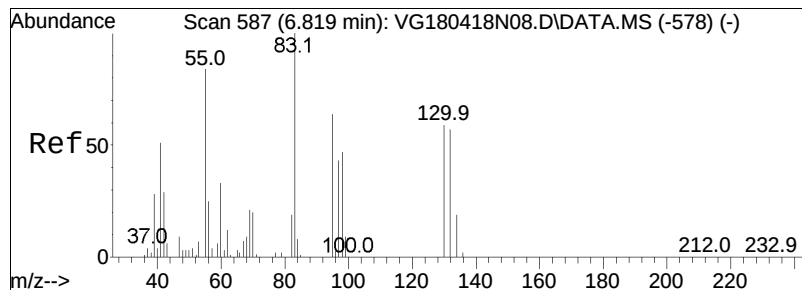




#44
 1,2-Dichloroethane
 Concen: 10.48 ug/L
 RT: 6.330 min Scan# 537
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

Tgt Ion:	62	Resp:	104693
Ion Ratio	Lower	Upper	
62	100		
64	33.3	11.9	51.9
98	8.7	0.0	29.3





#48

Trichloroethene

Concen: 9.09 ug/L

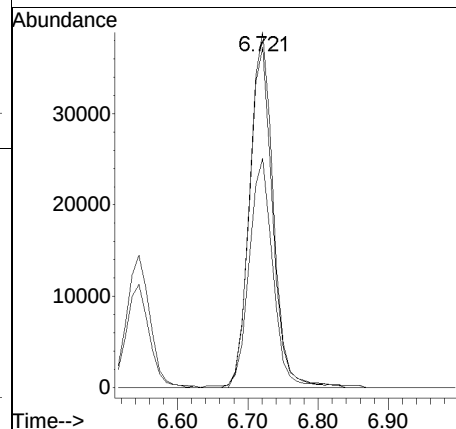
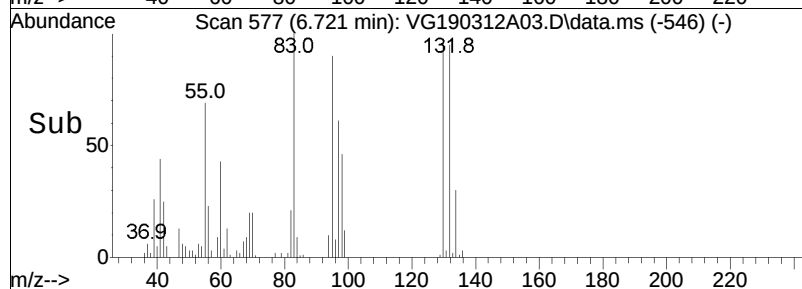
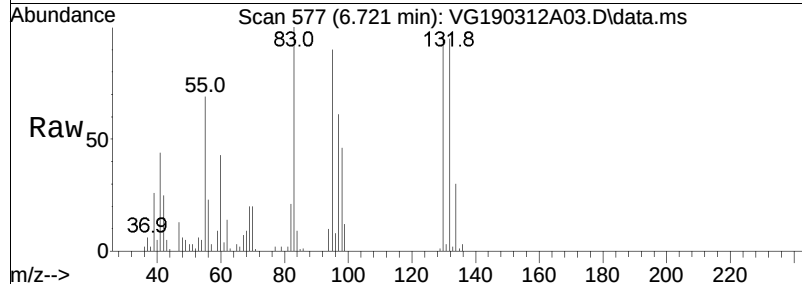
RT: 6.721 min Scan# 577

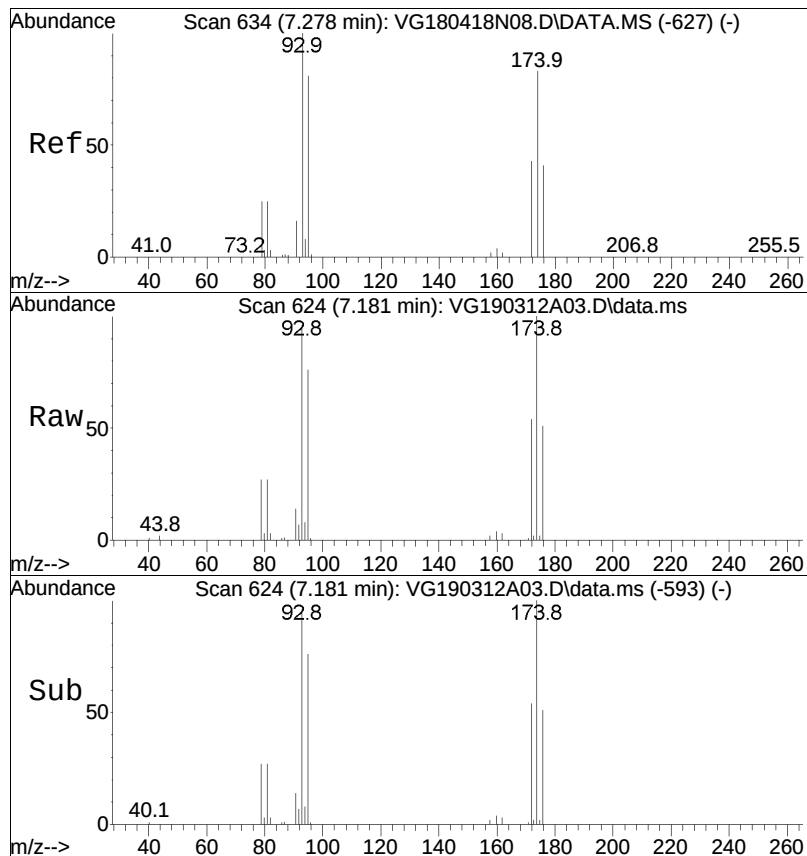
Delta R.T. -0.000 min

Lab File: VG190312A03.D

Acq: 12 Mar 2019 8:57

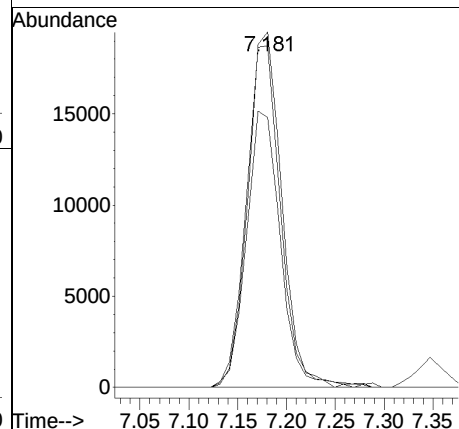
Tgt	Ion: 95	Resp:	86117
Ion	Ratio	Lower	Upper
95	100		
97	68.1	54.0	81.0
130	105.3	85.0	127.4

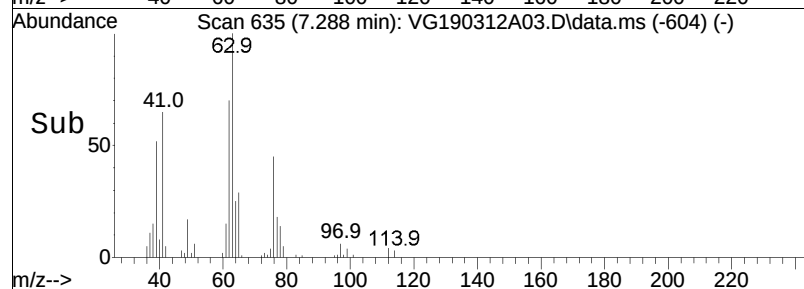
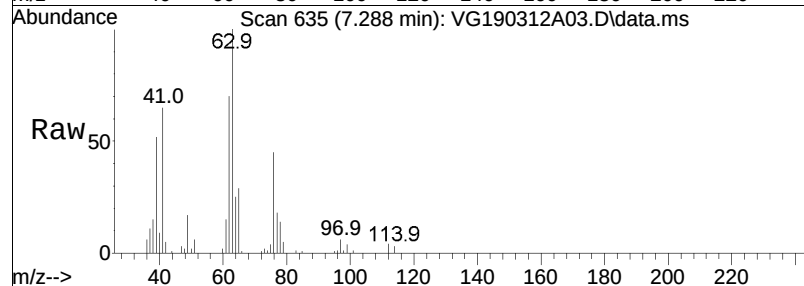
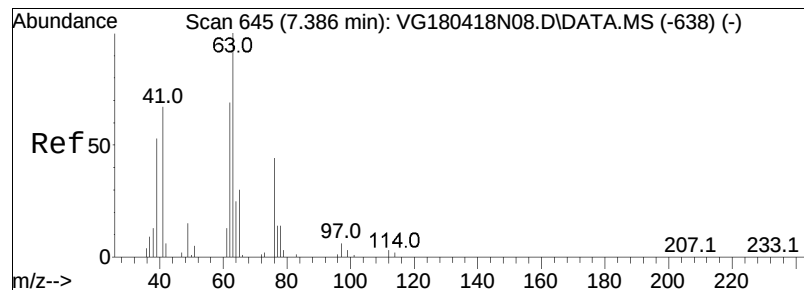




#50
 Dibromomethane
 Concen: 10.06 ug/L
 RT: 7.181 min Scan# 624
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

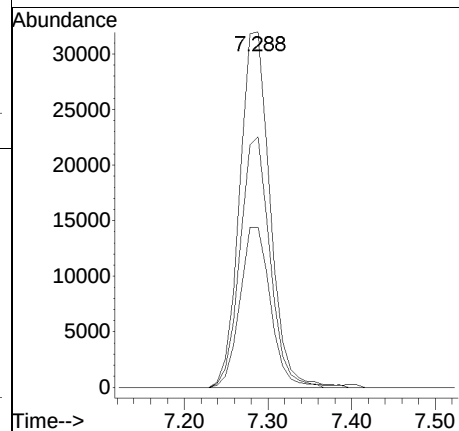
Tgt	Ion	Resp	Lower	Upper
93	100			
95	80.3	66.6	100.0	
174	102.1	90.5	135.7	

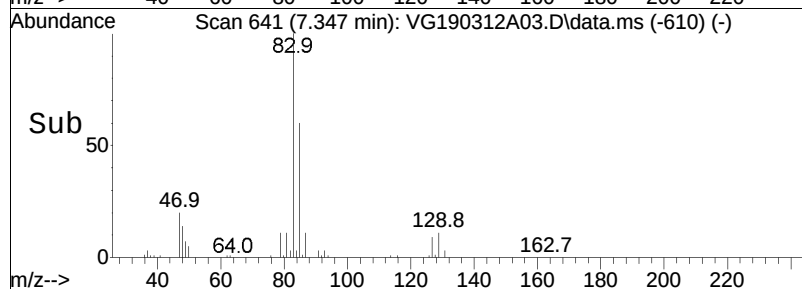
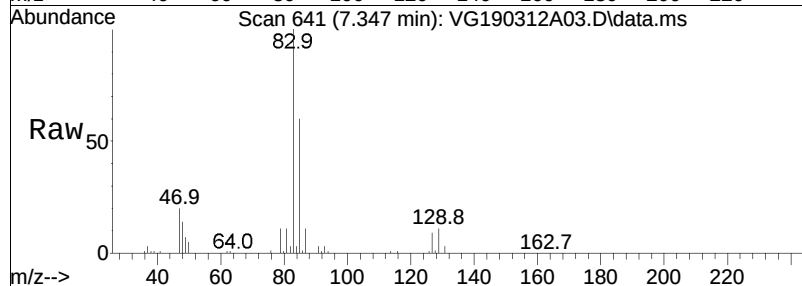
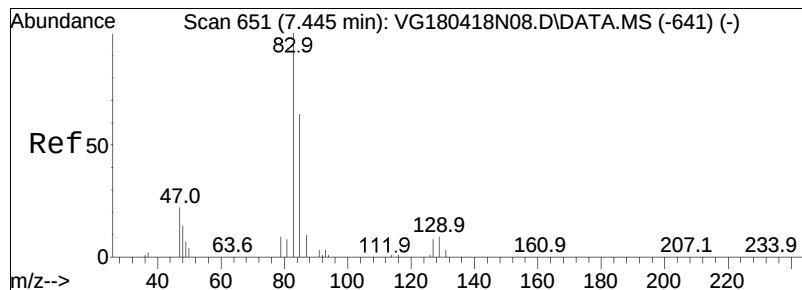




#51
 1,2-Dichloropropane
 Concen: 10.54 ug/L
 RT: 7.288 min Scan# 635
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

Tgt Ion:	63	Resp:	81040
Ion Ratio	Lower	Upper	
63	100		
62	69.3	56.5	84.7
76	45.0	34.6	52.0





#54

Bromodichloromethane

Concen: 10.02 ug/L

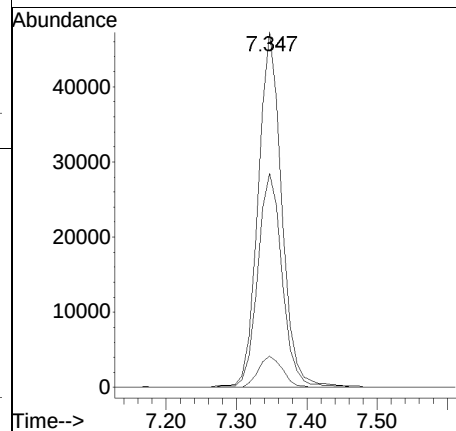
RT: 7.347 min Scan# 641

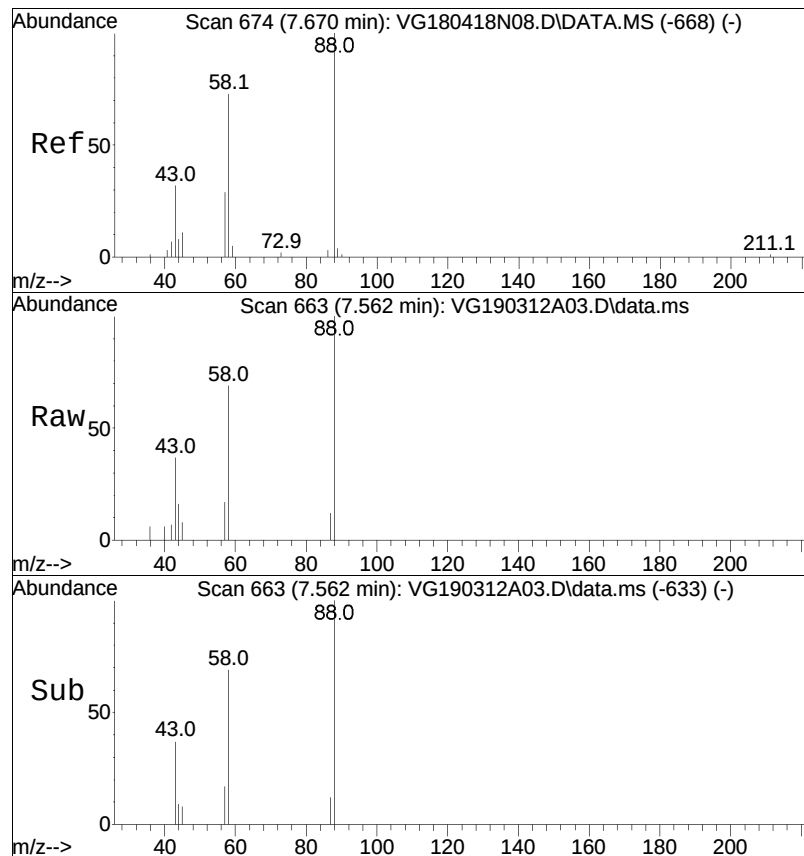
Delta R.T. -0.000 min

Lab File: VG190312A03.D

Acq: 12 Mar 2019 8:57

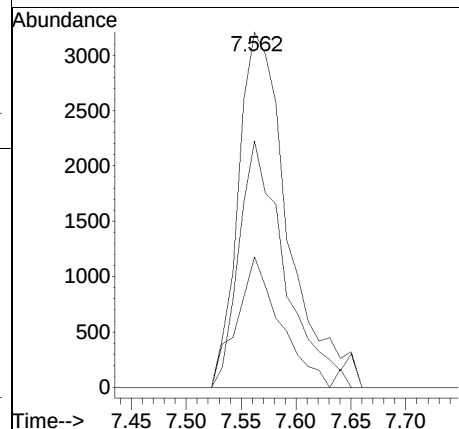
Tgt	Ion: 83	Resp:	110698
Ion	Ratio	Lower	Upper
83	100		
85	62.2	50.8	76.2
127	9.0	7.4	11.2

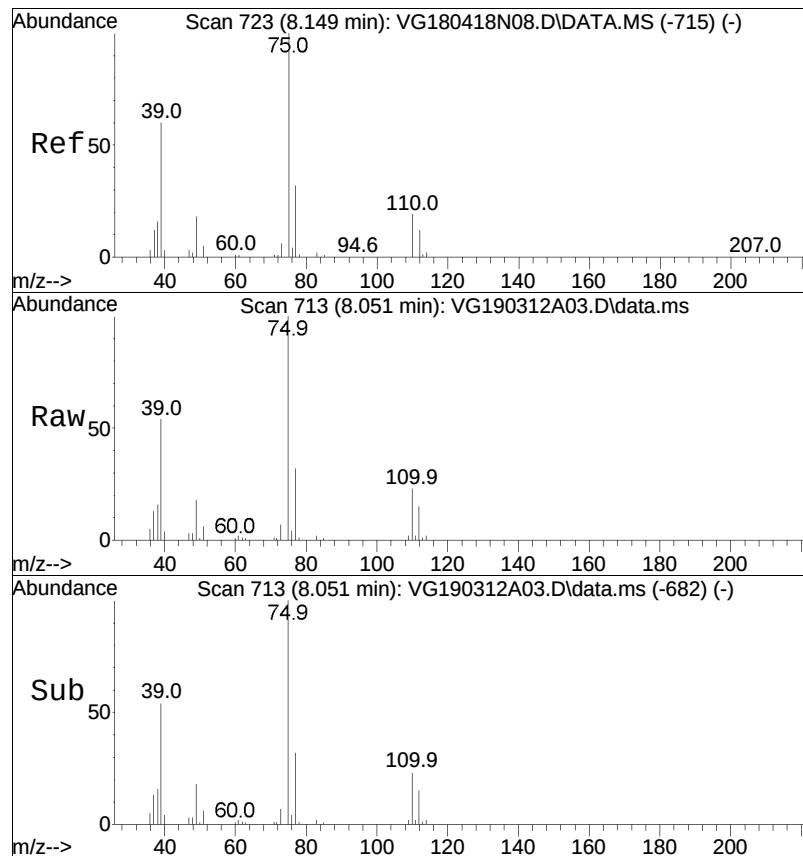




#57
 1,4-Dioxane
 Concen: 372.48 ug/L
 RT: 7.562 min Scan# 663
 Delta R.T. -0.010 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

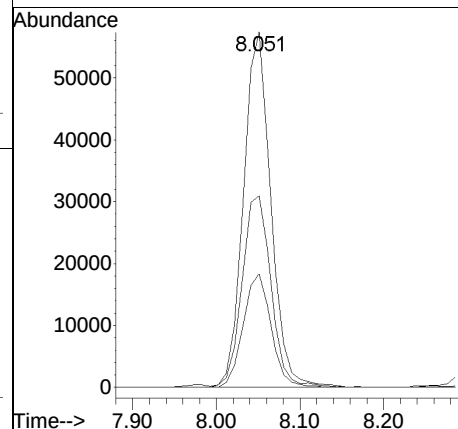
Tgt Ion:	88	Resp:	10131
Ion Ratio	Lower	Upper	
88	100		
58	65.1	48.7	73.1
43	33.0	22.4	33.6

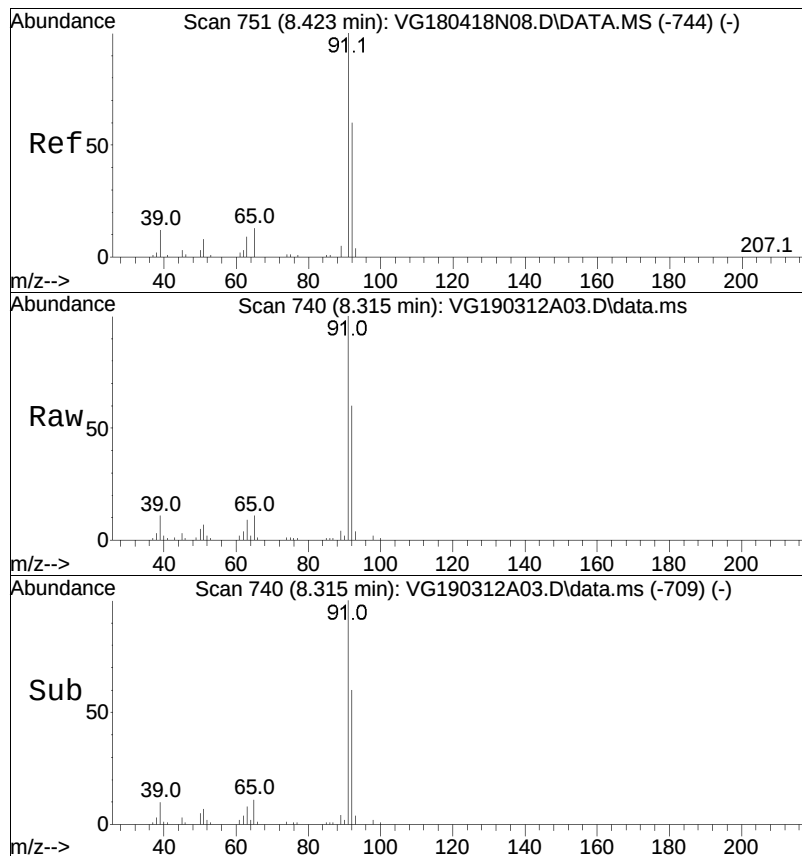




#58
 cis-1,3-Dichloropropene
 Concen: 10.16 ug/L
 RT: 8.051 min Scan# 713
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

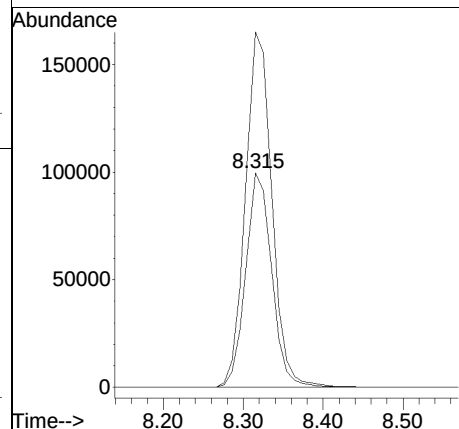
Tgt Ion:	75	Resp:	130597
Ion Ratio	Lower	Upper	
75	100		
77	32.5	24.6	36.8
39	57.0	40.8	61.2

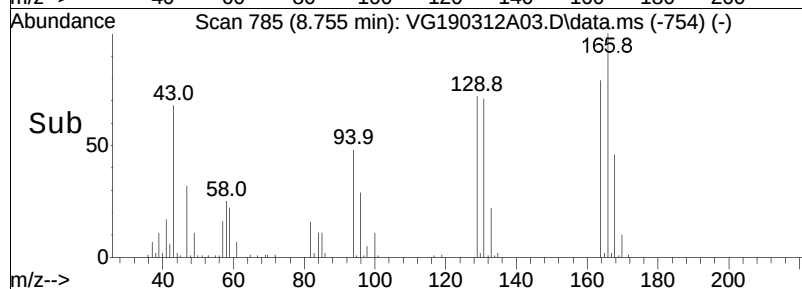
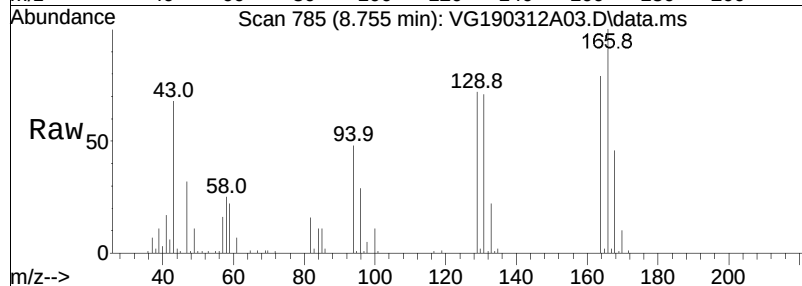
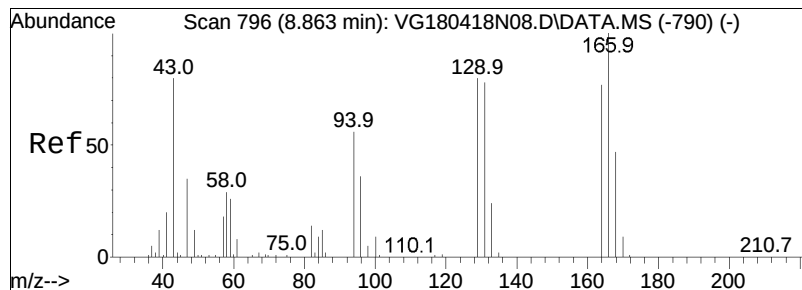




#61
 Toluene
 Concen: 10.35 ug/L
 RT: 8.315 min Scan# 740
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

Tgt	Ion	Resp	Lower	Upper
92	100	226497		
91	168.4	134.8	202.2	





#62

4-Methyl-2-pentanone

Concen: 11.17 ug/L

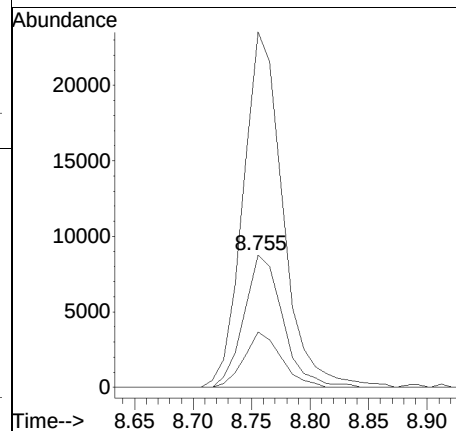
RT: 8.755 min Scan# 785

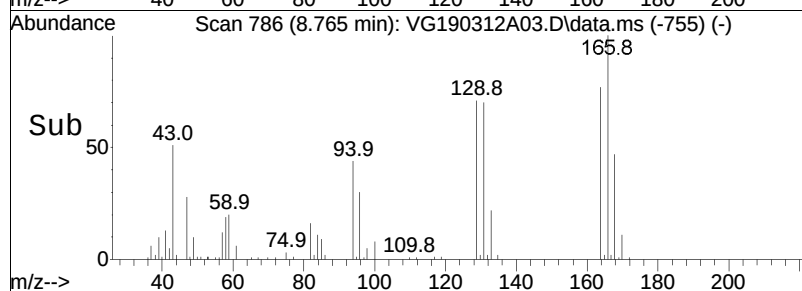
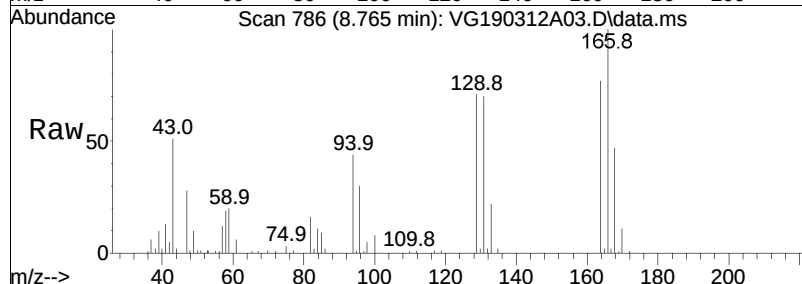
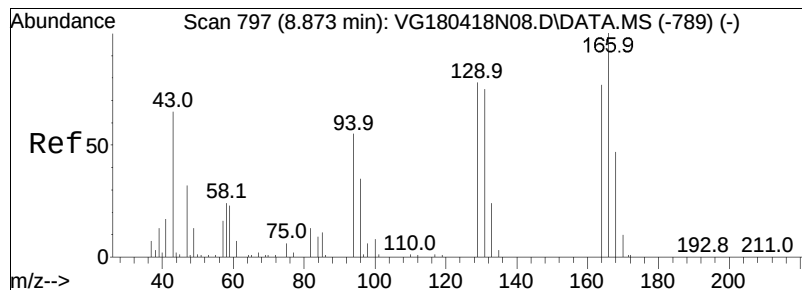
Delta R.T. -0.001 min

Lab File: VG190312A03.D

Acq: 12 Mar 2019 8:57

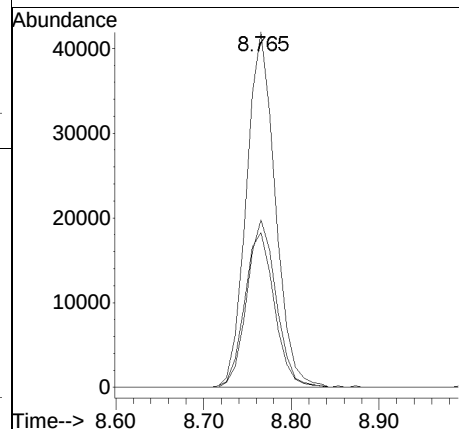
Tgt	Ion: 58	Resp:	20356
Ion	Ratio	Lower	Upper
58	100		
100	40.2	33.6	50.4
43	274.8	204.3	306.5

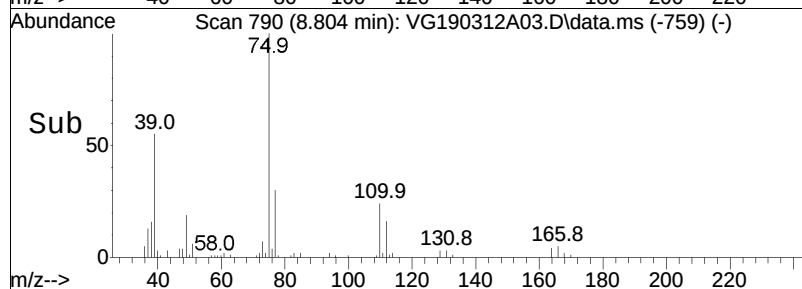
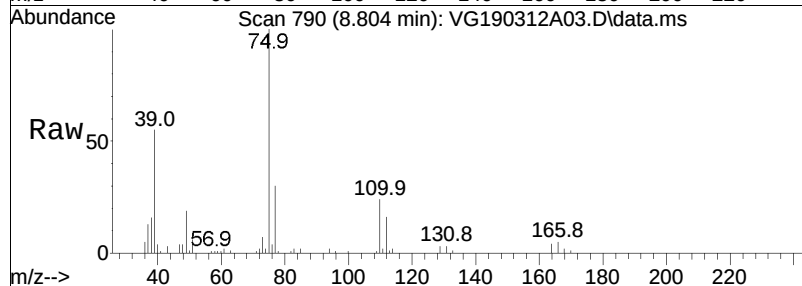
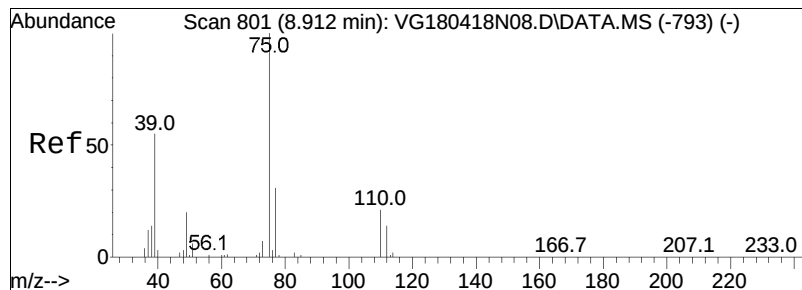




#63
 Tetrachloroethene
 Concen: 8.98 ug/L
 RT: 8.765 min Scan# 786
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

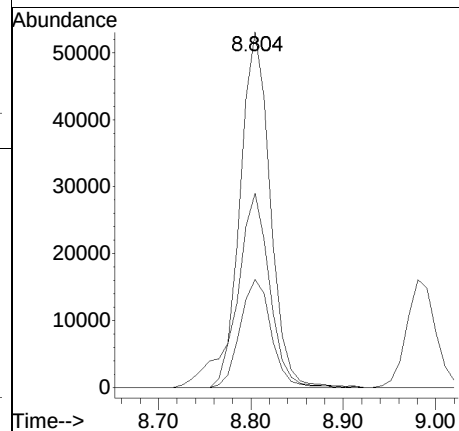
Tgt Ion	Ratio	Resp	Lower	Upper
166	100	96158		
168	47.5		27.3	67.3
94	45.1		20.5	60.5

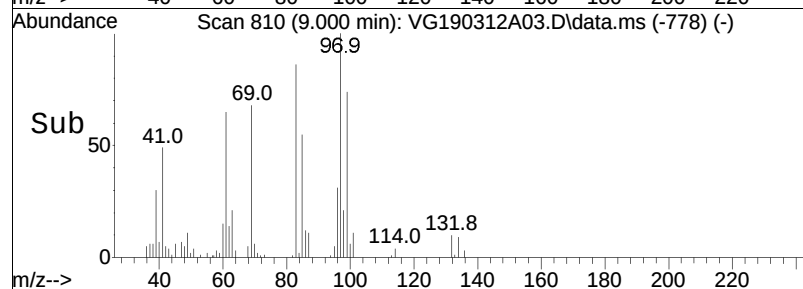
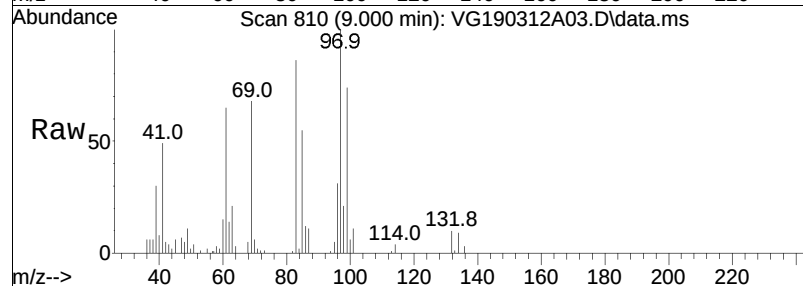
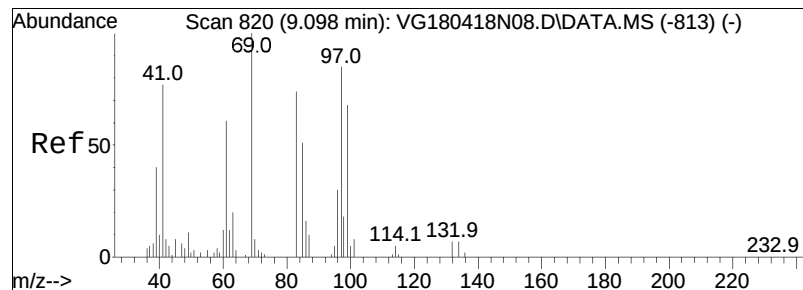




#65
trans-1,3-Dichloropropene
Concen: 11.24 ug/L
RT: 8.804 min Scan# 790
Delta R.T. -0.001 min
Lab File: VG190312A03.D
Acq: 12 Mar 2019 8:57

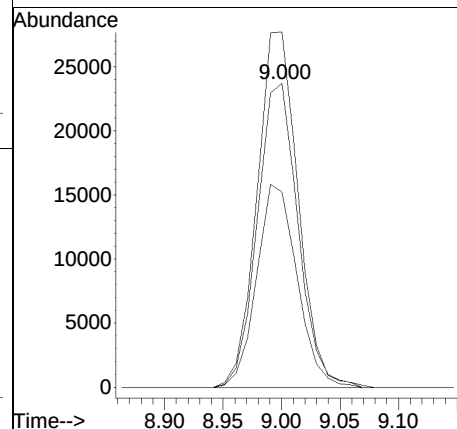
Tgt Ion	Ratio	Lower	Upper
75	100		
77	31.6	11.3	51.3
39	62.0	36.0	76.0

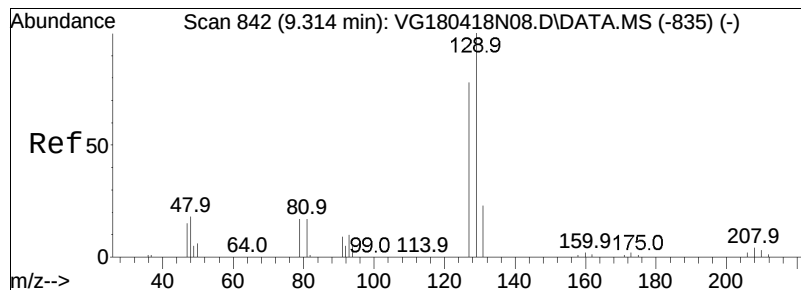




#68
 1,1,2-Trichloroethane
 Concen: 10.83 ug/L
 RT: 9.000 min Scan# 810
 Delta R.T. 0.009 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

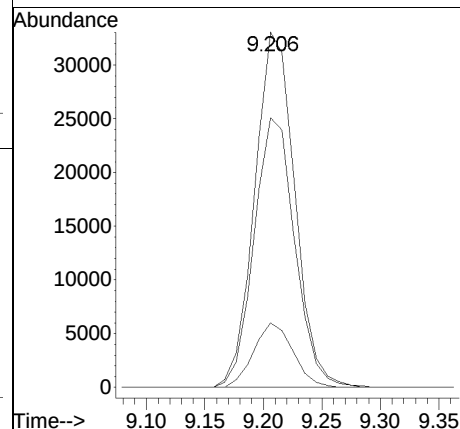
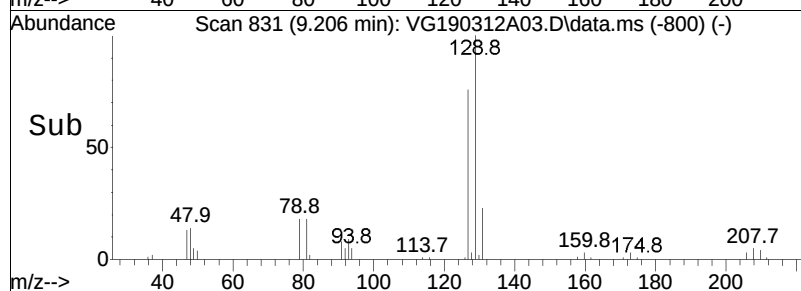
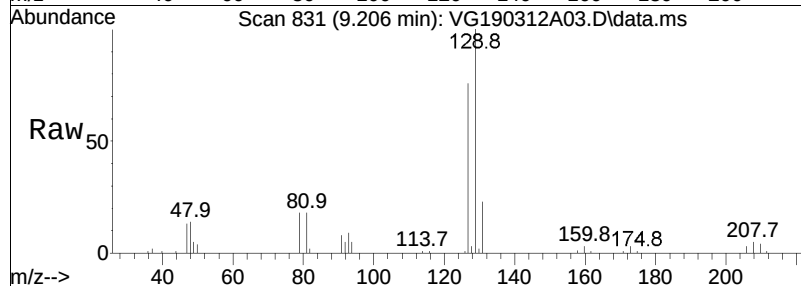
Tgt Ion	Ratio	Lower	Upper
83	100		
97	118.2	101.0	141.0
85	66.4	47.9	87.9

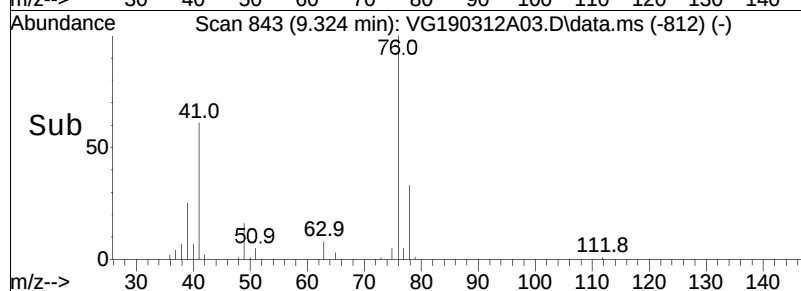
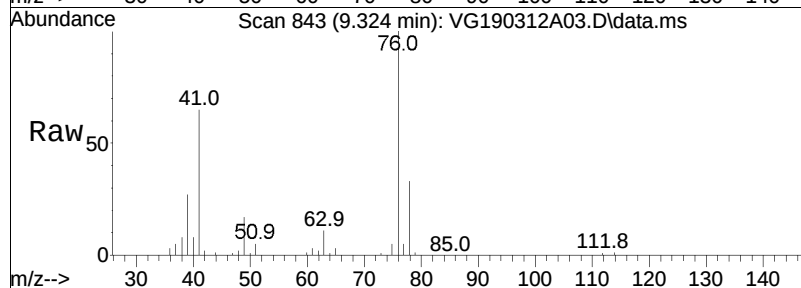
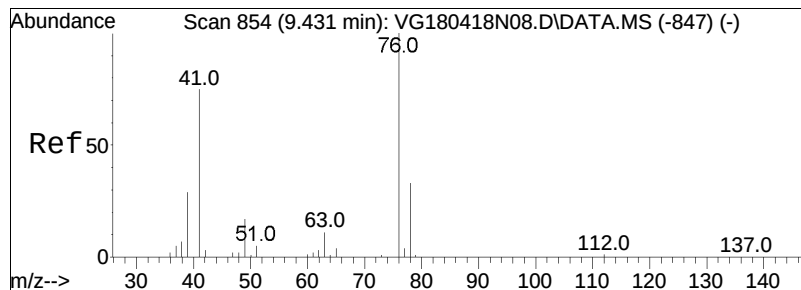




#69
 Chlorodibromomethane
 Concen: 10.35 ug/L
 RT: 9.206 min Scan# 831
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

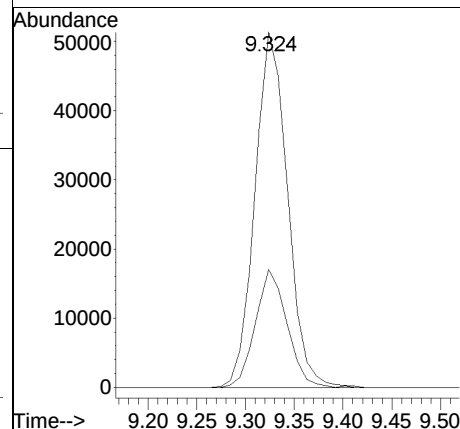
Tgt Ion	Ratio	Resp	Lower	Upper
129	100	78787		
81	17.8		0.0	35.0
127	77.2		57.1	97.1

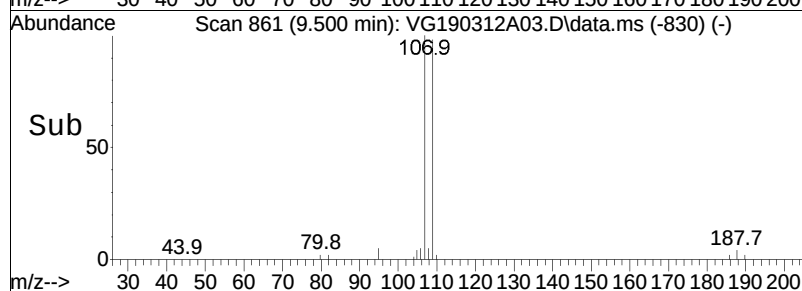
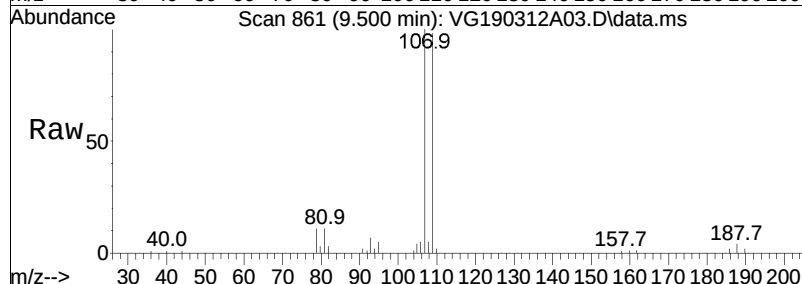
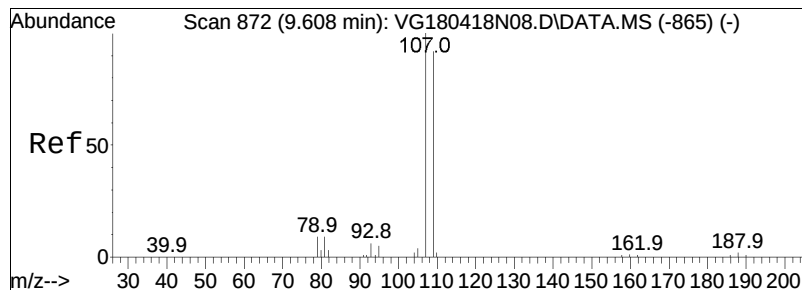




#70
 1,3-Dichloropropane
 Concen: 11.48 ug/L
 RT: 9.324 min Scan# 843
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

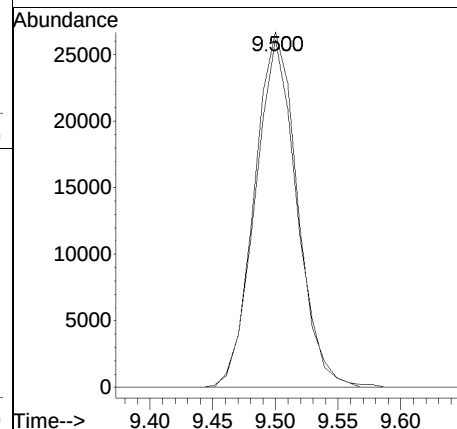
Tgt Ion:	76	78	Ratio	Lower	Upper
76	100				
78	32.1		25.4	38.2	

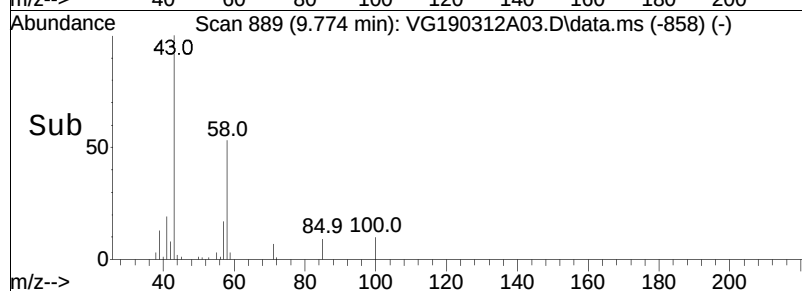
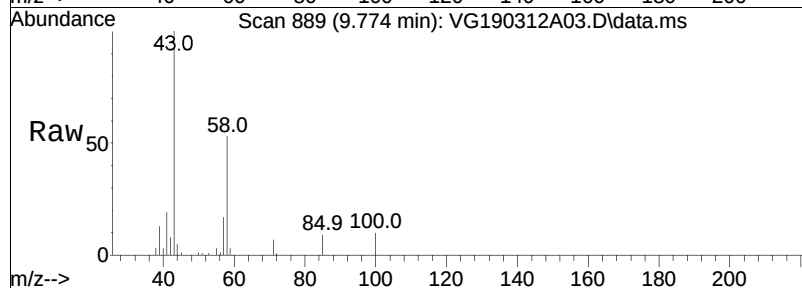
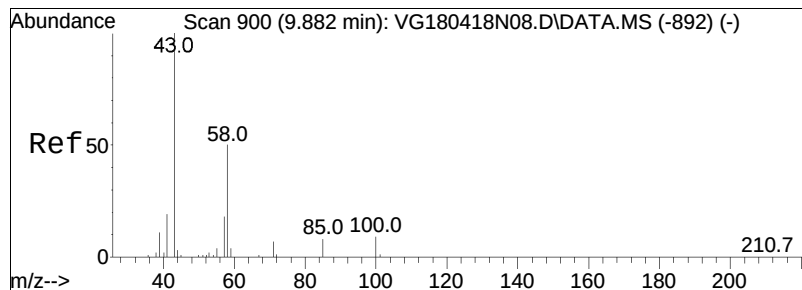




#71
 1,2-Dibromoethane
 Concen: 10.52 ug/L
 RT: 9.500 min Scan# 861
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

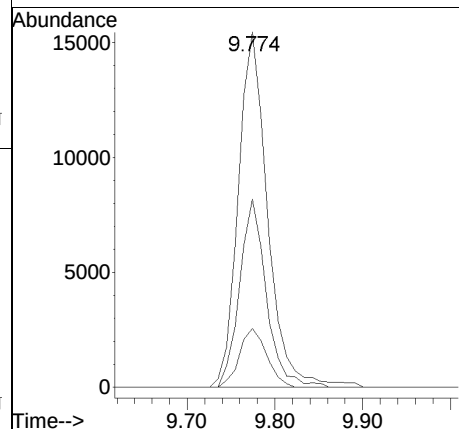
Tgt Ion	Ratio	Lower	Upper
107	100		
109	95.1	76.0	114.0

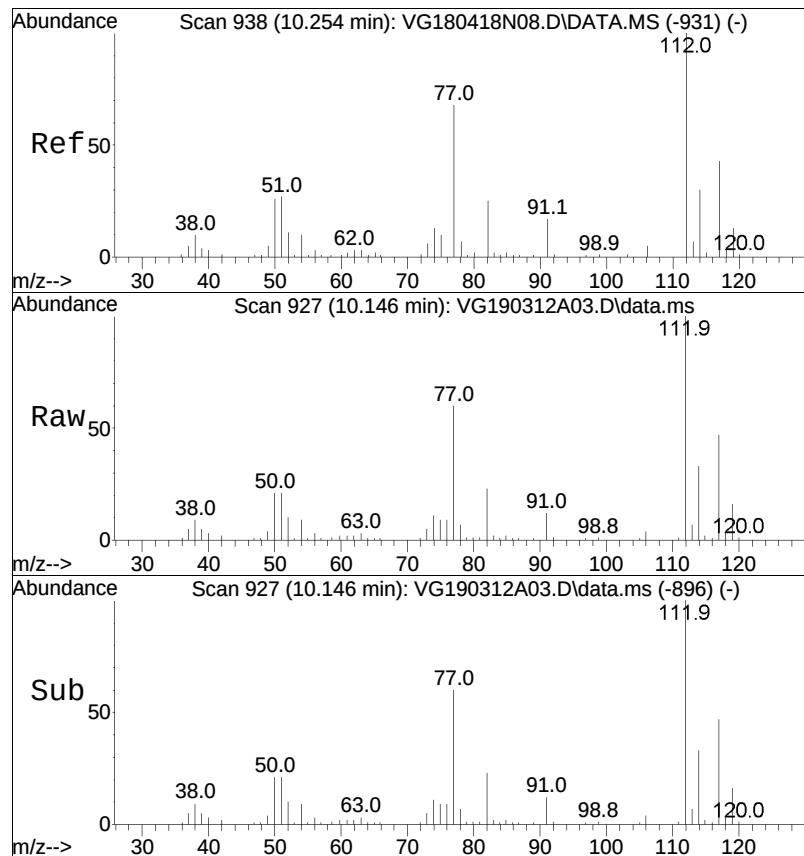




#72
 2-Hexanone
 Concen: 12.12 ug/L
 RT: 9.774 min Scan# 889
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

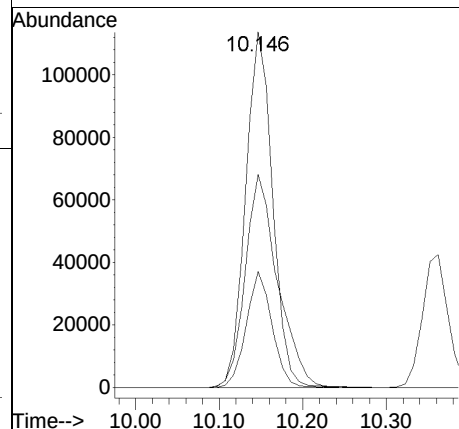
Tgt Ion:	43	Resp:	36081
Ion Ratio	Lower	Upper	
43	100		
58	48.2	43.8	65.6
57	15.4	15.2	22.8

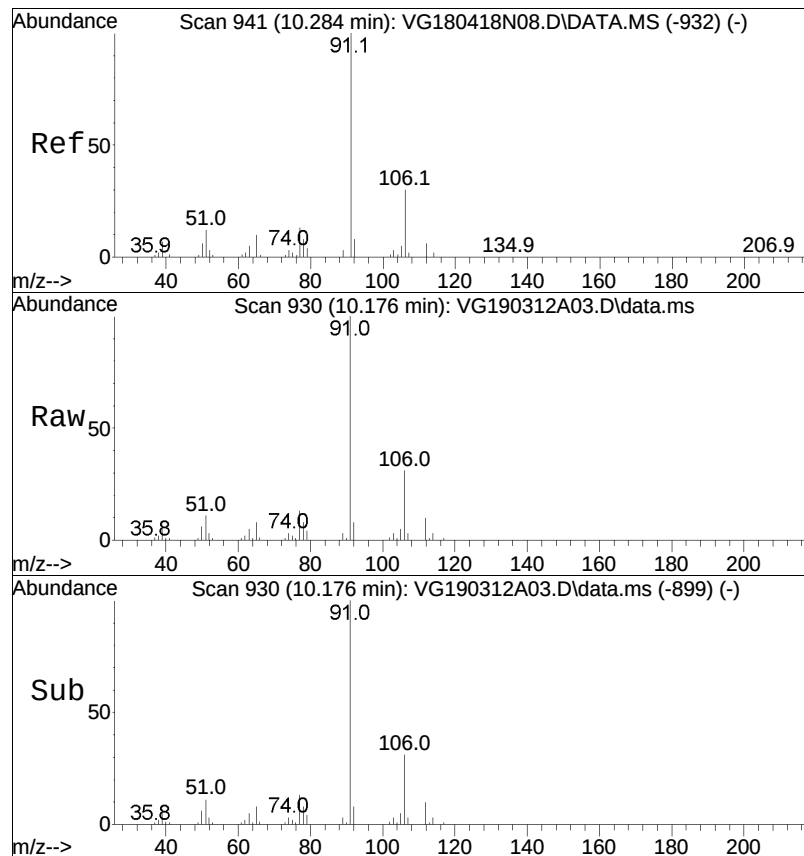




#73
 Chlorobenzene
 Concen: 10.30 ug/L
 RT: 10.146 min Scan# 927
 Delta R.T. -0.001 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

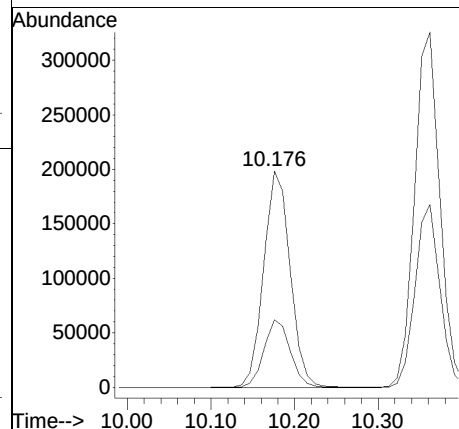
Tgt	Ion:112	Resp:	254725
Ion	Ratio	Lower	Upper
112	100		
77	72.4	55.9	83.9
114	31.2	25.4	38.0

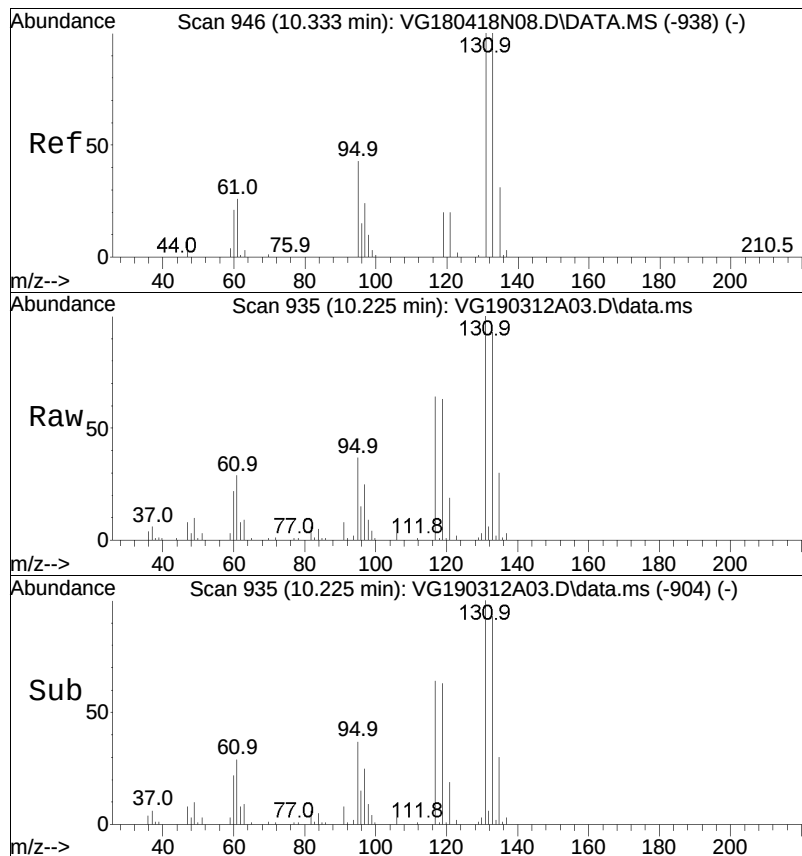




#74
 Ethylbenzene
 Concen: 10.19 ug/L
 RT: 10.176 min Scan# 930
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

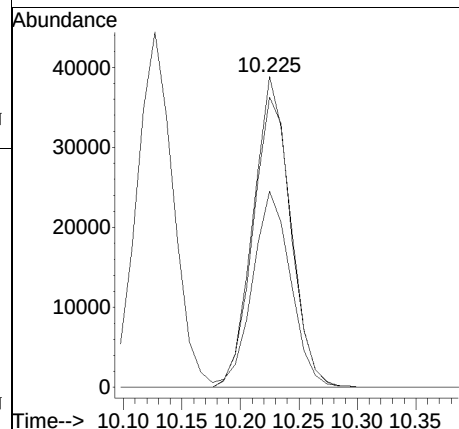
Tgt Ion:	91	Resp:	437954
Ion Ratio	Lower	Upper	
91	100		
106	31.0	25.3	37.9

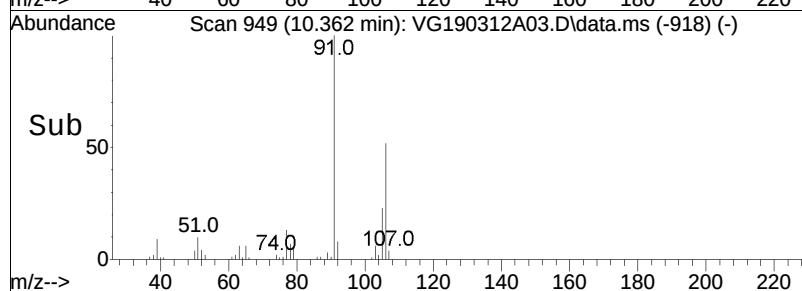
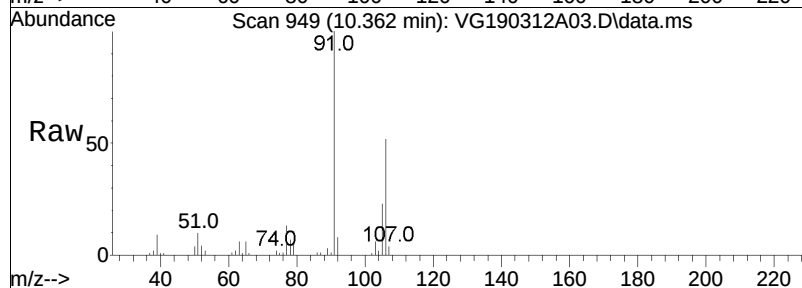
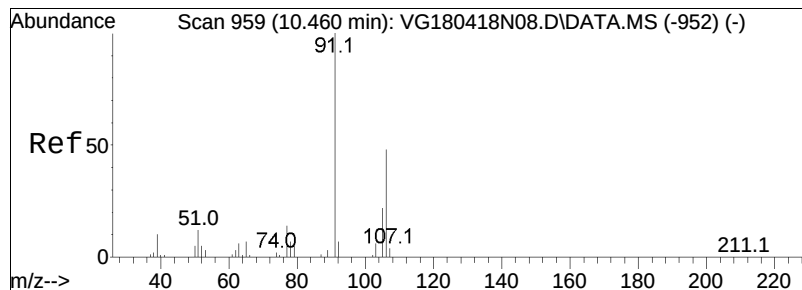




#75
 1,1,1,2-Tetrachloroethane
 Concen: 10.11 ug/L
 RT: 10.225 min Scan# 935
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

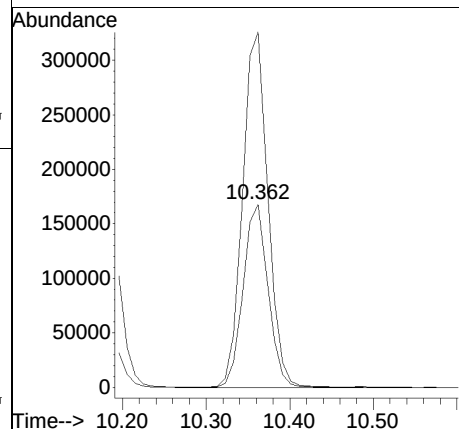
Tgt Ion:131	Resp:	86320
Ion Ratio	Lower	Upper
131	100	
133	96.0	77.3 117.3
119	64.6	42.7 82.7

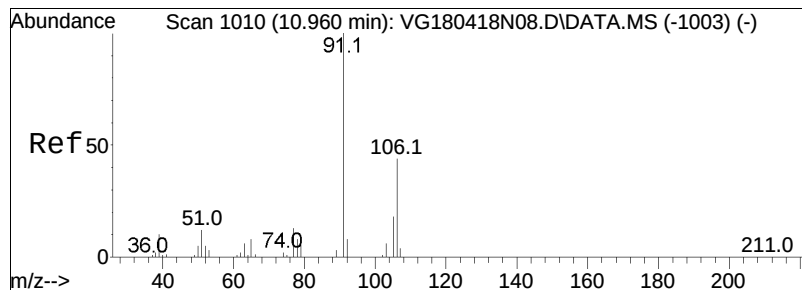




#76
p/m Xylene
Concen: 20.00 ug/L
RT: 10.362 min Scan# 949
Delta R.T. -0.000 min
Lab File: VG190312A03.D
Acq: 12 Mar 2019 8:57

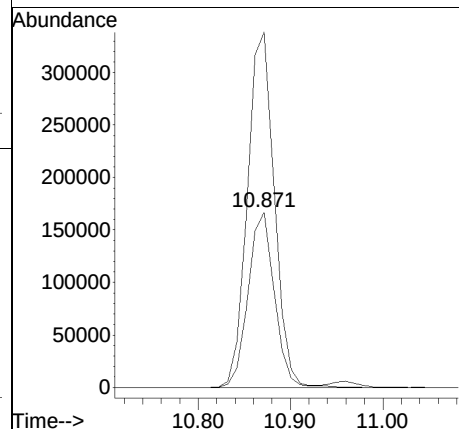
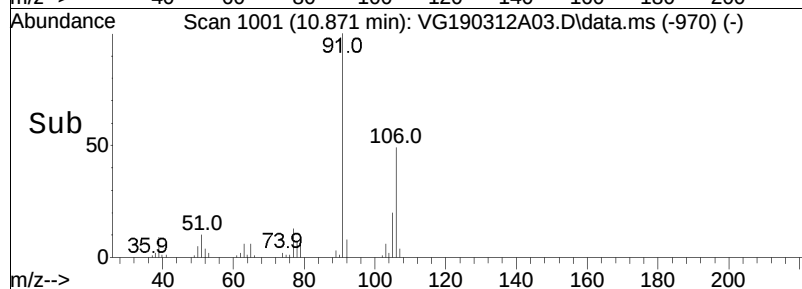
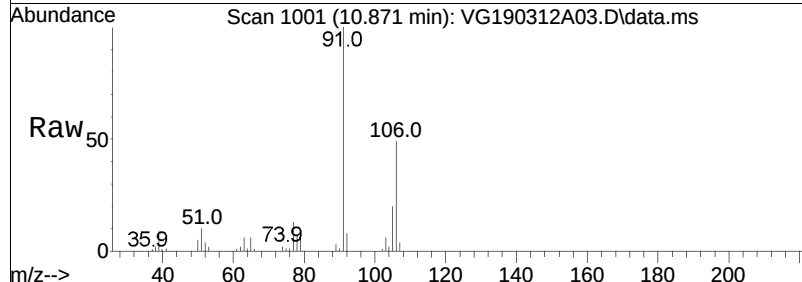
Tgt	Ion	Ratio	Lower	Upper
106	100			
91	196.1	157.1	235.7	

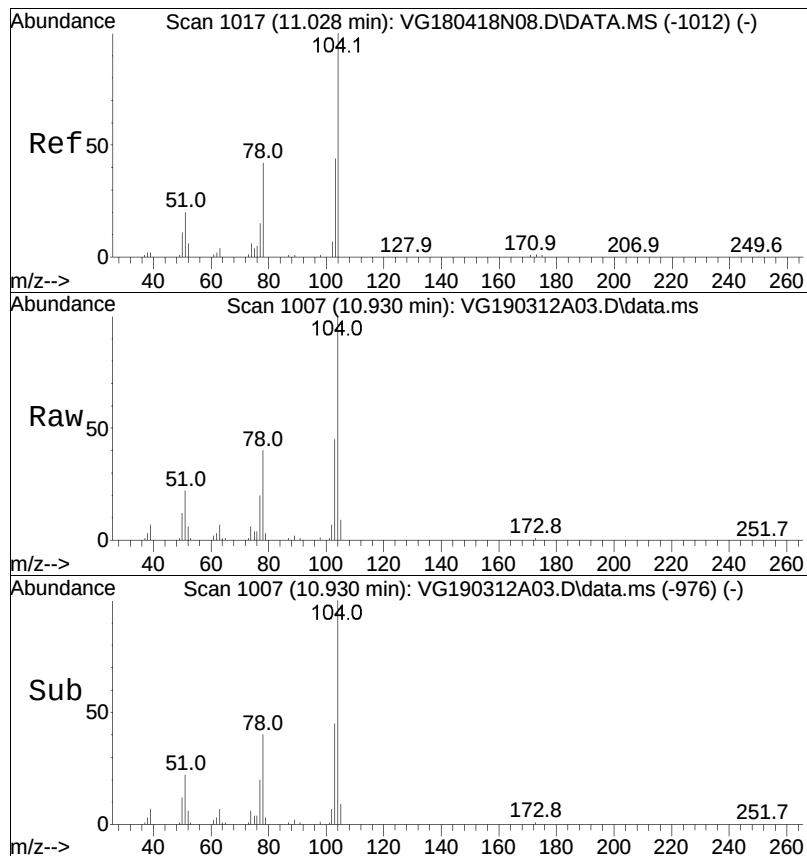




#77
o Xylene
Concen: 20.23 ug/L
RT: 10.871 min Scan# 1001
Delta R.T. -0.001 min
Lab File: VG190312A03.D
Acq: 12 Mar 2019 8:57

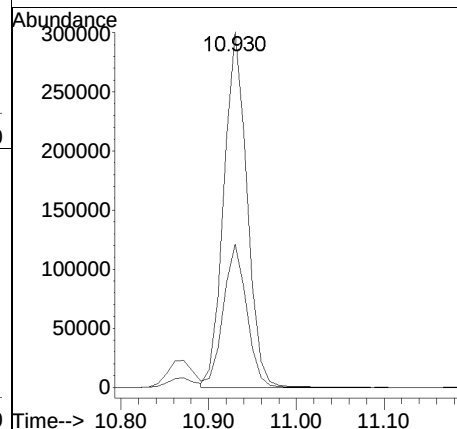
Tgt Ion	Ratio	Lower	Upper
106	100		
91	206.8	164.7	247.1

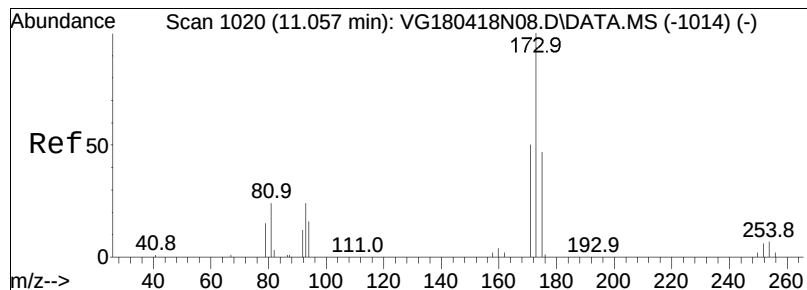




#78
 Styrene
 Concen: 20.51 ug/L
 RT: 10.930 min Scan# 1007
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

Tgt Ion	Ratio	Lower	Upper
104	100		
78	40.5	32.2	48.4





#80

Bromoform

Concen: 10.24 ug/L

RT: 10.960 min Scan# 1010

Delta R.T. -0.000 min

Lab File: VG190312A03.D

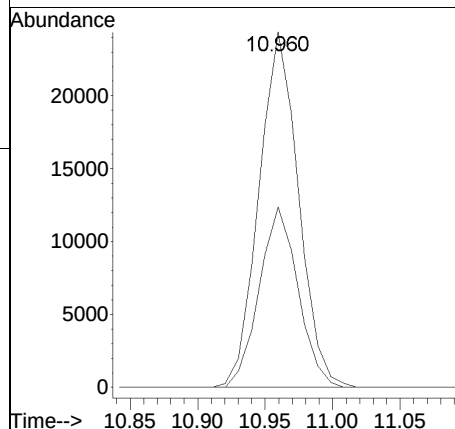
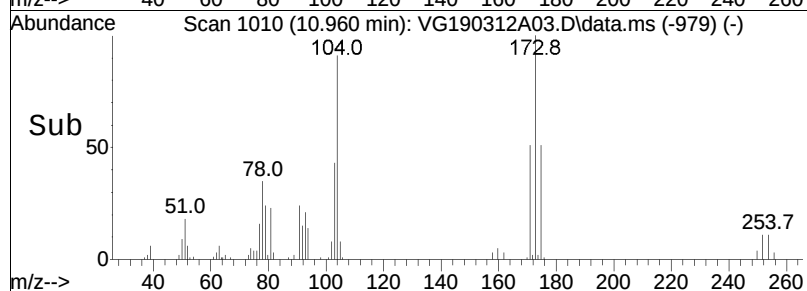
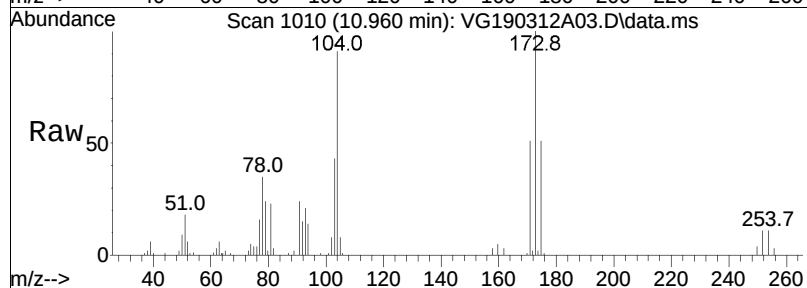
Acq: 12 Mar 2019 8:57

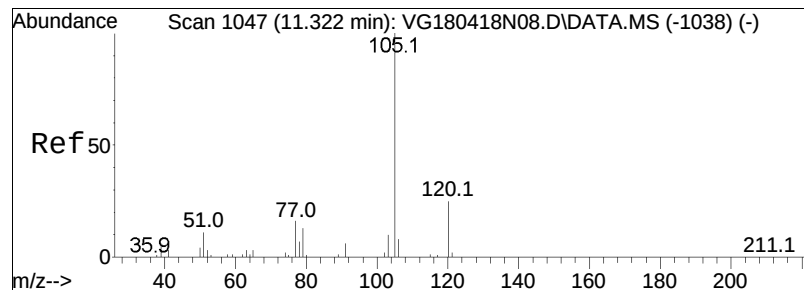
Tgt Ion:173 Resp: 49671

Ion Ratio Lower Upper

173 100

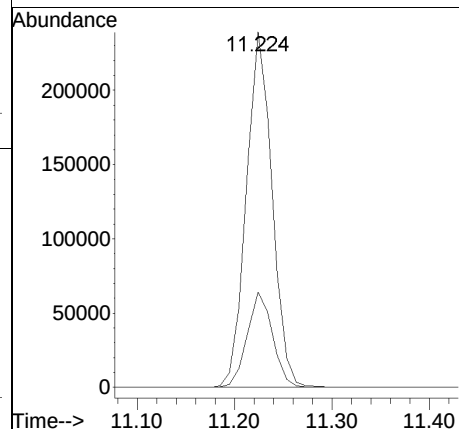
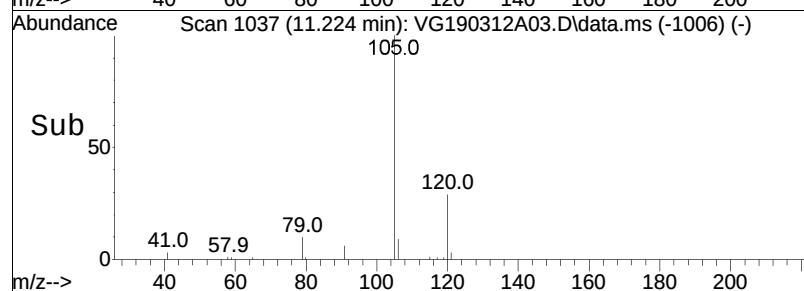
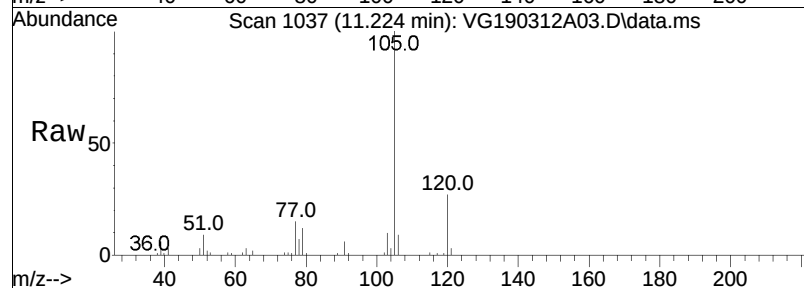
175 49.8 28.0 68.0

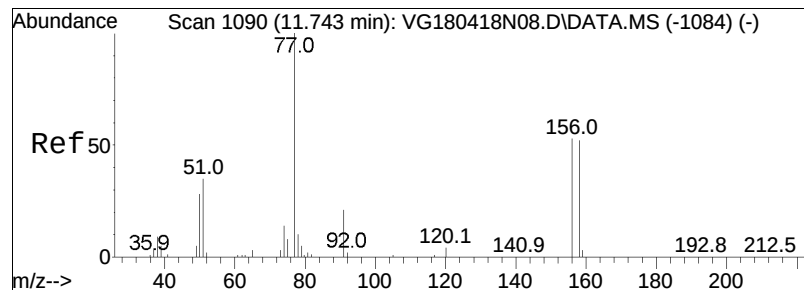




#82
 Isopropylbenzene
 Concen: 10.17 ug/L
 RT: 11.224 min Scan# 1037
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

Tgt Ion	Ratio	Lower	Upper
105	100		
120	26.4	7.0	47.0





#84

Bromobenzene

Concen: 10.31 ug/L

RT: 11.655 min Scan# 1081

Delta R.T. 0.000 min

Lab File: VG190312A03.D

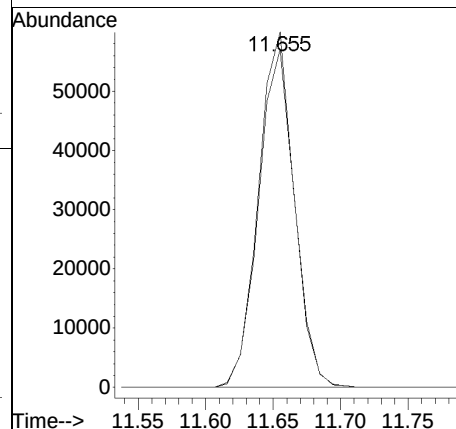
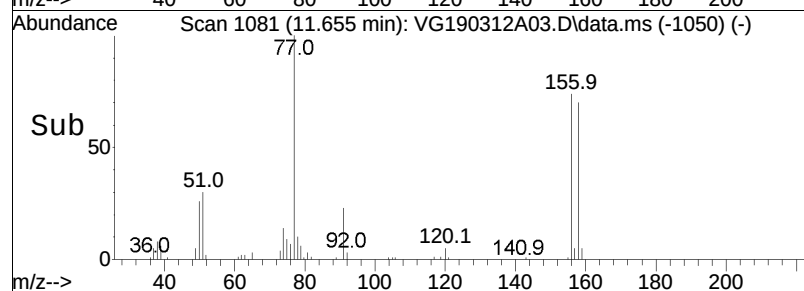
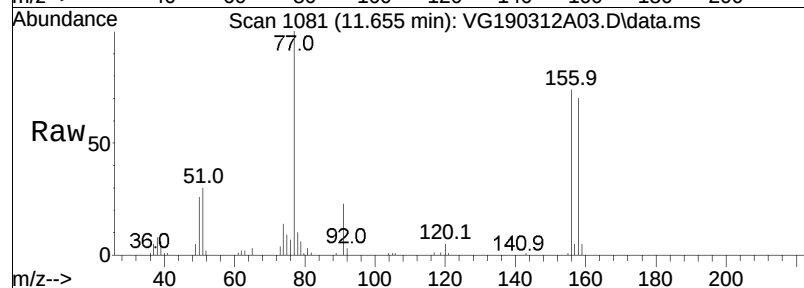
Acq: 12 Mar 2019 8:57

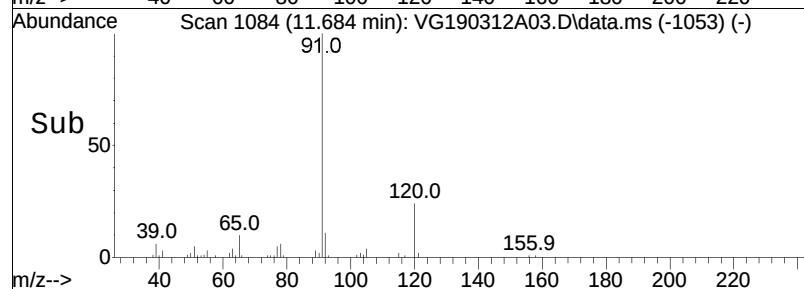
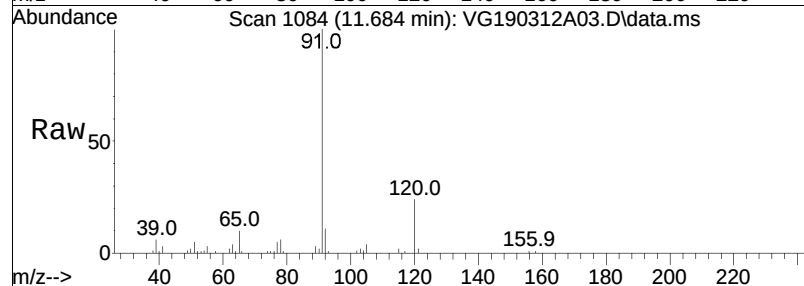
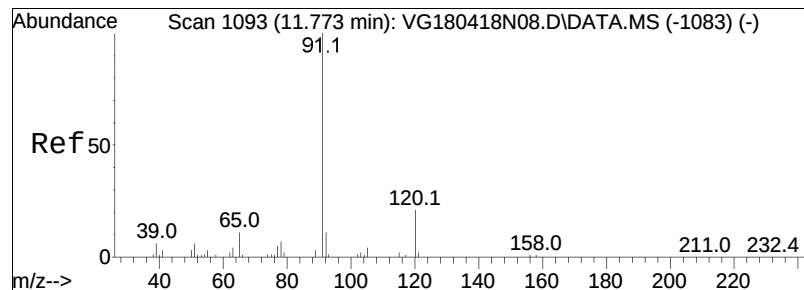
Tgt Ion:156 Resp: 110649

Ion Ratio Lower Upper

156 100

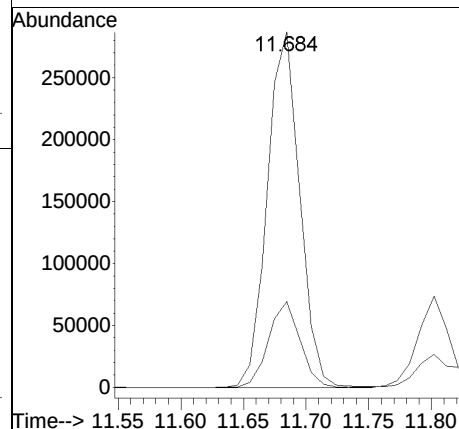
158 95.8 76.9 115.3

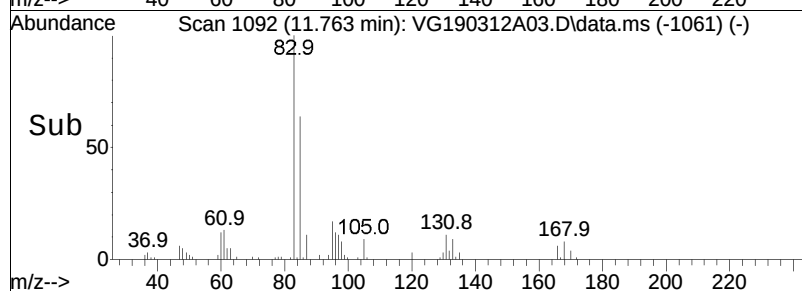
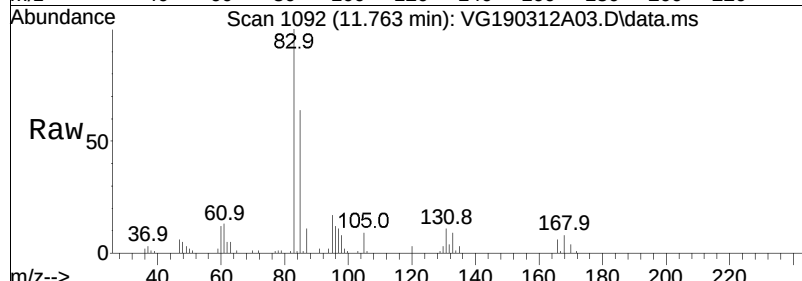
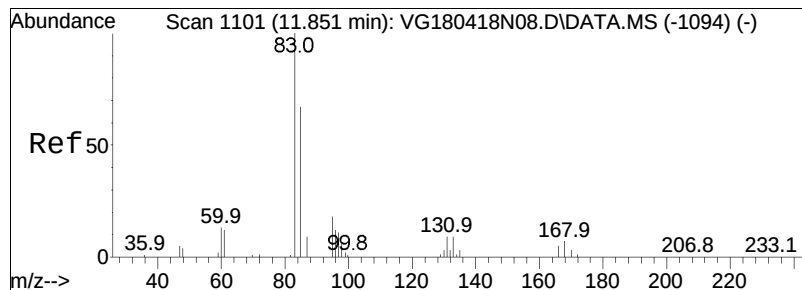




#85
 n-Propylbenzene
 Concen: 10.40 ug/L
 RT: 11.684 min Scan# 1084
 Delta R.T. -0.001 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

