2019 PERIODIC REVIEW REPORT

FORMER BUFFALO CHINA SITE
NYSDEC ID: C915209

16-344-1389

Prepared for:

Hayes Place Management Group, Inc.
57-75 Hayes Place
Buffalo, New York 14210

Prepared by:

LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, New York 14209

Revised January 23, 2020

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1.0 Introduction

1.1 Background Information

The Former Buffalo China (Site) is located at 51 Hayes Place in Buffalo, New York (Figure 1.1). The Site consists of the following properties:

Parcel Address	*Parcel No.*	*Section No.*	*Block No.*	*Lot No.*
51 Hayes Place, Buffalo, NY, 14210	123	9	4	2
75 Hayes Place, Buffalo, NY, 14210	123	9	4	17
55 Hayes Place, Buffalo, NY, 14210	123	9	4	16.2
151 Harrison Street, Buffalo, NY, 14210	123	38	3	1
133 Harrison Street, Buffalo, NY, 14210	123	38	2	39
70 Lester Street, Buffalo, NY, 14210	123	38	2	1.1

The properties and facility are currently owned by Hayes Place Management Group, Inc. (HPMG). Remediation of the Site was completed in 2012 under the oversight of the New York State Department of Environmental Conservation (NYSDEC) in accordance with Brownfield Cleanup Agreement (BCA) Index #B9-0732-06-11, Site #C-915209. A Site Management Plan (SMP) was developed upon completion of the remedial construction to ensure implementation and management of the institutional controls (ICs) and engineering controls (ECs) in place at the Site. This Periodic Review Report (PRR) is being prepared to certify that site management activities are being conducted in accordance with the SMP.

Site remedial activities were performed in accordance with the NYSDEC-approved Remedial Action Work Plan dated September 2010.

The following is a summary of the Remedial Actions completed at the Site and ongoing operations and monitoring activities:

- Excavation and off-Site disposal of unsaturated soils that exhibited concentrations of VOCs, SVOCs, and metals in excess of applicable NYSDEC standards or objectives. These soils were located primarily on the south and west sides of the Harrison Street warehouse.
- Backfill and restoration of the excavated area similar to pre-excavation conditions.
- Monitored natural attenuation of VOCs and SVOCs in some discrete areas and institutional and engineering controls to minimize exposures to metals in Site soils.
- In situ treatment through chemical oxidation (ISCO) of on-Site and off-Site groundwater impacted by VOCs.
- Groundwater monitoring to evaluate the effectiveness of the remedy.

Remedial activities conducted at the Site were completed in April 2012. Further details regarding the remediation of the Site are included in the Final Engineering Report (CRA, 2012). The NYSDEC issued the Certificate of Completion (COC) to Buffalo China in December 2012.

In addition to the remedial actions that were undertaken on the property, the following actions were also implemented in order to prevent exposure to any impacted soil remaining on-Site:

- Development of institutional and engineering controls including execution of an Environmental Easement to restrict land use and prevent further exposure to any contamination remaining at the Site.
- Development and implementation of a SMP for long term management of remaining contamination as required by the Environmental Easement, which includes plans for (1) Institutional and Engineering Controls, (2) excavation and soil management in the Post-Remediation Excavation Work Plan, (3) monitoring, (4) operation and maintenance, and (5) reporting.
- Annual Certification of the institutional and engineering controls.

The SMP, designed to serve as a work plan for Site monitoring and maintenance, was prepared in November 2012 and approved by NYSDEC in December 2012.

This report presents the results of one groundwater monitoring event performed in February 2019 and the Site Inspection conducted between February and March 2019. The report is organized as follows:

- Section 1 – Introduction: The background and brief remedial history of the Site.
- Section 2 – Engineering and Institutional Controls: The ECs and ICs for the Site are described.
- Section 3 – Inspections and Maintenance Activities: Activities performed during the current reporting period and their results.
- Section 4 – Operations and Maintenance: Discussion of groundwater treatment monitoring data and analytical results generated from the various monitoring events.
- Section 5 – Conclusions and Recommendations: Conclusions and recommendations based upon the data and results of the current monitoring period.

2.0 Engineering and Institutional Controls

Engineering controls are required to protect human health and the environment because impacted groundwater and some impacted soils are present at the Site. Figure 2.1 shows the Site layout and Figures 2.2 and 2.3 show the various EC systems in place at the Site.

2.1 Engineering Controls (ECs)

The purpose of the EC systems is to eliminate the potential for human contact with soils exceeding industrial use soil cleanup objectives, prevent percolation of precipitation through the impacted fill, and minimize the potential for contaminated runoff from the Site. The EC systems in place at the Site consist of the following:

- Cover System: Existing buildings and pavement at the Site form the Site cover, preventing exposure to soil exceeding industrial levels. The existing buildings and pavement at the Site that form the Site Cover Systems are shown on Figure 2.2.
- Soil Cover: In the absence of Site development, a soil cover is required in areas where the upper 1 foot of exposed surface soil exceeds the applicable SCOs. Since no areas where the upper 1 foot of exposed soil exceeds the applicable SCOs were left after the remedial activities, excavated areas were backfilled with imported clean fill and stone to existing grades. In the event that a soil cover is required at a later date (i.e. demolition of a building or paved area without replacement or restoration, regrading of undeveloped areas), the soil cover will consist of a minimum of 1 foot of soil meeting the SCOs for commercial use.
- Groundwater Treatment System: An injection piping gallery and overburden and bedrock injection wells have been installed for the distribution of oxidants and nutrients as part of the chemical oxidation and enhanced biodegradation components of the Site remedy for groundwater. The in situ groundwater treatment program began in April 2012.
- Groundwater Monitoring: Groundwater monitoring activities to assess the effectiveness of chemical oxidation, enhanced biodegradation, and natural attenuation will continue, as determined by the NYSDEC, until residual groundwater concentrations are found to be consistently below NYSDEC standards or have become asymptotic at an acceptable level over an extended period. Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC. If groundwater contaminant levels become asymptotic at a level that is not acceptable to the NYSDEC, additional source removal, treatment, and/or control measures will be evaluated. The groundwater monitoring program began in June 2012.
- Soil Vapor Intrusion (SVI) Mitigation System Operation and Maintenance: A sub-slab depressurization system has been installed off-Site at a residence located at 127 Harrison Street to minimize the potential for exposures through SVI.

2.2 Institutional Controls (ICs)

The purpose of the ICs are to:

- Implement, maintain, and monitor the ECs.

- Prevent future exposure to remaining on-Site contamination by controlling disturbance of the subsurface contamination.
- Limit the use and development of portions of the Site to industrial uses only.

The ICs that have been established for the Site must be:

- In compliance with the Environmental Easement and the SMP by the Grantor (Hayes Place Management Group, Inc.) and the Grantor's successors and assigns.
- Operated and maintained as specified in the SMP.
- Inspected at a frequency and in a manner defined in the SMP.

Data and information pertinent to the management of the Site must be reported at the frequency and in a manner defined in the SMP.

Adherence to the ICs is required by the Environmental Easement. The ICs may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The Site has a series of ICs in the form of Site restrictions. Adherence to these ICs is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

- Property Use: The property may only be used for industrial use, provided that the long-term ECs and ICs included in the SMP are adhered to. The property may not be used for a higher level of use, such as unrestricted, restricted residential, or commercial use without additional evaluation (including possible additional remediation) and amendment of the Environmental Easement, as approved by the NYSDEC.
- Prohibition of Groundwater Use: The use of groundwater underlying the property as a source of potable water is prohibited without treatment rendering it safe for the intended use as determined by the NYSDEC, NYSDOH, or the Erie County Health Department.
- Prohibition of Vegetable Gardening: Vegetable gardens and farming on the property are prohibited.
- Annual Certification: The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that:

    a. Controls employed at the Site are unchanged from previous certification or that any changes to the controls were approved by the NYSDEC.
    b. Nothing has occurred that impairs the ability of the controls to protect public health and the environment or that constitutes a violation or failure to comply with the SMP. NYSDEC retains the right to access the Site at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

3.0 Inspections and Maintenance Activities

A comprehensive Site-wide inspection is required to be conducted annually, as specified in the SMP. The intent of the annual inspection is to determine whether:

- The ECs continue to perform as designed.
- The ECs continue to be protective of human health and the environment.
- The Site is operated and maintained in compliance with the SMP and Environmental Easement.
- The remedial performance criteria have been achieved.
- Sampling and analysis of appropriate media were conducted.
- Site records are complete and current.
- Changes to the remedial systems or monitoring are needed.

The O&M activities were performed in 2015 by GHD Consulting Services, Inc. (GHD). Upon transfer of the property ownership to Hayes Place Management Group, Inc., LiRo Engineers, Inc. (LiRo) was retained in 2016 by HPMG to continue operation and maintenance and monitoring activities.

LiRo conducted the annual comprehensive Site inspection on March 20, 2019. The following sections discuss the findings of the 2019 inspection. The completed Site Inspection Form is provided as Appendix A to this report. Site photographs taken at the time of the inspection are provided as Appendix B to this report.

3.1 Asphalt Pavement/Concrete Cover System

The areas of pavement and concrete cover systems to be maintained are shown on Figure 2.2. These areas were observed for damage and deterioration and no deficiencies were observed.

3.1.1 Corrective Action

No damage or deterioration was noted during the inspection. No corrective action is necessary for the Asphalt Pavement/Concrete Cover System at this time.

3.2 Surface Soil/Stone Cover System

Excavated areas were backfilled with imported clean fill and stone to existing grades. These areas were observed for erosion and animal burrows.

3.2.1 Corrective Action

No erosion or animal burrows were observed during the Site inspection. No corrective action is necessary for the surface soil/stone cover system at this time.

3.3 SVI Mitigation System at 127 Harrison Street

Mitigation of SVI at the off-Site residence located at 127 Harrison Street was addressed as an interim remedial measure (IRM) in accordance with the IRM Work Plan for the installation of a sub slab depressurization system dated July 25, 2011 (CRA).

The mitigation IRM was implemented on August 4, 2011 and included installation of a RADONAWAY RP-145 centrifugal in-line fan to provide sub-slab depressurization, sealing of floor cracks, score lines, and other openings to sub-slab with urethane sealant, and installation of a lexan cover and airtight drain over the sump crock. Post mitigation sampling was conducted in December 2011. Details of the IRM and post mitigation sampling are provided in the FER (CRA, December 2012).

Since LiRo was retained by HPMG, LiRo has made multiple attempts both in-person and by telephone to contact the property owner to request access to SVI system in order to perform an inspection and vacuum monitoring. The attempts went unanswered. On January 18, 2019 a request for access letter was sent to the property owner via United States Postal Service and several attempts to contact the homeowner in person were made during the groundwater sampling in February 2019. The requests for access were not answered. A copy of the access request letter is attached as Appendix C.

3.3.1 Corrective Action

LiRo will continue to attempt to make arrangements with the property owner to gain access to the SVI system in order to perform the routine SVI system inspection and vacuum monitoring.

4.0 Operations and Maintenance

4.1 In Situ Groundwater Treatment

The in situ chemical oxidation (ISCO) program began in April 2012. The groundwater treatment system consists of 10 horizontal injection piping galleries and 29 injection wells (22 overburden wells and 7 bedrock wells). The oxidant solution utilized for the in situ groundwater treatment program is sodium hydroxide (NaOH)-activated sodium persulfate. Injections were completed in April 2012, July 2012, October 2012, January 2013, April 2013, July 2013, August 2015, and March 2017.

During this reporting period, no ISCO injections were completed.

4.2 Groundwater Monitoring

4.2.1 Monitoring Well Inspection

Monitoring well inspections were conducted in conjunction with February 2019 groundwater sampling and the Site-wide inspection performed on March 20, 2019. The locations of the groundwater monitoring wells are shown on Figure 2.3. The inspections of the monitoring wells included the condition of well caps, J-plugs, seals, protective pads, and visible portions of the well casings. Monitoring well conditions are noted on the Site Inspection Forms presented in Appendix A. Photographs of wells requiring repairs are presented in Appendix B.

The majority of wells were noted to be in good condition. Two wells (IW-14 and IW-15) require repairs to the concrete surface seals due to cracks, One well (IW-25) requires a new lid due to damage, one well (MW-11) requires curb box replacement, and two wells (MW-13A and MW-26A) are missing one or more lid bolts/washers. These repairs will be made prior to the next groundwater sampling event. Two wells (MW-22 and MW-22A) could not be located. These are off-site wells located adjacent to an active construction site and could not be located during the February 2019 groundwater sampling event. One well (MW-15A) could not be accessed for inspection. MW-15A is located on private property at 54 Lester Street. This property is under new ownership and the current owner has not responded to a letter requesting access for groundwater sampling. A copy of the access request letter is provided in Appendix C. Attempts were made daily during the groundwater sampling event to contact the new owner in-person, however, the new owner was either not home or would not answer the door.

4.2.2 Groundwater Elevations

As part of the monitoring activities described in the SMP, water levels were measured in each monitoring well using an electric water level meter. Water level measurements are summarized in Table 4.1. Groundwater surface elevation contour maps are provided as Figure 4.1 (overburden) and Figure 4.2 (bedrock).

4.2.3 Groundwater Sampling

Eleven groundwater sampling events have been performed by CRA/GHD and LiRo since the inception of the in situ chemical oxidation program. Groundwater samples were collected and analyzed in June 2012, September 2012, December 2012, March 2013, June 2013, September 2013, April 2015, October 2015, September/October 2016, February 2018, and February 2019. Additionally, samples were collected from MW-6A, MW-20, and MW-20A in December 2012, March, June and September 2013, and October 2015. These wells were not part of the monitoring well network specified in the SMP but were used to assess conditions east of MW-6 based on the lower than expected acceptance rate for the oxidant in that area. Monitoring well MW-20A has continued to be used for groundwater sampling since the October 2015 sampling event.

Currently, groundwater sampling consists of the collection of samples from all SMP monitoring wells for analysis of volatile organic compounds (VOCs) and field parameters (pH, conductivity, oxidation-reduction potential (ORP), dissolved oxygen (DO), temperature, and turbidity). In addition, samples are collected from the overburden and bedrock plume wells for field analysis of sodium persulfate.

Four monitoring wells, MW-8. MW-15A, MW-22, and MW-22A were not sampled during the February 2019 groundwater sampling event. Monitoring well MW-8 became flooded following the inspection and water level monitoring event. Due to sub-freezing temperatures, the water within the protective cover became frozen and prevented access to the well. Monitoring well MW-15A is located on a residential property. At some point between the 2018 and 2019 groundwater sampling events, the property was sold. An access request letter was sent to the new property owner, however, no response was received. During the 2019 sampling event, several unsuccessful attempts were made to contact the new property owner. Monitoring wells MW-22 and MW-22A are located on the Community Center property and due to construction activities, could not be located.

4.3 Groundwater Data Evaluation

The groundwater analytical data generated during this reporting period (February 2019) are summarized in the following tables:

- Table 4.2 – Volatile organic compounds (VOCs) in perimeter wells.
- Table 4.3 – VOCs in overburden plume wells.
- Table 4.4 – VOCs in bedrock plume wells.

The analytical data reports are provided electronically as Appendix D. A quality assurance/quality control (QA/QC) review of the analytical data is currently being conducted by a qualified third party data validator and Data Usability Summary Reports (DUSRs) are being prepared. The DUSRs will be submitted as Appendix E to this report upon completion.

VOCs in Perimeter Wells: The perimeter monitoring wells were monitored for VOCs only. A review of the data presented in Table 4.2, with the exception of detections of vinyl chloride and cis-1,2-dichloroethene at MW-7A, shows that all results for VOCs in February 2019 were either non-detect or below the NYS groundwater cleanup standards. At MW-7A, vinyl chloride was detected at 7.9 µg/L (the NYS Standard for vinyl chloride is 2 µg/L) and cis-1,2-dichloroethene was detected at 44 µg/L (the NYS

Standard for cis-1,2-dichloroethene is 5 µg/L). Vinyl chloride and cis-1,2-dichloroethene have previously been detected at concentrations exceeding NYS groundwater cleanup standards at MW-7A.

MW-15 and MW-15A are located on the offsite private property at 54 Lester Street. This property has undergone a change in ownership since the last groundwater sampling event. LiRo has attempted to establish an access agreement with the new owner both in person and by mail. To date, no response has been received from the new owner. Because there is no access agreement with the current owner, MW-15A was not sampled during the February 2019 monitoring event.

VOCs in Plume Wells: Specific VOC compounds to be monitored in overburden and bedrock plume wells are listed in Table 4.2 of the SMP. These compounds include:

- 1,1-Dichloroethene (1,1-DCE)
- 1,2-Dichloroethane (1,2-DCA)
- Acetone
- Cis-1,2-Dichloroethene (cis-1,2-DCE)
- Methylene Chloride
- Tetrachloroethene (PCE)
- Toluene
- Trans-1,2-Dichloroethene (trans-1,2-DCE)
- Trichloroethene (TCE)
- Vinyl Chloride (VC)

Overburden Plume Wells: There are four monitoring wells used to monitor the overburden groundwater plume, these are MW-5R, MW-6, MW-11, and MW-19R. Table 4.3 presents the monitoring results for the overburden plume wells.

Concentration versus time plots were generated for the six VOCs that had an exceedance of the NYS groundwater standard since the last sampling event performed during the Remedial Investigation phase of the project (July 2009). The plots are presented in Appendix F of this report. The February 2019 concentrations generally indicate an increase in VOC concentrations in these wells. Notable exceptions to the increases are decreases in TCE, trans-1,2-DCE, and PCE in MW-6 ,decreases of cis-1,2-DCE in MW-6 and MW-19R, decreases in vinyl chloride in MW-5R, MW-6, and MW-19R, and a decrease in acetone in MW-5R.

Bedrock Plume Wells: There are six monitoring wells used to monitor the bedrock groundwater plume, these are MW-5AR, MW-13A, MW-14A, MW-19AR, MW-20A and MW-21A. Table 4.4 presents the VOC results for the bedrock plume monitoring wells.

Concentration versus time plots were generated for the nine VOCs that had an exceedance of the NYS groundwater standard since the last sampling event performed during the Remedial Investigation phase of the project (July 2009). The plots are presented in Appendix F of this report. The February 2019 concentrations indicate minor fluctuations of VOC concentrations in these wells. Notable exceptions are

decreases in concentrations of 1,1-DCE in MW-13A and toluene in MW-5AR and MW-13A, increases in vinyl chloride concentrations in MW-5AR and MW-19R, and an increase in trans-1,2-DCE in MW-5AR.

Sodium Persulfate in Plume Wells: A sample was collected from each of the plume wells for field analysis of sodium persulfate using Peroxychem's Klozur Field Test Kit-K. Sodium persulfate was detected in 8 of the 10 plume wells that were sampled. The concentrations of sodium persulfate ranged from 2.5 to 8.5 milligrams per liter (mg/L) in the overburden wells and 1 to 8.5 mg/L in the bedrock wells.

pH was also measured at each well at the time of sample collection. Overburden well pH values ranged from 7.36 to 7.96 standard units (s.u.) and bedrock well pH values ranged from 6.68 to 7.38 s.u..

5.0 Conclusions and Recommendations

The annual inspection and monitoring activities performed during this reporting period found that:

- Twelve monitoring and injection wells require repairs ranging from installing new bolts to replacing curb boxes.
- The asphalt and stone cover systems are in good condition.
- The inspection of the SVI system and basement floor at 127 Harrison Street was not completed during this reporting period due to an unresponsive homeowner.
- Groundwater surface elevation contours indicate that the groundwater flow patterns across the Site remain consisted with previous hydraulic monitoring events.
- With the exception of detections of vinyl chloride and cis-1,2-DCE at MW-7A, VOCs in the perimeter wells are either non-detect or below NYS groundwater standards, indicating that the plume has not migrated beyond the current established perimeter.
- Total VOC concentrations have been reduced to below the target concentration of 1,000 µg/L in three of the four overburden plume wells (MW-5R, MW-6, and MW-19R). The total VOC concentration of 1,615 µg/L in MW-11 has not been reduced to an acceptable level to begin the in-situ enhanced biodegradation program.
- Total VOC concentrations have been reduced to below the target concentration of 1,000 µg/L in two of the five bedrock plume wells (MW-14A and MW-21A). Total VOC concentrations of 1,142 µg/L in MW-19AR and 1,306 µg/L in MW-20A are very near the target concentration of 1,000 µg/L. The total VOC concentrations of 51,357 µg/L in MW-5AR and 12,218 µg/L in MW-13A have not been reduced to an acceptable level to begin the in-situ enhanced biodegradation program.
- Sodium Persulfate remains within the three of the four overburden and five of the six bedrock plume wells sampled at concentrations between 1.0 and 8.5 grams per liter.
- Groundwater pH was below 10.5 s.u. in all monitoring wells.

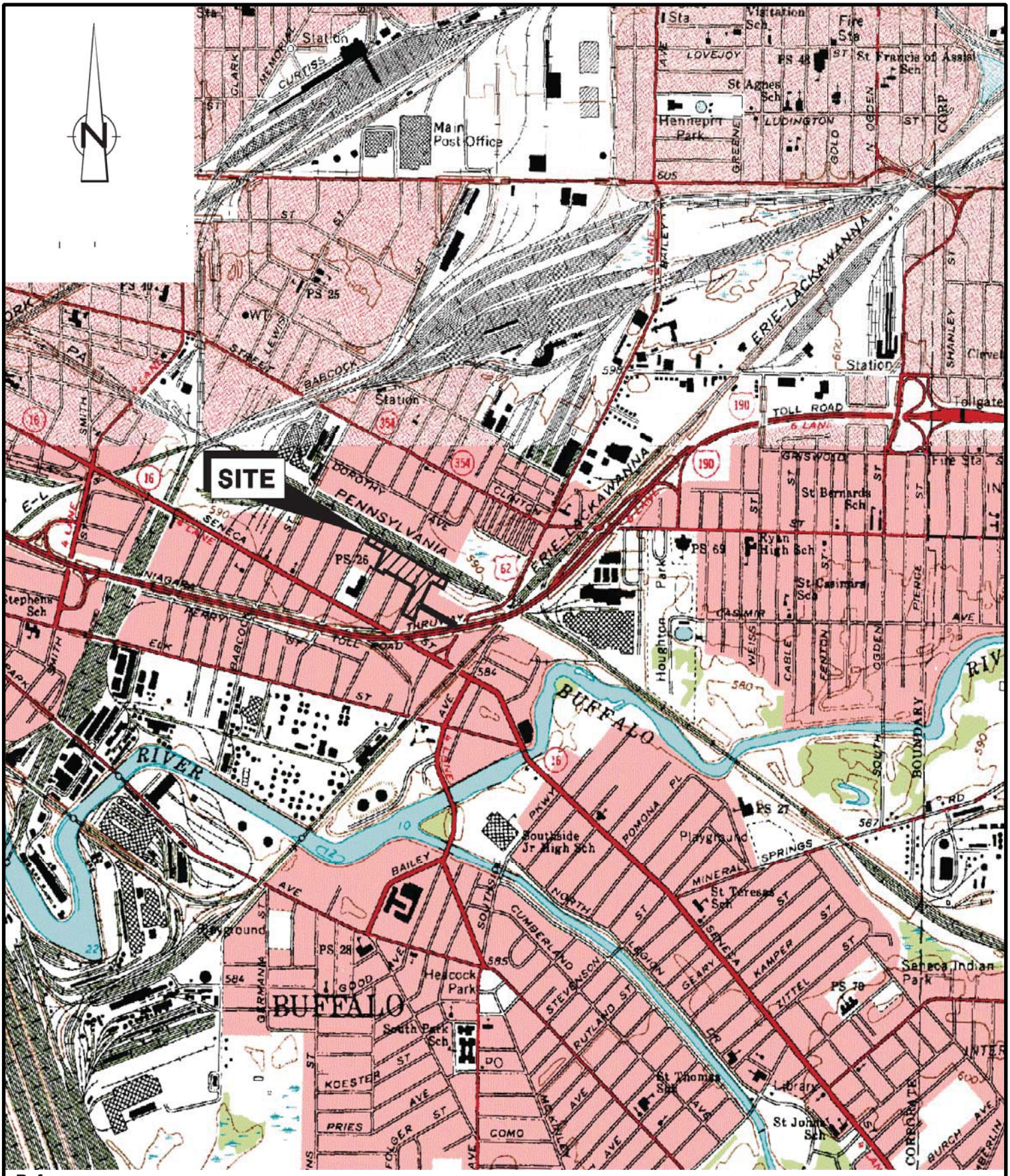
The identified maintenance issues (minor well pad and road box issues) will be addressed. The NYSDEC will be notified when the corrective actions have been completed. Once construction of the Community Center is complete, monitoring wells MW-22 and MW-22A will be located and repaired/replaced if needed. LiRo will continue seeking access to monitoring well MW-15A so that it can be included in future groundwater monitoring events and to 127 Harrison Street to inspect the SVI system.

Based on the groundwater monitoring data, the remedial action continues to be effective in preventing further off-Site migration of impacted groundwater. However, the VOC concentrations have not been reduced at all monitoring locations to levels amenable to begin the ISEB program at this time. Annual groundwater monitoring should be continued.

6.0 Certification

The PRR Certification Form is attached as Appendix G.

Figures



Reference:
UNITED STATES GEOLOGIC SURVEY BUFFALO NE, BUFFALO SE QUAD, NY
TOPOGRAPHIC, 7.5 MINUTES SERIES 1965 ~ SCALE: 1:24,000

LiRo-Engineers, Inc.
690 Delaware Ave.
Buffalo, New York

Former Buffalo China Site
SITE LOCATION MAP

FIGURE NO.

1.1

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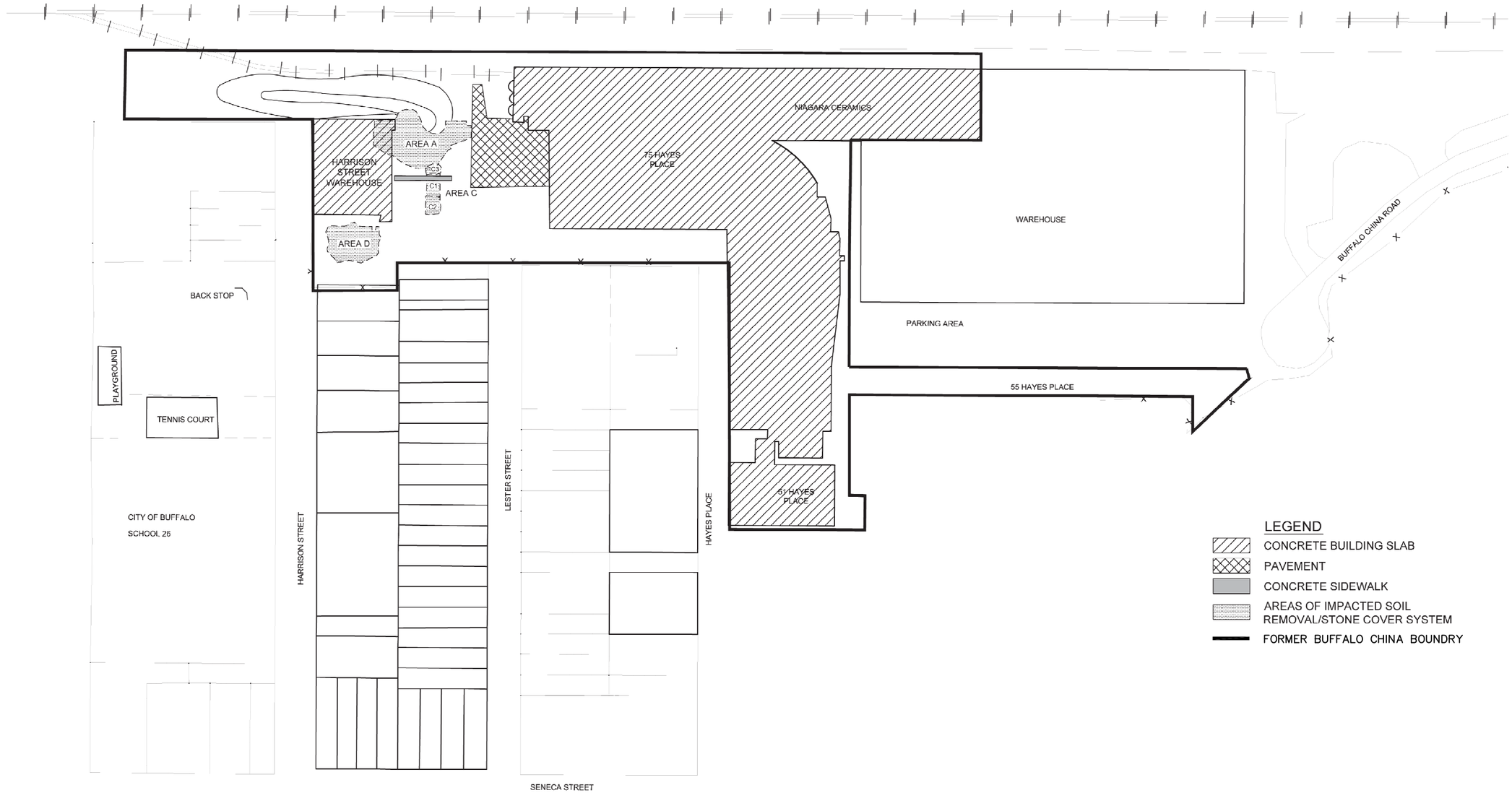

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NO.	DATE	DESCRIPTION
		REVISIONS

LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, New York

PROJ. ENG.:	
DESIGNED BY:	
CHECKED BY:	
DRAWN BY:	EMM
CLIENT:	HAYES PLACE MANAGEMENT GROUP, INC.
DATE:	MARCH 2019
SCALE:	NOT TO SCALE
JOB TITLE AND LOCATION:	FORMER BUFFALO CHINA
LIRO JOB NO.:	16–344–1389
SHEET	3 OF 4
DRAWING TITLE:	EXISTING SITE COVER TO BE MAINTAINED
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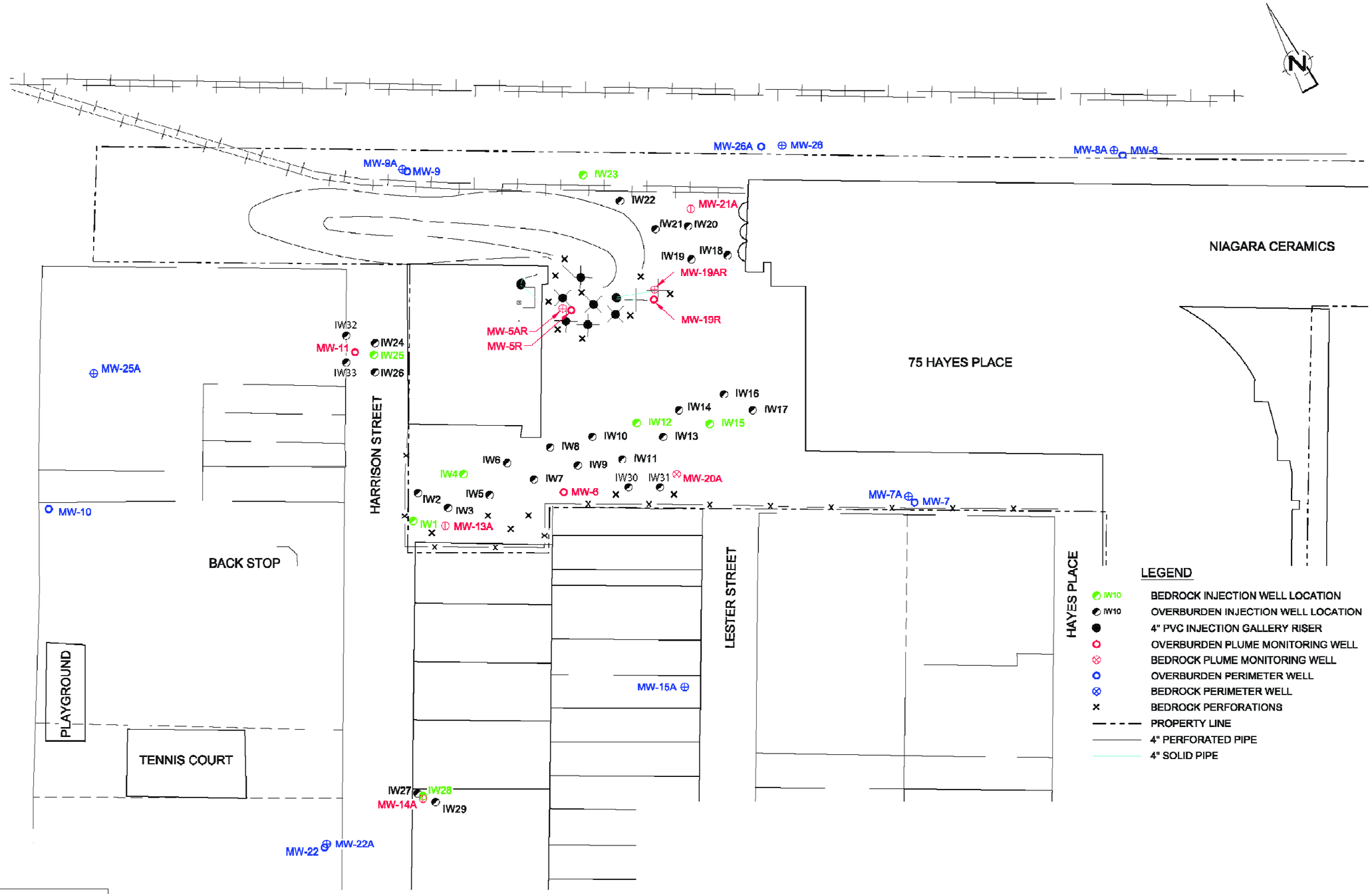

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NO.	DATE	DESCRIPTION
		REVISIONS

Liro Engineers, Inc.
690 Delaware Avenue
Buffalo, New York

PROJ. ENG.:	CLIENT: HAYES PLACE MANAGEMENT GROUP, INC.	JOB TITLE AND LOCATION: FORMER BUFFALO CHINA	LIRO JOB NO.: 16-344-1389
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DRAWN BY: EMM	DATE: MARCH 2019	SCALE: NOT TO SCALE	

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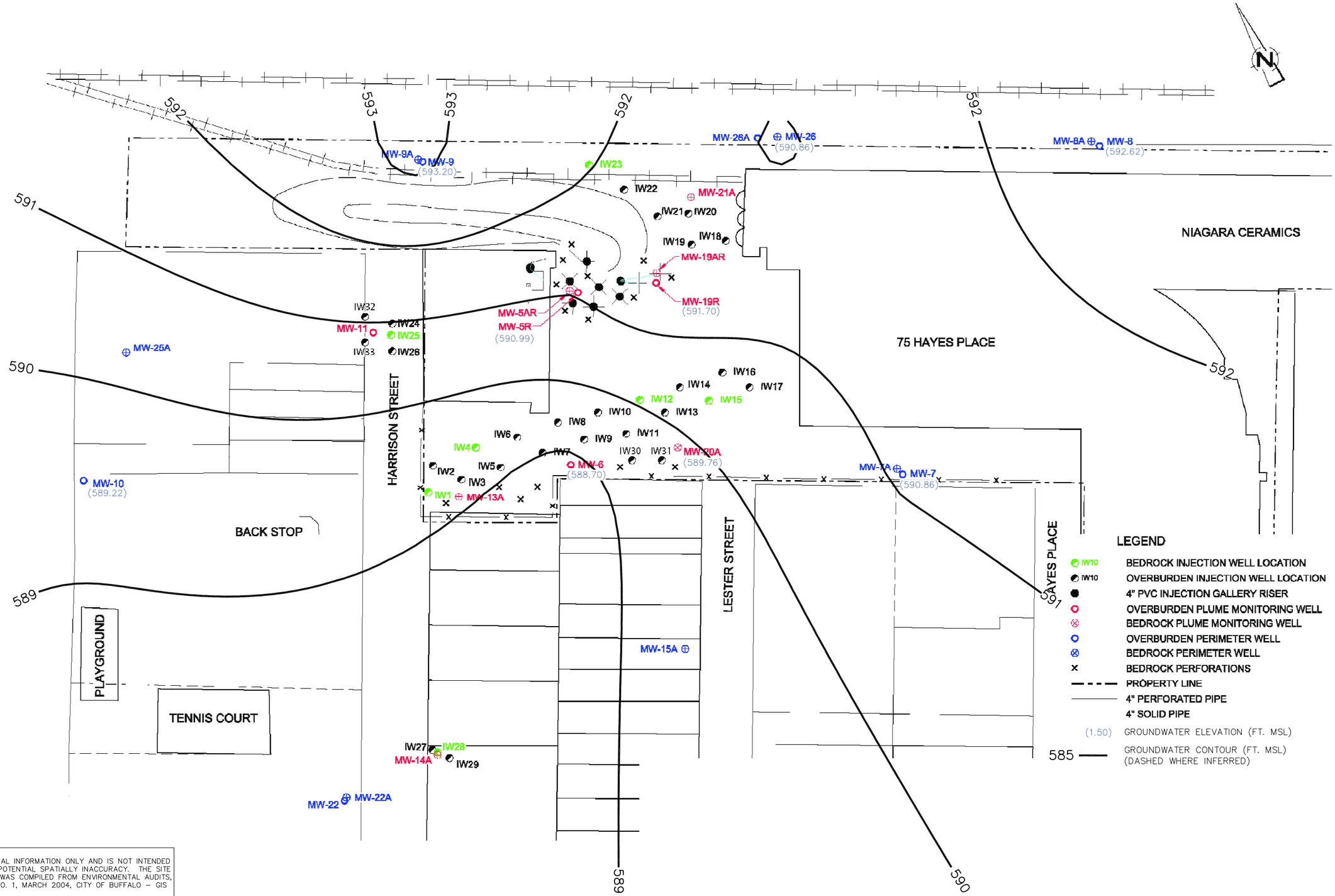

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NO.	DATE	DESCRIPTION
		REVISIONS

LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, New York

PROJ. ENG.:	
DESIGNED BY:	
CHECKED BY:	
DRAWN BY:	EMM
CLIENT:	HAYES PLACE MANAGEMENT GROUP, INC.
DATE:	MARCH 2019
SCALE:	NOT TO SCALE
JOB TITLE AND LOCATION:	FORMER BUFFALO CHINA
LIRO JOB NO.:	16–344–1389
SHEET	5 OF 6
DRAWING TITLE:	OVERBURDEN GROUNDWATER SURFACE ELEVATION CONTOURS - FEBRUARY 2019
FIGURE NO.	4.1

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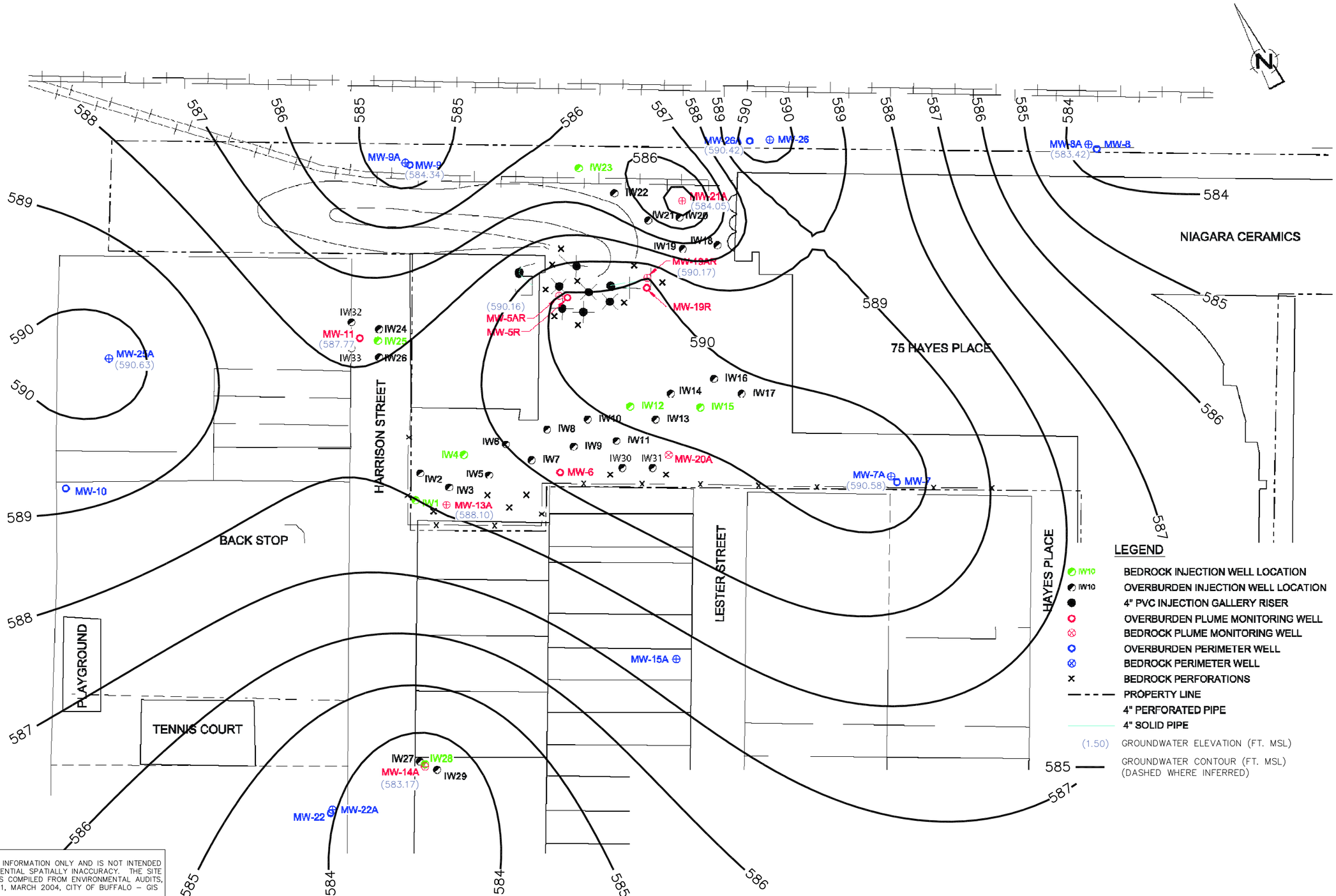

LEGEND

- IW10 — BEDROCK INJECTION WELL LOCATION
- IW10 — OVERBURDEN INJECTION WELL LOCATION
- 4" PVC INJECTION GALLERY RISER
- OVERBURDEN PLUME MONITORING WELL
- BEDROCK PLUME MONITORING WELL
- OVERBURDEN PERIMETER WELL
- BEDROCK PERIMETER WELL
- BEDROCK PERFORATIONS
- PROPERTY LINE
- 4" PERFORATED PIPE
- 4" SOLID PIPE
- (1.50) GROUNDWATER ELEVATION (FT. MSL)
- 585 GROUNDWATER CONTOUR (FT. MSL) (DASHED WHERE INFERRED)

SOURCE:
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NO.	DATE	DESCRIPTION
		REVISIONS

LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, New York

PROJ. ENG.:	
DESIGNED BY:	
CHECKED BY:	
DRAWN BY:	EMM
CLIENT:	HAYES PLACE MANAGEMENT GROUP, INC.
DATE:	MARCH 2019
SCALE:	NOT TO SCALE
JOB TITLE AND LOCATION:	FORMER BUFFALO CHINA
LIRO JOB NO.:	16–344–1389
SHEET	6 OF 6
DRAWING TITLE:	BEDROCK GROUNDWATER SURFACE ELEVATION CONTOURS - FEBRUARY 2019
FIGURE NO.	4.2

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Tables

TABLE 4.1

SUMMARY OF HYDRAULIC MONITORING DATA
FEBRUARY 2019
FORMER BUFFALO CHINA SITE (No. C915209)

Well ID	*Sample / Measurement Date*	*Top of Riser Elevation (ft. above AMSL)*	*Depth to Water (ft. below top of riser)*	*Water Elevation (ft. above AMSL)*
Overburden				
MW-5R	2/22/2019	598.10	7.11	590.99
MW-6	2/14/2019	594.15	5.45	588.70
MW-7	2/15/2019	592.03	0.95	591.08
MW-8	2/14/2019	594.00	1.38	592.62
MW-9	2/14/2019	594.81	1.61	593.20
MW-10	2/14/2019	596.45	7.23	589.22
MW-11	2/26/2019	595.04	5.28	589.76
MW-19R	2/22/2019	593.28	1.58	591.70
MW-22	--	592.34	NM(1)	NA
MW-26	2/14/2019	593.22	2.36	590.86
Bedrock				
MW-5AR	2/22/2019	596.29	6.13	590.16
MW-7A	2/15/2019	592.31	1.73	590.58
MW-8A	2/14/2019	594.10	10.68	583.42
MW-9A	2/14/2019	594.94	10.60	584.34
MW-13A	2/14/2019	594.75	6.65	588.10
MW-14A	2/26/2019	593.37	10.60	582.77
MW-15A	--	592.70	NM(2)	NA
MW-19AR	3/5/2019	593.40	3.23	590.17
MW-20A	2/14/2019	593.06	5.29	587.77
MW-21A	2/14/2019	590.98	6.93	584.05
MW-22A	--	592.23	NM(1)	NA
MW-25A	2/14/2019	598.13	7.50	590.63
MW-26A	2/14/2019	593.05	2.18	590.87

Notes:
AMSL - Above Mean Sea Level
(1) - Monitoring well could not be located
(2) - Monitoring well located on private property, no current access agreement

TABLE 4.2

ANALYTICAL RESULTS SUMMARY
VOCs in PERIMETER WELLS - FEBRUARY 2019
FORMER BUFFALO CHINA SITE (No. C915209)

				Perimeter	*Perimeter*	*Perimeter*	*Perimeter*	*Perimeter*	*Perimeter*
				Overburden Monitoring Well	*Bedrock Monitoring Well*	*Bedrock Monitoring Well*	*Overburden Monitoring Well*	*Bedrock Monitoring Well*	*Overburden Monitoring Well*
			Location ID:	*MW-7*	*MW-7A*	*MW-8A*	*MW-9*	*MW-9A*	*MW-10*
			Sample ID:	*MW-7*	*MW-7A*	*MW-8A*	*MW-9*	*MW-9A*	*MW-10*
			Sample Date:	*2/15/2019*	*2/15/2019*	*2/15/2019*	*2/21/2019*	*2/15/2019*	*2/21/2019*
		New York State Water Quality							
Parameters	*Units*	*Guidance Values*	*Standards*						
Volatile Organic Analytes									
1,1,1-Trichloroethane (TCA)	ug/L	NC	5	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/L	NC	1	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	ug/L	NC	5	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene (1,1-DCE)	ug/L	NC	5	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ug/L	NC	5	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ug/L	NC	5	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	NC	0.04	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ug/L	NC	0.0006	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ug/L	NC	3	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ug/L	NC	0.6	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ug/L	NC	1	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ug/L	NC	3	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/L	NC	3	ND	ND	ND	0.24 J	ND	0.87 J
1,4-Dioxane	ug/L	NC	NC	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ug/L	50	NC	ND	ND	ND	ND	ND	ND
2-Hexanone	ug/L	50	NC	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/L	NC	NC	ND	ND	ND	ND	ND	ND
Acetone	ug/L	50	NC	3.5 J	2.9 J	ND	3.4 J	ND	ND
Benzene	ug/L	50	1	ND	ND	ND	ND	ND	ND
Bromochloromethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ug/L	50	NC	ND	ND	ND	ND	ND	ND
Bromoform	ug/L	50	NC	ND	ND	ND	ND	ND	ND
Bromomethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ug/L	60	60	0.26 BJ	ND	ND	0.26 J	2.7 J	ND
Carbon Tetrachloride	ug/L	NC	5	ND	ND	ND	ND	ND	ND
Chlorobenzene	ug/L	NC	5	ND	ND	ND	ND	ND	ND
Chloroethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND
Chloroform	ug/L	NC	7	ND	ND	ND	ND	ND	1.7 J
Chloromethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND
Cyclohexane	ug/L	NC	NC	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane (CFC 12)	ug/L	NC	5	ND	ND	ND	ND	ND	ND
Methylene Chloride (Dichloromethane)	ug/L	NC	NC	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/L	NC	5	ND	ND	ND	ND	ND	ND
Isopropylbenzene (Cumene)	ug/L	NC	5	ND	ND	ND	ND	ND	ND
Methyl Acetate	ug/L	NC	NC	ND	ND	ND	ND	ND	ND

TABLE 4.2

ANALYTICAL RESULTS SUMMARY
VOCs in PERIMETER WELLS - FEBRUARY 2019
FORMER BUFFALO CHINA SITE (No. C915209)

				Perimeter	*Perimeter*	*Perimeter*	*Perimeter*	*Perimeter*	*Perimeter*
				Overburden Monitoring Well	*Bedrock Monitoring Well*	*Bedrock Monitoring Well*	*Overburden Monitoring Well*	*Bedrock Monitoring Well*	*Overburden Monitoring Well*
			Location ID:	*MW-7*	*MW-7A*	*MW-8A*	*MW-9*	*MW-9A*	*MW-10*
			Sample ID:	*MW-7*	*MW-7A*	*MW-8A*	*MW-9*	*MW-9A*	*MW-10*
			Sample Date:	*2/15/2019*	*2/15/2019*	*2/15/2019*	*2/21/2019*	*2/15/2019*	*2/21/2019*
		New York State Water Quality							
Parameters	***Units***	***Guidance Values***	***Standards***						
Volatile Organic Analytes									
Methyl tert-Butyl Ether	ug/L	10	NC	ND	ND	ND	ND	ND	ND
Methylcyclohexane	ug/L	NC	NC	ND	ND	ND	ND	ND	ND
Styrene	ug/L	NC	5	ND	ND	ND	ND	ND	ND
Tetrachloroethene (PCE)	ug/L	NC	5	ND	ND	ND	ND	ND	ND
Toluene	ug/L	NC	5	ND	ND	ND	ND	ND	ND
Trichloroethene (TCE)	ug/L	NC	5	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane (CFC 11)	ug/L	NC	5	ND	0.27 J	ND	ND	ND	ND
Vinyl Chloride	ug/L	NC	2	ND	**7.9**	ND	ND	ND	ND
cis-1,2-Dichloroethene	ug/L	NC	5	ND	**44**	ND	ND	ND	ND
cis-1,3-Dichloropropene	ug/L	NC	NC	ND	ND	ND	ND	ND	ND
m,p-Xylenes	ug/L	NC	5	ND	ND	ND	ND	ND	ND
o-Xylene	ug/L	NC	5	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/L	NC	5	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ug/L	NC	NC	ND	ND	ND	ND	ND	ND
Field Parameters									
Conductivity, field	mS/cm	NC	NC	0.836	0.679	1.25	1.29	1.44	0.456
Dissolved oxygen (DO), field	ug/L	NC	NC	3.36	2.39	2.43	1.05	2.65	2.43
Oxidation reduction potential (ORP), field	millivolts	NC	NC	-176	-169	-253	-13	-165	33
pH, field	s.u.	NC	6.5-8.5	6.83	7.37	7.88	7.06	7.02	8.17
Temperature, field	Deg. C	NC	NC	7.99	8.99	10.74	6.08	7.05	7.4
Turbidity, field	NTU	NC	NC	0	31.8	0	0	0	4

Notes:

1.0 - Exceeds criteria

ND - Not detected

J - Estimated concentration

B - Compound detected in associated blank sample

NC - No criteria

ug/L - Micrograms per liter

TABLE 4.2

ANALYTICAL RESULTS SUMMARY
VOCs in PERIMETER WELLS - FEBRUARY 2019
FORMER BUFFALO CHINA SITE (No. C915209)

				Perimeter	*Perimeter*	*Perimeter*
				Bedrock Monitoring Well	*Overburden Monitoring Well*	*Bedrock Monitoring Well*
			Location ID:	*MW-25A*	*MW-26*	*MW-26A*
			Sample ID:	*MW-25A*	*MW-26*	*MW-26A*
			Sample Date:	*2/21/2019*	*2/15/2019*	*2/15/2019*
		New York State Water Quality				
Parameters	*Units*	*Guidance Values*	*Standards*			
Volatile Organic Analytes						
1,1,1-Trichloroethane (TCA)	ug/L	NC	5	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/L	NC	5	ND	ND	ND
1,1,2-Trichloroethane	ug/L	NC	1	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	NC	5	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	ug/L	NC	5	ND	ND	ND
1,1-Dichloroethene (1,1-DCE)	ug/L	NC	5	ND	ND	ND
1,2,3-Trichlorobenzene	ug/L	NC	5	ND	ND	ND
1,2,4-Trichlorobenzene	ug/L	NC	5	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	NC	0.04	ND	ND	ND
1,2-Dibromoethane	ug/L	NC	0.0006	ND	ND	ND
1,2-Dichlorobenzene	ug/L	NC	3	ND	ND	ND
1,2-Dichloroethane	ug/L	NC	0.6	ND	ND	ND
1,2-Dichloropropane	ug/L	NC	1	ND	ND	ND
1,3-Dichlorobenzene	ug/L	NC	3	ND	ND	ND
1,4-Dichlorobenzene	ug/L	NC	3	ND	ND	ND
1,4-Dioxane	ug/L	NC	NC	ND	ND	ND
2-Butanone (MEK)	ug/L	50	NC	ND	ND	ND
2-Hexanone	ug/L	50	NC	ND	ND	ND
4-Methyl-2-pentanone	ug/L	NC	NC	ND	ND	ND
Acetone	ug/L	50	NC	ND	ND	ND
Benzene	ug/L	50	1	ND	ND	ND
Bromochloromethane	ug/L	NC	5	ND	ND	ND
Bromodichloromethane	ug/L	50	NC	ND	ND	ND
Bromoform	ug/L	50	NC	ND	ND	ND
Bromomethane	ug/L	NC	5	ND	ND	ND
Carbon Disulfide	ug/L	60	60	ND	ND	ND
Carbon Tetrachloride	ug/L	NC	5	ND	ND	ND
Chlorobenzene	ug/L	NC	5	ND	ND	ND
Chloroethane	ug/L	NC	5	ND	ND	ND
Chloroform	ug/L	NC	7	ND	ND	ND
Chloromethane	ug/L	NC	5	ND	ND	ND
Cyclohexane	ug/L	NC	NC	ND	ND	ND
Dibromochloromethane	ug/L	NC	5	ND	ND	ND
Dichlorodifluoromethane (CFC 12)	ug/L	NC	5	ND	ND	ND
Methylene Chloride (Dichloromethane)	ug/L	NC	NC	ND	ND	ND
Ethylbenzene	ug/L	NC	5	ND	ND	ND
Isopropylbenzene (Cumene)	ug/L	NC	5	ND	ND	ND
Methyl Acetate	ug/L	NC	NC	ND	ND	ND

TABLE 4.2

ANALYTICAL RESULTS SUMMARY
VOCs in PERIMETER WELLS - FEBRUARY 2019
FORMER BUFFALO CHINA SITE (No. C915209)

				Perimeter	*Perimeter*	*Perimeter*
				Bedrock Monitoring Well	*Overburden Monitoring Well*	*Bedrock Monitoring Well*
			Location ID:	*MW-25A*	*MW-26*	*MW-26A*
			Sample ID:	*MW-25A*	*MW-26*	*MW-26A*
			Sample Date:	*2/21/2019*	*2/15/2019*	*2/15/2019*
		New York State Water Quality				
Parameters	*Units*	*Guidance Values*	*Standards*			
Volatile Organic Analytes						
Methyl tert-Butyl Ether	ug/L	10	NC	ND	ND	ND
Methylcyclohexane	ug/L	NC	NC	ND	ND	ND
Styrene	ug/L	NC	5	ND	ND	ND
Tetrachloroethene (PCE)	ug/L	NC	5	ND	ND	ND
Toluene	ug/L	NC	5	ND	ND	ND
Trichloroethene (TCE)	ug/L	NC	5	0.62 J	ND	ND
Trichlorofluoromethane (CFC 11)	ug/L	NC	5	ND	ND	ND
Vinyl Chloride	ug/L	NC	2	ND	ND	ND
cis-1,2-Dichloroethene	ug/L	NC	5	0.26 J	ND	ND
cis-1,3-Dichloropropene	ug/L	NC	NC	ND	ND	ND
m,p-Xylenes	ug/L	NC	5	ND	ND	ND
o-Xylene	ug/L	NC	5	ND	ND	ND
trans-1,2-Dichloroethene	ug/L	NC	5	ND	ND	ND
trans-1,3-Dichloropropene	ug/L	NC	NC	ND	ND	ND
Field Parameters						
Conductivity, field	mS/cm	NC	NC	0.939	4.47	1.42
Dissolved oxygen (DO), field	ug/L	NC	NC	1.22	3	4.69
Oxidation reduction potential (ORP), field	millivolts	NC	NC	-38	-89	-67
pH, field	s.u.	NC	6.5-8.5	7.27	6.77	7.47
Temperature, field	Deg. C	NC	NC	10.56	6.77	7.35
Turbidity, field	NTU	NC	NC	13.6	11.8	132

Notes:
1.0 - Exceeds criteria
ND - Not detected
J - Estimated concentration
B - Compound detected in associated blank sample
NC - No criteria
ug/L - Micrograms per liter

TABLE 4.3

ANALYTICAL RESULTS SUMMARY
VOCs in OVERBURDEN PLUME WELLS - FEBRUARY 2019
FORMER BUFFALO CHINA SITE (No. C915209)

				Plume	*Plume*	*Plume*	*Plume*
				Overburden Monitoring Well	*Overburden Monitoring Well*	*Overburden Monitoring Well*	*Overburden Monitoring Well*
			Location ID:	*MW-5R*	*MW-6*	*MW-11*	*MW-19R*
			Sample ID:	*MW-5R*	*MW-6*	*MW-11*	*MW-19R*
			Sample Date:	*2/22/2019*	*2/21/2019*	*3/5/2019*	*2/22/2019*
		New York State Water Quality					
Parameters	*Units*	*Guidance Values*	*Standards*				
Volatile Organic Analytes							
1,1,1-Trichloroethane (TCA)	ug/L	NC	5	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/L	NC	5	0.31 J	ND	ND	ND
1,1,2-Trichloroethane	ug/L	NC	1	0.5 J	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	NC	5	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	ug/L	NC	5	ND	ND	ND	ND
1,1-Dichloroethene (1,1-DCE)	ug/L	NC	5	ND	**9.3 J**	2.5 J	ND
1,2,3-Trichlorobenzene	ug/L	NC	5	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ug/L	NC	5	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	NC	0.04	ND	ND	ND	ND
1,2-Dibromoethane	ug/L	NC	0.0006	ND	ND	ND	ND
1,2-Dichlorobenzene	ug/L	NC	3	ND	ND	ND	ND
1,2-Dichloroethane	ug/L	NC	0.6	ND	ND	ND	ND
1,2-Dichloropropane	ug/L	NC	1	ND	ND	ND	ND
1,3-Dichlorobenzene	ug/L	NC	3	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/L	NC	3	ND	ND	0.59 J	ND
1,4-Dioxane	ug/L	NC	NC	ND	ND	ND	ND
2-Butanone (MEK)	ug/L	50	NC	ND	ND	ND	ND
2-Hexanone	ug/L	50	NC	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/L	NC	NC	ND	ND	ND	ND
Acetone	ug/L	50	NC	11	ND	13	3.2 J
Benzene	ug/L	50	1	ND	ND	0.35 J	ND
Bromochloromethane	ug/L	NC	5	ND	ND	ND	ND
Bromodichloromethane	ug/L	50	NC	ND	ND	ND	ND
Bromoform	ug/L	50	NC	ND	ND	ND	ND
Bromomethane	ug/L	NC	5	ND	ND	ND	ND
Carbon Disulfide	ug/L	60	60	0.32 J	ND	ND	ND
Carbon Tetrachloride	ug/L	NC	5	ND	ND	ND	ND
Chlorobenzene	ug/L	NC	5	ND	ND	ND	ND
Chloroethane	ug/L	NC	5	ND	ND	ND	ND
Chloroform	ug/L	NC	7	0.33 J	ND	ND	ND
Chloromethane	ug/L	NC	5	ND	ND	ND	ND
Cyclohexane	ug/L	NC	NC	ND	ND	ND	ND
Dibromochloromethane	ug/L	NC	5	ND	ND	ND	ND
Dichlorodifluoromethane (CFC 12)	ug/L	NC	5	ND	ND	ND	ND
Methylene Chloride (Dichloromethane)	ug/L	NC	NC	ND	ND	ND	ND
Ethylbenzene	ug/L	NC	5	ND	ND	ND	ND
Isopropylbenzene (Cumene)	ug/L	NC	5	ND	ND	ND	ND
Methyl Acetate	ug/L	NC	NC	ND	ND	ND	ND

TABLE 4.3

ANALYTICAL RESULTS SUMMARY
VOCs in OVERBURDEN PLUME WELLS - FEBRUARY 2019
FORMER BUFFALO CHINA SITE (No. C915209)

				Plume	*Plume*	*Plume*	*Plume*
				Overburden Monitoring Well	*Overburden Monitoring Well*	*Overburden Monitoring Well*	*Overburden Monitoring Well*
			Location ID:	*MW-5R*	*MW-6*	*MW-11*	*MW-19R*
			Sample ID:	*MW-5R*	*MW-6*	*MW-11*	*MW-19R*
			Sample Date:	*2/22/2019*	*2/21/2019*	*3/5/2019*	*2/22/2019*
		New York State Water Quality					
Parameters	*Units*	*Guidance Values*	*Standards*				
Volatile Organic Analytes							
Methyl tert-Butyl Ether	ug/L	10	NC	ND	ND	0.33 J	ND
Methylcyclohexane	ug/L	NC	NC	ND	ND	ND	0.26 J
Styrene	ug/L	NC	5	ND	ND	ND	ND
Tetrachloroethene (PCE)	ug/L	NC	5	1.2 J	ND	ND	ND
Toluene	ug/L	NC	5	ND	ND	ND	ND
Trichloroethene (TCE)	ug/L	NC	5	**450 D**	**110**	**290 E**	**78**
Trichlorofluoromethane (CFC 11)	ug/L	NC	5	ND	ND	ND	ND
Vinyl Chloride	ug/L	NC	2	0.51 J	ND	2 J	0.36 J
cis-1,2-Dichloroethene	ug/L	NC	5	**160**	**800 D**	**1,300 D**	**59**
cis-1,3-Dichloropropene	ug/L	NC	NC	ND	ND	ND	ND
m,p-Xylenes	ug/L	NC	5	ND	ND	ND	ND
o-Xylene	ug/L	NC	5	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/L	NC	5	**12**	**7.3 J**	**6.2**	4.3 J
trans-1,3-Dichloropropene	ug/L	NC	NC	ND	ND	ND	ND
Total VOCs	ug/L	NC	NC	636	927	1,615	145
Field Parameters							
Conductivity, field	mS/cm	NC	NC	0.991	1.18	7.19	1.08
Dissolved oxygen (DO), field	ug/L	NC	NC	6.56	29.78	2.15	3.46
Oxidation reduction potential (ORP), field	millivolts	NC	NC	142	105	112	108
pH, field	s.u.	NC	6.5-8.5	7.96	7.9	7.36	7.41
Temperature, field	Deg. C	NC	NC	5.64	8.14	6.21	5.97
Turbidity, field	NTU	NC	NC	31.3	47	44	33.8
Sodium Persulfate	g/L	NC	NC	2.5	2.5	0	8.5

Notes:

1.0 - Exceeds criteria

ND - Not detected

J - Estimated concentration

D - Diluted

E - Concentration has exceeded the calibration range for that specific analysis

NC - No criteria

ug/L - Micrograms per liter

TABLE 4.4

ANALYTICAL RESULTS SUMMARY
VOCs in BEDROCK PLUME WELLS - FEBRUARY 2019
FORMER BUFFALO CHINA SITE (No. C915209)

				Plume	Plume	Plume	Plume	Plume	Plume	Plume
				Bedrock Monitoring Well	Bedrock Monitoring Well	Bedrock Monitoring Well	Bedrock Monitoring Well	Bedrock Monitoring Well	Bedrock Monitoring Well	Bedrock Monitoring Well
			Location ID:	MW-5AR	MW-13A	MW-14A	MW-19AR	MW-20A	MW-20A	MW-21A
			Sample ID:	MW-5AR MS/MSD	MW-13A	MW-14A	MW-19AR	MW-20A	Duplicate	MW-21A
			Sample Date:	2/22/2019	2/26/2019	2/26/2019	3/5/2019	2/22/2019	2/22/2019	2/21/2019
		New York State Water Quality								
Parameters	Units	Guidance Values	Standards							
Volatile Organic Analytes										
1,1,1-Trichloroethane (TCA)	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/L	NC	5	**43 J**	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/L	NC	1	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene (1,1-DCE)	ug/L	NC	5	ND	ND	ND	ND	2 J	1.9 J	1.7 J
1,2,3-Trichlorobenzene	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	NC	0.04	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ug/L	NC	0.0006	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ug/L	NC	3	ND	ND	ND	ND	ND	ND	0.38 J
1,2-Dichloroethane	ug/L	NC	0.6	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ug/L	NC	1	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ug/L	NC	3	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/L	NC	3	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	ug/L	NC	NC	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ug/L	50	NC	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ug/L	50	NC	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/L	NC	NC	ND	ND	ND	ND	ND	ND	ND
Acetone	ug/L	50	NC	ND	ND	3.2 J	9 J	ND	3.1 J	2.3 J
Benzene	ug/L	50	1	ND	ND	ND	ND	0.26 J	0.28 J	0.37 J
Bromochloromethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ug/L	50	NC	**61 J**	ND	ND	ND	ND	ND	ND
Bromoform	ug/L	50	NC	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ug/L	60	60	50 J	35 J	ND	3.6 J	ND	ND	1.6 J
Carbon Tetrachloride	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/L	NC	7	**310 J**	ND	ND	ND	ND	ND	ND
Chloromethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	ug/L	NC	NC	ND	ND	ND	1.9 J	0.67 J	0.71 J	0.45 J
Dibromochloromethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane (CFC 12)	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride (Dichloromethane)	ug/L	NC	NC	ND	ND	ND	2.3 J	ND	ND	ND
Ethylbenzene	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene (Cumene)	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
Methyl Acetate	ug/L	NC	NC	ND	ND	ND	ND	ND	ND	ND
Methyl tert-Butyl Ether	ug/L	10	NC	ND	ND	0.28 J	ND	ND	ND	ND

TABLE 4.4

ANALYTICAL RESULTS SUMMARY
VOCs in BEDROCK PLUME WELLS - FEBRUARY 2019
FORMER BUFFALO CHINA SITE (No. C915209)

				Plume	*Plume*	*Plume*	*Plume*	*Plume*	*Plume*	*Plume*
				Bedrock Monitoring Well	*Bedrock Monitoring Well*	*Bedrock Monitoring Well*	*Bedrock Monitoring Well*	*Bedrock Monitoring Well*	*Bedrock Monitoring Well*	*Bedrock Monitoring Well*
			Location ID:	*MW-5AR*	*MW-13A*	*MW-14A*	*MW-19AR*	*MW-20A*	*MW-20A*	*MW-21A*
			Sample ID:	*MW-5AR MS/MSD*	*MW-13A*	*MW-14A*	*MW-19AR*	*MW-20A*	*Duplicate*	*MW-21A*
			Sample Date:	*2/22/2019*	*2/26/2019*	*2/26/2019*	*3/5/2019*	*2/22/2019*	*2/22/2019*	*2/21/2019*
		New York State Water Quality								
Parameters	***Units***	***Guidance Values***	***Standards***							
Volatile Organic Analytes										
Methylcyclohexane	ug/L	NC	NC	ND	ND	ND	1.3 J	0.24 J	0.36 J	0.22 J
Styrene	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene (PCE)	ug/L	NC	5	**63 J**	**23 J**	ND	**6.6 J**	ND	ND	ND
Toluene	ug/L	NC	5	ND		ND	ND	ND	ND	ND
Trichloroethene (TCE)	ug/L	NC	5	**24,000**	**3,100**	1.1 J	**830 D**	1.6 J	1.6 J	**11**
Trichlorofluoromethane (CFC 11)	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ug/L	NC	2	**440 J**	**150 J**	**2.5 J**	**4.8 J**	**260 D**	**240 D**	ND
cis-1,2-Dichloroethene	ug/L	NC	5	**25,000**	**8,500**	4.9 J	**270 D**	**1,100 D**	**990 D**	**160**
cis-1,3-Dichloropropene	ug/L	NC	NC	ND	ND	ND	ND	ND	ND	ND
m,p-Xylenes	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/L	NC	5	**1,700**	**410**	0.68 J	**12 J**	5	4.4 J	**12**
trans-1,3-Dichloropropene	ug/L	NC	NC	ND	ND	ND	ND	ND	ND	ND
Total VOCs	ug/L	NC	NC	51,357	12,218	13	1,142	1,370	1,242	190
Field Parameters										
Conductivity, field	mS/cm	NC	NC	23.5	9.93	4.51	7.2	2.35	2.35	5.63
Dissolved oxygen (DO), field	ug/L	NC	NC	2.08	2.03	2.41	2.4	3.75	3.75	0.76
Oxidation reduction potential (ORP), field	millivolts	NC	NC	67	-33	-100	-194	-122	-122	-42
pH, field	s.u.	NC	6.5-8.5	6.68	6.75	7.28	7.38	7.27	7.27	7.2
Temperature, field	Deg. C	NC	NC	9.77	8.57	9.47	7.3	10.68	10.68	8.89
Turbidity, field	NTU	NC	NC	493	2.7	43.2	409	135	135	23.8
Sodium Persulfate	g/L	NC	NC	2.5	0	2.5	1	8.5	8.5	2.5

Notes:

1.0 - Exceeds criteria

ND - Not detected

J - Estimated concentration

D - Diluted

NC - No criteria

ug/L - Micrograms per liter

Appendix A
Site Inspection Forms

SITE INSPECTION FORM
FORMER BUFFALO CHINA SITE
BUFFALO, NEW YORK
NYSDEC SITE NO. C915209

INSPECTION DATE: 3/20/19

INSPECTED BY: Jon Williams

Overall Site

Has the Site use changed since the last inspection? *Yes* _____ *No* X

If yes, please describe the changes: _____

Have neighboring property uses changed? *Yes* _____ *No* X

If yes, please describe the changes: _____

Asphalt/Concrete Cover System

Potential Problems	*Concern*	*Corrective Action*
Potholes and cracks	• Deterioration of asphalt pavement or concrete • Safety hazard	• Use cold mix or hot mix asphalt and liquid bituminous material to patch, repair, or replace asphalt • For concrete, select repair method based on type and extent of damage
Ponding water	• Safety hazard	• No action required if ponding is minor • If ponding is significant, install drainage holes in asphalt/concrete pavement
Obstructions/Debris	• Safety hazard	• Remove obstructions as soon as possible

Inspect For	*Inspection Item Identified (circle one)*		*Action Required (circle one)*		*Comments*
Deterioration	(Yes)	No	Yes	(No)	few minor cracks
Obstruction/Debris	Yes	(No)	Yes	(No)	
Potholes	Yes	(No)	Yes	(No)	
Drainage/Puddles	Yes	(No)	Yes	(No)	
Other	Yes	(No)	Yes	(No)	

SITE INSPECTION FORM
FORMER BUFFALO CHINA SITE
BUFFALO, NEW YORK
NYSDEC SITE NO. C915209

INSPECTION DATE: 3/20/19

INSPECTED BY: J. Williams

Surface Soil/Stone Cover System

Potential Problems	***Concern***	***Corrective Action***
Erosion	• Deterioration of integrity of cover • Washed out soil/stone	• Backfill with additional imported stone/common fill as needed • If persistent erosion occurs, erosion control mats may be required in selected areas
Animal burrows	• Potential for soil cover erosion • Safety hazard	• Contract exterminator regarding trapping and relocation of persistent rodents • Seal all holes with common fill and compact
Damage to fence	• Potential access to Site by unauthorized persons	• No action if damage is minor and does not allow access by unauthorized persons • Repair fence if appropriate

Inspect For	*Inspection Item Identified (circle one)*		*Action Required (circle one)*		*Comments*
Erosion	Yes	(No)	Yes	(No)	
Animal Burrows	Yes	(No)	Yes	(No)	
Damage to fence	Yes	(No)	Yes	(No)	
Other	Yes	(No)	Yes	(No)	

SITE INSPECTION FORM
FORMER BUFFALO CHINA SITE
BUFFALO, NEW YORK
NYSDEC SITE NO. C915209

INSPECTION DATE: 2/14/19

INSPECTED BY: Jon Williams

Monitoring Wells

Potential Problems	*Concern*	*Corrective Action*
Missing locks	• Potential access by unauthorized persons	• Replace lock
Missing J-plugs	• Potential well contamination from surface water or rain water	• Replace J-plug
Concrete surface seal	• Damaged seal can allow water infiltration around casing and contamination of groundwater	• Contract drilling subcontractor to have surface seal replaced
Damaged flush-mount or stickup casing	• Damaged casing can result in damage to riser	• Contract drilling subcontractor to have casing replaced

Monitoring Well	*Well Condition (circle one)*			*Comments*
MW-5 R	(Good)	Fair	Needs Repair	
MW-5A R	(Good)	Fair	Needs Repair	
MW-6	(Good)	Fair	Needs Repair	
MW-7	(Good)	Fair	Needs Repair	
MW-7A	(Good)	Fair	Needs Repair	
MW-8	Good	(Fair)	Needs Repair	water in curb box
MW-8A	(Good)	Fair	Needs Repair	
MW-9	(Good)	Fair	Needs Repair	
MW-9A	(Good)	Fair	Needs Repair	
MW-10	(Good)	Fair	Needs Repair	
MW-11	Good	Fair	(Needs Repair)	needs curb box
MW-13A	Good	(Fair)	Needs Repair	lid bolt
MW-14A	(Good)	Fair	Needs Repair	
MW-15A	Good	Fair	Needs Repair	No access
MW-19	(Good)	Fair	Needs Repair	
MW-19A	(Good)	Fair	Needs Repair	
MW-21A	(Good)	Fair	Needs Repair	
MW-22	Good	Fair	Needs Repair	could not locate

SITE INSPECTION FORM
FORMER BUFFALO CHINA SITE
BUFFALO, NEW YORK
NYSDEC SITE NO. C915209

INSPECTION DATE: 2/14/19

INSPECTED BY: Jon Williams

Monitoring Well	*Well Condition (circle one)*			*Comments*
MW-22A	Good	Fair	Needs Repair	could not locate
MW-25A	(Good)	Fair	Needs Repair	
MW-26	(Good)	Fair	Needs Repair	
MW-26A	Good	(Fair)	Needs Repair	lid bolt

Injection Wells

Potential Problems	***Concern***	***Corrective Action***
Missing caps	• Potential well contamination from surface water or rain water	• Replace cap
Damaged stickup	• Inability to distribute oxidant, inoculum, substrate, nutrients to subsurface	• Repair stickup or contract drilling subcontractor to replace injection well

Injection Well/Gallery	*Well Condition (circle one)*			*Comments*
IW-1	(Good)	Fair	Needs Repair	
IW-2	(Good)	Fair	Needs Repair	
IW-3	(Good)	Fair	Needs Repair	
IW-4	(Good)	Fair	Needs Repair	
IW-5	(Good)	Fair	Needs Repair	
IW-6	(Good)	Fair	Needs Repair	
IW-7	(Good)	Fair	Needs Repair	
IW-8	(Good)	Fair	Needs Repair	
IW-9	(Good)	Fair	Needs Repair	
IW-10	(Good)	Fair	Needs Repair	
IW-11	Good	(Fair)	Needs Repair	few cracks in collar
IW-12	(Good)	Fair	Needs Repair	
IW-13	(Good)	Fair	Needs Repair	
IW-14	Good	Fair	(Needs Repair)	curb box collar, lid bolt
IW-15	Good	(Fair)	Needs Repair	cracking concrete
IW-16	(Good)	Fair	Needs Repair	

SITE INSPECTION FORM
FORMER BUFFALO CHINA SITE
BUFFALO, NEW YORK
NYSDEC SITE NO. C915209

INSPECTION DATE: 2/14/19

INSPECTED BY: Jon Williams

Injection Well/Gallery	*Well Condition (circle one)*			*Comments*
IW-17	(Good)	Fair	Needs Repair	
IW-18	Good	Fair	Needs Repair	
IW-19	(Good)	Fair	Needs Repair	
IW-20	Good	Fair	Needs Repair	
IW-21	Good	Fair	Needs Repair	
IW-22	(Good)	Fair	Needs Repair	
IW-23	(Good)	Fair	Needs Repair	
IW-24	Good	(Fair)	Needs Repair	concrete ?
IW-25	Good	Fair	(Needs Repair)	curb box lid
IW-26	Good	(Fair)	Needs Repair	
IW-27	(Good)	Fair	Needs Repair	
IW-28	(Good)	Fair	Needs Repair	
IW-29	(Good)	Fair	Needs Repair	
IG-1	(Good)	Fair	Needs Repair	
IG-2	(Good)	Fair	Needs Repair	
IG-3	(Good)	Fair	Needs Repair	
IG-4	(Good)	Fair	Needs Repair	
IG-5	(Good)	Fair	Needs Repair	
IG-6	(Good)	Fair	Needs Repair	
IG-7	(Good)	Fair	Needs Repair	
IG-8	(Good)	Fair	Needs Repair	
IG-9	(Good)	Fair	Needs Repair	
IG-10	(Good)	Fair	Needs Repair	

Appendix B
Site Photographs

Site Photos

Asphalt cover system, view towards north.

Asphalt cover system, view towards northeast

Site Photos

Northeastern edge of asphalt cover system.

Eastern edge of asphalt cover system.

Site Photos

Concrete cover, view towards northwest.

Concrete cover, view towards southeast.

Site Photos

Area A stone cover system, view towards northeast.

Area A stone cover system, view towards northwest.

Site Photos

Area C stone cover system, view towards southeast.

Area D stone cover system, view towards north.

Site Photos

Harrison Street Warehouse, view towards north.

New Community Center under construction in the vicinity of monitoring wells MW-22 and MW-22A, view towards northwest.

Site Photos

Monitoring well MW-11, missing curb box.

Monitoring well MW-13A, missing 1 lid bolt.

Site Photos

General vicinity of monitoring wells MW-22 and MW-22A.

Monitoring well MW-26A, missing 1 lid bolt.

Site Photos

Injection well IW-14, missing 1 lid bolt and damaged concrete collar.

Injection well IW-15, damaged concrete collar.

Site Photos

Injection well IW-25, damaged curb box lid.

Appendix C
Access Request Letters

LiRo Engineers, Inc.
A LiRo Group Company
690 Delaware Avenue, Buffalo, NY 14209 Telephone 716.882.5476 Facsimile 716.882.9640

February 20, 2019

Ms. Ashley Soto
54 Lester Street
Buffalo, NY 14210

Re: Former Buffalo China Site
Brownfield Site #C915209
Request for Access – 54 Lester Street, Buffalo, New York

Dear Ms. Soto,

LiRo Engineers, Inc. (LiRo) has been retained by Hayes Place Management Group, Inc. (HPMG) to provide environmental engineering services at the Former Buffalo China (Brownfield Site #C915209) at 51 Hayes Street in Buffalo, New York. As part of the environmental engineering services, LiRo will be conducting groundwater monitoring and sampling on behalf of HPMG.

As part of the remediation and monitoring program, LiRo would like to request access to the groundwater monitoring well on your property located at 54 Lester Street.

LiRo is currently performing a groundwater sampling event for HPMG and is available to sample wells located on your property until the end of February. If there is a convenient day and time that the wells could be sampled please contact me at 716-970-4136 and the sampling will be scheduled. Following receipt of analytical data generated during sampling of the monitoring wells on your property, you will be provided with a copy of the data within 30 days. For any future events, LiRo will provide you with written notification prior to sampling.

Please review the attached indemnification agreement. If the terms of the agreement are agreeable please sign and return a copy in the enclosed self-addressed stamped envelope.

Should you require any additional information, please contact me directly at 716-970-4136 or by email at williamsj@liro.com.

Sincerely,

LiRo Engineers, Inc.

Jon Williams
Senior Geologist

LiRo Engineers, Inc.
A LiRo Group Company
690 Delaware Avenue, Buffalo, NY 14209 Telephone 716.882.5476 Facsimile 716.882.9640

February 20, 2019

Mr. Gregory Wachowiak
103 Harrison Street
Buffalo, New York 14210

Re: Former Buffalo China Site
Brownfield Site #C915209
Request for Access – 103 Harrison Street

Dear Mr. Wachowiak,

LiRo Engineers, Inc. (LiRo) has been retained by Hayes Place Management Group, Inc. (HPMG) to provide environmental engineering services at the Former Buffalo China (Brownfield Site #C915209) at 51 Hayes Street in Buffalo, New York. As part of the environmental engineering services, LiRo will be conducting groundwater monitoring and sampling on behalf of HPMG.

As part of the remediation and monitoring program, LiRo would like to request access to the groundwater monitoring wells on your property located at 103 Harrison Street.

LiRo is currently performing a groundwater sampling event for HPMG and is available to sample wells located on your property until the end of February. If there is a convenient day and time that the wells could be sampled please contact me at 716-970-4136 and the sampling will be scheduled. Following receipt of analytical data generated during sampling of the monitoring wells on your property, you will be provided with a copy of the data within 30 days. For any future events, LiRo will provide you with written notification prior to sampling.

Please review the attached indemnification agreement. If the terms of the agreement are agreeable please sign and return a copy in the enclosed self-addressed stamped envelope.

Should you require any additional information, please contact me directly at 716-970-4136 or by email at williamsj@liro.com.

Sincerely,

LiRo Engineers, Inc.

Jon Williams
Senior Geologist

LiRo Engineers, Inc.
A LiRo Group Company
690 Delaware Avenue, Buffalo, NY 14209 Telephone 716.882.5476 Facsimile 716.882.9640

January 18, 2019

Mr. Richard Runge
127 Harrison Street
Buffalo, New York 14210

Re: Former Buffalo China Site
Brownfield Site #C915209
Request for Access – 127 Harrison Street

Dear Mr. Runge,

LiRo Engineers, Inc. (LiRo) has been retained by Hayes Place Management Group, Inc. (HPMG) to provide environmental engineering services at the Former Buffalo China (Brownfield Site #C915209) at 51 Hayes Street in Buffalo, New York. As part of the environmental engineering services, LiRo is conducting groundwater monitoring and soil vapor intrusion monitoring on behalf of HPMG.

The remediation and monitoring program is being conducted under a Site Management Plan (SMP) that has been approved by the New York State Department of Environmental Conservation (NYSDEC). A requirement of the SMP is that the sub-slab depressurization system that is installed at your property be checked at least once per year to ensure that it is working properly. Proper system operation ensures that potentially harmful contaminants cannot enter your home through the basement.

LiRo would like to request access to your property located at 127 Harrison Street in order to inspect and test the sub-slab depressurization system. Testing will require access to your basement to check for cracks in the floor, ensure the sump crock is sealed, and perform a vacuum pressure test at the sample point installed in the basement floor. We anticipate that the inspection and testing will take no longer than 30 minutes.

LiRo will be happy to discuss the performance of the sub-slab depressurization system at the time of monitoring. If any deficiencies are identified with the operation of the system, LiRo will discuss these with you and schedule a convenient date and time to complete repairs.

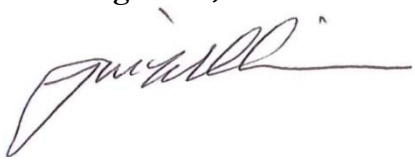
If you have any questions regarding soil vapor intrusion and/or contaminants associated with the Former Buffalo China Site you may also call Mr. David Szymanski, the NYSDEC project manager for the site at (716)-851-7220. Arrangements could also be made to have Mr. Szymanski present during the testing.

Please review the attached indemnification agreement. If the terms of the agreement are agreeable please sign and return a copy in the enclosed self-addressed stamped envelope and indicate what would be a convenient date and time for you to have the inspection performed.

Should you require any additional information and to schedule a convenient time for the monitoring, please contact me directly at 716-970-4136 or by email at williamsj@liro.com.

Sincerely,

LiRo Engineers, Inc.



Jon Williams
Senior Geologist

Appendix D
Laboratory Analytical Reports
(Included on Attached CD)

ALS Environmental
ALS Group USA, Corp
1565 Jefferson Road, Building 300, Suite 360
Rochester, NY 14623
T : +1 585 288 5380
F : +1 585 288 8475
www.alsglobal.com

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Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: The LiRo Group
Project: Buffalo China
Sample Matrix: Water

Service Request: R1901592
Date Received: 02/22/2019

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV, validation deliverables including all summary forms and associated raw data. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Any parameters that are not included in the lab's NELAC accreditation are identified on a "Non-Certified Analytes" report in the Miscellaneous Forms Section of this report. Individual analytical results requiring further explanation are flagged with qualifiers and/or discussed below. The flags are explained in the Report Qualifiers and Definitions page in the Miscellaneous Forms section of this report.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 02/22/2019. Any discrepancies noted upon initial sample inspection are noted on the cooler receipt and preservation form included in this data package. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at 0 to 6°C upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature. If any samples were received for the analysis of pH, chlorine residual, sulfite, dissolved oxygen, or ferrous iron, the samples were analyzed past their holding time expiration since these analyses are required to be analyzed within 15 minutes of sampling.

Volatiles by GC/MS:

Method 8260C, 02/25/2019: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Approved by _____ Date 02/27/2019

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-7			Lab ID: R1901592-001			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Acetone	3.5	J	2.1	10	ug/L	8260C
Carbon Disulfide	0.26	BJ	0.25	10	ug/L	8260C

CLIENT ID: MW-7A			Lab ID: R1901592-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Acetone	2.9	J	2.1	10	ug/L	8260C
Trichlorofluoromethane (CFC 11)	0.27	J	0.24	5.0	ug/L	8260C
Vinyl Chloride	7.9		0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	44		0.23	5.0	ug/L	8260C

CLIENT ID: MW-9A			Lab ID: R1901592-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon Disulfide	2.7	J	0.25	10	ug/L	8260C

CLIENT ID: MW-9			Lab ID: R1901592-007			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,4-Dichlorobenzene	0.24	J	0.20	5.0	ug/L	8260C
Acetone	3.4	J	2.1	10	ug/L	8260C
Carbon Disulfide	0.26	J	0.25	10	ug/L	8260C

CLIENT ID: MW-6			Lab ID: R1901592-008			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1-Dichloroethene (1,1-DCE)	9.3	J	1.3	25	ug/L	8260C
Trichloroethene (TCE)	110		1.0	25	ug/L	8260C
cis-1,2-Dichloroethene	800	D	2.3	50	ug/L	8260C
trans-1,2-Dichloroethene	7.3	J	1.0	25	ug/L	8260C

CLIENT ID: MW-10			Lab ID: R1901592-009			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,4-Dichlorobenzene	0.87	J	0.20	5.0	ug/L	8260C
Chloroform	1.7	J	0.24	5.0	ug/L	8260C

CLIENT ID: MW-25A			Lab ID: R1901592-010			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Trichloroethene (TCE)	0.62	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	0.26	J	0.23	5.0	ug/L	8260C

CLIENT ID: MW-21A			Lab ID: R1901592-011			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1-Dichloroethene (1,1-DCE)	1.7	J	0.25	5.0	ug/L	8260C
1,2-Dichlorobenzene	0.38	J	0.20	5.0	ug/L	8260C
Acetone	2.3	J	2.1	10	ug/L	8260C
Benzene	0.37	J	0.20	5.0	ug/L	8260C
Carbon Disulfide	1.6	J	0.25	10	ug/L	8260C
Cyclohexane	0.45	J	0.26	10	ug/L	8260C

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-21A			Lab ID: R1901592-011			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Methylcyclohexane	0.22	J	0.20	10	ug/L	8260C
Trichloroethene (TCE)	11		0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	160		0.23	5.0	ug/L	8260C
trans-1,2-Dichloroethene	12		0.20	5.0	ug/L	8260C

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: The LiRo Group **Service Request:**R1901592
Project: Buffalo China/16-344-1389

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1901592-001	MW-7	2/15/2019	1115
R1901592-002	MW-7A	2/15/2019	1140
R1901592-003	MW-8A	2/15/2019	1345
R1901592-004	MW-26	2/15/2019	1430
R1901592-005	MW-26A	2/15/2019	1510
R1901592-006	MW-9A	2/15/2019	1540
R1901592-007	MW-9	2/21/2019	0930
R1901592-008	MW-6	2/21/2019	1020
R1901592-009	MW-10	2/21/2019	1100
R1901592-010	MW-25A	2/21/2019	1145
R1901592-011	MW-21A	2/21/2019	1400
R1901592-012	Trip Blank	2/21/2019	

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

49548

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 2

Project Name: Buffalo China	Project Number: 16-344-1389
Project Manager: Jon Williams	Report CC:
Company/Address: LiRo Engineers, Inc. 690 Delaware Avenue Buffalo NY 14209	
Phone #: 716-882-5476	Email: williamsj@liro.com
Sampler's Signature:	Sampler's Printed Name: Jon Williams

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
MW-7		2/15/19	1115	WG	3	X							
MW-7A			1140		3	X							
MW-8A			1345		3	X							
MW-26			1430		3	X							
MW-26A			1510		3	X							
MW-9A			1540		3	X							

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED: New York

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day ____ 2 day ____ 3 day
_____ 4 day __X__ 5 day

REQUESTED REPORT DATE: 3/8/19

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
__X__ IV. Data Validation Report with Raw Data

NYSDEC EDD V4

Edata __X__ Yes ____ No

INVOICE INFORMATION
PO# 16-344-1389
BILL TO: Annette Gorecki
LiRo Engineers, Inc.
690 Delaware Ave.
Buffalo NY 14209

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Andrew Kaas	Signature: Gregory O. Esmerian	Signature:	Signature:	Signature:	Signature:
Printed Name: Andrew Kaas	Printed Name: Gregory O. Esmerian	Printed Name:	Printed Name:	Printed Name:	Printed Name:
Firm: LiRo	Firm: AS	Firm:	Firm:	Firm:	Firm:
Date/Time: 2/21/19	Date/Time: 2-22-19 09:25	Date/Time:	Date/Time:	Date/Time:	Date/Time:

R1901592 5
The LiRo Group
Buffalo China

Distribution: White - Lab Copy; Yellow - Return to Originator
To Fedex

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM 51294

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 2 OF 2

Project Name: Buffalo China	Project Number: 16-344-1389
Project Manager: Jon Williams	Report CC:
Company/Address: LiRo Engineers 690 Delaware Ave Buffalo, NY 14209	
Phone #: 716-882-5476	Email: williamsje@liro.com
Sampler's Signature: Andrew Kaus	Sampler's Printed Name: Andrew Kaus

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs • 8260 • 624 • CLP	GC/MS SVOAs • 8270 • 625	GC VOAs • 8021 • 601/602	PESTICIDES • 8081 • 608	PCBs • 8082 • 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
MW-9		2/21/19	0950 (1400)	WG	3	X							
MW-6			1020		3	X							
MW-10			1100		3	X							
MW-25A			1145		3	X							
MW-21A		↓	1400	↓	3	X							
Trip Blank		—	—	↓	3	X							

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day X 5 day
_____ Standard (10 business days-No Surcharge)

REQUESTED REPORT DATE
3/8/19

REPORT REQUIREMENTS
_____ I. Results Only
_____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
_____ III. Results + QC and Calibration Summaries
X IV. Data Validation Report with Raw Data
NYSDEC EDD V4
Edata X Yes _____ No

INVOICE INFORMATION
PO # 16-344-1389
BILL TO: Annette Goreck
LiRo Engineers
690 Delaware Ave
Buffalo NY 14209

STATE WHERE SAMPLES WERE COLLECTED New York

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Andrew Kaus	Signature:	Signature	Signature	Signature	Signature
Printed Name	Printed Name: Gregory O. Esmerian	Printed Name	Printed Name	Printed Name	Printed Name
Firm: LiRo	Firm: ALS	Firm	Firm	Firm	
Date/Time: 2/21/19	Date/Time: 2-22-19 09:25	Date/Time	Date/Time	Date/Time	

R1901592 5
The LiRo Group
Buffalo China

Distribution: White - Lab Copy; Yellow - Return to Originator
To Fedex

Cooler Receipt and Preservation Check Form

R1901592 5
The LiRo Group
Buffalo China

Project/Client LiRo Engineers Folder Number

Cooler received on 2-22-19 by: HE

COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y)	N
2	**Custody papers** properly completed (ink, signed)?	(Y)	N
3	Did all bottles arrive in good **condition** (unbroken)?	(Y)	N
4	Circle: (Wet Ice) **Dry Ice Gel packs** present?	(Y)	N

5a	**Perchlorate** samples have required headspace?	Y	N	(NA)
5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	(Y)	N	NA *
6	Where did the bottles originate?	(ALS/ROC)	CLIENT	
7	Soil VOA received as: Bulk Encore 5035set	(NA)		

8. Temperature Readings Date: 2-22-19 Time: 09:55 ID: IR#7 (IR#10) From: (Temp Blank) Sample Bottle

Observed Temp (°C)	2.9						
Correction Factor (°C)	+0.3						
Corrected Temp (°C)	3.2						
Temp from:Type of bottle	cent tube						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-002 by HE on 2-22-19 at 09158
5035 samples placed in storage location: _____ by _____ on _____ at _____

Cooler Breakdown/Preservation Check**: Date: 2/22/19 Time: 1335 by: SH

9.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO	
10.	Did all bottle labels and tags agree with custody papers?	(YES)	NO	
11.	Were correct containers used for the tests indicated?	(YES)	NO	
12.	Were 5035 vials acceptable (no extra labels, not leaking)?	YES	NO	(N/A)
13.	Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized		Tedlar® Bags Inflated	(N/A)

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2		HNO_3								
≤2		H_2SO_4								
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-			**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).			
		HCl	**	**	4117090					

Bottle lot numbers: 8-206-00

Explain all Discrepancies/ Other Comments:

* MW-26: 1 of 3 vials

CLRES	BULK
DO	FLDT
HPROD	HGFB
HTR	LL3541
PH	SUB
SO3	MARRS
ALS	REV

Labels secondary reviewed by: SH

PC Secondary Review: MP

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Client: The LiRo Group **Service Request:** R1901592
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R1901592-001.01					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
		2/25/2019	1507	In Lab / KRUEST	
		2/25/2019	1614	R-001-S12 / KRUEST	
R1901592-001.02					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-001.03					
	8260C				
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
		2/26/2019	1349	In Lab / KRUEST	
		2/26/2019	1424	R-001-S12 / KRUEST	
R1901592-002.01					
	8260C				
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
		2/25/2019	1507	In Lab / KRUEST	
		2/25/2019	1614	R-001-S12 / KRUEST	
R1901592-002.02					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-002.03					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-003.01					
	8260C				
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
		2/25/2019	1507	In Lab / KRUEST	
		2/25/2019	1614	R-001-S12 / KRUEST	
R1901592-003.02					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-003.03					

Client: The LiRo Group **Service Request:** R1901592
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-004.01					
	8260C				
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
		2/25/2019	1507	In Lab / KRUEST	
		2/25/2019	1614	R-001-S12 / KRUEST	
R1901592-004.02					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-004.03					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-005.01					
	8260C				
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
		2/25/2019	1507	In Lab / KRUEST	
		2/25/2019	1614	R-001-S12 / KRUEST	
R1901592-005.02					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-005.03					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-006.01					
	8260C				
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
		2/25/2019	1646	In Lab / KRUEST	
		2/25/2019	1706	R-001-S12 / KRUEST	
R1901592-006.02					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	

ALS Group USA, Corp.
dba ALS Environmental

Internal Chain of Custody Report

Client: The LiRo Group **Service Request:** R1901592
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R1901592-006.03					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-007.01					
	8260C				
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
		2/25/2019	1646	In Lab / KRUEST	
		2/25/2019	1706	R-001-S12 / KRUEST	
R1901592-007.02					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-007.03					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-008.01					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
		2/25/2019	1646	In Lab / KRUEST	
		2/25/2019	1706	R-001-S12 / KRUEST	
R1901592-008.02					
	8260C				
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-008.03					
	8260C				
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
		2/26/2019	1349	In Lab / KRUEST	
		2/26/2019	1424	R-001-S12 / KRUEST	
R1901592-009.01					
	8260C				
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
		2/25/2019	1646	In Lab / KRUEST	
		2/25/2019	1706	R-001-S12 / KRUEST	

Client: The LiRo Group **Service Request:** R1901592
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R1901592-009.02					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-009.03					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-010.01					
	8260C				
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
		2/25/2019	1646	In Lab / KRUEST	
		2/25/2019	1706	R-001-S12 / KRUEST	
R1901592-010.02					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-010.03					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-011.01					
	8260C				
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
		2/25/2019	1646	In Lab / KRUEST	
		2/25/2019	1706	R-001-S12 / KRUEST	
R1901592-011.02					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-011.03					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-012.01					
	8260C				
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
		2/25/2019	1646	In Lab / KRUEST	

ALS Group USA, Corp.
dba ALS Environmental

Internal Chain of Custody Report

Client: The LiRo Group **Service Request:** R1901592
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	8260C				
		2/25/2019	1706	R-001-S12 / KRUEST	
R1901592-012.02					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	
R1901592-012.03					
		2/22/2019	1335	SMO / GESMERIAN	
		2/22/2019	1336	R-001 / GESMERIAN	

Miscellaneous Forms

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REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the ñNotesò column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an ñimmediateò hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (Ó100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Certifications[1]

Connecticut ID # PH0556	Maine ID #NY0032	Pennsylvania ID# 68-786
Delaware Approved	New Hampshire ID # 2941	Rhode Island ID # 158
DoD ELAP #65817	New York ID # 10145	Virginia #460167
Florida ID # E87674	North Carolina #676	

[1] Analyses were performed according to our laboratoryôs NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to https://www.alsglobal.com/locations/americas/north-america/usa/new-york/rochester-environmental

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: The LiRo Group **Service Request:** R1901592
Project: Buffalo China/16-344-1389

Sample Name: MW-7 **Date Collected:** 02/15/19
Lab Code: R1901592-001 **Date Received:** 02/22/19
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-7A **Date Collected:** 02/15/19
Lab Code: R1901592-002 **Date Received:** 02/22/19
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-8A **Date Collected:** 02/15/19
Lab Code: R1901592-003 **Date Received:** 02/22/19
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-26 **Date Collected:** 02/15/19
Lab Code: R1901592-004 **Date Received:** 02/22/19
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-26A **Date Collected:** 02/15/19
Lab Code: R1901592-005 **Date Received:** 02/22/19
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Client: The LiRo Group
Project: Buffalo China/16-344-1389
Service Request: R1901592

Sample Name: MW-9A
Lab Code: R1901592-006
Sample Matrix: Water
Date Collected: 02/15/19
Date Received: 02/22/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-9
Lab Code: R1901592-007
Sample Matrix: Water
Date Collected: 02/21/19
Date Received: 02/22/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-6
Lab Code: R1901592-008
Sample Matrix: Water
Date Collected: 02/21/19
Date Received: 02/22/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-6
Lab Code: R1901592-008.R01
Sample Matrix: Water
Date Collected: 02/21/19
Date Received: 02/22/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-10
Lab Code: R1901592-009
Sample Matrix: Water
Date Collected: 02/21/19
Date Received: 02/22/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389		

Sample Name:	MW-25A	**Date Collected:**	02/21/19
Lab Code:	R1901592-010	**Date Received:**	02/22/19
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name:	MW-21A	**Date Collected:**	02/21/19
Lab Code:	R1901592-011	**Date Received:**	02/22/19
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name:	Trip Blank	**Date Collected:**	02/21/19
Lab Code:	R1901592-012	**Date Received:**	02/22/19
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

Sample Results

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Volatile Organic Compounds by GC/MS

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Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 11:15
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-7	**Units:**	ug/L
Lab Code:	R1901592-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/26/19 14:18	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/26/19 14:18	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/26/19 14:18	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/26/19 14:18	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,4-Dioxane	100 U	100	13	1	02/26/19 14:18	
2-Butanone (MEK)	10 U	10	0.78	1	02/26/19 14:18	
2-Hexanone	10 U	10	0.20	1	02/26/19 14:18	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/26/19 14:18	
Acetone	**3.5 J**	10	2.1	1	02/26/19 14:18	
Benzene	5.0 U	5.0	0.20	1	02/26/19 14:18	
Bromochloromethane	5.0 U	5.0	0.24	1	02/26/19 14:18	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/26/19 14:18	
Bromoform	5.0 U	5.0	0.25	1	02/26/19 14:18	
Bromomethane	5.0 U	5.0	0.70	1	02/26/19 14:18	
Carbon Disulfide	**0.26 BJ**	10	0.25	1	02/26/19 14:18	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/26/19 14:18	
Chlorobenzene	5.0 U	5.0	0.20	1	02/26/19 14:18	
Chloroethane	5.0 U	5.0	0.23	1	02/26/19 14:18	
Chloroform	5.0 U	5.0	0.24	1	02/26/19 14:18	
Chloromethane	5.0 U	5.0	0.28	1	02/26/19 14:18	
Cyclohexane	10 U	10	0.26	1	02/26/19 14:18	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/26/19 14:18	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/26/19 14:18	
Dichloromethane	5.0 U	5.0	0.36	1	02/26/19 14:18	
Ethylbenzene	5.0 U	5.0	0.20	1	02/26/19 14:18	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/26/19 14:18	
Methyl Acetate	10 U	10	0.33	1	02/26/19 14:18	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/26/19 14:18	
Methylcyclohexane	10 U	10	0.20	1	02/26/19 14:18	
Styrene	5.0 U	5.0	0.20	1	02/26/19 14:18	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/26/19 14:18	
Toluene	5.0 U	5.0	0.20	1	02/26/19 14:18	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 11:15
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-7	**Units:**	ug/L
Lab Code:	R1901592-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/26/19 14:18	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/26/19 14:18	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/26/19 14:18	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/26/19 14:18	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/26/19 14:18	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/26/19 14:18	
o-Xylene	5.0 U	5.0	0.20	1	02/26/19 14:18	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/26/19 14:18	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/26/19 14:18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 122	02/26/19 14:18	
Dibromofluoromethane	100	89 - 119	02/26/19 14:18	
Toluene-d8	99	87 - 121	02/26/19 14:18	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 11:40
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-7A	**Units:**	ug/L
Lab Code:	R1901592-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/25/19 21:11	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/25/19 21:11	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/25/19 21:11	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/25/19 21:11	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,4-Dioxane	100 U	100	13	1	02/25/19 21:11	
2-Butanone (MEK)	10 U	10	0.78	1	02/25/19 21:11	
2-Hexanone	10 U	10	0.20	1	02/25/19 21:11	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/25/19 21:11	
Acetone	**2.9 J**	10	2.1	1	02/25/19 21:11	
Benzene	5.0 U	5.0	0.20	1	02/25/19 21:11	
Bromochloromethane	5.0 U	5.0	0.24	1	02/25/19 21:11	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/25/19 21:11	
Bromoform	5.0 U	5.0	0.25	1	02/25/19 21:11	
Bromomethane	5.0 U	5.0	0.70	1	02/25/19 21:11	
Carbon Disulfide	10 U	10	0.25	1	02/25/19 21:11	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/25/19 21:11	
Chlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:11	
Chloroethane	5.0 U	5.0	0.23	1	02/25/19 21:11	
Chloroform	5.0 U	5.0	0.24	1	02/25/19 21:11	
Chloromethane	5.0 U	5.0	0.28	1	02/25/19 21:11	
Cyclohexane	10 U	10	0.26	1	02/25/19 21:11	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/25/19 21:11	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/25/19 21:11	
Dichloromethane	5.0 U	5.0	0.36	1	02/25/19 21:11	
Ethylbenzene	5.0 U	5.0	0.20	1	02/25/19 21:11	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/25/19 21:11	
Methyl Acetate	10 U	10	0.33	1	02/25/19 21:11	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/25/19 21:11	
Methylcyclohexane	10 U	10	0.20	1	02/25/19 21:11	
Styrene	5.0 U	5.0	0.20	1	02/25/19 21:11	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/25/19 21:11	
Toluene	5.0 U	5.0	0.20	1	02/25/19 21:11	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 11:40
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-7A	**Units:**	ug/L
Lab Code:	R1901592-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/25/19 21:11	
Trichlorofluoromethane (CFC 11)	**0.27 J**	5.0	0.24	1	02/25/19 21:11	
Vinyl Chloride	**7.9**	5.0	0.20	1	02/25/19 21:11	
cis-1,2-Dichloroethene	**44**	5.0	0.23	1	02/25/19 21:11	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/25/19 21:11	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/25/19 21:11	
o-Xylene	5.0 U	5.0	0.20	1	02/25/19 21:11	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/25/19 21:11	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/25/19 21:11	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	02/25/19 21:11	
Dibromofluoromethane	104	89 - 119	02/25/19 21:11	
Toluene-d8	101	87 - 121	02/25/19 21:11	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 13:45
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-8A	**Units:**	ug/L
Lab Code:	R1901592-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/25/19 21:33	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/25/19 21:33	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/25/19 21:33	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/25/19 21:33	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,4-Dioxane	100 U	100	13	1	02/25/19 21:33	
2-Butanone (MEK)	10 U	10	0.78	1	02/25/19 21:33	
2-Hexanone	10 U	10	0.20	1	02/25/19 21:33	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/25/19 21:33	
Acetone	10 U	10	2.1	1	02/25/19 21:33	
Benzene	5.0 U	5.0	0.20	1	02/25/19 21:33	
Bromochloromethane	5.0 U	5.0	0.24	1	02/25/19 21:33	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/25/19 21:33	
Bromoform	5.0 U	5.0	0.25	1	02/25/19 21:33	
Bromomethane	5.0 U	5.0	0.70	1	02/25/19 21:33	
Carbon Disulfide	10 U	10	0.25	1	02/25/19 21:33	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/25/19 21:33	
Chlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:33	
Chloroethane	5.0 U	5.0	0.23	1	02/25/19 21:33	
Chloroform	5.0 U	5.0	0.24	1	02/25/19 21:33	
Chloromethane	5.0 U	5.0	0.28	1	02/25/19 21:33	
Cyclohexane	10 U	10	0.26	1	02/25/19 21:33	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/25/19 21:33	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/25/19 21:33	
Dichloromethane	5.0 U	5.0	0.36	1	02/25/19 21:33	
Ethylbenzene	5.0 U	5.0	0.20	1	02/25/19 21:33	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/25/19 21:33	
Methyl Acetate	10 U	10	0.33	1	02/25/19 21:33	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/25/19 21:33	
Methylcyclohexane	10 U	10	0.20	1	02/25/19 21:33	
Styrene	5.0 U	5.0	0.20	1	02/25/19 21:33	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/25/19 21:33	
Toluene	5.0 U	5.0	0.20	1	02/25/19 21:33	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 13:45
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-8A	**Units:**	ug/L
Lab Code:	R1901592-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/25/19 21:33	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/25/19 21:33	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/25/19 21:33	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/25/19 21:33	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/25/19 21:33	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/25/19 21:33	
o-Xylene	5.0 U	5.0	0.20	1	02/25/19 21:33	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/25/19 21:33	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/25/19 21:33	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	02/25/19 21:33	
Dibromofluoromethane	102	89 - 119	02/25/19 21:33	
Toluene-d8	100	87 - 121	02/25/19 21:33	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 14:30
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-26	**Units:**	ug/L
Lab Code:	R1901592-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/25/19 21:55	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/25/19 21:55	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/25/19 21:55	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/25/19 21:55	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,4-Dioxane	100 U	100	13	1	02/25/19 21:55	
2-Butanone (MEK)	10 U	10	0.78	1	02/25/19 21:55	
2-Hexanone	10 U	10	0.20	1	02/25/19 21:55	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/25/19 21:55	
Acetone	10 U	10	2.1	1	02/25/19 21:55	
Benzene	5.0 U	5.0	0.20	1	02/25/19 21:55	
Bromochloromethane	5.0 U	5.0	0.24	1	02/25/19 21:55	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/25/19 21:55	
Bromoform	5.0 U	5.0	0.25	1	02/25/19 21:55	
Bromomethane	5.0 U	5.0	0.70	1	02/25/19 21:55	
Carbon Disulfide	10 U	10	0.25	1	02/25/19 21:55	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/25/19 21:55	
Chlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:55	
Chloroethane	5.0 U	5.0	0.23	1	02/25/19 21:55	
Chloroform	5.0 U	5.0	0.24	1	02/25/19 21:55	
Chloromethane	5.0 U	5.0	0.28	1	02/25/19 21:55	
Cyclohexane	10 U	10	0.26	1	02/25/19 21:55	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/25/19 21:55	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/25/19 21:55	
Dichloromethane	5.0 U	5.0	0.36	1	02/25/19 21:55	
Ethylbenzene	5.0 U	5.0	0.20	1	02/25/19 21:55	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/25/19 21:55	
Methyl Acetate	10 U	10	0.33	1	02/25/19 21:55	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/25/19 21:55	
Methylcyclohexane	10 U	10	0.20	1	02/25/19 21:55	
Styrene	5.0 U	5.0	0.20	1	02/25/19 21:55	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/25/19 21:55	
Toluene	5.0 U	5.0	0.20	1	02/25/19 21:55	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 14:30
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-26	**Units:**	ug/L
Lab Code:	R1901592-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/25/19 21:55	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/25/19 21:55	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/25/19 21:55	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/25/19 21:55	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/25/19 21:55	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/25/19 21:55	
o-Xylene	5.0 U	5.0	0.20	1	02/25/19 21:55	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/25/19 21:55	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/25/19 21:55	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	02/25/19 21:55	
Dibromofluoromethane	103	89 - 119	02/25/19 21:55	
Toluene-d8	101	87 - 121	02/25/19 21:55	

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 15:10
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-26A	**Units:**	ug/L
Lab Code:	R1901592-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/25/19 22:16	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/25/19 22:16	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/25/19 22:16	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/25/19 22:16	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,4-Dioxane	100 U	100	13	1	02/25/19 22:16	
2-Butanone (MEK)	10 U	10	0.78	1	02/25/19 22:16	
2-Hexanone	10 U	10	0.20	1	02/25/19 22:16	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/25/19 22:16	
Acetone	10 U	10	2.1	1	02/25/19 22:16	
Benzene	5.0 U	5.0	0.20	1	02/25/19 22:16	
Bromochloromethane	5.0 U	5.0	0.24	1	02/25/19 22:16	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/25/19 22:16	
Bromoform	5.0 U	5.0	0.25	1	02/25/19 22:16	
Bromomethane	5.0 U	5.0	0.70	1	02/25/19 22:16	
Carbon Disulfide	10 U	10	0.25	1	02/25/19 22:16	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/25/19 22:16	
Chlorobenzene	5.0 U	5.0	0.20	1	02/25/19 22:16	
Chloroethane	5.0 U	5.0	0.23	1	02/25/19 22:16	
Chloroform	5.0 U	5.0	0.24	1	02/25/19 22:16	
Chloromethane	5.0 U	5.0	0.28	1	02/25/19 22:16	
Cyclohexane	10 U	10	0.26	1	02/25/19 22:16	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/25/19 22:16	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/25/19 22:16	
Dichloromethane	5.0 U	5.0	0.36	1	02/25/19 22:16	
Ethylbenzene	5.0 U	5.0	0.20	1	02/25/19 22:16	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/25/19 22:16	
Methyl Acetate	10 U	10	0.33	1	02/25/19 22:16	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/25/19 22:16	
Methylcyclohexane	10 U	10	0.20	1	02/25/19 22:16	
Styrene	5.0 U	5.0	0.20	1	02/25/19 22:16	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/25/19 22:16	
Toluene	5.0 U	5.0	0.20	1	02/25/19 22:16	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 15:10
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-26A	**Units:**	ug/L
Lab Code:	R1901592-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/25/19 22:16	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/25/19 22:16	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/25/19 22:16	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/25/19 22:16	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/25/19 22:16	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/25/19 22:16	
o-Xylene	5.0 U	5.0	0.20	1	02/25/19 22:16	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/25/19 22:16	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/25/19 22:16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	02/25/19 22:16	
Dibromofluoromethane	100	89 - 119	02/25/19 22:16	
Toluene-d8	100	87 - 121	02/25/19 22:16	

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 15:40
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-9A	**Units:**	ug/L
Lab Code:	R1901592-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/26/19 02:14	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/26/19 02:14	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/26/19 02:14	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/26/19 02:14	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,4-Dioxane	100 U	100	13	1	02/26/19 02:14	
2-Butanone (MEK)	10 U	10	0.78	1	02/26/19 02:14	
2-Hexanone	10 U	10	0.20	1	02/26/19 02:14	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/26/19 02:14	
Acetone	10 U	10	2.1	1	02/26/19 02:14	
Benzene	5.0 U	5.0	0.20	1	02/26/19 02:14	
Bromochloromethane	5.0 U	5.0	0.24	1	02/26/19 02:14	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/26/19 02:14	
Bromoform	5.0 U	5.0	0.25	1	02/26/19 02:14	
Bromomethane	5.0 U	5.0	0.70	1	02/26/19 02:14	
Carbon Disulfide	**2.7 J**	10	0.25	1	02/26/19 02:14	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/26/19 02:14	
Chlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:14	
Chloroethane	5.0 U	5.0	0.23	1	02/26/19 02:14	
Chloroform	5.0 U	5.0	0.24	1	02/26/19 02:14	
Chloromethane	5.0 U	5.0	0.28	1	02/26/19 02:14	
Cyclohexane	10 U	10	0.26	1	02/26/19 02:14	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/26/19 02:14	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/26/19 02:14	
Dichloromethane	5.0 U	5.0	0.36	1	02/26/19 02:14	
Ethylbenzene	5.0 U	5.0	0.20	1	02/26/19 02:14	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/26/19 02:14	
Methyl Acetate	10 U	10	0.33	1	02/26/19 02:14	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/26/19 02:14	
Methylcyclohexane	10 U	10	0.20	1	02/26/19 02:14	
Styrene	5.0 U	5.0	0.20	1	02/26/19 02:14	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/26/19 02:14	
Toluene	5.0 U	5.0	0.20	1	02/26/19 02:14	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 15:40
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-9A	**Units:**	ug/L
Lab Code:	R1901592-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/26/19 02:14	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/26/19 02:14	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/26/19 02:14	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/26/19 02:14	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/26/19 02:14	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/26/19 02:14	
o-Xylene	5.0 U	5.0	0.20	1	02/26/19 02:14	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/26/19 02:14	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/26/19 02:14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	02/26/19 02:14	
Dibromofluoromethane	101	89 - 119	02/26/19 02:14	
Toluene-d8	99	87 - 121	02/26/19 02:14	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 09:30
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-9	**Units:**	ug/L
Lab Code:	R1901592-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/26/19 02:35	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/26/19 02:35	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/26/19 02:35	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/26/19 02:35	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,4-Dichlorobenzene	**0.24 J**	5.0	0.20	1	02/26/19 02:35	
1,4-Dioxane	100 U	100	13	1	02/26/19 02:35	
2-Butanone (MEK)	10 U	10	0.78	1	02/26/19 02:35	
2-Hexanone	10 U	10	0.20	1	02/26/19 02:35	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/26/19 02:35	
Acetone	**3.4 J**	10	2.1	1	02/26/19 02:35	
Benzene	5.0 U	5.0	0.20	1	02/26/19 02:35	
Bromochloromethane	5.0 U	5.0	0.24	1	02/26/19 02:35	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/26/19 02:35	
Bromoform	5.0 U	5.0	0.25	1	02/26/19 02:35	
Bromomethane	5.0 U	5.0	0.70	1	02/26/19 02:35	
Carbon Disulfide	**0.26 J**	10	0.25	1	02/26/19 02:35	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/26/19 02:35	
Chlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:35	
Chloroethane	5.0 U	5.0	0.23	1	02/26/19 02:35	
Chloroform	5.0 U	5.0	0.24	1	02/26/19 02:35	
Chloromethane	5.0 U	5.0	0.28	1	02/26/19 02:35	
Cyclohexane	10 U	10	0.26	1	02/26/19 02:35	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/26/19 02:35	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/26/19 02:35	
Dichloromethane	5.0 U	5.0	0.36	1	02/26/19 02:35	
Ethylbenzene	5.0 U	5.0	0.20	1	02/26/19 02:35	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/26/19 02:35	
Methyl Acetate	10 U	10	0.33	1	02/26/19 02:35	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/26/19 02:35	
Methylcyclohexane	10 U	10	0.20	1	02/26/19 02:35	
Styrene	5.0 U	5.0	0.20	1	02/26/19 02:35	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/26/19 02:35	
Toluene	5.0 U	5.0	0.20	1	02/26/19 02:35	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 09:30
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-9	**Units:**	ug/L
Lab Code:	R1901592-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/26/19 02:35	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/26/19 02:35	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/26/19 02:35	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/26/19 02:35	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/26/19 02:35	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/26/19 02:35	
o-Xylene	5.0 U	5.0	0.20	1	02/26/19 02:35	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/26/19 02:35	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/26/19 02:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	02/26/19 02:35	
Dibromofluoromethane	98	89 - 119	02/26/19 02:35	
Toluene-d8	97	87 - 121	02/26/19 02:35	

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 10:20
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-6	**Units:**	ug/L
Lab Code:	R1901592-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	25 U	25	1.1	5	02/26/19 14:39	
1,1,2,2-Tetrachloroethane	25 U	25	1.0	5	02/26/19 14:39	
1,1,2-Trichloroethane	25 U	25	1.0	5	02/26/19 14:39	
1,1,2-Trichloro-1,2,2-trifluoroethane	25 U	25	1.0	5	02/26/19 14:39	
1,1-Dichloroethane (1,1-DCA)	25 U	25	1.0	5	02/26/19 14:39	
1,1-Dichloroethene (1,1-DCE)	**9.3 J**	25	1.3	5	02/26/19 14:39	
1,2,3-Trichlorobenzene	25 U	25	1.0	5	02/26/19 14:39	
1,2,4-Trichlorobenzene	25 U	25	1.3	5	02/26/19 14:39	
1,2-Dibromo-3-chloropropane (DBCP)	25 U	25	2.3	5	02/26/19 14:39	
1,2-Dibromoethane	25 U	25	1.0	5	02/26/19 14:39	
1,2-Dichlorobenzene	25 U	25	1.0	5	02/26/19 14:39	
1,2-Dichloroethane	25 U	25	1.0	5	02/26/19 14:39	
1,2-Dichloropropane	25 U	25	1.0	5	02/26/19 14:39	
1,3-Dichlorobenzene	25 U	25	1.0	5	02/26/19 14:39	
1,4-Dichlorobenzene	25 U	25	1.0	5	02/26/19 14:39	
1,4-Dioxane	500 U	500	65	5	02/26/19 14:39	
2-Butanone (MEK)	50 U	50	3.9	5	02/26/19 14:39	
2-Hexanone	50 U	50	1.0	5	02/26/19 14:39	
4-Methyl-2-pentanone	50 U	50	1.0	5	02/26/19 14:39	
Acetone	50 U	50	11	5	02/26/19 14:39	
Benzene	25 U	25	1.0	5	02/26/19 14:39	
Bromochloromethane	25 U	25	1.2	5	02/26/19 14:39	
Bromodichloromethane	25 U	25	1.1	5	02/26/19 14:39	
Bromoform	25 U	25	1.3	5	02/26/19 14:39	
Bromomethane	25 U	25	3.5	5	02/26/19 14:39	
Carbon Disulfide	50 U	50	1.3	5	02/26/19 14:39	
Carbon Tetrachloride	25 U	25	1.7	5	02/26/19 14:39	
Chlorobenzene	25 U	25	1.0	5	02/26/19 14:39	
Chloroethane	25 U	25	1.2	5	02/26/19 14:39	
Chloroform	25 U	25	1.2	5	02/26/19 14:39	
Chloromethane	25 U	25	1.4	5	02/26/19 14:39	
Cyclohexane	50 U	50	1.3	5	02/26/19 14:39	
Dibromochloromethane	25 U	25	1.0	5	02/26/19 14:39	
Dichlorodifluoromethane (CFC 12)	25 U	25	1.1	5	02/26/19 14:39	
Dichloromethane	25 U	25	1.8	5	02/26/19 14:39	
Ethylbenzene	25 U	25	1.0	5	02/26/19 14:39	
Isopropylbenzene (Cumene)	25 U	25	1.0	5	02/26/19 14:39	
Methyl Acetate	50 U	50	1.7	5	02/26/19 14:39	
Methyl tert-Butyl Ether	25 U	25	1.0	5	02/26/19 14:39	
Methylcyclohexane	50 U	50	1.0	5	02/26/19 14:39	
Styrene	25 U	25	1.0	5	02/26/19 14:39	
Tetrachloroethene (PCE)	25 U	25	1.1	5	02/26/19 14:39	
Toluene	25 U	25	1.0	5	02/26/19 14:39	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 10:20
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-6	**Units:**	ug/L
Lab Code:	R1901592-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**110**		25	1.0	5	02/26/19 14:39	
Trichlorofluoromethane (CFC 11)	25	U	25	1.2	5	02/26/19 14:39	
Vinyl Chloride	25	U	25	1.0	5	02/26/19 14:39	
cis-1,2-Dichloroethene	**800**	**D**	50	2.3	10	02/26/19 11:51	
cis-1,3-Dichloropropene	25	U	25	1.0	5	02/26/19 14:39	
m,p-Xylenes	25	U	25	1.0	5	02/26/19 14:39	
o-Xylene	25	U	25	1.0	5	02/26/19 14:39	
trans-1,2-Dichloroethene	**7.3**	**J**	25	1.0	5	02/26/19 14:39	
trans-1,3-Dichloropropene	25	U	25	1.2	5	02/26/19 14:39	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	02/26/19 14:39	
Dibromofluoromethane	101	89 - 119	02/26/19 14:39	
Toluene-d8	100	87 - 121	02/26/19 14:39	

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 11:00
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-10	**Units:**	ug/L
Lab Code:	R1901592-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/26/19 02:57	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/26/19 02:57	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/26/19 02:57	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/26/19 02:57	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,4-Dichlorobenzene	**0.87 J**	5.0	0.20	1	02/26/19 02:57	
1,4-Dioxane	100 U	100	13	1	02/26/19 02:57	
2-Butanone (MEK)	10 U	10	0.78	1	02/26/19 02:57	
2-Hexanone	10 U	10	0.20	1	02/26/19 02:57	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/26/19 02:57	
Acetone	10 U	10	2.1	1	02/26/19 02:57	
Benzene	5.0 U	5.0	0.20	1	02/26/19 02:57	
Bromochloromethane	5.0 U	5.0	0.24	1	02/26/19 02:57	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/26/19 02:57	
Bromoform	5.0 U	5.0	0.25	1	02/26/19 02:57	
Bromomethane	5.0 U	5.0	0.70	1	02/26/19 02:57	
Carbon Disulfide	10 U	10	0.25	1	02/26/19 02:57	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/26/19 02:57	
Chlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:57	
Chloroethane	5.0 U	5.0	0.23	1	02/26/19 02:57	
Chloroform	**1.7 J**	5.0	0.24	1	02/26/19 02:57	
Chloromethane	5.0 U	5.0	0.28	1	02/26/19 02:57	
Cyclohexane	10 U	10	0.26	1	02/26/19 02:57	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/26/19 02:57	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/26/19 02:57	
Dichloromethane	5.0 U	5.0	0.36	1	02/26/19 02:57	
Ethylbenzene	5.0 U	5.0	0.20	1	02/26/19 02:57	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/26/19 02:57	
Methyl Acetate	10 U	10	0.33	1	02/26/19 02:57	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/26/19 02:57	
Methylcyclohexane	10 U	10	0.20	1	02/26/19 02:57	
Styrene	5.0 U	5.0	0.20	1	02/26/19 02:57	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/26/19 02:57	
Toluene	5.0 U	5.0	0.20	1	02/26/19 02:57	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 11:00
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-10	**Units:**	ug/L
Lab Code:	R1901592-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/26/19 02:57	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/26/19 02:57	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/26/19 02:57	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/26/19 02:57	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/26/19 02:57	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/26/19 02:57	
o-Xylene	5.0 U	5.0	0.20	1	02/26/19 02:57	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/26/19 02:57	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/26/19 02:57	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	02/26/19 02:57	
Dibromofluoromethane	99	89 - 119	02/26/19 02:57	
Toluene-d8	99	87 - 121	02/26/19 02:57	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 11:45
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-25A	**Units:**	ug/L
Lab Code:	R1901592-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/26/19 03:18	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/26/19 03:18	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/26/19 03:18	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/26/19 03:18	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,4-Dioxane	100 U	100	13	1	02/26/19 03:18	
2-Butanone (MEK)	10 U	10	0.78	1	02/26/19 03:18	
2-Hexanone	10 U	10	0.20	1	02/26/19 03:18	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/26/19 03:18	
Acetone	10 U	10	2.1	1	02/26/19 03:18	
Benzene	5.0 U	5.0	0.20	1	02/26/19 03:18	
Bromochloromethane	5.0 U	5.0	0.24	1	02/26/19 03:18	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/26/19 03:18	
Bromoform	5.0 U	5.0	0.25	1	02/26/19 03:18	
Bromomethane	5.0 U	5.0	0.70	1	02/26/19 03:18	
Carbon Disulfide	10 U	10	0.25	1	02/26/19 03:18	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/26/19 03:18	
Chlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:18	
Chloroethane	5.0 U	5.0	0.23	1	02/26/19 03:18	
Chloroform	5.0 U	5.0	0.24	1	02/26/19 03:18	
Chloromethane	5.0 U	5.0	0.28	1	02/26/19 03:18	
Cyclohexane	10 U	10	0.26	1	02/26/19 03:18	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/26/19 03:18	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/26/19 03:18	
Dichloromethane	5.0 U	5.0	0.36	1	02/26/19 03:18	
Ethylbenzene	5.0 U	5.0	0.20	1	02/26/19 03:18	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/26/19 03:18	
Methyl Acetate	10 U	10	0.33	1	02/26/19 03:18	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/26/19 03:18	
Methylcyclohexane	10 U	10	0.20	1	02/26/19 03:18	
Styrene	5.0 U	5.0	0.20	1	02/26/19 03:18	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/26/19 03:18	
Toluene	5.0 U	5.0	0.20	1	02/26/19 03:18	

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 11:45
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-25A	**Units:**	ug/L
Lab Code:	R1901592-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**0.62**	**J**	5.0	0.20	1	02/26/19 03:18	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	02/26/19 03:18	
Vinyl Chloride	5.0	U	5.0	0.20	1	02/26/19 03:18	
cis-1,2-Dichloroethene	**0.26**	**J**	5.0	0.23	1	02/26/19 03:18	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	02/26/19 03:18	
m,p-Xylenes	5.0	U	5.0	0.20	1	02/26/19 03:18	
o-Xylene	5.0	U	5.0	0.20	1	02/26/19 03:18	
trans-1,2-Dichloroethene	5.0	U	5.0	0.20	1	02/26/19 03:18	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	02/26/19 03:18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	02/26/19 03:18	
Dibromofluoromethane	100	89 - 119	02/26/19 03:18	
Toluene-d8	98	87 - 121	02/26/19 03:18	

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 14:00
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-21A	**Units:**	ug/L
Lab Code:	R1901592-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/26/19 03:40	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,1-Dichloroethene (1,1-DCE)	**1.7 J**	5.0	0.25	1	02/26/19 03:40	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/26/19 03:40	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/26/19 03:40	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,2-Dichlorobenzene	**0.38 J**	5.0	0.20	1	02/26/19 03:40	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,4-Dioxane	100 U	100	13	1	02/26/19 03:40	
2-Butanone (MEK)	10 U	10	0.78	1	02/26/19 03:40	
2-Hexanone	10 U	10	0.20	1	02/26/19 03:40	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/26/19 03:40	
Acetone	**2.3 J**	10	2.1	1	02/26/19 03:40	
Benzene	**0.37 J**	5.0	0.20	1	02/26/19 03:40	
Bromochloromethane	5.0 U	5.0	0.24	1	02/26/19 03:40	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/26/19 03:40	
Bromoform	5.0 U	5.0	0.25	1	02/26/19 03:40	
Bromomethane	5.0 U	5.0	0.70	1	02/26/19 03:40	
Carbon Disulfide	**1.6 J**	10	0.25	1	02/26/19 03:40	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/26/19 03:40	
Chlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:40	
Chloroethane	5.0 U	5.0	0.23	1	02/26/19 03:40	
Chloroform	5.0 U	5.0	0.24	1	02/26/19 03:40	
Chloromethane	5.0 U	5.0	0.28	1	02/26/19 03:40	
Cyclohexane	**0.45 J**	10	0.26	1	02/26/19 03:40	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/26/19 03:40	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/26/19 03:40	
Dichloromethane	5.0 U	5.0	0.36	1	02/26/19 03:40	
Ethylbenzene	5.0 U	5.0	0.20	1	02/26/19 03:40	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/26/19 03:40	
Methyl Acetate	10 U	10	0.33	1	02/26/19 03:40	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/26/19 03:40	
Methylcyclohexane	**0.22 J**	10	0.20	1	02/26/19 03:40	
Styrene	5.0 U	5.0	0.20	1	02/26/19 03:40	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/26/19 03:40	
Toluene	5.0 U	5.0	0.20	1	02/26/19 03:40	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 14:00
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-21A	**Units:**	ug/L
Lab Code:	R1901592-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**11**	5.0	0.20	1	02/26/19 03:40	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/26/19 03:40	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/26/19 03:40	
cis-1,2-Dichloroethene	**160**	5.0	0.23	1	02/26/19 03:40	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/26/19 03:40	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/26/19 03:40	
o-Xylene	5.0 U	5.0	0.20	1	02/26/19 03:40	
trans-1,2-Dichloroethene	**12**	5.0	0.20	1	02/26/19 03:40	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/26/19 03:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	02/26/19 03:40	
Dibromofluoromethane	100	89 - 119	02/26/19 03:40	
Toluene-d8	99	87 - 121	02/26/19 03:40	

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R1901592-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/26/19 01:52	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/26/19 01:52	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/26/19 01:52	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/26/19 01:52	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,4-Dioxane	100 U	100	13	1	02/26/19 01:52	
2-Butanone (MEK)	10 U	10	0.78	1	02/26/19 01:52	
2-Hexanone	10 U	10	0.20	1	02/26/19 01:52	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/26/19 01:52	
Acetone	10 U	10	2.1	1	02/26/19 01:52	
Benzene	5.0 U	5.0	0.20	1	02/26/19 01:52	
Bromochloromethane	5.0 U	5.0	0.24	1	02/26/19 01:52	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/26/19 01:52	
Bromoform	5.0 U	5.0	0.25	1	02/26/19 01:52	
Bromomethane	5.0 U	5.0	0.70	1	02/26/19 01:52	
Carbon Disulfide	10 U	10	0.25	1	02/26/19 01:52	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/26/19 01:52	
Chlorobenzene	5.0 U	5.0	0.20	1	02/26/19 01:52	
Chloroethane	5.0 U	5.0	0.23	1	02/26/19 01:52	
Chloroform	5.0 U	5.0	0.24	1	02/26/19 01:52	
Chloromethane	5.0 U	5.0	0.28	1	02/26/19 01:52	
Cyclohexane	10 U	10	0.26	1	02/26/19 01:52	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/26/19 01:52	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/26/19 01:52	
Dichloromethane	5.0 U	5.0	0.36	1	02/26/19 01:52	
Ethylbenzene	5.0 U	5.0	0.20	1	02/26/19 01:52	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/26/19 01:52	
Methyl Acetate	10 U	10	0.33	1	02/26/19 01:52	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/26/19 01:52	
Methylcyclohexane	10 U	10	0.20	1	02/26/19 01:52	
Styrene	5.0 U	5.0	0.20	1	02/26/19 01:52	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/26/19 01:52	
Toluene	5.0 U	5.0	0.20	1	02/26/19 01:52	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R1901592-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/26/19 01:52	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/26/19 01:52	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/26/19 01:52	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/26/19 01:52	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/26/19 01:52	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/26/19 01:52	
o-Xylene	5.0 U	5.0	0.20	1	02/26/19 01:52	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/26/19 01:52	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/26/19 01:52	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	02/26/19 01:52	
Dibromofluoromethane	100	89 - 119	02/26/19 01:52	
Toluene-d8	98	87 - 121	02/26/19 01:52	

QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: The LiRo Group **Service Request:** R1901592
Project: Buffalo China/16-344-1389
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene 85-122	Dibromofluoromethane 89-119	Toluene-d8 87-121
MW-7	R1901592-001	102	100	99
MW-9A	R1901592-006	97	101	99
MW-9	R1901592-007	98	98	97
MW-6	R1901592-008	101	101	100
MW-10	R1901592-009	97	99	99
MW-25A	R1901592-010	97	100	98
MW-21A	R1901592-011	97	100	99
Trip Blank	R1901592-012	99	100	98
Method Blank	RQ1901613-04	97	98	98
Method Blank	RQ1901633-04	96	98	97
Lab Control Sample	RQ1901613-03	100	104	100
Lab Control Sample	RQ1901633-03	99	101	99
MW-7A	R1901592-002	99	104	101
MW-8A	R1901592-003	97	102	100
MW-26	R1901592-004	97	103	101
MW-26A	R1901592-005	99	100	100
Method Blank	RQ1901592-04	100	99	99
Lab Control Sample	RQ1901592-03	98	100	98

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	02/25/19 15:37
Sample Matrix:	Water	**Date Extracted:**	

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-12
Lab Code:	RQ1901592-04	**File ID:**	I:\ACQUDATA\msvoa12\Data\022519\P24458.D\
Analysis Method:	8260C	**Analysis Lot:**	626275
Prep Method:	EPA 5035A		

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1901592-03	I:\ACQUDATA\msvoa12\Data\022519\P24456.D\	02/25/19 14:41
MW-7A	R1901592-002	I:\ACQUDATA\msvoa12\Data\022519\P24473.D\	02/25/19 21:11
MW-8A	R1901592-003	I:\ACQUDATA\msvoa12\Data\022519\P24474.D\	02/25/19 21:33
MW-26	R1901592-004	I:\ACQUDATA\msvoa12\Data\022519\P24475.D\	02/25/19 21:55
MW-26A	R1901592-005	I:\ACQUDATA\msvoa12\Data\022519\P24476.D\	02/25/19 22:16

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	02/26/19 01:31
Sample Matrix:	Water	**Date Extracted:**	

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank **Instrument ID:** R-MS-12

Lab Code: RQ1901613-04 **File ID:** I:\ACQUDATA\msvoa12\Data\022519\P24485.D\

Analysis Method: 8260C **Analysis Lot:** 626321

Prep Method: EPA 5030C

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1901613-03	I:\ACQUDATA\msvoa12\Data\022519\P24483.D\	02/26/19 00:47
Trip Blank	R1901592-012	I:\ACQUDATA\msvoa12\Data\022519\P24486.D\	02/26/19 01:52
MW-9A	R1901592-006	I:\ACQUDATA\msvoa12\Data\022519\P24487.D\	02/26/19 02:14
MW-9	R1901592-007	I:\ACQUDATA\msvoa12\Data\022519\P24488.D\	02/26/19 02:35
MW-10	R1901592-009	I:\ACQUDATA\msvoa12\Data\022519\P24489.D\	02/26/19 02:57
MW-25A	R1901592-010	I:\ACQUDATA\msvoa12\Data\022519\P24490.D\	02/26/19 03:18
MW-21A	R1901592-011	I:\ACQUDATA\msvoa12\Data\022519\P24491.D\	02/26/19 03:40
MW-6	R1901592-008	I:\ACQUDATA\msvoa12\Data\022519\P24503.D\	02/26/19 11:51

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	02/26/19 13:48
Sample Matrix:	Water	**Date Extracted:**	

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-12
Lab Code:	RQ1901633-04	**File ID:**	I:\ACQUDATA\msvoa12\Data\022619\P24508.D\
Analysis Method:	8260C	**Analysis Lot:**	626413
Prep Method:	EPA 5030C		

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1901633-03	I:\ACQUDATA\msvoa12\Data\022619\P24506.D\	02/26/19 13:05
MW-7	R1901592-001	I:\ACQUDATA\msvoa12\Data\022619\P24509.D\	02/26/19 14:18
MW-6	R1901592-008	I:\ACQUDATA\msvoa12\Data\022619\P24510.D\	02/26/19 14:39

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1901592-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/25/19 15:37	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/25/19 15:37	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/25/19 15:37	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/25/19 15:37	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/25/19 15:37	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/25/19 15:37	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 15:37	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/25/19 15:37	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/25/19 15:37	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/25/19 15:37	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 15:37	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/25/19 15:37	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/25/19 15:37	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 15:37	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 15:37	
1,4-Dioxane	100 U	100	13	1	02/25/19 15:37	
2-Butanone (MEK)	10 U	10	0.78	1	02/25/19 15:37	
2-Hexanone	10 U	10	0.20	1	02/25/19 15:37	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/25/19 15:37	
Acetone	10 U	10	2.1	1	02/25/19 15:37	
Benzene	5.0 U	5.0	0.20	1	02/25/19 15:37	
Bromochloromethane	5.0 U	5.0	0.24	1	02/25/19 15:37	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/25/19 15:37	
Bromoform	5.0 U	5.0	0.25	1	02/25/19 15:37	
Bromomethane	5.0 U	5.0	0.70	1	02/25/19 15:37	
Carbon Disulfide	**0.64 J**	10	0.25	1	02/25/19 15:37	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/25/19 15:37	
Chlorobenzene	5.0 U	5.0	0.20	1	02/25/19 15:37	
Chloroethane	5.0 U	5.0	0.23	1	02/25/19 15:37	
Chloroform	5.0 U	5.0	0.24	1	02/25/19 15:37	
Chloromethane	5.0 U	5.0	0.28	1	02/25/19 15:37	
Cyclohexane	10 U	10	0.26	1	02/25/19 15:37	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/25/19 15:37	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/25/19 15:37	
Dichloromethane	5.0 U	5.0	0.36	1	02/25/19 15:37	
Ethylbenzene	5.0 U	5.0	0.20	1	02/25/19 15:37	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/25/19 15:37	
Methyl Acetate	10 U	10	0.33	1	02/25/19 15:37	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/25/19 15:37	
Methylcyclohexane	10 U	10	0.20	1	02/25/19 15:37	
Styrene	5.0 U	5.0	0.20	1	02/25/19 15:37	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/25/19 15:37	
Toluene	5.0 U	5.0	0.20	1	02/25/19 15:37	

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1901592-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/25/19 15:37	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/25/19 15:37	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/25/19 15:37	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/25/19 15:37	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/25/19 15:37	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/25/19 15:37	
o-Xylene	5.0 U	5.0	0.20	1	02/25/19 15:37	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/25/19 15:37	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/25/19 15:37	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	02/25/19 15:37	
Dibromofluoromethane	99	89 - 119	02/25/19 15:37	
Toluene-d8	99	87 - 121	02/25/19 15:37	

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1901613-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/26/19 01:31	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/26/19 01:31	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/26/19 01:31	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/26/19 01:31	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/26/19 01:31	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/26/19 01:31	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 01:31	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/26/19 01:31	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/26/19 01:31	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/26/19 01:31	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 01:31	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/26/19 01:31	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/26/19 01:31	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 01:31	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 01:31	
1,4-Dioxane	100 U	100	13	1	02/26/19 01:31	
2-Butanone (MEK)	10 U	10	0.78	1	02/26/19 01:31	
2-Hexanone	10 U	10	0.20	1	02/26/19 01:31	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/26/19 01:31	
Acetone	10 U	10	2.1	1	02/26/19 01:31	
Benzene	5.0 U	5.0	0.20	1	02/26/19 01:31	
Bromochloromethane	5.0 U	5.0	0.24	1	02/26/19 01:31	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/26/19 01:31	
Bromoform	5.0 U	5.0	0.25	1	02/26/19 01:31	
Bromomethane	5.0 U	5.0	0.70	1	02/26/19 01:31	
Carbon Disulfide	10 U	10	0.25	1	02/26/19 01:31	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/26/19 01:31	
Chlorobenzene	5.0 U	5.0	0.20	1	02/26/19 01:31	
Chloroethane	5.0 U	5.0	0.23	1	02/26/19 01:31	
Chloroform	5.0 U	5.0	0.24	1	02/26/19 01:31	
Chloromethane	5.0 U	5.0	0.28	1	02/26/19 01:31	
Cyclohexane	10 U	10	0.26	1	02/26/19 01:31	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/26/19 01:31	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/26/19 01:31	
Dichloromethane	5.0 U	5.0	0.36	1	02/26/19 01:31	
Ethylbenzene	5.0 U	5.0	0.20	1	02/26/19 01:31	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/26/19 01:31	
Methyl Acetate	10 U	10	0.33	1	02/26/19 01:31	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/26/19 01:31	
Methylcyclohexane	10 U	10	0.20	1	02/26/19 01:31	
Styrene	5.0 U	5.0	0.20	1	02/26/19 01:31	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/26/19 01:31	
Toluene	5.0 U	5.0	0.20	1	02/26/19 01:31	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1901613-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/26/19 01:31	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/26/19 01:31	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/26/19 01:31	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/26/19 01:31	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/26/19 01:31	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/26/19 01:31	
o-Xylene	5.0 U	5.0	0.20	1	02/26/19 01:31	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/26/19 01:31	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/26/19 01:31	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	02/26/19 01:31	
Dibromofluoromethane	98	89 - 119	02/26/19 01:31	
Toluene-d8	98	87 - 121	02/26/19 01:31	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1901633-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/26/19 13:48	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/26/19 13:48	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/26/19 13:48	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/26/19 13:48	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/26/19 13:48	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/26/19 13:48	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 13:48	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/26/19 13:48	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/26/19 13:48	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/26/19 13:48	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 13:48	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/26/19 13:48	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/26/19 13:48	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 13:48	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 13:48	
1,4-Dioxane	100 U	100	13	1	02/26/19 13:48	
2-Butanone (MEK)	10 U	10	0.78	1	02/26/19 13:48	
2-Hexanone	10 U	10	0.20	1	02/26/19 13:48	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/26/19 13:48	
Acetone	10 U	10	2.1	1	02/26/19 13:48	
Benzene	5.0 U	5.0	0.20	1	02/26/19 13:48	
Bromochloromethane	5.0 U	5.0	0.24	1	02/26/19 13:48	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/26/19 13:48	
Bromoform	5.0 U	5.0	0.25	1	02/26/19 13:48	
Bromomethane	5.0 U	5.0	0.70	1	02/26/19 13:48	
Carbon Disulfide	**0.25 J**	10	0.25	1	02/26/19 13:48	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/26/19 13:48	
Chlorobenzene	5.0 U	5.0	0.20	1	02/26/19 13:48	
Chloroethane	5.0 U	5.0	0.23	1	02/26/19 13:48	
Chloroform	5.0 U	5.0	0.24	1	02/26/19 13:48	
Chloromethane	5.0 U	5.0	0.28	1	02/26/19 13:48	
Cyclohexane	10 U	10	0.26	1	02/26/19 13:48	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/26/19 13:48	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/26/19 13:48	
Dichloromethane	5.0 U	5.0	0.36	1	02/26/19 13:48	
Ethylbenzene	5.0 U	5.0	0.20	1	02/26/19 13:48	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/26/19 13:48	
Methyl Acetate	10 U	10	0.33	1	02/26/19 13:48	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/26/19 13:48	
Methylcyclohexane	10 U	10	0.20	1	02/26/19 13:48	
Styrene	5.0 U	5.0	0.20	1	02/26/19 13:48	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/26/19 13:48	
Toluene	5.0 U	5.0	0.20	1	02/26/19 13:48	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1901633-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/26/19 13:48	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/26/19 13:48	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/26/19 13:48	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/26/19 13:48	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/26/19 13:48	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/26/19 13:48	
o-Xylene	5.0 U	5.0	0.20	1	02/26/19 13:48	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/26/19 13:48	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/26/19 13:48	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	02/26/19 13:48	
Dibromofluoromethane	98	89 - 119	02/26/19 13:48	
Toluene-d8	97	87 - 121	02/26/19 13:48	

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	02/25/19 14:41
Sample Matrix:	Water	**Date Extracted:**	

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-12
Lab Code:	RQ1901592-03	**File ID:**	I:\ACQUDATA\msvoa12\Data\022519\P24456.D\
Analysis Method:	8260C	**Analysis Lot:**	626275
Prep Method:	EPA 5035A		

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ1901592-04	I:\ACQUDATA\msvoa12\Data\022519\P24458.D\	02/25/19 15:37
MW-7A	R1901592-002	I:\ACQUDATA\msvoa12\Data\022519\P24473.D\	02/25/19 21:11
MW-8A	R1901592-003	I:\ACQUDATA\msvoa12\Data\022519\P24474.D\	02/25/19 21:33
MW-26	R1901592-004	I:\ACQUDATA\msvoa12\Data\022519\P24475.D\	02/25/19 21:55
MW-26A	R1901592-005	I:\ACQUDATA\msvoa12\Data\022519\P24476.D\	02/25/19 22:16

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	02/26/19 00:47
Sample Matrix:	Water	**Date Extracted:**	

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-12
Lab Code:	RQ1901613-03	**File ID:**	I:\ACQUDATA\msvoa12\Data\022519\P24483.D\
Analysis Method:	8260C	**Analysis Lot:**	626321
Prep Method:	EPA 5030C		

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ1901613-04	I:\ACQUDATA\msvoa12\Data\022519\P24485.D\	02/26/19 01:31
Trip Blank	R1901592-012	I:\ACQUDATA\msvoa12\Data\022519\P24486.D\	02/26/19 01:52
MW-9A	R1901592-006	I:\ACQUDATA\msvoa12\Data\022519\P24487.D\	02/26/19 02:14
MW-9	R1901592-007	I:\ACQUDATA\msvoa12\Data\022519\P24488.D\	02/26/19 02:35
MW-10	R1901592-009	I:\ACQUDATA\msvoa12\Data\022519\P24489.D\	02/26/19 02:57
MW-25A	R1901592-010	I:\ACQUDATA\msvoa12\Data\022519\P24490.D\	02/26/19 03:18
MW-21A	R1901592-011	I:\ACQUDATA\msvoa12\Data\022519\P24491.D\	02/26/19 03:40
MW-6	R1901592-008	I:\ACQUDATA\msvoa12\Data\022519\P24503.D\	02/26/19 11:51

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	02/26/19 13:05
Sample Matrix:	Water	**Date Extracted:**	

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-12
Lab Code:	RQ1901633-03	**File ID:**	I:\ACQUDATA\msvoa12\Data\022619\P24506.D\
Analysis Method:	8260C	**Analysis Lot:**	626413
Prep Method:	EPA 5030C		

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ1901633-04	I:\ACQUDATA\msvoa12\Data\022619\P24508.D\	02/26/19 13:48
MW-7	R1901592-001	I:\ACQUDATA\msvoa12\Data\022619\P24509.D\	02/26/19 14:18
MW-6	R1901592-008	I:\ACQUDATA\msvoa12\Data\022619\P24510.D\	02/26/19 14:39

Client: The LiRo Group
Project: Buffalo China/16-344-1389
Sample Matrix: Water

Service Request: R1901592
Date Analyzed: 02/25/19

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1901592-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	18.0	20.0	90	75-125
1,1,2,2-Tetrachloroethane	8260C	17.2	20.0	86	78-126
1,1,2-Trichloroethane	8260C	17.2	20.0	86	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	18.3	20.0	92	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	18.7	20.0	93	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	18.8	20.0	94	71-118
1,2,3-Trichlorobenzene	8260C	18.2	20.0	91	67-136
1,2,4-Trichlorobenzene	8260C	19.2	20.0	96	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	16.0	20.0	80	55-136
1,2-Dibromoethane	8260C	17.0	20.0	85	82-127
1,2-Dichlorobenzene	8260C	17.2	20.0	86	80-119
1,2-Dichloroethane	8260C	17.7	20.0	89	71-127
1,2-Dichloropropane	8260C	17.5	20.0	88	80-119
1,3-Dichlorobenzene	8260C	17.7	20.0	88	83-121
1,4-Dichlorobenzene	8260C	17.0	20.0	85	79-119
1,4-Dioxane	8260C	402	400	101	44-154
2-Butanone (MEK)	8260C	17.2	20.0	86	61-137
2-Hexanone	8260C	16.4	20.0	82	63-124
4-Methyl-2-pentanone	8260C	16.9	20.0	84	66-124
Acetone	8260C	19.7	20.0	98	40-161
Benzene	8260C	17.9	20.0	89	79-119
Bromochloromethane	8260C	18.1	20.0	91	81-126
Bromodichloromethane	8260C	17.1	20.0	85	81-123
Bromoform	8260C	17.1	20.0	85	65-146
Bromomethane	8260C	19.8	20.0	99	42-166
Carbon Disulfide	8260C	20.9	20.0	105	66-128
Carbon Tetrachloride	8260C	16.5	20.0	82	70-127
Chlorobenzene	8260C	17.4	20.0	87	80-121
Chloroethane	8260C	15.4	20.0	77	62-131
Chloroform	8260C	18.2	20.0	91	79-120
Chloromethane	8260C	15.7	20.0	78	65-135
Cyclohexane	8260C	18.8	20.0	94	69-120
Dibromochloromethane	8260C	18.1	20.0	90	72-128

Client: The LiRo Group
Project: Buffalo China/16-344-1389
Sample Matrix: Water

Service Request: R1901592
Date Analyzed: 02/25/19

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1901592-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	17.1	20.0	86	59-155
Dichloromethane	8260C	17.2	20.0	86	73-122
Ethylbenzene	8260C	17.3	20.0	87	76-120
Isopropylbenzene (Cumene)	8260C	17.7	20.0	89	77-128
Methyl Acetate	8260C	16.5	20.0	82	40-112
Methyl tert-Butyl Ether	8260C	19.1	20.0	96	75-118
Methylcyclohexane	8260C	18.9	20.0	94	51-129
Styrene	8260C	18.4	20.0	92	80-124
Tetrachloroethene (PCE)	8260C	17.3	20.0	86	72-125
Toluene	8260C	17.6	20.0	88	79-119
Trichloroethene (TCE)	8260C	17.1	20.0	86	74-122
Trichlorofluoromethane (CFC 11)	8260C	17.3	20.0	86	71-136
Vinyl Chloride	8260C	17.3	20.0	86	74-159
cis-1,2-Dichloroethene	8260C	18.1	20.0	91	80-121
cis-1,3-Dichloropropene	8260C	17.6	20.0	88	77-122
m,p-Xylenes	8260C	34.7	40.0	87	80-126
o-Xylene	8260C	17.7	20.0	88	79-123
trans-1,2-Dichloroethene	8260C	18.2	20.0	91	73-118
trans-1,3-Dichloropropene	8260C	18.4	20.0	92	71-133

Client: The LiRo Group
Project: Buffalo China/16-344-1389
Sample Matrix: Water

Service Request: R1901592
Date Analyzed: 02/26/19

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1901613-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	19.4	20.0	97	75-125
1,1,2,2-Tetrachloroethane	8260C	19.6	20.0	98	78-126
1,1,2-Trichloroethane	8260C	18.9	20.0	95	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	18.9	20.0	95	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	19.6	20.0	98	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	19.0	20.0	95	71-118
1,2,3-Trichlorobenzene	8260C	19.8	20.0	99	67-136
1,2,4-Trichlorobenzene	8260C	20.0	20.0	100	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	17.3	20.0	87	55-136
1,2-Dibromoethane	8260C	18.8	20.0	94	82-127
1,2-Dichlorobenzene	8260C	19.1	20.0	96	80-119
1,2-Dichloroethane	8260C	19.7	20.0	99	71-127
1,2-Dichloropropane	8260C	19.8	20.0	99	80-119
1,3-Dichlorobenzene	8260C	18.7	20.0	94	83-121
1,4-Dichlorobenzene	8260C	18.2	20.0	91	79-119
1,4-Dioxane	8260C	485	400	121	44-154
2-Butanone (MEK)	8260C	19.4	20.0	97	61-137
2-Hexanone	8260C	18.8	20.0	94	63-124
4-Methyl-2-pentanone	8260C	19.4	20.0	97	66-124
Acetone	8260C	21.9	20.0	109	40-161
Benzene	8260C	19.5	20.0	98	79-119
Bromochloromethane	8260C	19.6	20.0	98	81-126
Bromodichloromethane	8260C	19.4	20.0	97	81-123
Bromoform	8260C	18.1	20.0	90	65-146
Bromomethane	8260C	19.4	20.0	97	42-166
Carbon Disulfide	8260C	22.0	20.0	110	66-128
Carbon Tetrachloride	8260C	19.0	20.0	95	70-127
Chlorobenzene	8260C	18.8	20.0	94	80-121
Chloroethane	8260C	16.3	20.0	81	62-131
Chloroform	8260C	19.4	20.0	97	79-120
Chloromethane	8260C	17.0	20.0	85	65-135
Cyclohexane	8260C	20.5	20.0	102	69-120
Dibromochloromethane	8260C	18.6	20.0	93	72-128

Client: The LiRo Group
Project: Buffalo China/16-344-1389
Sample Matrix: Water

Service Request: R1901592
Date Analyzed: 02/26/19

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1901613-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	17.4	20.0	87	59-155
Dichloromethane	8260C	18.6	20.0	93	73-122
Ethylbenzene	8260C	18.9	20.0	95	76-120
Isopropylbenzene (Cumene)	8260C	18.9	20.0	94	77-128
Methyl Acetate	8260C	18.2	20.0	91	40-112
Methyl tert-Butyl Ether	8260C	20.5	20.0	102	75-118
Methylcyclohexane	8260C	20.4	20.0	102	51-129
Styrene	8260C	19.6	20.0	98	80-124
Tetrachloroethene (PCE)	8260C	18.7	20.0	94	72-125
Toluene	8260C	19.7	20.0	98	79-119
Trichloroethene (TCE)	8260C	19.0	20.0	95	74-122
Trichlorofluoromethane (CFC 11)	8260C	18.0	20.0	90	71-136
Vinyl Chloride	8260C	19.1	20.0	96	74-159
cis-1,2-Dichloroethene	8260C	19.4	20.0	97	80-121
cis-1,3-Dichloropropene	8260C	19.7	20.0	98	77-122
m,p-Xylenes	8260C	37.7	40.0	94	80-126
o-Xylene	8260C	19.0	20.0	95	79-123
trans-1,2-Dichloroethene	8260C	19.4	20.0	97	73-118
trans-1,3-Dichloropropene	8260C	20.1	20.0	100	71-133

Client: The LiRo Group
Project: Buffalo China/16-344-1389
Sample Matrix: Water

Service Request: R1901592
Date Analyzed: 02/26/19

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1901633-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	17.5	20.0	87	75-125
1,1,2,2-Tetrachloroethane	8260C	20.8	20.0	104	78-126
1,1,2-Trichloroethane	8260C	18.6	20.0	93	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	17.5	20.0	88	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	18.8	20.0	94	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	18.4	20.0	92	71-118
1,2,3-Trichlorobenzene	8260C	18.3	20.0	91	67-136
1,2,4-Trichlorobenzene	8260C	19.6	20.0	98	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	17.9	20.0	90	55-136
1,2-Dibromoethane	8260C	19.3	20.0	96	82-127
1,2-Dichlorobenzene	8260C	18.4	20.0	92	80-119
1,2-Dichloroethane	8260C	19.3	20.0	97	71-127
1,2-Dichloropropane	8260C	19.1	20.0	96	80-119
1,3-Dichlorobenzene	8260C	18.5	20.0	93	83-121
1,4-Dichlorobenzene	8260C	17.7	20.0	89	79-119
1,4-Dioxane	8260C	486	400	121	44-154
2-Butanone (MEK)	8260C	21.1	20.0	105	61-137
2-Hexanone	8260C	20.8	20.0	104	63-124
4-Methyl-2-pentanone	8260C	21.7	20.0	109	66-124
Acetone	8260C	21.9	20.0	110	40-161
Benzene	8260C	18.9	20.0	95	79-119
Bromochloromethane	8260C	19.5	20.0	98	81-126
Bromodichloromethane	8260C	18.4	20.0	92	81-123
Bromoform	8260C	19.0	20.0	95	65-146
Bromomethane	8260C	20.2	20.0	101	42-166
Carbon Disulfide	8260C	21.1	20.0	106	66-128
Carbon Tetrachloride	8260C	16.8	20.0	84	70-127
Chlorobenzene	8260C	18.4	20.0	92	80-121
Chloroethane	8260C	15.4	20.0	77	62-131
Chloroform	8260C	18.9	20.0	95	79-120
Chloromethane	8260C	16.5	20.0	82	65-135
Cyclohexane	8260C	20.7	20.0	104	69-120
Dibromochloromethane	8260C	18.3	20.0	91	72-128

Client: The LiRo Group
Project: Buffalo China/16-344-1389
Sample Matrix: Water

Service Request: R1901592
Date Analyzed: 02/26/19

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1901633-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	17.0	20.0	85	59-155
Dichloromethane	8260C	18.8	20.0	94	73-122
Ethylbenzene	8260C	17.5	20.0	87	76-120
Isopropylbenzene (Cumene)	8260C	18.0	20.0	90	77-128
Methyl Acetate	8260C	20.0	20.0	100	40-112
Methyl tert-Butyl Ether	8260C	20.5	20.0	102	75-118
Methylcyclohexane	8260C	20.7	20.0	103	51-129
Styrene	8260C	19.1	20.0	96	80-124
Tetrachloroethene (PCE)	8260C	17.4	20.0	87	72-125
Toluene	8260C	18.9	20.0	95	79-119
Trichloroethene (TCE)	8260C	17.6	20.0	88	74-122
Trichlorofluoromethane (CFC 11)	8260C	17.7	20.0	89	71-136
Vinyl Chloride	8260C	18.7	20.0	93	74-159
cis-1,2-Dichloroethene	8260C	19.2	20.0	96	80-121
cis-1,3-Dichloropropene	8260C	19.8	20.0	99	77-122
m,p-Xylenes	8260C	34.9	40.0	87	80-126
o-Xylene	8260C	18.0	20.0	90	79-123
trans-1,2-Dichloroethene	8260C	18.2	20.0	91	73-118
trans-1,3-Dichloropropene	8260C	20.0	20.0	100	71-133

Client: The LiRo Group **Service Request:**R1901592
Project: Buffalo China/16-344-1389 **Date Analyzed:**02/25/19 13:45

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\022519\P24454.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 626275

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	16.54	26144	Pass
75	95	30	60	46.50	73472	Pass
95	95	100	100	100.00	158019	Pass
96	95	5	9	6.72	10625	Pass
173	174	0	2	0.79	1065	Pass
174	95	50	120	85.80	135581	Pass
175	174	5	9	6.94	9412	Pass
176	174	95	101	97.14	131707	Pass
177	176	5	9	6.65	8757	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ1901592-02	I:\ACQUDATA\msvoa12\Data\022519\P24455.D\	02/25/19 14:15	
Lab Control Sample	RQ1901592-03	I:\ACQUDATA\msvoa12\Data\022519\P24456.D\	02/25/19 14:41	
Method Blank	RQ1901592-04	I:\ACQUDATA\msvoa12\Data\022519\P24458.D\	02/25/19 15:37	
MW-7A	R1901592-002	I:\ACQUDATA\msvoa12\Data\022519\P24473.D\	02/25/19 21:11	
MW-8A	R1901592-003	I:\ACQUDATA\msvoa12\Data\022519\P24474.D\	02/25/19 21:33	
MW-26	R1901592-004	I:\ACQUDATA\msvoa12\Data\022519\P24475.D\	02/25/19 21:55	
MW-26A	R1901592-005	I:\ACQUDATA\msvoa12\Data\022519\P24476.D\	02/25/19 22:16	

Client: The LiRo Group **Service Request:**R1901592
Project: Buffalo China/16-344-1389 **Date Analyzed:**02/26/19 00:04

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\022519\P24481.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 626321

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	17.25	27152	Pass
75	95	30	60	47.00	73984	Pass
95	95	100	100	100.00	157403	Pass
96	95	5	9	6.32	9949	Pass
173	174	0	2	0.84	1126	Pass
174	95	50	120	85.38	134392	Pass
175	174	5	9	6.95	9337	Pass
176	174	95	101	97.62	131195	Pass
177	176	5	9	6.93	9098	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ1901613-02	I:\ACQUDATA\msvoa12\Data\022519\P24482.D\	02/26/19 00:26	
Lab Control Sample	RQ1901613-03	I:\ACQUDATA\msvoa12\Data\022519\P24483.D\	02/26/19 00:47	
Method Blank	RQ1901613-04	I:\ACQUDATA\msvoa12\Data\022519\P24485.D\	02/26/19 01:31	
Trip Blank	R1901592-012	I:\ACQUDATA\msvoa12\Data\022519\P24486.D\	02/26/19 01:52	
MW-9A	R1901592-006	I:\ACQUDATA\msvoa12\Data\022519\P24487.D\	02/26/19 02:14	
MW-9	R1901592-007	I:\ACQUDATA\msvoa12\Data\022519\P24488.D\	02/26/19 02:35	
MW-10	R1901592-009	I:\ACQUDATA\msvoa12\Data\022519\P24489.D\	02/26/19 02:57	
MW-25A	R1901592-010	I:\ACQUDATA\msvoa12\Data\022519\P24490.D\	02/26/19 03:18	
MW-21A	R1901592-011	I:\ACQUDATA\msvoa12\Data\022519\P24491.D\	02/26/19 03:40	
MW-6	R1901592-008	I:\ACQUDATA\msvoa12\Data\022519\P24503.D\	02/26/19 11:51	

Client: The LiRo Group **Service Request:**R1901592
Project: Buffalo China/16-344-1389 **Date Analyzed:**02/26/19 12:21

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\022619\P24504.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 626413

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	16.97	27403	Pass
75	95	30	60	48.53	78352	Pass
95	95	100	100	100.00	161451	Pass
96	95	5	9	6.36	10272	Pass
173	174	0	2	0.84	1105	Pass
174	95	50	120	81.96	132331	Pass
175	174	5	9	7.15	9461	Pass
176	174	95	101	98.57	130435	Pass
177	176	5	9	6.62	8634	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ1901633-02	I:\ACQUDATA\msvoa12\Data\022619\P24505.D\	02/26/19 12:43	
Lab Control Sample	RQ1901633-03	I:\ACQUDATA\msvoa12\Data\022619\P24506.D\	02/26/19 13:05	
Method Blank	RQ1901633-04	I:\ACQUDATA\msvoa12\Data\022619\P24508.D\	02/26/19 13:48	
MW-7	R1901592-001	I:\ACQUDATA\msvoa12\Data\022619\P24509.D\	02/26/19 14:18	
MW-6	R1901592-008	I:\ACQUDATA\msvoa12\Data\022619\P24510.D\	02/26/19 14:39	

Client: The LiRo Group **Service Request:** R1901592
Project: Buffalo China/16-344-1389 **Date Analyzed:** 02/25/19 14:15

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\022519\P24455.D\ **Lab Code:** RQ1901592-02
Instrument ID: R-MS-12 **Analysis Lot:** 626275
Analysis Method: 8260C **Signal ID:** 1

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	270,739	11.84	566,431	6.48	506,181	9.78
	Upper Limit ==>	541,478	12.34	1,132,862	6.98	1,012,362	10.28
	Lower Limit ==>	135,370	11.34	283,216	5.98	253,091	9.28
Associated Analyses							
Lab Control Sample	RQ1901592-03	261187	11.84	571168	6.48	499870	9.78
Method Blank	RQ1901592-04	233437	11.84	516730	6.49	446019	9.78
MW-7A	R1901592-002	228366	11.84	493994	6.49	433830	9.79
MW-8A	R1901592-003	244866	11.84	517113	6.49	449291	9.79
MW-26	R1901592-004	240211	11.84	517543	6.49	456151	9.79
MW-26A	R1901592-005	228629	11.84	494571	6.49	434816	9.79

Client: The LiRo Group **Service Request:** R1901592
Project: Buffalo China/16-344-1389 **Date Analyzed:** 02/25/19 14:15

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\022519\P24455.D\ **Lab Code:** RQ1901592-02
Instrument ID: R-MS-12 **Analysis Lot:** 626275
Analysis Method: 8260C **Signal ID:** 1

		Pentafluorobenzene	
		Area	**RT**
	Result ==>	368,023	5.40
	Upper Limit ==>	736,046	5.90
	Lower Limit ==>	184,012	4.90
Associated Analyses			
Lab Control Sample	RQ1901592-03	356786	5.40
Method Blank	RQ1901592-04	323004	5.40
MW-7A	R1901592-002	314439	5.41
MW-8A	R1901592-003	328726	5.41
MW-26	R1901592-004	329487	5.40
MW-26A	R1901592-005	317480	5.40

QA/QC Report

Client: The LiRo Group **Service Request:**R1901592
Project: Buffalo China/16-344-1389 **Date Analyzed:**02/26/19 00:26

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\022519\P24482.D\ **Lab Code:**RQ1901613-02
Instrument ID: R-MS-12 **Analysis Lot:**626321
Analysis Method: 8260C **Signal ID:**1

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	239,671	11.84	521,395	6.49	456,539	9.79
	Upper Limit ==>	479,342	12.34	1,042,790	6.99	913,078	10.29
	Lower Limit ==>	119,836	11.34	260,698	5.99	228,270	9.29
Associated Analyses							
Lab Control Sample	RQ1901613-03	238641	11.84	509896	6.49	457059	9.78
Method Blank	RQ1901613-04	251673	11.84	527000	6.49	458581	9.78
Trip Blank	R1901592-012	242838	11.84	518791	6.48	451950	9.78
MW-9A	R1901592-006	234860	11.84	514904	6.49	450035	9.79
MW-9	R1901592-007	250418	11.84	530599	6.49	459320	9.78
MW-10	R1901592-009	237005	11.84	522562	6.48	447664	9.78
MW-25A	R1901592-010	227151	11.84	512466	6.49	443762	9.78
MW-21A	R1901592-011	234672	11.84	517937	6.49	447513	9.79
MW-6	R1901592-008	230935	11.84	496689	6.49	429372	9.79

Client: The LiRo Group **Service Request:** R1901592
Project: Buffalo China/16-344-1389 **Date Analyzed:** 02/26/19 00:26

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\022519\P24482.D\ **Lab Code:** RQ1901613-02
Instrument ID: R-MS-12 **Analysis Lot:** 626321
Analysis Method: 8260C **Signal ID:** 1

		Pentafluorobenzene	
		Area	**RT**
	Result ==>	328,351	5.41
	Upper Limit ==>	656,702	5.91
	Lower Limit ==>	164,176	4.91
Associated Analyses			
Lab Control Sample	RQ1901613-03	332409	5.41
Method Blank	RQ1901613-04	335480	5.40
Trip Blank	R1901592-012	334112	5.40
MW-9A	R1901592-006	329331	5.41
MW-9	R1901592-007	338594	5.40
MW-10	R1901592-009	324946	5.40
MW-25A	R1901592-010	329458	5.41
MW-21A	R1901592-011	328268	5.41
MW-6	R1901592-008	311607	5.41

Client: The LiRo Group **Service Request:** R1901592
Project: Buffalo China/16-344-1389 **Date Analyzed:** 02/26/19 12:43

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\022619\P24505.D\ **Lab Code:** RQ1901633-02
Instrument ID: R-MS-12 **Analysis Lot:** 626413
Analysis Method: 8260C **Signal ID:** 1

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	234,417	11.84	505,438	6.49	450,985	9.78
	Upper Limit ==>	468,834	12.34	1,010,876	6.99	901,970	10.28
	Lower Limit ==>	117,209	11.34	252,719	5.99	225,493	9.28
Associated Analyses							
Lab Control Sample	RQ1901633-03	233574	11.84	521704	6.48	458178	9.79
Method Blank	RQ1901633-04	226744	11.84	489725	6.49	430089	9.79
MW-7	R1901592-001	247844	11.84	530614	6.49	466692	9.79
MW-6	R1901592-008	234852	11.84	511745	6.49	444575	9.79

Client: The LiRo Group **Service Request:** R1901592
Project: Buffalo China/16-344-1389 **Date Analyzed:** 02/26/19 12:43

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\022619\P24505.D\ **Lab Code:** RQ1901633-02
Instrument ID: R-MS-12 **Analysis Lot:** 626413
Analysis Method: 8260C **Signal ID:** 1

		Pentafluorobenzene	
		Area	**RT**
	Result ==>	321,915	5.40
	Upper Limit ==>	643,830	5.90
	Lower Limit ==>	160,958	4.90
Associated Analyses			
Lab Control Sample	RQ1901633-03	335357	5.40
Method Blank	RQ1901633-04	315948	5.41
MW-7	R1901592-001	341579	5.40
MW-6	R1901592-008	324876	5.40

Raw Data

ALS Environmental—Rochester Laboratory
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Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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www.alsglobal.com

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 11:15
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-7	**Units:**	ug/L
Lab Code:	R1901592-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/26/19 14:18	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/26/19 14:18	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/26/19 14:18	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/26/19 14:18	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 14:18	
1,4-Dioxane	100 U	100	13	1	02/26/19 14:18	
2-Butanone (MEK)	10 U	10	0.78	1	02/26/19 14:18	
2-Hexanone	10 U	10	0.20	1	02/26/19 14:18	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/26/19 14:18	
Acetone	**3.5 J**	10	2.1	1	02/26/19 14:18	
Benzene	5.0 U	5.0	0.20	1	02/26/19 14:18	
Bromochloromethane	5.0 U	5.0	0.24	1	02/26/19 14:18	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/26/19 14:18	
Bromoform	5.0 U	5.0	0.25	1	02/26/19 14:18	
Bromomethane	5.0 U	5.0	0.70	1	02/26/19 14:18	
Carbon Disulfide	**0.26 BJ**	10	0.25	1	02/26/19 14:18	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/26/19 14:18	
Chlorobenzene	5.0 U	5.0	0.20	1	02/26/19 14:18	
Chloroethane	5.0 U	5.0	0.23	1	02/26/19 14:18	
Chloroform	5.0 U	5.0	0.24	1	02/26/19 14:18	
Chloromethane	5.0 U	5.0	0.28	1	02/26/19 14:18	
Cyclohexane	10 U	10	0.26	1	02/26/19 14:18	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/26/19 14:18	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/26/19 14:18	
Dichloromethane	5.0 U	5.0	0.36	1	02/26/19 14:18	
Ethylbenzene	5.0 U	5.0	0.20	1	02/26/19 14:18	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/26/19 14:18	
Methyl Acetate	10 U	10	0.33	1	02/26/19 14:18	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/26/19 14:18	
Methylcyclohexane	10 U	10	0.20	1	02/26/19 14:18	
Styrene	5.0 U	5.0	0.20	1	02/26/19 14:18	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/26/19 14:18	
Toluene	5.0 U	5.0	0.20	1	02/26/19 14:18	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 11:15
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-7	**Units:**	ug/L
Lab Code:	R1901592-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/26/19 14:18	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/26/19 14:18	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/26/19 14:18	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/26/19 14:18	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/26/19 14:18	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/26/19 14:18	
o-Xylene	5.0 U	5.0	0.20	1	02/26/19 14:18	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/26/19 14:18	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/26/19 14:18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 122	02/26/19 14:18	
Dibromofluoromethane	100	89 - 119	02/26/19 14:18	
Toluene-d8	99	87 - 121	02/26/19 14:18	

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 11:40
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-7A	**Units:**	ug/L
Lab Code:	R1901592-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/25/19 21:11	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/25/19 21:11	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/25/19 21:11	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/25/19 21:11	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:11	
1,4-Dioxane	100 U	100	13	1	02/25/19 21:11	
2-Butanone (MEK)	10 U	10	0.78	1	02/25/19 21:11	
2-Hexanone	10 U	10	0.20	1	02/25/19 21:11	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/25/19 21:11	
Acetone	**2.9 J**	10	2.1	1	02/25/19 21:11	
Benzene	5.0 U	5.0	0.20	1	02/25/19 21:11	
Bromochloromethane	5.0 U	5.0	0.24	1	02/25/19 21:11	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/25/19 21:11	
Bromoform	5.0 U	5.0	0.25	1	02/25/19 21:11	
Bromomethane	5.0 U	5.0	0.70	1	02/25/19 21:11	
Carbon Disulfide	10 U	10	0.25	1	02/25/19 21:11	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/25/19 21:11	
Chlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:11	
Chloroethane	5.0 U	5.0	0.23	1	02/25/19 21:11	
Chloroform	5.0 U	5.0	0.24	1	02/25/19 21:11	
Chloromethane	5.0 U	5.0	0.28	1	02/25/19 21:11	
Cyclohexane	10 U	10	0.26	1	02/25/19 21:11	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/25/19 21:11	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/25/19 21:11	
Dichloromethane	5.0 U	5.0	0.36	1	02/25/19 21:11	
Ethylbenzene	5.0 U	5.0	0.20	1	02/25/19 21:11	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/25/19 21:11	
Methyl Acetate	10 U	10	0.33	1	02/25/19 21:11	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/25/19 21:11	
Methylcyclohexane	10 U	10	0.20	1	02/25/19 21:11	
Styrene	5.0 U	5.0	0.20	1	02/25/19 21:11	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/25/19 21:11	
Toluene	5.0 U	5.0	0.20	1	02/25/19 21:11	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 11:40
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-7A	**Units:**	ug/L
Lab Code:	R1901592-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/25/19 21:11	
Trichlorofluoromethane (CFC 11)	**0.27 J**	5.0	0.24	1	02/25/19 21:11	
Vinyl Chloride	**7.9**	5.0	0.20	1	02/25/19 21:11	
cis-1,2-Dichloroethene	**44**	5.0	0.23	1	02/25/19 21:11	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/25/19 21:11	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/25/19 21:11	
o-Xylene	5.0 U	5.0	0.20	1	02/25/19 21:11	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/25/19 21:11	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/25/19 21:11	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	02/25/19 21:11	
Dibromofluoromethane	104	89 - 119	02/25/19 21:11	
Toluene-d8	101	87 - 121	02/25/19 21:11	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 13:45
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-8A	**Units:**	ug/L
Lab Code:	R1901592-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/25/19 21:33	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/25/19 21:33	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/25/19 21:33	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/25/19 21:33	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:33	
1,4-Dioxane	100 U	100	13	1	02/25/19 21:33	
2-Butanone (MEK)	10 U	10	0.78	1	02/25/19 21:33	
2-Hexanone	10 U	10	0.20	1	02/25/19 21:33	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/25/19 21:33	
Acetone	10 U	10	2.1	1	02/25/19 21:33	
Benzene	5.0 U	5.0	0.20	1	02/25/19 21:33	
Bromochloromethane	5.0 U	5.0	0.24	1	02/25/19 21:33	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/25/19 21:33	
Bromoform	5.0 U	5.0	0.25	1	02/25/19 21:33	
Bromomethane	5.0 U	5.0	0.70	1	02/25/19 21:33	
Carbon Disulfide	10 U	10	0.25	1	02/25/19 21:33	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/25/19 21:33	
Chlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:33	
Chloroethane	5.0 U	5.0	0.23	1	02/25/19 21:33	
Chloroform	5.0 U	5.0	0.24	1	02/25/19 21:33	
Chloromethane	5.0 U	5.0	0.28	1	02/25/19 21:33	
Cyclohexane	10 U	10	0.26	1	02/25/19 21:33	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/25/19 21:33	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/25/19 21:33	
Dichloromethane	5.0 U	5.0	0.36	1	02/25/19 21:33	
Ethylbenzene	5.0 U	5.0	0.20	1	02/25/19 21:33	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/25/19 21:33	
Methyl Acetate	10 U	10	0.33	1	02/25/19 21:33	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/25/19 21:33	
Methylcyclohexane	10 U	10	0.20	1	02/25/19 21:33	
Styrene	5.0 U	5.0	0.20	1	02/25/19 21:33	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/25/19 21:33	
Toluene	5.0 U	5.0	0.20	1	02/25/19 21:33	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 13:45
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-8A	**Units:**	ug/L
Lab Code:	R1901592-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/25/19 21:33	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/25/19 21:33	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/25/19 21:33	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/25/19 21:33	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/25/19 21:33	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/25/19 21:33	
o-Xylene	5.0 U	5.0	0.20	1	02/25/19 21:33	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/25/19 21:33	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/25/19 21:33	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	02/25/19 21:33	
Dibromofluoromethane	102	89 - 119	02/25/19 21:33	
Toluene-d8	100	87 - 121	02/25/19 21:33	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 14:30
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-26	**Units:**	ug/L
Lab Code:	R1901592-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/25/19 21:55	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/25/19 21:55	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/25/19 21:55	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/25/19 21:55	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:55	
1,4-Dioxane	100 U	100	13	1	02/25/19 21:55	
2-Butanone (MEK)	10 U	10	0.78	1	02/25/19 21:55	
2-Hexanone	10 U	10	0.20	1	02/25/19 21:55	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/25/19 21:55	
Acetone	10 U	10	2.1	1	02/25/19 21:55	
Benzene	5.0 U	5.0	0.20	1	02/25/19 21:55	
Bromochloromethane	5.0 U	5.0	0.24	1	02/25/19 21:55	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/25/19 21:55	
Bromoform	5.0 U	5.0	0.25	1	02/25/19 21:55	
Bromomethane	5.0 U	5.0	0.70	1	02/25/19 21:55	
Carbon Disulfide	10 U	10	0.25	1	02/25/19 21:55	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/25/19 21:55	
Chlorobenzene	5.0 U	5.0	0.20	1	02/25/19 21:55	
Chloroethane	5.0 U	5.0	0.23	1	02/25/19 21:55	
Chloroform	5.0 U	5.0	0.24	1	02/25/19 21:55	
Chloromethane	5.0 U	5.0	0.28	1	02/25/19 21:55	
Cyclohexane	10 U	10	0.26	1	02/25/19 21:55	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/25/19 21:55	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/25/19 21:55	
Dichloromethane	5.0 U	5.0	0.36	1	02/25/19 21:55	
Ethylbenzene	5.0 U	5.0	0.20	1	02/25/19 21:55	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/25/19 21:55	
Methyl Acetate	10 U	10	0.33	1	02/25/19 21:55	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/25/19 21:55	
Methylcyclohexane	10 U	10	0.20	1	02/25/19 21:55	
Styrene	5.0 U	5.0	0.20	1	02/25/19 21:55	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/25/19 21:55	
Toluene	5.0 U	5.0	0.20	1	02/25/19 21:55	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 14:30
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-26	**Units:**	ug/L
Lab Code:	R1901592-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/25/19 21:55	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/25/19 21:55	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/25/19 21:55	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/25/19 21:55	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/25/19 21:55	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/25/19 21:55	
o-Xylene	5.0 U	5.0	0.20	1	02/25/19 21:55	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/25/19 21:55	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/25/19 21:55	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	02/25/19 21:55	
Dibromofluoromethane	103	89 - 119	02/25/19 21:55	
Toluene-d8	101	87 - 121	02/25/19 21:55	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 15:10
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-26A	**Units:**	ug/L
Lab Code:	R1901592-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/25/19 22:16	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/25/19 22:16	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/25/19 22:16	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/25/19 22:16	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/25/19 22:16	
1,4-Dioxane	100 U	100	13	1	02/25/19 22:16	
2-Butanone (MEK)	10 U	10	0.78	1	02/25/19 22:16	
2-Hexanone	10 U	10	0.20	1	02/25/19 22:16	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/25/19 22:16	
Acetone	10 U	10	2.1	1	02/25/19 22:16	
Benzene	5.0 U	5.0	0.20	1	02/25/19 22:16	
Bromochloromethane	5.0 U	5.0	0.24	1	02/25/19 22:16	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/25/19 22:16	
Bromoform	5.0 U	5.0	0.25	1	02/25/19 22:16	
Bromomethane	5.0 U	5.0	0.70	1	02/25/19 22:16	
Carbon Disulfide	10 U	10	0.25	1	02/25/19 22:16	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/25/19 22:16	
Chlorobenzene	5.0 U	5.0	0.20	1	02/25/19 22:16	
Chloroethane	5.0 U	5.0	0.23	1	02/25/19 22:16	
Chloroform	5.0 U	5.0	0.24	1	02/25/19 22:16	
Chloromethane	5.0 U	5.0	0.28	1	02/25/19 22:16	
Cyclohexane	10 U	10	0.26	1	02/25/19 22:16	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/25/19 22:16	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/25/19 22:16	
Dichloromethane	5.0 U	5.0	0.36	1	02/25/19 22:16	
Ethylbenzene	5.0 U	5.0	0.20	1	02/25/19 22:16	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/25/19 22:16	
Methyl Acetate	10 U	10	0.33	1	02/25/19 22:16	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/25/19 22:16	
Methylcyclohexane	10 U	10	0.20	1	02/25/19 22:16	
Styrene	5.0 U	5.0	0.20	1	02/25/19 22:16	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/25/19 22:16	
Toluene	5.0 U	5.0	0.20	1	02/25/19 22:16	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 15:10
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-26A	**Units:**	ug/L
Lab Code:	R1901592-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/25/19 22:16	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/25/19 22:16	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/25/19 22:16	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/25/19 22:16	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/25/19 22:16	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/25/19 22:16	
o-Xylene	5.0 U	5.0	0.20	1	02/25/19 22:16	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/25/19 22:16	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/25/19 22:16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	02/25/19 22:16	
Dibromofluoromethane	100	89 - 119	02/25/19 22:16	
Toluene-d8	100	87 - 121	02/25/19 22:16	

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 15:40
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-9A	**Units:**	ug/L
Lab Code:	R1901592-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/26/19 02:14	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/26/19 02:14	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/26/19 02:14	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/26/19 02:14	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:14	
1,4-Dioxane	100 U	100	13	1	02/26/19 02:14	
2-Butanone (MEK)	10 U	10	0.78	1	02/26/19 02:14	
2-Hexanone	10 U	10	0.20	1	02/26/19 02:14	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/26/19 02:14	
Acetone	10 U	10	2.1	1	02/26/19 02:14	
Benzene	5.0 U	5.0	0.20	1	02/26/19 02:14	
Bromochloromethane	5.0 U	5.0	0.24	1	02/26/19 02:14	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/26/19 02:14	
Bromoform	5.0 U	5.0	0.25	1	02/26/19 02:14	
Bromomethane	5.0 U	5.0	0.70	1	02/26/19 02:14	
Carbon Disulfide	**2.7 J**	10	0.25	1	02/26/19 02:14	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/26/19 02:14	
Chlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:14	
Chloroethane	5.0 U	5.0	0.23	1	02/26/19 02:14	
Chloroform	5.0 U	5.0	0.24	1	02/26/19 02:14	
Chloromethane	5.0 U	5.0	0.28	1	02/26/19 02:14	
Cyclohexane	10 U	10	0.26	1	02/26/19 02:14	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/26/19 02:14	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/26/19 02:14	
Dichloromethane	5.0 U	5.0	0.36	1	02/26/19 02:14	
Ethylbenzene	5.0 U	5.0	0.20	1	02/26/19 02:14	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/26/19 02:14	
Methyl Acetate	10 U	10	0.33	1	02/26/19 02:14	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/26/19 02:14	
Methylcyclohexane	10 U	10	0.20	1	02/26/19 02:14	
Styrene	5.0 U	5.0	0.20	1	02/26/19 02:14	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/26/19 02:14	
Toluene	5.0 U	5.0	0.20	1	02/26/19 02:14	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/15/19 15:40
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-9A	**Units:**	ug/L
Lab Code:	R1901592-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/26/19 02:14	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/26/19 02:14	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/26/19 02:14	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/26/19 02:14	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/26/19 02:14	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/26/19 02:14	
o-Xylene	5.0 U	5.0	0.20	1	02/26/19 02:14	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/26/19 02:14	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/26/19 02:14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	02/26/19 02:14	
Dibromofluoromethane	101	89 - 119	02/26/19 02:14	
Toluene-d8	99	87 - 121	02/26/19 02:14	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 09:30
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-9	**Units:**	ug/L
Lab Code:	R1901592-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/26/19 02:35	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/26/19 02:35	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/26/19 02:35	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/26/19 02:35	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:35	
1,4-Dichlorobenzene	**0.24 J**	5.0	0.20	1	02/26/19 02:35	
1,4-Dioxane	100 U	100	13	1	02/26/19 02:35	
2-Butanone (MEK)	10 U	10	0.78	1	02/26/19 02:35	
2-Hexanone	10 U	10	0.20	1	02/26/19 02:35	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/26/19 02:35	
Acetone	**3.4 J**	10	2.1	1	02/26/19 02:35	
Benzene	5.0 U	5.0	0.20	1	02/26/19 02:35	
Bromochloromethane	5.0 U	5.0	0.24	1	02/26/19 02:35	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/26/19 02:35	
Bromoform	5.0 U	5.0	0.25	1	02/26/19 02:35	
Bromomethane	5.0 U	5.0	0.70	1	02/26/19 02:35	
Carbon Disulfide	**0.26 J**	10	0.25	1	02/26/19 02:35	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/26/19 02:35	
Chlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:35	
Chloroethane	5.0 U	5.0	0.23	1	02/26/19 02:35	
Chloroform	5.0 U	5.0	0.24	1	02/26/19 02:35	
Chloromethane	5.0 U	5.0	0.28	1	02/26/19 02:35	
Cyclohexane	10 U	10	0.26	1	02/26/19 02:35	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/26/19 02:35	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/26/19 02:35	
Dichloromethane	5.0 U	5.0	0.36	1	02/26/19 02:35	
Ethylbenzene	5.0 U	5.0	0.20	1	02/26/19 02:35	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/26/19 02:35	
Methyl Acetate	10 U	10	0.33	1	02/26/19 02:35	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/26/19 02:35	
Methylcyclohexane	10 U	10	0.20	1	02/26/19 02:35	
Styrene	5.0 U	5.0	0.20	1	02/26/19 02:35	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/26/19 02:35	
Toluene	5.0 U	5.0	0.20	1	02/26/19 02:35	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 09:30
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-9	**Units:**	ug/L
Lab Code:	R1901592-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/26/19 02:35	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/26/19 02:35	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/26/19 02:35	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/26/19 02:35	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/26/19 02:35	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/26/19 02:35	
o-Xylene	5.0 U	5.0	0.20	1	02/26/19 02:35	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/26/19 02:35	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/26/19 02:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	02/26/19 02:35	
Dibromofluoromethane	98	89 - 119	02/26/19 02:35	
Toluene-d8	97	87 - 121	02/26/19 02:35	

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 10:20
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-6	**Units:**	ug/L
Lab Code:	R1901592-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	25 U	25	1.1	5	02/26/19 14:39	
1,1,2,2-Tetrachloroethane	25 U	25	1.0	5	02/26/19 14:39	
1,1,2-Trichloroethane	25 U	25	1.0	5	02/26/19 14:39	
1,1,2-Trichloro-1,2,2-trifluoroethane	25 U	25	1.0	5	02/26/19 14:39	
1,1-Dichloroethane (1,1-DCA)	25 U	25	1.0	5	02/26/19 14:39	
1,1-Dichloroethene (1,1-DCE)	**9.3 J**	25	1.3	5	02/26/19 14:39	
1,2,3-Trichlorobenzene	25 U	25	1.0	5	02/26/19 14:39	
1,2,4-Trichlorobenzene	25 U	25	1.3	5	02/26/19 14:39	
1,2-Dibromo-3-chloropropane (DBCP)	25 U	25	2.3	5	02/26/19 14:39	
1,2-Dibromoethane	25 U	25	1.0	5	02/26/19 14:39	
1,2-Dichlorobenzene	25 U	25	1.0	5	02/26/19 14:39	
1,2-Dichloroethane	25 U	25	1.0	5	02/26/19 14:39	
1,2-Dichloropropane	25 U	25	1.0	5	02/26/19 14:39	
1,3-Dichlorobenzene	25 U	25	1.0	5	02/26/19 14:39	
1,4-Dichlorobenzene	25 U	25	1.0	5	02/26/19 14:39	
1,4-Dioxane	500 U	500	65	5	02/26/19 14:39	
2-Butanone (MEK)	50 U	50	3.9	5	02/26/19 14:39	
2-Hexanone	50 U	50	1.0	5	02/26/19 14:39	
4-Methyl-2-pentanone	50 U	50	1.0	5	02/26/19 14:39	
Acetone	50 U	50	11	5	02/26/19 14:39	
Benzene	25 U	25	1.0	5	02/26/19 14:39	
Bromochloromethane	25 U	25	1.2	5	02/26/19 14:39	
Bromodichloromethane	25 U	25	1.1	5	02/26/19 14:39	
Bromoform	25 U	25	1.3	5	02/26/19 14:39	
Bromomethane	25 U	25	3.5	5	02/26/19 14:39	
Carbon Disulfide	50 U	50	1.3	5	02/26/19 14:39	
Carbon Tetrachloride	25 U	25	1.7	5	02/26/19 14:39	
Chlorobenzene	25 U	25	1.0	5	02/26/19 14:39	
Chloroethane	25 U	25	1.2	5	02/26/19 14:39	
Chloroform	25 U	25	1.2	5	02/26/19 14:39	
Chloromethane	25 U	25	1.4	5	02/26/19 14:39	
Cyclohexane	50 U	50	1.3	5	02/26/19 14:39	
Dibromochloromethane	25 U	25	1.0	5	02/26/19 14:39	
Dichlorodifluoromethane (CFC 12)	25 U	25	1.1	5	02/26/19 14:39	
Dichloromethane	25 U	25	1.8	5	02/26/19 14:39	
Ethylbenzene	25 U	25	1.0	5	02/26/19 14:39	
Isopropylbenzene (Cumene)	25 U	25	1.0	5	02/26/19 14:39	
Methyl Acetate	50 U	50	1.7	5	02/26/19 14:39	
Methyl tert-Butyl Ether	25 U	25	1.0	5	02/26/19 14:39	
Methylcyclohexane	50 U	50	1.0	5	02/26/19 14:39	
Styrene	25 U	25	1.0	5	02/26/19 14:39	
Tetrachloroethene (PCE)	25 U	25	1.1	5	02/26/19 14:39	
Toluene	25 U	25	1.0	5	02/26/19 14:39	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 10:20
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-6	**Units:**	ug/L
Lab Code:	R1901592-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**110**		25	1.0	5	02/26/19 14:39	
Trichlorofluoromethane (CFC 11)	25	U	25	1.2	5	02/26/19 14:39	
Vinyl Chloride	25	U	25	1.0	5	02/26/19 14:39	
cis-1,2-Dichloroethene	**800**	**D**	50	2.3	10	02/26/19 11:51	
cis-1,3-Dichloropropene	25	U	25	1.0	5	02/26/19 14:39	
m,p-Xylenes	25	U	25	1.0	5	02/26/19 14:39	
o-Xylene	25	U	25	1.0	5	02/26/19 14:39	
trans-1,2-Dichloroethene	**7.3**	**J**	25	1.0	5	02/26/19 14:39	
trans-1,3-Dichloropropene	25	U	25	1.2	5	02/26/19 14:39	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	02/26/19 14:39	
Dibromofluoromethane	101	89 - 119	02/26/19 14:39	
Toluene-d8	100	87 - 121	02/26/19 14:39	

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 11:00
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-10	**Units:**	ug/L
Lab Code:	R1901592-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/26/19 02:57	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/26/19 02:57	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/26/19 02:57	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/26/19 02:57	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:57	
1,4-Dichlorobenzene	**0.87 J**	5.0	0.20	1	02/26/19 02:57	
1,4-Dioxane	100 U	100	13	1	02/26/19 02:57	
2-Butanone (MEK)	10 U	10	0.78	1	02/26/19 02:57	
2-Hexanone	10 U	10	0.20	1	02/26/19 02:57	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/26/19 02:57	
Acetone	10 U	10	2.1	1	02/26/19 02:57	
Benzene	5.0 U	5.0	0.20	1	02/26/19 02:57	
Bromochloromethane	5.0 U	5.0	0.24	1	02/26/19 02:57	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/26/19 02:57	
Bromoform	5.0 U	5.0	0.25	1	02/26/19 02:57	
Bromomethane	5.0 U	5.0	0.70	1	02/26/19 02:57	
Carbon Disulfide	10 U	10	0.25	1	02/26/19 02:57	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/26/19 02:57	
Chlorobenzene	5.0 U	5.0	0.20	1	02/26/19 02:57	
Chloroethane	5.0 U	5.0	0.23	1	02/26/19 02:57	
Chloroform	**1.7 J**	5.0	0.24	1	02/26/19 02:57	
Chloromethane	5.0 U	5.0	0.28	1	02/26/19 02:57	
Cyclohexane	10 U	10	0.26	1	02/26/19 02:57	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/26/19 02:57	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/26/19 02:57	
Dichloromethane	5.0 U	5.0	0.36	1	02/26/19 02:57	
Ethylbenzene	5.0 U	5.0	0.20	1	02/26/19 02:57	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/26/19 02:57	
Methyl Acetate	10 U	10	0.33	1	02/26/19 02:57	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/26/19 02:57	
Methylcyclohexane	10 U	10	0.20	1	02/26/19 02:57	
Styrene	5.0 U	5.0	0.20	1	02/26/19 02:57	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/26/19 02:57	
Toluene	5.0 U	5.0	0.20	1	02/26/19 02:57	

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 11:00
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-10	**Units:**	ug/L
Lab Code:	R1901592-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/26/19 02:57	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/26/19 02:57	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/26/19 02:57	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/26/19 02:57	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/26/19 02:57	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/26/19 02:57	
o-Xylene	5.0 U	5.0	0.20	1	02/26/19 02:57	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/26/19 02:57	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/26/19 02:57	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	02/26/19 02:57	
Dibromofluoromethane	99	89 - 119	02/26/19 02:57	
Toluene-d8	99	87 - 121	02/26/19 02:57	

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 11:45
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-25A	**Units:**	ug/L
Lab Code:	R1901592-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/26/19 03:18	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/26/19 03:18	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/26/19 03:18	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/26/19 03:18	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:18	
1,4-Dioxane	100 U	100	13	1	02/26/19 03:18	
2-Butanone (MEK)	10 U	10	0.78	1	02/26/19 03:18	
2-Hexanone	10 U	10	0.20	1	02/26/19 03:18	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/26/19 03:18	
Acetone	10 U	10	2.1	1	02/26/19 03:18	
Benzene	5.0 U	5.0	0.20	1	02/26/19 03:18	
Bromochloromethane	5.0 U	5.0	0.24	1	02/26/19 03:18	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/26/19 03:18	
Bromoform	5.0 U	5.0	0.25	1	02/26/19 03:18	
Bromomethane	5.0 U	5.0	0.70	1	02/26/19 03:18	
Carbon Disulfide	10 U	10	0.25	1	02/26/19 03:18	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/26/19 03:18	
Chlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:18	
Chloroethane	5.0 U	5.0	0.23	1	02/26/19 03:18	
Chloroform	5.0 U	5.0	0.24	1	02/26/19 03:18	
Chloromethane	5.0 U	5.0	0.28	1	02/26/19 03:18	
Cyclohexane	10 U	10	0.26	1	02/26/19 03:18	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/26/19 03:18	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/26/19 03:18	
Dichloromethane	5.0 U	5.0	0.36	1	02/26/19 03:18	
Ethylbenzene	5.0 U	5.0	0.20	1	02/26/19 03:18	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/26/19 03:18	
Methyl Acetate	10 U	10	0.33	1	02/26/19 03:18	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/26/19 03:18	
Methylcyclohexane	10 U	10	0.20	1	02/26/19 03:18	
Styrene	5.0 U	5.0	0.20	1	02/26/19 03:18	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/26/19 03:18	
Toluene	5.0 U	5.0	0.20	1	02/26/19 03:18	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 11:45
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-25A	**Units:**	ug/L
Lab Code:	R1901592-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**0.62 J**	5.0	0.20	1	02/26/19 03:18	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/26/19 03:18	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/26/19 03:18	
cis-1,2-Dichloroethene	**0.26 J**	5.0	0.23	1	02/26/19 03:18	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/26/19 03:18	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/26/19 03:18	
o-Xylene	5.0 U	5.0	0.20	1	02/26/19 03:18	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/26/19 03:18	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/26/19 03:18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	02/26/19 03:18	
Dibromofluoromethane	100	89 - 119	02/26/19 03:18	
Toluene-d8	98	87 - 121	02/26/19 03:18	

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 14:00
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-21A	**Units:**	ug/L
Lab Code:	R1901592-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/26/19 03:40	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,1-Dichloroethene (1,1-DCE)	**1.7 J**	5.0	0.25	1	02/26/19 03:40	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/26/19 03:40	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/26/19 03:40	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,2-Dichlorobenzene	**0.38 J**	5.0	0.20	1	02/26/19 03:40	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:40	
1,4-Dioxane	100 U	100	13	1	02/26/19 03:40	
2-Butanone (MEK)	10 U	10	0.78	1	02/26/19 03:40	
2-Hexanone	10 U	10	0.20	1	02/26/19 03:40	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/26/19 03:40	
Acetone	**2.3 J**	10	2.1	1	02/26/19 03:40	
Benzene	**0.37 J**	5.0	0.20	1	02/26/19 03:40	
Bromochloromethane	5.0 U	5.0	0.24	1	02/26/19 03:40	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/26/19 03:40	
Bromoform	5.0 U	5.0	0.25	1	02/26/19 03:40	
Bromomethane	5.0 U	5.0	0.70	1	02/26/19 03:40	
Carbon Disulfide	**1.6 J**	10	0.25	1	02/26/19 03:40	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/26/19 03:40	
Chlorobenzene	5.0 U	5.0	0.20	1	02/26/19 03:40	
Chloroethane	5.0 U	5.0	0.23	1	02/26/19 03:40	
Chloroform	5.0 U	5.0	0.24	1	02/26/19 03:40	
Chloromethane	5.0 U	5.0	0.28	1	02/26/19 03:40	
Cyclohexane	**0.45 J**	10	0.26	1	02/26/19 03:40	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/26/19 03:40	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/26/19 03:40	
Dichloromethane	5.0 U	5.0	0.36	1	02/26/19 03:40	
Ethylbenzene	5.0 U	5.0	0.20	1	02/26/19 03:40	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/26/19 03:40	
Methyl Acetate	10 U	10	0.33	1	02/26/19 03:40	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/26/19 03:40	
Methylcyclohexane	**0.22 J**	10	0.20	1	02/26/19 03:40	
Styrene	5.0 U	5.0	0.20	1	02/26/19 03:40	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/26/19 03:40	
Toluene	5.0 U	5.0	0.20	1	02/26/19 03:40	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19 14:00
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	MW-21A	**Units:**	ug/L
Lab Code:	R1901592-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**11**	5.0	0.20	1	02/26/19 03:40	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/26/19 03:40	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/26/19 03:40	
cis-1,2-Dichloroethene	**160**	5.0	0.23	1	02/26/19 03:40	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/26/19 03:40	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/26/19 03:40	
o-Xylene	5.0 U	5.0	0.20	1	02/26/19 03:40	
trans-1,2-Dichloroethene	**12**	5.0	0.20	1	02/26/19 03:40	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/26/19 03:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	02/26/19 03:40	
Dibromofluoromethane	100	89 - 119	02/26/19 03:40	
Toluene-d8	99	87 - 121	02/26/19 03:40	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R1901592-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	02/26/19 01:52	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	02/26/19 01:52	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	02/26/19 01:52	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	02/26/19 01:52	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	02/26/19 01:52	
1,4-Dioxane	100 U	100	13	1	02/26/19 01:52	
2-Butanone (MEK)	10 U	10	0.78	1	02/26/19 01:52	
2-Hexanone	10 U	10	0.20	1	02/26/19 01:52	
4-Methyl-2-pentanone	10 U	10	0.20	1	02/26/19 01:52	
Acetone	10 U	10	2.1	1	02/26/19 01:52	
Benzene	5.0 U	5.0	0.20	1	02/26/19 01:52	
Bromochloromethane	5.0 U	5.0	0.24	1	02/26/19 01:52	
Bromodichloromethane	5.0 U	5.0	0.22	1	02/26/19 01:52	
Bromoform	5.0 U	5.0	0.25	1	02/26/19 01:52	
Bromomethane	5.0 U	5.0	0.70	1	02/26/19 01:52	
Carbon Disulfide	10 U	10	0.25	1	02/26/19 01:52	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	02/26/19 01:52	
Chlorobenzene	5.0 U	5.0	0.20	1	02/26/19 01:52	
Chloroethane	5.0 U	5.0	0.23	1	02/26/19 01:52	
Chloroform	5.0 U	5.0	0.24	1	02/26/19 01:52	
Chloromethane	5.0 U	5.0	0.28	1	02/26/19 01:52	
Cyclohexane	10 U	10	0.26	1	02/26/19 01:52	
Dibromochloromethane	5.0 U	5.0	0.20	1	02/26/19 01:52	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	02/26/19 01:52	
Dichloromethane	5.0 U	5.0	0.36	1	02/26/19 01:52	
Ethylbenzene	5.0 U	5.0	0.20	1	02/26/19 01:52	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	02/26/19 01:52	
Methyl Acetate	10 U	10	0.33	1	02/26/19 01:52	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	02/26/19 01:52	
Methylcyclohexane	10 U	10	0.20	1	02/26/19 01:52	
Styrene	5.0 U	5.0	0.20	1	02/26/19 01:52	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	02/26/19 01:52	
Toluene	5.0 U	5.0	0.20	1	02/26/19 01:52	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/21/19
Sample Matrix:	Water	**Date Received:**	02/22/19 09:25
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R1901592-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	02/26/19 01:52	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	02/26/19 01:52	
Vinyl Chloride	5.0 U	5.0	0.20	1	02/26/19 01:52	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	02/26/19 01:52	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	02/26/19 01:52	
m,p-Xylenes	5.0 U	5.0	0.20	1	02/26/19 01:52	
o-Xylene	5.0 U	5.0	0.20	1	02/26/19 01:52	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	02/26/19 01:52	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	02/26/19 01:52	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	02/26/19 01:52	
Dibromofluoromethane	100	89 - 119	02/26/19 01:52	
Toluene-d8	98	87 - 121	02/26/19 01:52	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24509.D
Acq On : 26 Feb 2019 2:18 pm
Operator : K.Ruest
Sample : R1901592-001|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 26 16:20:03 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

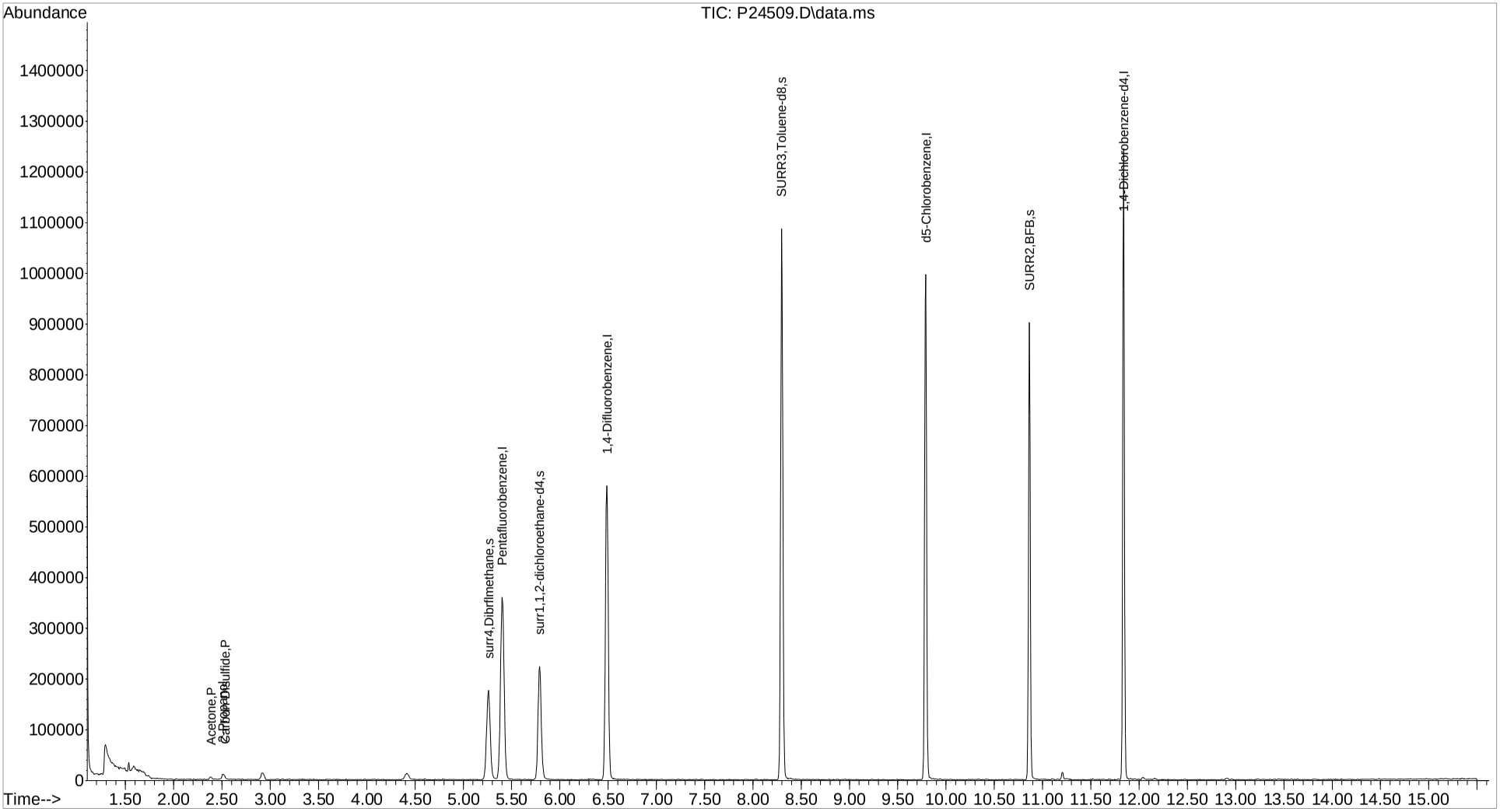
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.401	168	341579	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.486	114	530614	50.00	ppb	0.00
71) d5-Chlorobenzene	9.791	117	466692	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	247844	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.261	113	145469	49.89	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.78%			
48) surr1,1,2-dichloroetha...	5.791	65	188872	51.07	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.14%			
65) SURR3,Toluene-d8	8.297	98	686627	49.64	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.28%			
70) SURR2,BFB	10.864	95	253141	51.10	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.20%			
Target Compounds						Qvalue
15) Acetone	2.384	43	5769	3.53	ppb	85
16) 2-Propanol	2.512	45	11790	27.76	ppb	95
18) Carbon Disulfide	2.530	76	2507	0.26	ppb	77

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

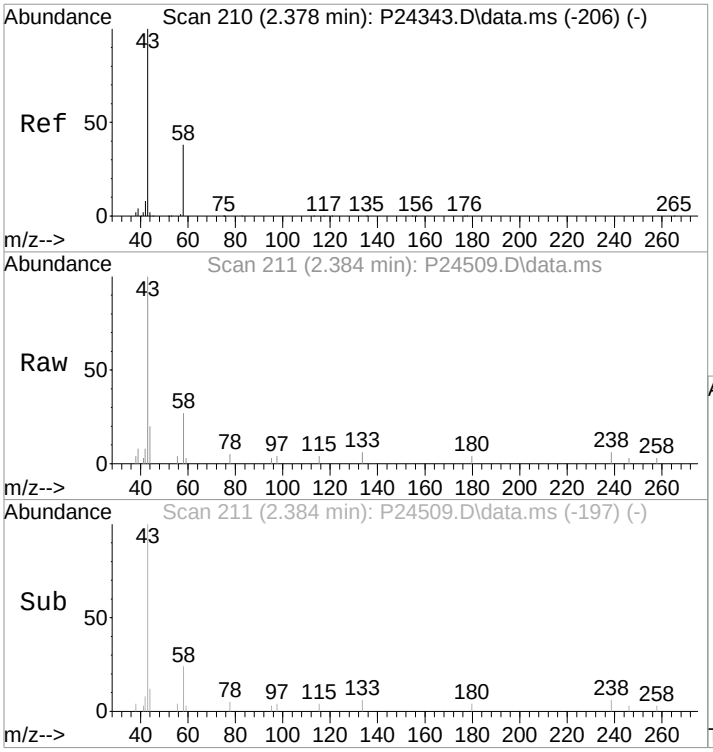
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24509.D
Acq On : 26 Feb 2019 2:18 pm
Operator : K.Ruest
Sample : R1901592-001|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 26 16:20:03 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



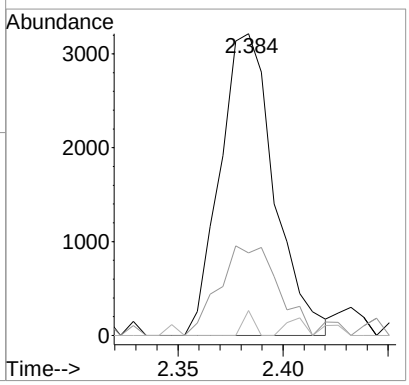
1st 02/26/19
2nd 02/27/19

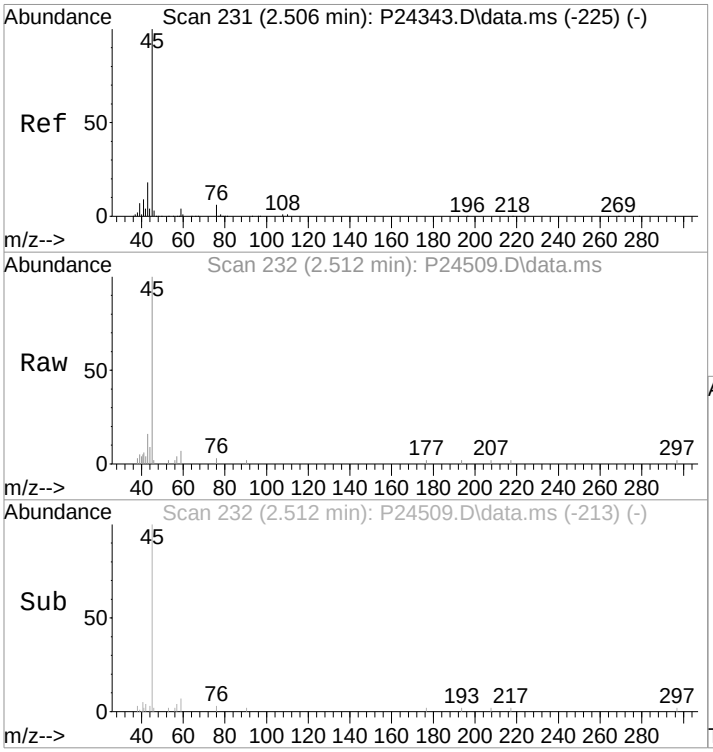


#15
Acetone
Concen: 3.53 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24509.D
Acq: 26 Feb 2019 2:18 pm

Tgt Ion: 43 Resp: 5769

Ion	Ratio	Lower	Upper
43	100		
58	27.4	18.1	58.1
42	8.2	0.0	27.8

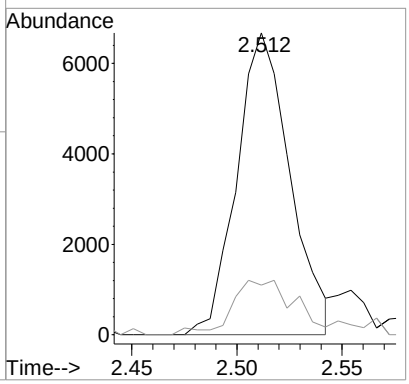




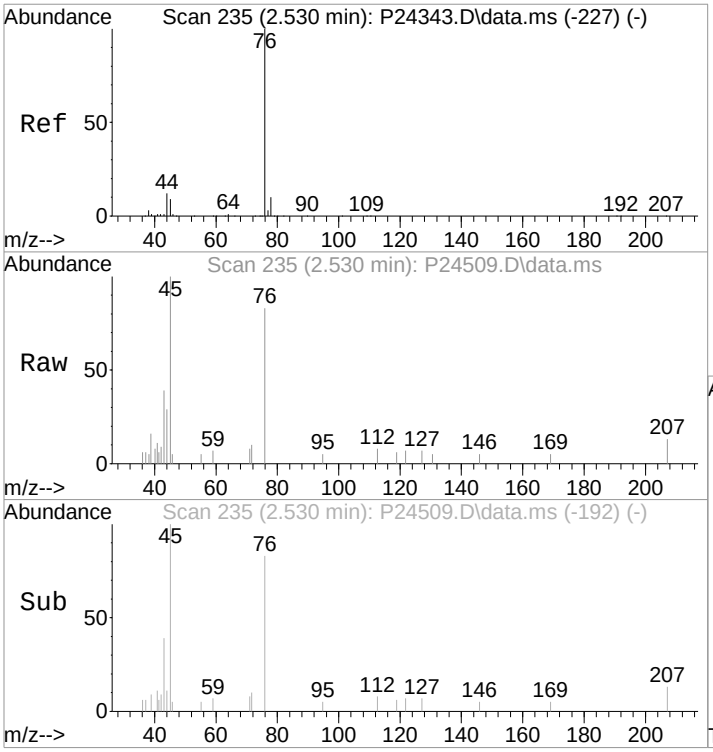
#16
2-Propanol
Concen: 27.76 ppb
RT: 2.512 min Scan# 232
Delta R.T. 0.006 min
Lab File: P24509.D
Acq: 26 Feb 2019 2:18 pm

Tgt Ion: 45 Resp: 11790

Ion	Ratio	Lower	Upper
45	100		
43	16.5	0.0	38.5



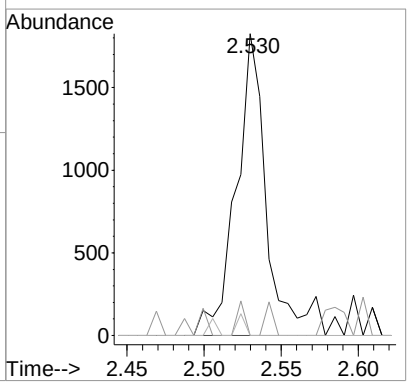
1st 02/26/19
2nd 02/27/19



#18
Carbon Disulfide
Concen: 0.26 ppb
RT: 2.530 min Scan# 235
Delta R.T. 0.006 min
Lab File: P24509.D
Acq: 26 Feb 2019 2:18 pm

Tgt Ion: 76 Resp: 2507

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	30.1
77	0.0	0.0	22.9



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24473.D
Acq On : 25 Feb 2019 9:11 pm
Operator : K.Ruest
Sample : R1901592-002|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 26 12:25:24 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

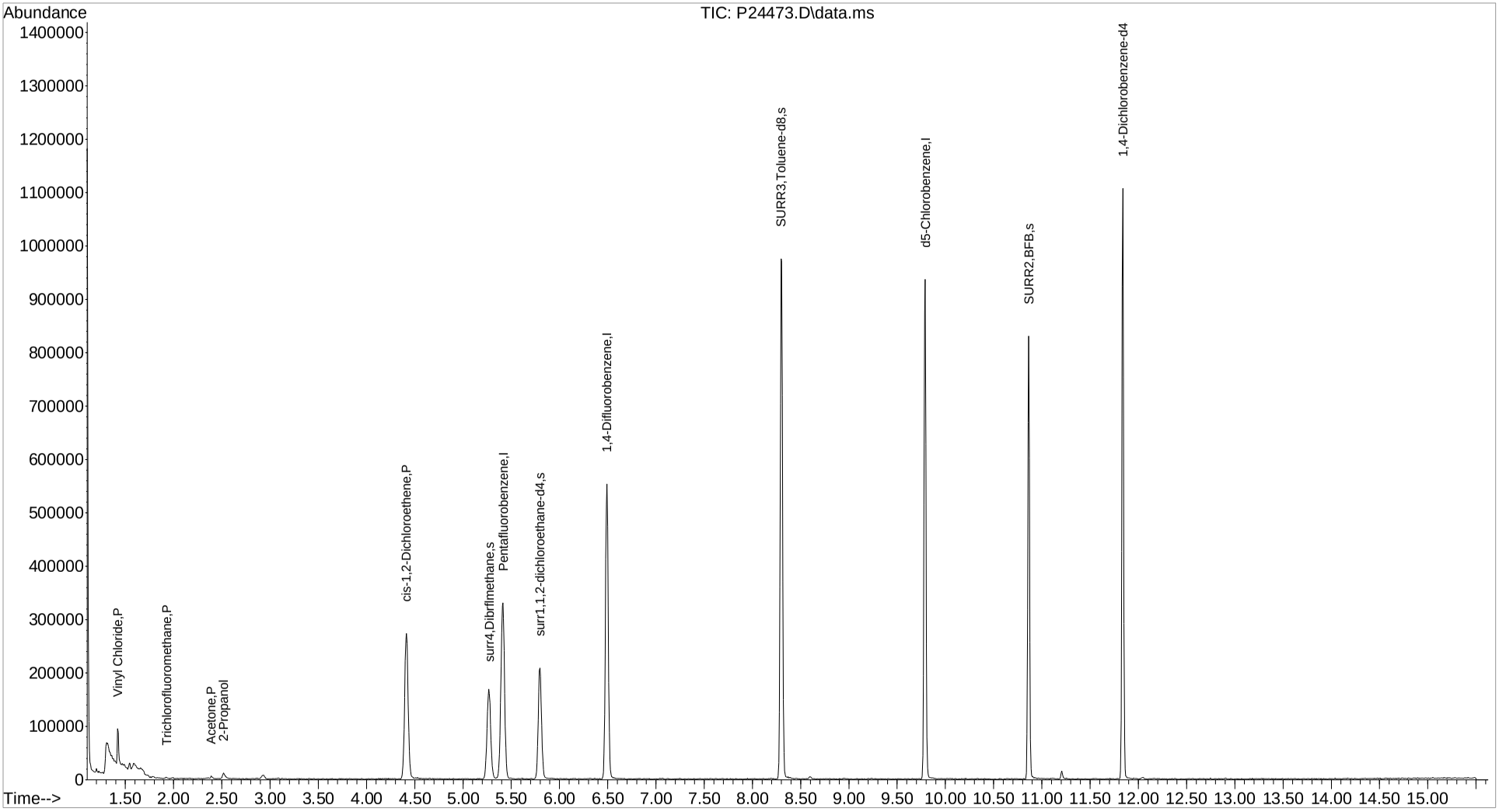
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.414	168	314439	50.00	ppb		0.02
43) 1,4-Difluorobenzene	6.493	114	493994	50.00	ppb		0.01
71) d5-Chlorobenzene	9.791	117	433830	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	228366	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.273	113	141512	52.13	ppb		0.02
Spiked Amount 50.000	Range 89 - 119		Recovery = 104.26%				
48) surr1,1,2-dichloroetha...	5.798	65	175490	50.97	ppb		0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.94%				
65) SURR3,Toluene-d8	8.297	98	649517	50.44	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.88%				
70) SURR2,BFB	10.864	95	228531	49.55	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.10%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.420	62	36226	7.93	ppb	#	30
8) Trichlorofluoromethane	1.926	101	1190	0.27	ppb		90
15) Acetone	2.390	43	4308	2.86	ppb		89
16) 2-Propanol	2.518	45	12335	31.55	ppb		90
34) cis-1,2-Dichloroethene	4.414	96	159442	43.58	ppb	#	82

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

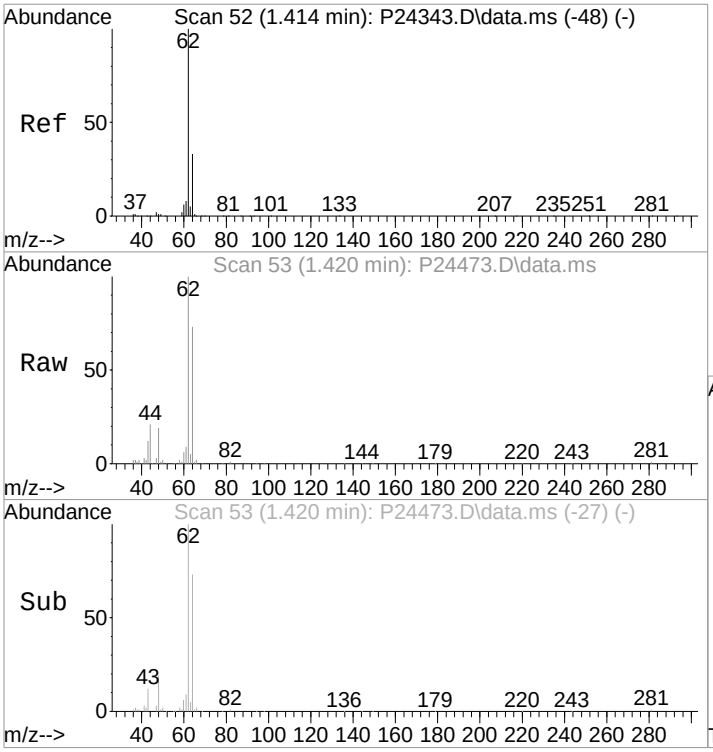
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24473.D
Acq On : 25 Feb 2019 9:11 pm
Operator : K.Ruest
Sample : R1901592-002|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 26 12:25:24 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



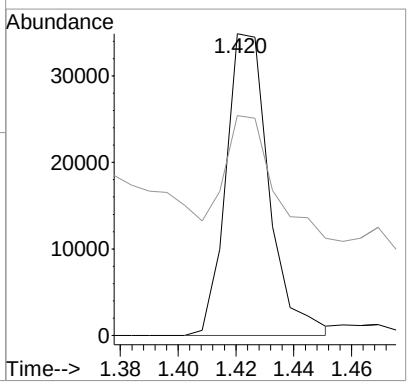
1st 02/26/19
2nd 02/26/19

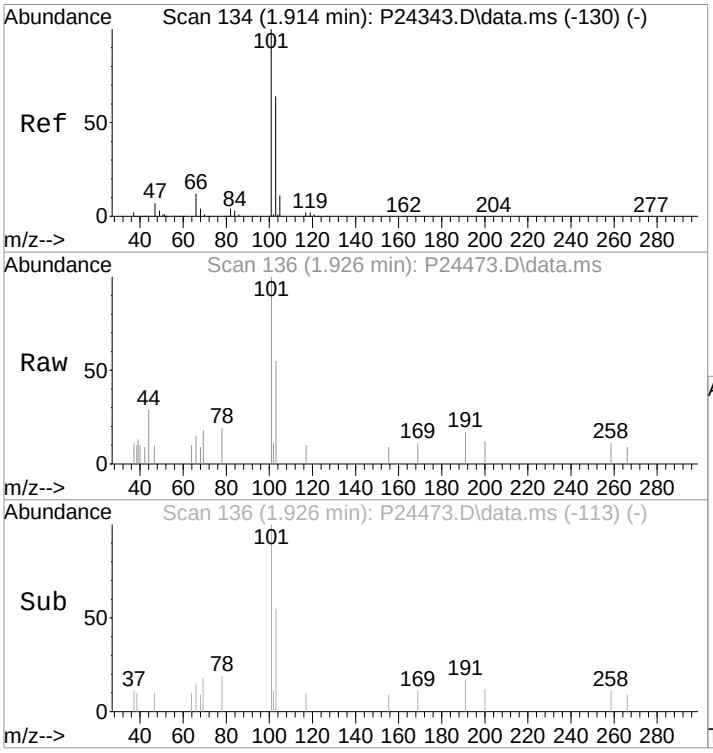


#4
Vinyl Chloride
Concen: 7.93 ppb
RT: 1.420 min Scan# 53
Delta R.T. 0.012 min
Lab File: P24473.D
Acq: 25 Feb 2019 9:11 pm

Tgt Ion: 62 Resp: 36226

Ion	Ratio	Lower	Upper
62	100		
64	72.9	13.2	53.2#

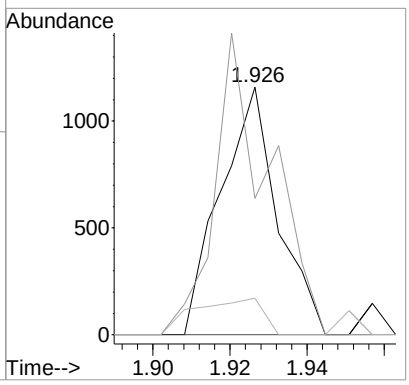


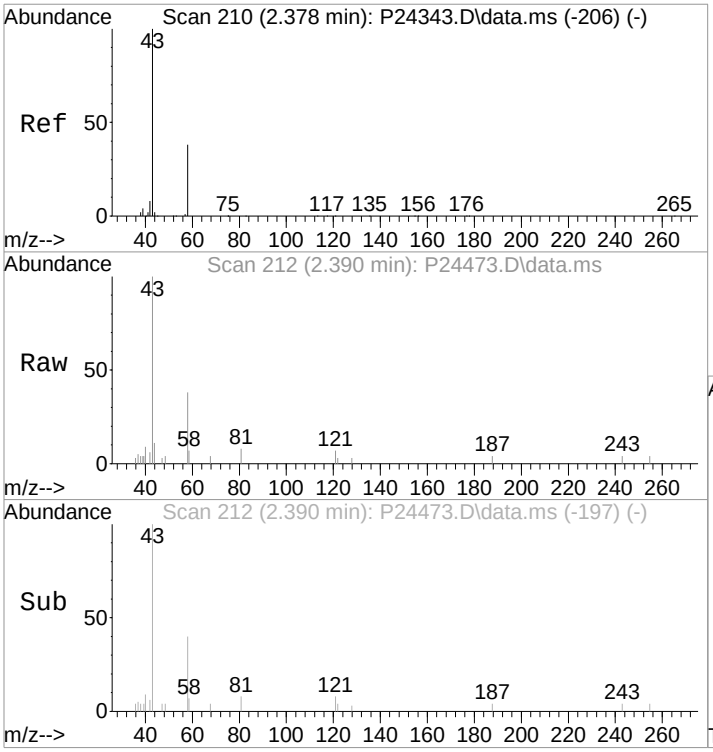


#8
Trichlorofluoromethane
Concen: 0.27 ppb
RT: 1.926 min Scan# 136
Delta R.T. 0.018 min
Lab File: P24473.D
Acq: 25 Feb 2019 9:11 pm

Tgt Ion:101 Resp: 1190

Ion	Ratio	Lower	Upper
101	100		
103	55.0	43.6	83.6
66	14.8	0.0	31.9

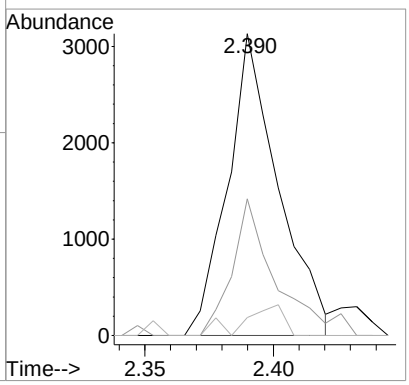


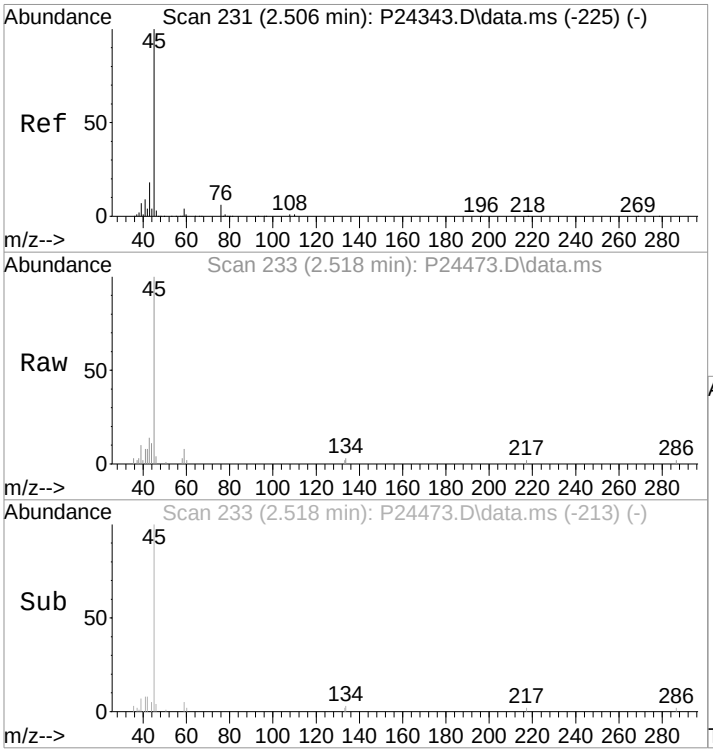


#15
Acetone
Concen: 2.86 ppb
RT: 2.390 min Scan# 212
Delta R.T. 0.018 min
Lab File: P24473.D
Acq: 25 Feb 2019 9:11 pm

Tgt Ion: 43 Resp: 4308

Ion	Ratio	Lower	Upper
43	100		
58	45.3	18.1	58.1
42	5.9	0.0	27.8

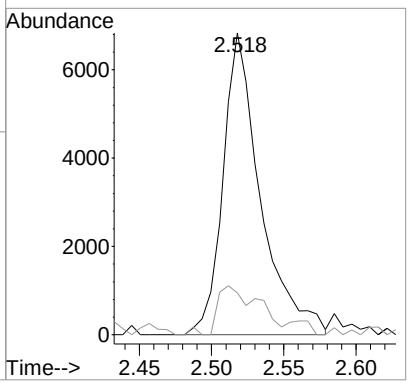


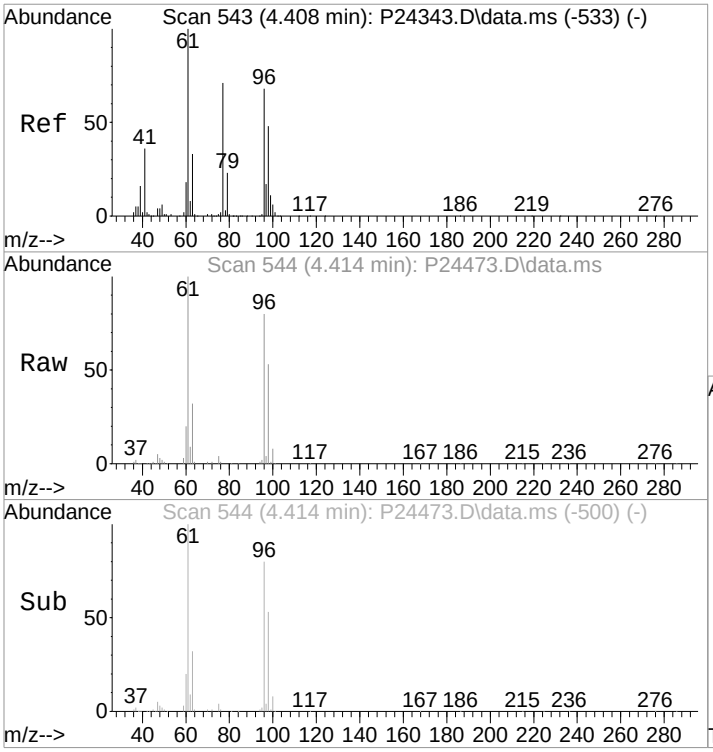


#16
2-Propanol
Concen: 31.55 ppb
RT: 2.518 min Scan# 233
Delta R.T. 0.012 min
Lab File: P24473.D
Acq: 25 Feb 2019 9:11 pm

Tgt Ion: 45 Resp: 12335

Ion	Ratio	Lower	Upper
45	100		
43	13.9	0.0	38.5

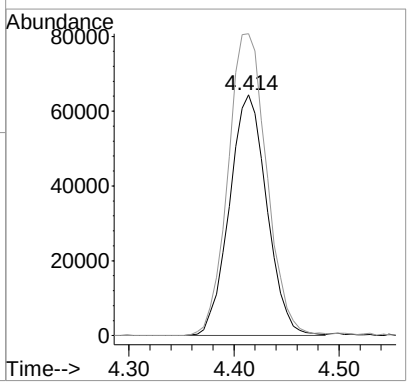




#34
cis-1,2-Dichloroethene
Concen: 43.58 ppb
RT: 4.414 min Scan# 544
Delta R.T. 0.012 min
Lab File: P24473.D
Acq: 25 Feb 2019 9:11 pm

Tgt Ion: 96 Resp: 159442

Ion	Ratio	Lower	Upper
96	100		
61	125.4	128.1	168.1#



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24474.D
Acq On : 25 Feb 2019 9:33 pm
Operator : K.Ruest
Sample : R1901592-003|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 26 12:26:44 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

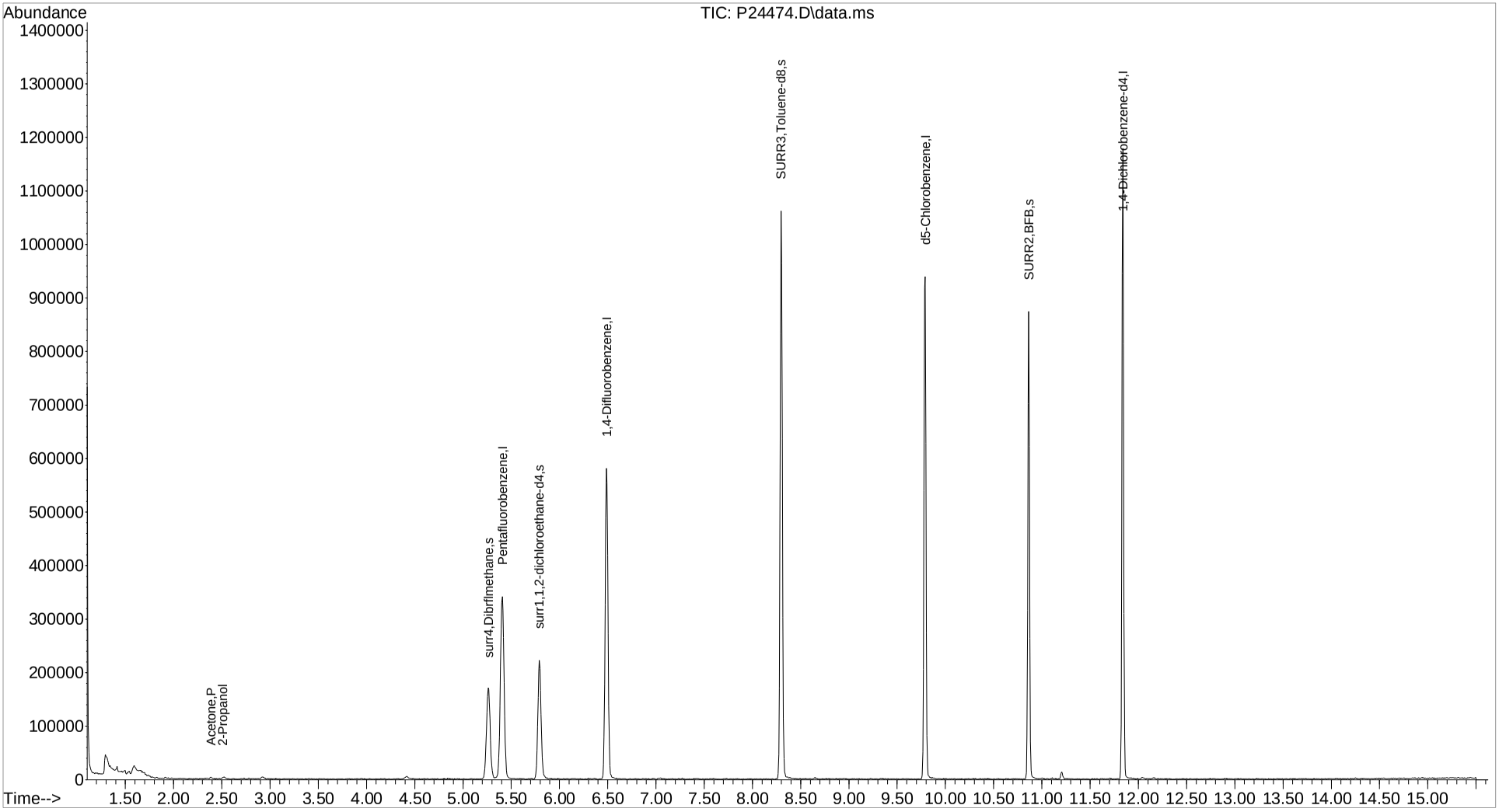
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.407	168	328726	50.00	ppb	0.01
43) 1,4-Difluorobenzene	6.486	114	517113	50.00	ppb	0.00
71) d5-Chlorobenzene	9.791	117	449291	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	244866	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.267	113	144388	50.81	ppb	0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.62%			
48) surr1,1,2-dichloroetha...	5.791	65	177651	49.29	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 98.58%			
65) SURR3,Toluene-d8	8.297	98	672087	49.86	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.72%			
70) SURR2,BFB	10.864	95	233618	48.39	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.78%			
Target Compounds						Qvalue
15) Acetone	2.384	43	2825	1.79	ppb	90
16) 2-Propanol	2.512	45	3765	9.21	ppb	62

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

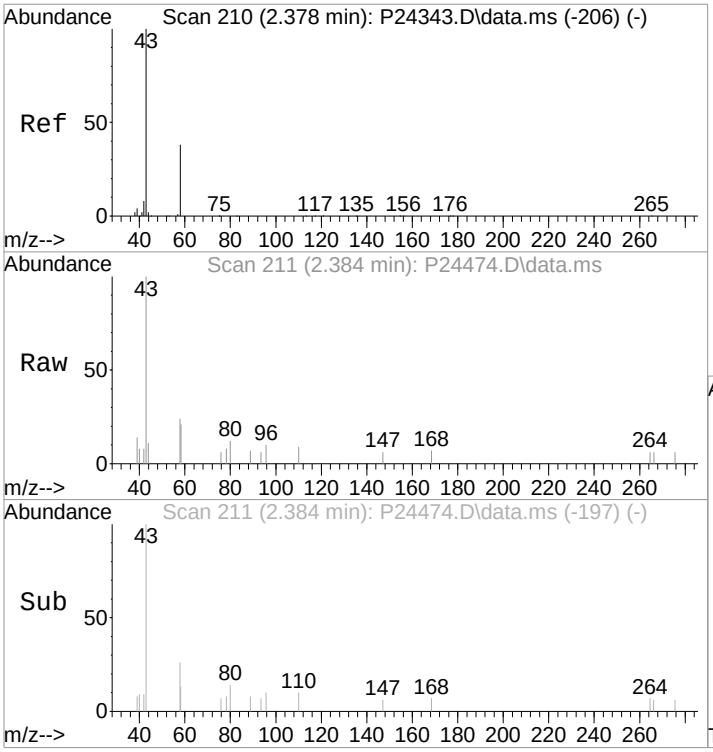
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24474.D
Acq On : 25 Feb 2019 9:33 pm
Operator : K.Ruest
Sample : R1901592-003|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 26 12:26:44 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



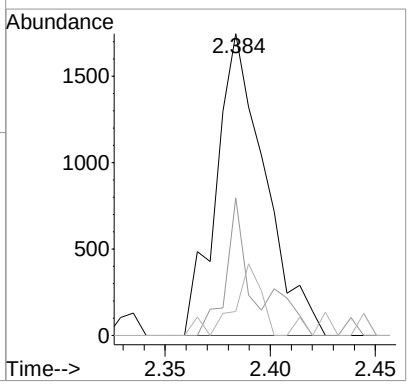
1st 02/26/19
2nd 02/26/19

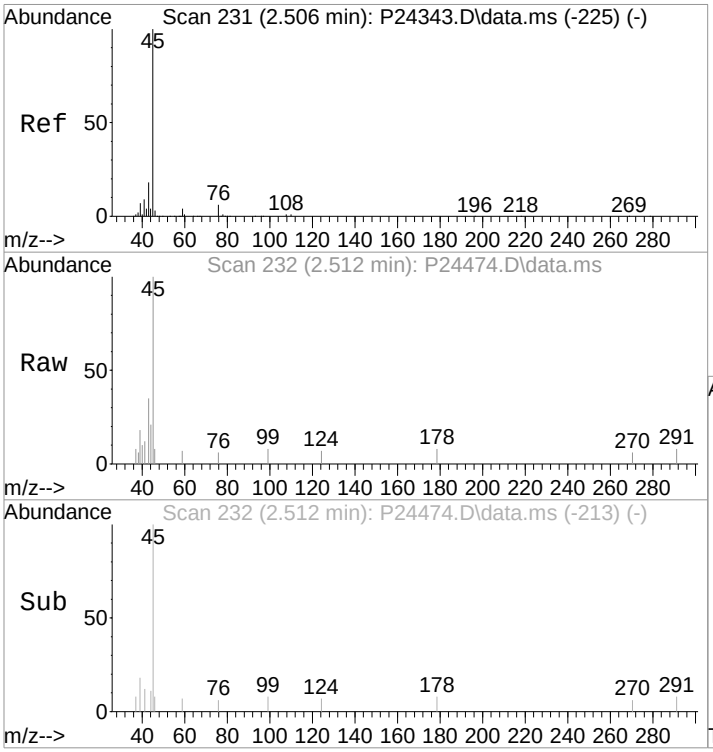


#15
Acetone
Concen: 1.79 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24474.D
Acq: 25 Feb 2019 9:33 pm

Tgt Ion: 43 Resp: 2825

Ion	Ratio	Lower	Upper
43	100		
58	45.6	18.1	58.1
42	8.0	0.0	27.8

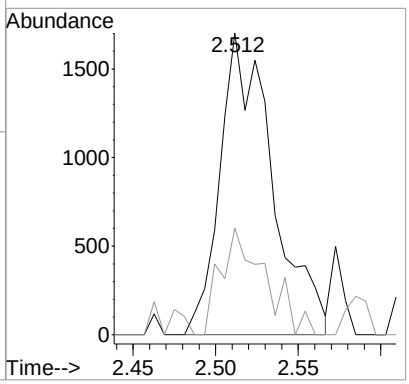




#16
2-Propanol
Concen: 9.21 ppb
RT: 2.512 min Scan# 232
Delta R.T. 0.006 min
Lab File: P24474.D
Acq: 25 Feb 2019 9:33 pm

Tgt Ion: 45 Resp: 3765

Ion	Ratio	Lower	Upper
45	100		
43	35.3	0.0	38.5



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24475.D
Acq On : 25 Feb 2019 9:55 pm
Operator : K.Ruest
Sample : R1901592-004|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 26 12:28:02 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

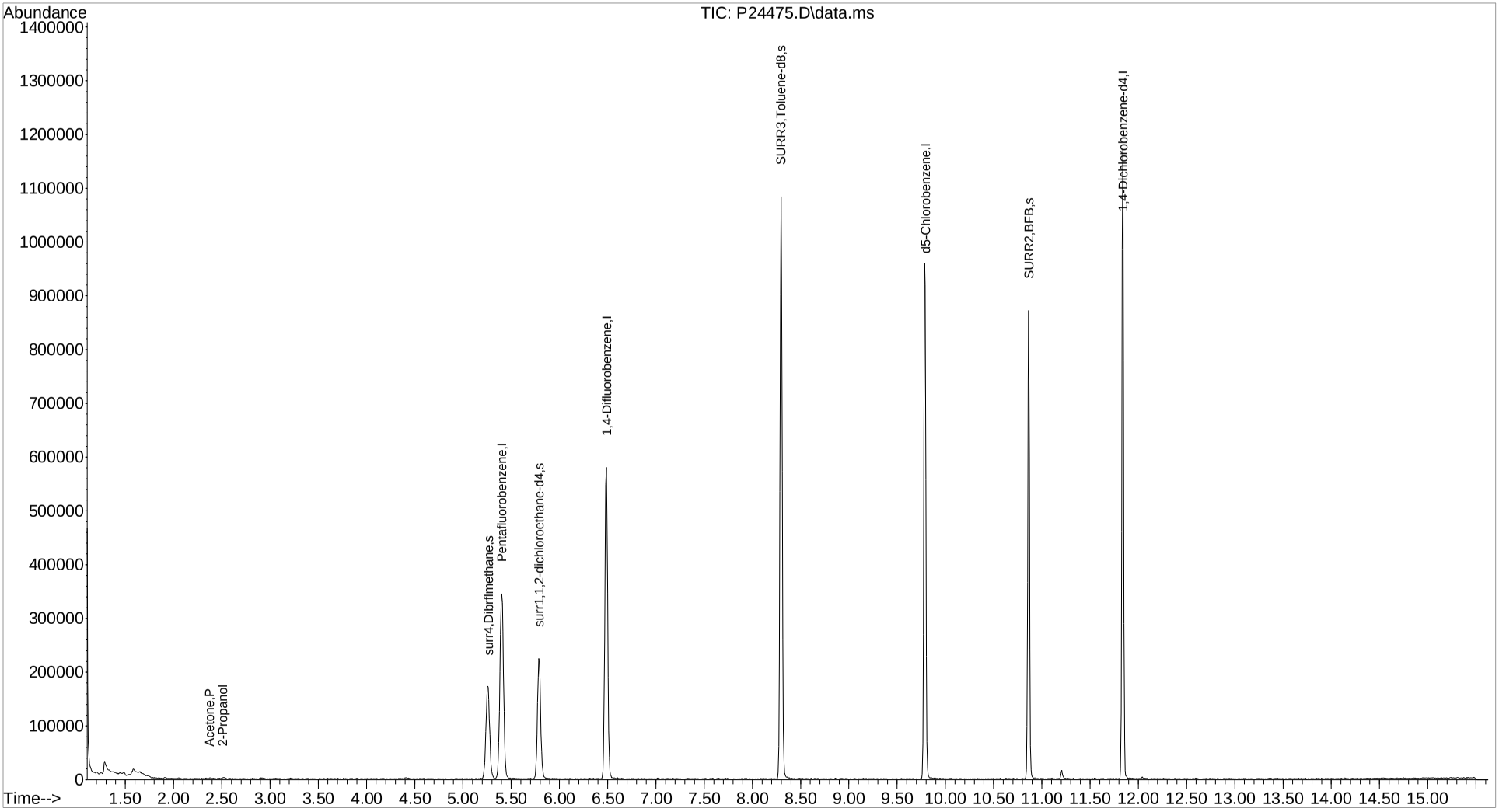
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.401	168	329487	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.487	114	517543	50.00	ppb	0.00
71) d5-Chlorobenzene	9.791	117	456151	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	240211	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.261	113	145980	51.33	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.66%			
48) surr1,1,2-dichloroetha...	5.785	65	185268	51.36	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.72%			
65) SURR3,Toluene-d8	8.297	98	681868	50.54	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.08%			
70) SURR2,BFB	10.864	95	233571	48.34	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.68%			
Target Compounds						Qvalue
15) Acetone	2.372	43	1450	0.92	ppb	77
16) 2-Propanol	2.506	45	2402	5.86	ppb	80

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

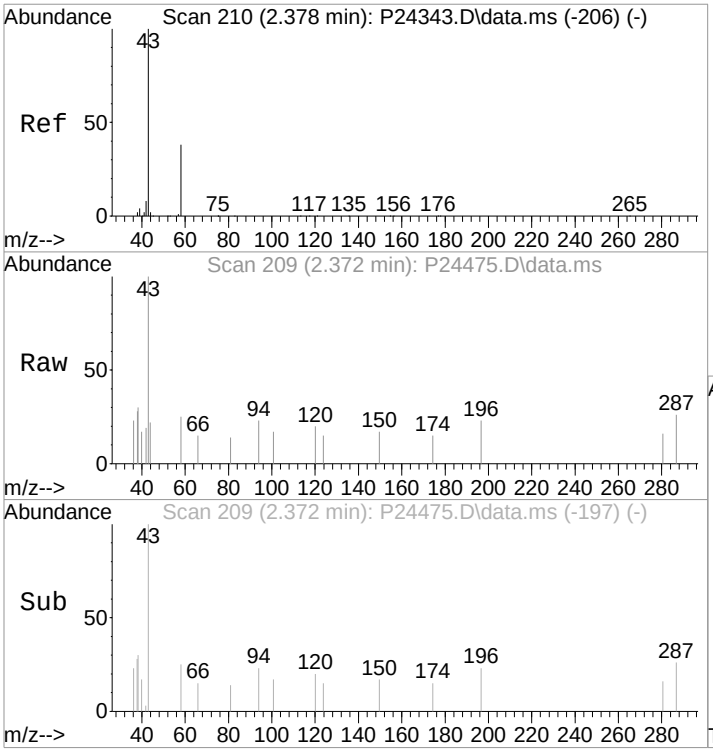
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24475.D
Acq On : 25 Feb 2019 9:55 pm
Operator : K.Ruest
Sample : R1901592-004|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 26 12:28:02 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



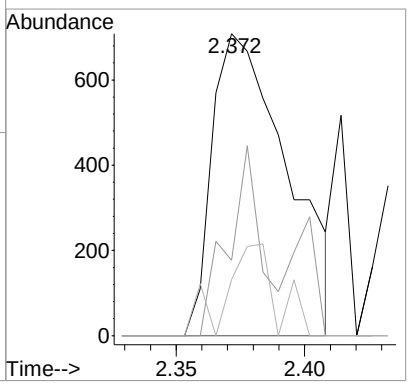
1st 02/26/19
2nd 02/26/19

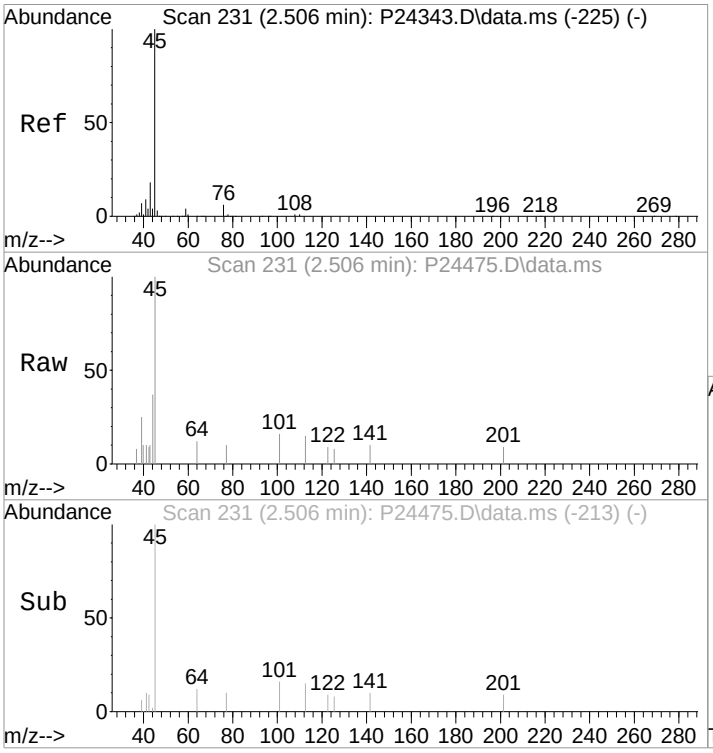


#15
Acetone
Concen: 0.92 ppb
RT: 2.372 min Scan# 209
Delta R.T. 0.000 min
Lab File: P24475.D
Acq: 25 Feb 2019 9:55 pm

Tgt Ion: 43 Resp: 1450

Ion	Ratio	Lower	Upper
43	100		
58	25.0	18.1	58.1
42	18.6	0.0	27.8

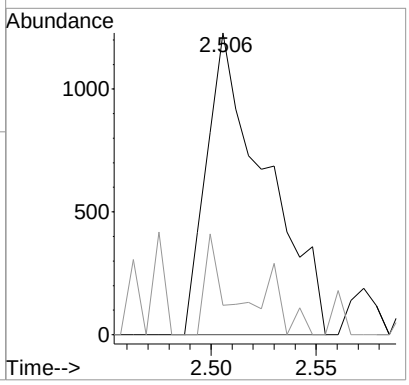




#16
2-Propanol
Concen: 5.86 ppb
RT: 2.506 min Scan# 231
Delta R.T. 0.000 min
Lab File: P24475.D
Acq: 25 Feb 2019 9:55 pm

Tgt Ion: 45 Resp: 2402

Ion	Ratio	Lower	Upper
45	100		
43	9.8	0.0	38.5



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24476.D
Acq On : 25 Feb 2019 10:16 pm
Operator : K.Ruest
Sample : R1901592-005|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 26 12:29:29 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

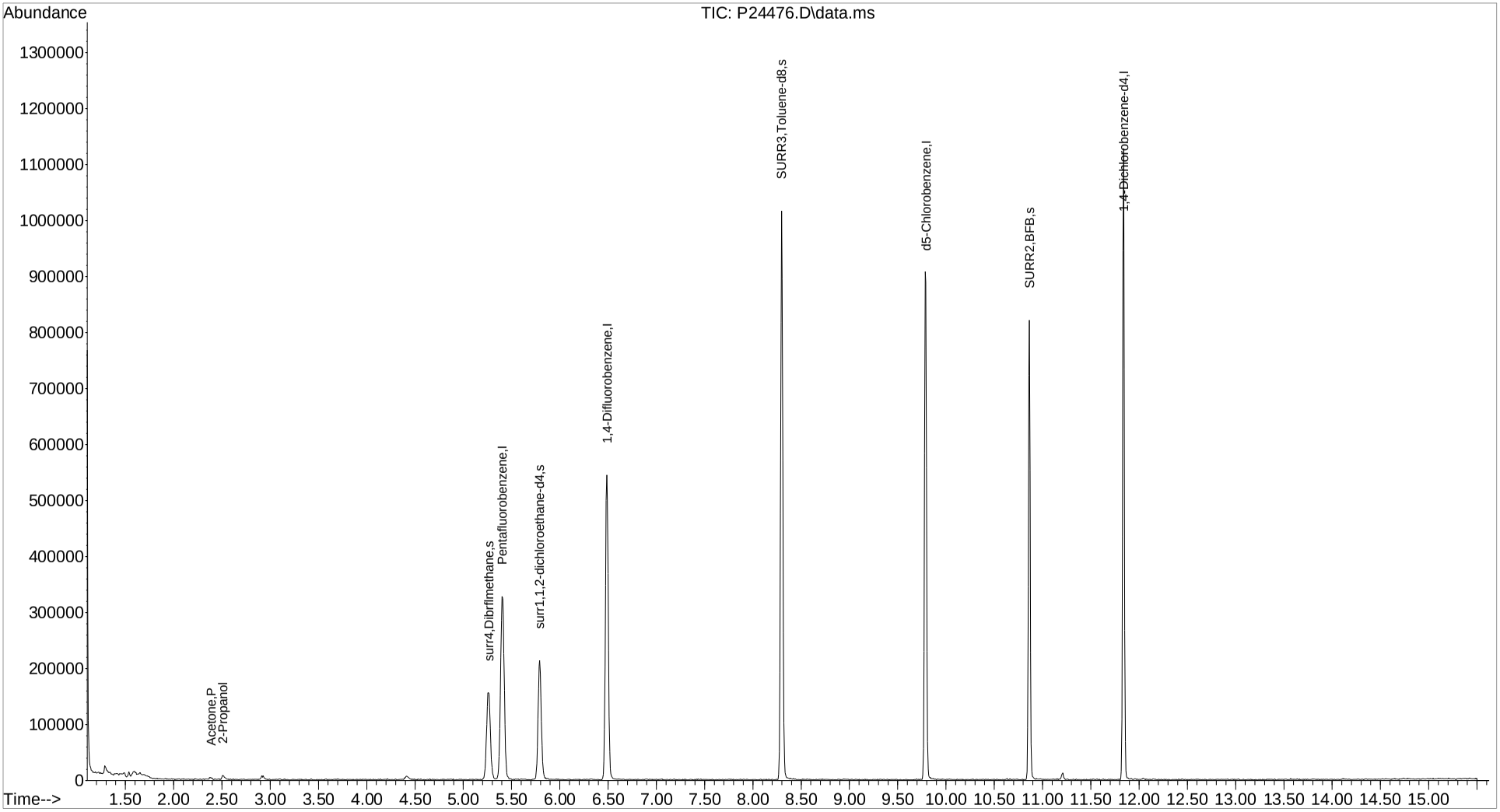
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.402	168	317480	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.487	114	494571	50.00	ppb	0.00
71) d5-Chlorobenzene	9.791	117	434816	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	228629	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.261	113	135438	49.83	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.66%			
48) surr1,1,2-dichloroetha...	5.792	65	175580	50.93	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.86%			
65) SURR3,Toluene-d8	8.297	98	641844	49.79	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.58%			
70) SURR2,BFB	10.864	95	227573	49.29	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.58%			
Target Compounds						Qvalue
15) Acetone	2.384	43	3120	2.05	ppb	95
16) 2-Propanol	2.506	45	7908	20.04	ppb	83

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

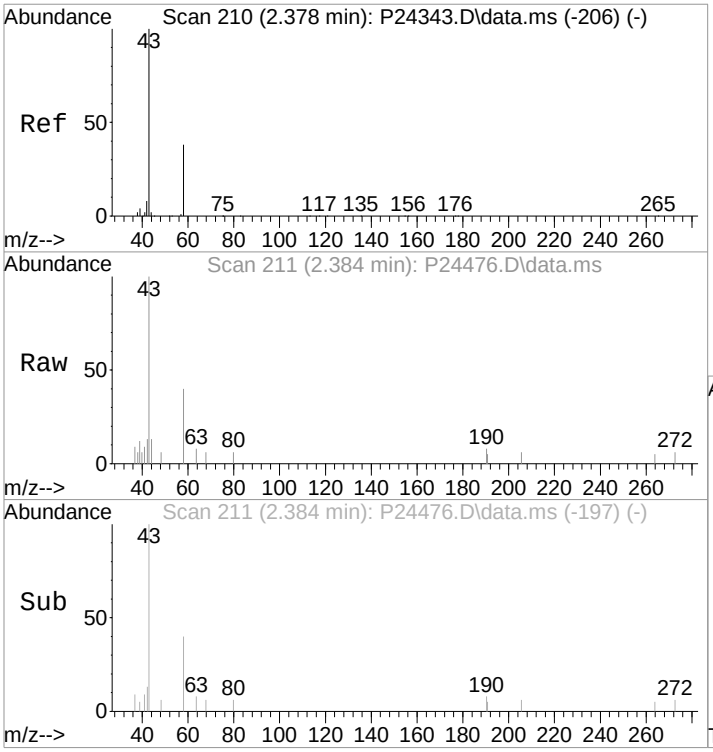
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24476.D
Acq On : 25 Feb 2019 10:16 pm
Operator : K.Ruest
Sample : R1901592-005|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 26 12:29:29 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



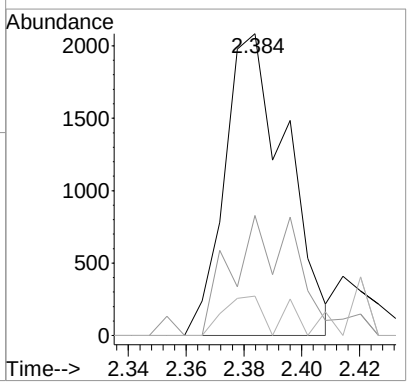
1st 02/26/19
2nd 02/26/19

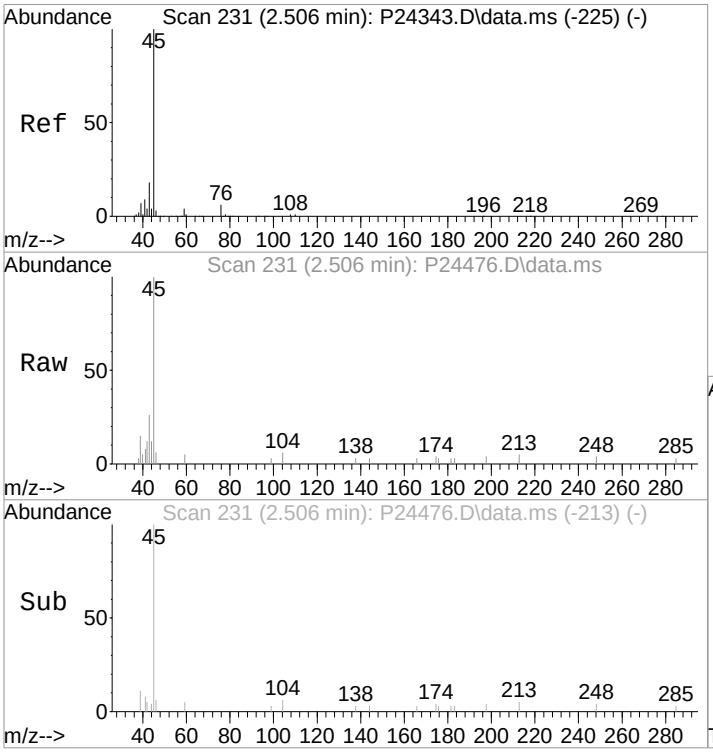


#15
Acetone
Concen: 2.05 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24476.D
Acq: 25 Feb 2019 10:16 pm

Tgt Ion: 43 Resp: 3120

Ion	Ratio	Lower	Upper
43	100		
58	39.8	18.1	58.1
42	13.0	0.0	27.8

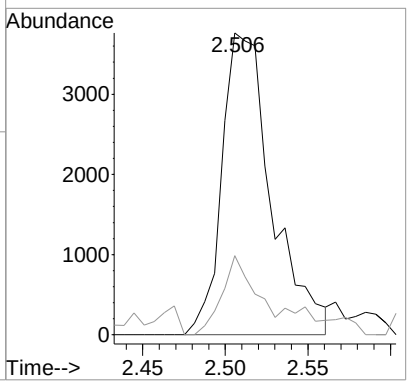




#16
2-Propanol
Concen: 20.04 ppb
RT: 2.506 min Scan# 231
Delta R.T. 0.000 min
Lab File: P24476.D
Acq: 25 Feb 2019 10:16 pm

Tgt Ion: 45 Resp: 7908

Ion	Ratio	Lower	Upper
45	100		
43	26.2	0.0	38.5

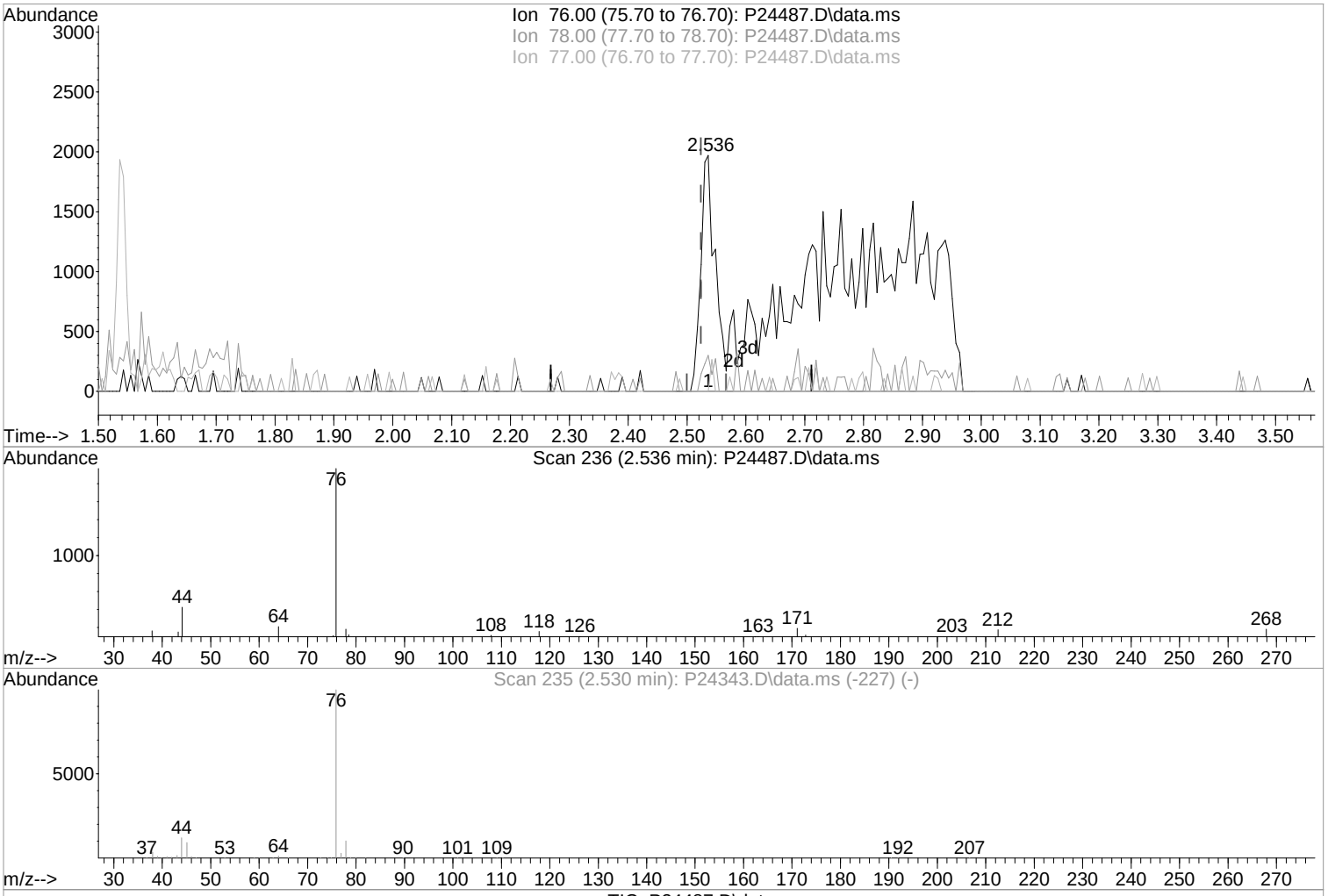


1st 02/26/19
2nd 02/26/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24487.D
Acq On : 26 Feb 2019 2:14 am
Operator : K.Ruest
Sample : R1901592-006|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 26 09:06:16 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24487.D\data.ms

(18) Carbon Disulfide (P)

2.536min (+0.012) 2.66 ppb m

response 24473

Ion	Exp%	Act%
76.00	100	100
78.00	10.10	9.24
77.00	2.90	0.00
0.00	0.00	0.00

Manual Integration:

After

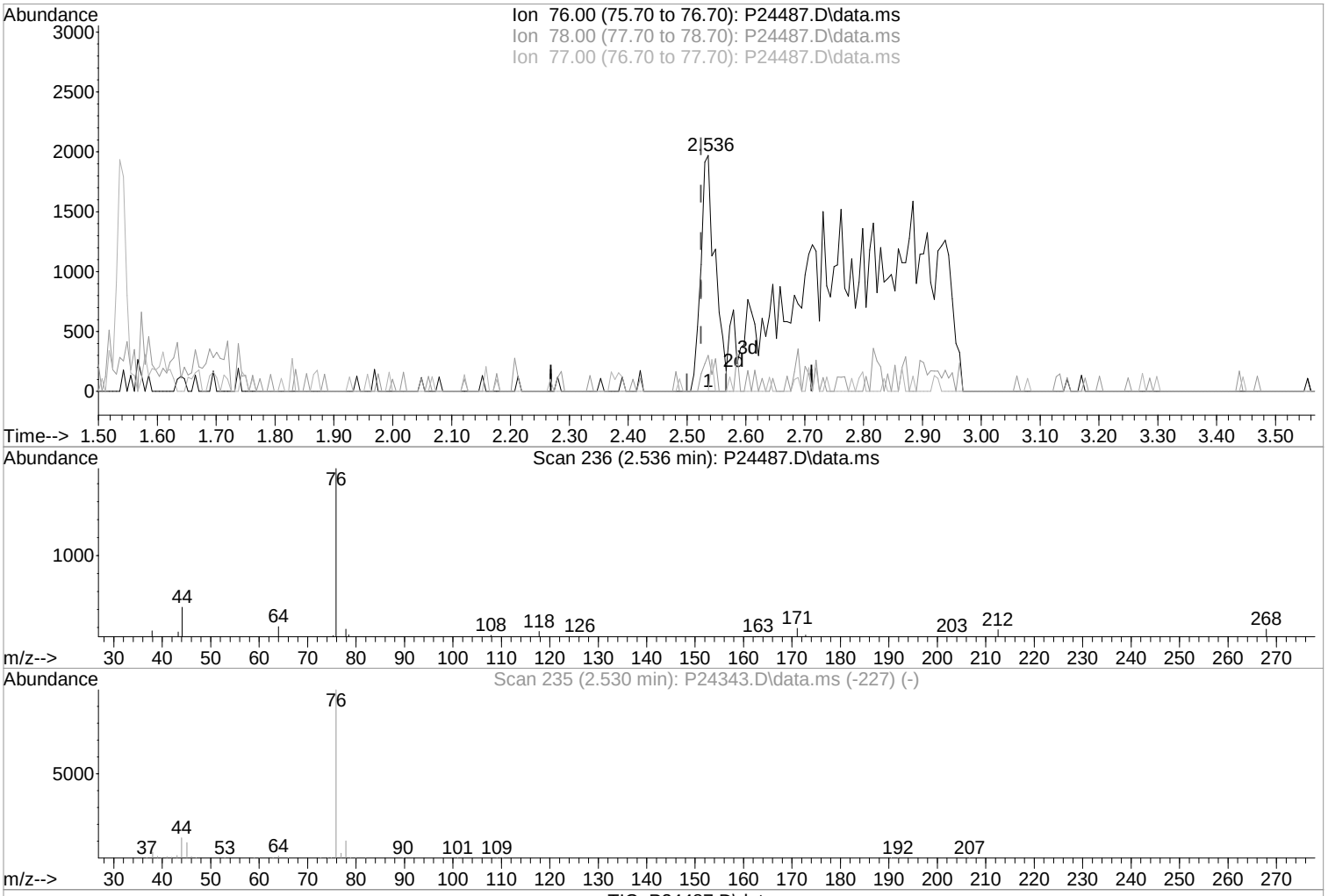
Other - SO2 interference

02/26/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24487.D
Acq On : 26 Feb 2019 2:14 am
Operator : K.Ruest
Sample : R1901592-006|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 26 09:06:16 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24487.D\data.ms

(18) Carbon Disulfide (P)

2.536min (+0.012) 0.37 ppb

response 3373

Ion	Exp%	Act%
76.00	100	100
78.00	10.10	15.28
77.00	2.90	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/26/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24487.D
Acq On : 26 Feb 2019 2:14 am
Operator : K.Ruest
Sample : R1901592-006|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 26 14:54:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

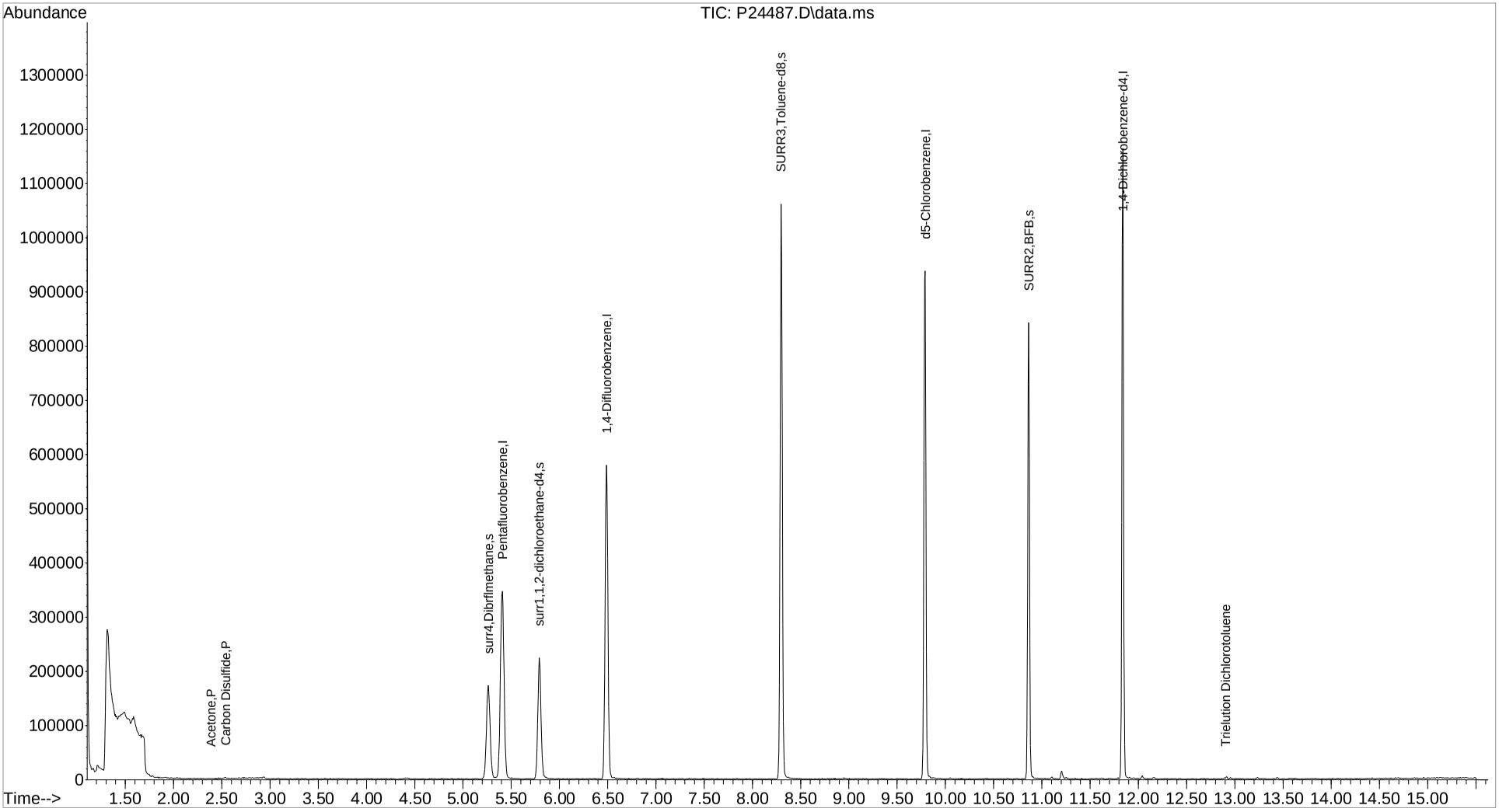
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.408	168	329331	50.00	ppb	0.01
43) 1,4-Difluorobenzene	6.487	114	514904	50.00	ppb	0.00
71) d5-Chlorobenzene	9.791	117	450035	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	234860	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.261	113	142239	50.27	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.54%			
48) surr1,1,2-dichloroetha...	5.792	65	180552	50.31	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 100.62%			
65) SURR3,Toluene-d8	8.297	98	661563	49.29	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.58%			
70) SURR2,BFB	10.864	95	232333	48.33	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.66%			
Target Compounds						Qvalue
15) Acetone	2.384	43	875	0.55	ppb	# 46
18) Carbon Disulfide	2.536	76	24473m	2.66	ppb	
112) Trielution Dichlorotol...	12.906	125	1435	0.23	ppb	96

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

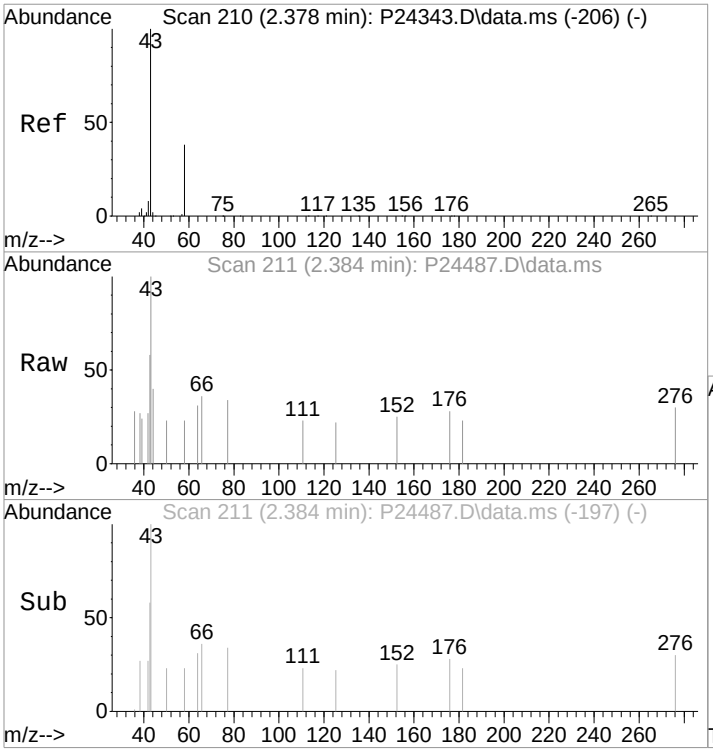
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24487.D
Acq On : 26 Feb 2019 2:14 am
Operator : K.Ruest
Sample : R1901592-006|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 26 14:54:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



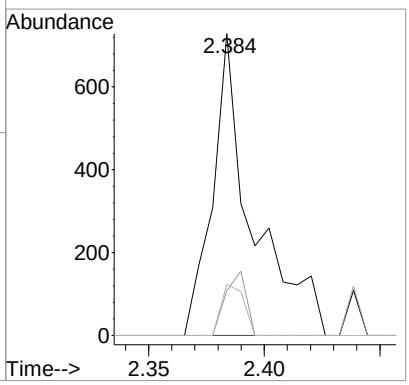
1st 02/26/19
2nd 02/26/19

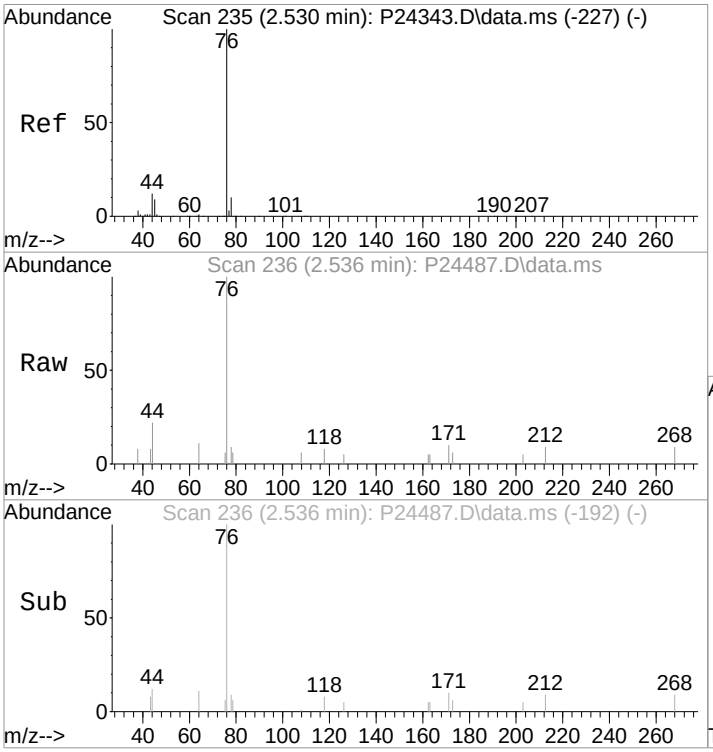


#15
Acetone
Concen: 0.55 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24487.D
Acq: 26 Feb 2019 2:14 am

Tgt Ion: 43 Resp: 875

Ion	Ratio	Lower	Upper
43	100		
58	14.8	18.1	58.1#
42	53.5	0.0	27.8#

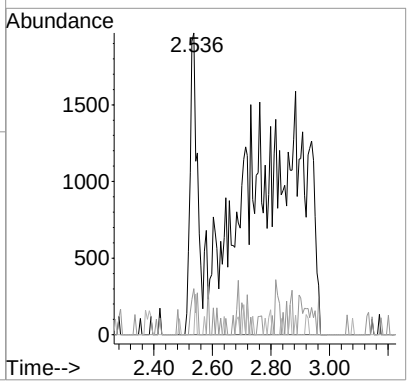


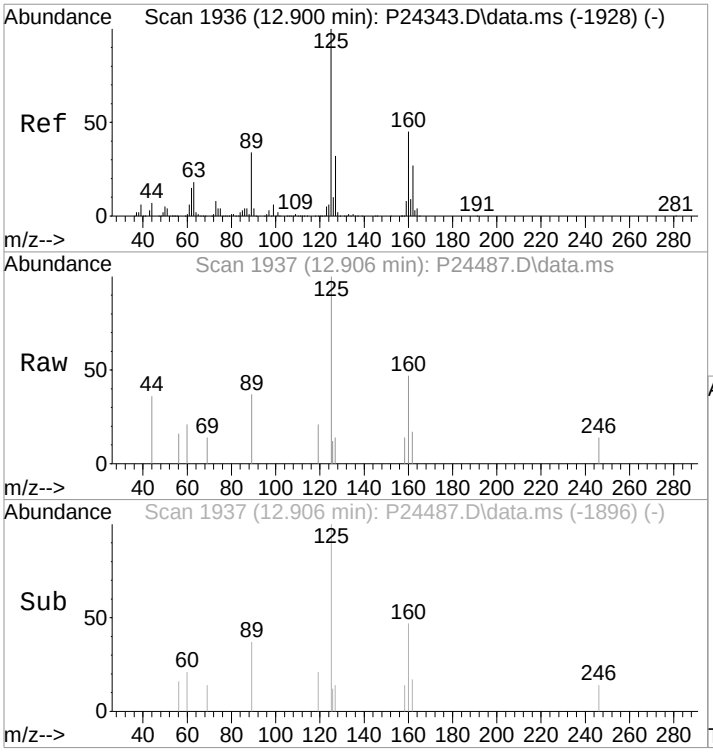


#18
Carbon Disulfide
Concen: 2.66 ppb m
RT: 2.536 min Scan# 236
Delta R.T. 0.012 min
Lab File: P24487.D
Acq: 26 Feb 2019 2:14 am

Tgt Ion: 76 Resp: 24473

Ion	Ratio	Lower	Upper
76	100		
78	9.2	0.0	30.1
77	0.0	0.0	22.9

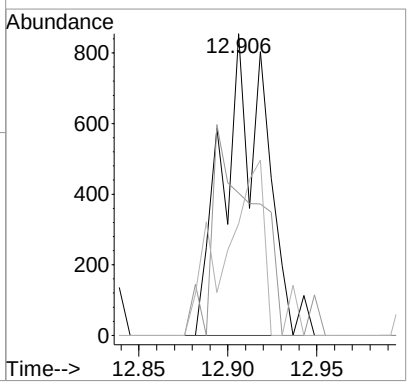




#112
Trielution Dichlorotoluene
Concen: 0.23 ppb
RT: 12.906 min Scan# 1937
Delta R.T. 0.000 min
Lab File: P24487.D
Acq: 26 Feb 2019 2:14 am

Tgt Ion:125 Resp: 1435

Ion	Ratio	Lower	Upper
125	100		
160	47.1	35.8	53.8
89	37.0	27.0	40.4



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24488.D
Acq On : 26 Feb 2019 2:35 am
Operator : K.Ruest
Sample : R1901592-007|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 26 14:59:28 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

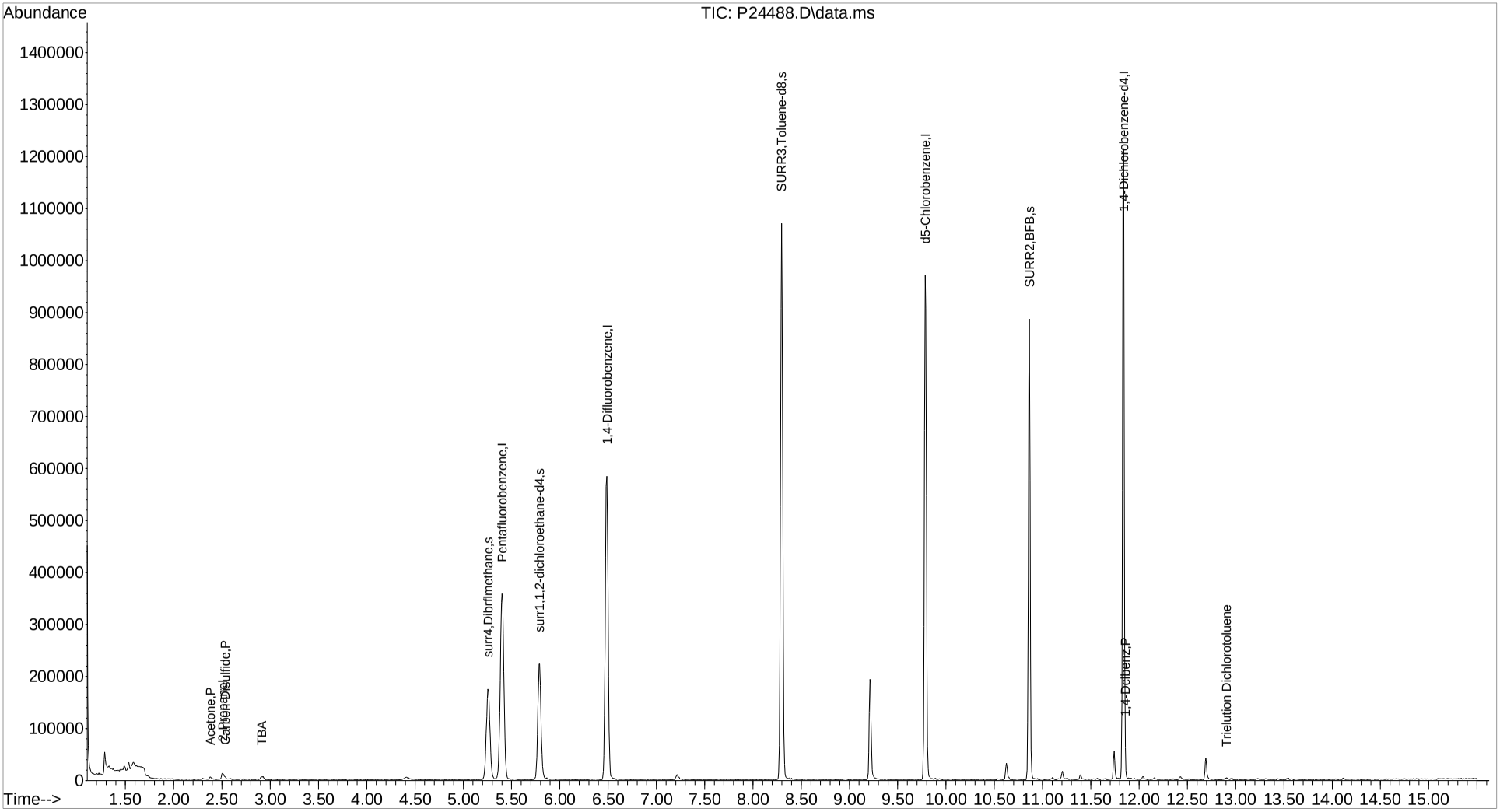
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.401	168	338594	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.487	114	530599	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	459320	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	250418	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	143461	49.20	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.40%				
48) surr1,1,2-dichloroetha...	5.792	65	181407	49.05	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 98.10%				
65) SURR3,Toluene-d8	8.297	98	672828	48.65	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.30%				
70) SURR2,BFB	10.864	95	242396	48.93	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.86%				
Target Compounds							Qvalue
15) Acetone	2.378	43	5457	3.37	ppb		98
16) 2-Propanol	2.506	45	15194	36.10	ppb		100
18) Carbon Disulfide	2.530	76	2462	0.26	ppb		77
23) TBA	2.908	59	3326	4.97	ppb		83
106) 1,4-Dclbenz	11.857	146	2056	0.24	ppb		80
112) Trielution Dichlorotol...	12.900	125	1667	0.25	ppb	#	88

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

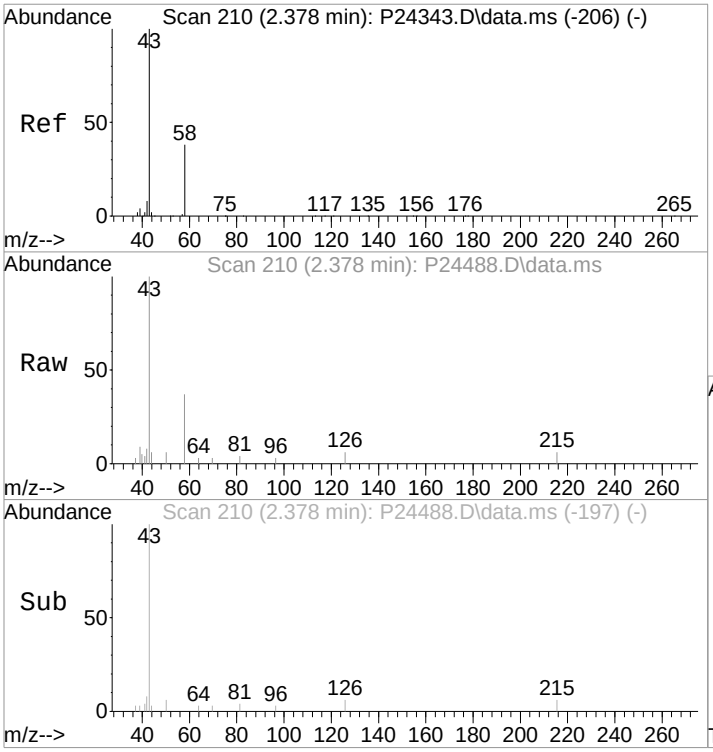
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24488.D
Acq On : 26 Feb 2019 2:35 am
Operator : K.Ruest
Sample : R1901592-007|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 26 14:59:28 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



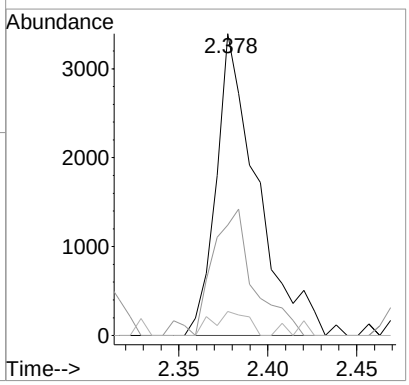
1st 02/26/19
2nd 02/26/19

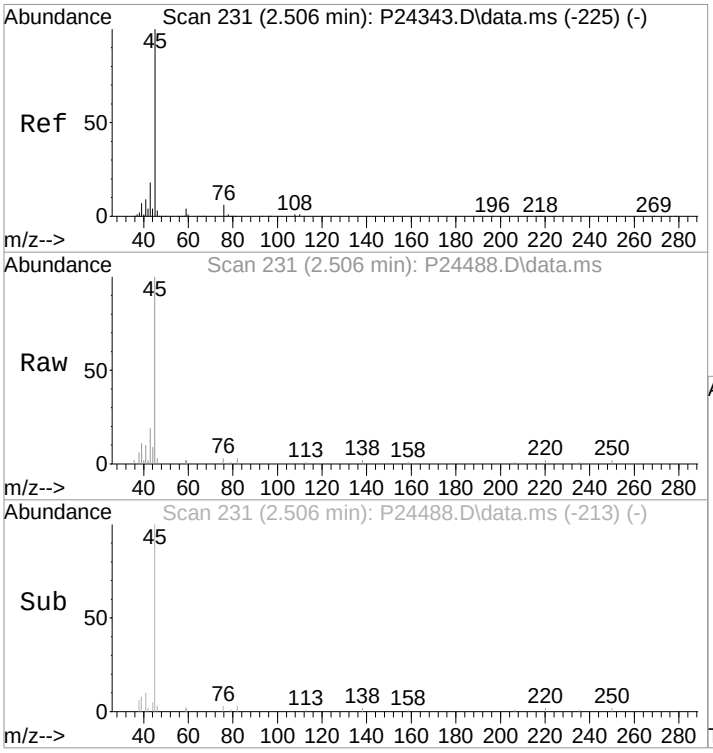


#15
Acetone
Concen: 3.37 ppb
RT: 2.378 min Scan# 210
Delta R.T. 0.006 min
Lab File: P24488.D
Acq: 26 Feb 2019 2:35 am

Tgt Ion: 43 Resp: 5457

Ion	Ratio	Lower	Upper
43	100		
58	36.6	18.1	58.1
42	8.0	0.0	27.8

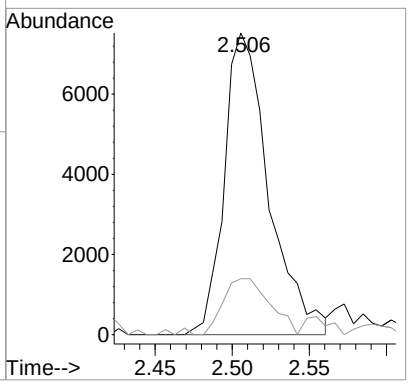


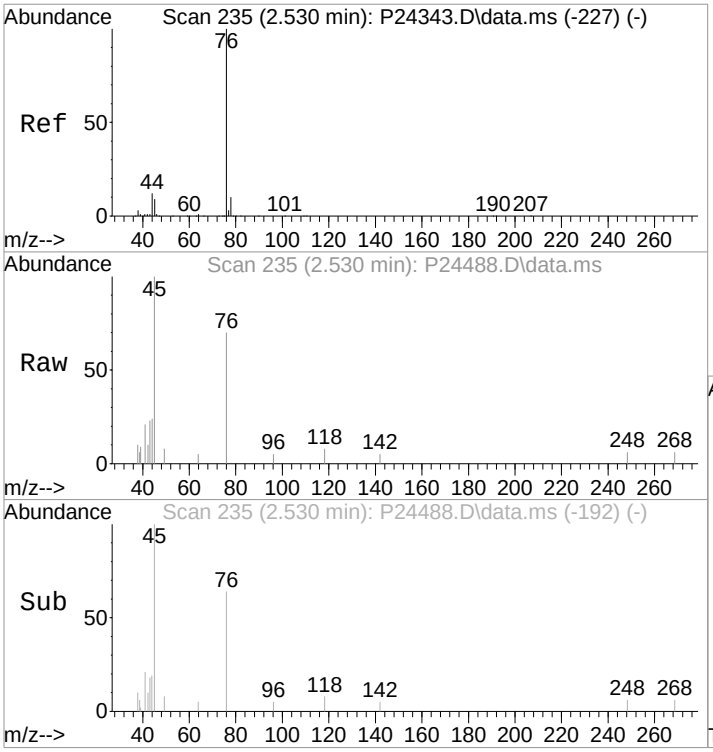


#16
2-Propanol
Concen: 36.10 ppb
RT: 2.506 min Scan# 231
Delta R.T. 0.000 min
Lab File: P24488.D
Acq: 26 Feb 2019 2:35 am

Tgt Ion: 45 Resp: 15194

Ion	Ratio	Lower	Upper
45	100		
43	18.6	0.0	38.5

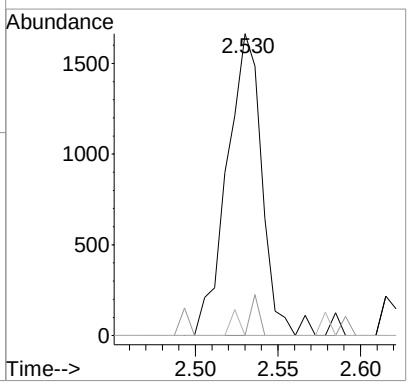


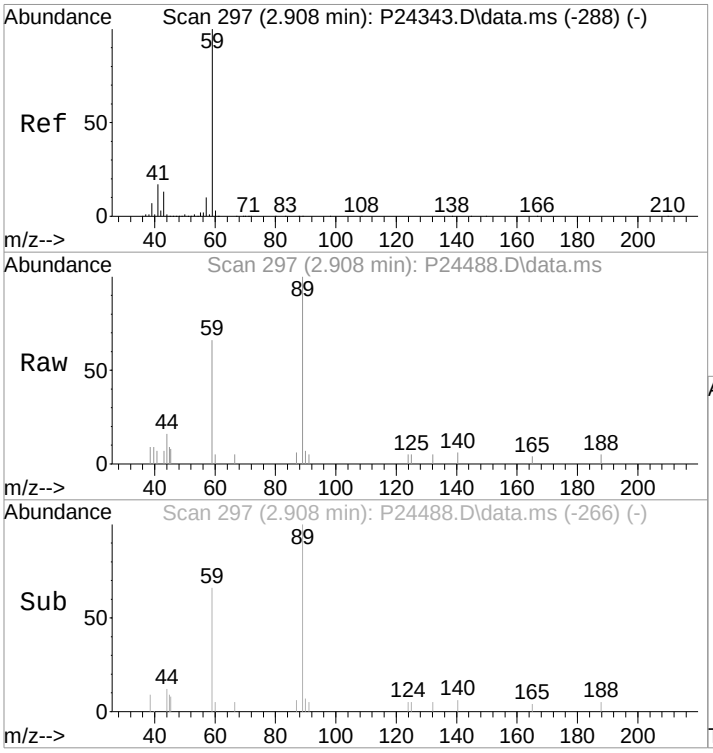


#18
Carbon Disulfide
Concen: 0.26 ppb
RT: 2.530 min Scan# 235
Delta R.T. 0.006 min
Lab File: P24488.D
Acq: 26 Feb 2019 2:35 am

Tgt Ion: 76 Resp: 2462

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	30.1
77	0.0	0.0	22.9

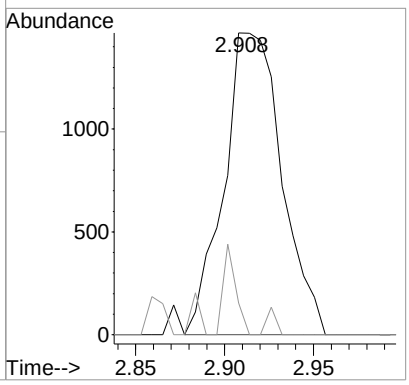


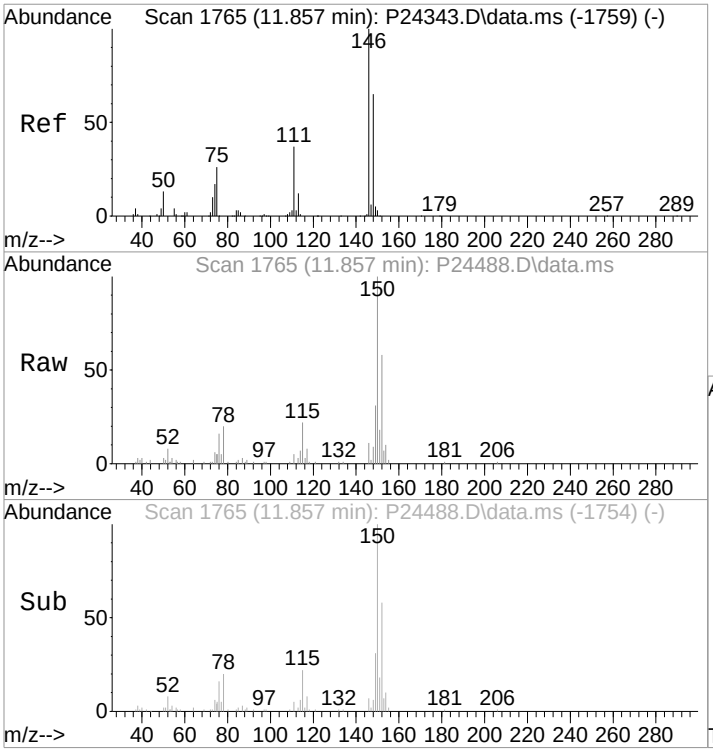


#23
TBA
Concen: 4.97 ppb
RT: 2.908 min Scan# 297
Delta R.T. -0.000 min
Lab File: P24488.D
Acq: 26 Feb 2019 2:35 am

Tgt Ion: 59 Resp: 3326

Ion	Ratio	Lower	Upper
59	100		
41	10.5	0.0	38.2

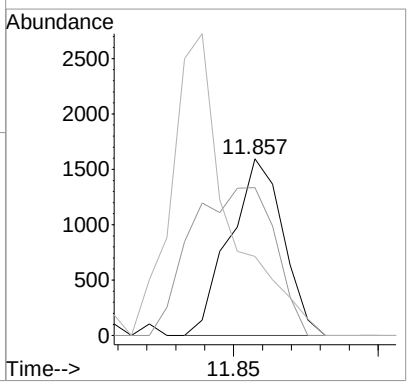


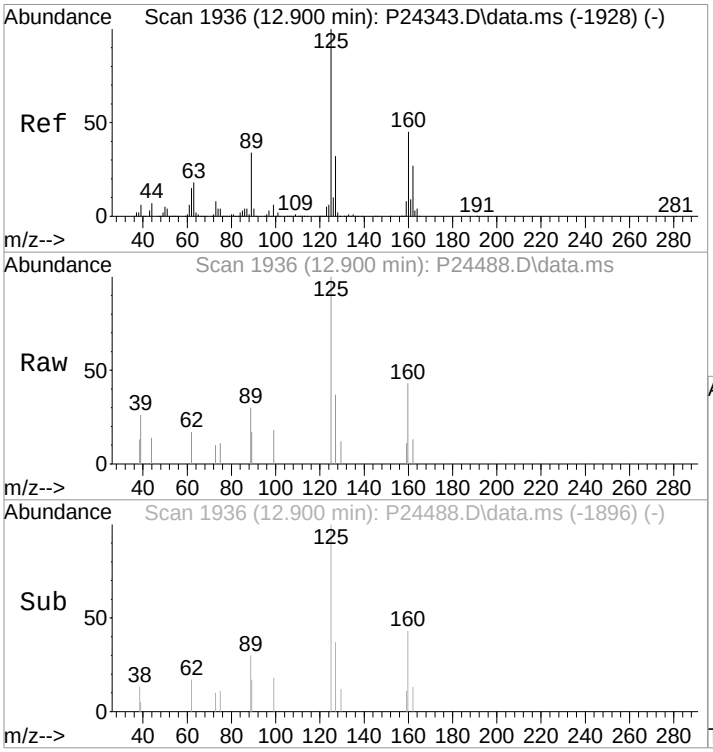


#106
1,4-Dclbenz
Concen: 0.24 ppb
RT: 11.857 min Scan# 1765
Delta R.T. 0.000 min
Lab File: P24488.D
Acq: 26 Feb 2019 2:35 am

Tgt Ion:146 Resp: 2056

Ion	Ratio	Lower	Upper
146	100		
148	83.7	44.6	84.6
111	44.8	16.7	56.7

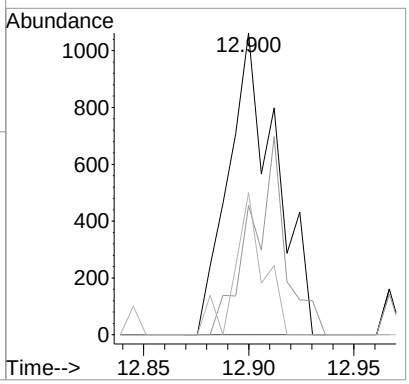




#112
Trielution Dichlorotoluene
Concen: 0.25 ppb
RT: 12.900 min Scan# 1936
Delta R.T. -0.006 min
Lab File: P24488.D
Acq: 26 Feb 2019 2:35 am

Tgt Ion:125 Resp: 1667

Ion	Ratio	Lower	Upper
125	100		
160	42.8	35.8	53.8
89	47.0	27.0	40.4#



1st 02/26/19
2nd 02/27/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24510.D
Acq On : 26 Feb 2019 2:39 pm
Operator : K.Ruest
Sample : R1901592-008|5.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 16:28:47 2019 w/DL on previous run
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.401	168	324876	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.487	114	511745	50.00	ppb		0.00
71) d5-Chlorobenzene	9.791	117	444575	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	234852	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	141584	50.35	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.70%				
48) surr1,1,2-dichloroetha...	5.786	65	181692	50.94	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.88%				
65) SURR3,Toluene-d8	8.297	98	667147	50.01	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.02%				
70) SURR2,BFB	10.864	95	240572	50.36	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.72%				
Target Compounds							Qvalue
13) 1,1-Diclethene	2.335	96	5627	1.86	ppb		90
15) Acetone	2.384	43	2092	1.34	ppb		84
16) 2-Propanol	2.506	45	14589	36.12	ppb		97
23) TBA	2.920	59	5421	8.45	ppb		82
26) trans-1,2-Dichloroethene	3.073	96	4943	1.47	ppb	#	79
34) cis-1,2-Dichloroethene	4.396	96	942239	249.29	ppb		86
54) Trichloroethene	6.810	130	80933	22.61	ppb		96
112) Trielution Dichlorotol...	12.912	125	1326	0.21	ppb	#	84

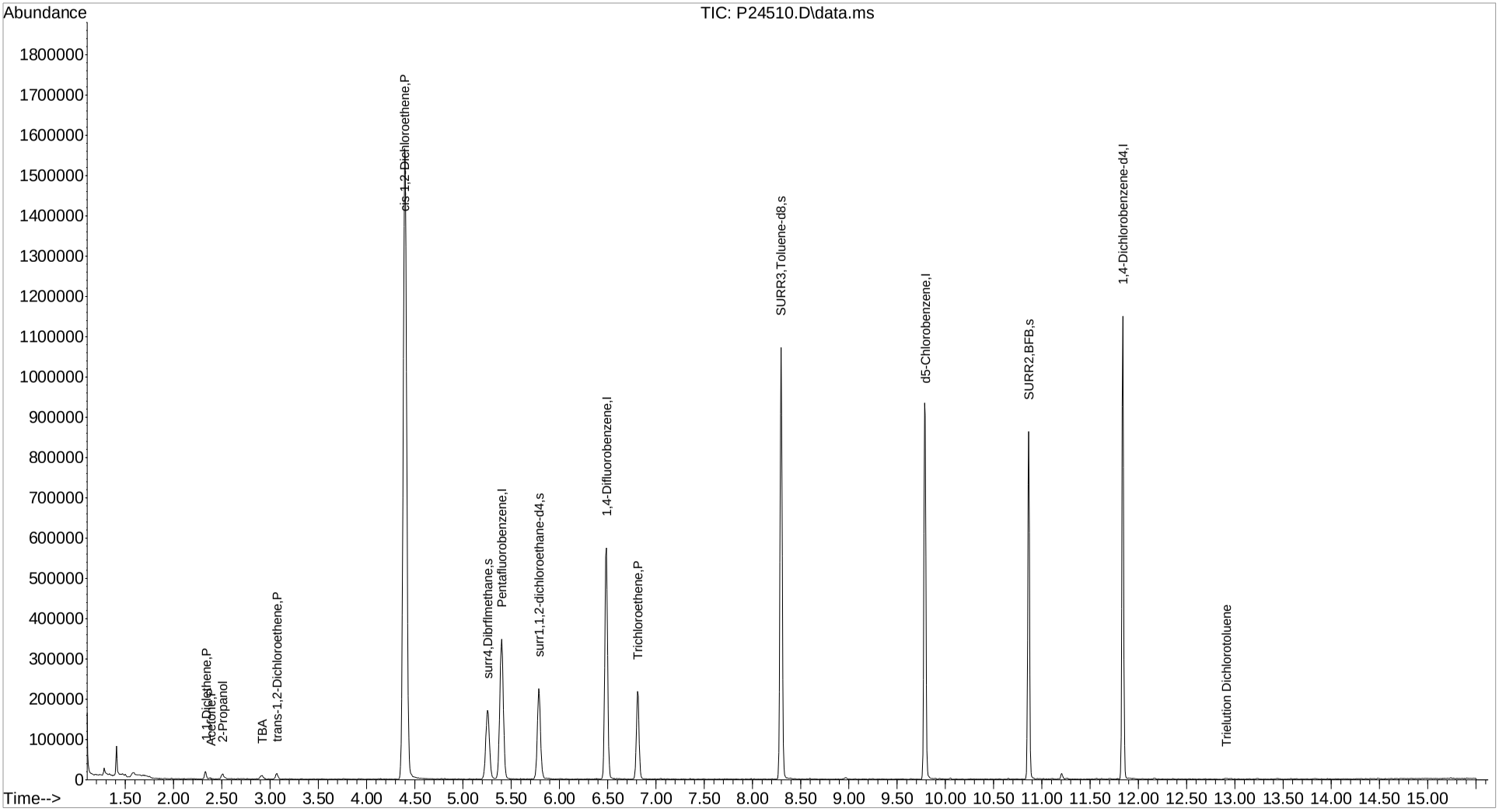
E-Over Calibration

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

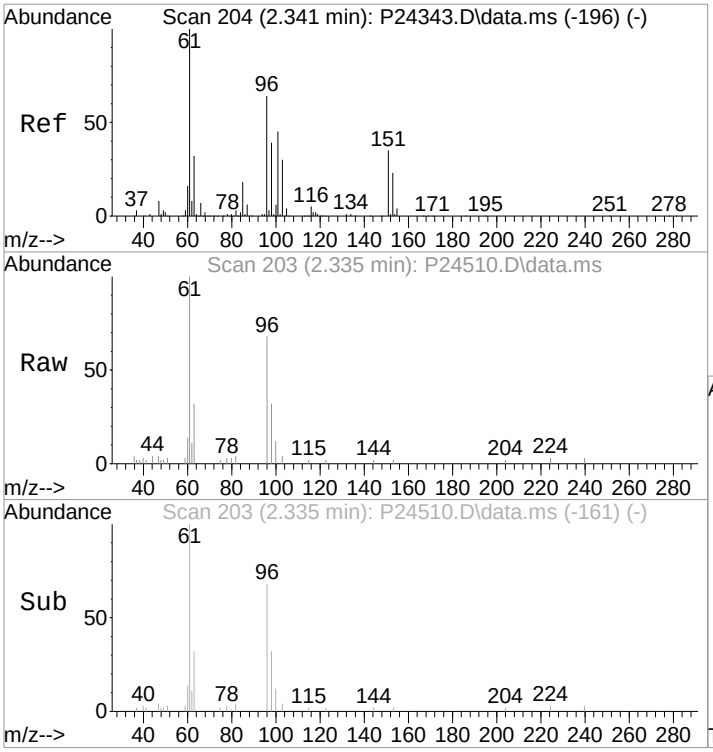
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24510.D
Acq On : 26 Feb 2019 2:39 pm
Operator : K.Ruest
Sample : R1901592-008|5.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 16:28:47 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



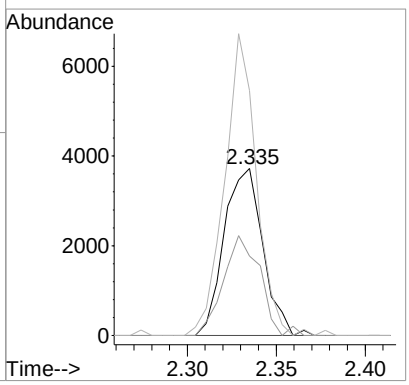
1st 02/26/19
2nd 02/27/19

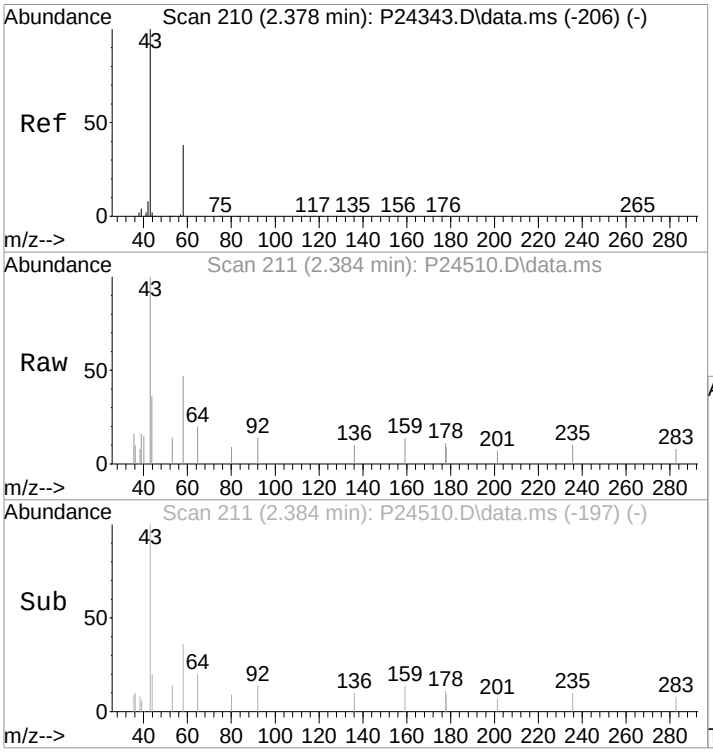


#13
1,1-Diclethene
Concen: 1.86 ppb
RT: 2.335 min Scan# 203
Delta R.T. 0.006 min
Lab File: P24510.D
Acq: 26 Feb 2019 2:39 pm

Tgt Ion: 96 Resp: 5627

Ion	Ratio	Lower	Upper
96	100		
98	47.5	40.8	80.8
61	146.5	136.2	176.2

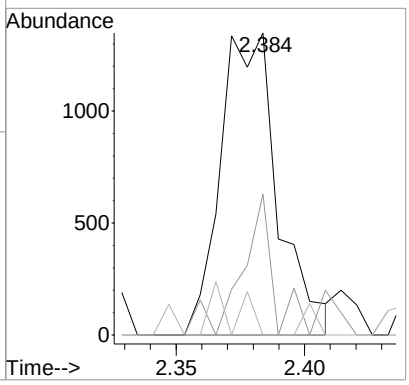


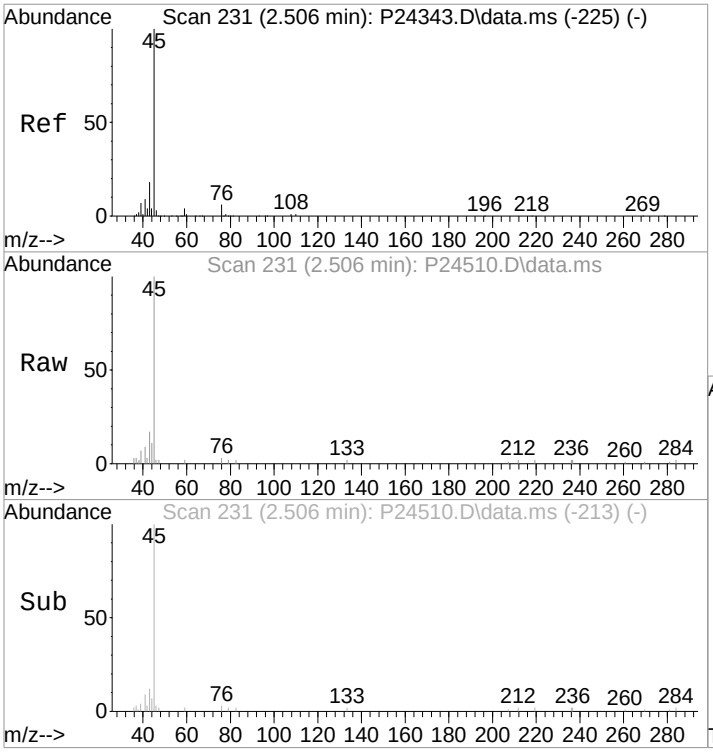


#15
Acetone
Concen: 1.34 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24510.D
Acq: 26 Feb 2019 2:39 pm

Tgt Ion: 43 Resp: 2092

Ion	Ratio	Lower	Upper
43	100		
58	46.7	18.1	58.1
42	0.0	0.0	27.8

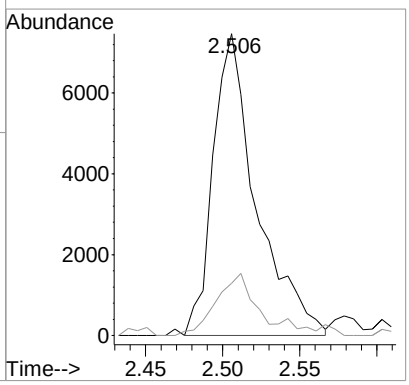


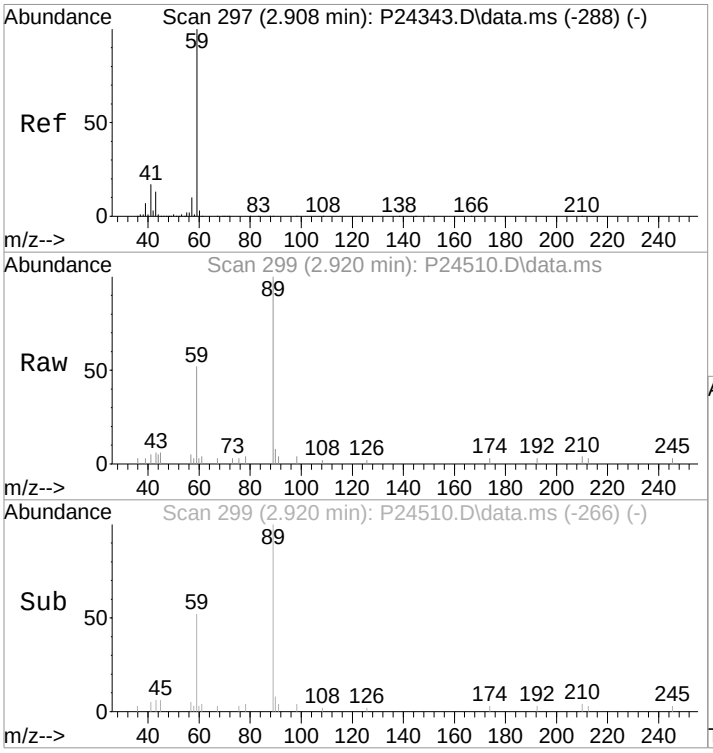


#16
2-Propanol
Concen: 36.12 ppb
RT: 2.506 min Scan# 231
Delta R.T. 0.000 min
Lab File: P24510.D
Acq: 26 Feb 2019 2:39 pm

Tgt Ion: 45 Resp: 14589

Ion	Ratio	Lower	Upper
45	100		
43	17.2	0.0	38.5

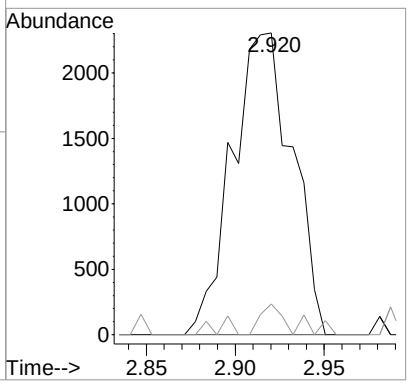


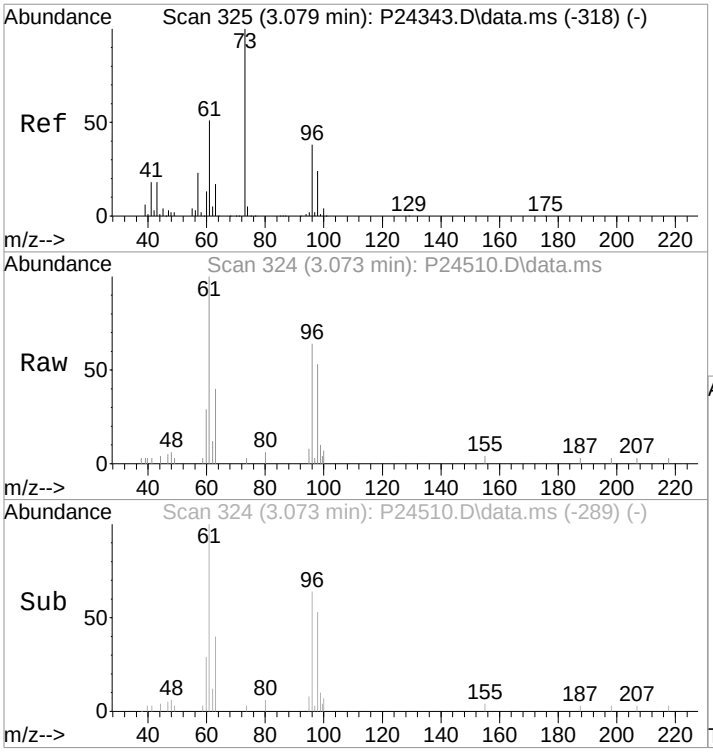


#23
TBA
Concen: 8.45 ppb
RT: 2.920 min Scan# 299
Delta R.T. 0.012 min
Lab File: P24510.D
Acq: 26 Feb 2019 2:39 pm

Tgt Ion: 59 Resp: 5421

Ion	Ratio	Lower	Upper
59	100		
41	10.2	0.0	38.2

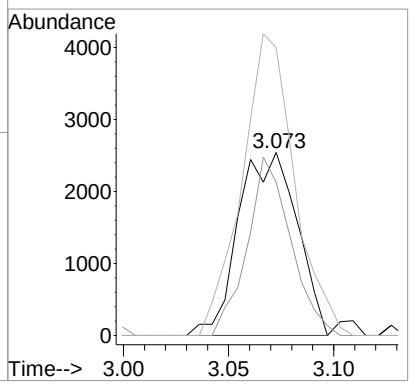


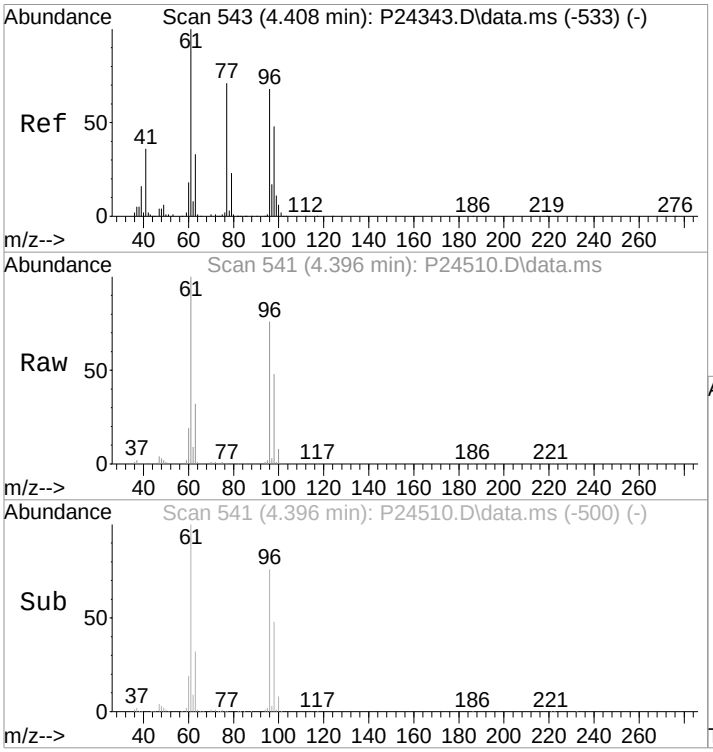


#26
trans-1,2-Dichloroethene
Concen: 1.47 ppb
RT: 3.073 min Scan# 324
Delta R.T. 0.006 min
Lab File: P24510.D
Acq: 26 Feb 2019 2:39 pm

Tgt Ion: 96 Resp: 4943

Ion	Ratio	Lower	Upper
96	100		
98	83.8	43.5	83.5#
61	157.3	114.4	154.4#

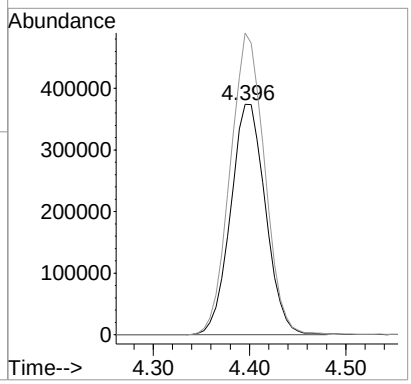


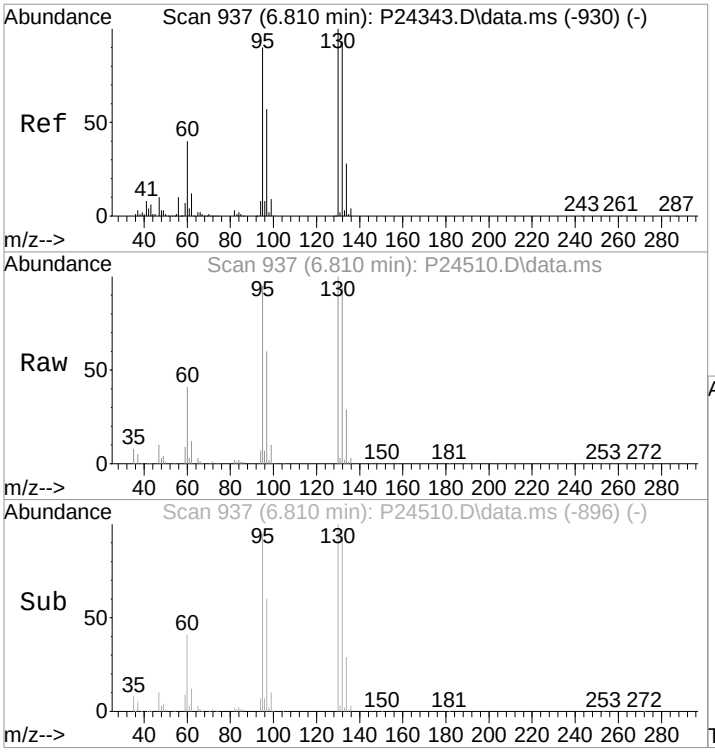


#34
cis-1,2-Dichloroethene
Concen: 249.29 ppb
RT: 4.396 min Scan# 541
Delta R.T. -0.006 min
Lab File: P24510.D
Acq: 26 Feb 2019 2:39 pm

Tgt Ion: 96 Resp: 942239

Ion	Ratio	Lower	Upper
96	100		
61	131.0	128.1	168.1

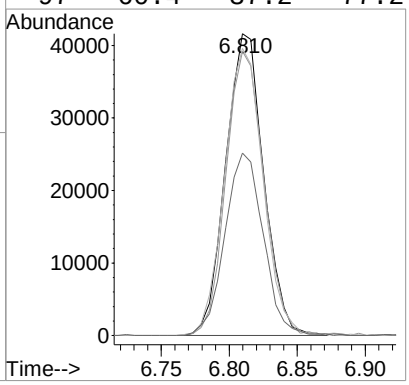


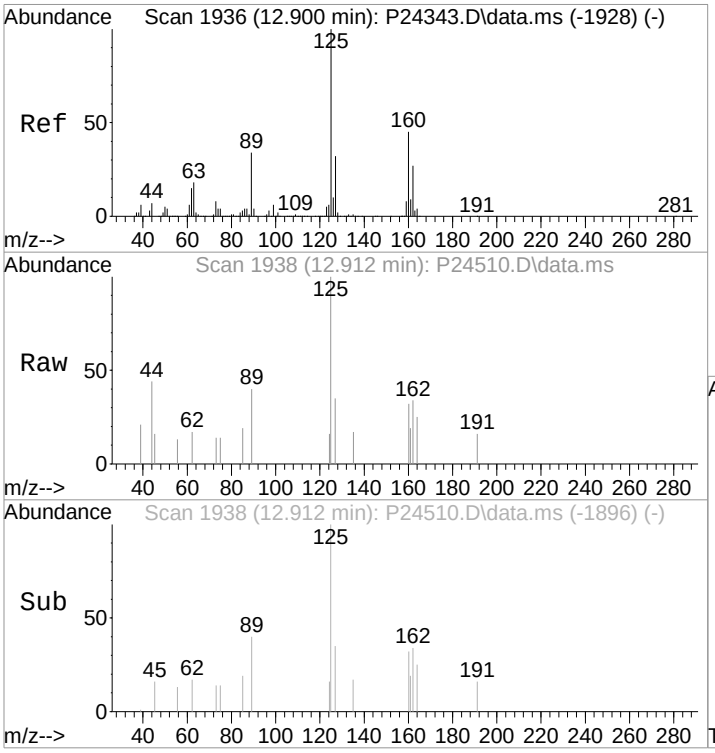


#54
Trichloroethene
Concen: 22.61 ppb
RT: 6.810 min Scan# 937
Delta R.T. 0.000 min
Lab File: P24510.D
Acq: 26 Feb 2019 2:39 pm

Tgt Ion:130 Resp: 80933

Ion	Ratio	Lower	Upper
130	100		
132	94.2	72.6	112.6
95	95.1	69.8	109.8
97	60.4	37.2	77.2

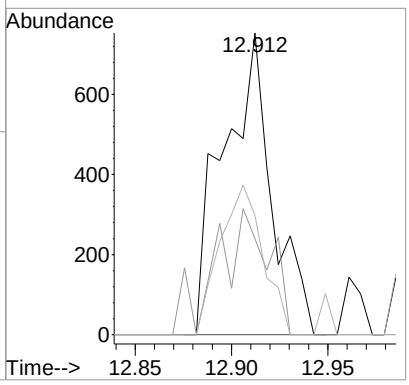




#112
Trielution Dichlorotoluene
Concen: 0.21 ppb
RT: 12.912 min Scan# 1938
Delta R.T. 0.006 min
Lab File: P24510.D
Acq: 26 Feb 2019 2:39 pm

Tgt Ion:125 Resp: 1326

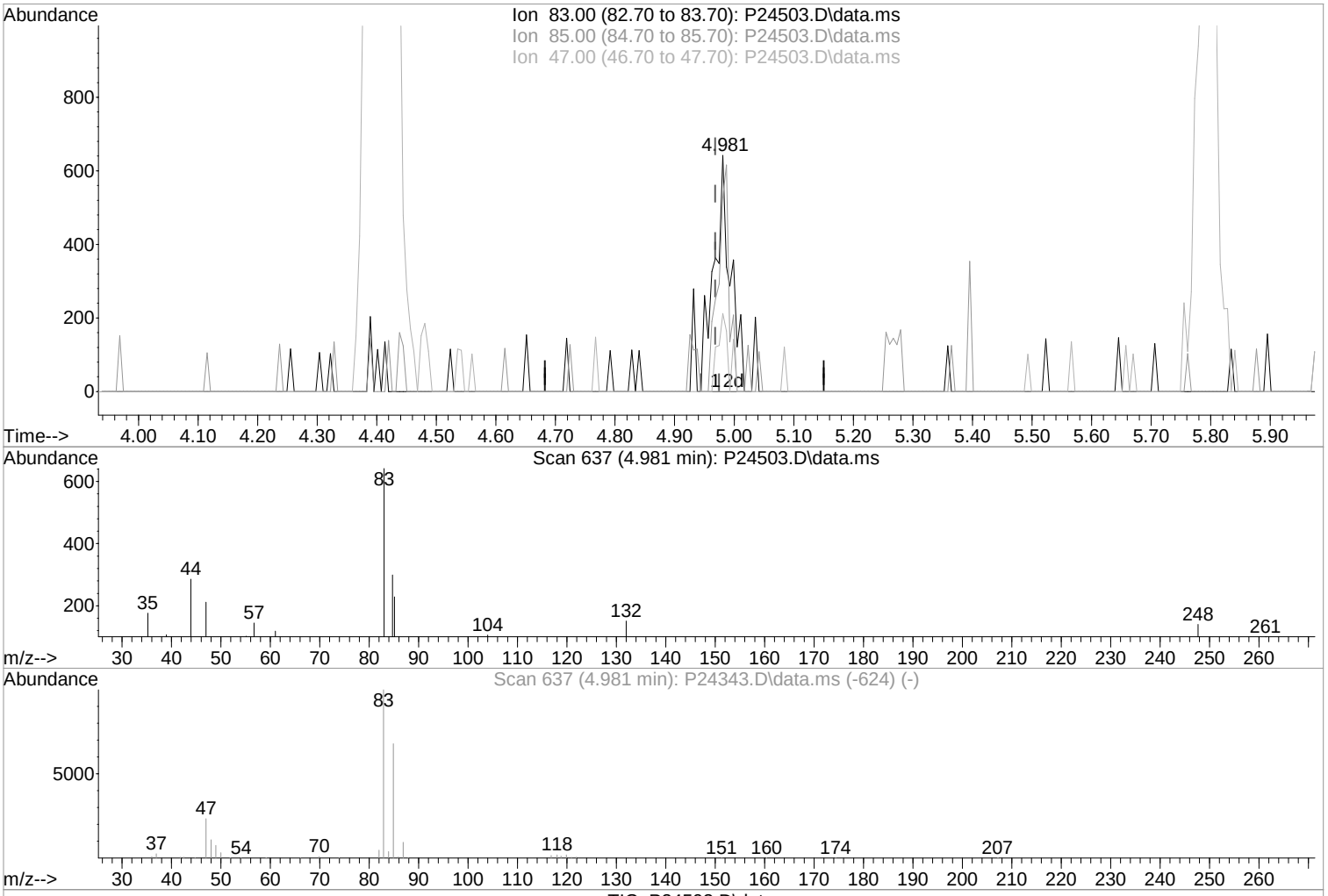
Ion	Ratio	Lower	Upper
125	100		
160	31.8	35.8	53.8#
89	39.5	27.0	40.4



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24503.D
Acq On : 26 Feb 2019 11:51 am
Operator : K.Ruest
Sample : R1901592-008|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 26 12:11:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24503.D\data.ms

(40) Chloroform (P)

4.981min (+0.012) 0.23 ppb m

response 1243

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	46.57#
47.00	23.40	33.02
0.00	0.00	0.00

Manual Integration:

After

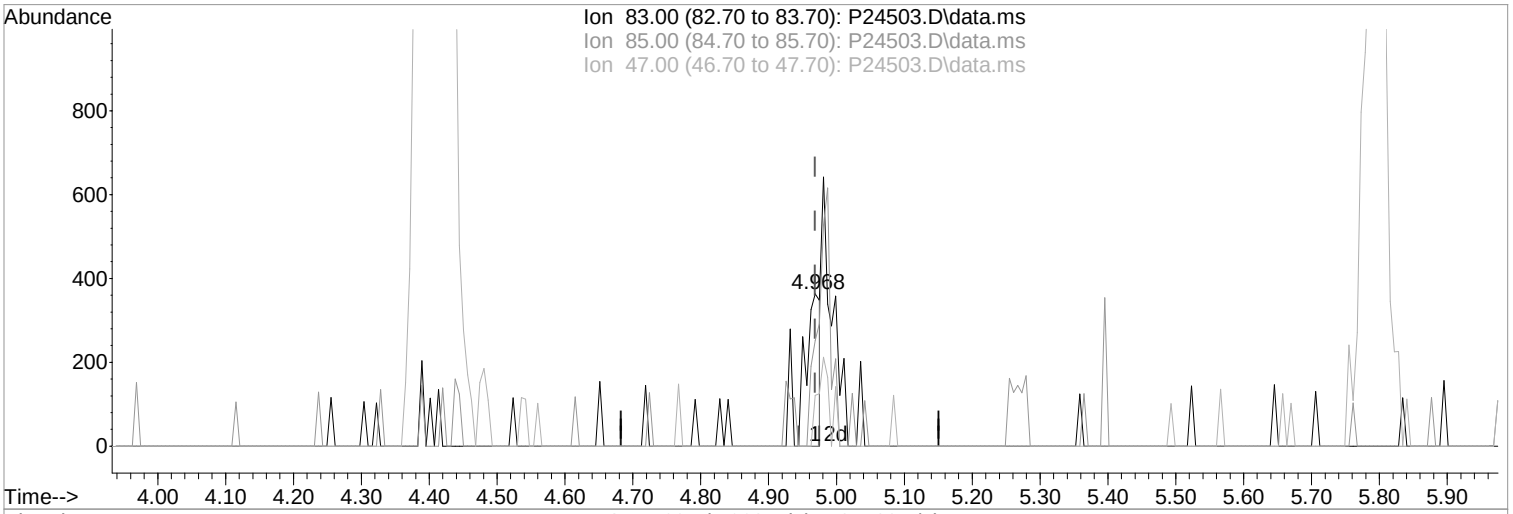
Split Peak

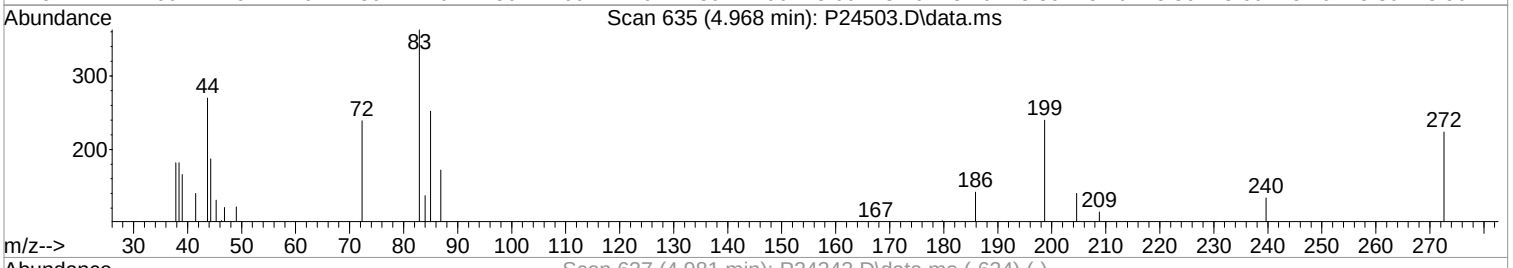
02/26/19

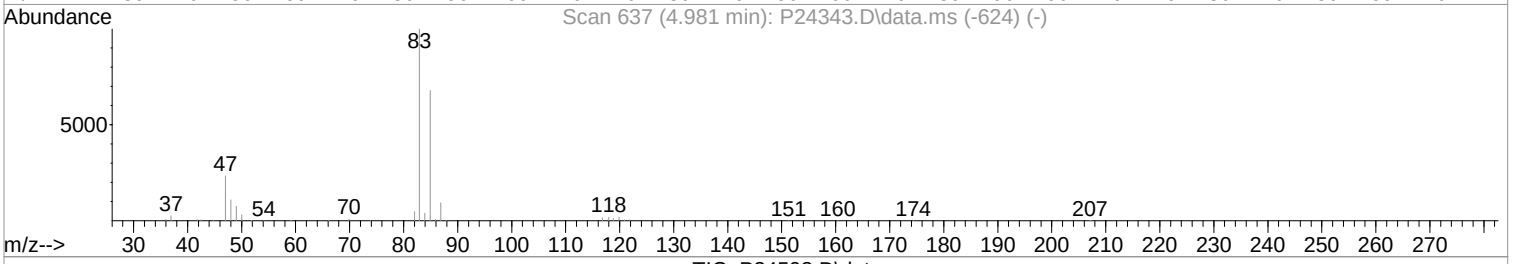
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24503.D
Acq On : 26 Feb 2019 11:51 am
Operator : K.Ruest
Sample : R1901592-008|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 26 12:11:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24503.D\data.ms

(40) Chloroform (P)

4.968min (-0.000) 0.10 ppb

response 528

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	69.42
47.00	23.40	33.33
0.00	0.00	0.00

Manual Integration:

Before

02/26/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24503.D
Acq On : 26 Feb 2019 11:51 am
Operator : K.Ruest
Sample : R1901592-008|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 26 15:21:41 2019 DL
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

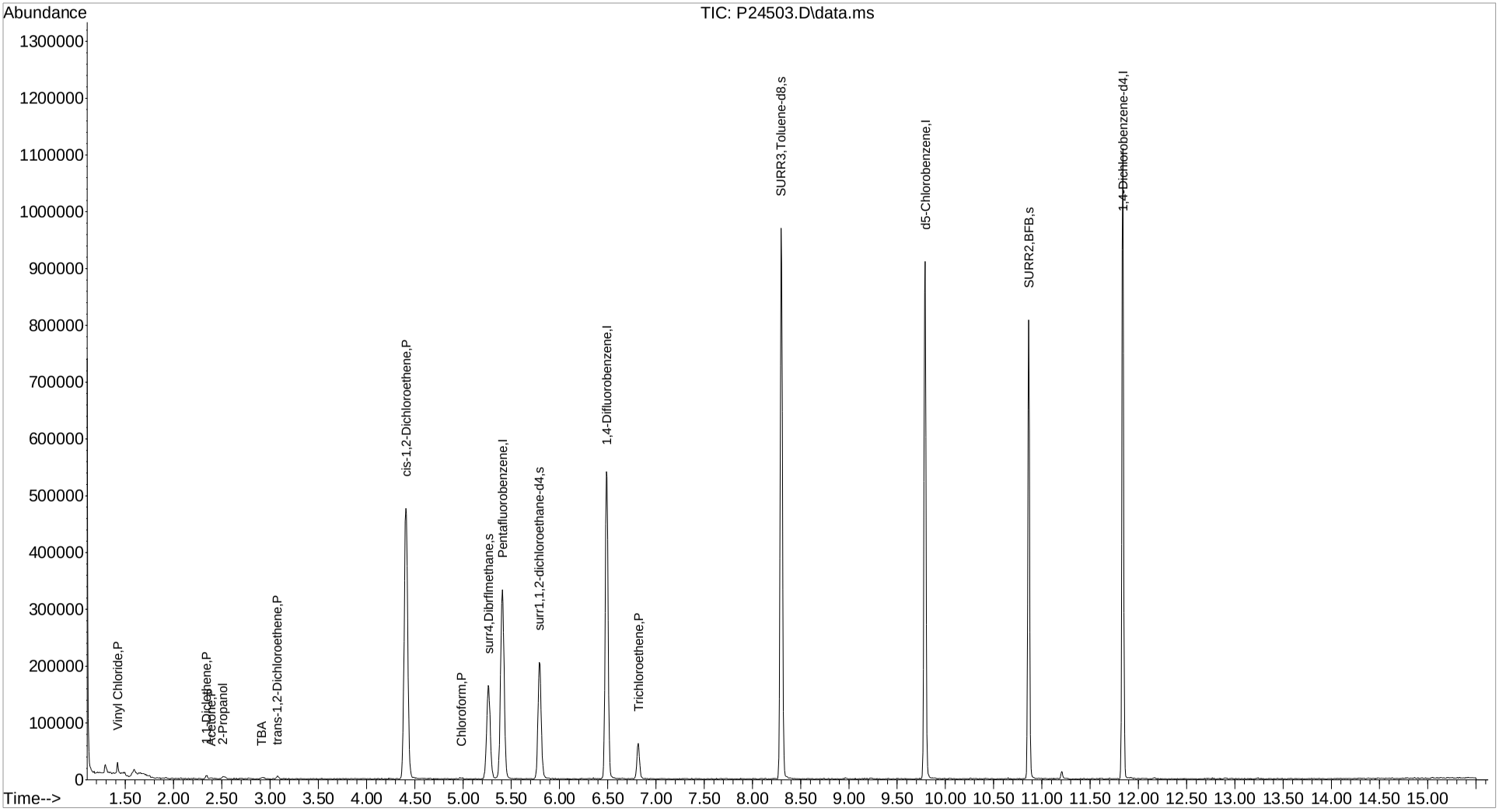
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.407	168	311607	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.493	114	496689	50.00	ppb		0.01
71) d5-Chlorobenzene	9.791	117	429372	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	230935	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.261	113	135054	49.48	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.96%				
48) surr1,1,2-dichloroetha...	5.791	65	169407	48.93	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 97.86%				
65) SURR3,Toluene-d8	8.297	98	629300	48.61	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.22%				
70) SURR2,BFB	10.864	95	223742	48.25	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.50%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.420	62	11665	2.58	ppb		87
13) 1,1-Diclethene	2.341	96	1518	0.52	ppb	#	77
15) Acetone	2.384	43	1756	1.18	ppb		95
16) 2-Propanol	2.512	45	4180	10.79	ppb		90
23) TBA	2.914	59	1674	2.72	ppb		77
26) trans-1,2-Dichloroethene	3.072	96	1595	0.49	ppb		98
34) cis-1,2-Dichloroethene	4.408	96	290840	80.23	ppb	#	83
40) Chloroform	4.981	83	1243m	0.23	ppb		
54) Trichloroethene	6.816	130	21996	6.33	ppb		95

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

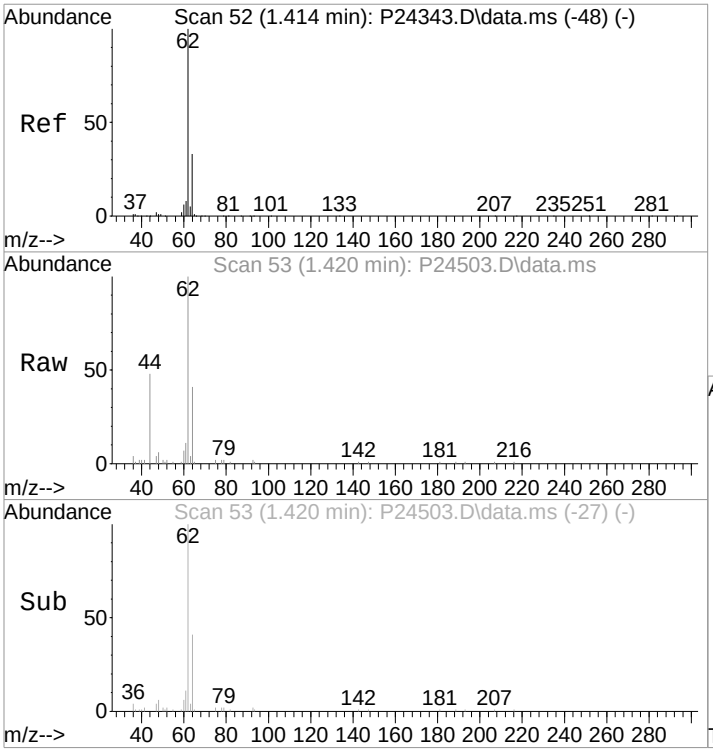
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24503.D
Acq On : 26 Feb 2019 11:51 am
Operator : K.Ruest
Sample : R1901592-008|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 26 15:21:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



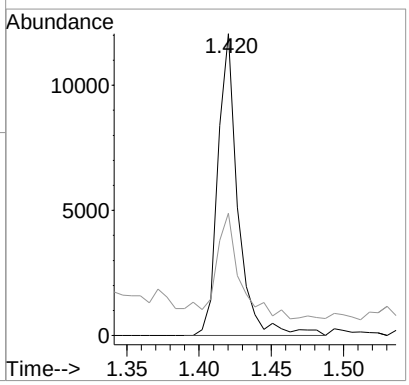
1st 02/26/19
2nd 02/26/19

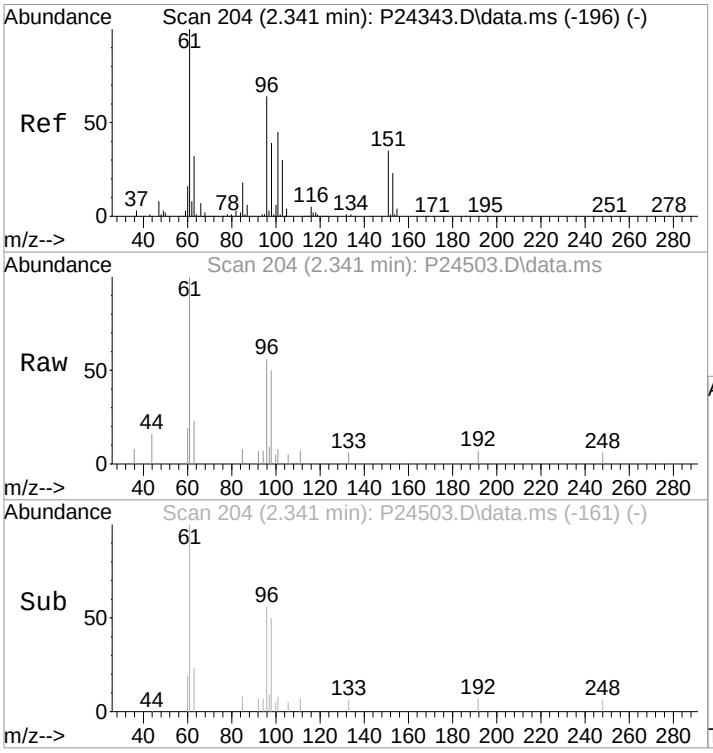


#4
Vinyl Chloride
Concen: 2.58 ppb
RT: 1.420 min Scan# 53
Delta R.T. 0.012 min
Lab File: P24503.D
Acq: 26 Feb 2019 11:51 am

Tgt Ion: 62 Resp: 11665

Ion	Ratio	Lower	Upper
62	100		
64	40.5	13.2	53.2

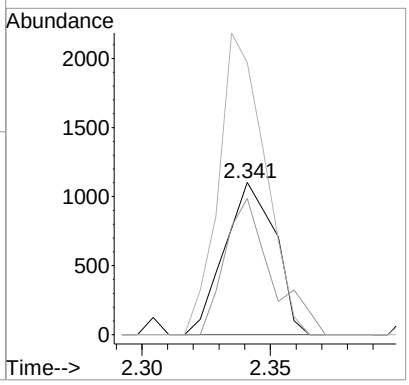


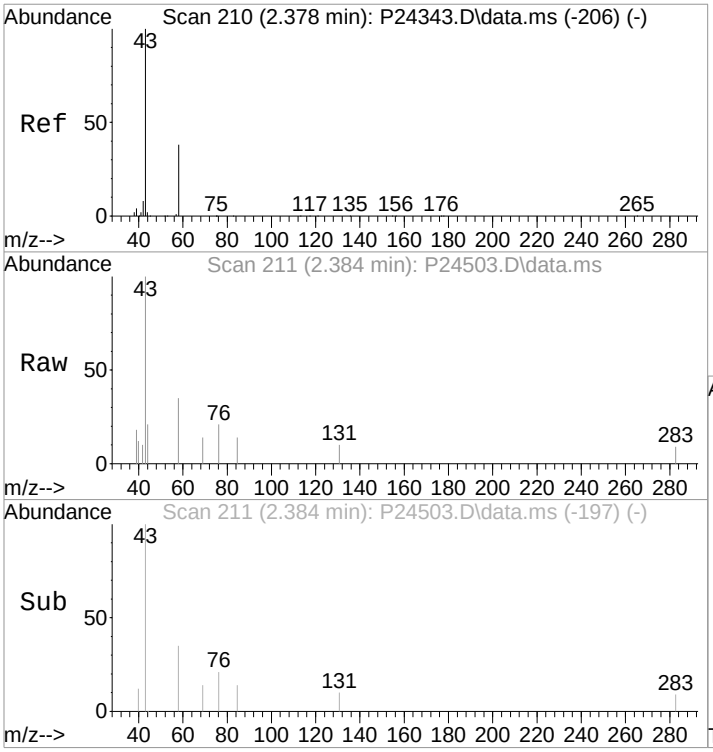


#13
1,1-Diclethene
Concen: 0.52 ppb
RT: 2.341 min Scan# 204
Delta R.T. 0.012 min
Lab File: P24503.D
Acq: 26 Feb 2019 11:51 am

Tgt Ion: 96 Resp: 1518

Ion	Ratio	Lower	Upper
96	100		
98	89.6	40.8	80.8#
61	178.6	136.2	176.2#

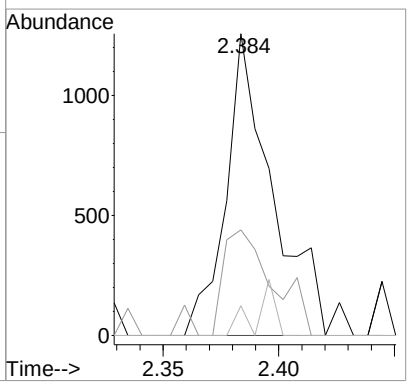


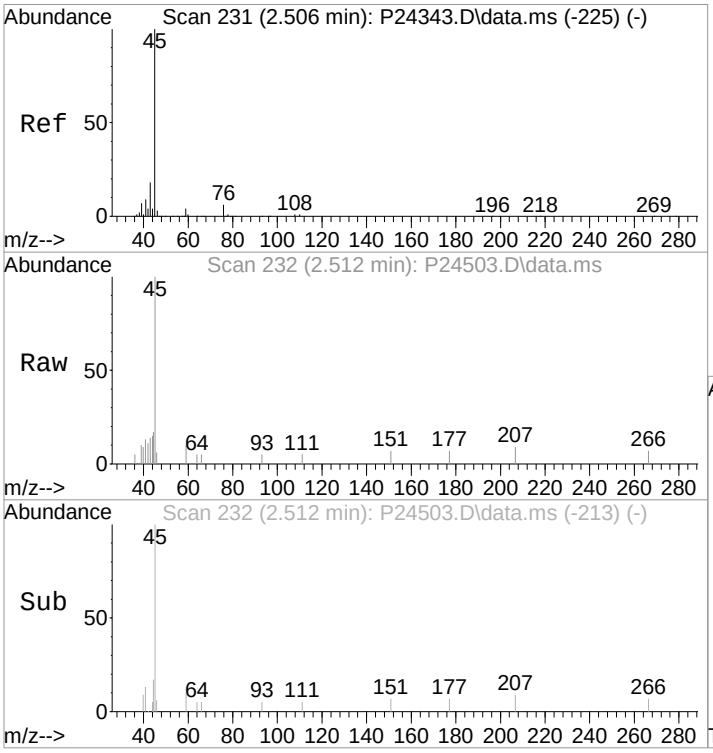


#15
Acetone
Concen: 1.18 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24503.D
Acq: 26 Feb 2019 11:51 am

Tgt Ion: 43 Resp: 1756

Ion	Ratio	Lower	Upper
43	100		
58	35.0	18.1	58.1
42	9.9	0.0	27.8

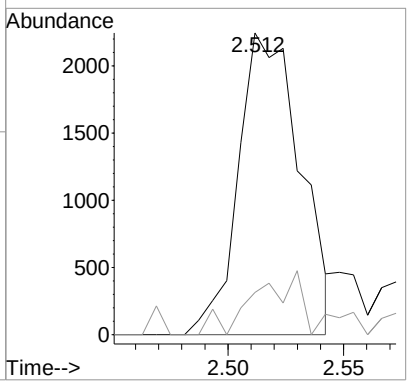


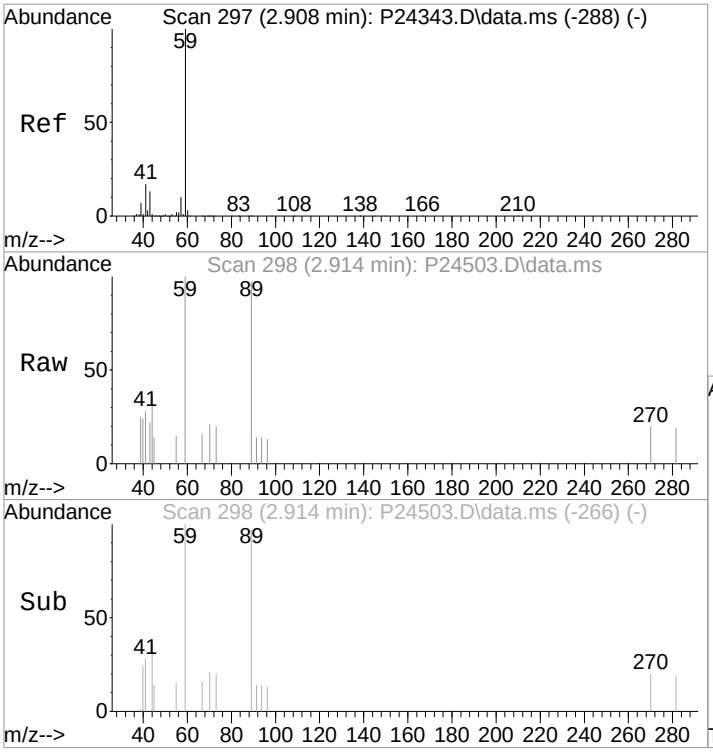


#16
2-Propanol
Concen: 10.79 ppb
RT: 2.512 min Scan# 232
Delta R.T. 0.006 min
Lab File: P24503.D
Acq: 26 Feb 2019 11:51 am