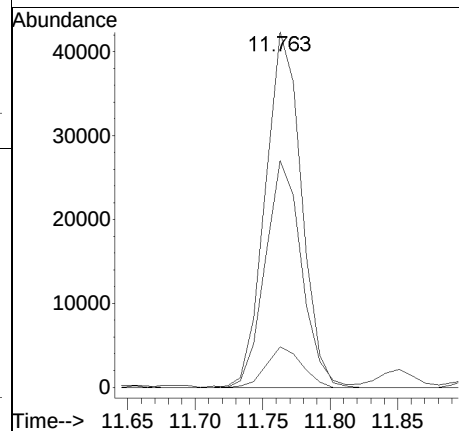
Tgt Ion:	91	Resp:	516197
Ion Ratio	Lower	Upper	
91	100		
120	23.4	19.0	28.6

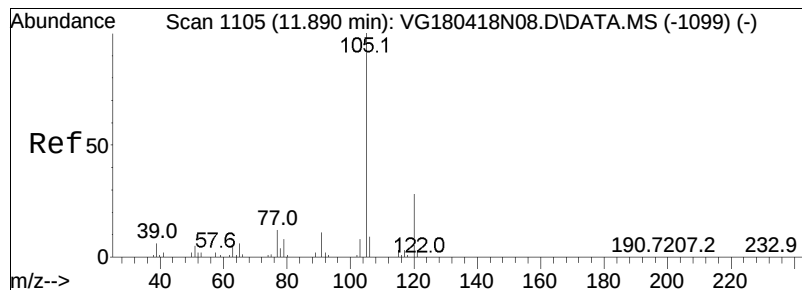




#87
 1,1,2,2-Tetrachloroethane
 Concen: 11.78 ug/L
 RT: 11.763 min Scan# 1092
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

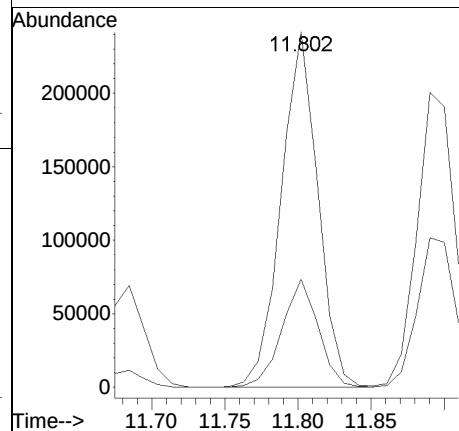
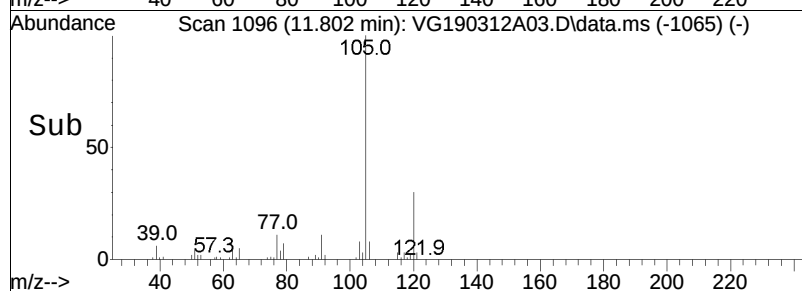
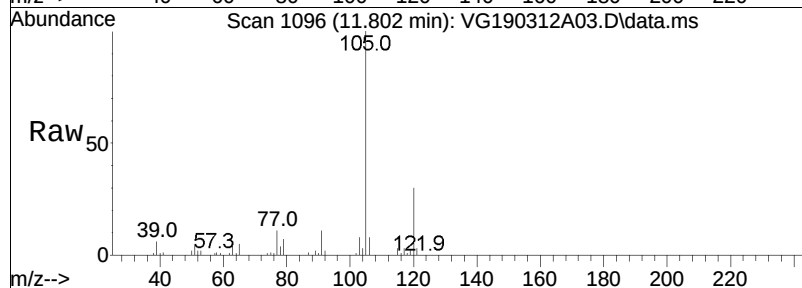
Tgt	Ion	Ratio	Lower	Upper
83	100			
131	11.3	0.0	31.0	
85	64.6	43.9	83.9	

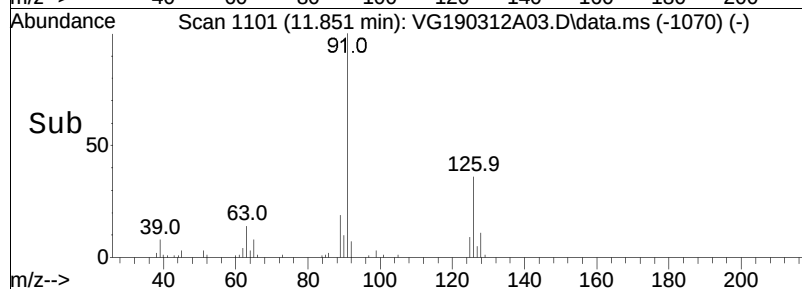
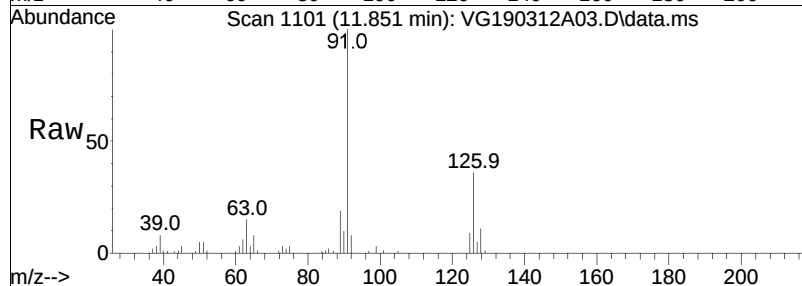
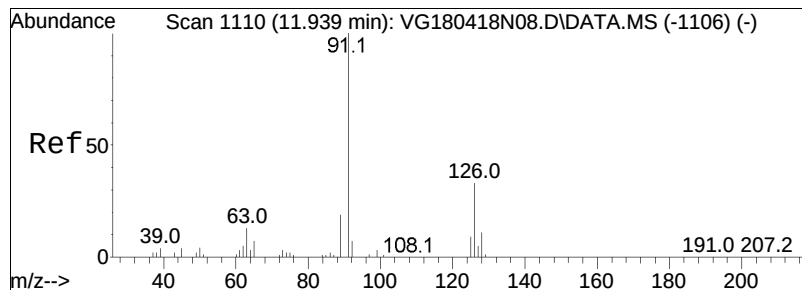




#88
 4-Ethyltoluene
 Concen: 10.29 ug/L
 RT: 11.802 min Scan# 1096
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

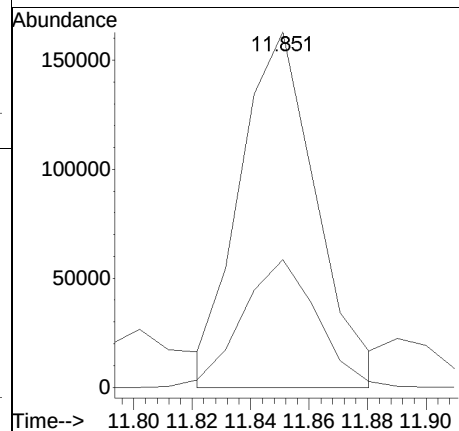
Tgt Ion	Ratio	Lower	Upper
105	100		
120	30.3	19.9	41.3

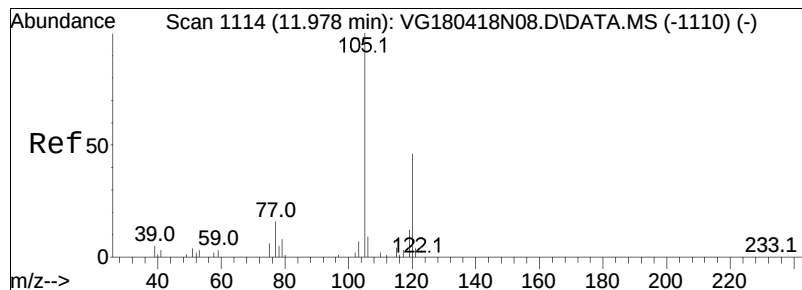




#89
 2-Chlorotoluene
 Concen: 10.71 ug/L M1
 RT: 11.851 min Scan# 1101
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

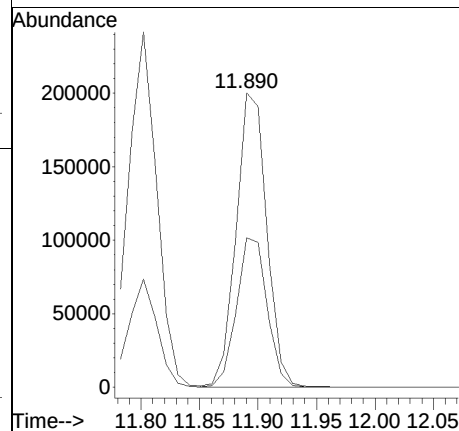
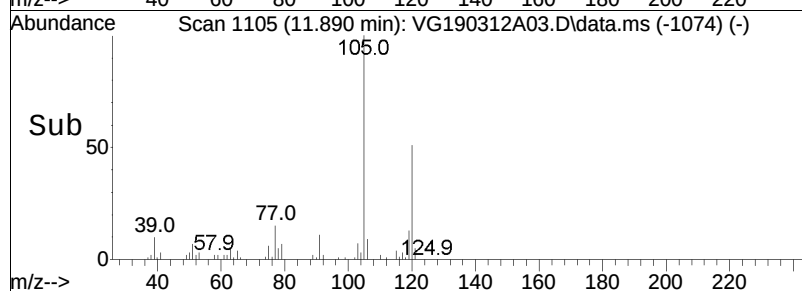
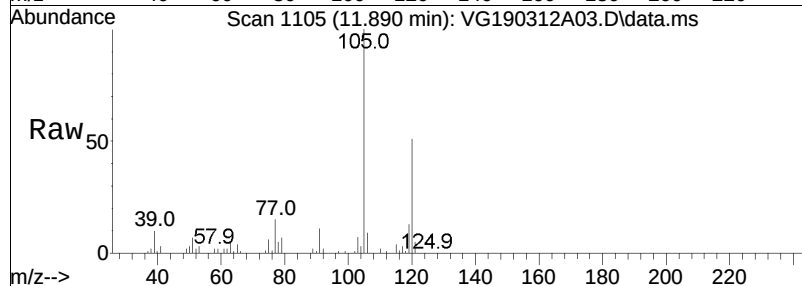
Tgt Ion:	91	Resp:	294608
Ion Ratio	Lower	Upper	
91	100		
126	35.7	27.4	41.2

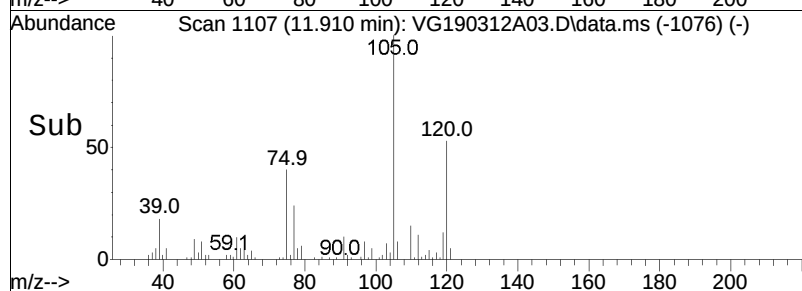
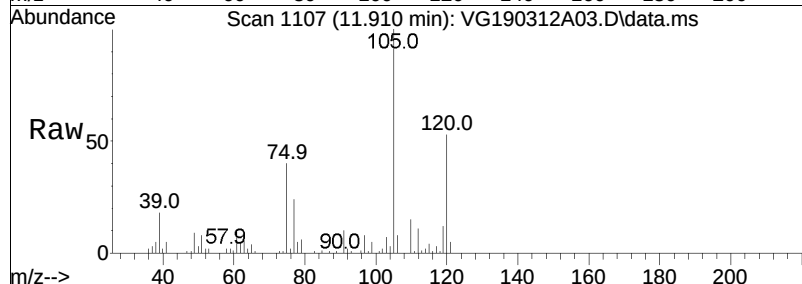
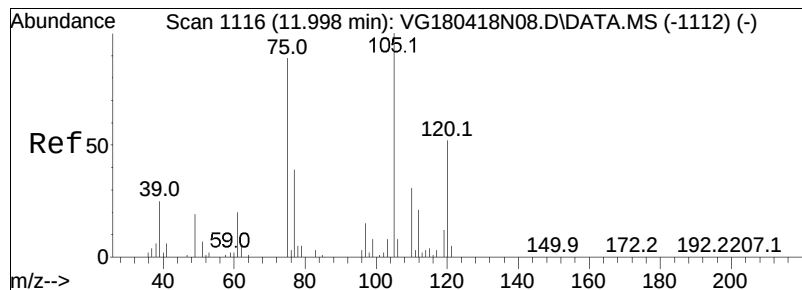




#90
 1,3,5-Trimethylbenzene
 Concen: 10.28 ug/L
 RT: 11.890 min Scan# 1105
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

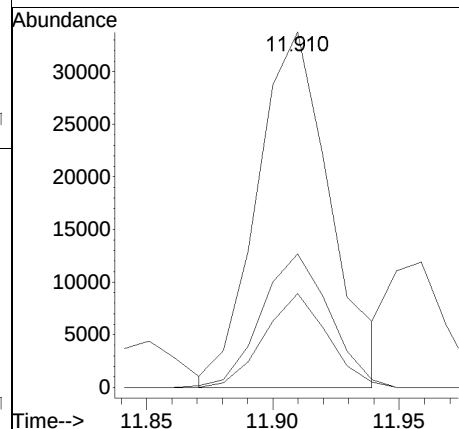
Tgt Ion	Ratio	Lower	Upper
105	100		
120	51.1	40.3	60.5

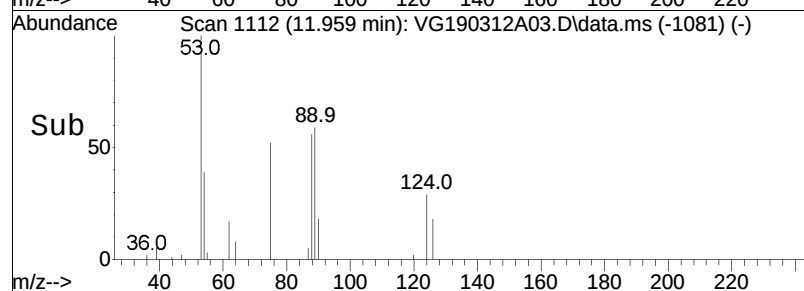
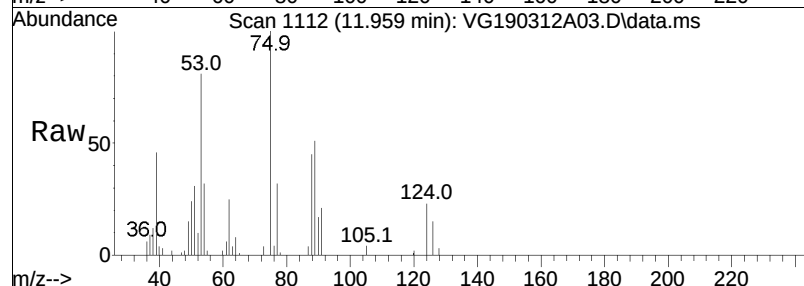
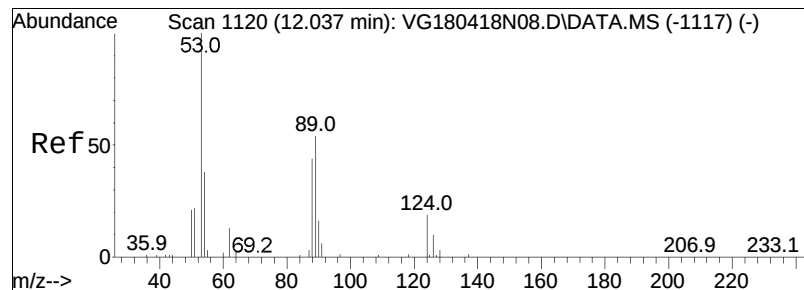




#91
 1,2,3-Trichloropropane
 Concen: 11.65 ug/L M1
 RT: 11.910 min Scan# 1107
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

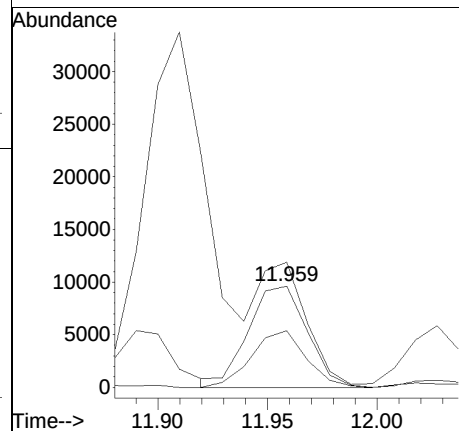
Tgt Ion:	75	Resp:	68201
Ion Ratio	Lower	Upper	
75	100		
110	34.9	23.5	48.9
112	22.8	15.9	32.9

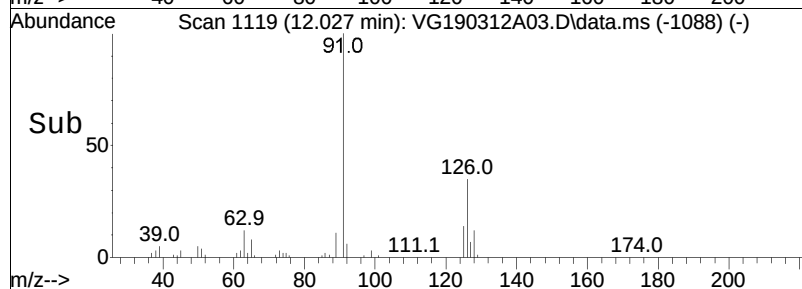
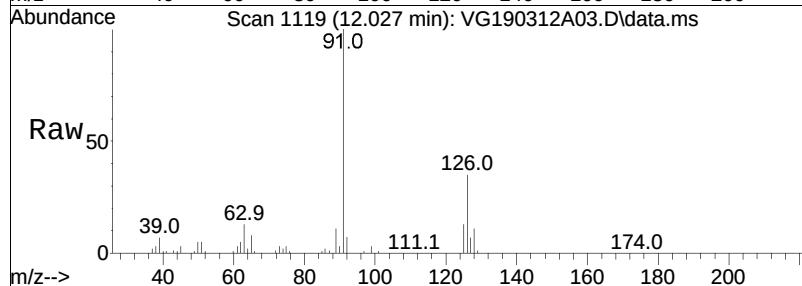
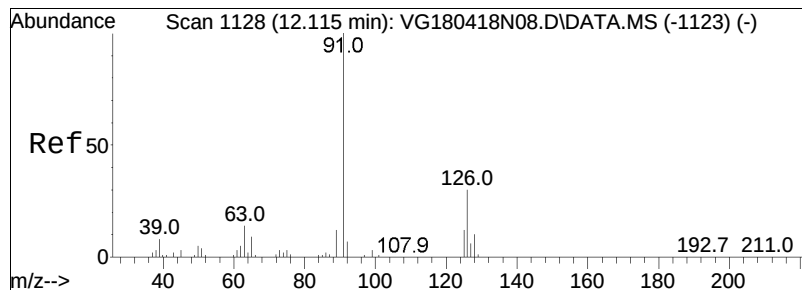




#92
 trans-1,4-Dichloro-2-butene
 Concen: 11.83 ug/L
 RT: 11.959 min Scan# 1112
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

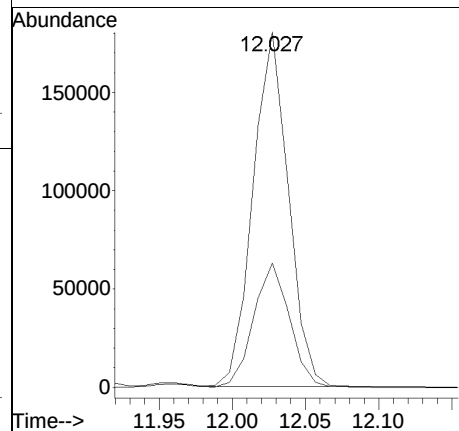
Tgt Ion	Ratio	Resp	Lower	Upper
53	100	17996		
88	51.9		41.6	62.4
75	100.4		0.0	0.0#

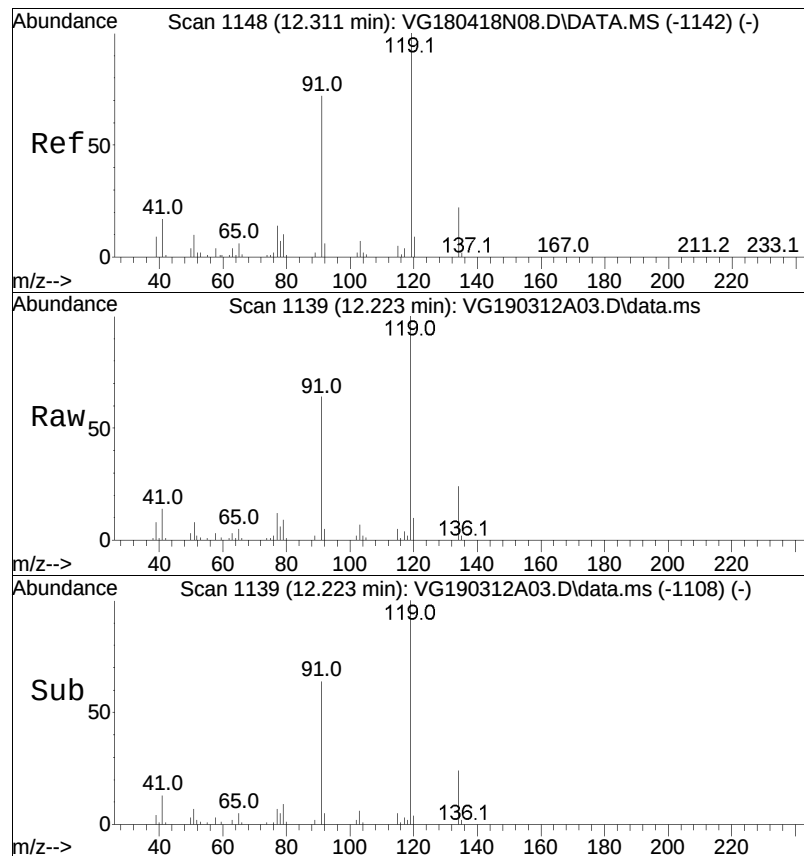




#93
 4-Chlorotoluene
 Concen: 10.67 ug/L
 RT: 12.027 min Scan# 1119
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

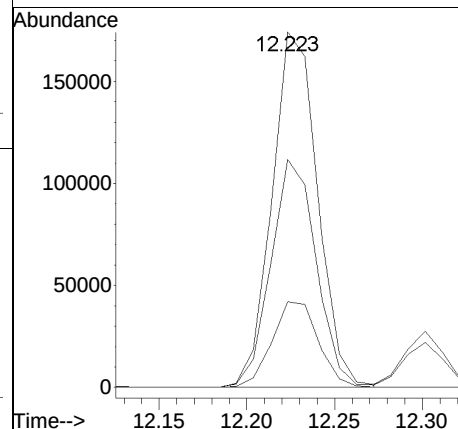
Tgt	Ion	Resp	Lower	Upper
91	100			
126	35.6	28.2	42.4	

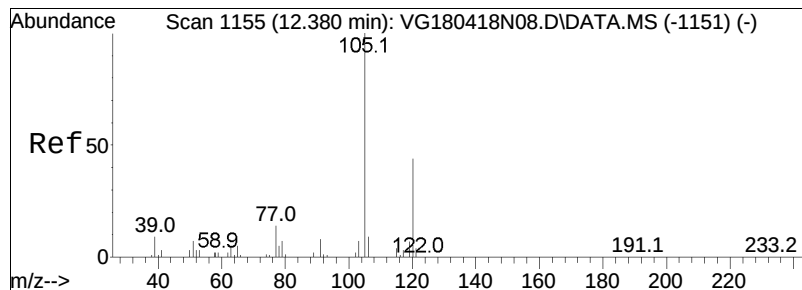




#94
 tert-Butylbenzene
 Concen: 10.08 ug/L
 RT: 12.223 min Scan# 1139
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

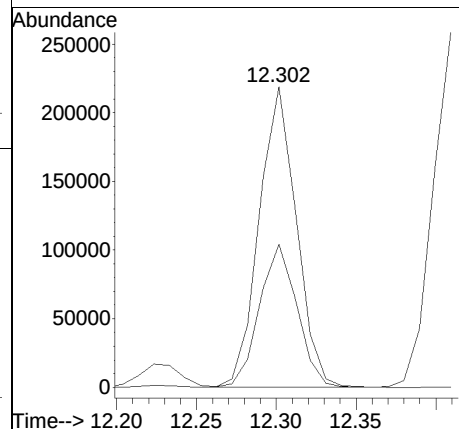
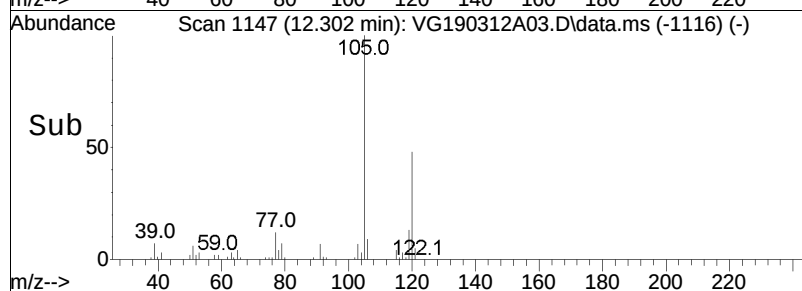
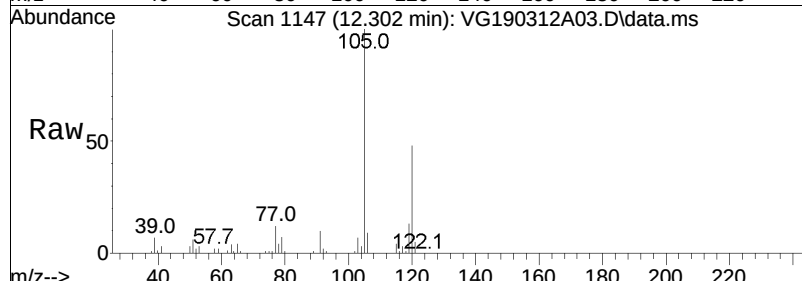
Tgt	Ion:119	Resp:	314939
Ion	Ratio	Lower	Upper
119	100		
91	63.8	50.8	76.2
134	24.6	20.2	30.4

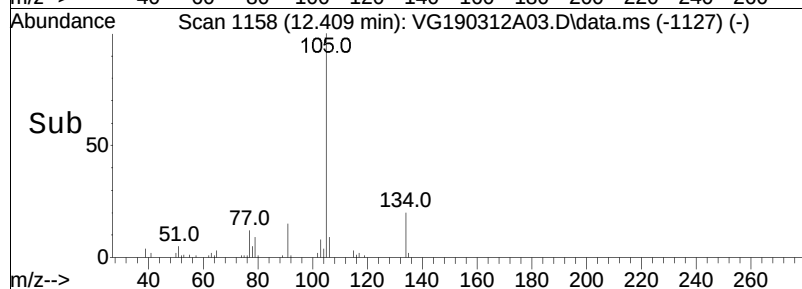
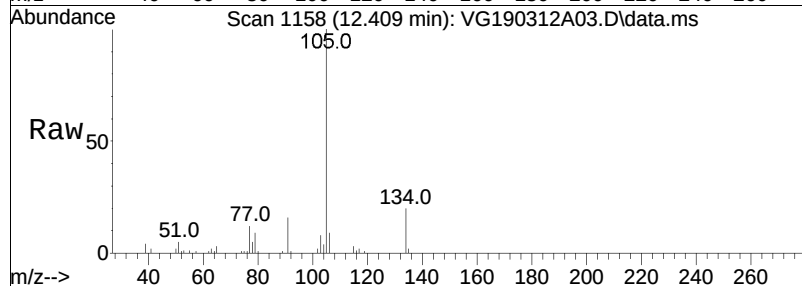
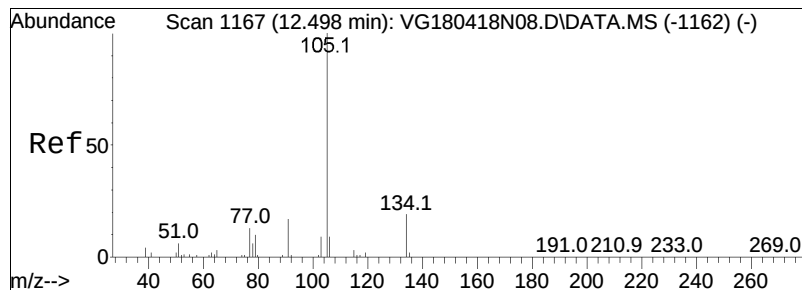




#97
 1,2,4-Trimethylbenzene
 Concen: 10.40 ug/L
 RT: 12.302 min Scan# 1147
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

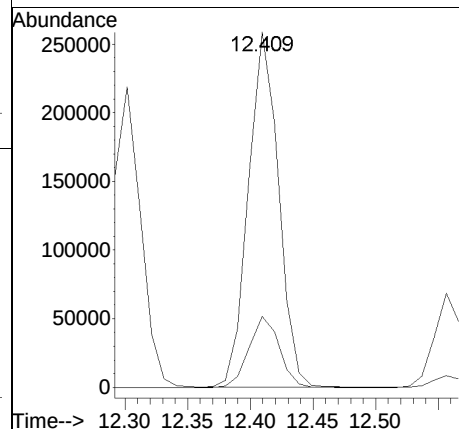
Tgt Ion	Ratio	Lower	Upper
105	100		
120	48.2	37.8	56.6

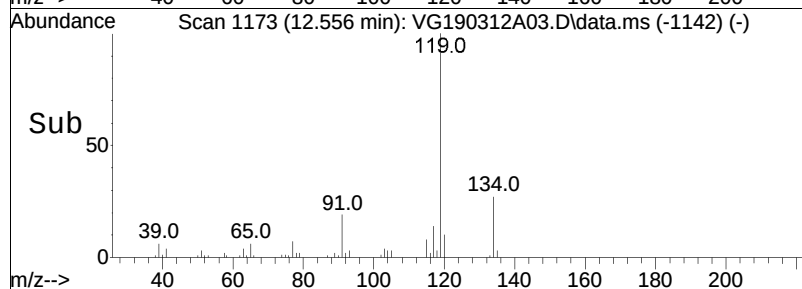
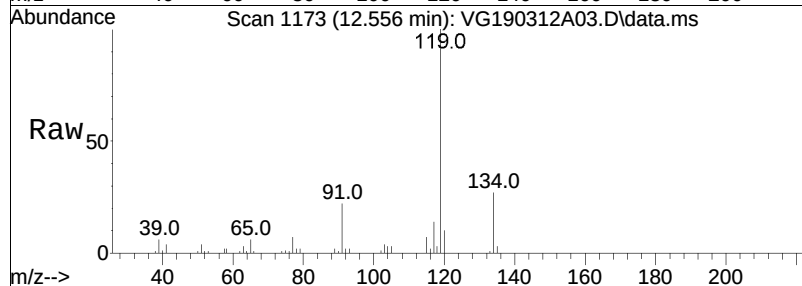
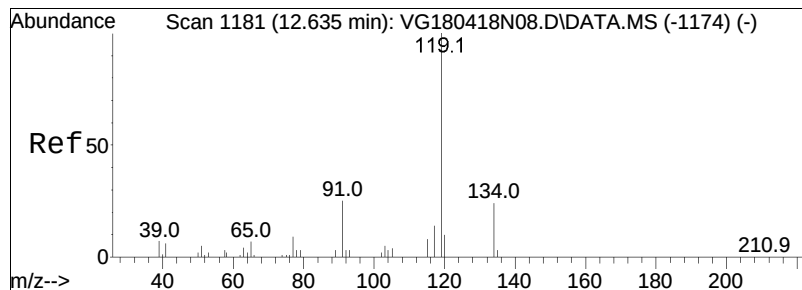




#98
 sec-Butylbenzene
 Concen: 10.17 ug/L
 RT: 12.409 min Scan# 1158
 Delta R.T. -0.001 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

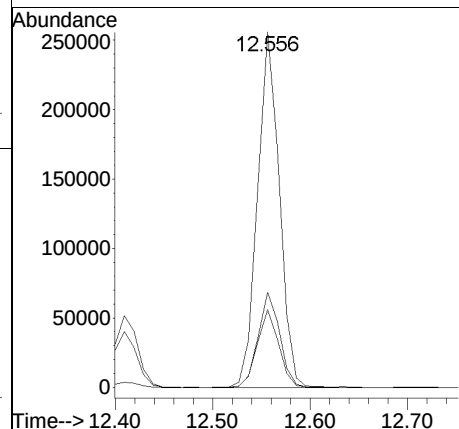
Tgt Ion	Ratio	Lower	Upper
105	100		
134	20.1	13.3	27.7

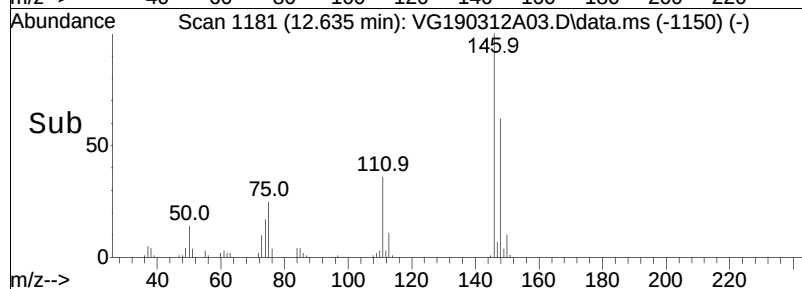
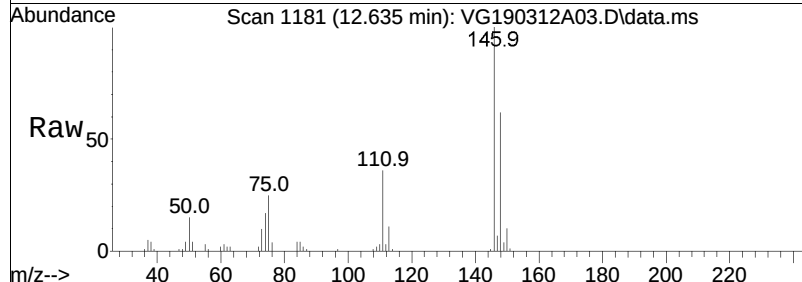
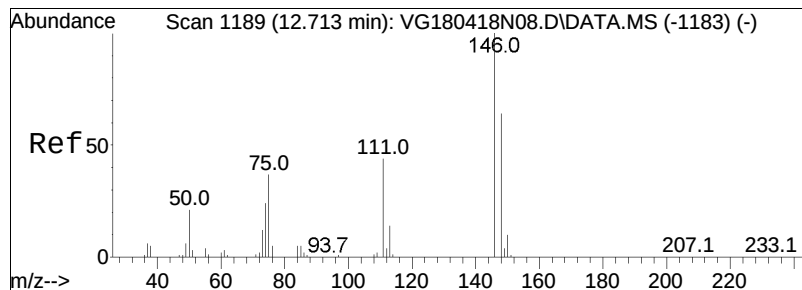




#99
 p-Isopropyltoluene
 Concen: 10.17 ug/L
 RT: 12.556 min Scan# 1173
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

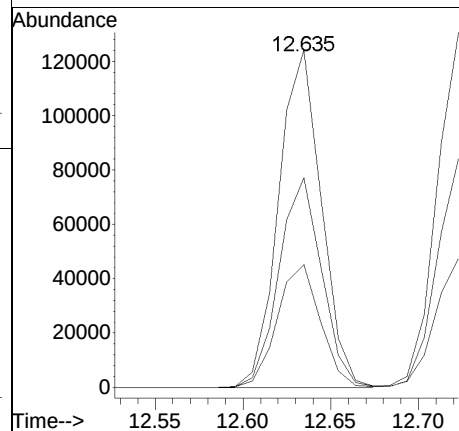
Tgt Ion	Ratio	Resp	Lower	Upper
119	100	398577		
134	26.4		17.5	36.3
91	21.6		14.6	30.4

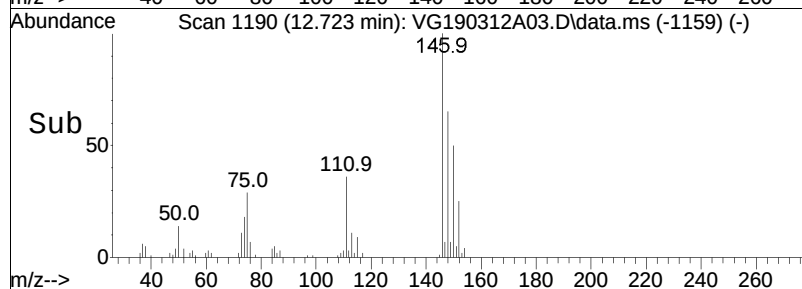
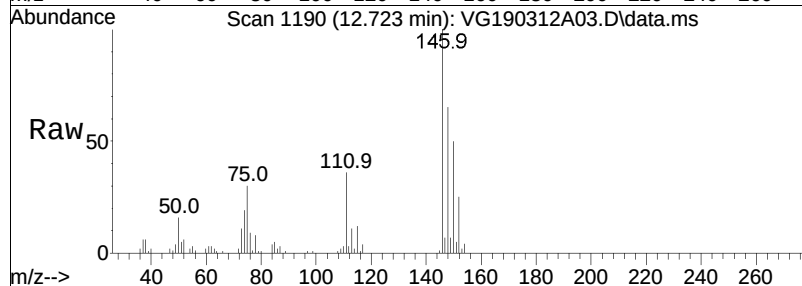
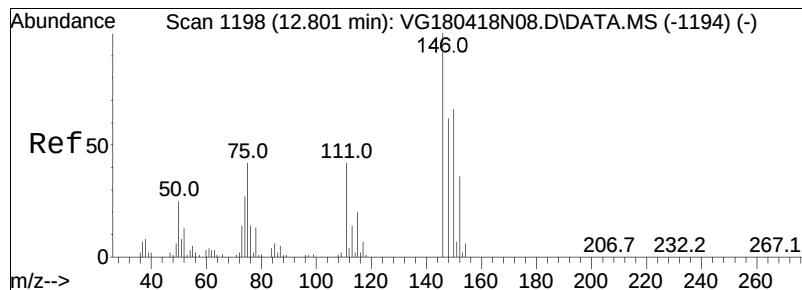




#100
 1,3-Dichlorobenzene
 Concen: 10.60 ug/L
 RT: 12.635 min Scan# 1181
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

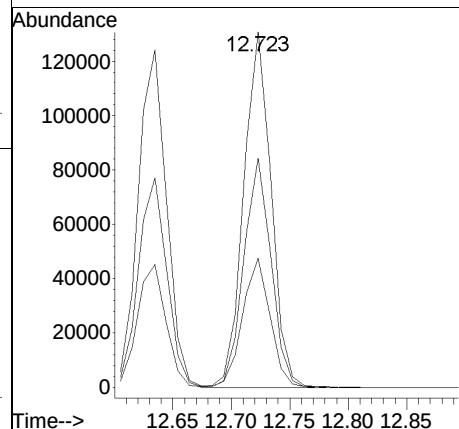
Tgt Ion	Ratio	Resp	Lower	Upper
146	100	209986		
111	37.0		24.4	50.6
148	62.4		41.0	85.2

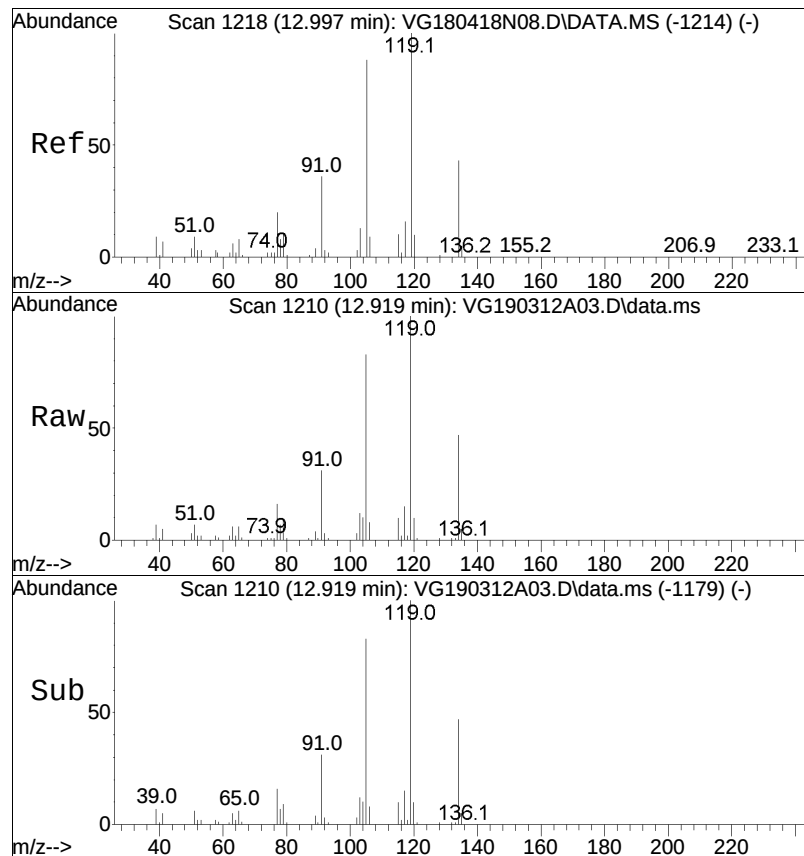




#101
 1,4-Dichlorobenzene
 Concen: 10.48 ug/L
 RT: 12.723 min Scan# 1190
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

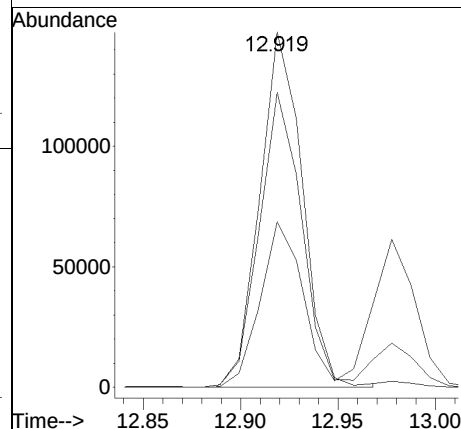
Tgt Ion	Ratio	Lower	Upper
146	100		
111	36.6	29.3	43.9
148	64.1	51.2	76.8

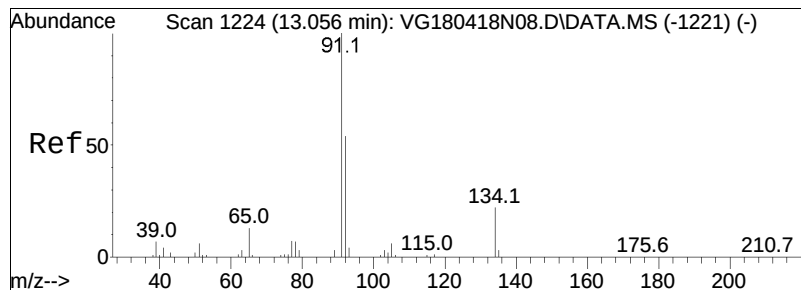




#102
 p-Diethylbenzene
 Concen: 9.98 ug/L
 RT: 12.919 min Scan# 1210
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

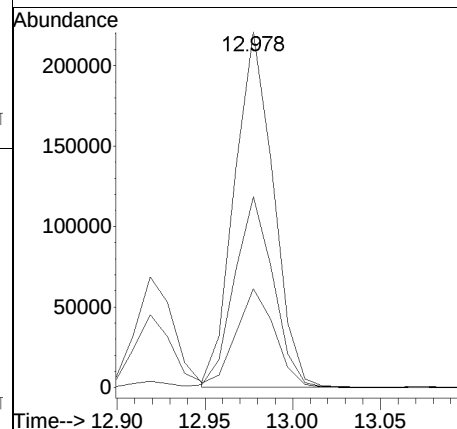
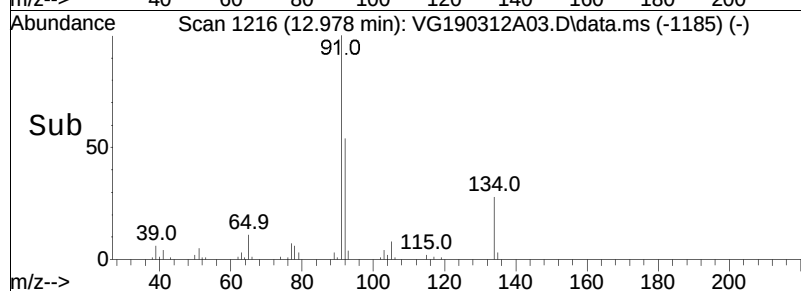
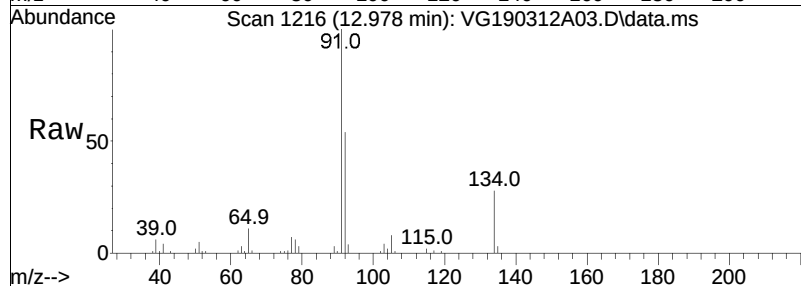
Tgt	Ion:119	Resp:	224287
Ion	Ratio	Lower	Upper
119	100		
105	83.0	53.9	112.1
134	46.7	32.0	66.6

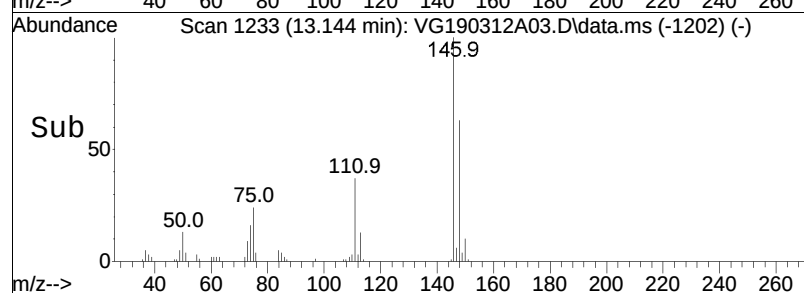
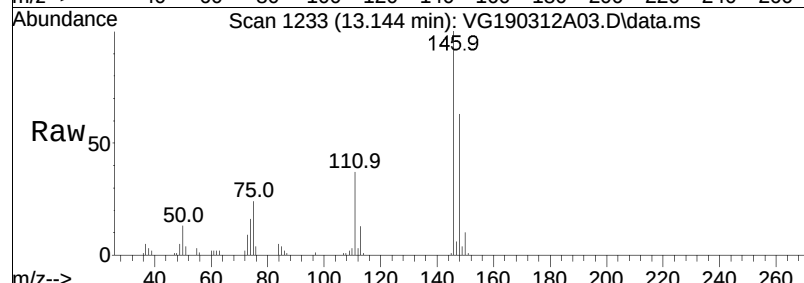
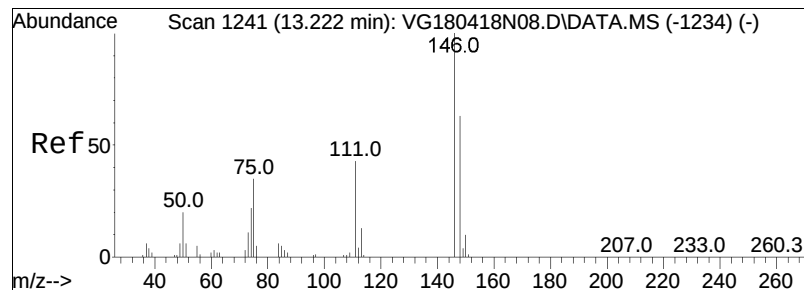




#103
 n-Butylbenzene
 Concen: 10.20 ug/L
 RT: 12.978 min Scan# 1216
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

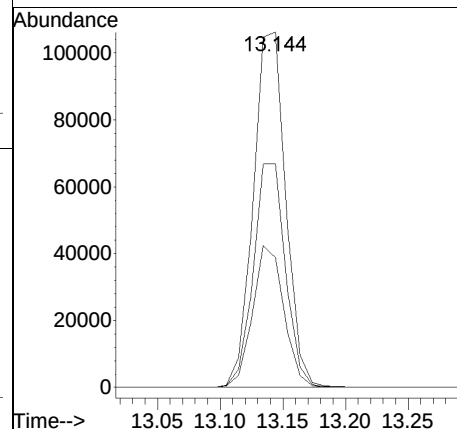
Tgt Ion	Ratio	Resp	Lower	Upper
91	100	340402		
92	53.9		43.8	65.8
134	27.7		22.0	33.0

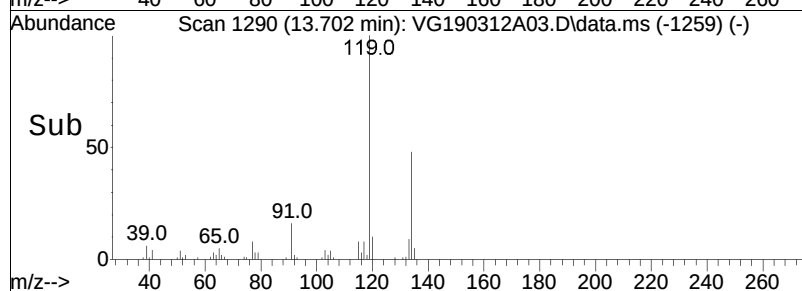
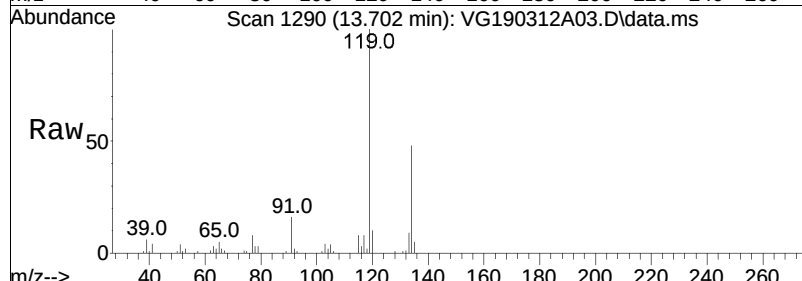
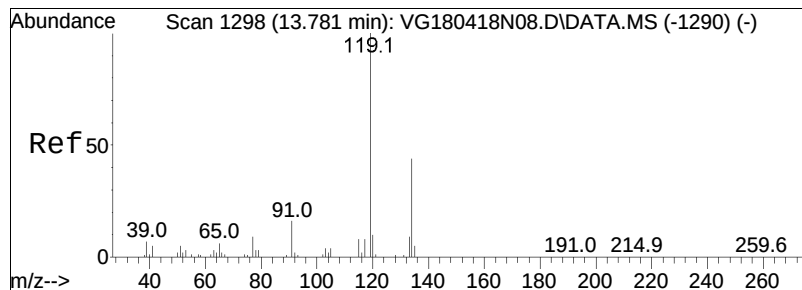




#104
 1,2-Dichlorobenzene
 Concen: 10.78 ug/L
 RT: 13.144 min Scan# 1233
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

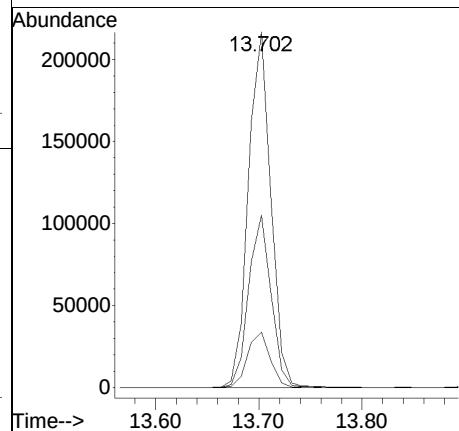
Tgt Ion	Ratio	Resp	Lower	Upper
146	100	191016		
111	38.5		25.4	52.8
148	62.4		41.7	86.5

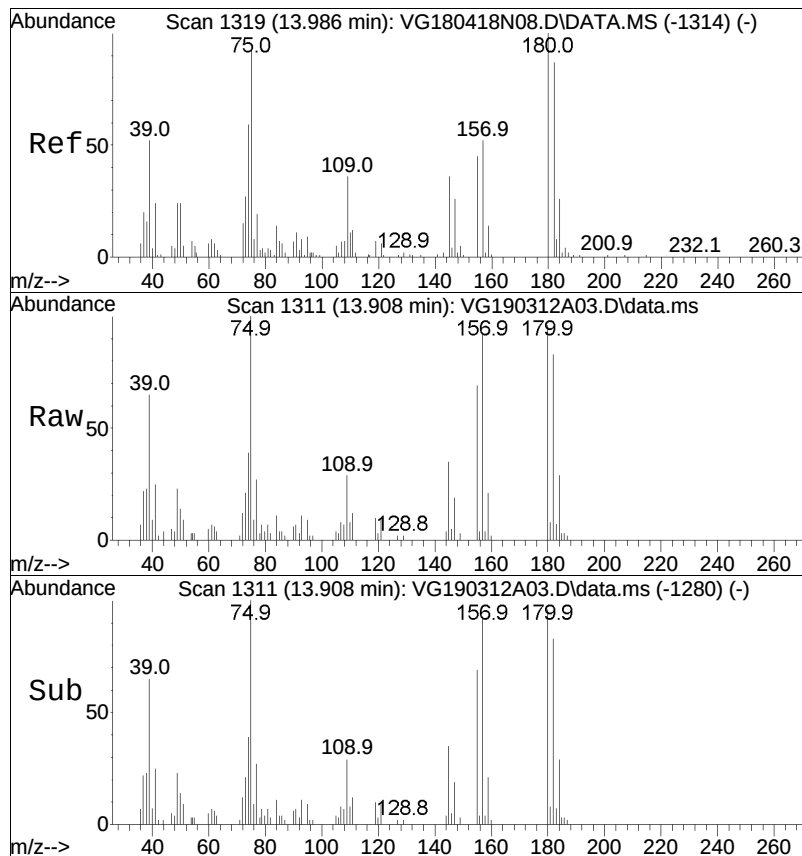




#105
 1,2,4,5-Tetramethylbenzene
 Concen: 10.21 ug/L
 RT: 13.702 min Scan# 1290
 Delta R.T. -0.001 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

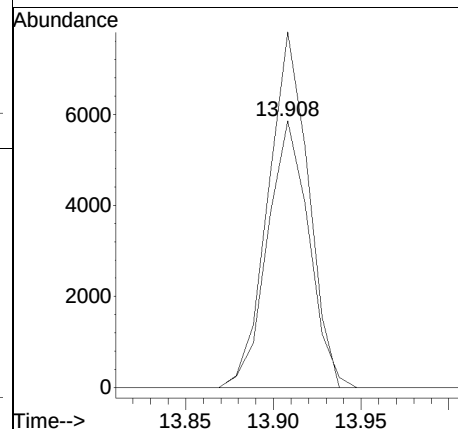
Tgt Ion:	119	Resp:	327838
Ion Ratio	Lower	Upper	
119	100		
134	48.3	32.7	67.9
91	15.7	9.9	20.7

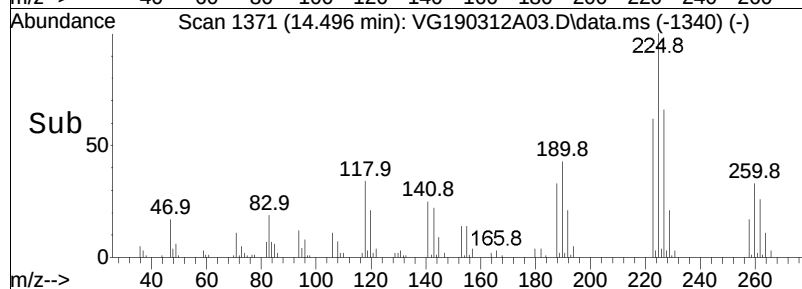
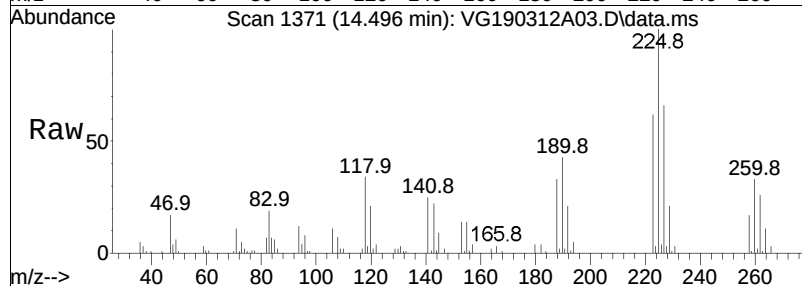
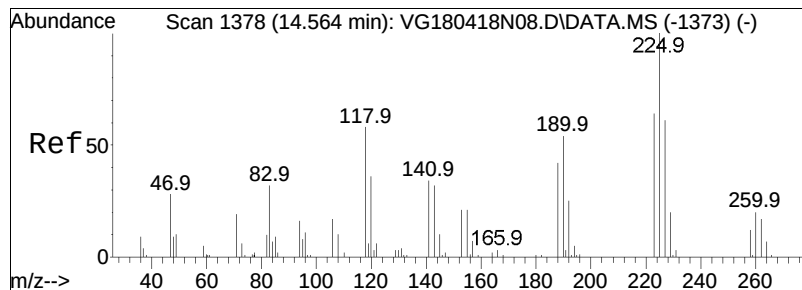




#106
 1,2-Dibromo-3-chloropropane
 Concen: 9.88 ug/L
 RT: 13.908 min Scan# 1311
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

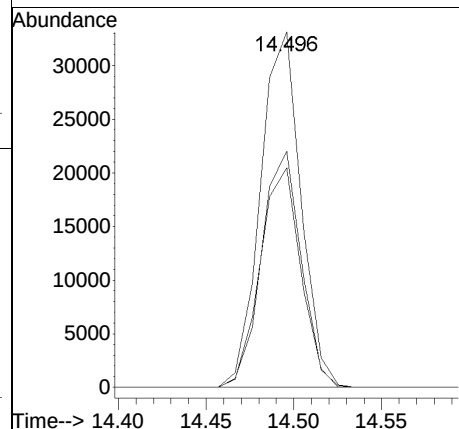
Tgt Ion	Ratio	Lower	Upper
155	100		
157	128.4	99.9	149.9

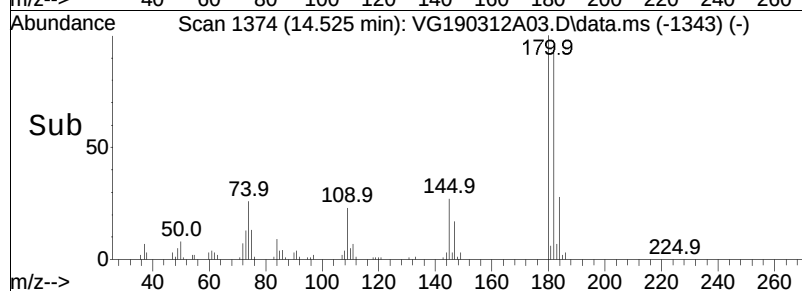
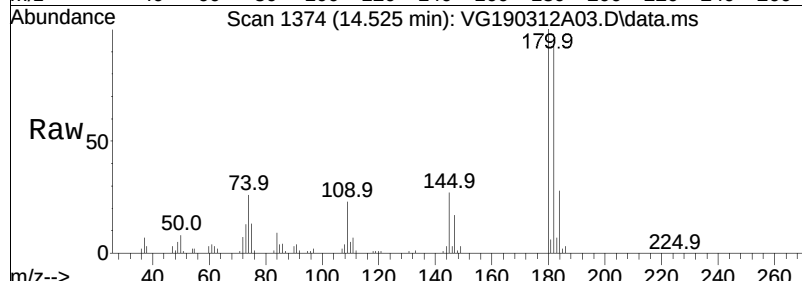
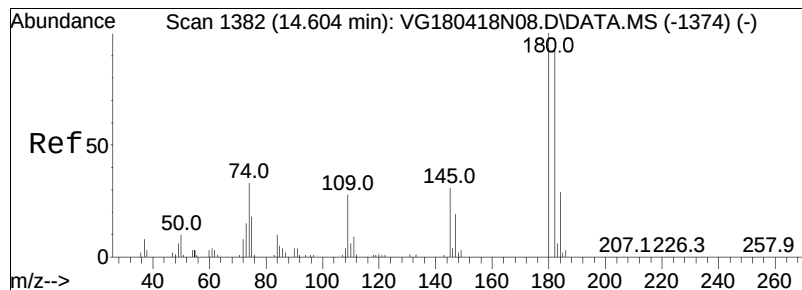




#108
 Hexachlorobutadiene
 Concen: 8.52 ug/L
 RT: 14.496 min Scan# 1371
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

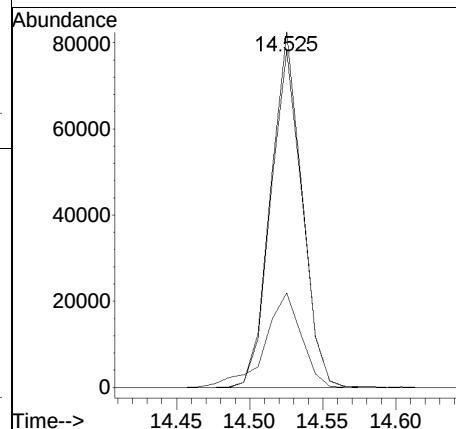
Tgt	Ion	Ratio	Resp	Lower	Upper
225	100		53235		
223	62.1	50.1		75.1	
227	65.2	50.2		75.4	

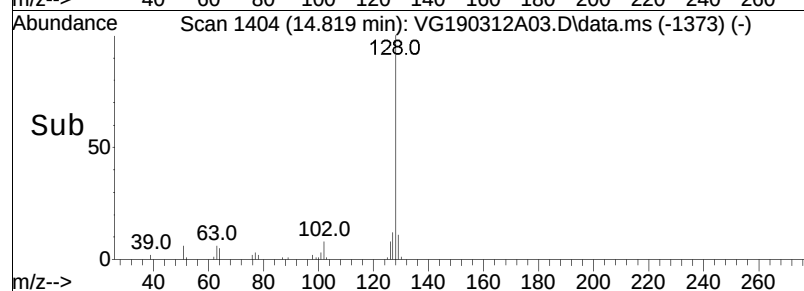
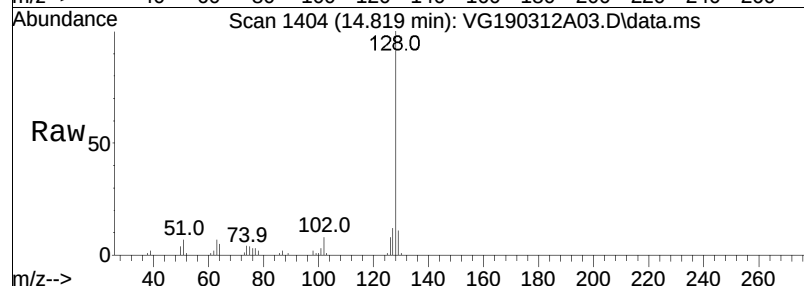
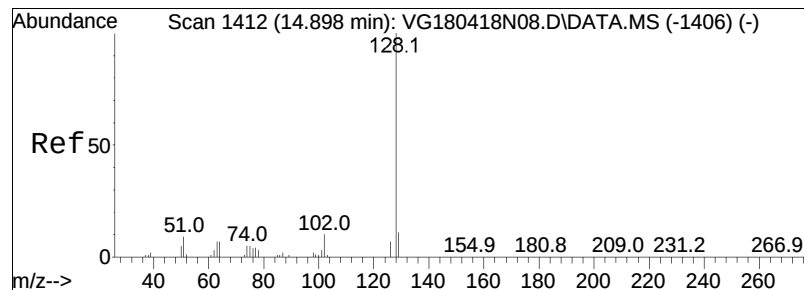




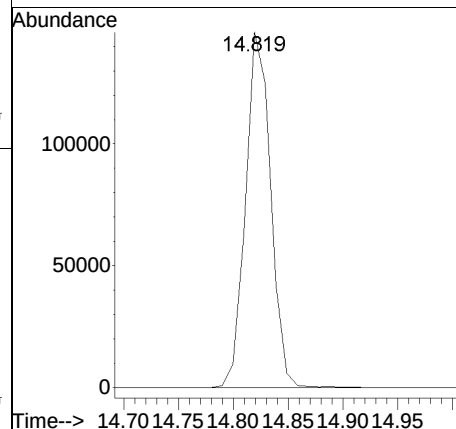
#109
 1,2,4-Trichlorobenzene
 Concen: 9.98 ug/L
 RT: 14.525 min Scan# 1374
 Delta R.T. 0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

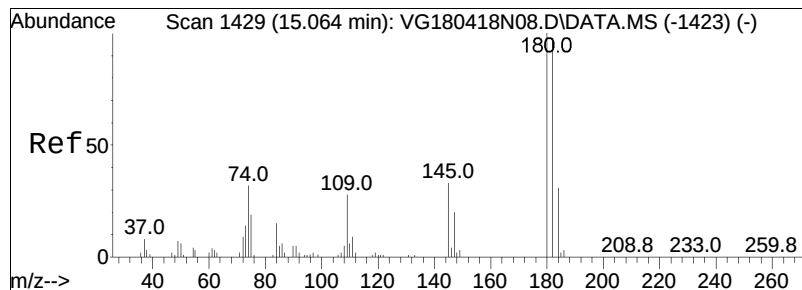
Tgt Ion	Ratio	Resp	Lower	Upper
180	100	122591		
182	95.8	76.7	115.1	
145	31.1	26.5	39.7	





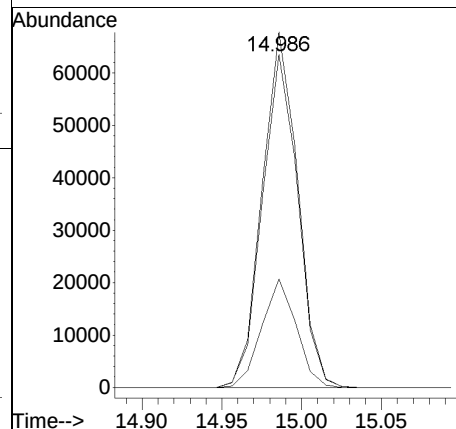
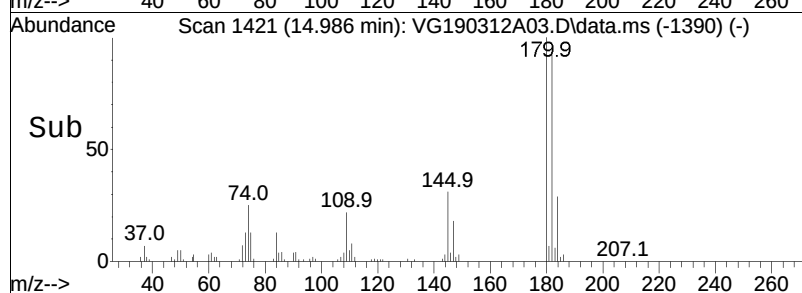
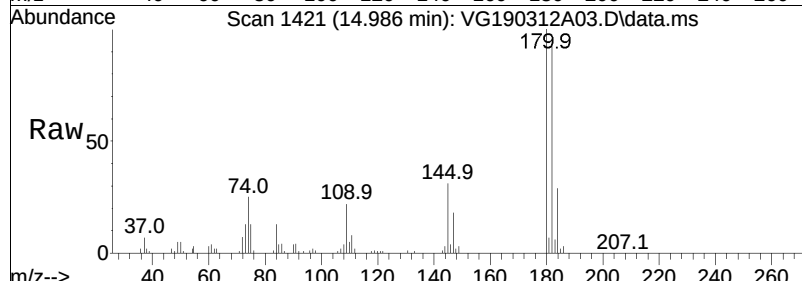
#110
Naphthalene
Concen: 10.90 ug/L
RT: 14.819 min Scan# 1404
Delta R.T. 0.000 min
Lab File: VG190312A03.D
Acq: 12 Mar 2019 8:57
Tgt Ion:128 Resp: 231400





#111
 1,2,3-Trichlorobenzene
 Concen: 10.38 ug/L
 RT: 14.986 min Scan# 1421
 Delta R.T. -0.000 min
 Lab File: VG190312A03.D
 Acq: 12 Mar 2019 8:57

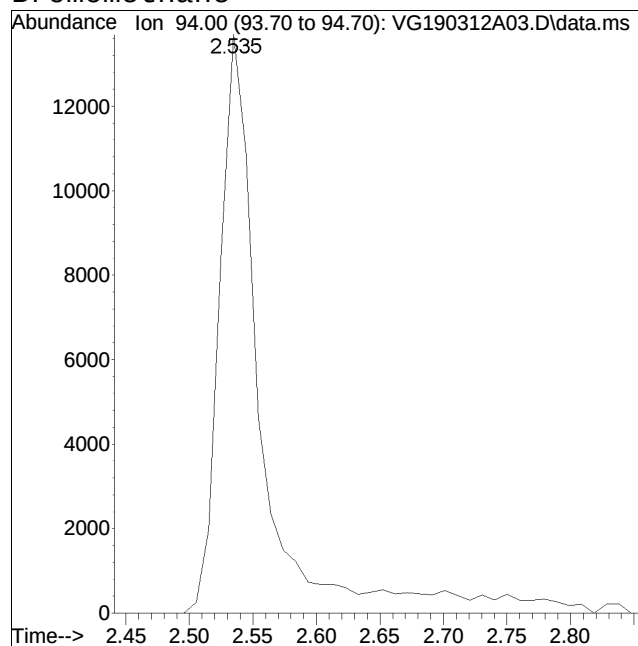
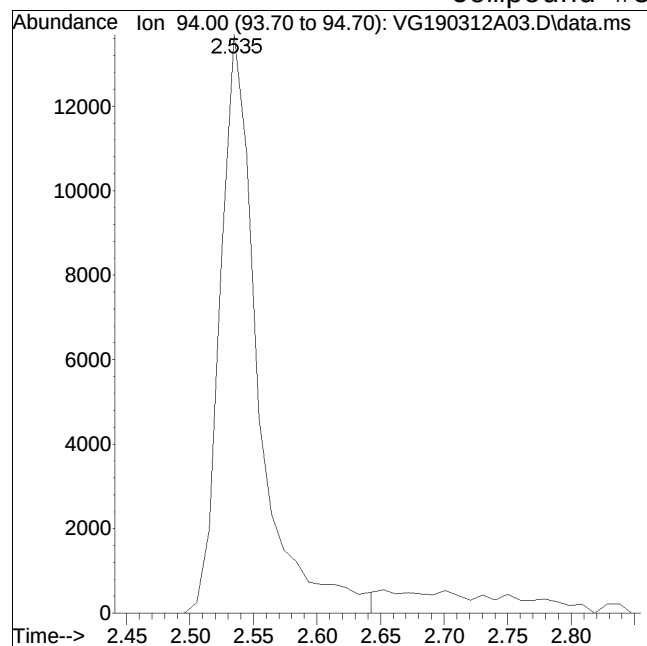
Tgt Ion	Ratio	Lower	Upper
180	100		
182	93.6	77.0	115.4
145	29.7	24.1	36.1



Manual Integration Report

Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190312A03.D Operator : GONZO:PD
Date Inj'd : 3/12/2019 8:57 Instrument : Gonzo
Sample : WG1214926-4,31,10,10 Quant Date : 3/12/2019 9:44 am

Compound #5: Bromomethane



Original Peak Response = 28561

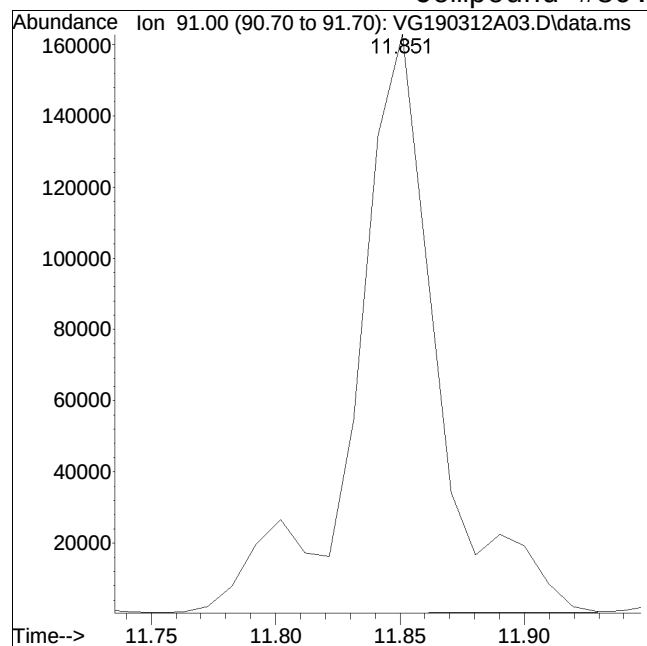
Manual Peak Response = 32328 M1

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

Manual Integration Report

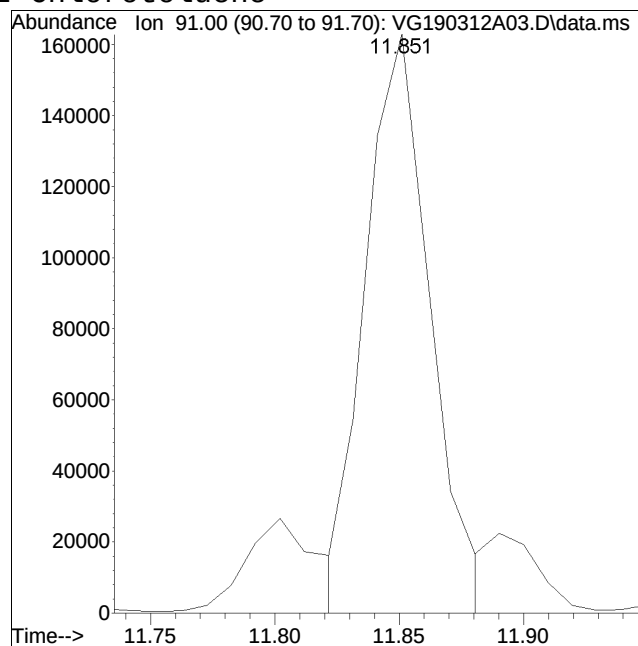
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190312A03.D Operator : GONZO:PD
Date Inj'd : 3/12/2019 8:57 Instrument : Gonzo
Sample : WG1214926-4,31,10,10 Quant Date : 3/12/2019 9:44 am

Compound #89: 2-Chlorotoluene



Original Peak Response = 374708

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

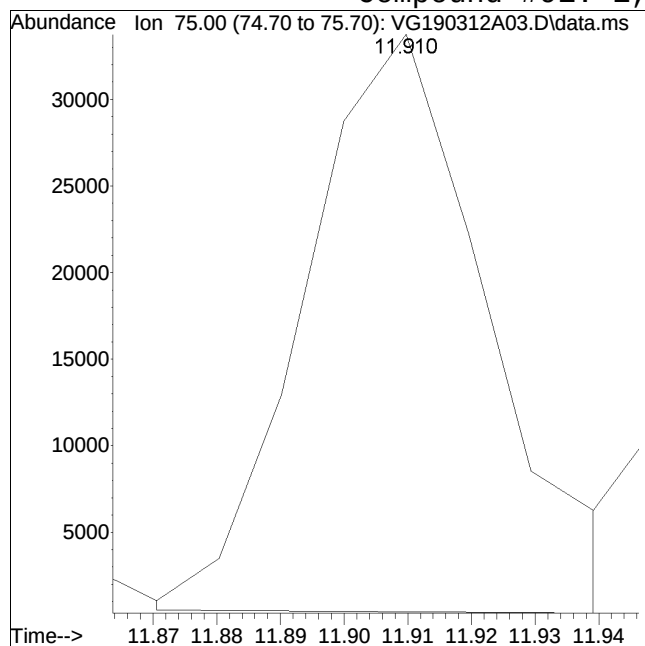


Manual Peak Response = 294608 M1

Manual Integration Report

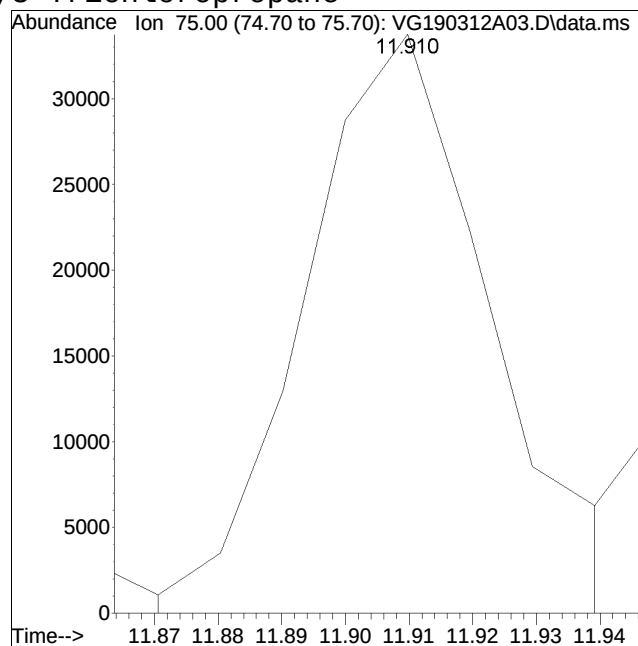
Data Path : I:\VOLATILES\Gonzo\2019\19QMethod : G_190227N_8260.m
Data File : VG190312A03.D Operator : GONZO:PD
Date Inj'd : 3/12/2019 8:57 Instrument : Gonzo
Sample : WG1214926-4,31,10,10 Quant Date : 3/12/2019 9:44 am

Compound #91: 1,2,3-Trichloropropane



Original Peak Response = 66419

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



Manual Peak Response = 68201 M1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N03.D
 Acq On : 12 Mar 2019 6:51 pm
 Operator : VOA108:KJD
 Sample : WG1215235-4,31,10,10
 Misc : WG1215235,ICAL15519
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 19:43:42 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.551	96	305813	10.000	ug/L	0.00
Standard Area 1 = 304926			Recovery	=	100.29%	
59) Chlorobenzene-d5	8.526	117	208759	10.000	ug/L	0.00
Standard Area 1 = 209940			Recovery	=	99.44%	
79) 1,4-Dichlorobenzene-d4	10.007	152	103366	10.000	ug/L	0.00
Standard Area 1 = 100075			Recovery	=	103.29%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.575	113	80987	10.368	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.68%	
43) 1,2-Dichloroethane-d4	5.208	65	92739	10.563	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.63%	
60) Toluene-d8	7.241	98	289074	10.103	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.03%	
83) 4-Bromofluorobenzene	9.340	95	90595	8.957	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	89.57%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.975	85	55847	9.138	ug/L	97
3) Chloromethane	1.092	50	57531	9.557	ug/L	99
4) Vinyl chloride	1.150	62	68359	10.633	ug/L	97
5) Bromomethane	1.357	94	53578	9.678	ug/L	96
6) Chloroethane	1.440	64	66873	14.224	ug/L	96
7) Trichlorofluoromethane	1.543	101	119634	11.527	ug/L	96
8) Ethyl ether	1.780	74	33083	9.569	ug/L	70
10) 1,1-Dichloroethene	1.914	96	56694	9.861	ug/L	# 66
11) Carbon disulfide	1.920	76	174997	9.683	ug/L	100
15) Methylene chloride	2.408	84	67503	9.856	ug/L	70
17) Acetone	2.466	43	11658	9.807	ug/L	99
18) trans-1,2-Dichloroethene	2.558	96	64449	9.881	ug/L	74
20) Methyl tert-butyl ether	2.687	73	145355	8.484	ug/L	92
23) 1,1-Dichloroethane	3.208	63	115401	10.002	ug/L	98
25) Acrylonitrile	3.275	53	16808	9.395	ug/L	91
27) Vinyl acetate	3.582	43	115266	8.426	ug/L	# 93
28) cis-1,2-Dichloroethene	3.905	96	71656	9.679	ug/L	# 68
29) 2,2-Dichloropropane	4.048	77	84039	8.864	ug/L	95
30) Bromochloromethane	4.179	128	34963	10.218	ug/L	# 56
32) Chloroform	4.335	83	122524	10.170	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N03.D
 Acq On : 12 Mar 2019 6:51 pm
 Operator : VOA108:KJD
 Sample : WG1215235-4,31,10,10
 Misc : WG1215235,ICAL15519
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 19:43:42 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Carbon tetrachloride	4.455	117	92152	10.236	ug/L	97
37) 1,1,1-Trichloroethane	4.552	97	101466	9.657	ug/L #	97
39) 2-Butanone	4.759	43	18807	9.053	ug/L #	67
40) 1,1-Dichloropropene	4.728	75	82912	9.859	ug/L	96
41) Benzene	5.032	78	262399	9.993	ug/L	90
44) 1,2-Dichloroethane	5.291	62	92846	10.277	ug/L	98
48) Trichloroethene	5.740	95	69916	9.999	ug/L	95
50) Dibromomethane	6.186	93	41895	10.218	ug/L	96
51) 1,2-Dichloropropane	6.298	63	65796	9.662	ug/L	99
54) Bromodichloromethane	6.407	83	95197	9.968	ug/L	98
57) 1,4-Dioxane	6.630	88	24087	808.813	ug/L #	65
58) cis-1,3-Dichloropropene	7.062	75	98323	9.185	ug/L	90
61) Toluene	7.288	92	163215	10.032	ug/L	96
62) 4-Methyl-2-pentanone	7.692	58	15364	8.376	ug/L #	92
63) Tetrachloroethene	7.639	166	67797	9.705	ug/L	93
65) trans-1,3-Dichloropropene	7.706	75	83897	9.134	ug/L	94
68) 1,1,2-Trichloroethane	7.837	83	48617	10.431	ug/L	93
69) Chlorodibromomethane	7.968	129	69657	10.157	ug/L	99
70) 1,3-Dichloropropane	8.047	76	96227	10.226	ug/L	99
71) 1,2-Dibromoethane	8.127	107	54960	9.912	ug/L	100
72) 2-Hexanone	8.364	43	25531	8.040	ug/L #	95
73) Chlorobenzene	8.537	112	182999	10.112	ug/L	90
74) Ethylbenzene	8.576	91	293204	9.665	ug/L	98
75) 1,1,1,2-Tetrachloroethane	8.596	131	68103	10.053	ug/L	94
76) p/m Xylene	8.682	106	218546	18.940	ug/L	96
77) o Xylene	8.964	106	213116	18.655	ug/L	92
78) Styrene	9.003	104	356527	19.538	ug/L	88
80) Bromoform	9.006	173	40738	9.468	ug/L	97
82) Isopropylbenzene	9.173	105	289809	9.604	ug/L	98
84) Bromobenzene	9.396	156	70327	9.056	ug/L	95
85) n-Propylbenzene	9.430	91	344141	9.991	ug/L	97
87) 1,1,2,2-Tetrachloroethane	9.483	83	71484	10.200	ug/L	99
88) 4-Ethyltoluene	9.499	105	280607	9.781	ug/L	95
89) 2-Chlorotoluene	9.513	91	237794	9.458	ug/L	95
90) 1,3,5-Trimethylbenzene	9.555	105	236867	9.561	ug/L	91
91) 1,2,3-Trichloropropane	9.552	75	57272	10.518	ug/L	99
92) trans-1,4-Dichloro-2-b...	9.586	53	15511	8.085	ug/L	86
93) 4-Chlorotoluene	9.617	91	206219	9.428	ug/L	94
94) tert-Butylbenzene	9.742	119	215702	8.473	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
 Data File : V08190312N03.D
 Acq On : 12 Mar 2019 6:51 pm
 Operator : VOA108:KJD
 Sample : WG1215235-4,31,10,10
 Misc : WG1215235,ICAL15519
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 19:43:42 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190312N\V08190312N02.D
 Sub List : 8260-Curve - Megamix plus Diox