Tgt Ion: 45 Resp: 4180

Ion	Ratio	Lower	Upper
45	100		
43	14.1	0.0	38.5

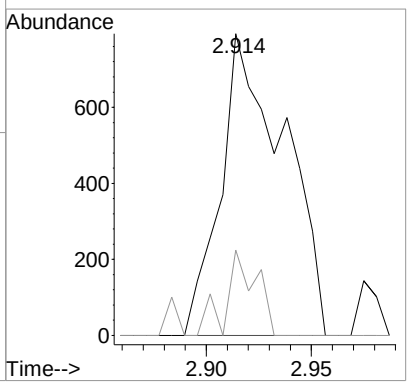


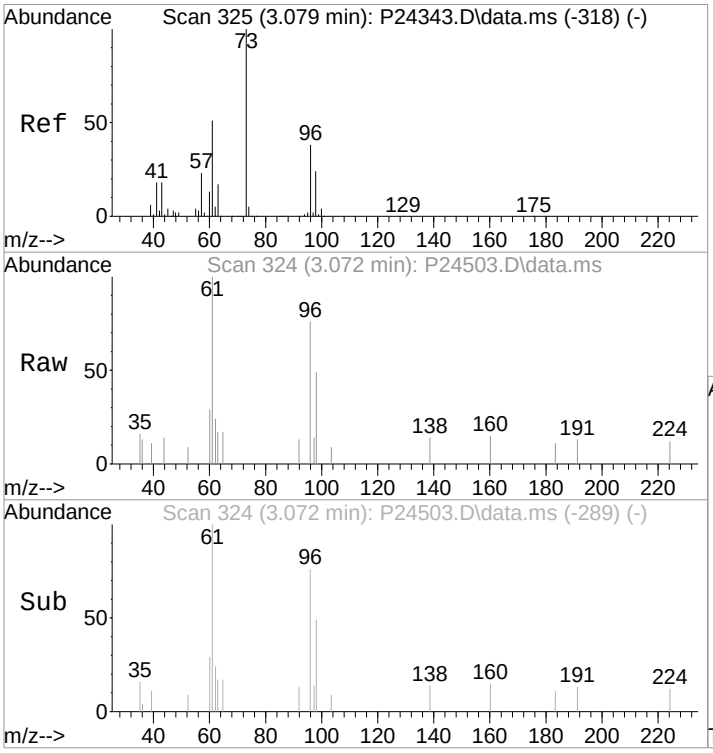


#23
TBA
Concen: 2.72 ppb
RT: 2.914 min Scan# 298
Delta R.T. 0.006 min
Lab File: P24503.D
Acq: 26 Feb 2019 11:51 am

Tgt Ion: 59 Resp: 1674

Ion	Ratio	Lower	Upper
59	100		
41	28.3	0.0	38.2

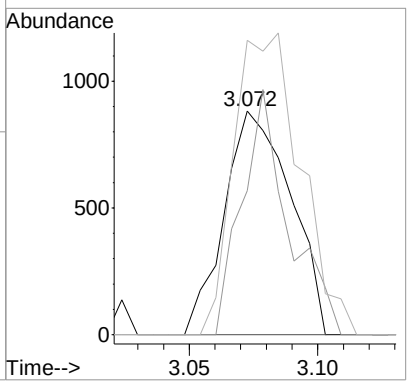


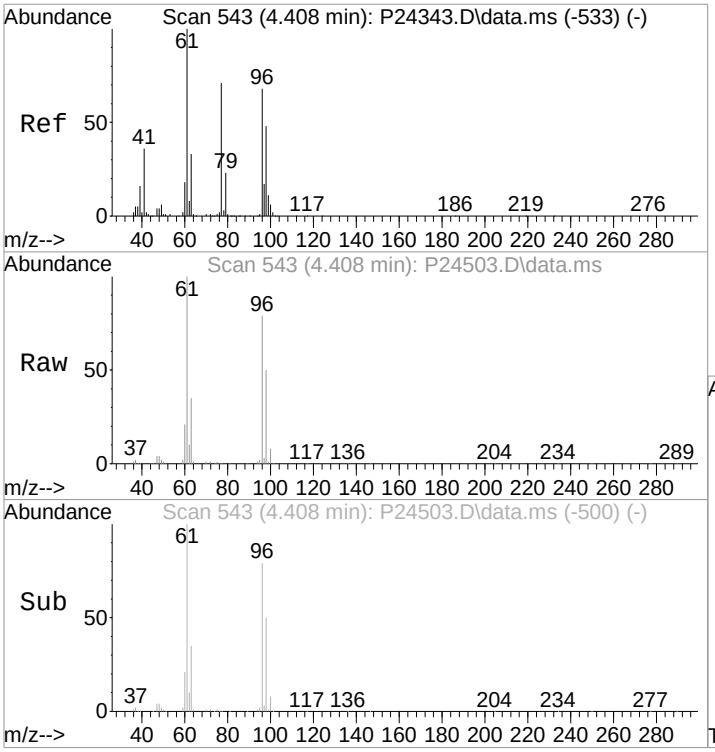


#26
trans-1,2-Dichloroethene
Concen: 0.49 ppb
RT: 3.072 min Scan# 324
Delta R.T. 0.006 min
Lab File: P24503.D
Acq: 26 Feb 2019 11:51 am

Tgt Ion: 96 Resp: 1595

Ion	Ratio	Lower	Upper
96	100		
98	64.4	43.5	83.5
61	131.7	114.4	154.4

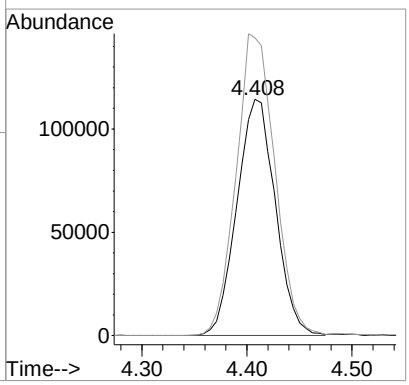


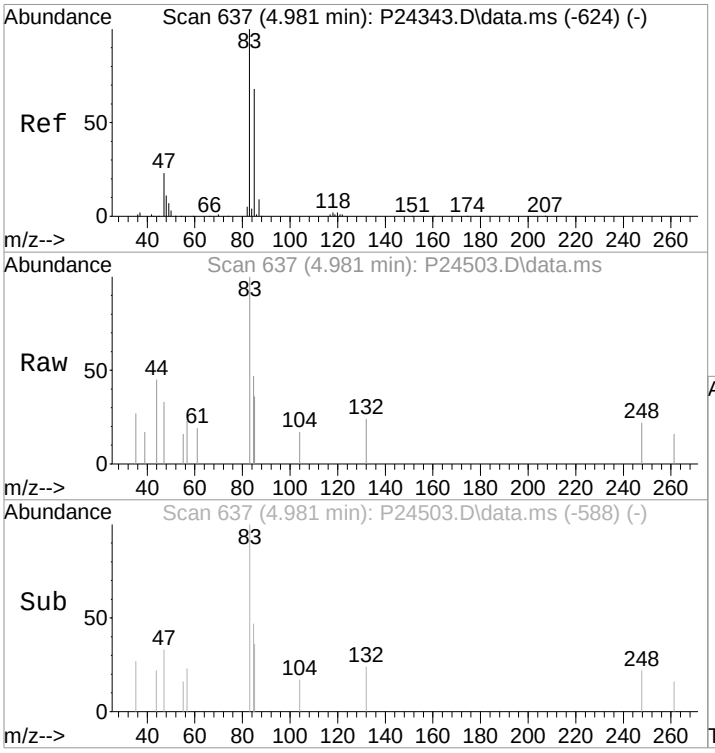


#34
cis-1,2-Dichloroethene
Concen: 80.23 ppb
RT: 4.408 min Scan# 543
Delta R.T. 0.006 min
Lab File: P24503.D
Acq: 26 Feb 2019 11:51 am

Tgt Ion: 96 Resp: 290840

Ion	Ratio	Lower	Upper
96	100		
61	126.1	128.1	168.1#

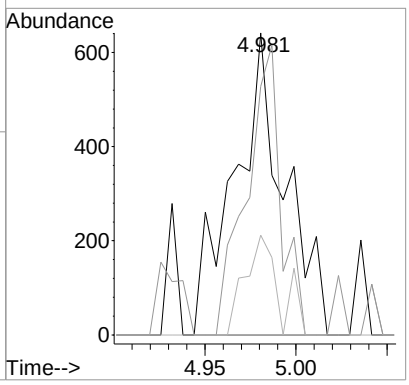


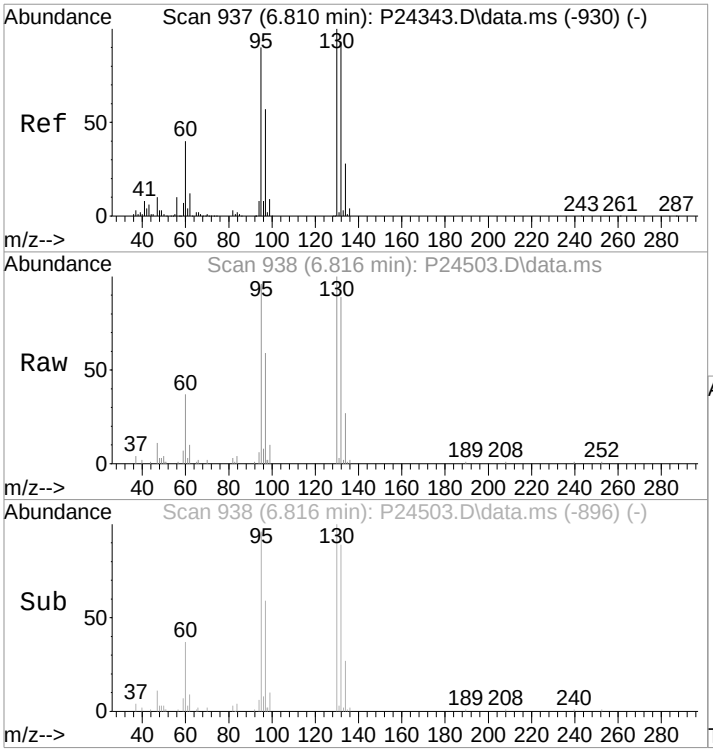


#40
Chloroform
Concen: 0.23 ppb m
RT: 4.981 min Scan# 637
Delta R.T. 0.012 min
Lab File: P24503.D
Acq: 26 Feb 2019 11:51 am

Tgt Ion: 83 Resp: 1243

Ion	Ratio	Lower	Upper
83	100		
85	46.6	47.9	87.9#
47	33.0	3.4	43.4

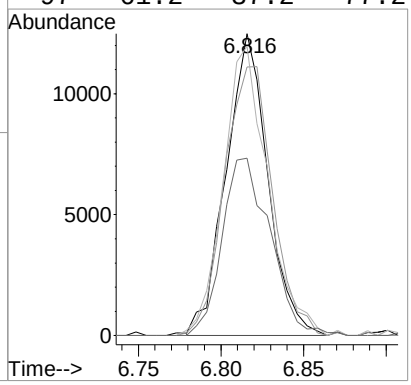




#54
Trichloroethene
Concen: 6.33 ppb
RT: 6.816 min Scan# 938
Delta R.T. 0.006 min
Lab File: P24503.D
Acq: 26 Feb 2019 11:51 am

Tgt Ion:130 Resp: 21996

Ion	Ratio	Lower	Upper
130	100		
132	89.0	72.6	112.6
95	95.8	69.8	109.8
97	61.2	37.2	77.2



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24489.D
Acq On : 26 Feb 2019 2:57 am
Operator : K.Ruest
Sample : R1901592-009|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 26 15:01:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

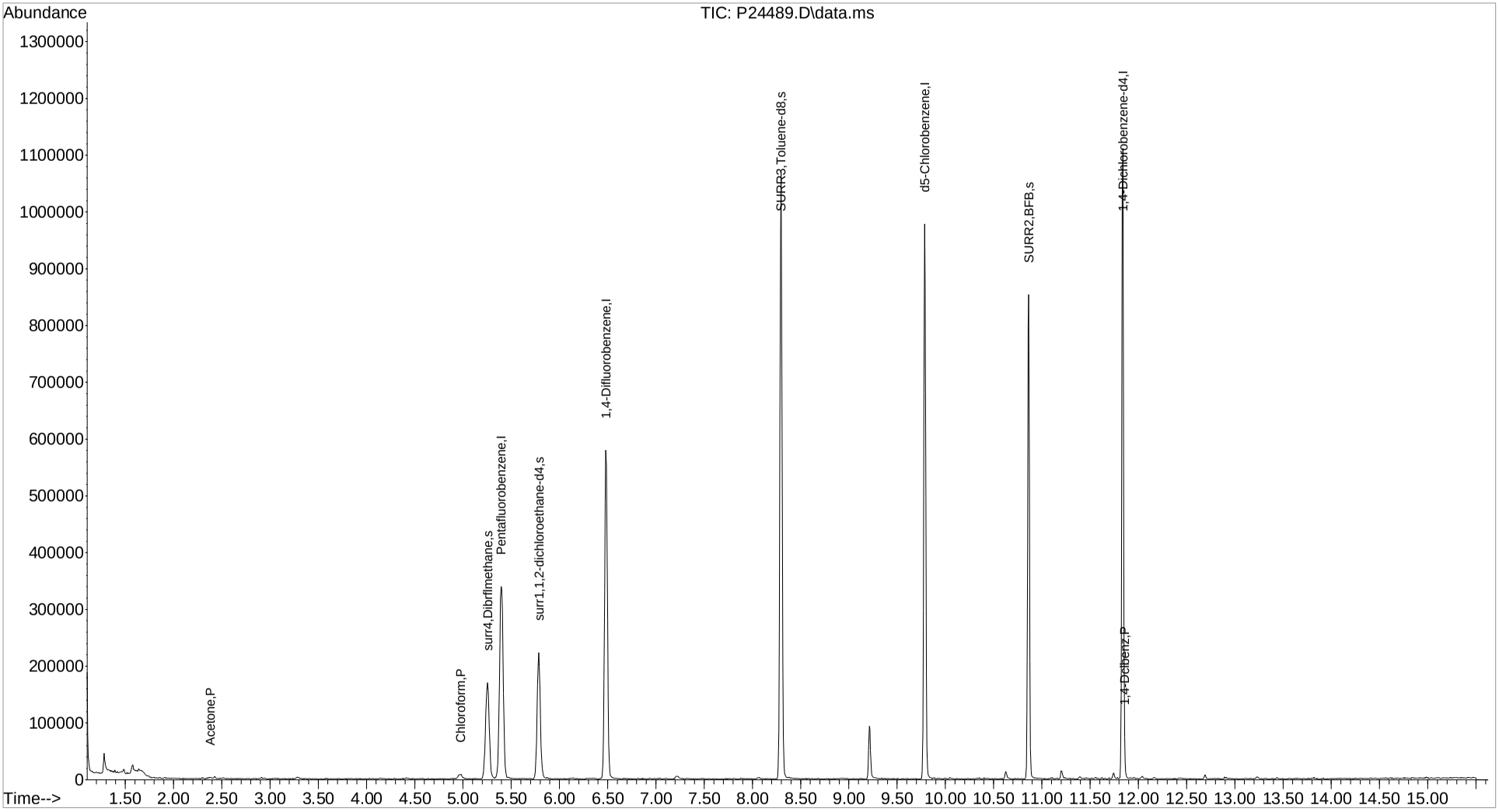
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.395	168	324946	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.481	114	522562	50.00	ppb	0.00
71) d5-Chlorobenzene	9.785	117	447664	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	237005	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.255	113	142816	49.73	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.46%			
48) surr1,1,2-dichloroetha...	5.786	65	181537	49.84	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 99.68%			
65) SURR3,Toluene-d8	8.297	98	673216	49.42	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.84%			
70) SURR2,BFB	10.864	95	236050	48.39	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.78%			
Target Compounds						Qvalue
15) Acetone	2.378	43	2594	1.67	ppb	79
40) Chloroform	4.975	83	9669	1.72	ppb	84
106) 1,4-Dclbenz	11.858	146	7014	0.87	ppb	92

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

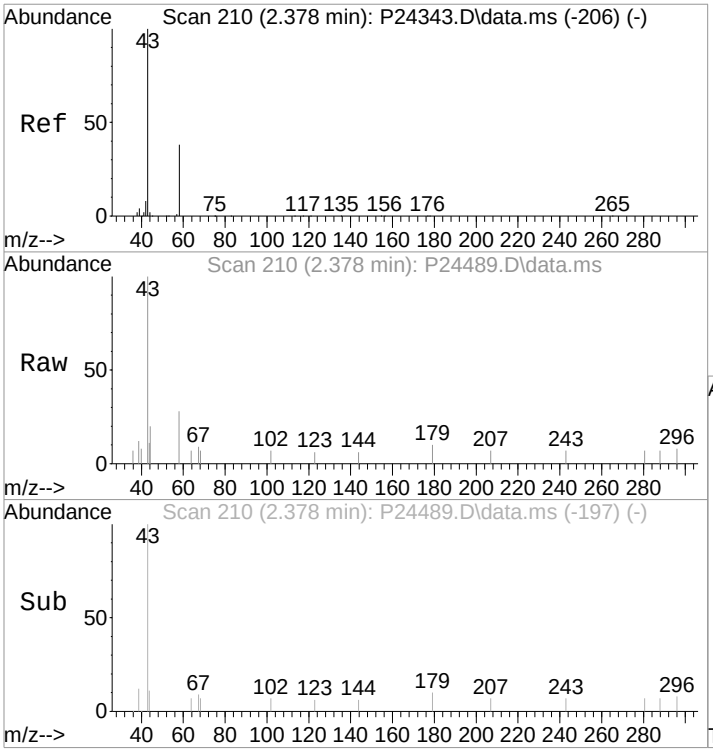
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24489.D
Acq On : 26 Feb 2019 2:57 am
Operator : K.Ruest
Sample : R1901592-009|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 26 15:01:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



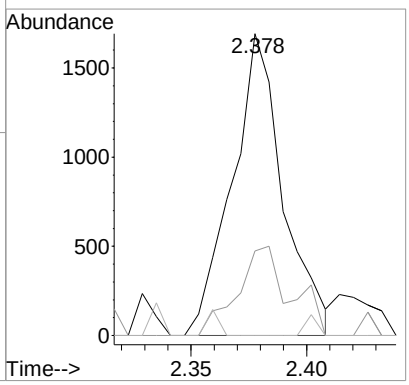
1st 02/26/19
2nd 02/26/19

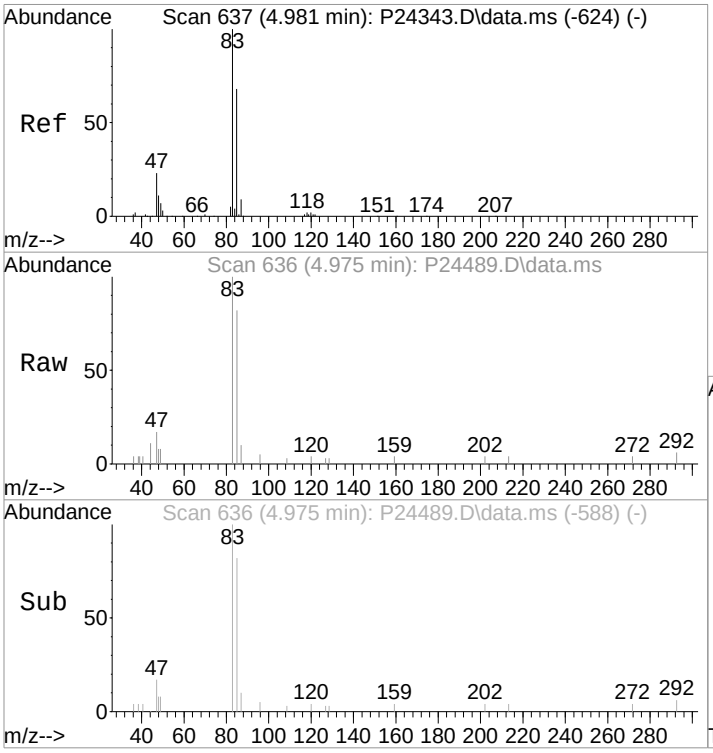


#15
Acetone
Concen: 1.67 ppb
RT: 2.378 min Scan# 210
Delta R.T. 0.006 min
Lab File: P24489.D
Acq: 26 Feb 2019 2:57 am

Tgt Ion: 43 Resp: 2594

Ion	Ratio	Lower	Upper
43	100		
58	25.3	18.1	58.1
42	0.0	0.0	27.8

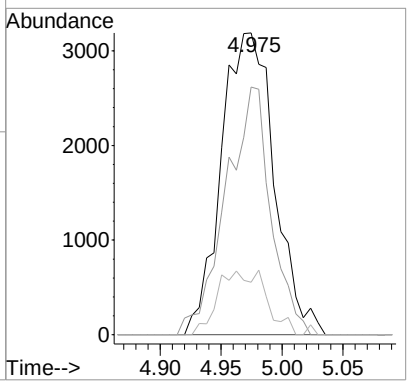


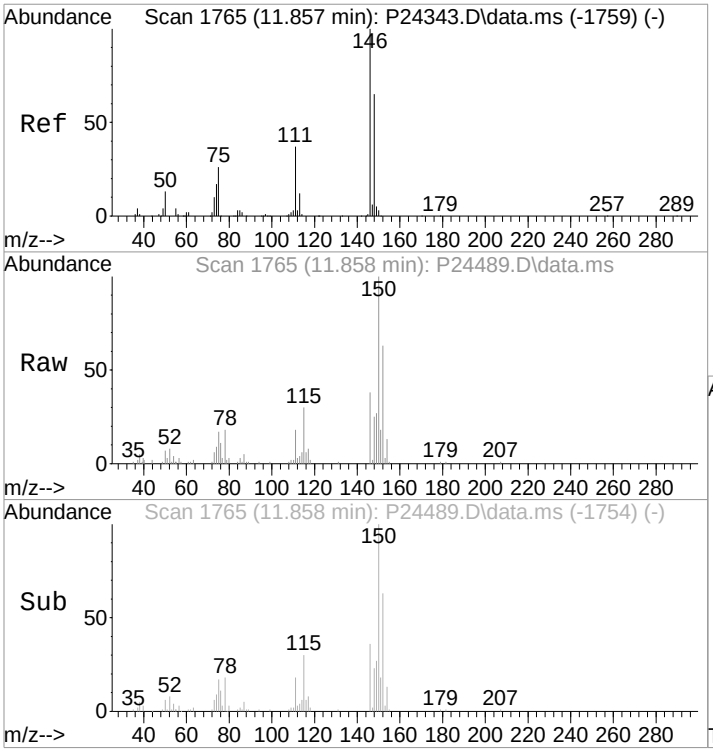


#40
Chloroform
Concen: 1.72 ppb
RT: 4.975 min Scan# 636
Delta R.T. 0.006 min
Lab File: P24489.D
Acq: 26 Feb 2019 2:57 am

Tgt Ion: 83 Resp: 9669

Ion	Ratio	Lower	Upper
83	100		
85	82.0	47.9	87.9
47	17.4	3.4	43.4

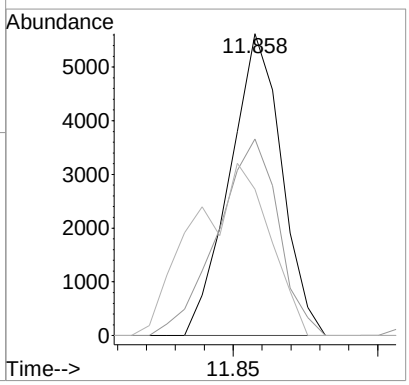




#106
1,4-Dclbenz
Concen: 0.87 ppb
RT: 11.858 min Scan# 1765
Delta R.T. 0.000 min
Lab File: P24489.D
Acq: 26 Feb 2019 2:57 am

Tgt Ion:146 Resp: 7014

Ion	Ratio	Lower	Upper
146	100		
148	65.1	44.6	84.6
111	48.5	16.7	56.7

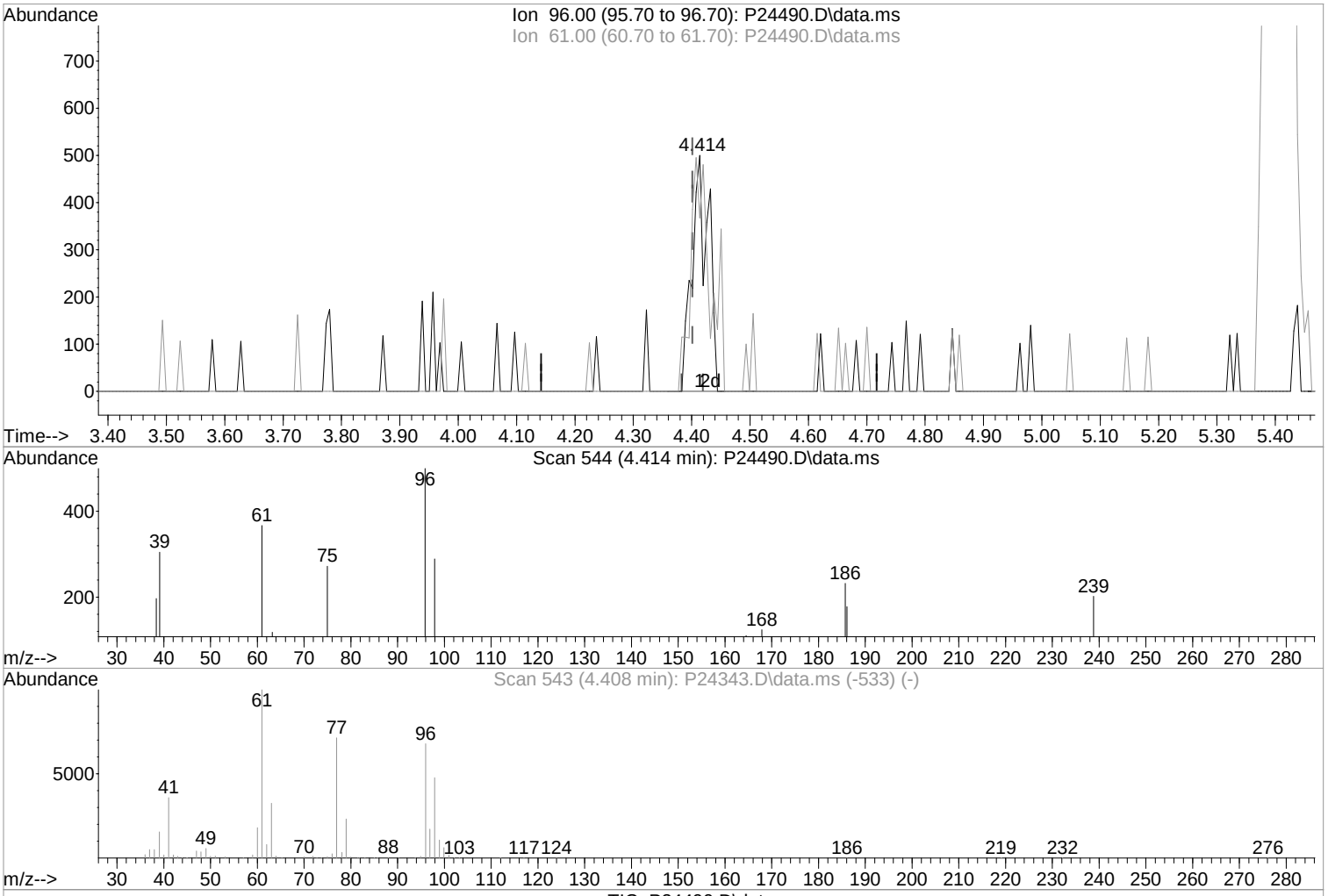


1st 02/26/19
2nd 02/26/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24490.D
Acq On : 26 Feb 2019 3:18 am
Operator : K.Ruest
Sample : R1901592-010|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 26 09:07:00 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24490.D\data.ms

(34) cis-1,2-Dichloroethene (P)

4.414min (+0.012) 0.26 ppb m

response 988

Ion	Exp%	Act%
96.00	100	100
61.00	148.10	73.40#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Split Peak

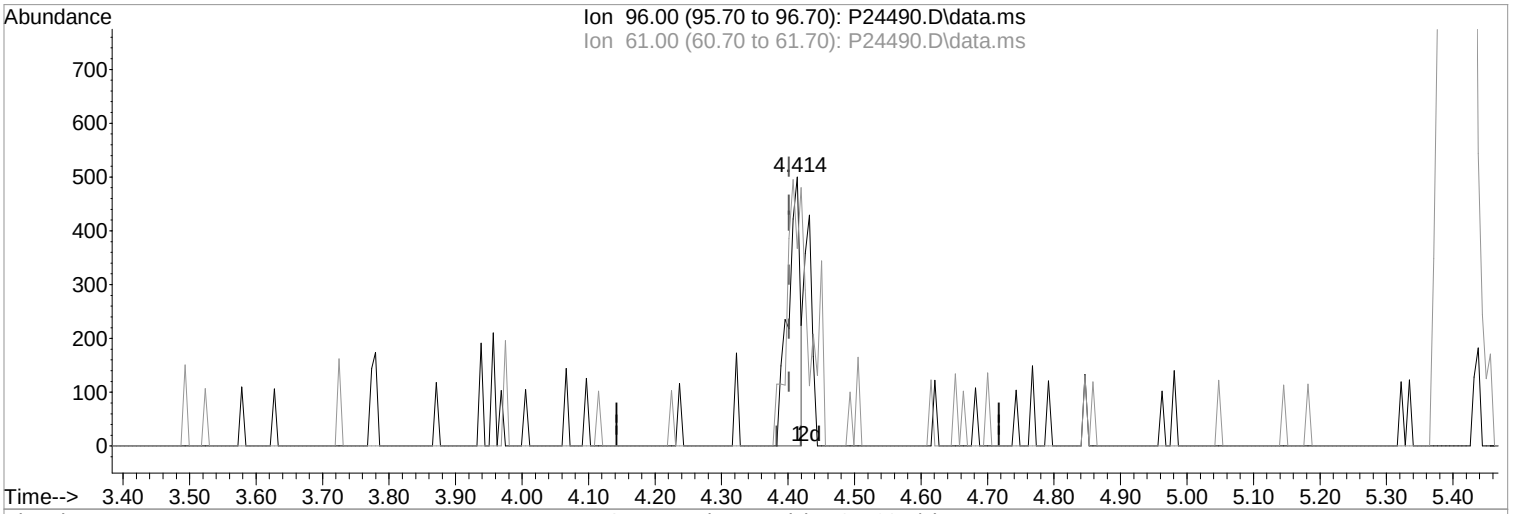
02/26/19

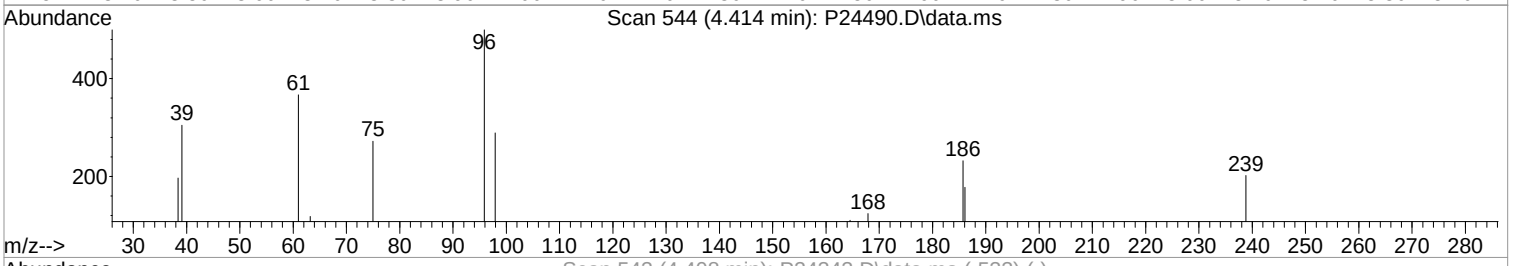
1st 02/26/19
2nd 02/26/19

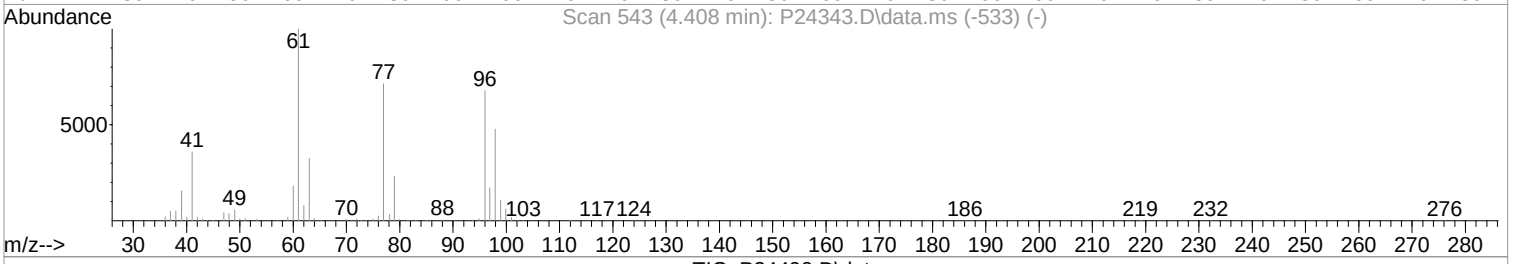
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24490.D
Acq On : 26 Feb 2019 3:18 am
Operator : K.Ruest
Sample : R1901592-010|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 26 09:07:00 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24490.D\data.ms

(34) cis-1,2-Dichloroethene (P)

4.414min (+0.012) 0.17 ppb

response 639

Ion	Exp%	Act%
96.00	100	100
61.00	148.10	73.40#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

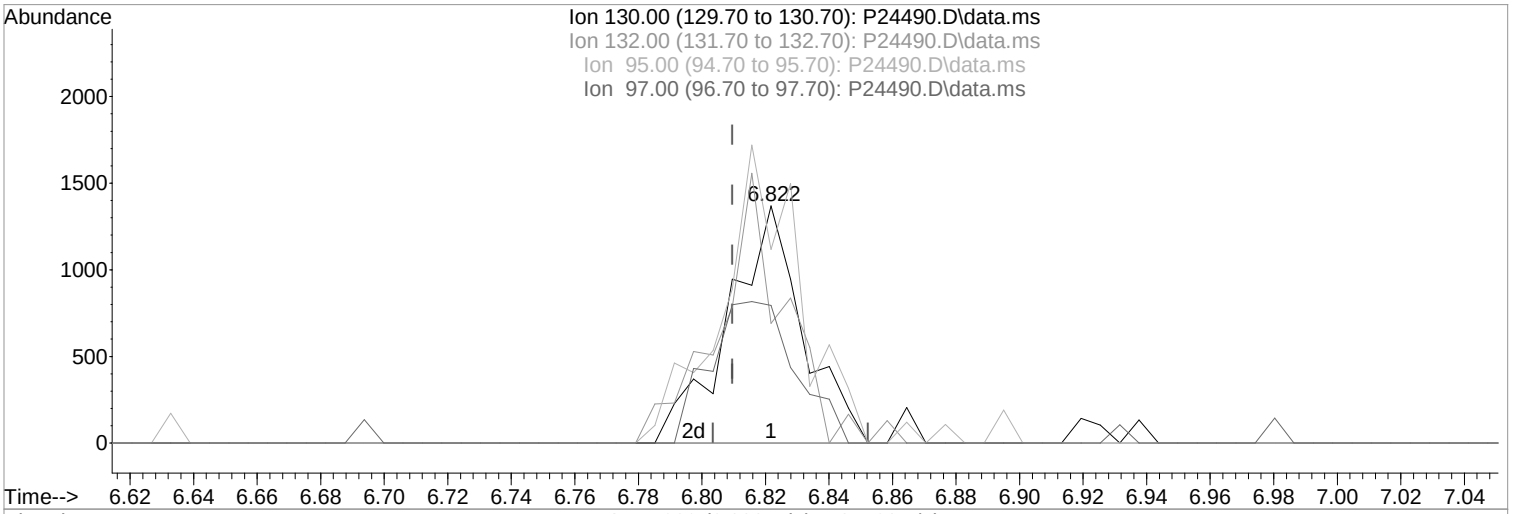
Before

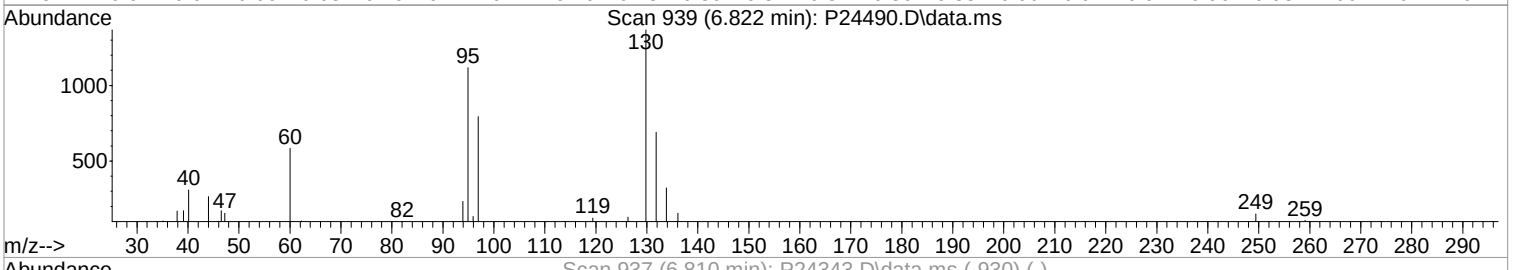
02/26/19

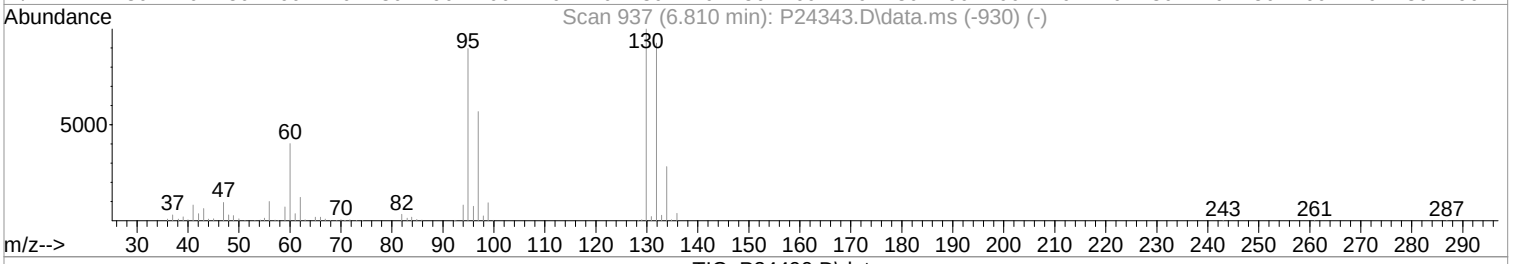
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24490.D
Acq On : 26 Feb 2019 3:18 am
Operator : K.Ruest
Sample : R1901592-010|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 26 09:07:00 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24490.D\data.ms

(54) Trichloroethene (P)

6.822min (+0.012) 0.62 ppb m

response 2231

Ion	Exp%	Act%
130.00	100	100
132.00	92.60	50.51#
95.00	89.80	81.65
97.00	57.20	58.04

Manual Integration:

After

Split Peak

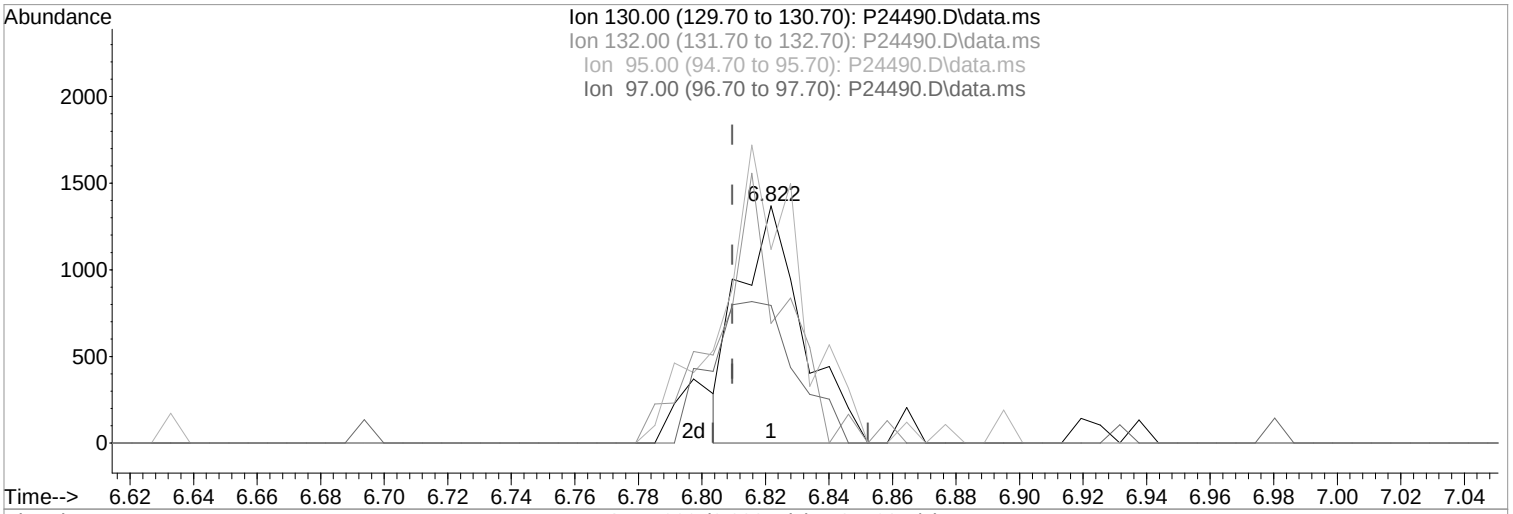
02/26/19

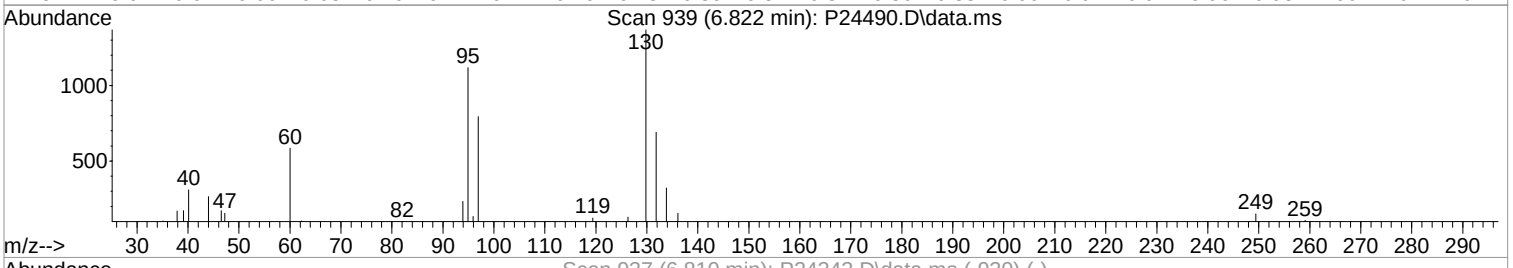
1st 02/26/19
2nd 02/26/19

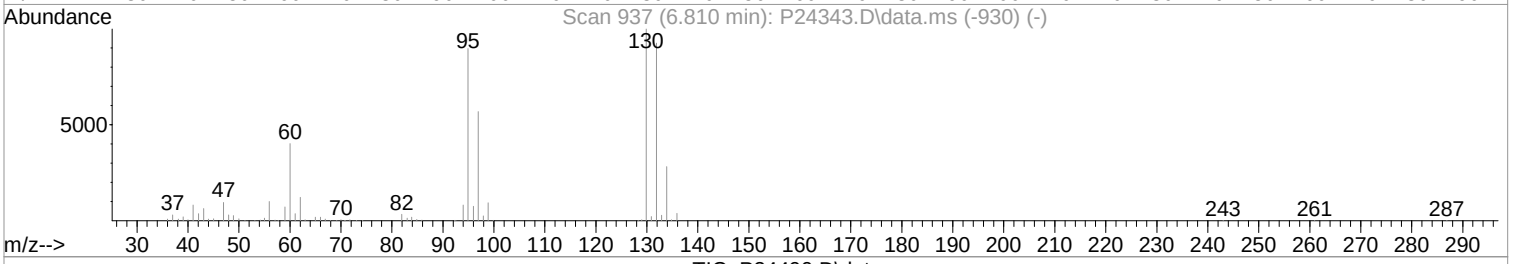
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24490.D
Acq On : 26 Feb 2019 3:18 am
Operator : K.Ruest
Sample : R1901592-010|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 26 09:07:00 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24490.D\data.ms

(54) Trichloroethene (P)

6.822min (+0.012) 0.53 ppb

response 1908

Ion	Exp%	Act%
130.00	100	100
132.00	92.60	50.51#
95.00	89.80	81.65
97.00	57.20	58.04

Manual Integration:

Before

02/26/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24490.D
Acq On : 26 Feb 2019 3:18 am
Operator : K.Ruest
Sample : R1901592-010|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 26 15:03:26 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

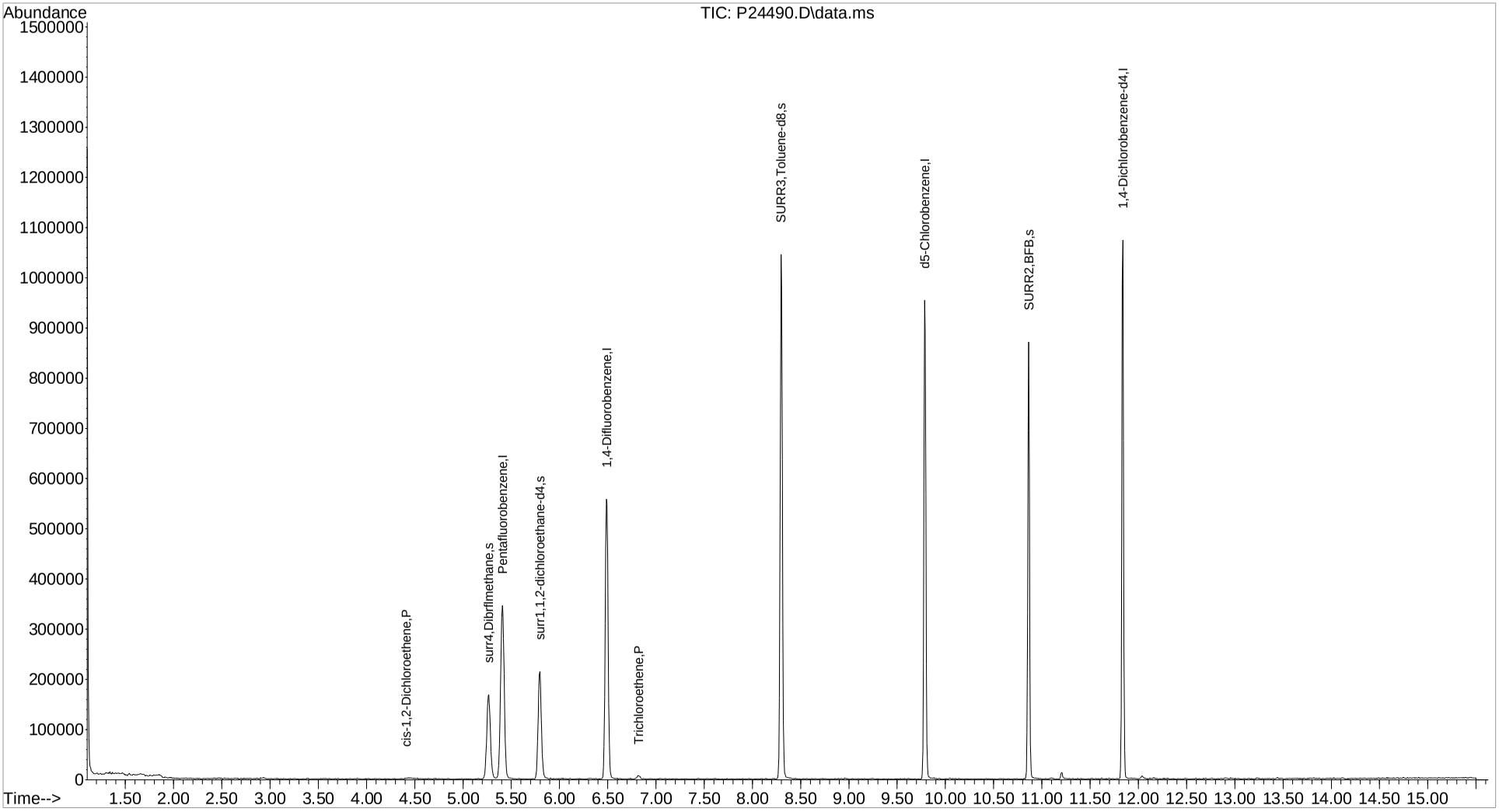
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.407	168	329458	50.00	ppb	0.01
43) 1,4-Difluorobenzene	6.486	114	512466	50.00	ppb	0.00
71) d5-Chlorobenzene	9.785	117	443762	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	227151	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.267	113	140462	49.88	ppb	0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.76%			
48) surr1,1,2-dichloroetha...	5.798	65	176827	49.50	ppb	0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 99.00%			
65) SURR3,Toluene-d8	8.297	98	655766	49.09	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.18%			
70) SURR2,BFB	10.864	95	231160	48.32	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.64%			
Target Compounds						Qvalue
34) cis-1,2-Dichloroethene	4.414	96	988m	0.26	ppb	
54) Trichloroethene	6.822	130	2231m	0.62	ppb	

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

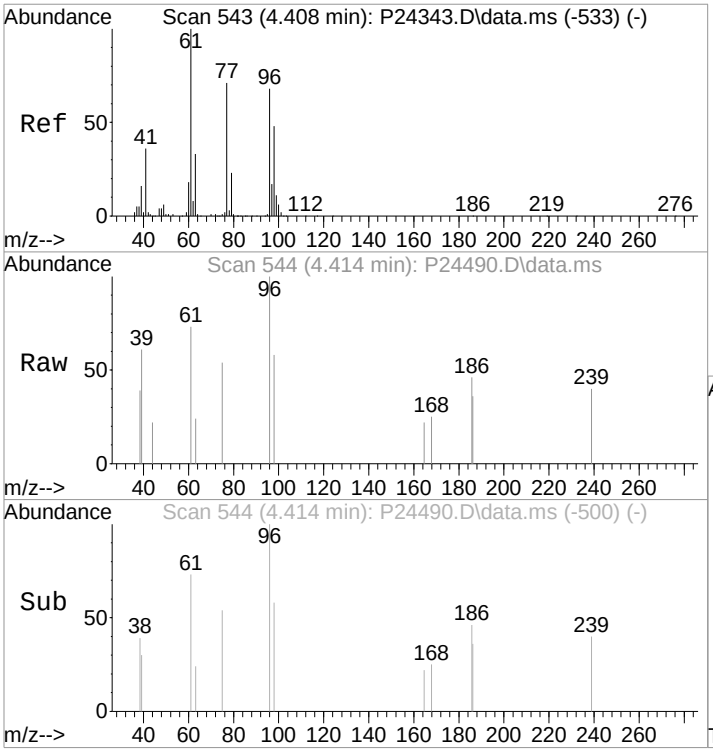
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24490.D
Acq On : 26 Feb 2019 3:18 am
Operator : K.Ruest
Sample : R1901592-010|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 26 15:03:26 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



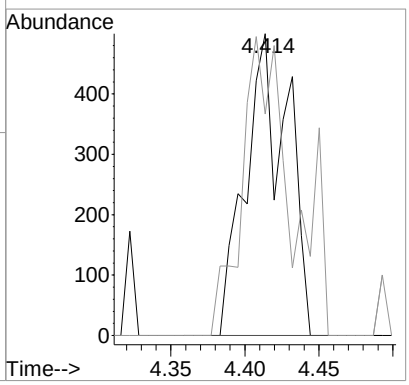
1st 02/26/19
2nd 02/26/19

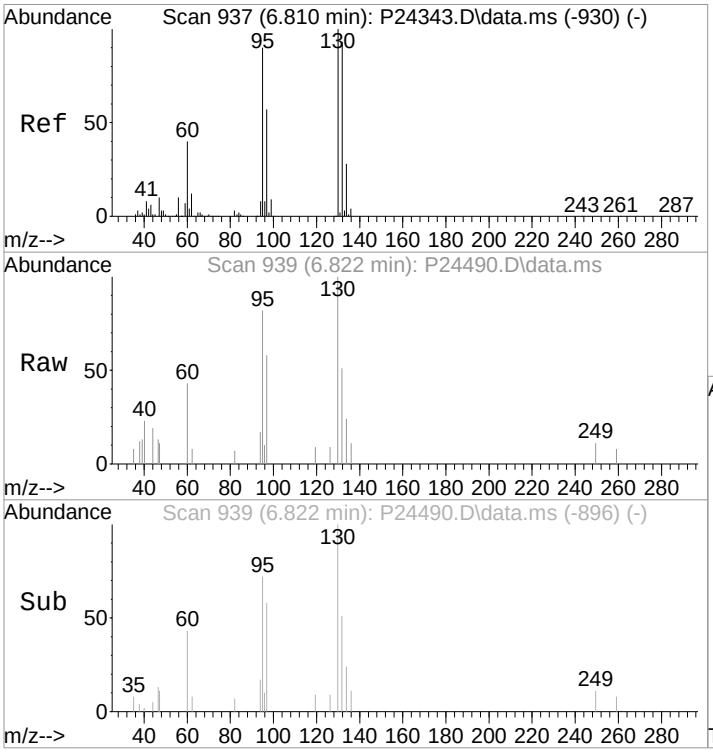


#34
cis-1,2-Dichloroethene
Concen: 0.26 ppb m
RT: 4.414 min Scan# 544
Delta R.T. 0.012 min
Lab File: P24490.D
Acq: 26 Feb 2019 3:18 am

Tgt Ion: 96 Resp: 988

Ion	Ratio	Lower	Upper
96	100		
61	73.4	128.1	168.1#

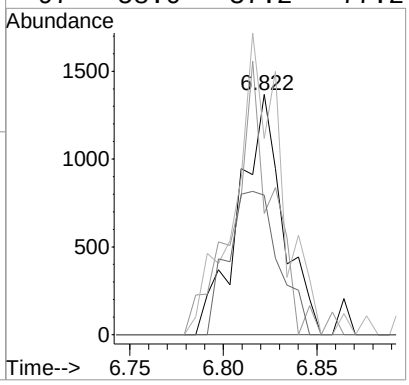




#54
Trichloroethene
Concen: 0.62 ppb m
RT: 6.822 min Scan# 939
Delta R.T. 0.012 min
Lab File: P24490.D
Acq: 26 Feb 2019 3:18 am

Tgt Ion:130 Resp: 2231

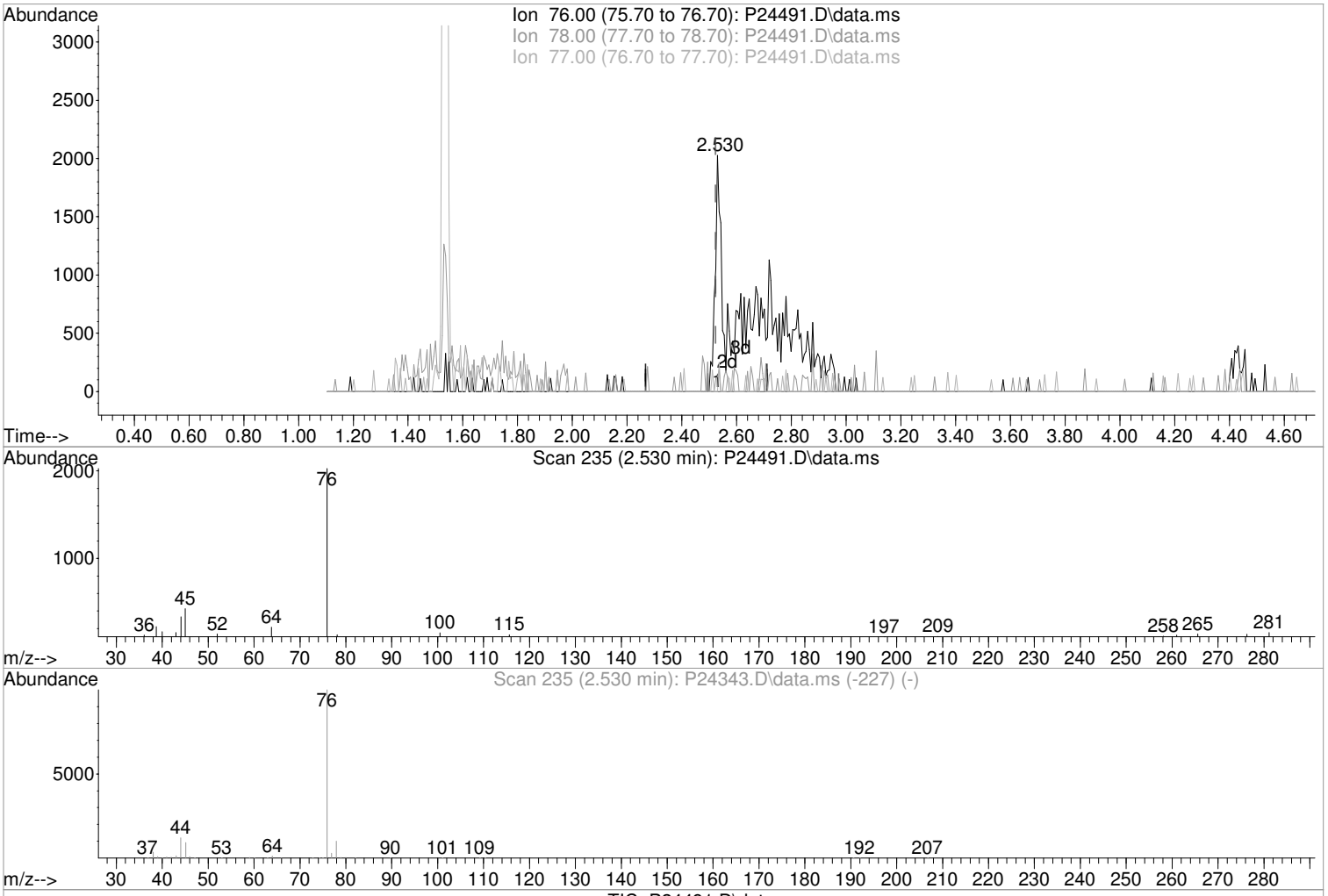
Ion	Ratio	Lower	Upper
130	100		
132	50.5	72.6	112.6#
95	81.7	69.8	109.8
97	58.0	37.2	77.2



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24491.D
Acq On : 26 Feb 2019 3:40 am
Operator : K.Ruest
Sample : R1901592-011|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 26 15:05:21 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24491.D\data.ms

(18) Carbon Disulfide (P)

2.530min (+0.006) 1.63 ppb m

response 14934

Ion	Exp%	Act%
76.00	100	100
78.00	10.10	6.32
77.00	2.90	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

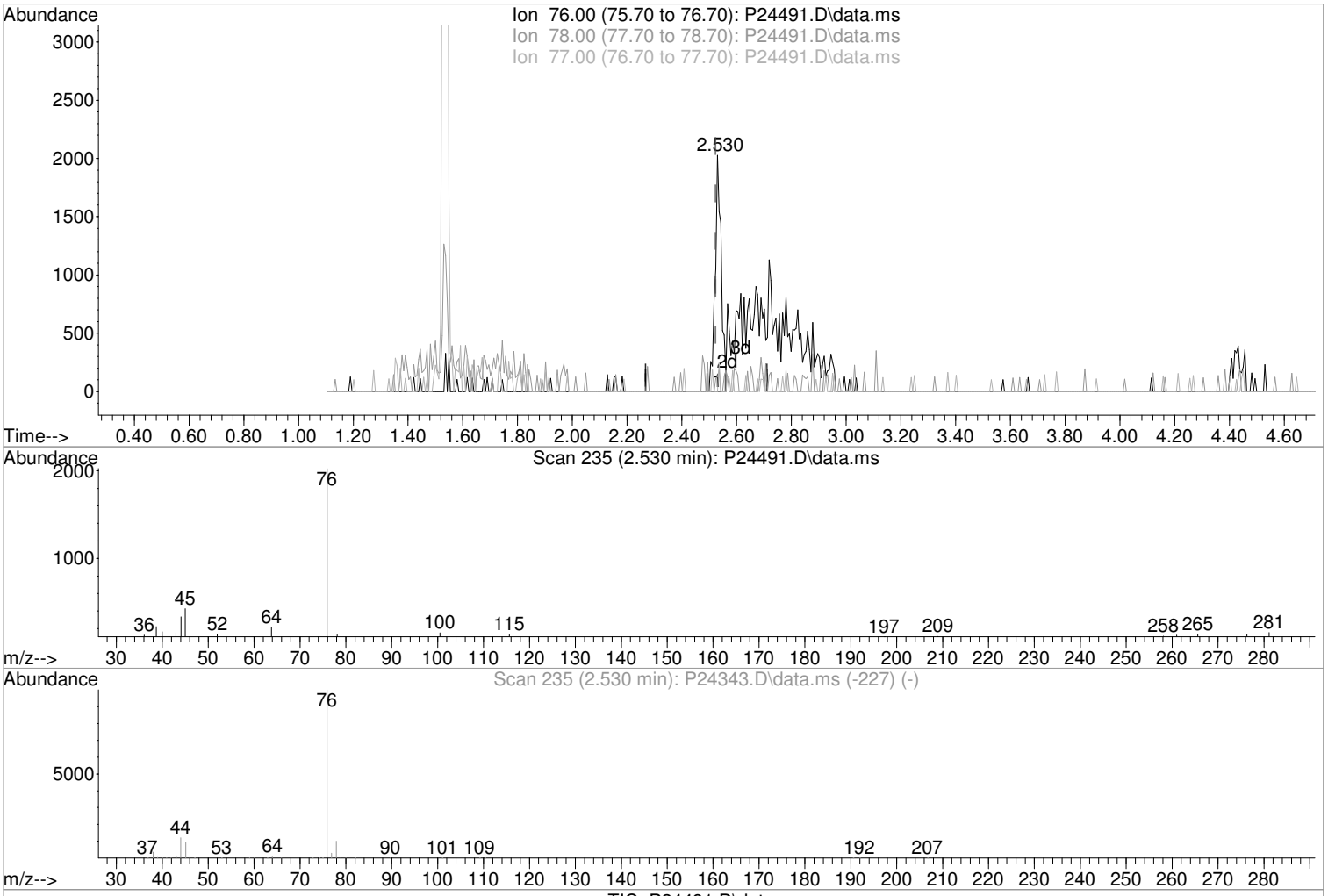
02/26/19

1st FW 02/26/19
2nd FW 02/26/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24491.D
Acq On : 26 Feb 2019 3:40 am
Operator : K.Ruest
Sample : R1901592-011|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 26 15:05:21 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24491.D\data.ms

(18) Carbon Disulfide (P)

2.530min (+0.006) 0.34 ppb

response 3116

Ion	Exp%	Act%
76.00	100	100
78.00	10.10	6.32
77.00	2.90	0.00
0.00	0.00	0.00

Manual Integration:

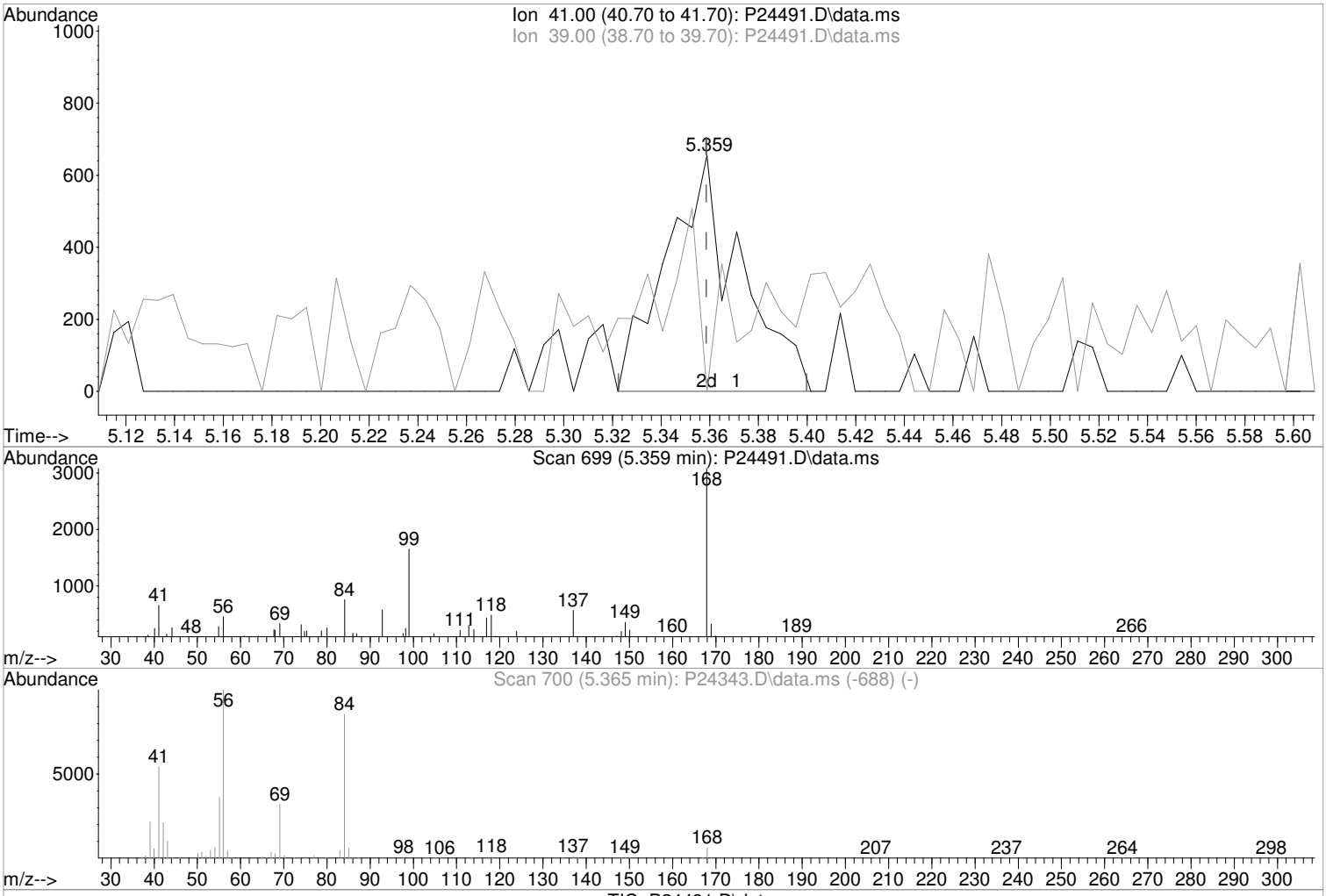
Before

02/26/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24491.D
Acq On : 26 Feb 2019 3:40 am
Operator : K.Ruest
Sample : R1901592-011|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 26 15:05:21 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24491.D\data.ms

(44) Cyclohexane (P)

5.359min (+0.000) 0.45 ppb m

response 1379

Ion	Exp%	Act%
41.00	100	100
39.00	40.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

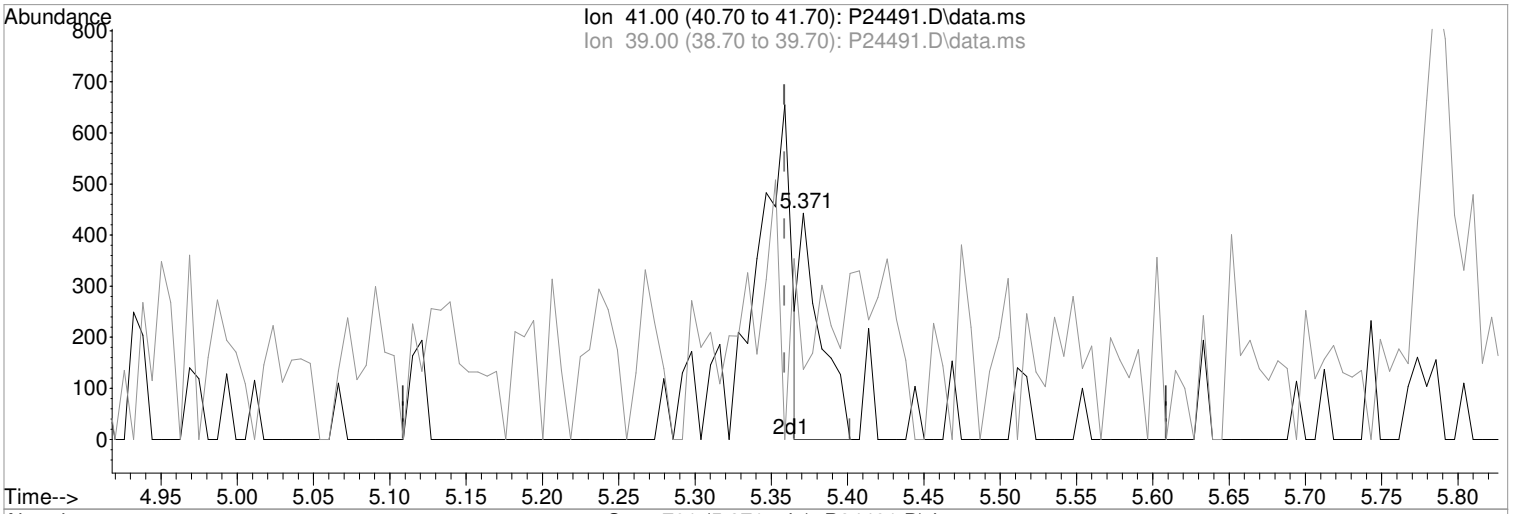
02/26/19

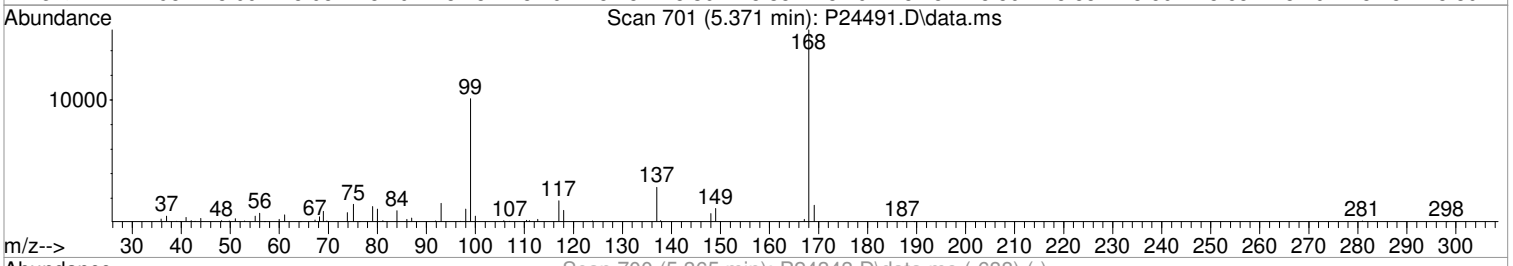
1st FW 02/26/19
2nd FW 02/26/19

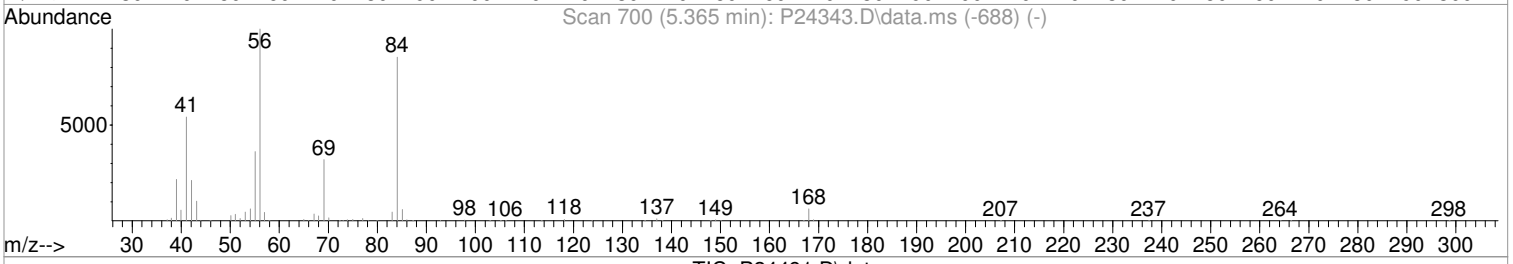
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24491.D
Acq On : 26 Feb 2019 3:40 am
Operator : K.Ruest
Sample : R1901592-011|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 26 15:05:21 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24491.D\data.ms

(44) Cyclohexane (P)

5.371min (+0.012) 0.14 ppb

response 429

Ion	Exp%	Act%
41.00	100	100
39.00	40.30	30.93
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/26/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24491.D
Acq On : 26 Feb 2019 3:40 am
Operator : K.Ruest
Sample : R1901592-011|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 26 16:39:45 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

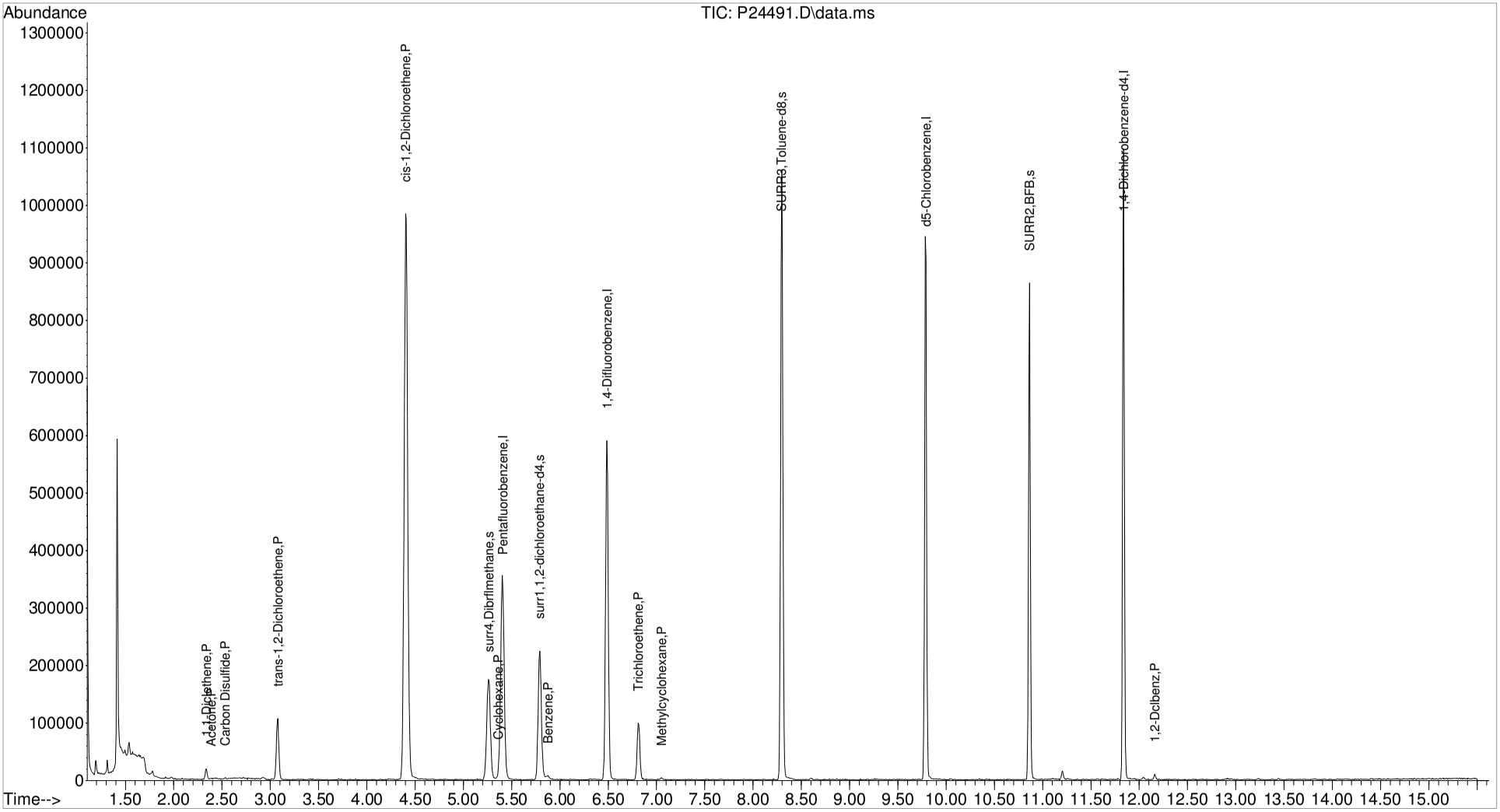
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.408	168	328268	50.00	ppb	0.01
43) 1,4-Difluorobenzene	6.487	114	517937	50.00	ppb	0.00
71) d5-Chlorobenzene	9.791	117	447513	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	234672	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.267	113	142178	49.95	ppb	0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.90%			
48) surr1,1,2-dichloroetha...	5.792	65	183525	50.84	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.68%			
65) SURR3,Toluene-d8	8.297	98	669645	49.60	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.20%			
70) SURR2,BFB	10.864	95	235155	48.63	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.26%			
Target Compounds						Qvalue
13) 1,1-Diclethene	2.335	96	5251	1.71	ppb	90
15) Acetone	2.390	43	3692	2.35	ppb	89
18) Carbon Disulfide	2.530	76	14934m	1.63	ppb	
26) trans-1,2-Dichloroethene	3.079	96	41330	12.13	ppb	91
34) cis-1,2-Dichloroethene	4.402	96	594029	155.54	ppb	87
44) Cyclohexane	5.359	41	1379m	0.45	ppb	
49) Benzene	5.877	78	5404	0.37	ppb	93
54) Trichloroethene	6.810	130	38544	10.64	ppb	98
55) Methylcyclohexane	7.054	55	993	0.22	ppb	93
110) 1,2-Dclbenz	12.162	146	2921	0.38	ppb	83

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

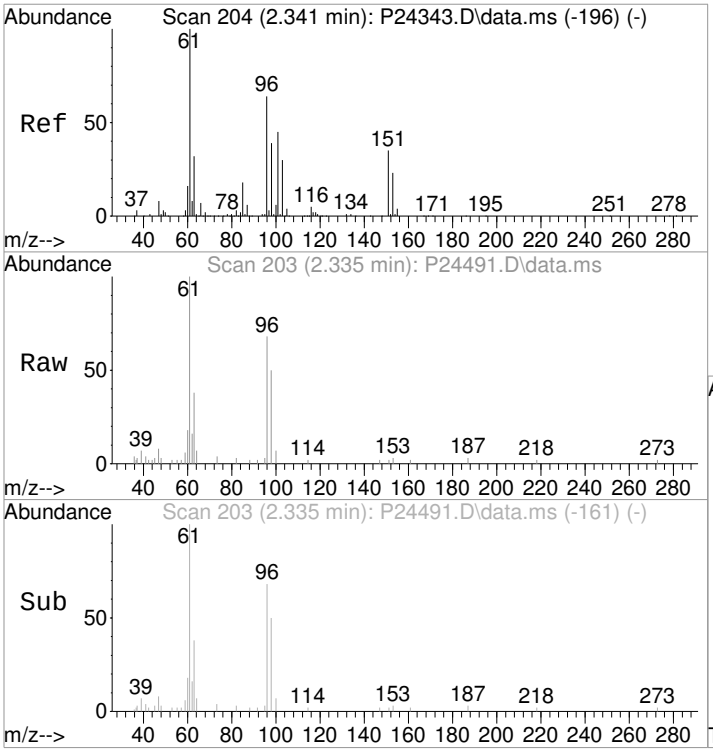
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24491.D
Acq On : 26 Feb 2019 3:40 am
Operator : K.Ruest
Sample : R1901592-011|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 26 16:39:45 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



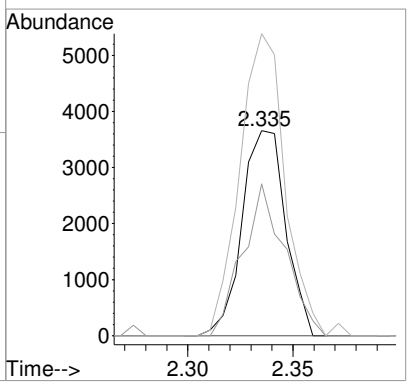
1st 02/26/19
2nd 02/26/19

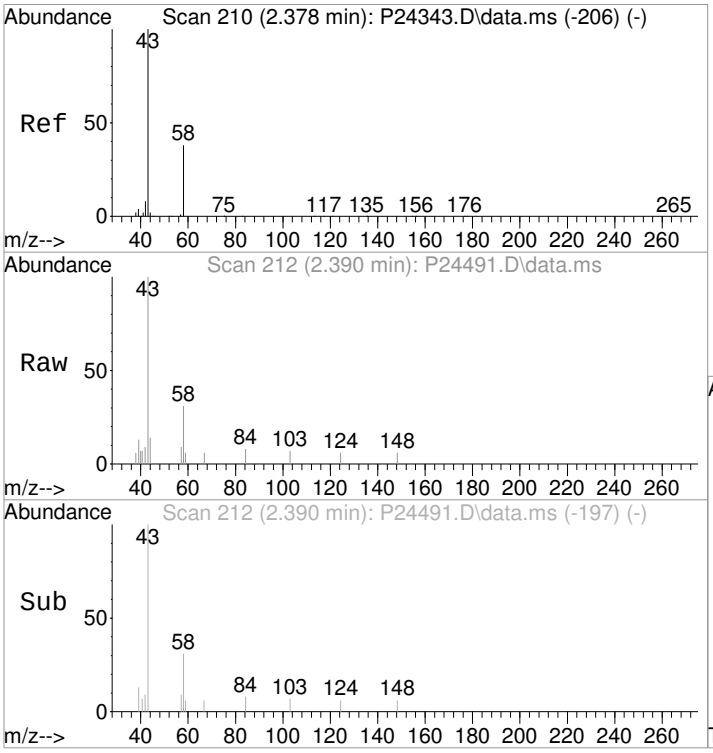


#13
1,1-Diclethene
Concen: 1.71 ppb
RT: 2.335 min Scan# 203
Delta R.T. 0.006 min
Lab File: P24491.D
Acq: 26 Feb 2019 3:40 am

Tgt Ion: 96 Resp: 5251

Ion	Ratio	Lower	Upper
96	100		
98	74.1	40.8	80.8
61	147.2	136.2	176.2

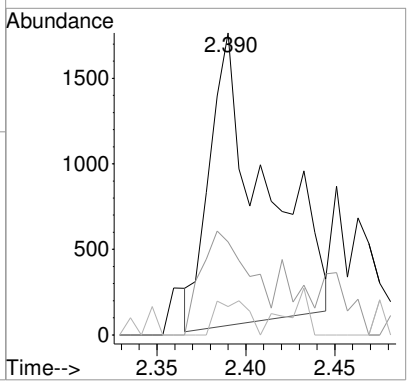


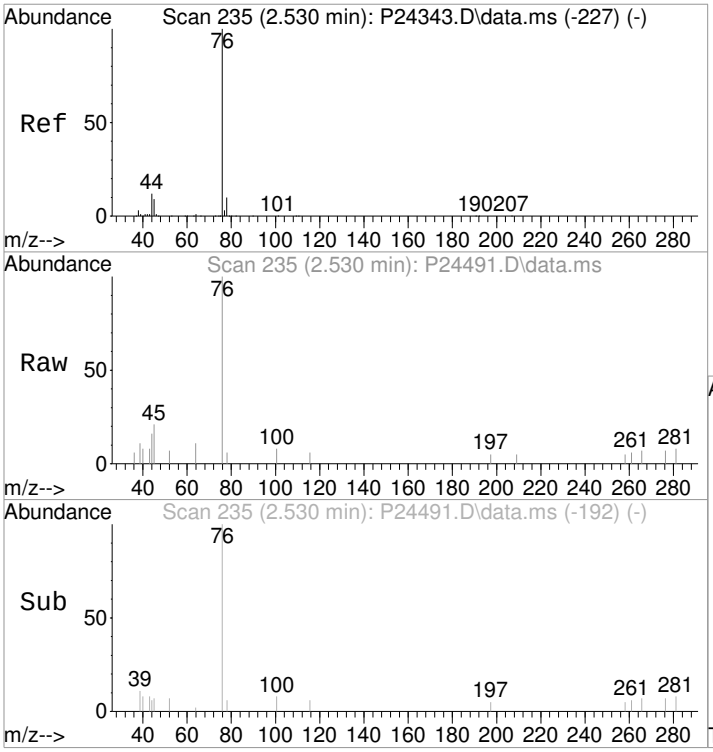


#15
Acetone
Concen: 2.35 ppb
RT: 2.390 min Scan# 212
Delta R.T. 0.018 min
Lab File: P24491.D
Acq: 26 Feb 2019 3:40 am

Tgt Ion: 43 Resp: 3692

Ion	Ratio	Lower	Upper
43	100		
58	30.8	18.1	58.1
42	9.4	0.0	27.8

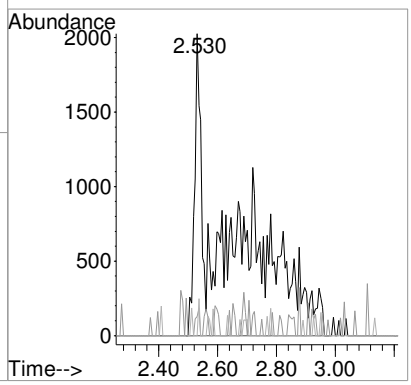


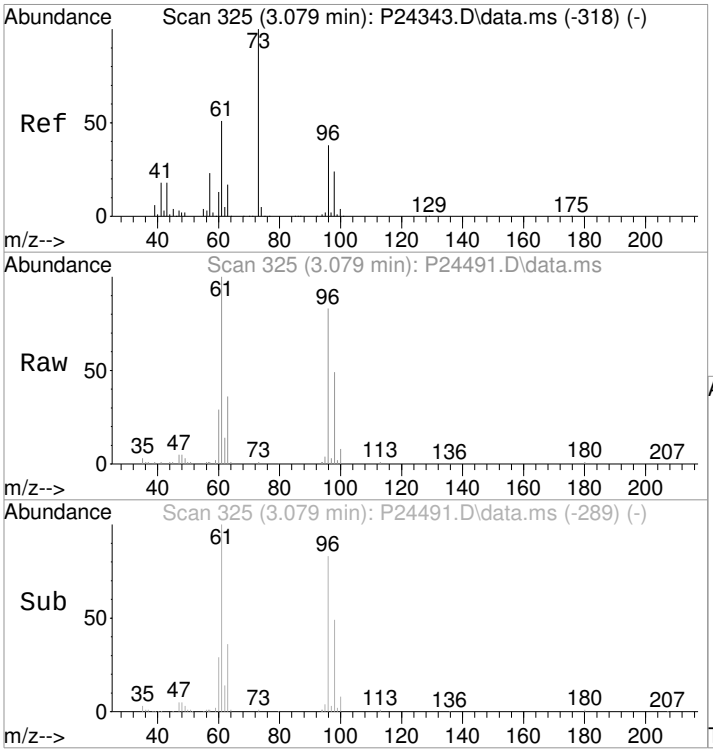


#18
Carbon Disulfide
Concen: 1.63 ppb m
RT: 2.530 min Scan# 235
Delta R.T. 0.006 min
Lab File: P24491.D
Acq: 26 Feb 2019 3:40 am

Tgt Ion: 76 Resp: 14934

Ion	Ratio	Lower	Upper
76	100		
78	6.3	0.0	30.1
77	0.0	0.0	22.9

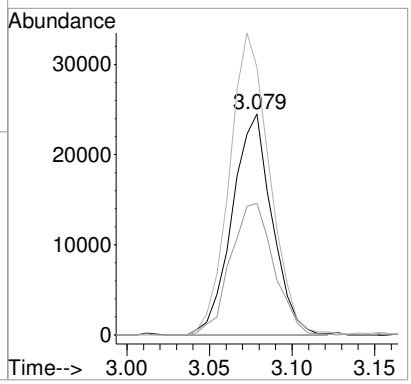


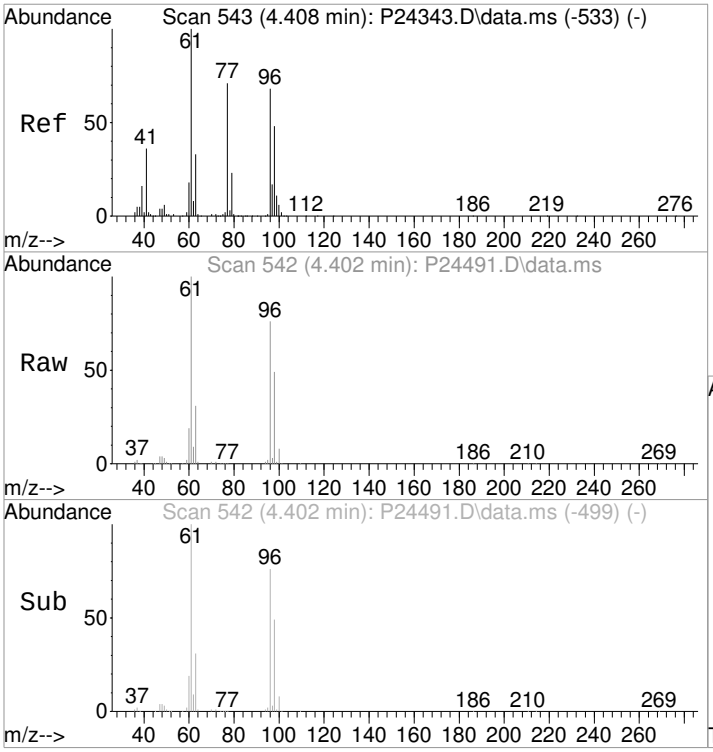


#26
trans-1,2-Dichloroethene
Concen: 12.13 ppb
RT: 3.079 min Scan# 325
Delta R.T. 0.012 min
Lab File: P24491.D
Acq: 26 Feb 2019 3:40 am

Tgt Ion: 96 Resp: 41330

Ion	Ratio	Lower	Upper
96	100		
98	59.6	43.5	83.5
61	121.0	114.4	154.4

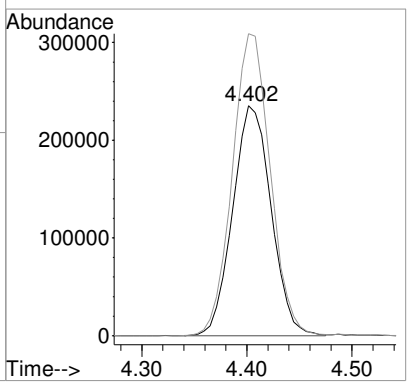


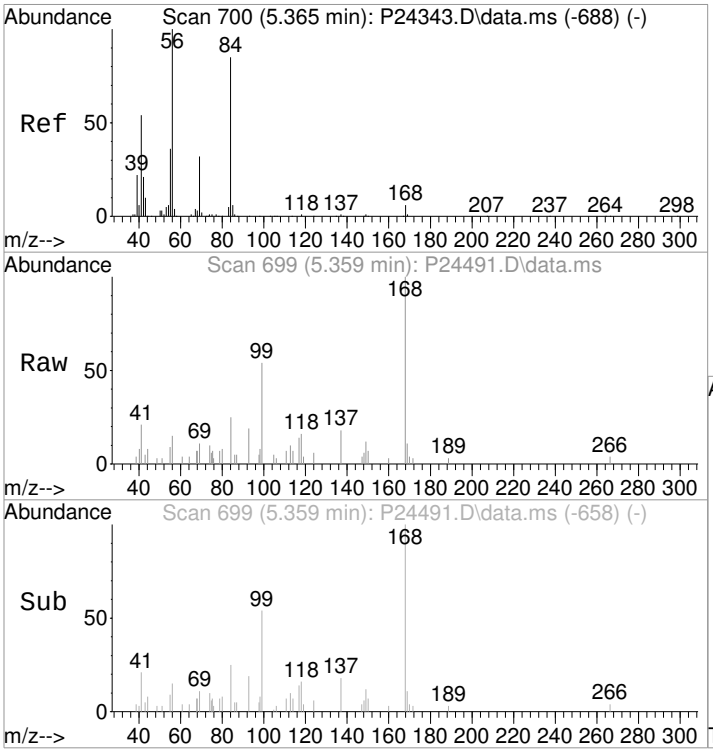


#34
cis-1,2-Dichloroethene
Concen: 155.54 ppb
RT: 4.402 min Scan# 542
Delta R.T. 0.000 min
Lab File: P24491.D
Acq: 26 Feb 2019 3:40 am

Tgt Ion: 96 Resp: 594029

Ion	Ratio	Lower	Upper
96	100		
61	131.3	128.1	168.1

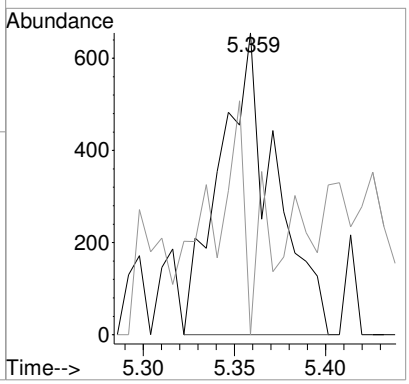


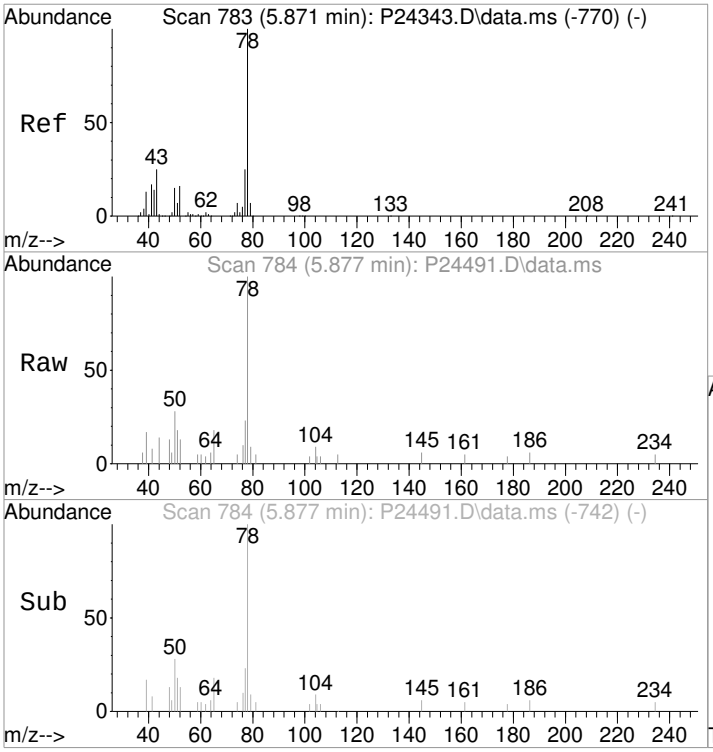


#44
Cyclohexane
Concen: 0.45 ppb m
RT: 5.359 min Scan# 699
Delta R.T. 0.000 min
Lab File: P24491.D
Acq: 26 Feb 2019 3:40 am

Tgt Ion: 41 Resp: 1379

Ion	Ratio	Lower	Upper
41	100		
39	0.0	20.3	60.3#

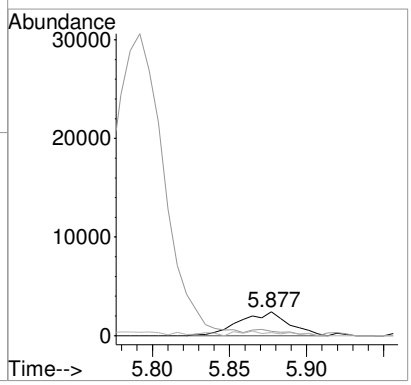


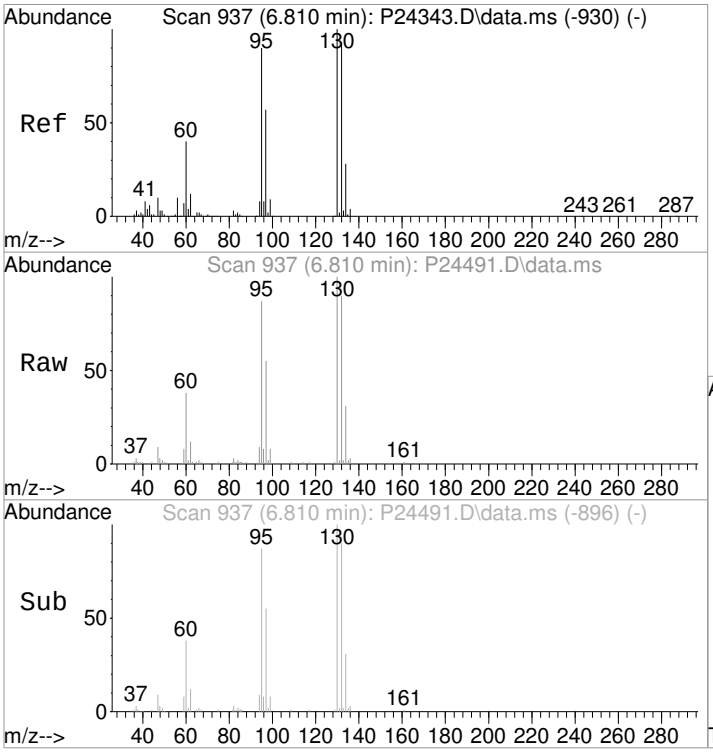


#49
Benzene
Concen: 0.37 ppb
RT: 5.877 min Scan# 784
Delta R.T. 0.012 min
Lab File: P24491.D
Acq: 26 Feb 2019 3:40 am

Tgt Ion: 78 Resp: 5404

Ion	Ratio	Lower	Upper
78	100		
51	18.4	0.0	36.0
52	12.5	0.0	36.2

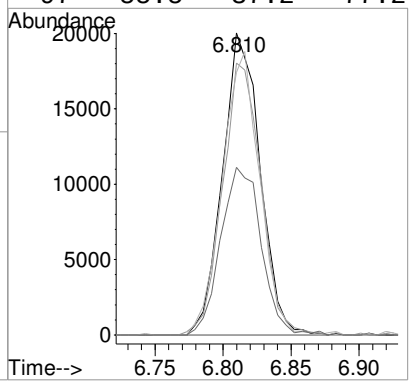


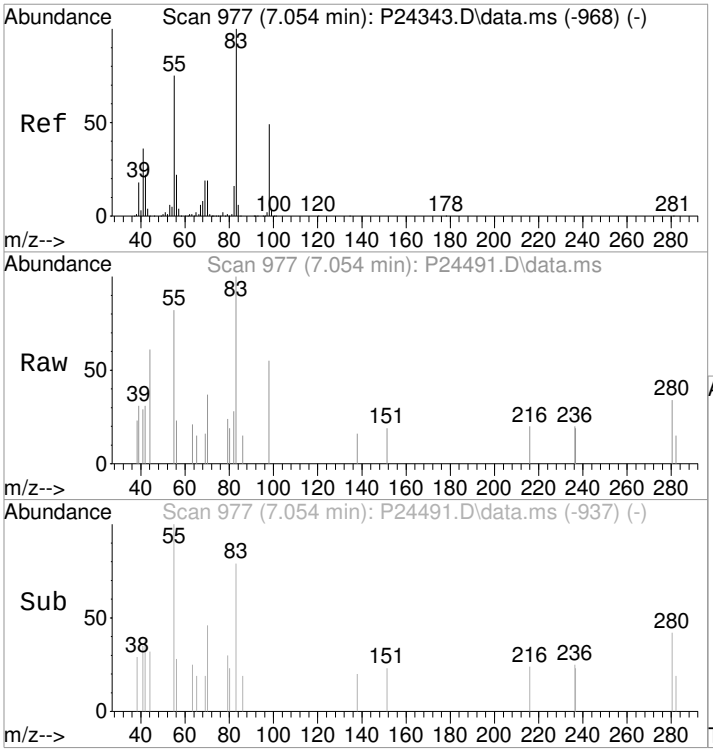


#54
Trichloroethene
Concen: 10.64 ppb
RT: 6.810 min Scan# 937
Delta R.T. 0.000 min
Lab File: P24491.D
Acq: 26 Feb 2019 3:40 am

Tgt Ion:130 Resp: 38544

Ion	Ratio	Lower	Upper
130	100		
132	92.1	72.6	112.6
95	86.9	69.8	109.8
97	55.5	37.2	77.2

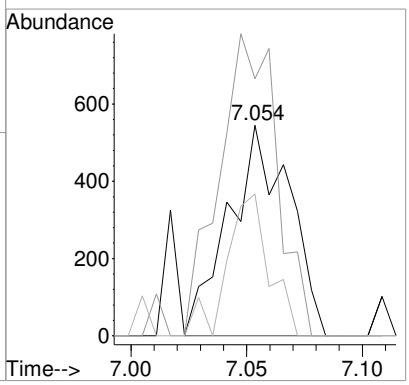


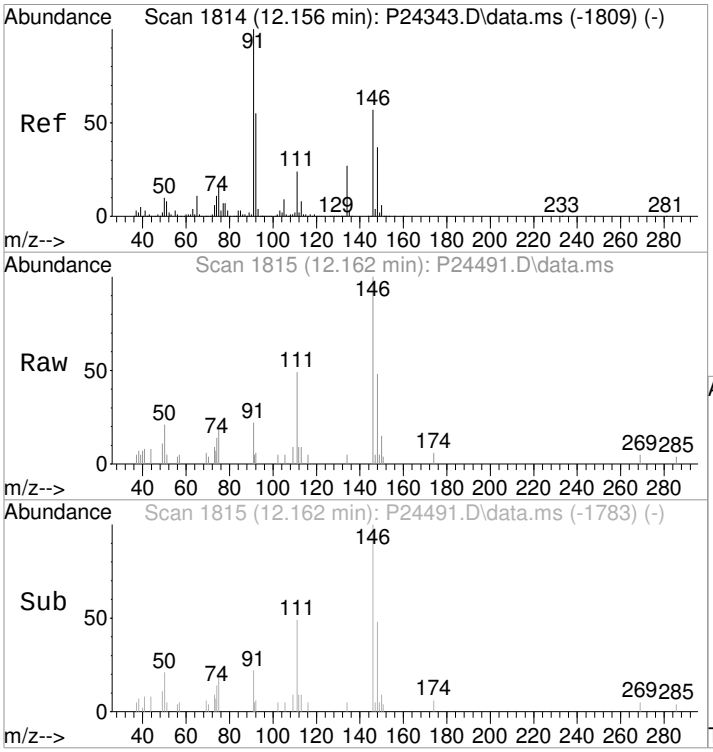


#55
Methylcyclohexane
Concen: 0.22 ppb
RT: 7.054 min Scan# 977
Delta R.T. 0.006 min
Lab File: P24491.D
Acq: 26 Feb 2019 3:40 am

Tgt Ion: 55 Resp: 993

Ion	Ratio	Lower	Upper
55	100		
83	122.0	113.1	153.1
98	67.3	45.0	85.0

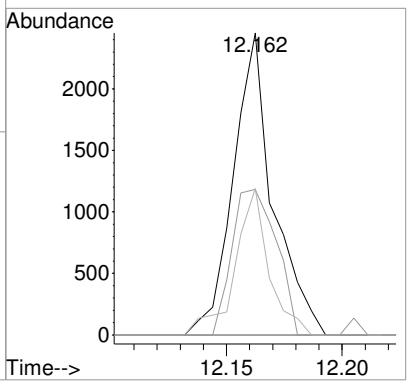




#110
1,2-Dclbenz
Concen: 0.38 ppb
RT: 12.162 min Scan# 1815
Delta R.T. 0.000 min
Lab File: P24491.D
Acq: 26 Feb 2019 3:40 am

Tgt Ion:146 Resp: 2921

Ion	Ratio	Lower	Upper
146	100		
148	48.2	44.5	84.5
111	48.5	21.6	61.6



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24486.D
Acq On : 26 Feb 2019 1:52 am
Operator : K.Ruest
Sample : R1901592-012|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 26 14:52:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

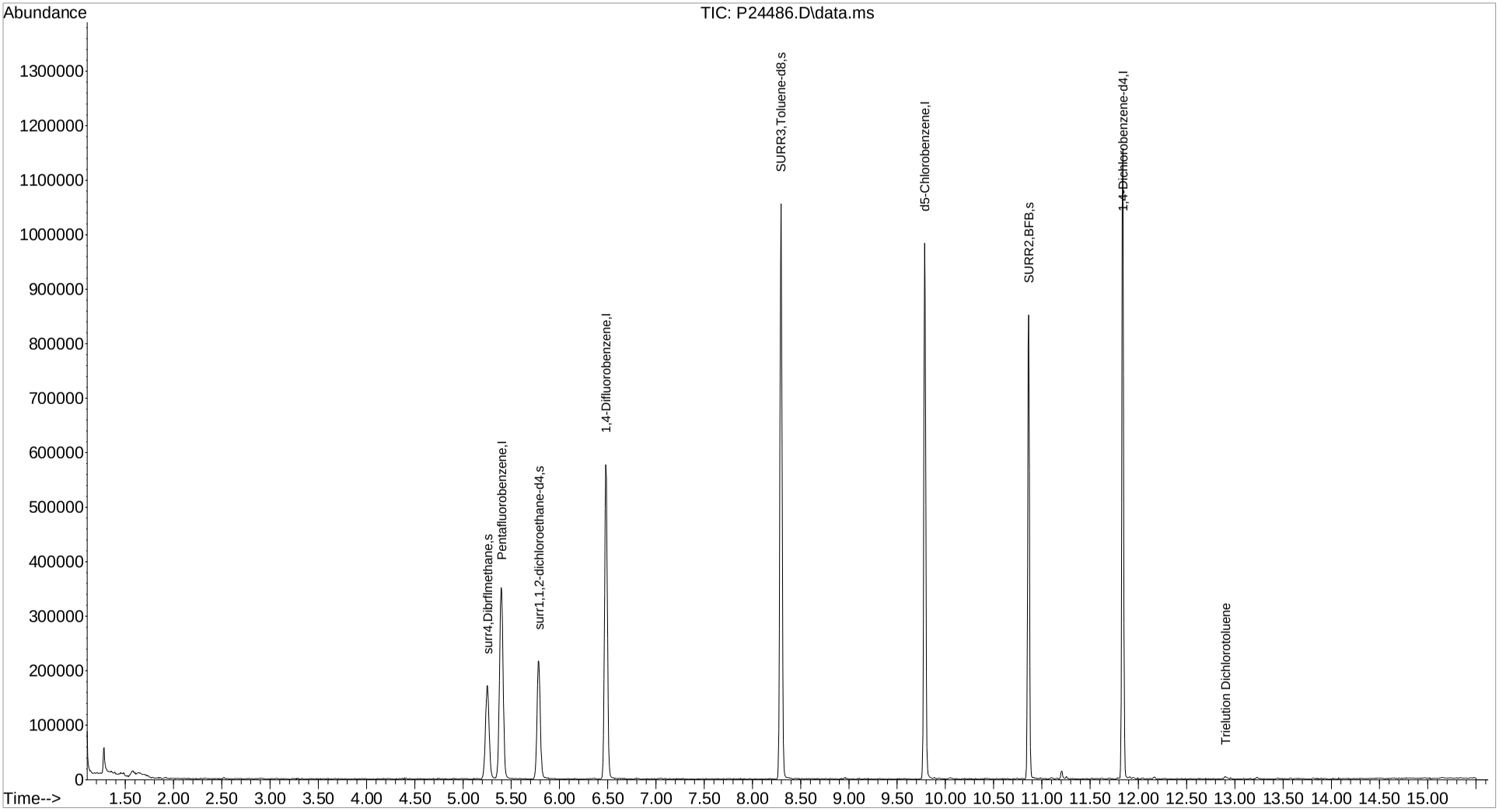
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.401	168	334112	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.480	114	518791	50.00	ppb	0.00
71) d5-Chlorobenzene	9.785	117	451950	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	242838	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.255	113	142721	50.06	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.12%			
48) surr1,1,2-dichloroetha...	5.785	65	178870	49.46	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 98.92%			
65) SURR3,Toluene-d8	8.297	98	664326	49.13	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.26%			
70) SURR2,BFB	10.864	95	239022	49.35	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.70%			
Target Compounds						Qvalue
112) Trielution Dichlorotol...	12.906	125	1877	0.29	ppb	# 86

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

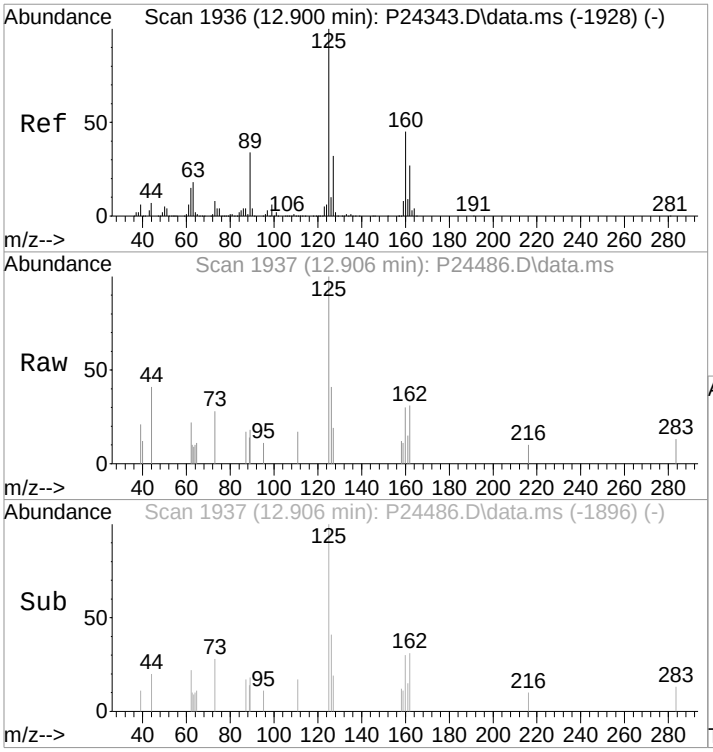
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24486.D
Acq On : 26 Feb 2019 1:52 am
Operator : K.Ruest
Sample : R1901592-012|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 26 14:52:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



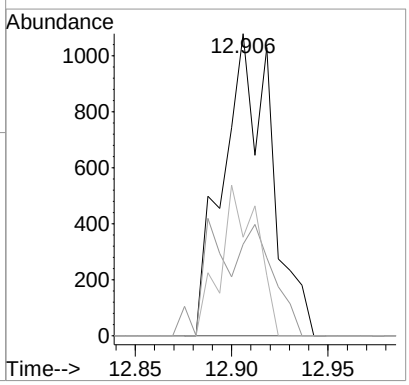
1st 02/26/19
2nd 02/26/19



#112
Trielution Dichlorotoluene
Concen: 0.29 ppb
RT: 12.906 min Scan# 1937
Delta R.T. 0.000 min
Lab File: P24486.D
Acq: 26 Feb 2019 1:52 am

Tgt Ion:125 Resp: 1877

Ion	Ratio	Lower	Upper
125	100		
160	30.2	35.8	53.8#
89	32.6	27.0	40.4



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24458.D
Acq On : 25 Feb 2019 3:37 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 11:35:38 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

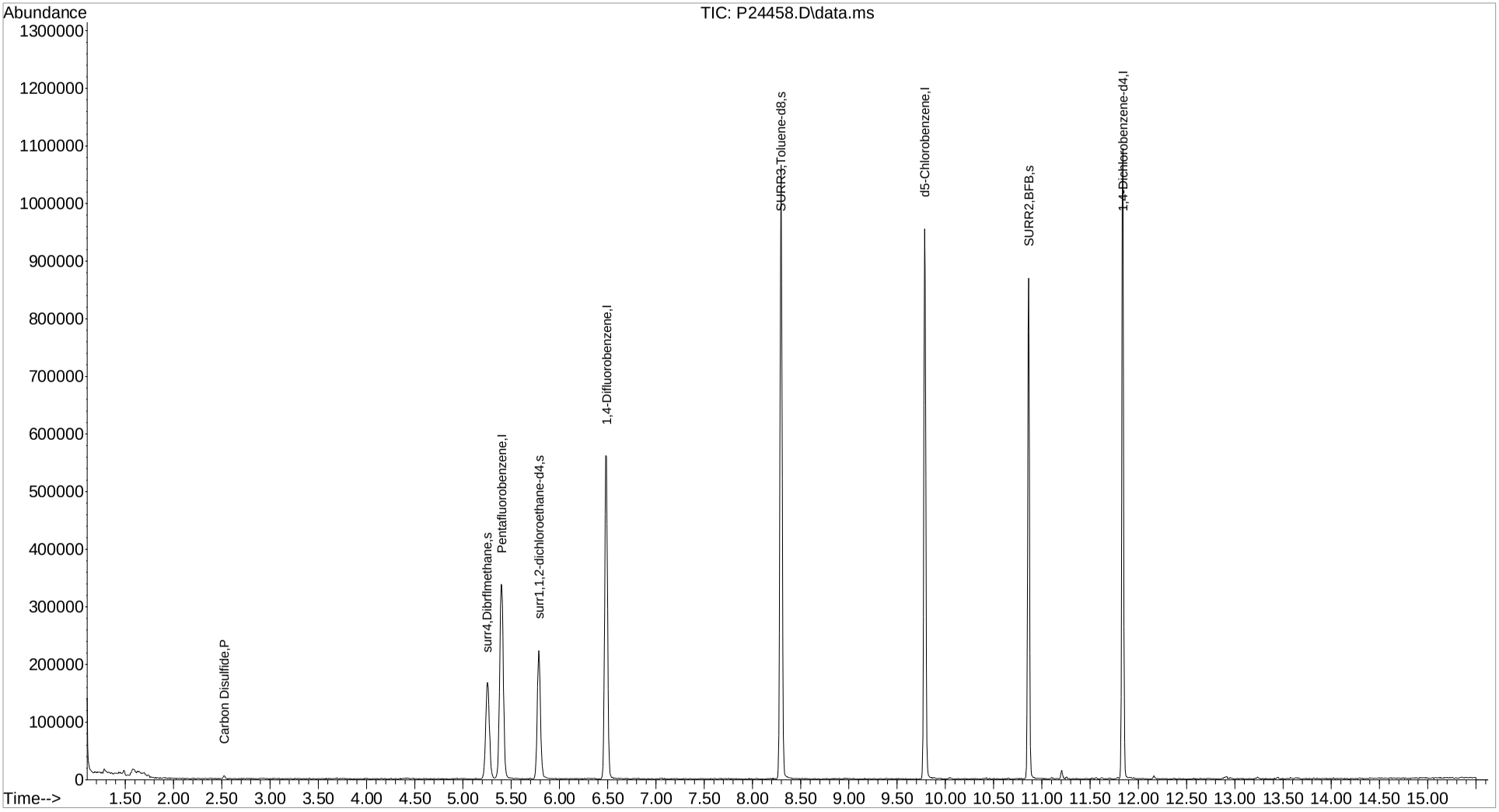
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.402	168	323004	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.487	114	516730	50.00	ppb	0.00
71) d5-Chlorobenzene	9.785	117	446019	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	233437	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.249	113	140222	49.38	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.76%			
48) surr1,1,2-dichloroetha...	5.786	65	183599	50.97	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.94%			
65) SURR3,Toluene-d8	8.297	98	667934	49.59	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.18%			
70) SURR2,BFB	10.864	95	241546	50.07	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.14%			
Target Compounds						Qvalue
18) Carbon Disulfide	2.524	76	5796	0.64	ppb	72

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

Quantitation Report (QT Reviewed)

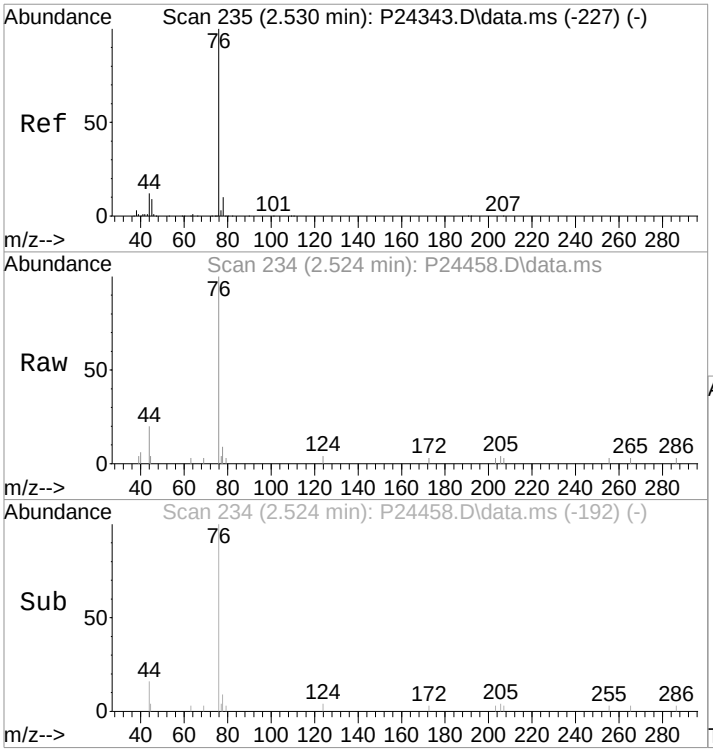
Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24458.D
Acq On : 25 Feb 2019 3:37 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 11:35:38 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



1st 02/26/19
2nd 02/26/19

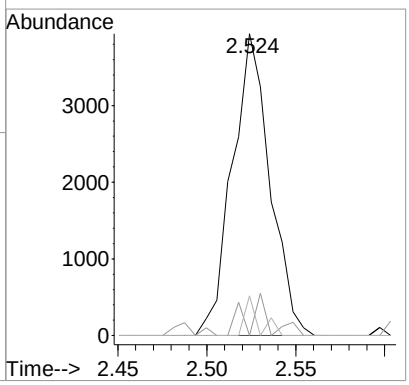
1st 02/26/19
2nd 02/26/19



#18
Carbon Disulfide
Concen: 0.64 ppb
RT: 2.524 min Scan# 234
Delta R.T. 0.000 min
Lab File: P24458.D
Acq: 25 Feb 2019 3:37 pm

Tgt Ion: 76 Resp: 5796

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	30.1
77	13.1	0.0	22.9



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24458.D
Acq On : 25 Feb 2019 3:37 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24458.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.579	73	79	81	rBV6	11715	22386	1.32%	0.260%
2	5.255	668	682	694	rBV2	167946	462115	27.34%	5.368%
3	5.395	695	705	719	rVB	336813	888235	52.56%	10.318%
4	5.786	760	769	785	rBV2	222877	526513	31.15%	6.116%
5	6.481	874	883	893	rBV	561768	1155366	68.36%	13.421%
6	8.297	1173	1181	1191	rBV	1066189	1690024	100.00%	19.631%
7	9.785	1419	1425	1436	rBV	954660	1344743	79.57%	15.620%
8	10.864	1596	1602	1610	rBV	868331	1112142	65.81%	12.918%
9	11.205	1654	1658	1662	rBV2	15099	18764	1.11%	0.218%
10	11.839	1756	1762	1771	rBV	1094070	1388654	82.17%	16.130%

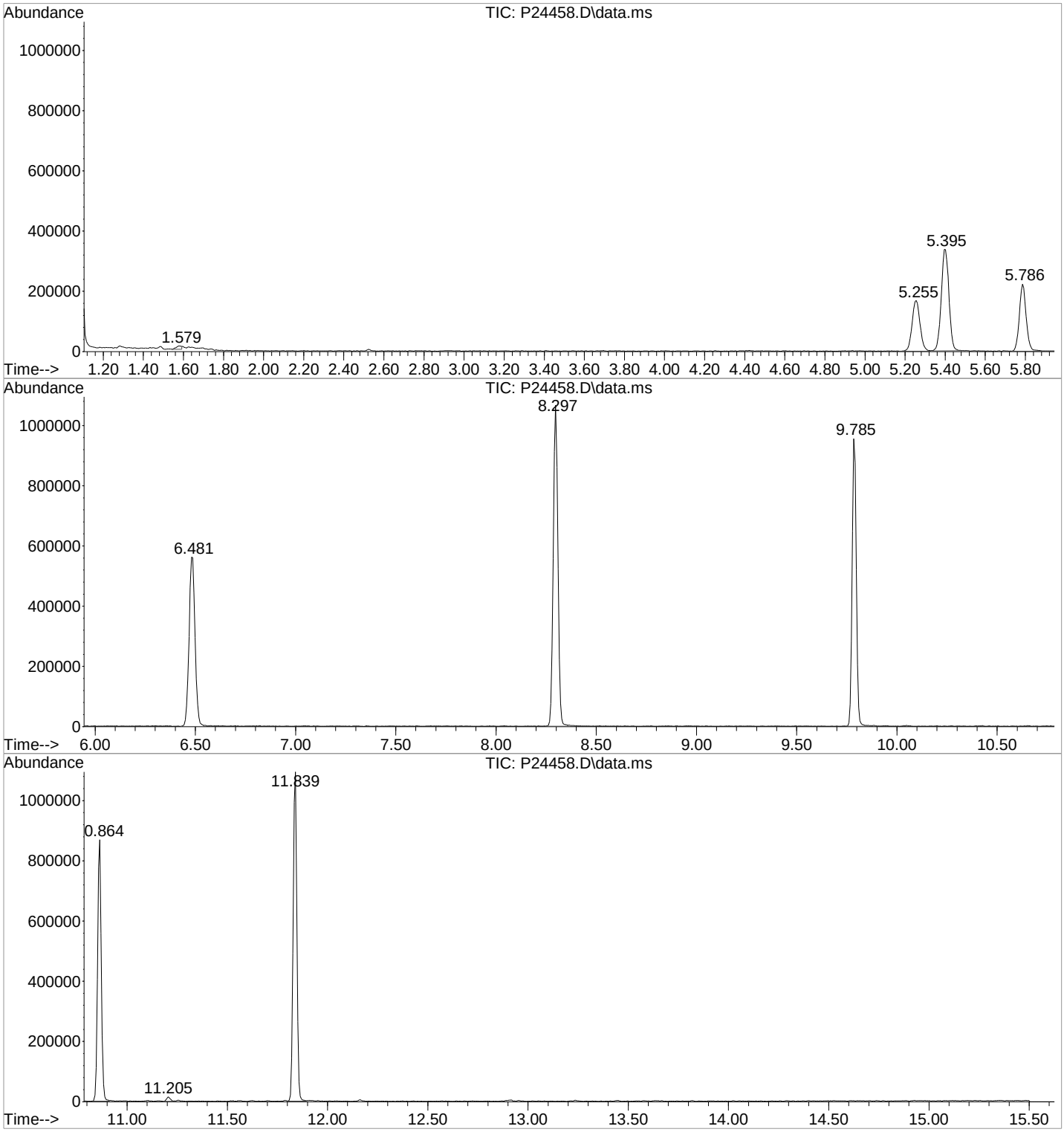
Sum of corrected areas: 8608942

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24458.D
Acq On : 25 Feb 2019 3:37 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022519\\
Data File : P24458.D
Acq On : 25 Feb 2019 3:37 pmm
Operator : K.Ruestt
Sample : VBLK Inst : MSVOA-122
Misc :
ALS Vial : 2 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24485.D
Acq On : 26 Feb 2019 1:31 am
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 26 10:44:42 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

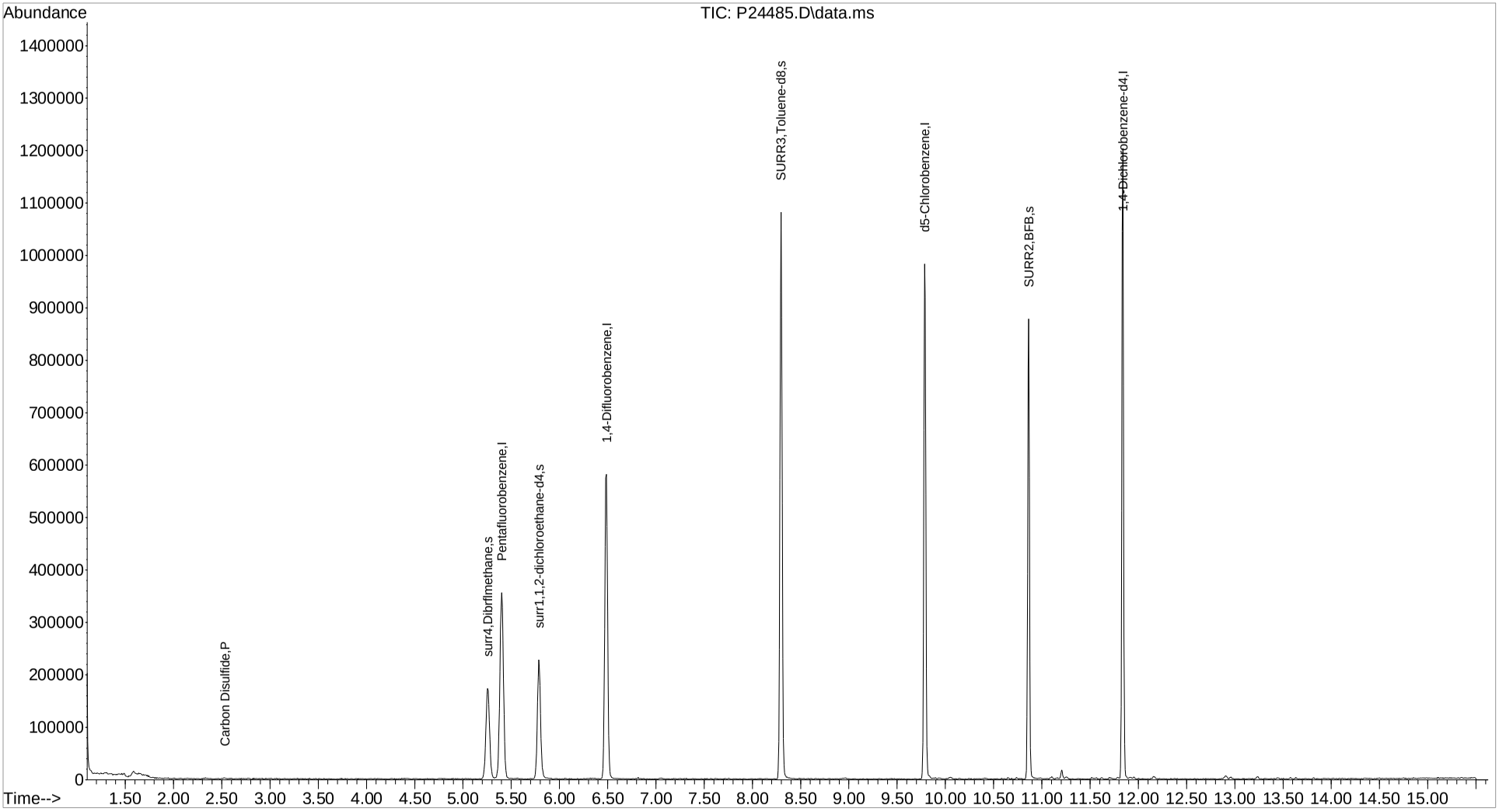
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.401	168	335480	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.487	114	527000	50.00	ppb	0.00
71) d5-Chlorobenzene	9.785	117	458581	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	251673	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.255	113	142453	49.19	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.38%			
48) surr1,1,2-dichloroetha...	5.786	65	185023	50.37	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 100.74%			
65) SURR3,Toluene-d8	8.297	98	672837	48.98	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.96%			
70) SURR2,BFB	10.864	95	239544	48.69	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.38%			
Target Compounds						Qvalue
18) Carbon Disulfide	2.530	76	2339	0.25	ppb	96

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

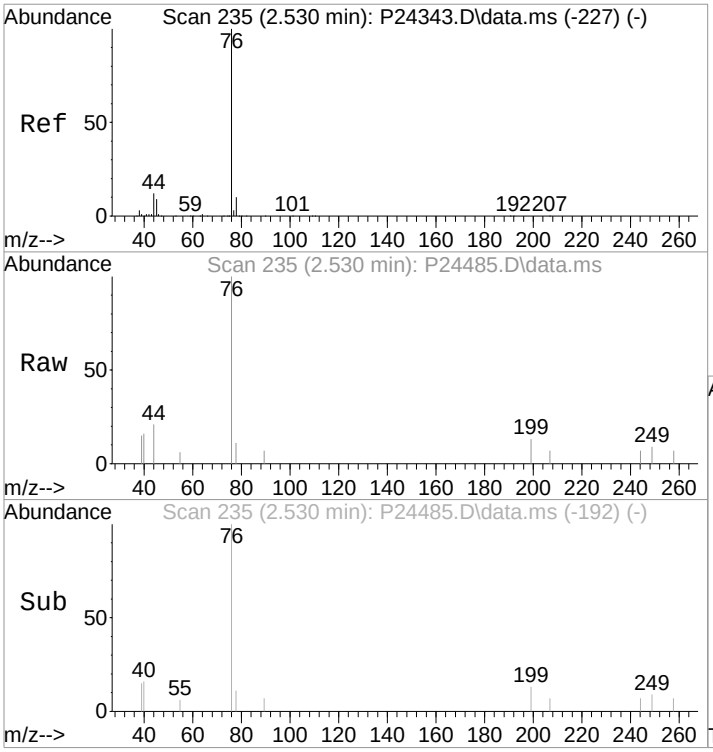
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24485.D
Acq On : 26 Feb 2019 1:31 am
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 26 10:44:42 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



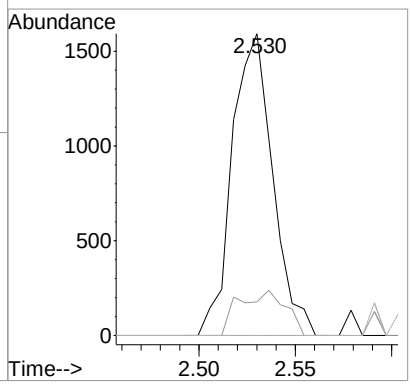
1st 02/26/19
2nd 02/26/19



#18
Carbon Disulfide
Concen: 0.25 ppb
RT: 2.530 min Scan# 235
Delta R.T. 0.006 min
Lab File: P24485.D
Acq: 26 Feb 2019 1:31 am

Tgt Ion: 76 Resp: 2339

Ion	Ratio	Lower	Upper
76	100		
78	11.2	0.0	30.1
77	0.0	0.0	22.9



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24485.D
Acq On : 26 Feb 2019 1:31 am
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24485.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.585	74	80	86	rBV7	9436	24267	1.41%	0.274%
2	5.255	670	682	694	rBV2	173618	475393	27.70%	5.377%
3	5.401	694	706	719	rVB	354783	918370	53.51%	10.387%
4	5.786	760	769	780	rBV	226786	521326	30.37%	5.897%
5	6.487	875	884	898	rBV	580427	1180133	68.76%	13.348%
6	8.297	1173	1181	1190	rBV	1081396	1716397	100.00%	19.414%
7	9.785	1419	1425	1437	rBV	982283	1385907	80.75%	15.676%
8	10.864	1595	1602	1611	rBV	877781	1127442	65.69%	12.752%
9	11.205	1654	1658	1662	rBV3	16568	20318	1.18%	0.230%
10	11.839	1757	1762	1771	rVB	1201540	1471598	85.74%	16.645%

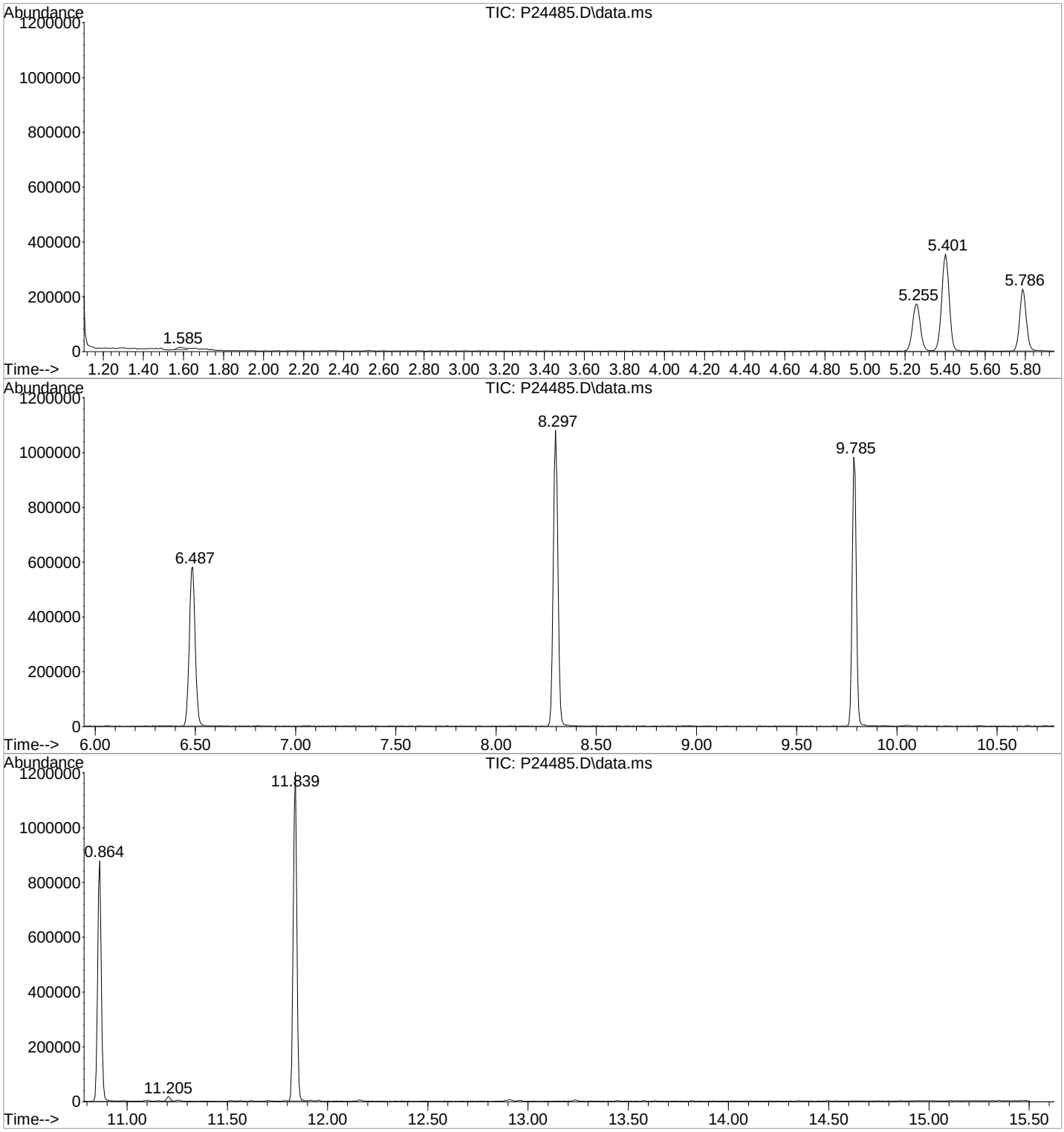
Sum of corrected areas: 8841151

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24485.D
Acq On : 26 Feb 2019 1:31 am
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



1st 02/26/19
2nd 02/26/19

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022519\\
Data File : P24485.D
Acq On : 26 Feb 2019 1:31 amm
Operator : K.Ruestt
Sample : VBLK Inst : MSVOA-122
Misc :
ALS Vial : 27 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24508.D
Acq On : 26 Feb 2019 1:48 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 26 15:37:38 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

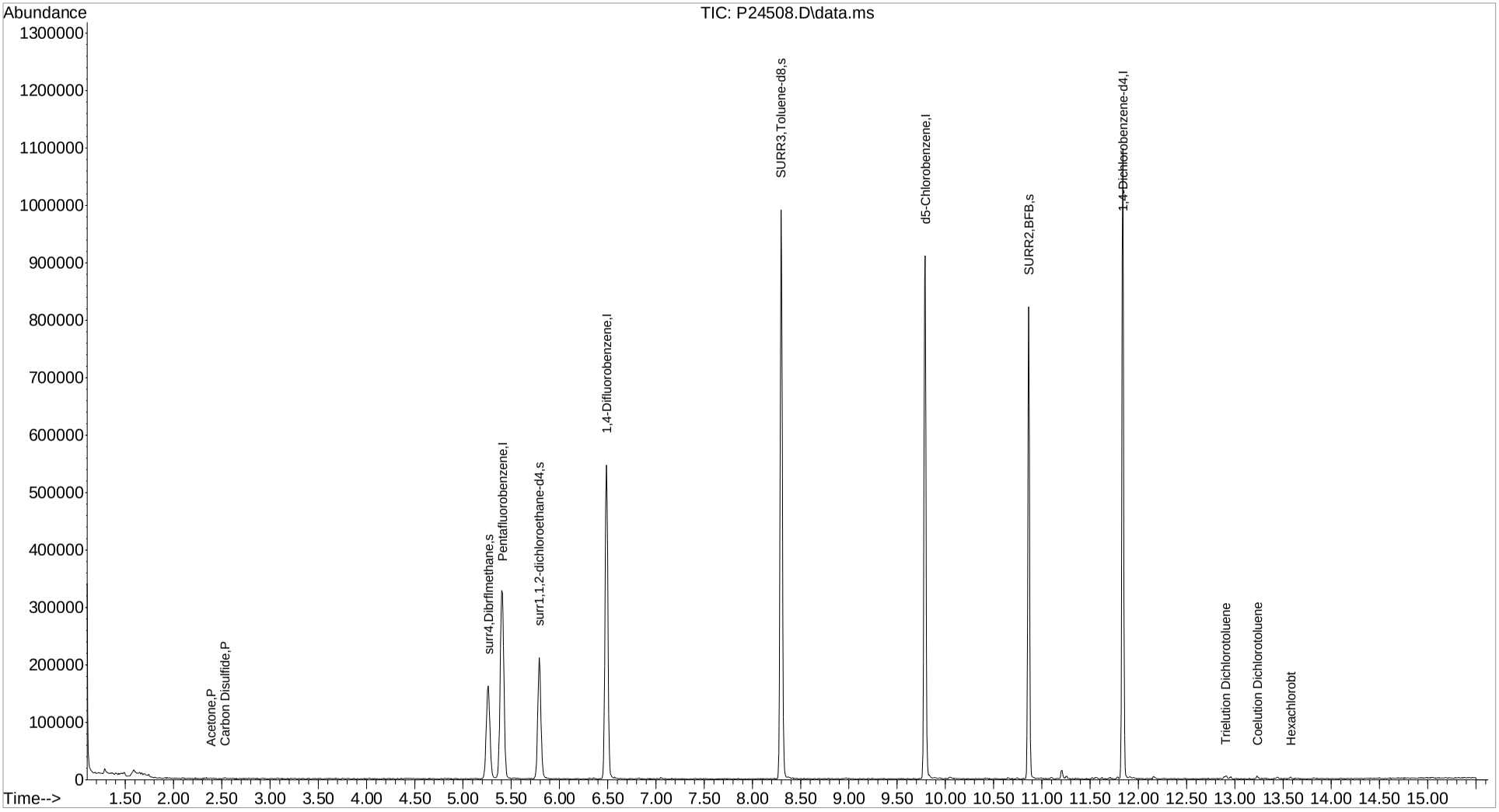
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.408	168	315948	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	489725	50.00	ppb		0.00
71) d5-Chlorobenzene	9.791	117	430089	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	226744	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.261	113	131831	48.99	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.98%				
48) surr1,1,2-dichloroetha...	5.792	65	166882	48.89	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 97.78%				
65) SURR3,Toluene-d8	8.297	98	617423	48.37	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.74%				
70) SURR2,BFB	10.864	95	220396	48.21	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.42%				
Target Compounds							Qvalue
15) Acetone	2.390	43	879	0.58	ppb		88
18) Carbon Disulfide	2.530	76	2204	0.25	ppb		91
112) Trielution Dichlorotol...	12.900	125	2647	0.43	ppb	#	84
114) Coelution Dichlorotoluene	13.235	125	1511	0.22	ppb	#	78
116) Hexachlorobt	13.583	225	692	0.31	ppb	#	19

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

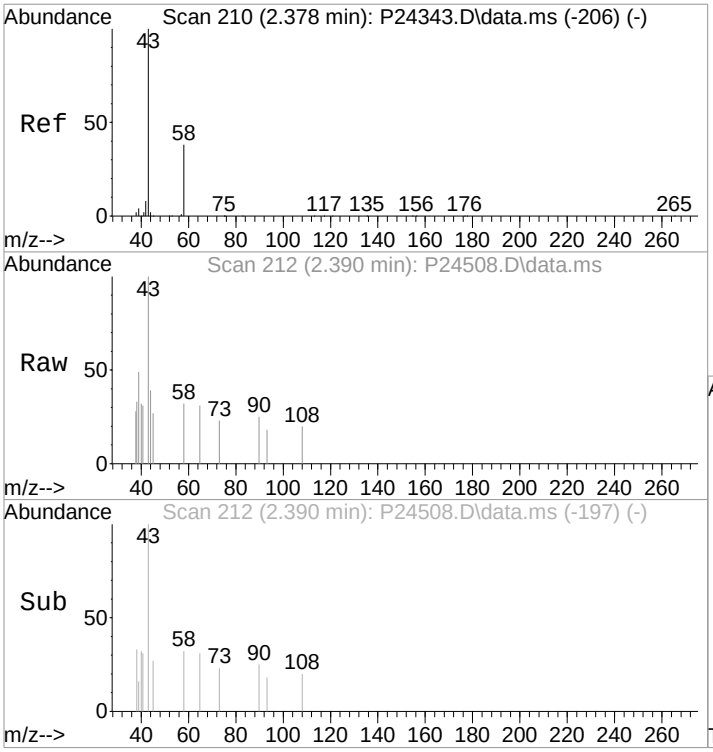
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24508.D
Acq On : 26 Feb 2019 1:48 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 26 15:37:38 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



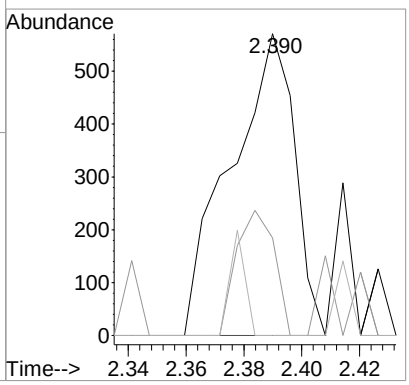
1st 02/26/19
2nd 02/27/19

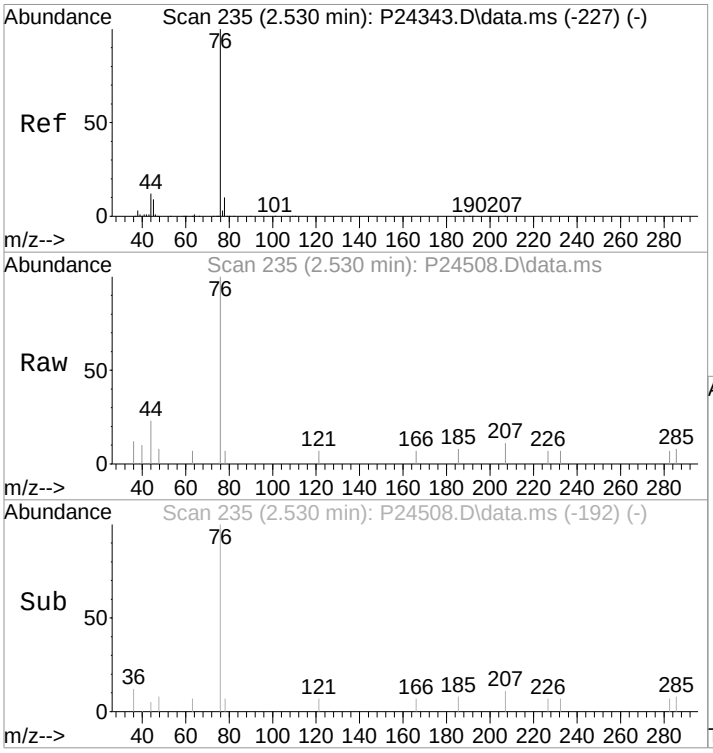


#15
Acetone
Concen: 0.58 ppb
RT: 2.390 min Scan# 212
Delta R.T. 0.018 min
Lab File: P24508.D
Acq: 26 Feb 2019 1:48 pm

Tgt Ion: 43 Resp: 879

Ion	Ratio	Lower	Upper
43	100		
58	32.4	18.1	58.1
42	0.0	0.0	27.8

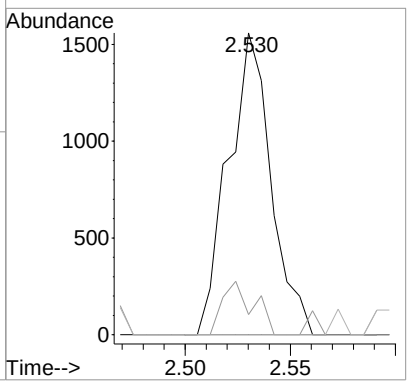


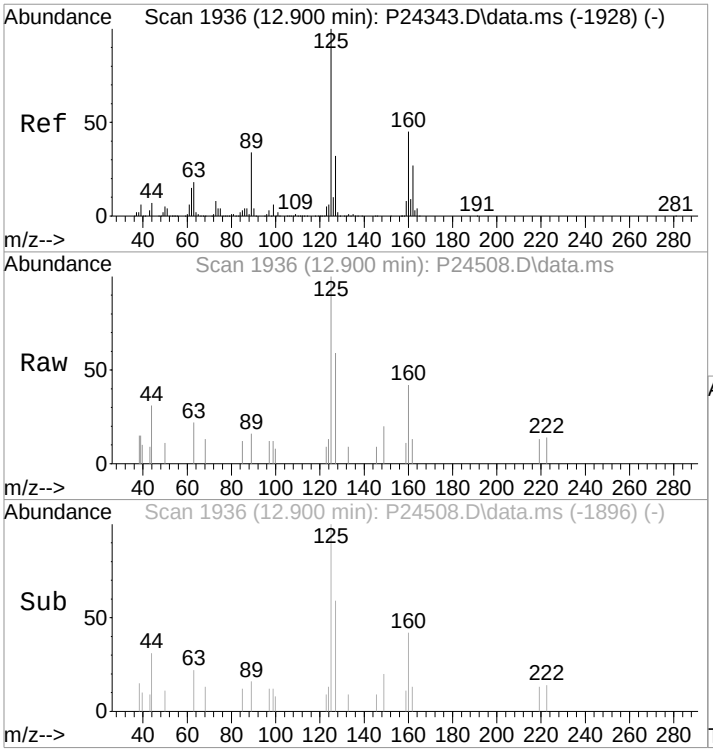


#18
Carbon Disulfide
Concen: 0.25 ppb
RT: 2.530 min Scan# 235
Delta R.T. 0.006 min
Lab File: P24508.D
Acq: 26 Feb 2019 1:48 pm

Tgt Ion: 76 Resp: 2204

Ion	Ratio	Lower	Upper
76	100		
78	6.7	0.0	30.1
77	0.0	0.0	22.9

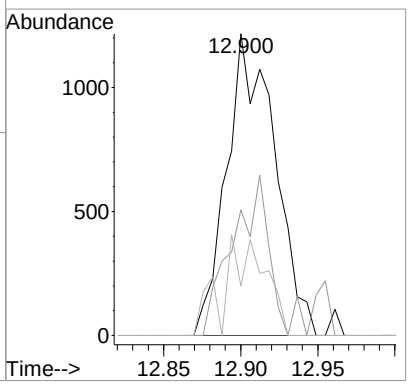


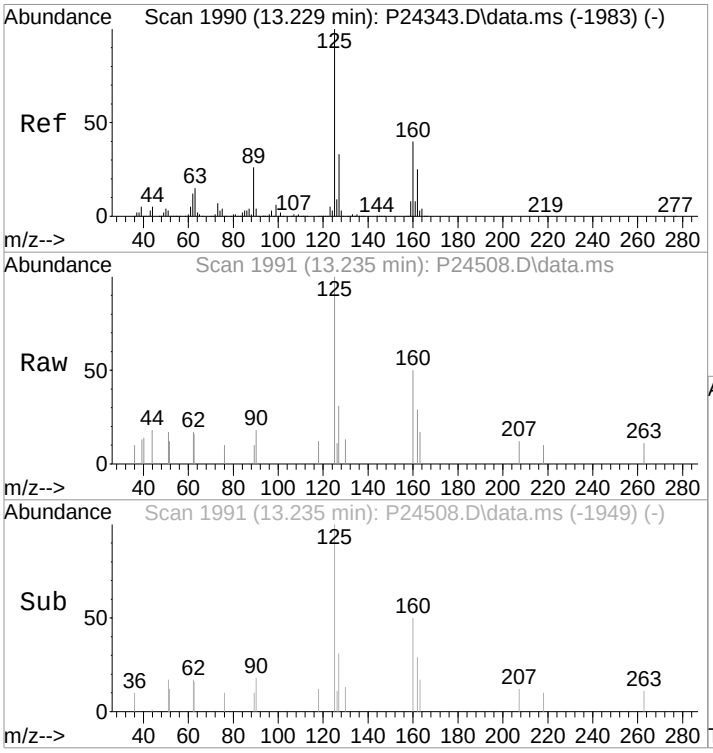


#112
Trielution Dichlorotoluene
Concen: 0.43 ppb
RT: 12.900 min Scan# 1936
Delta R.T. -0.006 min
Lab File: P24508.D
Acq: 26 Feb 2019 1:48 pm

Tgt Ion:125 Resp: 2647

Ion	Ratio	Lower	Upper
125	100		
160	41.6	35.8	53.8
89	16.3	27.0	40.4#

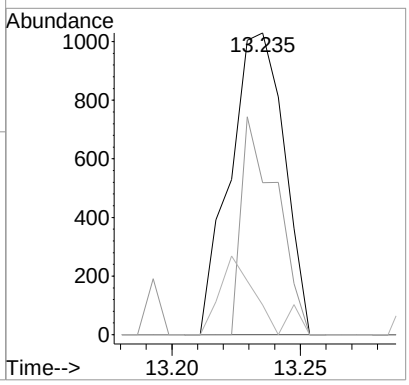


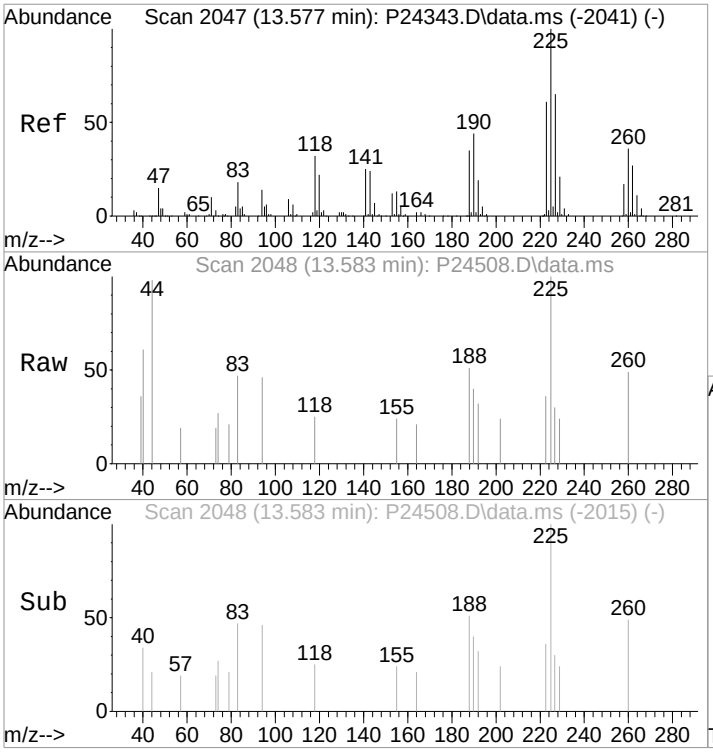


#114
Coelution Dichlorotoluene
Concen: 0.22 ppb
RT: 13.235 min Scan# 1991
Delta R.T. 0.006 min
Lab File: P24508.D
Acq: 26 Feb 2019 1:48 pm

Tgt Ion:125 Resp: 1511

Ion	Ratio	Lower	Upper
125	100		
160	50.4	32.4	48.6#
89	9.9	20.7	31.1#

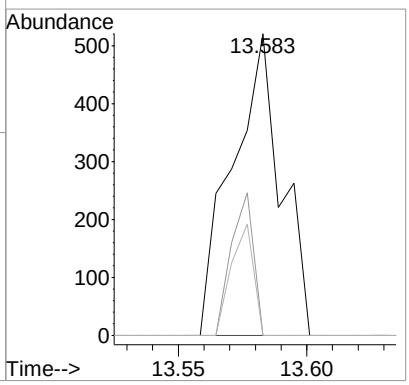




#116
Hexachlorobt
Concen: 0.31 ppb
RT: 13.583 min Scan# 2048
Delta R.T. 0.006 min
Lab File: P24508.D
Acq: 26 Feb 2019 1:48 pm

Tgt Ion:225 Resp: 692

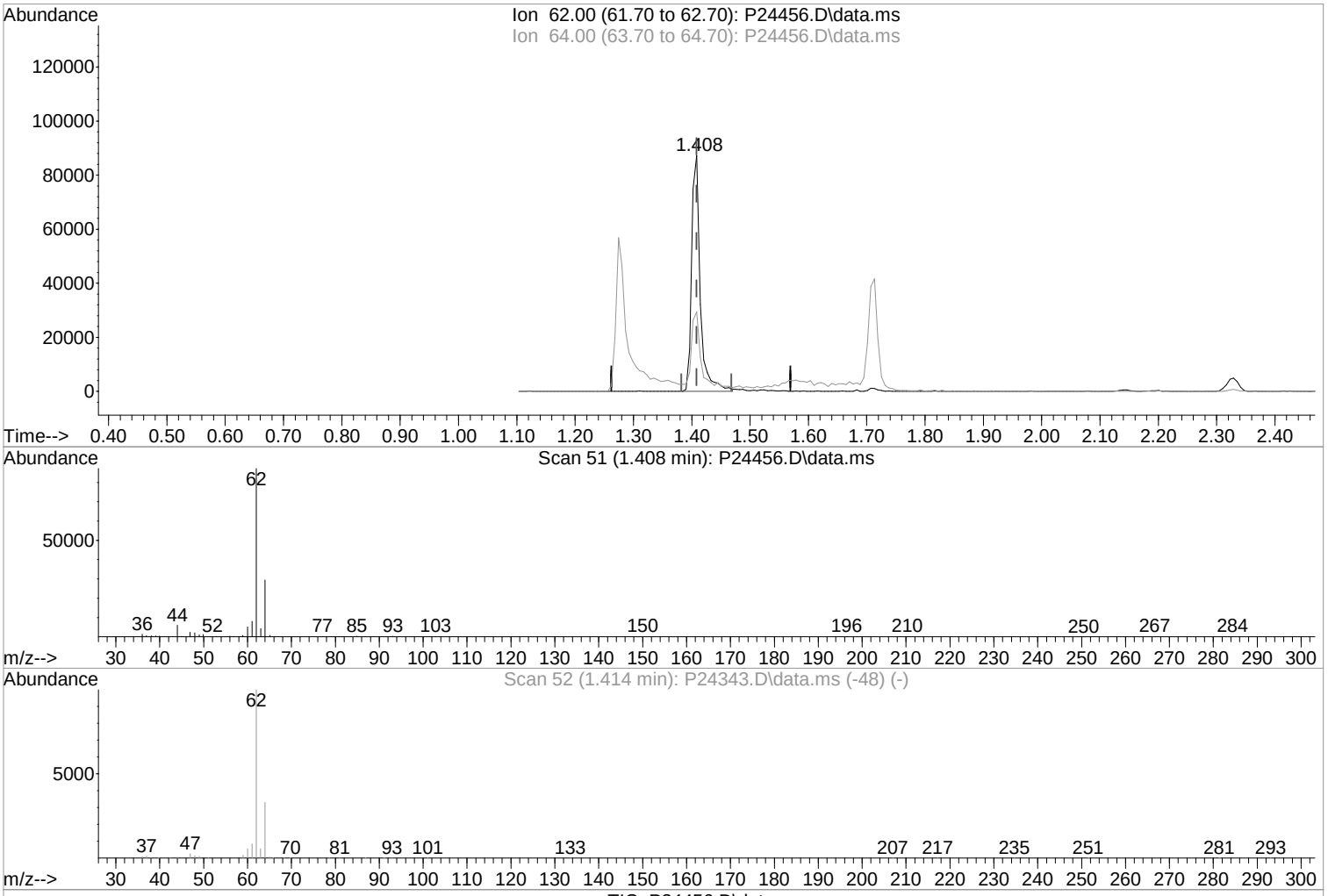
Ion	Ratio	Lower	Upper
225	100		
223	0.0	41.5	81.5#
227	0.0	44.7	84.7#



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24456.D
Acq On : 25 Feb 2019 2:41 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 25 14:56:42 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24456.D\data.ms

(4) Vinyl Chloride (P)

1.408min (+0.000) 17.27 ppb m

response 89572

Ion	Exp%	Act%
62.00	100	100
64.00	33.20	33.67
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

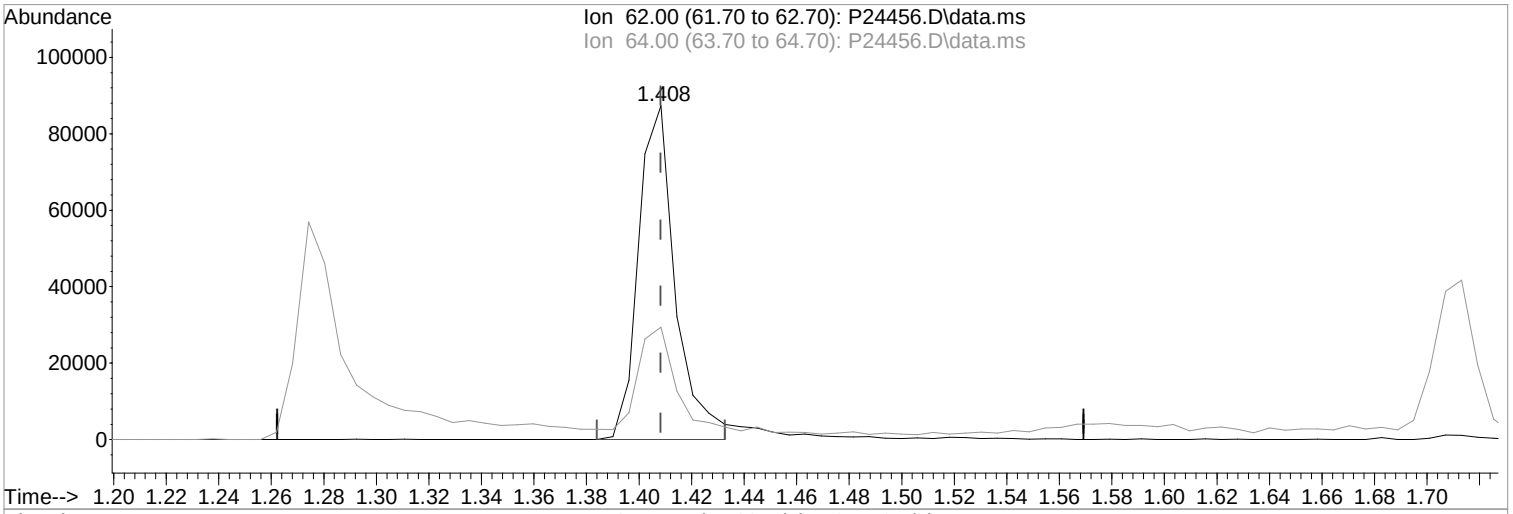
Poor integration.

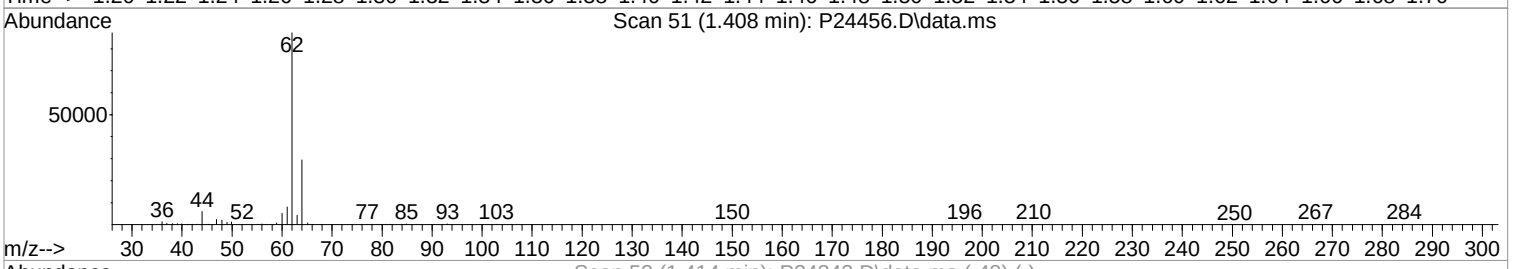
02/25/19

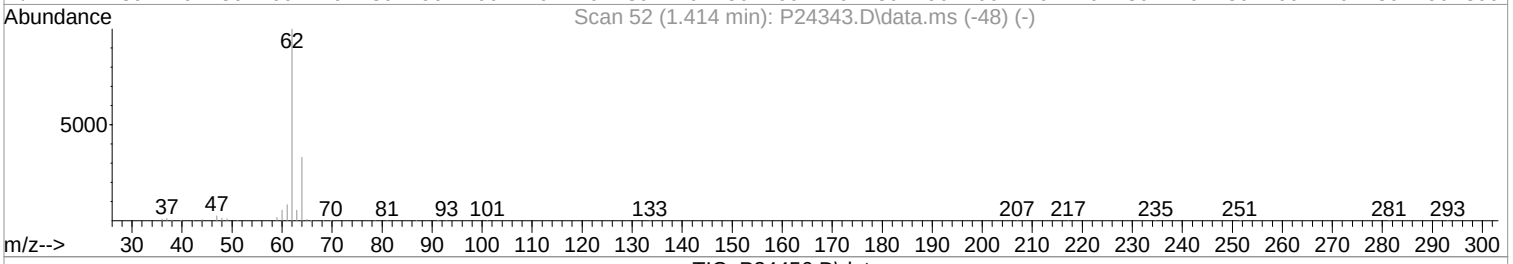
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24456.D
Acq On : 25 Feb 2019 2:41 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 25 14:56:42 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24456.D\data.ms

(4) Vinyl Chloride (P)

1.408min (+0.000) 16.43 ppb

response 85225

Ion	Exp%	Act%
62.00	100	100
64.00	33.20	33.67
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/25/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24456.D
Acq On : 25 Feb 2019 2:41 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 25 14:57:18 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.395	168	356786	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.481	114	571168	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	499870	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	261187	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.249	113	157594	50.21	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.42%				
48) surr1,1,2-dichloroetha...	5.779	65	200544	50.37	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 100.74%				
65) SURR3,Toluene-d8	8.297	98	732997	49.23	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.46%				
70) SURR2,BFB	10.864	95	260183	48.79	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.58%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	74015	17.13	ppb		96
3) Chloromethane	1.329	50	90443	15.66	ppb		94
4) Vinyl Chloride	1.408	62	89572m	17.27	ppb		
5) Bromomethane	1.634	94	63162	19.81	ppb		91
6) Chloroethane	1.713	64	48189	15.35	ppb		94
7) Freon 21	1.859	67	114315	17.46	ppb		99
8) Trichlorofluoromethane	1.908	101	86999	17.29	ppb		98
9) Diethyl Ether	2.140	59	73193	19.02	ppb		97
10) Freon 123a	2.140	67	77721	18.63	ppb		98
11) Freon 123	2.195	83	96357	20.11	ppb		100
12) Acrolein	2.237	56	36033	36.65	ppb		97
13) 1,1-Diclethene	2.329	96	62660	18.83	ppb		97
14) Freon 113	2.335	101	54327	18.33	ppb		98
15) Acetone	2.372	43	33651	19.69	ppb		95
16) 2-Propanol	2.500	45	145254	327.48	ppb		93
17) Iodomethane	2.457	142	62061	14.66	ppb		95
18) Carbon Disulfide	2.518	76	208705	20.93	ppb		97
19) Acetonitrile	2.622	40	27757	127.46	ppb		95
20) Allyl Chloride	2.658	76	37047	18.61	ppb	#	93
21) Methyl Acetate	2.676	43	76387	16.47	ppb		98
22) Methylene Chloride	2.774	84	71350	17.22	ppb		98
23) TBA	2.896	59	239775	340.14	ppb		97
24) Acrylonitrile	3.024	53	208336	92.41	ppb		99
25) Methyl-t-Butyl Ether	3.073	73	246793	19.15	ppb		98
26) trans-1,2-Dichloroethene	3.067	96	67246	18.16	ppb		98
28) 1,1-Diclethane	3.560	63	128329	18.69	ppb		96
29) Vinyl Acetate	3.646	86	18362	21.66	ppb	#	87
30) DIPE	3.682	45	250020	20.12	ppb		99
31) 2-Chloro-1,3-Butadiene	3.682	53	97757	18.20	ppb		91
32) ETBE	4.207	59	229475	18.47	ppb		90
33) 2,2-Dichloropropane	4.389	77	88235	16.32	ppb		99
34) cis-1,2-Dichloroethene	4.396	96	75132	18.10	ppb		95
35) 2-Butanone	4.438	43	49281	17.16	ppb		95
36) Propionitrile	4.517	54	80979	86.69	ppb		99
37) Bromochloromethane	4.792	130	46740	18.14	ppb		86
38) Methacrylonitrile	4.786	67	41252	16.97	ppb		84
39) Tetrahydrofuran	4.877	42	33100	17.80	ppb		96
40) Chloroform	4.969	83	112337	18.23	ppb		95
41) 1,1,1-Trichloroethane	5.261	97	86165	17.96	ppb		93

1st 02/25/19
2nd 02/26/19

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24456.D
Acq On : 25 Feb 2019 2:41 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 25 14:57:18 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.096	73	233406	19.81	ppb	97
44) Cyclohexane	5.347	41	63108	18.85	ppb	96
46) Carbontetrachloride	5.542	117	62713	16.49	ppb	87
47) 1,1-Dichloropropene	5.548	75	91095	18.67	ppb	98
49) Benzene	5.865	78	291311	17.86	ppb	96
50) 1,2-Dichloroethane	5.907	62	92491	17.71	ppb	98
51) Iso-Butyl Alcohol	5.871	43	97235	284.30	ppb	100
52) n-Heptane	6.353	43	83855	16.87	ppb	98
53) 1-Butanol	6.828	56	175563	777.75	ppb	98
54) Trichloroethene	6.810	130	68335	17.11	ppb	98
55) Methylcyclohexane	7.047	55	95196	18.88	ppb	97
56) 1,2-Diclpropane	7.090	63	75906	17.51	ppb	92
57) Dibromomethane	7.230	93	44306	18.05	ppb	98
58) 1,4-Dioxane	7.291	88	31116	402.29	ppb	94
59) Methyl Methacrylate	7.316	69	68815	17.76	ppb	91
60) Bromodichloromethane	7.456	83	77906	17.07	ppb	98
61) 2-Nitropropane	7.736	41	30709	33.91	ppb	87
63) cis-1,3-Dichloropropene	7.999	75	113811	17.65	ppb	96
64) 4-Methyl-2-pentanone	8.206	43	92854	16.88	ppb	96
66) Toluene	8.370	91	297140	17.59	ppb	99
67) trans-1,3-Dichloropropene	8.639	75	104190	18.45	ppb	97
68) Ethyl Methacrylate	8.779	69	123053	18.92	ppb	93
69) 1,1,2-Trichloroethane	8.828	97	68274	17.25	ppb	96
72) Tetrachloroethene	8.962	164	51773	17.30	ppb	93
73) 2-Hexanone	9.114	43	66166	16.42	ppb	97
74) 1,3-Dichloropropane	8.992	76	126031	17.51	ppb	96
75) Dibromochloromethane	9.224	129	60760	18.10	ppb	94
76) N-Butyl Acetate	9.273	43	130268	17.71	ppb	98
77) 1,2-Dibromoethane	9.315	107	66827	17.02	ppb	99
78) Chlorobenzene	9.815	112	186500	17.43	ppb	99
79) 3-CBTF	9.834	180	107717	20.65	ppb	98
80) 4-CBTF	9.888	180	98492	20.88	ppb	98
81) 1,1,1,2-Tetrachloroethane	9.901	131	59195	17.09	ppb	96
82) Ethylbenzene	9.937	106	99864	17.31	ppb	95
83) (m+p)Xylene	10.047	106	244529	34.66	ppb	99
84) o-Xylene	10.407	106	122618	17.67	ppb	100
85) Styrene	10.419	104	207496	18.45	ppb	98
87) Bromoform	10.565	173	37624	17.06	ppb	100
88) 2-CBTF	10.650	180	106722	19.91	ppb	99
89) Isopropylbenzene	10.742	105	304268	17.71	ppb	99
90) Cyclohexanone	10.797	55	85264	78.30	ppb	100
91) trans-1,4-Dichloro-2-B...	11.047	53	24705	17.38	ppb	94
92) 1,1,2,2-Tetrachloroethane	10.998	83	98388	17.17	ppb	99
93) Bromobenzene	10.986	156	78960	17.08	ppb	93
94) 1,2,3-Trichloropropane	11.028	110	32016	17.61	ppb	98
95) n-Propylbenzene	11.095	91	354586	18.02	ppb	95
96) 2-Chlorotoluene	11.156	91	211356	17.04	ppb	98
97) 3-Chlorotoluene	11.211	91	242817	20.01	ppb	97
98) 4-Chlorotoluene	11.248	91	240631	17.40	ppb	99
99) 1,3,5-Trimethylbenzene	11.248	105	245652	17.23	ppb	98
100) tert-Butylbenzene	11.522	119	217167	17.51	ppb	96
101) 1,2,4-Trimethylbenzene	11.559	105	256030	17.36	ppb	100
102) 3,4-DCBTF	11.620	214	86873	19.65	ppb	99
103) sec-Butylbenzene	11.705	105	324445	18.04	ppb	97
104) p-Isopropyltoluene	11.827	119	269592	18.05	ppb	99
105) 1,3-Dclbenz	11.784	146	148712	17.67	ppb	98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24456.D
Acq On : 25 Feb 2019 2:41 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 25 14:57:18 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

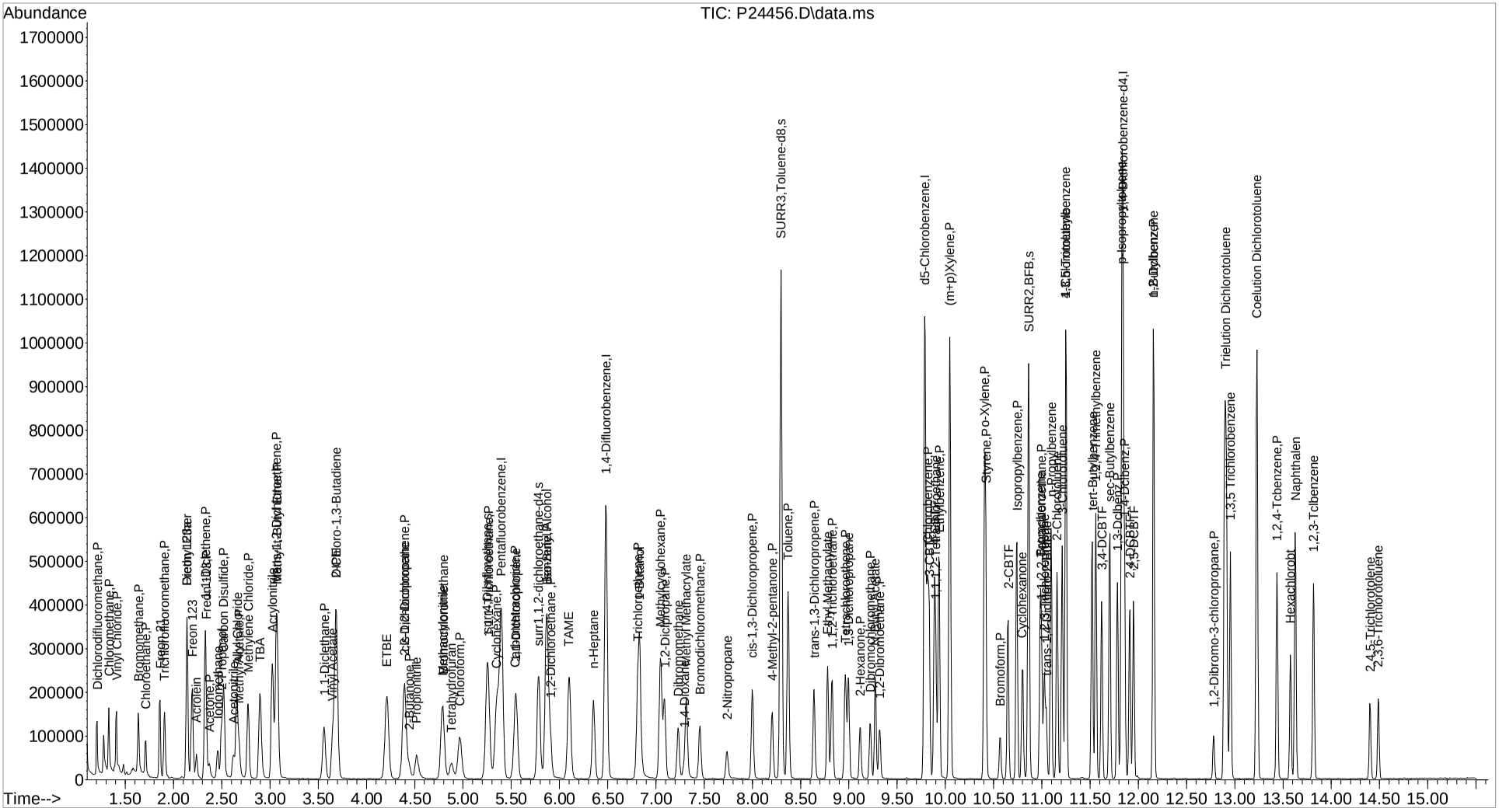
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.858	146	150812	16.98	ppb	96
107) 2,4-DCBTF	11.912	214	79556	19.65	ppb	98
108) 2,5-DCBTF	11.949	214	89466	19.60	ppb	97
109) n-Butylbenzene	12.156	91	243859	18.63	ppb	97
110) 1,2-Dclbenz	12.156	146	147872	17.18	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.784	157	22621	16.02	ppb	84
112) Trielution Dichlorotol...	12.900	125	445859	62.95	ppb	98
113) 1,3,5 Trichlorobenzene	12.955	180	126800	20.46	ppb	99
114) Coelution Dichlorotoluene	13.229	125	330986	42.37	ppb	98
115) 1,2,4-Tcbenzene	13.436	180	115742	19.17	ppb	94
116) Hexachlorobt	13.577	225	43884	17.23	ppb	94
117) Naphthalen	13.625	128	340493	16.19	ppb	98
118) 1,2,3-Tclbenzene	13.814	180	113106	18.16	ppb	97
119) 2,4,5-Trichlorotolene	14.400	159	35098	14.23	ppb	96
120) 2,3,6-Trichlorotoluene	14.485	159	36284	12.79	ppb	97

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24456.D
Acq On : 25 Feb 2019 2:41 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 25 14:57:18 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24483.D
Acq On : 26 Feb 2019 12:47 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 26 10:43:33 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.408	168	332409	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	509896	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	457059	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	238641	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	146239	52.19	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 104.38%				
48) surr1,1,2-dichloroetha...	5.792	65	183430	51.61	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.22%				
65) SURR3,Toluene-d8	8.297	98	665208	50.05	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.10%				
70) SURR2,BFB	10.864	95	238210	50.04	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.08%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	70124	17.42	ppb		98
3) Chloromethane	1.335	50	91460	16.99	ppb		96
4) Vinyl Chloride	1.414	62	92508	19.15	ppb		99
5) Bromomethane	1.646	94	57694	19.41	ppb		96
6) Chloroethane	1.719	64	47651	16.30	ppb		92
7) Freon 21	1.866	67	115828	18.99	ppb		99
8) Trichlorofluoromethane	1.914	101	84565	18.04	ppb		100
9) Diethyl Ether	2.146	59	72127	20.12	ppb		97
10) Freon 123a	2.146	67	76293	19.63	ppb		96
11) Freon 123	2.201	83	96623	21.65	ppb		95
12) Acrolein	2.244	56	38588	42.13	ppb		93
13) 1,1-Diclethene	2.335	96	58852	18.98	ppb		92
14) Freon 113	2.341	101	52227	18.91	ppb		100
15) Acetone	2.378	43	34798	21.86	ppb		89
16) 2-Propanol	2.506	45	143424	347.07	ppb		98
17) Iodomethane	2.463	142	69483	17.16	ppb		98
18) Carbon Disulfide	2.530	76	204814	22.05	ppb		98
19) Acetonitrile	2.628	40	27564	135.86	ppb	#	85
20) Allyl Chloride	2.664	76	38530	20.77	ppb	#	87
21) Methyl Acetate	2.689	43	78848	18.25	ppb		96
22) Methylene Chloride	2.780	84	71841	18.61	ppb		96
23) TBA	2.902	59	239639	364.88	ppb		100
24) Acrylonitrile	3.030	53	208860	99.44	ppb		100
25) Methyl-t-Butyl Ether	3.085	73	245770	20.47	ppb		97
26) trans-1,2-Dichloroethene	3.073	96	66989	19.42	ppb		99
28) 1,1-Diclethane	3.566	63	125084	19.55	ppb		98
29) Vinyl Acetate	3.658	86	15983	20.24	ppb	#	91
30) DIPE	3.694	45	243342	21.02	ppb		99
31) 2-Chloro-1,3-Butadiene	3.694	53	107083	21.40	ppb		97
32) ETBE	4.219	59	220034	19.01	ppb		93
33) 2,2-Dichloropropane	4.389	77	77394	15.36	ppb		95
34) cis-1,2-Dichloroethene	4.402	96	75198	19.44	ppb		91
35) 2-Butanone	4.450	43	51863	19.38	ppb		94
36) Propionitrile	4.530	54	83496	95.94	ppb		99
37) Bromochloromethane	4.798	130	47088	19.61	ppb		90
38) Methacrylonitrile	4.804	67	43445	19.19	ppb		90
39) Tetrahydrofuran	4.883	42	33424	19.29	ppb		99
40) Chloroform	4.975	83	111354	19.39	ppb		97
41) 1,1,1-Trichloroethane	5.267	97	86811	19.42	ppb		96

1st 02/26/19
2nd 02/26/19

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24483.D
Acq On : 26 Feb 2019 12:47 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 26 10:43:33 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.103	73	227537	20.73	ppb	98
44) Cyclohexane	5.365	41	61248	20.49	ppb	99
46) Carbontetrachloride	5.548	117	64489	18.99	ppb	94
47) 1,1-Dichloropropene	5.554	75	88007	20.20	ppb	95
49) Benzene	5.871	78	284251	19.52	ppb	99
50) 1,2-Dichloroethane	5.901	62	91888	19.70	ppb	94
51) Iso-Butyl Alcohol	5.877	43	103593	339.29	ppb	91
52) n-Heptane	6.352	43	70691	15.93	ppb	98
53) 1-Butanol	6.834	56	172685	856.92	ppb	98
54) Trichloroethene	6.816	130	67899	19.04	ppb	92
55) Methylcyclohexane	7.054	55	91909	20.42	ppb	98
56) 1,2-Diclpropane	7.090	63	76805	19.84	ppb	96
57) Dibromomethane	7.230	93	41589	18.98	ppb	99
58) 1,4-Dioxane	7.285	88	33517	485.40	ppb	75
59) Methyl Methacrylate	7.316	69	71256	20.60	ppb	94
60) Bromodichloromethane	7.456	83	78841	19.36	ppb	96
61) 2-Nitropropane	7.736	41	31952	39.52	ppb	84
63) cis-1,3-Dichloropropene	7.999	75	113209	19.66	ppb	97
64) 4-Methyl-2-pentanone	8.206	43	95474	19.44	ppb	98
66) Toluene	8.370	91	296915	19.69	ppb	99
67) trans-1,3-Dichloropropene	8.639	75	101296	20.09	ppb	98
68) Ethyl Methacrylate	8.779	69	119285	20.54	ppb	95
69) 1,1,2-Trichloroethane	8.828	97	66878	18.93	ppb	93
72) Tetrachloroethene	8.968	164	51309	18.75	ppb	93
73) 2-Hexanone	9.114	43	69285	18.81	ppb	97
74) 1,3-Dichloropropane	8.992	76	124883	18.97	ppb	97
75) Dibromochloromethane	9.224	129	57002	18.57	ppb	93
76) N-Butyl Acetate	9.273	43	129106	19.20	ppb	96
77) 1,2-Dibromoethane	9.321	107	67464	18.79	ppb	98
78) Chlorobenzene	9.815	112	184260	18.83	ppb	99
79) 3-CBTF	9.834	180	92021	19.29	ppb	100
80) 4-CBTF	9.888	180	81519	18.90	ppb	97
81) 1,1,1,2-Tetrachloroethane	9.901	131	59390	18.75	ppb	93
82) Ethylbenzene	9.931	106	99795	18.92	ppb	98
83) (m+p)Xylene	10.047	106	243490	37.75	ppb	95
84) o-Xylene	10.407	106	120371	18.97	ppb	91
85) Styrene	10.419	104	201759	19.62	ppb	99
87) Bromoform	10.565	173	36443	18.08	ppb	96
88) 2-CBTF	10.650	180	92998	18.99	ppb	96
89) Isopropylbenzene	10.742	105	296381	18.88	ppb	99
90) Cyclohexanone	10.803	55	85936	86.37	ppb	94
91) trans-1,4-Dichloro-2-B...	11.047	53	23256	17.90	ppb	95
92) 1,1,2,2-Tetrachloroethane	10.998	83	102809	19.63	ppb	100
93) Bromobenzene	10.986	156	78421	18.57	ppb	99
94) 1,2,3-Trichloropropane	11.028	110	30548	18.39	ppb	97
95) n-Propylbenzene	11.095	91	351459	19.54	ppb	97
96) 2-Chlorotoluene	11.156	91	212806	18.78	ppb	99
97) 3-Chlorotoluene	11.211	91	219719	19.82	ppb	97
98) 4-Chlorotoluene	11.254	91	237835	18.82	ppb	94
99) 1,3,5-Trimethylbenzene	11.248	105	245332	18.83	ppb	99
100) tert-Butylbenzene	11.522	119	220213	19.43	ppb	96
101) 1,2,4-Trimethylbenzene	11.559	105	253453	18.81	ppb	99
102) 3,4-DCBTF	11.620	214	71350	17.67	ppb	93
103) sec-Butylbenzene	11.705	105	321661	19.58	ppb	99
104) p-Isopropyltoluene	11.827	119	258407	18.94	ppb	98
105) 1,3-Dclbenz	11.784	146	144112	18.74	ppb	99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24483.D
Acq On : 26 Feb 2019 12:47 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 26 10:43:33 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.858	146	147897	18.23	ppb	98
107) 2,4-DCBTF	11.912	214	69990	18.92	ppb	94
108) 2,5-DCBTF	11.949	214	75846	18.18	ppb	97
109) n-Butylbenzene	12.156	91	238295	19.92	ppb	99
110) 1,2-Dclbenz	12.162	146	150368	19.12	ppb	93
111) 1,2-Dibromo-3-chloropr...	12.784	157	22342	17.32	ppb	88
112) Trielution Dichlorotol...	12.900	125	389654	60.22	ppb	96
113) 1,3,5 Trichlorobenzene	12.955	180	113700	20.08	ppb	98
114) Coelution Dichlorotoluene	13.229	125	294145	41.21	ppb	97
115) 1,2,4-Tcbenzene	13.436	180	110575	20.04	ppb	98
116) Hexachlorobt	13.577	225	42532	18.28	ppb	96
117) Naphthalen	13.625	128	337705	17.52	ppb	99
118) 1,2,3-Tclbenzene	13.814	180	112788	19.82	ppb	98
119) 2,4,5-Trichlorotolene	14.400	159	29597	13.29	ppb	95
120) 2,3,6-Trichlorotoluene	14.485	159	27731	11.01	ppb	89

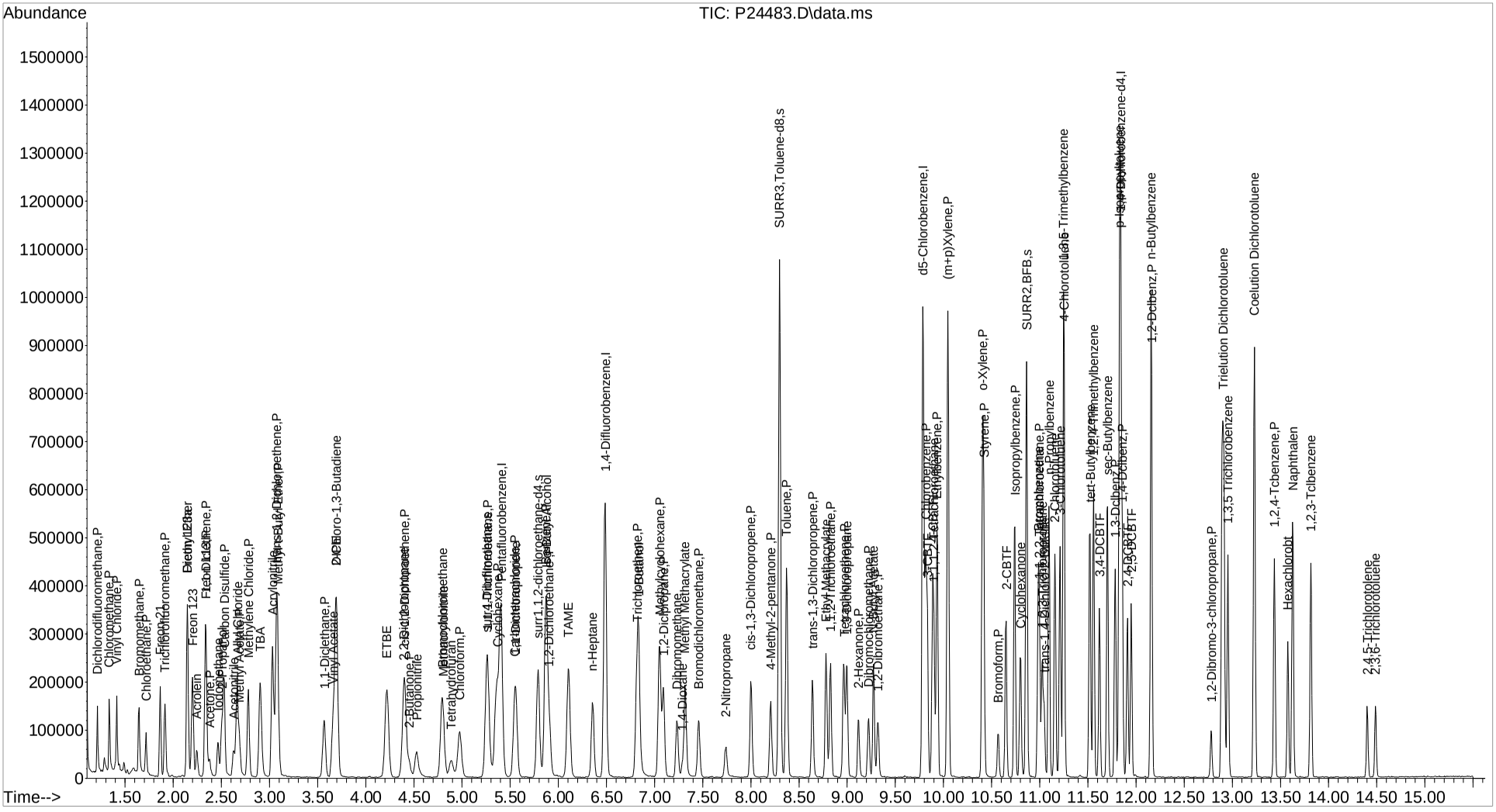
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24483.D
Acq On : 26 Feb 2019 12:47 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 26 10:43:33 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

02/26/19 1st 02/26/19 2nd

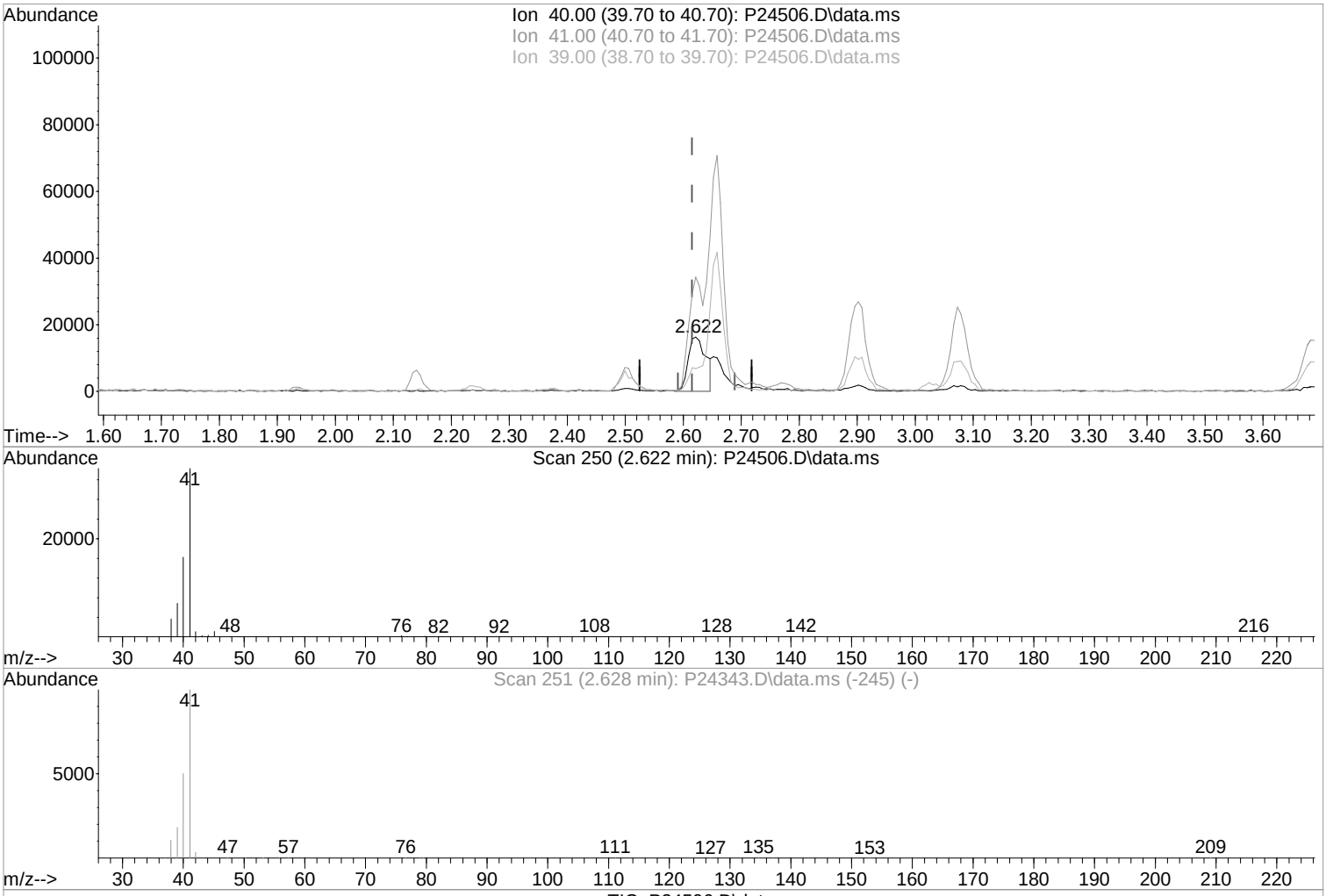


1st 02/26/19
2nd 02/27/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24506.D
Acq On : 26 Feb 2019 1:05 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 26 13:27:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24506.D\data.ms

(19) Acetonitrile

2.622min (+0.006) 169.46 ppb m

response 34686

Ion	Exp%	Act%
40.00	100	100
41.00	199.30	210.94
39.00	38.60	42.14
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

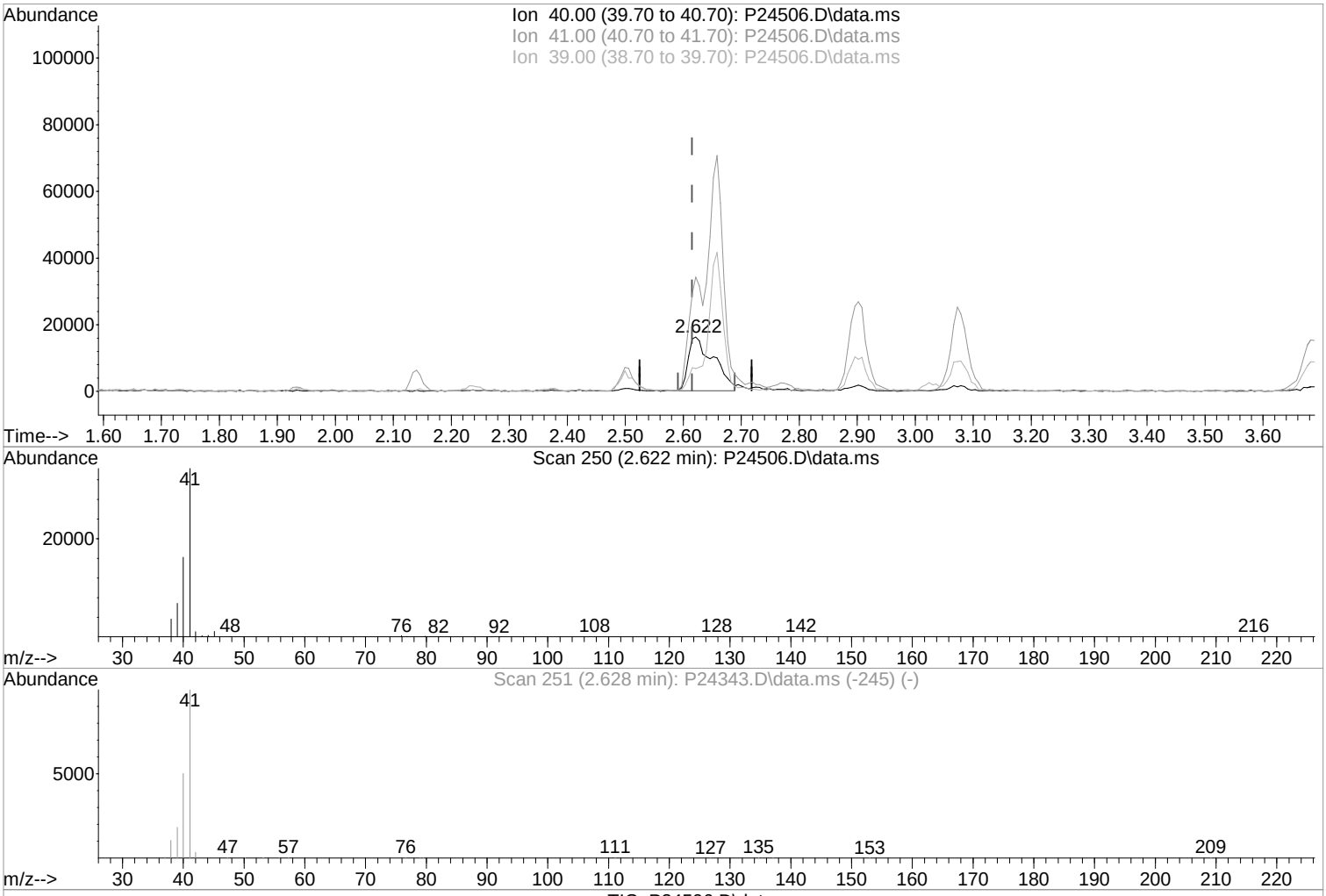
02/26/19

1st 02/26/19
2nd 02/27/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24506.D
Acq On : 26 Feb 2019 1:05 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 26 13:27:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24506.D\data.ms

(19) Acetonitrile

2.622min (+0.006) 237.20 ppb

response 48553

Ion	Exp%	Act%
40.00	100	100
41.00	199.30	210.94
39.00	38.60	42.14
0.00	0.00	0.00

Manual Integration:

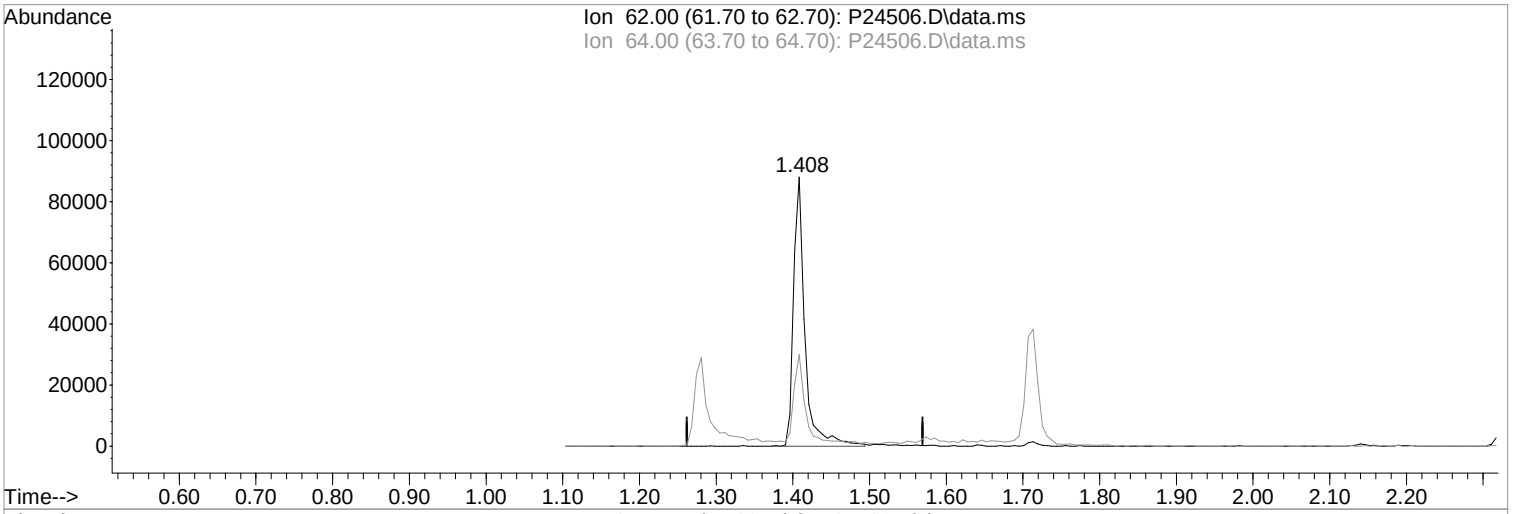
Before

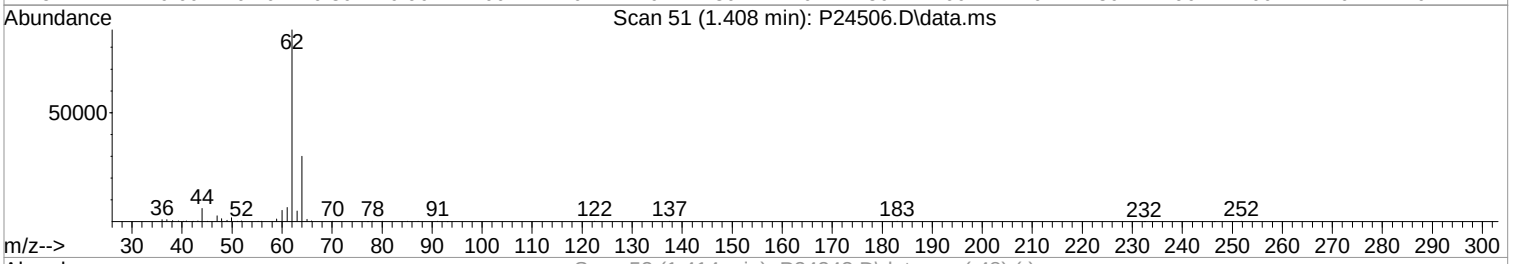
02/26/19

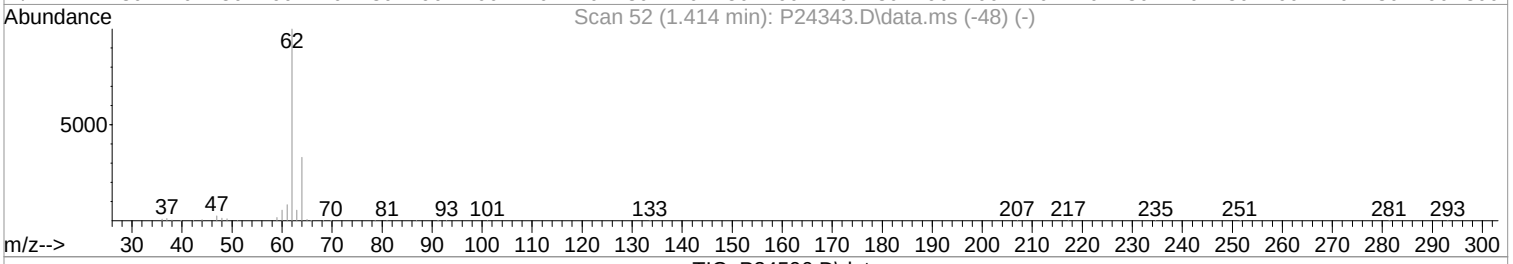
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24506.D
Acq On : 26 Feb 2019 1:05 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 26 13:27:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24506.D\data.ms

(4) Vinyl Chloride (P)

1.408min (+0.000) 18.69 ppb m

response 91086

Ion	Exp%	Act%
62.00	100	100
64.00	33.20	34.08
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

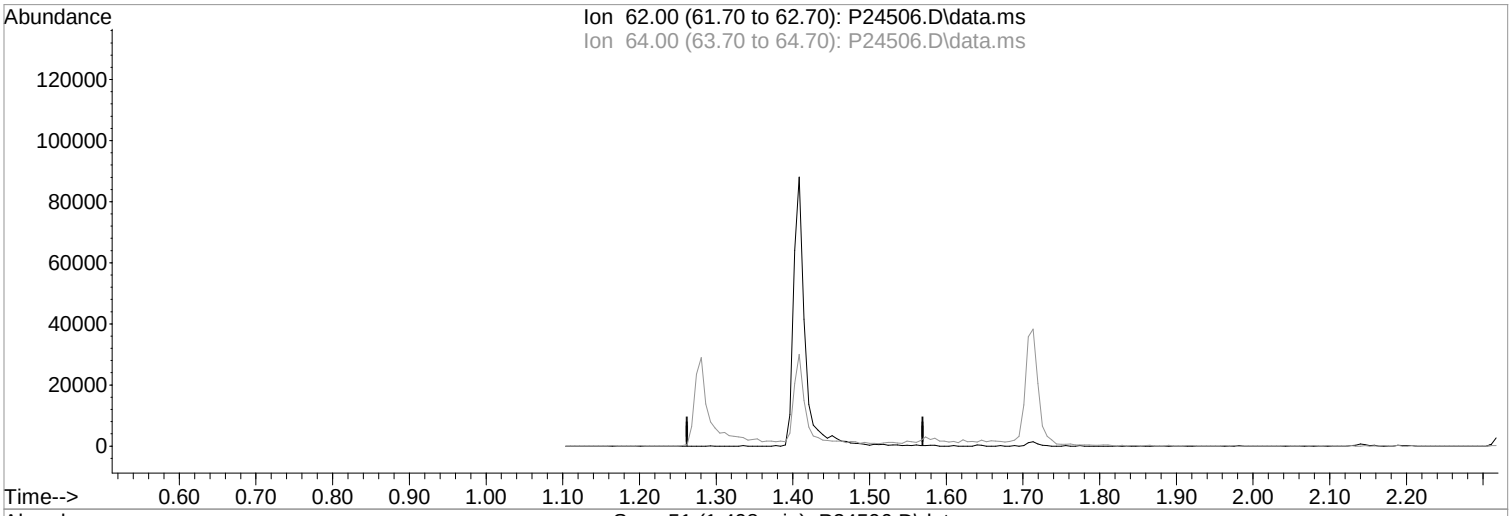
Peak not found.

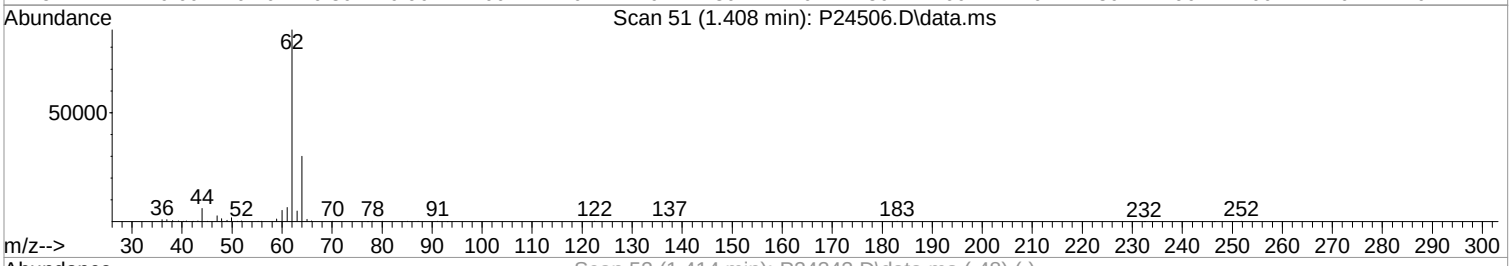
02/26/19

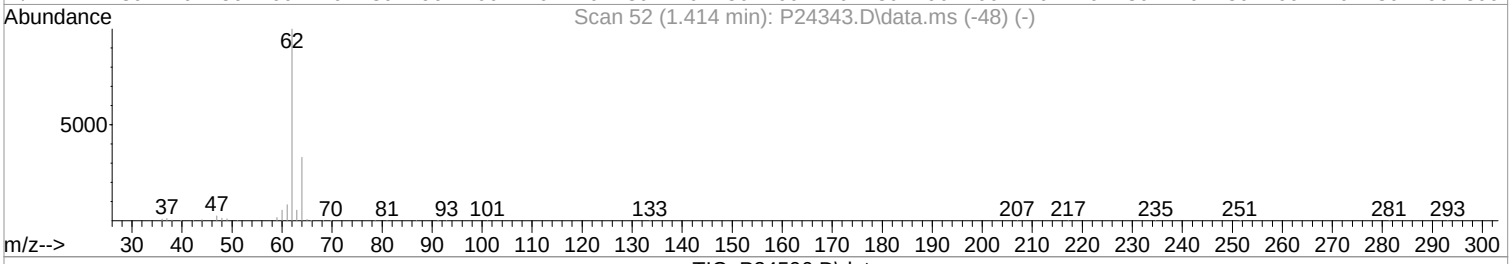
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24506.D
Acq On : 26 Feb 2019 1:05 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 26 13:27:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24506.D\data.ms

(4) Vinyl Chloride (P)

1.408min (-1.408) 0.00 ppb

response 0

Ion	Exp%	Act%
62.00	100	0.00
64.00	33.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/26/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24506.D
Acq On : 26 Feb 2019 1:05 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 26 13:27:49 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.402	168	335357	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.481	114	521704	50.00	ppb		0.00
71) d5-Chlorobenzene	9.791	117	458178	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	233574	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.249	113	144536	50.42	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.84%				
48) surr1,1,2-dichloroetha...	5.786	65	183009	50.33	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 100.66%				
65) SURR3,Toluene-d8	8.297	98	675515	49.67	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.34%				
70) SURR2,BFB	10.864	95	241521	49.59	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.18%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	69236	17.05	ppb		96
3) Chloromethane	1.329	50	89481	16.48	ppb		99
4) Vinyl Chloride	1.408	62	91086m	18.69	ppb		
5) Bromomethane	1.634	94	60426	20.18	ppb		95
6) Chloroethane	1.713	64	45558	15.44	ppb		100
7) Freon 21	1.860	67	118362	19.23	ppb		99
8) Trichlorofluoromethane	1.908	101	83839	17.73	ppb		99
9) Diethyl Ether	2.140	59	72105	19.94	ppb		98
10) Freon 123a	2.140	67	79226	20.21	ppb		96
11) Freon 123	2.195	83	97377	21.63	ppb		99
12) Acrolein	2.238	56	40785	44.13	ppb		100
13) 1,1-Diclethene	2.329	96	57507	18.38	ppb		89
14) Freon 113	2.335	101	48763	17.50	ppb		88
15) Acetone	2.372	43	35229	21.94	ppb		98
16) 2-Propanol	2.500	45	167786	402.45	ppb		97
17) Iodomethane	2.457	142	62719	15.59	ppb		100
18) Carbon Disulfide	2.524	76	198040	21.13	ppb		98
19) Acetonitrile	2.622	40	34686m	169.46	ppb		
20) Allyl Chloride	2.658	76	37754	20.17	ppb		93
21) Methyl Acetate	2.683	43	86994	19.95	ppb		98
22) Methylene Chloride	2.774	84	73035	18.76	ppb		97
23) TBA	2.902	59	281595	425.00	ppb		99
24) Acrylonitrile	3.024	53	224986	106.17	ppb		96
25) Methyl-t-Butyl Ether	3.079	73	248145	20.48	ppb		98
26) trans-1,2-Dichloroethene	3.067	96	63344	18.20	ppb		93
28) 1,1-Diclethane	3.560	63	121014	18.75	ppb		98
29) Vinyl Acetate	3.652	86	18355	23.04	ppb	#	89
30) DIPE	3.688	45	255645	21.89	ppb		98
31) 2-Chloro-1,3-Butadiene	3.682	53	102331	20.27	ppb		96
32) ETBE	4.213	59	231074	19.79	ppb		93
33) 2,2-Dichloropropane	4.383	77	86057	16.93	ppb		94
34) cis-1,2-Dichloroethene	4.402	96	74913	19.20	ppb		94
35) 2-Butanone	4.444	43	56918	21.09	ppb		92
36) Propionitrile	4.518	54	91053	103.71	ppb		98
37) Bromochloromethane	4.786	130	47338	19.54	ppb		97
38) Methacrylonitrile	4.798	67	44407	19.44	ppb		97
39) Tetrahydrofuran	4.877	42	36944	21.13	ppb		98
40) Chloroform	4.969	83	109741	18.94	ppb		95
41) 1,1,1-Trichloroethane	5.267	97	78789	17.47	ppb		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24506.D
Acq On : 26 Feb 2019 1:05 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 26 13:27:49 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.109	73	242966	21.94	ppb		99
44) Cyclohexane	5.359	41	63391	20.72	ppb		97
46) Carbontetrachloride	5.542	117	58346	16.79	ppb		92
47) 1,1-Dichloropropene	5.554	75	84152	18.88	ppb		94
49) Benzene	5.865	78	281684	18.90	ppb		98
50) 1,2-Dichloroethane	5.901	62	92280	19.34	ppb		94
51) Iso-Butyl Alcohol	5.871	43	120035	384.24	ppb		99
52) n-Heptane	6.353	43	77256	17.01	ppb		96
53) 1-Butanol	6.834	56	207315	1005.48	ppb		99
54) Trichloroethene	6.810	130	64178	17.59	ppb		90
55) Methylcyclohexane	7.048	55	95183	20.67	ppb		95
56) 1,2-Diclpropane	7.090	63	75727	19.12	ppb		99
57) Dibromomethane	7.230	93	42992	19.18	ppb		98
58) 1,4-Dioxane	7.291	88	34309	485.63	ppb		85
59) Methyl Methacrylate	7.316	69	73961	20.90	ppb		96
60) Bromodichloromethane	7.456	83	76618	18.38	ppb		97
61) 2-Nitropropane	7.736	41	33702	40.74	ppb		92
63) cis-1,3-Dichloropropene	7.999	75	116478	19.77	ppb		99
64) 4-Methyl-2-pentanone	8.206	43	109202	21.73	ppb		98
66) Toluene	8.370	91	291885	18.91	ppb		98
67) trans-1,3-Dichloropropene	8.639	75	103162	20.00	ppb		96
68) Ethyl Methacrylate	8.779	69	125645	21.15	ppb		97
69) 1,1,2-Trichloroethane	8.828	97	67159	18.58	ppb		98
72) Tetrachloroethene	8.968	164	47775	17.41	ppb		94
73) 2-Hexanone	9.114	43	76866	20.82	ppb		92
74) 1,3-Dichloropropane	8.992	76	127322	19.29	ppb		98
75) Dibromochloromethane	9.224	129	56192	18.26	ppb		93
76) N-Butyl Acetate	9.273	43	145319	21.55	ppb		99
77) 1,2-Dibromoethane	9.322	107	69292	19.25	ppb		99
78) Chlorobenzene	9.815	112	180389	18.39	ppb		95
79) 3-CBTF	9.834	180	107361	22.45	ppb		98
80) 4-CBTF	9.888	180	96935	22.42	ppb		97
81) 1,1,1,2-Tetrachloroethane	9.901	131	55549	17.50	ppb		96
82) Ethylbenzene	9.937	106	92449	17.48	ppb		98
83) (m+p)Xylene	10.047	106	225394	34.86	ppb		95
84) o-Xylene	10.407	106	114440	17.99	ppb		91
85) Styrene	10.419	104	197130	19.12	ppb		97
87) Bromoform	10.565	173	37389	18.96	ppb		100
88) 2-CBTF	10.650	180	103427	21.57	ppb		99
89) Isopropylbenzene	10.736	105	276222	17.98	ppb		100
90) Cyclohexanone	10.797	55	100911	103.63	ppb		100
91) trans-1,4-Dichloro-2-B...	11.047	53	28142	22.13	ppb		88
92) 1,1,2,2-Tetrachloroethane	10.998	83	106533	20.79	ppb		99
93) Bromobenzene	10.986	156	77005	18.63	ppb		96
94) 1,2,3-Trichloropropane	11.028	110	31700	19.50	ppb	#	82
95) n-Propylbenzene	11.096	91	323613	18.39	ppb		98
96) 2-Chlorotoluene	11.156	91	200789	18.10	ppb		100
97) 3-Chlorotoluene	11.211	91	238920	22.02	ppb		100
98) 4-Chlorotoluene	11.248	91	224447	18.15	ppb		98
99) 1,3,5-Trimethylbenzene	11.248	105	229584	18.01	ppb		99
100) tert-Butylbenzene	11.522	119	196274	17.70	ppb		96
101) 1,2,4-Trimethylbenzene	11.559	105	239497	18.16	ppb		97
102) 3,4-DCBTF	11.620	214	86006	21.76	ppb		99
103) sec-Butylbenzene	11.705	105	288896	17.97	ppb		99
104) p-Isopropyltoluene	11.827	119	240283	17.99	ppb		99
105) 1,3-Dclbenz	11.784	146	139316	18.51	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24506.D
Acq On : 26 Feb 2019 1:05 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 26 13:27:49 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

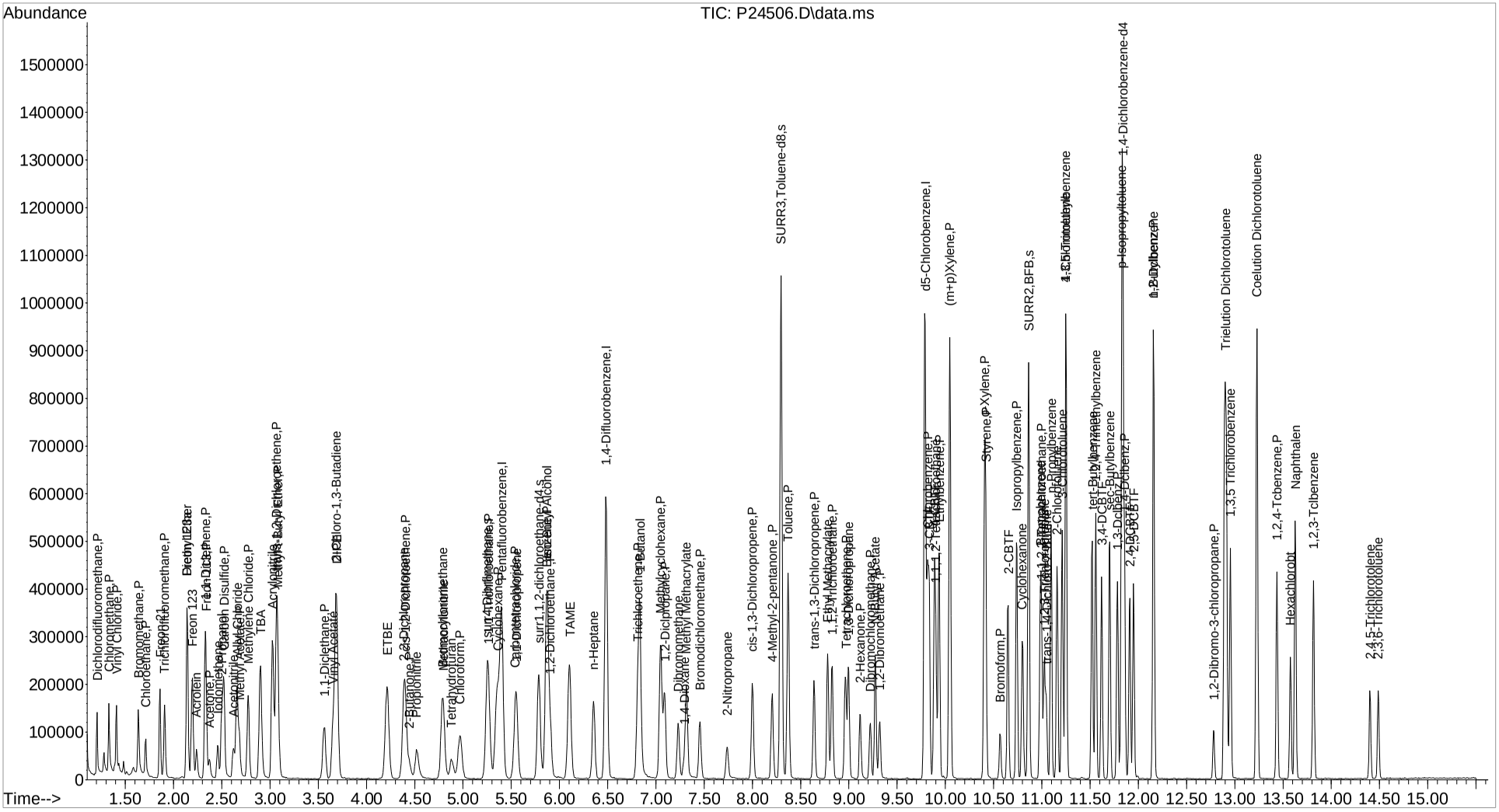
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.858	146	140879	17.74	ppb	97
107) 2,4-DCBTF	11.912	214	79792	22.04	ppb	98
108) 2,5-DCBTF	11.949	214	88977	21.80	ppb	99
109) n-Butylbenzene	12.156	91	222557	19.01	ppb	98
110) 1,2-Dclbenz	12.156	146	141321	18.36	ppb	97
111) 1,2-Dibromo-3-chloropr...	12.784	157	22636	17.93	ppb	93
112) Trielution Dichlorotol...	12.900	125	433583	68.46	ppb	99
113) 1,3,5 Trichlorobenzene	12.955	180	118245	21.33	ppb	99
114) Coelution Dichlorotoluene	13.229	125	312510	44.73	ppb	96
115) 1,2,4-Tcbenzene	13.437	180	105689	19.57	ppb	96
116) Hexachlorobt	13.577	225	39709	17.44	ppb	94
117) Naphthalen	13.626	128	335159	17.76	ppb	98
118) 1,2,3-Tclbenzene	13.815	180	101708	18.26	ppb	98
119) 2,4,5-Trichlorotolene	14.400	159	37621	16.60	ppb	98
120) 2,3,6-Trichlorotoluene	14.485	159	36145	14.01	ppb	98

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24506.D
Acq On : 26 Feb 2019 1:05 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 26 13:27:49 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



1st 02/25/19
2nd 02/26/19

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24455.D
Acq On : 25 Feb 2019 2:15 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 14:30:38 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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	Pentafluorobenzene	1.0000	1.0000		0.0	111	0.00
2	P	Dichlorodifluoromethane	0.6056	0.6449		-6.5	107	0.00
3	P	Chloromethane	0.8095	0.7155		11.6	98	0.00
4	P	Vinyl Chloride	0.7267	0.7379		-1.5	102	0.00
5	P	Bromomethane	0.5125	0.4270	2.1	~~-16.7~~	113	0.00
6	P	Chloroethane	0.4398	0.4133		6.0	106	0.00
7		Freon 21	0.9175	0.8896		3.0	99	0.00
8	P	Trichlorofluoromethane	0.7050	0.6698		5.0	104	0.00
9		Diethyl Ether	0.5392	0.4909		9.0	97	0.00
10		Freon 123a	0.5846	0.5837		0.2	105	0.00
11		Freon 123	0.6713	0.6625		1.3	106	0.00
12		Acrolein	0.1378	0.1053		23.6#	84	0.00
13	P	1,1-Diclethene	0.4664	0.4683		-0.4	107	0.00
14	P	Freon 113	0.4154	0.4306		-3.7	117	0.00
15	P	Acetone	0.2394	0.2085		12.9	89	0.00
16		2-Propanol	0.0622	0.0491		21.1#	87	0.00
17		Iodomethane	0.5130	0.5444	18.3	~~-6.1~~	87	0.00
18	P	Carbon Disulfide	1.3974	1.3654		2.3	107	0.00
19		Acetonitrile	0.0305	0.0422		-38.4#	124	0.00
20		Allyl Chloride	0.2790	0.2812		-0.8	105	0.00
21	P	Methyl Acetate	0.6500	0.5529		14.9	86	0.00
22	P	Methylene Chloride	0.5806	0.5246		9.6	100	0.00
23		TBA	0.0988	0.0761		23.0#	83	-0.01
24		Acrylonitrile	0.3159	0.2801		11.3	92	0.00
25	P	Methyl-t-Butyl Ether	1.8063	1.6406		9.2	97	0.00
26	P	trans-1,2-Dichloroethene	0.5189	0.4910		5.4	103	0.00
27		Halothane	0.0000	0.0000		0.0	0#	-4.08#
28	P	1,1-Diclethane	0.9623	0.9421		2.1	101	0.00
29		Vinyl Acetate	0.1188	0.1116		6.1	105	0.00
30		DIPE	1.7415	1.6707		4.1	99	0.00
31		2-Chloro-1,3-Butadiene	0.7526	0.7071		6.0	103	0.00
32		ETBE	1.7407	1.6358		6.0	99	0.00
33		2,2-Dichloropropane	0.7578	0.7367		2.8	109	-0.01
34	P	cis-1,2-Dichloroethene	0.5817	0.5650		2.9	105	0.00
35	P	2-Butanone	0.4024	0.3109		22.7#	86	0.00
36		Propionitrile	0.1309	0.1075		17.9	83	-0.01
37		Bromochloromethane	0.3611	0.3417		5.4	102	0.00
38		Methacrylonitrile	0.3406	0.2825		17.1	88	0.00
39		Tetrahydrofuran	0.2607	0.2109		19.1	85	0.00
40	P	Chloroform	0.8638	0.8233		4.7	103	0.00
41	P	1,1,1-Trichloroethane	0.6725	0.6592		2.0	103	0.00
42		TAME	1.6509	1.5574		5.7	97	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000		0.0	109	0.00
44	P	Cyclohexane	0.2931	0.2972		-1.4	106	-0.01
45	s	surr4,Dibrflmethane	0.2748	0.2873		-4.5	110	0.00
46	P	Carbontetrachloride	0.3330	0.3334		-0.1	105	0.00
47		1,1-Dichloropropene	0.4272	0.4274		-0.0	106	0.00
48	s	surr1,1,2-dichloroethane-d4	0.3485	0.3491		-0.2	106	0.00
49	P	Benzene	1.4282	1.3754		3.7	101	0.00
50	P	1,2-Dichloroethane	0.4573	0.4391		4.0	98	0.00
51		Iso-Butyl Alcohol	0.0299	0.0227		24.1#	79	-0.01

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24455.D
Acq On : 25 Feb 2019 2:15 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 14:30:38 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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)
52		n-Heptane	0.4352	0.4640	-6.6	121	0.00
53		1-Butanol	0.0198	0.0157	NT 20.7#	79	-0.01
54	P	Trichloroethene	0.3497	0.3433	1.8	102	0.00
55	P	Methylcyclohexane	0.4413	0.4482	-1.6	105	0.00
56	P	1,2-Diclpropane	0.3796	0.3603	5.1	102	0.00
57		Dibromomethane	0.2148	0.2046	4.7	99	0.00
58		1,4-Dioxane	0.0068	0.0064	5.9	102	-0.05
59		Methyl Methacrylate	0.3391	0.3082	9.1	95	0.00
60	P	Bromodichloromethane	0.3994	0.3774	5.5	100	0.00
61		2-Nitropropane	0.0793	0.0695	12.4	95	0.00
62		2-Chloroethylvinyl Ether	0.1132	0.0967	17.4 ~~14.6~~	83	0.00
63	P	cis-1,3-Dichloropropene	0.5646	0.5665	-0.3	101	0.00
64	P	4-Methyl-2-pentanone	0.4816	0.3956	17.9	87	0.00
65	s	SURR3,Toluene-d8	1.3033	1.2898	1.0	107	0.00
66	P	Toluene	1.4790	1.4734	0.4	104	0.00
67	P	trans-1,3-Dichloropropene	0.4944	0.4992	-1.0	100	0.00
68		Ethyl Methacrylate	0.5694	0.5372	5.7	94	0.00
69	P	1,1,2-Trichloroethane	0.3465	0.3203	7.6	98	0.00
70	s	SURR2,BFB	0.4668	0.4604	1.4	107	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	108	0.00
72	P	Tetrachloroethene	0.2994	0.3012	-0.6	111	0.00
73	P	2-Hexanone	0.4030	0.3175	21.2#	86	0.00
74		1,3-Dichloropropane	0.7201	0.6444	10.5	96	0.00
75	P	Dibromochloromethane	0.3359	0.3196	4.9	101	0.00
76		N-Butyl Acetate	0.7358	0.6500	11.7	89	0.00
77	P	1,2-Dibromoethane	0.3927	0.3660	6.8	98	0.00
78	P	Chlorobenzene	1.0703	1.0260	4.1	105	0.00
79		3-CBTF	0.5218	0.5464	-4.7	109	0.00
80		4-CBTF	0.4717	0.4971	-5.4	109	0.00
81		1,1,1,2-Tetrachloroethane	0.3464	0.3355	3.1	104	0.00
82	P	Ethylbenzene	0.5771	0.5700	1.2	108	0.00
83	P	(m+p)Xylene	0.7057	0.7020	0.5	109	0.00
84	P	o-Xylene	0.6943	0.6890	0.8	107	0.00
85	P	Styrene	1.1252	1.1623	-3.3	106	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	112	0.00
87	P	Bromoform	0.4222	0.3849	8.8	97	0.00
88		2-CBTF	1.0263	0.9899	3.5	107	0.00
89	P	Isopropylbenzene	3.2888	3.2862	0.1	112	0.00
90		Cyclohexanone	0.2085	0.1627	NT 22.0#	81	-0.01
91		trans-1,4-Dichloro-2-Butene	0.2722	0.2256	17.1	92	0.00
92	P	1,1,2,2-Tetrachloroethane	1.0971	0.9793	10.7	97	0.00
93		Bromobenzene	0.8848	0.8271	6.5	107	0.00
94		1,2,3-Trichloropropane	0.3480	0.3157	9.3	96	0.00
95		n-Propylbenzene	3.7678	3.8180	-1.3	113	0.00
96		2-Chlorotoluene	2.3743	2.2716	4.3	108	0.00
97		3-Chlorotoluene	2.3228	2.2118	4.8	102	0.00
98		4-Chlorotoluene	2.6479	2.5632	3.2	109	0.00
99		1,3,5-Trimethylbenzene	2.7293	2.6560	2.7	110	0.00
100		tert-Butylbenzene	2.3741	2.3702	0.2	110	0.00
101		1,2,4-Trimethylbenzene	2.8232	2.7141	3.9	109	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24455.D
Acq On : 25 Feb 2019 2:15 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 14:30:38 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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)
102		3,4-DCBTF	0.8462	0.8420	0.5	111	0.00
103		sec-Butylbenzene	3.4421	3.4540	-0.3	111	0.00
104		p-Isopropyltoluene	2.8587	2.9000	-1.4	112	0.00
105	P	1,3-Dclbenz	1.6112	1.5729	2.4	109	0.00
106	P	1,4-Dclbenz	1.7003	1.5854	6.8	107	0.00
107		2,4-DCBTF	0.7750	0.7765	-0.2	111	0.00
108		2,5-DCBTF	0.8739	0.8618	1.4	112	0.00
109		n-Butylbenzene	2.5058	2.7492	-9.7	116	0.00
110	P	1,2-Dclbenz	1.6482	1.5745	4.5	107	0.00
111	P	1,2-Dibromo-3-chloropropane	0.2703	0.2246	16.9	87	0.00
112		Trielution Dichlorotoluene	1.3558	1.4061	-3.7	112	0.00
113		1,3,5 Trichlorobenzene	1.1864	1.2166	-2.5	119	0.00
114		Coelution Dichlorotoluene	1.4956	1.5556	-4.0	113	0.00
115	P	1,2,4-Tcbenzene	1.1561	1.2603	-9.0	120	0.00
116		Hexachlorobt	0.4875	0.5331	-9.4	141	0.00
117		Naphthalen	3.3933	3.5046	14.2 ~~-3.3~~	98	0.00
118		1,2,3-Tclbenzene	1.1924	1.2759	-7.0	117	0.00
119		2,4,5-Trichlorotolene	0.5335	0.5213	10.6 ~~-2.3~~	95	0.00
120		2,3,6-Trichlorotoluene	0.6055	0.6020	10.5 ~~0.6~~	97	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24455.D
Acq On : 25 Feb 2019 2:15 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 14:30:38 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.395	168	368023	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.480	114	566431	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	506181	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	270739	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	162736	52.28	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 104.56%				
48) surr1,1,2-dichloroetha...	5.785	65	197722	50.08	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 100.16%				
65) SURR3,Toluene-d8	8.297	98	730604	49.48	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.96%				
70) SURR2,BFB	10.864	95	260764	49.31	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.62%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	237348	53.25	ppb		97
3) Chloromethane	1.329	50	263337	44.20	ppb		98
4) Vinyl Chloride	1.408	62	271550	50.77	ppb		98
5) Bromomethane	1.634	94	157153	48.94	ppb		98
6) Chloroethane	1.707	64	152105	46.98	ppb		96
7) Freon 21	1.859	67	327388	48.48	ppb		97
8) Trichlorofluoromethane	1.908	101	246512	47.51	ppb		97
9) Diethyl Ether	2.140	59	180661	45.52	ppb		97
10) Freon 123a	2.140	67	214814	49.92	ppb		99
11) Freon 123	2.195	83	243819	49.34	ppb		100
12) Acrolein	2.237	56	193800	191.10	ppb		96
13) 1,1-Diclethene	2.329	96	172359	50.21	ppb		97
14) Freon 113	2.335	101	158463	51.83	ppb		99
15) Acetone	2.365	43	76739	43.54	ppb		90
16) 2-Propanol	2.500	45	361742	790.65	ppb		100
17) Iodomethane	2.457	142	200344	40.86	ppb		97
18) Carbon Disulfide	2.518	76	502492	48.85	ppb		99
19) Acetonitrile	2.615	40	77571	345.33	ppb		93
20) Allyl Chloride	2.652	76	103470	50.38	ppb		97
21) Methyl Acetate	2.676	43	203496	42.53	ppb		98
22) Methylene Chloride	2.774	84	193070	45.18	ppb		98
23) TBA	2.896	59	559977	770.13	ppb		96
24) Acrylonitrile	3.024	53	515414	221.64	ppb		97
25) Methyl-t-Butyl Ether	3.073	73	603762	45.41	ppb		98
26) trans-1,2-Dichloroethene	3.067	96	180696	47.31	ppb		91
28) 1,1-Diclethane	3.560	63	346726	48.95	ppb		98
29) Vinyl Acetate	3.652	86	41075	46.98	ppb	#	92
30) DIPE	3.682	45	614844	47.97	ppb		100
31) 2-Chloro-1,3-Butadiene	3.682	53	260226	46.98	ppb		97
32) ETBE	4.213	59	602021	46.99	ppb		94
33) 2,2-Dichloropropane	4.383	77	271125	48.61	ppb		97
34) cis-1,2-Dichloroethene	4.396	96	207946	48.57	ppb		99
35) 2-Butanone	4.438	43	114433	38.63	ppb		90
36) Propionitrile	4.517	54	197874	205.37	ppb		98
37) Bromochloromethane	4.786	130	125748	47.31	ppb		97
38) Methacrylonitrile	4.786	67	103974	41.47	ppb		93
39) Tetrahydrofuran	4.877	42	77598	40.44	ppb		98
40) Chloroform	4.969	83	303011	47.66	ppb		96
41) 1,1,1-Trichloroethane	5.261	97	242606	49.01	ppb		97

1st 02/25/19
2nd 02/26/19

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24455.D
Acq On : 25 Feb 2019 2:15 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 14:30:38 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.096	73	573146	47.17	ppb	100
44) Cyclohexane	5.347	41	168344	50.69	ppb	100
46) Carbontetrachloride	5.542	117	188843	50.06	ppb	99
47) 1,1-Dichloropropene	5.548	75	242087	50.03	ppb	97
49) Benzene	5.865	78	779048	48.15	ppb	99
50) 1,2-Dichloroethane	5.901	62	248697	48.01	ppb	97
51) Iso-Butyl Alcohol	5.871	43	256739	756.95	ppb	99
52) n-Heptane	6.352	43	262819	53.31	ppb	99
53) 1-Butanol	6.828	56	443315	1980.31	ppb	97
54) Trichloroethene	6.810	130	194435	49.08	ppb	99
55) Methylcyclohexane	7.047	55	253900	50.79	ppb	98
56) 1,2-Diclpropane	7.090	63	204071	47.46	ppb	100
57) Dibromomethane	7.230	93	115887	47.61	ppb	96
58) 1,4-Dioxane	7.291	88	72273	942.21	ppb	86
59) Methyl Methacrylate	7.316	69	174551	45.44	ppb	98
60) Bromodichloromethane	7.456	83	213780	47.25	ppb	96
61) 2-Nitropropane	7.736	41	78721	87.65	ppb	99
62) 2-Chloroethylvinyl Ether	7.864	63	54791	41.30	ppb	90
63) cis-1,3-Dichloropropene	7.998	75	320858	50.17	ppb	98
64) 4-Methyl-2-pentanone	8.200	43	224094	41.08	ppb	99
66) Toluene	8.370	91	834554	49.81	ppb	100
67) trans-1,3-Dichloropropene	8.639	75	282763	50.49	ppb	97
68) Ethyl Methacrylate	8.779	69	304313	47.17	ppb	96
69) 1,1,2-Trichloroethane	8.828	97	181448	46.22	ppb	96
72) Tetrachloroethene	8.962	164	152451	50.30	ppb	92
73) 2-Hexanone	9.114	43	160722	39.40	ppb	97
74) 1,3-Dichloropropane	8.992	76	326198	44.74	ppb	99
75) Dibromochloromethane	9.218	129	161780	47.58	ppb	96
76) N-Butyl Acetate	9.273	43	328996	44.17	ppb	96
77) 1,2-Dibromoethane	9.321	107	185284	46.60	ppb	98
78) Chlorobenzene	9.815	112	519329	47.93	ppb	98
79) 3-CBTF	9.833	180	276574	52.35	ppb	98
80) 4-CBTF	9.888	180	251603	52.68	ppb	99
81) 1,1,1,2-Tetrachloroethane	9.901	131	169803	48.42	ppb	99
82) Ethylbenzene	9.931	106	288518	49.38	ppb	98
83) (m+p)Xylene	10.047	106	710683	99.48	ppb	97
84) o-Xylene	10.407	106	348775	49.62	ppb	97
85) Styrene	10.419	104	588341	51.65	ppb	100
87) Bromoform	10.565	173	104220	45.59	ppb	98
88) 2-CBTF	10.650	180	267994	48.22	ppb	97
89) Isopropylbenzene	10.742	105	889710	49.96	ppb	98
90) Cyclohexanone	10.797	55	881060	780.56	ppb	99
91) trans-1,4-Dichloro-2-B...	11.047	53	61073	41.44	ppb	97
92) 1,1,2,2-Tetrachloroethane	10.998	83	265135	44.63	ppb	99
93) Bromobenzene	10.986	156	223925	46.74	ppb	98
94) 1,2,3-Trichloropropane	11.028	110	85467	45.35	ppb	99
95) n-Propylbenzene	11.095	91	1033686	50.67	ppb	98
96) 2-Chlorotoluene	11.156	91	615019	47.84	ppb	100
97) 3-Chlorotoluene	11.211	91	598815	47.61	ppb	98
98) 4-Chlorotoluene	11.248	91	693945	48.40	ppb	100
99) 1,3,5-Trimethylbenzene	11.248	105	719085	48.66	ppb	99
100) tert-Butylbenzene	11.522	119	641696	49.92	ppb	98
101) 1,2,4-Trimethylbenzene	11.559	105	734823	48.07	ppb	98
102) 3,4-DCBTF	11.620	214	227962	49.75	ppb	95
103) sec-Butylbenzene	11.705	105	935141	50.17	ppb	100
104) p-Isopropyltoluene	11.827	119	785156	50.72	ppb	98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24455.D
Acq On : 25 Feb 2019 2:15 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 14:30:38 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.784	146	425856	48.81	ppb	99
106) 1,4-Dclbenz	11.857	146	429218	46.62	ppb	100
107) 2,4-DCBTF	11.912	214	210227	50.10	ppb	98
108) 2,5-DCBTF	11.955	214	233333	49.31	ppb	97
109) n-Butylbenzene	12.156	91	744311	54.86	ppb	99
110) 1,2-Dclbenz	12.162	146	426277	47.77	ppb	95
111) 1,2-Dibromo-3-chloropr...	12.784	157	60813	41.55	ppb	90
112) Trielution Dichlorotol...	12.900	125	1142095	155.57	ppb	99
113) 1,3,5 Trichlorobenzene	12.955	180	329394	51.27	ppb	99
114) Coelution Dichlorotoluene	13.229	125	842316	104.01	ppb	98
115) 1,2,4-Tcbenzene	13.436	180	341220	54.51	ppb	96
116) Hexachlorobt	13.577	225	144344	54.68	ppb	98
117) Naphthalen	13.625	128	948829	42.91	ppb	99
118) 1,2,3-Tclbenzene	13.814	180	345441	53.50	ppb	97
119) 2,4,5-Trichlorotolene	14.400	159	141134	44.69	ppb	97
120) 2,3,6-Trichlorotoluene	14.485	159	162976	44.73	ppb	96

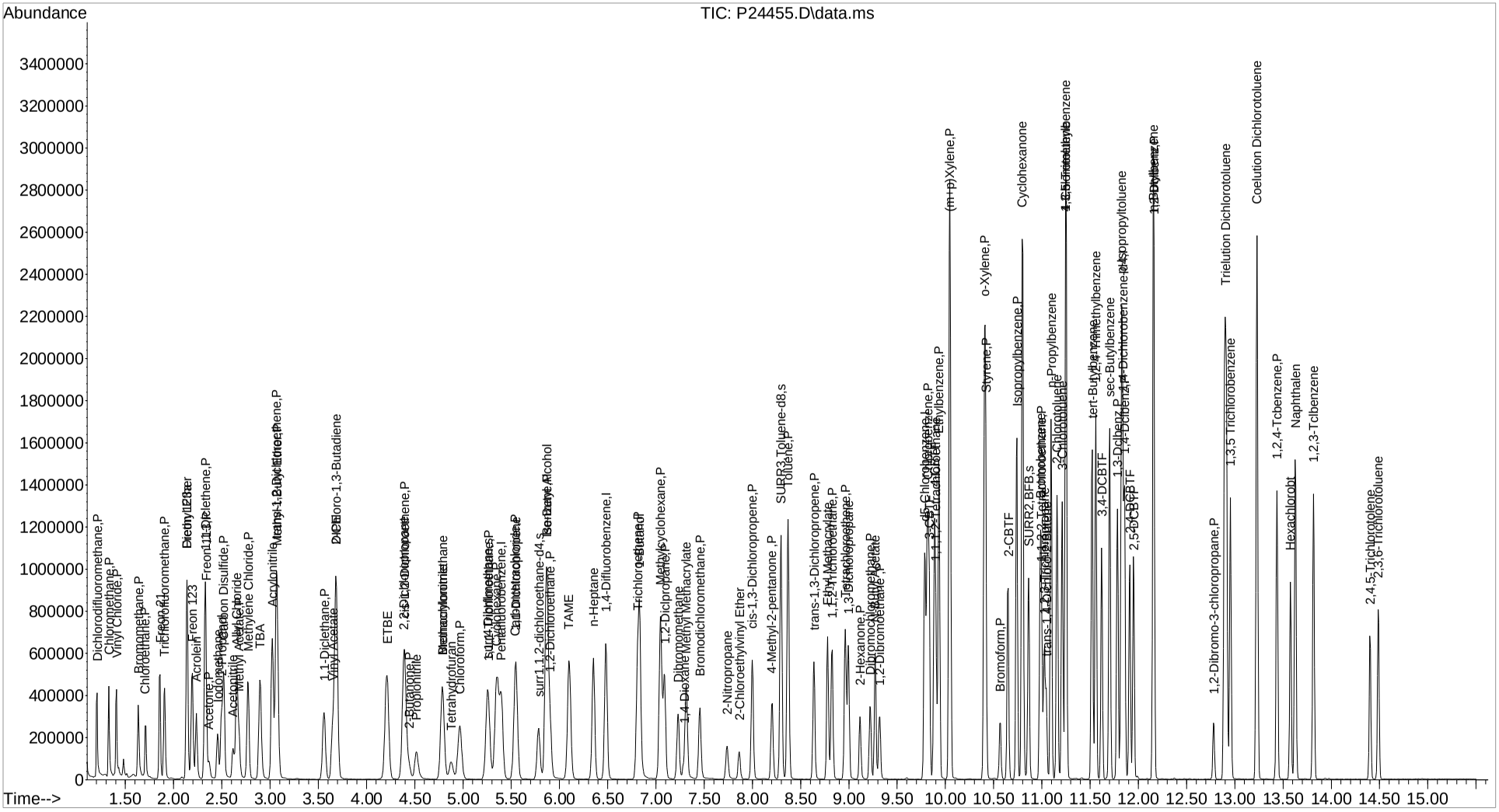
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24455.D
Acq On : 25 Feb 2019 2:15 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 14:30:38 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

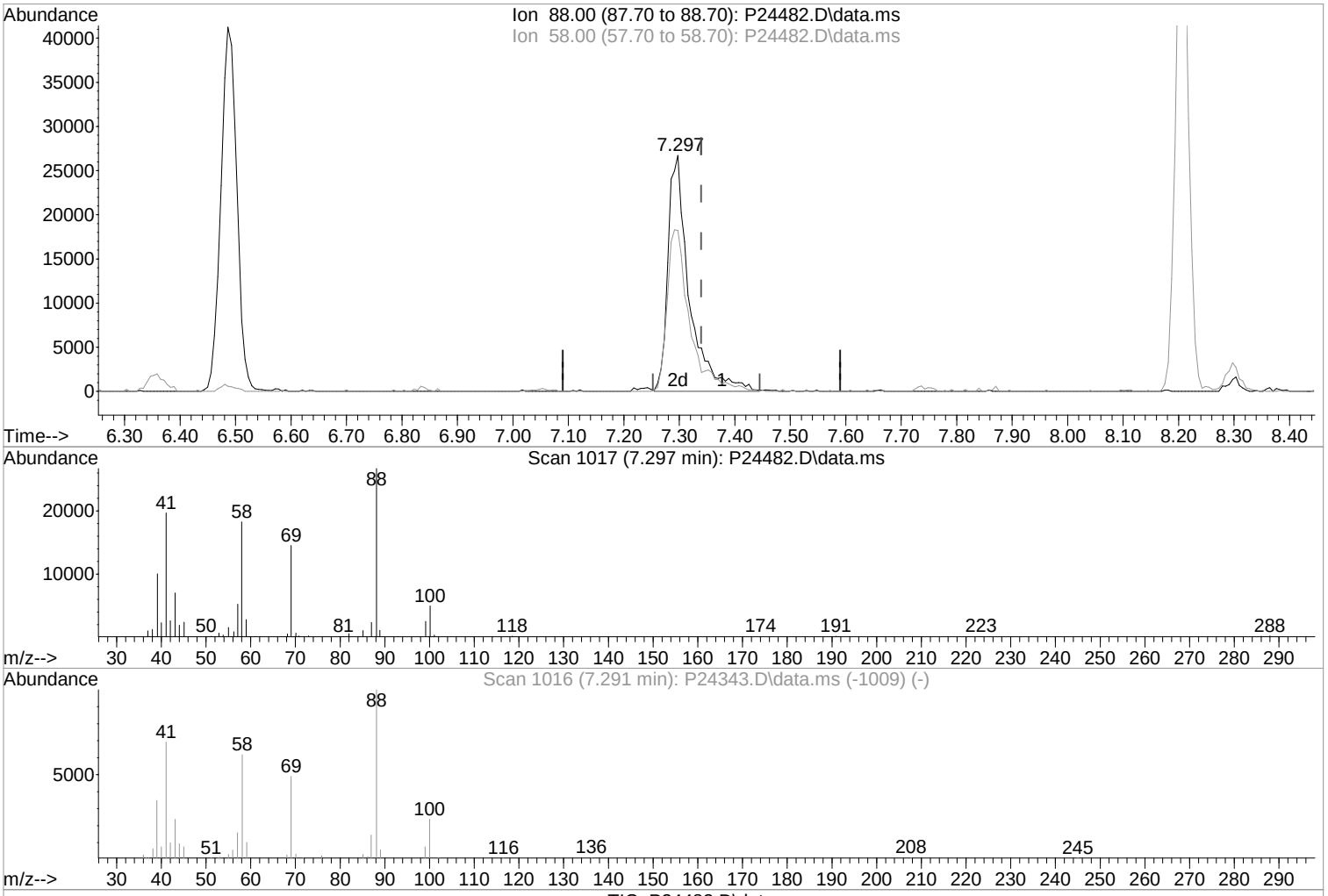
1st 02/25/19
2nd 02/26/19



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24482.D
Acq On : 26 Feb 2019 12:26 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 26 09:04:38 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24482.D\data.ms

(58) 1,4-Dioxane

7.297min (-0.043) 1015.01 ppb m

response 71667

Ion	Exp%	Act%
88.00	100	100
58.00	63.20	68.27
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Peak not found.

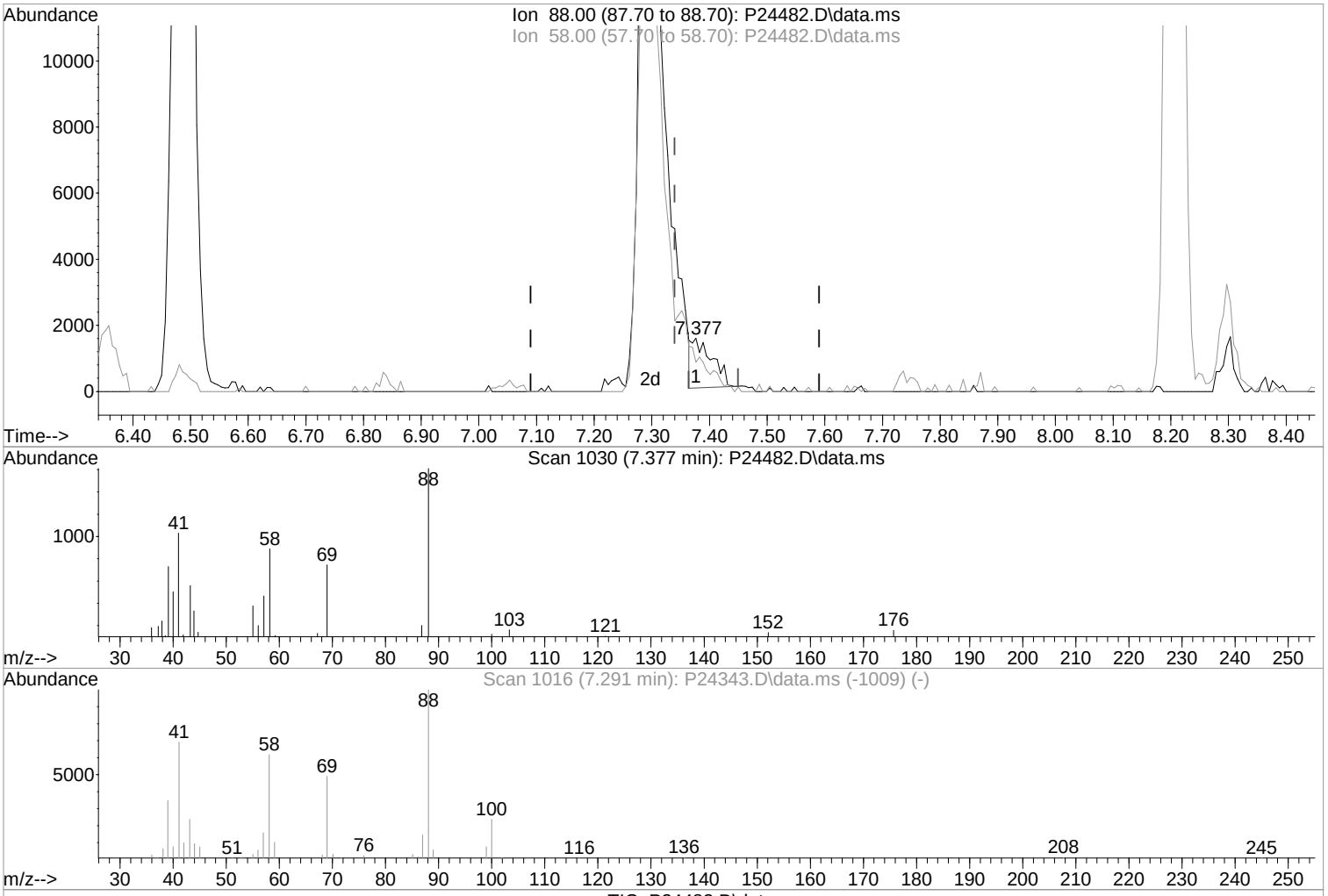
02/26/19

1st 02/26/19
2nd 02/26/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24482.D
Acq On : 26 Feb 2019 12:26 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 26 09:04:38 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24482.D\data.ms

(58) 1,4-Dioxane

7.377min (+0.037) 51.61 ppb

response 3644

Ion	Exp%	Act%
88.00	100	100
58.00	63.20	55.25
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/26/19

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24482.D
Acq On : 26 Feb 2019 12:26 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 26 10:42:18 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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	Pentafluorobenzene	1.0000	1.0000	0.0	99	0.01
2	P	Dichlorodifluoromethane	0.6056	0.6432	-6.2	95	0.01
3	P	Chloromethane	0.8095	0.7833	3.2	96	0.01
4	P	Vinyl Chloride	0.7267	0.7865	-8.2	97	0.01
5	P	Bromomethane	0.5125	0.4328	0.8 ~~15.6~~	102	0.00
6	P	Chloroethane	0.4398	0.4283	2.6	98	0.01
7		Freon 21	0.9175	1.0166	-10.8	101	0.01
8	P	Trichlorofluoromethane	0.7050	0.6809	3.4	94	0.01
9		Diethyl Ether	0.5392	0.5252	2.6	93	0.01
10		Freon 123a	0.5846	0.6437	-10.1	103	0.01
11		Freon 123	0.6713	0.7338	-9.3	104	0.01
12		Acrolein	0.1378	0.1092	20.8#	77	0.01
13	P	1,1-Diclethene	0.4664	0.4749	-1.8	97	0.01
14	P	Freon 113	0.4154	0.4084	1.7	99	0.01
15	P	Acetone	0.2394	0.2473	-3.3	94	0.00
16		2-Propanol	0.0622	0.0546	12.2	86	0.00
17		Iodomethane	0.5130	0.6588	2.3 ~~-28.4#~~	94	0.01
18	P	Carbon Disulfide	1.3974	1.4488	-3.7	101	0.00
19		Acetonitrile	0.0305	0.0466	-52.8#	122	0.01
20		Allyl Chloride	0.2790	0.2791	-0.0	93	0.01
21	P	Methyl Acetate	0.6500	0.6019	7.4	84	0.00
22	P	Methylene Chloride	0.5806	0.5521	4.9	94	0.01
23		TBA	0.0988	0.0873	11.6	85	0.00
24		Acrylonitrile	0.3159	0.3032	4.0	89	0.00
25	P	Methyl-t-Butyl Ether	1.8063	1.8036	0.1	95	0.00
26	P	trans-1,2-Dichloroethene	0.5189	0.5217	-0.5	97	0.01
27		Halothane	0.0000	0.0000	0.0	0#	-4.08#
28	P	1,1-Diclethane	0.9623	0.9897	-2.8	95	0.01
29		Vinyl Acetate	0.1188	0.0885	25.5#	74	0.01
30		DIPE	1.7415	1.7736	-1.8	94	0.00
31		2-Chloro-1,3-Butadiene	0.7526	0.7789	-3.5	101	0.00
32		ETBE	1.7407	1.7665	-1.5	96	0.01
33		2,2-Dichloropropane	0.7578	0.6386	15.7	85	0.00
34	P	cis-1,2-Dichloroethene	0.5817	0.5948	-2.3	98	0.00
35	P	2-Butanone	0.4024	0.3448	14.3	85	0.01
36		Propionitrile	0.1309	0.1234	5.7	85	0.00
37		Bromochloromethane	0.3611	0.3726	-3.2	99	0.00
38		Methacrylonitrile	0.3406	0.3207	5.8	89	0.00
39		Tetrahydrofuran	0.2607	0.2371	9.1	86	0.01
40	P	Chloroform	0.8638	0.8794	-1.8	98	0.01
41	P	1,1,1-Trichloroethane	0.6725	0.7020	-4.4	98	0.00
42		TAME	1.6509	1.6753	-1.5	93	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	100	0.00
44	P	Cyclohexane	0.2931	0.3057	-4.3	101	0.00
45	s	surr4,Dibrflmethane	0.2748	0.2805	-2.1	99	0.00
46	P	Carbontetrachloride	0.3330	0.3256	2.2	94	0.01
47		1,1-Dichloropropene	0.4272	0.4291	-0.4	98	0.00
48	s	surr1,1,2-dichloroethane-d4	0.3485	0.3580	-2.7	100	0.00
49	P	Benzene	1.4282	1.4137	1.0	96	0.01
50	P	1,2-Dichloroethane	0.4573	0.4630	-1.2	96	0.01
51		Iso-Butyl Alcohol	0.0299	0.0245	18.1	79	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24482.D
Acq On : 26 Feb 2019 12:26 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 26 10:42:18 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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)
52		n-Heptane	0.4352	0.3775	13.3	90	0.00
53		1-Butanol	0.0198	0.0171	13.6	79	0.00
54	P	Trichloroethene	0.3497	0.3627	-3.7	99	0.00
55	P	Methylcyclohexane	0.4413	0.4671	-5.8	101	0.00
56	P	1,2-Diclpropane	0.3796	0.3767	0.8	98	0.00
57		Dibromomethane	0.2148	0.2147	0.0	95	0.00
58		1,4-Dioxane	0.0068	0.0069	-1.5	101	-0.04
59		Methyl Methacrylate	0.3391	0.3257	4.0	92	0.00
60	P	Bromodichloromethane	0.3994	0.3930	1.6	96	0.00
61		2-Nitropropane	0.0793	0.0711	10.3	90	0.00
62		2-Chloroethylvinyl Ether	0.1132	0.0961	2.3 ~~15.1~~	76	0.00
63	P	cis-1,3-Dichloropropene	0.5646	0.5541	1.9	91	0.00
64	P	4-Methyl-2-pentanone	0.4816	0.4260	11.5	87	0.00
65	s	SURR3,Toluene-d8	1.3033	1.2885	1.1	99	0.00
66	P	Toluene	1.4790	1.4970	-1.2	97	0.00
67	P	trans-1,3-Dichloropropene	0.4944	0.4989	-0.9	92	0.00
68		Ethyl Methacrylate	0.5694	0.5733	-0.7	92	0.00
69	P	1,1,2-Trichloroethane	0.3465	0.3345	3.5	95	0.00
70	s	SURR2,BFB	0.4668	0.4604	1.4	99	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	98	0.00
72	P	Tetrachloroethene	0.2994	0.3017	-0.8	101	0.00
73	P	2-Hexanone	0.4030	0.3535	12.3	86	0.00
74		1,3-Dichloropropane	0.7201	0.7029	2.4	94	0.00
75	P	Dibromochloromethane	0.3359	0.3332	0.8	95	0.00
76		N-Butyl Acetate	0.7358	0.7125	3.2	88	0.00
77	P	1,2-Dibromoethane	0.3927	0.3811	3.0	92	0.00
78	P	Chlorobenzene	1.0703	1.0586	1.1	98	0.00
79		3-CBTF	0.5218	0.5211	0.1	94	0.00
80		4-CBTF	0.4717	0.4709	0.2	93	0.00
81		1,1,1,2-Tetrachloroethane	0.3464	0.3364	2.9	94	0.00
82	P	Ethylbenzene	0.5771	0.5787	-0.3	99	0.00
83	P	(m+p)Xylene	0.7057	0.7133	-1.1	100	0.00
84	P	o-Xylene	0.6943	0.7137	-2.8	100	0.00
85	P	Styrene	1.1252	1.1914	-5.9	98	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	99	0.00
87	P	Bromoform	0.4222	0.4184	0.9	94	0.00
88		2-CBTF	1.0263	0.9971	2.8	95	0.00
89	P	Isopropylbenzene	3.2888	3.3404	-1.6	101	0.00
90		Cyclohexanone	0.2085	0.1076	48.4#	48#	-0.01
91		trans-1,4-Dichloro-2-Butene	0.2722	0.2291	15.8	83	0.00
92	P	1,1,2,2-Tetrachloroethane	1.0971	1.0132	7.6	89	0.00
93		Bromobenzene	0.8848	0.8653	2.2	99	0.00
94		1,2,3-Trichloropropane	0.3480	0.3278	5.8	88	0.00
95		n-Propylbenzene	3.7678	3.8883	-3.2	102	0.00
96		2-Chlorotoluene	2.3743	2.3750	-0.0	100	0.00
97		3-Chlorotoluene	2.3228	2.3113	0.5	94	0.00
98		4-Chlorotoluene	2.6479	2.6515	-0.1	100	0.00
99		1,3,5-Trimethylbenzene	2.7293	2.7530	-0.9	101	0.00
100		tert-Butylbenzene	2.3741	2.4438	-2.9	101	0.00
101		1,2,4-Trimethylbenzene	2.8232	2.7884	1.2	99	0.00

1st 02/26/19
2nd 02/26/19

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24482.D
Acq On : 26 Feb 2019 12:26 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 26 10:42:18 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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)
102		3,4-DCBTF	0.8462	0.7798	7.8	91	0.00
103		sec-Butylbenzene	3.4421	3.5351	-2.7	101	0.00
104		p-Isopropyltoluene	2.8587	2.9473	-3.1	101	0.00
105	P	1,3-Dclbenz	1.6112	1.6051	0.4	99	0.00
106	P	1,4-Dclbenz	1.7003	1.6321	4.0	98	0.00
107		2,4-DCBTF	0.7750	0.7493	3.3	95	0.00
108		2,5-DCBTF	0.8739	0.8378	4.1	96	0.00
109		n-Butylbenzene	2.5058	2.6971	-7.6	101	0.00
110	P	1,2-Dclbenz	1.6482	1.6572	-0.5	100	0.00
111	P	1,2-Dibromo-3-chloropropane	0.2703	0.2478	8.3	85	0.00
112		Trielution Dichlorotoluene	1.3558	1.3917	-2.6	98	0.00
113		1,3,5 Trichlorobenzene	1.1864	1.2189	-2.7	105	0.00
114		Coelution Dichlorotoluene	1.4956	1.5980	-6.8	103	0.00
115	P	1,2,4-Tcbenzene	1.1561	1.3018	-12.6	110	0.00
116		Hexachlorobt	0.4875	0.5100	-4.6	120	0.00
117		Naphthalen	3.3933	3.8195	~~-12.6~~ 6.4	95	0.00
118		1,2,3-Tclbenzene	1.1924	1.3174	-10.5	107	0.00
119		2,4,5-Trichlorotolene	0.5335	0.4856	~~-9.0~~ 15.7	78	0.00
120		2,3,6-Trichlorotoluene	0.6055	0.5397	~~-10.9~~ 18.4	77	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24482.D
Acq On : 26 Feb 2019 12:26 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 26 10:42:18 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.407	168	328351	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.486	114	521395	50.00	ppb		0.00
71) d5-Chlorobenzene	9.791	117	456539	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	239671	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.261	113	146264	51.05	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.10%				
48) surr1,1,2-dichloroetha...	5.791	65	186673	51.36	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.72%				
65) SURR3,Toluene-d8	8.297	98	671823	49.43	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.86%				
70) SURR2,BFB	10.864	95	240059	49.32	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.64%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.219	85	211209	53.11	ppb		99
3) Chloromethane	1.341	50	257211	48.39	ppb		100
4) Vinyl Chloride	1.420	62	258254	54.12	ppb		97
5) Bromomethane	1.646	94	142117	49.61	ppb		96
6) Chloroethane	1.725	64	140623	48.69	ppb		96
7) Freon 21	1.872	67	333805	55.40	ppb		98
8) Trichlorofluoromethane	1.920	101	223578	48.29	ppb		99
9) Diethyl Ether	2.152	59	172436	48.70	ppb		98
10) Freon 123a	2.152	67	211348	55.05	ppb		96
11) Freon 123	2.207	83	240957	54.65	ppb		99
12) Acrolein	2.249	56	179223	198.07	ppb		99
13) 1,1-Diclethene	2.341	96	155931	50.91	ppb		96
14) Freon 113	2.347	101	134089	49.16	ppb		93
15) Acetone	2.378	43	81186	51.63	ppb		93
16) 2-Propanol	2.506	45	358602	878.49	ppb		99
17) Iodomethane	2.469	142	216313	48.84	ppb		94
18) Carbon Disulfide	2.530	76	475720	51.84	ppb		98
19) Acetonitrile	2.627	40	76470	381.56	ppb		93
20) Allyl Chloride	2.670	76	91656	50.02	ppb		93
21) Methyl Acetate	2.688	43	197628	46.30	ppb		97
22) Methylene Chloride	2.786	84	181272	47.54	ppb		99
23) TBA	2.908	59	573356	883.80	ppb		97
24) Acrylonitrile	3.036	53	497847	239.95	ppb		97
25) Methyl-t-Butyl Ether	3.085	73	592217	49.93	ppb		99
26) trans-1,2-Dichloroethene	3.079	96	171316	50.28	ppb		96
28) 1,1-Diclethane	3.572	63	324964	51.42	ppb		98
29) Vinyl Acetate	3.664	86	29047	37.23	ppb	#	94
30) DIPE	3.694	45	582371	50.92	ppb		99
31) 2-Chloro-1,3-Butadiene	3.694	53	255747	51.75	ppb		94
32) ETBE	4.225	59	580028	50.74	ppb		94
33) 2,2-Dichloropropane	4.402	77	209684	42.13	ppb		99
34) cis-1,2-Dichloroethene	4.408	96	195295	51.12	ppb		93
35) 2-Butanone	4.450	43	113212	42.84	ppb		98
36) Propionitrile	4.530	54	202565	235.64	ppb		100
37) Bromochloromethane	4.798	130	122333	51.58	ppb		93
38) Methacrylonitrile	4.798	67	105301	47.08	ppb		92
39) Tetrahydrofuran	4.889	42	77841	45.47	ppb		88
40) Chloroform	4.981	83	288746	50.90	ppb		91
41) 1,1,1-Trichloroethane	5.273	97	230487	52.19	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24482.D
Acq On : 26 Feb 2019 12:26 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 26 10:42:18 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.109	73	550091	50.74	ppb	96
44) Cyclohexane	5.365	41	159414	52.15	ppb	97
46) Carbontetrachloride	5.554	117	169770	48.89	ppb	96
47) 1,1-Dichloropropene	5.560	75	223713	50.22	ppb	95
49) Benzene	5.877	78	737119	49.49	ppb	99
50) 1,2-Dichloroethane	5.913	62	241431	50.63	ppb	99
51) Iso-Butyl Alcohol	5.877	43	254991	816.73	ppb	99
52) n-Heptane	6.358	43	196839	43.38	ppb	98
53) 1-Butanol	6.834	56	446893	2168.73	ppb	96
54) Trichloroethene	6.816	130	189096	51.85	ppb	97
55) Methylcyclohexane	7.053	55	243561	52.93	ppb	96
56) 1,2-Diclpropane	7.090	63	196386	49.62	ppb	95
57) Dibromomethane	7.230	93	111960	49.97	ppb	98
58) 1,4-Dioxane	7.297	88	71667m	1015.01	ppb	
59) Methyl Methacrylate	7.316	69	169836	48.03	ppb	99
60) Bromodichloromethane	7.462	83	204887	49.19	ppb	97
61) 2-Nitropropane	7.742	41	74092	89.62	ppb	88
62) 2-Chloroethylvinyl Ether	7.864	63	50086	41.04	ppb	96
63) cis-1,3-Dichloropropene	8.004	75	288925	49.08	ppb	99
64) 4-Methyl-2-pentanone	8.206	43	222128	44.23	ppb	98
66) Toluene	8.370	91	780550	50.61	ppb	98
67) trans-1,3-Dichloropropene	8.639	75	260122	50.46	ppb	98
68) Ethyl Methacrylate	8.779	69	298921	50.34	ppb	98
69) 1,1,2-Trichloroethane	8.827	97	174420	48.27	ppb	98
72) Tetrachloroethene	8.968	164	137743	50.39	ppb	92
73) 2-Hexanone	9.114	43	161388	43.86	ppb	99
74) 1,3-Dichloropropane	8.998	76	320898	48.80	ppb	99
75) Dibromochloromethane	9.224	129	152114	49.60	ppb	97
76) N-Butyl Acetate	9.273	43	325282	48.42	ppb	98
77) 1,2-Dibromoethane	9.321	107	173972	48.52	ppb	100
78) Chlorobenzene	9.815	112	483274	49.45	ppb	97
79) 3-CBTF	9.833	180	237923	49.93	ppb	96
80) 4-CBTF	9.888	180	215004	49.92	ppb	97
81) 1,1,1,2-Tetrachloroethane	9.900	131	153568	48.55	ppb	96
82) Ethylbenzene	9.937	106	264193	50.14	ppb	97
83) (m+p)Xylene	10.047	106	651298	101.08	ppb	95
84) o-Xylene	10.406	106	325828	51.40	ppb	99
85) Styrene	10.419	104	543938	52.95	ppb	99
87) Bromoform	10.565	173	100288	49.55	ppb	97
88) 2-CBTF	10.650	180	238981	48.58	ppb	96
89) Isopropylbenzene	10.742	105	800590	50.78	ppb	100
90) Cyclohexanone	10.797	55	515639	516.04	ppb	99
91) trans-1,4-Dichloro-2-B...	11.047	53	54903	42.08	ppb	96
92) 1,1,2,2-Tetrachloroethane	10.998	83	242831	46.18	ppb	99
93) Bromobenzene	10.986	156	207392	48.90	ppb	96
94) 1,2,3-Trichloropropane	11.028	110	78566	47.09	ppb	92
95) n-Propylbenzene	11.095	91	931901	51.60	ppb	99
96) 2-Chlorotoluene	11.156	91	569218	50.01	ppb	99
97) 3-Chlorotoluene	11.211	91	553952	49.75	ppb	99
98) 4-Chlorotoluene	11.254	91	635496	50.07	ppb	96
99) 1,3,5-Trimethylbenzene	11.248	105	659812	50.43	ppb	99
100) tert-Butylbenzene	11.522	119	585718	51.47	ppb	98
101) 1,2,4-Trimethylbenzene	11.559	105	668307	49.38	ppb	100
102) 3,4-DCBTF	11.620	214	186885	46.07	ppb	96
103) sec-Butylbenzene	11.705	105	847255	51.35	ppb	98
104) p-Isopropyltoluene	11.827	119	706373	51.55	ppb	99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24482.D
Acq On : 26 Feb 2019 12:26 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 26 10:42:18 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.784	146	384707	49.81	ppb	99
106) 1,4-Dclbenz	11.857	146	391168	48.00	ppb	98
107) 2,4-DCBTF	11.912	214	179586	48.34	ppb	98
108) 2,5-DCBTF	11.949	214	200799	47.94	ppb	98
109) n-Butylbenzene	12.156	91	646415	53.82	ppb	98
110) 1,2-Dclbenz	12.156	146	397187	50.28	ppb	97
111) 1,2-Dibromo-3-chloropr...	12.784	157	59379	45.83	ppb	86
112) Trielution Dichlorotol...	12.900	125	1000622	153.97	ppb	98
113) 1,3,5 Trichlorobenzene	12.955	180	292140	51.37	ppb	99
114) Coelution Dichlorotoluene	13.229	125	765981	106.84	ppb	97
115) 1,2,4-Tcbenzene	13.436	180	311993	56.30	ppb	99
116) Hexachlorobt	13.577	225	122239	52.31	ppb	97
117) Naphthalen	13.625	128	915415	46.80	ppb	99
118) 1,2,3-Tclbenzene	13.814	180	315745	55.24	ppb	97
119) 2,4,5-Trichlorotolene	14.400	159	116387	42.17	ppb	95
120) 2,3,6-Trichlorotoluene	14.485	159	129340	40.82	ppb	94

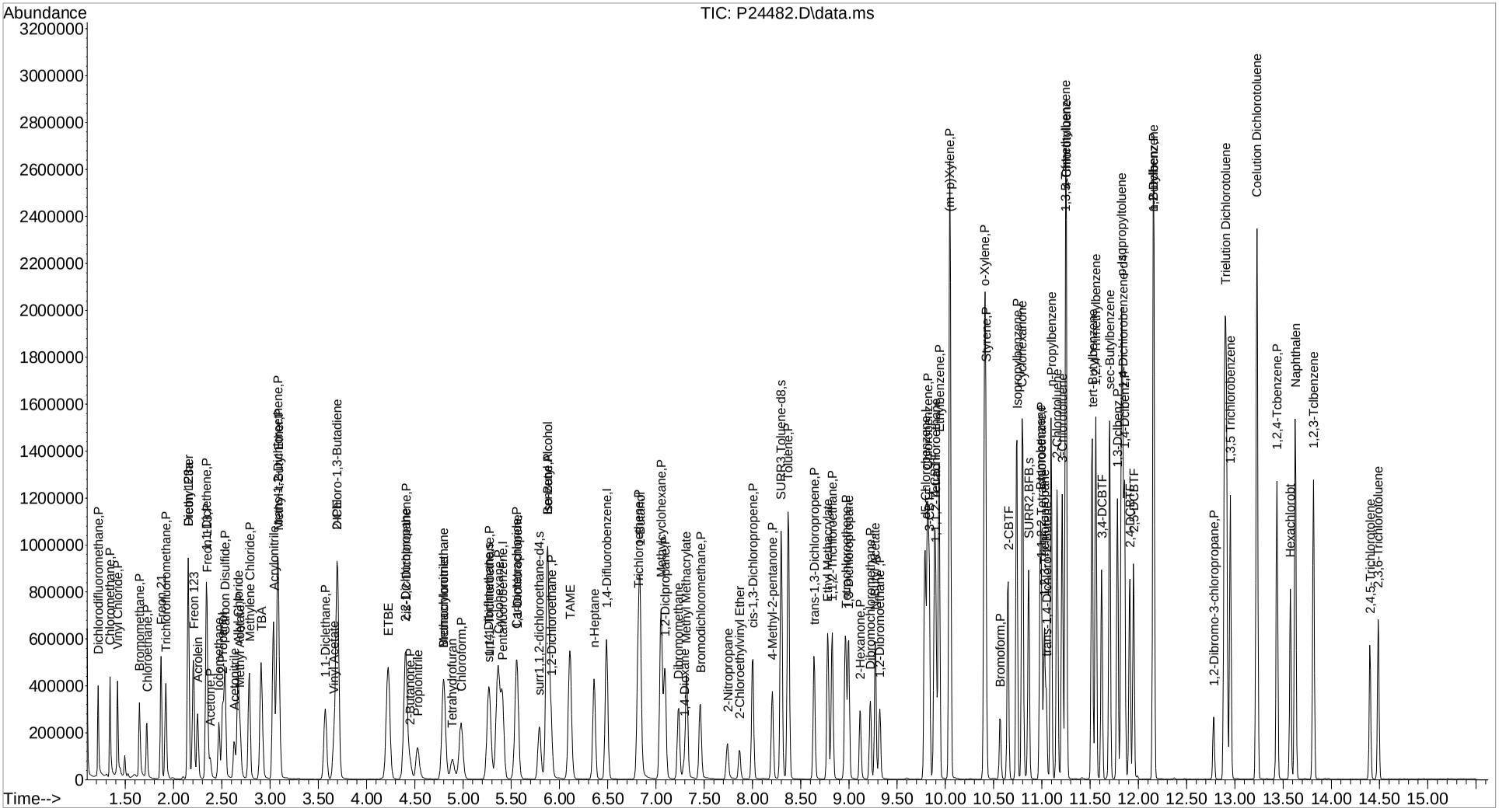
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24482.D
Acq On : 26 Feb 2019 12:26 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 26 10:42:18 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

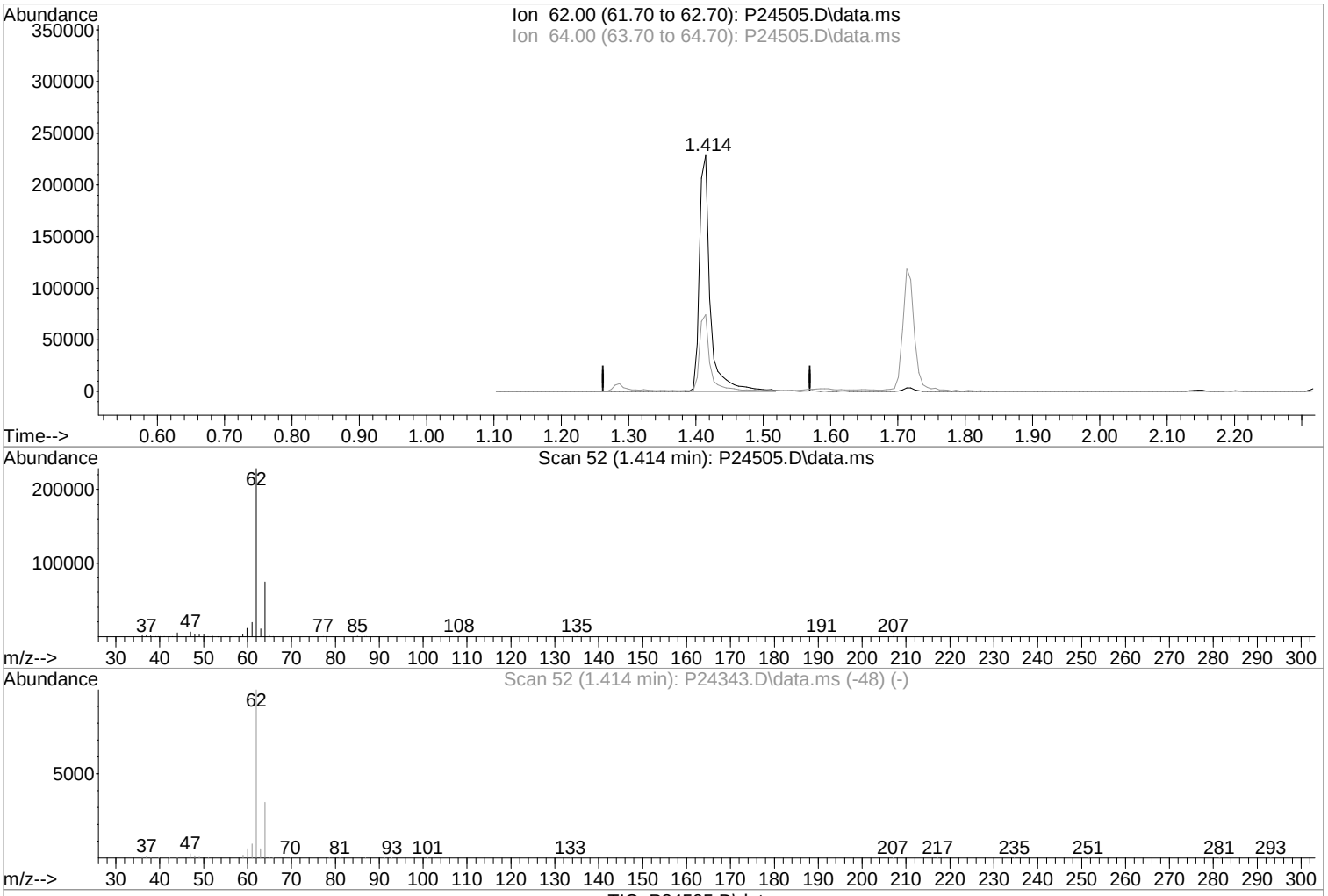
1st 02/26/19
2nd 02/26/19



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24505.D
Acq On : 26 Feb 2019 12:43 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 13:25:16 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24505.D\data.ms

(4) Vinyl Chloride (P)

1.414min (+0.006) 54.25 ppb m

response 253846

Ion	Exp%	Act%
62.00	100	100
64.00	33.20	32.50
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

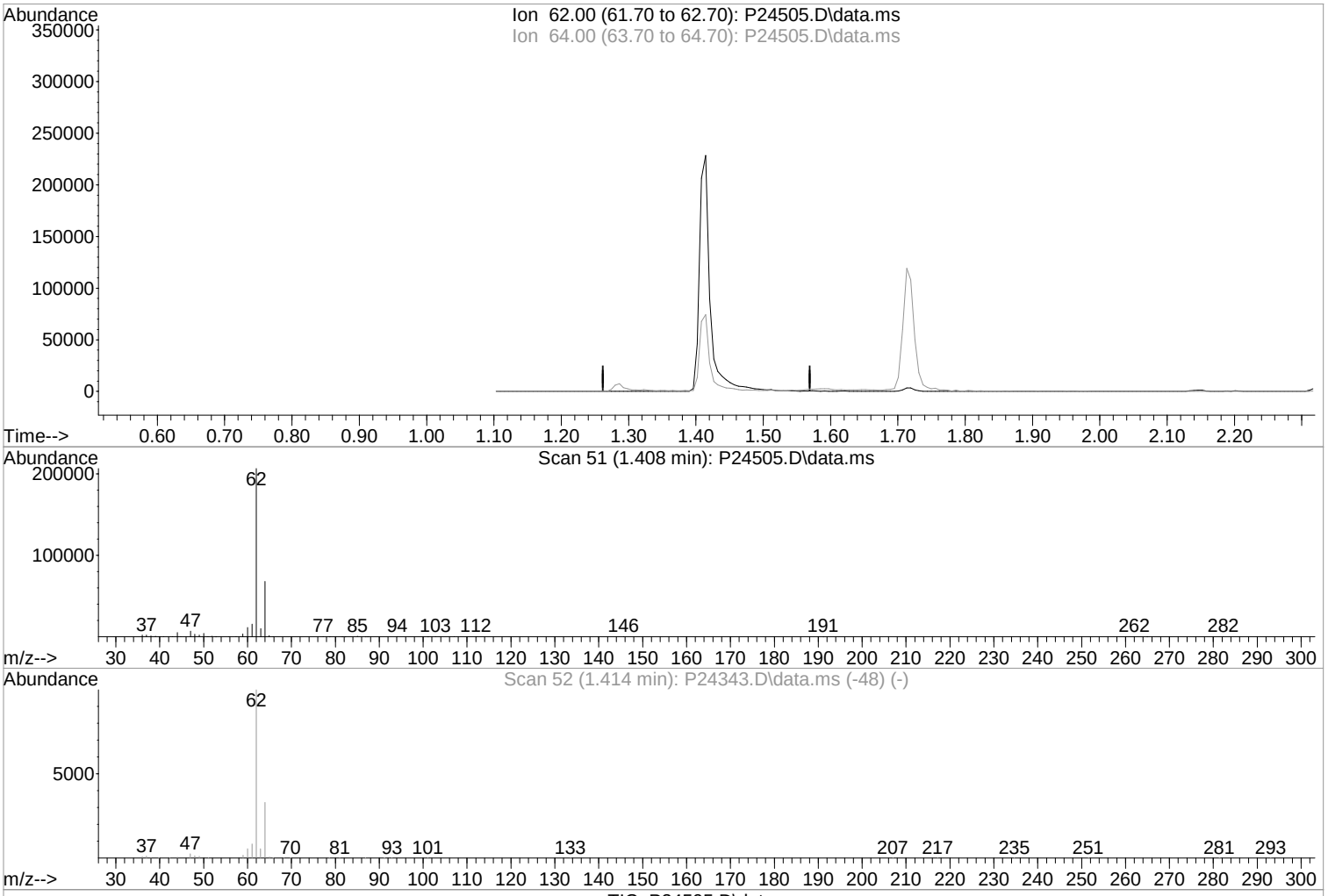
Peak not found.

02/26/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24505.D
Acq On : 26 Feb 2019 12:43 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 13:25:16 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24505.D\data.ms

(4) Vinyl Chloride (P)

1.408min (-1.408) 0.00 ppb

response 0

Ion	Exp%	Act%
62.00	100	0.00
64.00	33.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/26/19

1st 02/26/19
2nd 02/27/19

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24505.D
Acq On : 26 Feb 2019 12:43 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 13:25:39 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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	Pentafluorobenzene	1.0000	1.0000	0.0	97	0.00
2	P	Dichlorodifluoromethane	0.6056	0.6315	-4.3	91	0.00
3	P	Chloromethane	0.8095	0.7910	2.3	95	0.00
4	P	Vinyl Chloride	0.7267	0.7885	-8.5	96	0.00
5	P	Bromomethane	0.5125	0.4389	-0.6 ~~14.4~~	102	0.00
6	P	Chloroethane	0.4398	0.4371	0.6	98	0.00
7		Freon 21	0.9175	1.0254	-11.8	100	0.00
8	P	Trichlorofluoromethane	0.7050	0.7098	-0.7	96	0.00
9		Diethyl Ether	0.5392	0.5517	-2.3	96	0.00
10		Freon 123a	0.5846	0.6697	-14.6	105	0.00
11		Freon 123	0.6713	0.7661	-14.1	107	0.00
12		Acrolein	0.1378	0.1300	5.7	90	0.00
13	P	1,1-Diclethene	0.4664	0.4925	-5.6	98	0.00
14	P	Freon 113	0.4154	0.4386	-5.6	104	0.00
15	P	Acetone	0.2394	0.2638	-10.2	98	0.00
16		2-Propanol	0.0622	0.0654	-5.1	101	0.00
17		Iodomethane	0.5130	0.6207	7.6 ~~-21.0#~~	86	0.00
18	P	Carbon Disulfide	1.3974	1.4796	-5.9	101	0.00
19		Acetonitrile	0.0305	0.0519	-70.2#	133	0.00
20		Allyl Chloride	0.2790	0.2988	-7.1	97	0.00
21	P	Methyl Acetate	0.6500	0.6931	-6.6	95	0.00
22	P	Methylene Chloride	0.5806	0.5897	-1.6	98	0.00
23		TBA	0.0988	0.1023	-3.5	98	0.00
24		Acrylonitrile	0.3159	0.3349	-6.0	96	0.00
25	P	Methyl-t-Butyl Ether	1.8063	1.8551	-2.7	96	0.00
26	P	trans-1,2-Dichloroethene	0.5189	0.5271	-1.6	96	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-4.08#
28	P	1,1-Diclethane	0.9623	1.0392	-8.0	98	0.00
29		Vinyl Acetate	0.1188	0.1339	-12.7	110	0.00
30		DIPE	1.7415	1.8601	-6.8	96	0.00
31		2-Chloro-1,3-Butadiene	0.7526	0.7973	-5.9	101	0.00
32		ETBE	1.7407	1.8326	-5.3	97	0.00
33		2,2-Dichloropropane	0.7578	0.7473	1.4	97	0.00
34	P	cis-1,2-Dichloroethene	0.5817	0.6056	-4.1	98	0.00
35	P	2-Butanone	0.4024	0.4155	-3.3	101	0.00
36		Propionitrile	0.1309	0.1372	-4.8	93	0.00
37		Bromochloromethane	0.3611	0.3837	-6.3	100	0.00
38		Methacrylonitrile	0.3406	0.3507	-3.0	96	0.00
39		Tetrahydrofuran	0.2607	0.2606	0.0	92	0.01
40	P	Chloroform	0.8638	0.9017	-4.4	98	0.00
41	P	1,1,1-Trichloroethane	0.6725	0.7020	-4.4	96	0.00
42		TAME	1.6509	1.7553	-6.3	96	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	97	0.00
44	P	Cyclohexane	0.2931	0.3284	-12.0	105	0.00
45	s	surr4,Dibrflmethane	0.2748	0.2806	-2.1	96	0.00
46	P	Carbontetrachloride	0.3330	0.3374	-1.3	95	0.00
47		1,1-Dichloropropene	0.4272	0.4431	-3.7	98	0.00
48	s	surr1,1,2-dichloroethane-d4	0.3485	0.3549	-1.8	96	0.00
49	P	Benzene	1.4282	1.4557	-1.9	96	0.00
50	P	1,2-Dichloroethane	0.4573	0.4814	-5.3	96	0.00
51		Iso-Butyl Alcohol	0.0299	0.0295	1.3	92	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24505.D
Acq On : 26 Feb 2019 12:43 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 13:25:39 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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)
52		n-Heptane	0.4352	0.4587	-5.4	106	0.00
53		1-Butanol	0.0198	0.0202	-2.0	91	0.00
54	P	Trichloroethene	0.3497	0.3583	-2.5	95	0.00
55	P	Methylcyclohexane	0.4413	0.5011	-13.6	105	0.00
56	P	1,2-Diclpropane	0.3796	0.3958	-4.3	100	0.00
57		Dibromomethane	0.2148	0.2278	-6.1	98	0.00
58		1,4-Dioxane	0.0068	0.0080	-17.6	114	-0.05
59		Methyl Methacrylate	0.3391	0.3677	-8.4	101	0.00
60	P	Bromodichloromethane	0.3994	0.4067	-1.8	96	0.00
61		2-Nitropropane	0.0793	0.0810	-2.1	99	0.00
62		2-Chloroethylvinyl Ether	0.1132	0.1227	-2.4 ~~-8.4~~	94	0.00
63	P	cis-1,3-Dichloropropene	0.5646	0.5985	-6.0	95	0.00
64	P	4-Methyl-2-pentanone	0.4816	0.5020	-4.2	99	0.00
65	s	SURR3,Toluene-d8	1.3033	1.3081	-0.4	97	0.00
66	P	Toluene	1.4790	1.5431	-4.3	97	0.00
67	P	trans-1,3-Dichloropropene	0.4944	0.5334	-7.9	95	0.00
68		Ethyl Methacrylate	0.5694	0.6229	-9.4	97	0.00
69	P	1,1,2-Trichloroethane	0.3465	0.3561	-2.8	98	0.00
70	s	SURR2,BFB	0.4668	0.4671	-0.1	97	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	96	0.00
72	P	Tetrachloroethene	0.2994	0.3020	-0.9	100	0.00
73	P	2-Hexanone	0.4030	0.4145	-2.9	100	0.00
74		1,3-Dichloropropane	0.7201	0.7256	-0.8	96	0.00
75	P	Dibromochloromethane	0.3359	0.3380	-0.6	95	0.00
76		N-Butyl Acetate	0.7358	0.7948	-8.0	97	0.00
77	P	1,2-Dibromoethane	0.3927	0.3984	-1.5	95	0.00
78	P	Chlorobenzene	1.0703	1.0829	-1.2	99	0.00
79		3-CBTF	0.5218	0.5505	-5.5	98	0.00
80		4-CBTF	0.4717	0.4953	-5.0	96	0.00
81		1,1,1,2-Tetrachloroethane	0.3464	0.3519	-1.6	97	0.00
82	P	Ethylbenzene	0.5771	0.5951	-3.1	101	0.00
83	P	(m+p)Xylene	0.7057	0.7290	-3.3	101	0.00
84	P	o-Xylene	0.6943	0.7241	-4.3	100	0.00
85	P	Styrene	1.1252	1.2246	-8.8	100	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	97	0.00
87	P	Bromoform	0.4222	0.4232	-0.2	93	0.00
88		2-CBTF	1.0263	1.0424	-1.6	97	0.00
89	P	Isopropylbenzene	3.2888	3.4747	-5.7	102	0.00
90		Cyclohexanone	0.2085	0.2031	2.6	88	-0.01
91		trans-1,4-Dichloro-2-Butene	0.2722	0.2736	-0.5	96	0.00
92	P	1,1,2,2-Tetrachloroethane	1.0971	1.1395	-3.9	98	0.00
93		Bromobenzene	0.8848	0.8837	0.1	99	0.00
94		1,2,3-Trichloropropane	0.3480	0.3686	-5.9	97	0.00
95		n-Propylbenzene	3.7678	4.0272	-6.9	103	0.00
96		2-Chlorotoluene	2.3743	2.4535	-3.3	101	0.00
97		3-Chlorotoluene	2.3228	2.4160	-4.0	96	0.00
98		4-Chlorotoluene	2.6479	2.7315	-3.2	101	0.00
99		1,3,5-Trimethylbenzene	2.7293	2.8643	-4.9	102	0.00
100		tert-Butylbenzene	2.3741	2.5149	-5.9	101	0.00
101		1,2,4-Trimethylbenzene	2.8232	2.8937	-2.5	101	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24505.D
Acq On : 26 Feb 2019 12:43 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 13:25:39 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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)
102		3,4-DCBTF	0.8462	0.8833		-4.4	100	0.00
103		sec-Butylbenzene	3.4421	3.7060		-7.7	103	0.00
104		p-Isopropyltoluene	2.8587	3.0967		-8.3	104	0.00
105	P	1,3-Dclbenz	1.6112	1.6517		-2.5	99	0.00
106	P	1,4-Dclbenz	1.7003	1.6860		0.8	99	0.00
107		2,4-DCBTF	0.7750	0.7912		-2.1	98	0.00
108		2,5-DCBTF	0.8739	0.8853		-1.3	99	0.00
109		n-Butylbenzene	2.5058	2.8996		-15.7	106	0.00
110	P	1,2-Dclbenz	1.6482	1.7106		-3.8	101	0.00
111	P	1,2-Dibromo-3-chloropropane	0.2703	0.2720		-0.6	92	0.00
112		Trielution Dichlorotoluene	1.3558	1.4577		-7.5	100	0.00
113		1,3,5 Trichlorobenzene	1.1864	1.2502		-5.4	106	0.00
114		Coelution Dichlorotoluene	1.4956	1.6332		-9.2	103	0.00
115	P	1,2,4-Tcbenzene	1.1561	1.3246		-14.6	109	0.00
116		Hexachlorobt	0.4875	0.5393		-10.6	124	0.00
117		Naphthalen	3.3933	4.0229	1.3	~~-18.6~~	97	0.00
118		1,2,3-Tclbenzene	1.1924	1.3197		-10.7	105	0.00
119		2,4,5-Trichlorotolene	0.5335	0.5320	9.1	~~-0.3~~	84	0.00
120		2,3,6-Trichlorotoluene	0.6055	0.5935	11.6	~~-2.0~~	83	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24505.D
Acq On : 26 Feb 2019 12:43 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 13:25:39 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.401	168	321915	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.487	114	505438	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	450985	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	234417	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	141816	51.06	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.12%				
48) surr1,1,2-dichloroetha...	5.792	65	179405	50.92	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.84%				
65) SURR3,Toluene-d8	8.297	98	661155	50.18	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.36%				
70) SURR2,BFB	10.864	95	236102	50.04	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.08%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	203276	52.14	ppb		99
3) Chloromethane	1.335	50	254630	48.86	ppb		99
4) Vinyl Chloride	1.414	62	253846m	54.25	ppb		
5) Bromomethane	1.640	94	141296	50.32	ppb		98
6) Chloroethane	1.713	64	140693	49.68	ppb		93
7) Freon 21	1.865	67	330084	55.88	ppb		97
8) Trichlorofluoromethane	1.914	101	228491	50.34	ppb		98
9) Diethyl Ether	2.146	59	177604	51.16	ppb		97
10) Freon 123a	2.146	67	215582	57.28	ppb		99
11) Freon 123	2.195	83	246632	57.06	ppb		97
12) Acrolein	2.243	56	209260	235.89	ppb		99
13) 1,1-Diclethene	2.335	96	158554	52.80	ppb		98
14) Freon 113	2.341	101	141177	52.79	ppb		99
15) Acetone	2.378	43	84911	55.08	ppb		95
16) 2-Propanol	2.506	45	421174	1052.40	ppb		99
17) Iodomethane	2.463	142	199823	46.19	ppb		98
18) Carbon Disulfide	2.524	76	476313	52.94	ppb		97
19) Acetonitrile	2.621	40	83537	425.16	ppb		99
20) Allyl Chloride	2.664	76	96184	53.54	ppb		98
21) Methyl Acetate	2.682	43	223124	53.31	ppb		99
22) Methylene Chloride	2.780	84	189834	50.78	ppb		96
23) TBA	2.902	59	658650	1035.57	ppb		97
24) Acrylonitrile	3.030	53	539071	265.02	ppb		100
25) Methyl-t-Butyl Ether	3.079	73	597189	51.35	ppb		98
26) trans-1,2-Dichloroethene	3.073	96	169686	50.79	ppb		99
28) 1,1-Diclethane	3.566	63	334534	54.00	ppb		98
29) Vinyl Acetate	3.652	86	43098	56.35	ppb	#	77
30) DIPE	3.694	45	598785	53.40	ppb		98
31) 2-Chloro-1,3-Butadiene	3.688	53	256672	52.97	ppb		97
32) ETBE	4.219	59	589945	52.64	ppb		96
33) 2,2-Dichloropropane	4.395	77	240567	49.30	ppb		92
34) cis-1,2-Dichloroethene	4.395	96	194964	52.06	ppb		98
35) 2-Butanone	4.444	43	133740	51.62	ppb		92
36) Propionitrile	4.523	54	220793	261.98	ppb		100
37) Bromochloromethane	4.792	130	123506	53.12	ppb		96
38) Methacrylonitrile	4.798	67	112907	51.49	ppb		95
39) Tetrahydrofuran	4.889	42	83881	49.98	ppb		93
40) Chloroform	4.975	83	290280	52.20	ppb		95
41) 1,1,1-Trichloroethane	5.273	97	225993	52.20	ppb		100

1st 02/26/19
2nd 02/27/19

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24505.D
Acq On : 26 Feb 2019 12:43 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 13:25:39 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.102	73	565071	53.16	ppb	99
44) Cyclohexane	5.359	41	165972	56.01	ppb	93
46) Carbontetrachloride	5.548	117	170541	50.66	ppb	94
47) 1,1-Dichloropropene	5.554	75	223939	51.86	ppb	98
49) Benzene	5.871	78	735758	50.96	ppb	97
50) 1,2-Dichloroethane	5.907	62	243297	52.63	ppb	98
51) Iso-Butyl Alcohol	5.877	43	298268	985.51	ppb	99
52) n-Heptane	6.358	43	231856	52.70	ppb	98
53) 1-Butanol	6.834	56	509877	2552.50	ppb	99
54) Trichloroethene	6.810	130	181111	51.23	ppb	97
55) Methylcyclohexane	7.053	55	253295	56.78	ppb	95
56) 1,2-Diclpropane	7.090	63	200065	52.14	ppb	94
57) Dibromomethane	7.236	93	115124	53.01	ppb	97
58) 1,4-Dioxane	7.291	88	80595	1177.49	ppb	87
59) Methyl Methacrylate	7.316	69	185848	54.21	ppb	100
60) Bromodichloromethane	7.456	83	205564	50.91	ppb	96
61) 2-Nitropropane	7.736	41	81832	102.11	ppb	94
62) 2-Chloroethylvinyl Ether	7.864	63	62013	51.22	ppb	97
63) cis-1,3-Dichloropropene	7.998	75	302492	53.00	ppb	98
64) 4-Methyl-2-pentanone	8.206	43	253752	52.13	ppb	98
66) Toluene	8.370	91	779963	52.17	ppb	99
67) trans-1,3-Dichloropropene	8.639	75	269581	53.94	ppb	99
68) Ethyl Methacrylate	8.779	69	314846	54.70	ppb	100
69) 1,1,2-Trichloroethane	8.828	97	179991	51.39	ppb	94
72) Tetrachloroethene	8.962	164	136190	50.43	ppb	94
73) 2-Hexanone	9.120	43	186940	51.43	ppb	99
74) 1,3-Dichloropropane	8.998	76	327223	50.38	ppb	100
75) Dibromochloromethane	9.224	129	152454	50.33	ppb	91
76) N-Butyl Acetate	9.273	43	358432	54.01	ppb	97
77) 1,2-Dibromoethane	9.321	107	179682	50.73	ppb	98
78) Chlorobenzene	9.815	112	488350	50.59	ppb	99
79) 3-CBTF	9.833	180	248287	52.75	ppb	99
80) 4-CBTF	9.888	180	223390	52.50	ppb	98
81) 1,1,1,2-Tetrachloroethane	9.900	131	158722	50.79	ppb	100
82) Ethylbenzene	9.937	106	268384	51.56	ppb	93
83) (m+p)Xylene	10.047	106	657581	103.31	ppb	100
84) o-Xylene	10.406	106	326552	52.15	ppb	99
85) Styrene	10.419	104	552256	54.42	ppb	99
87) Bromoform	10.571	173	99195	50.11	ppb	99
88) 2-CBTF	10.650	180	244361	50.78	ppb	97
89) Isopropylbenzene	10.742	105	814535	52.83	ppb	99
90) Cyclohexanone	10.797	55	952113	974.21	ppb	100
91) trans-1,4-Dichloro-2-B...	11.047	53	64144	50.27	ppb	91
92) 1,1,2,2-Tetrachloroethane	10.998	83	267127	51.93	ppb	99
93) Bromobenzene	10.986	156	207145	49.94	ppb	92
94) 1,2,3-Trichloropropane	11.028	110	86417	52.96	ppb	96
95) n-Propylbenzene	11.095	91	944043	53.44	ppb	98
96) 2-Chlorotoluene	11.156	91	575151	51.67	ppb	99
97) 3-Chlorotoluene	11.211	91	566351	52.01	ppb	100
98) 4-Chlorotoluene	11.254	91	640314	51.58	ppb	95
99) 1,3,5-Trimethylbenzene	11.248	105	671441	52.47	ppb	100
100) tert-Butylbenzene	11.522	119	589530	52.96	ppb	99
101) 1,2,4-Trimethylbenzene	11.559	105	678340	51.25	ppb	100
102) 3,4-DCBTF	11.620	214	207064	52.19	ppb	96
103) sec-Butylbenzene	11.705	105	868752	53.83	ppb	99
104) p-Isopropyltoluene	11.827	119	725927	54.16	ppb	100

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24505.D
Acq On : 26 Feb 2019 12:43 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 13:25:39 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.784	146	387197	51.26	ppb	99
106) 1,4-Dclbenz	11.857	146	395221	49.58	ppb	99
107) 2,4-DCBTF	11.912	214	185471	51.05	ppb	98
108) 2,5-DCBTF	11.949	214	207530	50.65	ppb	100
109) n-Butylbenzene	12.156	91	679716	57.86	ppb	99
110) 1,2-Dclbenz	12.156	146	400993	51.89	ppb	97
111) 1,2-Dibromo-3-chloropr...	12.784	157	63751	50.30	ppb	86
112) Trielution Dichlorotol...	12.900	125	1025118	161.27	ppb	98
113) 1,3,5 Trichlorobenzene	12.955	180	293068	52.69	ppb	98
114) Coelution Dichlorotoluene	13.229	125	765687	109.20	ppb	96
115) 1,2,4-Tcbenzene	13.436	180	310500	57.29	ppb	98
116) Hexachlorobt	13.577	225	126430	55.32	ppb	99
117) Naphthalen	13.625	128	943030	49.33	ppb	100
118) 1,2,3-Tclbenzene	13.814	180	309357	55.34	ppb	99
119) 2,4,5-Trichlorotolene	14.400	159	124715	45.44	ppb	98
120) 2,3,6-Trichlorotoluene	14.491	159	139125	44.21	ppb	93

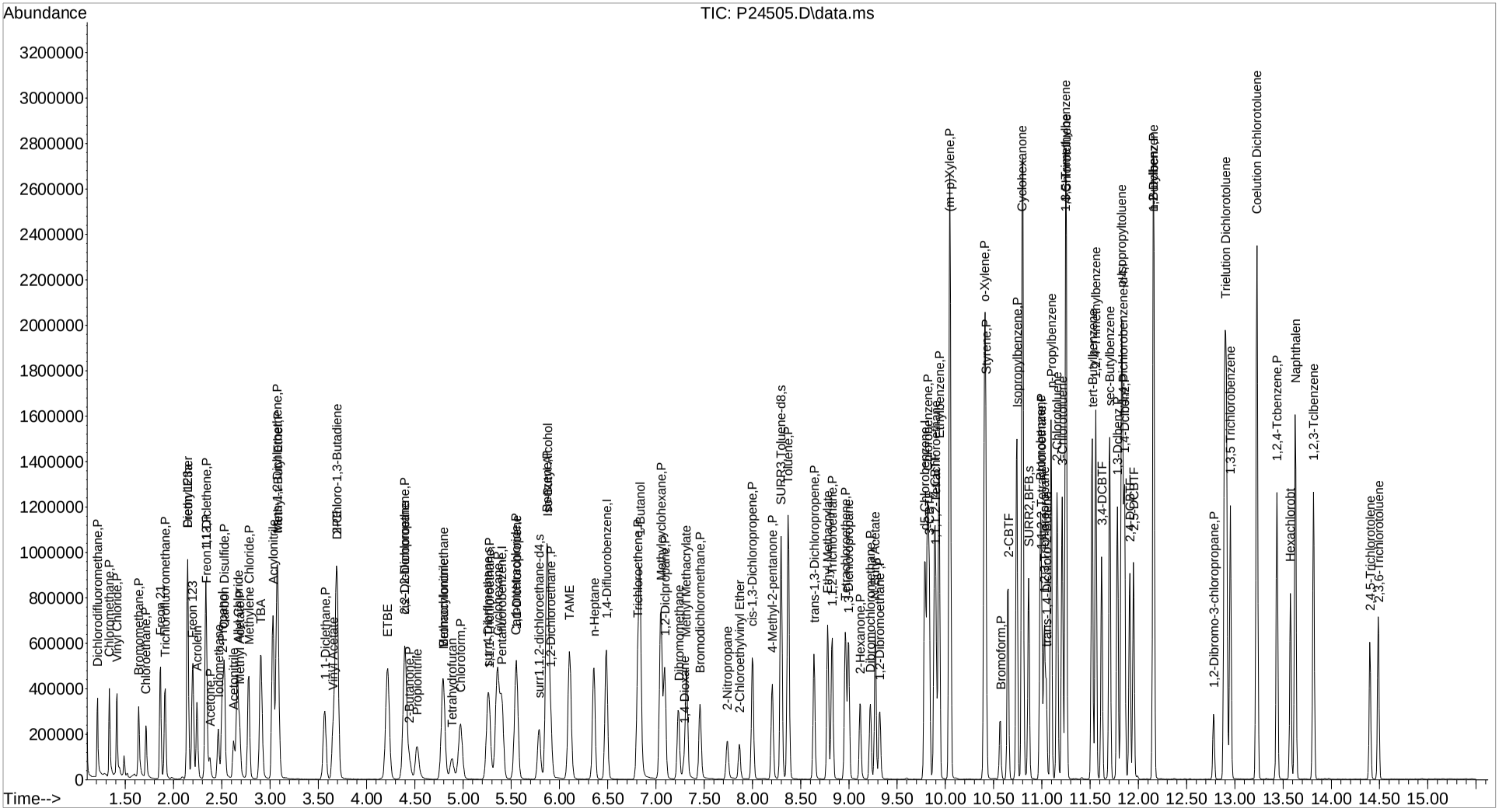
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24505.D
Acq On : 26 Feb 2019 12:43 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

1st 02/26/19
2nd 02/27/19

Quant Time: Feb 26 13:25:39 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

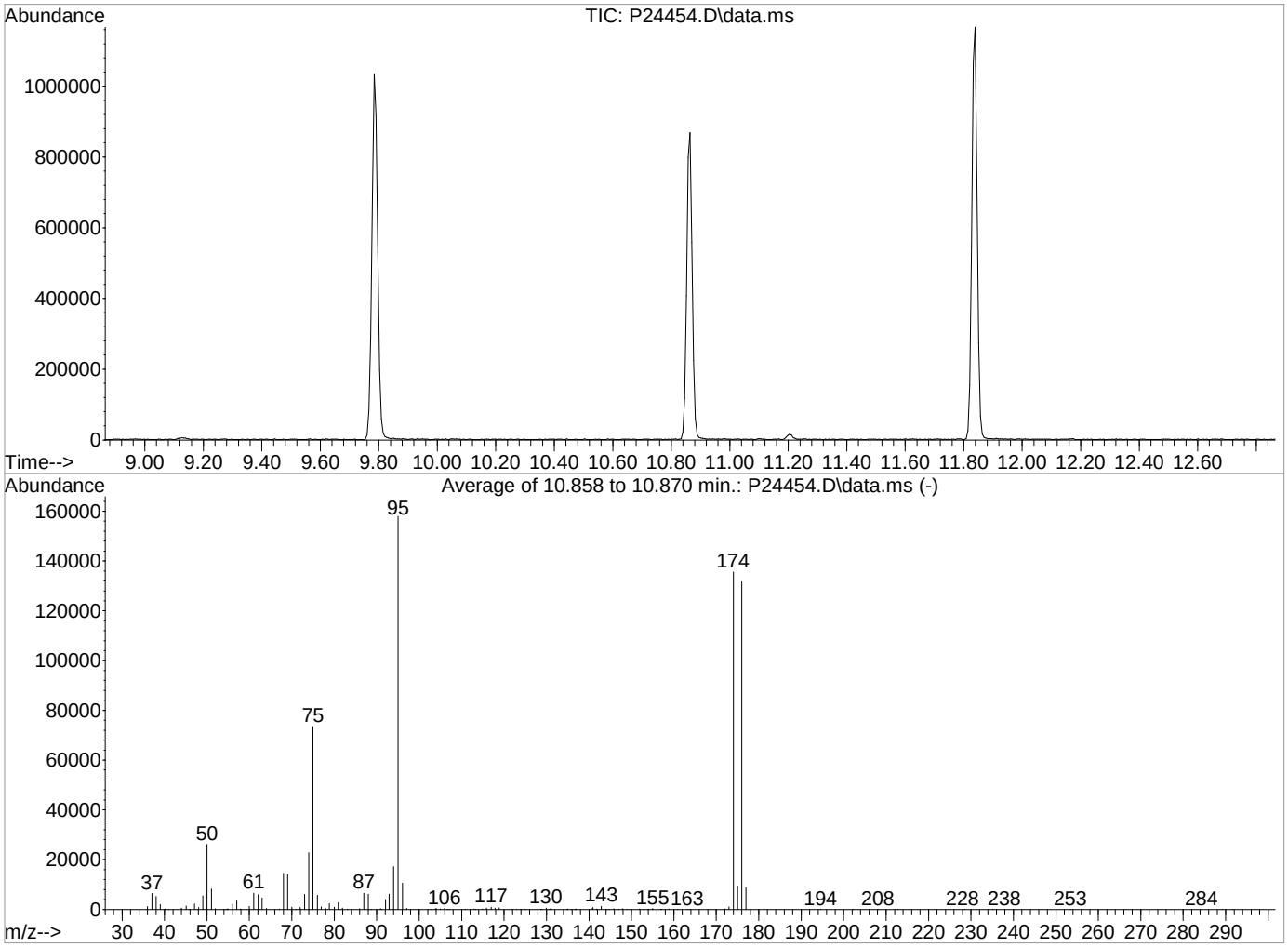


1st 02/25/19
2nd 02/26/19

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24454.D
Acq On : 25 Feb 2019 1:45 pm
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: INTP90.P

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Feb 21 11:43:56 2019



AutoFind: Scans 1601, 1602, 1603; Background Corrected with Scan 1593

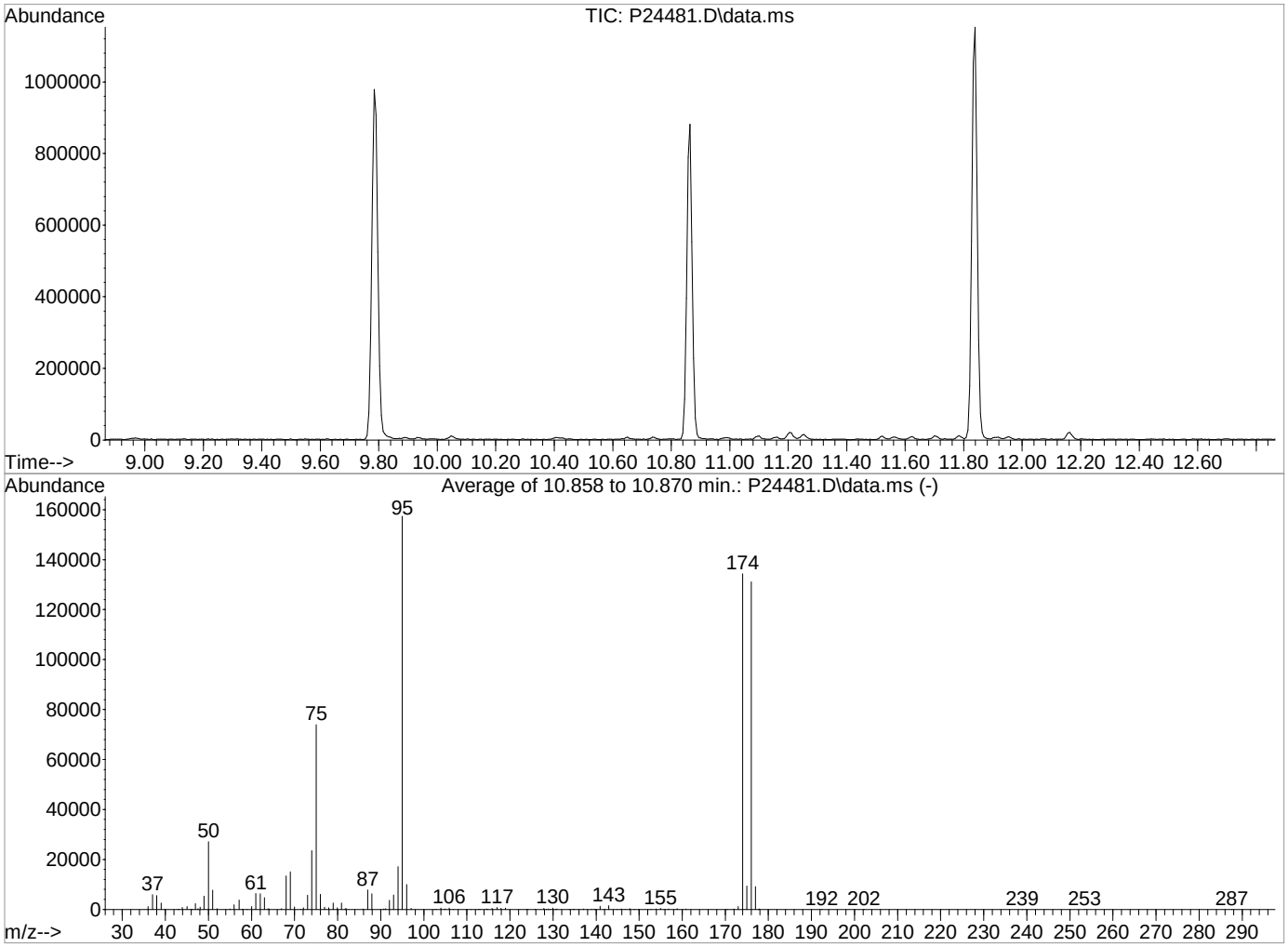
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.5	26144	PASS
75	95	30	60	46.5	73472	PASS
95	95	100	100	100.0	158019	PASS
96	95	5	9	6.7	10625	PASS
173	174	0.00	2	0.8	1065	PASS
174	95	50	120	85.8	135581	PASS
175	174	5	9	6.9	9412	PASS
176	174	95	101	97.1	131707	PASS
177	176	5	9	6.6	8757	PASS

1st 02/26/19
2nd 02/26/19

Data Path : I:\ACQUDATA\msvoa12\Data\022519\
Data File : P24481.D
Acq On : 26 Feb 2019 12:04 am
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: INTP90.P

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Feb 21 11:43:56 2019



AutoFind: Scans 1601, 1602, 1603; Background Corrected with Scan 1593

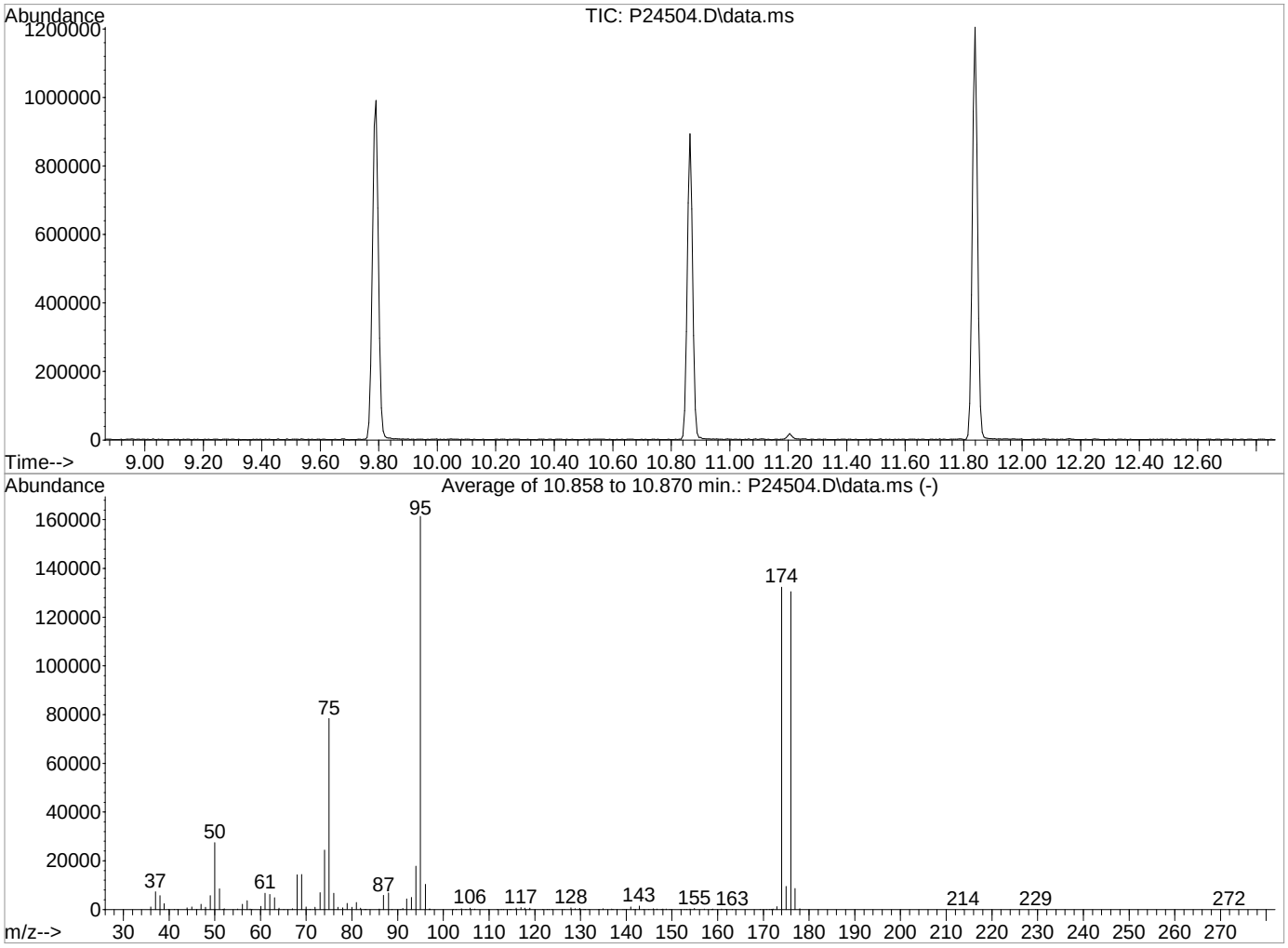
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.2	27152	PASS
75	95	30	60	47.0	73984	PASS
95	95	100	100	100.0	157403	PASS
96	95	5	9	6.3	9949	PASS
173	174	0.00	2	0.8	1126	PASS
174	95	50	120	85.4	134392	PASS
175	174	5	9	6.9	9337	PASS
176	174	95	101	97.6	131195	PASS
177	176	5	9	6.9	9098	PASS

1st 02/26/19
2nd 02/27/19

Data Path : I:\ACQUDATA\msvoa12\Data\022619\
Data File : P24504.D
Acq On : 26 Feb 2019 12:21 pm
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: INTP90.P

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Feb 21 11:43:56 2019



AutoFind: Scans 1601, 1602, 1603; Background Corrected with Scan 1594

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.0	27403	PASS
75	95	30	60	48.5	78352	PASS
95	95	100	100	100.0	161451	PASS
96	95	5	9	6.4	10272	PASS
173	174	0.00	2	0.8	1105	PASS
174	95	50	120	82.0	132331	PASS
175	174	5	9	7.1	9461	PASS
176	174	95	101	98.6	130435	PASS
177	176	5	9	6.6	8634	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24389.D
Acq On : 21 Feb 2019 11:09 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 22 09:21:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.395	168	329151	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.481	114	520474	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	451968	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	229694	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.249	113	143326	50.11	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.22%				
48) surr1,1,2-dichloroetha...	5.786	65	187044	51.56	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.12%				
65) SURR3,Toluene-d8	8.297	98	678960	50.05	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.10%				
70) SURR2,BFB	10.858	95	246212	50.67	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.34%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	76835	19.27	ppb		99
3) Chloromethane	1.329	50	100661	18.89	ppb		95
4) Vinyl Chloride	1.408	62	99828	20.87	ppb		100
5) Bromomethane	1.640	94	61491	20.95	ppb		99
6) Chloroethane	1.713	64	48757	16.84	ppb		95
7) Freon 21	1.859	67	126766	20.99	ppb		99
8) Trichlorofluoromethane	1.908	101	92324	19.89	ppb		98
9) Diethyl Ether	2.140	59	76423	21.53	ppb		96
10) Freon 123a	2.140	67	86117	22.38	ppb		93
11) Freon 123	2.195	83	107958	24.43	ppb		96
12) Acrolein	2.237	56	43694	48.17	ppb		97
13) 1,1-Diclethene	2.329	96	62595	20.39	ppb		91
14) Freon 113	2.335	101	54837	20.05	ppb		97
15) Acetone	2.372	43	39186	24.86	ppb		88
16) 2-Propanol	2.500	45	166129	405.99	ppb		95
17) Iodomethane	2.457	142	61393	15.55	ppb		96
18) Carbon Disulfide	2.524	76	199637	21.70	ppb		95
19) Acetonitrile	2.622	40	29145	145.07	ppb		91
20) Allyl Chloride	2.658	76	39503	21.50	ppb		99
21) Methyl Acetate	2.683	43	92829	21.69	ppb		99
22) Methylene Chloride	2.774	84	73813	19.31	ppb		95
23) TBA	2.902	59	296146	455.38	ppb		97
24) Acrylonitrile	3.024	53	235654	113.30	ppb		100
25) Methyl-t-Butyl Ether	3.073	73	261027	21.95	ppb		99
26) trans-1,2-Dichloroethene	3.067	96	68119	19.94	ppb		91
28) 1,1-Diclethane	3.560	63	133165	21.02	ppb		99
29) Vinyl Acetate	3.658	86	18885	24.15	ppb	#	86
30) DIPE	3.688	45	260407	22.71	ppb		98
31) 2-Chloro-1,3-Butadiene	3.688	53	108444	21.89	ppb		96
32) ETBE	4.213	59	241243	21.05	ppb		95
33) 2,2-Dichloropropane	4.396	77	84735	16.98	ppb		97
34) cis-1,2-Dichloroethene	4.396	96	77033	20.12	ppb		98
35) 2-Butanone	4.444	43	58094	21.93	ppb		93
36) Propionitrile	4.518	54	95468	110.79	ppb		98
37) Bromochloromethane	4.792	130	48363	20.34	ppb		95
38) Methacrylonitrile	4.786	67	48405	21.59	ppb		100
39) Tetrahydrofuran	4.883	42	37895	22.08	ppb		88
40) Chloroform	4.975	83	118371	20.82	ppb		96
41) 1,1,1-Trichloroethane	5.267	97	89799	20.28	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24389.D
Acq On : 21 Feb 2019 11:09 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 22 09:21:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.103	73	244720	22.52	ppb		99
44) Cyclohexane	5.347	41	68601	22.48	ppb		98
46) Carbontetrachloride	5.542	117	66908	19.30	ppb		96
47) 1,1-Dichloropropene	5.554	75	89288	20.08	ppb		96
49) Benzene	5.865	78	300514	20.21	ppb		100
50) 1,2-Dichloroethane	5.901	62	99610	20.93	ppb		98
51) Iso-Butyl Alcohol	5.871	43	134403	431.25	ppb		98
52) n-Heptane	6.353	43	78156	17.25	ppb		94
53) 1-Butanol	6.834	56	222176	1080.11	ppb		99
54) Trichloroethene	6.810	130	71153	19.55	ppb		97
55) Methylcyclohexane	7.048	55	103856	22.61	ppb		92
56) 1,2-Diclpropane	7.090	63	78608	19.90	ppb		96
57) Dibromomethane	7.230	93	46201	20.66	ppb		98
58) 1,4-Dioxane	7.291	88	32746	464.60	ppb		99
59) Methyl Methacrylate	7.316	69	80992	22.94	ppb		97
60) Bromodichloromethane	7.456	83	81479	19.60	ppb		97
61) 2-Nitropropane	7.736	41	33872	41.04	ppb		93
63) cis-1,3-Dichloropropene	7.999	75	117733	20.03	ppb		98
64) 4-Methyl-2-pentanone	8.206	43	111228	22.19	ppb		98
66) Toluene	8.370	91	311806	20.25	ppb		99
67) trans-1,3-Dichloropropene	8.639	75	105791	20.56	ppb		95
68) Ethyl Methacrylate	8.779	69	133044	22.45	ppb		91
69) 1,1,2-Trichloroethane	8.828	97	70867	19.65	ppb		96
72) Tetrachloroethene	8.962	164	50821	18.78	ppb	#	82
73) 2-Hexanone	9.114	43	77731	21.34	ppb		99
74) 1,3-Dichloropropane	8.992	76	132244	20.32	ppb		96
75) Dibromochloromethane	9.218	129	58234	19.18	ppb		98
76) N-Butyl Acetate	9.273	43	155219	23.34	ppb		97
77) 1,2-Dibromoethane	9.315	107	71007	20.00	ppb		98
78) Chlorobenzene	9.815	112	190074	19.65	ppb		97
79) 3-CBTF	9.834	180	101455	21.51	ppb		97
80) 4-CBTF	9.888	180	88088	20.66	ppb		97
81) 1,1,1,2-Tetrachloroethane	9.901	131	62030	19.81	ppb		95
82) Ethylbenzene	9.931	106	102673	19.68	ppb		92
83) (m+p)Xylene	10.047	106	249024	39.04	ppb		99
84) o-Xylene	10.400	106	125595	20.01	ppb		93
85) Styrene	10.419	104	207886	20.44	ppb		96
87) Bromoform	10.565	173	34916	18.00	ppb		94
88) 2-CBTF	10.650	180	99119	21.02	ppb		98
89) Isopropylbenzene	10.736	105	305434	20.22	ppb		97
90) Cyclohexanone	10.803	55	101918	106.43	ppb		97
91) trans-1,4-Dichloro-2-B...	11.047	53	28095	22.47	ppb		90
92) 1,1,2,2-Tetrachloroethane	10.998	83	107363	21.30	ppb		97
93) Bromobenzene	10.986	156	81021	19.93	ppb		98
94) 1,2,3-Trichloropropane	11.028	110	34322	21.47	ppb	#	90
95) n-Propylbenzene	11.095	91	354490	20.48	ppb		98
96) 2-Chlorotoluene	11.156	91	217438	19.93	ppb		99
97) 3-Chlorotoluene	11.211	91	245721	23.03	ppb		99
98) 4-Chlorotoluene	11.248	91	243520	20.02	ppb		97
99) 1,3,5-Trimethylbenzene	11.248	105	253742	20.24	ppb		99
100) tert-Butylbenzene	11.522	119	216624	19.86	ppb		99
101) 1,2,4-Trimethylbenzene	11.559	105	255796	19.72	ppb		99
102) 3,4-DCBTF	11.620	214	76537	19.69	ppb		96
103) sec-Butylbenzene	11.705	105	326598	20.65	ppb		98
104) p-Isopropyltoluene	11.821	119	267982	20.41	ppb		100
105) 1,3-Dclbenz	11.784	146	144838	19.57	ppb		95

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24389.D
Acq On : 21 Feb 2019 11:09 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 22 09:21:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.858	146	149356	19.12	ppb	99
107) 2,4-DCBTF	11.912	214	68868	19.34	ppb	96
108) 2,5-DCBTF	11.949	214	77836	19.39	ppb	95
109) n-Butylbenzene	12.156	91	250648	21.77	ppb	98
110) 1,2-Dclbenz	12.156	146	151113	19.96	ppb	97
111) 1,2-Dibromo-3-chloropr...	12.784	157	24123	19.43	ppb	86
112) Trielution Dichlorotol...	12.900	125	420999	67.59	ppb	96
113) 1,3,5 Trichlorobenzene	12.955	180	116702	21.41	ppb	98
114) Coelution Dichlorotoluene	13.229	125	312439	45.47	ppb	95
115) 1,2,4-Tcbenzene	13.437	180	113675	21.40	ppb	99
116) Hexachlorobt	13.577	225	42724	19.08	ppb	99
117) Naphthalen	13.625	128	367712	19.75	ppb	99
118) 1,2,3-Tclbenzene	13.814	180	114448	20.89	ppb	98
119) 2,4,5-Trichlorotolene	14.400	159	40325	17.86	ppb	94
120) 2,3,6-Trichlorotoluene	14.485	159	39363	15.28	ppb	98

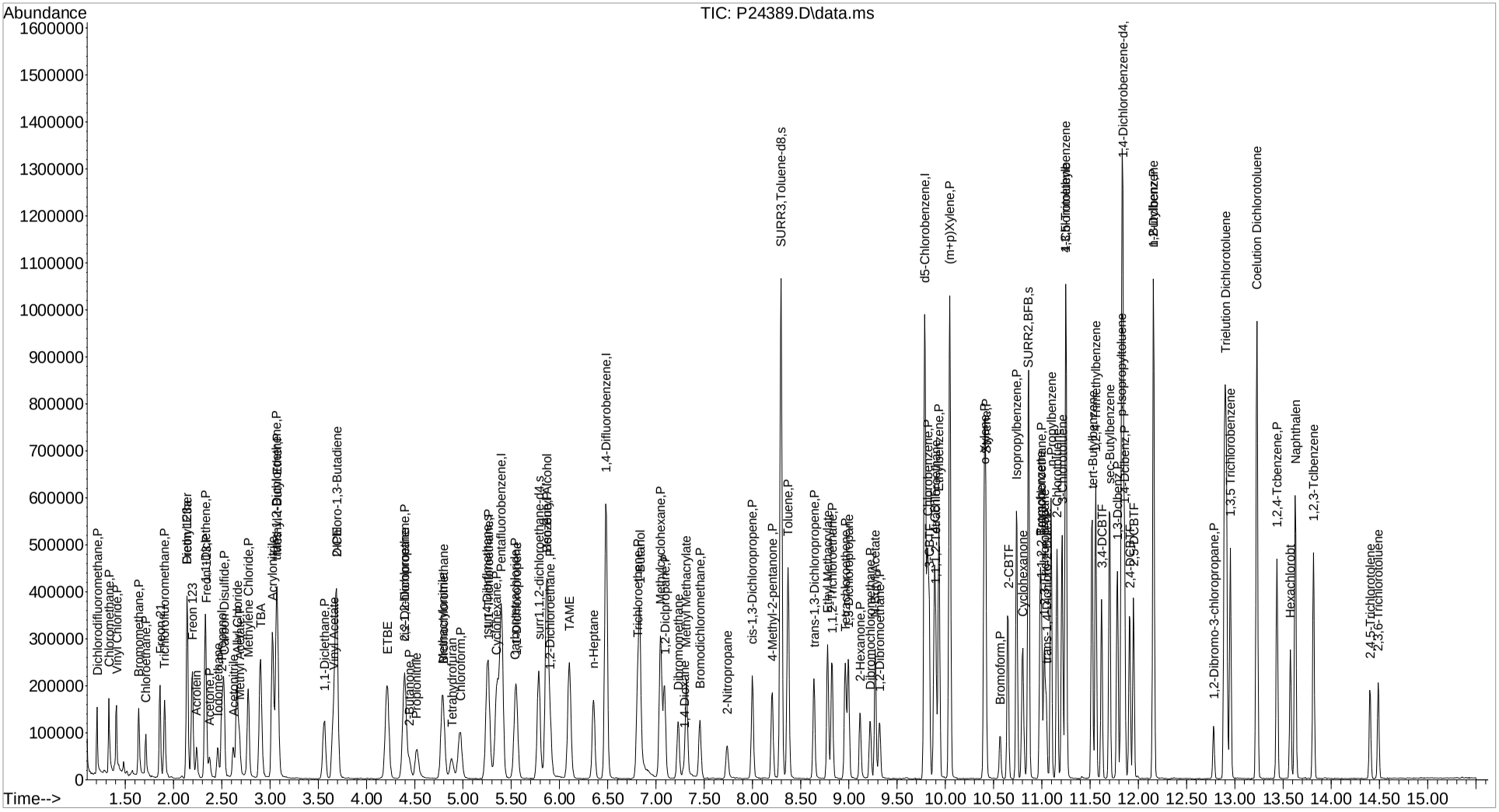
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24389.D
Acq On : 21 Feb 2019 11:09 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 22 09:21:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

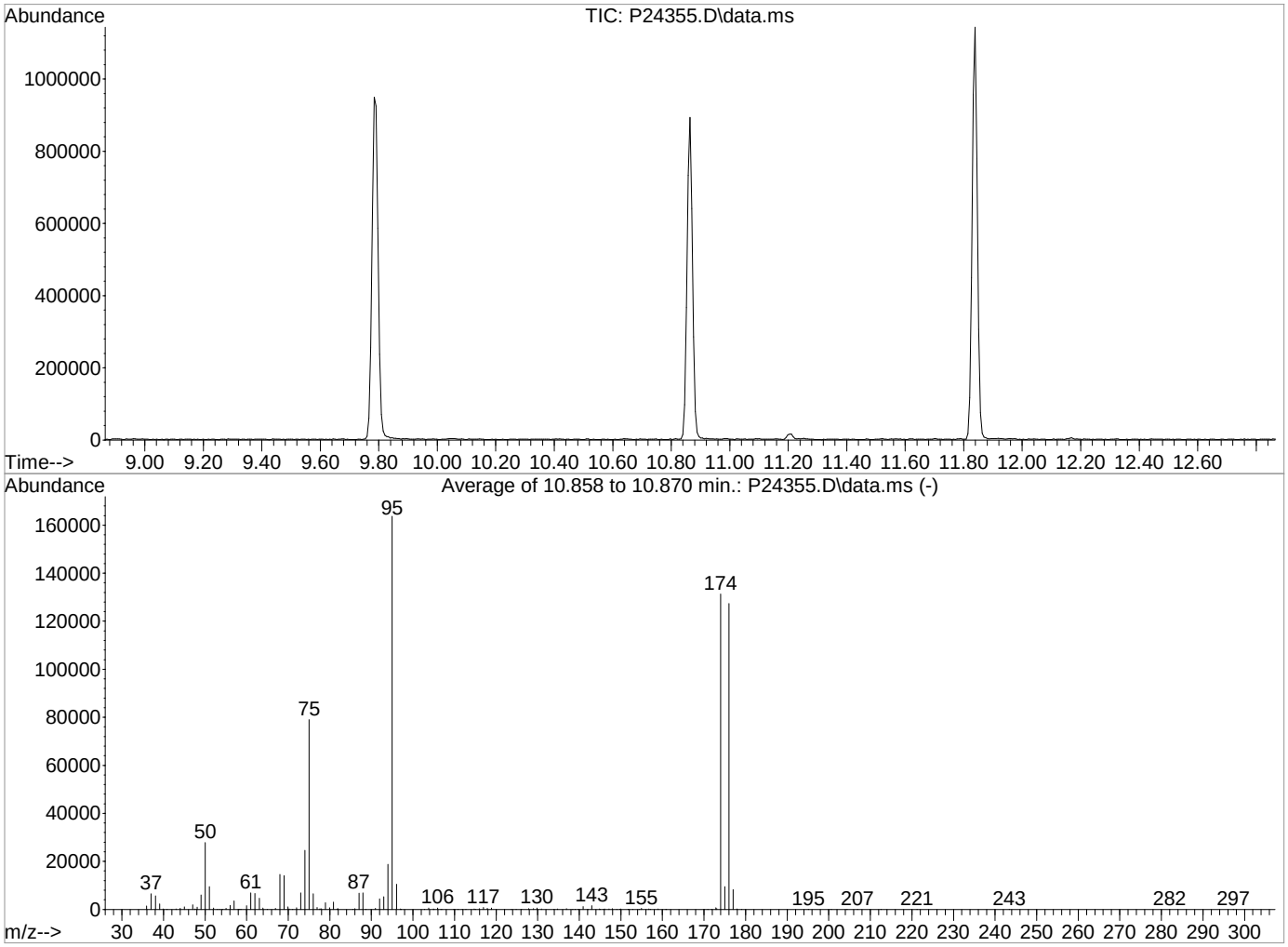


BFB

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24355.D
Acq On : 21 Feb 2019 10:25 am
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: INTP90.P

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Feb 21 10:22:17 2019



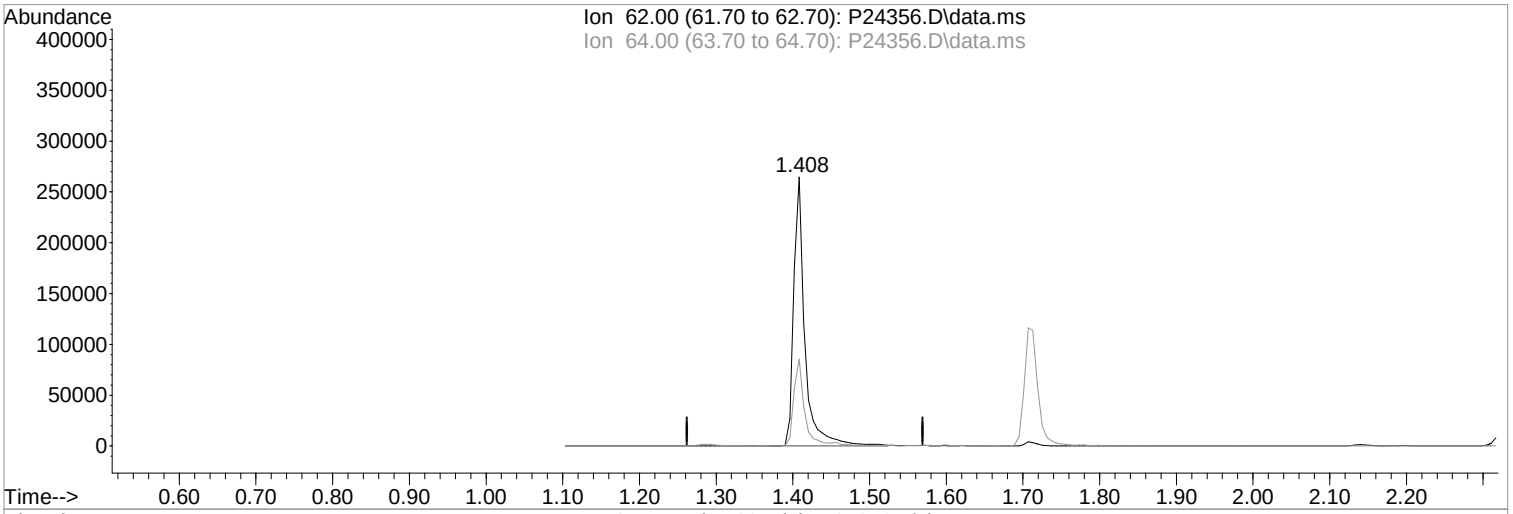
AutoFind: Scans 1601, 1602, 1603; Background Corrected with Scan 1594

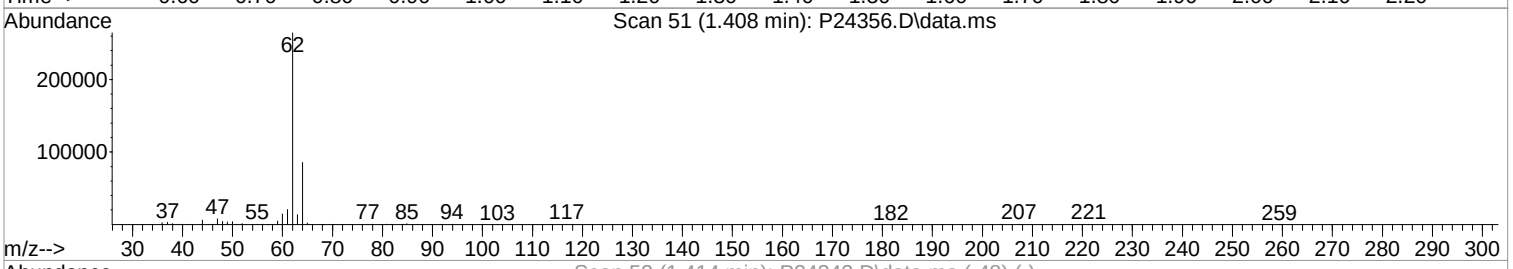
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.0	27816	PASS
75	95	30	60	48.3	79059	PASS
95	95	100	100	100.0	163755	PASS
96	95	5	9	6.4	10535	PASS
173	174	0.00	2	0.5	653	PASS
174	95	50	120	80.2	131299	PASS
175	174	5	9	7.2	9462	PASS
176	174	95	101	97.0	127368	PASS
177	176	5	9	6.5	8297	PASS

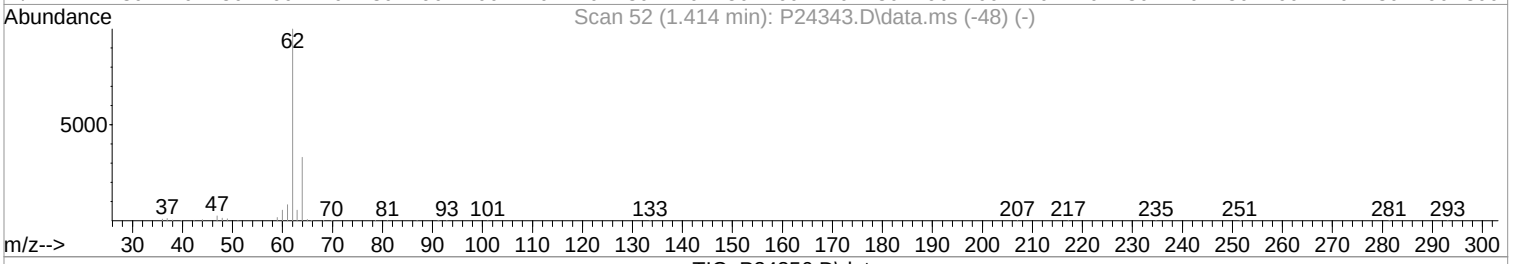
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:27 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24356.D\data.ms

(4) Vinyl Chloride (P)

1.408min (-0.000) 52.50 ppb m

response 270118

Ion	Exp%	Act%
62.00	100	100
64.00	33.20	32.35
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

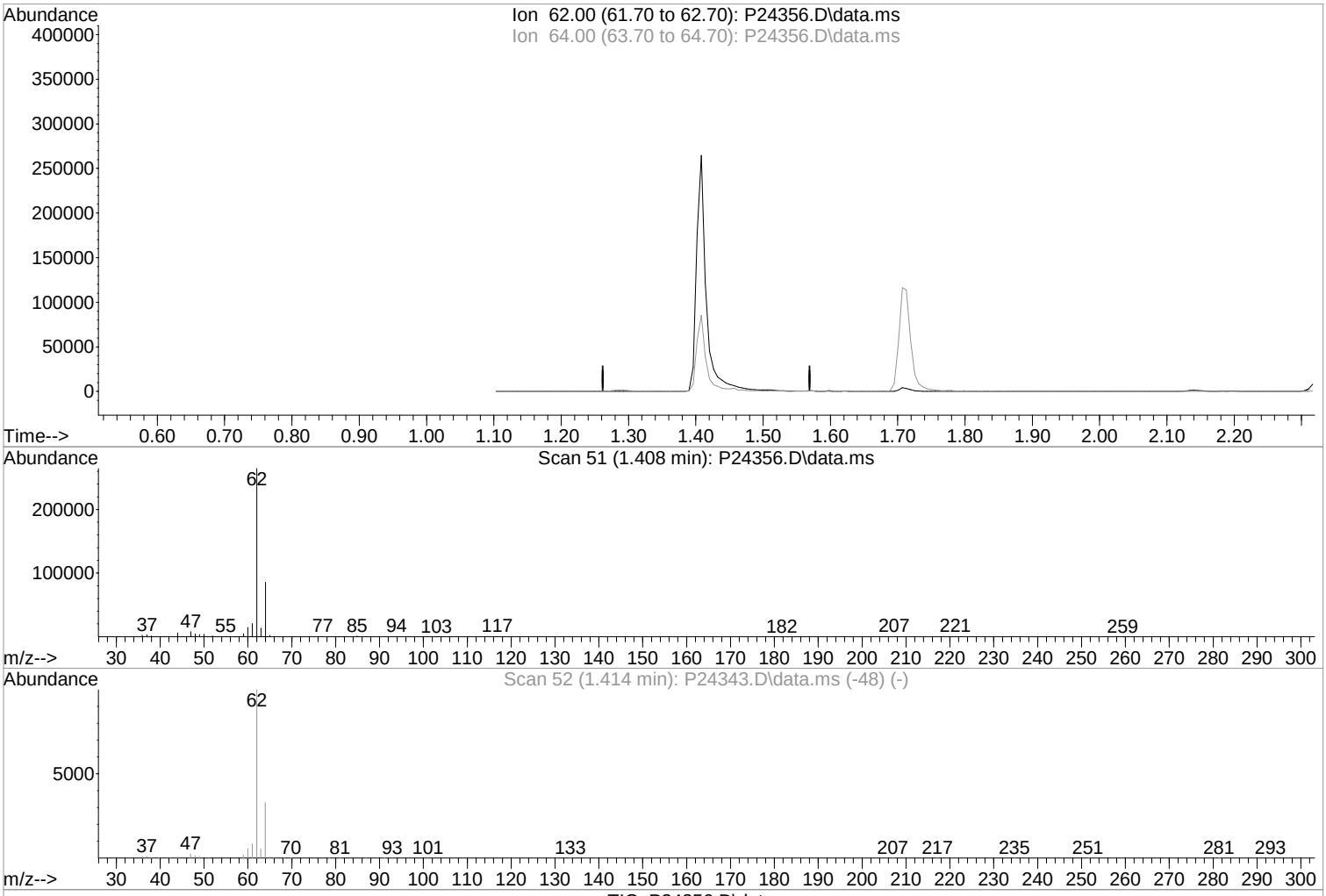
Peak not found.

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:27 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24356.D\data.ms

(4) Vinyl Chloride (P)

1.408min (-1.408) 0.00 ppb

response 0

Ion	Exp%	Act%
62.00	100	0.00
64.00	33.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/21/19

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:48 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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	Pentafluorobenzene	1.0000	1.0000	0.0	107	0.00
2	P	Dichlorodifluoromethane	0.6056	0.6545	-8.1	104	0.00
3	P	Chloromethane	0.8095	0.7616	5.9	100	0.00
4	P	Vinyl Chloride	0.7267	0.7631	-5.0	102	0.00
5	P	Bromomethane	0.5125	0.4162	4.6 ~~-18.8~~	106	0.00
6	P	Chloroethane	0.4398	0.4023	8.5	99	0.00
7		Freon 21	0.9175	0.9591	-4.5	102	0.00
8	P	Trichlorofluoromethane	0.7050	0.6651	5.7	99	0.00
9		Diethyl Ether	0.5392	0.4903	9.1	93	0.00
10		Freon 123a	0.5846	0.6144	-5.1	106	0.00
11		Freon 123	0.6713	0.7284	-8.5	112	0.00
12		Acrolein	0.1378	0.1310	4.9	100	0.00
13	P	1,1-Diclethene	0.4664	0.4584	1.7	101	0.00
14	P	Freon 113	0.4154	0.4146	0.2	108	0.00
15	P	Acetone	0.2394	0.2482	-3.7	102	0.00
16		2-Propanol	0.0622	0.0591	5.0	100	0.00
17		Iodomethane	0.5130	0.5998	10.5 ~~-16.9~~	92	0.00
18	P	Carbon Disulfide	1.3974	1.4386	-2.9	108	0.00
19		Acetonitrile	0.0305	0.0495	-62.3#	140	0.00
20		Allyl Chloride	0.2790	0.2654	4.9	95	0.00
21	P	Methyl Acetate	0.6500	0.6316	2.8	95	0.00
22	P	Methylene Chloride	0.5806	0.5256	9.5	96	0.00
23		TBA	0.0988	0.0878	11.1	93	0.00
24		Acrylonitrile	0.3159	0.2901	8.2	91	0.00
25	P	Methyl-t-Butyl Ether	1.8063	1.6670	7.7	94	0.00
26	P	trans-1,2-Dichloroethene	0.5189	0.4947	4.7	99	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-4.08#
28	P	1,1-Diclethane	0.9623	0.9322	3.1	96	0.00
29		Vinyl Acetate	0.1188	0.1185	0.3	107	0.00
30		DIPE	1.7415	1.7559	-0.8	100	0.00
31		2-Chloro-1,3-Butadiene	0.7526	0.7656	-1.7	107	0.00
32		ETBE	1.7407	1.7307	0.6	101	0.00
33		2,2-Dichloropropane	0.7578	0.7219	4.7	103	0.00
34	P	cis-1,2-Dichloroethene	0.5817	0.5497	5.5	98	0.00
35	P	2-Butanone	0.4024	0.3713	7.7	99	0.00
36		Propionitrile	0.1309	0.1184	9.5	88	-0.01
37		Bromochloromethane	0.3611	0.3432	5.0	98	0.00
38		Methacrylonitrile	0.3406	0.3012	11.6	91	0.00
39		Tetrahydrofuran	0.2607	0.2302	11.7	90	0.00
40	P	Chloroform	0.8638	0.8247	4.5	99	0.00
41	P	1,1,1-Trichloroethane	0.6725	0.6548	2.6	99	0.00
42		TAME	1.6509	1.6480	0.2	99	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	107	0.00
44	P	Cyclohexane	0.2931	0.3081	-5.1	108	0.00
45	s	surr4,Dibrflmethane	0.2748	0.2850	-3.7	107	0.00
46	P	Carbontetrachloride	0.3330	0.3362	-1.0	103	0.00
47		1,1-Dichloropropene	0.4272	0.4168	2.4	101	0.00
48	s	surr1,1,2-dichloroethane-d4	0.3485	0.3663	-5.1	109	0.00
49	P	Benzene	1.4282	1.3223	7.4	95	0.00
50	P	1,2-Dichloroethane	0.4573	0.4271	6.6	94	0.00
51		Iso-Butyl Alcohol	0.0299	0.0254	15.1	87	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:48 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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)
52		n-Heptane	0.4352	0.4443	-2.1	113	0.00
53		1-Butanol	0.0198	0.0182	8.1	89	0.00
54	P	Trichloroethene	0.3497	0.3396	2.9	98	0.00
55	P	Methylcyclohexane	0.4413	0.4749	-7.6	109	0.00
56	P	1,2-Diclpropane	0.3796	0.3586	5.5	99	0.00
57		Dibromomethane	0.2148	0.2026	5.7	96	0.00
58		1,4-Dioxane	0.0068	0.0067	1.5	105	-0.05
59		Methyl Methacrylate	0.3391	0.3133	7.6	94	0.00
60	P	Bromodichloromethane	0.3994	0.3873	3.0	100	0.00
61		2-Nitropropane	0.0793	0.0708	10.7	95	0.00
62		2-Chloroethylvinyl Ether	0.1132	0.1191	0.3 ~~-5.2~~	100	0.00
63	P	cis-1,3-Dichloropropene	0.5646	0.5457	3.3	95	0.00
64	P	4-Methyl-2-pentanone	0.4816	0.4624	4.0	100	0.00
65	s	SURR3,Toluene-d8	1.3033	1.3187	-1.2	107	0.00
66	P	Toluene	1.4790	1.4247	3.7	98	0.00
67	P	trans-1,3-Dichloropropene	0.4944	0.4888	1.1	95	0.00
68		Ethyl Methacrylate	0.5694	0.5469	4.0	93	0.00
69	P	1,1,2-Trichloroethane	0.3465	0.3132	9.6	94	0.00
70	s	SURR2,BFB	0.4668	0.4760	-2.0	108	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	105	0.00
72	P	Tetrachloroethene	0.2994	0.2872	4.1	103	0.00
73	P	2-Hexanone	0.4030	0.3769	6.5	99	0.00
74		1,3-Dichloropropane	0.7201	0.6581	8.6	95	0.00
75	P	Dibromochloromethane	0.3359	0.3161	5.9	96	0.00
76		N-Butyl Acetate	0.7358	0.7352	0.1	98	0.00
77	P	1,2-Dibromoethane	0.3927	0.3554	9.5	92	0.00
78	P	Chlorobenzene	1.0703	1.0105	5.6	100	0.00
79		3-CBTF	0.5218	0.5409	-3.7	104	0.00
80		4-CBTF	0.4717	0.5000	-6.0	106	0.00
81		1,1,1,2-Tetrachloroethane	0.3464	0.3212	7.3	96	0.00
82	P	Ethylbenzene	0.5771	0.5589	3.2	103	0.00
83	P	(m+p)Xylene	0.7057	0.6845	3.0	103	0.00
84	P	o-Xylene	0.6943	0.6742	2.9	102	0.00
85	P	Styrene	1.1252	1.1146	0.9	99	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	106	0.00
87	P	Bromoform	0.4222	0.3933	6.8	94	0.00
88		2-CBTF	1.0263	1.0146	1.1	104	0.00
89	P	Isopropylbenzene	3.2888	3.2253	1.9	104	0.00
90		Cyclohexanone	0.2085	0.1766	15.3	84	-0.01
91		trans-1,4-Dichloro-2-Butene	0.2722	0.2315	15.0	89	0.00
92	P	1,1,2,2-Tetrachloroethane	1.0971	0.9982	9.0	94	0.00
93		Bromobenzene	0.8848	0.8042	9.1	98	0.00
94		1,2,3-Trichloropropane	0.3480	0.3238	7.0	93	0.00
95		n-Propylbenzene	3.7678	3.7389	0.8	105	0.00
96		2-Chlorotoluene	2.3743	2.2677	4.5	102	0.00
97		3-Chlorotoluene	2.3228	2.3069	0.7	100	0.00
98		4-Chlorotoluene	2.6479	2.5298	4.5	102	0.00
99		1,3,5-Trimethylbenzene	2.7293	2.6619	2.5	104	0.00
100		tert-Butylbenzene	2.3741	2.3556	0.8	104	0.00
101		1,2,4-Trimethylbenzene	2.8232	2.6780	5.1	102	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:48 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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)
102		3,4-DCBTF	0.8462	0.8328	1.6	103	0.00
103		sec-Butylbenzene	3.4421	3.5085	-1.9	107	0.00
104		p-Isopropyltoluene	2.8587	2.9138	-1.9	106	0.00
105	P	1,3-Dclbenz	1.6112	1.5081	6.4	99	0.00
106	P	1,4-Dclbenz	1.7003	1.5451	9.1	99	0.00
107		2,4-DCBTF	0.7750	0.7725	0.3	104	0.00
108		2,5-DCBTF	0.8739	0.8536	2.3	105	0.00
109		n-Butylbenzene	2.5058	2.7433	-9.5	109	0.00
110	P	1,2-Dclbenz	1.6482	1.5236	7.6	98	0.00
111	P	1,2-Dibromo-3-chloropropane	0.2703	0.2353	12.9	87	0.00
112		Trielution Dichlorotoluene	1.3558	1.4364	-5.9	108	0.00
113		1,3,5 Trichlorobenzene	1.1864	1.2086	-1.9	111	0.00
114		Coelution Dichlorotoluene	1.4956	1.5949	-6.6	109	0.00
115	P	1,2,4-Tcbenzene	1.1561	1.2163	-5.2	110	0.00
116		Hexachlorobt	0.4875	0.5063	-3.9	127	0.00
117		Naphthalen	3.3933	3.5268	13.6 ~~-3.9~~	93	0.00
118		1,2,3-Tclbenzene	1.1924	1.2096	-1.4	105	0.00
119		2,4,5-Trichlorotolene	0.5335	0.6371	-5.2 ~~-19.4~~	109	0.00
120		2,3,6-Trichlorotoluene	0.6055	0.7156	-3.3 ~~-18.2~~	109	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:48 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.401	168	353986	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.480	114	553650	50.00	ppb	0.00
71) d5-Chlorobenzene	9.785	117	490288	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	256128	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.249	113	157783	51.86	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.72%			
48) surr1,1,2-dichloroetha...	5.785	65	202821	52.56	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 105.12%			
65) SURR3,Toluene-d8	8.297	98	730113	50.59	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.18%			
70) SURR2,BFB	10.864	95	263536	50.99	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.98%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.207	85	231700	54.05	ppb	99
3) Chloromethane	1.329	50	269586	47.04	ppb	100
4) Vinyl Chloride	1.408	62	270118m	52.50	ppb	
5) Bromomethane	1.634	94	147342	47.68	ppb	98
6) Chloroethane	1.707	64	142396	45.73	ppb	96
7) Freon 21	1.859	67	339494	52.27	ppb	99
8) Trichlorofluoromethane	1.908	101	235421	47.17	ppb	98
9) Diethyl Ether	2.140	59	173552	45.46	ppb	96
10) Freon 123a	2.140	67	217495	52.55	ppb	99
11) Freon 123	2.195	83	257847	54.25	ppb	98
12) Acrolein	2.237	56	231803	237.63	ppb	95
13) 1,1-Diclethene	2.329	96	162250	49.14	ppb	92
14) Freon 113	2.335	101	146767	49.91	ppb	99
15) Acetone	2.371	43	87847	51.82	ppb	94
16) 2-Propanol	2.499	45	418261	950.44	ppb	98
17) Iodomethane	2.457	142	212323	44.73	ppb	98
18) Carbon Disulfide	2.524	76	509252	51.47	ppb	98
19) Acetonitrile	2.615	40	87688	405.85	ppb	93
20) Allyl Chloride	2.658	76	93965	47.56	ppb	97
21) Methyl Acetate	2.682	43	223588	48.58	ppb	96
22) Methylene Chloride	2.774	84	186066	45.27	ppb	97
23) TBA	2.902	59	621775	889.02	ppb	97
24) Acrylonitrile	3.024	53	513378	229.52	ppb	99
25) Methyl-t-Butyl Ether	3.079	73	590099	46.15	ppb	97
26) trans-1,2-Dichloroethene	3.066	96	175134	47.68	ppb	99
28) 1,1-Diclethane	3.560	63	329987	48.44	ppb	99
29) Vinyl Acetate	3.652	86	41940	49.87	ppb	98
30) DIPE	3.688	45	621558	50.41	ppb	98
31) 2-Chloro-1,3-Butadiene	3.682	53	270999	50.86	ppb	99
32) ETBE	4.212	59	612661	49.72	ppb	96
33) 2,2-Dichloropropane	4.389	77	255538	47.63	ppb	96
34) cis-1,2-Dichloroethene	4.401	96	194586	47.25	ppb	92
35) 2-Butanone	4.444	43	131443	46.14	ppb	95
36) Propionitrile	4.517	54	209544	226.11	ppb	100
37) Bromochloromethane	4.786	130	121505	47.52	ppb	97
38) Methacrylonitrile	4.792	67	106636	44.22	ppb	97
39) Tetrahydrofuran	4.883	42	81505	44.17	ppb	92
40) Chloroform	4.968	83	291925	47.74	ppb	96
41) 1,1,1-Trichloroethane	5.267	97	231801	48.69	ppb	99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:48 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.102	73	583370	49.91	ppb		96
44) Cyclohexane	5.353	41	170573	52.55	ppb		98
46) Carbontetrachloride	5.542	117	186130	50.48	ppb		100
47) 1,1-Dichloropropene	5.554	75	230740	48.78	ppb		99
49) Benzene	5.865	78	732067	46.29	ppb		100
50) 1,2-Dichloroethane	5.901	62	236470	46.70	ppb		97
51) Iso-Butyl Alcohol	5.877	43	281291	848.48	ppb		100
52) n-Heptane	6.352	43	245986	51.05	ppb		97
53) 1-Butanol	6.834	56	502641	2297.16	ppb		100
54) Trichloroethene	6.810	130	188005	48.55	ppb		97
55) Methylcyclohexane	7.047	55	262921	53.81	ppb		97
56) 1,2-Diclpropane	7.090	63	198561	47.24	ppb		97
57) Dibromomethane	7.230	93	112150	47.14	ppb		98
58) 1,4-Dioxane	7.291	88	74617	995.22	ppb		87
59) Methyl Methacrylate	7.316	69	173458	46.19	ppb		99
60) Bromodichloromethane	7.456	83	214442	48.49	ppb		97
61) 2-Nitropropane	7.736	41	78380	89.28	ppb		95
62) 2-Chloroethylvinyl Ether	7.864	63	65934	49.86	ppb		89
63) cis-1,3-Dichloropropene	7.998	75	302101	48.33	ppb		97
64) 4-Methyl-2-pentanone	8.206	43	256011	48.01	ppb		99
66) Toluene	8.370	91	788798	48.17	ppb		98
67) trans-1,3-Dichloropropene	8.638	75	270616	49.43	ppb		100
68) Ethyl Methacrylate	8.779	69	302783	48.02	ppb		99
69) 1,1,2-Trichloroethane	8.827	97	173402	45.19	ppb		98
72) Tetrachloroethene	8.962	164	140812	47.96	ppb		95
73) 2-Hexanone	9.114	43	184812	46.77	ppb		96
74) 1,3-Dichloropropane	8.998	76	322647	45.69	ppb		97
75) Dibromochloromethane	9.224	129	154966	47.05	ppb		94
76) N-Butyl Acetate	9.272	43	360481	49.96	ppb		97
77) 1,2-Dibromoethane	9.315	107	174241	45.25	ppb		98
78) Chlorobenzene	9.815	112	495449	47.21	ppb		98
79) 3-CBTF	9.833	180	265201	51.83	ppb		99
80) 4-CBTF	9.888	180	245131	52.99	ppb		98
81) 1,1,1,2-Tetrachloroethane	9.900	131	157469	46.35	ppb		97
82) Ethylbenzene	9.937	106	274033	48.42	ppb	#	90
83) (m+p)Xylene	10.047	106	671198	97.00	ppb		97
84) o-Xylene	10.406	106	330544	48.55	ppb		99
85) Styrene	10.419	104	546471	49.53	ppb		99
87) Bromoform	10.565	173	100731	46.57	ppb		100
88) 2-CBTF	10.650	180	259873	49.43	ppb		99
89) Isopropylbenzene	10.742	105	826085	49.03	ppb		98
90) Cyclohexanone	10.797	55	904631	847.17	ppb		100
91) trans-1,4-Dichloro-2-B...	11.047	53	59287	42.52	ppb		97
92) 1,1,2,2-Tetrachloroethane	10.998	83	255658	45.49	ppb		99
93) Bromobenzene	10.986	156	205968	45.44	ppb		95
94) 1,2,3-Trichloropropane	11.028	110	82922	46.51	ppb		100
95) n-Propylbenzene	11.095	91	957635	49.62	ppb		100
96) 2-Chlorotoluene	11.156	91	580815	47.75	ppb		99
97) 3-Chlorotoluene	11.211	91	590872	49.66	ppb		99
98) 4-Chlorotoluene	11.254	91	647963	47.77	ppb		97
99) 1,3,5-Trimethylbenzene	11.248	105	681780	48.76	ppb		99
100) tert-Butylbenzene	11.522	119	603338	49.61	ppb		99
101) 1,2,4-Trimethylbenzene	11.559	105	685905	47.43	ppb		97
102) 3,4-DCBTF	11.620	214	213315	49.21	ppb		98
103) sec-Butylbenzene	11.705	105	898626	50.97	ppb		99
104) p-Isopropyltoluene	11.827	119	746309	50.96	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:48 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.784	146	386278	46.80	ppb	98
106) 1,4-Dclbenz	11.857	146	395733	45.44	ppb	100
107) 2,4-DCBTF	11.912	214	197850	49.84	ppb	100
108) 2,5-DCBTF	11.955	214	218627	48.84	ppb	97
109) n-Butylbenzene	12.156	91	702638	54.74	ppb	98
110) 1,2-Dclbenz	12.162	146	390242	46.22	ppb	97
111) 1,2-Dibromo-3-chloropr...	12.784	157	60257	43.52	ppb	90
112) Trielution Dichlorotol...	12.900	125	1103717	158.92	ppb	99
113) 1,3,5 Trichlorobenzene	12.955	180	309567	50.94	ppb	99
114) Coelution Dichlorotoluene	13.229	125	817010	106.64	ppb	97
115) 1,2,4-Tcbenzene	13.436	180	311518	52.60	ppb	99
116) Hexachlorobt	13.577	225	129681	51.93	ppb	98
117) Naphthalen	13.625	128	903316	43.18	ppb	99
118) 1,2,3-Tclbenzene	13.814	180	309821	50.72	ppb	98
119) 2,4,5-Trichlorotolene	14.406	159	163174	52.59	ppb	96
120) 2,3,6-Trichlorotoluene	14.485	159	183297	51.63	ppb	94

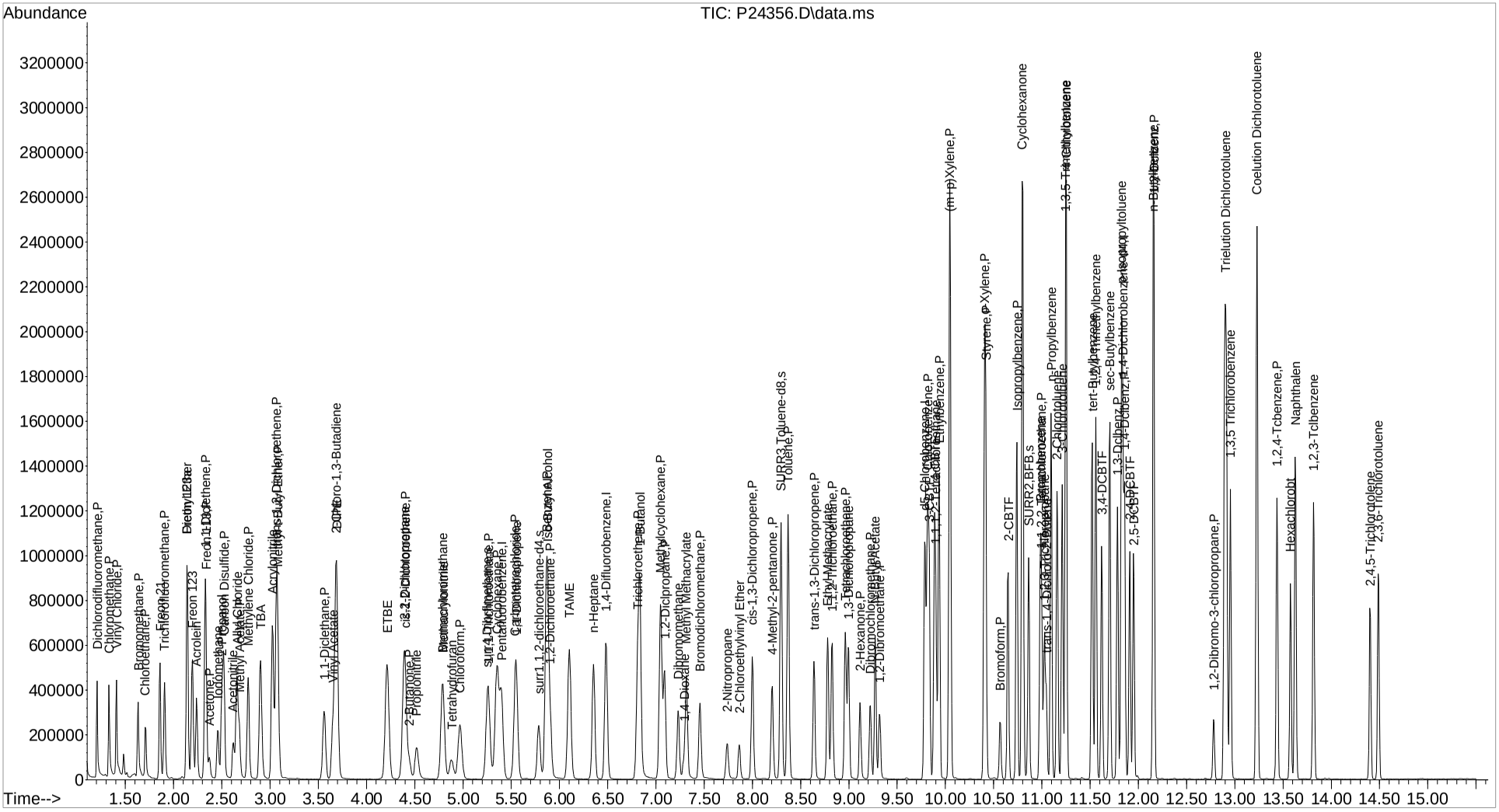
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 02/21/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:48 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24357.D
Acq On : 21 Feb 2019 11:24 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:07:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.407	168	337905	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	538827	50.00	ppb		0.00
71) d5-Chlorobenzene	9.791	117	459654	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	241518	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.261	113	148649	50.20	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.40%				
48) surr1,1,2-dichloroetha...	5.792	65	193211	51.44	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.88%				
65) SURR3,Toluene-d8	8.297	98	686676	48.89	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.78%				
70) SURR2,BFB	10.864	95	246046	48.91	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.82%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	73146	17.87	ppb		98
3) Chloromethane	1.341	50	91815	16.78	ppb		97
4) Vinyl Chloride	1.414	62	92754	18.89	ppb		99
5) Bromomethane	1.640	94	61098	20.25	ppb		96
6) Chloroethane	1.719	64	44441	14.95	ppb		91
7) Freon 21	1.865	67	117593	18.97	ppb		97
8) Trichlorofluoromethane	1.914	101	87250	18.31	ppb		98
9) Diethyl Ether	2.152	59	73983	20.30	ppb		96
10) Freon 123a	2.152	67	78648	19.91	ppb		92
11) Freon 123	2.201	83	99811	22.00	ppb		97
12) Acrolein	2.250	56	42481	45.62	ppb		95
13) 1,1-Diclethene	2.341	96	60012	19.04	ppb		98
14) Freon 113	2.341	101	56858	20.26	ppb		99
15) Acetone	2.384	43	36584	22.61	ppb		97
16) 2-Propanol	2.512	45	160415	381.87	ppb		99
17) Iodomethane	2.469	142	57625	14.41	ppb		98
18) Carbon Disulfide	2.530	76	179033	18.96	ppb		98
19) Acetonitrile	2.627	40	37375	181.22	ppb		95
20) Allyl Chloride	2.670	76	37861	20.08	ppb		92
21) Methyl Acetate	2.688	43	83155	18.93	ppb		99
22) Methylene Chloride	2.786	84	73146	18.64	ppb		97
23) TBA	2.908	59	287475	430.60	ppb		99
24) Acrylonitrile	3.036	53	226586	106.12	ppb		96
25) Methyl-t-Butyl Ether	3.085	73	255629	20.94	ppb		99
26) trans-1,2-Dichloroethene	3.073	96	62086	17.71	ppb		91
28) 1,1-Diclethane	3.572	63	127149	19.55	ppb		97
29) Vinyl Acetate	3.670	86	17810	22.18	ppb	#	69
30) DIPE	3.700	45	246544	20.95	ppb		99
31) 2-Chloro-1,3-Butadiene	3.694	53	93808	18.44	ppb		96
32) ETBE	4.225	59	226229	19.23	ppb		92
33) 2,2-Dichloropropane	4.402	77	93200	18.20	ppb		98
34) cis-1,2-Dichloroethene	4.408	96	78486	19.96	ppb		92
35) 2-Butanone	4.450	43	55173	20.29	ppb		100
36) Propionitrile	4.530	54	93535	105.73	ppb		96
37) Bromochloromethane	4.798	130	46537	19.07	ppb		90
38) Methacrylonitrile	4.798	67	47570	20.67	ppb		84
39) Tetrahydrofuran	4.895	42	35864	20.36	ppb		88
40) Chloroform	4.975	83	112913	19.34	ppb		90
41) 1,1,1-Trichloroethane	5.273	97	86002	18.92	ppb		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24357.D
Acq On : 21 Feb 2019 11:24 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:07:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.109	73	235440	21.10	ppb	97
44) Cyclohexane	5.359	41	66161	20.94	ppb	89
46) Carbontetrachloride	5.542	117	63868	17.80	ppb	91
47) 1,1-Dichloropropene	5.560	75	86548	18.80	ppb	96
49) Benzene	5.871	78	285072	18.52	ppb	99
50) 1,2-Dichloroethane	5.913	62	94447	19.17	ppb	97
51) Iso-Butyl Alcohol	5.883	43	118898	368.51	ppb	99
52) n-Heptane	6.358	43	87400	18.64	ppb	96
53) 1-Butanol	6.840	56	208922	981.08	ppb	99
54) Trichloroethene	6.816	130	68609	18.21	ppb	95
55) Methylcyclohexane	7.047	55	98490	20.71	ppb	88
56) 1,2-Diclpropane	7.090	63	75695	18.51	ppb	98
57) Dibromomethane	7.230	93	42905	18.53	ppb	95
58) 1,4-Dioxane	7.291	88	34650	474.87	ppb	93
59) Methyl Methacrylate	7.322	69	74404	20.36	ppb	95
60) Bromodichloromethane	7.462	83	78206	18.17	ppb	98
61) 2-Nitropropane	7.736	41	34044	39.85	ppb	90
63) cis-1,3-Dichloropropene	8.005	75	115938	19.06	ppb	96
64) 4-Methyl-2-pentanone	8.206	43	104483	20.13	ppb	97
66) Toluene	8.370	91	294038	18.45	ppb	96
67) trans-1,3-Dichloropropene	8.639	75	104857	19.68	ppb	98
68) Ethyl Methacrylate	8.785	69	126229	20.57	ppb	94
69) 1,1,2-Trichloroethane	8.828	97	68243	18.28	ppb	96
72) Tetrachloroethene	8.968	164	50758	18.44	ppb	93
73) 2-Hexanone	9.120	43	75831	20.47	ppb	98
74) 1,3-Dichloropropane	8.998	76	128893	19.47	ppb	98
75) Dibromochloromethane	9.224	129	58496	18.95	ppb	98
76) N-Butyl Acetate	9.273	43	138559	20.48	ppb	100
77) 1,2-Dibromoethane	9.321	107	70730	19.59	ppb	99
78) Chlorobenzene	9.815	112	183549	18.65	ppb	97
79) 3-CBTF	9.833	180	105602	22.01	ppb	98
80) 4-CBTF	9.888	180	92950	21.43	ppb	92
81) 1,1,1,2-Tetrachloroethane	9.900	131	61214	19.22	ppb	98
82) Ethylbenzene	9.937	106	95916	18.08	ppb	99
83) (m+p)Xylene	10.047	106	240657	37.10	ppb	99
84) o-Xylene	10.406	106	118852	18.62	ppb	89
85) Styrene	10.419	104	202987	19.62	ppb	98
87) Bromoform	10.571	173	38638	18.95	ppb	99
88) 2-CBTF	10.650	180	102456	20.67	ppb	97
89) Isopropylbenzene	10.742	105	289959	18.25	ppb	99
90) Cyclohexanone	10.797	55	96627	95.96	ppb	97
91) trans-1,4-Dichloro-2-B...	11.047	53	26784	20.37	ppb	97
92) 1,1,2,2-Tetrachloroethane	10.998	83	101338	19.12	ppb	99
93) Bromobenzene	10.986	156	78333	18.33	ppb	95
94) 1,2,3-Trichloropropane	11.028	110	32301	19.21	ppb	91
95) n-Propylbenzene	11.095	91	335826	18.45	ppb	99
96) 2-Chlorotoluene	11.156	91	208125	18.15	ppb	99
97) 3-Chlorotoluene	11.211	91	236287	21.06	ppb	97
98) 4-Chlorotoluene	11.254	91	235667	18.43	ppb	95
99) 1,3,5-Trimethylbenzene	11.248	105	237072	17.98	ppb	100
100) tert-Butylbenzene	11.522	119	206327	17.99	ppb	97
101) 1,2,4-Trimethylbenzene	11.559	105	245026	17.97	ppb	99
102) 3,4-DCBTF	11.620	214	82973	20.30	ppb	96
103) sec-Butylbenzene	11.705	105	307067	18.47	ppb	100
104) p-Isopropyltoluene	11.827	119	251904	18.24	ppb	98
105) 1,3-Dclbenz	11.784	146	139009	17.86	ppb	97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24357.D
Acq On : 21 Feb 2019 11:24 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:07:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	143477	17.47	ppb	99
107) 2,4-DCBTF	11.912	214	77251	20.64	ppb	98
108) 2,5-DCBTF	11.955	214	85353	20.22	ppb	97
109) n-Butylbenzene	12.156	91	237407	19.61	ppb	99
110) 1,2-Dclbenz	12.156	146	144537	18.16	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.784	157	24572	18.82	ppb	88
112) Trielution Dichlorotol...	12.900	125	424904	64.88	ppb	95
113) 1,3,5 Trichlorobenzene	12.955	180	121626	21.22	ppb	98
114) Coelution Dichlorotoluene	13.229	125	315672	43.70	ppb	98
115) 1,2,4-Tcbenzene	13.436	180	112032	20.06	ppb	97
116) Hexachlorobt	13.577	225	43817	18.61	ppb	96
117) Naphthalen	13.625	128	338432	17.36	ppb	100
118) 1,2,3-Tclbenzene	13.814	180	113863	19.77	ppb	99
119) 2,4,5-Trichlorotolene	14.400	159	49524	20.40	ppb	95
120) 2,3,6-Trichlorotoluene	14.485	159	48158	17.41	ppb	98

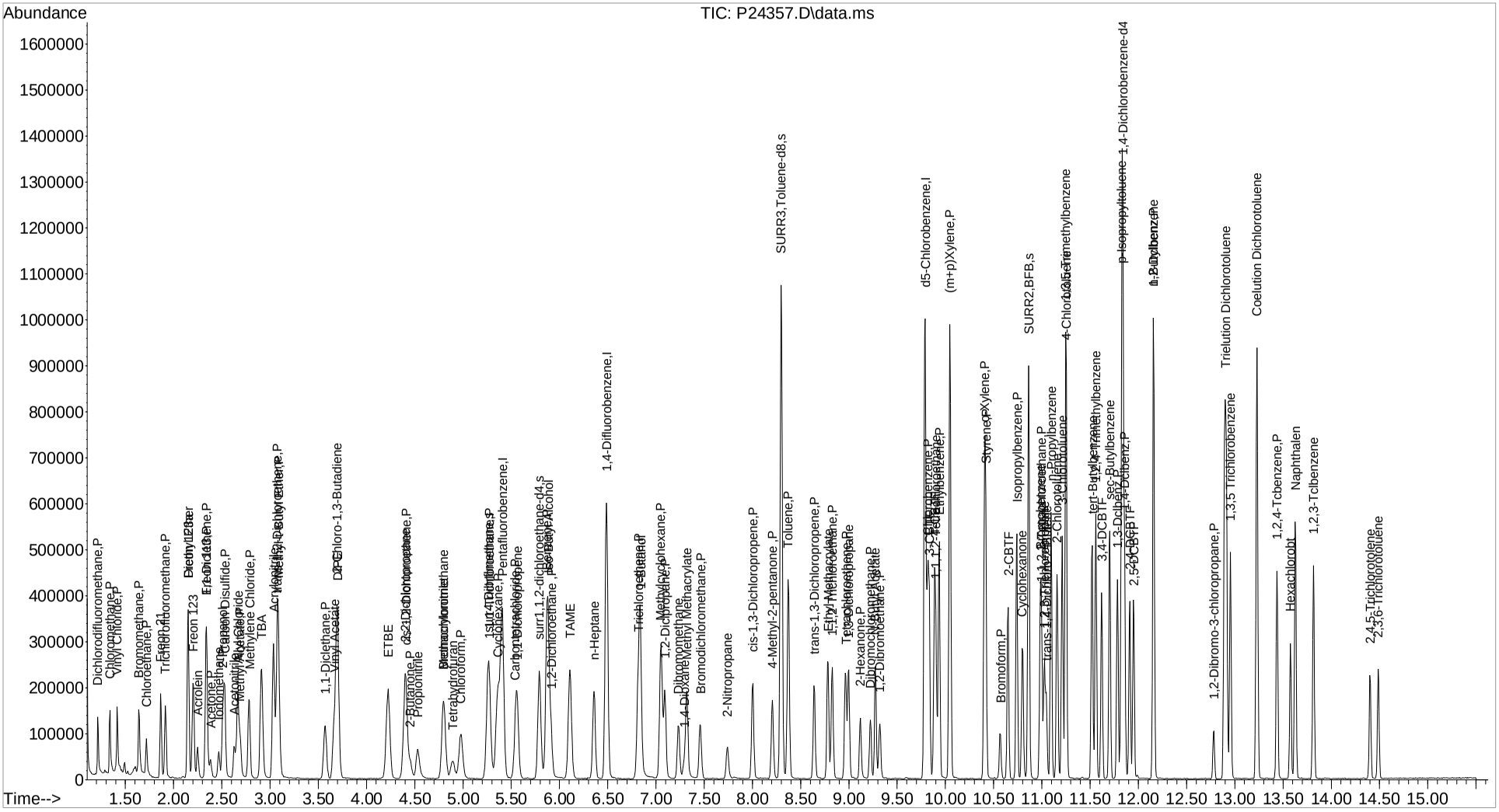
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 02/21/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24357.D
Acq On : 21 Feb 2019 11:24 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

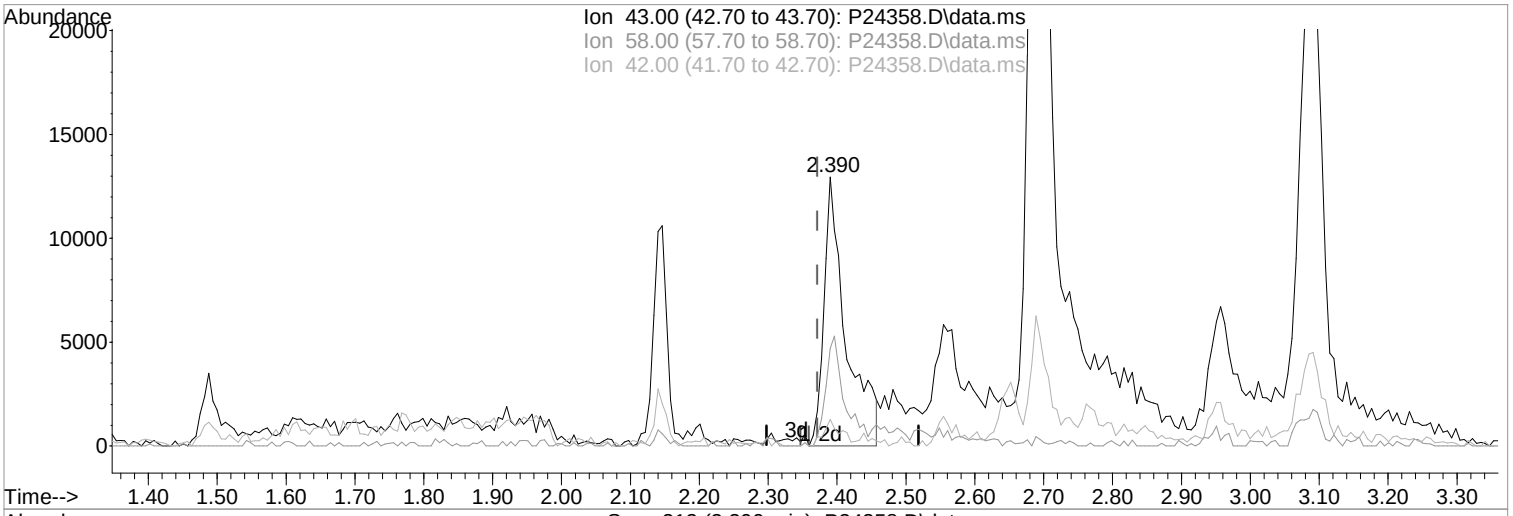
Quant Time: Feb 21 12:07:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

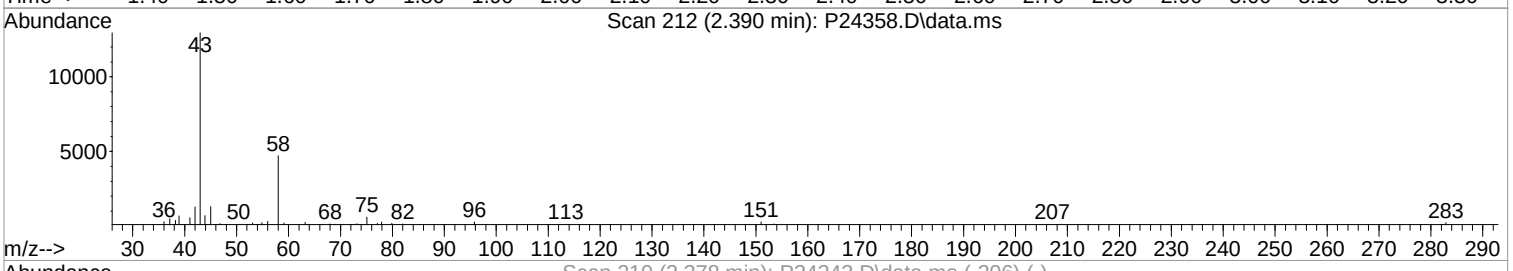


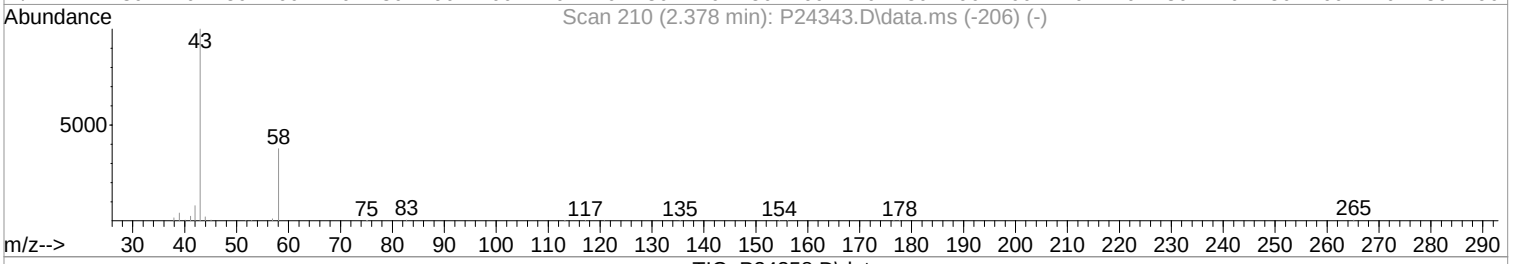
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(15) Acetone (P)

2.390min (+0.018) 18.63 ppb m

response 28982

Ion	Exp%	Act%
43.00	100	100
58.00	38.10	36.37
42.00	7.80	9.91
0.00	0.00	0.00

Manual Integration:

After

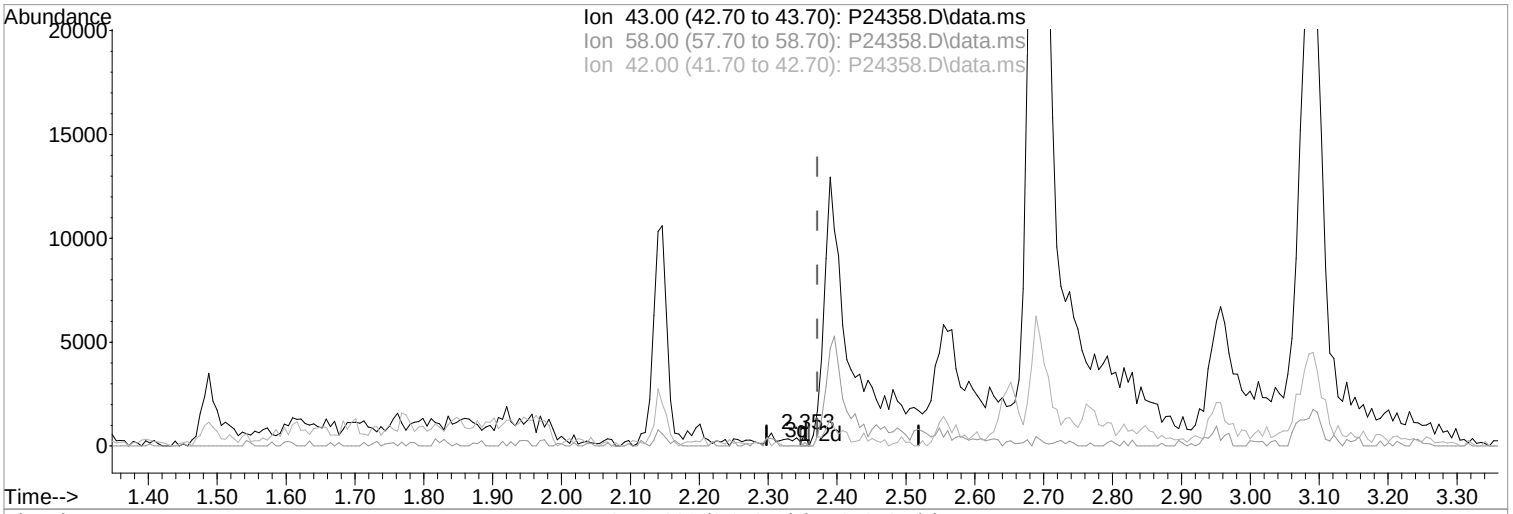
Peak not found.

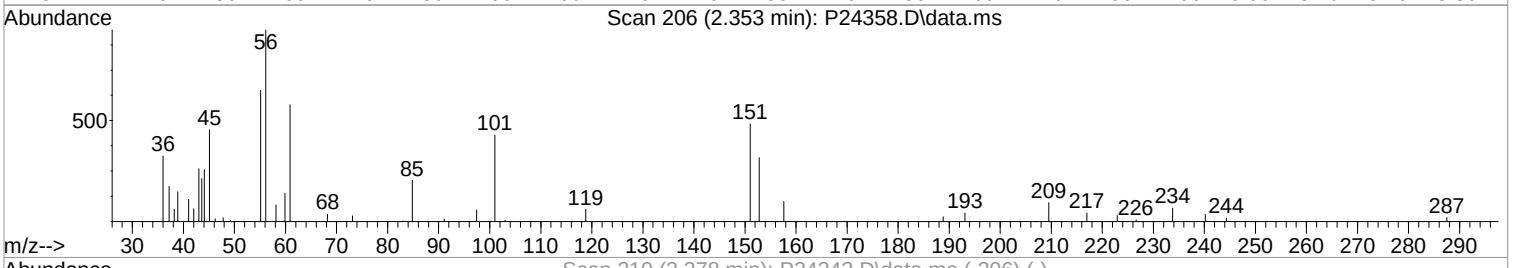
02/21/19

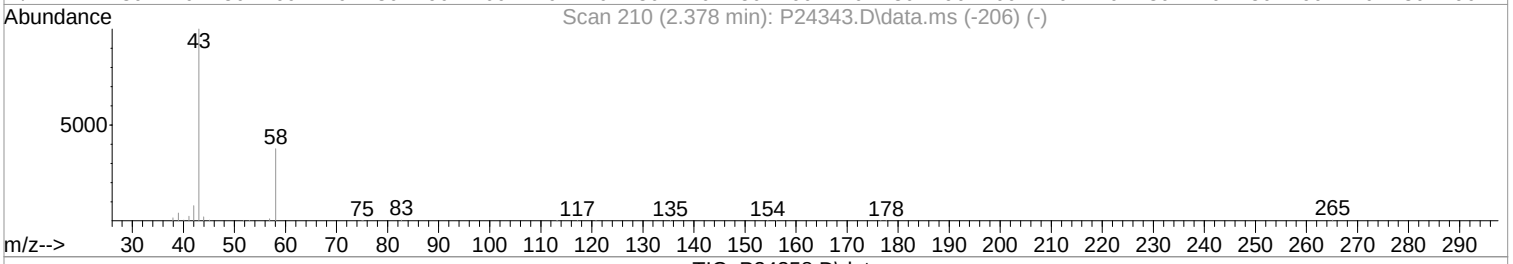
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(15) Acetone (P)

2.353min (-0.018) 0.14 ppb

response 212

Ion	Exp%	Act%
43.00	100	100
58.00	38.10	28.50
42.00	7.80	25.91
0.00	0.00	0.00

Manual Integration:

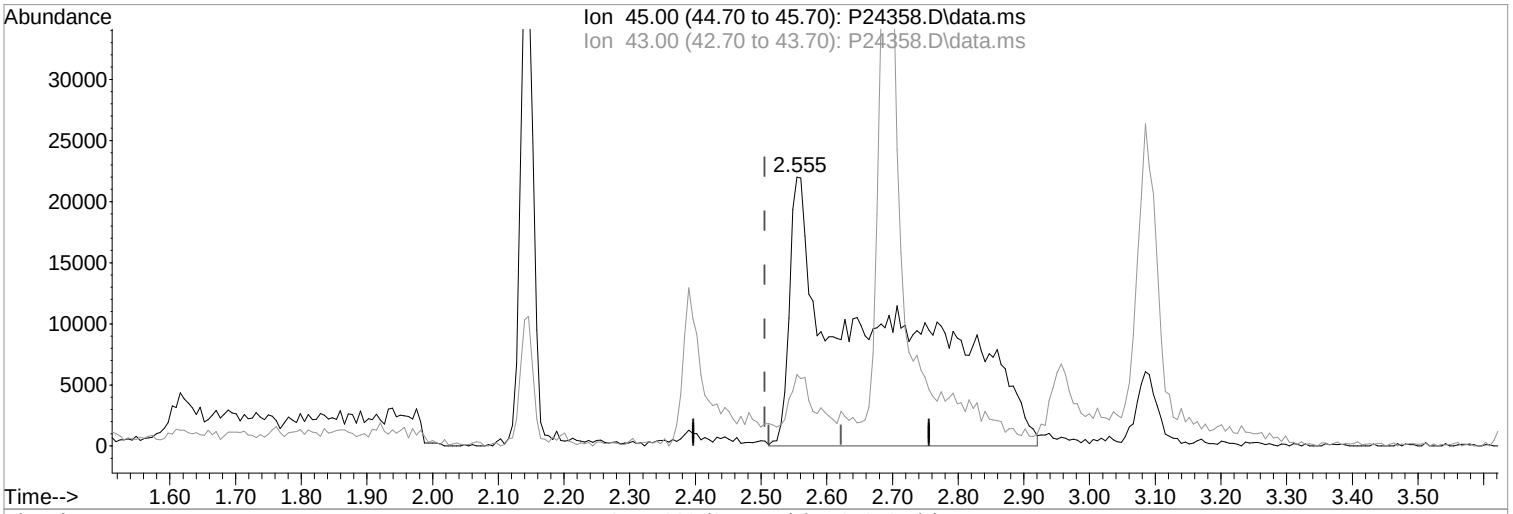
Before

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(16) 2-Propanol

2.555min (+0.049) 522.92 ppb m

response 211151

Ion	Exp%	Act%
45.00	100	100
43.00	18.50	26.55
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

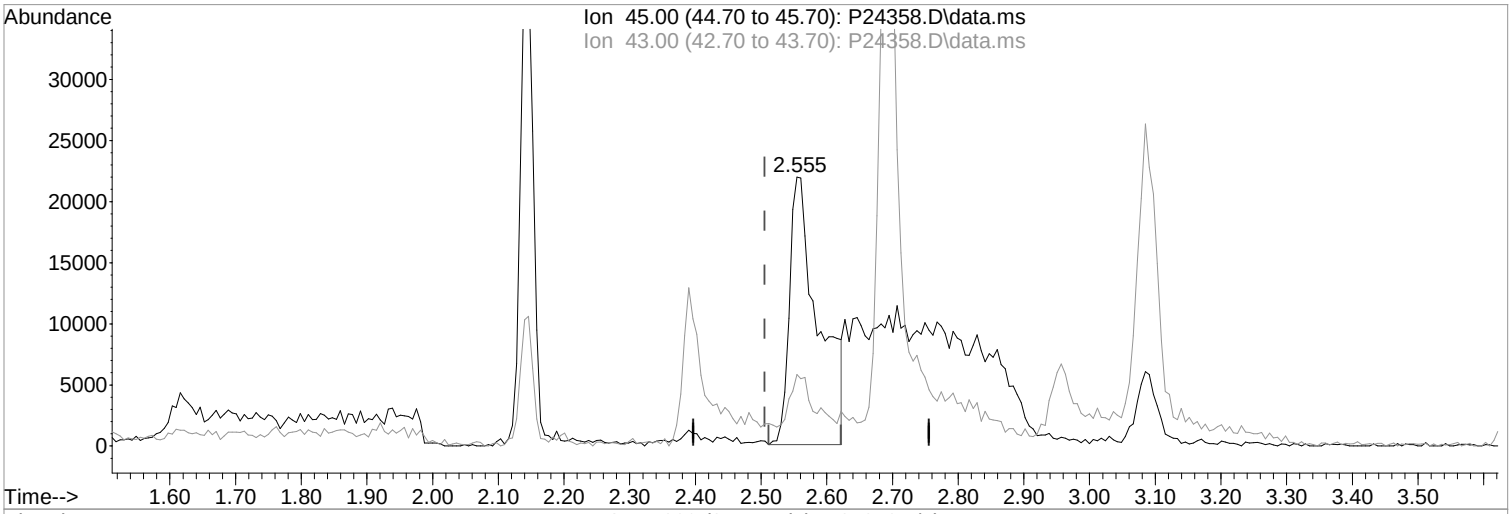
Poor integration.

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(16) 2-Propanol

2.555min (+0.049) 165.47 ppb

response 66814

Ion	Exp%	Act%
45.00	100	100
43.00	18.50	26.55
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

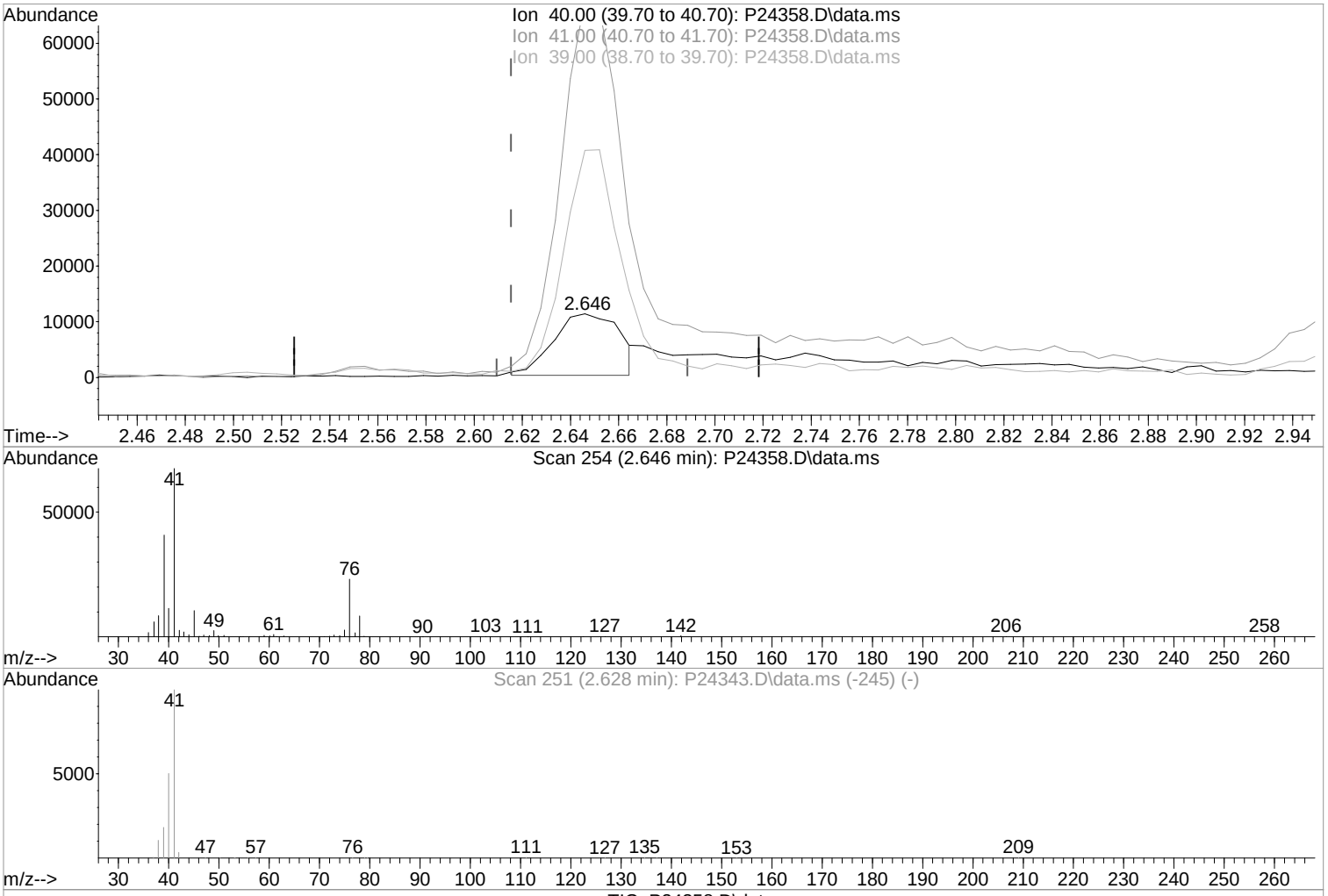
Before

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(19) Acetonitrile

2.646min (+0.031) 106.29 ppb m

response 21072

Ion	Exp%	Act%
40.00	100	100
41.00	199.30	592.11#
39.00	38.60	357.37#
0.00	0.00	0.00

Manual Integration:

After

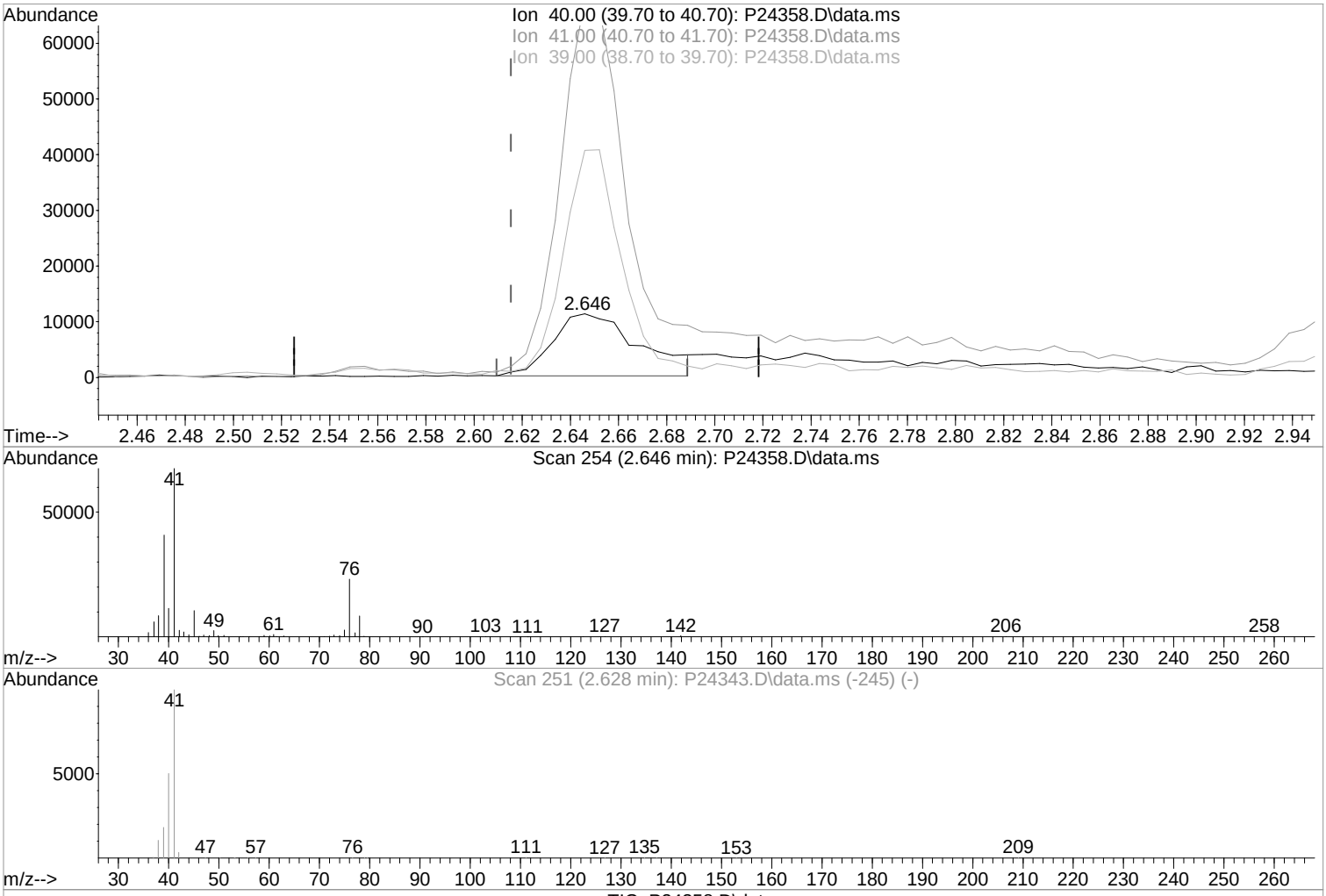
Poor integration.

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(19) Acetonitrile

2.646min (+0.031) 140.80 ppb

response 27914

Ion	Exp%	Act%
40.00	100	100
41.00	199.30	592.11#
39.00	38.60	357.37#
0.00	0.00	0.00

Manual Integration:

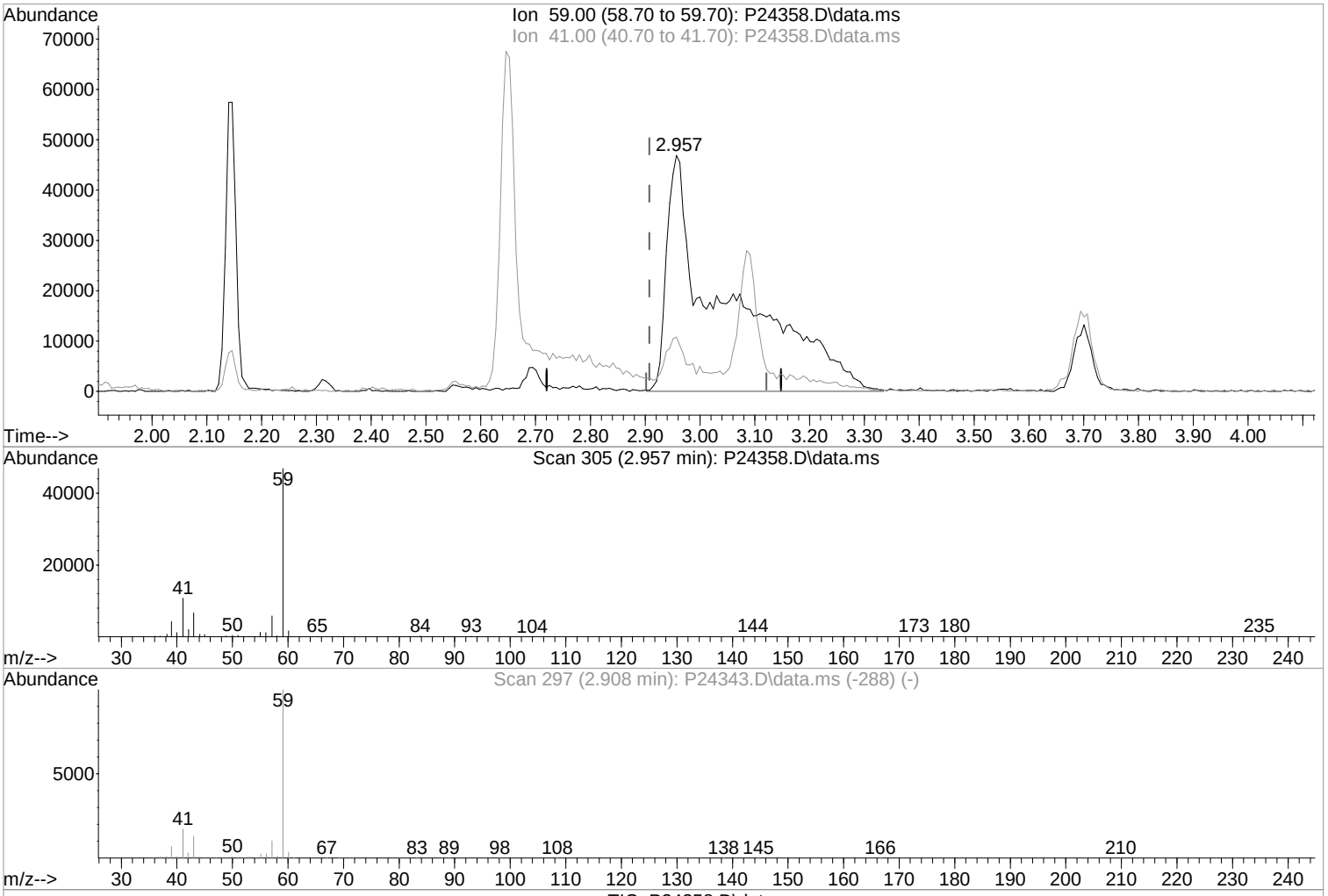
Before

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(23) TBA

2.957min (+0.049) 547.71 ppb m

response 351486

Ion	Exp%	Act%
59.00	100	100
41.00	18.20	22.96
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

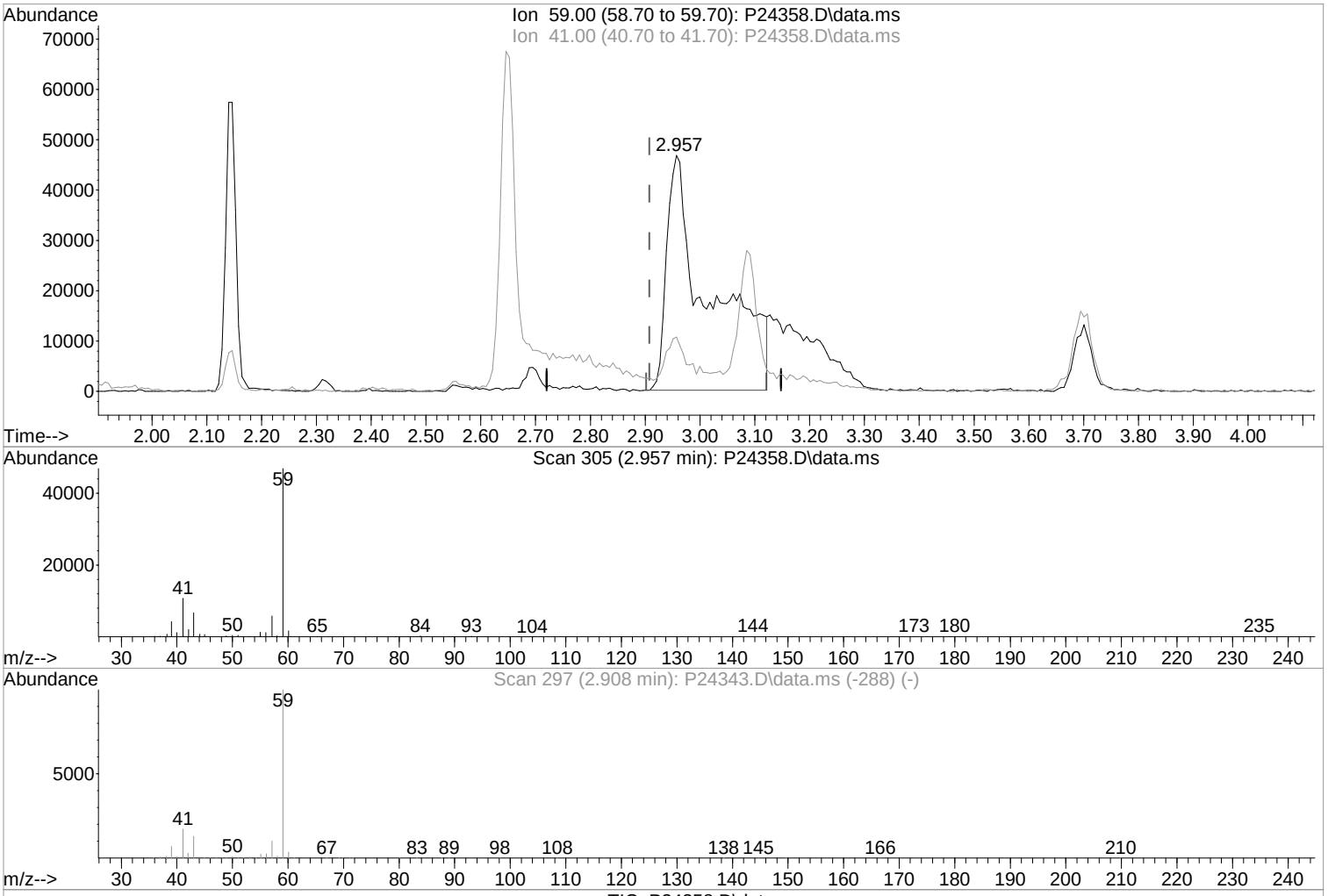
Poor integration.

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(23) TBA

2.957min (+0.049) 397.65 ppb

response 255187

Ion	Exp%	Act%
59.00	100	100
41.00	18.20	22.96
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

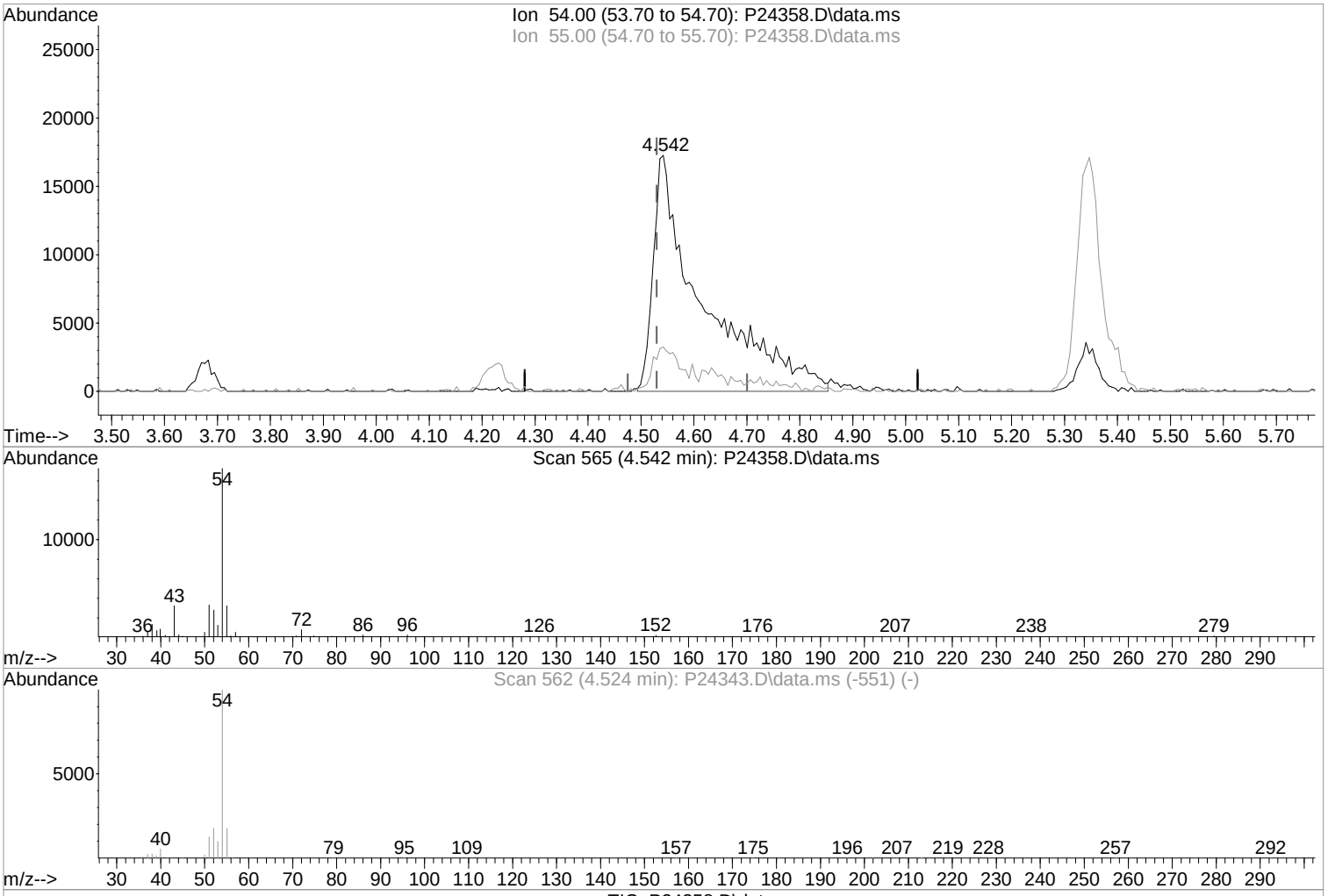
Before

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(36) Propionitrile

4.542min (+0.012) 130.53 ppb m

response 110998

Ion	Exp%	Act%
54.00	100	100
55.00	18.00	18.83
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

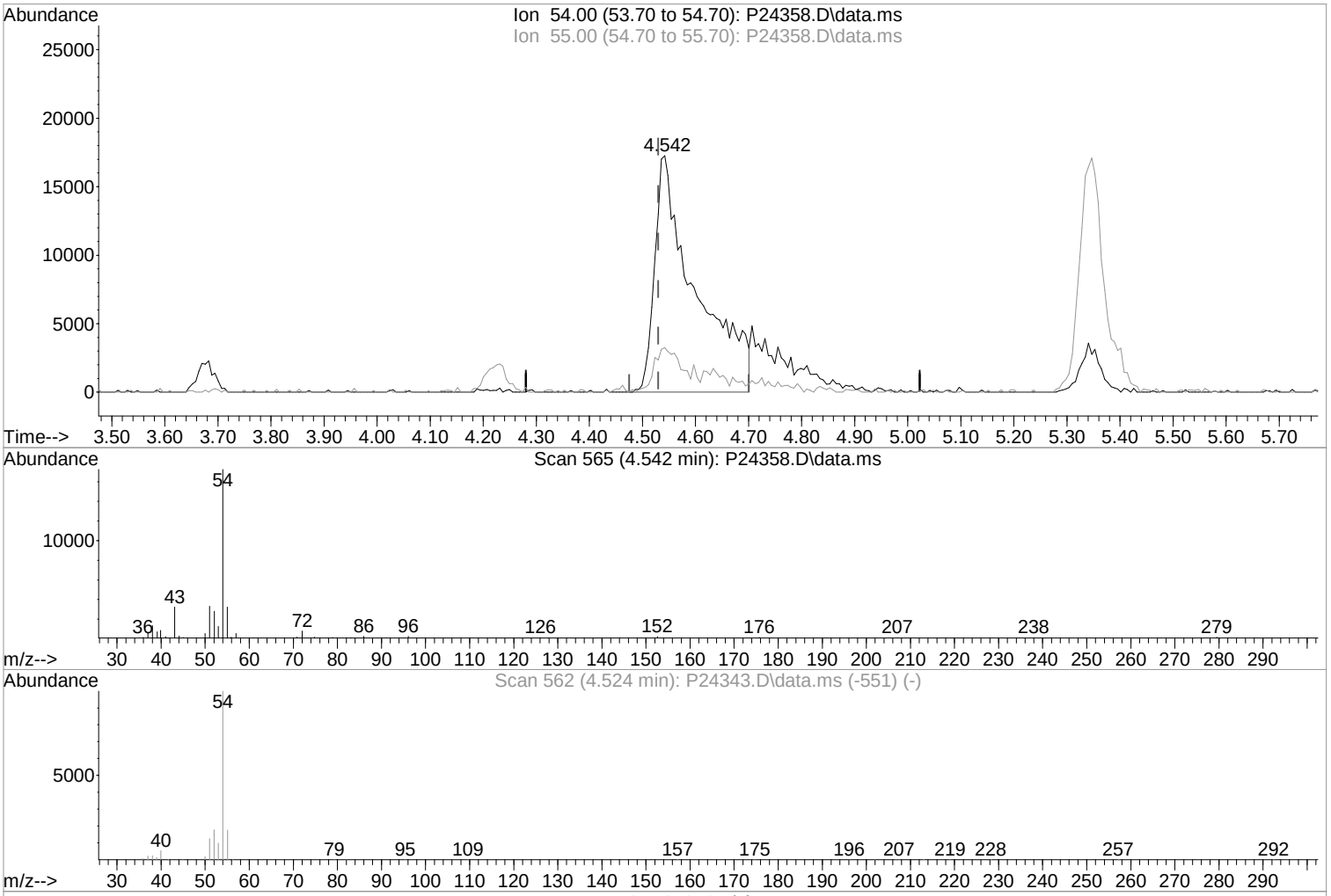
Poor integration.

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(36) Propionitrile

4.542min (+0.012) 107.62 ppb

response 91513

Ion	Exp%	Act%
54.00	100	100
55.00	18.00	18.83
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

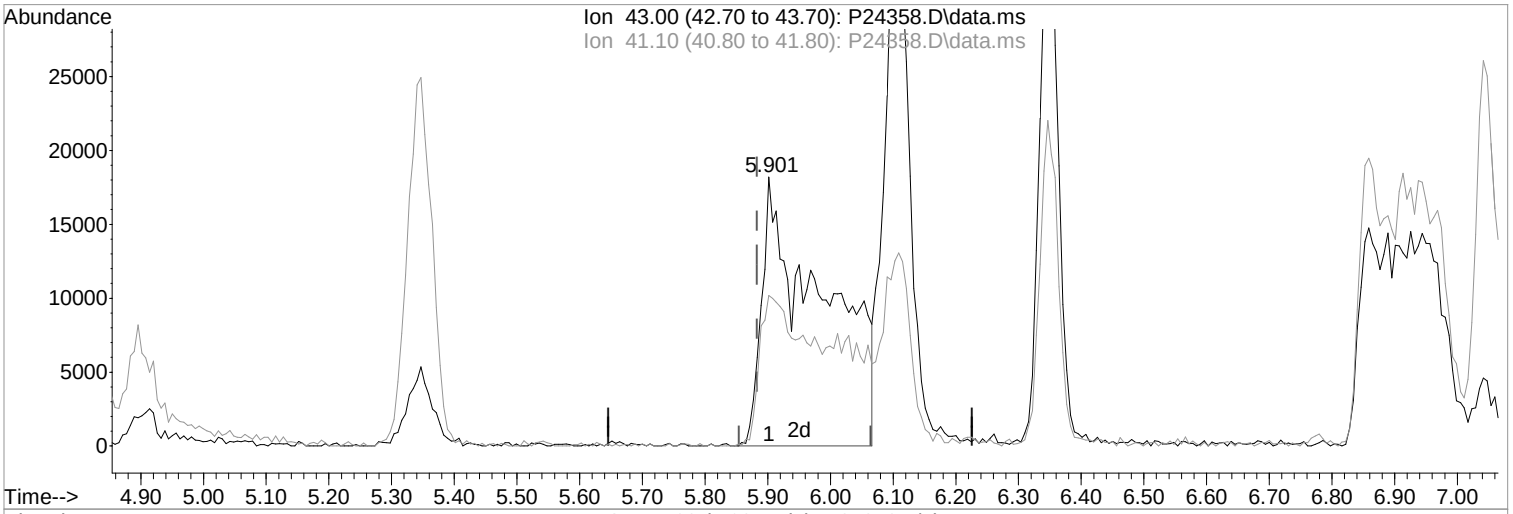
Before

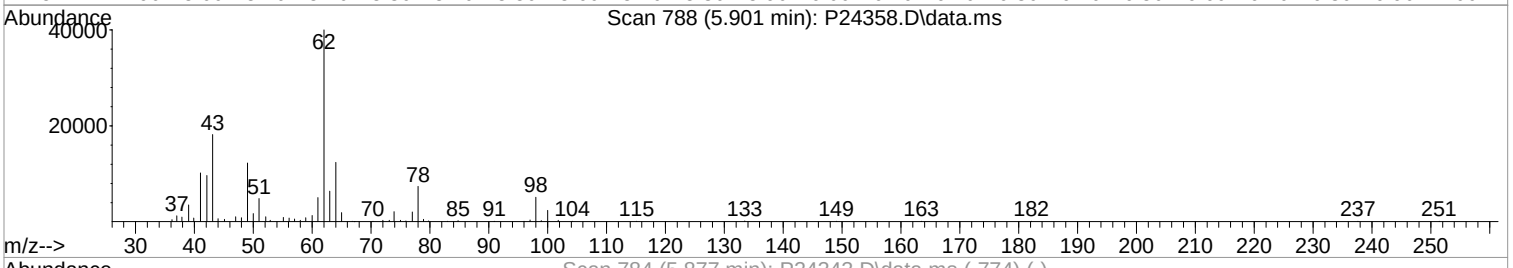
02/21/19

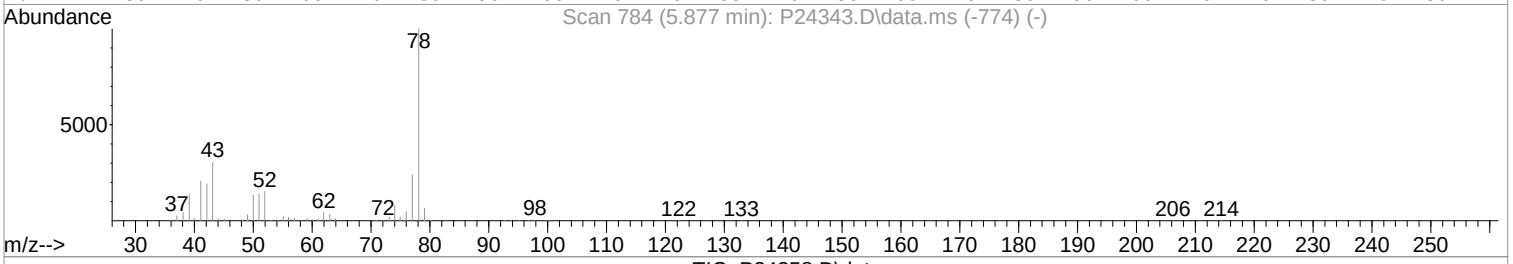
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(51) Iso-Butyl Alcohol

5.901min (+0.018) 391.55 ppb m

response 123197

Ion	Exp%	Act%
43.00	100	100
41.10	67.00	55.96
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

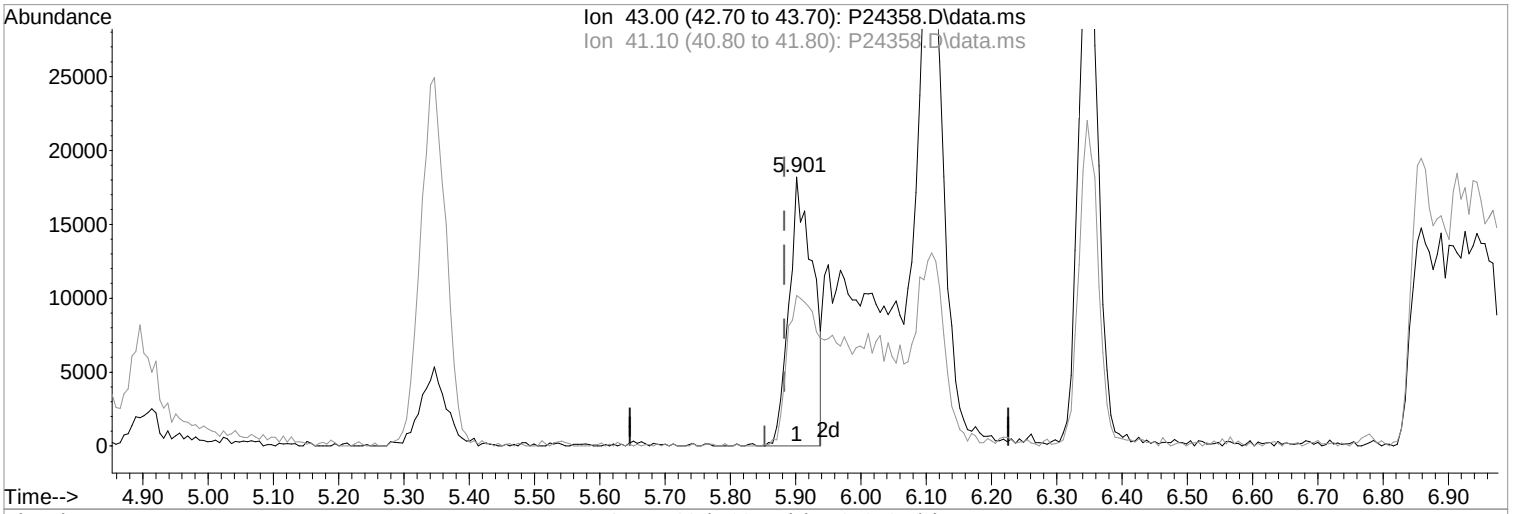
Poor integration.

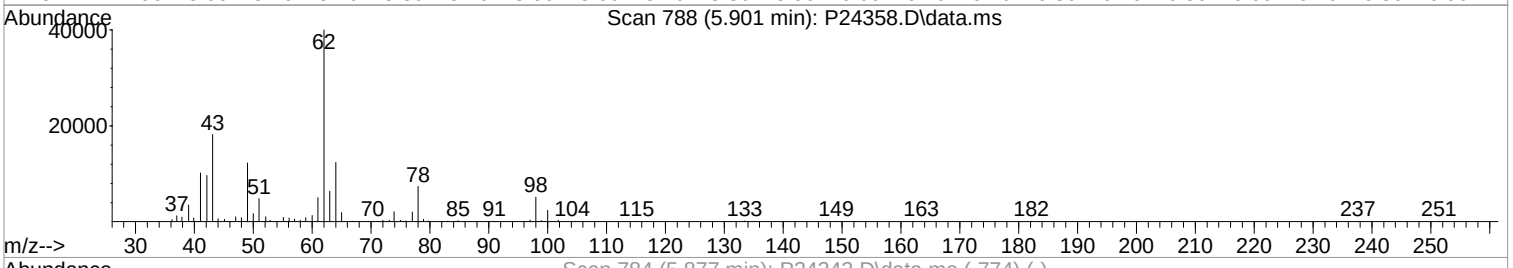
02/21/19

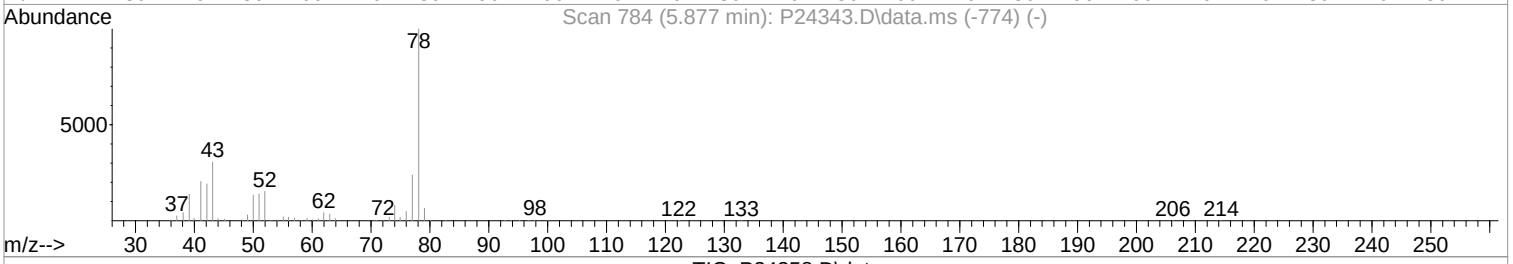
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(51) Iso-Butyl Alcohol

5.901min (+0.018) 146.31 ppb

response 46036

Ion	Exp%	Act%
43.00	100	100
41.10	67.00	55.96
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

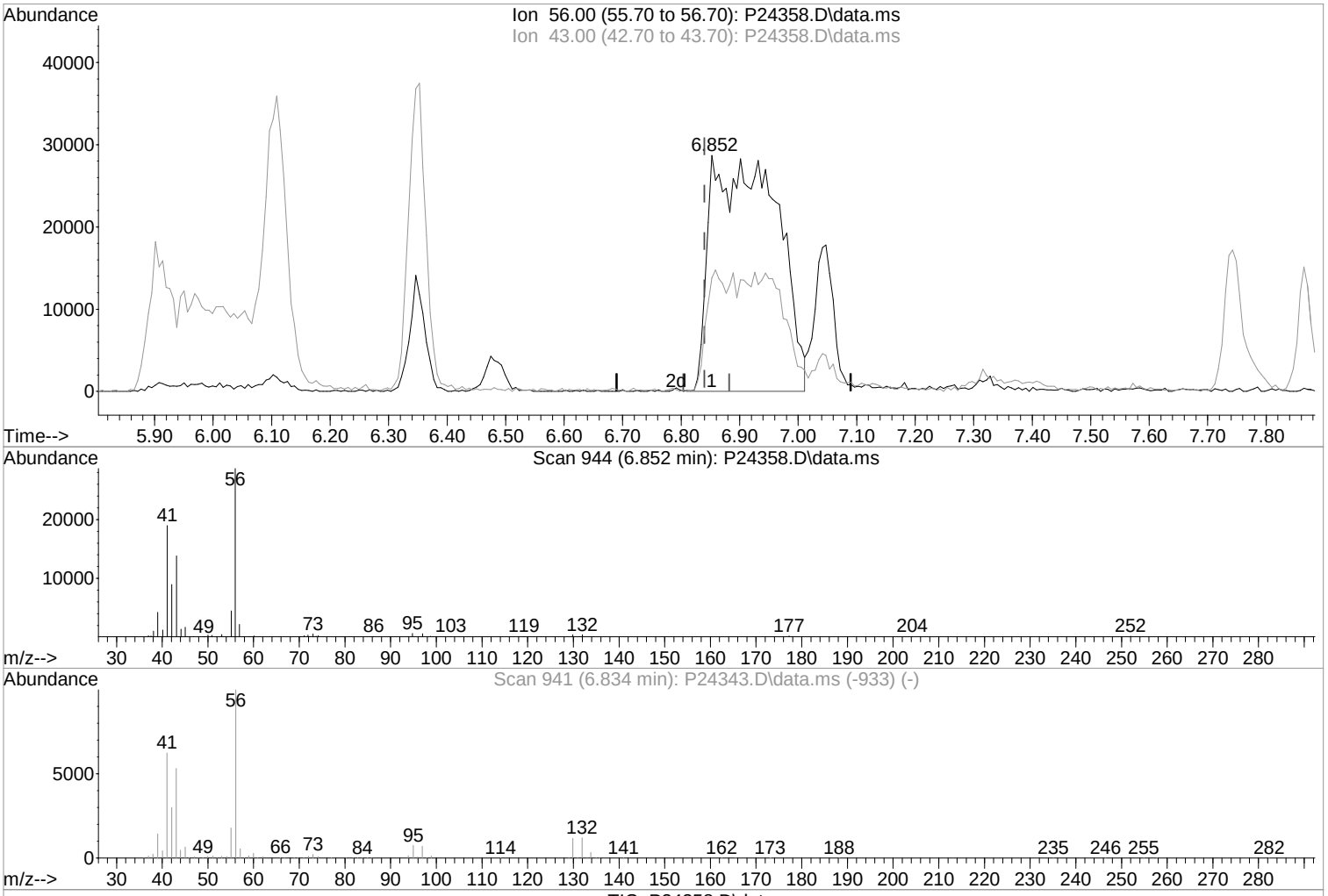
Before

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(53) 1-Butanol

6.852min (+0.012) 1098.07 ppb m

response 228029

Ion	Exp%	Act%
56.00	100	100
43.00	54.40	52.98
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

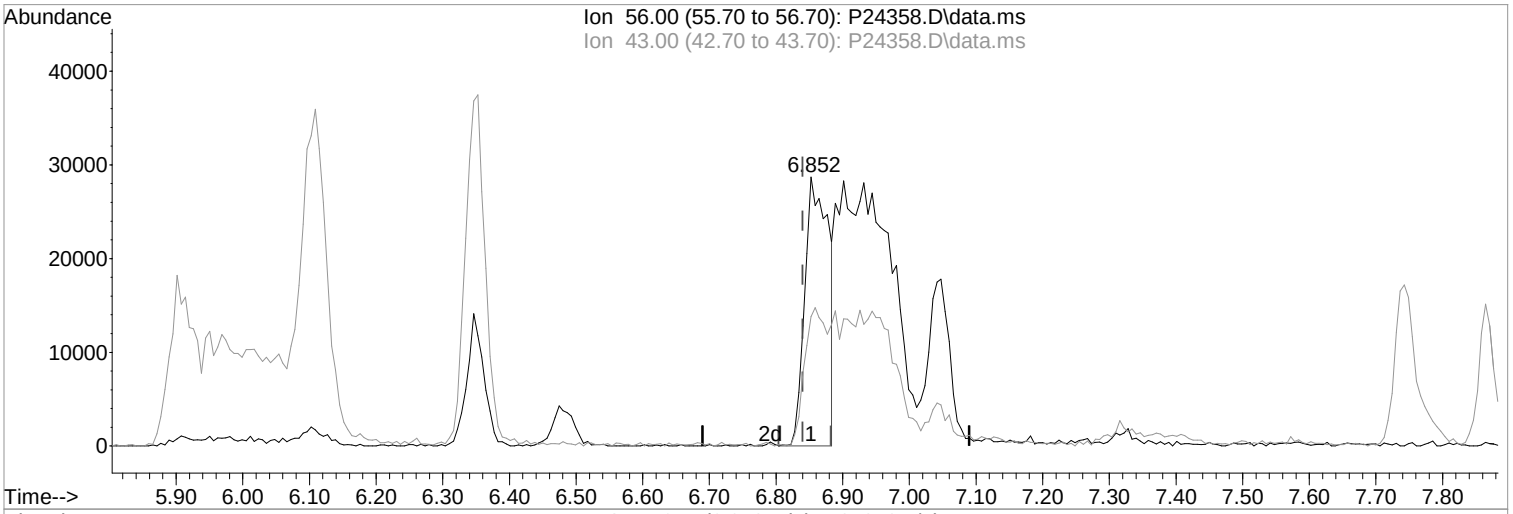
Poor integration.

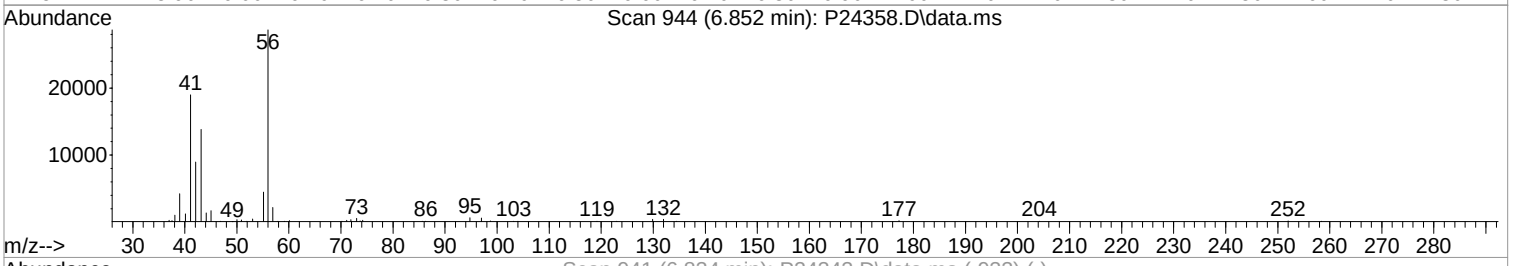
02/21/19

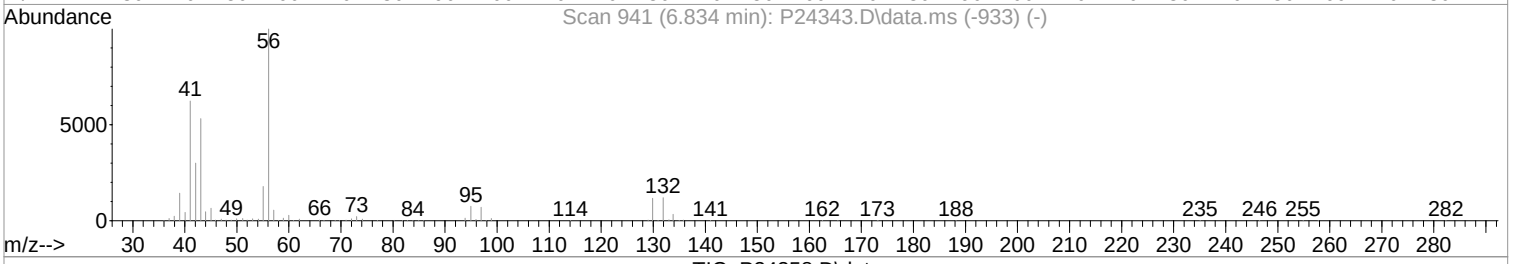
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(53) 1-Butanol

6.852min (+0.012) 339.10 ppb

response 70418

Ion	Exp%	Act%
56.00	100	100
43.00	54.40	171.56#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

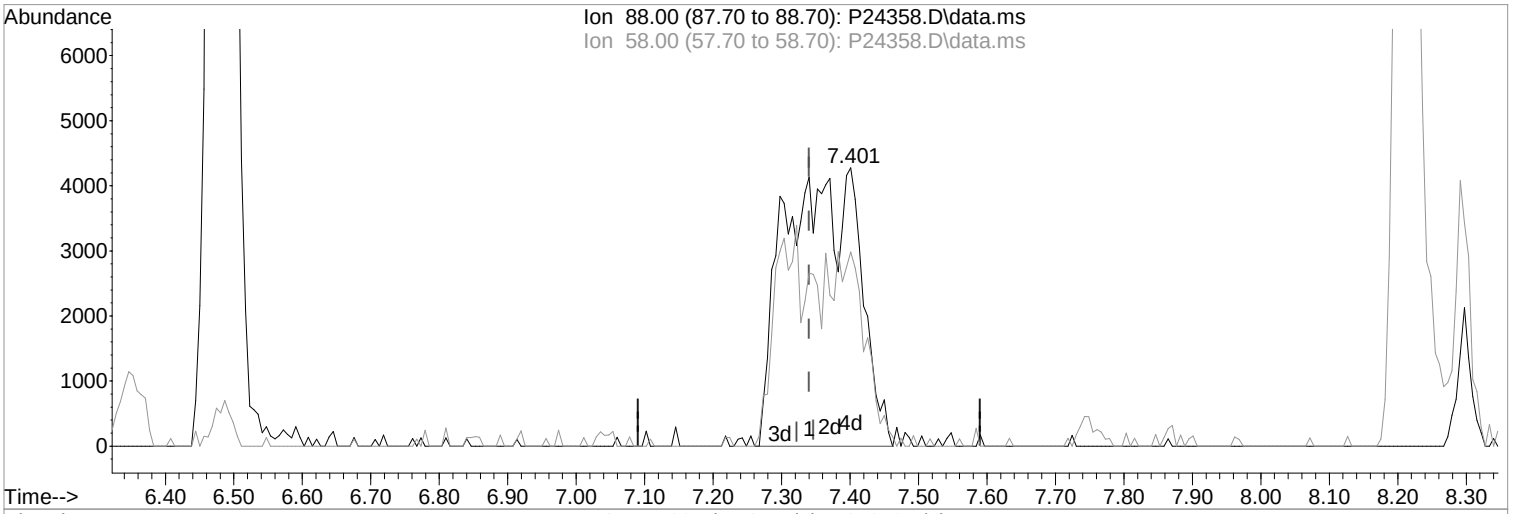
Before

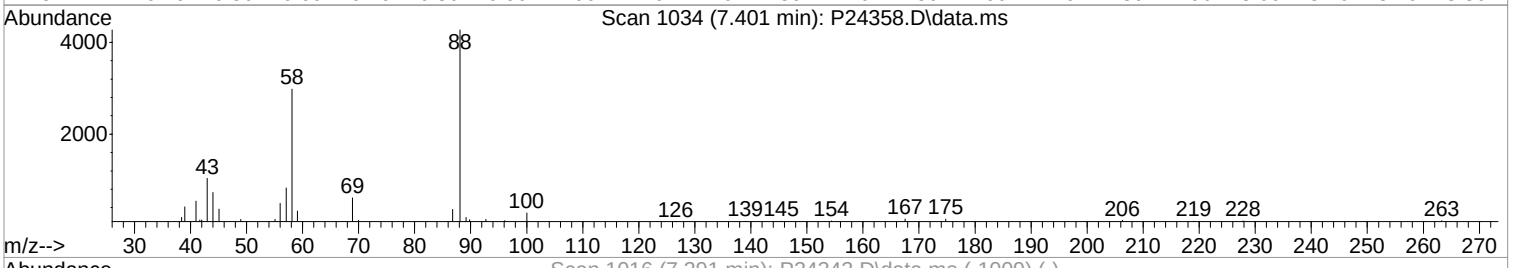
02/21/19

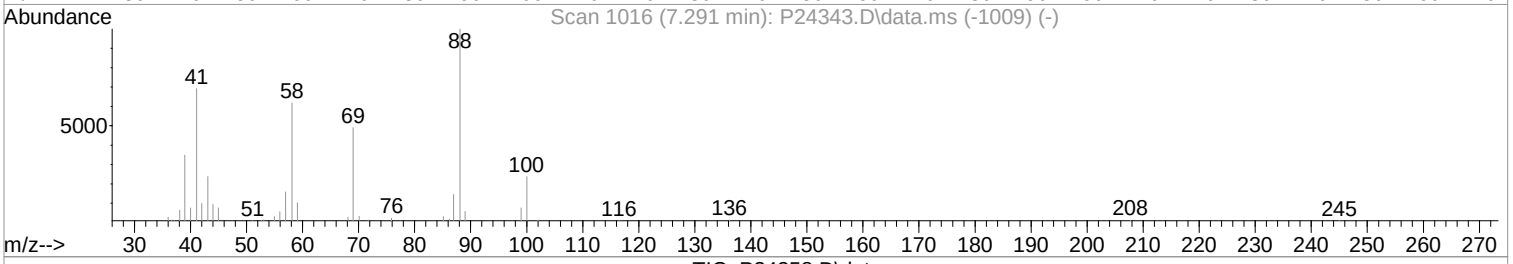
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(58) 1,4-Dioxane

7.401min (+0.061) 452.02 ppb m

response 32164

Ion	Exp%	Act%
88.00	100	100
58.00	63.20	69.79
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

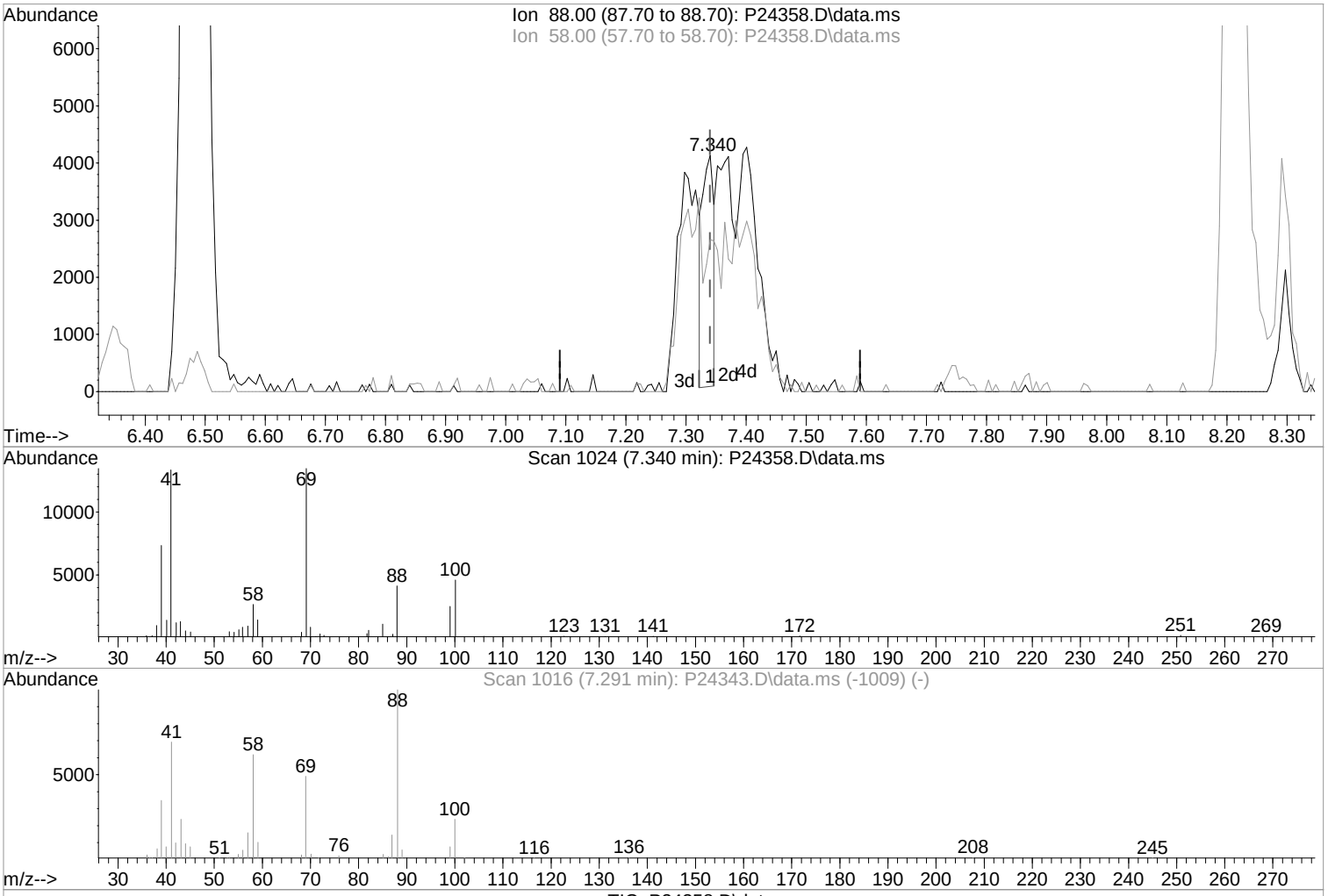
Poor integration.

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(58) 1,4-Dioxane

7.340min (+0.000) 74.16 ppb

response 5277

Ion	Exp%	Act%
88.00	100	100
58.00	63.20	64.32
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

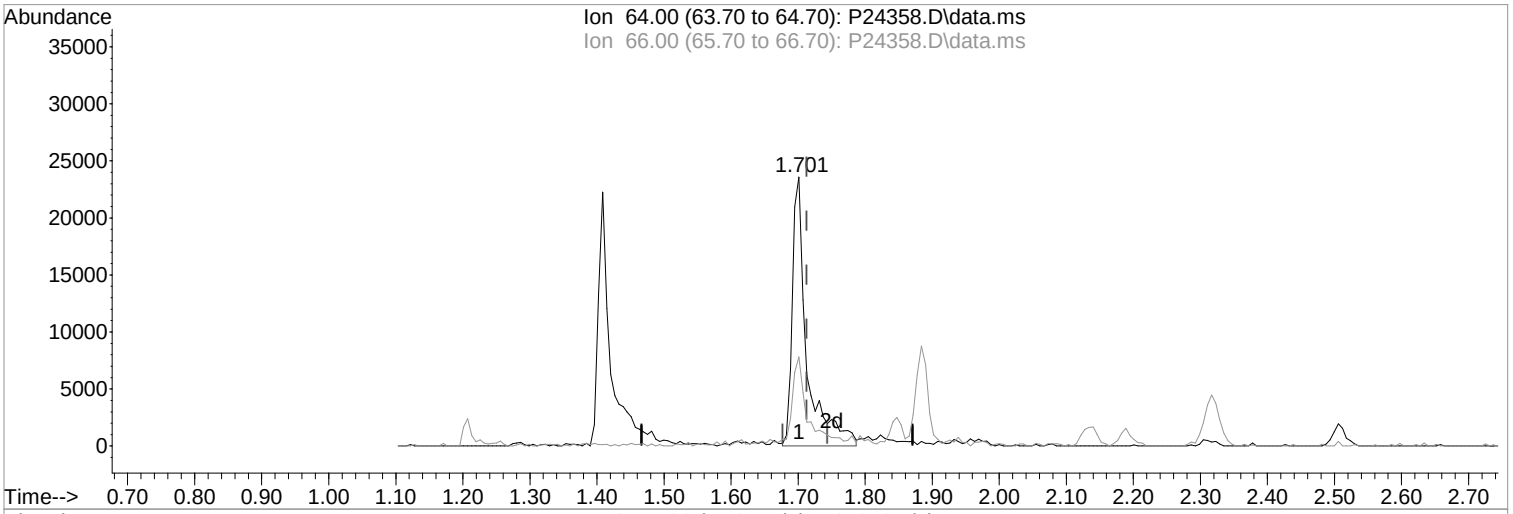
Before

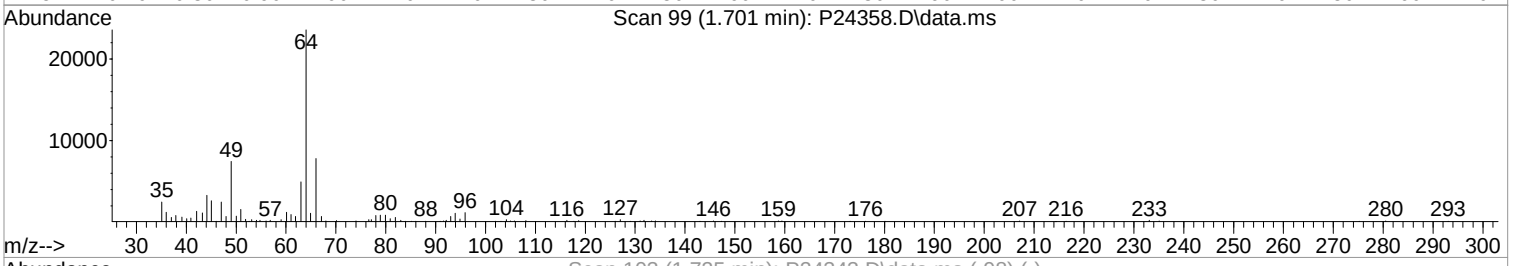
02/21/19

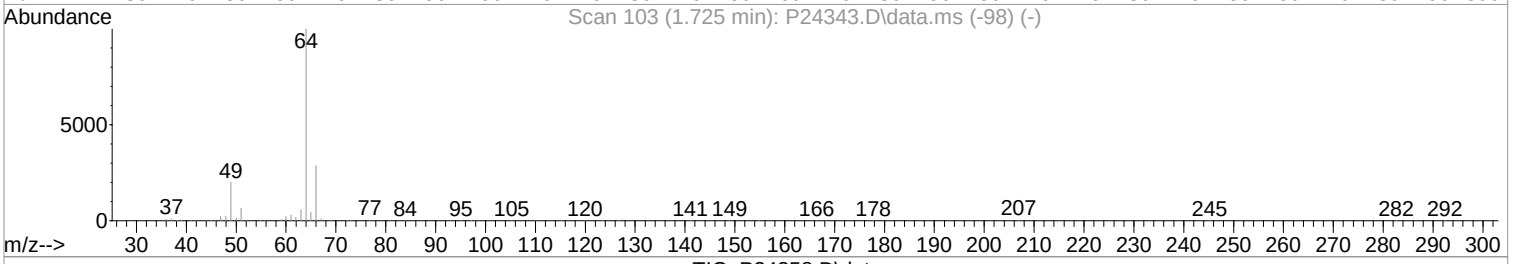
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(6) Chloroethane (P)

1.701min (-0.012) 12.47 ppb m

response 35635

Ion	Exp%	Act%
64.00	100	100
66.00	28.70	33.14
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

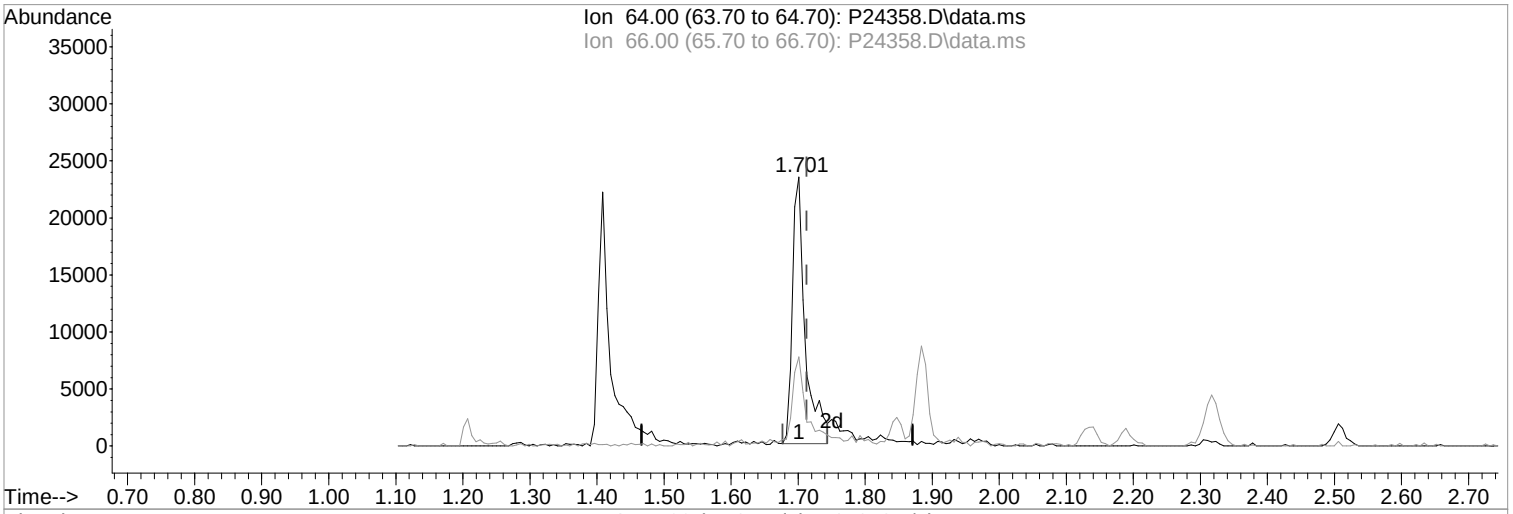
Poor integration.

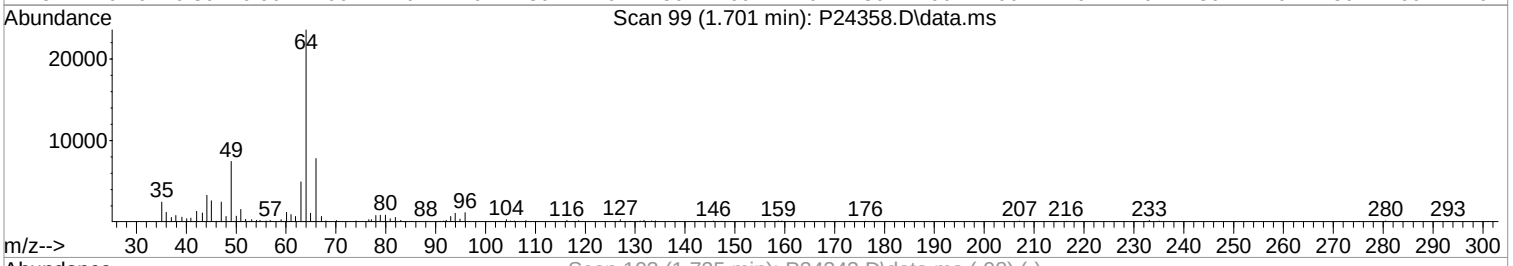
02/21/19

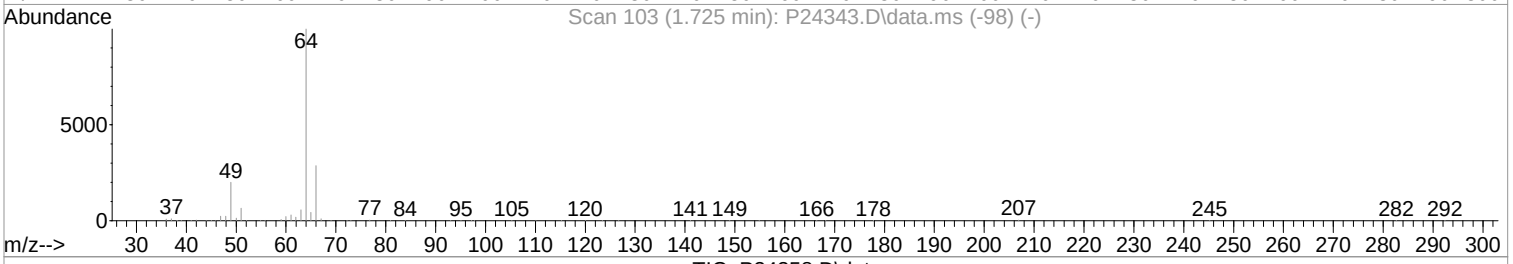
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(6) Chloroethane (P)

1.701min (-0.012) 10.89 ppb

response 31103

Ion	Exp%	Act%
64.00	100	100
66.00	28.70	33.14
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/21/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:12:15 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.395	168	324805	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.481	114	525448	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	457597	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	237787	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	145806	50.50	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.00%				
48) surr1,1,2-dichloroetha...	5.786	65	192314	52.51	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 105.02%				
65) SURR3,Toluene-d8	8.297	98	688084	50.24	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.48%				
70) SURR2,BFB	10.864	95	243906	49.72	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.44%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	66516	16.91	ppb		98
3) Chloromethane	1.329	50	96694	18.39	ppb		97
4) Vinyl Chloride	1.408	62	90695	19.21	ppb		100
5) Bromomethane	1.628	94	65994	22.86	ppb		96
6) Chloroethane	1.701	64	35635m	12.47	ppb		
7) Freon 21	1.847	67	126118	21.16	ppb		95
8) Trichlorofluoromethane	1.884	101	87605	19.13	ppb		99
9) Diethyl Ether	2.140	59	75883	21.66	ppb		98
10) Freon 123a	2.134	67	82535	21.73	ppb		96
11) Freon 123	2.189	83	104839	24.04	ppb		96
12) Acrolein	2.250	56	39484	44.11	ppb		82
13) 1,1-Diclethene	2.317	96	58802	19.41	ppb		96
14) Freon 113	2.317	101	49631	18.39	ppb		96
15) Acetone	2.390	43	28982m	18.63	ppb		
16) 2-Propanol	2.555	45	211151m	522.92	ppb		
17) Iodomethane	2.451	142	44772	12.07	ppb		96
18) Carbon Disulfide	2.506	76	196088	21.60	ppb		97
19) Acetonitrile	2.646	40	21072m	106.29	ppb		
20) Allyl Chloride	2.652	76	36691	20.24	ppb		94
21) Methyl Acetate	2.695	43	101133	23.95	ppb		99
22) Methylene Chloride	2.774	84	65821	17.45	ppb		94
23) TBA	2.957	59	351486m	547.71	ppb		
24) Acrylonitrile	3.036	53	249442	121.54	ppb		98
25) Methyl-t-Butyl Ether	3.091	73	260755	22.22	ppb		99
26) trans-1,2-Dichloroethene	3.061	96	63673	18.89	ppb		92
28) 1,1-Diclethane	3.554	63	127594	20.41	ppb		99
29) Vinyl Acetate	3.658	86	18305	23.72	ppb	#	73
30) DIPE	3.701	45	259460	22.93	ppb		95
31) 2-Chloro-1,3-Butadiene	3.682	53	102800	21.03	ppb		96
32) ETBE	4.219	59	239790	21.21	ppb		94
33) 2,2-Dichloropropane	4.390	77	91993	18.69	ppb		96
34) cis-1,2-Dichloroethene	4.396	96	74033	19.59	ppb		94
35) 2-Butanone	4.463	43	61094	23.37	ppb		92
36) Propionitrile	4.542	54	110998m	130.53	ppb		
37) Bromochloromethane	4.786	130	46807	19.95	ppb		98
38) Methacrylonitrile	4.804	67	47677	21.55	ppb		94
39) Tetrahydrofuran	4.896	42	37274	22.01	ppb		91
40) Chloroform	4.969	83	115947	20.66	ppb		91
41) 1,1,1-Trichloroethane	5.255	97	80682	18.47	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:12:15 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.109	73	251660	23.47	ppb		97
44) Cyclohexane	5.347	41	68723	22.31	ppb		92
46) Carbontetrachloride	5.542	117	58904	16.83	ppb		97
47) 1,1-Dichloropropene	5.548	75	79574	17.73	ppb		98
49) Benzene	5.865	78	277339	18.48	ppb		99
50) 1,2-Dichloroethane	5.901	62	99652	20.74	ppb		96
51) Iso-Butyl Alcohol	5.901	43	123197m	391.55	ppb		
52) n-Heptane	6.353	43	77806	17.01	ppb		95
53) 1-Butanol	6.852	56	228029m	1098.07	ppb		
54) Trichloroethene	6.810	130	66868	18.20	ppb		95
55) Methylcyclohexane	7.041	55	105999	22.86	ppb		91
56) 1,2-Diclpropane	7.090	63	75732	18.99	ppb		98
57) Dibromomethane	7.230	93	44778	19.83	ppb		94
58) 1,4-Dioxane	7.401	88	32164m	452.02	ppb		
59) Methyl Methacrylate	7.322	69	78899	22.14	ppb		97
60) Bromodichloromethane	7.456	83	79801	19.01	ppb		95
61) 2-Nitropropane	7.743	41	32555	39.07	ppb		92
62) 2-Chloroethylvinyl Ether	7.864	63	36671	30.59	ppb		93
63) cis-1,3-Dichloropropene	7.999	75	115930	19.54	ppb		99
64) 4-Methyl-2-pentanone	8.212	43	112192	22.17	ppb		96
66) Toluene	8.370	91	296207	19.06	ppb		99
67) trans-1,3-Dichloropropene	8.639	75	109129	21.00	ppb		98
68) Ethyl Methacrylate	8.785	69	136126	22.75	ppb		92
69) 1,1,2-Trichloroethane	8.828	97	72674	19.96	ppb		96
72) Tetrachloroethene	8.962	164	48181	17.58	ppb		90
73) 2-Hexanone	9.120	43	84322	22.86	ppb		97
74) 1,3-Dichloropropane	8.998	76	130408	19.79	ppb		98
75) Dibromochloromethane	9.218	129	58149	18.92	ppb		94
76) N-Butyl Acetate	9.273	43	158432	23.53	ppb		95
77) 1,2-Dibromoethane	9.322	107	72464	20.16	ppb		99
78) Chlorobenzene	9.815	112	183411	18.72	ppb		97
79) 3-CBTF	9.834	180	105412	22.07	ppb		94
80) 4-CBTF	9.888	180	93035	21.55	ppb		94
81) 1,1,1,2-Tetrachloroethane	9.901	131	59337	18.71	ppb		99
82) Ethylbenzene	9.931	106	96247	18.22	ppb		99
83) (m+p)Xylene	10.047	106	233726	36.19	ppb		98
84) o-Xylene	10.407	106	117889	18.55	ppb		97
85) Styrene	10.419	104	202692	19.68	ppb		98
87) Bromoform	10.571	173	37221	18.54	ppb		100
88) 2-CBTF	10.651	180	103906	21.29	ppb		92
89) Isopropylbenzene	10.742	105	275900	17.64	ppb		99
90) Cyclohexanone	10.809	55	170503	171.99	ppb		99
91) trans-1,4-Dichloro-2-B...	11.047	53	29739	22.98	ppb		94
92) 1,1,2,2-Tetrachloroethane	10.998	83	106677	20.45	ppb		93
93) Bromobenzene	10.986	156	77744	18.48	ppb		91
94) 1,2,3-Trichloropropane	11.028	110	35268	21.31	ppb	#	89
95) n-Propylbenzene	11.096	91	322410	17.99	ppb		99
96) 2-Chlorotoluene	11.157	91	206261	18.27	ppb		99
97) 3-Chlorotoluene	11.211	91	239880	21.72	ppb		98
98) 4-Chlorotoluene	11.254	91	235484	18.70	ppb		96
99) 1,3,5-Trimethylbenzene	11.248	105	232202	17.89	ppb		98
100) tert-Butylbenzene	11.522	119	198313	17.56	ppb		97
101) 1,2,4-Trimethylbenzene	11.559	105	244286	18.19	ppb		95
102) 3,4-DCBTF	11.620	214	84029	20.88	ppb		94
103) sec-Butylbenzene	11.705	105	283974	17.35	ppb		96
104) p-Isopropyltoluene	11.827	119	240125	17.66	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:12:15 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.784	146	143834	18.77	ppb	97
106) 1,4-Dclbenz	11.858	146	146211	18.08	ppb	98
107) 2,4-DCBTF	11.912	214	78571	21.32	ppb	95
108) 2,5-DCBTF	11.949	214	86843	20.90	ppb	99
109) n-Butylbenzene	12.156	91	223268	18.74	ppb	96
110) 1,2-Dclbenz	12.156	146	148462	18.94	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.784	157	25500	19.84	ppb	92
112) Trielution Dichlorotol...	12.900	125	451770	70.07	ppb	95
113) 1,3,5 Trichlorobenzene	12.955	180	123688	21.92	ppb	99
114) Coelution Dichlorotoluene	13.229	125	329276	46.29	ppb	97
115) 1,2,4-Tcbenzene	13.437	180	116759	21.24	ppb	94
116) Hexachlorobt	13.577	225	39446	17.01	ppb	94
117) Naphthalen	13.626	128	365797	19.00	ppb	98
118) 1,2,3-Tclbenzene	13.815	180	116913	20.62	ppb	97
119) 2,4,5-Trichlorotolene	14.400	159	70861	28.04	ppb	95
120) 2,3,6-Trichlorotoluene	14.485	159	65664	23.04	ppb	95

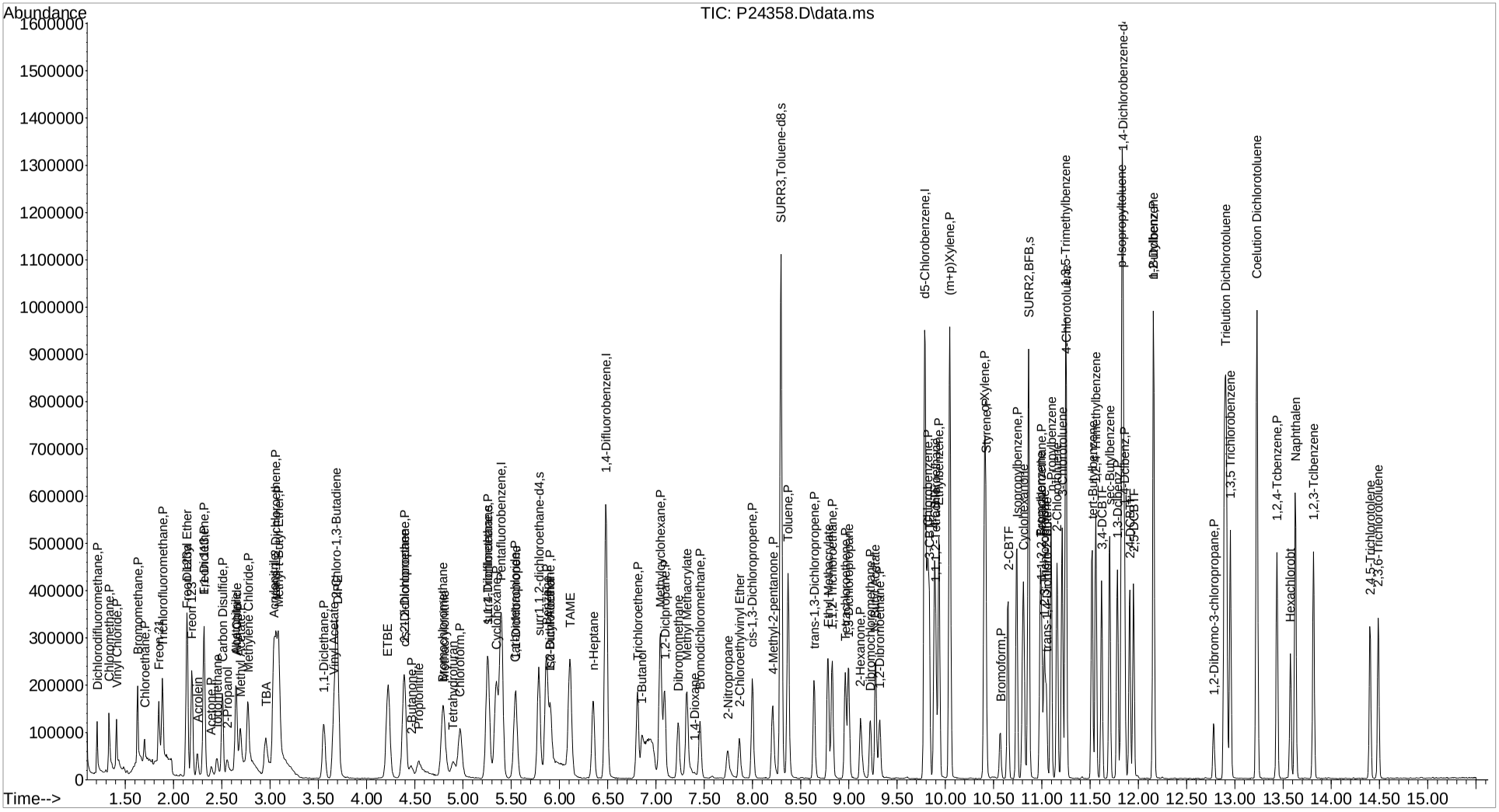
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 02/21/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:12:15 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24360.D
Acq On : 21 Feb 2019 12:34 pm
Operator : K.Ruest
Sample : MEDBLK|50 Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 22 10:52:51 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

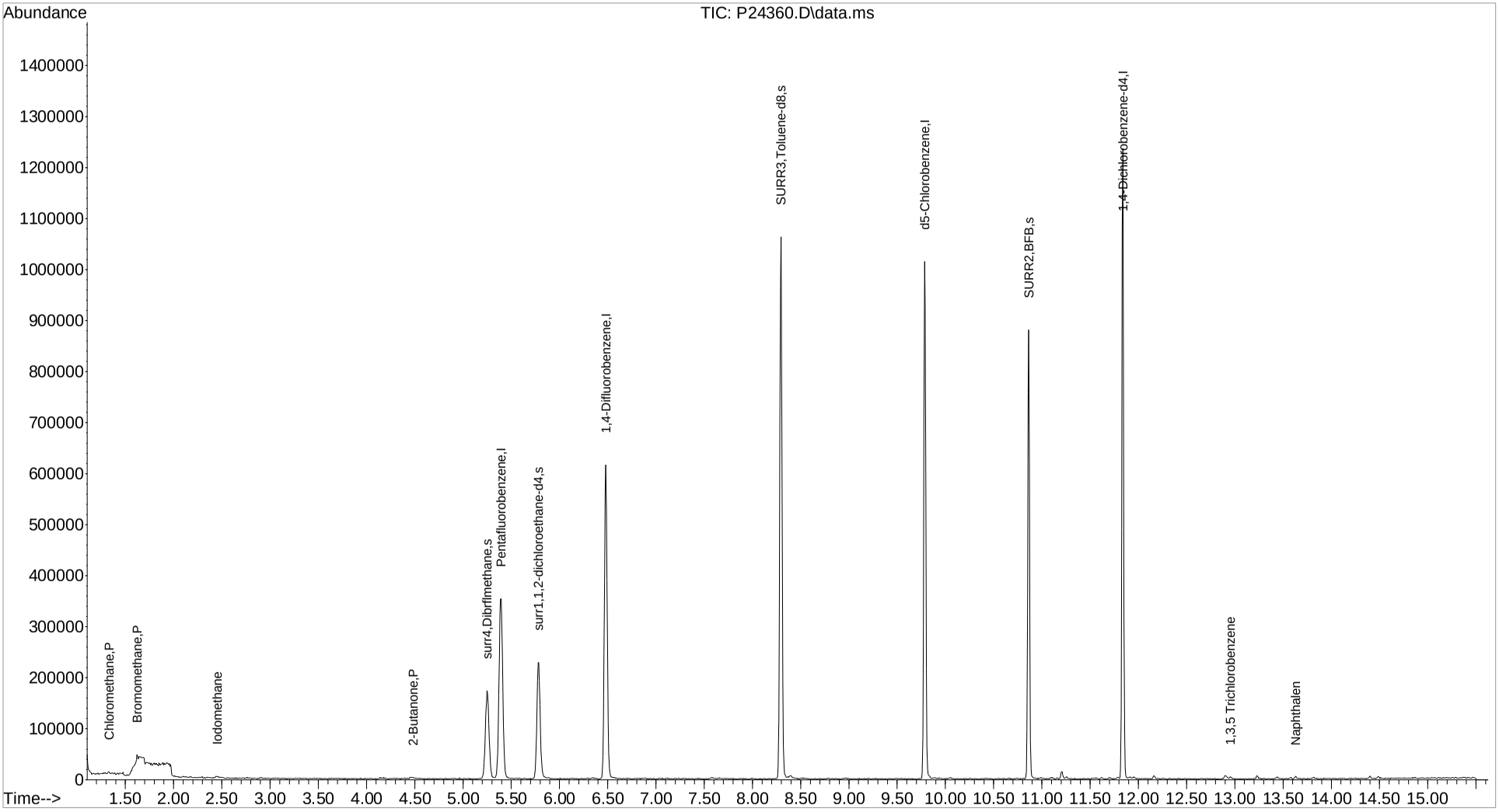
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.395	168	337453	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.480	114	546258	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	473519	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	255385	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.249	113	140609	46.84	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 93.68%				
48) surr1,1,2-dichloroetha...	5.779	65	193138	50.72	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.44%				
65) SURR3,Toluene-d8	8.297	98	687455	48.28	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.56%				
70) SURR2,BFB	10.864	95	244501	47.94	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.88%				
Target Compounds							Qvalue
3) Chloromethane	1.329	50	2223	0.41	ppb		89
5) Bromomethane	1.622	94	5331	0.98	ppb		92
17) Iodomethane	2.451	142	3045	2.79	ppb		70
35) 2-Butanone	4.481	43	5359	1.97	ppb		85
113) 1,3,5 Trichlorobenzene	12.955	180	1408	0.23	ppb	#	78
117) Naphthalen	13.625	128	2673	0.87	ppb		94

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

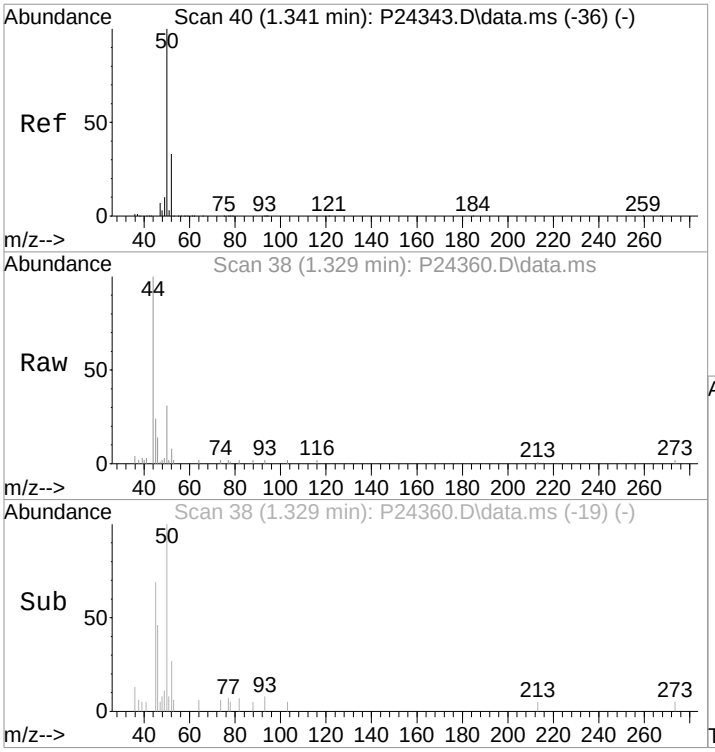
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24360.D
Acq On : 21 Feb 2019 12:34 pm
Operator : K.Ruest
Sample : MEDBLK|50 Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 22 10:52:51 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



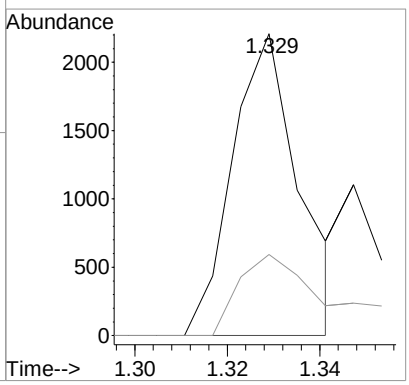
1st 02/22/19

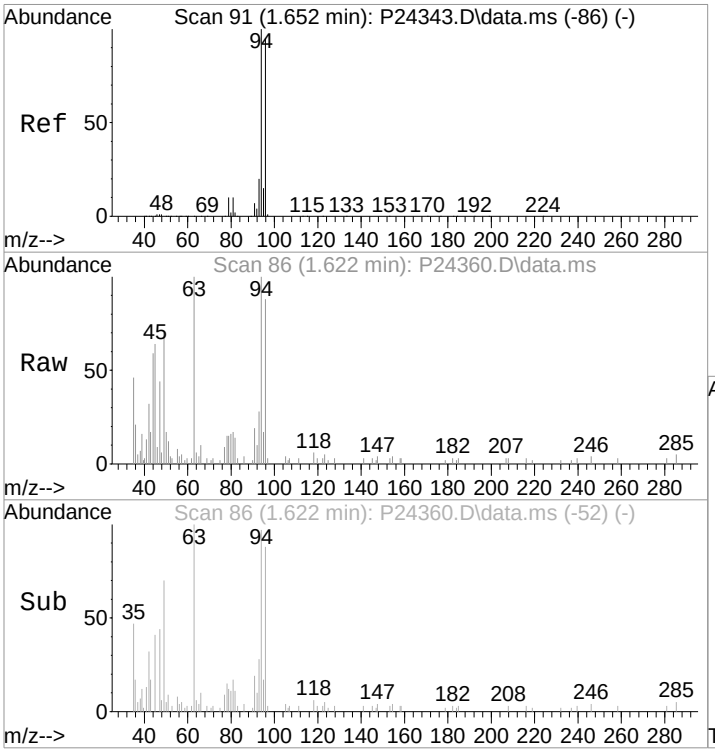


#3
Chloromethane
Concen: 0.41 ppb
RT: 1.329 min Scan# 38
Delta R.T. 0.000 min
Lab File: P24360.D
Acq: 21 Feb 2019 12:34 pm

Tgt Ion: 50 Resp: 2223

Ion	Ratio	Lower	Upper
50	100		
52	26.8	13.0	53.0

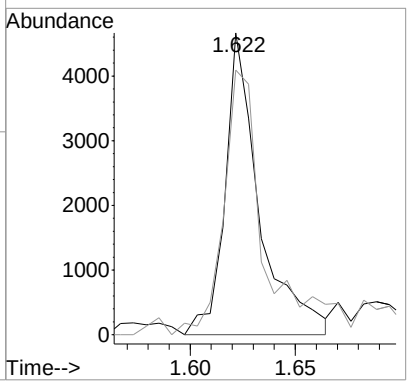


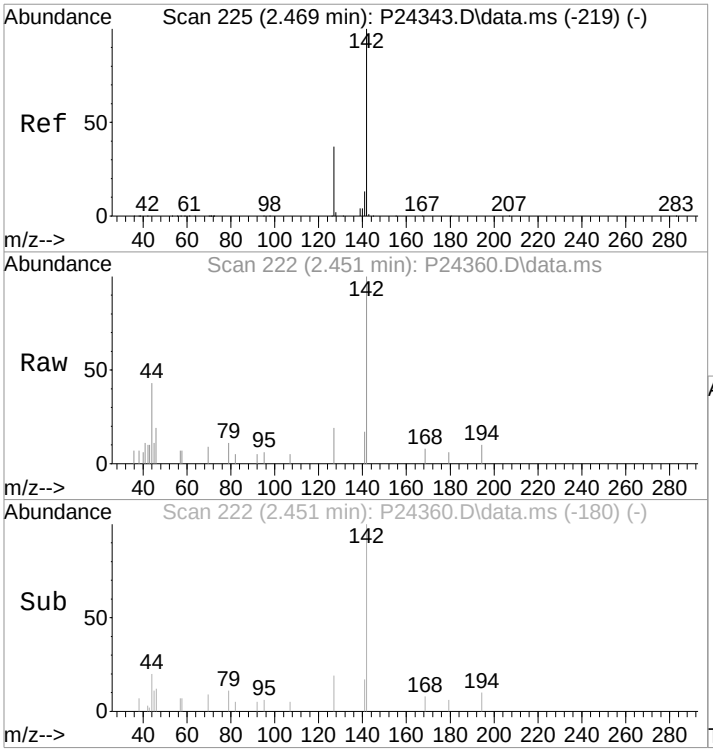


#5
Bromomethane
Concen: 0.98 ppb
RT: 1.622 min Scan# 86
Delta R.T. -0.017 min
Lab File: P24360.D
Acq: 21 Feb 2019 12:34 pm

Tgt Ion: 94 Resp: 5331

Ion	Ratio	Lower	Upper
94	100		
96	87.7	75.4	115.4

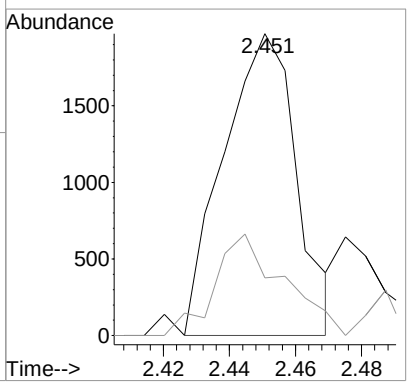


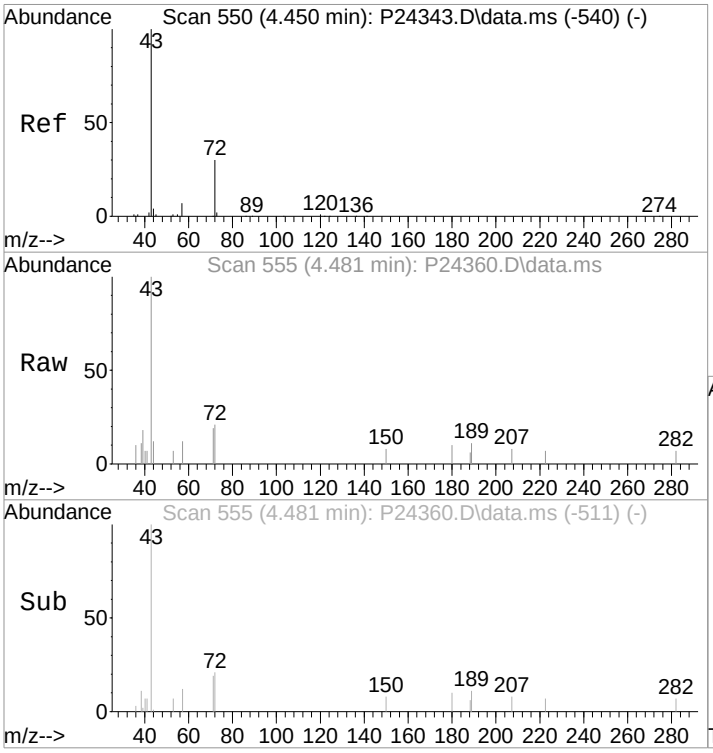


#17
Iodomethane
Concen: 2.79 ppb
RT: 2.451 min Scan# 222
Delta R.T. -0.005 min
Lab File: P24360.D
Acq: 21 Feb 2019 12:34 pm

Tgt Ion:142 Resp: 3045

Ion	Ratio	Lower	Upper
142	100		
127	19.1	16.7	56.7

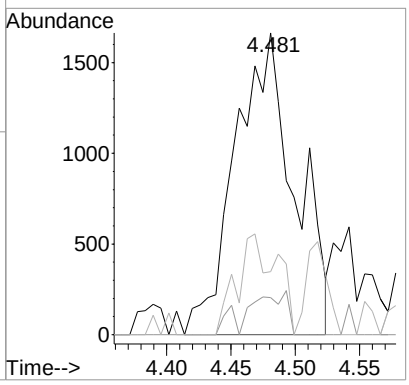


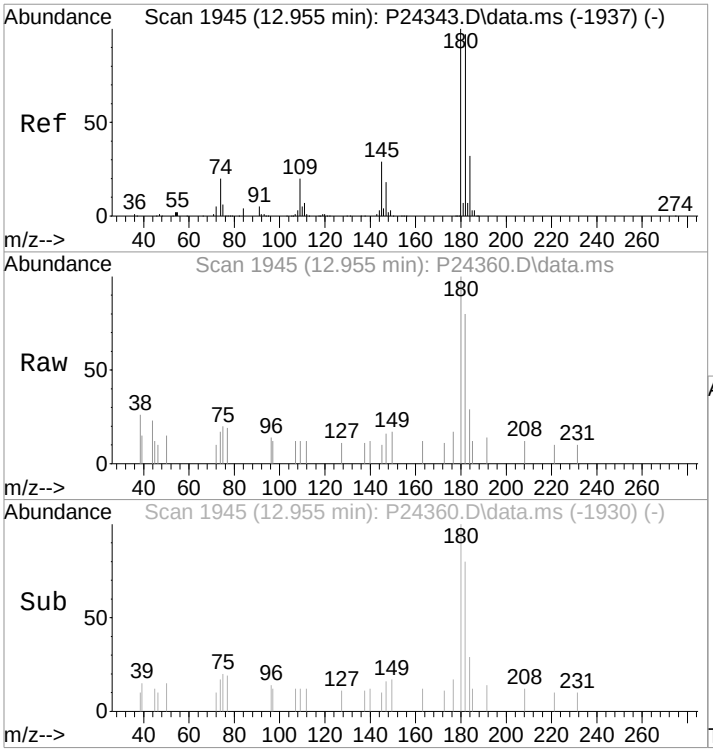


#35
2-Butanone
Concen: 1.97 ppb
RT: 4.481 min Scan# 555
Delta R.T. 0.043 min
Lab File: P24360.D
Acq: 21 Feb 2019 12:34 pm

Tgt Ion: 43 Resp: 5359

Ion	Ratio	Lower	Upper
43	100		
57	12.3	0.0	27.7
72	20.9	9.5	49.5

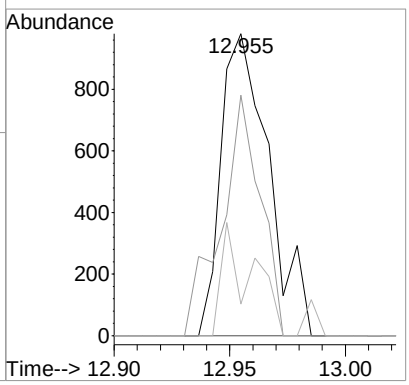


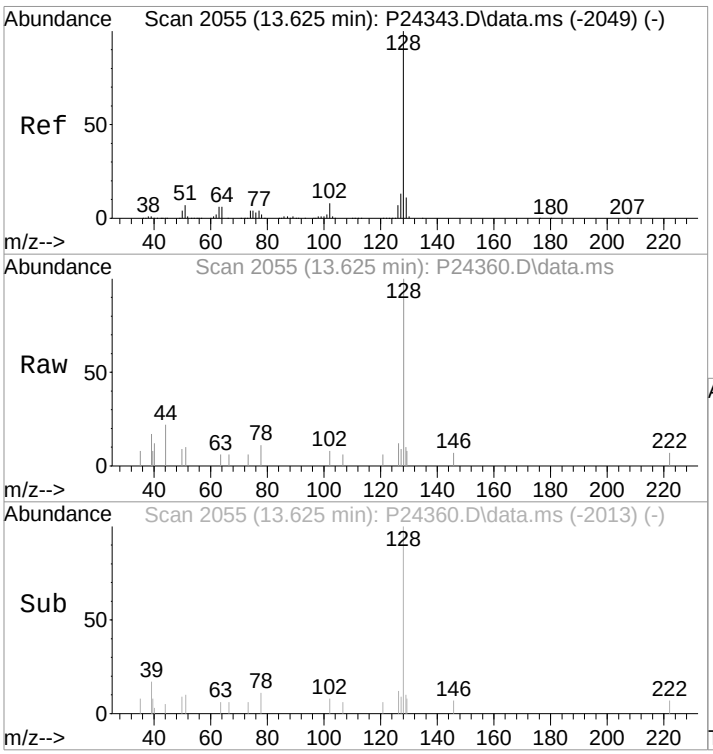


#113
1,3,5 Trichlorobenzene
Concen: 0.23 ppb
RT: 12.955 min Scan# 1945
Delta R.T. 0.000 min
Lab File: P24360.D
Acq: 21 Feb 2019 12:34 pm

Tgt Ion:180 Resp: 1408

Ion	Ratio	Lower	Upper
180	100		
182	79.6	77.7	116.5
145	10.4	23.3	34.9#

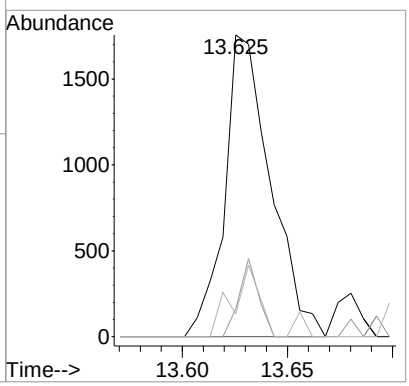




#117
Naphthalen
Concen: 0.87 ppb
RT: 13.625 min Scan# 2055
Delta R.T. 0.000 min
Lab File: P24360.D
Acq: 21 Feb 2019 12:34 pm

Tgt Ion:128 Resp: 2673

Ion	Ratio	Lower	Upper
128	100		
127	9.3	0.0	32.9
102	7.6	0.0	28.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24360.D
Acq On : 21 Feb 2019 12:34 pm
Operator : K.Ruest
Sample : MEDBLK|50 Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24360.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.622	71	86	88	rBV6	41518	113856	6.51%	1.245%
2	5.249	671	681	695	rBV2	172420	459809	26.29%	5.027%
3	5.395	695	705	717	rVB	352247	929857	53.17%	10.166%
4	5.779	756	768	781	rBV	228674	554371	31.70%	6.061%
5	6.480	875	883	892	rBV	613881	1221292	69.83%	13.352%
6	8.297	1173	1181	1191	rBV	1062258	1748855	100.00%	19.120%
7	9.785	1419	1425	1437	rBV	1014059	1429461	81.74%	15.628%
8	10.864	1595	1602	1608	rBV	880439	1138066	65.07%	12.442%
9	11.211	1653	1659	1663	rBV3	14510	23299	1.33%	0.255%
10	11.839	1756	1762	1770	rBV	1234823	1527954	87.37%	16.705%

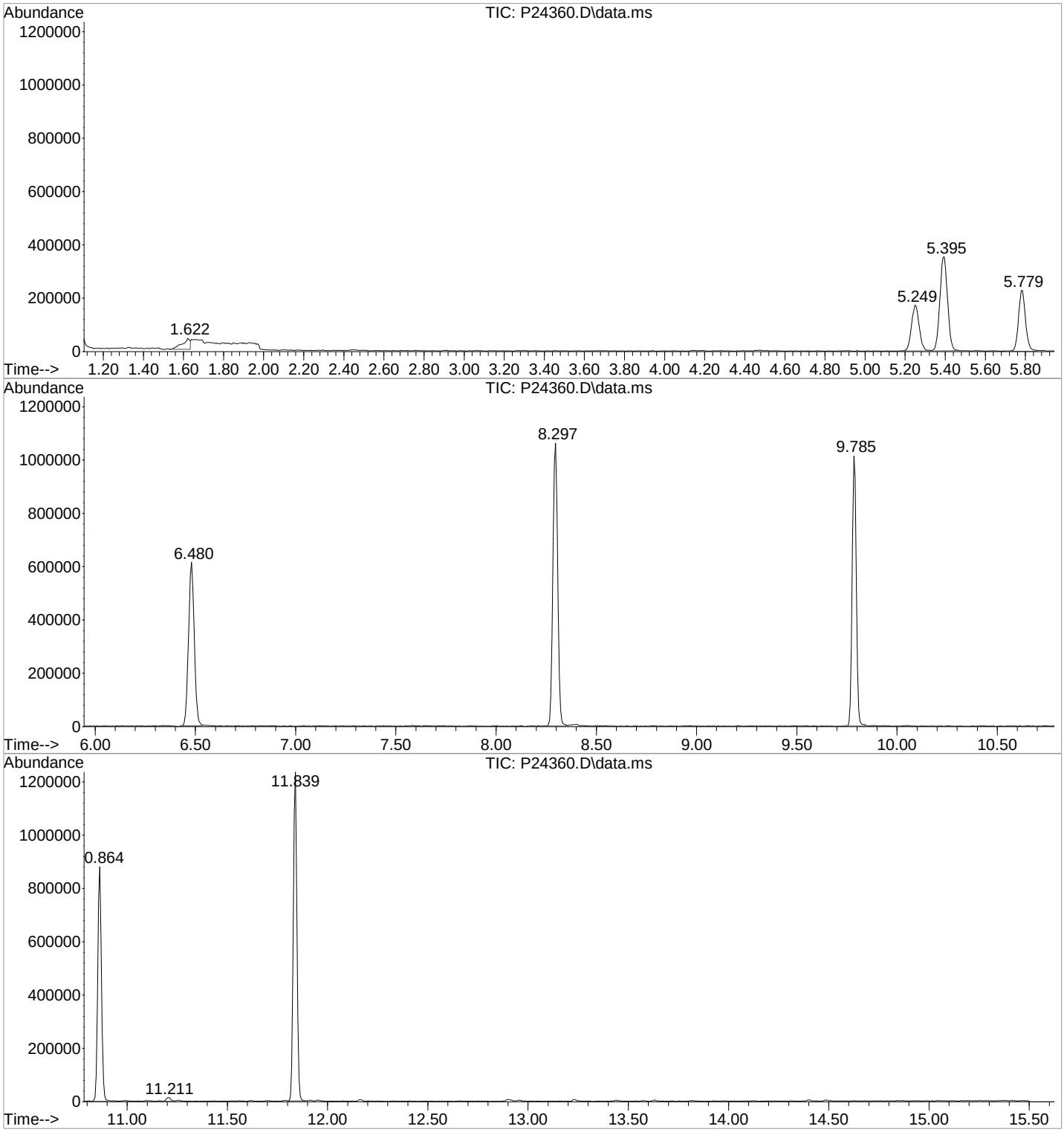
Sum of corrected areas: 9146820

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24360.D
Acq On : 21 Feb 2019 12:34 pm
Operator : K.Ruest
Sample : MEDBLK|50 Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\\
Data File : P24360.D
Acq On : 21 Feb 2019 12:34 pmm
Operator : K.Ruestt
Sample : MEDBLK|50 Inst : MSVOA-122
Misc :
ALS Vial : 1 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

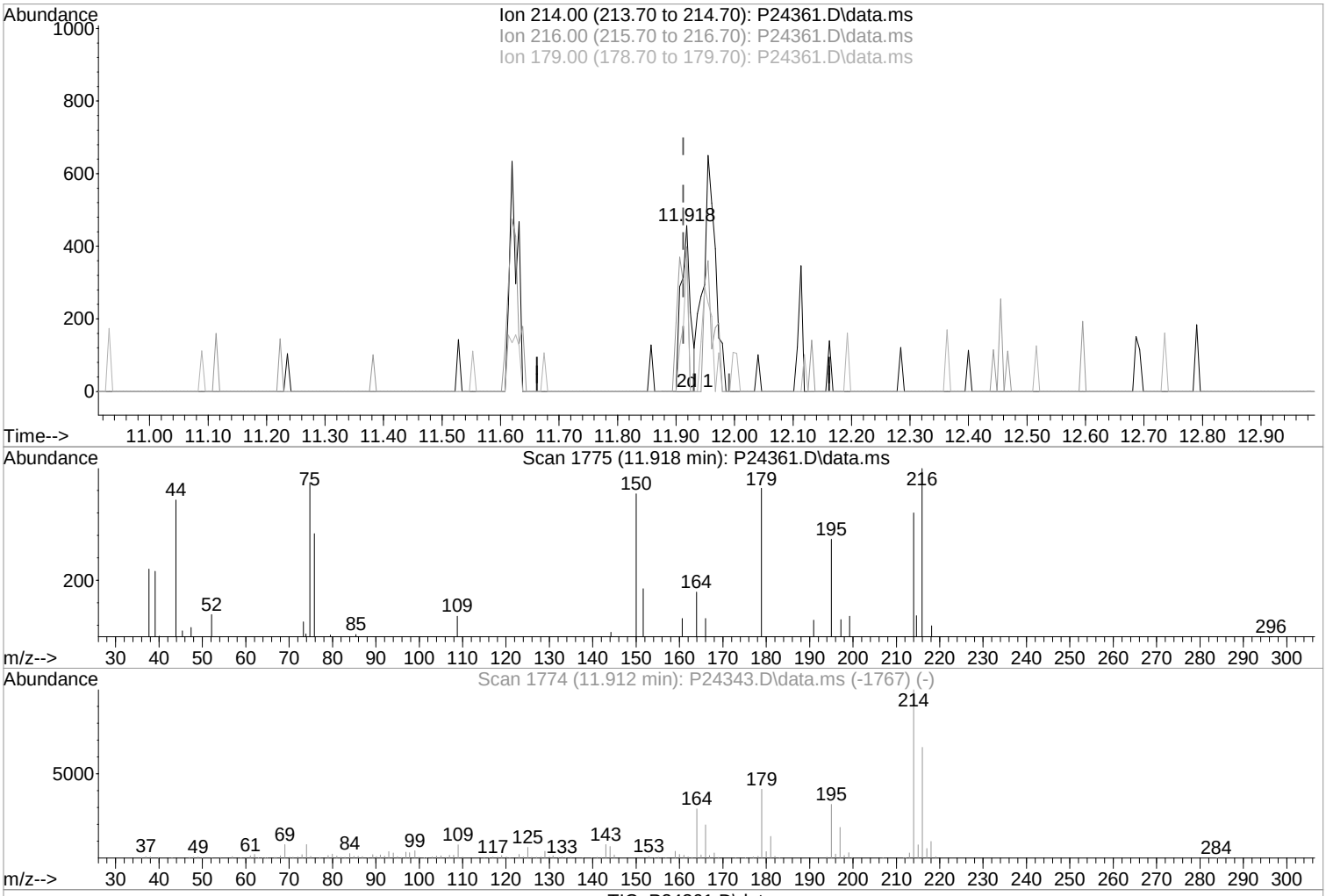
					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24361.D
Acq On : 21 Feb 2019 12:56 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 13:55:47 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24361.D\data.ms

(107) 2,4-DCBTF

11.918min (+0.006) 0.15 ppb m

response 511

Ion	Exp%	Act%
214.00	100	100
216.00	65.70	124.69#
179.00	40.90	113.75#
0.00	0.00	0.00

Manual Integration:

After

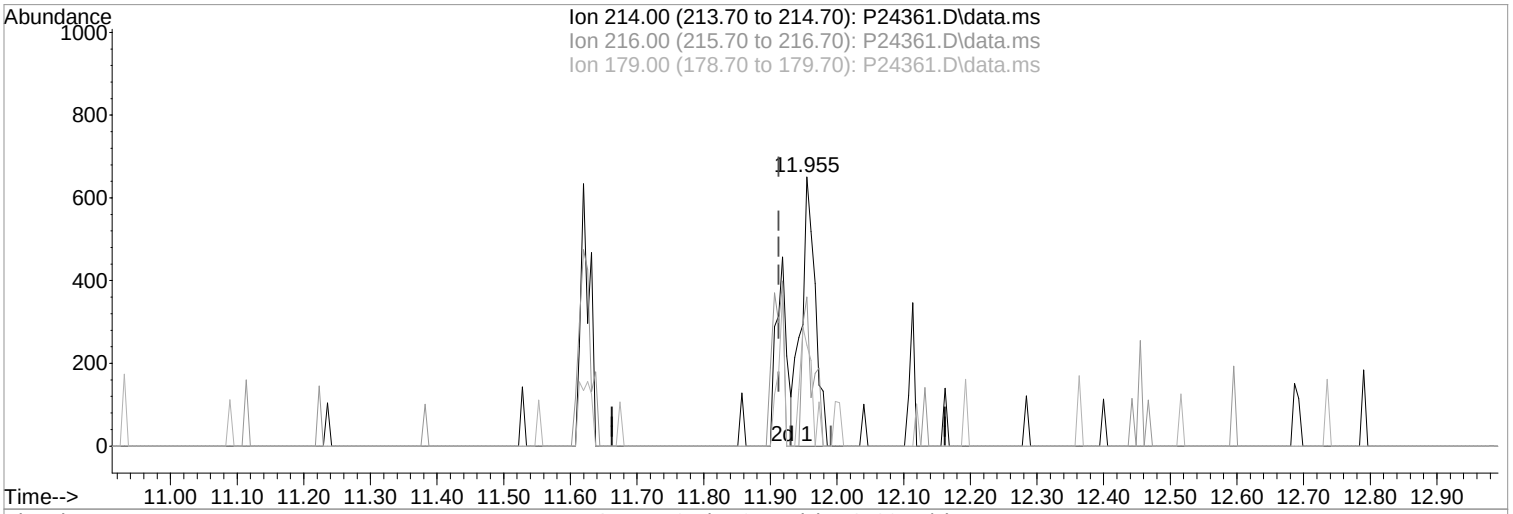
Wrong peak selected.

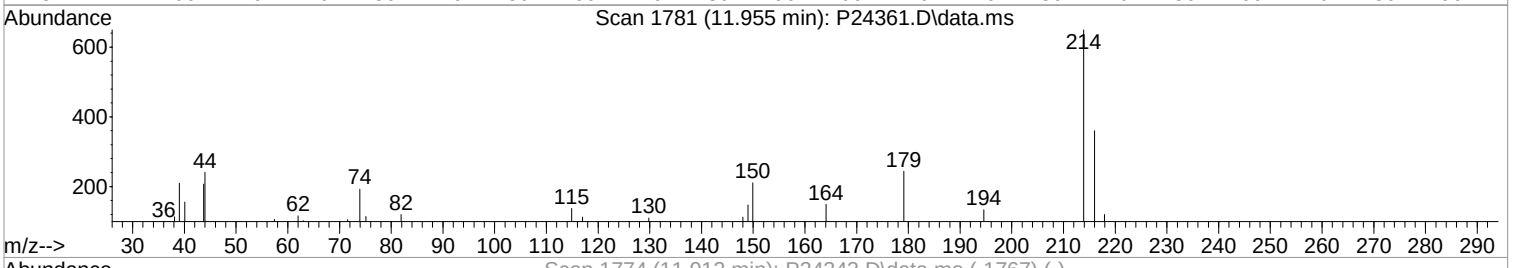
02/22/19

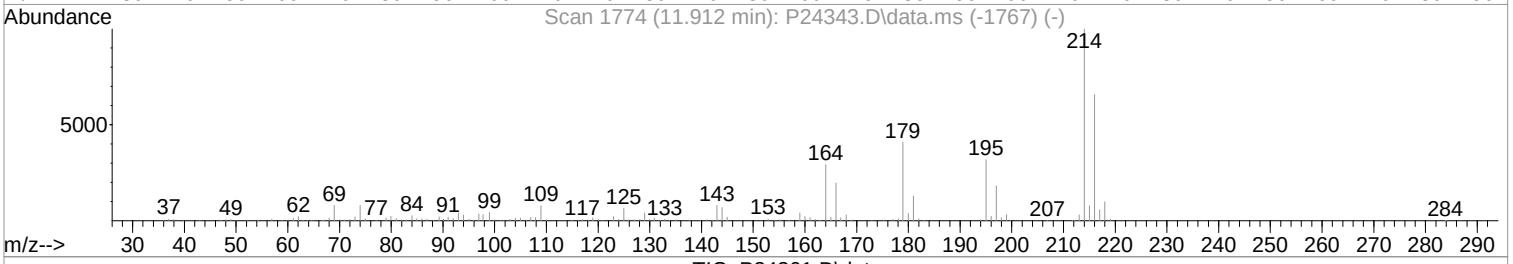
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24361.D
Acq On : 21 Feb 2019 12:56 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 13:55:47 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24361.D\data.ms

(107) 2,4-DCBTF

11.955min (+0.043) 0.28 ppb

response 956

Ion	Exp%	Act%
214.00	100	100
216.00	65.70	55.38
179.00	40.90	37.54
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24361.D
Acq On : 21 Feb 2019 12:56 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 22 10:56:16 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

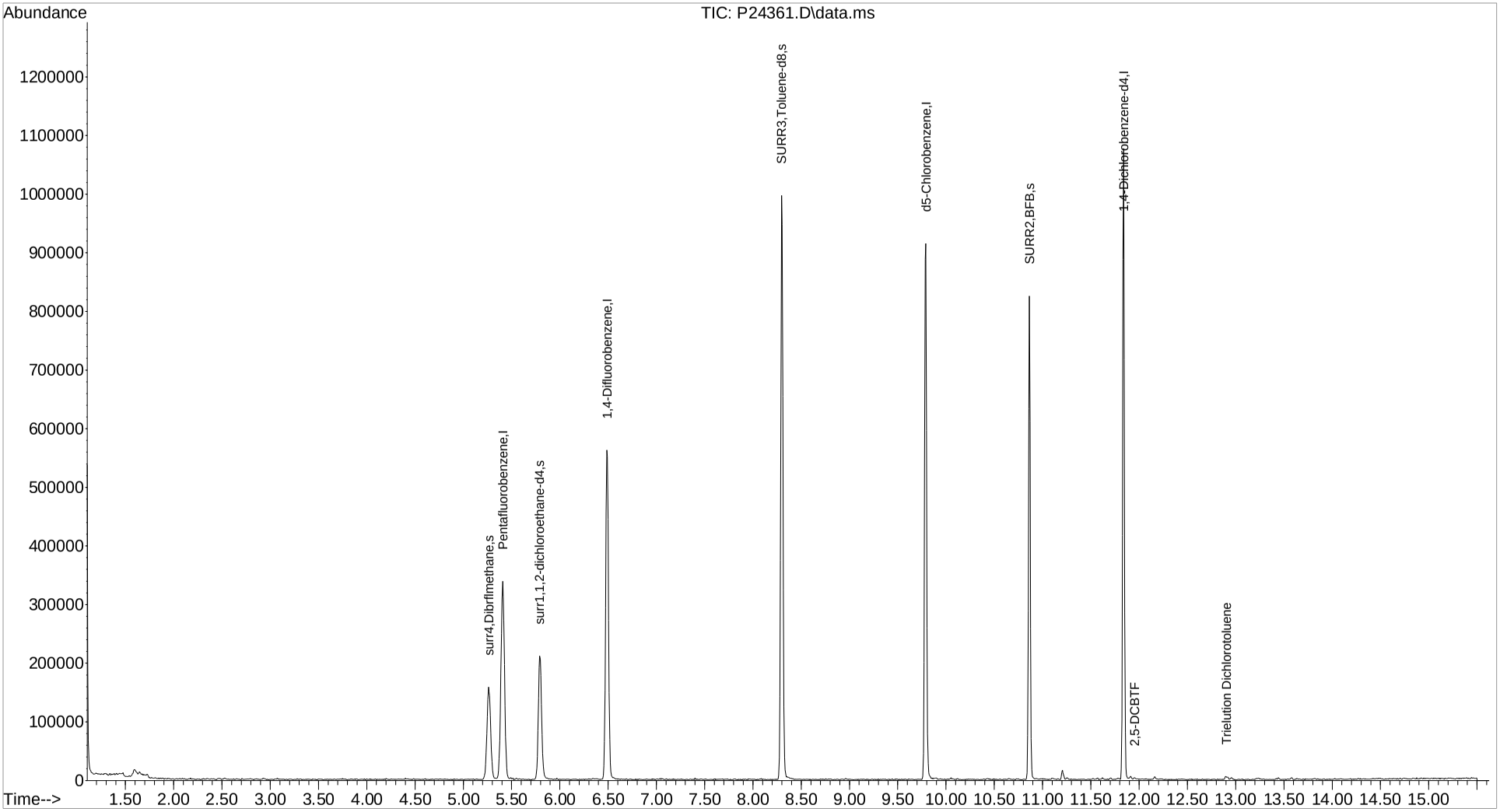
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.407	168	312408	50.00	ppb	0.01
43) 1,4-Difluorobenzene	6.486	114	501562	50.00	ppb	0.00
71) d5-Chlorobenzene	9.791	117	428849	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	219464	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.261	113	130722	47.43	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 94.86%			
48) surr1,1,2-dichloroetha...	5.792	65	175082	50.08	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 100.16%			
65) SURR3,Toluene-d8	8.297	98	634045	48.50	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.00%			
70) SURR2,BFB	10.864	95	222339	47.48	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.96%			
Target Compounds						Qvalue
108) 2,5-DCBTF	11.955	214	956	0.25	ppb	# 81
112) Trielution Dichlorotol...	12.900	125	2459	0.41	ppb	# 81

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

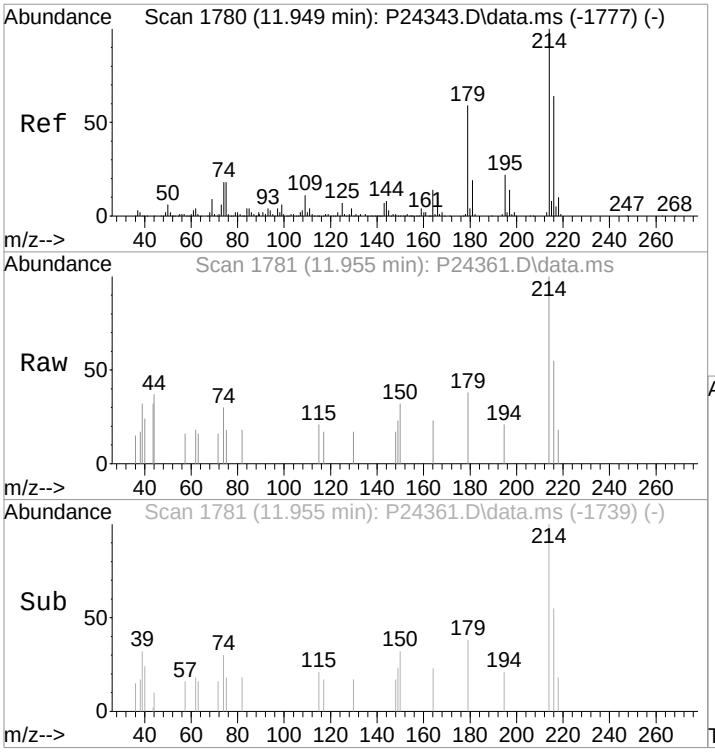
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24361.D
Acq On : 21 Feb 2019 12:56 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 22 10:56:16 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



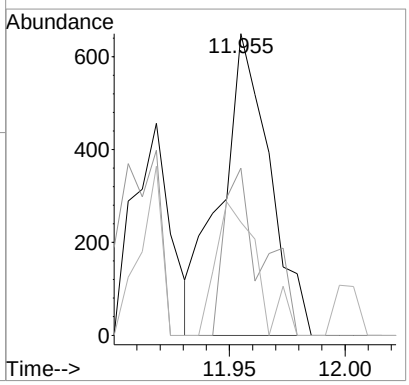
1st 02/22/19

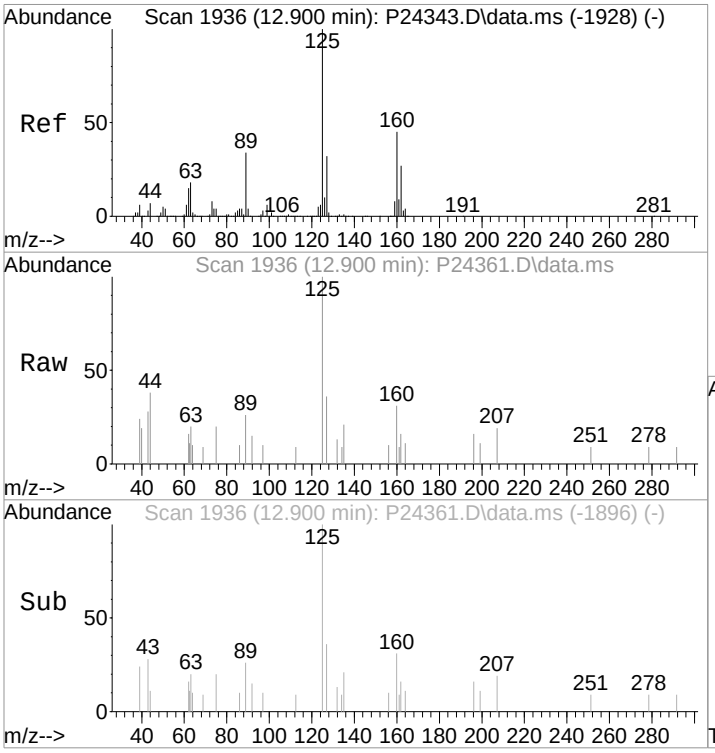


#108
2,5-DCBTF
Concen: 0.25 ppb
RT: 11.955 min Scan# 1781
Delta R.T. 0.006 min
Lab File: P24361.D
Acq: 21 Feb 2019 12:56 pm

Tgt Ion:214 Resp: 956

Ion	Ratio	Lower	Upper
214	100		
216	55.4	51.4	77.0
179	37.5	46.4	69.6#

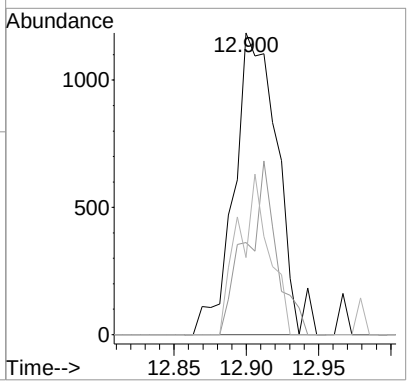




#112
Trielution Dichlorotoluene
Concen: 0.41 ppb
RT: 12.900 min Scan# 1936
Delta R.T. -0.006 min
Lab File: P24361.D
Acq: 21 Feb 2019 12:56 pm

Tgt Ion:125 Resp: 2459

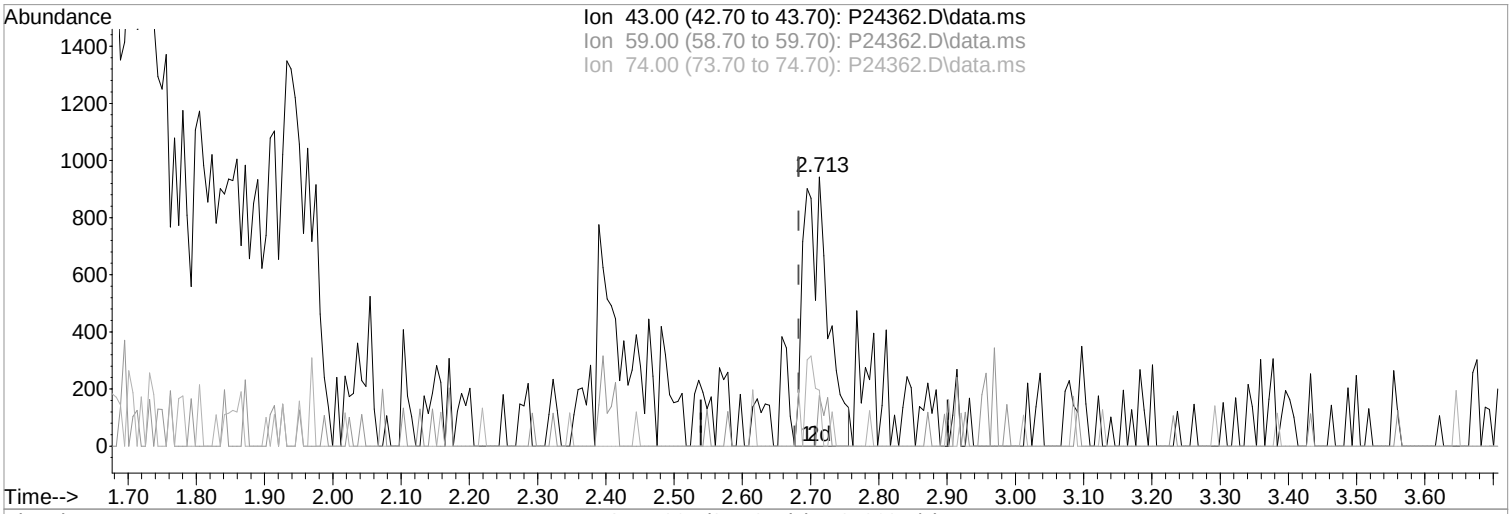
Ion	Ratio	Lower	Upper
125	100		
160	30.5	35.8	53.8#
89	25.5	27.0	40.4#

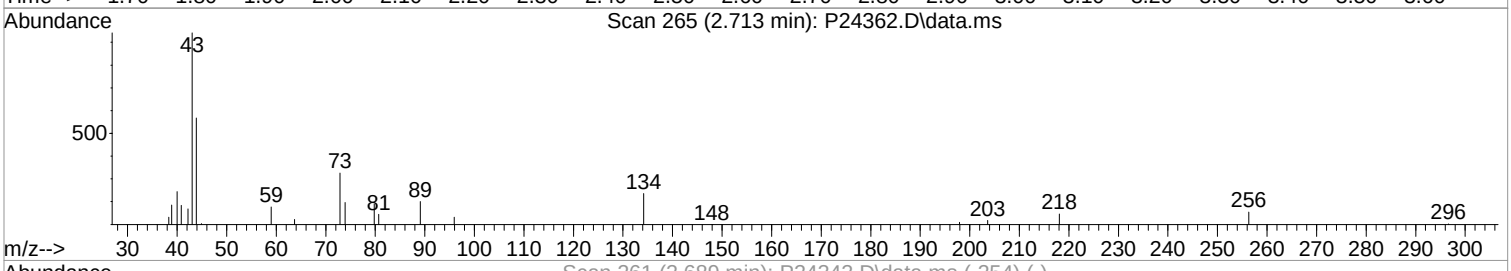


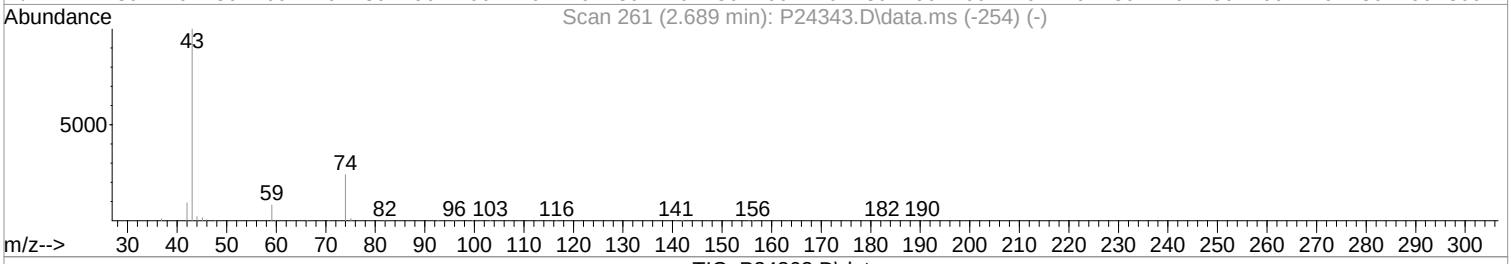
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pm
Operator : K.Ruest
Sample : R1901228-002|78 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 21 13:56:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24362.D\data.ms

(21) Methyl Acetate (P)

2.713min (+0.031) 0.58 ppb m

response 2307

Ion	Exp%	Act%
43.00	100	100
59.00	8.40	18.79
74.00	23.60	20.81
0.00	0.00	0.00

Manual Integration:

After

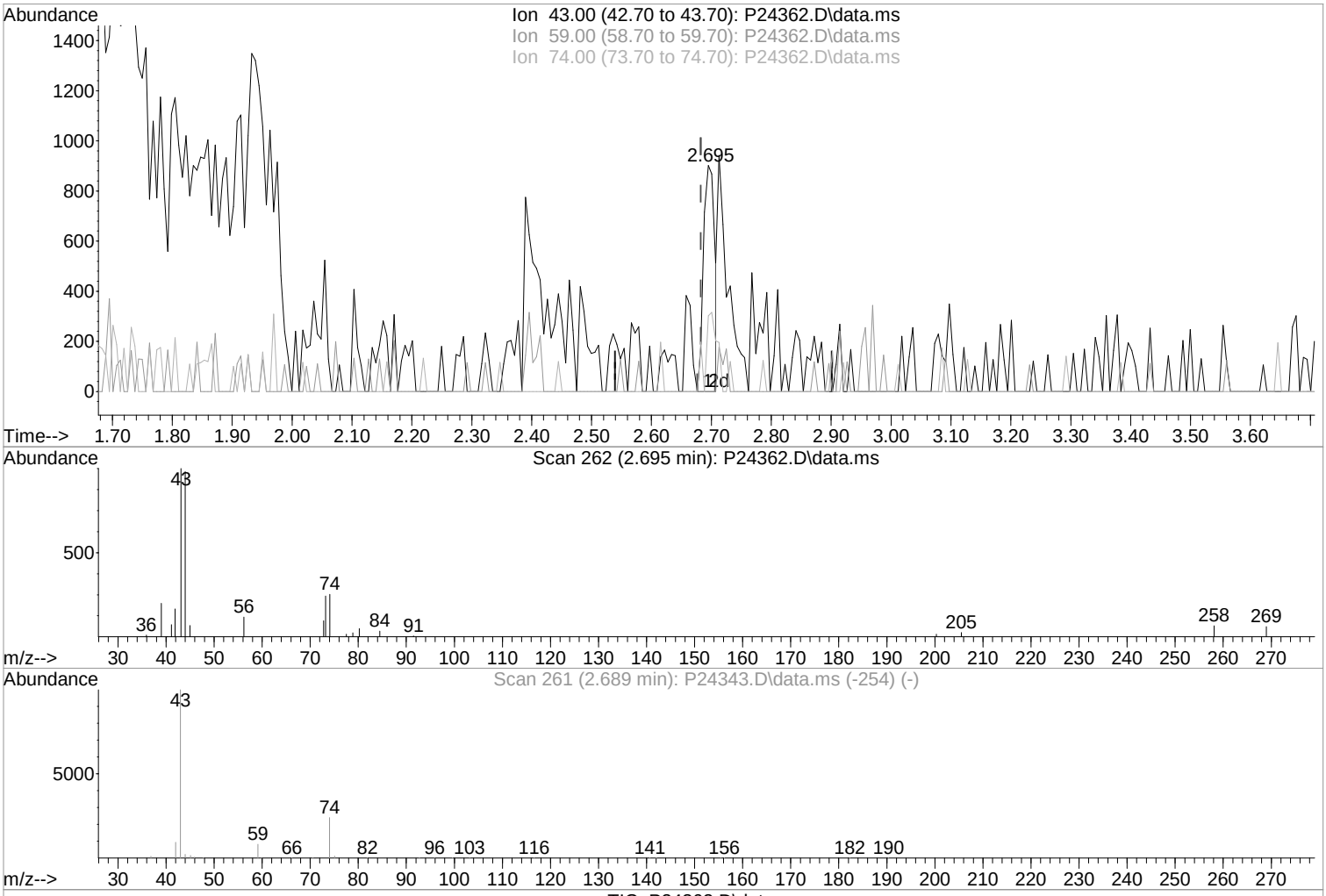
Split Peak

02/22/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pm
Operator : K.Ruest
Sample : R1901228-002|78 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 21 13:56:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24362.D\data.ms

(21) Methyl Acetate (P)

2.695min (+0.012) 0.29 ppb

response 1161

Ion	Exp%	Act%
43.00	100	100
59.00	8.40	0.00
74.00	23.60	33.52
0.00	0.00	0.00

Manual Integration:

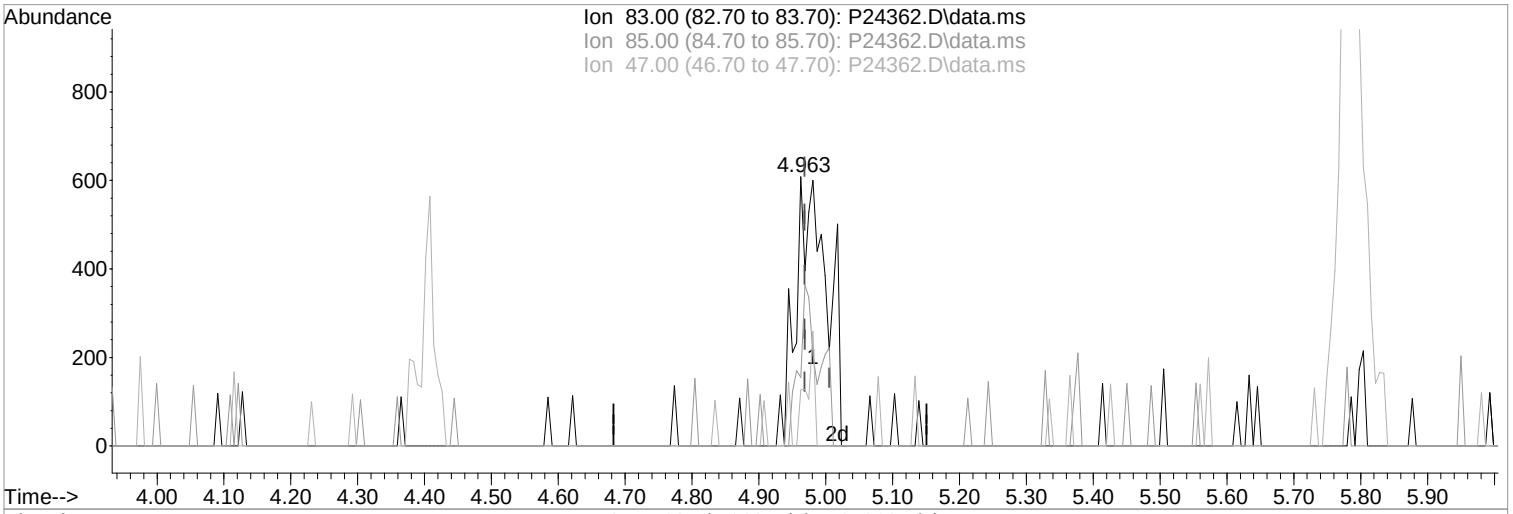
Before

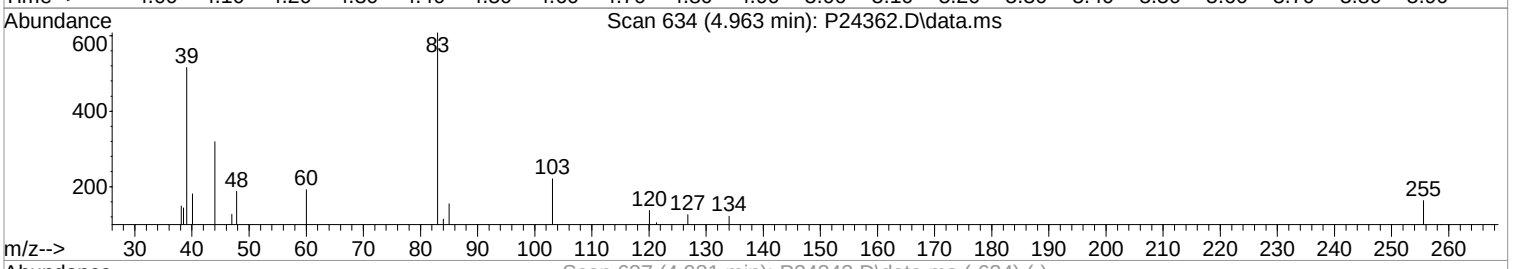
02/22/19

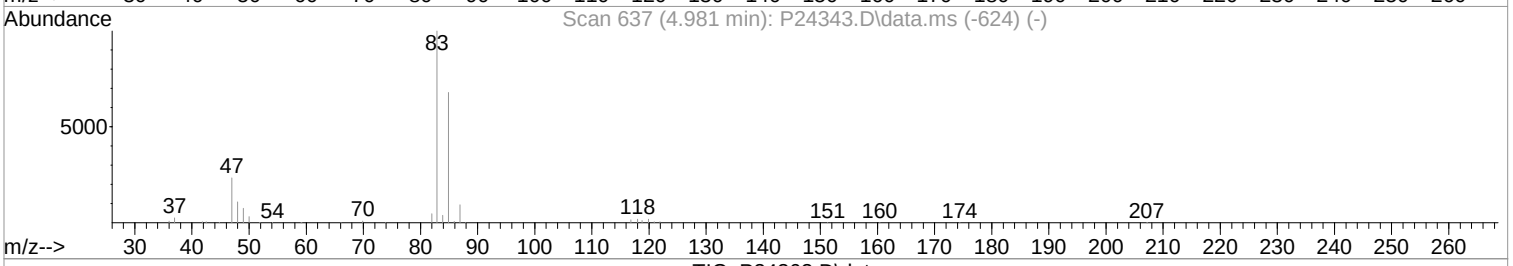
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pm
Operator : K.Ruest
Sample : R1901228-002|78 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 21 13:56:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24362.D\data.ms

(40) Chloroform (P)

4.963min (-0.006) 0.37 ppb m

response 1941

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	25.49#
47.00	23.40	20.89
0.00	0.00	0.00

Manual Integration:

After

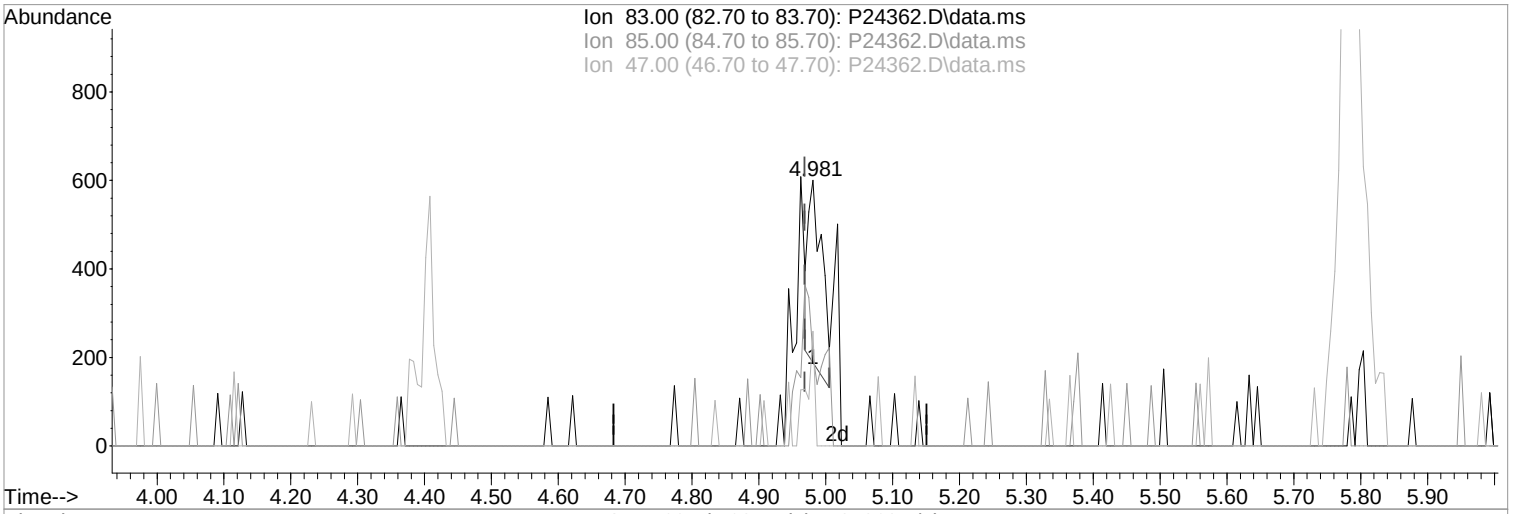
Split Peak

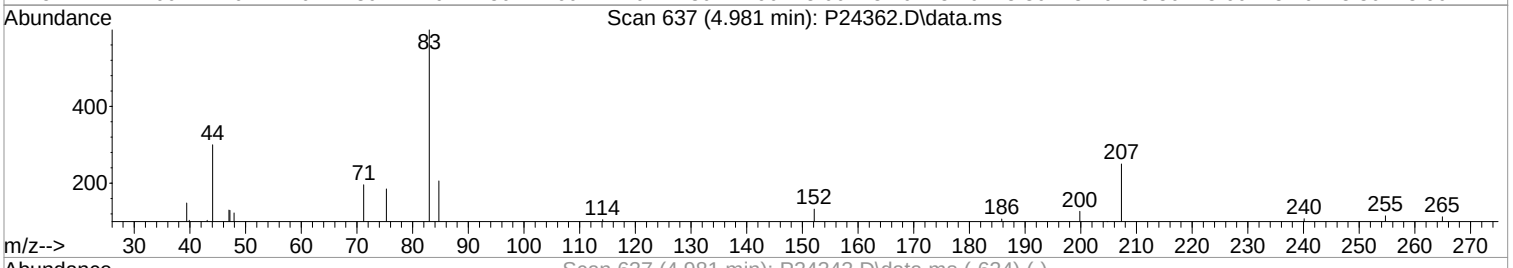
02/22/19

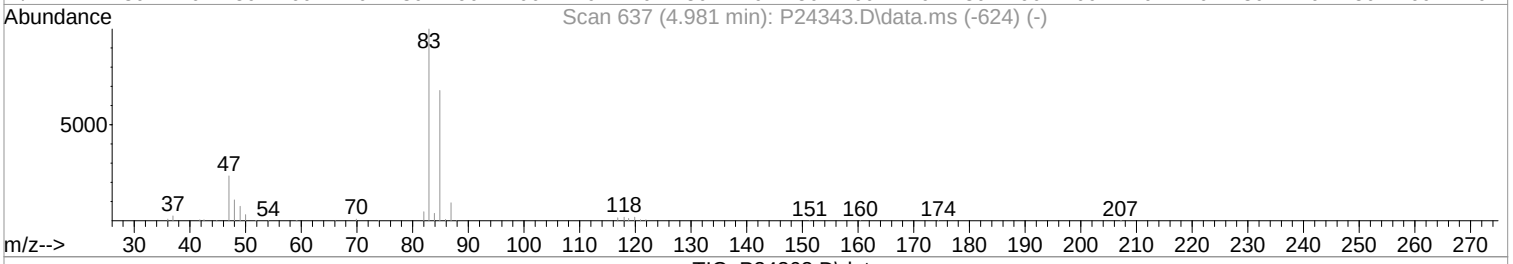
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pm
Operator : K.Ruest
Sample : R1901228-002|78 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 21 13:56:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24362.D\data.ms

(40) Chloroform (P)

4.981min (+0.012) 0.11 ppb

response 587

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	34.33#
47.00	23.40	43.17
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pm
Operator : K.Ruest
Sample : R1901228-002|78 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 3 Sample Multiplier: 1

DL

Quant Time: Feb 22 10:59:47 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

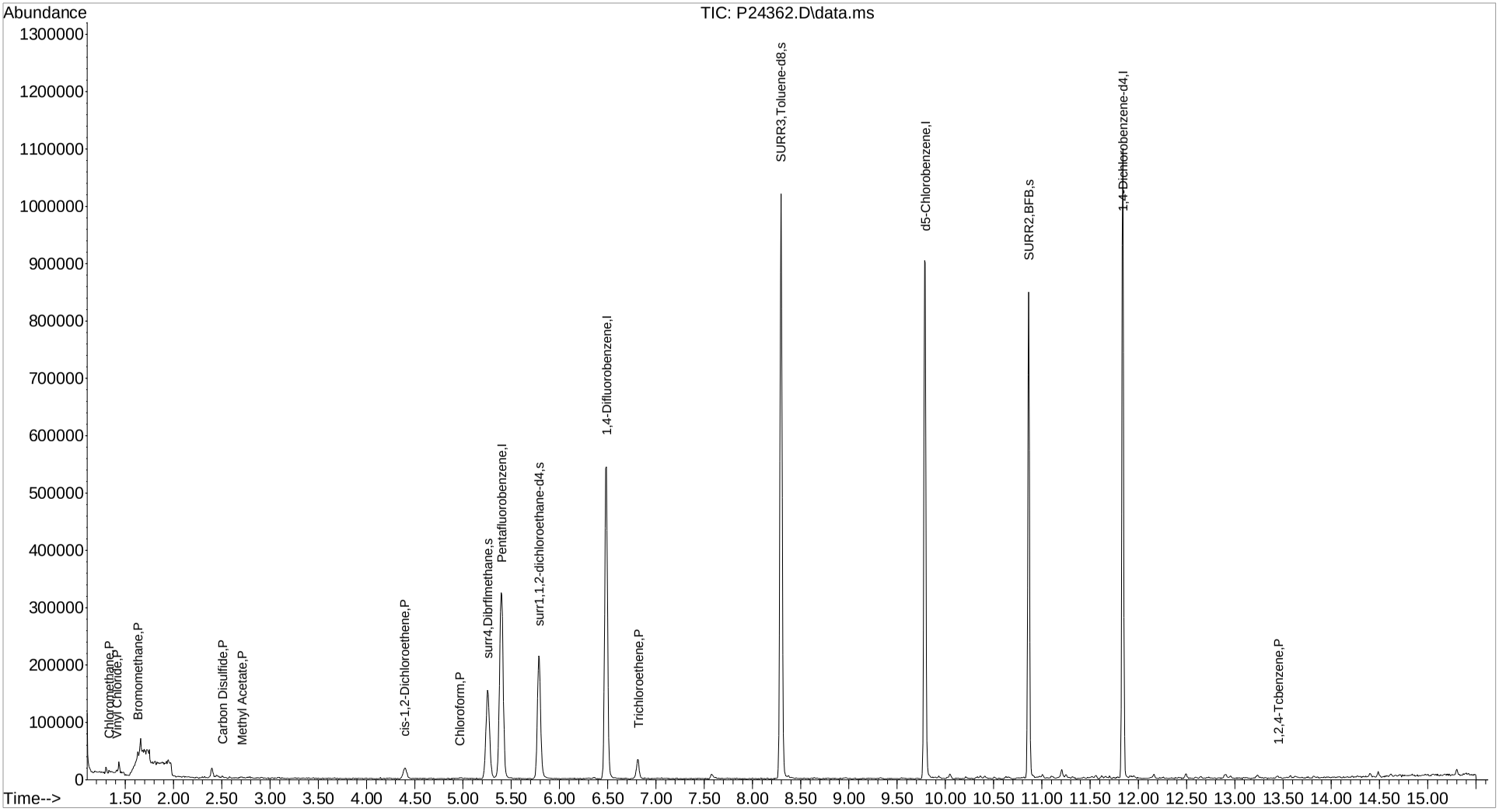
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.402	168	306420	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.487	114	493379	50.00	ppb		0.00
71) d5-Chlorobenzene	9.791	117	430038	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	228183	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	128694	47.47	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 94.94%				
48) surr1,1,2-dichloroetha...	5.792	65	181152	52.68	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 105.36%				
65) SURR3,Toluene-d8	8.297	98	639222	49.70	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.40%				
70) SURR2,BFB	10.864	95	226364	49.14	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.28%				
Target Compounds							Qvalue
3) Chloromethane	1.329	50	2623	0.53	ppb		88
4) Vinyl Chloride	1.415	62	2466	0.55	ppb		90
5) Bromomethane	1.628	94	5435	1.20	ppb		90
18) Carbon Disulfide	2.506	76	2935	0.34	ppb		89
21) Methyl Acetate	2.713	43	2307m	0.58	ppb		
34) cis-1,2-Dichloroethene	4.396	96	10870	3.05	ppb	#	73
40) Chloroform	4.963	83	1941m	0.37	ppb		
54) Trichloroethene	6.816	130	13046	3.78	ppb		90
115) 1,2,4-Tcbenzene	13.449	180	1091	0.21	ppb	#	62

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

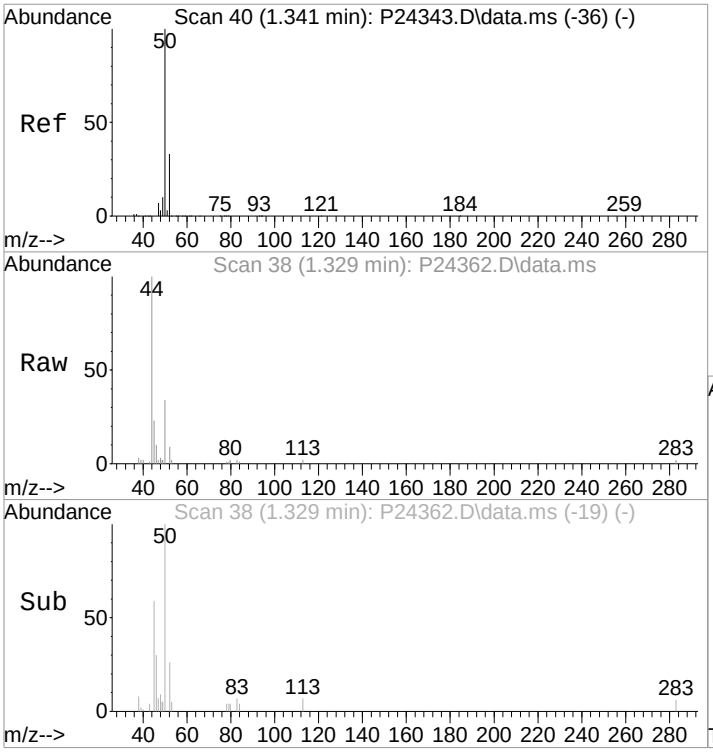
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pm
Operator : K.Ruest
Sample : R1901228-002|78 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 22 10:59:47 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



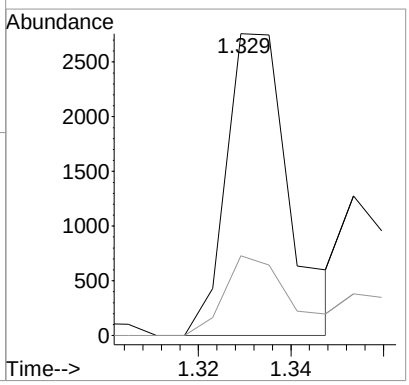
1st 02/22/19

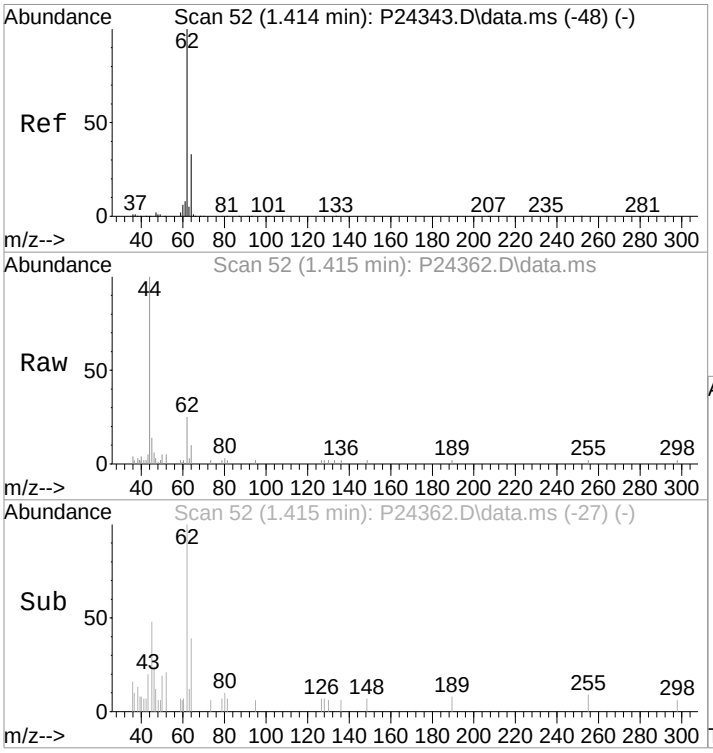


#3
Chloromethane
Concen: 0.53 ppb
RT: 1.329 min Scan# 38
Delta R.T. 0.000 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion: 50 Resp: 2623

Ion	Ratio	Lower	Upper
50	100		
52	26.4	13.0	53.0

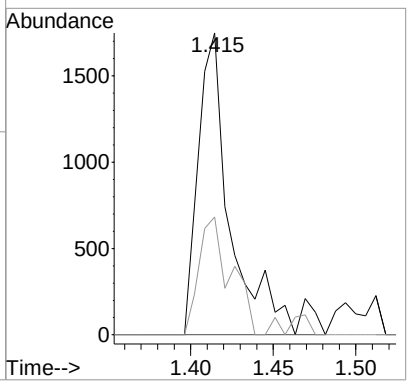


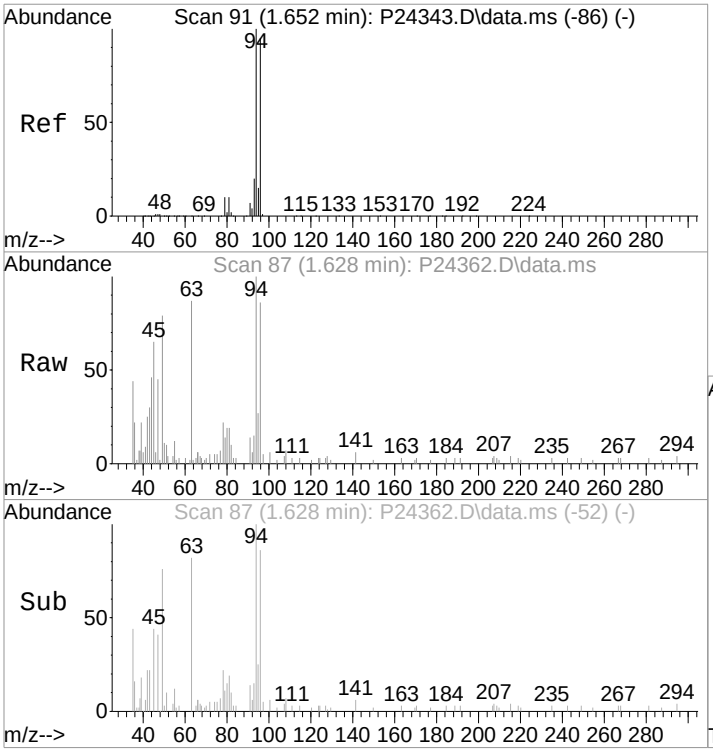


#4
Vinyl Chloride
Concen: 0.55 ppb
RT: 1.415 min Scan# 52
Delta R.T. 0.006 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion: 62 Resp: 2466

Ion	Ratio	Lower	Upper
62	100		
64	39.1	13.2	53.2

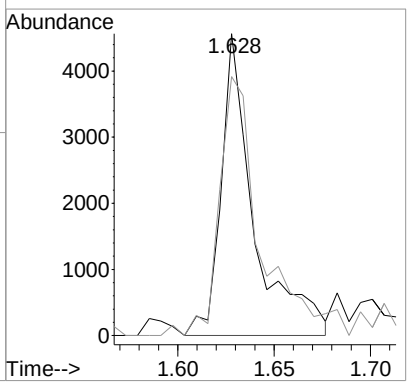


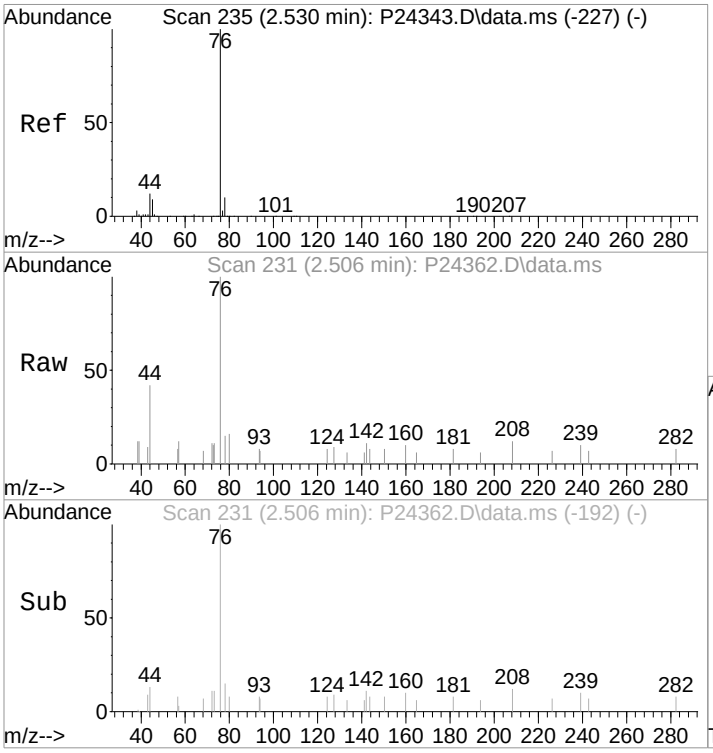


#5
Bromomethane
Concen: 1.20 ppb
RT: 1.628 min Scan# 87
Delta R.T. -0.011 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion: 94 Resp: 5435

Ion	Ratio	Lower	Upper
94	100		
96	85.7	75.4	115.4

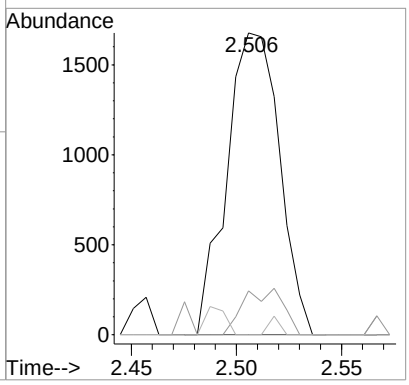


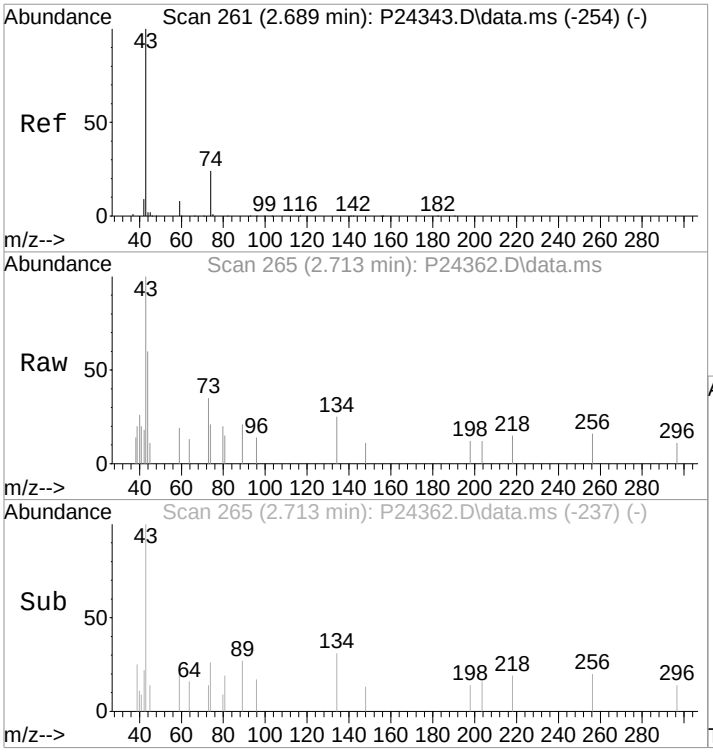


#18
Carbon Disulfide
Concen: 0.34 ppb
RT: 2.506 min Scan# 231
Delta R.T. -0.018 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion: 76 Resp: 2935

Ion	Ratio	Lower	Upper
76	100		
78	14.6	0.0	30.1
77	0.0	0.0	22.9

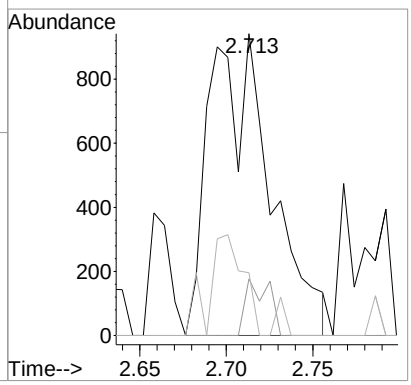


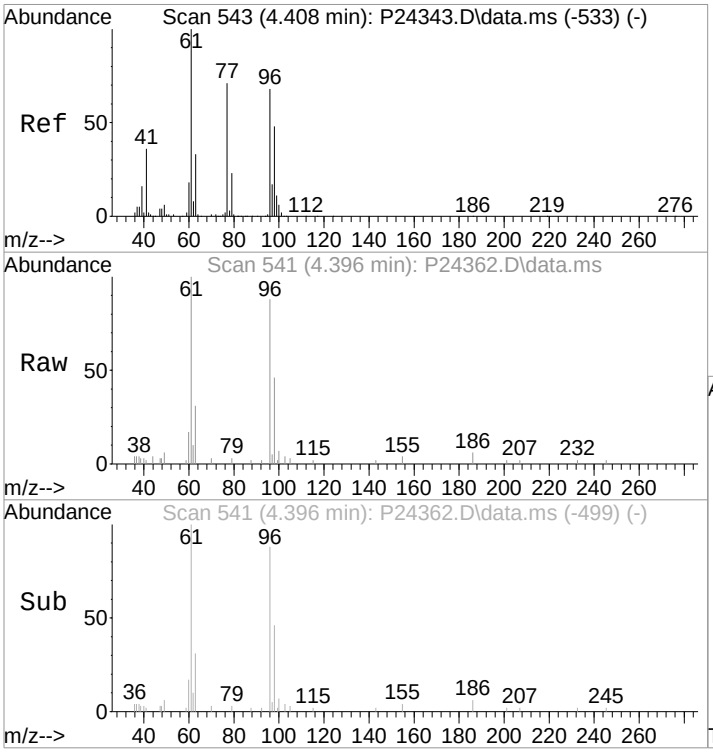


#21
Methyl Acetate
Concen: 0.58 ppb m
RT: 2.713 min Scan# 265
Delta R.T. 0.031 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion: 43 Resp: 2307

Ion	Ratio	Lower	Upper
43	100		
59	18.8	0.0	28.4
74	20.8	3.6	43.6

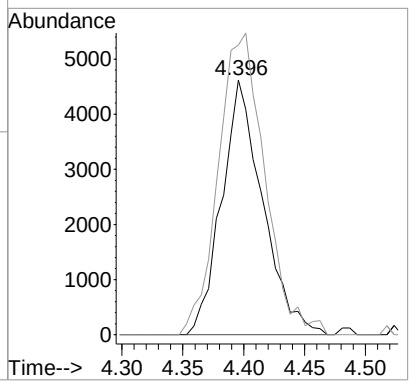


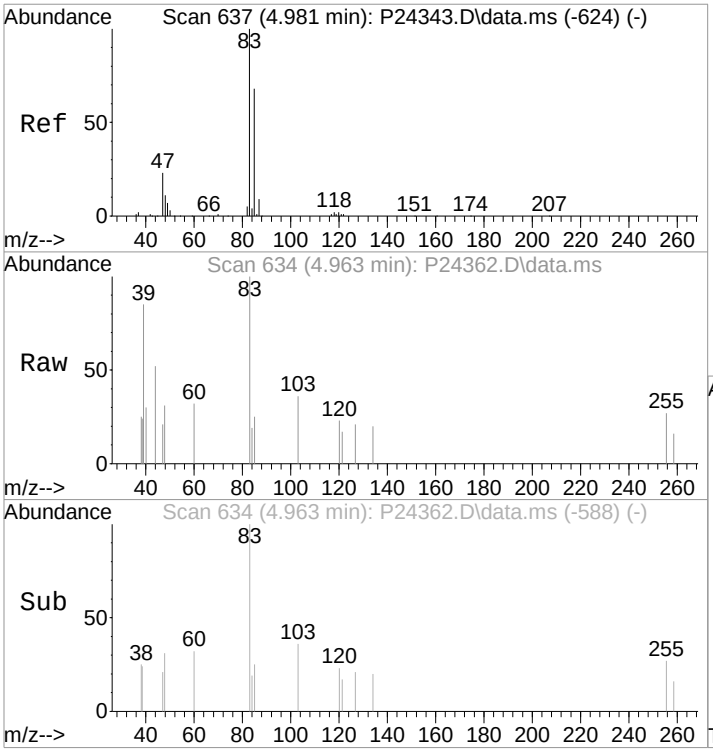


#34
cis-1,2-Dichloroethene
Concen: 3.05 ppb
RT: 4.396 min Scan# 541
Delta R.T. -0.006 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion: 96 Resp: 10870

Ion	Ratio	Lower	Upper
96	100		
61	113.7	128.1	168.1#

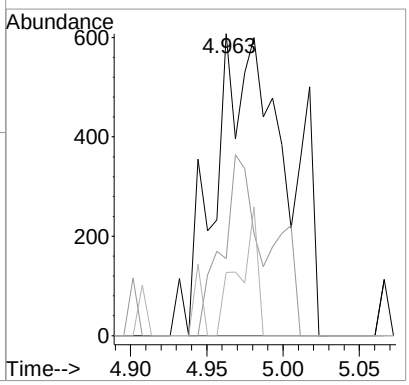


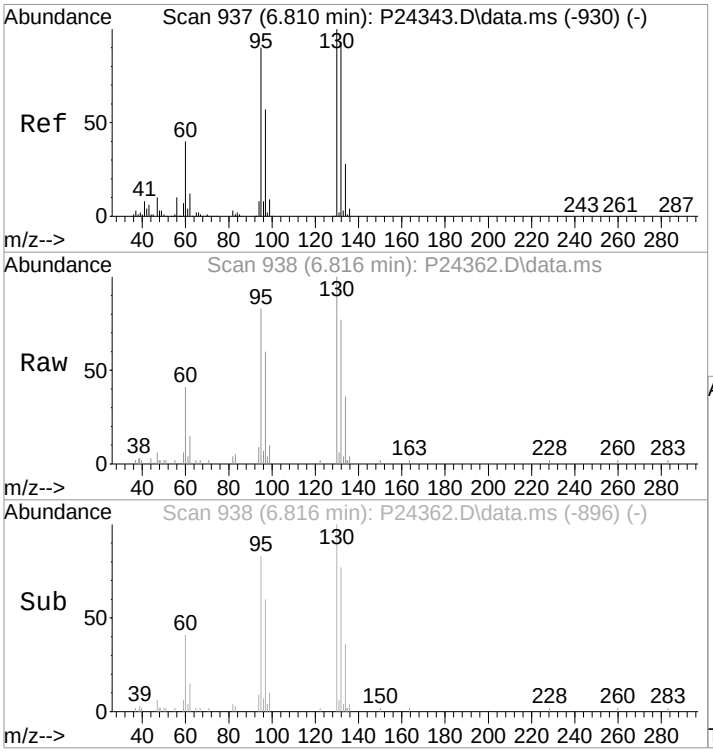


#40
Chloroform
Concen: 0.37 ppb m
RT: 4.963 min Scan# 634
Delta R.T. -0.006 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion: 83 Resp: 1941

Ion	Ratio	Lower	Upper
83	100		
85	25.5	47.9	87.9#
47	20.9	3.4	43.4

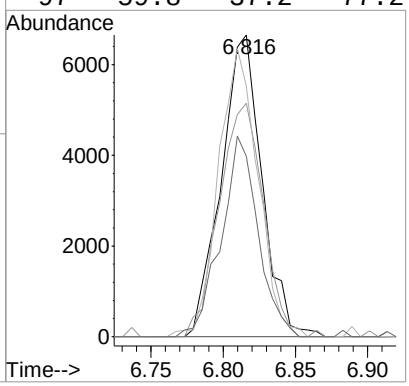


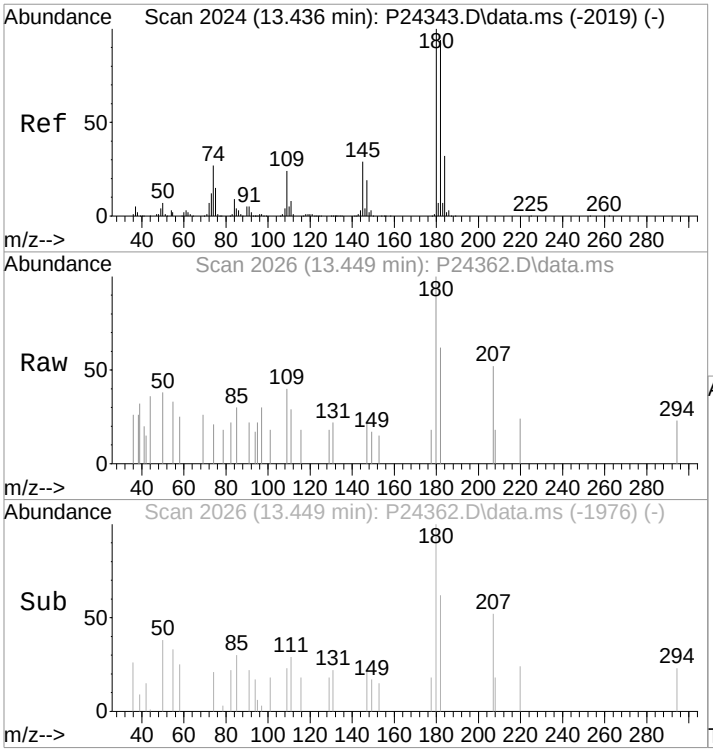


#54
Trichloroethene
Concen: 3.78 ppb
RT: 6.816 min Scan# 938
Delta R.T. 0.006 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion:130 Resp: 13046

Ion	Ratio	Lower	Upper
130	100		
132	77.3	72.6	112.6
95	83.0	69.8	109.8
97	59.8	37.2	77.2

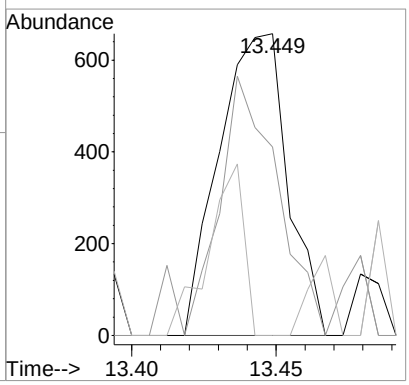




#115
1,2,4-Tcbenzene
Concen: 0.21 ppb
RT: 13.449 min Scan# 2026
Delta R.T. 0.012 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion:180 Resp: 1091

Ion	Ratio	Lower	Upper
180	100		
182	62.5	74.2	114.2#
145	0.0	8.7	48.7#



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pm
Operator : K.Ruest
Sample : R1901228-002|78 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24362.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.433	53	55	58	rVB	19743	17706	1.08%	0.205%
2	1.628	72	87	89	rBV7	41574	115523	7.08%	1.336%
3	1.658	89	92	94	rVV	30594	30586	1.87%	0.354%
4	2.396	207	213	217	rBV	17292	28096	1.72%	0.325%
5	4.402	532	542	551	rBV	19263	52626	3.22%	0.609%
6	5.255	672	682	693	rBV2	154584	417249	25.57%	4.825%
7	5.395	695	705	719	rVB	323134	854895	52.39%	9.886%
8	5.786	757	769	783	rBV	215356	524177	32.12%	6.062%
9	6.487	874	884	896	rBV	544495	1122664	68.79%	12.983%
10	6.810	929	937	945	rBV2	33440	68561	4.20%	0.793%
11	7.578	1058	1063	1069	rBV3	8614	19051	1.17%	0.220%
12	8.297	1174	1181	1192	rBV	1019374	1631905	100.00%	18.872%
13	9.785	1419	1425	1438	rBV	903961	1313377	80.48%	15.188%
14	10.864	1596	1602	1608	rBV	847532	1053385	64.55%	12.182%
15	11.205	1648	1658	1663	rBV5	15417	27240	1.67%	0.315%
16	11.839	1756	1762	1772	rVB	1097890	1370230	83.97%	15.846%

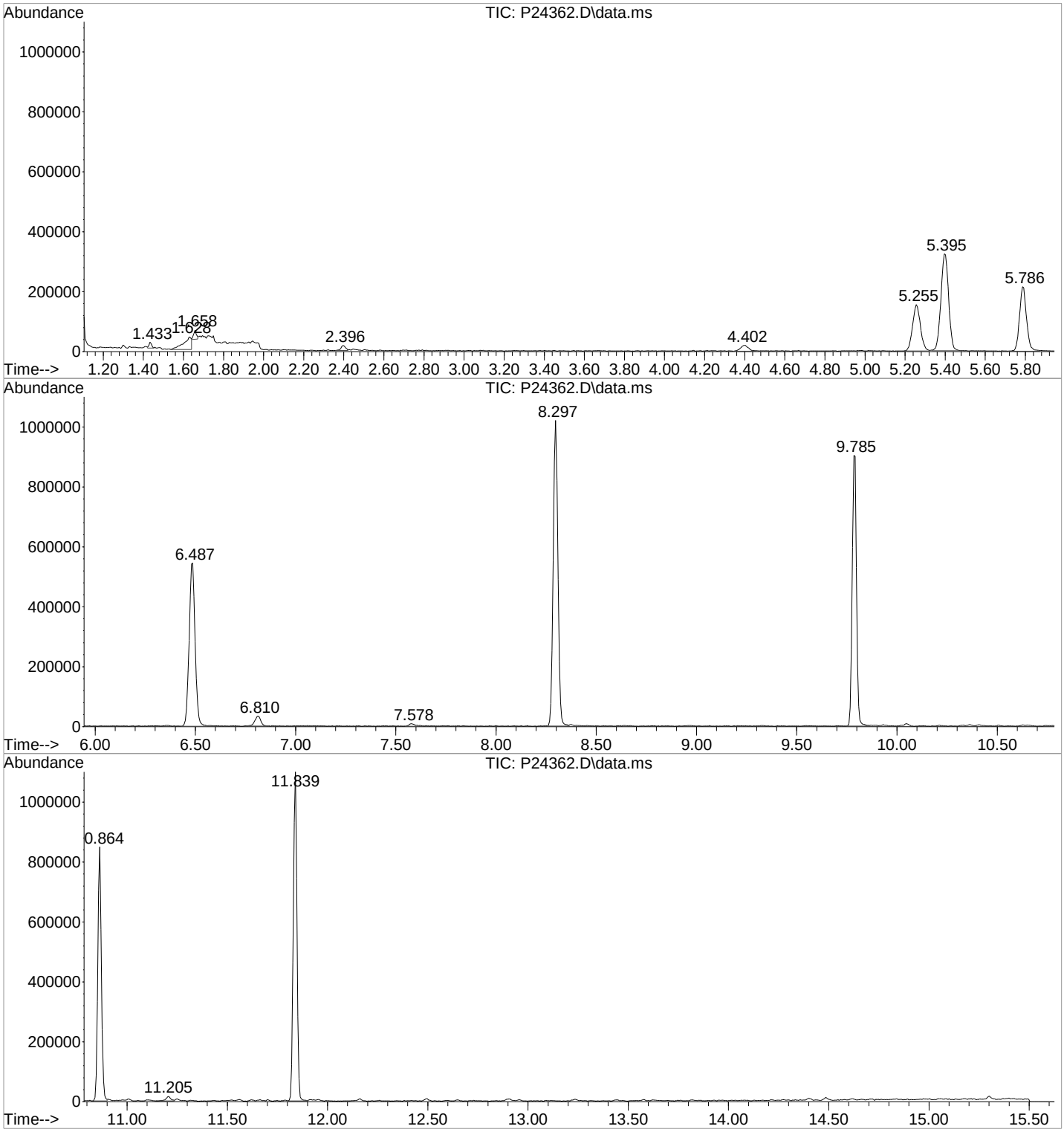
Sum of corrected areas: 8647271

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pm
Operator : K.Ruest
Sample : R1901228-002|78 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pmm
Operator : K.Ruestt
Sample : R1901228-002|78 Inst : MSVOA-122
Misc : DAY MED T44
ALS Vial : 3 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

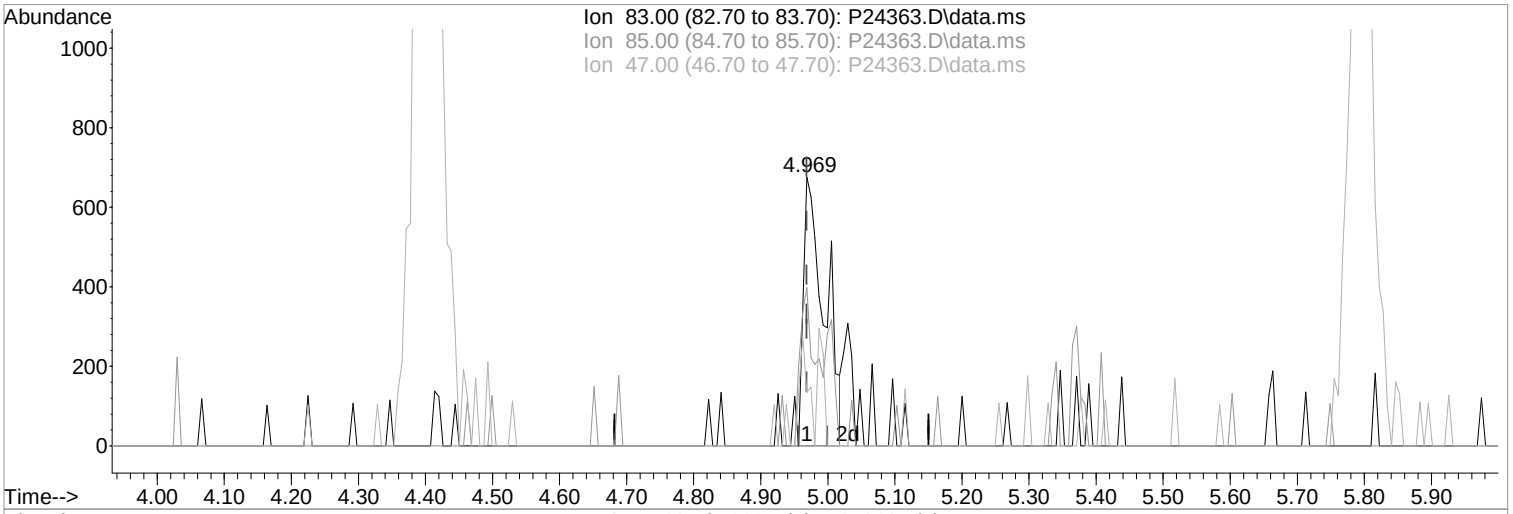
					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

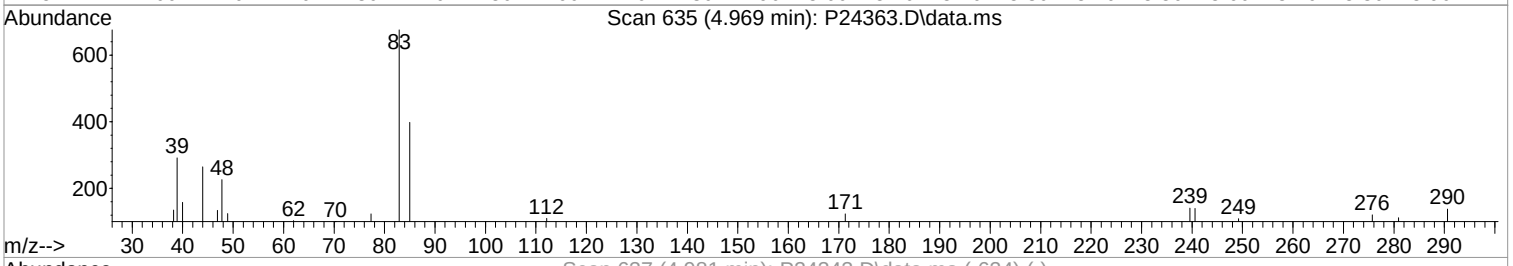
No Library Search Compounds Detected
****

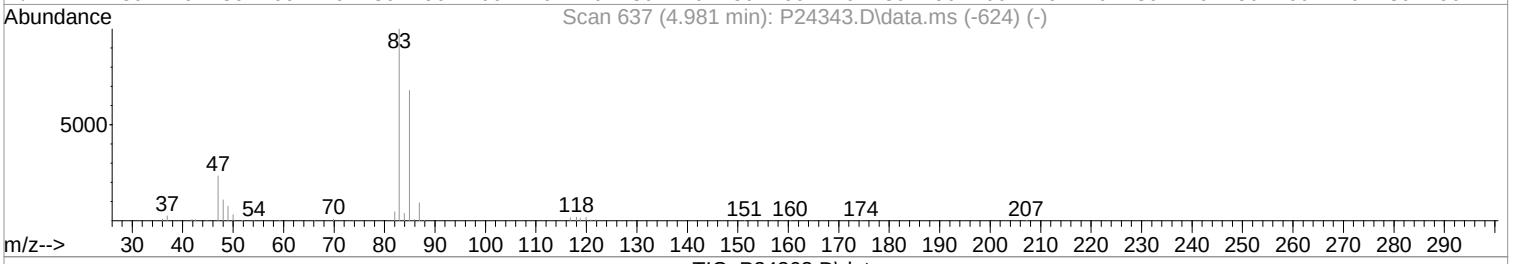
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 21 13:56:42 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24363.D\data.ms

(40) Chloroform (P)

4.969min (+0.000) 0.27 ppb m

response 1514

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	58.88
47.00	23.40	19.82
0.00	0.00	0.00

Manual Integration:

After

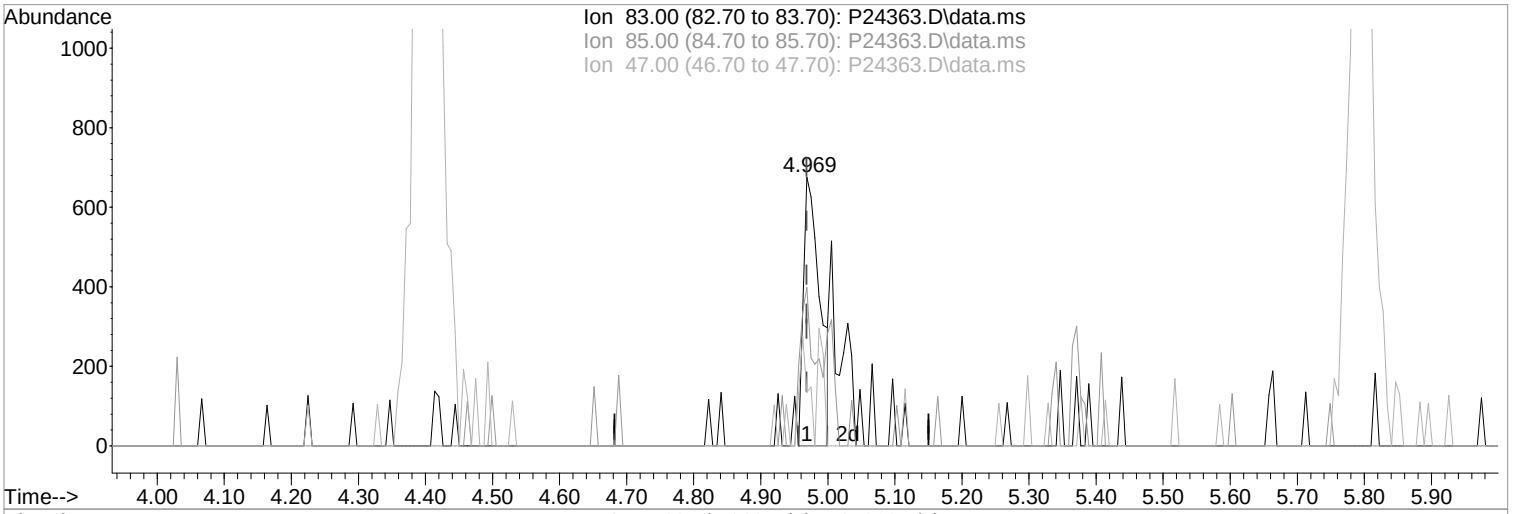
Split Peak

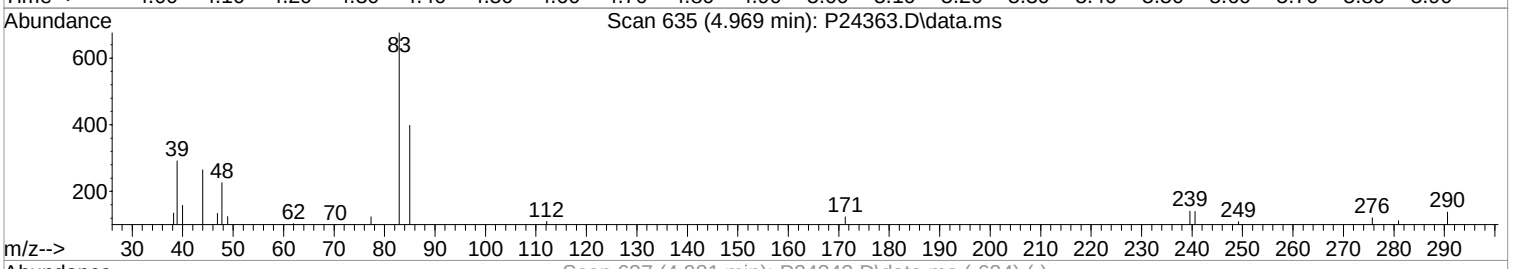
02/22/19

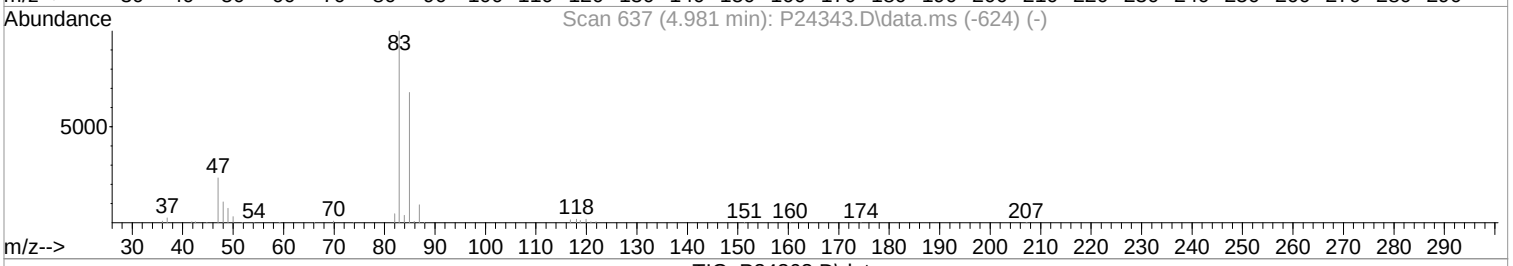
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 21 13:56:42 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24363.D\data.ms

(40) Chloroform (P)

4.969min (+0.000) 0.21 ppb

response 1149

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	58.88
47.00	23.40	19.82
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

DL

Quant Time: Feb 22 11:56:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

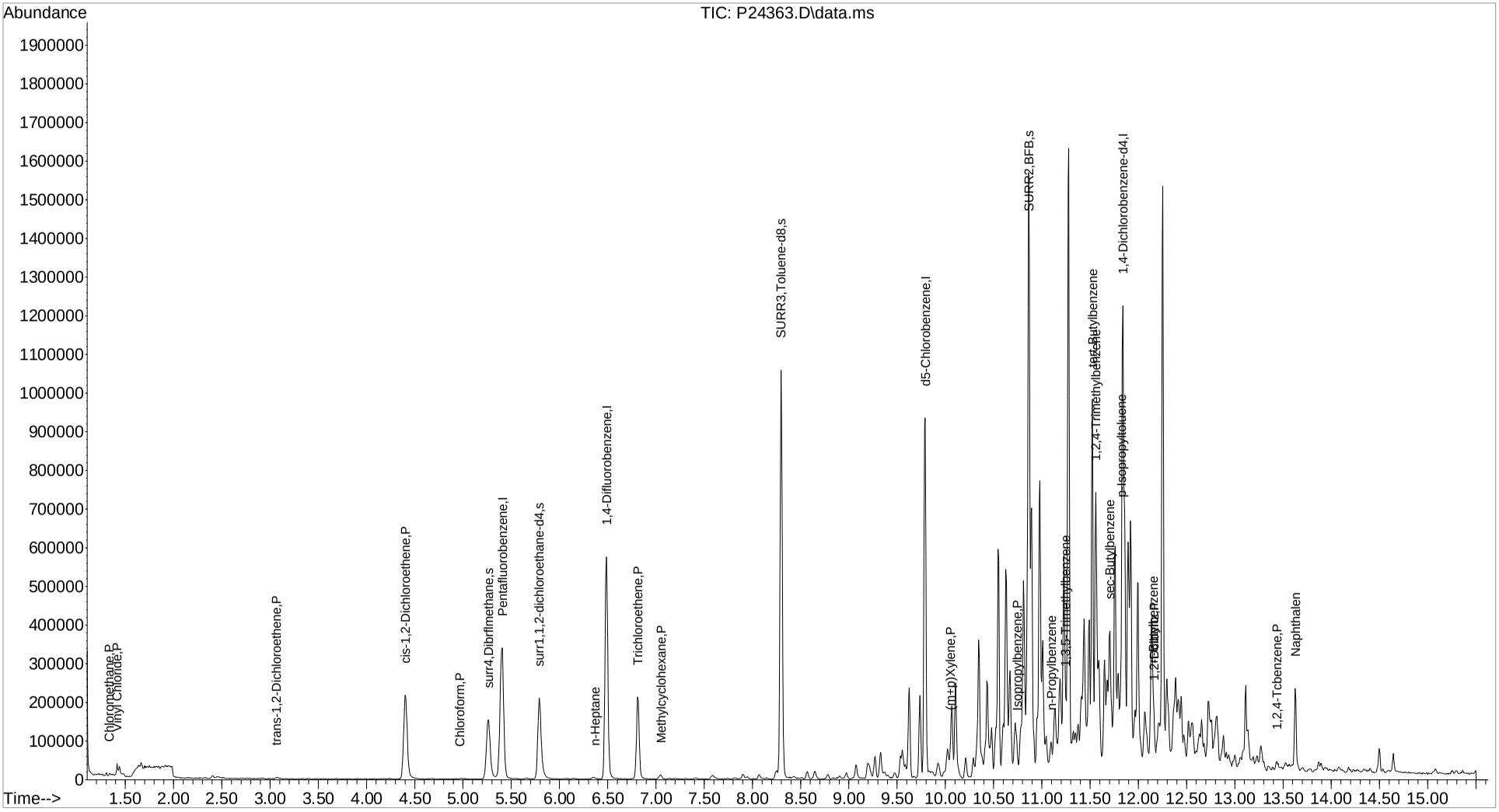
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.408	168	319836	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	511049	50.00	ppb		0.00
71) d5-Chlorobenzene	9.791	117	446233	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	228098	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.261	113	135258	48.16	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.32%				
48) surr1,1,2-dichloroetha...	5.792	65	192063	53.92	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 107.84%				
65) SURR3,Toluene-d8	8.297	98	663505	49.81	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.62%				
70) SURR2,BFB	10.864	95	244061	51.16	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.32%				
Target Compounds							Qvalue
3) Chloromethane	1.335	50	2462	0.48	ppb		85
4) Vinyl Chloride	1.414	62	23916	5.14	ppb		88
26) trans-1,2-Dichloroethene	3.067	96	1067	0.32	ppb	#	82
34) cis-1,2-Dichloroethene	4.402	96	133191	35.79	ppb		85
40) Chloroform	4.969	83	1514m	0.27	ppb		
52) n-Heptane	6.365	43	2352	0.53	ppb		76
54) Trichloroethene	6.810	130	81456	22.79	ppb		94
55) Methylcyclohexane	7.054	55	3734	0.83	ppb	#	86
83) (m+p)Xylene	10.053	106	3858	0.61	ppb	#	69
89) Isopropylbenzene	10.742	105	19380	1.29	ppb		95
95) n-Propylbenzene	11.095	91	20734	1.21	ppb		98
99) 1,3,5-Trimethylbenzene	11.248	105	26534	2.13	ppb		88
100) tert-Butylbenzene	11.522	119	4782	0.44	ppb		93
101) 1,2,4-Trimethylbenzene	11.559	105	241384	18.74	ppb		100
103) sec-Butylbenzene	11.705	105	26423	1.68	ppb		94
104) p-Isopropyltoluene	11.827	119	11153	0.86	ppb		93
109) n-Butylbenzene	12.156	91	34826	3.05	ppb		84
110) 1,2-Dclbenz	12.162	146	1903	0.25	ppb	#	18
115) 1,2,4-Tcbenzene	13.436	180	1213	0.23	ppb	#	56
117) Naphthalen	13.625	128	129723	7.45	ppb		98

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

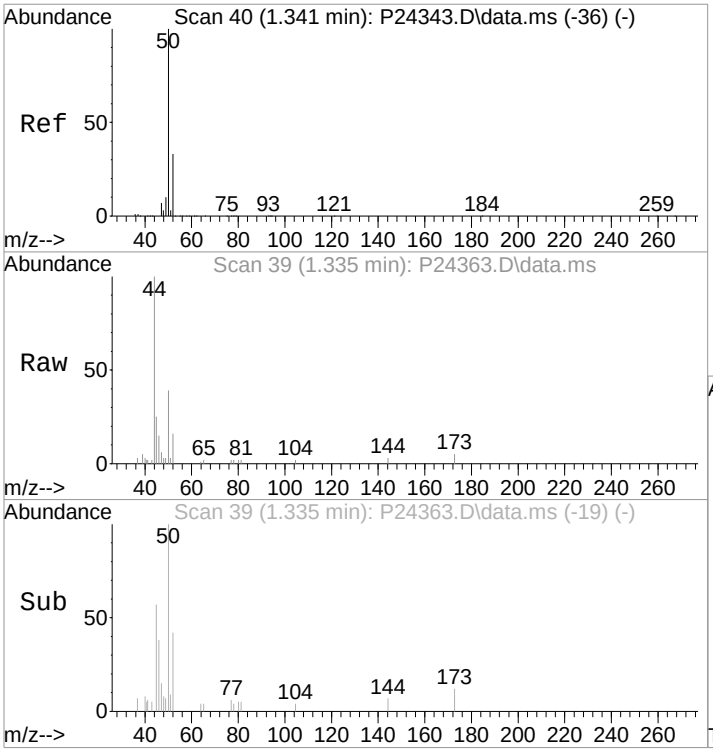
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 22 11:56:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



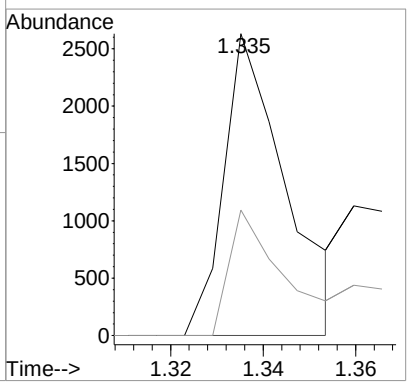
1st 02/22/19

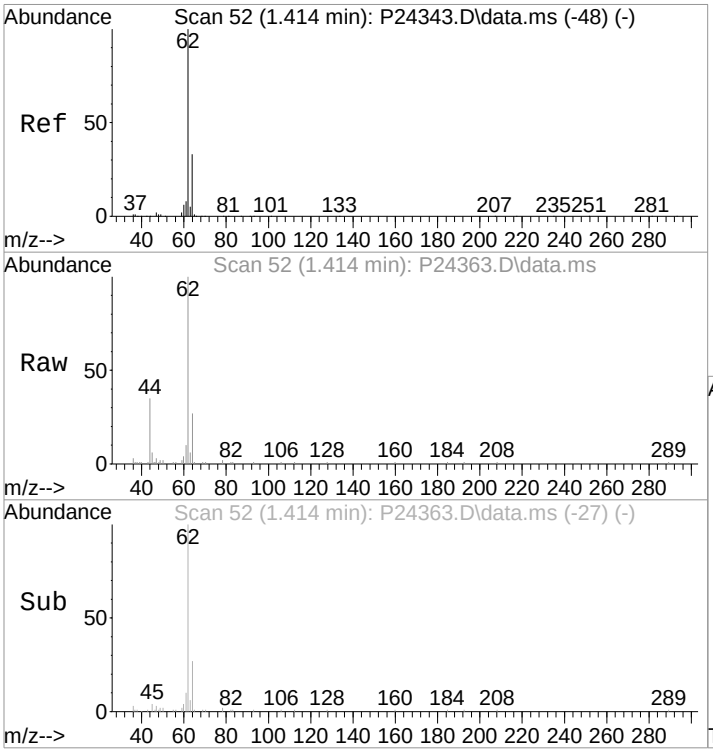


#3
Chloromethane
Concen: 0.48 ppb
RT: 1.335 min Scan# 39
Delta R.T. 0.006 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 50 Resp: 2462

Ion	Ratio	Lower	Upper
50	100		
52	41.5	13.0	53.0

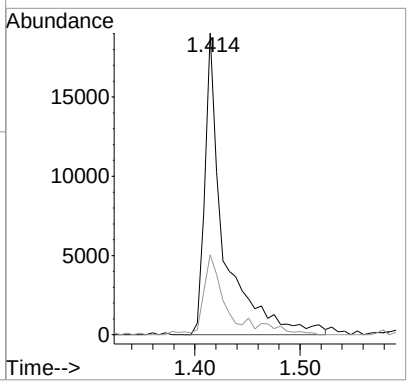


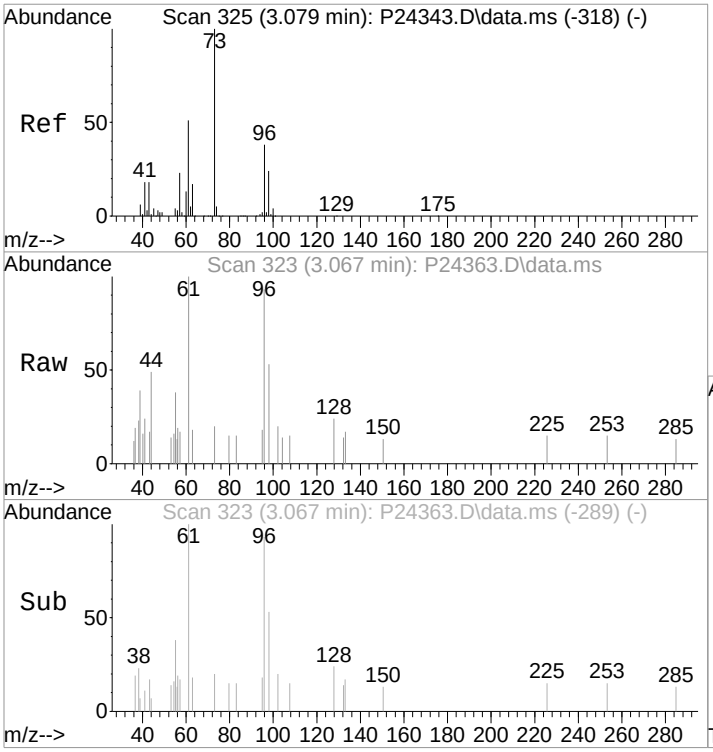


#4
Vinyl Chloride
Concen: 5.14 ppb
RT: 1.414 min Scan# 52
Delta R.T. 0.006 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 62 Resp: 23916

Ion	Ratio	Lower	Upper
62	100		
64	26.5	13.2	53.2

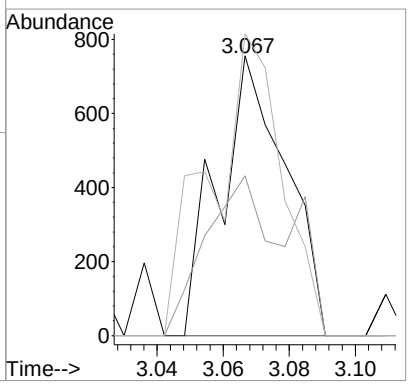


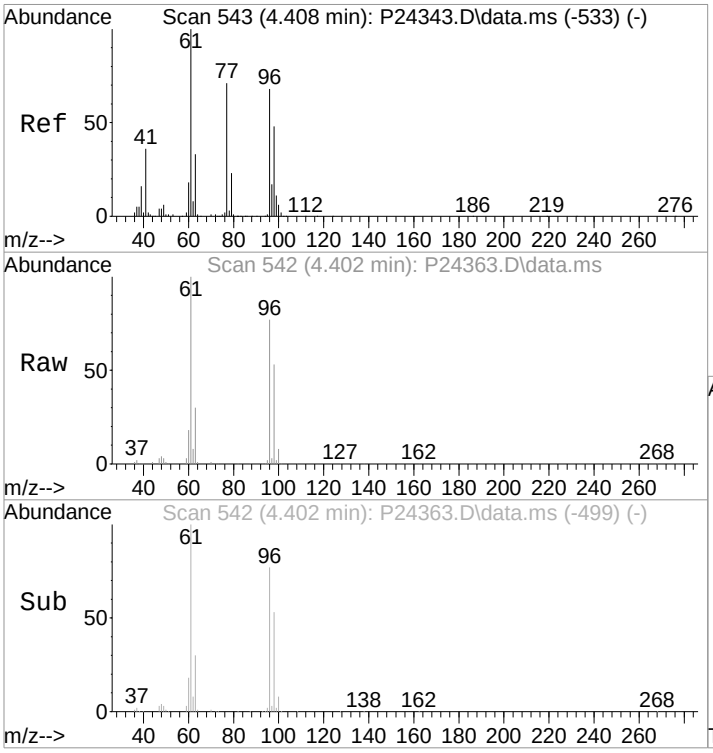


#26
trans-1,2-Dichloroethene
Concen: 0.32 ppb
RT: 3.067 min Scan# 323
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 96 Resp: 1067

Ion	Ratio	Lower	Upper
96	100		
98	57.1	43.5	83.5
61	107.9	114.4	154.4#

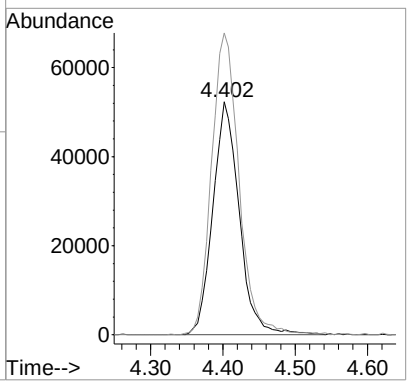


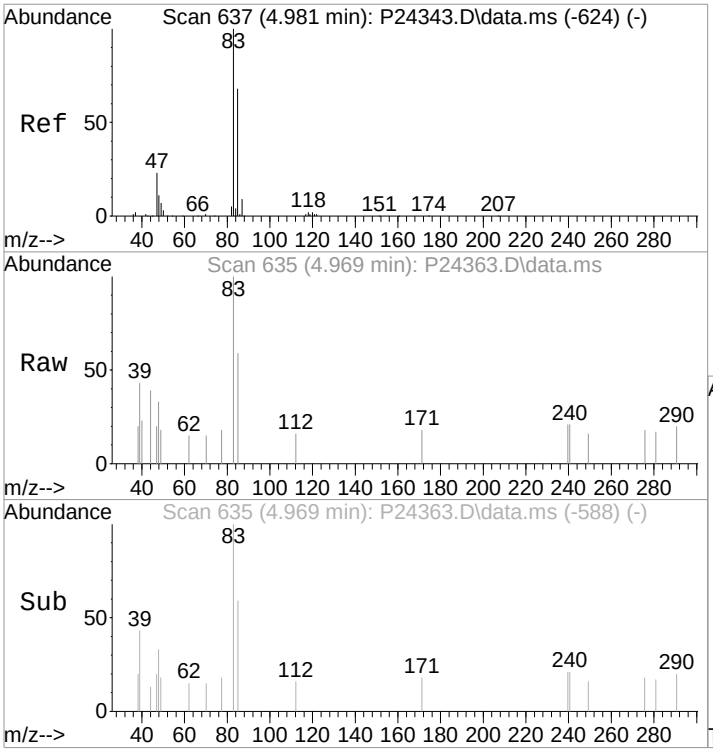


#34
cis-1,2-Dichloroethene
Concen: 35.79 ppb
RT: 4.402 min Scan# 542
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 96 Resp: 133191

Ion	Ratio	Lower	Upper
96	100		
61	129.5	128.1	168.1

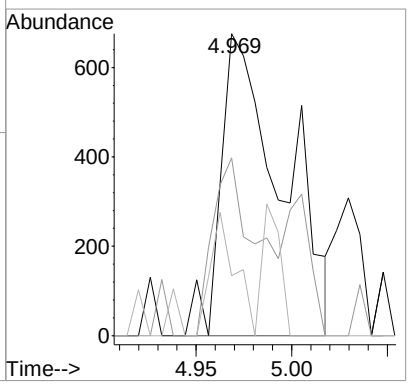


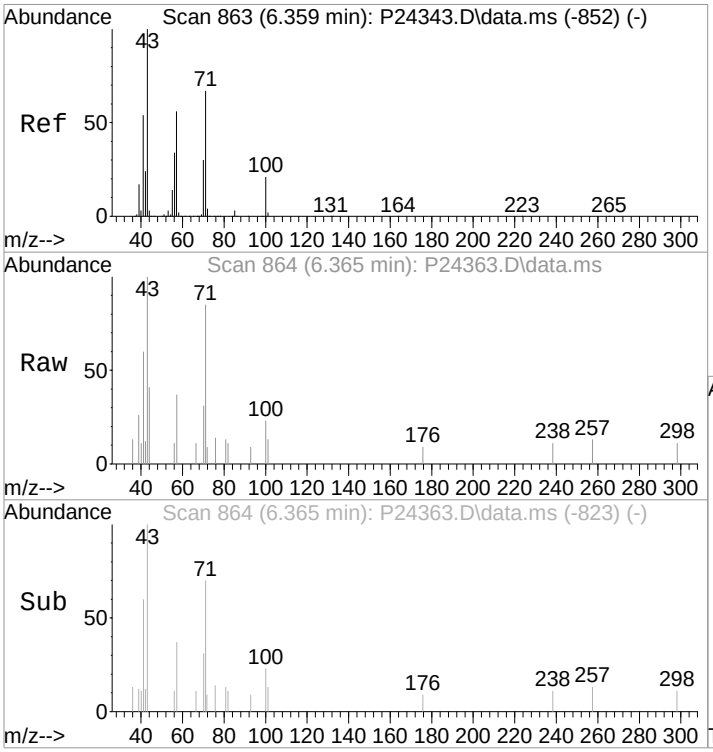


#40
Chloroform
Concen: 0.27 ppb m
RT: 4.969 min Scan# 635
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 83 Resp: 1514

Ion	Ratio	Lower	Upper
83	100		
85	58.9	47.9	87.9
47	19.8	3.4	43.4

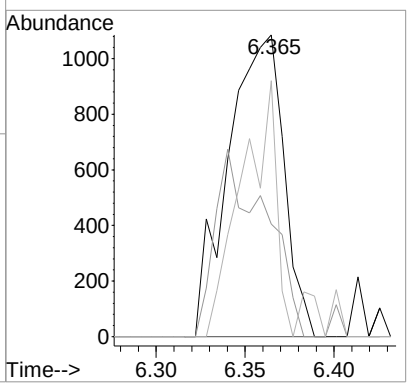


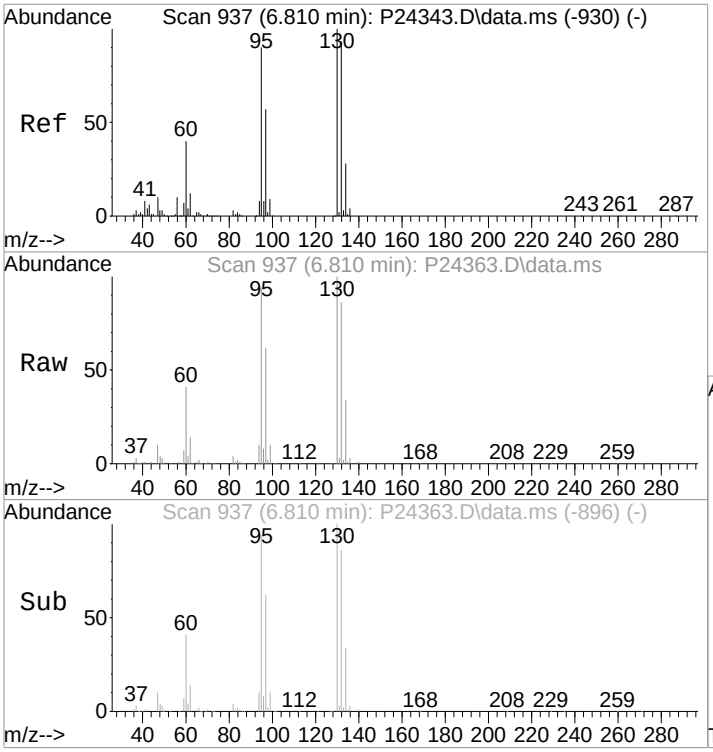


#52
n-Heptane
Concen: 0.53 ppb
RT: 6.365 min Scan# 864
Delta R.T. 0.012 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 43 Resp: 2352

Ion	Ratio	Lower	Upper
43	100		
57	37.3	35.5	75.5
71	84.8	47.0	87.0

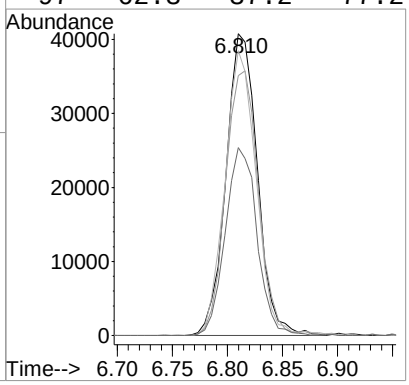


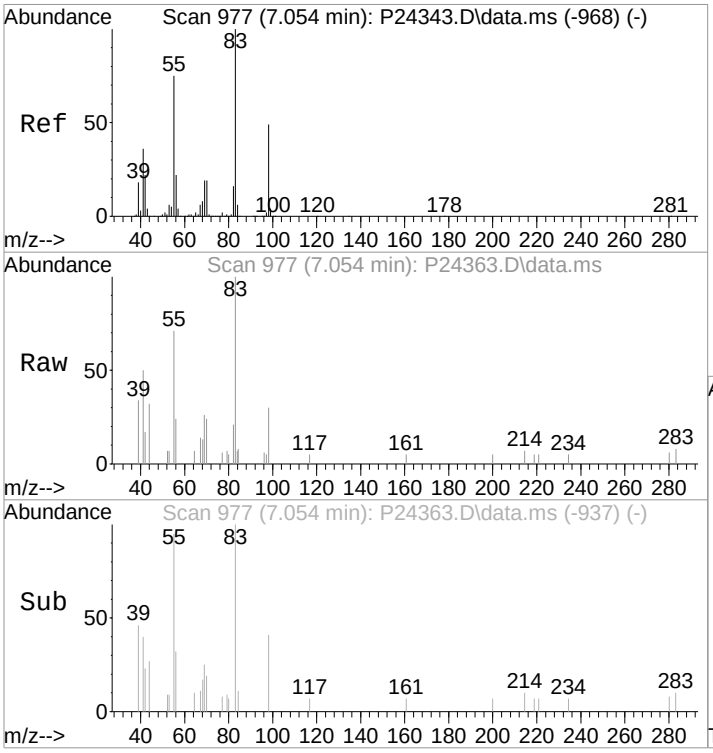


#54
Trichloroethene
Concen: 22.79 ppb
RT: 6.810 min Scan# 937
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:130 Resp: 81456

Ion	Ratio	Lower	Upper
130	100		
132	86.1	72.6	112.6
95	94.3	69.8	109.8
97	62.3	37.2	77.2

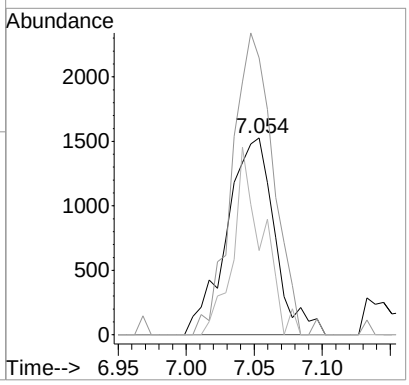


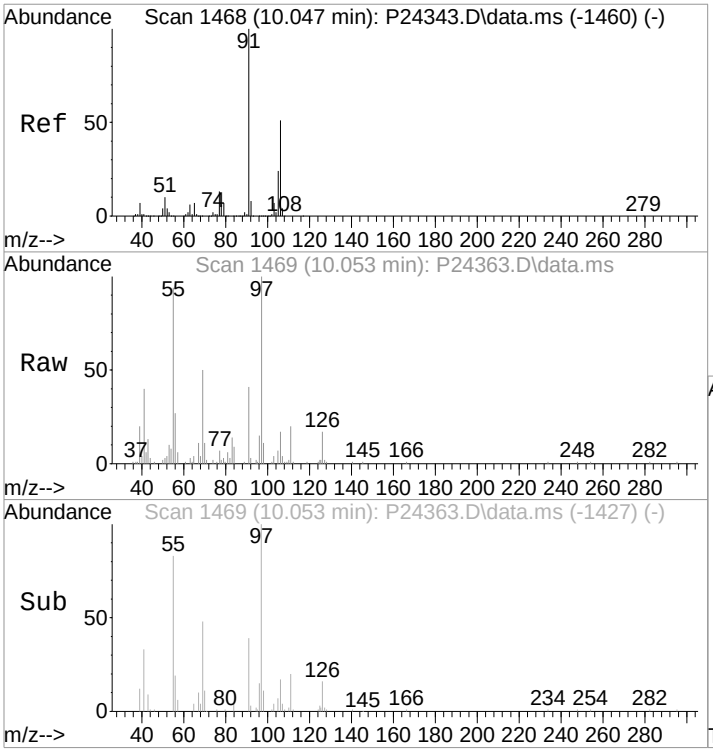


#55
Methylcyclohexane
Concen: 0.83 ppb
RT: 7.054 min Scan# 977
Delta R.T. 0.006 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 55 Resp: 3734

Ion	Ratio	Lower	Upper
55	100		
83	140.7	113.1	153.1
98	42.8	45.0	85.0#

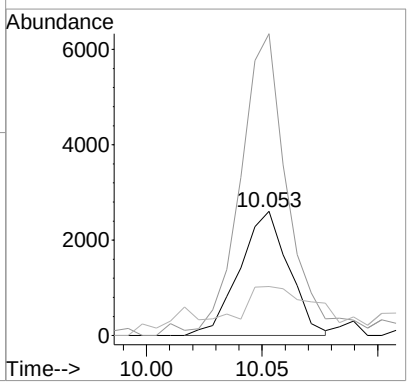


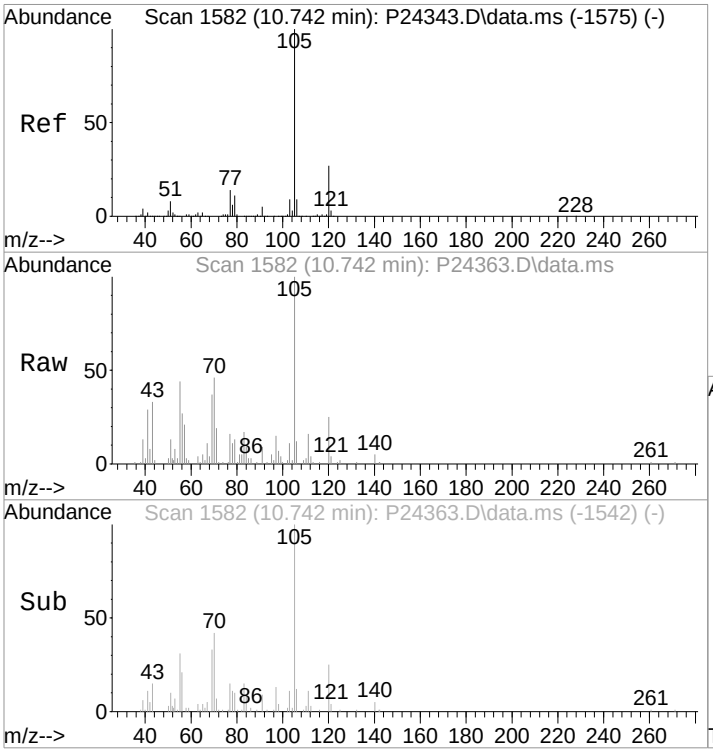


#83
(m+p)Xylene
Concen: 0.61 ppb
RT: 10.053 min Scan# 1469
Delta R.T. 0.006 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:106 Resp: 3858

Ion	Ratio	Lower	Upper
106	100		
91	242.9	175.0	215.0#
77	39.4	6.3	46.3

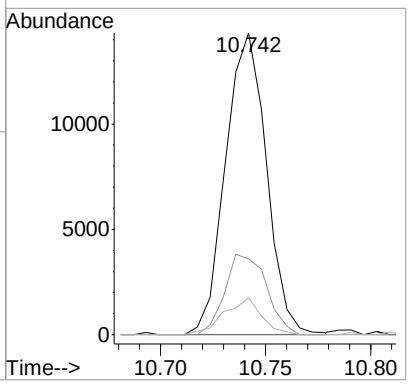


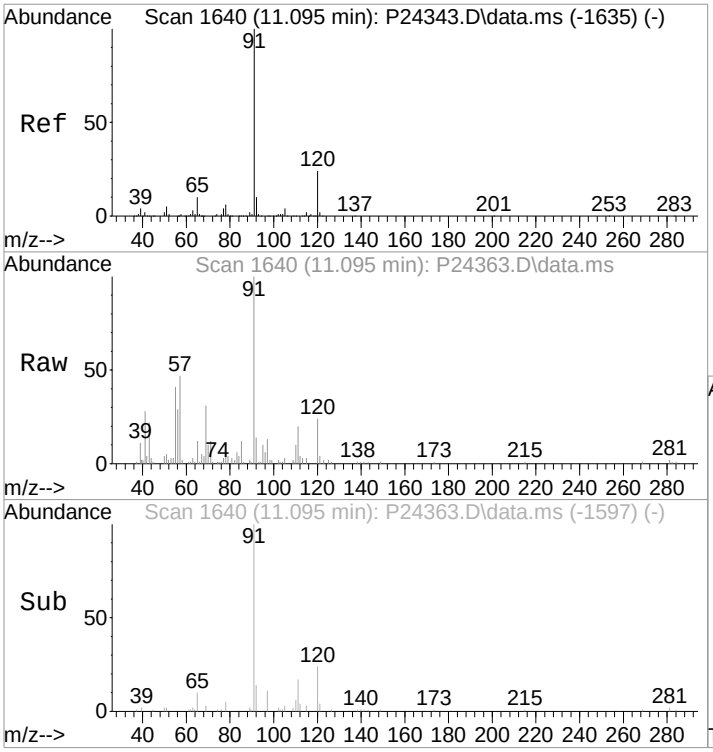


#89
Isopropylbenzene
Concen: 1.29 ppb
RT: 10.742 min Scan# 1582
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:105 Resp: 19380

Ion	Ratio	Lower	Upper
105	100		
120	25.2	7.2	47.2
106	12.3	0.0	28.8

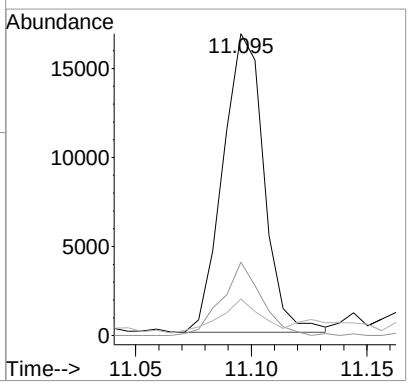


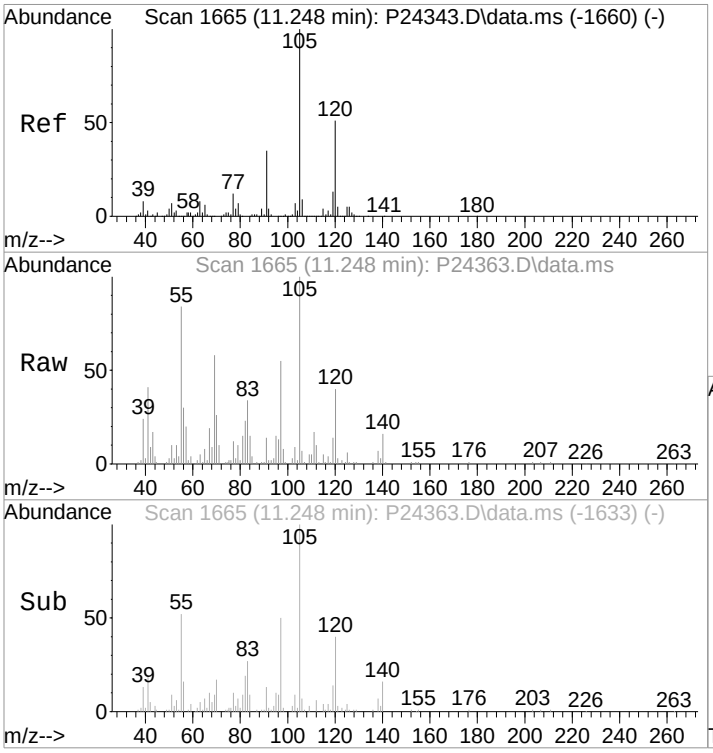


#95
n-Propylbenzene
Concen: 1.21 ppb
RT: 11.095 min Scan# 1640
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 91 Resp: 20734

Ion	Ratio	Lower	Upper
91	100		
120	24.3	4.4	44.4
65	12.1	0.0	30.4

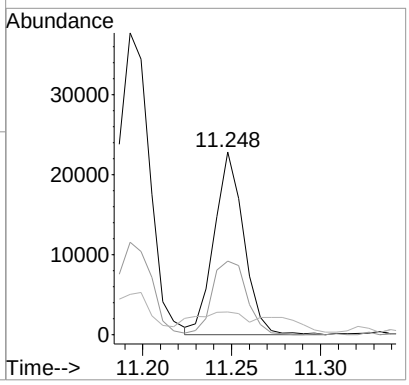


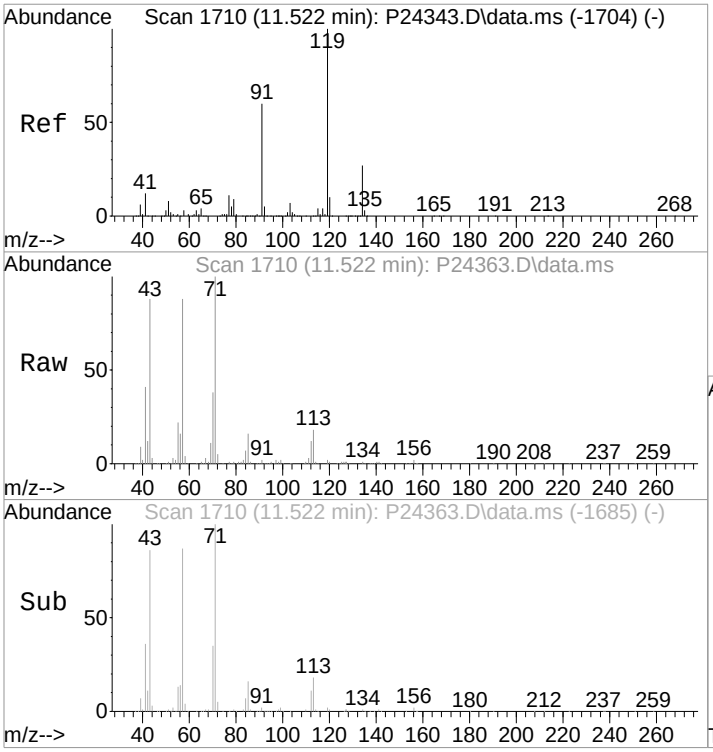


#99
1,3,5-Trimethylbenzene
Concen: 2.13 ppb
RT: 11.248 min Scan# 1665
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:105 Resp: 26534

Ion	Ratio	Lower	Upper
105	100		
120	40.4	30.8	70.8
77	12.4	0.0	32.5

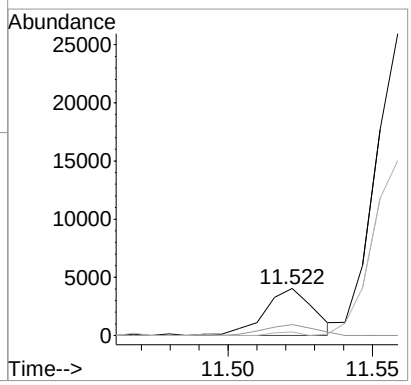


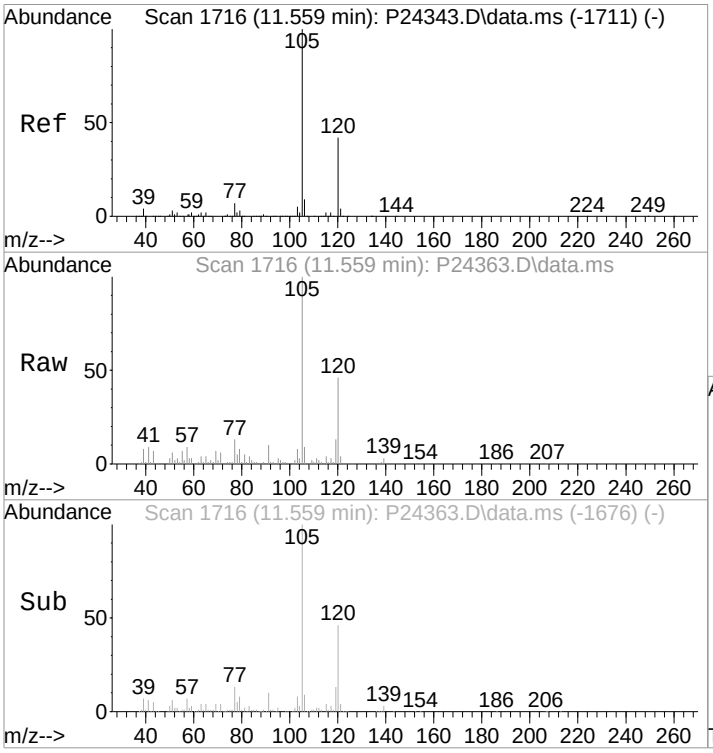


#100
tert-Butylbenzene
Concen: 0.44 ppb
RT: 11.522 min Scan# 1710
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:119 Resp: 4782

Ion	Ratio	Lower	Upper
119	100		
134	23.1	7.0	47.0
103	7.7	0.0	26.6

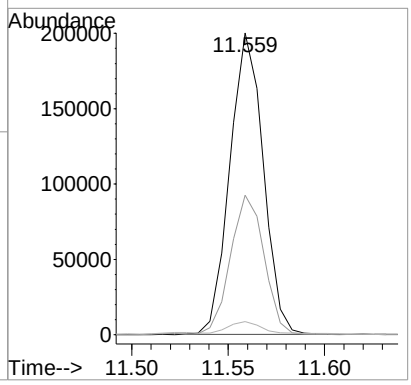


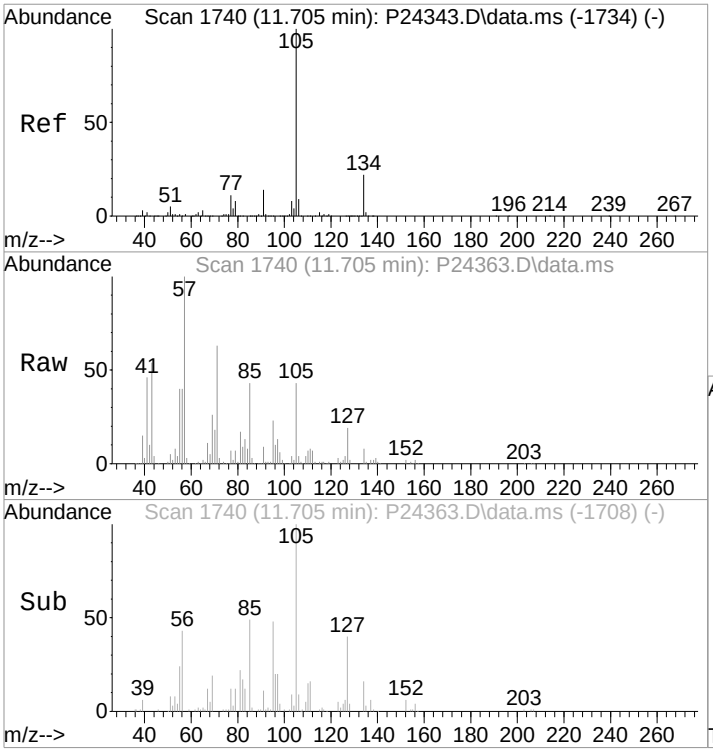


#101
1,2,4-Trimethylbenzene
Concen: 18.74 ppb
RT: 11.559 min Scan# 1716
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:105 Resp: 241384

Ion	Ratio	Lower	Upper
105	100		
120	46.2	26.4	66.4
65	4.3	0.0	24.1

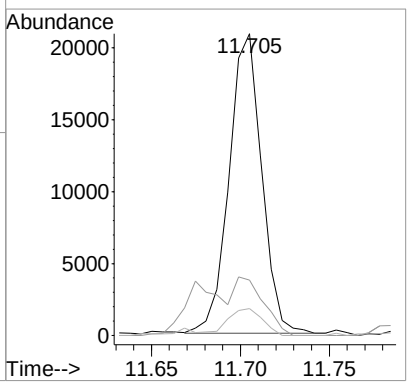


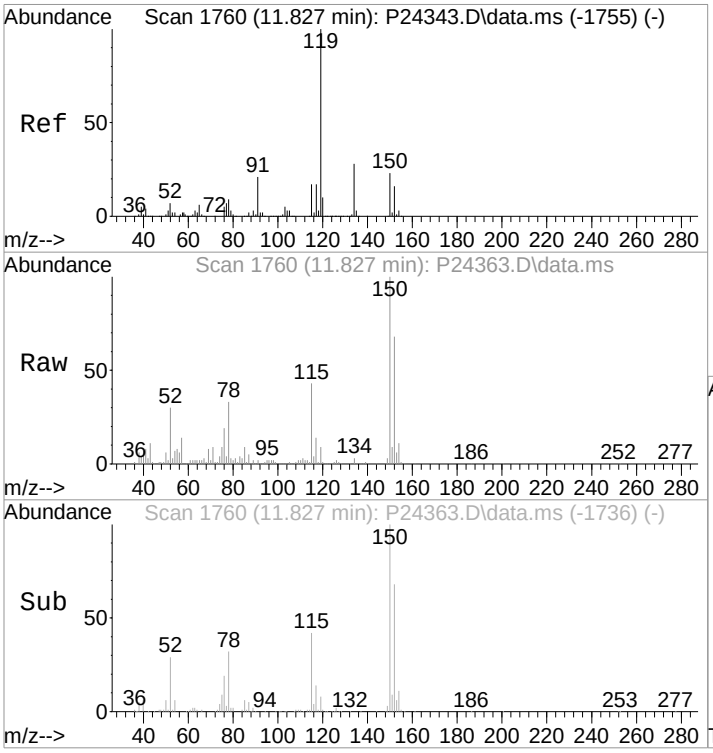


#103
sec-Butylbenzene
Concen: 1.68 ppb
RT: 11.705 min Scan# 1740
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:105 Resp: 26423

Ion	Ratio	Lower	Upper
105	100		
134	18.4	1.8	41.8
103	8.9	0.0	27.9

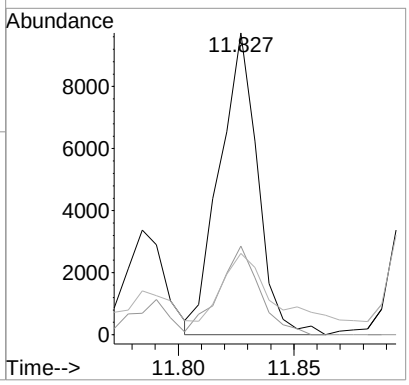


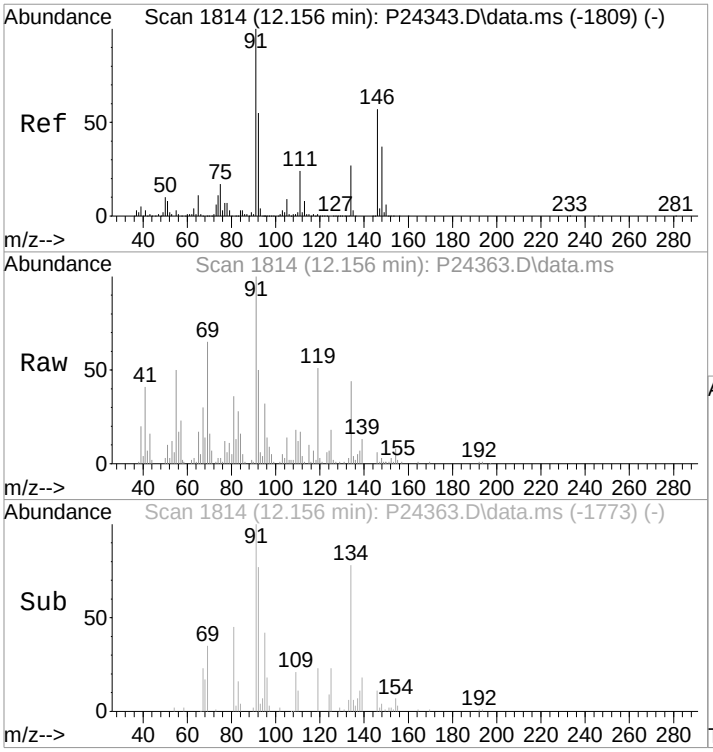


#104
p-Isopropyltoluene
Concen: 0.86 ppb
RT: 11.827 min Scan# 1760
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:119 Resp: 11153

Ion	Ratio	Lower	Upper
119	100		
134	29.4	7.6	47.6
91	26.9	1.3	41.3

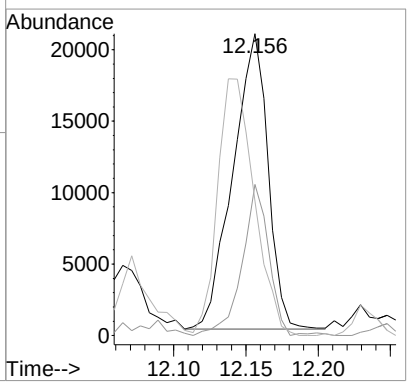


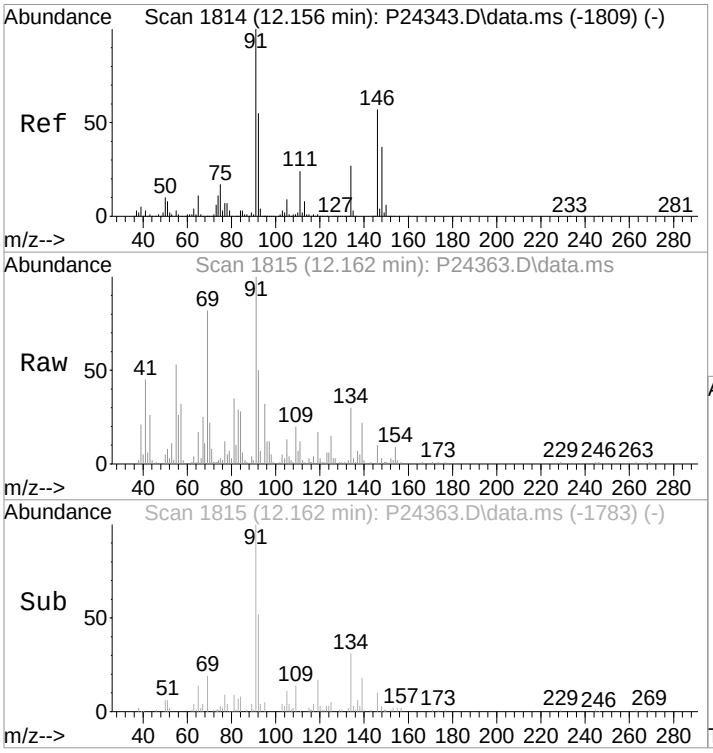


#109
n-Butylbenzene
Concen: 3.05 ppb
RT: 12.156 min Scan# 1814
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 91 Resp: 34826

Ion	Ratio	Lower	Upper
91	100		
92	50.0	34.7	74.7
134	44.5	6.8	46.8

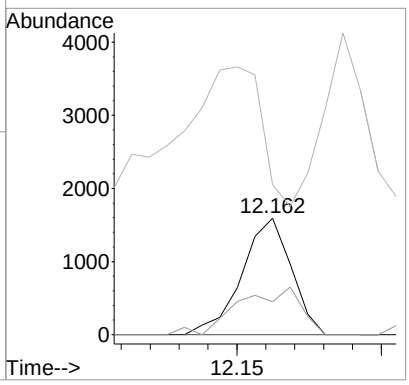


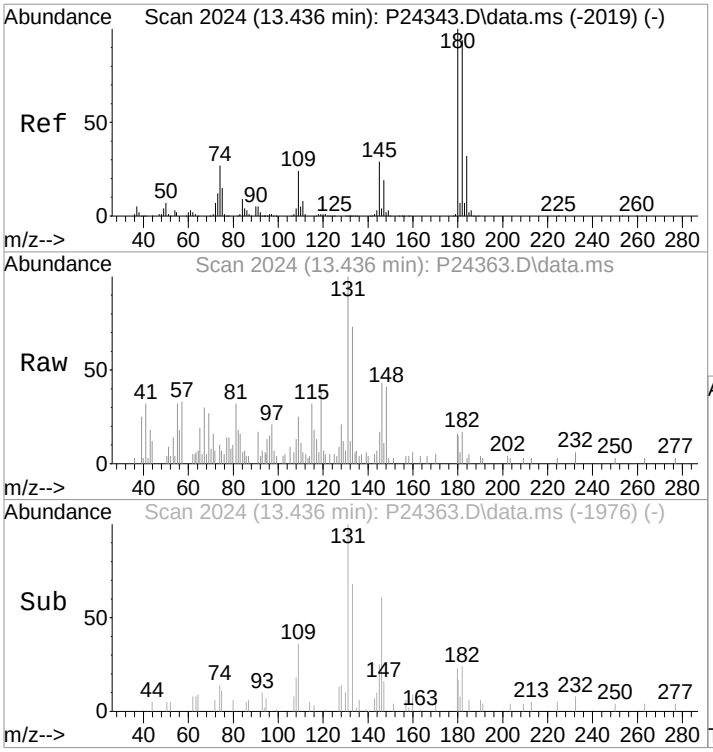


#110
1,2-Dclbenz
Concen: 0.25 ppb
RT: 12.162 min Scan# 1815
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:146 Resp: 1903

Ion	Ratio	Lower	Upper
146	100		
148	28.4	44.5	84.5#
111	128.7	21.6	61.6#

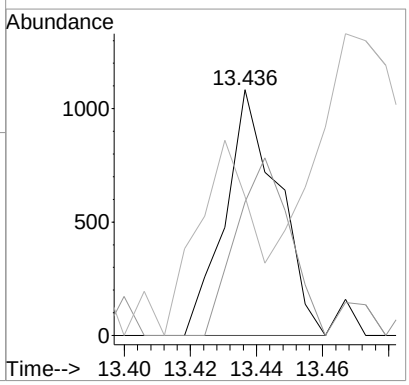


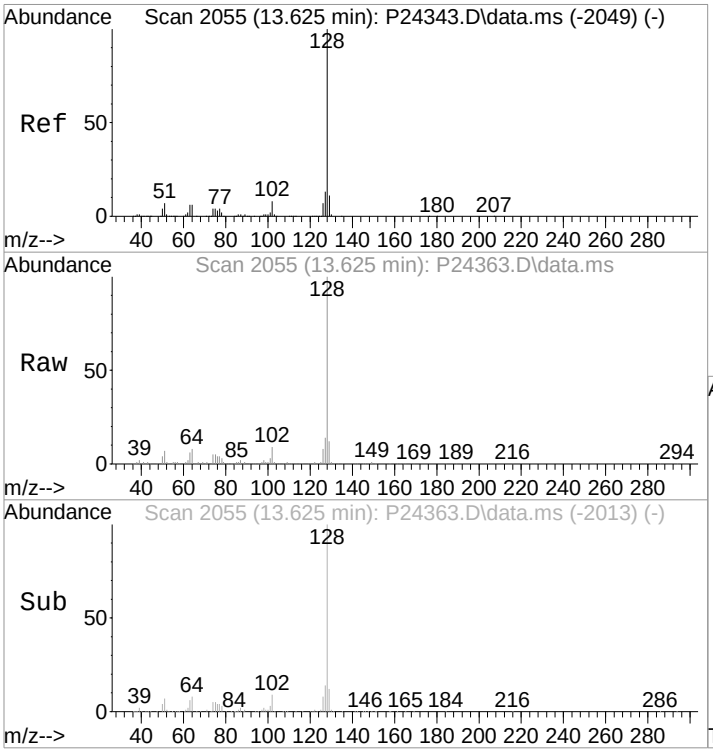


#115
1,2,4-Tcbenzene
Concen: 0.23 ppb
RT: 13.436 min Scan# 2024
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:180 Resp: 1213

Ion	Ratio	Lower	Upper
180	100		
182	54.3	74.2	114.2#
145	56.5	8.7	48.7#

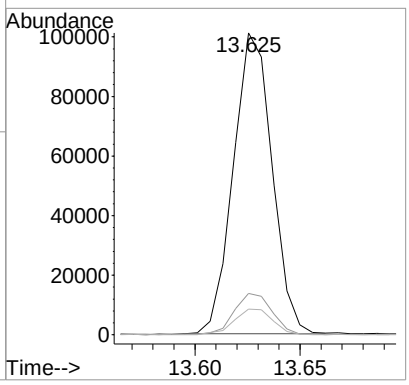




#117
Naphthalen
Concen: 7.45 ppb
RT: 13.625 min Scan# 2055
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:128 Resp: 129723

Ion	Ratio	Lower	Upper
128	100		
127	13.7	0.0	32.9
102	8.5	0.0	28.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24363.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.414	49	52	54	rBV	28798	24653	1.06%	0.070%
2	1.640	76	89	91	rBV6	28748	97734	4.21%	0.278%
3	4.402	533	542	557	rBV2	217372	568886	24.49%	1.617%
4	5.261	672	683	694	rBV2	153680	441761	19.01%	1.256%
5	5.408	696	707	722	rVB	338368	903228	38.88%	2.568%
6	5.792	761	770	788	rBV	208638	534620	23.01%	1.520%
7	6.487	876	884	897	rBV	575305	1167430	50.25%	3.319%
8	6.810	927	937	946	rBV	212246	423196	18.22%	1.203%
9	7.047	966	976	982	rBV4	10996	25589	1.10%	0.073%
10	7.895	1107	1115	1121	rBV2	11599	24646	1.06%	0.070%
11	8.255	1167	1174	1175	rBV2	20980	36473	1.57%	0.104%
12	8.297	1175	1181	1191	rVB	1055319	1716103	73.86%	4.878%
13	8.572	1219	1226	1231	rBV2	19112	30325	1.31%	0.086%
14	8.645	1231	1238	1246	rVB3	20422	37565	1.62%	0.107%
15	8.974	1287	1292	1298	rVB2	15756	24496	1.05%	0.070%
16	9.071	1300	1308	1314	rBV2	36474	65561	2.82%	0.186%
17	9.193	1324	1328	1336	rBV2	38258	93727	4.03%	0.266%
18	9.273	1336	1341	1345	rVB	55003	80874	3.48%	0.230%
19	9.328	1345	1350	1354	rBV	65400	102119	4.40%	0.290%
20	9.474	1370	1374	1379	rBV3	13979	24653	1.06%	0.070%
21	9.535	1379	1384	1385	rVV	57619	69340	2.98%	0.197%
22	9.553	1385	1387	1391	rVV2	72789	112583	4.85%	0.320%
23	9.626	1394	1399	1404	rVB	232730	337848	14.54%	0.960%
24	9.736	1410	1417	1421	rBV	214416	303629	13.07%	0.863%
25	9.791	1421	1426	1431	rVV	921884	1312598	56.50%	3.731%
26	9.925	1443	1448	1455	rVB4	34243	64866	2.79%	0.184%
27	10.023	1455	1464	1467	rBV3	71470	146817	6.32%	0.417%
28	10.065	1467	1471	1474	rBV	140254	174784	7.52%	0.497%
29	10.108	1474	1478	1489	rVB	247363	384988	16.57%	1.094%
30	10.212	1489	1495	1501	rBV2	53388	83177	3.58%	0.236%
31	10.291	1504	1508	1510	rBV2	49442	65893	2.84%	0.187%
32	10.346	1510	1517	1525	rBV3	327948	516636	22.24%	1.469%
33	10.431	1525	1531	1536	rBV2	216648	359287	15.46%	1.021%
34	10.480	1536	1539	1542	rVB2	106591	126115	5.43%	0.359%
35	10.547	1542	1550	1555	rBV	569015	881612	37.95%	2.506%
36	10.602	1555	1559	1560	rBV	109659	148431	6.39%	0.422%
37	10.626	1560	1563	1567	rBV	409156	504502	21.71%	1.434%
38	10.669	1567	1570	1575	rVB2	240638	347637	14.96%	0.988%
39	10.724	1575	1579	1585	rVB3	109189	190133	8.18%	0.541%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

40	10.809	1585	1593	1597	rBV	476600	859941	37.01%	2.445%
41	10.864	1597	1602	1605	rBV3	1402734	2004769	86.29%	5.699%
42	10.894	1605	1607	1613	rVB	660407	736932	31.72%	2.095%
43	10.949	1613	1616	1617	rBV	117064	118838	5.12%	0.338%
44	10.980	1617	1621	1624	rBV	613824	724757	31.19%	2.060%
45	11.010	1624	1626	1630	rVB2	268997	263541	11.34%	0.749%
46	11.047	1630	1632	1636	rVB2	68726	69203	2.98%	0.197%
47	11.095	1636	1640	1642	rBV3	53792	66935	2.88%	0.190%
48	11.138	1642	1647	1651	rBV3	119238	210549	9.06%	0.599%
49	11.187	1651	1655	1658	rBV3	168777	261508	11.26%	0.743%
50	11.230	1658	1662	1666	rBV	442342	553890	23.84%	1.575%
51	11.278	1666	1670	1675	rVB2	1538865	1917759	82.54%	5.452%
52	11.327	1675	1678	1679	rBV2	32230	26849	1.16%	0.076%
53	11.376	1683	1686	1688	rBV	47951	50187	2.16%	0.143%
54	11.412	1688	1692	1693	rBV2	115026	153696	6.62%	0.437%
55	11.437	1693	1696	1700	rVB4	278511	340160	14.64%	0.967%
56	11.492	1701	1705	1707	rBV	274176	314531	13.54%	0.894%
57	11.522	1707	1710	1713	rBV	790036	800598	34.46%	2.276%
58	11.559	1713	1716	1719	rBV	541985	649248	27.94%	1.846%
59	11.650	1726	1731	1733	rBV	249936	338534	14.57%	0.962%
60	11.675	1733	1735	1737	rVV2	195762	256032	11.02%	0.728%
61	11.705	1737	1740	1744	rVV3	321573	516436	22.23%	1.468%
62	11.760	1744	1749	1752	rVV	539340	828747	35.67%	2.356%
63	11.790	1752	1754	1756	rVV3	208127	249341	10.73%	0.709%
64	11.839	1756	1762	1768	rVV2	1157111	2323315	100.00%	6.605%
65	11.894	1768	1771	1773	rVV	543217	749469	32.26%	2.131%
66	11.918	1773	1775	1779	rVV	596632	704385	30.32%	2.002%
67	11.967	1779	1783	1784	rVV3	105434	138759	5.97%	0.394%
68	11.992	1784	1787	1795	rVB	451894	647608	27.87%	1.841%
69	12.065	1795	1799	1806	rBV5	117564	227606	9.80%	0.647%
70	12.138	1806	1811	1818	rBV3	346457	621822	26.76%	1.768%
71	12.211	1818	1823	1825	rBV4	77732	139148	5.99%	0.396%
72	12.254	1825	1830	1834	rVV	1448228	1704073	73.35%	4.844%
73	12.296	1834	1837	1843	rVB5	187525	318099	13.69%	0.904%
74	12.388	1844	1852	1854	rBV3	189592	387359	16.67%	1.101%
75	12.412	1854	1856	1859	rVV2	113258	172029	7.40%	0.489%
76	12.443	1859	1861	1864	rVB	119647	122161	5.26%	0.347%
77	12.473	1864	1866	1870	rVB5	55577	67614	2.91%	0.192%
78	12.522	1870	1874	1876	rBV3	91963	128324	5.52%	0.365%
79	12.559	1876	1880	1884	rVB4	80121	152607	6.57%	0.434%
80	12.638	1888	1893	1894	rBV4	47379	76382	3.29%	0.217%
81	12.656	1894	1896	1899	rVB2	70648	63886	2.75%	0.182%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

82	12.723	1903	1907	1911	rBV3	143688	262978	11.32%	0.748%
83	12.815	1915	1922	1927	rVB4	114720	271440	11.68%	0.772%
84	12.882	1927	1933	1936	rBV3	65318	96787	4.17%	0.275%
85	12.937	1940	1942	1947	rVB3	31060	43382	1.87%	0.123%
86	12.998	1950	1952	1956	rVB3	30313	35207	1.52%	0.100%
87	13.059	1956	1962	1964	rBV5	24050	42646	1.84%	0.121%
88	13.113	1967	1971	1973	rBV	167285	175951	7.57%	0.500%
89	13.229	1986	1990	1993	rBV3	20928	28261	1.22%	0.080%
90	13.272	1993	1997	2001	rVB4	43447	60524	2.61%	0.172%
91	13.436	2020	2024	2030	rBV7	21394	41898	1.80%	0.119%
92	13.528	2034	2039	2042	rBV6	16923	30541	1.31%	0.087%
93	13.625	2051	2055	2063	rVB	212535	286574	12.33%	0.815%
94	14.497	2192	2198	2202	rBV	61409	87095	3.75%	0.248%
95	14.644	2218	2222	2227	rVB	46324	51602	2.22%	0.147%
96	15.083	2286	2294	2298	rBV4	13275	26714	1.15%	0.076%
97	15.497	2359	2362	2363	rVB2	23879	23288	1.00%	0.066%

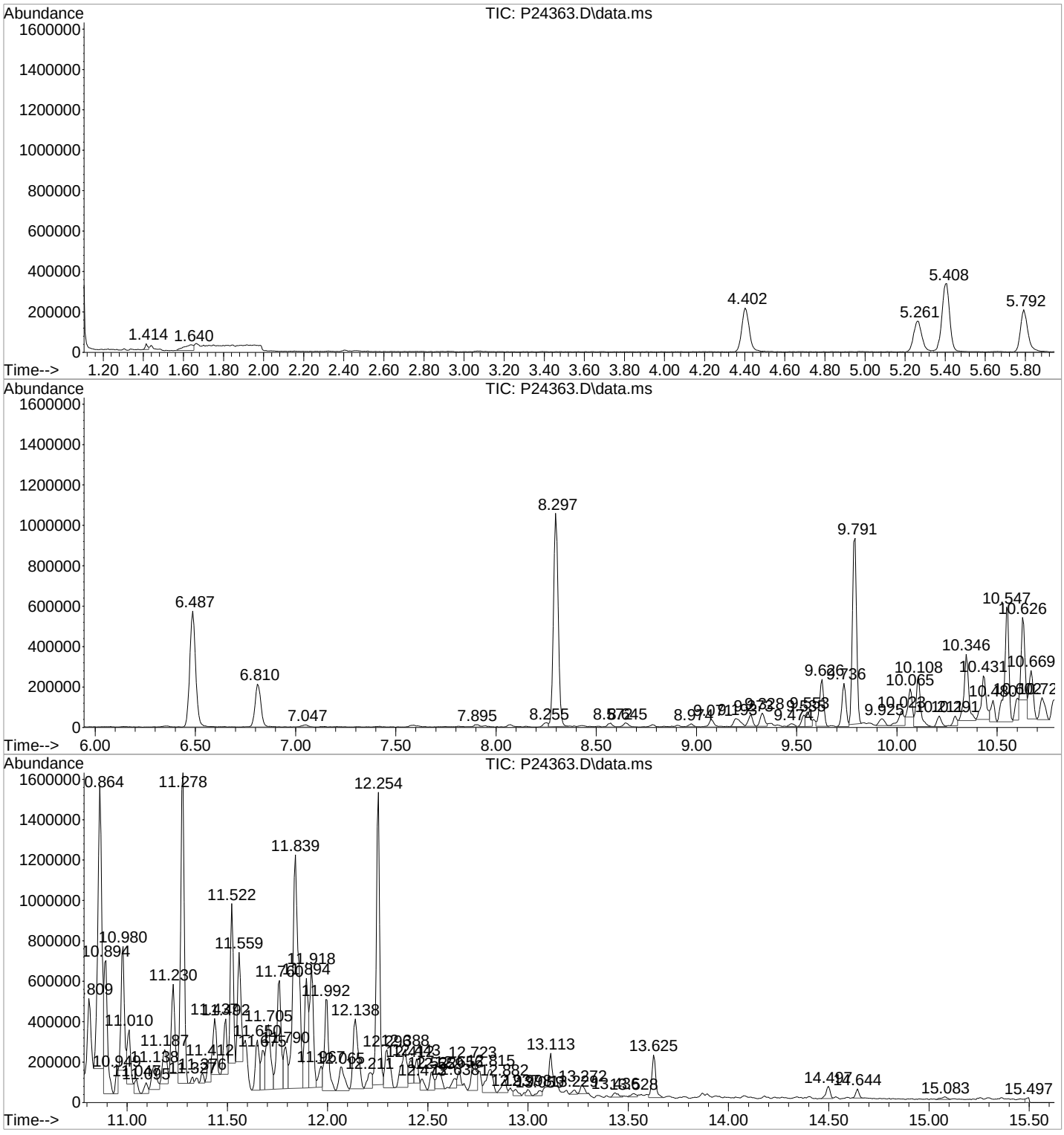
Sum of corrected areas: 35177030

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

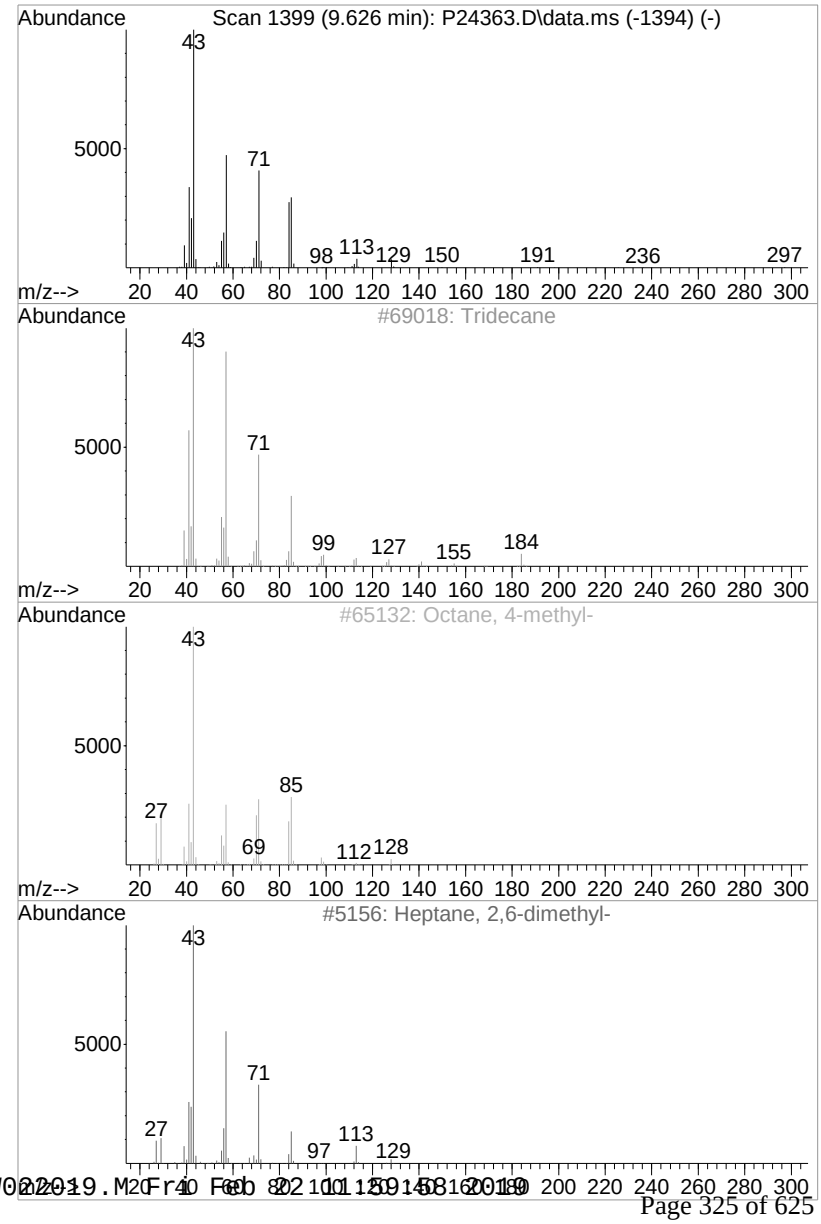
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

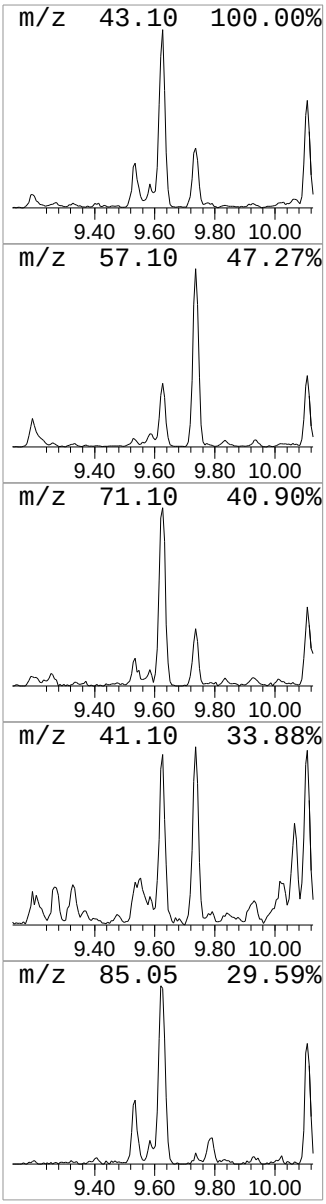
****

Peak Number 1 unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.626	12.87 ppb	337848	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tridecane	184	C13H28	000629-50-5	64
2	Octane, 4-methyl-	128	C9H20	002216-34-4	59
3	Heptane, 2,6-dimethyl-	128	C9H20	001072-05-5	59
4	Octane, 2-methyl-	128	C9H20	003221-61-2	52
5	Heptane, 2,3-dimethyl-	128	C9H20	003074-71-3	50





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

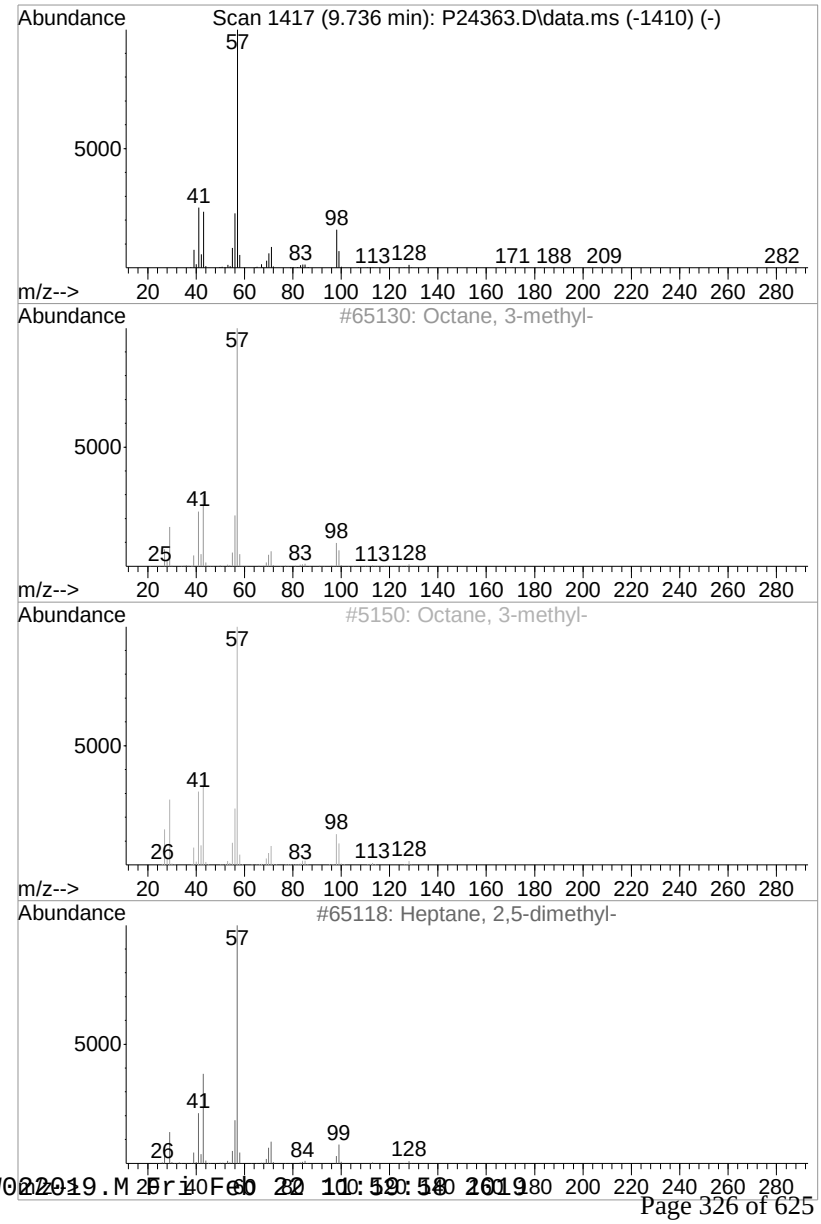
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

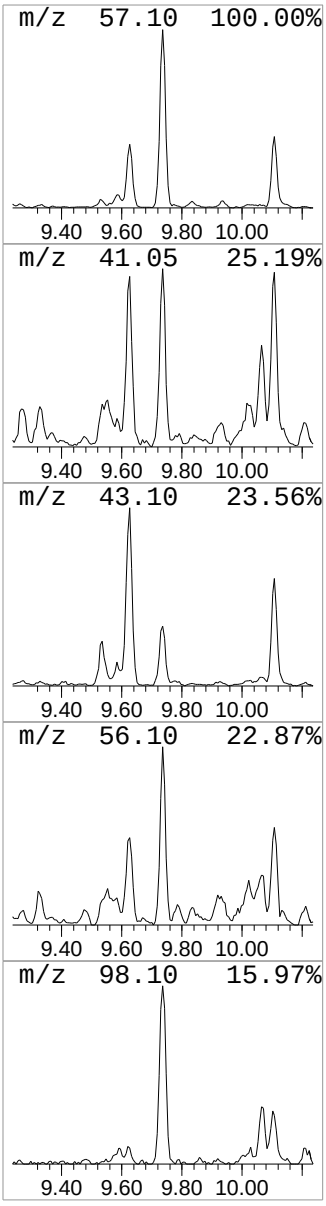
****

Peak Number 2 Octane, 3-methyl- Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.736	11.57 ppb	303629	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	91
2	Octane, 3-methyl-	128	C9H20	002216-33-3	91
3	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	80
4	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	72
5	Nonane, 3-methyl-	142	C10H22	005911-04-6	53





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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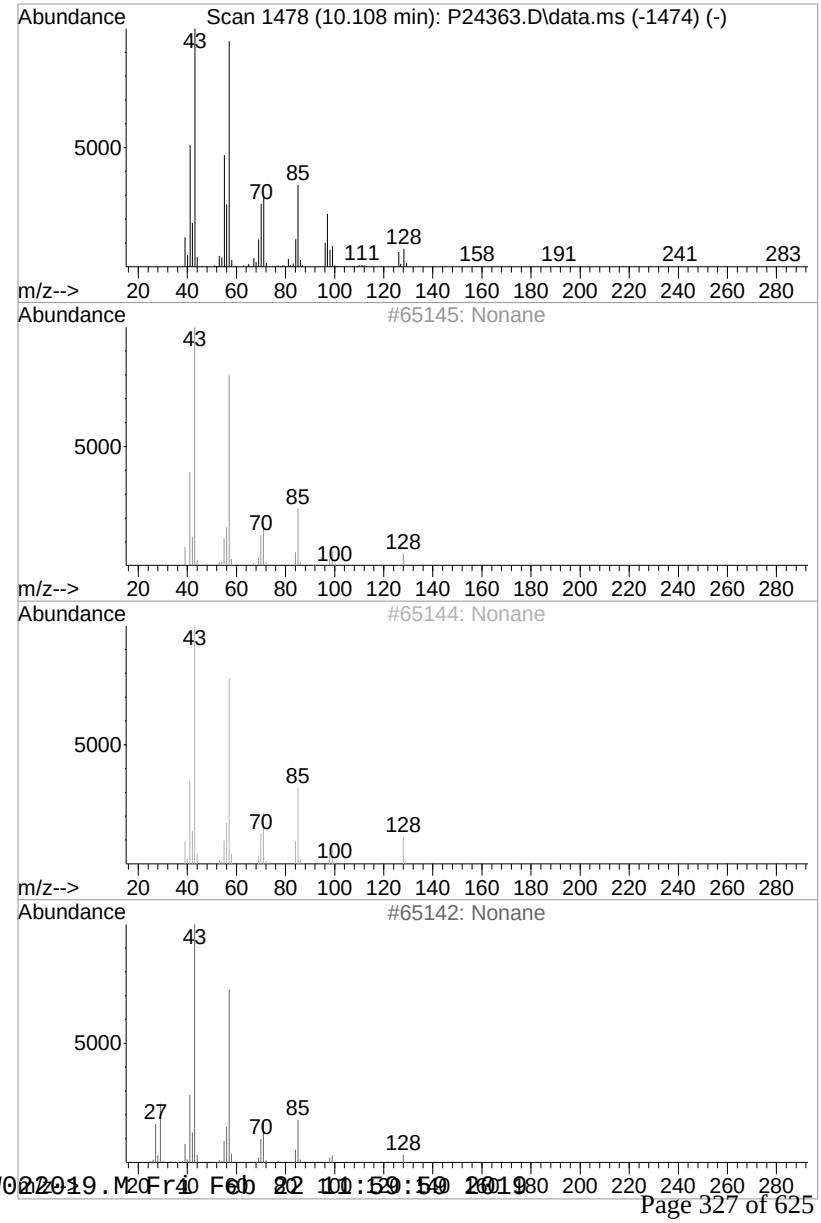
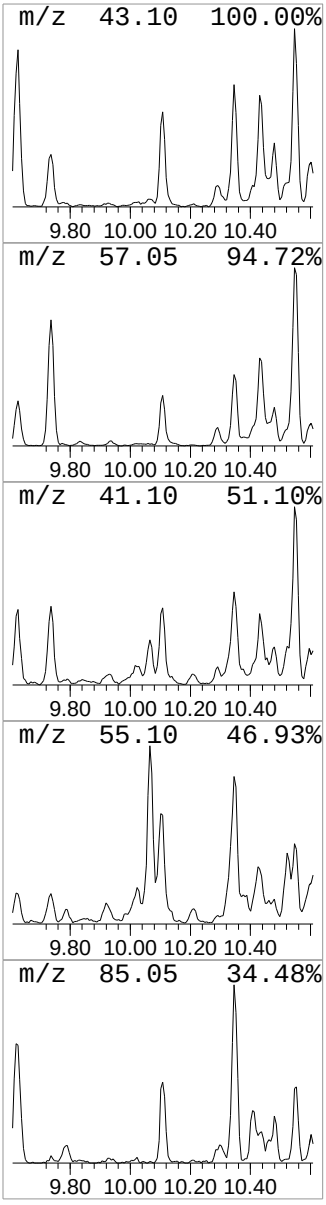
Peak Number 3 unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.108	14.67 ppb	384988	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonane	128	C9H20	000111-84-2	70
2	Nonane	128	C9H20	000111-84-2	70
3	Nonane	128	C9H20	000111-84-2	62
4	Nonane	128	C9H20	000111-84-2	60
5	1-Decanol, 2-ethyl-	186	C12H26O	021078-65-9	53





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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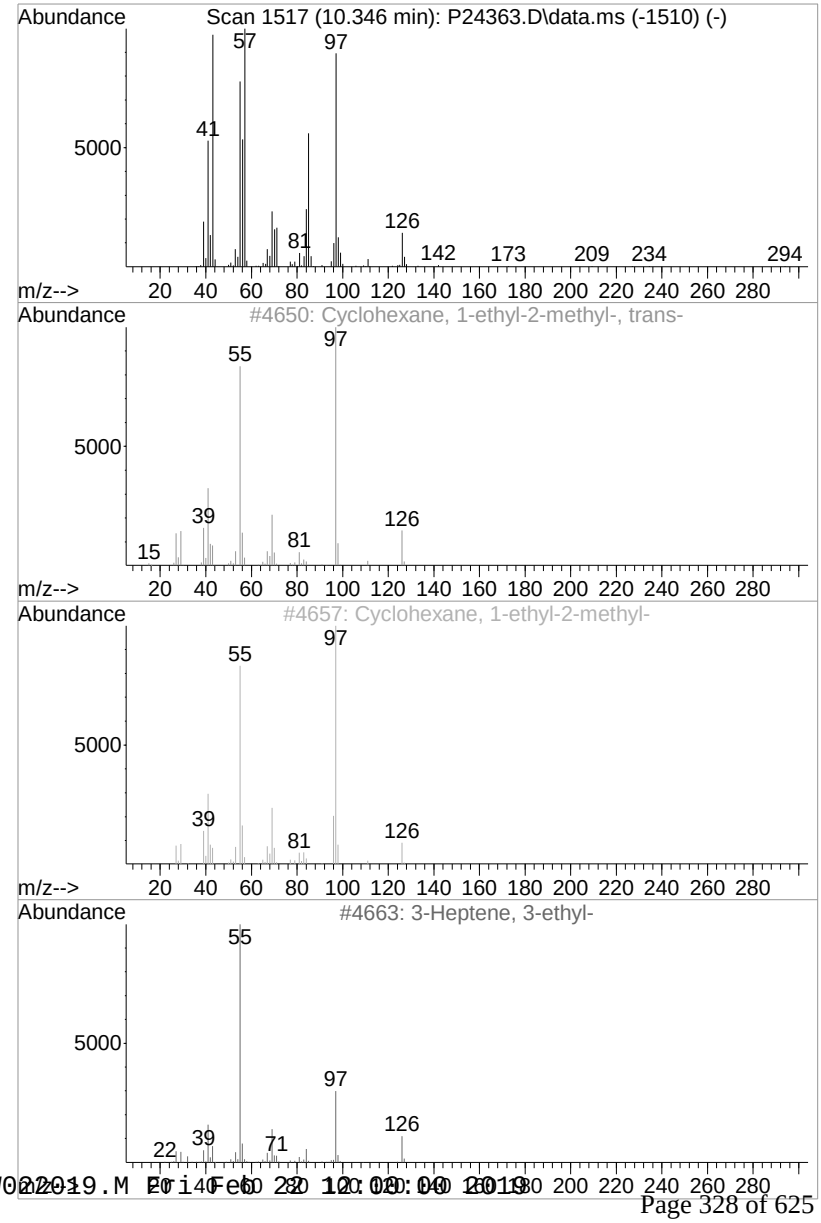
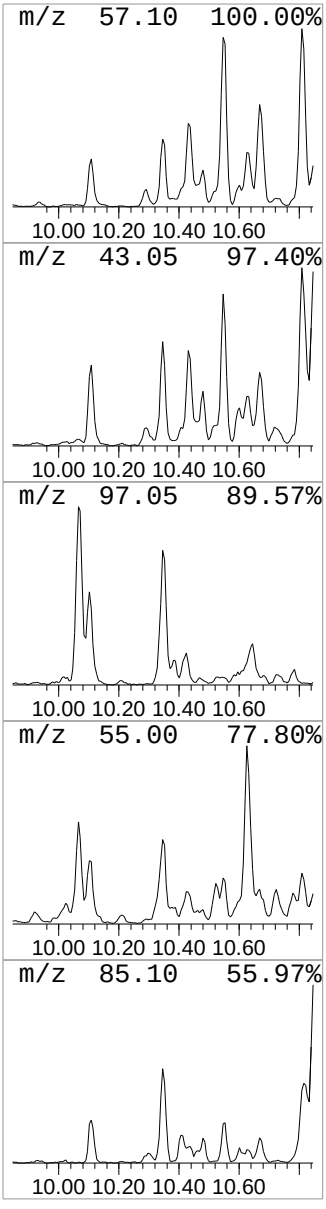
Peak Number 4 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.346	19.68 ppb	516636	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-78-8	50
2	Cyclohexane, 1-ethyl-2-methyl-	126	C9H18	003728-54-9	45
3	3-Heptene, 3-ethyl-	126	C9H18	074764-46-8	43
4	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	38
5	Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-77-7	38





Library Search Compound Report

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Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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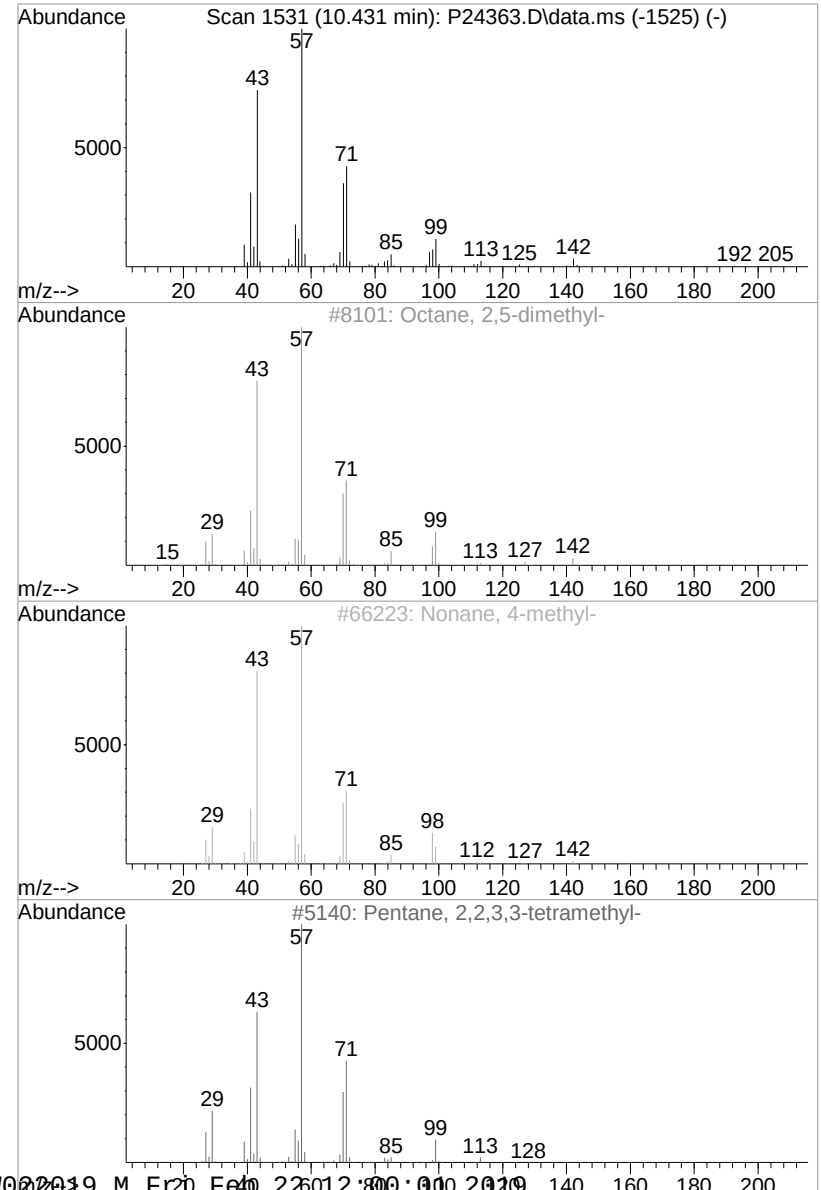
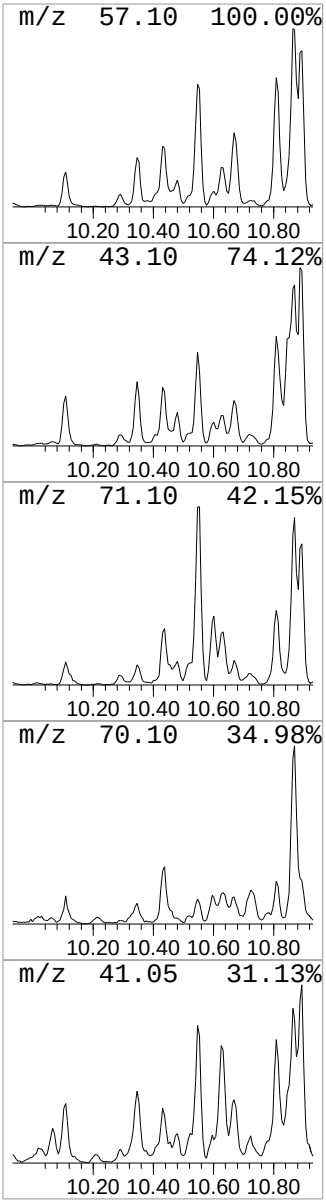
Peak Number 5 Octane, 2,5-dimethyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.431	13.69 ppb	359287	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,5-dimethyl-	142	C10H22	015869-89-3	94
2	Nonane, 4-methyl-	142	C10H22	017301-94-9	87
3	Pentane, 2,2,3,3-tetramethyl-	128	C9H20	007154-79-2	78
4	Nonane, 4-methyl-	142	C10H22	017301-94-9	76
5	Heptane, 2,3,4-trimethyl-	142	C10H22	052896-95-4	72





Library Search Compound Report

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Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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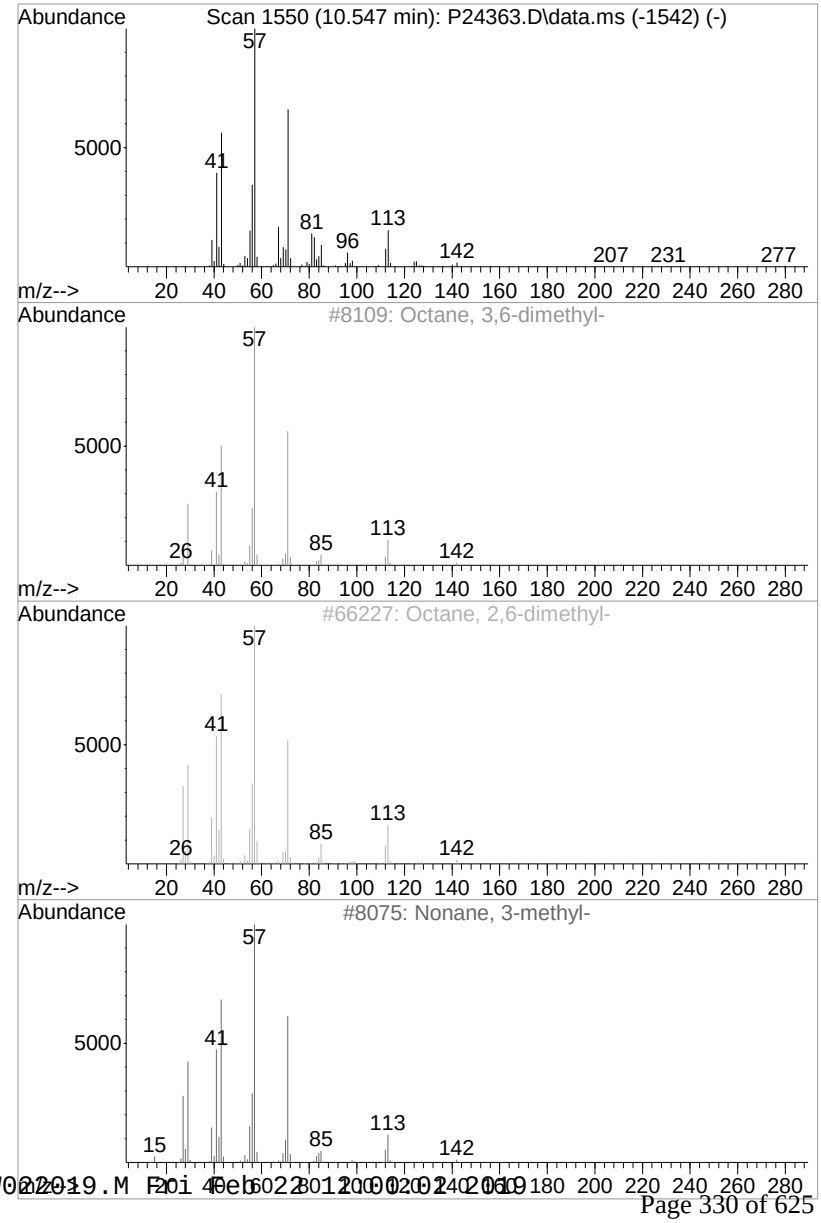
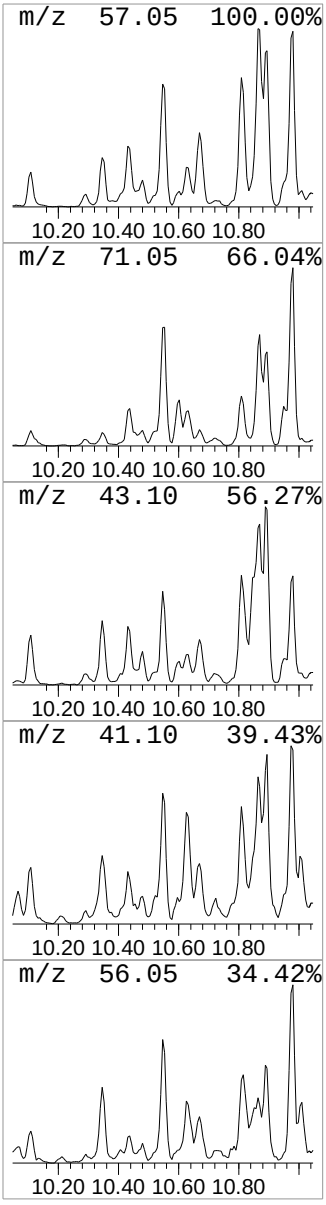
Peak Number 6 Octane, 3,6-dimethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.547	33.58 ppb	881612	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	94
2	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	87
3	Nonane, 3-methyl-	142	C10H22	005911-04-6	81
4	Nonane, 3-methyl-	142	C10H22	005911-04-6	81
5	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	80





Library Search Compound Report

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Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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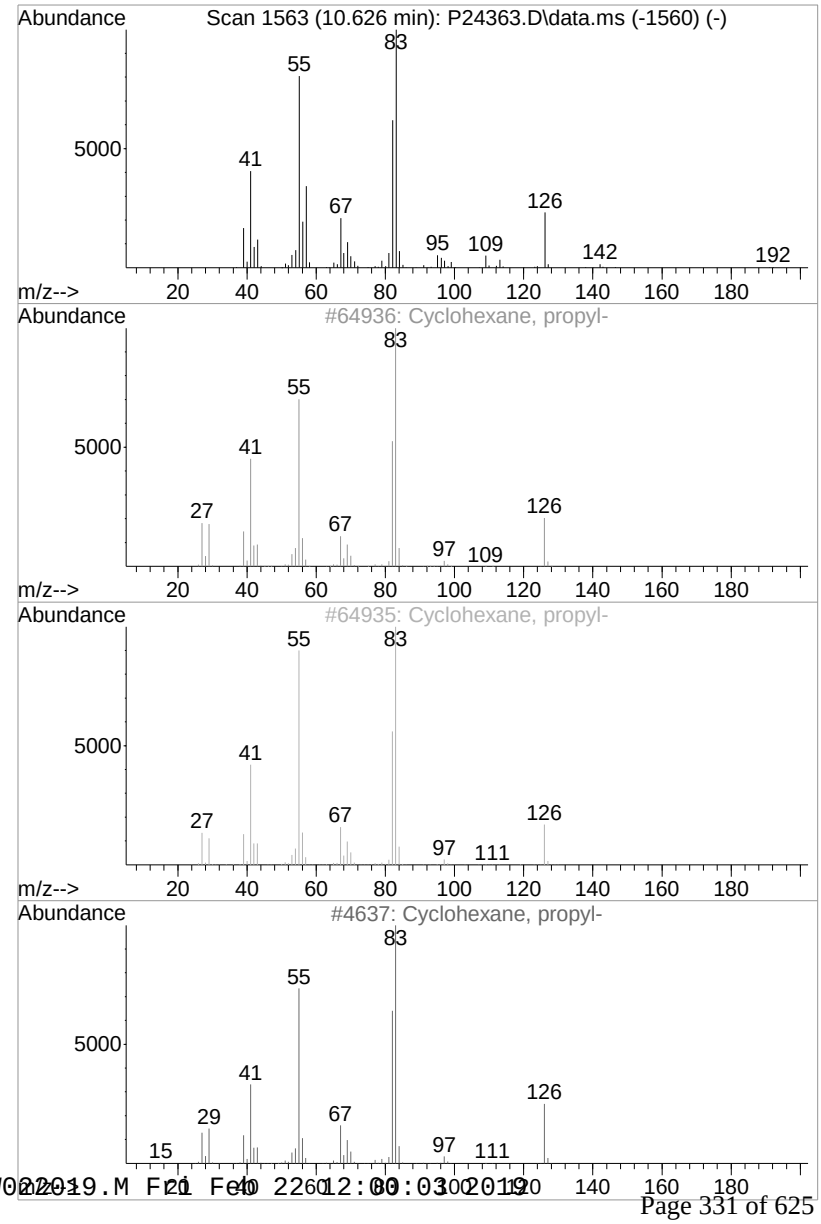
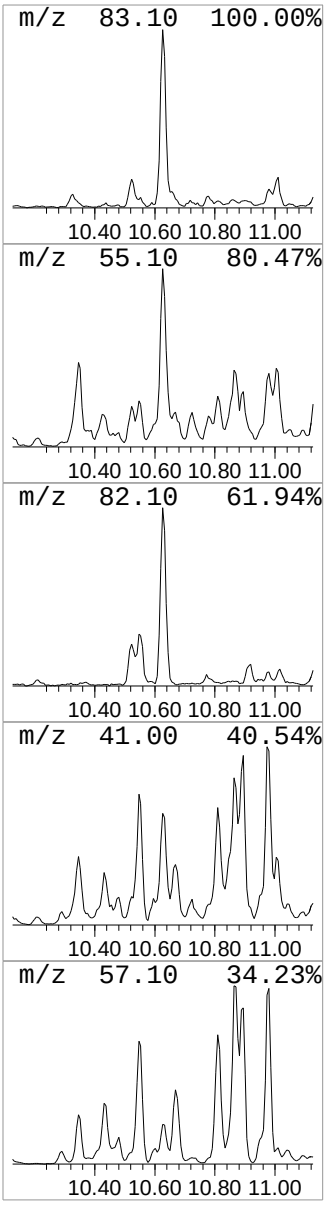
Peak Number 7 Cyclohexane, propyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.626	19.22 ppb	504502	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
2	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
3	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
4	Cyclohexane, propyl-	126	C9H18	001678-92-8	80
5	Cyclohexane, octyl-	196	C14H28	001795-15-9	80





Library Search Compound Report

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Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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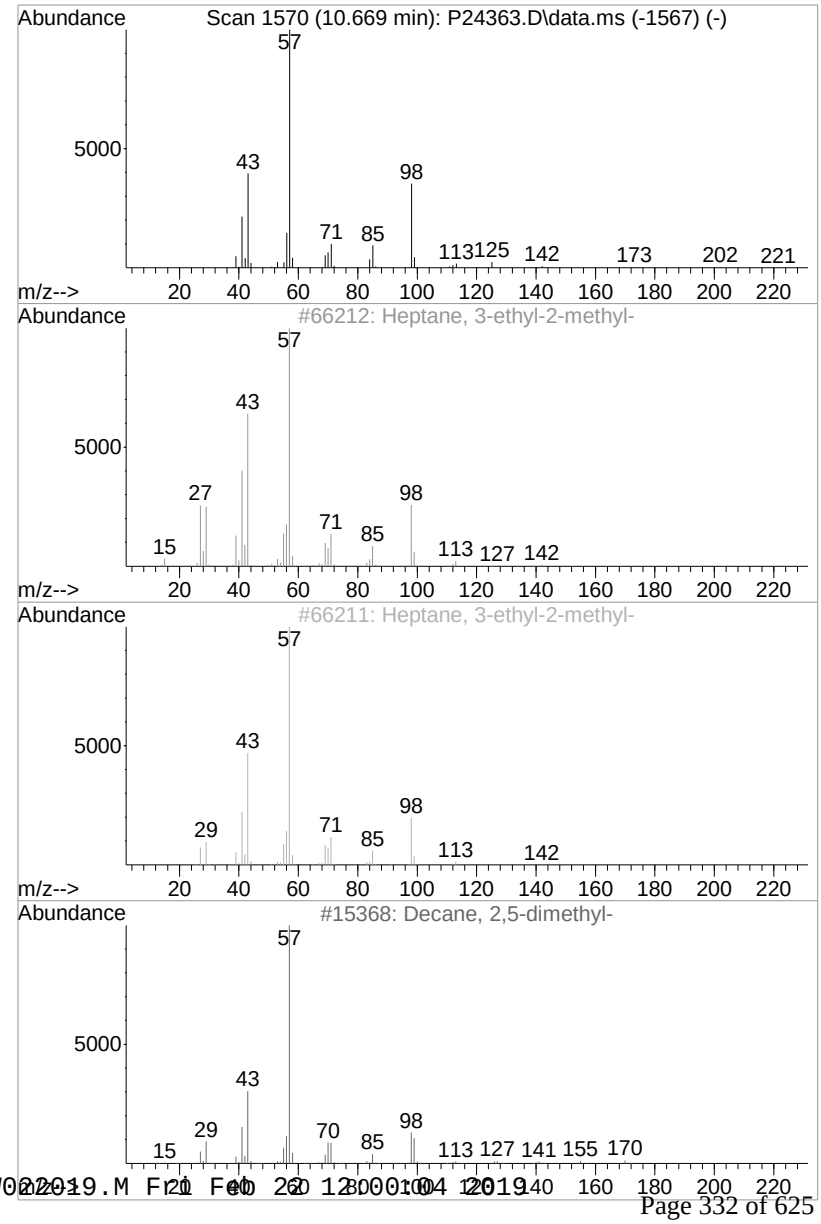
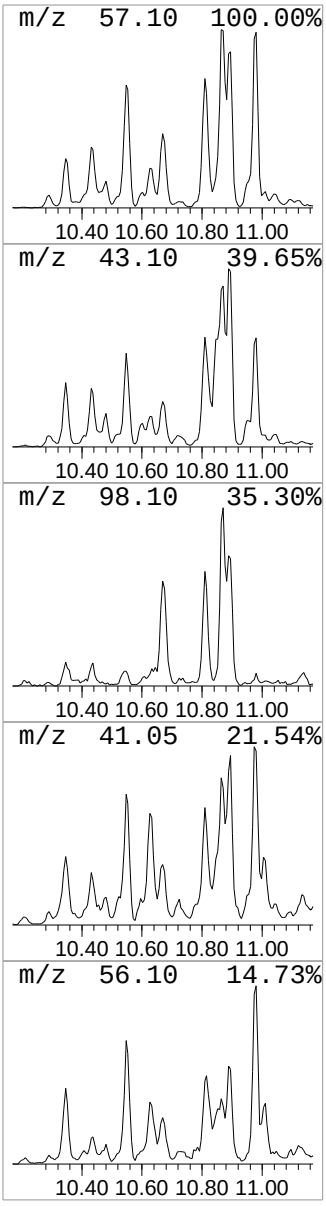
Peak Number 8 unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.669	13.24 ppb	347637	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	72
2	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	64
3	Decane, 2,5-dimethyl-	170	C12H26	017312-50-4	64
4	Octane, 2,4,6-trimethyl-	156	C11H24	062016-37-9	50
5	Undecane, 2,6-dimethyl-	184	C13H28	017301-23-4	47





Library Search Compound Report

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Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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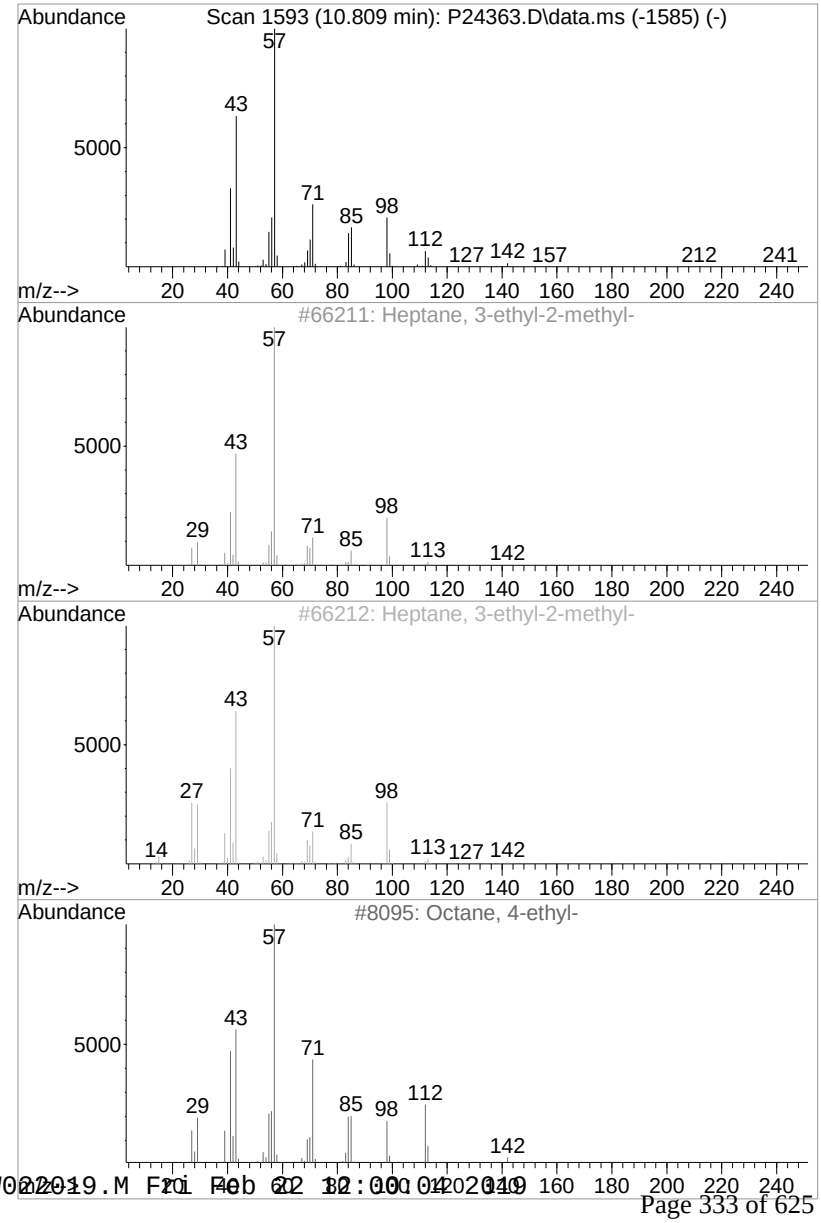
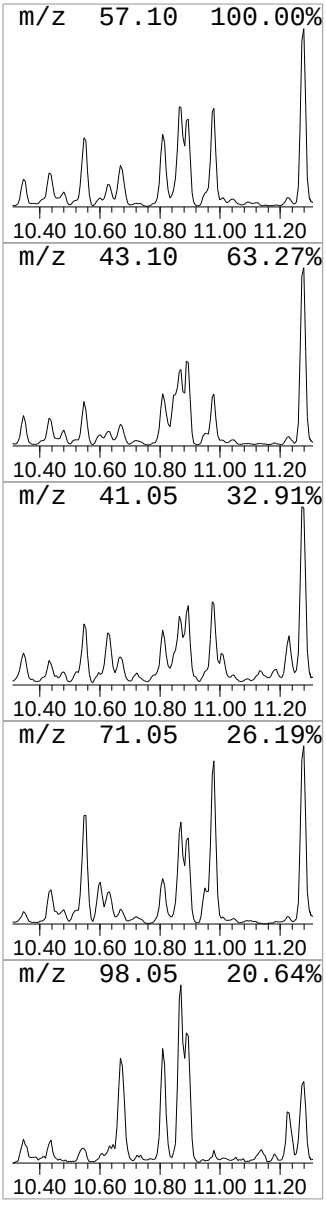
Peak Number 9 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.809	32.76 ppb	859941	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	53
2	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	50
3	Octane, 4-ethyl-	142	C10H22	015869-86-0	50
4	Undecane, 5,6-dimethyl-	184	C13H28	017615-91-7	50
5	Dodecane, 6-methyl-	184	C13H28	006044-71-9	50





Library Search Compound Report

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Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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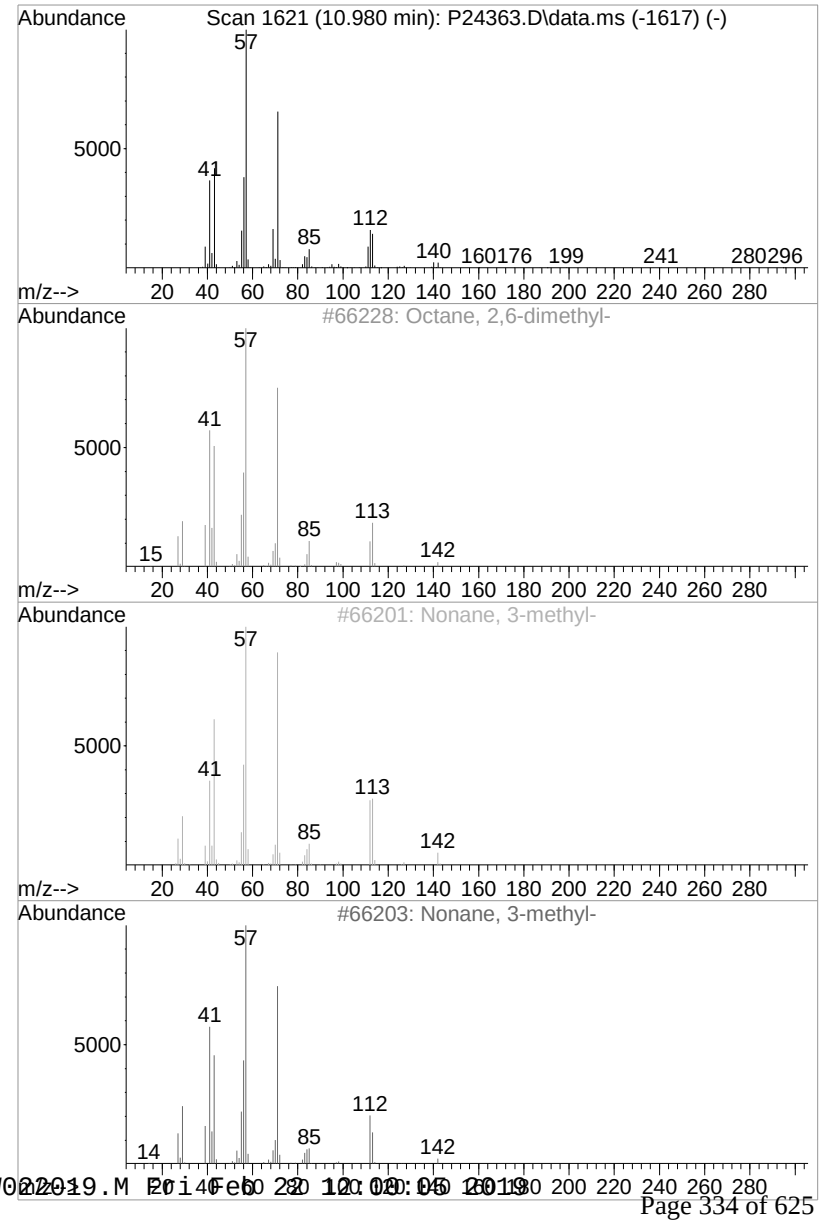
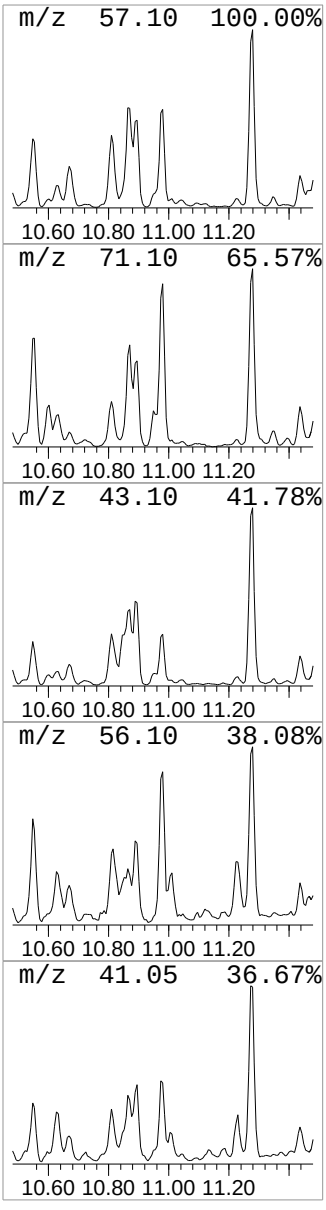
Peak Number 10 Octane, 2,6-dimethyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.980	15.60 ppb	724757	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	87
2	Nonane, 3-methyl-	142	C10H22	005911-04-6	87
3	Nonane, 3-methyl-	142	C10H22	005911-04-6	87
4	Nonane, 3-methyl-	142	C10H22	005911-04-6	86
5	Nonane, 3-methyl-	142	C10H22	005911-04-6	68





Library Search Compound Report

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Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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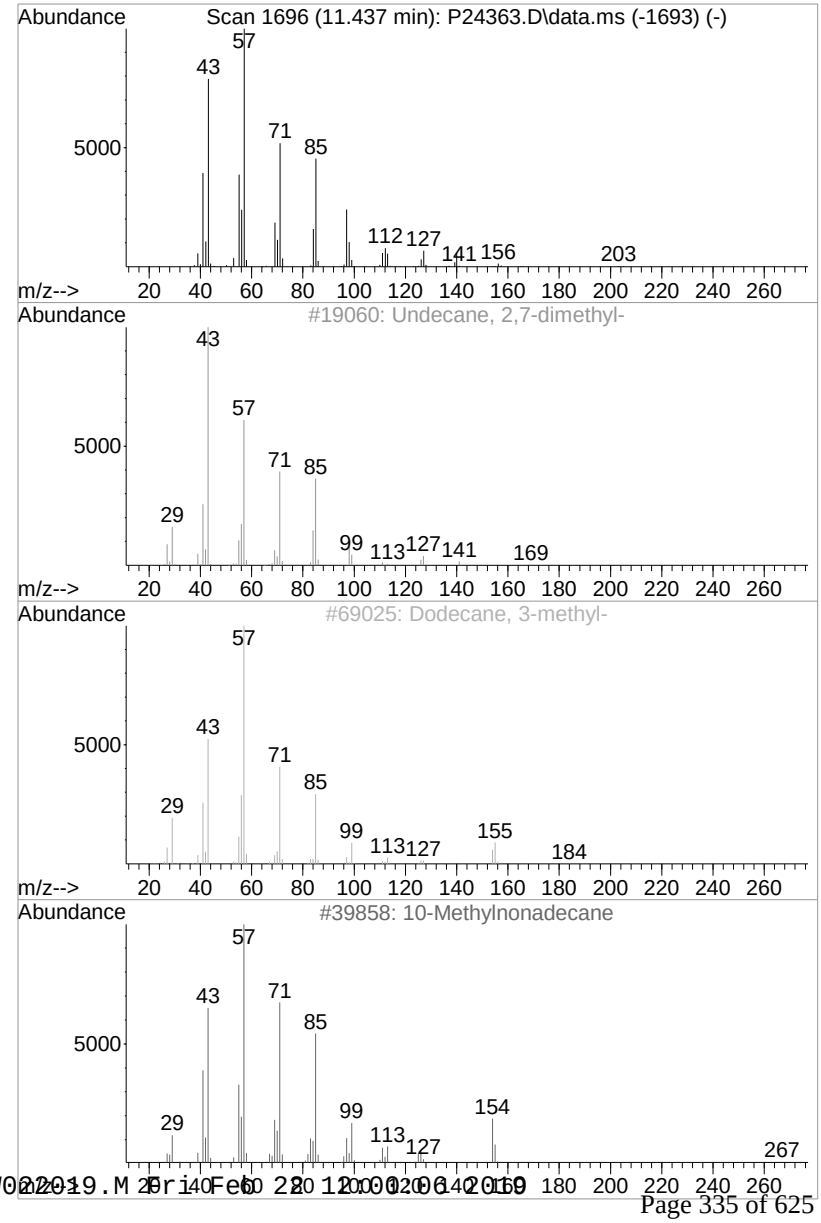
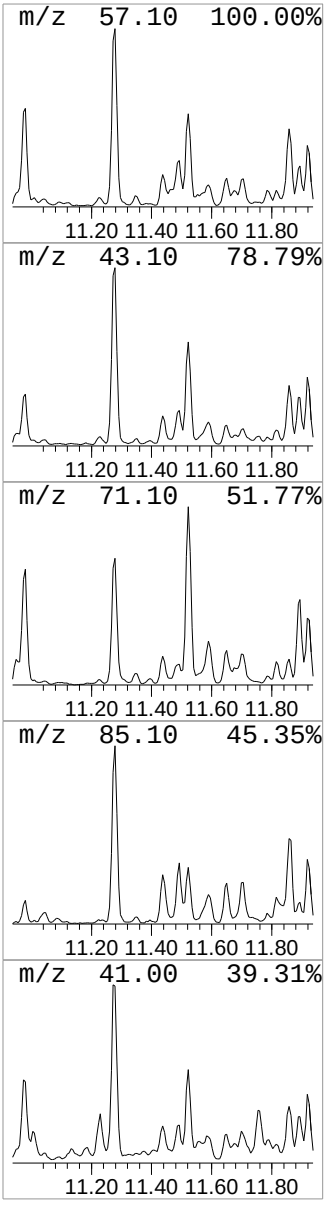
Peak Number 11 unknown Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.437	7.32 ppb	340160	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 2,7-dimethyl-	184	C13H28	017301-24-5	64
2	Dodecane, 3-methyl-	184	C13H28	017312-57-1	59
3	10-Methylnonadecane	282	C20H42	000000-00-0	53
4	Decane, 3,8-dimethyl-	170	C12H26	017312-55-9	53
5	Dodecane	170	C12H26	000112-40-3	53





Library Search Compound Report

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Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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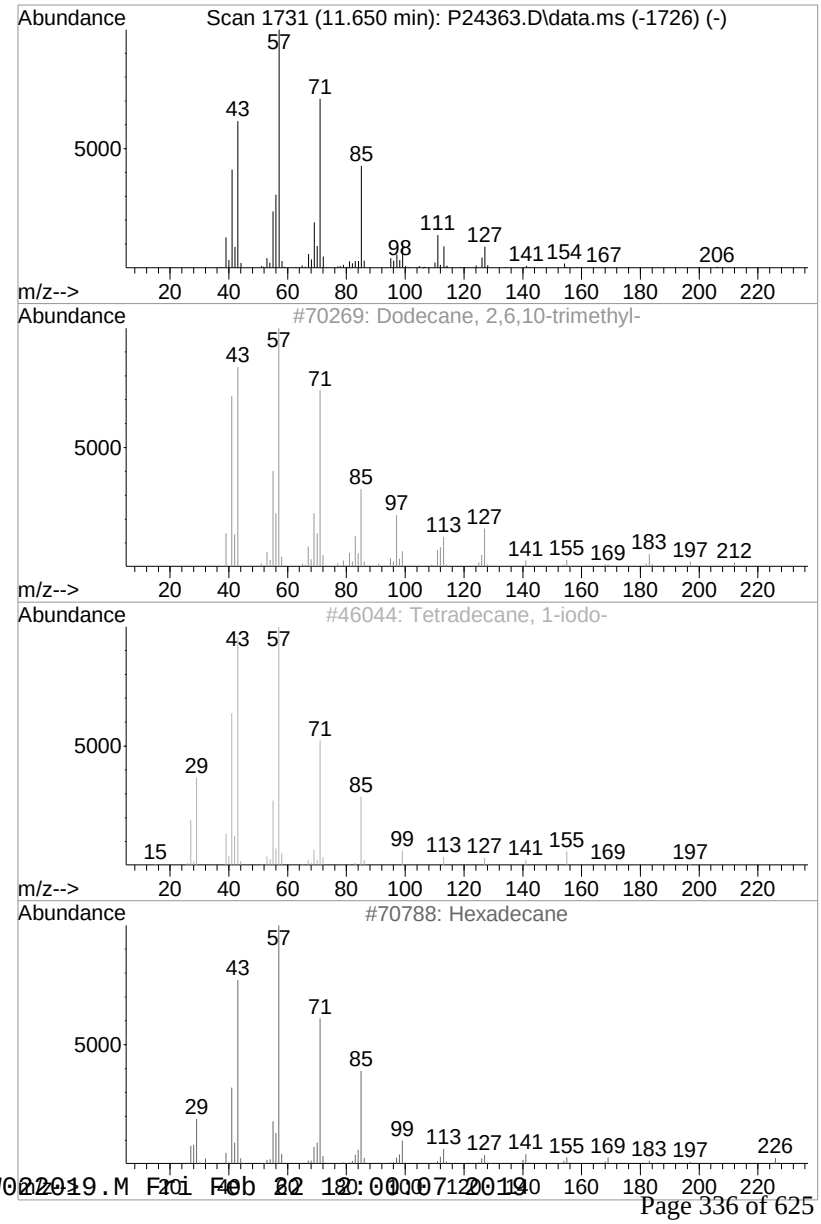
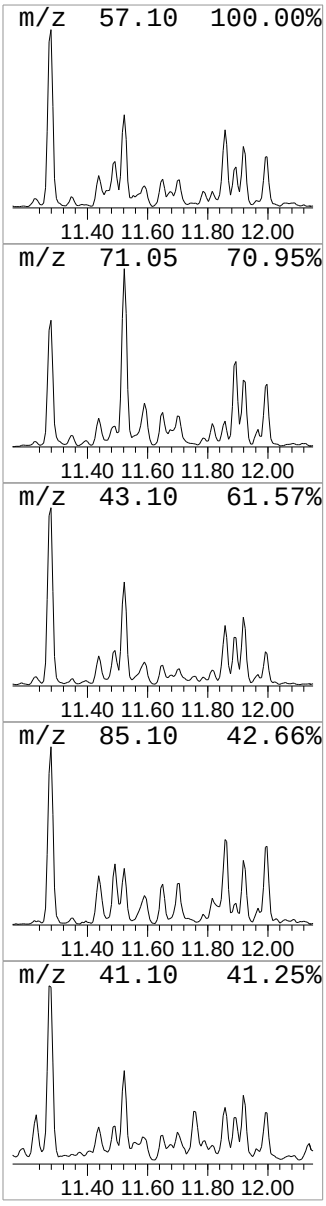
Peak Number 12 unknown Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.650	7.29 ppb	338534	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane, 2,6,10-trimethyl-	212	C15H32	003891-98-3	64
2	Tetradecane, 1-iodo-	324	C14H29I	019218-94-1	64
3	Hexadecane	226	C16H34	000544-76-3	64
4	Undecane, 3-methyl-	170	C12H26	001002-43-3	64
5	Hexadecane, 7,9-dimethyl-	254	C18H38	021164-95-4	59





Library Search Compound Report

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Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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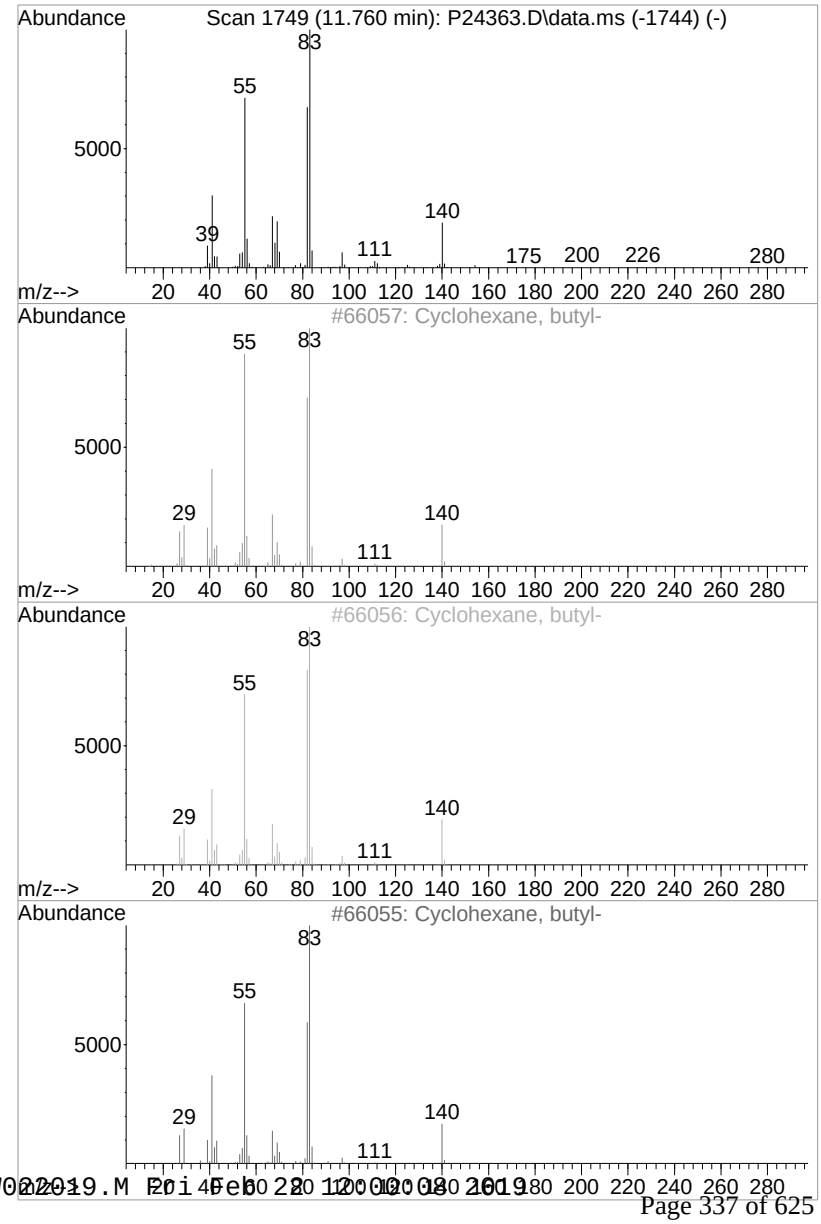
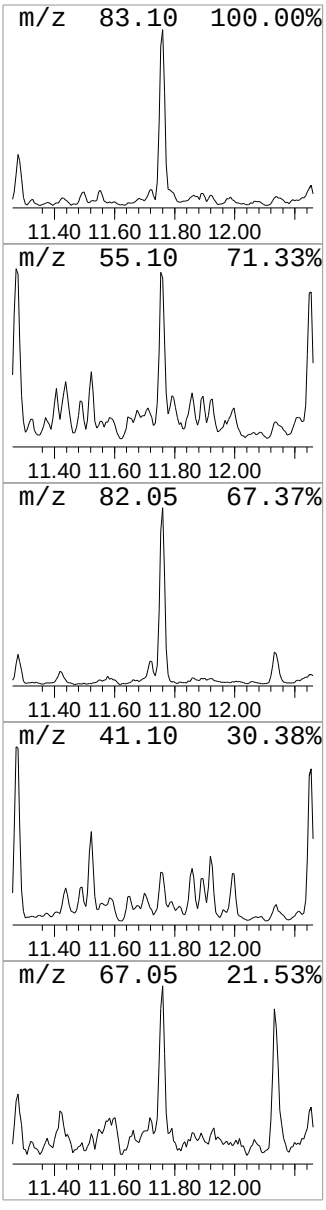
Peak Number 13 Cyclohexane, butyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.760	17.84 ppb	828747	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, butyl-	140	C10H20	001678-93-9	91
2	Cyclohexane, butyl-	140	C10H20	001678-93-9	90
3	Cyclohexane, butyl-	140	C10H20	001678-93-9	87
4	Cyclohexane, butyl-	140	C10H20	001678-93-9	86
5	n-Amylcyclohexane	154	C11H22	029949-27-7	83