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

97)	1,2,4-Trimethylbenzene	9.784	105	227163	9.215	ug/L	93
98)	sec-Butylbenzene	9.845	105	323353	10.368	ug/L	99
99)	p-Isopropyltoluene	9.934	119	257550	9.619	ug/L	95
100)	1,3-Dichlorobenzene	9.962	146	143801	10.043	ug/L	97
101)	1,4-Dichlorobenzene	10.015	146	145138	9.787	ug/L	99
102)	p-Diethylbenzene	10.144	119	133673	8.531	ug/L	95
103)	n-Butylbenzene	10.174	91	241129	9.711	ug/L	98
104)	1,2-Dichlorobenzene	10.255	146	135573	9.708	ug/L	97
105)	1,2,4,5-Tetramethylben...	10.598	119	78563	3.507	ug/L	98
106)	1,2-Dibromo-3-chloropr...	10.710	155	8813	8.398	ug/L	92
108)	Hexachlorobutadiene	11.075	225	39723	8.818	ug/L	97
109)	1,2,4-Trichlorobenzene	11.089	180	54708	6.242	ug/L	97
110)	Naphthalene	11.267	128	119387	6.187	ug/L	100
111)	1,2,3-Trichlorobenzene	11.371	180	47434	5.987	ug/L	99

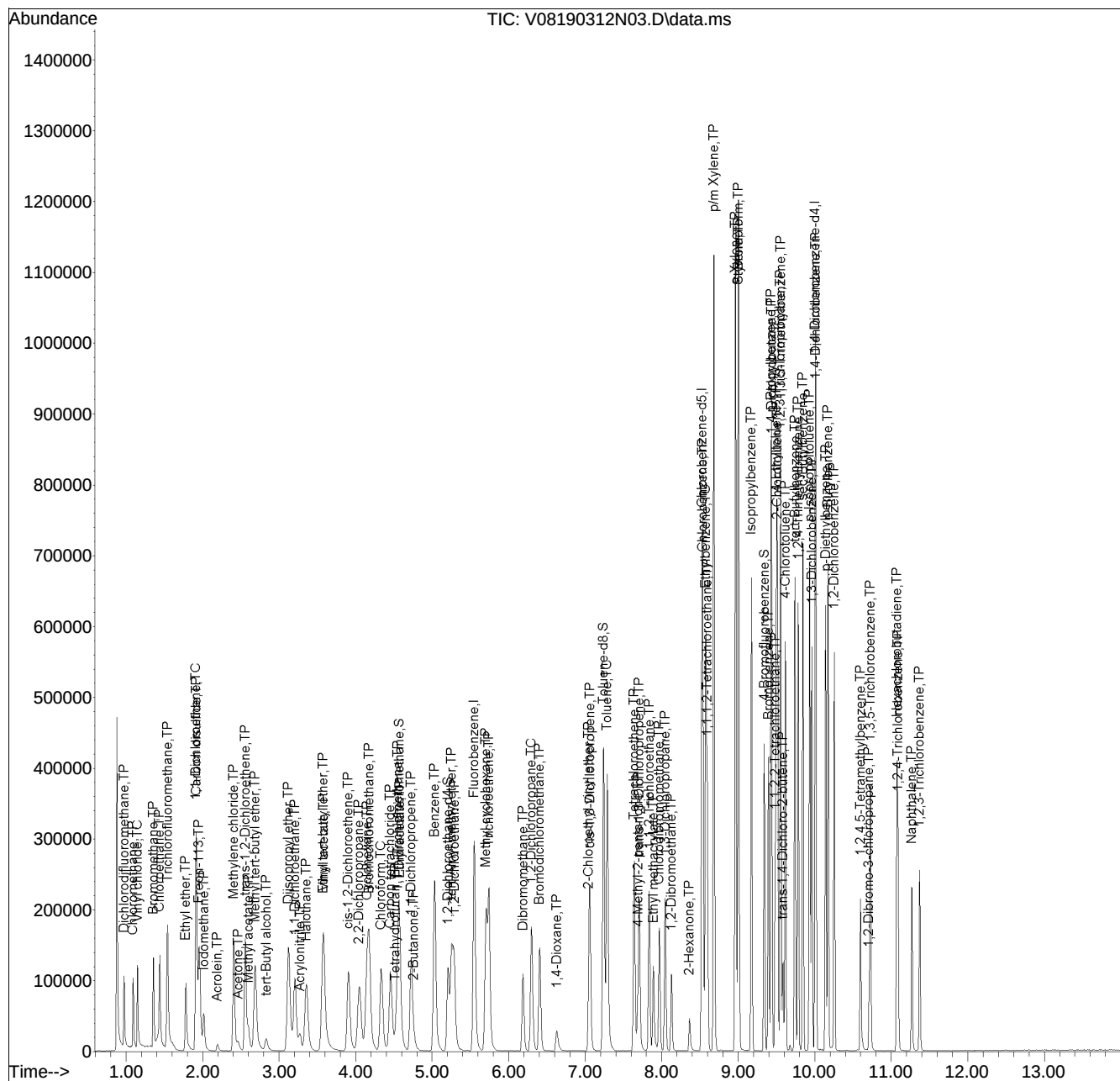
(#) = qualifier out of range (m) = manual integration (+) = signals summed

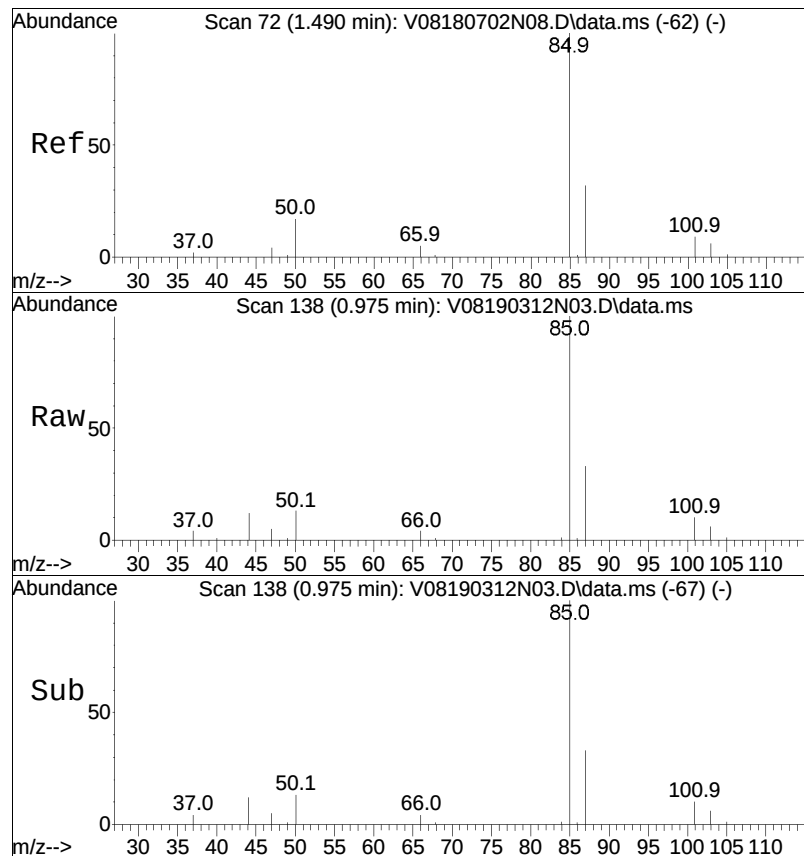
(QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190312N\
Data File : V08190312N03.D
Acq On : 12 Mar 2019 6:51 pm
Operator : VOA108:KJD
Sample : WG1215235-4, 31, 10, 10
Misc : WG1215235, ICAL15519
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 19:43:42 2019
Quant Method : I:\VOLATILES\VOA108\2019\190312N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Feb 19 00:08:39 2019
Response via : Initial Calibration

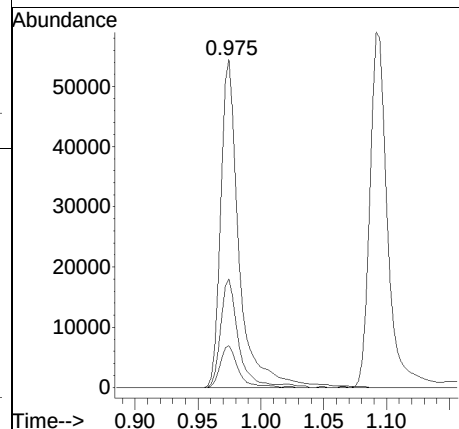
Sub List : 8260-Curve - Megamix plus Diox90312N\V08190312N02.D•

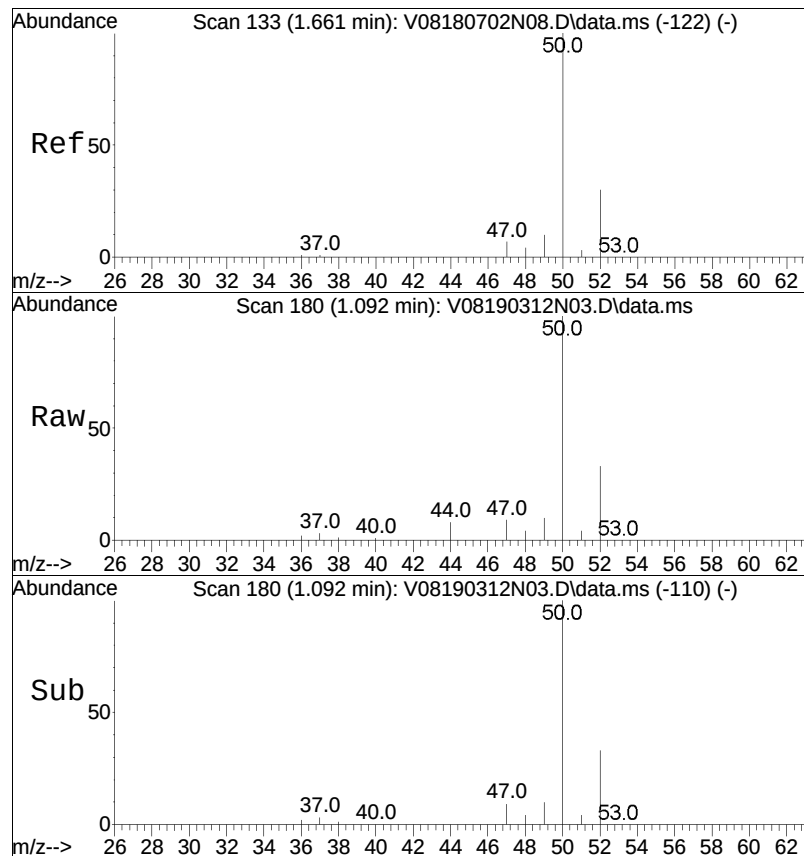




#2
 Dichlorodifluoromethane
 Concen: 9.14 ug/L
 RT: 0.975 min Scan# 138
 Delta R.T. -0.002 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

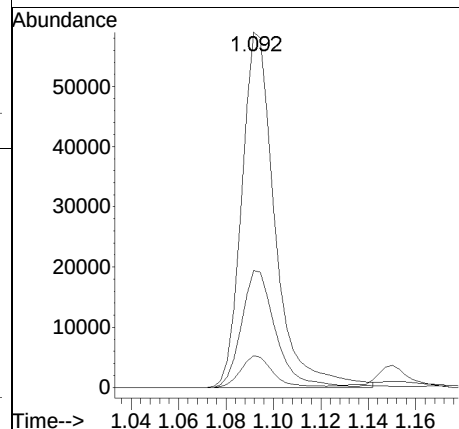
Tgt Ion:	85	Resp:	55847
Ion Ratio	Lower	Upper	
85	100		
87	31.2	21.0	43.6
50	12.1	8.9	18.5

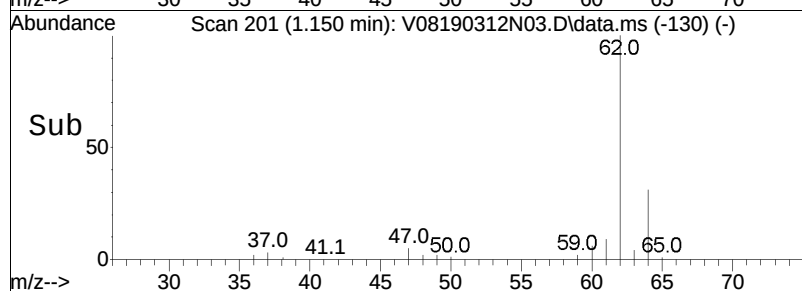
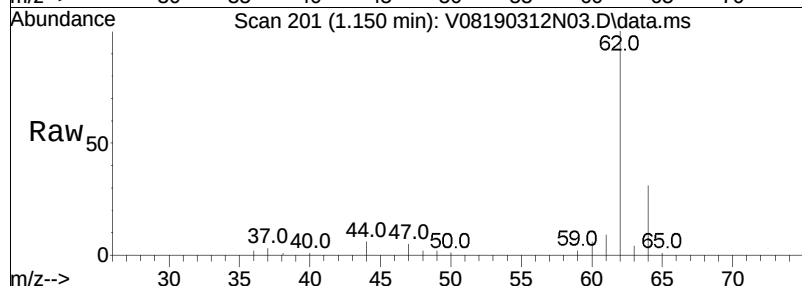
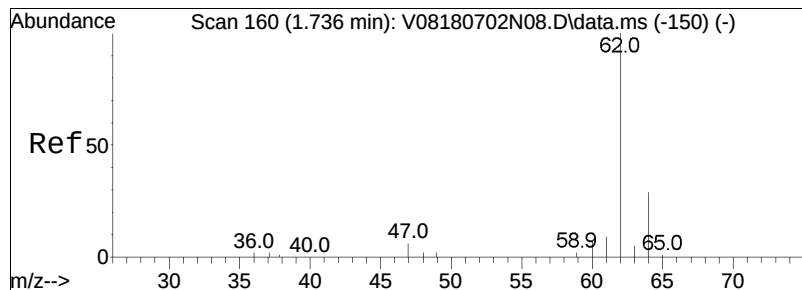




#3
 Chloromethane
 Concen: 9.56 ug/L
 RT: 1.092 min Scan# 180
 Delta R.T. -0.005 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

Tgt Ion:	50	Resp:	57531
Ion Ratio	Lower	Upper	
50	100		
52	33.7	12.9	52.9
47	8.7	0.0	28.3





#4

Vinyl chloride

Concen: 10.63 ug/L

RT: 1.150 min Scan# 201

Delta R.T. -0.003 min

Lab File: V08190312N03.D

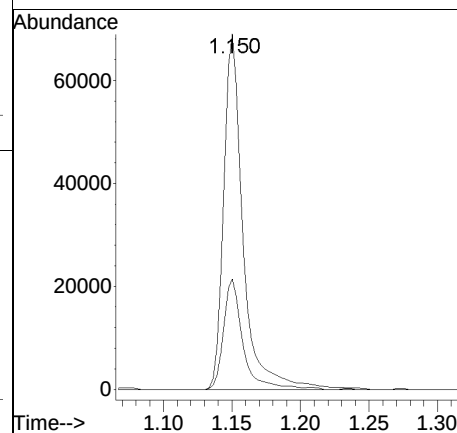
Acq: 12 Mar 2019 6:51 pm

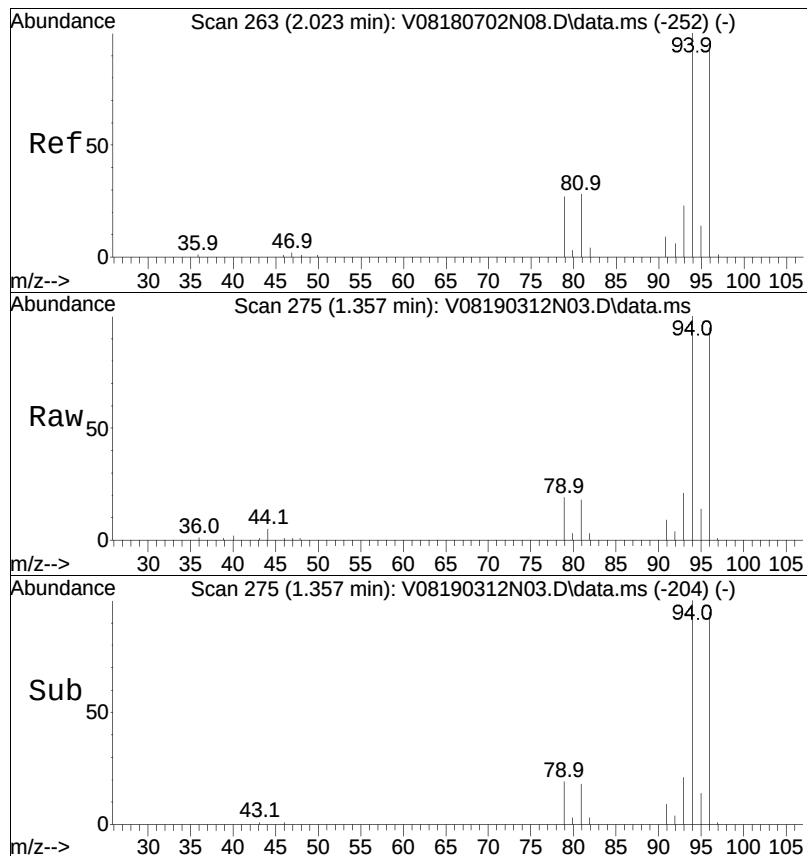
Tgt Ion: 62 Resp: 68359

Ion Ratio Lower Upper

62 100

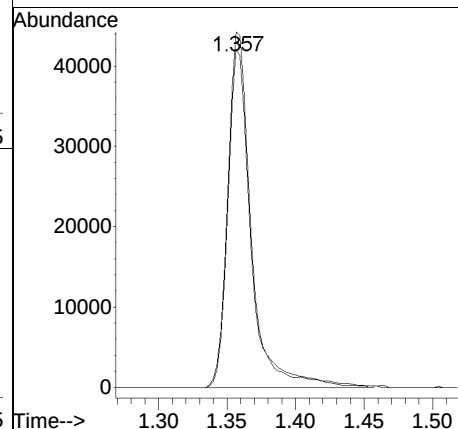
64 30.7 9.1 49.1

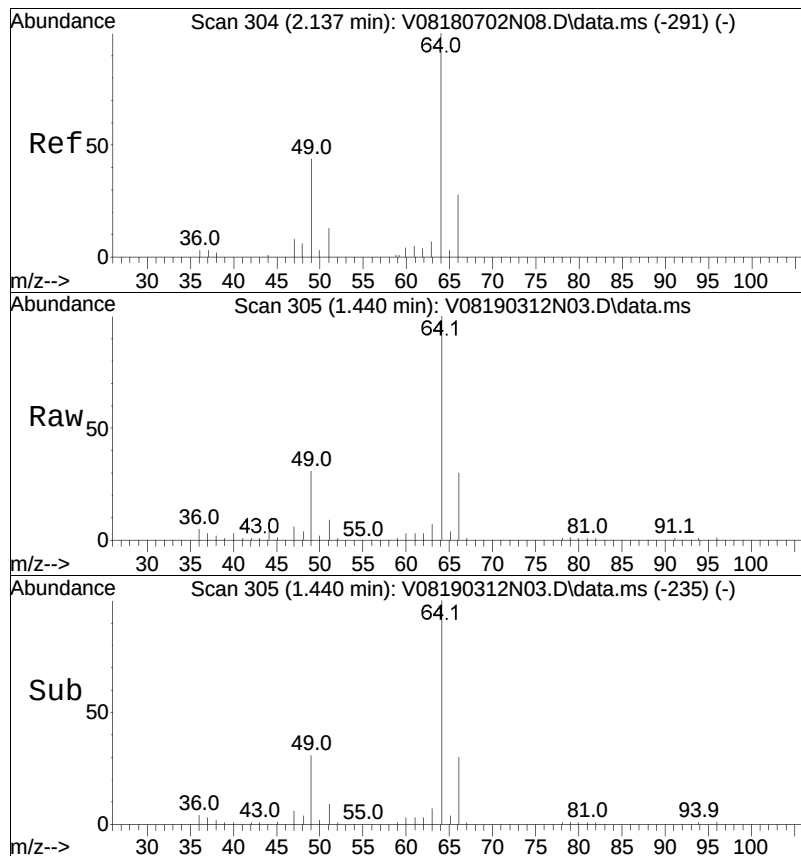




#5
 Bromomethane
 Concen: 9.68 ug/L
 RT: 1.357 min Scan# 275
 Delta R.T. -0.002 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

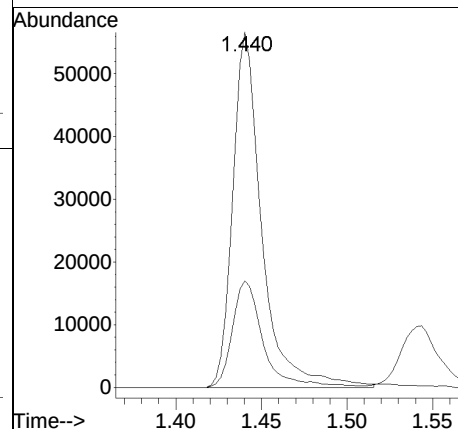
Tgt Ion	94	96	Ratio	Lower	Upper
Resp	53578				
Ion	100				
Ratio	92.1				
Lower	75.6				
Upper	115.6				

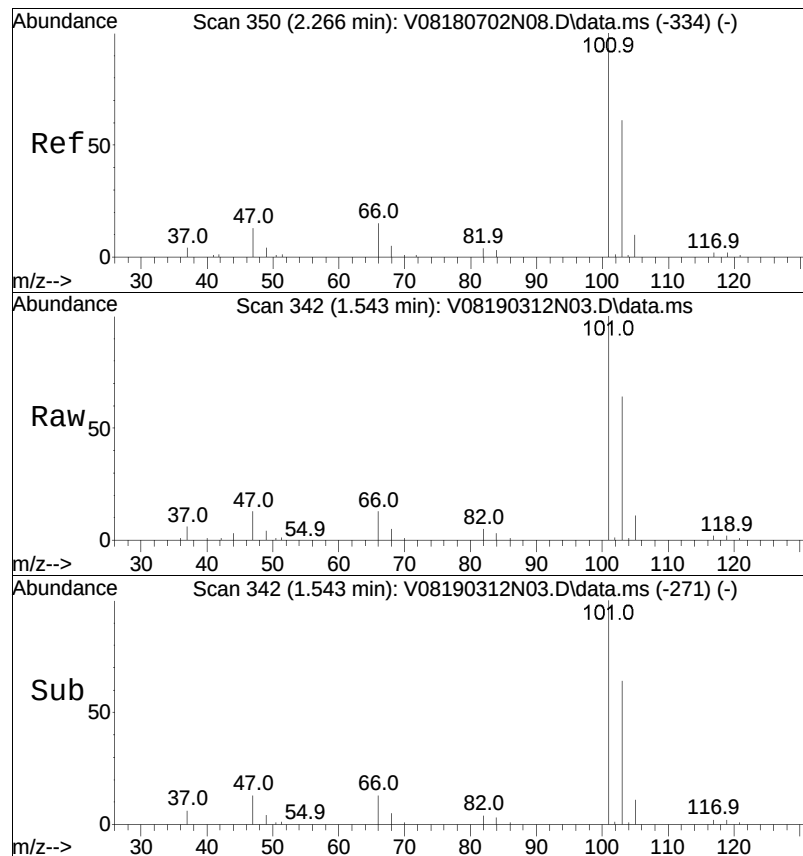




#6
 Chloroethane
 Concen: 14.22 ug/L
 RT: 1.440 min Scan# 305
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

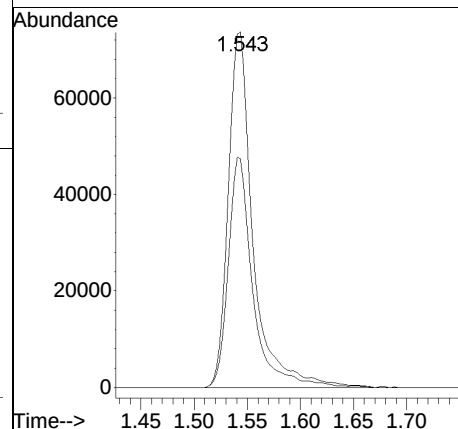
Tgt Ion	Ratio	Lower	Upper
64	100		
66	31.8	9.8	49.8

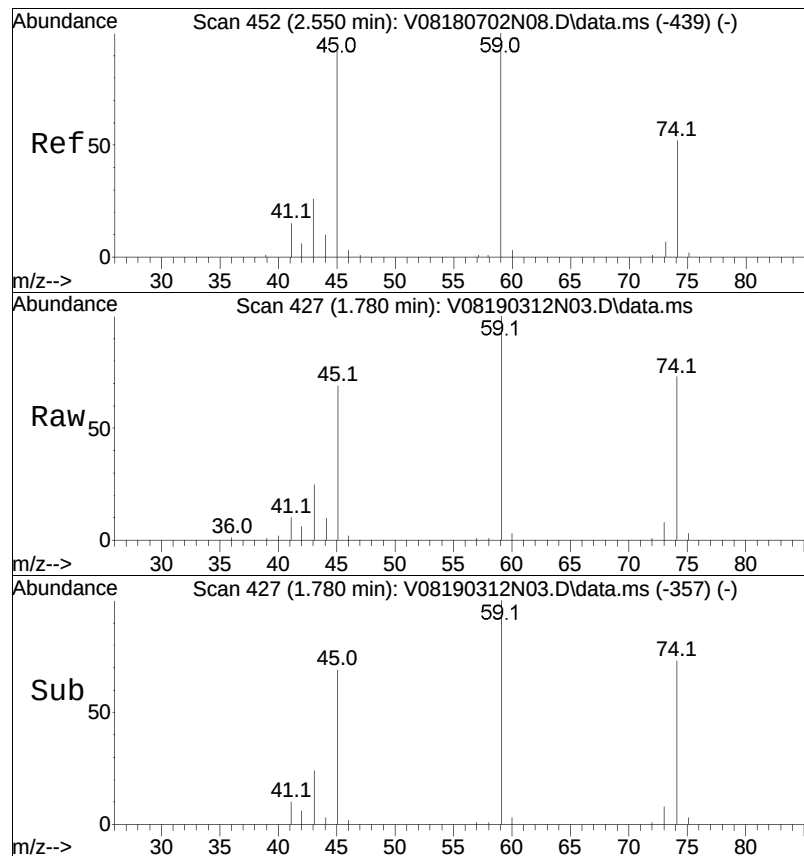




#7
 Trichlorofluoromethane
 Concen: 11.53 ug/L
 RT: 1.543 min Scan# 342
 Delta R.T. -0.003 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

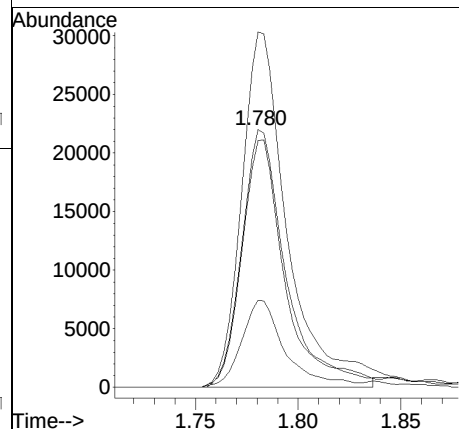
Tgt Ion	101	103	Ratio	Lower	Upper
Resp	119634				
Ion	100				
Ratio	64.2			53.8	80.6

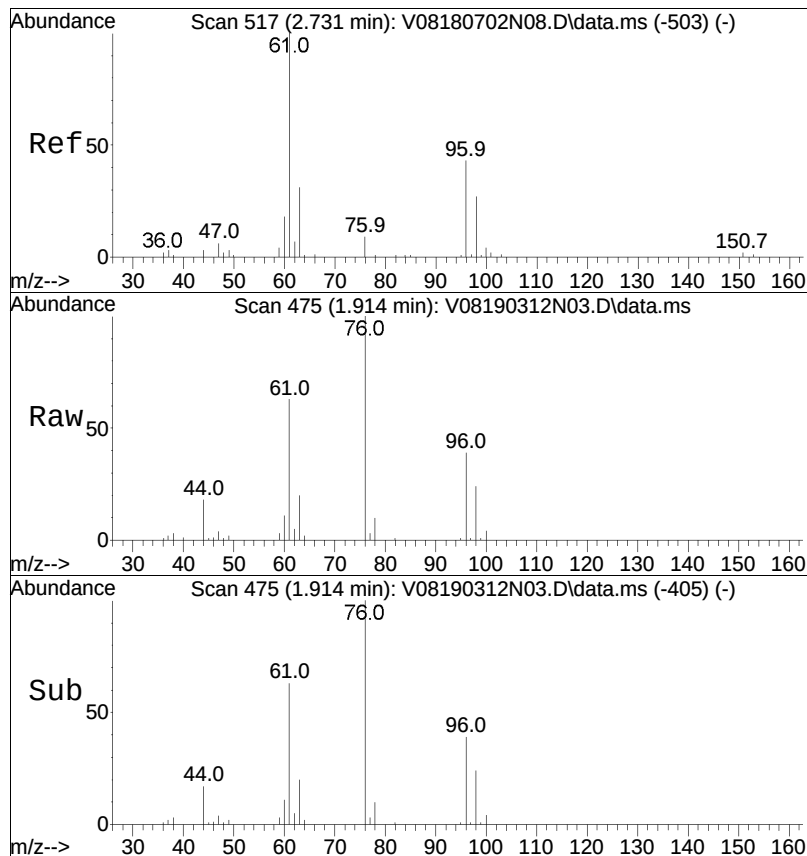




#8
 Ethyl ether
 Concen: 9.57 ug/L
 RT: 1.780 min Scan# 427
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

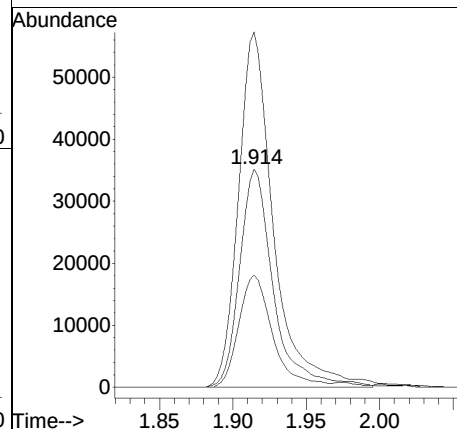
Tgt Ion:	74	Resp:	33083
Ion Ratio	Lower	Upper	
74	100		
59	145.8	122.2	253.8
45	95.0	91.9	190.9
43	33.5	25.2	52.2

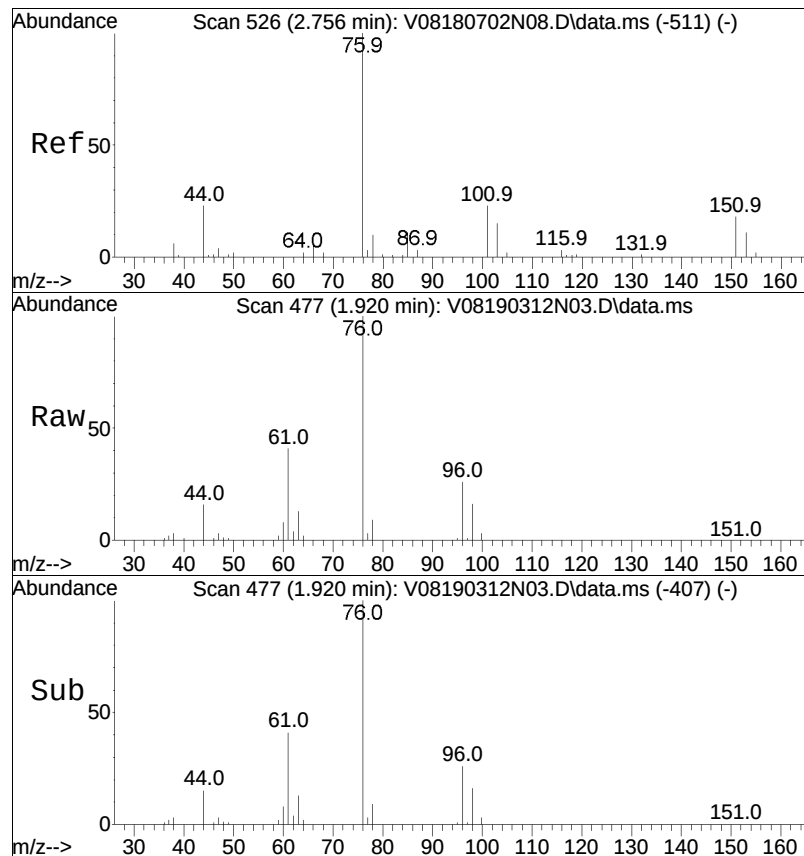




#10
 1,1-Dichloroethene
 Concen: 9.86 ug/L
 RT: 1.914 min Scan# 475
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

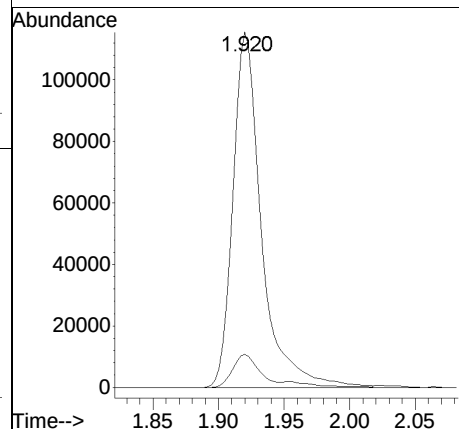
Tgt Ion:	96	Resp:	56694
Ion Ratio	Lower	Upper	
96	100		
61	170.4	186.1	279.1#
63	51.5	57.6	86.4#

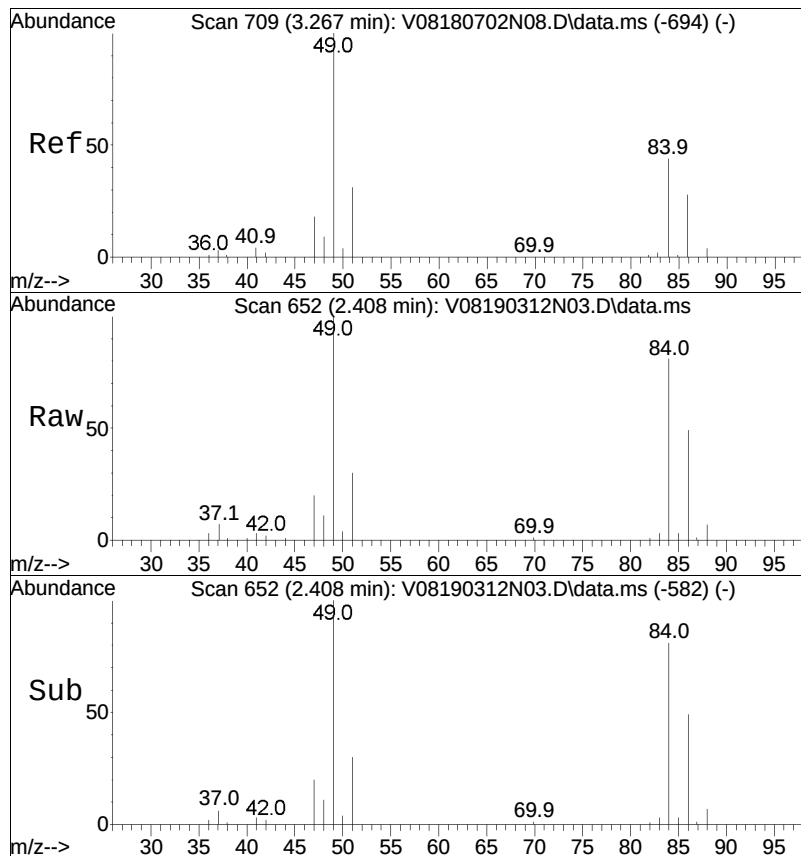




#11
Carbon disulfide
Concen: 9.68 ug/L
RT: 1.920 min Scan# 477
Delta R.T. -0.005 min
Lab File: V08190312N03.D
Acq: 12 Mar 2019 6:51 pm

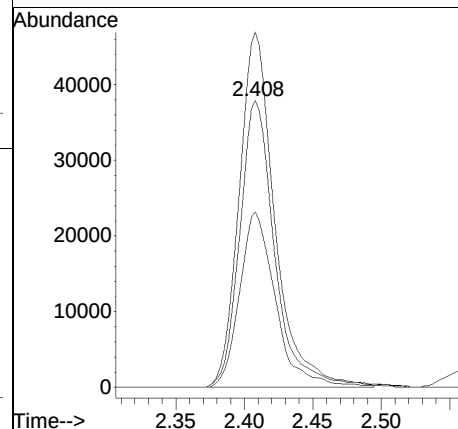
Tgt Ion: 76 Resp: 174997
Ion Ratio Lower Upper
76 100
78 8.7 5.7 11.7

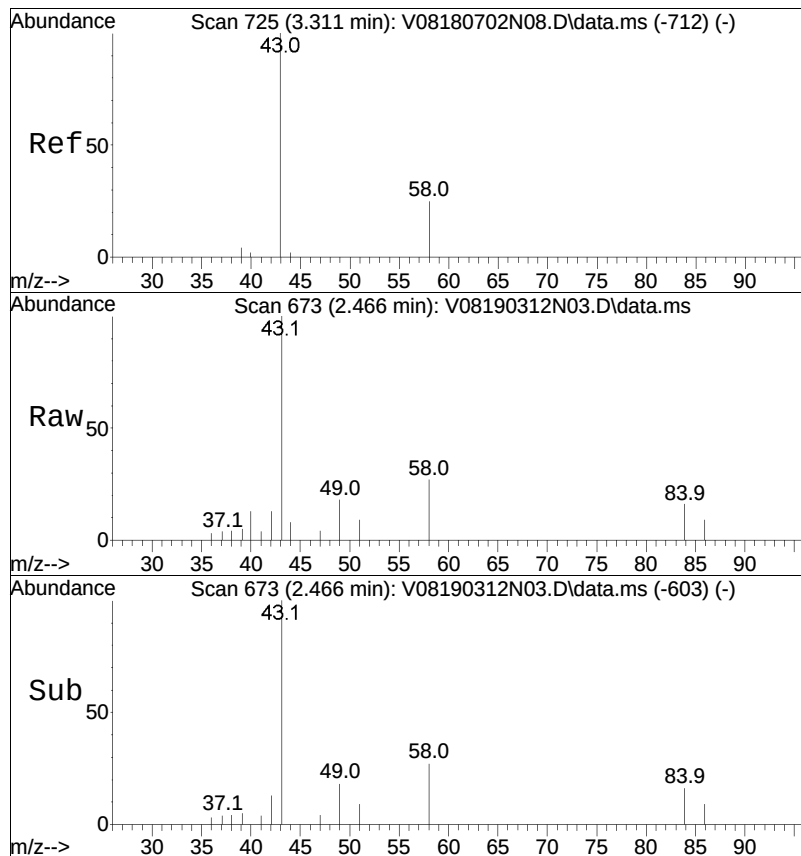




#15
Methylene chloride
Concen: 9.86 ug/L
RT: 2.408 min Scan# 652
Delta R.T. -0.005 min
Lab File: V08190312N03.D
Acq: 12 Mar 2019 6:51 pm

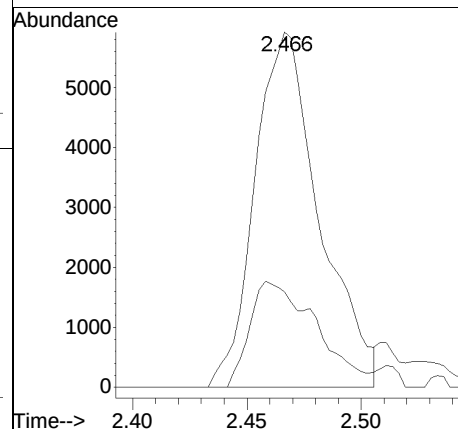
Tgt Ion:	84	Resp:	67503
Ion Ratio	Lower	Upper	
84	100		
86	62.9	40.4	83.8
49	127.1	120.0	249.2

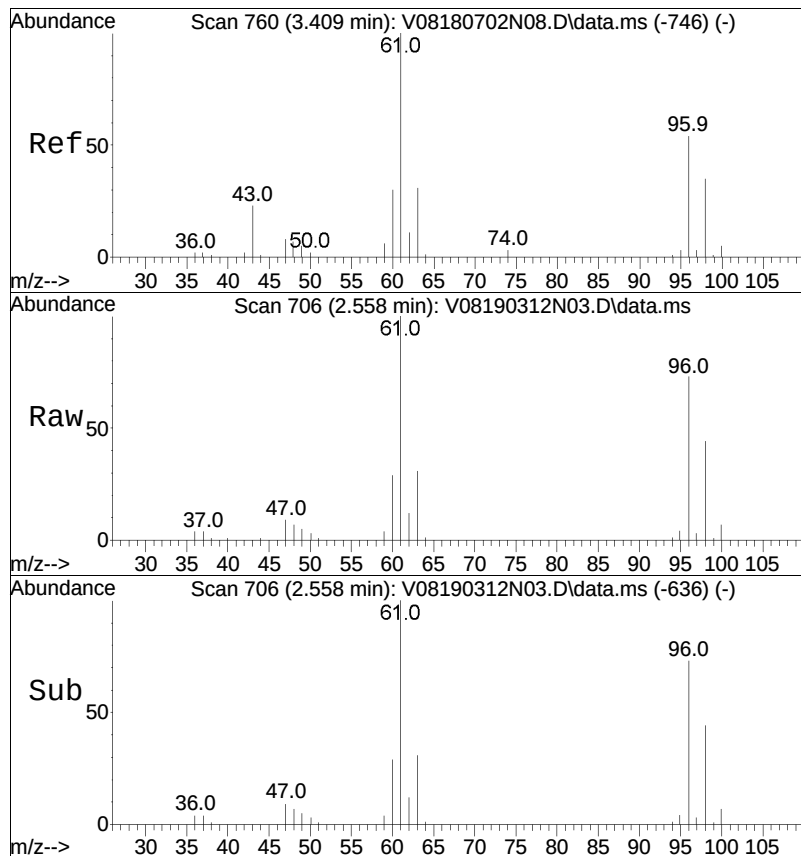




#17
 Acetone
 Concen: 9.81 ug/L
 RT: 2.466 min Scan# 673
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

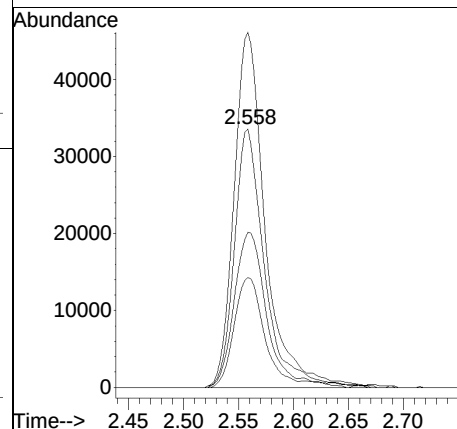
Tgt Ion:	43	58	Ratio	100	30.6	Resp:	11658	Lower	Upper
43	100								
58		30.6						24.2	36.4

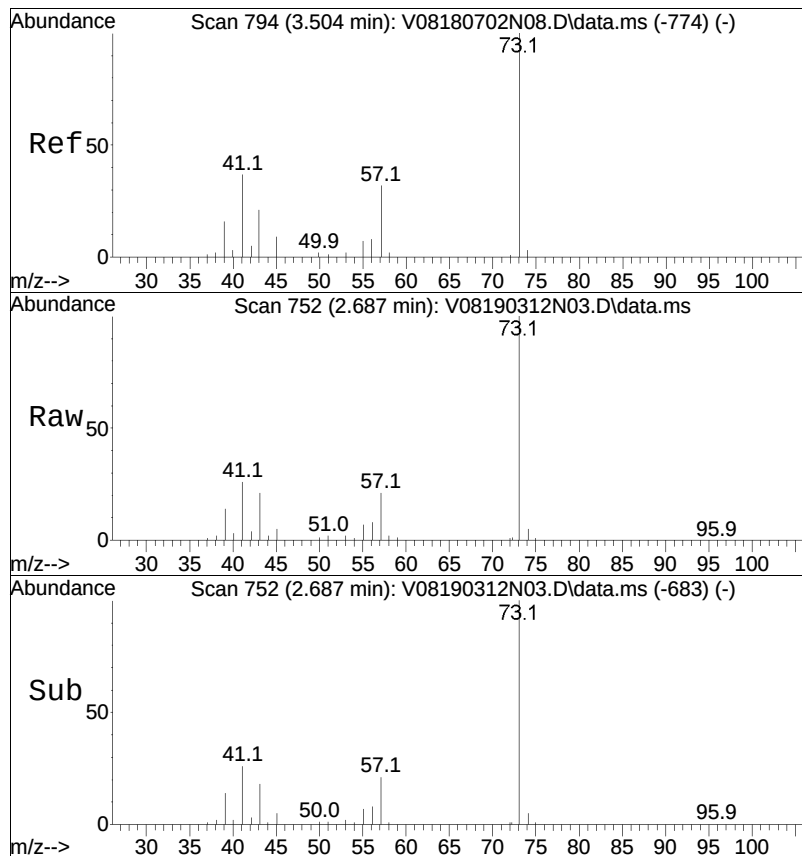




#18
trans-1,2-Dichloroethene
Concen: 9.88 ug/L
RT: 2.558 min Scan# 706
Delta R.T. -0.006 min
Lab File: V08190312N03.D
Acq: 12 Mar 2019 6:51 pm

Tgt Ion:	96	Resp:	64449
Ion Ratio	Lower	Upper	
96	100		
61	139.3	124.0	257.6
98	63.9	41.2	85.6
63	42.2	38.4	79.7





#20

Methyl tert-butyl ether

Concen: 8.48 ug/L

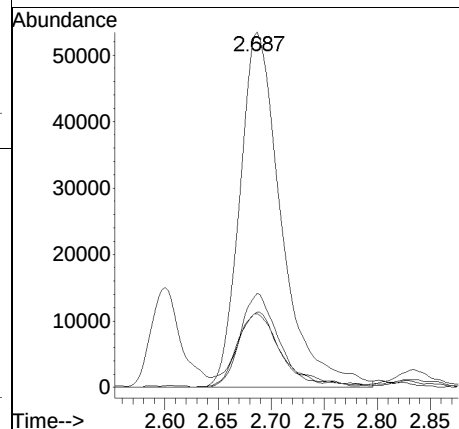
RT: 2.687 min Scan# 752

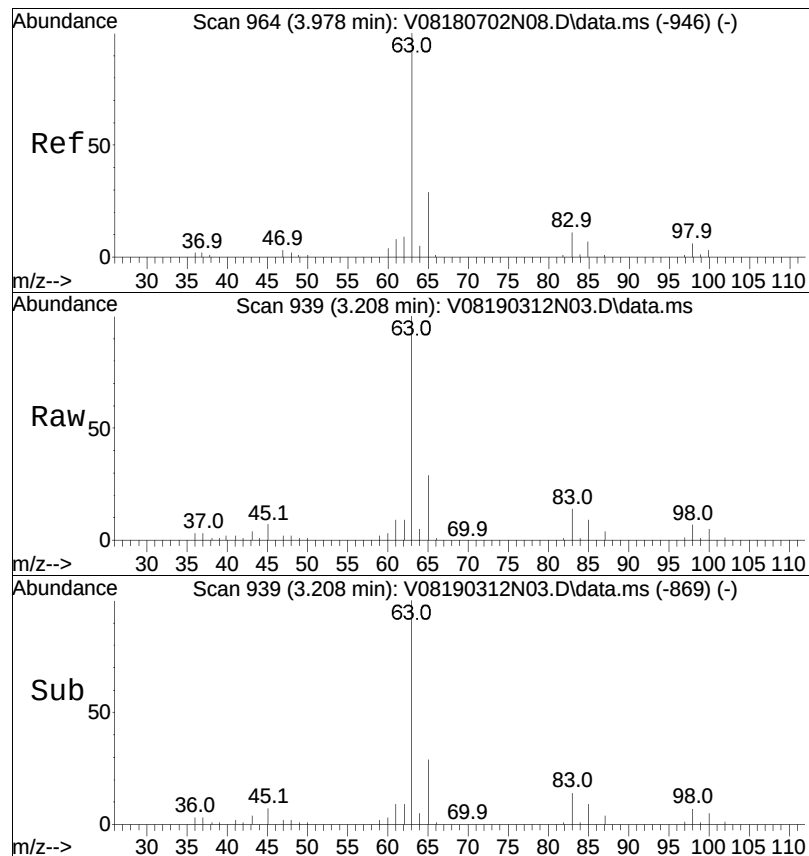
Delta R.T. -0.008 min

Lab File: V08190312N03.D

Acq: 12 Mar 2019 6:51 pm

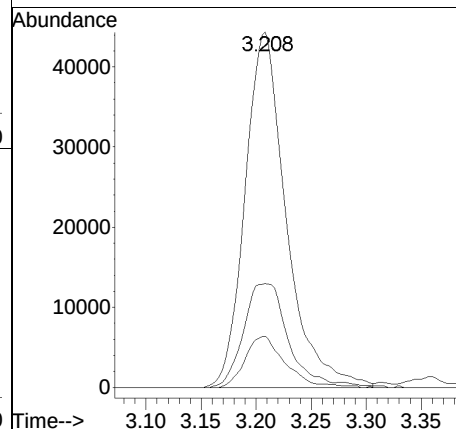
Tgt Ion:	73	Resp:	145355
Ion	Ratio	Lower	Upper
73	100		
57	21.0	17.5	36.3
43	19.6	15.3	31.9
41	26.0	15.3	31.7

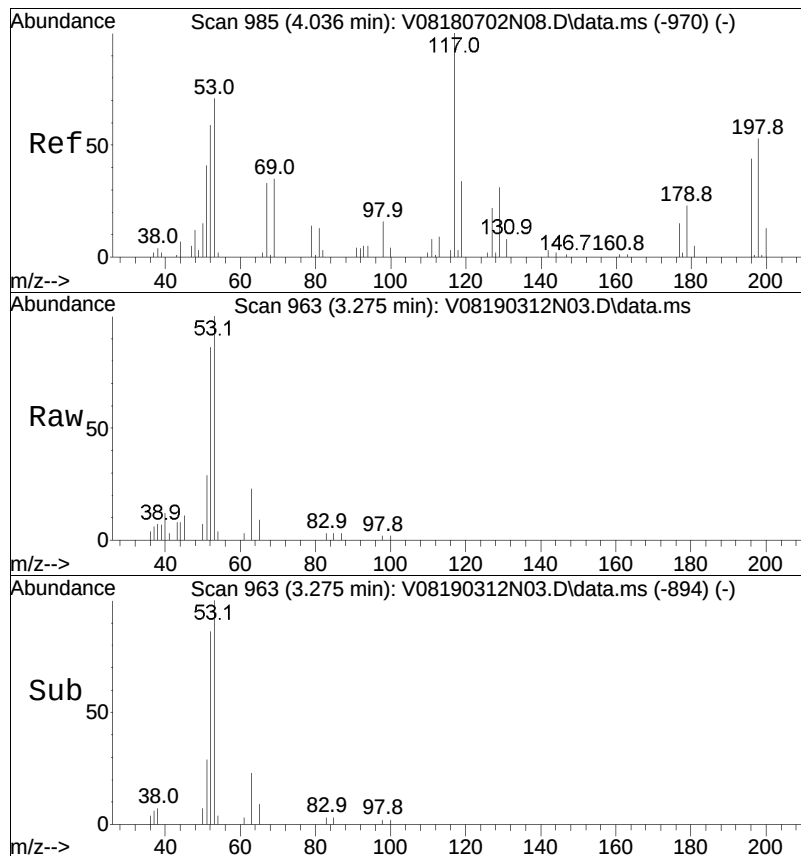




#23
 1,1-Dichloroethane
 Concen: 10.00 ug/L
 RT: 3.208 min Scan# 939
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

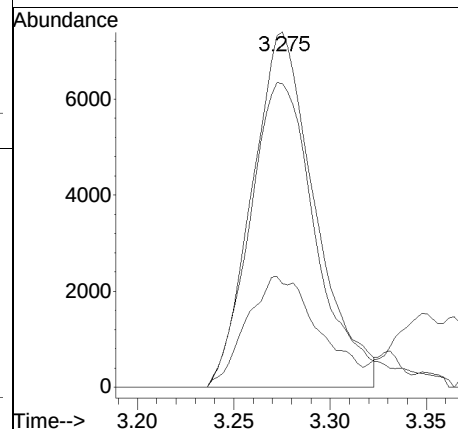
Tgt	Ion: 63	Resp:	115401
Ion	Ratio	Lower	Upper
63	100		
65	31.1	11.0	51.0
83	14.1	0.0	31.8

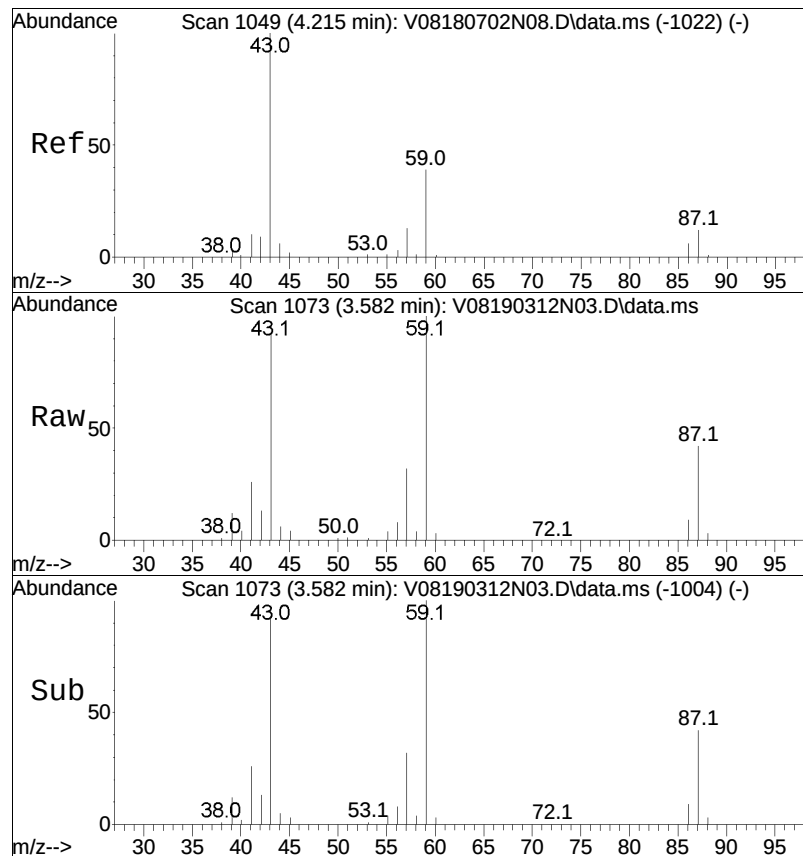




#25
 Acrylonitrile
 Concen: 9.40 ug/L
 RT: 3.275 min Scan# 963
 Delta R.T. -0.008 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

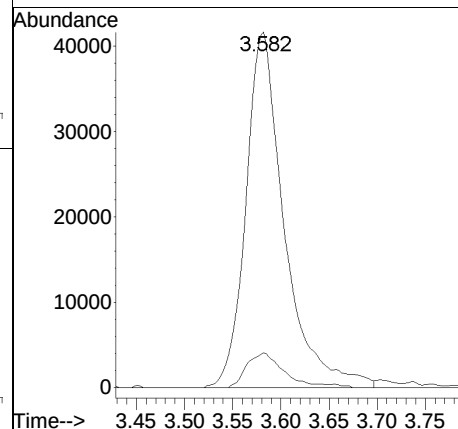
Tgt Ion	Ratio	Lower	Upper
53	100		
52	94.0	66.7	100.1
51	35.9	30.6	46.0

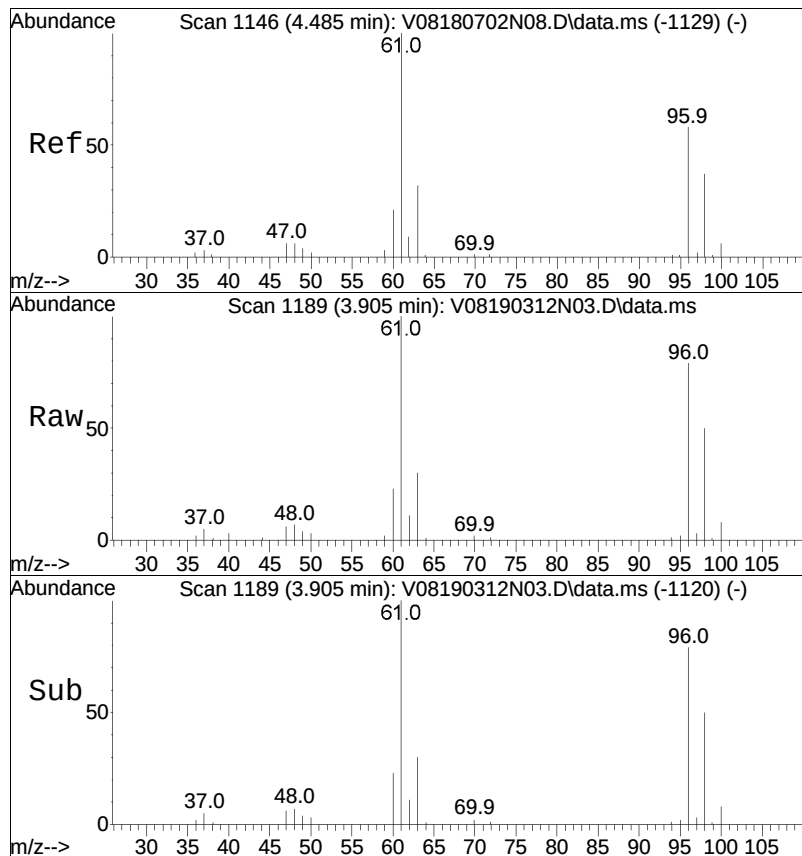




#27
 Vinyl acetate
 Concen: 8.43 ug/L
 RT: 3.582 min Scan# 1073
 Delta R.T. -0.008 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

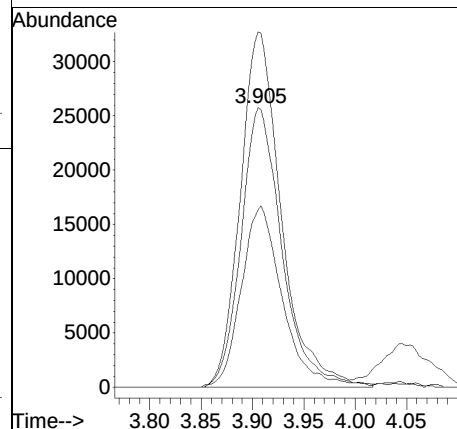
Tgt Ion	Ratio	Lower	Upper
43	100		
86	9.0	5.2	7.8#

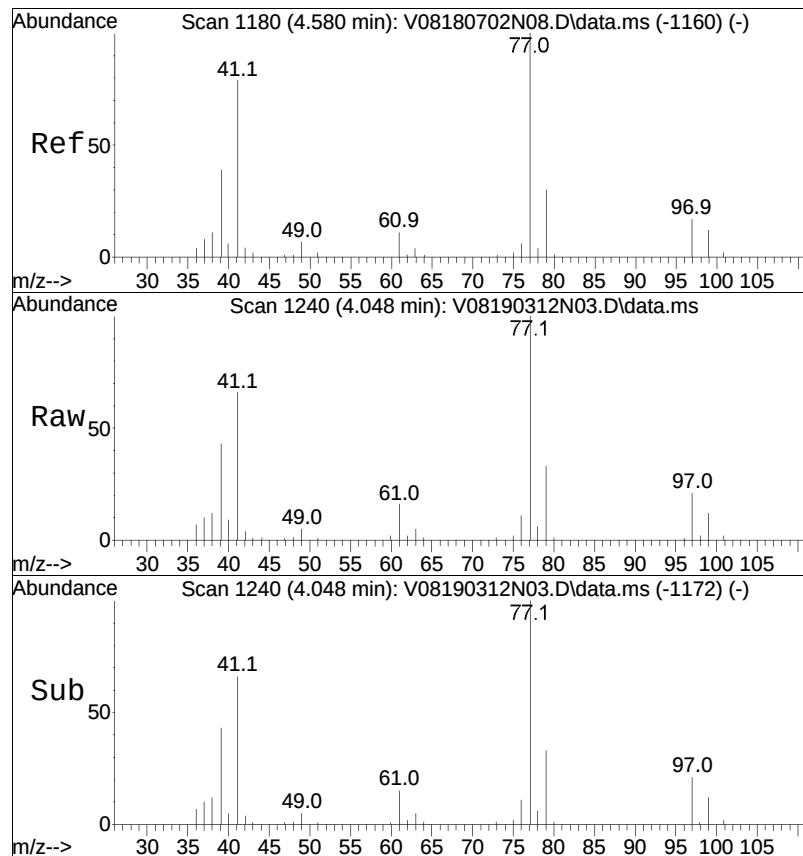




#28
 cis-1,2-Dichloroethene
 Concen: 9.68 ug/L
 RT: 3.905 min Scan# 1189
 Delta R.T. -0.009 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

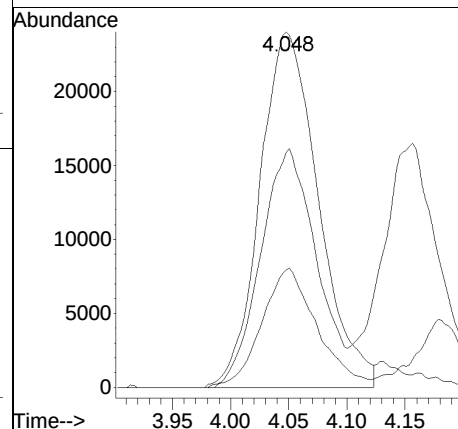
Tgt Ion:	96	Resp:	71656
Ion Ratio	Lower	Upper	
96	100		
61	126.5	149.4	224.2#
98	63.8	53.4	80.2

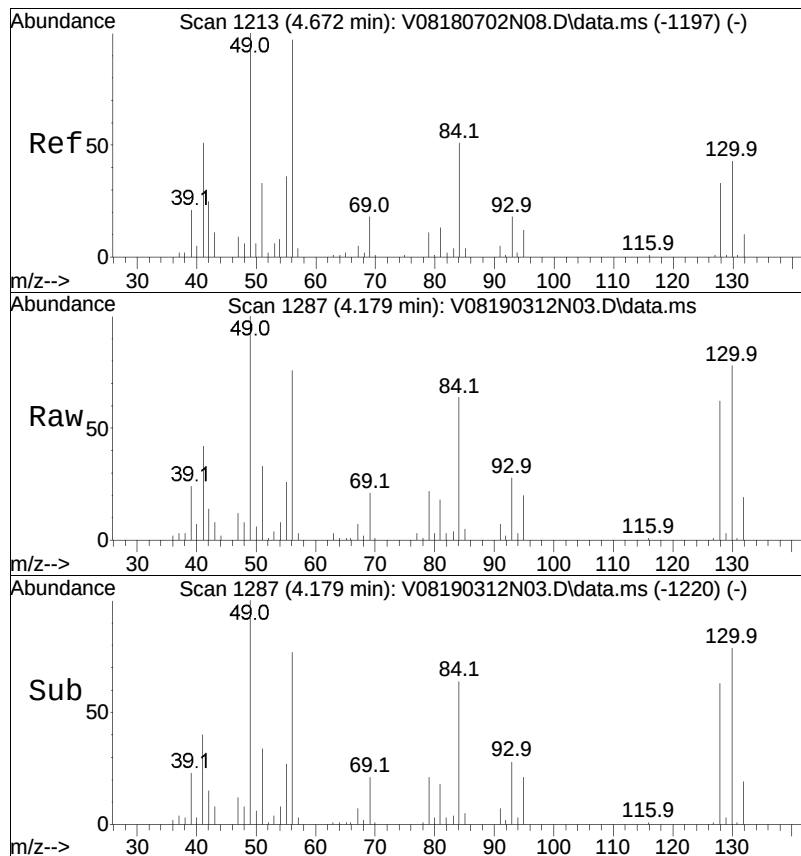




#29
 2,2-Dichloropropane
 Concen: 8.86 ug/L
 RT: 4.048 min Scan# 1240
 Delta R.T. -0.011 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

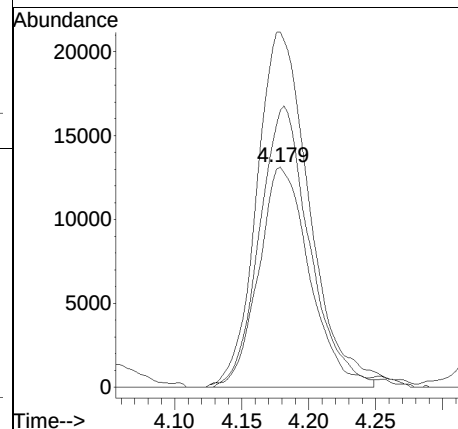
Tgt Ion:	77	Resp:	84039
Ion Ratio	Lower	Upper	
77	100		
41	63.8	38.0	78.8
79	31.5	20.5	42.5

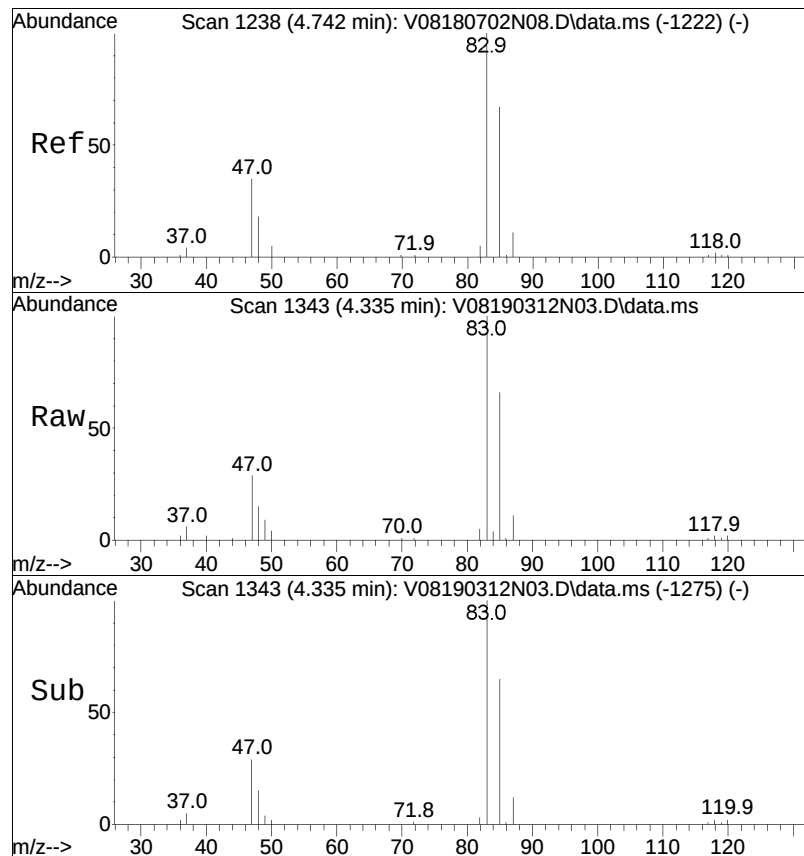




#30
 Bromochloromethane
 Concen: 10.22 ug/L
 RT: 4.179 min Scan# 1287
 Delta R.T. -0.013 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

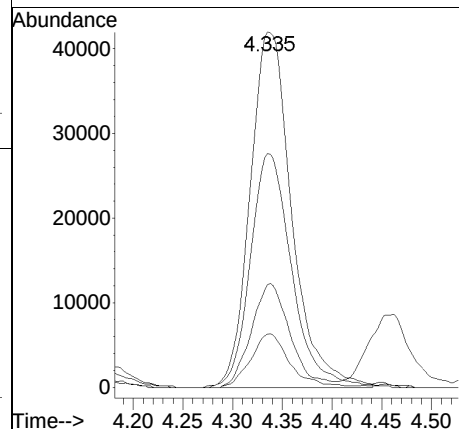
Tgt	Ion	Ratio	Lower	Upper
128	100			
49	168.0	223.0	334.4#	
130	124.2	111.4	167.0	

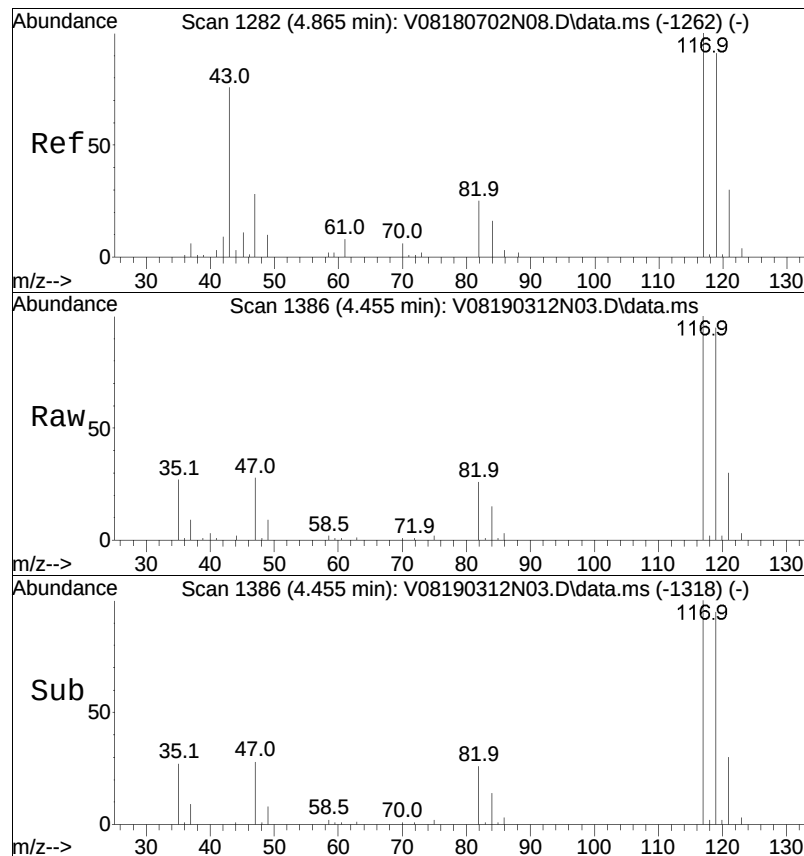




#32
 Chloroform
 Concen: 10.17 ug/L
 RT: 4.335 min Scan# 1343
 Delta R.T. -0.011 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

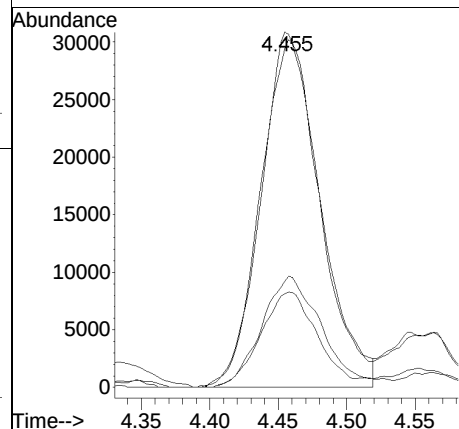
Tgt	Ion: 83	Resp:	122524
Ion	Ratio	Lower	Upper
83	100		
85	65.3	41.5	86.1
47	27.3	19.0	39.4
48	14.1	9.9	20.5

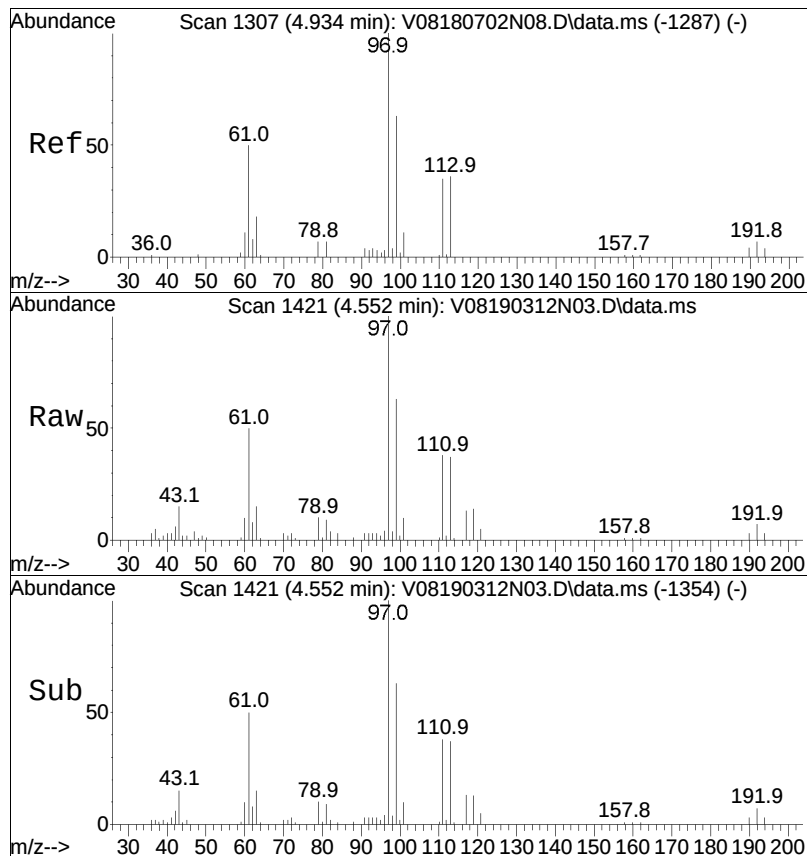




#34
 Carbon tetrachloride
 Concen: 10.24 ug/L
 RT: 4.455 min Scan# 1386
 Delta R.T. -0.011 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

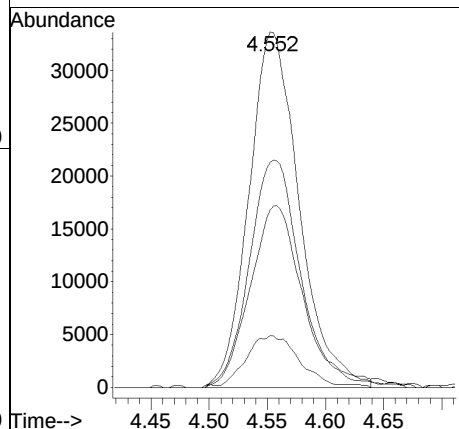
Tgt Ion:	117	Resp:	92152
Ion Ratio	Lower	Upper	
117	100		
119	99.0	62.4	129.6
121	31.6	19.5	40.5
82	25.8	17.0	35.4

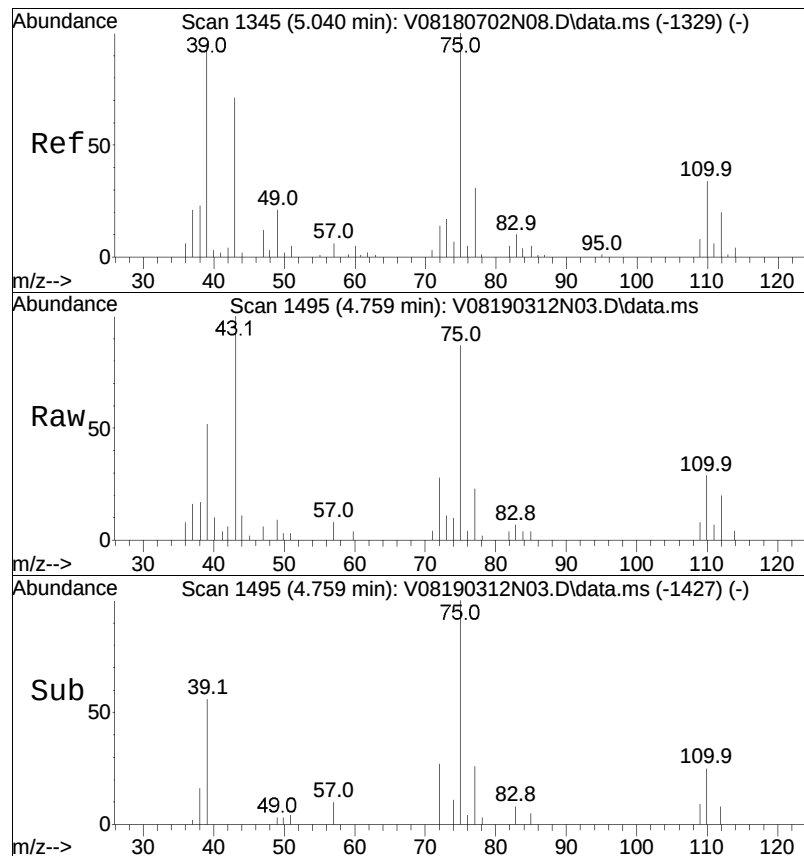




#37
 1,1,1-Trichloroethane
 Concen: 9.66 ug/L
 RT: 4.552 min Scan# 1421
 Delta R.T. -0.014 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

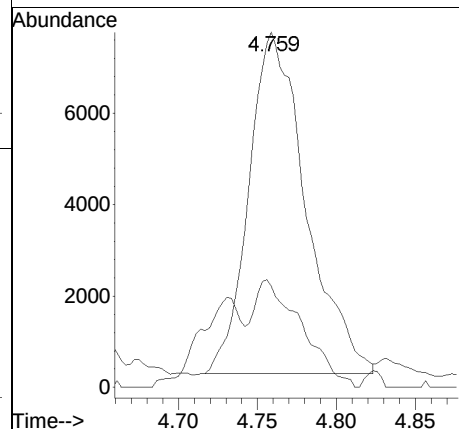
Tgt Ion:	97	Resp:	101466
Ion Ratio	Lower	Upper	
97	100		
99	65.0	40.7	84.5
61	53.8	35.4	73.4
63	14.5	5.0	10.4#

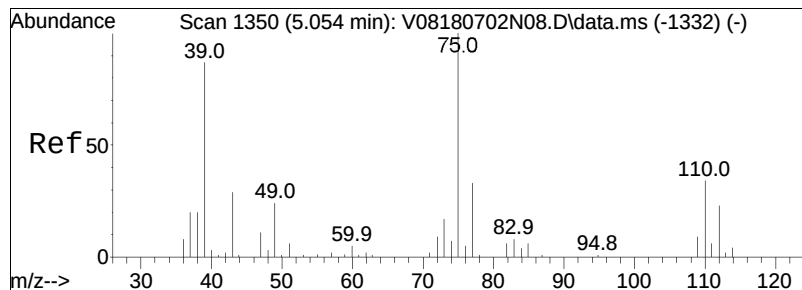




#39
 2-Butanone
 Concen: 9.05 ug/L
 RT: 4.759 min Scan# 1495
 Delta R.T. -0.011 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

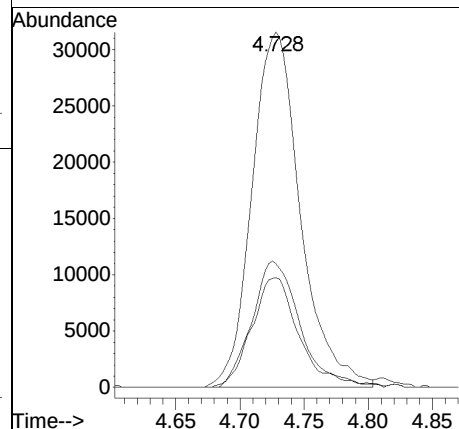
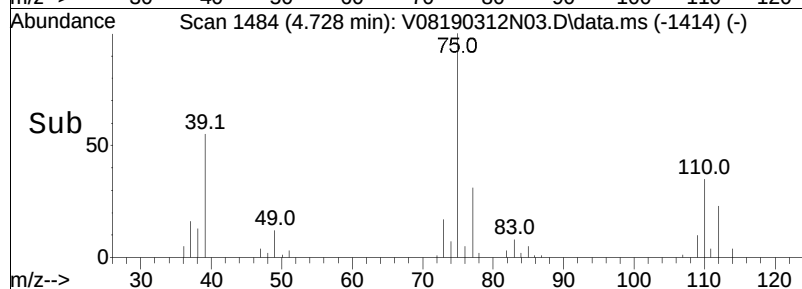
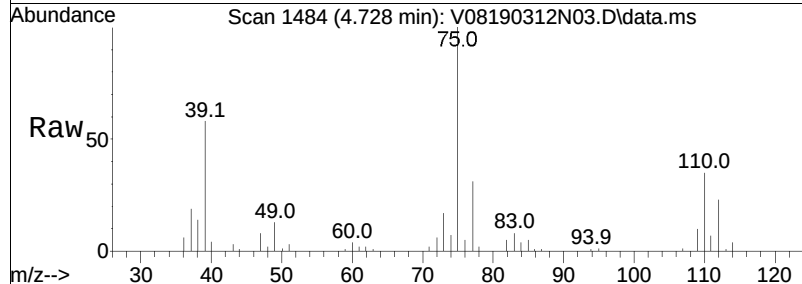
Tgt Ion:	43	72	Ratio	100	26.9	Resp:	18807	Lower	Upper
								10.9	16.3#

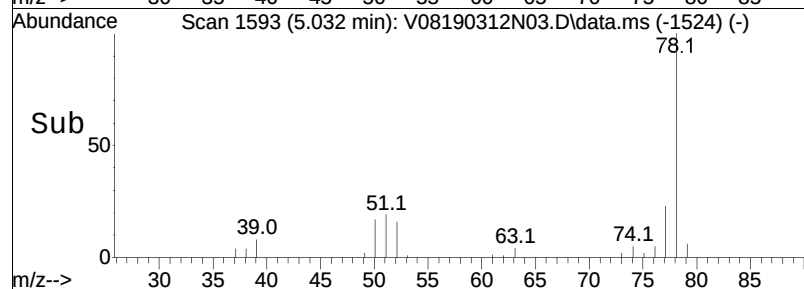
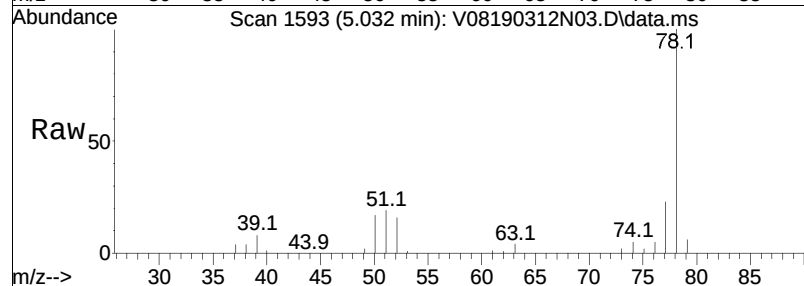
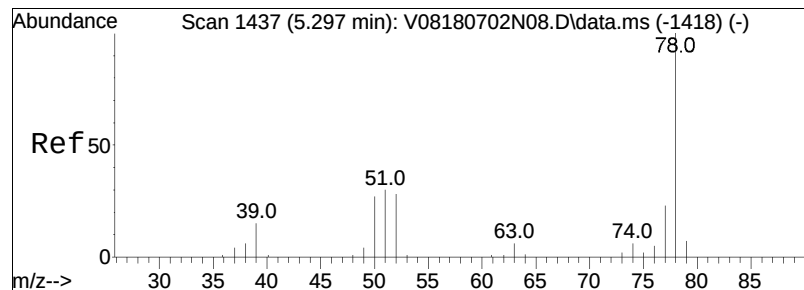




#40
 1,1-Dichloropropene
 Concen: 9.86 ug/L
 RT: 4.728 min Scan# 1484
 Delta R.T. -0.005 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

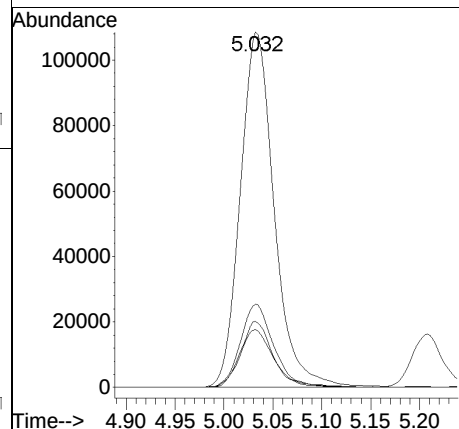
Tgt Ion:	75	Resp:	82912
Ion Ratio	Lower	Upper	
75	100		
110	35.1	20.2	41.9
77	30.4	20.1	41.7

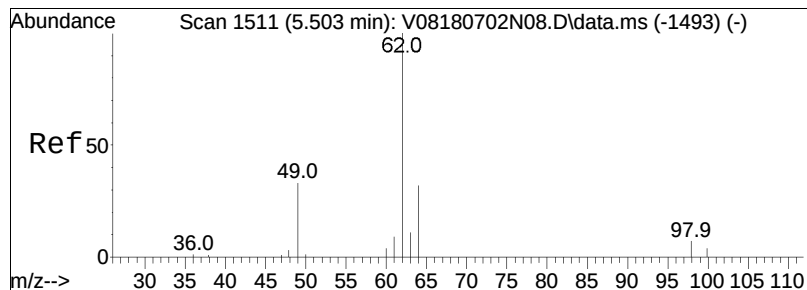




#41
Benzene
Concen: 9.99 ug/L
RT: 5.032 min Scan# 1593
Delta R.T. -0.008 min
Lab File: V08190312N03.D
Acq: 12 Mar 2019 6:51 pm

Tgt Ion: 78	Resp: 262399
Ion Ratio	Lower Upper
78 100	
77 23.2	15.7 32.7
51 18.0	16.0 33.2
52 16.1	15.3 31.9





#44

1,2-Dichloroethane

Concen: 10.28 ug/L

RT: 5.291 min Scan# 1686

Delta R.T. -0.006 min

Lab File: V08190312N03.D

Acq: 12 Mar 2019 6:51 pm

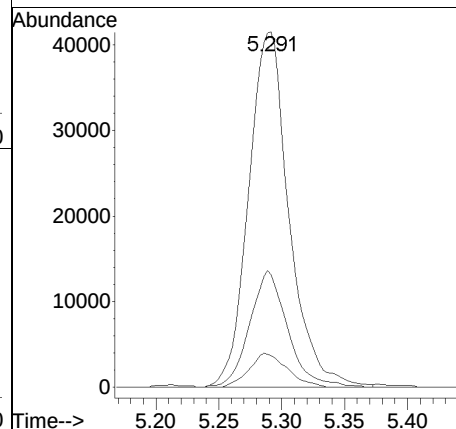
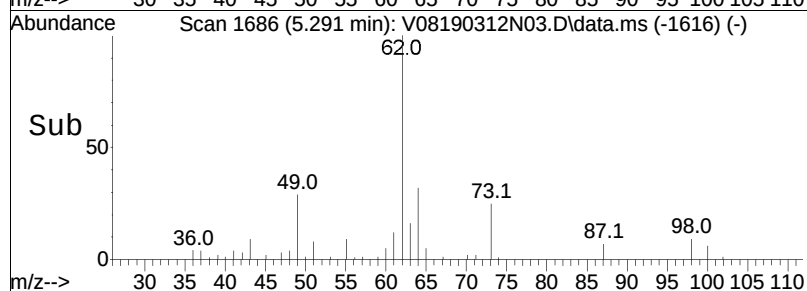
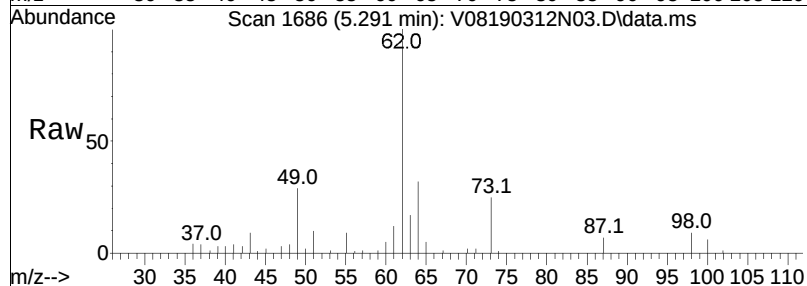
Tgt Ion: 62 Resp: 92846

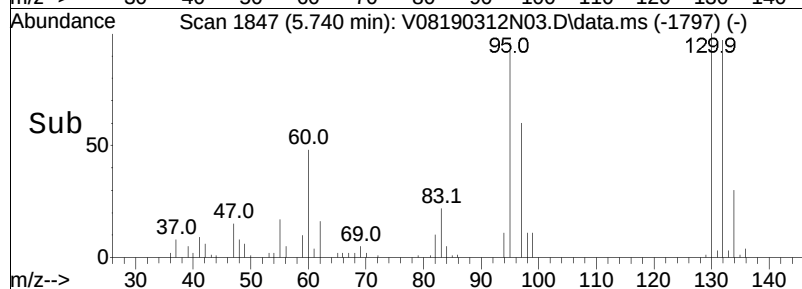
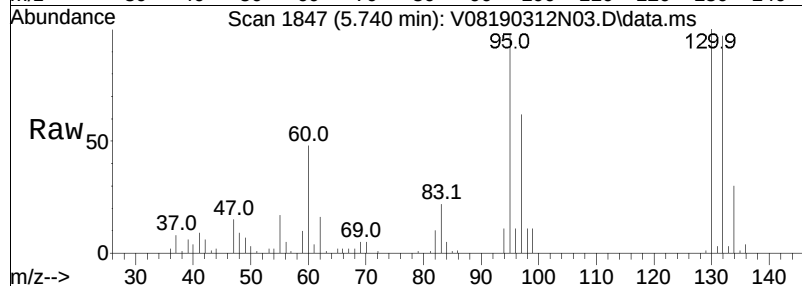
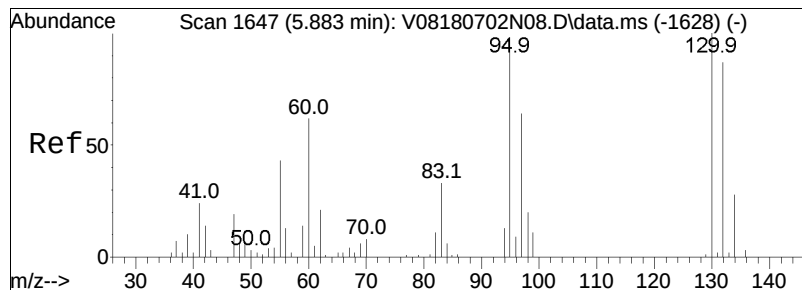
Ion Ratio Lower Upper

62 100

64 31.0 11.2 51.2

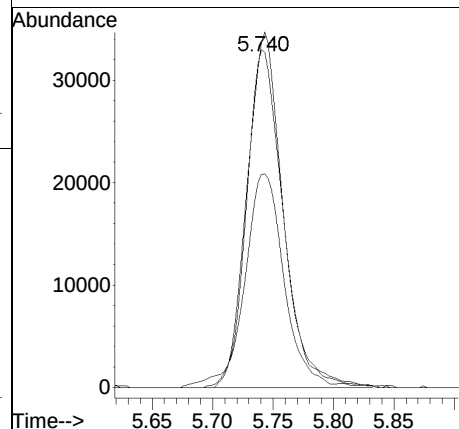
98 9.1 0.0 26.1

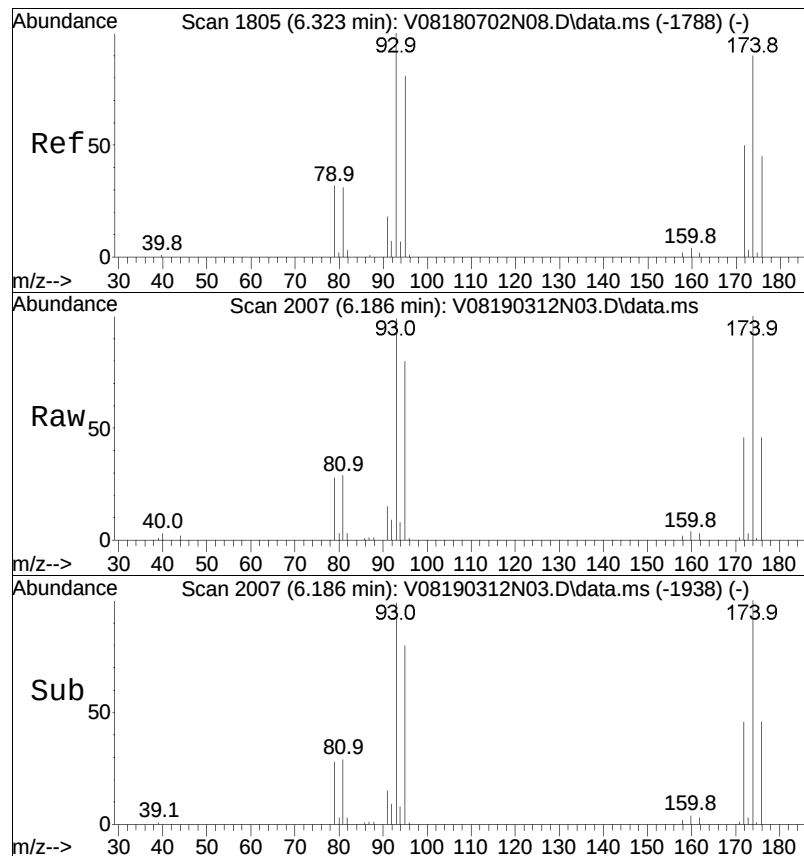




#48
 Trichloroethene
 Concen: 10.00 ug/L
 RT: 5.740 min Scan# 1847
 Delta R.T. -0.011 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

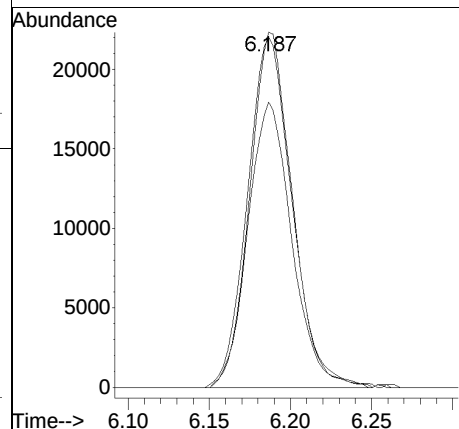
Tgt Ion:	95	Resp:	69916
Ion Ratio	Lower	Upper	
95	100		
97	67.2	55.5	83.3
130	103.1	76.6	115.0

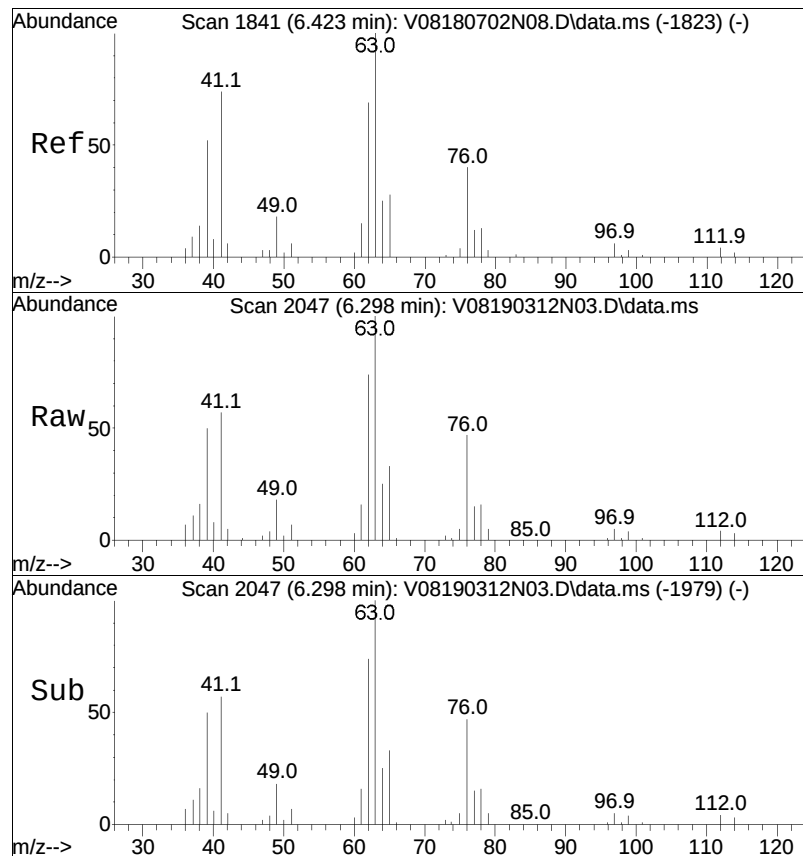




#50
 Dibromomethane
 Concen: 10.22 ug/L
 RT: 6.186 min Scan# 2007
 Delta R.T. -0.009 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

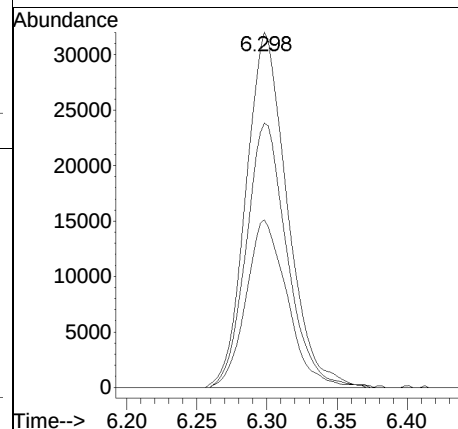
Tgt Ion:	93	Resp:	41895
Ion Ratio	Lower	Upper	
93	100		
95	80.6	67.0	100.4
174	97.8	75.0	112.4

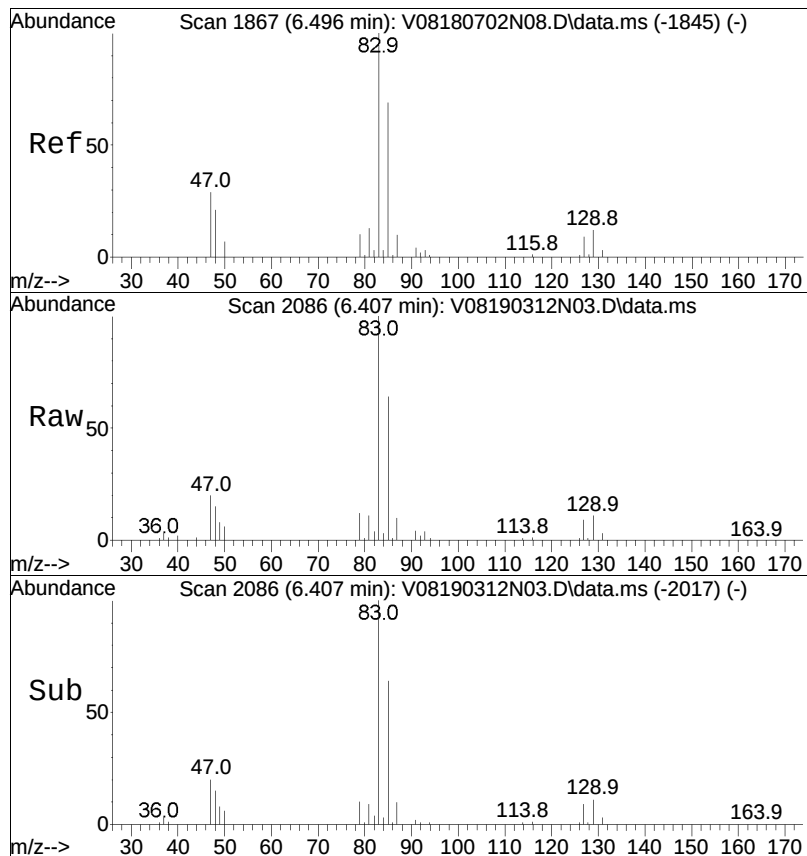




#51
 1,2-Dichloropropane
 Concen: 9.66 ug/L
 RT: 6.298 min Scan# 2047
 Delta R.T. -0.011 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

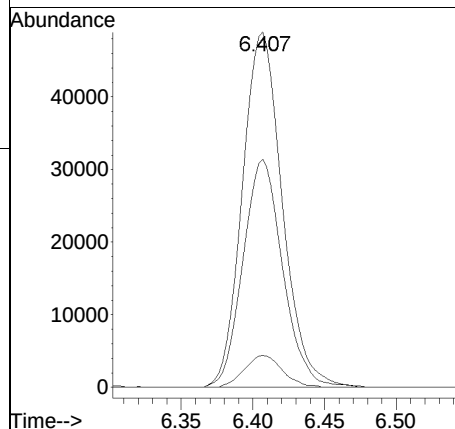
Tgt Ion:	63	Resp:	65796
Ion Ratio	Lower	Upper	
63	100		
62	73.4	58.6	87.8
76	46.7	38.0	57.0

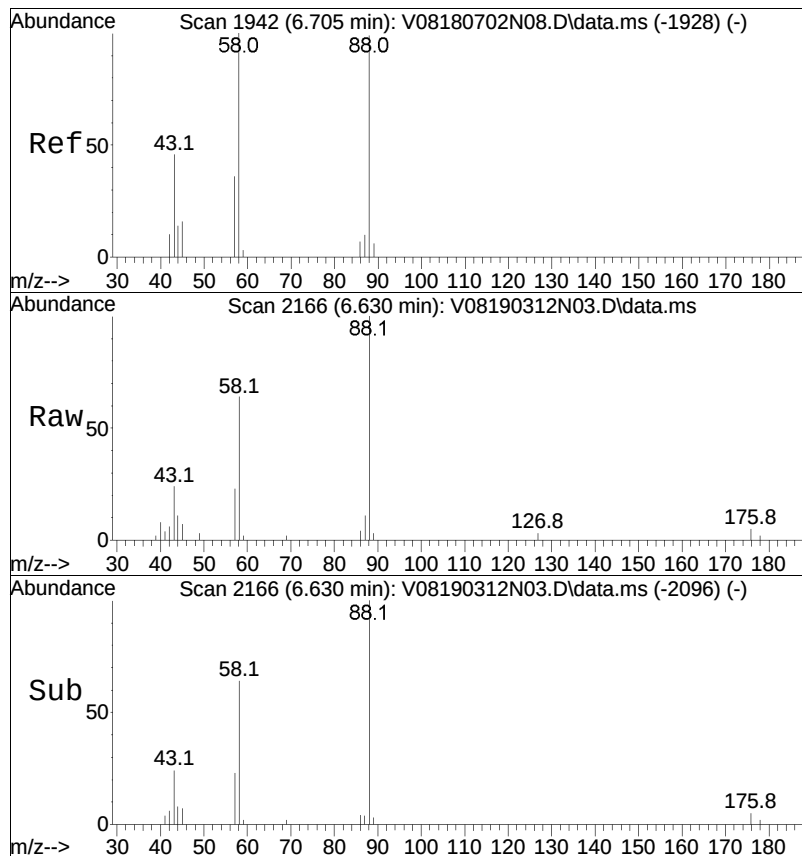




#54
 Bromodichloromethane
 Concen: 9.97 ug/L
 RT: 6.407 min Scan# 2086
 Delta R.T. -0.008 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

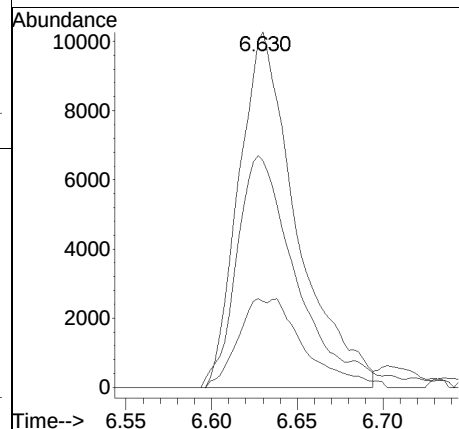
Tgt Ion	Ratio	Lower	Upper
83	100		
85	63.8	52.3	78.5
127	8.6	6.2	9.4

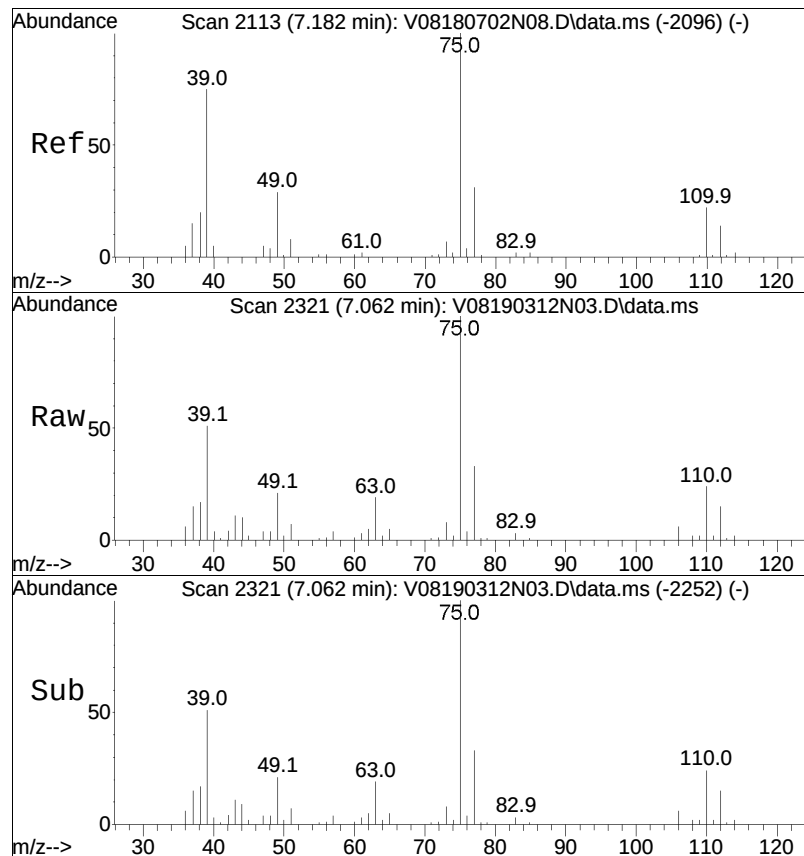




#57
 1,4-Dioxane
 Concen: 808.81 ug/L
 RT: 6.630 min Scan# 2166
 Delta R.T. -0.005 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

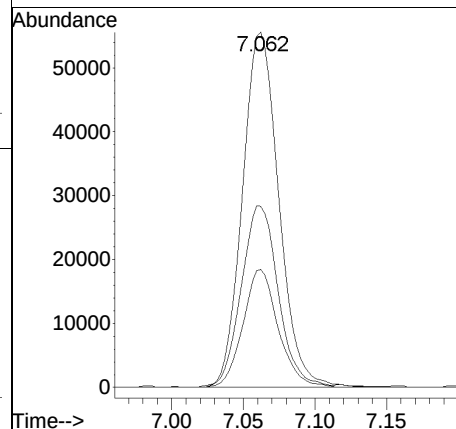
Tgt Ion	Ratio	Lower	Upper
88	100		
58	68.3	76.7	115.1#
43	13.1	36.2	54.2#

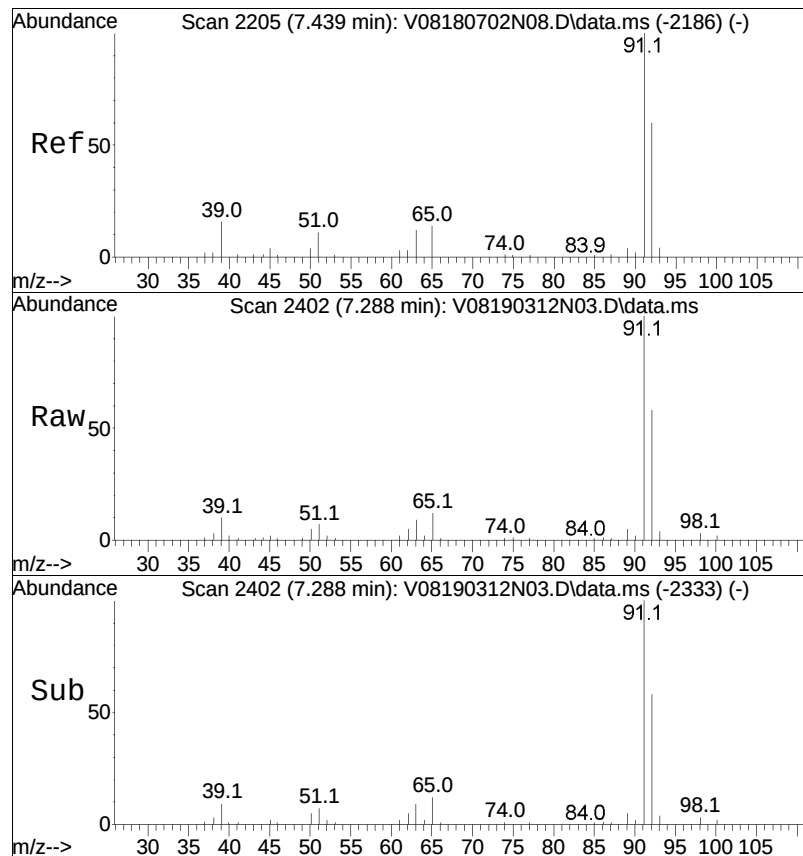




#58
 cis-1,3-Dichloropropene
 Concen: 9.19 ug/L
 RT: 7.062 min Scan# 2321
 Delta R.T. -0.008 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

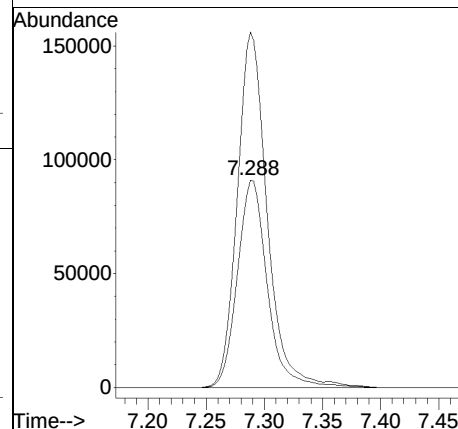
Tgt Ion:	75	Resp:	98323
Ion Ratio	Lower	Upper	
75	100		
77	32.2	25.0	37.4
39	52.1	50.1	75.1

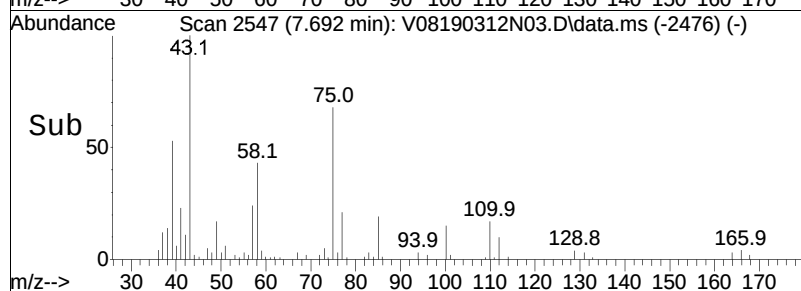
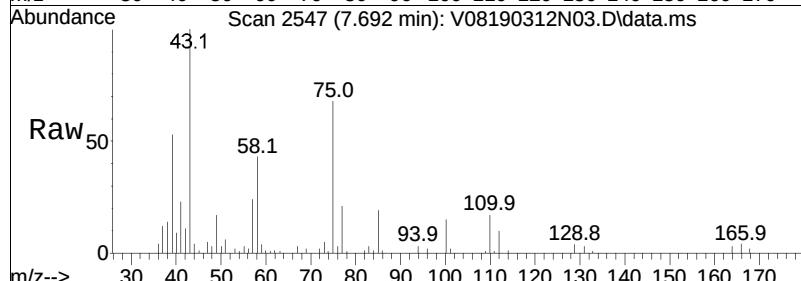
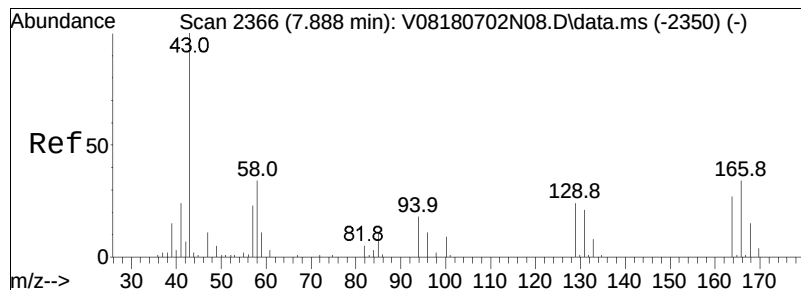




#61
Toluene
Concen: 10.03 ug/L
RT: 7.288 min Scan# 2402
Delta R.T. -0.008 min
Lab File: V08190312N03.D
Acq: 12 Mar 2019 6:51 pm

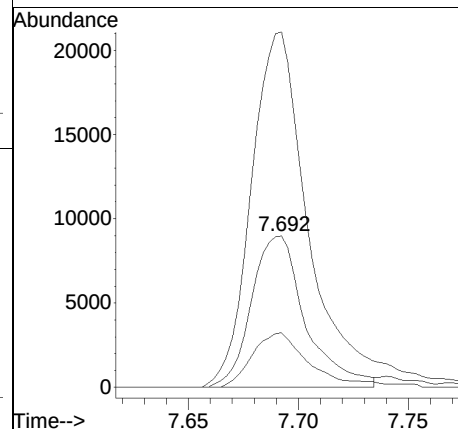
Tgt Ion	Ratio	Lower	Upper
92	100		
91	168.9	139.8	209.6

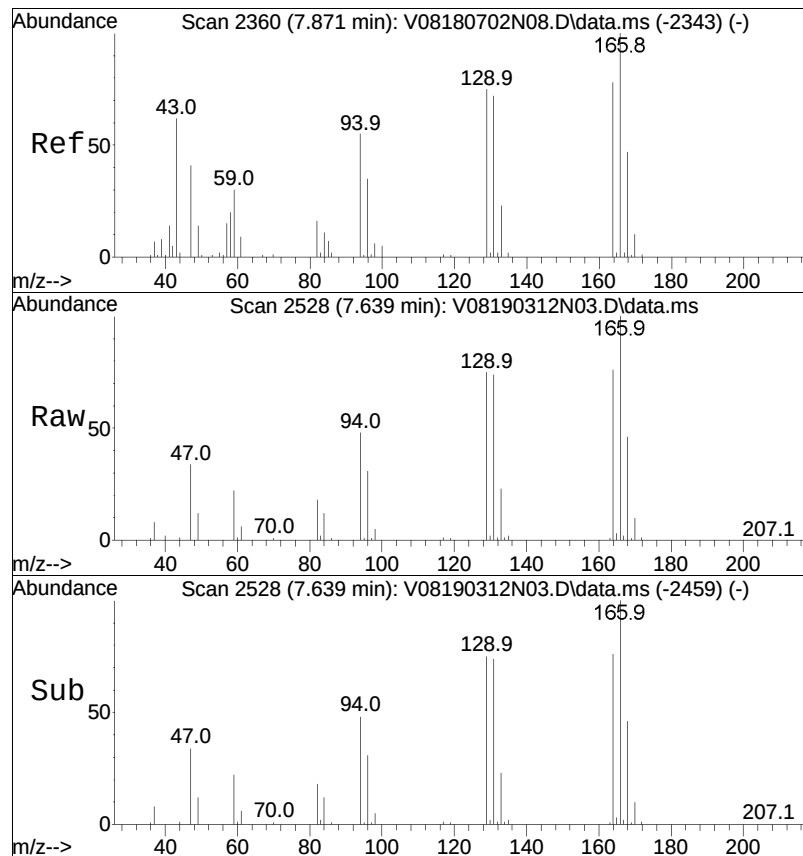




#62
 4-Methyl-2-pentanone
 Concen: 8.38 ug/L
 RT: 7.692 min Scan# 2547
 Delta R.T. -0.003 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

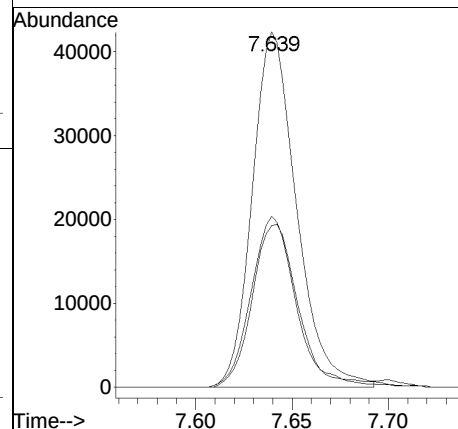
Tgt	Ion	Resp	Lower	Upper
58	100			
100	38.3	20.2	30.2	#
43	257.1	196.6	295.0	

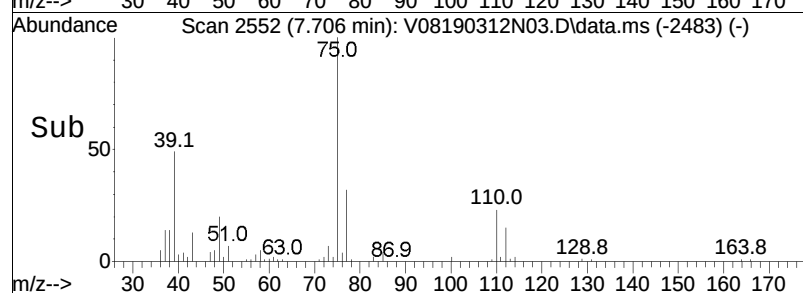
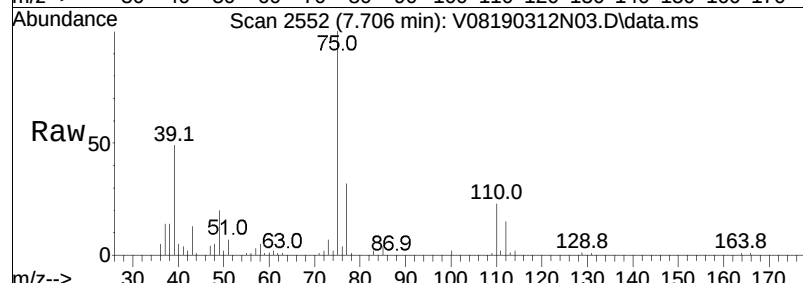
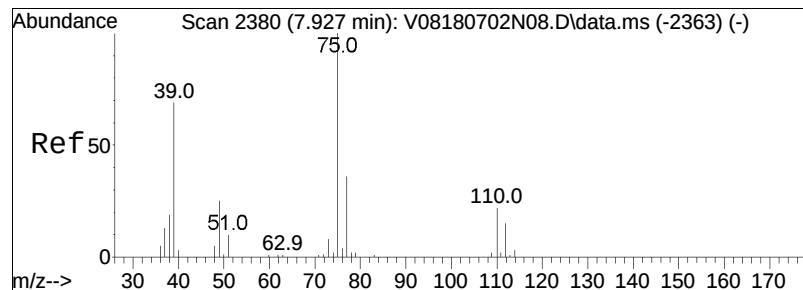




#63
Tetrachloroethene
Concen: 9.70 ug/L
RT: 7.639 min Scan# 2528
Delta R.T. -0.009 min
Lab File: V08190312N03.D
Acq: 12 Mar 2019 6:51 pm

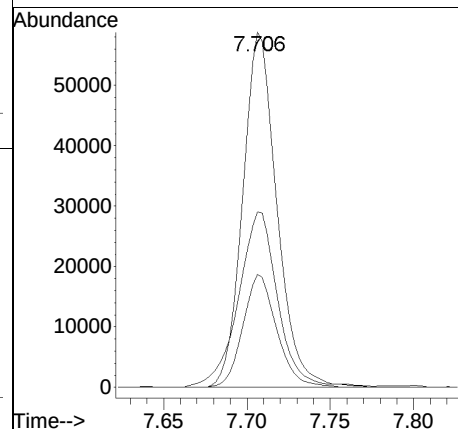
Tgt Ion:	166	Resp:	67797
Ion Ratio	Lower	Upper	
166	100		
168	48.0	28.2	68.2
94	49.3	38.4	78.4

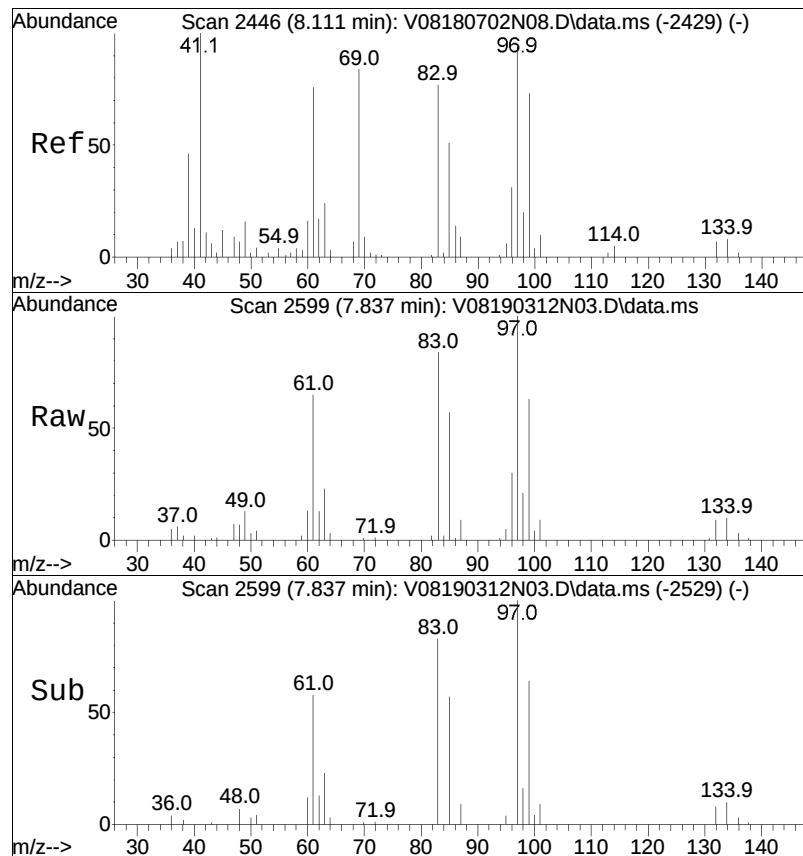




#65
 trans-1,3-Dichloropropene
 Concen: 9.13 ug/L
 RT: 7.706 min Scan# 2552
 Delta R.T. -0.009 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

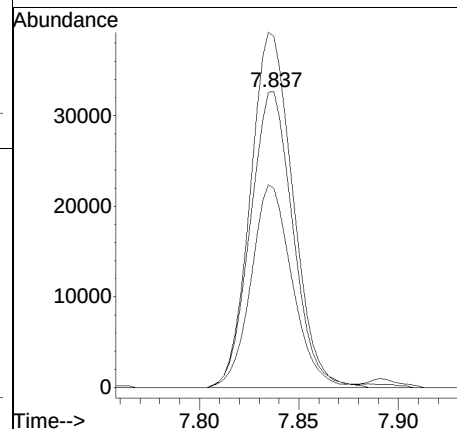
Tgt Ion	Ratio	Lower	Upper
75	100		
77	31.5	12.4	52.4
39	56.5	42.8	82.8

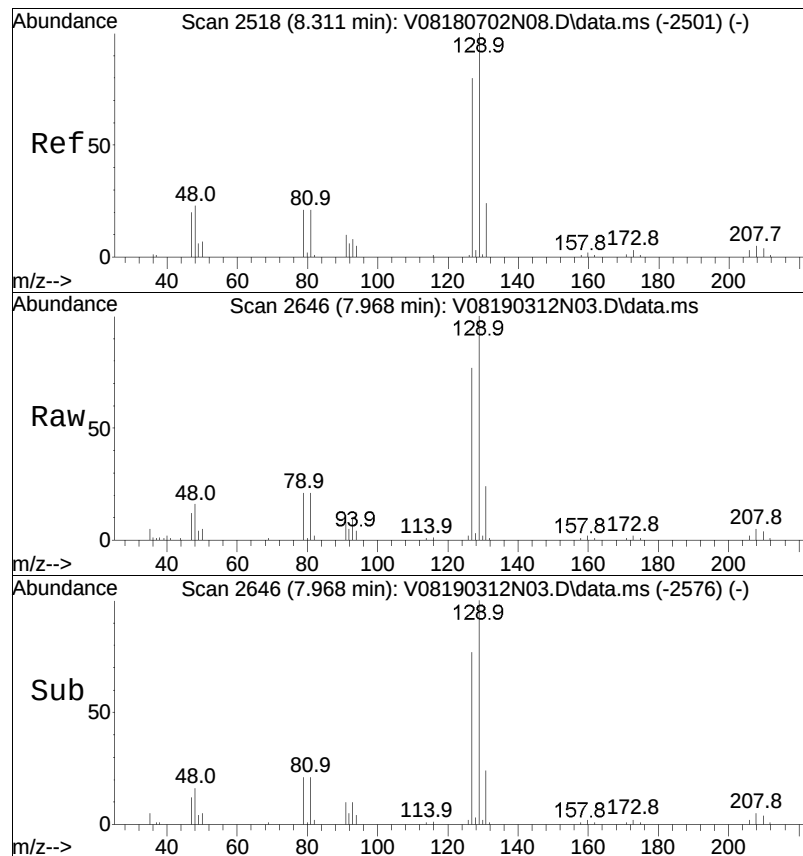




#68
 1,1,2-Trichloroethane
 Concen: 10.43 ug/L
 RT: 7.837 min Scan# 2599
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

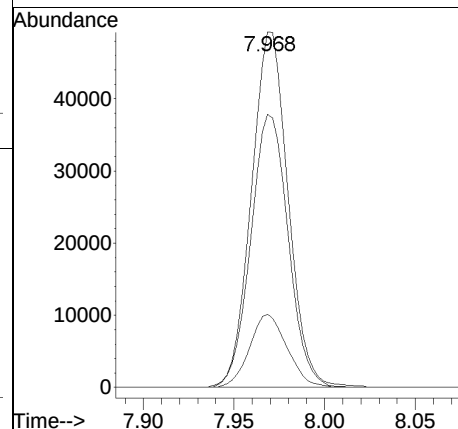
Tgt Ion	Ratio	Lower	Upper
83	100		
97	119.6	89.8	129.8
85	66.0	44.4	84.4

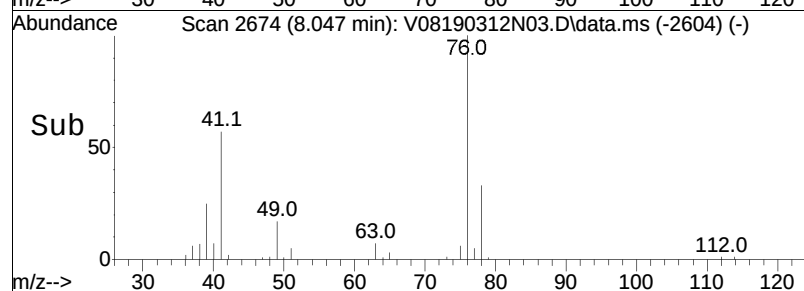
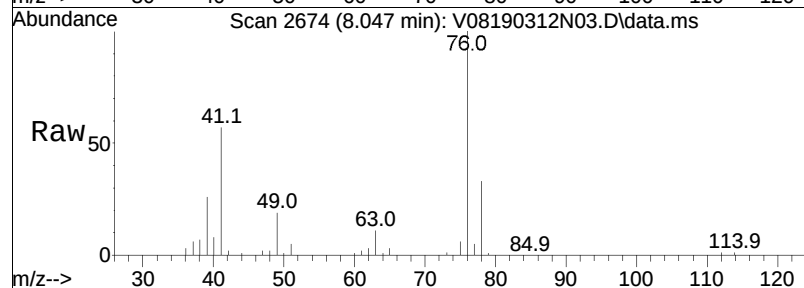
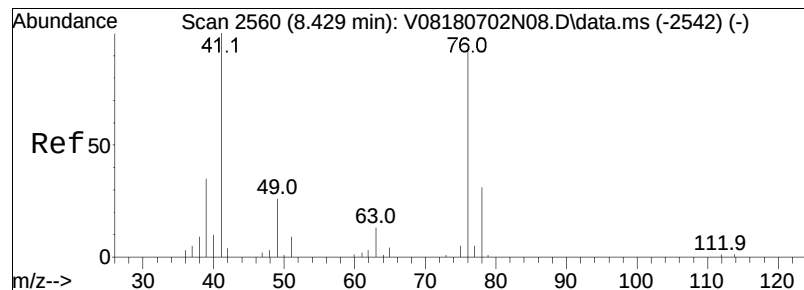




#69
 Chlorodibromomethane
 Concen: 10.16 ug/L
 RT: 7.968 min Scan# 2646
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

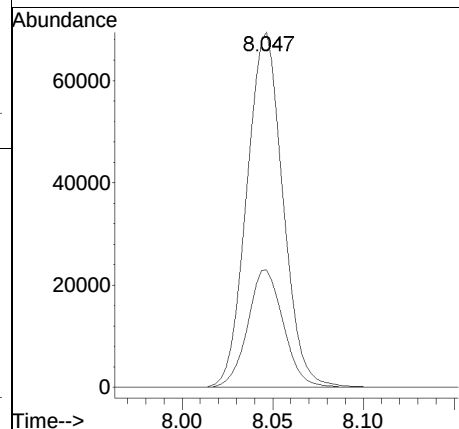
Tgt Ion:	129	Resp:	69657
Ion Ratio	Lower	Upper	
129	100		
81	21.0	2.9	42.9
127	78.1	57.8	97.8

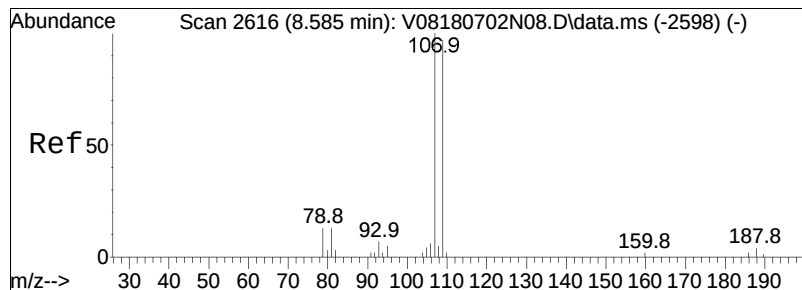




#70
 1,3-Dichloropropane
 Concen: 10.23 ug/L
 RT: 8.047 min Scan# 2674
 Delta R.T. -0.005 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

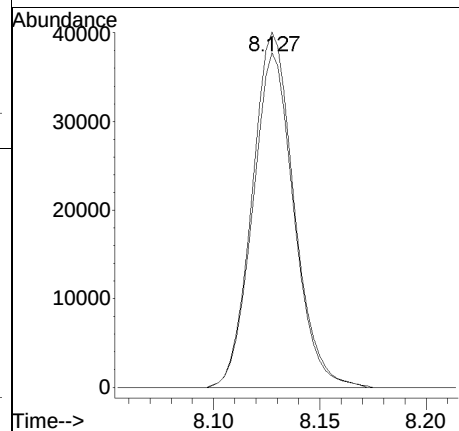
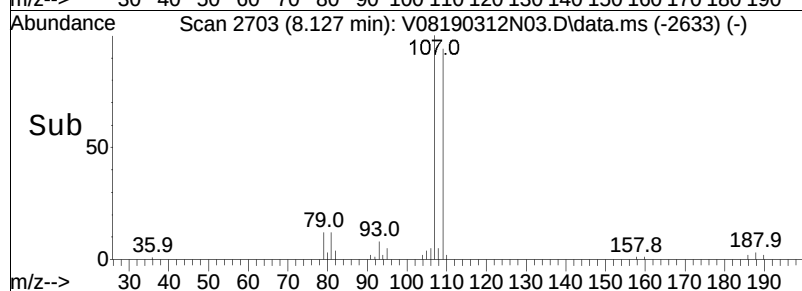
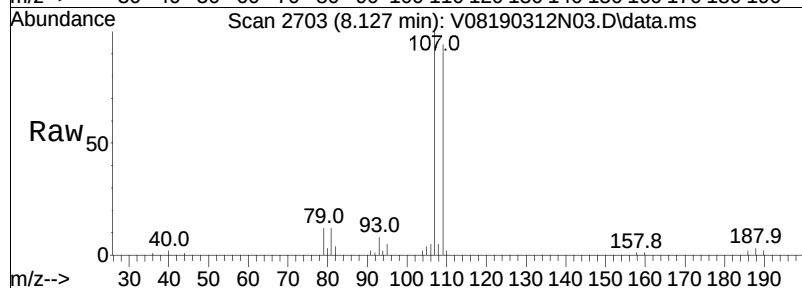
Tgt Ion	Ratio	Lower	Upper
76	100		
78	32.7	25.5	38.3

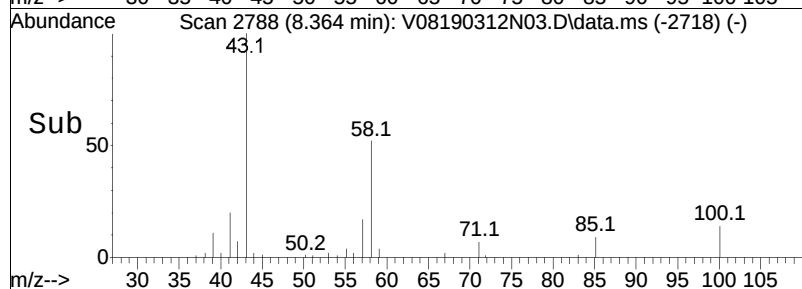
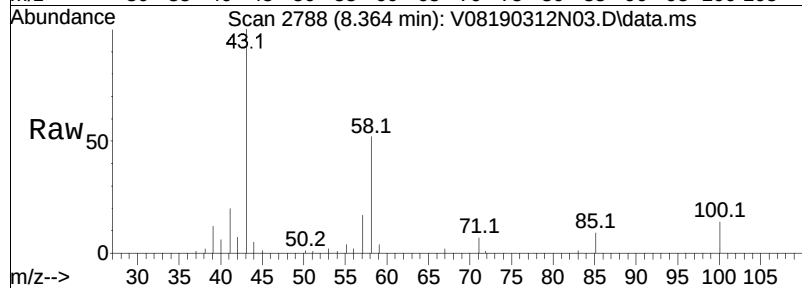
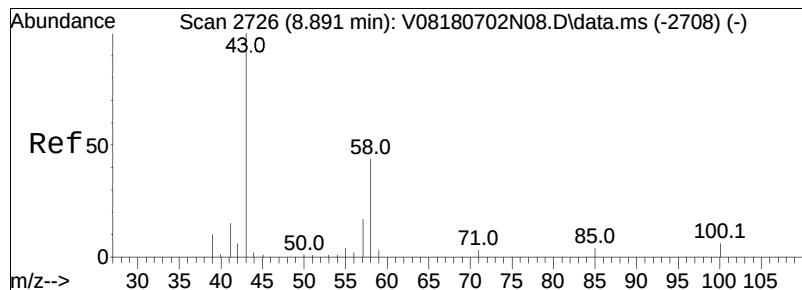




#71
 1,2-Dibromoethane
 Concen: 9.91 ug/L
 RT: 8.127 min Scan# 2703
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

Tgt Ion: 107 Resp: 54960
 Ion Ratio Lower Upper
 107 100
 109 92.8 74.3 111.5





#72

2-Hexanone

Concen: 8.04 ug/L

RT: 8.364 min Scan# 2788

Delta R.T. -0.006 min

Lab File: V08190312N03.D

Acq: 12 Mar 2019 6:51 pm

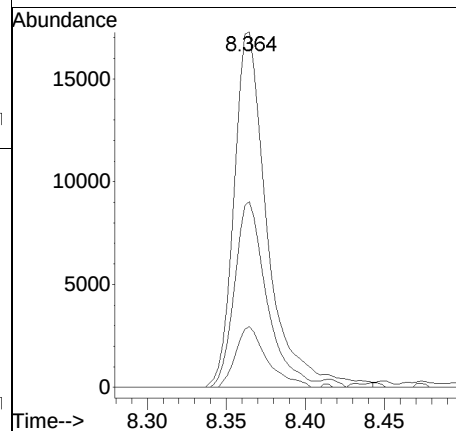
Tgt Ion: 43 Resp: 25531

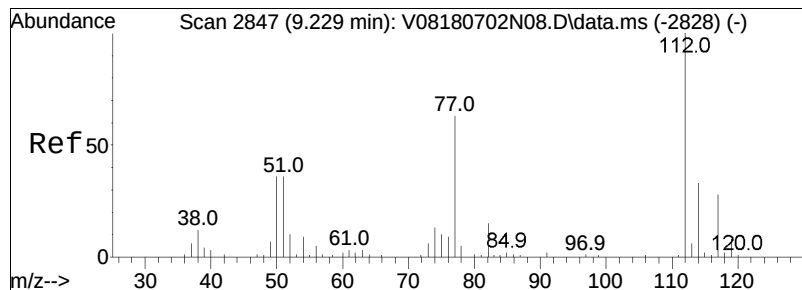
Ion Ratio Lower Upper

43 100

58 50.3 41.2 61.8

57 16.1 17.2 25.8#





#73

Chlorobenzene

Concen: 10.11 ug/L

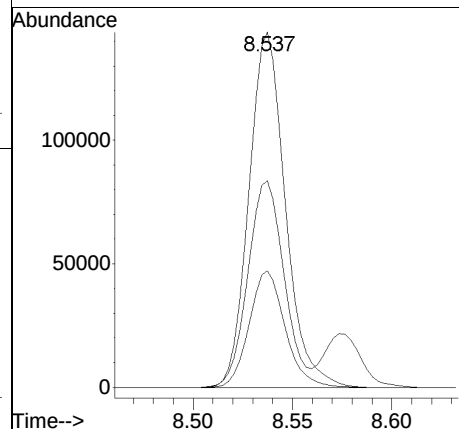
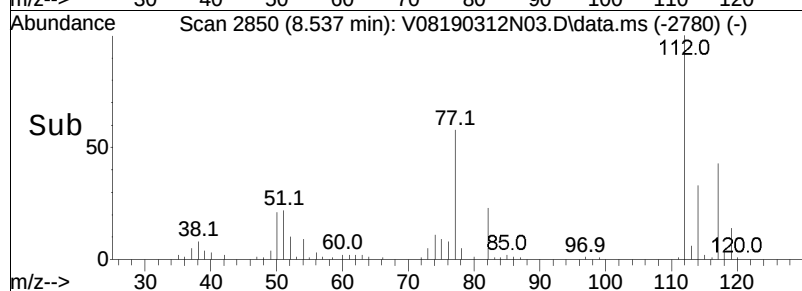
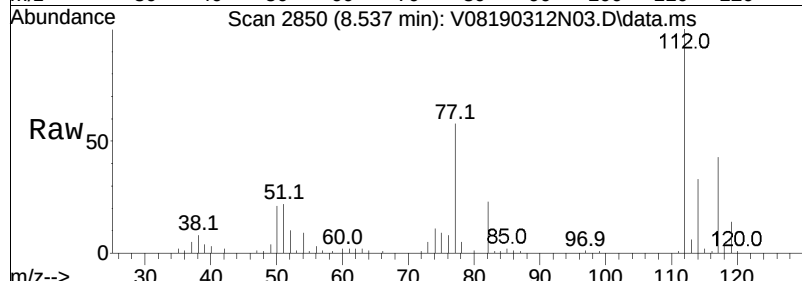
RT: 8.537 min Scan# 2850

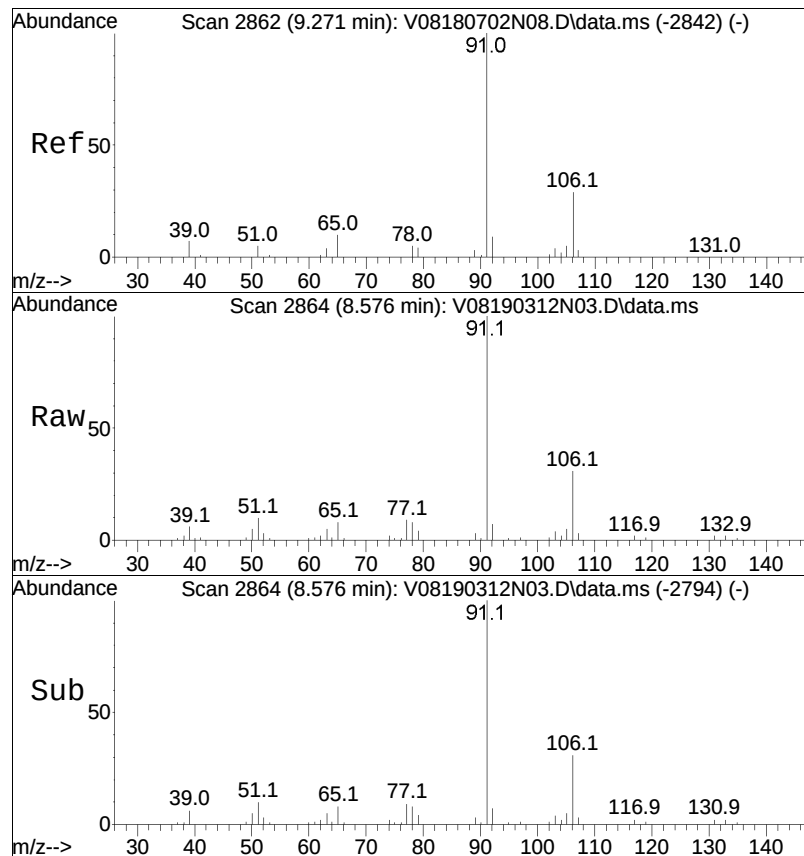
Delta R.T. -0.006 min

Lab File: V08190312N03.D

Acq: 12 Mar 2019 6:51 pm

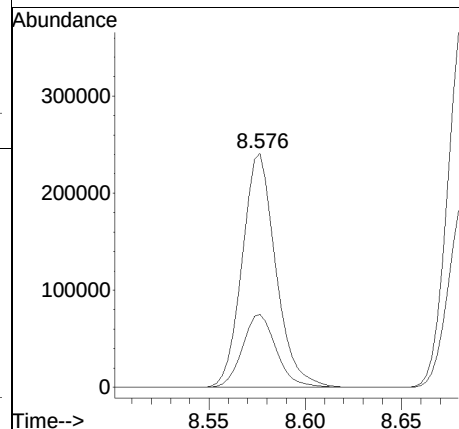
Tgt	Ion:112	Resp:	182999
Ion	Ratio	Lower	Upper
112	100		
77	58.1	55.4	83.0
114	32.3	25.4	38.2

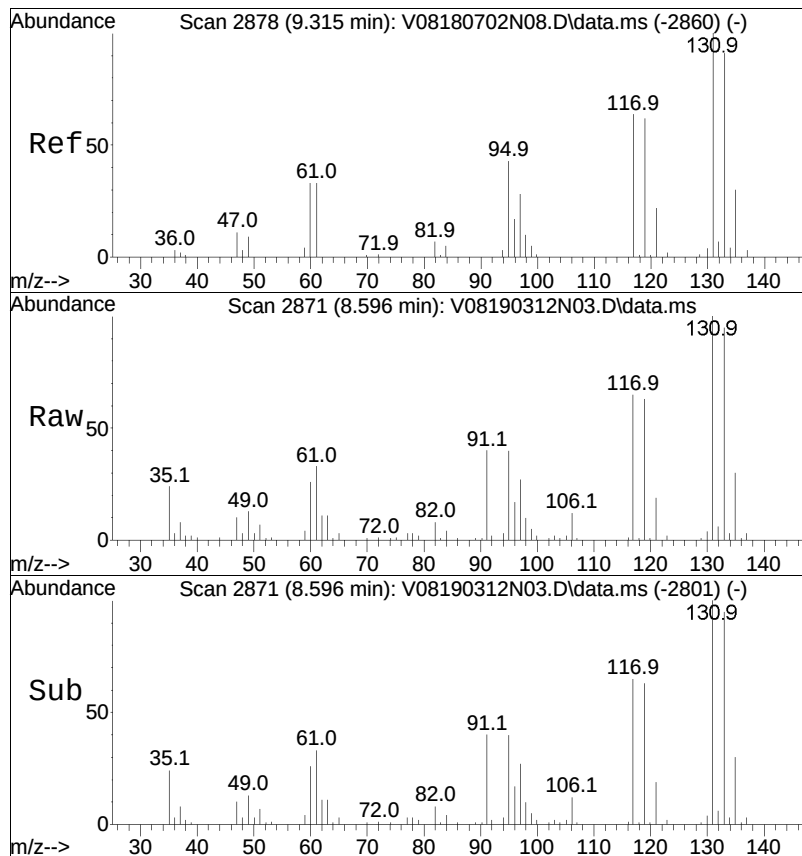




#74
 Ethylbenzene
 Concen: 9.67 ug/L
 RT: 8.576 min Scan# 2864
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

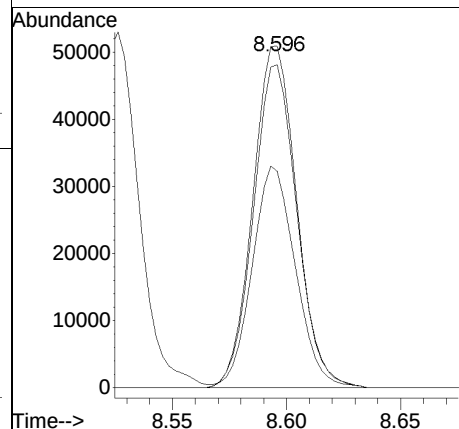
Tgt	Ion	Resp	Lower	Upper
91	100	293204		
106	31.3	24.3	36.5	

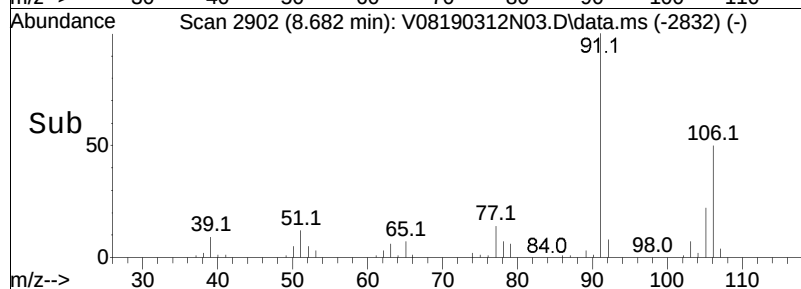
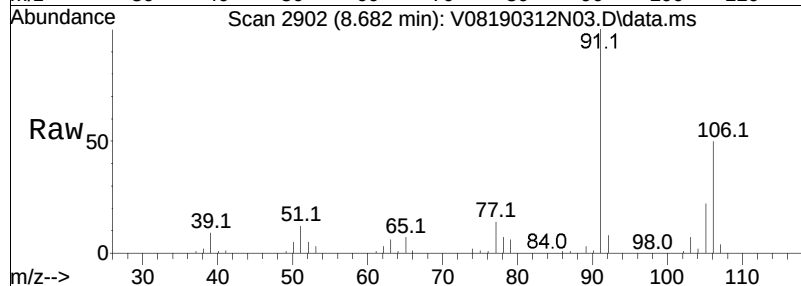
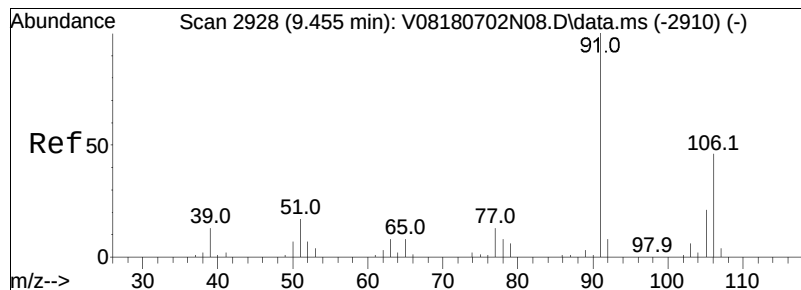




#75
 1,1,1,2-Tetrachloroethane
 Concen: 10.05 ug/L
 RT: 8.596 min Scan# 2871
 Delta R.T. -0.005 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

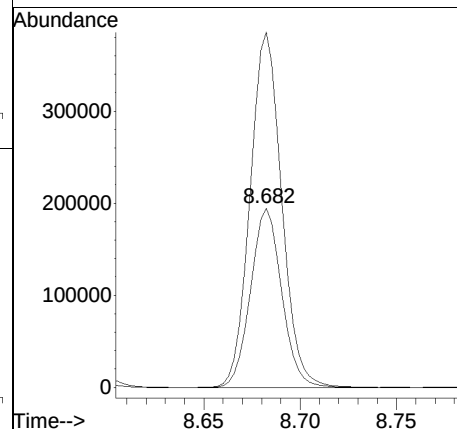
Tgt Ion:	131	Resp:	68103
Ion Ratio	Lower	Upper	
131	100		
133	93.7	81.0	121.0
119	63.8	41.3	81.3

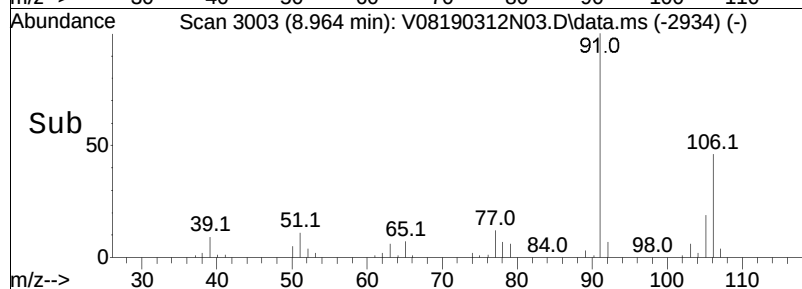
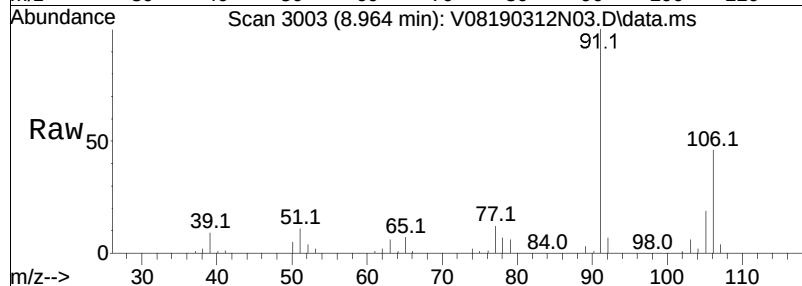
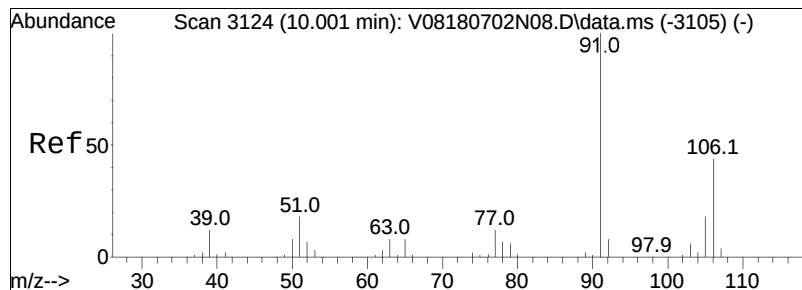




#76
 p/m Xylene
 Concen: 18.94 ug/L
 RT: 8.682 min Scan# 2902
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

Tgt	Ion	Ratio	Lower	Upper
106	100			
91	201.1	166.4	249.6	





#77

o Xylene

Concen: 18.65 ug/L

RT: 8.964 min Scan# 3003

Delta R.T. -0.008 min

Lab File: V08190312N03.D

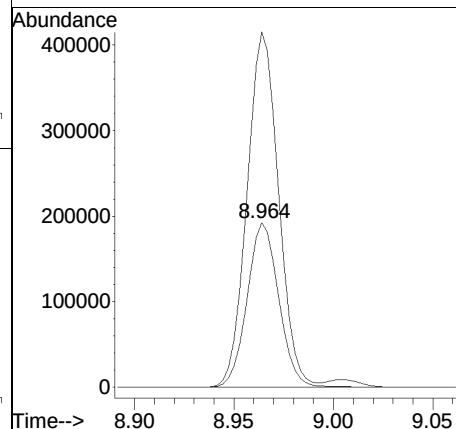
Acq: 12 Mar 2019 6:51 pm

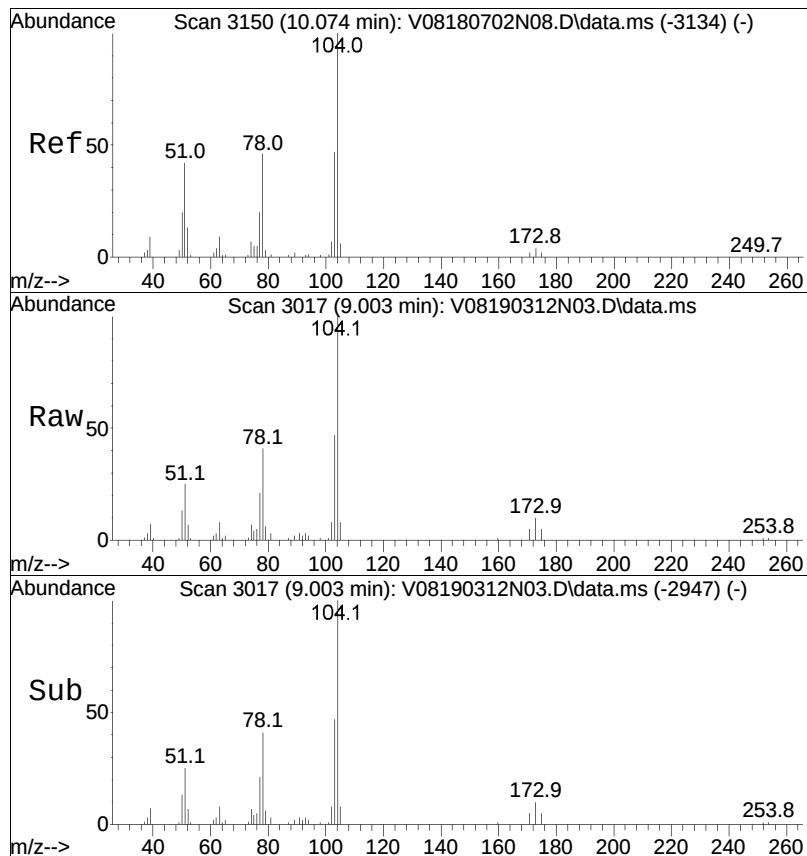
Tgt Ion:106 Resp: 213116

Ion Ratio Lower Upper

106 100

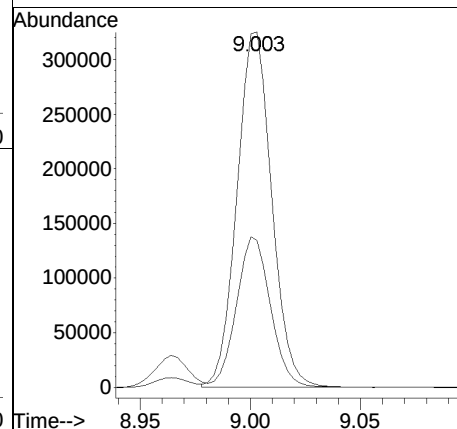
91 214.6 182.6 273.8

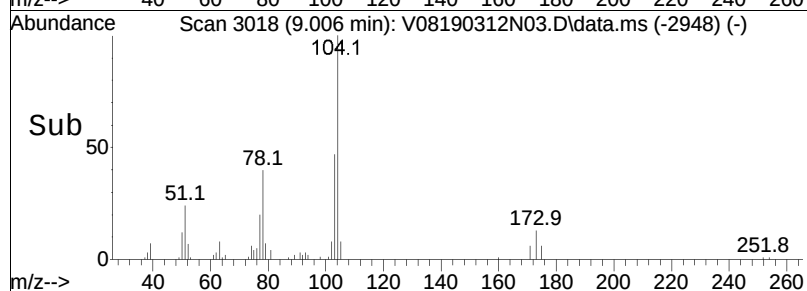
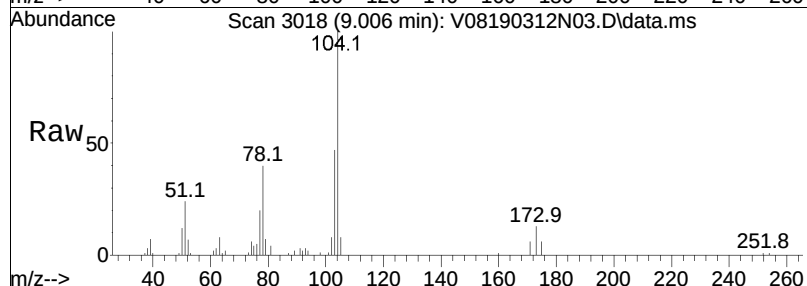
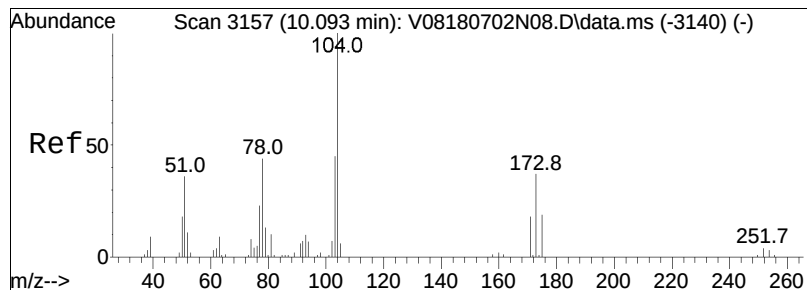




#78
 Styrene
 Concen: 19.54 ug/L
 RT: 9.003 min Scan# 3017
 Delta R.T. -0.005 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

Tgt Ion	Ratio	Lower	Upper
104	100		
78	41.6	39.8	59.6





#80

Bromoform

Concen: 9.47 ug/L

RT: 9.006 min Scan# 3018

Delta R.T. -0.005 min

Lab File: V08190312N03.D

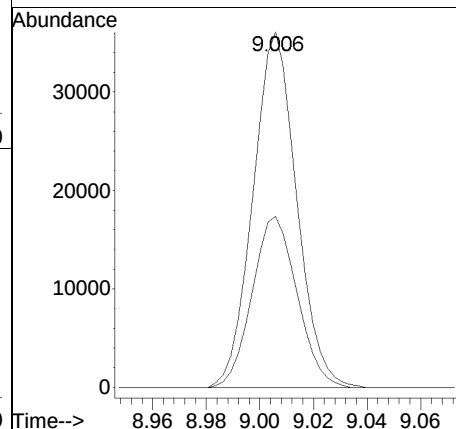
Acq: 12 Mar 2019 6:51 pm

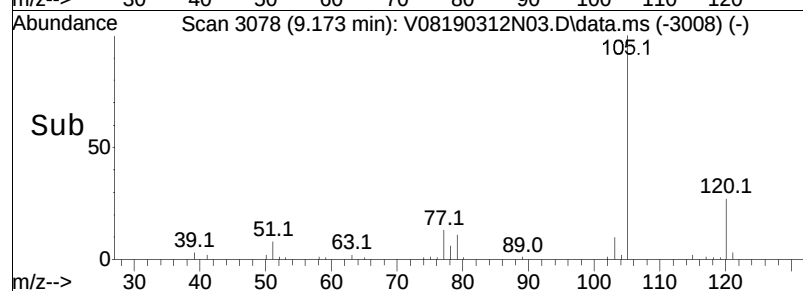
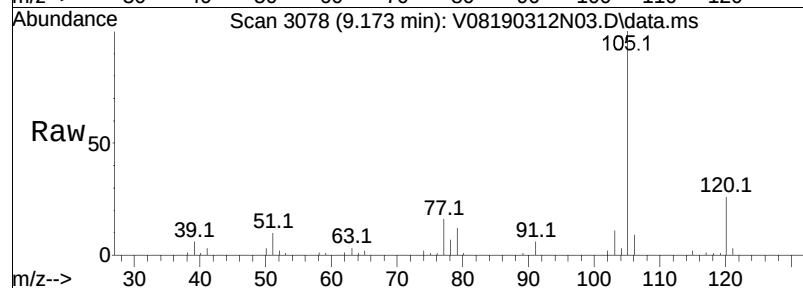
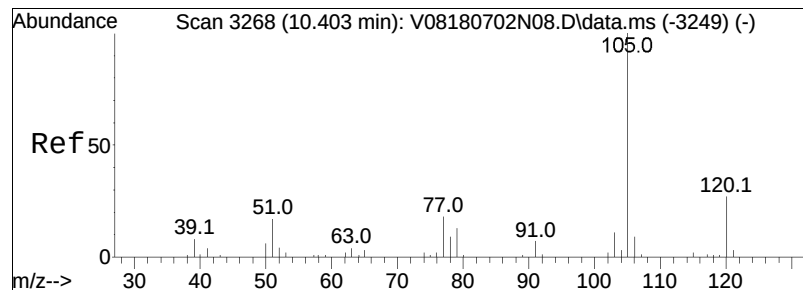
Tgt Ion:173 Resp: 40738

Ion Ratio Lower Upper

173 100

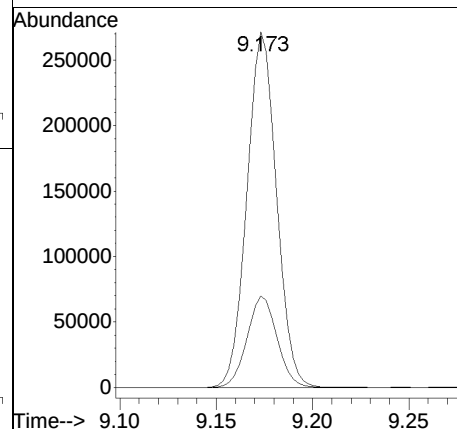
175 49.5 31.5 71.5

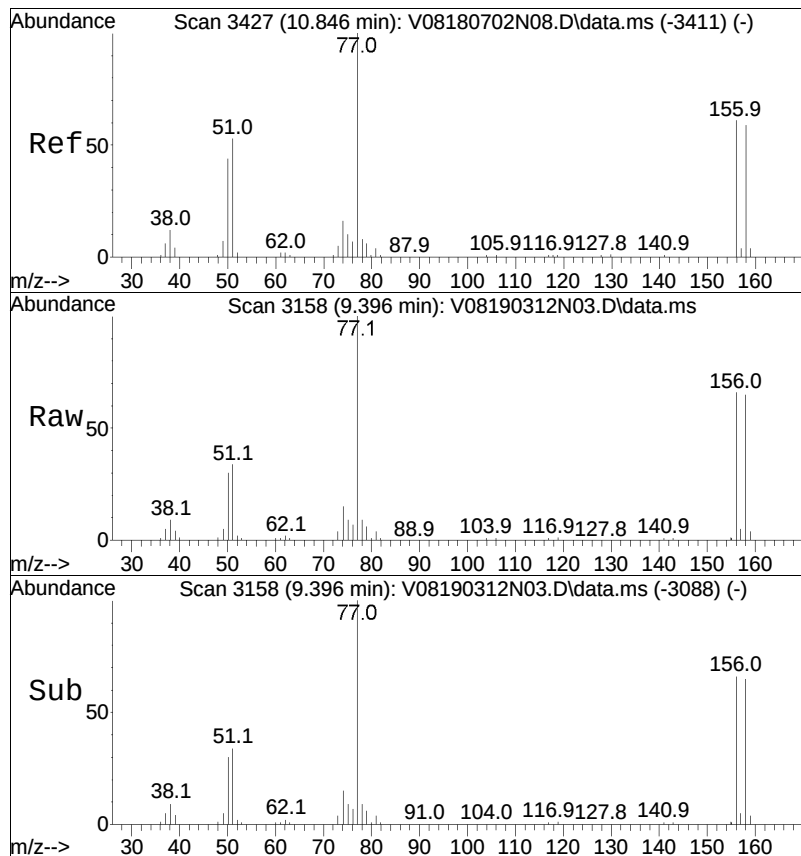




#82
 Isopropylbenzene
 Concen: 9.60 ug/L
 RT: 9.173 min Scan# 3078
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

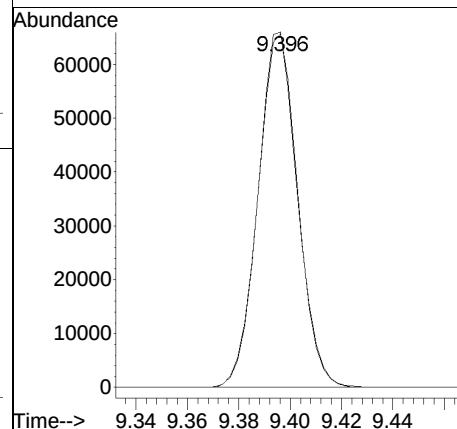
Tgt Ion	Ratio	Lower	Upper
105	100		
120	26.0	4.8	44.8