Library Search Compound Report

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Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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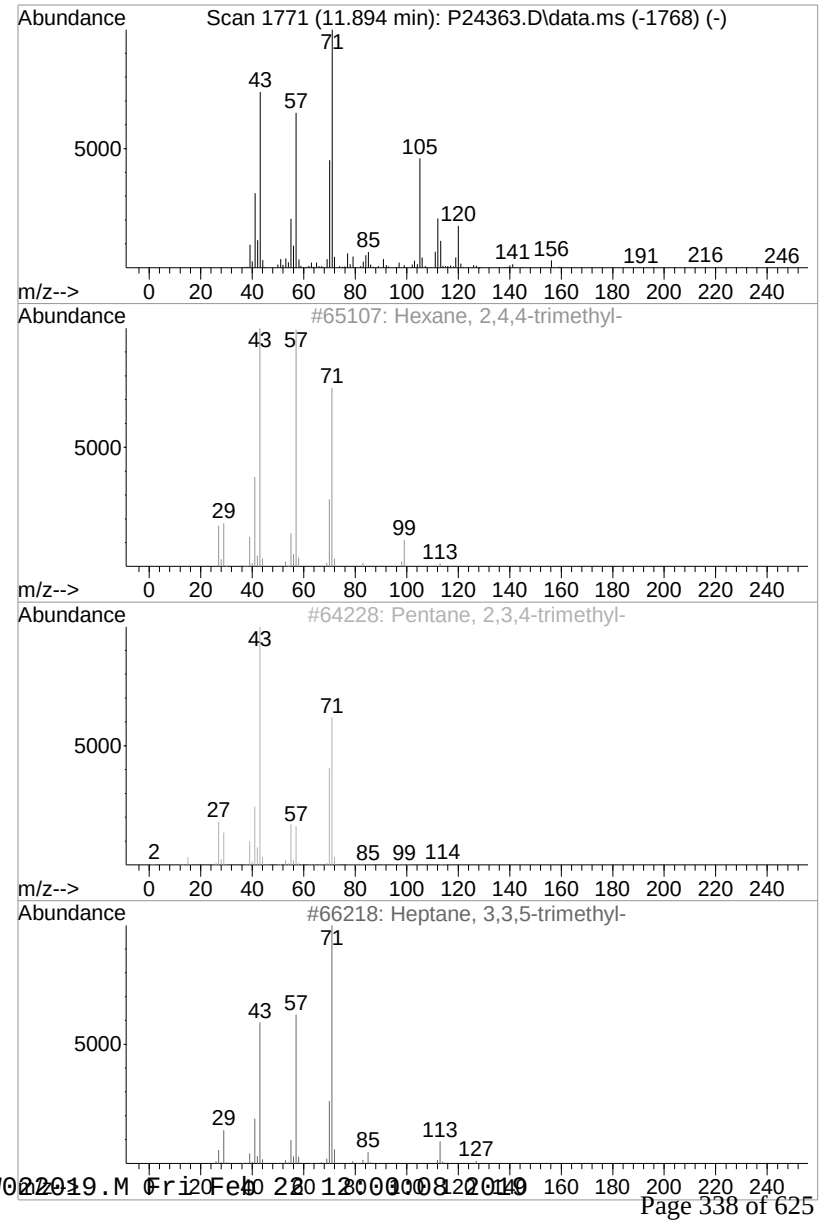
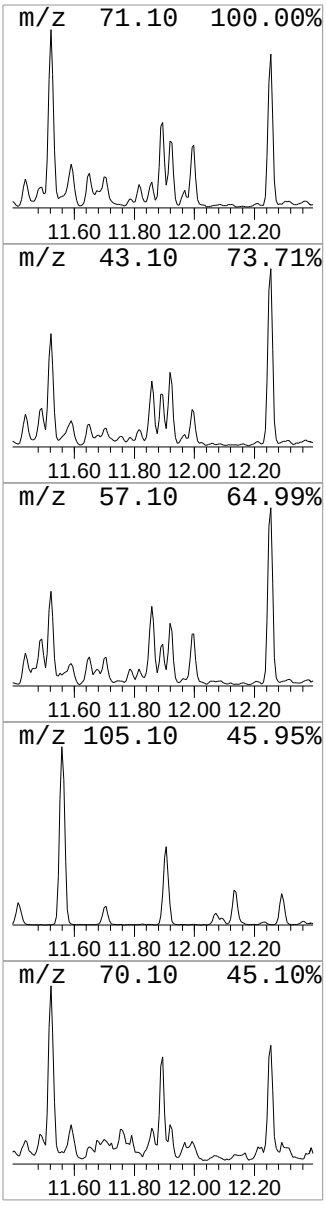
Peak Number 14 unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.894	16.13 ppb	749469	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane, 2,4,4-trimethyl-	128	C9H20	016747-30-1	50
2	Pentane, 2,3,4-trimethyl-	114	C8H18	000565-75-3	49
3	Heptane, 3,3,5-trimethyl-	142	C10H22	007154-80-5	47
4	Heptane, 2,5,5-trimethyl-	142	C10H22	001189-99-7	43
5	Heptane, 3,3,5-trimethyl-	142	C10H22	007154-80-5	42





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

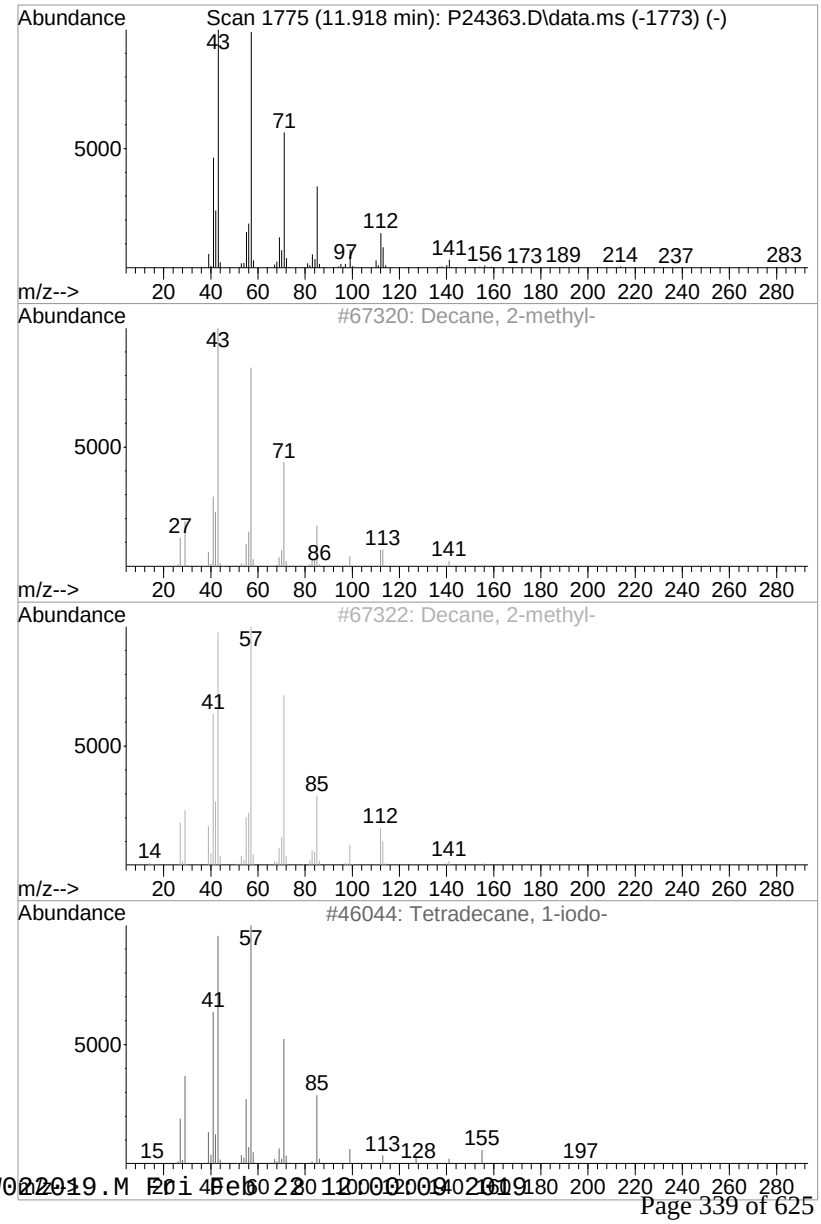
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

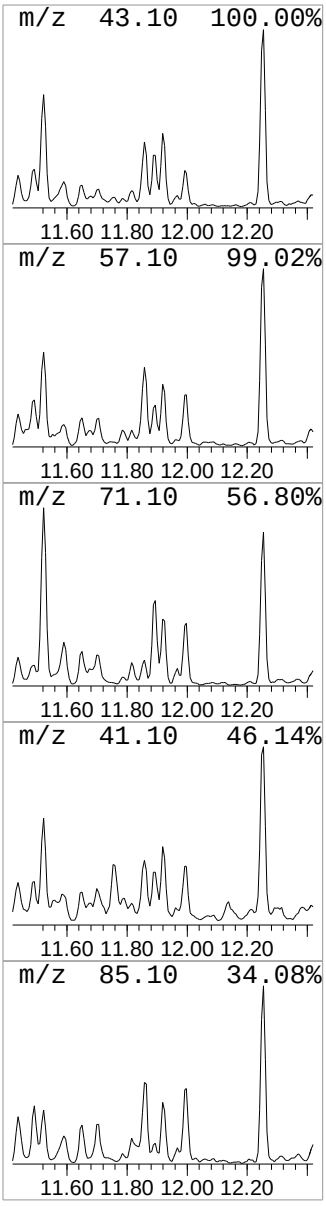
****

Peak Number 15 Decane, 2-methyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.919	15.16 ppb	704385	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 2-methyl-	156	C11H24	006975-98-0	93
2	Decane, 2-methyl-	156	C11H24	006975-98-0	68
3	Tetradecane, 1-iodo-	324	C14H29I	019218-94-1	64
4	Nonane, 4,5-dimethyl-	156	C11H24	017302-23-7	64
5	Decane, 2,9-dimethyl-	170	C12H26	001002-17-1	64





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

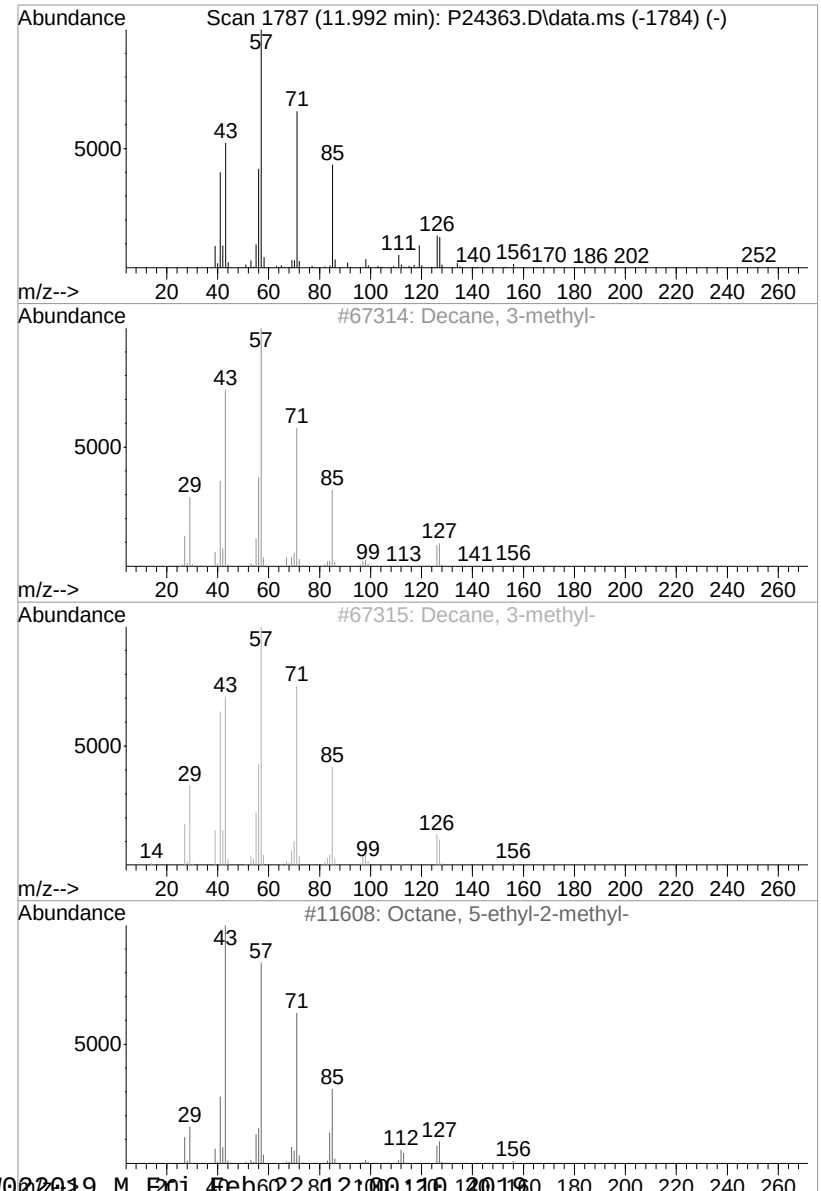
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

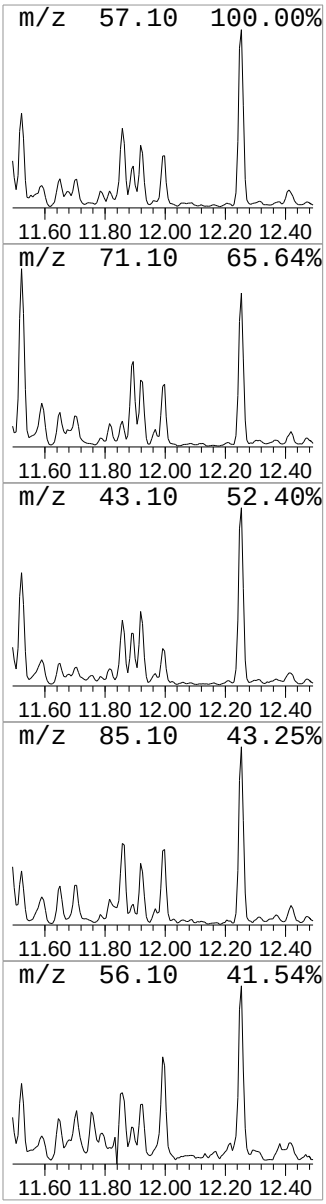
****

Peak Number 16 unknown Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.992	13.94 ppb	647608	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 3-methyl-	156	C11H24	013151-34-3	78
2	Decane, 3-methyl-	156	C11H24	013151-34-3	64
3	Octane, 5-ethyl-2-methyl-	156	C11H24	062016-18-6	59
4	Dodecane, 2,5-dimethyl-	198	C14H30	056292-65-0	53
5	Decane, 3,8-dimethyl-	170	C12H26	017312-55-9	50





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

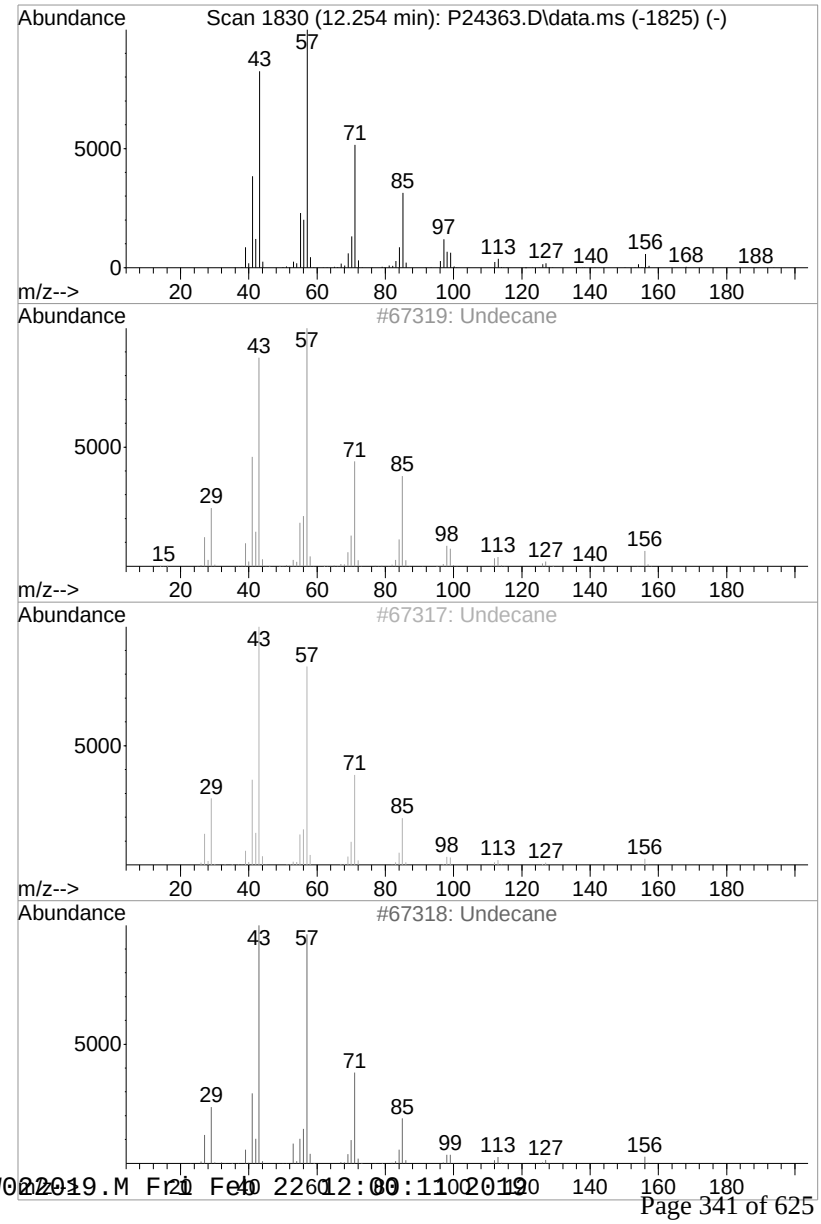
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

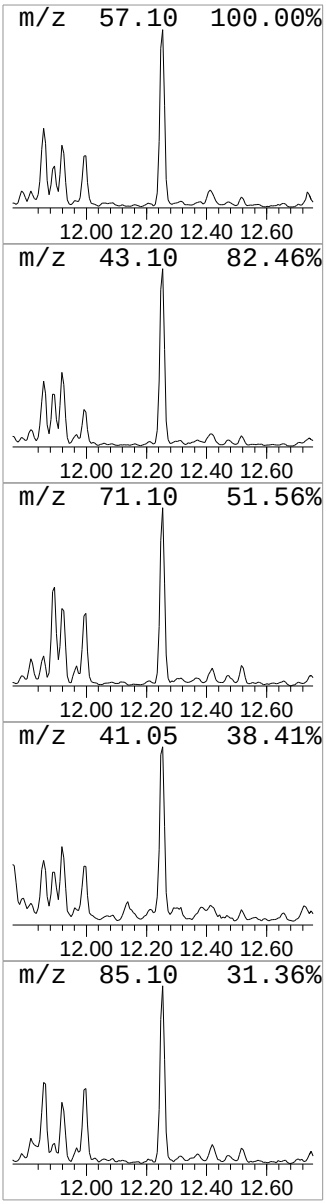
****

Peak Number 17 Undecane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.254	36.67 ppb	1704070	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane	156	C11H24	001120-21-4	94
2	Undecane	156	C11H24	001120-21-4	93
3	Undecane	156	C11H24	001120-21-4	90
4	Undecane	156	C11H24	001120-21-4	90
5	Hexadecane	226	C16H34	000544-76-3	72





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

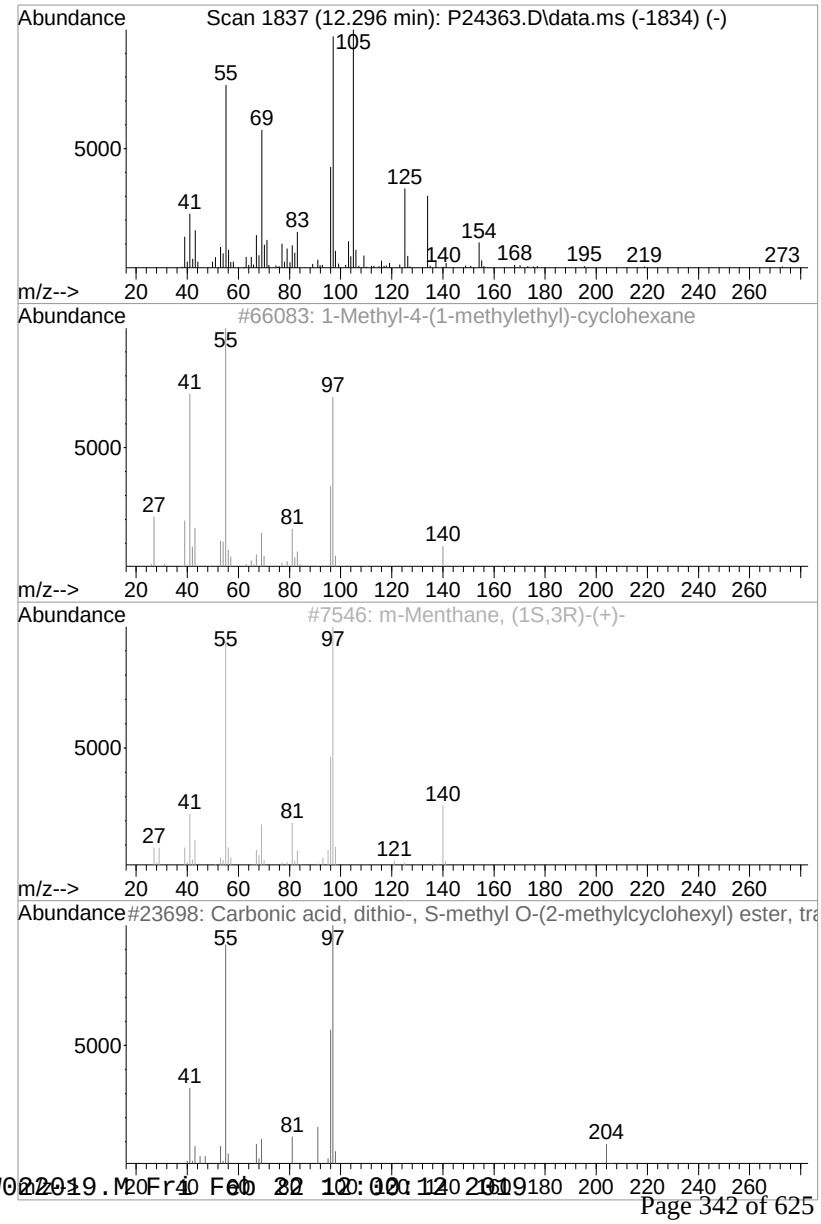
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

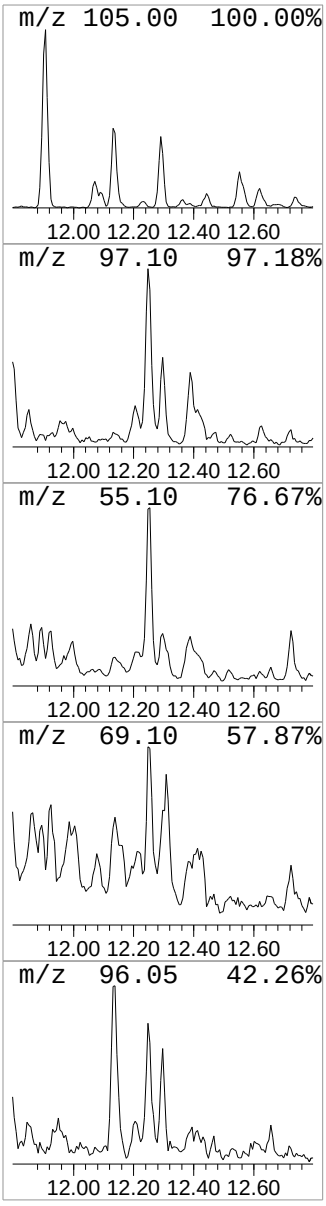
****

Peak Number 18 unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.297	6.85 ppb	318099	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Methyl-4-(1-methylethyl)-cyclo...	140	C10H20	000099-82-1	47
2	m-Menthane, (1S,3R)-(+)-	140	C10H20	013837-66-6	47
3	Carbonic acid, dithio-, S-methyl...	204	C9H16OS2	015288-13-8	47
4	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	001678-82-6	47
5	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	006069-98-3	47





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

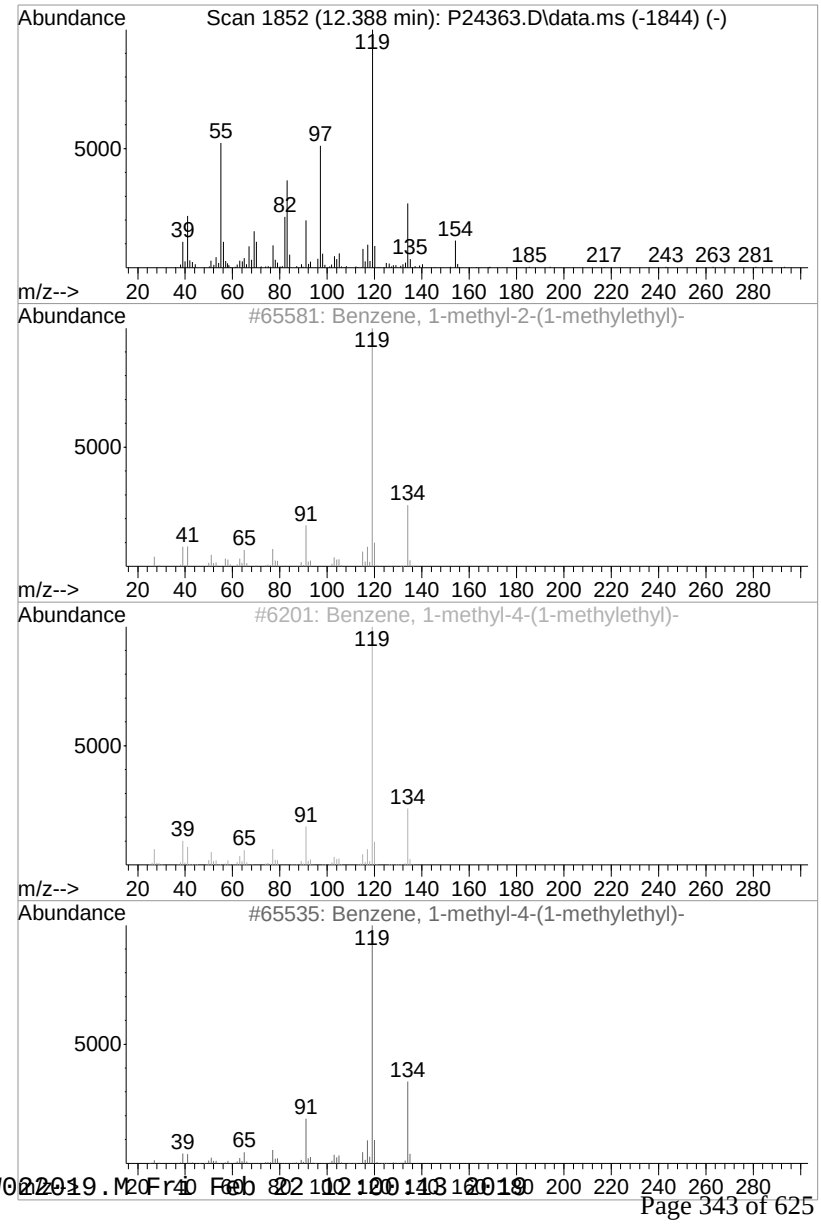
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

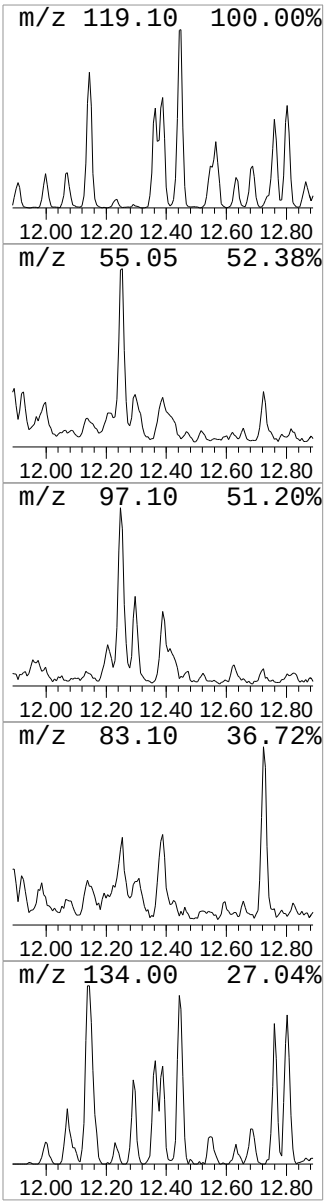
****

Peak Number 19 Benzene, 1-methyl-2-(1-meth... Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.388	8.34 ppb	387359	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	92
2	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	90
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	90
4	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	60
5	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	60





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

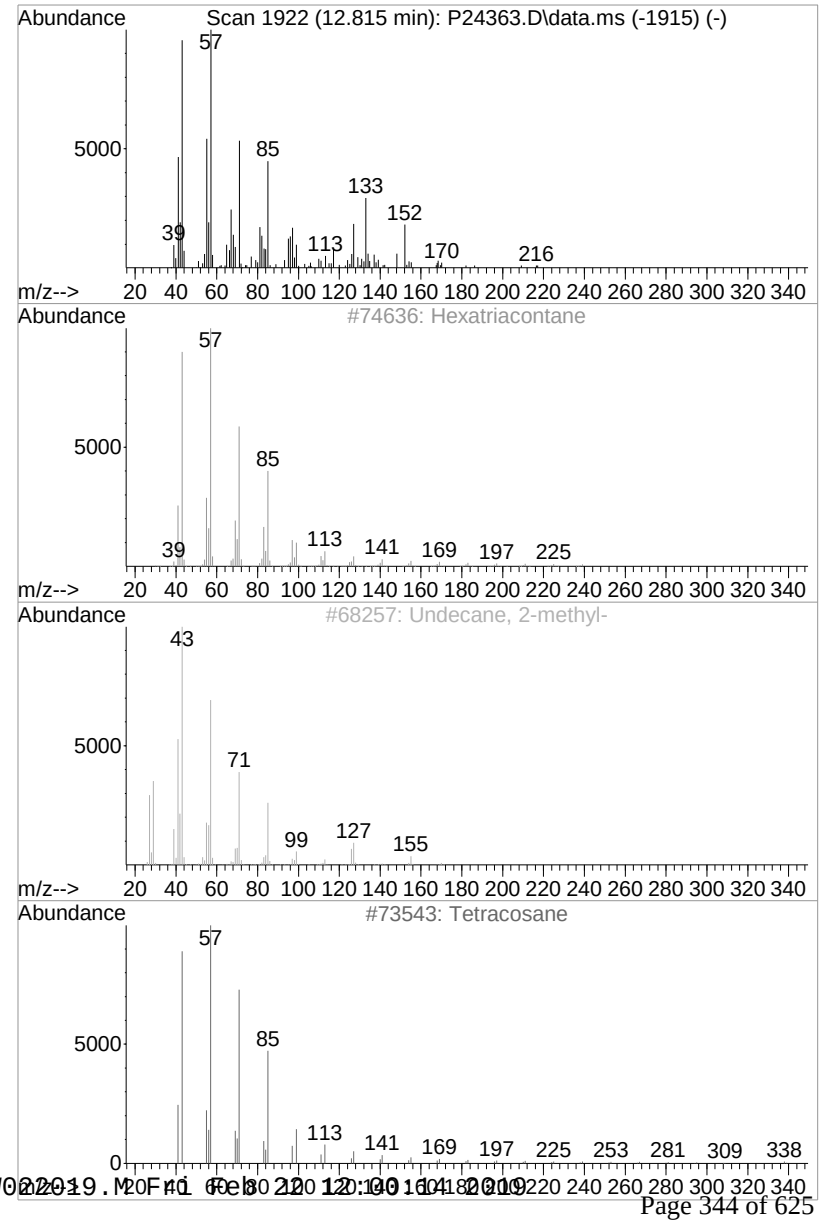
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

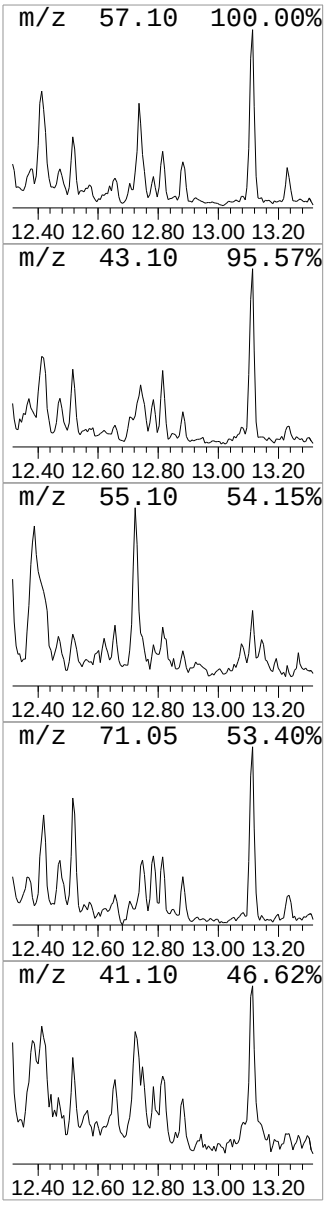
****

Peak Number 20 unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.815	5.84 ppb	271440	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexatriacontane	507	C36H74	000630-06-8	46
2	Undecane, 2-methyl-	170	C12H26	007045-71-8	46
3	Tetracosane	338	C24H50	000646-31-1	43
4	Dotriacontane	451	C32H66	000544-85-4	43
5	Decane, 2,3,6-trimethyl-	184	C13H28	062238-12-4	38





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

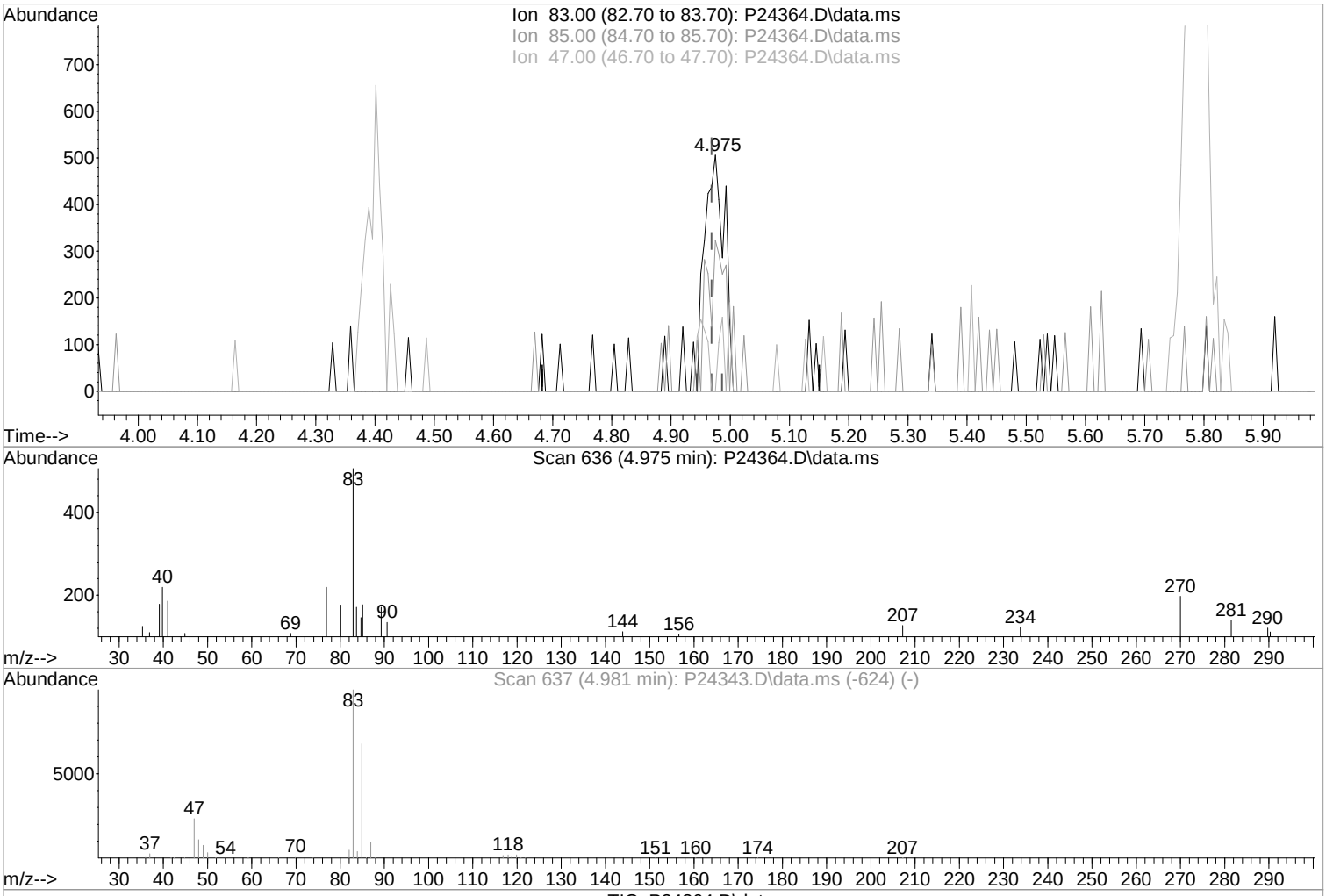
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					Internal Standard		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	9.626	12.9	ppb	337848	3	9.791	1312600	50.0
Octane, 3-methyl-	9.736	11.6	ppb	303629	3	9.791	1312600	50.0
unknown	10.108	14.7	ppb	384988	3	9.791	1312600	50.0
unknown	10.346	19.7	ppb	516636	3	9.791	1312600	50.0
Octane, 2,5-dim...	10.431	13.7	ppb	359287	3	9.791	1312600	50.0
Octane, 3,6-dim...	10.547	33.6	ppb	881612	3	9.791	1312600	50.0
Cyclohexane, pr...	10.626	19.2	ppb	504502	3	9.791	1312600	50.0
unknown	10.669	13.2	ppb	347637	3	9.791	1312600	50.0
unknown	10.809	32.8	ppb	859941	3	9.791	1312600	50.0
Octane, 2,6-dim...	10.980	15.6	ppb	724757	4	11.839	2323320	50.0
unknown	11.437	7.3	ppb	340160	4	11.839	2323320	50.0
unknown	11.650	7.3	ppb	338534	4	11.839	2323320	50.0
Cyclohexane, bu...	11.760	17.8	ppb	828747	4	11.839	2323320	50.0
unknown	11.894	16.1	ppb	749469	4	11.839	2323320	50.0
Decane, 2-methyl-	11.919	15.2	ppb	704385	4	11.839	2323320	50.0
unknown	11.992	13.9	ppb	647608	4	11.839	2323320	50.0
Undecane	12.254	36.7	ppb	1704070	4	11.839	2323320	50.0
unknown	12.297	6.8	ppb	318099	4	11.839	2323320	50.0
Benzene, 1-meth...	12.388	8.3	ppb	387359	4	11.839	2323320	50.0
unknown	12.815	5.8	ppb	271440	4	11.839	2323320	50.0

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24364.D
Acq On : 21 Feb 2019 2:02 pm
Operator : K.Ruest
Sample : R1901228-004|71.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 21 14:18:43 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24364.D\data.ms

(40) Chloroform (P)

4.975min (+0.006) 0.22 ppb m

response 1221

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	34.98#
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

After

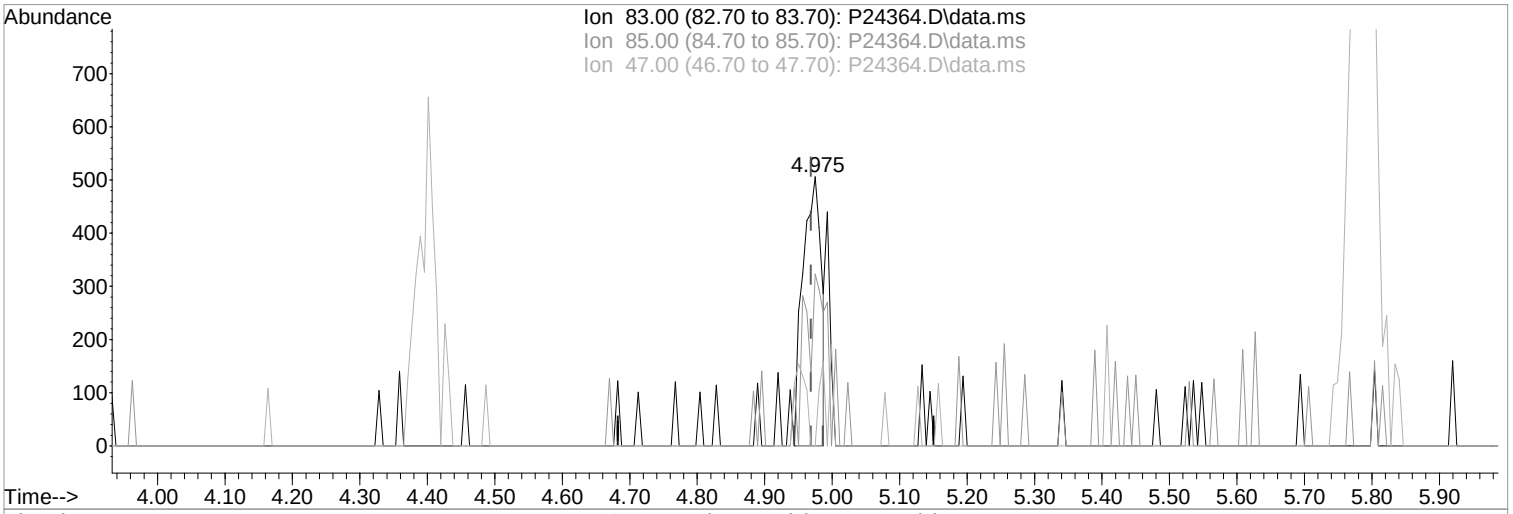
Split Peak

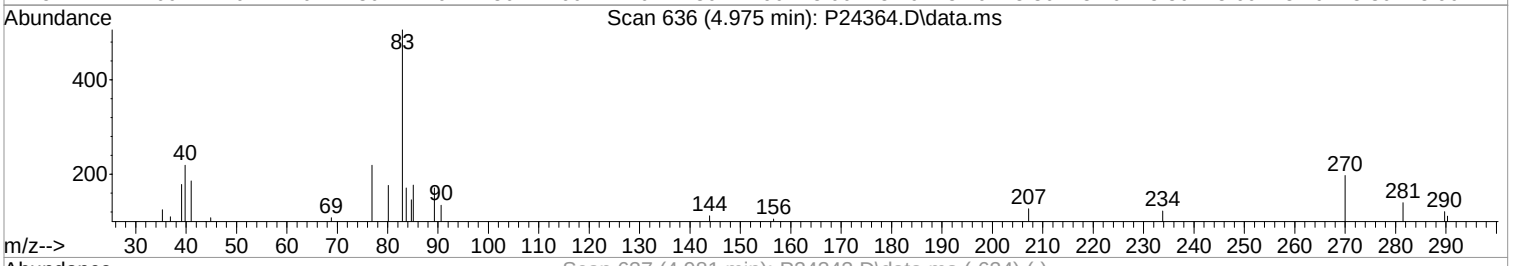
02/22/19

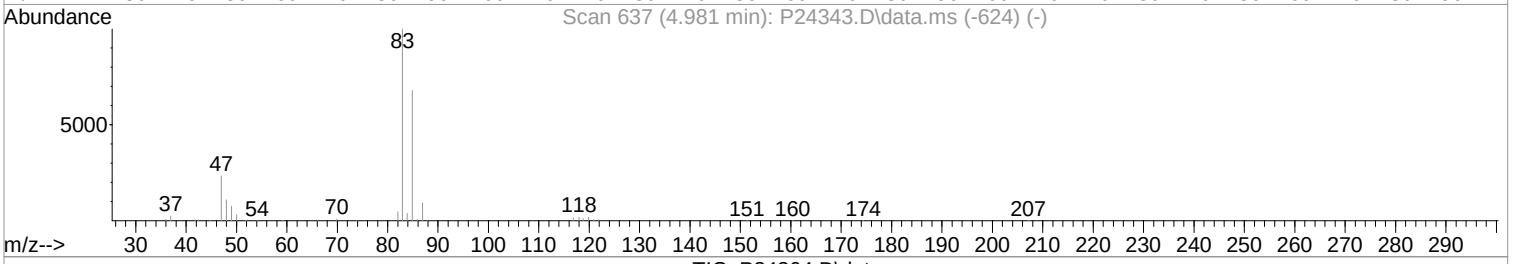
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24364.D
Acq On : 21 Feb 2019 2:02 pm
Operator : K.Ruest
Sample : R1901228-004|71.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 21 14:18:43 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24364.D\data.ms

(40) Chloroform (P)

4.975min (+0.006) 0.17 ppb

response 966

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	47.71#
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24364.D
Acq On : 21 Feb 2019 2:02 pm
Operator : K.Ruest
Sample : R1901228-004|71.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 5 Sample Multiplier: 1

DL

Quant Time: Feb 22 12:04:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

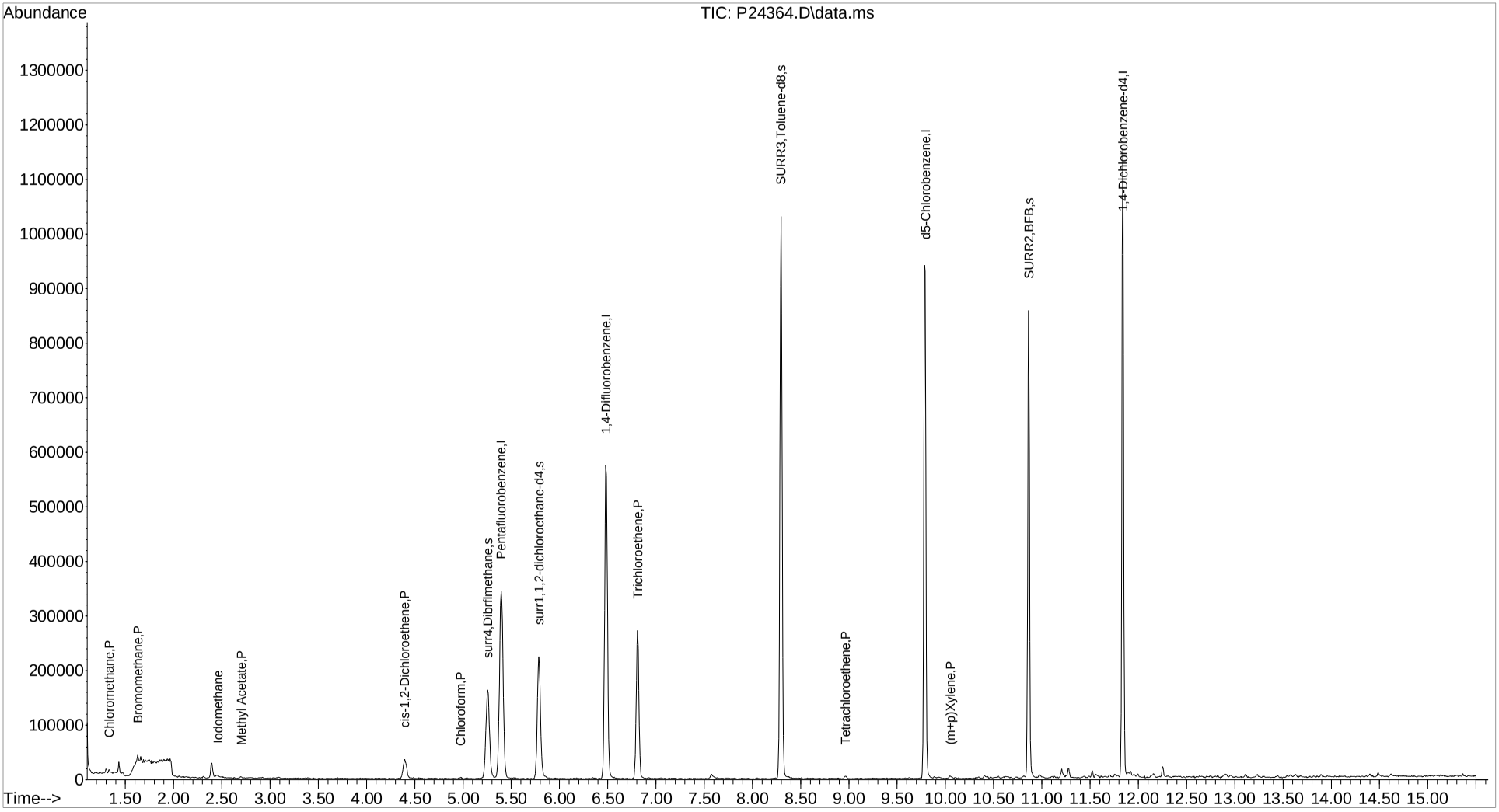
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.395	168	322084	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.480	114	516669	50.00	ppb		0.00
71) d5-Chlorobenzene	9.791	117	446327	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	233006	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	132436	46.65	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 93.30%				
48) surr1,1,2-dichloroetha...	5.785	65	188678	52.39	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 104.78%				
65) SURR3,Toluene-d8	8.297	98	651831	48.40	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.80%				
70) SURR2,BFB	10.864	95	239503	49.65	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.30%				
Target Compounds							Qvalue
3) Chloromethane	1.329	50	2618	0.50	ppb		78
5) Bromomethane	1.628	94	4869	0.90	ppb		99
17) Iodomethane	2.457	142	4143	3.07	ppb		99
21) Methyl Acetate	2.701	43	1878	0.45	ppb	#	43
34) cis-1,2-Dichloroethene	4.395	96	19919	5.32	ppb		85
40) Chloroform	4.975	83	1221m	0.22	ppb		
54) Trichloroethene	6.810	130	99817	27.62	ppb		97
72) Tetrachloroethene	8.962	164	852	0.32	ppb	#	53
83) (m+p)Xylene	10.053	106	1312	0.21	ppb	#	47

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

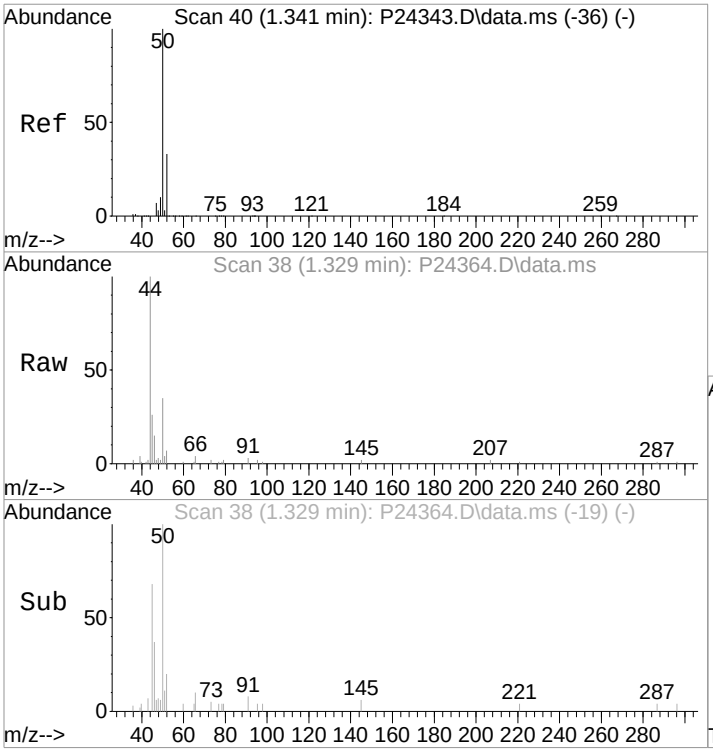
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24364.D
Acq On : 21 Feb 2019 2:02 pm
Operator : K.Ruest
Sample : R1901228-004|71.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 22 12:04:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



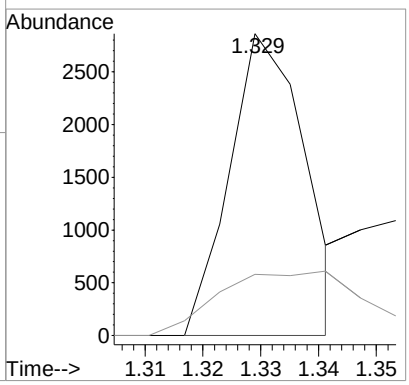
1st 02/22/19

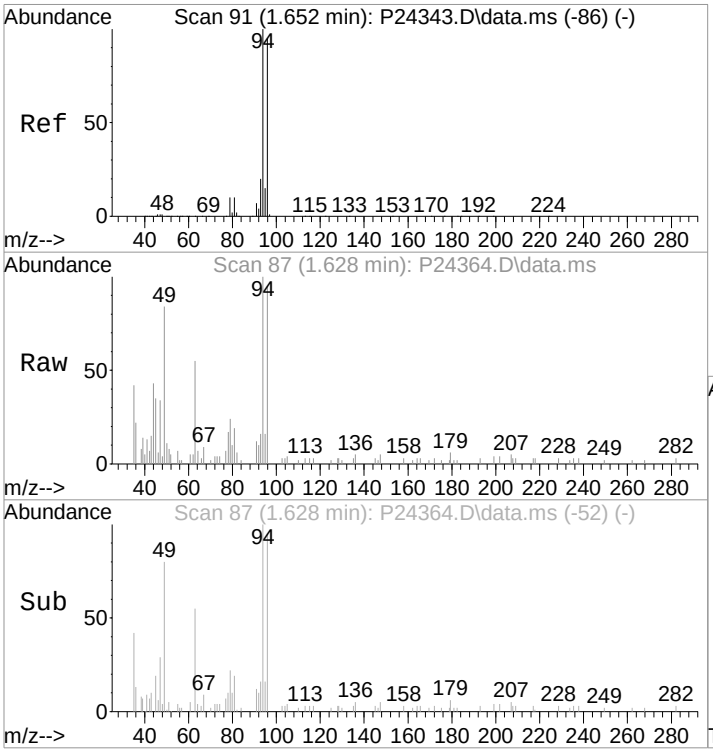


#3
Chloromethane
Concen: 0.50 ppb
RT: 1.329 min Scan# 38
Delta R.T. 0.000 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion: 50 Resp: 2618

Ion	Ratio	Lower	Upper
50	100		
52	20.3	13.0	53.0

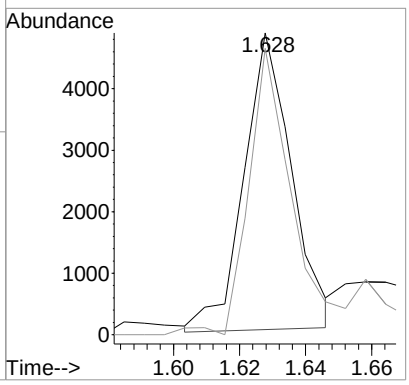


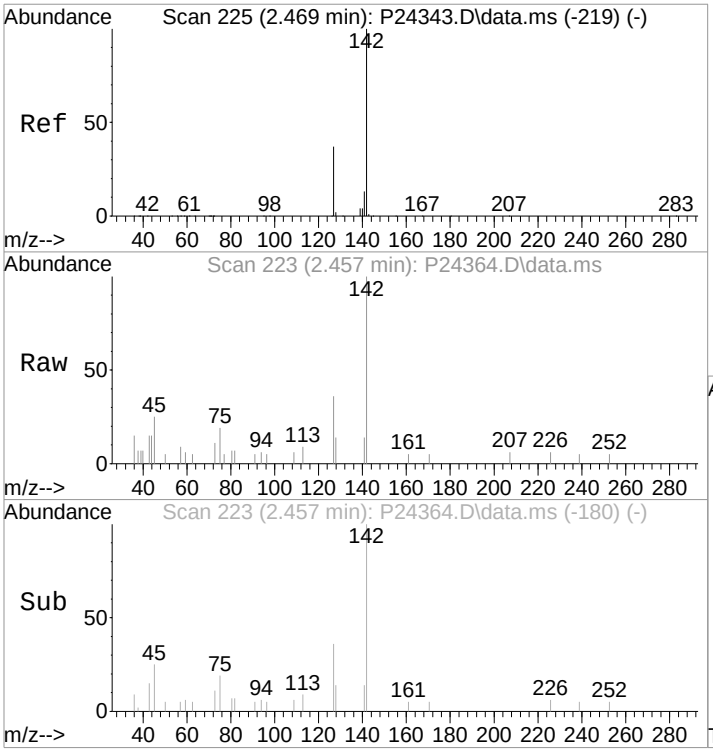


#5
Bromomethane
Concen: 0.90 ppb
RT: 1.628 min Scan# 87
Delta R.T. -0.011 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion: 94 Resp: 4869

Ion	Ratio	Lower	Upper
94	100		
96	94.8	75.4	115.4

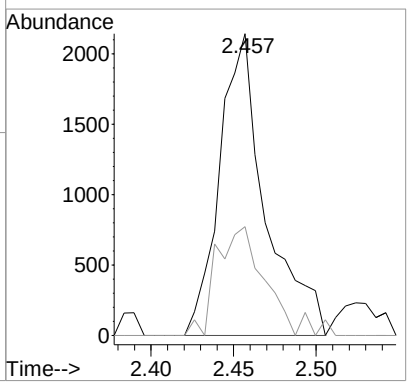


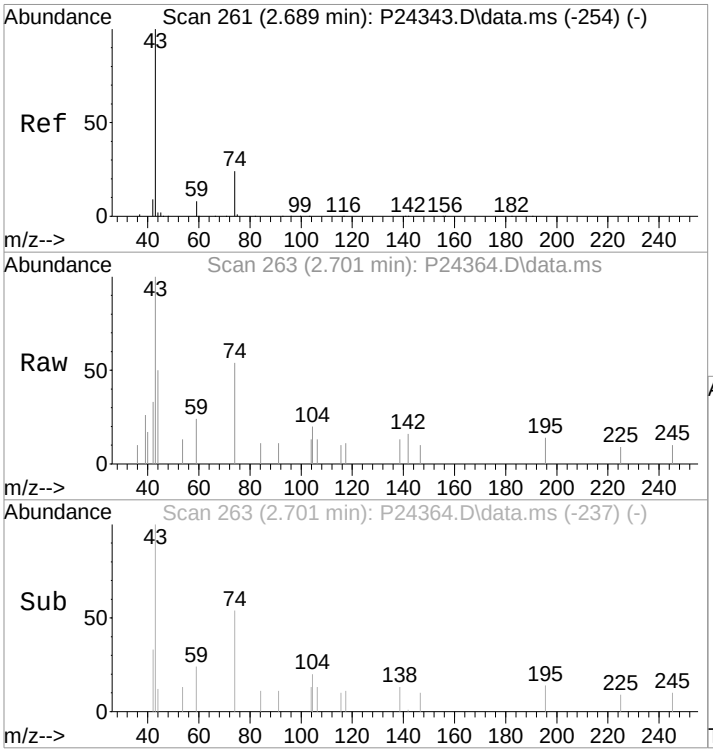


#17
Iodomethane
Concen: 3.07 ppb
RT: 2.457 min Scan# 223
Delta R.T. 0.001 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion:142 Resp: 4143

Ion	Ratio	Lower	Upper
142	100		
127	36.0	16.7	56.7

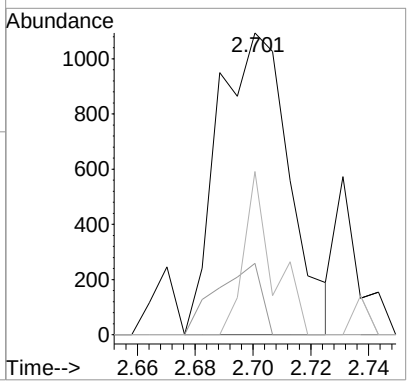


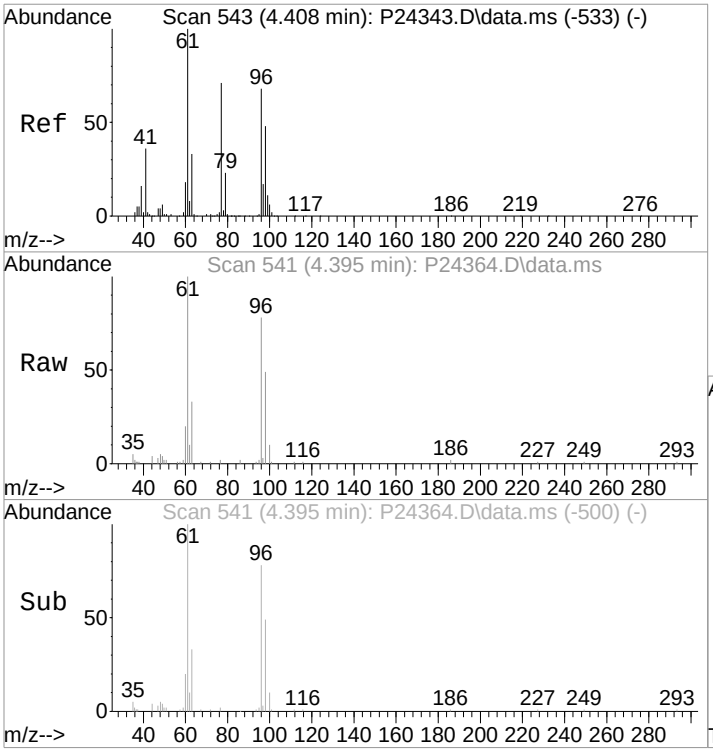


#21
Methyl Acetate
Concen: 0.45 ppb
RT: 2.701 min Scan# 263
Delta R.T. 0.018 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion: 43 Resp: 1878

Ion	Ratio	Lower	Upper
43	100		
59	23.7	0.0	28.4
74	54.0	3.6	43.6#

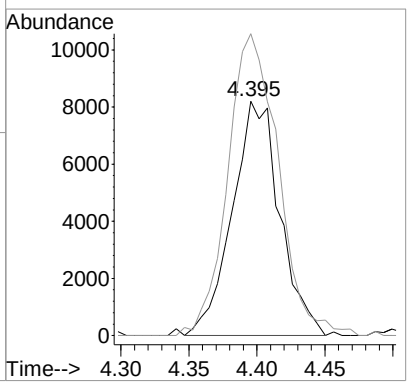


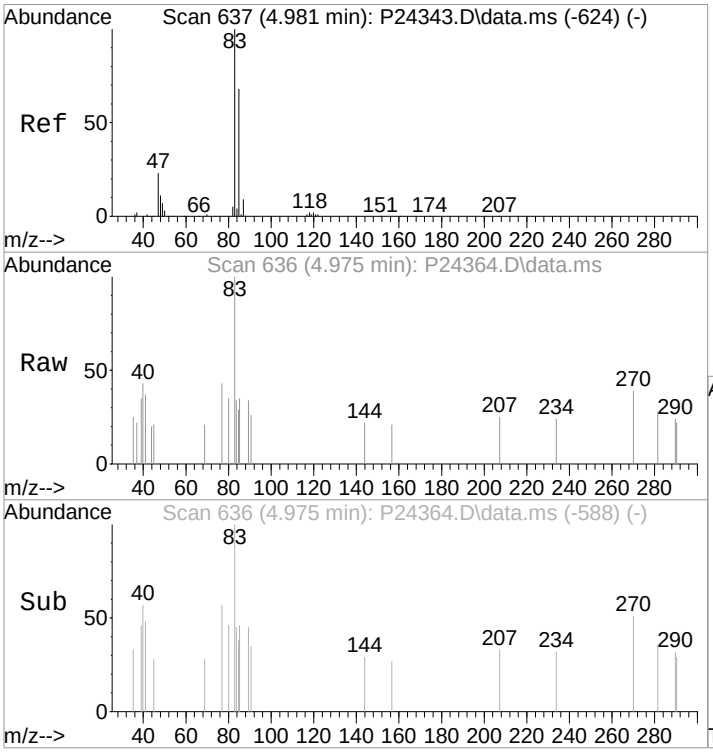


#34
cis-1,2-Dichloroethene
Concen: 5.32 ppb
RT: 4.395 min Scan# 541
Delta R.T. -0.006 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion: 96 Resp: 19919

Ion	Ratio	Lower	Upper
96	100		
61	128.8	128.1	168.1

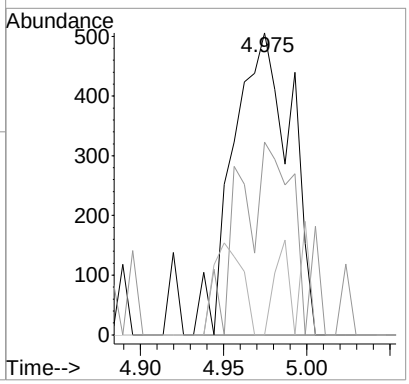


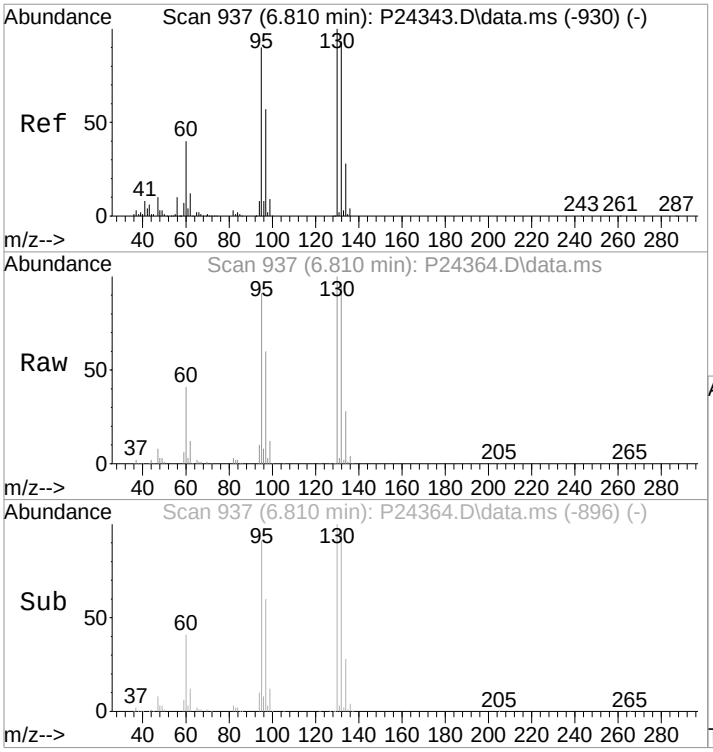


#40
Chloroform
Concen: 0.22 ppb m
RT: 4.975 min Scan# 636
Delta R.T. 0.006 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion: 83 Resp: 1221

Ion	Ratio	Lower	Upper
83	100		
85	35.0	47.9	87.9#
47	0.0	3.4	43.4#

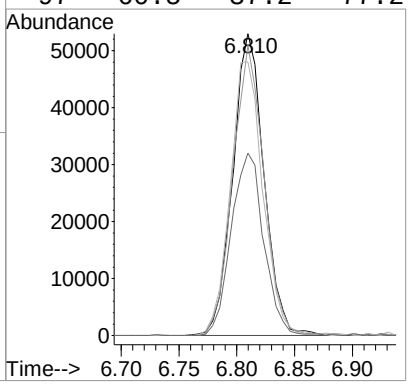


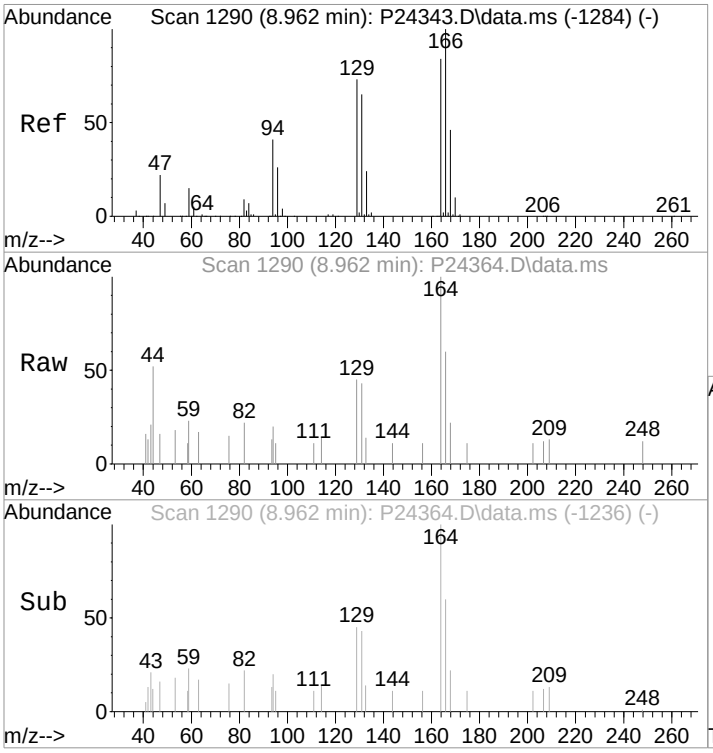


#54
Trichloroethene
Concen: 27.62 ppb
RT: 6.810 min Scan# 937
Delta R.T. 0.000 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion:130 Resp: 99817

Ion	Ratio	Lower	Upper
130	100		
132	96.2	72.6	112.6
95	90.7	69.8	109.8
97	60.5	37.2	77.2

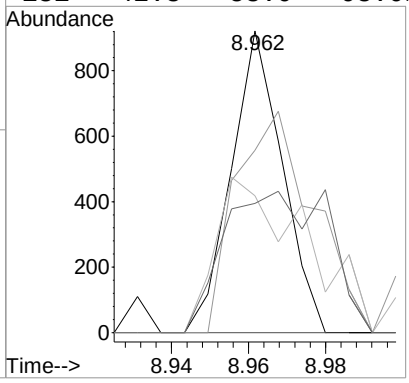


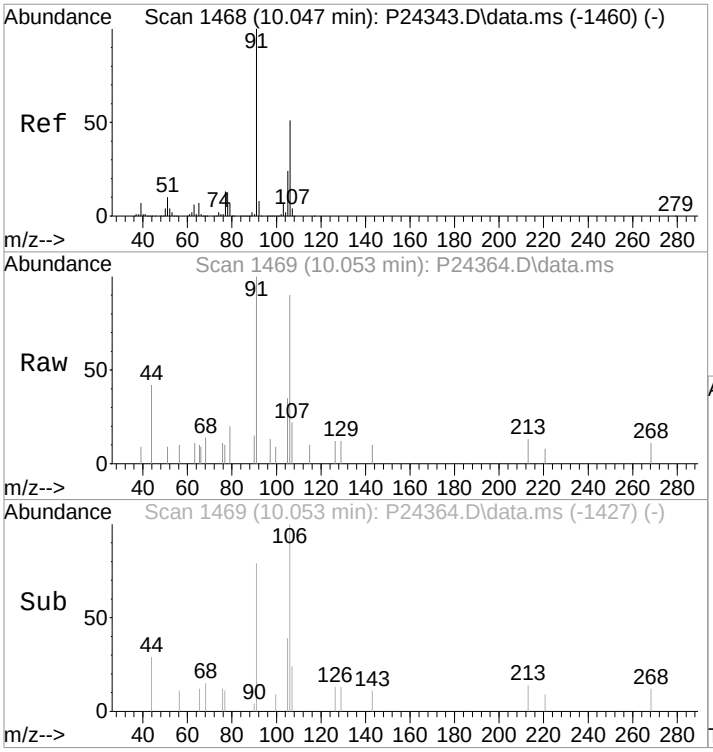


#72
Tetrachloroethene
Concen: 0.32 ppb
RT: 8.962 min Scan# 1290
Delta R.T. 0.000 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion:164 Resp: 852

Ion	Ratio	Lower	Upper
164	100		
166	60.4	99.6	139.6#
129	45.3	66.7	106.7#
131	42.8	58.0	98.0#

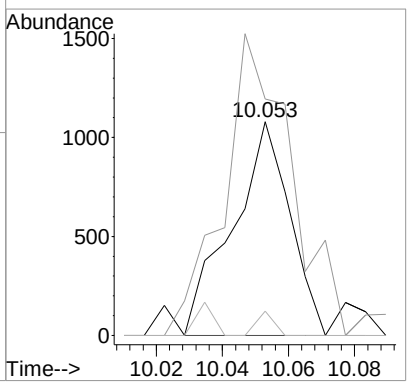




#83
(m+p)Xylene
Concen: 0.21 ppb
RT: 10.053 min Scan# 1469
Delta R.T. 0.006 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion:106 Resp: 1312

Ion	Ratio	Lower	Upper
106	100		
91	110.7	175.0	215.0#
77	11.4	6.3	46.3



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24364.D
Acq On : 21 Feb 2019 2:02 pm
Operator : K.Ruest
Sample : R1901228-004|71.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24364.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.433	52	55	58	rVB	20218	17237	1.04%	0.181%
2	1.628	72	87	90	rBV6	38194	120430	7.24%	1.265%
3	2.396	208	213	218	rBV	26923	41531	2.50%	0.436%
4	4.395	533	541	550	rBV2	35776	89432	5.38%	0.939%
5	5.255	669	682	693	rBV	163076	437203	26.29%	4.591%
6	5.395	696	705	718	rVB	342739	895497	53.85%	9.404%
7	5.785	759	769	779	rBV2	223976	530055	31.87%	5.567%
8	6.480	874	883	896	rBV	574219	1173073	70.54%	12.319%
9	6.810	926	937	949	rBV	272403	534818	32.16%	5.617%
10	7.578	1057	1063	1071	rBV2	8798	20068	1.21%	0.211%
11	8.297	1174	1181	1191	rBV	1029591	1663067	100.00%	17.465%
12	9.785	1419	1425	1439	rBV	940025	1365073	82.08%	14.336%
13	10.864	1597	1602	1615	rVB	856388	1112251	66.88%	11.681%
14	11.205	1652	1658	1664	rBV5	16709	27141	1.63%	0.285%
15	11.278	1666	1670	1674	rVB2	17990	24081	1.45%	0.253%
16	11.839	1756	1762	1769	rBV	1151873	1430547	86.02%	15.023%
17	12.254	1826	1830	1835	rBV	19044	23279	1.40%	0.244%
18	12.900	1930	1936	1942	rBV9	6839	17394	1.05%	0.183%

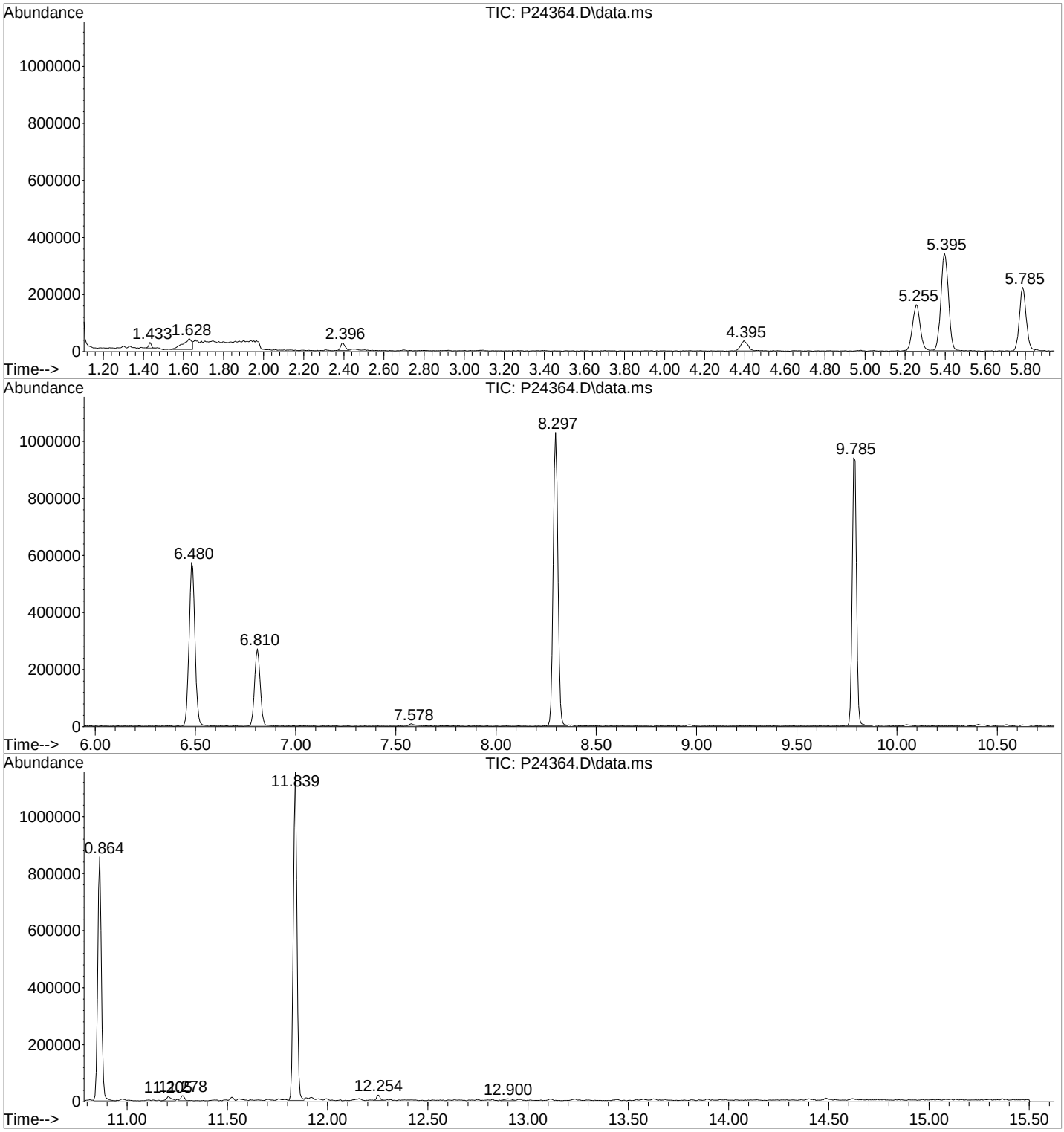
Sum of corrected areas: 9522177

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24364.D
Acq On : 21 Feb 2019 2:02 pm
Operator : K.Ruest
Sample : R1901228-004|71.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\\
Data File : P24364.D
Acq On : 21 Feb 2019 2:02 pmm
Operator : K.Ruestt
Sample : R1901228-004|71.5 Inst : MSVOA-122
Misc : DAY MED T44
ALS Vial : 5 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

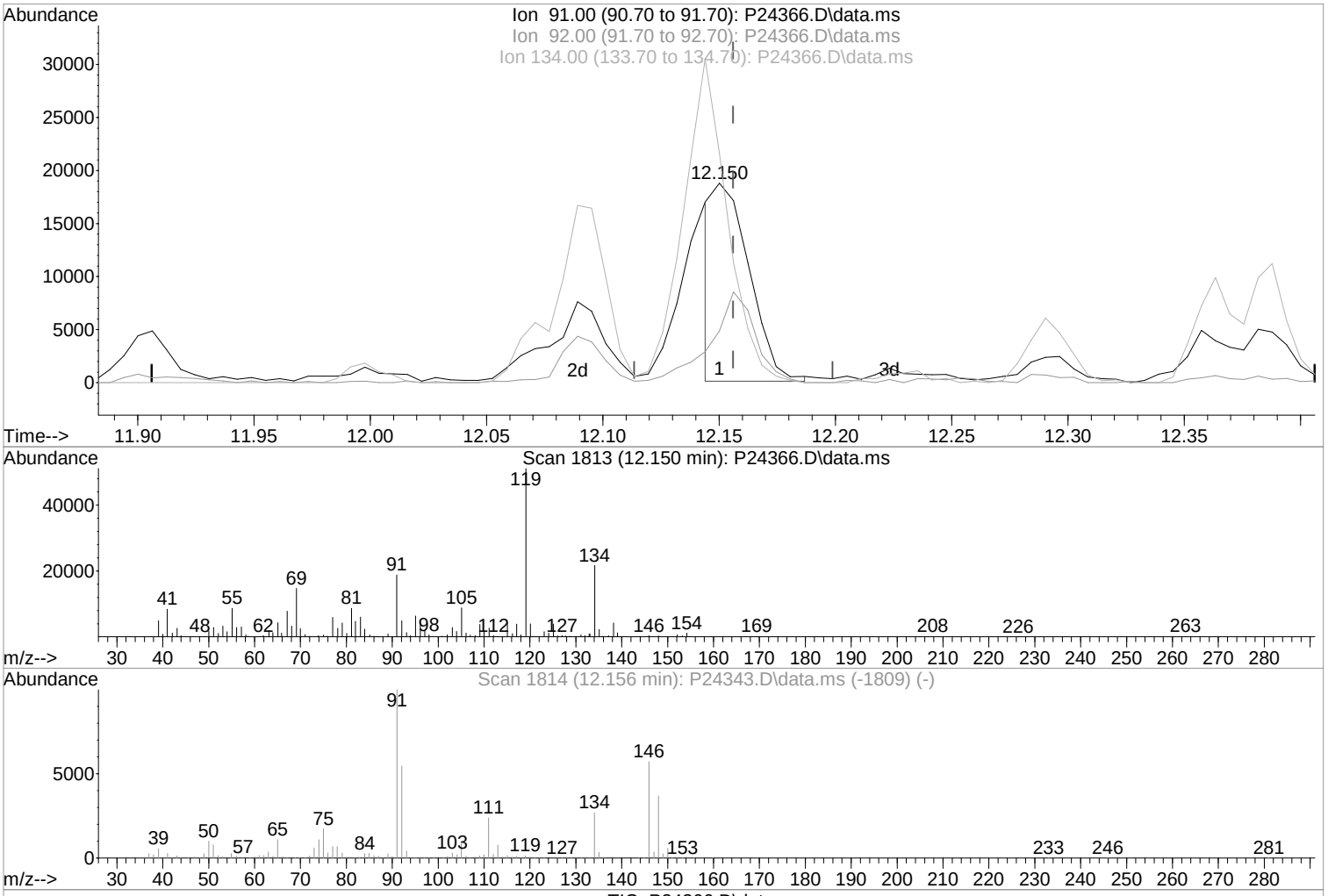
					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 21 15:04:01 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24366.D\data.ms

(109) n-Butylbenzene

12.150min (-0.006) 1.90 ppb m

response 19990

Ion	Exp%	Act%
91.00	100	100
92.00	54.70	25.98#
134.00	26.80	115.11#
0.00	0.00	0.00

Manual Integration:

After

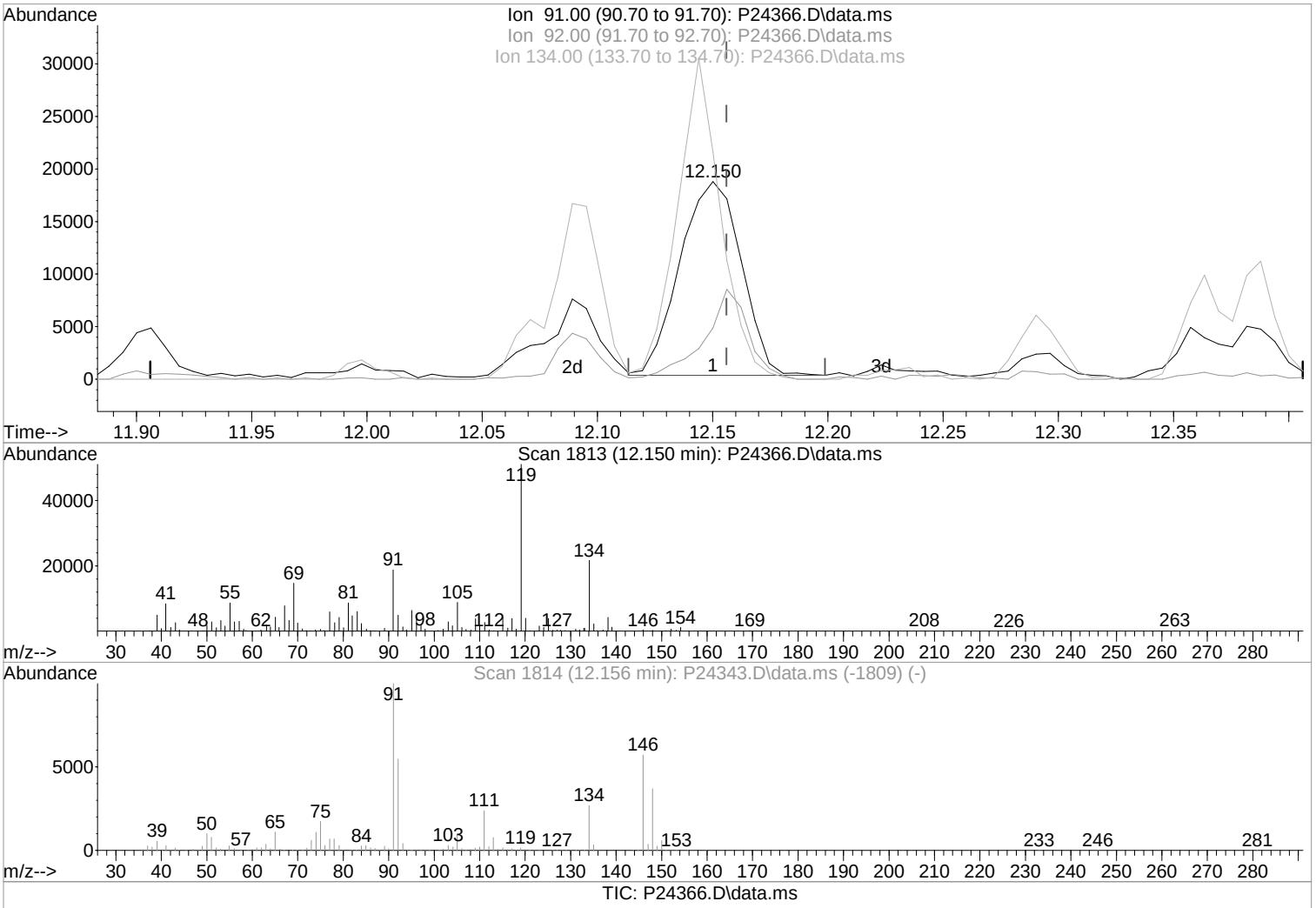
Poor integration.

02/22/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 21 15:04:01 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24366.D\data.ms

(109) n-Butylbenzene

12.150min (-0.006) 3.24 ppb

response 34049

Ion	Exp%	Act%
91.00	100	100
92.00	54.70	25.98#
134.00	26.80	115.11#
0.00	0.00	0.00

Manual Integration:

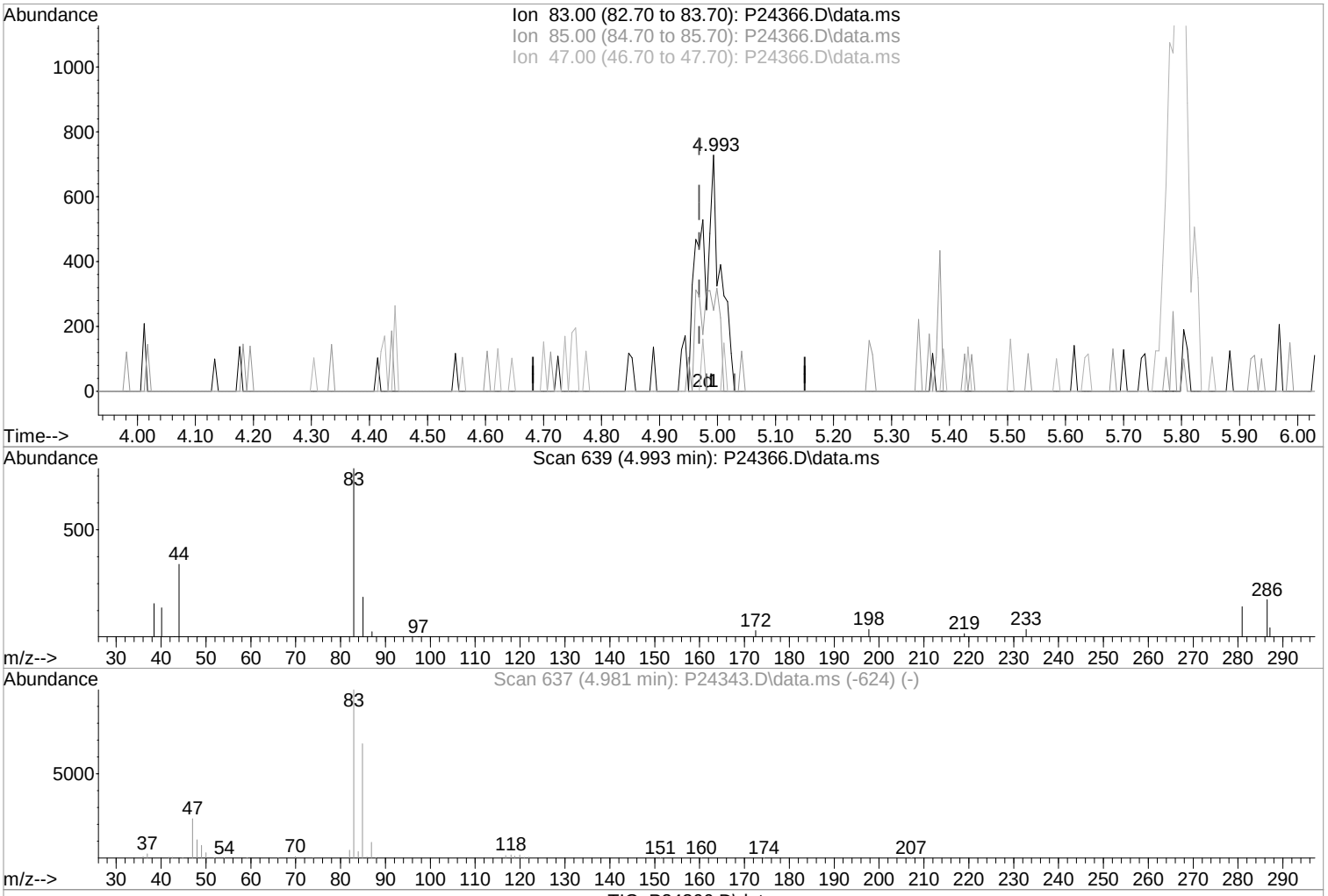
Before

02/22/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 21 15:04:01 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24366.D\data.ms

(40) Chloroform (P)

4.993min (+0.024) 0.31 ppb m

response 1697

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	34.34#
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

After

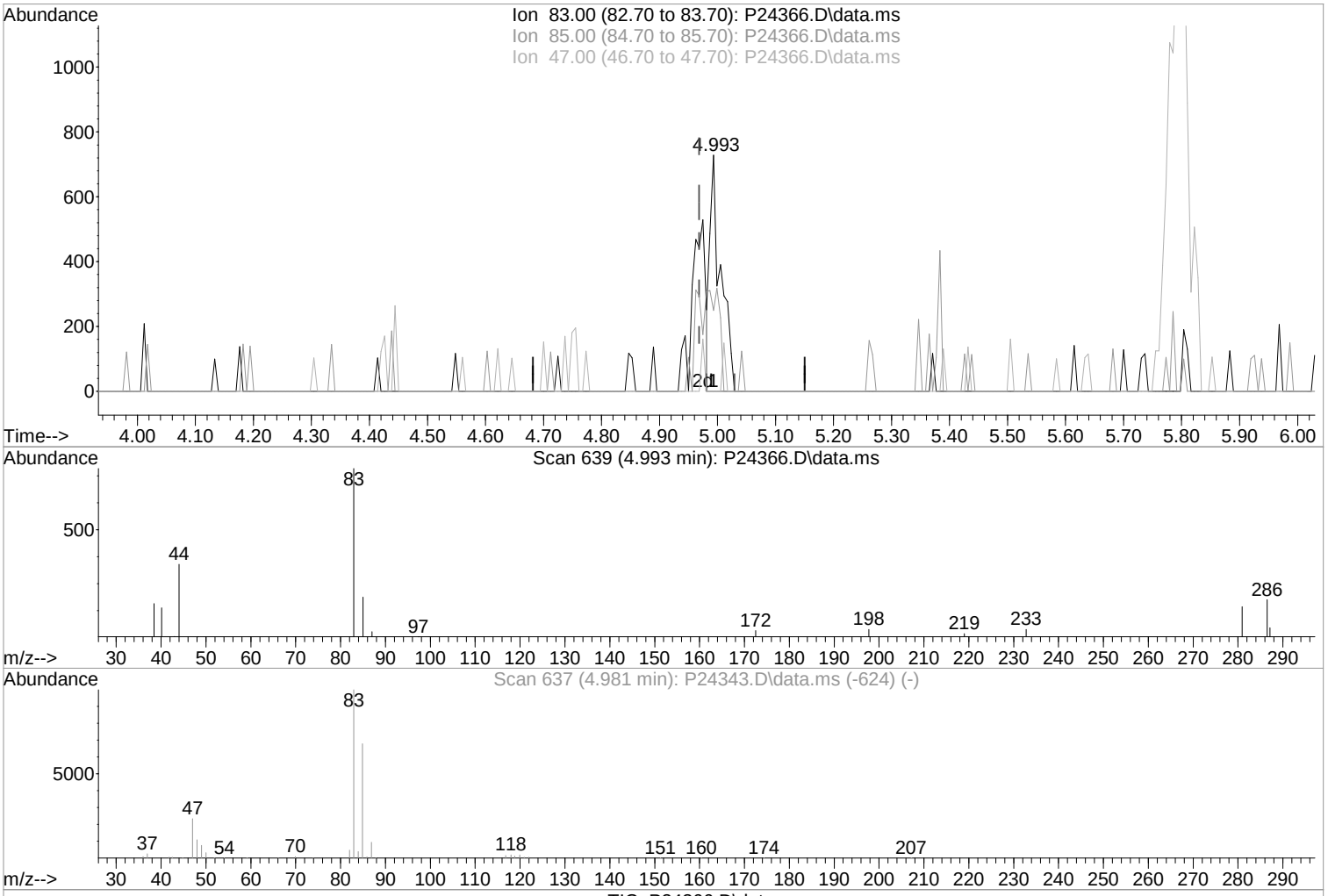
Split Peak

02/22/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 21 15:04:01 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24366.D\data.ms

(40) Chloroform (P)

4.993min (+0.024) 0.18 ppb

response 958

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	34.34#
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

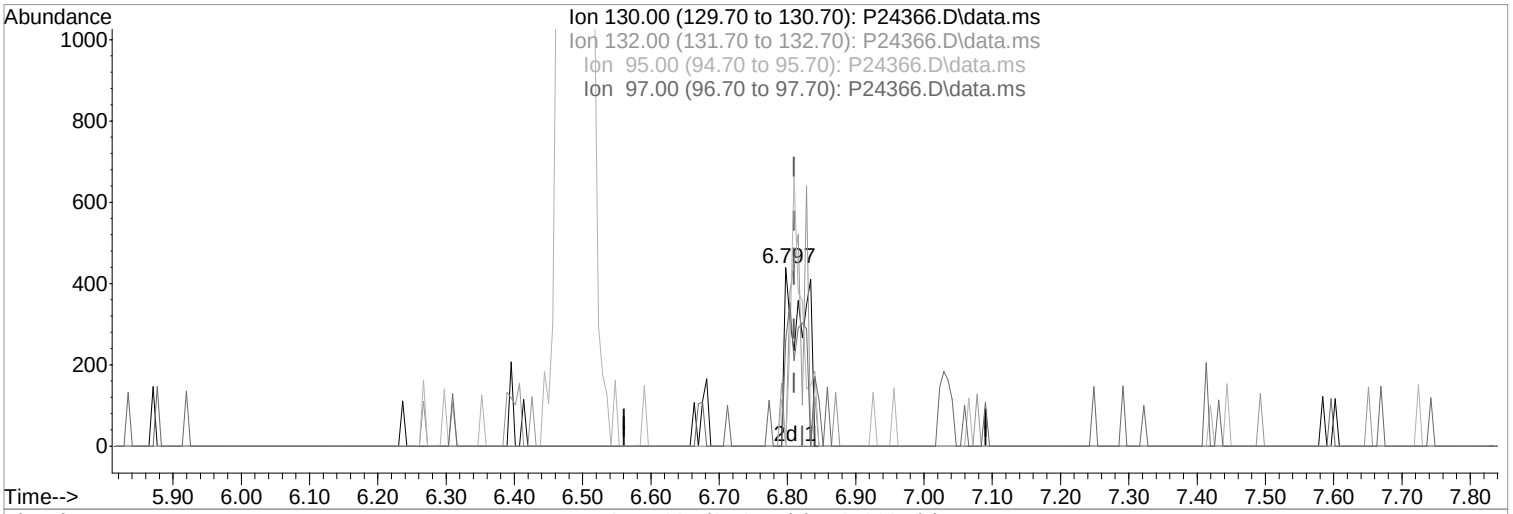
Before

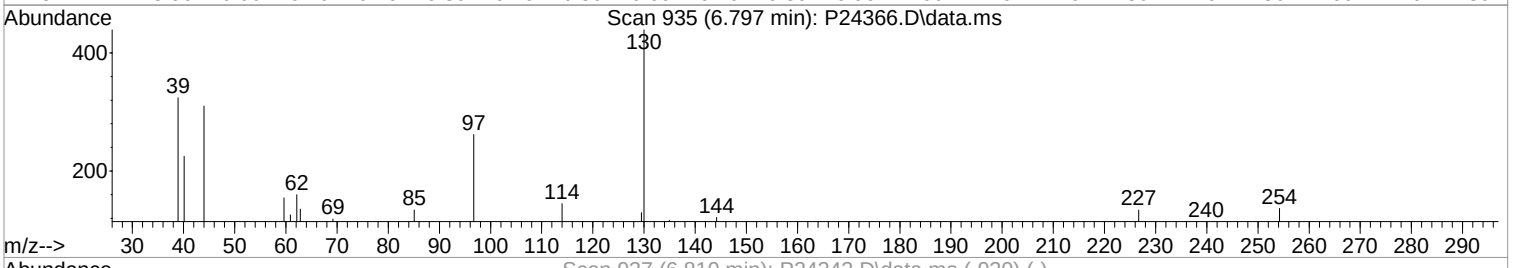
02/22/19

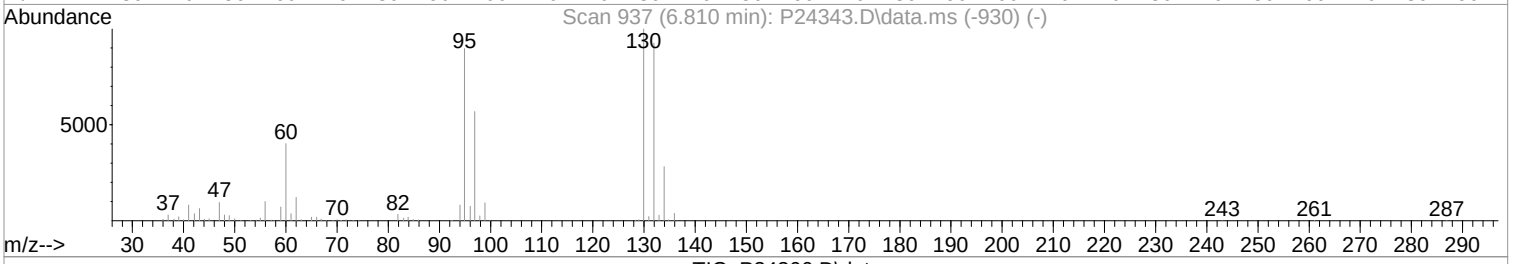
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 21 15:04:01 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24366.D\data.ms

(54) Trichloroethene (P)

6.797min (-0.012) 0.25 ppb m

response 866

Ion	Exp%	Act%
130.00	100	100
132.00	92.60	0.00#
95.00	89.80	0.00#
97.00	57.20	59.68

Manual Integration:

After

Split Peak

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

DL

Quant Time: Feb 22 12:07:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

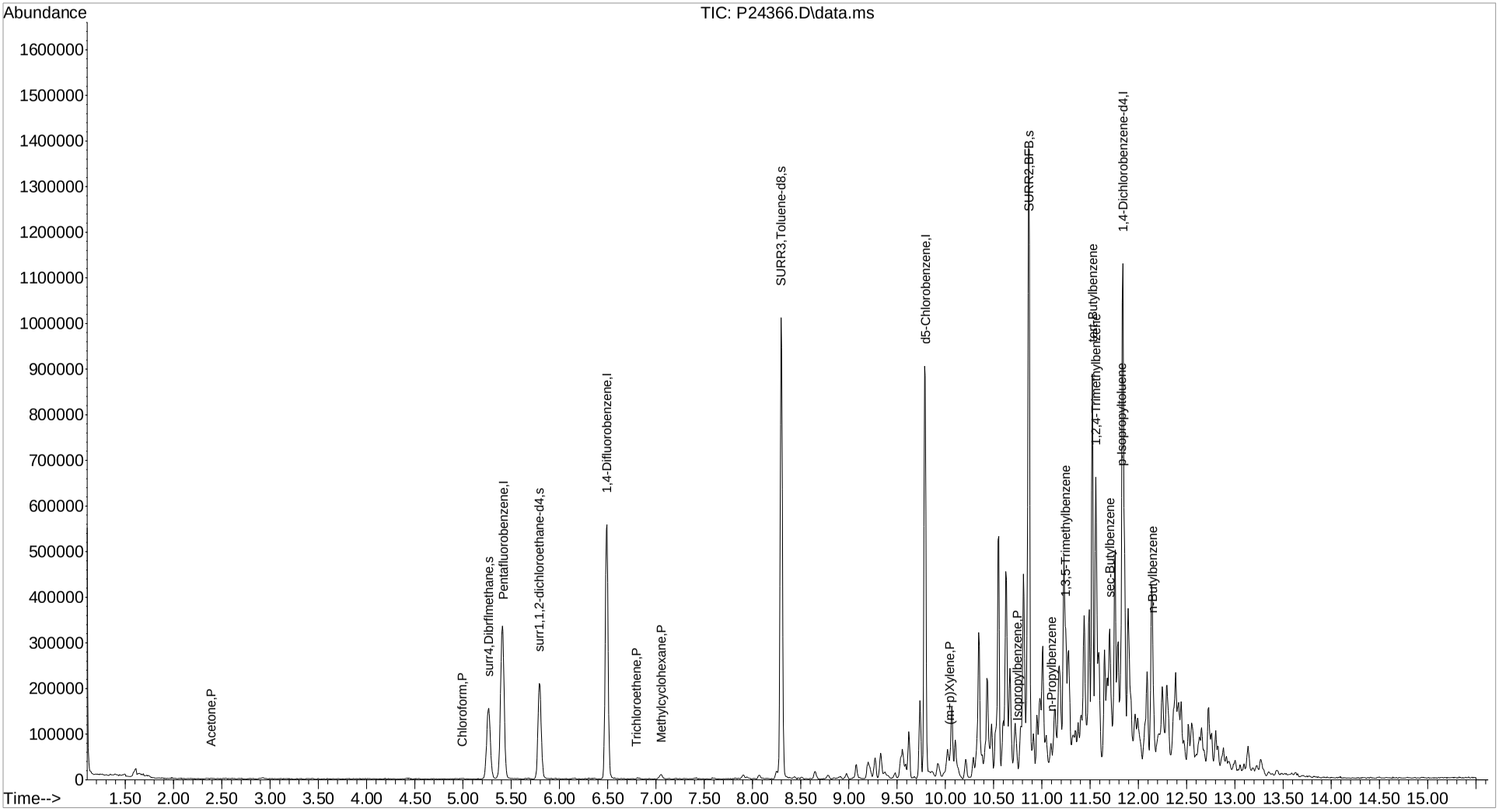
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.414	168	316165	50.00	ppb		0.02
43) 1,4-Difluorobenzene	6.493	114	499446	50.00	ppb		0.01
71) d5-Chlorobenzene	9.791	117	422996	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	209448	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.267	113	130584	47.58	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.16%				
48) surr1,1,2-dichloroetha...	5.792	65	178047	51.14	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.28%				
65) SURR3,Toluene-d8	8.297	98	643644	49.44	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.88%				
70) SURR2,BFB	10.864	95	225448	48.35	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.70%				
Target Compounds							Qvalue
15) Acetone	2.384	43	1143	0.75	ppb		97
40) Chloroform	4.993	83	1697m	0.31	ppb		
54) Trichloroethene	6.797	130	866m	0.25	ppb		
55) Methylcyclohexane	7.054	55	3365	0.76	ppb	#	86
83) (m+p)Xylene	10.047	106	2352	0.39	ppb	#	73
89) Isopropylbenzene	10.742	105	5851	0.42	ppb		90
95) n-Propylbenzene	11.095	91	15442	0.98	ppb		96
99) 1,3,5-Trimethylbenzene	11.248	105	89770	7.85	ppb		98
100) tert-Butylbenzene	11.522	119	3185	0.32	ppb		93
101) 1,2,4-Trimethylbenzene	11.559	105	212046	17.93	ppb		96
103) sec-Butylbenzene	11.705	105	18472	1.28	ppb		98
104) p-Isopropyltoluene	11.827	119	24020	2.01	ppb		96
109) n-Butylbenzene	12.150	91	19990m	1.90	ppb		

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

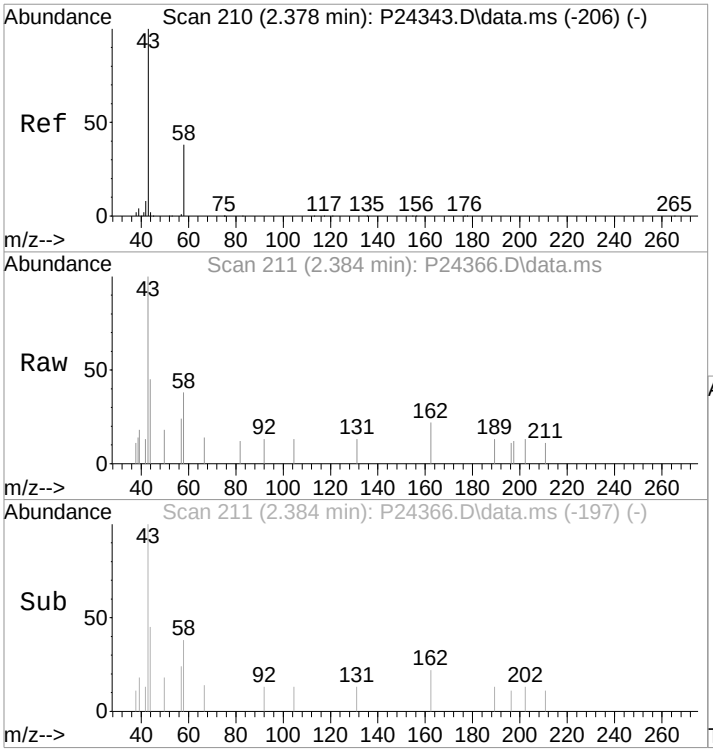
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 12:07:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



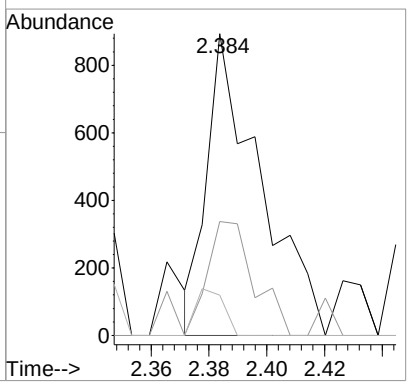
1st 02/22/19

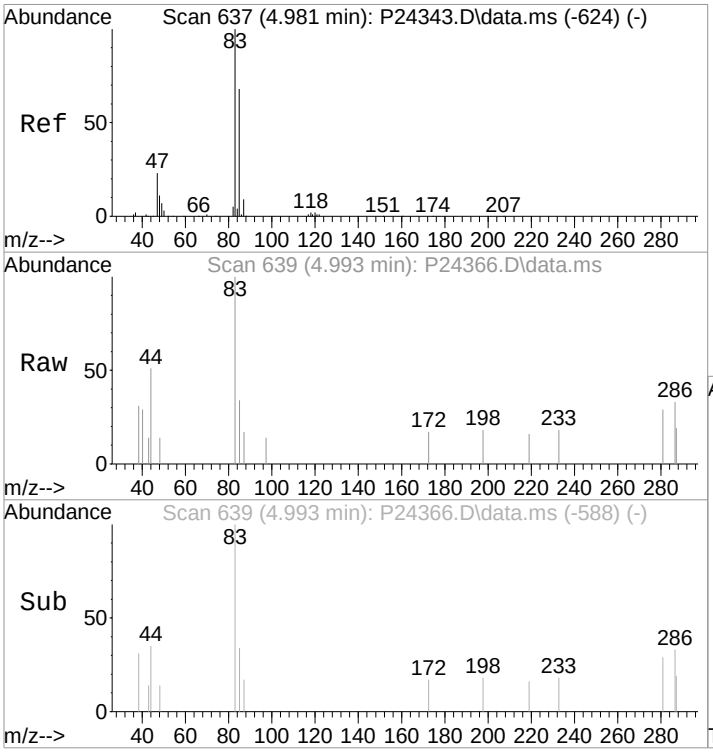


#15
Acetone
Concen: 0.75 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion: 43 Resp: 1143

Ion	Ratio	Lower	Upper
43	100		
58	37.7	18.1	58.1
42	13.3	0.0	27.8

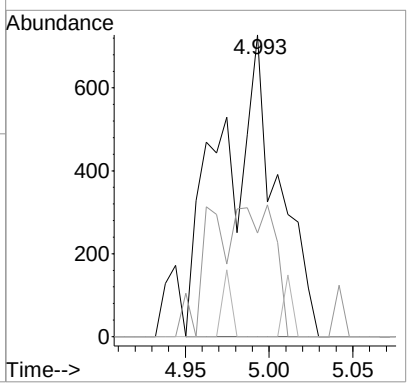


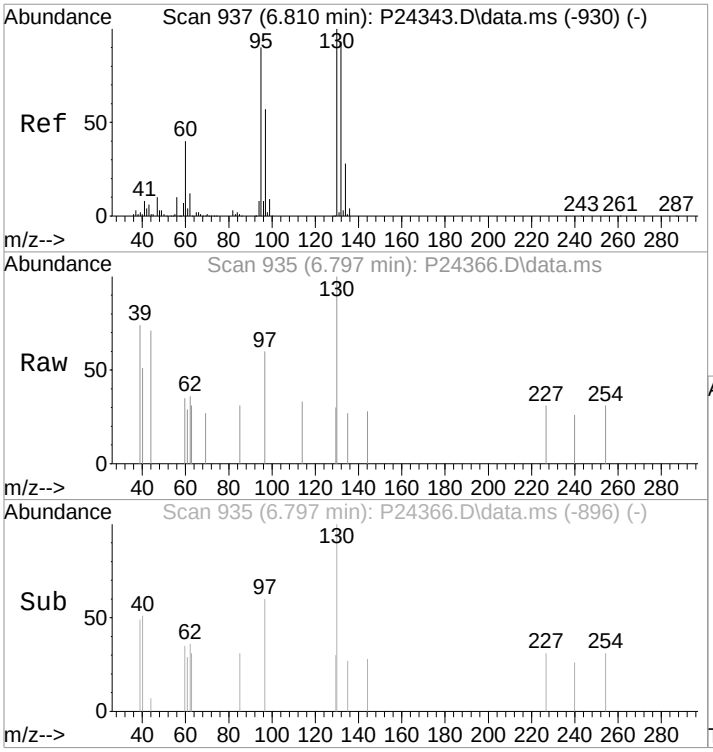


#40
Chloroform
Concen: 0.31 ppb m
RT: 4.993 min Scan# 639
Delta R.T. 0.024 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion: 83 Resp: 1697

Ion	Ratio	Lower	Upper
83	100		
85	34.3	47.9	87.9#
47	0.0	3.4	43.4#

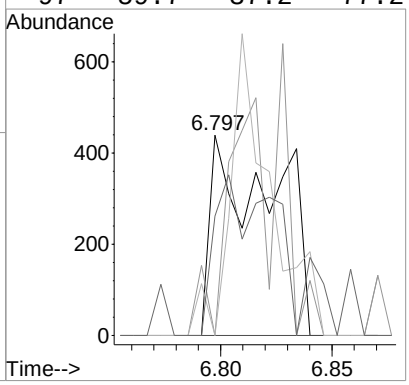


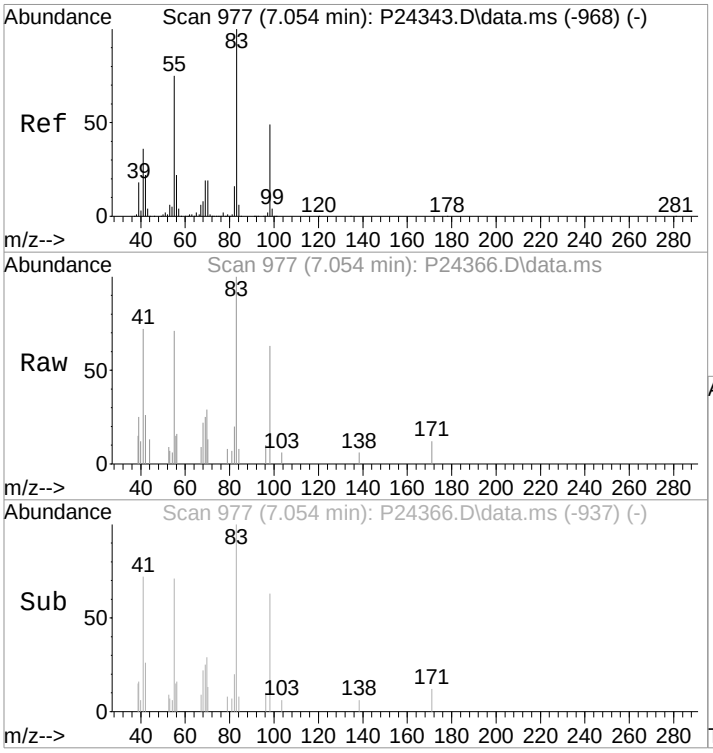


#54
Trichloroethene
Concen: 0.25 ppb m
RT: 6.797 min Scan# 935
Delta R.T. -0.012 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion:130 Resp: 866

Ion	Ratio	Lower	Upper
130	100		
132	0.0	72.6	112.6#
95	0.0	69.8	109.8#
97	59.7	37.2	77.2

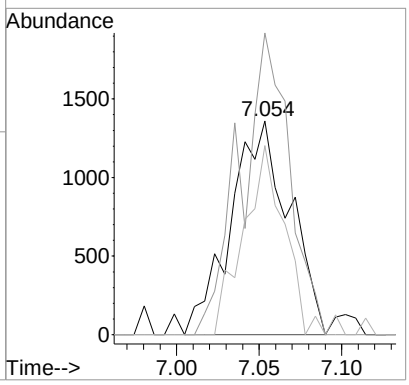


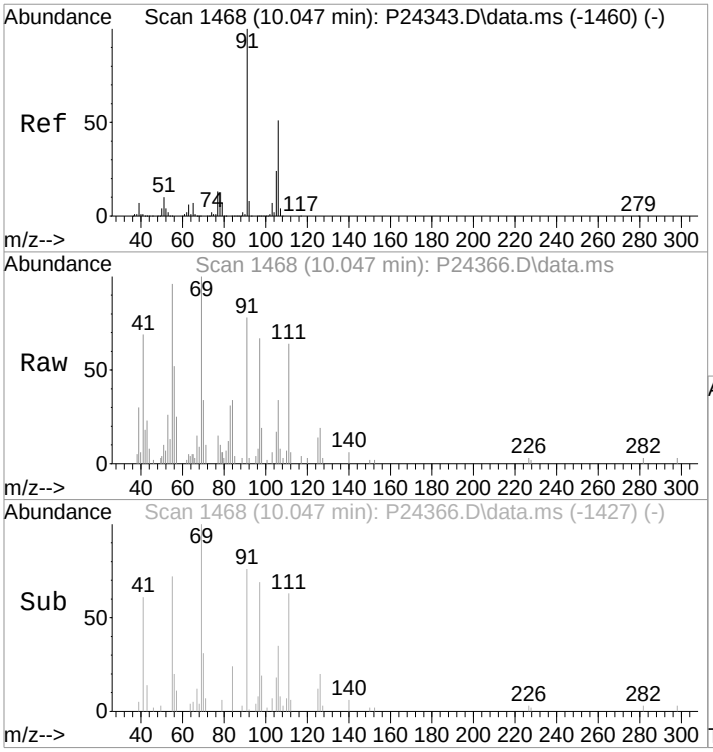


#55
Methylcyclohexane
Concen: 0.76 ppb
RT: 7.054 min Scan# 977
Delta R.T. 0.006 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion: 55 Resp: 3365

Ion	Ratio	Lower	Upper
55	100		
83	141.1	113.1	153.1
98	88.5	45.0	85.0#

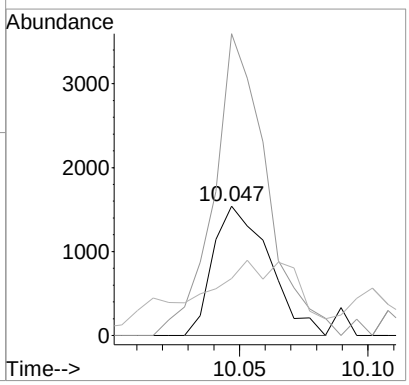


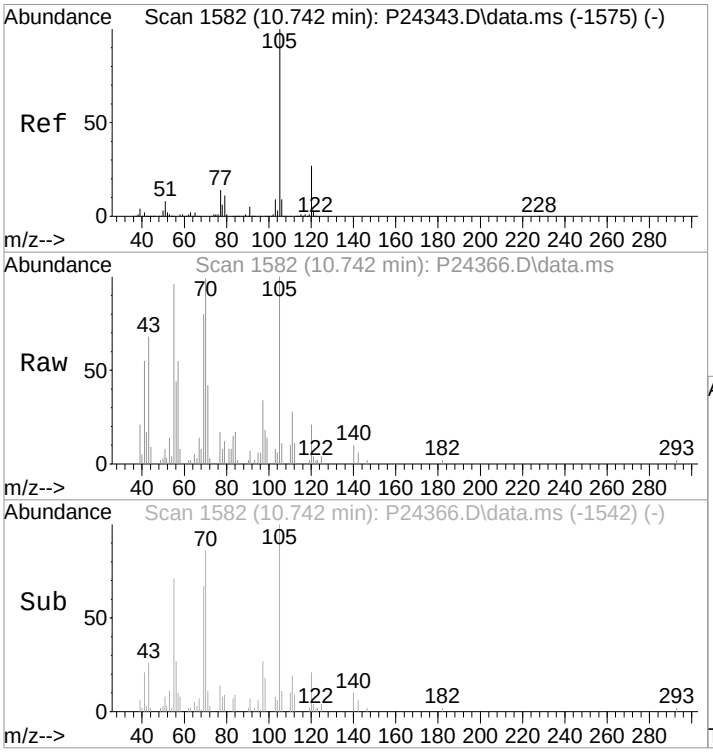


#83
(m+p)Xylene
Concen: 0.39 ppb
RT: 10.047 min Scan# 1468
Delta R.T. 0.000 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion:106 Resp: 2352

Ion	Ratio	Lower	Upper
106	100		
91	233.3	175.0	215.0#
77	44.1	6.3	46.3

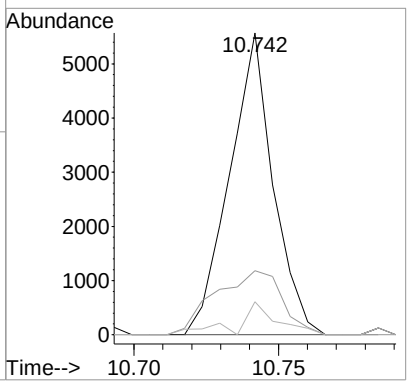


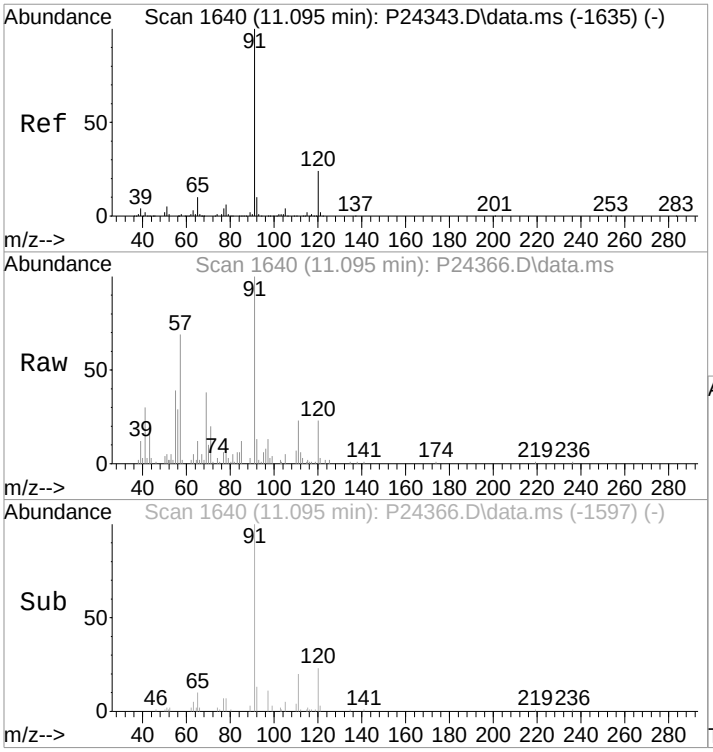


#89
Isopropylbenzene
Concen: 0.42 ppb
RT: 10.742 min Scan# 1582
Delta R.T. 0.000 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion:105 Resp: 5851

Ion	Ratio	Lower	Upper
105	100		
120	21.2	7.2	47.2
106	10.9	0.0	28.8

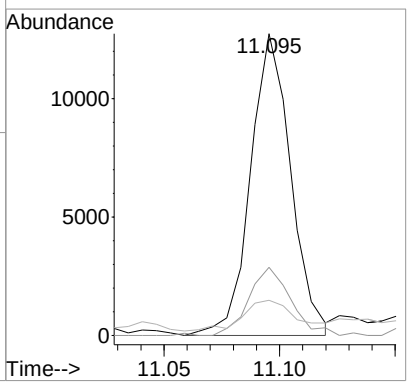


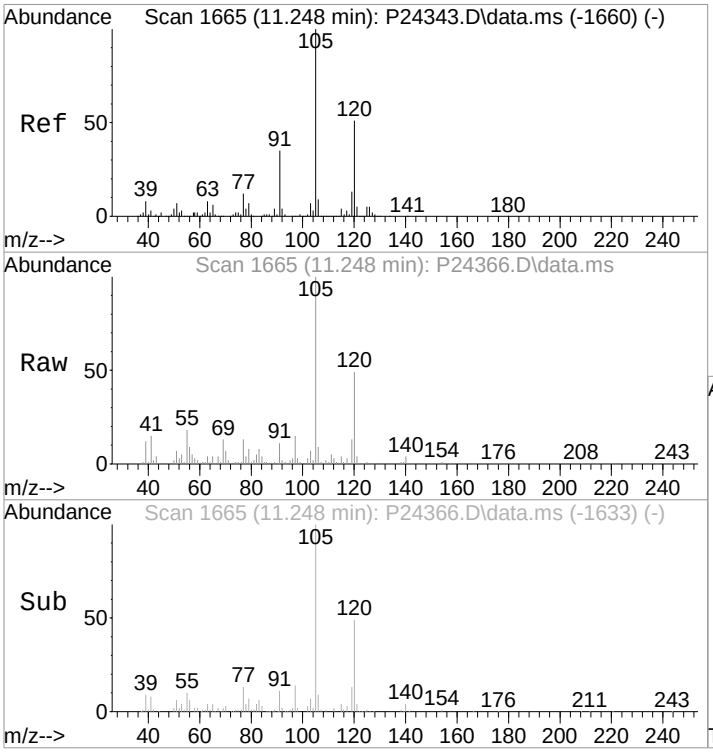


#95
n-Propylbenzene
Concen: 0.98 ppb
RT: 11.095 min Scan# 1640
Delta R.T. 0.000 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion: 91 Resp: 15442

Ion	Ratio	Lower	Upper
91	100		
120	22.6	4.4	44.4
65	11.6	0.0	30.4

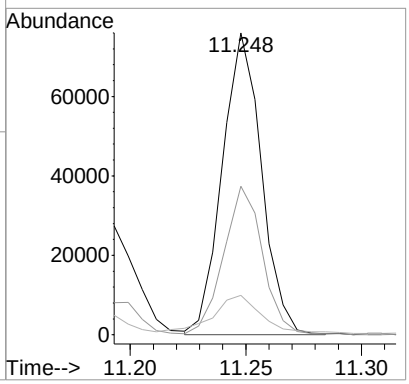


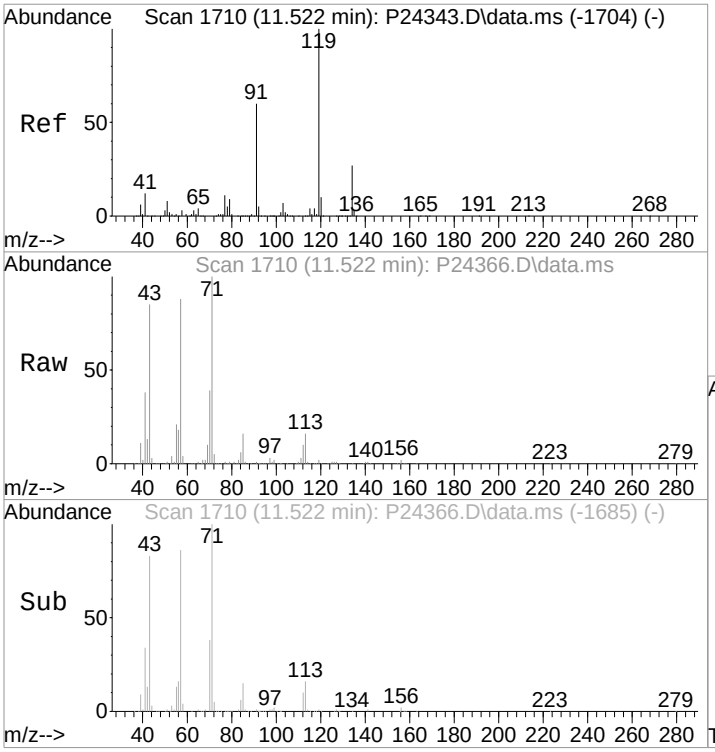


#99
1,3,5-Trimethylbenzene
Concen: 7.85 ppb
RT: 11.248 min Scan# 1665
Delta R.T. 0.000 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion:105 Resp: 89770

Ion	Ratio	Lower	Upper
105	100		
120	49.2	30.8	70.8
77	13.0	0.0	32.5

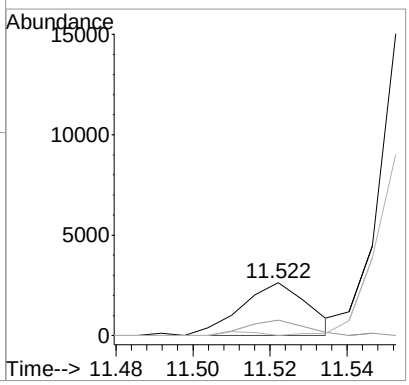


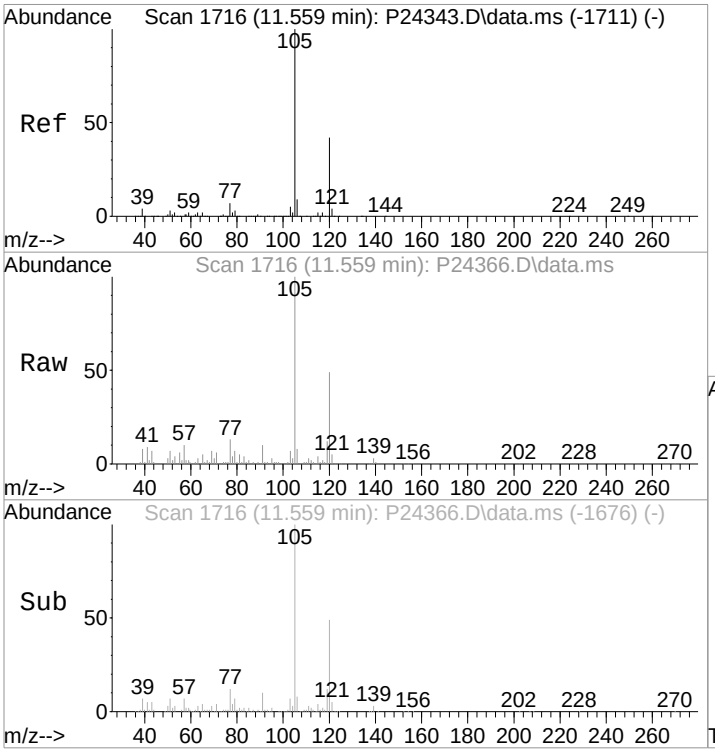


#100
tert-Butylbenzene
Concen: 0.32 ppb
RT: 11.522 min Scan# 1710
Delta R.T. 0.000 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion:119 Resp: 3185

Ion	Ratio	Lower	Upper
119	100		
134	29.4	7.0	47.0
103	0.0	0.0	26.6

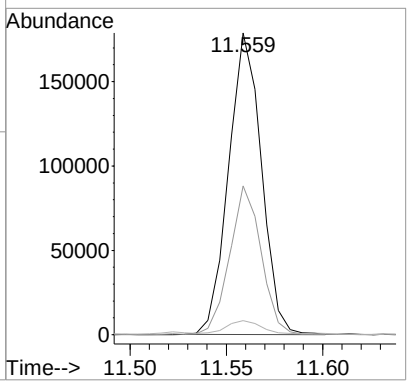


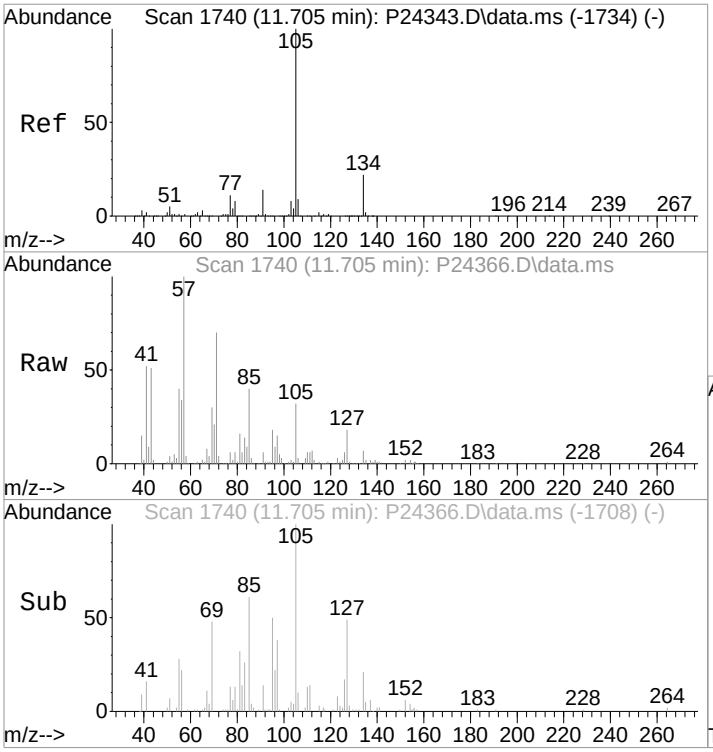


#101
1,2,4-Trimethylbenzene
Concen: 17.93 ppb
RT: 11.559 min Scan# 1716
Delta R.T. 0.000 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion:105 Resp: 212046

Ion	Ratio	Lower	Upper
105	100		
120	49.3	26.4	66.4
65	4.7	0.0	24.1

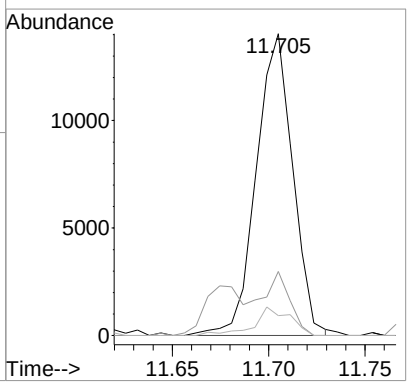


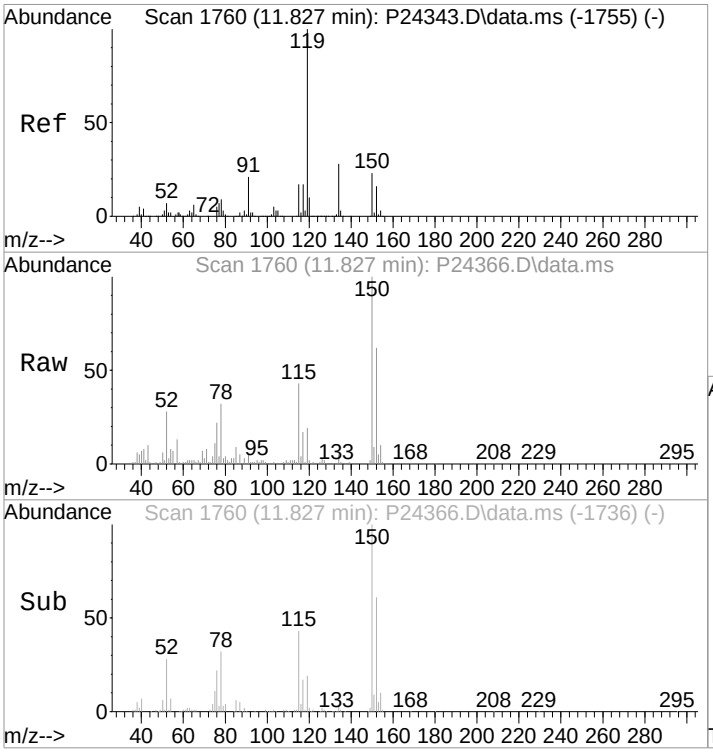


#103
sec-Butylbenzene
Concen: 1.28 ppb
RT: 11.705 min Scan# 1740
Delta R.T. 0.000 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion:105 Resp: 18472

Ion	Ratio	Lower	Upper
105	100		
134	21.2	1.8	41.8
103	6.6	0.0	27.9

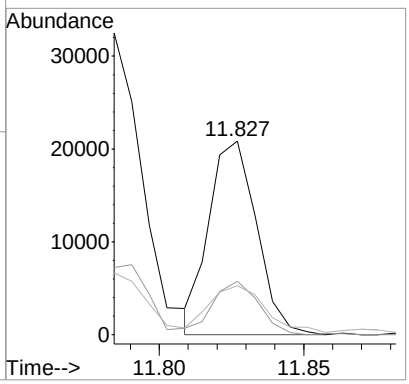


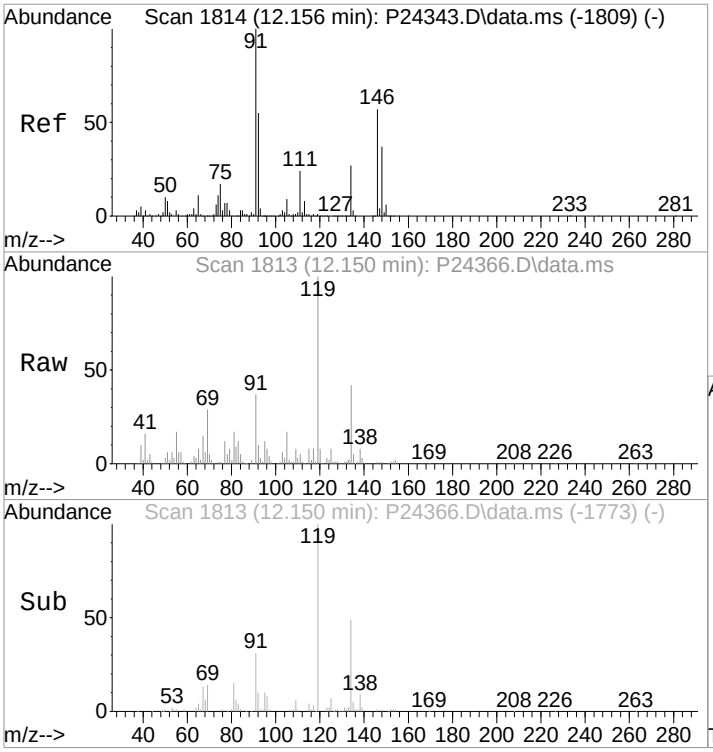


#104
p-Isopropyltoluene
Concen: 2.01 ppb
RT: 11.827 min Scan# 1760
Delta R.T. 0.000 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion:119 Resp: 24020

Ion	Ratio	Lower	Upper
119	100		
134	27.7	7.6	47.6
91	25.3	1.3	41.3

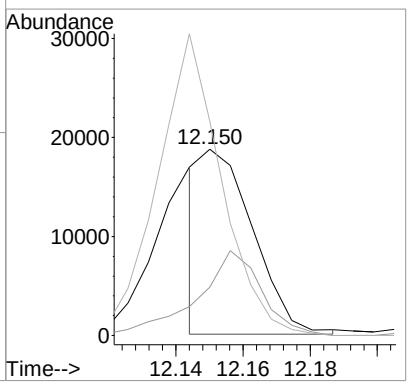




#109
n-Butylbenzene
Concen: 1.90 ppb m
RT: 12.150 min Scan# 1813
Delta R.T. -0.006 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion: 91 Resp: 19990

Ion	Ratio	Lower	Upper
91	100		
92	26.0	34.7	74.7#
134	115.1	6.8	46.8#



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24366.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.609	77	84	86	rBV5	16606	30451	1.58%	0.125%
2	5.267	673	684	694	rBV2	154832	427019	22.17%	1.748%
3	5.408	696	707	718	rVV2	334147	865526	44.93%	3.544%
4	5.792	760	770	783	rBV2	209631	510683	26.51%	2.091%
5	6.493	874	885	897	rBV	557454	1129079	58.61%	4.623%
6	7.054	970	977	981	rBV5	10223	21660	1.12%	0.089%
7	8.248	1168	1173	1175	rBV	17054	26252	1.36%	0.107%
8	8.297	1175	1181	1189	rVB	1007300	1636450	84.95%	6.700%
9	8.651	1233	1239	1244	rVB3	16903	31005	1.61%	0.127%
10	8.974	1286	1292	1297	rVB3	12517	19542	1.01%	0.080%
11	9.078	1304	1309	1313	rBV	29301	39618	2.06%	0.162%
12	9.199	1322	1329	1336	rBV3	36726	89380	4.64%	0.366%
13	9.273	1336	1341	1345	rVB	44212	67539	3.51%	0.277%
14	9.327	1345	1350	1355	rBV	54385	88449	4.59%	0.362%
15	9.553	1378	1387	1391	rVV2	63939	154168	8.00%	0.631%
16	9.620	1395	1398	1403	rVB	101642	134791	7.00%	0.552%
17	9.736	1411	1417	1421	rBV	172076	246173	12.78%	1.008%
18	9.785	1421	1425	1431	rVV	896245	1259605	65.39%	5.157%
19	9.864	1435	1438	1443	rVB5	10856	19512	1.01%	0.080%
20	9.919	1443	1447	1453	rBV6	28544	53336	2.77%	0.218%
21	10.022	1455	1464	1467	rBV2	59152	117777	6.11%	0.482%
22	10.065	1467	1471	1475	rVB	118723	144386	7.50%	0.591%
23	10.102	1475	1477	1490	rVB3	85386	148820	7.73%	0.609%
24	10.211	1490	1495	1500	rBV2	43017	67225	3.49%	0.275%
25	10.291	1503	1508	1510	rBV	43678	59066	3.07%	0.242%
26	10.346	1510	1517	1522	rBV3	297032	463082	24.04%	1.896%
27	10.431	1525	1531	1536	rBV2	187991	311555	16.17%	1.276%
28	10.480	1536	1539	1542	rVB	97884	117471	6.10%	0.481%
29	10.553	1542	1551	1555	rBV	509193	790682	41.05%	3.237%
30	10.602	1555	1559	1560	rBV	100103	129255	6.71%	0.529%
31	10.626	1560	1563	1567	rVB	339839	424307	22.03%	1.737%
32	10.669	1567	1570	1575	rVB2	208027	292924	15.21%	1.199%
33	10.724	1575	1579	1584	rVB4	100492	167205	8.68%	0.685%
34	10.785	1584	1589	1590	rBV2	94135	135343	7.03%	0.554%
35	10.809	1590	1593	1597	rBV	336149	416483	21.62%	1.705%
36	10.864	1597	1602	1607	rVB3	1319855	1839234	95.48%	7.531%
37	10.913	1607	1610	1613	rVB2	65745	76080	3.95%	0.311%
38	10.949	1613	1616	1618	rBV2	106396	127224	6.60%	0.521%
39	10.980	1618	1621	1623	rBV	79782	107312	5.57%	0.439%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

40	11.010	1623	1626	1629	rVB2	210663	253272	13.15%	1.037%
41	11.047	1629	1632	1636	rVB2	60686	81083	4.21%	0.332%
42	11.095	1636	1640	1642	rBV3	42485	51241	2.66%	0.210%
43	11.132	1642	1646	1650	rBV4	102168	176420	9.16%	0.722%
44	11.181	1650	1654	1658	rBV3	157953	278111	14.44%	1.139%
45	11.230	1658	1662	1667	rBV2	379644	672745	34.92%	2.754%
46	11.278	1667	1670	1675	rVB3	207529	314724	16.34%	1.289%
47	11.327	1675	1678	1680	rBV3	21759	33400	1.73%	0.137%
48	11.376	1683	1686	1688	rBV	43269	38696	2.01%	0.158%
49	11.406	1688	1691	1693	rBV	50586	66625	3.46%	0.273%
50	11.437	1693	1696	1701	rVB4	240217	288381	14.97%	1.181%
51	11.492	1701	1705	1707	rBV	253190	294713	15.30%	1.207%
52	11.522	1707	1710	1713	rBV	718691	745242	38.69%	3.051%
53	11.559	1713	1716	1719	rBV	480418	558980	29.02%	2.289%
54	11.650	1726	1731	1733	rBV	234675	311723	16.18%	1.276%
55	11.675	1733	1735	1737	rVV2	167760	224573	11.66%	0.919%
56	11.705	1737	1740	1744	rVV2	271276	425429	22.09%	1.742%
57	11.760	1744	1749	1751	rVV	438962	608485	31.59%	2.491%
58	11.790	1751	1754	1756	rVV3	232436	319449	16.58%	1.308%
59	11.839	1756	1762	1768	rVV2	1056097	1926264	100.00%	7.887%
60	11.894	1768	1771	1779	rVB2	292304	526619	27.34%	2.156%
61	11.967	1779	1783	1785	rBV3	59807	76691	3.98%	0.314%
62	11.992	1785	1787	1795	rVB5	90251	177398	9.21%	0.726%
63	12.089	1795	1803	1807	rBV2	191660	351682	18.26%	1.440%
64	12.138	1807	1811	1818	rVB4	365160	605210	31.42%	2.478%
65	12.211	1818	1823	1825	rBV6	40774	79825	4.14%	0.327%
66	12.248	1826	1829	1833	rVB2	100958	115619	6.00%	0.473%
67	12.296	1833	1837	1844	rVB5	153569	290768	15.09%	1.191%
68	12.388	1844	1852	1854	rBV2	181084	370070	19.21%	1.515%
69	12.443	1859	1861	1864	rVB	91466	92082	4.78%	0.377%
70	12.516	1870	1873	1876	rBV3	77581	103934	5.40%	0.426%
71	12.552	1876	1879	1884	rVV3	82231	151619	7.87%	0.621%
72	12.632	1888	1892	1894	rVV3	54853	95608	4.96%	0.391%
73	12.656	1894	1896	1903	rVV4	77097	123104	6.39%	0.504%
74	12.729	1903	1908	1911	rVV2	123675	207229	10.76%	0.848%
75	12.760	1911	1913	1916	rVV	69466	74535	3.87%	0.305%
76	12.802	1916	1920	1922	rVV	77190	102139	5.30%	0.418%
77	12.821	1922	1923	1927	rVV2	44469	45267	2.35%	0.185%
78	12.882	1927	1933	1936	rVV4	43481	73014	3.79%	0.299%
79	12.912	1936	1938	1940	rVV	25759	27197	1.41%	0.111%
80	12.937	1940	1942	1947	rVB5	18581	28580	1.48%	0.117%
81	13.004	1947	1953	1956	rVB5	22830	38523	2.00%	0.158%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

82	13.138	1970	1975	1981	rVB4	53469	83473	4.33%	0.342%
83	13.229	1986	1990	1993	rVV2	14556	24813	1.29%	0.102%
84	13.266	1993	1996	2006	rVB7	36746	81176	4.21%	0.332%
85	13.436	2019	2024	2029	rBV7	11202	22388	1.16%	0.092%

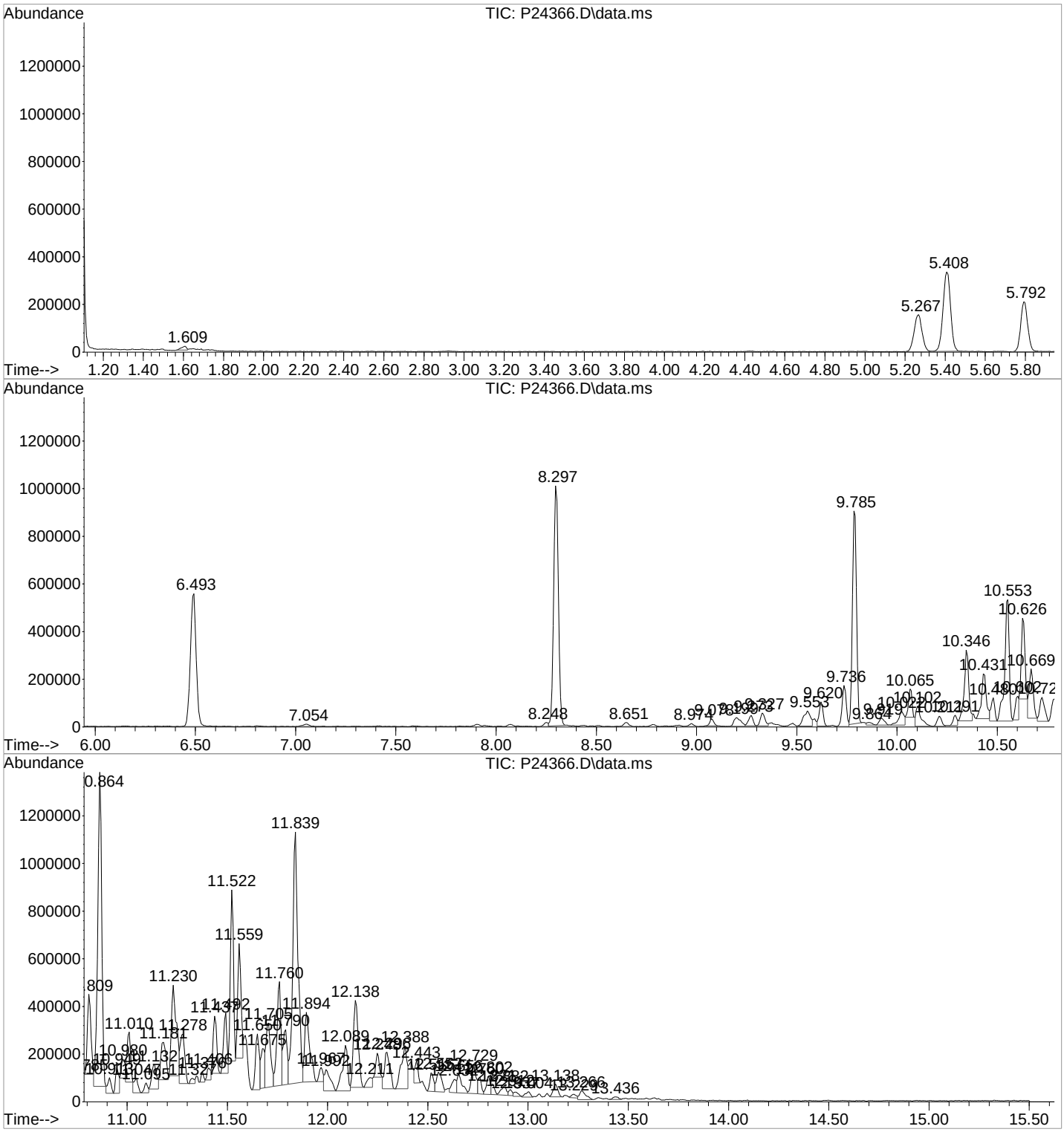
Sum of corrected areas: 24423788

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

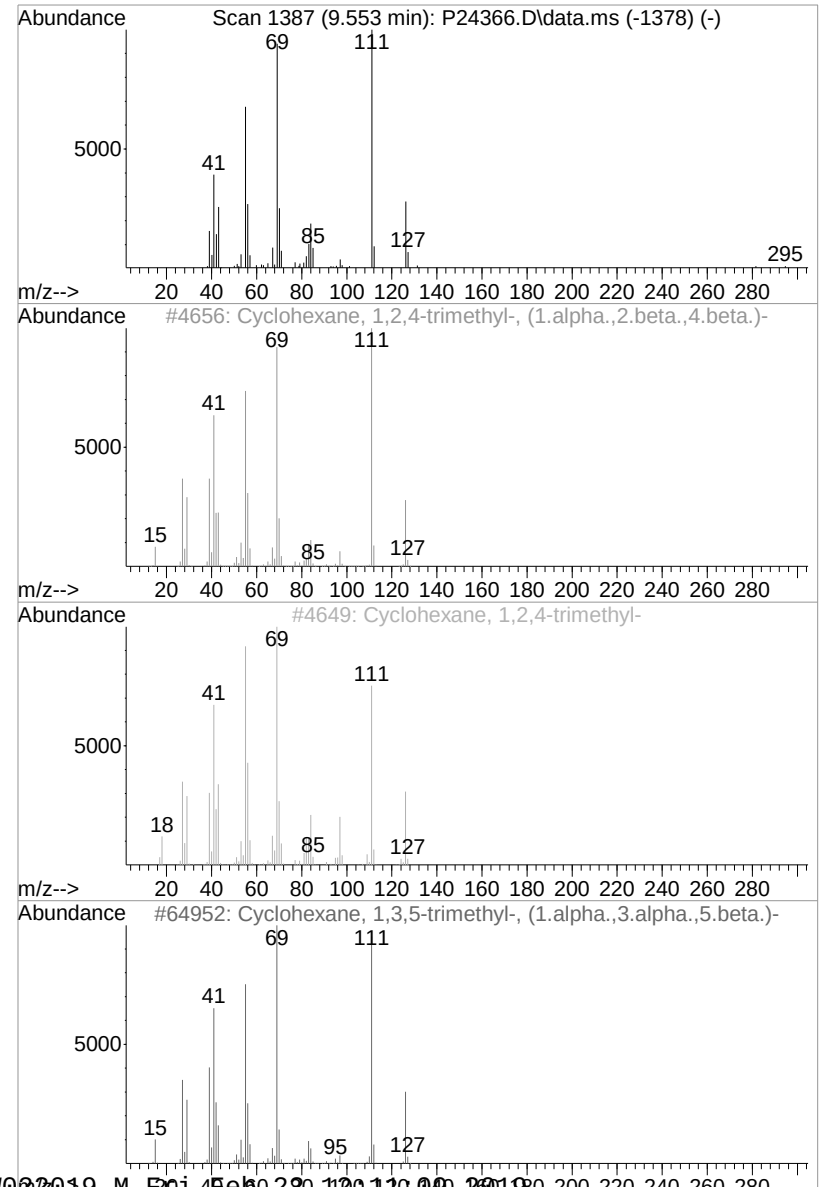
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

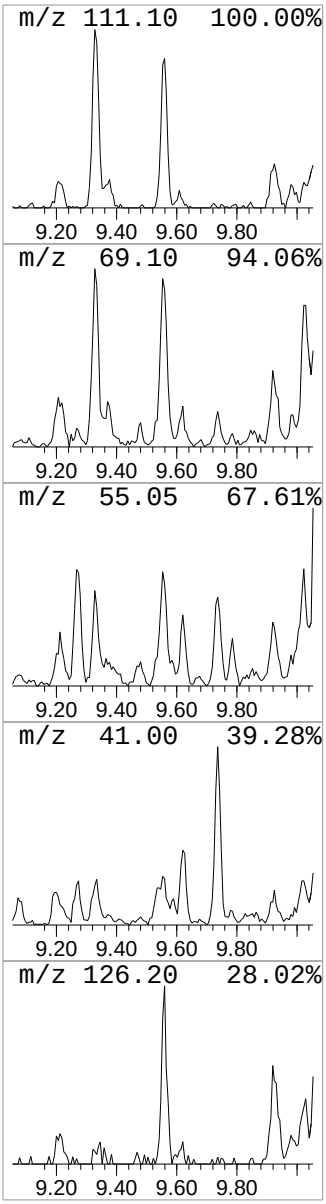
****

Peak Number 1 Cyclohexane, 1,2,4-trimethy... Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.553	6.12 ppb	154168	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,2,4-trimethyl-, (...	126	C9H18	007667-60-9	91
2	Cyclohexane, 1,2,4-trimethyl-	126	C9H18	002234-75-5	91
3	Cyclohexane, 1,3,5-trimethyl-, (...	126	C9H18	001795-26-2	86
4	Cyclohexane, 1,2,4-trimethyl-, (...	126	C9H18	007667-60-9	86
5	Cyclohexane, 1,2,4-trimethyl-	126	C9H18	002234-75-5	81





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

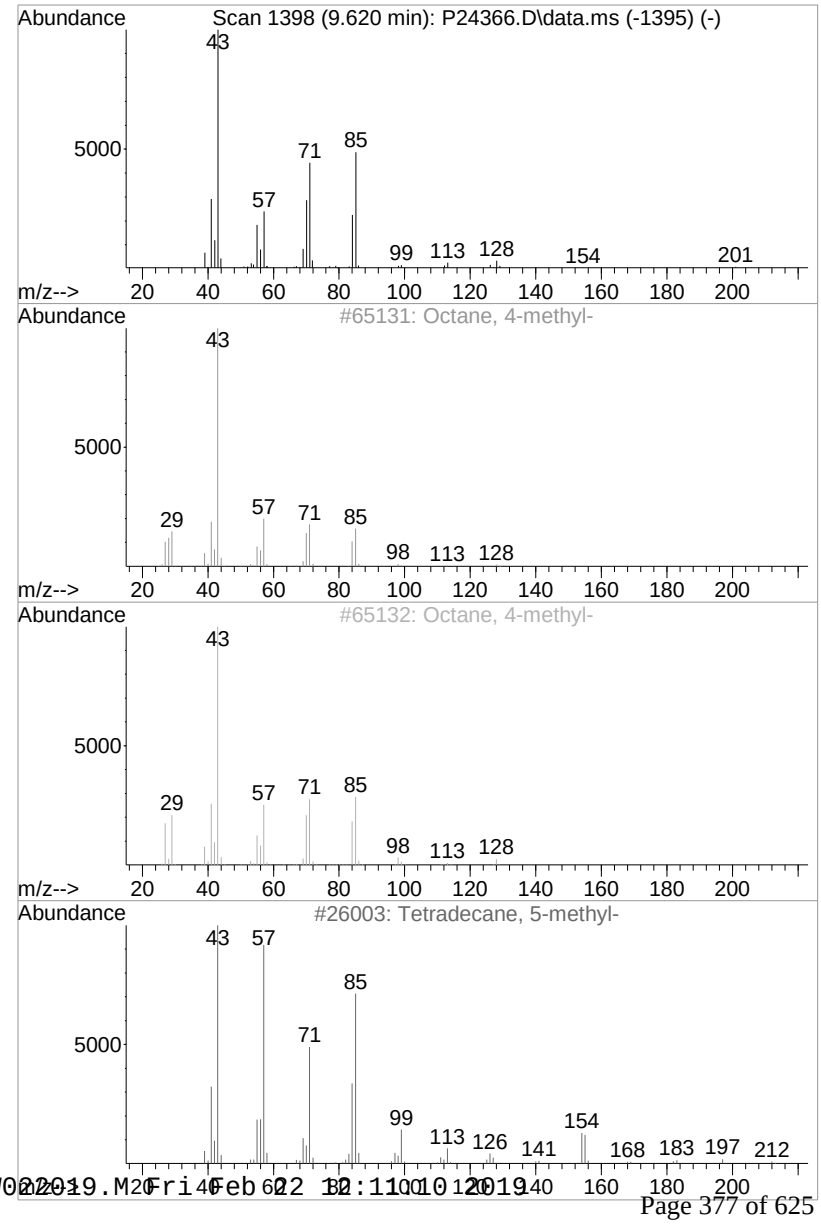
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

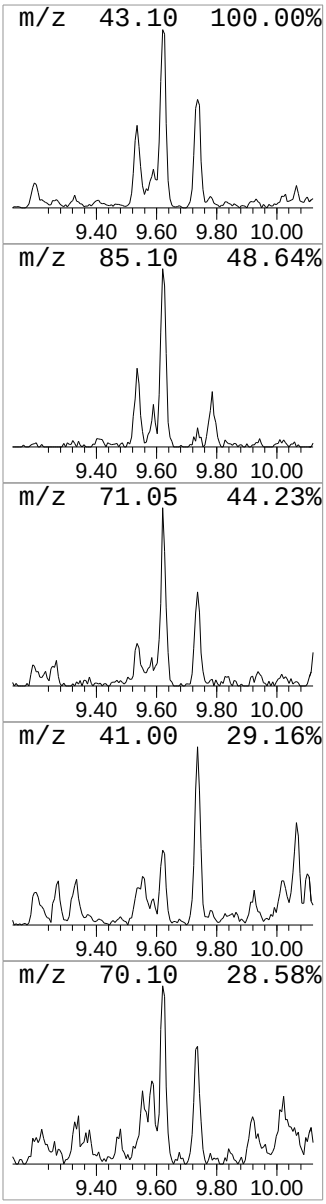
****

Peak Number 2 unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.620	5.35 ppb	134791	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 4-methyl-	128	C9H20	002216-34-4	64
2	Octane, 4-methyl-	128	C9H20	002216-34-4	58
3	Tetradecane, 5-methyl-	212	C15H32	025117-32-2	50
4	Hexane, 2,3,4-trimethyl-	128	C9H20	000921-47-1	50
5	Hexane, 2,3,5-trimethyl-	128	C9H20	001069-53-0	50





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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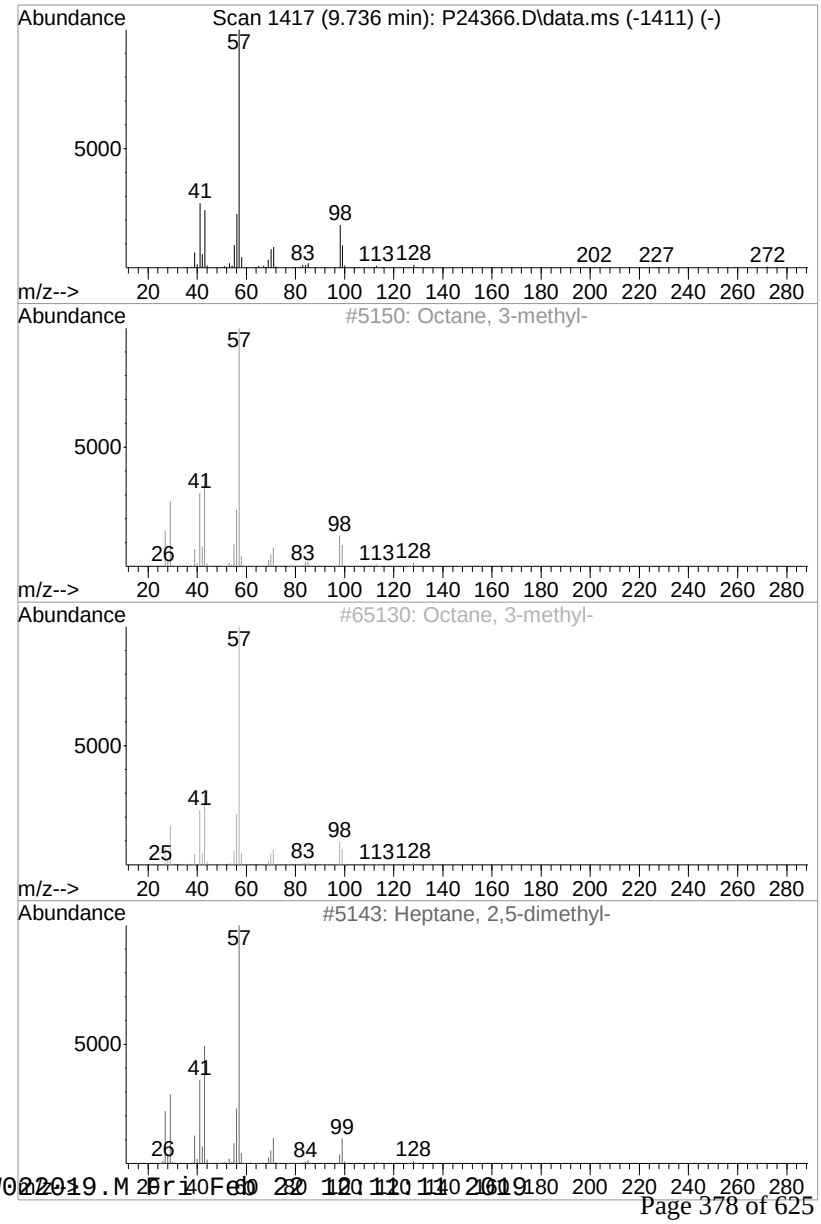
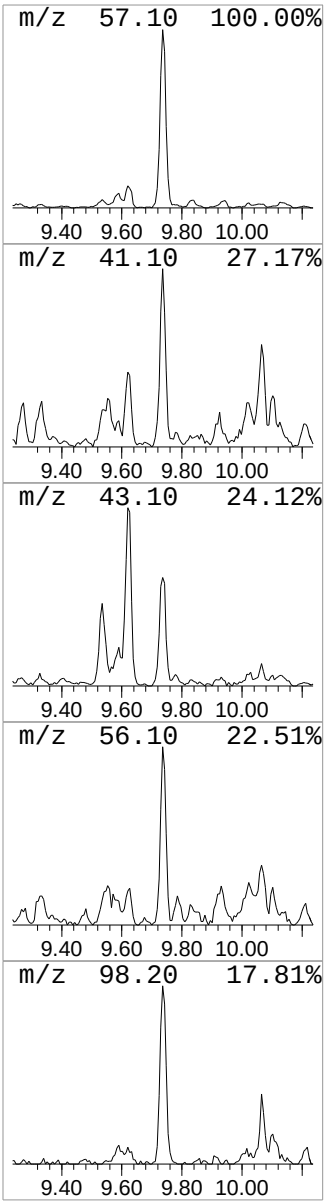
Peak Number 3 Octane, 3-methyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.736	9.77 ppb	246173	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	91
2	Octane, 3-methyl-	128	C9H20	002216-33-3	87
3	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	87
4	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	80
5	Butane, 2,2,3,3-tetramethyl-	114	C8H18	000594-82-1	50





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

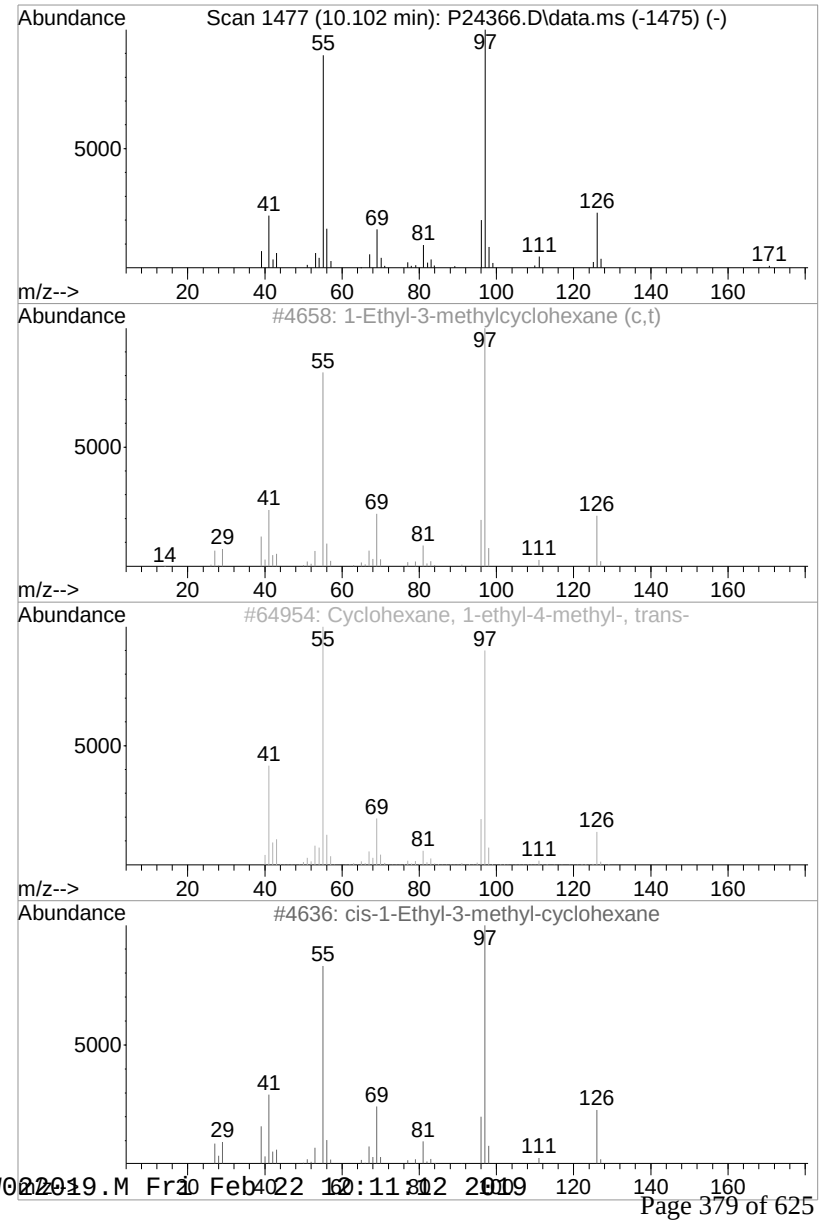
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

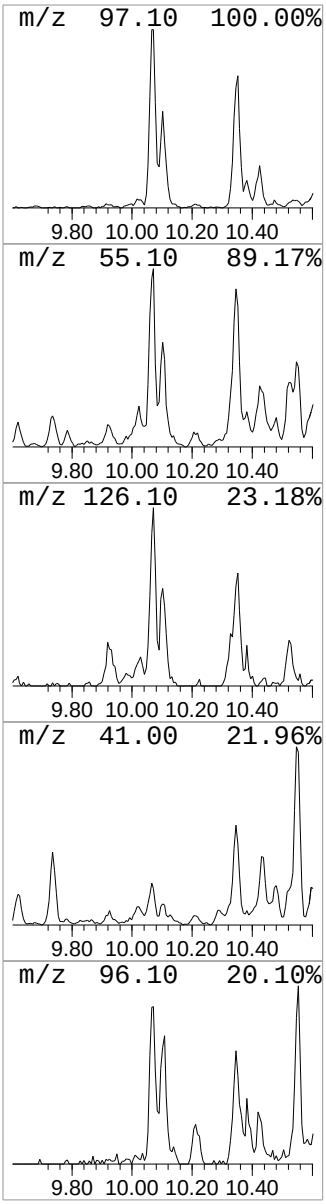
****

Peak Number 4 1-Ethyl-3-methylcyclohexane... Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.102	5.91 ppb	148820	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Ethyl-3-methylcyclohexane (c,t)	126	C9H18	003728-55-0	91
2	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	91
3	cis-1-Ethyl-3-methyl-cyclohexane	126	C9H18	019489-10-2	91
4	Cyclohexane, 1-ethyl-2-methyl-	126	C9H18	003728-54-9	90
5	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	004926-78-7	86





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

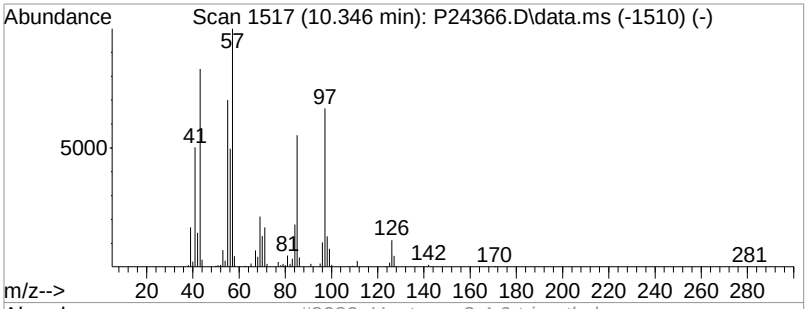
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

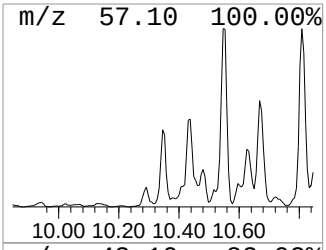
****

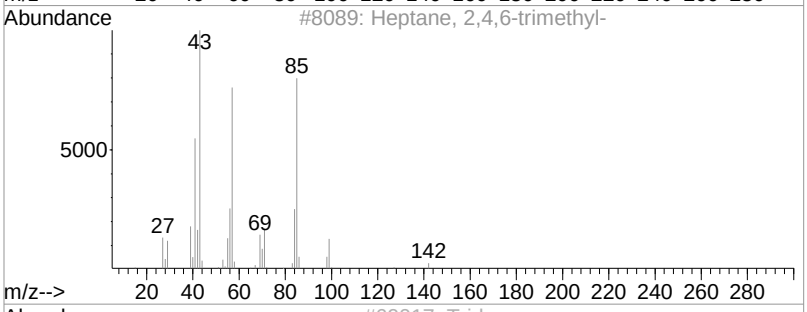
Peak Number 5 unknown Concentration Rank 2

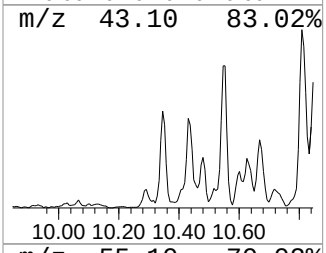
R.T.	EstConc	Area	Relative to ISTD	R.T.
10.346	18.38 ppb	463082	d5-Chlorobenzene	9.791

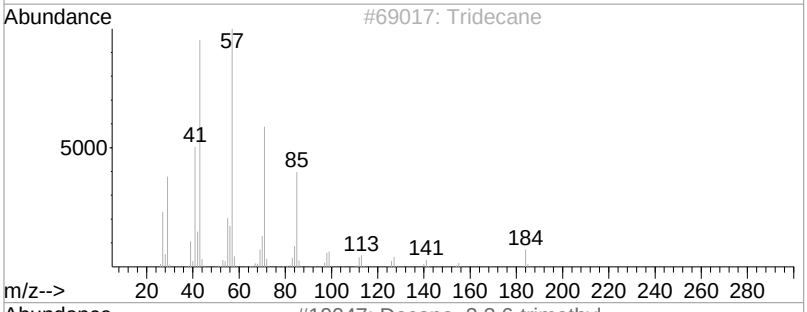
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 2,4,6-trimethyl-	142	C10H22	002613-61-8	38
2	Tridecane	184	C13H28	000629-50-5	35
3	Decane, 2,3,6-trimethyl-	184	C13H28	062238-12-4	35
4	Undecane, 5,7-dimethyl-	184	C13H28	017312-83-3	35
5	Hexane, 2,4-dimethyl-	114	C8H18	000589-43-5	35

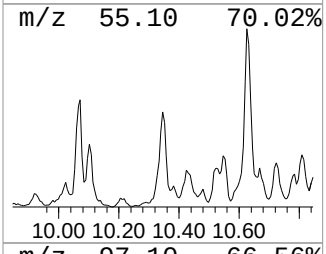


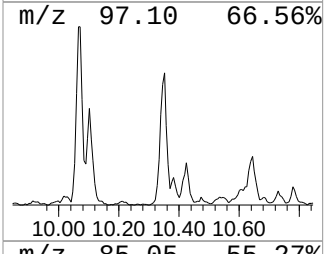


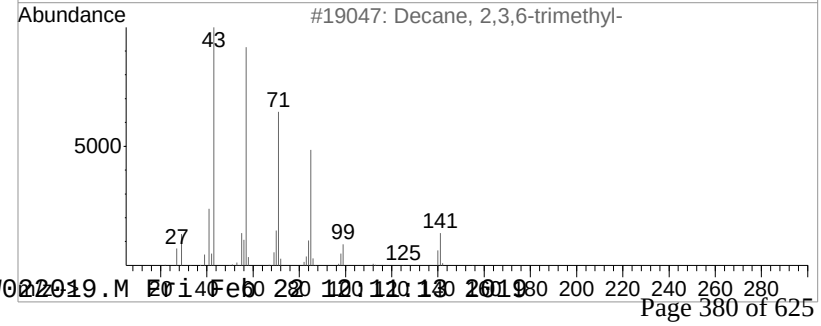


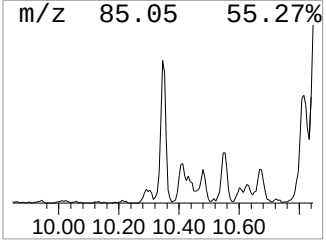












Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

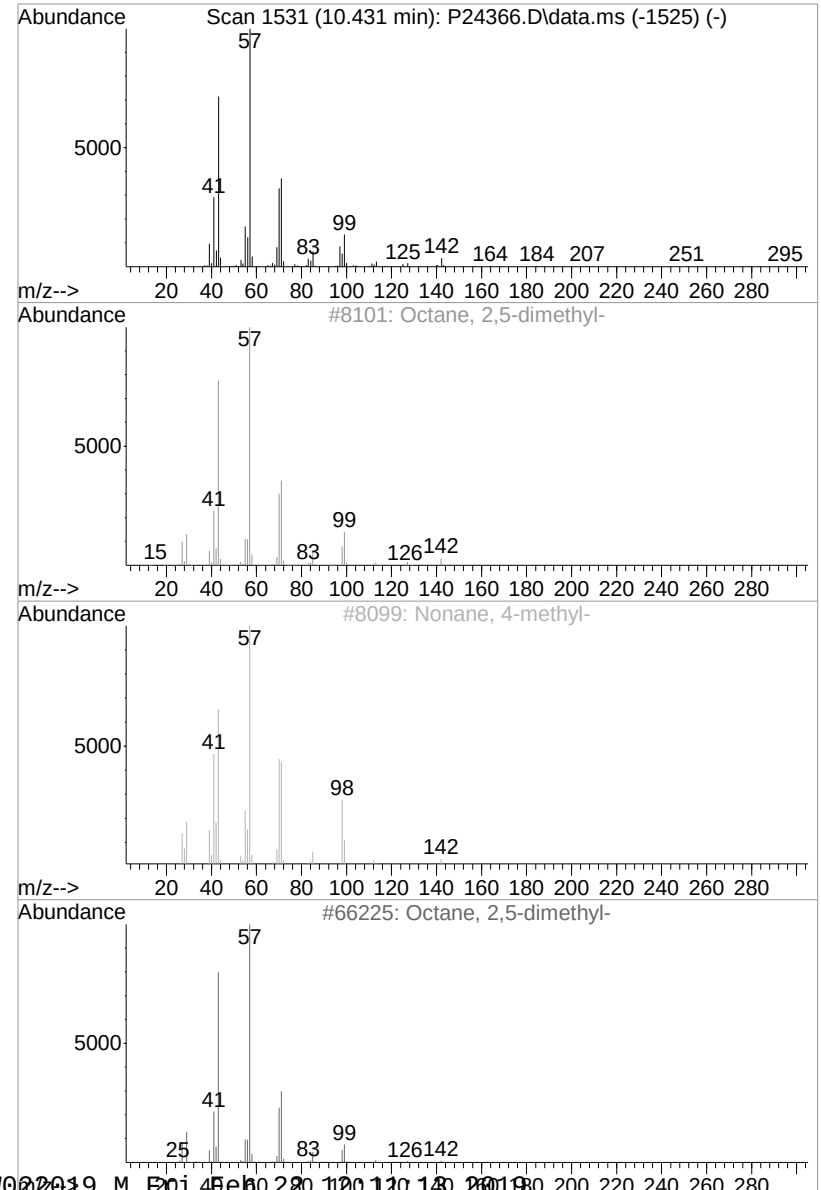
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

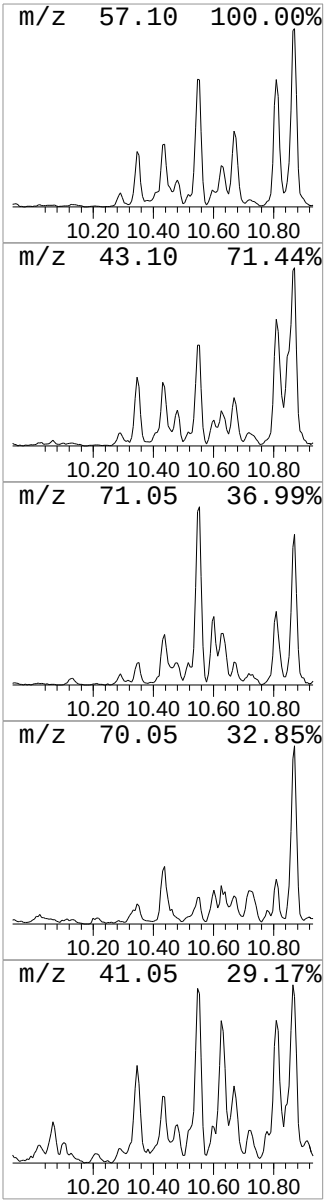
****

Peak Number 6 Octane, 2,5-dimethyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.431	12.37 ppb	311555	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,5-dimethyl-	142	C10H22	015869-89-3	91
2	Nonane, 4-methyl-	142	C10H22	017301-94-9	87
3	Octane, 2,5-dimethyl-	142	C10H22	015869-89-3	83
4	Octane, 3,5-dimethyl-	142	C10H22	015869-93-9	72
5	Pentane, 2,2,3,3-tetramethyl-	128	C9H20	007154-79-2	64





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

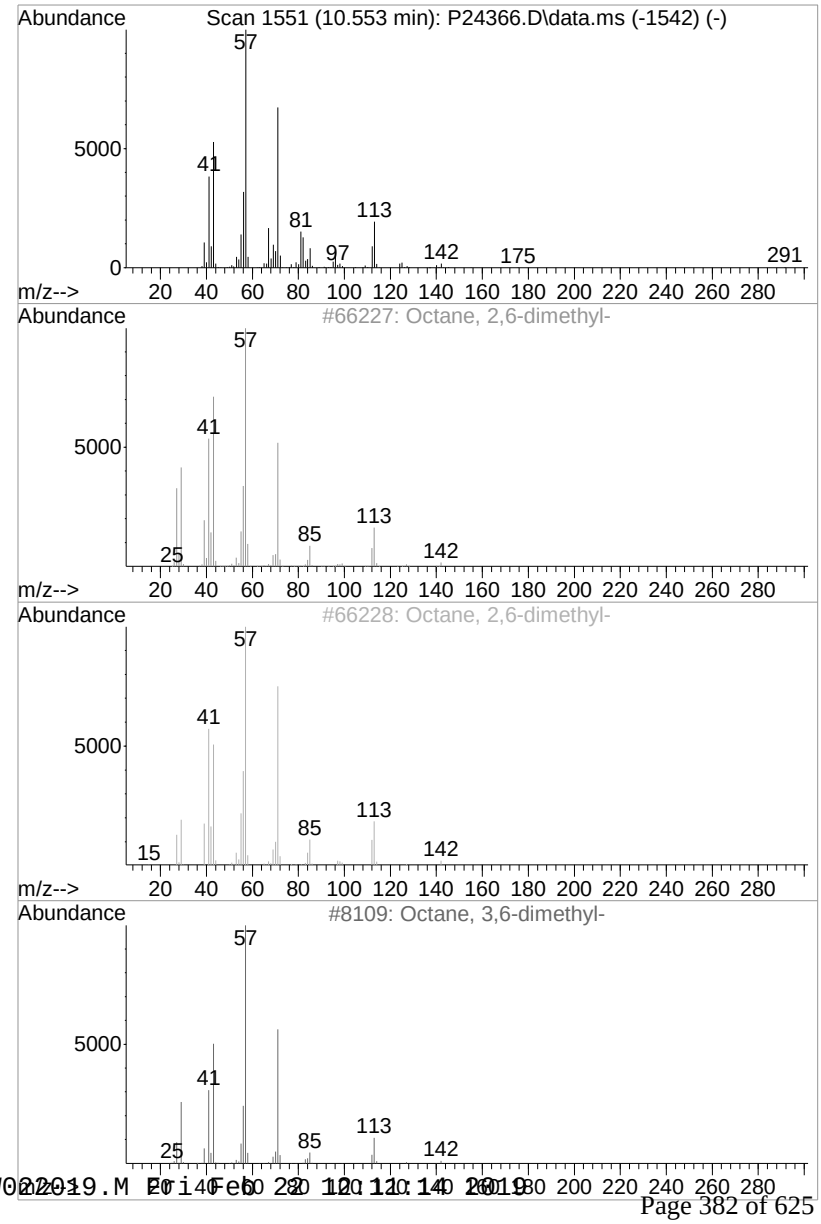
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

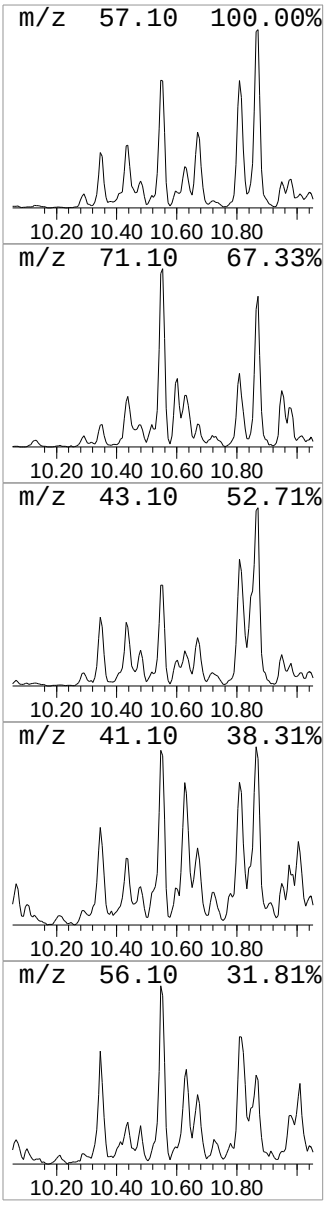
****

Peak Number 7 Octane, 2,6-dimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.553	31.39 ppb	790682	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	87
2	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	83
3	Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	81
4	Nonane, 3-methyl-	142	C10H22	005911-04-6	68
5	Undecane, 6,6-dimethyl-	184	C13H28	017312-76-4	64





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

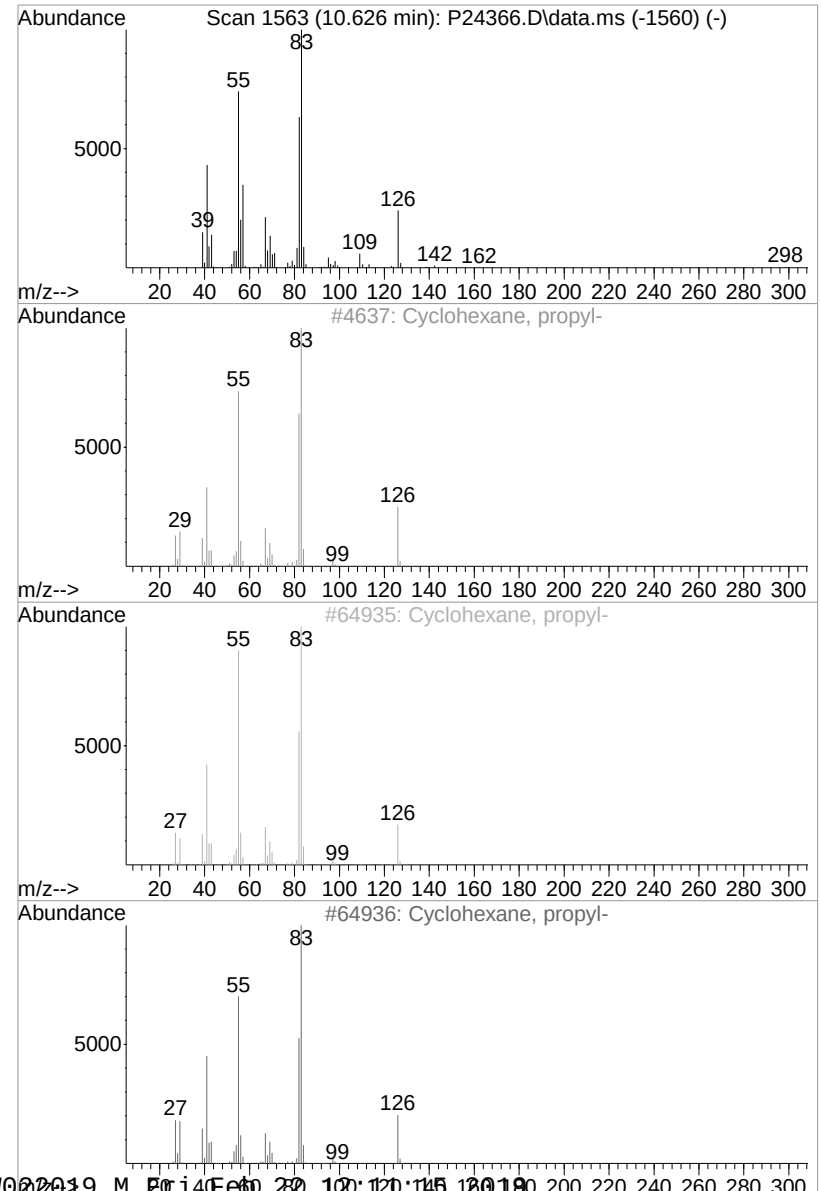
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

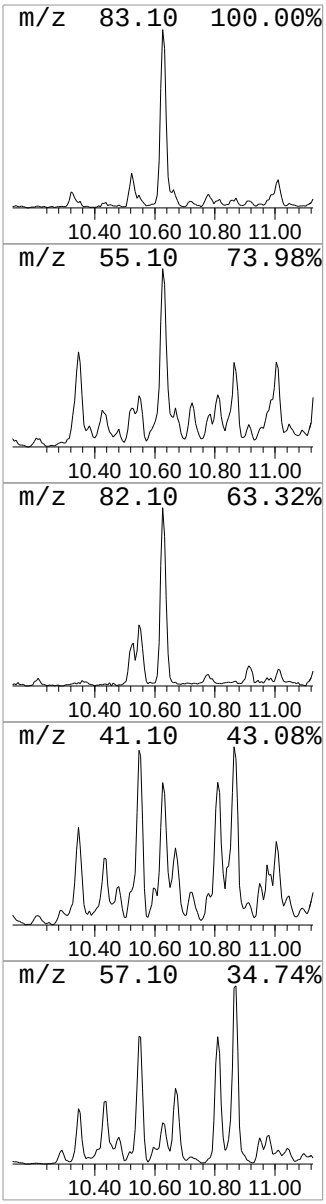
****

Peak Number 8 Cyclohexane, propyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.626	16.84 ppb	424307	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, propyl-	126	C9H18	001678-92-8	90
2	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
3	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
4	Cyclohexane, propyl-	126	C9H18	001678-92-8	74
5	Cyclohexane, 1,1'-(1,5-pentanedi...	236	C17H32	054833-31-7	72





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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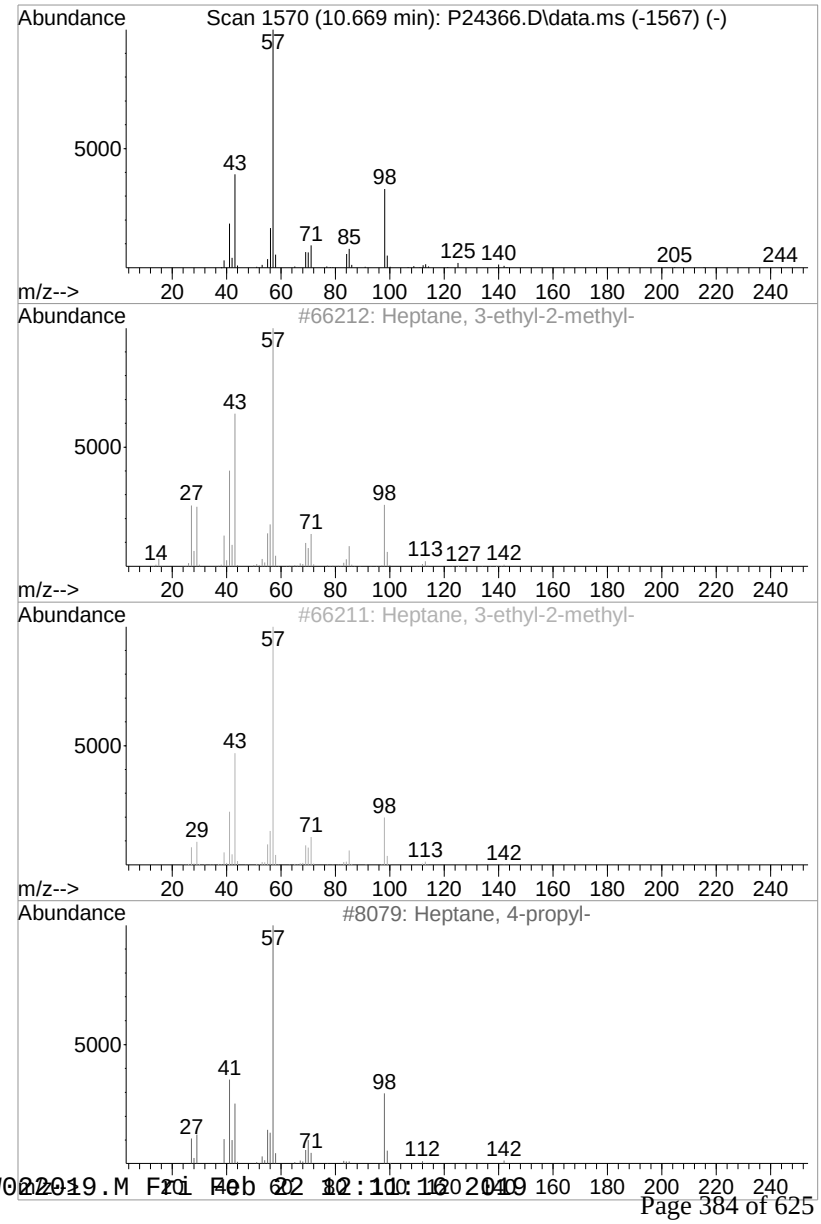
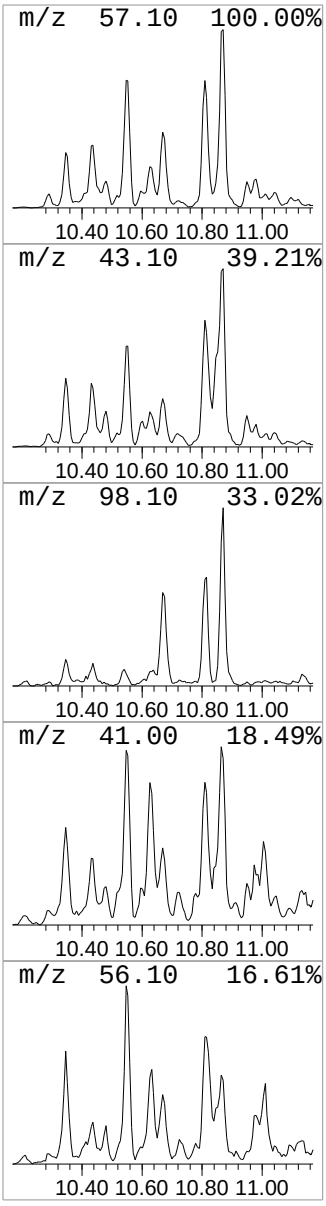
Peak Number 9 unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.669	11.63 ppb	292924	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	59
2	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	59
3	Heptane, 4-propyl-	142	C10H22	003178-29-8	56
4	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	45
5	Undecane, 2,6-dimethyl-	184	C13H28	017301-23-4	43





Library Search Compound Report

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Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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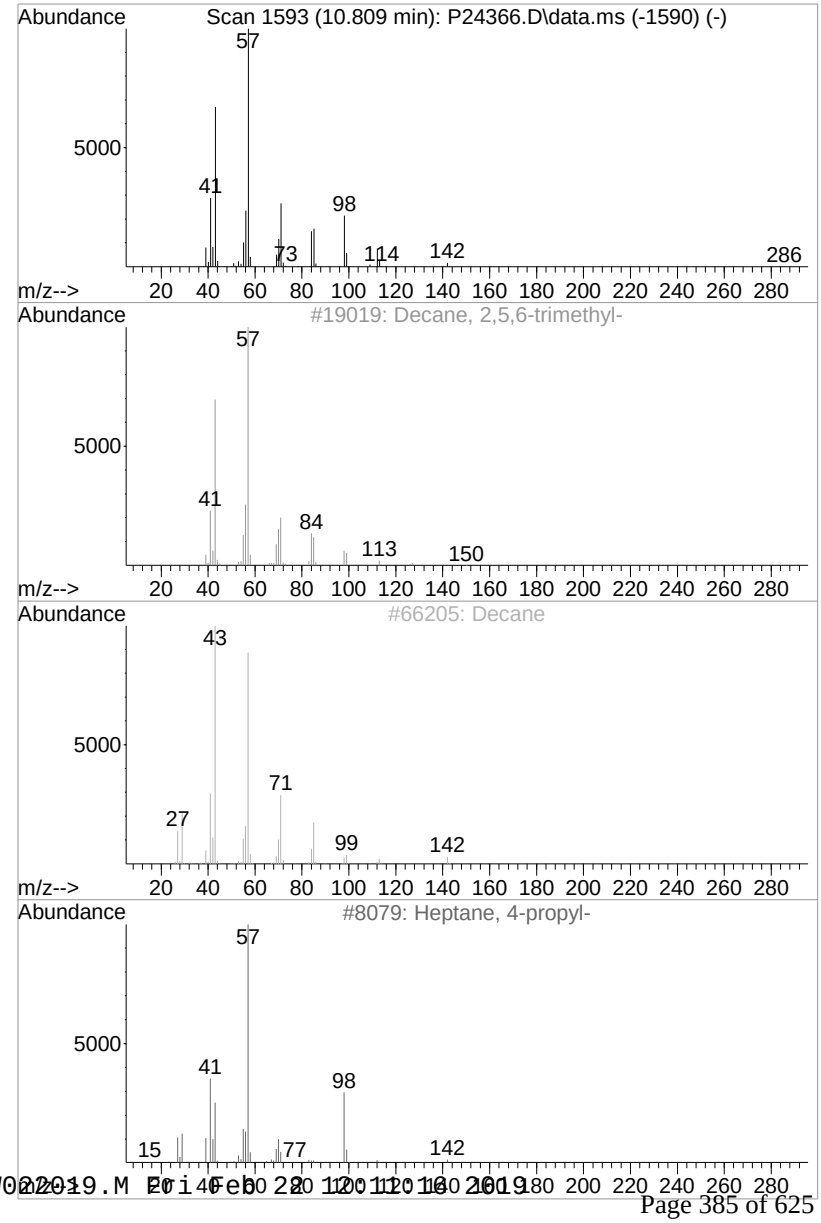
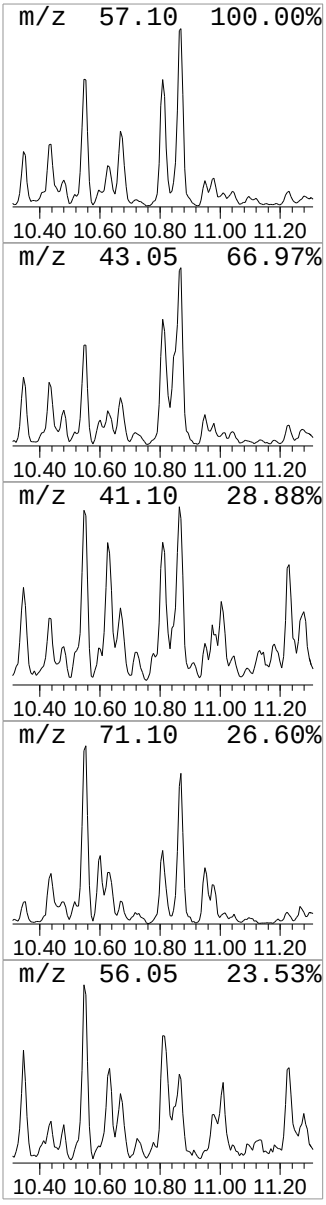
Peak Number 10 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.809	16.53 ppb	416483	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 2,5,6-trimethyl-	184	C13H28	062108-23-0	53
2	Decane	142	C10H22	000124-18-5	50
3	Heptane, 4-propyl-	142	C10H22	003178-29-8	49
4	Octane, 2,3-dimethyl-	142	C10H22	007146-60-3	47
5	Decane	142	C10H22	000124-18-5	47





Library Search Compound Report

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Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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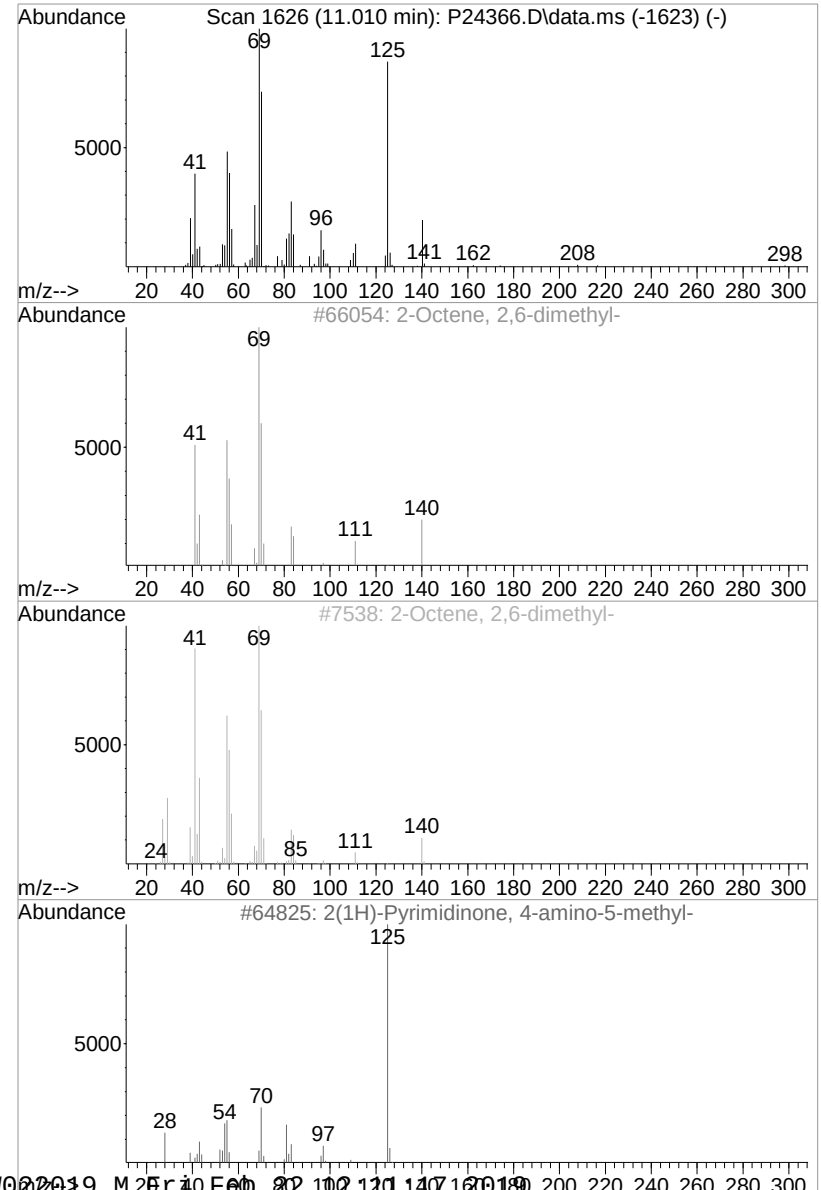
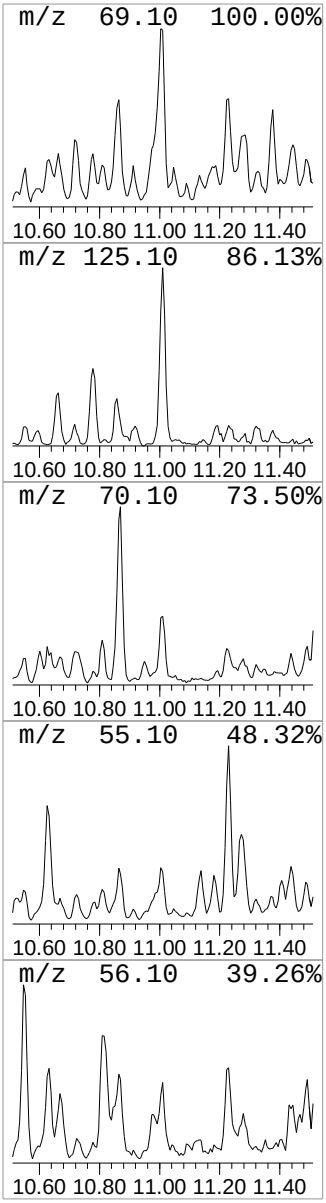
Peak Number 11 unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.010	6.57 ppb	253272	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Octene, 2,6-dimethyl-	140	C10H20	004057-42-5	55
2	2-Octene, 2,6-dimethyl-	140	C10H20	004057-42-5	50
3	2(1H)-Pyrimidinone, 4-amino-5-me...	125	C5H7N3O	000554-01-8	46
4	4-Nonene, 2,3,3-trimethyl-, (Z)-	168	C12H24	063830-68-2	43
5	2(1H)-Pyrimidinone, 4-amino-5-me...	125	C5H7N3O	000554-01-8	38





Library Search Compound Report

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Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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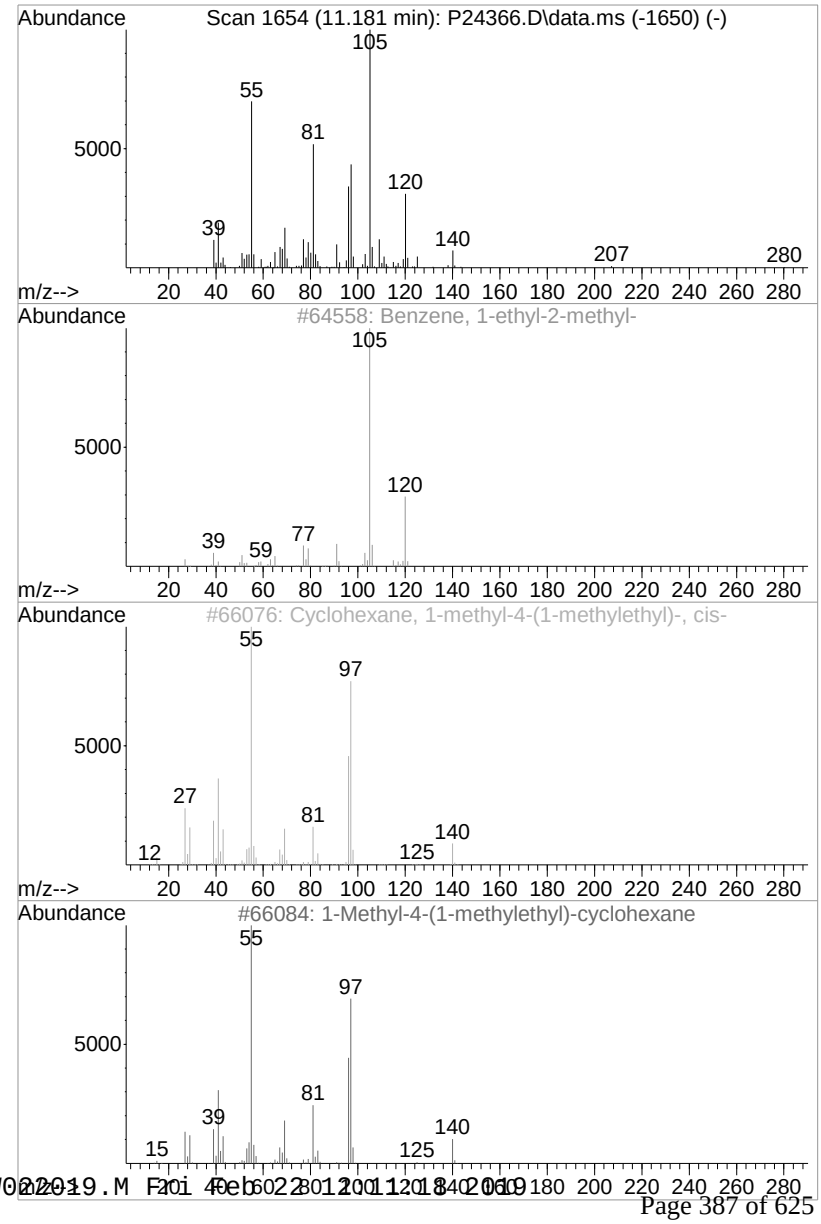
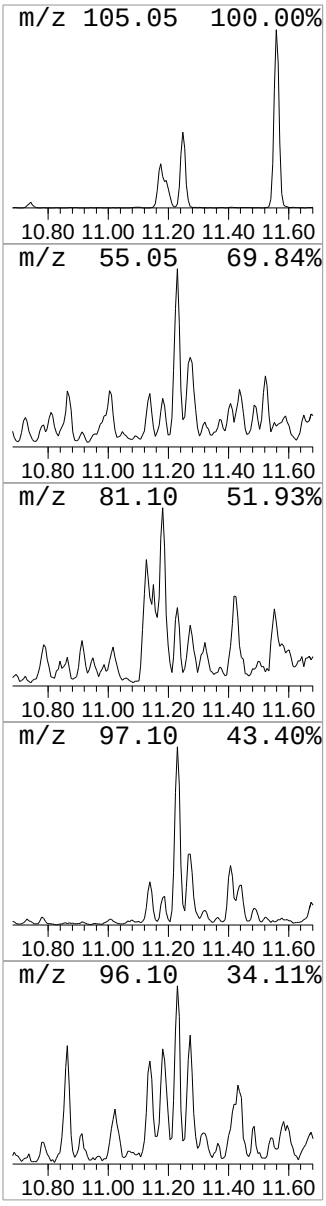
Peak Number 12 unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.181	7.22 ppb	278111	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	70
2	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	006069-98-3	46
3	1-Methyl-4-(1-methylethyl)-cyclo...	140	C10H20	000099-82-1	46
4	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	38
5	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	38





Library Search Compound Report

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Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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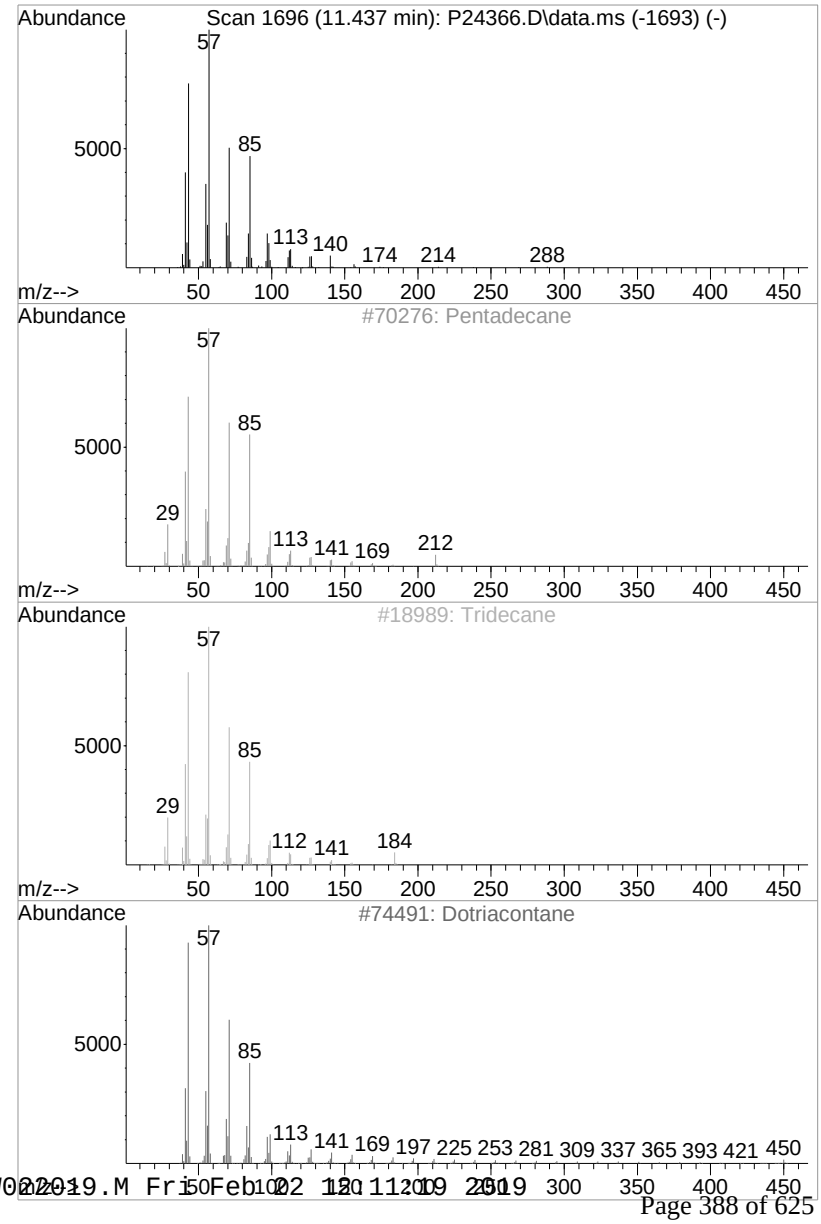
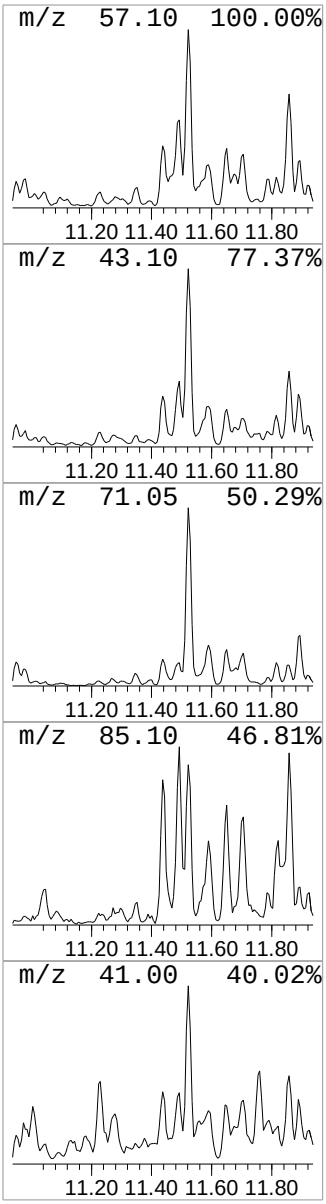
Peak Number 13 Pentadecane Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.437	7.49 ppb	288381	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecane	212	C15H32	000629-62-9	86
2	Tridecane	184	C13H28	000629-50-5	86
3	Dotriacontane	451	C32H66	000544-85-4	80
4	Decane, 2,3,6-trimethyl-	184	C13H28	062238-12-4	64
5	Undecane, 2,7-dimethyl-	184	C13H28	017301-24-5	64





Library Search Compound Report

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Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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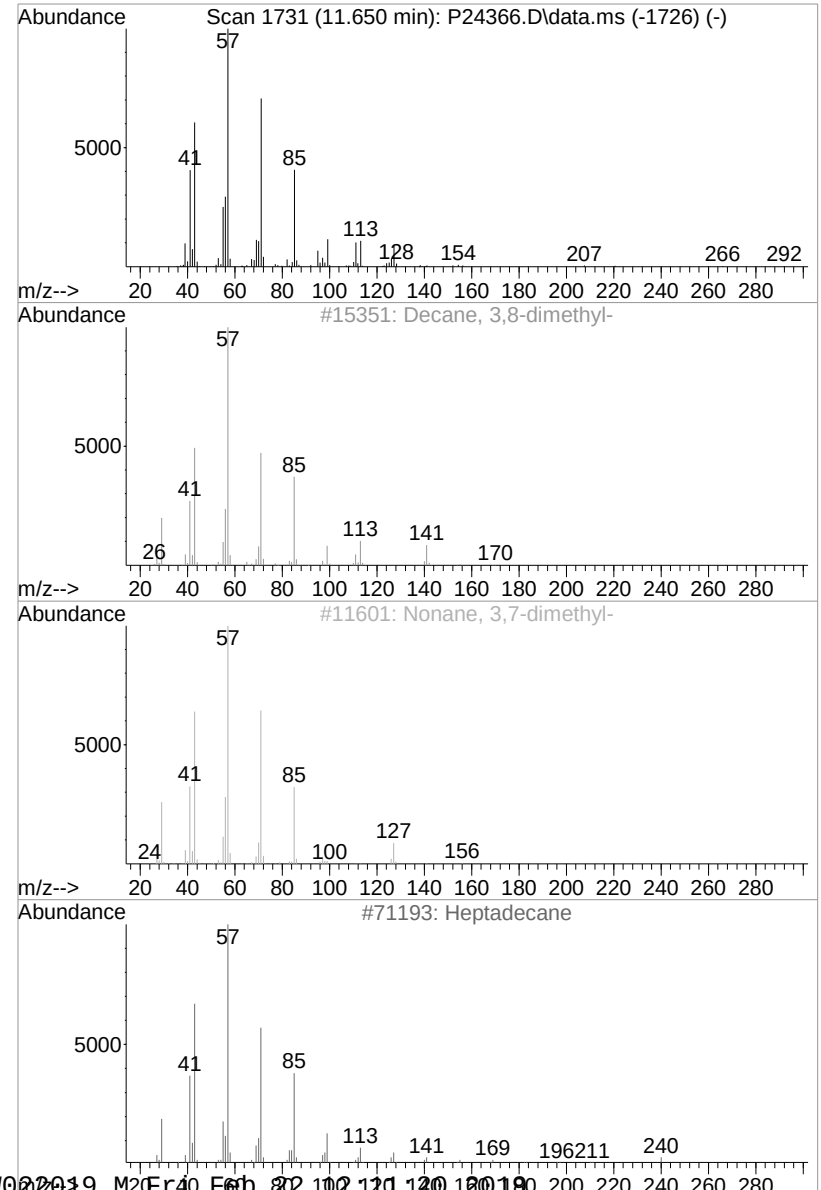
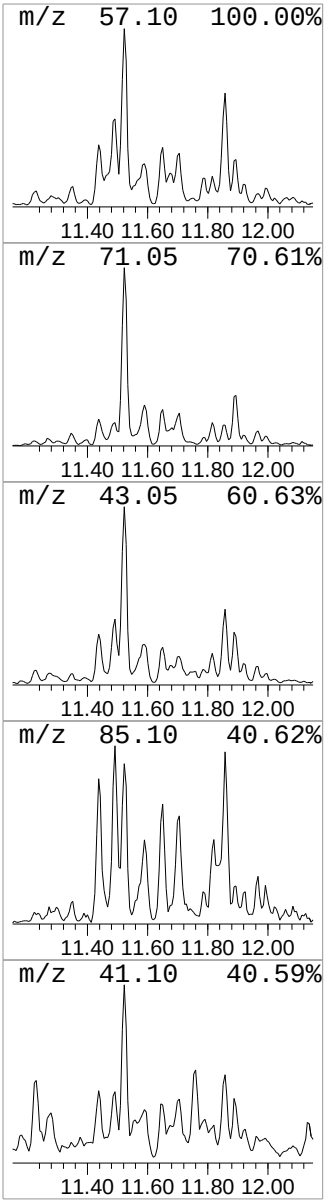
Peak Number 14 unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.650	8.09 ppb	311723	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 3,8-dimethyl-	170	C12H26	017312-55-9	78
2	Nonane, 3,7-dimethyl-	156	C11H24	017302-32-8	74
3	Heptadecane	240	C17H36	000629-78-7	72
4	Tetradecane	198	C14H30	000629-59-4	64
5	Hexadecane	226	C16H34	000544-76-3	59





Library Search Compound Report

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Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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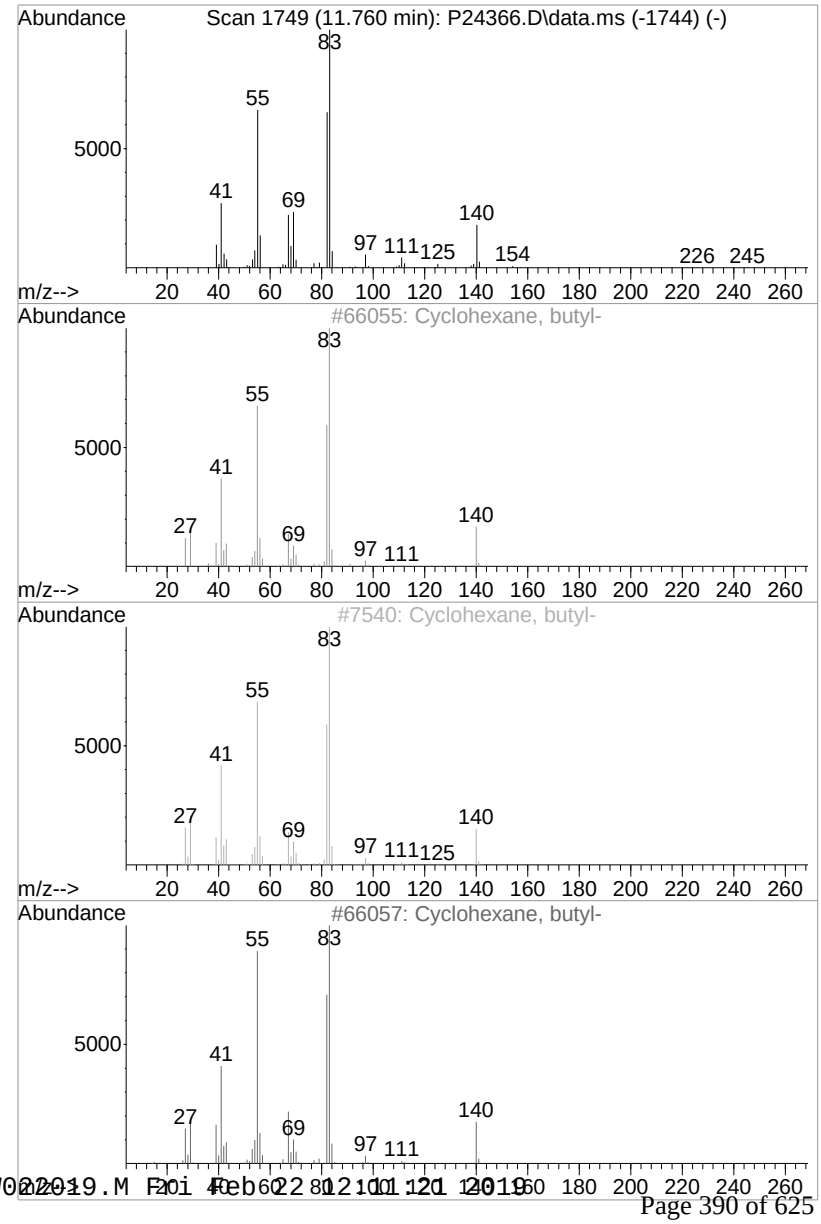
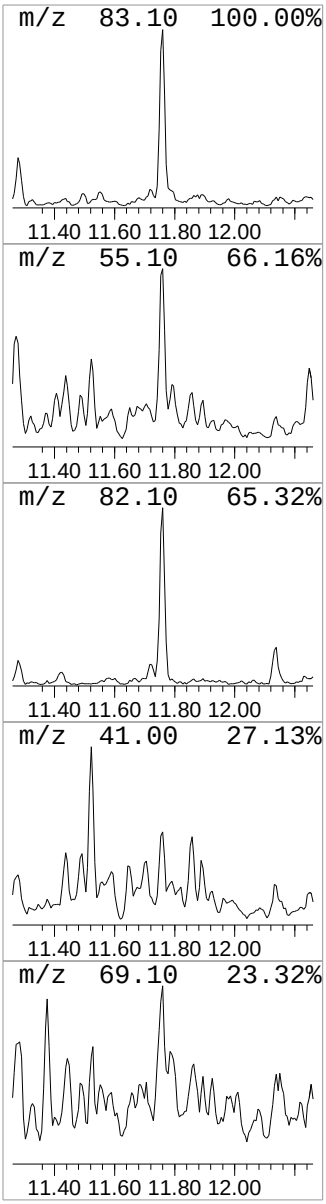
Peak Number 15 unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.760	15.79 ppb	608485	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, butyl-	140	C10H20	001678-93-9	83
2	Cyclohexane, butyl-	140	C10H20	001678-93-9	80
3	Cyclohexane, butyl-	140	C10H20	001678-93-9	78
4	Cyclohexane, octyl-	196	C14H28	001795-15-9	72
5	Cyclohexane, 1,1'-(1,4-butanediy...	222	C16H30	006165-44-2	72





Library Search Compound Report

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Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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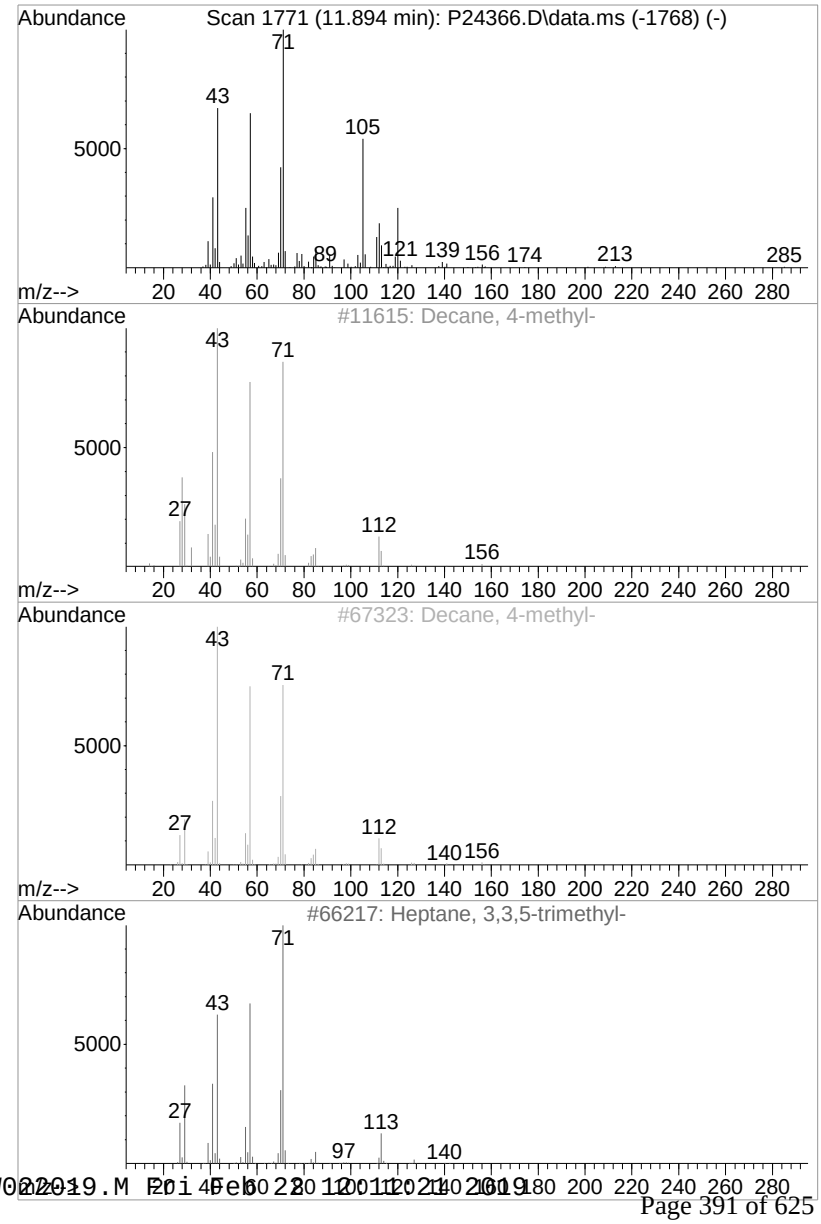
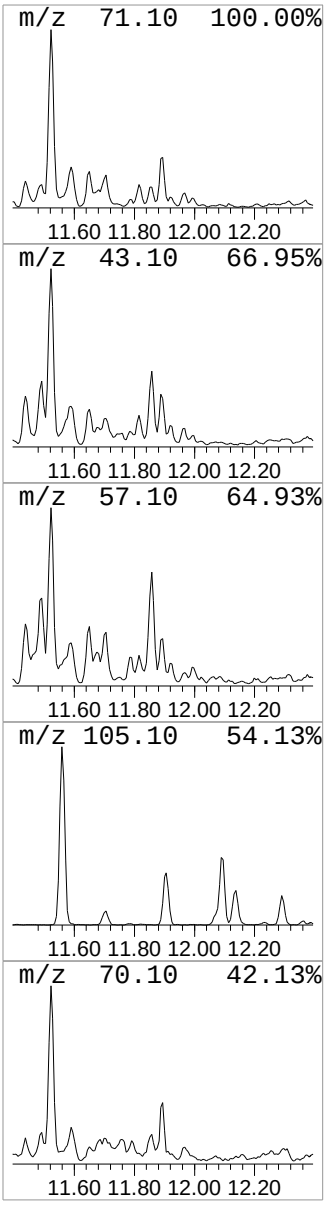
Peak Number 16 unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.894	13.67 ppb	526619	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 4-methyl-	156	C11H24	002847-72-5	76
2	Decane, 4-methyl-	156	C11H24	002847-72-5	68
3	Heptane, 3,3,5-trimethyl-	142	C10H22	007154-80-5	50
4	Octane, 3,3-dimethyl-	142	C10H22	004110-44-5	50
5	1,1-Dimethylpropyl 2-ethylhexanoate	214	C13H26O2	005421-13-6	47





Library Search Compound Report

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Data File : P24366.D
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Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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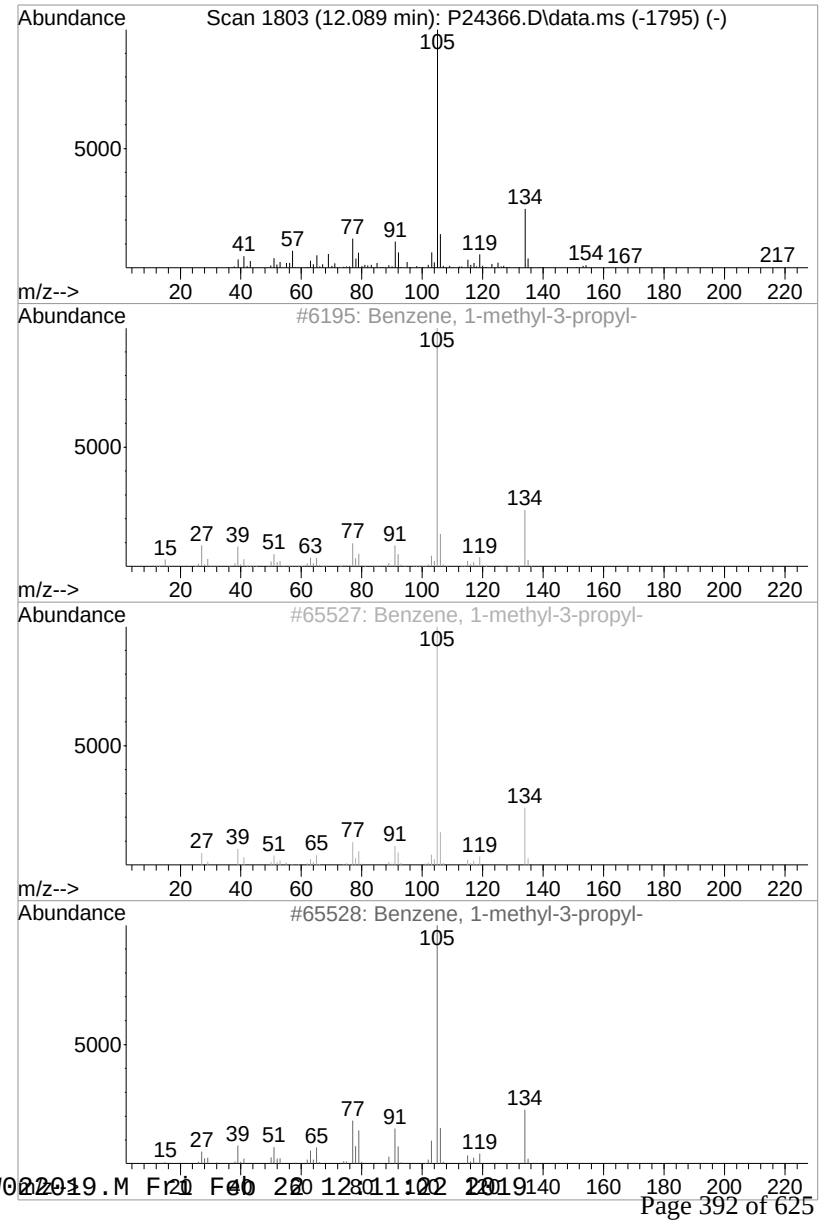
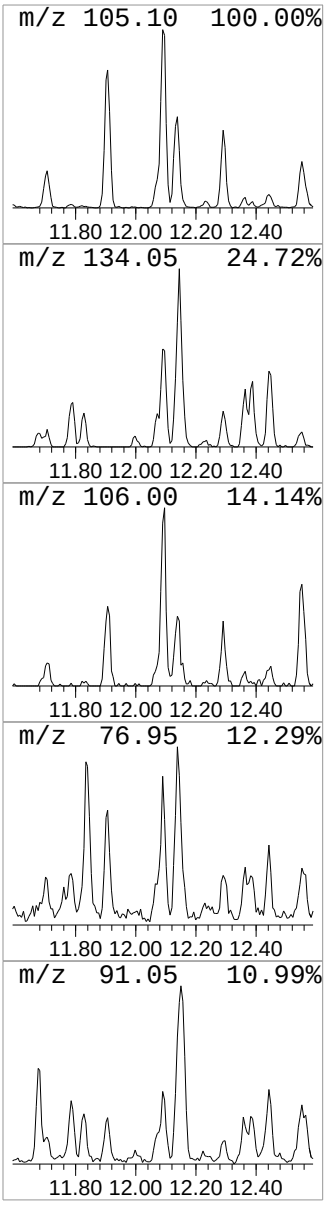
Peak Number 17 Benzene, 1-methyl-3-propyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.089	9.13 ppb	351682	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	95
2	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	95
3	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	91
4	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	90
5	Benzene, 1-methyl-4-propyl-	134	C10H14	001074-55-1	90





Library Search Compound Report

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Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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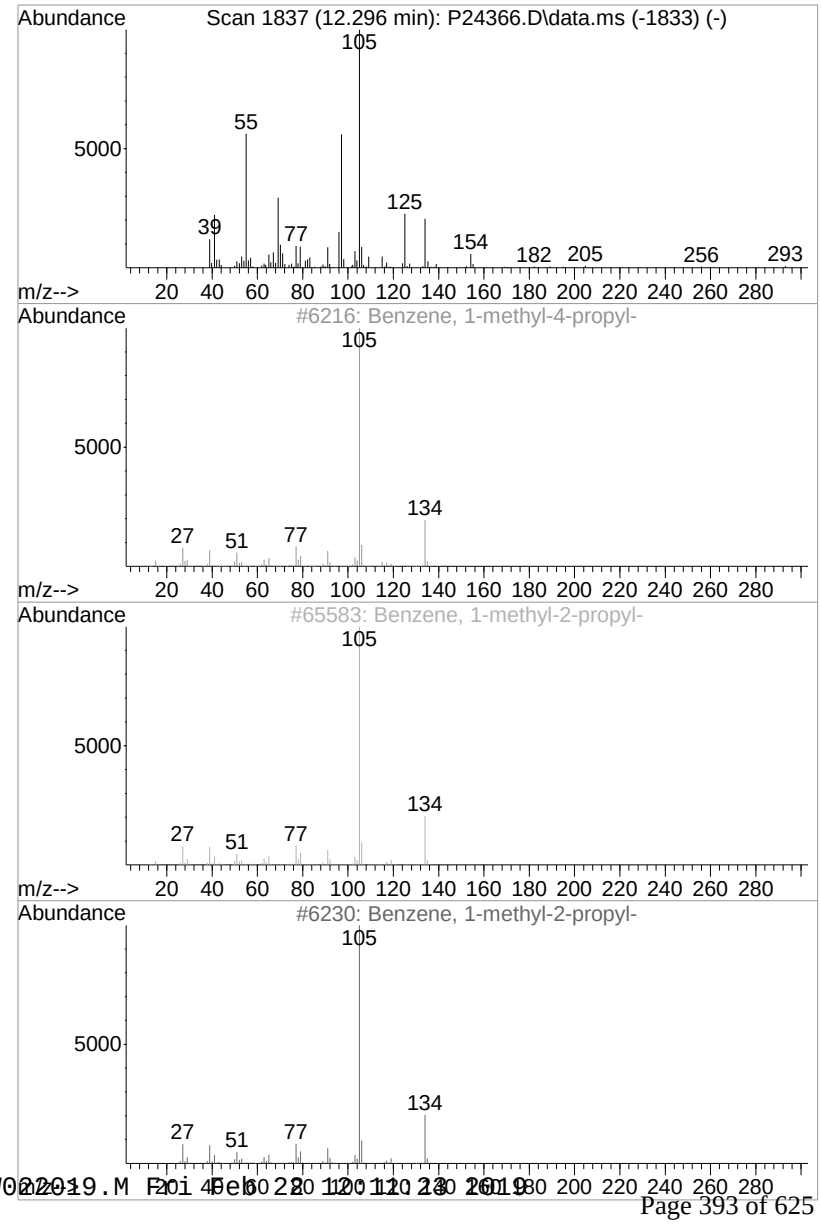
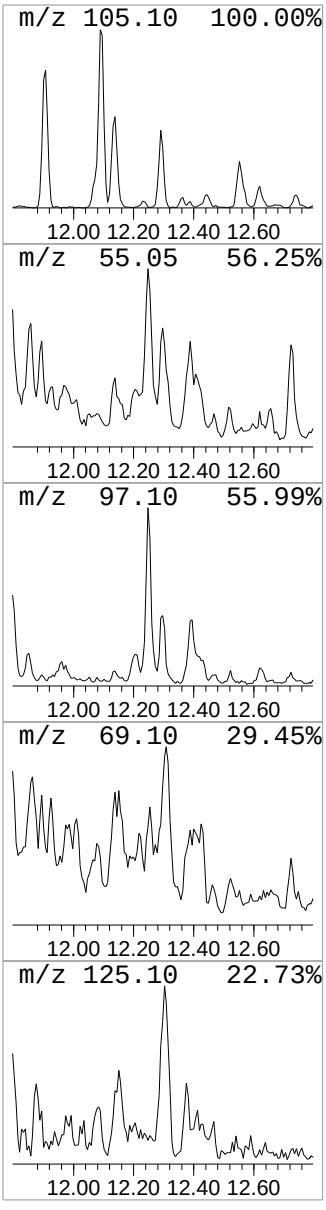
Peak Number 18 Benzene, 1-methyl-4-propyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.296	7.55 ppb	290768	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-propyl-	134	C10H14	001074-55-1	38
2	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	30
3	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	30
4	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	30
5	Benzeneacetaldehyde, .alpha.-met...	134	C9H10O	000093-53-8	30





Library Search Compound Report

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Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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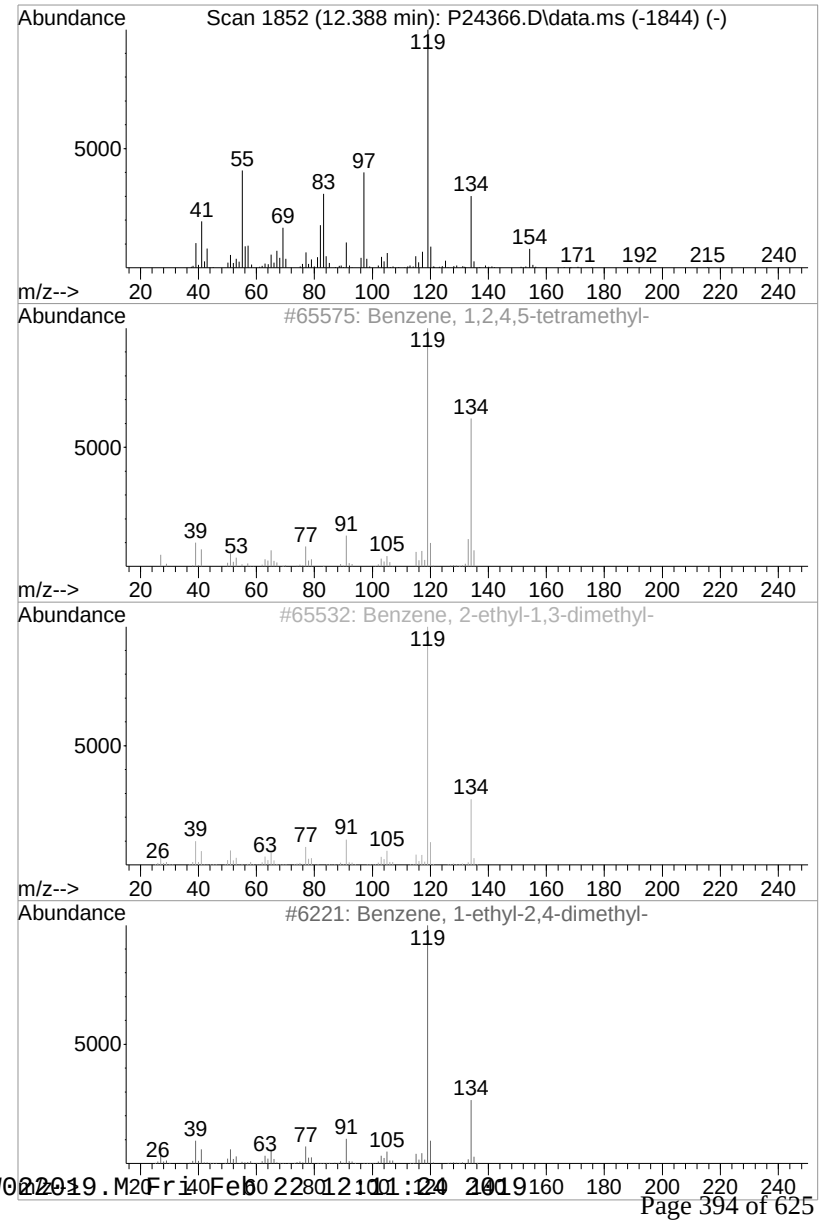
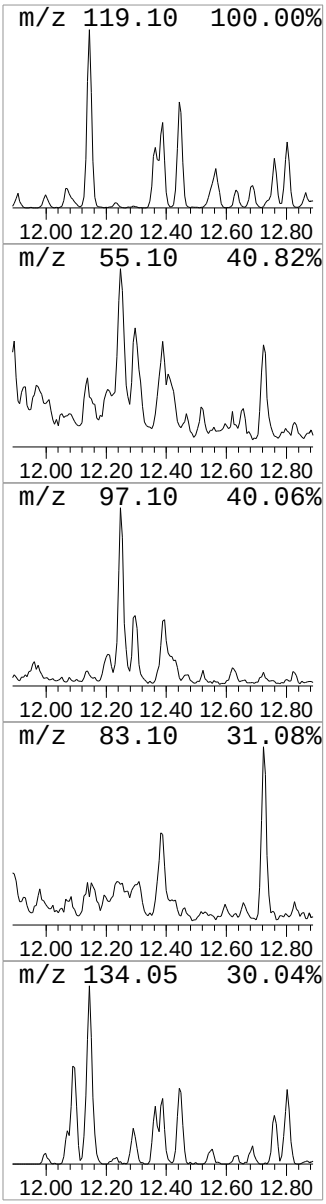
Peak Number 19 unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.388	9.61 ppb	370070	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	60
2	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	60
3	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	60
4	Benzene, 1-ethyl-3,5-dimethyl-	134	C10H14	000934-74-7	60
5	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	60





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Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

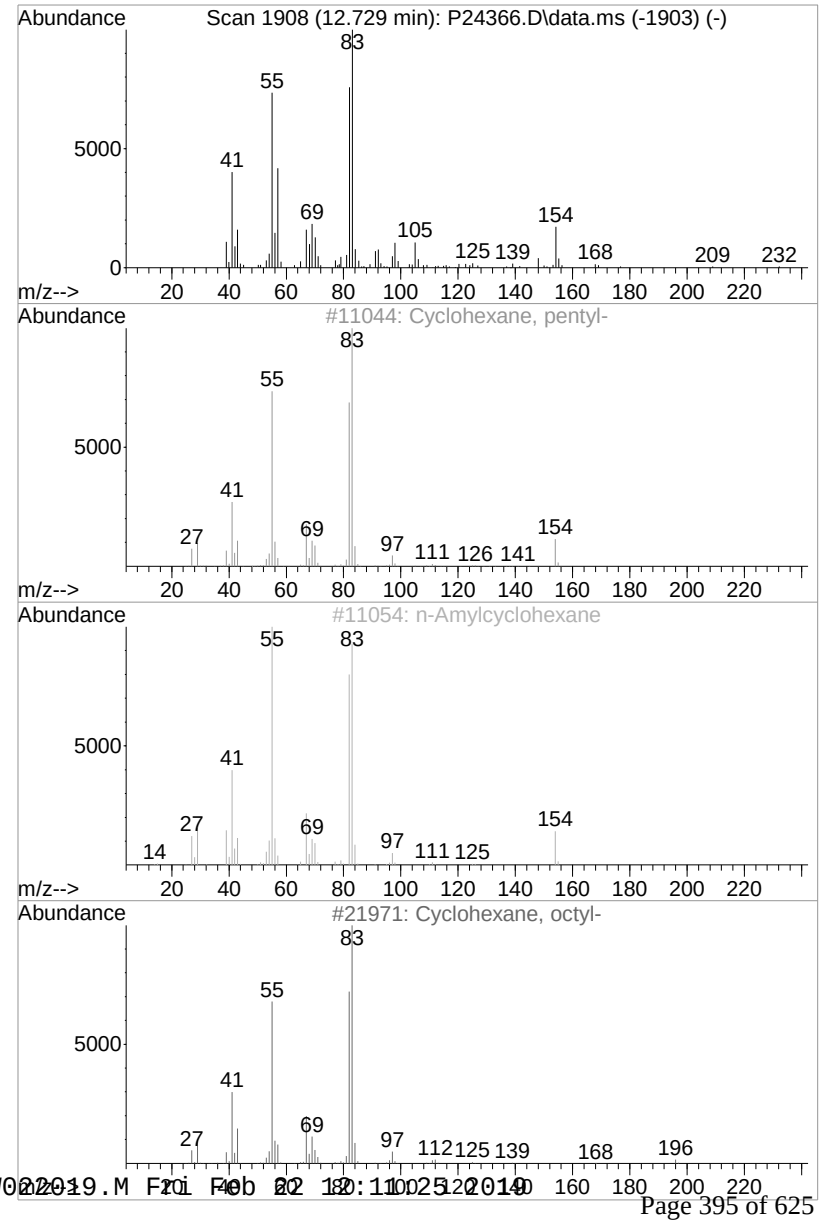
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

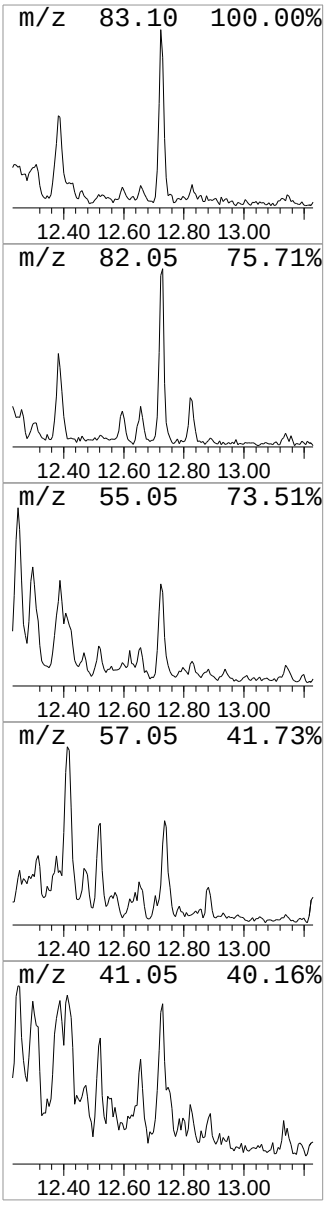
****

Peak Number 20 unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.729	5.38 ppb	207229	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, pentyl-	154	C11H22	004292-92-6	83
2	n-Amylcyclohexane	154	C11H22	029949-27-7	72
3	Cyclohexane, octyl-	196	C14H28	001795-15-9	64
4	Cyclohexane, octyl-	196	C14H28	001795-15-9	64
5	Cyclohexane, butyl-	140	C10H20	001678-93-9	64





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

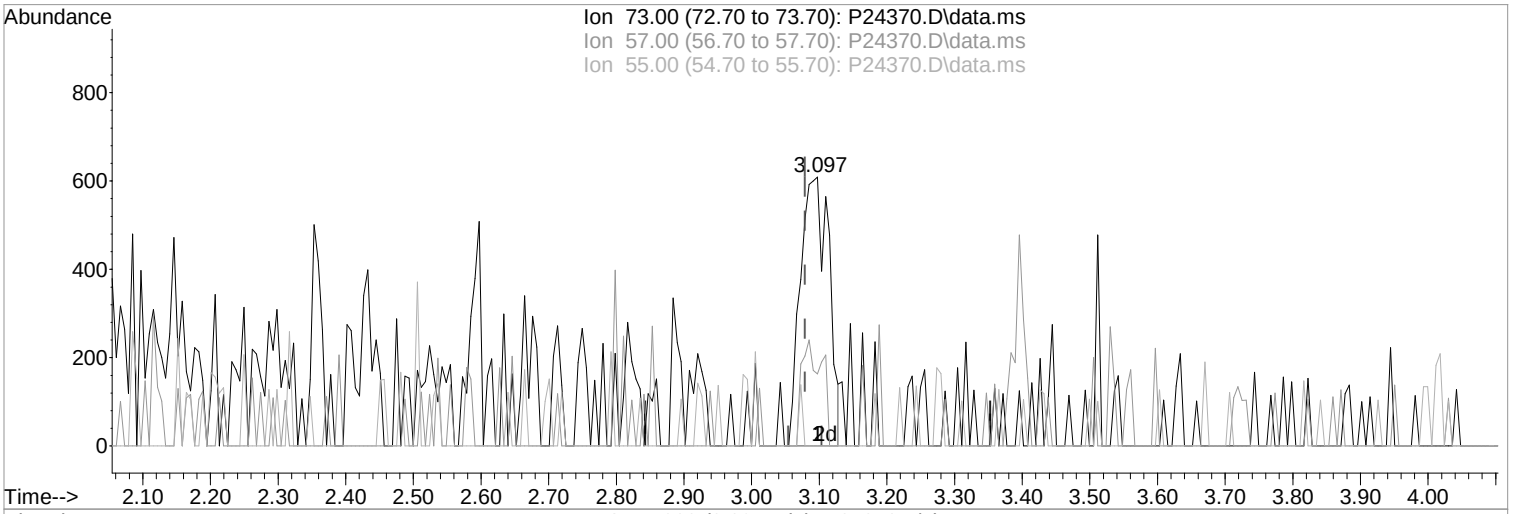
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

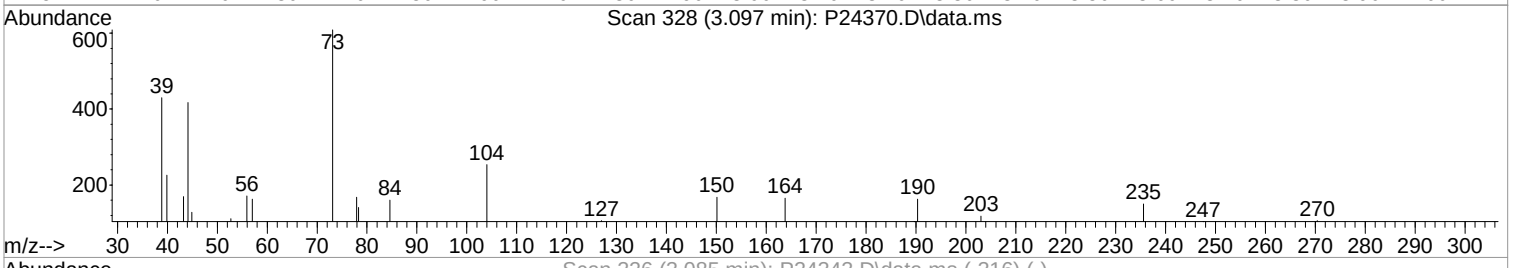
					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Cyclohexane, 1,...	9.553	6.1	ppb	154168	3	9.791	1259610	50.0
unknown	9.620	5.3	ppb	134791	3	9.791	1259610	50.0
Octane, 3-methyl-	9.736	9.8	ppb	246173	3	9.791	1259610	50.0
1-Ethyl-3-methy...	10.102	5.9	ppb	148820	3	9.791	1259610	50.0
unknown	10.346	18.4	ppb	463082	3	9.791	1259610	50.0
Octane, 2,5-dim...	10.431	12.4	ppb	311555	3	9.791	1259610	50.0
Octane, 2,6-dim...	10.553	31.4	ppb	790682	3	9.791	1259610	50.0
Cyclohexane, pr...	10.626	16.8	ppb	424307	3	9.791	1259610	50.0
unknown	10.669	11.6	ppb	292924	3	9.791	1259610	50.0
unknown	10.809	16.5	ppb	416483	3	9.791	1259610	50.0
unknown	11.010	6.6	ppb	253272	4	11.839	1926260	50.0
unknown	11.181	7.2	ppb	278111	4	11.839	1926260	50.0
Pentadecane	11.437	7.5	ppb	288381	4	11.839	1926260	50.0
unknown	11.650	8.1	ppb	311723	4	11.839	1926260	50.0
unknown	11.760	15.8	ppb	608485	4	11.839	1926260	50.0
unknown	11.894	13.7	ppb	526619	4	11.839	1926260	50.0
Benzene, 1-meth...	12.089	9.1	ppb	351682	4	11.839	1926260	50.0
Benzene, 1-meth...	12.296	7.5	ppb	290768	4	11.839	1926260	50.0
unknown	12.388	9.6	ppb	370070	4	11.839	1926260	50.0
unknown	12.729	5.4	ppb	207229	4	11.839	1926260	50.0

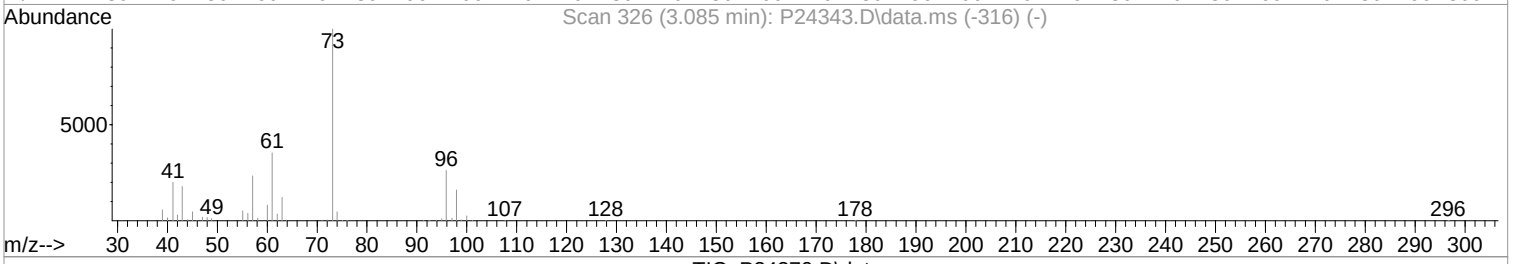
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 21 16:43:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24370.D\data.ms

(25) Methyl-t-Butyl Ether (P)

3.097min (+0.019) 0.16 ppb m

response 1776

Ion	Exp%	Act%
73.00	100	100
57.00	23.70	26.77
55.00	5.20	0.00
0.00	0.00	0.00

Manual Integration:

After

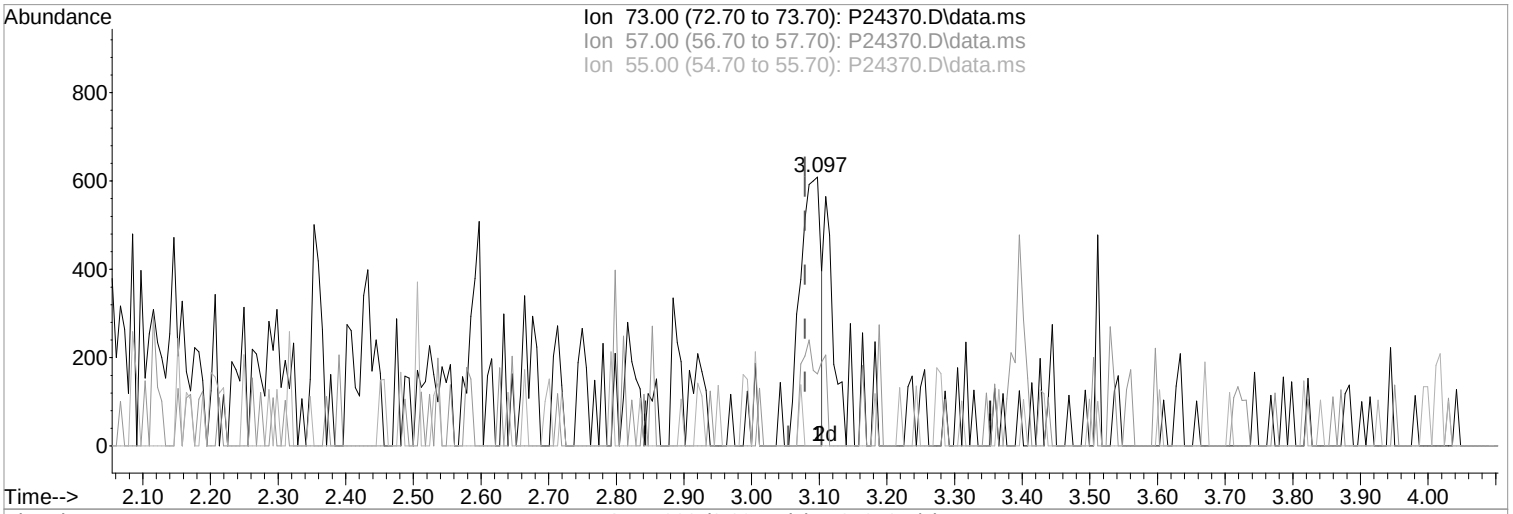
Split Peak

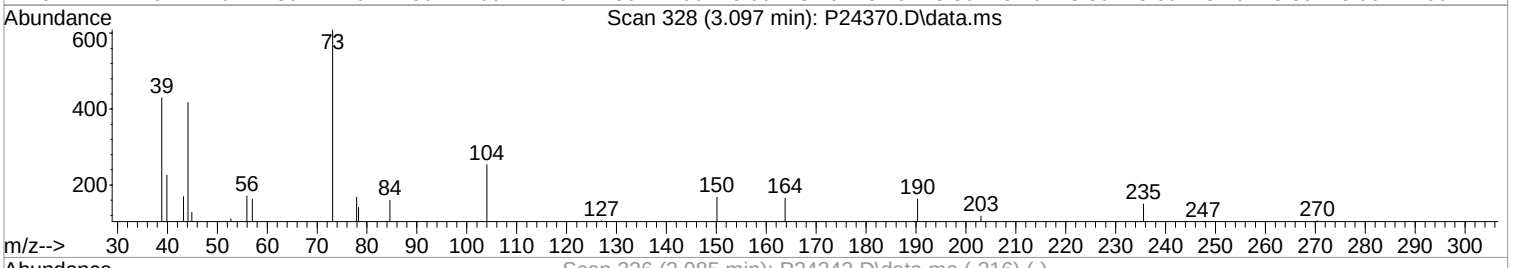
02/22/19

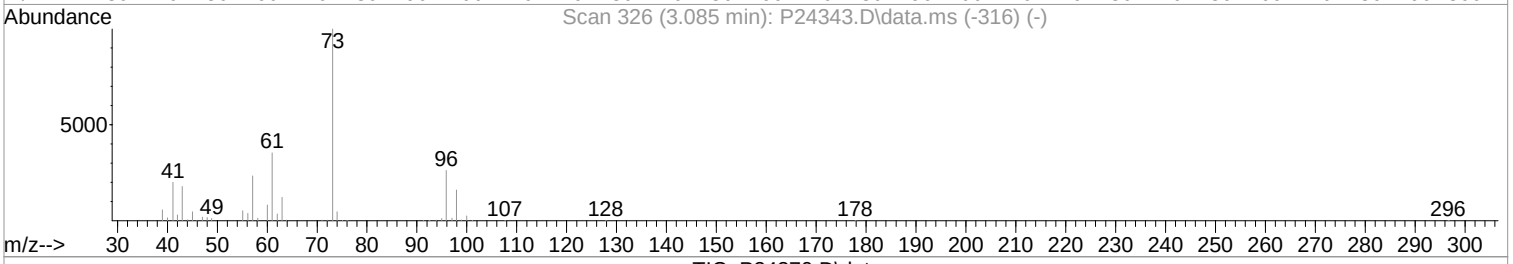
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 21 16:43:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24370.D\data.ms

(25) Methyl-t-Butyl Ether (P)

3.097min (+0.019) 0.11 ppb

response 1276

Ion	Exp%	Act%
73.00	100	100
57.00	23.70	26.77
55.00	5.20	0.00
0.00	0.00	0.00

Manual Integration:

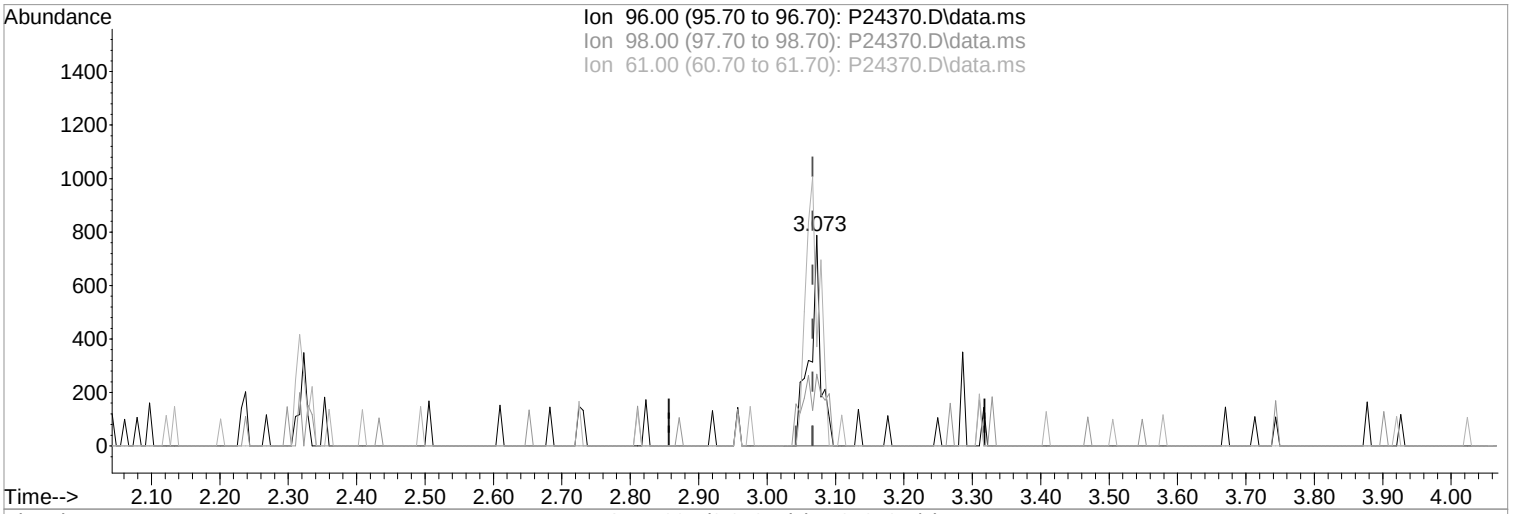
Before

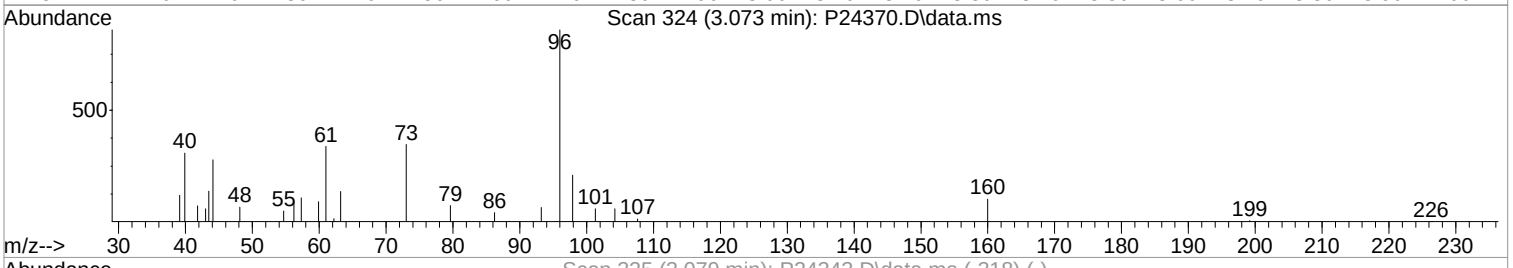
02/22/19

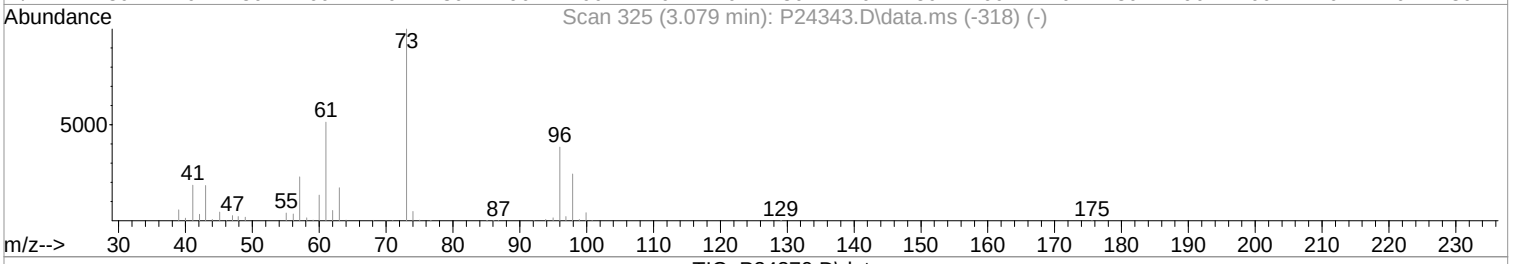
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 21 16:43:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24370.D\data.ms

(26) trans-1,2-Dichloroethene (P)

3.073min (+0.006) 0.27 ppb m

response 882

Ion	Exp%	Act%
96.00	100	100
98.00	63.50	34.01#
61.00	134.40	47.08#
0.00	0.00	0.00

Manual Integration:

After

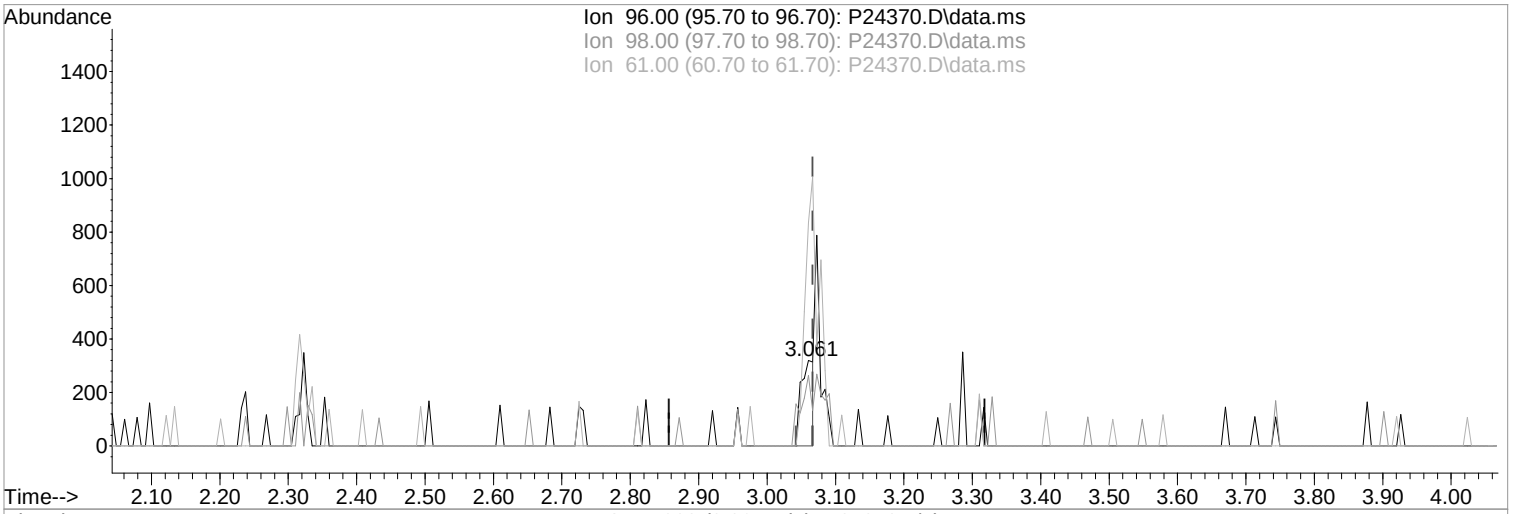
Split Peak

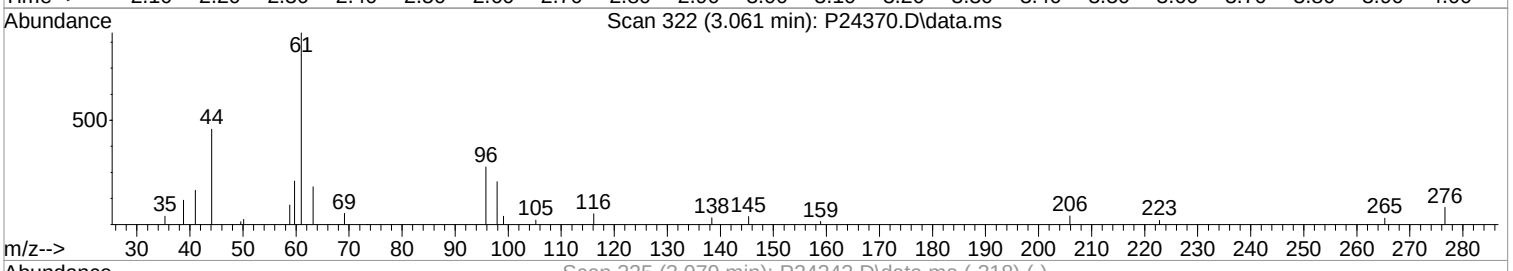
02/22/19

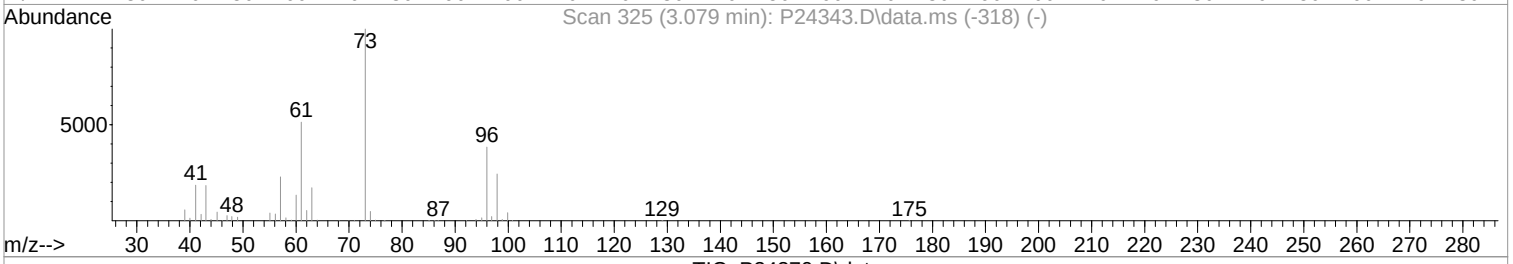
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 21 16:43:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24370.D\data.ms

(26) trans-1,2-Dichloroethene (P)

3.061min (-0.006) 0.13 ppb

response 411

Ion	Exp%	Act%
96.00	100	100
98.00	63.50	82.50
61.00	134.40	261.25#
0.00	0.00	0.00

Manual Integration:

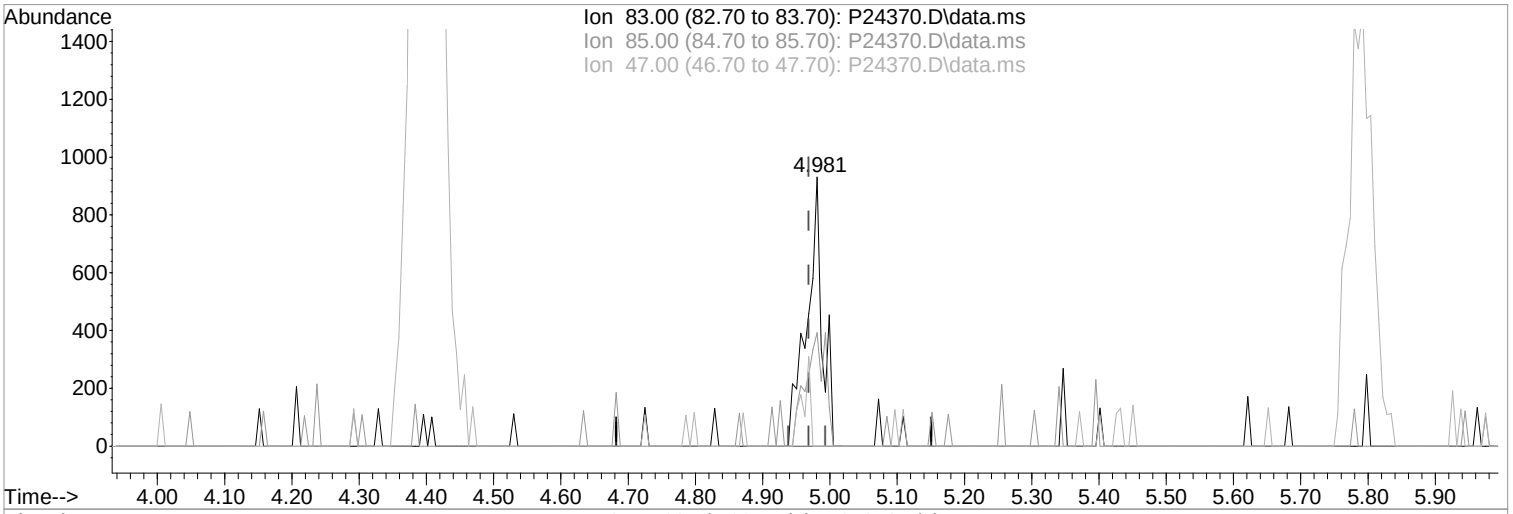
Before

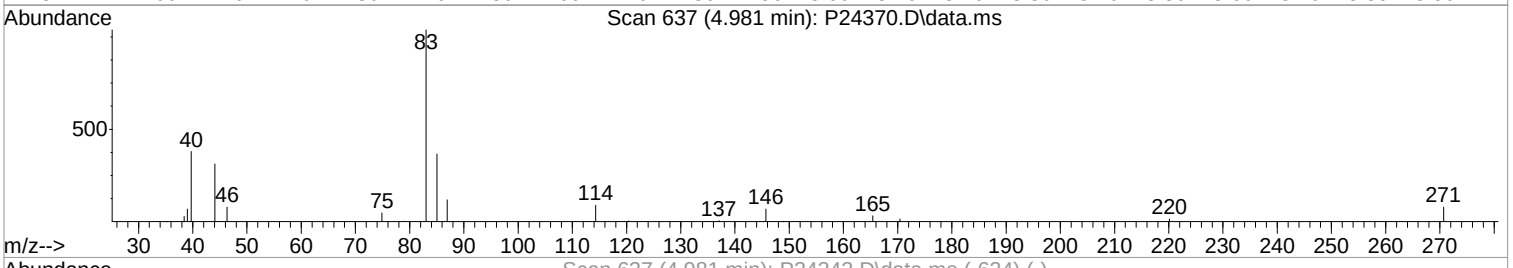
02/22/19

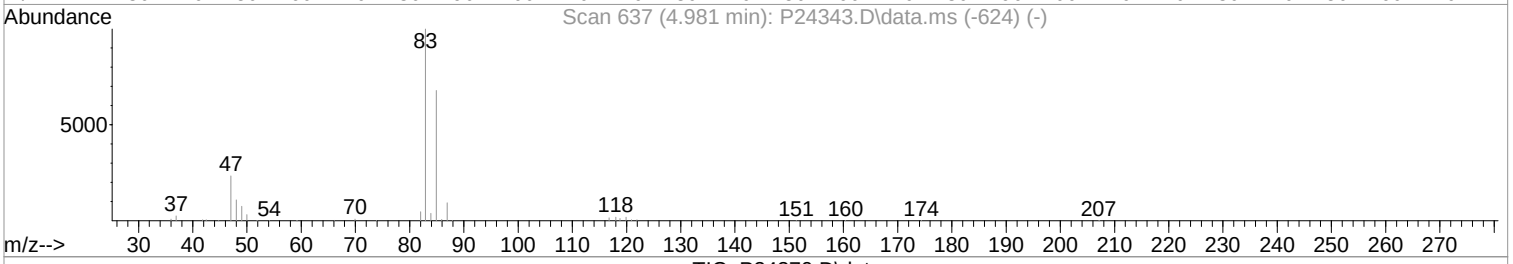
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 21 16:43:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24370.D\data.ms

(40) Chloroform (P)

4.981min (+0.012) 0.28 ppb m

response 1495

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	42.21#
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

After

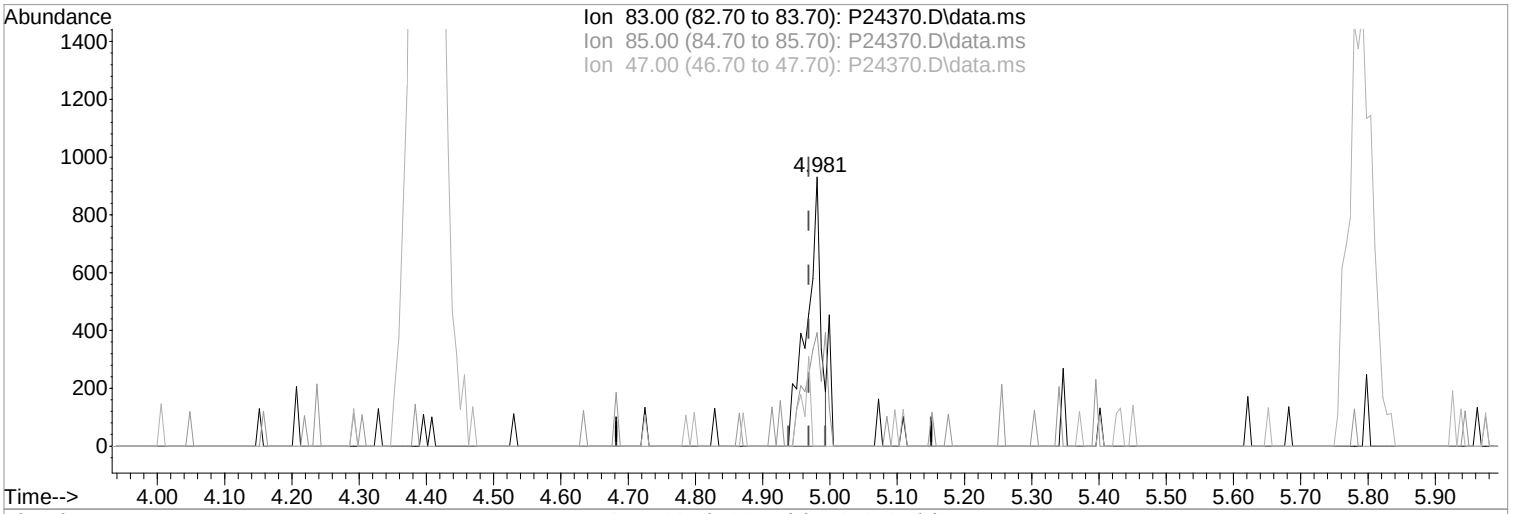
Split Peak

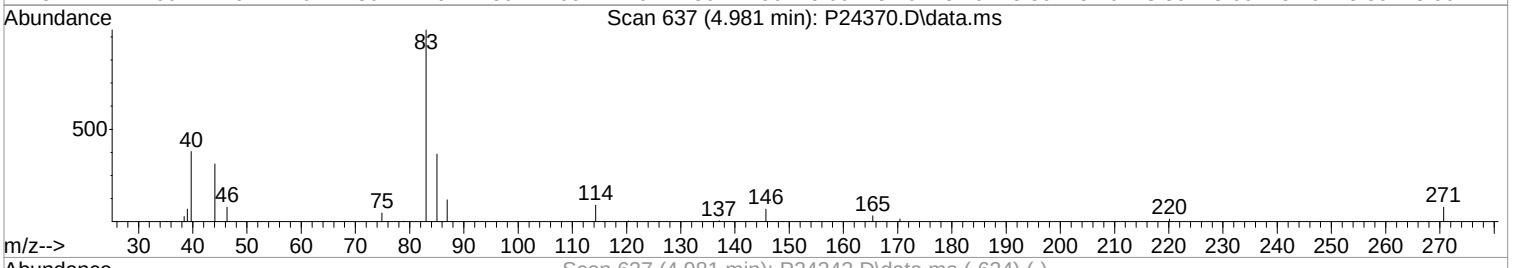
02/22/19

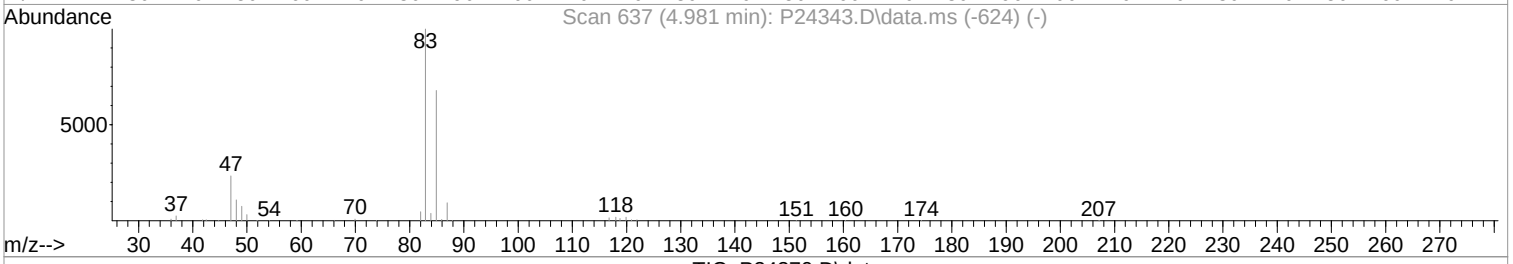
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 21 16:43:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24370.D\data.ms

(40) Chloroform (P)

4.981min (+0.012) 0.24 ppb

response 1329

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	42.21#
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

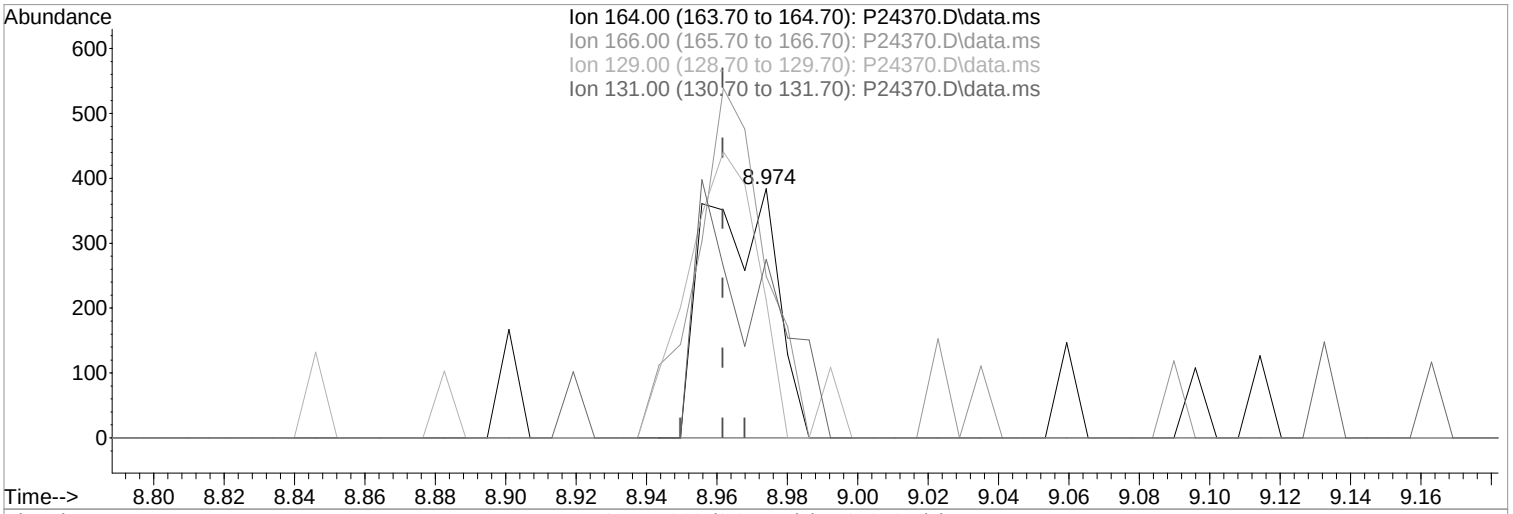
Before

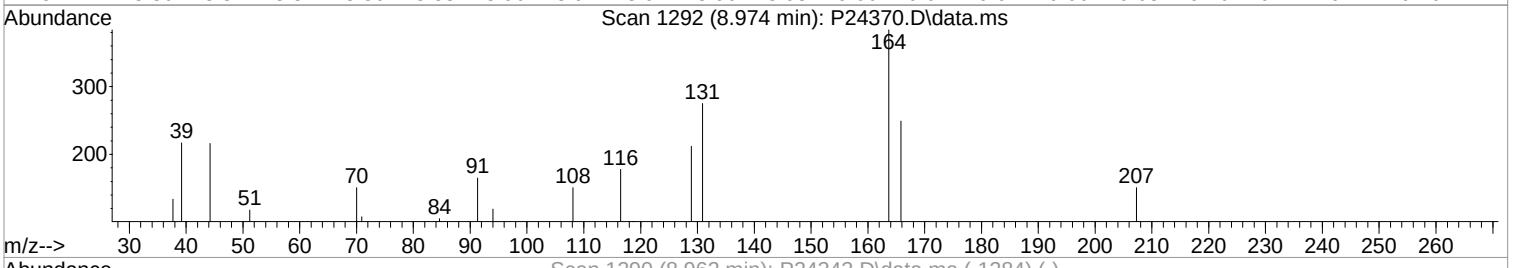
02/22/19

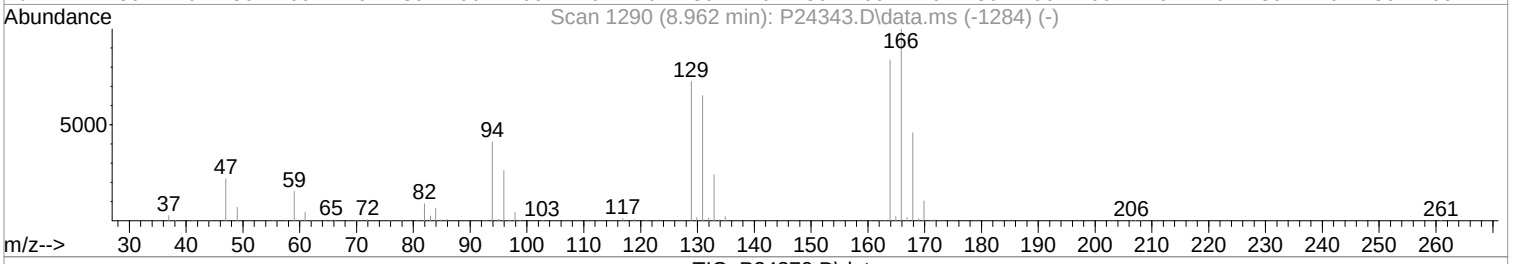
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 21 16:43:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24370.D\data.ms

(72) Tetrachloroethene (P)

8.974min (+0.012) 0.20 ppb m

response 542

Ion	Exp%	Act%
164.00	100	100
166.00	119.60	64.84#
129.00	86.70	55.21#
131.00	78.00	71.61

Manual Integration:

After

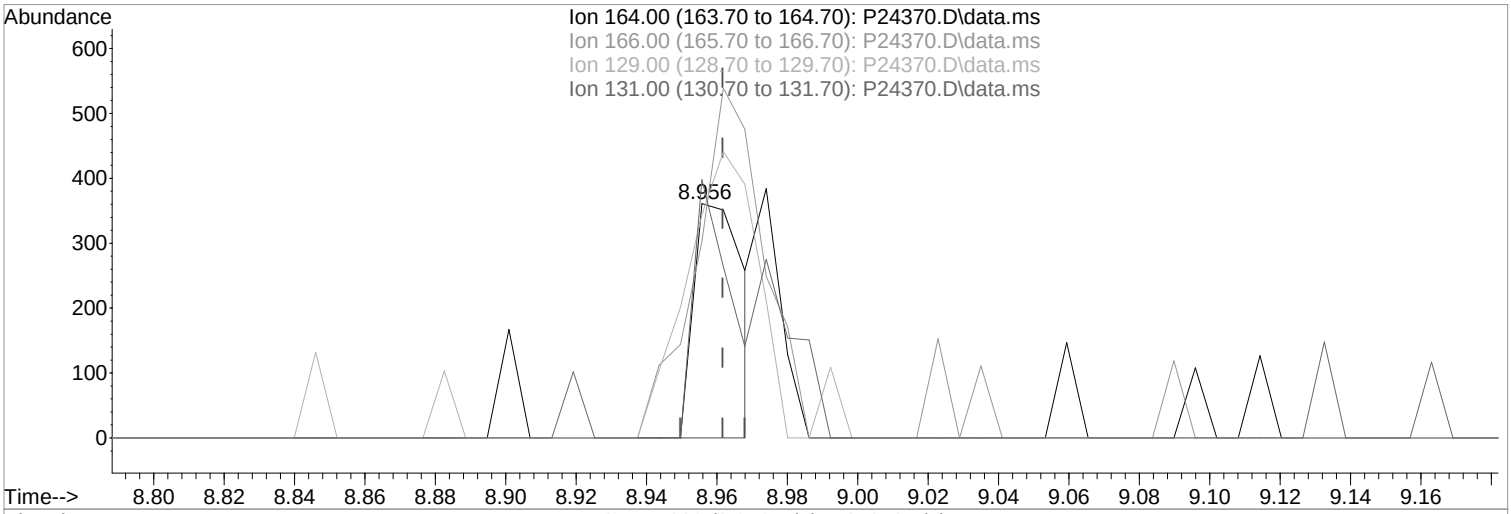
Split Peak

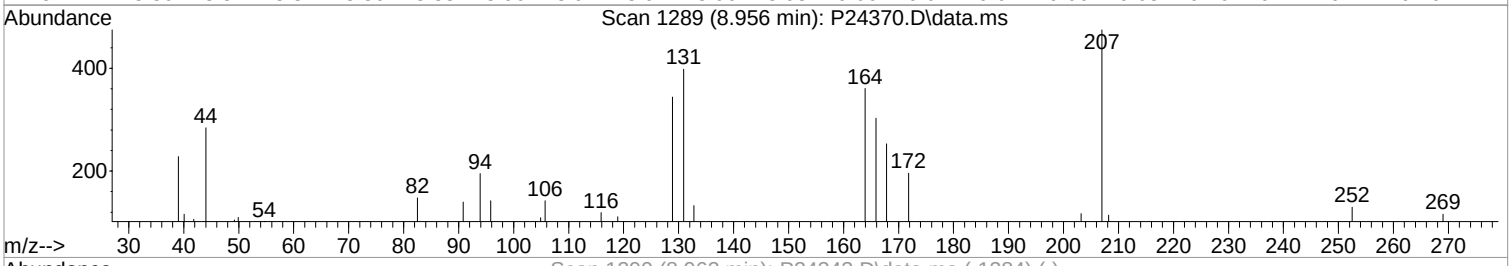
02/22/19

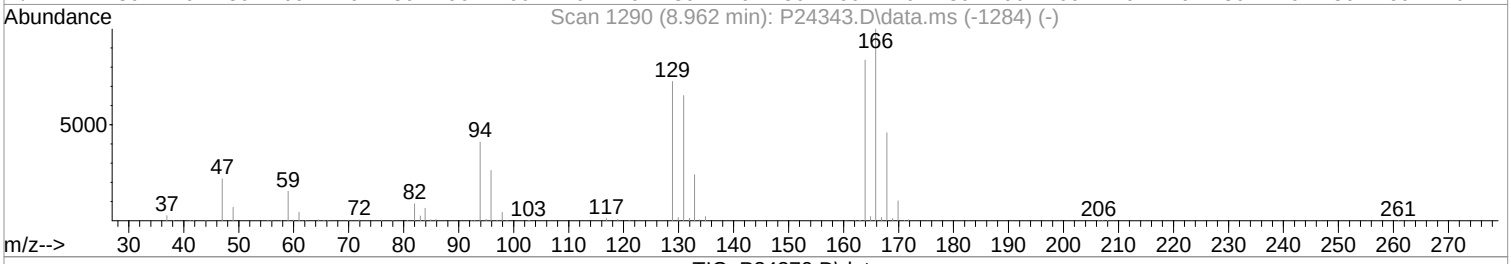
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 21 16:43:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24370.D\data.ms

(72) Tetrachloroethene (P)

8.956min (-0.006) 0.13 ppb

response 355

Ion	Exp%	Act%
164.00	100	100
166.00	119.60	83.93#
129.00	86.70	95.29
131.00	78.00	110.25#

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 22 12:19:45 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

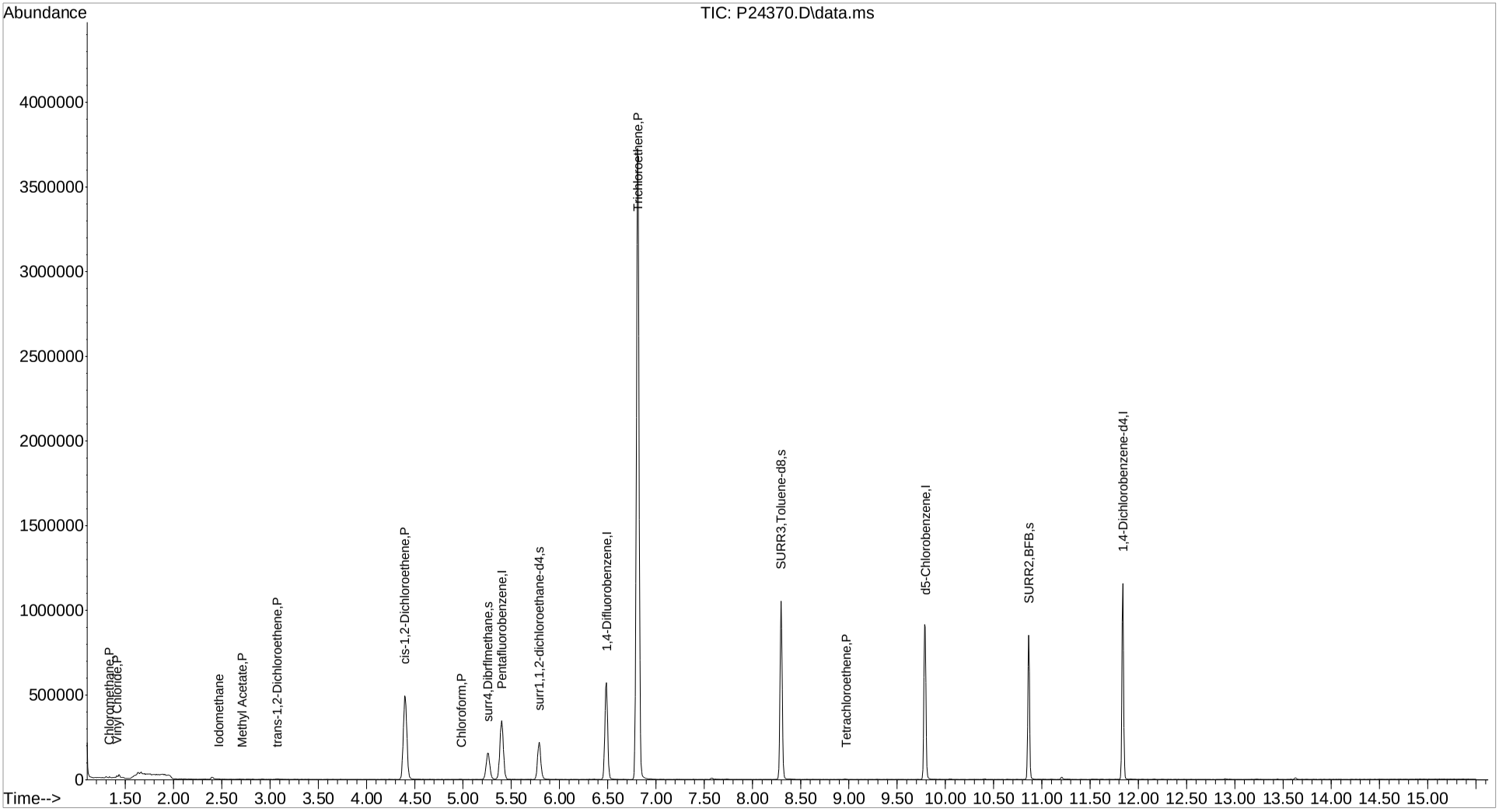
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Pentafluorobenzene	5.402	168	314032	50.00	ppb	0.00	
43) 1,4-Difluorobenzene	6.487	114	498581	50.00	ppb	0.00	
71) d5-Chlorobenzene	9.791	117	441748	50.00	ppb	0.00	
86) 1,4-Dichlorobenzene-d4	11.839	152	231136	50.00	ppb	0.00	
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	129429	47.24	ppb	0.00	
Spiked Amount 50.000	Range 89 - 119		Recovery = 94.48%				
48) surr1,1,2-dichloroetha...	5.792	65	186297	53.61	ppb	0.00	
Spiked Amount 50.000	Range 73 - 125		Recovery = 107.22%				
65) SURR3,Toluene-d8	8.297	98	651431	50.12	ppb	0.00	
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.24%				
70) SURR2,BFB	10.864	95	233283	50.12	ppb	0.00	
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.24%				
Target Compounds						Qvalue	
3) Chloromethane	1.335	50	2363	0.46	ppb	99	
4) Vinyl Chloride	1.415	62	6231	1.37	ppb	99	
17) Iodomethane	2.463	142	2576	2.73	ppb	79	
21) Methyl Acetate	2.707	43	1923	0.47	ppb	78	
26) trans-1,2-Dichloroethene	3.073	96	882m	0.27	ppb		
34) cis-1,2-Dichloroethene	4.396	96	294339	80.56	ppb	89	
40) Chloroform	4.981	83	1495m	0.28	ppb		
54) Trichloroethene	6.810	130	1366816	391.96	ppb	93	E-Over Calibration
72) Tetrachloroethene	8.974	164	542m	0.20	ppb		

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

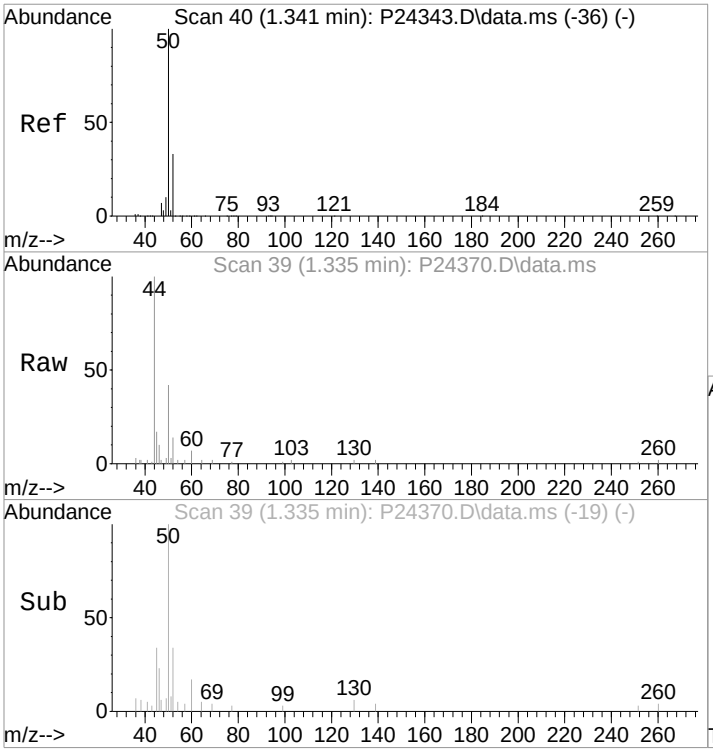
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 22 12:19:45 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



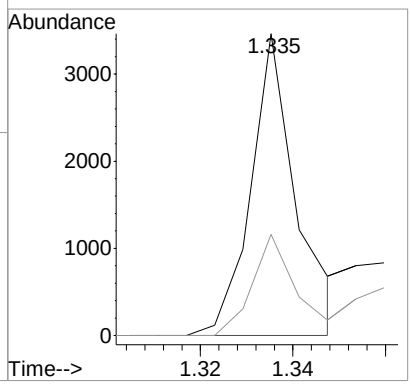
1st 02/22/19

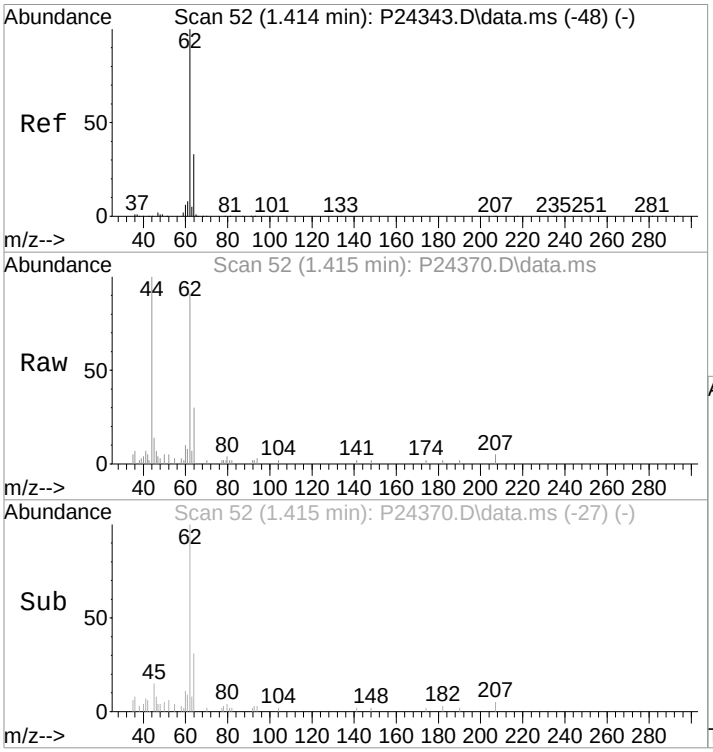


#3
Chloromethane
Concen: 0.46 ppb
RT: 1.335 min Scan# 39
Delta R.T. 0.006 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion: 50 Resp: 2363

Ion	Ratio	Lower	Upper
50	100		
52	33.5	13.0	53.0

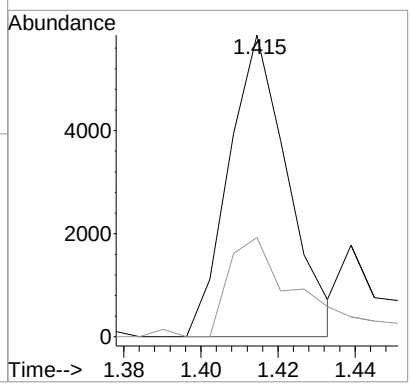


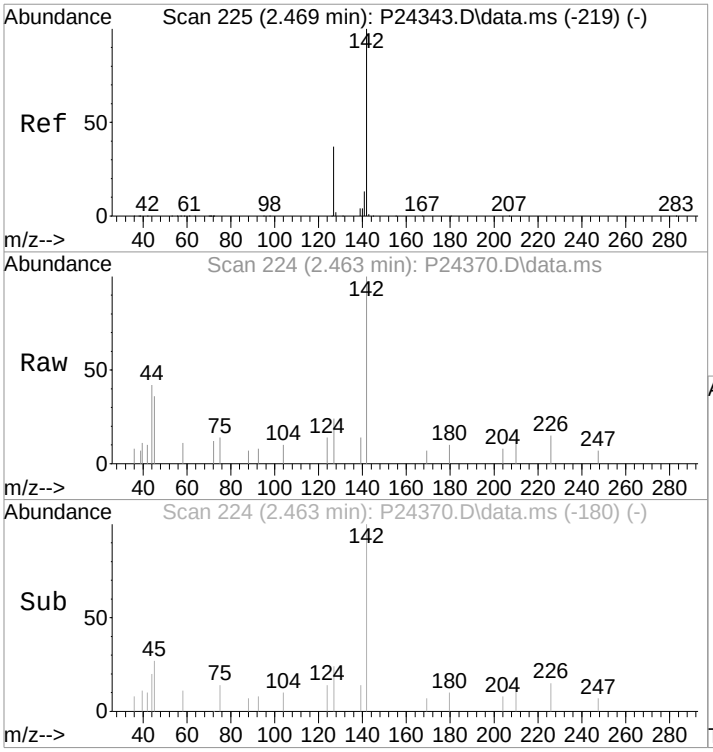


#4
Vinyl Chloride
Concen: 1.37 ppb
RT: 1.415 min Scan# 52
Delta R.T. 0.006 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion: 62 Resp: 6231

Ion	Ratio	Lower	Upper
62	100		
64	32.9	13.2	53.2

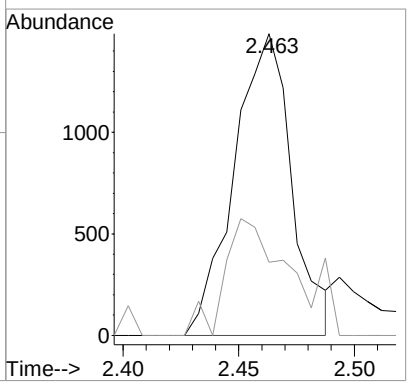


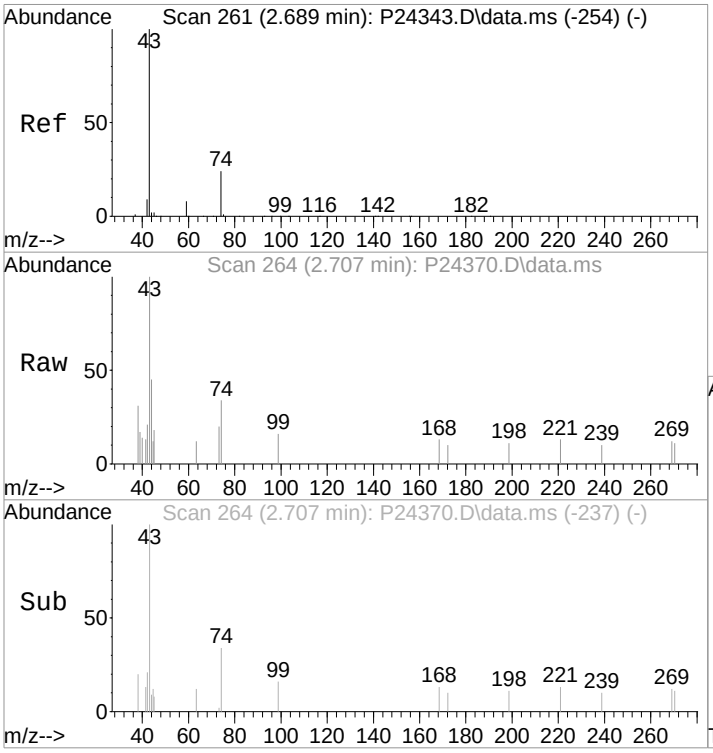


#17
Iodomethane
Concen: 2.73 ppb
RT: 2.463 min Scan# 224
Delta R.T. 0.007 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion:142 Resp: 2576

Ion	Ratio	Lower	Upper
142	100		
127	24.2	16.7	56.7

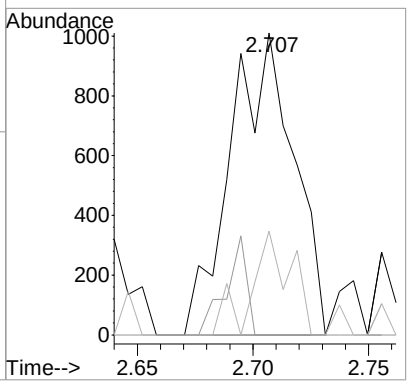


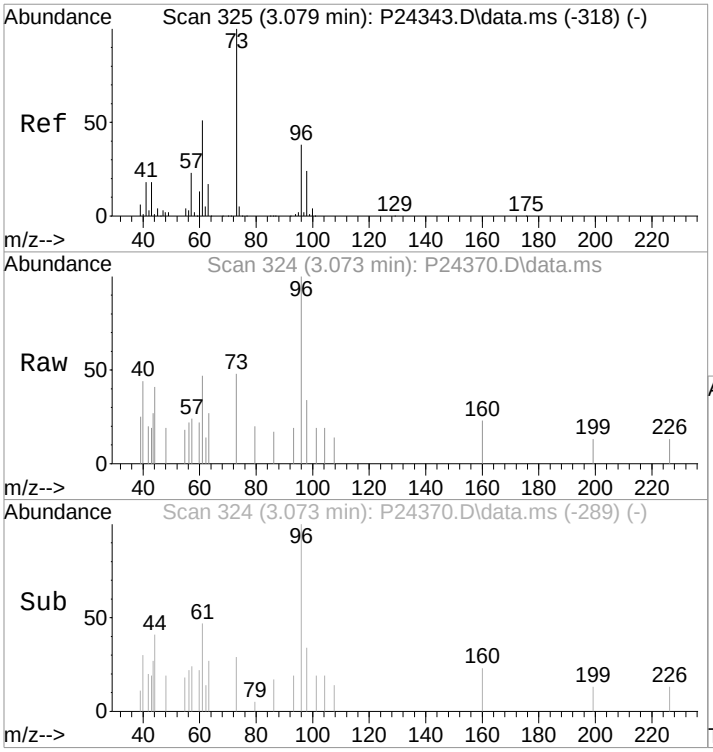


#21
Methyl Acetate
Concen: 0.47 ppb
RT: 2.707 min Scan# 264
Delta R.T. 0.025 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion: 43 Resp: 1923

Ion	Ratio	Lower	Upper
43	100		
59	0.0	0.0	28.4
74	34.4	3.6	43.6

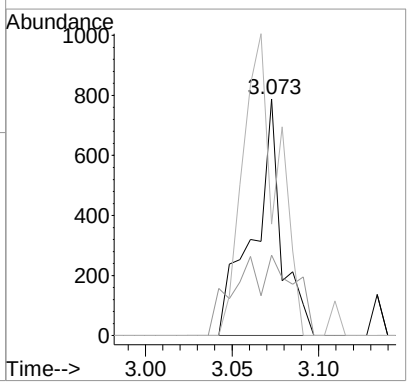


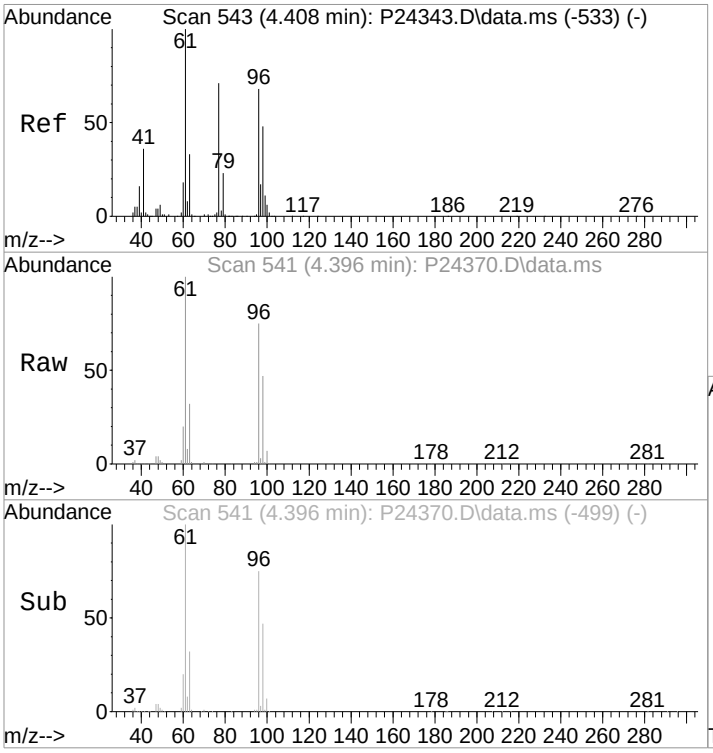


#26
trans-1,2-Dichloroethene
Concen: 0.27 ppb m
RT: 3.073 min Scan# 324
Delta R.T. 0.006 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion: 96 Resp: 882

Ion	Ratio	Lower	Upper
96	100		
98	34.0	43.5	83.5#
61	47.1	114.4	154.4#

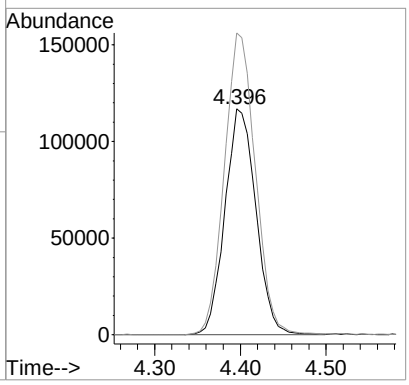


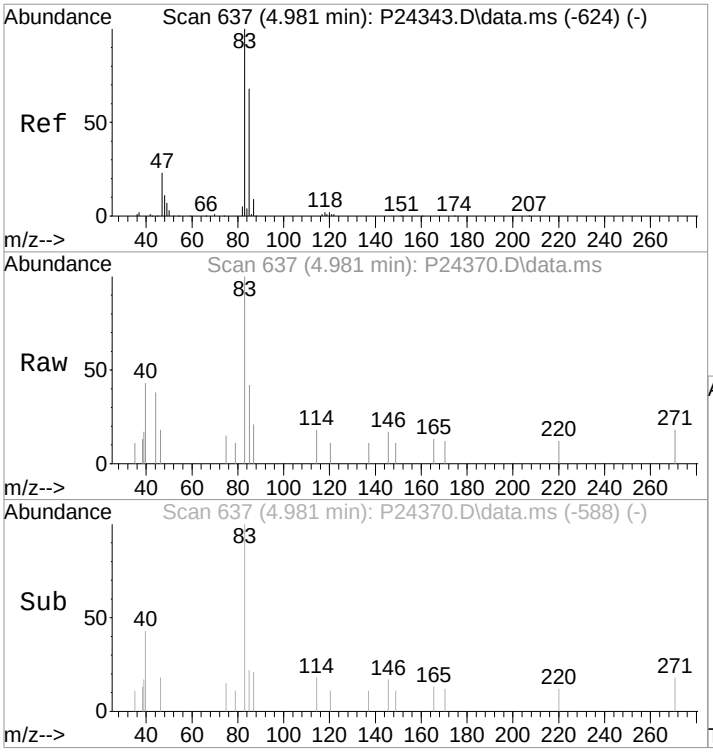


#34
cis-1,2-Dichloroethene
Concen: 80.56 ppb
RT: 4.396 min Scan# 541
Delta R.T. -0.006 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion: 96 Resp: 294339

Ion	Ratio	Lower	Upper
96	100		
61	133.6	128.1	168.1

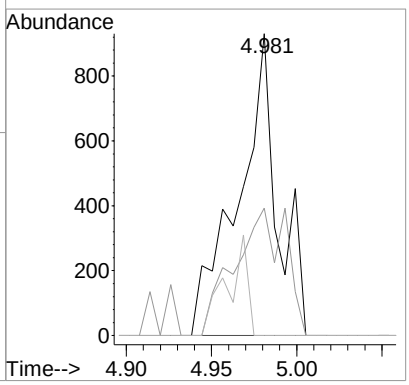


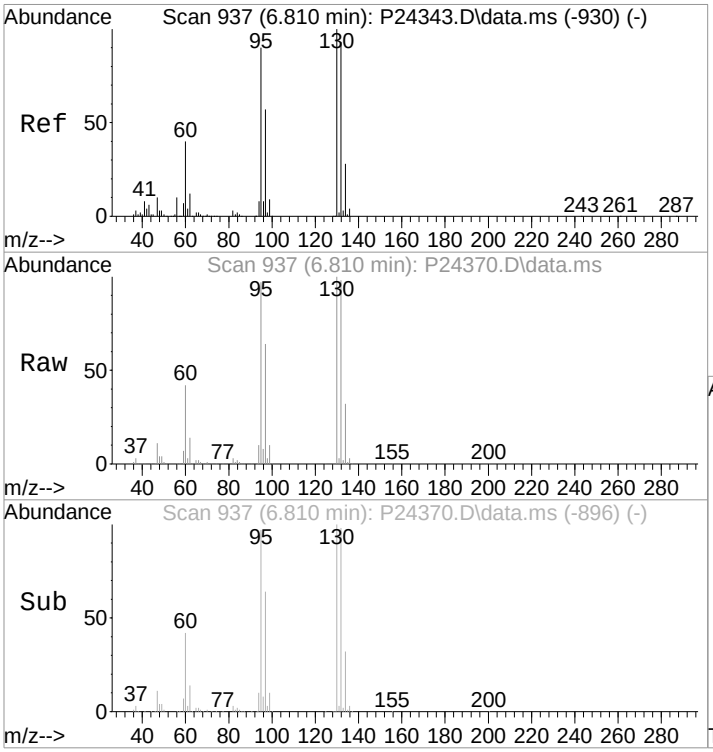


#40
Chloroform
Concen: 0.28 ppb m
RT: 4.981 min Scan# 637
Delta R.T. 0.012 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion: 83 Resp: 1495

Ion	Ratio	Lower	Upper
83	100		
85	42.2	47.9	87.9#
47	0.0	3.4	43.4#

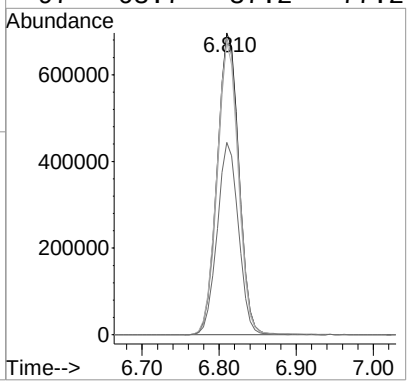


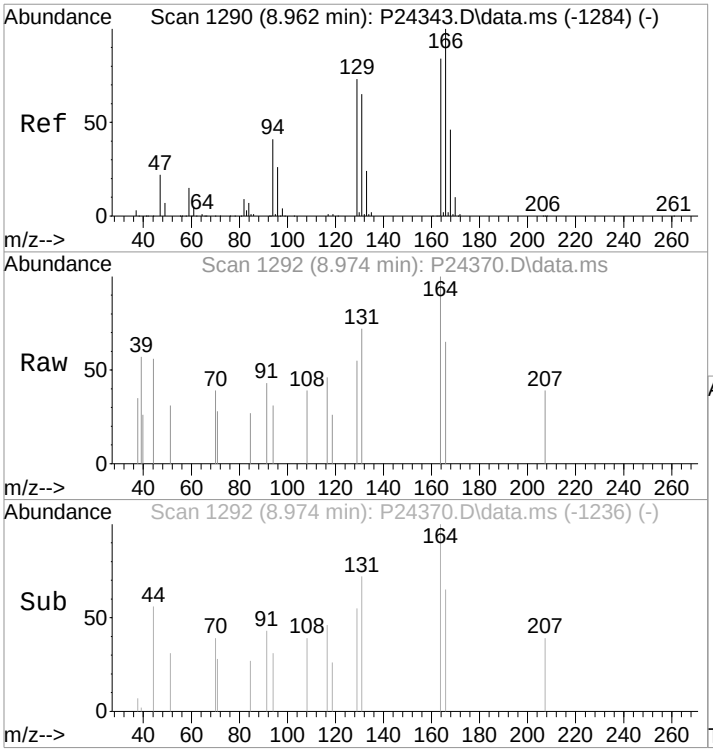


#54
Trichloroethene
Concen: 391.96 ppb
RT: 6.810 min Scan# 937
Delta R.T. 0.000 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion:130 Resp: 1366816

Ion	Ratio	Lower	Upper
130	100		
132	98.3	72.6	112.6
95	97.0	69.8	109.8
97	63.7	37.2	77.2

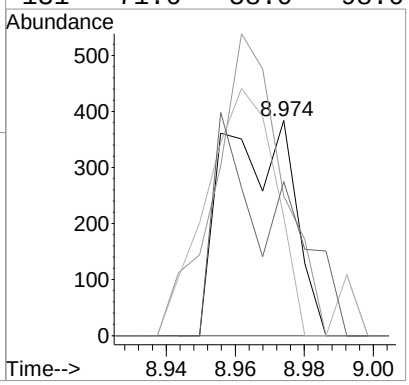




#72
Tetrachloroethene
Concen: 0.20 ppb m
RT: 8.974 min Scan# 1292
Delta R.T. 0.012 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion:164 Resp: 542

Ion	Ratio	Lower	Upper
164	100		
166	64.8	99.6	139.6#
129	55.2	66.7	106.7#
131	71.6	58.0	98.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24370.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.634	74	88	90	rBV4	36504	109147	1.51%	0.641%
2	4.396	532	541	556	rBV	493589	1256511	17.40%	7.376%
3	5.261	674	683	694	rBV	155788	417154	5.78%	2.449%
4	5.402	694	706	717	rBV	345670	872437	12.08%	5.122%
5	5.792	758	770	783	rBV	221382	534659	7.41%	3.139%
6	6.487	874	884	893	rBV	571417	1144030	15.85%	6.716%
7	6.810	927	937	954	rBV	3726584	7219865	100.00%	42.385%
8	8.297	1174	1181	1192	rBV	1050924	1657366	22.96%	9.730%
9	9.785	1420	1425	1436	rBV	915457	1346785	18.65%	7.906%
10	10.864	1596	1602	1613	rBV	852188	1074112	14.88%	6.306%
11	11.839	1756	1762	1770	rBV	1157802	1401997	19.42%	8.231%

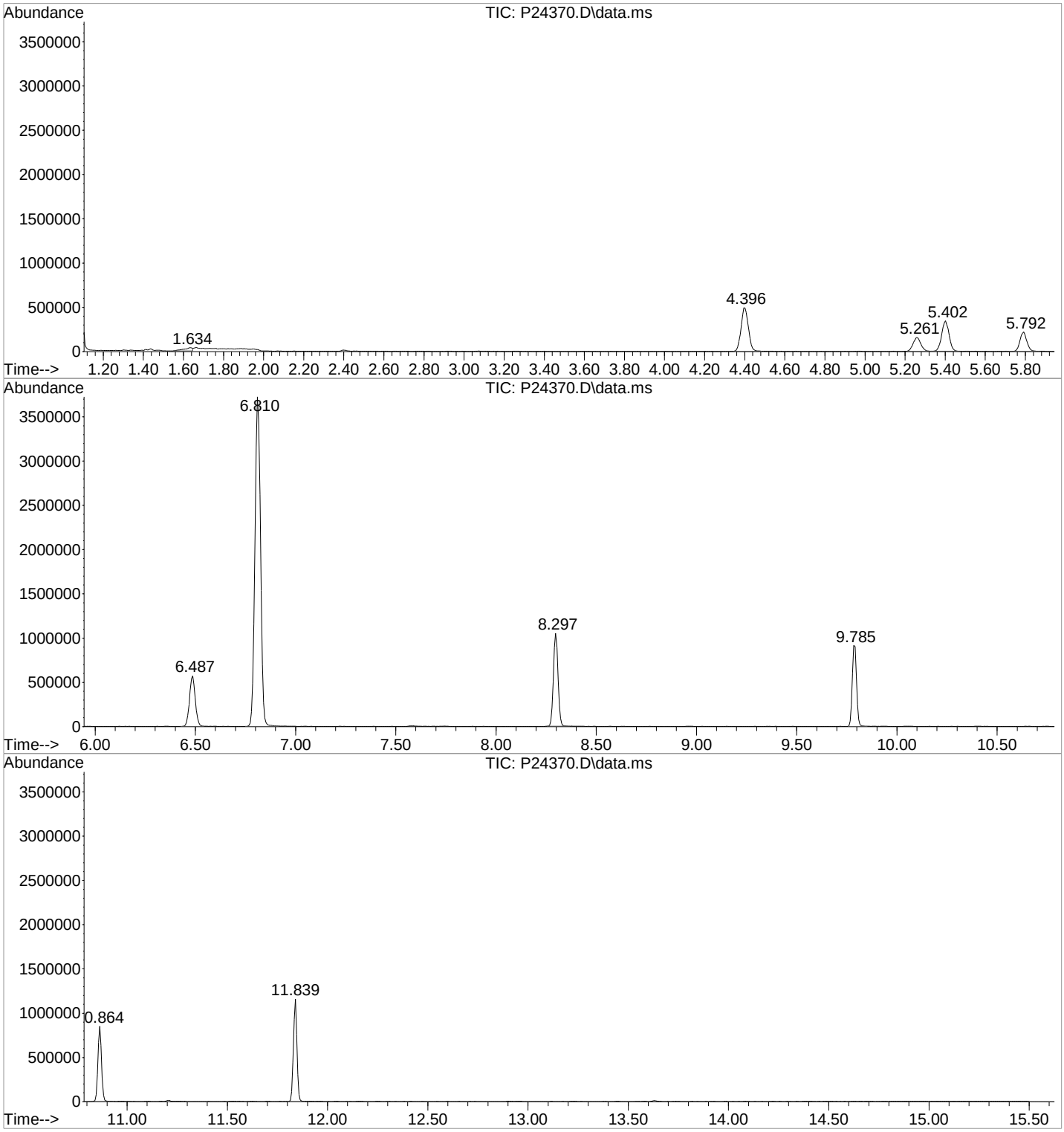
Sum of corrected areas: 17034063

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

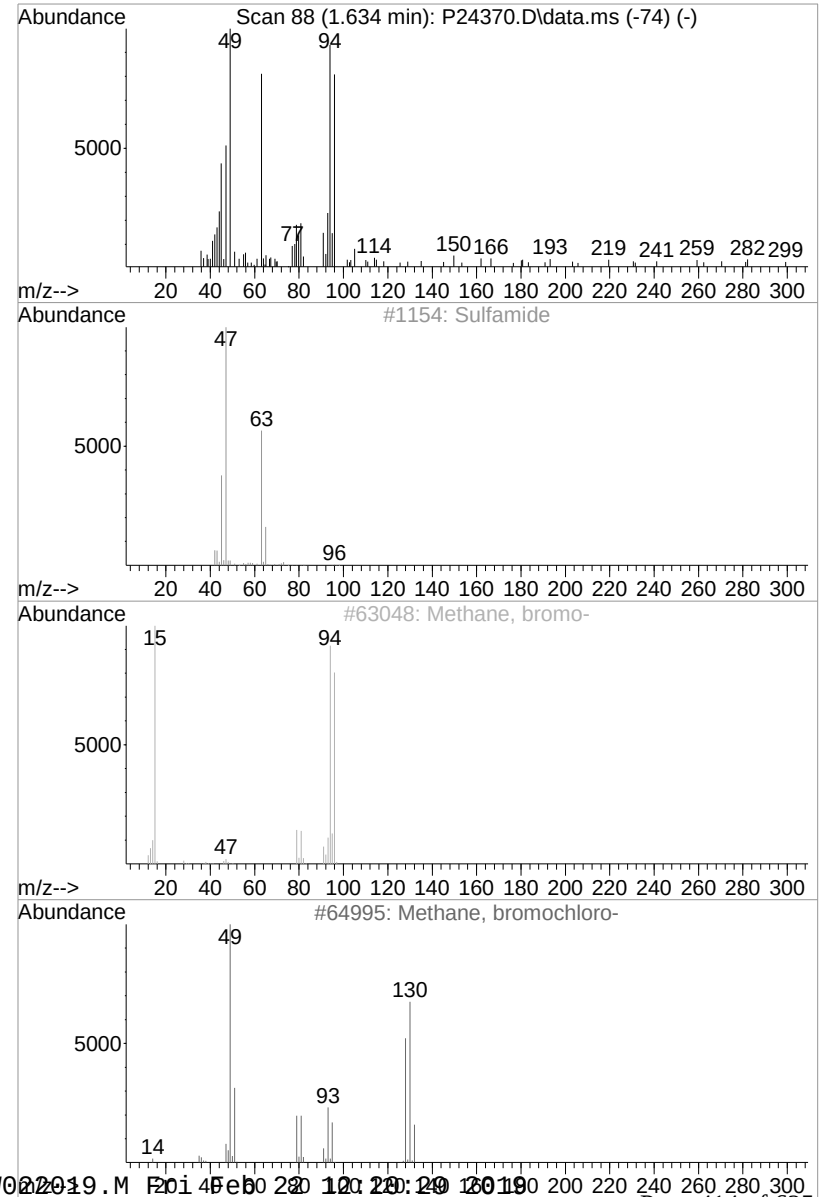
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

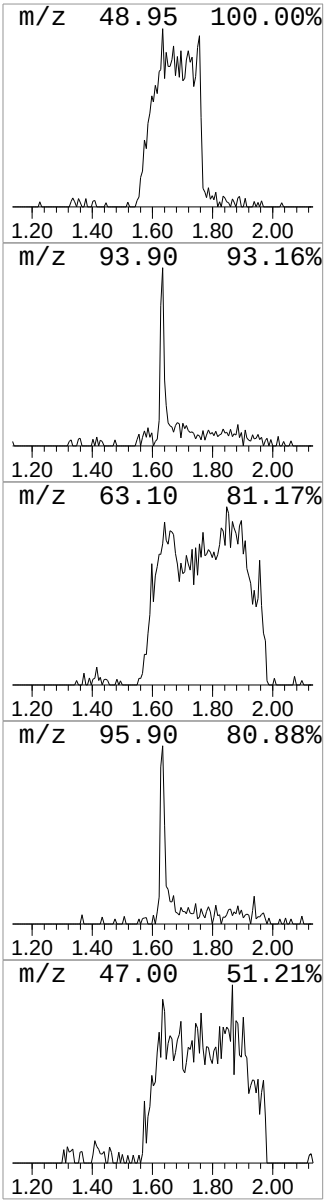
****

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.634	6.26 ppb	109147	Pentafluorobenzene	5.402

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Sulfamide	96	H4N2O2S	000000-00-0	12
2	Methane, bromo-	94	CH3Br	000074-83-9	11
3	Methane, bromochloro-	128	CH2BrCl	000074-97-5	10
4	Methane, bromo-	94	CH3Br	000074-83-9	10
5	Methane, bromo-	94	CH3Br	000074-83-9	10





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

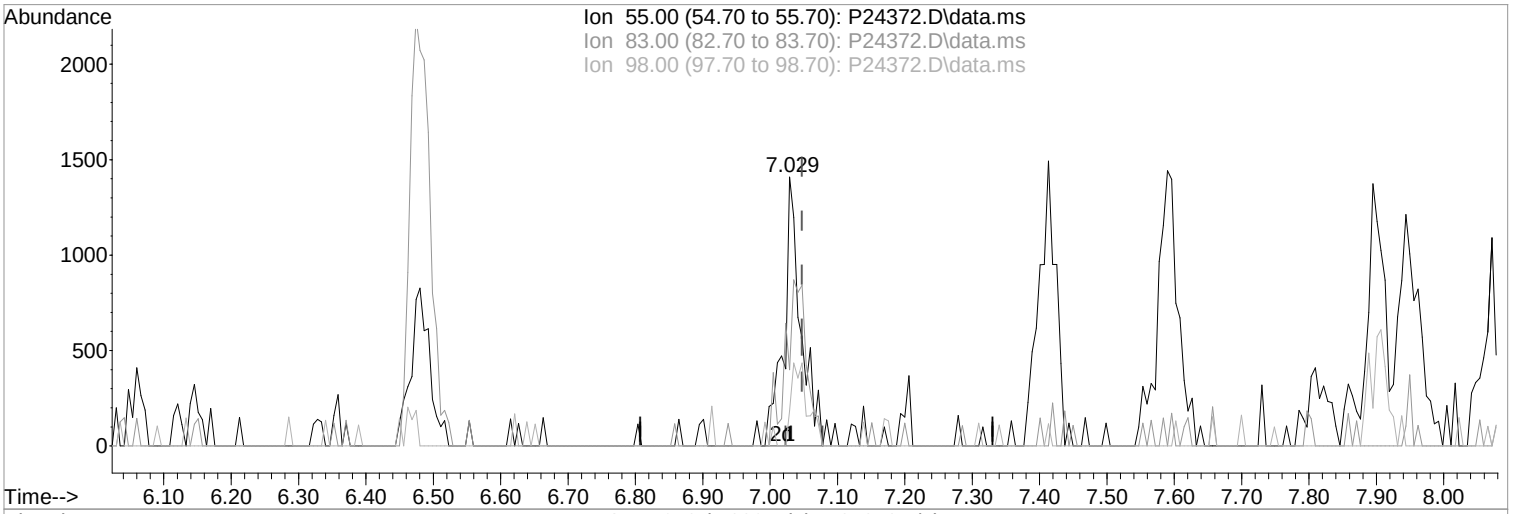
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

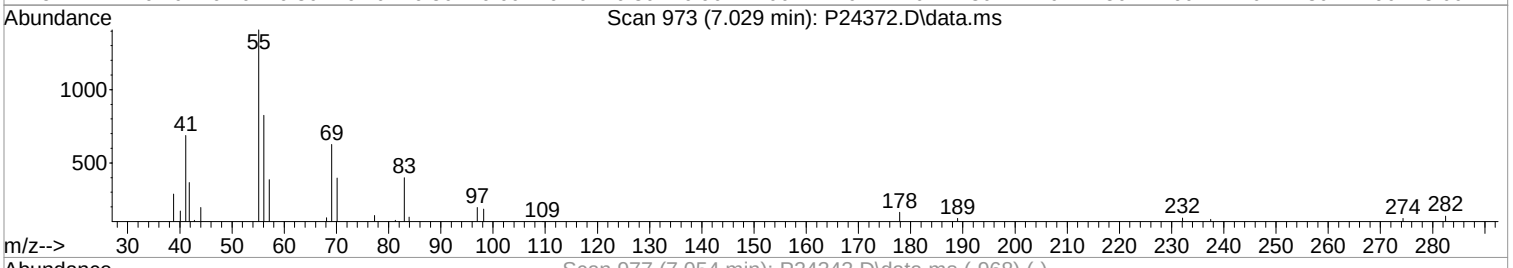
					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	1.634	6.3	ppb	109147	1	5.402	872437	50.0

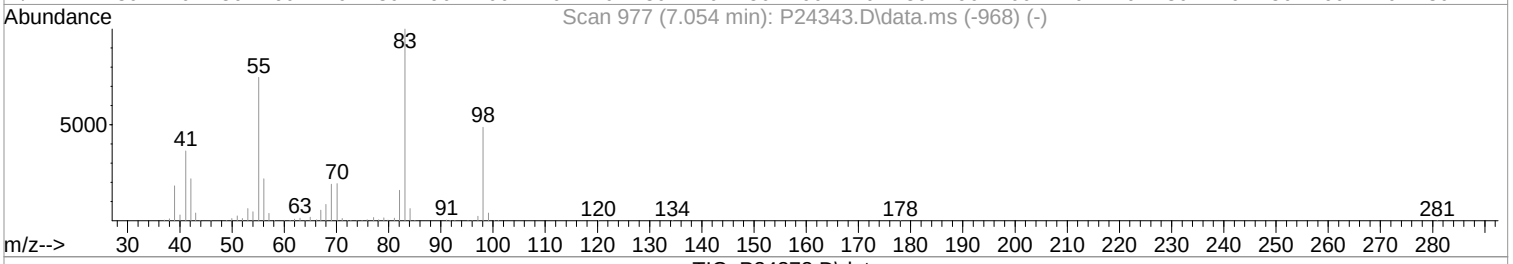
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 21 17:12:45 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24372.D\data.ms

(55) Methylcyclohexane (P)

7.029min (-0.018) 0.56 ppb m

response 2496

Ion	Exp%	Act%
55.00	100	100
83.00	133.10	28.39#
98.00	65.00	13.13#
0.00	0.00	0.00

Manual Integration:

After

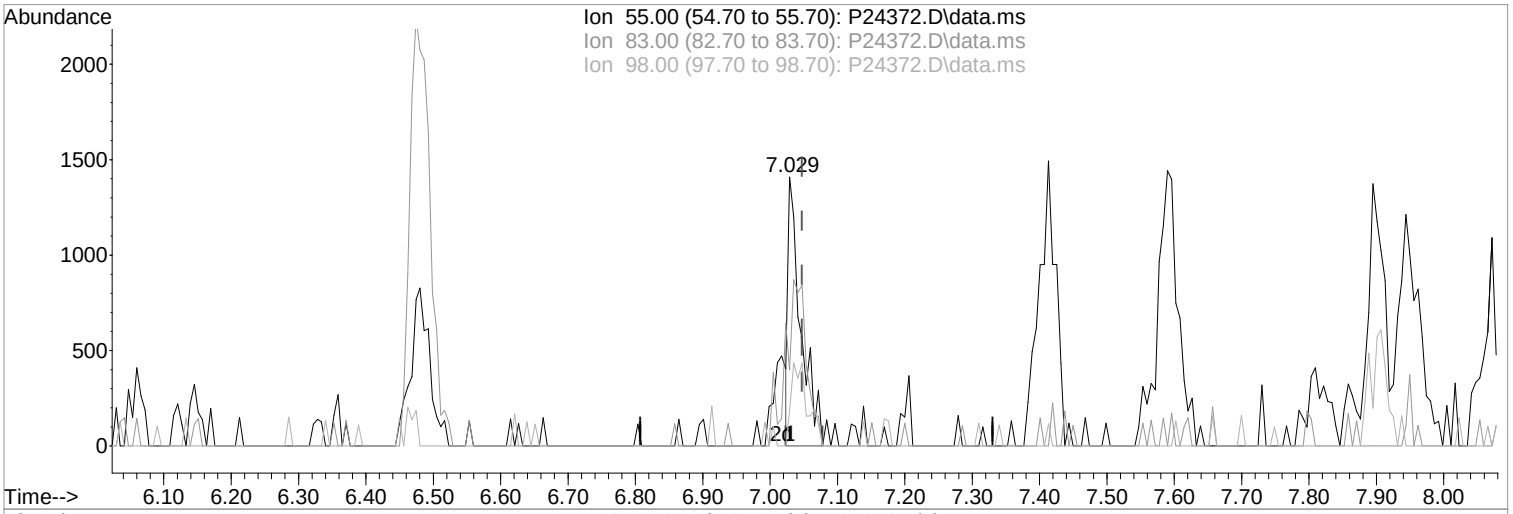
Split Peak

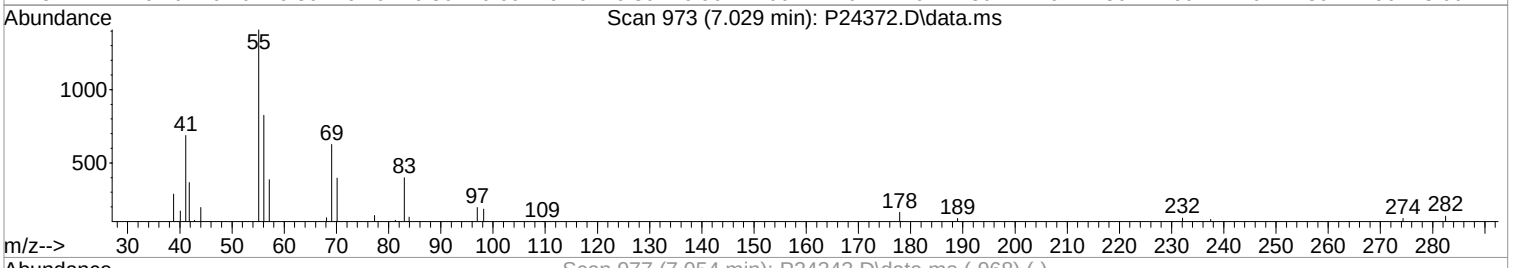
02/22/19

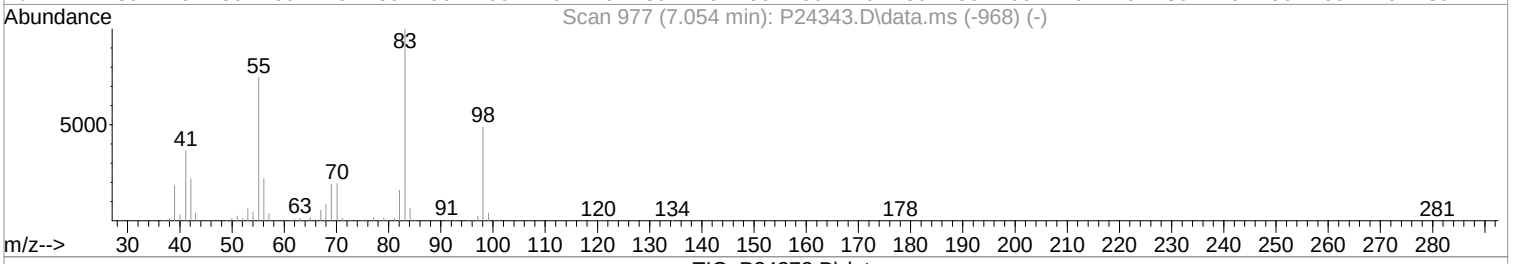
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 21 17:12:45 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24372.D\data.ms

(55) Methylcyclohexane (P)

7.029min (-0.018) 0.41 ppb

response 1857

Ion	Exp%	Act%
55.00	100	100
83.00	133.10	28.39#
98.00	65.00	13.13#
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 22 12:41:21 2019 high NT's
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

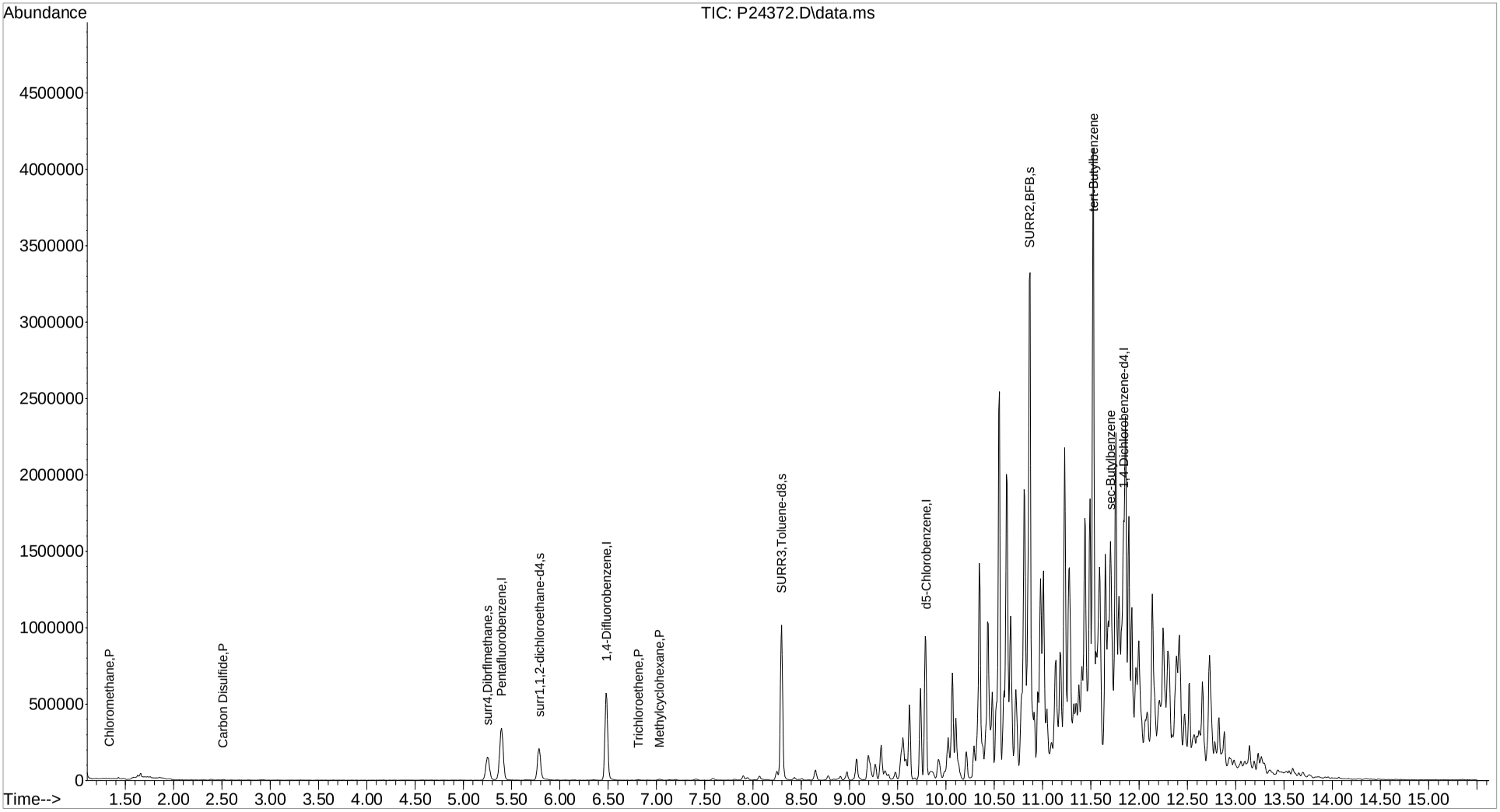
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.395	168	319967	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.480	114	509123	50.00	ppb		0.00
71) d5-Chlorobenzene	9.791	117	445563	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	226557	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.249	113	132685	47.43	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 94.86%				
48) surr1,1,2-dichloroetha...	5.785	65	182246	51.35	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.70%				
65) SURR3,Toluene-d8	8.297	98	653487	49.24	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.48%				
70) SURR2,BFB	10.864	95	245365	51.62	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 103.24%				
Target Compounds							Qvalue
3) Chloromethane	1.329	50	1441	0.28	ppb		97
18) Carbon Disulfide	2.506	76	2962	0.33	ppb		90
54) Trichloroethene	6.810	130	2177	0.61	ppb	#	76
55) Methylcyclohexane	7.029	55	2496m	0.56	ppb		
100) tert-Butylbenzene	11.522	119	3342	0.31	ppb		96
103) sec-Butylbenzene	11.705	105	11467	0.74	ppb		93

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

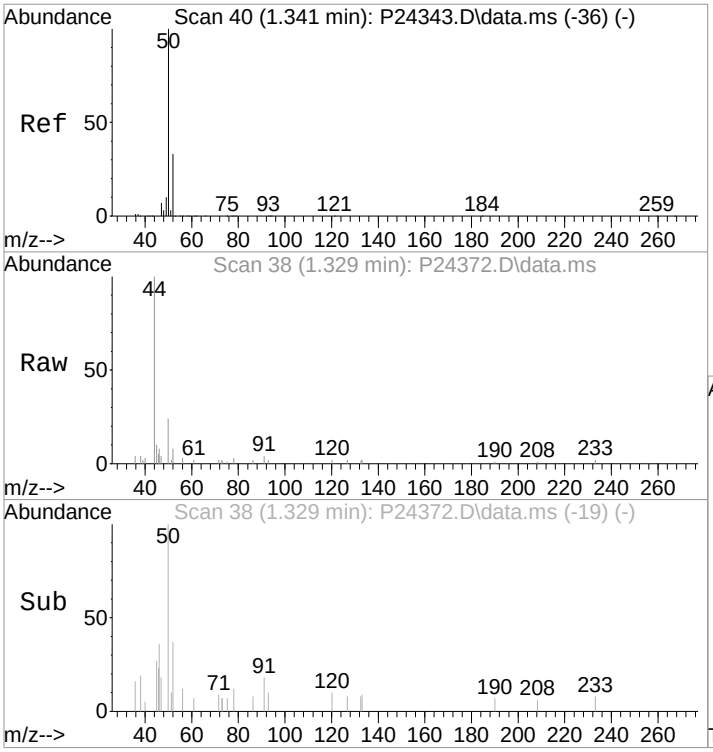
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 22 12:41:21 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



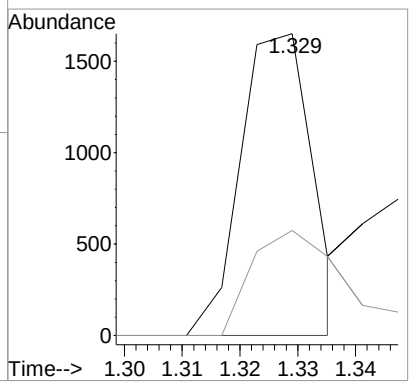
1st 02/22/19

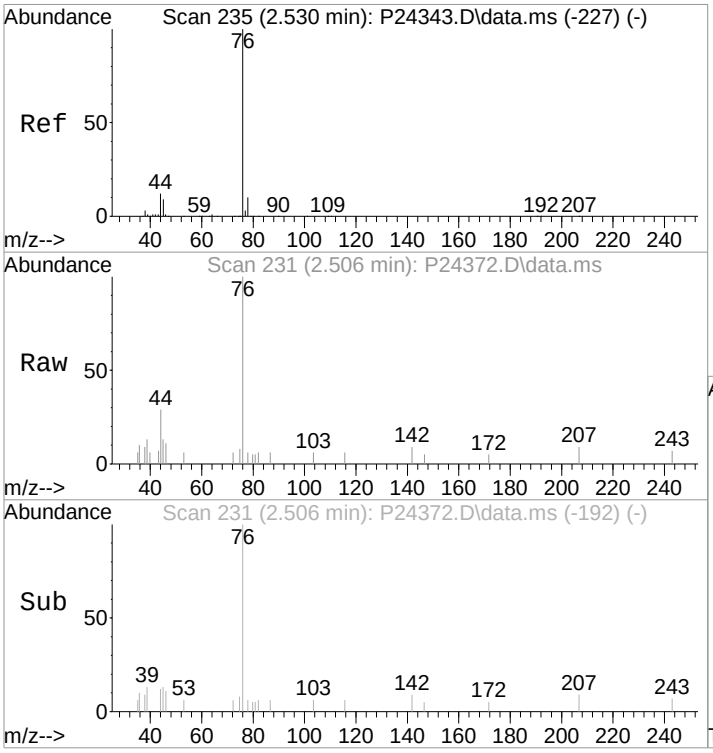


#3
Chloromethane
Concen: 0.28 ppb
RT: 1.329 min Scan# 38
Delta R.T. 0.000 min
Lab File: P24372.D
Acq: 21 Feb 2019 4:57 pm

Tgt Ion: 50 Resp: 1441

Ion	Ratio	Lower	Upper
50	100		
52	34.8	13.0	53.0

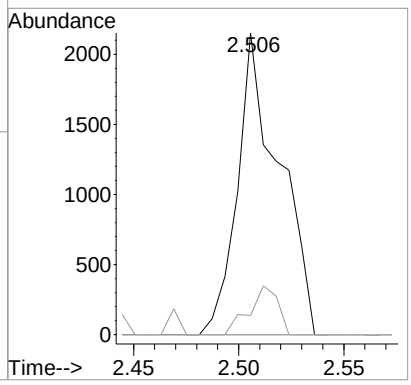


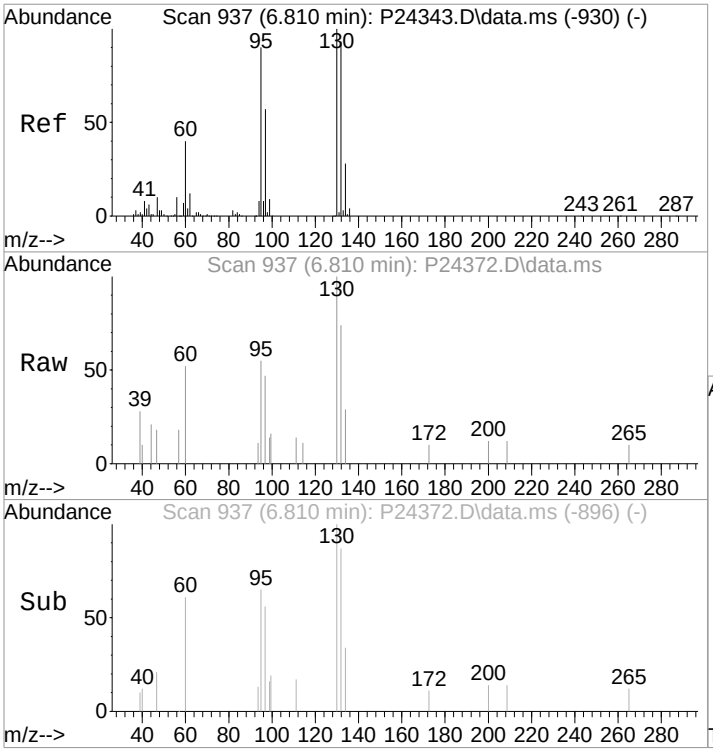


#18
Carbon Disulfide
Concen: 0.33 ppb
RT: 2.506 min Scan# 231
Delta R.T. -0.018 min
Lab File: P24372.D
Acq: 21 Feb 2019 4:57 pm

Tgt Ion: 76 Resp: 2962

Ion	Ratio	Lower	Upper
76	100		
78	6.4	0.0	30.1
77	0.0	0.0	22.9

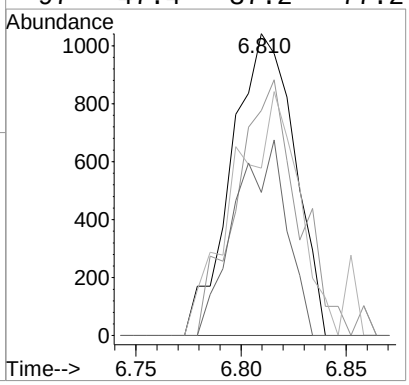


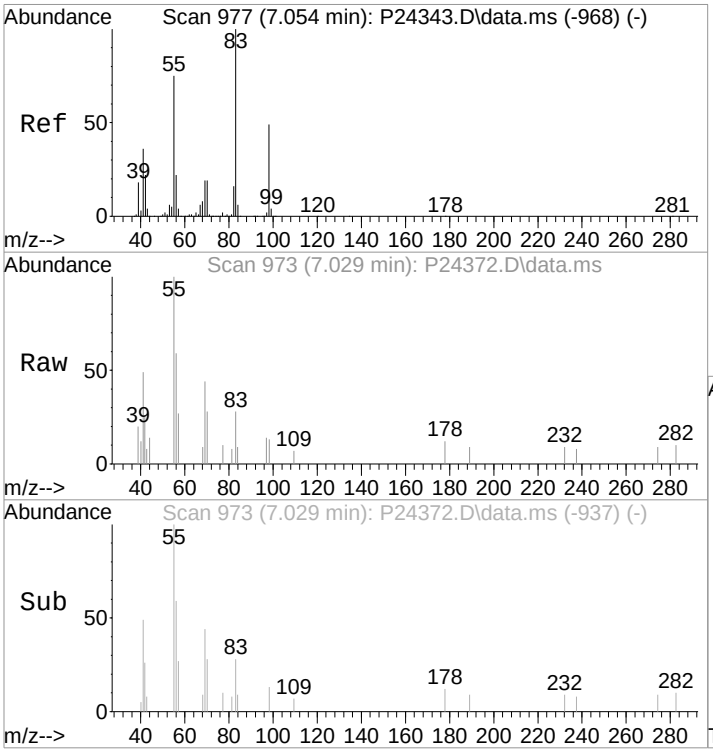


#54
Trichloroethene
Concen: 0.61 ppb
RT: 6.810 min Scan# 937
Delta R.T. 0.000 min
Lab File: P24372.D
Acq: 21 Feb 2019 4:57 pm

Tgt Ion:130 Resp: 2177

Ion	Ratio	Lower	Upper
130	100		
132	74.5	72.6	112.6
95	55.5	69.8	109.8#
97	47.4	37.2	77.2

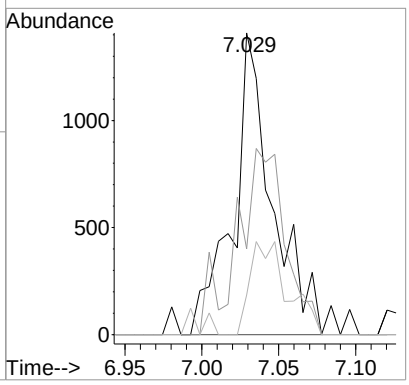


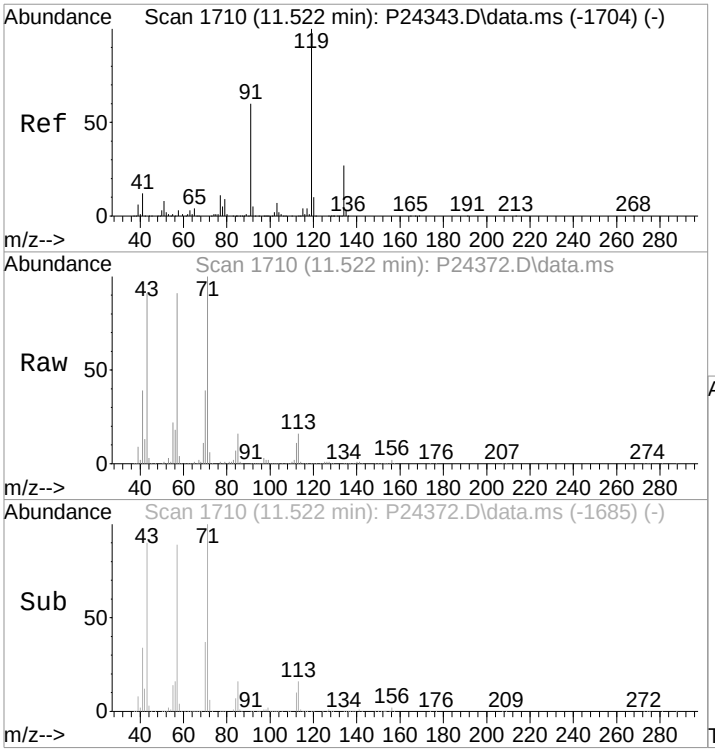


#55
Methylcyclohexane
Concen: 0.56 ppb m
RT: 7.029 min Scan# 973
Delta R.T. -0.018 min
Lab File: P24372.D
Acq: 21 Feb 2019 4:57 pm