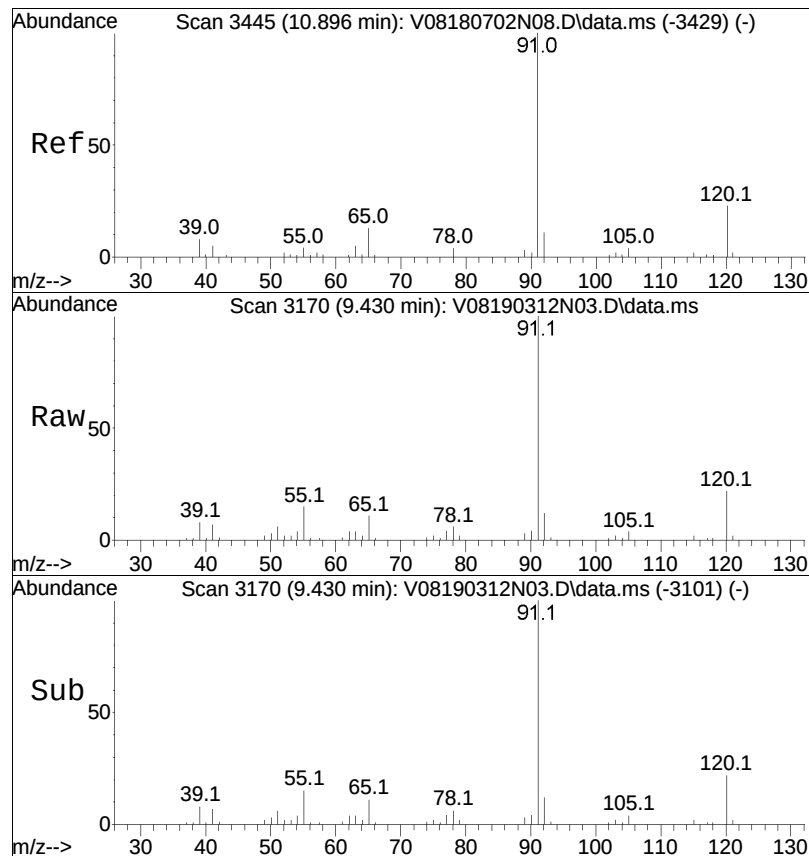




#84
 Bromobenzene
 Concen: 9.06 ug/L
 RT: 9.396 min Scan# 3158
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

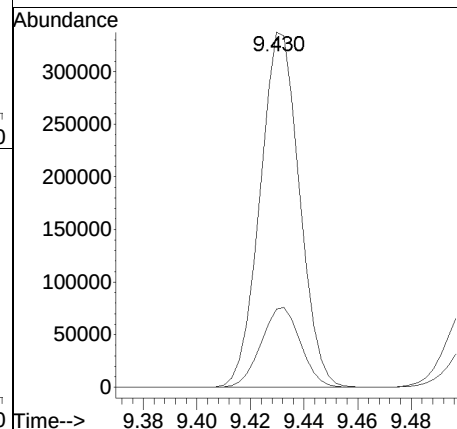
Tgt Ion:156 Resp: 70327
 Ion Ratio Lower Upper
 156 100
 158 99.9 75.9 113.9

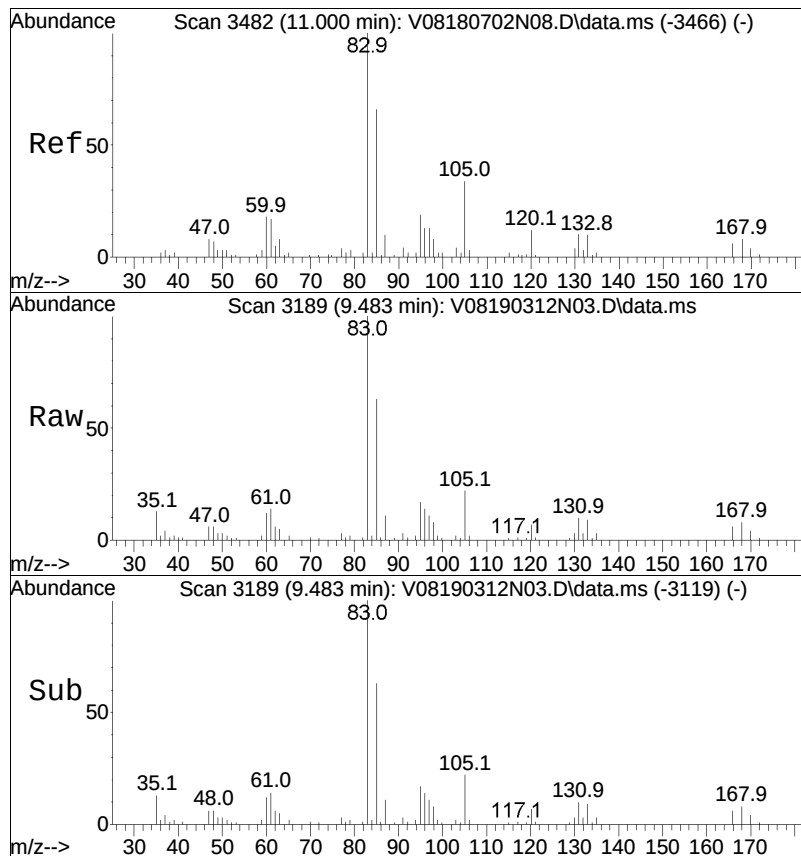




#85
 n-Propylbenzene
 Concen: 9.99 ug/L
 RT: 9.430 min Scan# 3170
 Delta R.T. -0.008 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

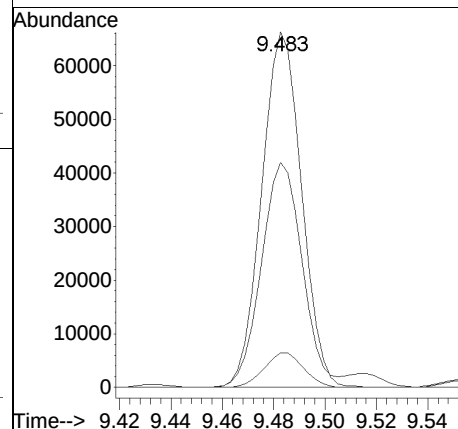
Tgt Ion:	91	Resp:	344141
Ion Ratio	Lower	Upper	
91	100		
120	22.6	17.0	25.6

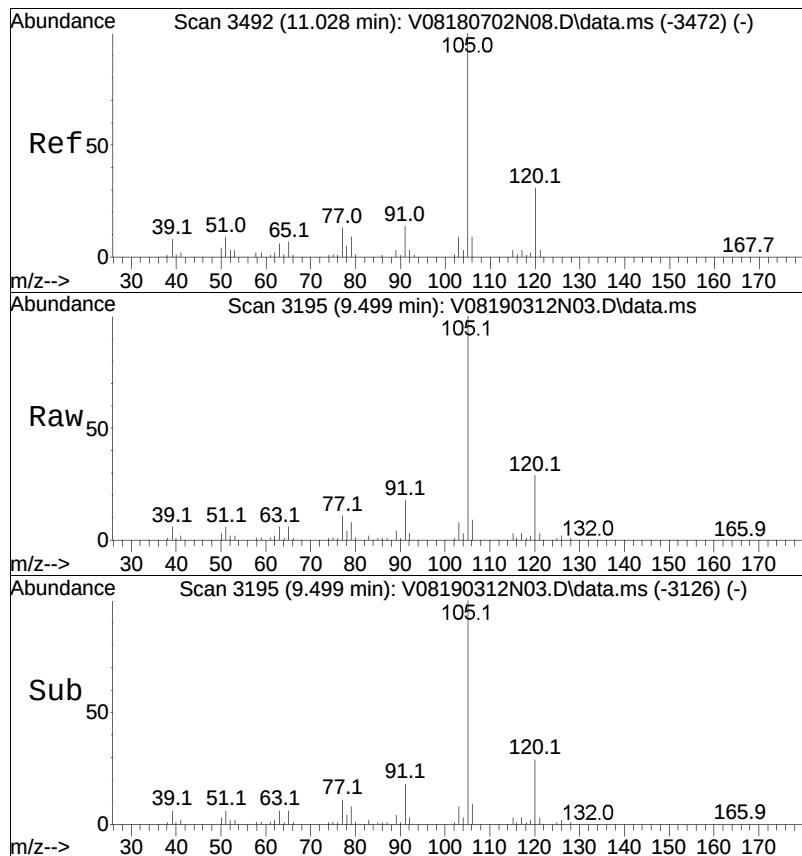




#87
 1,1,2,2-Tetrachloroethane
 Concen: 10.20 ug/L
 RT: 9.483 min Scan# 3189
 Delta R.T. -0.005 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

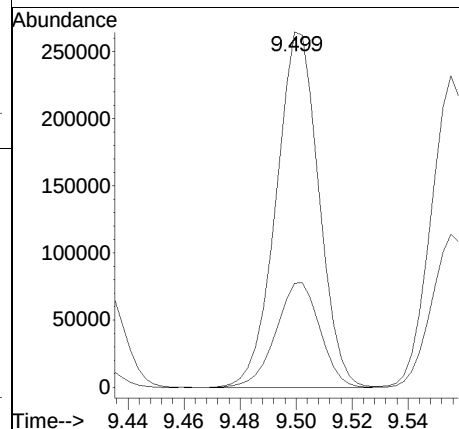
Tgt Ion:	83	Resp:	71484
Ion Ratio	Lower	Upper	
83	100		
131	9.7	0.0	30.4
85	64.9	45.4	85.4

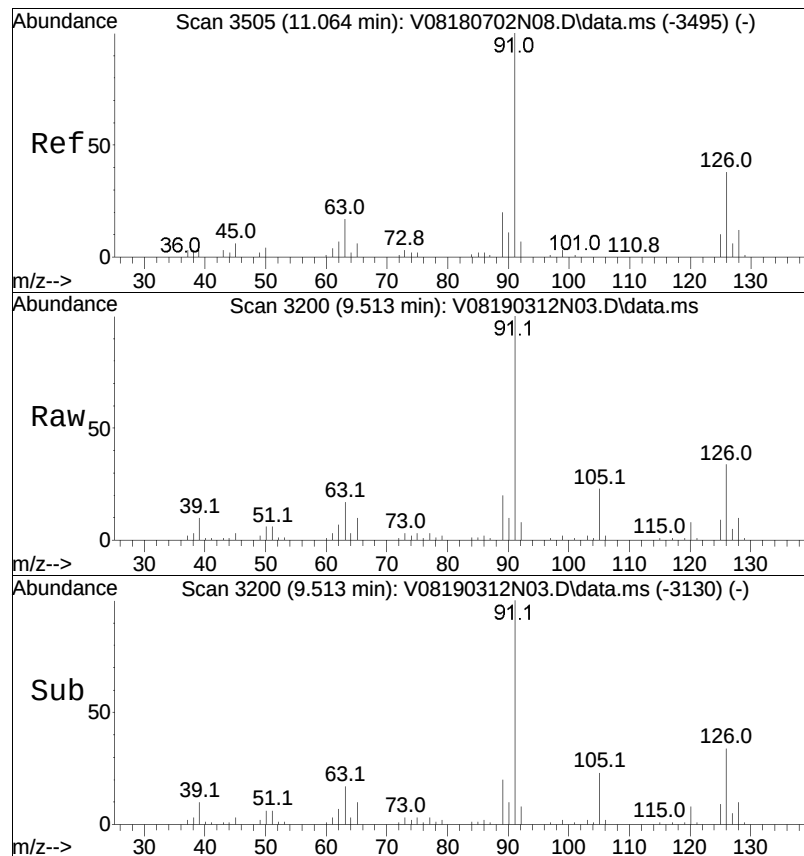




#88
 4-Ethyltoluene
 Concen: 9.78 ug/L
 RT: 9.499 min Scan# 3195
 Delta R.T. -0.009 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

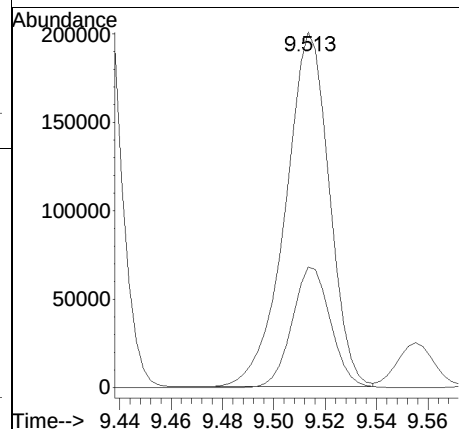
Tgt Ion	Ratio	Lower	Upper
105	100		
120	30.3	18.1	37.7

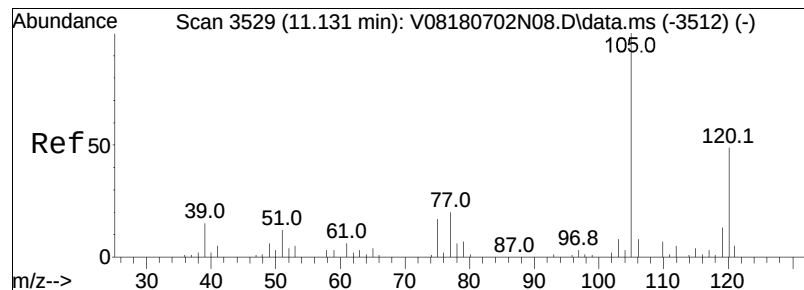




#89
 2-Chlorotoluene
 Concen: 9.46 ug/L
 RT: 9.513 min Scan# 3200
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

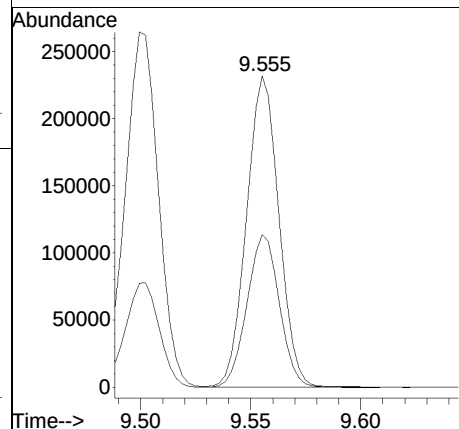
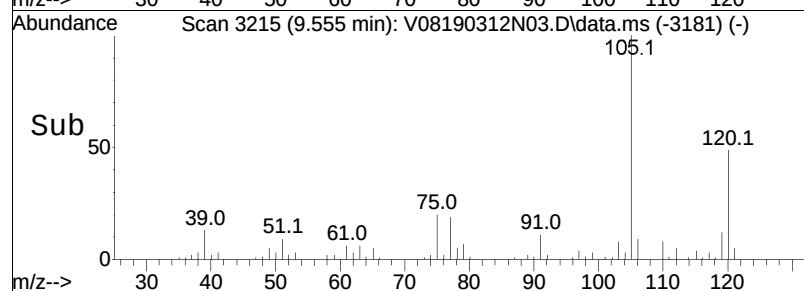
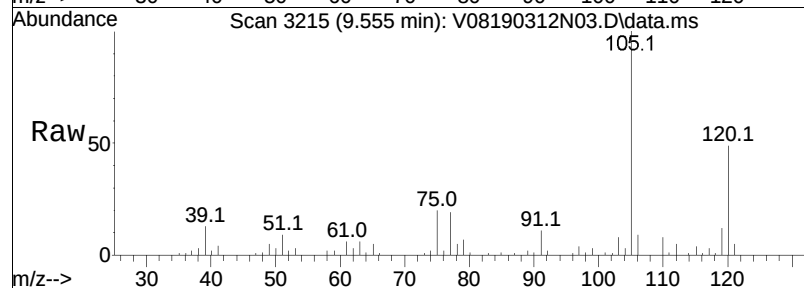
Tgt Ion	Ratio	Lower	Upper
91	100		
126	29.7	21.5	32.3

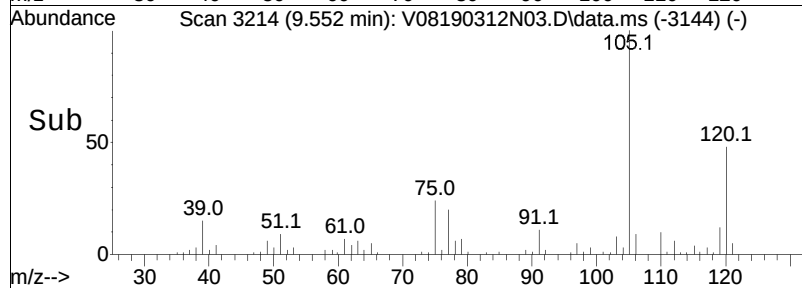
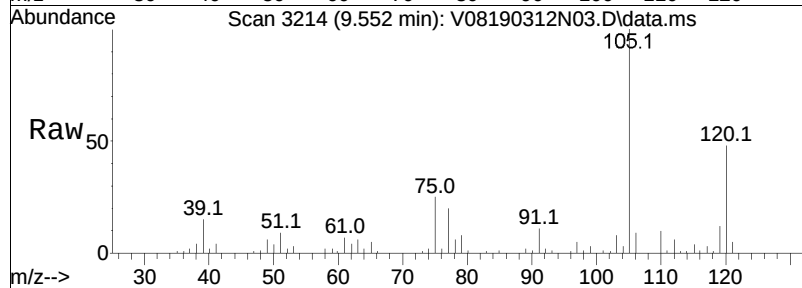
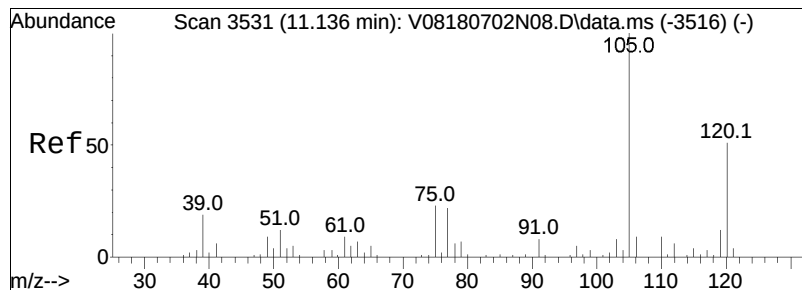




#90
 1,3,5-Trimethylbenzene
 Concen: 9.56 ug/L
 RT: 9.555 min Scan# 3215
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

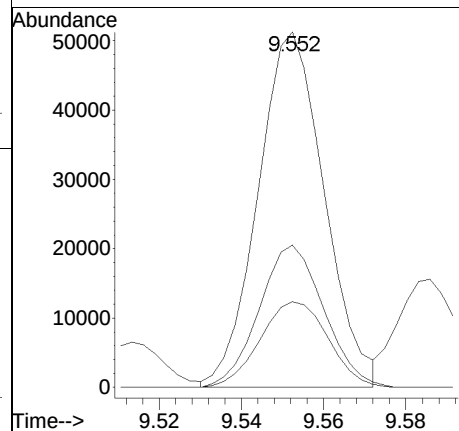
Tgt Ion	Ratio	Lower	Upper
105	100		
120	49.2	34.8	52.2

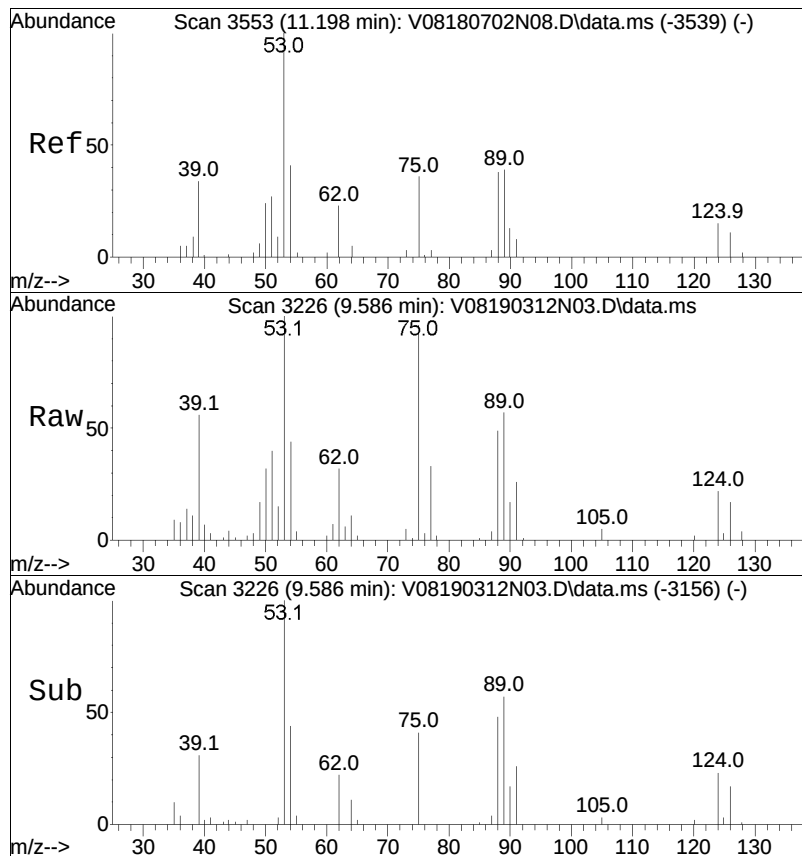




#91
 1,2,3-Trichloropropane
 Concen: 10.52 ug/L
 RT: 9.552 min Scan# 3214
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

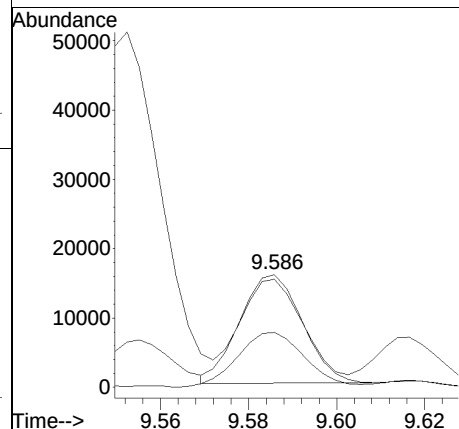
Tgt Ion	Ratio	Lower	Upper
75	100		
110	39.2	25.4	52.8
112	24.8	15.6	32.4

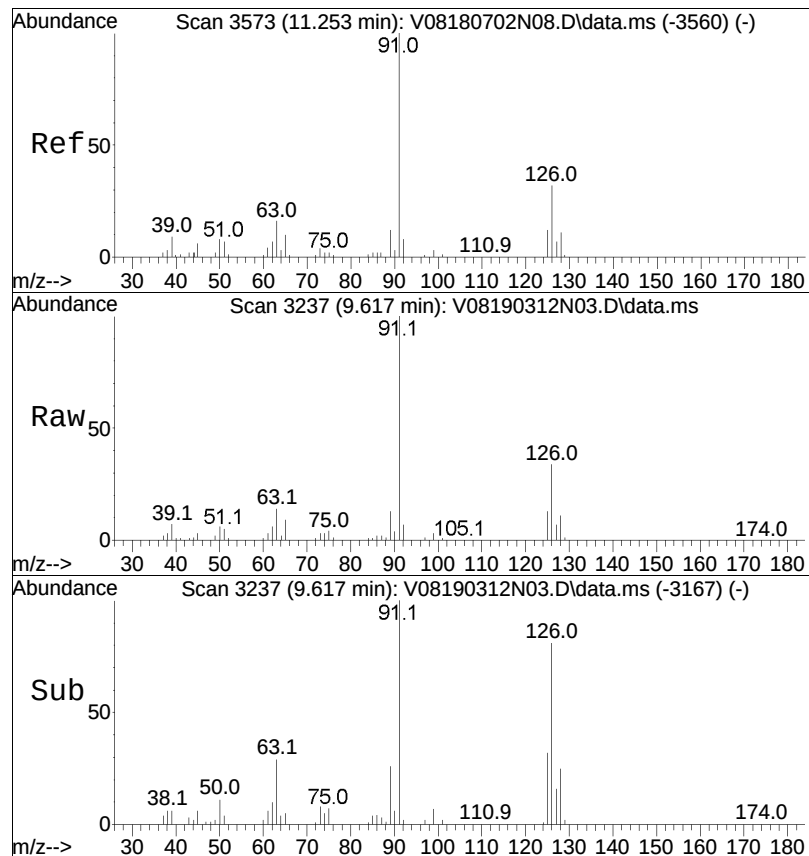




#92
trans-1,4-Dichloro-2-butene
Concen: 8.08 ug/L
RT: 9.586 min Scan# 3226
Delta R.T. -0.005 min
Lab File: V08190312N03.D
Acq: 12 Mar 2019 6:51 pm

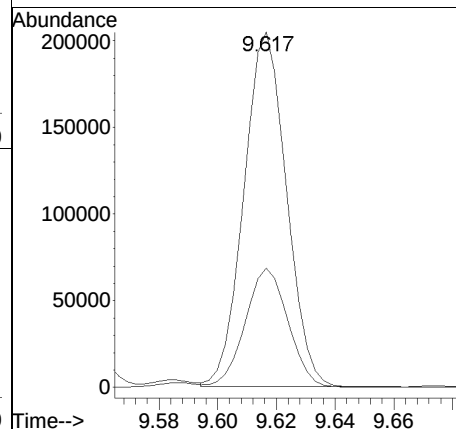
Tgt Ion:	53	Resp:	15511
Ion Ratio	Lower	Upper	
53	100		
88	54.7	39.6	59.4
75	104.3	70.2	105.4

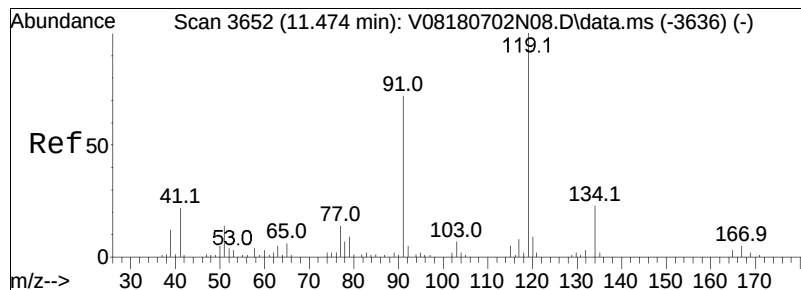




#93
 4-Chlorotoluene
 Concen: 9.43 ug/L
 RT: 9.617 min Scan# 3237
 Delta R.T. -0.005 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

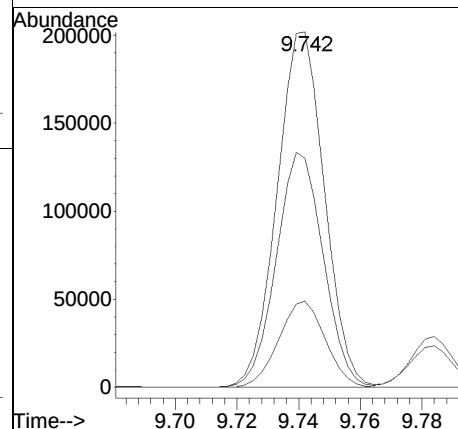
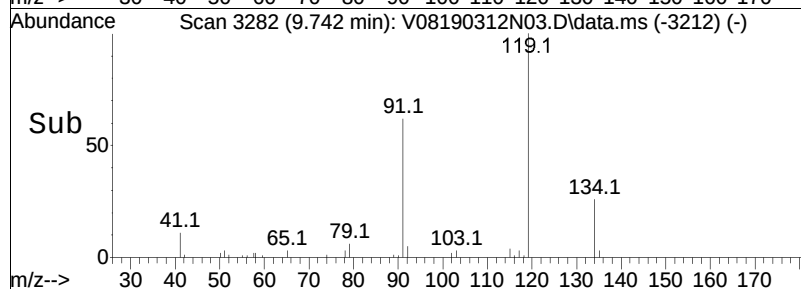
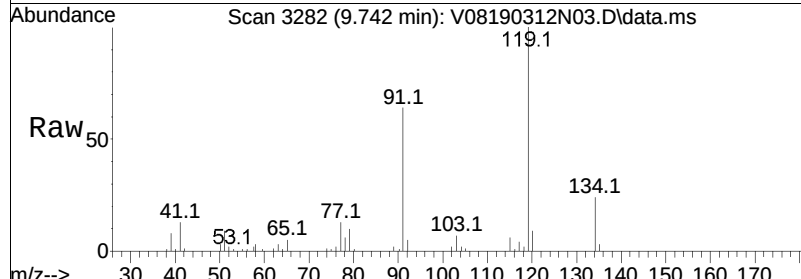
Tgt Ion:	91	Resp:	206219
Ion Ratio	Lower	Upper	
91	100		
126	33.9	24.6	36.8

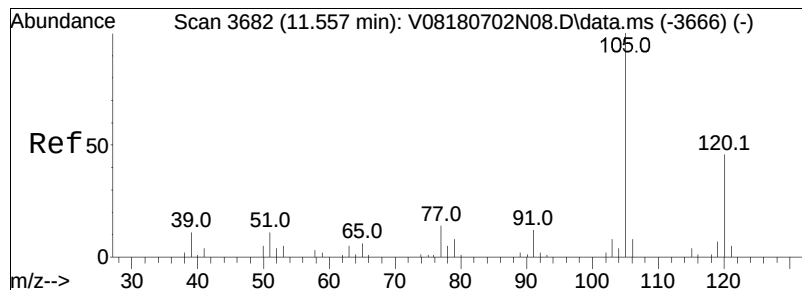




#94
 tert-Butylbenzene
 Concen: 8.47 ug/L
 RT: 9.742 min Scan# 3282
 Delta R.T. -0.005 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

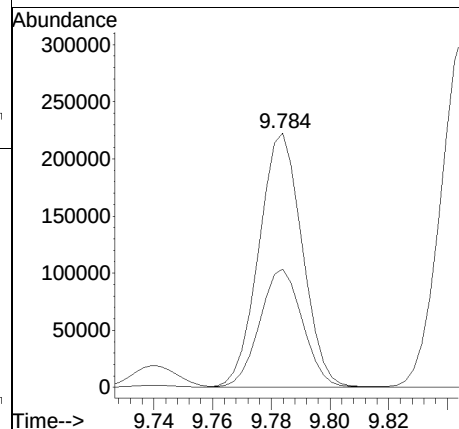
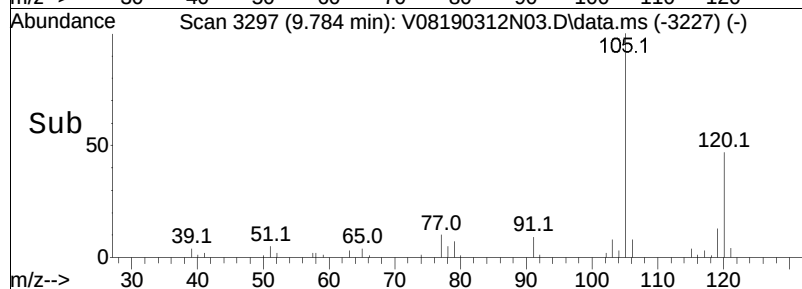
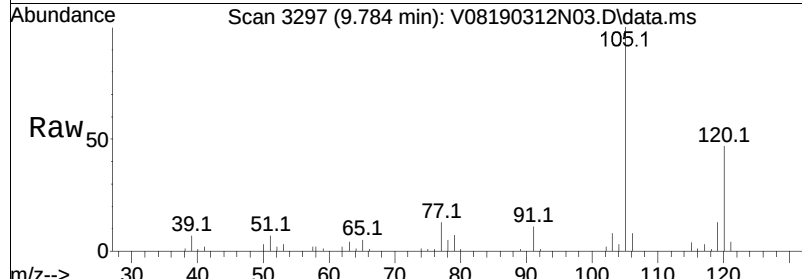
Tgt Ion	Ratio	Lower	Upper
119	100		
91	65.4	51.4	77.2
134	23.9	18.3	27.5

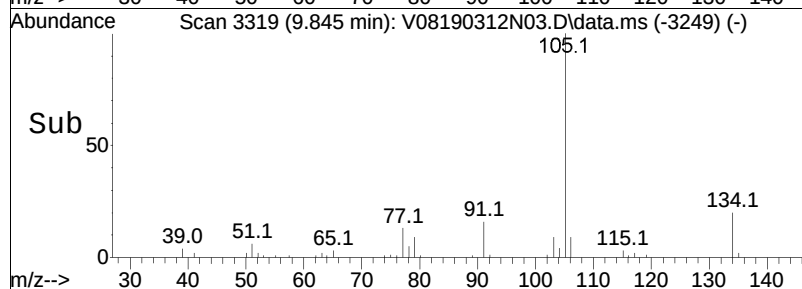
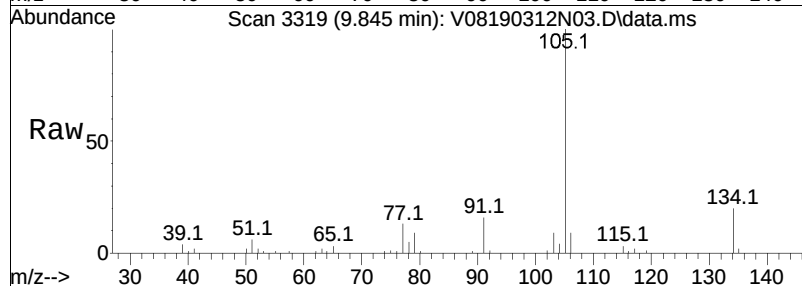
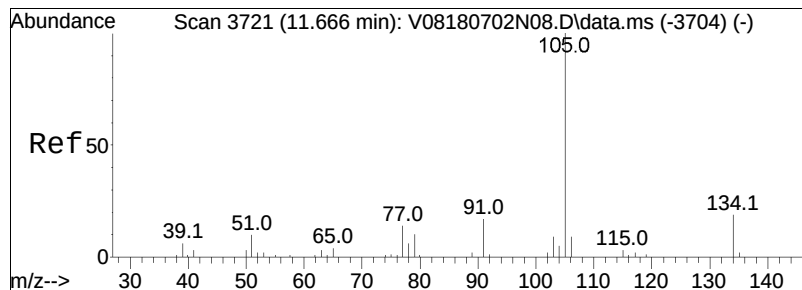




#97
 1,2,4-Trimethylbenzene
 Concen: 9.21 ug/L
 RT: 9.784 min Scan# 3297
 Delta R.T. -0.005 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

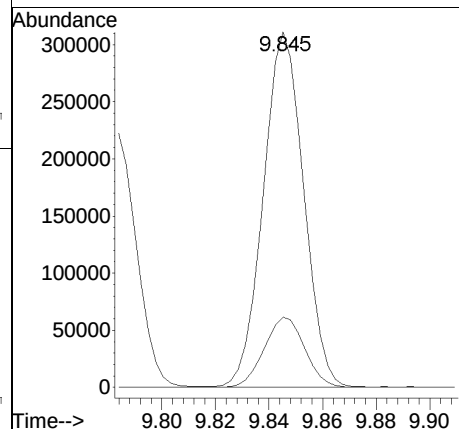
Tgt Ion	Ratio	Lower	Upper
105	100		
120	46.1	33.4	50.0

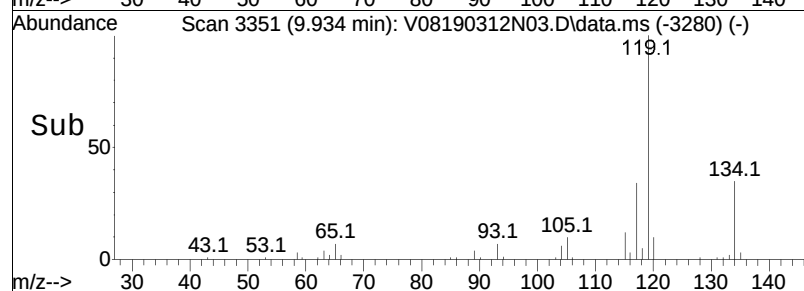
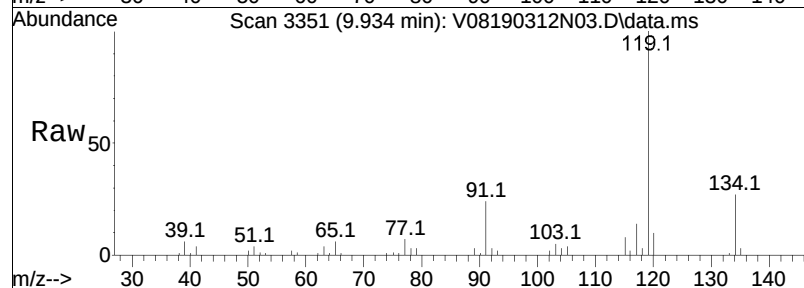
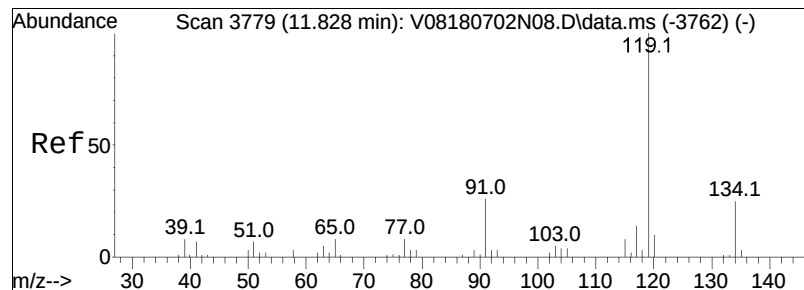




#98
 sec-Butylbenzene
 Concen: 10.37 ug/L
 RT: 9.845 min Scan# 3319
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

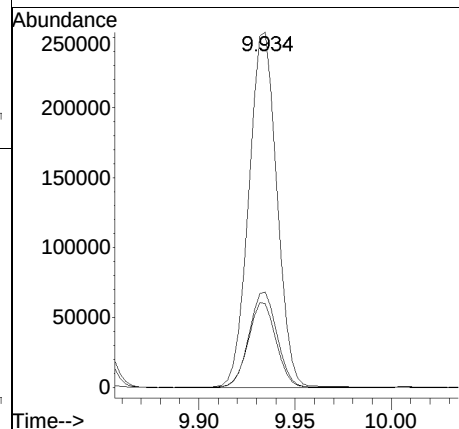
Tgt	Ion	Ratio	Lower	Upper
105	100			
134	20.0	12.5	26.1	

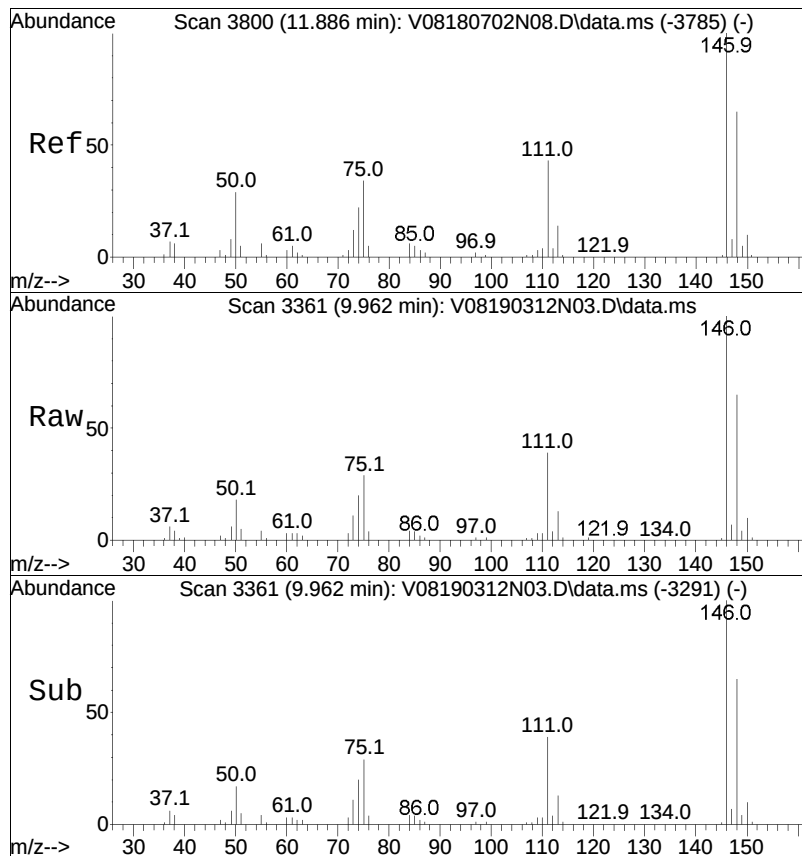




#99
 p-Isopropyltoluene
 Concen: 9.62 ug/L
 RT: 9.934 min Scan# 3351
 Delta R.T. -0.003 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

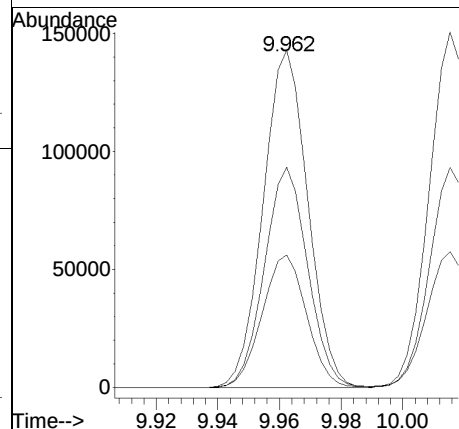
Tgt Ion	Ratio	Lower	Upper
119	100		
134	26.8	16.1	33.3
91	23.8	17.3	35.9

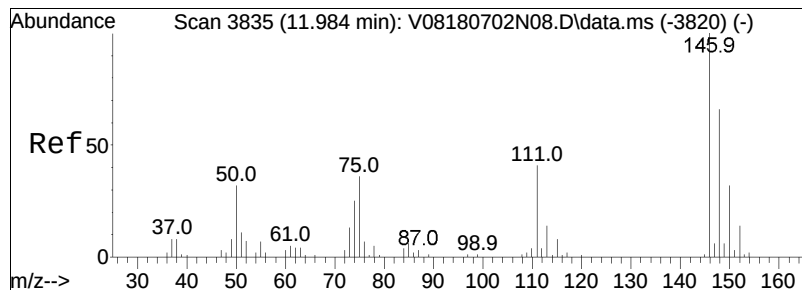




#100
 1,3-Dichlorobenzene
 Concen: 10.04 ug/L
 RT: 9.962 min Scan# 3361
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

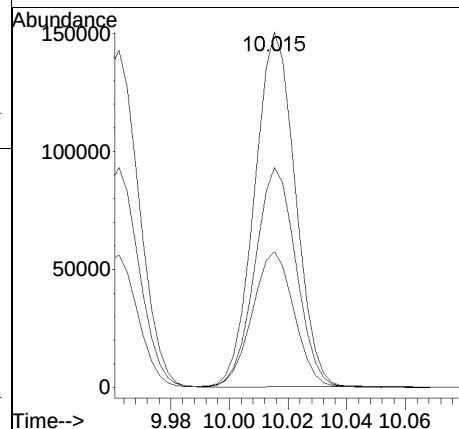
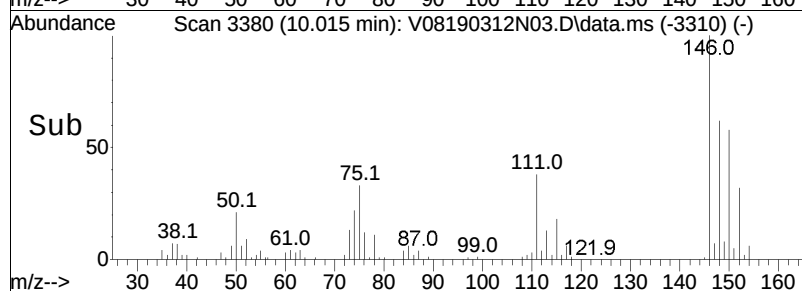
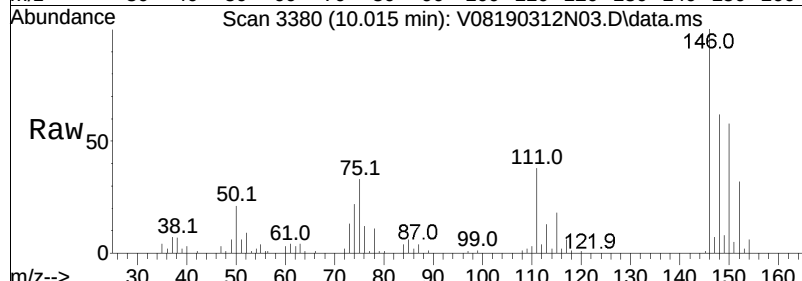
Tgt Ion:	146	Resp:	143801
Ion Ratio	Lower	Upper	
146	100		
111	39.1	27.5	57.1
148	63.3	41.9	86.9

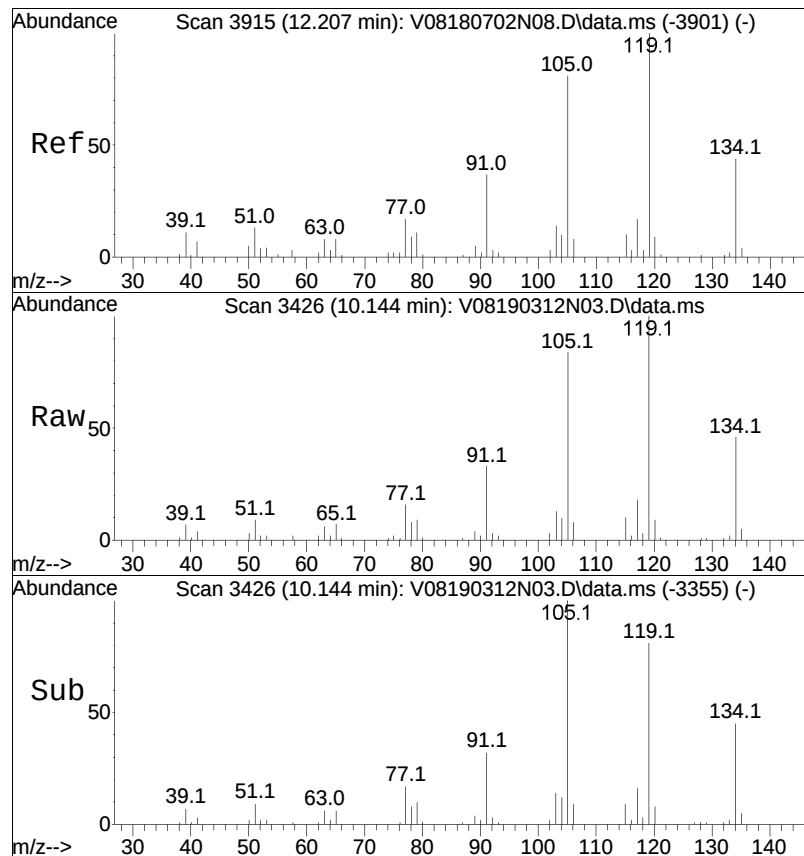




#101
 1,4-Dichlorobenzene
 Concen: 9.79 ug/L
 RT: 10.015 min Scan# 3380
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

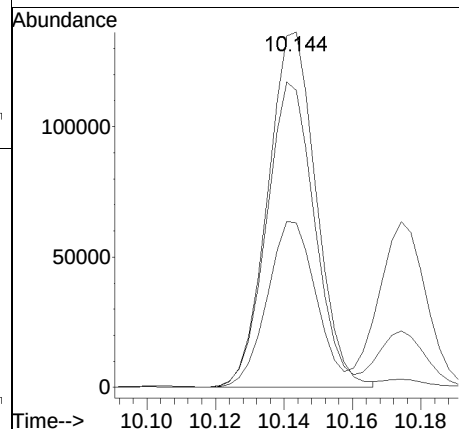
Tgt Ion	Ratio	Lower	Upper
146	100		
111	39.6	32.3	48.5
148	62.9	49.9	74.9

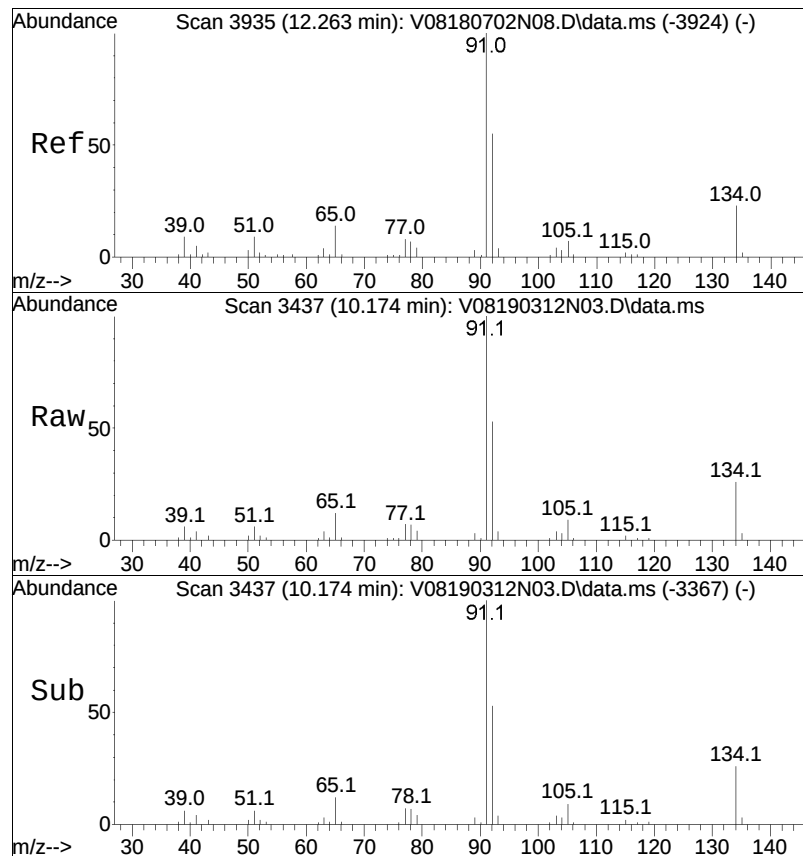




#102
 p-Diethylbenzene
 Concen: 8.53 ug/L
 RT: 10.144 min Scan# 3426
 Delta R.T. -0.002 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

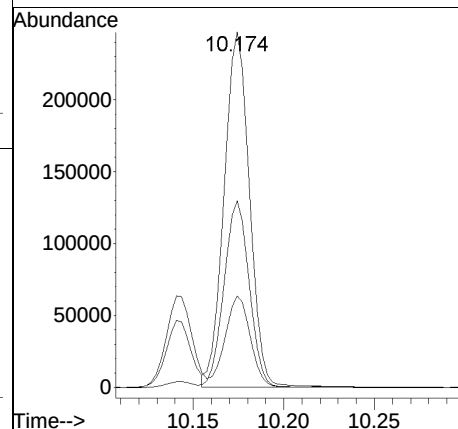
Tgt Ion:	119	Resp:	133673
Ion Ratio	Lower	Upper	
119	100		
105	85.4	59.5	123.7
134	47.0	30.2	62.6

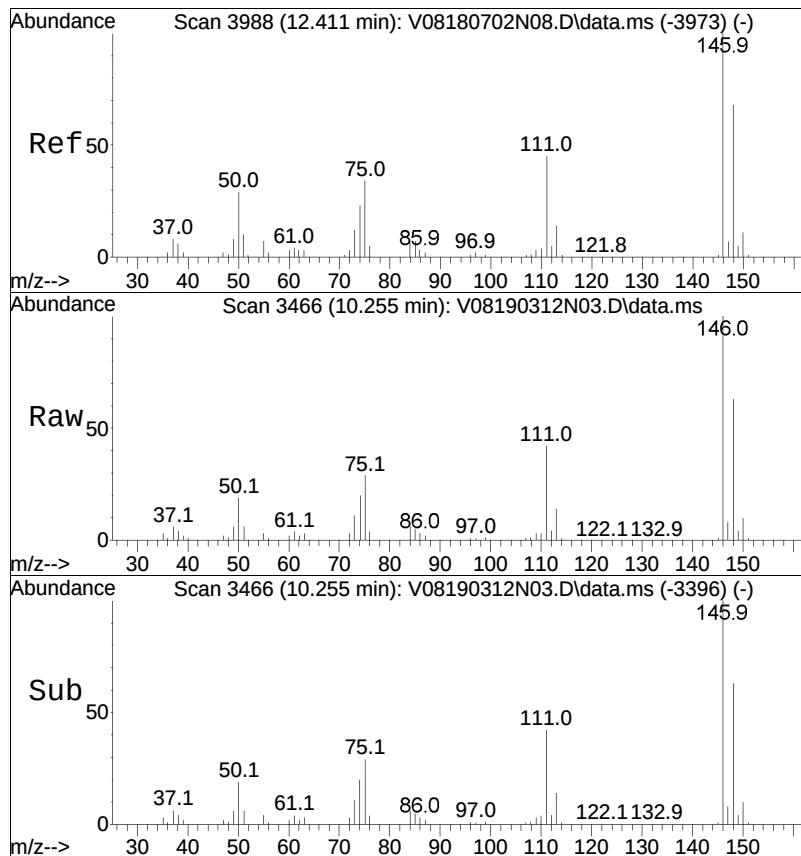




#103
 n-Butylbenzene
 Concen: 9.71 ug/L
 RT: 10.174 min Scan# 3437
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

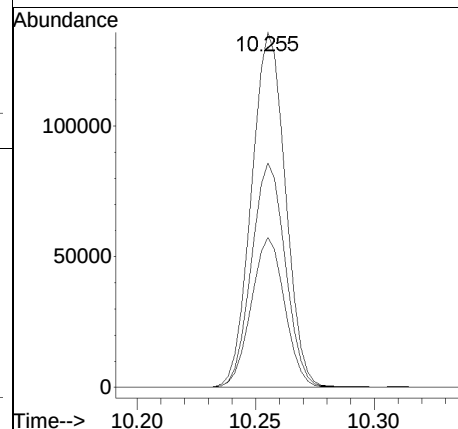
Tgt Ion:	91	Resp:	241129
Ion Ratio	Lower	Upper	
91	100		
92	51.9	43.0	64.4
134	25.4	19.6	29.4

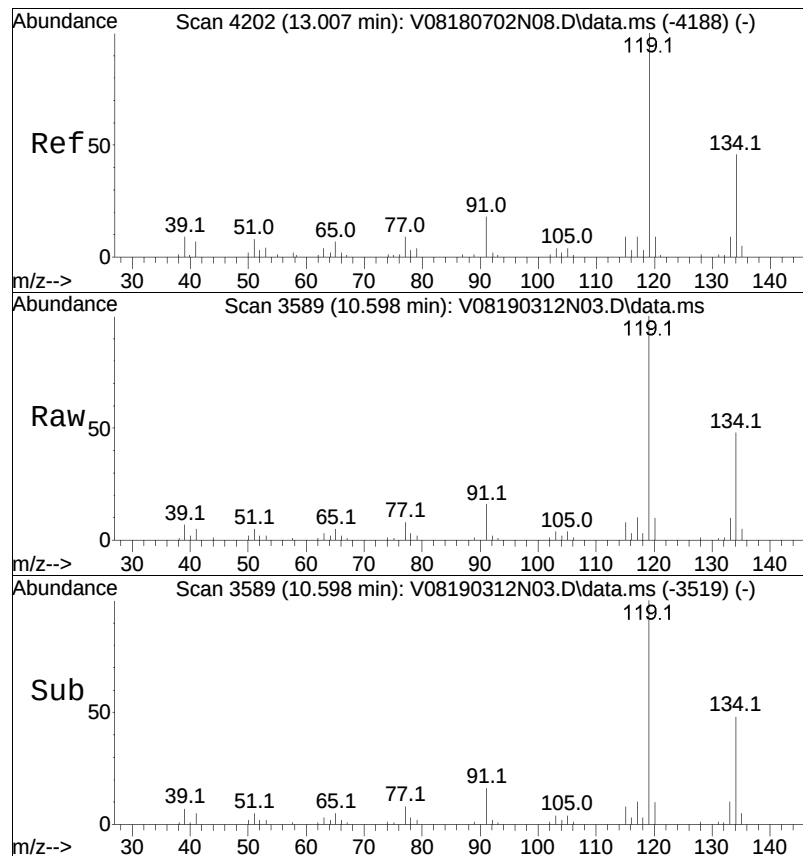




#104
 1,2-Dichlorobenzene
 Concen: 9.71 ug/L
 RT: 10.255 min Scan# 3466
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

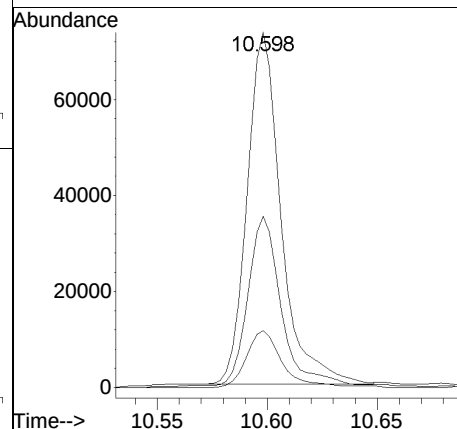
Tgt Ion:	146	Resp:	135573
Ion Ratio	Lower	Upper	
146	100		
111	41.7	28.3	58.7
148	63.0	42.3	87.8

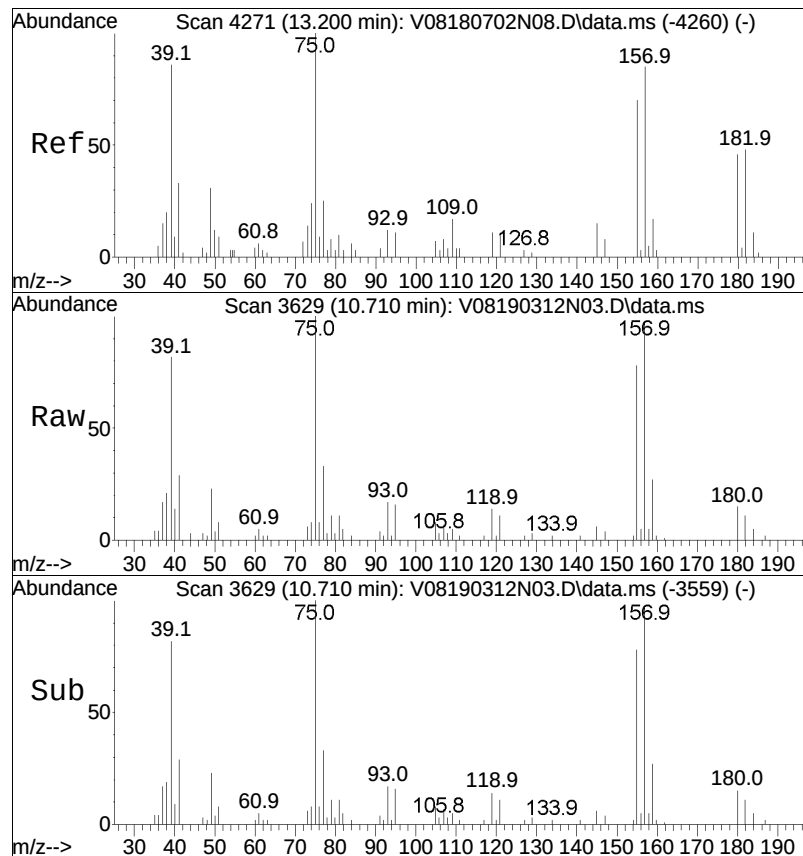




#105
 1,2,4,5-Tetramethylbenzene
 Concen: 3.51 ug/L
 RT: 10.598 min Scan# 3589
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

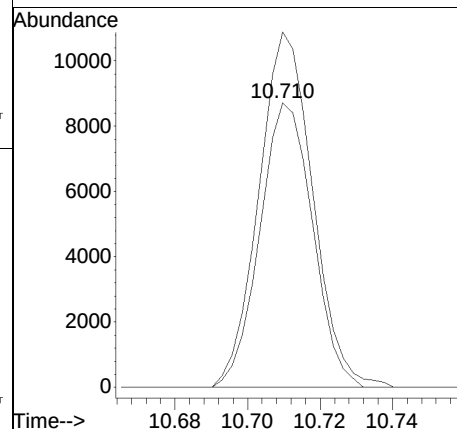
Tgt Ion:	119	Resp:	78563
Ion Ratio	Lower	Upper	
119	100		
134	47.9	30.5	63.3
91	16.8	12.4	25.7

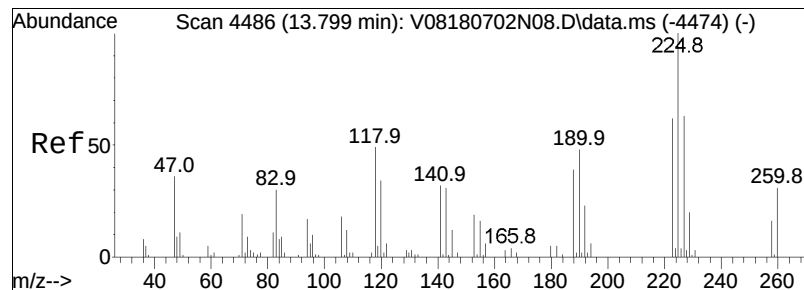




#106
 1,2-Dibromo-3-chloropropane
 Concen: 8.40 ug/L
 RT: 10.710 min Scan# 3629
 Delta R.T. -0.005 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

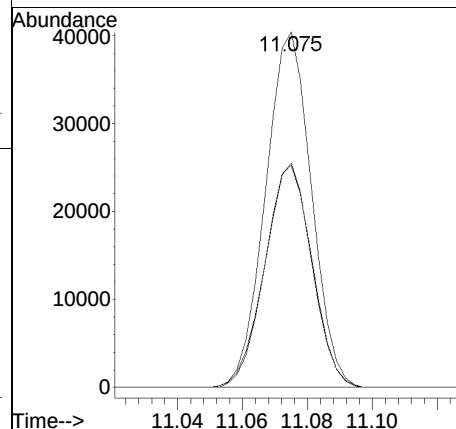
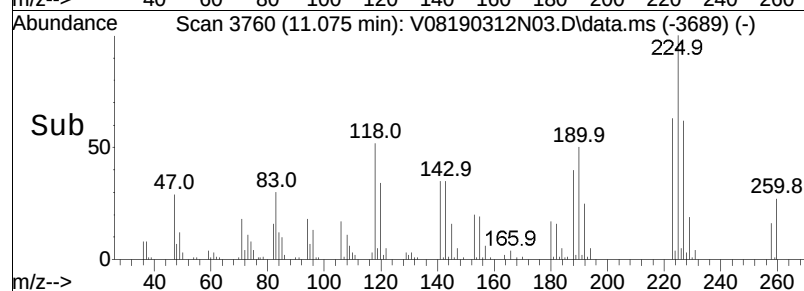
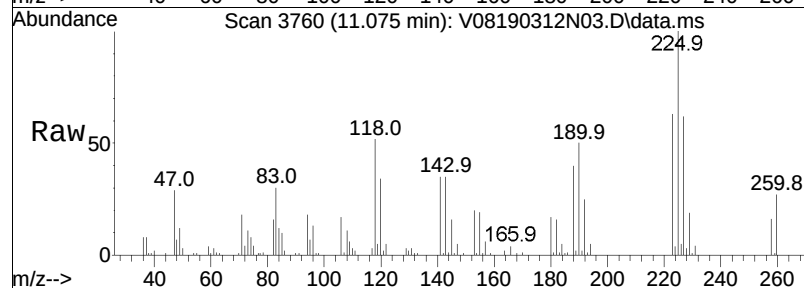
Tgt	Ion	Ratio	Lower	Upper
155	100			
157	127.8	94.8	142.2	

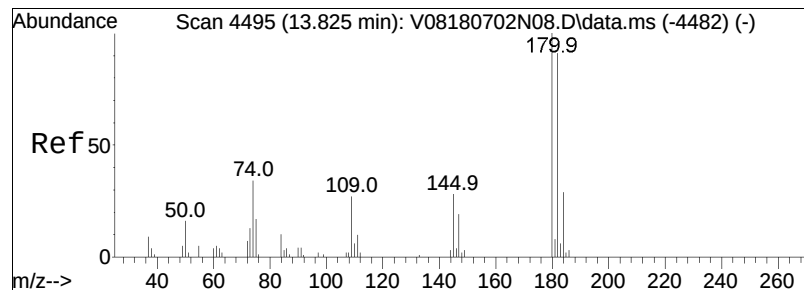




#108
 Hexachlorobutadiene
 Concen: 8.82 ug/L
 RT: 11.075 min Scan# 3760
 Delta R.T. -0.003 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

Tgt Ion	Ratio	Lower	Upper
225	100		
223	63.8	54.3	81.5
227	64.8	52.4	78.6





#109

1,2,4-Trichlorobenzene

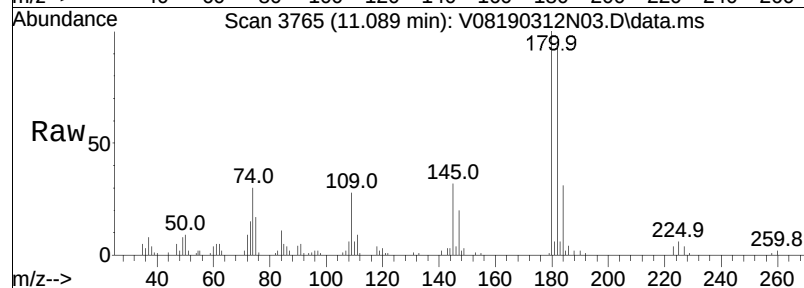
Concen: 6.24 ug/L

RT: 11.089 min Scan# 3765

Delta R.T. -0.003 min

Lab File: V08190312N03.D

Acq: 12 Mar 2019 6:51 pm



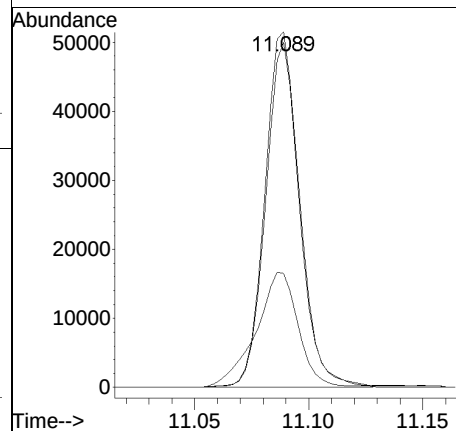
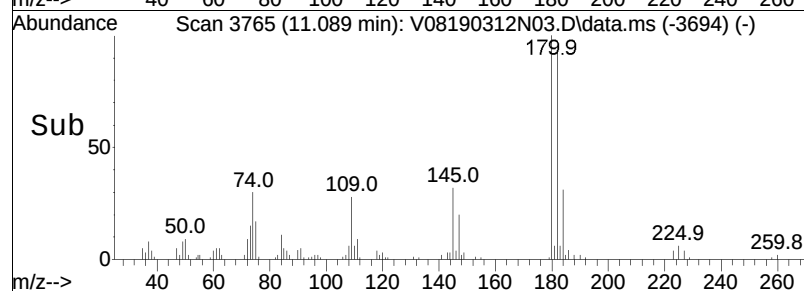
Tgt Ion:180 Resp: 54708

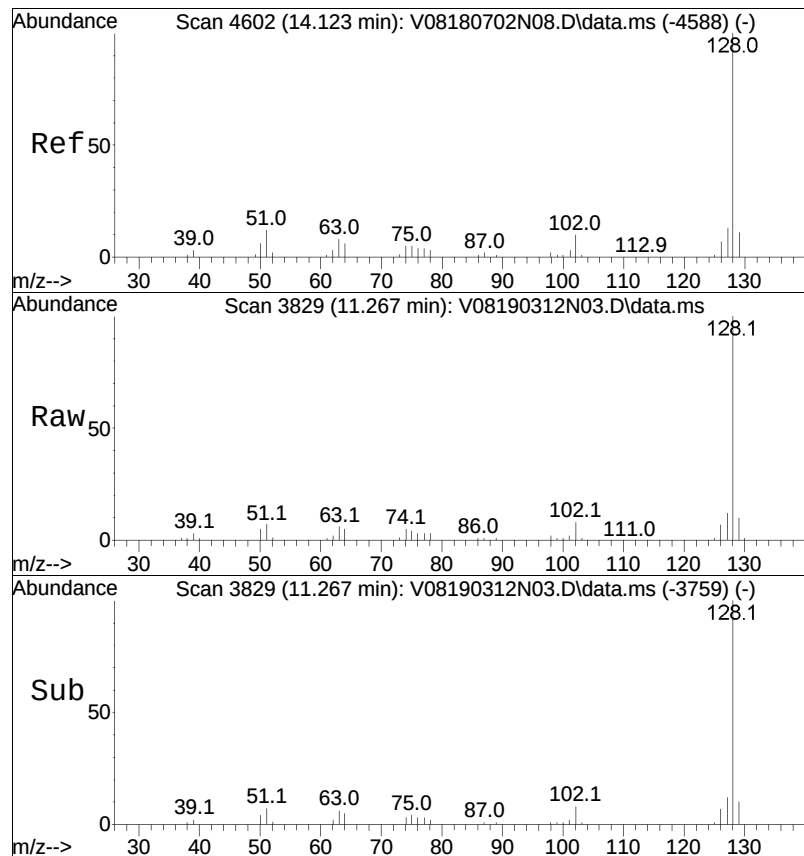
Ion Ratio Lower Upper

180 100

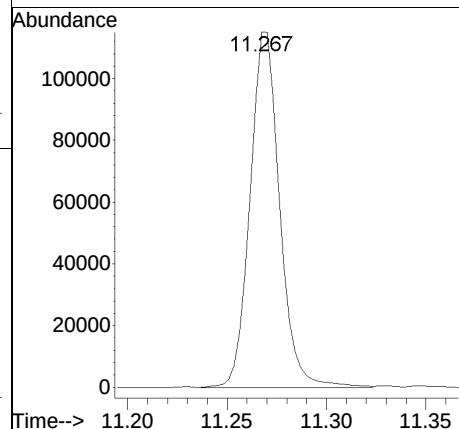
182 95.0 77.3 115.9

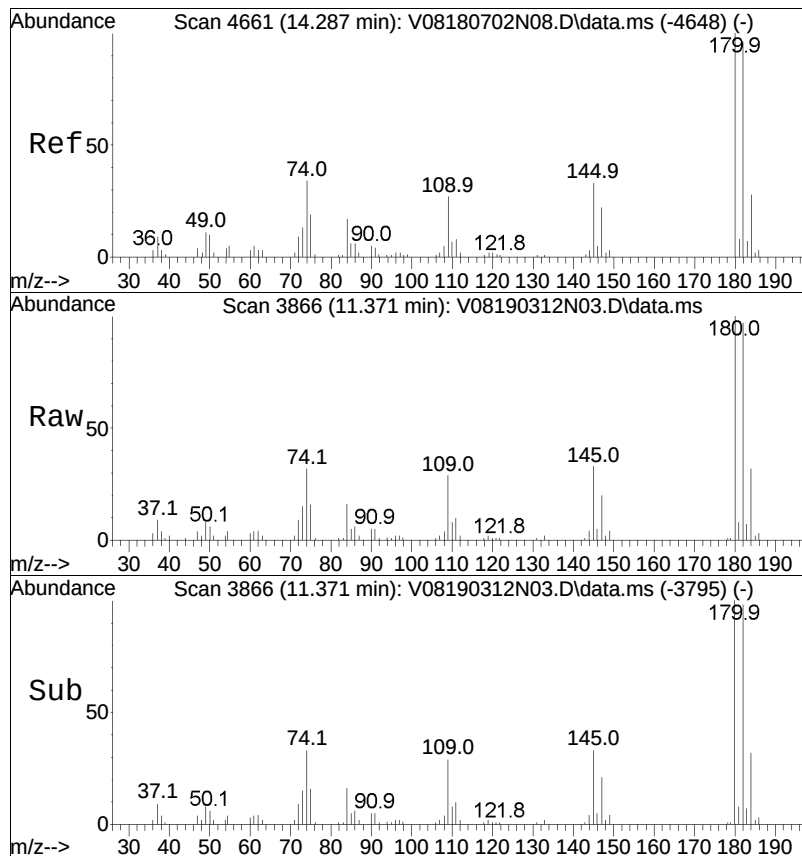
145 39.6 28.1 42.1





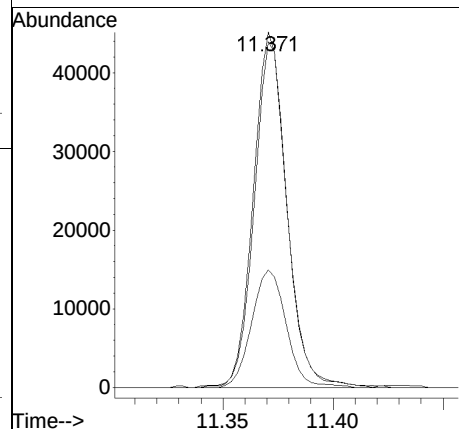
#110
 Naphthalene
 Concen: 6.19 ug/L
 RT: 11.267 min Scan# 3829
 Delta R.T. -0.006 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm
 Tgt Ion:128 Resp: 119387





#111
 1,2,3-Trichlorobenzene
 Concen: 5.99 ug/L
 RT: 11.371 min Scan# 3866
 Delta R.T. -0.002 min
 Lab File: V08190312N03.D
 Acq: 12 Mar 2019 6:51 pm

Tgt Ion:	180	Resp:	47434
Ion Ratio	Lower	Upper	
180	100		
182	96.2	76.4	114.6
145	34.3	26.4	39.6



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N03.D
 Acq On : 13 Mar 2019 7:04 pm
 Operator : VOA108:KJD
 Sample : WG1215584-4,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 13 20:12:35 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.550	96	300956	10.000	ug/L	0.00
Standard Area 1 = 302021			Recovery	=	99.65%	
59) Chlorobenzene-d5	8.526	117	199502	10.000	ug/L	0.00
Standard Area 1 = 206709			Recovery	=	96.51%	
79) 1,4-Dichlorobenzene-d4	10.007	152	95596	10.000	ug/L	0.00
Standard Area 1 = 100898			Recovery	=	94.75%	
System Monitoring Compounds						
36) Dibromofluoromethane	4.574	113	80961	10.532	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	105.32%	
43) 1,2-Dichloroethane-d4	5.210	65	92639	10.722	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	107.22%	
60) Toluene-d8	7.240	98	277378	10.144	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	101.44%	
83) 4-Bromofluorobenzene	9.340	95	87514	9.356	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	93.56%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.974	85	61321	10.195	ug/L	98
3) Chloromethane	1.094	50	63722	10.756	ug/L	100
4) Vinyl chloride	1.150	62	72079	11.392	ug/L	95
5) Bromomethane	1.359	94	55096	10.113	ug/L	98
6) Chloroethane	1.440	64	69022	14.918	ug/L	98
7) Trichlorofluoromethane	1.543	101	123704	12.112	ug/L	95
8) Ethyl ether	1.783	74	33427	9.824	ug/L	70
10) 1,1-Dichloroethene	1.914	96	59678	10.547	ug/L	# 65
11) Carbon disulfide	1.920	76	187897	10.565	ug/L	97
15) Methylene chloride	2.408	84	69599	10.326	ug/L	71
17) Acetone	2.466	43	13490	11.531	ug/L	96
18) trans-1,2-Dichloroethene	2.558	96	65663	10.229	ug/L	75
20) Methyl tert-butyl ether	2.687	73	147492	8.747	ug/L	91
23) 1,1-Dichloroethane	3.208	63	124845	10.995	ug/L	97
25) Acrylonitrile	3.278	53	18697	10.620	ug/L	96
27) Vinyl acetate	3.579	43	116666	8.666	ug/L	# 92
28) cis-1,2-Dichloroethene	3.905	96	75311	10.337	ug/L	# 69
29) 2,2-Dichloropropane	4.047	77	86065	9.225	ug/L	94
30) Bromochloromethane	4.184	128	37747	11.210	ug/L	# 55
32) Chloroform	4.335	83	131490	11.090	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N03.D
 Acq On : 13 Mar 2019 7:04 pm
 Operator : VOA108:KJD
 Sample : WG1215584-4,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 13 20:12:35 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
34)	Carbon tetrachloride	4.460	117	98654	11.136	ug/L		98
37)	1,1,1-Trichloroethane	4.555	97	113693	10.995	ug/L	#	97
39)	2-Butanone	4.761	43	20478	10.017	ug/L	#	93
40)	1,1-Dichloropropene	4.728	75	90228	10.902	ug/L		96
41)	Benzene	5.035	78	281838	10.906	ug/L		89
44)	1,2-Dichloroethane	5.288	62	100426	11.296	ug/L		97
48)	Trichloroethene	5.743	95	76388	11.101	ug/L		96
50)	Dibromomethane	6.189	93	45108	11.180	ug/L		98
51)	1,2-Dichloropropane	6.301	63	69012	10.298	ug/L		98
54)	Bromodichloromethane	6.407	83	102725	10.930	ug/L		96
57)	1,4-Dioxane	6.624	88	22141	755.468	ug/L	#	68
58)	cis-1,3-Dichloropropene	7.062	75	104151	9.887	ug/L		91
61)	Toluene	7.288	92	172458	11.092	ug/L		98
62)	4-Methyl-2-pentanone	7.689	58	16494	9.409	ug/L	#	95
63)	Tetrachloroethene	7.642	166	72918	10.922	ug/L		90
65)	trans-1,3-Dichloropropene	7.709	75	92336	10.519	ug/L		95
68)	1,1,2-Trichloroethane	7.837	83	53137	11.930	ug/L		95
69)	Chlorodibromomethane	7.971	129	73198	11.169	ug/L		97
70)	1,3-Dichloropropane	8.046	76	102469	11.395	ug/L		98
71)	1,2-Dibromoethane	8.127	107	57665	10.882	ug/L		98
72)	2-Hexanone	8.364	43	25556	8.422	ug/L		94
73)	Chlorobenzene	8.537	112	189613	10.963	ug/L		90
74)	Ethylbenzene	8.576	91	305866	10.550	ug/L		97
75)	1,1,1,2-Tetrachloroethane	8.596	131	70883	10.949	ug/L		95
76)	p/m Xylene	8.682	106	232800	21.112	ug/L		94
77)	o Xylene	8.964	106	222768	20.405	ug/L		89
78)	Styrene	9.003	104	376307	21.579	ug/L		88
80)	Bromoform	9.006	173	43890	11.030	ug/L		92
82)	Isopropylbenzene	9.173	105	305041	10.931	ug/L		96
84)	Bromobenzene	9.396	156	76423	10.641	ug/L		98
85)	n-Propylbenzene	9.432	91	367910	11.549	ug/L		96
87)	1,1,2,2-Tetrachloroethane	9.482	83	69043	10.652	ug/L		99
88)	4-Ethyltoluene	9.502	105	297710	11.220	ug/L		97
89)	2-Chlorotoluene	9.513	91	250171	10.759	ug/L		96
90)	1,3,5-Trimethylbenzene	9.555	105	245566	10.718	ug/L		91
91)	1,2,3-Trichloropropane	9.552	75	58102	11.538	ug/L		98
92)	trans-1,4-Dichloro-2-b...	9.586	53	16420	9.254	ug/L		93
93)	4-Chlorotoluene	9.616	91	225084	11.127	ug/L		94
94)	tert-Butylbenzene	9.742	119	220372	9.360	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
 Data File : V08190313N03.D
 Acq On : 13 Mar 2019 7:04 pm
 Operator : VOA108:KJD
 Sample : WG1215584-4,31,10,10
 Misc : WG1215584,ICAL15519
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 13 20:12:35 2019
 Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Feb 19 00:08:39 2019
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA108\2019\190313N\V08190313N02.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	1,2,4-Trimethylbenzene	9.784	105	235510	10.330	ug/L	93
98)	sec-Butylbenzene	9.845	105	323966	11.232	ug/L	99
99)	p-Isopropyltoluene	9.934	119	259852	10.494	ug/L	96
100)	1,3-Dichlorobenzene	9.962	146	152170	11.492	ug/L	97
101)	1,4-Dichlorobenzene	10.015	146	150382	10.965	ug/L	99
102)	p-Diethylbenzene	10.143	119	129590	8.942	ug/L	96
103)	n-Butylbenzene	10.174	91	241304	10.508	ug/L	99
104)	1,2-Dichlorobenzene	10.255	146	143281	11.093	ug/L	98
105)	1,2,4,5-Tetramethylben...	10.598	119	73130	3.526	ug/L	95
106)	1,2-Dibromo-3-chloropr...	10.709	155	9722	10.017	ug/L	90
108)	Hexachlorobutadiene	11.075	225	38013	9.124	ug/L	97
109)	1,2,4-Trichlorobenzene	11.089	180	52330	6.456	ug/L	97
110)	Naphthalene	11.270	128	113101	6.338	ug/L	100
111)	1,2,3-Trichlorobenzene	11.373	180	48110	6.566	ug/L	96

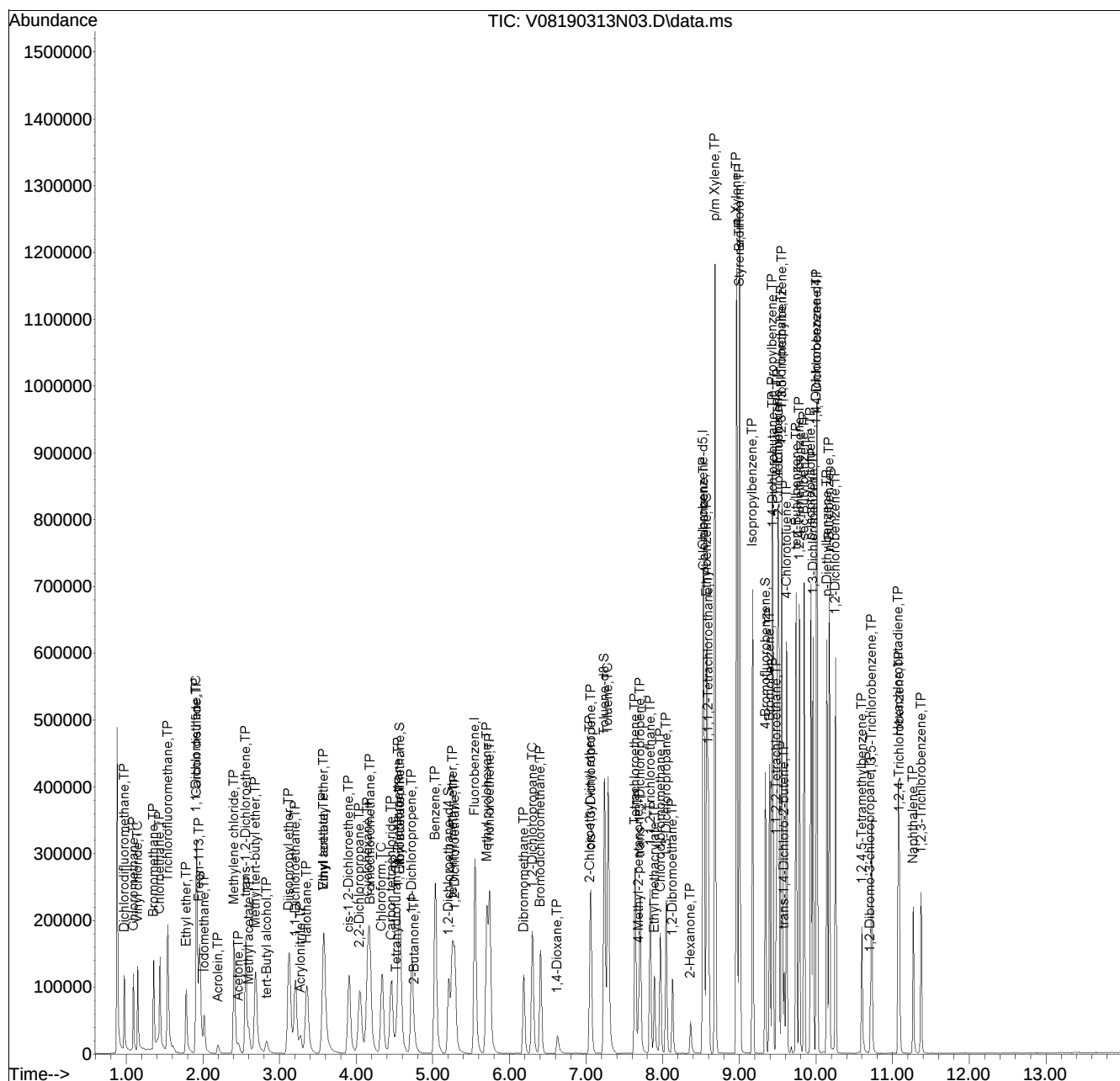
 (#) = qualifier out of range (m) = manual integration (+) = signals summed

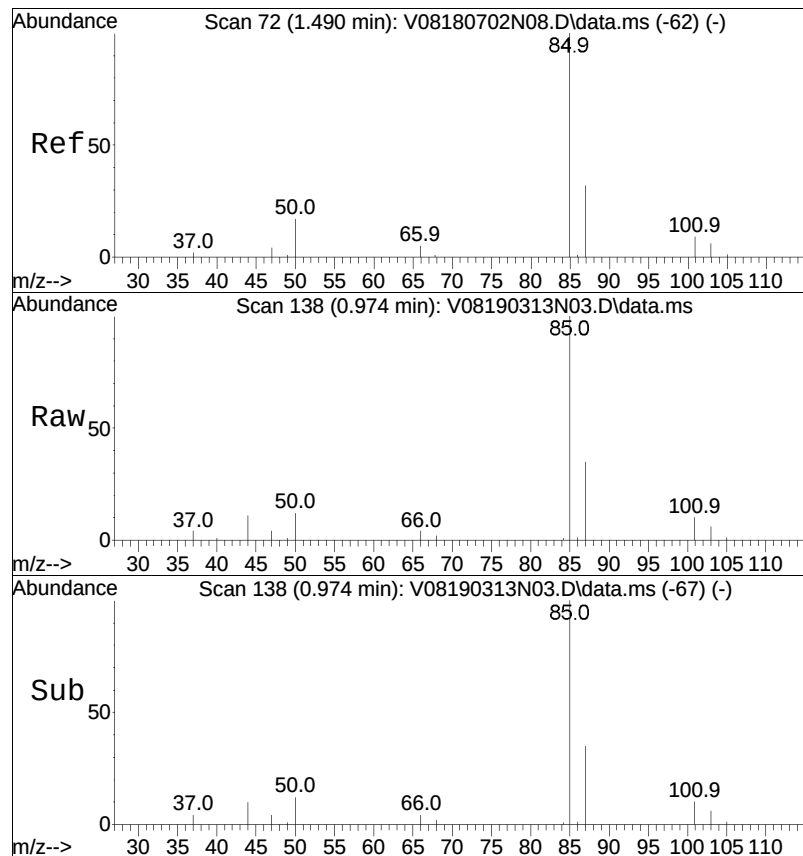
(QT Reviewed)

Data Path : I:\VOLATILES\VOA108\2019\190313N\
Data File : V08190313N03.D
Acq On : 13 Mar 2019 7:04 pm
Operator : VOA108:KJD
Sample : WG1215584-4, 31, 10, 10
Misc : WG1215584, ICAL15519
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 13 20:12:35 2019
Quant Method : I:\VOLATILES\VOA108\2019\190313N\V108_190218N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Feb 19 00:08:39 2019
Response via : Initial Calibration

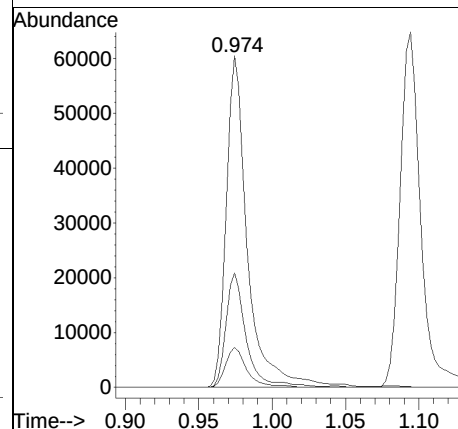
Sub List : 8260-Curve - Megamix plus Diox90313N\V08190313N02.D•

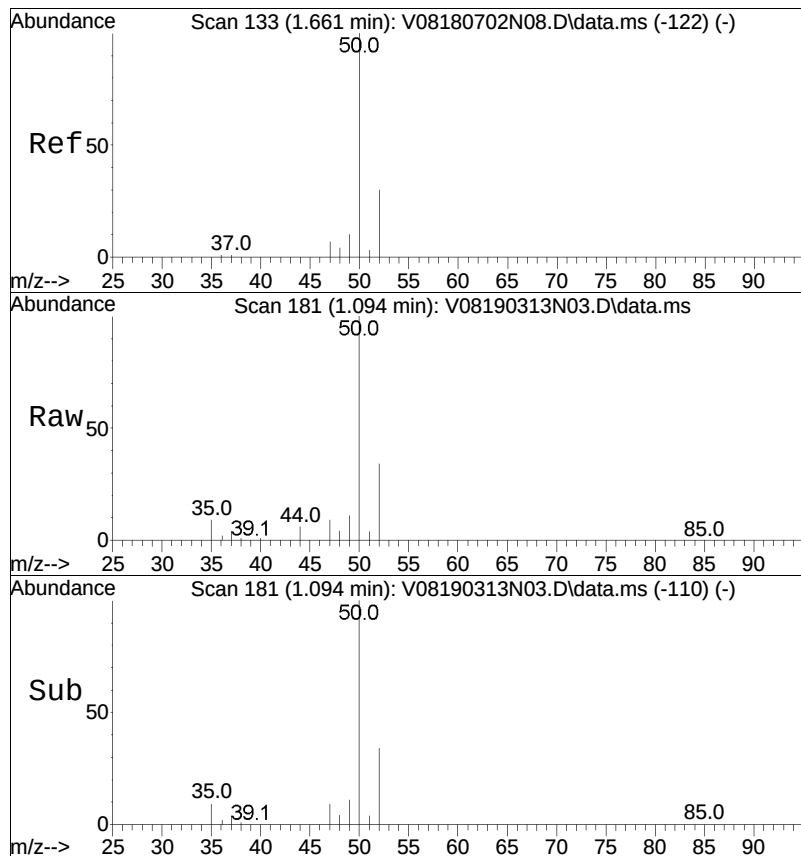




#2
 Dichlorodifluoromethane
 Concen: 10.20 ug/L
 RT: 0.974 min Scan# 138
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

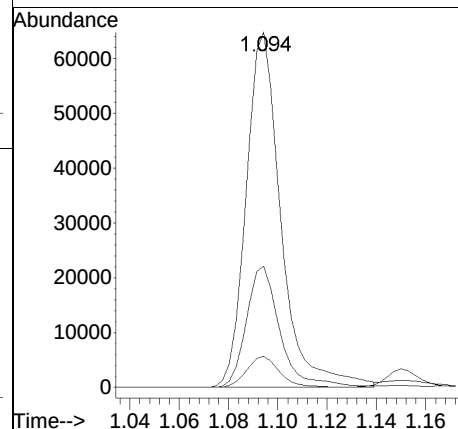
Tgt Ion:	85	Resp:	61321
Ion Ratio	Lower	Upper	
85	100		
87	32.7	21.0	43.6
50	12.1	8.9	18.5

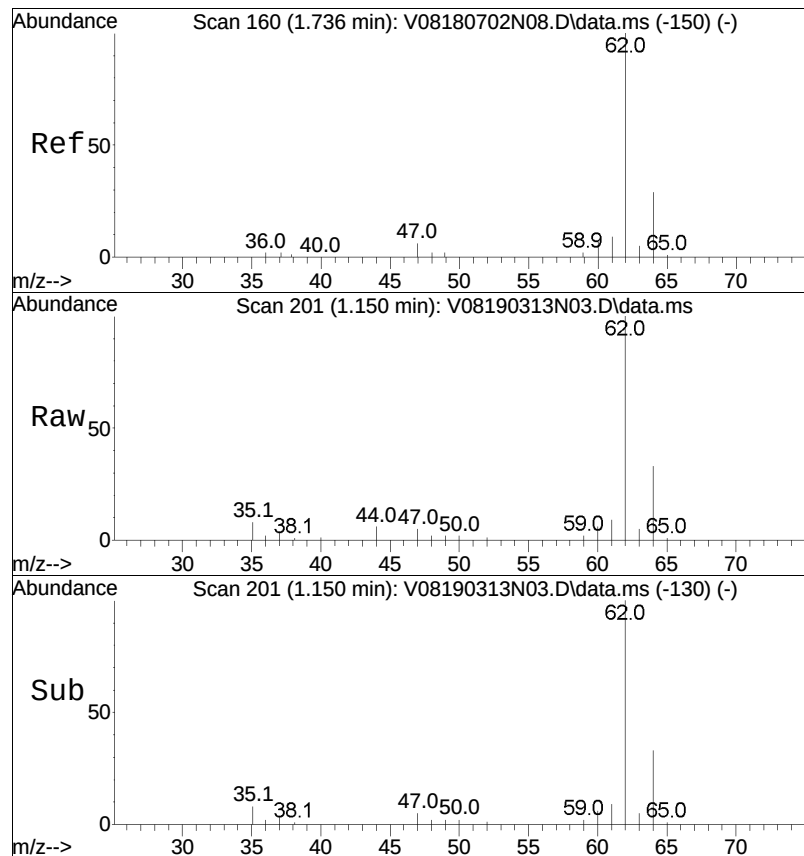




#3
 Chloromethane
 Concen: 10.76 ug/L
 RT: 1.094 min Scan# 181
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

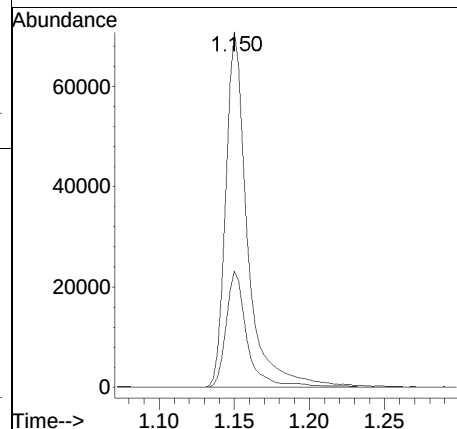
Tgt Ion:	50	Resp:	63722
Ion Ratio	Lower	Upper	
50	100		
52	33.0	12.9	52.9
47	8.2	0.0	28.3

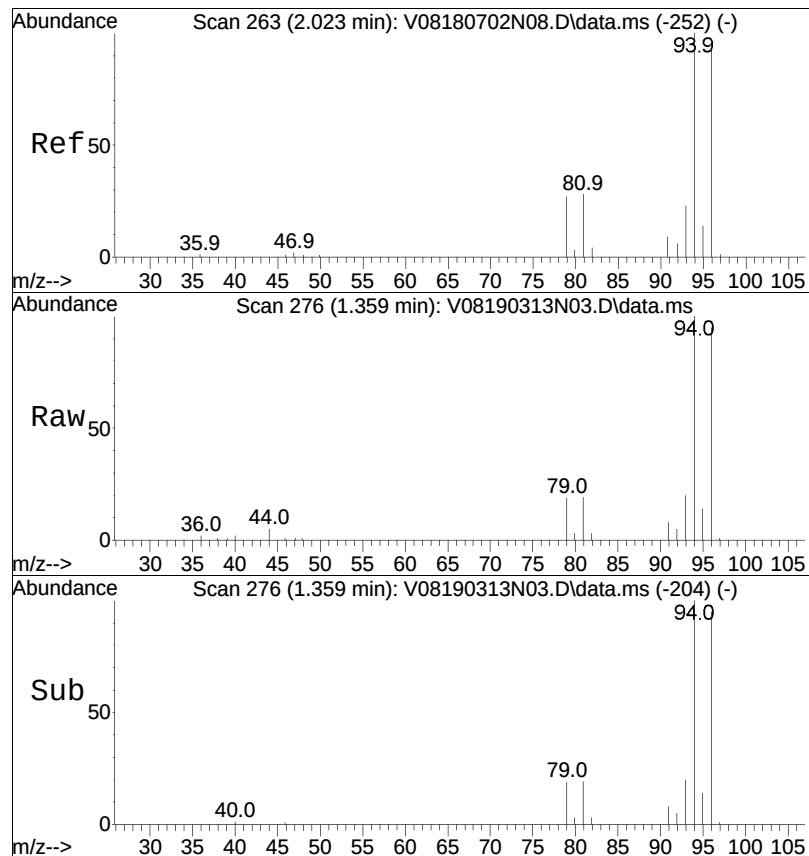




#4
 Vinyl chloride
 Concen: 11.39 ug/L
 RT: 1.150 min Scan# 201
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

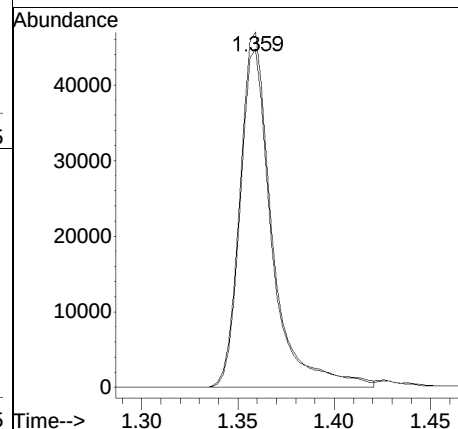
Tgt Ion	Ratio	Lower	Upper
62	100		
64	31.8	9.1	49.1

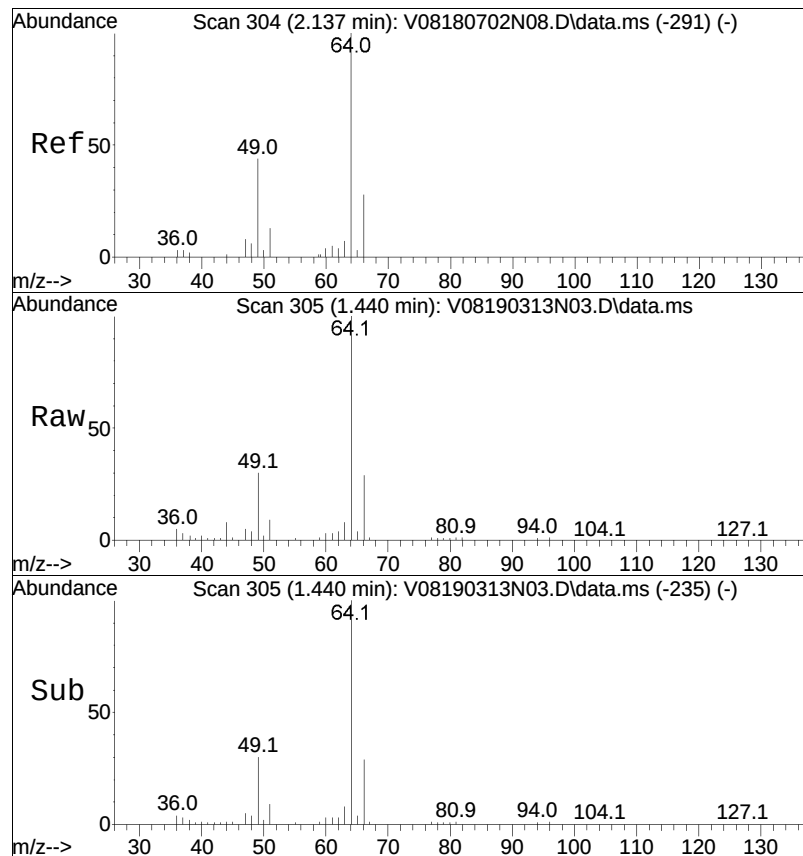




#5
 Bromomethane
 Concen: 10.11 ug/L
 RT: 1.359 min Scan# 276
 Delta R.T. 0.000 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

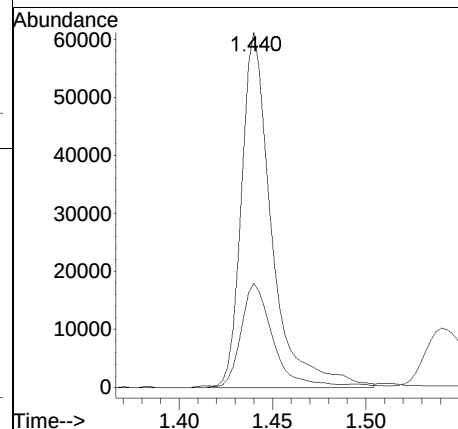
Tgt Ion: 94 Resp: 55096
 Ion Ratio Lower Upper
 94 100
 96 93.5 75.6 115.6

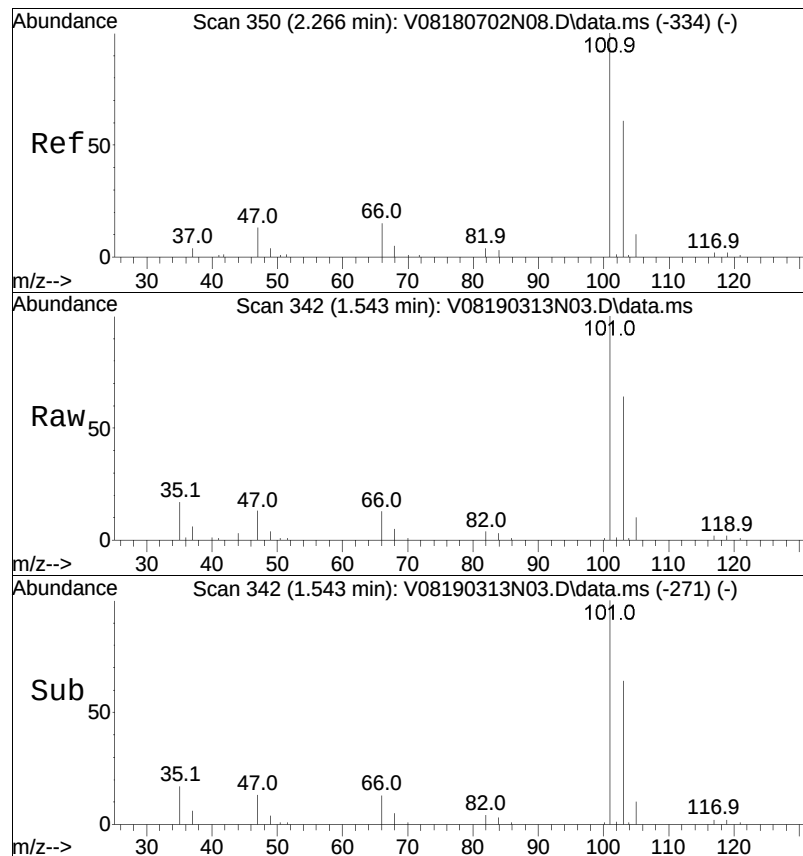




#6
 Chloroethane
 Concen: 14.92 ug/L
 RT: 1.440 min Scan# 305
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

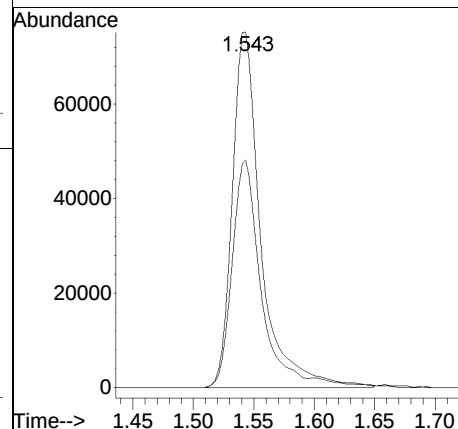
Tgt Ion	Ratio	Lower	Upper
64	100		
66	30.9	9.8	49.8

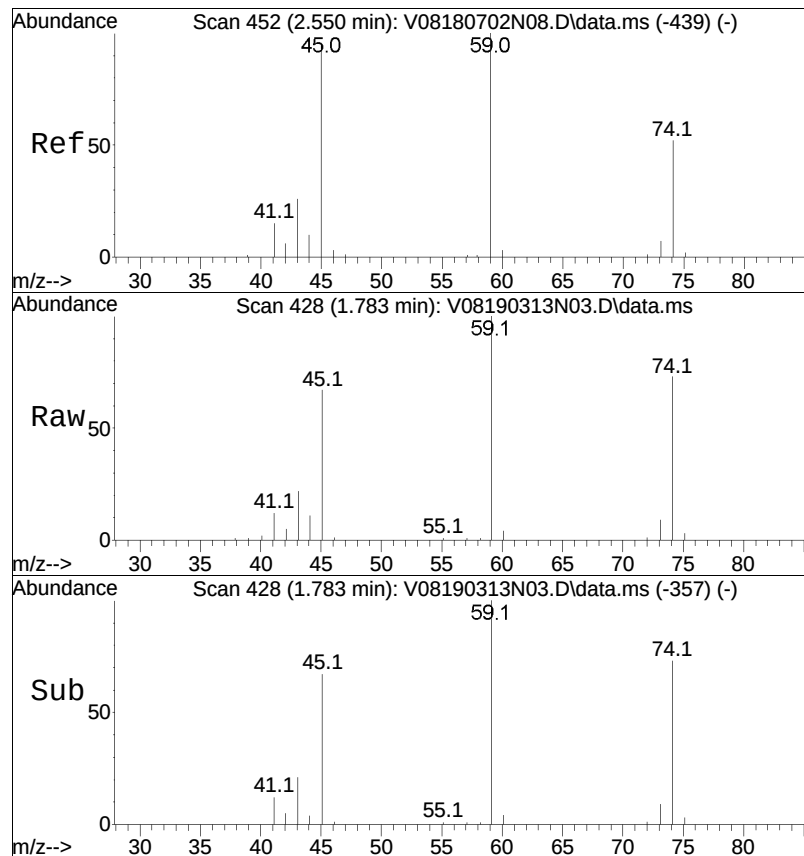




#7
 Trichlorofluoromethane
 Concen: 12.11 ug/L
 RT: 1.543 min Scan# 342
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

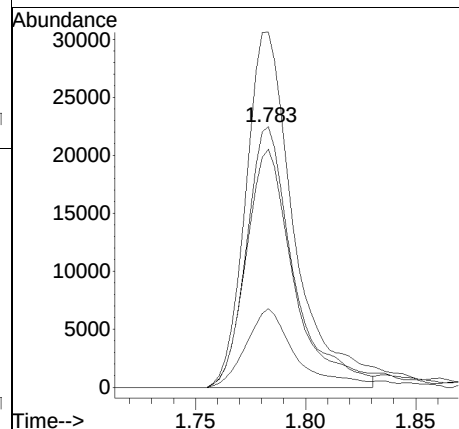
Tgt Ion	Ratio	Lower	Upper
101	100		
103	62.9	53.8	80.6

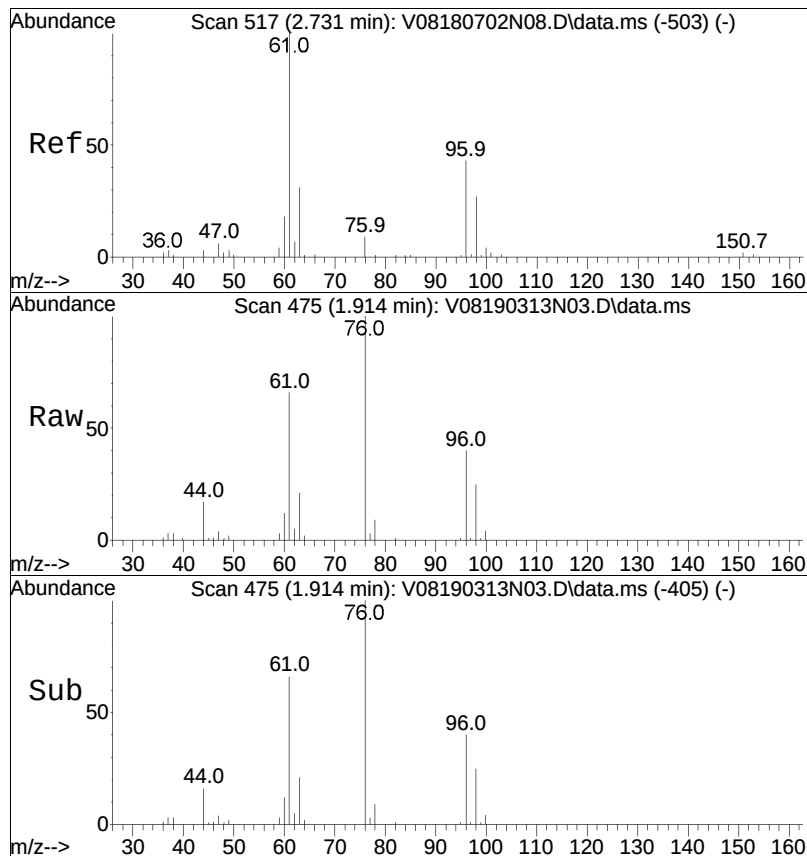




#8
 Ethyl ether
 Concen: 9.82 ug/L
 RT: 1.783 min Scan# 428
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

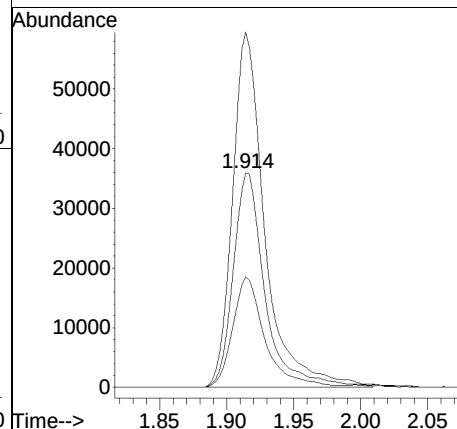
Tgt Ion:	74	Resp:	33427
Ion Ratio	Lower	Upper	
74	100		
59	145.1	122.2	253.8
45	97.0	91.9	190.9
43	31.7	25.2	52.2

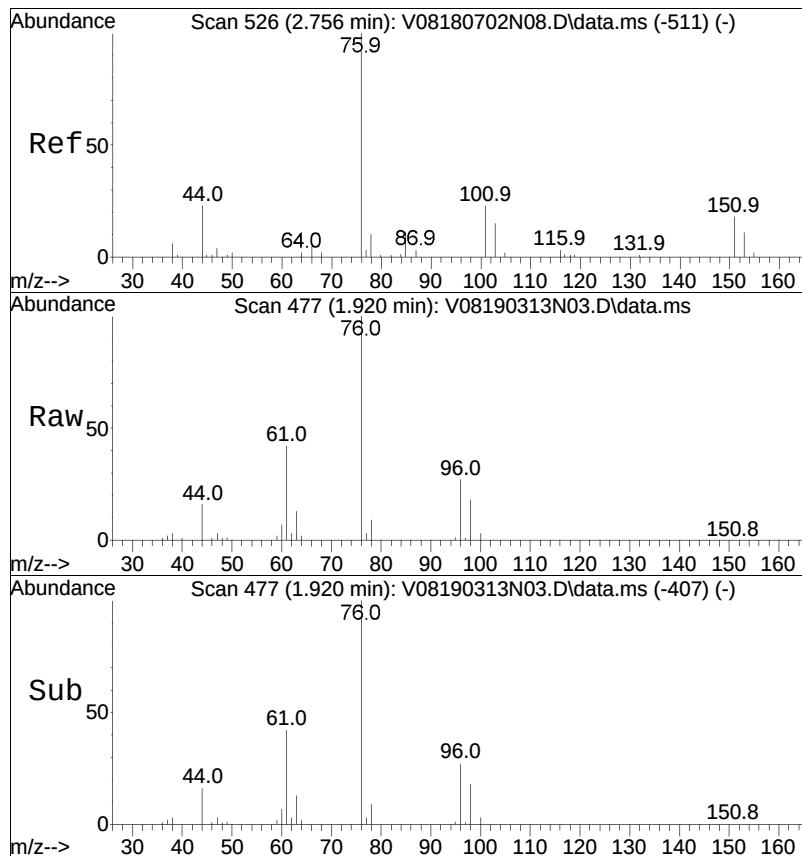




#10
 1,1-Dichloroethene
 Concen: 10.55 ug/L
 RT: 1.914 min Scan# 475
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

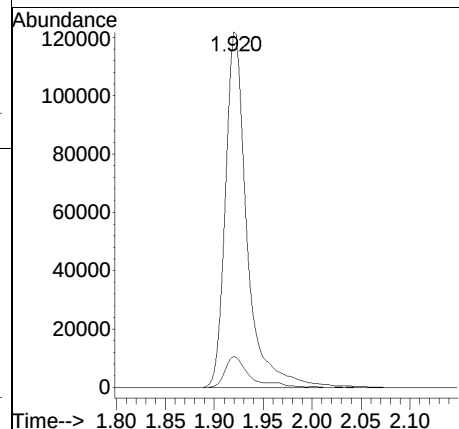
Tgt Ion:	96	Resp:	59678
Ion Ratio	Lower	Upper	
96	100		
61	168.0	186.1	279.1#
63	52.4	57.6	86.4#

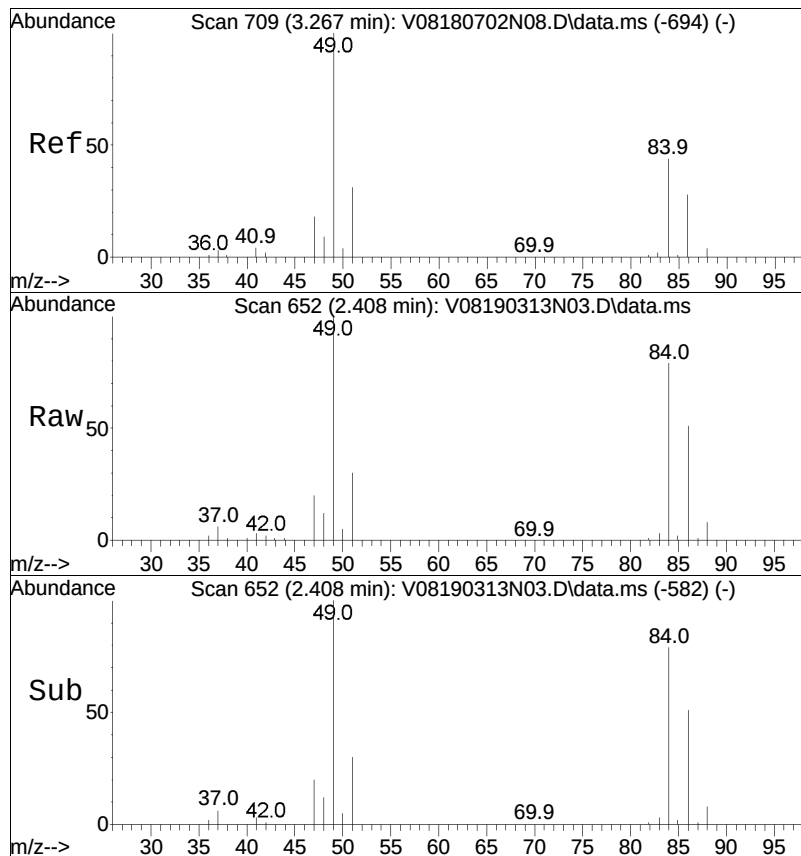




#11
Carbon disulfide
Concen: 10.56 ug/L
RT: 1.920 min Scan# 477
Delta R.T. -0.005 min
Lab File: V08190313N03.D
Acq: 13 Mar 2019 7:04 pm

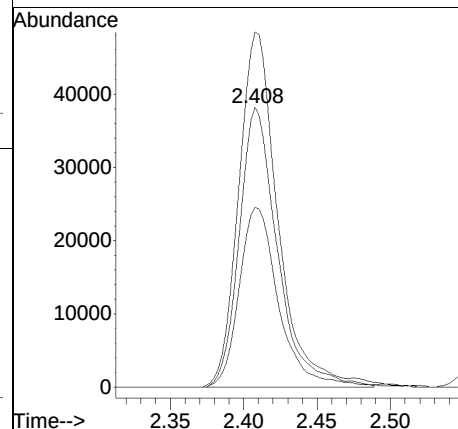
Tgt	Ion	Resp	Lower	Upper
76	100	187897		
78	9.8	5.7	11.7	

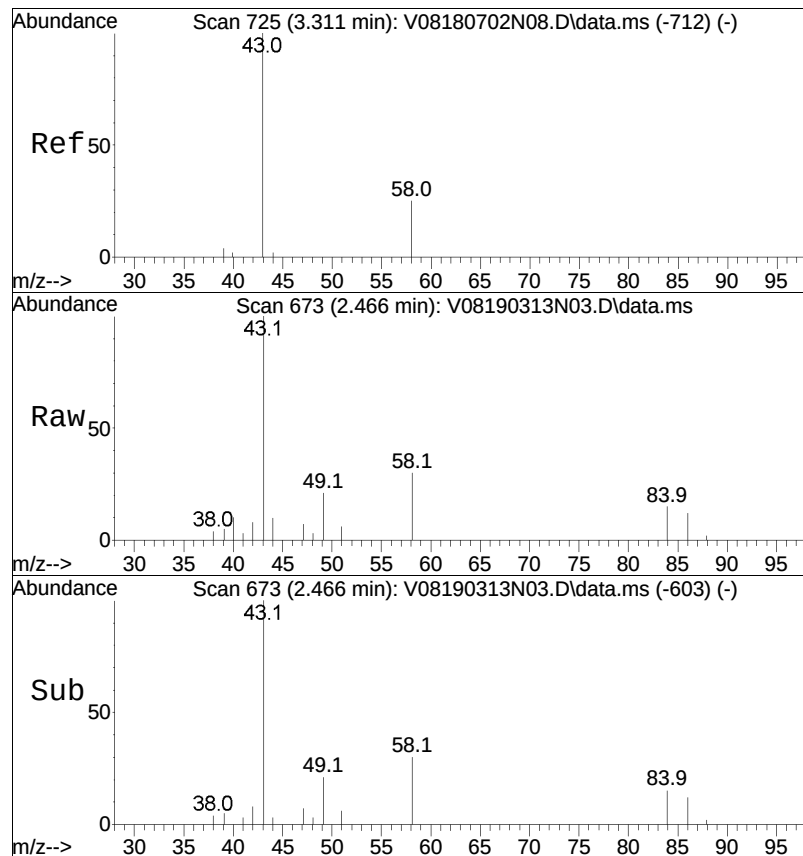




#15
 Methylene chloride
 Concen: 10.33 ug/L
 RT: 2.408 min Scan# 652
 Delta R.T. -0.005 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

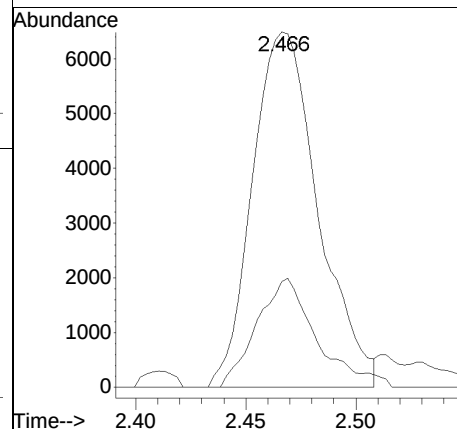
Tgt Ion:	84	Resp:	69599
Ion Ratio	Lower	Upper	
84	100		
86	66.1	40.4	83.8
49	131.1	120.0	249.2

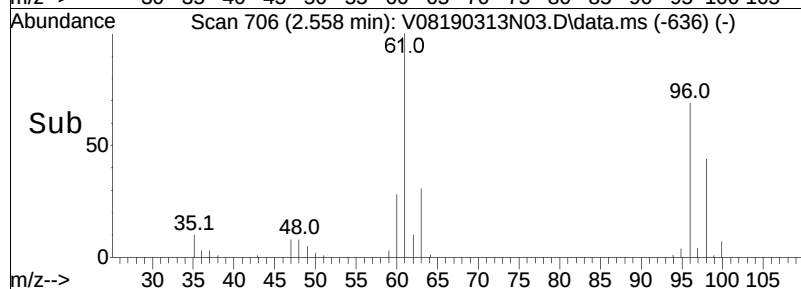
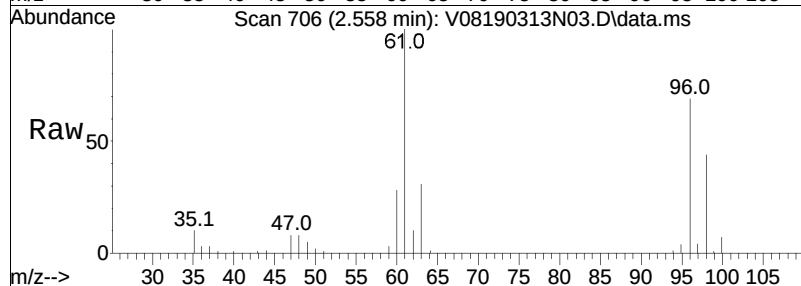
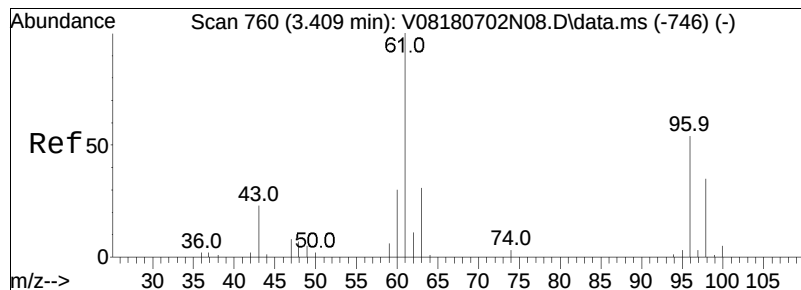




#17
 Acetone
 Concen: 11.53 ug/L
 RT: 2.466 min Scan# 673
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

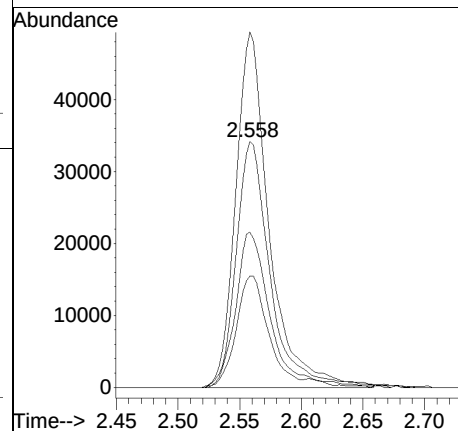
Tgt Ion:	43	58	Ratio	100	28.0	Resp:	13490	Lower	Upper
								24.2	36.4

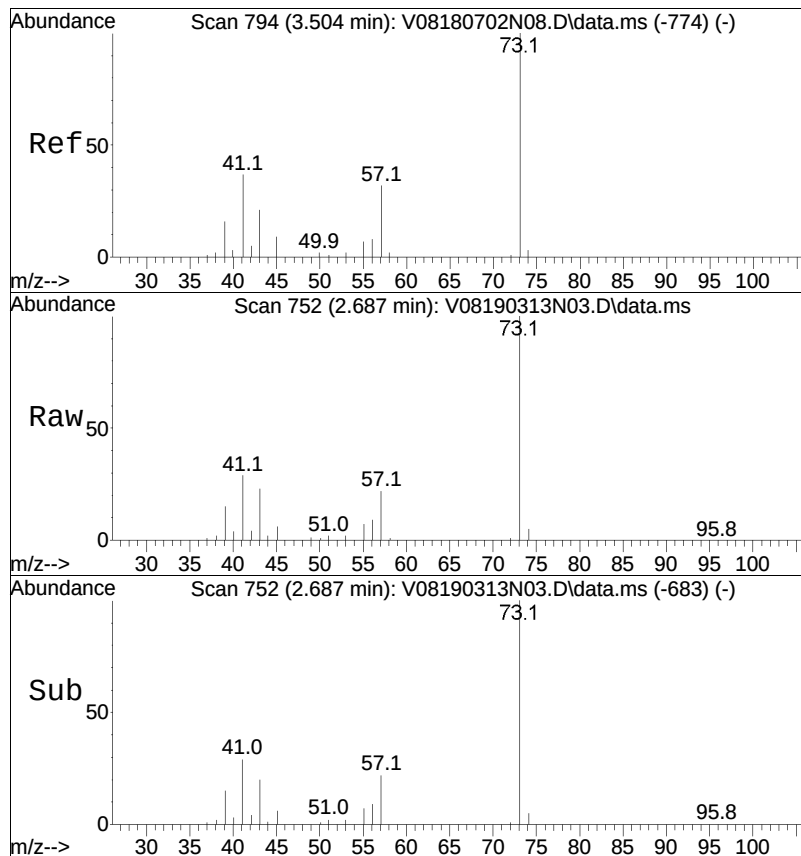




#18
 trans-1,2-Dichloroethene
 Concen: 10.23 ug/L
 RT: 2.558 min Scan# 706
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

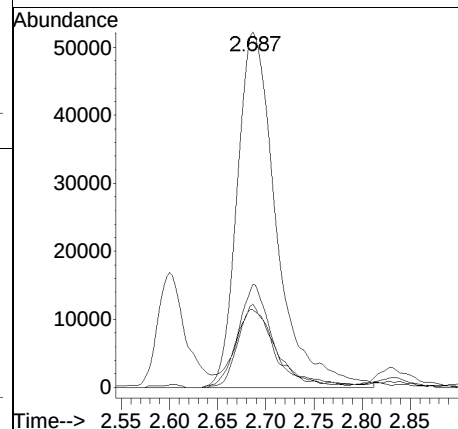
Tgt Ion: 96	Resp: 65663
Ion Ratio	Lower Upper
96 100	
61 141.0	124.0 257.6
98 62.6	41.2 85.6
63 42.8	38.4 79.7

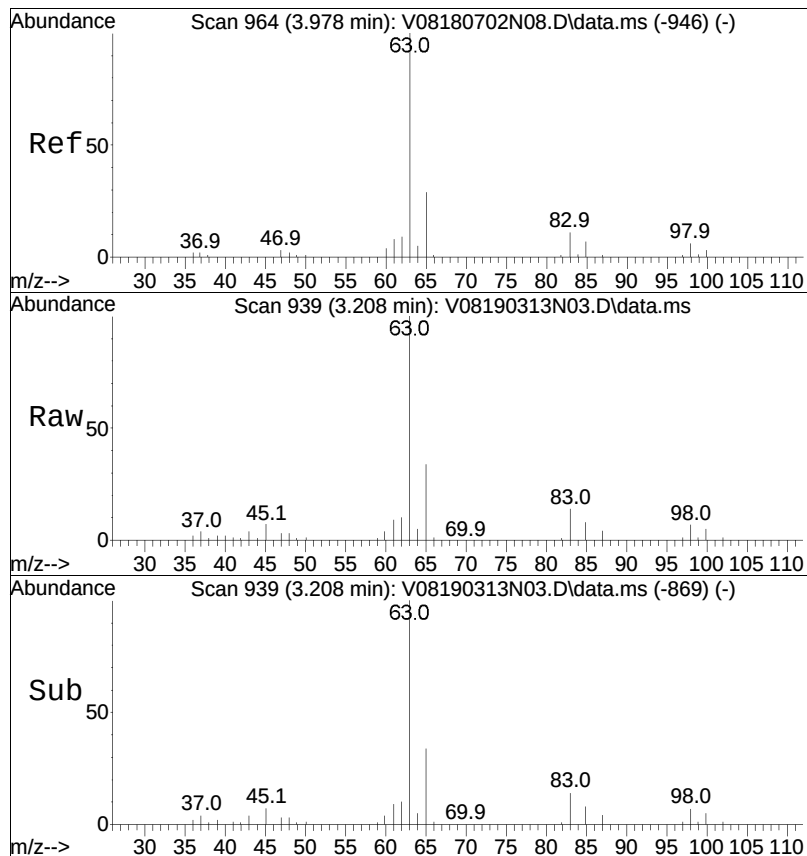




#20
Methyl tert-butyl ether
Concen: 8.75 ug/L
RT: 2.687 min Scan# 752
Delta R.T. -0.008 min
Lab File: V08190313N03.D
Acq: 13 Mar 2019 7:04 pm

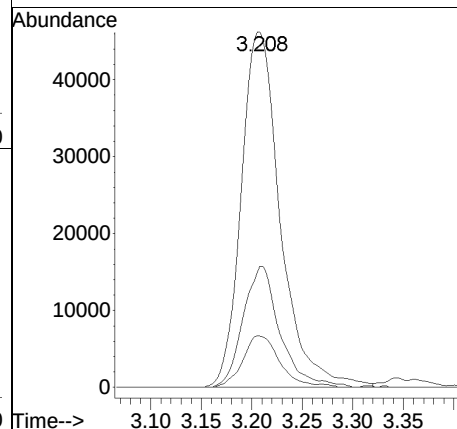
Tgt Ion:	73	Resp:	147492
Ion Ratio	Lower	Upper	
73	100		
57	20.5	17.5	36.3
43	20.3	15.3	31.9
41	26.8	15.3	31.7

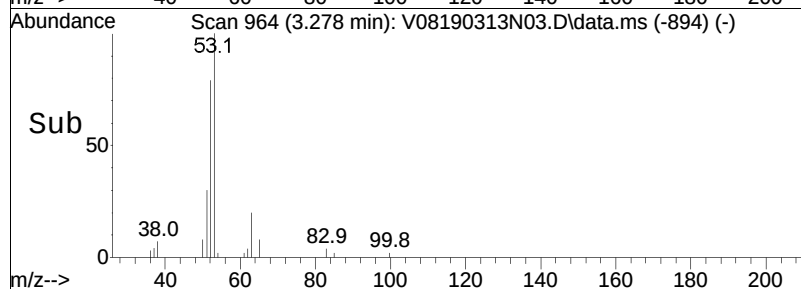
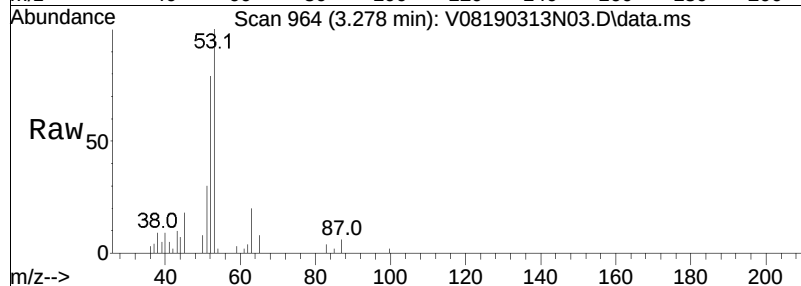
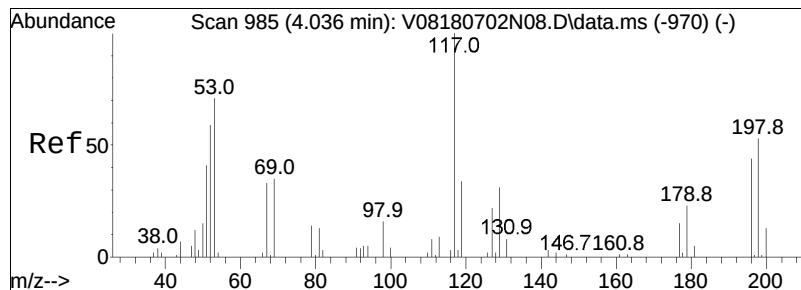




#23
 1,1-Dichloroethane
 Concen: 11.00 ug/L
 RT: 3.208 min Scan# 939
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

Tgt Ion:	63	Resp:	124845
Ion Ratio	Lower	Upper	
63	100		
65	32.2	11.0	51.0
83	13.6	0.0	31.8





#25

Acrylonitrile

Concen: 10.62 ug/L

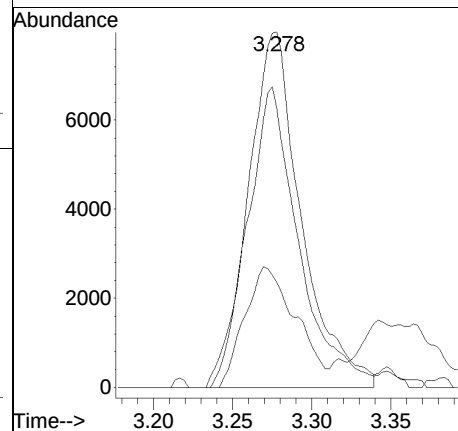
RT: 3.278 min Scan# 964

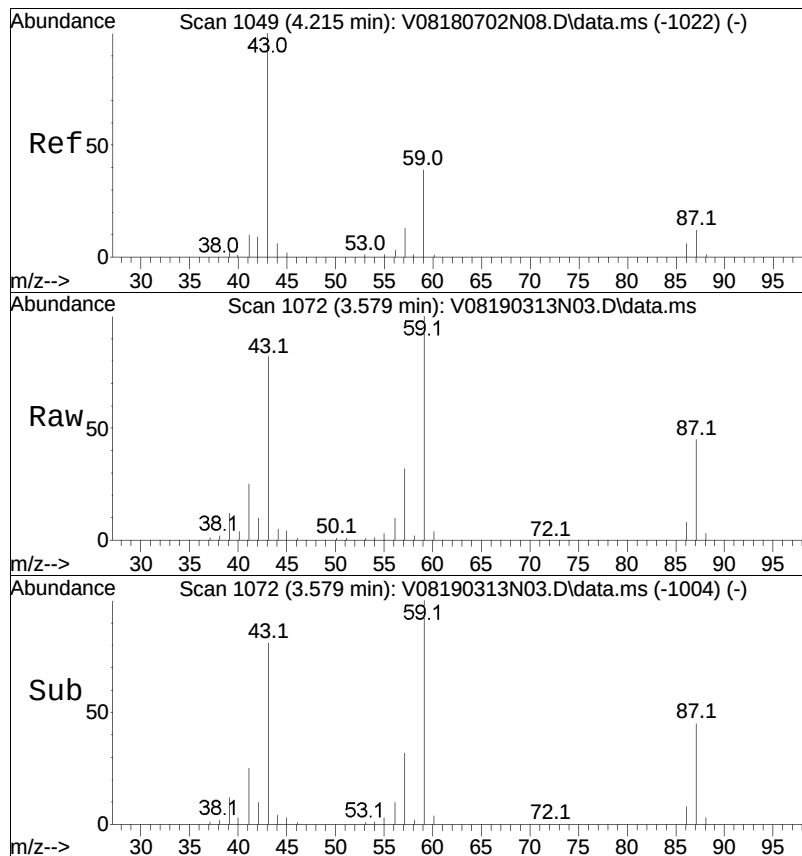
Delta R.T. -0.005 min

Lab File: V08190313N03.D

Acq: 13 Mar 2019 7:04 pm

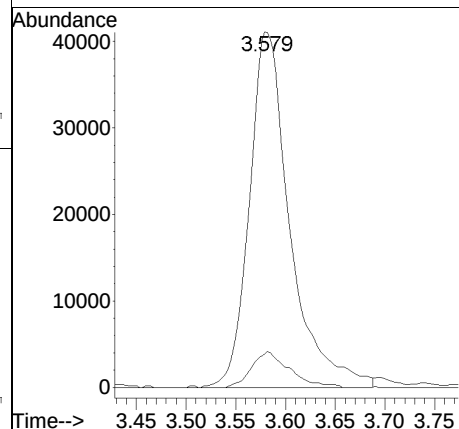
Tgt Ion:	53	Resp:	18697
Ion Ratio	Lower	Upper	
53	100		
52	81.4	66.7	100.1
51	32.7	30.6	46.0

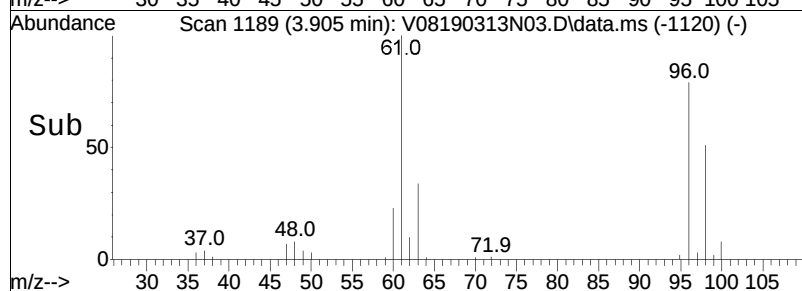
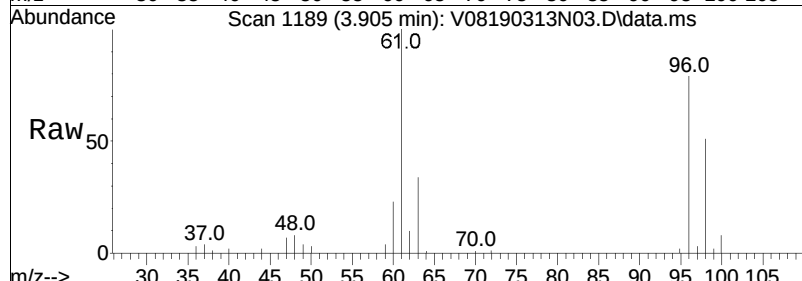
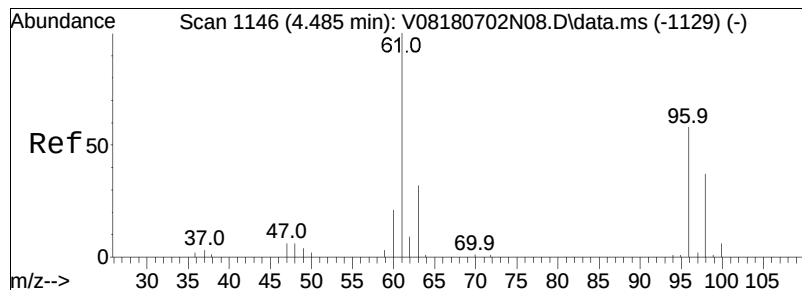




#27
 Vinyl acetate
 Concen: 8.67 ug/L
 RT: 3.579 min Scan# 1072
 Delta R.T. -0.011 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

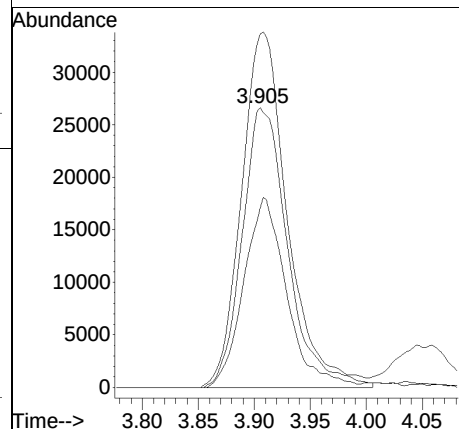
Tgt Ion	Ratio	Lower	Upper
43	100		
86	9.2	5.2	7.8#

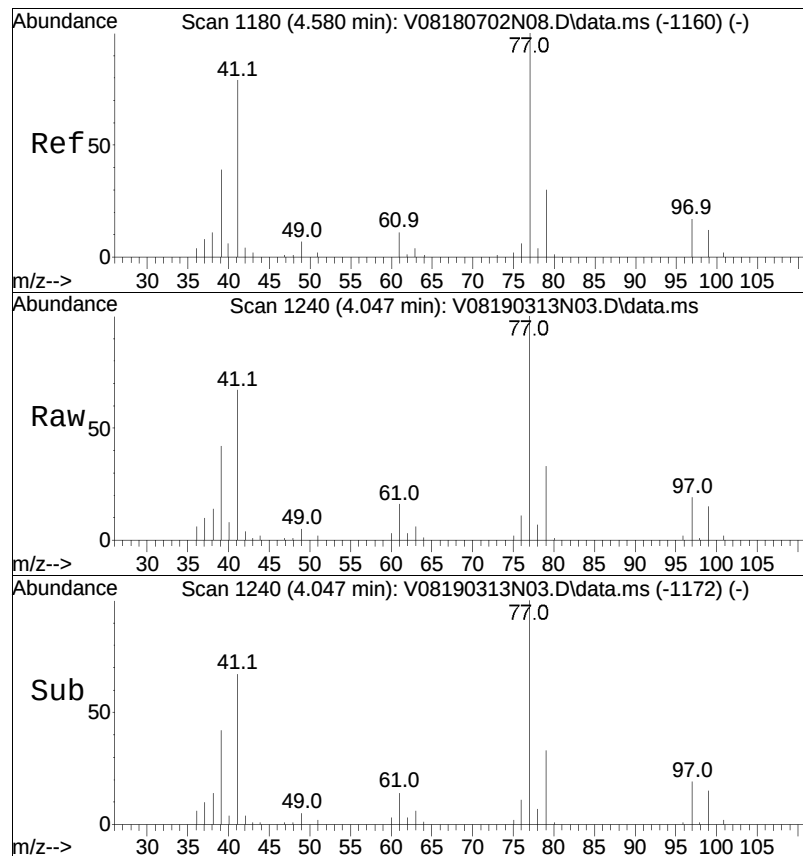




#28
 cis-1,2-Dichloroethene
 Concen: 10.34 ug/L
 RT: 3.905 min Scan# 1189
 Delta R.T. -0.009 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

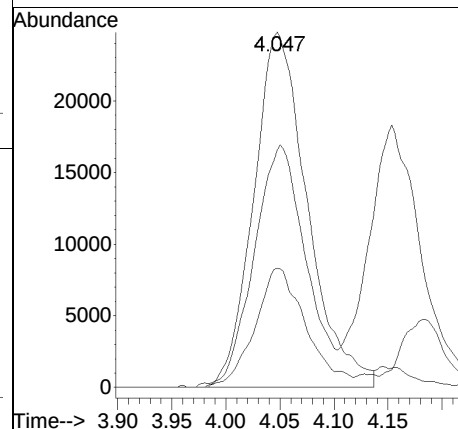
Tgt Ion	Ratio	Lower	Upper
96	100		
61	128.0	149.4	224.2#
98	63.9	53.4	80.2

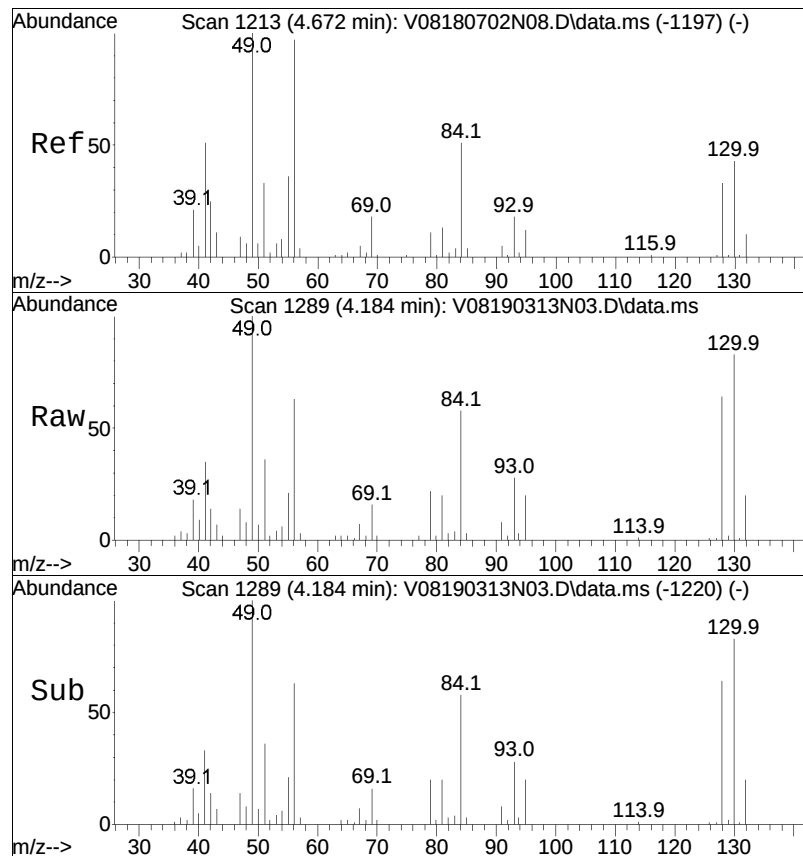




#29
 2,2-Dichloropropane
 Concen: 9.22 ug/L
 RT: 4.047 min Scan# 1240
 Delta R.T. -0.012 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

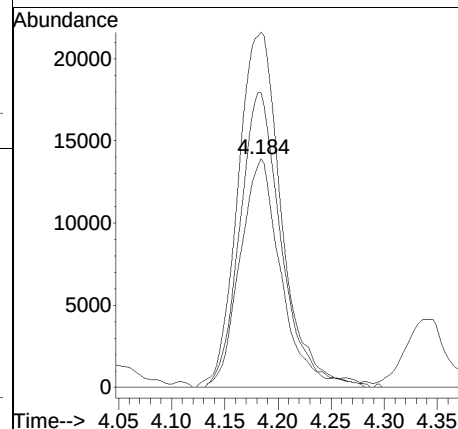
Tgt Ion:	77	Resp:	86065
Ion Ratio	Lower	Upper	
77	100		
41	65.6	38.0	78.8
79	31.8	20.5	42.5

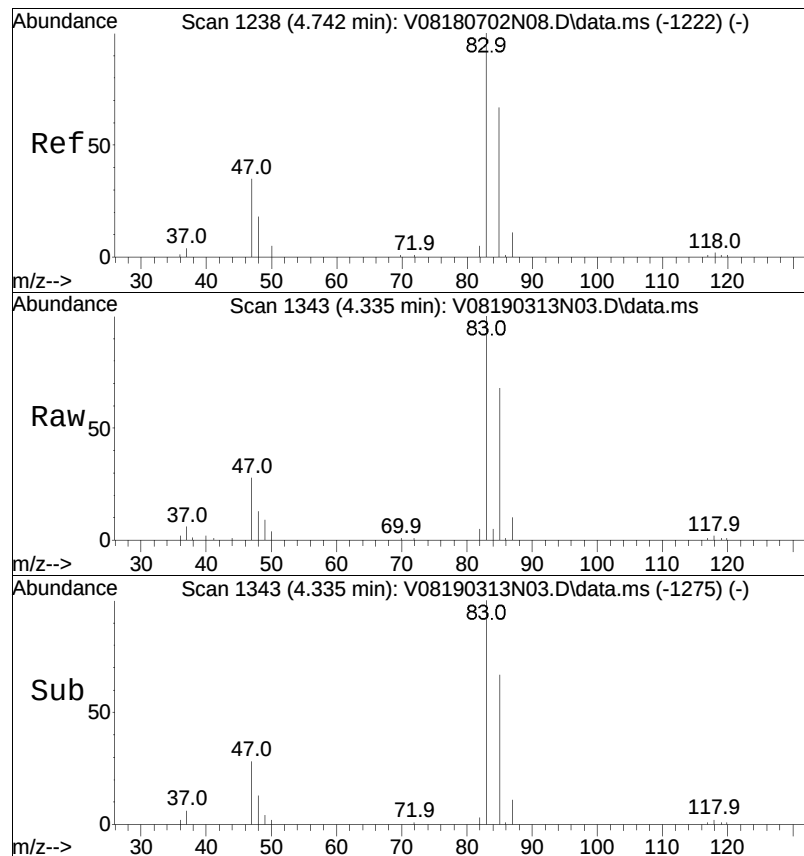




#30
 Bromochloromethane
 Concen: 11.21 ug/L
 RT: 4.184 min Scan# 1289
 Delta R.T. -0.008 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

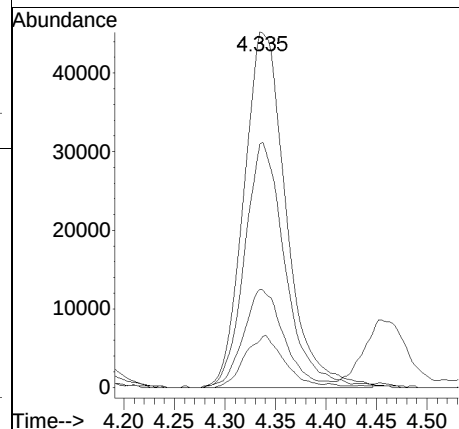
Tgt	Ion:128	Resp:	37747
Ion	Ratio	Lower	Upper
128	100		
49	162.2	223.0	334.4#
130	126.5	111.4	167.0

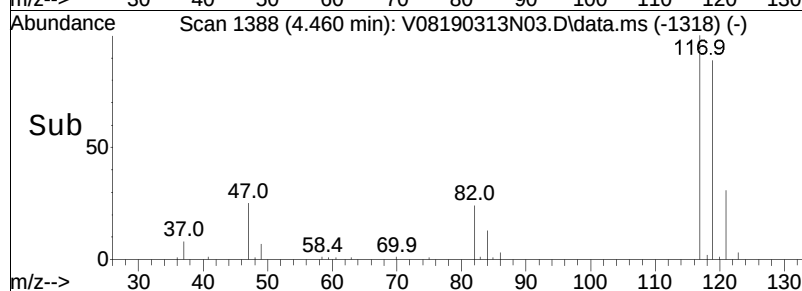
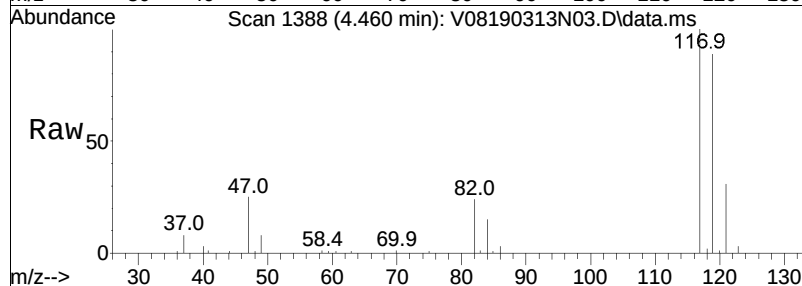
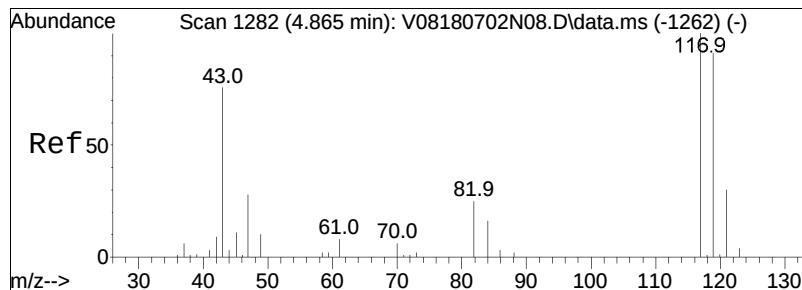




#32
 Chloroform
 Concen: 11.09 ug/L
 RT: 4.335 min Scan# 1343
 Delta R.T. -0.011 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

Tgt Ion:	83	Resp:	131490
Ion Ratio	Lower	Upper	
83	100		
85	66.0	41.5	86.1
47	26.9	19.0	39.4
48	13.6	9.9	20.5





#34

Carbon tetrachloride

Concen: 11.14 ug/L

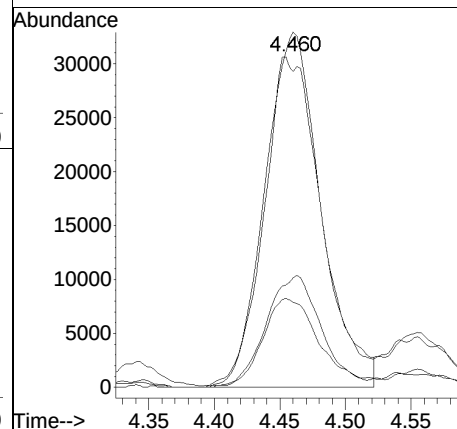
RT: 4.460 min Scan# 1388

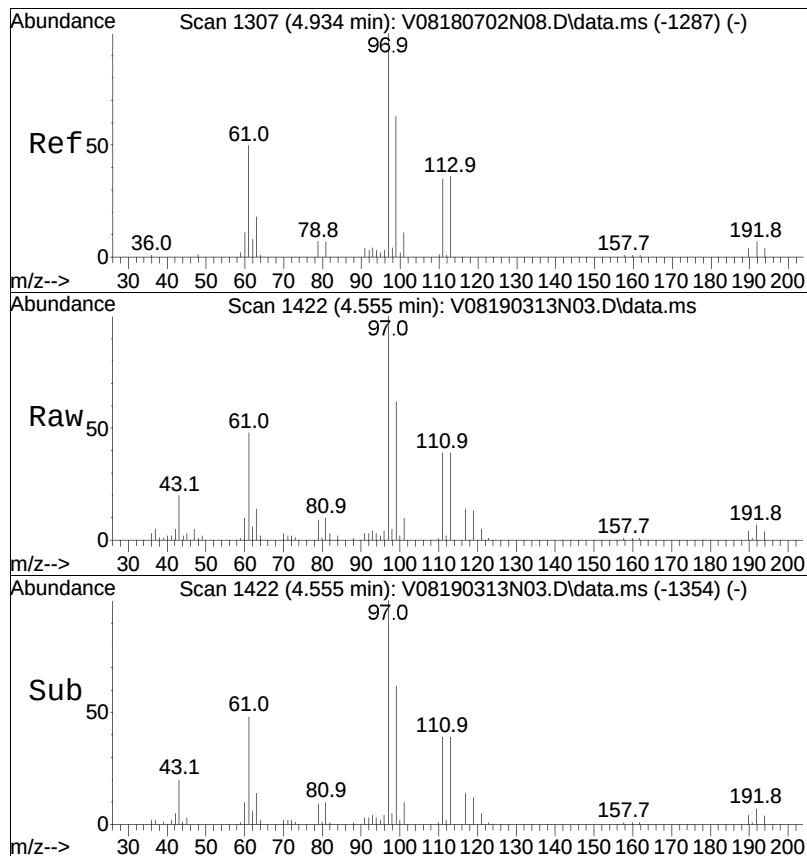
Delta R.T. -0.006 min

Lab File: V08190313N03.D

Acq: 13 Mar 2019 7:04 pm

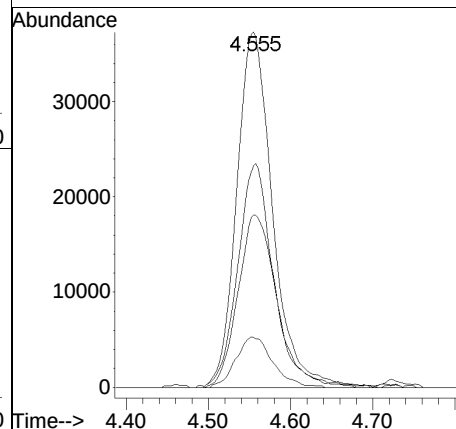
Tgt Ion:	117	Resp:	98654
Ion Ratio	Lower	Upper	
117	100		
119	94.8	62.4	129.6
121	30.8	19.5	40.5
82	23.9	17.0	35.4

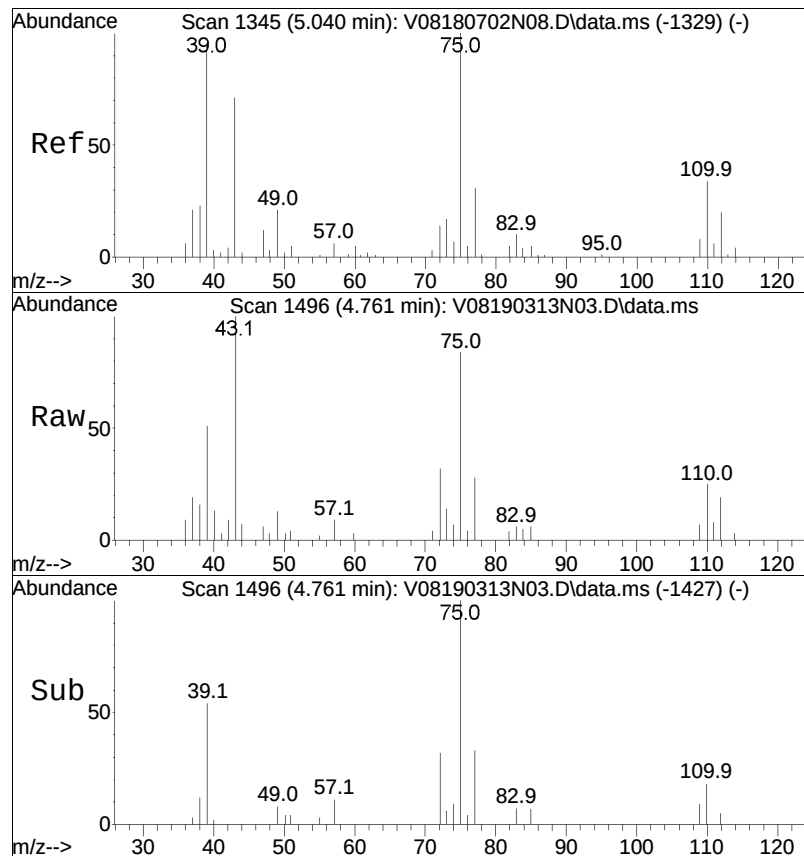




#37
 1,1,1-Trichloroethane
 Concen: 11.00 ug/L
 RT: 4.555 min Scan# 1422
 Delta R.T. -0.011 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

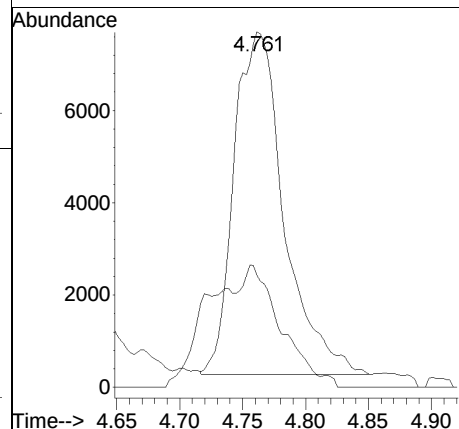
Tgt Ion:	97	Resp:	113693
Ion Ratio	Lower	Upper	
97	100		
99	63.0	40.7	84.5
61	51.9	35.4	73.4
63	14.4	5.0	10.4#

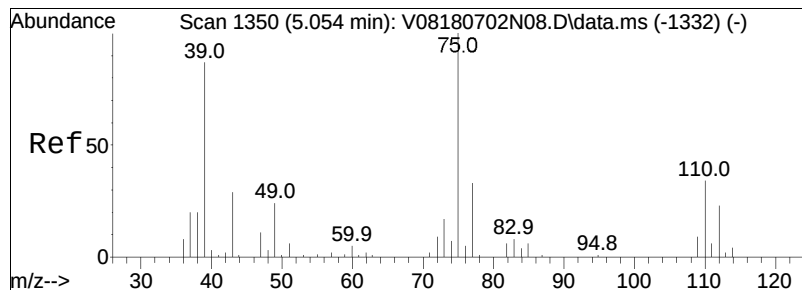




#39
 2-Butanone
 Concen: 10.02 ug/L
 RT: 4.761 min Scan# 1496
 Delta R.T. -0.009 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

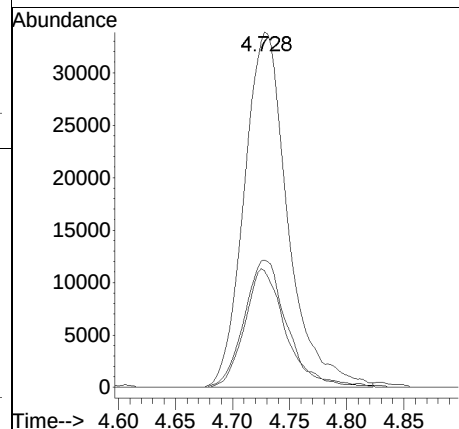
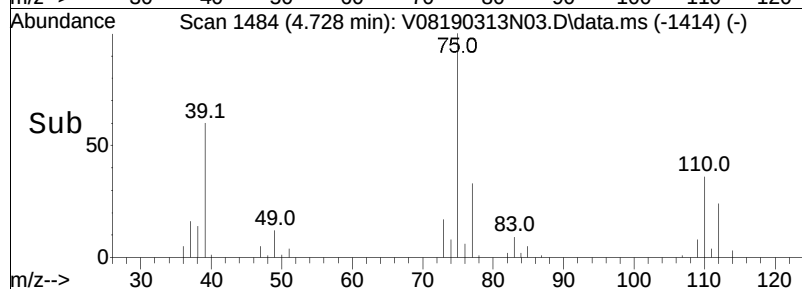
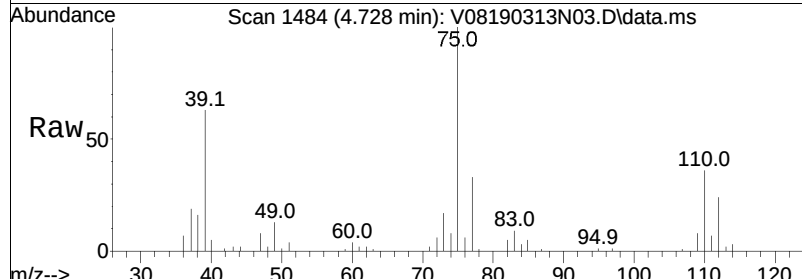
Tgt Ion:	43	72	100	10.8	10.9	16.3
Resp:	20478					
Ratio	100					
Lower						
Upper						

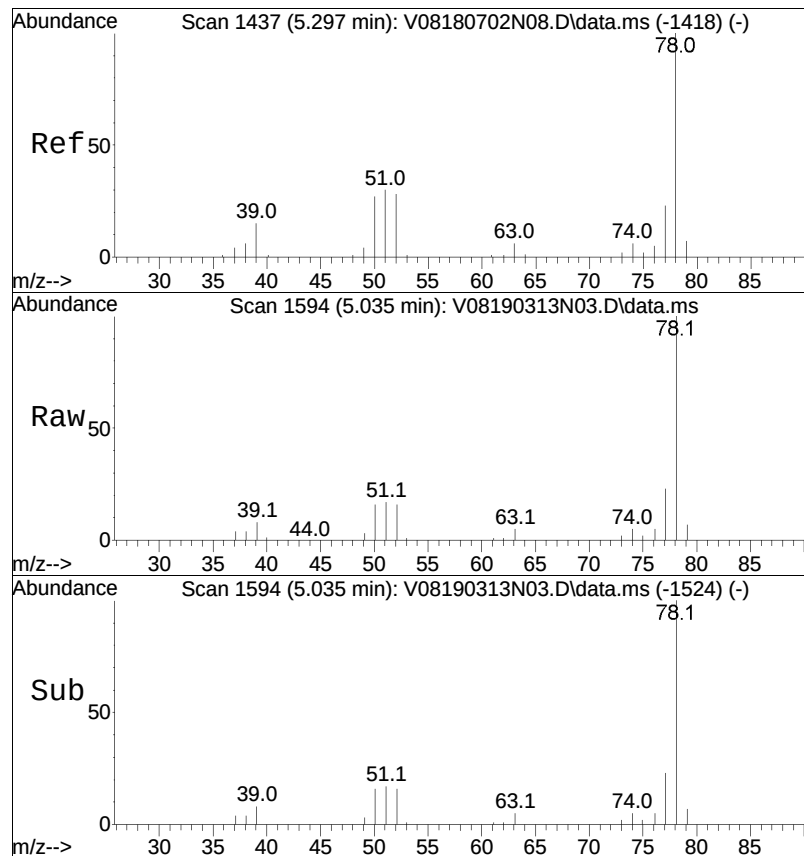




#40
 1,1-Dichloropropene
 Concen: 10.90 ug/L
 RT: 4.728 min Scan# 1484
 Delta R.T. -0.005 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

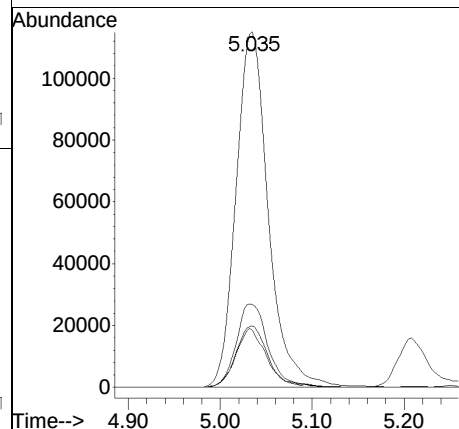
Tgt Ion:	75	Resp:	90228
Ion Ratio	Lower	Upper	
75	100		
110	34.9	20.2	41.9
77	31.4	20.1	41.7

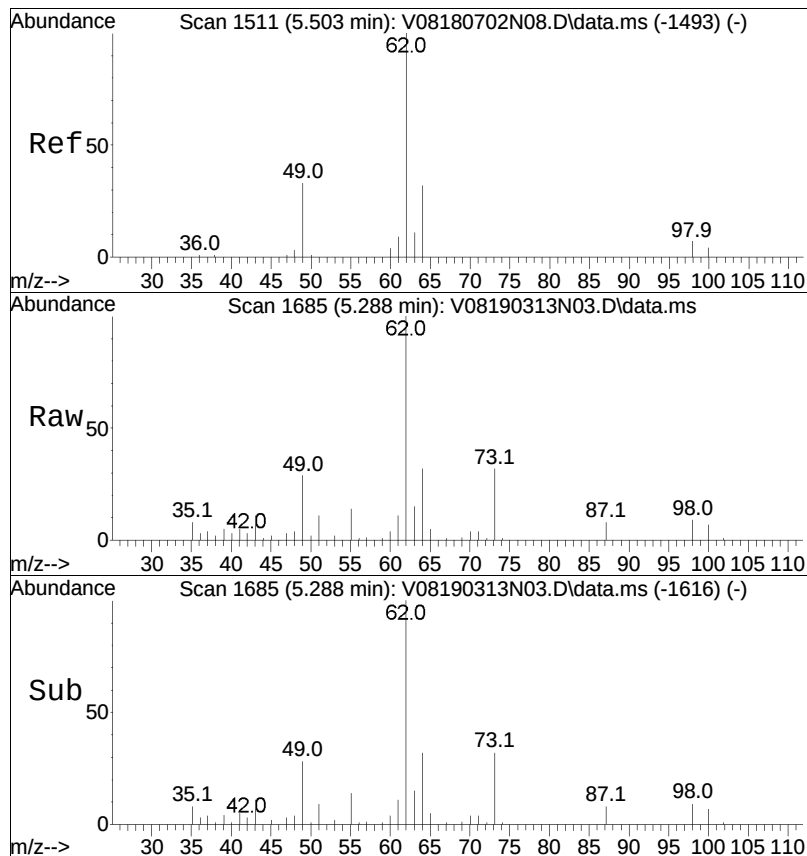




#41
Benzene
Concen: 10.91 ug/L
RT: 5.035 min Scan# 1594
Delta R.T. -0.005 min
Lab File: V08190313N03.D
Acq: 13 Mar 2019 7:04 pm

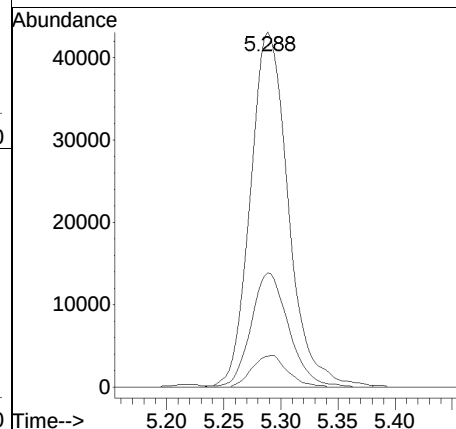
Tgt Ion: 78	Resp: 281838
Ion Ratio	Lower Upper
78 100	
77 23.4	15.7 32.7
51 17.3	16.0 33.2
52 15.7	15.3 31.9