Tgt Ion: 55 Resp: 2496

Ion	Ratio	Lower	Upper
55	100		
83	28.4	113.1	153.1#
98	13.1	45.0	85.0#

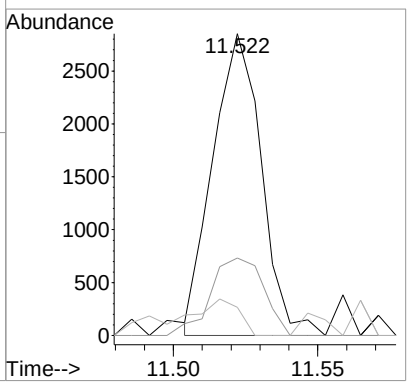


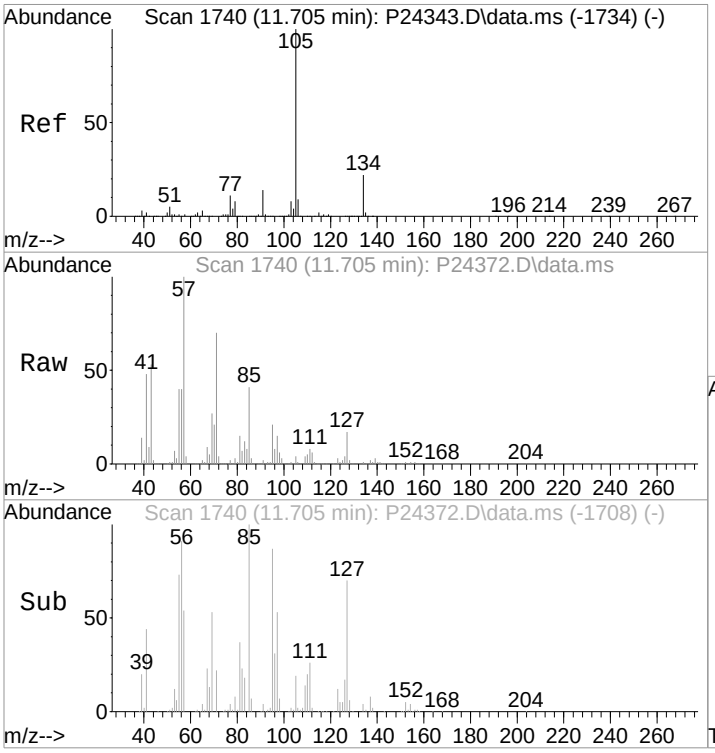


#100
tert-Butylbenzene
Concen: 0.31 ppb
RT: 11.522 min Scan# 1710
Delta R.T. 0.000 min
Lab File: P24372.D
Acq: 21 Feb 2019 4:57 pm

Tgt Ion:119 Resp: 3342

Ion	Ratio	Lower	Upper
119	100		
134	25.6	7.0	47.0
103	9.3	0.0	26.6

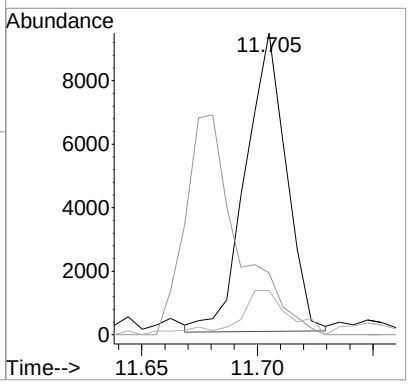




#103
sec-Butylbenzene
Concen: 0.74 ppb
RT: 11.705 min Scan# 1740
Delta R.T. 0.000 min
Lab File: P24372.D
Acq: 21 Feb 2019 4:57 pm

Tgt Ion:105 Resp: 11467

Ion	Ratio	Lower	Upper
105	100		
134	20.5	1.8	41.8
103	14.7	0.0	27.9



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24372.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.249	671	681	691	rBV2	151493	420041	7.26%	0.432%
2	5.395	694	705	715	rVB	337162	872200	15.08%	0.898%
3	5.785	758	769	781	rBV2	207004	516466	8.93%	0.532%
4	6.480	872	883	899	rBV	570574	1170786	20.25%	1.205%
5	8.248	1166	1173	1175	rBV2	59032	94332	1.63%	0.097%
6	8.297	1175	1181	1192	rVB	1013559	1710263	29.58%	1.760%
7	8.651	1231	1239	1245	rBV	66777	114810	1.99%	0.118%
8	8.974	1286	1292	1298	rVB	55379	83452	1.44%	0.086%
9	9.071	1298	1308	1319	rBV	139257	248425	4.30%	0.256%
10	9.193	1323	1328	1336	rBV2	158152	363546	6.29%	0.374%
11	9.267	1336	1340	1345	rVB2	95157	148203	2.56%	0.153%
12	9.327	1345	1350	1354	rBV	219931	340094	5.88%	0.350%
13	9.474	1367	1374	1378	rBV2	46429	71183	1.23%	0.073%
14	9.553	1378	1387	1390	rVV2	272395	611602	10.58%	0.629%
15	9.584	1390	1392	1395	rVV2	133126	204997	3.55%	0.211%
16	9.620	1395	1398	1404	rVB	488151	671994	11.62%	0.692%
17	9.736	1411	1417	1421	rBV	598249	829400	14.34%	0.854%
18	9.785	1421	1425	1431	rVV	932330	1369949	23.69%	1.410%
19	9.846	1431	1435	1442	rVB7	43428	125876	2.18%	0.130%
20	9.925	1442	1448	1454	rBV3	122422	240837	4.17%	0.248%
21	10.022	1459	1464	1467	rVV	249659	424086	7.33%	0.436%
22	10.065	1467	1471	1474	rVV	668244	964669	16.68%	0.993%
23	10.102	1474	1477	1489	rVB2	400949	716708	12.40%	0.738%
24	10.211	1489	1495	1501	rBV2	181094	289205	5.00%	0.298%
25	10.291	1503	1508	1511	rBV2	207440	323881	5.60%	0.333%
26	10.346	1511	1517	1525	rVV2	1360127	2396803	41.45%	2.467%
27	10.431	1525	1531	1536	rVV	967775	1837730	31.78%	1.891%
28	10.480	1536	1539	1542	rVV	504987	648574	11.22%	0.668%
29	10.553	1542	1551	1555	rVV	2464528	3878278	67.07%	3.992%
30	10.602	1555	1559	1560	rVV2	504867	677844	11.72%	0.698%
31	10.626	1560	1563	1567	rVV	1916448	2977252	51.49%	3.064%
32	10.669	1567	1570	1575	rVV	983554	1531729	26.49%	1.576%
33	10.724	1575	1579	1584	rVB2	497328	808836	13.99%	0.832%
34	10.809	1589	1593	1597	rVV2	1794450	3089549	53.43%	3.180%
35	10.870	1597	1603	1609	rVV3	3207860	5782162	100.00%	5.951%
36	10.949	1613	1616	1618	rVV	457201	600332	10.38%	0.618%
37	10.980	1618	1621	1623	rVV	1196172	1633781	28.26%	1.682%
38	11.010	1623	1626	1630	rVV3	1242501	1841964	31.86%	1.896%
39	11.047	1630	1632	1636	rVV2	335010	400476	6.93%	0.412%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

40	11.089	1636	1639	1642	rVV2	111740	179368	3.10%	0.185%
41	11.138	1642	1647	1651	rVV4	645667	1262898	21.84%	1.300%
42	11.181	1651	1654	1658	rVV3	695065	1174042	20.30%	1.208%
43	11.230	1658	1662	1666	rVV	2028333	2959716	51.19%	3.046%
44	11.278	1666	1670	1675	rVV3	1237153	2426083	41.96%	2.497%
45	11.327	1675	1678	1679	rVV2	342363	445159	7.70%	0.458%
46	11.345	1679	1681	1683	rVV2	342565	450263	7.79%	0.463%
47	11.376	1683	1686	1688	rVV	461702	660484	11.42%	0.680%
48	11.406	1688	1691	1693	rVV	578773	867091	15.00%	0.892%
49	11.437	1693	1696	1700	rVV4	1546744	2477296	42.84%	2.550%
50	11.492	1701	1705	1707	rVV	1669340	2310911	39.97%	2.378%
51	11.522	1707	1710	1714	rVV	3957075	5280884	91.33%	5.435%
52	11.589	1717	1721	1727	rVV	1209693	2343468	40.53%	2.412%
53	11.650	1727	1731	1734	rVV2	1290031	1907708	32.99%	1.963%
54	11.681	1734	1736	1737	rVV	851827	904213	15.64%	0.931%
55	11.705	1737	1740	1745	rVV3	1367983	2525818	43.68%	2.600%
56	11.760	1745	1749	1752	rVV	2074579	3084114	53.34%	3.174%
57	11.790	1752	1754	1757	rVV3	1001180	1484124	25.67%	1.527%
58	11.857	1757	1765	1768	rVV3	2171398	5235812	90.55%	5.389%
59	11.894	1768	1771	1774	rVV	1514938	1973121	34.12%	2.031%
60	11.925	1774	1776	1780	rVV2	914131	1142735	19.76%	1.176%
61	11.967	1780	1783	1785	rVV3	516851	773586	13.38%	0.796%
62	11.998	1785	1788	1795	rVV2	687881	1253526	21.68%	1.290%
63	12.083	1795	1802	1806	rVV7	215164	500852	8.66%	0.515%
64	12.138	1806	1811	1818	rVV3	980723	1728071	29.89%	1.779%
65	12.211	1818	1823	1825	rVV4	280340	551233	9.53%	0.567%
66	12.248	1826	1829	1834	rVV	750033	1319889	22.83%	1.358%
67	12.296	1834	1837	1843	rVV4	592379	1241948	21.48%	1.278%
68	12.388	1846	1852	1854	rVV4	553284	1034070	17.88%	1.064%
69	12.418	1854	1857	1862	rVB2	722164	1180761	20.42%	1.215%
70	12.473	1862	1866	1870	rVB4	212520	275058	4.76%	0.283%
71	12.522	1870	1874	1877	rVB	422216	499125	8.63%	0.514%
72	12.571	1877	1882	1885	rBV4	86405	154830	2.68%	0.159%
73	12.656	1893	1896	1902	rVV4	572351	934678	16.16%	0.962%
74	12.729	1902	1908	1915	rVV4	745064	1658140	28.68%	1.707%
75	12.784	1915	1917	1920	rVV3	178163	254285	4.40%	0.262%
76	12.827	1920	1924	1927	rVV2	334043	521260	9.01%	0.536%
77	12.882	1930	1933	1937	rVV2	240518	340515	5.89%	0.350%
78	12.937	1938	1942	1947	rVV6	71351	168120	2.91%	0.173%
79	12.985	1947	1950	1955	rVB6	52179	80152	1.39%	0.082%
80	13.144	1972	1976	1980	rVB	146780	198005	3.42%	0.204%
81	13.193	1981	1984	1987	rVB4	55954	64732	1.12%	0.067%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

82	13.235	1987	1991	1993	rBV	106957	139591	2.41%	0.144%
83	13.351	2006	2010	2018	rVB10	30765	74856	1.29%	0.077%
84	13.589	2046	2049	2057	rVB3	48722	87027	1.51%	0.090%

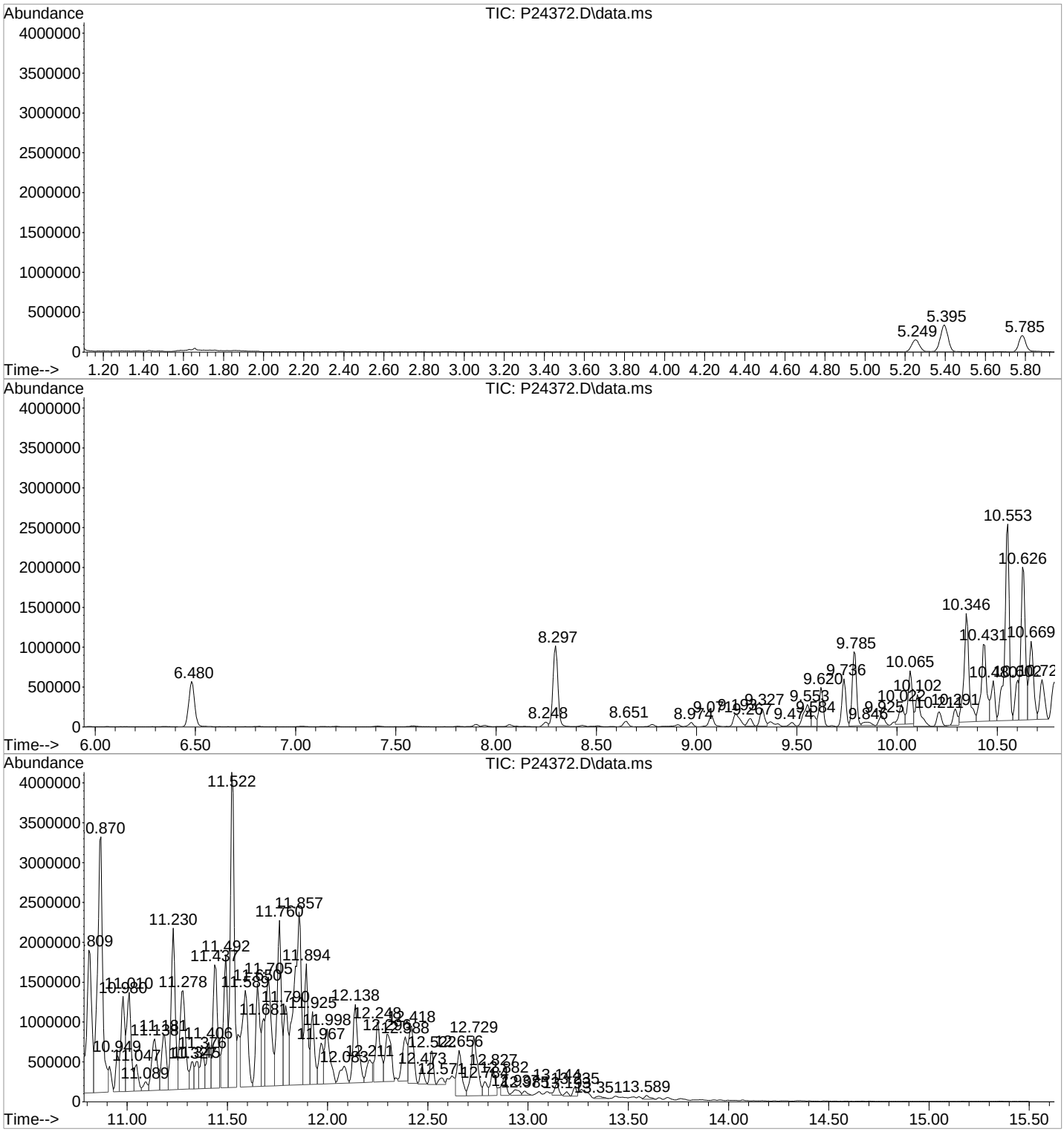
Sum of corrected areas: 97161933

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

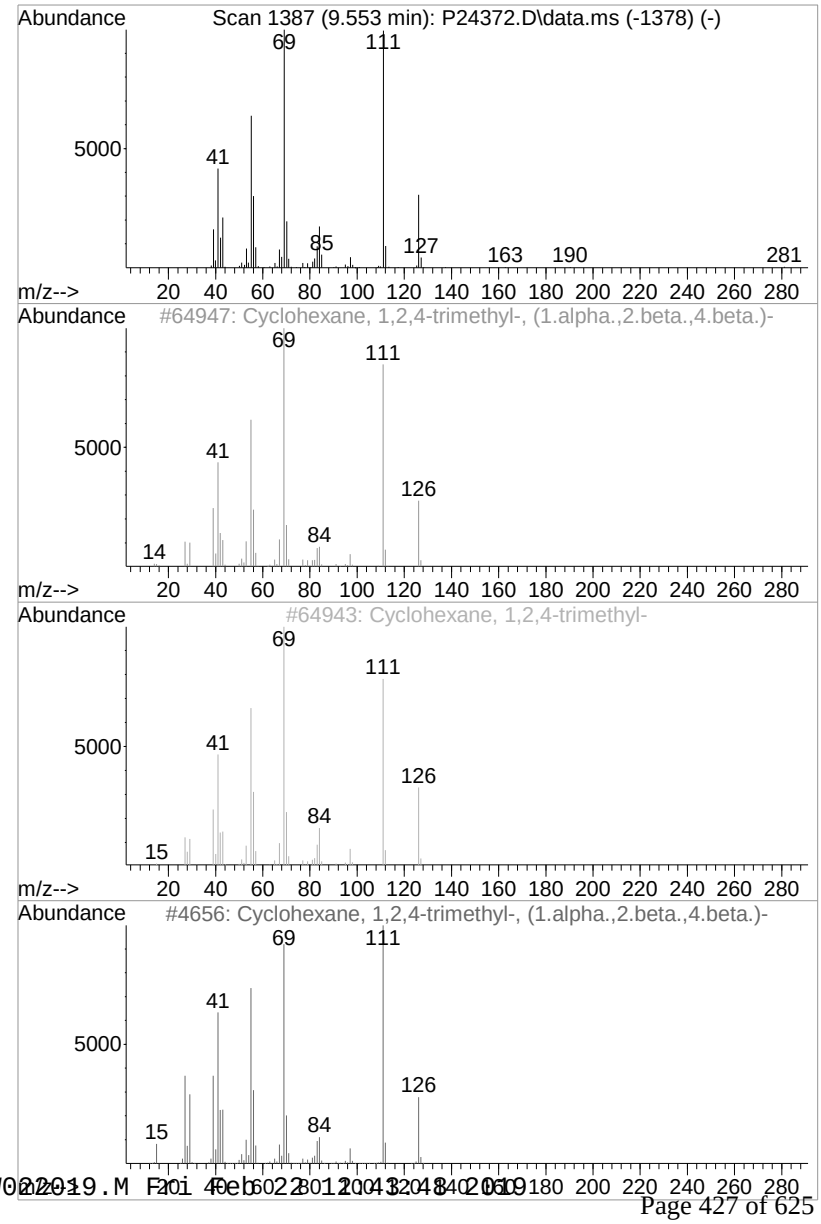
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

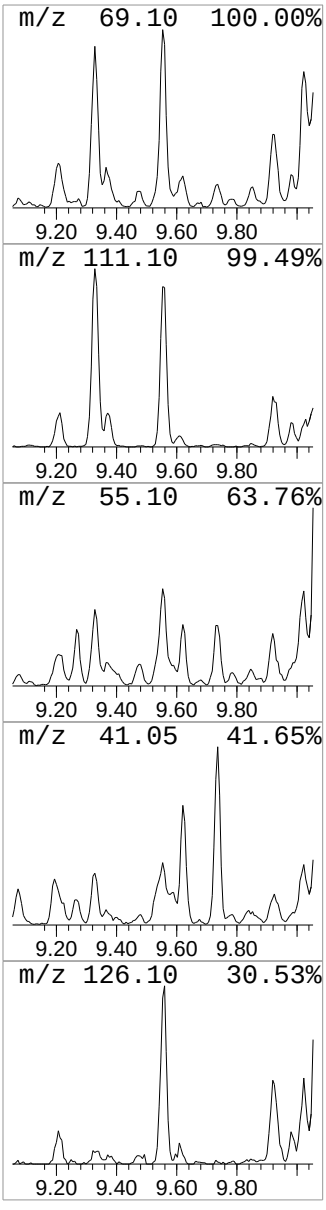
****

Peak Number 1 Cyclohexane, 1,2,4-trimethy... Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.553	22.32 ppb	611602	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,2,4-trimethyl-, (...	126	C9H18	007667-60-9	94
2	Cyclohexane, 1,2,4-trimethyl-	126	C9H18	002234-75-5	94
3	Cyclohexane, 1,2,4-trimethyl-, (...	126	C9H18	007667-60-9	91
4	Cyclohexane, 1,3,5-trimethyl-	126	C9H18	001839-63-0	87
5	Cyclohexane, 1,3,5-trimethyl-, (...	126	C9H18	001795-26-2	87





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

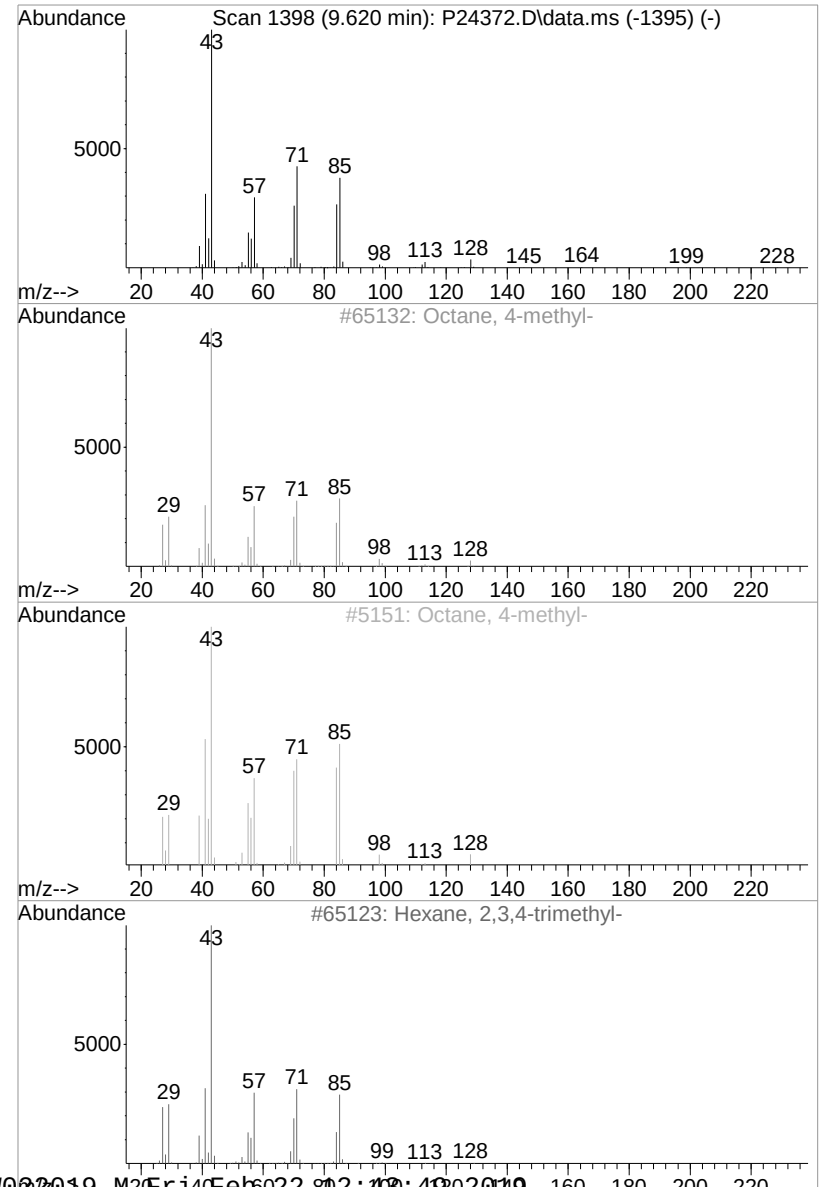
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

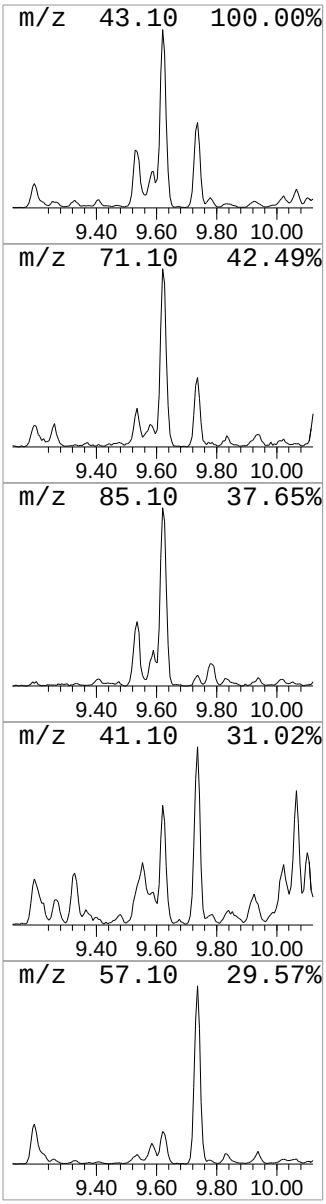
****

Peak Number 2 unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.620	24.53 ppb	671994	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 4-methyl-	128	C9H20	002216-34-4	81
2	Octane, 4-methyl-	128	C9H20	002216-34-4	76
3	Hexane, 2,3,4-trimethyl-	128	C9H20	000921-47-1	72
4	Hexane, 2,3,4-trimethyl-	128	C9H20	000921-47-1	64
5	Octane, 4-methyl-	128	C9H20	002216-34-4	64





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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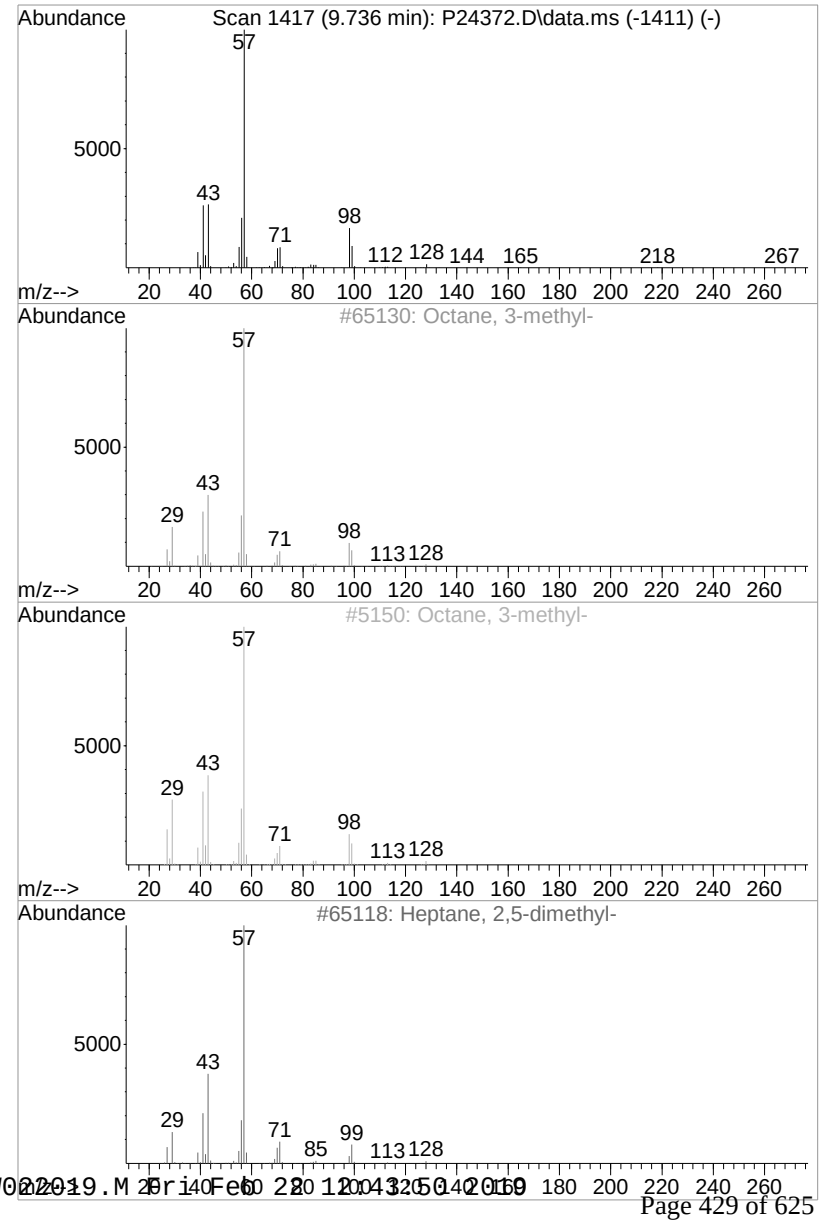
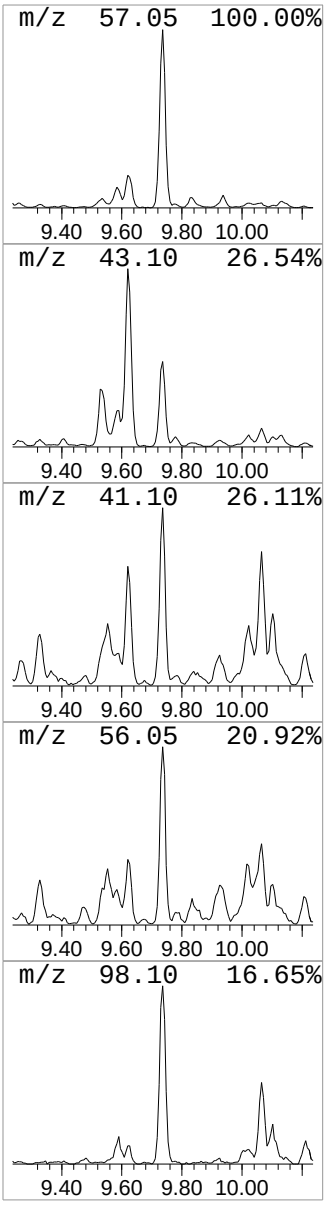
Peak Number 3 Octane, 3-methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.736	30.27 ppb	829400	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	91
2	Octane, 3-methyl-	128	C9H20	002216-33-3	83
3	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	80
4	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	72
5	Decane, 5-methyl-	156	C11H24	013151-35-4	64





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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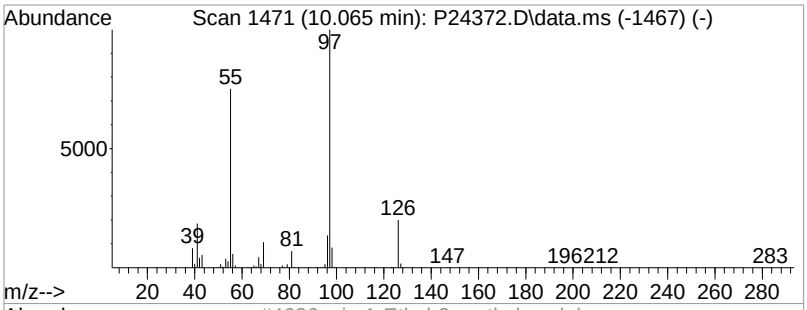
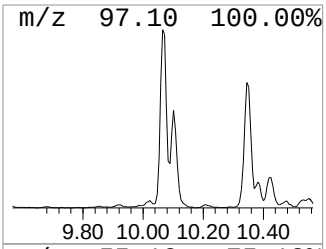
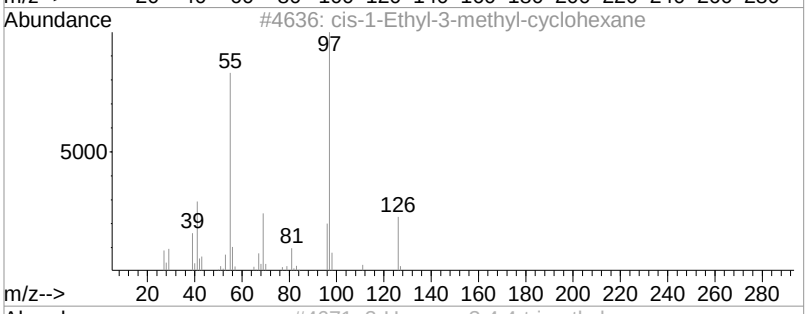
Peak Number 4 unknown Concentration Rank 7

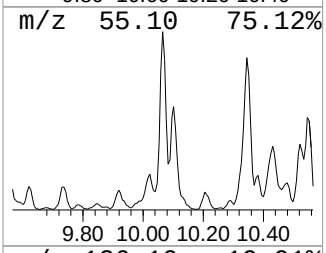
R.T.	EstConc	Area	Relative to ISTD	R.T.
10.065	35.21 ppb	964669	d5-Chlorobenzene	9.791

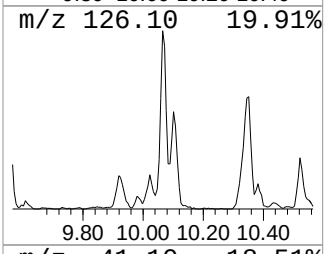
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	cis-1-Ethyl-3-methyl-cyclohexane	126	C9H18	019489-10-2	78
2	2-Hexene, 3,4,4-trimethyl-	126	C9H18	053941-19-8	72
3	Cyclohexane, 1,1-dimethyl-	112	C8H16	000590-66-9	64
4	Furan, 2,3-dihydro-4-(1-methylpr...	126	C8H14O	034379-54-9	64
5	4-Octen-3-one	126	C8H14O	014129-48-7	64

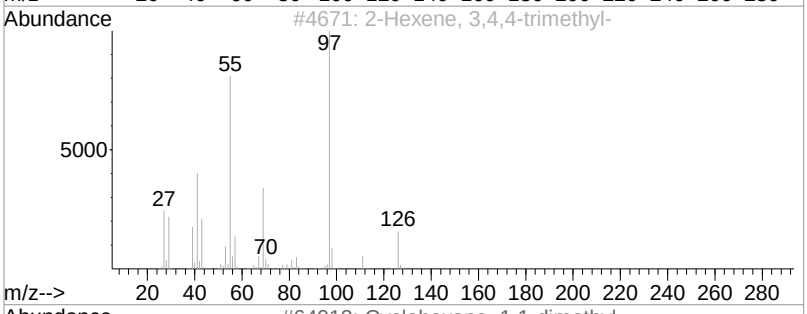


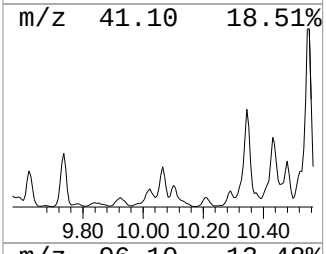


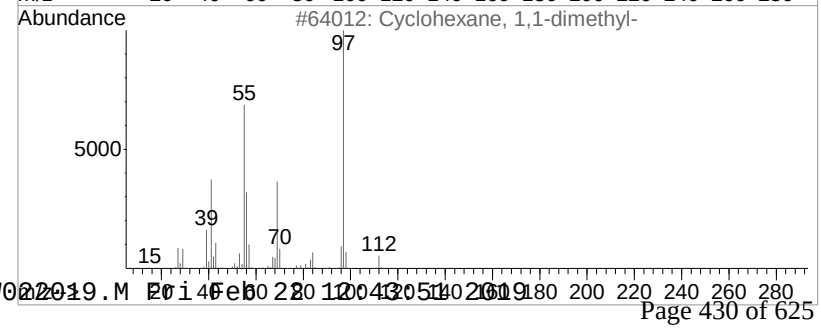


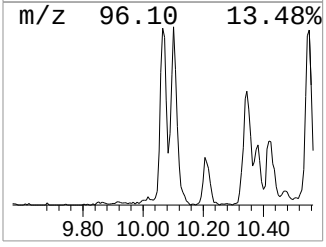












Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

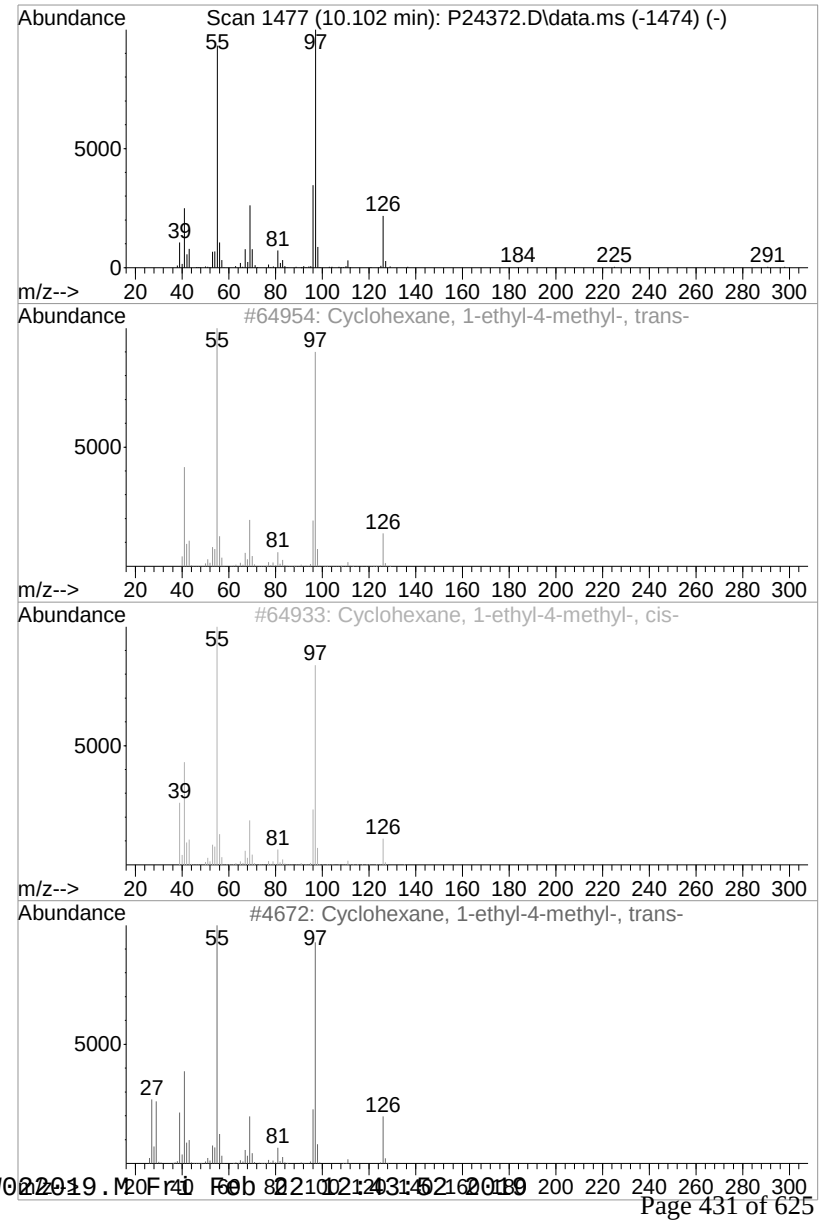
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

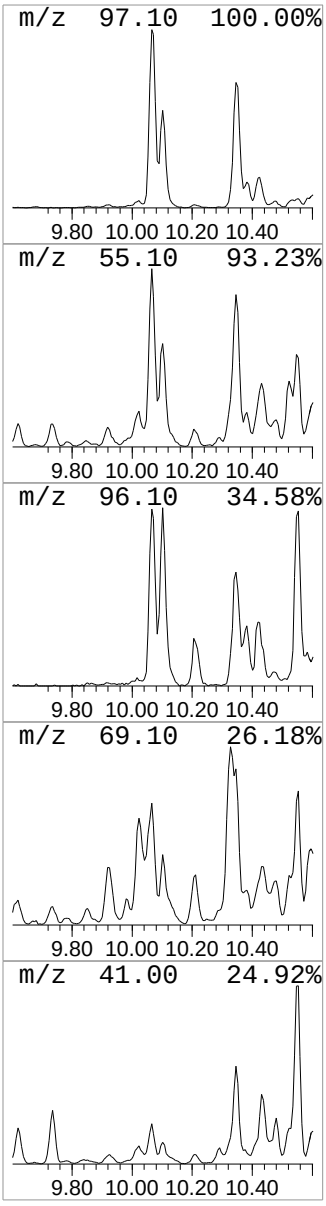
****

Peak Number 5 Cyclohexane, 1-ethyl-4-meth... Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.102	26.16 ppb	716708	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	91
2	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	004926-78-7	91
3	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	91
4	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	91
5	1-Ethyl-3-methylcyclohexane (c,t)	126	C9H18	003728-55-0	90





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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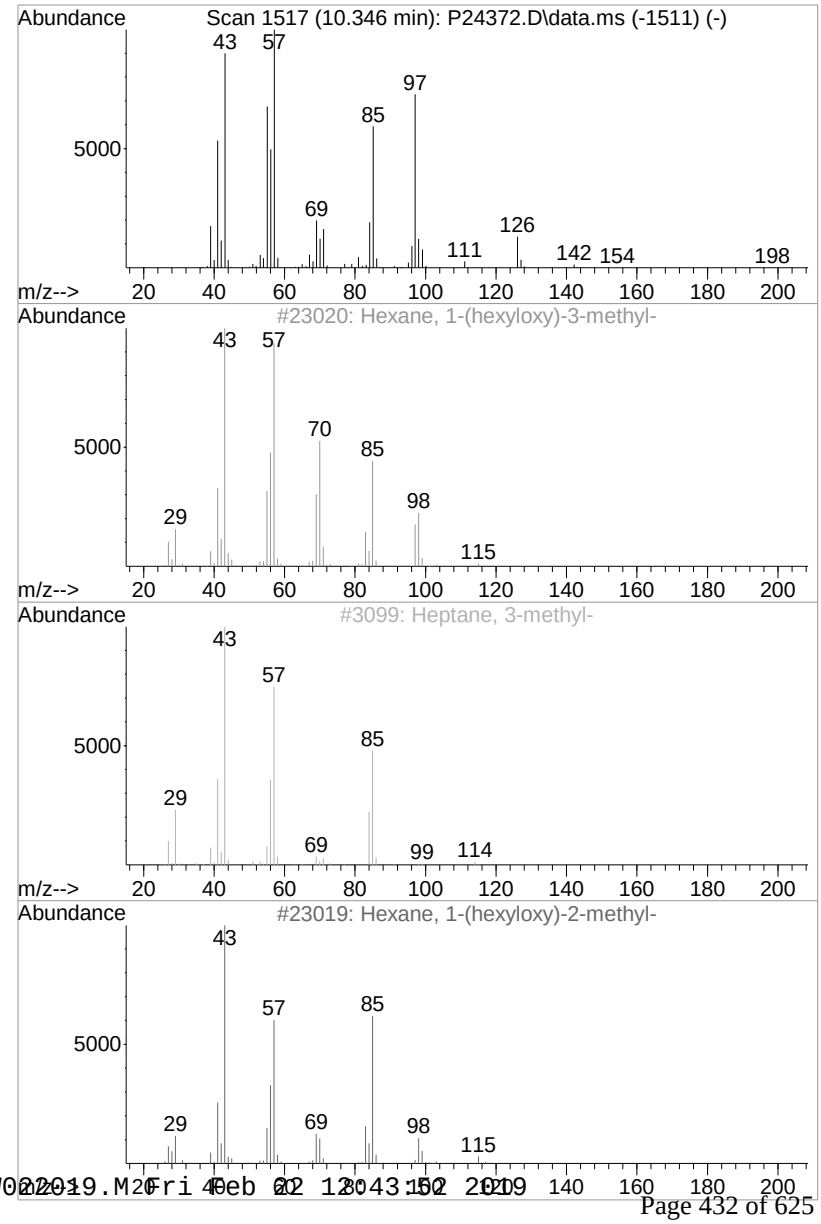
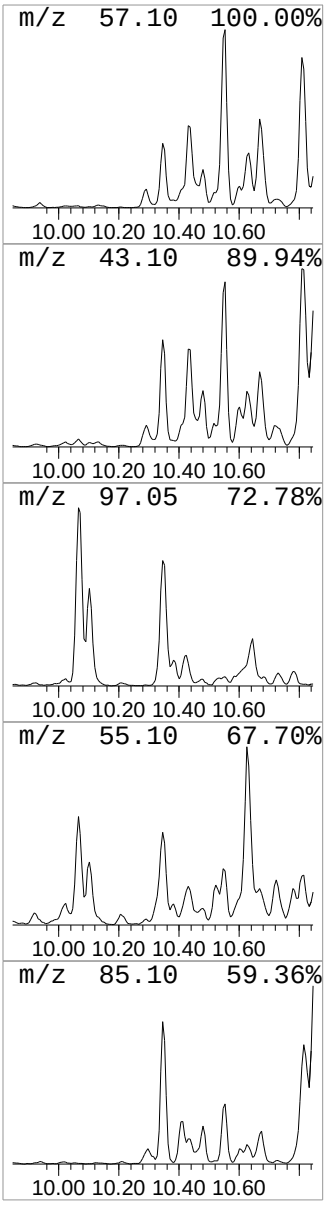
Peak Number 6 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.346	87.48 ppb	2396800	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane, 1-(hexyloxy)-3-methyl-	200	C13H28O	074421-18-4	50
2	Heptane, 3-methyl-	114	C8H18	000589-81-1	47
3	Hexane, 1-(hexyloxy)-2-methyl-	200	C13H28O	074421-17-3	46
4	Heptane, 2,4,6-trimethyl-	142	C10H22	002613-61-8	43
5	Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-78-8	38





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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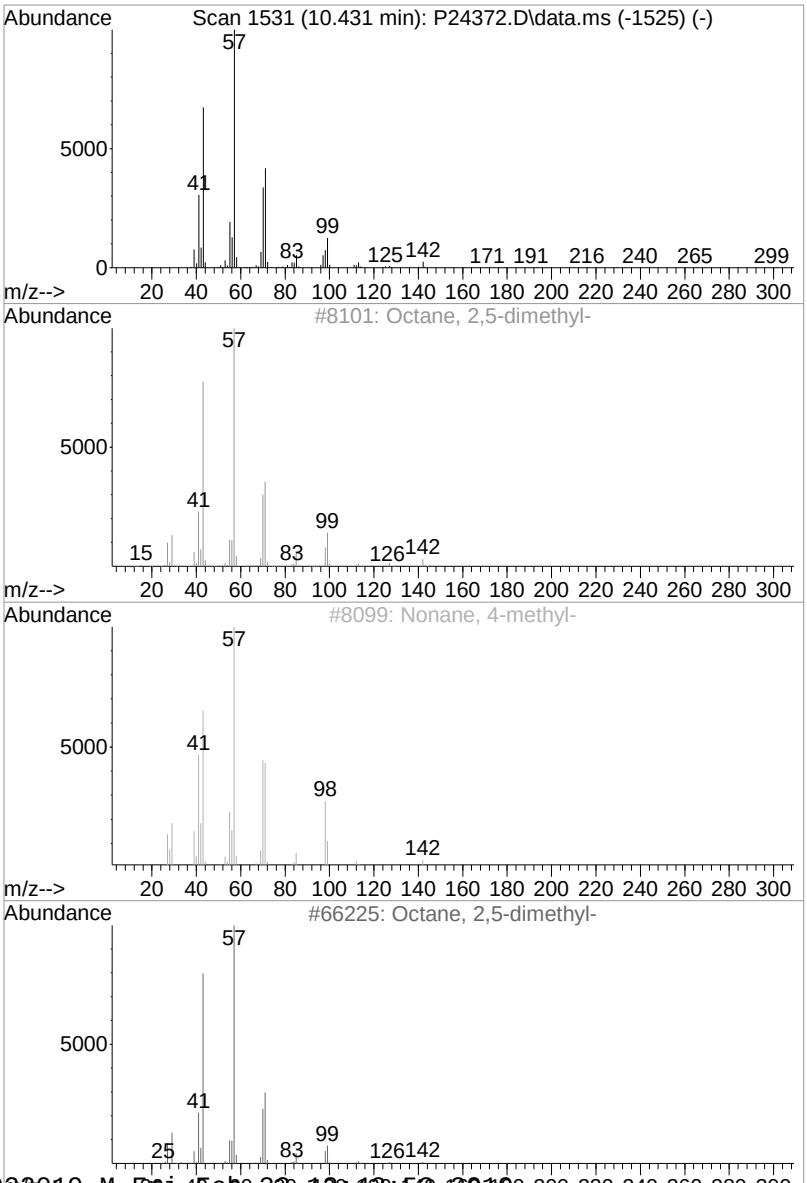
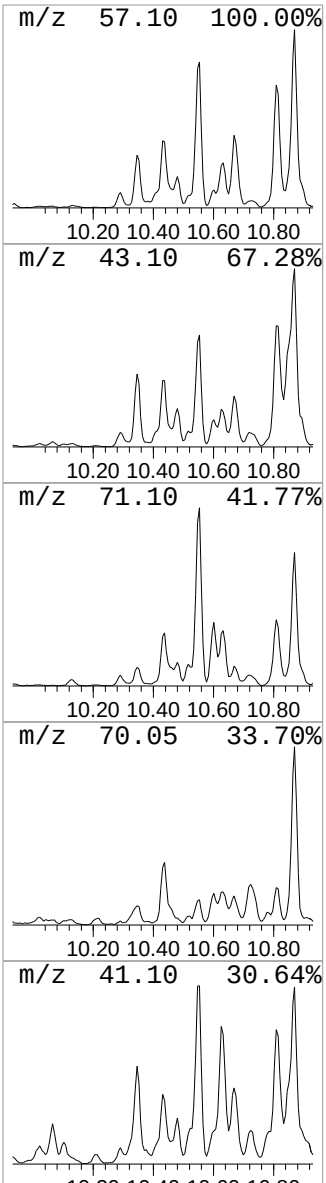
Peak Number 7 Octane, 2,5-dimethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.431	67.07 ppb	1837730	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,5-dimethyl-	142	C10H22	015869-89-3	93
2	Nonane, 4-methyl-	142	C10H22	017301-94-9	90
3	Octane, 2,5-dimethyl-	142	C10H22	015869-89-3	86
4	Pentane, 2,2,3,3-tetramethyl-	128	C9H20	007154-79-2	72
5	Pentane, 2,2,3,3-tetramethyl-	128	C9H20	007154-79-2	72





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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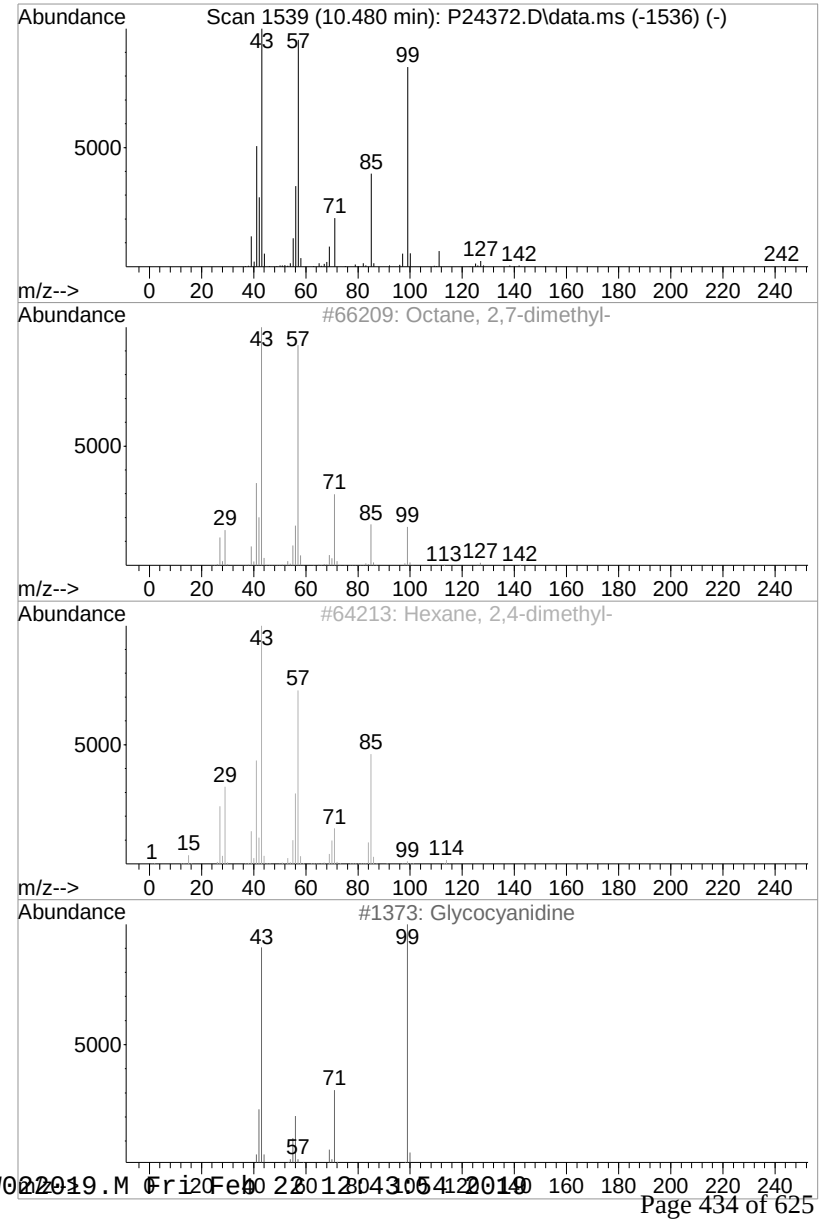
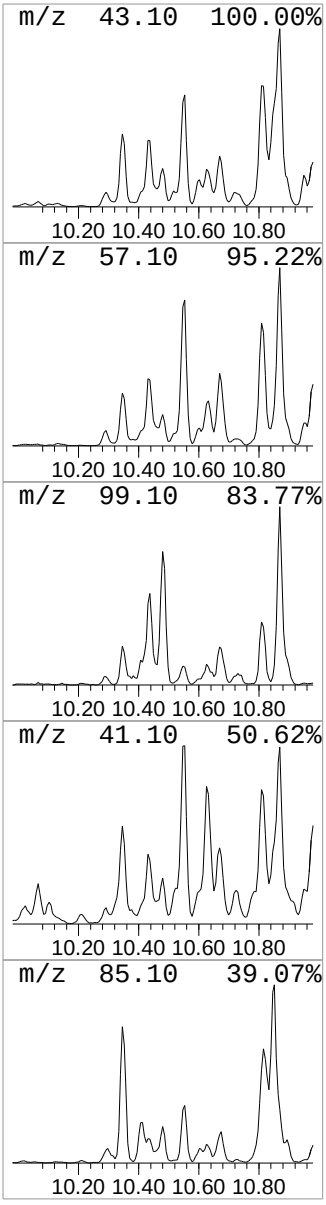
Peak Number 8 unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.480	23.67 ppb	648574	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,7-dimethyl-	142	C10H22	001072-16-8	45
2	Hexane, 2,4-dimethyl-	114	C8H18	000589-43-5	43
3	Glycocyanidine	99	C3H5N3O	000503-86-6	43
4	2(3H)-Furanone, 5-ethyldihydro-5...	128	C7H12O2	002865-82-9	40
5	Hexane, 2,4-dimethyl-	114	C8H18	000589-43-5	38





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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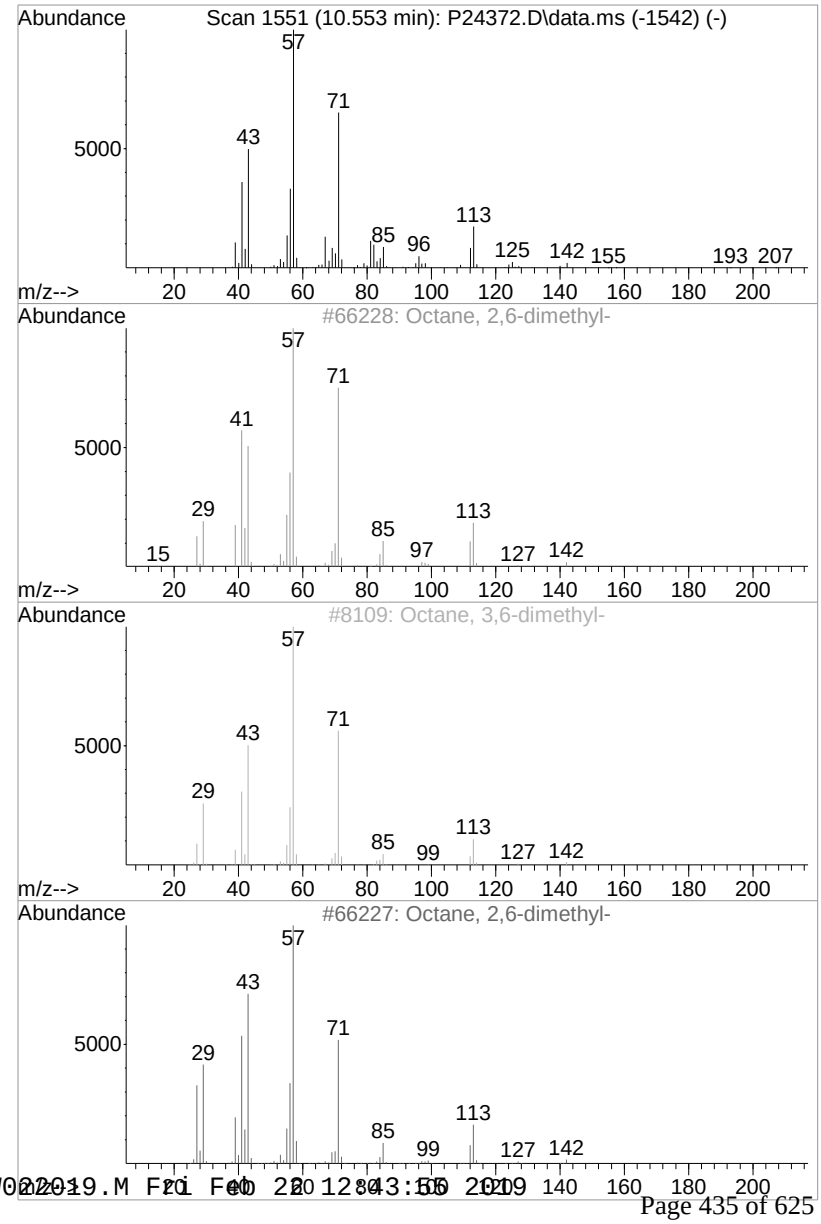
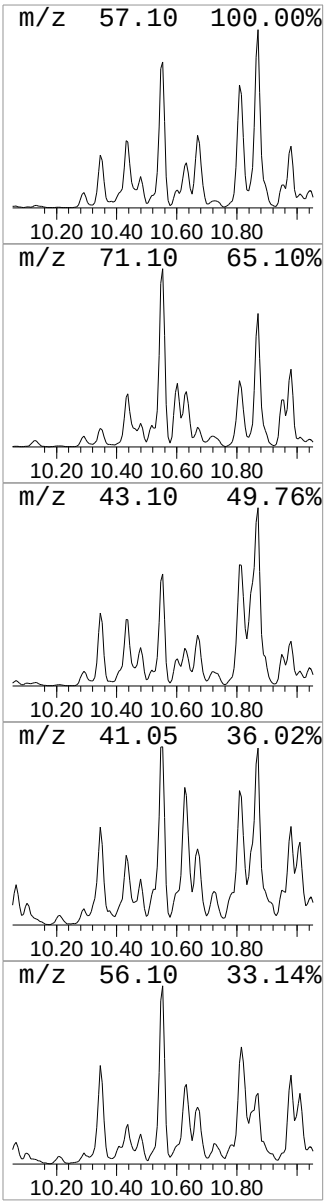
Peak Number 9 Octane, 2,6-dimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.553	141.55 ppb	3878280	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	87
2	Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	87
3	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	87
4	Nonane, 3-methyl-	142	C10H22	005911-04-6	74
5	Nonane, 3-methyl-	142	C10H22	005911-04-6	72





Library Search Compound Report

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Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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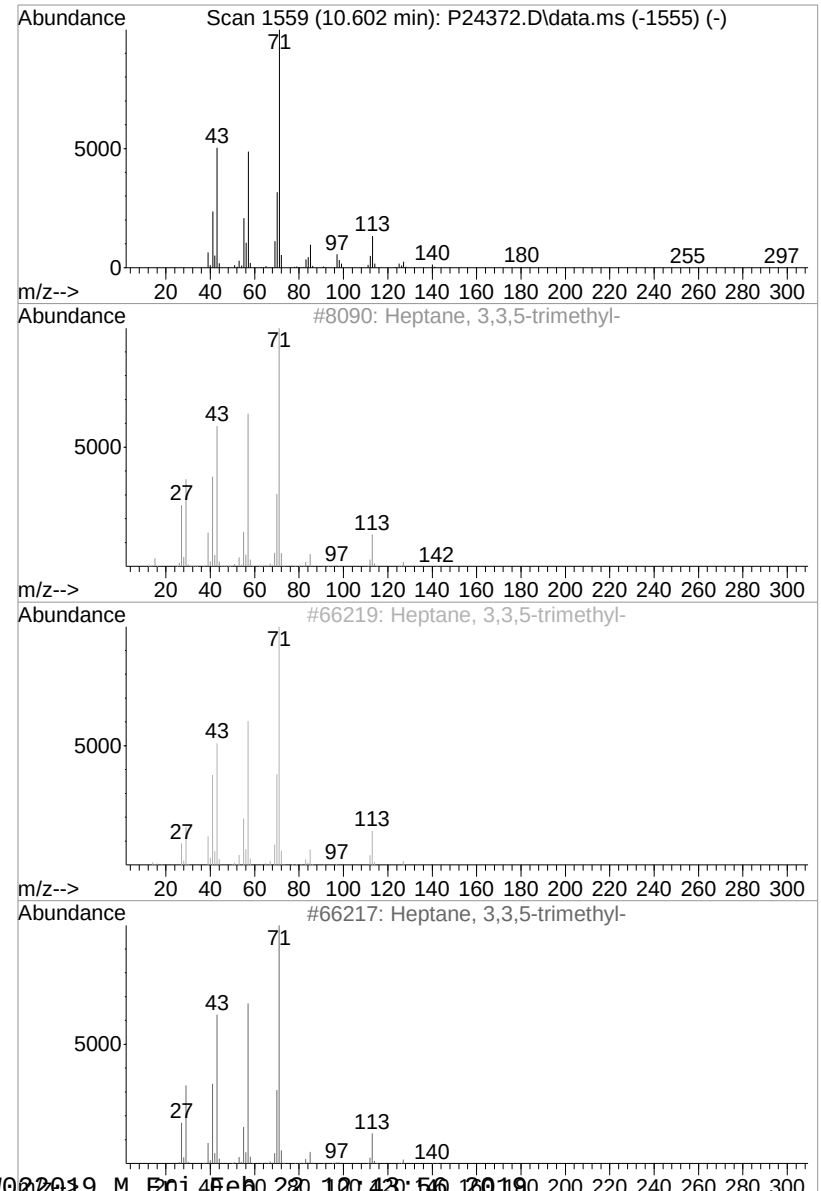
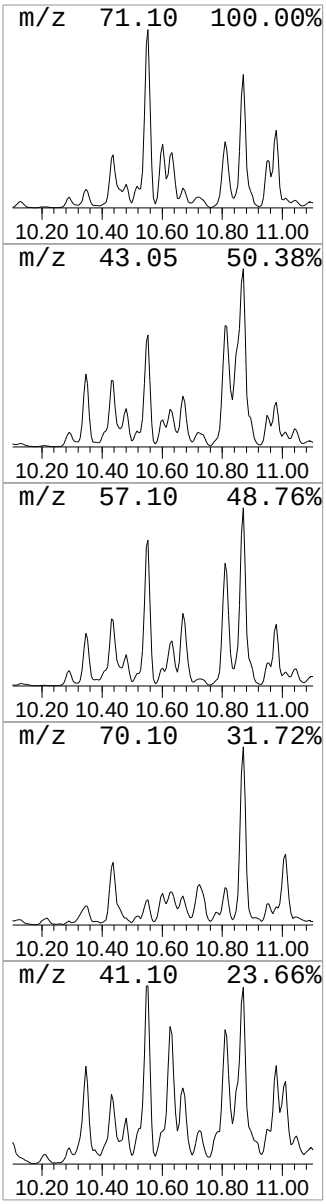
Peak Number 10 unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.602	24.74 ppb	677844	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 3,3,5-trimethyl-	142	C10H22	007154-80-5	78
2	Heptane, 3,3,5-trimethyl-	142	C10H22	007154-80-5	78
3	Heptane, 3,3,5-trimethyl-	142	C10H22	007154-80-5	78
4	Hexane, 3,3,4,4-tetramethyl-	142	C10H22	005171-84-6	72
5	Octane, 3,3-dimethyl-	142	C10H22	004110-44-5	72





Library Search Compound Report

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Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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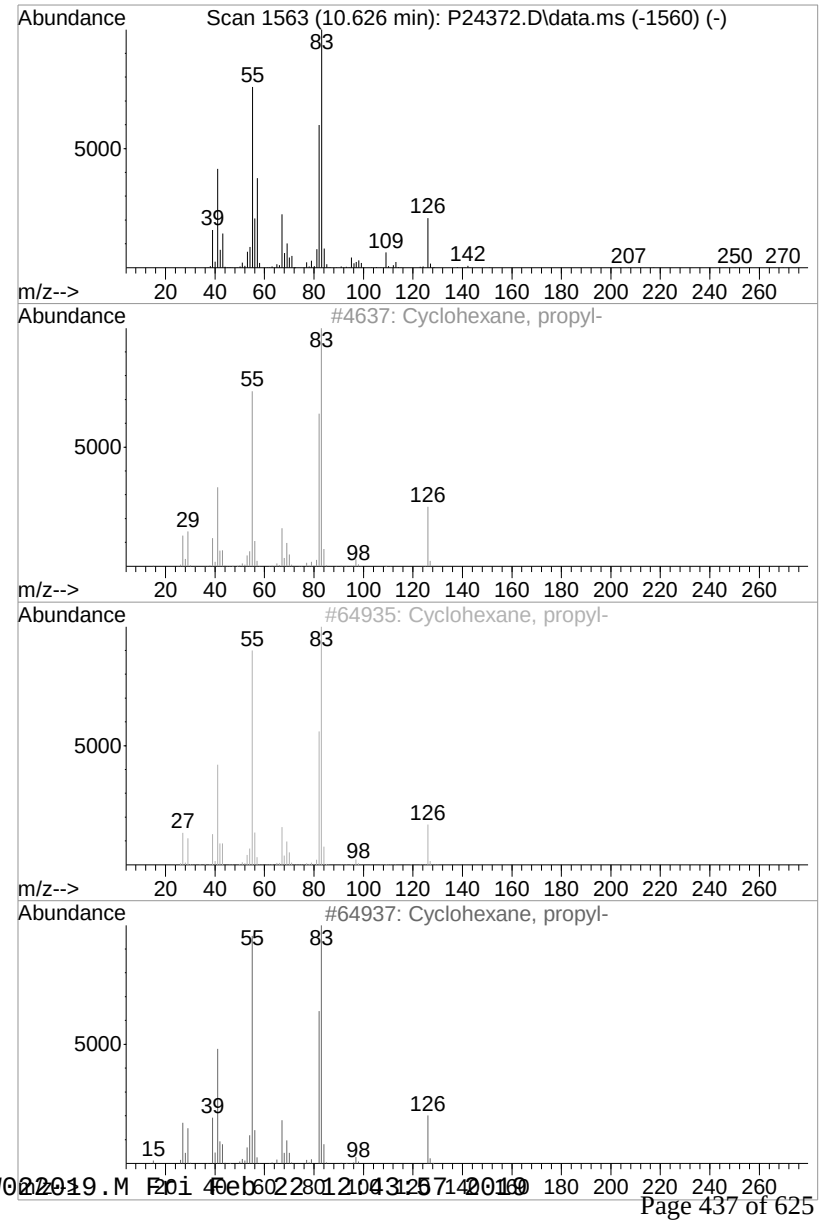
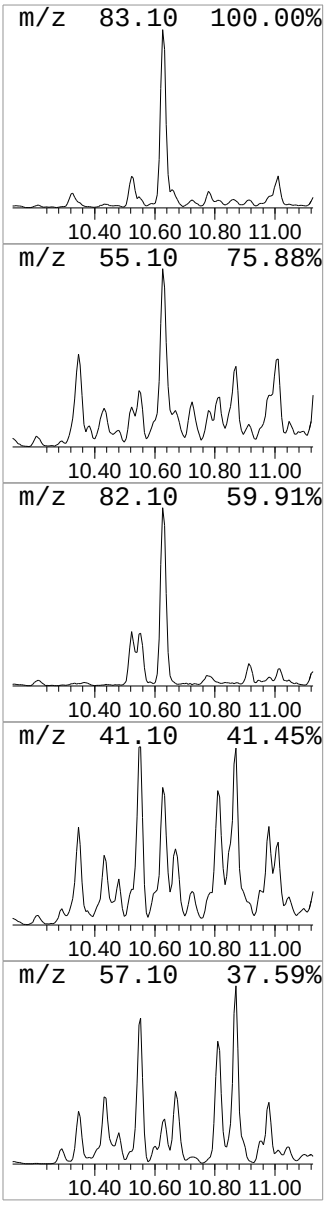
Peak Number 11 Cyclohexane, propyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.626	108.66 ppb	2977250	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
2	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
3	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
4	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
5	Cyclohexane, ethyl-	112	C8H16	001678-91-7	64





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

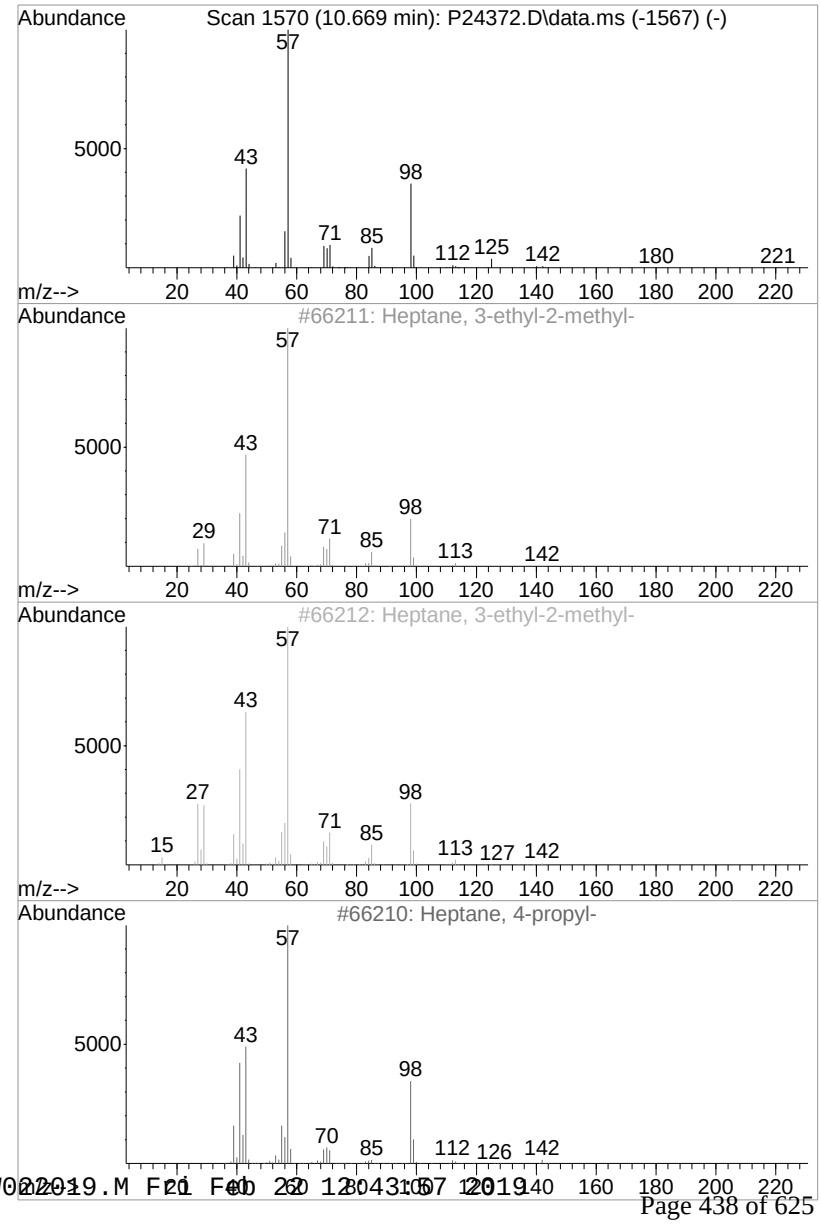
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

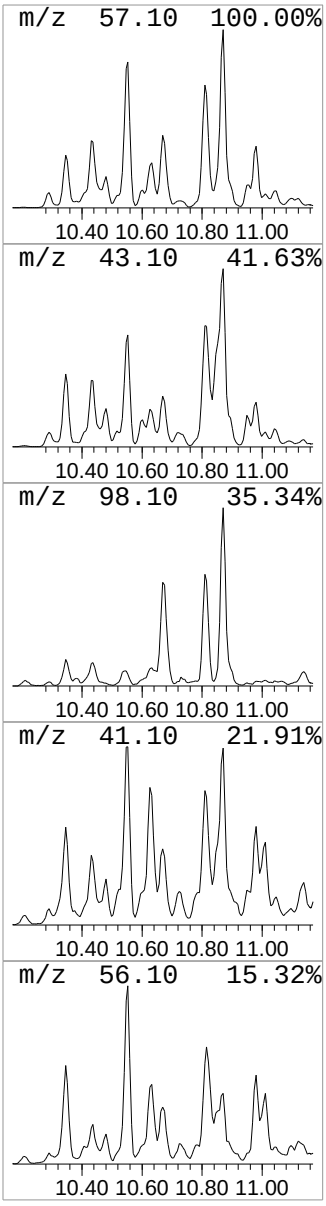
****

Peak Number 12 Heptane, 3-ethyl-2-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.669	55.90 ppb	1531730	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	86
2	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	80
3	Heptane, 4-propyl-	142	C10H22	003178-29-8	56
4	Undecane, 2,6-dimethyl-	184	C13H28	017301-23-4	53
5	Decane, 2,5-dimethyl-	170	C12H26	017312-50-4	50





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

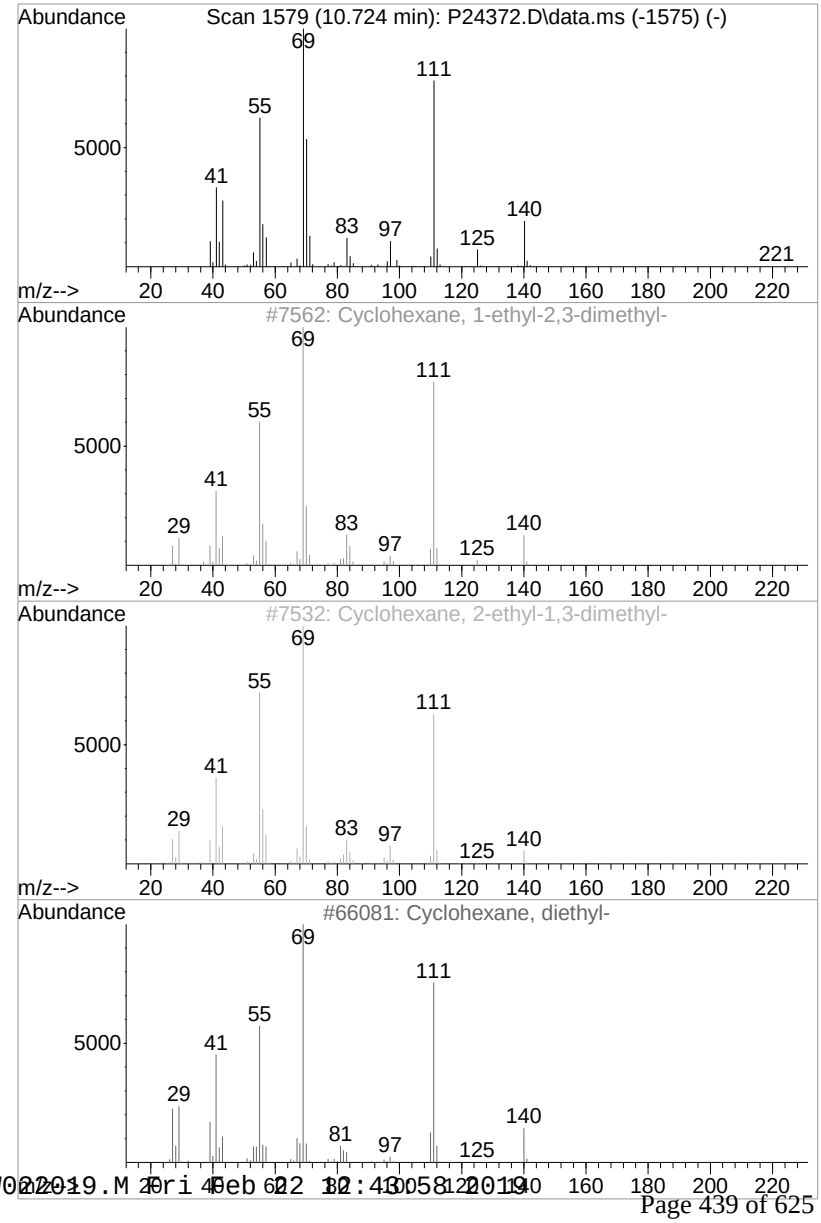
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

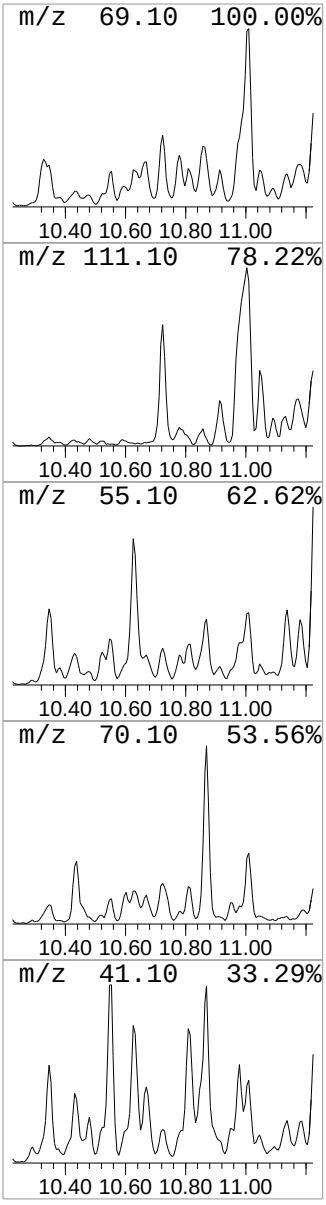
****

Peak Number 13 unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.724	29.52 ppb	808836	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-ethyl-2,3-dimethyl-	140	C10H20	007058-05-1	80
2	Cyclohexane, 2-ethyl-1,3-dimethyl-	140	C10H20	007045-67-2	64
3	Cyclohexane, diethyl-	140	C10H20	001331-43-7	59
4	Cyclohexane, 1-ethyl-1,4-dimethy...	140	C10H20	062238-30-6	59
5	Cyclohexane, 1,3,5-trimethyl-	126	C9H18	001839-63-0	59





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

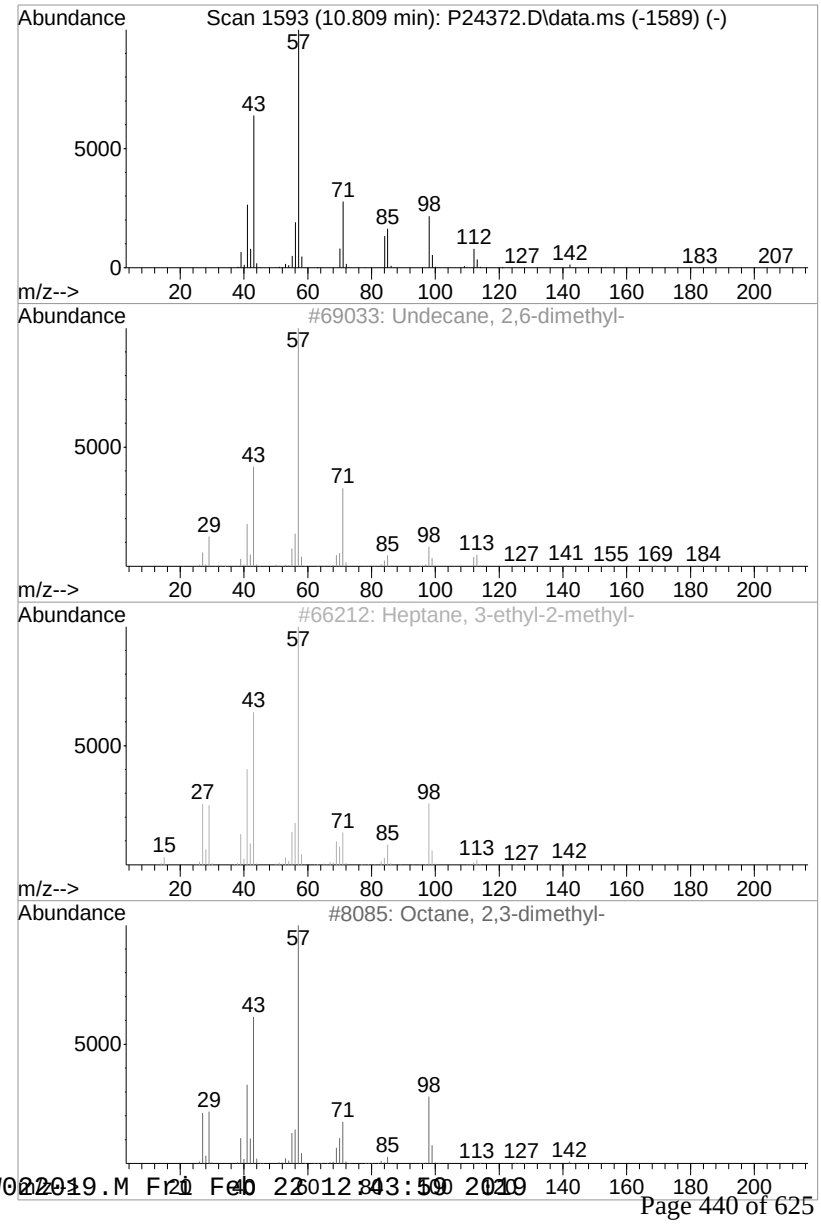
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

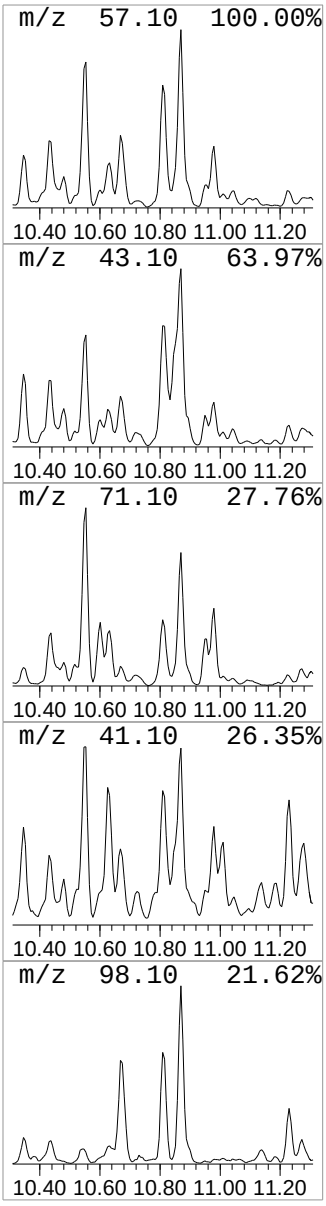
****

Peak Number 14 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.809	112.76 ppb	3089550	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 2,6-dimethyl-	184	C13H28	017301-23-4	53
2	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	53
3	Octane, 2,3-dimethyl-	142	C10H22	007146-60-3	52
4	Decane	142	C10H22	000124-18-5	50
5	Nonane, 2-methyl-	142	C10H22	000871-83-0	50





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

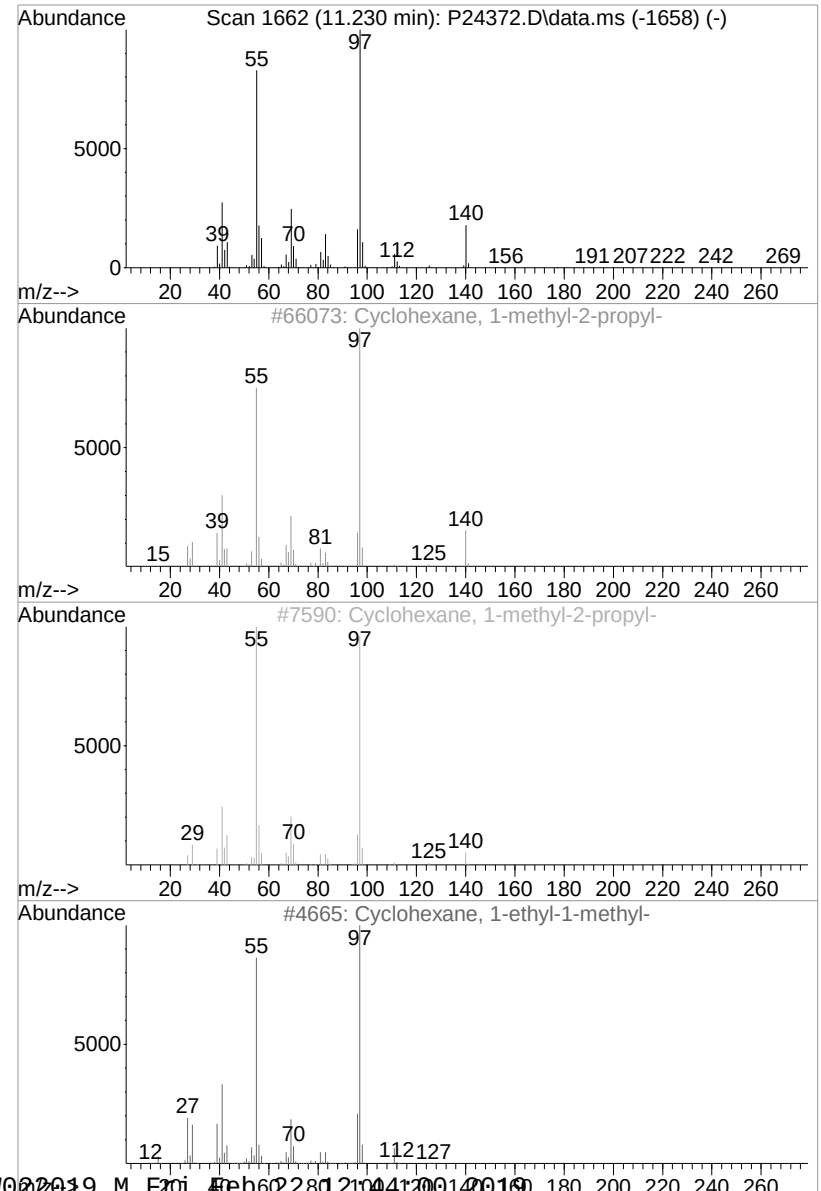
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

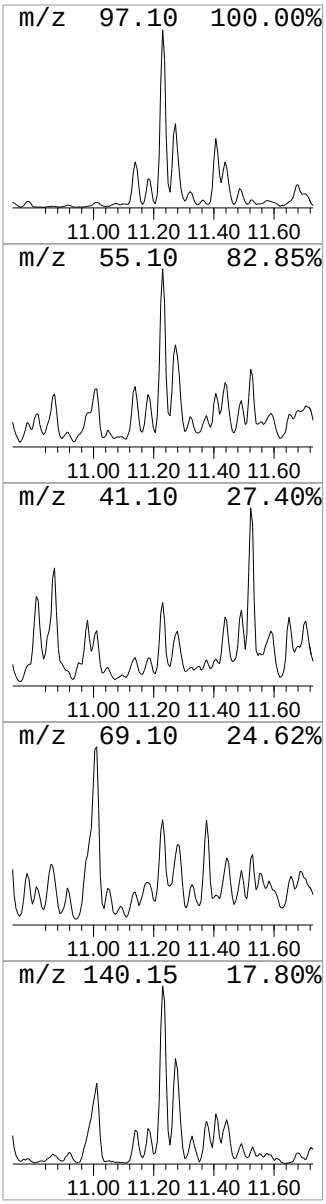
****

Peak Number 15 Cyclohexane, 1-methyl-2-pro... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.230	28.26 ppb	2959720	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	87
2	Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	87
3	Cyclohexane, 1-ethyl-1-methyl-	126	C9H18	004926-90-3	74
4	3-Hexene, 3-ethyl-2,5-dimethyl-	140	C10H20	062338-08-3	74
5	Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-77-7	72





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

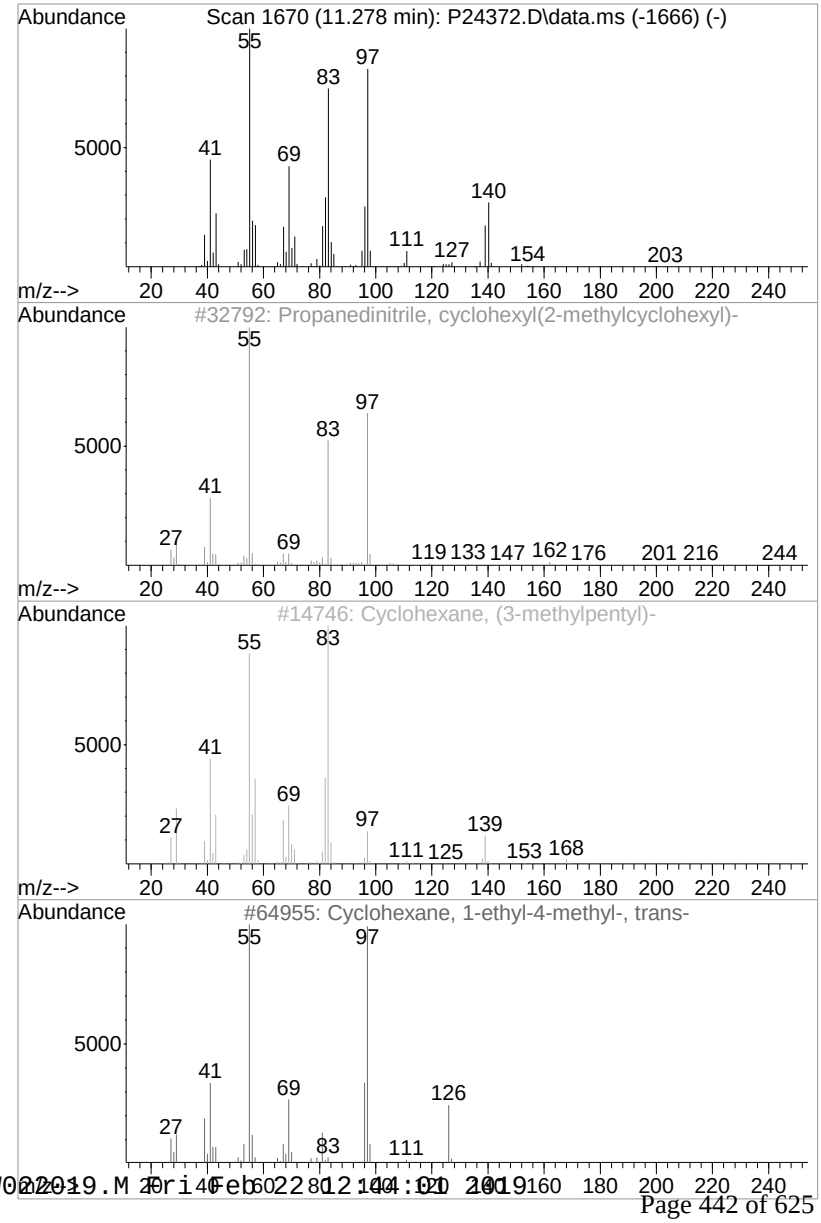
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

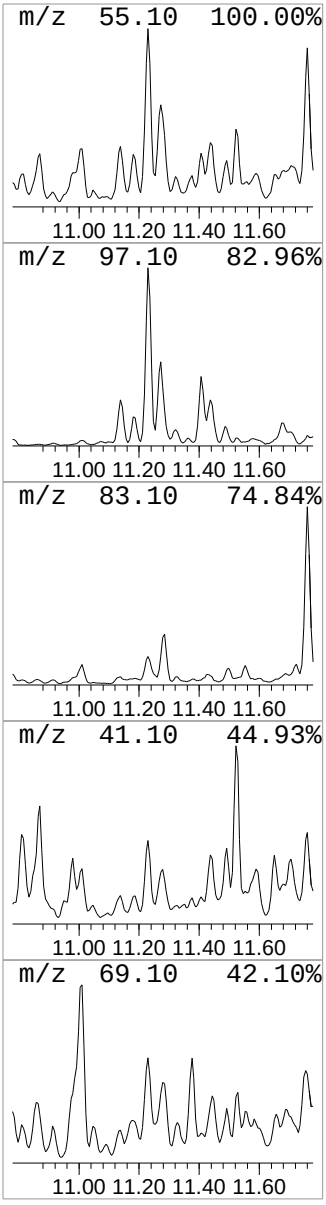
****

Peak Number 16 unknown Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.278	23.17 ppb	2426080	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanedinitrile, cyclohexyl(2-m...	244	C16H24N2	074764-55-9	50
2	Cyclohexane, (3-methylpentyl)-	168	C12H24	061142-38-9	43
3	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	38
4	Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	38
5	Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	38





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

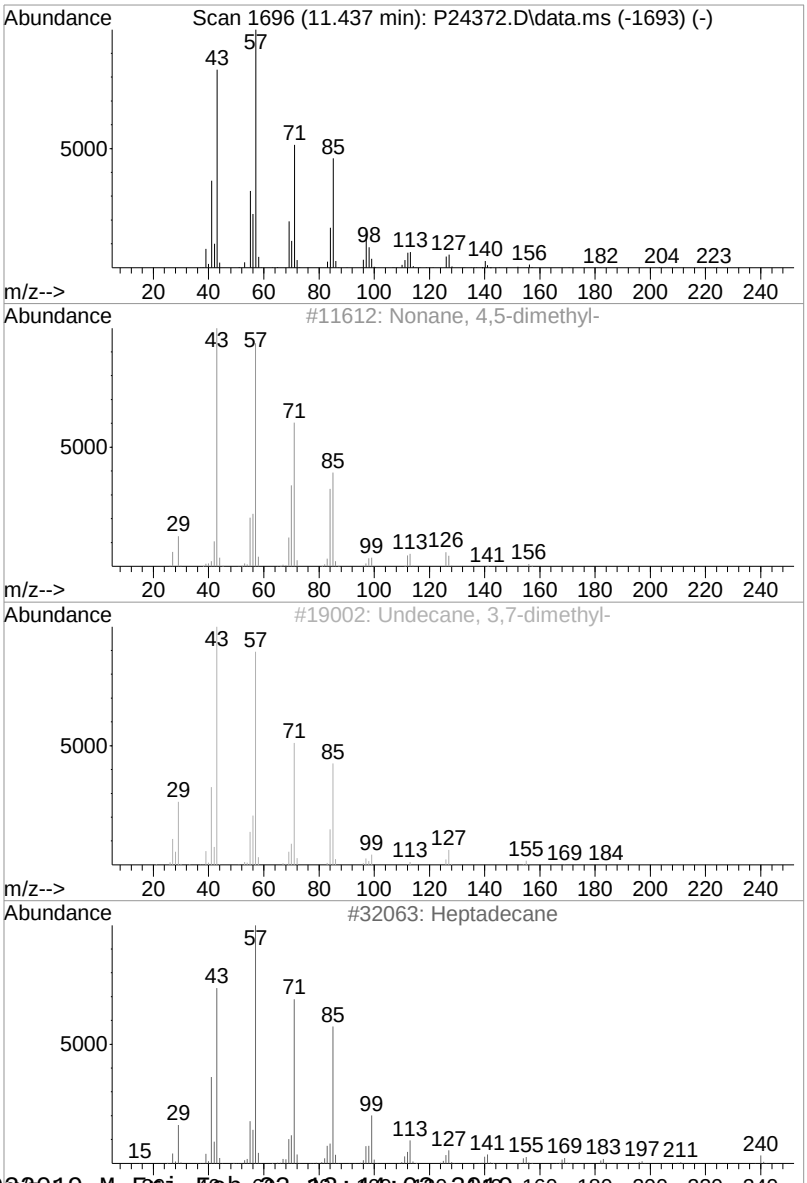
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

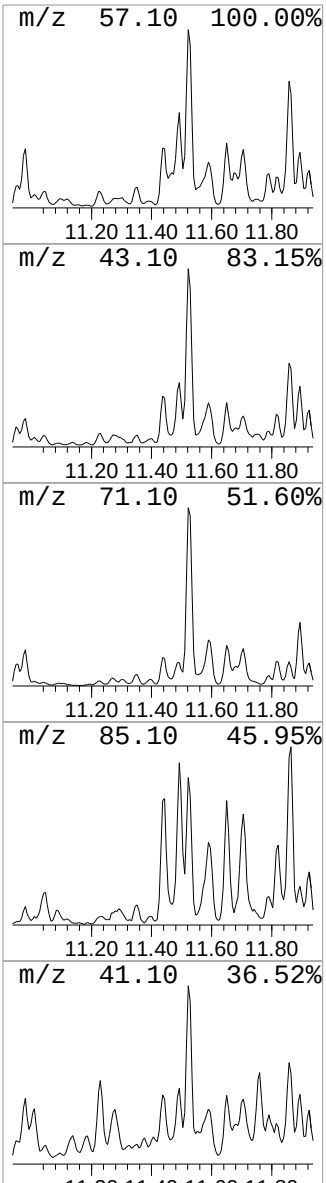
****

Peak Number 17 Nonane, 4,5-dimethyl- Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.437	23.66 ppb	2477300	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonane, 4,5-dimethyl-	156	C11H24	017302-23-7	91
2	Undecane, 3,7-dimethyl-	184	C13H28	017301-29-0	72
3	Heptadecane	240	C17H36	000629-78-7	72
4	Dotriacontane	451	C32H66	000544-85-4	72
5	10-Methylnonadecane	282	C20H42	000000-00-0	72





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

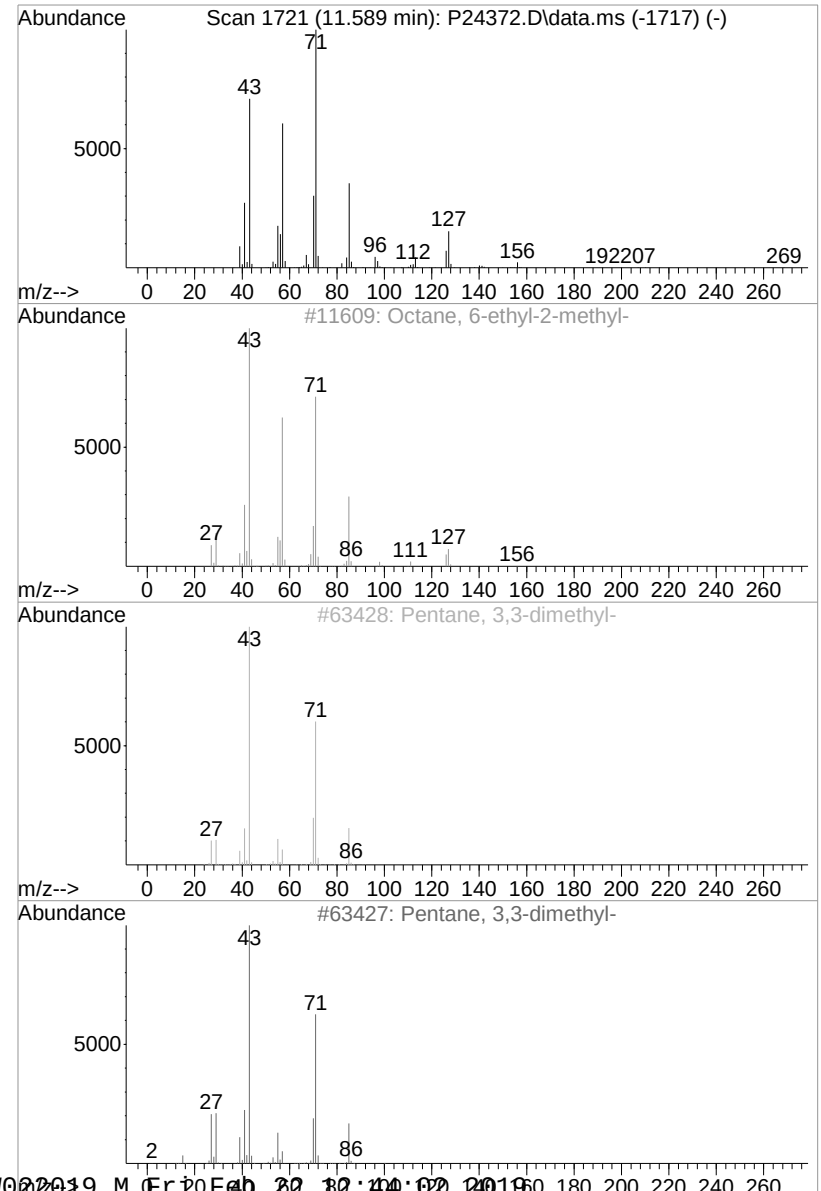
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

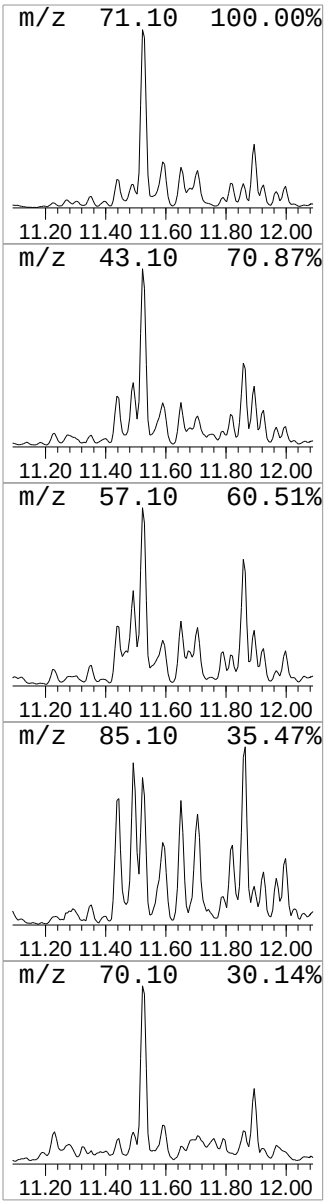
****

Peak Number 18 unknown Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.589	22.38 ppb	2343470	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 6-ethyl-2-methyl-	156	C11H24	062016-19-7	72
2	Pentane, 3,3-dimethyl-	100	C7H16	000562-49-2	64
3	Pentane, 3,3-dimethyl-	100	C7H16	000562-49-2	64
4	Decane, 3,3,8-trimethyl-	184	C13H28	062338-16-3	59
5	1,1-Dimethylpropyl 2-ethylhexanoate	214	C13H26O2	005421-13-6	53





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

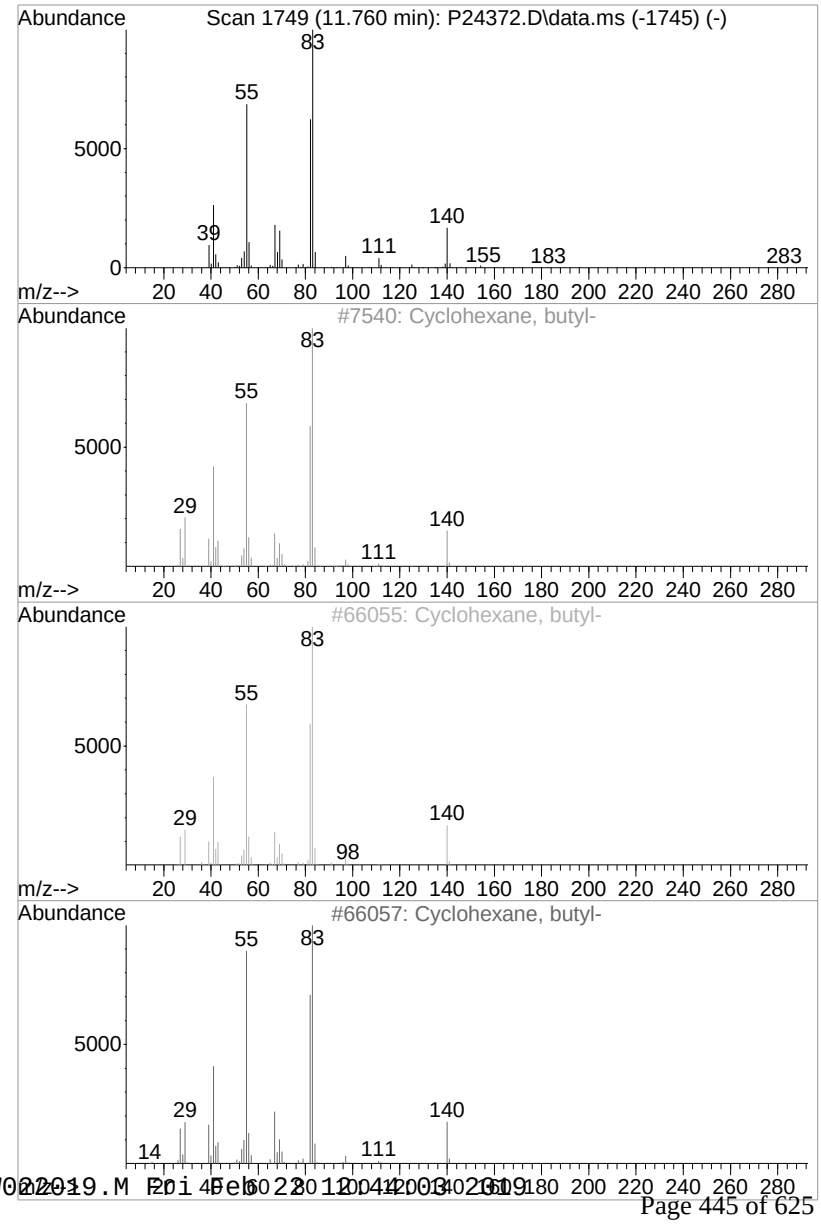
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

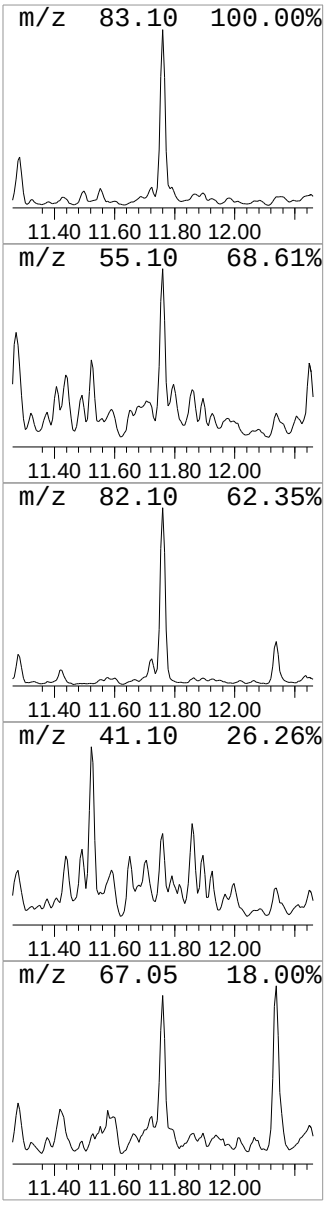
****

Peak Number 19 Cyclohexane, butyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.760	29.45 ppb	3084110	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, butyl-	140	C10H20	001678-93-9	91
2	Cyclohexane, butyl-	140	C10H20	001678-93-9	91
3	Cyclohexane, butyl-	140	C10H20	001678-93-9	91
4	Cyclohexane, pentyl-	154	C11H22	004292-92-6	87
5	Cyclohexane, pentyl-	154	C11H22	004292-92-6	87





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

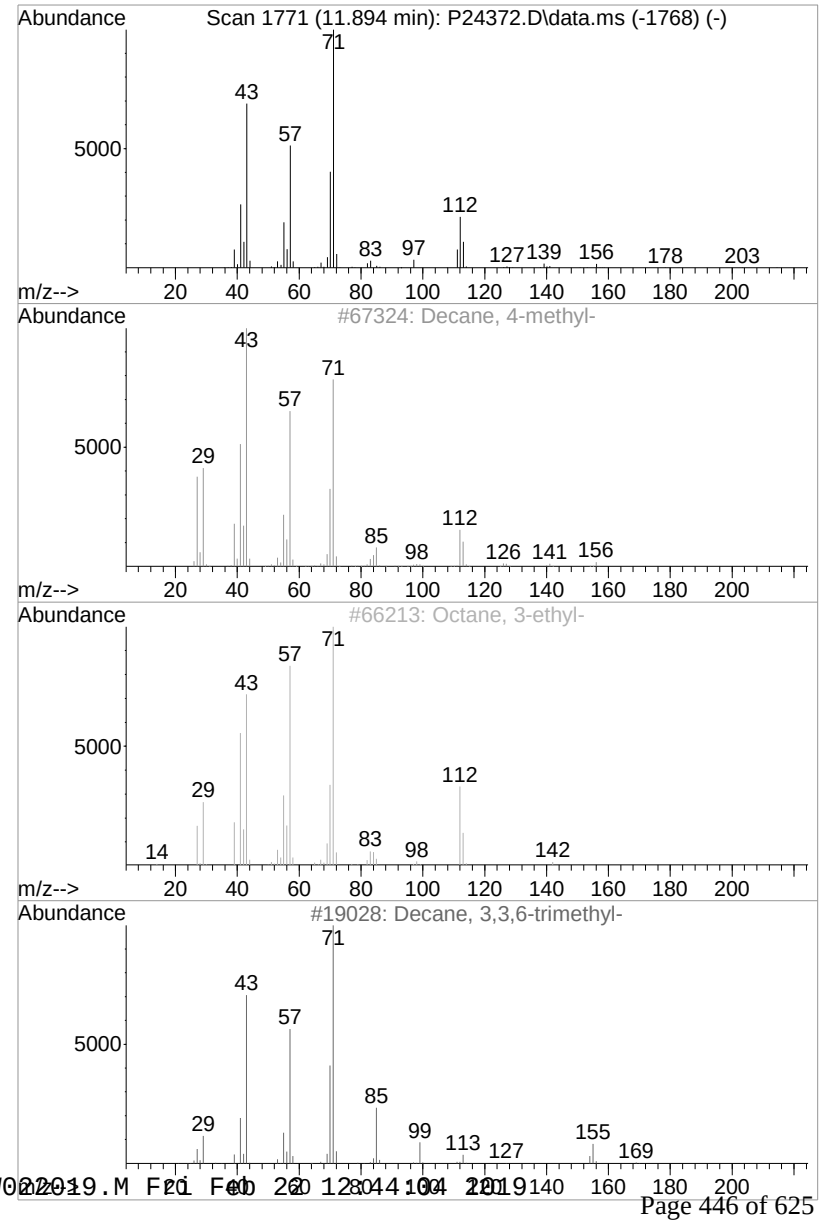
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

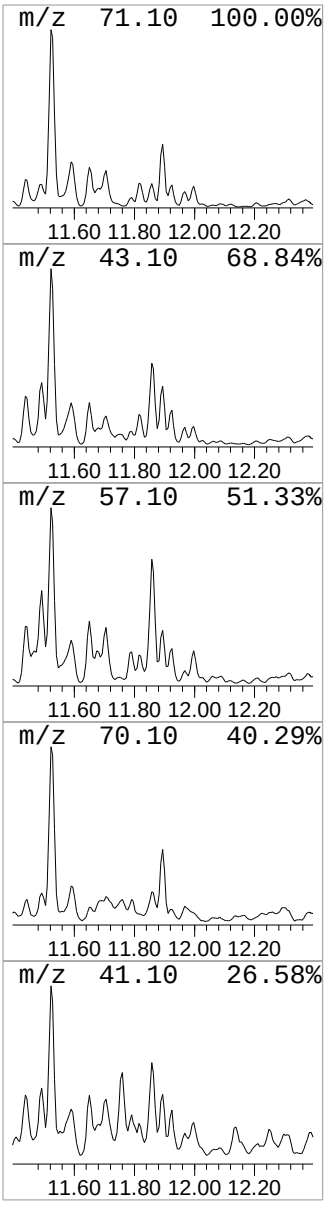
****

Peak Number 20 unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.894	18.84 ppb	1973120	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 4-methyl-	156	C11H24	002847-72-5	78
2	Octane, 3-ethyl-	142	C10H22	005881-17-4	64
3	Decane, 3,3,6-trimethyl-	184	C13H28	062338-14-1	59
4	1,1-Dimethylpropyl 2-ethylhexanoate	214	C13H26O2	005421-13-6	59
5	Decane, 2,7,7-trimethyl-	184	C13H28	062338-15-2	59





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

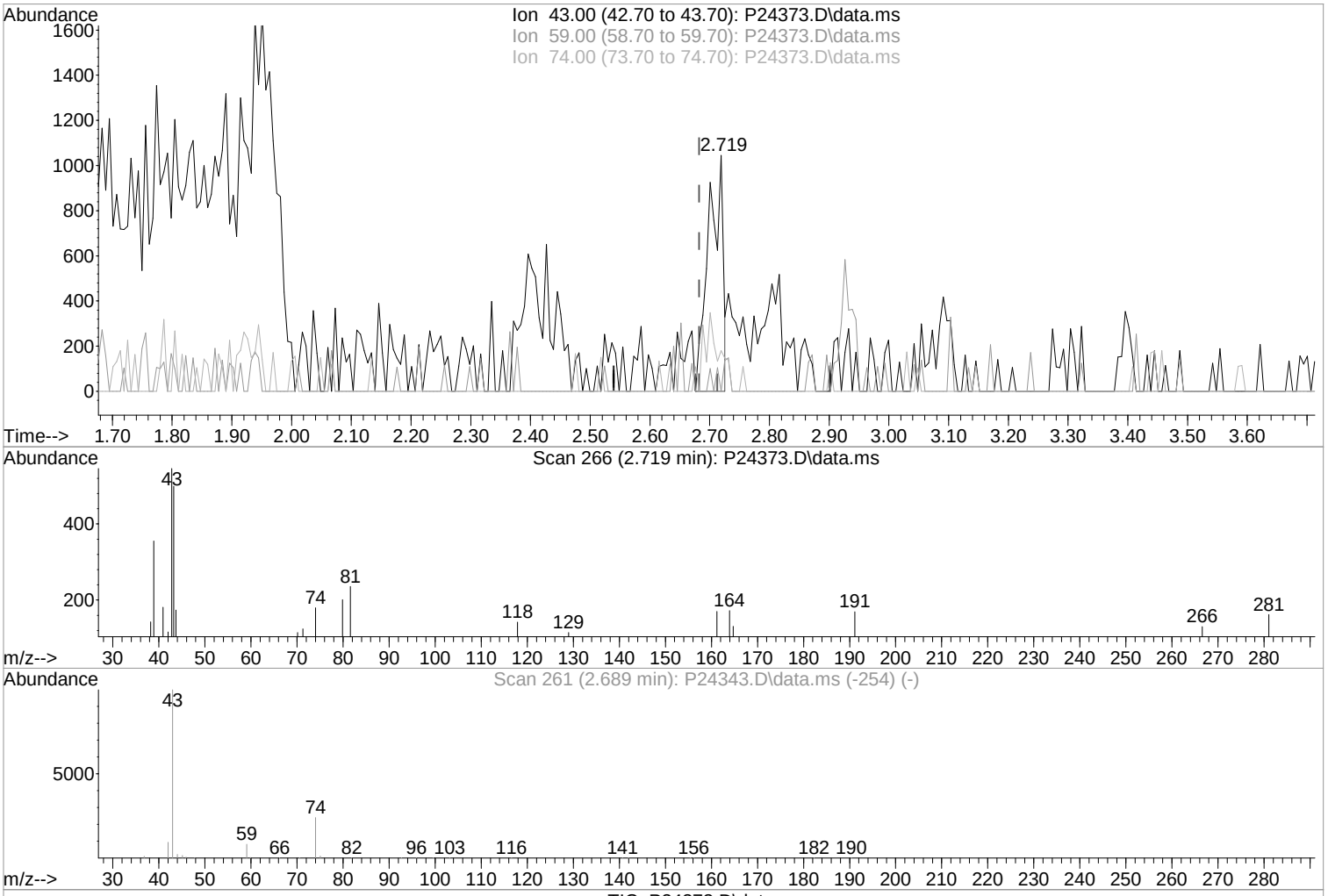
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Cyclohexane, 1,...	9.553	22.3	ppb	611602	3	9.791	1369950	50.0
unknown	9.620	24.5	ppb	671994	3	9.791	1369950	50.0
Octane, 3-methyl-	9.736	30.3	ppb	829400	3	9.791	1369950	50.0
unknown	10.065	35.2	ppb	964669	3	9.791	1369950	50.0
Cyclohexane, 1-...	10.102	26.2	ppb	716708	3	9.791	1369950	50.0
unknown	10.346	87.5	ppb	2396800	3	9.791	1369950	50.0
Octane, 2,5-dim...	10.431	67.1	ppb	1837730	3	9.791	1369950	50.0
unknown	10.480	23.7	ppb	648574	3	9.791	1369950	50.0
Octane, 2,6-dim...	10.553	141.6	ppb	3878280	3	9.791	1369950	50.0
unknown	10.602	24.7	ppb	677844	3	9.791	1369950	50.0
Cyclohexane, pr...	10.626	108.7	ppb	2977250	3	9.791	1369950	50.0
Heptane, 3-ethy...	10.669	55.9	ppb	1531730	3	9.791	1369950	50.0
unknown	10.724	29.5	ppb	808836	3	9.791	1369950	50.0
unknown	10.809	112.8	ppb	3089550	3	9.791	1369950	50.0
Cyclohexane, 1-...	11.230	28.3	ppb	2959720	4	11.839	5235810	50.0
unknown	11.278	23.2	ppb	2426080	4	11.839	5235810	50.0
Nonane, 4,5-dim...	11.437	23.7	ppb	2477300	4	11.839	5235810	50.0
unknown	11.589	22.4	ppb	2343470	4	11.839	5235810	50.0
Cyclohexane, bu...	11.760	29.4	ppb	3084110	4	11.839	5235810	50.0
unknown	11.894	18.8	ppb	1973120	4	11.839	5235810	50.0

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 21 17:40:05 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24373.D\data.ms

(21) Methyl Acetate (P)

2.719min (+0.037) 0.43 ppb m

response 1752

Ion	Exp%	Act%
43.00	100	100
59.00	8.40	0.00
74.00	23.60	32.97
0.00	0.00	0.00

Manual Integration:

After

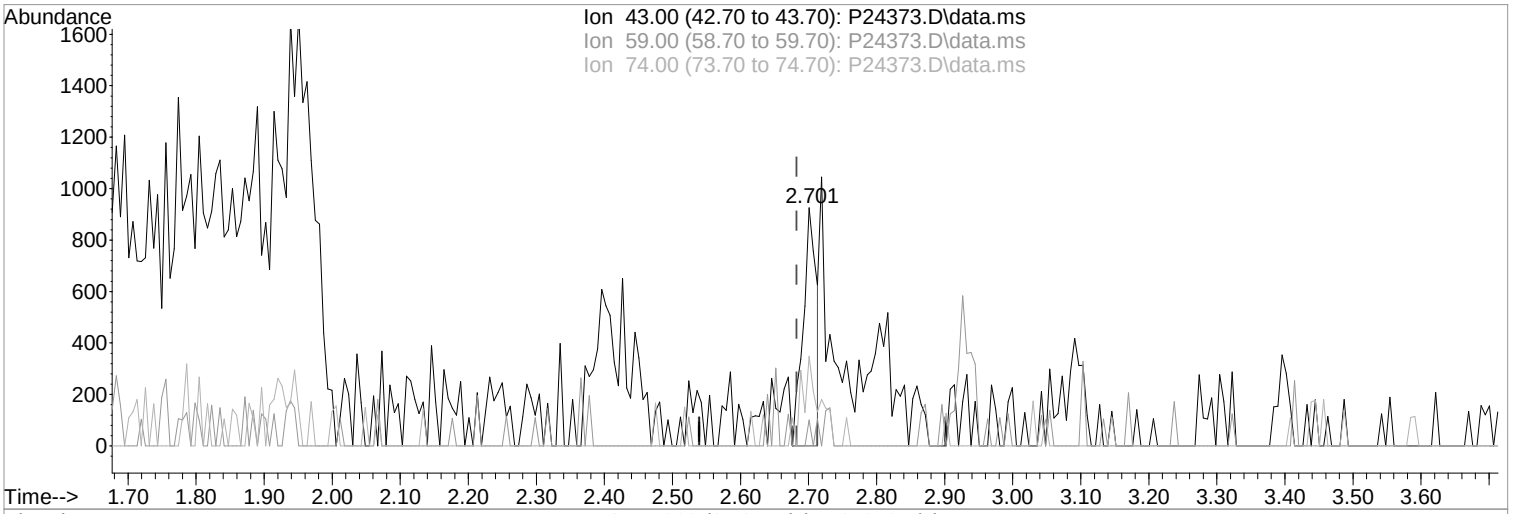
Split Peak

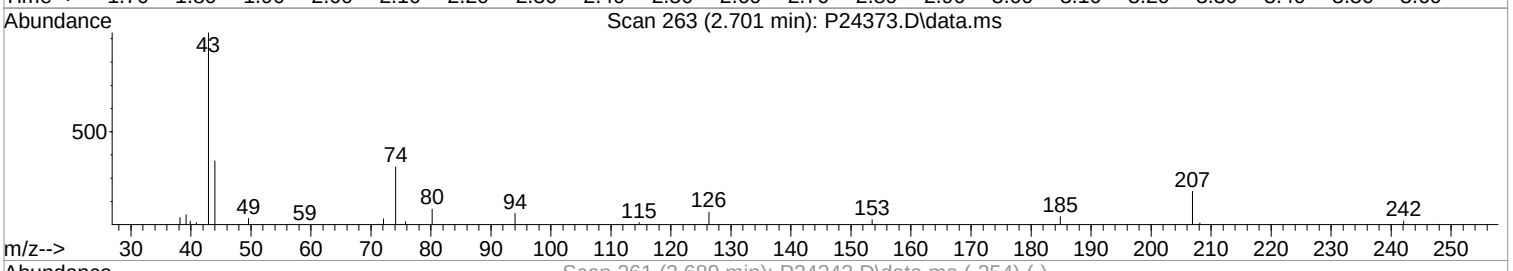
02/22/19

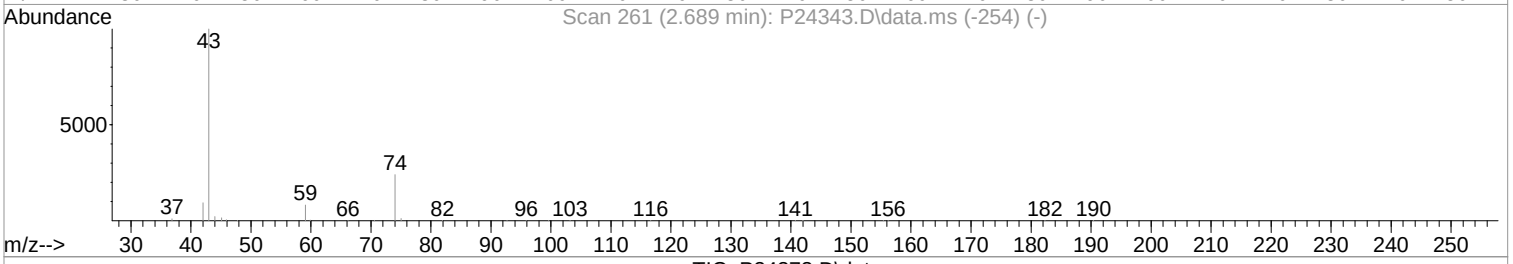
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 21 17:40:05 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24373.D\data.ms

(21) Methyl Acetate (P)

2.701min (+0.018) 0.30 ppb

response 1249

Ion	Exp%	Act%
43.00	100	100
59.00	8.40	10.91
74.00	23.60	37.58
0.00	0.00	0.00

Manual Integration:

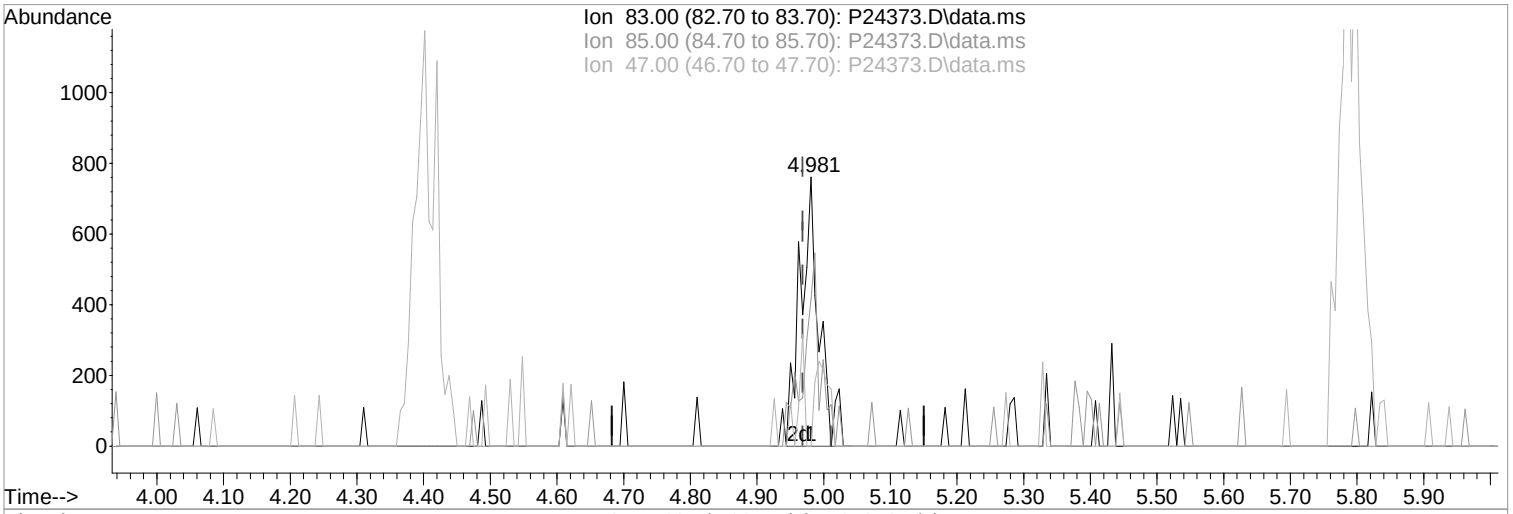
Before

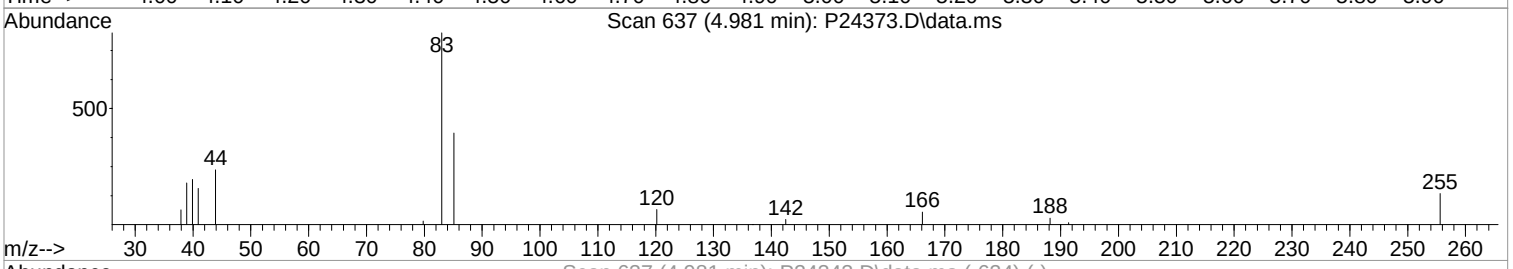
02/22/19

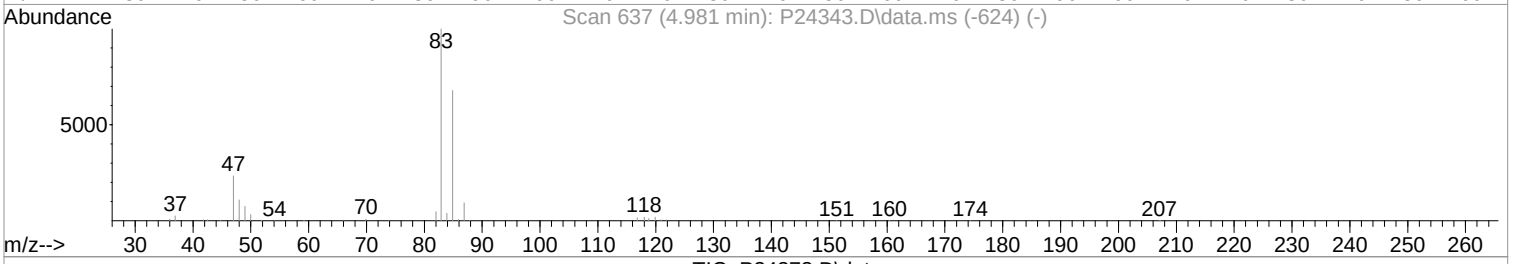
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 21 17:40:05 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24373.D\data.ms

(40) Chloroform (P)

4.981min (+0.012) 0.27 ppb m

response 1504

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	54.66
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

After

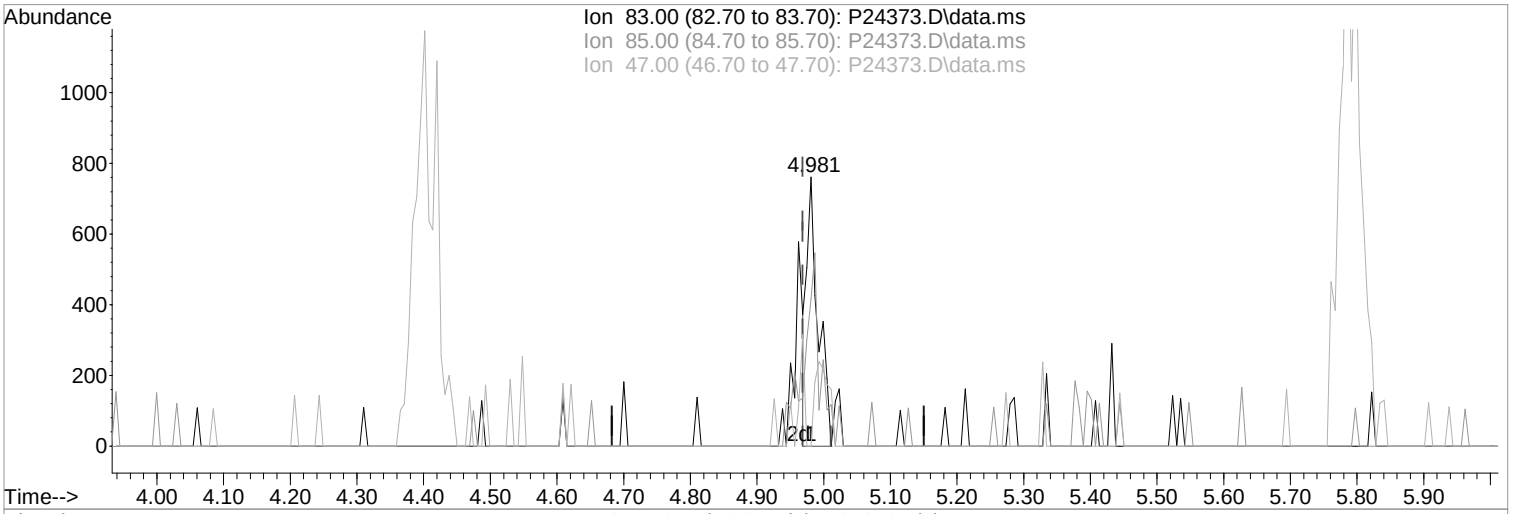
Split Peak

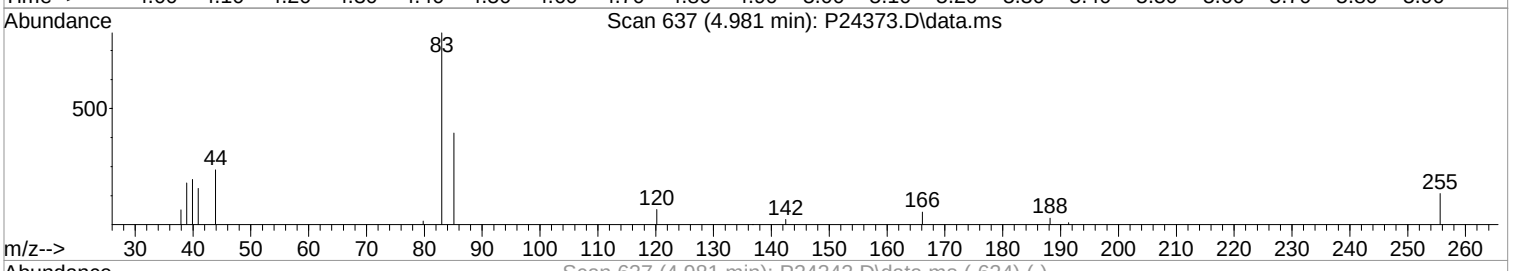
02/22/19

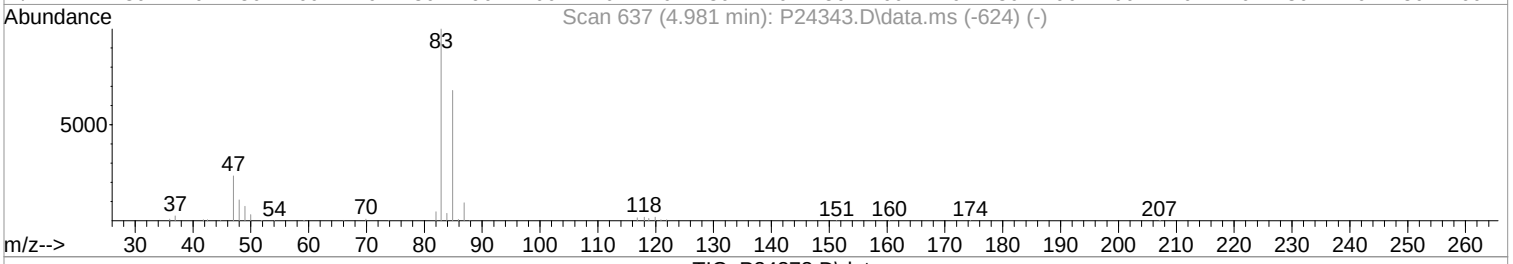
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 21 17:40:05 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24373.D\data.ms

(40) Chloroform (P)

4.981min (+0.012) 0.17 ppb

response 915

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	54.66
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 22 14:37:17 2019 DL
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

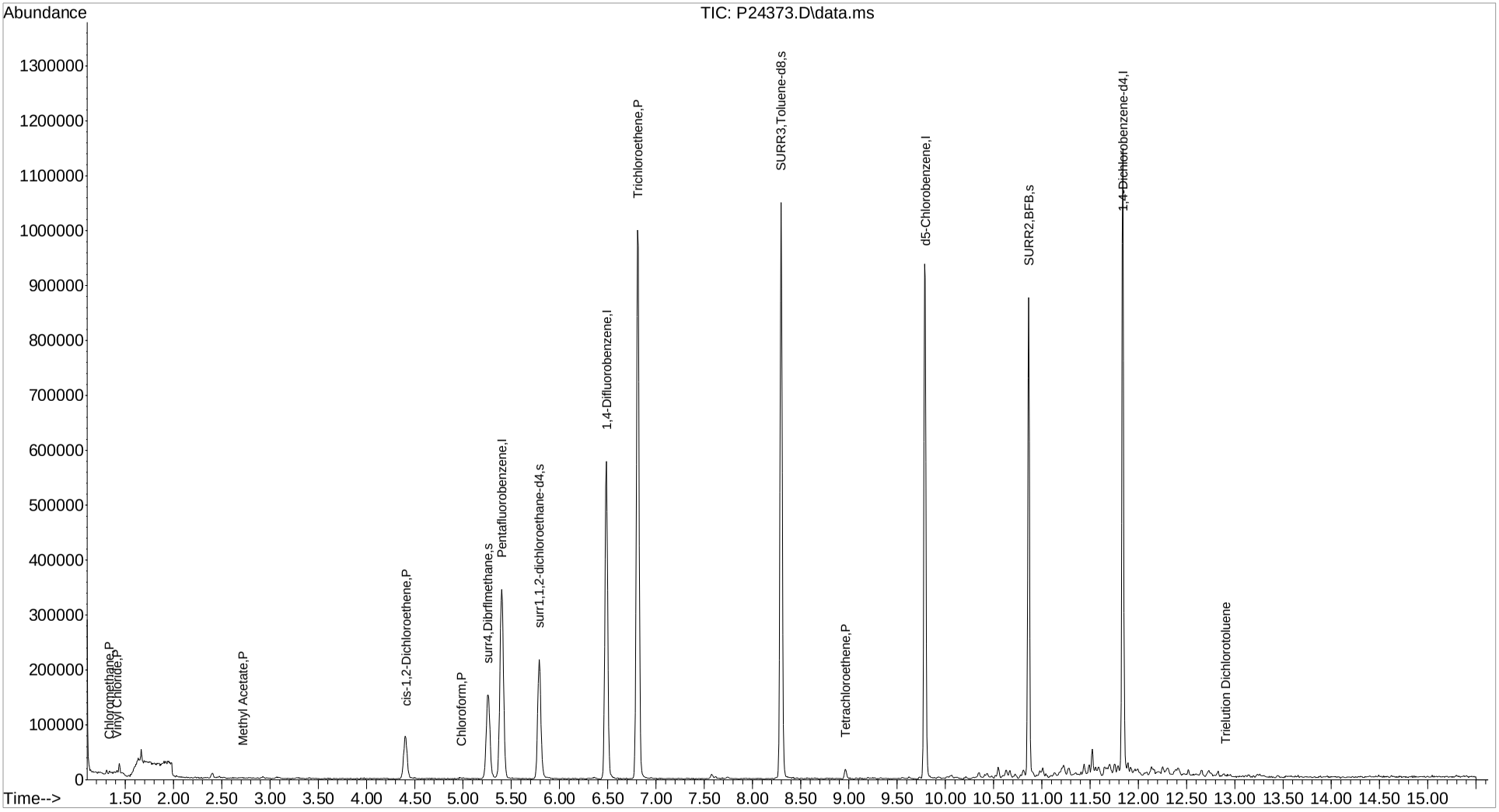
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.401	168	317061	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.487	114	504809	50.00	ppb		0.00
71) d5-Chlorobenzene	9.791	117	440204	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	227870	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	132896	47.91	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.82%				
48) surr1,1,2-dichloroetha...	5.792	65	182305	51.81	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.62%				
65) SURR3,Toluene-d8	8.297	98	656869	49.92	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.84%				
70) SURR2,BFB	10.864	95	235769	50.03	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.06%				
Target Compounds							Qvalue
3) Chloromethane	1.335	50	2847	0.55	ppb		87
4) Vinyl Chloride	1.414	62	2239	0.49	ppb		90
21) Methyl Acetate	2.719	43	1752m	0.43	ppb		
34) cis-1,2-Dichloroethene	4.408	96	46214	12.53	ppb	#	80
40) Chloroform	4.981	83	1504m	0.27	ppb		
54) Trichloroethene	6.810	130	374665	106.12	ppb		97
72) Tetrachloroethene	8.962	164	3528	1.34	ppb	#	87
112) Trielution Dichlorotol...	12.906	125	1762	0.29	ppb	#	88

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

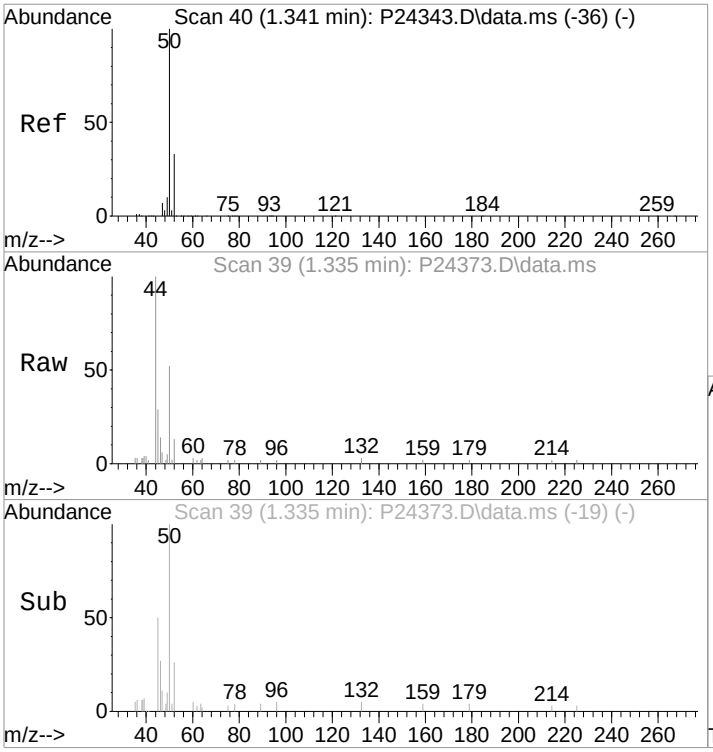
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 22 14:37:17 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



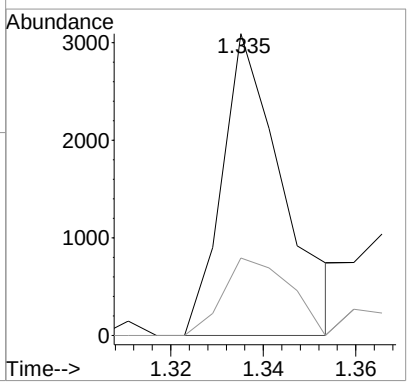
1st 02/22/19

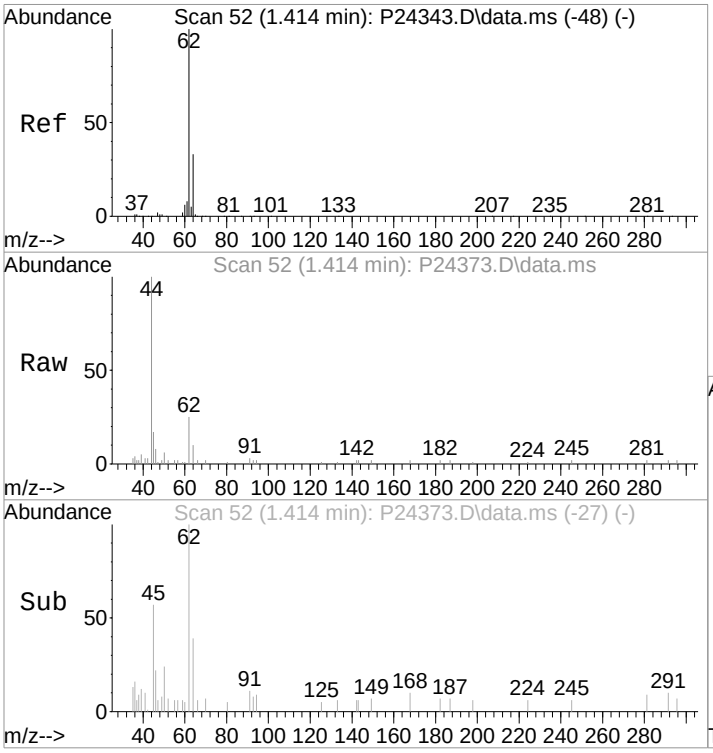


#3
Chloromethane
Concen: 0.55 ppb
RT: 1.335 min Scan# 39
Delta R.T. 0.006 min
Lab File: P24373.D
Acq: 21 Feb 2019 5:19 pm

Tgt Ion: 50 Resp: 2847

Ion	Ratio	Lower	Upper
50	100		
52	25.7	13.0	53.0

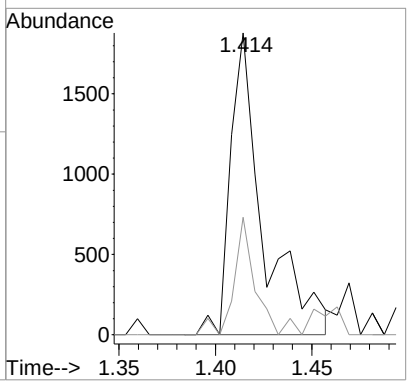


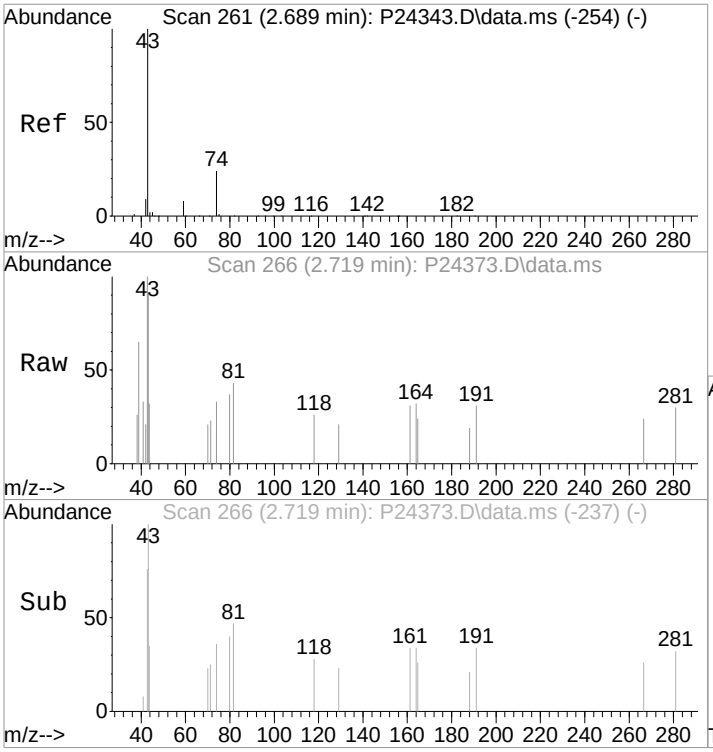


#4
Vinyl Chloride
Concen: 0.49 ppb
RT: 1.414 min Scan# 52
Delta R.T. 0.006 min
Lab File: P24373.D
Acq: 21 Feb 2019 5:19 pm

Tgt Ion: 62 Resp: 2239

Ion	Ratio	Lower	Upper
62	100		
64	38.9	13.2	53.2

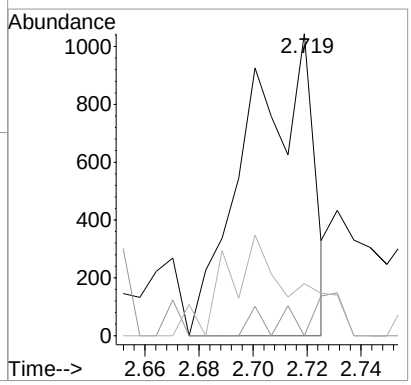


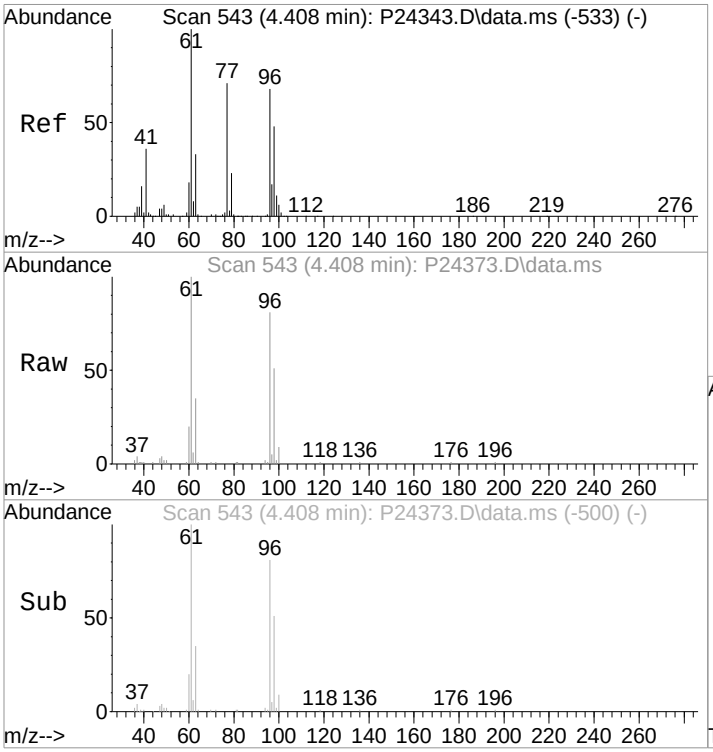


#21
Methyl Acetate
Concen: 0.43 ppb m
RT: 2.719 min Scan# 266
Delta R.T. 0.037 min
Lab File: P24373.D
Acq: 21 Feb 2019 5:19 pm

Tgt Ion: 43 Resp: 1752

Ion	Ratio	Lower	Upper
43	100		
59	0.0	0.0	28.4
74	33.0	3.6	43.6

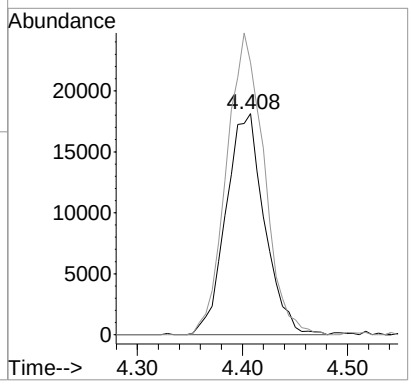


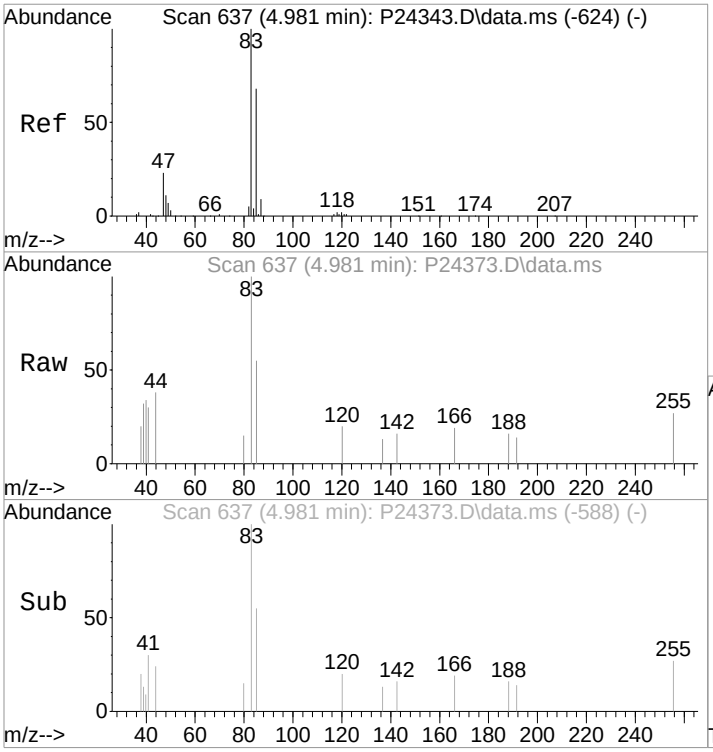


#34
cis-1,2-Dichloroethene
Concen: 12.53 ppb
RT: 4.408 min Scan# 543
Delta R.T. 0.006 min
Lab File: P24373.D
Acq: 21 Feb 2019 5:19 pm

Tgt Ion: 96 Resp: 46214

Ion	Ratio	Lower	Upper
96	100		
61	123.0	128.1	168.1#

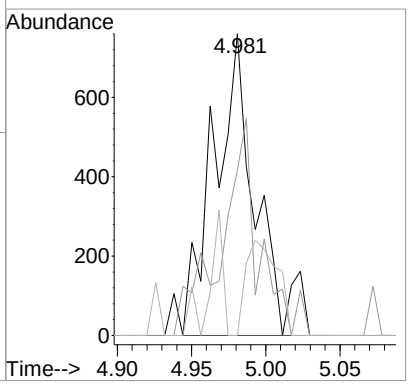


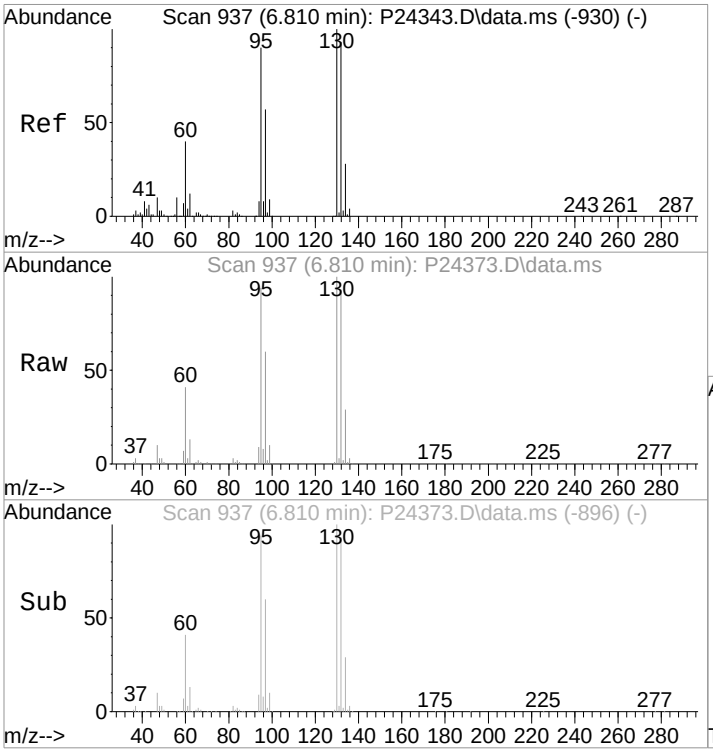


#40
Chloroform
Concen: 0.27 ppb m
RT: 4.981 min Scan# 637
Delta R.T. 0.012 min
Lab File: P24373.D
Acq: 21 Feb 2019 5:19 pm

Tgt Ion: 83 Resp: 1504

Ion	Ratio	Lower	Upper
83	100		
85	54.7	47.9	87.9
47	0.0	3.4	43.4#

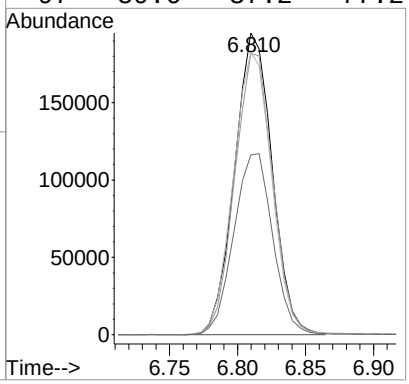


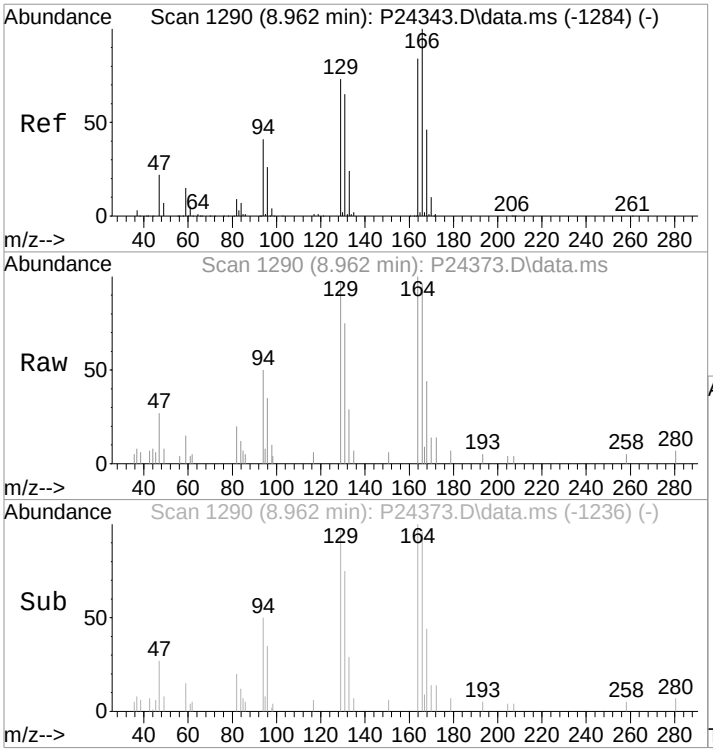


#54
Trichloroethene
Concen: 106.12 ppb
RT: 6.810 min Scan# 937
Delta R.T. 0.000 min
Lab File: P24373.D
Acq: 21 Feb 2019 5:19 pm

Tgt Ion:130 Resp: 374665

Ion	Ratio	Lower	Upper
130	100		
132	93.2	72.6	112.6
95	93.5	69.8	109.8
97	59.6	37.2	77.2

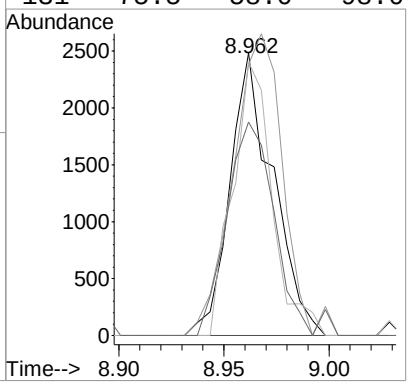


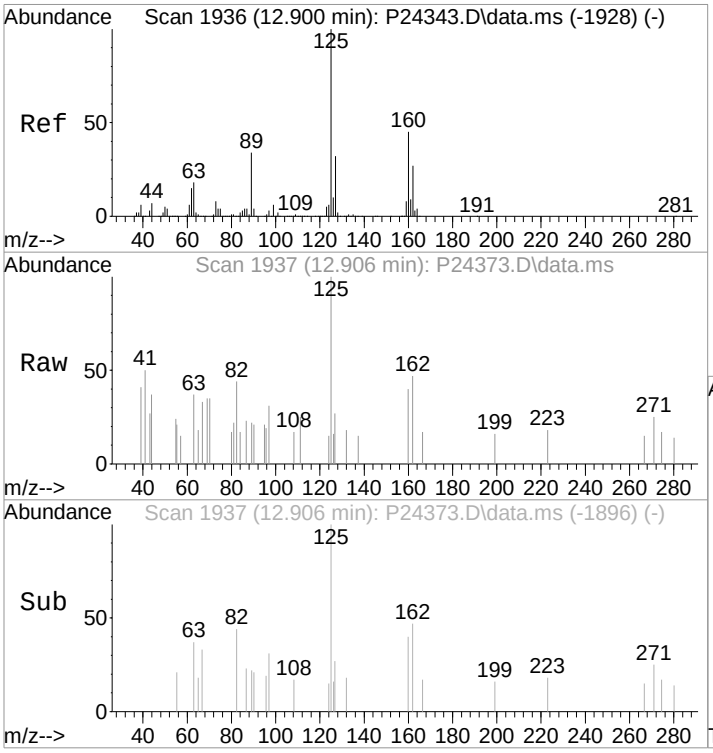


#72
Tetrachloroethene
Concen: 1.34 ppb
RT: 8.962 min Scan# 1290
Delta R.T. 0.000 min
Lab File: P24373.D
Acq: 21 Feb 2019 5:19 pm

Tgt Ion:164 Resp: 3528

Ion	Ratio	Lower	Upper
164	100		
166	95.9	99.6	139.6#
129	96.8	66.7	106.7
131	75.5	58.0	98.0

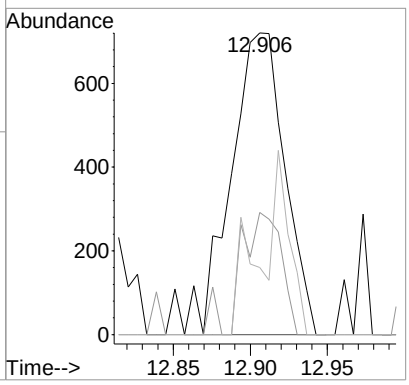




#112
Trielution Dichlorotoluene
Concen: 0.29 ppb
RT: 12.906 min Scan# 1937
Delta R.T. 0.000 min
Lab File: P24373.D
Acq: 21 Feb 2019 5:19 pm

Tgt Ion:125 Resp: 1762

Ion	Ratio	Lower	Upper
125	100		
160	40.5	35.8	53.8
89	22.2	27.0	40.4#



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24373.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.634	74	88	91	rBV5	34140	119274	6.08%	1.053%
2	1.664	91	93	97	rVB	26293	30058	1.53%	0.265%
3	1.981	143	145	149	rVB4	24227	20392	1.04%	0.180%
4	4.402	533	542	551	rBV	77884	198746	10.13%	1.755%
5	5.261	671	683	695	rBV3	152409	427311	21.77%	3.773%
6	5.401	695	706	717	rVB	343419	885541	45.12%	7.818%
7	5.792	760	770	781	rBV2	217195	520469	26.52%	4.595%
8	6.487	874	884	901	rBV	578747	1158134	59.01%	10.225%
9	6.810	927	937	951	rBV	998852	1962662	100.00%	17.328%
10	8.297	1174	1181	1190	rBV	1047185	1673047	85.24%	14.771%
11	8.962	1285	1290	1296	rBV3	18282	30633	1.56%	0.270%
12	9.785	1419	1425	1438	rBV	936838	1357621	69.17%	11.986%
13	10.547	1547	1550	1555	rVB3	19901	25646	1.31%	0.226%
14	10.632	1560	1564	1567	rVV3	14618	24707	1.26%	0.218%
15	10.669	1567	1570	1574	rVV3	14441	20737	1.06%	0.183%
16	10.864	1596	1602	1613	rVB	872716	1118668	57.00%	9.876%
17	11.223	1659	1661	1666	rVB3	16890	23730	1.21%	0.210%
18	11.284	1666	1671	1675	rVB6	12765	21741	1.11%	0.192%
19	11.437	1692	1696	1700	rBV5	18733	22637	1.15%	0.200%
20	11.522	1707	1710	1714	rVV	45149	55309	2.82%	0.488%
21	11.589	1718	1721	1726	rVB5	15585	25296	1.29%	0.223%
22	11.650	1728	1731	1733	rBV2	14855	21547	1.10%	0.190%
23	11.705	1737	1740	1744	rVB5	15870	23443	1.19%	0.207%
24	11.754	1744	1748	1751	rBV5	16209	22345	1.14%	0.197%
25	11.839	1756	1762	1769	rVV	1135624	1425397	72.63%	12.584%
26	12.138	1805	1811	1813	rBV5	15077	24446	1.25%	0.216%
27	12.303	1834	1838	1842	rVV5	11377	21656	1.10%	0.191%
28	12.412	1854	1856	1862	rVB5	13417	22170	1.13%	0.196%
29	12.656	1891	1896	1902	rVB9	11588	20905	1.07%	0.185%
30	12.729	1902	1908	1911	rBV5	11288	22356	1.14%	0.197%

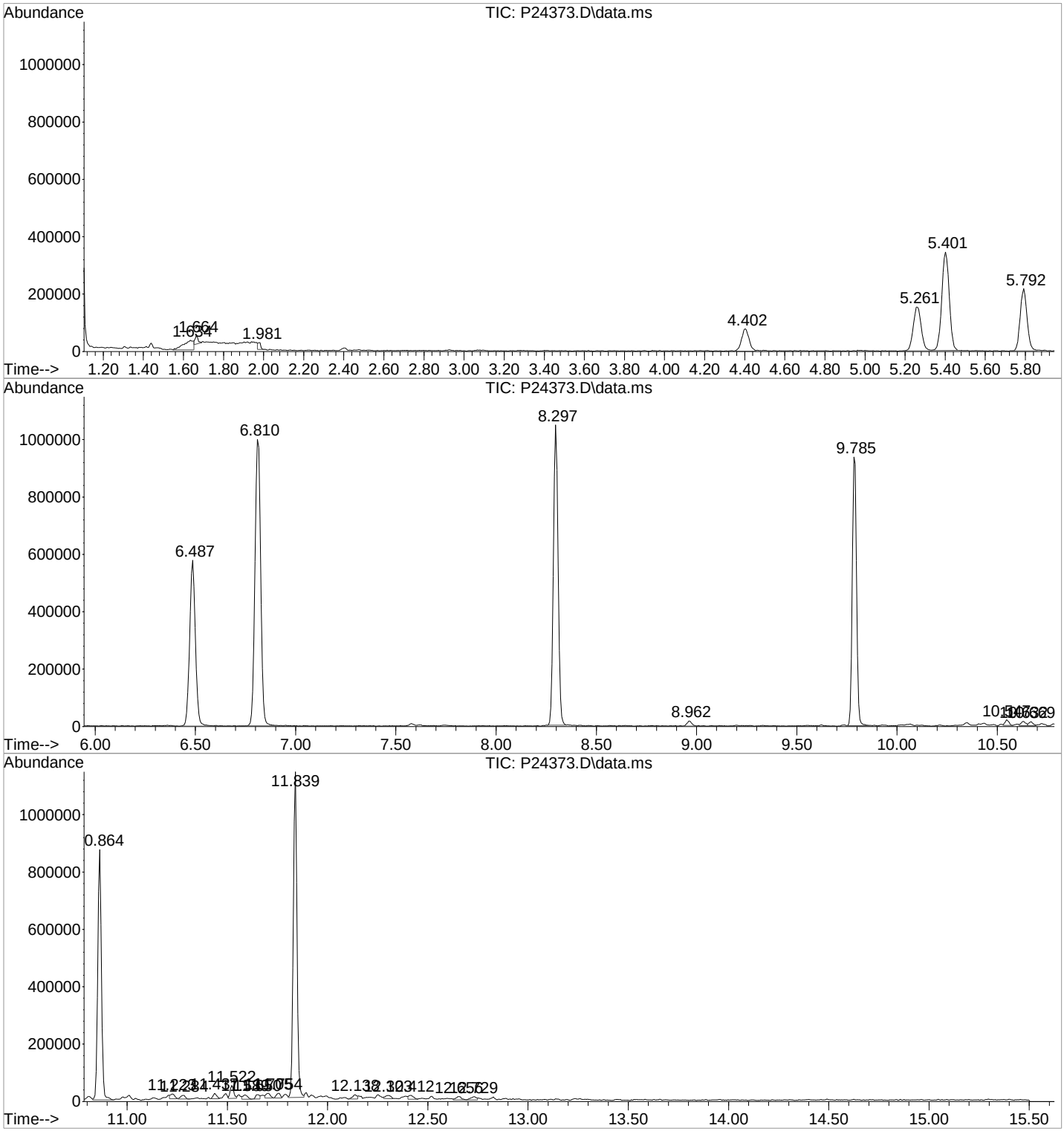
Sum of corrected areas: 11326624

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

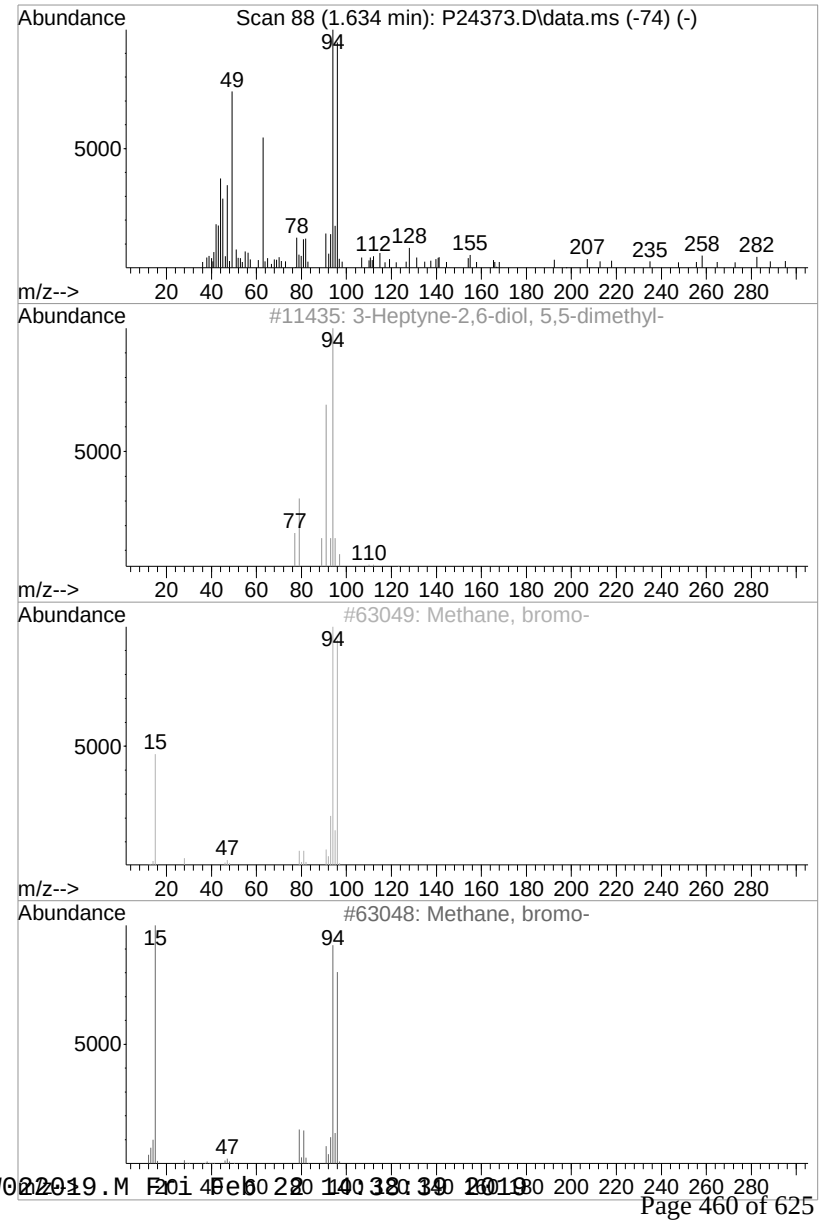
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

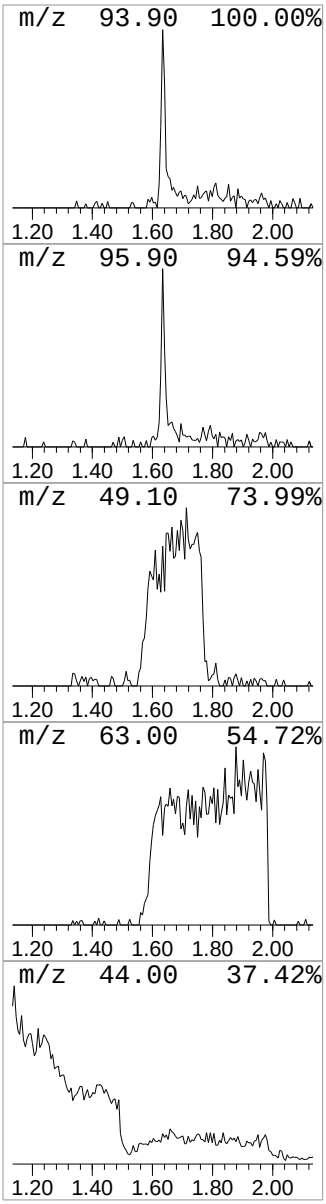
****

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.634	6.73 ppb	119274	Pentafluorobenzene	5.401

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Heptyne-2,6-diol, 5,5-dimethyl-	156	C9H16O2	061228-11-3	23
2	Methane, bromo-	94	CH3Br	000074-83-9	11
3	Methane, bromo-	94	CH3Br	000074-83-9	11
4	Methane, bromo-	94	CH3Br	000074-83-9	10
5	Ethyne, dichloro-	94	C2Cl2	007572-29-4	9





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

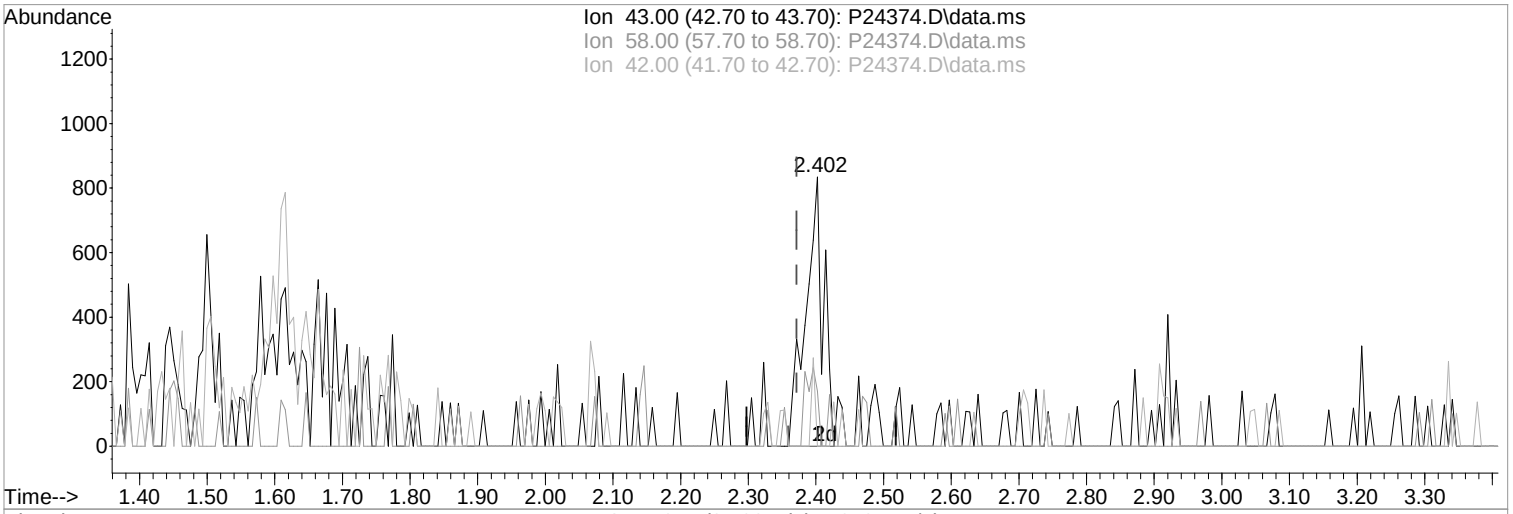
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

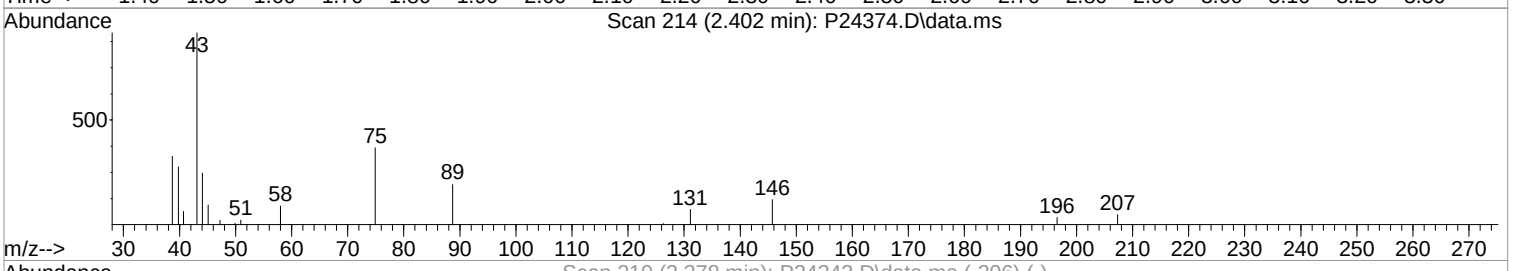
					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	1.634	6.7	ppb	119274	1	5.401	885541	50.0

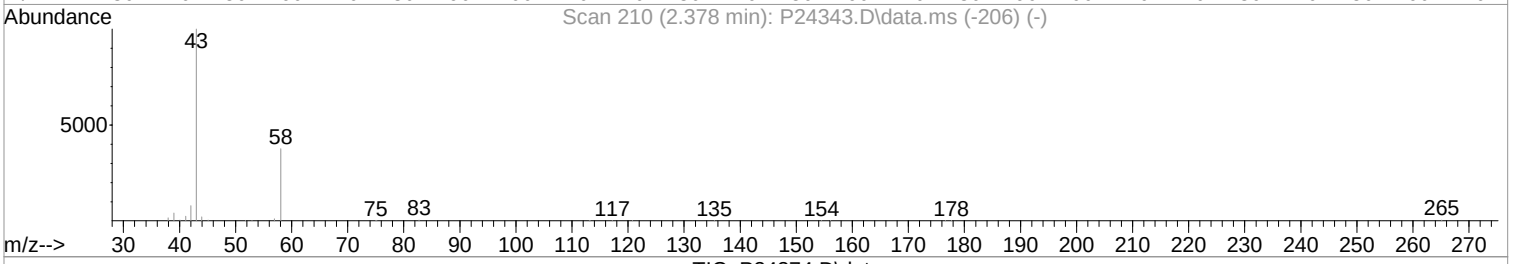
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24374.D
Acq On : 21 Feb 2019 5:41 pm
Operator : K.Ruest
Sample : R1901228-008|4325 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 21 18:01:28 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24374.D\data.ms

(15) Acetone (P)

2.402min (+0.031) 1.03 ppb m

response 1519

Ion	Exp%	Act%
43.00	100	100
58.00	38.10	20.50
42.00	7.80	0.00
0.00	0.00	0.00

Manual Integration:

After

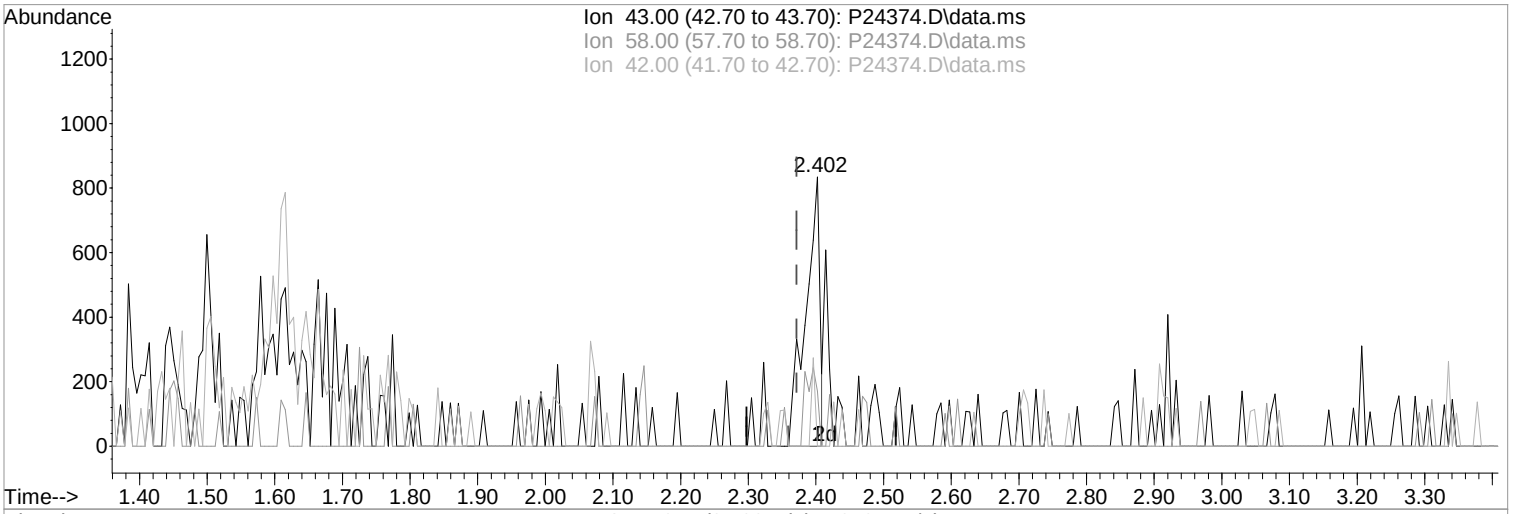
Split Peak

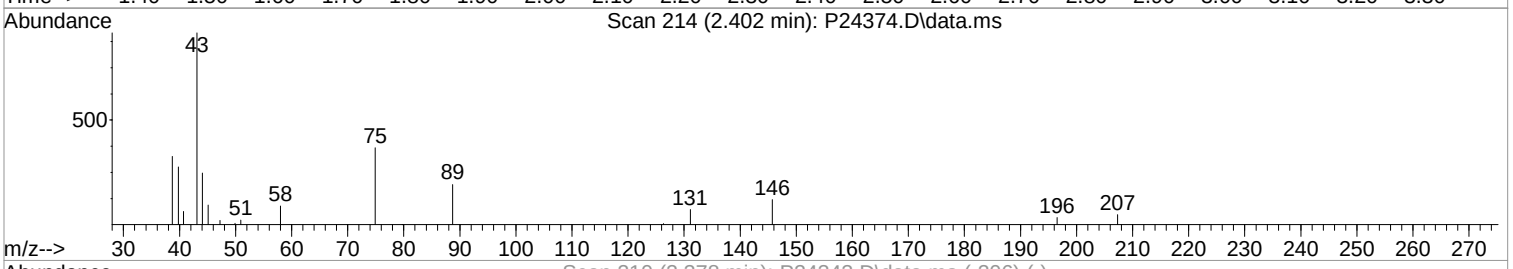
02/22/19

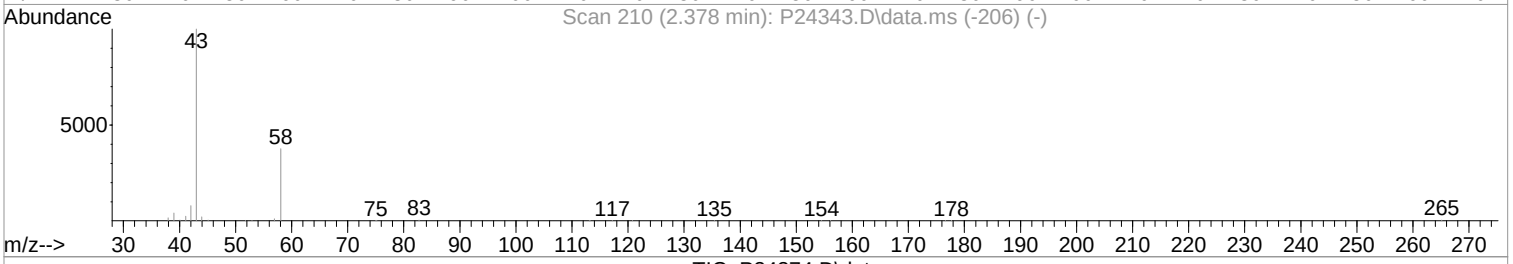
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24374.D
Acq On : 21 Feb 2019 5:41 pm
Operator : K.Ruest
Sample : R1901228-008|4325 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 21 18:01:28 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24374.D\data.ms

(15) Acetone (P)

2.402min (+0.031) 0.82 ppb

response 1209

Ion	Exp%	Act%
43.00	100	100
58.00	38.10	20.50
42.00	7.80	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24374.D
Acq On : 21 Feb 2019 5:41 pm
Operator : K.Ruest
Sample : R1901228-008|4325 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 22 14:39:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

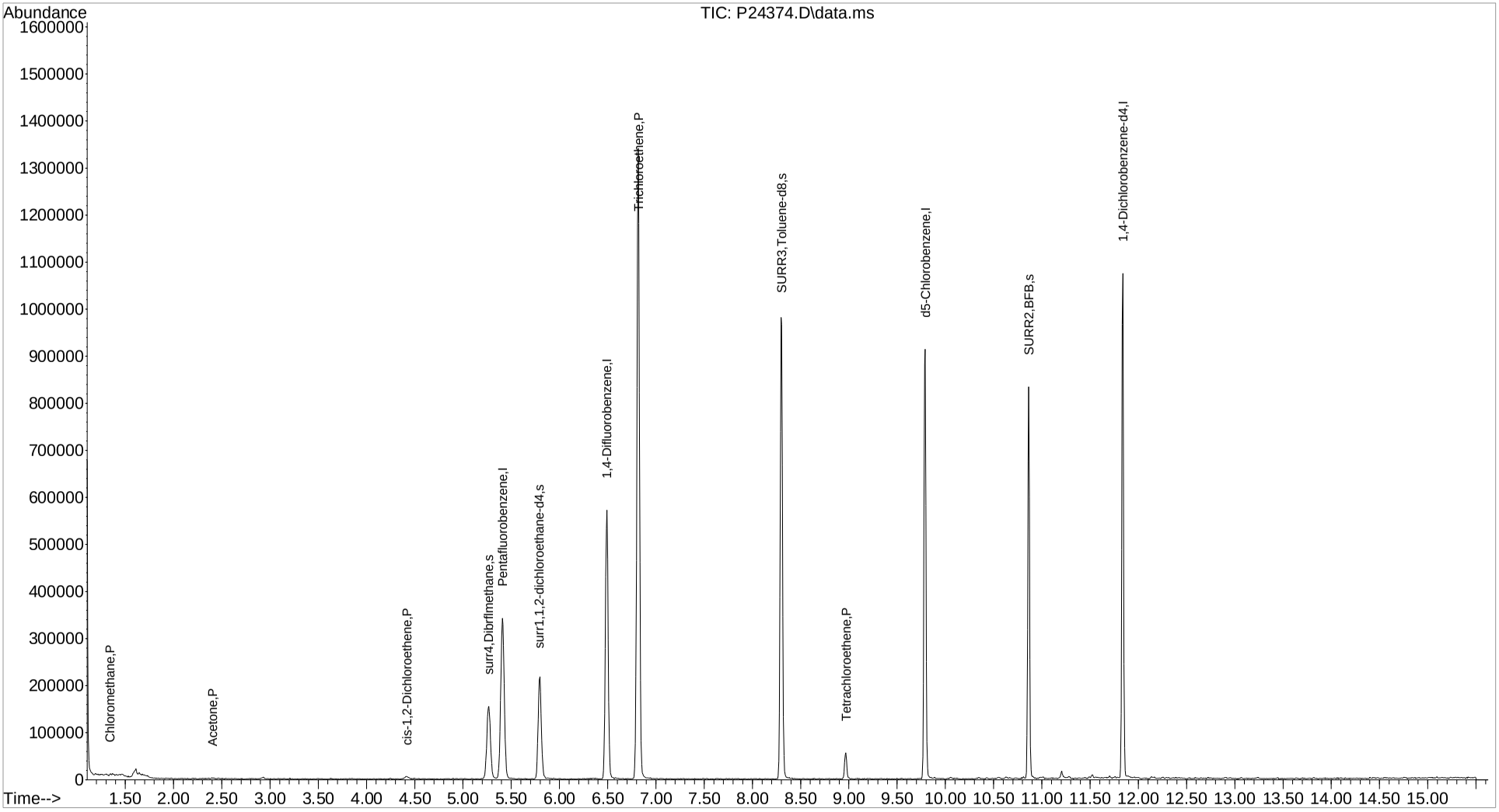
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.408	168	308441	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.493	114	498749	50.00	ppb		0.01
71) d5-Chlorobenzene	9.791	117	428416	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	224566	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.267	113	130959	47.78	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.56%				
48) surr1,1,2-dichloroetha...	5.792	65	178369	51.31	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.62%				
65) SURR3,Toluene-d8	8.303	98	642742	49.44	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.88%				
70) SURR2,BFB	10.864	95	228995	49.18	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.36%				
Target Compounds							Qvalue
3) Chloromethane	1.341	50	1015	0.20	ppb		89
15) Acetone	2.402	43	1519m	1.03	ppb		
34) cis-1,2-Dichloroethene	4.420	96	2183	0.61	ppb	#	82
54) Trichloroethene	6.816	130	485876	139.29	ppb		91
72) Tetrachloroethene	8.968	164	12130	4.73	ppb		93

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

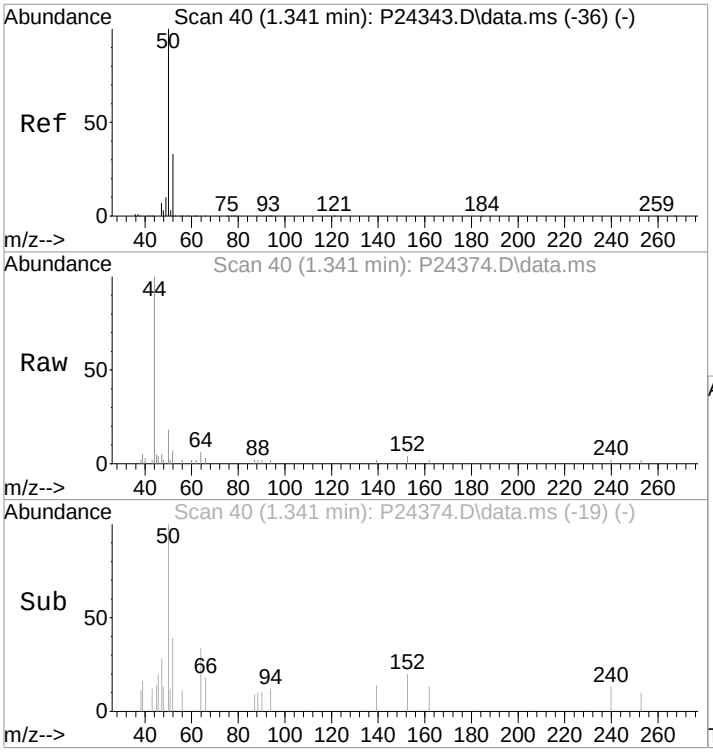
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24374.D
Acq On : 21 Feb 2019 5:41 pm
Operator : K.Ruest
Sample : R1901228-008|4325 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 22 14:39:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



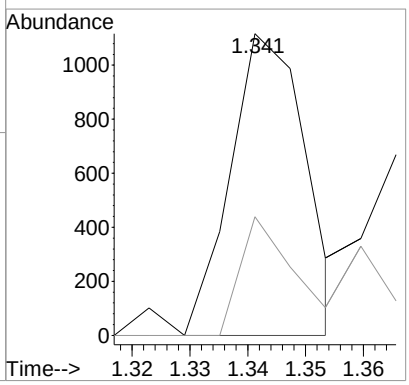
1st 02/22/19

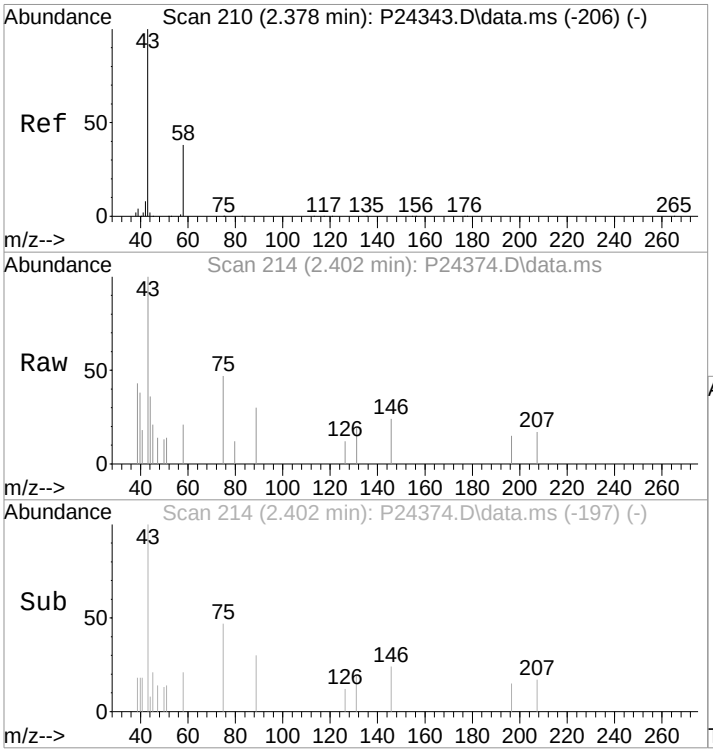


#3
Chloromethane
Concen: 0.20 ppb
RT: 1.341 min Scan# 40
Delta R.T. 0.012 min
Lab File: P24374.D
Acq: 21 Feb 2019 5:41 pm

Tgt Ion: 50 Resp: 1015

Ion	Ratio	Lower	Upper
50	100		
52	39.3	13.0	53.0

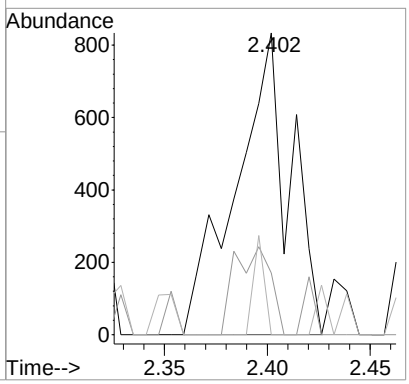


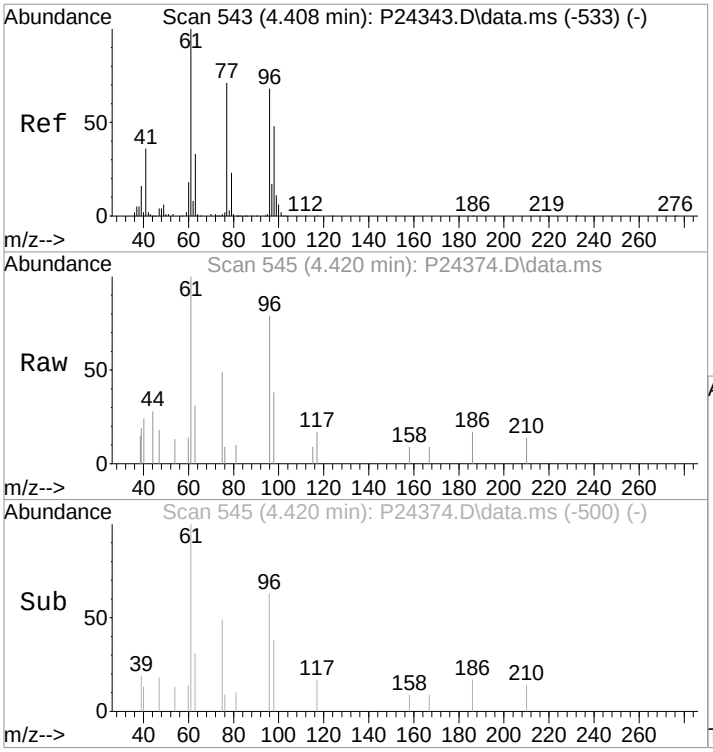


#15
Acetone
Concen: 1.03 ppb m
RT: 2.402 min Scan# 214
Delta R.T. 0.031 min
Lab File: P24374.D
Acq: 21 Feb 2019 5:41 pm

Tgt Ion: 43 Resp: 1519

Ion	Ratio	Lower	Upper
43	100		
58	20.5	18.1	58.1
42	0.0	0.0	27.8

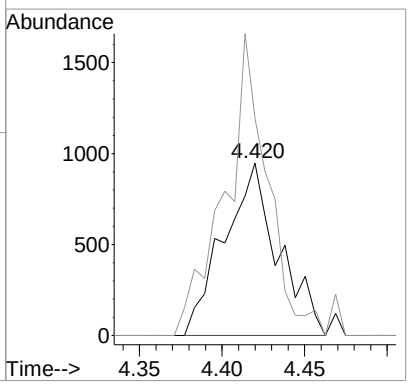


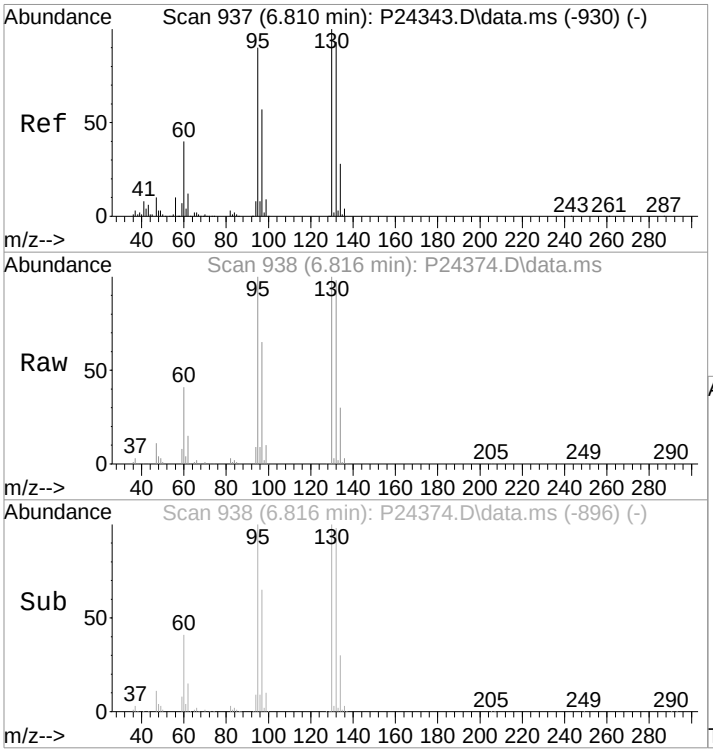


#34
cis-1,2-Dichloroethene
Concen: 0.61 ppb
RT: 4.420 min Scan# 545
Delta R.T. 0.018 min
Lab File: P24374.D
Acq: 21 Feb 2019 5:41 pm

Tgt Ion: 96 Resp: 2183

Ion	Ratio	Lower	Upper
96	100		
61	126.0	128.1	168.1#

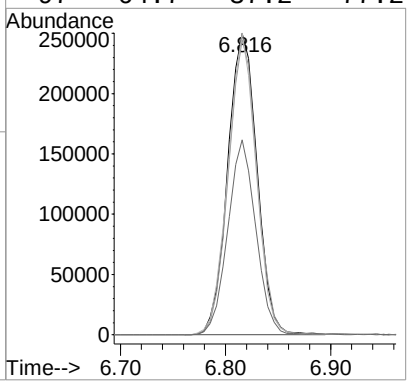


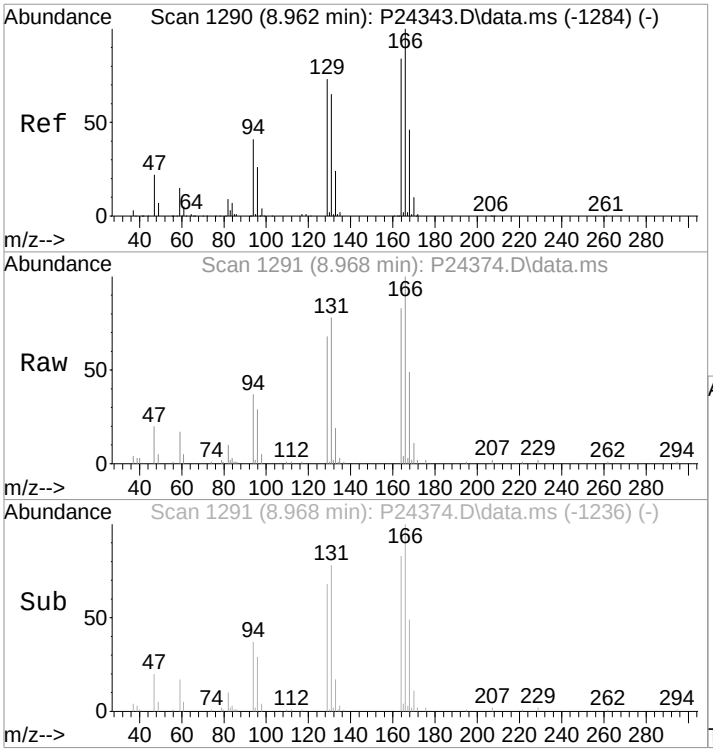


#54
Trichloroethene
Concen: 139.29 ppb
RT: 6.816 min Scan# 938
Delta R.T. 0.006 min
Lab File: P24374.D
Acq: 21 Feb 2019 5:41 pm

Tgt Ion:130 Resp: 485876

Ion	Ratio	Lower	Upper
130	100		
132	97.9	72.6	112.6
95	100.2	69.8	109.8
97	64.7	37.2	77.2

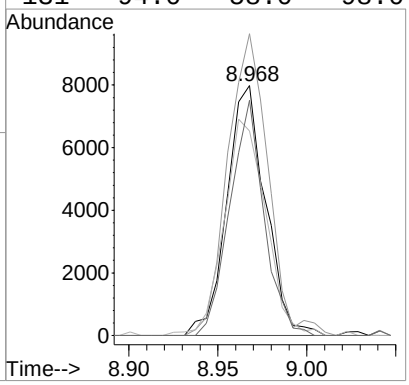




#72
Tetrachloroethene
Concen: 4.73 ppb
RT: 8.968 min Scan# 1291
Delta R.T. 0.006 min
Lab File: P24374.D
Acq: 21 Feb 2019 5:41 pm

Tgt Ion:164 Resp: 12130

Ion	Ratio	Lower	Upper
164	100		
166	120.8	99.6	139.6
129	81.9	66.7	106.7
131	94.0	58.0	98.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24374.D
Acq On : 21 Feb 2019 5:41 pm
Operator : K.Ruest
Sample : R1901228-008|4325 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24374.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.609	76	84	88	rBV8	17237	38189	1.50%	0.348%
2	5.267	673	684	697	rBV2	154306	419008	16.45%	3.822%
3	5.408	697	707	720	rVB	340781	863645	33.90%	7.877%
4	5.798	760	771	781	rBV	217805	509328	19.99%	4.646%
5	6.493	876	885	897	rBV	571151	1130698	44.39%	10.313%
6	6.816	928	938	953	rBV	1340062	2547287	100.00%	23.234%
7	8.297	1174	1181	1193	rBV	980692	1640497	64.40%	14.963%
8	8.968	1285	1291	1296	rBV2	56001	89544	3.52%	0.817%
9	9.791	1420	1426	1435	rBV	913299	1301734	51.10%	11.873%
10	10.864	1596	1602	1608	rBV	832351	1051118	41.26%	9.587%
11	11.205	1650	1658	1665	rBV4	16324	26421	1.04%	0.241%
12	11.839	1756	1762	1769	rBV	1071867	1346060	52.84%	12.278%

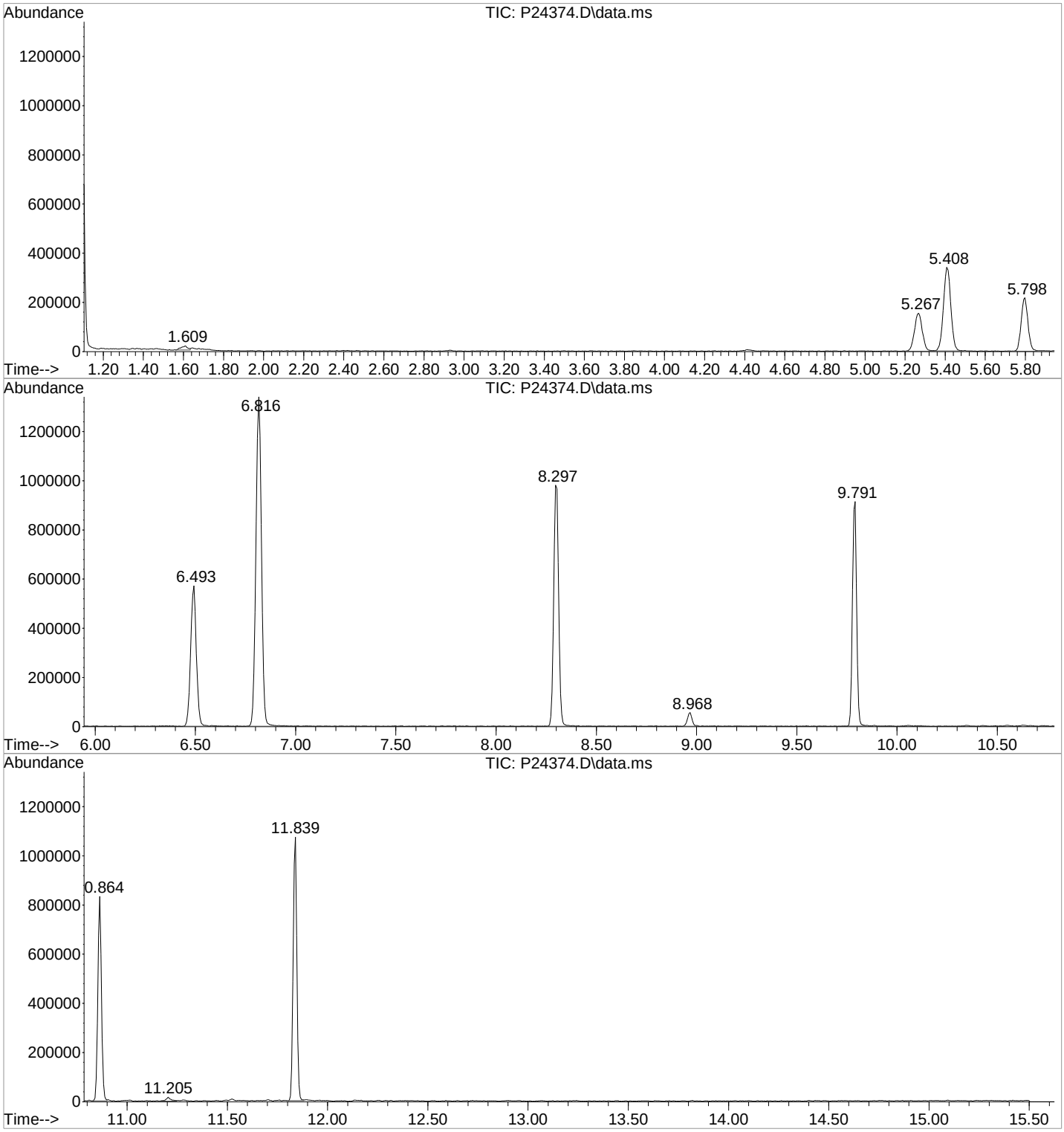
Sum of corrected areas: 10963529

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24374.D
Acq On : 21 Feb 2019 5:41 pm
Operator : K.Ruest
Sample : R1901228-008|4325 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\\
Data File : P24374.D
Acq On : 21 Feb 2019 5:41 pmm
Operator : K.Ruestt
Sample : R1901228-008|4325 Inst : MSVOA-122
Misc : DAY MED T44
ALS Vial : 15 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

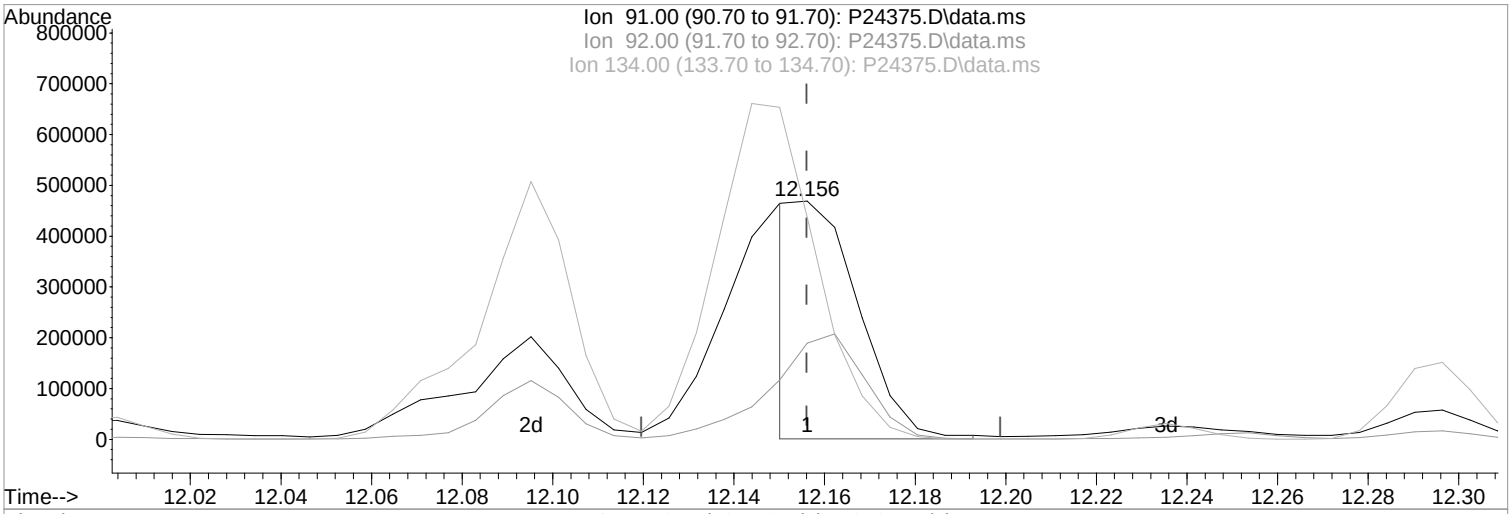
					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

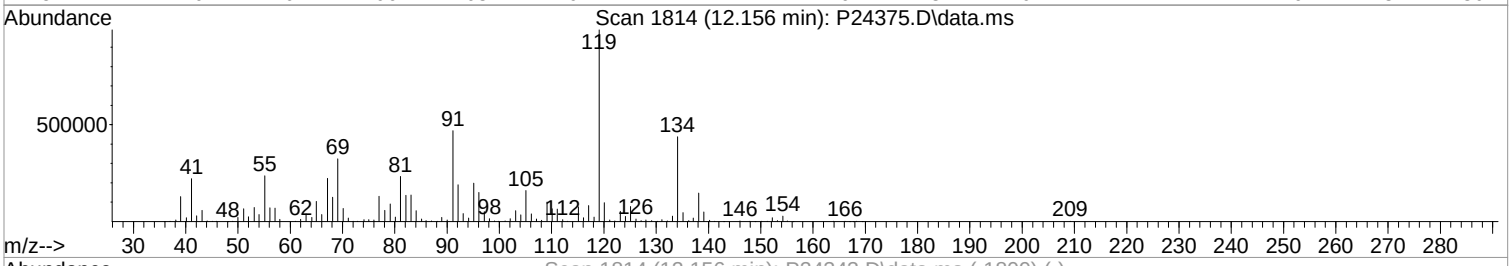
No Library Search Compounds Detected
****

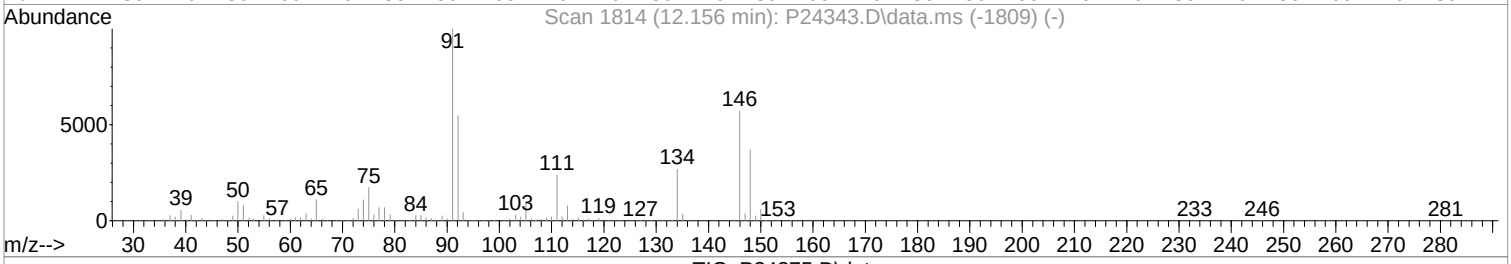
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 22 09:05:25 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24375.D\data.ms

(109) n-Butylbenzene

12.156min (+0.000) 33.32 ppb m

response 455067

Ion	Exp%	Act%
91.00	100	100
92.00	54.70	40.32
134.00	26.80	93.26#
0.00	0.00	0.00

Manual Integration:

After

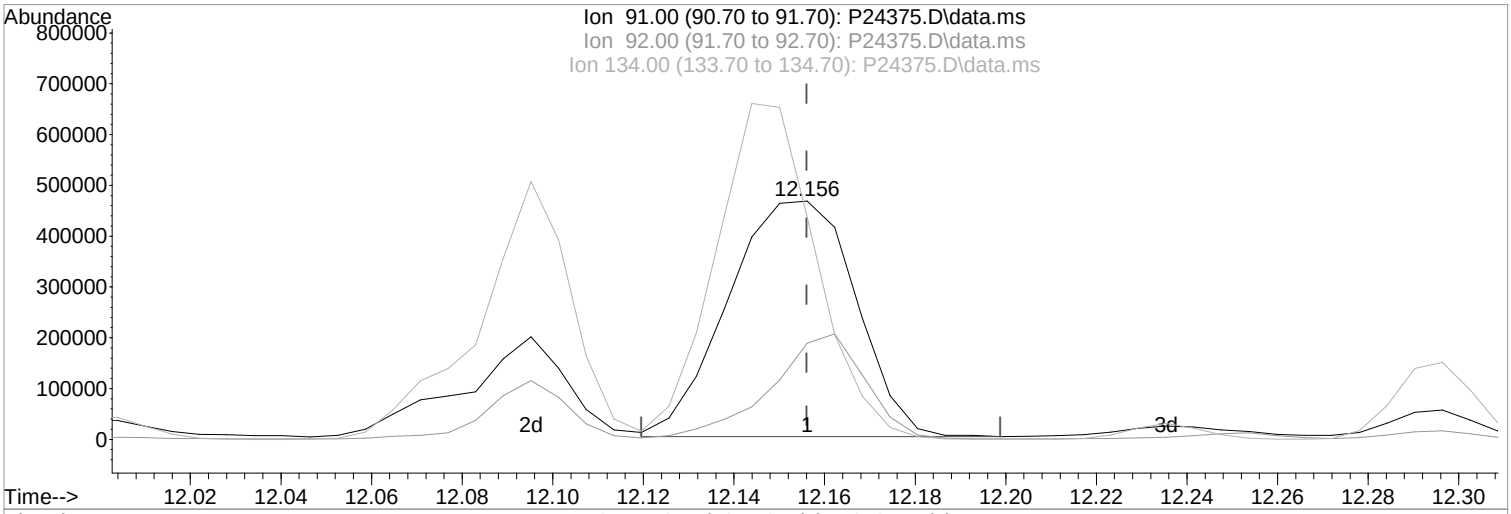
Poor integration.

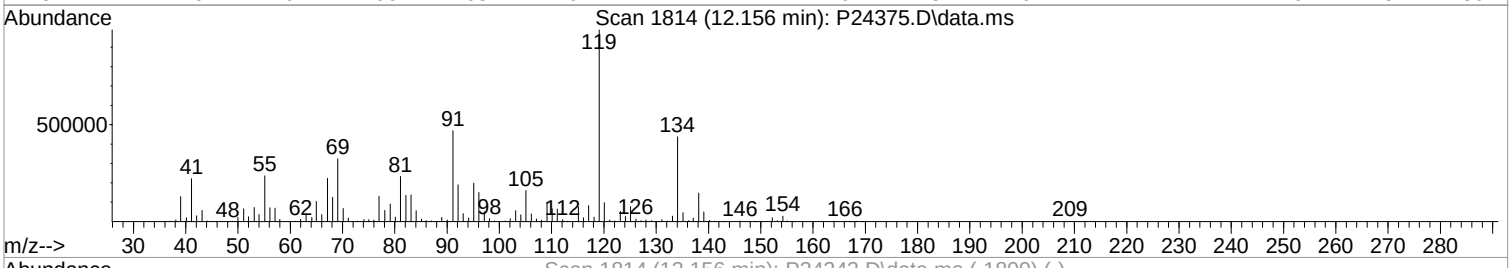
02/22/19

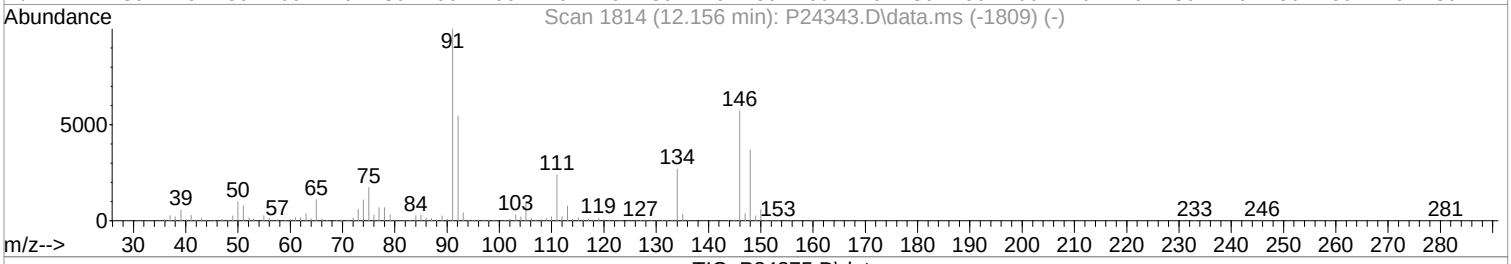
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 22 09:05:25 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24375.D\data.ms

(109) n-Butylbenzene

12.156min (+0.000) 66.13 ppb

response 903262

Ion	Exp%	Act%
91.00	100	100
92.00	54.70	40.32
134.00	26.80	93.26#
0.00	0.00	0.00

Manual Integration:

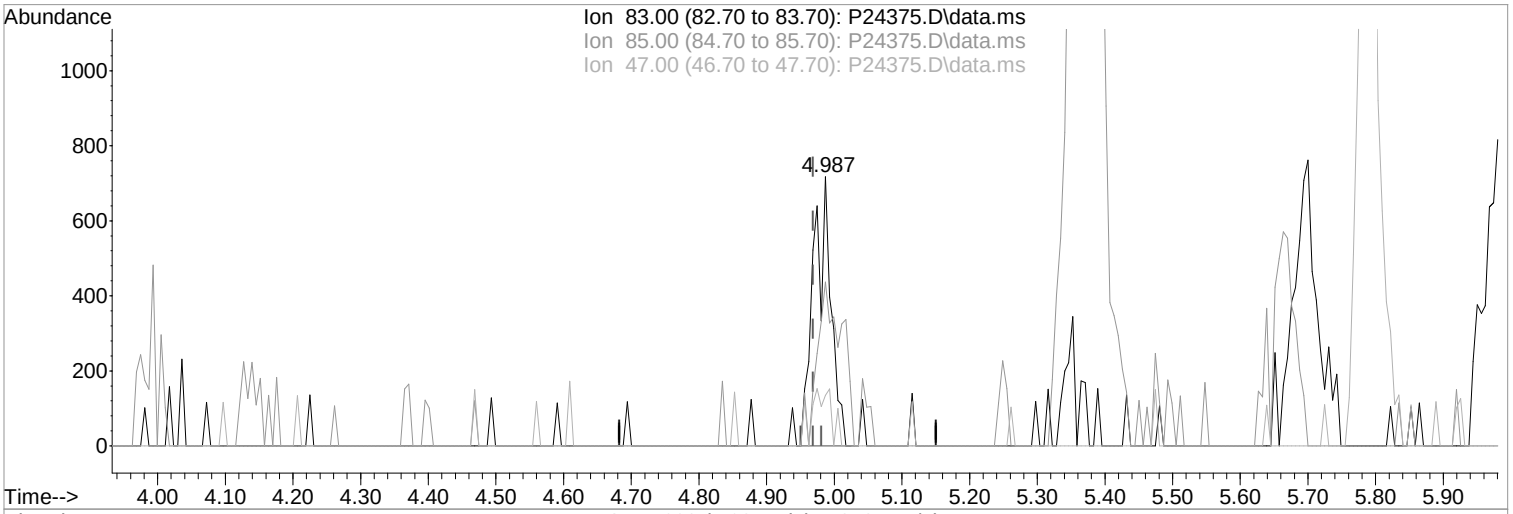
Before

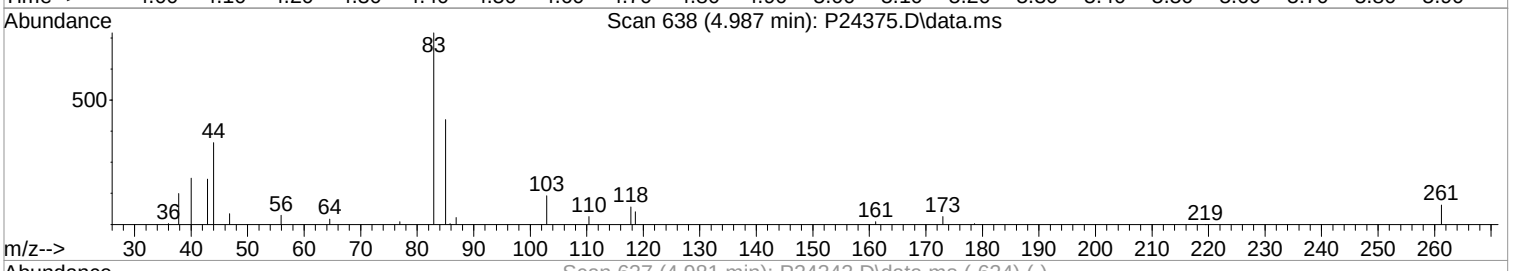
02/22/19

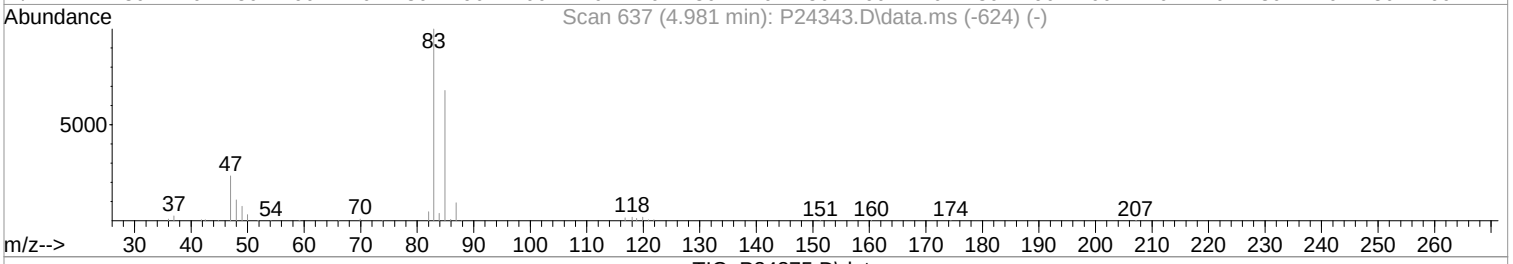
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 22 09:05:25 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24375.D\data.ms

(40) Chloroform (P)

4.987min (+0.018) 0.24 ppb m

response 1291

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	60.95
47.00	23.40	18.83
0.00	0.00	0.00

Manual Integration:

After

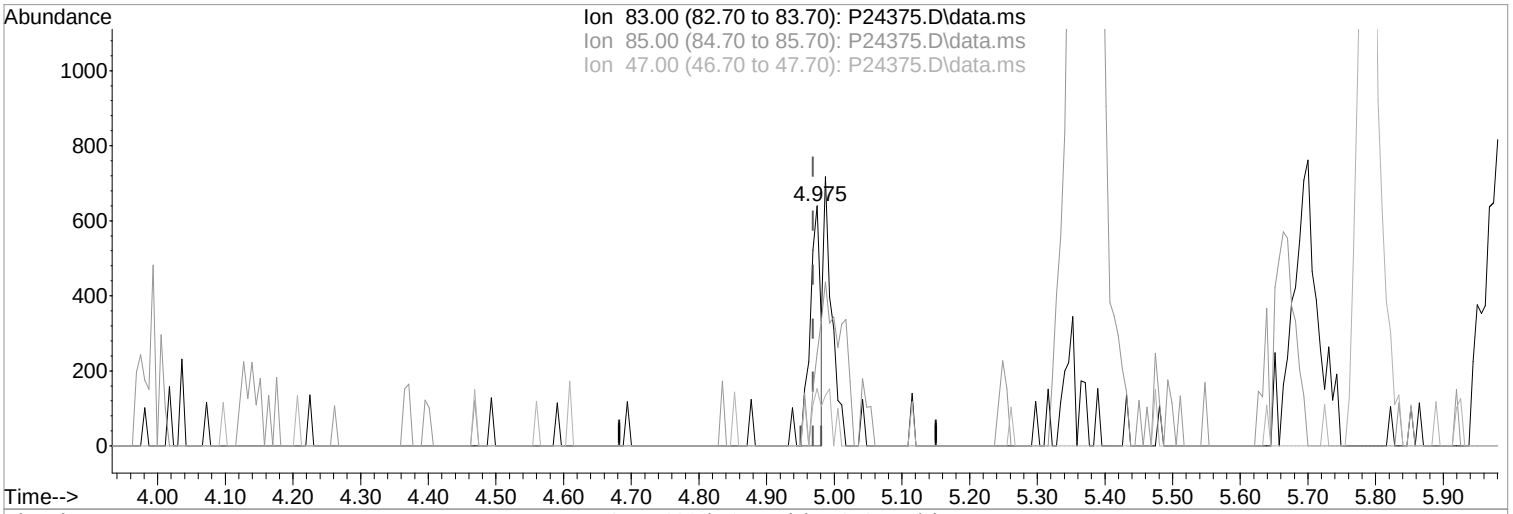
Split Peak

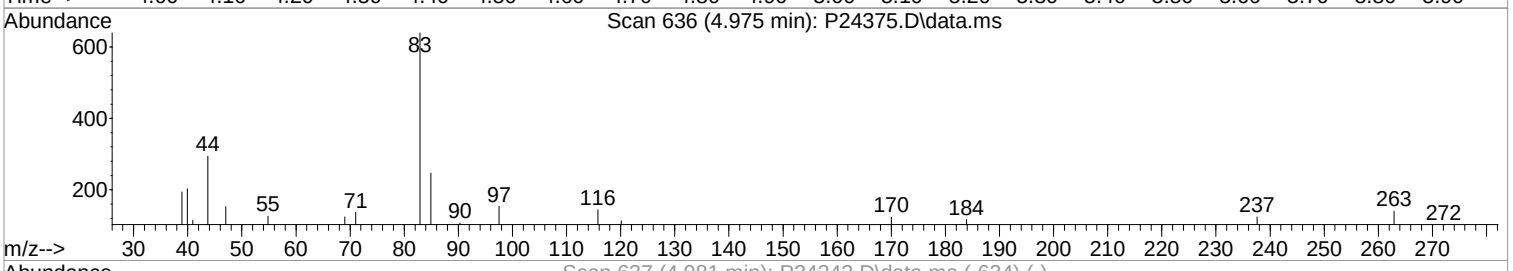
02/22/19

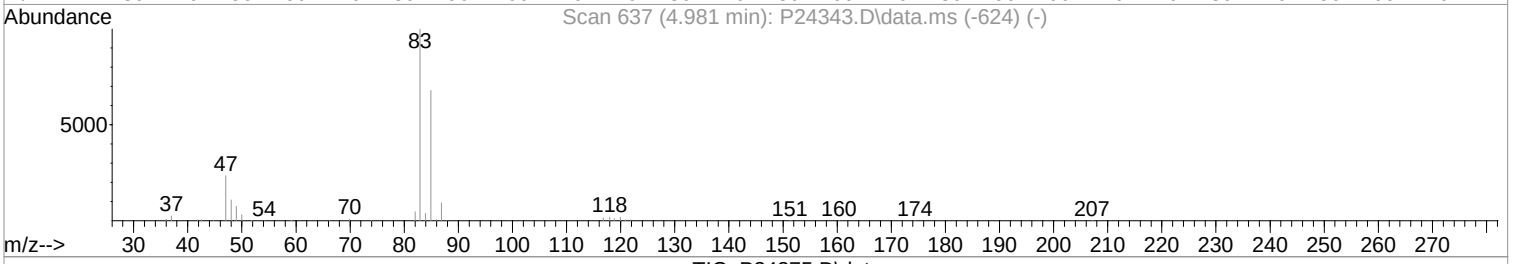
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 22 09:05:25 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24375.D\data.ms

(40) Chloroform (P)

4.975min (+0.006) 0.13 ppb

response 685

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	38.59#
47.00	23.40	23.91
0.00	0.00	0.00

Manual Integration:

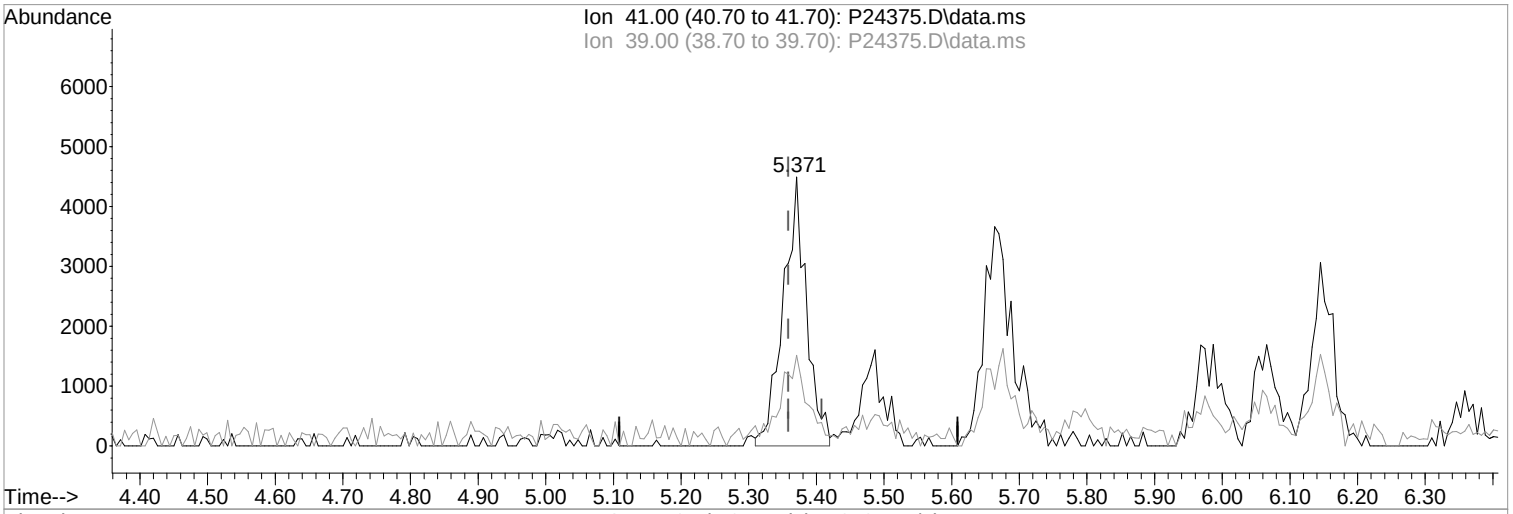
Before

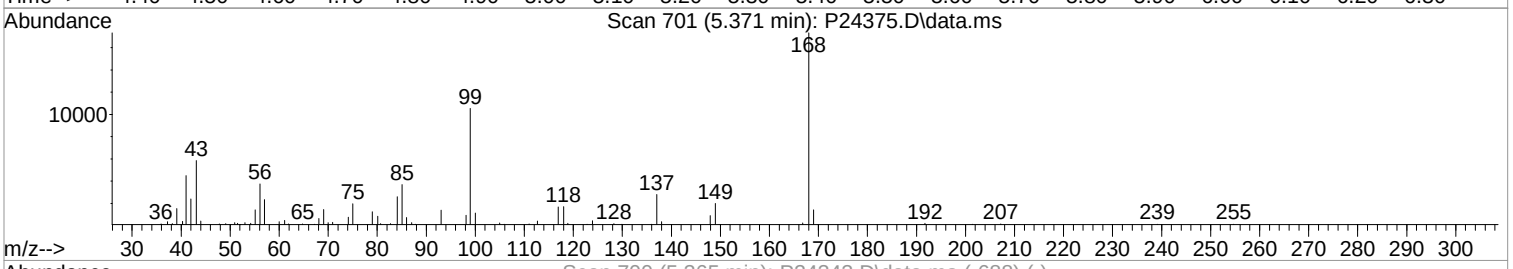
02/22/19

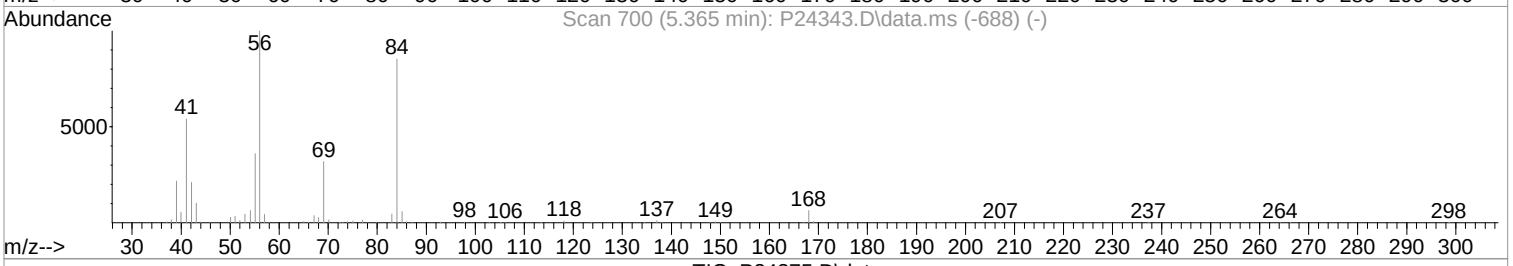
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 22 09:05:25 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24375.D\data.ms

(44) Cyclohexane (P)

5.371min (+0.012) 3.58 ppb m

response 10713

Ion	Exp%	Act%
41.00	100	100
39.00	40.30	33.69
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

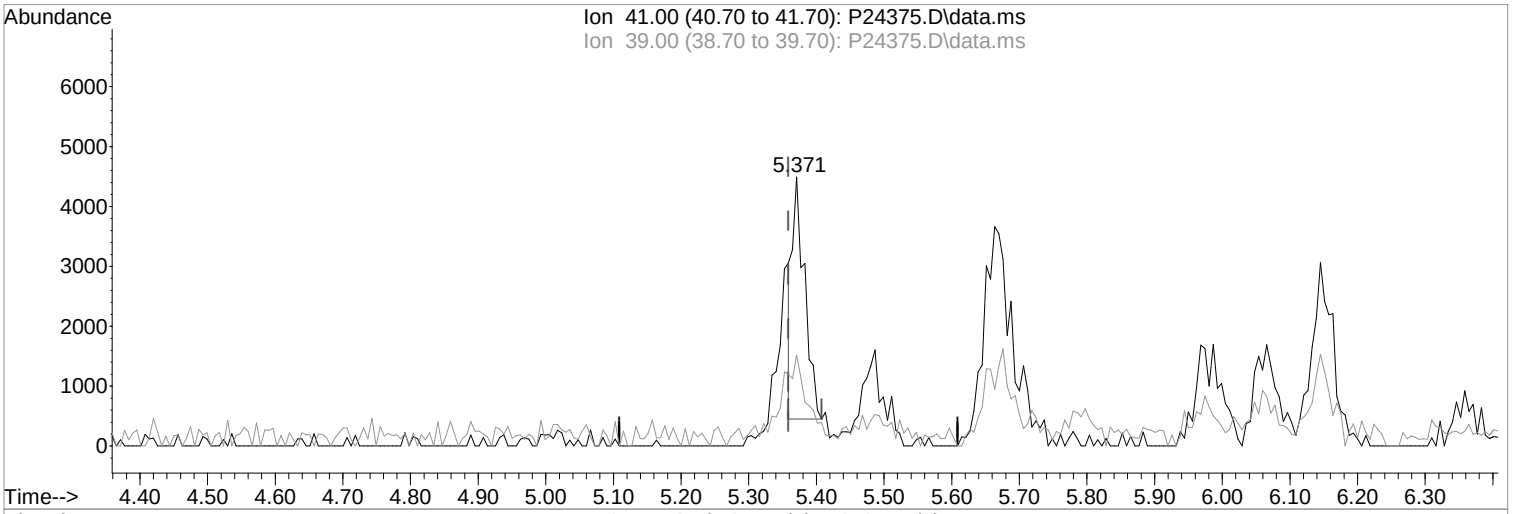
Split Peak

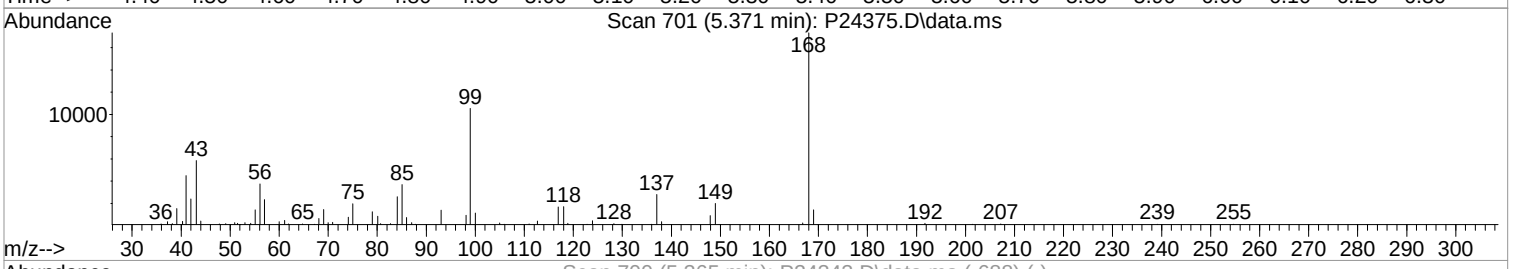
02/22/19

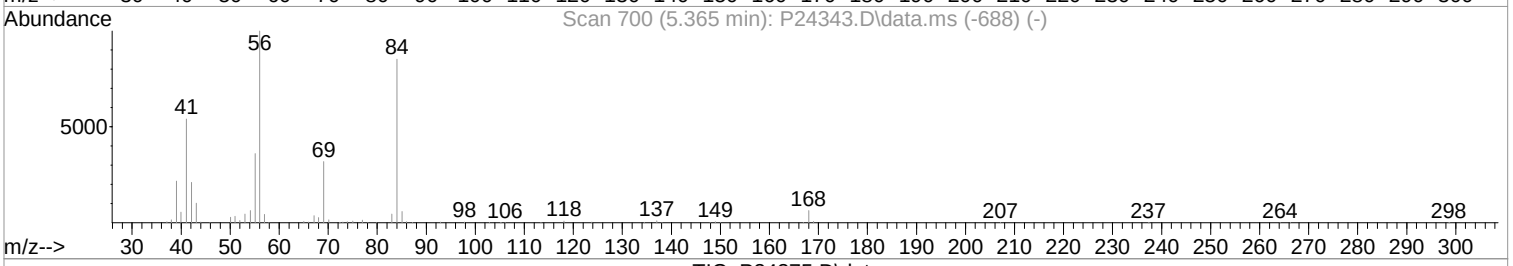
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 22 09:05:25 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24375.D\data.ms

(44) Cyclohexane (P)

5.371min (+0.012) 1.72 ppb

response 5139

Ion	Exp%	Act%
41.00	100	100
39.00	40.30	33.69
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 22 14:45:55 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

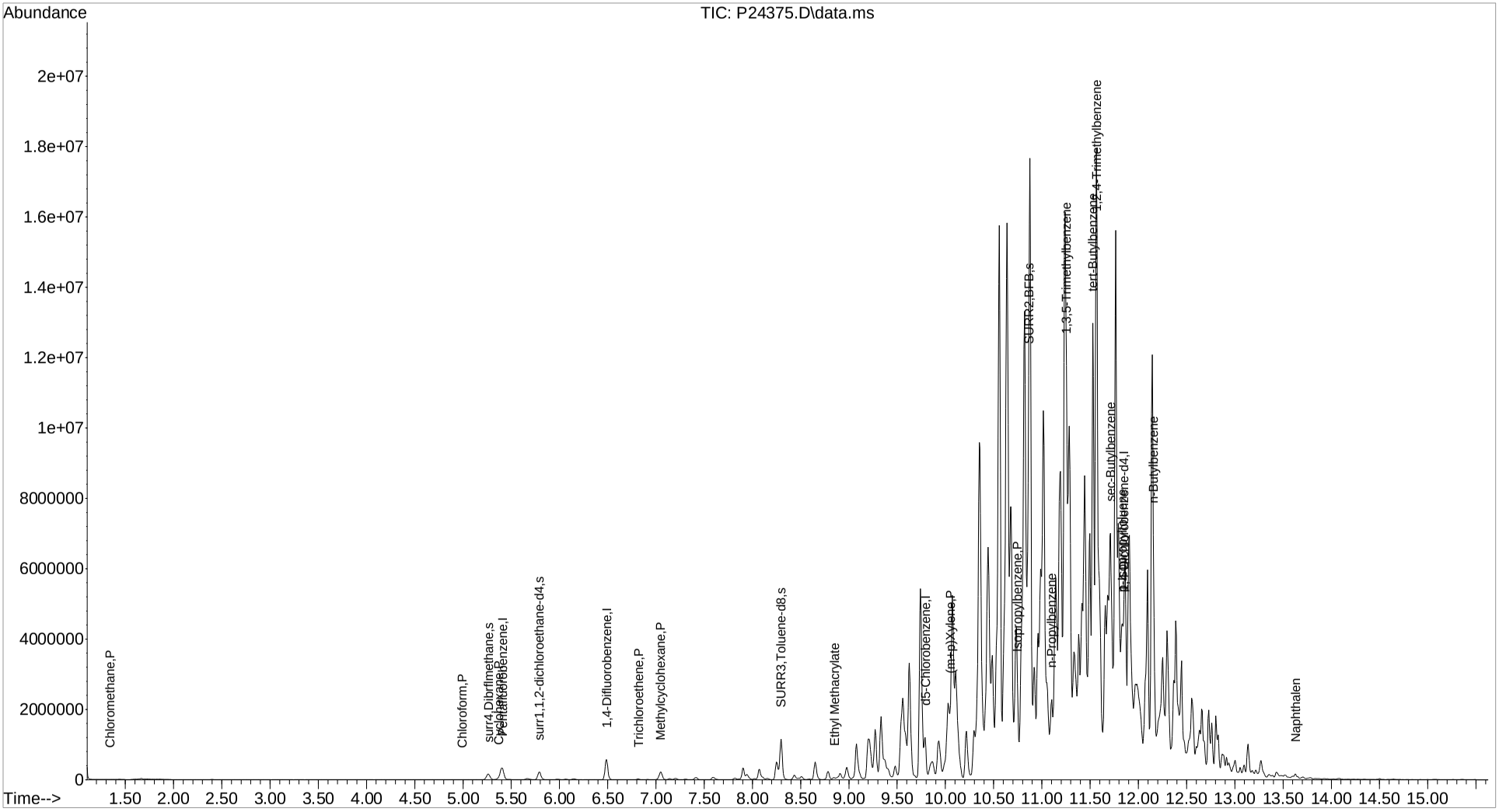
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
Internal Standards								
1) Pentafluorobenzene	5.407	168	316263	50.00	ppb		0.01	
43) 1,4-Difluorobenzene	6.487	114	510710	50.00	ppb		0.00	
71) d5-Chlorobenzene	9.791	117	467224	50.00	ppb		0.00	
86) 1,4-Dichlorobenzene-d4	11.845	152	272535	50.00	ppb		0.00	
System Monitoring Compounds								
45) surr4,Dibrflmethane	5.261	113	134706	48.00	ppb		0.00	
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.00%					
48) surr1,1,2-dichloroetha...	5.792	65	190254	53.44	ppb		0.00	
Spiked Amount 50.000	Range 73 - 125		Recovery = 106.88%					
65) SURR3,Toluene-d8	8.297	98	678887	51.00	ppb		0.00	
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.00%					
70) SURR2,BFB	10.864	95	394147	82.67	ppb		0.00	
Spiked Amount 50.000	Range 85 - 122		Recovery = 165.34%#					
Target Compounds							Qvalue	
3) Chloromethane	1.341	50	1568	0.31	ppb		95	
40) Chloroform	4.987	83	1291m	0.24	ppb			
44) Cyclohexane	5.371	41	10713m	3.58	ppb			
54) Trichloroethene	6.822	130	8174	2.29	ppb	#	84	
55) Methylcyclohexane	7.047	55	82830	18.38	ppb		90	
68) Ethyl Methacrylate	8.846	69	15694	2.70	ppb		86	
83) (m+p)Xylene	10.053	106	57753	8.76	ppb		87	
89) Isopropylbenzene	10.748	105	170190	9.49	ppb		98	
95) n-Propylbenzene	11.101	91	492748	23.99	ppb		96	
99) 1,3,5-Trimethylbenzene	11.254	105	2747280	184.67	ppb		98	
100) tert-Butylbenzene	11.528	119	80358	6.21	ppb		99	
101) 1,2,4-Trimethylbenzene	11.565	105	5735559	372.72	ppb		85	E-Over Calibration
103) sec-Butylbenzene	11.711	105	545394	29.07	ppb		100	
104) p-Isopropyltoluene	11.833	119	694124	44.55	ppb		97	
109) n-Butylbenzene	12.156	91	455067m	33.32	ppb			
117) Naphthalen	13.625	128	72636	3.88	ppb		99	

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 22 14:45:55 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



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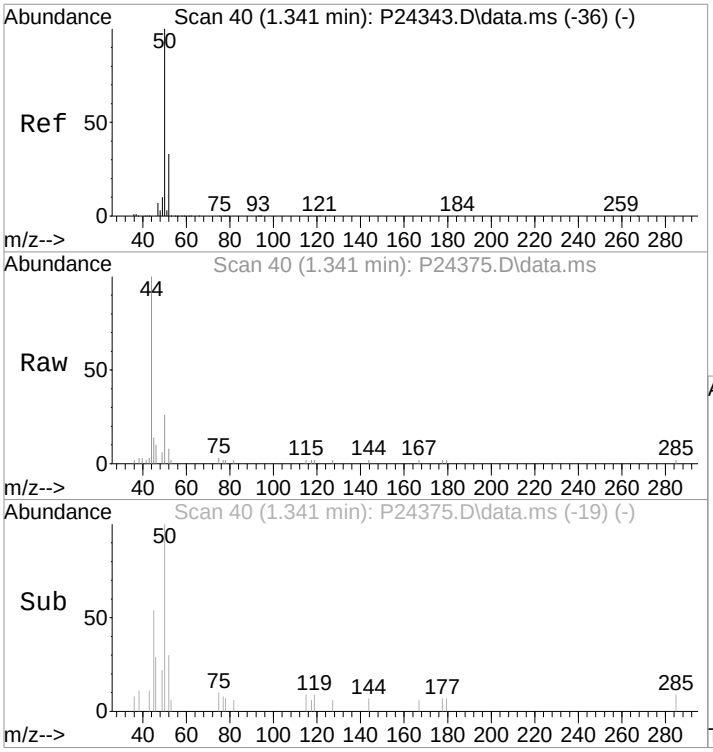
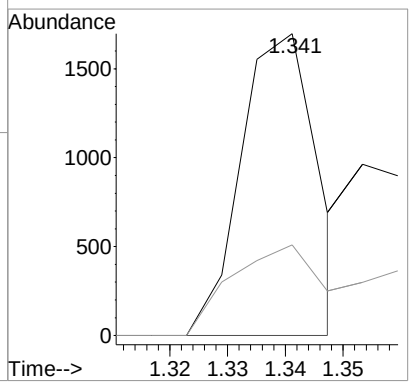
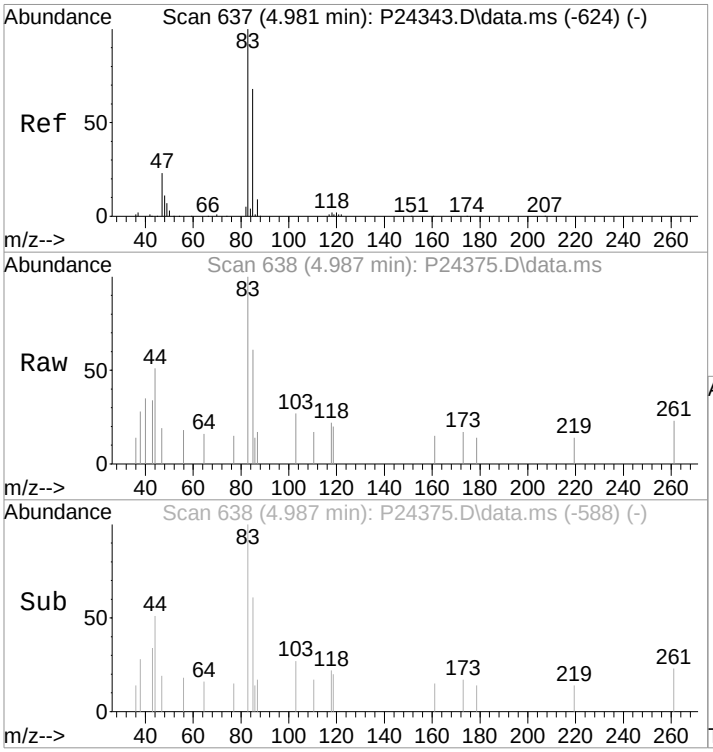


#3
Chloromethane
Concen: 0.31 ppb
RT: 1.341 min Scan# 40
Delta R.T. 0.012 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion: 50 Resp: 1568

Ion	Ratio	Lower	Upper
50	100		
52	30.0	13.0	53.0

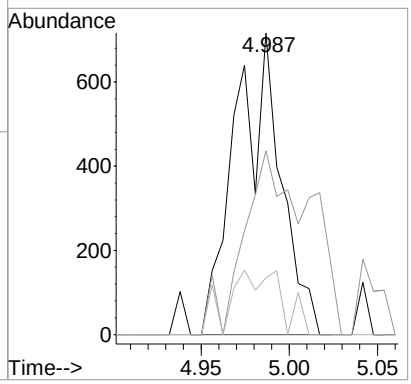


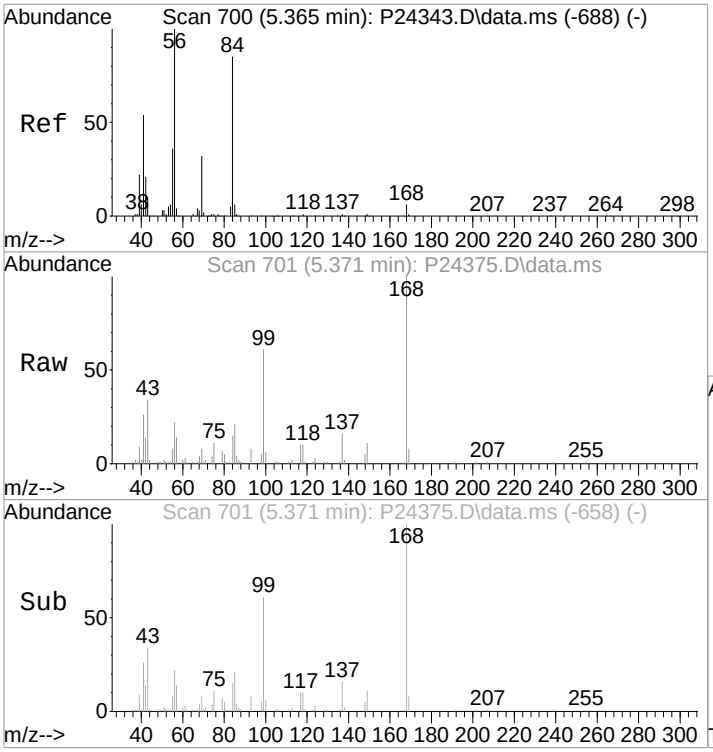


#40
Chloroform
Concen: 0.24 ppb m
RT: 4.987 min Scan# 638
Delta R.T. 0.018 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion: 83 Resp: 1291

Ion	Ratio	Lower	Upper
83	100		
85	60.9	47.9	87.9
47	18.8	3.4	43.4

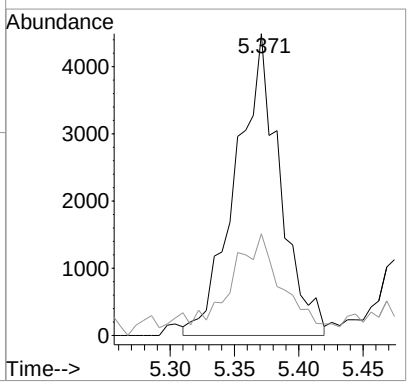


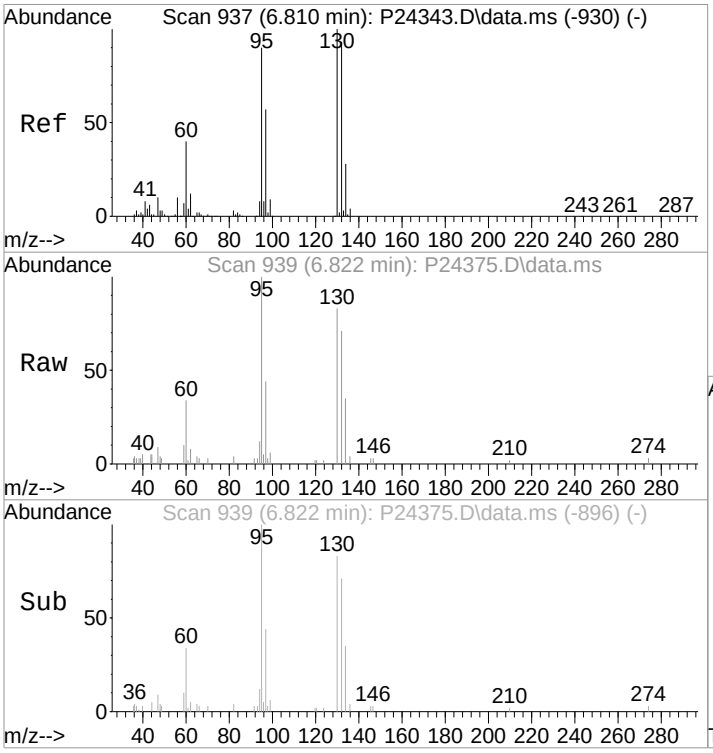


#44
Cyclohexane
Concen: 3.58 ppb m
RT: 5.371 min Scan# 701
Delta R.T. 0.012 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion: 41 Resp: 10713

Ion	Ratio	Lower	Upper
41	100		
39	33.7	20.3	60.3

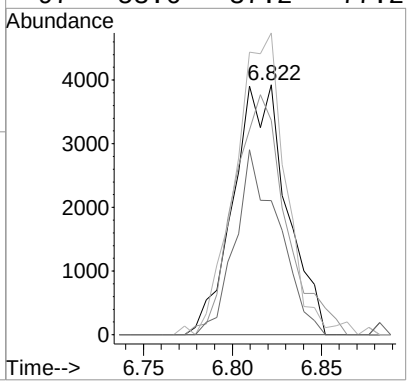


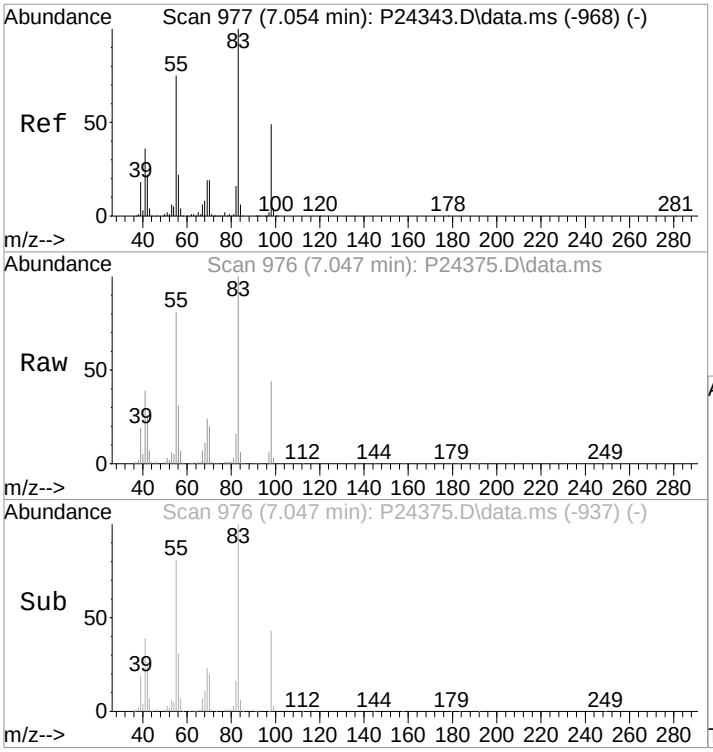


#54
Trichloroethene
Concen: 2.29 ppb
RT: 6.822 min Scan# 939
Delta R.T. 0.012 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:130 Resp: 8174

Ion	Ratio	Lower	Upper
130	100		
132	85.8	72.6	112.6
95	120.8	69.8	109.8#
97	53.6	37.2	77.2

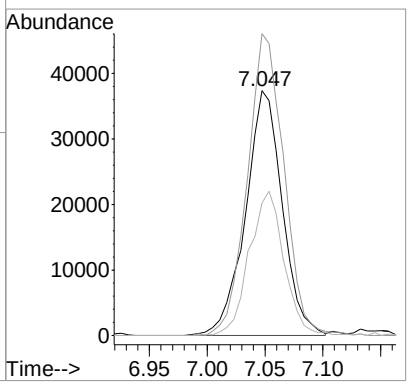


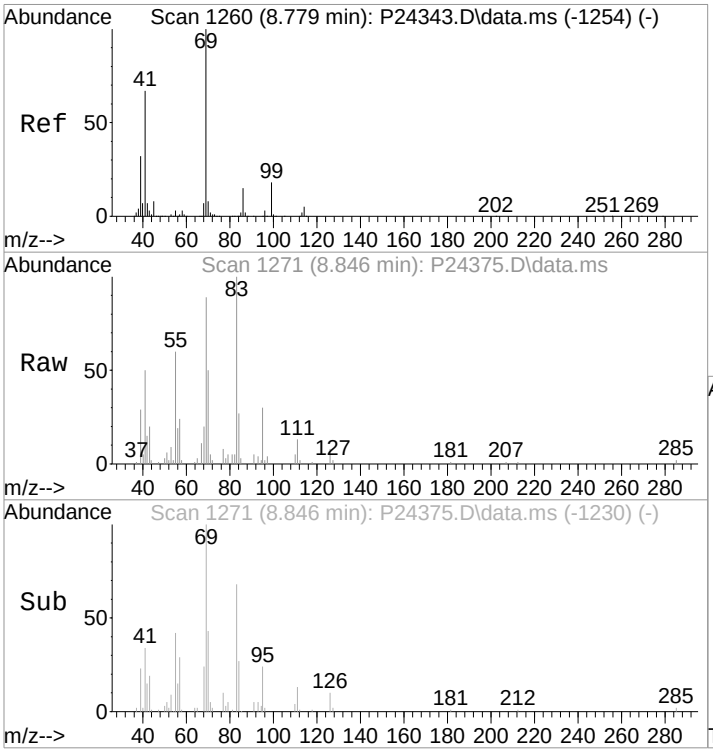


#55
Methylcyclohexane
Concen: 18.38 ppb
RT: 7.047 min Scan# 976
Delta R.T. 0.000 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion: 55 Resp: 82830

Ion	Ratio	Lower	Upper
55	100		
83	123.4	113.1	153.1
98	54.1	45.0	85.0

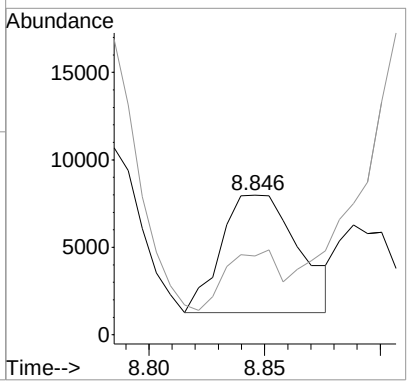


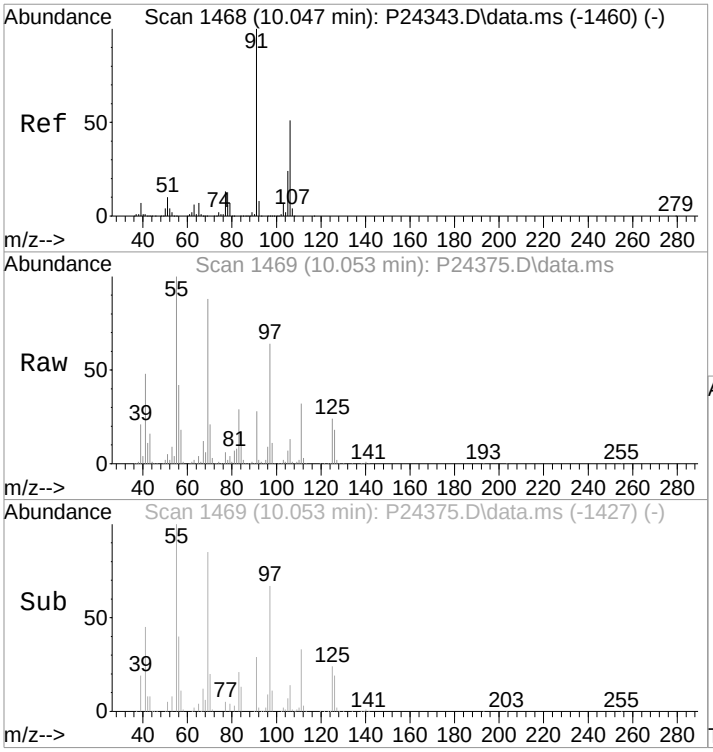


#68
Ethyl Methacrylate
Concen: 2.70 ppb
RT: 8.846 min Scan# 1271
Delta R.T. 0.067 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion: 69 Resp: 15694

Ion	Ratio	Lower	Upper
69	100		
41	56.5	47.6	87.6

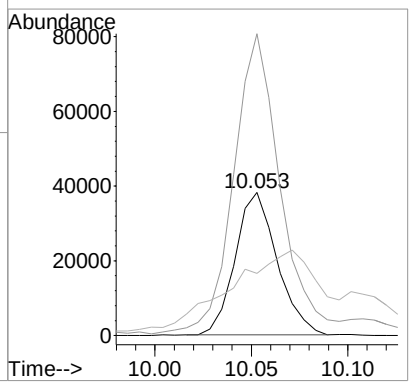


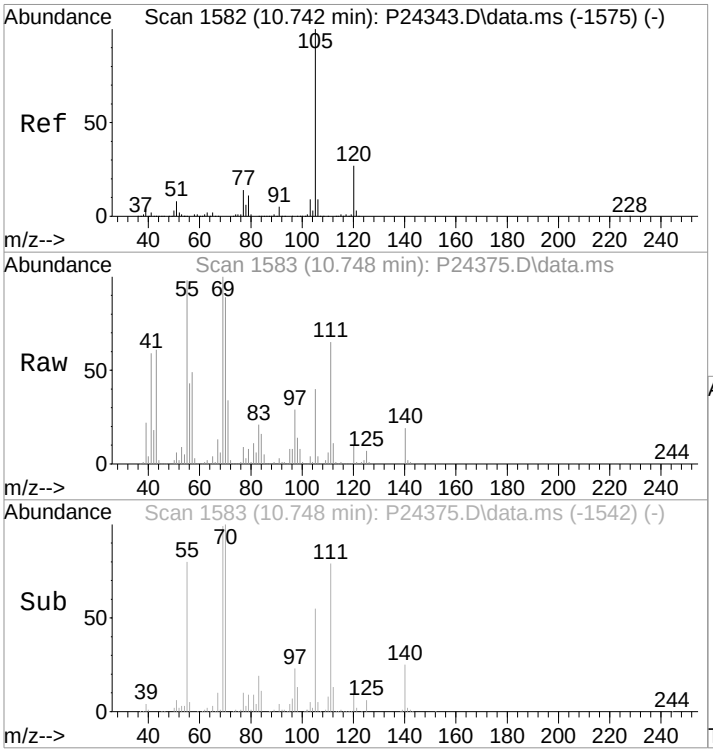


#83
(m+p)Xylene
Concen: 8.76 ppb
RT: 10.053 min Scan# 1469
Delta R.T. 0.006 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:106 Resp: 57753

Ion	Ratio	Lower	Upper
106	100		
91	210.9	175.0	215.0
77	43.4	6.3	46.3

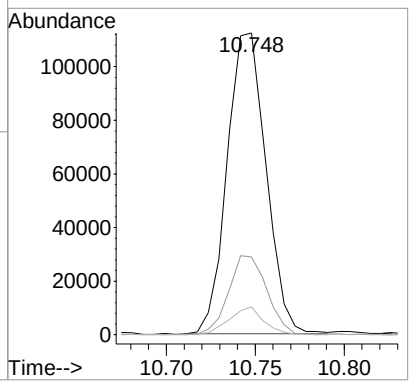


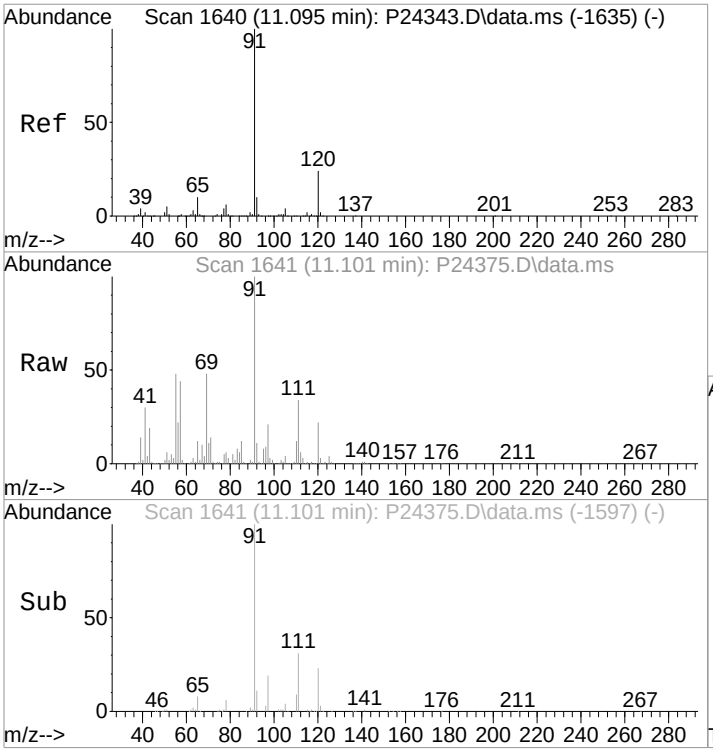


#89
Isopropylbenzene
Concen: 9.49 ppb
RT: 10.748 min Scan# 1583
Delta R.T. 0.006 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:105 Resp: 170190

Ion	Ratio	Lower	Upper
105	100		
120	25.8	7.2	47.2
106	9.2	0.0	28.8

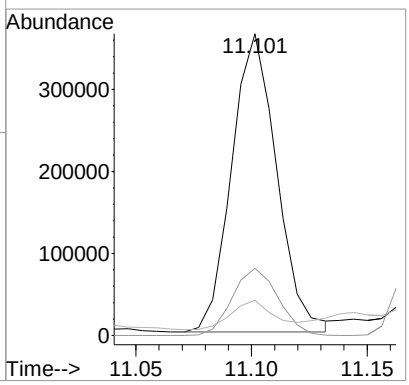


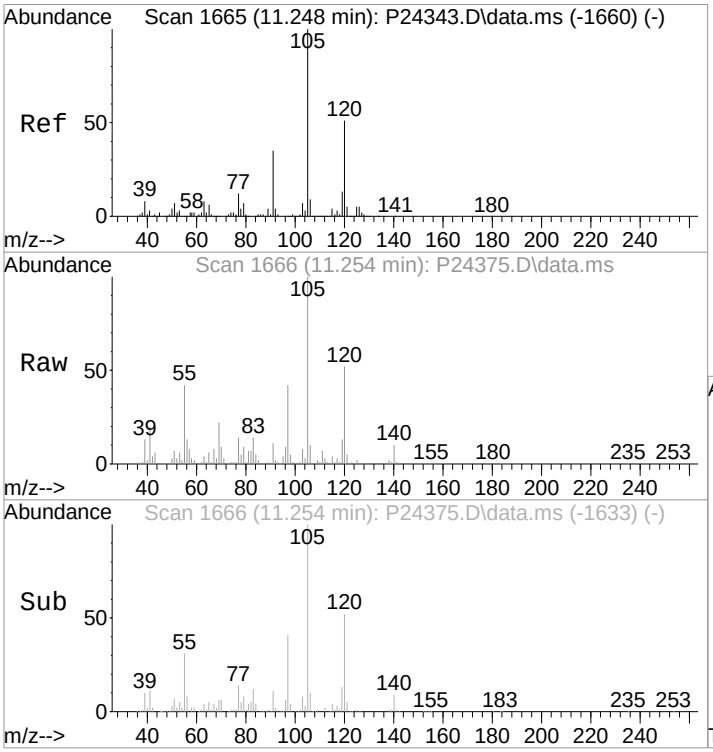


#95
n-Propylbenzene
Concen: 23.99 ppb
RT: 11.101 min Scan# 1641
Delta R.T. 0.006 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion: 91 Resp: 492748

Ion	Ratio	Lower	Upper
91	100		
120	22.2	4.4	44.4
65	11.6	0.0	30.4

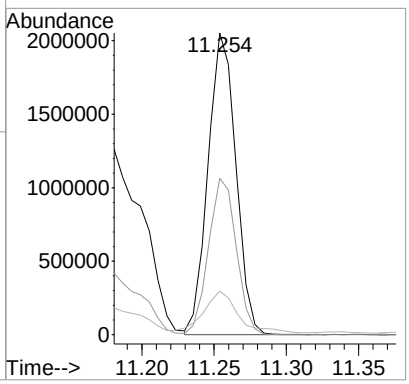


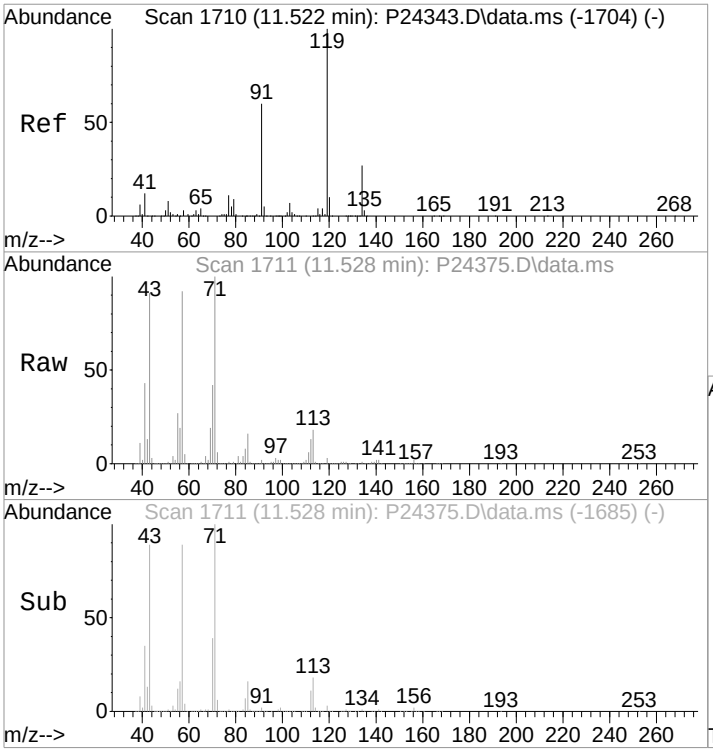


#99
1,3,5-Trimethylbenzene
Concen: 184.67 ppb
RT: 11.254 min Scan# 1666
Delta R.T. 0.006 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:105 Resp: 2747280

Ion	Ratio	Lower	Upper
105	100		
120	51.9	30.8	70.8
77	14.5	0.0	32.5

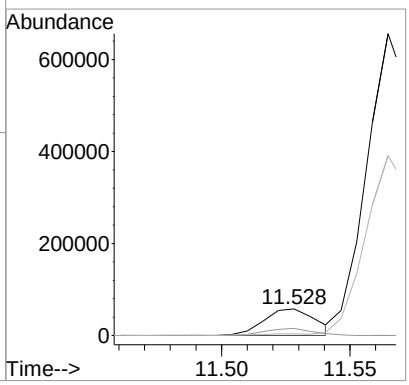


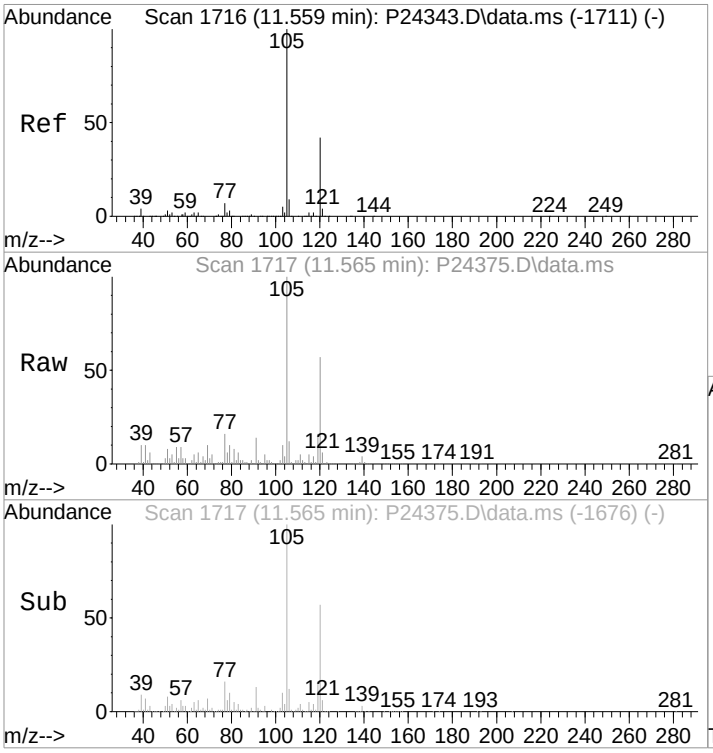


#100
tert-Butylbenzene
Concen: 6.21 ppb
RT: 11.528 min Scan# 1711
Delta R.T. 0.006 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:119 Resp: 80358

Ion	Ratio	Lower	Upper
119	100		
134	26.3	7.0	47.0
103	6.6	0.0	26.6

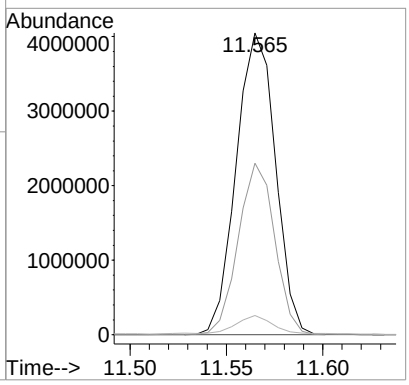


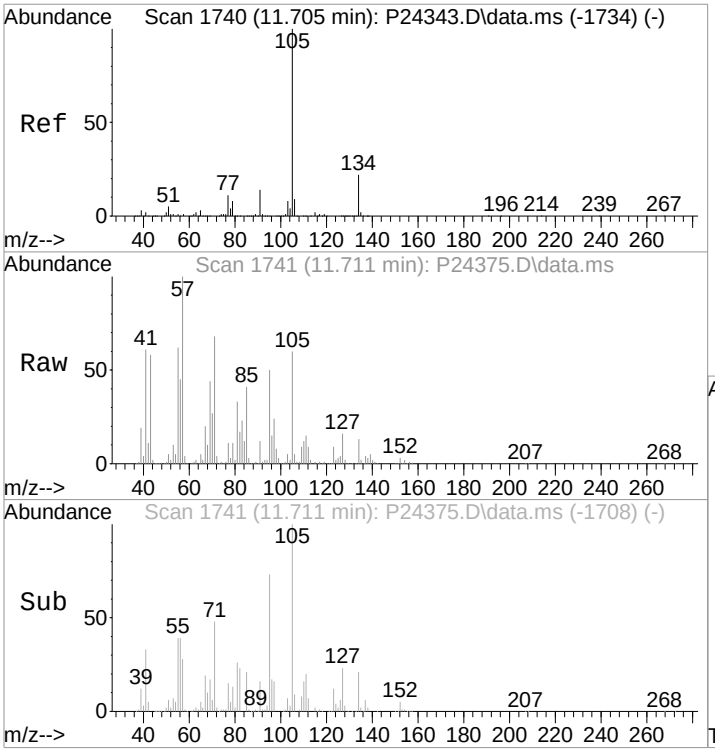


#101
1,2,4-Trimethylbenzene
Concen: 372.72 ppb
RT: 11.565 min Scan# 1717
Delta R.T. 0.006 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:105 Resp: 5735559

Ion	Ratio	Lower	Upper
105	100		
120	56.8	26.4	66.4
65	6.3	0.0	24.1

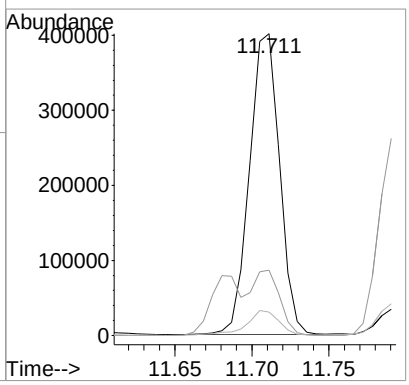


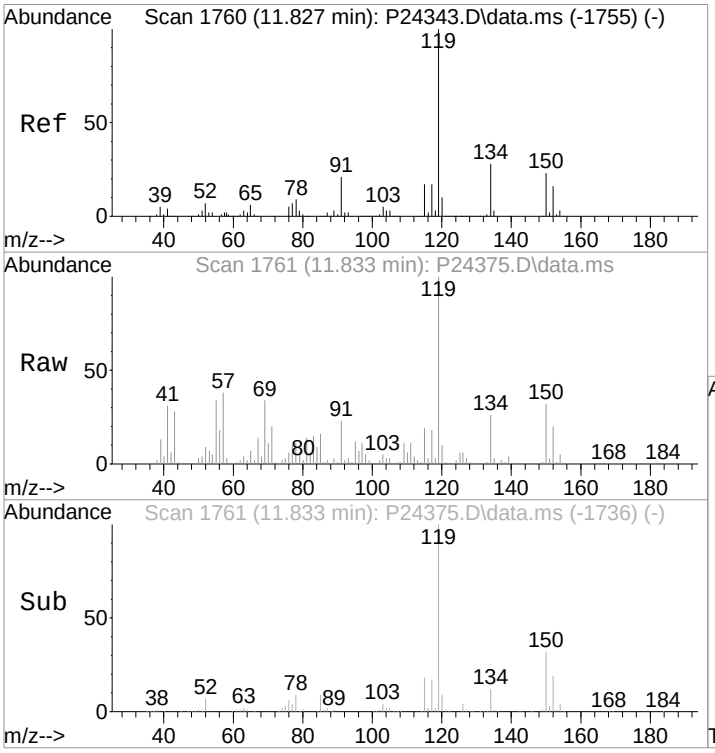


#103
sec-Butylbenzene
Concen: 29.07 ppb
RT: 11.711 min Scan# 1741
Delta R.T. 0.006 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:105 Resp: 545394

Ion	Ratio	Lower	Upper
105	100		
134	21.6	1.8	41.8
103	7.7	0.0	27.9

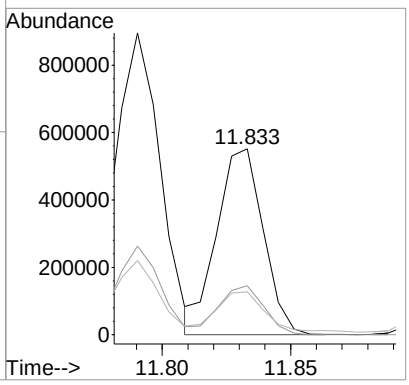


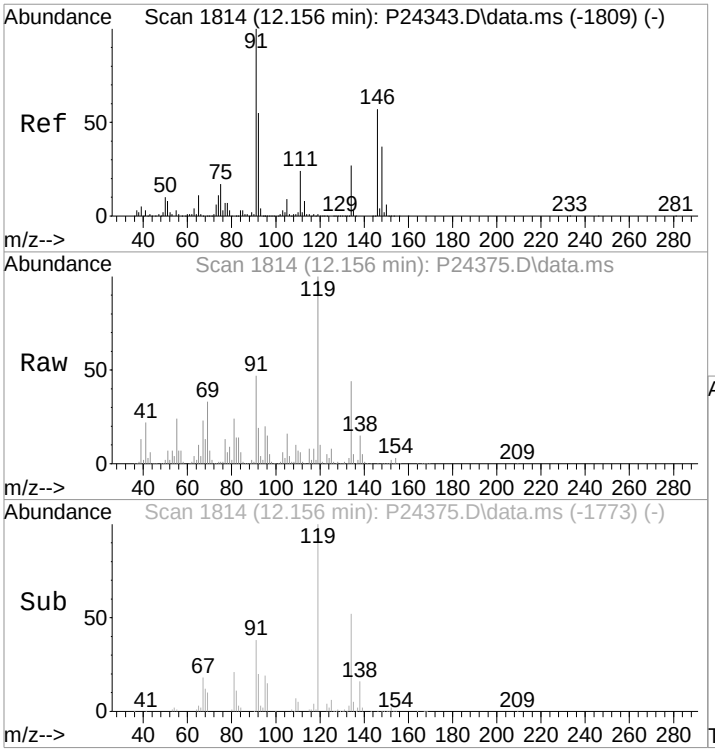


#104
p-Isopropyltoluene
Concen: 44.55 ppb
RT: 11.833 min Scan# 1761
Delta R.T. 0.006 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:119 Resp: 694124

Ion	Ratio	Lower	Upper
119	100		
134	26.4	7.6	47.6
91	23.2	1.3	41.3

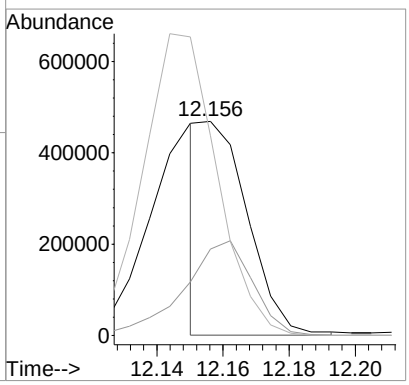


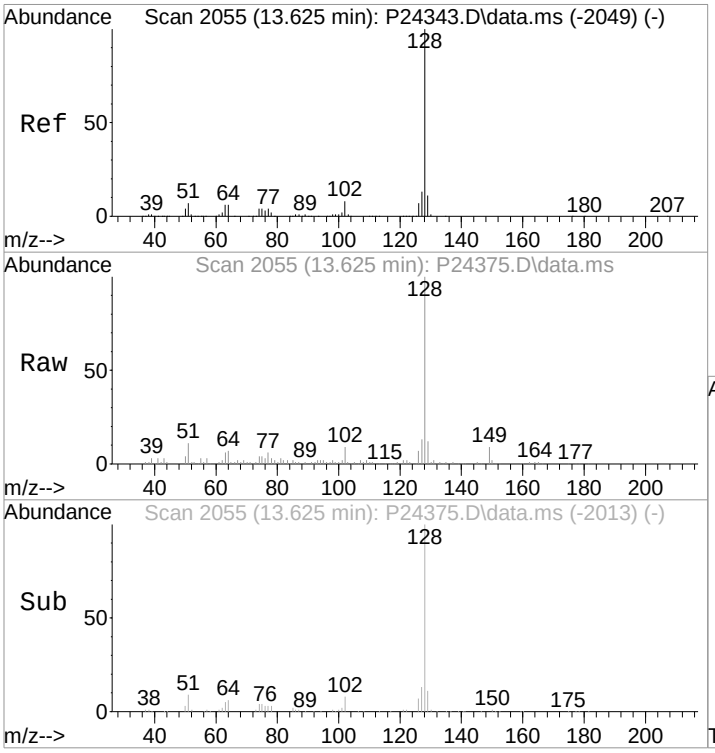


#109
n-Butylbenzene
Concen: 33.32 ppb m
RT: 12.156 min Scan# 1814
Delta R.T. 0.000 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion: 91 Resp: 455067

Ion	Ratio	Lower	Upper
91	100		
92	40.3	34.7	74.7
134	93.3	6.8	46.8#

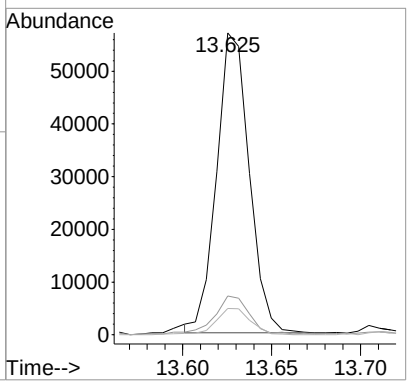




#117
Naphthalen
Concen: 3.88 ppb
RT: 13.625 min Scan# 2055
Delta R.T. 0.000 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:128 Resp: 72636

Ion	Ratio	Lower	Upper
128	100		
127	12.9	0.0	32.9
102	8.8	0.0	28.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24375.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.261	671	683	692	rBV	161363	430889	1.41%	0.091%
2	5.401	692	706	717	rVV	330632	933397	3.05%	0.197%
3	5.792	761	770	783	rVB	220633	518367	1.70%	0.109%
4	6.487	875	884	897	rBV	576627	1175490	3.84%	0.248%
5	7.047	965	976	985	rBV2	221874	515589	1.69%	0.109%
6	7.901	1111	1116	1120	rBV	314526	542306	1.77%	0.114%
7	8.072	1139	1144	1153	rBV	275579	545881	1.79%	0.115%
8	8.248	1166	1173	1176	rBV	502321	895796	2.93%	0.189%
9	8.297	1176	1181	1192	rVB	1150686	2177966	7.12%	0.460%
10	8.651	1233	1239	1251	rVB	502924	950971	3.11%	0.201%
11	8.785	1251	1261	1267	rBV	231346	441686	1.44%	0.093%
12	8.974	1286	1292	1300	rVB2	325775	636064	2.08%	0.134%
13	9.077	1300	1309	1320	rBV	995168	2021278	6.61%	0.427%
14	9.206	1323	1330	1336	rBV3	1122367	3095981	10.13%	0.654%
15	9.273	1336	1341	1346	rVB	1203168	1933047	6.32%	0.408%
16	9.334	1346	1351	1361	rBV	1572517	3205730	10.49%	0.677%
17	9.480	1369	1375	1380	rBV	315631	552488	1.81%	0.117%
18	9.559	1380	1388	1395	rBV4	2185308	6876995	22.49%	1.452%
19	9.626	1395	1399	1407	rVB	3189786	5818327	19.03%	1.228%
20	9.742	1411	1418	1423	rBV	5377168	9982369	32.65%	2.107%
21	9.791	1423	1426	1431	rVB	1049608	1495373	4.89%	0.316%
22	9.864	1431	1438	1443	rBV5	367989	955371	3.12%	0.202%
23	9.931	1443	1449	1455	rBV3	941730	2046874	6.70%	0.432%
24	10.029	1455	1465	1468	rBV2	1954503	4527061	14.81%	0.956%
25	10.071	1468	1472	1476	rVV	4132054	7204034	23.56%	1.521%
26	10.108	1476	1478	1490	rVB2	3020970	6035944	19.74%	1.274%
27	10.218	1490	1496	1502	rBV	1321283	2452142	8.02%	0.518%
28	10.297	1503	1509	1511	rBV2	1269628	2023296	6.62%	0.427%
29	10.352	1511	1518	1526	rBV4	8367435	16722189	54.70%	3.530%
30	10.443	1526	1533	1537	rBV4	5220646	10283982	33.64%	2.171%
31	10.486	1537	1540	1544	rVB2	2055049	2857860	9.35%	0.603%
32	10.559	1544	1552	1557	rBV2	14280560	25458546	83.27%	5.374%
33	10.638	1557	1565	1569	rBV2	14175418	29139371	95.31%	6.151%
34	10.681	1569	1572	1576	rVB2	6126589	9298023	30.41%	1.963%
35	10.736	1576	1581	1586	rVB3	3256196	5686751	18.60%	1.200%
36	10.821	1586	1595	1599	rBV3	12253137	27521048	90.02%	5.810%
37	10.876	1599	1604	1609	rVB2	15558681	25863198	84.60%	5.460%
38	10.919	1609	1611	1614	rVB2	1466444	1634906	5.35%	0.345%
39	10.961	1614	1618	1619	rBV	2441055	2911689	9.52%	0.615%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

40	10.986	1619	1622	1624	rVV2	3314609	4915099	16.08%	1.038%
41	11.016	1624	1627	1632	rVB3	7734306	11406231	37.31%	2.408%
42	11.101	1637	1641	1643	rBV	1000478	1304140	4.27%	0.275%
43	11.144	1643	1648	1651	rBV3	3964648	7097300	23.21%	1.498%
44	11.193	1651	1656	1659	rBV4	5099716	8882177	29.05%	1.875%
45	11.242	1659	1664	1668	rBV2	12084122	22367744	73.16%	4.722%
46	11.284	1668	1671	1676	rVB3	7712052	12319891	40.30%	2.601%
47	11.333	1676	1679	1684	rBV5	1299286	2018897	6.60%	0.426%
48	11.382	1684	1687	1689	rBV	1763570	1957111	6.40%	0.413%
49	11.418	1689	1693	1694	rBV	2048380	2575826	8.43%	0.544%
50	11.443	1694	1697	1702	rVB5	5724763	7970821	26.07%	1.683%
51	11.498	1702	1706	1708	rBV2	4080205	5199404	17.01%	1.098%
52	11.528	1708	1711	1714	rBV	8889409	10368188	33.91%	2.189%
53	11.565	1714	1717	1728	rVB	16602911	30572645	100.00%	6.454%
54	11.656	1728	1732	1734	rBV2	3610614	5293687	17.32%	1.118%
55	11.681	1734	1736	1738	rBV	1107628	1348677	4.41%	0.285%
56	11.711	1738	1741	1745	rVB3	3847506	5630196	18.42%	1.189%
57	11.766	1745	1750	1753	rBV	12456915	16391401	53.61%	3.460%
58	11.833	1758	1761	1762	rVV2	1899353	2598946	8.50%	0.549%
59	11.864	1763	1766	1769	rVV	3705150	4775909	15.62%	1.008%
60	11.906	1769	1773	1780	rVB2	4930074	8933808	29.22%	1.886%
61	11.973	1780	1784	1785	rBV3	698624	954034	3.12%	0.201%
62	12.095	1796	1804	1807	rBV2	4943676	8238005	26.95%	1.739%
63	12.144	1807	1812	1819	rVV3	11113331	18792320	61.47%	3.967%
64	12.254	1820	1830	1834	rVV	2588880	6698771	21.91%	1.414%
65	12.296	1834	1837	1843	rVV4	3412389	5897567	19.29%	1.245%
66	12.370	1844	1849	1850	rVV	2052551	2872926	9.40%	0.606%
67	12.388	1850	1852	1858	rVV2	3775827	6256089	20.46%	1.321%
68	12.449	1858	1862	1869	rVV	2690580	4337645	14.19%	0.916%
69	12.552	1871	1879	1885	rVV5	1705357	3983532	13.03%	0.841%
70	12.601	1885	1887	1888	rVV2	380634	372843	1.22%	0.079%
71	12.632	1889	1892	1894	rVV3	861507	1360243	4.45%	0.287%
72	12.656	1894	1896	1900	rVV2	1493574	2203146	7.21%	0.465%
73	12.729	1904	1908	1911	rBV3	1555082	2241083	7.33%	0.473%
74	12.760	1911	1913	1917	rVV	1187156	1272127	4.16%	0.269%
75	12.802	1917	1920	1923	rVV	1424932	1957539	6.40%	0.413%
76	12.827	1923	1924	1928	rVB	939893	698424	2.28%	0.147%
77	12.869	1928	1931	1936	rBV4	404173	813350	2.66%	0.172%
78	12.912	1936	1938	1940	rVV	330985	321205	1.05%	0.068%
79	12.936	1940	1942	1947	rVB	258007	343471	1.12%	0.073%
80	13.004	1947	1953	1959	rVB4	349627	586672	1.92%	0.124%
81	13.138	1971	1975	1980	rVB2	804625	1178673	3.86%	0.249%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

82	13.272	1991	1997	2007	rVB5	473671	1024464	3.35%	0.216%

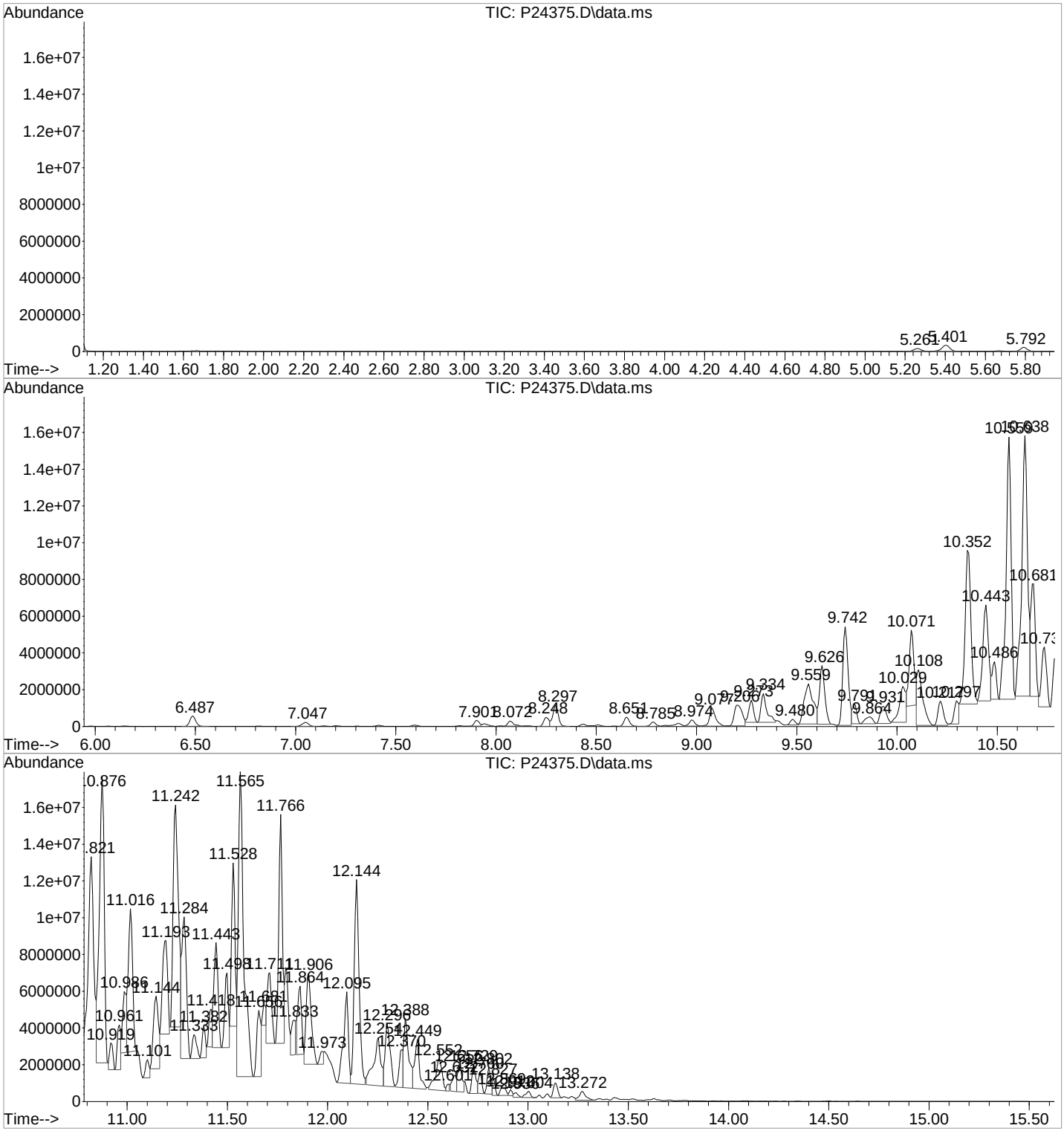
Sum of corrected areas: 473700502

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

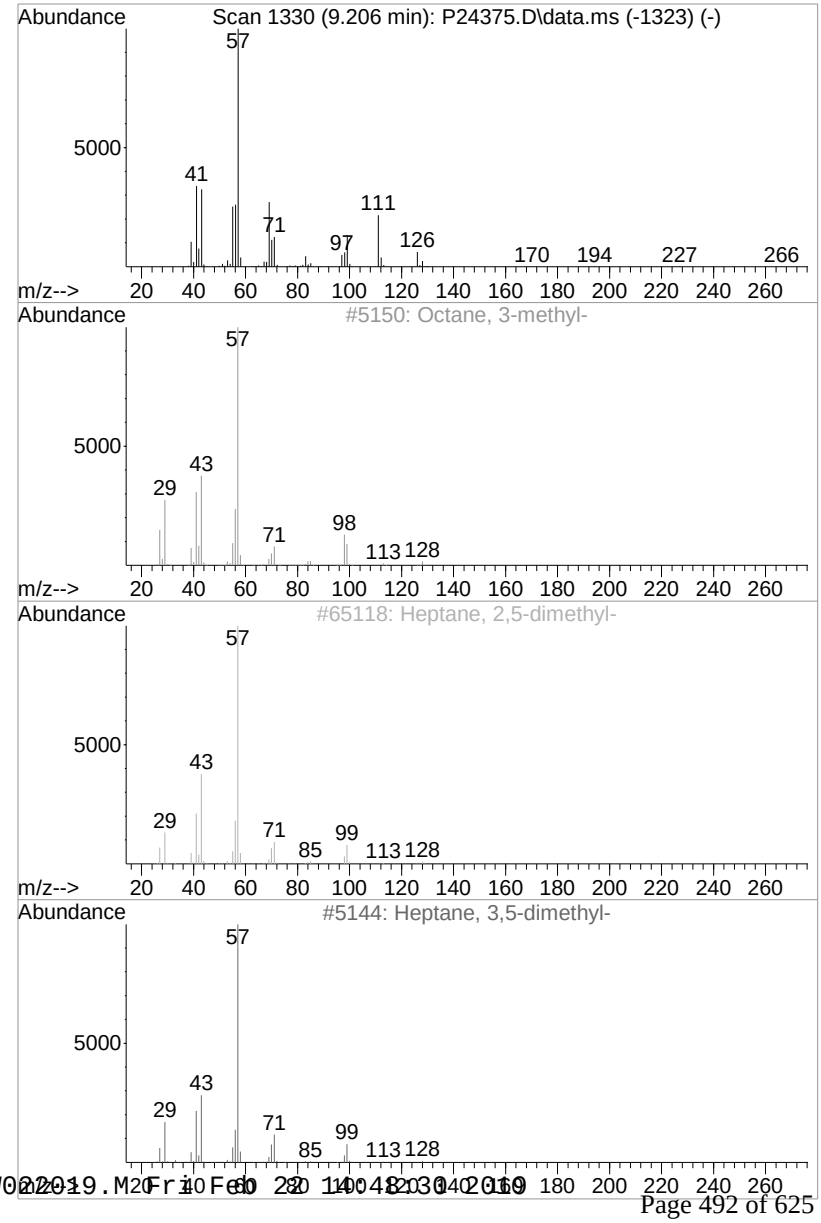
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

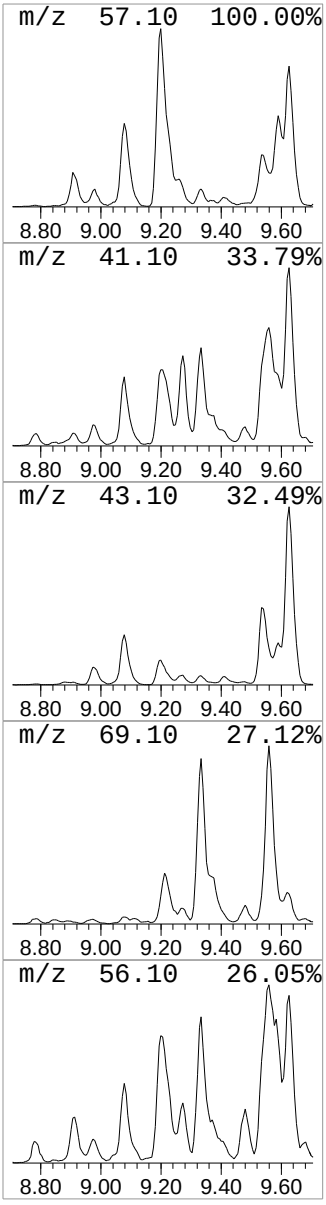
****

Peak Number 1 unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.206	103.52 ppb	3095980	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	49
2	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	47
3	Heptane, 3,5-dimethyl-	128	C9H20	000926-82-9	47
4	Heptane, 3,5-dimethyl-	128	C9H20	000926-82-9	47
5	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	43





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

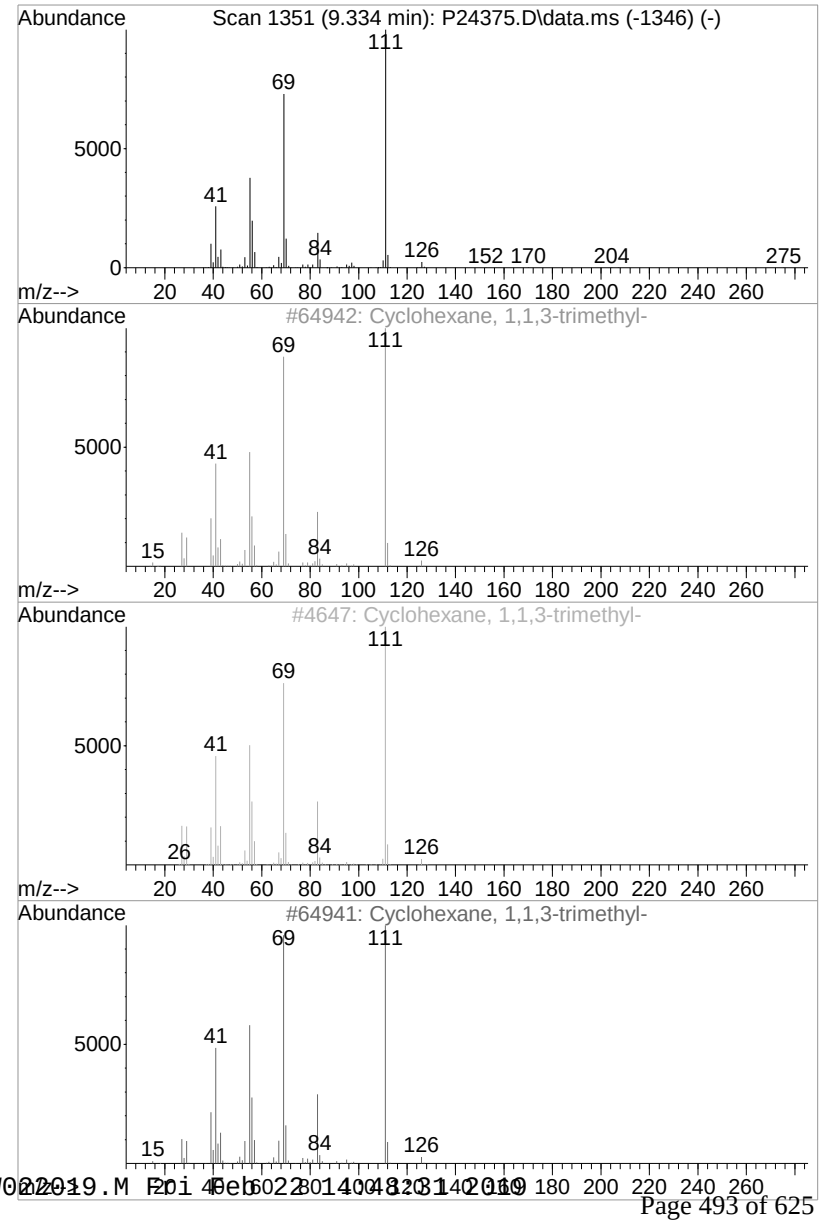
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

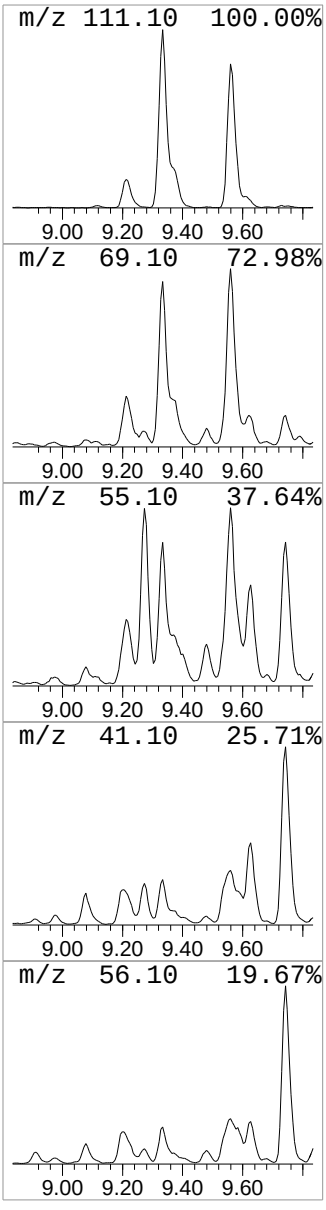
****

Peak Number 2 unknown Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.334	107.19 ppb	3205730	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,1,3-trimethyl-	126	C9H18	003073-66-3	83
2	Cyclohexane, 1,1,3-trimethyl-	126	C9H18	003073-66-3	70
3	Cyclohexane, 1,1,3-trimethyl-	126	C9H18	003073-66-3	49
4	Cyclohexane, 1,3,5-trimethyl-	126	C9H18	001839-63-0	42
5	Cyclohexane, 1-ethyl-1,4-dimethy...	140	C10H20	062238-30-6	39





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

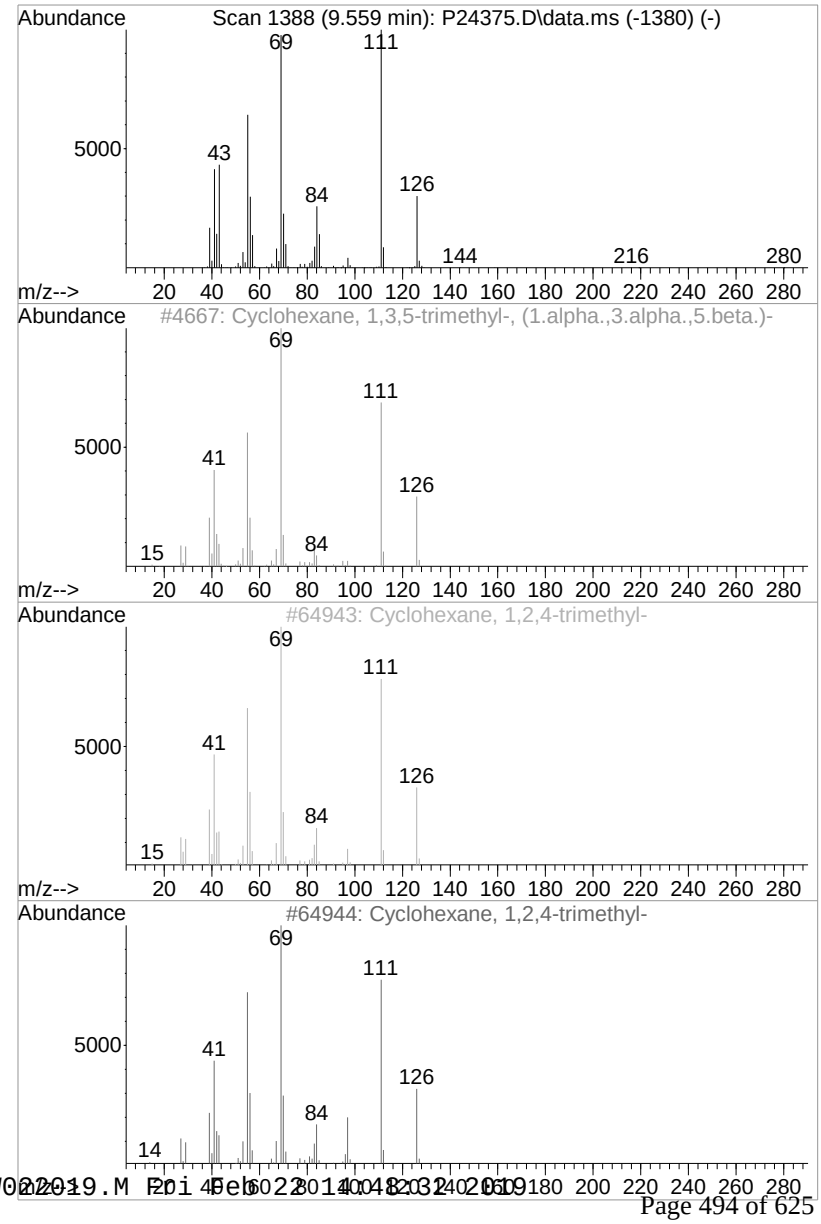
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

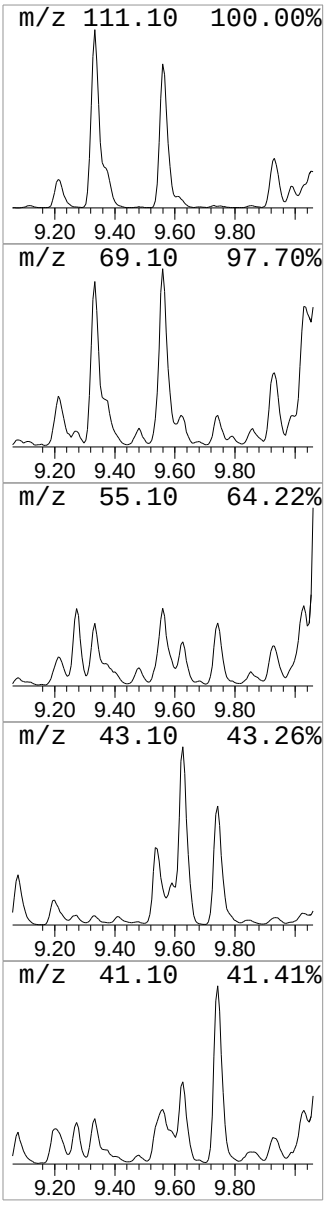
****

Peak Number 3 Cyclohexane, 1,3,5-trimethy... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.559	229.94 ppb	6877000	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,3,5-trimethyl-, (...	126	C9H18	001795-26-2	93
2	Cyclohexane, 1,2,4-trimethyl-	126	C9H18	002234-75-5	87
3	Cyclohexane, 1,2,4-trimethyl-	126	C9H18	002234-75-5	87
4	Cyclohexane, 1,2,4-trimethyl-, (...	126	C9H18	007667-60-9	80
5	Cyclohexane, 1,2,4-trimethyl-, (...	126	C9H18	007667-60-9	80





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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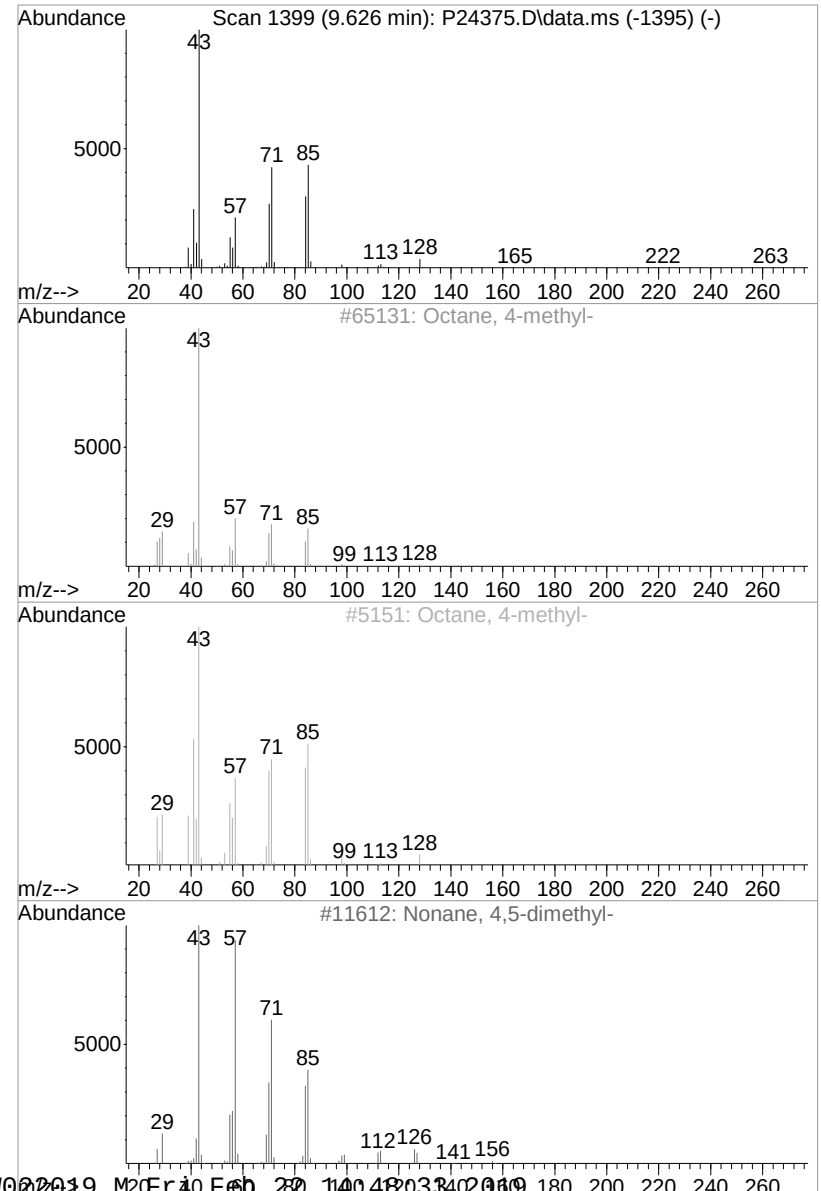
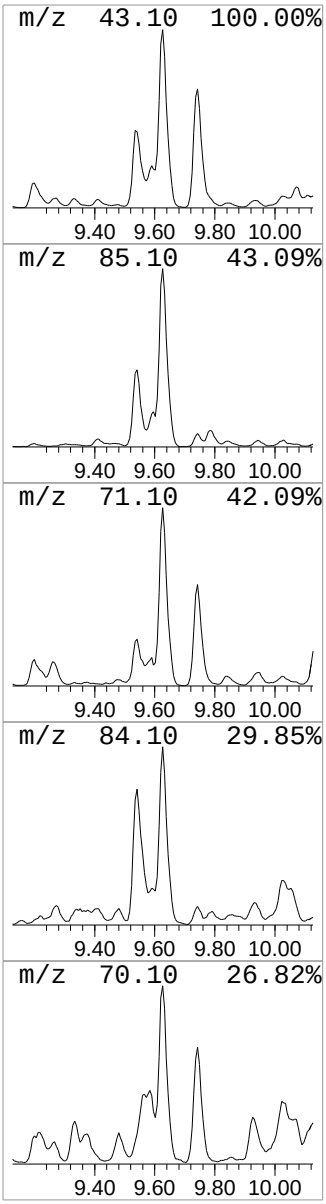
Peak Number 4 Octane, 4-methyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.626	194.54 ppb	5818330	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 4-methyl-	128	C9H20	002216-34-4	91
2	Octane, 4-methyl-	128	C9H20	002216-34-4	90
3	Nonane, 4,5-dimethyl-	156	C11H24	017302-23-7	78
4	Hexane, 2,3,4-trimethyl-	128	C9H20	000921-47-1	64
5	Ether, hexyl pentyl	172	C11H24O	032357-83-8	59





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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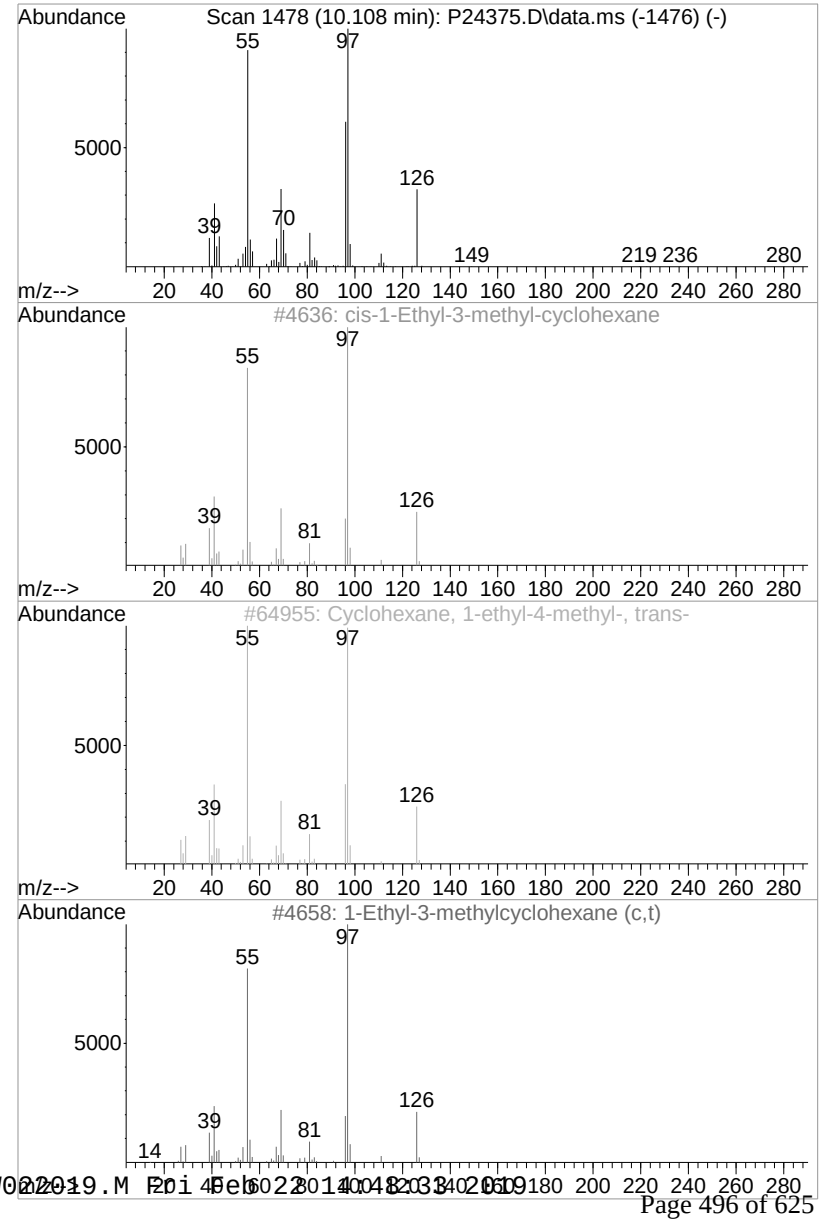
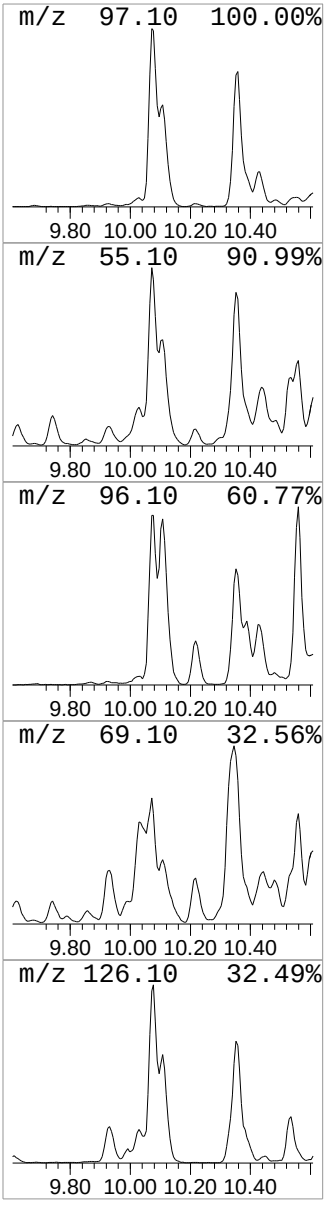
Peak Number 5 cis-1-Ethyl-3-methyl-cycloh... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.108	201.82 ppb	6035940	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	cis-1-Ethyl-3-methyl-cyclohexane	126	C9H18	019489-10-2	87
2	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	80
3	1-Ethyl-3-methylcyclohexane (c,t)	126	C9H18	003728-55-0	80
4	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	004926-78-7	64
5	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	006069-98-3	64





Library Search Compound Report

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Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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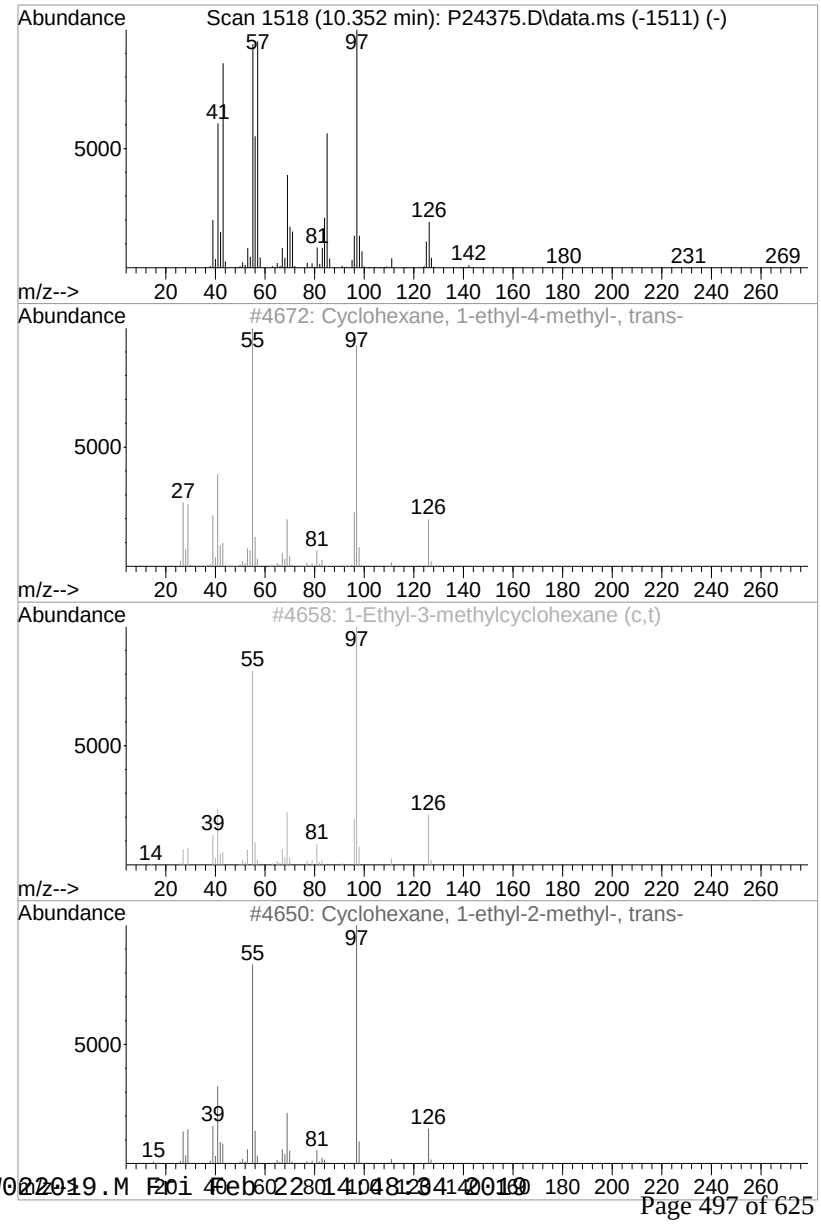
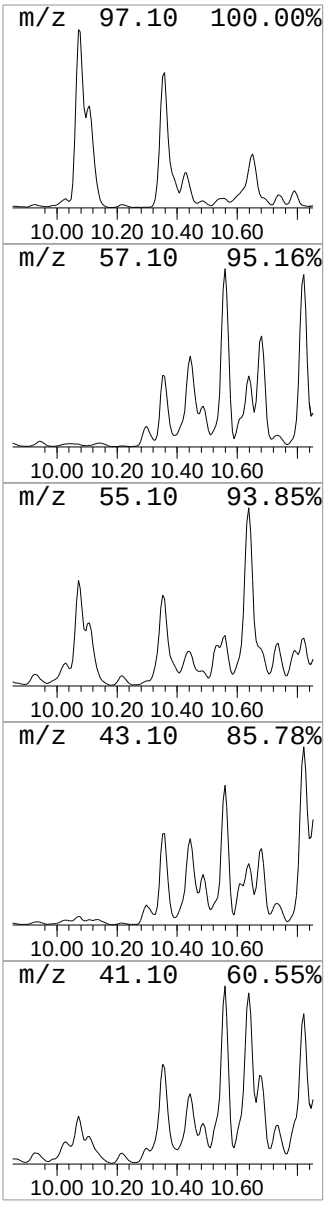
Peak Number 6 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.352	559.13 ppb	16722200	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	43
2	1-Ethyl-3-methylcyclohexane (c,t)	126	C9H18	003728-55-0	43
3	Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-78-8	43
4	3-Heptene, 3-ethyl-	126	C9H18	074764-46-8	43
5	cis-1-Ethyl-3-methyl-cyclohexane	126	C9H18	019489-10-2	43





Library Search Compound Report

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Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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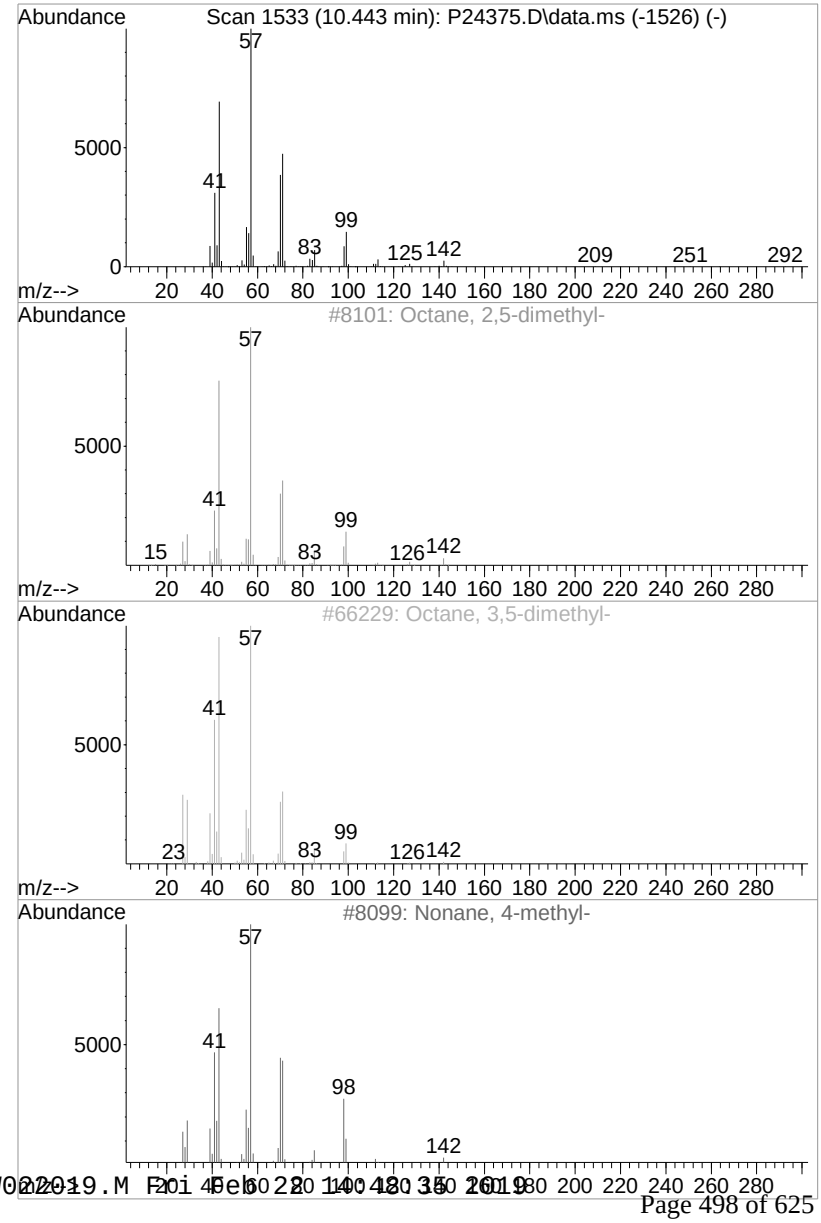
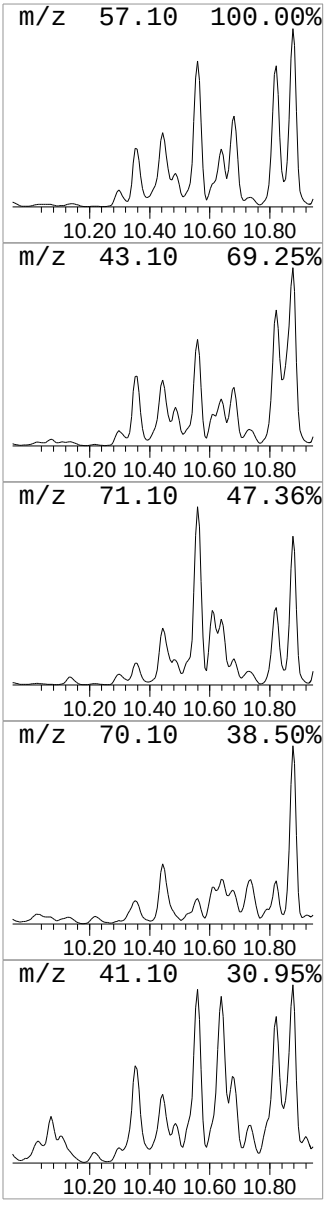
Peak Number 7 Octane, 2,5-dimethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.443	343.86 ppb	10284000	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,5-dimethyl-	142	C10H22	015869-89-3	91
2	Octane, 3,5-dimethyl-	142	C10H22	015869-93-9	90
3	Nonane, 4-methyl-	142	C10H22	017301-94-9	90
4	Octane, 2,5-dimethyl-	142	C10H22	015869-89-3	80
5	Pentane, 2,2,3,3-tetramethyl-	128	C9H20	007154-79-2	78





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Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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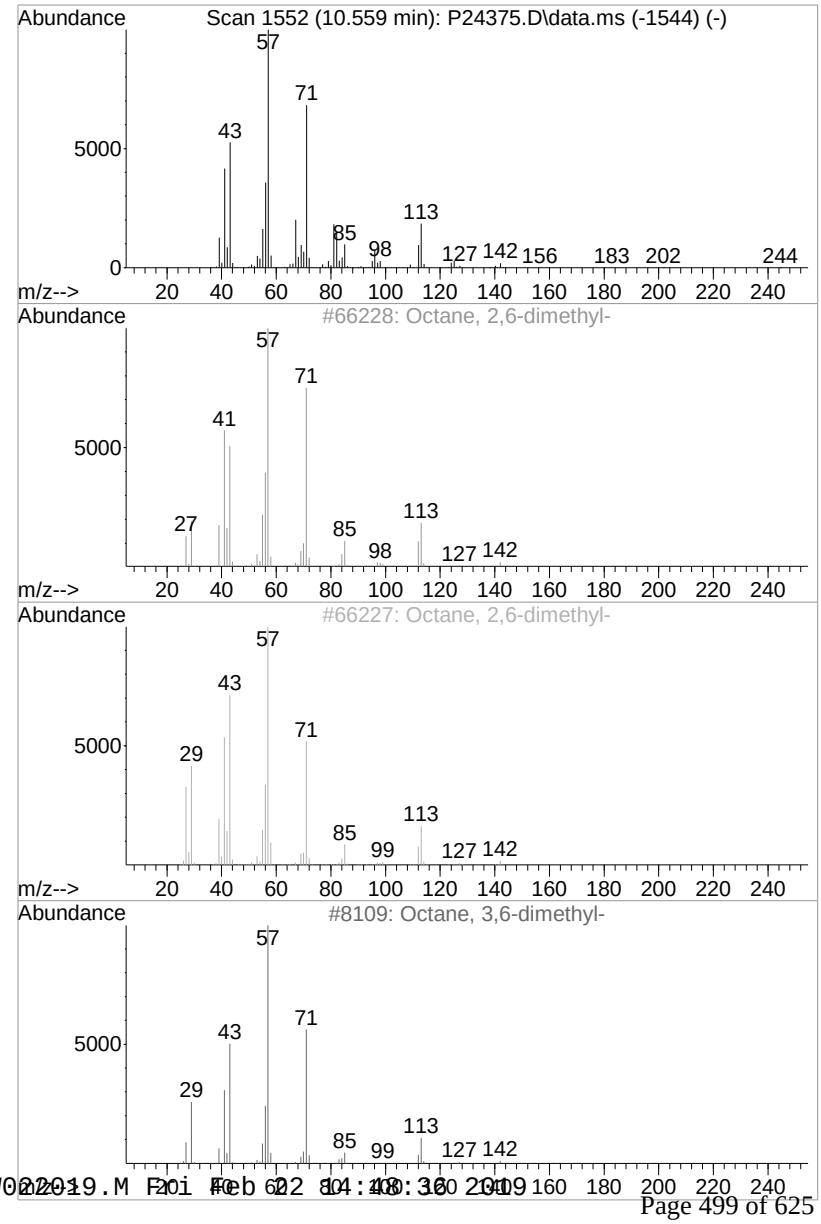
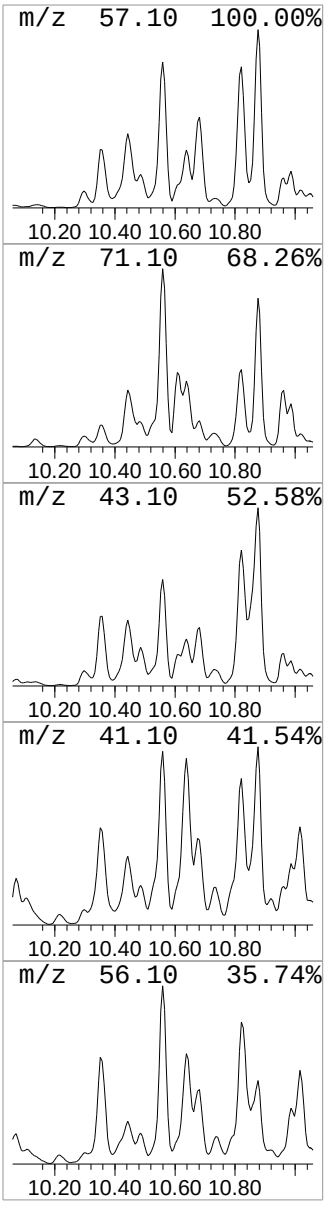
Peak Number 8 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.559	851.24 ppb	25458500	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	81
2	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	81
3	Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	76
4	Nonane, 3-methyl-	142	C10H22	005911-04-6	70
5	Nonane, 3-methyl-	142	C10H22	005911-04-6	64





Library Search Compound Report

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Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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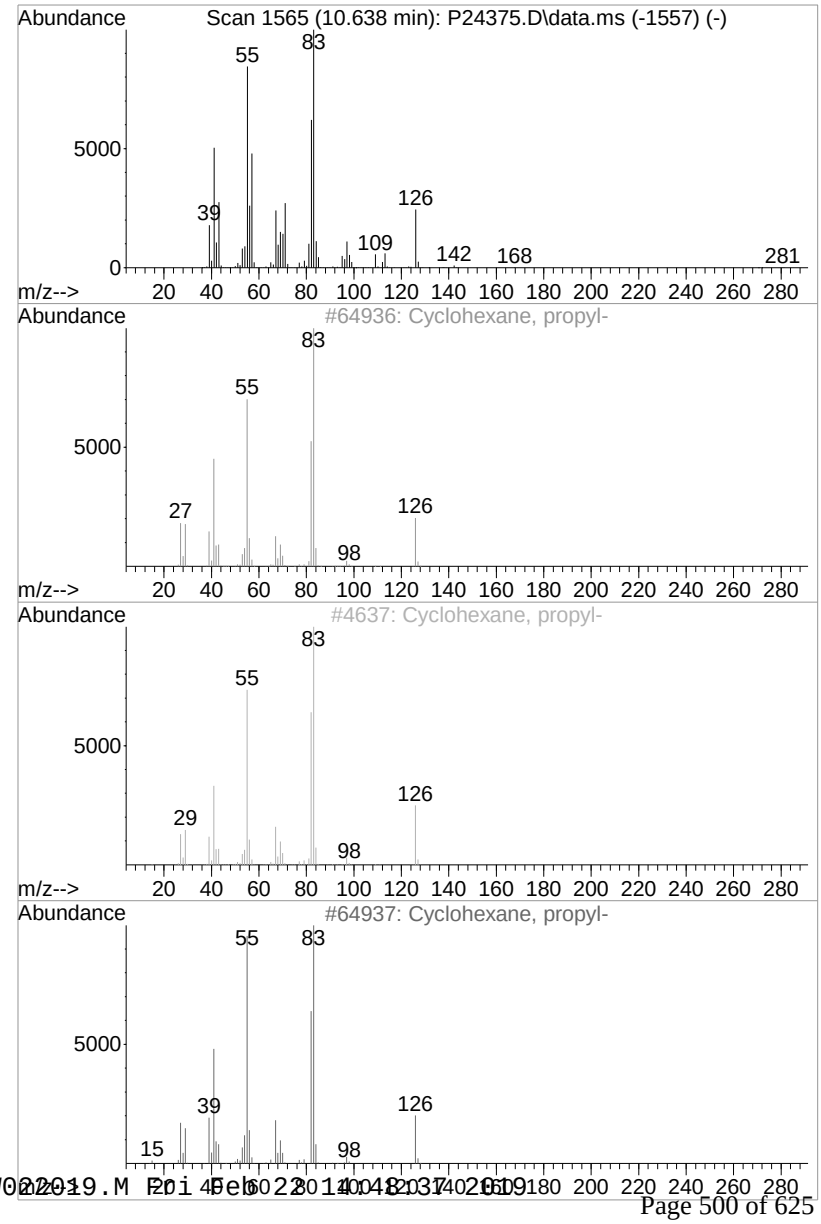
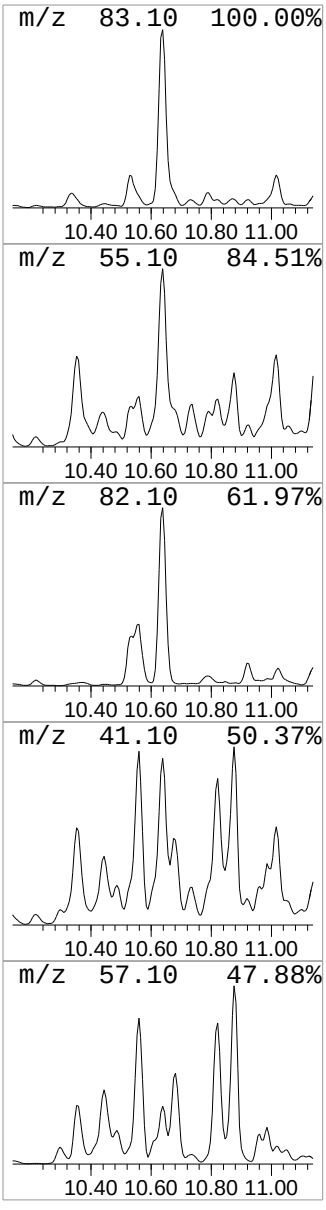
Peak Number 9 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.638	974.32 ppb	29139400	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, propyl-	126	C9H18	001678-92-8	68
2	Cyclohexane, propyl-	126	C9H18	001678-92-8	64
3	Cyclohexane, propyl-	126	C9H18	001678-92-8	64
4	Cyclohexane, butyl-	140	C10H20	001678-93-9	59
5	Cyclohexane, hexyl-	168	C12H24	004292-75-5	59





Library Search Compound Report

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Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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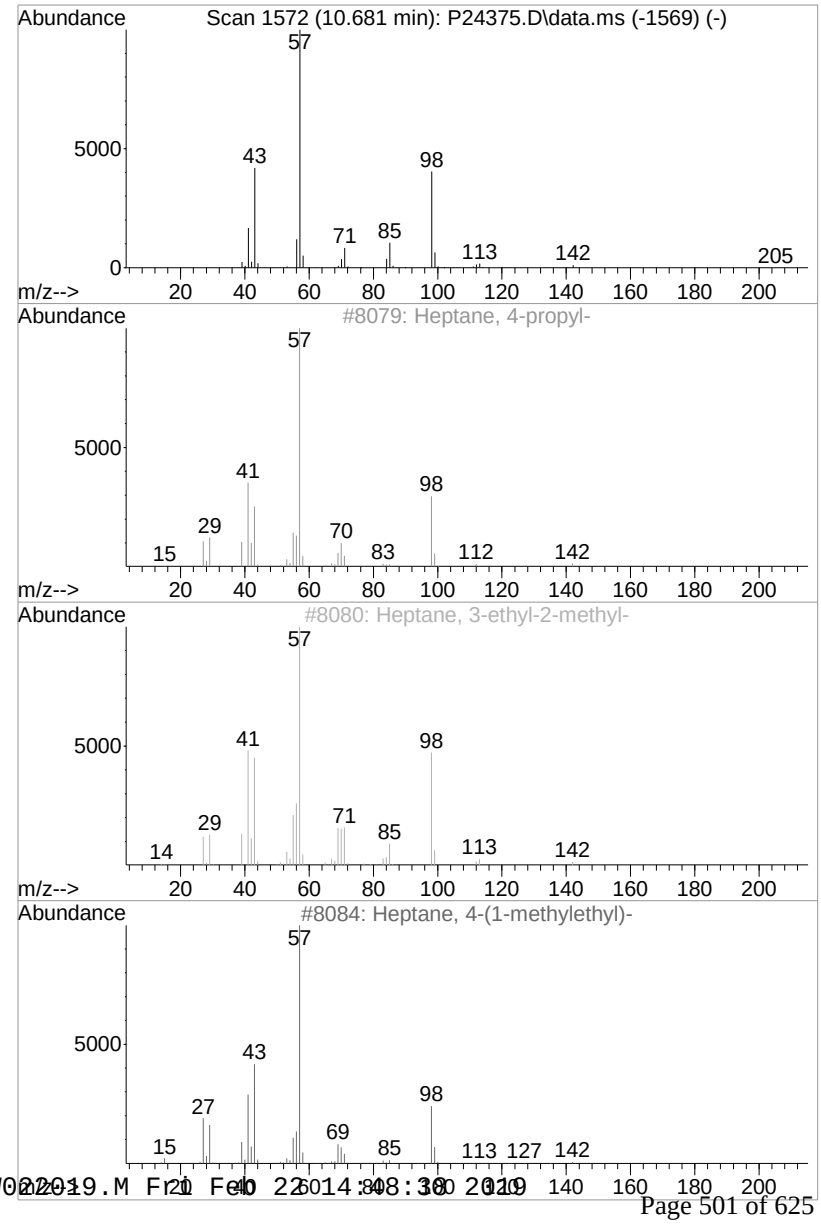
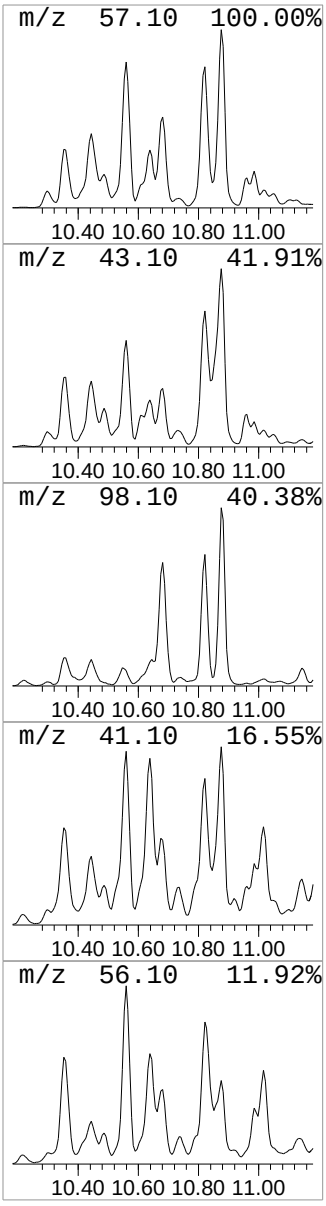
Peak Number 10 unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.681	310.89 ppb	9298020	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 4-propyl-	142	C10H22	003178-29-8	64
2	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	59
3	Heptane, 4-(1-methylethyl)-	142	C10H22	052896-87-4	47
4	Octane, 2,4,6-trimethyl-	156	C11H24	062016-37-9	43
5	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	42





Library Search Compound Report

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Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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Peak Number 11 Cyclohexane, 1,1,2,3-tetram... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.016	219.44 ppb	11406200	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,1,2,3-tetramethyl-	140	C10H20	006783-92-2	90
2	4-Octene, 2,6-dimethyl-, [S-(E)]-	140	C10H20	062960-76-3	58
3	4-Octene, 2,6-dimethyl-, [S-(Z)]-	140	C10H20	062960-77-4	58
4	2-Octene, 2,6-dimethyl-	140	C10H20	004057-42-5	52
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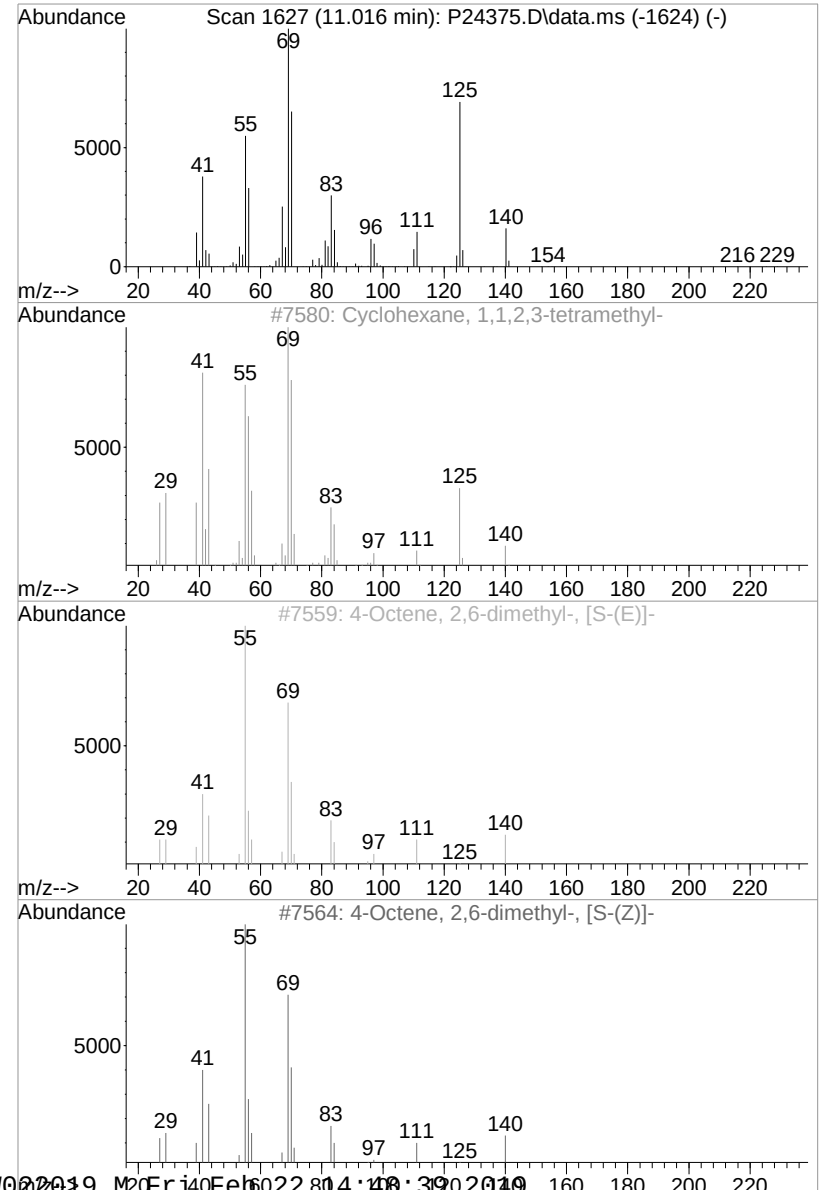

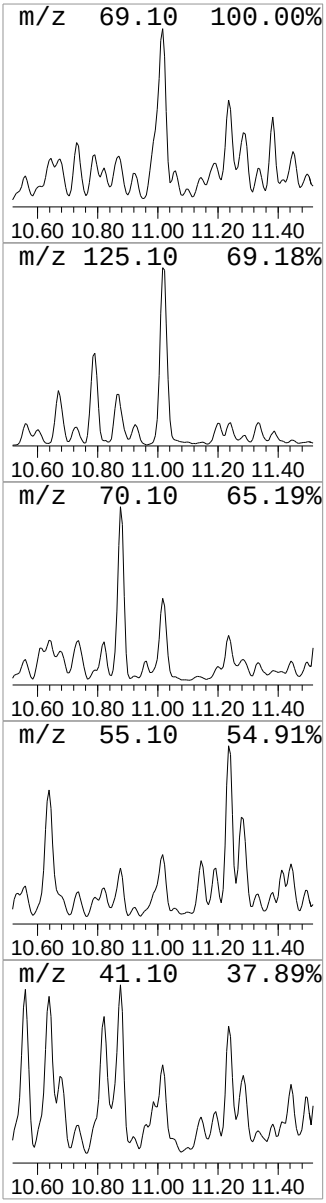

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Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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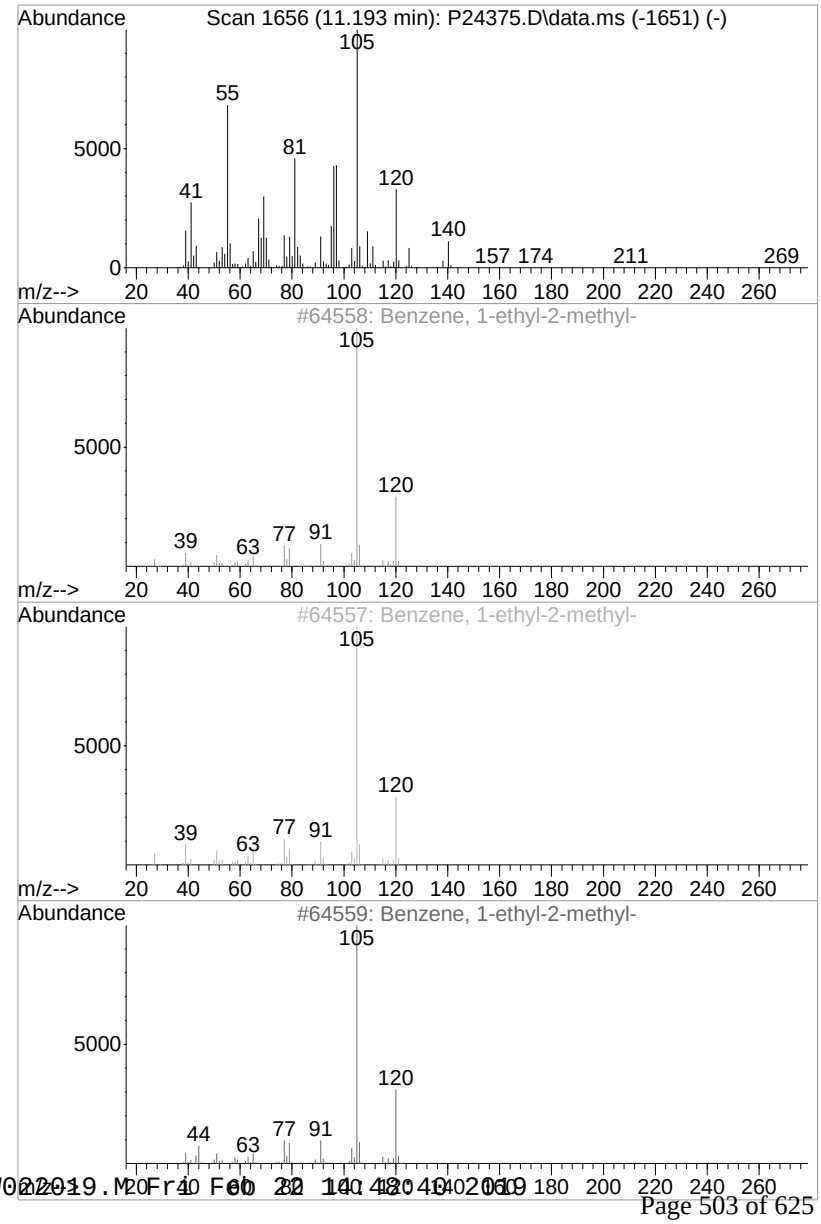
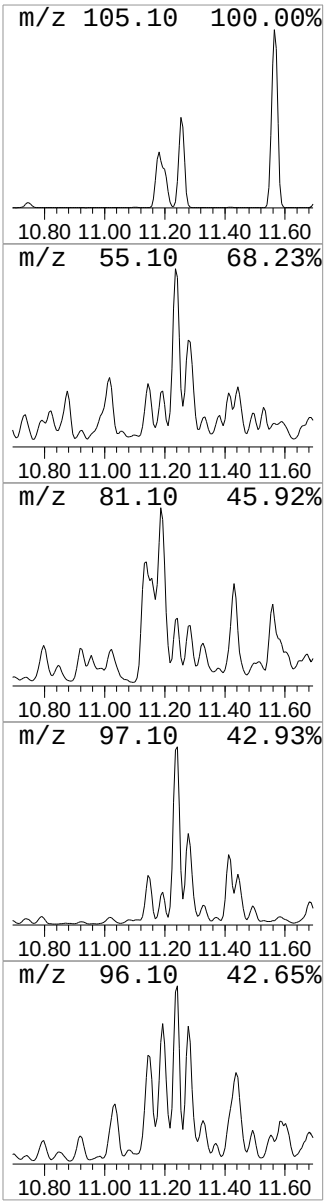
Peak Number 12 unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.193	170.88 ppb	8882180	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	56
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	56
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	56
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	56
5	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	53