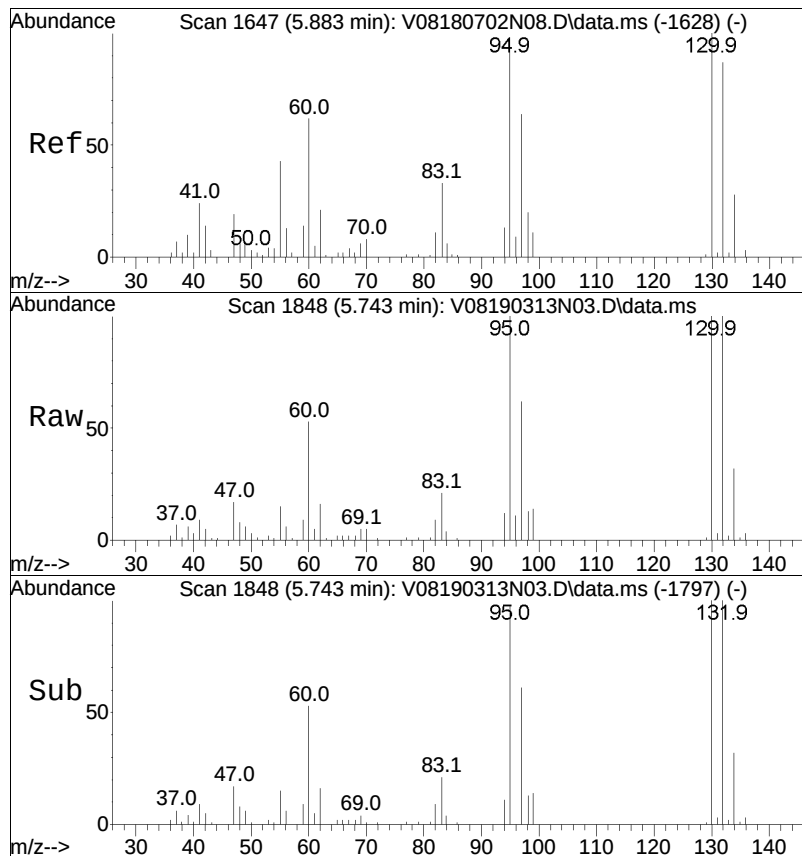




#44
 1,2-Dichloroethane
 Concen: 11.30 ug/L
 RT: 5.288 min Scan# 1685
 Delta R.T. -0.009 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

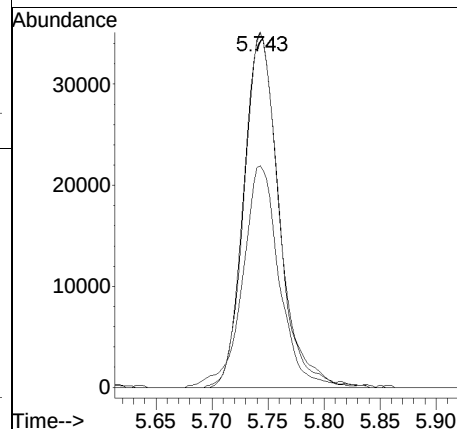
Tgt	Ion: 62	Resp:	100426
Ion	Ratio	Lower	Upper
62	100		
64	32.1	11.2	51.2
98	8.5	0.0	26.1

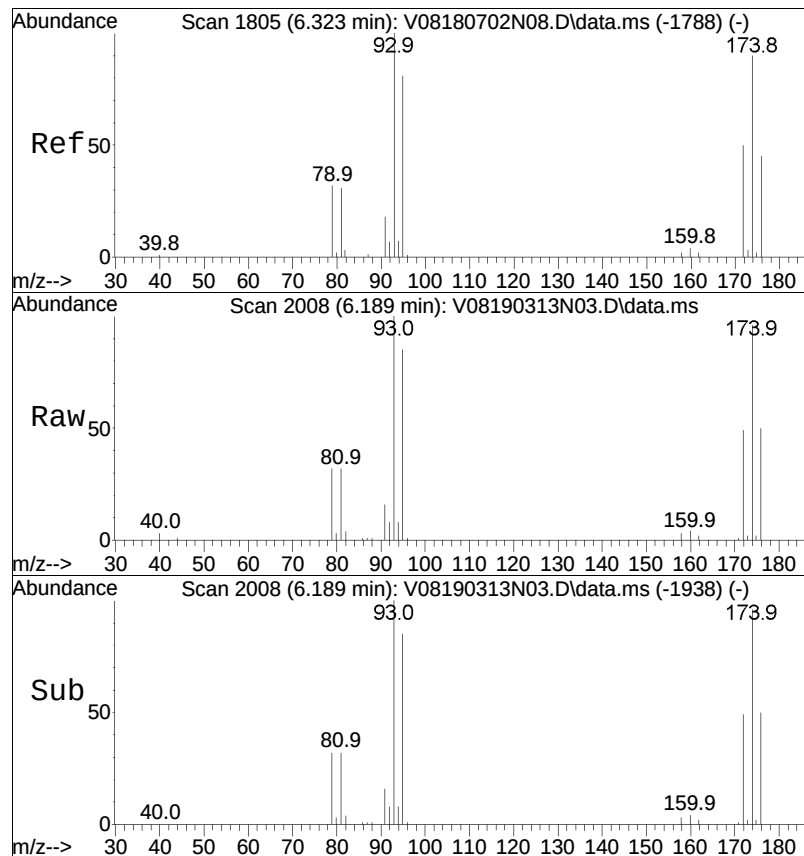




#48
 Trichloroethene
 Concen: 11.10 ug/L
 RT: 5.743 min Scan# 1848
 Delta R.T. -0.008 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

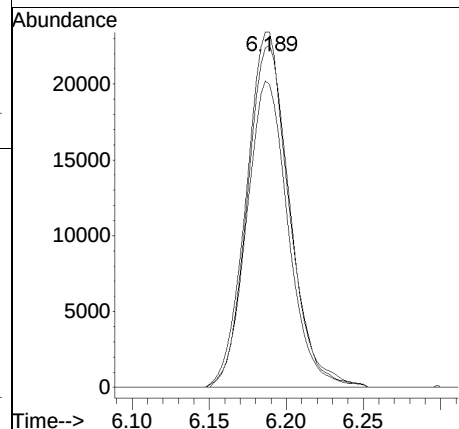
Tgt Ion:	95	Resp:	76388
Ion Ratio	Lower	Upper	
95	100		
97	65.3	55.5	83.3
130	99.2	76.6	115.0

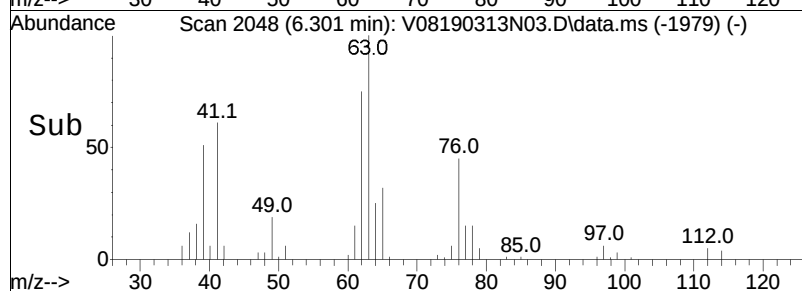
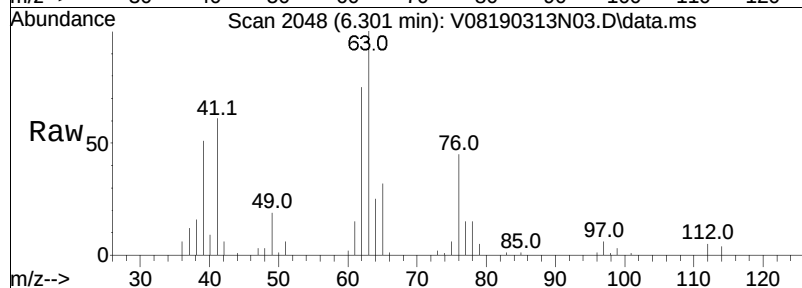
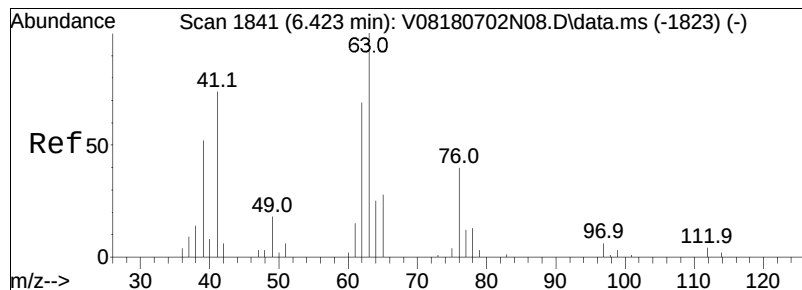




#50
 Dibromomethane
 Concen: 11.18 ug/L
 RT: 6.189 min Scan# 2008
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

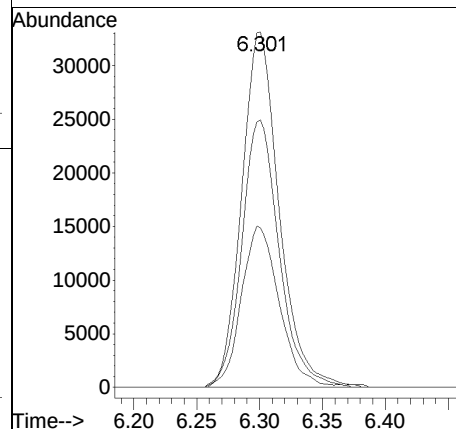
Tgt Ion	Ratio	Lower	Upper
93	100		
95	84.3	67.0	100.4
174	96.7	75.0	112.4

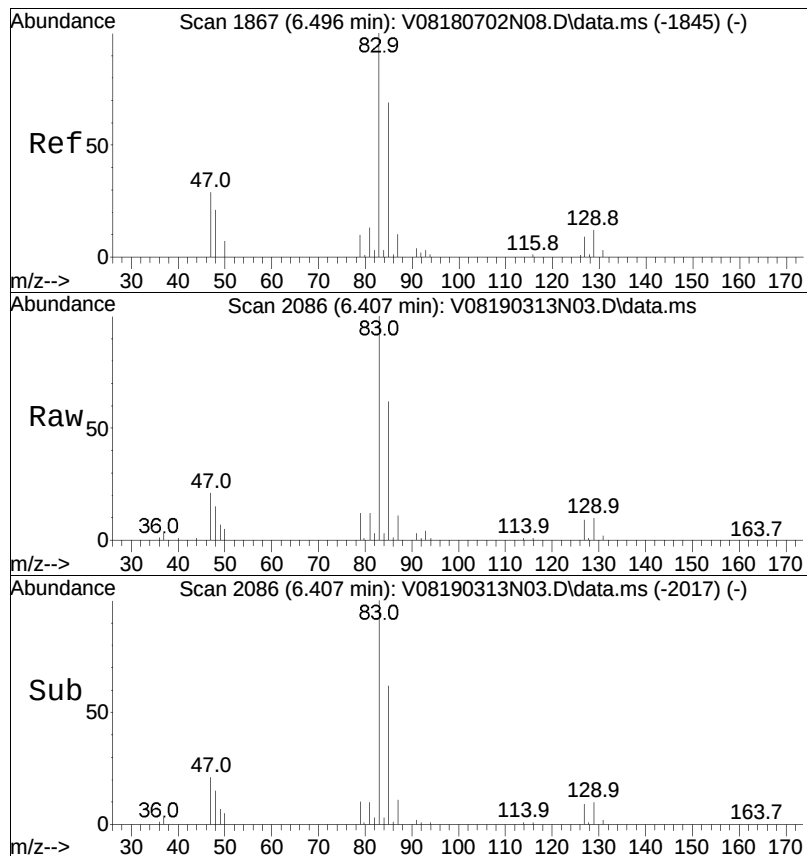




#51
 1,2-Dichloropropane
 Concen: 10.30 ug/L
 RT: 6.301 min Scan# 2048
 Delta R.T. -0.008 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

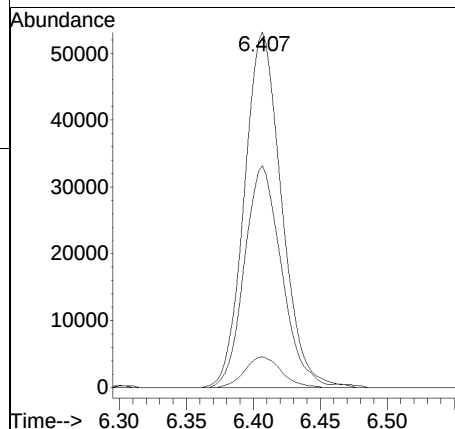
Tgt Ion:	63	Resp:	69012
Ion Ratio	Lower	Upper	
63	100		
62	74.8	58.6	87.8
76	45.7	38.0	57.0

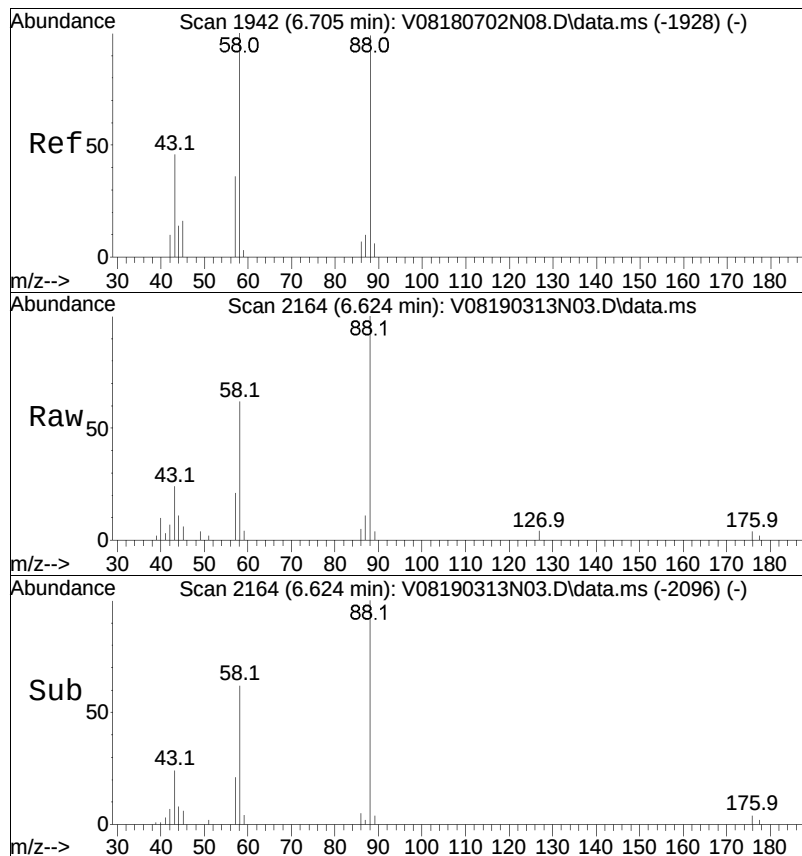




#54
 Bromodichloromethane
 Concen: 10.93 ug/L
 RT: 6.407 min Scan# 2086
 Delta R.T. -0.008 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

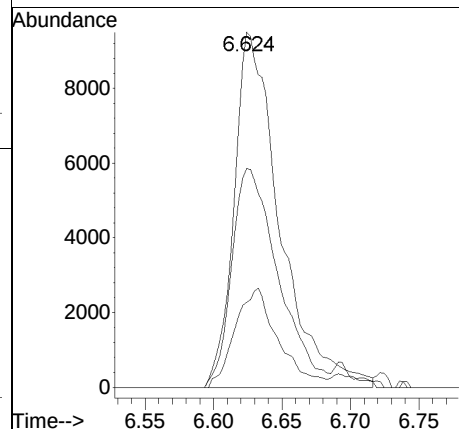
Tgt Ion:	83	Resp:	102725
Ion Ratio	Lower	Upper	
83	100		
85	62.2	52.3	78.5
127	8.4	6.2	9.4

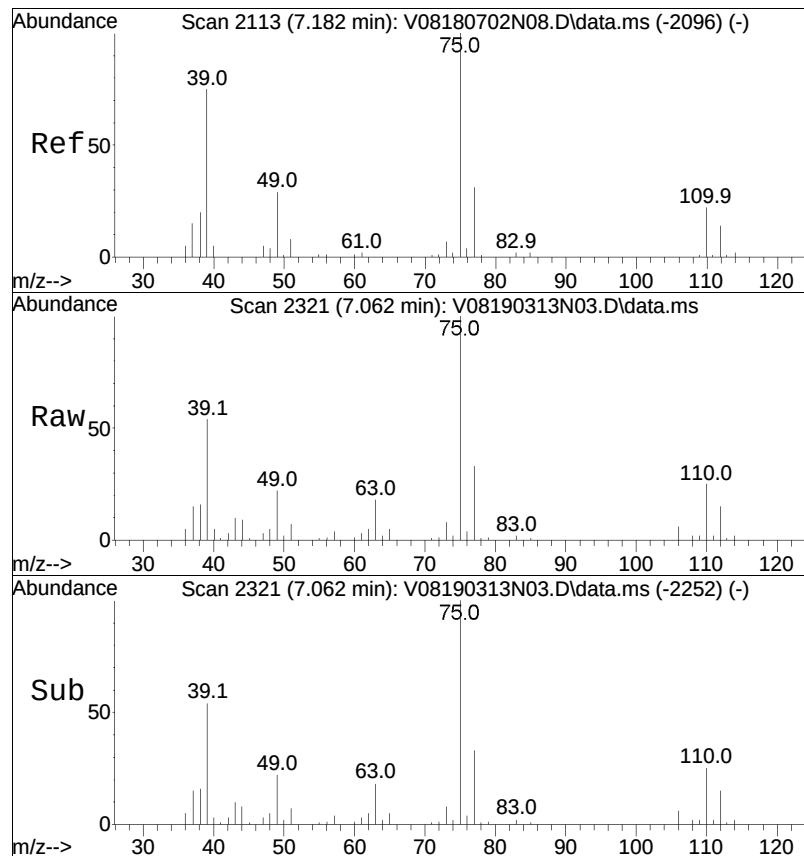




#57
 1,4-Dioxane
 Concen: 755.47 ug/L
 RT: 6.624 min Scan# 2164
 Delta R.T. -0.011 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

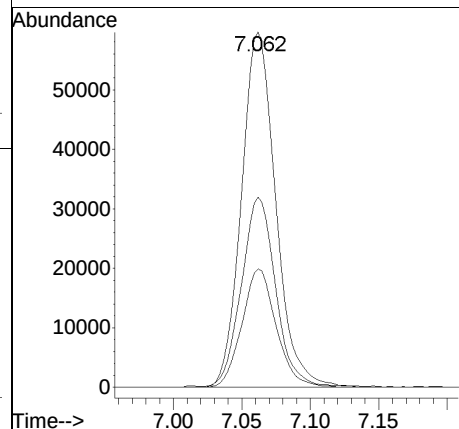
Tgt Ion	Ratio	Lower	Upper
88	100		
58	62.7	76.7	115.1#
43	26.5	36.2	54.2#

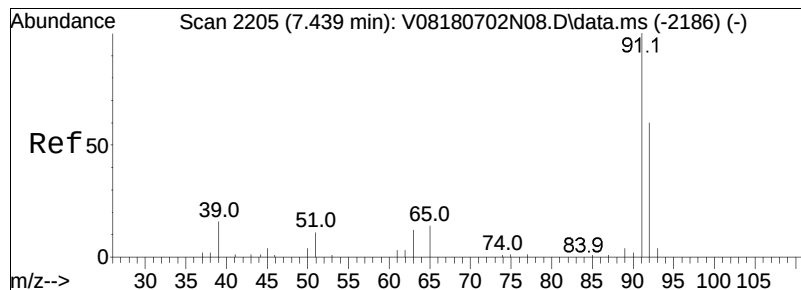




#58
 cis-1,3-Dichloropropene
 Concen: 9.89 ug/L
 RT: 7.062 min Scan# 2321
 Delta R.T. -0.008 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

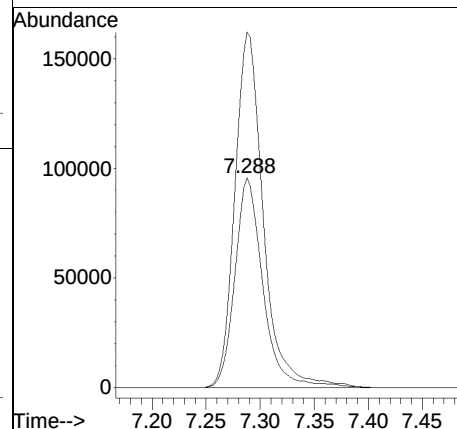
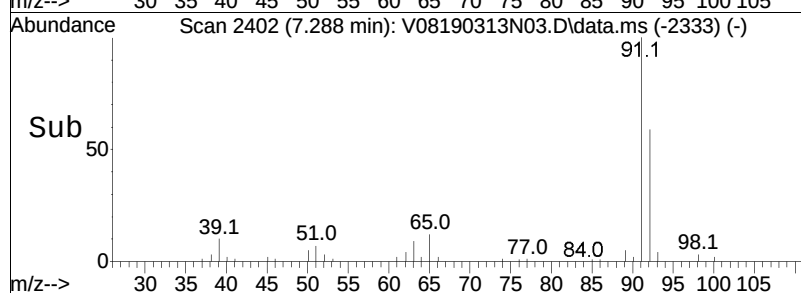
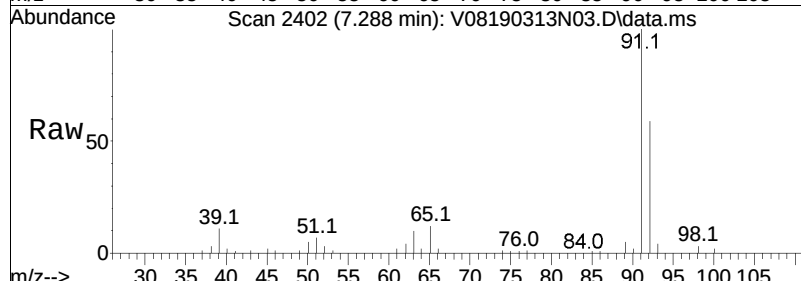
Tgt Ion:	75	Resp:	104151
Ion Ratio	Lower	Upper	
75	100		
77	33.3	25.0	37.4
39	53.7	50.1	75.1

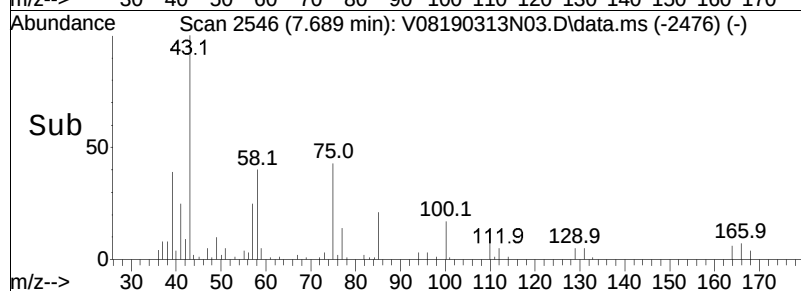
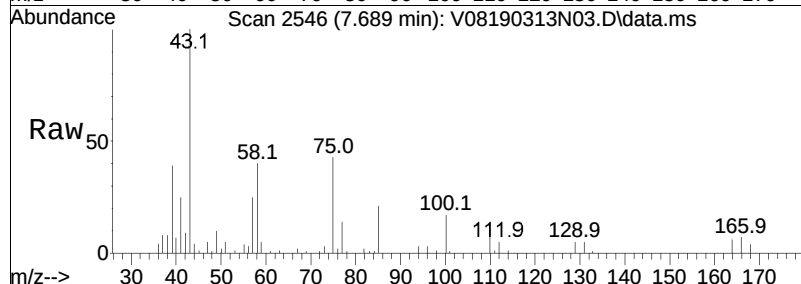
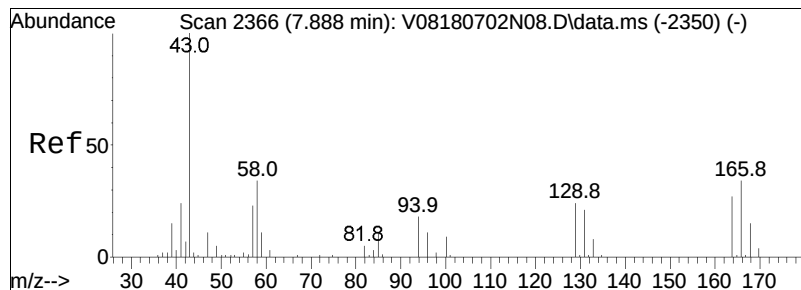




#61
Toluene
Concen: 11.09 ug/L
RT: 7.288 min Scan# 2402
Delta R.T. -0.008 min
Lab File: V08190313N03.D
Acq: 13 Mar 2019 7:04 pm

Tgt	Ion	Resp	Lower	Upper
92	100			
91	171.8	139.8	209.6	





#62

4-Methyl-2-pentanone

Concen: 9.41 ug/L

RT: 7.689 min Scan# 2546

Delta R.T. -0.006 min

Lab File: V08190313N03.D

Acq: 13 Mar 2019 7:04 pm

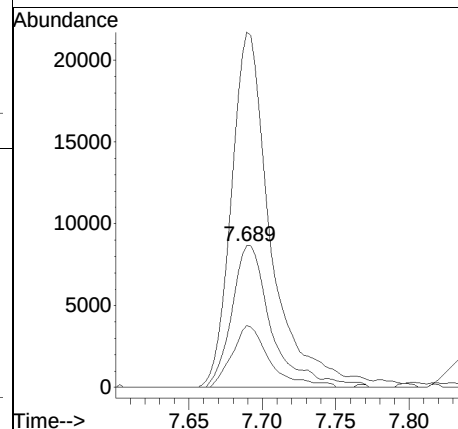
Tgt Ion: 58 Resp: 16494

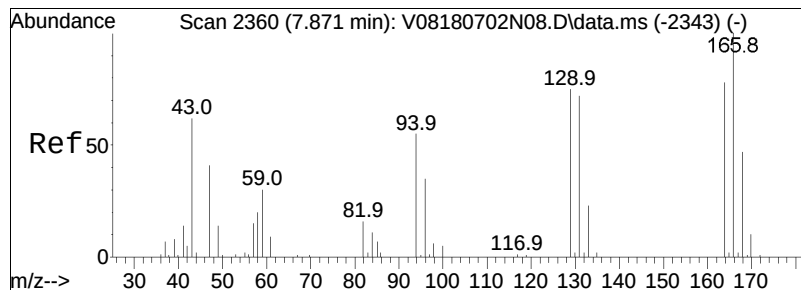
Ion Ratio Lower Upper

58 100

100 41.3 20.2 30.2#

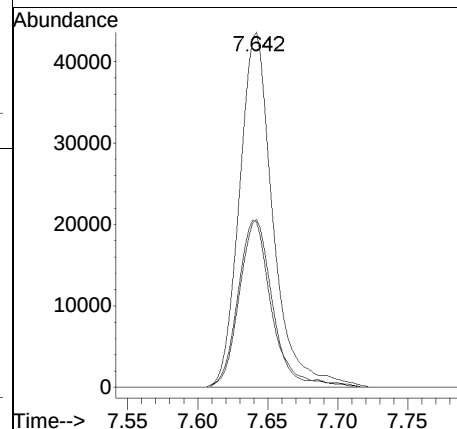
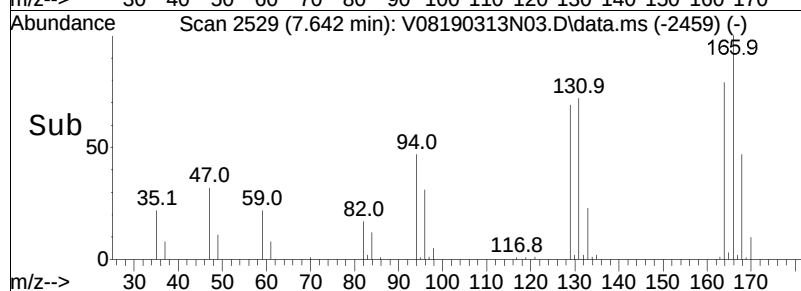
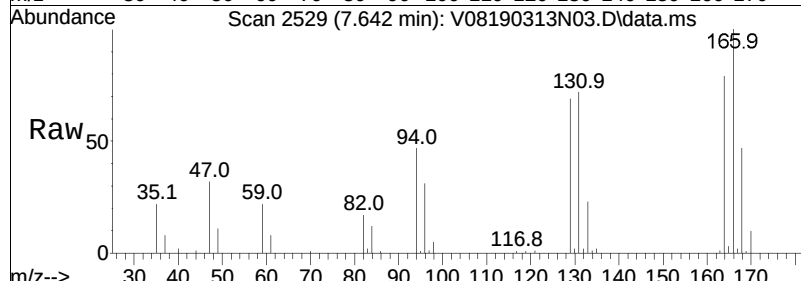
43 242.9 196.6 295.0

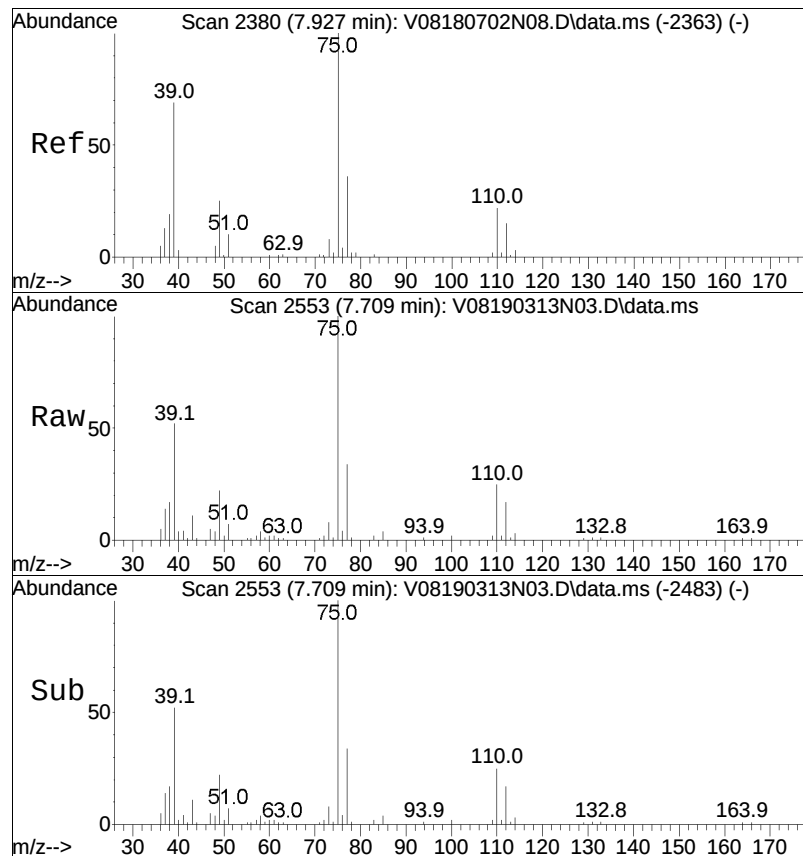




#63
 Tetrachloroethene
 Concen: 10.92 ug/L
 RT: 7.642 min Scan# 2529
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

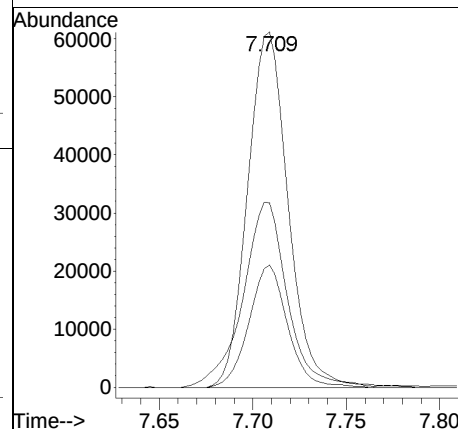
Tgt Ion	Ratio	Lower	Upper
166	100		
168	45.5	28.2	68.2
94	47.6	38.4	78.4

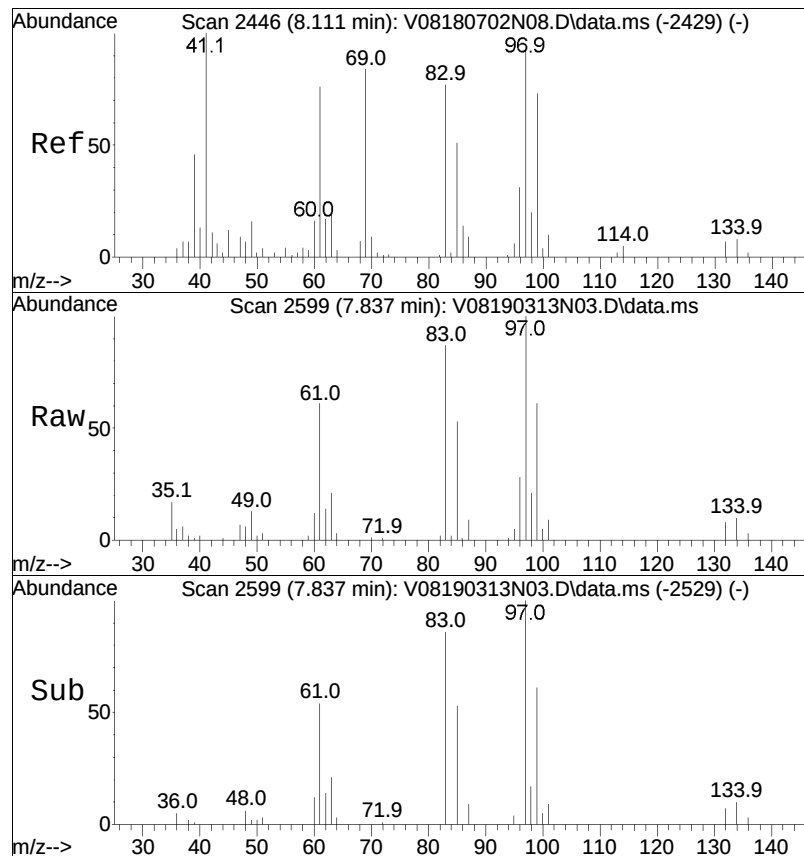




#65
 trans-1,3-Dichloropropene
 Concen: 10.52 ug/L
 RT: 7.709 min Scan# 2553
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

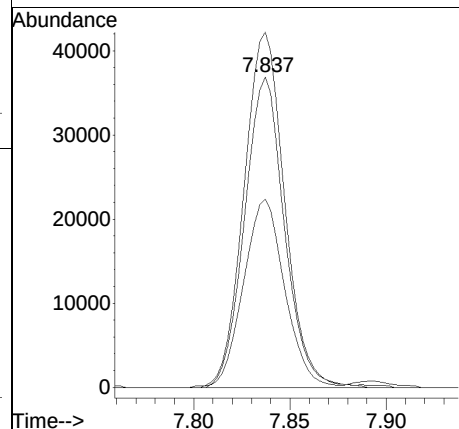
Tgt Ion:	75	Resp:	92336
Ion Ratio	Lower	Upper	
75	100		
77	32.8	12.4	52.4
39	57.3	42.8	82.8

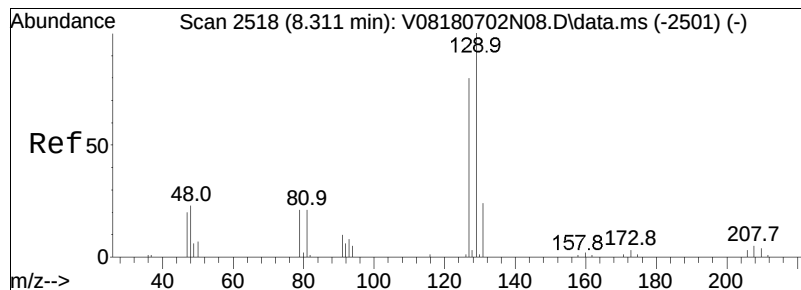




#68
 1,1,2-Trichloroethane
 Concen: 11.93 ug/L
 RT: 7.837 min Scan# 2599
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

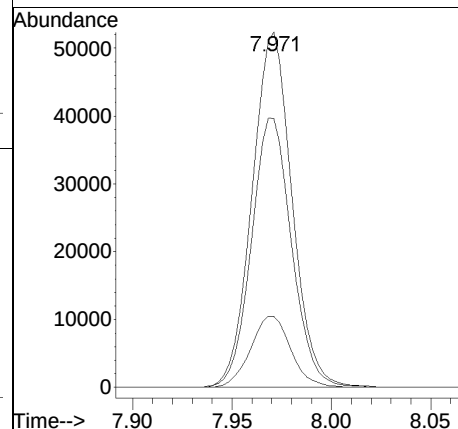
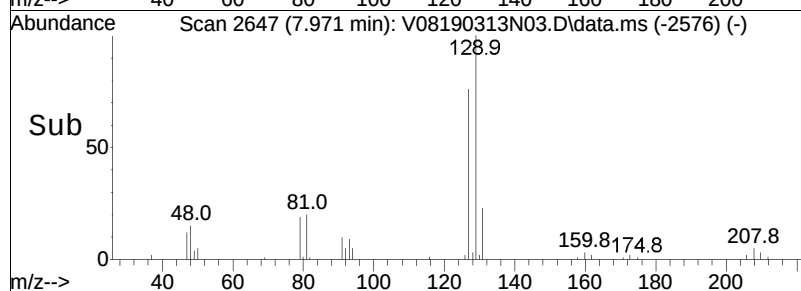
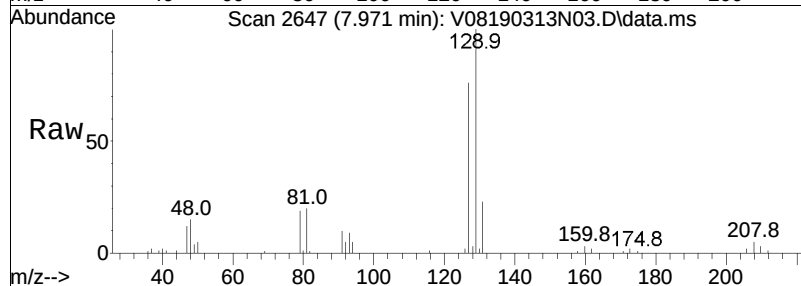
Tgt Ion:	83	Resp:	53137
Ion Ratio	Lower	Upper	
83	100		
97	117.1	89.8	129.8
85	62.7	44.4	84.4

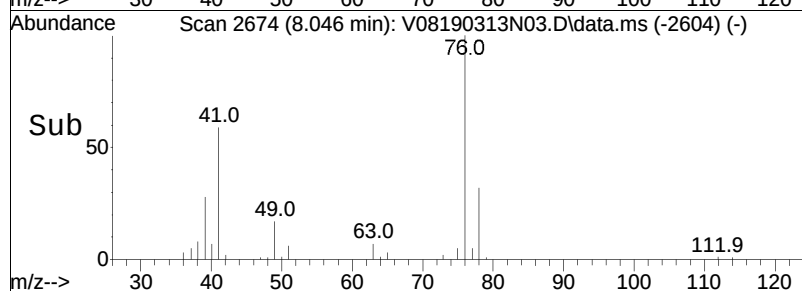
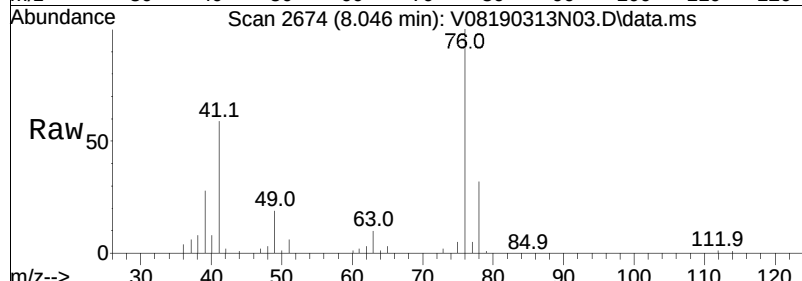
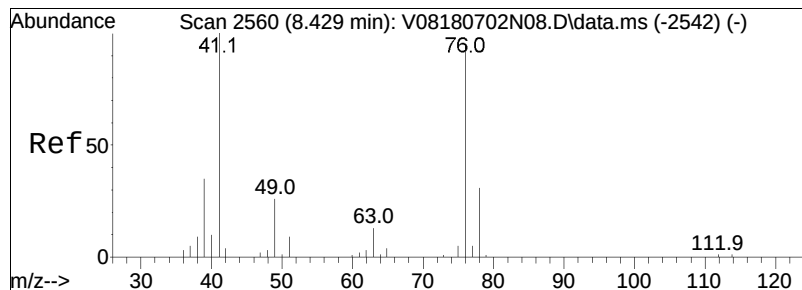




#69
 Chlorodibromomethane
 Concen: 11.17 ug/L
 RT: 7.971 min Scan# 2647
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

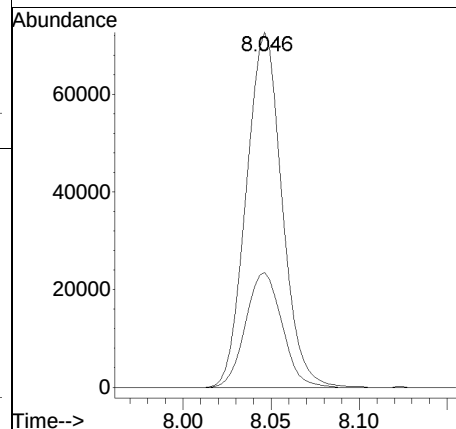
Tgt Ion	Ratio	Lower	Upper
129	100		
81	20.3	2.9	42.9
127	76.3	57.8	97.8

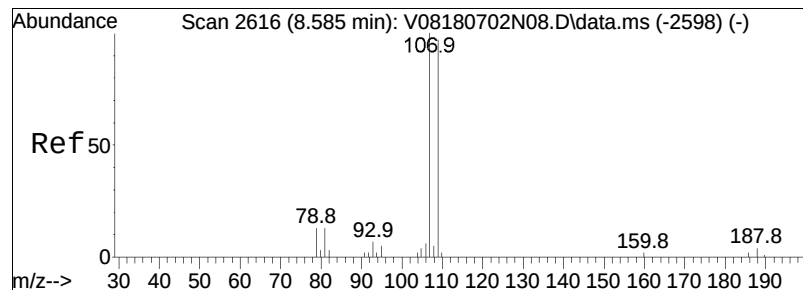




#70
 1,3-Dichloropropane
 Concen: 11.39 ug/L
 RT: 8.046 min Scan# 2674
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

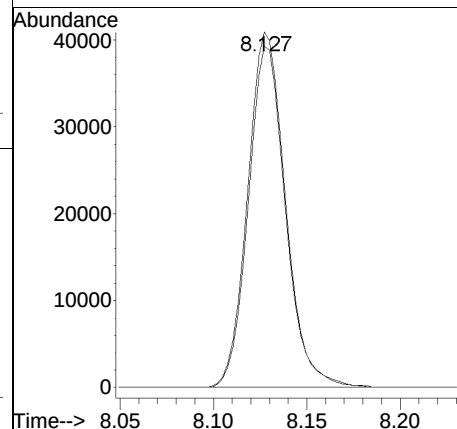
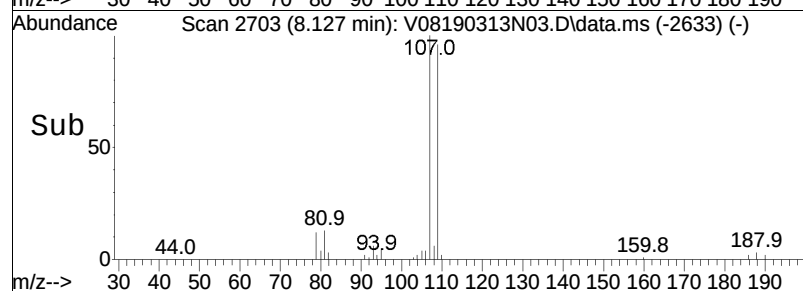
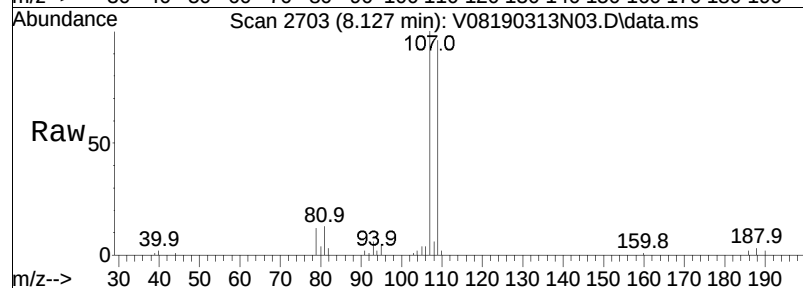
Tgt Ion	Ratio	Lower	Upper
76	100		
78	33.0	25.5	38.3

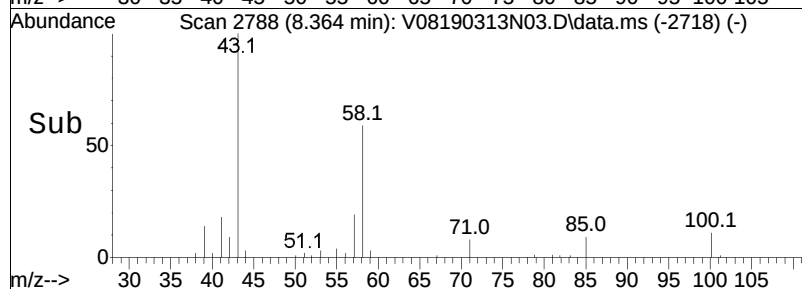
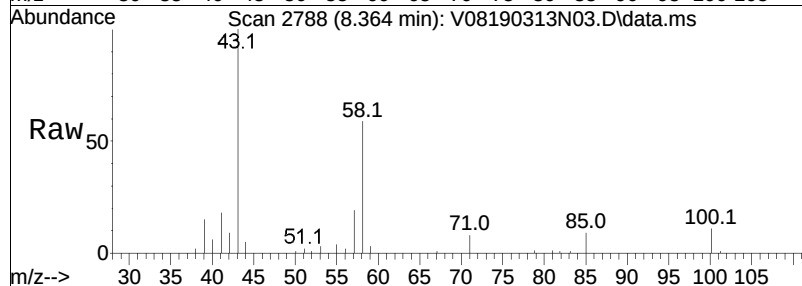
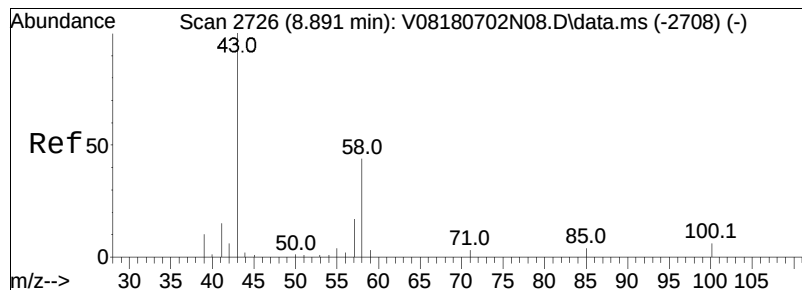




#71
 1,2-Dibromoethane
 Concen: 10.88 ug/L
 RT: 8.127 min Scan# 2703
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

Tgt Ion:107 Resp: 57665
 Ion Ratio Lower Upper
 107 100
 109 94.4 74.3 111.5





#72

2-Hexanone

Concen: 8.42 ug/L

RT: 8.364 min Scan# 2788

Delta R.T. -0.006 min

Lab File: V08190313N03.D

Acq: 13 Mar 2019 7:04 pm

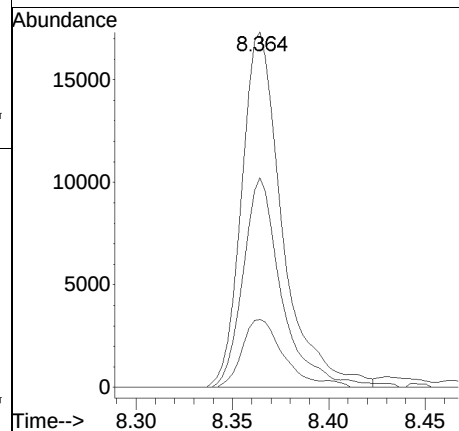
Tgt Ion: 43 Resp: 25556

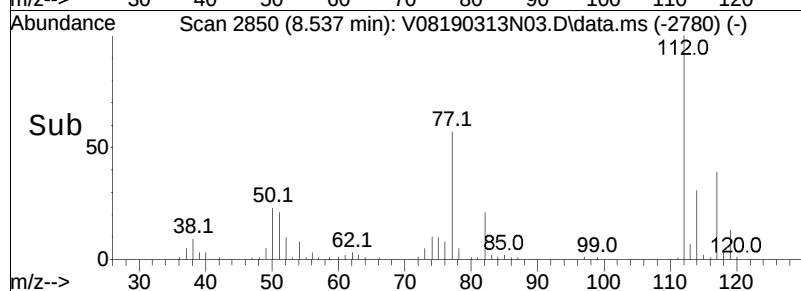
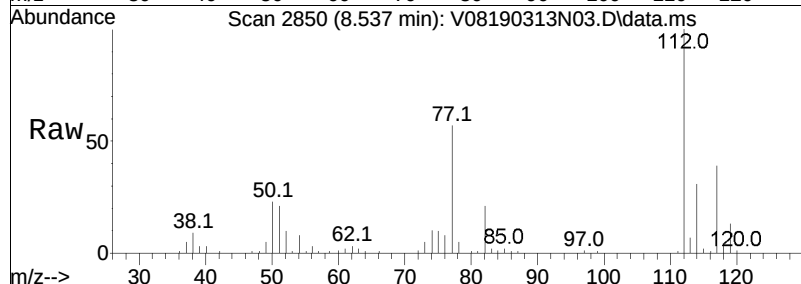
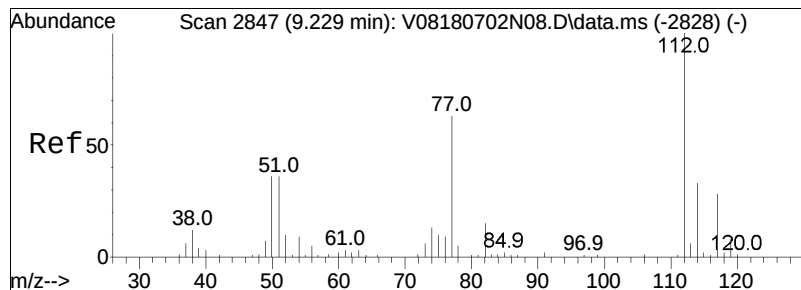
Ion Ratio Lower Upper

43 100

58 56.4 41.2 61.8

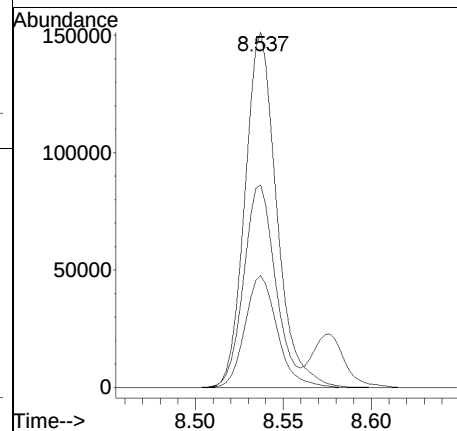
57 19.8 17.2 25.8

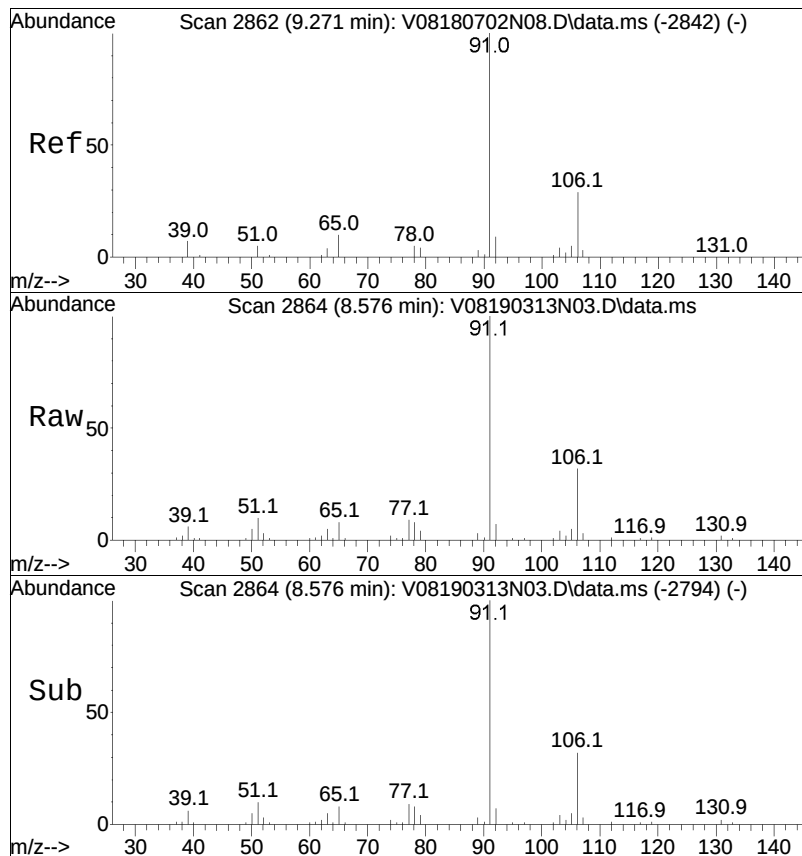




#73
 Chlorobenzene
 Concen: 10.96 ug/L
 RT: 8.537 min Scan# 2850
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

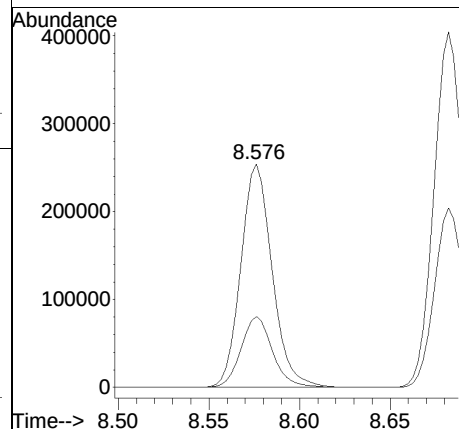
Tgt Ion	Ratio	Lower	Upper
112	100		
77	57.2	55.4	83.0
114	32.0	25.4	38.2

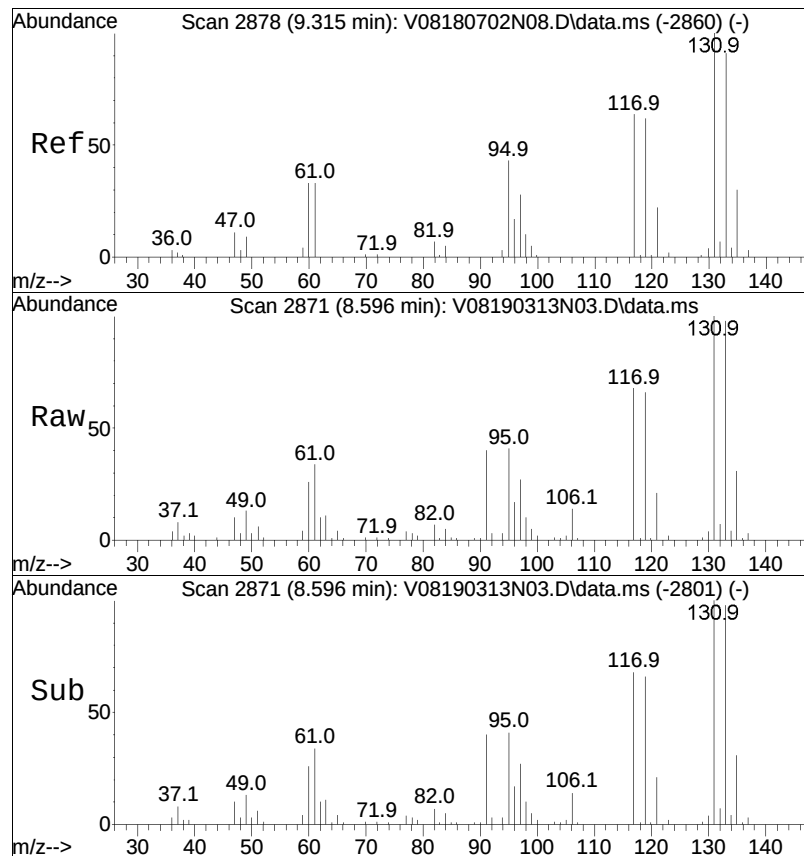




#74
 Ethylbenzene
 Concen: 10.55 ug/L
 RT: 8.576 min Scan# 2864
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

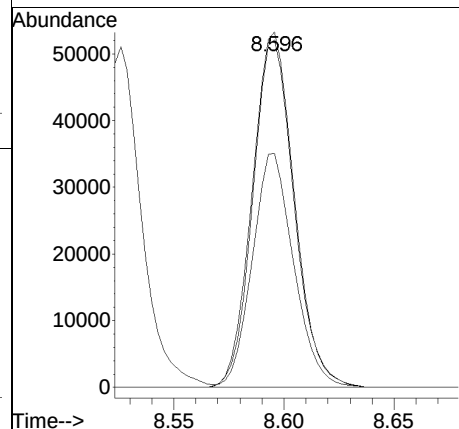
Tgt Ion	Ratio	Lower	Upper
91	100		
106	31.8	24.3	36.5

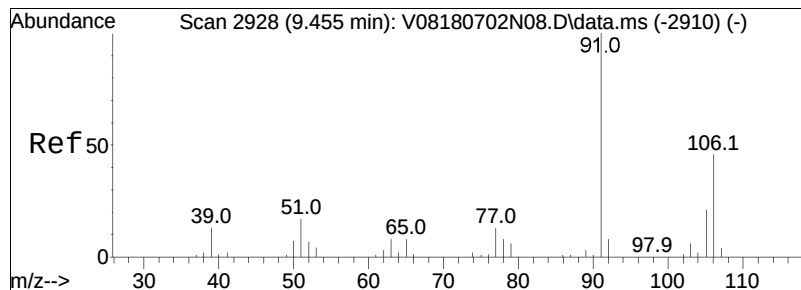




#75
 1,1,1,2-Tetrachloroethane
 Concen: 10.95 ug/L
 RT: 8.596 min Scan# 2871
 Delta R.T. -0.005 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

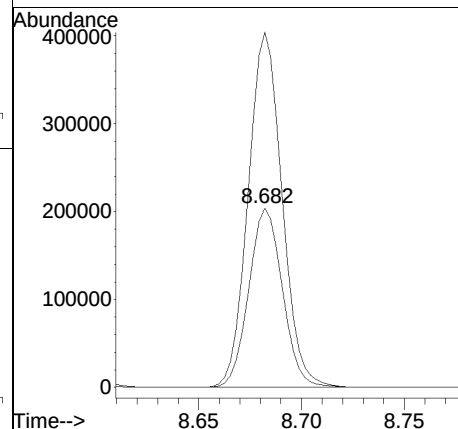
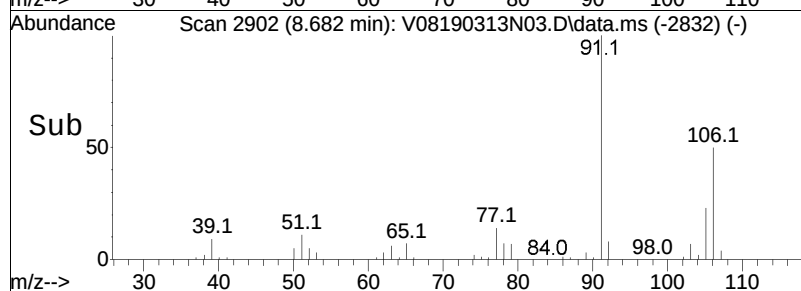
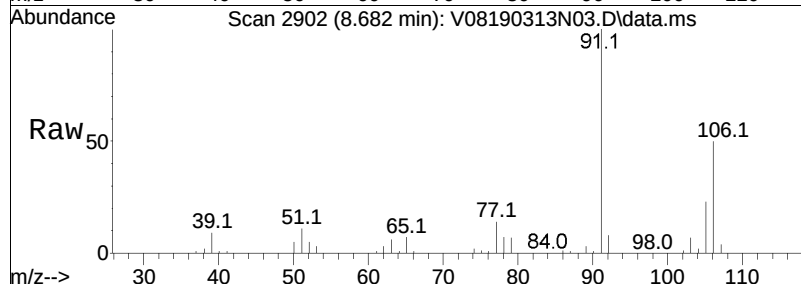
Tgt Ion:	131	Resp:	70883
Ion Ratio	Lower	Upper	
131	100		
133	95.9	81.0	121.0
119	64.9	41.3	81.3

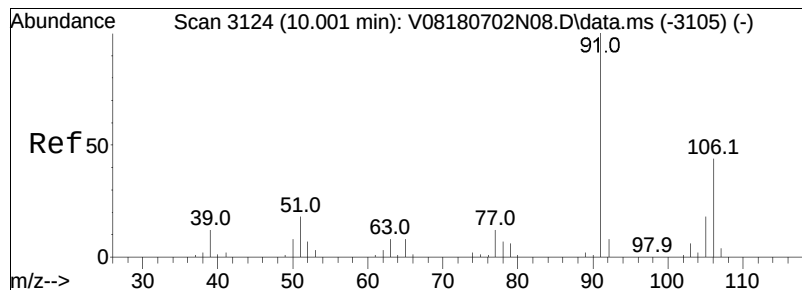




#76
 p/m Xylene
 Concen: 21.11 ug/L
 RT: 8.682 min Scan# 2902
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

Tgt Ion	Ratio	Lower	Upper
106	100		
91	199.0	166.4	249.6





#77

o Xylene

Concen: 20.40 ug/L

RT: 8.964 min Scan# 3003

Delta R.T. -0.008 min

Lab File: V08190313N03.D

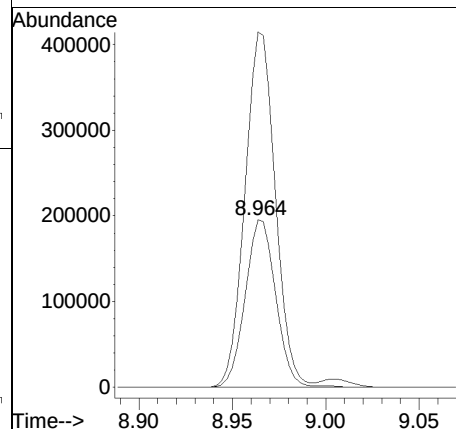
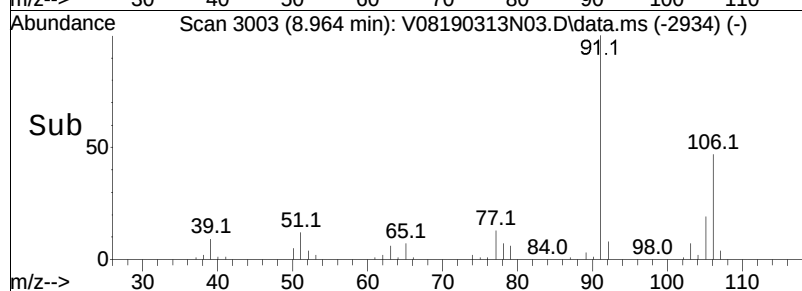
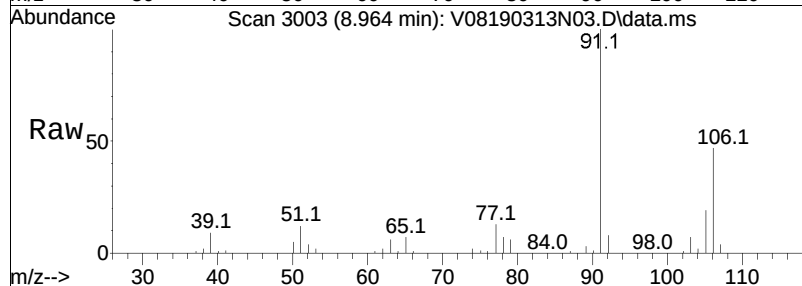
Acq: 13 Mar 2019 7:04 pm

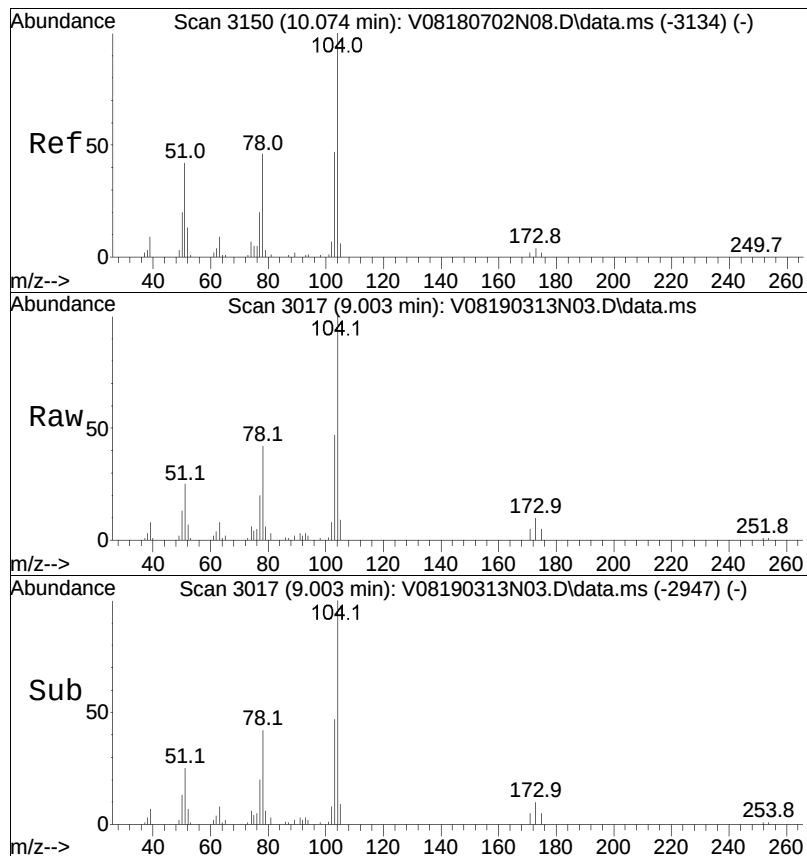
Tgt Ion:106 Resp: 222768

Ion Ratio Lower Upper

106 100

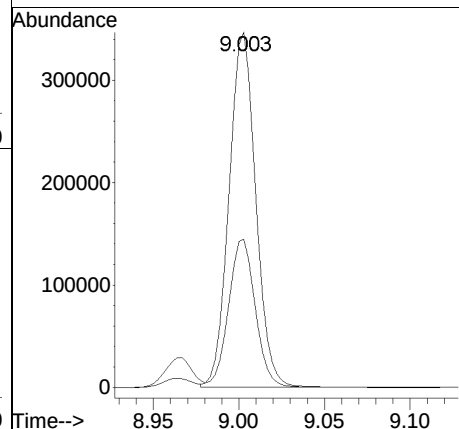
91 210.1 182.6 273.8

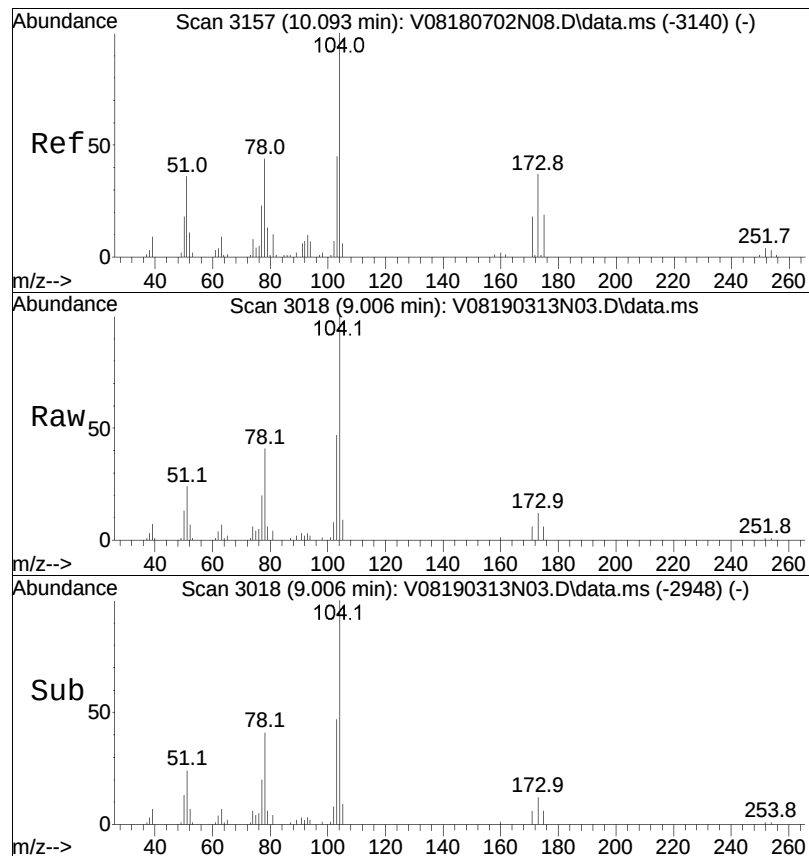




#78
 Styrene
 Concen: 21.58 ug/L
 RT: 9.003 min Scan# 3017
 Delta R.T. -0.005 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

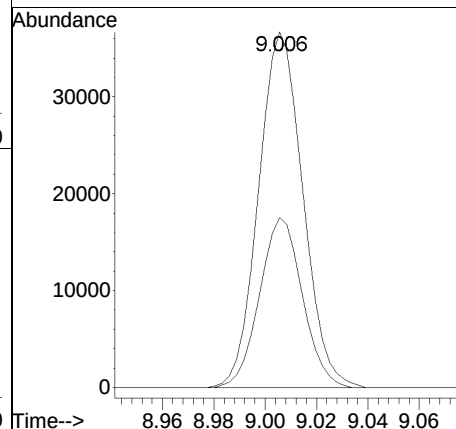
Tgt Ion	Ratio	Lower	Upper
104	100		
78	41.6	39.8	59.6

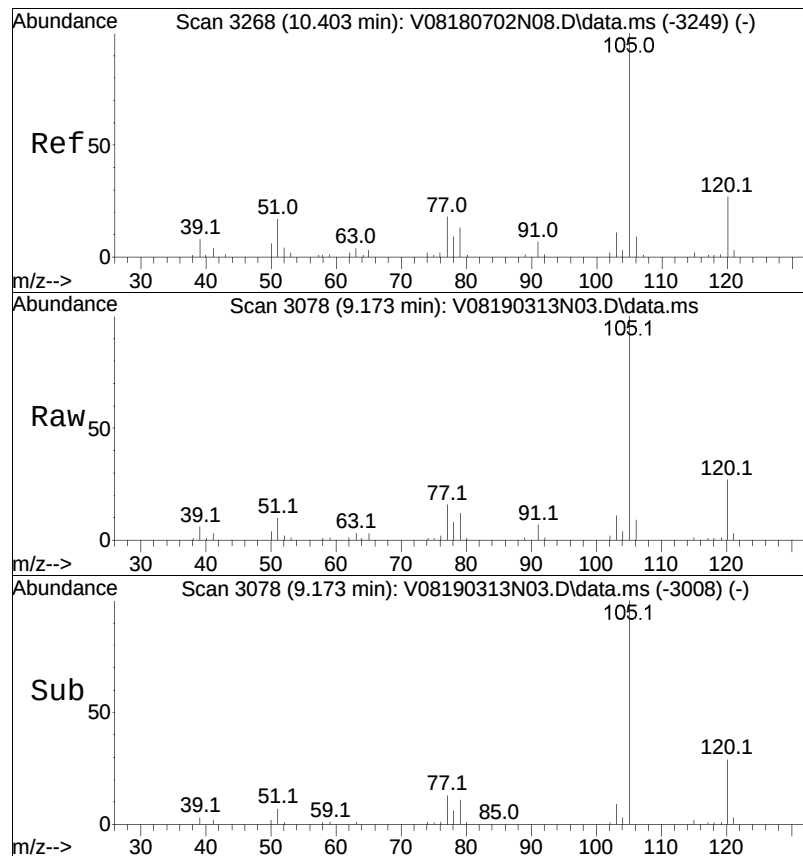




#80
 Bromoform
 Concen: 11.03 ug/L
 RT: 9.006 min Scan# 3018
 Delta R.T. -0.005 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

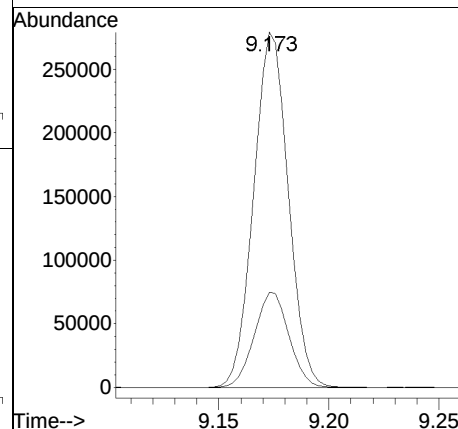
Tgt Ion	Ratio	Lower	Upper
173	100		
175	46.1	31.5	71.5

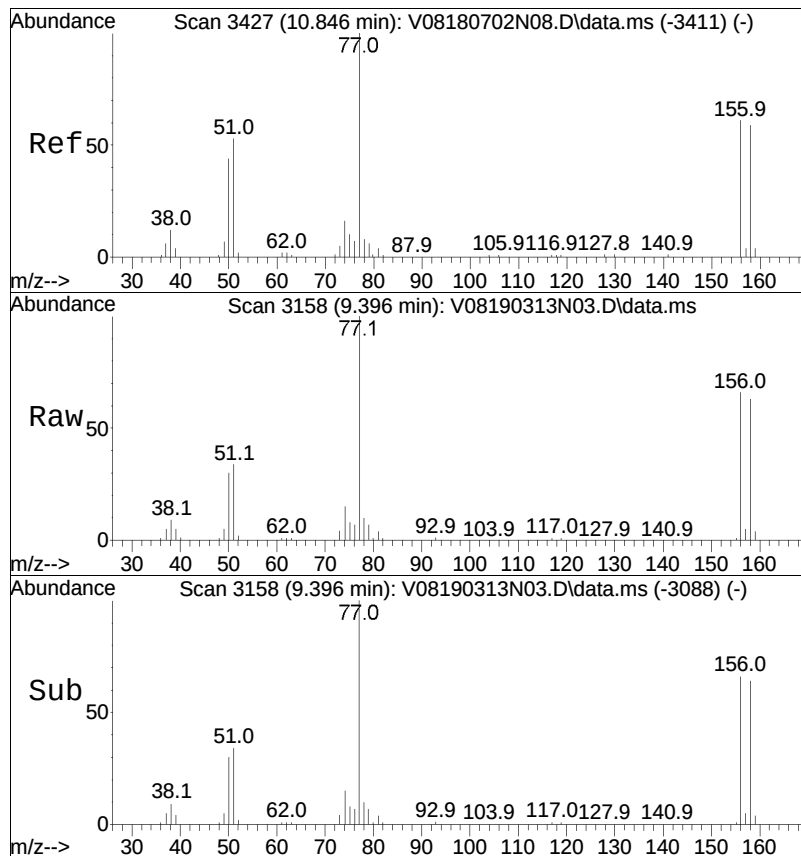




#82
 Isopropylbenzene
 Concen: 10.93 ug/L
 RT: 9.173 min Scan# 3078
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

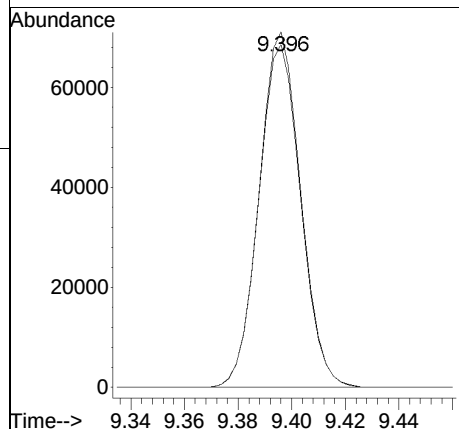
Tgt	Ion	Ratio	Lower	Upper
105	100			
120	26.8	4.8	44.8	

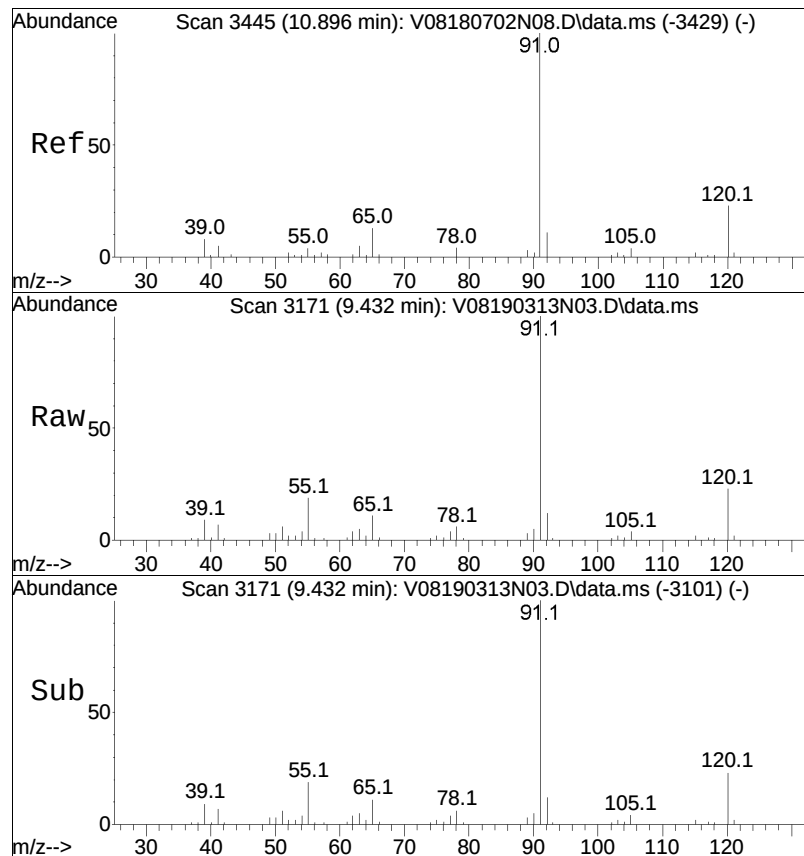




#84
 Bromobenzene
 Concen: 10.64 ug/L
 RT: 9.396 min Scan# 3158
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

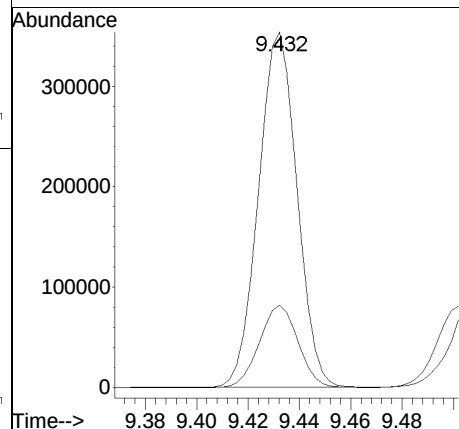
Tgt Ion	Ratio	Lower	Upper
156	100		
158	97.2	75.9	113.9

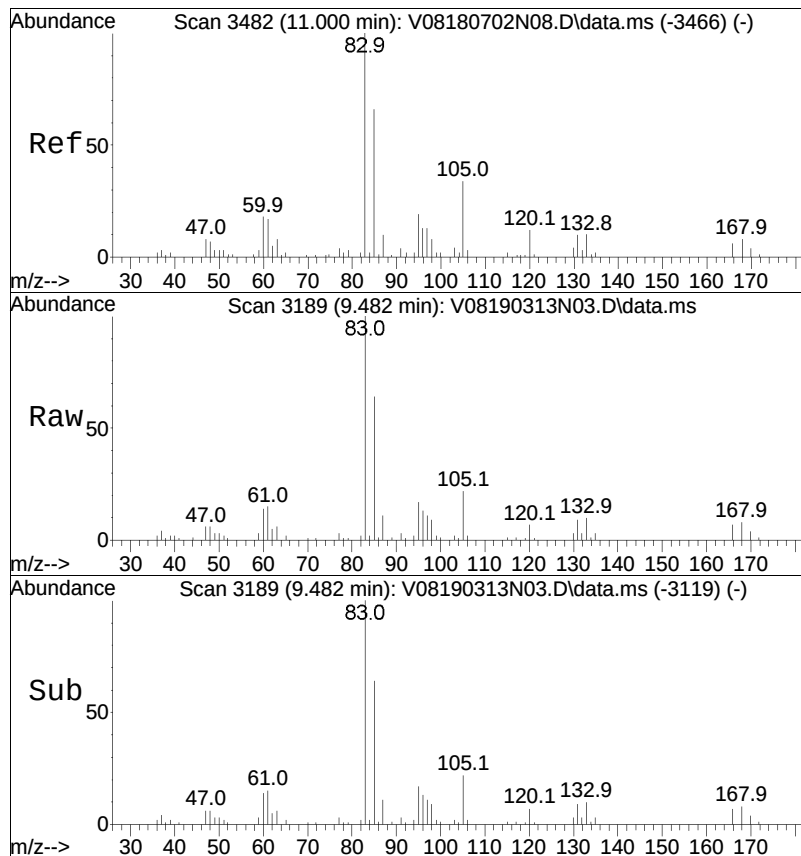




#85
 n-Propylbenzene
 Concen: 11.55 ug/L
 RT: 9.432 min Scan# 3171
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

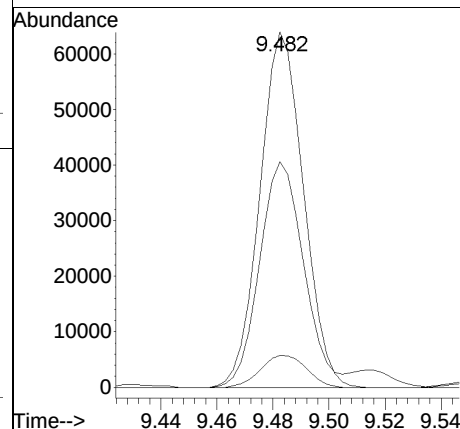
Tgt Ion	Ratio	Lower	Upper
91	100		
120	23.2	17.0	25.6

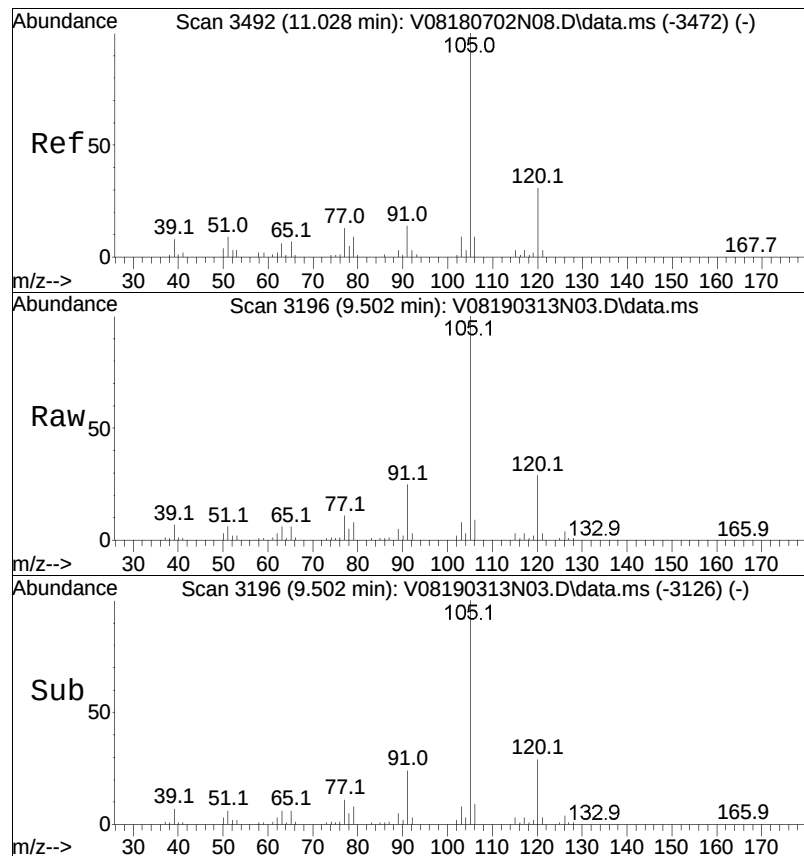




#87
 1,1,2,2-Tetrachloroethane
 Concen: 10.65 ug/L
 RT: 9.482 min Scan# 3189
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