Library Search Compound Report

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Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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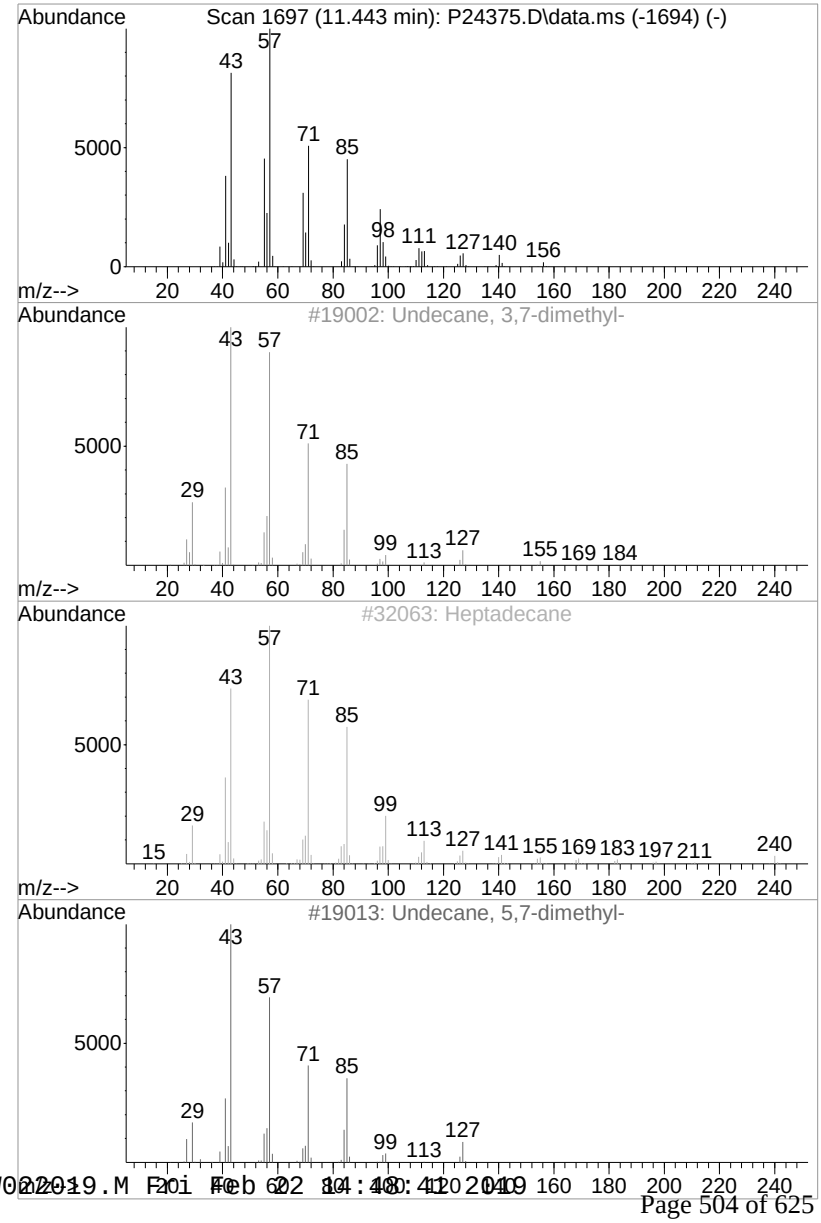
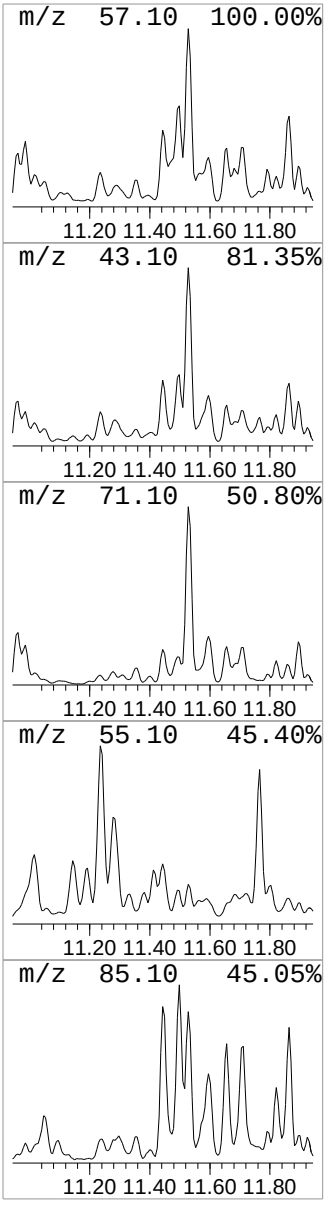
Peak Number 13 unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.443	153.35 ppb	7970820	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 3,7-dimethyl-	184	C13H28	017301-29-0	64
2	Heptadecane	240	C17H36	000629-78-7	59
3	Undecane, 5,7-dimethyl-	184	C13H28	017312-83-3	59
4	Dodecane	170	C12H26	000112-40-3	59
5	Undecane, 2,4-dimethyl-	184	C13H28	017312-80-0	53





Library Search Compound Report

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Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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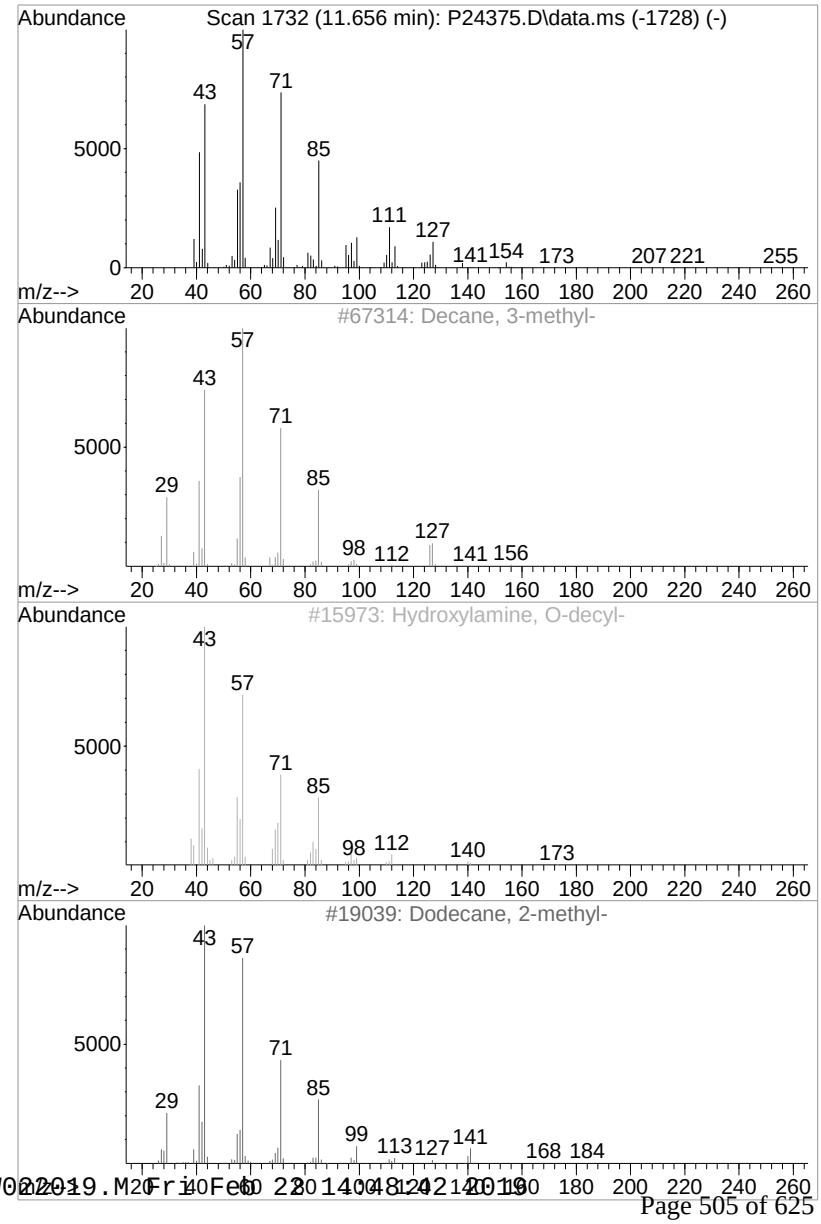
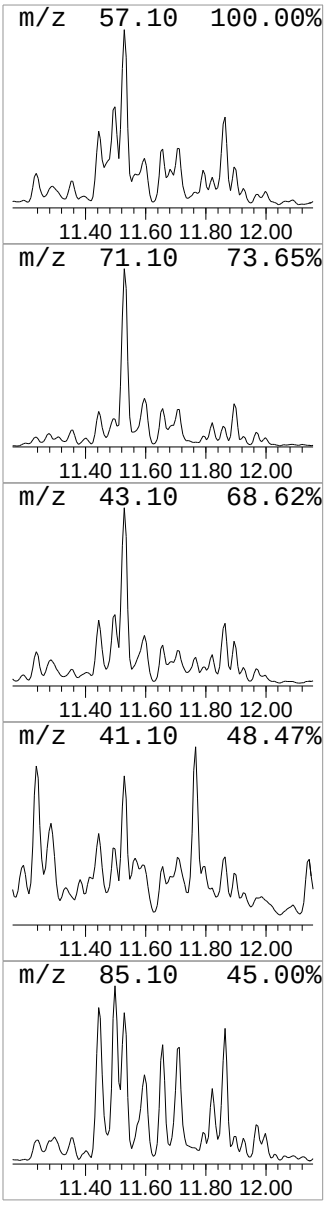
Peak Number 14 unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.656	101.84 ppb	5293690	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 3-methyl-	156	C11H24	013151-34-3	72
2	Hydroxylamine, O-decyl-	173	C10H23NO	029812-79-1	64
3	Dodecane, 2-methyl-	184	C13H28	001560-97-0	59
4	Tetradecane, 1-iodo-	324	C14H29I	019218-94-1	59
5	Nonane, 3,7-dimethyl-	156	C11H24	017302-32-8	58





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Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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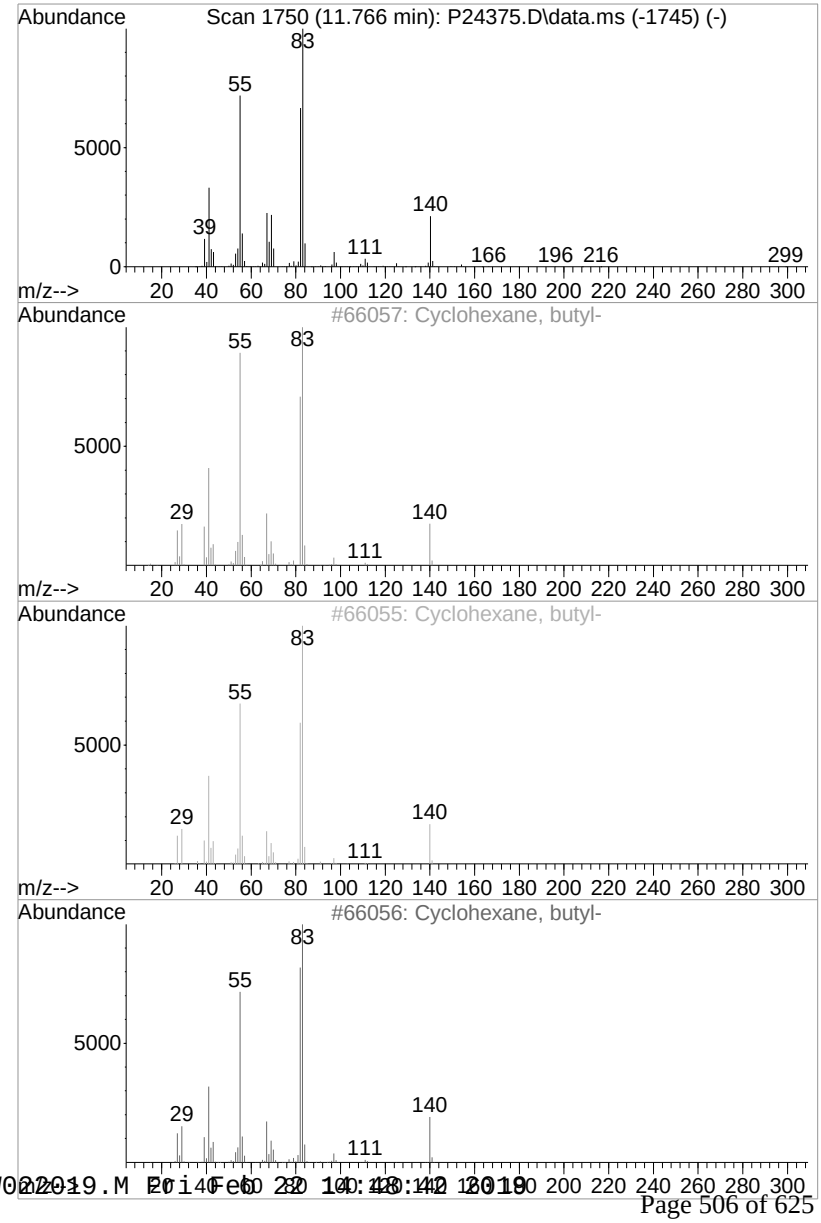
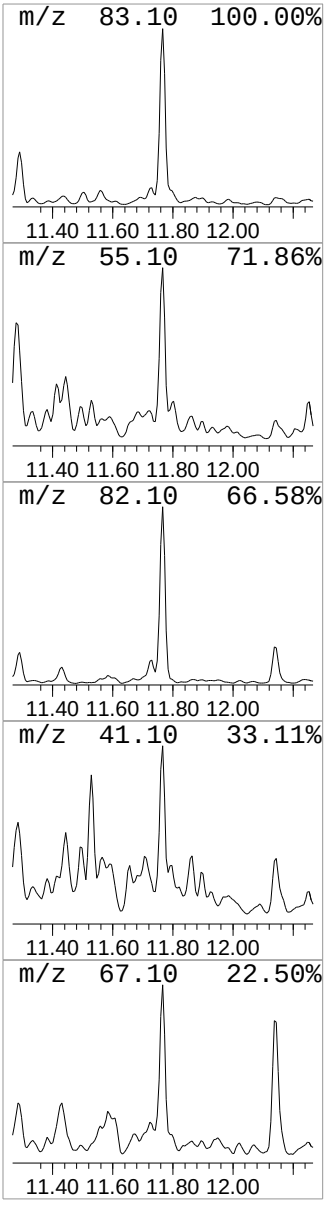
Peak Number 15 Cyclohexane, butyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.766	315.35 ppb	16391400	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, butyl-	140	C10H20	001678-93-9	91
2	Cyclohexane, butyl-	140	C10H20	001678-93-9	90
3	Cyclohexane, butyl-	140	C10H20	001678-93-9	90
4	Cyclohexane, butyl-	140	C10H20	001678-93-9	87
5	Cyclohexane, octyl-	196	C14H28	001795-15-9	87





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

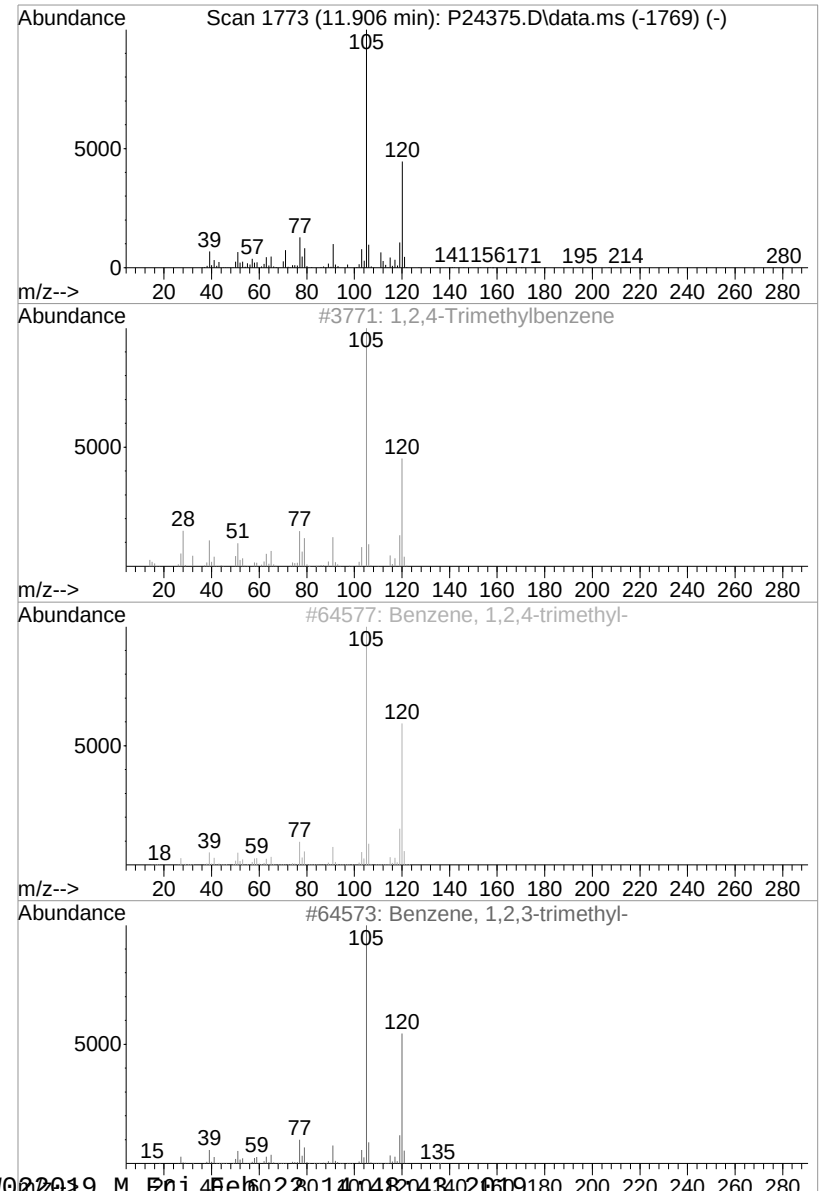
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

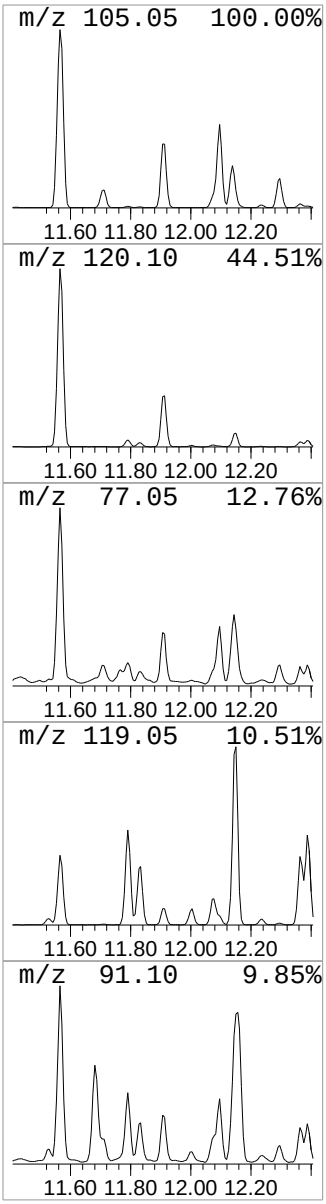
****

Peak Number 16 Benzene, 1,2,3-trimethyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.906	171.87 ppb	8933810	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2,4-Trimethylbenzene	120	C9H12	000095-36-3	97
2	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	95
3	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
4	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	94
5	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

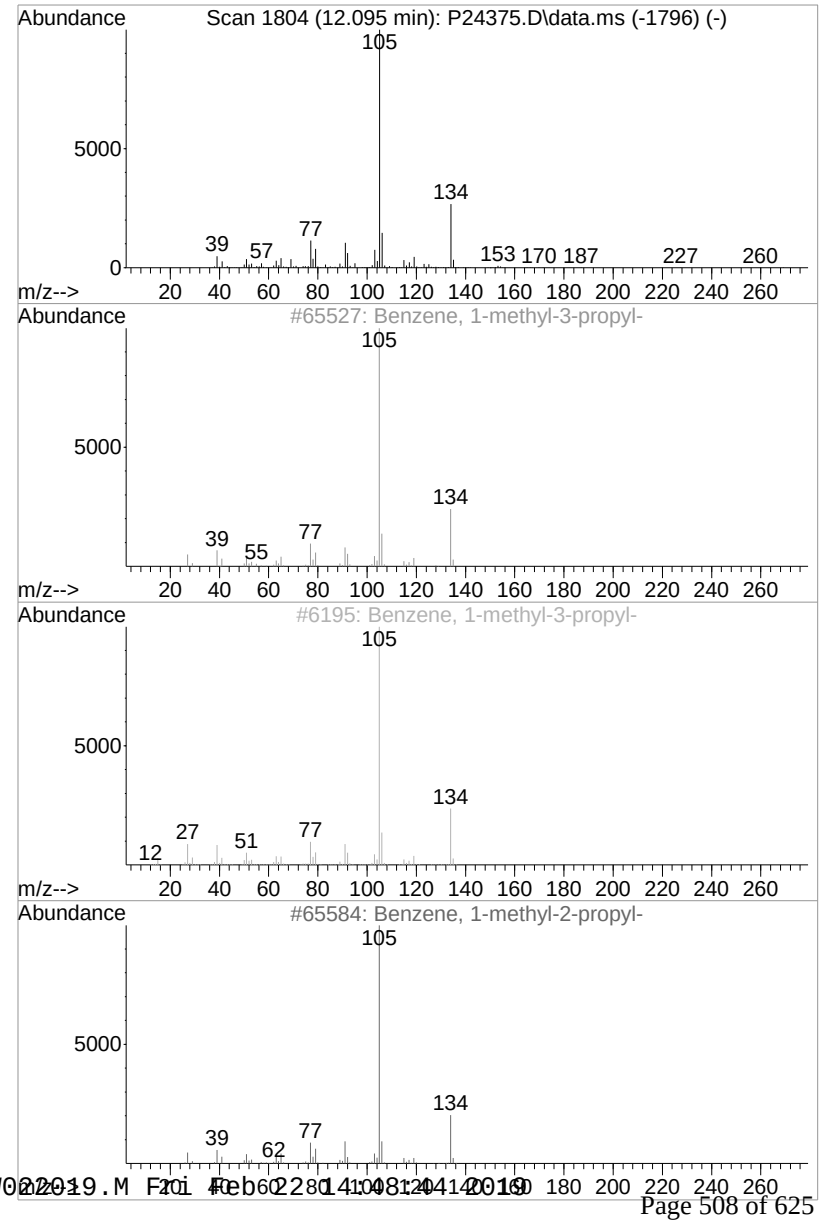
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

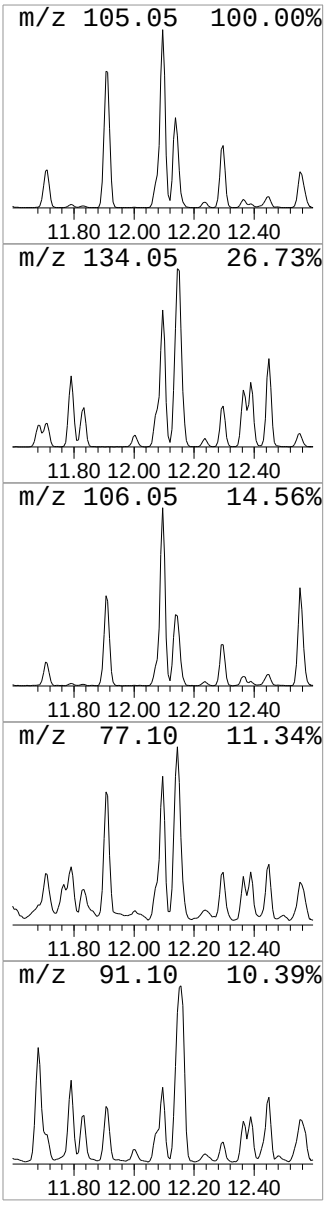
****

Peak Number 17 Benzene, 1-methyl-3-propyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.095	158.49 ppb	8238010	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	95
2	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	95
3	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	91
4	Benzene, (1-methylpropyl)-	134	C10H14	000135-98-8	87
5	Benzene, (1-methylpropyl)-	134	C10H14	000135-98-8	87





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

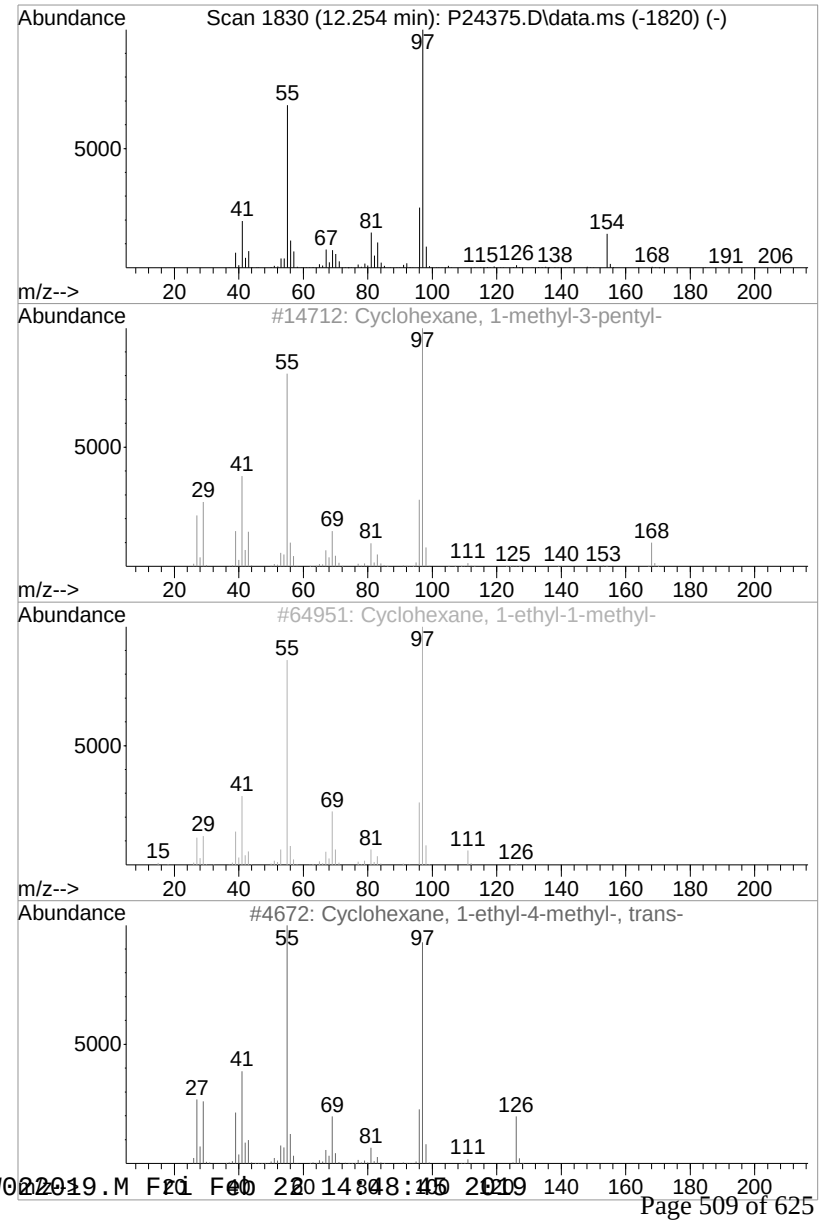
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

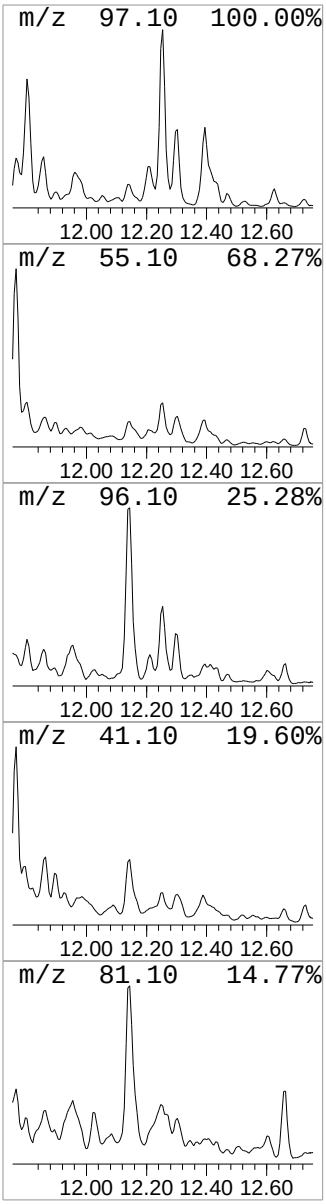
****

Peak Number 18 unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.254	128.88 ppb	6698770	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-methyl-3-pentyl-	168	C12H24	054411-02-8	72
2	Cyclohexane, 1-ethyl-1-methyl-	126	C9H18	004926-90-3	64
3	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	64
4	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	004926-78-7	64
5	Cyclohexane, 1-bromo-2-methyl-	176	C7H13Br	006294-39-9	59





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

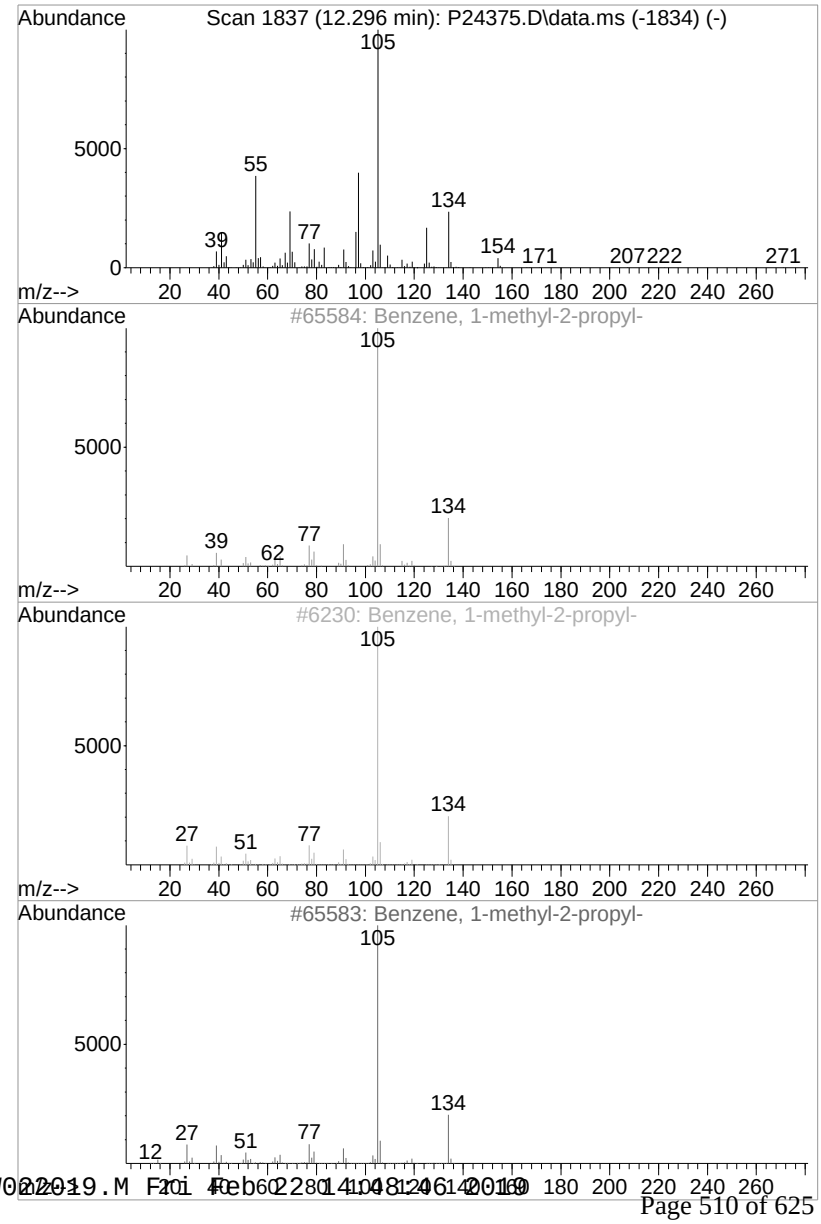
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

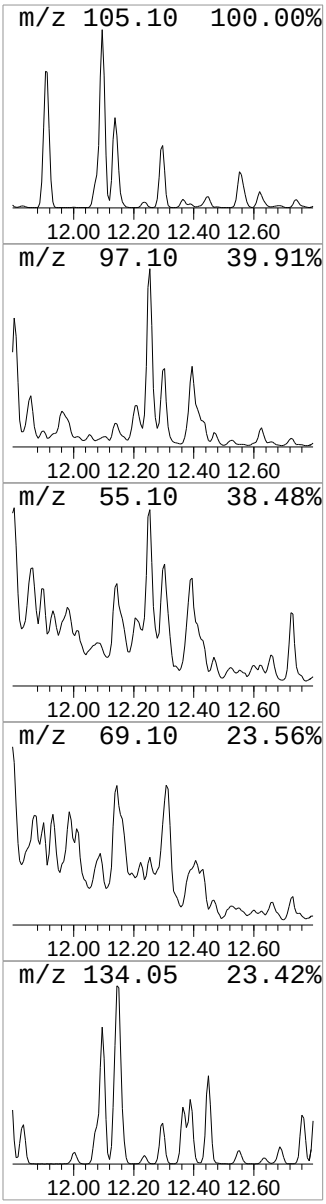
****

Peak Number 19 unknown Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.296	113.46 ppb	5897570	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	83
2	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	46
3	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	46
4	Benzene, 1-methyl-4-propyl-	134	C10H14	001074-55-1	46
5	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	46





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

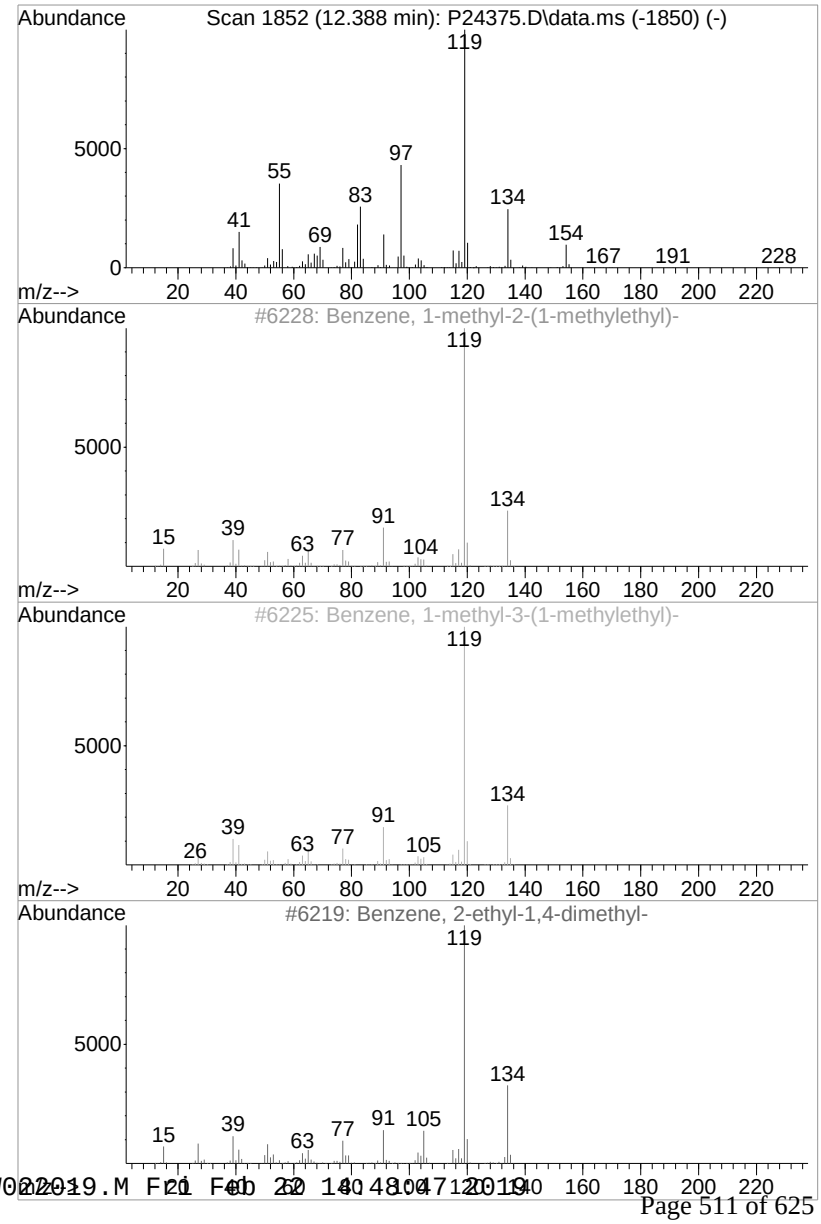
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

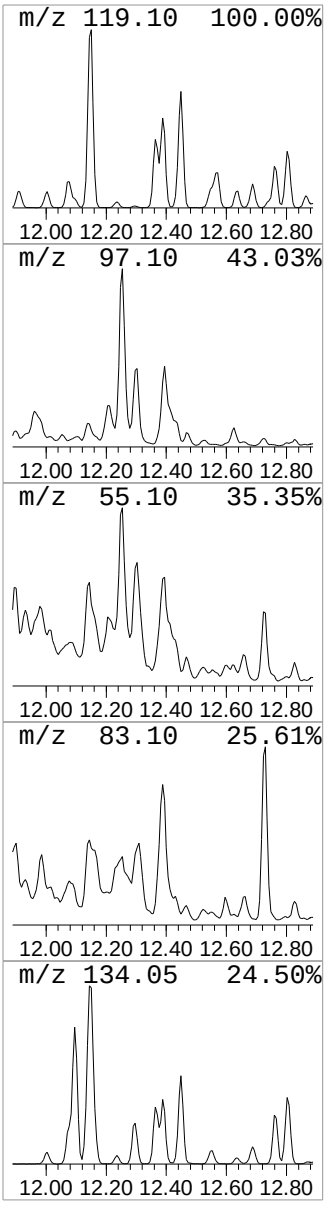
****

Peak Number 20 unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.388	120.36 ppb	6256090	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	78
2	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	60
3	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	60
4	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	60
5	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	60





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

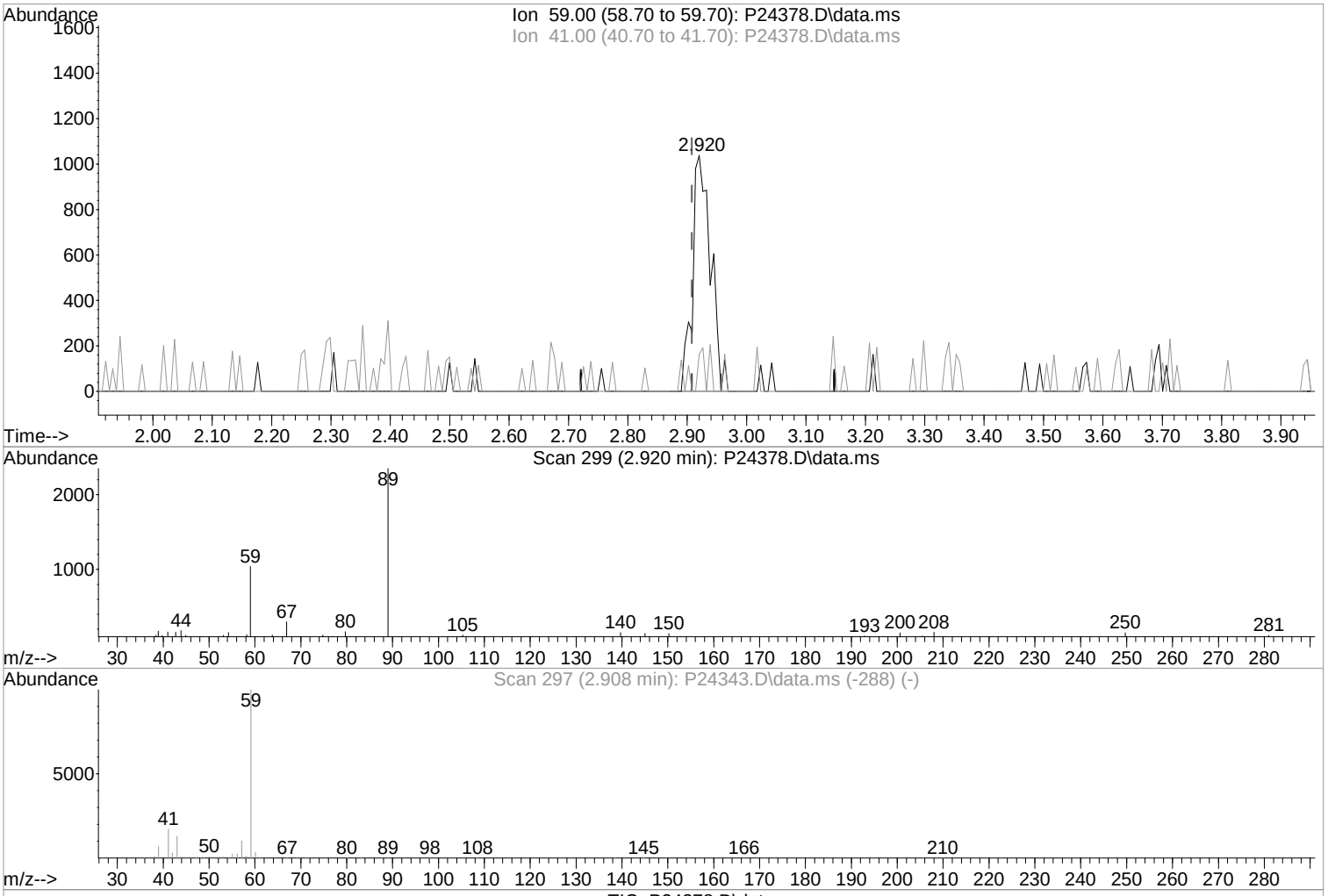
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	9.206	103.5	ppb	3095980	3	9.791	1495370	50.0
unknown	9.334	107.2	ppb	3205730	3	9.791	1495370	50.0
Cyclohexane, 1,...	9.559	229.9	ppb	6877000	3	9.791	1495370	50.0
Octane, 4-methyl-	9.626	194.5	ppb	5818330	3	9.791	1495370	50.0
cis-1-Ethyl-3-m...	10.108	201.8	ppb	6035940	3	9.791	1495370	50.0
unknown	10.352	559.1	ppb	16722200	3	9.791	1495370	50.0
Octane, 2,5-dim...	10.443	343.9	ppb	10284000	3	9.791	1495370	50.0
unknown	10.559	851.2	ppb	25458500	3	9.791	1495370	50.0
unknown	10.638	974.3	ppb	29139400	3	9.791	1495370	50.0
unknown	10.681	310.9	ppb	9298020	3	9.791	1495370	50.0
Cyclohexane, 1,...	11.016	219.4	ppb	11406200	4	11.845	2598950	50.0
unknown	11.193	170.9	ppb	8882180	4	11.845	2598950	50.0
unknown	11.443	153.3	ppb	7970820	4	11.845	2598950	50.0
unknown	11.656	101.8	ppb	5293690	4	11.845	2598950	50.0
Cyclohexane, bu...	11.766	315.4	ppb	16391400	4	11.845	2598950	50.0
Benzene, 1,2,3-...	11.906	171.9	ppb	8933810	4	11.845	2598950	50.0
Benzene, 1-meth...	12.095	158.5	ppb	8238010	4	11.845	2598950	50.0
unknown	12.254	128.9	ppb	6698770	4	11.845	2598950	50.0
unknown	12.296	113.5	ppb	5897570	4	11.845	2598950	50.0
unknown	12.388	120.4	ppb	6256090	4	11.845	2598950	50.0

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24378.D
Acq On : 21 Feb 2019 7:08 pm
Operator : K.Ruest
Sample : R1901421-001|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 22 09:08:02 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24378.D\data.ms

(23) TBA

2.920min (+0.012) 3.49 ppb m

response 2207

Ion	Exp%	Act%
59.00	100	100
41.00	18.20	15.70
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

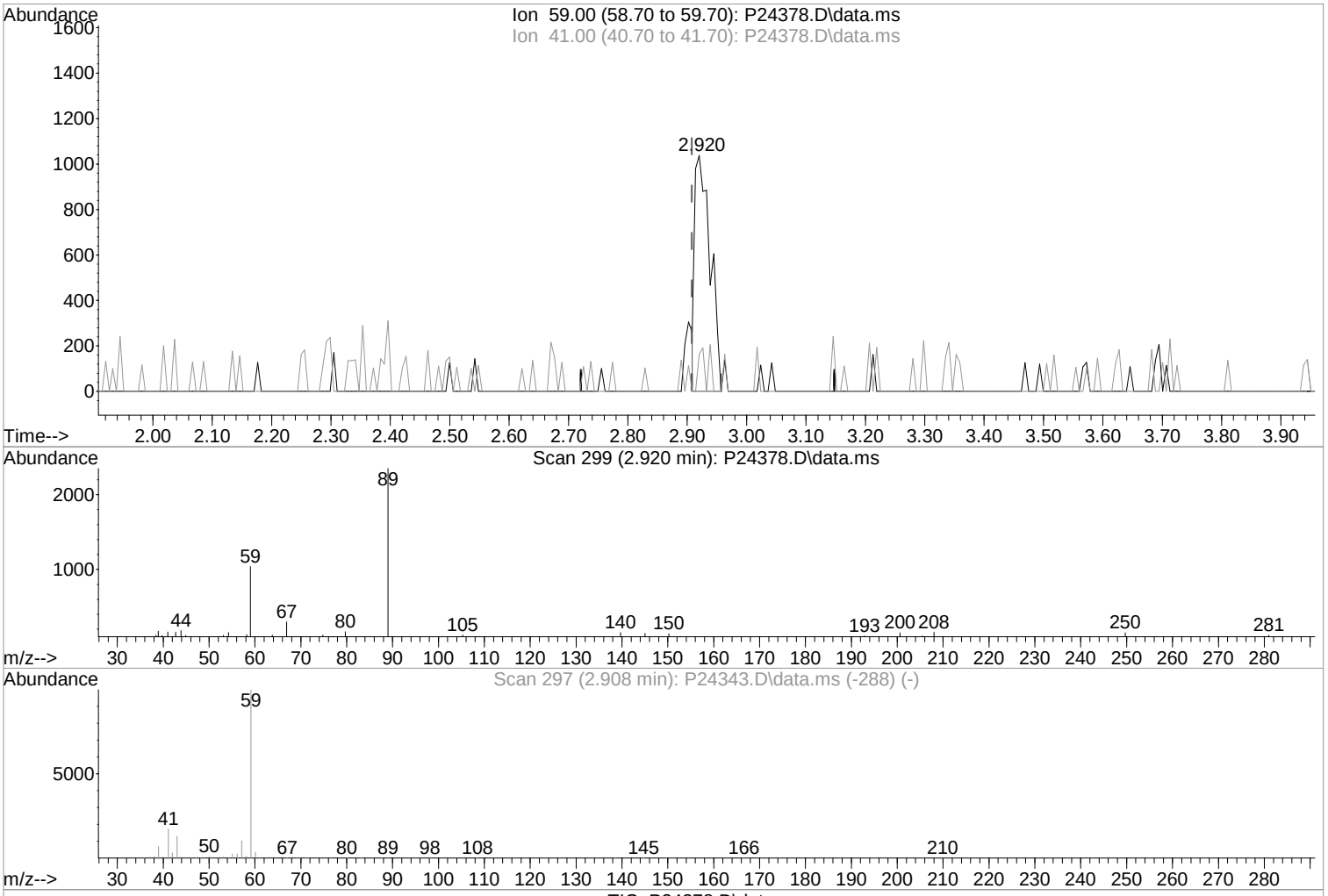
Split Peak

02/22/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24378.D
Acq On : 21 Feb 2019 7:08 pm
Operator : K.Ruest
Sample : R1901421-001|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 22 09:08:02 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24378.D\data.ms

(23) TBA

2.920min (+0.012) 2.96 ppb

response 1874

Ion	Exp%	Act%
59.00	100	100
41.00	18.20	15.70
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24378.D
Acq On : 21 Feb 2019 7:08 pm
Operator : K.Ruest
Sample : R1901421-001|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 22 14:50:21 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

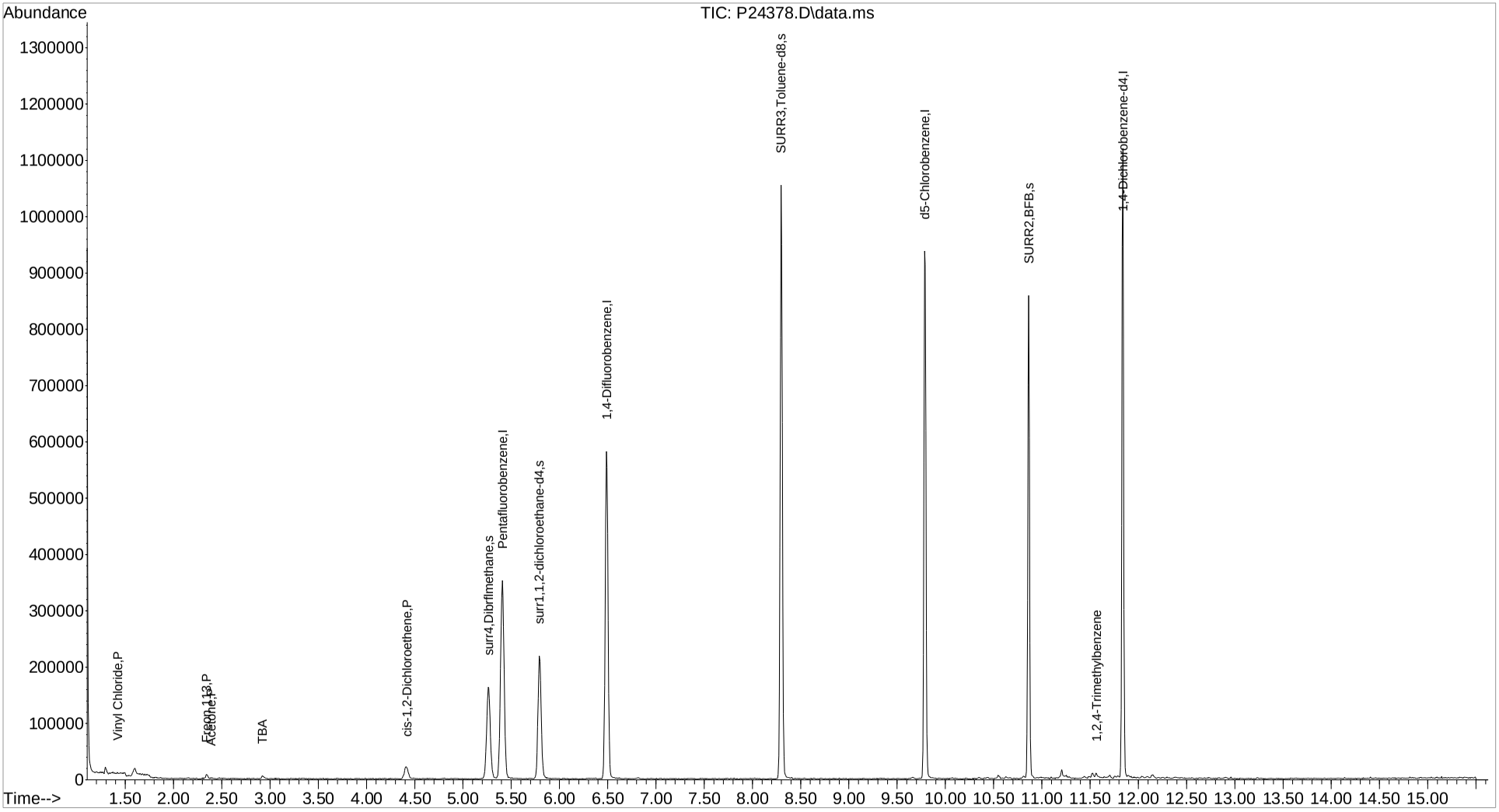
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.408	168	320433	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	509029	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	440199	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	225933	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.261	113	134246	47.99	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.98%				
48) surr1,1,2-dichloroetha...	5.792	65	185940	52.41	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 104.82%				
65) SURR3,Toluene-d8	8.297	98	647254	48.78	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.56%				
70) SURR2,BFB	10.864	95	230598	48.52	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.04%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.421	62	1521	0.33	ppb	#	62
14) Freon 113	2.341	101	2621	0.98	ppb		83
15) Acetone	2.384	43	943	0.61	ppb		87
23) TBA	2.920	59	2207m	3.49	ppb		
34) cis-1,2-Dichloroethene	4.420	96	11600	3.11	ppb	#	59
101) 1,2,4-Trimethylbenzene	11.565	105	3378	0.26	ppb		81

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

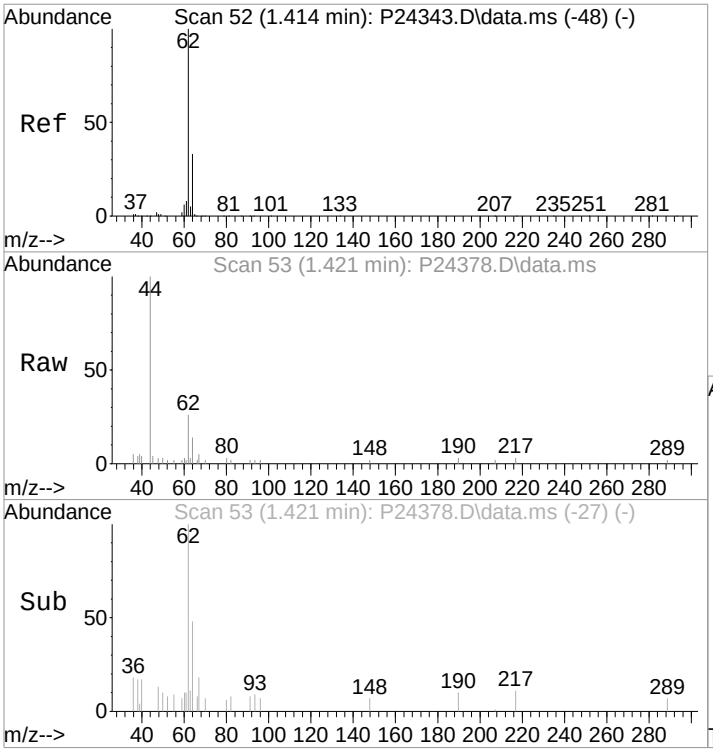
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24378.D
Acq On : 21 Feb 2019 7:08 pm
Operator : K.Ruest
Sample : R1901421-001|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 22 14:50:21 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



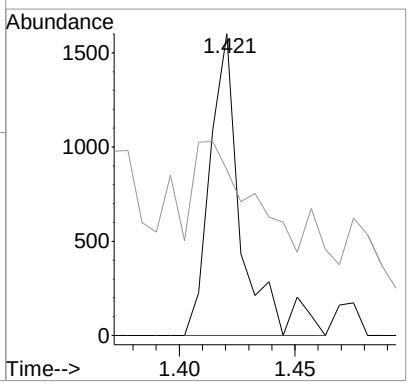
1st 02/22/19

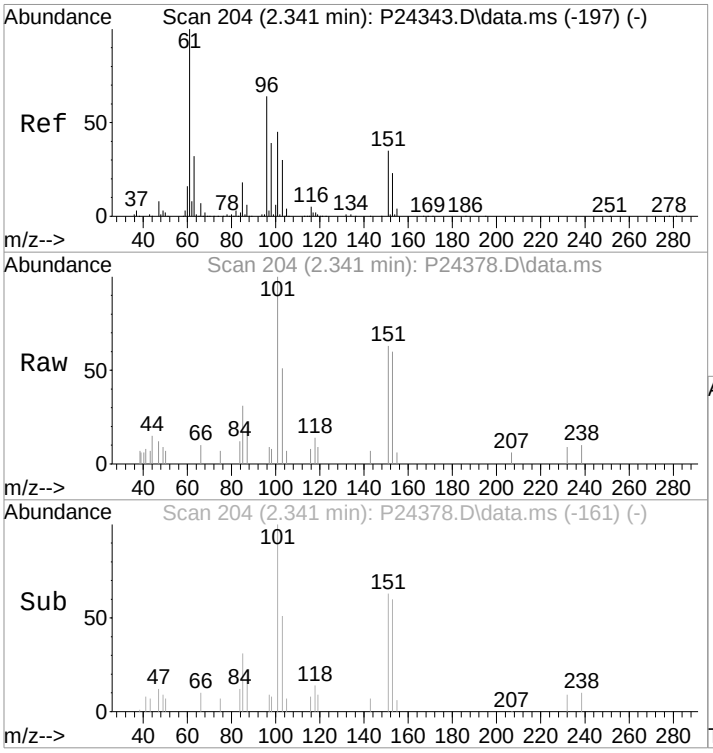


#4
Vinyl Chloride
Concen: 0.33 ppb
RT: 1.421 min Scan# 53
Delta R.T. 0.012 min
Lab File: P24378.D
Acq: 21 Feb 2019 7:08 pm

Tgt Ion: 62 Resp: 1521

Ion	Ratio	Lower	Upper
62	100		
64	54.9	13.2	53.2#

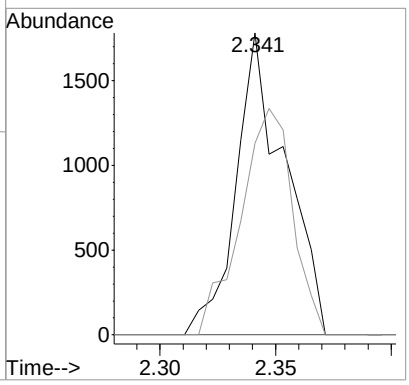


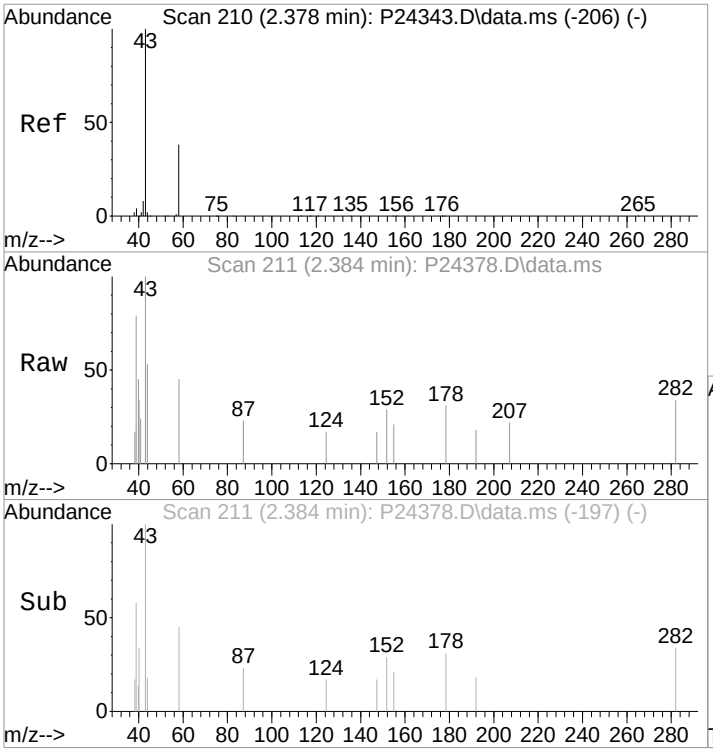


#14
Freon 113
Concen: 0.98 ppb
RT: 2.341 min Scan# 204
Delta R.T. 0.006 min
Lab File: P24378.D
Acq: 21 Feb 2019 7:08 pm

Tgt Ion:101 Resp: 2621

Ion	Ratio	Lower	Upper
101	100		
151	63.4	58.4	98.4

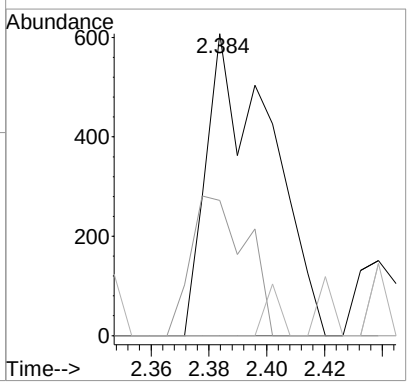


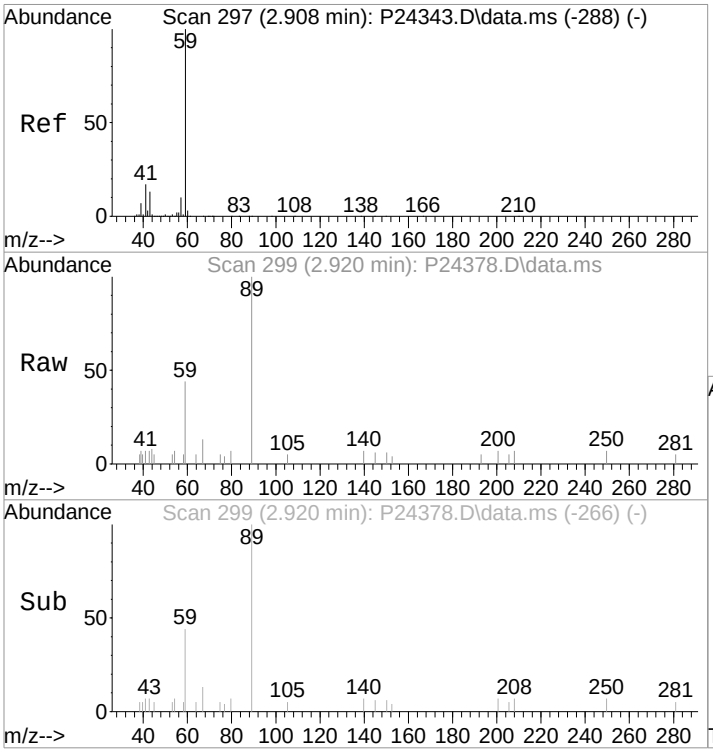


#15
Acetone
Concen: 0.61 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24378.D
Acq: 21 Feb 2019 7:08 pm

Tgt Ion: 43 Resp: 943

Ion	Ratio	Lower	Upper
43	100		
58	44.7	18.1	58.1
42	0.0	0.0	27.8

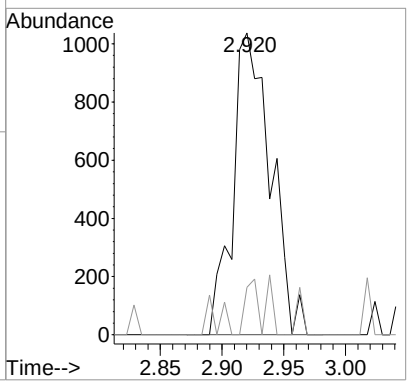


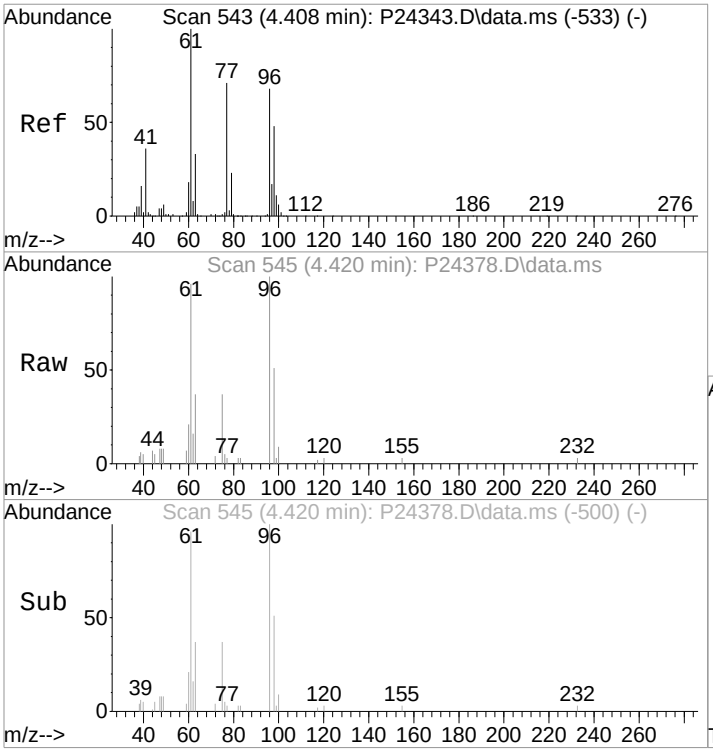


#23
TBA
Concen: 3.49 ppb m
RT: 2.920 min Scan# 299
Delta R.T. 0.012 min
Lab File: P24378.D
Acq: 21 Feb 2019 7:08 pm

Tgt Ion: 59 Resp: 2207

Ion	Ratio	Lower	Upper
59	100		
41	15.7	0.0	38.2

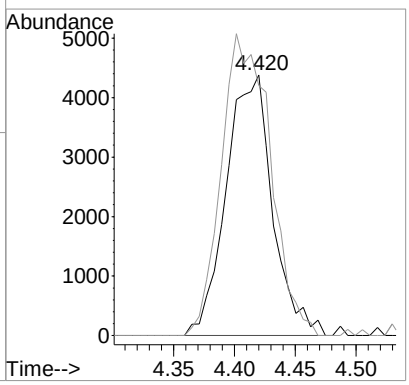


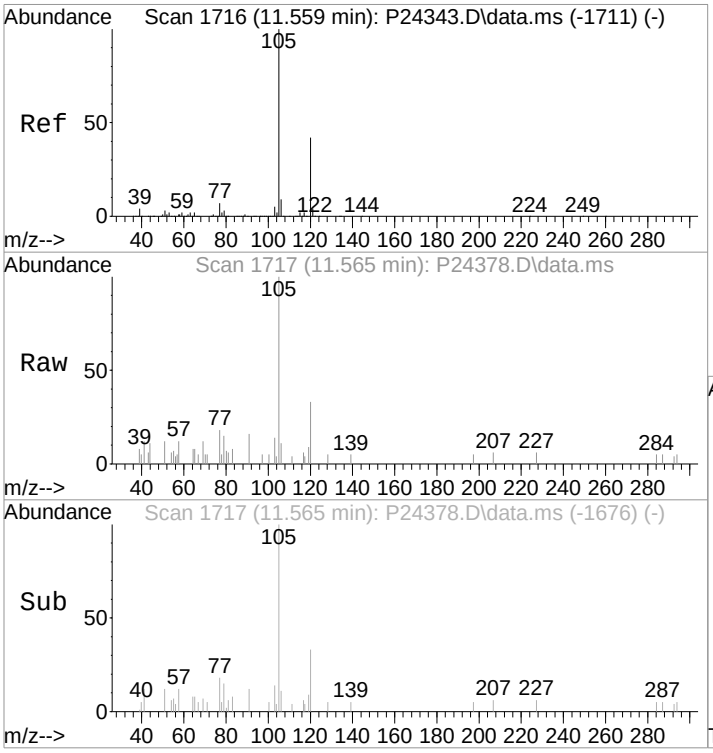


#34
cis-1,2-Dichloroethene
Concen: 3.11 ppb
RT: 4.420 min Scan# 545
Delta R.T. 0.018 min
Lab File: P24378.D
Acq: 21 Feb 2019 7:08 pm

Tgt Ion: 96 Resp: 11600

Ion	Ratio	Lower	Upper
96	100		
61	95.9	128.1	168.1#

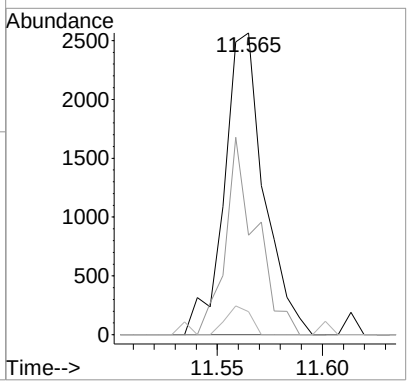




#101
1,2,4-Trimethylbenzene
Concen: 0.26 ppb
RT: 11.565 min Scan# 1717
Delta R.T. 0.006 min
Lab File: P24378.D
Acq: 21 Feb 2019 7:08 pm

Tgt Ion:105 Resp: 3378

Ion	Ratio	Lower	Upper
105	100		
120	33.0	26.4	66.4
65	7.7	0.0	24.1



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24379.D
Acq On : 21 Feb 2019 7:30 pm
Operator : K.Ruest
Sample : R1901421-002|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 22 14:52:31 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

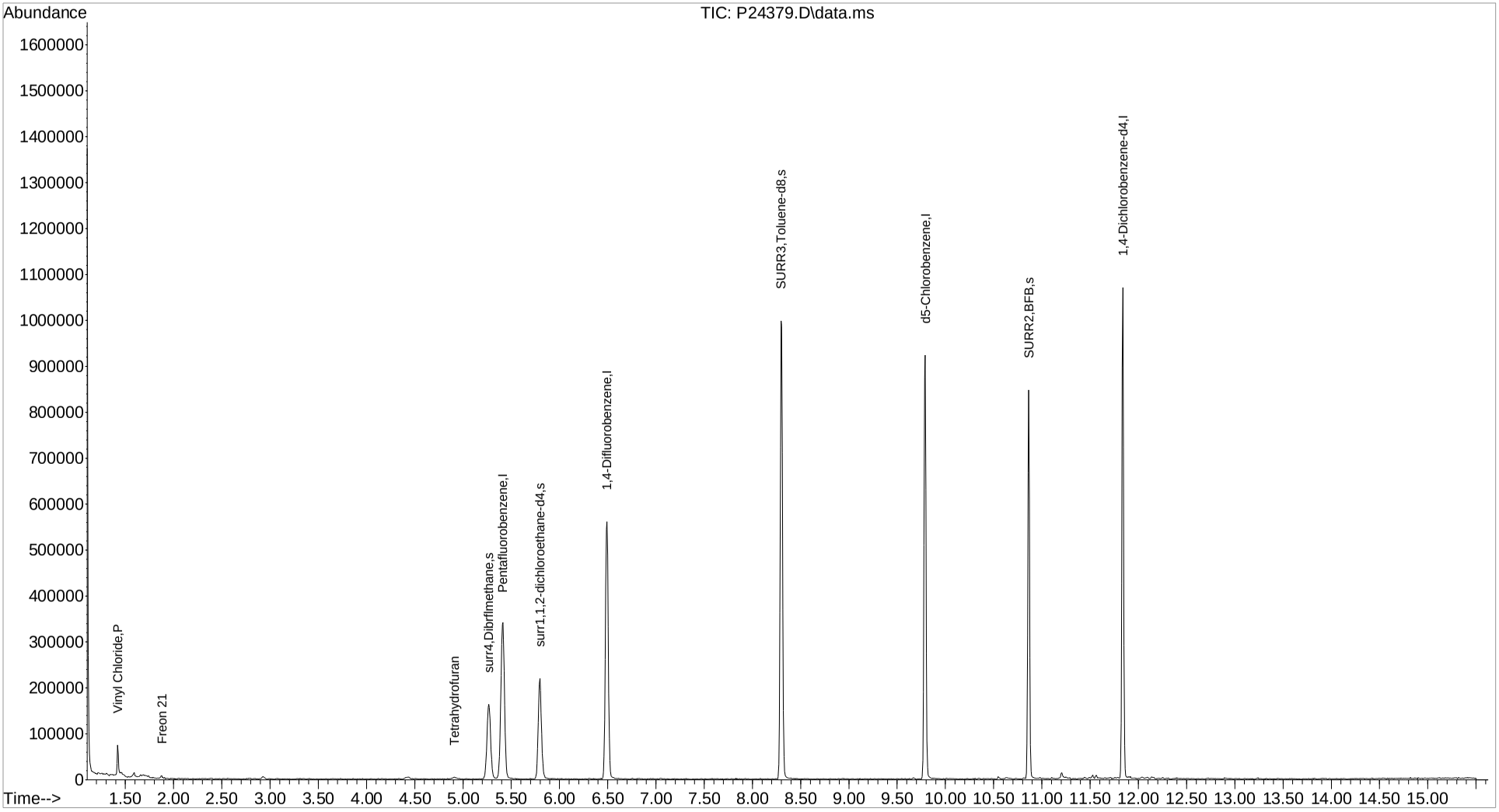
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.407	168	319772	50.00	ppb	0.01
43) 1,4-Difluorobenzene	6.493	114	507624	50.00	ppb	0.01
71) d5-Chlorobenzene	9.791	117	430038	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	219662	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.267	113	136878	49.07	ppb	0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.14%			
48) surr1,1,2-dichloroetha...	5.798	65	181248	51.22	ppb	0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.44%			
65) SURR3,Toluene-d8	8.297	98	654893	49.49	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.98%			
70) SURR2,BFB	10.864	95	226472	47.79	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.58%			
Target Compounds						Qvalue
4) Vinyl Chloride	1.420	62	38776	8.34	ppb	98
7) Freon 21	1.878	67	3692	0.63	ppb	97
39) Tetrahydrofuran	4.908	42	3579	2.15	ppb	82

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

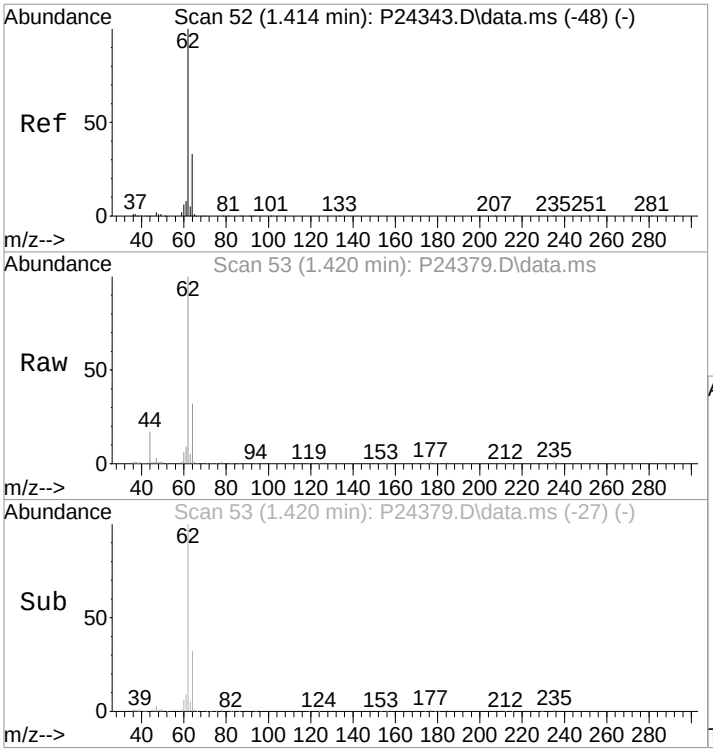
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24379.D
Acq On : 21 Feb 2019 7:30 pm
Operator : K.Ruest
Sample : R1901421-002|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 22 14:52:31 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



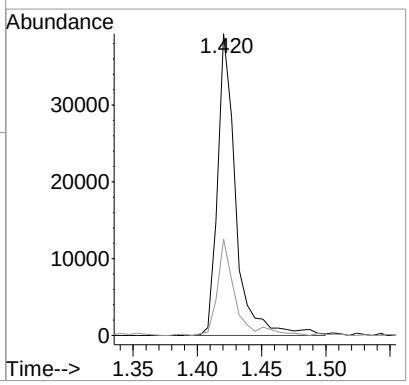
1st 02/22/19

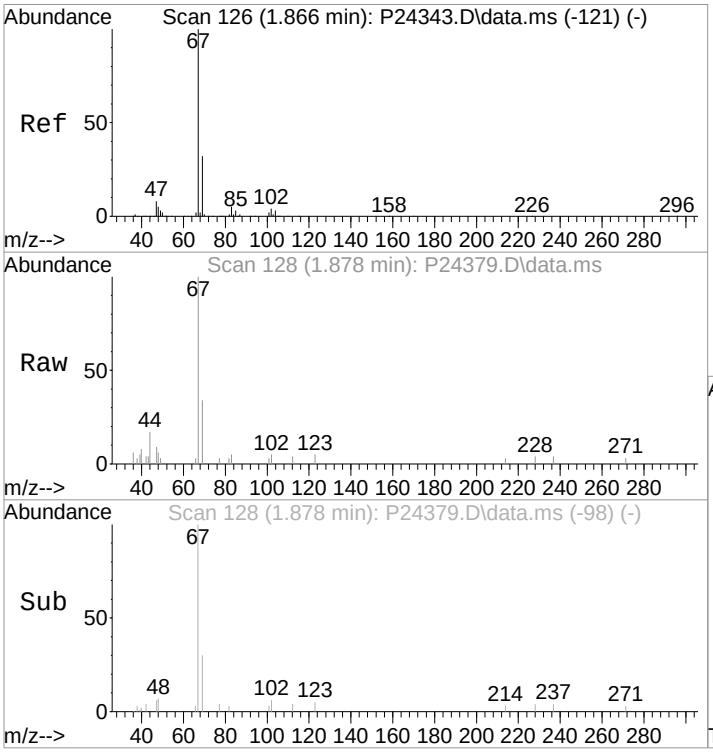


#4
Vinyl Chloride
Concen: 8.34 ppb
RT: 1.420 min Scan# 53
Delta R.T. 0.012 min
Lab File: P24379.D
Acq: 21 Feb 2019 7:30 pm

Tgt Ion: 62 Resp: 38776

Ion	Ratio	Lower	Upper
62	100		
64	31.9	13.2	53.2

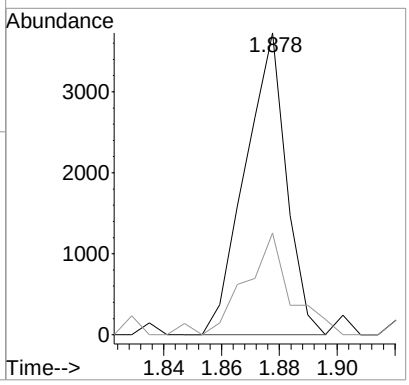


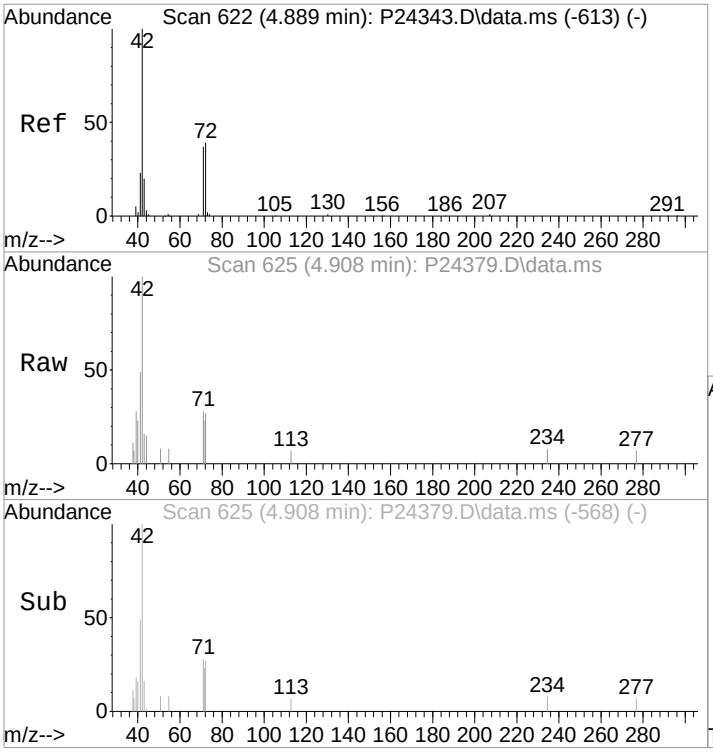


#7
Freon 21
Concen: 0.63 ppb
RT: 1.878 min Scan# 128
Delta R.T. 0.018 min
Lab File: P24379.D
Acq: 21 Feb 2019 7:30 pm

Tgt Ion: 67 Resp: 3692

Ion	Ratio	Lower	Upper
67	100		
69	33.7	11.9	51.9

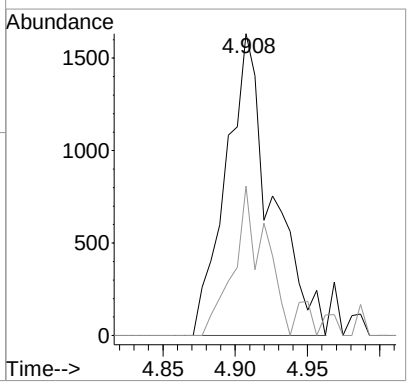




#39
Tetrahydrofuran
Concen: 2.15 ppb
RT: 4.908 min Scan# 625
Delta R.T. 0.030 min
Lab File: P24379.D
Acq: 21 Feb 2019 7:30 pm

Tgt Ion: 42 Resp: 3579

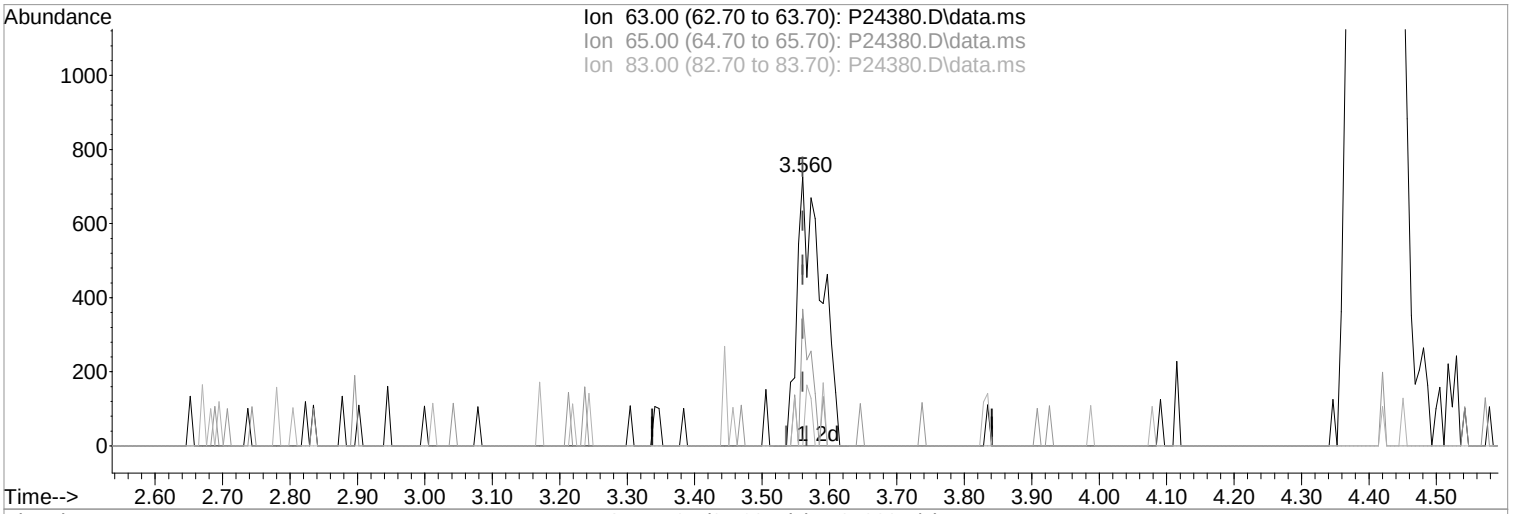
Ion	Ratio	Lower	Upper
42	100		
72	49.5	18.5	58.5

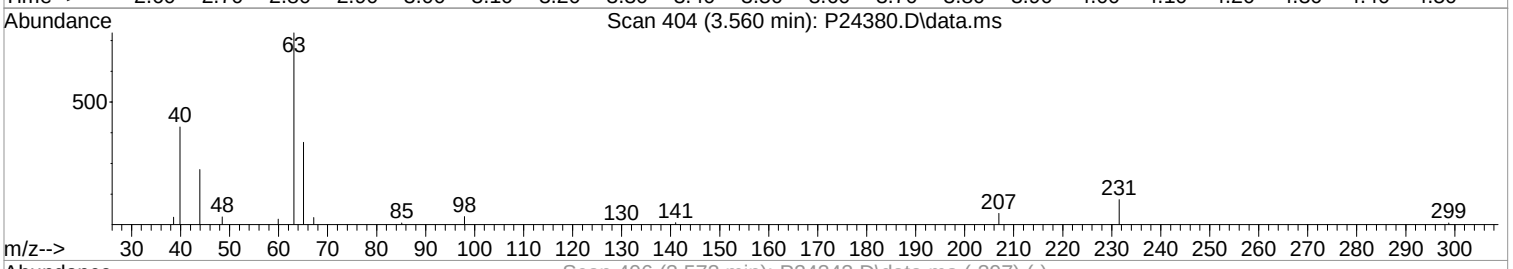


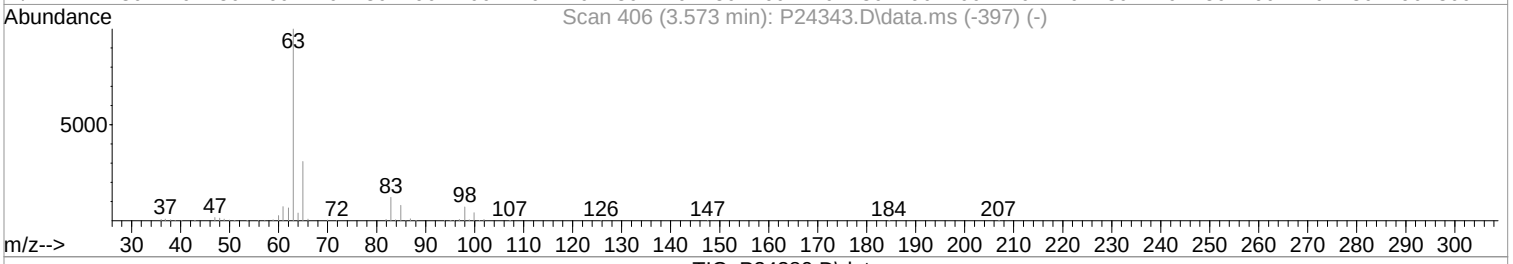
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24380.D
Acq On : 21 Feb 2019 7:52 pm
Operator : K.Ruest
Sample : R1901421-003|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 22 09:08:55 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24380.D\data.ms

(28) 1,1-Diclethane (P)

3.560min (+0.000) 0.31 ppb m

response 1838

Ion	Exp%	Act%
63.00	100	100
65.00	31.00	50.83
83.00	12.10	0.00
0.00	0.00	0.00

Manual Integration:

After

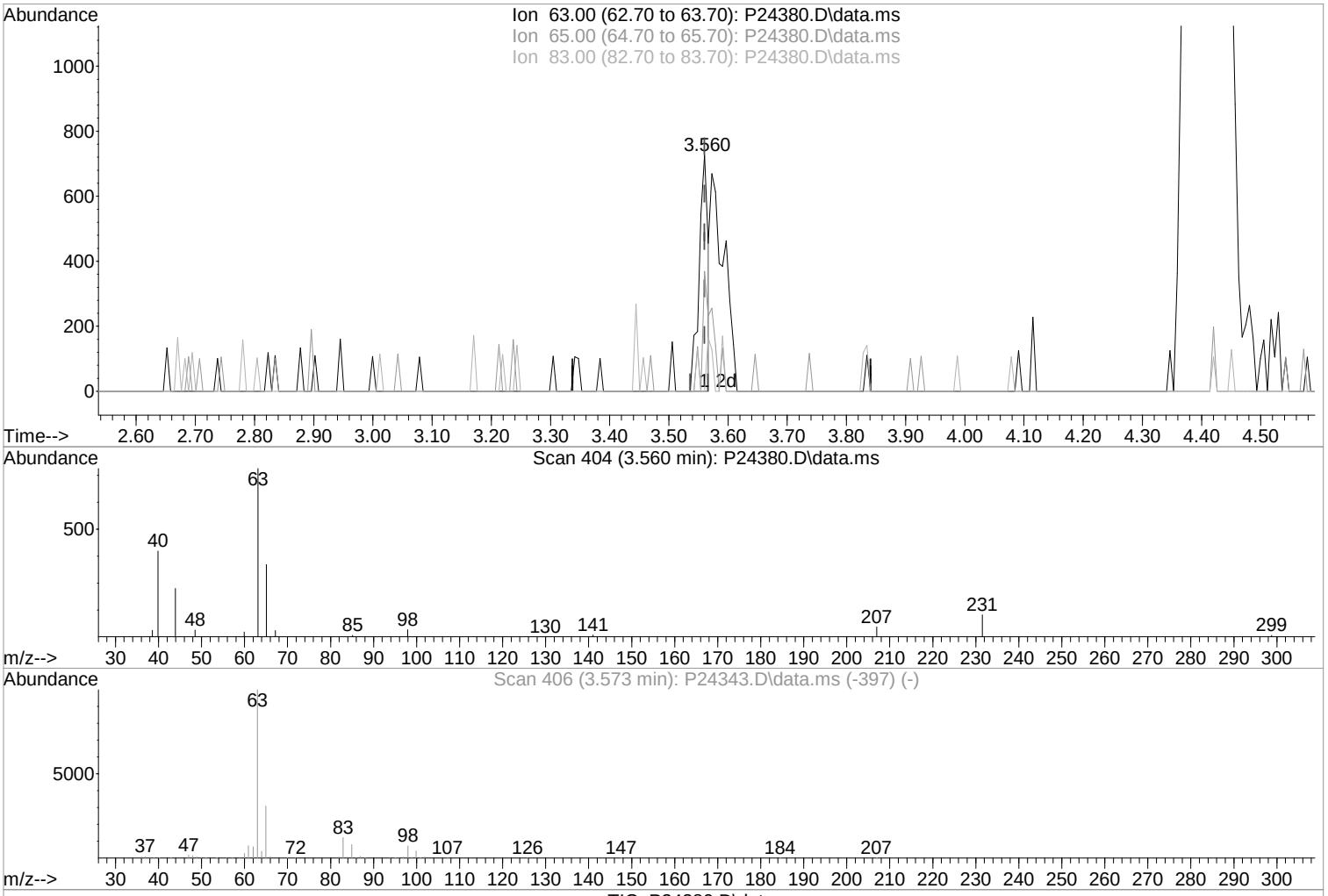
Split Peak

02/22/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24380.D
Acq On : 21 Feb 2019 7:52 pm
Operator : K.Ruest
Sample : R1901421-003|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 22 09:08:55 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24380.D\data.ms

(28) 1,1-Diclethane (P)

3.560min (+0.000) 0.13 ppb

response 762

Ion	Exp%	Act%
63.00	100	100
65.00	31.00	50.83
83.00	12.10	0.00
0.00	0.00	0.00

Manual Integration:

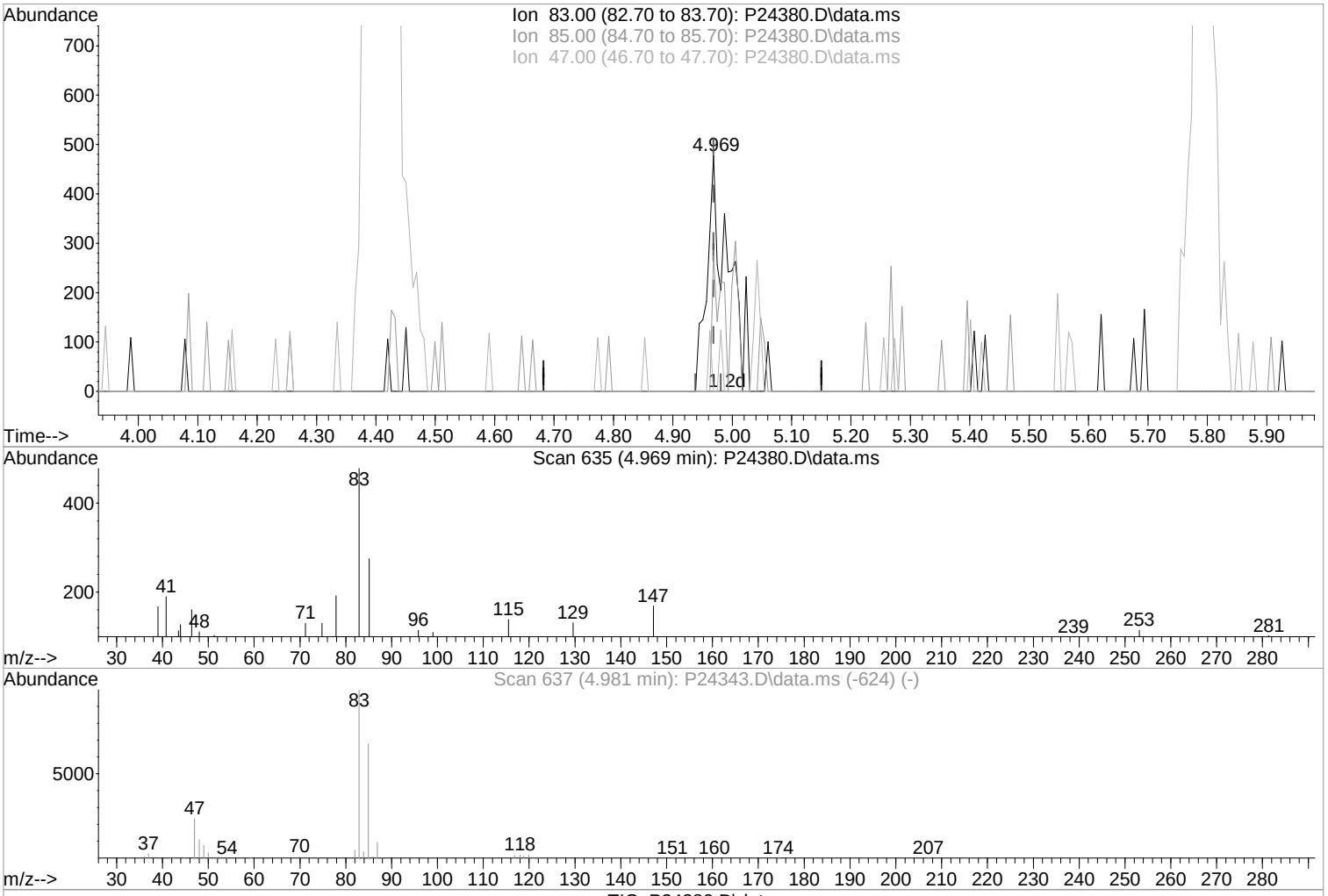
Before

02/22/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24380.D
Acq On : 21 Feb 2019 7:52 pm
Operator : K.Ruest
Sample : R1901421-003|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 22 09:08:55 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24380.D\data.ms

(40) Chloroform (P)

4.969min (+0.000) 0.22 ppb m

response 1188

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	57.53
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

After

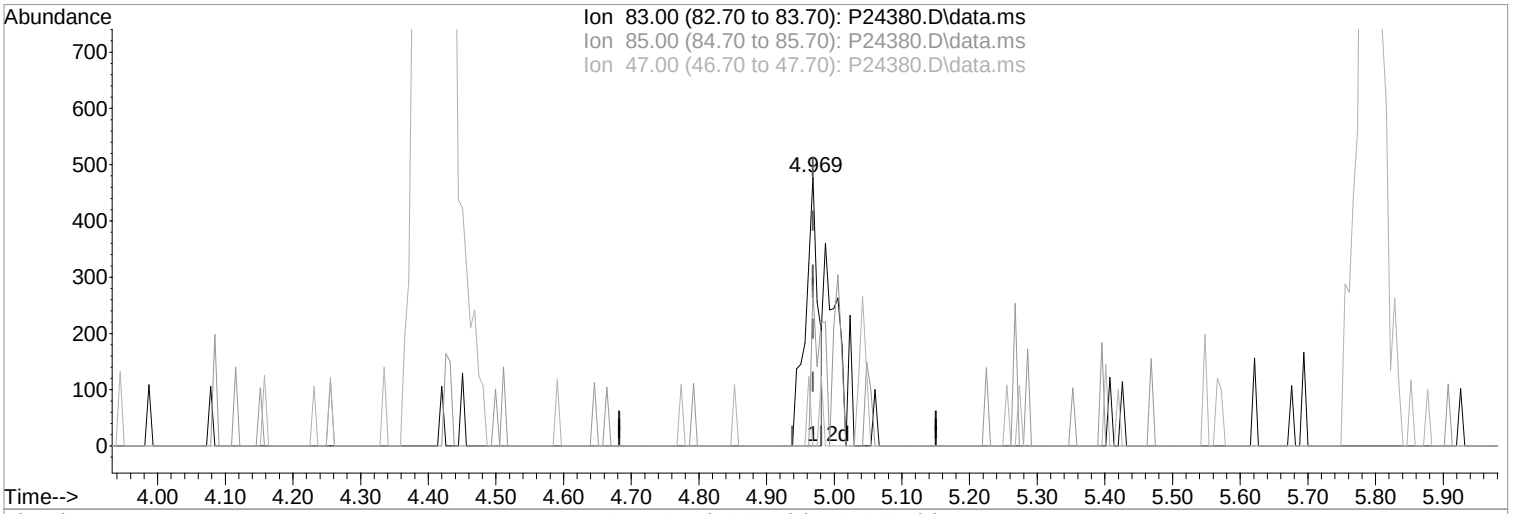
Split Peak

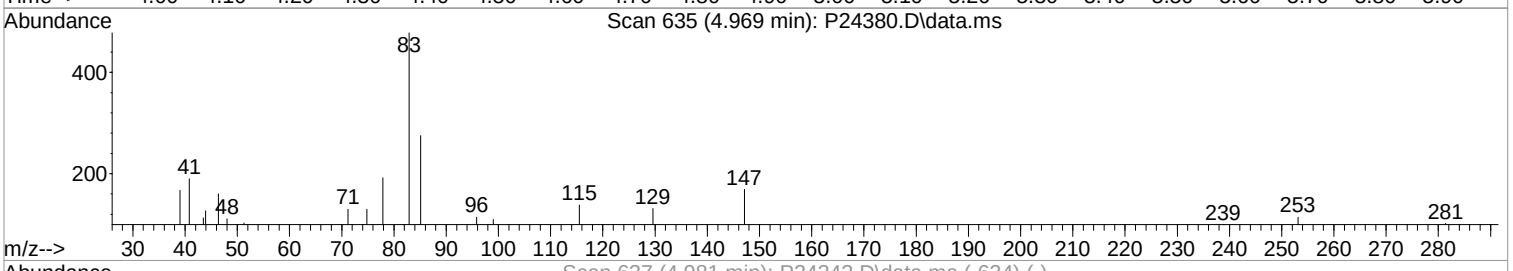
02/22/19

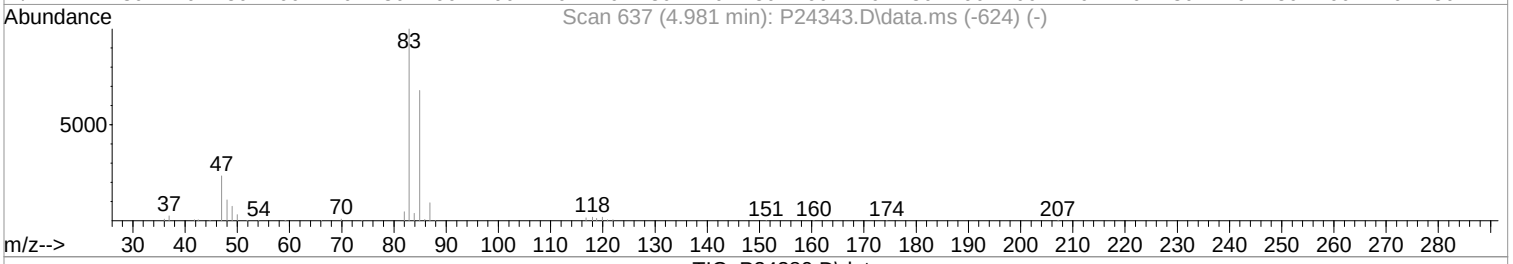
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24380.D
Acq On : 21 Feb 2019 7:52 pm
Operator : K.Ruest
Sample : R1901421-003|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 22 09:08:55 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24380.D\data.ms

(40) Chloroform (P)

4.969min (+0.000) 0.12 ppb

response 632

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	57.53
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24380.D
Acq On : 21 Feb 2019 7:52 pm
Operator : K.Ruest
Sample : R1901421-003|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 22 14:55:01 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

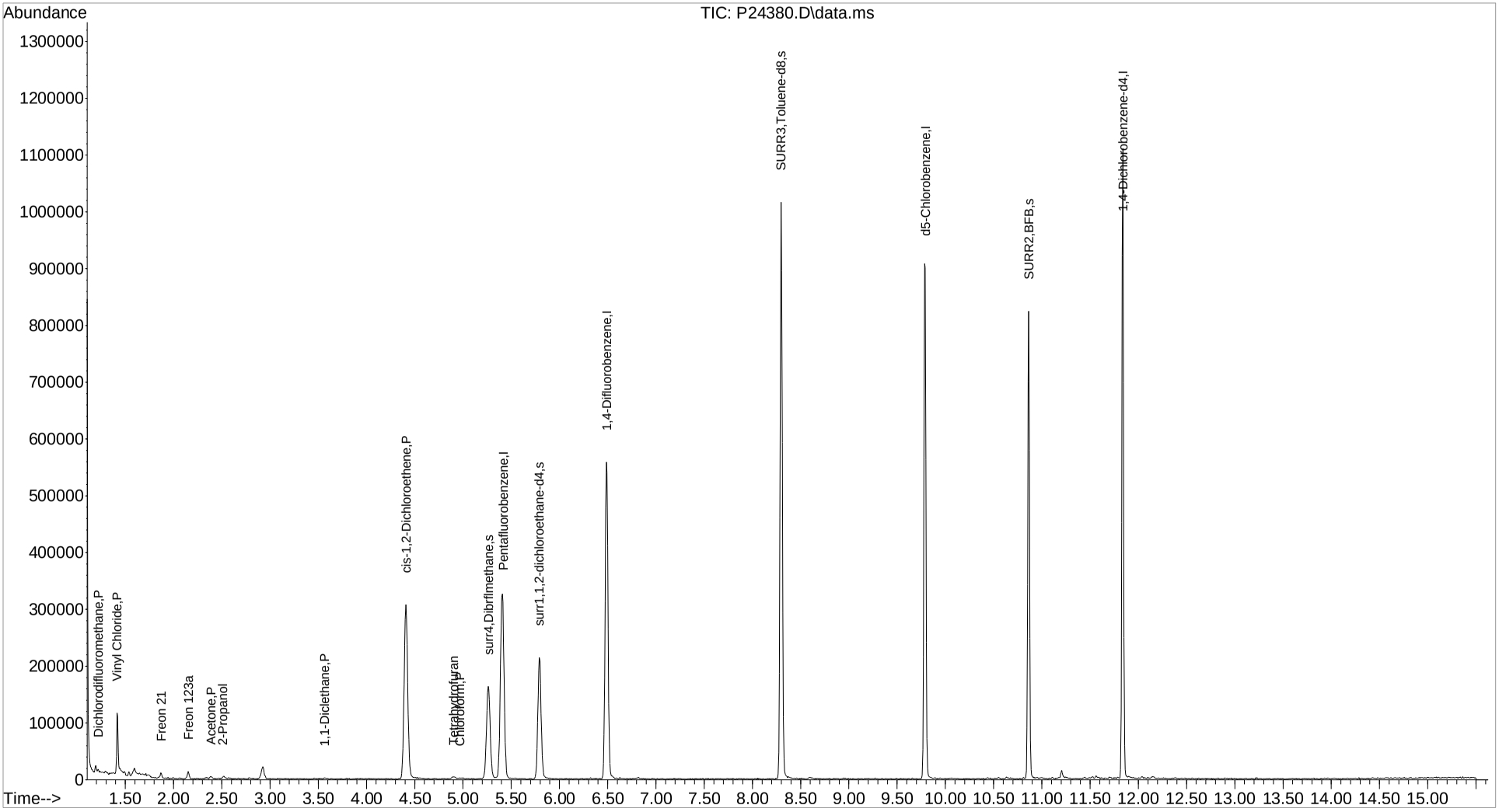
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.414	168	308873	50.00	ppb	0.02
43) 1,4-Difluorobenzene	6.487	114	494090	50.00	ppb	0.00
71) d5-Chlorobenzene	9.791	117	426656	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	217662	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.261	113	139462	51.36	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.72%			
48) surr1,1,2-dichloroetha...	5.792	65	179295	52.06	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 104.12%			
65) SURR3,Toluene-d8	8.297	98	645319	50.11	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.22%			
70) SURR2,BFB	10.864	95	229318	49.71	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.42%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.219	85	849	0.23	ppb	85
4) Vinyl Chloride	1.414	62	73020	16.27	ppb	98
7) Freon 21	1.872	67	6554	1.16	ppb	98
10) Freon 123a	2.152	67	4528	1.25	ppb	91
15) Acetone	2.384	43	4087	2.76	ppb	85
16) 2-Propanol	2.512	45	4073	10.61	ppb	67
28) 1,1-Diclethane	3.560	63	1838m	0.31	ppb	
34) cis-1,2-Dichloroethene	4.408	96	173854	48.38	ppb	92
39) Tetrahydrofuran	4.902	42	2618	1.63	ppb	82
40) Chloroform	4.969	83	1188m	0.22	ppb	

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

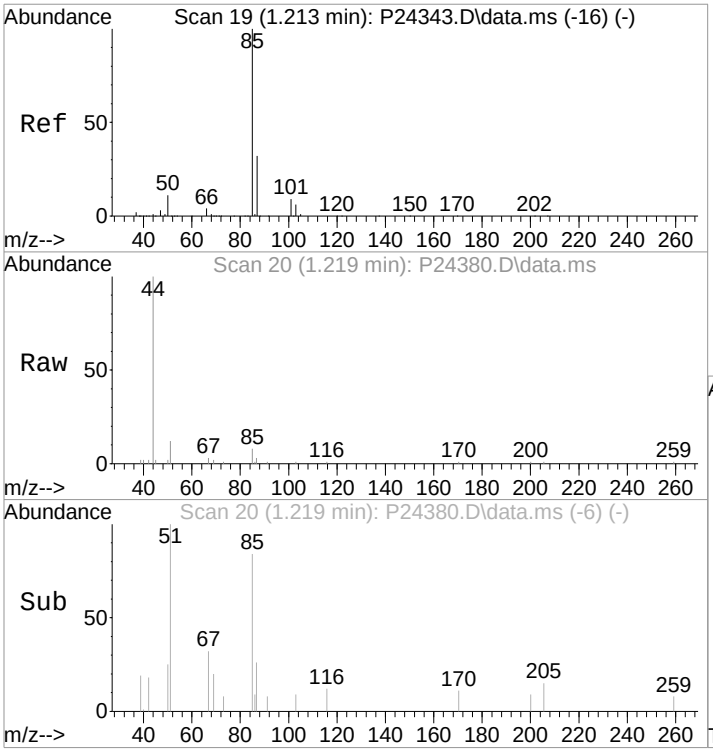
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24380.D
Acq On : 21 Feb 2019 7:52 pm
Operator : K.Ruest
Sample : R1901421-003|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 22 14:55:01 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



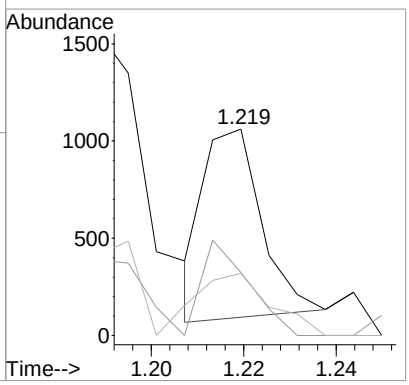
1st 02/22/19

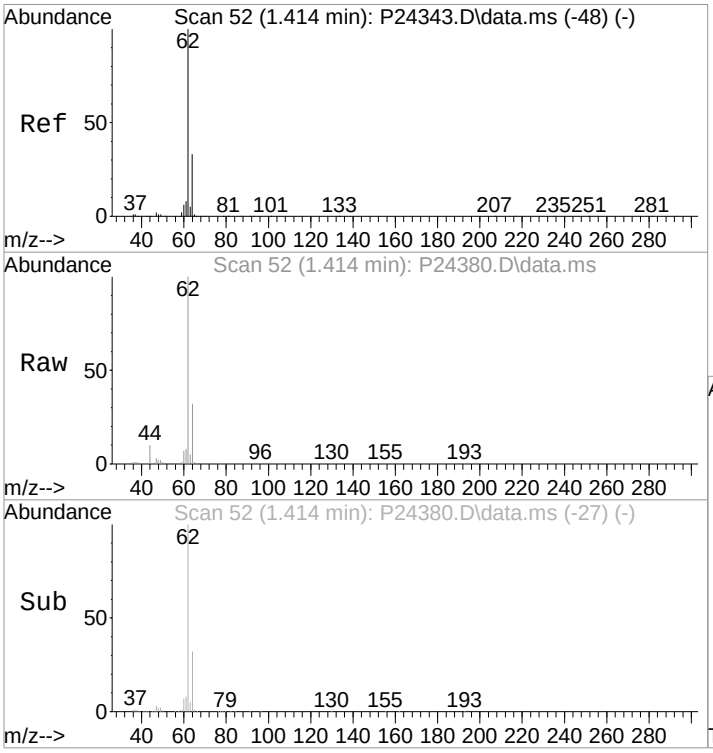


#2
Dichlorodifluoromethane
Concen: 0.23 ppb
RT: 1.219 min Scan# 20
Delta R.T. 0.012 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 85 Resp: 849

Ion	Ratio	Lower	Upper
85	100		
87	30.6	12.4	52.4
50	30.1	0.0	31.1

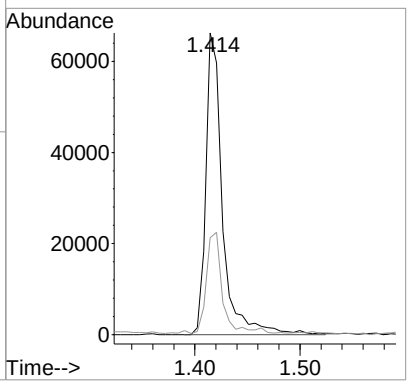


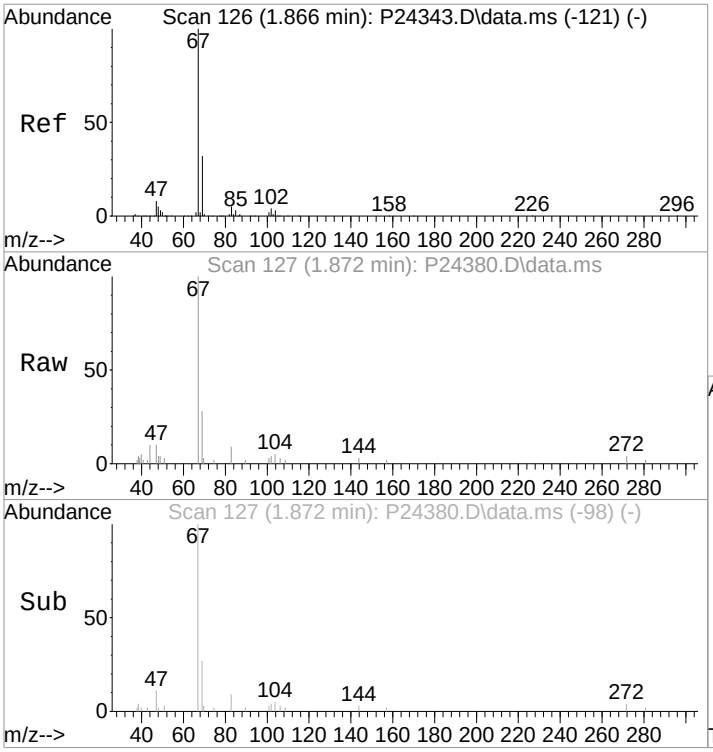


#4
Vinyl Chloride
Concen: 16.27 ppb
RT: 1.414 min Scan# 52
Delta R.T. 0.006 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 62 Resp: 73020

Ion	Ratio	Lower	Upper
62	100		
64	32.1	13.2	53.2

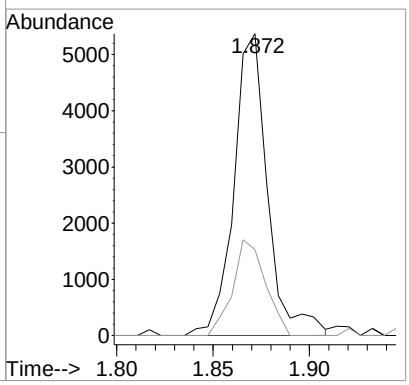


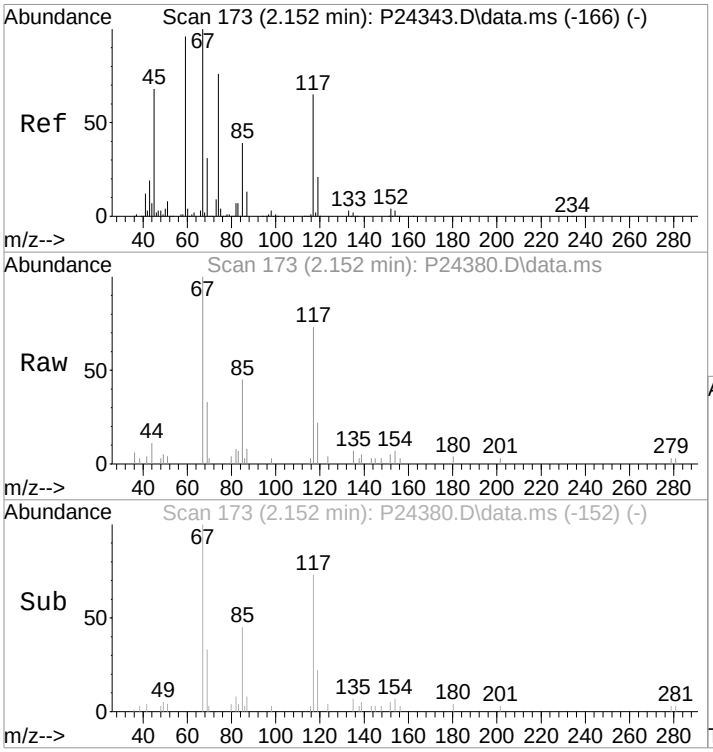


#7
Freon 21
Concen: 1.16 ppb
RT: 1.872 min Scan# 127
Delta R.T. 0.012 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 67 Resp: 6554

Ion	Ratio	Lower	Upper
67	100		
69	31.0	11.9	51.9

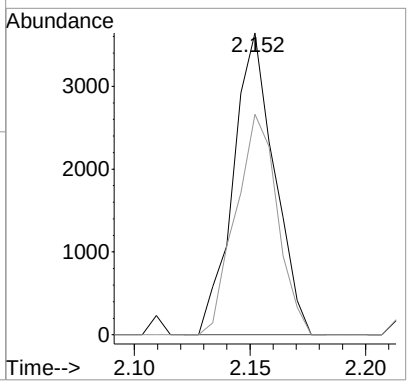


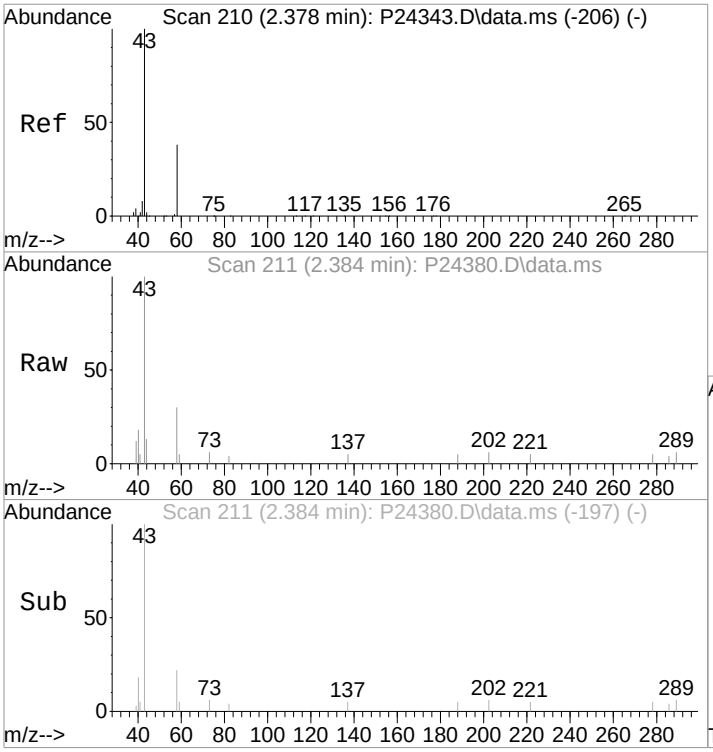


#10
Freon 123a
Concen: 1.25 ppb
RT: 2.152 min Scan# 173
Delta R.T. 0.012 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 67 Resp: 4528

Ion	Ratio	Lower	Upper
67	100		
117	73.0	45.7	85.7

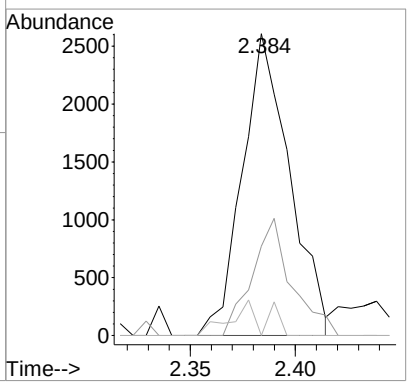


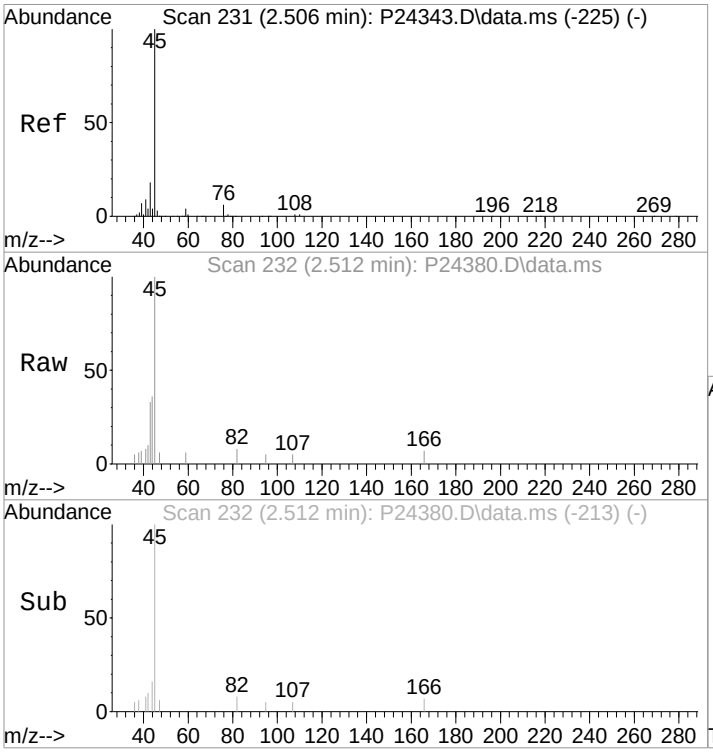


#15
Acetone
Concen: 2.76 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 43 Resp: 4087

Ion	Ratio	Lower	Upper
43	100		
58	29.6	18.1	58.1
42	0.0	0.0	27.8

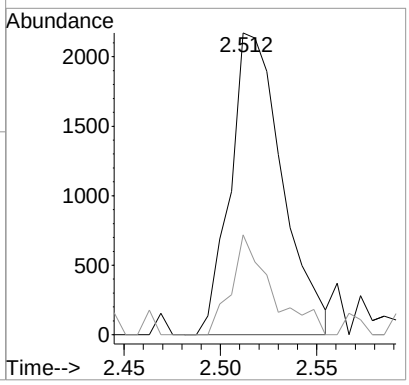


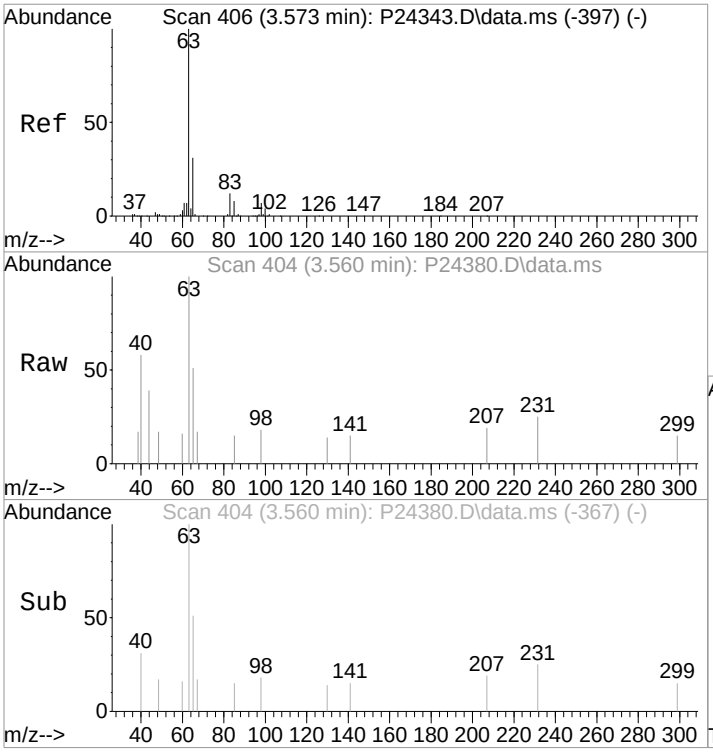


#16
2-Propanol
Concen: 10.61 ppb
RT: 2.512 min Scan# 232
Delta R.T. 0.006 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 45 Resp: 4073

Ion	Ratio	Lower	Upper
45	100		
43	33.1	0.0	38.5

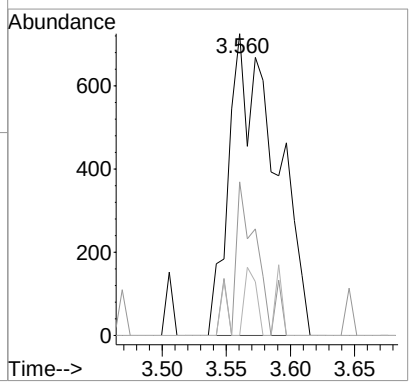


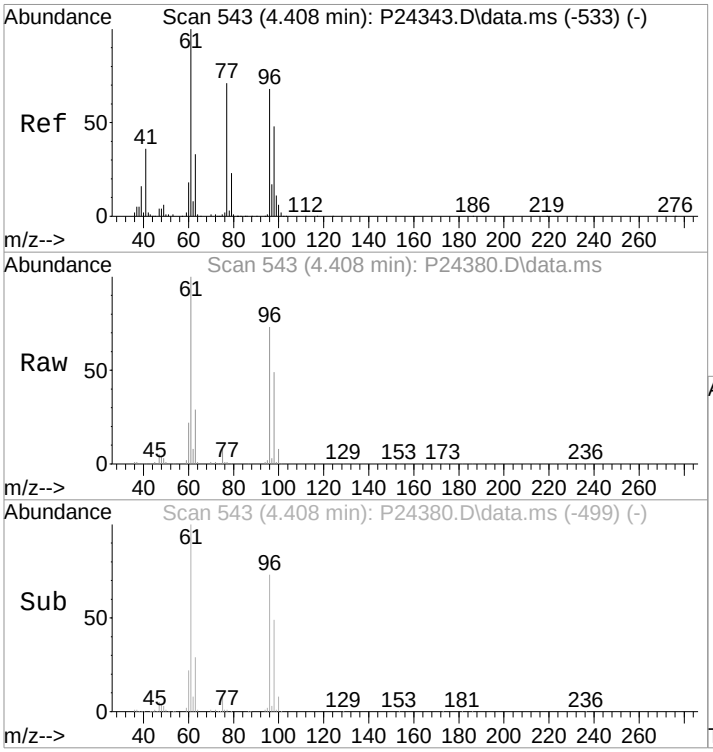


#28
1,1-Diclethane
Concen: 0.31 ppb m
RT: 3.560 min Scan# 404
Delta R.T. 0.000 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 63 Resp: 1838

Ion	Ratio	Lower	Upper
63	100		
65	50.8	11.0	51.0
83	0.0	0.0	32.1

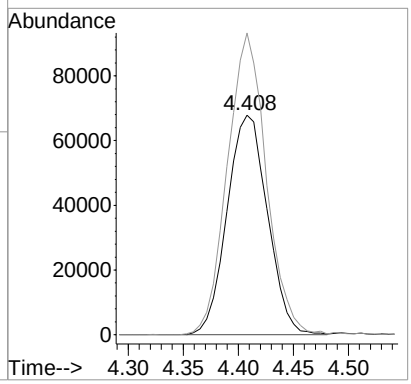


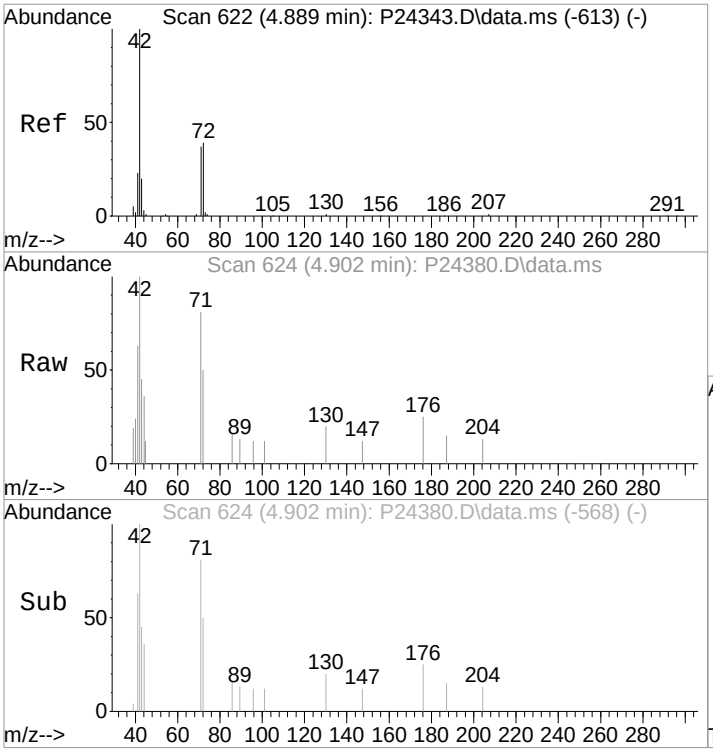


#34
cis-1,2-Dichloroethene
Concen: 48.38 ppb
RT: 4.408 min Scan# 543
Delta R.T. 0.006 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 96 Resp: 173854

Ion	Ratio	Lower	Upper
96	100		
61	137.5	128.1	168.1

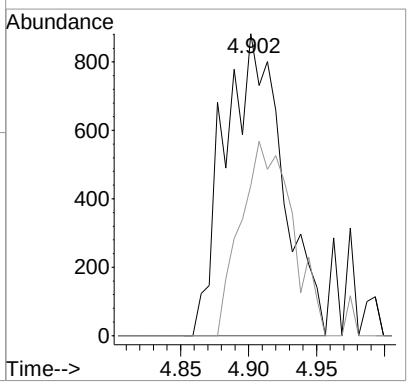


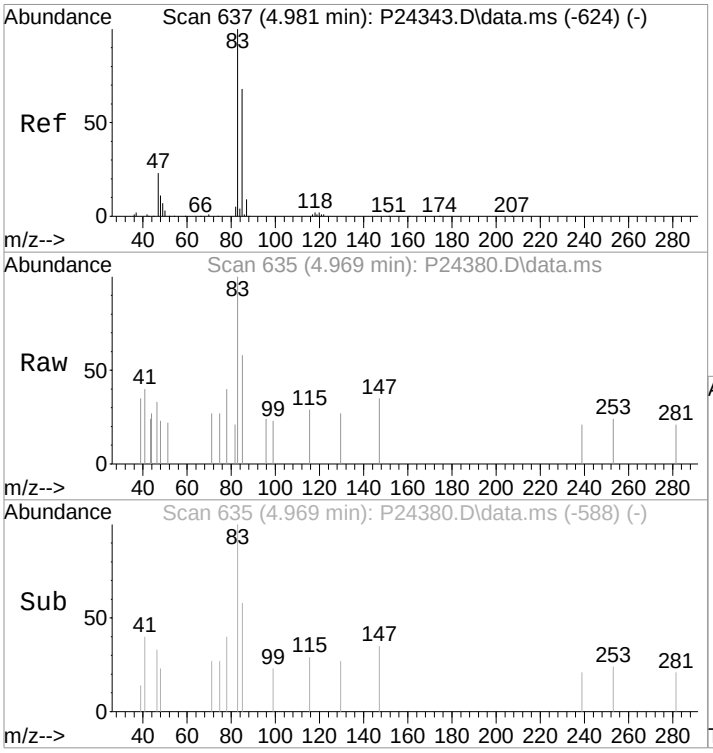


#39
Tetrahydrofuran
Concen: 1.63 ppb
RT: 4.902 min Scan# 624
Delta R.T. 0.025 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 42 Resp: 2618

Ion	Ratio	Lower	Upper
42	100		
72	49.7	18.5	58.5

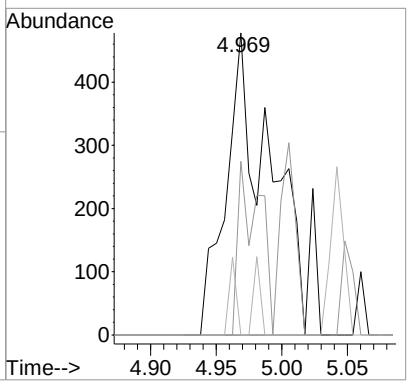




#40
Chloroform
Concen: 0.22 ppb m
RT: 4.969 min Scan# 635
Delta R.T. 0.000 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 83 Resp: 1188

Ion	Ratio	Lower	Upper
83	100		
85	57.5	47.9	87.9
47	0.0	3.4	43.4#



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24381.D
Acq On : 21 Feb 2019 8:14 pm
Operator : K.Ruest
Sample : R1901421-004|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 22 14:56:32 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

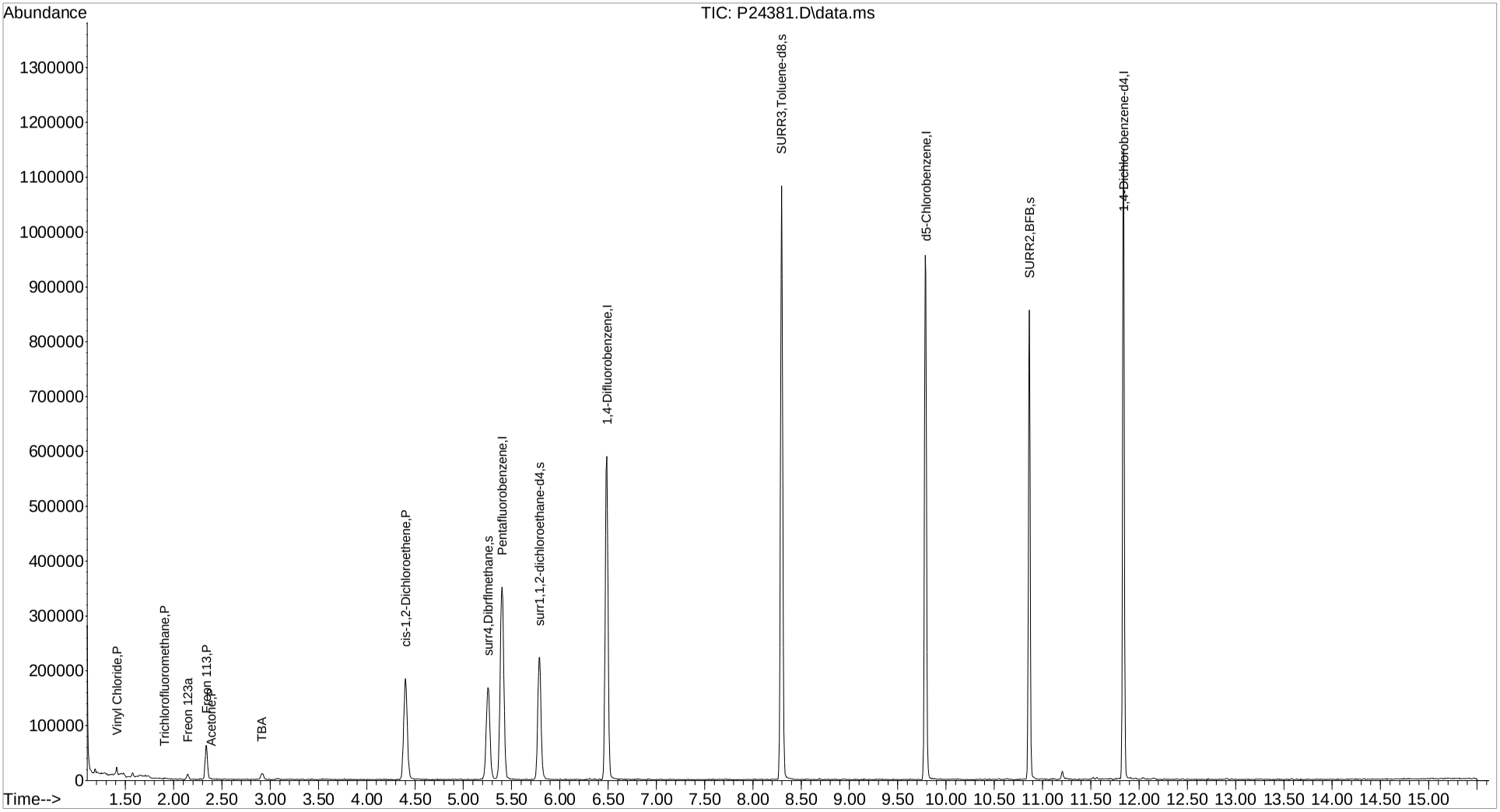
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.401	168	328235	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.487	114	524963	50.00	ppb	0.00
71) d5-Chlorobenzene	9.791	117	450334	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	236724	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.255	113	142557	49.42	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.84%			
48) surr1,1,2-dichloroetha...	5.786	65	189292	51.73	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.46%			
65) SURR3,Toluene-d8	8.297	98	677733	49.53	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.06%			
70) SURR2,BFB	10.864	95	239299	48.83	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.66%			
Target Compounds						Qvalue
4) Vinyl Chloride	1.408	62	7244	1.52	ppb	91
8) Trichlorofluoromethane	1.908	101	1026	0.22	ppb	85
10) Freon 123a	2.146	67	4196	1.09	ppb	99
14) Freon 113	2.335	101	23354	8.56	ppb	89
15) Acetone	2.384	43	1497	0.95	ppb	83
23) TBA	2.914	59	5977	9.22	ppb	70
34) cis-1,2-Dichloroethene	4.402	96	103677	27.15	ppb	85

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

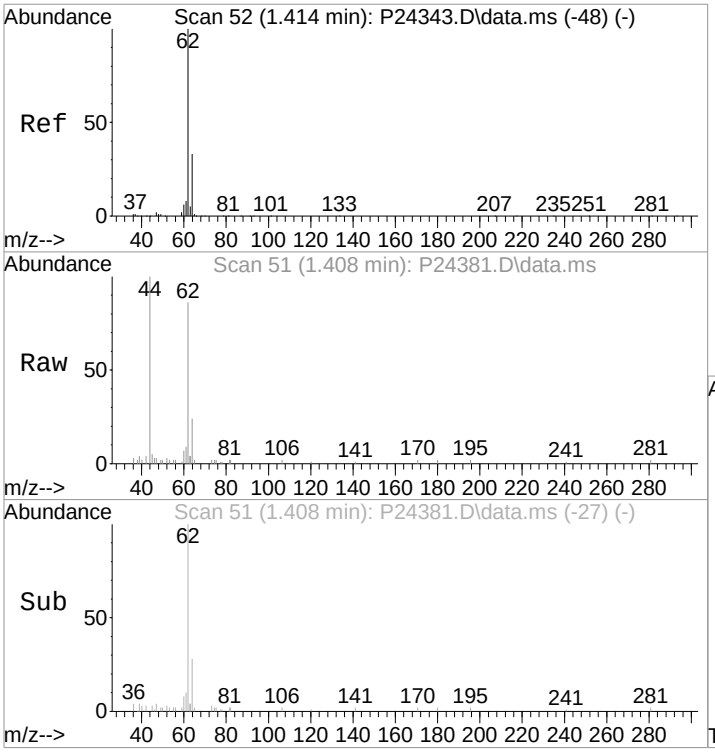
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24381.D
Acq On : 21 Feb 2019 8:14 pm
Operator : K.Ruest
Sample : R1901421-004|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 22 14:56:32 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



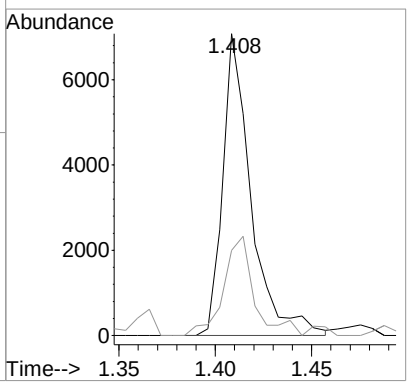
1st 02/22/19

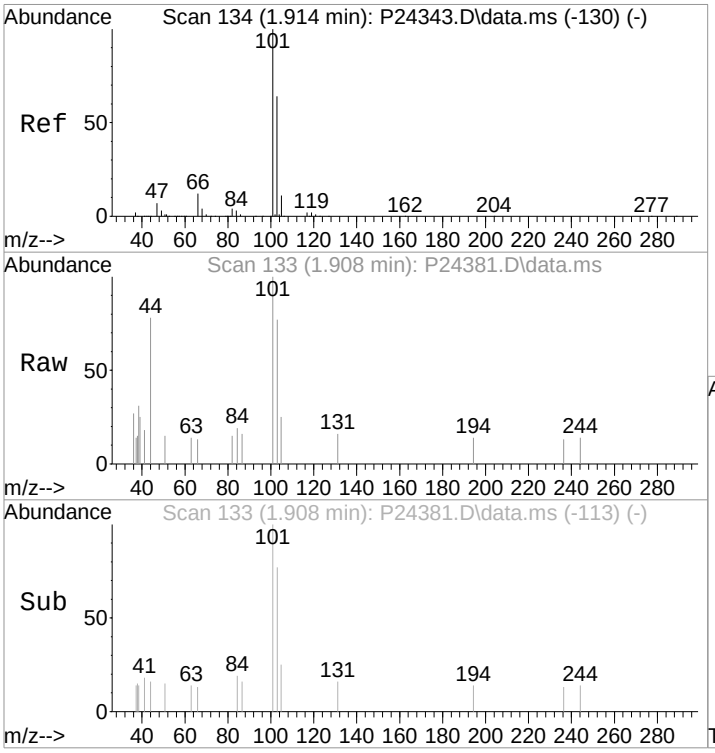


#4
Vinyl Chloride
Concen: 1.52 ppb
RT: 1.408 min Scan# 51
Delta R.T. 0.000 min
Lab File: P24381.D
Acq: 21 Feb 2019 8:14 pm

Tgt Ion: 62 Resp: 7244

Ion	Ratio	Lower	Upper
62	100		
64	28.2	13.2	53.2

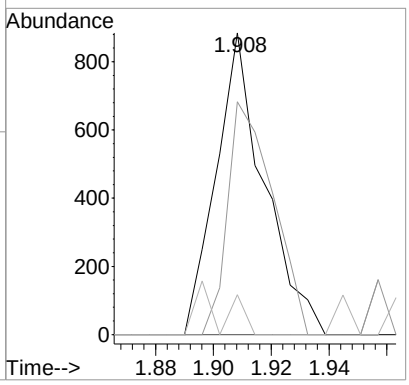


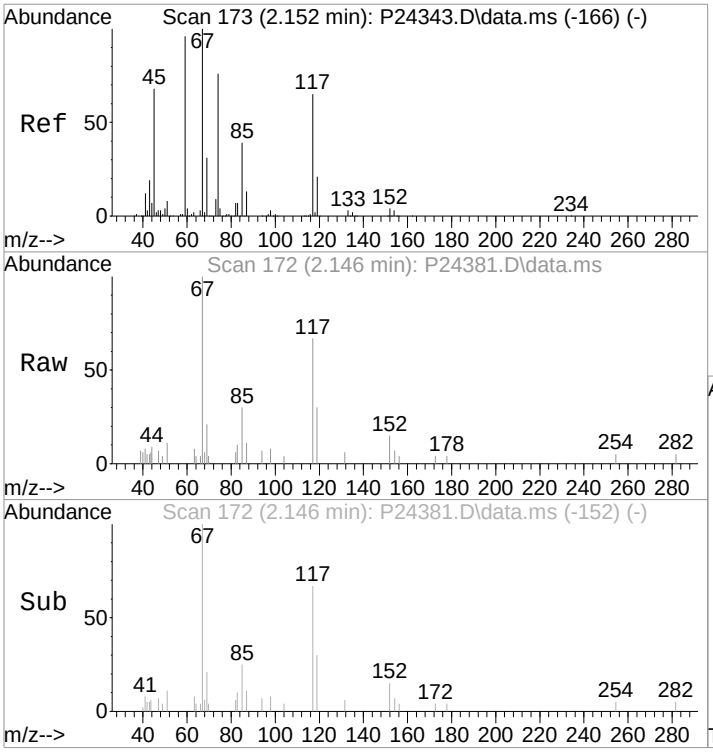


#8
Trichlorofluoromethane
Concen: 0.22 ppb
RT: 1.908 min Scan# 133
Delta R.T. 0.000 min
Lab File: P24381.D
Acq: 21 Feb 2019 8:14 pm

Tgt Ion:101 Resp: 1026

Ion	Ratio	Lower	Upper
101	100		
103	77.2	43.6	83.6
66	13.2	0.0	31.9

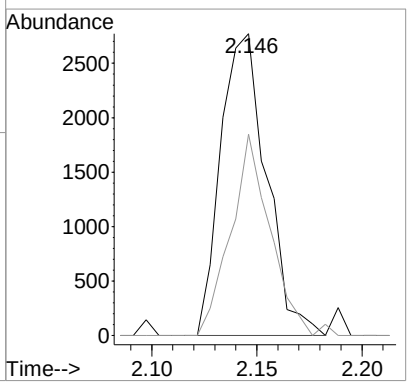


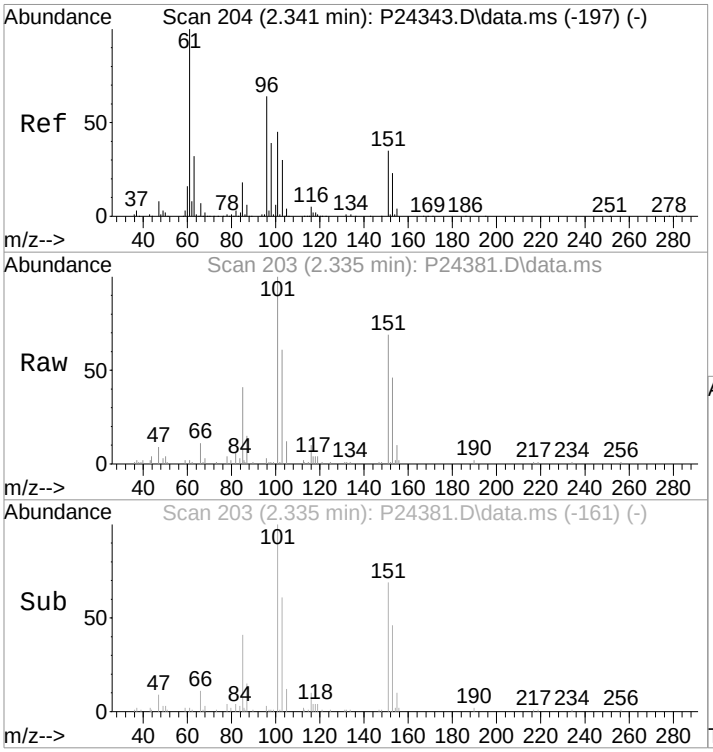


#10
Freon 123a
Concen: 1.09 ppb
RT: 2.146 min Scan# 172
Delta R.T. 0.006 min
Lab File: P24381.D
Acq: 21 Feb 2019 8:14 pm

Tgt Ion: 67 Resp: 4196

Ion	Ratio	Lower	Upper
67	100		
117	66.7	45.7	85.7

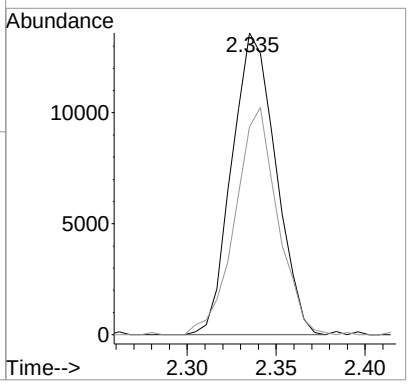


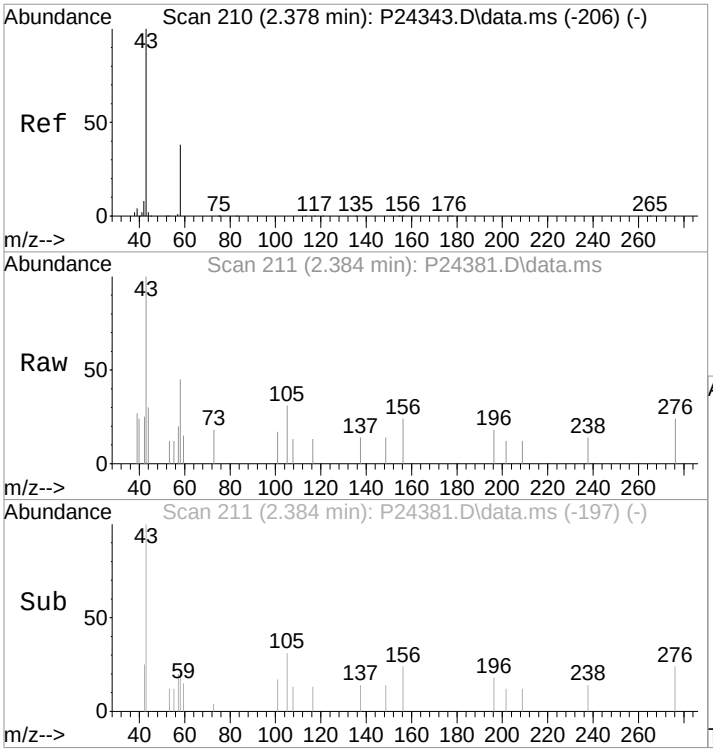


#14
Freon 113
Concen: 8.56 ppb
RT: 2.335 min Scan# 203
Delta R.T. 0.000 min
Lab File: P24381.D
Acq: 21 Feb 2019 8:14 pm

Tgt Ion:101 Resp: 23354

Ion	Ratio	Lower	Upper
101	100		
151	68.9	58.4	98.4

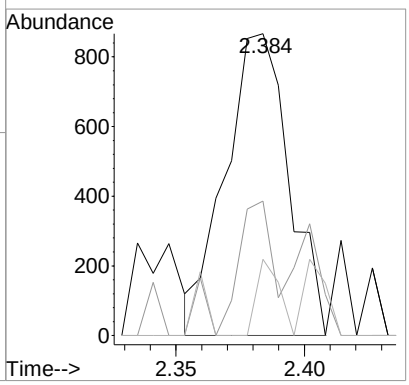


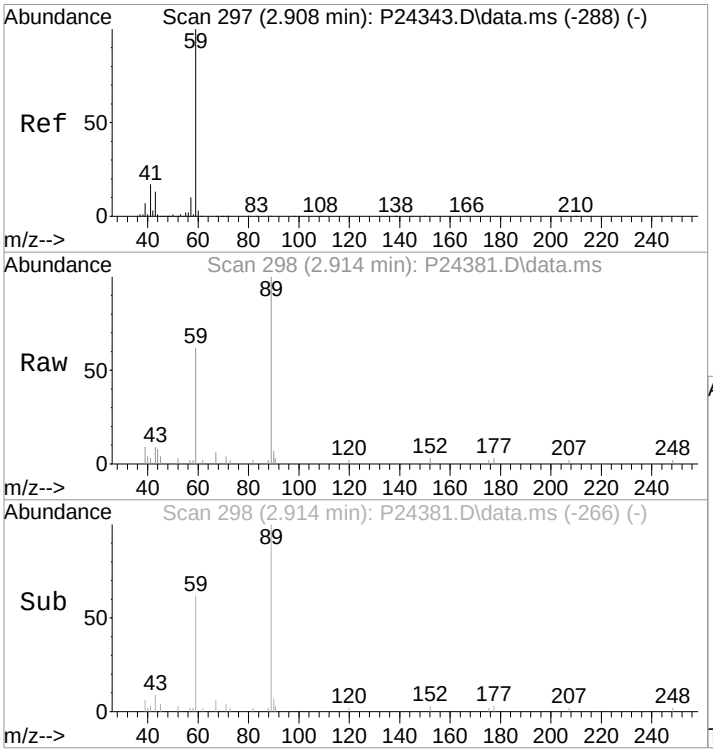


#15
Acetone
Concen: 0.95 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24381.D
Acq: 21 Feb 2019 8:14 pm

Tgt Ion: 43 Resp: 1497

Ion	Ratio	Lower	Upper
43	100		
58	44.5	18.1	58.1
42	25.3	0.0	27.8

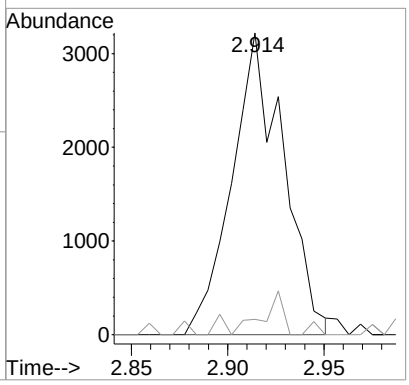


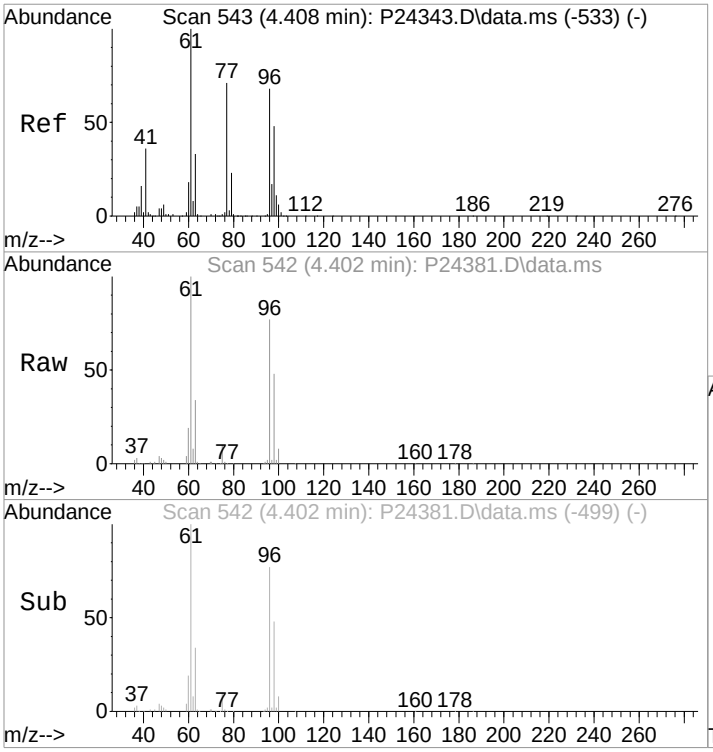


#23
TBA
Concen: 9.22 ppb
RT: 2.914 min Scan# 298
Delta R.T. 0.006 min
Lab File: P24381.D
Acq: 21 Feb 2019 8:14 pm

Tgt Ion: 59 Resp: 5977

Ion	Ratio	Lower	Upper
59	100		
41	5.1	0.0	38.2

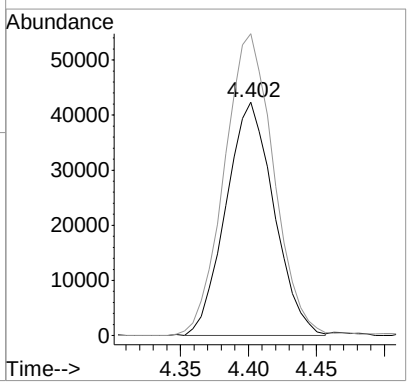




#34
cis-1,2-Dichloroethene
Concen: 27.15 ppb
RT: 4.402 min Scan# 542
Delta R.T. 0.000 min
Lab File: P24381.D
Acq: 21 Feb 2019 8:14 pm

Tgt Ion: 96 Resp: 103677

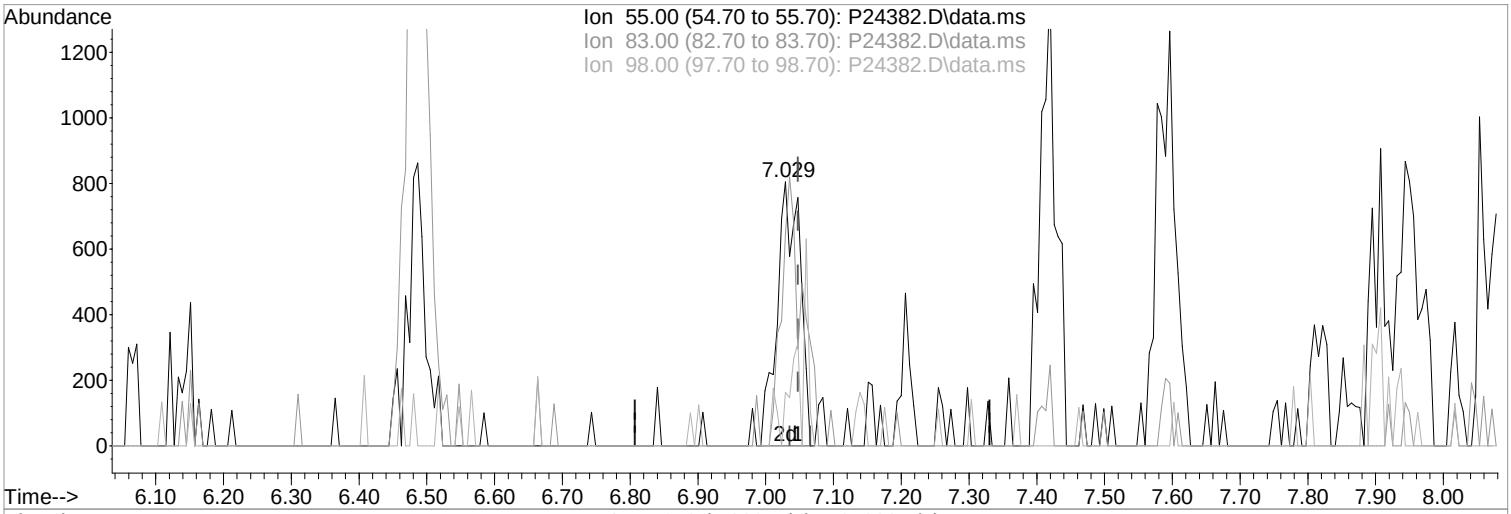
Ion	Ratio	Lower	Upper
96	100		
61	129.4	128.1	168.1

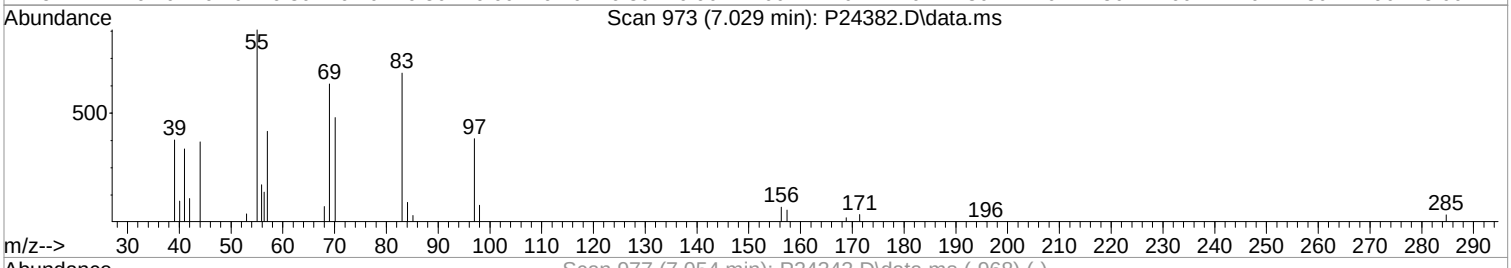


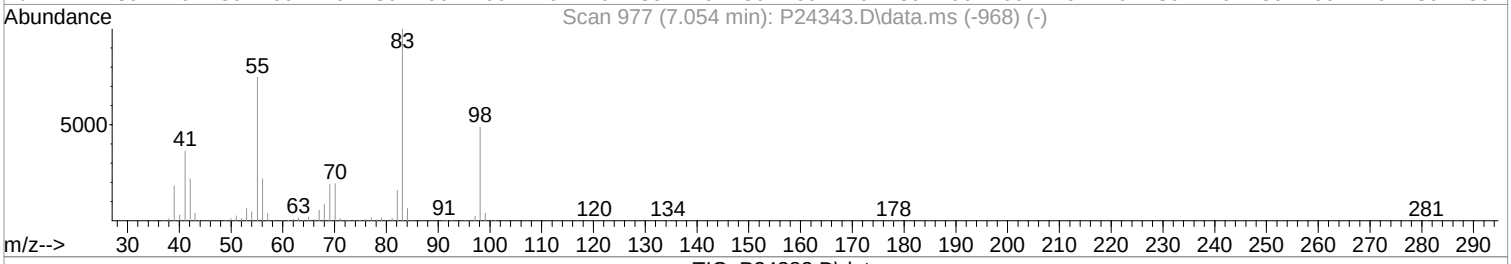
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 22 09:13:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24382.D\data.ms

(55) Methylcyclohexane (P)

7.029min (-0.018) 0.42 ppb m

response 1901

Ion	Exp%	Act%
55.00	100	100
83.00	133.10	80.37#
98.00	65.00	20.25#
0.00	0.00	0.00

Manual Integration:

After

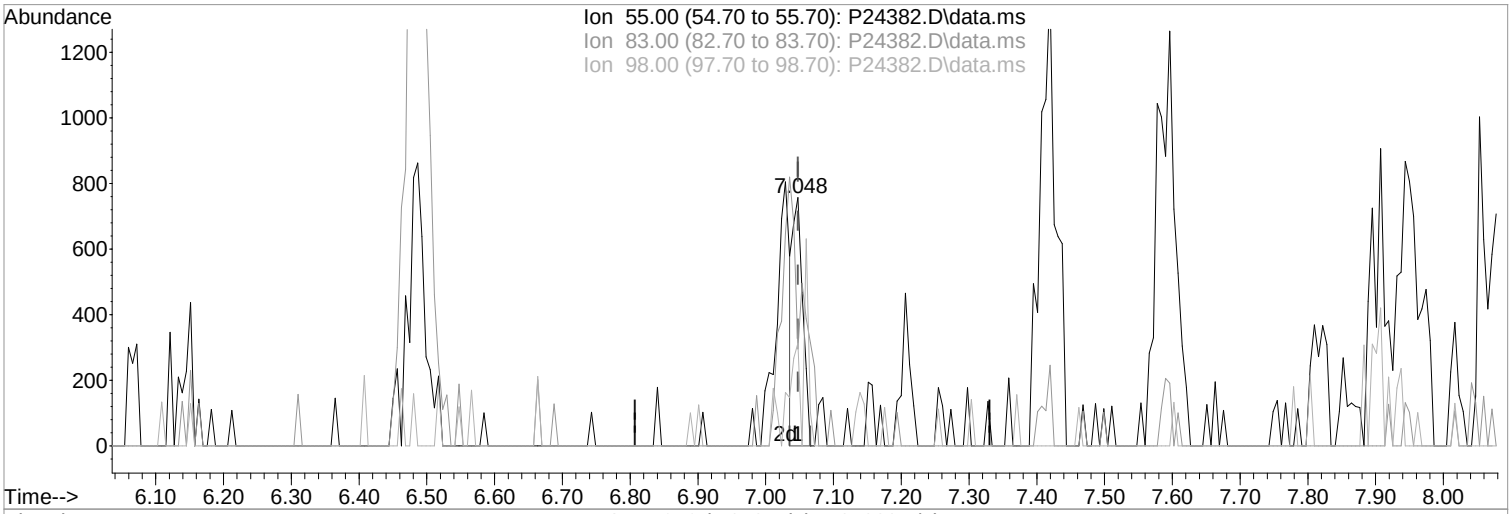
Split Peak

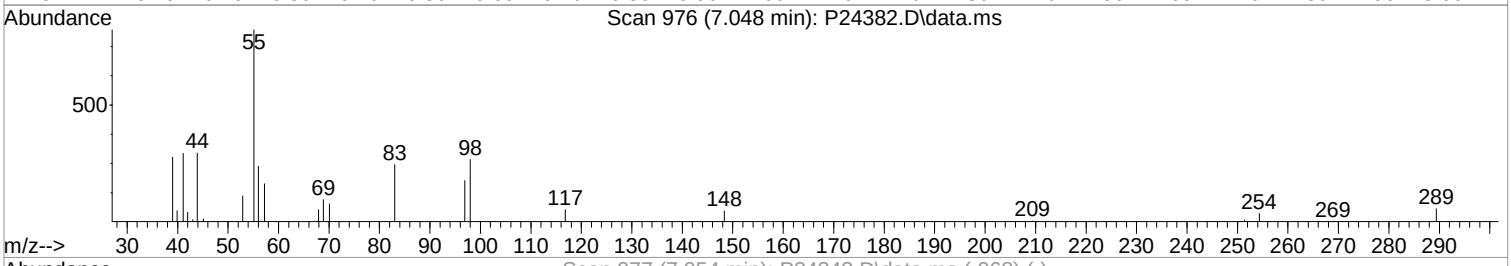
02/22/19

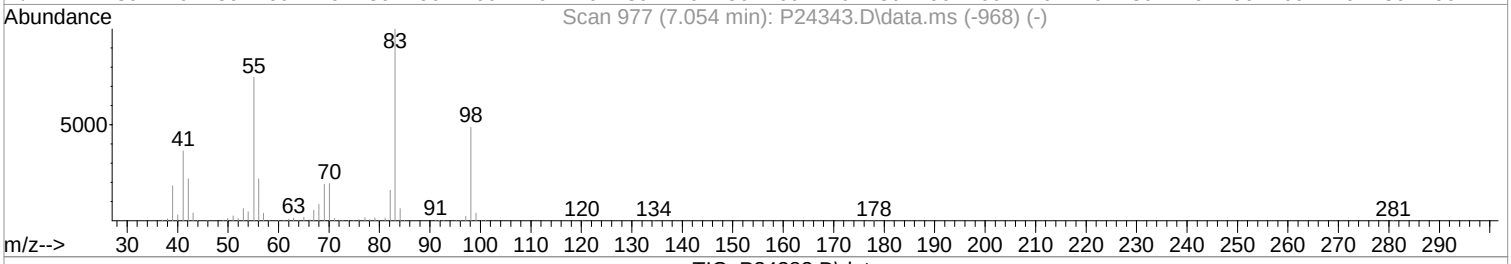
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 22 09:13:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24382.D\data.ms

(55) Methylcyclohexane (P)

7.048min (+0.000) 0.17 ppb

response 783

Ion	Exp%	Act%
55.00	100	100
83.00	133.10	39.10#
98.00	65.00	41.48#
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

high NT's

Quant Time: Feb 22 14:59:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

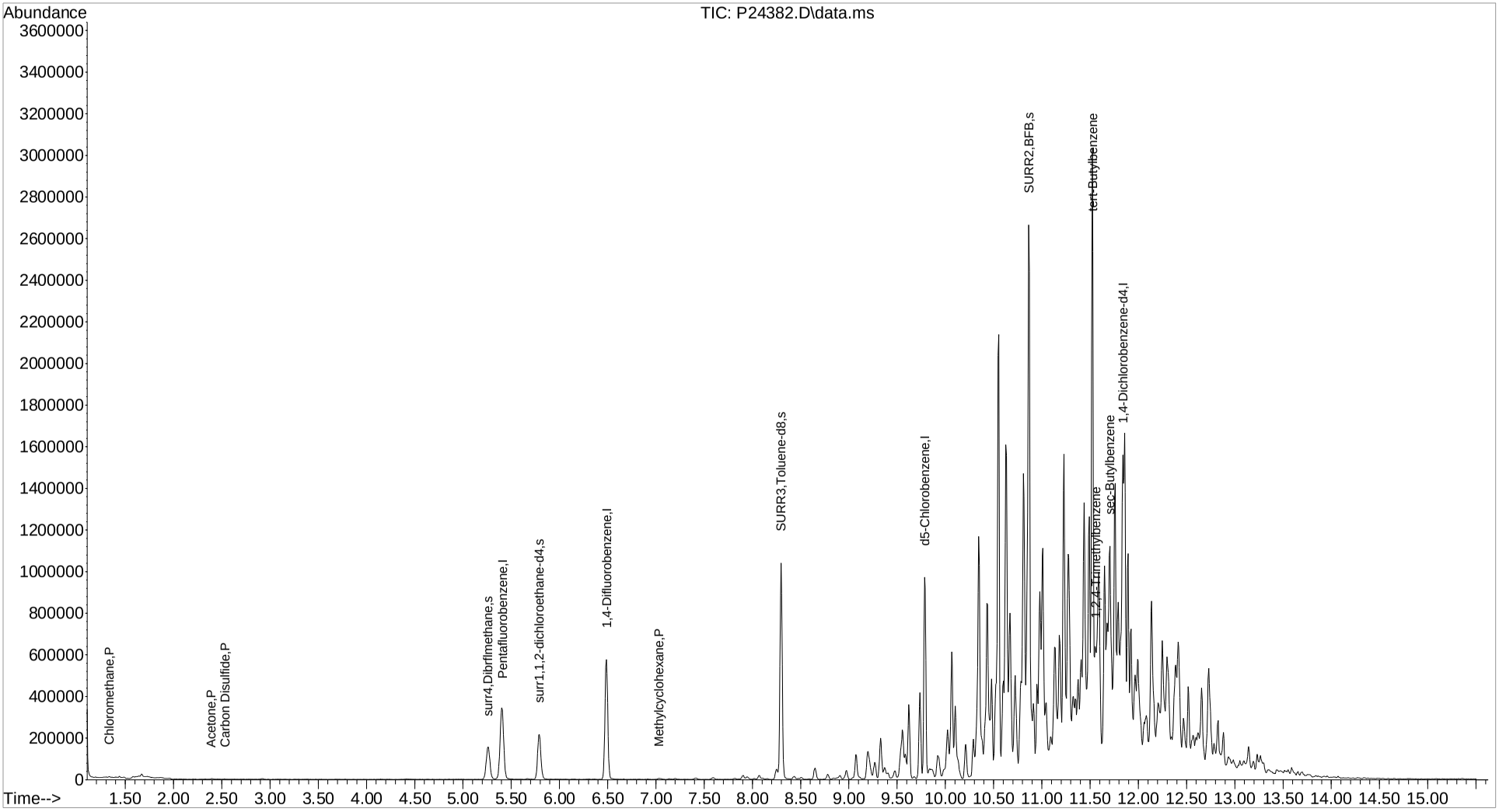
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.408	168	318117	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	508098	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	443202	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	225186	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	131244	47.01	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 94.02%				
48) surr1,1,2-dichloroetha...	5.792	65	181838	51.34	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.68%				
65) SURR3,Toluene-d8	8.297	98	654670	49.43	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.86%				
70) SURR2,BFB	10.864	95	244470	51.54	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 103.08%				
Target Compounds							Qvalue
3) Chloromethane	1.335	50	1300	0.25	ppb		77
15) Acetone	2.384	43	1198	0.79	ppb	#	73
18) Carbon Disulfide	2.530	76	2055	0.23	ppb		90
55) Methylcyclohexane	7.029	55	1901m	0.42	ppb		
100) tert-Butylbenzene	11.522	119	2892	0.27	ppb		78
101) 1,2,4-Trimethylbenzene	11.559	105	2604	0.20	ppb	#	49
103) sec-Butylbenzene	11.705	105	8764	0.57	ppb		83

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

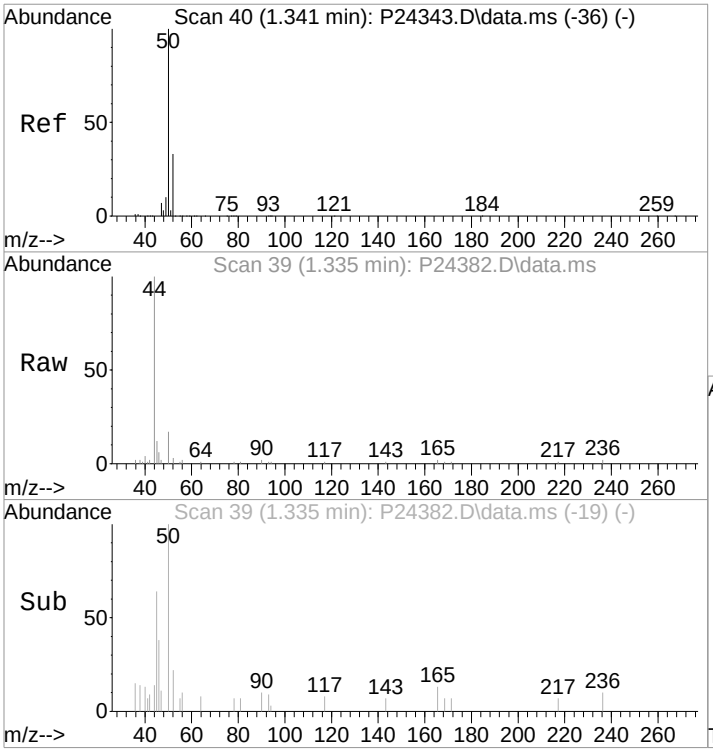
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 22 14:59:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



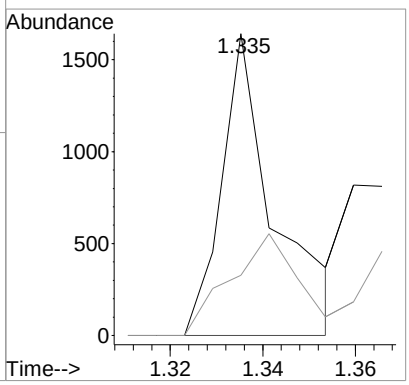
1st 02/22/19

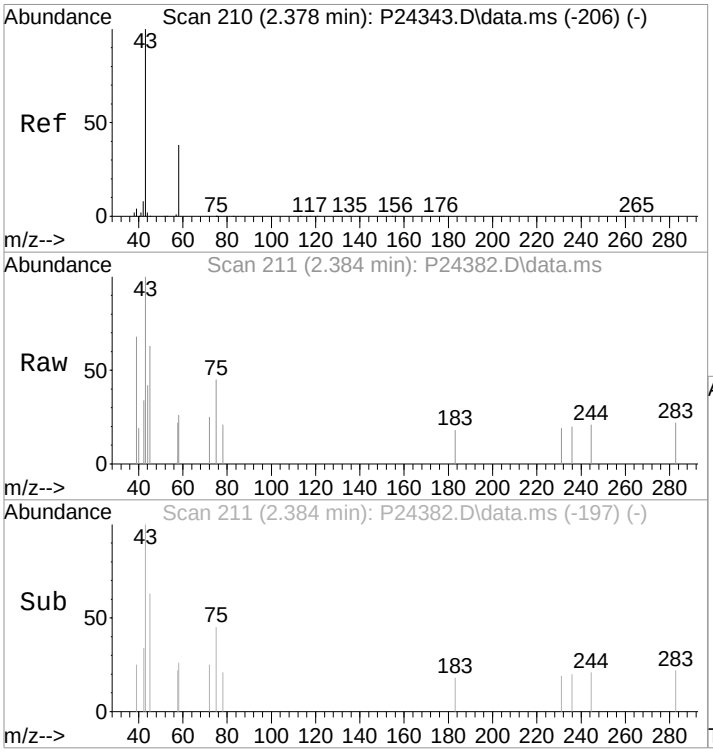


#3
Chloromethane
Concen: 0.25 ppb
RT: 1.335 min Scan# 39
Delta R.T. 0.006 min
Lab File: P24382.D
Acq: 21 Feb 2019 8:36 pm

Tgt Ion: 50 Resp: 1300

Ion	Ratio	Lower	Upper
50	100		
52	19.9	13.0	53.0

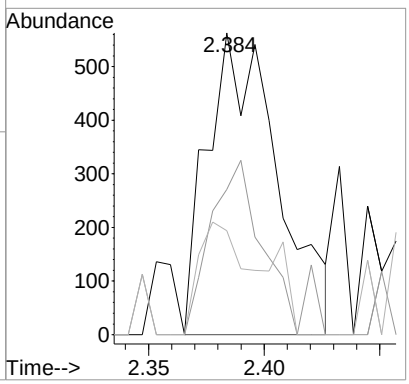


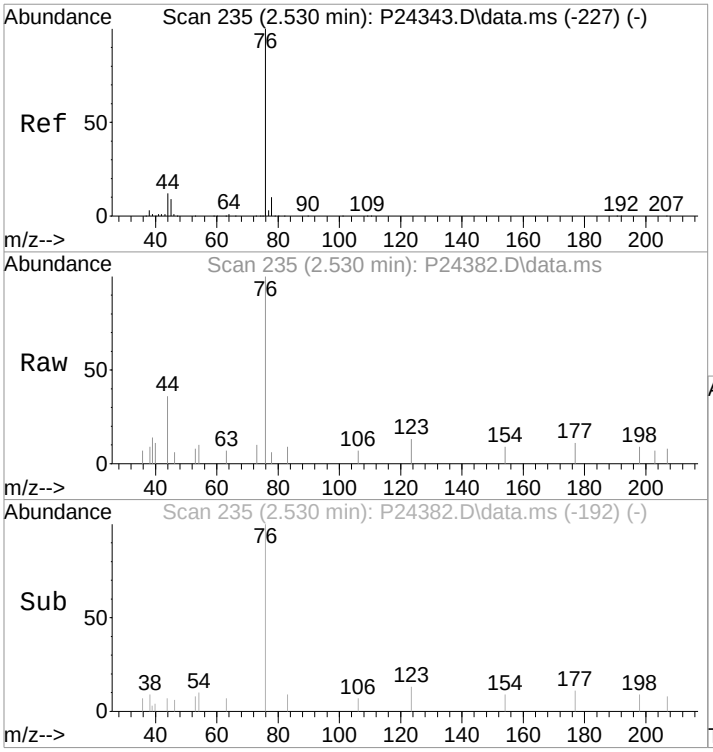


#15
Acetone
Concen: 0.79 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24382.D
Acq: 21 Feb 2019 8:36 pm

Tgt Ion: 43 Resp: 1198

Ion	Ratio	Lower	Upper
43	100		
58	48.1	18.1	58.1
42	34.5	0.0	27.8#

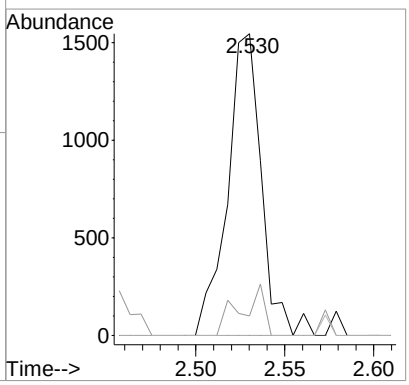


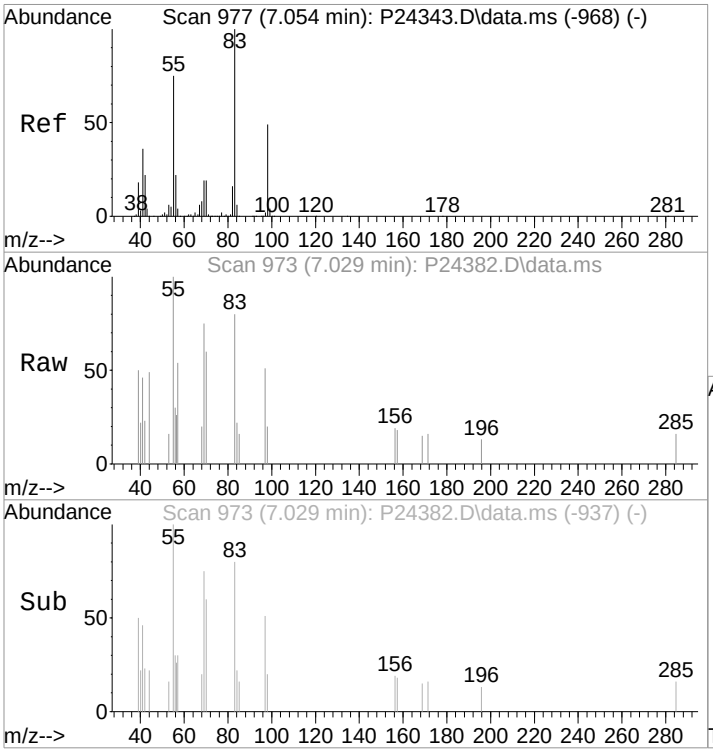


#18
Carbon Disulfide
Concen: 0.23 ppb
RT: 2.530 min Scan# 235
Delta R.T. 0.006 min
Lab File: P24382.D
Acq: 21 Feb 2019 8:36 pm

Tgt Ion: 76 Resp: 2055

Ion	Ratio	Lower	Upper
76	100		
78	6.5	0.0	30.1
77	0.0	0.0	22.9

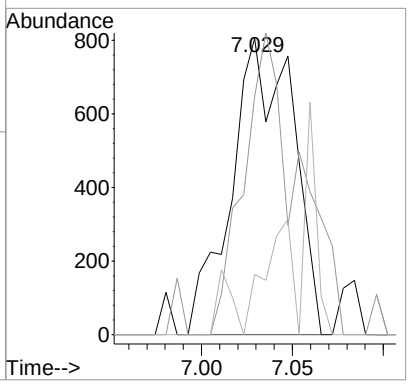


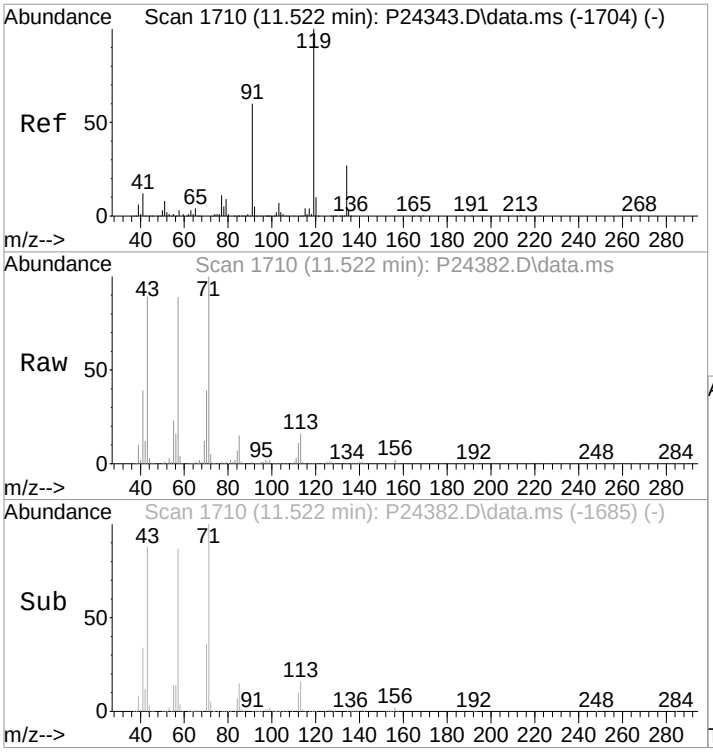


#55
Methylcyclohexane
Concen: 0.42 ppb m
RT: 7.029 min Scan# 973
Delta R.T. -0.018 min
Lab File: P24382.D
Acq: 21 Feb 2019 8:36 pm

Tgt Ion: 55 Resp: 1901

Ion	Ratio	Lower	Upper
55	100		
83	80.4	113.1	153.1#
98	20.2	45.0	85.0#

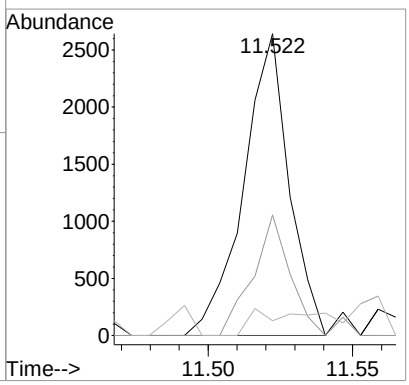


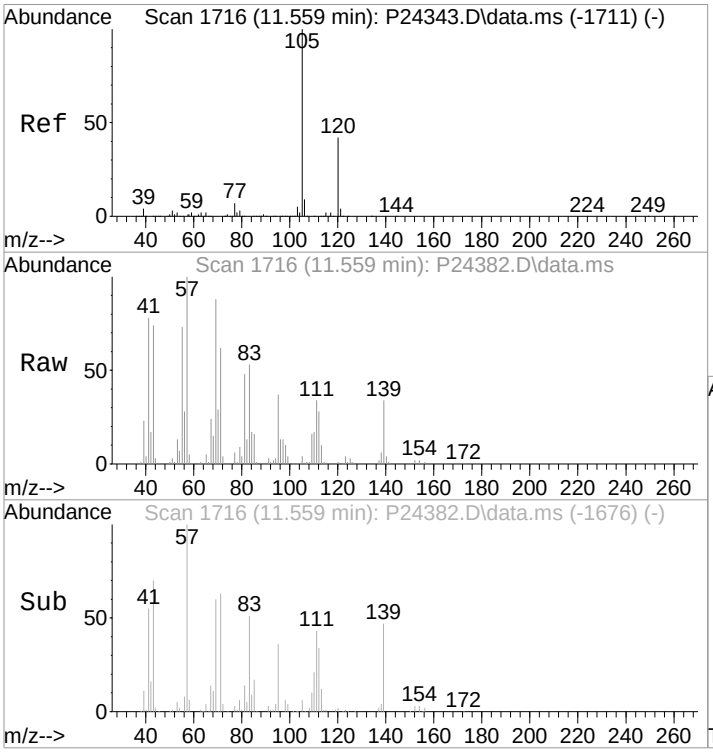


#100
tert-Butylbenzene
Concen: 0.27 ppb
RT: 11.522 min Scan# 1710
Delta R.T. 0.000 min
Lab File: P24382.D
Acq: 21 Feb 2019 8:36 pm

Tgt Ion:119 Resp: 2892

Ion	Ratio	Lower	Upper
119	100		
134	40.0	7.0	47.0
103	10.6	0.0	26.6

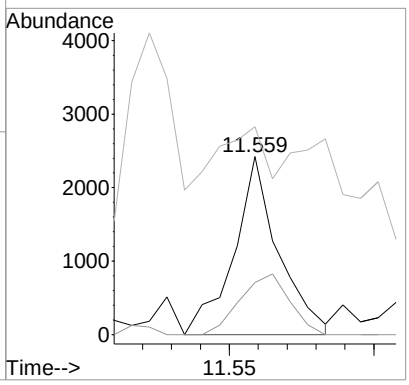


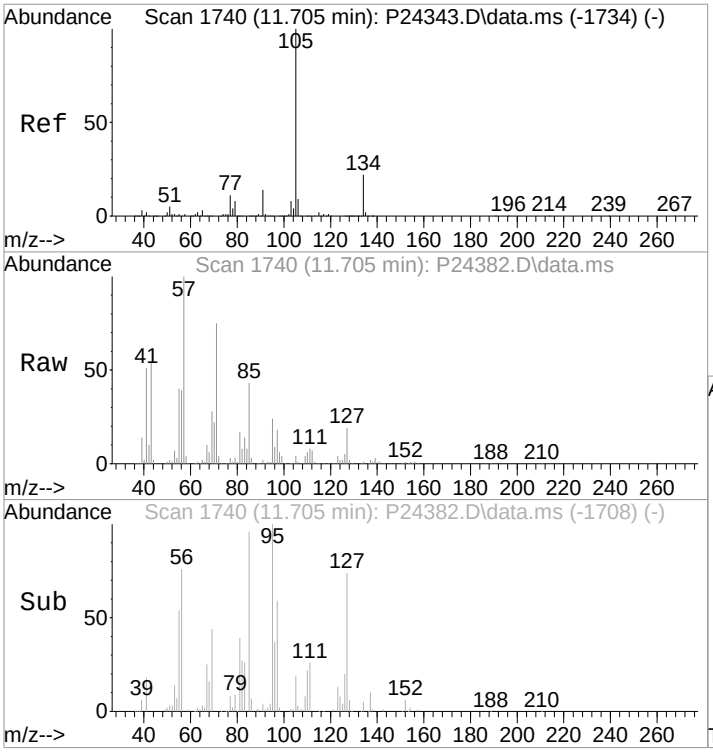


#101
1,2,4-Trimethylbenzene
Concen: 0.20 ppb
RT: 11.559 min Scan# 1716
Delta R.T. 0.000 min
Lab File: P24382.D
Acq: 21 Feb 2019 8:36 pm

Tgt Ion:105 Resp: 2604

Ion	Ratio	Lower	Upper
105	100		
120	29.4	26.4	66.4
65	116.6	0.0	24.1#

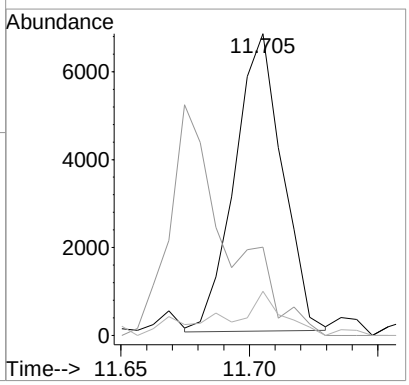




#103
sec-Butylbenzene
Concen: 0.57 ppb
RT: 11.705 min Scan# 1740
Delta R.T. 0.000 min
Lab File: P24382.D
Acq: 21 Feb 2019 8:36 pm

Tgt Ion:105 Resp: 8764

Ion	Ratio	Lower	Upper
105	100		
134	29.3	1.8	41.8
103	14.6	0.0	27.9



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24382.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.261	672	683	695	rBV2	157017	427803	10.25%	0.615%
2	5.402	695	706	717	rVV2	343061	883043	21.16%	1.269%
3	5.792	761	770	779	rBV2	216599	519203	12.44%	0.746%
4	6.487	876	884	892	rBV	575962	1156210	27.70%	1.662%
5	8.249	1167	1173	1176	rBV	49904	92400	2.21%	0.133%
6	8.297	1176	1181	1190	rVB	1037039	1685521	40.38%	2.423%
7	8.651	1233	1239	1246	rVB2	55213	98014	2.35%	0.141%
8	8.974	1286	1292	1298	rVB	42601	70803	1.70%	0.102%
9	9.072	1298	1308	1318	rBV	119238	215045	5.15%	0.309%
10	9.200	1323	1329	1336	rBV3	131676	312878	7.50%	0.450%
11	9.267	1336	1340	1345	rVB3	75225	124602	2.99%	0.179%
12	9.328	1345	1350	1354	rBV	191793	299279	7.17%	0.430%
13	9.474	1369	1374	1378	rBV2	33923	56176	1.35%	0.081%
14	9.553	1378	1387	1391	rVV2	233545	534279	12.80%	0.768%
15	9.584	1391	1392	1395	rVV2	116823	136121	3.26%	0.196%
16	9.620	1395	1398	1404	rVB	355675	489850	11.74%	0.704%
17	9.736	1411	1417	1421	rBV	412895	588783	14.11%	0.846%
18	9.785	1421	1425	1431	rVV	945925	1324516	31.73%	1.904%
19	9.919	1442	1447	1454	rBV4	102221	210581	5.05%	0.303%
20	10.023	1459	1464	1467	rVV2	213953	358835	8.60%	0.516%
21	10.065	1467	1471	1474	rVV	582947	829959	19.88%	1.193%
22	10.102	1474	1477	1490	rVB2	349399	631026	15.12%	0.907%
23	10.212	1490	1495	1501	rBV2	165592	263744	6.32%	0.379%
24	10.291	1503	1508	1510	rBV2	178510	241459	5.78%	0.347%
25	10.346	1510	1517	1525	rVV3	1104417	1935578	46.37%	2.782%
26	10.431	1525	1531	1536	rVV3	773053	1438094	34.45%	2.067%
27	10.480	1536	1539	1542	rVV2	402013	488525	11.70%	0.702%
28	10.553	1542	1551	1555	rVV	2051465	3172521	76.01%	4.560%
29	10.602	1555	1559	1560	rVV2	378604	499050	11.96%	0.717%
30	10.626	1560	1563	1567	rVV	1510353	2320445	55.59%	3.335%
31	10.669	1567	1570	1575	rVV2	695312	1065034	25.52%	1.531%
32	10.724	1575	1579	1584	rVB2	422809	664808	15.93%	0.956%
33	10.785	1584	1589	1590	rBV2	394731	562452	13.48%	0.808%
34	10.809	1590	1593	1597	rVV2	1349652	2095877	50.21%	3.013%
35	10.864	1597	1602	1608	rVV3	2538006	4174015	100.00%	6.000%
36	10.913	1608	1610	1613	rVB	241339	255801	6.13%	0.368%
37	10.949	1613	1616	1618	rBV	334905	403923	9.68%	0.581%
38	10.980	1618	1621	1623	rVV	762422	1069718	25.63%	1.538%
39	11.010	1623	1626	1629	rVV2	967946	1344003	32.20%	1.932%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

40	11.047	1629	1632	1636	rVB2	229045	303615	7.27%	0.436%
41	11.089	1637	1639	1642	rBV2	54019	59282	1.42%	0.085%
42	11.132	1642	1646	1651	rVV2	477521	875777	20.98%	1.259%
43	11.181	1651	1654	1658	rVV2	528557	828345	19.85%	1.191%
44	11.230	1658	1662	1666	rVV	1392761	1970766	47.22%	2.833%
45	11.272	1666	1669	1675	rVV3	906499	1662259	39.82%	2.389%
46	11.327	1675	1678	1680	rVV3	218058	342383	8.20%	0.492%
47	11.376	1683	1686	1688	rVV	293089	397714	9.53%	0.572%
48	11.406	1688	1691	1693	rVV	385637	561140	13.44%	0.807%
49	11.437	1693	1696	1700	rVV4	1134639	1656816	39.69%	2.381%
50	11.492	1701	1705	1707	rVV	1062931	1489274	35.68%	2.141%
51	11.522	1707	1710	1714	rVV	2826746	3507359	84.03%	5.041%
52	11.553	1714	1715	1717	rVV2	431183	456466	10.94%	0.656%
53	11.589	1717	1721	1726	rVB3	824848	1523296	36.49%	2.190%
54	11.650	1726	1731	1733	rBV2	855492	1142992	27.38%	1.643%
55	11.675	1733	1735	1737	rVV2	528958	717451	17.19%	1.031%
56	11.705	1737	1740	1744	rVV4	893414	1464492	35.09%	2.105%
57	11.760	1744	1749	1752	rVV2	1190029	1863425	44.64%	2.678%
58	11.791	1752	1754	1757	rVV2	615440	878651	21.05%	1.263%
59	11.839	1758	1762	1763	rVV	1317815	1726009	41.35%	2.481%
60	11.858	1763	1765	1768	rVV	1419519	1651615	39.57%	2.374%
61	11.894	1768	1771	1773	rVV	836342	964004	23.10%	1.386%
62	11.925	1773	1776	1780	rVV3	470068	600627	14.39%	0.863%
63	11.967	1780	1783	1785	rVV3	244601	350450	8.40%	0.504%
64	11.992	1785	1787	1795	rVB2	410122	754648	18.08%	1.085%
65	12.059	1795	1798	1799	rBV2	108809	107122	2.57%	0.154%
66	12.138	1806	1811	1818	rBV3	676891	1196765	28.67%	1.720%
67	12.205	1818	1822	1826	rVV5	197665	445076	10.66%	0.640%
68	12.248	1826	1829	1834	rVV	502138	874282	20.95%	1.257%
69	12.297	1834	1837	1843	rVV4	431166	877443	21.02%	1.261%
70	12.388	1846	1852	1854	rVV4	401013	830627	19.90%	1.194%
71	12.412	1854	1856	1862	rVV3	517360	827638	19.83%	1.190%
72	12.467	1862	1865	1870	rVV5	158067	237973	5.70%	0.342%
73	12.516	1870	1873	1877	rVV2	314874	393374	9.42%	0.565%
74	12.571	1877	1882	1884	rVV5	86456	160053	3.83%	0.230%
75	12.595	1884	1886	1888	rVV2	81080	104798	2.51%	0.151%
76	12.620	1888	1890	1892	rVV2	106822	138432	3.32%	0.199%
77	12.656	1892	1896	1902	rVB5	344353	535791	12.84%	0.770%
78	12.729	1902	1908	1915	rBV4	438783	903841	21.65%	1.299%
79	12.784	1915	1917	1920	rVV3	76080	94523	2.26%	0.136%
80	12.827	1920	1924	1929	rVV5	192793	274755	6.58%	0.395%
81	12.882	1930	1933	1937	rVB2	157552	195927	4.69%	0.282%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

82	12.937	1938	1942	1947	rBV6	39557	77151	1.85%	0.111%
83	13.052	1956	1961	1964	rBV6	35628	51460	1.23%	0.074%
84	13.144	1972	1976	1980	rVB3	101912	146799	3.52%	0.211%
85	13.193	1980	1984	1987	rVB4	39015	51271	1.23%	0.074%
86	13.229	1987	1990	1993	rBV	72565	94928	2.27%	0.136%
87	13.266	1993	1996	2000	rVB5	39492	45822	1.10%	0.066%
88	13.351	2006	2010	2021	rVB10	20122	54220	1.30%	0.078%
89	13.589	2046	2049	2057	rVB5	36882	62730	1.50%	0.090%

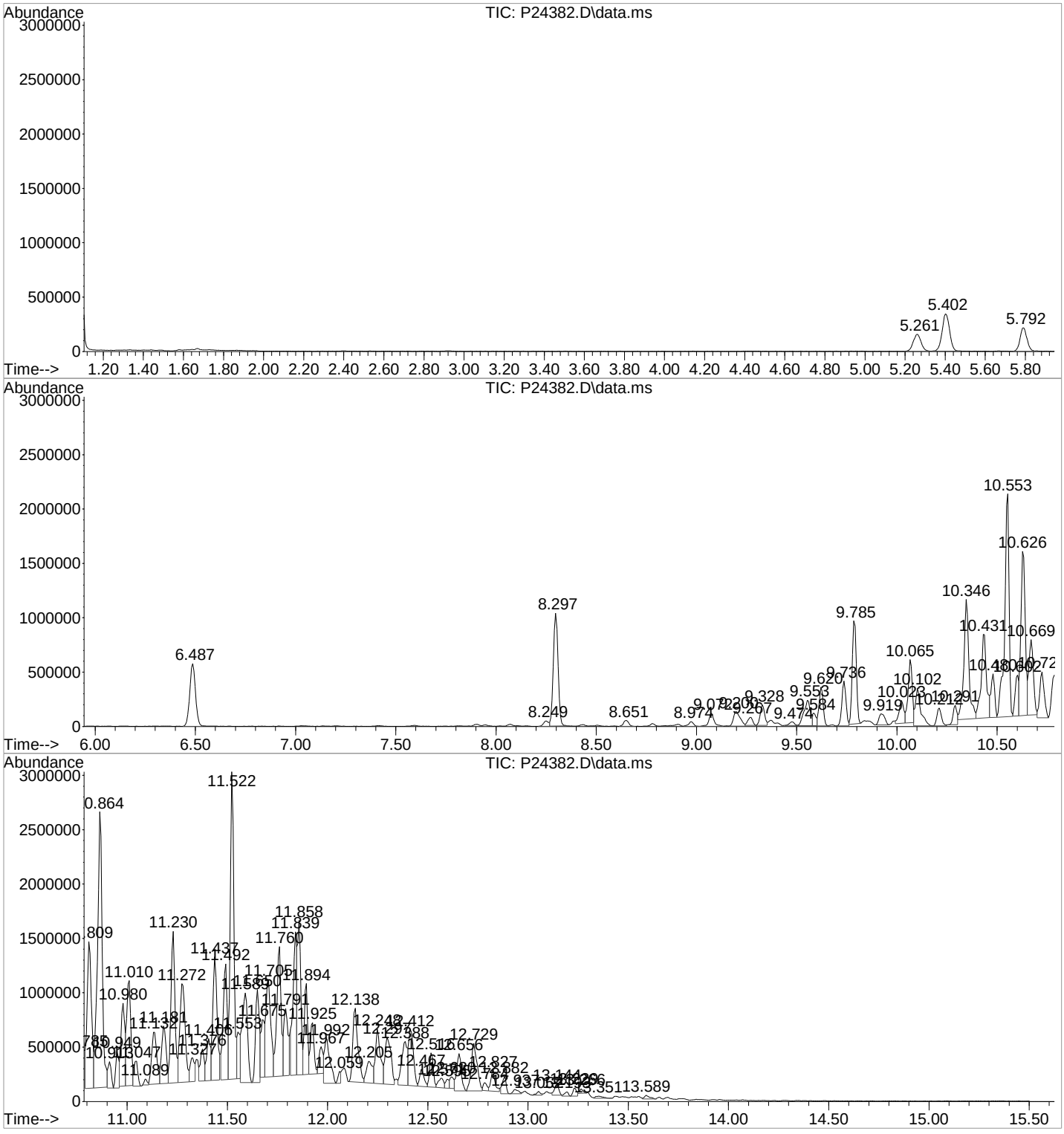
Sum of corrected areas: 69571631

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

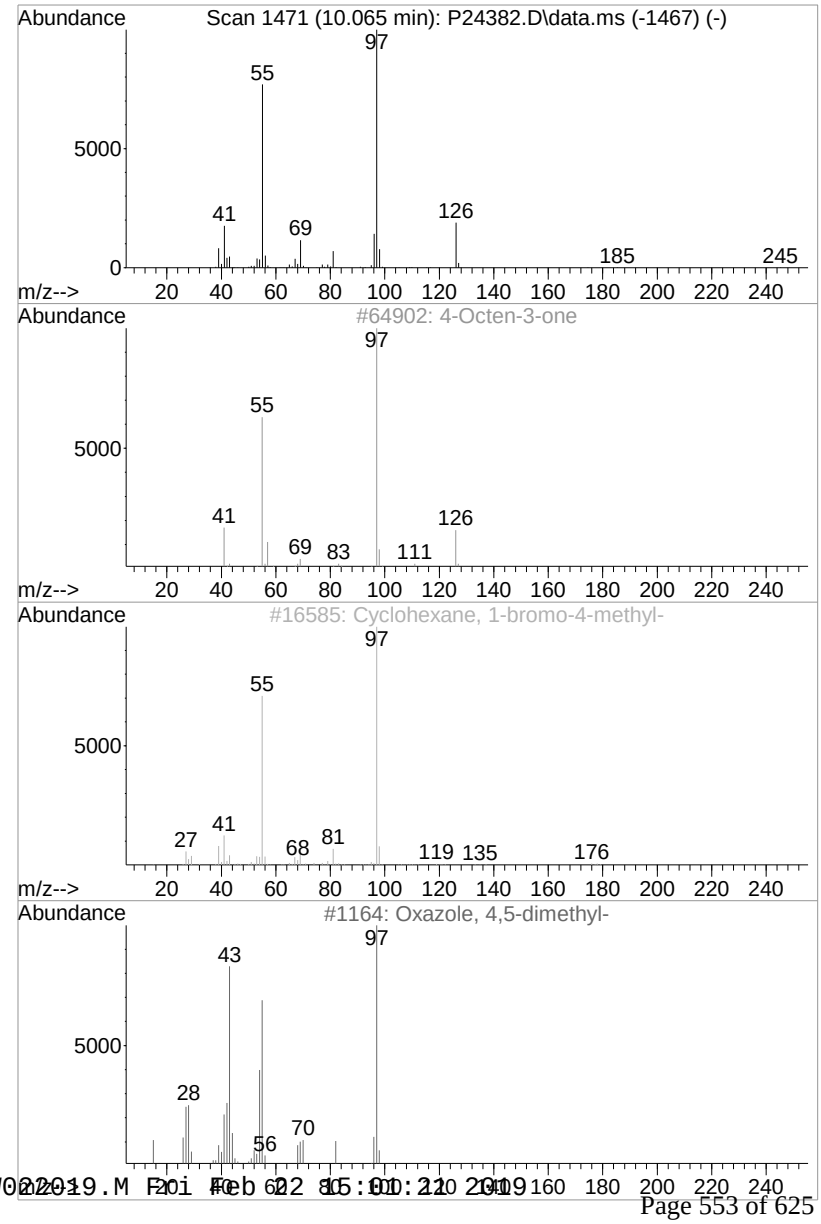
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

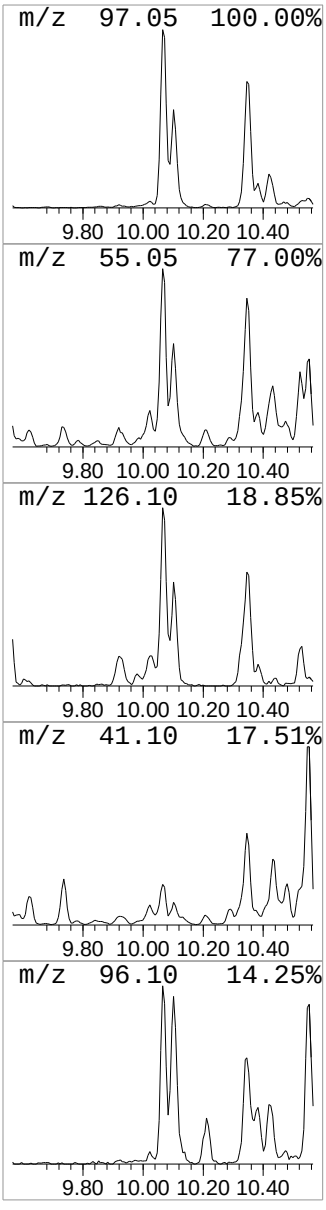
****

Peak Number 1 unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.065	31.33 ppb	829959	d5-Chlorobenzene	9.785

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Octen-3-one	126	C8H14O	014129-48-7	64
2	Cyclohexane, 1-bromo-4-methyl-	176	C7H13Br	006294-40-2	64
3	Oxazole, 4,5-dimethyl-	97	C5H7NO	020662-83-3	64
4	Propanedinitrile, cyclohexyl(2-m...	244	C16H24N2	074764-55-9	59
5	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	004926-78-7	59





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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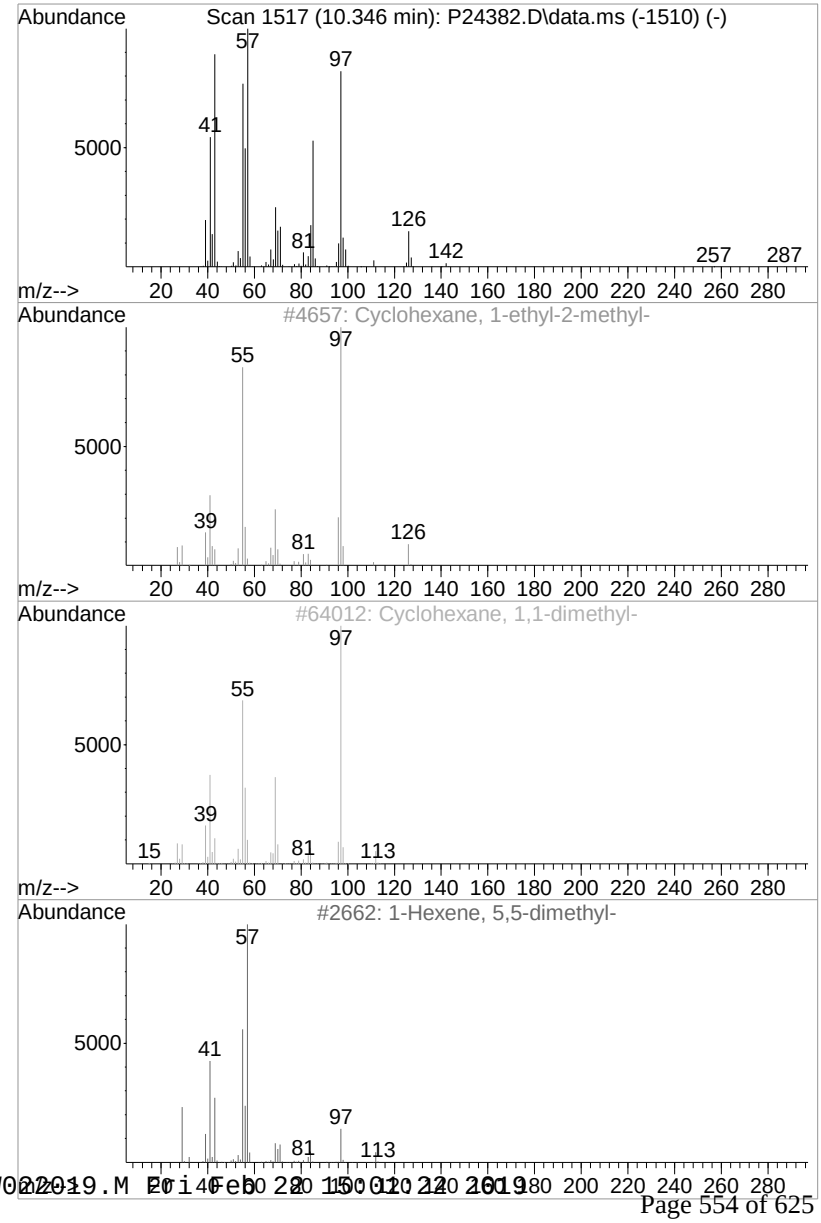
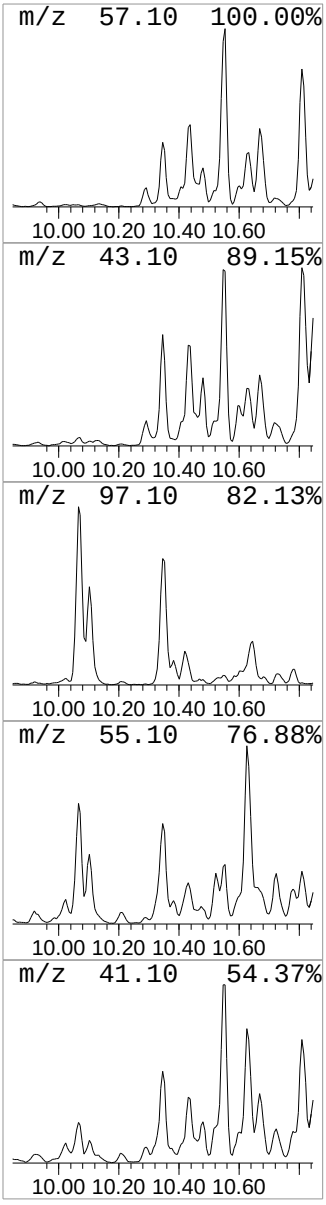
Peak Number 2 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.346	73.07 ppb	1935580	d5-Chlorobenzene	9.785

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-ethyl-2-methyl-	126	C9H18	003728-54-9	49
2	Cyclohexane, 1,1-dimethyl-	112	C8H16	000590-66-9	47
3	1-Hexene, 5,5-dimethyl-	112	C8H16	007116-86-1	47
4	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	46
5	Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-78-8	46





Library Search Compound Report

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Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

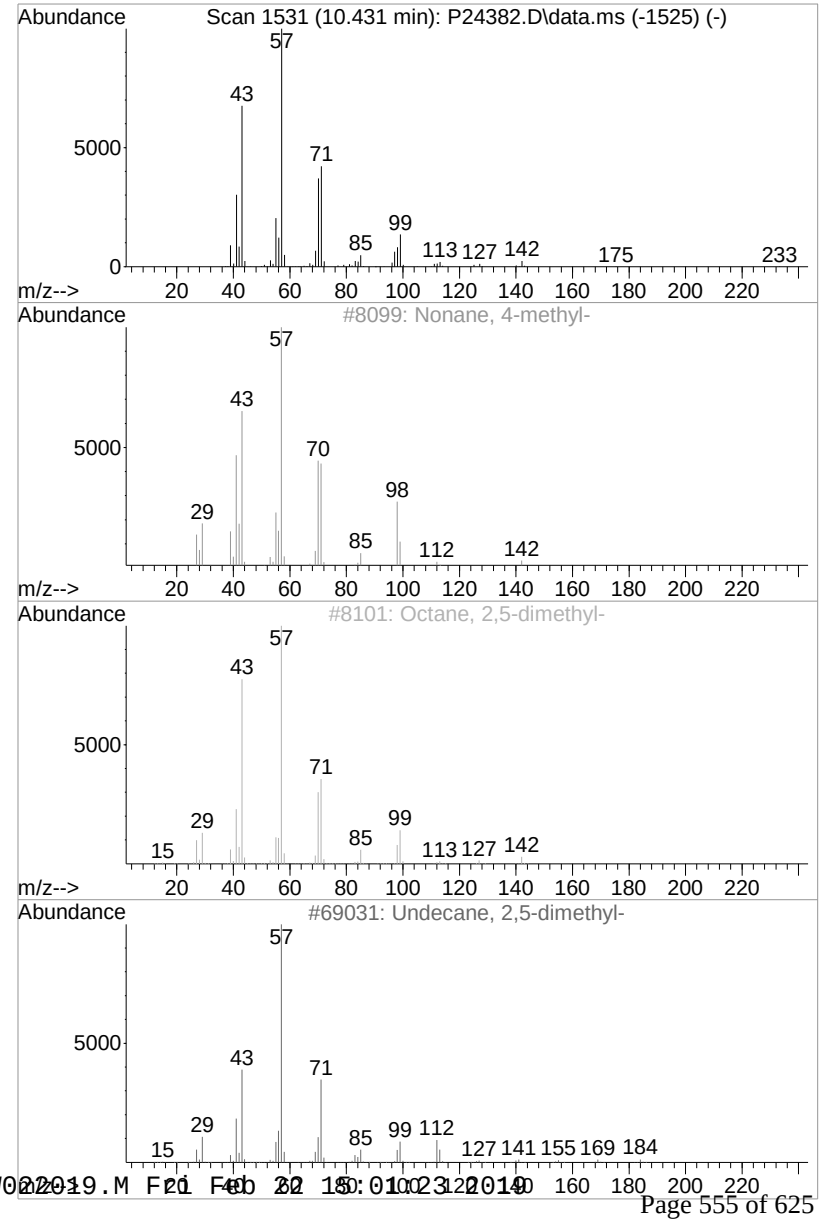
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

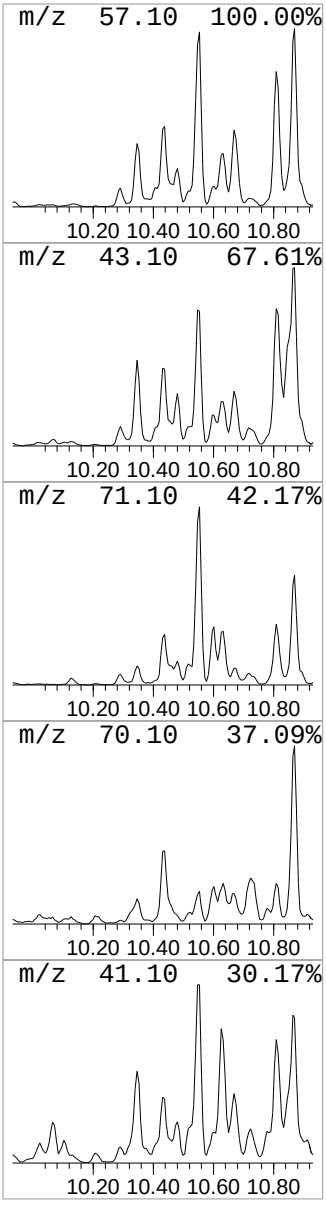
****

Peak Number 3 Nonane, 4-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.431	54.29 ppb	1438090	d5-Chlorobenzene	9.785

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonane, 4-methyl-	142	C10H22	017301-94-9	90
2	Octane, 2,5-dimethyl-	142	C10H22	015869-89-3	81
3	Undecane, 2,5-dimethyl-	184	C13H28	017301-22-3	64
4	Heptane, 2,3,4-trimethyl-	142	C10H22	052896-95-4	64
5	Nonane, 4-methyl-	142	C10H22	017301-94-9	58





Library Search Compound Report

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Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

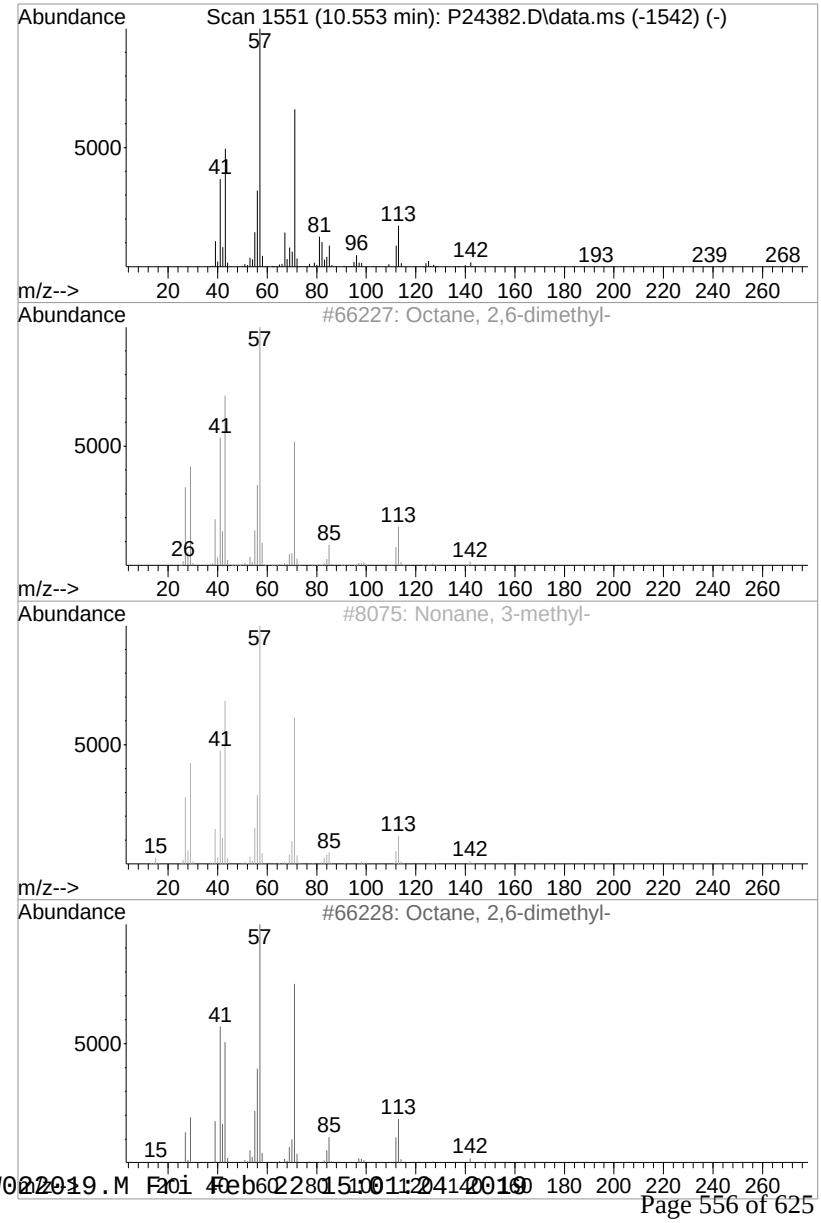
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

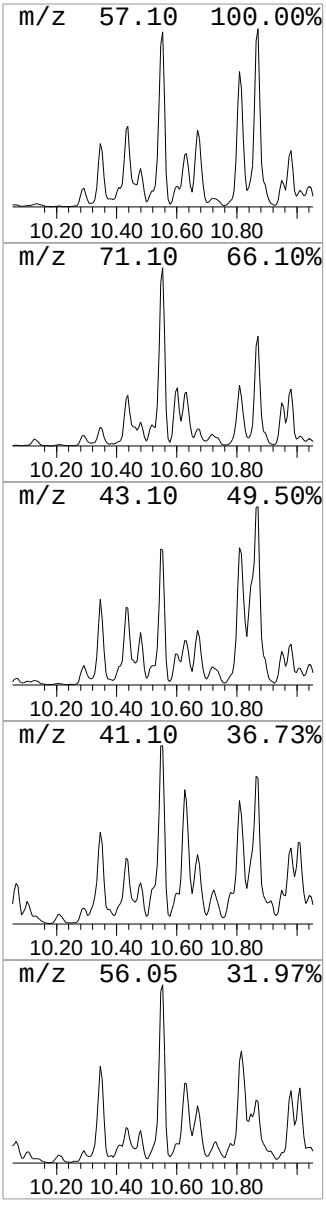
****

Peak Number 4 Octane, 2,6-dimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.553	119.76 ppb	3172520	d5-Chlorobenzene	9.785

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	87
2	Nonane, 3-methyl-	142	C10H22	005911-04-6	87
3	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	87
4	Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	87
5	Nonane, 3-methyl-	142	C10H22	005911-04-6	81





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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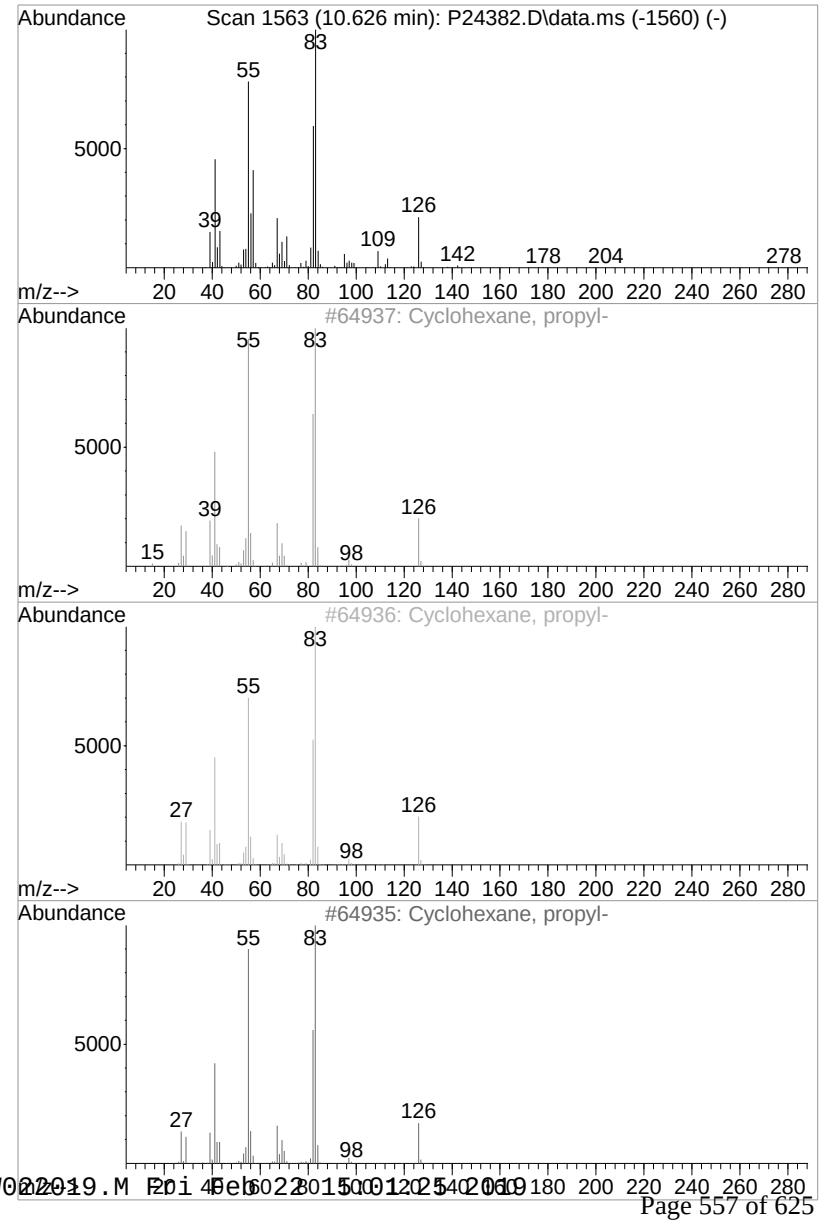
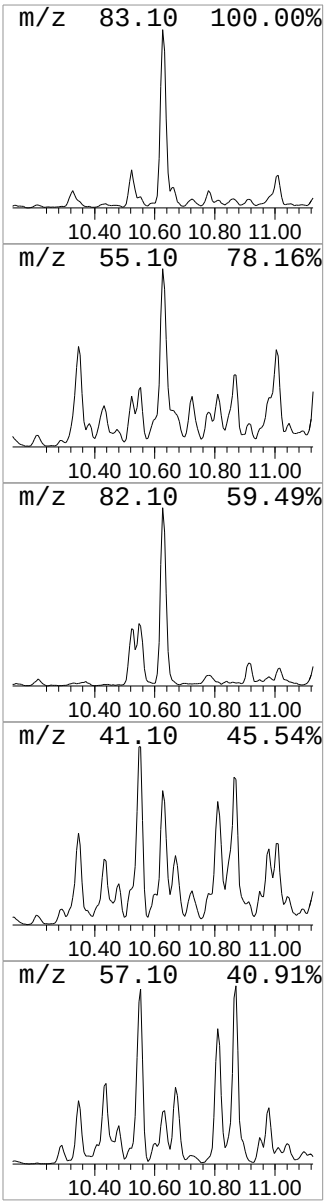
Peak Number 5 Cyclohexane, propyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.626	87.60 ppb	2320450	d5-Chlorobenzene	9.785

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
2	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
3	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
4	Cyclohexane, propyl-	126	C9H18	001678-92-8	81
5	Cyclohexane, ethyl-	112	C8H16	001678-91-7	81





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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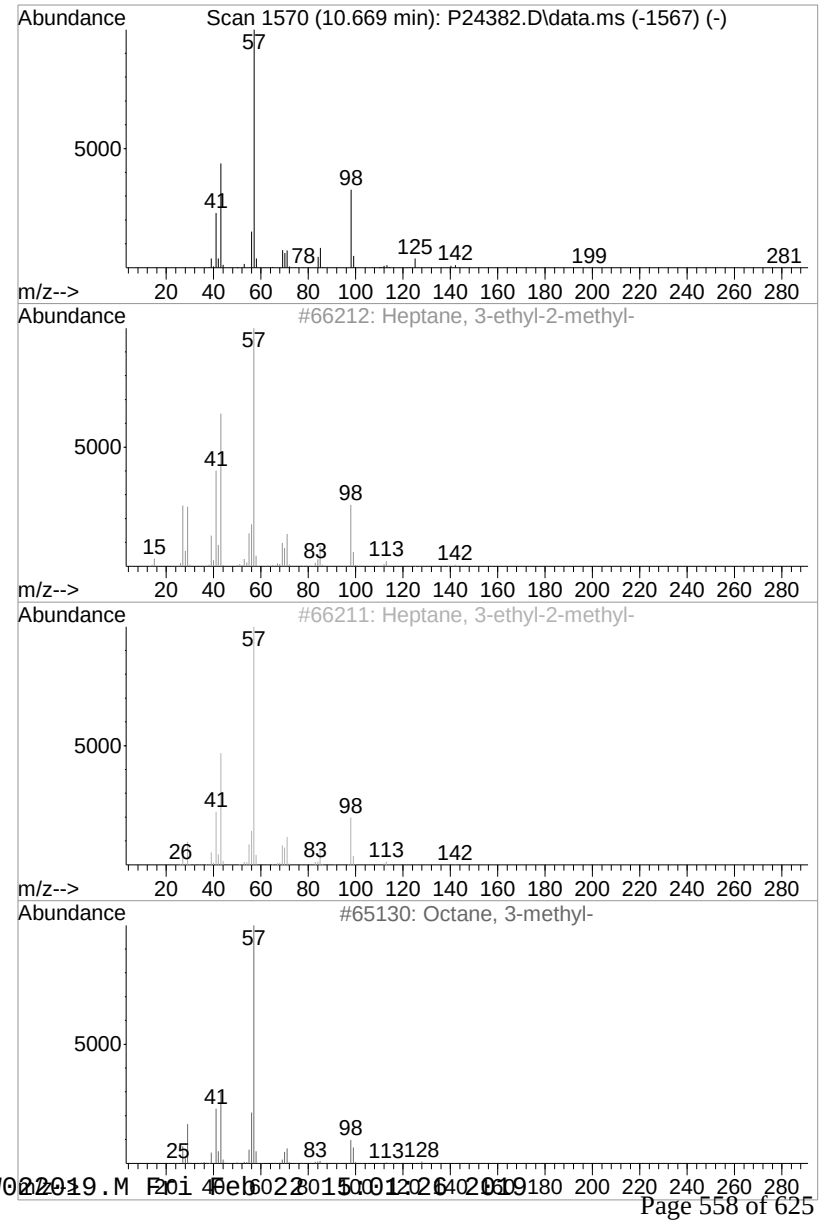
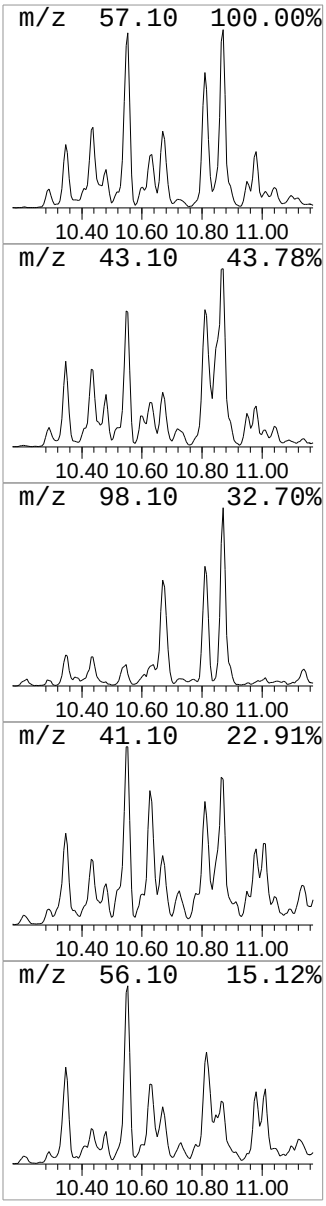
Peak Number 6 unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.669	40.20 ppb	1065030	d5-Chlorobenzene	9.785

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	56
2	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	50
3	Octane, 3-methyl-	128	C9H20	002216-33-3	47
4	Heptane, 4-(1-methylethyl)-	142	C10H22	052896-87-4	45
5	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	43





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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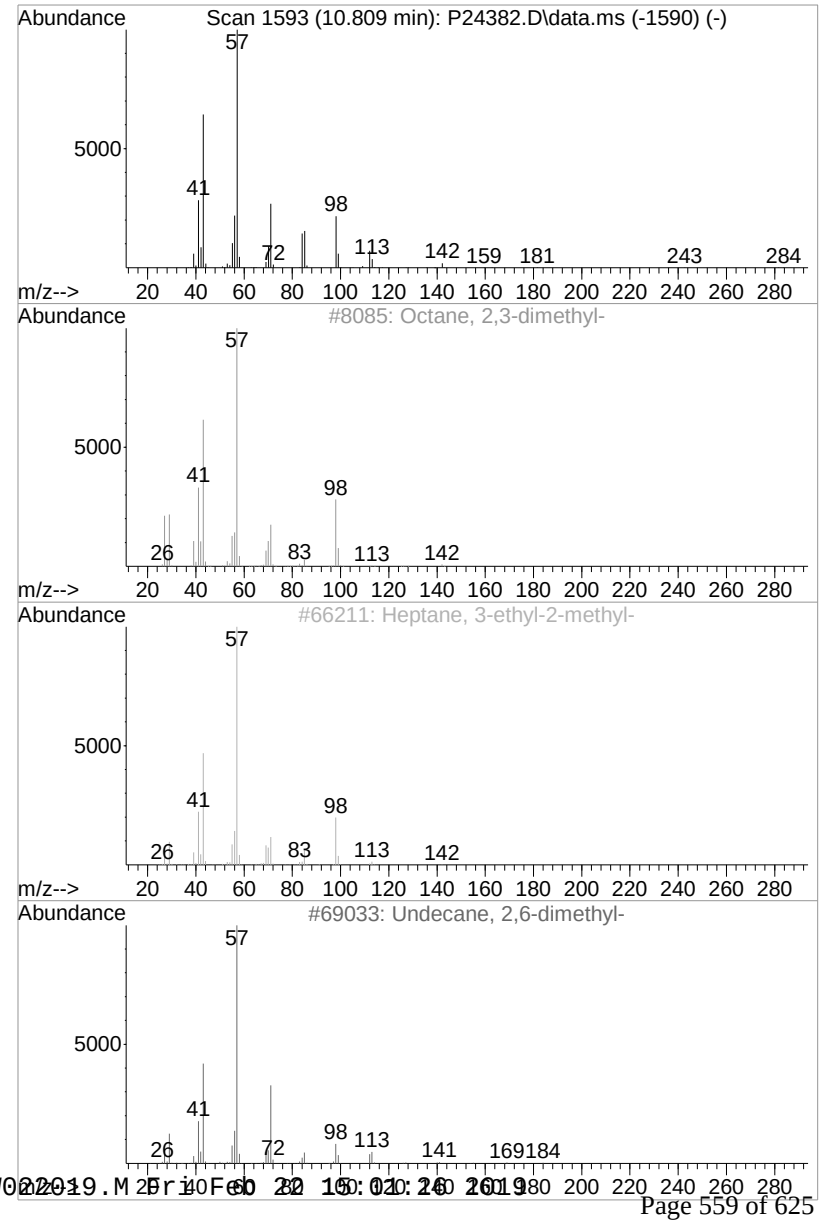
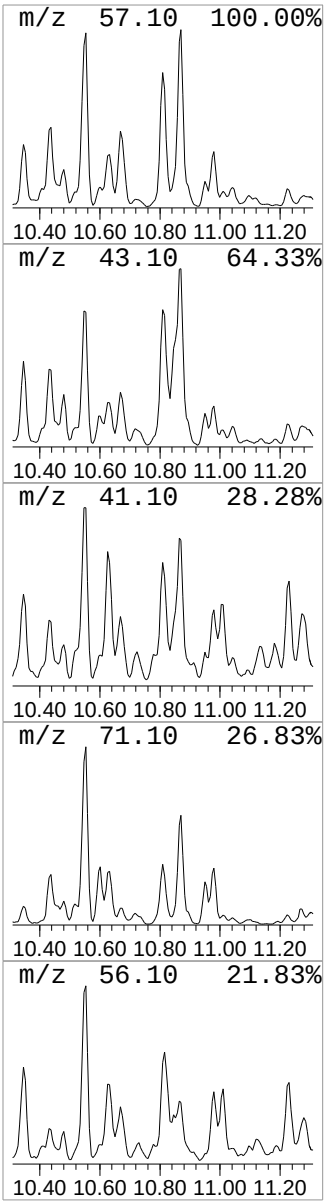
Peak Number 7 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.809	79.12 ppb	2095880	d5-Chlorobenzene	9.785

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,3-dimethyl-	142	C10H22	007146-60-3	50
2	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	47
3	Undecane, 2,6-dimethyl-	184	C13H28	017301-23-4	47
4	Decane	142	C10H22	000124-18-5	46
5	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	45





Library Search Compound Report

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Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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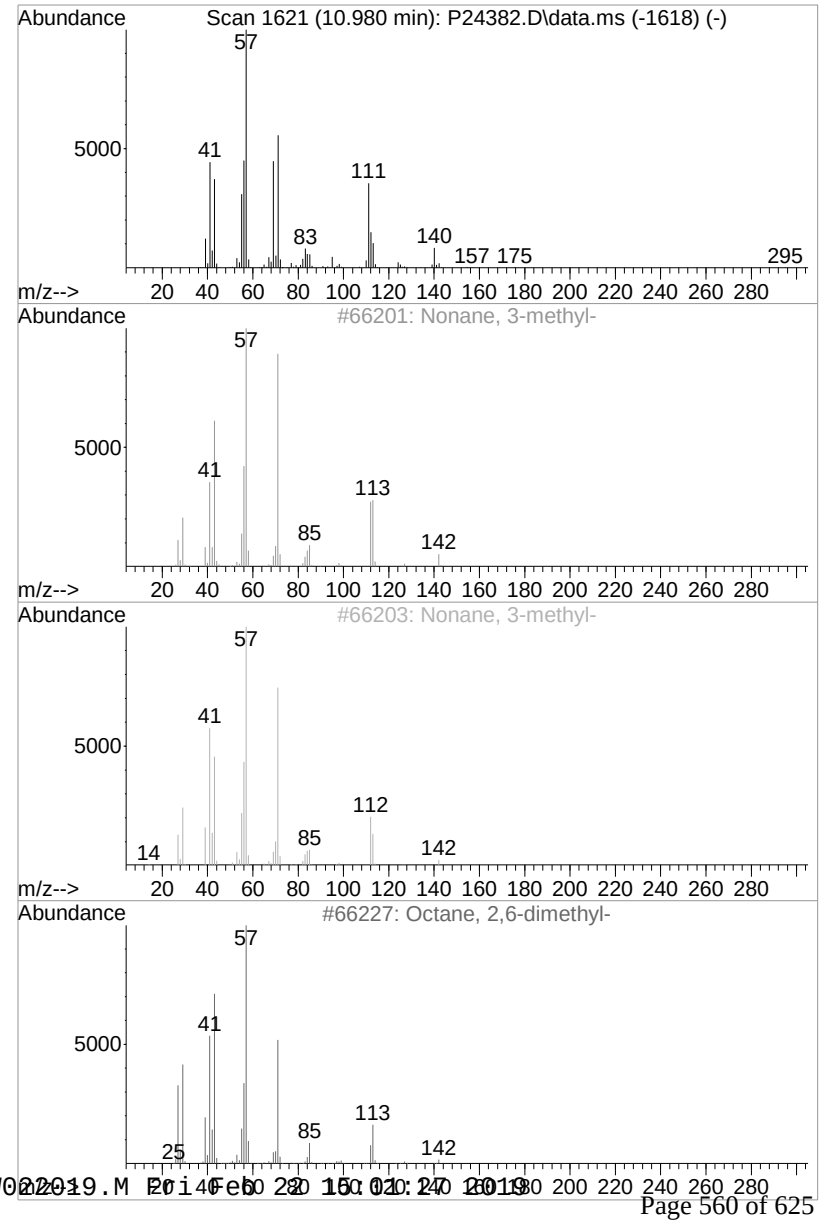
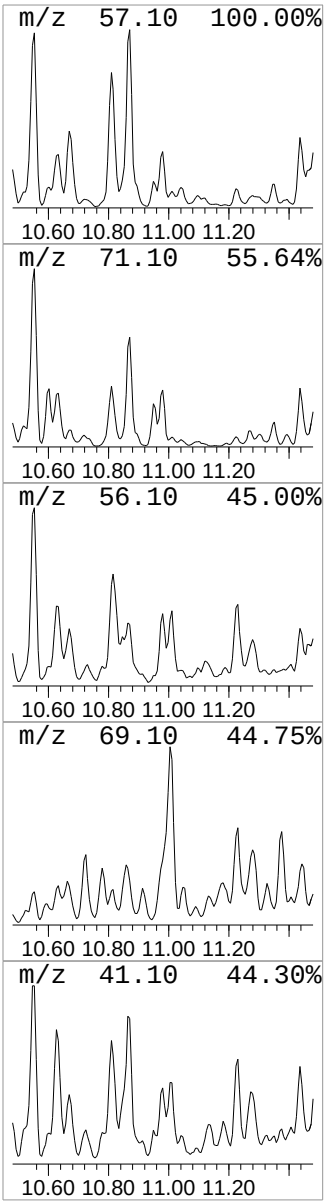
Peak Number 8 unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.980	30.99 ppb	1069720	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonane, 3-methyl-	142	C10H22	005911-04-6	81
2	Nonane, 3-methyl-	142	C10H22	005911-04-6	53
3	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	53
4	Octane, 1,1'-oxybis-	242	C16H34O	000629-82-3	50
5	Nonane, 3-methyl-	142	C10H22	005911-04-6	50





Library Search Compound Report

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Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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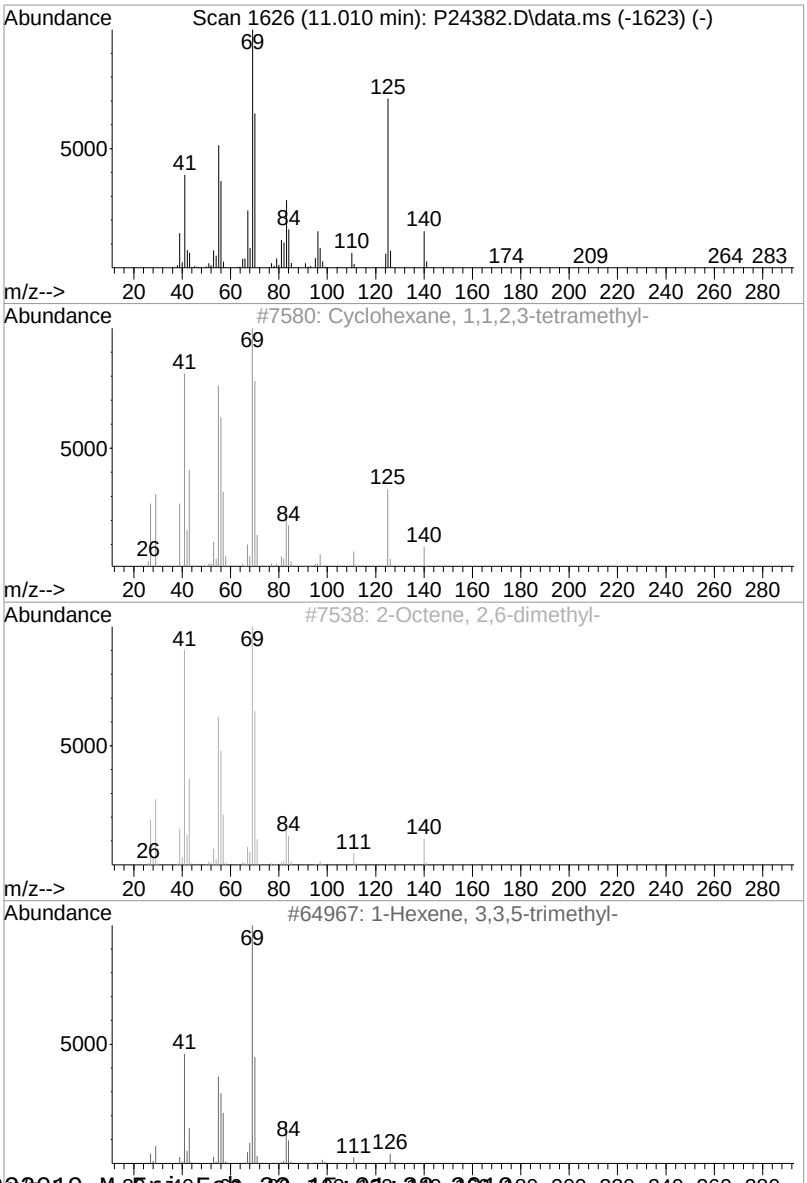
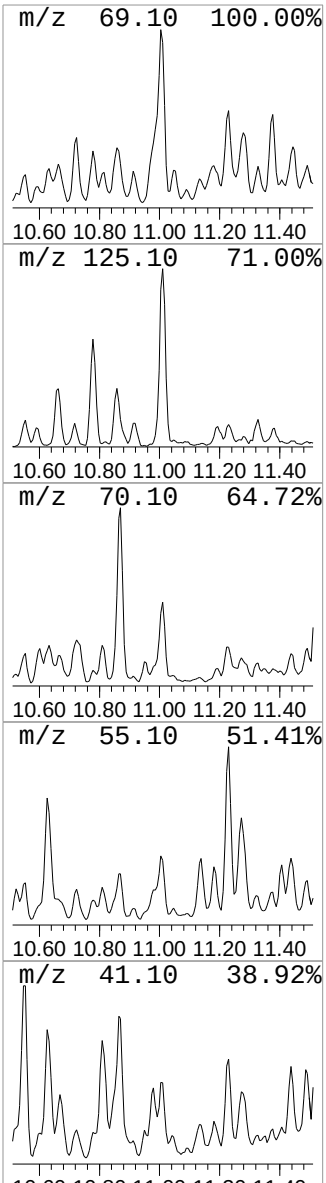
Peak Number 9 Cyclohexane, 1,1,2,3-tetram... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.010	38.93 ppb	1344000	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,1,2,3-tetramethyl-	140	C10H20	006783-92-2	90
2	2-Octene, 2,6-dimethyl-	140	C10H20	004057-42-5	58
3	1-Hexene, 3,3,5-trimethyl-	126	C9H18	013427-43-5	58
4	4-Octene, 2,6-dimethyl-, [S-(E)]-	140	C10H20	062960-76-3	58
5	4-Octene, 2,6-dimethyl-, [S-(Z)]-	140	C10H20	062960-77-4	58





Library Search Compound Report

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Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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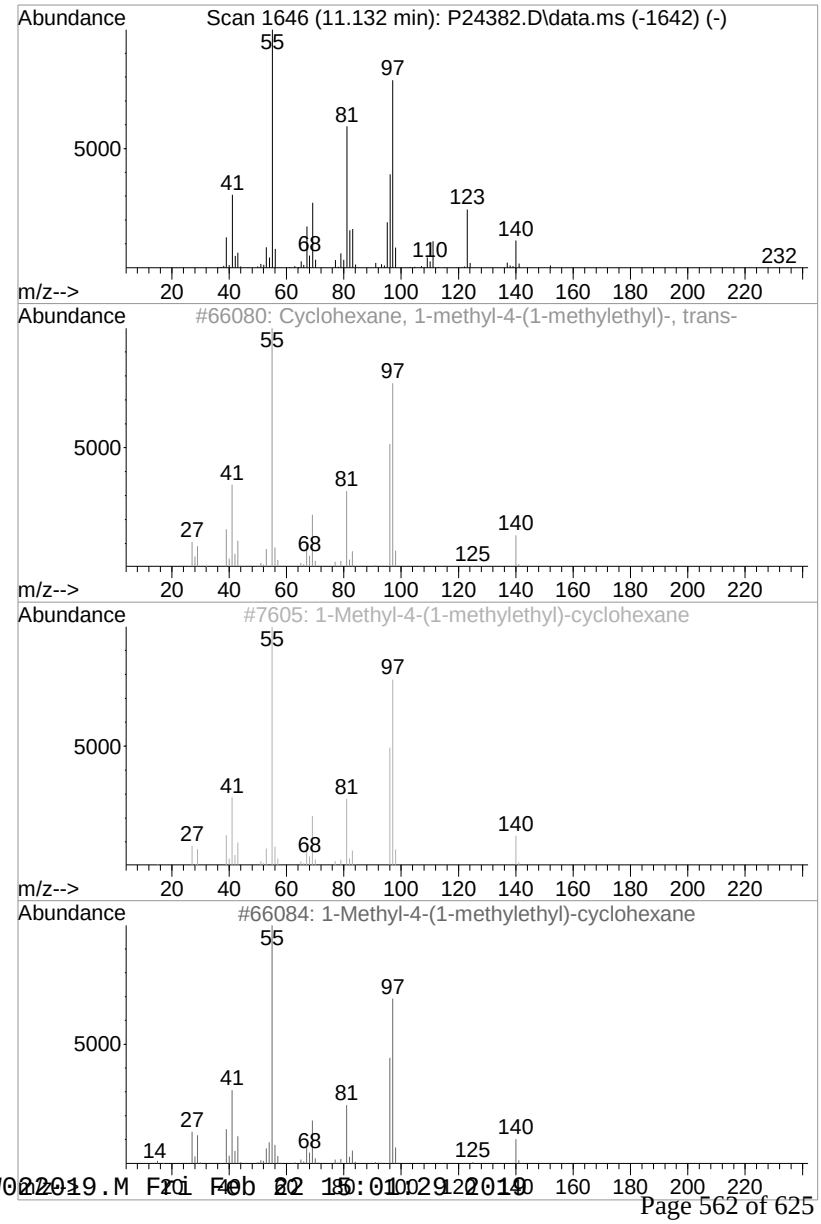
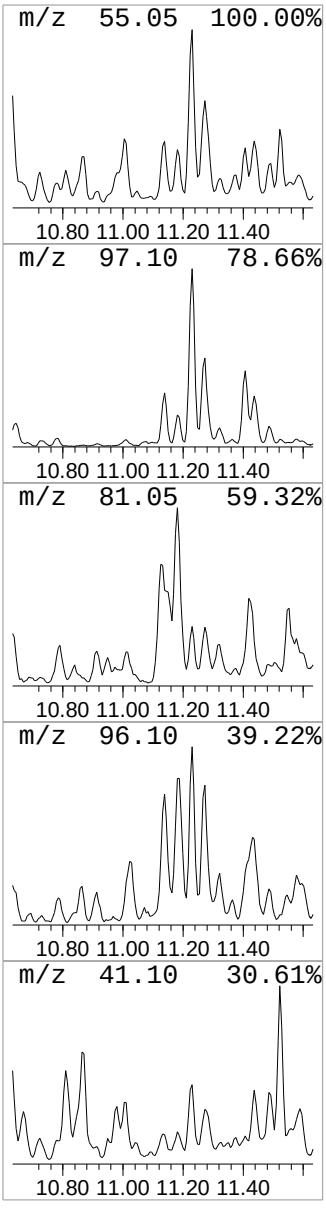
Peak Number 10 unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.132	25.37 ppb	875777	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	001678-82-6	76
2	1-Methyl-4-(1-methylethyl)-cyclo...	140	C10H20	000099-82-1	76
3	1-Methyl-4-(1-methylethyl)-cyclo...	140	C10H20	000099-82-1	68
4	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	001678-82-6	64
5	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	006069-98-3	64





Library Search Compound Report

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Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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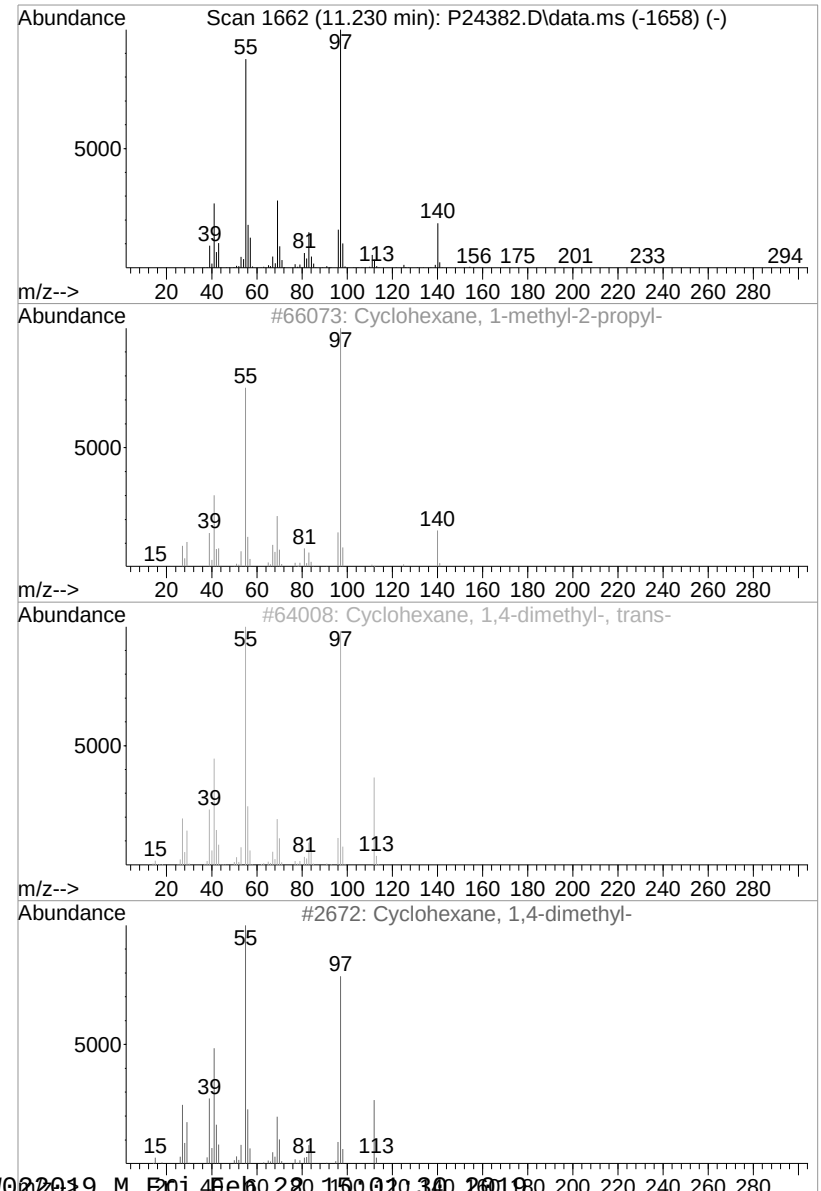
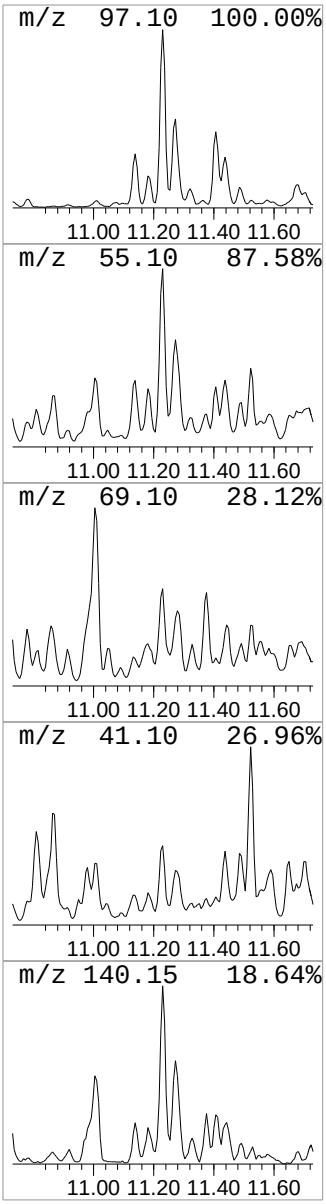
Peak Number 11 Cyclohexane, 1-methyl-2-pro... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.230	57.09 ppb	1970770	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	90
2	Cyclohexane, 1,4-dimethyl-, trans-	112	C8H16	002207-04-7	72
3	Cyclohexane, 1,4-dimethyl-	112	C8H16	000589-90-2	72
4	Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	72
5	Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-77-7	64





Library Search Compound Report

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Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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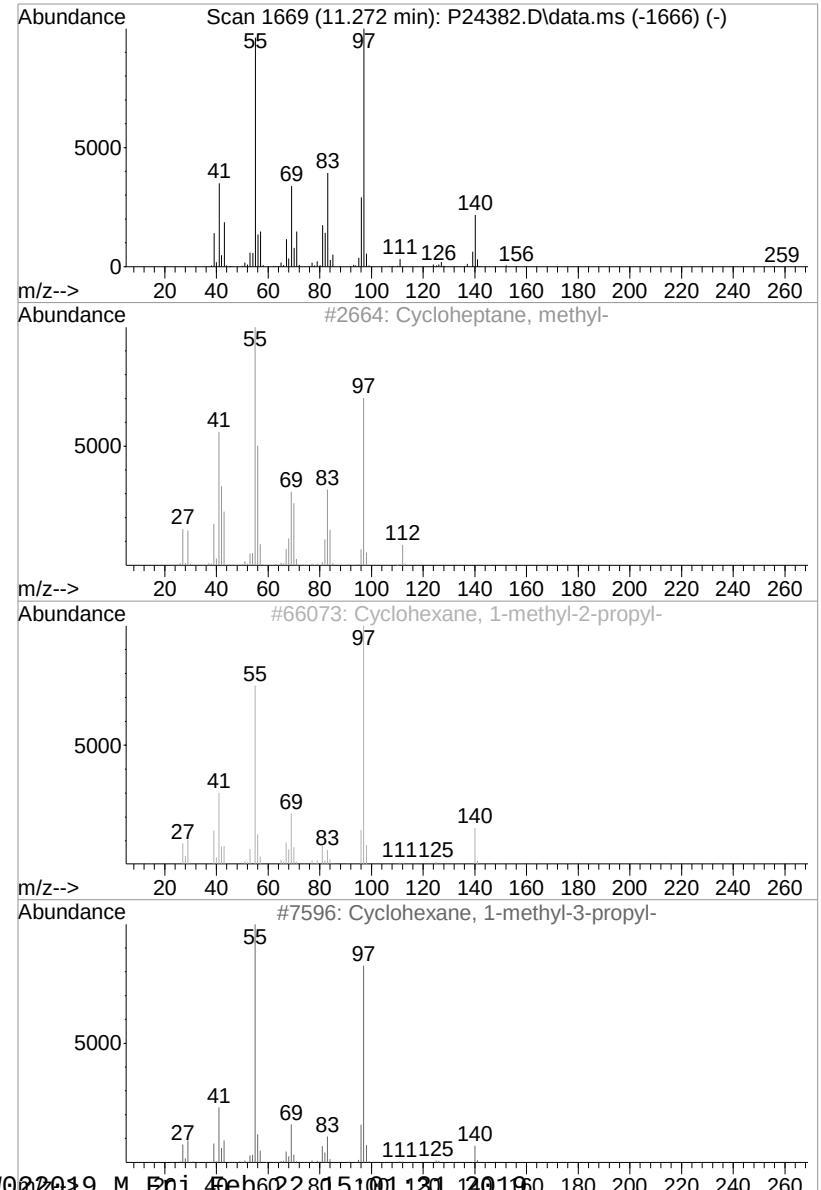
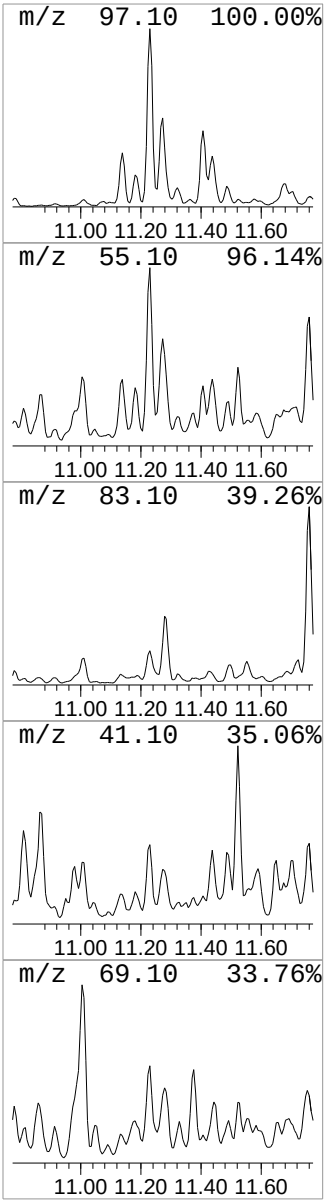
Peak Number 12 unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.272	48.15 ppb	1662260	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cycloheptane, methyl-	112	C8H16	004126-78-7	59
2	Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	52
3	Cyclohexane, 1-methyl-3-propyl-	140	C10H20	004291-80-9	50
4	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	001678-82-6	47
5	m-Menthane, (1S,3S)-(+)-	140	C10H20	013837-67-7	47





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

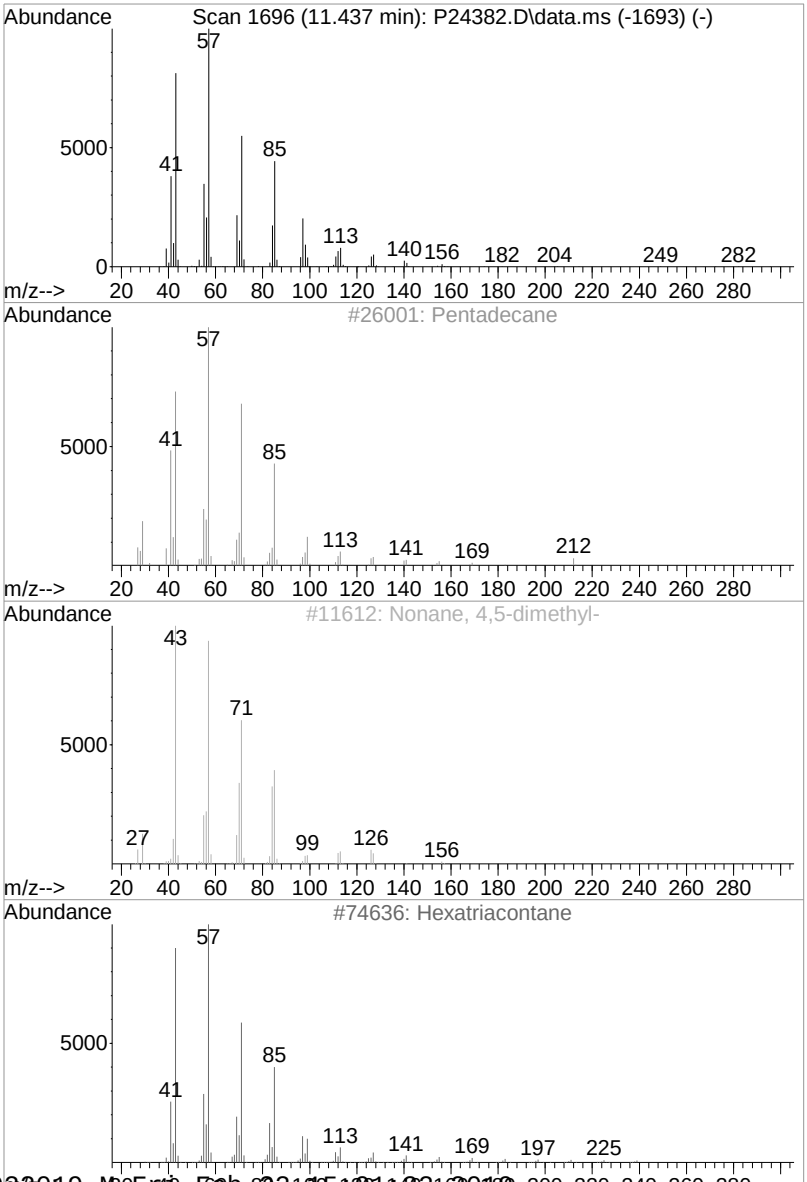
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

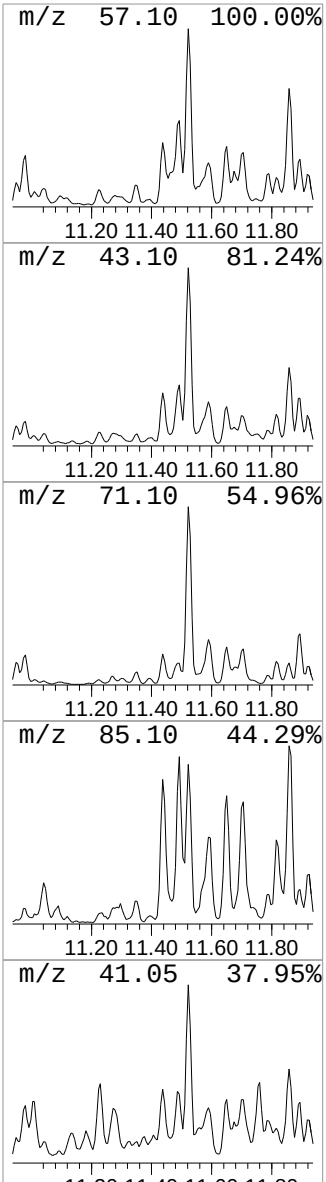
****

Peak Number 13 unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.437	48.00 ppb	1656820	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecane	212	C15H32	000629-62-9	80
2	Nonane, 4,5-dimethyl-	156	C11H24	017302-23-7	76
3	Hexatriacontane	507	C36H74	000630-06-8	72
4	Eicosane	282	C20H42	000112-95-8	64
5	Heptadecane	240	C17H36	000629-78-7	64





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

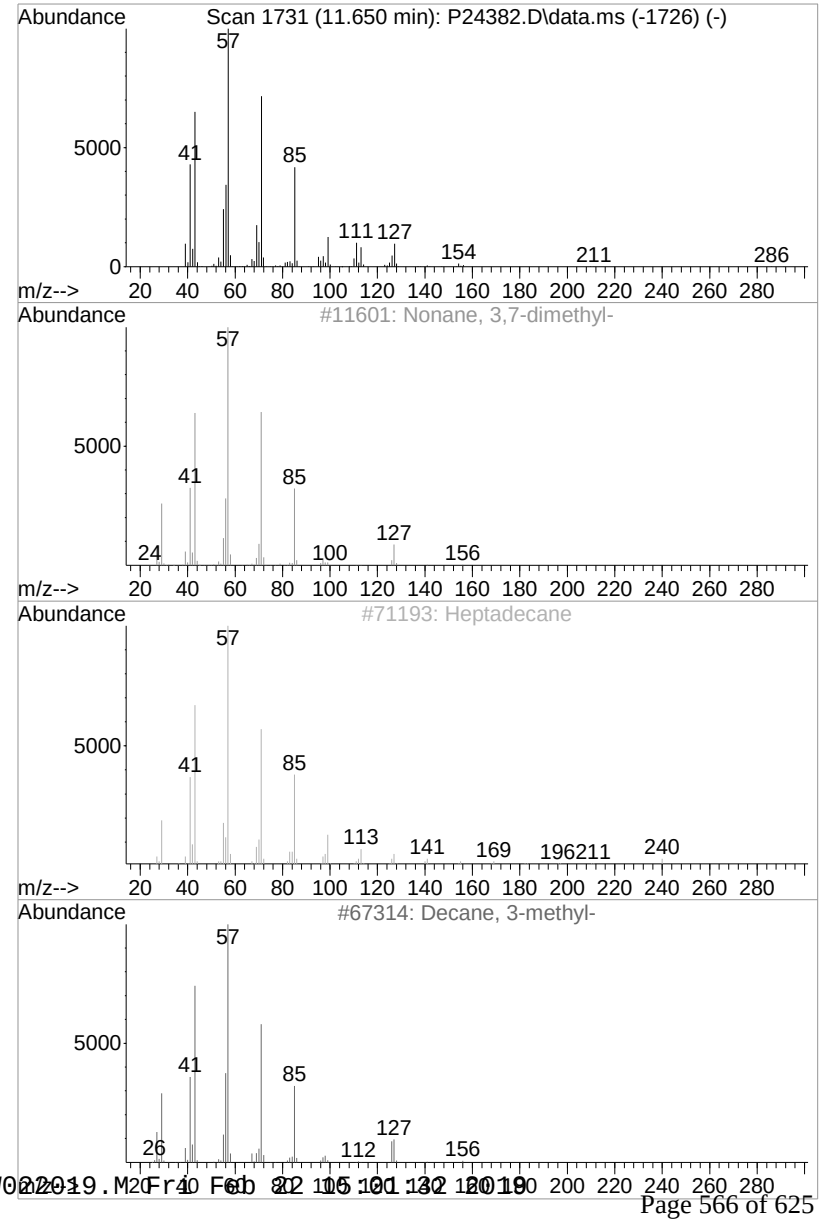
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

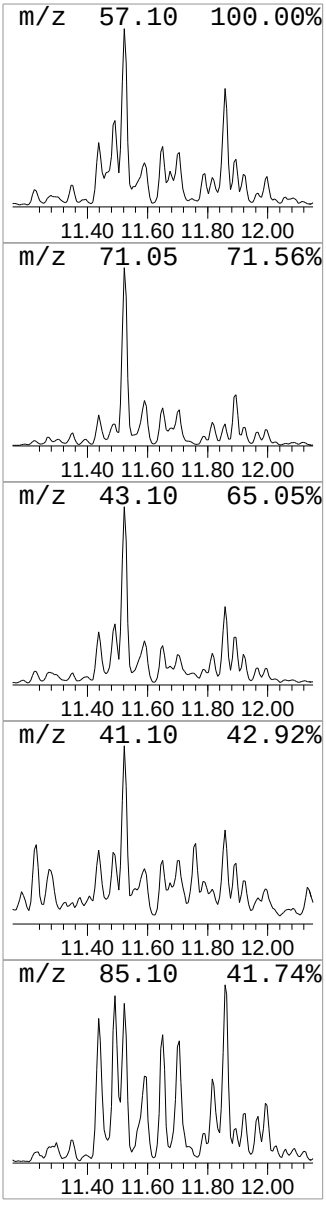
****

Peak Number 14 unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.650	33.11 ppb	1142990	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonane, 3,7-dimethyl-	156	C11H24	017302-32-8	76
2	Heptadecane	240	C17H36	000629-78-7	72
3	Decane, 3-methyl-	156	C11H24	013151-34-3	68
4	Decane, 2,4,6-trimethyl-	184	C13H28	062108-27-4	64
5	Hexadecane	226	C16H34	000544-76-3	59





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

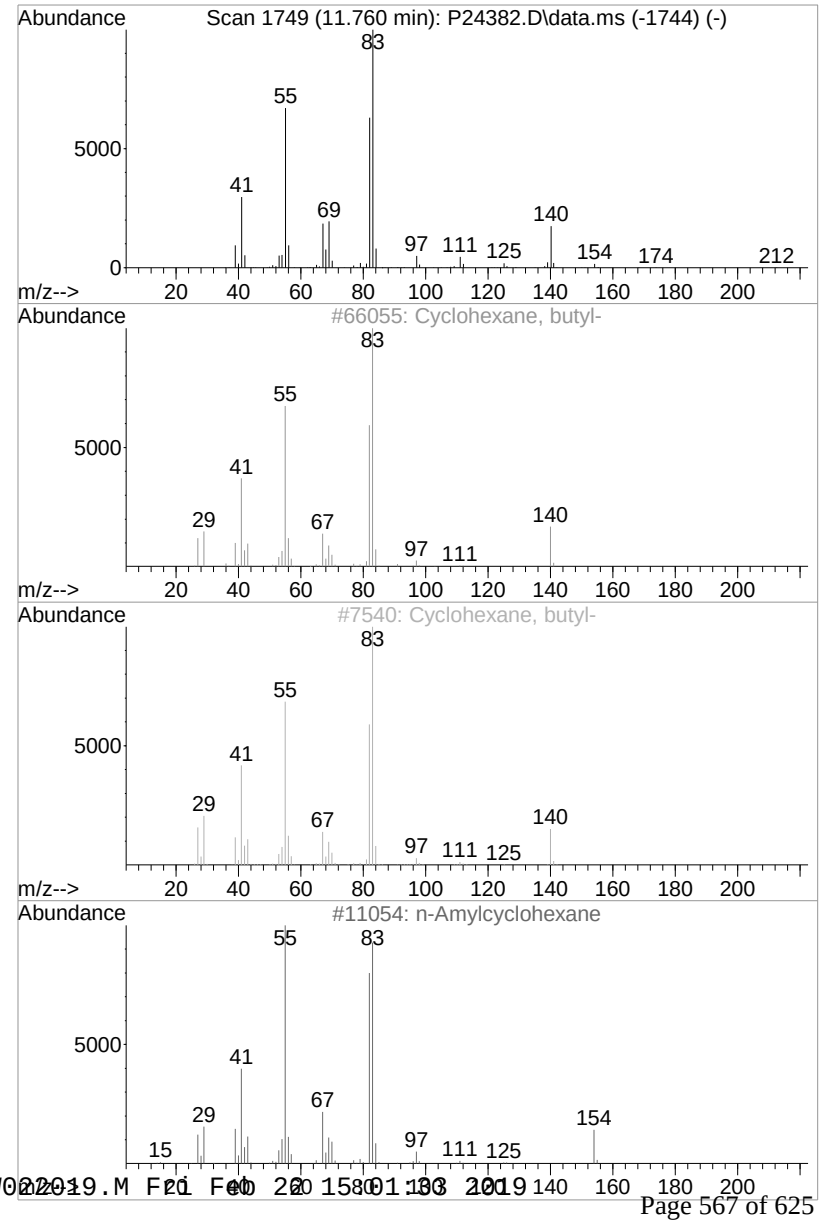
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

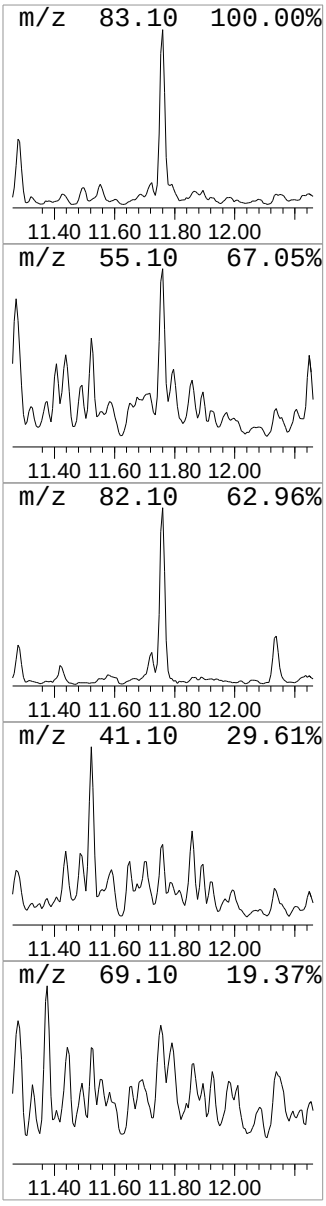
****

Peak Number 15 Cyclohexane, butyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.760	53.98 ppb	1863430	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, butyl-	140	C10H20	001678-93-9	87
2	Cyclohexane, butyl-	140	C10H20	001678-93-9	86
3	n-Amylcyclohexane	154	C11H22	029949-27-7	86
4	Cyclohexane, pentyl-	154	C11H22	004292-92-6	86
5	Cyclohexane, ethyl-	112	C8H16	001678-91-7	83





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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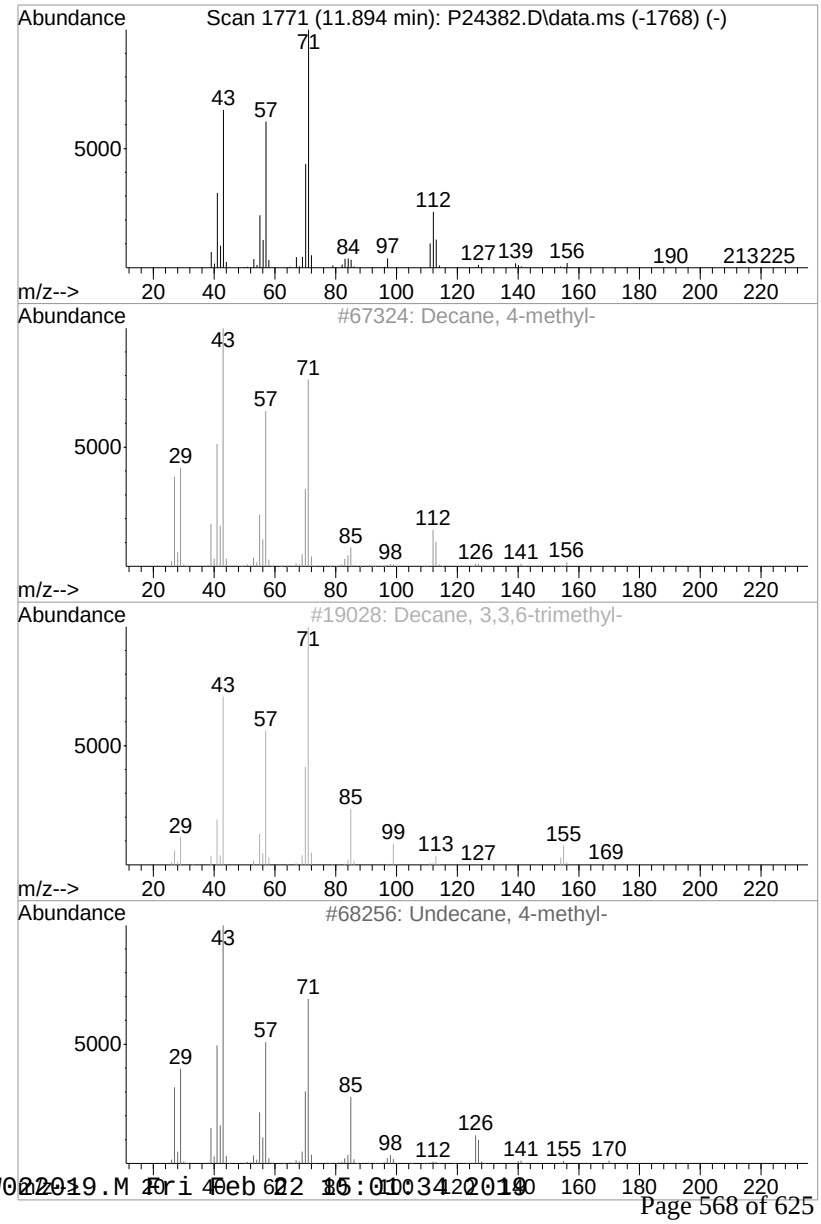
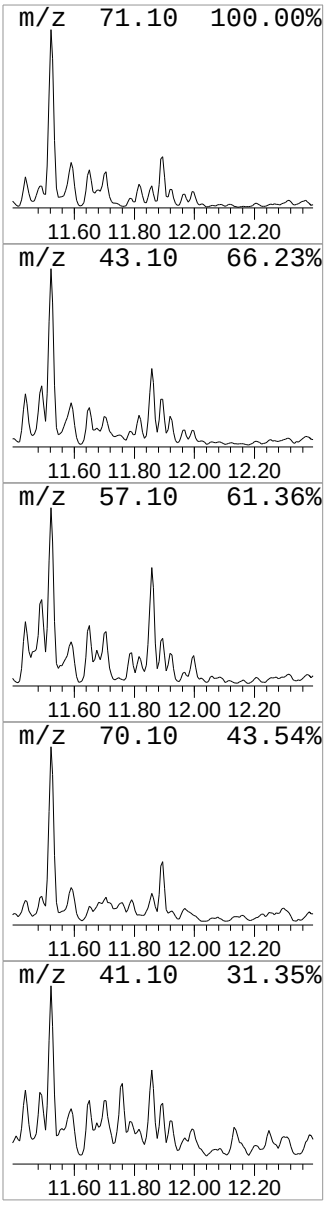
Peak Number 16 unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.894	27.93 ppb	964004	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 4-methyl-	156	C11H24	002847-72-5	72
2	Decane, 3,3,6-trimethyl-	184	C13H28	062338-14-1	59
3	Undecane, 4-methyl-	170	C12H26	002980-69-0	59
4	Decane, 2,7,7-trimethyl-	184	C13H28	062338-15-2	53
5	1,1-Dimethylpropyl 2-ethylhexanoate	214	C13H26O2	005421-13-6	53





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

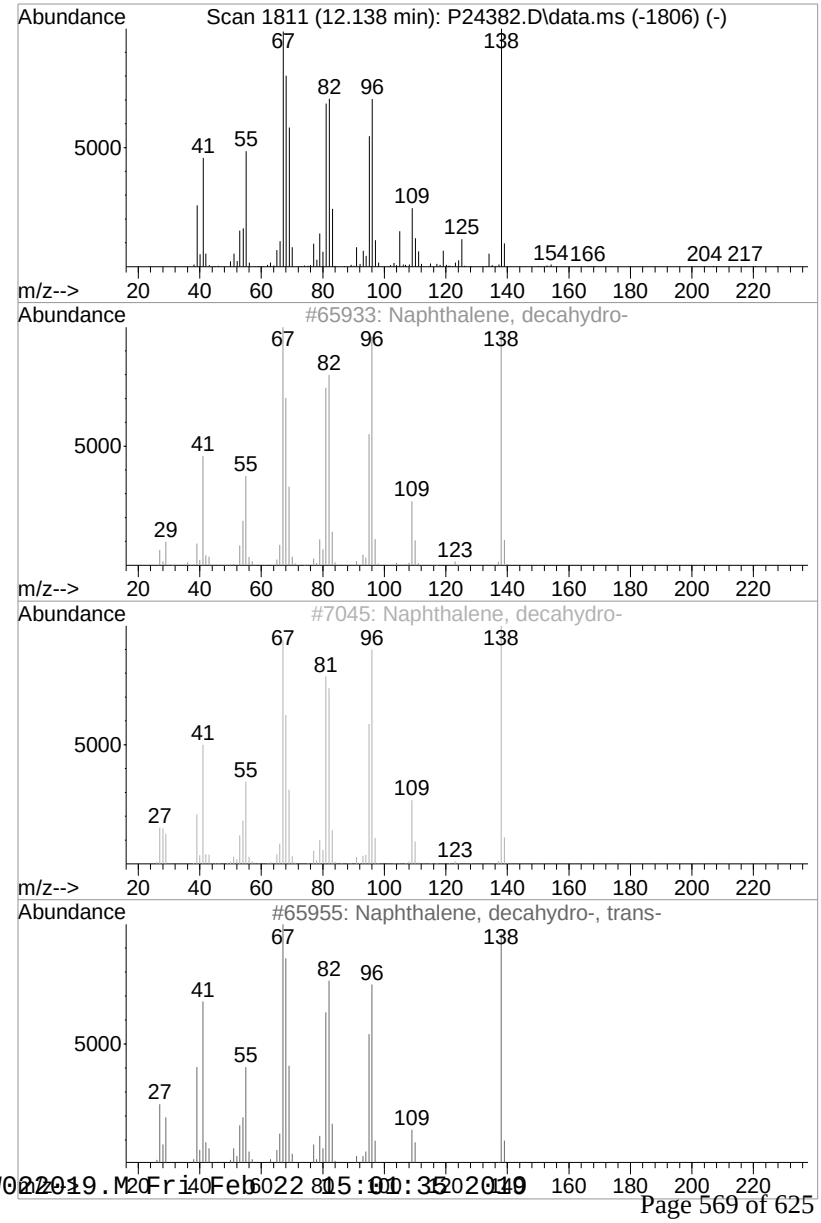
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

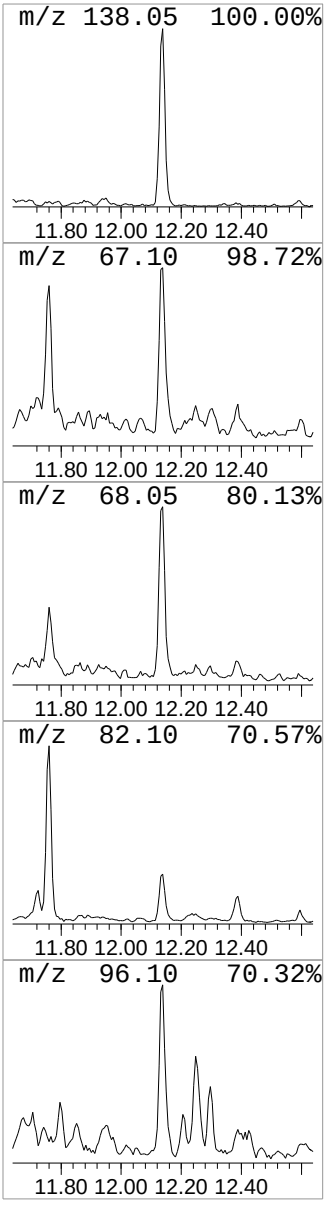
****

Peak Number 17 Naphthalene, decahydro- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.138	34.67 ppb	1196770	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, decahydro-	138	C10H18	000091-17-8	97
2	Naphthalene, decahydro-	138	C10H18	000091-17-8	97
3	Naphthalene, decahydro-, trans-	138	C10H18	000493-02-7	96
4	Naphthalene, decahydro-, trans-	138	C10H18	000493-02-7	94
5	Naphthalene, decahydro-, trans-	138	C10H18	000493-02-7	94





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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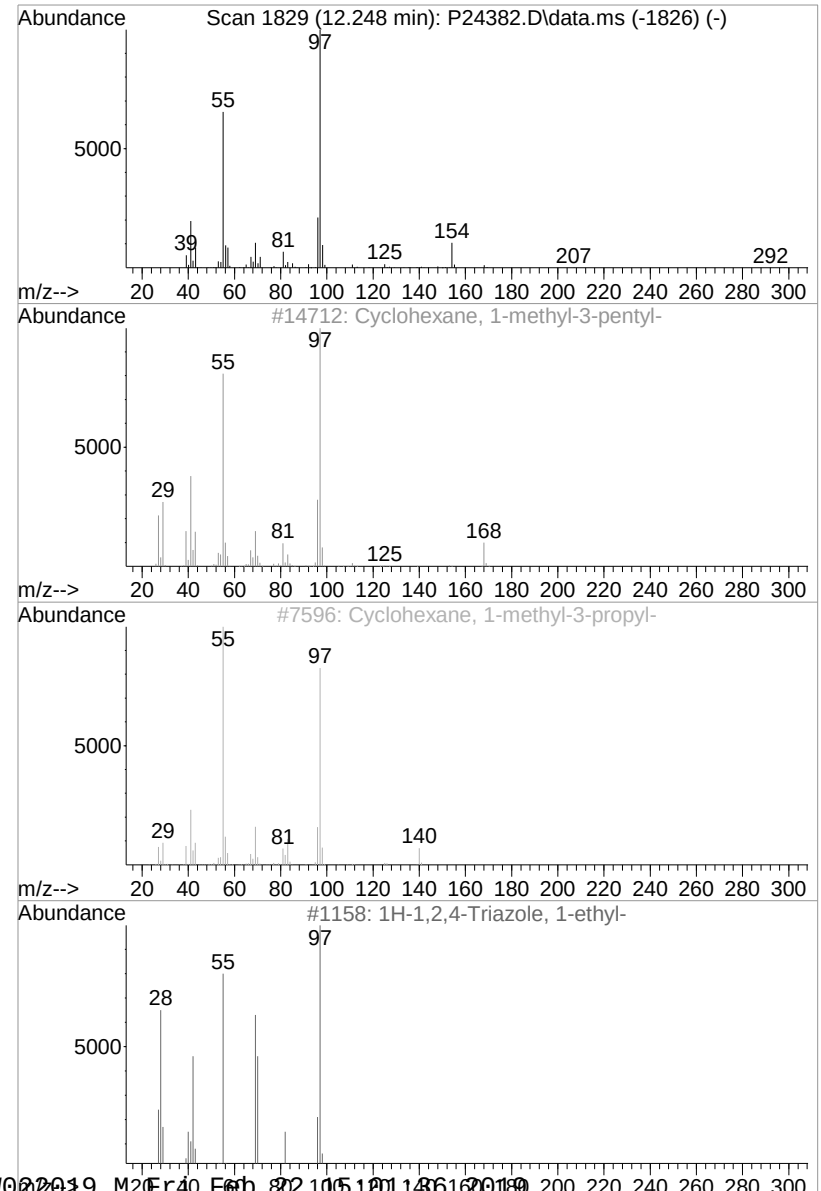
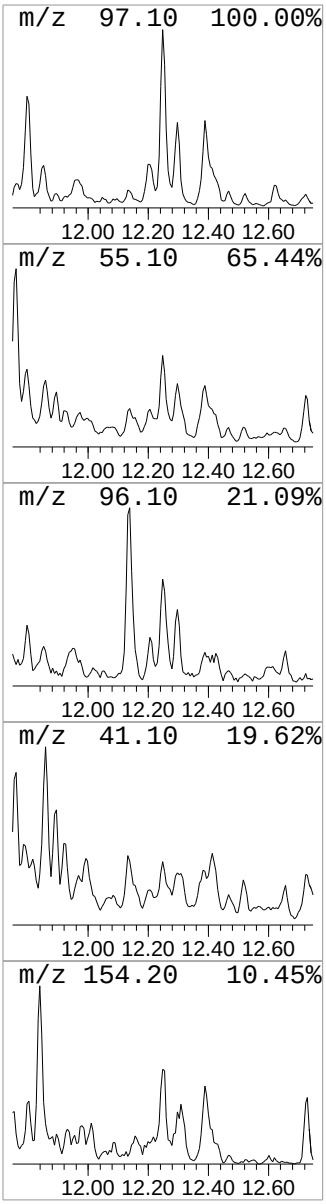
Peak Number 18 unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.248	25.33 ppb	874282	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-methyl-3-pentyl-	168	C12H24	054411-02-8	72
2	Cyclohexane, 1-methyl-3-propyl-	140	C10H20	004291-80-9	64
3	1H-1,2,4-Triazole, 1-ethyl-	97	C4H7N3	016778-70-4	59
4	Thiophene, 2-pentyl-	154	C9H14S	004861-58-9	52
5	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	50





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

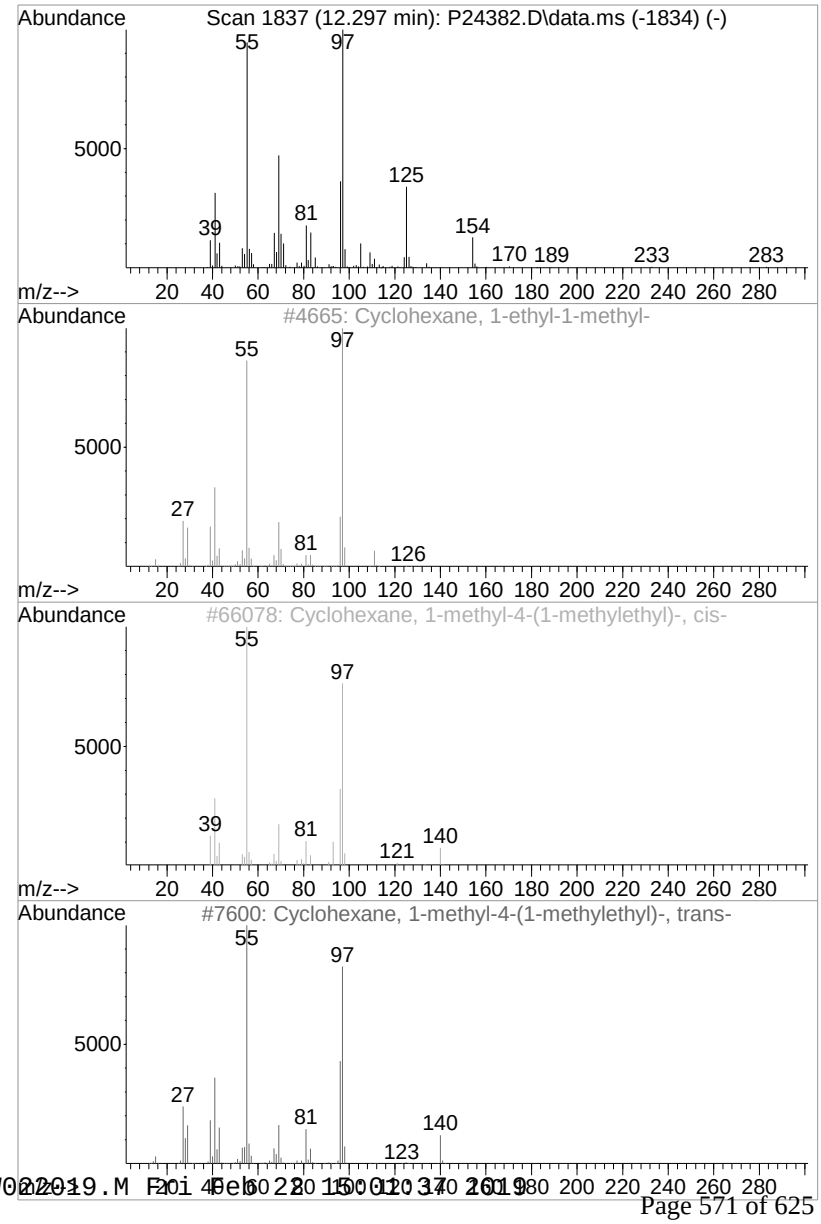
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

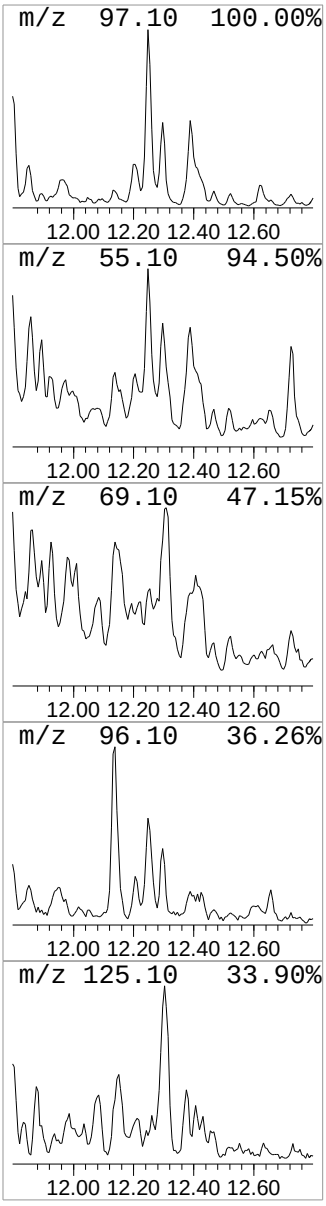
****

Peak Number 19 unknown Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.297	25.42 ppb	877443	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-ethyl-1-methyl-	126	C9H18	004926-90-3	53
2	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	006069-98-3	50
3	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	001678-82-6	50
4	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	001678-82-6	50
5	Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	50





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

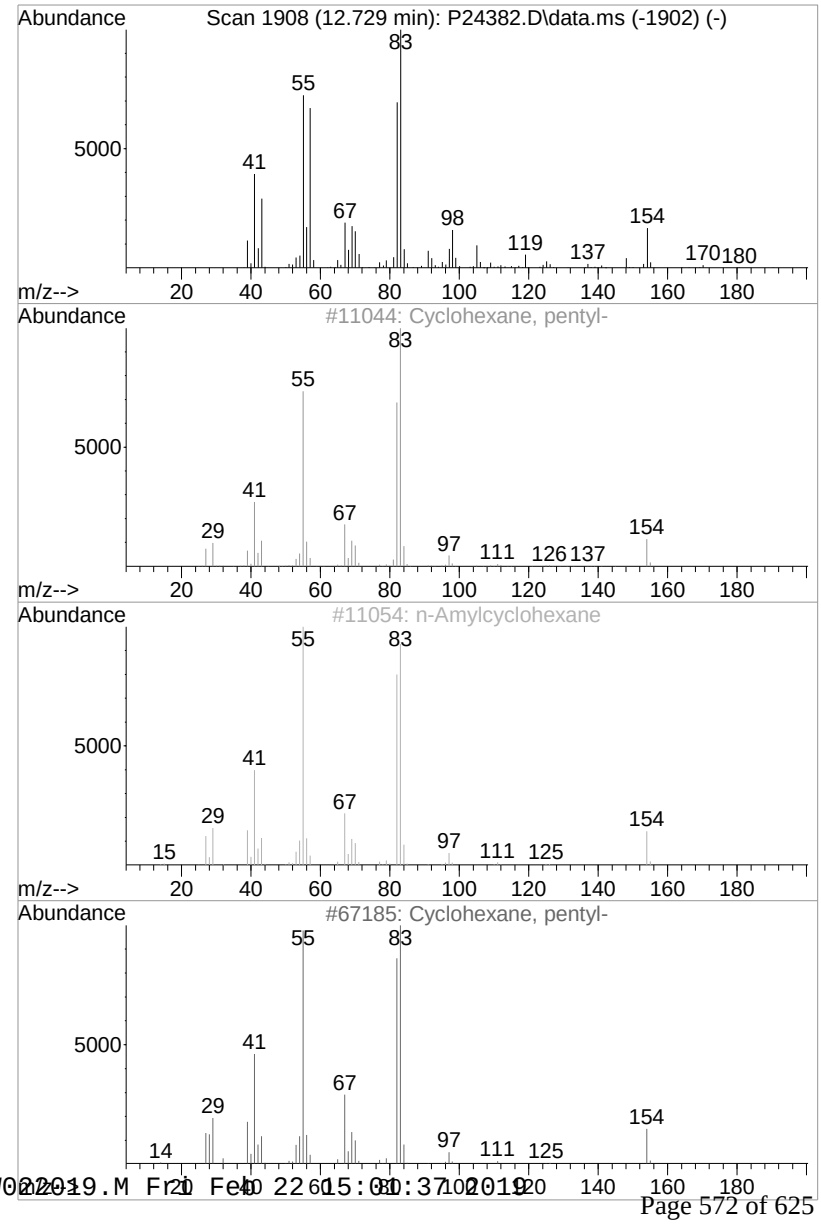
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

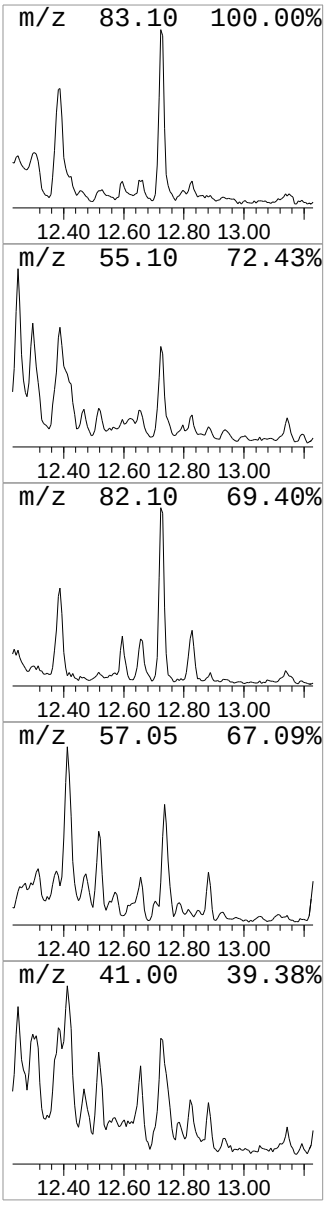
****

Peak Number 20 unknown Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.729	26.18 ppb	903841	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, pentyl-	154	C11H22	004292-92-6	74
2	n-Amylcyclohexane	154	C11H22	029949-27-7	68
3	Cyclohexane, pentyl-	154	C11H22	004292-92-6	64
4	Cyclohexane, (4-methylpentyl)-	168	C12H24	061142-20-9	58
5	Cyclohexane, butyl-	140	C10H20	001678-93-9	53





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

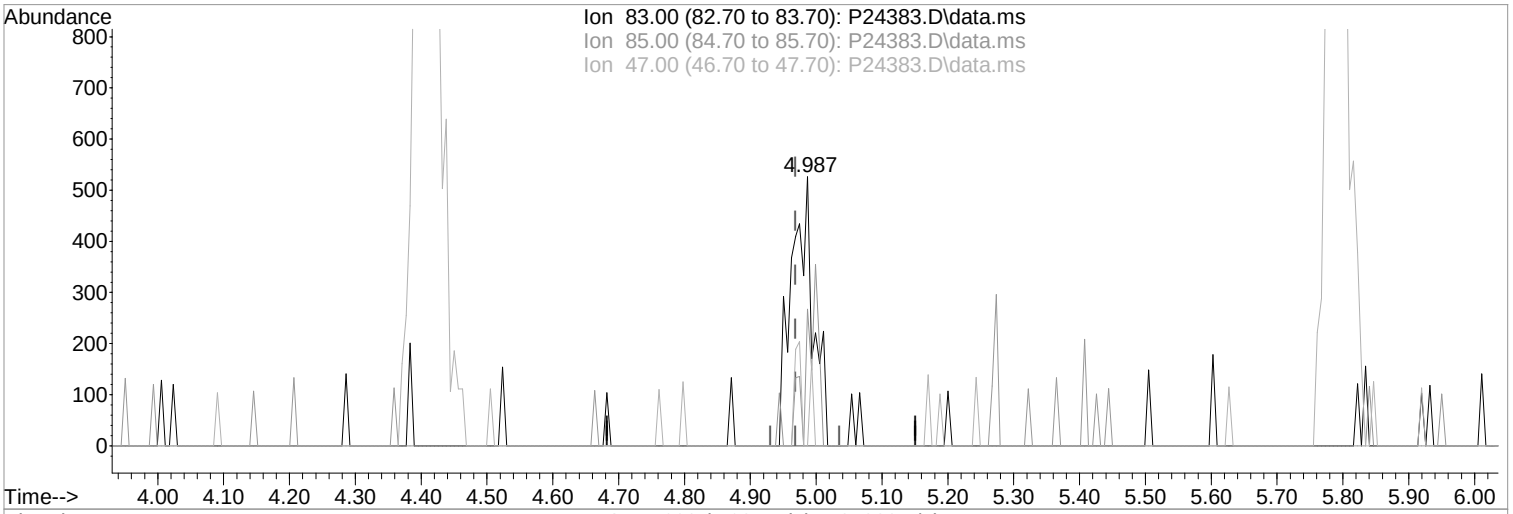
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

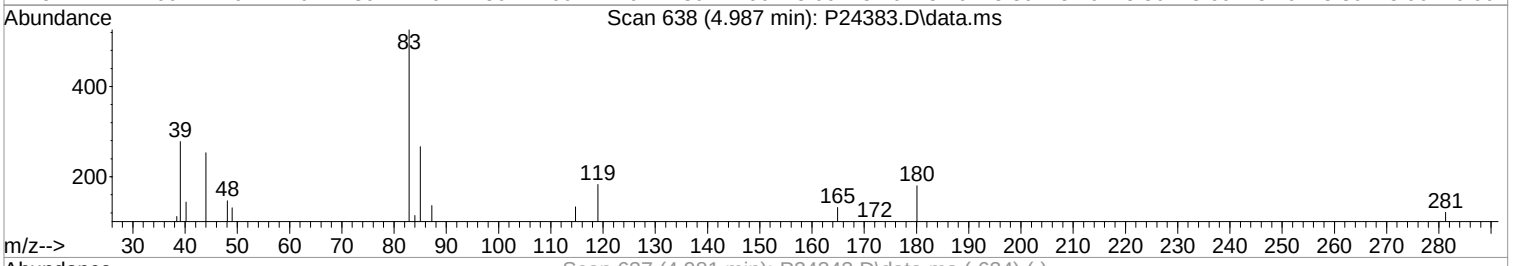
					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	10.065	31.3	ppb	829959	3	9.785	1324520	50.0
unknown	10.346	73.1	ppb	1935580	3	9.785	1324520	50.0
Nonane, 4-methyl-	10.431	54.3	ppb	1438090	3	9.785	1324520	50.0
Octane, 2,6-dim...	10.553	119.8	ppb	3172520	3	9.785	1324520	50.0
Cyclohexane, pr...	10.626	87.6	ppb	2320450	3	9.785	1324520	50.0
unknown	10.669	40.2	ppb	1065030	3	9.785	1324520	50.0
unknown	10.809	79.1	ppb	2095880	3	9.785	1324520	50.0
unknown	10.980	31.0	ppb	1069720	4	11.839	1726010	50.0
Cyclohexane, 1,...	11.010	38.9	ppb	1344000	4	11.839	1726010	50.0
unknown	11.132	25.4	ppb	875777	4	11.839	1726010	50.0
Cyclohexane, 1-...	11.230	57.1	ppb	1970770	4	11.839	1726010	50.0
unknown	11.272	48.1	ppb	1662260	4	11.839	1726010	50.0
unknown	11.437	48.0	ppb	1656820	4	11.839	1726010	50.0
unknown	11.650	33.1	ppb	1142990	4	11.839	1726010	50.0
Cyclohexane, bu...	11.760	54.0	ppb	1863430	4	11.839	1726010	50.0
unknown	11.894	27.9	ppb	964004	4	11.839	1726010	50.0
Naphthalene, de...	12.138	34.7	ppb	1196770	4	11.839	1726010	50.0
unknown	12.248	25.3	ppb	874282	4	11.839	1726010	50.0
unknown	12.297	25.4	ppb	877443	4	11.839	1726010	50.0
unknown	12.729	26.2	ppb	903841	4	11.839	1726010	50.0

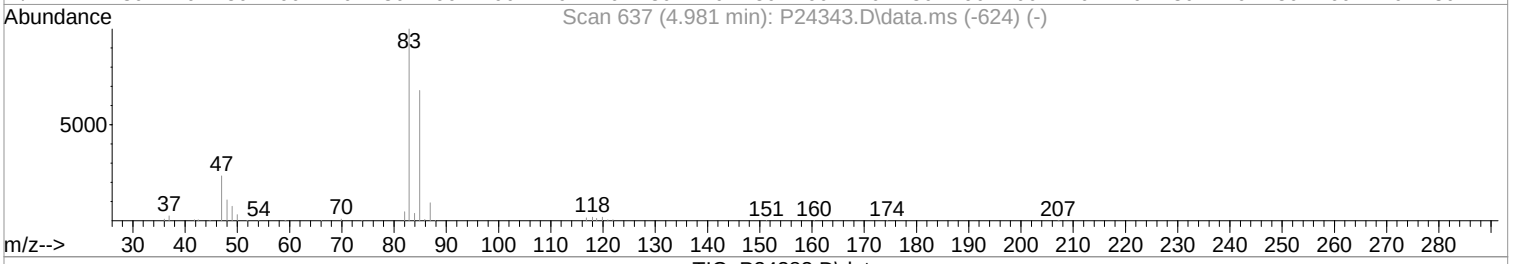
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24383.D
Acq On : 21 Feb 2019 8:58 pm
Operator : K.Ruest
Sample : R1901365-005|183 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 22 09:14:17 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24383.D\data.ms

(40) Chloroform (P)

4.987min (+0.018) 0.22 ppb m

response 1216

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	50.76
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

After

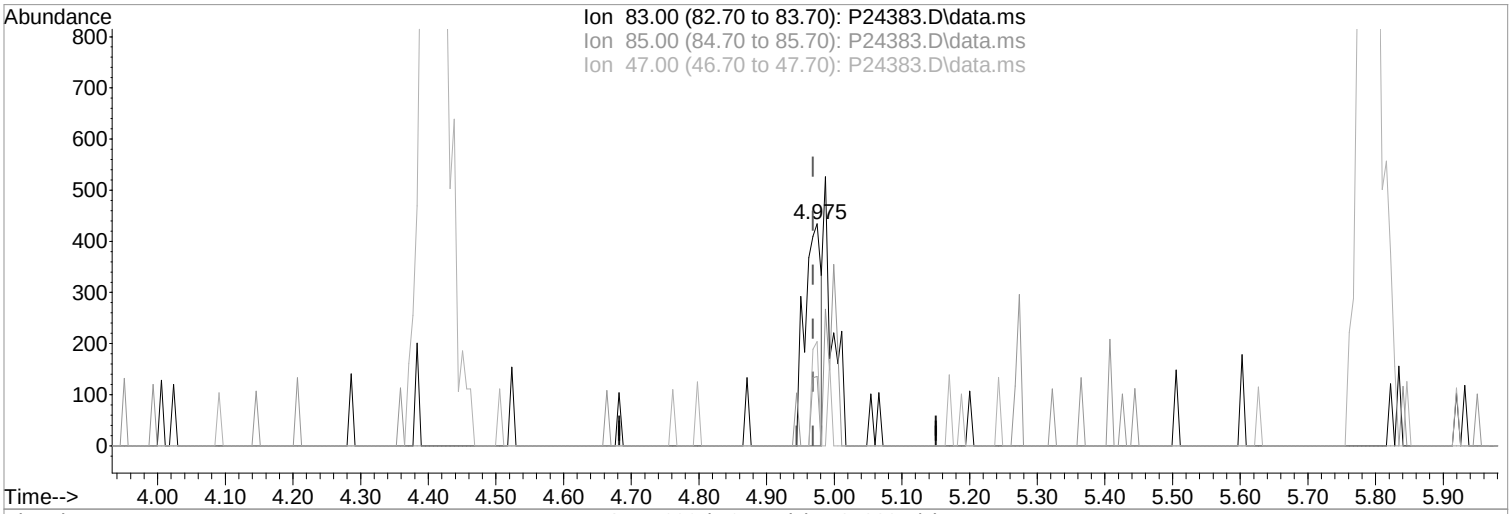
Split Peak

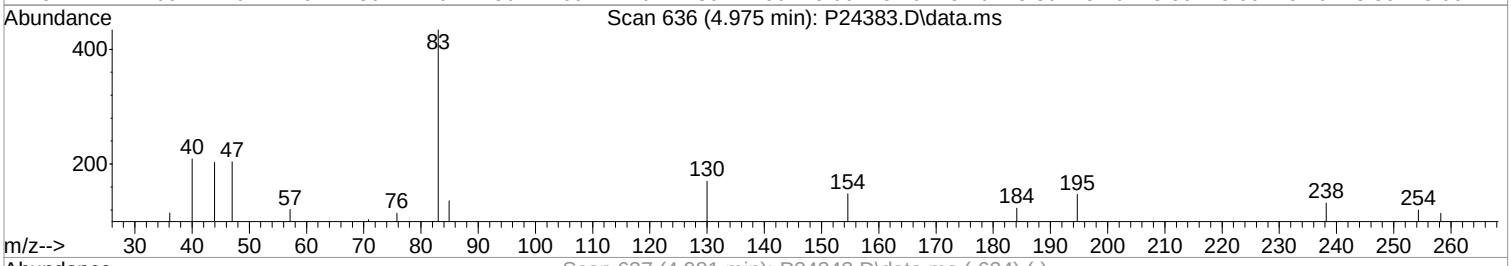
02/22/19

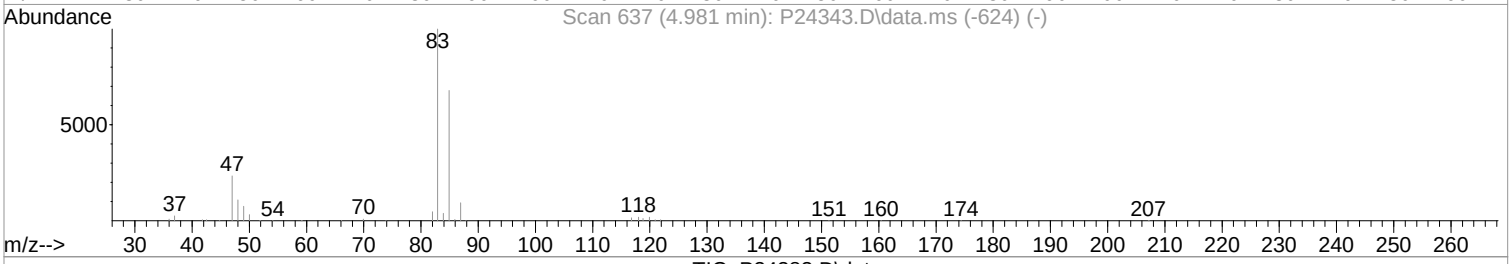
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24383.D
Acq On : 21 Feb 2019 8:58 pm
Operator : K.Ruest
Sample : R1901365-005|183 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 22 09:14:17 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24383.D\data.ms

(40) Chloroform (P)

4.975min (+0.006) 0.13 ppb

response 739

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	31.34#
47.00	23.40	47.00#
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24383.D
Acq On : 21 Feb 2019 8:58 pm
Operator : K.Ruest
Sample : R1901365-005|183 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 23 Sample Multiplier: 1

DL

Quant Time: Feb 22 15:02:45 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.408	168	325099	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.493	114	514111	50.00	ppb		0.01
71) d5-Chlorobenzene	9.791	117	449956	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	233889	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.267	113	135212	47.86	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.72%				
48) surr1,1,2-dichloroetha...	5.792	65	186253	51.97	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.94%				
65) SURR3,Toluene-d8	8.297	98	669098	49.93	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.86%				
70) SURR2,BFB	10.864	95	230142	47.95	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.90%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.421	62	1688	0.36	ppb		69
34) cis-1,2-Dichloroethene	4.408	96	75230	19.89	ppb	#	80
40) Chloroform	4.987	83	1216m	0.22	ppb		
54) Trichloroethene	6.816	130	333725	92.81	ppb		96

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

Quantitation Report (QT Reviewed)

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Sample : R1901365-005|183 Inst : MSVOA-12
Misc : DAY MED T4
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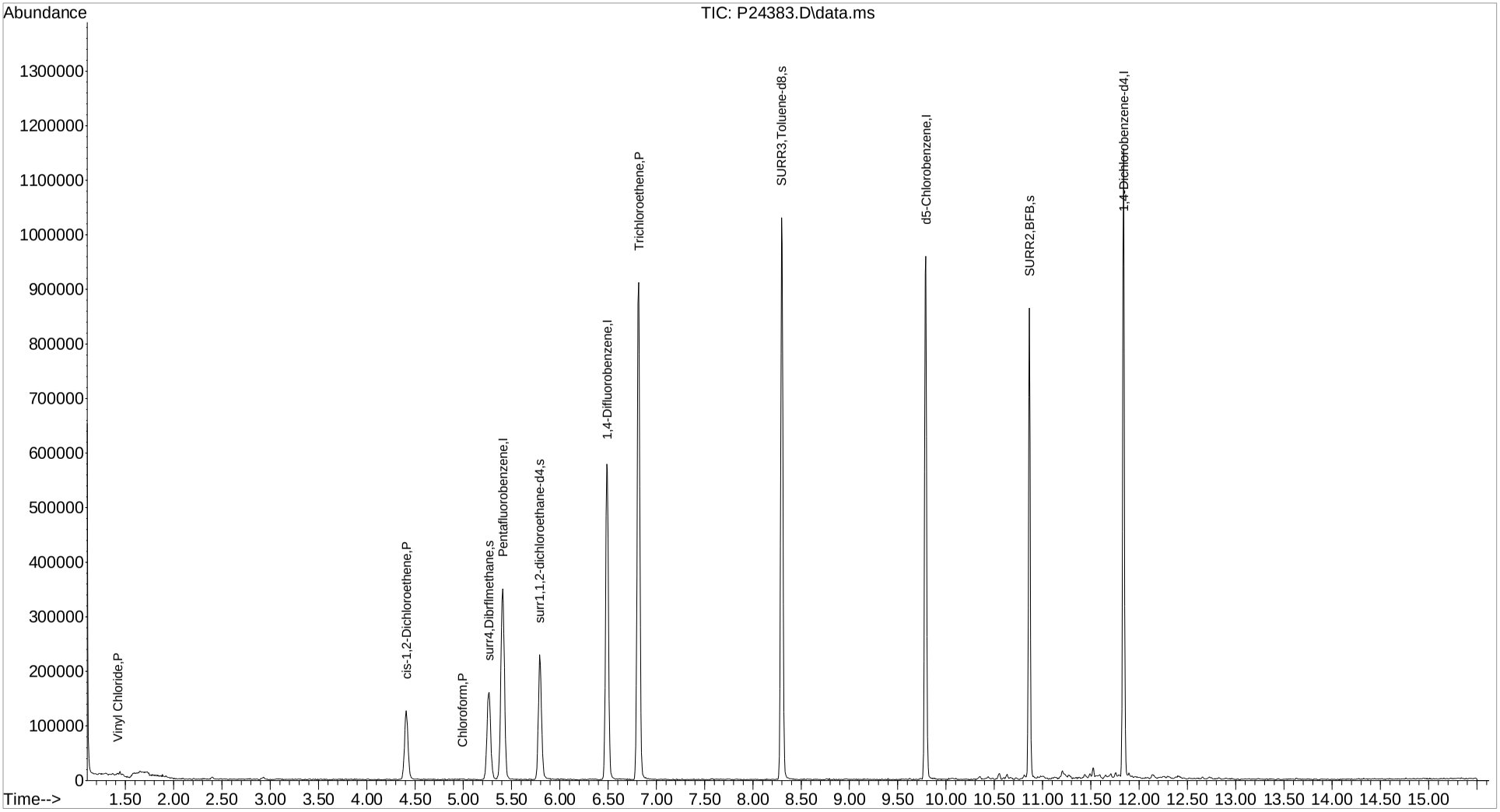
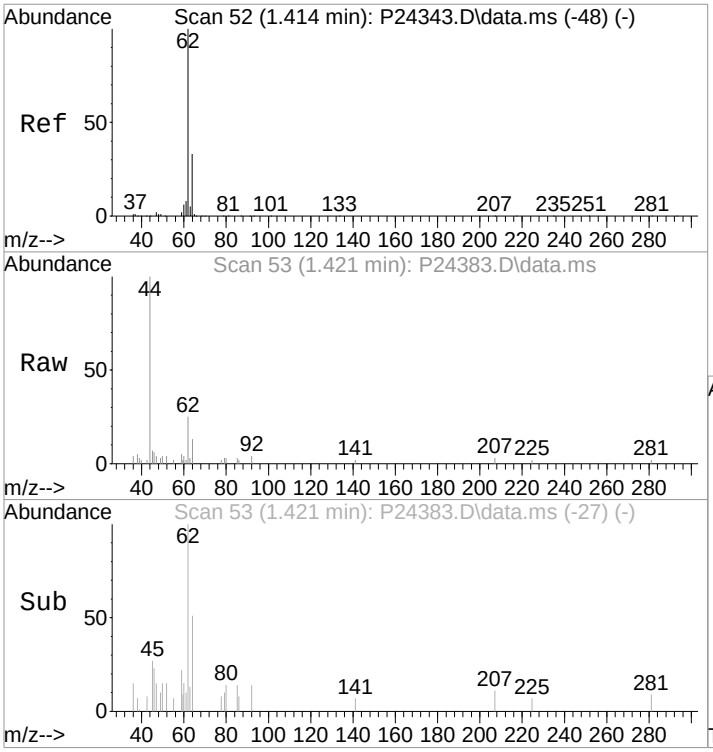
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



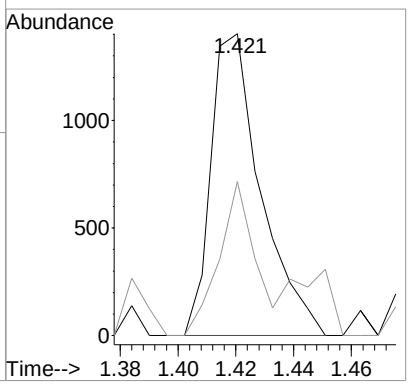
1st 02/22/19

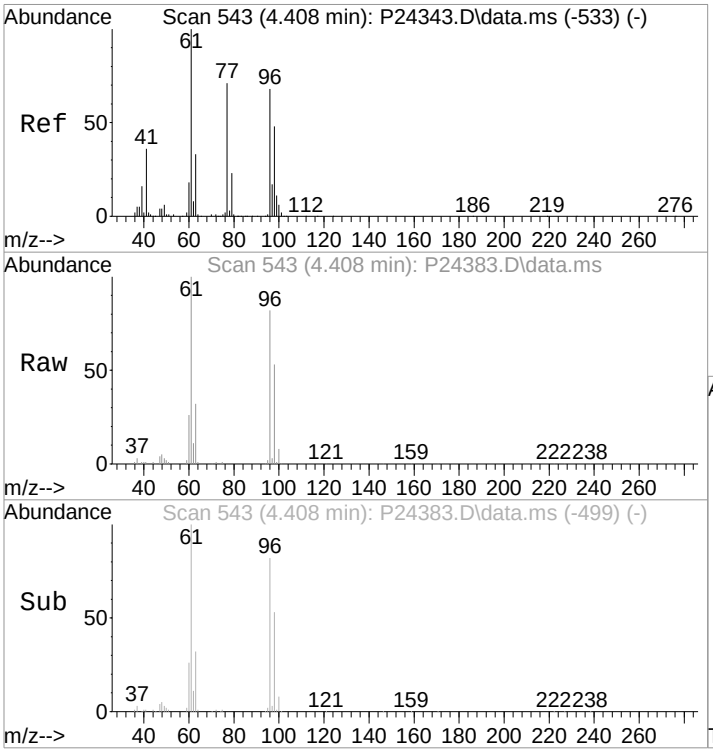


#4
Vinyl Chloride
Concen: 0.36 ppb
RT: 1.421 min Scan# 53
Delta R.T. 0.012 min
Lab File: P24383.D
Acq: 21 Feb 2019 8:58 pm

Tgt Ion: 62 Resp: 1688

Ion	Ratio	Lower	Upper
62	100		
64	51.0	13.2	53.2

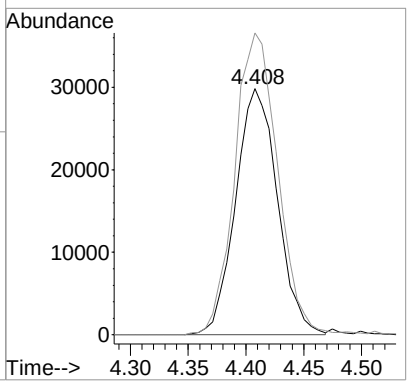


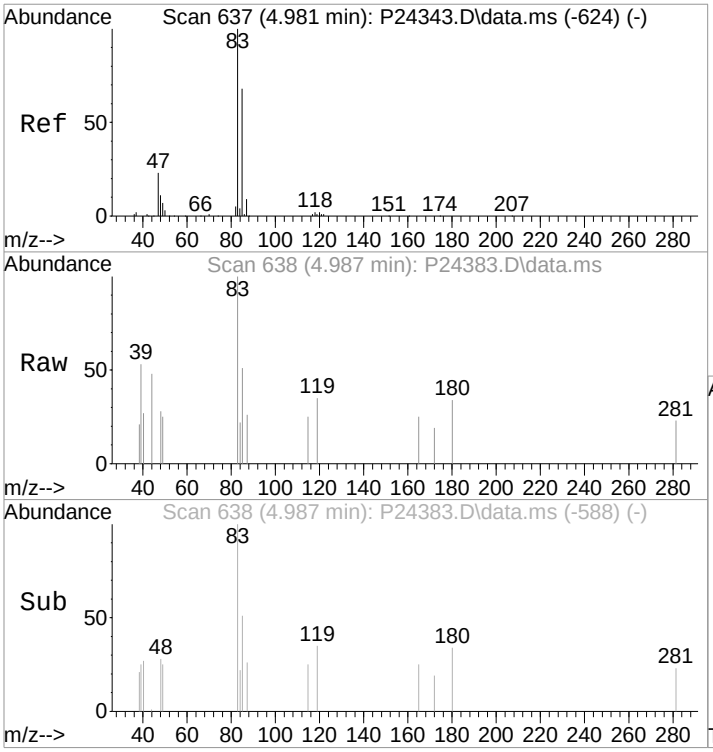


#34
cis-1,2-Dichloroethene
Concen: 19.89 ppb
RT: 4.408 min Scan# 543
Delta R.T. 0.006 min
Lab File: P24383.D
Acq: 21 Feb 2019 8:58 pm

Tgt Ion: 96 Resp: 75230

Ion	Ratio	Lower	Upper
96	100		
61	122.6	128.1	168.1#

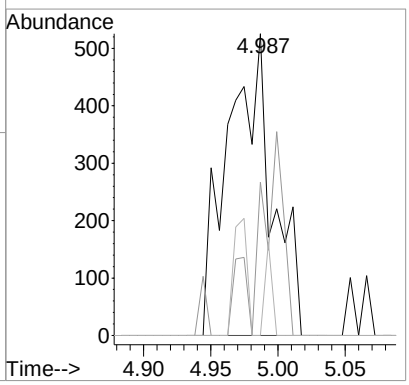


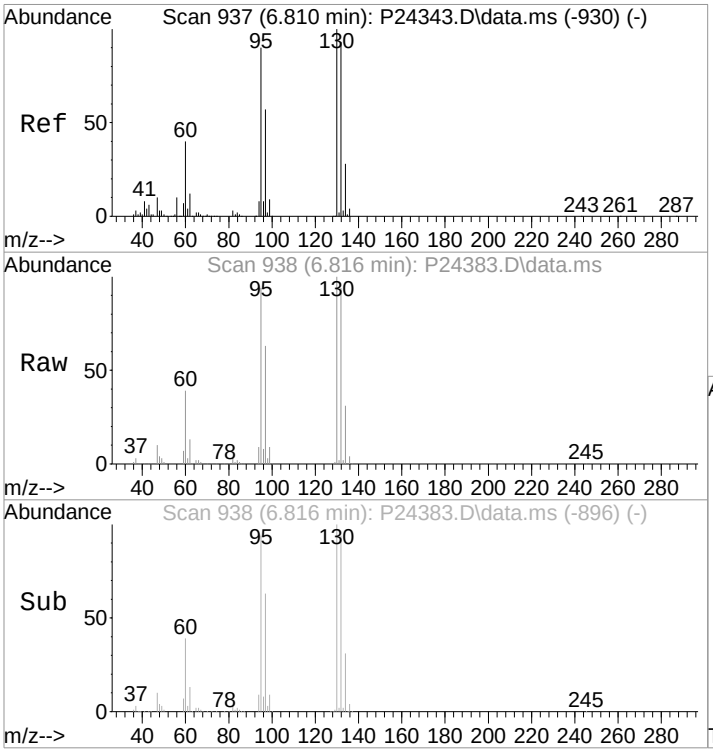


#40
Chloroform
Concen: 0.22 ppb m
RT: 4.987 min Scan# 638
Delta R.T. 0.018 min
Lab File: P24383.D
Acq: 21 Feb 2019 8:58 pm

Tgt Ion: 83 Resp: 1216

Ion	Ratio	Lower	Upper
83	100		
85	50.8	47.9	87.9
47	0.0	3.4	43.4#

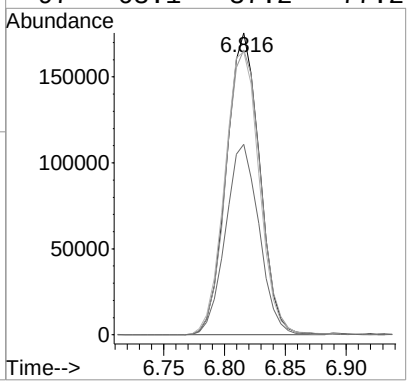




#54
Trichloroethene
Concen: 92.81 ppb
RT: 6.816 min Scan# 938
Delta R.T. 0.006 min
Lab File: P24383.D
Acq: 21 Feb 2019 8:58 pm

Tgt Ion:130 Resp: 333725

Ion	Ratio	Lower	Upper
130	100		
132	94.4	72.6	112.6
95	93.7	69.8	109.8
97	63.1	37.2	77.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24383.D
Acq On : 21 Feb 2019 8:58 pm
Operator : K.Ruest
Sample : R1901365-005|183 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 23 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24383.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.408	528	543	557	rBV	126791	323148	18.12%	3.001%
2	5.267	670	684	697	rBV3	160234	443199	24.86%	4.115%
3	5.408	697	707	721	rVB	349314	902862	50.63%	8.383%
4	5.792	761	770	782	rBV	228913	526283	29.51%	4.887%
5	6.487	875	884	899	rBV	578435	1180525	66.21%	10.962%
6	6.816	930	938	949	rBV	911055	1783109	100.00%	16.557%
7	8.297	1174	1181	1191	rBV	1029821	1693000	94.95%	15.720%
8	9.791	1420	1426	1438	rBV	958841	1366969	76.66%	12.693%
9	10.864	1597	1602	1608	rBV	859307	1061236	59.52%	9.854%
10	11.205	1650	1658	1661	rBV6	15571	30354	1.70%	0.282%
11	11.522	1707	1710	1713	rVB	16625	18704	1.05%	0.174%
12	11.839	1757	1762	1769	rVV	1150437	1421382	79.71%	13.198%
13	12.144	1806	1812	1819	rBV8	7629	18754	1.05%	0.174%

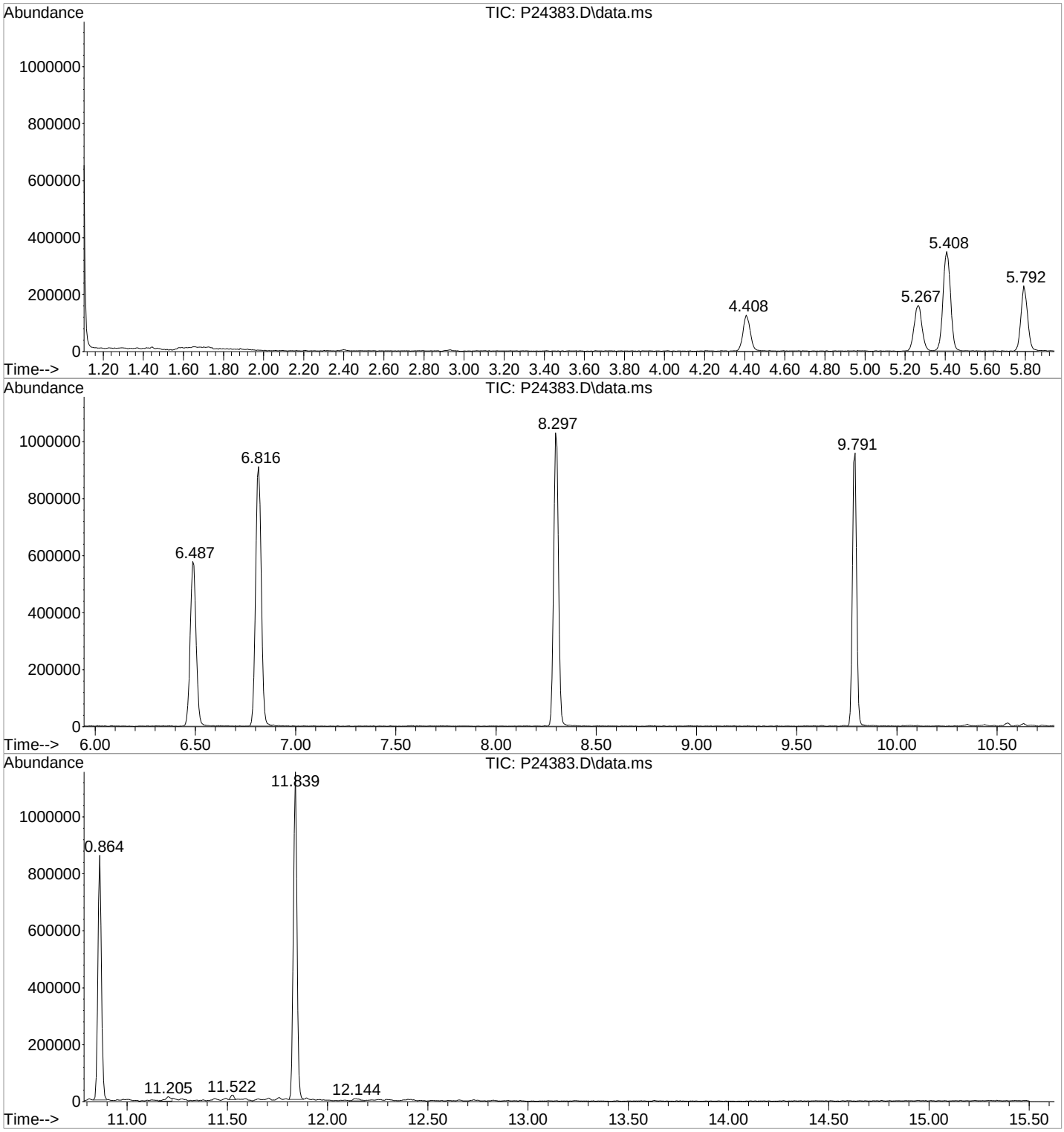
Sum of corrected areas: 10769525

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24383.D
Acq On : 21 Feb 2019 8:58 pm
Operator : K.Ruest
Sample : R1901365-005|183 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 23 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\\
Data File : P24383.D
Acq On : 21 Feb 2019 8:58 pmm
Operator : K.Ruestt
Sample : R1901365-005|183 Inst : MSVOA-122
Misc : DAY MED T44
ALS Vial : 23 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

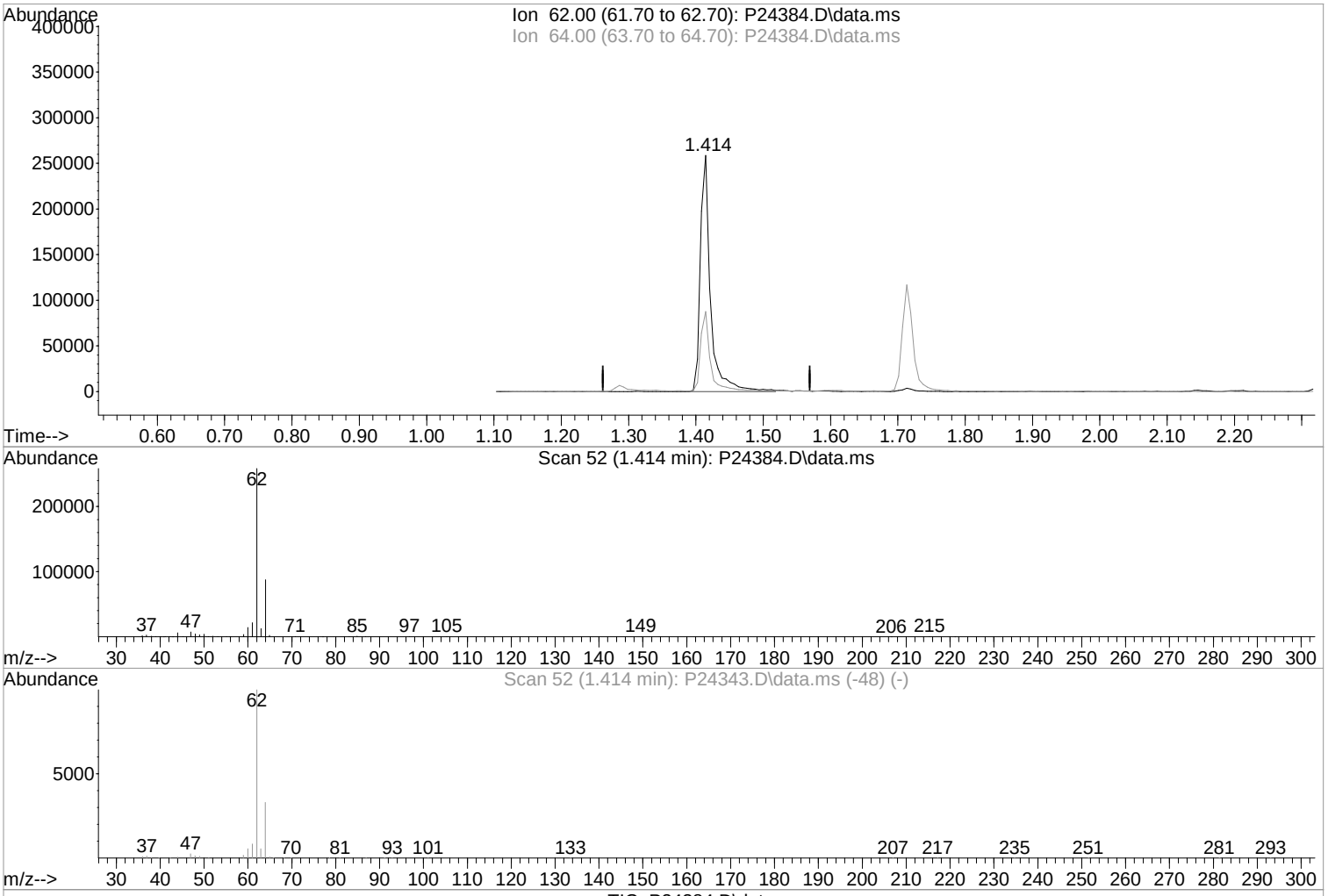
					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24384.D
Acq On : 21 Feb 2019 9:20 pm
Operator : K.Ruest
Sample : R1901421-001MS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 09:15:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24384.D\data.ms

(4) Vinyl Chloride (P)

1.414min (+0.006) 58.52 ppb m

response 273319

Ion	Exp%	Act%
62.00	100	100
64.00	33.20	33.86
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Peak not found.