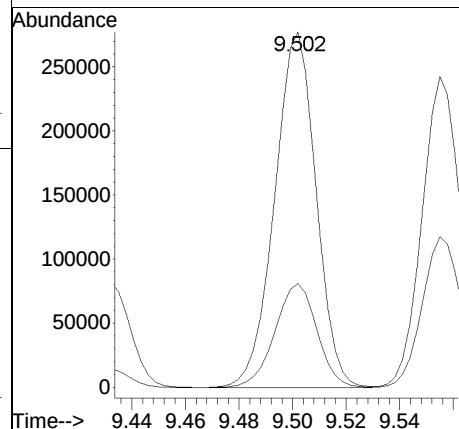
Tgt Ion:	83	Resp:	69043
Ion Ratio	Lower	Upper	
83	100		
131	9.5	0.0	30.4
85	64.6	45.4	85.4

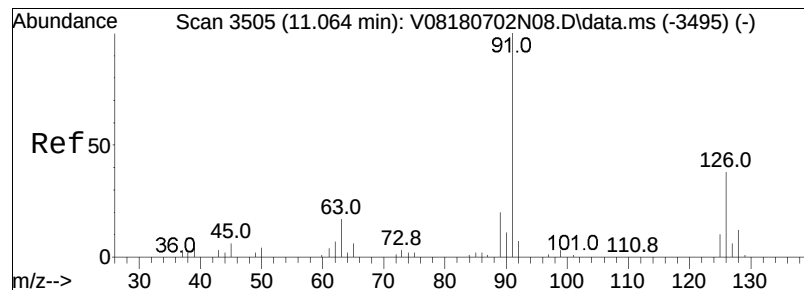




#88
 4-Ethyltoluene
 Concen: 11.22 ug/L
 RT: 9.502 min Scan# 3196
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

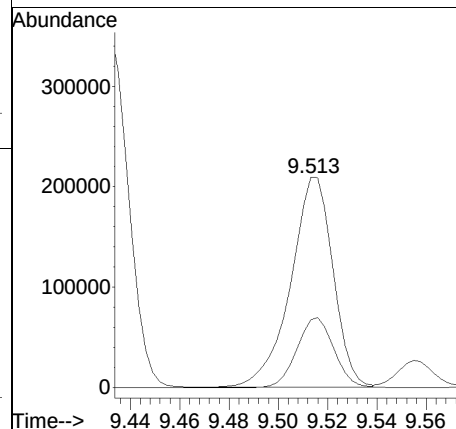
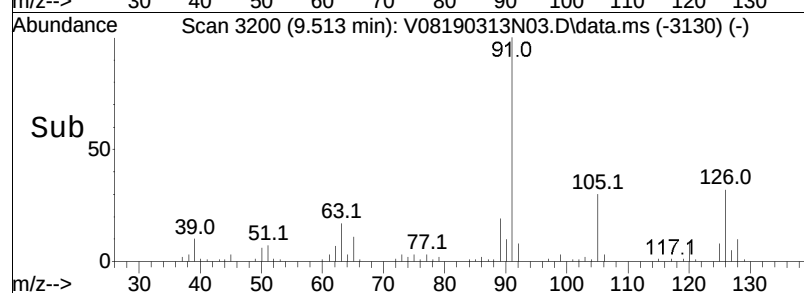
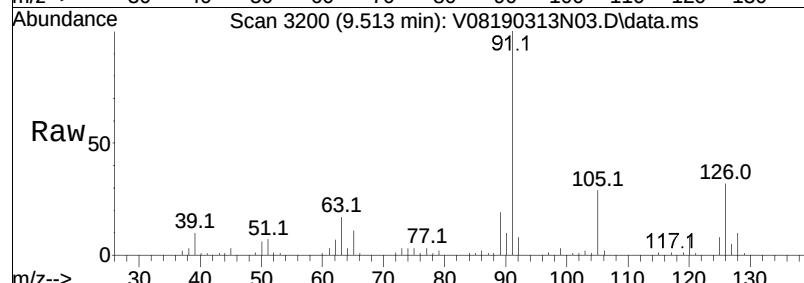
Tgt Ion	Ratio	Lower	Upper
105	100		
120	29.6	18.1	37.7

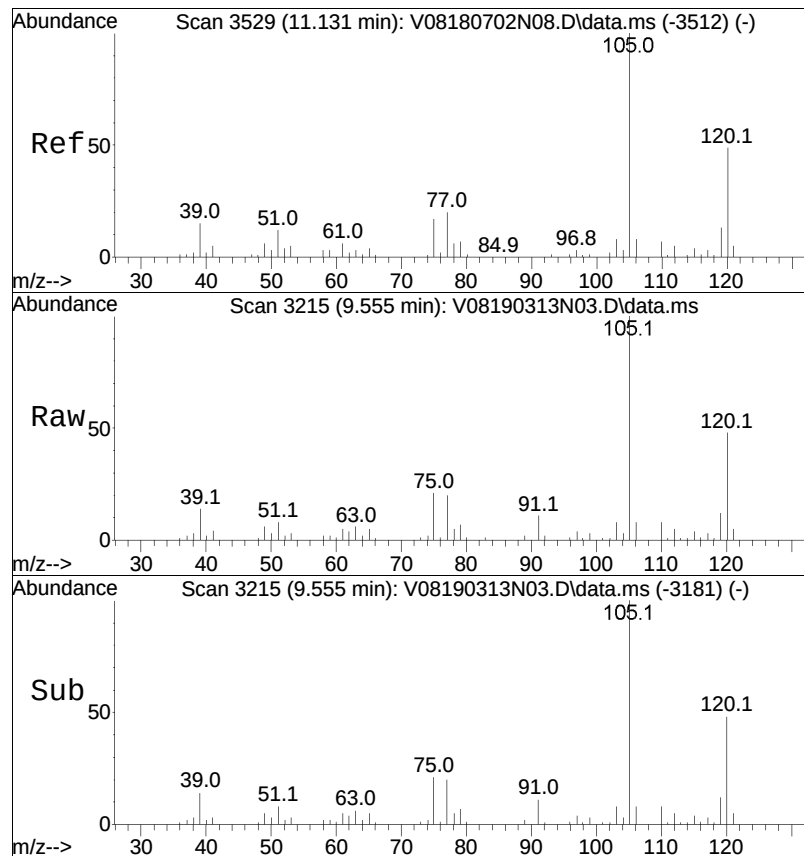




#89
 2-Chlorotoluene
 Concen: 10.76 ug/L
 RT: 9.513 min Scan# 3200
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

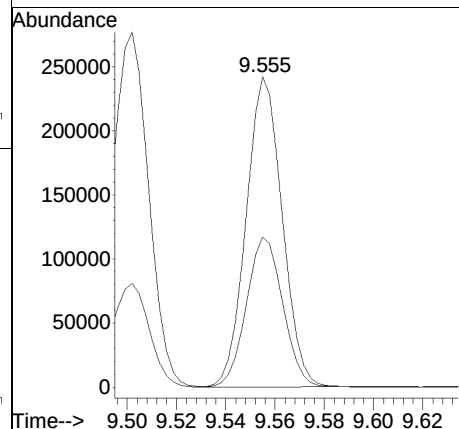
Tgt Ion	Ratio	Lower	Upper
91	100		
126	28.8	21.5	32.3

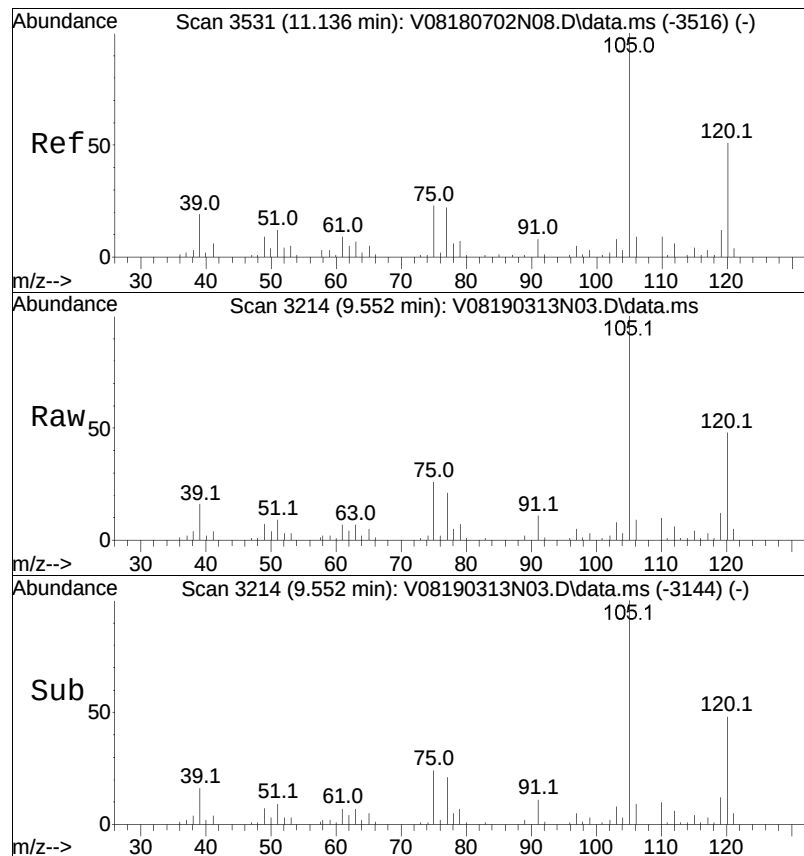




#90
 1,3,5-Trimethylbenzene
 Concen: 10.72 ug/L
 RT: 9.555 min Scan# 3215
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

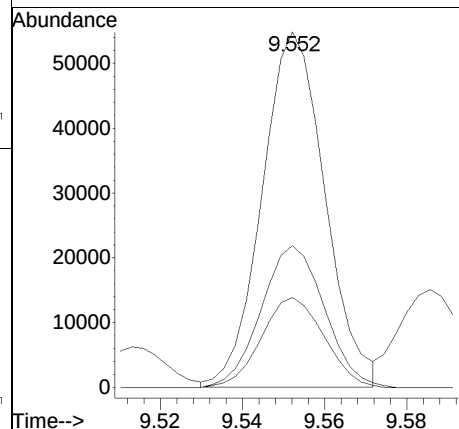
Tgt Ion	Ratio	Lower	Upper
105	100		
120	49.0	34.8	52.2

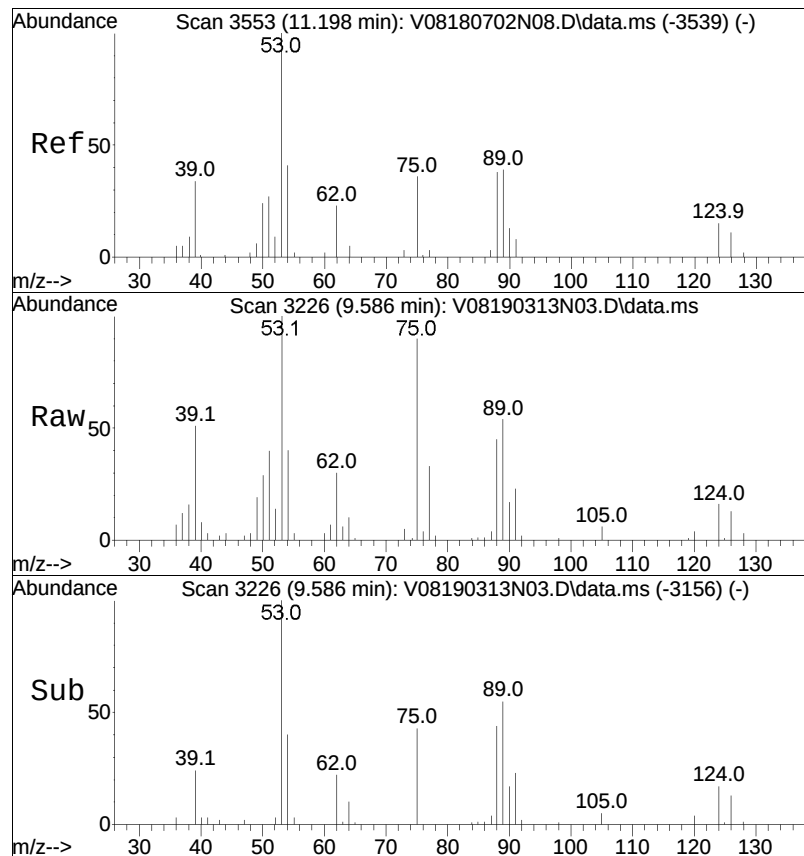




#91
 1,2,3-Trichloropropane
 Concen: 11.54 ug/L
 RT: 9.552 min Scan# 3214
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

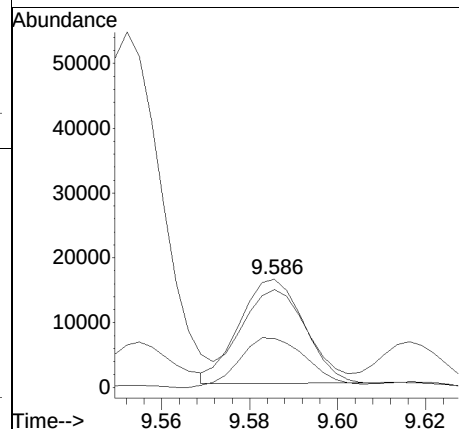
Tgt Ion:	75	Resp:	58102
Ion Ratio	Lower	Upper	
75	100		
110	40.2	25.4	52.8
112	25.3	15.6	32.4

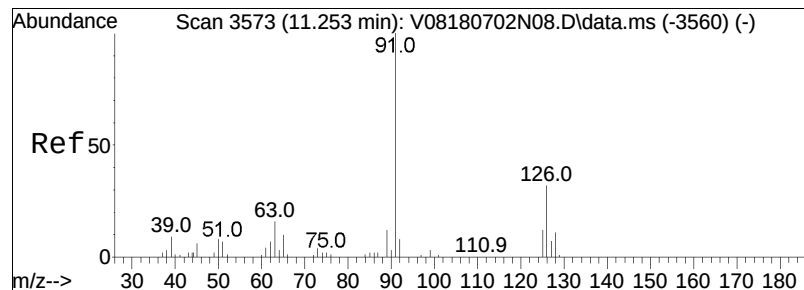




#92
 trans-1,4-Dichloro-2-butene
 Concen: 9.25 ug/L
 RT: 9.586 min Scan# 3226
 Delta R.T. -0.005 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

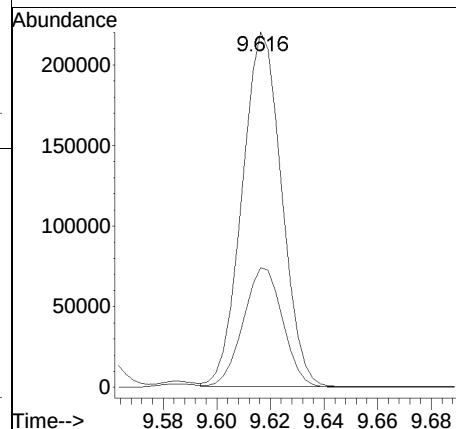
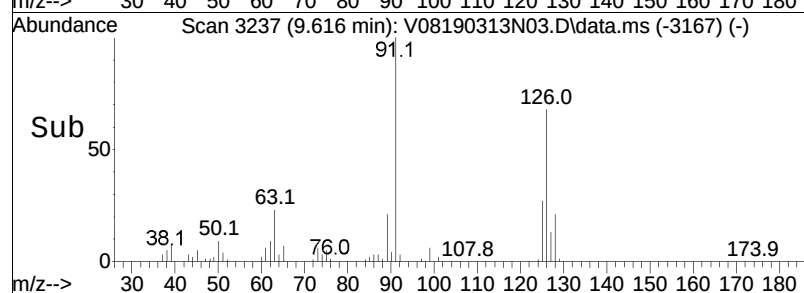
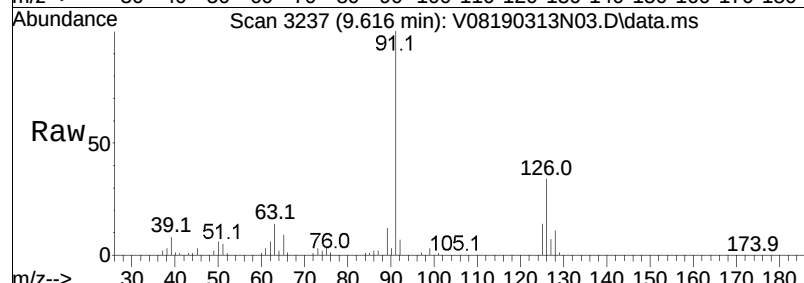
Tgt Ion:	53	Resp:	16420
Ion Ratio	Lower	Upper	
53	100		
88	50.5	39.6	59.4
75	97.4	70.2	105.4

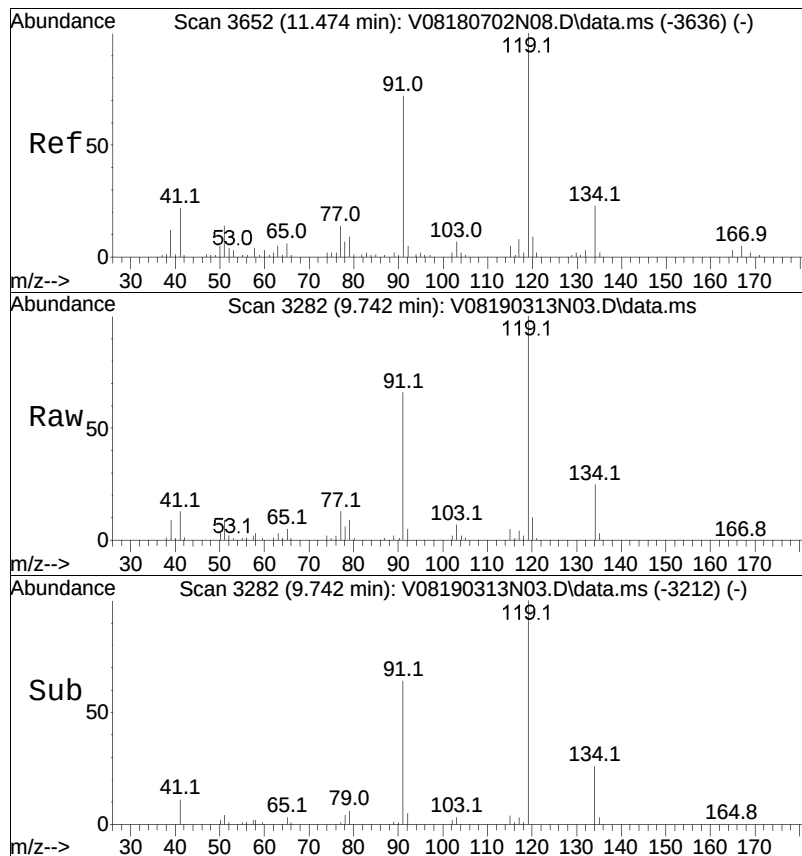




#93
 4-Chlorotoluene
 Concen: 11.13 ug/L
 RT: 9.616 min Scan# 3237
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

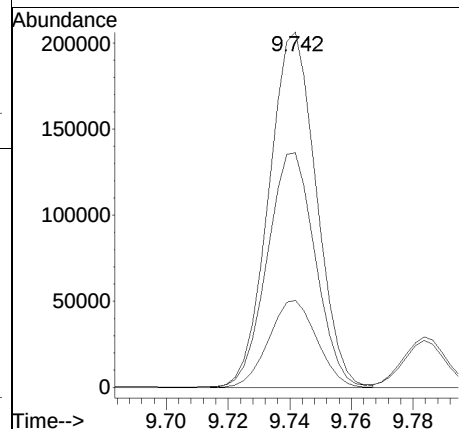
Tgt Ion:	91	Resp:	225084
Ion Ratio	Lower	Upper	
91	100		
126	33.9	24.6	36.8

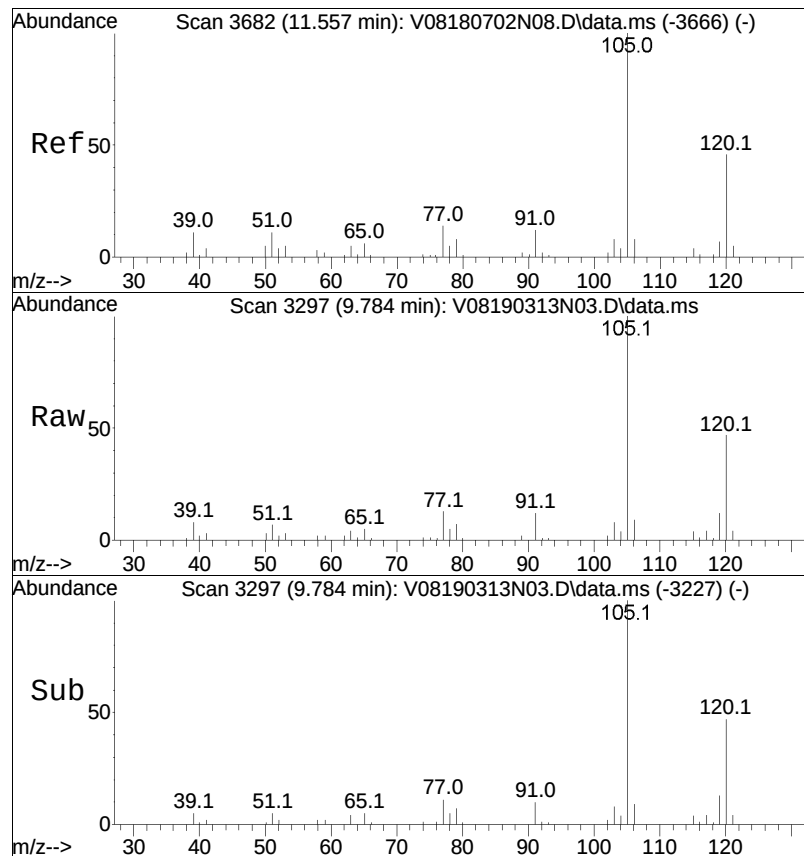




#94
 tert-Butylbenzene
 Concen: 9.36 ug/L
 RT: 9.742 min Scan# 3282
 Delta R.T. -0.005 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

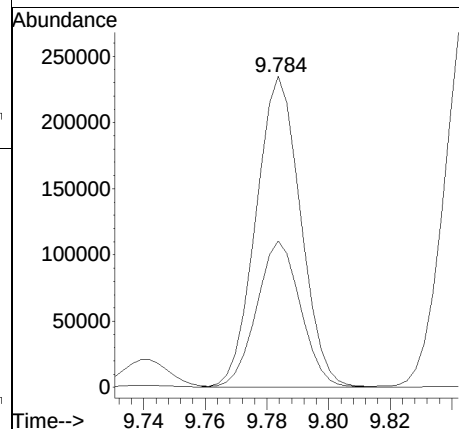
Tgt Ion	Ratio	Lower	Upper
119	100		
91	66.8	51.4	77.2
134	24.8	18.3	27.5

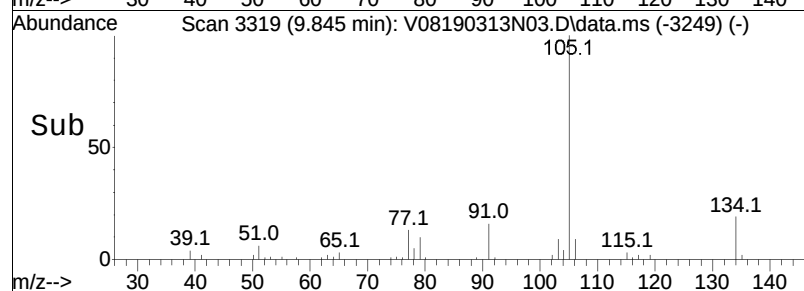
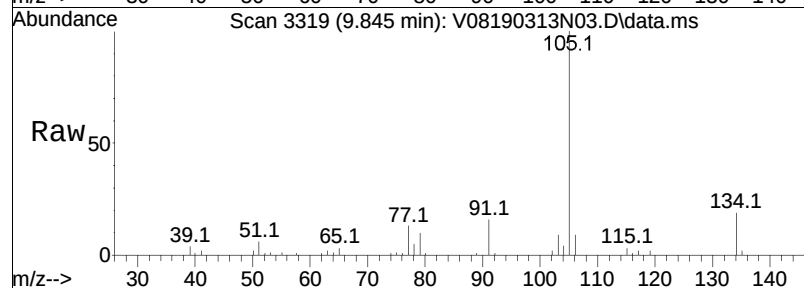
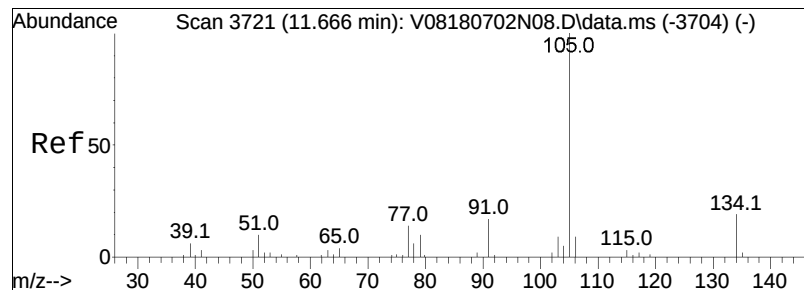




#97
 1,2,4-Trimethylbenzene
 Concen: 10.33 ug/L
 RT: 9.784 min Scan# 3297
 Delta R.T. -0.005 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

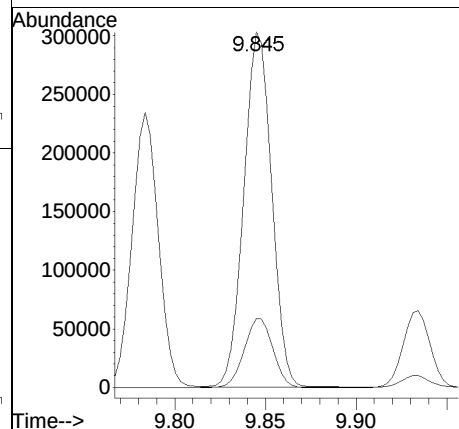
Tgt Ion	Ratio	Lower	Upper
105	100		
120	46.2	33.4	50.0

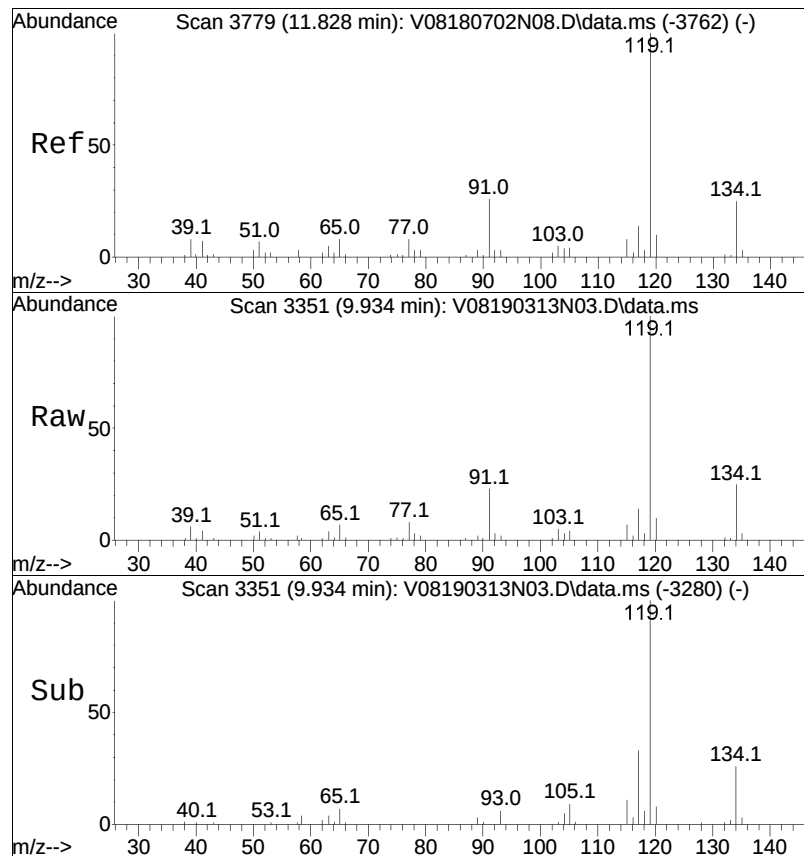




#98
 sec-Butylbenzene
 Concen: 11.23 ug/L
 RT: 9.845 min Scan# 3319
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

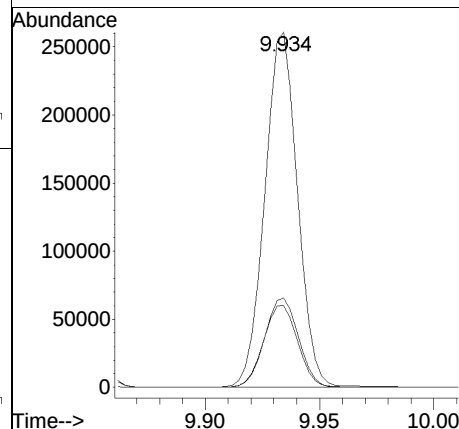
Tgt Ion	Ratio	Lower	Upper
105	100		
134	19.7	12.5	26.1

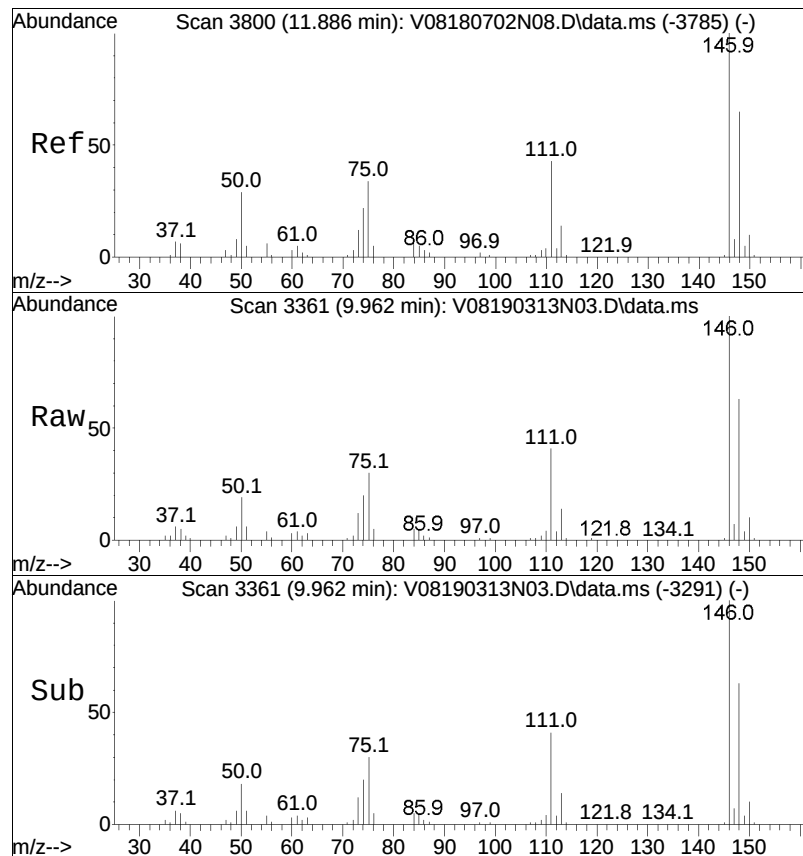




#99
 p-Isopropyltoluene
 Concen: 10.49 ug/L
 RT: 9.934 min Scan# 3351
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

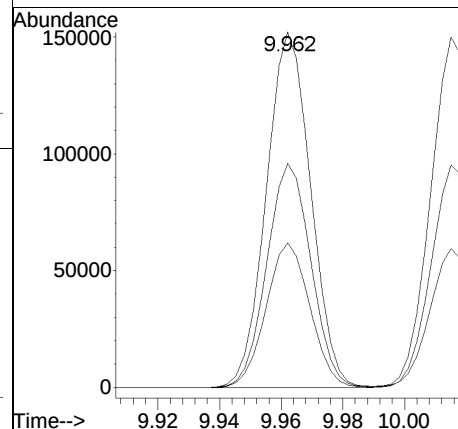
Tgt Ion:	119	Resp:	259852
Ion Ratio	Lower	Upper	
119	100		
134	26.0	16.1	33.3
91	24.4	17.3	35.9

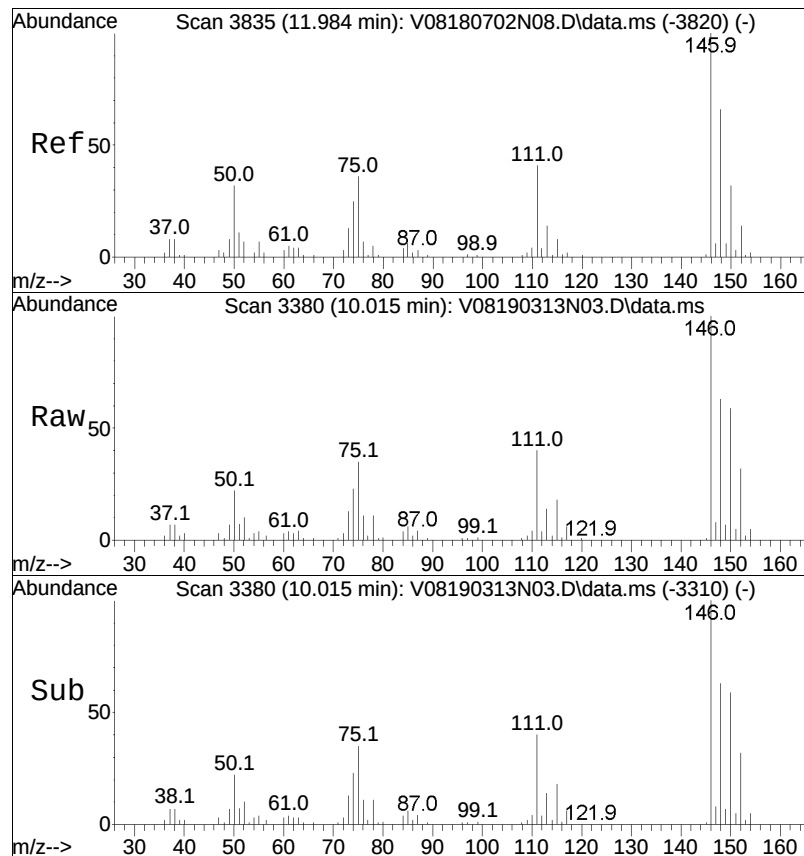




#100
 1,3-Dichlorobenzene
 Concen: 11.49 ug/L
 RT: 9.962 min Scan# 3361
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

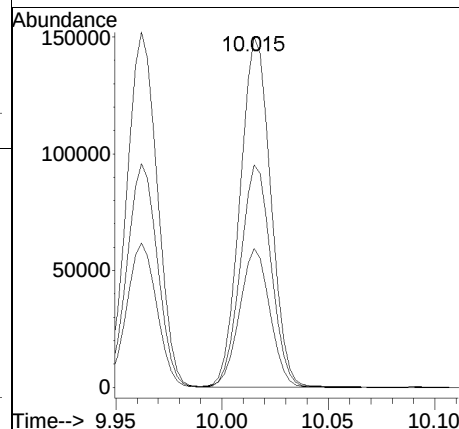
Tgt Ion:	146	Resp:	152170
Ion Ratio	Lower	Upper	
146	100		
111	40.2	27.5	57.1
148	62.7	41.9	86.9

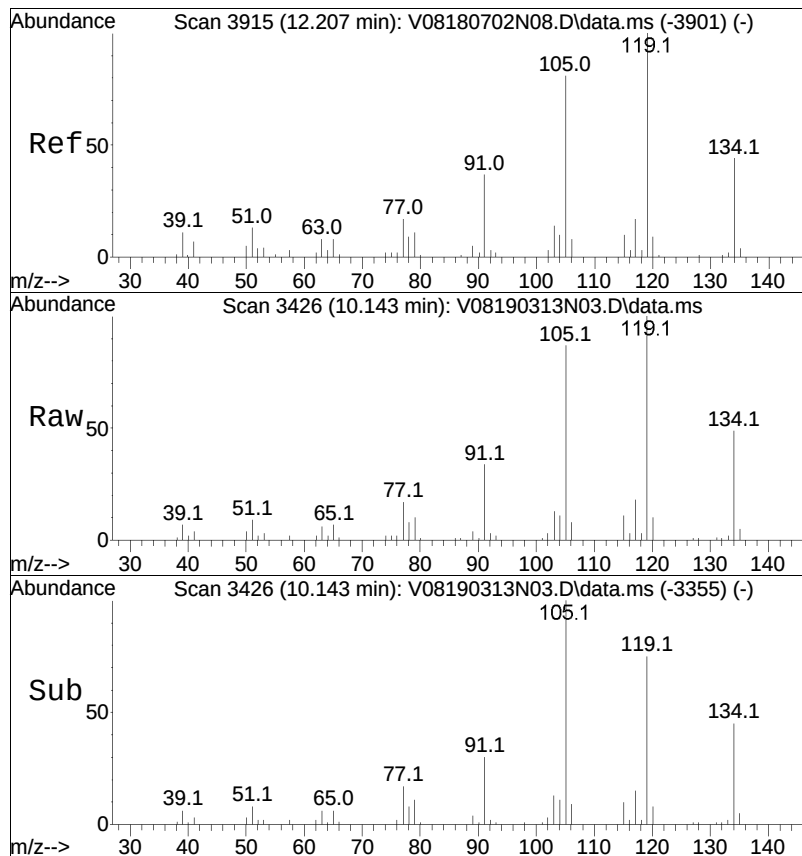




#101
 1,4-Dichlorobenzene
 Concen: 10.96 ug/L
 RT: 10.015 min Scan# 3380
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

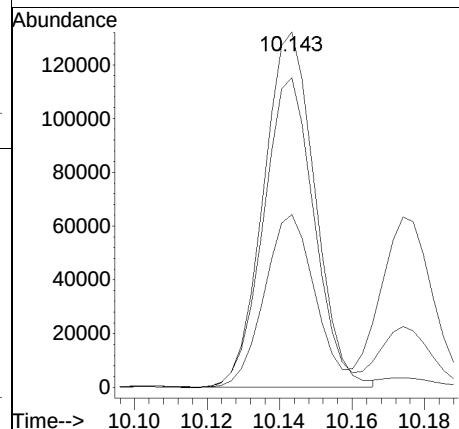
Tgt Ion:	146	Resp:	150382
Ion Ratio	Lower	Upper	
146	100		
111	39.4	32.3	48.5
148	63.4	49.9	74.9

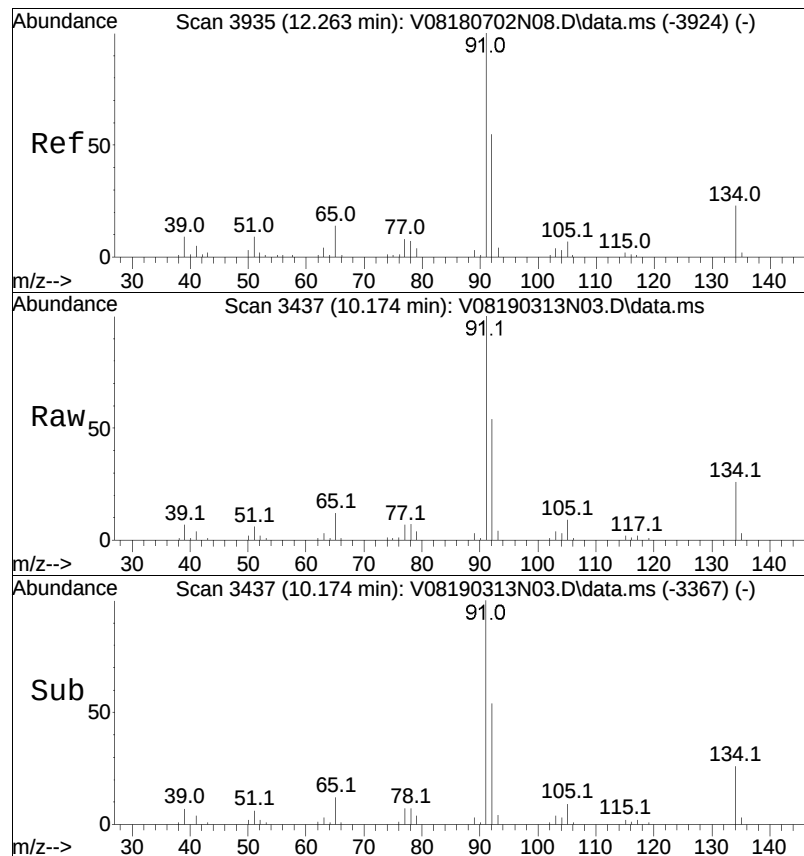




#102
 p-Diethylbenzene
 Concen: 8.94 ug/L
 RT: 10.143 min Scan# 3426
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

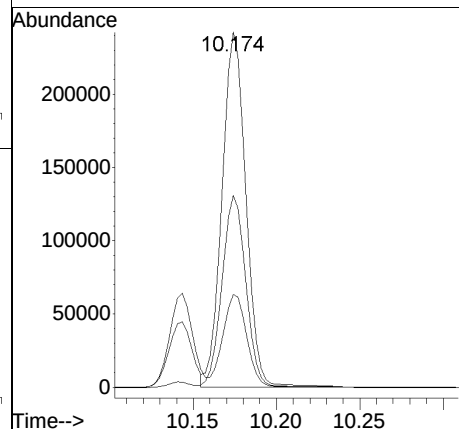
Tgt Ion:	119	Resp:	129590
Ion Ratio	Lower	Upper	
119	100		
105	86.2	59.5	123.7
134	47.6	30.2	62.6

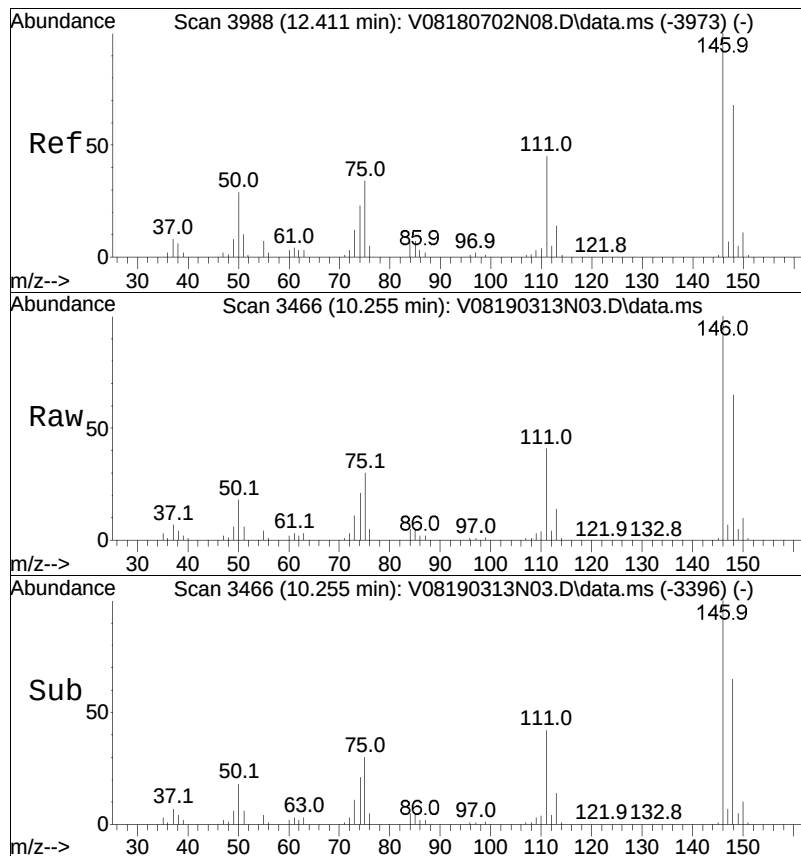




#103
 n-Butylbenzene
 Concen: 10.51 ug/L
 RT: 10.174 min Scan# 3437
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

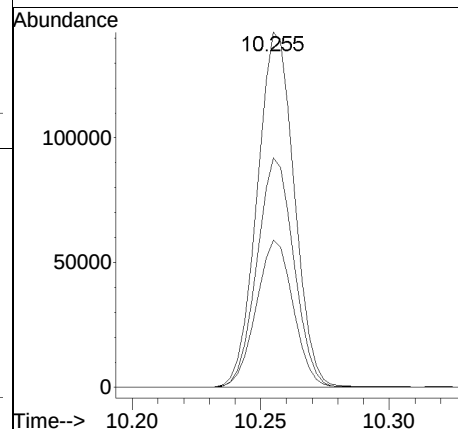
Tgt Ion:	91	Resp:	241304
Ion Ratio	Lower	Upper	
91	100		
92	53.9	43.0	64.4
134	26.3	19.6	29.4

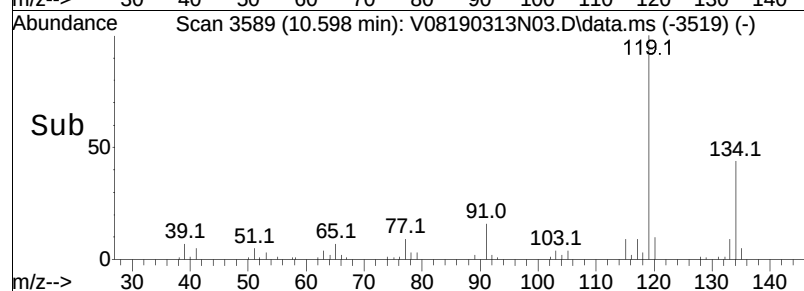
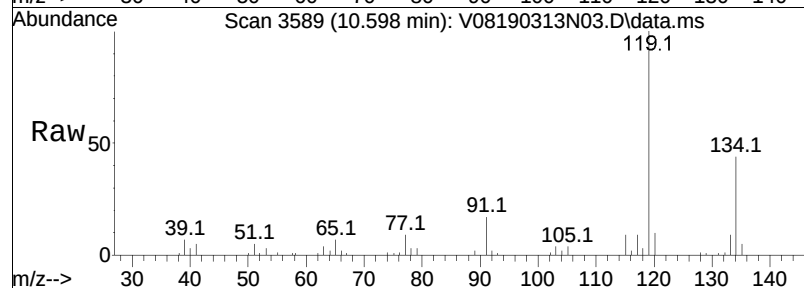
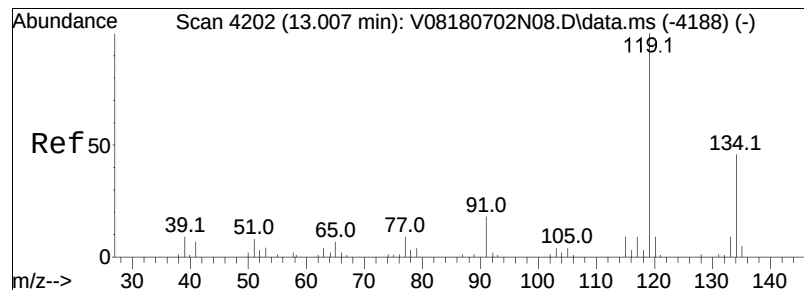




#104
 1,2-Dichlorobenzene
 Concen: 11.09 ug/L
 RT: 10.255 min Scan# 3466
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

Tgt Ion:	146	Resp:	143281
Ion Ratio	Lower	Upper	
146	100		
111	41.4	28.3	58.7
148	64.0	42.3	87.8





#105

1,2,4,5-Tetramethylbenzene

Concen: 3.53 ug/L

RT: 10.598 min Scan# 3589

Delta R.T. -0.006 min

Lab File: V08190313N03.D

Acq: 13 Mar 2019 7:04 pm

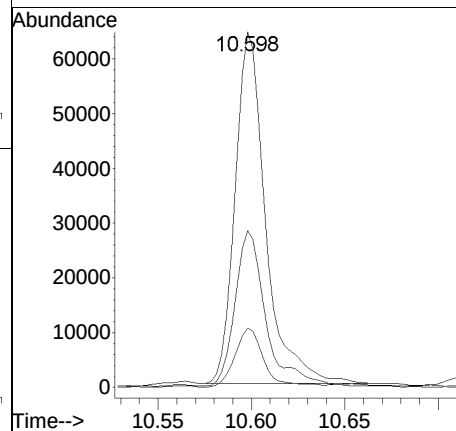
Tgt Ion:119 Resp: 73130

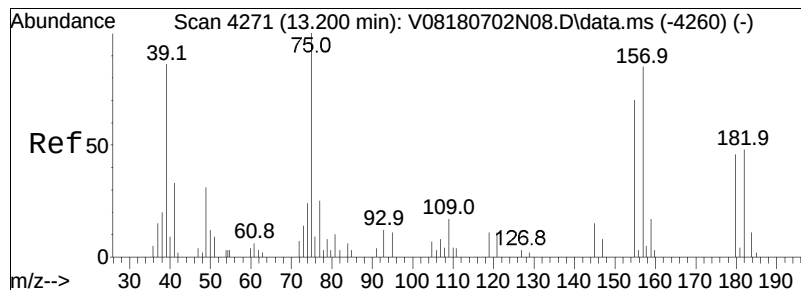
Ion Ratio Lower Upper

119 100

134 43.8 30.5 63.3

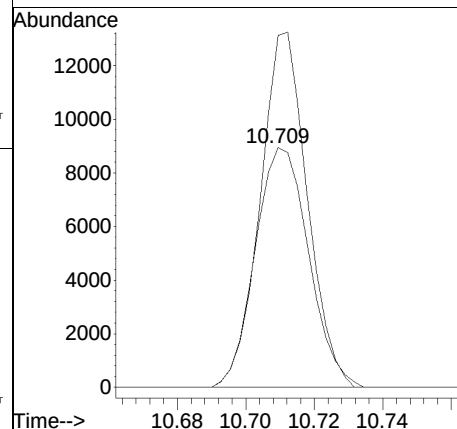
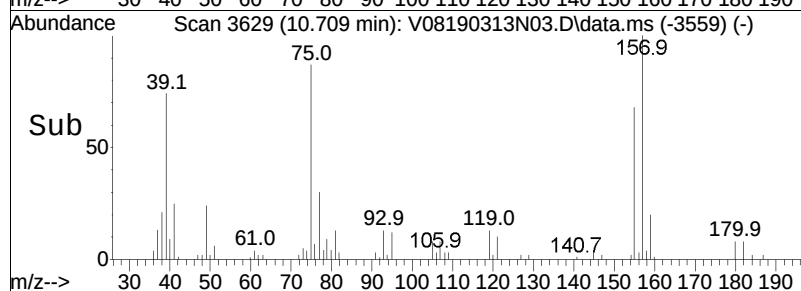
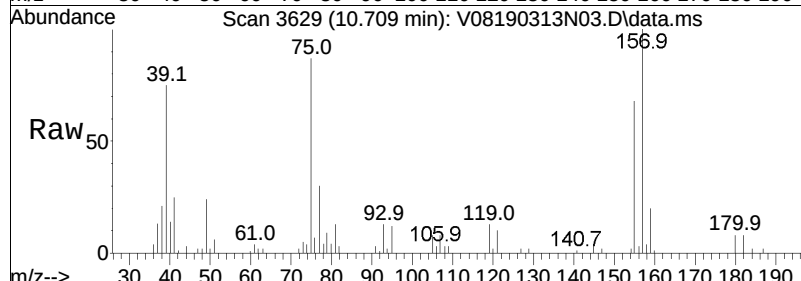
91 16.3 12.4 25.7

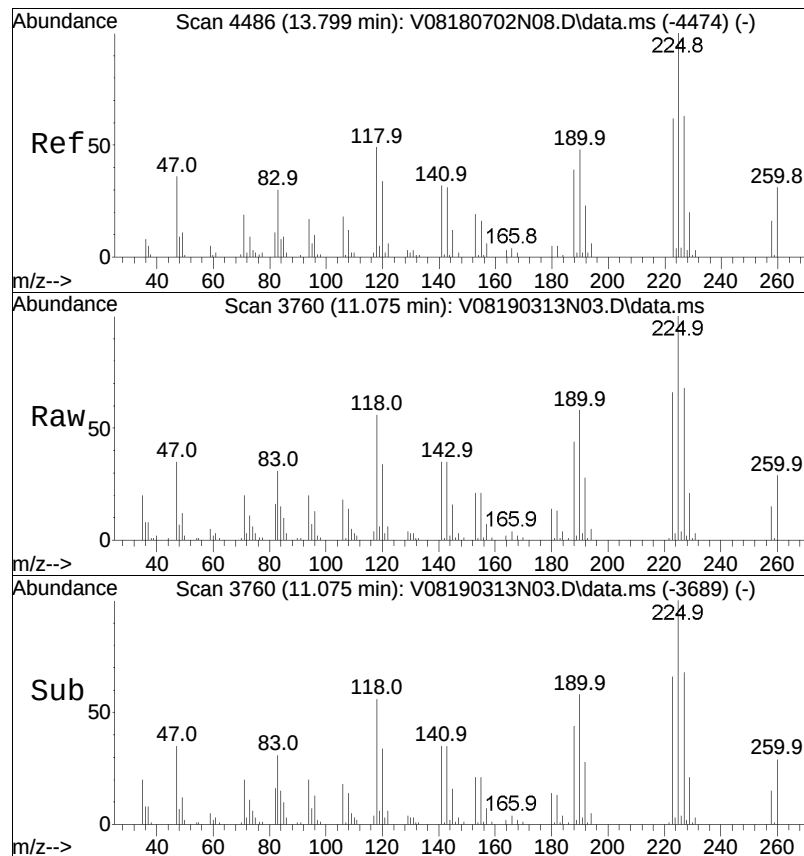




#106
 1,2-Dibromo-3-chloropropane
 Concen: 10.02 ug/L
 RT: 10.709 min Scan# 3629
 Delta R.T. -0.006 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

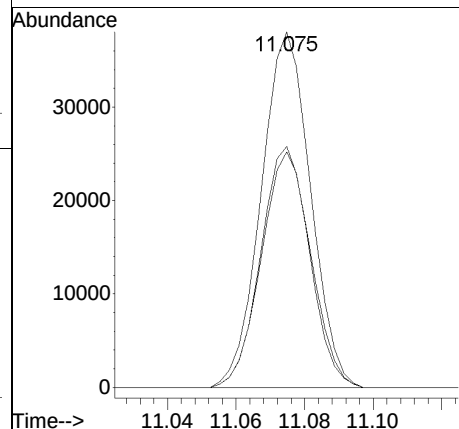
Tgt Ion:155 Resp: 9722
 Ion Ratio Lower Upper
 155 100
 157 129.8 94.8 142.2

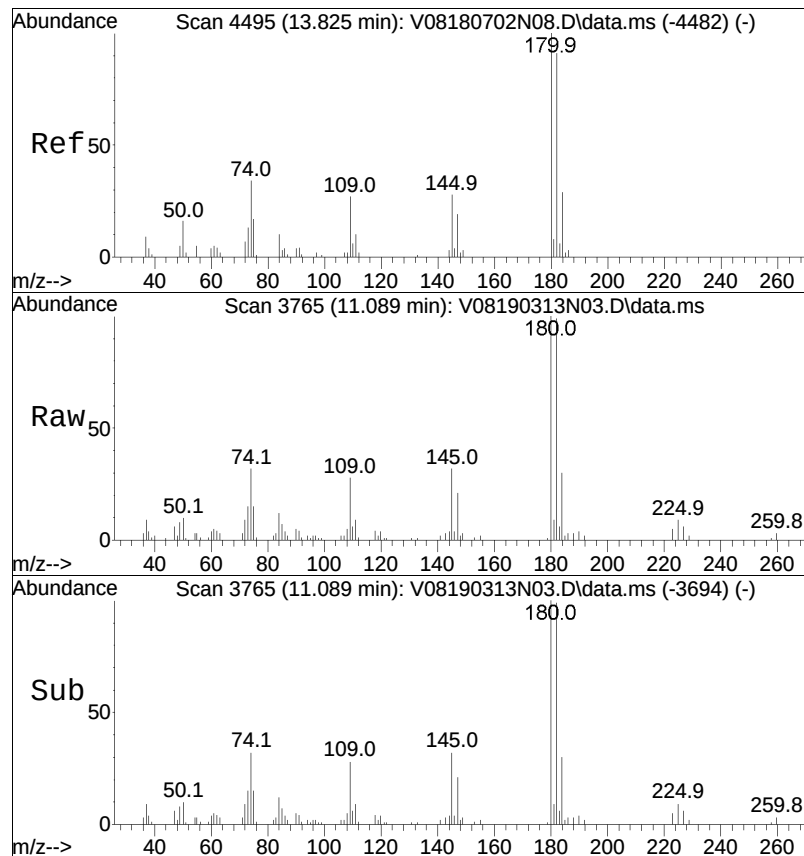




#108
 Hexachlorobutadiene
 Concen: 9.12 ug/L
 RT: 11.075 min Scan# 3760
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

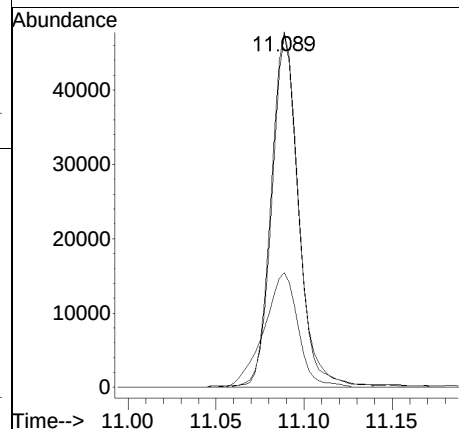
Tgt	Ion:225	Resp:	38013
Ion	Ratio	Lower	Upper
225	100		
223	65.4	54.3	81.5
227	68.3	52.4	78.6

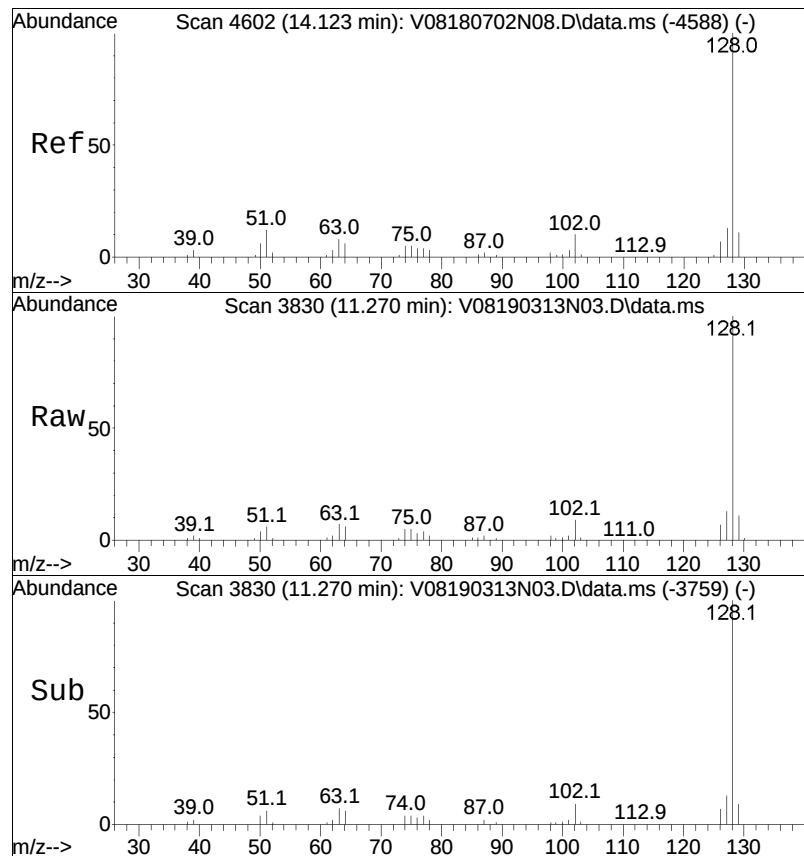




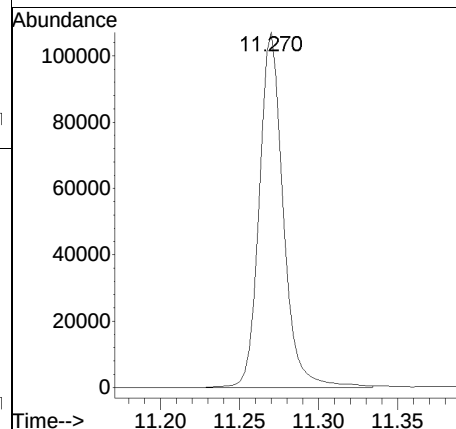
#109
 1,2,4-Trichlorobenzene
 Concen: 6.46 ug/L
 RT: 11.089 min Scan# 3765
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

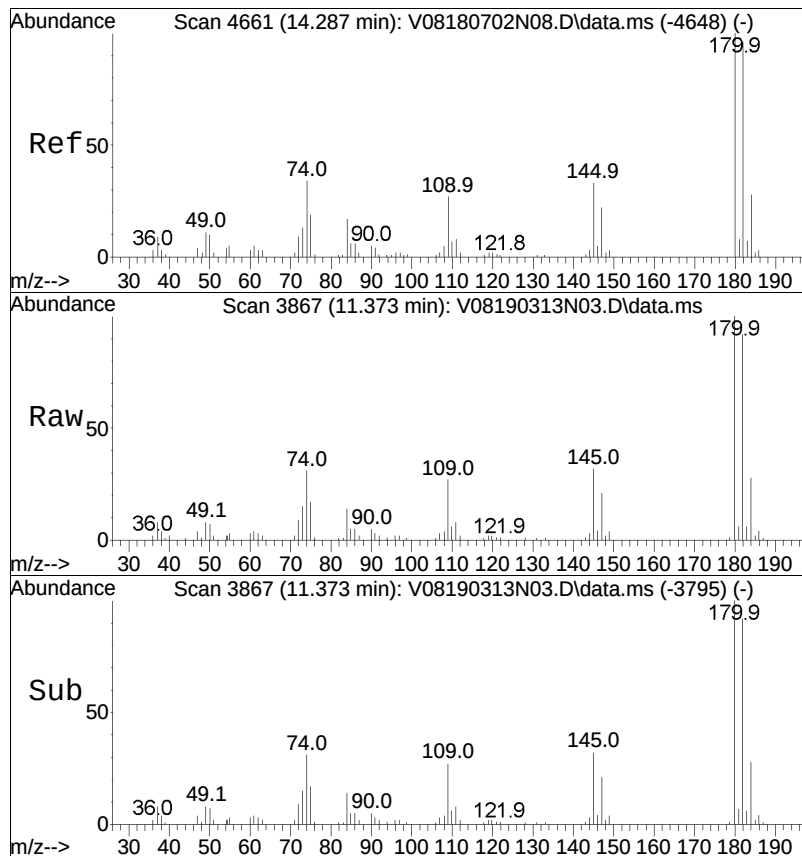
Tgt Ion:	180	Resp:	52330
Ion Ratio	Lower	Upper	
180	100		
182	95.5	77.3	115.9
145	39.9	28.1	42.1





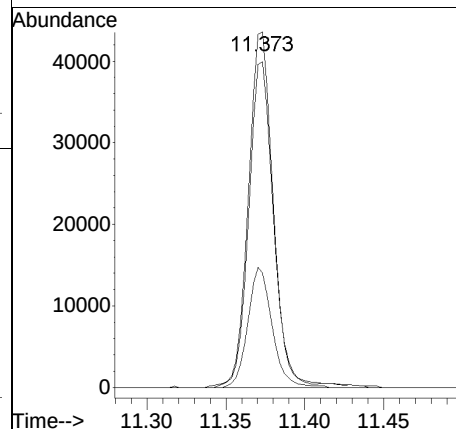
#110
 Naphthalene
 Concen: 6.34 ug/L
 RT: 11.270 min Scan# 3830
 Delta R.T. -0.003 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm
 Tgt Ion:128 Resp: 113101





#111
 1,2,3-Trichlorobenzene
 Concen: 6.57 ug/L
 RT: 11.373 min Scan# 3867
 Delta R.T. 0.000 min
 Lab File: V08190313N03.D
 Acq: 13 Mar 2019 7:04 pm

Tgt Ion:	180	Resp:	48110
Ion Ratio	Lower	Upper	
180	100		
182	90.0	76.4	114.6
145	32.6	26.4	39.6



Manual Integration Report

Data Path	: I:\VOLATILES\VOA108\2019\10	Method	: V108_190218N_8260.m
Data File	: V08190313N03.D	Operator	: VOA108:KJD
Date Inj'd	: 3/13/2019 7:04 pm	Instrument	: VOA 108
Sample	: WG1215584-4,31,10,10	Quant Date	: 3/13/2019 8:12 pm

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



Calculation of Volatile Organic Compounds

Aqueous Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (1/\text{Vo})$

Where:

DF = Dilution Factor

Vo = Sample Volume Purged (mL)

Uf = ng Unit Correction Factor (mL)

Soil Concentration Formula: $\text{Amt} * \text{DF} * (1/\text{Wt})$

Where:

DF = Dilution Factor

Wt = Weight of Sample (g)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Mar 14 2019, 01:20 pm

Work Group: WG1214926 for Department: 31 GC/MS - Volatiles

Created: 12-MAR-19 Due: Operator: PK

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1908838-01	FIELD BLANK	S NYTCL-8260	WATER	DONE	U	0320	0314	S0	Vial-B
L1908838-02	TRIP BLANK	S NYTCL-8260	WATER	DONE	U	0320	0314	S0	Vial-B
L1908838-03	DUPE	S NYTCL-8260	WATER	DONE	U	0320	0314	S0	Vial-B
L1908838-04	MLW-15-20	S NYTCL-8260	WATER	DONE	U	0320	0314	S0	Vial-B
L1908838-05	MLW-35-40	S NYTCL-8260	WATER	DONE	U	0320	0314	S0	Vial-B
L1908838-06	MW-10	S NYTCL-8260	WATER	DONE	U	0320	0314	S0	Vial-B
L1908838-07	MW-11	S NYTCL-8260	WATER	DONE	U	0320	0314	S0	Vial-B
L1908838-08	MW-12	S NYTCL-8260	WATER	DONE	U	0320	0314	S0	Vial-B
L1908838-09	MW-13	S NYTCL-8260	WATER	DONE	U	0320	0314	S0	Vial-B
L1908838-10	MW-14	S NYTCL-8260	WATER	DONE	U	0320	0314	S0	Vial-B
L1908867-02	EFF-03072019	S NYTCL-8260	WATER	DONE	U	0321	0314	S0	Vial-B
L1908936-01	MW-10_030719	S NYTCL-8260	WATER	DONE	U	0321	0314	S0	Vial-B
WG1214926-1	MS BFB Tune Standard	S NYTCL-8260	WATER	DONE	U				
WG1214926-2	Continuing Calibrati	S NYTCL-8260	WATER	DONE	U				
WG1214926-3	Laboratory Control S	S NYTCL-8260	WATER	DONE	U				
WG1214926-4	LCS Duplicate	S NYTCL-8260	WATER	DONE	U				
WG1214926-5	Laboratory Method Bl	S NYTCL-8260	WATER	DONE	U				
WG1214926-6	Matrix Spike	S NYTCL-8260	WATER	DONE	U				
WG1214926-7	Matrix Spike Duplica	S NYTCL-8260	WATER	DONE	U				
Comments:									
WG1214926-4	WG1214926-3								
WG1214926-6	L1908838-10								
WG1214926-7	L1908838-10								

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Mar 14 2019, 01:20 pm

Work Group: WG1215235 for Department: 31 GC/MS - Volatiles

Created: 13-MAR-19 Due: Operator: MKS

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1908867-01	INF-03072019	S NYTCL-8260	WATER	DONE	U	0321	0314	S0	Vial-B
L1908936-03	MW-7_030719	S NYTCL-8260	WATER	DONE	U	0321	0314	S0	Vial-B
L1908936-04	MW-9_030719	S NYTCL-8260	WATER	DONE	U	0321	0314	S0	Vial-B
L1908936-05	PZ-2_030719	S NYTCL-8260	WATER	DONE	U	0321	0314	S0	Vial-B
L1908936-06	MW-3A_030719	S NYTCL-8260	WATER	DONE	U	0321	0314	S0	Vial-B
L1908936-07	GWFB01_030719	S NYTCL-8260	WATER	DONE	U	0321	0314	S0	Vial-B
L1908936-08	GWTB01_030719	S NYTCL-8260	WATER	DONE	U	0321	0314	S0	Vial-B
WG1215235-1	MS BFB Tune Standard	S NYTCL-8260	WATER	DONE	U				
WG1215235-2	Continuing Calibrati	S NYTCL-8260	WATER	DONE	U				
WG1215235-3	Laboratory Control S	S NYTCL-8260	WATER	DONE	U				
WG1215235-4	LCS Duplicate	S NYTCL-8260	WATER	DONE	U				
WG1215235-5	Laboratory Method Bl	S NYTCL-8260	WATER	DONE	U				
Comments:									
WG1215235-4	WG1215235-3								

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Mar 14 2019, 01:20 pm

Work Group: WG1215584 for Department: 31 GC/MS - Volatiles

Created: 14-MAR-19 Due: Operator: NLK

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1908936-02	MW11_030719	S NYTCL-8260	WATER	DONE	U	0321	0314	S0	Vial-B
L1909107-01	MW-6_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909107-02	MW-19_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909107-03	MW-1_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909107-04	MW-18M_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909107-05	MW-18S_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909107-06	MW-17_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909107-07	MW-02_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909107-08	GWDUP01_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909107-09	GWTB02_030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909110-27	FB 030719	S NYTCL-8260	WATER	DONE	U	0321	0315	S0	Vial-B
L1909110-28	FB 030719	S NYTCL-8260	WATER	DONE	U	0321	0315	S0	Vial-B
L1909110-29	TB 030719A	S NYTCL-8260	WATER	DONE	U	0321	0315	S0	Vial-B
L1909110-30	TB 030719B	S NYTCL-8260	WATER	DONE	U	0321	0315	S0	Vial-B
L1909144-01	TRIP BLANK	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909363-05	DUP-030819	S NYTCL-8260	WATER	SENT	U	0322	0315	S0	Vial-B
L1909363-06	FB-030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
L1909363-07	TRIP BLANK-030819	S NYTCL-8260	WATER	DONE	U	0322	0315	S0	Vial-B
WG1215584-1	MS BFB Tune Standard	S NYTCL-8260	WATER	DONE	U				
WG1215584-2	Continuing Calibrati	S NYTCL-8260	WATER	DONE	U				
WG1215584-3	Laboratory Control S	S NYTCL-8260	WATER	DONE	U				
WG1215584-4	LCS Duplicate	S NYTCL-8260	WATER	DONE	U				
WG1215584-5	Laboratory Method Bl	S NYTCL-8260	WATER	DONE	U				

Comments:

WG1215584-4 WG1215584-3

Inst: VOA108
 Initials: KJD
 Date: **02/18/19**
 Run: **N**

BFB: V7193
 IS/SS: V7204
 ICAL: V7160E, V7206, V7164
 ICV: V7134, V7142, V7158, V7133, V7170, V7122, V7207

Method
 GC: 8260_ATOMX
 Autosampler: 8260
 Concentrator: 8260



QC: _____ Seq: _____

Vial	DATA FILE	SAMPLE
1	V08190218NBF1	BFB TUNE
1	V08190218N01	BLANK
2	V08190218N02	BLANK
3	V08190218N03	BLANK
4	V08190218N04	I8260STDL11
5	V08190218N05	I8260STDL1
6	V08190218N06	I8260STDL1
7	V08190218N07	I8260STDL2
8	V08190218N08	I8260STDL2
9	V08190218N09	I8260STDL3
10	V08190218N10	I8260STDL4
11	V08190218N11	I8260STDL6
12	V08190218N12	I8260STDL8
13	V08190218N13	I8260STDL10
14	V08190218N14	BLANK
15	V08190218N15	BLANK
16	V08190218N16	BLANK
17	V08190218N17	BLANK
18	V08190218N18	BLANK
19	V08190218N19	C8260STDL3
20	V08190218N20	C8260STDL3
21	V08190218N21	BLANK
22	V08190218N22	BLK
23	V08190218N23	L1903060-59,31,10,10,, MDL-0.2PPB
24	V08190218N24	L1903060-60,31,10,10,, MDL-0.5PPB
25	V08190218N25	L1903060-61,31,10,10,, MDL-2PPB
26	V08190218N26	BLK

Inst: Gonzo
Initials: KJD
Date: **02/27/19**
Run: **A**

BFB: V7193
IS/SS: V7204
ICAL: V7225A,V7222
ICV: V7134,V77142,V7158,V7133,V7170,V7215

Method
GC 8260_RTX_\
Autosampler: 8260
Concentrator: 8260



QC: _____ Seq: _____

Vial	DATA FILE	SAMPLE
1	VG190227ABF1	BFB TUNE
1	VG190227A01	BLK
2	VG190227A02	BLK
3	VG190227A03	I8260STD11
4	VG190227A04	I8260STD1
5	VG190227A05	I8260STD1
6	VG190227A06	I8260STD2
7	VG190227A07	I8260STD2
8	VG190227A08	I8260STD3
9	VG190227A09	I8260STD4
10	VG190227A10	I8260STD6
11	VG190227A11	I8260STD8
12	VG190227A12	I8260STD10
13	VG190227A13	BLK
14	VG190227A14	BLK
15	VG190227A15	BLK
16	VG190227A16	BLK
17	VG190227A17	BLK
18	VG190227A18	C8260STD3
19	VG190227A19	C8260STD3
20	VG190227A20	BLK
21	VG190226A21	BLK
22	VG190226A22	L1903060-17,31,10,10,, MDL L11
23	VG190226A23	L1903060-18,31,10,10,, MDL L1
24	VG190226A24	L1903060-19,31,10,10,, MDL L2
25	VG190226A25	BLK

Inst: Gonzo
 Initials: PD/RS
 Date: 03/12/19
 Run: A

BFB: V7193
 IS/SS: V7230
 ICAL: V7225C,V7234
 ICV: V7134,V77142,V7158,V7133,V7170,V7215

Method
 GC 8260_RTX_1
 Autosampler: 8260
 Concentrator: 8260



QC: _____ Seq: _____

Vial	DATA FILE	SAMPLE	
1	VG190312ABF1	BFB TUNE	07:52
1	VG190312A01	8260 CCAL	
2	VG190312A02	8260 CCAL	LCS
3	VG190312A03	8260 CCAL	LCSD
4	VG190312A04	BLK	
5	VG190312A05	METHOD BLK	
6	VG190312A06	I1909288-02,31,10,10,,a	NJ/NOTICs pH<2
7	VG190312A07	I1908644-11D,31,0.5,10,,c	ME8260 pH<2
8	VG190312A08	I1908865-04D,31,5,10,,a	ME/12DCA pH<2
9	VG190312A09	I1908878-01,31,10,10,,a	ME/PCEBREAK pH<2
10	VG190312A10	I1908878-02,31,10,10,,a	ME/PCEBREAK pH<2
11	VG190312A11	I1908878-03D,31,0.2,10,,a	ME/PCEBREAK pH<2
12	VG190312A12	I1908644-11D,31,1,10,,a	ME8260 pH<2
13	VG190312A13	I1908867-02,31,10,10,,a	NYTCL pH<2
14	VG190312A14	I1908936-01,31,10,10,,a	NYTCL pH<2
15	VG190312A15	I1908936-02D,31,5,10,,a	NYTCL pH<2
16	VG190312A16	I1908838-01,31,10,10,,a	NYTCL pH<2
17	VG190312A17	I1908838-02,31,10,10,,a	NYTCL pH<2
18	VG190312A18	I1908838-03,31,10,10,,a	NYTCL pH<2
19	VG190312A19	I1908838-04,31,10,10,,a	NYTCL pH<2
20	VG190312A20	I1908838-05,31,10,10,,a	NYTCL pH<2
21	VG190312A21	I1908838-06,31,10,10,,a	NYTCL pH<2
22	VG190312A22	I1908838-07,31,10,10,,a	NYTCL pH<2
23	VG190312A23	I1908838-08,31,10,10,,a	NYTCL pH<2
24	VG190312A24	I1908838-09,31,10,10,,a	NYTCL pH<2
25	VG190312A25	I1908838-10D,31,2,10,,a	NYTCL pH<2
26	VG190312A26	I1908838-10MS,31,2,10,,a	NYTCL pH<2
27	VG190312A27	I1908838-10MSD,31,2,10,,a	NYTCL pH<2
28	VG190312A28	BLK	
29	VG190312A29	BLK	
30	VG190312A30	BLK	
31	VG190312A31	I1907384-01,31,10,10,,a	8260/RFB pH>2
32	VG190312A32	I1907384-02,31,10,10,,a	8260/RFB pH>2
33	VG190312A33	I1907384-03,31,10,10,,a	8260/RFB pH>2
34	VG190312A34	I1907384-04,31,10,10,,a	8260/RFB pH>2
35	VG190312A35	I1907384-05,31,10,10,,a	8260/RFB pH>2
36	VG190312A36	I1907384-06,31,10,10,,a	8260/RFB pH>2
37	VG190312A37	I1907384-07,31,10,10,,a	8260/RFB pH>2

Inst: VOA108
 Initials: KJD
 Date: 03/12/19
 Run: N

BFB: V7193
 IS/SS: V7204
 ICAL: V7160E, V7234
 ICV: V7134, V7142, V7158, V7133, V7170, V7122, V7207

Method
 GC: 8260_ATOMX
 Autosampler: 8260
 Concentrator: 8260



QC: _____ Seq: _____

Vial	DATA FILE	SAMPLE	
1	V08190312NBF1	BFB TUNE	17:40
1	V08190312N01	8260 CCAL	
2	V08190312N02	8260 CCAL	LCS
3	V08190312N03	8260 CCAL	LCSD
4	V08190312N04	BLK	
5	V08190312N05	METHOD BLK	
6	V08190312N06	I1908936-07,31,10,10,,a	NYTCL pH<2
7	V08190312N07	I1908936-08,31,10,10,,a	NYTVL pH<2
8	V08190312N08	I1909399-03,31,10,10,,c	NJ/NO TICS pH>2
9	V08190312N09	I1909399-01D,31,0.2,10,,c	NJ/NO TICS pH>2
10	V08190312N10	I1908867-01,31,10,10,,a	NYTCL pH<2
11	V08190312N11	I1908936-03,31,10,10,,a	NYTCL pH<2
12	V08190312N12	I1908936-04,31,10,10,,a	NYTCL pH<2
13	V08190312N13	I1908936-05,31,10,10,,a	NYTCL pH<2
14	V08190312N14	I1908936-06,31,10,10,,a	NYTCL pH<2
15	V08190312N15	I1908980-11,31,10,10,,a	NJ+3/15 pH<2
16	V08190312N16	I1908980-12,31,10,10,,a	NJ+3/15 pH<2
17	V08190312N17	I1908980-01D,31,0.4,10,,a	NJ+3/15 pH<2
18	V08190312N18	I1908980-02D,31,1.0,10,,a	NJ+3/15 pH<2
19	V08190312N19	I1908980-03,31,10,10,,a	NJ+3/15 pH<2
20	V08190312N20	I1908980-04,31,10,10,,a	NJ+3/15 pH<2
21	V08190312N21	I1908980-05,31,10,10,,a	NJ+3/15 pH<2
22	V08190312N22	I1908980-06,31,10,10,,a	NJ+3/15 pH<2
23	V08190312N23	I1908980-07,31,10,10,,a	NJ+3/15 pH<2
24	V08190312N24	I1908980-09,31,10,10,,a	NJ+3/15 pH<2
25	V08190312N25	I1908980-08D,31,0.5,10,,a	NJ+3/15 pH<2
26	V08190312N26	I1908980-08DUP,31,0.5,10,,a	NJ+3/15 pH<2
27	V08190312N27	I1908980-08MS,31,0.5,10,,a	NJ+3/15 pH<2

Inst: VOA108
 Initials: KJD
 Date: 03/13/19
 Run: N

BFB: V7193
 IS/SS: V7204
 ICAL: V7160E, V7234
 ICV: V7134, V7142, V7158, V7133, V7170, V7122, V7207

Method
 GC: 8260_ATOMX
 Autosampler: 8260
 Concentrator: 8260



QC: _____ Seq: _____

Vial	DATA FILE	SAMPLE	
1	V08190313NBF1	BFB TUNE	18:00
1	V08190313N01	8260 CCAL	
2	V08190313N02	8260 CCAL	LCS
3	V08190313N03	8260 CCAL	LCSD
4	V08190313N04	BLK	
5	V08190313N05	METHOD BLK	
6	V08190313N06	I1909110-27,31,10,10,,a	NYTCL pH<2
7	V08190313N07	I1909110-28,31,10,10,,a	NYTCL pH<2
8	V08190313N08	I1909110-29,31,10,10,,a	NYTCL pH<2
9	V08190313N09	I1909110-30,31,10,10,,a	NYTCL pH<2
10	V08190313N10	I1909144-01,31,10,10,,a	NYTCL pH<2
11	V08190313N11	I1909363-06,31,10,10,,a	NYTCL pH<2
12	V08190313N12	I1909363-07,31,10,10,,a	NYTCL pH<2
13	V08190313N13	I1909107-09,31,10,10,,a	NYTCL pH<2
14	V08190313N14	I1908936-02,31,10,10,,c	NYTCL pH<2
15	V08190313N15	I1909168-17D,31,2.0,10,,c	8260 pH<2
16	V08190313N16	I1909107-01,31,10,10,,a	NYTCL pH<2
17	V08190313N17	I1909107-02D,31,0.4,10,,a	NYTCL pH<2
18	V08190313N18	I1909107-03,31,10,10,,a	NYTCL pH<2
19	V08190313N19	I1909107-04,31,10,10,,a	NYTCL pH<2
20	V08190313N20	I1909107-05,31,10,10,,a	NYTCL pH<2
21	V08190313N21	I1909107-06D,31,5.0,10,,a	NYTCL pH<2
22	V08190313N22	I1909107-07,31,10,10,,a	NYTCL pH<2
23	V08190313N23	I1909107-08,31,10,10,,a	NYTCL pH<2
24	V08190313N24	I1909363-01D,31,2.5,10,,a	NYTCL pH<2
25	V08190313N25	I1909363-05,31,10,10,,a	NYTCL pH<2