02/22/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24384.D
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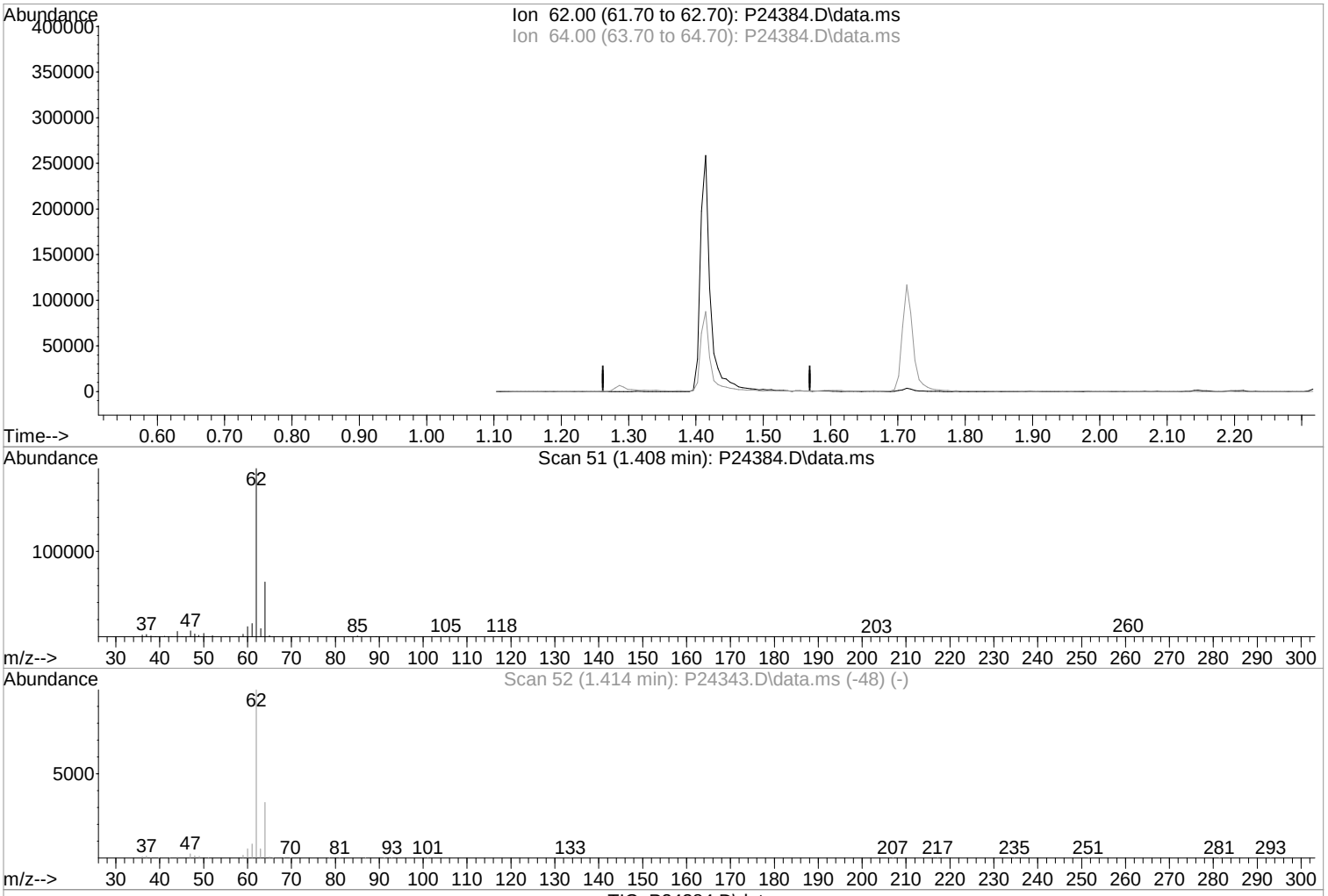
Operator : K.Ruest
Sample : R1901421-001MS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 09:15:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24384.D\data.ms

(4) Vinyl Chloride (P)

1.408min (-1.408) 0.00 ppb

response 0

Ion	Exp%	Act%
62.00	100	0.00
64.00	33.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24384.D
Acq On : 21 Feb 2019 9:20 pm
Operator : K.Ruest
Sample : R1901421-001MS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 15:18:34 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.401	168	321361	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.487	114	510221	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	449631	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	237929	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	136800	48.79	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.58%				
48) surr1,1,2-dichloroetha...	5.786	65	184407	51.85	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.70%				
65) SURR3,Toluene-d8	8.297	98	654798	49.23	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.46%				
70) SURR2,BFB	10.864	95	238885	50.15	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.30%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	199796	51.33	ppb		98
3) Chloromethane	1.335	50	273042	52.48	ppb		96
4) Vinyl Chloride	1.414	62	273319m	58.52	ppb		
5) Bromomethane	1.634	94	143439	51.19	ppb		99
6) Chloroethane	1.713	64	130240	46.07	ppb		95
7) Freon 21	1.866	67	311712	52.86	ppb		100
8) Trichlorofluoromethane	1.914	101	236658	52.23	ppb		97
9) Diethyl Ether	2.146	59	184485	53.24	ppb		98
10) Freon 123a	2.146	67	212038	56.44	ppb		99
11) Freon 123	2.201	83	267765	62.06	ppb		98
12) Acrolein	2.244	56	103311	116.66	ppb		89
13) 1,1-Diclethene	2.335	96	164996	55.04	ppb		98
14) Freon 113	2.341	101	151644	56.80	ppb		99
15) Acetone	2.378	43	99169	64.44	ppb		94
16) 2-Propanol	2.512	45	460418	1152.45	ppb		98
17) Iodomethane	2.463	142	228088	52.37	ppb		98
18) Carbon Disulfide	2.524	76	504864	56.21	ppb		98
19) Acetonitrile	2.622	40	95245	485.58	ppb		92
20) Allyl Chloride	2.664	76	105003	58.55	ppb		97
21) Methyl Acetate	2.689	43	218584	52.32	ppb		97
22) Methylene Chloride	2.780	84	188818	50.60	ppb		95
23) TBA	2.908	59	767506	1208.80	ppb		97
24) Acrylonitrile	3.030	53	585889	288.53	ppb		98
25) Methyl-t-Butyl Ether	3.085	73	628979	54.18	ppb		99
26) trans-1,2-Dichloroethene	3.073	96	182102	54.60	ppb		95
28) 1,1-Diclethane	3.566	63	351923	56.90	ppb		100
29) Vinyl Acetate	3.652	86	42623	55.83	ppb	#	84
30) DIPE	3.694	45	639047	57.09	ppb		99
31) 2-Chloro-1,3-Butadiene	3.688	53	273076	56.46	ppb		99
32) ETBE	4.219	59	573685	51.28	ppb		95
33) 2,2-Dichloropropane	4.396	77	247334	50.78	ppb		97
34) cis-1,2-Dichloroethene	4.402	96	213274	57.04	ppb		97
35) 2-Butanone	4.450	43	143261	55.39	ppb		99
36) Propionitrile	4.530	54	238436	283.40	ppb		97
37) Bromochloromethane	4.798	130	114452	49.31	ppb		95
38) Methacrylonitrile	4.792	67	117789	53.81	ppb		94
39) Tetrahydrofuran	4.883	42	97505	58.20	ppb		92
40) Chloroform	4.969	83	299662	53.98	ppb		98
41) 1,1,1-Trichloroethane	5.273	97	245530	56.81	ppb		97

Quantitation Report (QT Reviewed)

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Data File : P24384.D
Acq On : 21 Feb 2019 9:20 pm
Operator : K.Ruest
Sample : R1901421-001MS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 15:18:34 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.109	73	590718	55.67	ppb	98
44) Cyclohexane	5.359	41	166539	55.67	ppb	100
46) Carbontetrachloride	5.548	117	177327	52.18	ppb	98
47) 1,1-Dichloropropene	5.554	75	245022	56.21	ppb	98
49) Benzene	5.871	78	762354	52.31	ppb	98
50) 1,2-Dichloroethane	5.907	62	245663	52.65	ppb	96
51) Iso-Butyl Alcohol	5.877	43	325661	1065.93	ppb	99
52) n-Heptane	6.359	43	221202	49.81	ppb	100
53) 1-Butanol	6.834	56	553261	2743.72	ppb	99
54) Trichloroethene	6.810	130	184361	51.66	ppb	93
55) Methylcyclohexane	7.054	55	248987	55.29	ppb	99
56) 1,2-Diclpropane	7.090	63	204688	52.85	ppb	97
57) Dibromomethane	7.230	93	111124	50.69	ppb	97
58) 1,4-Dioxane	7.291	88	86826	1256.64	ppb	93
59) Methyl Methacrylate	7.316	69	195414	56.47	ppb	95
60) Bromodichloromethane	7.456	83	198225	48.64	ppb	98
61) 2-Nitropropane	7.736	41	82703	102.23	ppb	97
63) cis-1,3-Dichloropropene	7.998	75	298954	51.89	ppb	97
64) 4-Methyl-2-pentanone	8.206	43	271448	55.24	ppb	97
66) Toluene	8.370	91	815460	54.03	ppb	99
67) trans-1,3-Dichloropropene	8.639	75	264238	52.38	ppb	98
68) Ethyl Methacrylate	8.779	69	326306	56.16	ppb	97
69) 1,1,2-Trichloroethane	8.828	97	175003	49.49	ppb	97
72) Tetrachloroethene	8.962	164	138173	51.32	ppb	91
73) 2-Hexanone	9.114	43	198535	54.78	ppb	93
74) 1,3-Dichloropropane	8.998	76	320242	49.45	ppb	98
75) Dibromochloromethane	9.224	129	141933	46.99	ppb	99
76) N-Butyl Acetate	9.273	43	368278	55.66	ppb	96
77) 1,2-Dibromoethane	9.321	107	174983	49.55	ppb	99
78) Chlorobenzene	9.815	112	494410	51.37	ppb	99
79) 3-CBTF	9.834	180	250277	53.33	ppb	98
80) 4-CBTF	9.888	180	231660	54.61	ppb	97
81) 1,1,1,2-Tetrachloroethane	9.901	131	155910	50.05	ppb	98
82) Ethylbenzene	9.937	106	274513	52.89	ppb	97
83) (m+p)Xylene	10.047	106	673949	106.21	ppb	100
84) o-Xylene	10.407	106	334529	53.58	ppb	92
85) Styrene	10.419	104	547558	54.12	ppb	100
87) Bromoform	10.571	173	89750	44.67	ppb	98
88) 2-CBTF	10.650	180	250643	51.32	ppb	98
89) Isopropylbenzene	10.742	105	835900	53.41	ppb	100
90) Cyclohexanone	10.797	55	261504	263.62	ppb	100
91) trans-1,4-Dichloro-2-B...	11.047	53	69317	53.52	ppb	91
92) 1,1,2,2-Tetrachloroethane	10.998	83	271097	51.93	ppb	98
93) Bromobenzene	10.986	156	201437	47.84	ppb	90
94) 1,2,3-Trichloropropane	11.028	110	83460	50.39	ppb	97
95) n-Propylbenzene	11.095	91	985316	54.96	ppb	97
96) 2-Chlorotoluene	11.156	91	583300	51.63	ppb	98
97) 3-Chlorotoluene	11.211	91	597701	54.08	ppb	99
98) 4-Chlorotoluene	11.248	91	650063	51.59	ppb	98
99) 1,3,5-Trimethylbenzene	11.248	105	685246	52.76	ppb	99
100) tert-Butylbenzene	11.522	119	600803	53.18	ppb	100
101) 1,2,4-Trimethylbenzene	11.559	105	697964	51.95	ppb	99
102) 3,4-DCBTF	11.620	214	199093	49.44	ppb	96
103) sec-Butylbenzene	11.705	105	895778	54.69	ppb	99
104) p-Isopropyltoluene	11.827	119	738709	54.30	ppb	99
105) 1,3-Dclbenz	11.784	146	378829	49.41	ppb	98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24384.D
Acq On : 21 Feb 2019 9:20 pm
Operator : K.Ruest
Sample : R1901421-001MS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 15:18:34 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.858	146	375835	46.45	ppb	98
107) 2,4-DCBTF	11.912	214	181902	49.32	ppb	98
108) 2,5-DCBTF	11.949	214	205535	49.43	ppb	99
109) n-Butylbenzene	12.156	91	693712	58.18	ppb	100
110) 1,2-Dclbenz	12.156	146	379080	48.33	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.784	157	59849	46.53	ppb	89
112) Trielution Dichlorotol...	12.900	125	1052439	163.13	ppb	98
113) 1,3,5 Trichlorobenzene	12.955	180	286126	50.68	ppb	99
114) Coelution Dichlorotoluene	13.229	125	779630	109.55	ppb	96
115) 1,2,4-Tcbenzene	13.436	180	288498	52.44	ppb	94
116) Hexachlorobt	13.577	225	117374	50.60	ppb	97
117) Naphthalen	13.625	128	914603	47.11	ppb	98
118) 1,2,3-Tclbenzene	13.814	180	294429	51.89	ppb	98
119) 2,4,5-Trichlorotolene	14.400	159	141670	49.80	ppb	97
120) 2,3,6-Trichlorotoluene	14.485	159	133395	42.15	ppb	95

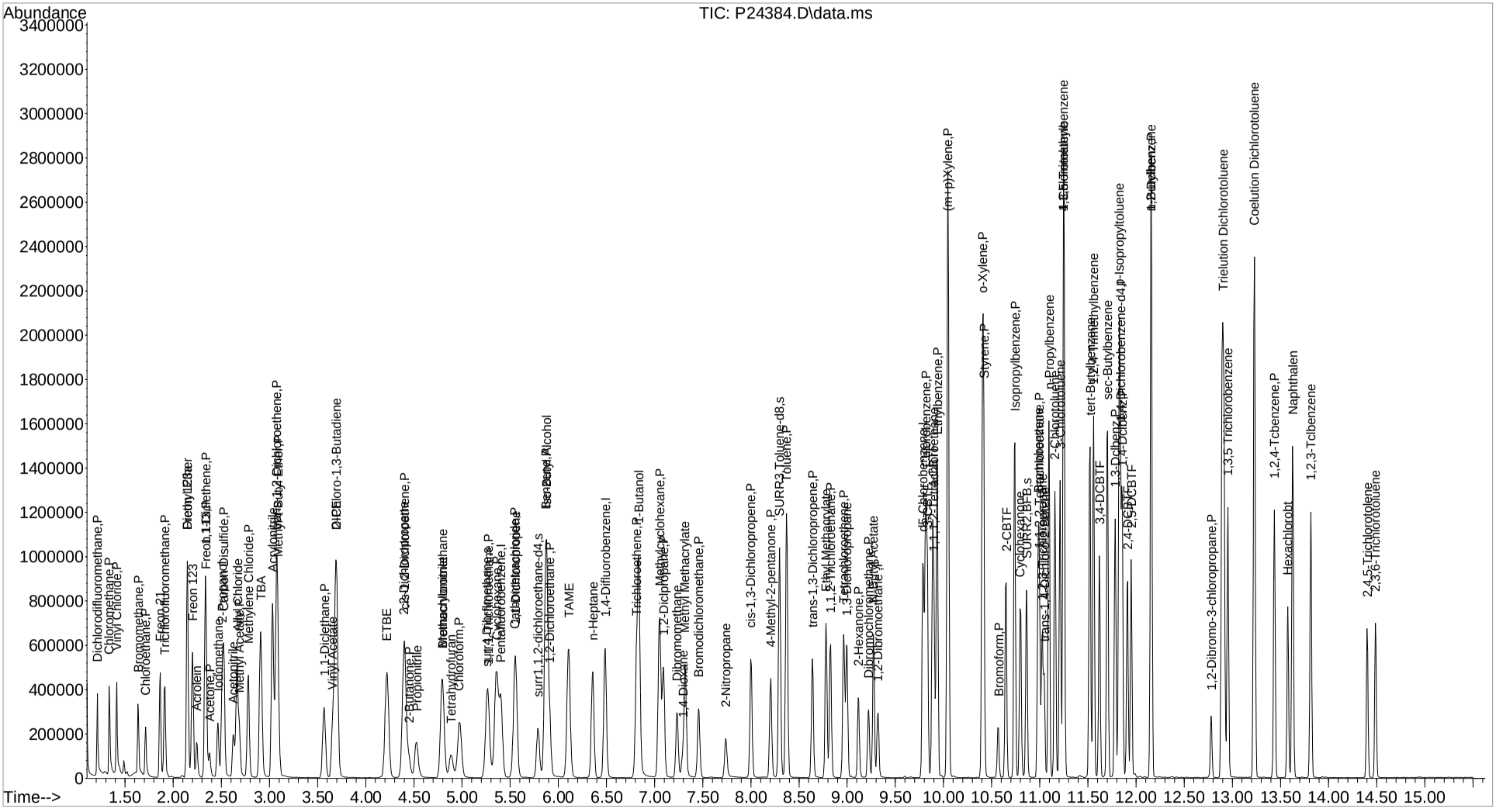
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24384.D
Acq On : 21 Feb 2019 9:20 pm
Operator : K.Ruest
Sample : R1901421-001MS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 15:18:34 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24385.D
Acq On : 21 Feb 2019 9:41 pm
Operator : K.Ruest
Sample : R1901421-001DMS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 15:20:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.407	168	318171	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	507700	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	438798	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	225821	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.261	113	135414	48.54	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.08%				
48) surr1,1,2-dichloroetha...	5.792	65	179948	50.85	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.70%				
65) SURR3,Toluene-d8	8.297	98	644693	48.72	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.44%				
70) SURR2,BFB	10.864	95	231982	48.94	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.88%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.219	85	183968	47.74	ppb		99
3) Chloromethane	1.341	50	255472	49.60	ppb		99
4) Vinyl Chloride	1.420	62	248643	53.77	ppb		99
5) Bromomethane	1.640	94	133856	48.20	ppb		97
6) Chloroethane	1.719	64	116792	41.73	ppb		89
7) Freon 21	1.872	67	298948	51.20	ppb		100
8) Trichlorofluoromethane	1.914	101	227877	50.79	ppb		96
9) Diethyl Ether	2.152	59	178652	52.07	ppb		98
10) Freon 123a	2.152	67	199263	53.57	ppb		98
11) Freon 123	2.207	83	251246	58.81	ppb		98
12) Acrolein	2.250	56	99071	112.99	ppb		100
13) 1,1-Diclethene	2.341	96	156427	52.71	ppb		94
14) Freon 113	2.347	101	142795	54.02	ppb		99
15) Acetone	2.384	43	94655	62.12	ppb		92
16) 2-Propanol	2.512	45	450567	1139.10	ppb		100
17) Iodomethane	2.469	142	217820	50.63	ppb		99
18) Carbon Disulfide	2.530	76	478371	53.80	ppb		98
19) Acetonitrile	2.628	40	91474	471.03	ppb		99
20) Allyl Chloride	2.664	76	97597	54.96	ppb		94
21) Methyl Acetate	2.689	43	209870	50.74	ppb		100
22) Methylene Chloride	2.786	84	177292	47.99	ppb		96
23) TBA	2.914	59	750497	1193.86	ppb		98
24) Acrylonitrile	3.036	53	562576	279.83	ppb		99
25) Methyl-t-Butyl Ether	3.085	73	616205	53.61	ppb		98
26) trans-1,2-Dichloroethene	3.079	96	166087	50.30	ppb		94
28) 1,1-Diclethane	3.572	63	333503	54.46	ppb		99
29) Vinyl Acetate	3.664	86	42526	56.26	ppb	#	86
30) DIPE	3.701	45	610462	55.09	ppb		98
31) 2-Chloro-1,3-Butadiene	3.694	53	257591	53.79	ppb		99
32) ETBE	4.225	59	553338	49.96	ppb		96
33) 2,2-Dichloropropane	4.402	77	227378	47.15	ppb		99
34) cis-1,2-Dichloroethene	4.408	96	203494	54.97	ppb		94
35) 2-Butanone	4.450	43	139650	54.53	ppb		92
36) Propionitrile	4.530	54	238405	286.21	ppb		98
37) Bromochloromethane	4.804	130	113271	49.29	ppb		90
38) Methacrylonitrile	4.804	67	112186	51.76	ppb		93
39) Tetrahydrofuran	4.895	42	93553	56.40	ppb		95
40) Chloroform	4.981	83	289733	52.71	ppb		98
41) 1,1,1-Trichloroethane	5.279	97	229650	53.66	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24385.D
Acq On : 21 Feb 2019 9:41 pm
Operator : K.Ruest
Sample : R1901421-001DMS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 15:20:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.109	73	576635	54.89	ppb		98
44) Cyclohexane	5.365	41	154457	51.89	ppb		95
46) Carbontetrachloride	5.554	117	174826	51.70	ppb		97
47) 1,1-Dichloropropene	5.560	75	233439	53.82	ppb		95
49) Benzene	5.871	78	723162	49.87	ppb		99
50) 1,2-Dichloroethane	5.907	62	237470	51.14	ppb		96
51) Iso-Butyl Alcohol	5.883	43	313238	1030.36	ppb		97
52) n-Heptane	6.359	43	207500	46.96	ppb		98
53) 1-Butanol	6.840	56	548136	2731.80	ppb		99
54) Trichloroethene	6.810	130	174823	49.23	ppb		97
55) Methylcyclohexane	7.054	55	228868	51.08	ppb		97
56) 1,2-Diclpropane	7.090	63	195207	50.65	ppb		98
57) Dibromomethane	7.230	93	110600	50.70	ppb		89
58) 1,4-Dioxane	7.291	88	86790	1262.35	ppb		95
59) Methyl Methacrylate	7.322	69	185591	53.90	ppb		100
60) Bromodichloromethane	7.456	83	201617	49.71	ppb		98
61) 2-Nitropropane	7.742	41	86125	106.99	ppb		92
63) cis-1,3-Dichloropropene	8.005	75	286724	50.02	ppb		98
64) 4-Methyl-2-pentanone	8.206	43	268983	55.01	ppb		97
66) Toluene	8.370	91	768633	51.18	ppb		100
67) trans-1,3-Dichloropropene	8.639	75	256537	51.10	ppb		98
68) Ethyl Methacrylate	8.779	69	317012	54.83	ppb		98
69) 1,1,2-Trichloroethane	8.828	97	165808	47.13	ppb		98
72) Tetrachloroethene	8.962	164	132978	50.61	ppb		93
73) 2-Hexanone	9.114	43	193341	54.67	ppb		98
74) 1,3-Dichloropropane	8.998	76	311869	49.35	ppb		99
75) Dibromochloromethane	9.224	129	140811	47.77	ppb		98
76) N-Butyl Acetate	9.273	43	349121	54.07	ppb		97
77) 1,2-Dibromoethane	9.321	107	167703	48.66	ppb		95
78) Chlorobenzene	9.815	112	466884	49.71	ppb		97
79) 3-CBTF	9.833	180	244033	53.29	ppb		98
80) 4-CBTF	9.888	180	217880	52.63	ppb		97
81) 1,1,1,2-Tetrachloroethane	9.901	131	152542	50.17	ppb		99
82) Ethylbenzene	9.937	106	261856	51.70	ppb		97
83) (m+p)Xylene	10.047	106	641425	103.58	ppb		99
84) o-Xylene	10.407	106	316112	51.88	ppb		92
85) Styrene	10.419	104	520447	52.71	ppb		98
87) Bromoform	10.565	173	88850	46.59	ppb		100
88) 2-CBTF	10.650	180	239611	51.69	ppb		99
89) Isopropylbenzene	10.742	105	789081	53.12	ppb		99
90) Cyclohexanone	10.797	55	256630	272.58	ppb		100
91) trans-1,4-Dichloro-2-B...	11.047	53	68086	55.39	ppb		97
92) 1,1,2,2-Tetrachloroethane	10.998	83	260664	52.61	ppb		96
93) Bromobenzene	10.986	156	194599	48.70	ppb		92
94) 1,2,3-Trichloropropane	11.028	110	81295	51.72	ppb	#	90
95) n-Propylbenzene	11.095	91	931836	54.76	ppb		98
96) 2-Chlorotoluene	11.156	91	558705	52.10	ppb		98
97) 3-Chlorotoluene	11.211	91	565998	53.95	ppb		99
98) 4-Chlorotoluene	11.248	91	620727	51.91	ppb		98
99) 1,3,5-Trimethylbenzene	11.248	105	653949	53.05	ppb		99
100) tert-Butylbenzene	11.522	119	572133	53.36	ppb		97
101) 1,2,4-Trimethylbenzene	11.559	105	666354	52.26	ppb		99
102) 3,4-DCBTF	11.620	214	184661	48.32	ppb		97
103) sec-Butylbenzene	11.705	105	830880	53.45	ppb		99
104) p-Isopropyltoluene	11.827	119	696023	53.91	ppb		99
105) 1,3-Dclbenz	11.784	146	367249	50.47	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24385.D
Acq On : 21 Feb 2019 9:41 pm
Operator : K.Ruest
Sample : R1901421-001DMS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 15:20:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	365905	47.65	ppb	99
107) 2,4-DCBTF	11.912	214	170582	48.74	ppb	97
108) 2,5-DCBTF	11.949	214	189516	48.02	ppb	95
109) n-Butylbenzene	12.156	91	663197	58.60	ppb	99
110) 1,2-Dclbenz	12.156	146	367875	49.42	ppb	97
111) 1,2-Dibromo-3-chloropr...	12.784	157	59253	48.53	ppb	86
112) Trielution Dichlorotol...	12.900	125	1015349	165.82	ppb	98
113) 1,3,5 Trichlorobenzene	12.955	180	275887	51.49	ppb	99
114) Coelution Dichlorotoluene	13.229	125	743343	110.05	ppb	97
115) 1,2,4-Tcbenzene	13.436	180	281441	53.90	ppb	97
116) Hexachlorobt	13.577	225	112199	50.96	ppb	97
117) Naphthalen	13.625	128	912421	49.54	ppb	99
118) 1,2,3-Tclbenzene	13.814	180	284813	52.89	ppb	97
119) 2,4,5-Trichlorotolene	14.400	159	136683	50.46	ppb	97
120) 2,3,6-Trichlorotoluene	14.485	159	127965	42.53	ppb	93

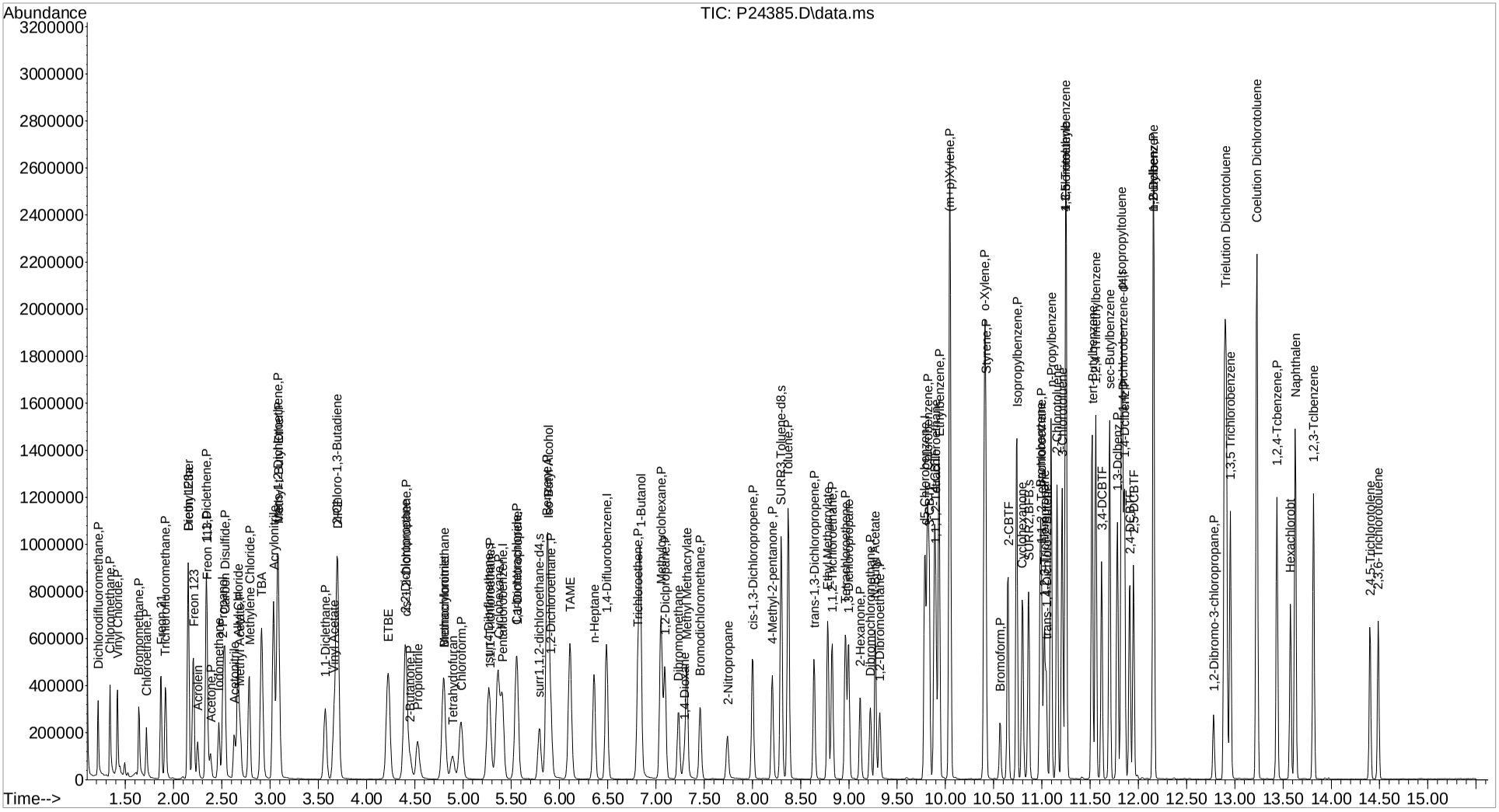
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24385.D
Acq On : 21 Feb 2019 9:41 pm
Operator : K.Ruest
Sample : R1901421-001DMS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 15:20:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

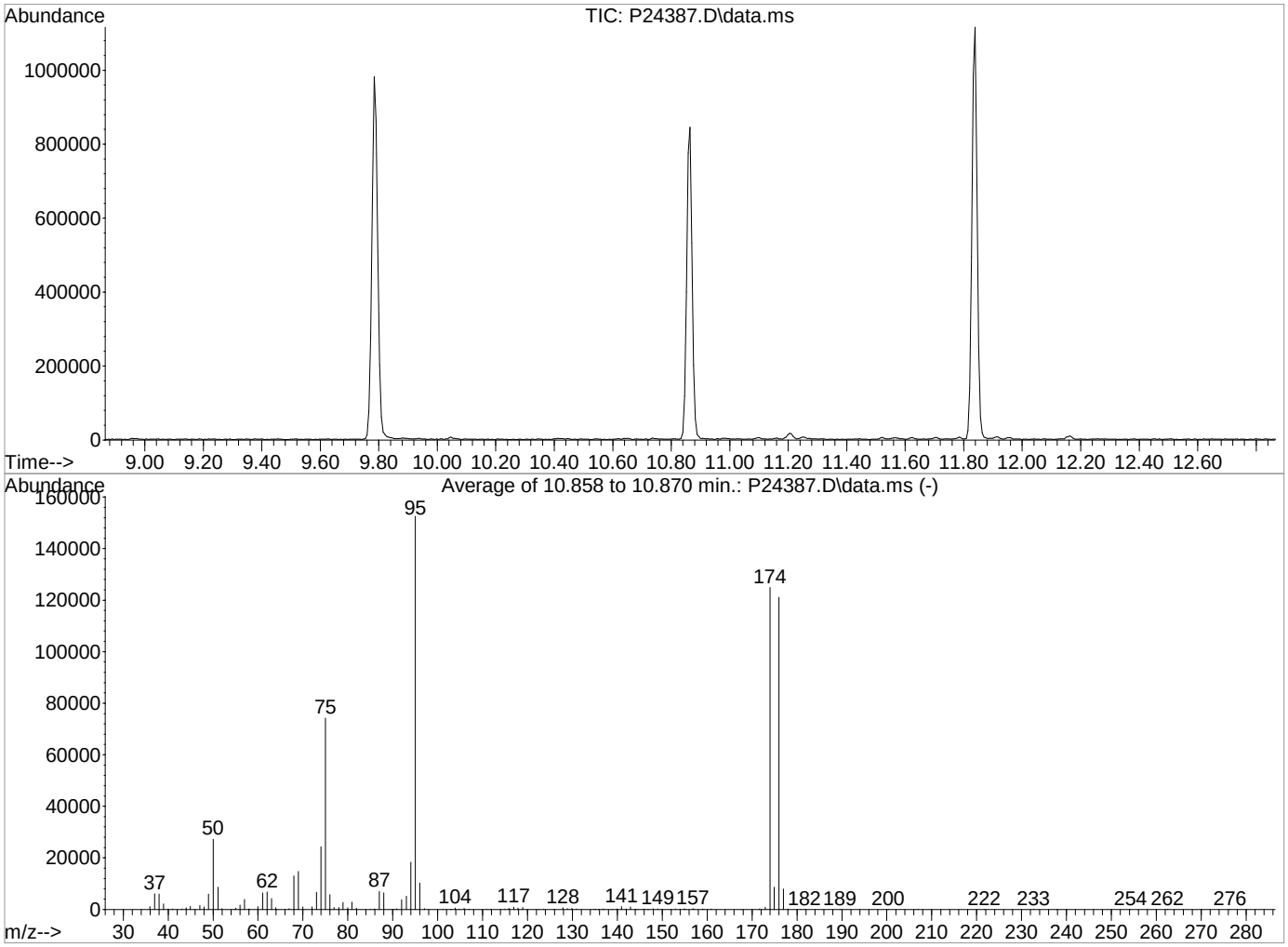


BFB

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24387.D
Acq On : 21 Feb 2019 10:25 pm
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File: INTP90.P

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Feb 21 11:43:56 2019



AutoFind: Scans 1601, 1602, 1603; Background Corrected with Scan 1594

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.9	27240	PASS
75	95	30	60	48.6	74205	PASS
95	95	100	100	100.0	152576	PASS
96	95	5	9	6.7	10286	PASS
173	174	0.00	2	0.7	862	PASS
174	95	50	120	81.9	124973	PASS
175	174	5	9	6.9	8640	PASS
176	174	95	101	96.9	121091	PASS
177	176	5	9	6.6	7957	PASS

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24388.D
Acq On : 21 Feb 2019 10:47 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 22 09:18:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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	Pentafluorobenzene	1.0000	1.0000	0.0	96	0.01
2	P	Dichlorodifluoromethane	0.6056	0.7256	-19.8	104	0.01
3	P	Chloromethane	0.8095	0.9127	-12.7	108	0.01
4	P	Vinyl Chloride	0.7267	0.8847	-21.7#	106	0.01
5	P	Bromomethane	0.5125	0.4564	-4.7 ~~10.9~~	105	0.00
6	P	Chloroethane	0.4398	0.4725	-7.4	105	0.01
7		Freon 21	0.9175	1.0641	-16.0	102	0.01
8	P	Trichlorofluoromethane	0.7050	0.7901	-12.1	106	0.01
9		Diethyl Ether	0.5392	0.5750	-6.6	99	0.01
10		Freon 123a	0.5846	0.6786	-16.1	105	0.01
11		Freon 123	0.6713	0.7738	-15.3	107	0.01
12		Acrolein	0.1378	0.1329	3.6	92	0.01
13	P	1,1-Diclethene	0.4664	0.5309	-13.8	105	0.01
14	P	Freon 113	0.4154	0.4742	-14.2	111	0.01
15	P	Acetone	0.2394	0.2927	-22.3#	108	0.01
16		2-Propanol	0.0622	0.0714	-14.8	109	0.00
17		Iodomethane	0.5130	0.6488	3.6 ~~-26.5#~~	89	0.02
18	P	Carbon Disulfide	1.3974	1.4528	-4.0	98	0.01
19		Acetonitrile	0.0305	0.0537	-76.1#	136	0.02
20		Allyl Chloride	0.2790	0.2705	3.0	87	0.01
21	P	Methyl Acetate	0.6500	0.7449	-14.6	101	0.01
22	P	Methylene Chloride	0.5806	0.6173	-6.3	101	0.01
23		TBA	0.0988	0.1142	-15.6	108	0.00
24		Acrylonitrile	0.3159	0.3563	-12.8	101	0.00
25	P	Methyl-t-Butyl Ether	1.8063	1.9364	-7.2	99	0.01
26	P	trans-1,2-Dichloroethene	0.5189	0.5677	-9.4	103	0.01
27		Halothane	0.0000	0.0000	0.0	0#	-4.08#
28	P	1,1-Diclethane	0.9623	1.1200	-16.4	104	0.01
29		Vinyl Acetate	0.1188	0.0961	19.1	78	0.01
30		DIPE	1.7415	2.0018	-14.9	103	0.01
31		2-Chloro-1,3-Butadiene	0.7526	0.8142	-8.2	102	0.00
32		ETBE	1.7407	1.9612	-12.7	103	0.01
33		2,2-Dichloropropane	0.7578	0.7466	1.5	96	0.00
34	P	cis-1,2-Dichloroethene	0.5817	0.6334	-8.9	102	0.01
35	P	2-Butanone	0.4024	0.4386	-9.0	105	0.01
36		Propionitrile	0.1309	0.1459	-11.5	98	0.00
37		Bromochloromethane	0.3611	0.3846	-6.5	99	0.00
38		Methacrylonitrile	0.3406	0.3672	-7.8	99	0.01
39		Tetrahydrofuran	0.2607	0.2804	-7.6	98	0.02
40	P	Chloroform	0.8638	0.9476	-9.7	102	0.01
41	P	1,1,1-Trichloroethane	0.6725	0.7823	-16.3	106	0.00
42		TAME	1.6509	1.8637	-12.9	100	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	98	0.00
44	P	Cyclohexane	0.2931	0.3344	-14.1	107	0.00
45	s	surr4,Dibrflmethane	0.2748	0.2777	-1.1	96	0.01
46	P	Carbontetrachloride	0.3330	0.3690	-10.8	104	0.00
47		1,1-Dichloropropene	0.4272	0.4851	-13.6	109	0.00
48	s	surr1,1,2-dichloroethane-d4	0.3485	0.3731	-7.1	102	0.00
49	P	Benzene	1.4282	1.5463	-8.3	103	0.01
50	P	1,2-Dichloroethane	0.4573	0.4944	-8.1	100	0.01
51		Iso-Butyl Alcohol	0.0299	0.0323	-8.0	101	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24388.D
Acq On : 21 Feb 2019 10:47 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 22 09:18:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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)
52		n-Heptane	0.4352	0.4578	-5.2	107	0.00
53		1-Butanol	0.0198	0.0221	-11.6	100	0.00
54	P	Trichloroethene	0.3497	0.3840	-9.8	102	0.00
55	P	Methylcyclohexane	0.4413	0.5023	-13.8	106	0.00
56	P	1,2-Diclpropane	0.3796	0.4163	-9.7	106	0.00
57		Dibromomethane	0.2148	0.2341	-9.0	102	0.00
58		1,4-Dioxane	0.0068	0.0083	-22.1#	119	-0.05
59		Methyl Methacrylate	0.3391	0.3674	-8.3	101	0.00
60	P	Bromodichloromethane	0.3994	0.4208	-5.4	100	0.00
61		2-Nitropropane	0.0793	0.0801	-1.0	99	0.00
62		2-Chloroethylvinyl Ether	0.1132	0.1313 -8.9	~~-16.0~~	101	0.00
63	P	cis-1,3-Dichloropropene	0.5646	0.5994	-6.2	96	0.00
64	P	4-Methyl-2-pentanone	0.4816	0.5348	-11.0	106	0.00
65	s	SURR3,Toluene-d8	1.3033	1.3119	-0.7	98	0.00
66	P	Toluene	1.4790	1.6301	-10.2	104	0.00
67	P	trans-1,3-Dichloropropene	0.4944	0.5365	-8.5	96	0.00
68		Ethyl Methacrylate	0.5694	0.6384	-12.1	100	0.00
69	P	1,1,2-Trichloroethane	0.3465	0.3609	-4.2	100	0.00
70	s	SURR2,BFB	0.4668	0.4664	0.1	98	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	96	0.00
72	P	Tetrachloroethene	0.2994	0.3214	-7.3	105	0.00
73	P	2-Hexanone	0.4030	0.4442	-10.2	106	0.00
74		1,3-Dichloropropane	0.7201	0.7432	-3.2	98	0.00
75	P	Dibromochloromethane	0.3359	0.3388	-0.9	95	0.00
76		N-Butyl Acetate	0.7358	0.8412	-14.3	102	0.00
77	P	1,2-Dibromoethane	0.3927	0.4023	-2.4	95	0.00
78	P	Chlorobenzene	1.0703	1.1369	-6.2	103	0.00
79		3-CBTF	0.5218	0.5577	-6.9	98	0.00
80		4-CBTF	0.4717	0.5050	-7.1	98	0.00
81		1,1,1,2-Tetrachloroethane	0.3464	0.3559	-2.7	98	0.00
82	P	Ethylbenzene	0.5771	0.6258	-8.4	105	0.00
83	P	(m+p)Xylene	0.7057	0.7702	-9.1	106	0.00
84	P	o-Xylene	0.6943	0.7650	-10.2	106	0.00
85	P	Styrene	1.1252	1.2449	-10.6	101	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	94	0.00
87	P	Bromoform	0.4222	0.4262	-0.9	90	0.00
88		2-CBTF	1.0263	1.0789	-5.1	97	0.00
89	P	Isopropylbenzene	3.2888	3.7923	-15.3	107	0.00
90		Cyclohexanone	0.2085	0.2182	-4.7	91	-0.01
91		trans-1,4-Dichloro-2-Butene	0.2722	0.2808	-3.2	95	0.00
92	P	1,1,2,2-Tetrachloroethane	1.0971	1.1539	-5.2	95	0.00
93		Bromobenzene	0.8848	0.9257	-4.6	100	0.00
94		1,2,3-Trichloropropane	0.3480	0.3920	-12.6	99	0.00
95		n-Propylbenzene	3.7678	4.4251	-17.4	109	0.00
96		2-Chlorotoluene	2.3743	2.6647	-12.2	105	0.00
97		3-Chlorotoluene	2.3228	2.6030	-12.1	100	0.00
98		4-Chlorotoluene	2.6479	2.9714	-12.2	106	0.00
99		1,3,5-Trimethylbenzene	2.7293	3.0713	-12.5	106	0.00
100		tert-Butylbenzene	2.3741	2.7340	-15.2	106	0.00
101		1,2,4-Trimethylbenzene	2.8232	3.1183	-10.5	104	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24388.D
Acq On : 21 Feb 2019 10:47 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 22 09:18:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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)
102		3,4-DCBTF	0.8462	0.8806	-4.1	96	0.00
103		sec-Butylbenzene	3.4421	4.0796	-18.5	109	0.00
104		p-Isopropyltoluene	2.8587	3.3184	-16.1	107	0.00
105	P	1,3-Dclbenz	1.6112	1.7499	-8.6	101	0.00
106	P	1,4-Dclbenz	1.7003	1.7674	-3.9	100	0.00
107		2,4-DCBTF	0.7750	0.8012	-3.4	95	0.00
108		2,5-DCBTF	0.8739	0.8872	-1.5	96	0.00
109		n-Butylbenzene	2.5058	3.0562	-22.0#	107	0.00
110	P	1,2-Dclbenz	1.6482	1.7642	-7.0	100	0.00
111	P	1,2-Dibromo-3-chloropropane	0.2703	0.2779	-2.8	90	0.00
112		Trielution Dichlorotoluene	1.3558	1.5717	-15.9	104	0.00
113		1,3,5 Trichlorobenzene	1.1864	1.2945	-9.1	105	0.00
114		Coelution Dichlorotoluene	1.4956	1.7395	-16.3	105	0.00
115	P	1,2,4-Tcbenzene	1.1561	1.3399	-15.9	106	0.00
116		Hexachlorobt	0.4875	0.5496	-12.7	121	0.00
117		Naphthalen	3.3933	4.3133	~~-27.1#~~ -5.9	100	0.00
118		1,2,3-Tclbenzene	1.1924	1.3789	-15.6	105	0.00
119		2,4,5-Trichlorotolene	0.5335	0.6047	~~-13.3~~ -0.8	91	0.00
120		2,3,6-Trichlorotoluene	0.6055	0.6779	~~-12.0~~ 1.3	91	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24388.D
Acq On : 21 Feb 2019 10:47 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 22 09:18:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.407	168	318449	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	509393	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	448640	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	225441	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.267	113	141463	50.54	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.08%				
48) surr1,1,2-dichloroetha...	5.792	65	190037	53.52	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 107.04%				
65) SURR3,Toluene-d8	8.297	98	668294	50.33	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.66%				
70) SURR2,BFB	10.864	95	237573	49.96	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.92%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.219	85	231072	59.91	ppb		98
3) Chloromethane	1.341	50	290636	56.37	ppb		98
4) Vinyl Chloride	1.420	62	281725	60.87	ppb		97
5) Bromomethane	1.646	94	145352	52.36	ppb		98
6) Chloroethane	1.725	64	150461	53.71	ppb		94
7) Freon 21	1.872	67	338851	57.99	ppb		98
8) Trichlorofluoromethane	1.920	101	251596	56.03	ppb		98
9) Diethyl Ether	2.152	59	183102	53.32	ppb		96
10) Freon 123a	2.152	67	216089	58.04	ppb		100
11) Freon 123	2.207	83	246409	57.63	ppb		98
12) Acrolein	2.250	56	211622	241.15	ppb		98
13) 1,1-Diclethene	2.341	96	169059	56.91	ppb		96
14) Freon 113	2.347	101	151020	57.09	ppb		94
15) Acetone	2.384	43	93201	61.11	ppb		98
16) 2-Propanol	2.512	45	454694	1148.53	ppb		98
17) Iodomethane	2.475	142	206595	48.14	ppb		99
18) Carbon Disulfide	2.536	76	462649	51.98	ppb		99
19) Acetonitrile	2.634	40	85459	439.67	ppb		99
20) Allyl Chloride	2.670	76	86146	48.47	ppb		93
21) Methyl Acetate	2.695	43	237225	57.30	ppb		98
22) Methylene Chloride	2.786	84	196584	53.16	ppb		99
23) TBA	2.914	59	727434	1156.17	ppb		95
24) Acrylonitrile	3.036	53	567260	281.91	ppb		97
25) Methyl-t-Butyl Ether	3.091	73	616632	53.60	ppb		100
26) trans-1,2-Dichloroethene	3.079	96	180771	54.70	ppb		97
28) 1,1-Diclethane	3.572	63	356653	58.19	ppb		99
29) Vinyl Acetate	3.664	86	30600	40.44	ppb	#	80
30) DIPE	3.700	45	637467	57.47	ppb		98
31) 2-Chloro-1,3-Butadiene	3.694	53	259272	54.09	ppb		97
32) ETBE	4.225	59	624544	56.34	ppb		93
33) 2,2-Dichloropropane	4.402	77	237755	49.26	ppb		98
34) cis-1,2-Dichloroethene	4.414	96	201699	54.44	ppb		92
35) 2-Butanone	4.450	43	139664	54.49	ppb		94
36) Propionitrile	4.530	54	232376	278.72	ppb		99
37) Bromochloromethane	4.798	130	122468	53.24	ppb		98
38) Methacrylonitrile	4.804	67	116931	53.90	ppb		93
39) Tetrahydrofuran	4.895	42	89279	53.78	ppb		92
40) Chloroform	4.981	83	301776	54.85	ppb		94
41) 1,1,1-Trichloroethane	5.273	97	249118	58.16	ppb		97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24388.D
Acq On : 21 Feb 2019 10:47 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 22 09:18:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.109	73	593479	56.44	ppb	98
44) Cyclohexane	5.365	41	170359	57.04	ppb	98
46) Carbontetrachloride	5.548	117	187958	55.40	ppb	100
47) 1,1-Dichloropropene	5.560	75	247124	56.79	ppb	98
49) Benzene	5.877	78	787675	54.14	ppb	98
50) 1,2-Dichloroethane	5.913	62	251848	54.06	ppb	97
51) Iso-Butyl Alcohol	5.883	43	328657	1077.48	ppb	98
52) n-Heptane	6.359	43	233217	52.60	ppb	95
53) 1-Butanol	6.840	56	563149	2797.30	ppb	99
54) Trichloroethene	6.816	130	195622	54.91	ppb	95
55) Methylcyclohexane	7.054	55	255892	56.92	ppb	94
56) 1,2-Diclpropane	7.096	63	212082	54.85	ppb	99
57) Dibromomethane	7.236	93	119225	54.47	ppb	95
58) 1,4-Dioxane	7.291	88	84276	1221.71	ppb	91
59) Methyl Methacrylate	7.322	69	187161	54.17	ppb	94
60) Bromodichloromethane	7.462	83	214329	52.67	ppb	97
61) 2-Nitropropane	7.736	41	81598	101.02	ppb	95
62) 2-Chloroethylvinyl Ether	7.870	63	66883	54.43	ppb	91
63) cis-1,3-Dichloropropene	8.005	75	305347	53.09	ppb	98
64) 4-Methyl-2-pentanone	8.206	43	272404	55.52	ppb	95
66) Toluene	8.370	91	830346	55.11	ppb	99
67) trans-1,3-Dichloropropene	8.639	75	273304	54.26	ppb	98
68) Ethyl Methacrylate	8.779	69	325183	56.05	ppb	98
69) 1,1,2-Trichloroethane	8.828	97	183841	52.08	ppb	97
72) Tetrachloroethene	8.968	164	144200	53.68	ppb	97
73) 2-Hexanone	9.114	43	199305	55.12	ppb	97
74) 1,3-Dichloropropane	8.998	76	333448	51.60	ppb	98
75) Dibromochloromethane	9.224	129	152000	50.44	ppb	97
76) N-Butyl Acetate	9.273	43	377404	57.16	ppb	97
77) 1,2-Dibromoethane	9.321	107	180484	51.22	ppb	96
78) Chlorobenzene	9.815	112	510058	53.11	ppb	98
79) 3-CBTF	9.833	180	250192	53.43	ppb	98
80) 4-CBTF	9.888	180	226554	53.52	ppb	95
81) 1,1,1,2-Tetrachloroethane	9.901	131	159669	51.36	ppb	98
82) Ethylbenzene	9.937	106	280764	54.22	ppb	99
83) (m+p)Xylene	10.047	106	691090	109.15	ppb	99
84) o-Xylene	10.407	106	343205	55.09	ppb	100
85) Styrene	10.419	104	558509	55.32	ppb	98
87) Bromoform	10.571	173	96090	50.48	ppb	94
88) 2-CBTF	10.650	180	243237	52.56	ppb	97
89) Isopropylbenzene	10.742	105	854937	57.65	ppb	98
90) Cyclohexanone	10.797	55	983782	1046.69	ppb	100
91) trans-1,4-Dichloro-2-B...	11.047	53	63294	51.58	ppb	93
92) 1,1,2,2-Tetrachloroethane	10.998	83	260137	52.59	ppb	96
93) Bromobenzene	10.986	156	208700	52.31	ppb	92
94) 1,2,3-Trichloropropane	11.028	110	88371	56.31	ppb	92
95) n-Propylbenzene	11.095	91	997595	58.72	ppb	98
96) 2-Chlorotoluene	11.156	91	600731	56.11	ppb	100
97) 3-Chlorotoluene	11.211	91	586824	56.03	ppb	98
98) 4-Chlorotoluene	11.248	91	669865	56.11	ppb	99
99) 1,3,5-Trimethylbenzene	11.248	105	692402	56.26	ppb	100
100) tert-Butylbenzene	11.522	119	616366	57.58	ppb	99
101) 1,2,4-Trimethylbenzene	11.559	105	702993	55.23	ppb	100
102) 3,4-DCBTF	11.620	214	198525	52.03	ppb	98
103) sec-Butylbenzene	11.705	105	919717	59.26	ppb	99
104) p-Isopropyltoluene	11.827	119	748102	58.04	ppb	99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24388.D
Acq On : 21 Feb 2019 10:47 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 22 09:18:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.784	146	394489	54.30	ppb	98
106) 1,4-Dclbenz	11.857	146	398440	51.97	ppb	97
107) 2,4-DCBTF	11.912	214	180624	51.69	ppb	97
108) 2,5-DCBTF	11.949	214	200004	50.76	ppb	98
109) n-Butylbenzene	12.156	91	688987	60.98	ppb	99
110) 1,2-Dclbenz	12.156	146	397726	53.52	ppb	100
111) 1,2-Dibromo-3-chloropr...	12.784	157	62651	51.40	ppb	89
112) Trielution Dichlorotol...	12.900	125	1063000	173.89	ppb	97
113) 1,3,5 Trichlorobenzene	12.955	180	291844	54.56	ppb	96
114) Coelution Dichlorotoluene	13.229	125	784289	116.30	ppb	97
115) 1,2,4-Tcbenzene	13.436	180	302069	57.95	ppb	100
116) Hexachlorobt	13.577	225	123912	56.37	ppb	96
117) Naphthalen	13.625	128	972395	52.94	ppb	99
118) 1,2,3-Tclbenzene	13.814	180	310859	57.82	ppb	97
119) 2,4,5-Trichlorotolene	14.400	159	136317	50.42	ppb	95
120) 2,3,6-Trichlorotoluene	14.485	159	152828	49.37	ppb	93

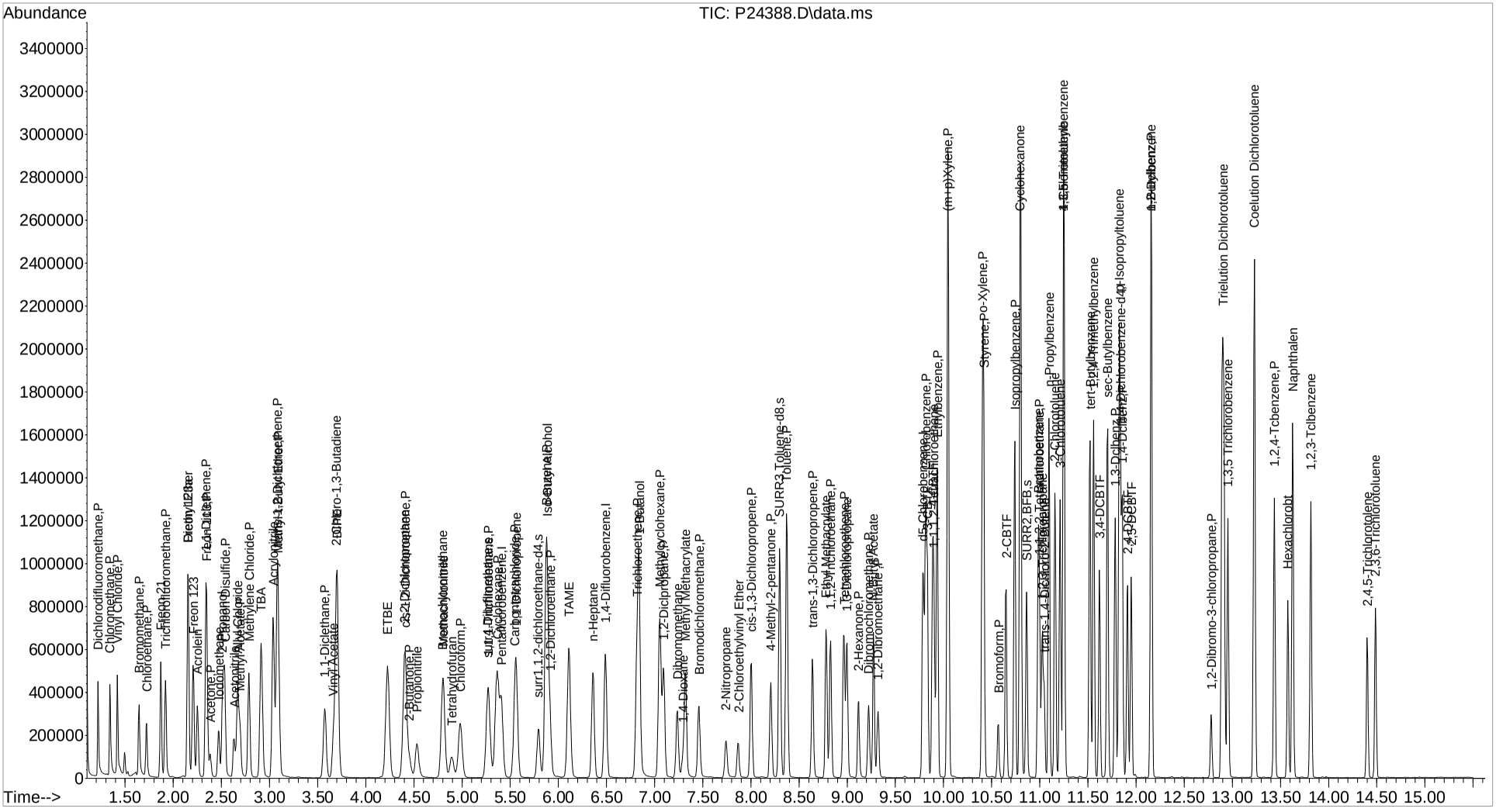
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24388.D
Acq On : 21 Feb 2019 10:47 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 22 09:18:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



ALS Group USA, Corp.

DBA ALS Environmetal

QC/QC Report

Date Analyzed: 2/20/19 11:05

ICAL Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA12\DATA\022019\P24336.D Analytical Method: 8260C/624.1

Instrument ID: R-MS-12

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Results Pass/Fail
50	95	15	40	17.1	27218	PASS
75	95	30	60	46.3	73712	PASS
95	95	100	100	100.0	159339	PASS
96	95	5	9	6.7	10612	PASS
173	174	0	2	0.3	399	PASS
174	95	50	120	83.3	132755	PASS
175	174	5	9	7.8	10302	PASS
176	174	95	101	98.4	130637	PASS
177	176	5	9	6.6	8625	PASS

Sample Name	Lab Code	File ID:	Date Analyzes:	Q
IBLK	IBLK	I:\ACQUDATA\msvoa12\Data\022019\P24337.D	2/20/19 11:27	
0.5ppb	0.5ppb	I:\ACQUDATA\msvoa12\Data\022019\P24338.D	2/20/19 12:01	
1.0ppb	1.0ppb	I:\ACQUDATA\msvoa12\Data\022019\P24339.D	2/20/19 12:23	
2.0ppb	2.0ppb	I:\ACQUDATA\msvoa12\Data\022019\P24340.D	2/20/19 12:45	
5.0ppb	5.0ppb	I:\ACQUDATA\msvoa12\Data\022019\P24341.D	2/20/19 13:07	
20ppb	20ppb	I:\ACQUDATA\msvoa12\Data\022019\P24342.D	2/20/19 13:28	
50ppb	50ppb	I:\ACQUDATA\msvoa12\Data\022019\P24343.D	2/20/19 13:50	
100ppb	100ppb	I:\ACQUDATA\msvoa12\Data\022019\P24344.D	2/20/19 14:12	
150ppb	150ppb	I:\ACQUDATA\msvoa12\Data\022019\P24345.D	2/20/19 14:34	
200ppb	200ppb	I:\ACQUDATA\msvoa12\Data\022019\P24346.D	2/20/19 14:55	
ICV 50	ICV 50	I:\ACQUDATA\msvoa12\Data\022019\P24351.D	2/20/19 16:44	

Analysis: 8260/624 Waters | Analyst: K. Quest | pH strips: N/A | Tune Method: W022019

Date: 2/20/19 | Balance ID: N/A | ResCl strips: N/A | Run Method: ↓

Instr. 12 | 50 mL Class A used for dilution FV | Syringes: 193643 | LIMS Run#: (ICAL)

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./			RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK									PJ4332		
2	↓									PJ4333		
3										PJ4334		
4	↓									PJ4335		
1	TUNE			Atomx						PJ4336	YT	(auto) 11:05
2	IBLK	5ppm	500ppm	5mL SD	FV					PJ4337	YB	
1	0.5 ppb	5mL	—	—	50mls					PJ4338	Y	
2	1.0	10mL	—	—	↓					PJ4339	Y	
3	2.0	20mL	—	—						PJ4340	Y	
4	5.0	50mL	—	1mL						PJ4341	Y	
5	20	—	2mL	2mL						PJ4342	Y	
6	50	—	5mL	5mL						PJ4343	Y	
7	100	—	10mL	10mL						PJ4344	Y	
8	150	—	15mL	20mL						PJ4345	Y	
9	200	—	20mL	—	↓					PJ4346	Y	
10	BLK									PJ4347	—	
10	↓									PJ4348	—	
11										PJ4349	—	
11	↓									PJ4350	—	
12	ICV 50									PJ4351	YQ	

LCD

YR 2/20/19

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

Combined IS/Surr : ——

500 ↓ Primary acct+ : 197026

Primary Fr+ : 197154 | 10uL → 1.0mL MeOH

Primary TG : 196747 | = 5ppm

Primary HSL : 196788

Primary : ——

200 Secondary Fr+ : 197077 - 12.5uL

500 ↓ Secondary acct+ : 195846

Secondary HSL : 197007 | 5uL } 50mls = ICV

Secondary TG : 196714

Secondary : ——

Surrogate 50 : 196918

Internal Std 50 : 196919

Reagents: ——

Runlog-MSVOAr4 1/17/17

Client: The LiRo Group
Project: Buffalo China

Service Request: R1901592
Calibration Date: 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015
Instrument ID: R-MS-12

Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1900015-01	0.5ppb	I:\ACQUDATA\msvoa12\Data\022019\P24338.D	02/20/2019 12:01
02	RC1900015-02	1.0ppb	I:\ACQUDATA\msvoa12\Data\022019\P24339.D	02/20/2019 12:23
03	RC1900015-03	2.0ppb	I:\ACQUDATA\msvoa12\Data\022019\P24340.D	02/20/2019 12:45
04	RC1900015-04	5.0ppb	I:\ACQUDATA\msvoa12\Data\022019\P24341.D	02/20/2019 13:07
05	RC1900015-05	20ppb	I:\ACQUDATA\msvoa12\Data\022019\P24342.D	02/20/2019 13:28
06	RC1900015-06	50ppb	I:\ACQUDATA\msvoa12\Data\022019\P24343.D	02/20/2019 13:50
07	RC1900015-07	100ppb	I:\ACQUDATA\msvoa12\Data\022019\P24344.D	02/20/2019 14:12
08	RC1900015-08	150ppb	I:\ACQUDATA\msvoa12\Data\022019\P24345.D	02/20/2019 14:34
09	RC1900015-09	200ppb	I:\ACQUDATA\msvoa12\Data\022019\P24346.D	02/20/2019 14:55

Analyte

1,1,1-Trichloroethane (TCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4799	02	1.000	0.6617	03	2.000	0.6312	04	5.000	0.6477
05	20.000	0.6722	06	50.000	0.7108	07	100.000	0.7357	08	150.000	0.7847
09	200.000	0.7287									

1,1,2,2-Tetrachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.055	02	1.000	1.091	03	2.000	1.039	04	5.000	1.07
05	20.000	1.171	06	50.000	1.131	07	100.000	1.092	08	150.000	1.162
09	200.000	1.063									

1,1,2-Trichloro-1,2,2-trifluoroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3449	02	1.000	0.469	03	2.000	0.4194	04	5.000	0.3698
05	20.000	0.4034	06	50.000	0.4112	07	100.000	0.4357	08	150.000	0.4555
09	200.000	0.4294									

1,1,2-Trichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3707	02	1.000	0.3297	03	2.000	0.315	04	5.000	0.3556
05	20.000	0.3555	06	50.000	0.3551	07	100.000	0.3371	08	150.000	0.3519
09	200.000	0.3479									

1,1-Dichloroethane (1,1-DCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7219	02	1.000	0.9373	03	2.000	0.9478	04	5.000	0.9376
05	20.000	1.01	06	50.000	1.036	07	100.000	1.022	08	150.000	1.067
09	200.000	0.9811									

1,1-Dichloroethene (1,1-DCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3905	02	1.000	0.4693	03	2.000	0.4397	04	5.000	0.4442
05	20.000	0.4752	06	50.000	0.4876	07	100.000	0.4974	08	150.000	0.5131
09	200.000	0.4804									

Client: The LiRo Group **Service Request:** R1901592
Project: Buffalo China **Calibration Date:** 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

1,2,3-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	1.002	03	2.000	1.073	04	5.000	1.145	05	20.000	1.251
06	50.000	1.227	07	100.000	1.292	08	150.000	1.316	09	200.000	1.232

1,2,4-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9338	02	1.000	1.024	03	2.000	1.078	04	5.000	1.122
05	20.000	1.24	06	50.000	1.179	07	100.000	1.279	08	150.000	1.314
09	200.000	1.234									

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.263	03	2.000	0.1985	04	5.000	0.2405	05	20.000	0.2672
06	50.000	0.2884	07	100.000	0.2962	08	150.000	0.3107	09	200.000	0.2981

1,2-Dibromoethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3813	02	1.000	0.3632	03	2.000	0.3848	04	5.000	0.385
05	20.000	0.427	06	50.000	0.4046	07	100.000	0.3936	08	150.000	0.4054
09	200.000	0.3897									

1,2-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.485	02	1.000	1.748	03	2.000	1.652	04	5.000	1.647
05	20.000	1.655	06	50.000	1.652	07	100.000	1.664	08	150.000	1.72
09	200.000	1.61									

1,2-Dichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3426	02	1.000	0.503	03	2.000	0.4596	04	5.000	0.4317
05	20.000	0.4825	06	50.000	0.487	07	100.000	0.4674	08	150.000	0.4772
09	200.000	0.4645									

1,2-Dichloropropane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3275	02	1.000	0.3887	03	2.000	0.3994	04	5.000	0.3625
05	20.000	0.3867	06	50.000	0.3867	07	100.000	0.3762	08	150.000	0.3986
09	200.000	0.3898									

1,3-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.494	02	1.000	1.584	03	2.000	1.607	04	5.000	1.671
05	20.000	1.632	06	50.000	1.617	07	100.000	1.609	08	150.000	1.706
09	200.000	1.58									

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.765	02	1.000	1.858	03	2.000	1.751	04	5.000	1.646

Client: The LiRo Group **Service Request:** R1901592
Project: Buffalo China **Calibration Date:** 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	1.655	06	50.000	1.658	07	100.000	1.637	08	150.000	1.717
09	200.000	1.615									

1,4-Dioxane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.006925	04	100.000	0.007207	05	400.000	0.006777	06	1000.000	0.006837
07	2000.000	0.006608	08	3000.000	0.00643	09	4000.000	0.006613			

2-Butanone (MEK)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.4125	04	5.000	0.3724	05	20.000	0.3747	06	50.000	0.4029
07	100.000	0.4157	08	150.000	0.4312	09	200.000	0.4076			

2-Hexanone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.3857	04	5.000	0.371	05	20.000	0.4028	06	50.000	0.4008
07	100.000	0.422	08	150.000	0.427	09	200.000	0.4116			

4-Bromofluorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.5377	05	20.000	0.4344	06	50.000	0.4693	07	100.000	0.4482
08	200.000	0.4443									

4-Methyl-2-pentanone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.4573	04	5.000	0.4562	05	20.000	0.4805	06	50.000	0.4948
07	100.000	0.486	08	150.000	0.5013	09	200.000	0.4949			

Acetone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.2364	05	20.000	0.2341	06	50.000	0.262	07	100.000	0.2438
08	150.000	0.2357	09	200.000	0.2247						

Benzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.258	02	1.000	1.474	03	2.000	1.457	04	5.000	1.389
05	20.000	1.459	06	50.000	1.48	07	100.000	1.419	08	150.000	1.49
09	200.000	1.428									

Bromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3163	02	1.000	0.3644	03	2.000	0.3401	04	5.000	0.3421
05	20.000	0.3951	06	50.000	0.3747	07	100.000	0.3684	08	150.000	0.3868
09	200.000	0.3625									

Client: The LiRo Group **Service Request:** R1901592
Project: Buffalo China **Calibration Date:** 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

Bromodichloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3847	02	1.000	0.38	03	2.000	0.3514	04	5.000	0.3708
05	20.000	0.3977	06	50.000	0.4131	07	100.000	0.4189	08	150.000	0.4449
09	200.000	0.4332									

Bromoform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3818	03	2.000	0.3375	04	5.000	0.3589	05	20.000	0.4239
06	50.000	0.4446	07	100.000	0.4529	08	150.000	0.5054	09	200.000	0.4727

Bromomethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.7211	03	2.000	0.6451	04	5.000	0.5568	05	20.000	0.4537
06	50.000	0.4204	07	100.000	0.4216	08	150.000	0.4553	09	200.000	0.4259

Carbon Disulfide

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.222	02	1.000	1.496	03	2.000	1.355	04	5.000	1.271
05	20.000	1.436	06	50.000	1.425	07	100.000	1.468	08	150.000	1.498
09	200.000	1.407									

Carbon Tetrachloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2686	02	1.000	0.3061	03	2.000	0.3378	04	5.000	0.3008
05	20.000	0.3096	06	50.000	0.3471	07	100.000	0.3583	08	150.000	0.3884
09	200.000	0.3805									

Chlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.006	02	1.000	1.147	03	2.000	1.064	04	5.000	1.066
05	20.000	1.088	06	50.000	1.06	07	100.000	1.055	08	150.000	1.104
09	200.000	1.043									

Chloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4703	02	1.000	0.4735	03	2.000	0.4034	04	5.000	0.4091
05	20.000	0.4424	06	50.000	0.4356	07	100.000	0.4422	08	150.000	0.4588
09	200.000	0.4233									

Chloroform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7513	02	1.000	0.8711	03	2.000	0.8819	04	5.000	0.7994
05	20.000	0.8991	06	50.000	0.8931	07	100.000	0.8863	08	150.000	0.9281
09	200.000	0.864									

Chloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7068	02	1.000	1.019	03	2.000	0.695	04	5.000	0.7453

Client: The LiRo Group **Service Request:** R1901592
Project: Buffalo China **Calibration Date:** 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

Chloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	0.8151	06	50.000	0.8132	07	100.000	0.8384	08	150.000	0.8444
09	200.000	0.8076									

Cyclohexane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.291	03	2.000	0.2639	04	5.000	0.2675	05	20.000	0.3124
06	50.000	0.3055	07	100.000	0.2911	08	150.000	0.3071	09	200.000	0.3066

Dibromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3441	02	1.000	0.288	03	2.000	0.3031	04	5.000	0.2981
05	20.000	0.3438	06	50.000	0.3437	07	100.000	0.3509	08	150.000	0.3794
09	200.000	0.3715									

Dibromofluoromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.2878	05	20.000	0.2586	06	50.000	0.2844	07	100.000	0.2717
08	200.000	0.2713									

Dichlorodifluoromethane (CFC 12)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4483	02	1.000	0.6508	03	2.000	0.5299	04	5.000	0.5005
05	20.000	0.646	06	50.000	0.6736	07	100.000	0.6688	08	150.000	0.6868
09	200.000	0.6454									

Dichloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5561	02	1.000	0.6012	03	2.000	0.6496	04	5.000	0.5661
05	20.000	0.5783	06	50.000	0.5865	07	100.000	0.562	08	150.000	0.5813
09	200.000	0.5444									

Ethylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5052	02	1.000	0.578	03	2.000	0.5779	04	5.000	0.5985
05	20.000	0.5736	06	50.000	0.5699	07	100.000	0.5873	08	150.000	0.6162
09	200.000	0.5874									

Isopropylbenzene (Cumene)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.768	02	1.000	3.226	03	2.000	3.63	04	5.000	3.502
05	20.000	3.261	06	50.000	3.305	07	100.000	3.326	08	150.000	3.471
09	200.000	3.111									

Methyl Acetate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.5967	03	2.000	0.6458	04	5.000	0.578	05	20.000	0.7057
06	50.000	0.7132	07	100.000	0.6522	08	150.000	0.644	09	200.000	0.6647

Client: The LiRo Group **Service Request:** R1901592
Project: Buffalo China **Calibration Date:** 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

Methyl tert-Butyl Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.588	02	1.000	1.911	03	2.000	1.728	04	5.000	1.739
05	20.000	1.919	06	50.000	1.891	07	100.000	1.812	08	150.000	1.89
09	200.000	1.779									

Methylcyclohexane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.4299	03	2.000	0.4065	04	5.000	0.4073	05	20.000	0.4771
06	50.000	0.465	07	100.000	0.429	08	150.000	0.4509	09	200.000	0.4644

Styrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9646	02	1.000	1.026	03	2.000	1.012	04	5.000	1.097
05	20.000	1.205	06	50.000	1.187	07	100.000	1.191	08	150.000	1.249
09	200.000	1.195									

Tetrachloroethene (PCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2484	02	1.000	0.3248	03	2.000	0.3114	04	5.000	0.3029
05	20.000	0.2865	06	50.000	0.2927	07	100.000	0.3041	08	150.000	0.3218
09	200.000	0.302									

Toluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.276	02	1.000	1.467	03	2.000	1.505	04	5.000	1.469
05	20.000	1.505	06	50.000	1.545	07	100.000	1.496	08	150.000	1.561
09	200.000	1.487									

Toluene-d8

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	1.541	05	20.000	1.236	06	50.000	1.312	07	100.000	1.236
08	200.000	1.191									

Trichloroethene (TCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2931	02	1.000	0.351	03	2.000	0.3662	04	5.000	0.3263
05	20.000	0.3459	06	50.000	0.369	07	100.000	0.356	08	150.000	0.3761
09	200.000	0.3637									

Trichlorofluoromethane (CFC 11)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5643	02	1.000	0.8218	03	2.000	0.6764	04	5.000	0.6449
05	20.000	0.6966	06	50.000	0.7185	07	100.000	0.7384	08	150.000	0.7734
09	200.000	0.7107									

Vinyl Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6243	02	1.000	0.6421	03	2.000	0.6127	04	5.000	0.6303

Client: The LiRo Group
Project: Buffalo China

Service Request: R1901592
Calibration Date: 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015
Instrument ID: R-MS-12

Signal ID: 1

Analyte

Vinyl Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	0.799	06	50.000	0.8026	07	100.000	0.8082	08	150.000	0.8447
09	200.000	0.7765									

cis-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3875	02	1.000	0.6955	03	2.000	0.6069	04	5.000	0.5376
05	20.000	0.6176	06	50.000	0.6008	07	100.000	0.5917	08	150.000	0.6199
09	200.000	0.5779									

cis-1,3-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4669	02	1.000	0.5266	03	2.000	0.5154	04	5.000	0.5423
05	20.000	0.5974	06	50.000	0.6118	07	100.000	0.5858	08	150.000	0.6243
09	200.000	0.6106									

m,p-Xylenes

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6141	02	2.000	0.7586	03	4.000	0.6982	04	10.000	0.7128
05	40.000	0.6999	06	100.000	0.6972	07	200.000	0.7134	08	300.000	0.7448
09	400.000	0.7118									

o-Xylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6377	02	1.000	0.653	03	2.000	0.6916	04	5.000	0.6922
05	20.000	0.7061	06	50.000	0.6954	07	100.000	0.7072	08	150.000	0.7484
09	200.000	0.7168									

trans-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4771	02	1.000	0.5226	03	2.000	0.5166	04	5.000	0.4938
05	20.000	0.5174	06	50.000	0.5337	07	100.000	0.5357	08	150.000	0.5559
09	200.000	0.517									

trans-1,3-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3861	02	1.000	0.4461	03	2.000	0.4651	04	5.000	0.4533
05	20.000	0.5349	06	50.000	0.5469	07	100.000	0.514	08	150.000	0.5516
09	200.000	0.5515									

Client: The LiRo Group
Project: Buffalo China

Service Request: R1901592
Calibration Date: 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015
Instrument ID: R-MS-12

Signal ID: 1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
1,1,1-Trichloroethane (TCA)	TRG	Average RF	% RSD	13.0	≤20	0.6725	0.100
1,1,2,2-Tetrachloroethane	TRG	Average RF	% RSD	4.3	≤20	1.097	0.300
1,1,2-Trichloro-1,2,2-trifluoroethane	TRG	Average RF	% RSD	9.4	≤20	0.4154	0.100
1,1,2-Trichloroethane	TRG	Average RF	% RSD	4.8	≤20	0.3465	0.100
1,1-Dichloroethane (1,1-DCA)	TRG	Average RF	% RSD	10.5	≤20	0.9623	0.200
1,1-Dichloroethene (1,1-DCE)	TRG	Average RF	% RSD	7.9	≤20	0.4664	0.100
1,2,3-Trichlorobenzene	TRG	Average RF	% RSD	9.2	≤20	1.192	
1,2,4-Trichlorobenzene	TRG	Average RF	% RSD	10.9	≤20	1.156	0.200
1,2-Dibromo-3-chloropropane (DBCP)	TRG	Average RF	% RSD	13.6	≤20	0.2703	0.050
1,2-Dibromoethane	TRG	Average RF	% RSD	4.6	≤20	0.3927	0.100
1,2-Dichlorobenzene	TRG	Average RF	% RSD	4.5	≤20	1.648	0.400
1,2-Dichloroethane	TRG	Average RF	% RSD	10.4	≤20	0.4573	0.100
1,2-Dichloropropane	TRG	Average RF	% RSD	5.9	≤20	0.3796	0.100
1,3-Dichlorobenzene	TRG	Average RF	% RSD	3.7	≤20	1.611	0.600
1,4-Dichlorobenzene	TRG	Average RF	% RSD	4.7	≤20	1.7	0.500
1,4-Dioxane	TRG	Average RF	% RSD	3.7	≤20	0.006771	
2-Butanone (MEK)	TRG	Average RF	% RSD	5.4	≤20	0.4024	0.05
2-Hexanone	TRG	Average RF	% RSD	4.9	≤20	0.403	0.05
4-Bromofluorobenzene	SURR	Average RF	% RSD	8.9	≤20	0.4668	
4-Methyl-2-pentanone	TRG	Average RF	% RSD	3.8	≤20	0.4816	0.05
Acetone	TRG	Average RF	% RSD	5.3	≤20	0.2394	0.05
Benzene	TRG	Average RF	% RSD	5.0	≤20	1.428	0.500
Bromochloromethane	TRG	Average RF	% RSD	6.8	≤20	0.3611	
Bromodichloromethane	TRG	Average RF	% RSD	7.7	≤20	0.3994	0.200
Bromoform	TRG	Average RF	% RSD	13.8	≤20	0.4222	0.100
Bromomethane	TRG	Quadratic	COD	0.9976	≥0.99	0.5125	0.100
Carbon Disulfide	TRG	Average RF	% RSD	7.0	≤20	1.397	0.100
Carbon Tetrachloride	TRG	Average RF	% RSD	11.9	≤20	0.333	0.05
Chlorobenzene	TRG	Average RF	% RSD	3.7	≤20	1.07	0.500
Chloroethane	TRG	Average RF	% RSD	5.7	≤20	0.4398	0.100
Chloroform	TRG	Average RF	% RSD	6.3	≤20	0.8638	0.200
Chloromethane	TRG	Average RF	% RSD	11.9	≤20	0.8095	0.100
Cyclohexane	TRG	Average RF	% RSD	6.3	≤20	0.2931	0.100
Dibromochloromethane	TRG	Average RF	% RSD	9.6	≤20	0.3359	0.100

Client: The LiRo Group
Project: Buffalo China

Service Request: R1901592
Calibration Date: 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015
Instrument ID: R-MS-12

Signal ID: 1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Dibromofluoromethane	SURR	Average RF	% RSD	4.2	≤20	0.2748	
Dichlorodifluoromethane (CFC 12)	TRG	Average RF	% RSD	14.5	≤20	0.6056	0.100
Dichloromethane	TRG	Average RF	% RSD	5.3	≤20	0.5806	0.100
Ethylbenzene	TRG	Average RF	% RSD	5.3	≤20	0.5771	0.100
Isopropylbenzene (Cumene)	TRG	Average RF	% RSD	7.6	≤20	3.289	0.100
Methyl Acetate	TRG	Average RF	% RSD	7.2	≤20	0.65	0.100
Methyl tert-Butyl Ether	TRG	Average RF	% RSD	6.1	≤20	1.806	0.100
Methylcyclohexane	TRG	Average RF	% RSD	6.1	≤20	0.4413	0.100
Styrene	TRG	Average RF	% RSD	9.1	≤20	1.125	0.300
Tetrachloroethene (PCE)	TRG	Average RF	% RSD	7.6	≤20	0.2994	0.200
Toluene	TRG	Average RF	% RSD	5.6	≤20	1.479	0.400
Toluene-d8	SURR	Average RF	% RSD	10.7	≤20	1.303	
Trichloroethene (TCE)	TRG	Average RF	% RSD	7.4	≤20	0.3497	0.200
Trichlorofluoromethane (CFC 11)	TRG	Average RF	% RSD	10.5	≤20	0.705	0.100
Vinyl Chloride	TRG	Average RF	% RSD	13.2	≤20	0.7267	0.100
cis-1,2-Dichloroethene	TRG	Average RF	% RSD	14.4	≤20	0.5817	0.100
cis-1,3-Dichloropropene	TRG	Average RF	% RSD	9.6	≤20	0.5646	0.200
m,p-Xylenes	TRG	Average RF	% RSD	5.7	≤20	0.7057	0.100
o-Xylene	TRG	Average RF	% RSD	4.7	≤20	0.6943	0.300
trans-1,2-Dichloroethene	TRG	Average RF	% RSD	4.5	≤20	0.5189	0.100
trans-1,3-Dichloropropene	TRG	Average RF	% RSD	12.0	≤20	0.4944	0.100

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: The LiRo Group
Project: Buffalo China

Service Request: R1901592
Calibration Date: 2/20/2019

Initial Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015
Instrument ID: R-MS-12

Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
10	RC1900015-10	ICV 50	I:\ACQUDATA\msvoa12\Data\022019\P24351.D	02/20/2019 16:44

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	51.4	6.725E-1	6.913E-1	2.79	±30	Average RF
1,1,2,2-Tetrachloroethane	50.0	49.9	1.097E0	1.094E0	-0.297	±30	Average RF
1,1,2-Trichloroethane	50.0	47.6	3.465E-1	3.297E-1	-4.864	±30	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	53.6	4.154E-1	4.452E-1	7.17	±30	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	51.0	9.623E-1	9.807E-1	1.91	±30	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	49.3	4.664E-1	4.597E-1	-1.434	±30	Average RF
1,2,3-Trichlorobenzene	50.0	52.9	1.192E0	1.262E0	5.87	±30	Average RF
1,2,4-Trichlorobenzene	50.0	55.2	1.156E0	1.275E0	10.31	±30	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	48.6	2.703E-1	2.63E-1	-2.700	±30	Average RF
1,2-Dibromoethane	50.0	47.8	3.927E-1	3.757E-1	-4.325	±30	Average RF
1,2-Dichlorobenzene	50.0	47.0	1.648E0	1.549E0	-6.035	±30	Average RF
1,2-Dichloroethane	50.0	49.2	4.573E-1	4.5E-1	-1.589	±30	Average RF
1,2-Dichloropropane	50.0	48.8	3.796E-1	3.705E-1	-2.399	±30	Average RF
1,3-Dichlorobenzene	50.0	47.5	1.611E0	1.532E0	-4.918	±30	Average RF
1,4-Dichlorobenzene	50.0	46.2	1.7E0	1.572E0	-7.535	±30	Average RF
1,4-Dioxane	1000	1090	6.771E-3	7.373E-3	8.89	±30	Average RF
2-Butanone (MEK)	50.0	52.1	4.024E-1	4.19E-1	4.11	±30	Average RF
2-Hexanone	50.0	52.1	4.03E-1	4.199E-1	4.21	±30	Average RF
4-Methyl-2-pentanone	50.0	51.8	4.816E-1	4.99E-1	3.63	±30	Average RF
Acetone	50.0	58.0	2.394E-1	2.779E-1	16.05	±30	Average RF
Benzene	50.0	47.6	1.428E0	1.36E0	-4.764	±30	Average RF
Bromochloromethane	50.0	48.4	3.611E-1	3.493E-1	-3.274	±30	Average RF
Bromodichloromethane	50.0	48.5	3.994E-1	3.874E-1	-3.018	±30	Average RF
Bromoform	50.0	52.1	4.222E-1	4.397E-1	4.13	±30	Average RF
Bromomethane	50.0	51.4	5.125E-1	4.481E-1	2.78	±30	Quadratic
Carbon Disulfide	50.0	54.2	1.397E0	1.516E0	8.46	±30	Average RF
Carbon Tetrachloride	50.0	50.0	3.33E-1	3.331E-1	0.023	±30	Average RF
Chlorobenzene	50.0	46.7	1.07E0	9.994E-1	-6.620	±30	Average RF
Chloroethane	50.0	40.7	4.398E-1	3.584E-1	-18.519	±30	Average RF
Chloroform	50.0	50.2	8.638E-1	8.667E-1	0.330	±30	Average RF
Chloromethane	50.0	47.0	8.095E-1	7.601E-1	-6.099	±30	Average RF
Cyclohexane	50.0	53.9	2.931E-1	3.16E-1	7.78	±30	Average RF
Dibromochloromethane	50.0	50.3	3.359E-1	3.38E-1	0.652	±30	Average RF

QA/QC Report

Client: The LiRo Group
Project: Buffalo China

Service Request: R1901592
Calibration Date: 2/20/2019

Initial Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015
Instrument ID: R-MS-12

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	47.7	6.056E-1	5.773E-1	-4.663	±30	Average RF
Dichloromethane	50.0	46.5	5.806E-1	5.402E-1	-6.966	±30	Average RF
Ethylbenzene	50.0	47.8	5.771E-1	5.517E-1	-4.412	±30	Average RF
Isopropylbenzene (Cumene)	50.0	49.9	3.289E0	3.28E0	-0.266	±30	Average RF
Methyl Acetate	50.0	52.3	6.5E-1	6.798E-1	4.58	±30	Average RF
Methyl tert-Butyl Ether	50.0	52.3	1.806E0	1.891E0	4.68	±30	Average RF
Methylcyclohexane	50.0	55.0	4.413E-1	4.85E-1	9.92	±30	Average RF
Styrene	50.0	51.0	1.125E0	1.148E0	2.02	±30	Average RF
Tetrachloroethene (PCE)	50.0	47.7	2.994E-1	2.857E-1	-4.589	±30	Average RF
Toluene	50.0	48.6	1.479E0	1.439E0	-2.717	±30	Average RF
Trichloroethene (TCE)	50.0	47.6	3.497E-1	3.327E-1	-4.850	±30	Average RF
Trichlorofluoromethane (CFC 11)	50.0	48.6	7.05E-1	6.852E-1	-2.805	±30	Average RF
Vinyl Chloride	50.0	51.0	7.267E-1	7.419E-1	2.10	±30	Average RF
cis-1,2-Dichloroethene	50.0	49.1	5.817E-1	5.715E-1	-1.757	±30	Average RF
cis-1,3-Dichloropropene	50.0	50.0	5.646E-1	5.651E-1	0.095	±30	Average RF
m,p-Xylenes	100	98.0	7.057E-1	6.917E-1	-1.979	±30	Average RF
o-Xylene	50.0	48.6	6.943E-1	6.746E-1	-2.835	±30	Average RF
trans-1,2-Dichloroethene	50.0	49.1	5.189E-1	5.096E-1	-1.785	±30	Average RF
trans-1,3-Dichloropropene	50.0	51.4	4.944E-1	5.081E-1	2.77	±30	Average RF

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	49.8	4.668E-1	4.653E-1	-0.309	±30	Average RF
Dibromofluoromethane	50.0	50.6	2.748E-1	2.781E-1	1.21	±30	Average RF
Toluene-d8	50.0	49.6	1.303E0	1.293E0	-0.826	±30	Average RF

Client: The LiRo Group
Project: Buffalo China/16-344-1389

Service Request: R1901592
Date Analyzed: 02/25/19 14:15

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\022519\P24455.D\
Signal ID: 1

Calibration Date: 2/20/2019
Calibration ID: RC1900015
Analysis Lot: 626275
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	49.0	0.6725	0.6592	-2.0	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	44.6	1.0971	0.9793	-10.7	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	46.2	0.3465	0.3203	-7.6	NA	±20	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	51.8	0.4154	0.4306	3.7	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	49.0	0.9623	0.9421	-2.1	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	50.2	0.4664	0.4683	0.4	NA	±20	Average RF
1,2,3-Trichlorobenzene	50.0	53.5	1.1924	1.2759	7.0	NA	±20	Average RF
1,2,4-Trichlorobenzene	50.0	54.5	1.1561	1.2603	9.0	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	41.5	0.2703	0.2246	-16.9	NA	±20	Average RF
1,2-Dibromoethane	50.0	46.6	0.3927	0.366	-6.8	NA	±20	Average RF
1,2-Dichlorobenzene	50.0	47.8	1.6482	1.5745	-4.5	NA	±20	Average RF
1,2-Dichloroethane	50.0	48.0	0.4573	0.4391	-4.0	NA	±20	Average RF
1,2-Dichloropropane	50.0	47.5	0.3796	0.3603	-5.1	NA	±20	Average RF
1,3-Dichlorobenzene	50.0	48.8	1.6112	1.5729	-2.4	NA	±20	Average RF
1,4-Dichlorobenzene	50.0	46.6	1.7003	1.5854	-6.8	NA	±20	Average RF
1,4-Dioxane	1000	942	0.0068	0.0064	-5.8	NA	±20	Average RF
2-Butanone (MEK)	50.0	38.6	0.4024	0.3109	-22.7*	NA	±20	Average RF
2-Hexanone	50.0	39.4	0.403	0.3175	-21.2*	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	41.1	0.4816	0.3956	-17.8	NA	±20	Average RF
Acetone	50.0	43.5	0.2394	0.2085	-12.9	NA	±20	Average RF
Benzene	50.0	48.2	1.4282	1.3754	-3.7	NA	±20	Average RF
Bromochloromethane	50.0	47.3	0.3611	0.3417	-5.4	NA	±20	Average RF
Bromodichloromethane	50.0	47.2	0.3994	0.3774	-5.5	NA	±20	Average RF
Bromoform	50.0	45.6	0.4222	0.3849	-8.8	NA	±20	Average RF
Bromomethane	50.0	48.9	0.5125	0.427	NA	-2.1	±20	Quadratic
Carbon Disulfide	50.0	48.9	1.3974	1.3654	-2.3	NA	±20	Average RF
Carbon Tetrachloride	50.0	50.1	0.333	0.3334	0.1	NA	±20	Average RF
Chlorobenzene	50.0	47.9	1.0703	1.026	-4.1	NA	±20	Average RF
Chloroethane	50.0	47.0	0.4398	0.4133	-6.0	NA	±20	Average RF
Chloroform	50.0	47.7	0.8638	0.8233	-4.7	NA	±20	Average RF
Chloromethane	50.0	44.2	0.8095	0.7155	-11.6	NA	±20	Average RF
Cyclohexane	50.0	50.7	0.2931	0.2972	1.4	NA	±20	Average RF
Dibromochloromethane	50.0	47.6	0.3359	0.3196	-4.8	NA	±20	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	53.3	0.6056	0.6449	6.5	NA	±20	Average RF
Dichloromethane	50.0	45.2	0.5806	0.5246	-9.6	NA	±20	Average RF
Ethylbenzene	50.0	49.4	0.5771	0.57	-1.2	NA	±20	Average RF
Isopropylbenzene (Cumene)	50.0	50.0	3.2888	3.2862	-0.1	NA	±20	Average RF
Methyl Acetate	50.0	42.5	0.65	0.5529	-14.9	NA	±20	Average RF
Methyl tert-Butyl Ether	50.0	45.4	1.8063	1.6406	-9.2	NA	±20	Average RF

Client: The LiRo Group
Project: Buffalo China/16-344-1389

Service Request: R1901592
Date Analyzed: 02/25/19 14:15

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\022519\P24455.D\
Signal ID: 1

Calibration Date: 2/20/2019
Calibration ID: RC1900015
Analysis Lot: 626275
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Methylcyclohexane	50.0	50.8	0.4413	0.4482	1.6	NA	±20	Average RF
Styrene	50.0	51.7	1.1252	1.1623	3.3	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	50.3	0.2994	0.3012	0.6	NA	±20	Average RF
Toluene	50.0	49.8	1.479	1.4734	-0.4	NA	±20	Average RF
Trichloroethene (TCE)	50.0	49.1	0.3497	0.3433	-1.8	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	47.5	0.705	0.6698	-5.0	NA	±20	Average RF
Vinyl Chloride	50.0	50.8	0.7267	0.7379	1.5	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	48.6	0.5817	0.565	-2.9	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	50.2	0.5646	0.5665	0.3	NA	±20	Average RF
m,p-Xylenes	100	99.5	0.7057	0.702	-0.5	NA	±20	Average RF
o-Xylene	50.0	49.6	0.6943	0.689	-0.8	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	47.3	0.5189	0.491	-5.4	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	50.5	0.4944	0.4992	1.0	NA	±20	Average RF
4-Bromofluorobenzene	50.0	49.3	0.4668	0.4604	-1.4	NA	±20	Average RF
Dibromofluoromethane	50.0	52.3	0.2748	0.2873	4.6	NA	±20	Average RF
Toluene-d8	50.0	49.5	1.3033	1.2898	-1.0	NA	±20	Average RF

Client: The LiRo Group
Project: Buffalo China/16-344-1389

Service Request: R1901592
Date Analyzed: 02/26/19 00:26

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\022519\P24482.D\
Signal ID: 1

Calibration Date: 2/20/2019
Calibration ID: RC1900015
Analysis Lot: 626321
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	52.2	0.6725	0.702	4.4	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	46.2	1.0971	1.0132	-7.6	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	48.3	0.3465	0.3345	-3.5	NA	±20	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	49.2	0.4154	0.4084	-1.7	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	51.4	0.9623	0.9897	2.8	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	50.9	0.4664	0.4749	1.8	NA	±20	Average RF
1,2,3-Trichlorobenzene	50.0	55.2	1.1924	1.3174	10.5	NA	±20	Average RF
1,2,4-Trichlorobenzene	50.0	56.3	1.1561	1.3018	12.6	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	45.8	0.2703	0.2478	-8.3	NA	±20	Average RF
1,2-Dibromoethane	50.0	48.5	0.3927	0.3811	-3.0	NA	±20	Average RF
1,2-Dichlorobenzene	50.0	50.3	1.6482	1.6572	0.6	NA	±20	Average RF
1,2-Dichloroethane	50.0	50.6	0.4573	0.463	1.3	NA	±20	Average RF
1,2-Dichloropropane	50.0	49.6	0.3796	0.3767	-0.8	NA	±20	Average RF
1,3-Dichlorobenzene	50.0	49.8	1.6112	1.6051	-0.4	NA	±20	Average RF
1,4-Dichlorobenzene	50.0	48.0	1.7003	1.6321	-4.0	NA	±20	Average RF
1,4-Dioxane	1000	1020	0.0068	0.0069	1.5	NA	±20	Average RF
2-Butanone (MEK)	50.0	42.8	0.4024	0.3448	-14.3	NA	±20	Average RF
2-Hexanone	50.0	43.9	0.403	0.3535	-12.3	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	44.2	0.4816	0.426	-11.5	NA	±20	Average RF
Acetone	50.0	51.6	0.2394	0.2473	3.3	NA	±20	Average RF
Benzene	50.0	49.5	1.4282	1.4137	-1.0	NA	±20	Average RF
Bromochloromethane	50.0	51.6	0.3611	0.3726	3.2	NA	±20	Average RF
Bromodichloromethane	50.0	49.2	0.3994	0.393	-1.6	NA	±20	Average RF
Bromoform	50.0	49.6	0.4222	0.4184	-0.9	NA	±20	Average RF
Bromomethane	50.0	49.6	0.5125	0.4328	NA	-0.8	±20	Quadratic
Carbon Disulfide	50.0	51.8	1.3974	1.4488	3.7	NA	±20	Average RF
Carbon Tetrachloride	50.0	48.9	0.333	0.3256	-2.2	NA	±20	Average RF
Chlorobenzene	50.0	49.5	1.0703	1.0586	-1.1	NA	±20	Average RF
Chloroethane	50.0	48.7	0.4398	0.4283	-2.6	NA	±20	Average RF
Chloroform	50.0	50.9	0.8638	0.8794	1.8	NA	±20	Average RF
Chloromethane	50.0	48.4	0.8095	0.7833	-3.2	NA	±20	Average RF
Cyclohexane	50.0	52.1	0.2931	0.3057	4.3	NA	±20	Average RF
Dibromochloromethane	50.0	49.6	0.3359	0.3332	-0.8	NA	±20	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	53.1	0.6056	0.6432	6.2	NA	±20	Average RF
Dichloromethane	50.0	47.5	0.5806	0.5521	-4.9	NA	±20	Average RF
Ethylbenzene	50.0	50.1	0.5771	0.5787	0.3	NA	±20	Average RF
Isopropylbenzene (Cumene)	50.0	50.8	3.2888	3.3404	1.6	NA	±20	Average RF
Methyl Acetate	50.0	46.3	0.65	0.6019	-7.4	NA	±20	Average RF
Methyl tert-Butyl Ether	50.0	49.9	1.8063	1.8036	-0.1	NA	±20	Average RF

Client:	The LiRo Group	**Service Request:**	R1901592
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	02/26/19 00:26

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Calibration Date:**	2/20/2019
File ID:	I:\ACQUDATA\msvoa12\Data\022519\P24482.D\	**Calibration ID:**	RC1900015
Signal ID:	1	**Analysis Lot:**	626321
		Units:	ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Methylcyclohexane	50.0	52.9	0.4413	0.4671	5.9	NA	±20	Average RF
Styrene	50.0	52.9	1.1252	1.1914	5.9	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	50.4	0.2994	0.3017	0.8	NA	±20	Average RF
Toluene	50.0	50.6	1.479	1.497	1.2	NA	±20	Average RF
Trichloroethene (TCE)	50.0	51.9	0.3497	0.3627	3.7	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	48.3	0.705	0.6809	-3.4	NA	±20	Average RF
Vinyl Chloride	50.0	54.1	0.7267	0.7865	8.2	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	51.1	0.5817	0.5948	2.2	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	49.1	0.5646	0.5541	-1.8	NA	±20	Average RF
m,p-Xylenes	100	101	0.7057	0.7133	1.1	NA	±20	Average RF
o-Xylene	50.0	51.4	0.6943	0.7137	2.8	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	50.3	0.5189	0.5217	0.6	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	50.5	0.4944	0.4989	0.9	NA	±20	Average RF
4-Bromofluorobenzene	50.0	49.3	0.4668	0.4604	-1.4	NA	±20	Average RF
Dibromofluoromethane	50.0	51.0	0.2748	0.2805	2.1	NA	±20	Average RF
Toluene-d8	50.0	49.4	1.3033	1.2885	-1.1	NA	±20	Average RF

Client: The LiRo Group
Project: Buffalo China/16-344-1389

Service Request: R1901592
Date Analyzed: 02/26/19 12:43

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\022619\P24505.D\
Signal ID: 1

Calibration Date: 2/20/2019
Calibration ID: RC1900015
Analysis Lot: 626413
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	52.2	0.6725	0.702	4.4	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	51.9	1.0971	1.1395	3.9	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	51.4	0.3465	0.3561	2.8	NA	±20	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	52.8	0.4154	0.4386	5.6	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	54.0	0.9623	1.0392	8.0	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	52.8	0.4664	0.4925	5.6	NA	±20	Average RF
1,2,3-Trichlorobenzene	50.0	55.3	1.1924	1.3197	10.7	NA	±20	Average RF
1,2,4-Trichlorobenzene	50.0	57.3	1.1561	1.3246	14.6	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	50.3	0.2703	0.272	0.6	NA	±20	Average RF
1,2-Dibromoethane	50.0	50.7	0.3927	0.3984	1.5	NA	±20	Average RF
1,2-Dichlorobenzene	50.0	51.9	1.6482	1.7106	3.8	NA	±20	Average RF
1,2-Dichloroethane	50.0	52.6	0.4573	0.4814	5.3	NA	±20	Average RF
1,2-Dichloropropane	50.0	52.1	0.3796	0.3958	4.3	NA	±20	Average RF
1,3-Dichlorobenzene	50.0	51.3	1.6112	1.6517	2.5	NA	±20	Average RF
1,4-Dichlorobenzene	50.0	49.6	1.7003	1.686	-0.8	NA	±20	Average RF
1,4-Dioxane	1000	1180	0.0068	0.008	17.7	NA	±20	Average RF
2-Butanone (MEK)	50.0	51.6	0.4024	0.4155	3.2	NA	±20	Average RF
2-Hexanone	50.0	51.4	0.403	0.4145	2.9	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	52.1	0.4816	0.502	4.3	NA	±20	Average RF
Acetone	50.0	55.1	0.2394	0.2638	10.2	NA	±20	Average RF
Benzene	50.0	51.0	1.4282	1.4557	1.9	NA	±20	Average RF
Bromochloromethane	50.0	53.1	0.3611	0.3837	6.2	NA	±20	Average RF
Bromodichloromethane	50.0	50.9	0.3994	0.4067	1.8	NA	±20	Average RF
Bromoform	50.0	50.1	0.4222	0.4232	0.2	NA	±20	Average RF
Bromomethane	50.0	50.3	0.5125	0.4389	NA	0.6	±20	Quadratic
Carbon Disulfide	50.0	52.9	1.3974	1.4796	5.9	NA	±20	Average RF
Carbon Tetrachloride	50.0	50.7	0.333	0.3374	1.3	NA	±20	Average RF
Chlorobenzene	50.0	50.6	1.0703	1.0829	1.2	NA	±20	Average RF
Chloroethane	50.0	49.7	0.4398	0.4371	-0.6	NA	±20	Average RF
Chloroform	50.0	52.2	0.8638	0.9017	4.4	NA	±20	Average RF
Chloromethane	50.0	48.9	0.8095	0.791	-2.3	NA	±20	Average RF
Cyclohexane	50.0	56.0	0.2931	0.3284	12.0	NA	±20	Average RF
Dibromochloromethane	50.0	50.3	0.3359	0.338	0.7	NA	±20	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	52.1	0.6056	0.6315	4.3	NA	±20	Average RF
Dichloromethane	50.0	50.8	0.5806	0.5897	1.6	NA	±20	Average RF
Ethylbenzene	50.0	51.6	0.5771	0.5951	3.1	NA	±20	Average RF
Isopropylbenzene (Cumene)	50.0	52.8	3.2888	3.4747	5.7	NA	±20	Average RF
Methyl Acetate	50.0	53.3	0.65	0.6931	6.6	NA	±20	Average RF
Methyl tert-Butyl Ether	50.0	51.4	1.8063	1.8551	2.7	NA	±20	Average RF

Client: The LiRo Group
Project: Buffalo China/16-344-1389

Service Request: R1901592
Date Analyzed: 02/26/19 12:43

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\022619\P24505.D\
Signal ID: 1

Calibration Date: 2/20/2019
Calibration ID: RC1900015
Analysis Lot: 626413
Units: ppb

Methylcyclohexane	50.0	56.8	0.4413	0.5011	13.6	NA	±20	Average RF
Styrene	50.0	54.4	1.1252	1.2246	8.8	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	50.4	0.2994	0.302	0.9	NA	±20	Average RF
Toluene	50.0	52.2	1.479	1.5431	4.3	NA	±20	Average RF
Trichloroethene (TCE)	50.0	51.2	0.3497	0.3583	2.5	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	50.3	0.705	0.7098	0.7	NA	±20	Average RF
Vinyl Chloride	50.0	54.3	0.7267	0.7885	8.5	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	52.1	0.5817	0.6056	4.1	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	53.0	0.5646	0.5985	6.0	NA	±20	Average RF
m,p-Xylenes	100	103	0.7057	0.729	3.3	NA	±20	Average RF
o-Xylene	50.0	52.1	0.6943	0.7241	4.3	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	50.8	0.5189	0.5271	1.6	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	53.9	0.4944	0.5334	7.9	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	50.0	0.4668	0.4671	0.1	NA	±20	Average RF
Dibromofluoromethane	50.0	51.1	0.2748	0.2806	2.1	NA	±20	Average RF
Toluene-d8	50.0	50.2	1.3033	1.3081	0.4	NA	±20	Average RF

Client: The LiRo Group **Service Request:**R1901592
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**626275
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\022519\P24454.D\	ZZZZZZZ	ZZZZZZZ	2/25/2019	13:45:00	
I:\ACQUDATA\msvoa12\Data\022519\P24455.D\	Continuing Calibration Verification	RQ1901592-02	2/25/2019	14:15:00	
I:\ACQUDATA\msvoa12\Data\022519\P24456.D\	Lab Control Sample	RQ1901592-03	2/25/2019	14:41:00	
I:\ACQUDATA\msvoa12\Data\022519\P24458.D\	Method Blank	RQ1901592-04	2/25/2019	15:37:00	
I:\ACQUDATA\msvoa12\Data\022519\P24459.D\	ZZZZZZZ	ZZZZZZZ	2/25/2019	16:08:00	
I:\ACQUDATA\msvoa12\Data\022519\P24460.D\	ZZZZZZZ	ZZZZZZZ	2/25/2019	16:29:00	
I:\ACQUDATA\msvoa12\Data\022519\P24461.D\	ZZZZZZZ	ZZZZZZZ	2/25/2019	16:51:00	
I:\ACQUDATA\msvoa12\Data\022519\P24462.D\	ZZZZZZZ	ZZZZZZZ	2/25/2019	17:13:00	
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I:\ACQUDATA\msvoa12\Data\022519\P24465.D\	ZZZZZZZ	ZZZZZZZ	2/25/2019	18:18:00	
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I:\ACQUDATA\msvoa12\Data\022519\P24467.D\	ZZZZZZZ	ZZZZZZZ	2/25/2019	19:01:00	
I:\ACQUDATA\msvoa12\Data\022519\P24468.D\	ZZZZZZZ	ZZZZZZZ	2/25/2019	19:23:00	
I:\ACQUDATA\msvoa12\Data\022519\P24470.D\	ZZZZZZZ	ZZZZZZZ	2/25/2019	20:06:00	
I:\ACQUDATA\msvoa12\Data\022519\P24473.D\	MW-7A	R1901592-002	2/25/2019	21:11:00	
I:\ACQUDATA\msvoa12\Data\022519\P24474.D\	MW-8A	R1901592-003	2/25/2019	21:33:00	
I:\ACQUDATA\msvoa12\Data\022519\P24475.D\	MW-26	R1901592-004	2/25/2019	21:55:00	
I:\ACQUDATA\msvoa12\Data\022519\P24476.D\	MW-26A	R1901592-005	2/25/2019	22:16:00	
I:\ACQUDATA\msvoa12\Data\022519\P24477.D\	ZZZZZZZ	ZZZZZZZ	2/25/2019	22:38:00	
I:\ACQUDATA\msvoa12\Data\022519\P24478.D\	ZZZZZZZ	ZZZZZZZ	2/25/2019	22:59:00	
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I:\ACQUDATA\msvoa12\Data\022519\P24480.D\	ZZZZZZZ	ZZZZZZZ	2/25/2019	23:43:00	

Client: The LiRo Group **Service Request:**R1901592
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**626321
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\022519\P24481.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	00:04:00	
I:\ACQUDATA\msvoa12\Data\022519\P24482.D\	Continuing Calibration Verification	RQ1901613-02	2/26/2019	00:26:00	
I:\ACQUDATA\msvoa12\Data\022519\P24483.D\	Lab Control Sample	RQ1901613-03	2/26/2019	00:47:00	
I:\ACQUDATA\msvoa12\Data\022519\P24485.D\	Method Blank	RQ1901613-04	2/26/2019	01:31:00	
I:\ACQUDATA\msvoa12\Data\022519\P24486.D\	Trip Blank	R1901592-012	2/26/2019	01:52:00	
I:\ACQUDATA\msvoa12\Data\022519\P24487.D\	MW-9A	R1901592-006	2/26/2019	02:14:00	
I:\ACQUDATA\msvoa12\Data\022519\P24488.D\	MW-9	R1901592-007	2/26/2019	02:35:00	
I:\ACQUDATA\msvoa12\Data\022519\P24489.D\	MW-10	R1901592-009	2/26/2019	02:57:00	
I:\ACQUDATA\msvoa12\Data\022519\P24490.D\	MW-25A	R1901592-010	2/26/2019	03:18:00	
I:\ACQUDATA\msvoa12\Data\022519\P24491.D\	MW-21A	R1901592-011	2/26/2019	03:40:00	
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I:\ACQUDATA\msvoa12\Data\022519\P24498.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	10:03:00	
I:\ACQUDATA\msvoa12\Data\022519\P24499.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	10:24:00	
I:\ACQUDATA\msvoa12\Data\022519\P24500.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	10:46:00	
I:\ACQUDATA\msvoa12\Data\022519\P24501.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	11:08:00	
I:\ACQUDATA\msvoa12\Data\022519\P24503.D\	MW-6	R1901592-008	2/26/2019	11:51:00	

Client: The LiRo Group **Service Request:**R1901592
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**626413
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\022619\P24504.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	12:21:00	
I:\ACQUDATA\msvoa12\Data\022619\P24505.D\	Continuing Calibration Verification	RQ1901633-02	2/26/2019	12:43:00	
I:\ACQUDATA\msvoa12\Data\022619\P24506.D\	Lab Control Sample	RQ1901633-03	2/26/2019	13:05:00	
I:\ACQUDATA\msvoa12\Data\022619\P24508.D\	Method Blank	RQ1901633-04	2/26/2019	13:48:00	
I:\ACQUDATA\msvoa12\Data\022619\P24509.D\	MW-7	R1901592-001	2/26/2019	14:18:00	
I:\ACQUDATA\msvoa12\Data\022619\P24510.D\	MW-6	R1901592-008	2/26/2019	14:39:00	
I:\ACQUDATA\msvoa12\Data\022619\P24512.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	15:23:00	
I:\ACQUDATA\msvoa12\Data\022619\P24513.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	15:45:00	
I:\ACQUDATA\msvoa12\Data\022619\P24514.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	16:07:00	
I:\ACQUDATA\msvoa12\Data\022619\P24515.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	16:28:00	
I:\ACQUDATA\msvoa12\Data\022619\P24518.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	17:33:00	
I:\ACQUDATA\msvoa12\Data\022619\P24519.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	17:55:00	
I:\ACQUDATA\msvoa12\Data\022619\P24520.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	18:17:00	
I:\ACQUDATA\msvoa12\Data\022619\P24521.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	18:39:00	
I:\ACQUDATA\msvoa12\Data\022619\P24522.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	19:00:00	
I:\ACQUDATA\msvoa12\Data\022619\P24523.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	19:22:00	
I:\ACQUDATA\msvoa12\Data\022619\P24524.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	19:44:00	
I:\ACQUDATA\msvoa12\Data\022619\P24525.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	20:05:00	
I:\ACQUDATA\msvoa12\Data\022619\P24526.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	20:27:00	
I:\ACQUDATA\msvoa12\Data\022619\P24527.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	20:49:00	
I:\ACQUDATA\msvoa12\Data\022619\P24528.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	21:10:00	
I:\ACQUDATA\msvoa12\Data\022619\P24529.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	21:32:00	
I:\ACQUDATA\msvoa12\Data\022619\P24530.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	21:53:00	

Client: The LiRo Group **Service Request:**R1901592
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**626413
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\022619\P24531.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	22:15:00	
I:\ACQUDATA\msvoa12\Data\022619\P24532.D\	ZZZZZZZ	ZZZZZZZ	2/26/2019	22:36:00	

Analysis: 8260D Waters | Analyst: K. Duerst | pH strips: 204019 | Tune Method: W022019

Date: 2/25/19 | Balance ID: N/A | ResCl strips: N/A | Run Method: ↓

Instr. 12 | 50 mL Class A used for dilution FV | Syringes: 193643 | LIMS Run#: 626275

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Tier	Vial	pH	File#	OK?	Comments
2	TUNE		RQ1901592.01					P24454	YT	(auto) 13:45
1	CCV		02					P24455	YC	
2	LCS. Acid		03					P24456	YQ	
1	VBLK		—					P24457	(N)	npt e/o
2	↓		04					P24458	YB	
1	R1901455.001	1.0	(LL)	66656	3	1	22	P24459	Y	
2	002	1.0				1	22	P24460	Y	
3	003	1.0				1	22	P24461	Y	
4	004	1.0				1	22	P24462	Y	
5	005	1.0				1	22	P24463	Y	
6	006	1.0				1	22	P24464	(N)	Isopanol hit 7mLL
7	007	1.0				1	22	P24465	Y	
8	008	1.0				1	22	P24466	Y	
9	009	1.0		↓	↓	1	22	P24467	Y	
10	R1901487.001	1.0		66656	3	1	22	P24468	(Y)	npt 2.5
11	002	1.0				1	22	P24469	(N)	npt e/o
12	003	1.0				1	22	P24470	(Y)	npt 5.0
13	004	1.0				1	22	P24471	(N)	npt e/o
14	R1901592.001	1.0		58613	4	1	22	P24472	(N)	pos e/o
15	002	1.0				1	22	P24473	Y	
16	003	1.0				1	22	P24474	Y	
17	004	1.0				1	22	P24475	Y	
18	005	1.0		↓	↓	1	22	P24476	Y	
19	R1901416.001	1.0		66675	2	2	22	P24477	Y	
20	003	5.0	10/50mLs	↓		2	22	P24478	(Y)	(DL)
21	R1901488.001	1.0	MS (LL)	66656	3	2	22	P24479	YQ	Run DL
22	001	1.0	MSD ↓	↓	↓	3	22	P24480	YQ	23:43 ✓ ↓
										END
										KR 2/25/19

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

Combined IS/Surr —

Surrogate 50 : 1969198

Internal Std 50 : 1969199

Reagents:

500 Primary Acct : 197026

Primary Frt : 197154 — 5mL → 50mLs = CCV

Primary HSL : 196788

Primary TG : 196747

Primary —

200 Secondary Frt : 197077 - 5mL

500 Secondary Acct : 195846

Secondary HSL : 197007 — 2mL

Secondary TG : 196714

Secondary —

50mLs - 10.6mL = LCS / 47.2mL

47mL vial = MS/D

Runlog-MSVOAr4 1/17/17

Analysis: 5260 Waters | Analyst: K. Quest | pH strips: 204018 | Tune Method: WOA7019

Date: 2/25/19 - Run#2 | Balance ID: N/A | ResCl strips: N/A | Run Method: ↓

Instr. 12 | 50 mL Class A used for dilution FV | Syringes: 193643 | LIMS Run#: 626321

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Tier	Vial	pH	File#	OK?	Comments
23	TUNE		RQ1901613 - 01					PJ4481	YT	(auto) 00:04
24	CCV		02					PJ4482	YC	
25	LCS. Acin		03					PJ4483	YQ	
26	VBLK		—					PJ4484	(N)	not c/o
27	↓		↓ 04					PJ4485	YB	
28	R1901592 - 012	1.0		8043	4	1	22	PJ4486	Y	
29	006	1.0				1	22	PJ4487	Y	
30	007	1.0				1	22	PJ4488	Y	
31	009	1.0				1	22	PJ4489	Y	
32	010	1.0				1	22	PJ4490	Y	
33	011	1.0				1	22	~~PJ4491~~	Y	~~PJ4491~~ PJ4491 (KR)
34	008	25	2/50mls			1	22	PJ4492	(N)	not 10
35	MS 008	25				1	22	PJ4493		(Run QL - parent overdilute)
36	MSD 008	25	↓	↓	↓	1	22	PJ4494	↓	
37	BLK					—	—	PJ4495	—	
1	BLK					—	—	PJ4496	—	
2	~~R1901592 - 005~~	~~10~~	~~5/50mls~~	~~8043~~	~~4~~	~~2~~		~~PJ4497~~		~~(KR)~~
3	R19015									(KR)
2	R1901488 - 006	1.0	(QL)	6656	3	2	22	PJ4497	Y	
3	R1901487 - 002	1.0				2	22	PJ4498	Y	
4	004	1.0				2	22	PJ4499	Y	
5	001	2.5	20/50mls			2	22	PJ4500	(Y)	(DL)
6	003	5.0	10/50mls	↓	↓	2	22	PJ4501	(Y)	(DL)
~~7~~	BLK							~~PJ4502~~	—	— (KR)
7	R1901592 - 001	1.0		8043	4	2	22	~~PJ4503~~	(N)	PJ4502 not c/o
8	↓ 005	10	5/50mls	↓	↓	2	22	~~PJ4504~~	(N)	PJ4503 not 5.0 as DL (Y) (KR)
(KR)										
										EOD
										KR 2/26/19

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

500 Primary OCC+ : 197026
Primary F/+ : 197154 5ml → 50mls
Primary H2 : 196788 = CCV
Primary TG : 196747
Primary :

200 Secondary F/+ : 197077 - 5ml
500 Secondary OCC+ : 195896
Secondary H2 : 197007 2ml
Secondary TG : 196714
Secondary : = 50mls = LCS

-10.6mL
4.2mL
42ml vial = MS/D

Combined IS/Surr :
Surrogate 50 : 196918
Internal Std 50 : 196919
Reagents:

Runlog-MSVOAr4 1/17/17

March 13, 2019 Service Request No:R1901880

Mr. Jon Williams
The LiRo Group
690 Delaware Ave.
Buffalo, NY 14209

Laboratory Results for: Buffalo China

Dear Mr.Williams,

Enclosed are the results of the sample(s) submitted to our laboratory March 06, 2019
For your reference, these analyses have been assigned our service request number **R1901880.**

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7475. You may also contact me via email at Meghan.Pedro@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Meghan Pedro
Project Manager

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ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: The LiRo Group
Project: Buffalo China
Sample Matrix: Water

Service Request: R1901880
Date Received: 03/06/2019

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV, validation deliverables including all summary forms and associated raw data. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Any parameters that are not included in the lab's NELAC accreditation are identified on a "Non-Certified Analytes" report in the Miscellaneous Forms Section of this report. Individual analytical results requiring further explanation are flagged with qualifiers and/or discussed below. The flags are explained in the Report Qualifiers and Definitions page in the Miscellaneous Forms section of this report.

Sample Receipt:

Nine water samples were received for analysis at ALS Environmental on 03/06/2019. Any discrepancies noted upon initial sample inspection are noted on the cooler receipt and preservation form included in this data package. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at 0 to 6°C upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature. If any samples were received for the analysis of pH, chlorine residual, sulfite, dissolved oxygen, or ferrous iron, the samples were analyzed past their holding time expiration since these analyses are required to be analyzed within 15 minutes of sampling.

Volatiles by GC/MS:

Method 8260C, 03/08/2019: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.
Method 8260C, 03/07/2019: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Approved by _____ Date 03/13/2019

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-5AR			Lab ID: R1901880-001			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1,2,2-Tetrachloroethane	43	J	40	1000	ug/L	8260C
Bromodichloromethane	61	J	44	1000	ug/L	8260C
Carbon Disulfide	50	J	50	2000	ug/L	8260C
Chloroform	310	J	48	1000	ug/L	8260C
Tetrachloroethene (PCE)	63	J	42	1000	ug/L	8260C
Trichloroethene (TCE)	24000		40	1000	ug/L	8260C
Vinyl Chloride	440	J	40	1000	ug/L	8260C
cis-1,2-Dichloroethene	25000		46	1000	ug/L	8260C
trans-1,2-Dichloroethene	1700		40	1000	ug/L	8260C

CLIENT ID: MW-20A			Lab ID: R1901880-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1-Dichloroethene (1,1-DCE)	2.0	J	0.25	5.0	ug/L	8260C
Benzene	0.26	J	0.20	5.0	ug/L	8260C
Cyclohexane	0.67	J	0.26	10	ug/L	8260C
Methylcyclohexane	0.24	J	0.20	10	ug/L	8260C
Trichloroethene (TCE)	1.6	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	260	D	2.0	50	ug/L	8260C
cis-1,2-Dichloroethene	1100	D	2.3	50	ug/L	8260C
trans-1,2-Dichloroethene	5.0		0.20	5.0	ug/L	8260C

CLIENT ID: MW-13A			Lab ID: R1901880-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon Disulfide	35	J	13	500	ug/L	8260C
Tetrachloroethene (PCE)	23	J	11	250	ug/L	8260C
Trichloroethene (TCE)	3100		10	250	ug/L	8260C
Vinyl Chloride	150	J	10	250	ug/L	8260C
cis-1,2-Dichloroethene	8500		12	250	ug/L	8260C
trans-1,2-Dichloroethene	410		10	250	ug/L	8260C

CLIENT ID: MW-14A			Lab ID: R1901880-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Acetone	3.2	J	2.1	10	ug/L	8260C
Methyl tert-Butyl Ether	0.28	J	0.20	5.0	ug/L	8260C
Trichloroethene (TCE)	1.1	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	2.5	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	4.9	J	0.23	5.0	ug/L	8260C
trans-1,2-Dichloroethene	0.68	J	0.20	5.0	ug/L	8260C

CLIENT ID: MW-19R			Lab ID: R1901880-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Acetone	3.2	J	2.1	10	ug/L	8260C
Methylcyclohexane	0.26	J	0.20	10	ug/L	8260C

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-19R			Lab ID: R1901880-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Trichloroethene (TCE)	78		0.20	5.0	ug/L	8260C
Vinyl Chloride	0.36	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	59		0.23	5.0	ug/L	8260C
trans-1,2-Dichloroethene	4.3	J	0.20	5.0	ug/L	8260C

CLIENT ID: DUP			Lab ID: R1901880-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1-Dichloroethene (1,1-DCE)	1.9	J	0.25	5.0	ug/L	8260C
Acetone	3.1	J	2.1	10	ug/L	8260C
Benzene	0.28	J	0.20	5.0	ug/L	8260C
Cyclohexane	0.71	J	0.26	10	ug/L	8260C
Methylcyclohexane	0.36	J	0.20	10	ug/L	8260C
Trichloroethene (TCE)	1.6	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	240	D	2.0	50	ug/L	8260C
cis-1,2-Dichloroethene	990	D	2.3	50	ug/L	8260C
trans-1,2-Dichloroethene	4.4	J	0.20	5.0	ug/L	8260C

CLIENT ID: MW-5R			Lab ID: R1901880-007			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1,2,2-Tetrachloroethane	0.31	J	0.20	5.0	ug/L	8260C
1,1,2-Trichloroethane	0.50	J	0.20	5.0	ug/L	8260C
Acetone	11		2.1	10	ug/L	8260C
Carbon Disulfide	0.32	J	0.25	10	ug/L	8260C
Chloroform	0.33	J	0.24	5.0	ug/L	8260C
Tetrachloroethene (PCE)	1.2	J	0.21	5.0	ug/L	8260C
Trichloroethene (TCE)	450	D	0.50	13	ug/L	8260C
Vinyl Chloride	0.51	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	160		0.23	5.0	ug/L	8260C
trans-1,2-Dichloroethene	12		0.20	5.0	ug/L	8260C

CLIENT ID: MW-19AR			Lab ID: R1901880-008			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Acetone	9.0	J	5.3	25	ug/L	8260C
Carbon Disulfide	3.6	J	0.63	25	ug/L	8260C
Cyclohexane	1.9	J	0.65	25	ug/L	8260C
Dichloromethane	2.3	J	0.90	13	ug/L	8260C
Methylcyclohexane	1.3	J	0.50	25	ug/L	8260C
Tetrachloroethene (PCE)	6.6	J	0.53	13	ug/L	8260C
Trichloroethene (TCE)	830	D	2.0	50	ug/L	8260C
Vinyl Chloride	4.8	J	0.50	13	ug/L	8260C
cis-1,2-Dichloroethene	270	D	2.3	50	ug/L	8260C
trans-1,2-Dichloroethene	12	J	0.50	13	ug/L	8260C

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-11	Lab ID: R1901880-009					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1-Dichloroethene (1,1-DCE)	2.5	J	0.25	5.0	ug/L	8260C
1,4-Dichlorobenzene	0.59	J	0.20	5.0	ug/L	8260C
Acetone	13		2.1	10	ug/L	8260C
Benzene	0.35	J	0.20	5.0	ug/L	8260C
Methyl tert-Butyl Ether	0.33	J	0.20	5.0	ug/L	8260C
Trichloroethene (TCE)	290	D	2.0	50	ug/L	8260C
Vinyl Chloride	2.0	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	1300	D	2.3	50	ug/L	8260C
trans-1,2-Dichloroethene	6.2		0.20	5.0	ug/L	8260C

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: The LiRo Group **Service Request:**R1901880
Project: Buffalo China/16-344-1389

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1901880-001	MW-5AR	2/22/2019	1215
R1901880-002	MW-20A	2/22/2019	1115
R1901880-003	MW-13A	2/26/2019	1015
R1901880-004	MW-14A	2/26/2019	1120
R1901880-005	MW-19R	2/22/2019	1445
R1901880-006	DUP	2/22/2019	
R1901880-007	MW-5R	2/22/2019	1305
R1901880-008	MW-19AR	3/5/2019	1120
R1901880-009	MW-11	3/5/2019	1300

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM 51295

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name: Buffalo China	Project Number: 16-344-1389
Project Manager: Jon Williams	Report CC:
Company/Address: LiRo Engineers 690 Delaware Ave Buffalo NY 14209	
Phone #: 716.882-5476	Email: williamsj@liro.com
Sampler's Signature: Andrew Koons	Sampler's Printed Name: Andrew Koons

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs • 8260 • 624 • CLP	GC/MS SVOAs • 8270 • 625	GC VOAs • 8021 • 601/602	PESTICIDES • 8081 • 608	PCBs • 8082 • 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
MW-5AR		2/22/19	1215	H_2O	9	X							MS/MSD
MW-20A		2/22/19	1115		3	X							
MW-13A		2/26/19	1015		3	X							
MW-14A		2/26/19	1120		3	X							
MW-19R		2/22/19	1445		3	X							
DUP		2/22/19	—		3	X							
MW-5R		2/22/19	1305		3	X							
MW-19AR		3/5/19	1120		3	X							
MW-11		3/5/19	1300		3	X							

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other ____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED: New York

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day X 5 day
____ Standard (10 business days-No Surcharge)
REQUESTED REPORT DATE: _____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
X IV. Data Validation Report with Raw Data
NYSDEC EDD v4
Edata X Yes ____ No

INVOICE INFORMATION
PO # 16-344-1389
BILL TO: Annette Gorecki
LiRo Engineers
690 Delaware Ave
Buffalo NY 14209

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Andrew Koons					
Signature: Andrew Koons	Signature:	Signature:	Signature:	Signature:	Signature:
Printed Name:	Printed Name:	Printed Name:	Printed Name:	Printed Name:	
Firm: LiRo	Firm: ALS	Firm:	Firm:	Firm:	
Date/Time: 3/5/19	Date/Time: 3/6/19 0925	Date/Time:	Date/Time:	Date/Time:	

To Fedex

R1901880 5
The LiRo Group
Buffalo China

Distribution: White - Lab Copy; Yellow - Return to Originator

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R1901880 5
The LIRo Group
Buffalo China

Cooler Receipt and Preservation Check Form

Project/Client LIRO Folder Number

Cooler received on 3/6/19 by: @ COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	(Y) N NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS/ROC) CLIENT
4	Circle: (Wet Ice) **Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 3/6/19 Time: 0942 ID: IR#7 (IR#10) From: Temp Blank (Sample Bottle)

Observed Temp (°C)	5.3						
Correction Factor (°C)	-0.1						
Corrected Temp (°C)	5.2						
Temp from:Type of bottle	VOA vial						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-002 by @ on 3/6/19 at 0955
5035 samples placed in storage location: _____ by _____ on _____ at _____

Cooler Breakdown/Preservation Check**: Date: 3/6/19 Time: 1243 by: @

9. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
10. Did all bottle labels and tags agree with custody papers? (YES) NO
11. Were correct containers used for the tests indicated? (YES) NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO ~~N/A~~
13. Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized Tedlar® Bags Inflated ~~N/A~~

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2		HNO_3								
≤2		H_2SO_4								
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-			**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).			
		HCl	**	**	4117090					

Bottle lot numbers: 8-206-001

Explain all Discrepancies/ Other Comments:

Headspace: MW-5AR (3 vials)
MW-13A ↓
MW-5AR MS (2 vials)
MW-11 (1 vial)
MW-5AR MSD (3 vials)

CLRES	BULK
DO	FLDT
HPROD	HGFB
HTR	LL3541
PH	SUB
SO3	MARRS
ALS	REV

Labels secondary reviewed by: @
PC Secondary Review: MP

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

ALS Group USA, Corp.
dba ALS Environmental

Internal Chain of Custody Report

Client: The LiRo Group **Service Request:** R1901880
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R1901880-001.01					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-001.02					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-001.03					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-001.04					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-001.05					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-001.06					
	8260C				
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
		3/7/2019	1213	In Lab / KRUEST	
		3/7/2019	1238	R-001-S12 / KRUEST	
R1901880-001.07					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-001.08					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-001.09					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-002.01					

Client: The LiRo Group **Service Request:** R1901880
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	8260C				
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
		3/7/2019	1213	In Lab / KRUEST	
		3/7/2019	1238	R-001-S12 / KRUEST	
R1901880-002.02					
	8260C				
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-002.03					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-003.01					
	8260C				
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
		3/7/2019	1213	In Lab / KRUEST	
		3/7/2019	1238	R-001-S12 / KRUEST	
R1901880-003.02					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-003.03					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-004.01					
	8260C				
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
		3/7/2019	1213	In Lab / KRUEST	
		3/7/2019	1238	R-001-S12 / KRUEST	
		3/8/2019	1405	In Lab / FNAEGLER	
		3/8/2019	1437	R-001-S12 / FNAEGLER	
R1901880-004.02					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-004.03					

Client: The LiRo Group **Service Request:** R1901880
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-005.01					
	8260C				
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
		3/7/2019	1213	In Lab / KRUEST	
		3/7/2019	1238	R-001-S12 / KRUEST	
R1901880-005.02					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-005.03					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-006.01					
	8260C				
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
		3/7/2019	1213	In Lab / KRUEST	
		3/7/2019	1238	R-001-S12 / KRUEST	
R1901880-006.02					
	8260C				
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-006.03					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-007.01					
	8260C,8260C				
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
		3/7/2019	1213	In Lab / KRUEST	
		3/7/2019	1238	R-001-S12 / KRUEST	
R1901880-007.02					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	

ALS Group USA, Corp.
dba ALS Environmental

Internal Chain of Custody Report

Client: The LiRo Group **Service Request:** R1901880
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R1901880-007.03					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-008.01					
	8260C				
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
		3/7/2019	1213	In Lab / KRUEST	
		3/7/2019	1238	R-001-S12 / KRUEST	
		3/8/2019	1405	In Lab / FNAEGLER	
		3/8/2019	1437	R-001-S12 / FNAEGLER	
R1901880-008.02					
	8260C				
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
		3/12/2019	1204	In Lab / KRUEST	
		3/12/2019	1336	R-001-S12 / KRUEST	
R1901880-008.03					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
R1901880-009.01					
	8260C				
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
		3/7/2019	1213	In Lab / KRUEST	
		3/7/2019	1238	R-001-S12 / KRUEST	
		3/8/2019	1405	In Lab / FNAEGLER	
		3/8/2019	1437	R-001-S12 / FNAEGLER	
R1901880-009.02					
	8260C				
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	
		3/12/2019	1204	In Lab / KRUEST	
		3/12/2019	1336	R-001-S12 / KRUEST	
R1901880-009.03					
		3/6/2019	1240	SMO / GLAFORCE	
		3/6/2019	1240	R-001 / GLAFORCE	

Miscellaneous Forms

ALS Environmental—Rochester Laboratory
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Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the ñNotesò column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an ñimmediateò hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (Ó100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Certifications[1]

Connecticut ID # PH0556	Maine ID #NY0032	Pennsylvania ID# 68-786
Delaware Approved	New Hampshire ID # 2941	Rhode Island ID # 158
DoD ELAP #65817	New York ID # 10145	Virginia #460167
Florida ID # E87674	North Carolina #676	

[1] Analyses were performed according to our laboratoryôs NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to https://www.alsglobal.com/locations/americas/north-america/usa/new-york/rochester-environmental

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: The LiRo Group
Project: Buffalo China/16-344-1389
Service Request: R1901880

Sample Name: MW-5AR
Lab Code: R1901880-001
Sample Matrix: Water
Date Collected: 02/22/19
Date Received: 03/6/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-20A
Lab Code: R1901880-002
Sample Matrix: Water
Date Collected: 02/22/19
Date Received: 03/6/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-20A
Lab Code: R1901880-002.R01
Sample Matrix: Water
Date Collected: 02/22/19
Date Received: 03/6/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-13A
Lab Code: R1901880-003
Sample Matrix: Water
Date Collected: 02/26/19
Date Received: 03/6/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-14A
Lab Code: R1901880-004
Sample Matrix: Water
Date Collected: 02/26/19
Date Received: 03/6/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		FNAEGLER

Client: The LiRo Group
Project: Buffalo China/16-344-1389
Service Request: R1901880

Sample Name: MW-19R
Lab Code: R1901880-005
Sample Matrix: Water
Date Collected: 02/22/19
Date Received: 03/6/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: DUP
Lab Code: R1901880-006
Sample Matrix: Water
Date Collected: 02/22/19
Date Received: 03/6/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: DUP
Lab Code: R1901880-006.R01
Sample Matrix: Water
Date Collected: 02/22/19
Date Received: 03/6/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-5R
Lab Code: R1901880-007
Sample Matrix: Water
Date Collected: 02/22/19
Date Received: 03/6/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-5R
Lab Code: R1901880-007.R01
Sample Matrix: Water
Date Collected: 02/22/19
Date Received: 03/6/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Client: The LiRo Group
Project: Buffalo China/16-344-1389
Service Request: R1901880

Sample Name: MW-19AR
Lab Code: R1901880-008
Sample Matrix: Water
Date Collected: 03/5/19
Date Received: 03/6/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-19AR
Lab Code: R1901880-008.R01
Sample Matrix: Water
Date Collected: 03/5/19
Date Received: 03/6/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		FNAEGLER

Sample Name: MW-11
Lab Code: R1901880-009
Sample Matrix: Water
Date Collected: 03/5/19
Date Received: 03/6/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-11
Lab Code: R1901880-009.R01
Sample Matrix: Water
Date Collected: 03/5/19
Date Received: 03/6/19

Analysis Method	Extracted/Digested By	Analyzed By
8260C		FNAEGLER

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

Sample Results

ALS Environmental—Rochester Laboratory
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Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19 12:15
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-5AR	**Units:**	ug/L
Lab Code:	R1901880-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1000 U	1000	42	200	03/07/19 13:04	
1,1,2,2-Tetrachloroethane	**43 J**	1000	40	200	03/07/19 13:04	
1,1,2-Trichloroethane	1000 U	1000	40	200	03/07/19 13:04	
1,1,2-Trichloro-1,2,2-trifluoroethane	1000 U	1000	40	200	03/07/19 13:04	
1,1-Dichloroethane (1,1-DCA)	1000 U	1000	40	200	03/07/19 13:04	
1,1-Dichloroethene (1,1-DCE)	1000 U	1000	50	200	03/07/19 13:04	
1,2,3-Trichlorobenzene	1000 U	1000	40	200	03/07/19 13:04	
1,2,4-Trichlorobenzene	1000 U	1000	50	200	03/07/19 13:04	
1,2-Dibromo-3-chloropropane (DBCP)	1000 U	1000	90	200	03/07/19 13:04	
1,2-Dibromoethane	1000 U	1000	40	200	03/07/19 13:04	
1,2-Dichlorobenzene	1000 U	1000	40	200	03/07/19 13:04	
1,2-Dichloroethane	1000 U	1000	40	200	03/07/19 13:04	
1,2-Dichloropropane	1000 U	1000	40	200	03/07/19 13:04	
1,3-Dichlorobenzene	1000 U	1000	40	200	03/07/19 13:04	
1,4-Dichlorobenzene	1000 U	1000	40	200	03/07/19 13:04	
1,4-Dioxane	20000 U	20000	2600	200	03/07/19 13:04	
2-Butanone (MEK)	2000 U	2000	160	200	03/07/19 13:04	
2-Hexanone	2000 U	2000	40	200	03/07/19 13:04	
4-Methyl-2-pentanone	2000 U	2000	40	200	03/07/19 13:04	
Acetone	2000 U	2000	420	200	03/07/19 13:04	
Benzene	1000 U	1000	40	200	03/07/19 13:04	
Bromochloromethane	1000 U	1000	48	200	03/07/19 13:04	
Bromodichloromethane	**61 J**	1000	44	200	03/07/19 13:04	
Bromoform	1000 U	1000	50	200	03/07/19 13:04	
Bromomethane	1000 U	1000	140	200	03/07/19 13:04	
Carbon Disulfide	**50 J**	2000	50	200	03/07/19 13:04	
Carbon Tetrachloride	1000 U	1000	68	200	03/07/19 13:04	
Chlorobenzene	1000 U	1000	40	200	03/07/19 13:04	
Chloroethane	1000 U	1000	46	200	03/07/19 13:04	
Chloroform	**310 J**	1000	48	200	03/07/19 13:04	
Chloromethane	1000 U	1000	56	200	03/07/19 13:04	
Cyclohexane	2000 U	2000	52	200	03/07/19 13:04	
Dibromochloromethane	1000 U	1000	40	200	03/07/19 13:04	
Dichlorodifluoromethane (CFC 12)	1000 U	1000	42	200	03/07/19 13:04	
Dichloromethane	1000 U	1000	72	200	03/07/19 13:04	
Ethylbenzene	1000 U	1000	40	200	03/07/19 13:04	
Isopropylbenzene (Cumene)	1000 U	1000	40	200	03/07/19 13:04	
Methyl Acetate	2000 U	2000	66	200	03/07/19 13:04	
Methyl tert-Butyl Ether	1000 U	1000	40	200	03/07/19 13:04	
Methylcyclohexane	2000 U	2000	40	200	03/07/19 13:04	
Styrene	1000 U	1000	40	200	03/07/19 13:04	
Tetrachloroethene (PCE)	**63 J**	1000	42	200	03/07/19 13:04	
Toluene	1000 U	1000	40	200	03/07/19 13:04	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19 12:15
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-5AR	**Units:**	ug/L
Lab Code:	R1901880-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**24000**		1000	40	200	03/07/19 13:04	
Trichlorofluoromethane (CFC 11)	1000	U	1000	48	200	03/07/19 13:04	
Vinyl Chloride	**440**	**J**	1000	40	200	03/07/19 13:04	
cis-1,2-Dichloroethene	**25000**		1000	46	200	03/07/19 13:04	
cis-1,3-Dichloropropene	1000	U	1000	40	200	03/07/19 13:04	
m,p-Xylenes	1000	U	1000	40	200	03/07/19 13:04	
o-Xylene	1000	U	1000	40	200	03/07/19 13:04	
trans-1,2-Dichloroethene	**1700**		1000	40	200	03/07/19 13:04	
trans-1,3-Dichloropropene	1000	U	1000	46	200	03/07/19 13:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	03/07/19 13:04	
Dibromofluoromethane	102	89 - 119	03/07/19 13:04	
Toluene-d8	100	87 - 121	03/07/19 13:04	

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19 11:15
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-20A	**Units:**	ug/L
Lab Code:	R1901880-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	03/07/19 13:47	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,1-Dichloroethene (1,1-DCE)	**2.0 J**	5.0	0.25	1	03/07/19 13:47	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	03/07/19 13:47	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	03/07/19 13:47	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,4-Dioxane	100 U	100	13	1	03/07/19 13:47	
2-Butanone (MEK)	10 U	10	0.78	1	03/07/19 13:47	
2-Hexanone	10 U	10	0.20	1	03/07/19 13:47	
4-Methyl-2-pentanone	10 U	10	0.20	1	03/07/19 13:47	
Acetone	10 U	10	2.1	1	03/07/19 13:47	
Benzene	**0.26 J**	5.0	0.20	1	03/07/19 13:47	
Bromochloromethane	5.0 U	5.0	0.24	1	03/07/19 13:47	
Bromodichloromethane	5.0 U	5.0	0.22	1	03/07/19 13:47	
Bromoform	5.0 U	5.0	0.25	1	03/07/19 13:47	
Bromomethane	5.0 U	5.0	0.70	1	03/07/19 13:47	
Carbon Disulfide	10 U	10	0.25	1	03/07/19 13:47	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	03/07/19 13:47	
Chlorobenzene	5.0 U	5.0	0.20	1	03/07/19 13:47	
Chloroethane	5.0 U	5.0	0.23	1	03/07/19 13:47	
Chloroform	5.0 U	5.0	0.24	1	03/07/19 13:47	
Chloromethane	5.0 U	5.0	0.28	1	03/07/19 13:47	
Cyclohexane	**0.67 J**	10	0.26	1	03/07/19 13:47	
Dibromochloromethane	5.0 U	5.0	0.20	1	03/07/19 13:47	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	03/07/19 13:47	
Dichloromethane	5.0 U	5.0	0.36	1	03/07/19 13:47	
Ethylbenzene	5.0 U	5.0	0.20	1	03/07/19 13:47	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	03/07/19 13:47	
Methyl Acetate	10 U	10	0.33	1	03/07/19 13:47	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	03/07/19 13:47	
Methylcyclohexane	**0.24 J**	10	0.20	1	03/07/19 13:47	
Styrene	5.0 U	5.0	0.20	1	03/07/19 13:47	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	03/07/19 13:47	
Toluene	5.0 U	5.0	0.20	1	03/07/19 13:47	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19 11:15
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-20A	**Units:**	ug/L
Lab Code:	R1901880-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**1.6**	**J**	5.0	0.20	1	03/07/19 13:47	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	03/07/19 13:47	
Vinyl Chloride	**260**	**D**	50	2.0	10	03/07/19 18:49	
cis-1,2-Dichloroethene	**1100**	**D**	50	2.3	10	03/07/19 18:49	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	03/07/19 13:47	
m,p-Xylenes	5.0	U	5.0	0.20	1	03/07/19 13:47	
o-Xylene	5.0	U	5.0	0.20	1	03/07/19 13:47	
trans-1,2-Dichloroethene	**5.0**		5.0	0.20	1	03/07/19 13:47	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	03/07/19 13:47	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 122	03/07/19 13:47	
Dibromofluoromethane	101	89 - 119	03/07/19 13:47	
Toluene-d8	102	87 - 121	03/07/19 13:47	

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/26/19 10:15
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-13A	**Units:**	ug/L
Lab Code:	R1901880-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	250 U	250	11	50	03/07/19 19:32	
1,1,2,2-Tetrachloroethane	250 U	250	10	50	03/07/19 19:32	
1,1,2-Trichloroethane	250 U	250	10	50	03/07/19 19:32	
1,1,2-Trichloro-1,2,2-trifluoroethane	250 U	250	10	50	03/07/19 19:32	
1,1-Dichloroethane (1,1-DCA)	250 U	250	10	50	03/07/19 19:32	
1,1-Dichloroethene (1,1-DCE)	250 U	250	13	50	03/07/19 19:32	
1,2,3-Trichlorobenzene	250 U	250	10	50	03/07/19 19:32	
1,2,4-Trichlorobenzene	250 U	250	13	50	03/07/19 19:32	
1,2-Dibromo-3-chloropropane (DBCP)	250 U	250	23	50	03/07/19 19:32	
1,2-Dibromoethane	250 U	250	10	50	03/07/19 19:32	
1,2-Dichlorobenzene	250 U	250	10	50	03/07/19 19:32	
1,2-Dichloroethane	250 U	250	10	50	03/07/19 19:32	
1,2-Dichloropropane	250 U	250	10	50	03/07/19 19:32	
1,3-Dichlorobenzene	250 U	250	10	50	03/07/19 19:32	
1,4-Dichlorobenzene	250 U	250	10	50	03/07/19 19:32	
1,4-Dioxane	5000 U	5000	650	50	03/07/19 19:32	
2-Butanone (MEK)	500 U	500	39	50	03/07/19 19:32	
2-Hexanone	500 U	500	10	50	03/07/19 19:32	
4-Methyl-2-pentanone	500 U	500	10	50	03/07/19 19:32	
Acetone	500 U	500	110	50	03/07/19 19:32	
Benzene	250 U	250	10	50	03/07/19 19:32	
Bromochloromethane	250 U	250	12	50	03/07/19 19:32	
Bromodichloromethane	250 U	250	11	50	03/07/19 19:32	
Bromoform	250 U	250	13	50	03/07/19 19:32	
Bromomethane	250 U	250	35	50	03/07/19 19:32	
Carbon Disulfide	**35 J**	500	13	50	03/07/19 19:32	
Carbon Tetrachloride	250 U	250	17	50	03/07/19 19:32	
Chlorobenzene	250 U	250	10	50	03/07/19 19:32	
Chloroethane	250 U	250	12	50	03/07/19 19:32	
Chloroform	250 U	250	12	50	03/07/19 19:32	
Chloromethane	250 U	250	14	50	03/07/19 19:32	
Cyclohexane	500 U	500	13	50	03/07/19 19:32	
Dibromochloromethane	250 U	250	10	50	03/07/19 19:32	
Dichlorodifluoromethane (CFC 12)	250 U	250	11	50	03/07/19 19:32	
Dichloromethane	250 U	250	18	50	03/07/19 19:32	
Ethylbenzene	250 U	250	10	50	03/07/19 19:32	
Isopropylbenzene (Cumene)	250 U	250	10	50	03/07/19 19:32	
Methyl Acetate	500 U	500	17	50	03/07/19 19:32	
Methyl tert-Butyl Ether	250 U	250	10	50	03/07/19 19:32	
Methylcyclohexane	500 U	500	10	50	03/07/19 19:32	
Styrene	250 U	250	10	50	03/07/19 19:32	
Tetrachloroethene (PCE)	**23 J**	250	11	50	03/07/19 19:32	
Toluene	250 U	250	10	50	03/07/19 19:32	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/26/19 10:15
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-13A	**Units:**	ug/L
Lab Code:	R1901880-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**3100**		250	10	50	03/07/19 19:32	
Trichlorofluoromethane (CFC 11)	250	U	250	12	50	03/07/19 19:32	
Vinyl Chloride	**150**	**J**	250	10	50	03/07/19 19:32	
cis-1,2-Dichloroethene	**8500**		250	12	50	03/07/19 19:32	
cis-1,3-Dichloropropene	250	U	250	10	50	03/07/19 19:32	
m,p-Xylenes	250	U	250	10	50	03/07/19 19:32	
o-Xylene	250	U	250	10	50	03/07/19 19:32	
trans-1,2-Dichloroethene	**410**		250	10	50	03/07/19 19:32	
trans-1,3-Dichloropropene	250	U	250	12	50	03/07/19 19:32	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/07/19 19:32	
Dibromofluoromethane	100	89 - 119	03/07/19 19:32	
Toluene-d8	99	87 - 121	03/07/19 19:32	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/26/19 11:20
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-14A	**Units:**	ug/L
Lab Code:	R1901880-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	03/08/19 20:12	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	03/08/19 20:12	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	03/08/19 20:12	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	03/08/19 20:12	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,4-Dioxane	100 U	100	13	1	03/08/19 20:12	
2-Butanone (MEK)	10 U	10	0.78	1	03/08/19 20:12	
2-Hexanone	10 U	10	0.20	1	03/08/19 20:12	
4-Methyl-2-pentanone	10 U	10	0.20	1	03/08/19 20:12	
Acetone	**3.2 J**	10	2.1	1	03/08/19 20:12	
Benzene	5.0 U	5.0	0.20	1	03/08/19 20:12	
Bromochloromethane	5.0 U	5.0	0.24	1	03/08/19 20:12	
Bromodichloromethane	5.0 U	5.0	0.22	1	03/08/19 20:12	
Bromoform	5.0 U	5.0	0.25	1	03/08/19 20:12	
Bromomethane	5.0 U	5.0	0.70	1	03/08/19 20:12	
Carbon Disulfide	10 U	10	0.25	1	03/08/19 20:12	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	03/08/19 20:12	
Chlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:12	
Chloroethane	5.0 U	5.0	0.23	1	03/08/19 20:12	
Chloroform	5.0 U	5.0	0.24	1	03/08/19 20:12	
Chloromethane	5.0 U	5.0	0.28	1	03/08/19 20:12	
Cyclohexane	10 U	10	0.26	1	03/08/19 20:12	
Dibromochloromethane	5.0 U	5.0	0.20	1	03/08/19 20:12	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	03/08/19 20:12	
Dichloromethane	5.0 U	5.0	0.36	1	03/08/19 20:12	
Ethylbenzene	5.0 U	5.0	0.20	1	03/08/19 20:12	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	03/08/19 20:12	
Methyl Acetate	10 U	10	0.33	1	03/08/19 20:12	
Methyl tert-Butyl Ether	**0.28 J**	5.0	0.20	1	03/08/19 20:12	
Methylcyclohexane	10 U	10	0.20	1	03/08/19 20:12	
Styrene	5.0 U	5.0	0.20	1	03/08/19 20:12	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	03/08/19 20:12	
Toluene	5.0 U	5.0	0.20	1	03/08/19 20:12	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/26/19 11:20
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-14A	**Units:**	ug/L
Lab Code:	R1901880-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**1.1**	**J**	5.0	0.20	1	03/08/19 20:12	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	03/08/19 20:12	
Vinyl Chloride	**2.5**	**J**	5.0	0.20	1	03/08/19 20:12	
cis-1,2-Dichloroethene	**4.9**	**J**	5.0	0.23	1	03/08/19 20:12	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	03/08/19 20:12	
m,p-Xylenes	5.0	U	5.0	0.20	1	03/08/19 20:12	
o-Xylene	5.0	U	5.0	0.20	1	03/08/19 20:12	
trans-1,2-Dichloroethene	**0.68**	**J**	5.0	0.20	1	03/08/19 20:12	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	03/08/19 20:12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/08/19 20:12	
Dibromofluoromethane	99	89 - 119	03/08/19 20:12	
Toluene-d8	100	87 - 121	03/08/19 20:12	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19 14:45
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-19R	**Units:**	ug/L
Lab Code:	R1901880-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	03/07/19 14:30	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	03/07/19 14:30	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	03/07/19 14:30	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	03/07/19 14:30	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,4-Dioxane	100 U	100	13	1	03/07/19 14:30	
2-Butanone (MEK)	10 U	10	0.78	1	03/07/19 14:30	
2-Hexanone	10 U	10	0.20	1	03/07/19 14:30	
4-Methyl-2-pentanone	10 U	10	0.20	1	03/07/19 14:30	
Acetone	**3.2 J**	10	2.1	1	03/07/19 14:30	
Benzene	5.0 U	5.0	0.20	1	03/07/19 14:30	
Bromochloromethane	5.0 U	5.0	0.24	1	03/07/19 14:30	
Bromodichloromethane	5.0 U	5.0	0.22	1	03/07/19 14:30	
Bromoform	5.0 U	5.0	0.25	1	03/07/19 14:30	
Bromomethane	5.0 U	5.0	0.70	1	03/07/19 14:30	
Carbon Disulfide	10 U	10	0.25	1	03/07/19 14:30	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	03/07/19 14:30	
Chlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:30	
Chloroethane	5.0 U	5.0	0.23	1	03/07/19 14:30	
Chloroform	5.0 U	5.0	0.24	1	03/07/19 14:30	
Chloromethane	5.0 U	5.0	0.28	1	03/07/19 14:30	
Cyclohexane	10 U	10	0.26	1	03/07/19 14:30	
Dibromochloromethane	5.0 U	5.0	0.20	1	03/07/19 14:30	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	03/07/19 14:30	
Dichloromethane	5.0 U	5.0	0.36	1	03/07/19 14:30	
Ethylbenzene	5.0 U	5.0	0.20	1	03/07/19 14:30	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	03/07/19 14:30	
Methyl Acetate	10 U	10	0.33	1	03/07/19 14:30	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	03/07/19 14:30	
Methylcyclohexane	**0.26 J**	10	0.20	1	03/07/19 14:30	
Styrene	5.0 U	5.0	0.20	1	03/07/19 14:30	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	03/07/19 14:30	
Toluene	5.0 U	5.0	0.20	1	03/07/19 14:30	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19 14:45
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-19R	**Units:**	ug/L
Lab Code:	R1901880-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**78**	5.0	0.20	1	03/07/19 14:30	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	03/07/19 14:30	
Vinyl Chloride	**0.36 J**	5.0	0.20	1	03/07/19 14:30	
cis-1,2-Dichloroethene	**59**	5.0	0.23	1	03/07/19 14:30	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	03/07/19 14:30	
m,p-Xylenes	5.0 U	5.0	0.20	1	03/07/19 14:30	
o-Xylene	5.0 U	5.0	0.20	1	03/07/19 14:30	
trans-1,2-Dichloroethene	**4.3 J**	5.0	0.20	1	03/07/19 14:30	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	03/07/19 14:30	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	03/07/19 14:30	
Dibromofluoromethane	99	89 - 119	03/07/19 14:30	
Toluene-d8	100	87 - 121	03/07/19 14:30	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	DUP	**Units:**	ug/L
Lab Code:	R1901880-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	03/07/19 14:09	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,1-Dichloroethene (1,1-DCE)	**1.9 J**	5.0	0.25	1	03/07/19 14:09	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	03/07/19 14:09	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	03/07/19 14:09	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,4-Dioxane	100 U	100	13	1	03/07/19 14:09	
2-Butanone (MEK)	10 U	10	0.78	1	03/07/19 14:09	
2-Hexanone	10 U	10	0.20	1	03/07/19 14:09	
4-Methyl-2-pentanone	10 U	10	0.20	1	03/07/19 14:09	
Acetone	**3.1 J**	10	2.1	1	03/07/19 14:09	
Benzene	**0.28 J**	5.0	0.20	1	03/07/19 14:09	
Bromochloromethane	5.0 U	5.0	0.24	1	03/07/19 14:09	
Bromodichloromethane	5.0 U	5.0	0.22	1	03/07/19 14:09	
Bromoform	5.0 U	5.0	0.25	1	03/07/19 14:09	
Bromomethane	5.0 U	5.0	0.70	1	03/07/19 14:09	
Carbon Disulfide	10 U	10	0.25	1	03/07/19 14:09	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	03/07/19 14:09	
Chlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:09	
Chloroethane	5.0 U	5.0	0.23	1	03/07/19 14:09	
Chloroform	5.0 U	5.0	0.24	1	03/07/19 14:09	
Chloromethane	5.0 U	5.0	0.28	1	03/07/19 14:09	
Cyclohexane	**0.71 J**	10	0.26	1	03/07/19 14:09	
Dibromochloromethane	5.0 U	5.0	0.20	1	03/07/19 14:09	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	03/07/19 14:09	
Dichloromethane	5.0 U	5.0	0.36	1	03/07/19 14:09	
Ethylbenzene	5.0 U	5.0	0.20	1	03/07/19 14:09	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	03/07/19 14:09	
Methyl Acetate	10 U	10	0.33	1	03/07/19 14:09	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	03/07/19 14:09	
Methylcyclohexane	**0.36 J**	10	0.20	1	03/07/19 14:09	
Styrene	5.0 U	5.0	0.20	1	03/07/19 14:09	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	03/07/19 14:09	
Toluene	5.0 U	5.0	0.20	1	03/07/19 14:09	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	DUP	**Units:**	ug/L
Lab Code:	R1901880-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**1.6**	**J**	5.0	0.20	1	03/07/19 14:09	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	03/07/19 14:09	
Vinyl Chloride	**240**	**D**	50	2.0	10	03/07/19 19:11	
cis-1,2-Dichloroethene	**990**	**D**	50	2.3	10	03/07/19 19:11	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	03/07/19 14:09	
m,p-Xylenes	5.0	U	5.0	0.20	1	03/07/19 14:09	
o-Xylene	5.0	U	5.0	0.20	1	03/07/19 14:09	
trans-1,2-Dichloroethene	**4.4**	**J**	5.0	0.20	1	03/07/19 14:09	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	03/07/19 14:09	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	03/07/19 14:09	
Dibromofluoromethane	104	89 - 119	03/07/19 14:09	
Toluene-d8	101	87 - 121	03/07/19 14:09	

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19 13:05
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-5R	**Units:**	ug/L
Lab Code:	R1901880-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	03/07/19 14:52	
1,1,2,2-Tetrachloroethane	**0.31 J**	5.0	0.20	1	03/07/19 14:52	
1,1,2-Trichloroethane	**0.50 J**	5.0	0.20	1	03/07/19 14:52	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	03/07/19 14:52	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	03/07/19 14:52	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	03/07/19 14:52	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,4-Dioxane	100 U	100	13	1	03/07/19 14:52	
2-Butanone (MEK)	10 U	10	0.78	1	03/07/19 14:52	
2-Hexanone	10 U	10	0.20	1	03/07/19 14:52	
4-Methyl-2-pentanone	10 U	10	0.20	1	03/07/19 14:52	
Acetone	**11**	10	2.1	1	03/07/19 14:52	
Benzene	5.0 U	5.0	0.20	1	03/07/19 14:52	
Bromochloromethane	5.0 U	5.0	0.24	1	03/07/19 14:52	
Bromodichloromethane	5.0 U	5.0	0.22	1	03/07/19 14:52	
Bromoform	5.0 U	5.0	0.25	1	03/07/19 14:52	
Bromomethane	5.0 U	5.0	0.70	1	03/07/19 14:52	
Carbon Disulfide	**0.32 J**	10	0.25	1	03/07/19 14:52	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	03/07/19 14:52	
Chlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:52	
Chloroethane	5.0 U	5.0	0.23	1	03/07/19 14:52	
Chloroform	**0.33 J**	5.0	0.24	1	03/07/19 14:52	
Chloromethane	5.0 U	5.0	0.28	1	03/07/19 14:52	
Cyclohexane	10 U	10	0.26	1	03/07/19 14:52	
Dibromochloromethane	5.0 U	5.0	0.20	1	03/07/19 14:52	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	03/07/19 14:52	
Dichloromethane	5.0 U	5.0	0.36	1	03/07/19 14:52	
Ethylbenzene	5.0 U	5.0	0.20	1	03/07/19 14:52	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	03/07/19 14:52	
Methyl Acetate	10 U	10	0.33	1	03/07/19 14:52	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	03/07/19 14:52	
Methylcyclohexane	10 U	10	0.20	1	03/07/19 14:52	
Styrene	5.0 U	5.0	0.20	1	03/07/19 14:52	
Tetrachloroethene (PCE)	**1.2 J**	5.0	0.21	1	03/07/19 14:52	
Toluene	5.0 U	5.0	0.20	1	03/07/19 14:52	

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19 13:05
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-5R	**Units:**	ug/L
Lab Code:	R1901880-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**450**	**D**	13	0.50	2.5	03/07/19 18:27	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	03/07/19 14:52	
Vinyl Chloride	**0.51**	**J**	5.0	0.20	1	03/07/19 14:52	
cis-1,2-Dichloroethene	**160**		5.0	0.23	1	03/07/19 14:52	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	03/07/19 14:52	
m,p-Xylenes	5.0	U	5.0	0.20	1	03/07/19 14:52	
o-Xylene	5.0	U	5.0	0.20	1	03/07/19 14:52	
trans-1,2-Dichloroethene	**12**		5.0	0.20	1	03/07/19 14:52	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	03/07/19 14:52	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	03/07/19 14:52	
Dibromofluoromethane	105	89 - 119	03/07/19 14:52	
Toluene-d8	103	87 - 121	03/07/19 14:52	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	03/05/19 11:20
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-19AR	**Units:**	ug/L
Lab Code:	R1901880-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	13 U	13	0.53	2.5	03/08/19 20:55	
1,1,2,2-Tetrachloroethane	13 U	13	0.50	2.5	03/08/19 20:55	
1,1,2-Trichloroethane	13 U	13	0.50	2.5	03/08/19 20:55	
1,1,2-Trichloro-1,2,2-trifluoroethane	13 U	13	0.50	2.5	03/08/19 20:55	
1,1-Dichloroethane (1,1-DCA)	13 U	13	0.50	2.5	03/08/19 20:55	
1,1-Dichloroethene (1,1-DCE)	13 U	13	0.63	2.5	03/08/19 20:55	
1,2,3-Trichlorobenzene	13 U	13	0.50	2.5	03/08/19 20:55	
1,2,4-Trichlorobenzene	13 U	13	0.63	2.5	03/08/19 20:55	
1,2-Dibromo-3-chloropropane (DBCP)	13 U	13	1.2	2.5	03/08/19 20:55	
1,2-Dibromoethane	13 U	13	0.50	2.5	03/08/19 20:55	
1,2-Dichlorobenzene	13 U	13	0.50	2.5	03/08/19 20:55	
1,2-Dichloroethane	13 U	13	0.50	2.5	03/08/19 20:55	
1,2-Dichloropropane	13 U	13	0.50	2.5	03/08/19 20:55	
1,3-Dichlorobenzene	13 U	13	0.50	2.5	03/08/19 20:55	
1,4-Dichlorobenzene	13 U	13	0.50	2.5	03/08/19 20:55	
1,4-Dioxane	250 U	250	33	2.5	03/08/19 20:55	
2-Butanone (MEK)	25 U	25	2.0	2.5	03/08/19 20:55	
2-Hexanone	25 U	25	0.50	2.5	03/08/19 20:55	
4-Methyl-2-pentanone	25 U	25	0.50	2.5	03/08/19 20:55	
Acetone	**9.0 J**	25	5.3	2.5	03/08/19 20:55	
Benzene	13 U	13	0.50	2.5	03/08/19 20:55	
Bromochloromethane	13 U	13	0.60	2.5	03/08/19 20:55	
Bromodichloromethane	13 U	13	0.55	2.5	03/08/19 20:55	
Bromoform	13 U	13	0.63	2.5	03/08/19 20:55	
Bromomethane	13 U	13	1.8	2.5	03/08/19 20:55	
Carbon Disulfide	**3.6 J**	25	0.63	2.5	03/08/19 20:55	
Carbon Tetrachloride	13 U	13	0.85	2.5	03/08/19 20:55	
Chlorobenzene	13 U	13	0.50	2.5	03/08/19 20:55	
Chloroethane	13 U	13	0.58	2.5	03/08/19 20:55	
Chloroform	13 U	13	0.60	2.5	03/08/19 20:55	
Chloromethane	13 U	13	0.70	2.5	03/08/19 20:55	
Cyclohexane	**1.9 J**	25	0.65	2.5	03/08/19 20:55	
Dibromochloromethane	13 U	13	0.50	2.5	03/08/19 20:55	
Dichlorodifluoromethane (CFC 12)	13 U	13	0.53	2.5	03/08/19 20:55	
Dichloromethane	**2.3 J**	13	0.90	2.5	03/08/19 20:55	
Ethylbenzene	13 U	13	0.50	2.5	03/08/19 20:55	
Isopropylbenzene (Cumene)	13 U	13	0.50	2.5	03/08/19 20:55	
Methyl Acetate	25 U	25	0.83	2.5	03/08/19 20:55	
Methyl tert-Butyl Ether	13 U	13	0.50	2.5	03/08/19 20:55	
Methylcyclohexane	**1.3 J**	25	0.50	2.5	03/08/19 20:55	
Styrene	13 U	13	0.50	2.5	03/08/19 20:55	
Tetrachloroethene (PCE)	**6.6 J**	13	0.53	2.5	03/08/19 20:55	
Toluene	13 U	13	0.50	2.5	03/08/19 20:55	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	03/05/19 11:20
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-19AR	**Units:**	ug/L
Lab Code:	R1901880-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**830**	**D**	50	2.0	10	03/12/19 14:36	
Trichlorofluoromethane (CFC 11)	13	U	13	0.60	2.5	03/08/19 20:55	
Vinyl Chloride	**4.8**	**J**	13	0.50	2.5	03/08/19 20:55	
cis-1,2-Dichloroethene	**270**	**D**	50	2.3	10	03/12/19 14:36	
cis-1,3-Dichloropropene	13	U	13	0.50	2.5	03/08/19 20:55	
m,p-Xylenes	13	U	13	0.50	2.5	03/08/19 20:55	
o-Xylene	13	U	13	0.50	2.5	03/08/19 20:55	
trans-1,2-Dichloroethene	**12**	**J**	13	0.50	2.5	03/08/19 20:55	
trans-1,3-Dichloropropene	13	U	13	0.58	2.5	03/08/19 20:55	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	03/08/19 20:55	
Dibromofluoromethane	103	89 - 119	03/08/19 20:55	
Toluene-d8	102	87 - 121	03/08/19 20:55	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	03/05/19 13:00
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-11	**Units:**	ug/L
Lab Code:	R1901880-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	03/08/19 20:33	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,1-Dichloroethene (1,1-DCE)	**2.5 J**	5.0	0.25	1	03/08/19 20:33	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	03/08/19 20:33	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	03/08/19 20:33	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,4-Dichlorobenzene	**0.59 J**	5.0	0.20	1	03/08/19 20:33	
1,4-Dioxane	100 U	100	13	1	03/08/19 20:33	
2-Butanone (MEK)	10 U	10	0.78	1	03/08/19 20:33	
2-Hexanone	10 U	10	0.20	1	03/08/19 20:33	
4-Methyl-2-pentanone	10 U	10	0.20	1	03/08/19 20:33	
Acetone	**13**	10	2.1	1	03/08/19 20:33	
Benzene	**0.35 J**	5.0	0.20	1	03/08/19 20:33	
Bromochloromethane	5.0 U	5.0	0.24	1	03/08/19 20:33	
Bromodichloromethane	5.0 U	5.0	0.22	1	03/08/19 20:33	
Bromoform	5.0 U	5.0	0.25	1	03/08/19 20:33	
Bromomethane	5.0 U	5.0	0.70	1	03/08/19 20:33	
Carbon Disulfide	10 U	10	0.25	1	03/08/19 20:33	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	03/08/19 20:33	
Chlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:33	
Chloroethane	5.0 U	5.0	0.23	1	03/08/19 20:33	
Chloroform	5.0 U	5.0	0.24	1	03/08/19 20:33	
Chloromethane	5.0 U	5.0	0.28	1	03/08/19 20:33	
Cyclohexane	10 U	10	0.26	1	03/08/19 20:33	
Dibromochloromethane	5.0 U	5.0	0.20	1	03/08/19 20:33	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	03/08/19 20:33	
Dichloromethane	5.0 U	5.0	0.36	1	03/08/19 20:33	
Ethylbenzene	5.0 U	5.0	0.20	1	03/08/19 20:33	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	03/08/19 20:33	
Methyl Acetate	10 U	10	0.33	1	03/08/19 20:33	
Methyl tert-Butyl Ether	**0.33 J**	5.0	0.20	1	03/08/19 20:33	
Methylcyclohexane	10 U	10	0.20	1	03/08/19 20:33	
Styrene	5.0 U	5.0	0.20	1	03/08/19 20:33	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	03/08/19 20:33	
Toluene	5.0 U	5.0	0.20	1	03/08/19 20:33	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	03/05/19 13:00
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-11	**Units:**	ug/L
Lab Code:	R1901880-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**290**	**D**	50	2.0	10	03/12/19 14:58	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	03/08/19 20:33	
Vinyl Chloride	**2.0**	**J**	5.0	0.20	1	03/08/19 20:33	
cis-1,2-Dichloroethene	**1300**	**D**	50	2.3	10	03/12/19 14:58	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	03/08/19 20:33	
m,p-Xylenes	5.0	U	5.0	0.20	1	03/08/19 20:33	
o-Xylene	5.0	U	5.0	0.20	1	03/08/19 20:33	
trans-1,2-Dichloroethene	**6.2**		5.0	0.20	1	03/08/19 20:33	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	03/08/19 20:33	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	03/08/19 20:33	
Dibromofluoromethane	103	89 - 119	03/08/19 20:33	
Toluene-d8	102	87 - 121	03/08/19 20:33	

QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: The LiRo Group **Service Request:** R1901880
Project: Buffalo China/16-344-1389
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene 85-122	Dibromofluoromethane 89-119	Toluene-d8 87-121
MW-5AR	R1901880-001	99	102	100
MW-20A	R1901880-002	102	101	102
MW-13A	R1901880-003	97	100	99
MW-14A	R1901880-004	97	99	100
MW-19R	R1901880-005	100	99	100
DUP	R1901880-006	101	104	101
MW-5R	R1901880-007	101	105	103
MW-19AR	R1901880-008	99	103	102
MW-11	R1901880-009	100	103	102
Method Blank	RQ1901929-04	101	101	100
Method Blank	RQ1902008-05	102	102	104
Method Blank	RQ1902040-04	103	103	102
Lab Control Sample	RQ1901929-03	99	102	100
Lab Control Sample	RQ1902008-03	101	104	102
Lab Control Sample	RQ1902040-03	101	103	101
MW-5AR MS	RQ1901929-06	101	104	102
MW-5AR DMS	RQ1901929-07	100	105	102

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19
Sample Matrix:	Water	**Date Received:**	03/06/19
		Date Analyzed:	03/7/19
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	MW-5AR	**Units:**	ug/L
Lab Code:	R1901880-001	**Basis:**	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

		Matrix Spike RQ1901929-06			**Duplicate Matrix Spike** RQ1901929-07					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1-Trichloroethane (TCA)	1000 U	11600	10000	116	12200	10000	122	74-127	5	30
1,1,2,2-Tetrachloroethane	43 J	9660	10000	96	10100	10000	101	72-122	5	30
1,1,2-Trichloroethane	1000 U	9530	10000	95	9860	10000	99	82-121	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1000 U	12000	10000	120	12100	10000	121	50-147	1	30
1,1-Dichloroethane (1,1-DCA)	1000 U	11800	10000	118	12400	10000	124	74-132	4	30
1,1-Dichloroethene (1,1-DCE)	1000 U	11000	10000	110	11400	10000	114	71-118	3	30
1,2,3-Trichlorobenzene	1000 U	10300	10000	103	10400	10000	104	59-129	1	30
1,2,4-Trichlorobenzene	1000 U	10600	10000	106	10800	10000	108	69-122	2	30
1,2-Dibromo-3-chloropropane (DBCP)	1000 U	7990	10000	80	8360	10000	84	37-150	5	30
1,2-Dibromoethane	1000 U	9530	10000	95	9710	10000	97	67-127	2	30
1,2-Dichlorobenzene	1000 U	9330	10000	93	9690	10000	97	77-120	4	30
1,2-Dichloroethane	1000 U	10300	10000	103	10700	10000	107	68-130	4	30
1,2-Dichloropropane	1000 U	10800	10000	108	11200	10000	112	79-124	3	30
1,3-Dichlorobenzene	1000 U	9680	10000	97	10100	10000	101	83-121	5	30
1,4-Dichlorobenzene	1000 U	8930	10000	89	9480	10000	95	82-120	6	30
1,4-Dioxane	20000 U	173000	200000	86	206000	200000	103	44-154	18	30
2-Butanone (MEK)	2000 U	9900	10000	99	10100	10000	101	61-137	2	30
2-Hexanone	2000 U	9580	10000	96	9850	10000	98	56-132	3	30
4-Methyl-2-pentanone	2000 U	9950	10000	100	10000	10000	100	60-141	<1	30
Acetone	2000 U	10900	10000	109	12400	10000	124	35-183	13	30
Benzene	1000 U	9860	10000	99	10300	10000	103	76-129	5	30
Bromochloromethane	1000 U	10300	10000	103	10700	10000	107	80-122	3	30
Bromodichloromethane	61 J	10200	10000	101	10500	10000	104	78-133	3	30
Bromoform	1000 U	8770	10000	88	9380	10000	94	58-133	7	30
Bromomethane	1000 U	10200	10000	102	11000	10000	110	10-184	7	30
Carbon Disulfide	50 J	11800	10000	118	12200	10000	122	59-140	3	30
Carbon Tetrachloride	1000 U	10600	10000	106	11600	10000	116	65-135	9	30
Chlorobenzene	1000 U	9440	10000	94	9860	10000	99	76-125	4	30
Chloroethane	1000 U	9790	10000	98	10200	10000	102	48-146	4	30
Chloroform	310 J	11700	10000	114	11900	10000	116	75-130	2	30
Chloromethane	1000 U	11500	10000	115	11900	10000	119	55-160	3	30
Cyclohexane	2000 U	11900	10000	119	12000	10000	120	52-145	1	30
Dibromochloromethane	1000 U	9270	10000	93	10100	10000	101	72-128	9	30
Dichlorodifluoromethane (CFC 12)	1000 U	12800	10000	128	13300	10000	133	49-154	4	30
Dichloromethane	1000 U	10400	10000	104	10600	10000	106	73-122	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19
Sample Matrix:	Water	**Date Received:**	03/06/19
		Date Analyzed:	03/7/19
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	MW-5AR	**Units:**	ug/L
Lab Code:	R1901880-001	**Basis:**	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

		Matrix Spike			Duplicate Matrix Spike					
		RQ1901929-06			RQ1901929-07					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Ethylbenzene	1000 U	9430	10000	94	9950	10000	100	72-134	5	30
Isopropylbenzene (Cumene)	1000 U	9850	10000	99	10300	10000	103	77-128	4	30
Methyl Acetate	2000 U	10200	10000	102	10600	10000	106	26-121	3	30
Methyl tert-Butyl Ether	1000 U	10800	10000	108	11000	10000	110	75-119	2	30
Methylcyclohexane	2000 U	11600	10000	116	11800	10000	118	45-146	2	30
Styrene	1000 U	8670	10000	87	9090	10000	91	74-136	5	30
Tetrachloroethene (PCE)	63 J	9780	10000	97	10400	10000	103	72-125	6	30
Toluene	1000 U	9610	10000	96	9940	10000	99	79-119	3	30
Trichloroethene (TCE)	24000	33100	10000	93	33100	10000	93	74-122	<1	30
Trichlorofluoromethane (CFC 11)	1000 U	11100	10000	111	11900	10000	119	71-136	7	30
Vinyl Chloride	440 J	13000	10000	126	13100	10000	126	74-159	<1	30
cis-1,2-Dichloroethene	25000	36400	10000	110	36100	10000	107	77-127	<1	30
cis-1,3-Dichloropropene	1000 U	10200	10000	102	10600	10000	106	52-134	3	30
m,p-Xylenes	1000 U	18100	20000	91	19000	20000	95	80-126	5	30
o-Xylene	1000 U	9210	10000	92	9580	10000	96	79-123	4	30
trans-1,2-Dichloroethene	1700	12500	10000	109	13100	10000	114	73-118	4	30
trans-1,3-Dichloropropene	1000 U	10100	10000	101	10700	10000	107	71-133	6	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	03/07/19 12:32
Sample Matrix:	Water	**Date Extracted:**	

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-12
Lab Code:	RQ1901929-04	**File ID:**	I:\ACQUDATA\msvoa12\Data\030719\P24757.D\
Analysis Method:	8260C	**Analysis Lot:**	627451
Prep Method:	EPA 5030C		

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1901929-03	I:\ACQUDATA\msvoa12\Data\030719\P24755.D\	03/07/19 11:34
MW-5AR	R1901880-001	I:\ACQUDATA\msvoa12\Data\030719\P24758.D\	03/07/19 13:04
MW-20A	R1901880-002	I:\ACQUDATA\msvoa12\Data\030719\P24760.D\	03/07/19 13:47
DUP	R1901880-006	I:\ACQUDATA\msvoa12\Data\030719\P24761.D\	03/07/19 14:09
MW-19R	R1901880-005	I:\ACQUDATA\msvoa12\Data\030719\P24762.D\	03/07/19 14:30
MW-5R	R1901880-007	I:\ACQUDATA\msvoa12\Data\030719\P24763.D\	03/07/19 14:52
MW-5R	R1901880-007	I:\ACQUDATA\msvoa12\Data\030719\P24773.D\	03/07/19 18:27
MW-20A	R1901880-002	I:\ACQUDATA\msvoa12\Data\030719\P24774.D\	03/07/19 18:49
DUP	R1901880-006	I:\ACQUDATA\msvoa12\Data\030719\P24775.D\	03/07/19 19:11
MW-13A	R1901880-003	I:\ACQUDATA\msvoa12\Data\030719\P24776.D\	03/07/19 19:32
MW-5ARMS	RQ1901929-06	I:\ACQUDATA\msvoa12\Data\030719\P24777.D\	03/07/19 19:54
MW-5ARDMS	RQ1901929-07	I:\ACQUDATA\msvoa12\Data\030719\P24778.D\	03/07/19 20:15

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	03/08/19 13:39
Sample Matrix:	Water	**Date Extracted:**	

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-12
Lab Code:	RQ1902008-05	**File ID:**	I:\ACQUDATA\msvoa12\Data\030819\P24791.D\
Analysis Method:	8260C	**Analysis Lot:**	627654
Prep Method:	EPA 5030C		

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1902008-03	I:\ACQUDATA\msvoa12\Data\030819\P24788.D\	03/08/19 12:28
MW-14A	R1901880-004	I:\ACQUDATA\msvoa12\Data\030819\P24809.D\	03/08/19 20:12
MW-11	R1901880-009	I:\ACQUDATA\msvoa12\Data\030819\P24810.D\	03/08/19 20:33
MW-19AR	R1901880-008	I:\ACQUDATA\msvoa12\Data\030819\P24811.D\	03/08/19 20:55

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	03/12/19 11:51
Sample Matrix:	Water	**Date Extracted:**	

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1902040-04
Instrument ID: R-MS-12
File ID: I:\ACQUDATA\msvoa12\Data\031219\P24833.D\

Analysis Method: 8260C
Prep Method: EPA 5030C
Analysis Lot: 627896

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1902040-03	I:\ACQUDATA\msvoa12\Data\031219\P24831.D\	03/12/19 11:02
MW-19AR	R1901880-008	I:\ACQUDATA\msvoa12\Data\031219\P24840.D\	03/12/19 14:36
MW-11	R1901880-009	I:\ACQUDATA\msvoa12\Data\031219\P24841.D\	03/12/19 14:58

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1901929-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	03/07/19 12:32	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	03/07/19 12:32	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	03/07/19 12:32	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	03/07/19 12:32	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	03/07/19 12:32	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	03/07/19 12:32	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 12:32	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	03/07/19 12:32	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	03/07/19 12:32	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	03/07/19 12:32	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 12:32	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	03/07/19 12:32	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	03/07/19 12:32	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 12:32	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 12:32	
1,4-Dioxane	100 U	100	13	1	03/07/19 12:32	
2-Butanone (MEK)	10 U	10	0.78	1	03/07/19 12:32	
2-Hexanone	10 U	10	0.20	1	03/07/19 12:32	
4-Methyl-2-pentanone	10 U	10	0.20	1	03/07/19 12:32	
Acetone	10 U	10	2.1	1	03/07/19 12:32	
Benzene	5.0 U	5.0	0.20	1	03/07/19 12:32	
Bromochloromethane	5.0 U	5.0	0.24	1	03/07/19 12:32	
Bromodichloromethane	5.0 U	5.0	0.22	1	03/07/19 12:32	
Bromoform	5.0 U	5.0	0.25	1	03/07/19 12:32	
Bromomethane	5.0 U	5.0	0.70	1	03/07/19 12:32	
Carbon Disulfide	10 U	10	0.25	1	03/07/19 12:32	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	03/07/19 12:32	
Chlorobenzene	5.0 U	5.0	0.20	1	03/07/19 12:32	
Chloroethane	5.0 U	5.0	0.23	1	03/07/19 12:32	
Chloroform	5.0 U	5.0	0.24	1	03/07/19 12:32	
Chloromethane	5.0 U	5.0	0.28	1	03/07/19 12:32	
Cyclohexane	10 U	10	0.26	1	03/07/19 12:32	
Dibromochloromethane	5.0 U	5.0	0.20	1	03/07/19 12:32	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	03/07/19 12:32	
Dichloromethane	5.0 U	5.0	0.36	1	03/07/19 12:32	
Ethylbenzene	5.0 U	5.0	0.20	1	03/07/19 12:32	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	03/07/19 12:32	
Methyl Acetate	10 U	10	0.33	1	03/07/19 12:32	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	03/07/19 12:32	
Methylcyclohexane	10 U	10	0.20	1	03/07/19 12:32	
Styrene	5.0 U	5.0	0.20	1	03/07/19 12:32	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	03/07/19 12:32	
Toluene	5.0 U	5.0	0.20	1	03/07/19 12:32	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1901929-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	03/07/19 12:32	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	03/07/19 12:32	
Vinyl Chloride	5.0 U	5.0	0.20	1	03/07/19 12:32	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	03/07/19 12:32	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	03/07/19 12:32	
m,p-Xylenes	5.0 U	5.0	0.20	1	03/07/19 12:32	
o-Xylene	5.0 U	5.0	0.20	1	03/07/19 12:32	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	03/07/19 12:32	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	03/07/19 12:32	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	03/07/19 12:32	
Dibromofluoromethane	101	89 - 119	03/07/19 12:32	
Toluene-d8	100	87 - 121	03/07/19 12:32	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1902008-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	03/08/19 13:39	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	03/08/19 13:39	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	03/08/19 13:39	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	03/08/19 13:39	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	03/08/19 13:39	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	03/08/19 13:39	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 13:39	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	03/08/19 13:39	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	03/08/19 13:39	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	03/08/19 13:39	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 13:39	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	03/08/19 13:39	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	03/08/19 13:39	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 13:39	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 13:39	
1,4-Dioxane	100 U	100	13	1	03/08/19 13:39	
2-Butanone (MEK)	10 U	10	0.78	1	03/08/19 13:39	
2-Hexanone	10 U	10	0.20	1	03/08/19 13:39	
4-Methyl-2-pentanone	10 U	10	0.20	1	03/08/19 13:39	
Acetone	10 U	10	2.1	1	03/08/19 13:39	
Benzene	5.0 U	5.0	0.20	1	03/08/19 13:39	
Bromochloromethane	5.0 U	5.0	0.24	1	03/08/19 13:39	
Bromodichloromethane	5.0 U	5.0	0.22	1	03/08/19 13:39	
Bromoform	5.0 U	5.0	0.25	1	03/08/19 13:39	
Bromomethane	5.0 U	5.0	0.70	1	03/08/19 13:39	
Carbon Disulfide	10 U	10	0.25	1	03/08/19 13:39	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	03/08/19 13:39	
Chlorobenzene	5.0 U	5.0	0.20	1	03/08/19 13:39	
Chloroethane	5.0 U	5.0	0.23	1	03/08/19 13:39	
Chloroform	5.0 U	5.0	0.24	1	03/08/19 13:39	
Chloromethane	5.0 U	5.0	0.28	1	03/08/19 13:39	
Cyclohexane	10 U	10	0.26	1	03/08/19 13:39	
Dibromochloromethane	5.0 U	5.0	0.20	1	03/08/19 13:39	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	03/08/19 13:39	
Dichloromethane	5.0 U	5.0	0.36	1	03/08/19 13:39	
Ethylbenzene	5.0 U	5.0	0.20	1	03/08/19 13:39	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	03/08/19 13:39	
Methyl Acetate	10 U	10	0.33	1	03/08/19 13:39	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	03/08/19 13:39	
Methylcyclohexane	10 U	10	0.20	1	03/08/19 13:39	
Styrene	5.0 U	5.0	0.20	1	03/08/19 13:39	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	03/08/19 13:39	
Toluene	5.0 U	5.0	0.20	1	03/08/19 13:39	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1902008-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	03/08/19 13:39	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	03/08/19 13:39	
Vinyl Chloride	5.0 U	5.0	0.20	1	03/08/19 13:39	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	03/08/19 13:39	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	03/08/19 13:39	
m,p-Xylenes	5.0 U	5.0	0.20	1	03/08/19 13:39	
o-Xylene	5.0 U	5.0	0.20	1	03/08/19 13:39	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	03/08/19 13:39	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	03/08/19 13:39	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 122	03/08/19 13:39	
Dibromofluoromethane	102	89 - 119	03/08/19 13:39	
Toluene-d8	104	87 - 121	03/08/19 13:39	

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1902040-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	03/12/19 11:51	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	03/12/19 11:51	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	03/12/19 11:51	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	03/12/19 11:51	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	03/12/19 11:51	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	03/12/19 11:51	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	03/12/19 11:51	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	03/12/19 11:51	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	03/12/19 11:51	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	03/12/19 11:51	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	03/12/19 11:51	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	03/12/19 11:51	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	03/12/19 11:51	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	03/12/19 11:51	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	03/12/19 11:51	
1,4-Dioxane	100 U	100	13	1	03/12/19 11:51	
2-Butanone (MEK)	10 U	10	0.78	1	03/12/19 11:51	
2-Hexanone	10 U	10	0.20	1	03/12/19 11:51	
4-Methyl-2-pentanone	10 U	10	0.20	1	03/12/19 11:51	
Acetone	10 U	10	2.1	1	03/12/19 11:51	
Benzene	5.0 U	5.0	0.20	1	03/12/19 11:51	
Bromochloromethane	5.0 U	5.0	0.24	1	03/12/19 11:51	
Bromodichloromethane	5.0 U	5.0	0.22	1	03/12/19 11:51	
Bromoform	5.0 U	5.0	0.25	1	03/12/19 11:51	
Bromomethane	5.0 U	5.0	0.70	1	03/12/19 11:51	
Carbon Disulfide	10 U	10	0.25	1	03/12/19 11:51	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	03/12/19 11:51	
Chlorobenzene	5.0 U	5.0	0.20	1	03/12/19 11:51	
Chloroethane	5.0 U	5.0	0.23	1	03/12/19 11:51	
Chloroform	5.0 U	5.0	0.24	1	03/12/19 11:51	
Chloromethane	5.0 U	5.0	0.28	1	03/12/19 11:51	
Cyclohexane	10 U	10	0.26	1	03/12/19 11:51	
Dibromochloromethane	5.0 U	5.0	0.20	1	03/12/19 11:51	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	03/12/19 11:51	
Dichloromethane	5.0 U	5.0	0.36	1	03/12/19 11:51	
Ethylbenzene	5.0 U	5.0	0.20	1	03/12/19 11:51	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	03/12/19 11:51	
Methyl Acetate	10 U	10	0.33	1	03/12/19 11:51	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	03/12/19 11:51	
Methylcyclohexane	10 U	10	0.20	1	03/12/19 11:51	
Styrene	5.0 U	5.0	0.20	1	03/12/19 11:51	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	03/12/19 11:51	
Toluene	5.0 U	5.0	0.20	1	03/12/19 11:51	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1902040-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	03/12/19 11:51	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	03/12/19 11:51	
Vinyl Chloride	5.0 U	5.0	0.20	1	03/12/19 11:51	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	03/12/19 11:51	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	03/12/19 11:51	
m,p-Xylenes	5.0 U	5.0	0.20	1	03/12/19 11:51	
o-Xylene	5.0 U	5.0	0.20	1	03/12/19 11:51	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	03/12/19 11:51	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	03/12/19 11:51	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85 - 122	03/12/19 11:51	
Dibromofluoromethane	103	89 - 119	03/12/19 11:51	
Toluene-d8	102	87 - 121	03/12/19 11:51	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	03/07/19 11:34
Sample Matrix:	Water	**Date Extracted:**	

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-12
Lab Code:	RQ1901929-03	**File ID:**	I:\ACQUDATA\msvoa12\Data\030719\P24755.D\
Analysis Method:	8260C	**Analysis Lot:**	627451
Prep Method:	EPA 5030C		

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ1901929-04	I:\ACQUDATA\msvoa12\Data\030719\P24757.D\	03/07/19 12:32
MW-5AR	R1901880-001	I:\ACQUDATA\msvoa12\Data\030719\P24758.D\	03/07/19 13:04
MW-20A	R1901880-002	I:\ACQUDATA\msvoa12\Data\030719\P24760.D\	03/07/19 13:47
DUP	R1901880-006	I:\ACQUDATA\msvoa12\Data\030719\P24761.D\	03/07/19 14:09
MW-19R	R1901880-005	I:\ACQUDATA\msvoa12\Data\030719\P24762.D\	03/07/19 14:30
MW-5R	R1901880-007	I:\ACQUDATA\msvoa12\Data\030719\P24763.D\	03/07/19 14:52
MW-5R	R1901880-007	I:\ACQUDATA\msvoa12\Data\030719\P24773.D\	03/07/19 18:27
MW-20A	R1901880-002	I:\ACQUDATA\msvoa12\Data\030719\P24774.D\	03/07/19 18:49
DUP	R1901880-006	I:\ACQUDATA\msvoa12\Data\030719\P24775.D\	03/07/19 19:11
MW-13A	R1901880-003	I:\ACQUDATA\msvoa12\Data\030719\P24776.D\	03/07/19 19:32
MW-5ARMS	RQ1901929-06	I:\ACQUDATA\msvoa12\Data\030719\P24777.D\	03/07/19 19:54
MW-5ARDMS	RQ1901929-07	I:\ACQUDATA\msvoa12\Data\030719\P24778.D\	03/07/19 20:15

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	03/08/19 12:28
Sample Matrix:	Water	**Date Extracted:**	

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-12
Lab Code:	RQ1902008-03	**File ID:**	I:\ACQUDATA\msvoa12\Data\030819\P24788.D\
Analysis Method:	8260C	**Analysis Lot:**	627654
Prep Method:	EPA 5030C		

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ1902008-05	I:\ACQUDATA\msvoa12\Data\030819\P24791.D\	03/08/19 13:39
MW-14A	R1901880-004	I:\ACQUDATA\msvoa12\Data\030819\P24809.D\	03/08/19 20:12
MW-11	R1901880-009	I:\ACQUDATA\msvoa12\Data\030819\P24810.D\	03/08/19 20:33
MW-19AR	R1901880-008	I:\ACQUDATA\msvoa12\Data\030819\P24811.D\	03/08/19 20:55

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	03/12/19 11:02
Sample Matrix:	Water	**Date Extracted:**	

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-12
Lab Code:	RQ1902040-03	**File ID:**	I:\ACQUDATA\msvoa12\Data\031219\P24831.D\
Analysis Method:	8260C	**Analysis Lot:**	627896
Prep Method:	EPA 5030C		

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ1902040-04	I:\ACQUDATA\msvoa12\Data\031219\P24833.D\	03/12/19 11:51
MW-19AR	R1901880-008	I:\ACQUDATA\msvoa12\Data\031219\P24840.D\	03/12/19 14:36
MW-11	R1901880-009	I:\ACQUDATA\msvoa12\Data\031219\P24841.D\	03/12/19 14:58

Client: The LiRo Group
Project: Buffalo China/16-344-1389
Sample Matrix: Water

Service Request: R1901880
Date Analyzed: 03/07/19

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1901929-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	17.7	20.0	88	75-125
1,1,2,2-Tetrachloroethane	8260C	18.8	20.0	94	78-126
1,1,2-Trichloroethane	8260C	17.8	20.0	89	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	17.5	20.0	88	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	19.6	20.0	98	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	18.9	20.0	95	71-118
1,2,3-Trichlorobenzene	8260C	18.7	20.0	93	67-136
1,2,4-Trichlorobenzene	8260C	19.4	20.0	97	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	13.6	20.0	68	55-136
1,2-Dibromoethane	8260C	18.0	20.0	90	82-127
1,2-Dichlorobenzene	8260C	17.7	20.0	88	80-119
1,2-Dichloroethane	8260C	19.5	20.0	97	71-127
1,2-Dichloropropane	8260C	18.5	20.0	93	80-119
1,3-Dichlorobenzene	8260C	17.5	20.0	88	83-121
1,4-Dichlorobenzene	8260C	17.1	20.0	85	79-119
1,4-Dioxane	8260C	306	400	77	44-154
2-Butanone (MEK)	8260C	17.4	20.0	87	61-137
2-Hexanone	8260C	16.2	20.0	81	63-124
4-Methyl-2-pentanone	8260C	17.7	20.0	89	66-124
Acetone	8260C	17.3	20.0	87	40-161
Benzene	8260C	18.5	20.0	92	79-119
Bromochloromethane	8260C	18.9	20.0	94	81-126
Bromodichloromethane	8260C	19.1	20.0	96	81-123
Bromoform	8260C	17.2	20.0	86	65-146
Bromomethane	8260C	19.5	20.0	98	42-166
Carbon Disulfide	8260C	21.8	20.0	109	66-128
Carbon Tetrachloride	8260C	16.3	20.0	82	70-127
Chlorobenzene	8260C	17.6	20.0	88	80-121
Chloroethane	8260C	16.2	20.0	81	62-131
Chloroform	8260C	19.3	20.0	97	79-120
Chloromethane	8260C	18.6	20.0	93	65-135
Cyclohexane	8260C	22.1	20.0	111	69-120
Dibromochloromethane	8260C	17.9	20.0	89	72-128

Client: The LiRo Group
Project: Buffalo China/16-344-1389
Sample Matrix: Water

Service Request: R1901880
Date Analyzed: 03/07/19

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1901929-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	21.0	20.0	105	59-155
Dichloromethane	8260C	18.5	20.0	92	73-122
Ethylbenzene	8260C	17.0	20.0	85	76-120
Isopropylbenzene (Cumene)	8260C	16.9	20.0	85	77-128
Methyl Acetate	8260C	17.3	20.0	87	40-112
Methyl tert-Butyl Ether	8260C	19.6	20.0	98	75-118
Methylcyclohexane	8260C	21.4	20.0	107	51-129
Styrene	8260C	18.6	20.0	93	80-124
Tetrachloroethene (PCE)	8260C	16.2	20.0	81	72-125
Toluene	8260C	17.9	20.0	89	79-119
Trichloroethene (TCE)	8260C	16.6	20.0	83	74-122
Trichlorofluoromethane (CFC 11)	8260C	17.5	20.0	88	71-136
Vinyl Chloride	8260C	19.9	20.0	100	74-159
cis-1,2-Dichloroethene	8260C	18.6	20.0	93	80-121
cis-1,3-Dichloropropene	8260C	19.5	20.0	98	77-122
m,p-Xylenes	8260C	33.6	40.0	84	80-126
o-Xylene	8260C	16.8	20.0	84	79-123
trans-1,2-Dichloroethene	8260C	18.8	20.0	94	73-118
trans-1,3-Dichloropropene	8260C	19.2	20.0	96	71-133

Client: The LiRo Group
Project: Buffalo China/16-344-1389
Sample Matrix: Water

Service Request: R1901880
Date Analyzed: 03/08/19

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1902008-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	19.1	20.0	96	75-125
1,1,2,2-Tetrachloroethane	8260C	17.4	20.0	87	78-126
1,1,2-Trichloroethane	8260C	16.7	20.0	83	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	19.9	20.0	99	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	19.8	20.0	99	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	19.3	20.0	96	71-118
1,2,3-Trichlorobenzene	8260C	18.1	20.0	91	67-136
1,2,4-Trichlorobenzene	8260C	20.0	20.0	100	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	14.1	20.0	70	55-136
1,2-Dibromoethane	8260C	17.0	20.0	85	82-127
1,2-Dichlorobenzene	8260C	17.7	20.0	89	80-119
1,2-Dichloroethane	8260C	18.4	20.0	92	71-127
1,2-Dichloropropane	8260C	18.6	20.0	93	80-119
1,3-Dichlorobenzene	8260C	18.0	20.0	90	83-121
1,4-Dichlorobenzene	8260C	16.9	20.0	85	79-119
1,4-Dioxane	8260C	276	400	69	44-154
2-Butanone (MEK)	8260C	17.9	20.0	89	61-137
2-Hexanone	8260C	17.5	20.0	87	63-124
4-Methyl-2-pentanone	8260C	17.1	20.0	86	66-124
Acetone	8260C	18.1	20.0	91	40-161
Benzene	8260C	18.6	20.0	93	79-119
Bromochloromethane	8260C	18.2	20.0	91	81-126
Bromodichloromethane	8260C	17.6	20.0	88	81-123
Bromoform	8260C	16.5	20.0	82	65-146
Bromomethane	8260C	20.0	20.0	100	42-166
Carbon Disulfide	8260C	21.3	20.0	106	66-128
Carbon Tetrachloride	8260C	17.0	20.0	85	70-127
Chlorobenzene	8260C	17.7	20.0	88	80-121
Chloroethane	8260C	17.1	20.0	85	62-131
Chloroform	8260C	18.8	20.0	94	79-120
Chloromethane	8260C	18.9	20.0	95	65-135
Cyclohexane	8260C	20.6	20.0	103	69-120
Dibromochloromethane	8260C	17.2	20.0	86	72-128

Client: The LiRo Group
Project: Buffalo China/16-344-1389
Sample Matrix: Water

Service Request: R1901880
Date Analyzed: 03/08/19

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1902008-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	21.4	20.0	107	59-155
Dichloromethane	8260C	18.3	20.0	92	73-122
Ethylbenzene	8260C	17.3	20.0	87	76-120
Isopropylbenzene (Cumene)	8260C	18.1	20.0	90	77-128
Methyl Acetate	8260C	17.2	20.0	86	40-112
Methyl tert-Butyl Ether	8260C	19.2	20.0	96	75-118
Methylcyclohexane	8260C	21.1	20.0	106	51-129
Styrene	8260C	18.6	20.0	93	80-124
Tetrachloroethene (PCE)	8260C	17.1	20.0	85	72-125
Toluene	8260C	18.3	20.0	91	79-119
Trichloroethene (TCE)	8260C	17.4	20.0	87	74-122
Trichlorofluoromethane (CFC 11)	8260C	18.7	20.0	94	71-136
Vinyl Chloride	8260C	19.5	20.0	97	74-159
cis-1,2-Dichloroethene	8260C	18.8	20.0	94	80-121
cis-1,3-Dichloropropene	8260C	18.7	20.0	93	77-122
m,p-Xylenes	8260C	35.2	40.0	88	80-126
o-Xylene	8260C	17.7	20.0	89	79-123
trans-1,2-Dichloroethene	8260C	19.0	20.0	95	73-118
trans-1,3-Dichloropropene	8260C	19.3	20.0	96	71-133

Client: The LiRo Group
Project: Buffalo China/16-344-1389
Sample Matrix: Water

Service Request: R1901880
Date Analyzed: 03/12/19

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1902040-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	17.8	20.0	89	75-125
1,1,2,2-Tetrachloroethane	8260C	19.9	20.0	99	78-126
1,1,2-Trichloroethane	8260C	17.7	20.0	89	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	17.6	20.0	88	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	19.0	20.0	95	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	18.8	20.0	94	71-118
1,2,3-Trichlorobenzene	8260C	19.4	20.0	97	67-136
1,2,4-Trichlorobenzene	8260C	19.6	20.0	98	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	17.3	20.0	86	55-136
1,2-Dibromoethane	8260C	18.1	20.0	91	82-127
1,2-Dichlorobenzene	8260C	17.3	20.0	86	80-119
1,2-Dichloroethane	8260C	19.5	20.0	98	71-127
1,2-Dichloropropane	8260C	18.7	20.0	94	80-119
1,3-Dichlorobenzene	8260C	17.2	20.0	86	83-121
1,4-Dichlorobenzene	8260C	16.7	20.0	83	79-119
1,4-Dioxane	8260C	400	400	100	44-154
2-Butanone (MEK)	8260C	19.1	20.0	96	61-137
2-Hexanone	8260C	19.6	20.0	98	63-124
4-Methyl-2-pentanone	8260C	19.7	20.0	99	66-124
Acetone	8260C	20.5	20.0	102	40-161
Benzene	8260C	18.1	20.0	90	79-119
Bromochloromethane	8260C	18.4	20.0	92	81-126
Bromodichloromethane	8260C	18.4	20.0	92	81-123
Bromoform	8260C	18.5	20.0	92	65-146
Bromomethane	8260C	20.5	20.0	102	42-166
Carbon Disulfide	8260C	21.6	20.0	108	66-128
Carbon Tetrachloride	8260C	16.1	20.0	80	70-127
Chlorobenzene	8260C	16.9	20.0	85	80-121
Chloroethane	8260C	14.7	20.0	74	62-131
Chloroform	8260C	19.3	20.0	97	79-120
Chloromethane	8260C	18.4	20.0	92	65-135
Cyclohexane	8260C	20.9	20.0	105	69-120
Dibromochloromethane	8260C	18.7	20.0	93	72-128

Client: The LiRo Group
Project: Buffalo China/16-344-1389
Sample Matrix: Water

Service Request: R1901880
Date Analyzed: 03/12/19

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1902040-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	19.4	20.0	97	59-155
Dichloromethane	8260C	18.0	20.0	90	73-122
Ethylbenzene	8260C	16.7	20.0	84	76-120
Isopropylbenzene (Cumene)	8260C	17.0	20.0	85	77-128
Methyl Acetate	8260C	20.0	20.0	100	40-112
Methyl tert-Butyl Ether	8260C	20.3	20.0	101	75-118
Methylcyclohexane	8260C	21.0	20.0	105	51-129
Styrene	8260C	17.6	20.0	88	80-124
Tetrachloroethene (PCE)	8260C	15.8	20.0	79	72-125
Toluene	8260C	17.6	20.0	88	79-119
Trichloroethene (TCE)	8260C	16.3	20.0	82	74-122
Trichlorofluoromethane (CFC 11)	8260C	16.9	20.0	85	71-136
Vinyl Chloride	8260C	19.7	20.0	98	74-159
cis-1,2-Dichloroethene	8260C	19.2	20.0	96	80-121
cis-1,3-Dichloropropene	8260C	18.7	20.0	94	77-122
m,p-Xylenes	8260C	32.0	40.0	80	80-126
o-Xylene	8260C	16.9	20.0	84	79-123
trans-1,2-Dichloroethene	8260C	18.1	20.0	91	73-118
trans-1,3-Dichloropropene	8260C	19.5	20.0	97	71-133

Client: The LiRo Group **Service Request:**R1901880
Project: Buffalo China/16-344-1389 **Date Analyzed:**03/07/19 10:35

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\030719\P24753.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 627451

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	17.00	27293	Pass
75	95	30	60	47.93	76928	Pass
95	95	100	100	100.00	160517	Pass
96	95	5	9	6.84	10973	Pass
173	174	0	2	0.72	926	Pass
174	95	50	120	80.67	129496	Pass
175	174	5	9	7.19	9317	Pass
176	174	95	101	96.93	125517	Pass
177	176	5	9	7.02	8817	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ1901929-02	I:\ACQUDATA\msvoa12\Data\030719\P24754.D\	03/07/19 11:06	
Lab Control Sample	RQ1901929-03	I:\ACQUDATA\msvoa12\Data\030719\P24755.D\	03/07/19 11:34	
Method Blank	RQ1901929-04	I:\ACQUDATA\msvoa12\Data\030719\P24757.D\	03/07/19 12:32	
MW-5AR	R1901880-001	I:\ACQUDATA\msvoa12\Data\030719\P24758.D\	03/07/19 13:04	
MW-20A	R1901880-002	I:\ACQUDATA\msvoa12\Data\030719\P24760.D\	03/07/19 13:47	
DUP	R1901880-006	I:\ACQUDATA\msvoa12\Data\030719\P24761.D\	03/07/19 14:09	
MW-19R	R1901880-005	I:\ACQUDATA\msvoa12\Data\030719\P24762.D\	03/07/19 14:30	
MW-5R	R1901880-007	I:\ACQUDATA\msvoa12\Data\030719\P24763.D\	03/07/19 14:52	
MW-5R	R1901880-007	I:\ACQUDATA\msvoa12\Data\030719\P24773.D\	03/07/19 18:27	
MW-20A	R1901880-002	I:\ACQUDATA\msvoa12\Data\030719\P24774.D\	03/07/19 18:49	
DUP	R1901880-006	I:\ACQUDATA\msvoa12\Data\030719\P24775.D\	03/07/19 19:11	
MW-13A	R1901880-003	I:\ACQUDATA\msvoa12\Data\030719\P24776.D\	03/07/19 19:32	
MW-5AR	RQ1901929-06	I:\ACQUDATA\msvoa12\Data\030719\P24777.D\	03/07/19 19:54	
MW-5AR	RQ1901929-07	I:\ACQUDATA\msvoa12\Data\030719\P24778.D\	03/07/19 20:15	

Client: The LiRo Group **Service Request:**R1901880
Project: Buffalo China/16-344-1389 **Date Analyzed:**03/08/19 11:21

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\030819\P24786.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 627654

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	17.75	30563	Pass
75	95	30	60	46.20	79568	Pass
95	95	100	100	100.00	172213	Pass
96	95	5	9	6.34	10918	Pass
173	174	0	2	0.52	718	Pass
174	95	50	120	79.44	136805	Pass
175	174	5	9	6.36	8707	Pass
176	174	95	101	97.79	133779	Pass
177	176	5	9	6.74	9012	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ1902008-02	I:\ACQUDATA\msvoa12\Data\030819\P24787.D\	03/08/19 11:51	
Lab Control Sample	RQ1902008-03	I:\ACQUDATA\msvoa12\Data\030819\P24788.D\	03/08/19 12:28	
Method Blank	RQ1902008-05	I:\ACQUDATA\msvoa12\Data\030819\P24791.D\	03/08/19 13:39	
MW-14A	R1901880-004	I:\ACQUDATA\msvoa12\Data\030819\P24809.D\	03/08/19 20:12	
MW-11	R1901880-009	I:\ACQUDATA\msvoa12\Data\030819\P24810.D\	03/08/19 20:33	
MW-19AR	R1901880-008	I:\ACQUDATA\msvoa12\Data\030819\P24811.D\	03/08/19 20:55	

Client: The LiRo Group **Service Request:**R1901880
Project: Buffalo China/16-344-1389 **Date Analyzed:**03/12/19 10:03

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\031219\P24829.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 627896

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	17.39	28235	Pass
75	95	30	60	48.68	79027	Pass
95	95	100	100	100.00	162347	Pass
96	95	5	9	6.58	10680	Pass
173	174	0	2	0.56	726	Pass
174	95	50	120	79.71	129400	Pass
175	174	5	9	6.99	9050	Pass
176	174	95	101	95.85	124027	Pass
177	176	5	9	6.12	7589	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ1902040-02	I:\ACQUDATA\msvoa12\Data\031219\P24830.D\	03/12/19 10:33	
Lab Control Sample	RQ1902040-03	I:\ACQUDATA\msvoa12\Data\031219\P24831.D\	03/12/19 11:02	
Method Blank	RQ1902040-04	I:\ACQUDATA\msvoa12\Data\031219\P24833.D\	03/12/19 11:51	
MW-19AR	R1901880-008	I:\ACQUDATA\msvoa12\Data\031219\P24840.D\	03/12/19 14:36	
MW-11	R1901880-009	I:\ACQUDATA\msvoa12\Data\031219\P24841.D\	03/12/19 14:58	

Client: The LiRo Group **Service Request:**R1901880
Project: Buffalo China/16-344-1389 **Date Analyzed:**03/07/19 11:06

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\030719\P24754.D\ **Lab Code:**RQ1901929-02
Instrument ID: R-MS-12 **Analysis Lot:**627451
Analysis Method: 8260C **Signal ID:**1

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	255,662	11.84	558,549	6.49	494,060	9.78
	Upper Limit ==>	511,324	12.34	1,117,098	6.99	988,120	10.28
	Lower Limit ==>	127,831	11.34	279,275	5.99	247,030	9.28
Associated Analyses							
Lab Control Sample	RQ1901929-03	252074	11.84	564315	6.48	499423	9.78
Method Blank	RQ1901929-04	228359	11.84	511013	6.48	450120	9.78
MW-5AR	R1901880-001	241517	11.84	554653	6.49	476824	9.78
MW-20A	R1901880-002	234751	11.84	526697	6.49	460357	9.78
DUP	R1901880-006	229300	11.84	507585	6.49	446741	9.78
MW-19R	R1901880-005	217245	11.84	503536	6.48	432335	9.78
MW-5R	R1901880-007	220190	11.84	485094	6.49	426850	9.78
MW-5R	R1901880-007	224042	11.84	506195	6.48	443981	9.78
MW-20A	R1901880-002	206317	11.84	471332	6.49	408139	9.78
DUP	R1901880-006	220553	11.84	493229	6.49	429008	9.78
MW-13A	R1901880-003	218887	11.84	508290	6.49	442256	9.78
MW-5ARMS	RQ1901929-06	221692	11.84	491924	6.49	433646	9.79
MW-5ARDMS	RQ1901929-07	226694	11.84	501759	6.48	439477	9.78

Client: The LiRo Group **Service Request:** R1901880
Project: Buffalo China/16-344-1389 **Date Analyzed:** 03/07/19 11:06

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\030719\P24754.D\ **Lab Code:** RQ1901929-02
Instrument ID: R-MS-12 **Analysis Lot:** 627451
Analysis Method: 8260C **Signal ID:** 1

		Pentafluorobenzene	
		Area	**RT**
	Result ==>	347,968	5.41
	Upper Limit ==>	695,936	5.91
	Lower Limit ==>	173,984	4.91
Associated Analyses			
Lab Control Sample	RQ1901929-03	356456	5.40
Method Blank	RQ1901929-04	310095	5.40
MW-5AR	R1901880-001	341465	5.41
MW-20A	R1901880-002	319811	5.40
DUP	R1901880-006	314625	5.40
MW-19R	R1901880-005	305671	5.40
MW-5R	R1901880-007	298288	5.41
MW-5R	R1901880-007	307677	5.40
MW-20A	R1901880-002	287133	5.41
DUP	R1901880-006	305614	5.40
MW-13A	R1901880-003	308270	5.40
MW-5ARMS	RQ1901929-06	300681	5.41
MW-5ARDMS	RQ1901929-07	305262	5.40

Client: The LiRo Group **Service Request:** R1901880
Project: Buffalo China/16-344-1389 **Date Analyzed:** 03/08/19 11:51

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\030819\P24787.D\ **Lab Code:** RQ1902008-02
Instrument ID: R-MS-12 **Analysis Lot:** 627654
Analysis Method: 8260C **Signal ID:** 1

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	247,185	11.84	552,755	6.49	480,658	9.79
	Upper Limit ==>	494,370	12.34	1,105,510	6.99	961,316	10.29
	Lower Limit ==>	123,593	11.34	276,378	5.99	240,329	9.29
Associated Analyses							
Lab Control Sample	RQ1902008-03	240872	11.84	549710	6.49	478541	9.78
Method Blank	RQ1902008-05	217746	11.84	481681	6.49	425343	9.78
MW-14A	R1901880-004	219538	11.84	493290	6.49	423612	9.78
MW-11	R1901880-009	218252	11.84	513619	6.49	447136	9.78
MW-19AR	R1901880-008	218598	11.84	499679	6.49	441202	9.78

Client: The LiRo Group **Service Request:** R1901880
Project: Buffalo China/16-344-1389 **Date Analyzed:** 03/08/19 11:51

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\030819\P24787.D\ **Lab Code:** RQ1902008-02
Instrument ID: R-MS-12 **Analysis Lot:** 627654
Analysis Method: 8260C **Signal ID:** 1

		Pentafluorobenzene	
		Area	**RT**
	Result ==>	337,032	5.41
	Upper Limit ==>	674,064	5.91
	Lower Limit ==>	168,516	4.91
Associated Analyses			
Lab Control Sample	RQ1902008-03	338404	5.41
Method Blank	RQ1902008-05	299551	5.41
MW-14A	R1901880-004	303362	5.41
MW-11	R1901880-009	314796	5.40
MW-19AR	R1901880-008	306928	5.40

Client: The LiRo Group **Service Request:**R1901880
Project: Buffalo China/16-344-1389 **Date Analyzed:**03/12/19 10:33

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\031219\P24830.D\ **Lab Code:**RQ1902040-02
Instrument ID: R-MS-12 **Analysis Lot:**627896
Analysis Method: 8260C **Signal ID:**1

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	247,278	11.84	541,207	6.49	474,342	9.79
	Upper Limit ==>	494,556	12.34	1,082,414	6.99	948,684	10.29
	Lower Limit ==>	123,639	11.34	270,604	5.99	237,171	9.29
Associated Analyses							
Lab Control Sample	RQ1902040-03	247307	11.84	562868	6.49	498267	9.78
Method Blank	RQ1902040-04	220584	11.84	507380	6.49	447562	9.79
MW-19AR	R1901880-008	216827	11.84	490061	6.49	434880	9.79
MW-11	R1901880-009	212462	11.84	496336	6.49	431969	9.79

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: The LiRo Group **Service Request:**R1901880
Project: Buffalo China/16-344-1389 **Date Analyzed:**03/12/19 10:33

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\031219\P24830.D\ **Lab Code:**RQ1902040-02
Instrument ID: R-MS-12 **Analysis Lot:**627896
Analysis Method: 8260C **Signal ID:**1

		Pentafluorobenzene	
		Area	**RT**
	Result ==>	340,092	5.41
	Upper Limit ==>	680,184	5.91
	Lower Limit ==>	170,046	4.91
Associated Analyses			
Lab Control Sample	RQ1902040-03	349749	5.40
Method Blank	RQ1902040-04	311098	5.40
MW-19AR	R1901880-008	307932	5.41
MW-11	R1901880-009	301675	5.41

Raw Data

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
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Volatile Organic Compounds by GC/MS

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Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19 12:15
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-5AR	**Units:**	ug/L
Lab Code:	R1901880-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1000 U	1000	42	200	03/07/19 13:04	
1,1,2,2-Tetrachloroethane	**43 J**	1000	40	200	03/07/19 13:04	
1,1,2-Trichloroethane	1000 U	1000	40	200	03/07/19 13:04	
1,1,2-Trichloro-1,2,2-trifluoroethane	1000 U	1000	40	200	03/07/19 13:04	
1,1-Dichloroethane (1,1-DCA)	1000 U	1000	40	200	03/07/19 13:04	
1,1-Dichloroethene (1,1-DCE)	1000 U	1000	50	200	03/07/19 13:04	
1,2,3-Trichlorobenzene	1000 U	1000	40	200	03/07/19 13:04	
1,2,4-Trichlorobenzene	1000 U	1000	50	200	03/07/19 13:04	
1,2-Dibromo-3-chloropropane (DBCP)	1000 U	1000	90	200	03/07/19 13:04	
1,2-Dibromoethane	1000 U	1000	40	200	03/07/19 13:04	
1,2-Dichlorobenzene	1000 U	1000	40	200	03/07/19 13:04	
1,2-Dichloroethane	1000 U	1000	40	200	03/07/19 13:04	
1,2-Dichloropropane	1000 U	1000	40	200	03/07/19 13:04	
1,3-Dichlorobenzene	1000 U	1000	40	200	03/07/19 13:04	
1,4-Dichlorobenzene	1000 U	1000	40	200	03/07/19 13:04	
1,4-Dioxane	20000 U	20000	2600	200	03/07/19 13:04	
2-Butanone (MEK)	2000 U	2000	160	200	03/07/19 13:04	
2-Hexanone	2000 U	2000	40	200	03/07/19 13:04	
4-Methyl-2-pentanone	2000 U	2000	40	200	03/07/19 13:04	
Acetone	2000 U	2000	420	200	03/07/19 13:04	
Benzene	1000 U	1000	40	200	03/07/19 13:04	
Bromochloromethane	1000 U	1000	48	200	03/07/19 13:04	
Bromodichloromethane	**61 J**	1000	44	200	03/07/19 13:04	
Bromoform	1000 U	1000	50	200	03/07/19 13:04	
Bromomethane	1000 U	1000	140	200	03/07/19 13:04	
Carbon Disulfide	**50 J**	2000	50	200	03/07/19 13:04	
Carbon Tetrachloride	1000 U	1000	68	200	03/07/19 13:04	
Chlorobenzene	1000 U	1000	40	200	03/07/19 13:04	
Chloroethane	1000 U	1000	46	200	03/07/19 13:04	
Chloroform	**310 J**	1000	48	200	03/07/19 13:04	
Chloromethane	1000 U	1000	56	200	03/07/19 13:04	
Cyclohexane	2000 U	2000	52	200	03/07/19 13:04	
Dibromochloromethane	1000 U	1000	40	200	03/07/19 13:04	
Dichlorodifluoromethane (CFC 12)	1000 U	1000	42	200	03/07/19 13:04	
Dichloromethane	1000 U	1000	72	200	03/07/19 13:04	
Ethylbenzene	1000 U	1000	40	200	03/07/19 13:04	
Isopropylbenzene (Cumene)	1000 U	1000	40	200	03/07/19 13:04	
Methyl Acetate	2000 U	2000	66	200	03/07/19 13:04	
Methyl tert-Butyl Ether	1000 U	1000	40	200	03/07/19 13:04	
Methylcyclohexane	2000 U	2000	40	200	03/07/19 13:04	
Styrene	1000 U	1000	40	200	03/07/19 13:04	
Tetrachloroethene (PCE)	**63 J**	1000	42	200	03/07/19 13:04	
Toluene	1000 U	1000	40	200	03/07/19 13:04	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19 12:15
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-5AR	**Units:**	ug/L
Lab Code:	R1901880-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**24000**		1000	40	200	03/07/19 13:04	
Trichlorofluoromethane (CFC 11)	1000	U	1000	48	200	03/07/19 13:04	
Vinyl Chloride	**440**	**J**	1000	40	200	03/07/19 13:04	
cis-1,2-Dichloroethene	**25000**		1000	46	200	03/07/19 13:04	
cis-1,3-Dichloropropene	1000	U	1000	40	200	03/07/19 13:04	
m,p-Xylenes	1000	U	1000	40	200	03/07/19 13:04	
o-Xylene	1000	U	1000	40	200	03/07/19 13:04	
trans-1,2-Dichloroethene	**1700**		1000	40	200	03/07/19 13:04	
trans-1,3-Dichloropropene	1000	U	1000	46	200	03/07/19 13:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	03/07/19 13:04	
Dibromofluoromethane	102	89 - 119	03/07/19 13:04	
Toluene-d8	100	87 - 121	03/07/19 13:04	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19 11:15
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-20A	**Units:**	ug/L
Lab Code:	R1901880-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	03/07/19 13:47	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,1-Dichloroethene (1,1-DCE)	**2.0 J**	5.0	0.25	1	03/07/19 13:47	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	03/07/19 13:47	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	03/07/19 13:47	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 13:47	
1,4-Dioxane	100 U	100	13	1	03/07/19 13:47	
2-Butanone (MEK)	10 U	10	0.78	1	03/07/19 13:47	
2-Hexanone	10 U	10	0.20	1	03/07/19 13:47	
4-Methyl-2-pentanone	10 U	10	0.20	1	03/07/19 13:47	
Acetone	10 U	10	2.1	1	03/07/19 13:47	
Benzene	**0.26 J**	5.0	0.20	1	03/07/19 13:47	
Bromochloromethane	5.0 U	5.0	0.24	1	03/07/19 13:47	
Bromodichloromethane	5.0 U	5.0	0.22	1	03/07/19 13:47	
Bromoform	5.0 U	5.0	0.25	1	03/07/19 13:47	
Bromomethane	5.0 U	5.0	0.70	1	03/07/19 13:47	
Carbon Disulfide	10 U	10	0.25	1	03/07/19 13:47	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	03/07/19 13:47	
Chlorobenzene	5.0 U	5.0	0.20	1	03/07/19 13:47	
Chloroethane	5.0 U	5.0	0.23	1	03/07/19 13:47	
Chloroform	5.0 U	5.0	0.24	1	03/07/19 13:47	
Chloromethane	5.0 U	5.0	0.28	1	03/07/19 13:47	
Cyclohexane	**0.67 J**	10	0.26	1	03/07/19 13:47	
Dibromochloromethane	5.0 U	5.0	0.20	1	03/07/19 13:47	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	03/07/19 13:47	
Dichloromethane	5.0 U	5.0	0.36	1	03/07/19 13:47	
Ethylbenzene	5.0 U	5.0	0.20	1	03/07/19 13:47	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	03/07/19 13:47	
Methyl Acetate	10 U	10	0.33	1	03/07/19 13:47	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	03/07/19 13:47	
Methylcyclohexane	**0.24 J**	10	0.20	1	03/07/19 13:47	
Styrene	5.0 U	5.0	0.20	1	03/07/19 13:47	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	03/07/19 13:47	
Toluene	5.0 U	5.0	0.20	1	03/07/19 13:47	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19 11:15
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-20A	**Units:**	ug/L
Lab Code:	R1901880-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**1.6**	**J**	5.0	0.20	1	03/07/19 13:47	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	03/07/19 13:47	
Vinyl Chloride	**260**	**D**	50	2.0	10	03/07/19 18:49	
cis-1,2-Dichloroethene	**1100**	**D**	50	2.3	10	03/07/19 18:49	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	03/07/19 13:47	
m,p-Xylenes	5.0	U	5.0	0.20	1	03/07/19 13:47	
o-Xylene	5.0	U	5.0	0.20	1	03/07/19 13:47	
trans-1,2-Dichloroethene	**5.0**		5.0	0.20	1	03/07/19 13:47	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	03/07/19 13:47	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 122	03/07/19 13:47	
Dibromofluoromethane	101	89 - 119	03/07/19 13:47	
Toluene-d8	102	87 - 121	03/07/19 13:47	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/26/19 10:15
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-13A	**Units:**	ug/L
Lab Code:	R1901880-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	250 U	250	11	50	03/07/19 19:32	
1,1,2,2-Tetrachloroethane	250 U	250	10	50	03/07/19 19:32	
1,1,2-Trichloroethane	250 U	250	10	50	03/07/19 19:32	
1,1,2-Trichloro-1,2,2-trifluoroethane	250 U	250	10	50	03/07/19 19:32	
1,1-Dichloroethane (1,1-DCA)	250 U	250	10	50	03/07/19 19:32	
1,1-Dichloroethene (1,1-DCE)	250 U	250	13	50	03/07/19 19:32	
1,2,3-Trichlorobenzene	250 U	250	10	50	03/07/19 19:32	
1,2,4-Trichlorobenzene	250 U	250	13	50	03/07/19 19:32	
1,2-Dibromo-3-chloropropane (DBCP)	250 U	250	23	50	03/07/19 19:32	
1,2-Dibromoethane	250 U	250	10	50	03/07/19 19:32	
1,2-Dichlorobenzene	250 U	250	10	50	03/07/19 19:32	
1,2-Dichloroethane	250 U	250	10	50	03/07/19 19:32	
1,2-Dichloropropane	250 U	250	10	50	03/07/19 19:32	
1,3-Dichlorobenzene	250 U	250	10	50	03/07/19 19:32	
1,4-Dichlorobenzene	250 U	250	10	50	03/07/19 19:32	
1,4-Dioxane	5000 U	5000	650	50	03/07/19 19:32	
2-Butanone (MEK)	500 U	500	39	50	03/07/19 19:32	
2-Hexanone	500 U	500	10	50	03/07/19 19:32	
4-Methyl-2-pentanone	500 U	500	10	50	03/07/19 19:32	
Acetone	500 U	500	110	50	03/07/19 19:32	
Benzene	250 U	250	10	50	03/07/19 19:32	
Bromochloromethane	250 U	250	12	50	03/07/19 19:32	
Bromodichloromethane	250 U	250	11	50	03/07/19 19:32	
Bromoform	250 U	250	13	50	03/07/19 19:32	
Bromomethane	250 U	250	35	50	03/07/19 19:32	
Carbon Disulfide	**35 J**	500	13	50	03/07/19 19:32	
Carbon Tetrachloride	250 U	250	17	50	03/07/19 19:32	
Chlorobenzene	250 U	250	10	50	03/07/19 19:32	
Chloroethane	250 U	250	12	50	03/07/19 19:32	
Chloroform	250 U	250	12	50	03/07/19 19:32	
Chloromethane	250 U	250	14	50	03/07/19 19:32	
Cyclohexane	500 U	500	13	50	03/07/19 19:32	
Dibromochloromethane	250 U	250	10	50	03/07/19 19:32	
Dichlorodifluoromethane (CFC 12)	250 U	250	11	50	03/07/19 19:32	
Dichloromethane	250 U	250	18	50	03/07/19 19:32	
Ethylbenzene	250 U	250	10	50	03/07/19 19:32	
Isopropylbenzene (Cumene)	250 U	250	10	50	03/07/19 19:32	
Methyl Acetate	500 U	500	17	50	03/07/19 19:32	
Methyl tert-Butyl Ether	250 U	250	10	50	03/07/19 19:32	
Methylcyclohexane	500 U	500	10	50	03/07/19 19:32	
Styrene	250 U	250	10	50	03/07/19 19:32	
Tetrachloroethene (PCE)	**23 J**	250	11	50	03/07/19 19:32	
Toluene	250 U	250	10	50	03/07/19 19:32	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/26/19 10:15
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-13A	**Units:**	ug/L
Lab Code:	R1901880-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**3100**		250	10	50	03/07/19 19:32	
Trichlorofluoromethane (CFC 11)	250	U	250	12	50	03/07/19 19:32	
Vinyl Chloride	**150**	**J**	250	10	50	03/07/19 19:32	
cis-1,2-Dichloroethene	**8500**		250	12	50	03/07/19 19:32	
cis-1,3-Dichloropropene	250	U	250	10	50	03/07/19 19:32	
m,p-Xylenes	250	U	250	10	50	03/07/19 19:32	
o-Xylene	250	U	250	10	50	03/07/19 19:32	
trans-1,2-Dichloroethene	**410**		250	10	50	03/07/19 19:32	
trans-1,3-Dichloropropene	250	U	250	12	50	03/07/19 19:32	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/07/19 19:32	
Dibromofluoromethane	100	89 - 119	03/07/19 19:32	
Toluene-d8	99	87 - 121	03/07/19 19:32	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/26/19 11:20
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-14A	**Units:**	ug/L
Lab Code:	R1901880-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	03/08/19 20:12	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	03/08/19 20:12	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	03/08/19 20:12	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	03/08/19 20:12	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:12	
1,4-Dioxane	100 U	100	13	1	03/08/19 20:12	
2-Butanone (MEK)	10 U	10	0.78	1	03/08/19 20:12	
2-Hexanone	10 U	10	0.20	1	03/08/19 20:12	
4-Methyl-2-pentanone	10 U	10	0.20	1	03/08/19 20:12	
Acetone	**3.2 J**	10	2.1	1	03/08/19 20:12	
Benzene	5.0 U	5.0	0.20	1	03/08/19 20:12	
Bromochloromethane	5.0 U	5.0	0.24	1	03/08/19 20:12	
Bromodichloromethane	5.0 U	5.0	0.22	1	03/08/19 20:12	
Bromoform	5.0 U	5.0	0.25	1	03/08/19 20:12	
Bromomethane	5.0 U	5.0	0.70	1	03/08/19 20:12	
Carbon Disulfide	10 U	10	0.25	1	03/08/19 20:12	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	03/08/19 20:12	
Chlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:12	
Chloroethane	5.0 U	5.0	0.23	1	03/08/19 20:12	
Chloroform	5.0 U	5.0	0.24	1	03/08/19 20:12	
Chloromethane	5.0 U	5.0	0.28	1	03/08/19 20:12	
Cyclohexane	10 U	10	0.26	1	03/08/19 20:12	
Dibromochloromethane	5.0 U	5.0	0.20	1	03/08/19 20:12	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	03/08/19 20:12	
Dichloromethane	5.0 U	5.0	0.36	1	03/08/19 20:12	
Ethylbenzene	5.0 U	5.0	0.20	1	03/08/19 20:12	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	03/08/19 20:12	
Methyl Acetate	10 U	10	0.33	1	03/08/19 20:12	
Methyl tert-Butyl Ether	**0.28 J**	5.0	0.20	1	03/08/19 20:12	
Methylcyclohexane	10 U	10	0.20	1	03/08/19 20:12	
Styrene	5.0 U	5.0	0.20	1	03/08/19 20:12	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	03/08/19 20:12	
Toluene	5.0 U	5.0	0.20	1	03/08/19 20:12	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/26/19 11:20
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-14A	**Units:**	ug/L
Lab Code:	R1901880-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**1.1**	**J**	5.0	0.20	1	03/08/19 20:12	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	03/08/19 20:12	
Vinyl Chloride	**2.5**	**J**	5.0	0.20	1	03/08/19 20:12	
cis-1,2-Dichloroethene	**4.9**	**J**	5.0	0.23	1	03/08/19 20:12	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	03/08/19 20:12	
m,p-Xylenes	5.0	U	5.0	0.20	1	03/08/19 20:12	
o-Xylene	5.0	U	5.0	0.20	1	03/08/19 20:12	
trans-1,2-Dichloroethene	**0.68**	**J**	5.0	0.20	1	03/08/19 20:12	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	03/08/19 20:12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	03/08/19 20:12	
Dibromofluoromethane	99	89 - 119	03/08/19 20:12	
Toluene-d8	100	87 - 121	03/08/19 20:12	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19 14:45
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-19R	**Units:**	ug/L
Lab Code:	R1901880-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	03/07/19 14:30	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	03/07/19 14:30	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	03/07/19 14:30	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	03/07/19 14:30	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:30	
1,4-Dioxane	100 U	100	13	1	03/07/19 14:30	
2-Butanone (MEK)	10 U	10	0.78	1	03/07/19 14:30	
2-Hexanone	10 U	10	0.20	1	03/07/19 14:30	
4-Methyl-2-pentanone	10 U	10	0.20	1	03/07/19 14:30	
Acetone	**3.2 J**	10	2.1	1	03/07/19 14:30	
Benzene	5.0 U	5.0	0.20	1	03/07/19 14:30	
Bromochloromethane	5.0 U	5.0	0.24	1	03/07/19 14:30	
Bromodichloromethane	5.0 U	5.0	0.22	1	03/07/19 14:30	
Bromoform	5.0 U	5.0	0.25	1	03/07/19 14:30	
Bromomethane	5.0 U	5.0	0.70	1	03/07/19 14:30	
Carbon Disulfide	10 U	10	0.25	1	03/07/19 14:30	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	03/07/19 14:30	
Chlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:30	
Chloroethane	5.0 U	5.0	0.23	1	03/07/19 14:30	
Chloroform	5.0 U	5.0	0.24	1	03/07/19 14:30	
Chloromethane	5.0 U	5.0	0.28	1	03/07/19 14:30	
Cyclohexane	10 U	10	0.26	1	03/07/19 14:30	
Dibromochloromethane	5.0 U	5.0	0.20	1	03/07/19 14:30	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	03/07/19 14:30	
Dichloromethane	5.0 U	5.0	0.36	1	03/07/19 14:30	
Ethylbenzene	5.0 U	5.0	0.20	1	03/07/19 14:30	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	03/07/19 14:30	
Methyl Acetate	10 U	10	0.33	1	03/07/19 14:30	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	03/07/19 14:30	
Methylcyclohexane	**0.26 J**	10	0.20	1	03/07/19 14:30	
Styrene	5.0 U	5.0	0.20	1	03/07/19 14:30	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	03/07/19 14:30	
Toluene	5.0 U	5.0	0.20	1	03/07/19 14:30	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19 14:45
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-19R	**Units:**	ug/L
Lab Code:	R1901880-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**78**		5.0	0.20	1	03/07/19 14:30	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	03/07/19 14:30	
Vinyl Chloride	**0.36**	**J**	5.0	0.20	1	03/07/19 14:30	
cis-1,2-Dichloroethene	**59**		5.0	0.23	1	03/07/19 14:30	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	03/07/19 14:30	
m,p-Xylenes	5.0	U	5.0	0.20	1	03/07/19 14:30	
o-Xylene	5.0	U	5.0	0.20	1	03/07/19 14:30	
trans-1,2-Dichloroethene	**4.3**	**J**	5.0	0.20	1	03/07/19 14:30	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	03/07/19 14:30	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	03/07/19 14:30	
Dibromofluoromethane	99	89 - 119	03/07/19 14:30	
Toluene-d8	100	87 - 121	03/07/19 14:30	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	DUP	**Units:**	ug/L
Lab Code:	R1901880-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	03/07/19 14:09	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,1-Dichloroethene (1,1-DCE)	**1.9 J**	5.0	0.25	1	03/07/19 14:09	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	03/07/19 14:09	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	03/07/19 14:09	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:09	
1,4-Dioxane	100 U	100	13	1	03/07/19 14:09	
2-Butanone (MEK)	10 U	10	0.78	1	03/07/19 14:09	
2-Hexanone	10 U	10	0.20	1	03/07/19 14:09	
4-Methyl-2-pentanone	10 U	10	0.20	1	03/07/19 14:09	
Acetone	**3.1 J**	10	2.1	1	03/07/19 14:09	
Benzene	**0.28 J**	5.0	0.20	1	03/07/19 14:09	
Bromochloromethane	5.0 U	5.0	0.24	1	03/07/19 14:09	
Bromodichloromethane	5.0 U	5.0	0.22	1	03/07/19 14:09	
Bromoform	5.0 U	5.0	0.25	1	03/07/19 14:09	
Bromomethane	5.0 U	5.0	0.70	1	03/07/19 14:09	
Carbon Disulfide	10 U	10	0.25	1	03/07/19 14:09	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	03/07/19 14:09	
Chlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:09	
Chloroethane	5.0 U	5.0	0.23	1	03/07/19 14:09	
Chloroform	5.0 U	5.0	0.24	1	03/07/19 14:09	
Chloromethane	5.0 U	5.0	0.28	1	03/07/19 14:09	
Cyclohexane	**0.71 J**	10	0.26	1	03/07/19 14:09	
Dibromochloromethane	5.0 U	5.0	0.20	1	03/07/19 14:09	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	03/07/19 14:09	
Dichloromethane	5.0 U	5.0	0.36	1	03/07/19 14:09	
Ethylbenzene	5.0 U	5.0	0.20	1	03/07/19 14:09	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	03/07/19 14:09	
Methyl Acetate	10 U	10	0.33	1	03/07/19 14:09	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	03/07/19 14:09	
Methylcyclohexane	**0.36 J**	10	0.20	1	03/07/19 14:09	
Styrene	5.0 U	5.0	0.20	1	03/07/19 14:09	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	03/07/19 14:09	
Toluene	5.0 U	5.0	0.20	1	03/07/19 14:09	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	DUP	**Units:**	ug/L
Lab Code:	R1901880-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**1.6**	**J**	5.0	0.20	1	03/07/19 14:09	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	03/07/19 14:09	
Vinyl Chloride	**240**	**D**	50	2.0	10	03/07/19 19:11	
cis-1,2-Dichloroethene	**990**	**D**	50	2.3	10	03/07/19 19:11	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	03/07/19 14:09	
m,p-Xylenes	5.0	U	5.0	0.20	1	03/07/19 14:09	
o-Xylene	5.0	U	5.0	0.20	1	03/07/19 14:09	
trans-1,2-Dichloroethene	**4.4**	**J**	5.0	0.20	1	03/07/19 14:09	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	03/07/19 14:09	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	03/07/19 14:09	
Dibromofluoromethane	104	89 - 119	03/07/19 14:09	
Toluene-d8	101	87 - 121	03/07/19 14:09	

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19 13:05
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-5R	**Units:**	ug/L
Lab Code:	R1901880-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	03/07/19 14:52	
1,1,2,2-Tetrachloroethane	**0.31 J**	5.0	0.20	1	03/07/19 14:52	
1,1,2-Trichloroethane	**0.50 J**	5.0	0.20	1	03/07/19 14:52	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.25	1	03/07/19 14:52	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	03/07/19 14:52	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	03/07/19 14:52	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:52	
1,4-Dioxane	100 U	100	13	1	03/07/19 14:52	
2-Butanone (MEK)	10 U	10	0.78	1	03/07/19 14:52	
2-Hexanone	10 U	10	0.20	1	03/07/19 14:52	
4-Methyl-2-pentanone	10 U	10	0.20	1	03/07/19 14:52	
Acetone	**11**	10	2.1	1	03/07/19 14:52	
Benzene	5.0 U	5.0	0.20	1	03/07/19 14:52	
Bromochloromethane	5.0 U	5.0	0.24	1	03/07/19 14:52	
Bromodichloromethane	5.0 U	5.0	0.22	1	03/07/19 14:52	
Bromoform	5.0 U	5.0	0.25	1	03/07/19 14:52	
Bromomethane	5.0 U	5.0	0.70	1	03/07/19 14:52	
Carbon Disulfide	**0.32 J**	10	0.25	1	03/07/19 14:52	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	03/07/19 14:52	
Chlorobenzene	5.0 U	5.0	0.20	1	03/07/19 14:52	
Chloroethane	5.0 U	5.0	0.23	1	03/07/19 14:52	
Chloroform	**0.33 J**	5.0	0.24	1	03/07/19 14:52	
Chloromethane	5.0 U	5.0	0.28	1	03/07/19 14:52	
Cyclohexane	10 U	10	0.26	1	03/07/19 14:52	
Dibromochloromethane	5.0 U	5.0	0.20	1	03/07/19 14:52	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	03/07/19 14:52	
Dichloromethane	5.0 U	5.0	0.36	1	03/07/19 14:52	
Ethylbenzene	5.0 U	5.0	0.20	1	03/07/19 14:52	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	03/07/19 14:52	
Methyl Acetate	10 U	10	0.33	1	03/07/19 14:52	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	03/07/19 14:52	
Methylcyclohexane	10 U	10	0.20	1	03/07/19 14:52	
Styrene	5.0 U	5.0	0.20	1	03/07/19 14:52	
Tetrachloroethene (PCE)	**1.2 J**	5.0	0.21	1	03/07/19 14:52	
Toluene	5.0 U	5.0	0.20	1	03/07/19 14:52	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	02/22/19 13:05
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-5R	**Units:**	ug/L
Lab Code:	R1901880-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**450**	**D**	13	0.50	2.5	03/07/19 18:27	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	03/07/19 14:52	
Vinyl Chloride	**0.51**	**J**	5.0	0.20	1	03/07/19 14:52	
cis-1,2-Dichloroethene	**160**		5.0	0.23	1	03/07/19 14:52	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	03/07/19 14:52	
m,p-Xylenes	5.0	U	5.0	0.20	1	03/07/19 14:52	
o-Xylene	5.0	U	5.0	0.20	1	03/07/19 14:52	
trans-1,2-Dichloroethene	**12**		5.0	0.20	1	03/07/19 14:52	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	03/07/19 14:52	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	03/07/19 14:52	
Dibromofluoromethane	105	89 - 119	03/07/19 14:52	
Toluene-d8	103	87 - 121	03/07/19 14:52	

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	03/05/19 11:20
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-19AR	**Units:**	ug/L
Lab Code:	R1901880-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	13 U	13	0.53	2.5	03/08/19 20:55	
1,1,2,2-Tetrachloroethane	13 U	13	0.50	2.5	03/08/19 20:55	
1,1,2-Trichloroethane	13 U	13	0.50	2.5	03/08/19 20:55	
1,1,2-Trichloro-1,2,2-trifluoroethane	13 U	13	0.50	2.5	03/08/19 20:55	
1,1-Dichloroethane (1,1-DCA)	13 U	13	0.50	2.5	03/08/19 20:55	
1,1-Dichloroethene (1,1-DCE)	13 U	13	0.63	2.5	03/08/19 20:55	
1,2,3-Trichlorobenzene	13 U	13	0.50	2.5	03/08/19 20:55	
1,2,4-Trichlorobenzene	13 U	13	0.63	2.5	03/08/19 20:55	
1,2-Dibromo-3-chloropropane (DBCP)	13 U	13	1.2	2.5	03/08/19 20:55	
1,2-Dibromoethane	13 U	13	0.50	2.5	03/08/19 20:55	
1,2-Dichlorobenzene	13 U	13	0.50	2.5	03/08/19 20:55	
1,2-Dichloroethane	13 U	13	0.50	2.5	03/08/19 20:55	
1,2-Dichloropropane	13 U	13	0.50	2.5	03/08/19 20:55	
1,3-Dichlorobenzene	13 U	13	0.50	2.5	03/08/19 20:55	
1,4-Dichlorobenzene	13 U	13	0.50	2.5	03/08/19 20:55	
1,4-Dioxane	250 U	250	33	2.5	03/08/19 20:55	
2-Butanone (MEK)	25 U	25	2.0	2.5	03/08/19 20:55	
2-Hexanone	25 U	25	0.50	2.5	03/08/19 20:55	
4-Methyl-2-pentanone	25 U	25	0.50	2.5	03/08/19 20:55	
Acetone	**9.0 J**	25	5.3	2.5	03/08/19 20:55	
Benzene	13 U	13	0.50	2.5	03/08/19 20:55	
Bromochloromethane	13 U	13	0.60	2.5	03/08/19 20:55	
Bromodichloromethane	13 U	13	0.55	2.5	03/08/19 20:55	
Bromoform	13 U	13	0.63	2.5	03/08/19 20:55	
Bromomethane	13 U	13	1.8	2.5	03/08/19 20:55	
Carbon Disulfide	**3.6 J**	25	0.63	2.5	03/08/19 20:55	
Carbon Tetrachloride	13 U	13	0.85	2.5	03/08/19 20:55	
Chlorobenzene	13 U	13	0.50	2.5	03/08/19 20:55	
Chloroethane	13 U	13	0.58	2.5	03/08/19 20:55	
Chloroform	13 U	13	0.60	2.5	03/08/19 20:55	
Chloromethane	13 U	13	0.70	2.5	03/08/19 20:55	
Cyclohexane	**1.9 J**	25	0.65	2.5	03/08/19 20:55	
Dibromochloromethane	13 U	13	0.50	2.5	03/08/19 20:55	
Dichlorodifluoromethane (CFC 12)	13 U	13	0.53	2.5	03/08/19 20:55	
Dichloromethane	**2.3 J**	13	0.90	2.5	03/08/19 20:55	
Ethylbenzene	13 U	13	0.50	2.5	03/08/19 20:55	
Isopropylbenzene (Cumene)	13 U	13	0.50	2.5	03/08/19 20:55	
Methyl Acetate	25 U	25	0.83	2.5	03/08/19 20:55	
Methyl tert-Butyl Ether	13 U	13	0.50	2.5	03/08/19 20:55	
Methylcyclohexane	**1.3 J**	25	0.50	2.5	03/08/19 20:55	
Styrene	13 U	13	0.50	2.5	03/08/19 20:55	
Tetrachloroethene (PCE)	**6.6 J**	13	0.53	2.5	03/08/19 20:55	
Toluene	13 U	13	0.50	2.5	03/08/19 20:55	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	03/05/19 11:20
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-19AR	**Units:**	ug/L
Lab Code:	R1901880-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**830**	**D**	50	2.0	10	03/12/19 14:36	
Trichlorofluoromethane (CFC 11)	13	U	13	0.60	2.5	03/08/19 20:55	
Vinyl Chloride	**4.8**	**J**	13	0.50	2.5	03/08/19 20:55	
cis-1,2-Dichloroethene	**270**	**D**	50	2.3	10	03/12/19 14:36	
cis-1,3-Dichloropropene	13	U	13	0.50	2.5	03/08/19 20:55	
m,p-Xylenes	13	U	13	0.50	2.5	03/08/19 20:55	
o-Xylene	13	U	13	0.50	2.5	03/08/19 20:55	
trans-1,2-Dichloroethene	**12**	**J**	13	0.50	2.5	03/08/19 20:55	
trans-1,3-Dichloropropene	13	U	13	0.58	2.5	03/08/19 20:55	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	03/08/19 20:55	
Dibromofluoromethane	103	89 - 119	03/08/19 20:55	
Toluene-d8	102	87 - 121	03/08/19 20:55	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	03/05/19 13:00
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-11	**Units:**	ug/L
Lab Code:	R1901880-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.21	1	03/08/19 20:33	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,1-Dichloroethene (1,1-DCE)	**2.5 J**	5.0	0.25	1	03/08/19 20:33	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.25	1	03/08/19 20:33	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	03/08/19 20:33	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:33	
1,4-Dichlorobenzene	**0.59 J**	5.0	0.20	1	03/08/19 20:33	
1,4-Dioxane	100 U	100	13	1	03/08/19 20:33	
2-Butanone (MEK)	10 U	10	0.78	1	03/08/19 20:33	
2-Hexanone	10 U	10	0.20	1	03/08/19 20:33	
4-Methyl-2-pentanone	10 U	10	0.20	1	03/08/19 20:33	
Acetone	**13**	10	2.1	1	03/08/19 20:33	
Benzene	**0.35 J**	5.0	0.20	1	03/08/19 20:33	
Bromochloromethane	5.0 U	5.0	0.24	1	03/08/19 20:33	
Bromodichloromethane	5.0 U	5.0	0.22	1	03/08/19 20:33	
Bromoform	5.0 U	5.0	0.25	1	03/08/19 20:33	
Bromomethane	5.0 U	5.0	0.70	1	03/08/19 20:33	
Carbon Disulfide	10 U	10	0.25	1	03/08/19 20:33	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	03/08/19 20:33	
Chlorobenzene	5.0 U	5.0	0.20	1	03/08/19 20:33	
Chloroethane	5.0 U	5.0	0.23	1	03/08/19 20:33	
Chloroform	5.0 U	5.0	0.24	1	03/08/19 20:33	
Chloromethane	5.0 U	5.0	0.28	1	03/08/19 20:33	
Cyclohexane	10 U	10	0.26	1	03/08/19 20:33	
Dibromochloromethane	5.0 U	5.0	0.20	1	03/08/19 20:33	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	03/08/19 20:33	
Dichloromethane	5.0 U	5.0	0.36	1	03/08/19 20:33	
Ethylbenzene	5.0 U	5.0	0.20	1	03/08/19 20:33	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	03/08/19 20:33	
Methyl Acetate	10 U	10	0.33	1	03/08/19 20:33	
Methyl tert-Butyl Ether	**0.33 J**	5.0	0.20	1	03/08/19 20:33	
Methylcyclohexane	10 U	10	0.20	1	03/08/19 20:33	
Styrene	5.0 U	5.0	0.20	1	03/08/19 20:33	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	03/08/19 20:33	
Toluene	5.0 U	5.0	0.20	1	03/08/19 20:33	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R1901880
Project:	Buffalo China/16-344-1389	**Date Collected:**	03/05/19 13:00
Sample Matrix:	Water	**Date Received:**	03/06/19 09:25
Sample Name:	MW-11	**Units:**	ug/L
Lab Code:	R1901880-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

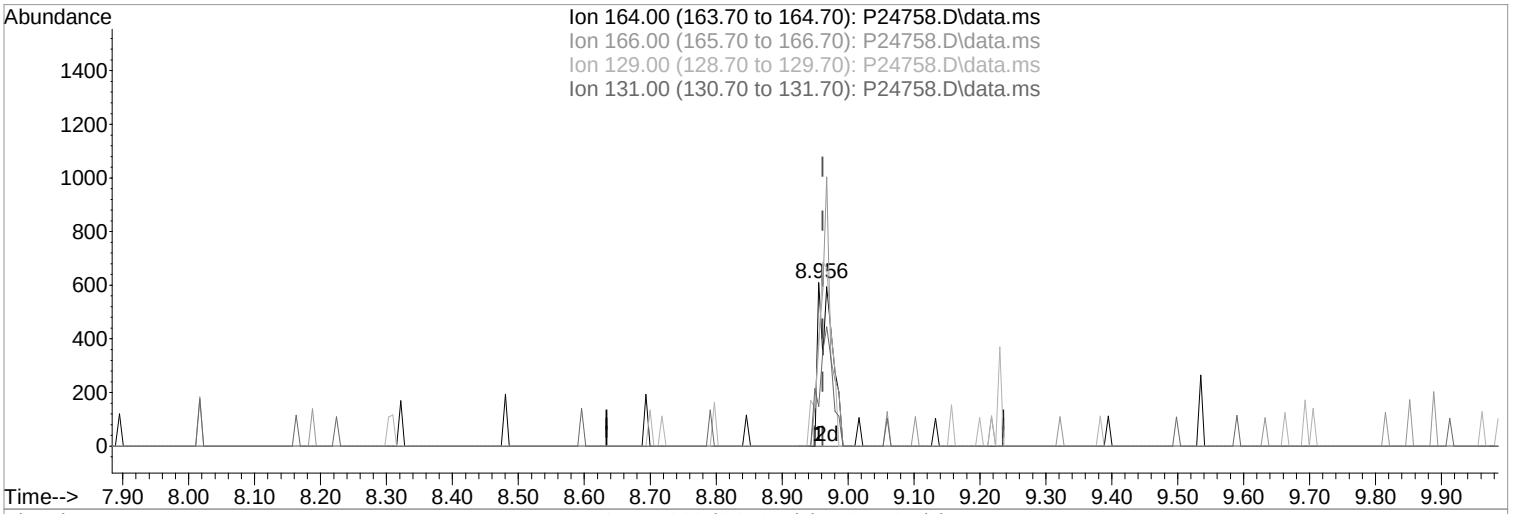
Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**290**	**D**	50	2.0	10	03/12/19 14:58	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	03/08/19 20:33	
Vinyl Chloride	**2.0**	**J**	5.0	0.20	1	03/08/19 20:33	
cis-1,2-Dichloroethene	**1300**	**D**	50	2.3	10	03/12/19 14:58	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	03/08/19 20:33	
m,p-Xylenes	5.0	U	5.0	0.20	1	03/08/19 20:33	
o-Xylene	5.0	U	5.0	0.20	1	03/08/19 20:33	
trans-1,2-Dichloroethene	**6.2**		5.0	0.20	1	03/08/19 20:33	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	03/08/19 20:33	

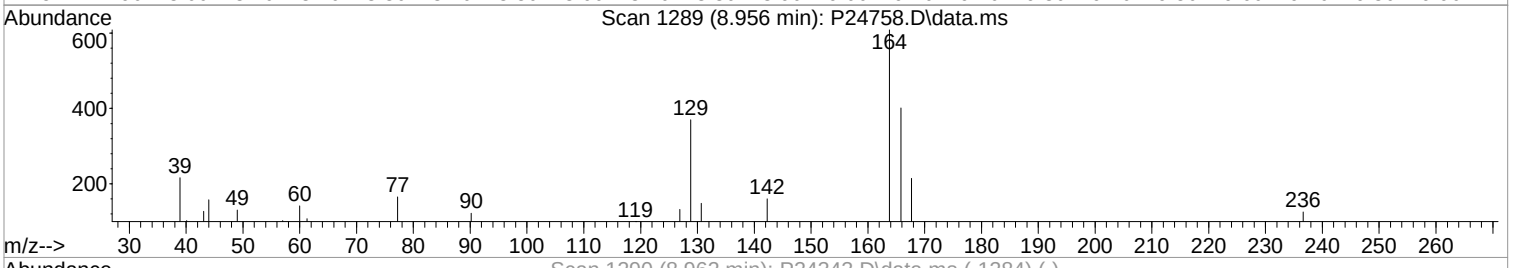
Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	03/08/19 20:33	
Dibromofluoromethane	103	89 - 119	03/08/19 20:33	
Toluene-d8	102	87 - 121	03/08/19 20:33	

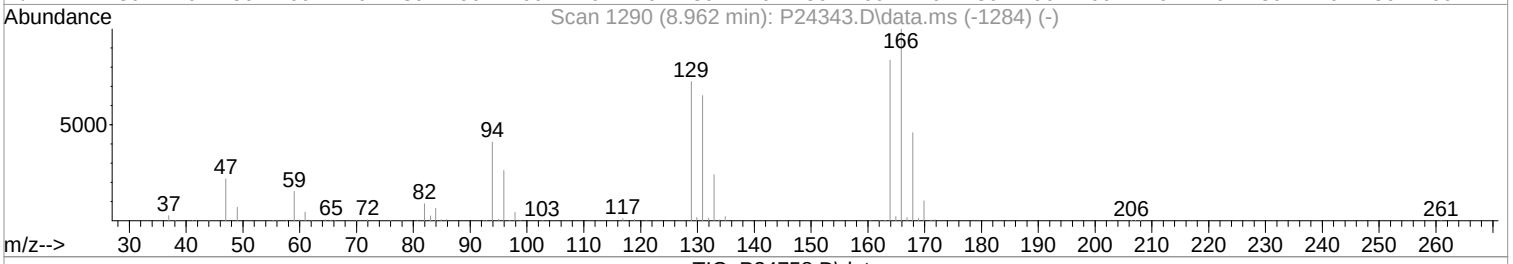
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24758.D
Acq On : 7 Mar 2019 1:04 pm
Operator : K.Ruest
Sample : R1901880-001|200 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 14:23:31 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24758.D\data.ms

(72) Tetrachloroethene (P)

8.956min (-0.006) 0.31 ppb m

response 897

Ion	Exp%	Act%
164.00	100	100
166.00	119.60	65.85#
129.00	86.70	60.76#
131.00	78.00	24.30#

Manual Integration:

After

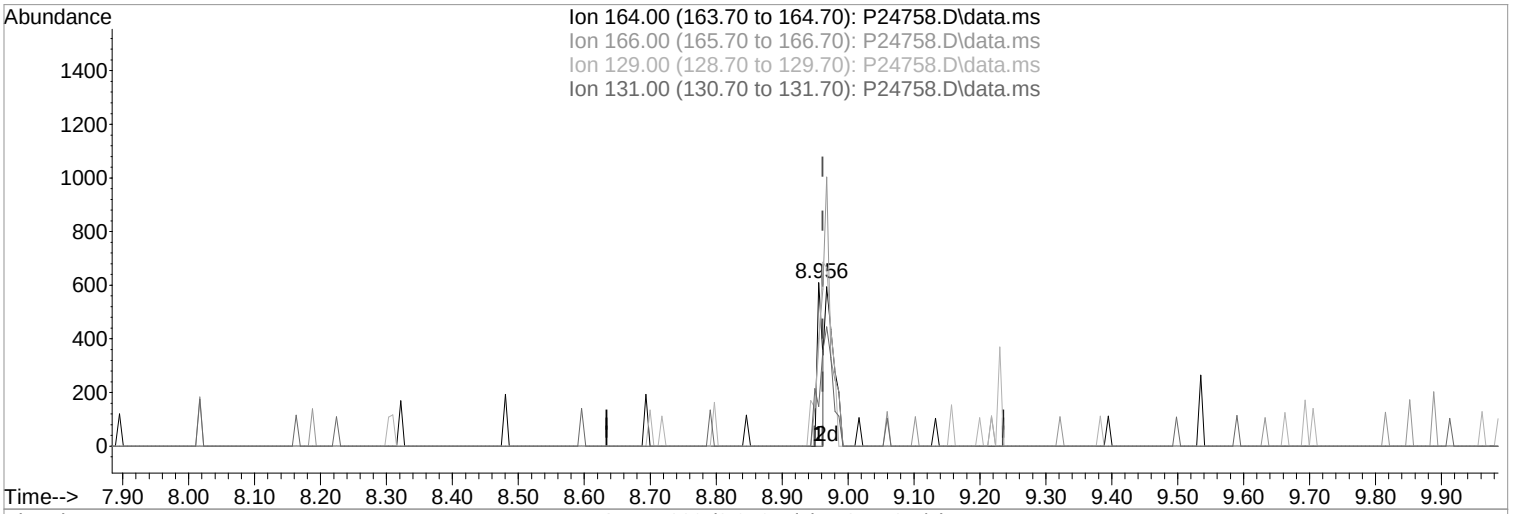
Split Peak

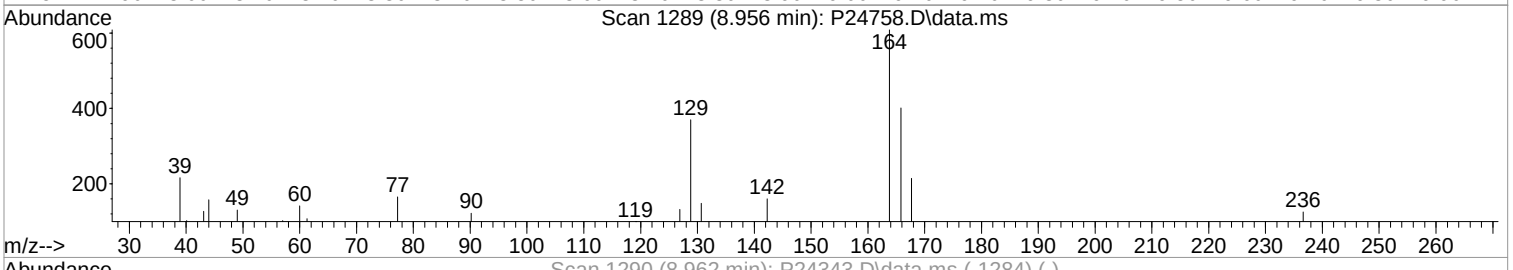
03/12/19

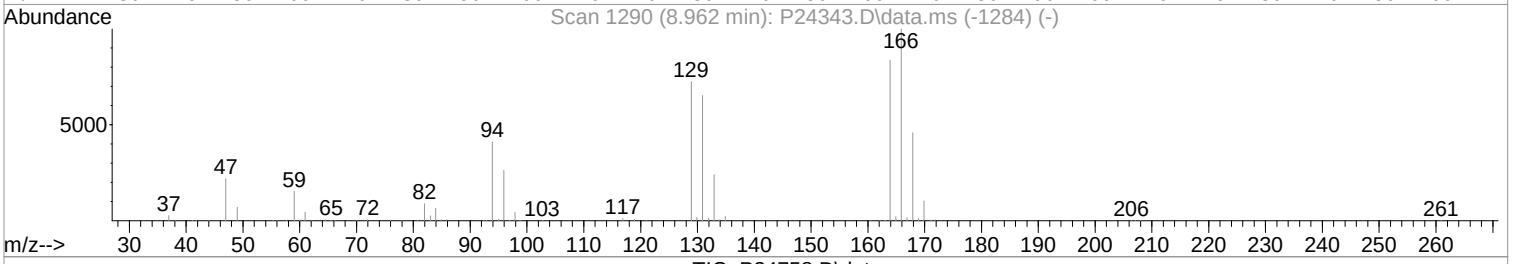
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24758.D
Acq On : 7 Mar 2019 1:04 pm
Operator : K.Ruest
Sample : R1901880-001|200 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 14:23:31 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24758.D\data.ms

(72) Tetrachloroethene (P)

8.956min (-0.006) 0.12 ppb

response 347

Ion	Exp%	Act%
164.00	100	100
166.00	119.60	65.85#
129.00	86.70	60.76#
131.00	78.00	24.30#

Manual Integration:

Before

03/12/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24758.D
Acq On : 7 Mar 2019 1:04 pm
Operator : K.Ruest
Sample : R1901880-001|200 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 09:19:02 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

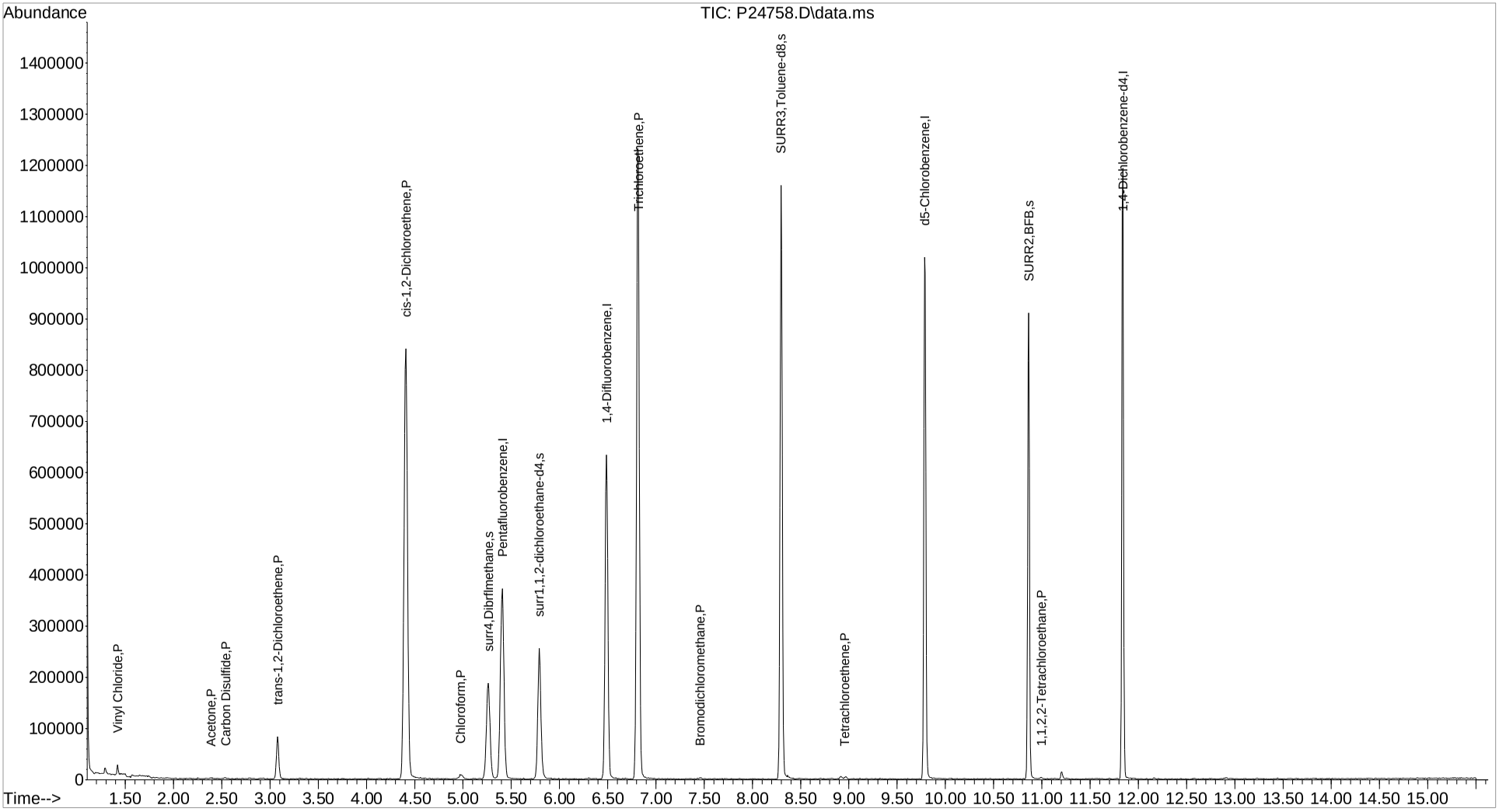
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.408	168	341465	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	554653	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	476824	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	241517	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.261	113	155297	50.95	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.90%				
48) surr1,1,2-dichloroetha...	5.792	65	199515	51.61	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.22%				
65) SURR3,Toluene-d8	8.297	98	722922	50.00	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.00%				
70) SURR2,BFB	10.864	95	256265	49.49	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.98%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.421	62	10872	2.19	ppb		94
15) Acetone	2.384	43	2072	1.27	ppb		90
18) Carbon Disulfide	2.536	76	2403	0.25	ppb		85
26) trans-1,2-Dichloroethene	3.079	96	29617	8.36	ppb		95
34) cis-1,2-Dichloroethene	4.408	96	504853	127.08	ppb		85
40) Chloroform	4.975	83	9211	1.56	ppb	#	76
54) Trichloroethene	6.816	130	461569	118.98	ppb		96
60) Bromodichloromethane	7.456	83	1352	0.31	ppb		78
72) Tetrachloroethene	8.956	164	897m	0.31	ppb		
92) 1,1,2,2-Tetrachloroethane	10.998	83	1140	0.22	ppb		89

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

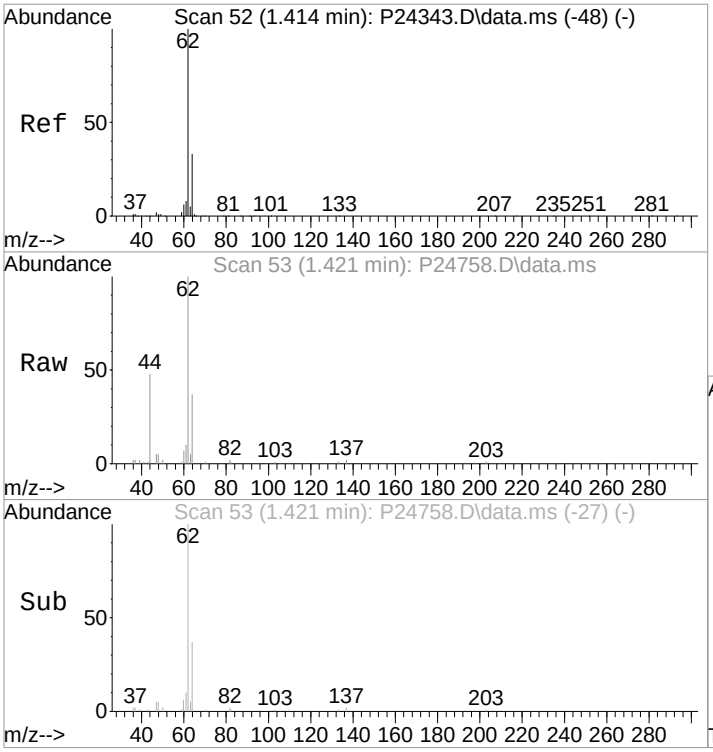
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24758.D
Acq On : 7 Mar 2019 1:04 pm
Operator : K.Ruest
Sample : R1901880-001|200 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 09:19:02 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



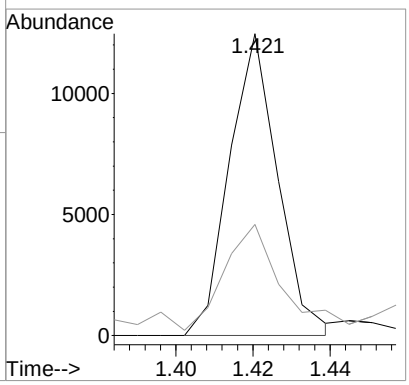
1st 03/12/19
2nd 03/12/19

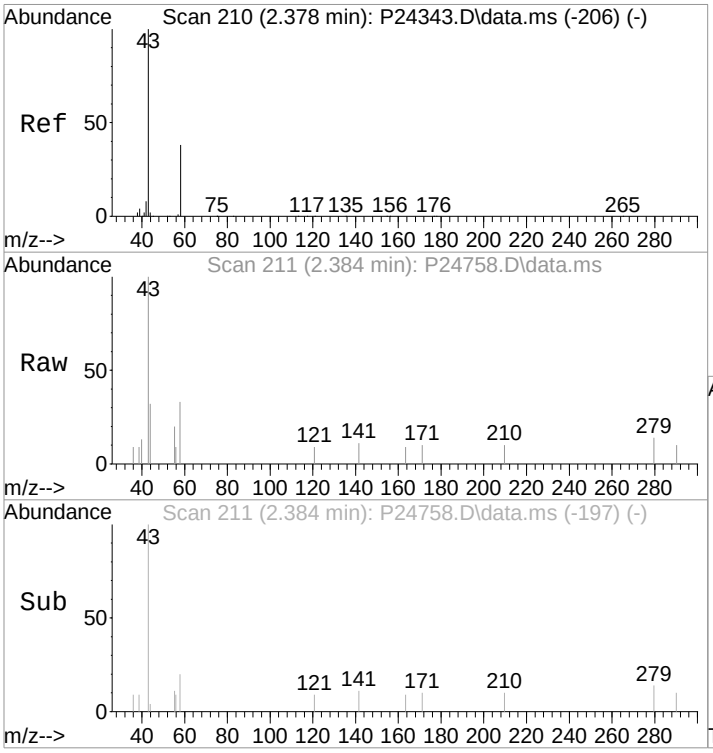


#4
Vinyl Chloride
Concen: 2.19 ppb
RT: 1.421 min Scan# 53
Delta R.T. 0.012 min
Lab File: P24758.D
Acq: 7 Mar 2019 1:04 pm

Tgt Ion: 62 Resp: 10872

Ion	Ratio	Lower	Upper
62	100		
64	36.8	13.2	53.2

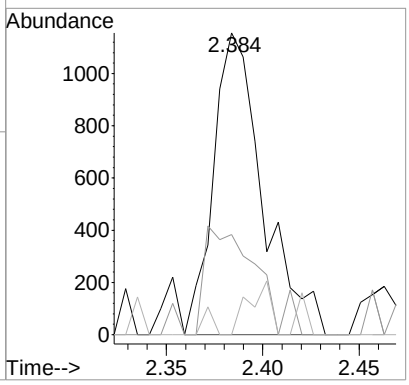


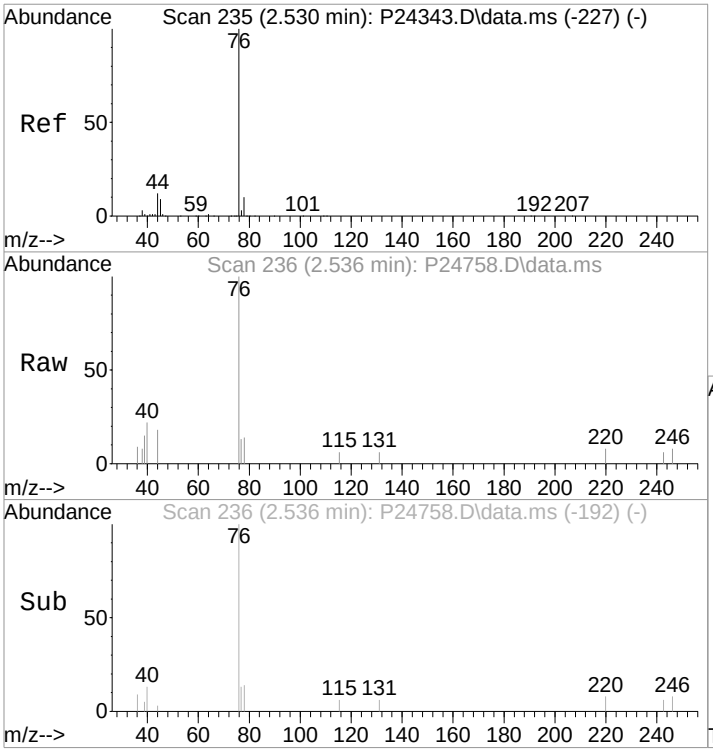


#15
Acetone
Concen: 1.27 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24758.D
Acq: 7 Mar 2019 1:04 pm

Tgt Ion: 43 Resp: 2072

Ion	Ratio	Lower	Upper
43	100		
58	33.2	18.1	58.1
42	0.0	0.0	27.8

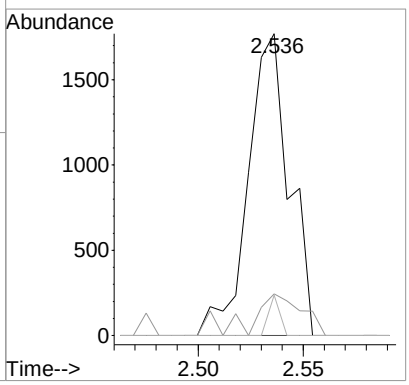


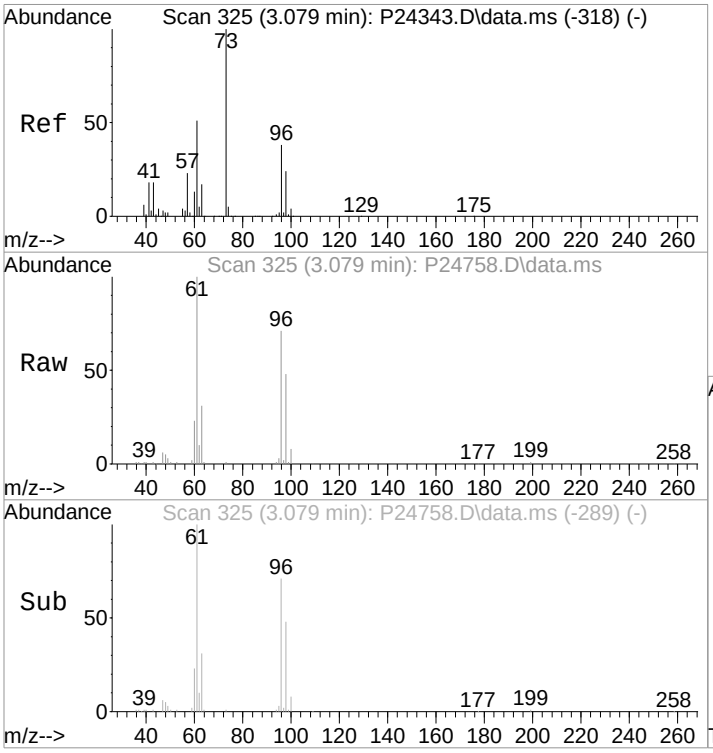


#18
Carbon Disulfide
Concen: 0.25 ppb
RT: 2.536 min Scan# 236
Delta R.T. 0.012 min
Lab File: P24758.D
Acq: 7 Mar 2019 1:04 pm

Tgt Ion: 76 Resp: 2403

Ion	Ratio	Lower	Upper
76	100		
78	13.8	0.0	30.1
77	13.4	0.0	22.9

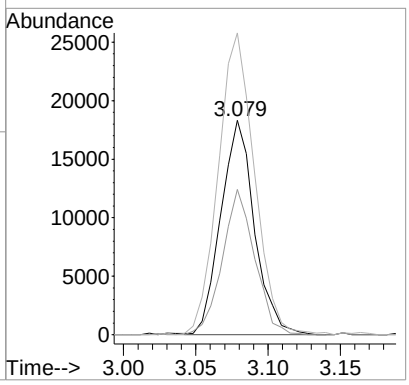


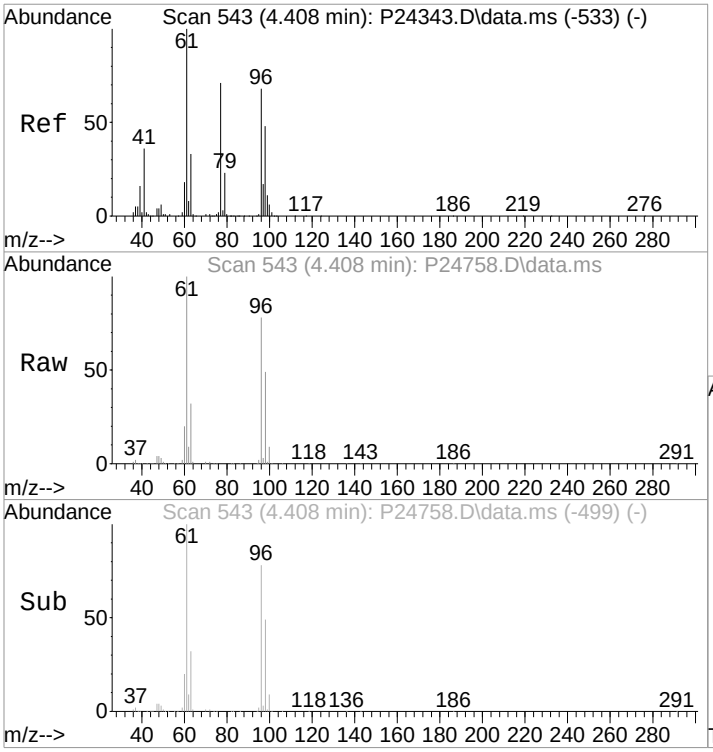


#26
trans-1,2-Dichloroethene
Concen: 8.36 ppb
RT: 3.079 min Scan# 325
Delta R.T. 0.012 min
Lab File: P24758.D
Acq: 7 Mar 2019 1:04 pm

Tgt Ion: 96 Resp: 29617

Ion	Ratio	Lower	Upper
96	100		
98	67.7	43.5	83.5
61	140.7	114.4	154.4

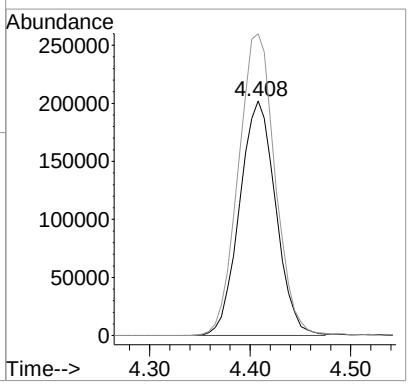


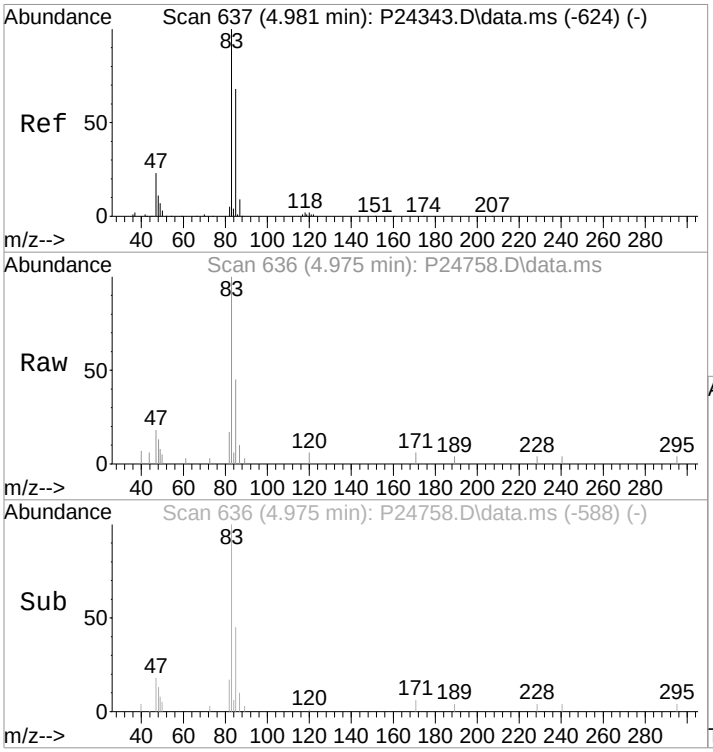


#34
cis-1,2-Dichloroethene
Concen: 127.08 ppb
RT: 4.408 min Scan# 543
Delta R.T. 0.006 min
Lab File: P24758.D
Acq: 7 Mar 2019 1:04 pm

Tgt Ion: 96 Resp: 504853

Ion	Ratio	Lower	Upper
96	100		
61	128.7	128.1	168.1

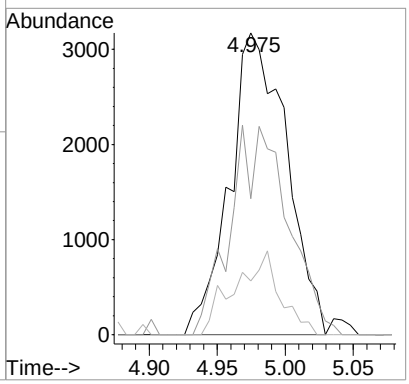


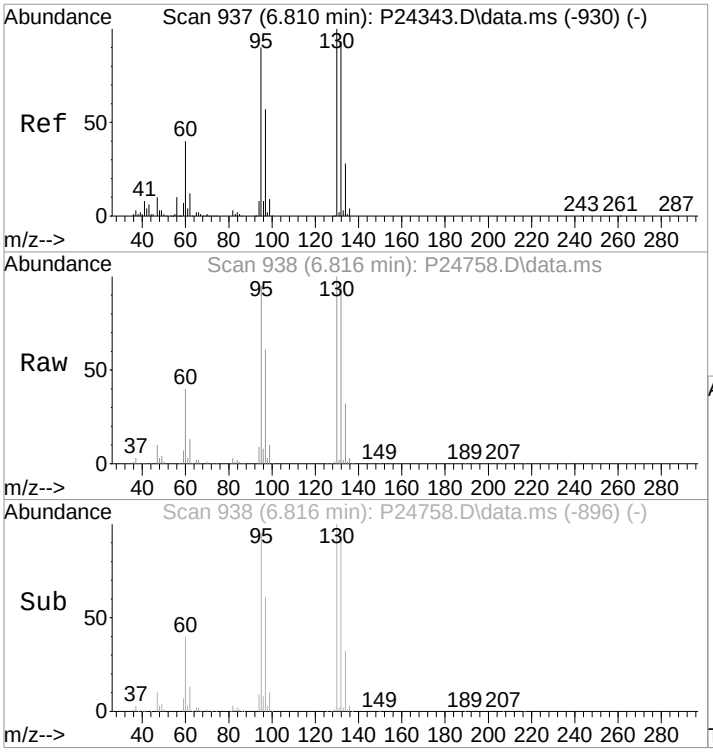


#40
Chloroform
Concen: 1.56 ppb
RT: 4.975 min Scan# 636
Delta R.T. 0.006 min
Lab File: P24758.D
Acq: 7 Mar 2019 1:04 pm

Tgt Ion: 83 Resp: 9211

Ion	Ratio	Lower	Upper
83	100		
85	45.1	47.9	87.9#
47	17.8	3.4	43.4

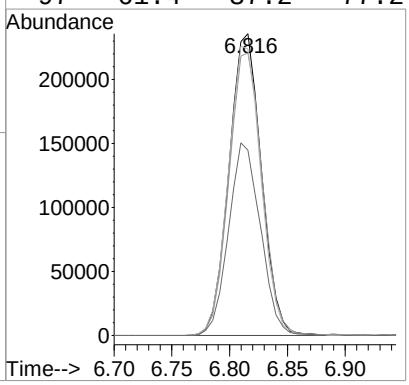


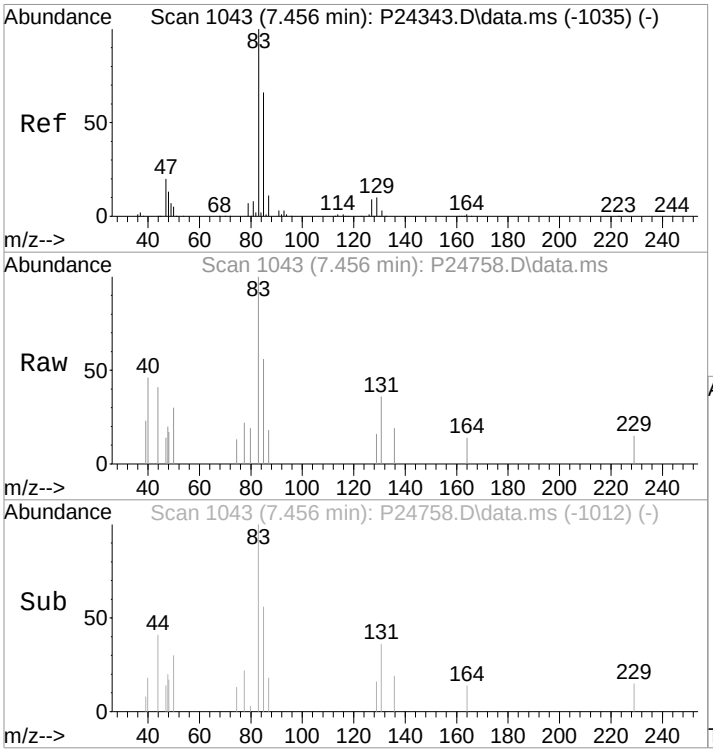


#54
Trichloroethene
Concen: 118.98 ppb
RT: 6.816 min Scan# 938
Delta R.T. 0.006 min
Lab File: P24758.D
Acq: 7 Mar 2019 1:04 pm

Tgt Ion:130 Resp: 461569

Ion	Ratio	Lower	Upper
130	100		
132	93.6	72.6	112.6
95	94.8	69.8	109.8
97	61.4	37.2	77.2

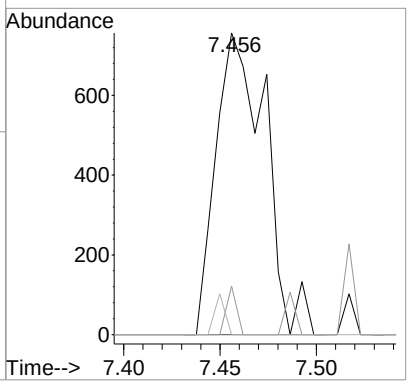


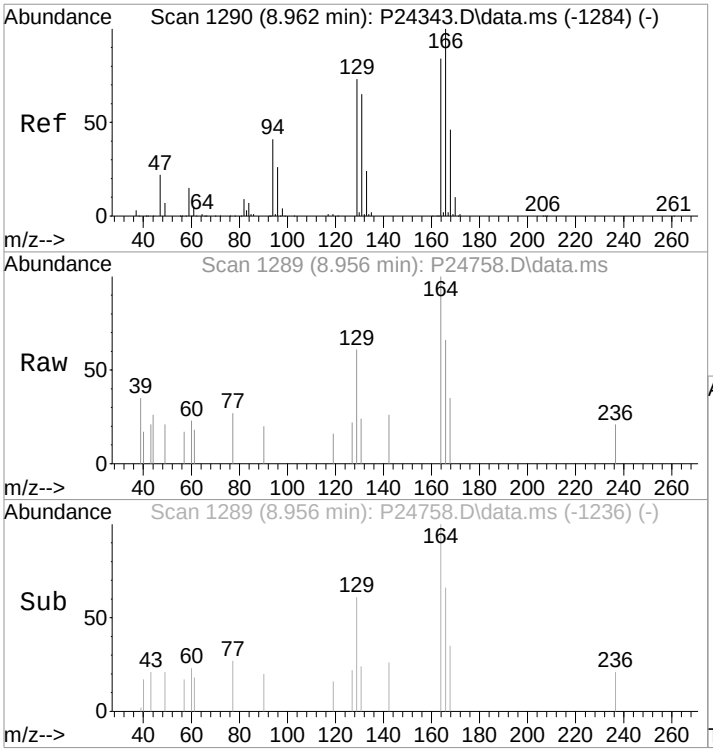


#60
Bromodichloromethane
Concen: 0.31 ppb
RT: 7.456 min Scan# 1043
Delta R.T. 0.000 min
Lab File: P24758.D
Acq: 7 Mar 2019 1:04 pm

Tgt Ion: 83 Resp: 1352

Ion	Ratio	Lower	Upper
83	100		
129	16.1	0.0	29.5
127	0.0	0.0	29.2

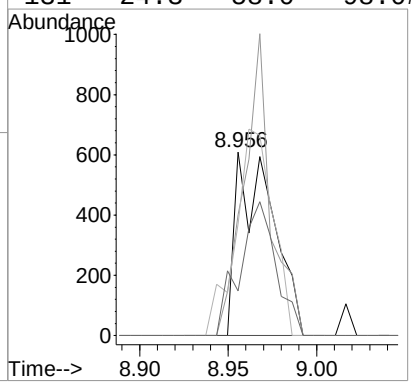


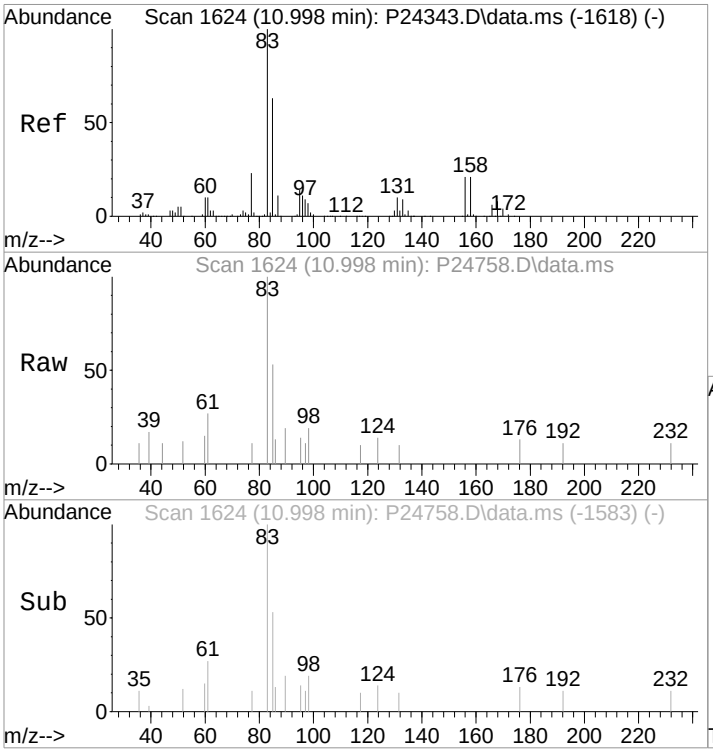


#72
Tetrachloroethene
Concen: 0.31 ppb m
RT: 8.956 min Scan# 1289
Delta R.T. -0.006 min
Lab File: P24758.D
Acq: 7 Mar 2019 1:04 pm

Tgt Ion:164 Resp: 897

Ion	Ratio	Lower	Upper
164	100		
166	65.8	99.6	139.6#
129	60.8	66.7	106.7#
131	24.3	58.0	98.0#

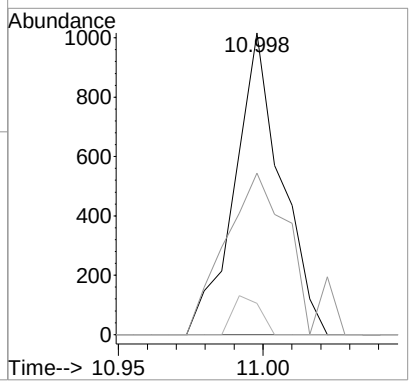




#92
1,1,2,2-Tetrachloroethane
Concen: 0.22 ppb
RT: 10.998 min Scan# 1624
Delta R.T. 0.000 min
Lab File: P24758.D
Acq: 7 Mar 2019 1:04 pm

Tgt Ion: 83 Resp: 1140

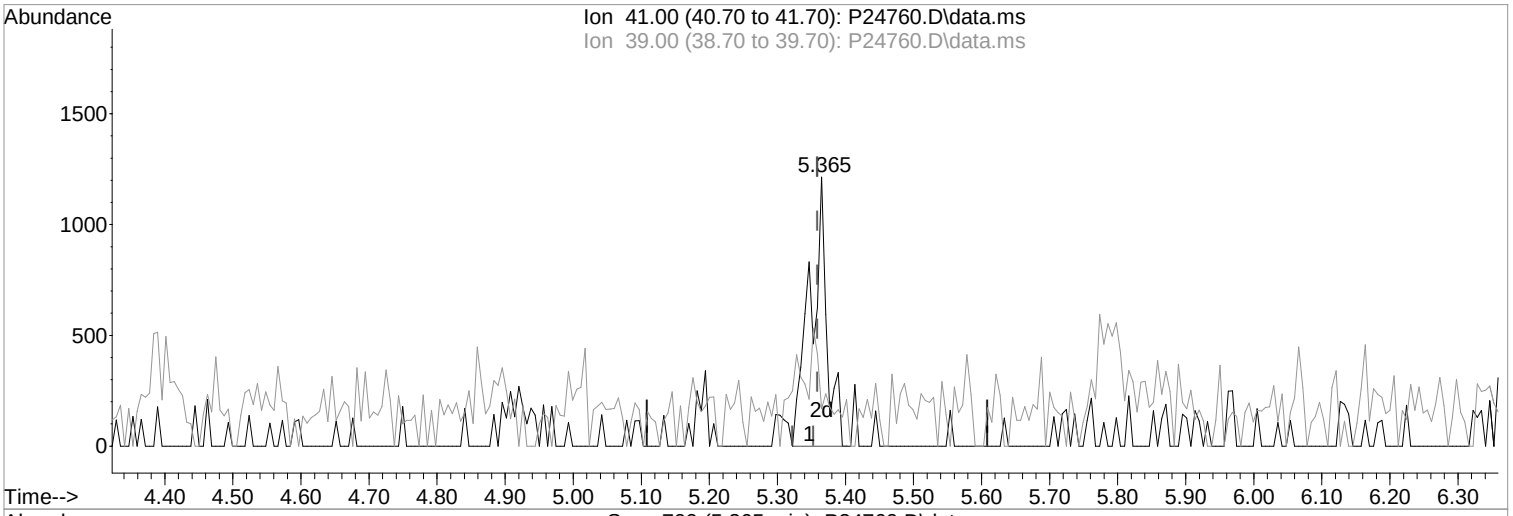
Ion	Ratio	Lower	Upper
83	100		
85	53.5	43.4	83.4
131	10.3	0.0	29.8

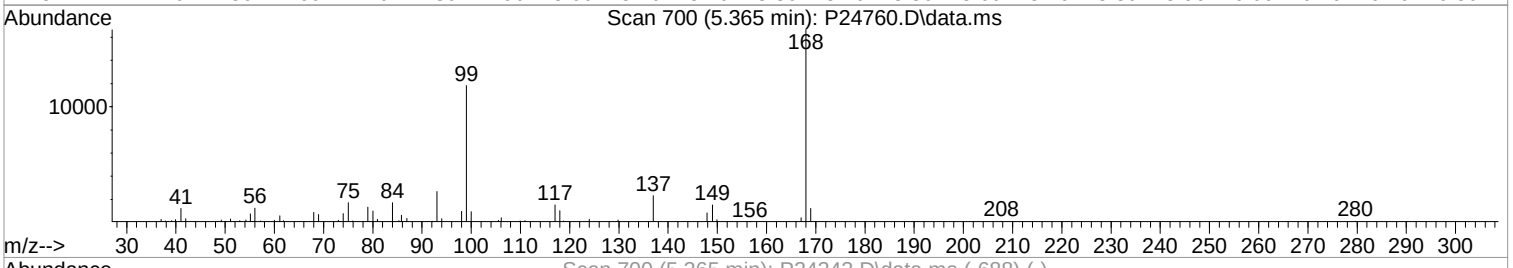


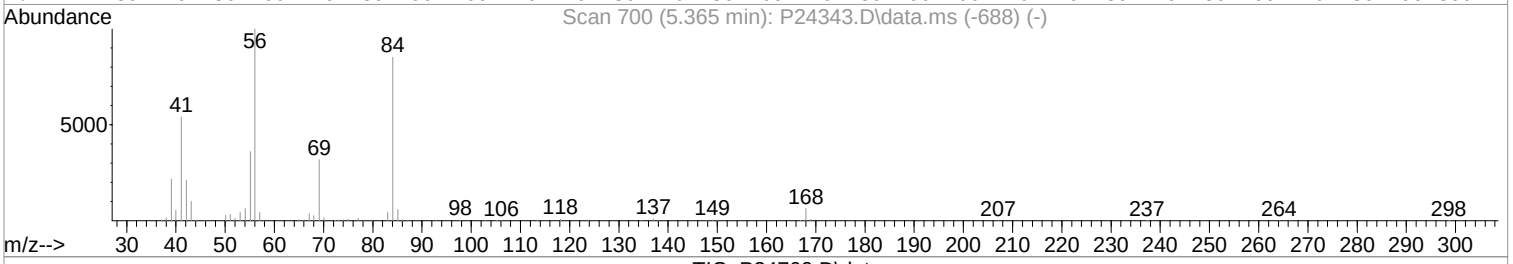
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24760.D
Acq On : 7 Mar 2019 1:47 pm
Operator : K.Ruest
Sample : R1901880-002|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 07 15:04:51 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24760.D\data.ms

(44) Cyclohexane (P)

5.365min (+0.006) 0.67 ppb m

response 2058

Ion	Exp%	Act%
41.00	100	100
39.00	40.30	13.92#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

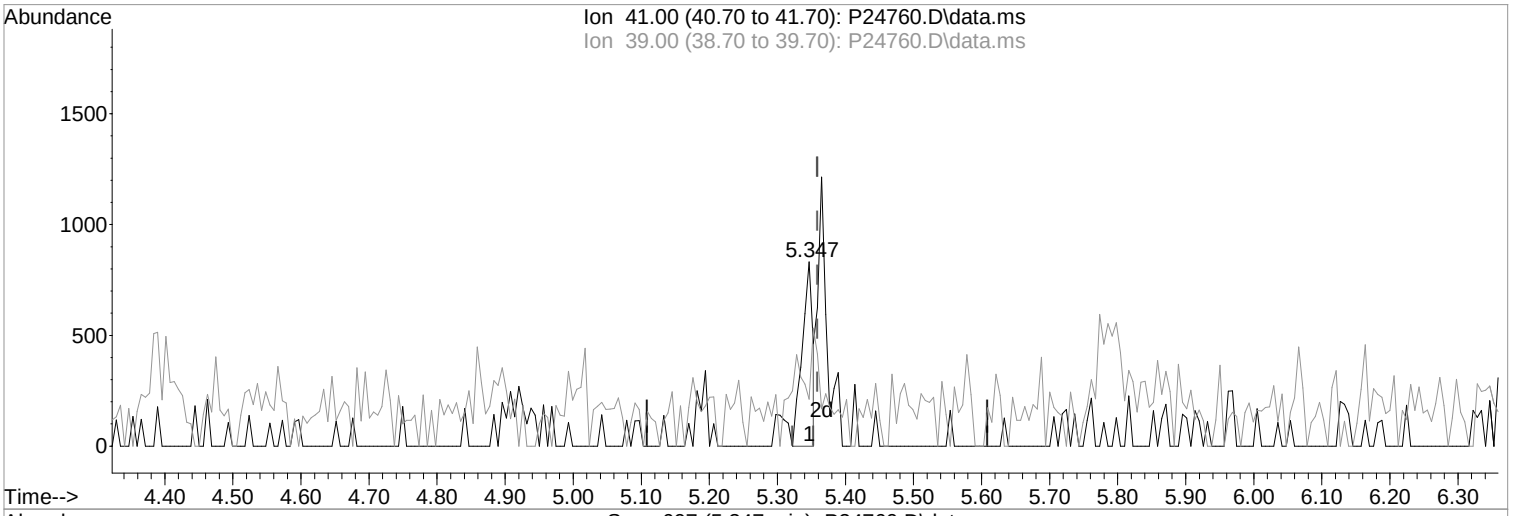
Split Peak

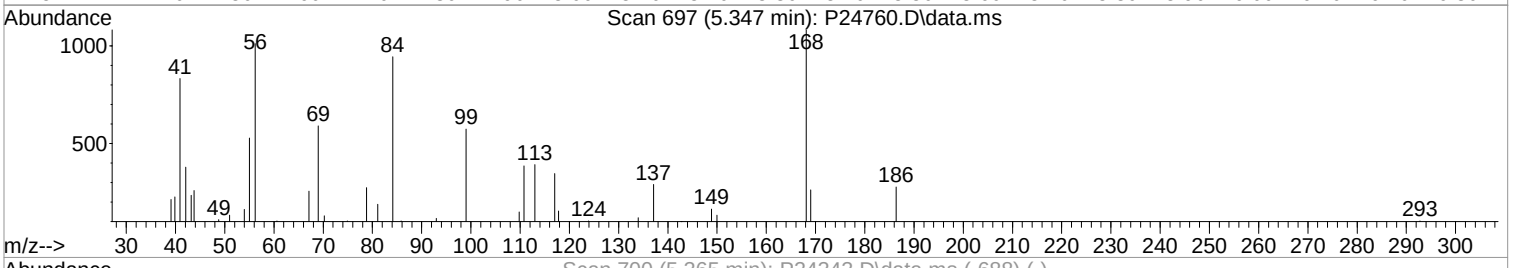
03/12/19

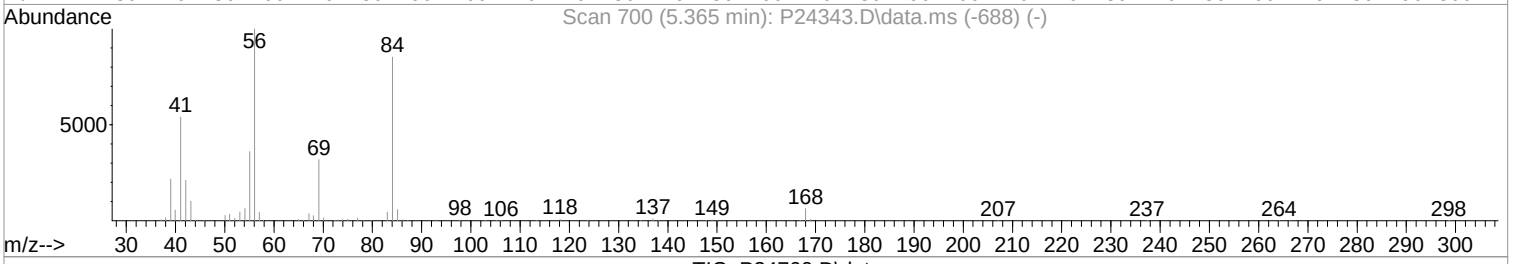
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24760.D
Acq On : 7 Mar 2019 1:47 pm
Operator : K.Ruest
Sample : R1901880-002|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 07 15:04:51 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24760.D\data.ms

(44) Cyclohexane (P)

5.347min (-0.012) 0.29 ppb

response 900

Ion	Exp%	Act%
41.00	100	100
39.00	40.30	25.48
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

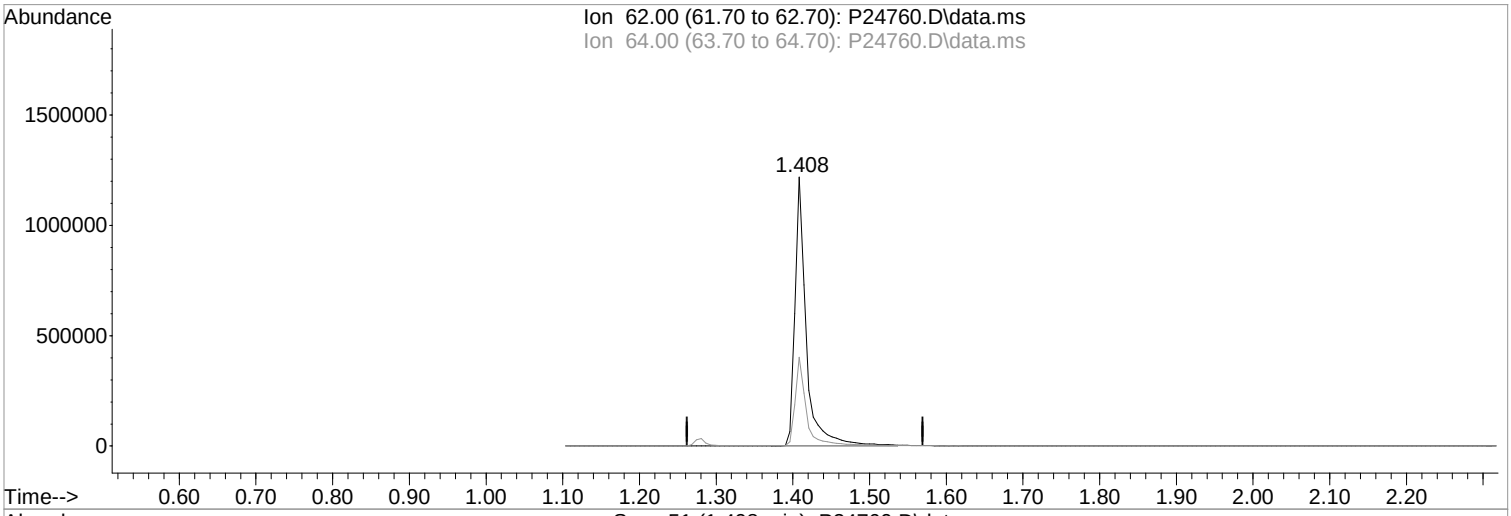
Before

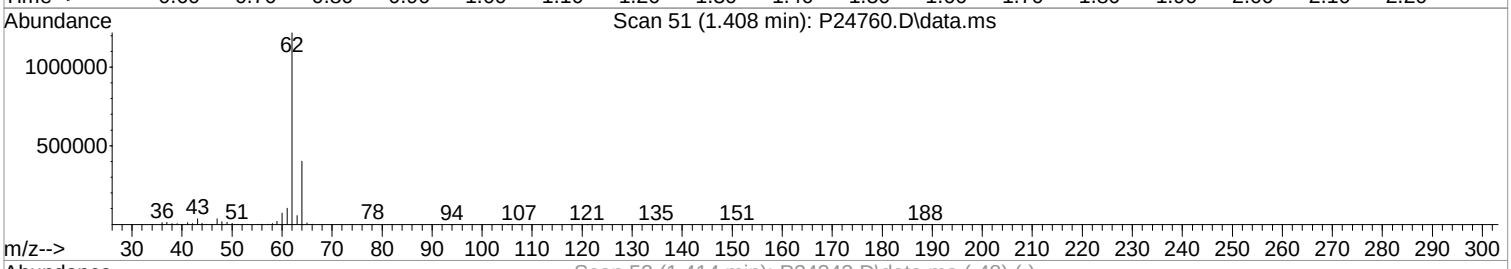
03/12/19

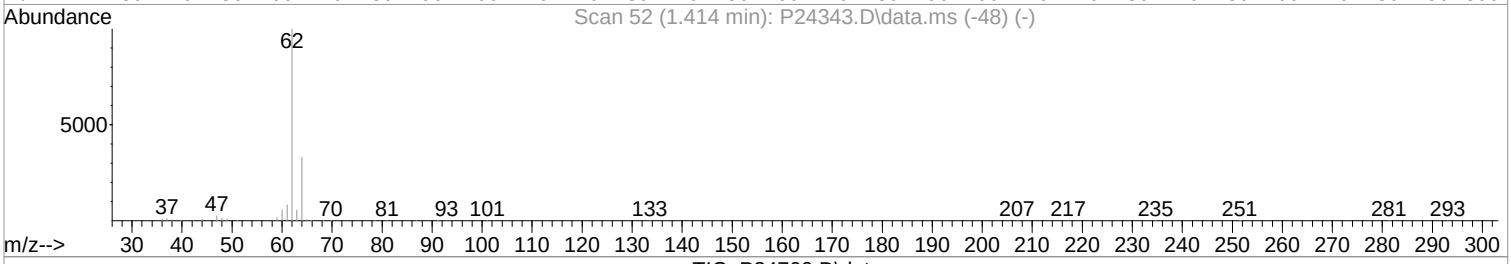
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24760.D
Acq On : 7 Mar 2019 1:47 pm
Operator : K.Ruest
Sample : R1901880-002|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 07 15:04:51 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24760.D\data.ms

(4) Vinyl Chloride (P)

1.408min (+0.000) 270.78 ppb m

response 1258639

Ion	Exp%	Act%
62.00	100	100
64.00	33.20	33.05
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

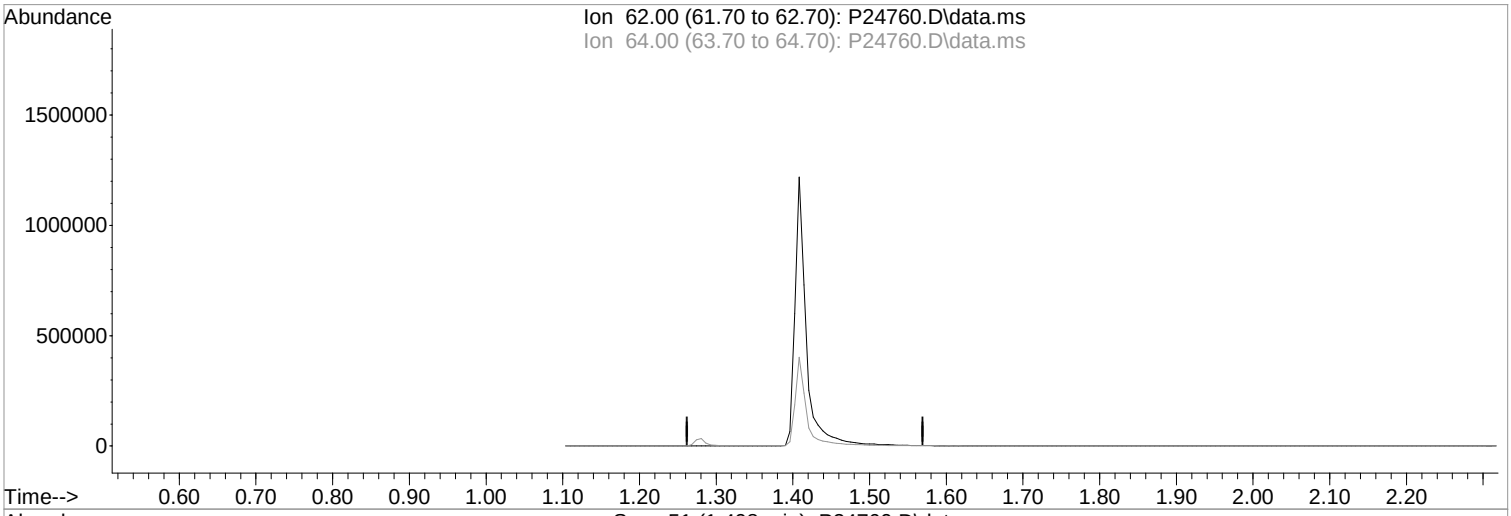
Peak not found.

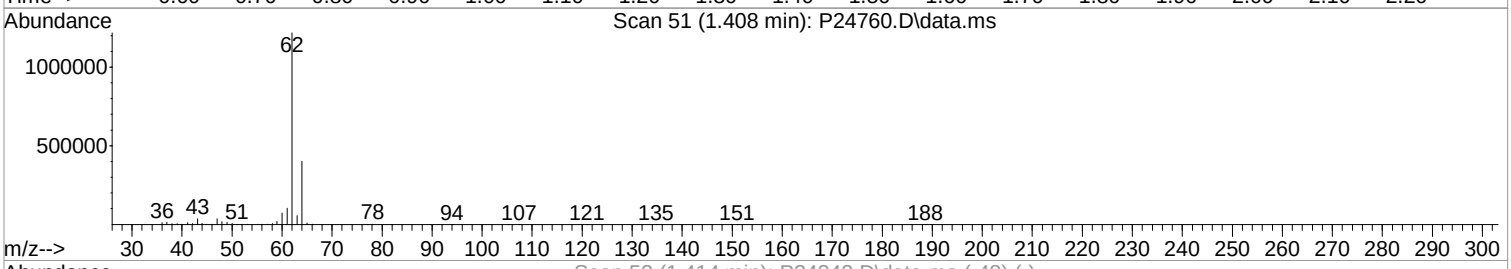
03/12/19

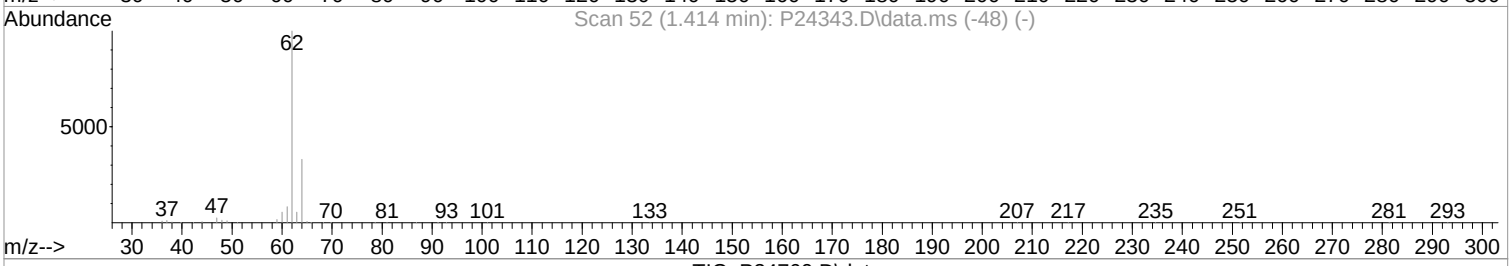
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24760.D
Acq On : 7 Mar 2019 1:47 pm
Operator : K.Ruest
Sample : R1901880-002|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 07 15:04:51 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24760.D\data.ms

(4) Vinyl Chloride (P)

1.408min (-1.408) 0.00 ppb

response 0

Ion	Exp%	Act%
62.00	100	0.00
64.00	33.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

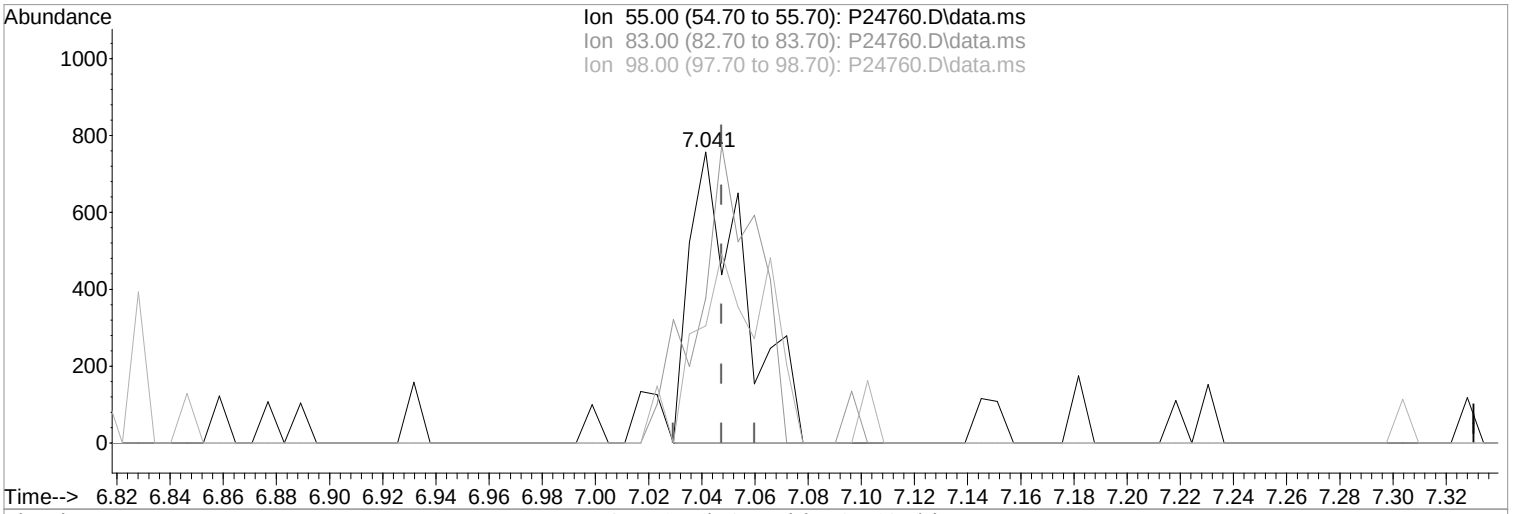
Before

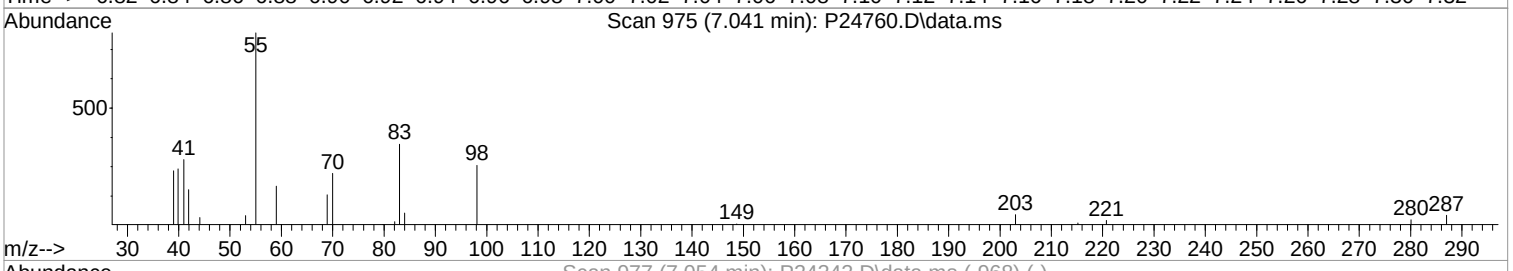
03/12/19

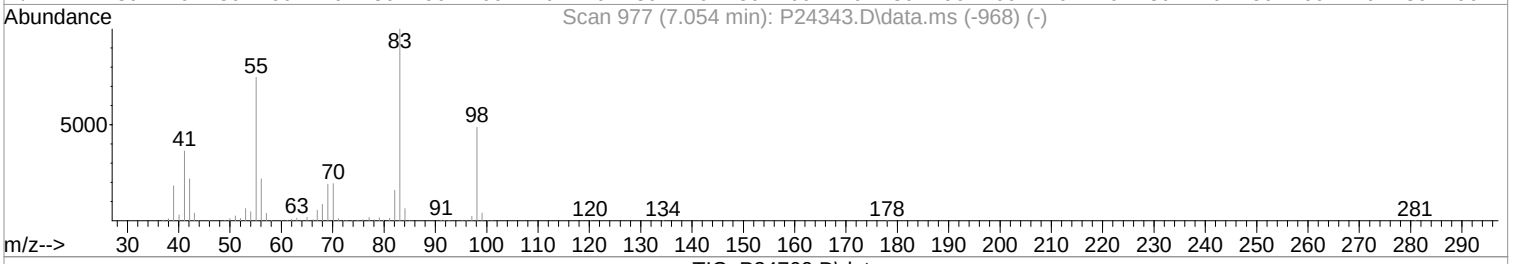
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24760.D
Acq On : 7 Mar 2019 1:47 pm
Operator : K.Ruest
Sample : R1901880-002|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 07 15:04:51 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24760.D\data.ms

(55) Methylcyclohexane (P)

7.041min (-0.006) 0.24 ppb m

response 1114

Ion	Exp%	Act%
55.00	100	100
83.00	133.10	49.80#
98.00	65.00	40.29#
0.00	0.00	0.00

Manual Integration:

After

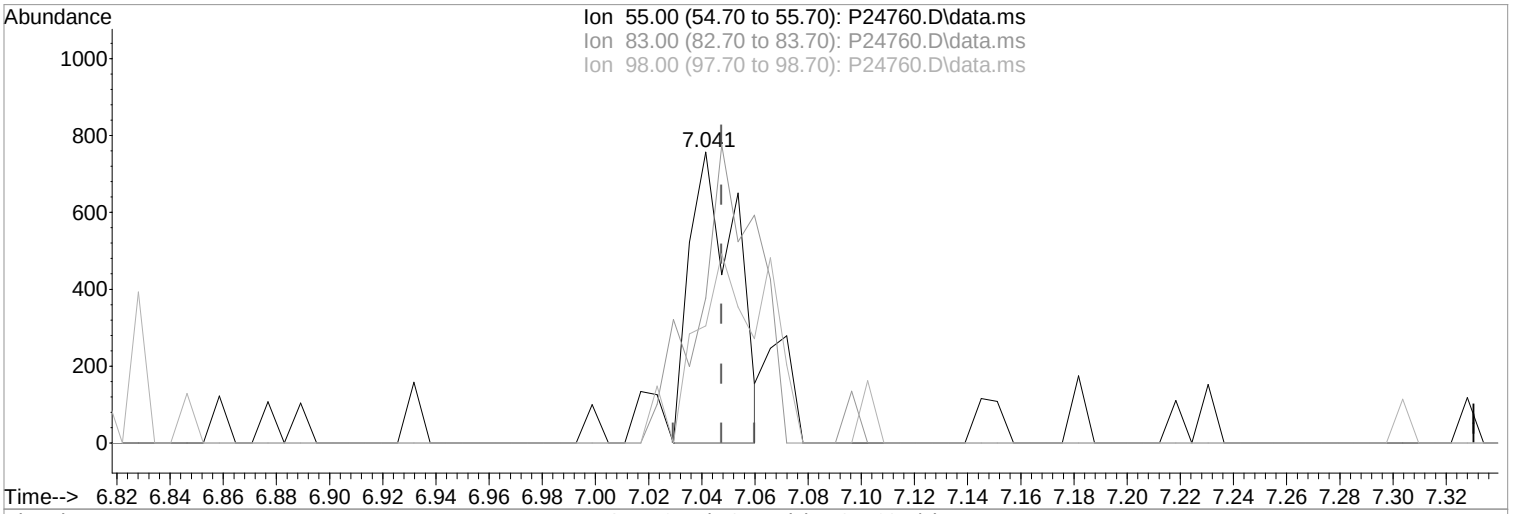
Split Peak

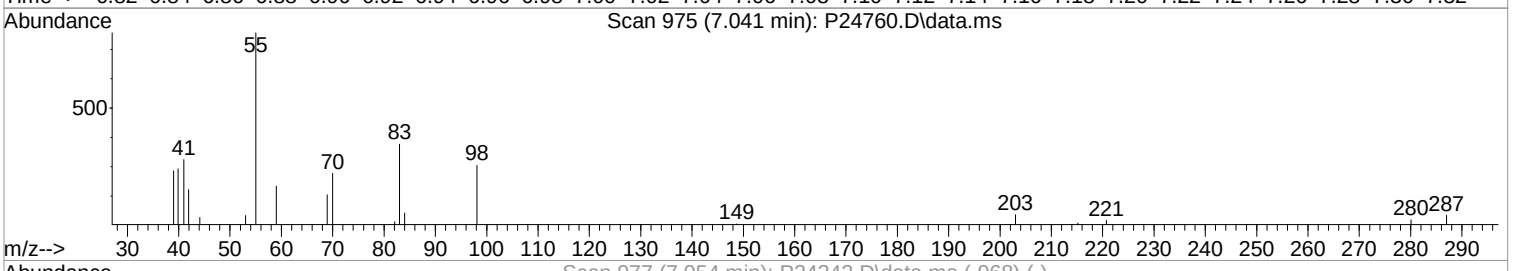
03/12/19

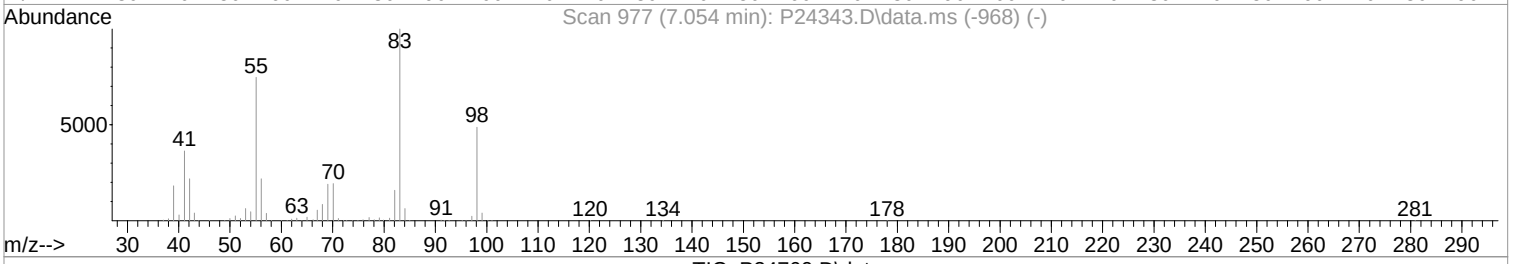
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24760.D
Acq On : 7 Mar 2019 1:47 pm
Operator : K.Ruest
Sample : R1901880-002|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 07 15:04:51 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24760.D\data.ms

(55) Methylcyclohexane (P)

7.041min (-0.006) 0.20 ppb

response 922

Ion	Exp%	Act%
55.00	100	100
83.00	133.10	49.80#
98.00	65.00	40.29#
0.00	0.00	0.00

Manual Integration:

Before

03/12/19

1st 03/12/19
2nd 03/12/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24760.D
Acq On : 7 Mar 2019 1:47 pm
Operator : K.Ruest
Sample : R1901880-002|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 3 Sample Multiplier: 1

repeat 10

Quant Time: Mar 12 09:25:25 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.402	168	319811	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.487	114	526697	50.00	ppb	0.00
71) d5-Chlorobenzene	9.785	117	460357	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	234751	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.255	113	146737	50.70	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.40%			
48) surr1,1,2-dichloroetha...	5.786	65	192091	52.32	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 104.64%			
65) SURR3,Toluene-d8	8.297	98	699305	50.94	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.88%			
70) SURR2,BFB	10.864	95	250583	50.96	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.92%			
Target Compounds						Qvalue
4) Vinyl Chloride	1.408	62	1258639m	270.78	ppb	
13) 1,1-Diclethene	2.329	96	5838	1.96	ppb	87
15) Acetone	2.366	43	1296	0.85	ppb	86
26) trans-1,2-Dichloroethene	3.073	96	16704	5.03	ppb	87
34) cis-1,2-Dichloroethene	4.396	96	4000398	1075.17	ppb	85
44) Cyclohexane	5.365	41	2058m	0.67	ppb	
49) Benzene	5.865	78	3965	0.26	ppb	97
54) Trichloroethene	6.810	130	5946	1.61	ppb	94
55) Methylcyclohexane	7.041	55	1114m	0.24	ppb	

E-Over Calibration

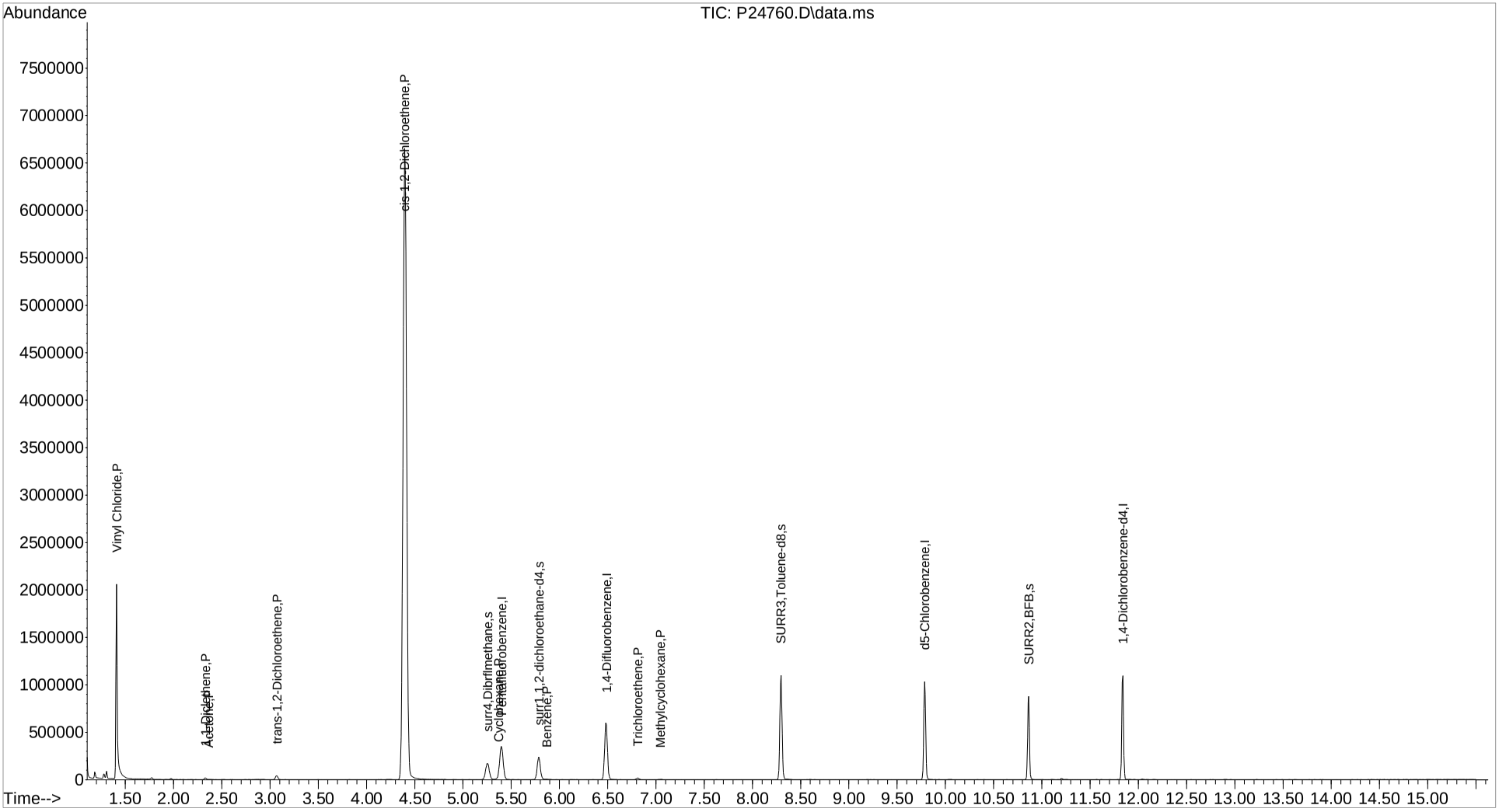
E-Over Calibration

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

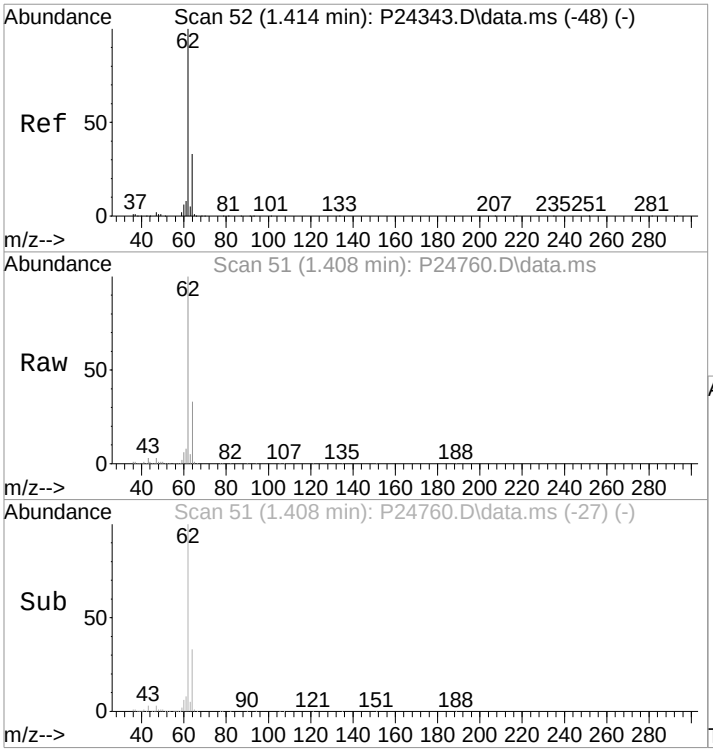
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24760.D
Acq On : 7 Mar 2019 1:47 pm
Operator : K.Ruest
Sample : R1901880-002|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 09:25:25 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



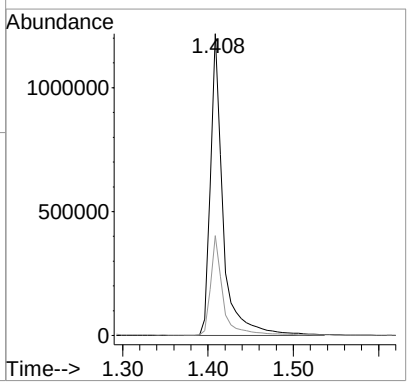
1st 03/12/19
2nd 03/12/19

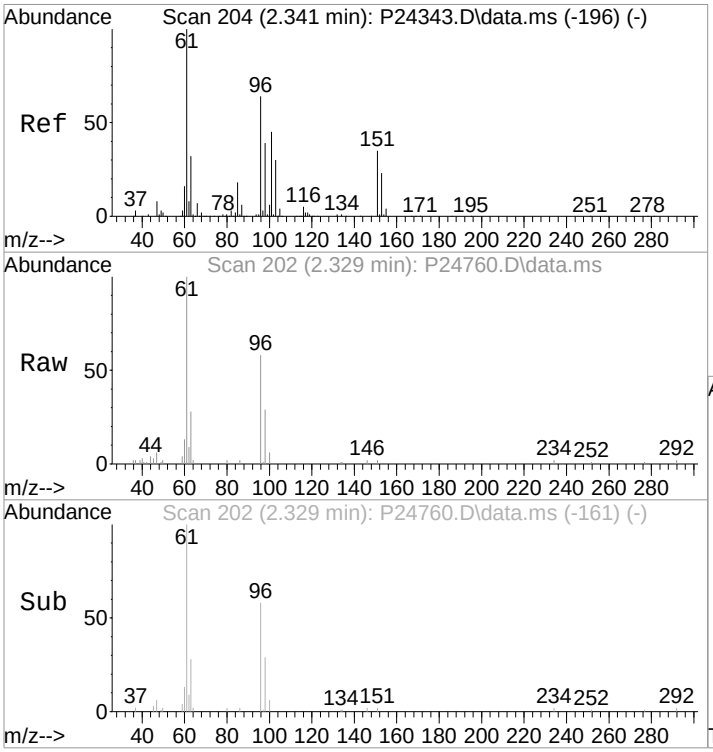


#4
Vinyl Chloride
Concen: 270.78 ppb m
RT: 1.408 min Scan# 51
Delta R.T. 0.000 min
Lab File: P24760.D
Acq: 7 Mar 2019 1:47 pm

Tgt Ion: 62 Resp: 1258639

Ion	Ratio	Lower	Upper
62	100		
64	33.0	13.2	53.2

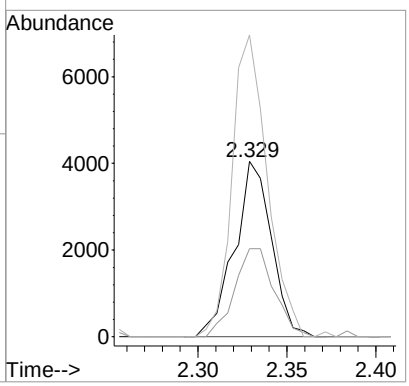


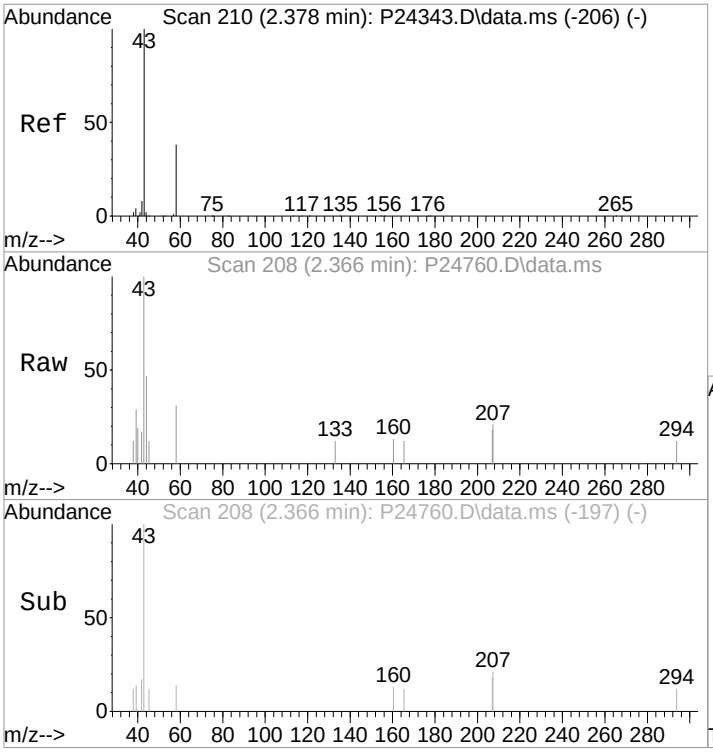


#13
1,1-Diclethene
Concen: 1.96 ppb
RT: 2.329 min Scan# 202
Delta R.T. 0.000 min
Lab File: P24760.D
Acq: 7 Mar 2019 1:47 pm

Tgt Ion: 96 Resp: 5838

Ion	Ratio	Lower	Upper
96	100		
98	50.1	40.8	80.8
61	172.1	136.2	176.2

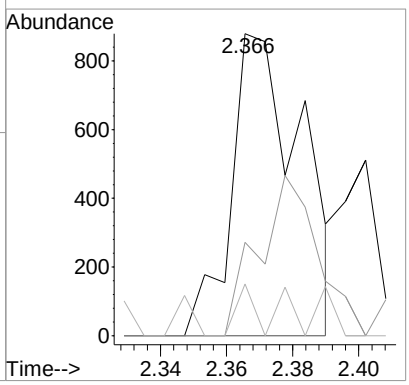


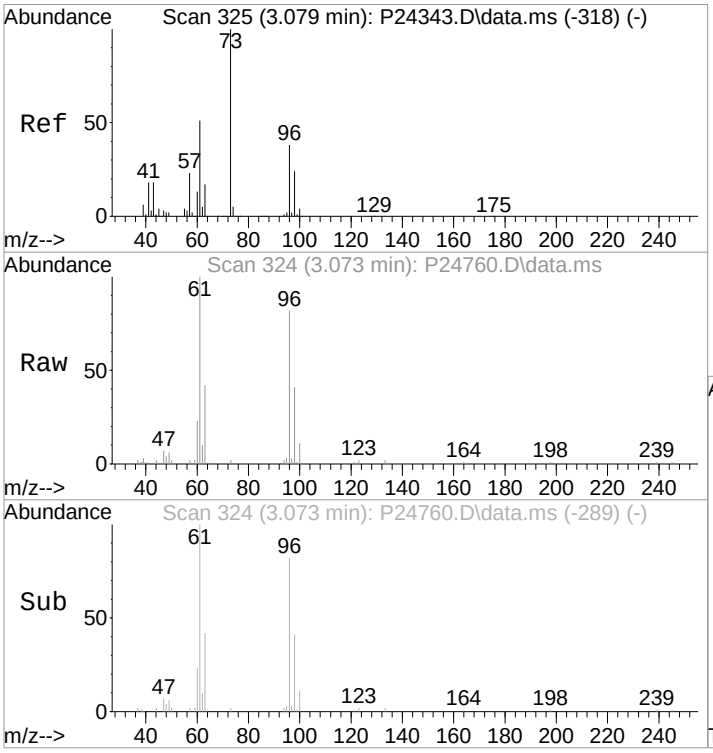


#15
Acetone
Concen: 0.85 ppb
RT: 2.366 min Scan# 208
Delta R.T. -0.006 min
Lab File: P24760.D
Acq: 7 Mar 2019 1:47 pm

Tgt Ion: 43 Resp: 1296

Ion	Ratio	Lower	Upper
43	100		
58	30.9	18.1	58.1
42	17.2	0.0	27.8

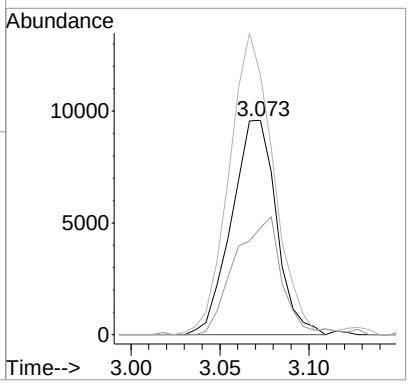


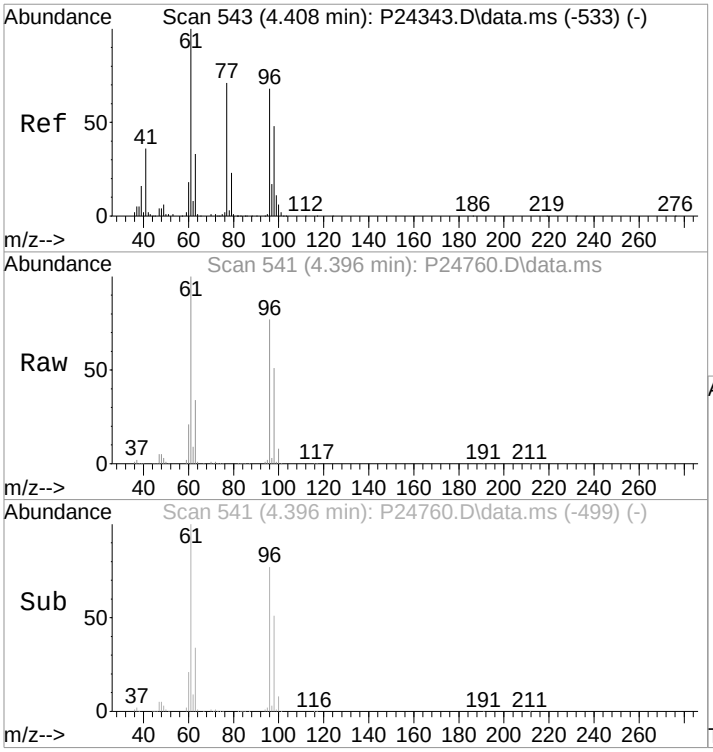


#26
trans-1,2-Dichloroethene
Concen: 5.03 ppb
RT: 3.073 min Scan# 324
Delta R.T. 0.006 min
Lab File: P24760.D
Acq: 7 Mar 2019 1:47 pm

Tgt Ion: 96 Resp: 16704

Ion	Ratio	Lower	Upper
96	100		
98	49.9	43.5	83.5
61	121.3	114.4	154.4

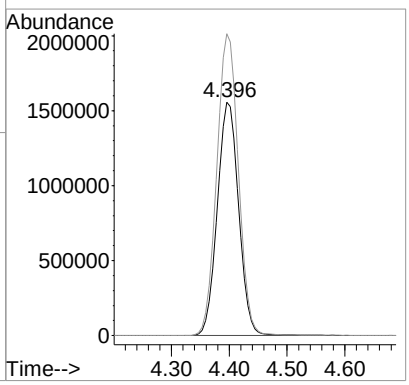


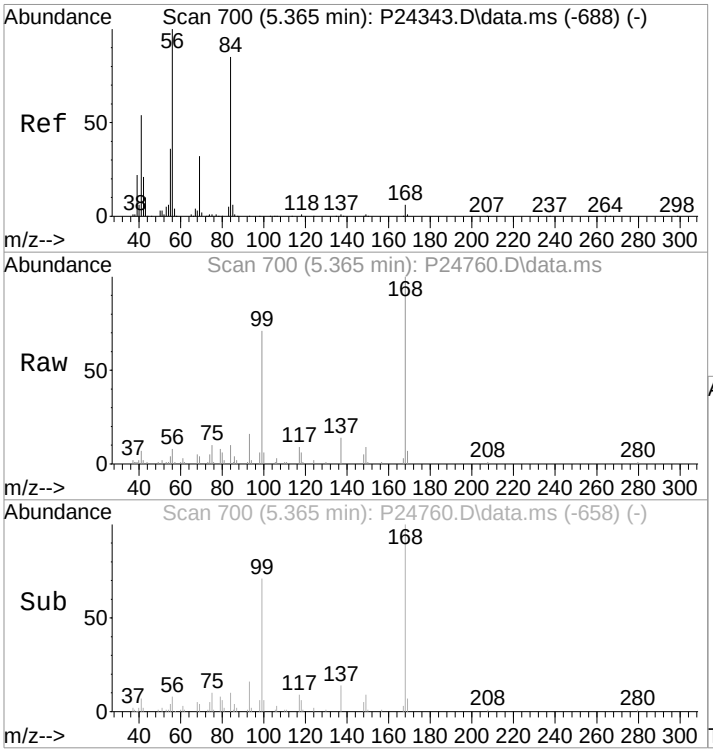


#34
cis-1,2-Dichloroethene
Concen: 1075.17 ppb
RT: 4.396 min Scan# 541
Delta R.T. -0.006 min
Lab File: P24760.D
Acq: 7 Mar 2019 1:47 pm

Tgt Ion: 96 Resp: 4000398

Ion	Ratio	Lower	Upper
96	100		
61	129.5	128.1	168.1

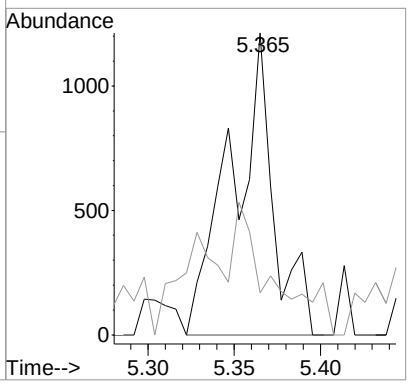


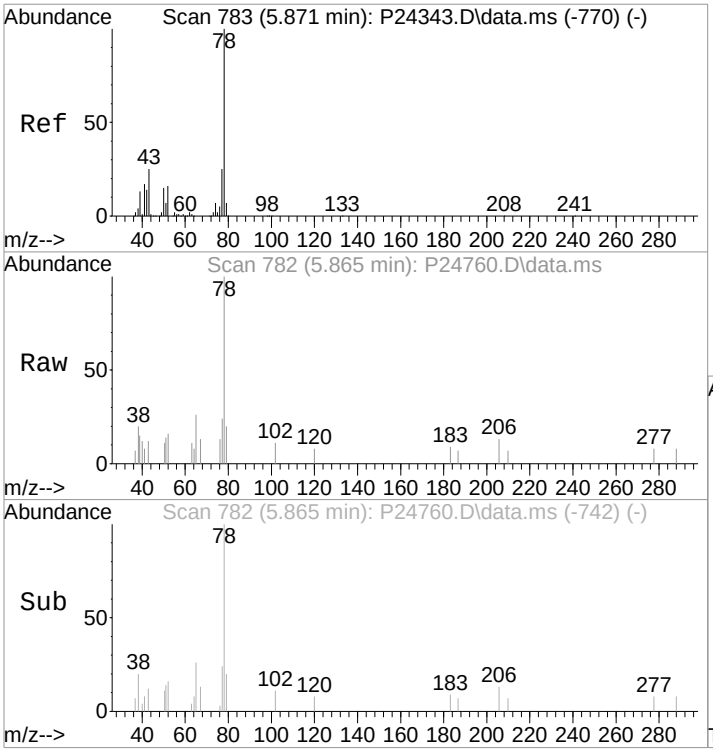


#44
Cyclohexane
Concen: 0.67 ppb m
RT: 5.365 min Scan# 700
Delta R.T. 0.006 min
Lab File: P24760.D
Acq: 7 Mar 2019 1:47 pm

Tgt Ion: 41 Resp: 2058

Ion	Ratio	Lower	Upper
41	100		
39	13.9	20.3	60.3#

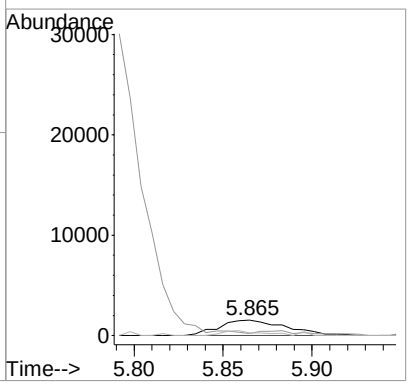


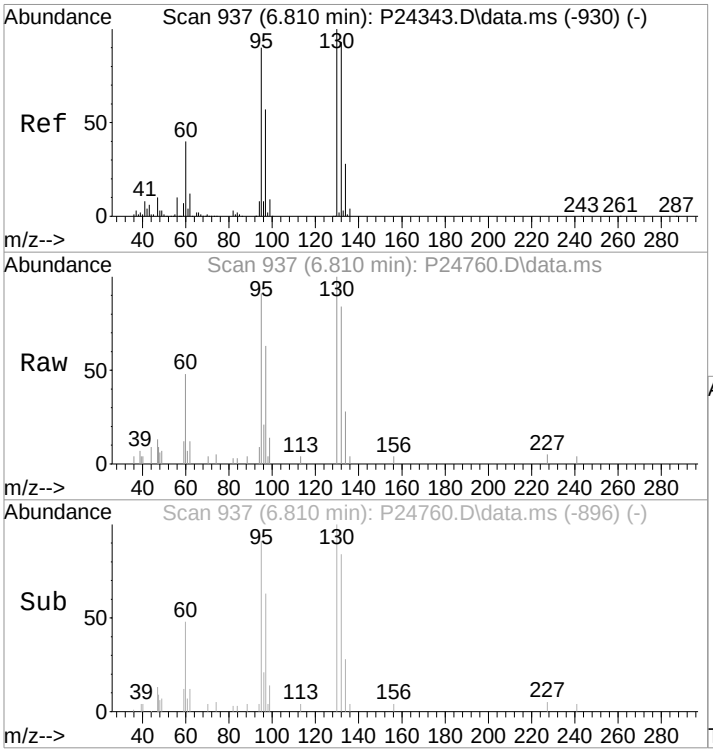


#49
Benzene
Concen: 0.26 ppb
RT: 5.865 min Scan# 782
Delta R.T. 0.000 min
Lab File: P24760.D
Acq: 7 Mar 2019 1:47 pm

Tgt Ion: 78 Resp: 3965

Ion	Ratio	Lower	Upper
78	100		
51	13.7	0.0	36.0
52	16.3	0.0	36.2

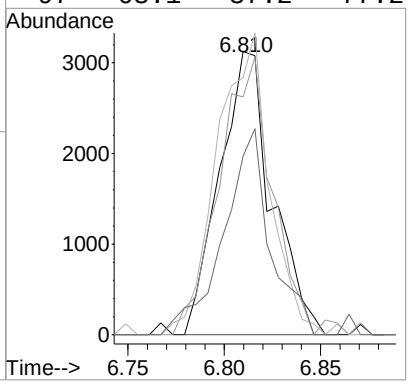


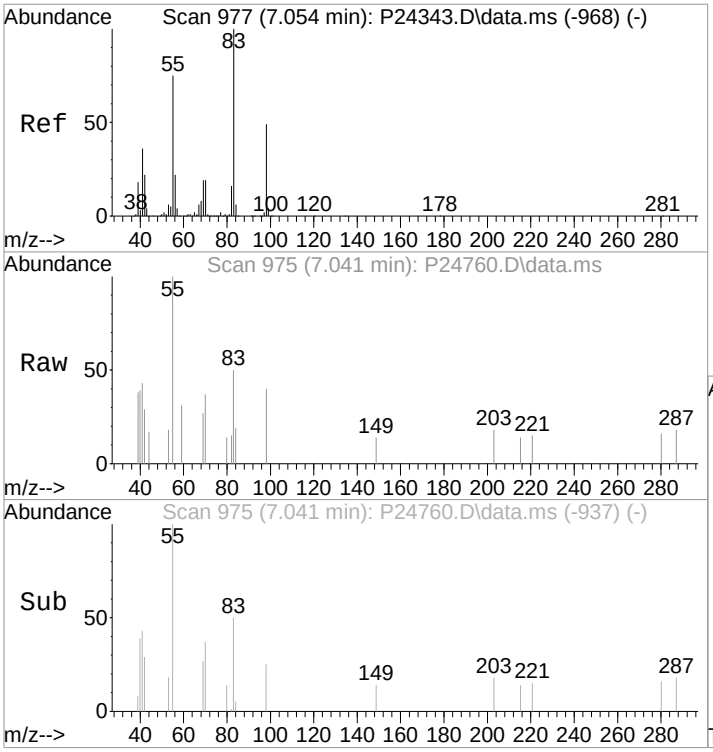


#54
Trichloroethene
Concen: 1.61 ppb
RT: 6.810 min Scan# 937
Delta R.T. 0.000 min
Lab File: P24760.D
Acq: 7 Mar 2019 1:47 pm

Tgt Ion:130 Resp: 5946

Ion	Ratio	Lower	Upper
130	100		
132	84.0	72.6	112.6
95	90.8	69.8	109.8
97	63.1	37.2	77.2

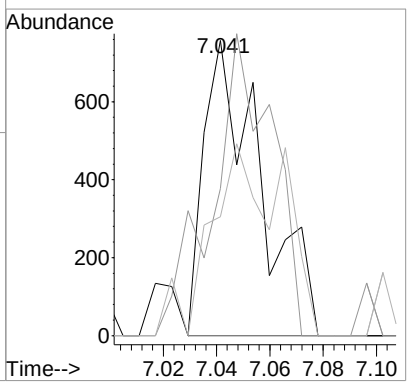




#55
Methylcyclohexane
Concen: 0.24 ppb m
RT: 7.041 min Scan# 975
Delta R.T. -0.006 min
Lab File: P24760.D
Acq: 7 Mar 2019 1:47 pm

Tgt Ion: 55 Resp: 1114

Ion	Ratio	Lower	Upper
55	100		
83	49.8	113.1	153.1#
98	40.3	45.0	85.0#

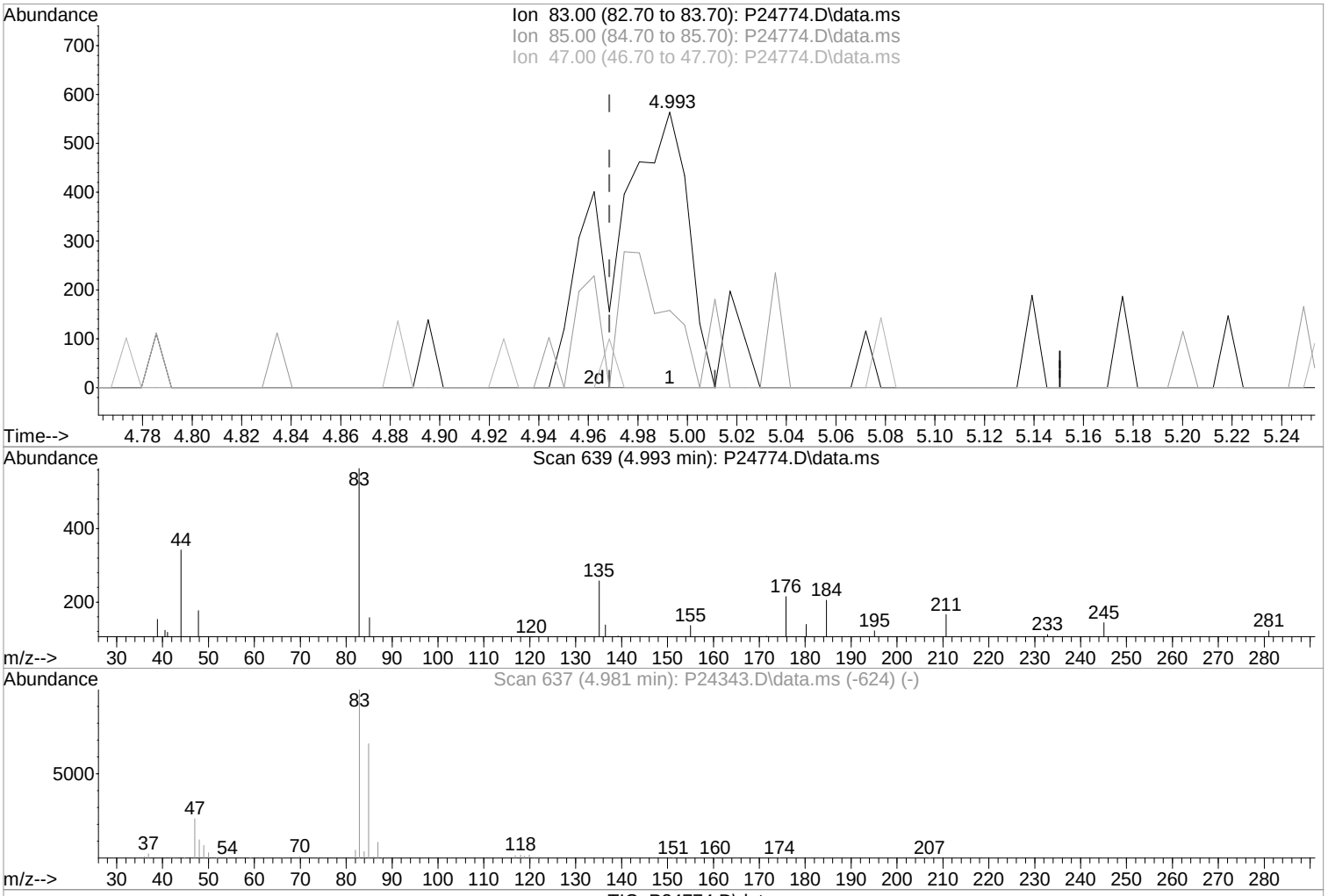


1st 03/12/19
2nd 03/12/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24774.D
Acq On : 7 Mar 2019 6:49 pm
Operator : K.Ruest
Sample : R1901880-002|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 08 10:37:37 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



TIC: P24774.D\data.ms

(40) Chloroform (P)

4.993min (+0.024) 0.25 ppb m

response 1255

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	28.01#
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

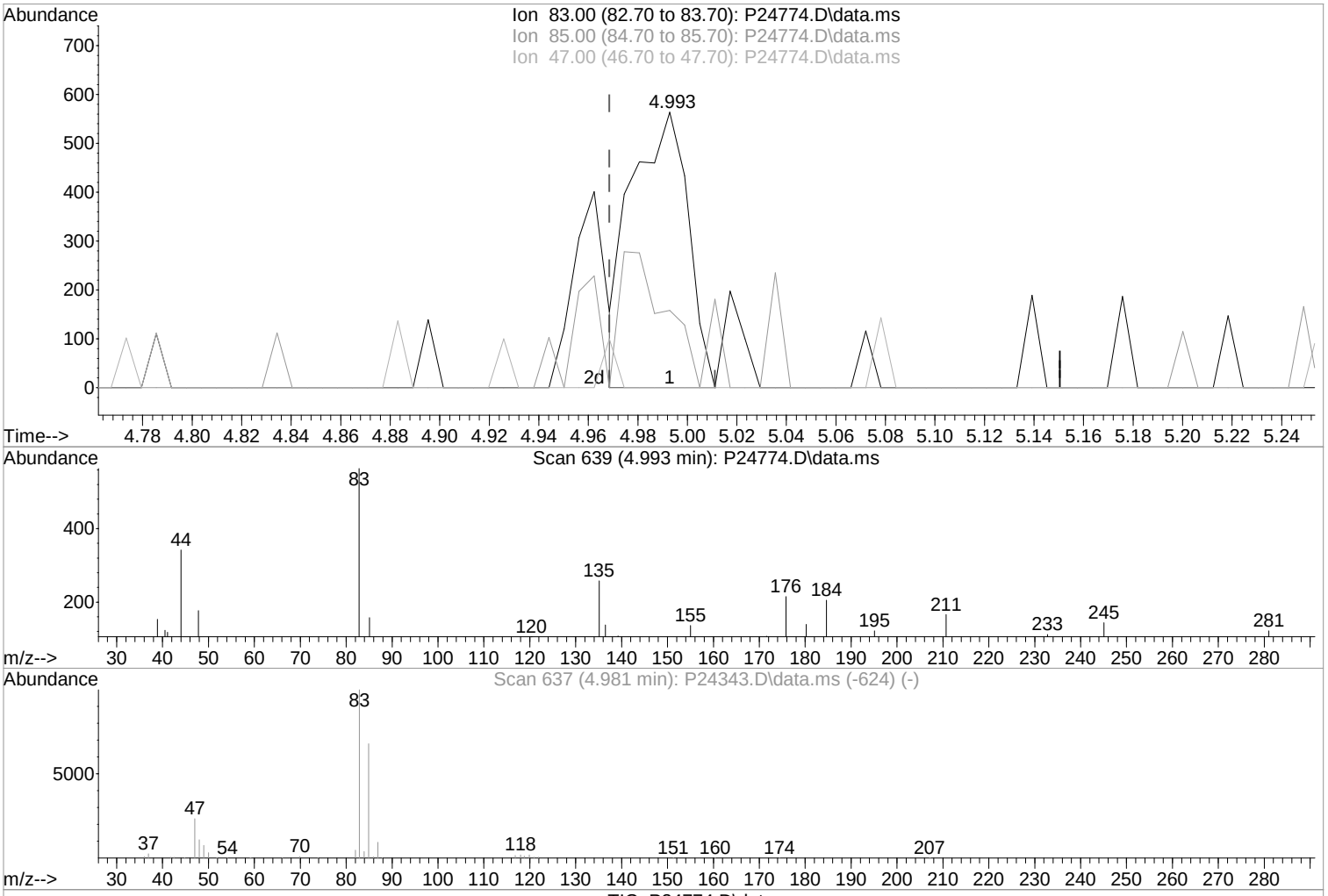
03/12/19

1st 03/12/19
2nd 03/12/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24774.D
Acq On : 7 Mar 2019 6:49 pm
Operator : K.Ruest
Sample : R1901880-002|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 08 10:37:37 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



TIC: P24774.D\data.ms

(40) Chloroform (P)

4.993min (+0.024) 0.18 ppb

response 895

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	28.01#
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

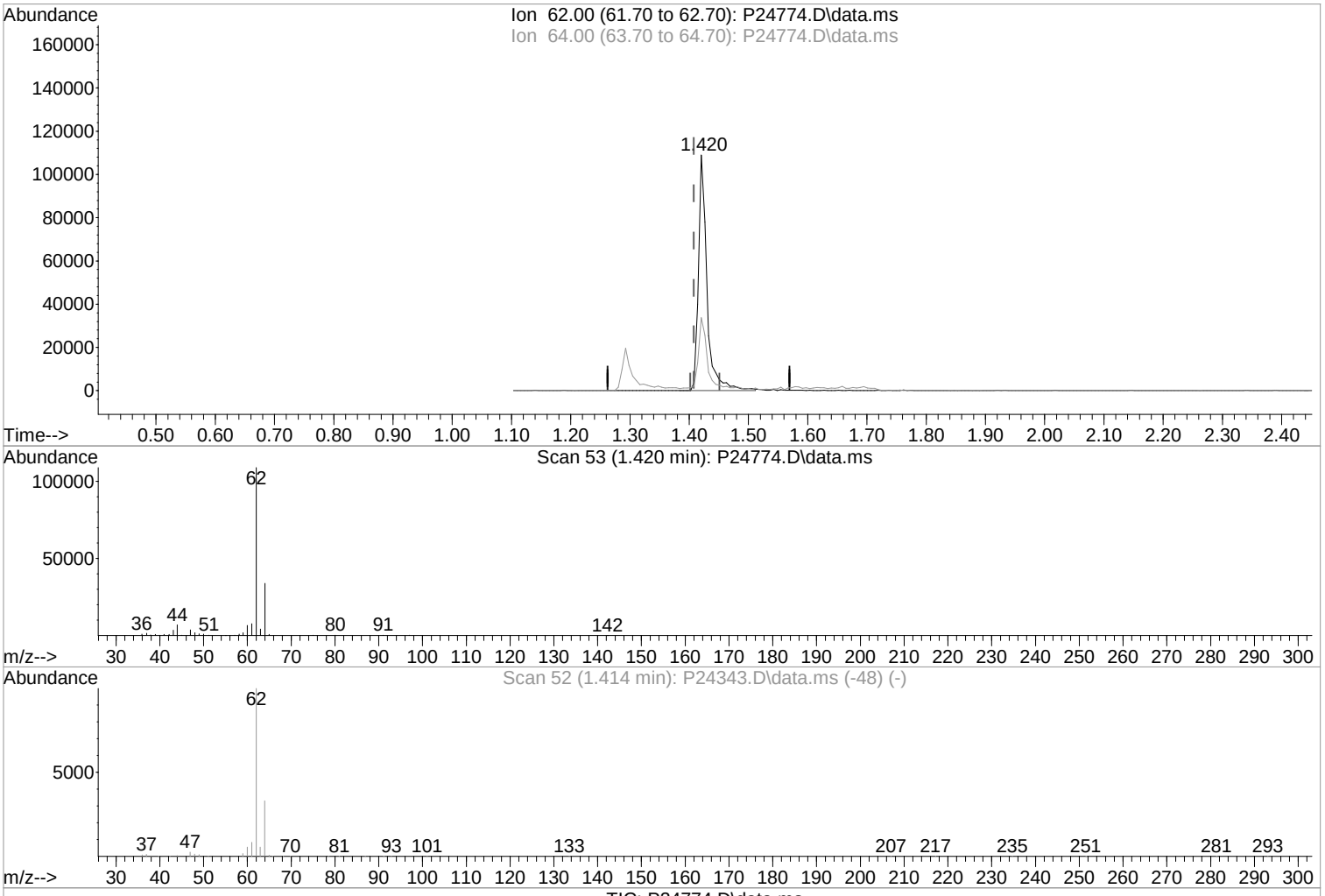
Before

03/12/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24774.D
Acq On : 7 Mar 2019 6:49 pm
Operator : K.Ruest
Sample : R1901880-002|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 08 10:37:37 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



TIC: P24774.D\data.ms

(4) Vinyl Chloride (P)

1.420min (+0.012) 26.11 ppb m

response 108961

Ion	Exp%	Act%
62.00	100	100
64.00	33.20	31.01
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

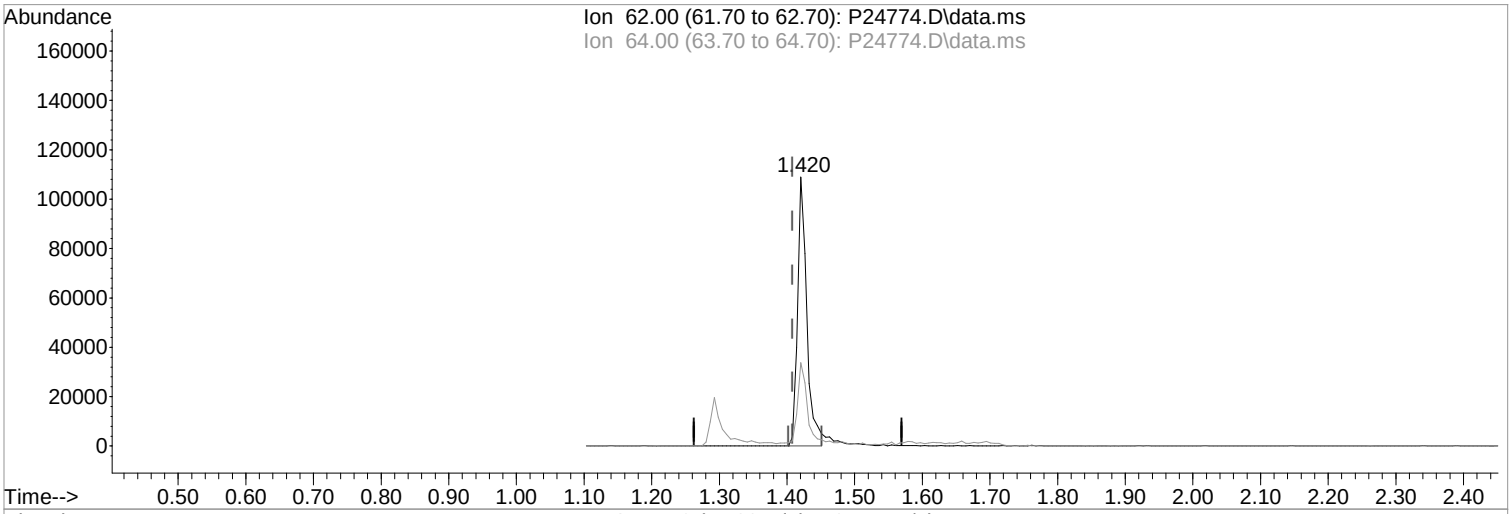
Poor integration.

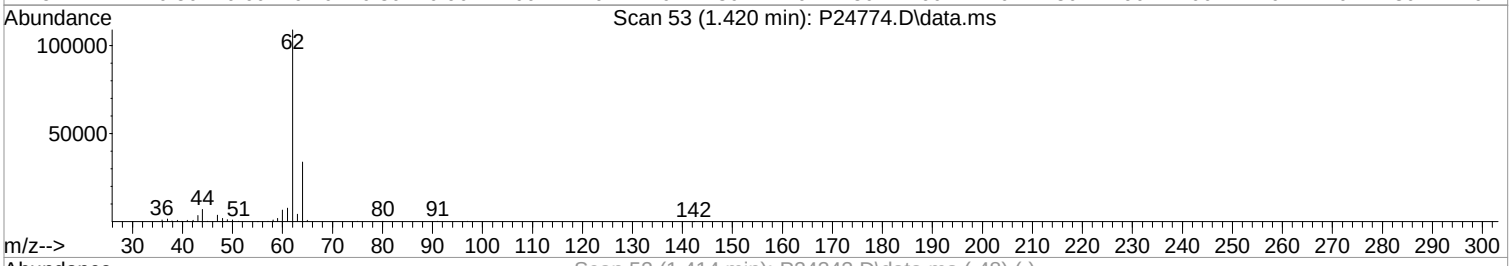
03/12/19

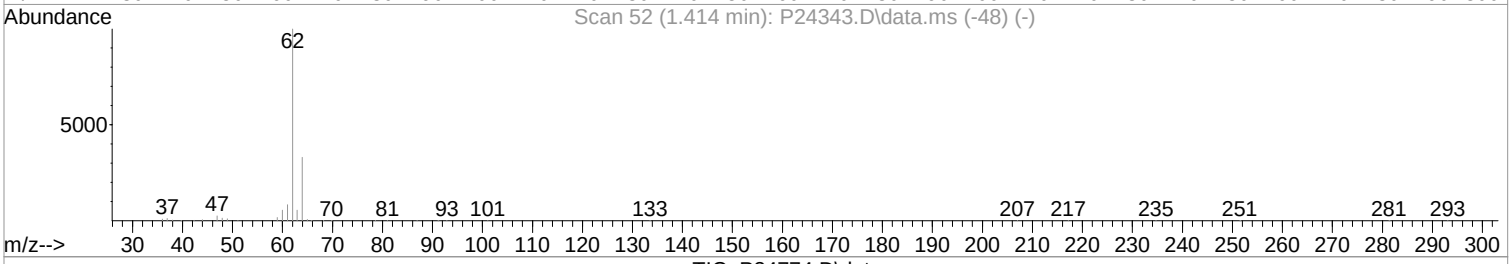
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24774.D
Acq On : 7 Mar 2019 6:49 pm
Operator : K.Ruest
Sample : R1901880-002|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 08 10:37:37 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration







TIC: P24774.D\data.ms

(4) Vinyl Chloride (P)

1.420min (+0.012) 24.58 ppb

response 102593

Ion	Exp%	Act%
62.00	100	100
64.00	33.20	31.01
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

03/12/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24774.D
Acq On : 7 Mar 2019 6:49 pm
Operator : K.Ruest
Sample : R1901880-002|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 12 10:06:26 2019 DL
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

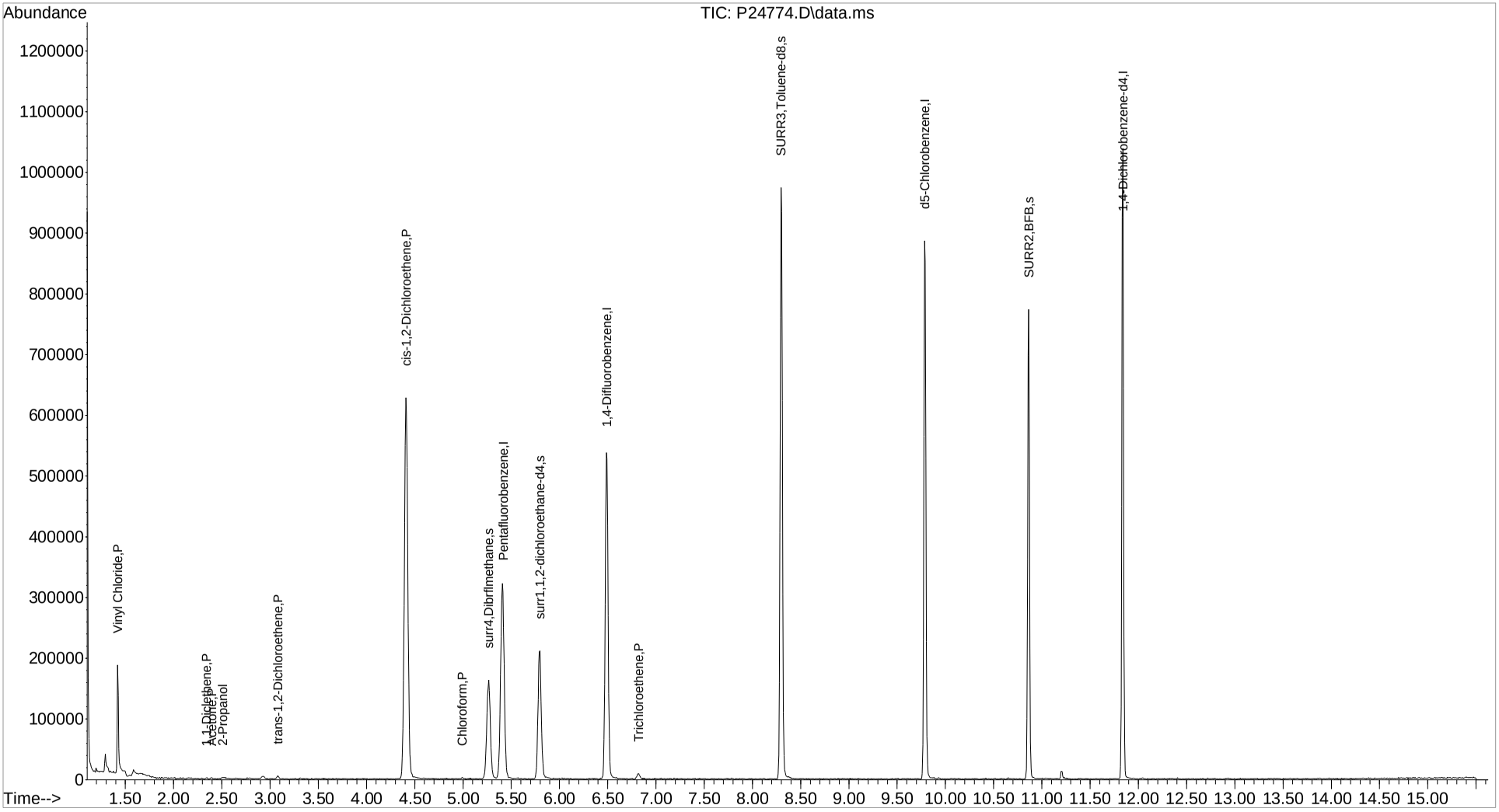
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.413	168	287133	50.00	ppb		0.02
43) 1,4-Difluorobenzene	6.493	114	471332	50.00	ppb		0.01
71) d5-Chlorobenzene	9.785	117	408139	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	206317	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.267	113	132013	50.97	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.94%				
48) surr1,1,2-dichloroetha...	5.798	65	174603	53.15	ppb		0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 106.30%				
65) SURR3,Toluene-d8	8.297	98	627965	51.11	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.22%				
70) SURR2,BFB	10.864	95	222273	50.51	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.02%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.420	62	108961m	26.11	ppb		
13) 1,1-Diclethene	2.341	96	600	0.22	ppb	#	72
15) Acetone	2.396	43	1051	0.76	ppb		87
16) 2-Propanol	2.512	45	2722	7.63	ppb		98
26) trans-1,2-Dichloroethene	3.079	96	1792	0.60	ppb	#	58
34) cis-1,2-Dichloroethene	4.408	96	364287	109.05	ppb		91
40) Chloroform	4.993	83	1255m	0.25	ppb		
54) Trichloroethene	6.822	130	3694	1.12	ppb	#	70

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

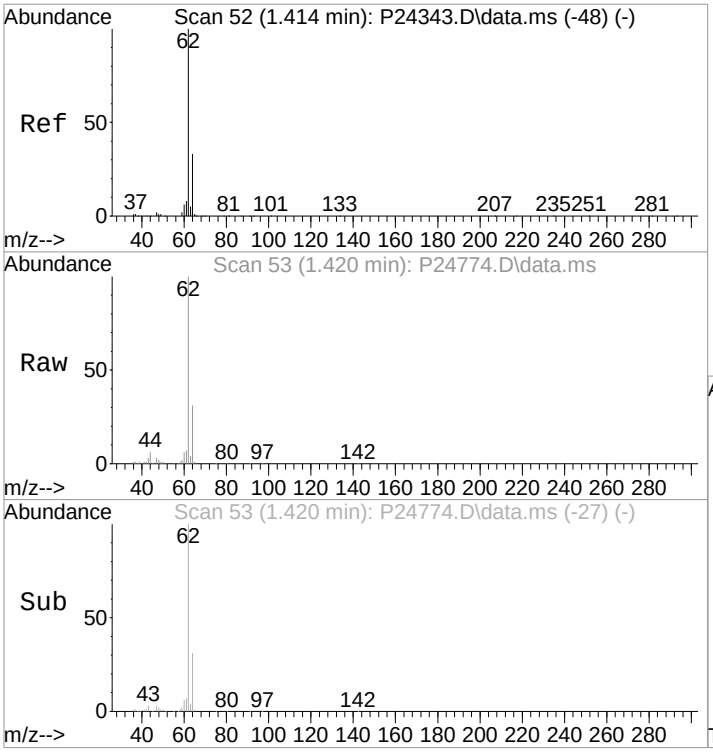
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24774.D
Acq On : 7 Mar 2019 6:49 pm
Operator : K.Ruest
Sample : R1901880-002|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 12 10:06:26 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



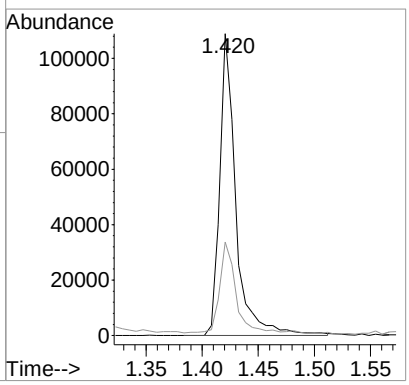
1st 03/12/19
2nd 03/12/19

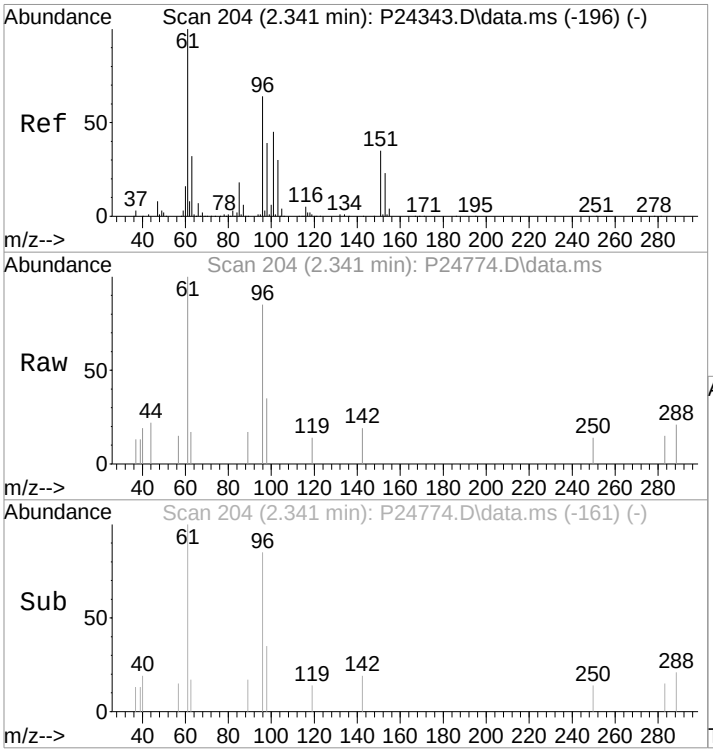


#4
Vinyl Chloride
Concen: 26.11 ppb m
RT: 1.420 min Scan# 53
Delta R.T. 0.012 min
Lab File: P24774.D
Acq: 7 Mar 2019 6:49 pm

Tgt Ion: 62 Resp: 108961

Ion	Ratio	Lower	Upper
62	100		
64	31.0	13.2	53.2

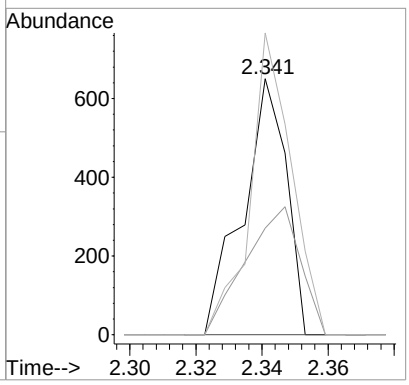


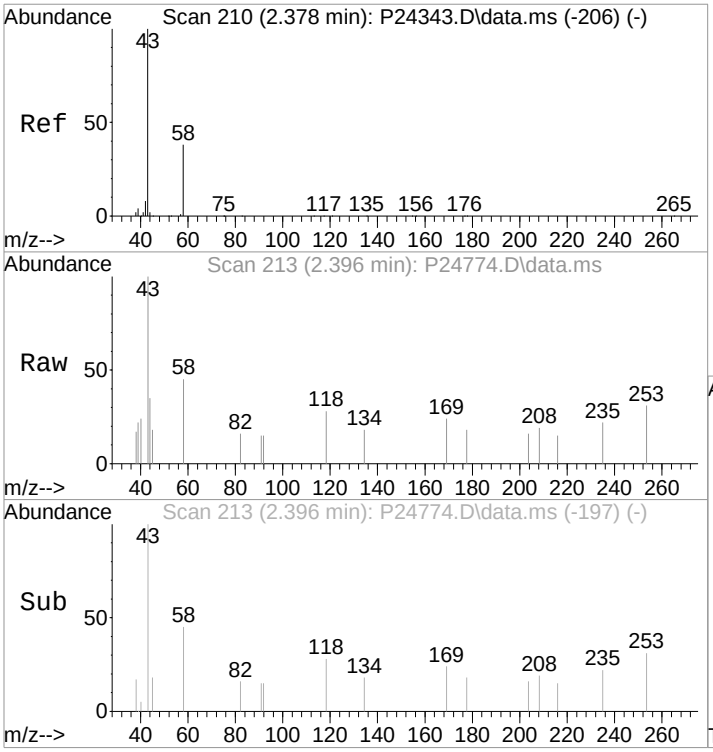


#13
1,1-Diclethene
Concen: 0.22 ppb
RT: 2.341 min Scan# 204
Delta R.T. 0.012 min
Lab File: P24774.D
Acq: 7 Mar 2019 6:49 pm

Tgt Ion: 96 Resp: 600

Ion	Ratio	Lower	Upper
96	100		
98	41.7	40.8	80.8
61	118.0	136.2	176.2#

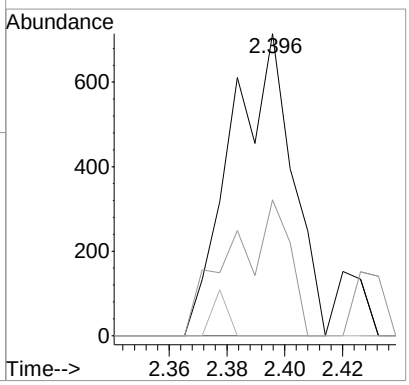


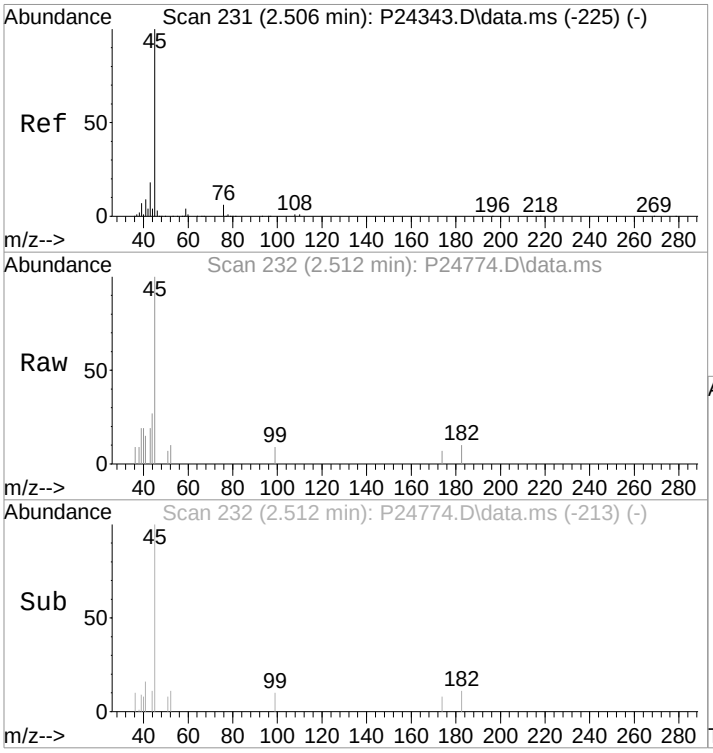


#15
Acetone
Concen: 0.76 ppb
RT: 2.396 min Scan# 213
Delta R.T. 0.024 min
Lab File: P24774.D
Acq: 7 Mar 2019 6:49 pm

Tgt Ion: 43 Resp: 1051

Ion	Ratio	Lower	Upper
43	100		
58	45.0	18.1	58.1
42	0.0	0.0	27.8

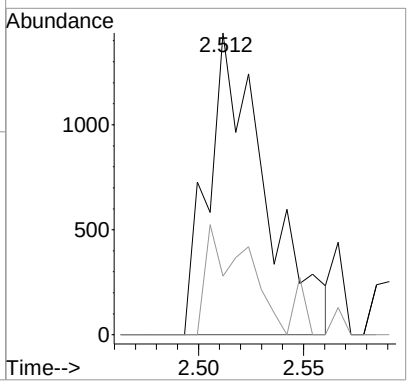


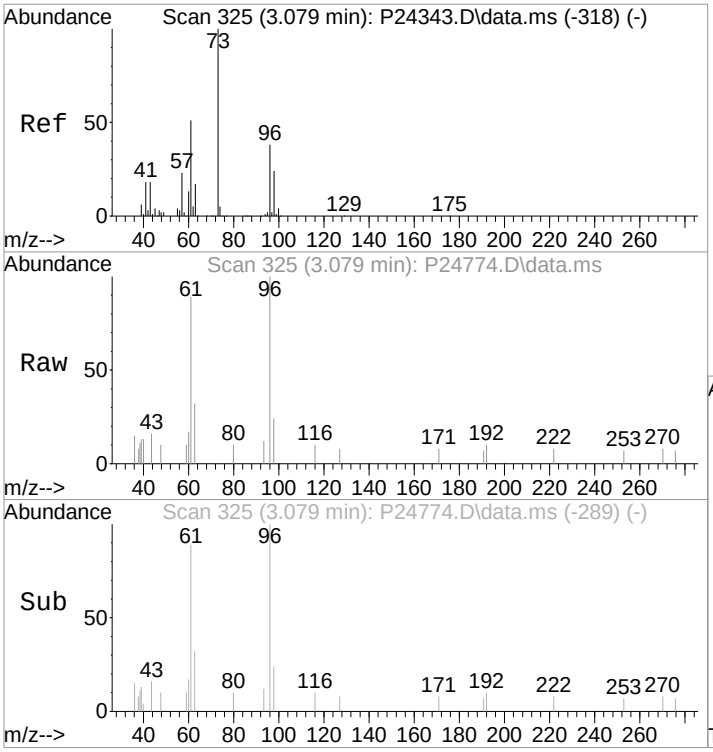


#16
2-Propanol
Concen: 7.63 ppb
RT: 2.512 min Scan# 232
Delta R.T. 0.006 min
Lab File: P24774.D
Acq: 7 Mar 2019 6:49 pm

Tgt Ion: 45 Resp: 2722

Ion	Ratio	Lower	Upper
45	100		
43	19.4	0.0	38.5

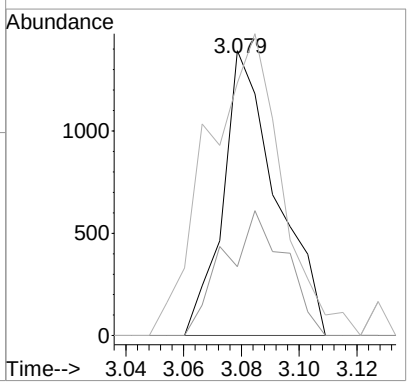


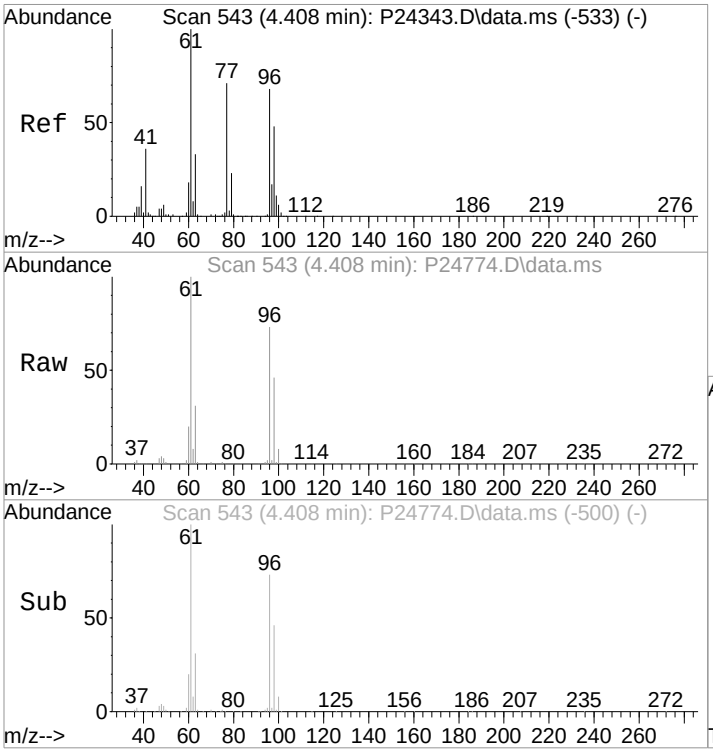


#26
trans-1,2-Dichloroethene
Concen: 0.60 ppb
RT: 3.079 min Scan# 325
Delta R.T. 0.012 min
Lab File: P24774.D
Acq: 7 Mar 2019 6:49 pm

Tgt Ion: 96 Resp: 1792

Ion	Ratio	Lower	Upper
96	100		
98	24.2	43.5	83.5#
61	88.7	114.4	154.4#

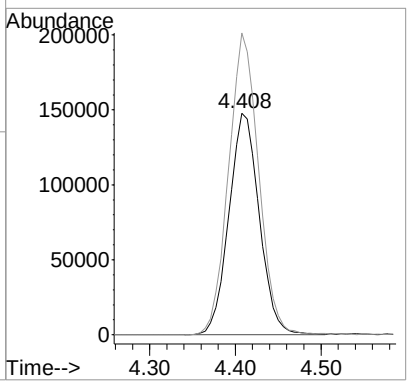


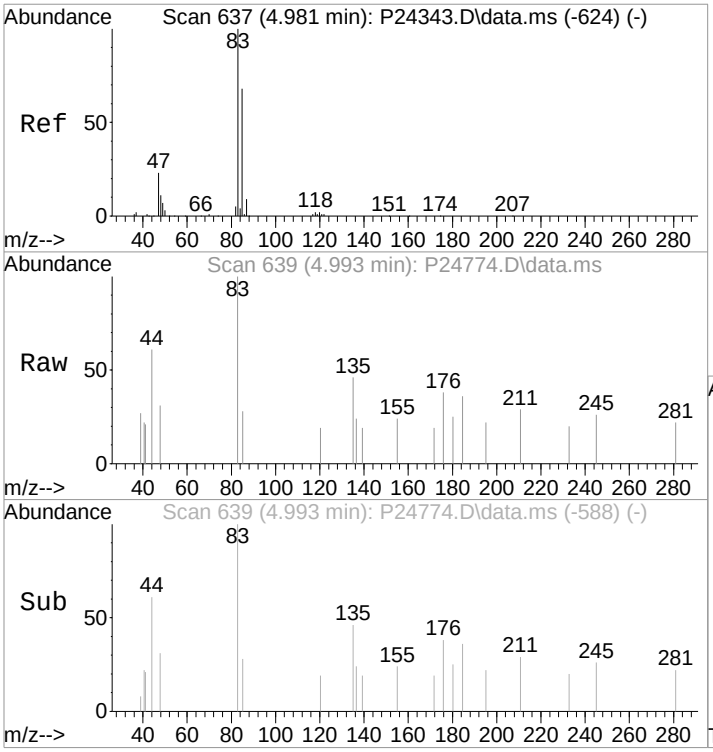


#34
cis-1,2-Dichloroethene
Concen: 109.05 ppb
RT: 4.408 min Scan# 543
Delta R.T. 0.006 min
Lab File: P24774.D
Acq: 7 Mar 2019 6:49 pm

Tgt Ion: 96 Resp: 364287

Ion	Ratio	Lower	Upper
96	100		
61	136.2	128.1	168.1

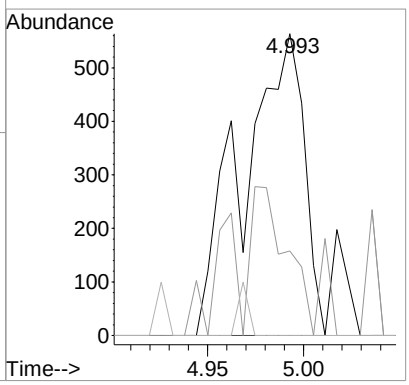


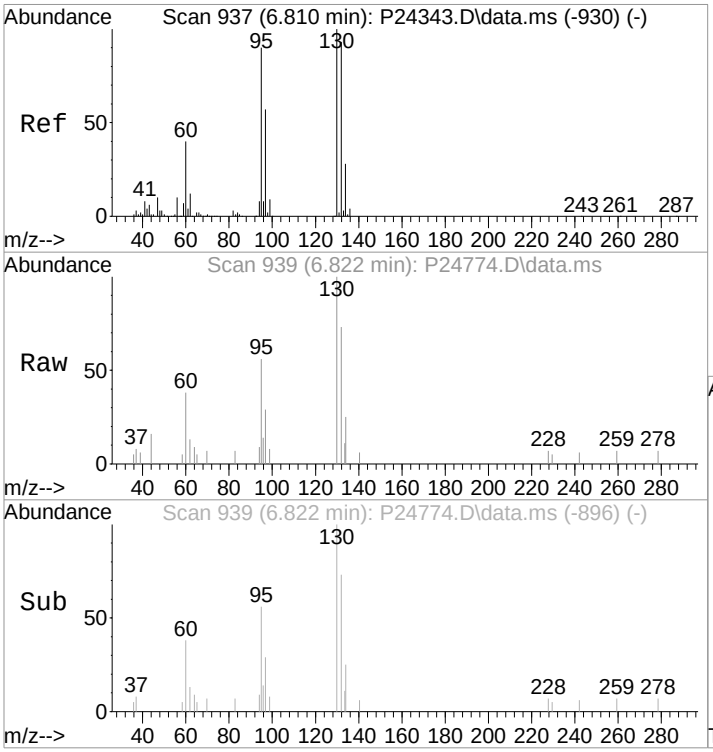


#40
Chloroform
Concen: 0.25 ppb m
RT: 4.993 min Scan# 639
Delta R.T. 0.024 min
Lab File: P24774.D
Acq: 7 Mar 2019 6:49 pm

Tgt Ion: 83 Resp: 1255

Ion	Ratio	Lower	Upper
83	100		
85	28.0	47.9	87.9#
47	0.0	3.4	43.4#

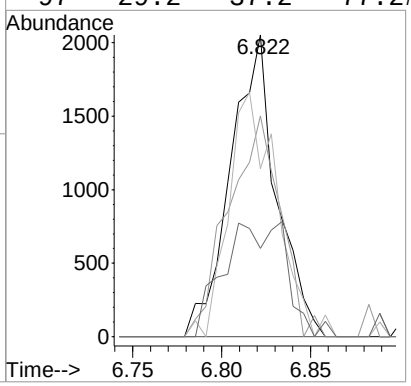




#54
Trichloroethene
Concen: 1.12 ppb
RT: 6.822 min Scan# 939
Delta R.T. 0.012 min
Lab File: P24774.D
Acq: 7 Mar 2019 6:49 pm

Tgt Ion:130 Resp: 3694

Ion	Ratio	Lower	Upper
130	100		
132	73.2	72.6	112.6
95	55.7	69.8	109.8#
97	29.2	37.2	77.2#

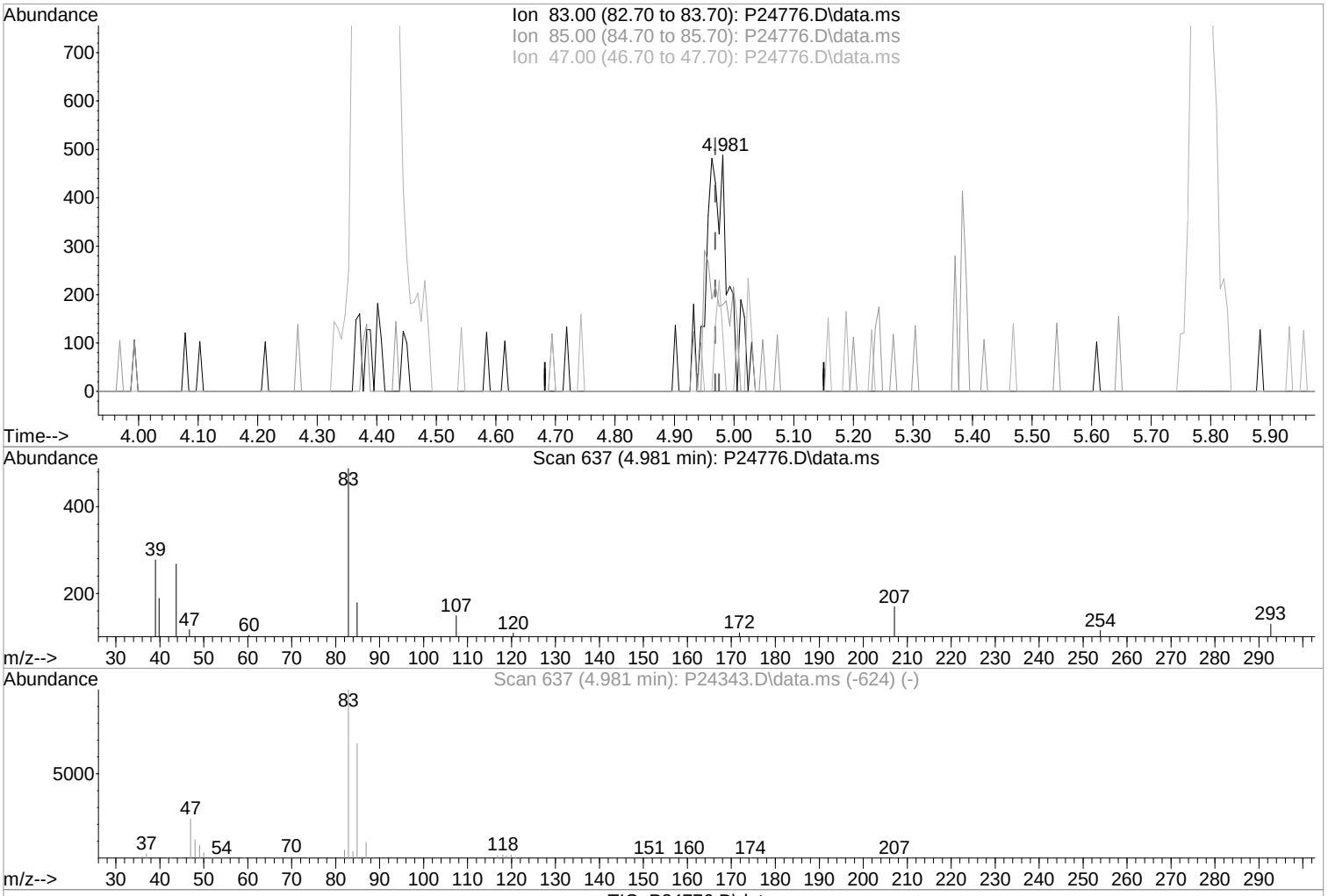


1st 03/12/19
2nd 03/12/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24776.D
Acq On : 7 Mar 2019 7:32 pm
Operator : K.Ruest
Sample : R1901880-003|50 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 08 10:38:42 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



TIC: P24776.D\data.ms

(40) Chloroform (P)

4.981min (+0.012) 0.23 ppb m

response 1213

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	36.68#
47.00	23.40	23.98
0.00	0.00	0.00

Manual Integration:

After

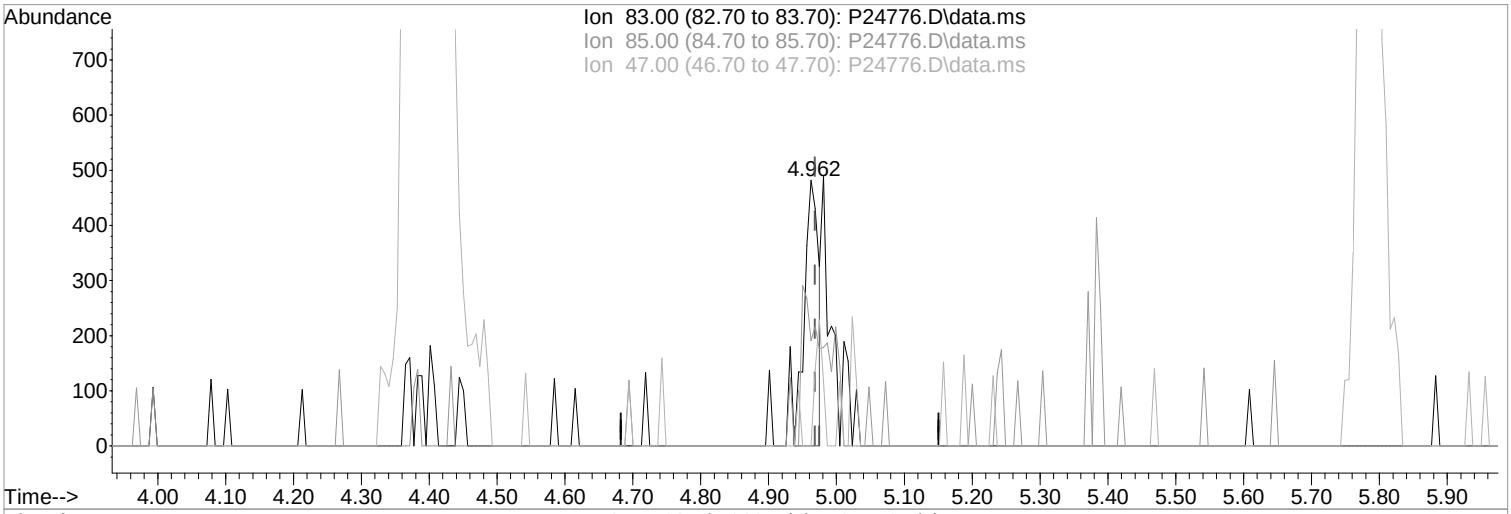
Split Peak

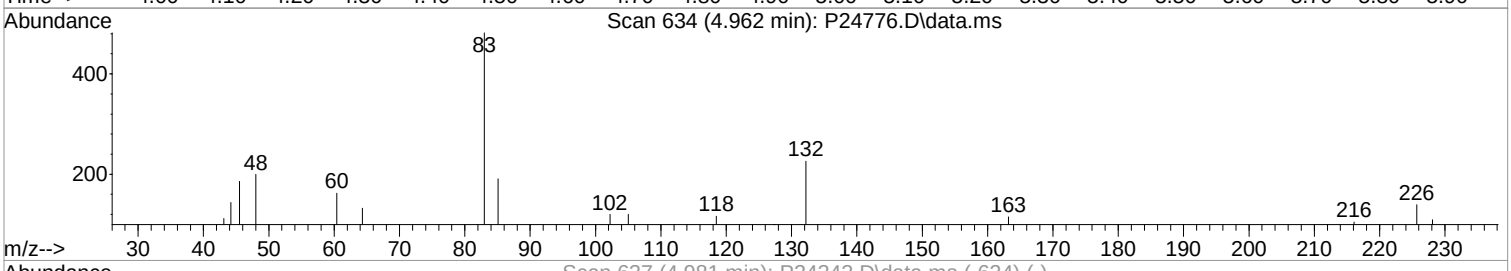
03/12/19

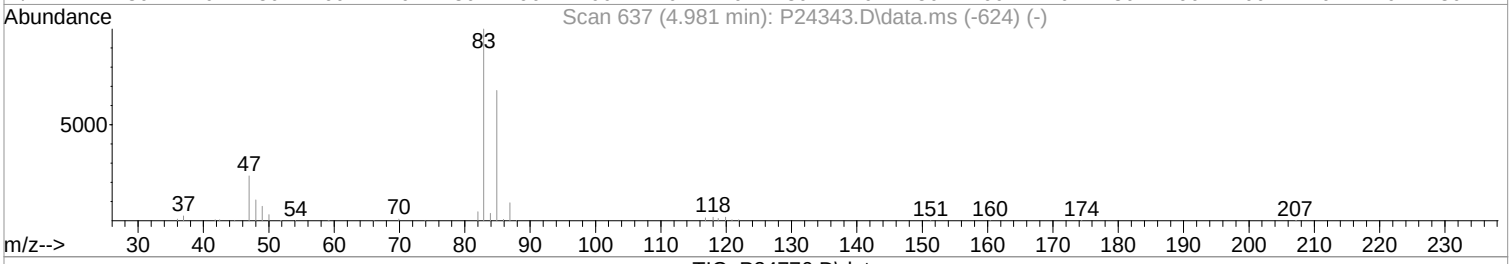
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24776.D
Acq On : 7 Mar 2019 7:32 pm
Operator : K.Ruest
Sample : R1901880-003|50 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 08 10:38:42 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration







TIC: P24776.D\data.ms

(40) Chloroform (P)

4.962min (-0.006) 0.13 ppb

response 684

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	39.63#
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

Before

03/12/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24776.D
Acq On : 7 Mar 2019 7:32 pm
Operator : K.Ruest
Sample : R1901880-003|50 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 12 10:52:30 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

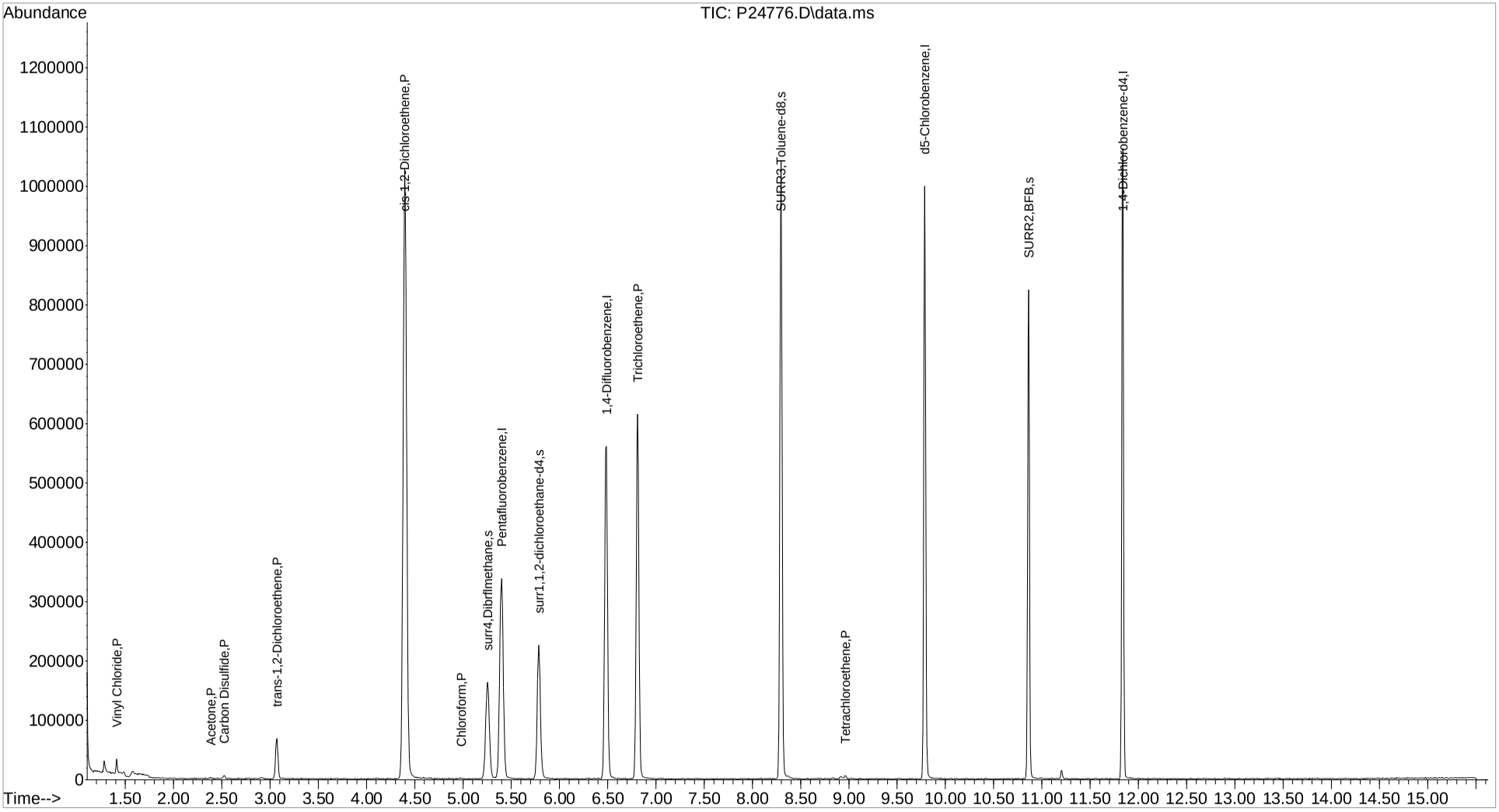
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.401	168	308270	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.487	114	508290	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	442256	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	218887	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	139024	49.77	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.54%				
48) surr1,1,2-dichloroetha...	5.785	65	184000	51.93	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.86%				
65) SURR3,Toluene-d8	8.297	98	659009	49.74	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.48%				
70) SURR2,BFB	10.864	95	231151	48.71	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.42%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.408	62	13700	3.06	ppb		90
15) Acetone	2.384	43	2601	1.76	ppb		85
18) Carbon Disulfide	2.524	76	5999	0.70	ppb		96
26) trans-1,2-Dichloroethene	3.073	96	26051	8.14	ppb	#	83
34) cis-1,2-Dichloroethene	4.395	96	607547	169.40	ppb		88
40) Chloroform	4.981	83	1213m	0.23	ppb		
54) Trichloroethene	6.810	130	221381	62.27	ppb		97
72) Tetrachloroethene	8.962	164	1215	0.46	ppb	#	64

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

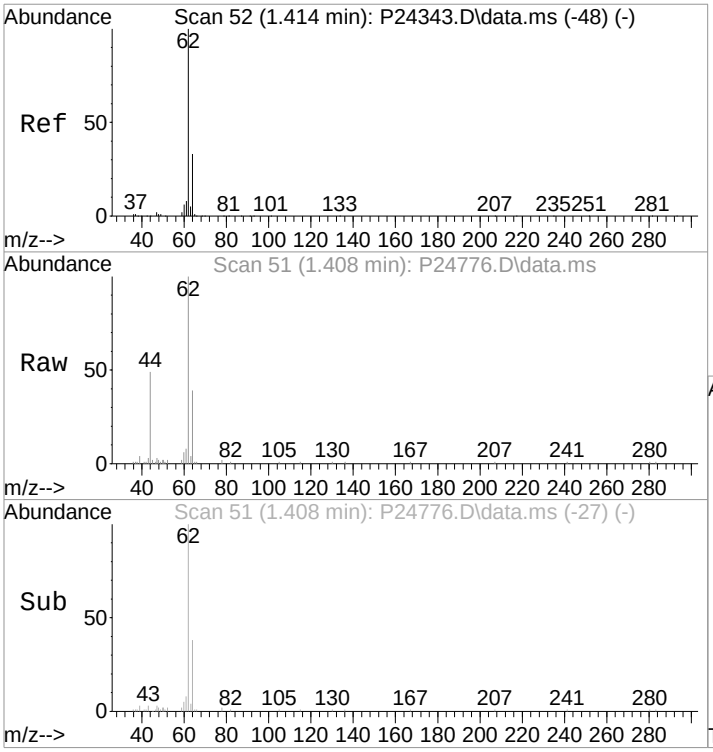
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24776.D
Acq On : 7 Mar 2019 7:32 pm
Operator : K.Ruest
Sample : R1901880-003|50 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 12 10:52:30 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



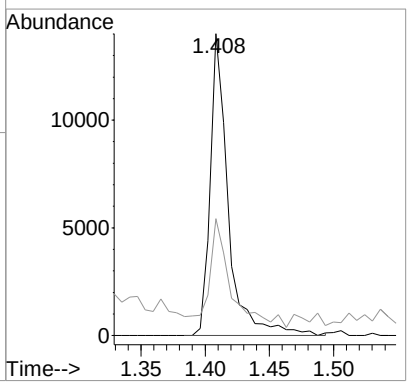
1st 03/12/19
2nd 03/12/19

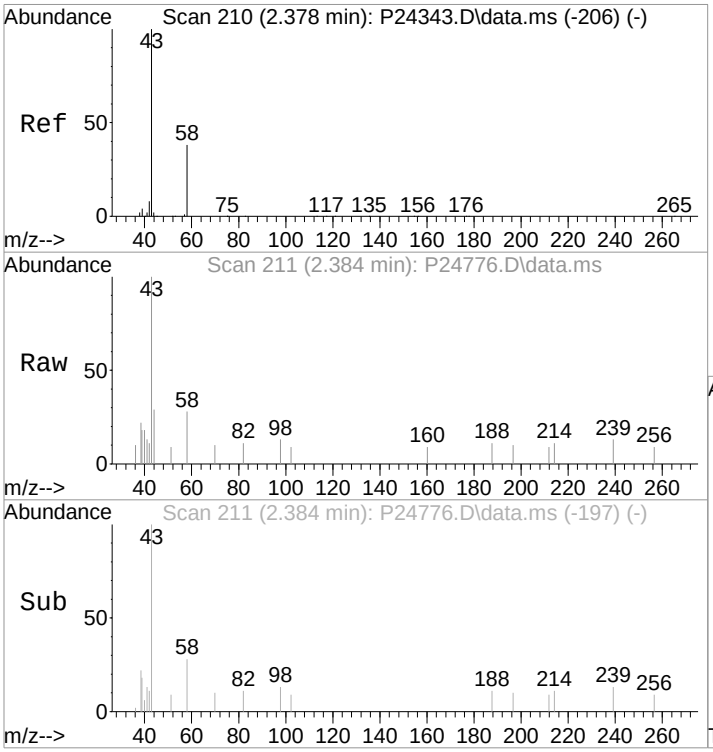


#4
Vinyl Chloride
Concen: 3.06 ppb
RT: 1.408 min Scan# 51
Delta R.T. 0.000 min
Lab File: P24776.D
Acq: 7 Mar 2019 7:32 pm

Tgt Ion: 62 Resp: 13700

Ion	Ratio	Lower	Upper
62	100		
64	38.7	13.2	53.2

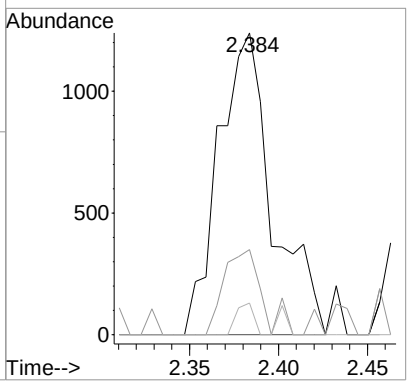


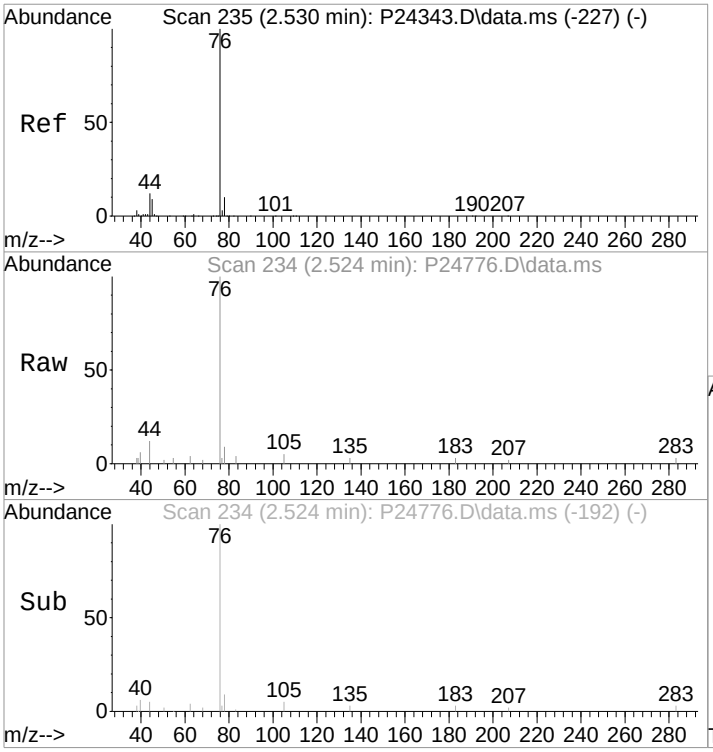


#15
Acetone
Concen: 1.76 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24776.D
Acq: 7 Mar 2019 7:32 pm

Tgt Ion: 43 Resp: 2601

Ion	Ratio	Lower	Upper
43	100		
58	28.2	18.1	58.1
42	10.6	0.0	27.8

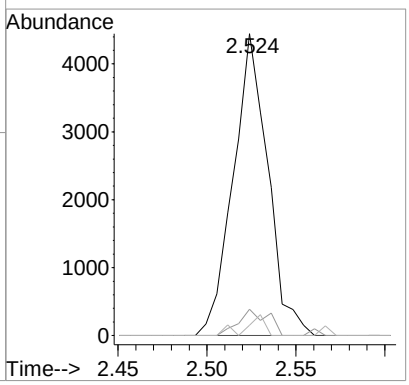


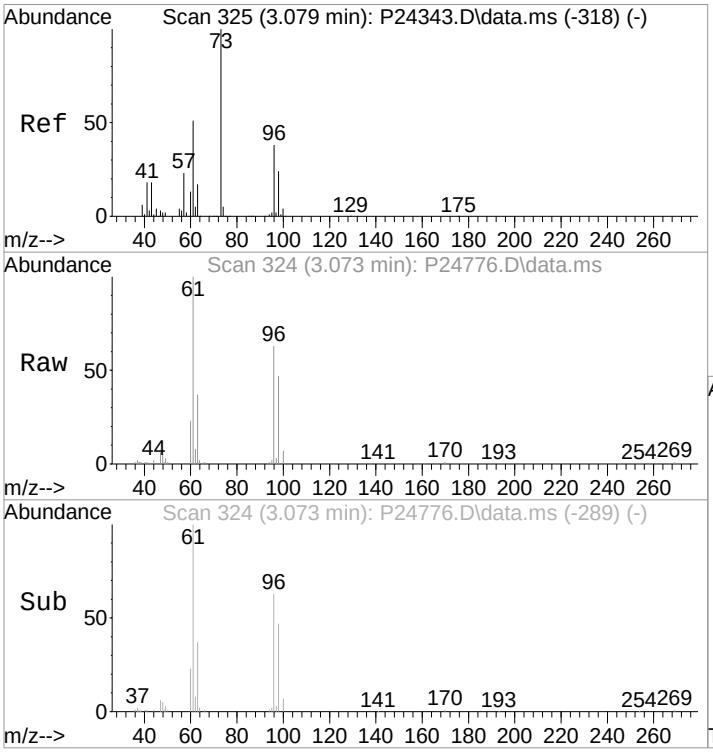


#18
Carbon Disulfide
Concen: 0.70 ppb
RT: 2.524 min Scan# 234
Delta R.T. 0.000 min
Lab File: P24776.D
Acq: 7 Mar 2019 7:32 pm

Tgt Ion: 76 Resp: 5999

Ion	Ratio	Lower	Upper
76	100		
78	8.5	0.0	30.1
77	3.3	0.0	22.9

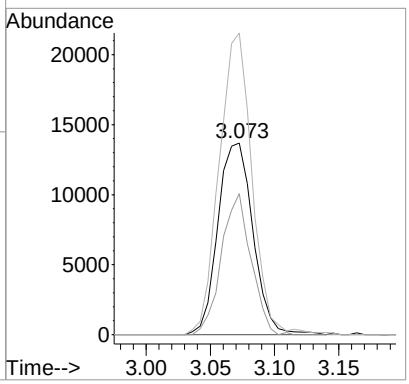


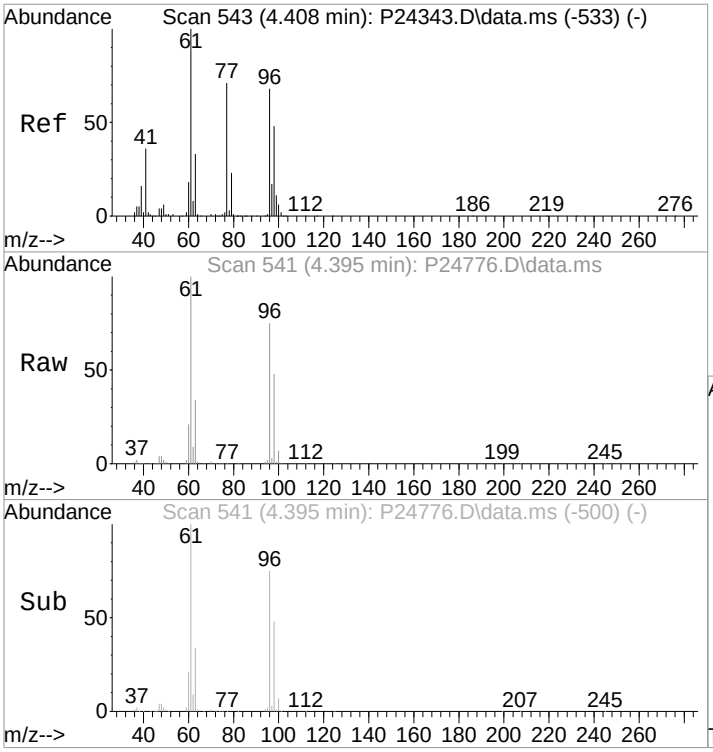


#26
trans-1,2-Dichloroethene
Concen: 8.14 ppb
RT: 3.073 min Scan# 324
Delta R.T. 0.006 min
Lab File: P24776.D
Acq: 7 Mar 2019 7:32 pm

Tgt Ion: 96 Resp: 26051

Ion	Ratio	Lower	Upper
96	100		
98	73.7	43.5	83.5
61	157.6	114.4	154.4#

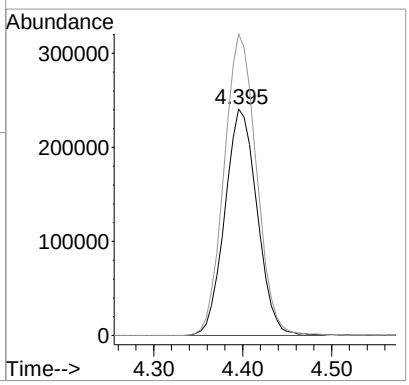


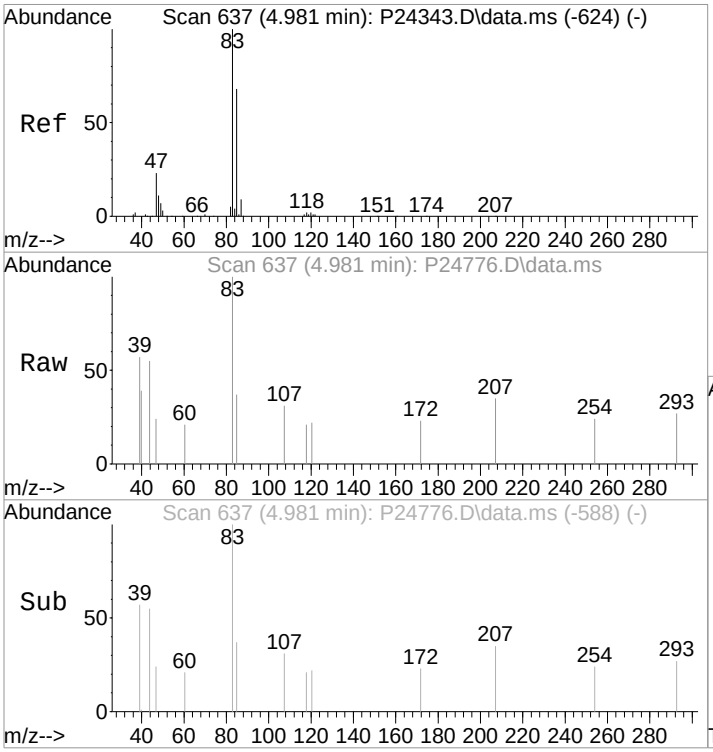


#34
cis-1,2-Dichloroethene
Concen: 169.40 ppb
RT: 4.395 min Scan# 541
Delta R.T. -0.006 min
Lab File: P24776.D
Acq: 7 Mar 2019 7:32 pm

Tgt Ion: 96 Resp: 607547

Ion	Ratio	Lower	Upper
96	100		
61	133.2	128.1	168.1

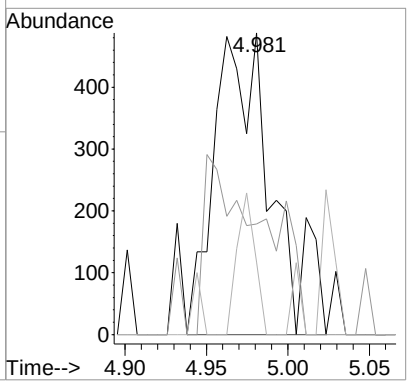


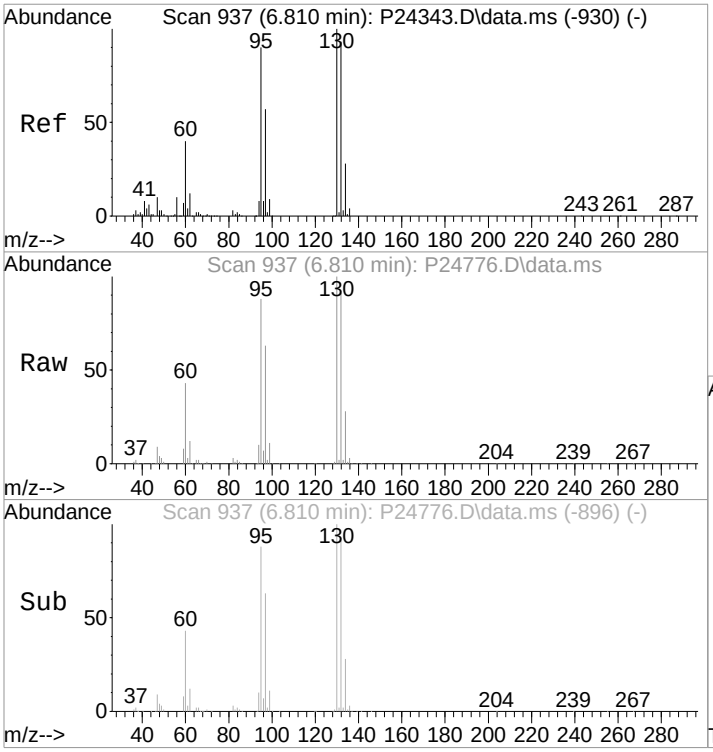


#40
Chloroform
Concen: 0.23 ppb m
RT: 4.981 min Scan# 637
Delta R.T. 0.012 min
Lab File: P24776.D
Acq: 7 Mar 2019 7:32 pm

Tgt Ion: 83 Resp: 1213

Ion	Ratio	Lower	Upper
83	100		
85	36.7	47.9	87.9#
47	24.0	3.4	43.4

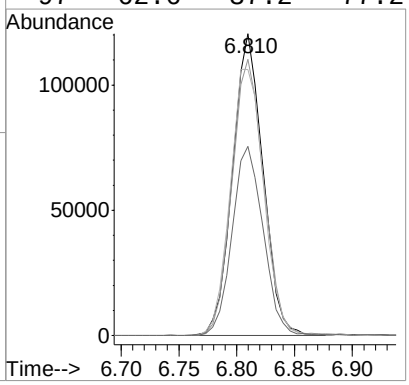


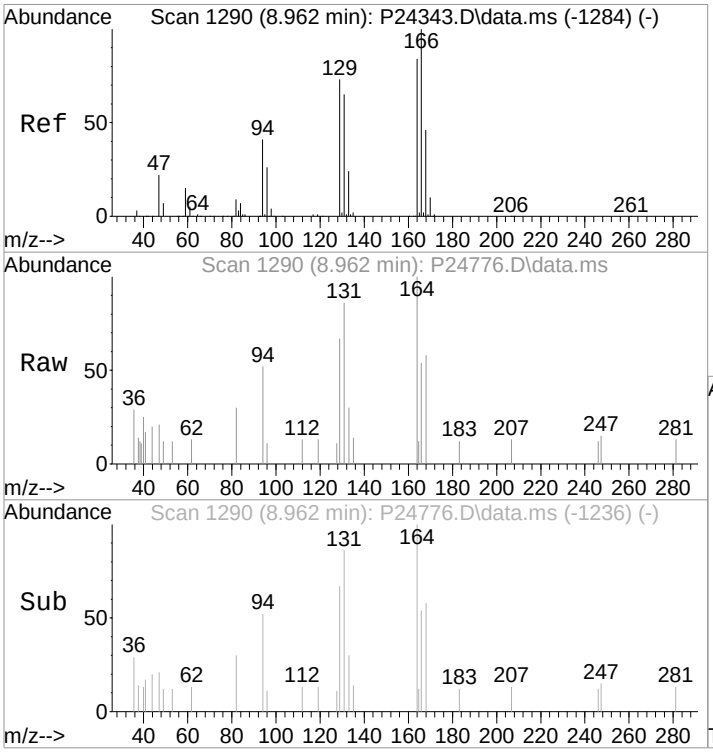


#54
Trichloroethene
Concen: 62.27 ppb
RT: 6.810 min Scan# 937
Delta R.T. 0.000 min
Lab File: P24776.D
Acq: 7 Mar 2019 7:32 pm

Tgt Ion:130 Resp: 221381

Ion	Ratio	Lower	Upper
130	100		
132	91.4	72.6	112.6
95	88.1	69.8	109.8
97	62.6	37.2	77.2

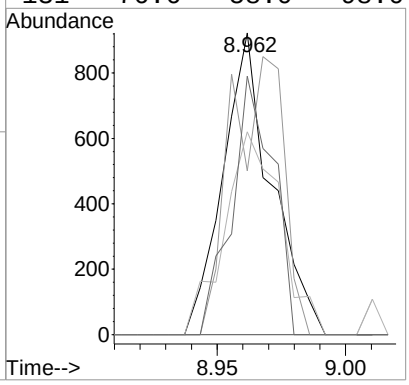




#72
Tetrachloroethene
Concen: 0.46 ppb
RT: 8.962 min Scan# 1290
Delta R.T. 0.000 min
Lab File: P24776.D
Acq: 7 Mar 2019 7:32 pm

Tgt Ion:164 Resp: 1215

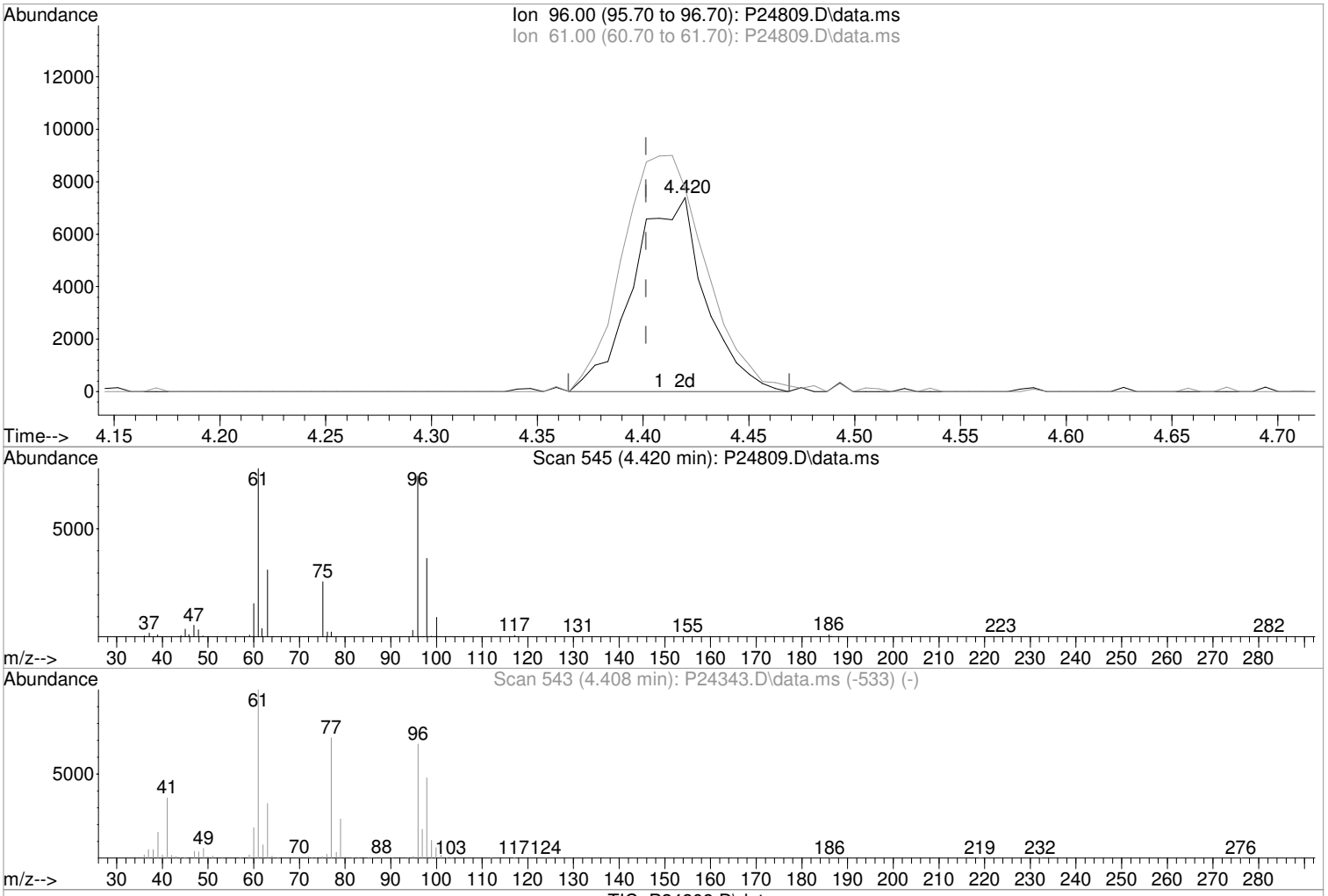
Ion	Ratio	Lower	Upper
164	100		
166	48.6	99.6	139.6#
129	60.1	66.7	106.7#
131	76.6	58.0	98.0



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24809.D
Acq On : 8 Mar 2019 8:12 pm
Operator : F.NAEGLER
Sample : R1901880-004|1.0 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 11 09:25:58 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



TIC: P24809.D\data.ms

(34) cis-1,2-Dichloroethene (P)

4.420min (+0.018) 4.95 ppb m

response 17454

Ion	Exp%	Act%
96.00	100	100
61.00	148.10	104.62#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

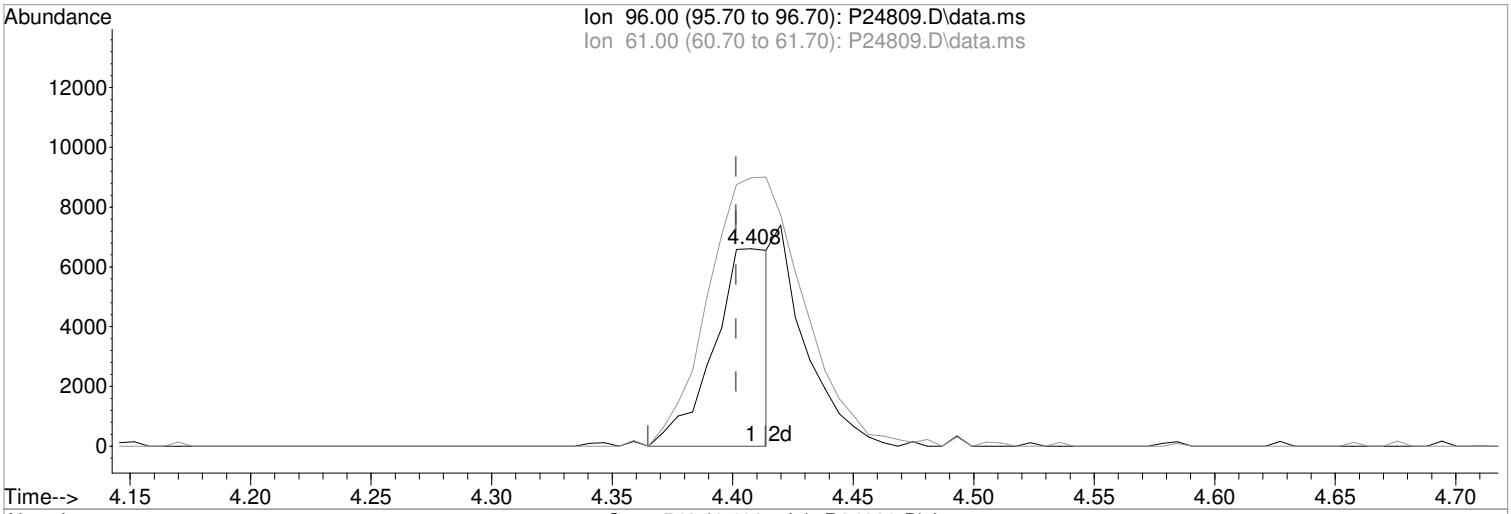
Poor integration.

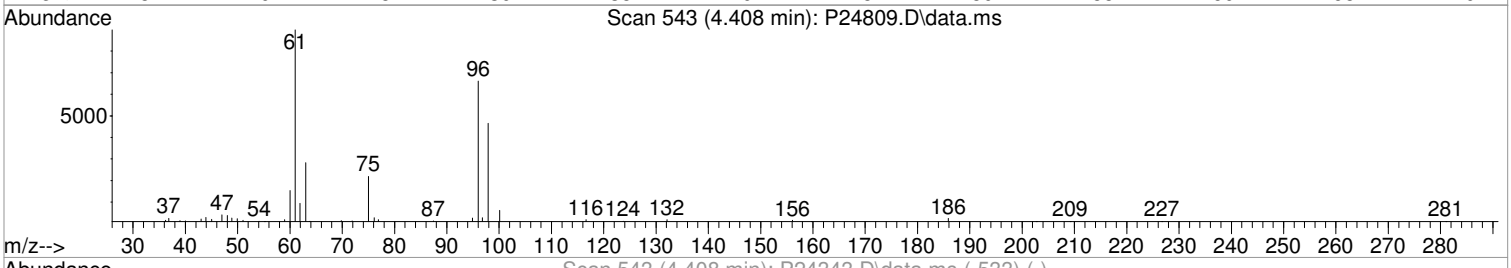
03/12/19

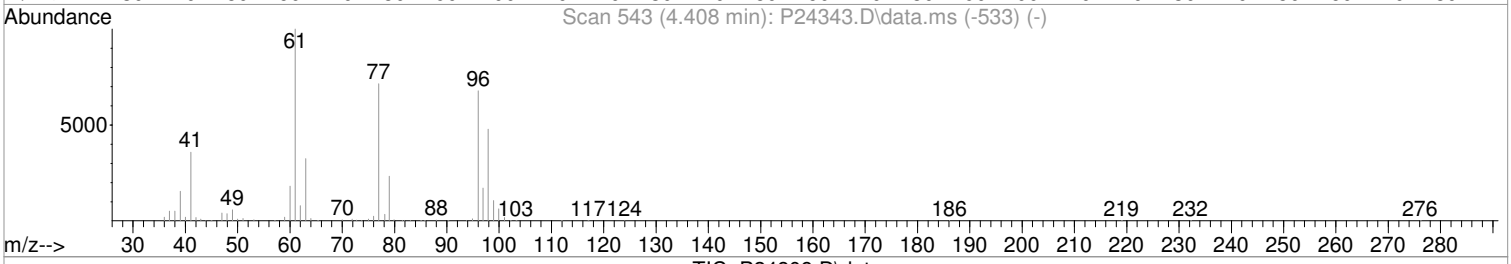
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24809.D
Acq On : 8 Mar 2019 8:12 pm
Operator : F.NAEGLER
Sample : R1901880-004|1.0 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 11 09:25:58 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration







TIC: P24809.D\data.ms

(34) cis-1,2-Dichloroethene (P)

4.408min (+0.006) 3.01 ppb

response 10619

Ion	Exp%	Act%
96.00	100	100
61.00	148.10	135.94
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

03/12/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24809.D
Acq On : 8 Mar 2019 8:12 pm
Operator : F.NAEGLER
Sample : R1901880-004|1.0 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 12 10:32:54 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

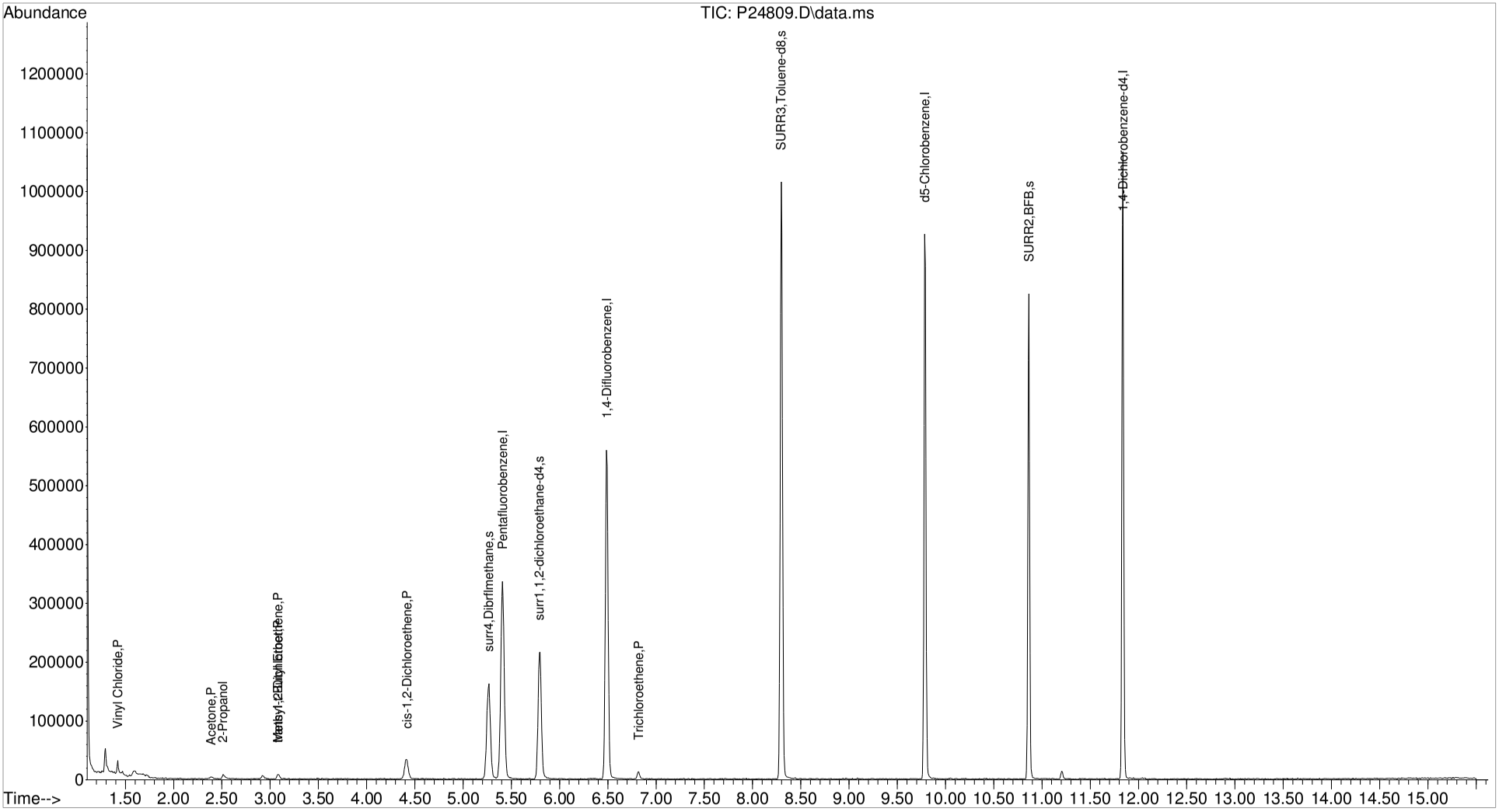
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.407	168	303362	50.00	ppb	0.01
43) 1,4-Difluorobenzene	6.487	114	493290	50.00	ppb	0.00
71) d5-Chlorobenzene	9.785	117	423612	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	219538	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.267	113	134050	49.45	ppb	0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.90%			
48) surr1,1,2-dichloroetha...	5.792	65	180615	52.53	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 105.06%			
65) SURR3,Toluene-d8	8.297	98	641323	49.88	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.76%			
70) SURR2,BFB	10.864	95	223189	48.46	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.92%			
Target Compounds						Qvalue
4) Vinyl Chloride	1.420	62	11165	2.53	ppb	67
5) Bromomethane	1.652	94	1014	Below Cal	#	61
15) Acetone	2.384	43	4620	3.18	ppb	83
16) 2-Propanol	2.512	45	9338	24.76	ppb	96
25) Methyl-t-Butyl Ether	3.079	73	3113	0.28	ppb	90
26) trans-1,2-Dichloroethene	3.079	96	2126	0.68	ppb	90
34) cis-1,2-Dichloroethene	4.420	96	17454m	4.95	ppb	
54) Trichloroethene	6.816	130	3876	1.12	ppb	98

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

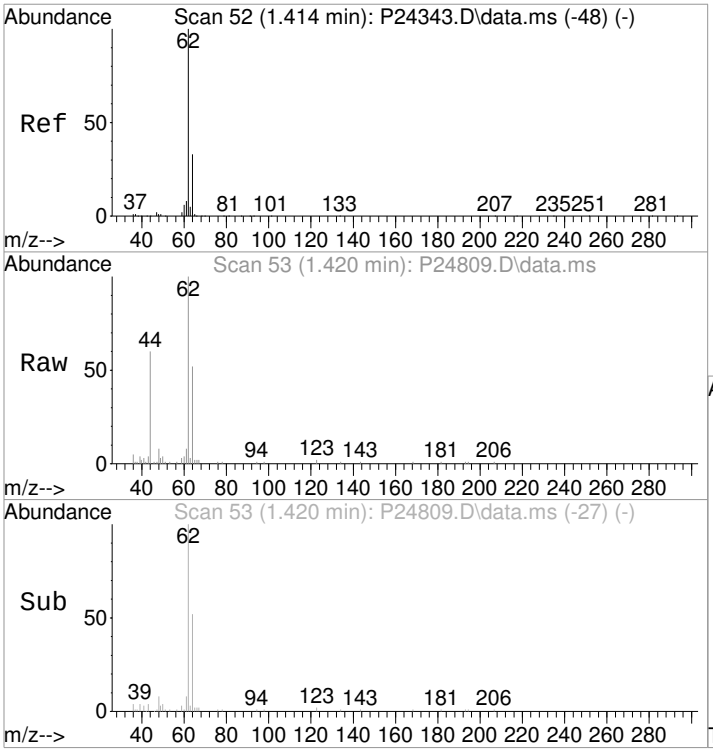
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24809.D
Acq On : 8 Mar 2019 8:12 pm
Operator : F.NAEGLER
Sample : R1901880-004|1.0 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 12 10:32:54 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



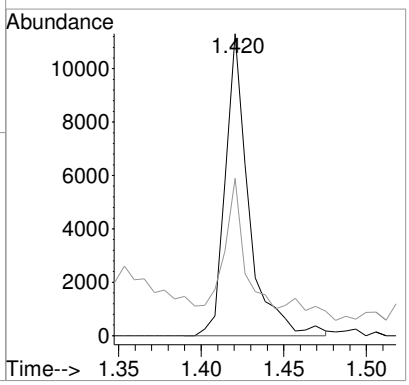
1st FJ 03/12/19
2nd 03/12/19

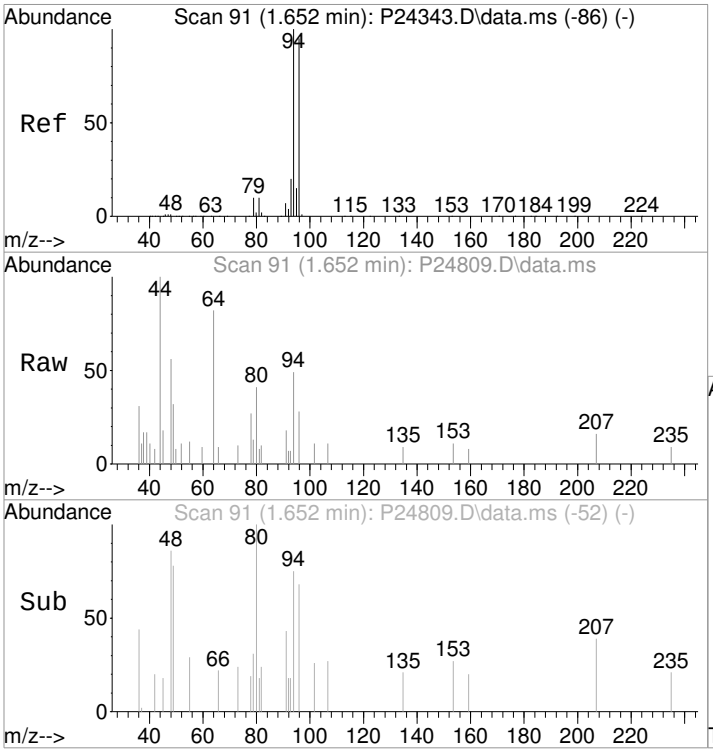


#4
Vinyl Chloride
Concen: 2.53 ppb
RT: 1.420 min Scan# 53
Delta R.T. 0.012 min
Lab File: P24809.D
Acq: 8 Mar 2019 8:12 pm

Tgt Ion: 62 Resp: 11165

Ion	Ratio	Lower	Upper
62	100		
64	52.1	13.2	53.2

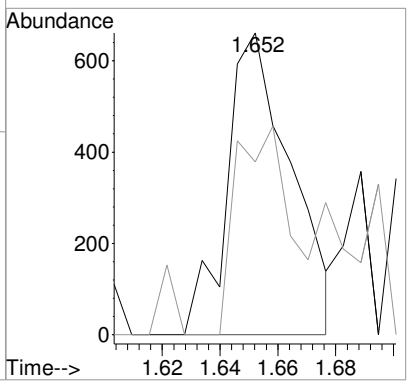


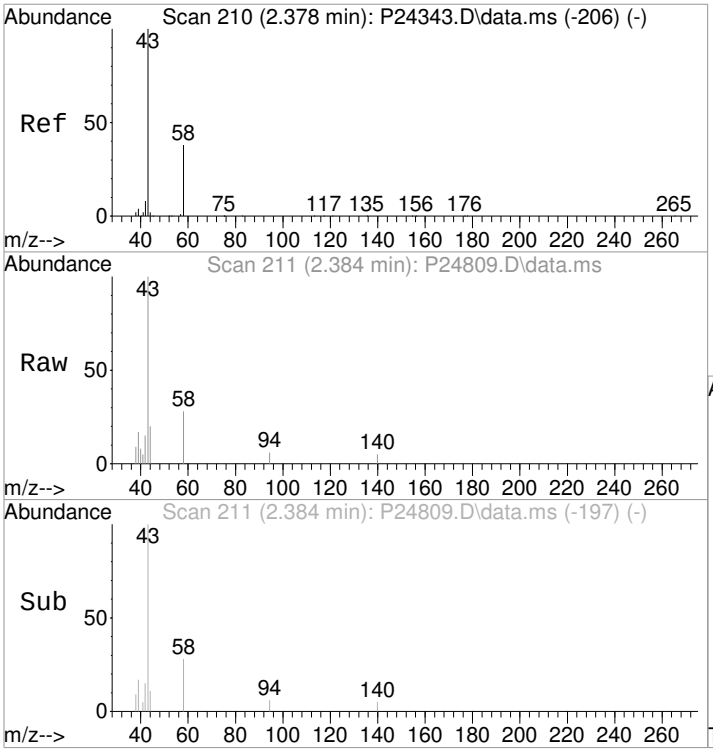


#5
Bromomethane
Concen: Below Cal
RT: 1.652 min Scan# 91
Delta R.T. 0.013 min
Lab File: P24809.D
Acq: 8 Mar 2019 8:12 pm

Tgt Ion: 94 Resp: 1014

Ion	Ratio	Lower	Upper
94	100		
96	57.3	75.4	115.4#

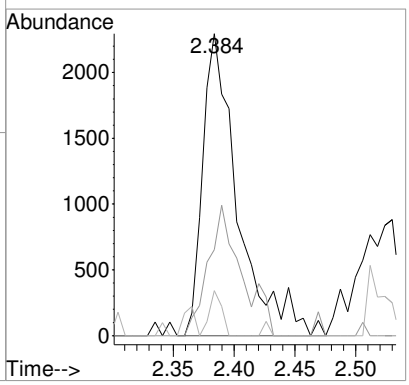


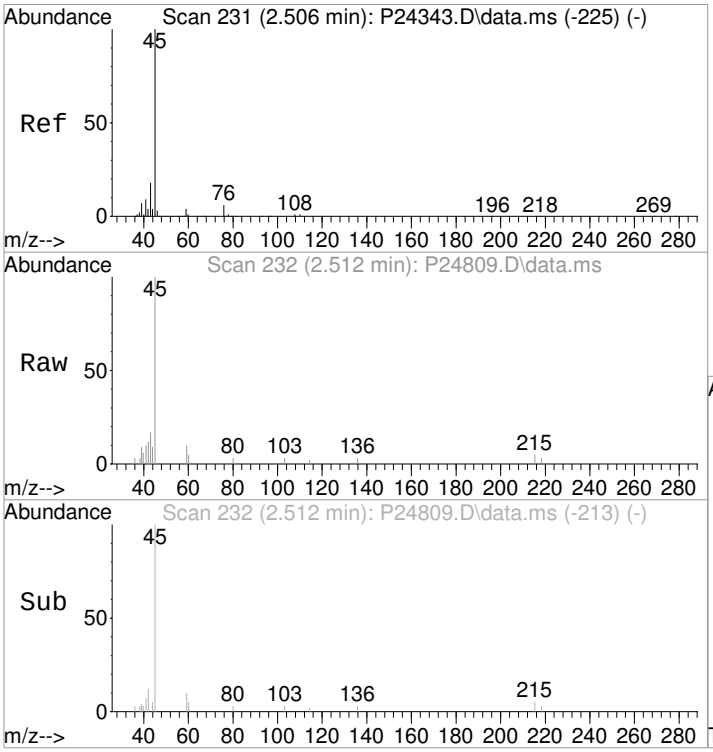


#15
Acetone
Concen: 3.18 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24809.D
Acq: 8 Mar 2019 8:12 pm

Tgt Ion: 43 Resp: 4620

Ion	Ratio	Lower	Upper
43	100		
58	28.5	18.1	58.1
42	14.9	0.0	27.8

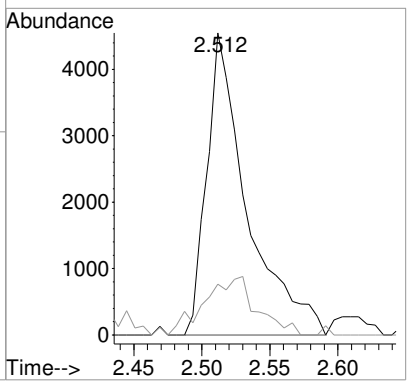


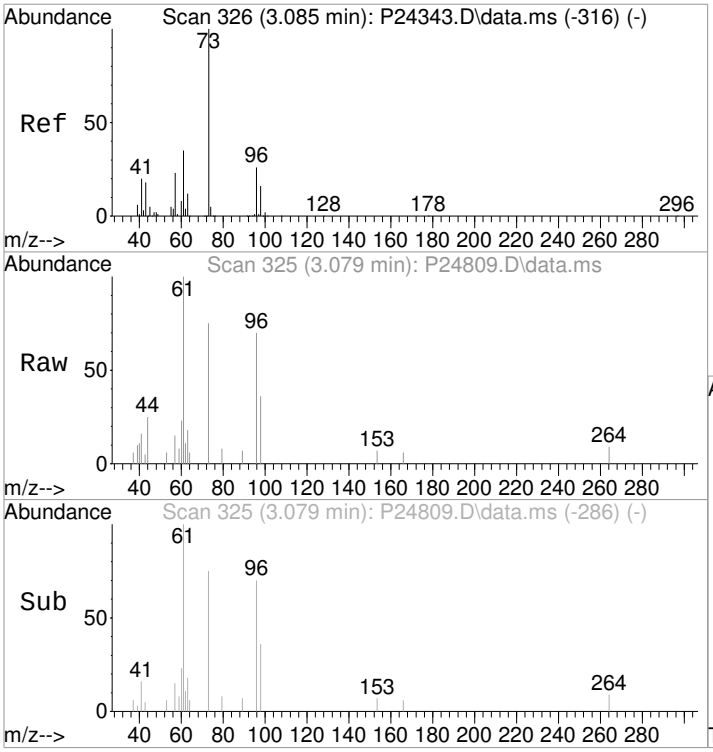


#16
2-Propanol
Concen: 24.76 ppb
RT: 2.512 min Scan# 232
Delta R.T. 0.006 min
Lab File: P24809.D
Acq: 8 Mar 2019 8:12 pm

Tgt Ion: 45 Resp: 9338

Ion	Ratio	Lower	Upper
45	100		
43	16.9	0.0	38.5

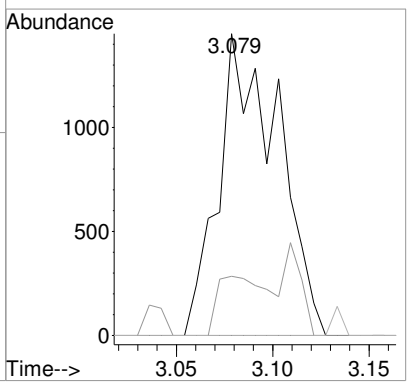


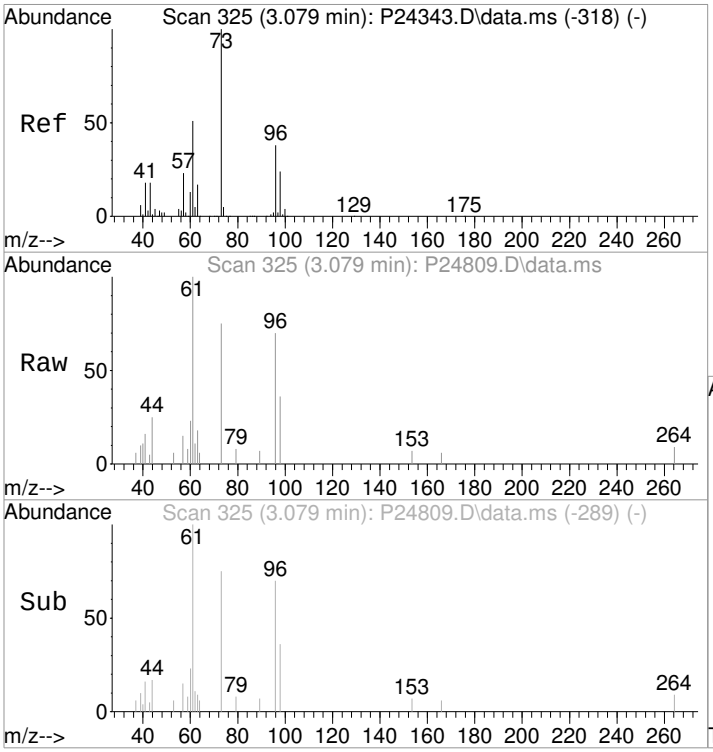


#25
Methyl-t-Butyl Ether
Concen: 0.28 ppb
RT: 3.079 min Scan# 325
Delta R.T. 0.000 min
Lab File: P24809.D
Acq: 8 Mar 2019 8:12 pm

Tgt Ion: 73 Resp: 3113

Ion	Ratio	Lower	Upper
73	100		
57	19.6	3.7	43.7
55	0.0	0.0	25.2

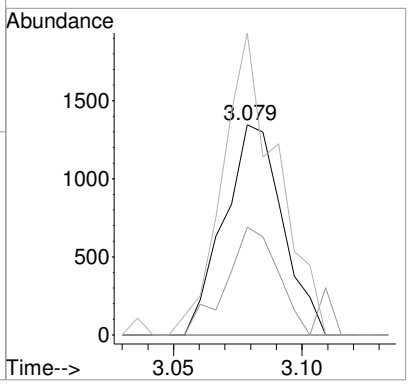


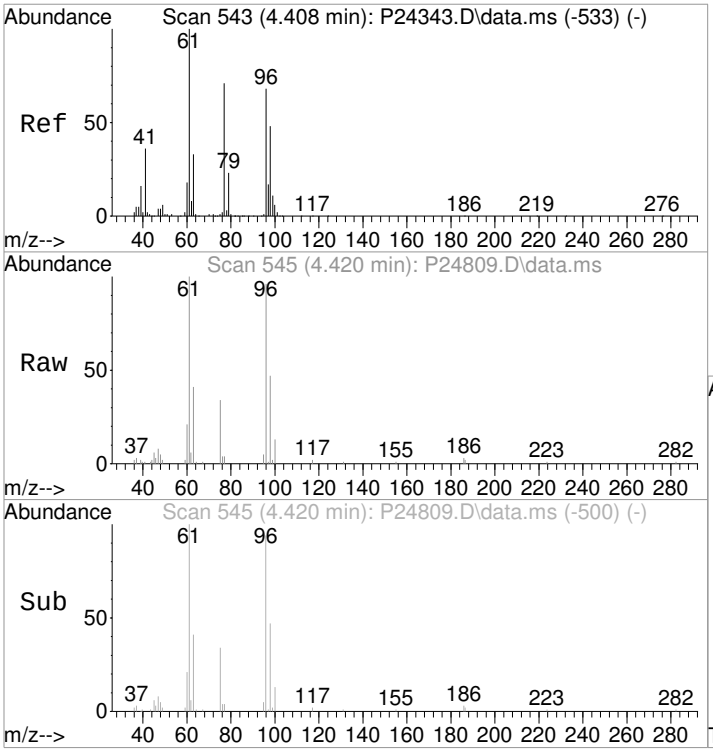


#26
trans-1,2-Dichloroethene
Concen: 0.68 ppb
RT: 3.079 min Scan# 325
Delta R.T. 0.012 min
Lab File: P24809.D
Acq: 8 Mar 2019 8:12 pm

Tgt Ion: 96 Resp: 2126

Ion	Ratio	Lower	Upper
96	100		
98	51.3	43.5	83.5
61	143.7	114.4	154.4

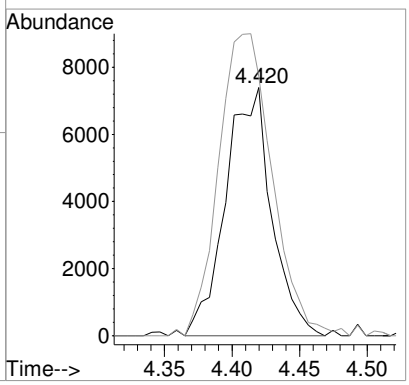


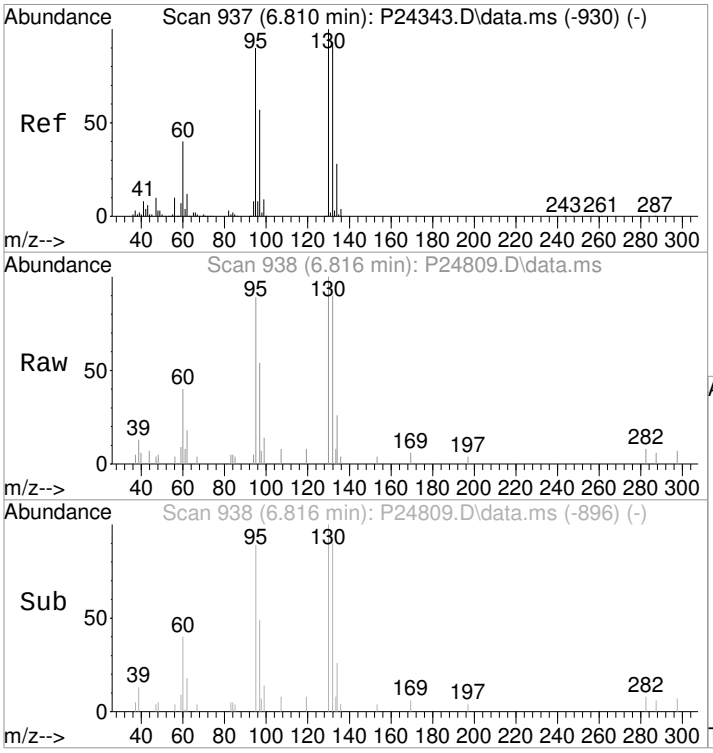


#34
cis-1,2-Dichloroethene
Concen: 4.95 ppb m
RT: 4.420 min Scan# 545
Delta R.T. 0.018 min
Lab File: P24809.D
Acq: 8 Mar 2019 8:12 pm

Tgt Ion: 96 Resp: 17454

Ion	Ratio	Lower	Upper
96	100		
61	104.6	128.1	168.1#

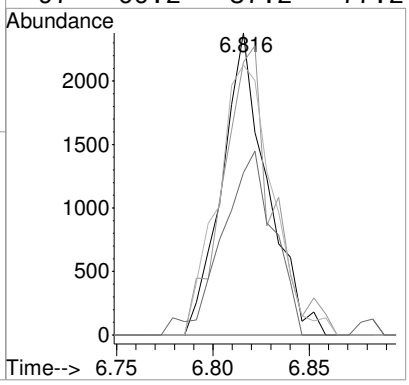




#54
Trichloroethene
Concen: 1.12 ppb
RT: 6.816 min Scan# 938
Delta R.T. 0.006 min
Lab File: P24809.D
Acq: 8 Mar 2019 8:12 pm

Tgt Ion:130 Resp: 3876

Ion	Ratio	Lower	Upper
130	100		
132	90.4	72.6	112.6
95	89.4	69.8	109.8
97	60.2	37.2	77.2

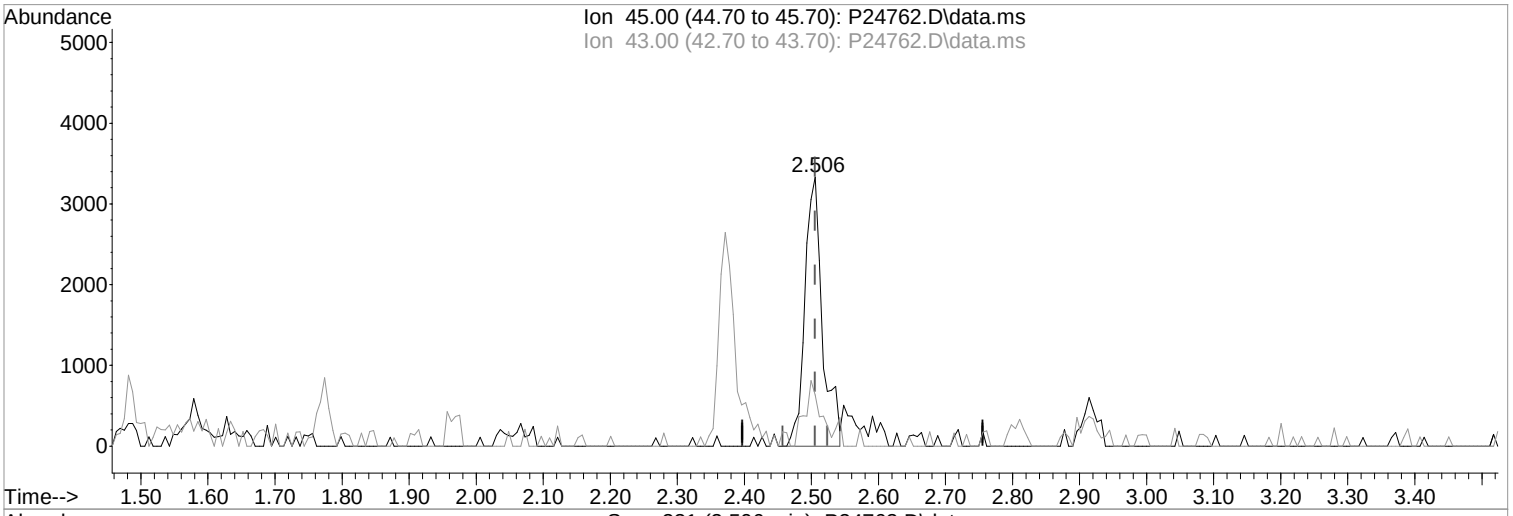


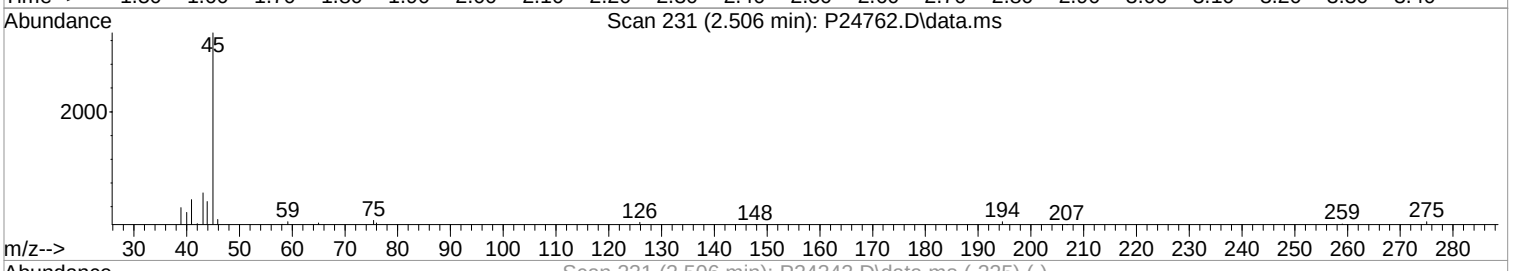
1st 03/12/19
2nd 03/12/19

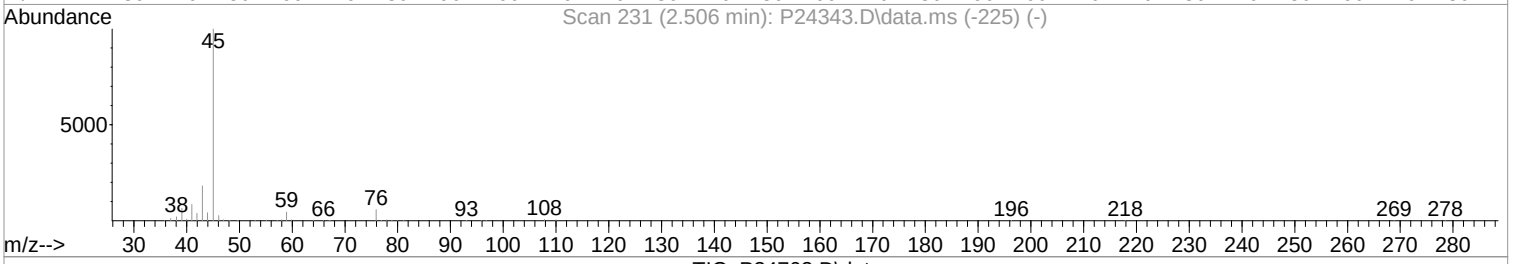
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24762.D
Acq On : 7 Mar 2019 2:30 pm
Operator : K.Ruest
Sample : R1901880-005|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 07 15:49:58 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24762.D\data.ms

(16) 2-Propanol

2.506min (+0.000) 15.91 ppb m

response 6046

Ion	Exp%	Act%
45.00	100	100
43.00	18.50	18.96
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

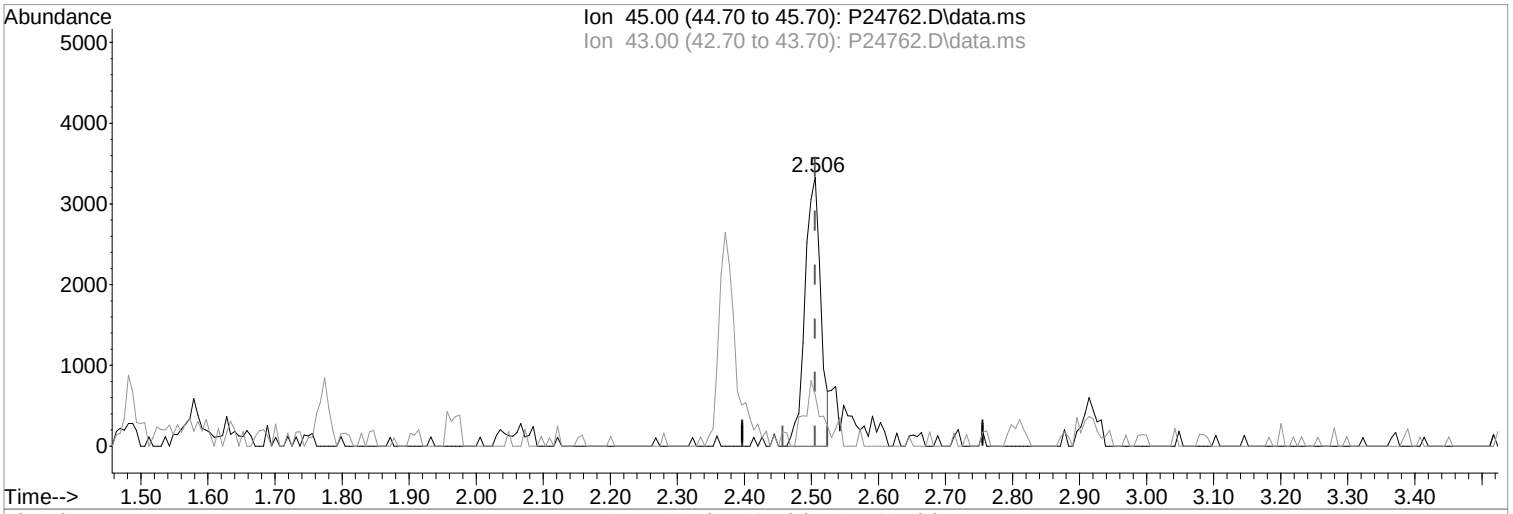
03/12/19

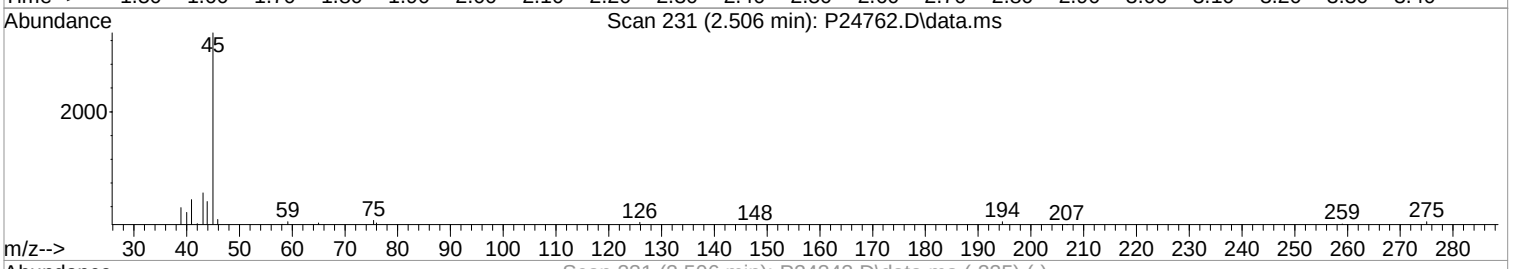
1st 03/12/19
2nd 03/12/19

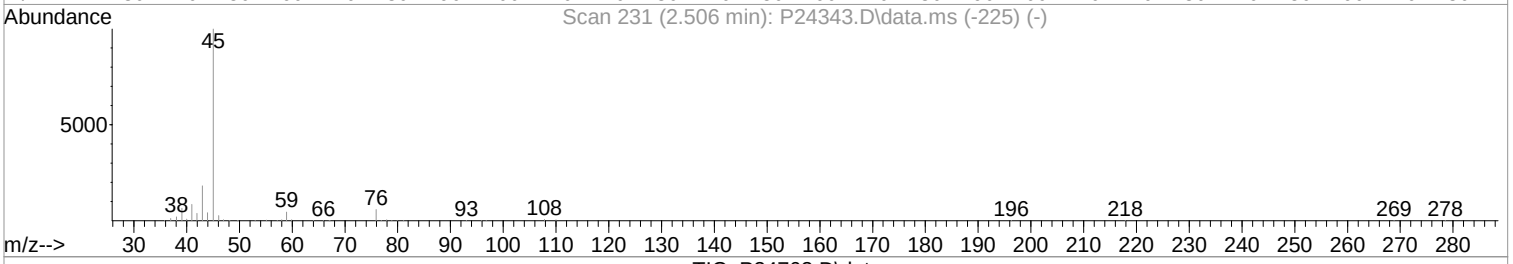
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24762.D
Acq On : 7 Mar 2019 2:30 pm
Operator : K.Ruest
Sample : R1901880-005|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 07 15:49:58 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24762.D\data.ms

(16) 2-Propanol

2.506min (+0.000) 14.35 ppb

response 5453

Ion	Exp%	Act%
45.00	100	100
43.00	18.50	18.96
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

03/12/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24762.D
Acq On : 7 Mar 2019 2:30 pm
Operator : K.Ruest
Sample : R1901880-005|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 09:36:37 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

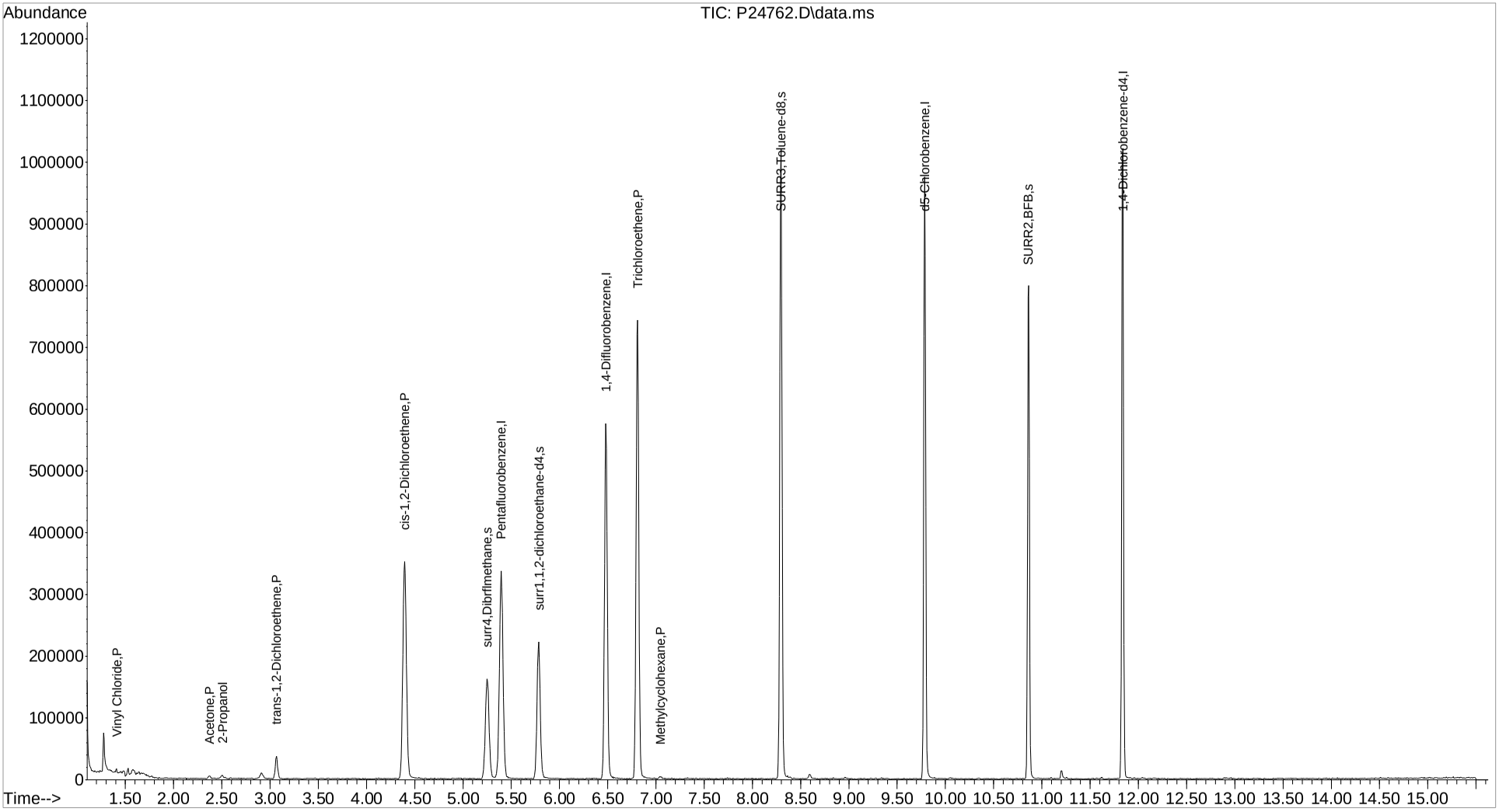
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
Internal Standards								
1) Pentafluorobenzene	5.395	168	305671	50.00	ppb		0.00	
43) 1,4-Difluorobenzene	6.480	114	503536	50.00	ppb		0.00	
71) d5-Chlorobenzene	9.785	117	432335	50.00	ppb		0.00	
86) 1,4-Dichlorobenzene-d4	11.839	152	217245	50.00	ppb		0.00	
System Monitoring Compounds								
45) surr4,Dibrflmethane	5.249	113	136894	49.47	ppb		0.00	
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.94%					
48) surr1,1,2-dichloroetha...	5.785	65	181357	51.67	ppb		0.00	
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.34%					
65) SURR3,Toluene-d8	8.297	98	657010	50.06	ppb		0.00	
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.12%					
70) SURR2,BFB	10.858	95	235906	50.18	ppb		0.00	
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.36%					
Target Compounds						Qvalue		
4) Vinyl Chloride	1.408	62	1593	0.36	ppb	#	1	(pos carry over)
15) Acetone	2.371	43	4688	3.20	ppb		82	
16) 2-Propanol	2.506	45	6046m	15.91	ppb			
26) trans-1,2-Dichloroethene	3.066	96	13546	4.27	ppb		92	
34) cis-1,2-Dichloroethene	4.395	96	209270	58.85	ppb		88	
54) Trichloroethene	6.810	130	275799	78.31	ppb		95	
55) Methylcyclohexane	7.041	55	1134	0.26	ppb	#	74	

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

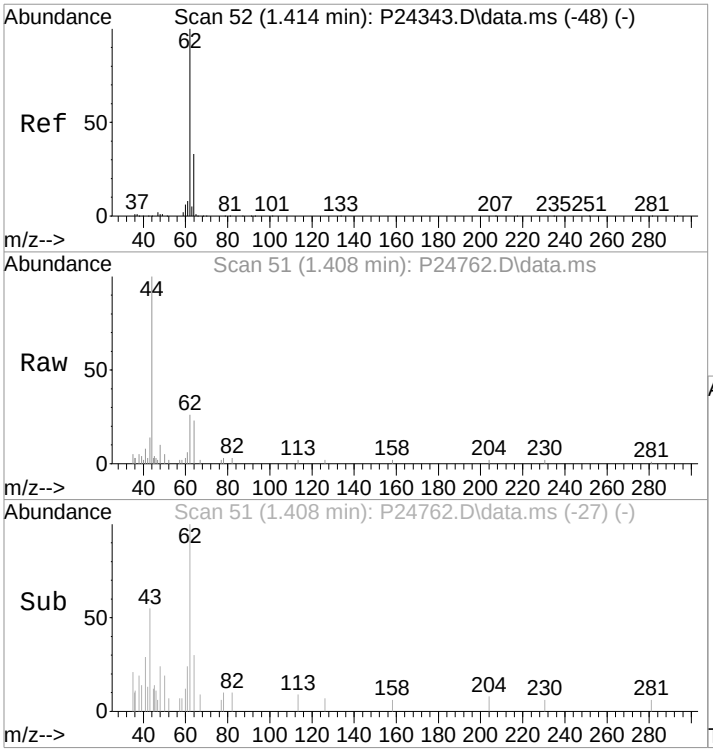
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24762.D
Acq On : 7 Mar 2019 2:30 pm
Operator : K.Ruest
Sample : R1901880-005|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 09:36:37 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



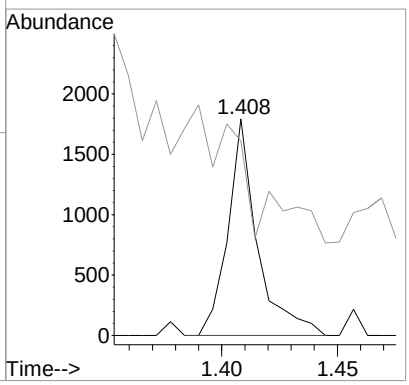
1st 03/12/19
2nd 03/12/19

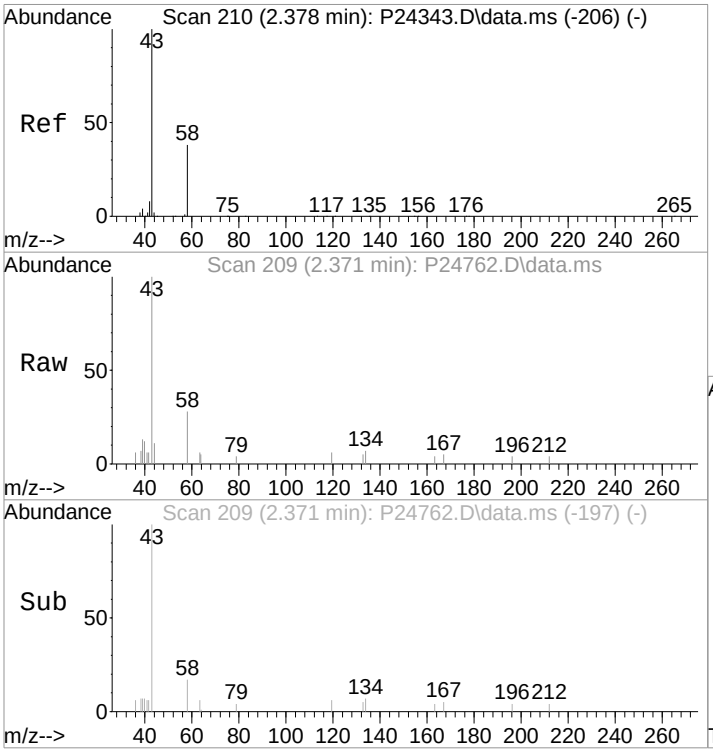


#4
Vinyl Chloride
Concen: 0.36 ppb
RT: 1.408 min Scan# 51
Delta R.T. 0.000 min
Lab File: P24762.D
Acq: 7 Mar 2019 2:30 pm

Tgt Ion: 62 Resp: 1593

Ion	Ratio	Lower	Upper
62	100		
64	89.8	13.2	53.2#

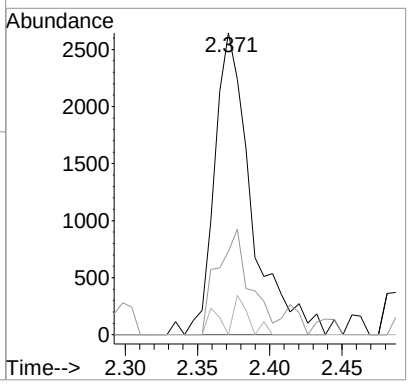


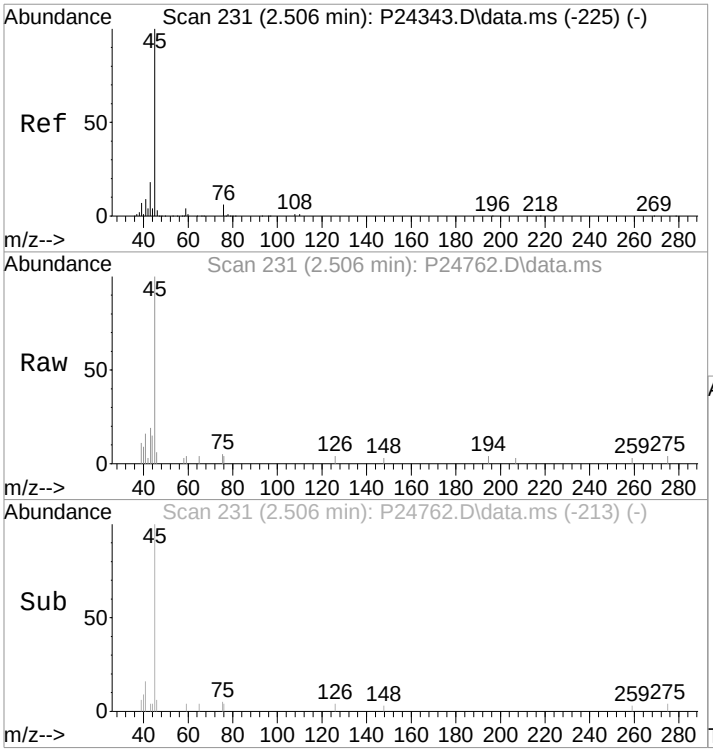


#15
Acetone
Concen: 3.20 ppb
RT: 2.371 min Scan# 209
Delta R.T. 0.000 min
Lab File: P24762.D
Acq: 7 Mar 2019 2:30 pm

Tgt Ion: 43 Resp: 4688

Ion	Ratio	Lower	Upper
43	100		
58	27.6	18.1	58.1
42	0.0	0.0	27.8

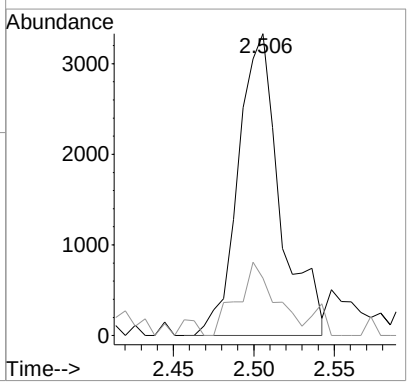


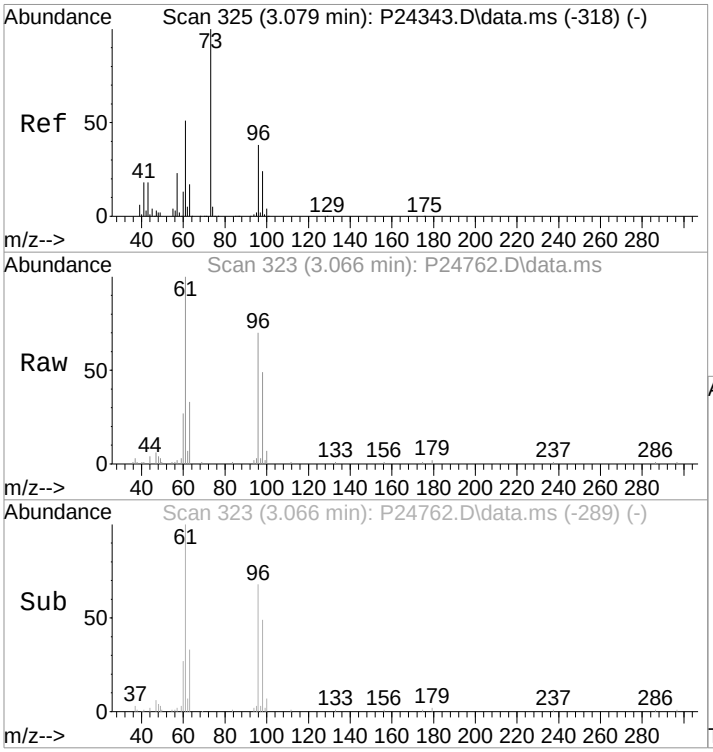


#16
2-Propanol
Concen: 15.91 ppb m
RT: 2.506 min Scan# 231
Delta R.T. 0.000 min
Lab File: P24762.D
Acq: 7 Mar 2019 2:30 pm

Tgt Ion: 45 Resp: 6046

Ion	Ratio	Lower	Upper
45	100		
43	19.0	0.0	38.5

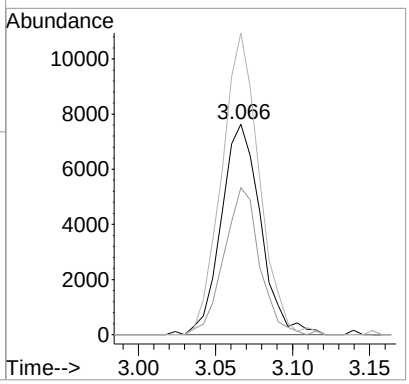


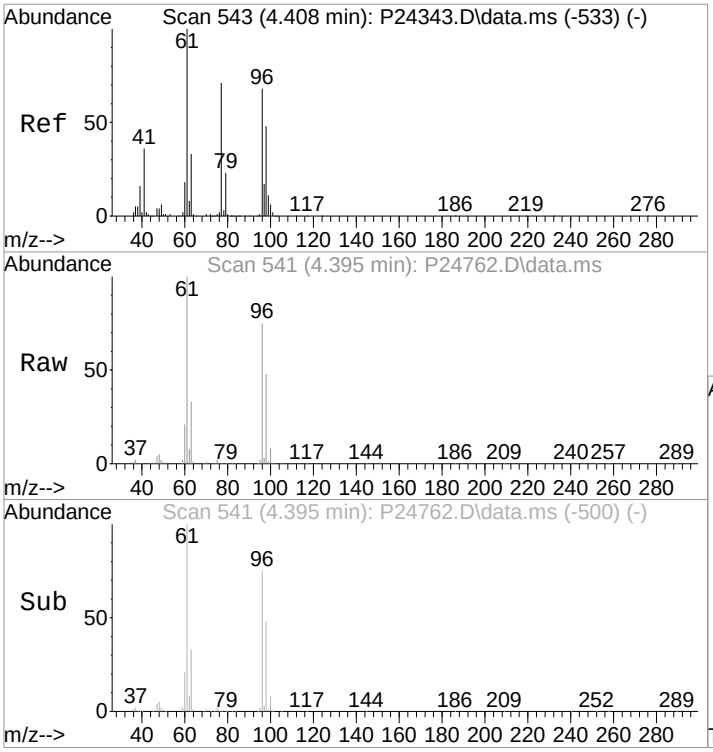


#26
trans-1,2-Dichloroethene
Concen: 4.27 ppb
RT: 3.066 min Scan# 323
Delta R.T. 0.000 min
Lab File: P24762.D
Acq: 7 Mar 2019 2:30 pm

Tgt Ion: 96 Resp: 13546

Ion	Ratio	Lower	Upper
96	100		
98	69.9	43.5	83.5
61	143.3	114.4	154.4

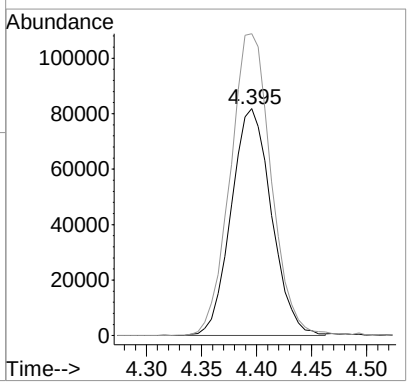


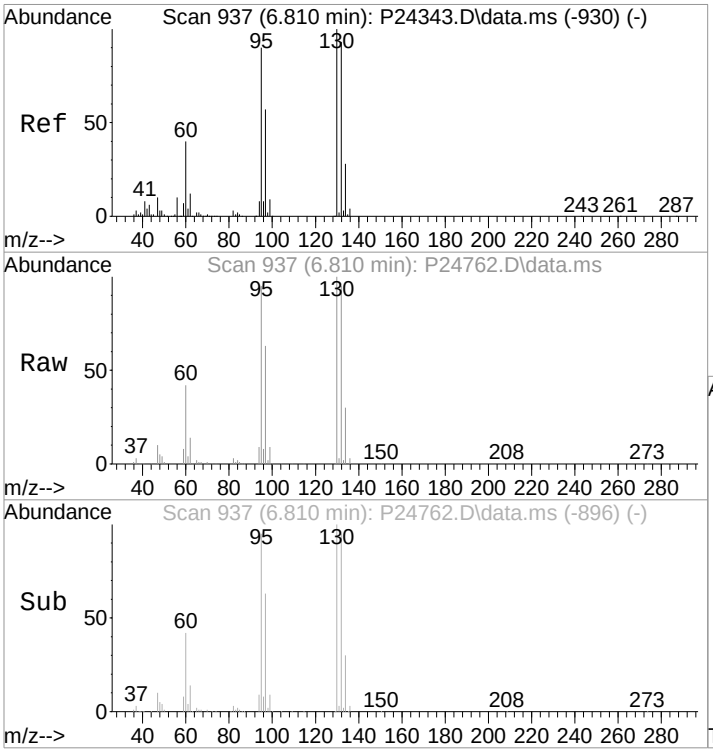


#34
cis-1,2-Dichloroethene
Concen: 58.85 ppb
RT: 4.395 min Scan# 541
Delta R.T. -0.006 min
Lab File: P24762.D
Acq: 7 Mar 2019 2:30 pm

Tgt Ion: 96 Resp: 209270

Ion	Ratio	Lower	Upper
96	100		
61	133.1	128.1	168.1

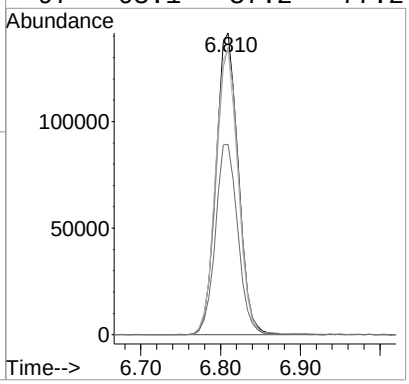


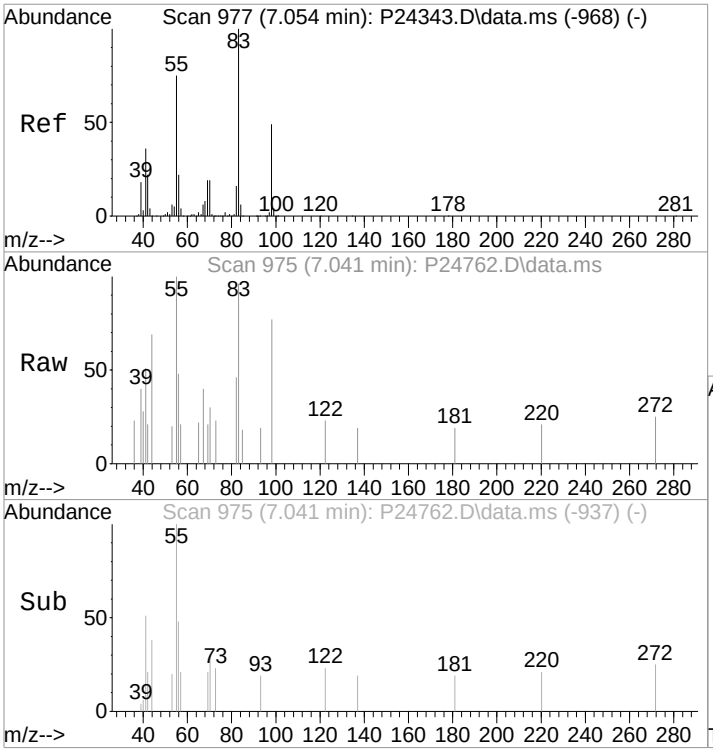


#54
Trichloroethene
Concen: 78.31 ppb
RT: 6.810 min Scan# 937
Delta R.T. 0.000 min
Lab File: P24762.D
Acq: 7 Mar 2019 2:30 pm

Tgt Ion:130 Resp: 275799

Ion	Ratio	Lower	Upper
130	100		
132	95.4	72.6	112.6
95	94.7	69.8	109.8
97	63.1	37.2	77.2

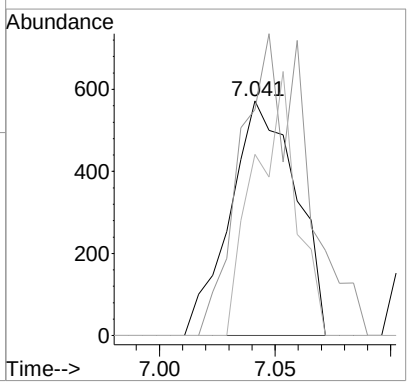




#55
Methylcyclohexane
Concen: 0.26 ppb
RT: 7.041 min Scan# 975
Delta R.T. -0.006 min
Lab File: P24762.D
Acq: 7 Mar 2019 2:30 pm

Tgt Ion: 55 Resp: 1134

Ion	Ratio	Lower	Upper
55	100		
83	96.3	113.1	153.1#
98	77.3	45.0	85.0

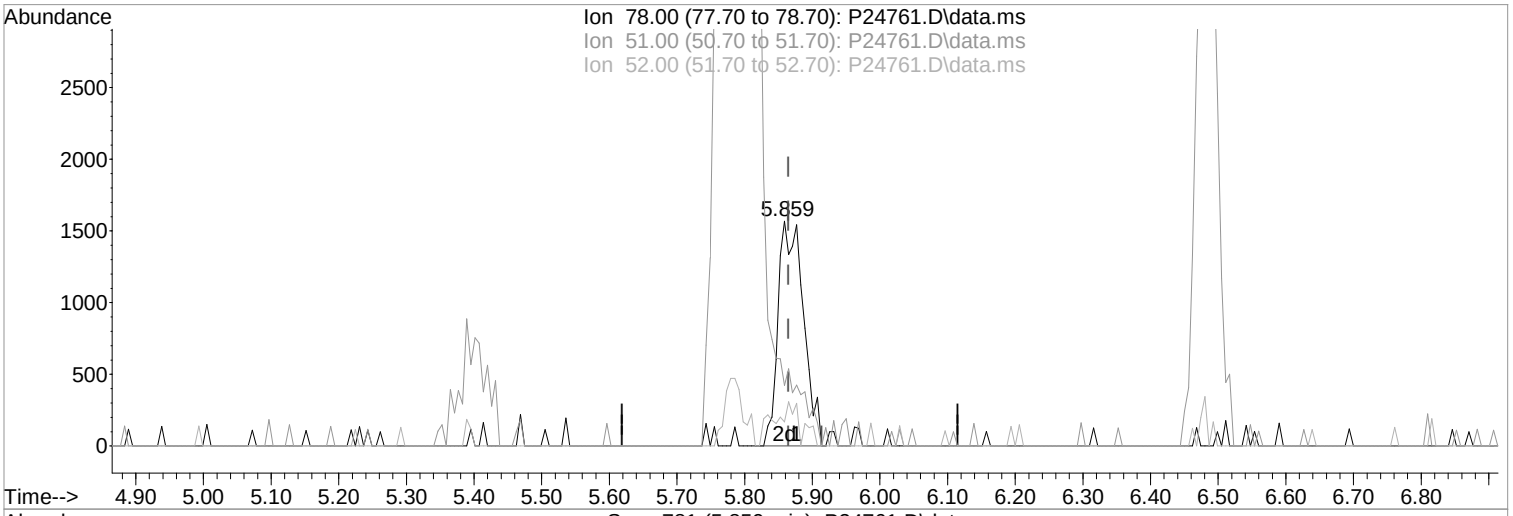


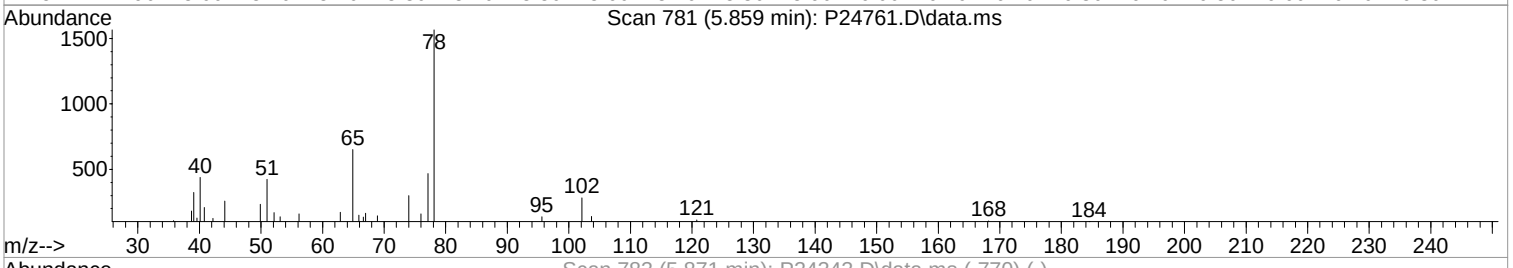
1st 03/12/19
2nd 03/12/19

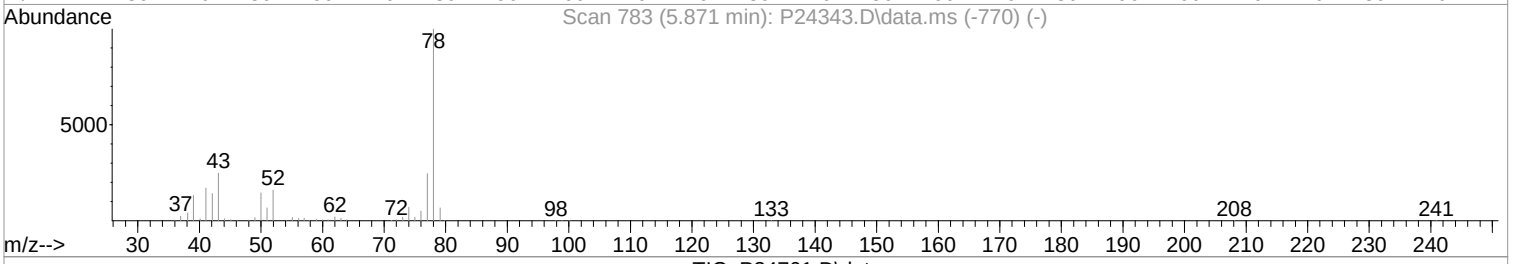
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24761.D
Acq On : 7 Mar 2019 2:09 pm
Operator : K.Ruest
Sample : R1901880-006|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 07 15:26:20 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24761.D\data.ms

(49) Benzene (P)

5.859min (-0.006) 0.28 ppb m

response 4074

Ion	Exp%	Act%
78.00	100	100
51.00	16.00	26.99
52.00	16.20	10.78
0.00	0.00	0.00

Manual Integration:

After

Split Peak

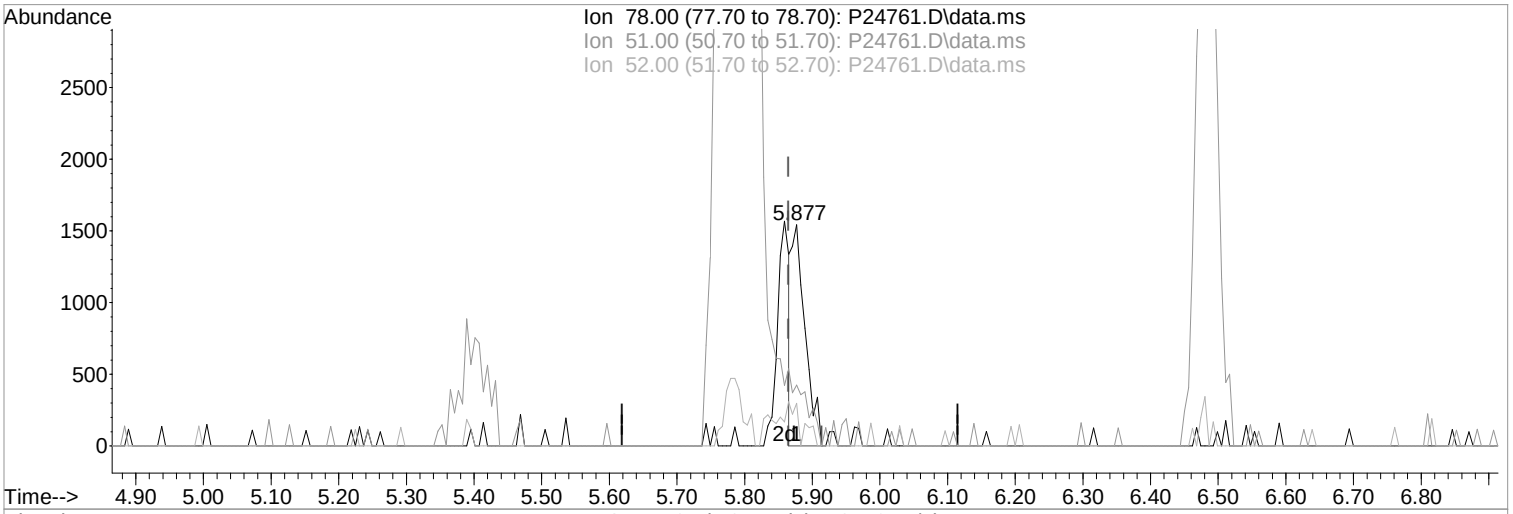
03/12/19

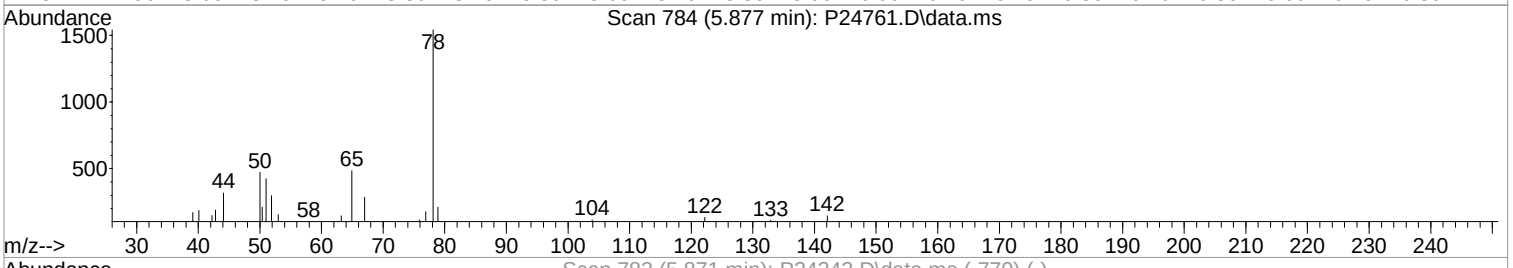
1st 03/12/19
2nd 03/12/19

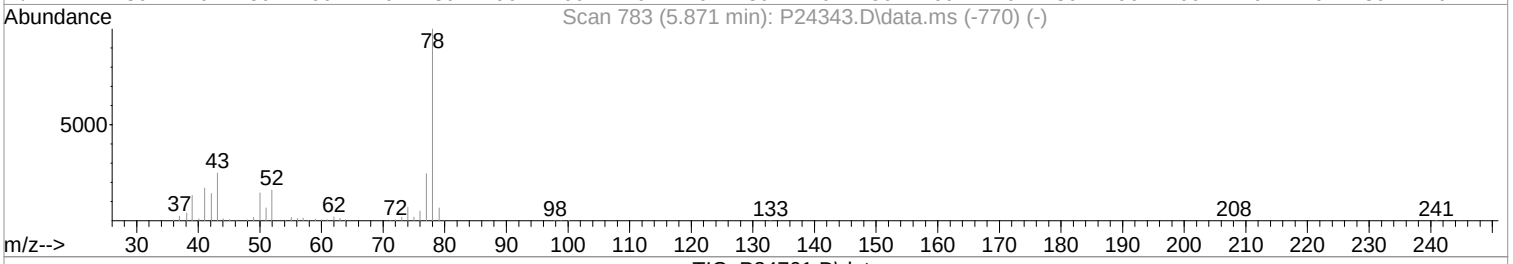
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24761.D
Acq On : 7 Mar 2019 2:09 pm
Operator : K.Ruest
Sample : R1901880-006|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 07 15:26:20 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24761.D\data.ms

(49) Benzene (P)

5.877min (+0.012) 0.15 ppb

response 2181

Ion	Exp%	Act%
78.00	100	100
51.00	16.00	27.54
52.00	16.20	19.25
0.00	0.00	0.00

Manual Integration:

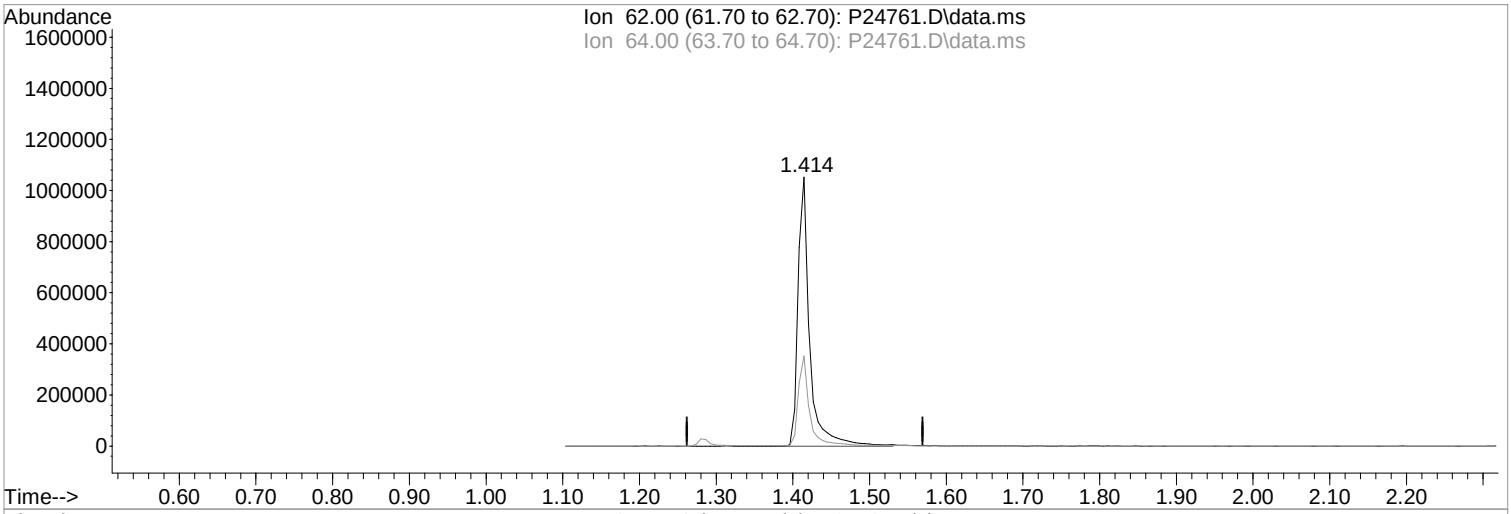
Before

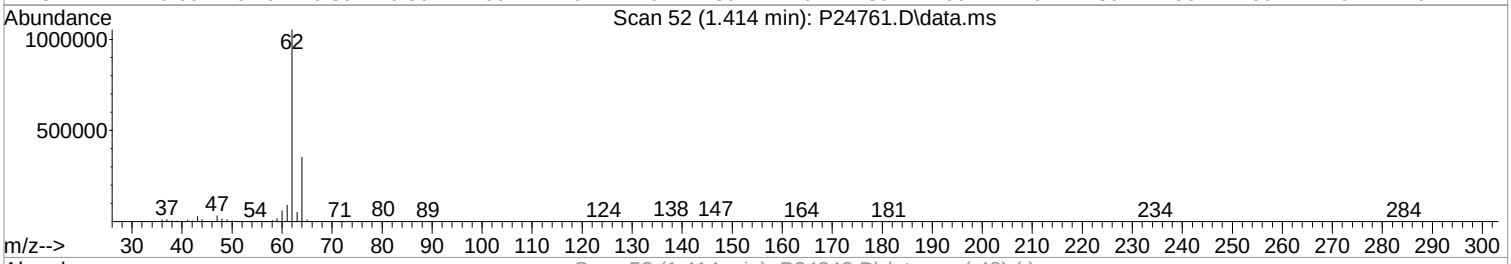
03/12/19

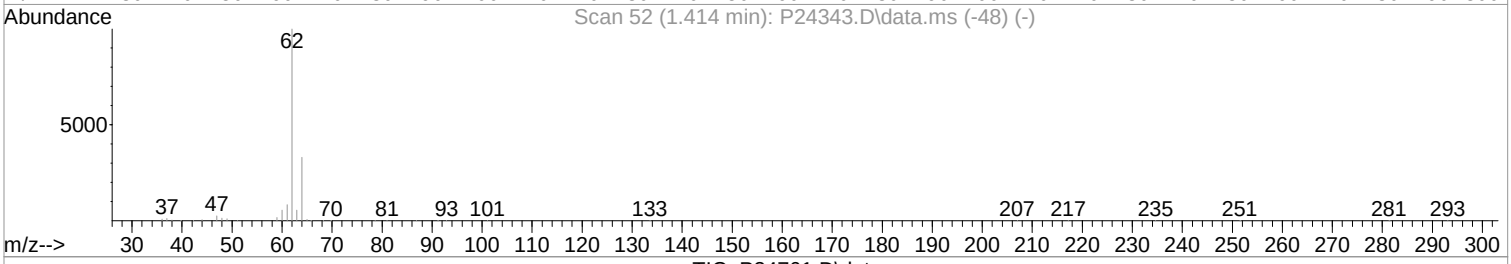
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24761.D
Acq On : 7 Mar 2019 2:09 pm
Operator : K.Ruest
Sample : R1901880-006|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 07 15:26:20 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24761.D\data.ms

(4) Vinyl Chloride (P)

1.414min (+0.006) 243.76 ppb m

response 1114653

Ion	Exp%	Act%
62.00	100	100
64.00	33.20	33.54
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

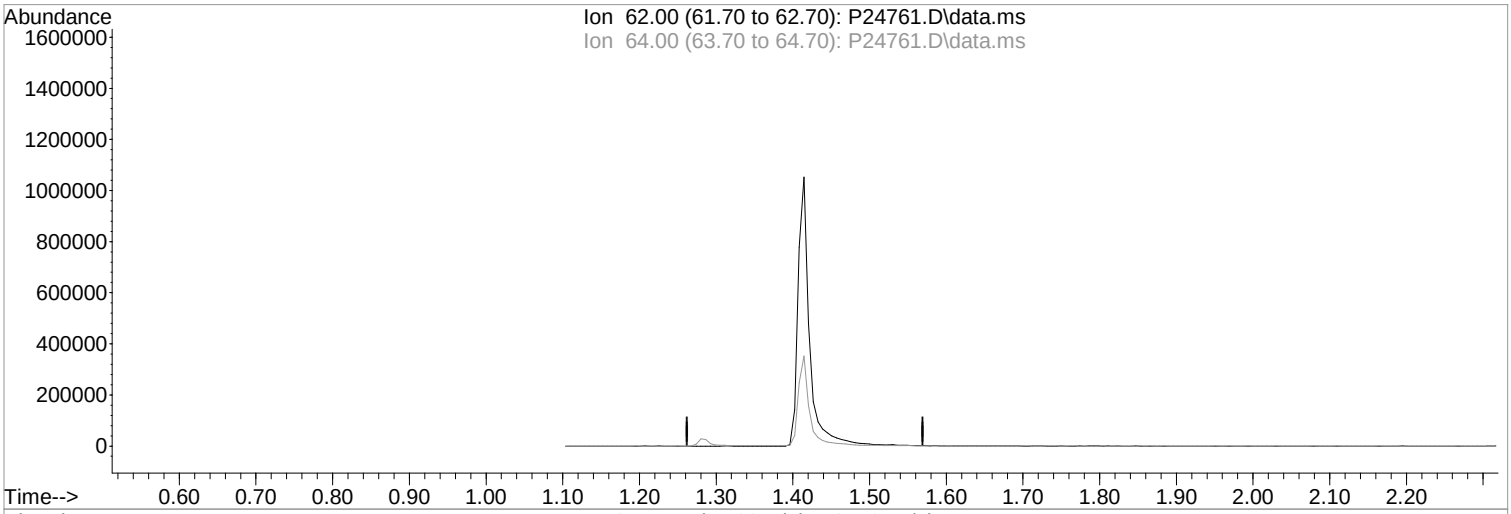
Peak not found.

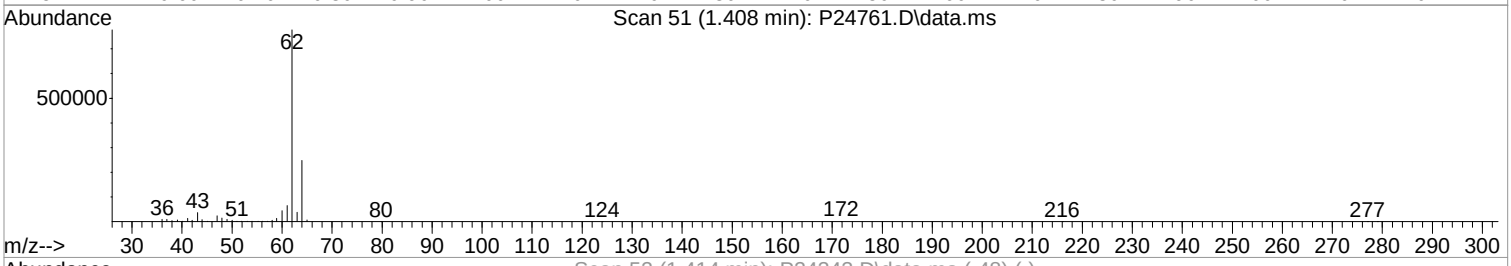
03/12/19

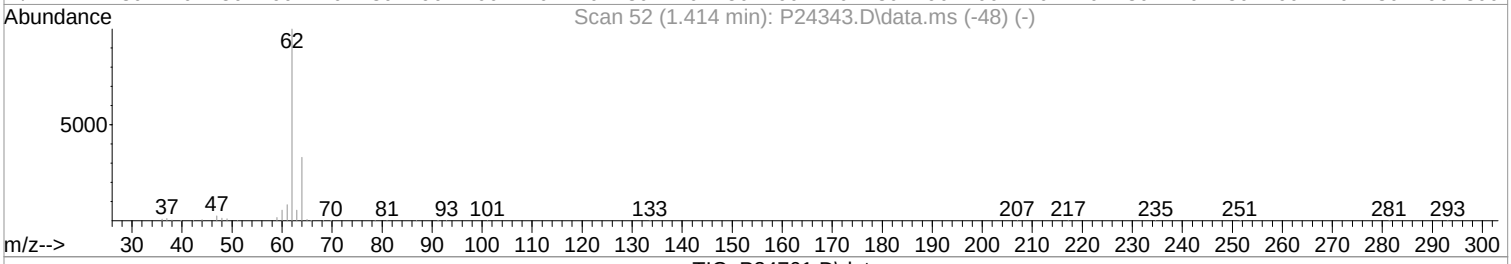
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24761.D
Acq On : 7 Mar 2019 2:09 pm
Operator : K.Ruest
Sample : R1901880-006|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 07 15:26:20 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24761.D\data.ms

(4) Vinyl Chloride (P)

1.408min (-1.408) 0.00 ppb

response 0

Ion	Exp%	Act%
62.00	100	0.00
64.00	33.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

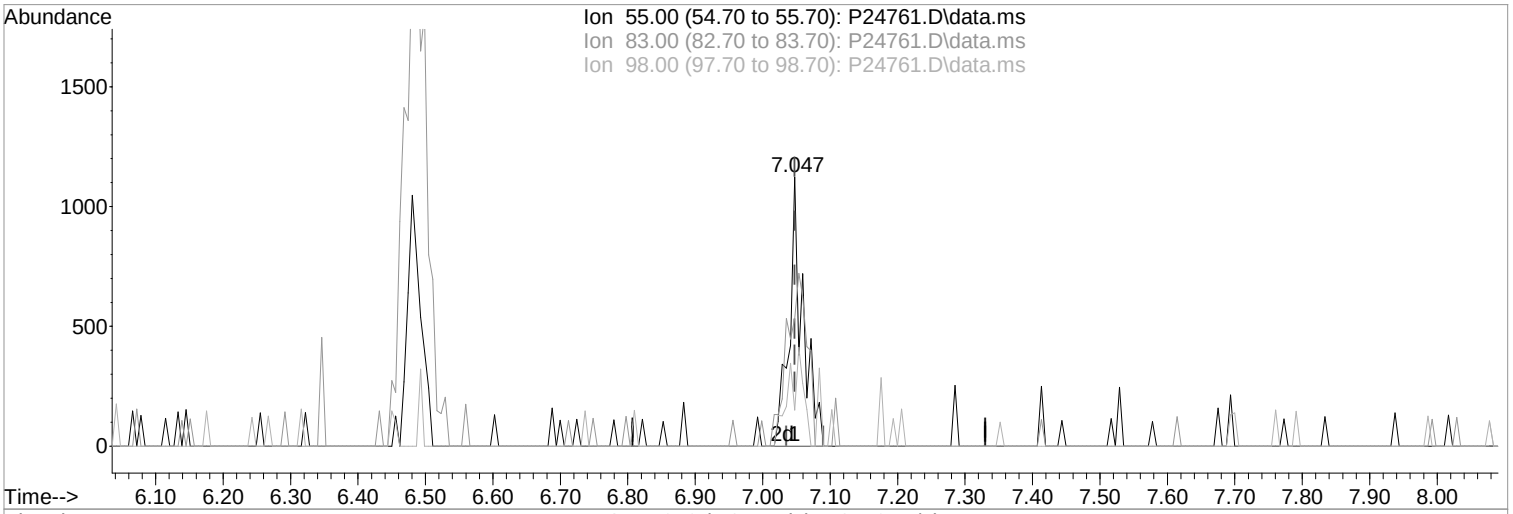
Before

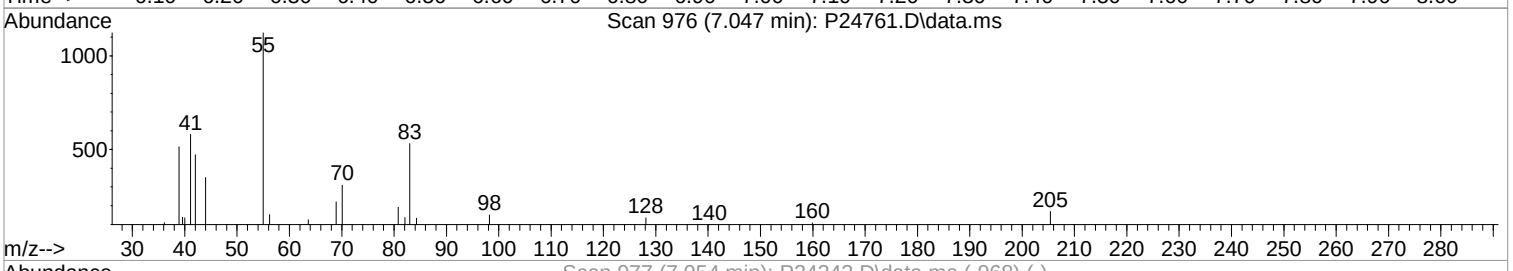
03/12/19

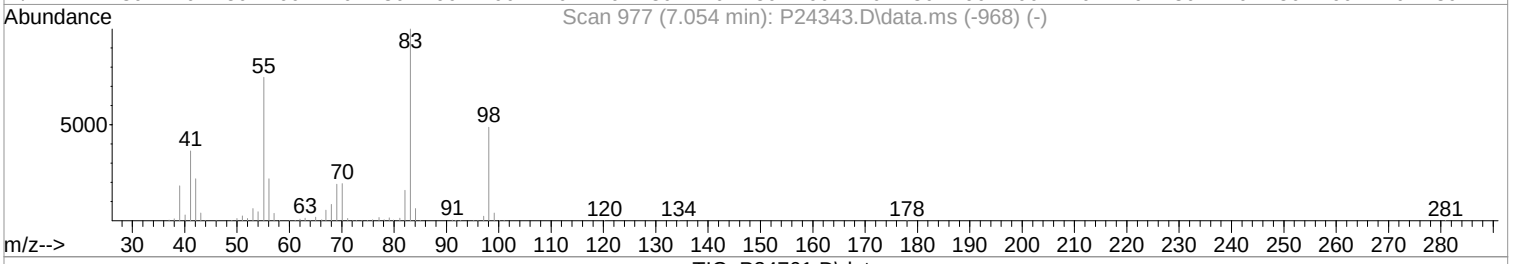
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24761.D
Acq On : 7 Mar 2019 2:09 pm
Operator : K.Ruest
Sample : R1901880-006|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 07 15:26:20 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24761.D\data.ms

(55) Methylcyclohexane (P)

7.047min (+0.000) 0.36 ppb m

response 1597

Ion	Exp%	Act%
55.00	100	100
83.00	133.10	47.37#
98.00	65.00	13.45#
0.00	0.00	0.00

Manual Integration:

After

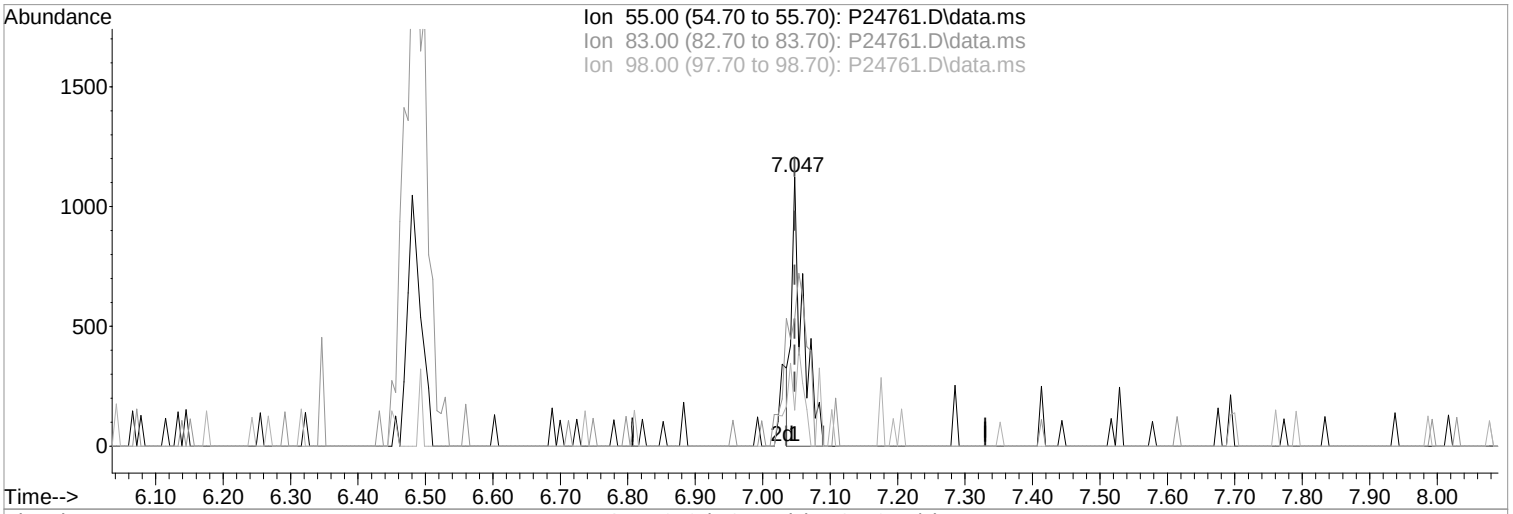
Split Peak

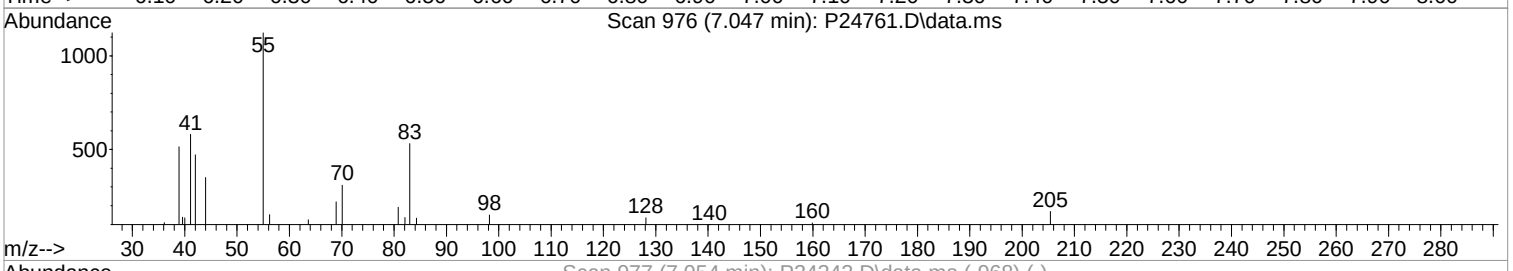
03/12/19

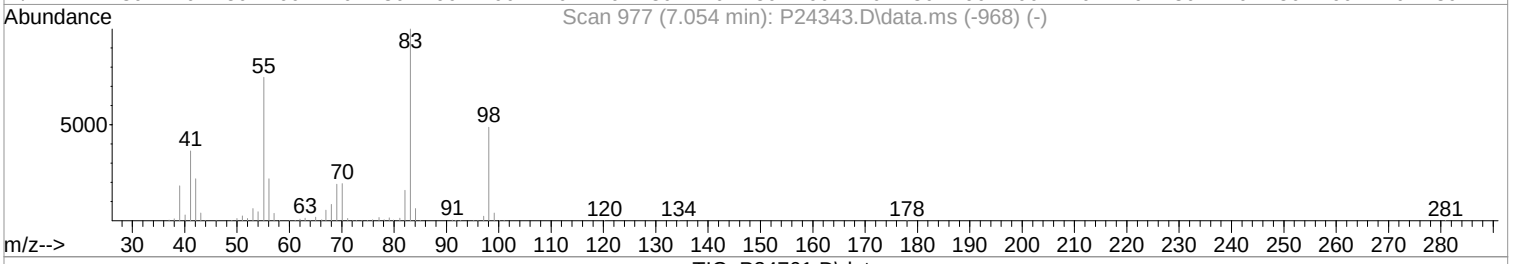
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24761.D
Acq On : 7 Mar 2019 2:09 pm
Operator : K.Ruest
Sample : R1901880-006|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 07 15:26:20 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24761.D\data.ms

(55) Methylcyclohexane (P)

7.047min (+0.000) 0.29 ppb

response 1315

Ion	Exp%	Act%
55.00	100	100
83.00	133.10	47.37#
98.00	65.00	13.45#
0.00	0.00	0.00

Manual Integration:

Before

03/12/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24761.D
Acq On : 7 Mar 2019 2:09 pm
Operator : K.Ruest
Sample : R1901880-006|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 12 09:27:17 2019 repeat 10
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

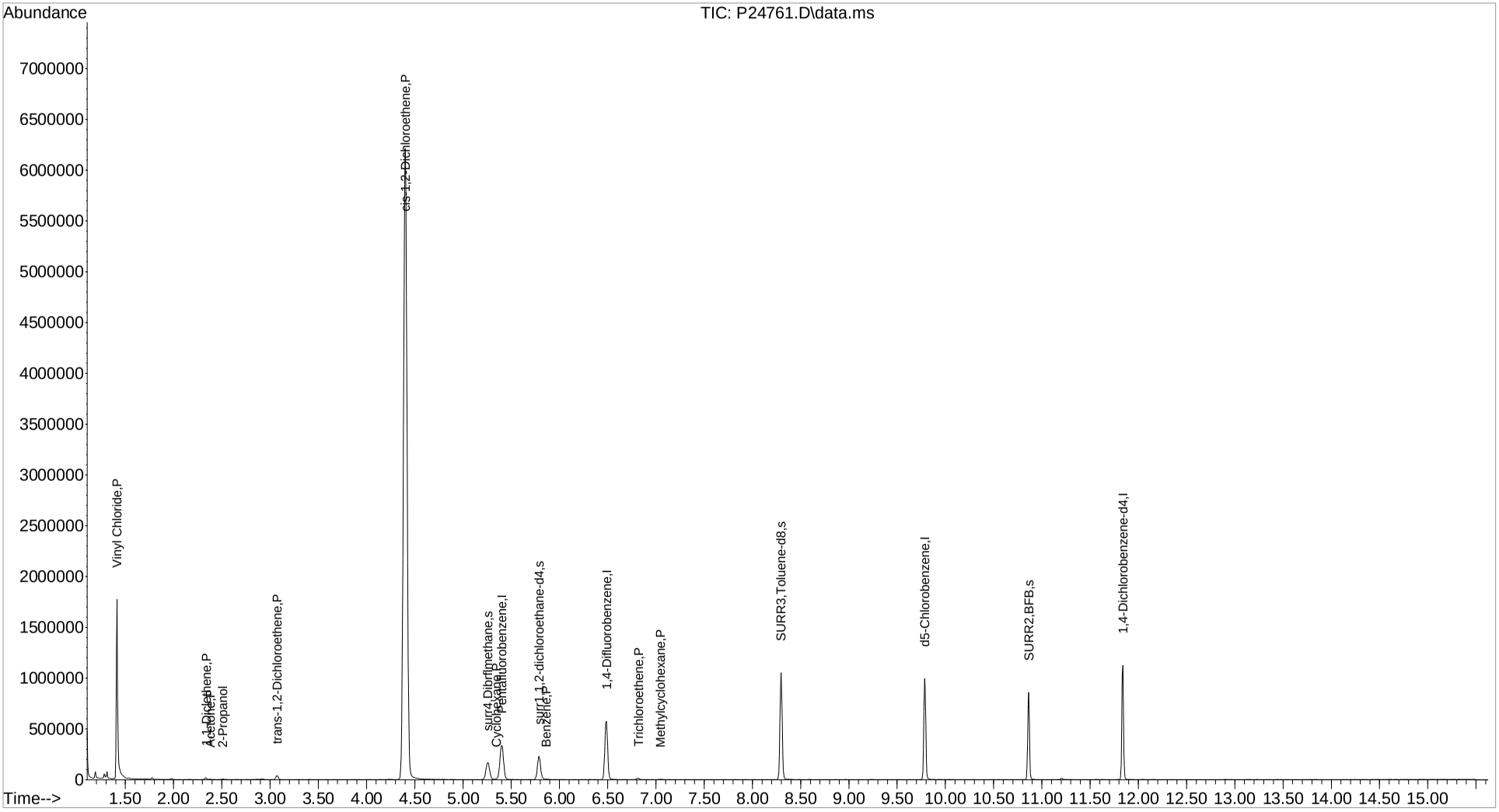
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.401	168	314625	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.487	114	507585	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	446741	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	229300	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	144915	51.95	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.90%				
48) surr1,1,2-dichloroetha...	5.785	65	189333	53.51	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 107.02%				
65) SURR3,Toluene-d8	8.297	98	666209	50.35	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.70%				
70) SURR2,BFB	10.864	95	239222	50.48	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.96%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.414	62	1114653m	243.76	ppb		E-Over Calibration
13) 1,1-Diclethene	2.335	96	5621	1.92	ppb		95
15) Acetone	2.378	43	4625	3.07	ppb		83
16) 2-Propanol	2.506	45	5343	13.66	ppb		75
26) trans-1,2-Dichloroethene	3.073	96	14399	4.41	ppb	#	85
34) cis-1,2-Dichloroethene	4.402	96	3693944	1009.17	ppb		87 E-Over Calibration
44) Cyclohexane	5.346	41	2116	0.71	ppb		84
49) Benzene	5.859	78	4074m	0.28	ppb		
54) Trichloroethene	6.816	130	5691	1.60	ppb		87
55) Methylcyclohexane	7.047	55	1597m	0.36	ppb		

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

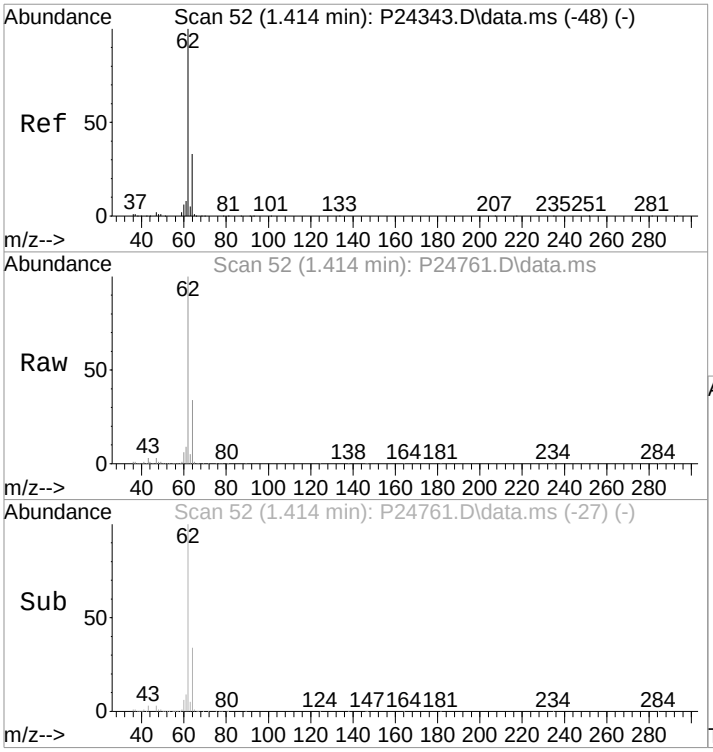
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24761.D
Acq On : 7 Mar 2019 2:09 pm
Operator : K.Ruest
Sample : R1901880-006|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 12 09:27:17 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



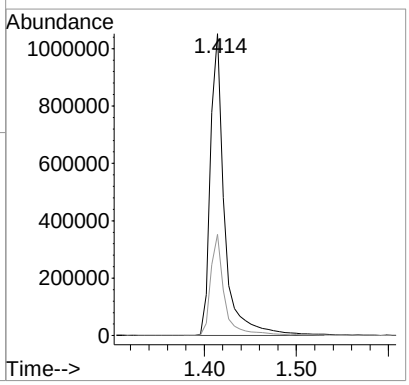
1st 03/12/19
2nd 03/12/19

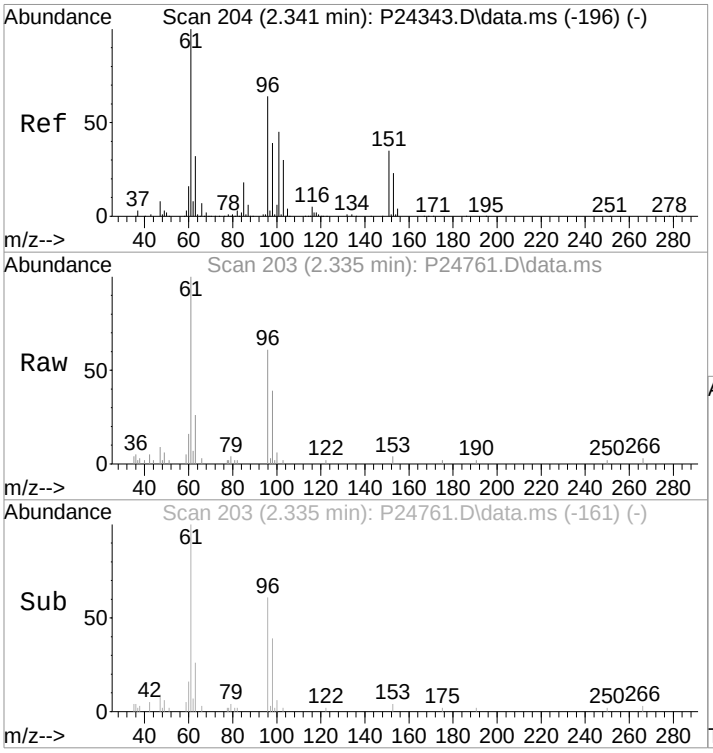


#4
Vinyl Chloride
Concen: 243.76 ppb m
RT: 1.414 min Scan# 52
Delta R.T. 0.006 min
Lab File: P24761.D
Acq: 7 Mar 2019 2:09 pm

Tgt Ion: 62 Resp: 1114653

Ion	Ratio	Lower	Upper
62	100		
64	33.5	13.2	53.2

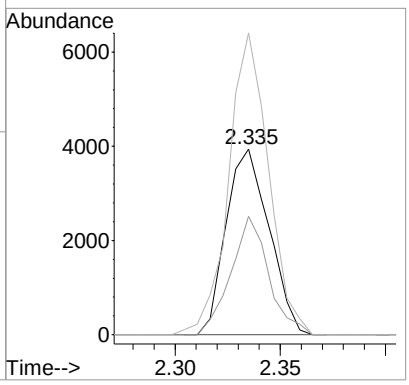


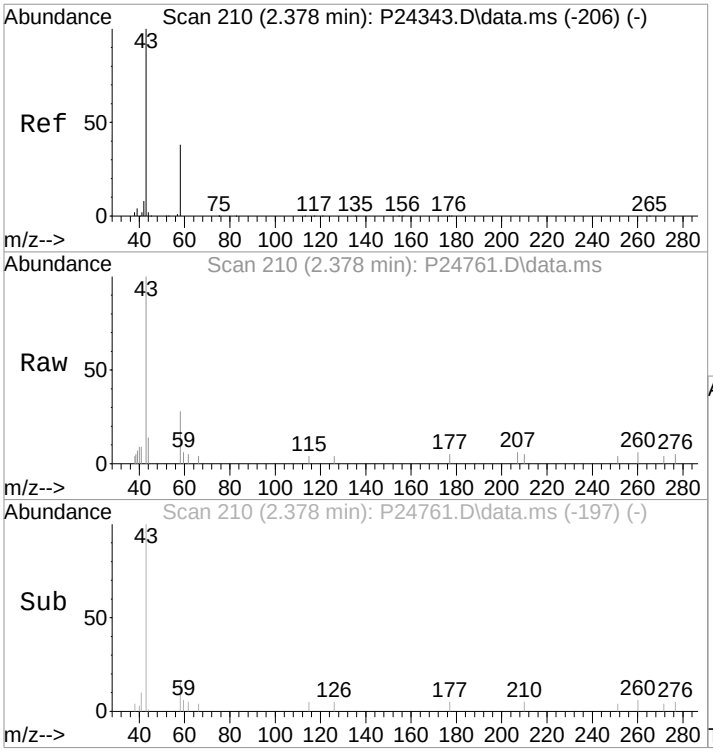


#13
1,1-Diclethene
Concen: 1.92 ppb
RT: 2.335 min Scan# 203
Delta R.T. 0.006 min
Lab File: P24761.D
Acq: 7 Mar 2019 2:09 pm

Tgt Ion: 96 Resp: 5621

Ion	Ratio	Lower	Upper
96	100		
98	63.9	40.8	80.8
61	162.7	136.2	176.2

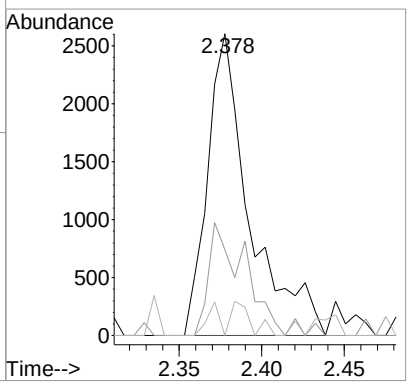


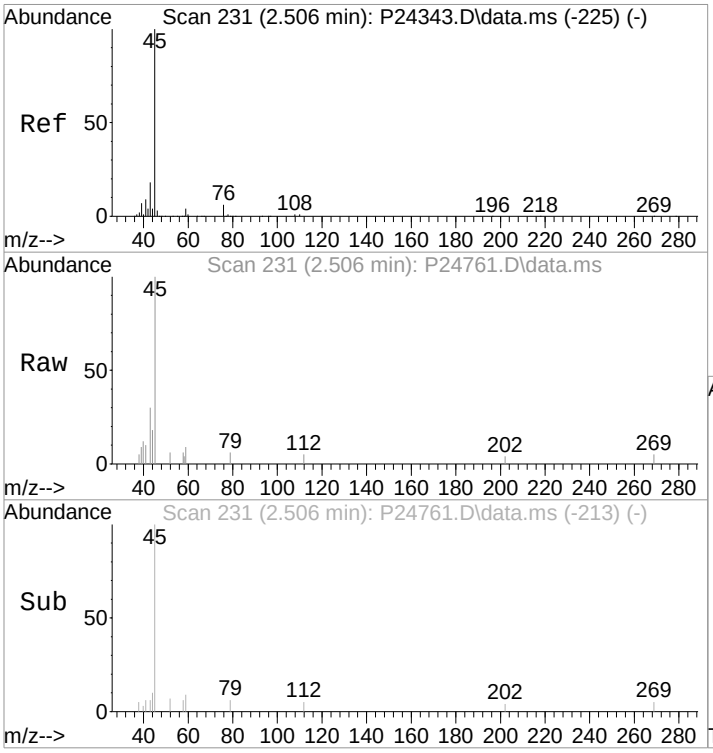


#15
Acetone
Concen: 3.07 ppb
RT: 2.378 min Scan# 210
Delta R.T. 0.006 min
Lab File: P24761.D
Acq: 7 Mar 2019 2:09 pm

Tgt Ion: 43 Resp: 4625

Ion	Ratio	Lower	Upper
43	100		
58	28.5	18.1	58.1
42	0.0	0.0	27.8

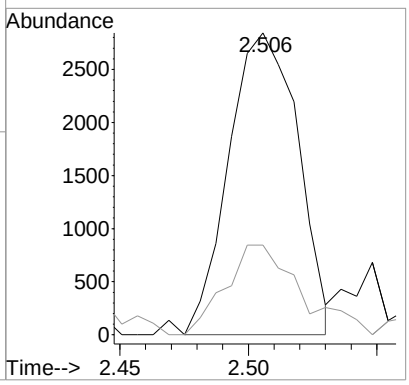


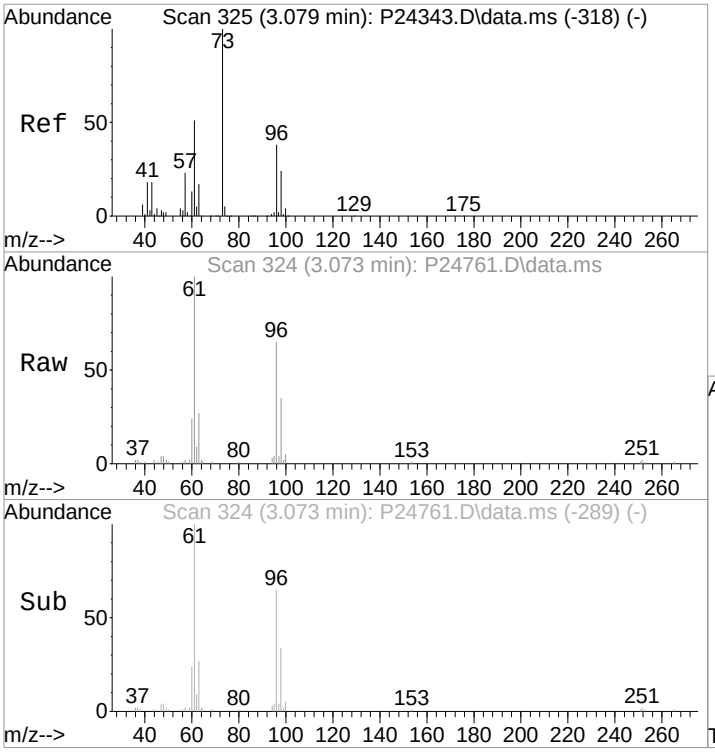


#16
2-Propanol
Concen: 13.66 ppb
RT: 2.506 min Scan# 231
Delta R.T. 0.000 min
Lab File: P24761.D
Acq: 7 Mar 2019 2:09 pm

Tgt Ion: 45 Resp: 5343

Ion	Ratio	Lower	Upper
45	100		
43	29.7	0.0	38.5

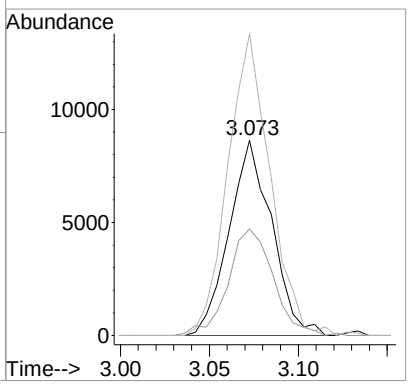


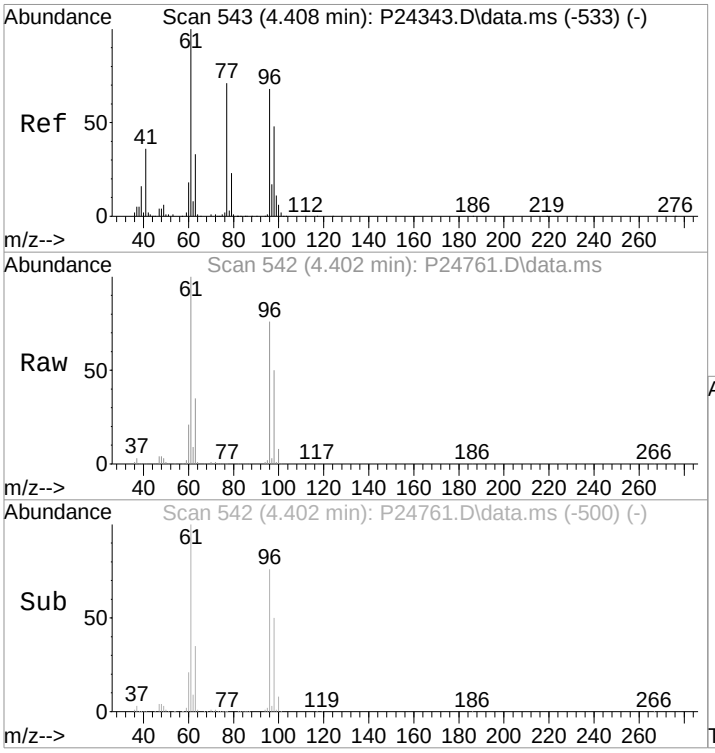


#26
trans-1,2-Dichloroethene
Concen: 4.41 ppb
RT: 3.073 min Scan# 324
Delta R.T. 0.006 min
Lab File: P24761.D
Acq: 7 Mar 2019 2:09 pm

Tgt Ion: 96 Resp: 14399

Ion	Ratio	Lower	Upper
96	100		
98	54.6	43.5	83.5
61	154.6	114.4	154.4#

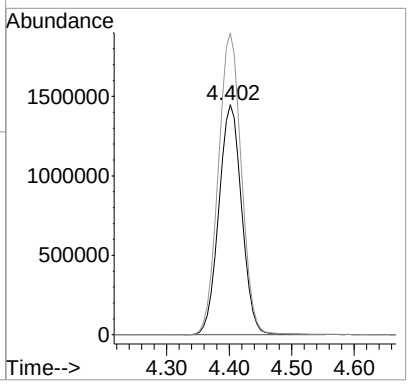


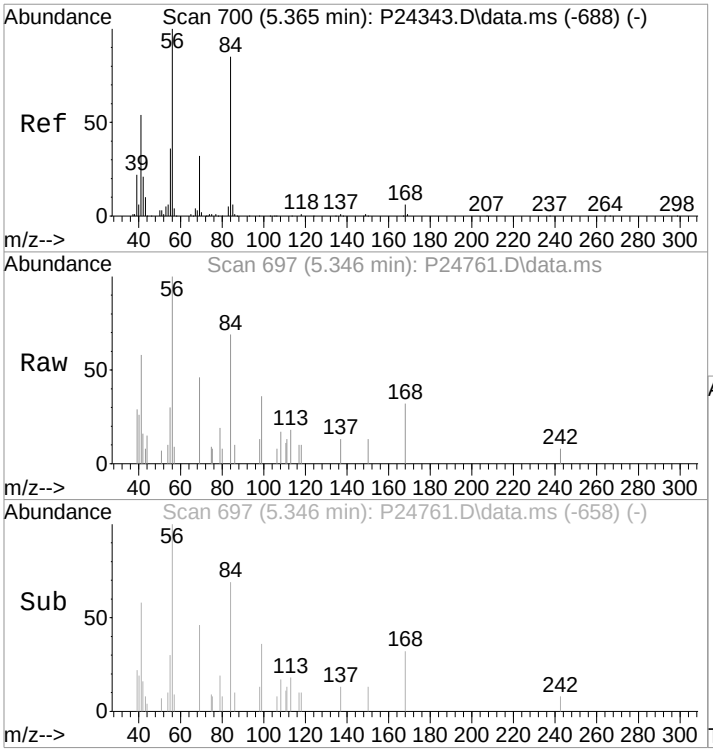


#34
cis-1,2-Dichloroethene
Concen: 1009.17 ppb
RT: 4.402 min Scan# 542
Delta R.T. 0.000 min
Lab File: P24761.D
Acq: 7 Mar 2019 2:09 pm

Tgt Ion: 96 Resp: 3693944

Ion	Ratio	Lower	Upper
96	100		
61	131.3	128.1	168.1

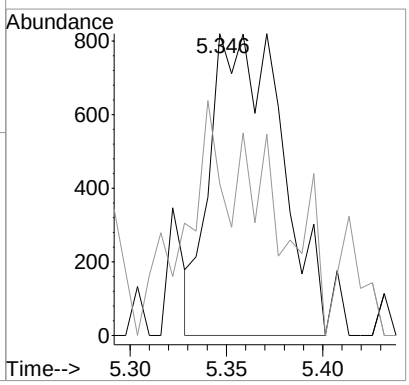


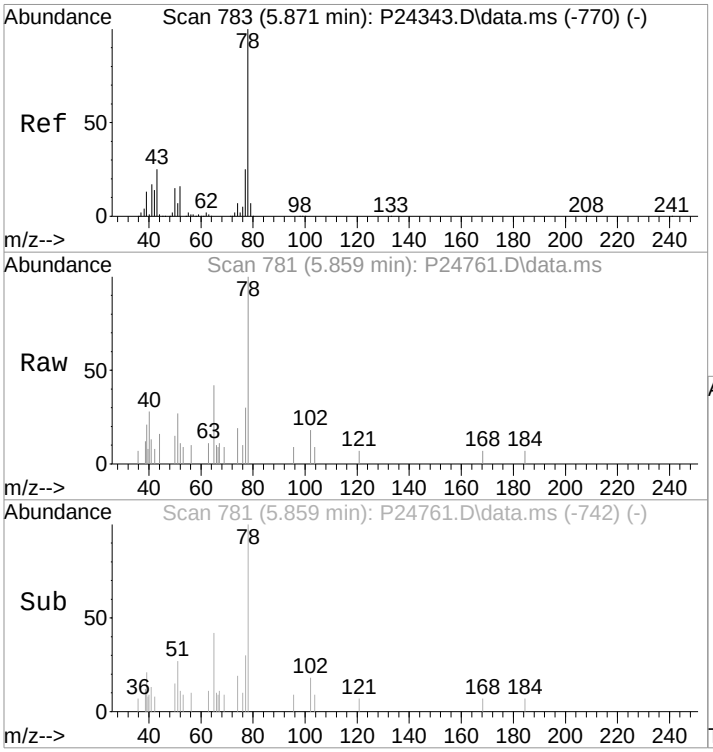


#44
Cyclohexane
Concen: 0.71 ppb
RT: 5.346 min Scan# 697
Delta R.T. -0.012 min
Lab File: P24761.D
Acq: 7 Mar 2019 2:09 pm

Tgt Ion: 41 Resp: 2116

Ion	Ratio	Lower	Upper
41	100		
39	50.2	20.3	60.3

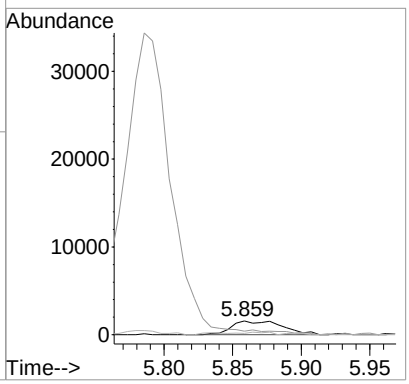


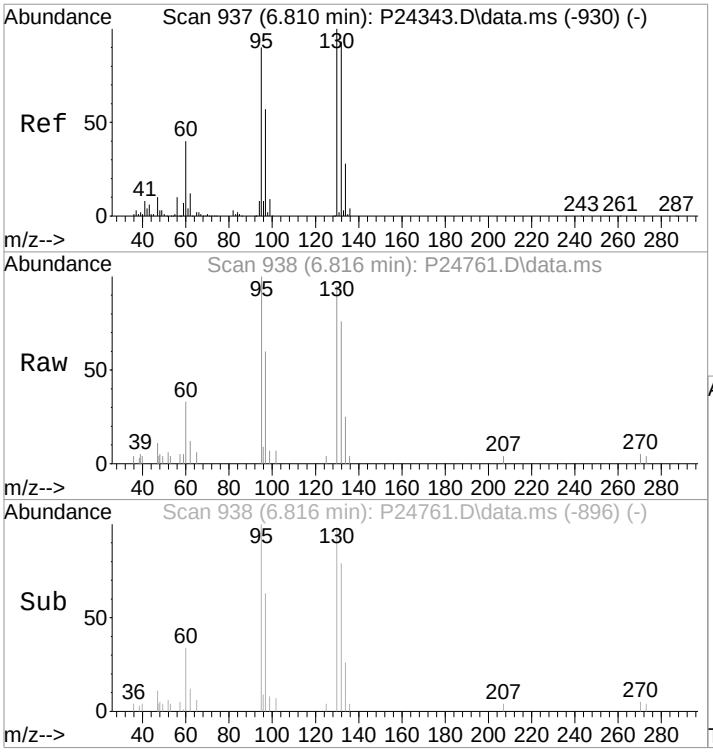


#49
Benzene
Concen: 0.28 ppb m
RT: 5.859 min Scan# 781
Delta R.T. -0.006 min
Lab File: P24761.D
Acq: 7 Mar 2019 2:09 pm

Tgt Ion: 78 Resp: 4074

Ion	Ratio	Lower	Upper
78	100		
51	27.0	0.0	36.0
52	10.8	0.0	36.2

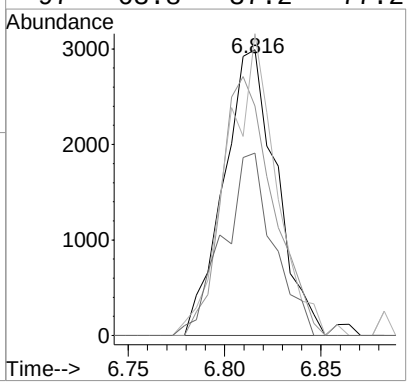


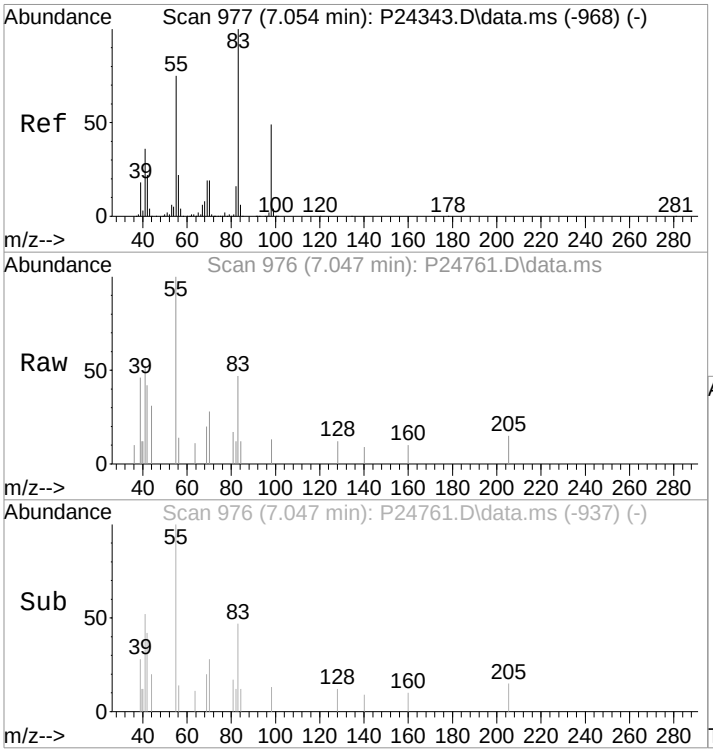


#54
Trichloroethene
Concen: 1.60 ppb
RT: 6.816 min Scan# 938
Delta R.T. 0.006 min
Lab File: P24761.D
Acq: 7 Mar 2019 2:09 pm

Tgt Ion:130 Resp: 5691

Ion	Ratio	Lower	Upper
130	100		
132	80.3	72.6	112.6
95	105.6	69.8	109.8
97	63.8	37.2	77.2

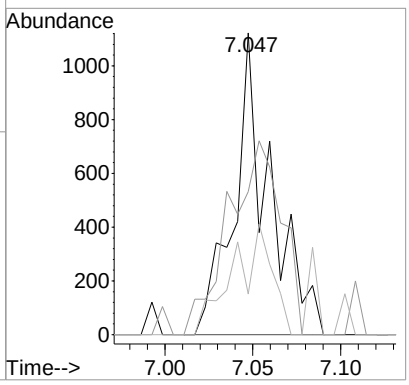




#55
Methylcyclohexane
Concen: 0.36 ppb m
RT: 7.047 min Scan# 976
Delta R.T. 0.000 min
Lab File: P24761.D
Acq: 7 Mar 2019 2:09 pm

Tgt Ion: 55 Resp: 1597

Ion	Ratio	Lower	Upper
55	100		
83	47.4	113.1	153.1#
98	13.4	45.0	85.0#



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24775.D
Acq On : 7 Mar 2019 7:11 pm
Operator : K.Ruest
Sample : R1901880-006|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 18 Sample Multiplier: 1

DL

Quant Time: Mar 12 10:07:30 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

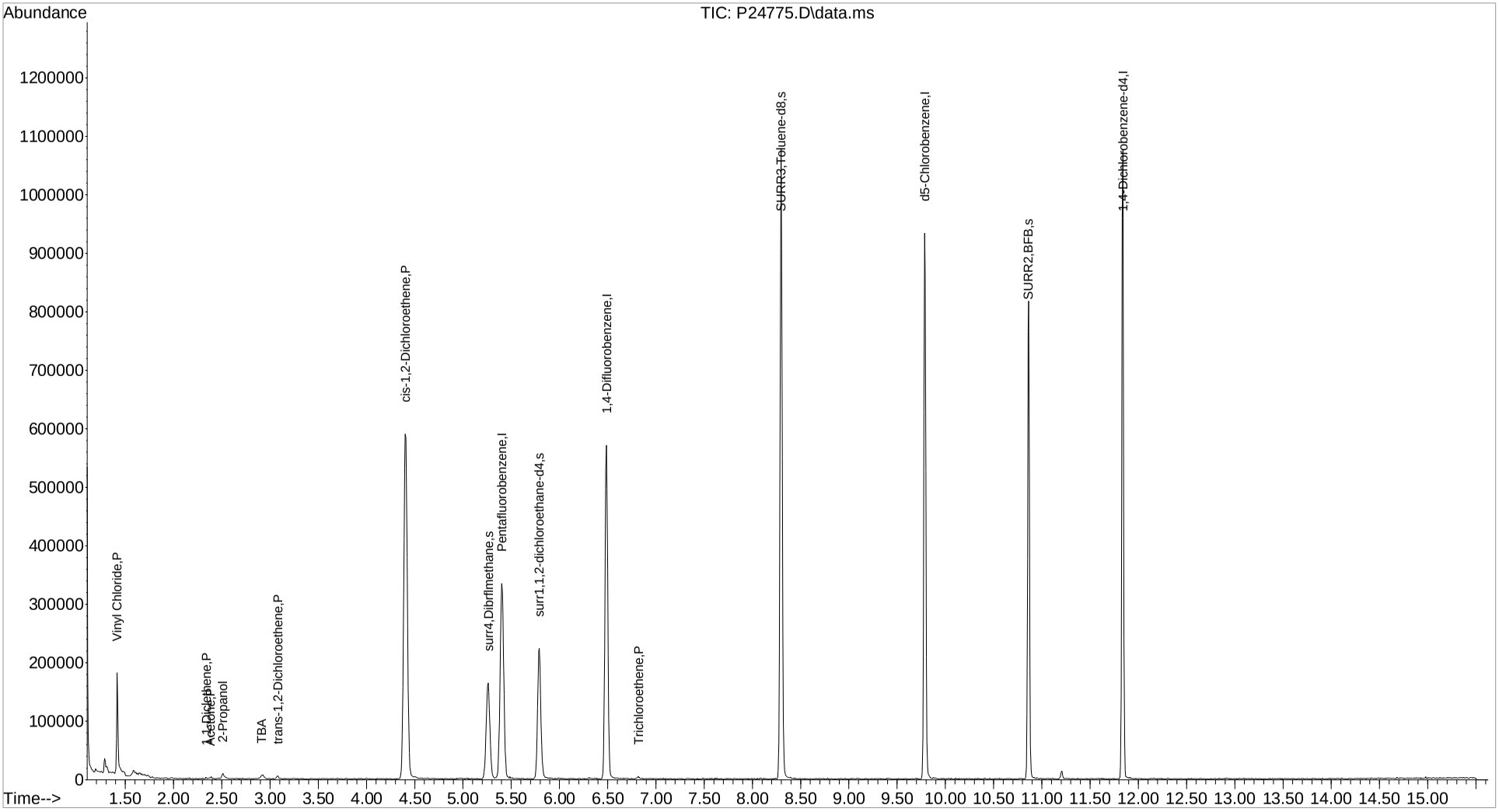
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.401	168	305614	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.487	114	493229	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	429008	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	220553	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.261	113	135193	49.88	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.76%				
48) surr1,1,2-dichloroetha...	5.792	65	185200	53.87	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 107.74%				
65) SURR3,Toluene-d8	8.297	98	656268	51.04	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.08%				
70) SURR2,BFB	10.858	95	231216	50.21	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.42%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.414	62	105165	23.68	ppb		96
13) 1,1-Diclethene	2.335	96	584	0.20	ppb		93
15) Acetone	2.378	43	2523	1.72	ppb		95
16) 2-Propanol	2.506	45	10552	27.77	ppb		99
23) TBA	2.914	59	4355	7.21	ppb		78
26) trans-1,2-Dichloroethene	3.079	96	1491	0.47	ppb	#	72
34) cis-1,2-Dichloroethene	4.402	96	352786	99.22	ppb		87
54) Trichloroethene	6.816	130	1172	0.34	ppb		88

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

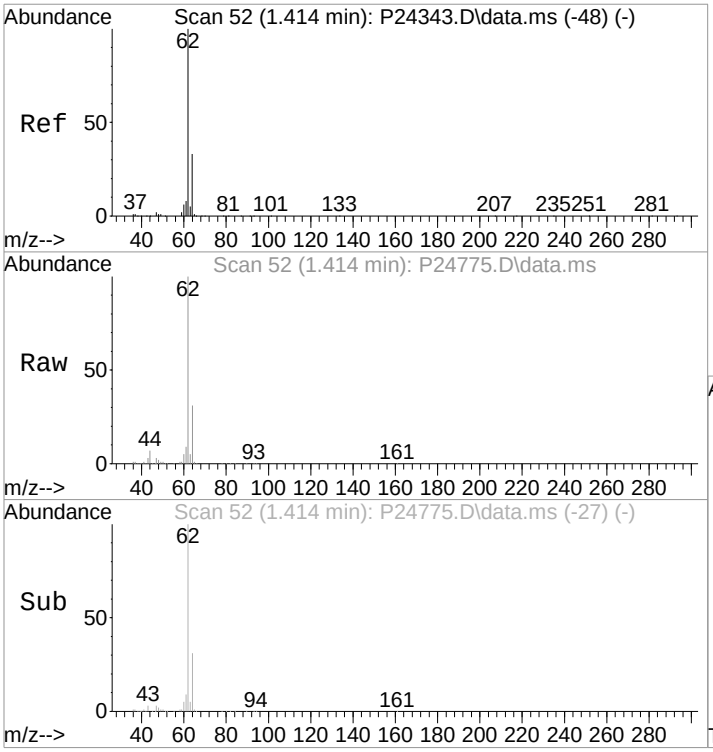
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24775.D
Acq On : 7 Mar 2019 7:11 pm
Operator : K.Ruest
Sample : R1901880-006|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 12 10:07:30 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



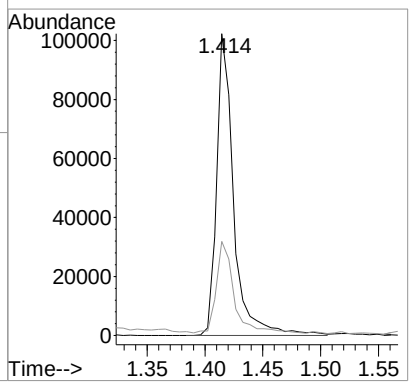
1st 03/12/19
2nd 03/12/19

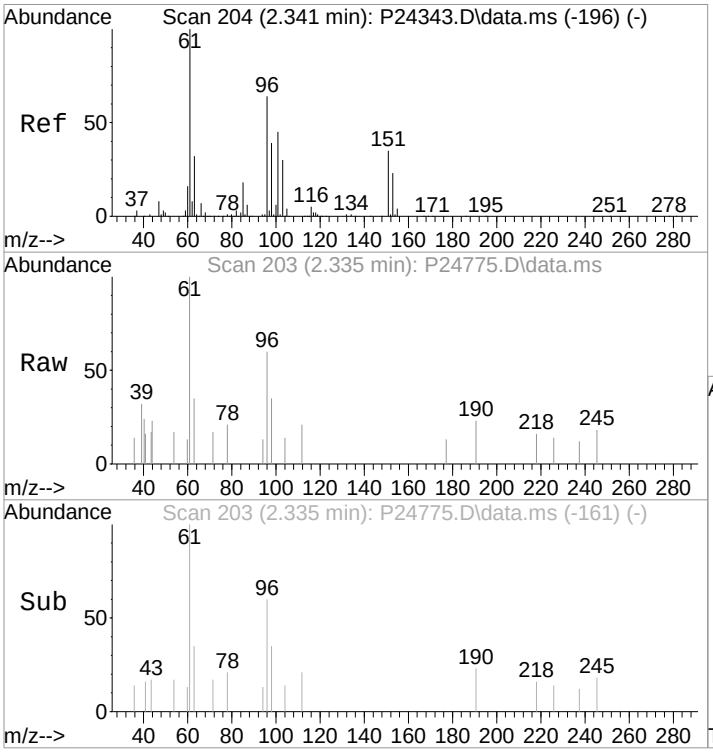


#4
Vinyl Chloride
Concen: 23.68 ppb
RT: 1.414 min Scan# 52
Delta R.T. 0.006 min
Lab File: P24775.D
Acq: 7 Mar 2019 7:11 pm

Tgt Ion: 62 Resp: 105165

Ion	Ratio	Lower	Upper
62	100		
64	31.2	13.2	53.2

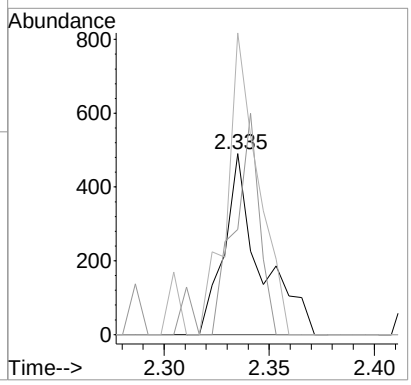


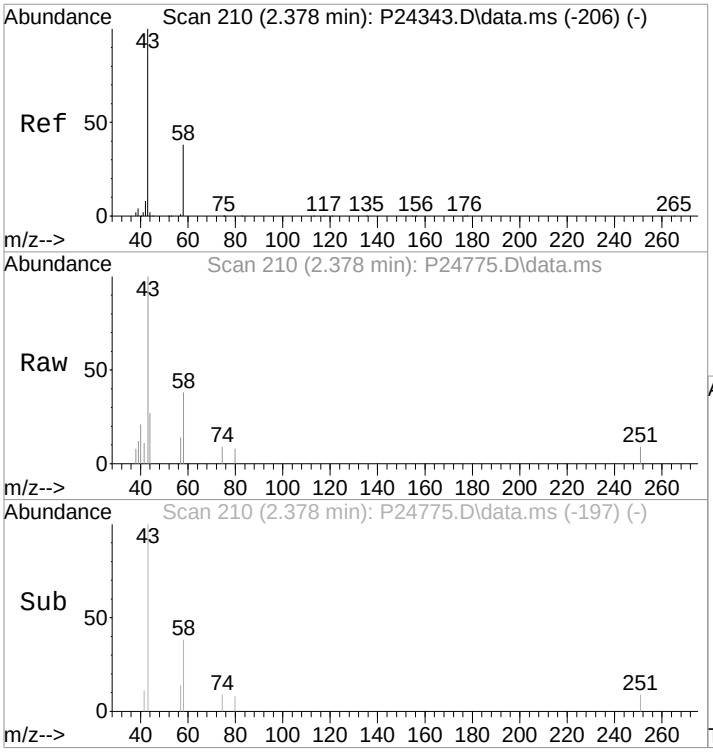


#13
1,1-Diclethene
Concen: 0.20 ppb
RT: 2.335 min Scan# 203
Delta R.T. 0.006 min
Lab File: P24775.D
Acq: 7 Mar 2019 7:11 pm

Tgt Ion: 96 Resp: 584

Ion	Ratio	Lower	Upper
96	100		
98	58.0	40.8	80.8
61	166.6	136.2	176.2

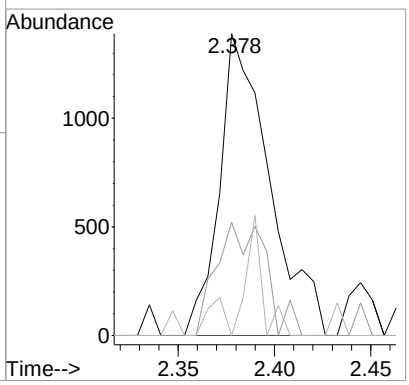


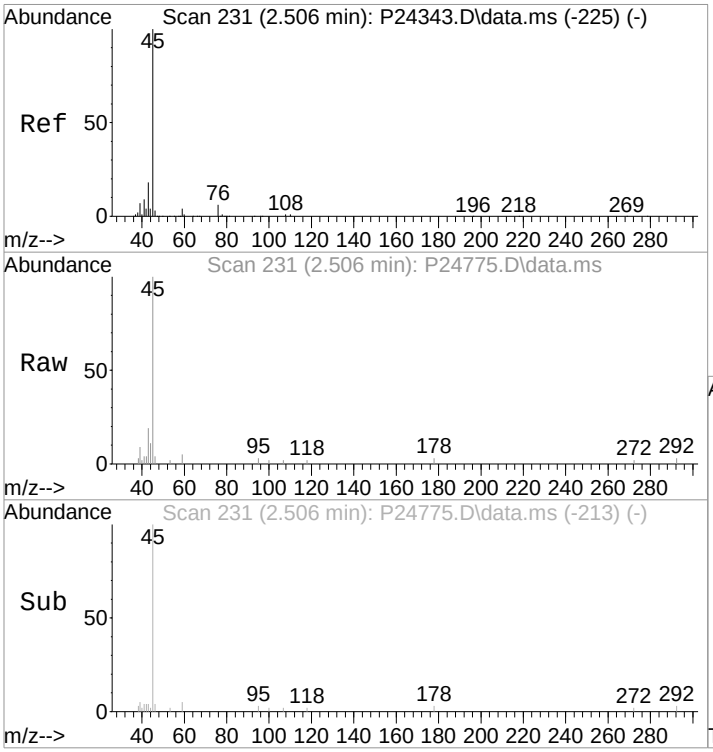


#15
Acetone
Concen: 1.72 ppb
RT: 2.378 min Scan# 210
Delta R.T. 0.006 min
Lab File: P24775.D
Acq: 7 Mar 2019 7:11 pm

Tgt Ion: 43 Resp: 2523

Ion	Ratio	Lower	Upper
43	100		
58	37.6	18.1	58.1
42	0.0	0.0	27.8

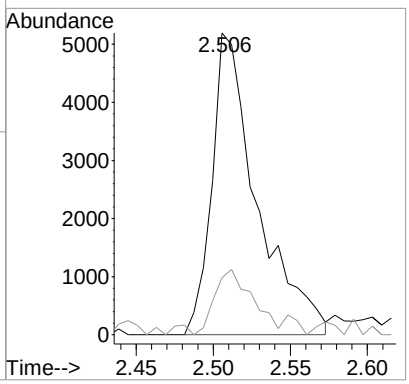


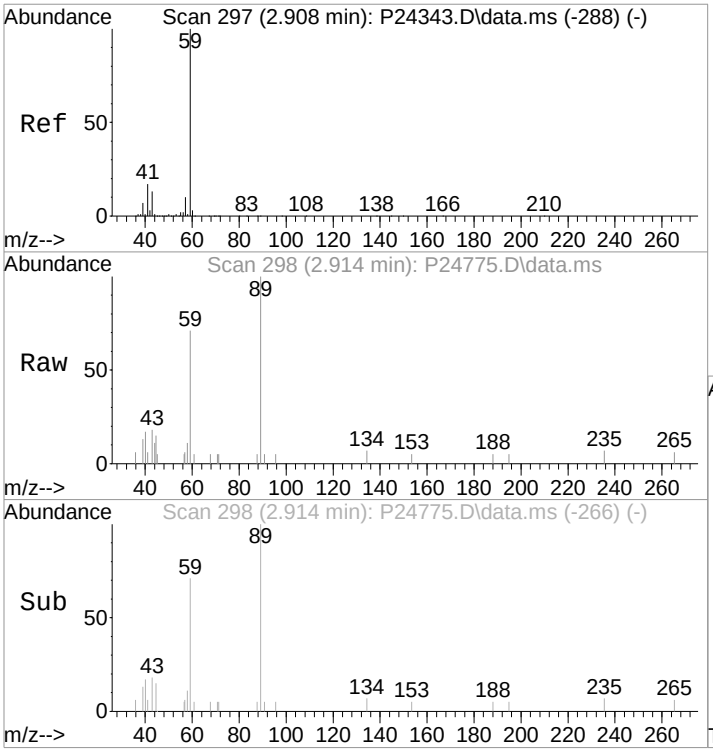


#16
2-Propanol
Concen: 27.77 ppb
RT: 2.506 min Scan# 231
Delta R.T. 0.000 min
Lab File: P24775.D
Acq: 7 Mar 2019 7:11 pm

Tgt Ion: 45 Resp: 10552

Ion	Ratio	Lower	Upper
45	100		
43	18.9	0.0	38.5

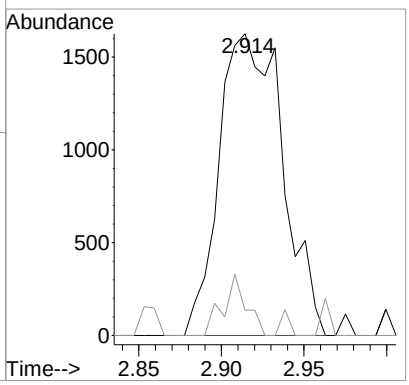


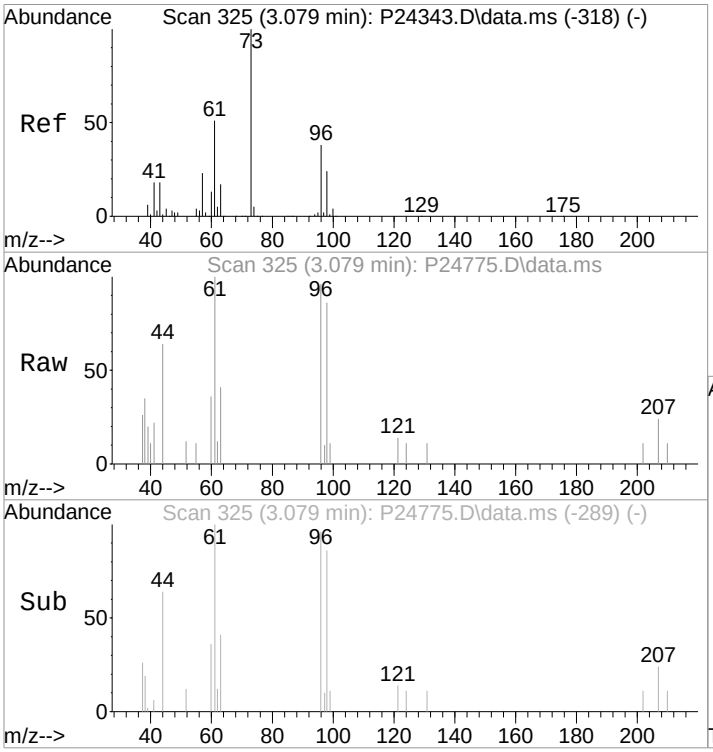


#23
TBA
Concen: 7.21 ppb
RT: 2.914 min Scan# 298
Delta R.T. 0.006 min
Lab File: P24775.D
Acq: 7 Mar 2019 7:11 pm

Tgt Ion: 59 Resp: 4355

Ion	Ratio	Lower	Upper
59	100		
41	8.4	0.0	38.2

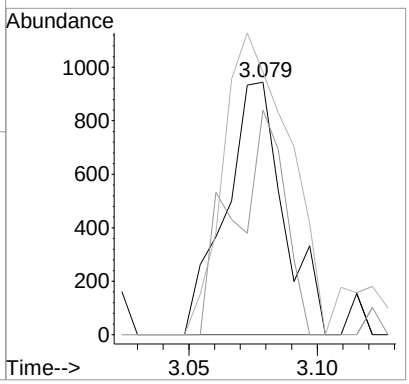


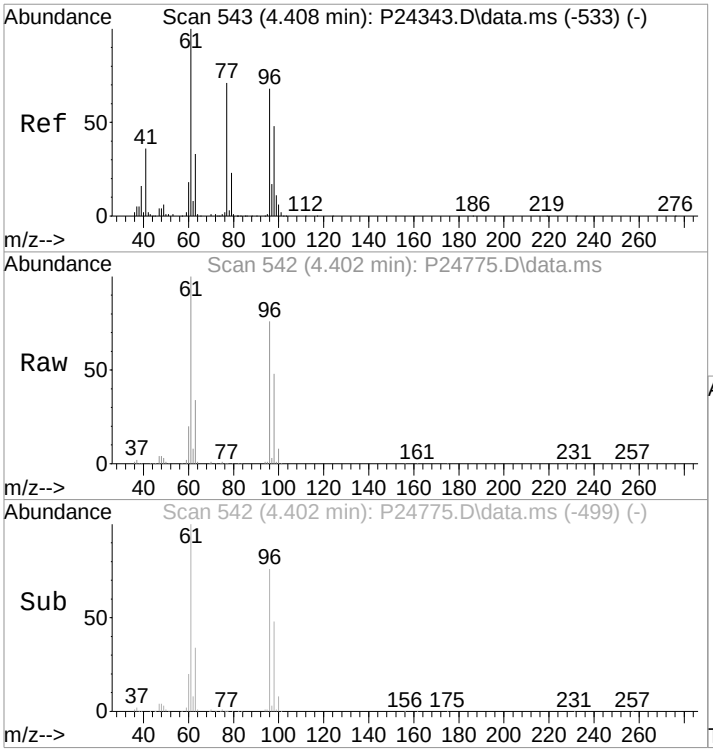


#26
trans-1,2-Dichloroethene
Concen: 0.47 ppb
RT: 3.079 min Scan# 325
Delta R.T. 0.012 min
Lab File: P24775.D
Acq: 7 Mar 2019 7:11 pm

Tgt Ion: 96 Resp: 1491

Ion	Ratio	Lower	Upper
96	100		
98	89.0	43.5	83.5#
61	103.9	114.4	154.4#

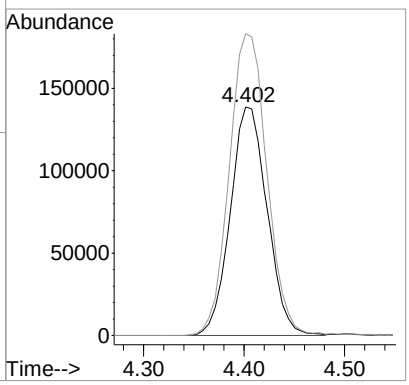


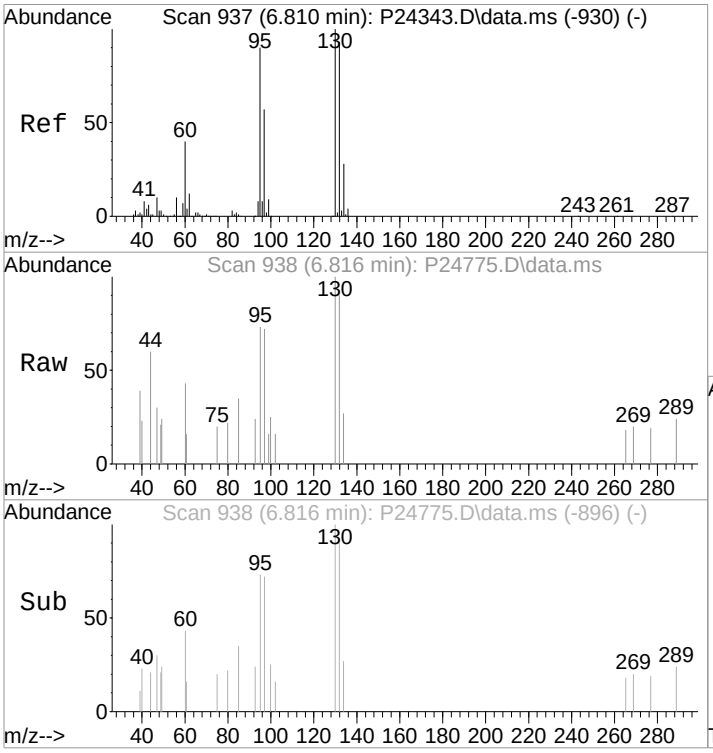


#34
cis-1,2-Dichloroethene
Concen: 99.22 ppb
RT: 4.402 min Scan# 542
Delta R.T. 0.000 min
Lab File: P24775.D
Acq: 7 Mar 2019 7:11 pm

Tgt Ion: 96 Resp: 352786

Ion	Ratio	Lower	Upper
96	100		
61	132.2	128.1	168.1

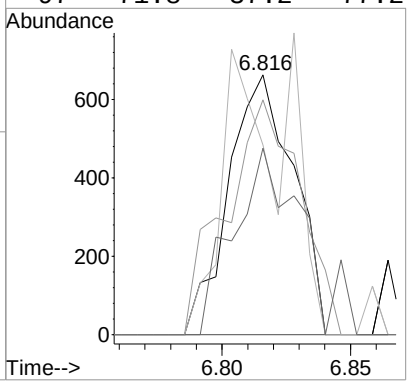




#54
Trichloroethene
Concen: 0.34 ppb
RT: 6.816 min Scan# 938
Delta R.T. 0.006 min
Lab File: P24775.D
Acq: 7 Mar 2019 7:11 pm

Tgt Ion:130 Resp: 1172

Ion	Ratio	Lower	Upper
130	100		
132	90.3	72.6	112.6
95	73.0	69.8	109.8
97	71.8	37.2	77.2

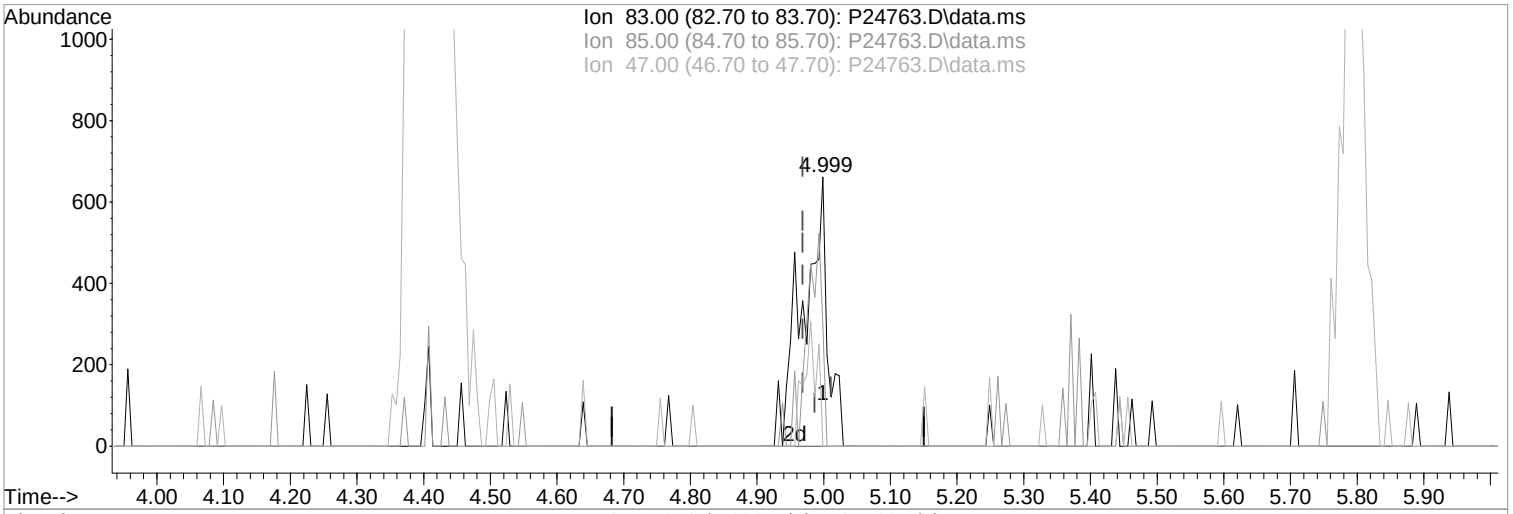


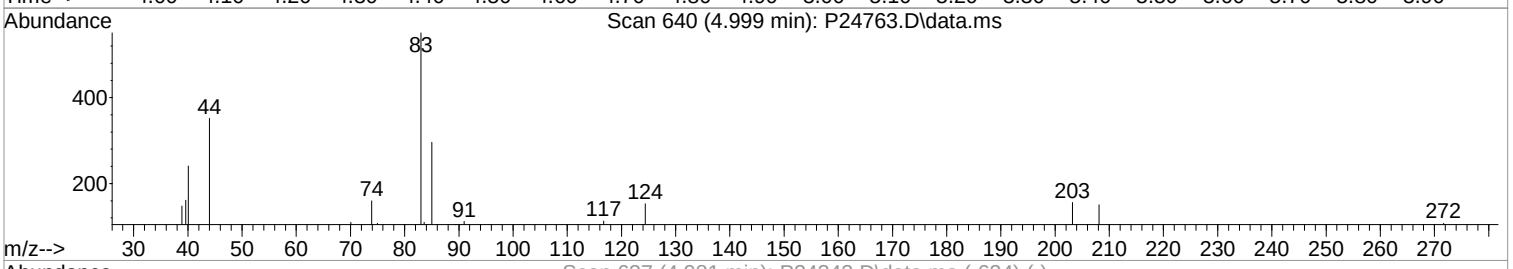
1st 03/12/19
2nd 03/12/19

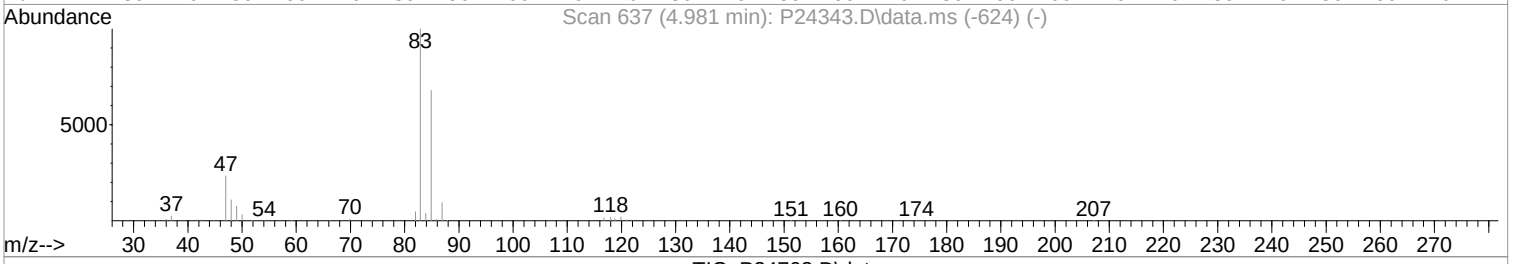
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24763.D
Acq On : 7 Mar 2019 2:52 pm
Operator : K.Ruest
Sample : R1901880-007|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 07 16:07:25 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24763.D\data.ms

(40) Chloroform (P)

4.999min (+0.030) 0.33 ppb m

response 1691

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	53.72
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

After

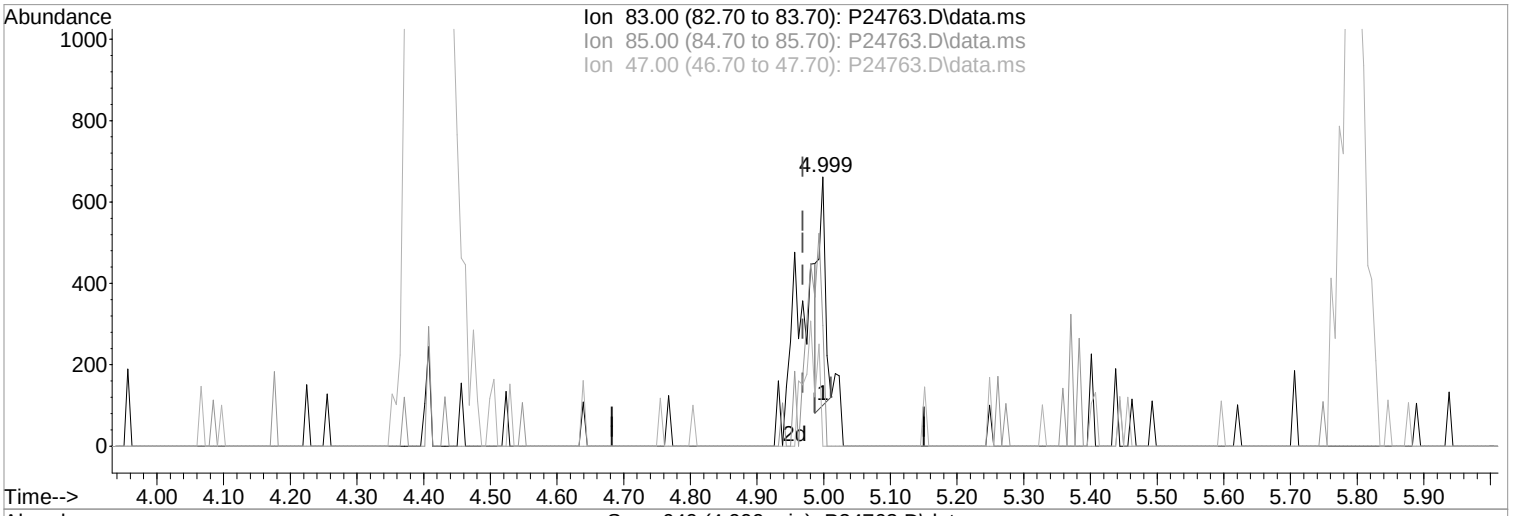
Split Peak

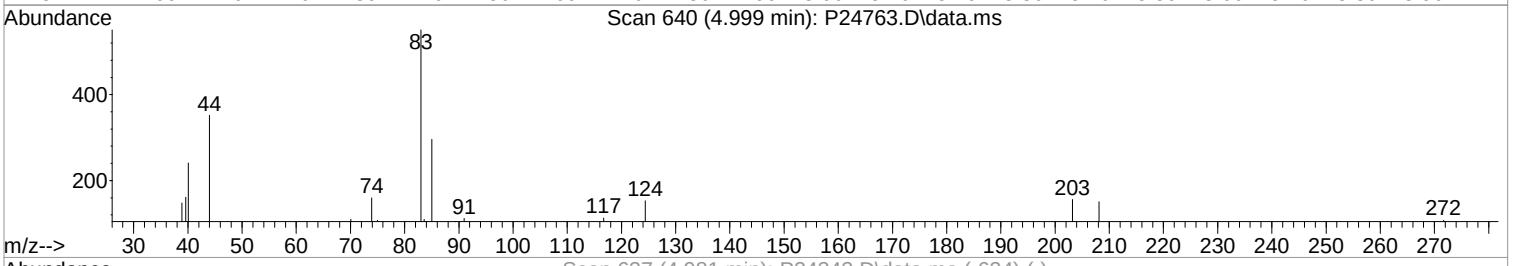
03/12/19

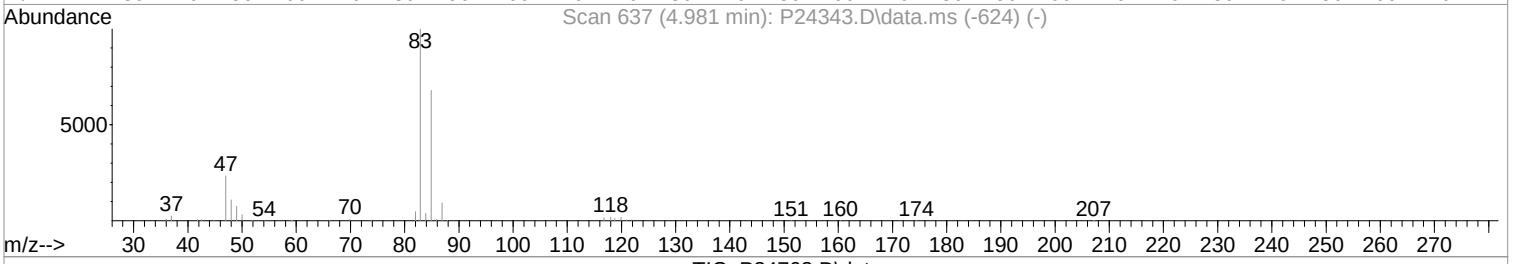
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24763.D
Acq On : 7 Mar 2019 2:52 pm
Operator : K.Ruest
Sample : R1901880-007|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 07 16:07:25 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24763.D\data.ms

(40) Chloroform (P)

4.999min (+0.030) 0.08 ppb

response 388

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	44.78#
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

Before

03/12/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24763.D
Acq On : 7 Mar 2019 2:52 pm
Operator : K.Ruest
Sample : R1901880-007|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 6 Sample Multiplier: 1

repeat 2.5

Quant Time: Mar 12 09:39:51 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.413	168	298288	50.00	ppb		0.02
43) 1,4-Difluorobenzene	6.493	114	485094	50.00	ppb		0.01
71) d5-Chlorobenzene	9.785	117	426850	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	220190	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.267	113	139555	52.35	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 104.70%				
48) surr1,1,2-dichloroetha...	5.791	65	182722	54.04	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 108.08%				
65) SURR3,Toluene-d8	8.297	98	649035	51.33	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.66%				
70) SURR2,BFB	10.864	95	229809	50.75	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.50%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.420	62	2226	0.51	ppb	#	58
15) Acetone	2.384	43	15842	11.09	ppb		97
16) 2-Propanol	2.512	45	15994	43.13	ppb		83
18) Carbon Disulfide	2.530	76	2666	0.32	ppb		97
26) trans-1,2-Dichloroethene	3.079	96	35838	11.58	ppb	#	86
34) cis-1,2-Dichloroethene	4.408	96	546473	157.47	ppb		86
40) Chloroform	4.999	83	1691m	0.33	ppb		
54) Trichloroethene	6.816	130	1287729	379.55	ppb		94
69) 1,1,2-Trichloroethane	8.827	97	1679	0.50	ppb		80
72) Tetrachloroethene	8.962	164	2983	1.17	ppb	#	83
92) 1,1,2,2-Tetrachloroethane	10.998	83	1508	0.31	ppb	#	71

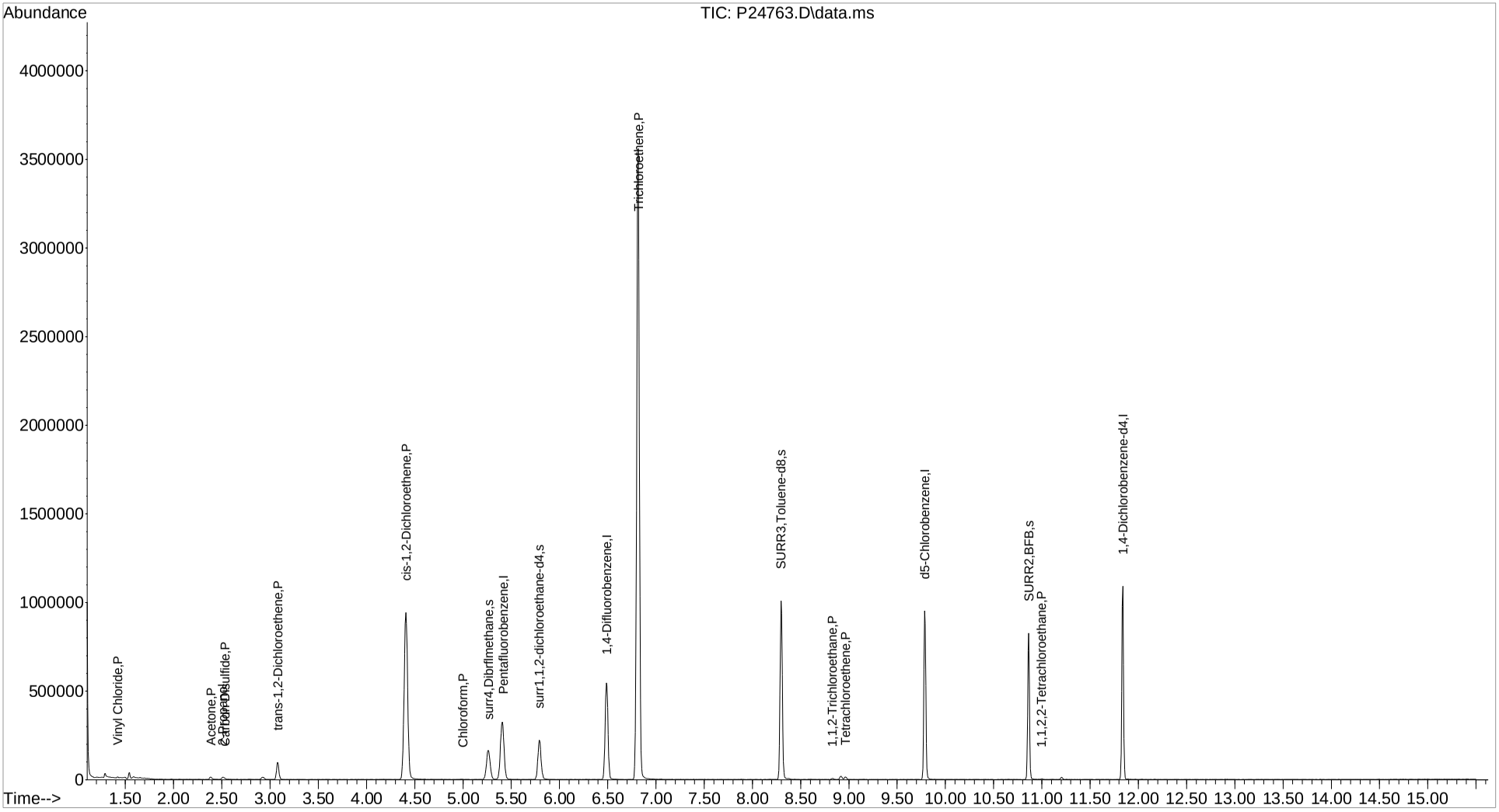
E-Over Calibration

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24763.D
Acq On : 7 Mar 2019 2:52 pm
Operator : K.Ruest
Sample : R1901880-007|1.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 12 09:39:51 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



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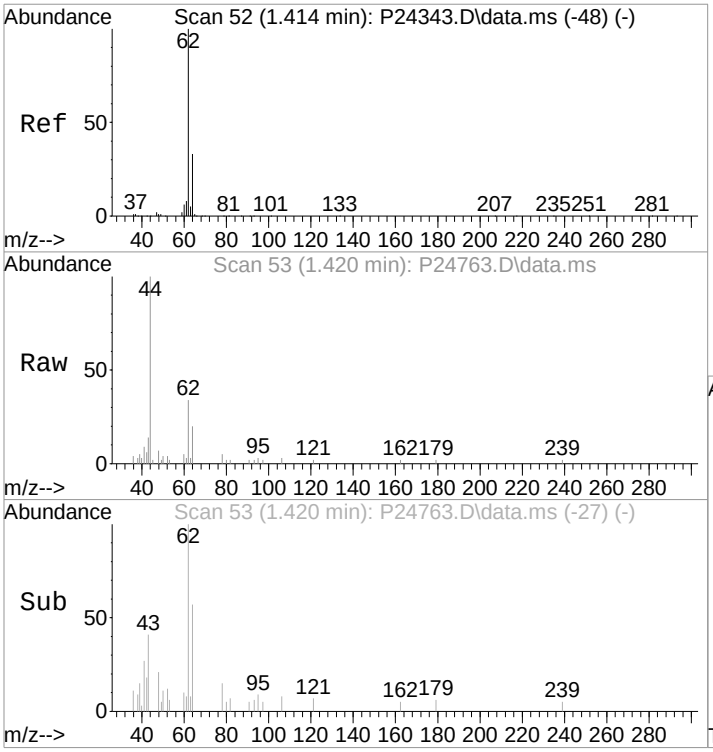
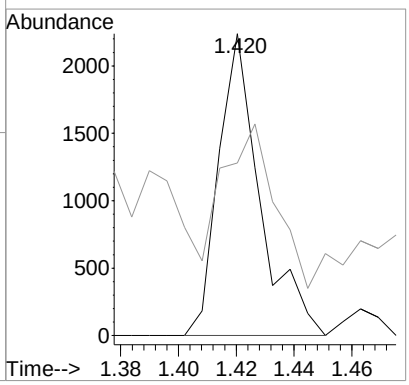
1st 03/12/19
2nd 03/12/19

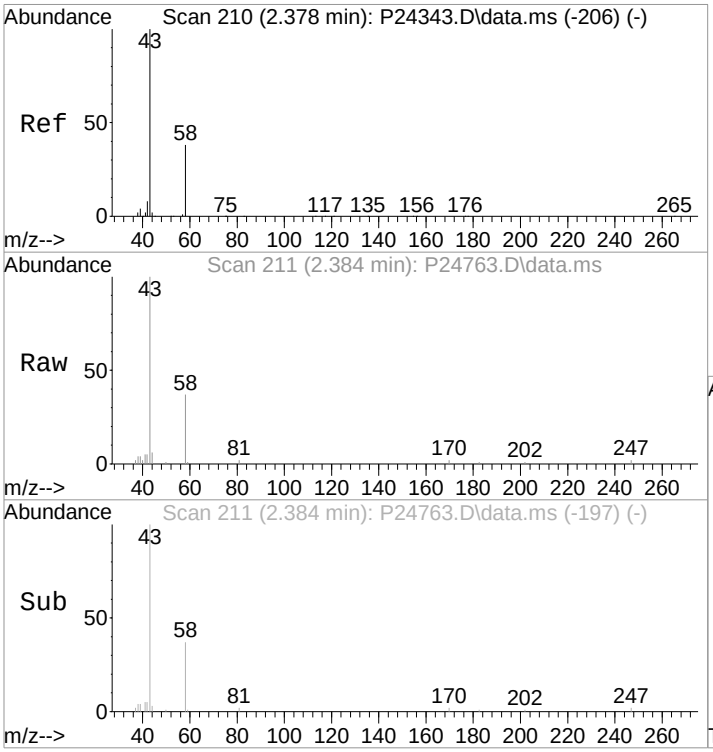


#4
Vinyl Chloride
Concen: 0.51 ppb
RT: 1.420 min Scan# 53
Delta R.T. 0.012 min
Lab File: P24763.D
Acq: 7 Mar 2019 2:52 pm

Tgt Ion: 62 Resp: 2226

Ion	Ratio	Lower	Upper
62	100		
64	57.1	13.2	53.2#

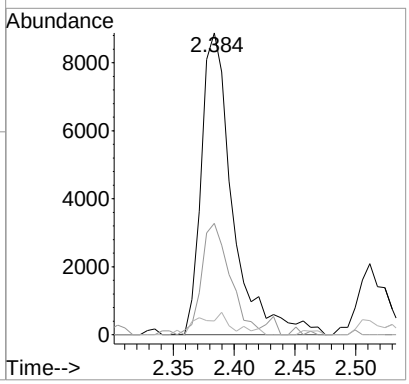


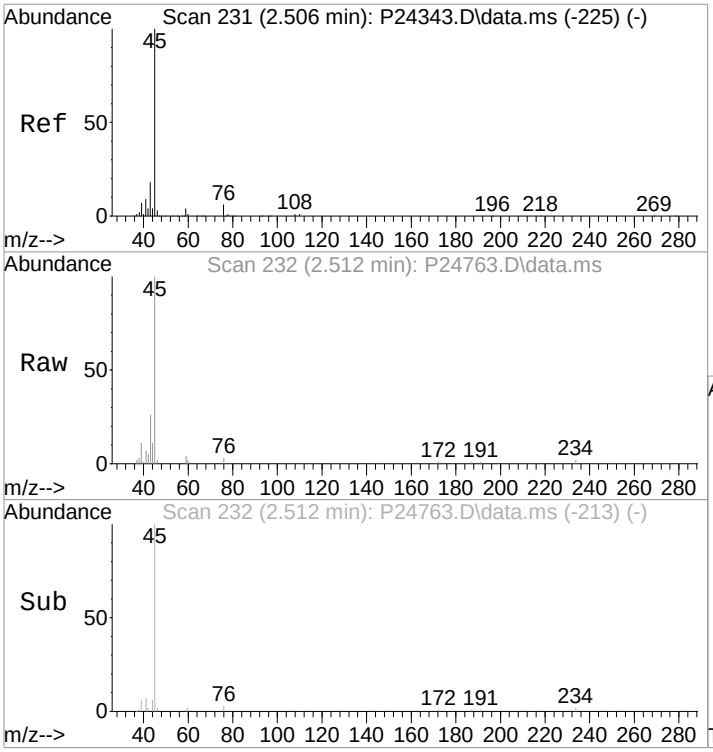


#15
Acetone
Concen: 11.09 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24763.D
Acq: 7 Mar 2019 2:52 pm

Tgt Ion: 43 Resp: 15842

Ion	Ratio	Lower	Upper
43	100		
58	36.9	18.1	58.1
42	4.5	0.0	27.8

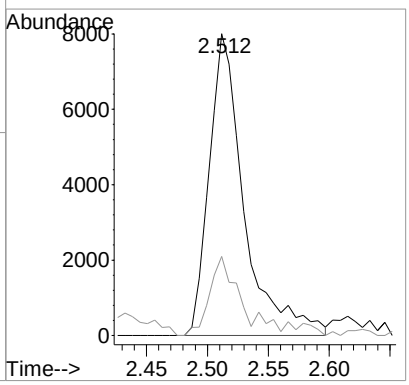


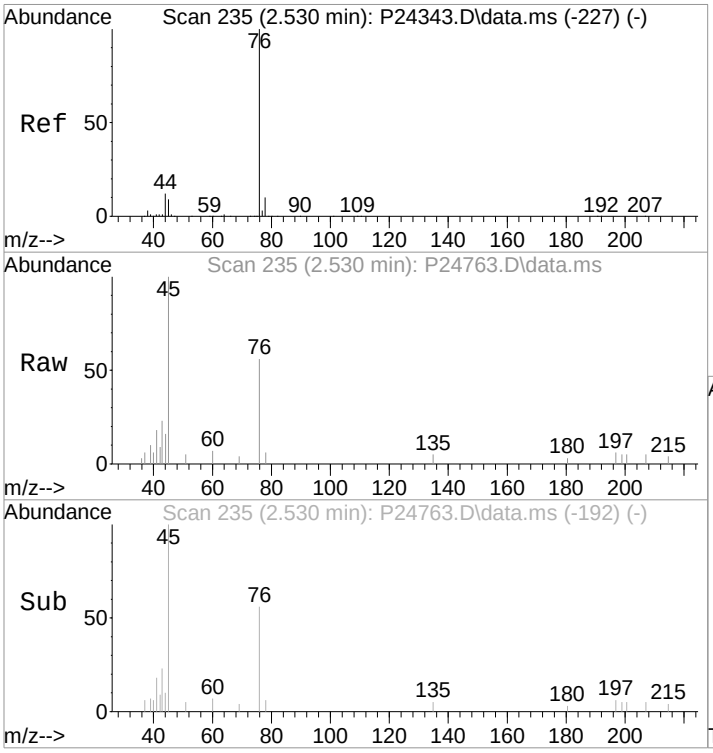


#16
2-Propanol
Concen: 43.13 ppb
RT: 2.512 min Scan# 232
Delta R.T. 0.006 min
Lab File: P24763.D
Acq: 7 Mar 2019 2:52 pm

Tgt Ion: 45 Resp: 15994

Ion	Ratio	Lower	Upper
45	100		
43	26.2	0.0	38.5

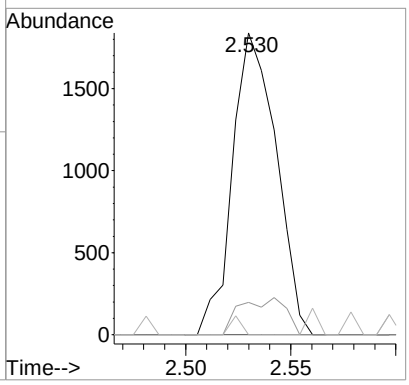


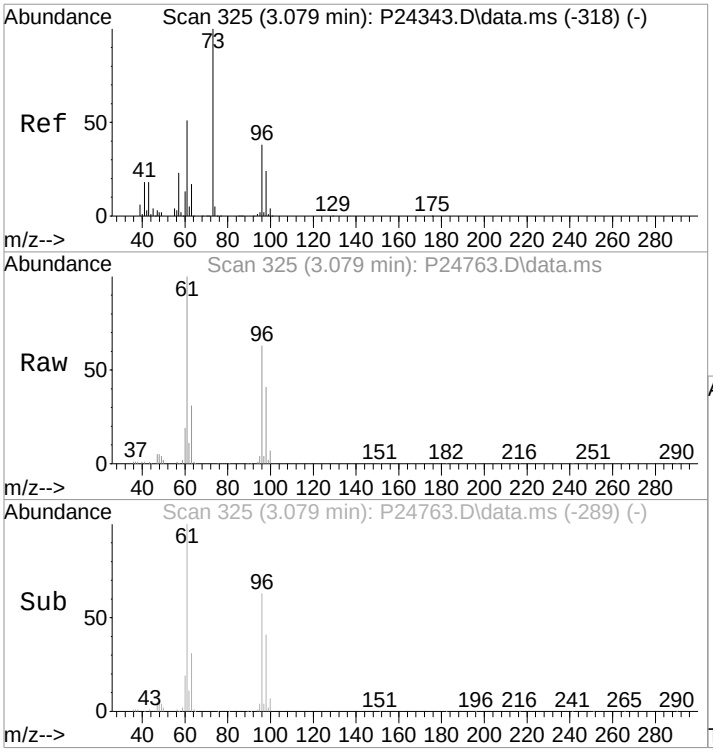


#18
Carbon Disulfide
Concen: 0.32 ppb
RT: 2.530 min Scan# 235
Delta R.T. 0.006 min
Lab File: P24763.D
Acq: 7 Mar 2019 2:52 pm

Tgt Ion: 76 Resp: 2666

Ion	Ratio	Lower	Upper
76	100		
78	10.8	0.0	30.1
77	0.0	0.0	22.9

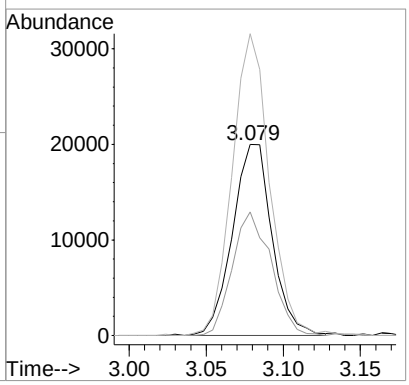


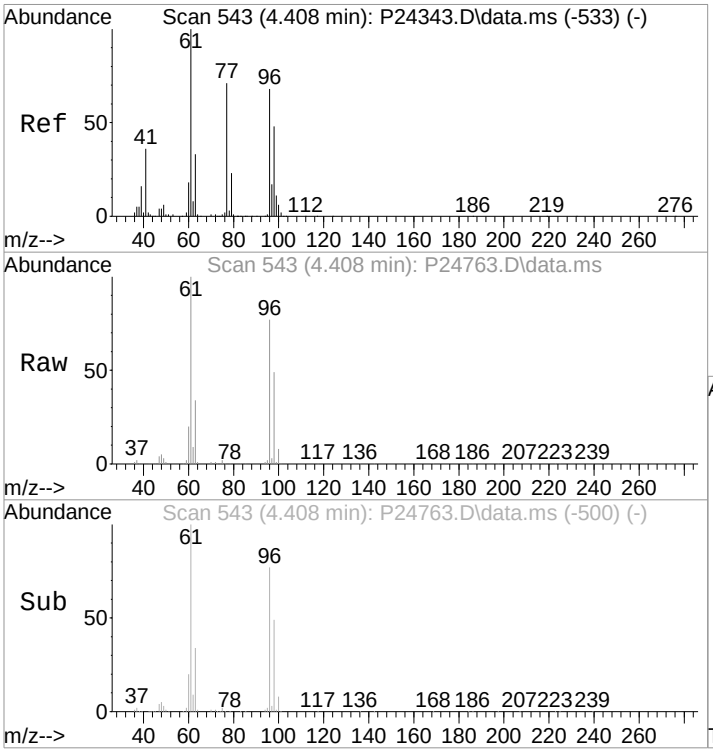


#26
trans-1,2-Dichloroethene
Concen: 11.58 ppb
RT: 3.079 min Scan# 325
Delta R.T. 0.012 min
Lab File: P24763.D
Acq: 7 Mar 2019 2:52 pm

Tgt Ion: 96 Resp: 35838

Ion	Ratio	Lower	Upper
96	100		
98	64.7	43.5	83.5
61	158.1	114.4	154.4#

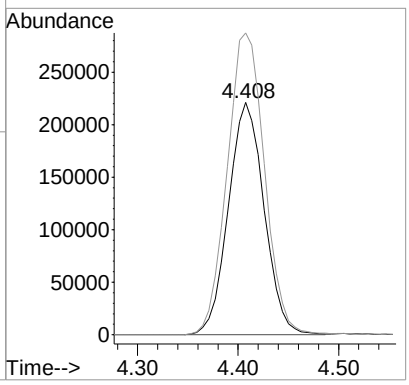


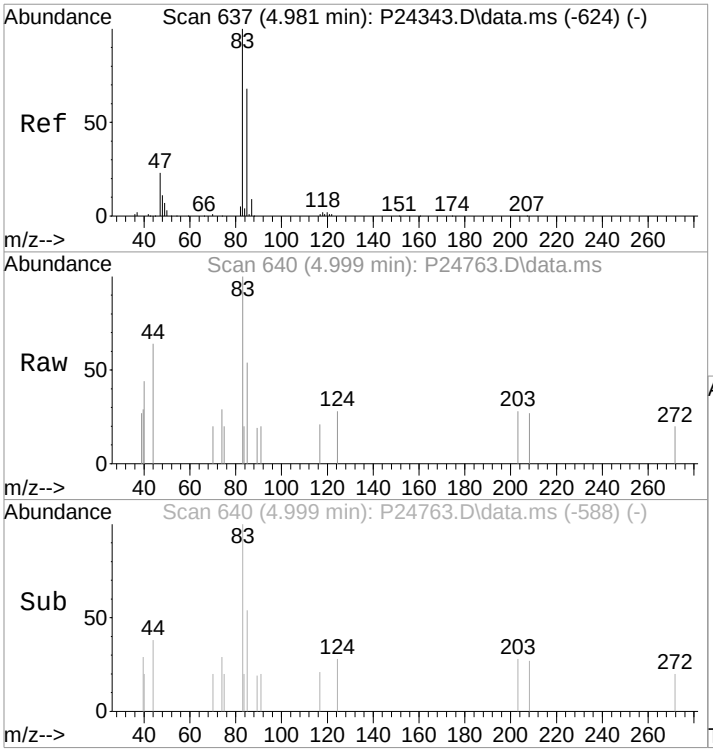


#34
cis-1,2-Dichloroethene
Concen: 157.47 ppb
RT: 4.408 min Scan# 543
Delta R.T. 0.006 min
Lab File: P24763.D
Acq: 7 Mar 2019 2:52 pm

Tgt Ion: 96 Resp: 546473

Ion	Ratio	Lower	Upper
96	100		
61	129.9	128.1	168.1

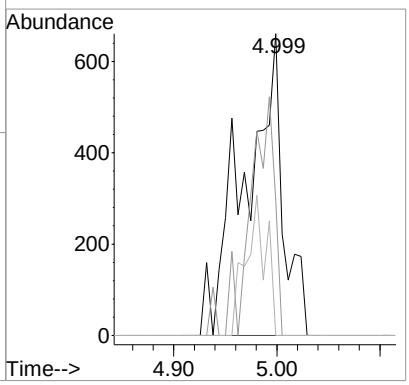


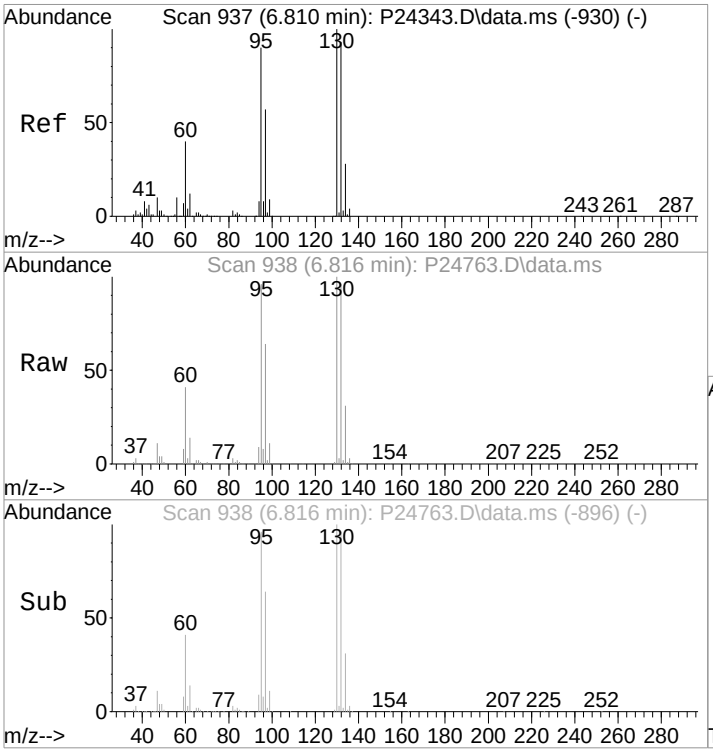


#40
Chloroform
Concen: 0.33 ppb m
RT: 4.999 min Scan# 640
Delta R.T. 0.030 min
Lab File: P24763.D
Acq: 7 Mar 2019 2:52 pm

Tgt Ion: 83 Resp: 1691

Ion	Ratio	Lower	Upper
83	100		
85	53.7	47.9	87.9
47	0.0	3.4	43.4#

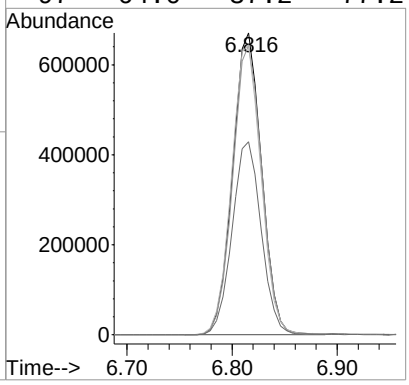


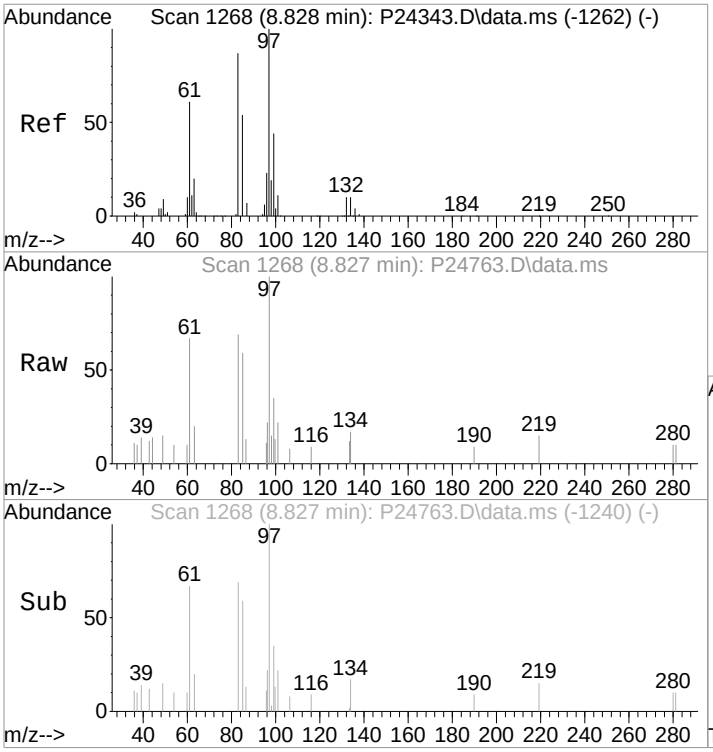


#54
Trichloroethene
Concen: 379.55 ppb
RT: 6.816 min Scan# 938
Delta R.T. 0.006 min
Lab File: P24763.D
Acq: 7 Mar 2019 2:52 pm

Tgt Ion:130 Resp: 1287729

Ion	Ratio	Lower	Upper
130	100		
132	95.8	72.6	112.6
95	96.1	69.8	109.8
97	64.0	37.2	77.2

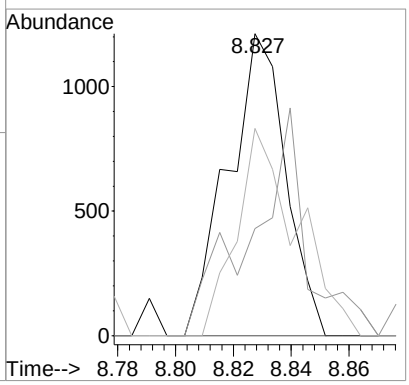


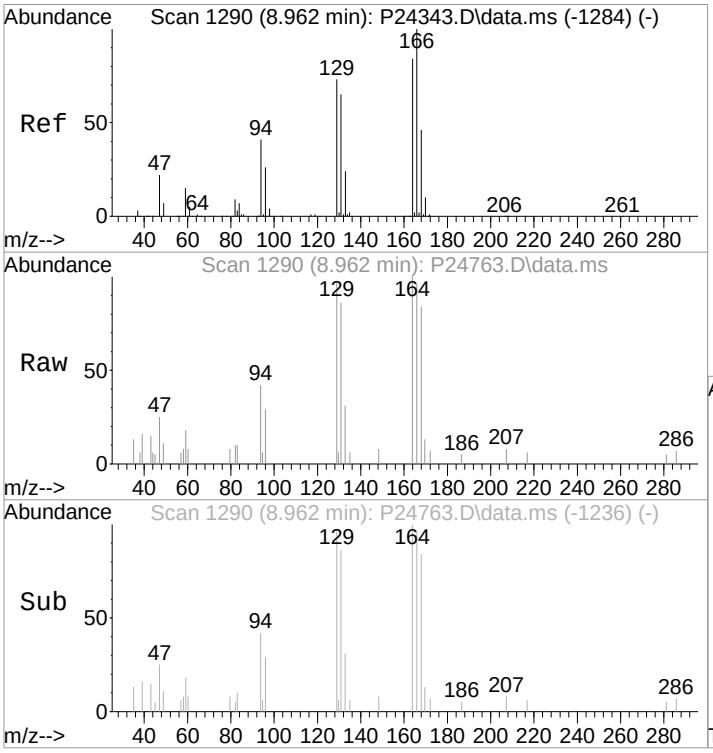


#69
1,1,2-Trichloroethane
Concen: 0.50 ppb
RT: 8.827 min Scan# 1268
Delta R.T. -0.000 min
Lab File: P24763.D
Acq: 7 Mar 2019 2:52 pm

Tgt Ion: 97 Resp: 1679

Ion	Ratio	Lower	Upper
97	100		
99	48.2	44.0	84.0
83	68.6	67.0	107.0

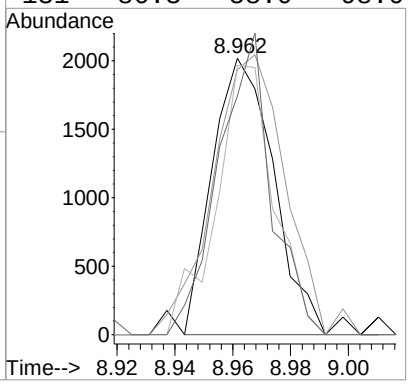


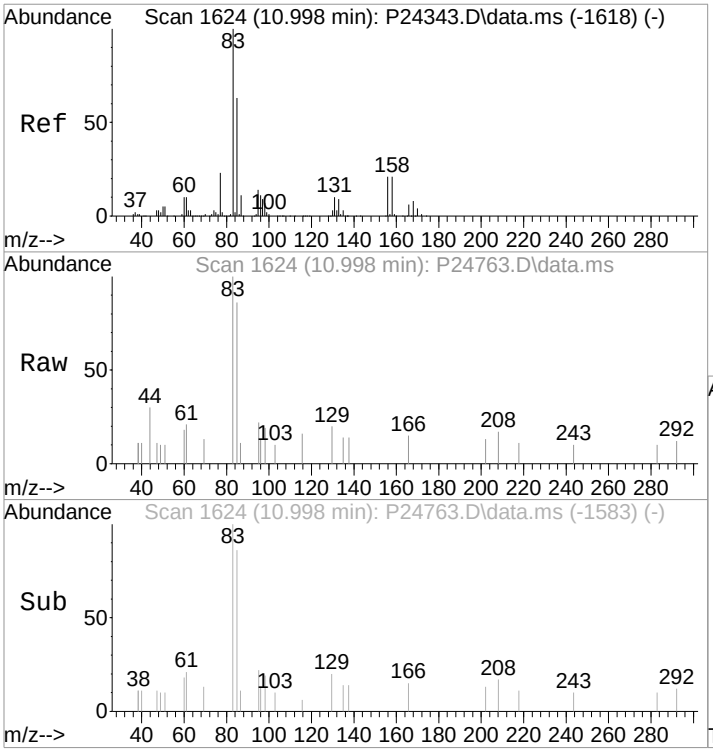


#72
Tetrachloroethene
Concen: 1.17 ppb
RT: 8.962 min Scan# 1290
Delta R.T. -0.000 min
Lab File: P24763.D
Acq: 7 Mar 2019 2:52 pm

Tgt Ion:164 Resp: 2983

Ion	Ratio	Lower	Upper
164	100		
166	95.8	99.6	139.6#
129	103.7	66.7	106.7
131	86.3	58.0	98.0

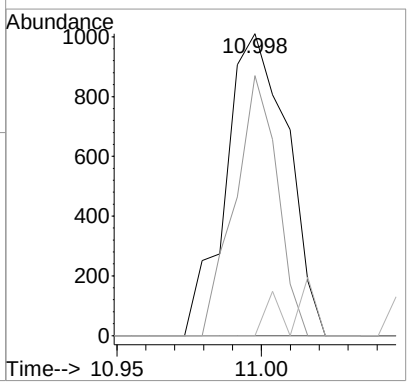




#92
1,1,2,2-Tetrachloroethane
Concen: 0.31 ppb
RT: 10.998 min Scan# 1624
Delta R.T. -0.000 min
Lab File: P24763.D
Acq: 7 Mar 2019 2:52 pm

Tgt Ion: 83 Resp: 1508

Ion	Ratio	Lower	Upper
83	100		
85	86.1	43.4	83.4#
131	0.0	0.0	29.8

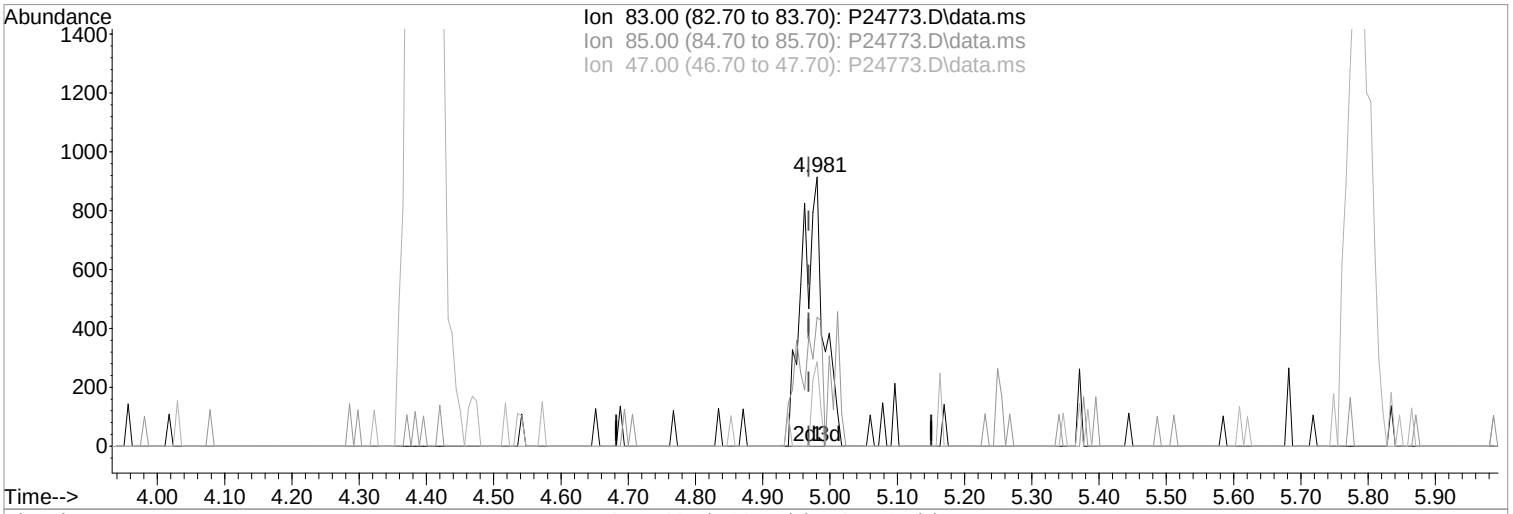


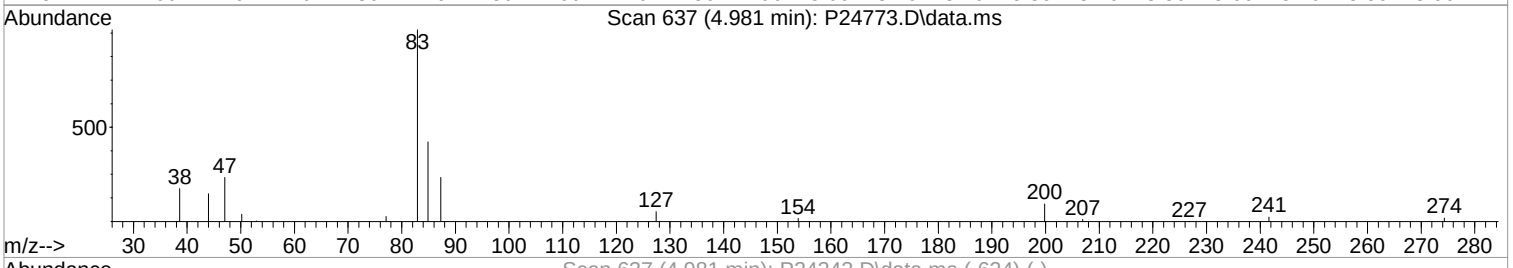
1st 03/12/19
2nd 03/12/19

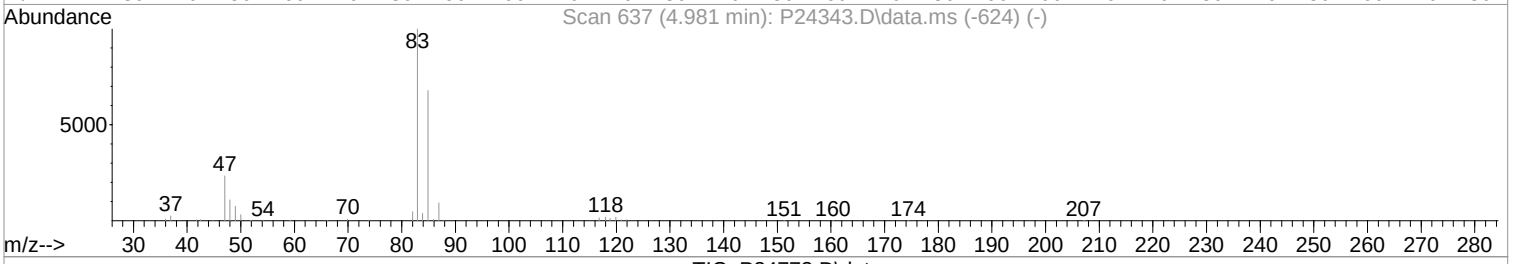
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24773.D
Acq On : 7 Mar 2019 6:27 pm
Operator : K.Ruest
Sample : R1901880-007|2.5 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 08 10:37:15 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration







TIC: P24773.D\data.ms

(40) Chloroform (P)

4.981min (+0.012) 0.39 ppb m

response 2050

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	47.92
47.00	23.40	31.40
0.00	0.00	0.00

Manual Integration:

After

Split Peak

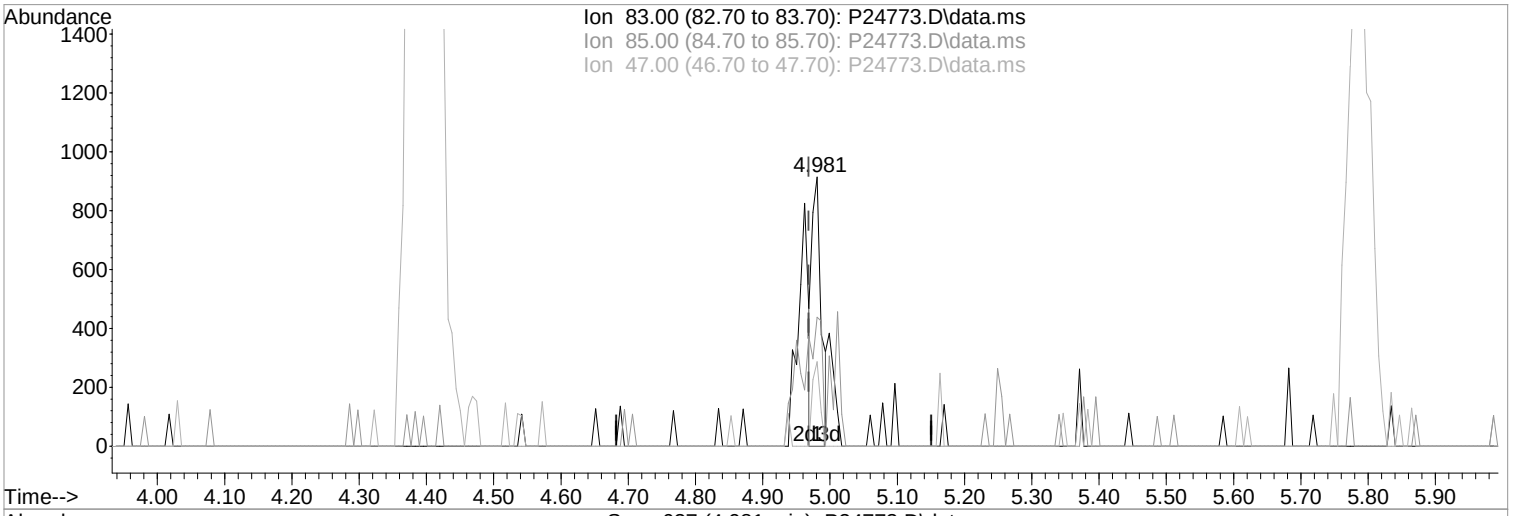
03/12/19

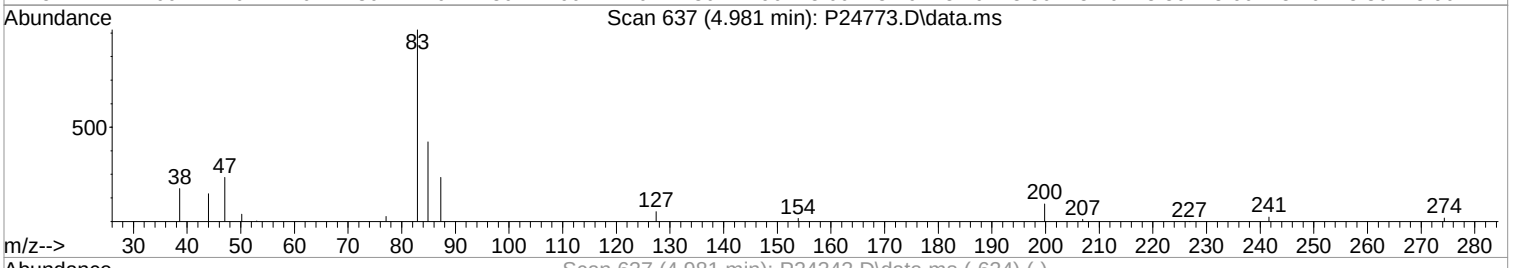
1st 03/12/19
2nd 03/12/19

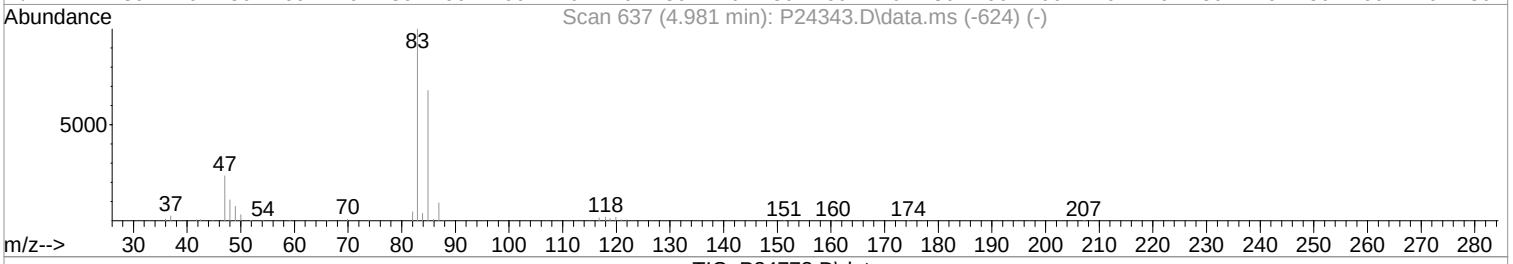
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24773.D
Acq On : 7 Mar 2019 6:27 pm
Operator : K.Ruest
Sample : R1901880-007|2.5 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 08 10:37:15 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration







TIC: P24773.D\data.ms

(40) Chloroform (P)

4.981min (+0.012) 0.17 ppb

response 881

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	47.92
47.00	23.40	31.40
0.00	0.00	0.00

Manual Integration:

Before

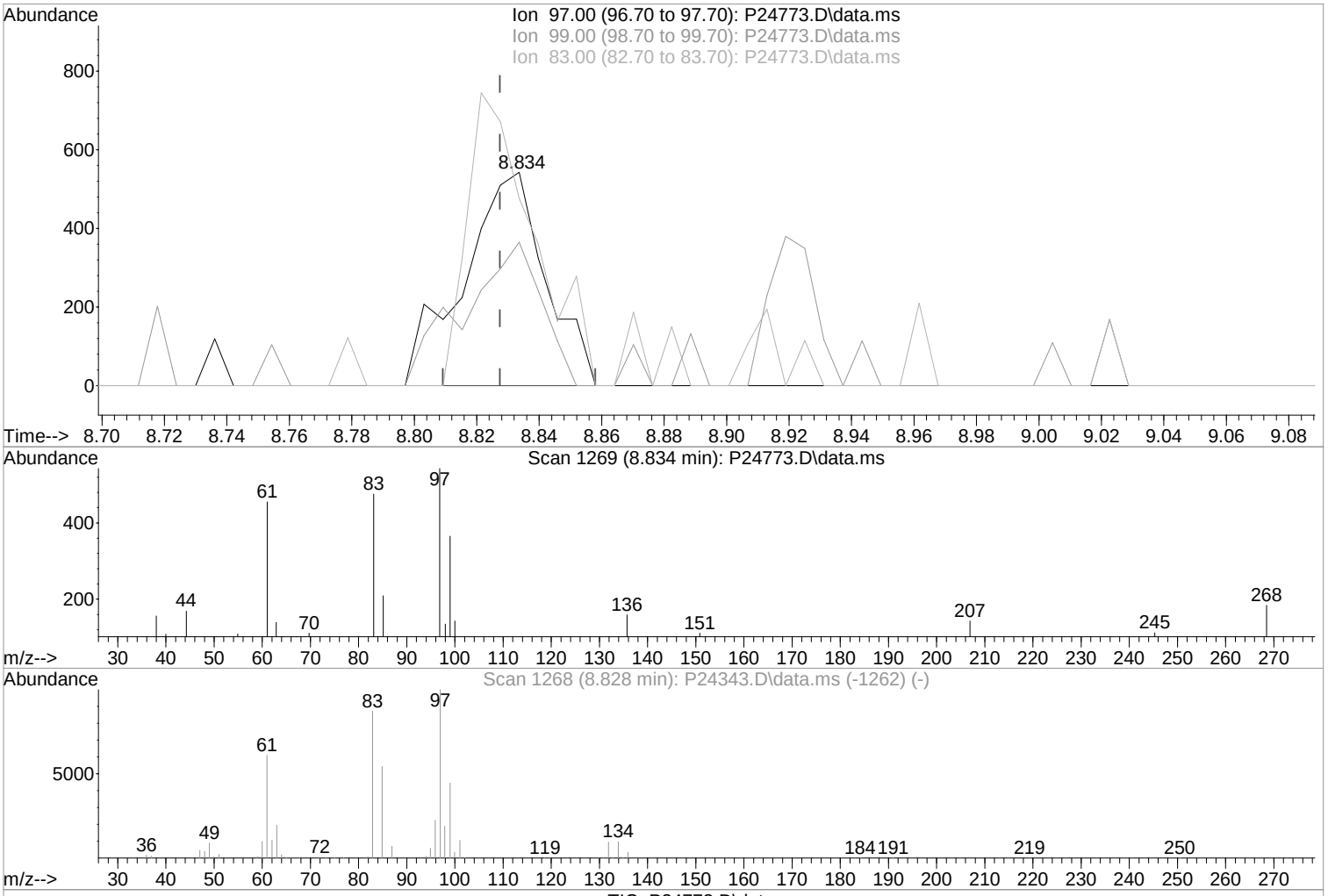
03/12/19

1st 03/12/19
2nd 03/12/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24773.D
Acq On : 7 Mar 2019 6:27 pm
Operator : K.Ruest
Sample : R1901880-007|2.5 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 08 10:37:15 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



TIC: P24773.D\data.ms

(69) 1,1,2-Trichloroethane (P)

8.834min (+0.006) 0.28 ppb m

response 993

Ion	Exp%	Act%
97.00	100	100
99.00	64.00	67.22
83.00	87.00	87.66
0.00	0.00	0.00

Manual Integration:

After

Split Peak

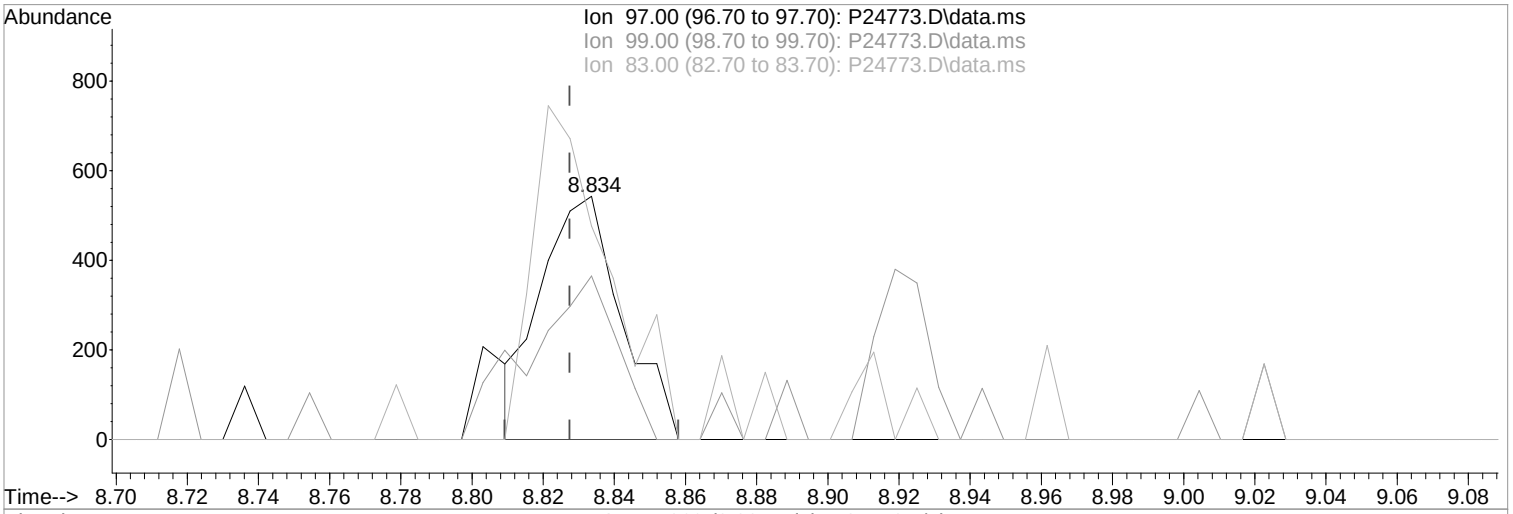
03/12/19

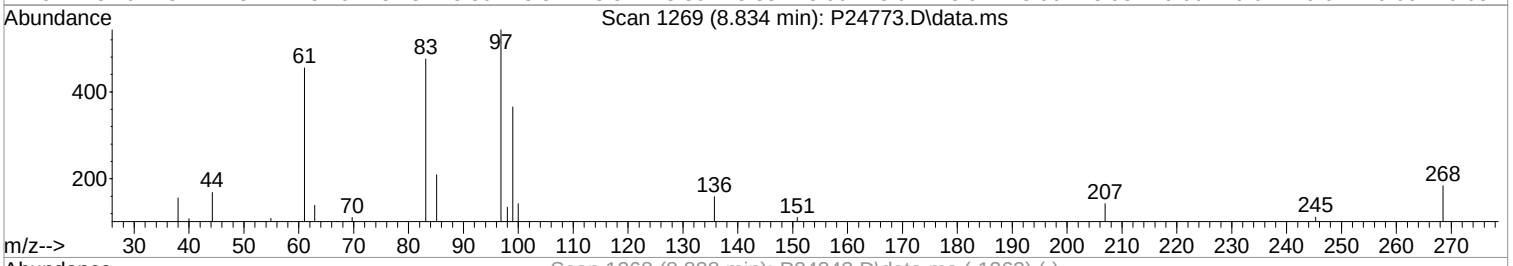
1st 03/12/19
2nd 03/12/19

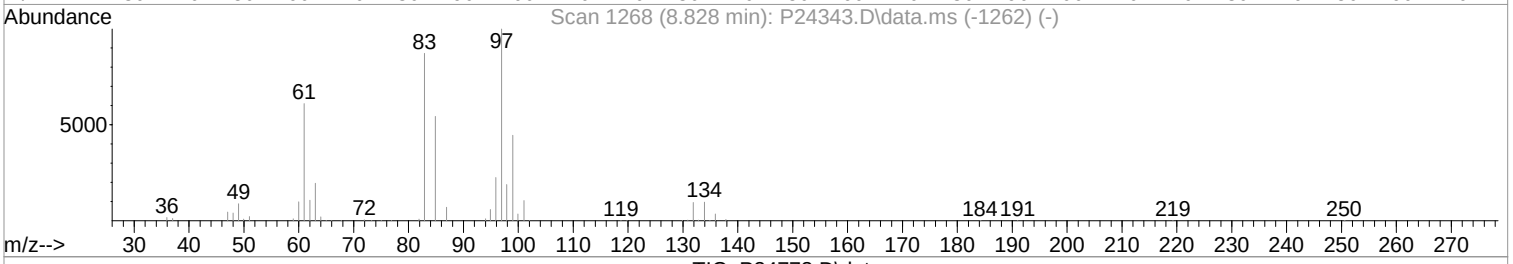
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24773.D
Acq On : 7 Mar 2019 6:27 pm
Operator : K.Ruest
Sample : R1901880-007|2.5 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 08 10:37:15 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration







TIC: P24773.D\data.ms

(69) 1,1,2-Trichloroethane (P)

8.834min (+0.006) 0.24 ppb

response 855

Ion	Exp%	Act%
97.00	100	100
99.00	64.00	67.22
83.00	87.00	87.66
0.00	0.00	0.00

Manual Integration:

Before

03/12/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24773.D
Acq On : 7 Mar 2019 6:27 pm
Operator : K.Ruest
Sample : R1901880-007|2.5 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 16 Sample Multiplier: 1

DL

Quant Time: Mar 12 10:03:26 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

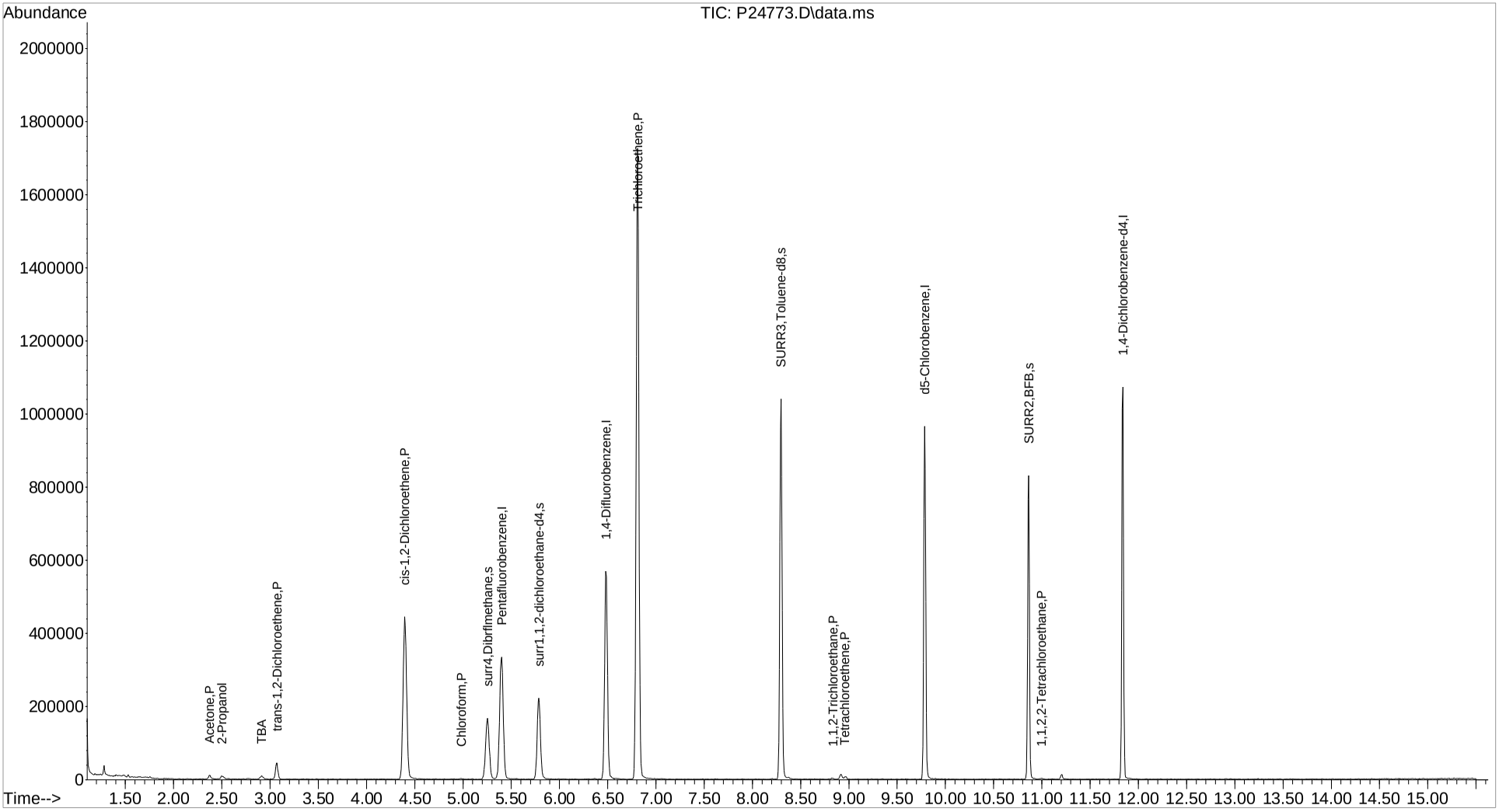
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.401	168	307677	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.480	114	506195	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	443981	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	224042	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	139519	50.16	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.32%				
48) surr1,1,2-dichloroetha...	5.785	65	182831	51.82	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.64%				
65) SURR3,Toluene-d8	8.297	98	666533	50.52	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.04%				
70) SURR2,BFB	10.864	95	231146	48.91	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.82%				
Target Compounds							Qvalue
15) Acetone	2.371	43	10865	7.37	ppb		90
16) 2-Propanol	2.499	45	9488	24.81	ppb		91
23) TBA	2.914	59	5094	8.38	ppb		77
26) trans-1,2-Dichloroethene	3.073	96	17057	5.34	ppb		96
34) cis-1,2-Dichloroethene	4.395	96	259204	72.41	ppb		88
40) Chloroform	4.981	83	2050m	0.39	ppb		
54) Trichloroethene	6.810	130	630291	178.03	ppb		95
69) 1,1,2-Trichloroethane	8.834	97	993m	0.28	ppb		
72) Tetrachloroethene	8.956	164	1569	0.59	ppb	#	56
92) 1,1,2,2-Tetrachloroethane	10.998	83	1052	0.21	ppb		86

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

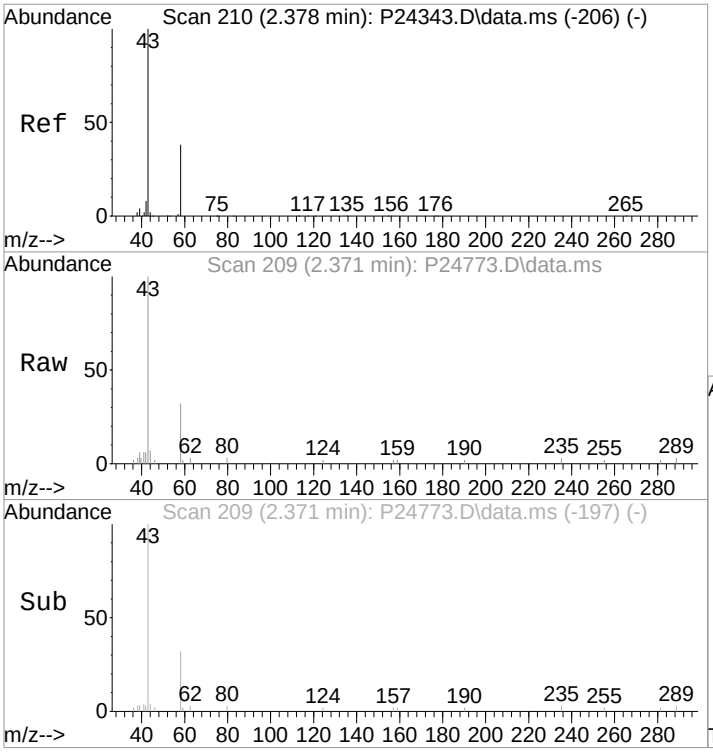
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24773.D
Acq On : 7 Mar 2019 6:27 pm
Operator : K.Ruest
Sample : R1901880-007|2.5 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 12 10:03:26 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



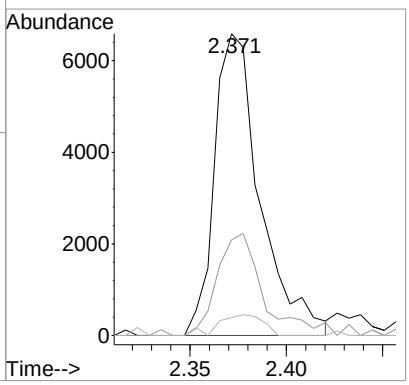
1st 03/12/19
2nd 03/12/19

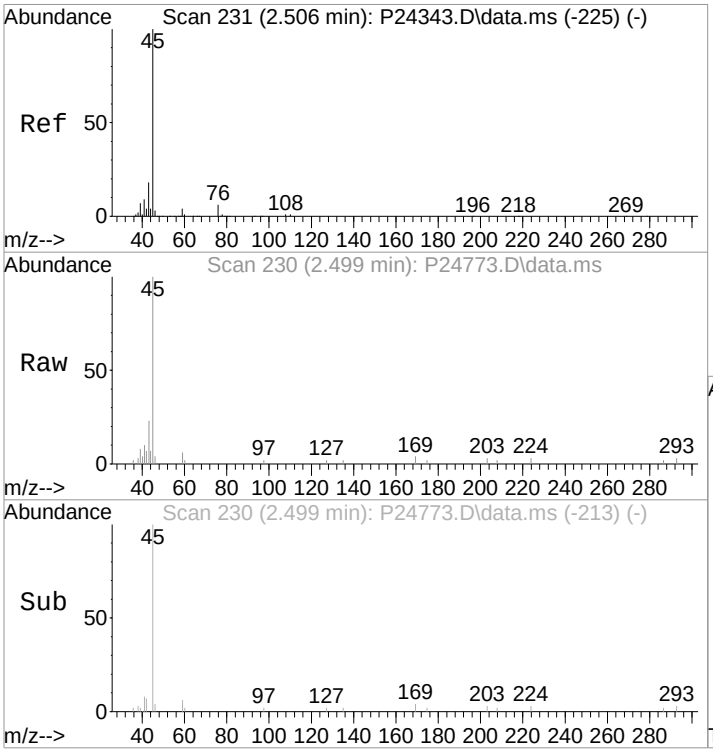


#15
Acetone
Concen: 7.37 ppb
RT: 2.371 min Scan# 209
Delta R.T. 0.000 min
Lab File: P24773.D
Acq: 7 Mar 2019 6:27 pm

Tgt Ion: 43 Resp: 10865

Ion	Ratio	Lower	Upper
43	100		
58	31.7	18.1	58.1
42	6.0	0.0	27.8

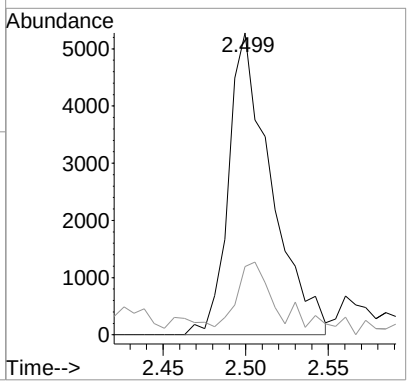


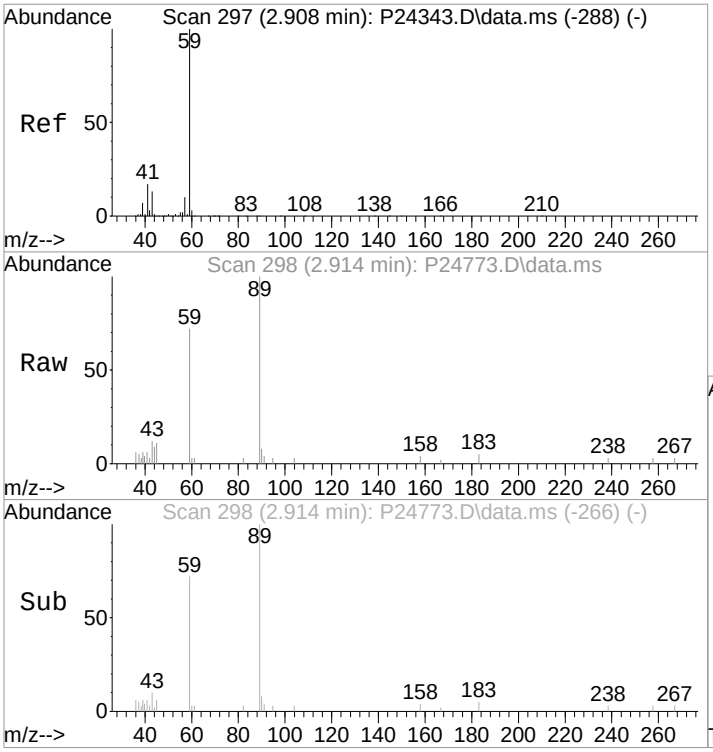


#16
2-Propanol
Concen: 24.81 ppb
RT: 2.499 min Scan# 230
Delta R.T. -0.006 min
Lab File: P24773.D
Acq: 7 Mar 2019 6:27 pm

Tgt Ion: 45 Resp: 9488

Ion	Ratio	Lower	Upper
45	100		
43	22.6	0.0	38.5

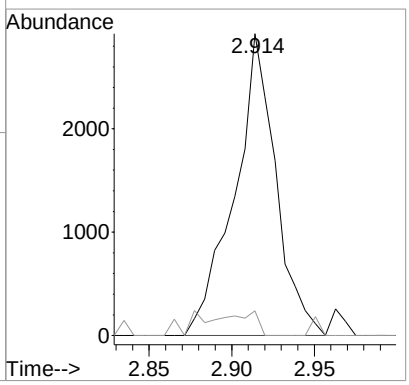


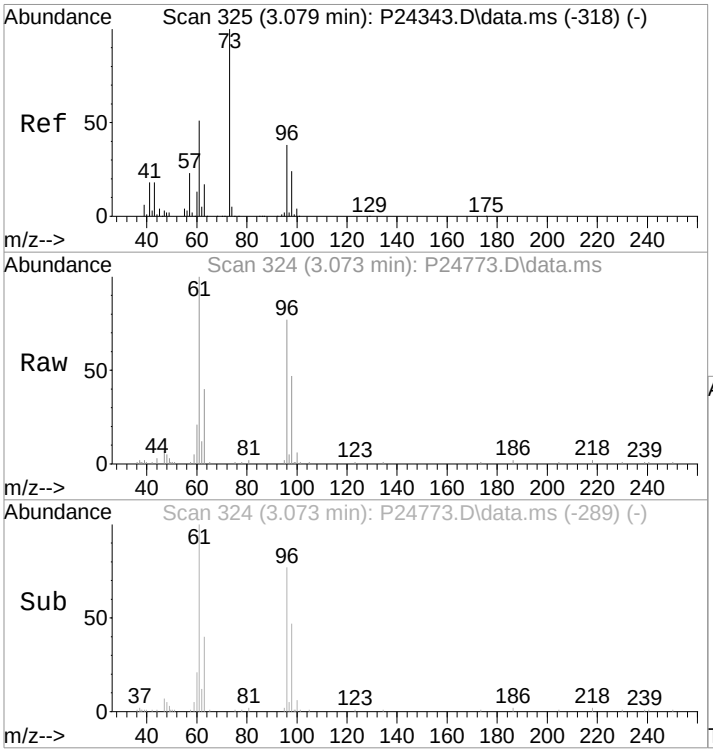


#23
TBA
Concen: 8.38 ppb
RT: 2.914 min Scan# 298
Delta R.T. 0.006 min
Lab File: P24773.D
Acq: 7 Mar 2019 6:27 pm

Tgt Ion: 59 Resp: 5094

Ion	Ratio	Lower	Upper
59	100		
41	8.1	0.0	38.2

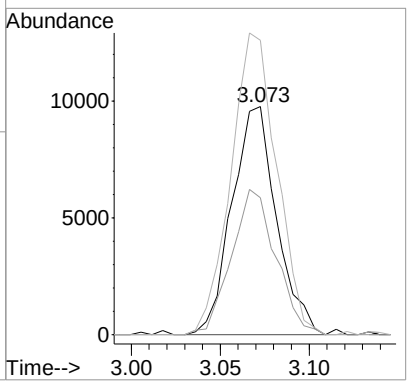


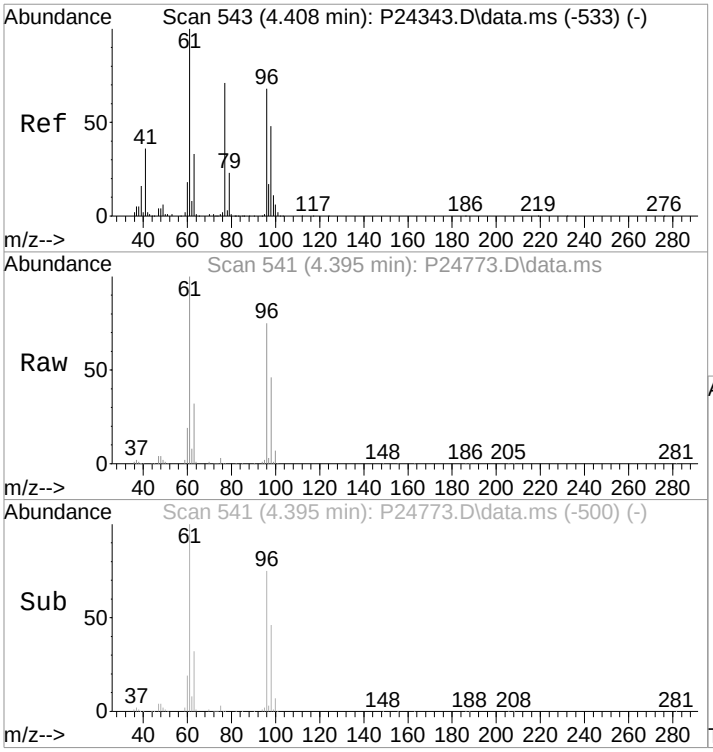


#26
trans-1,2-Dichloroethene
Concen: 5.34 ppb
RT: 3.073 min Scan# 324
Delta R.T. 0.006 min
Lab File: P24773.D
Acq: 7 Mar 2019 6:27 pm

Tgt Ion: 96 Resp: 17057

Ion	Ratio	Lower	Upper
96	100		
98	60.1	43.5	83.5
61	129.0	114.4	154.4

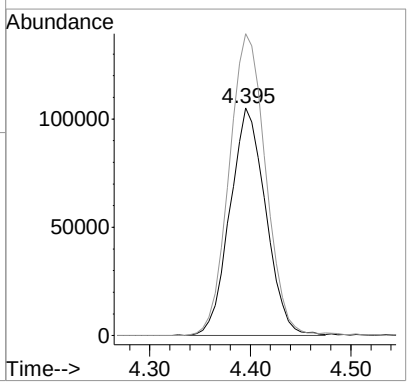


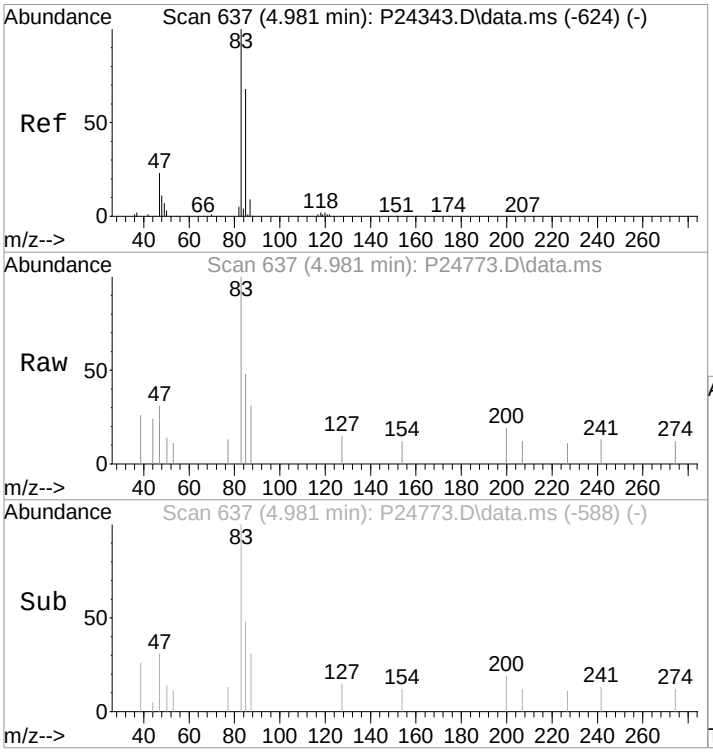


#34
cis-1,2-Dichloroethene
Concen: 72.41 ppb
RT: 4.395 min Scan# 541
Delta R.T. -0.006 min
Lab File: P24773.D
Acq: 7 Mar 2019 6:27 pm

Tgt Ion: 96 Resp: 259204

Ion	Ratio	Lower	Upper
96	100		
61	132.6	128.1	168.1

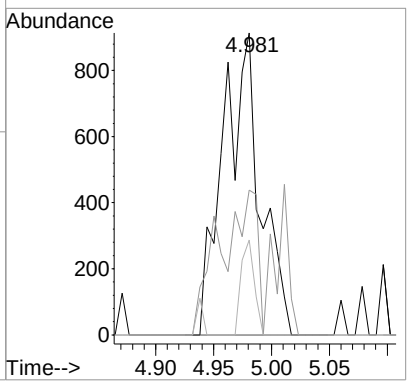


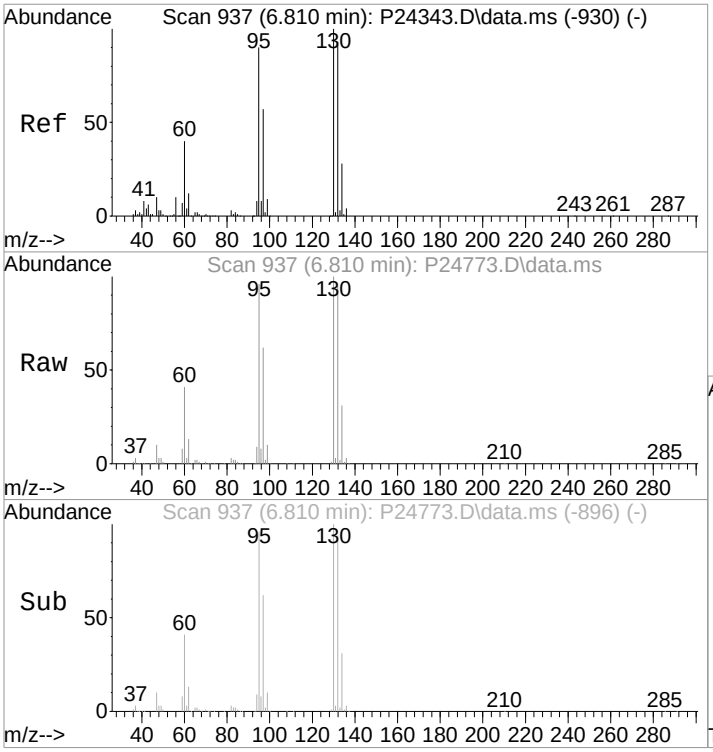


#40
Chloroform
Concen: 0.39 ppb m
RT: 4.981 min Scan# 637
Delta R.T. 0.012 min
Lab File: P24773.D
Acq: 7 Mar 2019 6:27 pm

Tgt Ion: 83 Resp: 2050

Ion	Ratio	Lower	Upper
83	100		
85	47.9	47.9	87.9
47	31.4	3.4	43.4

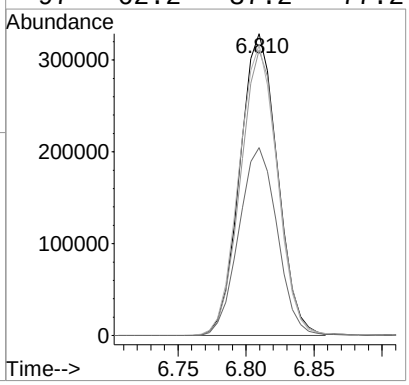


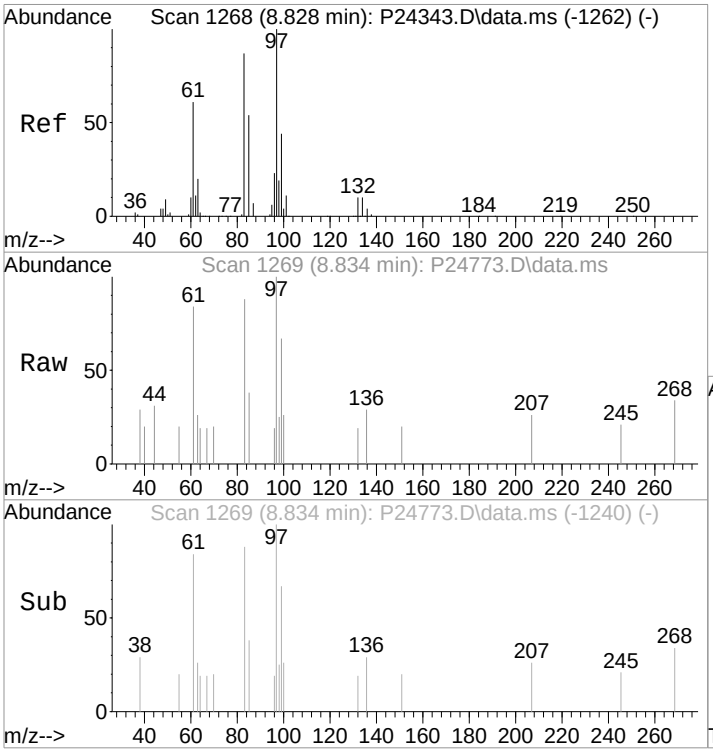


#54
Trichloroethene
Concen: 178.03 ppb
RT: 6.810 min Scan# 937
Delta R.T. 0.000 min
Lab File: P24773.D
Acq: 7 Mar 2019 6:27 pm

Tgt Ion:130 Resp: 630291

Ion	Ratio	Lower	Upper
130	100		
132	94.5	72.6	112.6
95	96.2	69.8	109.8
97	62.2	37.2	77.2

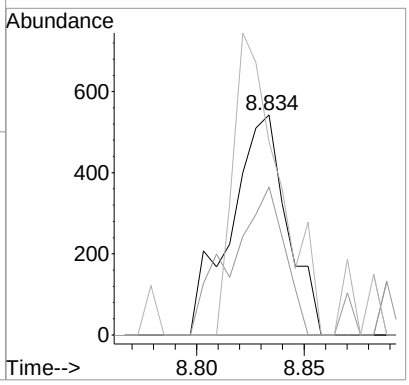


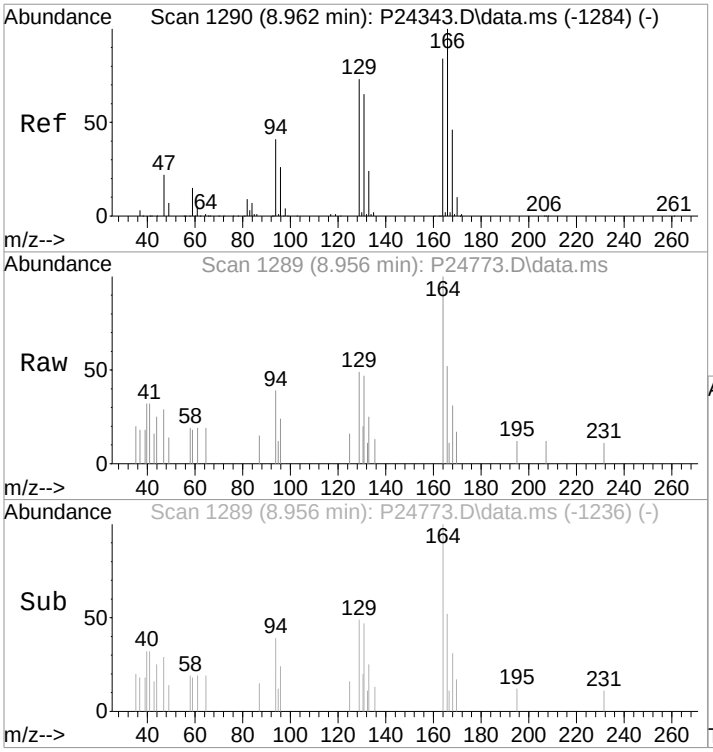


#69
1,1,2-Trichloroethane
Concen: 0.28 ppb m
RT: 8.834 min Scan# 1269
Delta R.T. 0.006 min
Lab File: P24773.D
Acq: 7 Mar 2019 6:27 pm

Tgt Ion: 97 Resp: 993

Ion	Ratio	Lower	Upper
97	100		
99	67.2	44.0	84.0
83	87.7	67.0	107.0

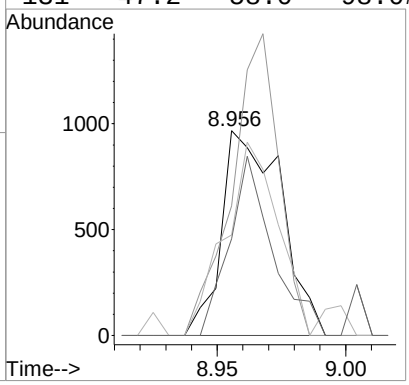


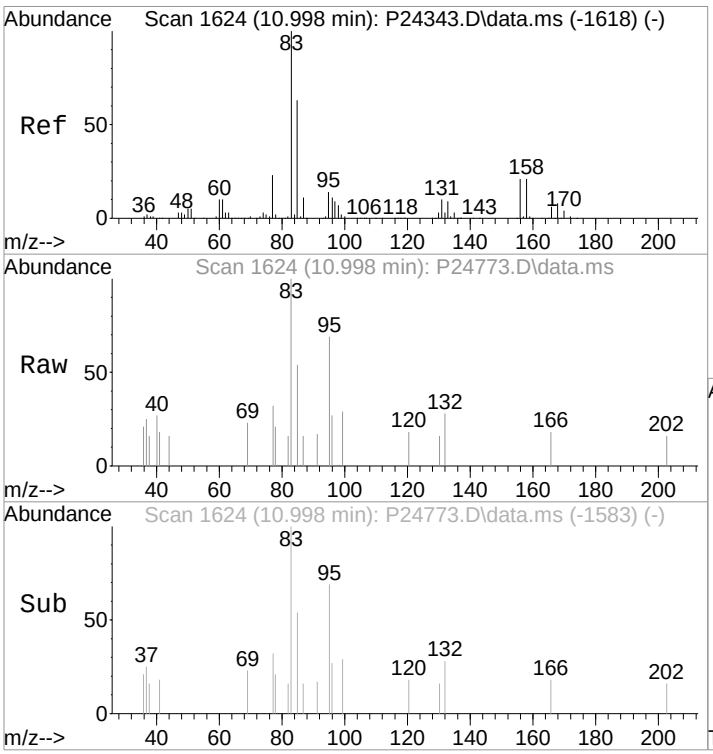


#72
Tetrachloroethene
Concen: 0.59 ppb
RT: 8.956 min Scan# 1289
Delta R.T. -0.006 min
Lab File: P24773.D
Acq: 7 Mar 2019 6:27 pm

Tgt Ion:164 Resp: 1569

Ion	Ratio	Lower	Upper
164	100		
166	63.2	99.6	139.6#
129	49.1	66.7	106.7#
131	47.2	58.0	98.0#

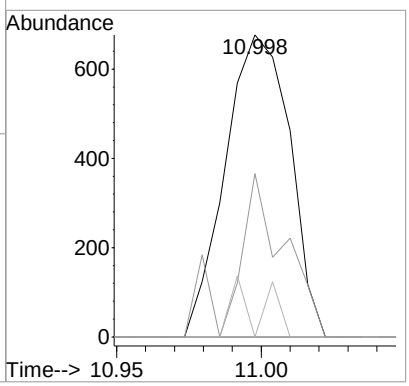




#92
1,1,2,2-Tetrachloroethane
Concen: 0.21 ppb
RT: 10.998 min Scan# 1624
Delta R.T. 0.000 min
Lab File: P24773.D
Acq: 7 Mar 2019 6:27 pm

Tgt Ion: 83 Resp: 1052

Ion	Ratio	Lower	Upper
83	100		
85	54.1	43.4	83.4
131	0.0	0.0	29.8

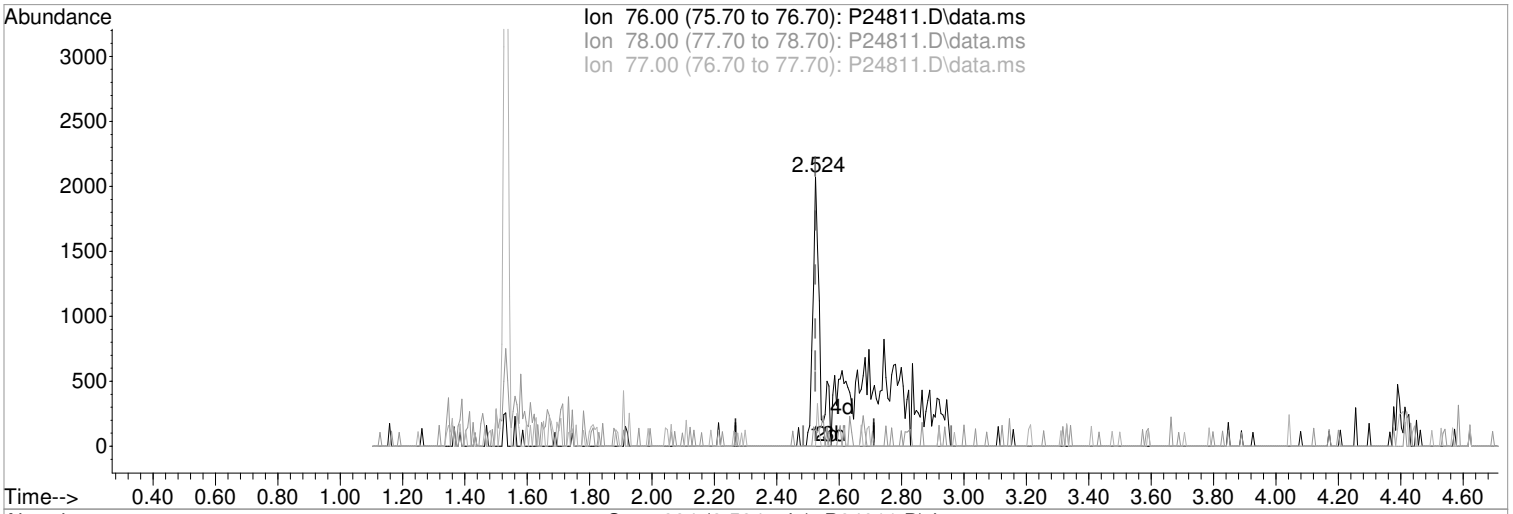


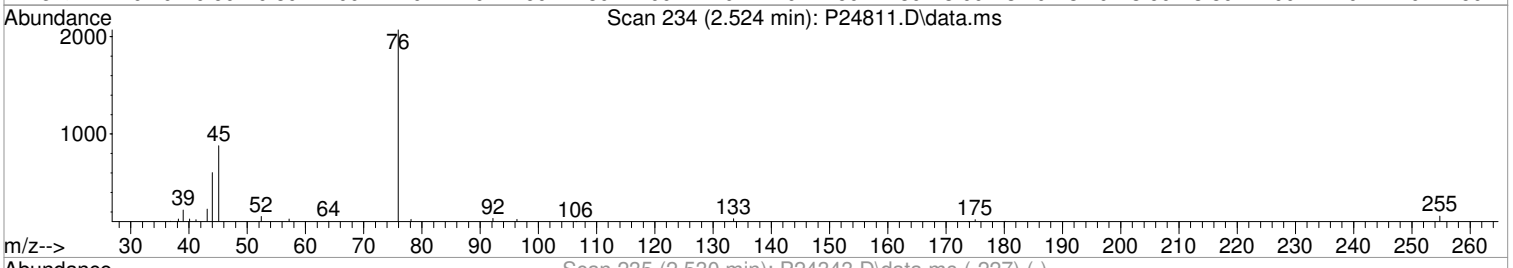
1st FW 03/12/19
2nd 03/12/19

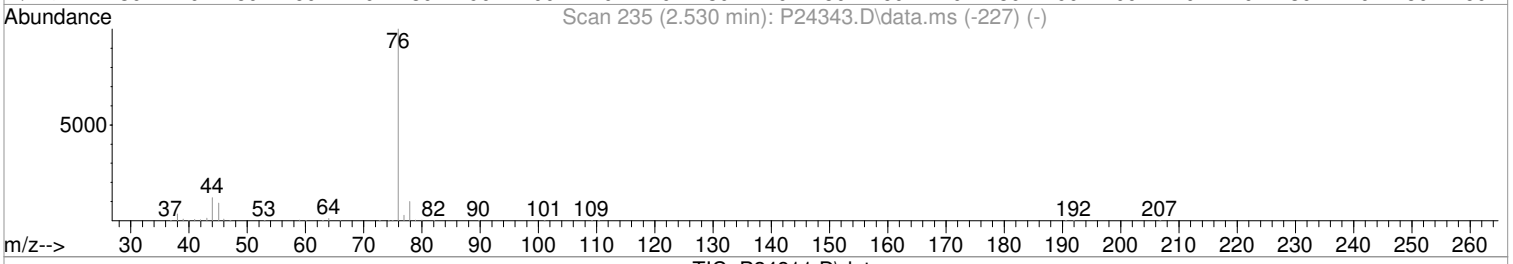
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24811.D
Acq On : 8 Mar 2019 8:55 pm
Operator : F.NAEGLER
Sample : R1901880-008|2.5 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Mar 11 09:27:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration







TIC: P24811.D\data.ms

(18) Carbon Disulfide (P)

2.524min (+0.000) 1.44 ppb m

response 12313

Ion	Exp%	Act%
76.00	100	100
78.00	10.10	5.89
77.00	2.90	0.00
0.00	0.00	0.00

Manual Integration:

After

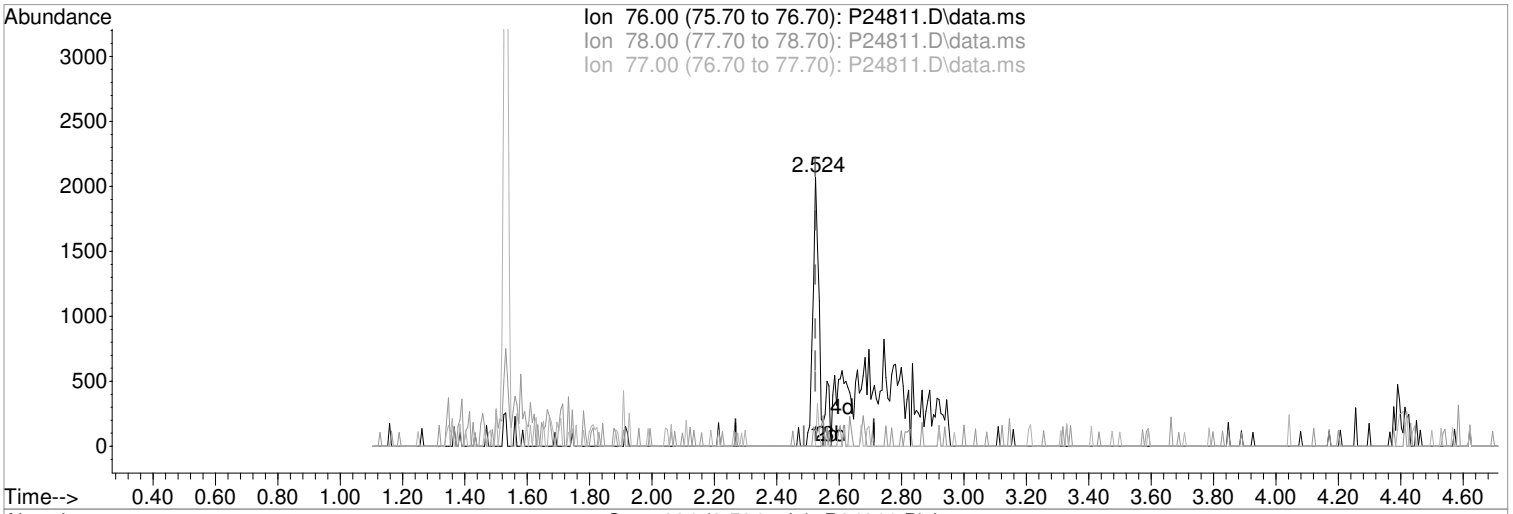
Poor integration.

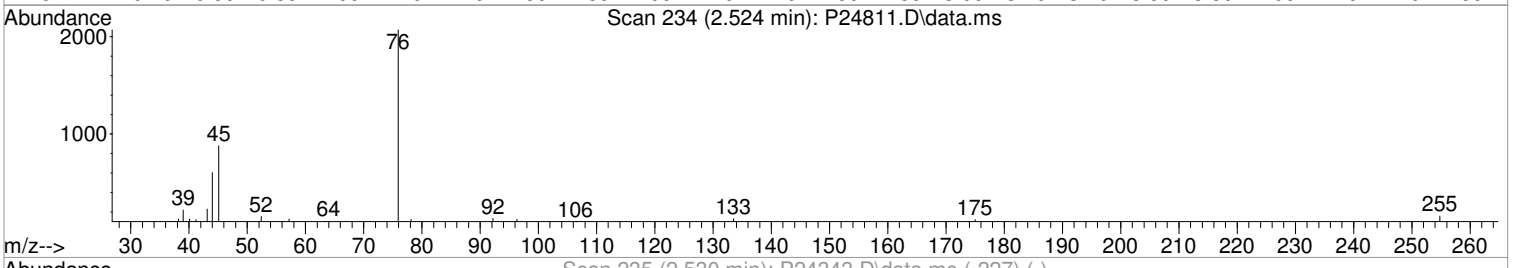
03/12/19

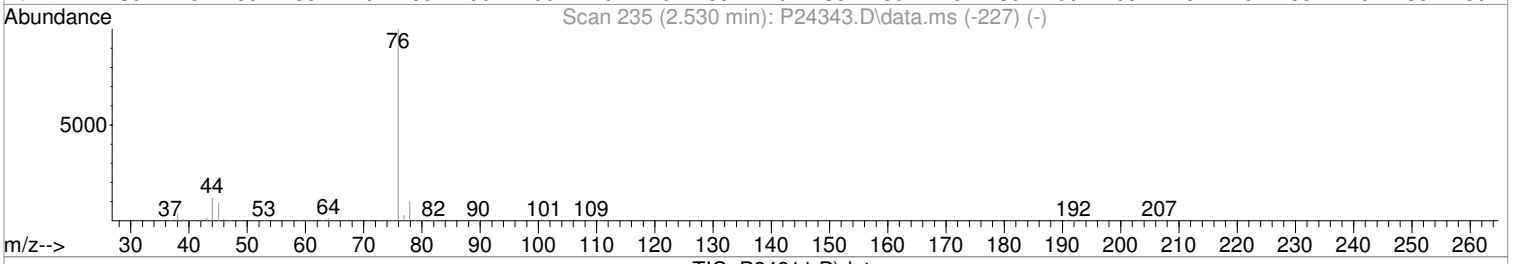
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24811.D
Acq On : 8 Mar 2019 8:55 pm
Operator : F.NAEGLER
Sample : R1901880-008|2.5 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Mar 11 09:27:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration







TIC: P24811.D\data.ms

(18) Carbon Disulfide (P)

2.524min (+0.000) 0.31 ppb

response 2691

Ion	Exp%	Act%
76.00	100	100
78.00	10.10	5.89
77.00	2.90	0.00
0.00	0.00	0.00

Manual Integration:

Before

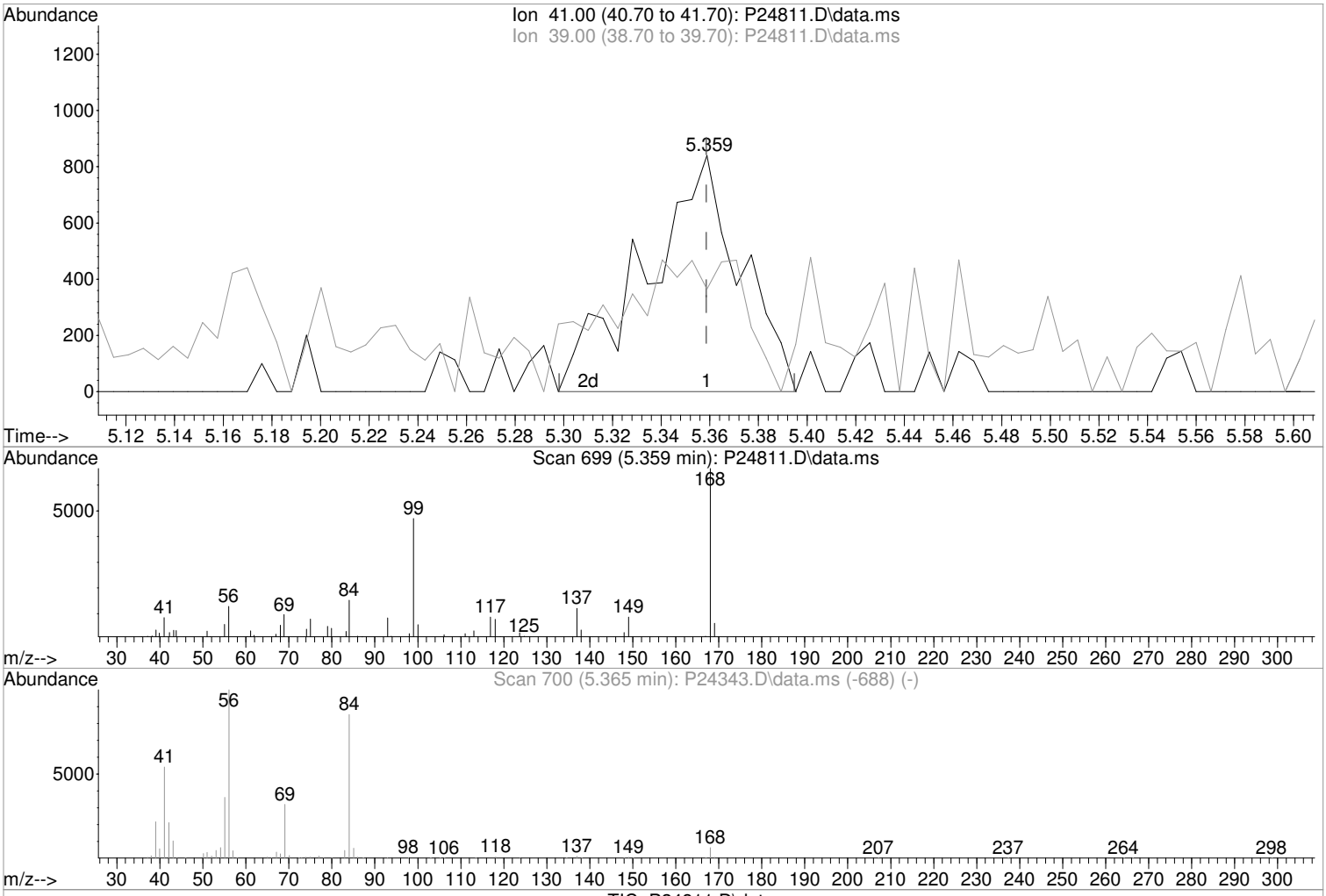
03/12/19

1st FW 03/12/19
2nd 03/12/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24811.D
Acq On : 8 Mar 2019 8:55 pm
Operator : F.NAEGLER
Sample : R1901880-008|2.5 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Mar 11 09:27:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



TIC: P24811.D\data.ms

(44) Cyclohexane (P)

5.359min (+0.000) 0.78 ppb m

response 2271

Ion	Exp%	Act%
41.00	100	100
39.00	40.30	43.45
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

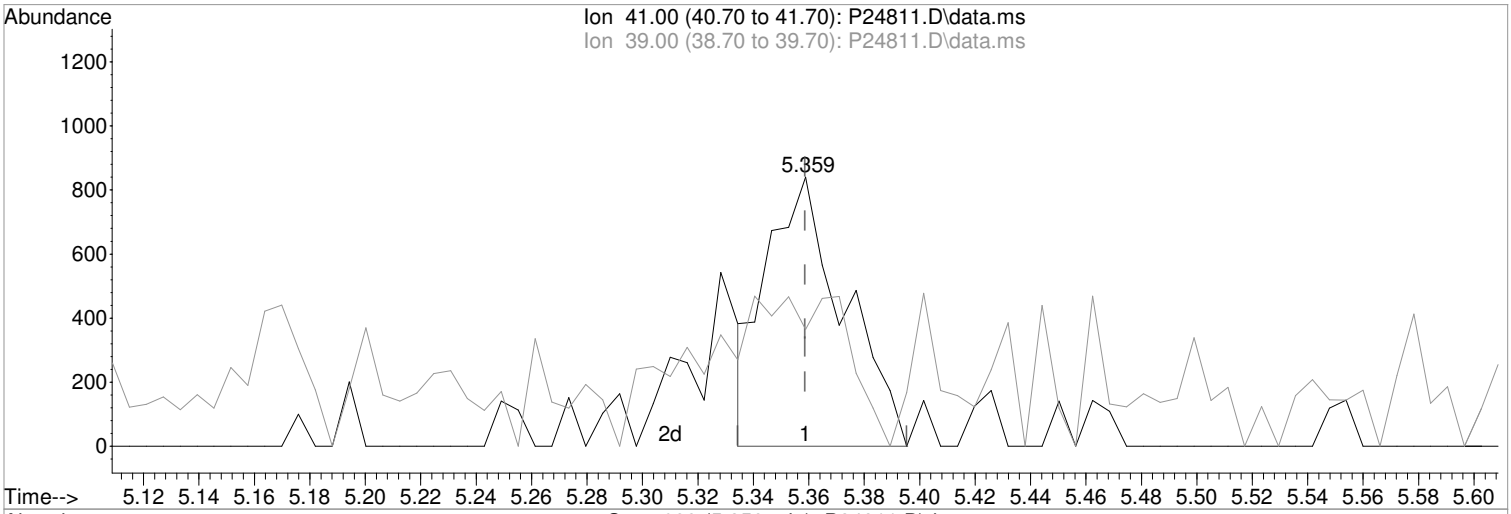
Poor integration.

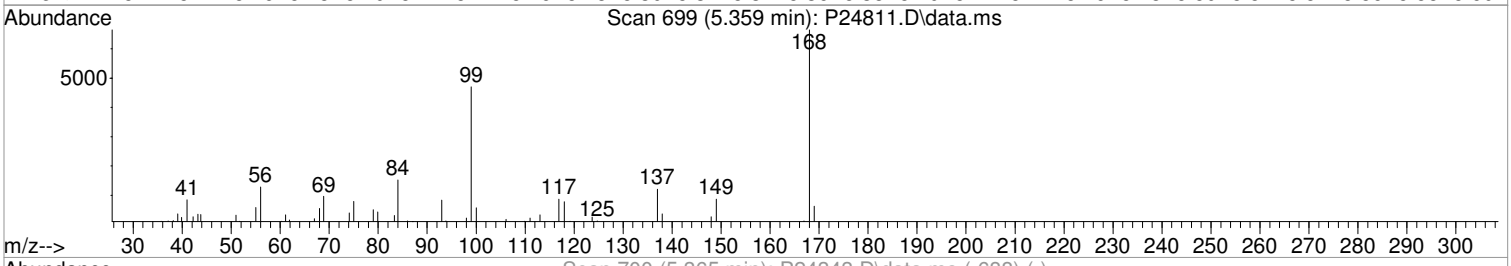
03/12/19

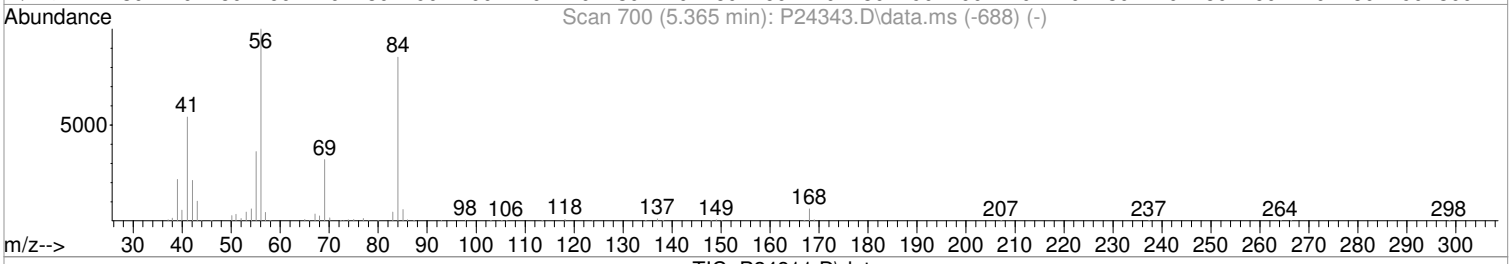
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24811.D
Acq On : 8 Mar 2019 8:55 pm
Operator : F.NAEGLER
Sample : R1901880-008|2.5 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Mar 11 09:27:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration







TIC: P24811.D\data.ms

(44) Cyclohexane (P)

5.359min (+0.000) 0.56 ppb

response 1634

Ion	Exp%	Act%
41.00	100	100
39.00	40.30	43.45
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

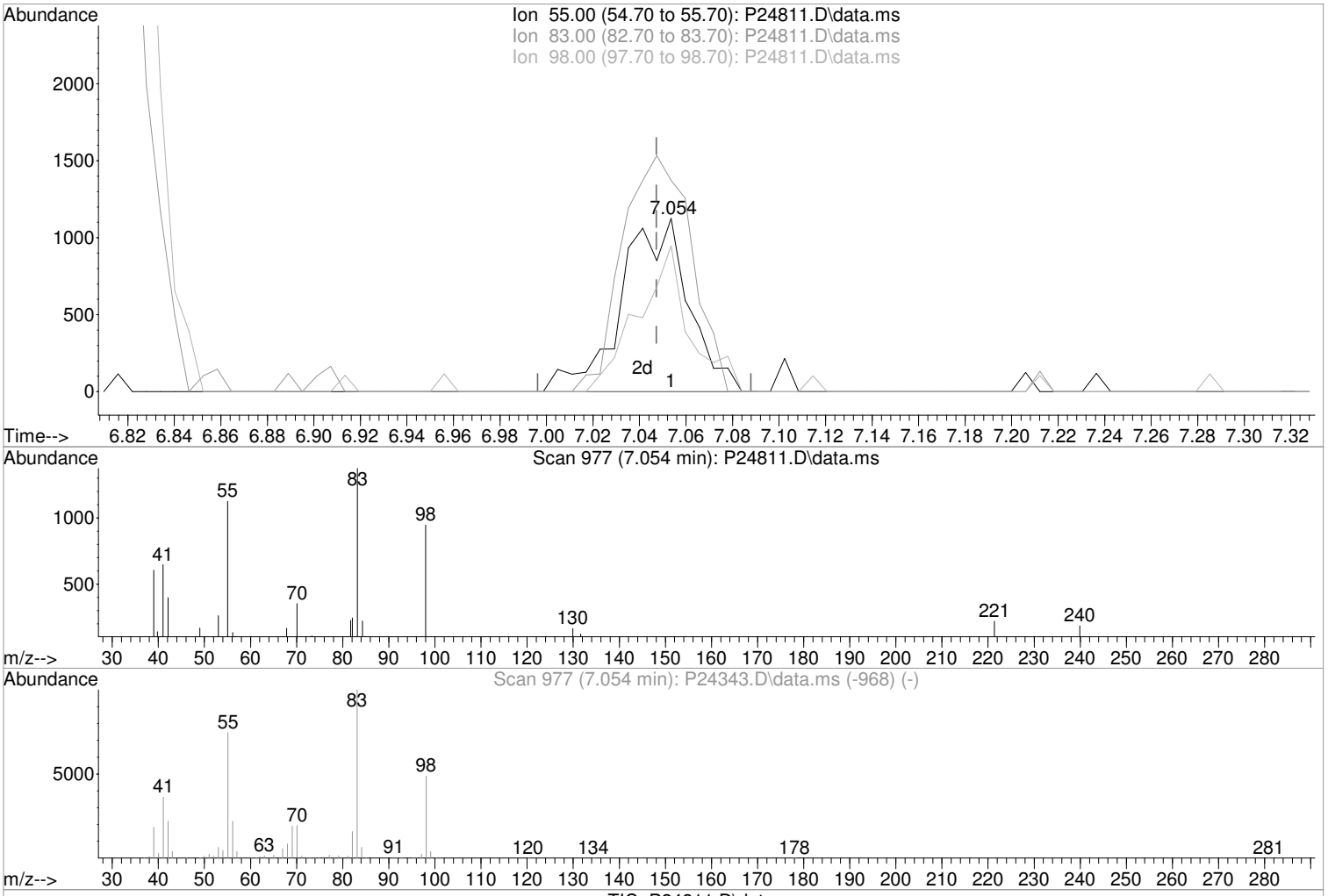
Before

03/12/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24811.D
Acq On : 8 Mar 2019 8:55 pm
Operator : F.NAEGLER
Sample : R1901880-008|2.5 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Mar 11 09:27:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



TIC: P24811.D\data.ms

(55) Methylcyclohexane (P)

7.054min (+0.006) 0.52 ppb m

response 2279

Ion	Exp%	Act%
55.00	100	100
83.00	133.10	121.94
98.00	65.00	84.10
0.00	0.00	0.00

Manual Integration:

After

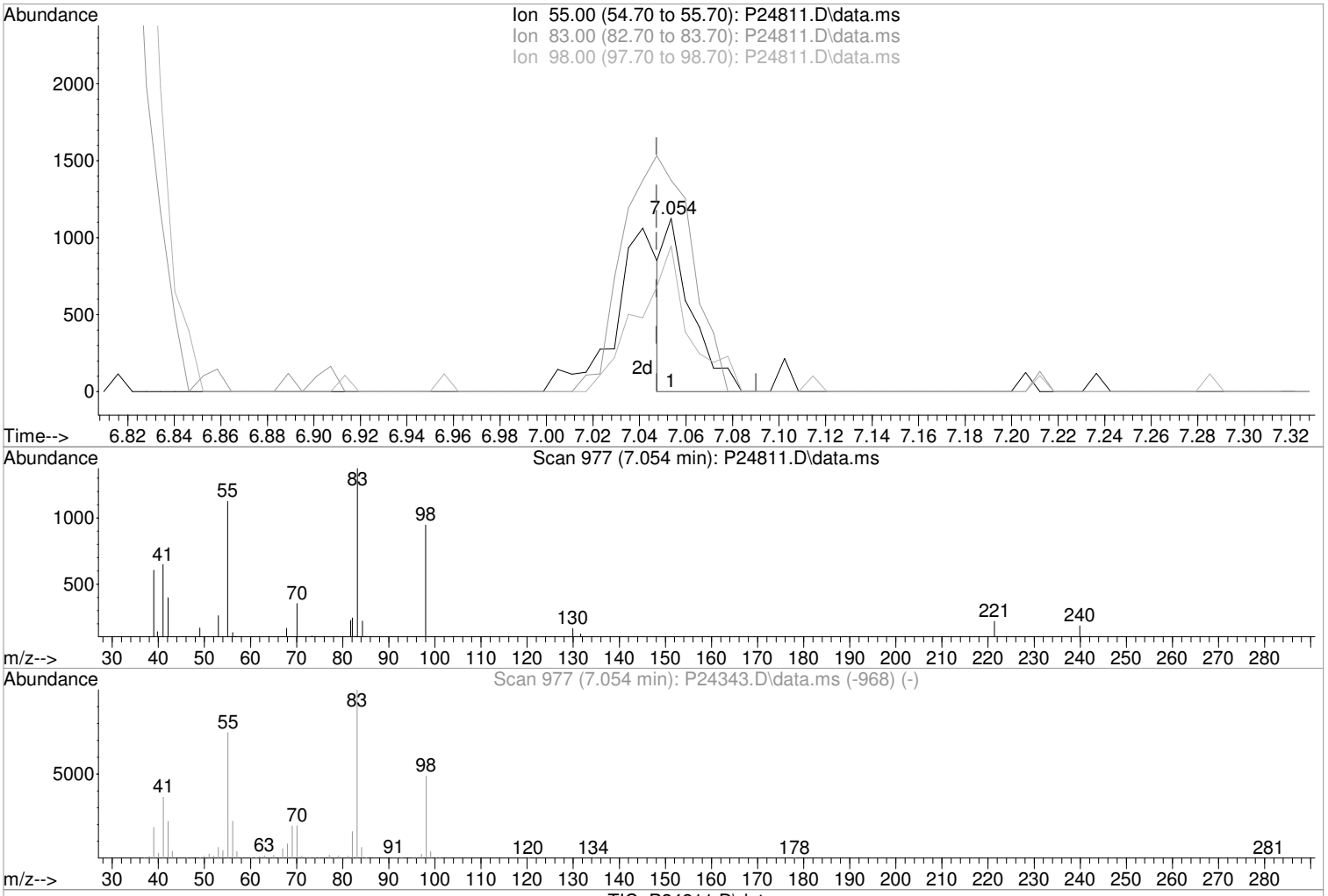
Poor integration.

03/12/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24811.D
Acq On : 8 Mar 2019 8:55 pm
Operator : F.NAEGLER
Sample : R1901880-008|2.5 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Mar 11 09:27:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



TIC: P24811.D\data.ms

(55) Methylcyclohexane (P)

7.054min (+0.006) 0.20 ppb

response 893

Ion	Exp%	Act%
55.00	100	100
83.00	133.10	121.94
98.00	65.00	84.10
0.00	0.00	0.00

Manual Integration:

Before

03/12/19

1st FW 03/12/19
2nd 03/12/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24811.D
Acq On : 8 Mar 2019 8:55 pm
Operator : F.NAEGLER
Sample : R1901880-008|2.5 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Mar 12 10:38:33 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

rpt 1/10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.401	168	306928	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.487	114	499679	50.00	ppb	0.00
71) d5-Chlorobenzene	9.785	117	441202	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	218598	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.255	113	141966	51.70	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.40%			
48) surr1,1,2-dichloroetha...	5.786	65	183701	52.74	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 105.48%			
65) SURR3,Toluene-d8	8.297	98	661907	50.82	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.64%			
70) SURR2,BFB	10.864	95	230883	49.49	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.98%			
Target Compounds						Qvalue
4) Vinyl Chloride	1.408	62	8482	1.90	ppb	# 1
5) Bromomethane	1.640	94	724	Below Cal		# 49
13) 1,1-Diclethene	2.323	96	579	0.20	ppb	# 65
15) Acetone	2.378	43	5298	3.60	ppb	88
16) 2-Propanol	2.506	45	8183	21.45	ppb	85
18) Carbon Disulfide	2.524	76	12313m	1.44	ppb	
22) Methylene Chloride	2.774	84	3260	0.91	ppb	89
26) trans-1,2-Dichloroethene	3.067	96	14911	4.68	ppb	96
34) cis-1,2-Dichloroethene	4.396	96	384893	107.79	ppb	90
44) Cyclohexane	5.359	41	2271m	0.78	ppb	
54) Trichloroethene	6.810	130	1102725	315.54	ppb	93
55) Methylcyclohexane	7.054	55	2279m	0.52	ppb	
72) Tetrachloroethene	8.968	164	7013	2.65	ppb	91
116) Hexachlorobt	13.571	225	720	0.34	ppb	87

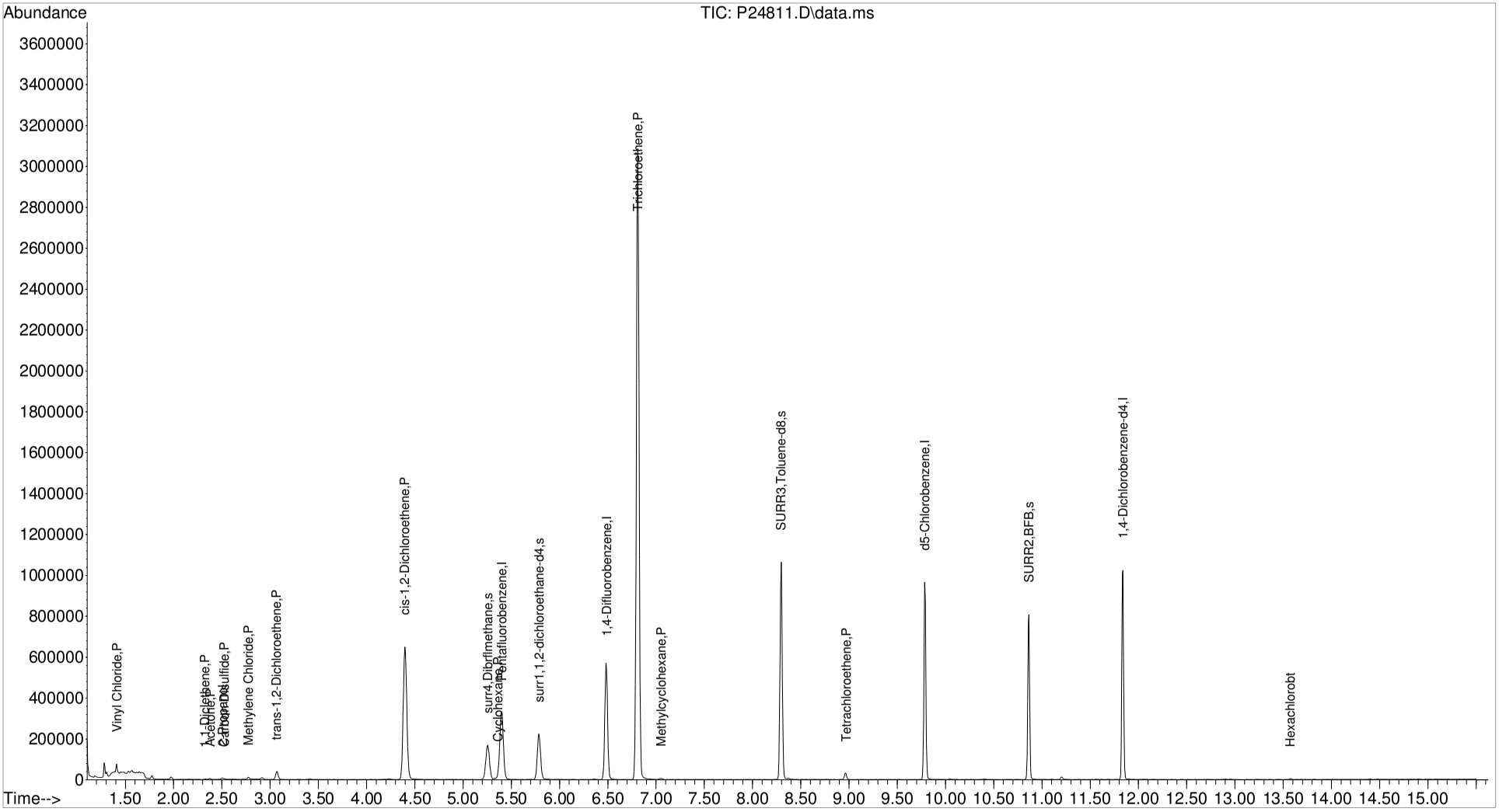
E-Over Calibration

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

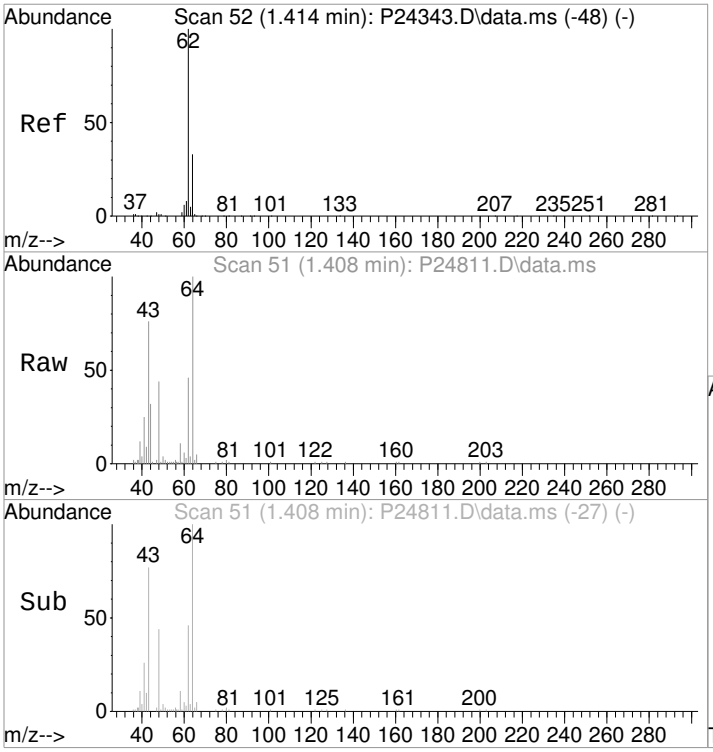
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24811.D
Acq On : 8 Mar 2019 8:55 pm
Operator : F.NAEGLER
Sample : R1901880-008|2.5 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Mar 12 10:38:33 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



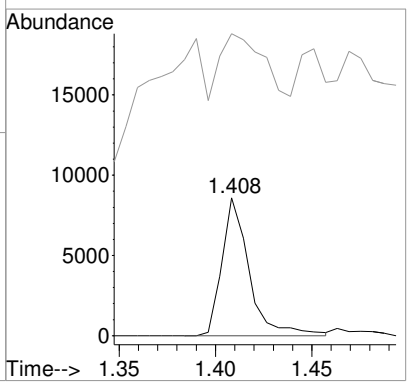
1st 03/12/19
2nd 03/12/19

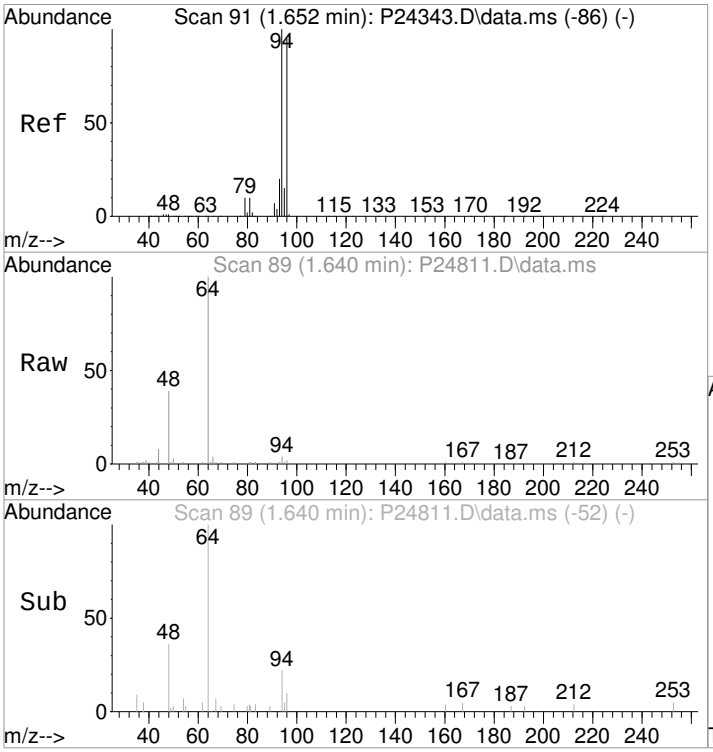


#4
Vinyl Chloride
Concen: 1.90 ppb
RT: 1.408 min Scan# 51
Delta R.T. 0.000 min
Lab File: P24811.D
Acq: 8 Mar 2019 8:55 pm

Tgt Ion: 62 Resp: 8482

Ion	Ratio	Lower	Upper
62	100		
64	219.2	13.2	53.2#

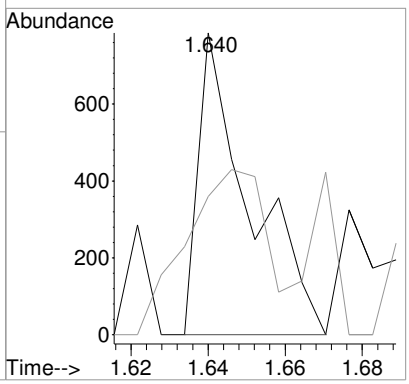


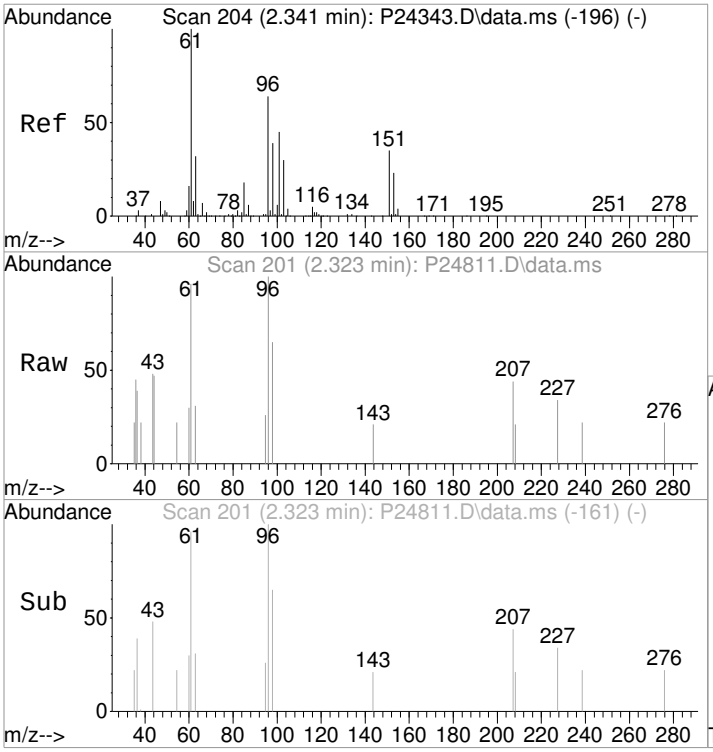


#5
Bromomethane
Concen: Below Cal
RT: 1.640 min Scan# 89
Delta R.T. 0.001 min
Lab File: P24811.D
Acq: 8 Mar 2019 8:55 pm

Tgt Ion: 94 Resp: 724

Ion	Ratio	Lower	Upper
94	100		
96	45.9	75.4	115.4#

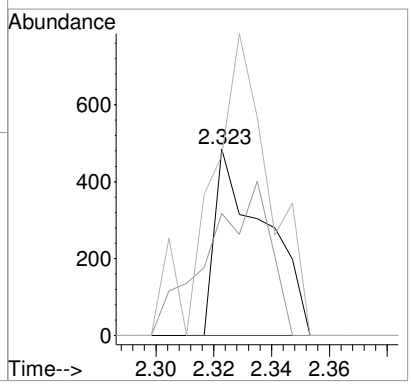


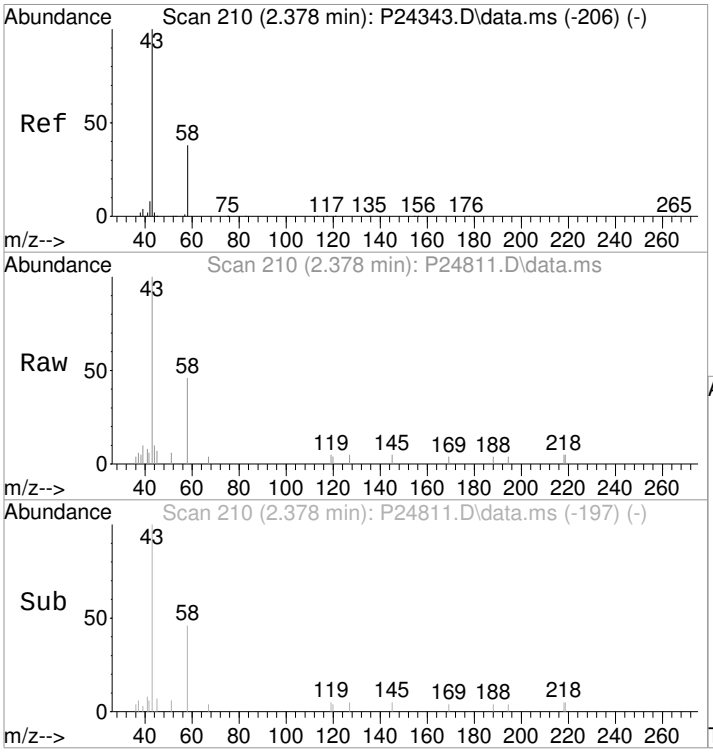


#13
1,1-Diclethene
Concen: 0.20 ppb
RT: 2.323 min Scan# 201
Delta R.T. -0.006 min
Lab File: P24811.D
Acq: 8 Mar 2019 8:55 pm

Tgt Ion: 96 Resp: 579

Ion	Ratio	Lower	Upper
96	100		
98	65.4	40.8	80.8
61	96.5	136.2	176.2#

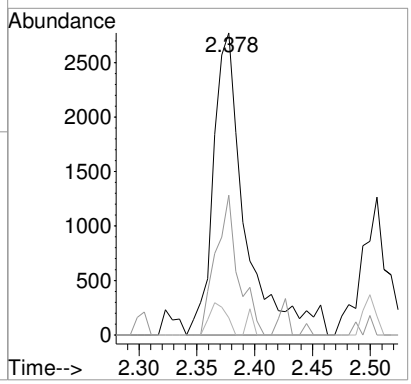


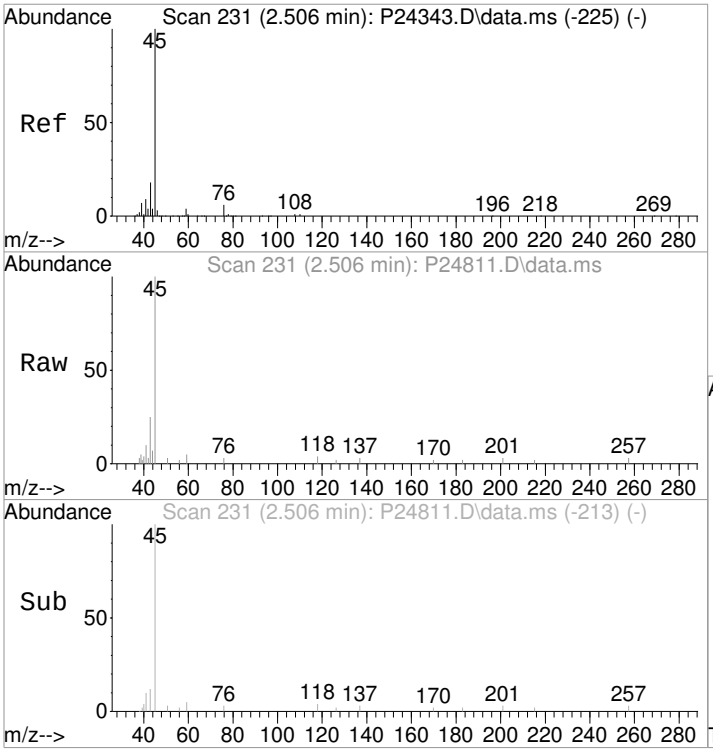


#15
Acetone
Concen: 3.60 ppb
RT: 2.378 min Scan# 210
Delta R.T. 0.006 min
Lab File: P24811.D
Acq: 8 Mar 2019 8:55 pm

Tgt Ion: 43 Resp: 5298

Ion	Ratio	Lower	Upper
43	100		
58	46.3	18.1	58.1
42	5.7	0.0	27.8

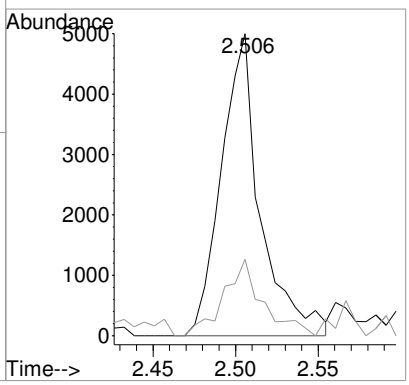


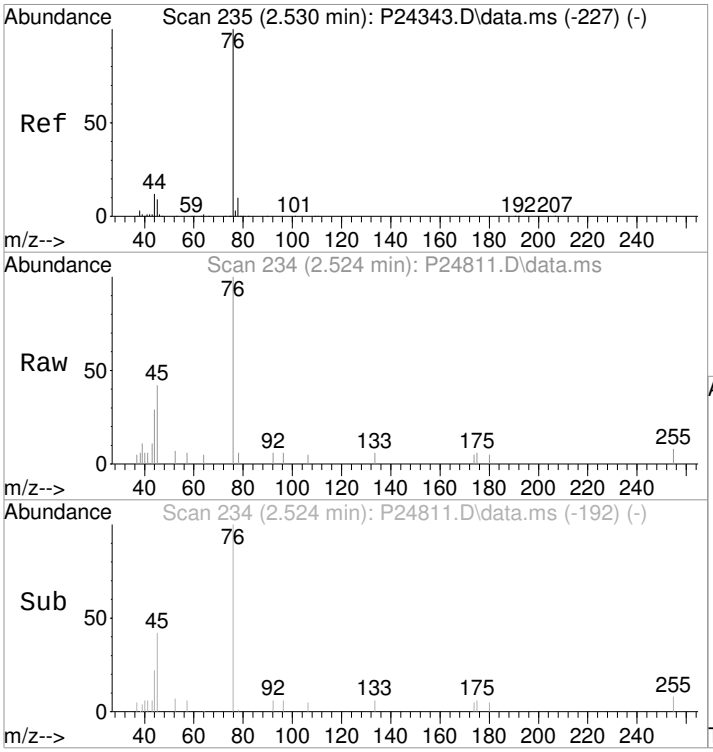


#16
2-Propanol
Concen: 21.45 ppb
RT: 2.506 min Scan# 231
Delta R.T. 0.000 min
Lab File: P24811.D
Acq: 8 Mar 2019 8:55 pm

Tgt Ion: 45 Resp: 8183

Ion	Ratio	Lower	Upper
45	100		
43	25.3	0.0	38.5

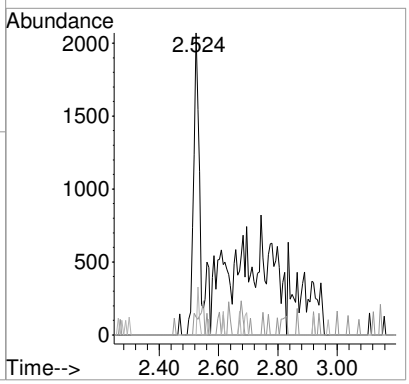


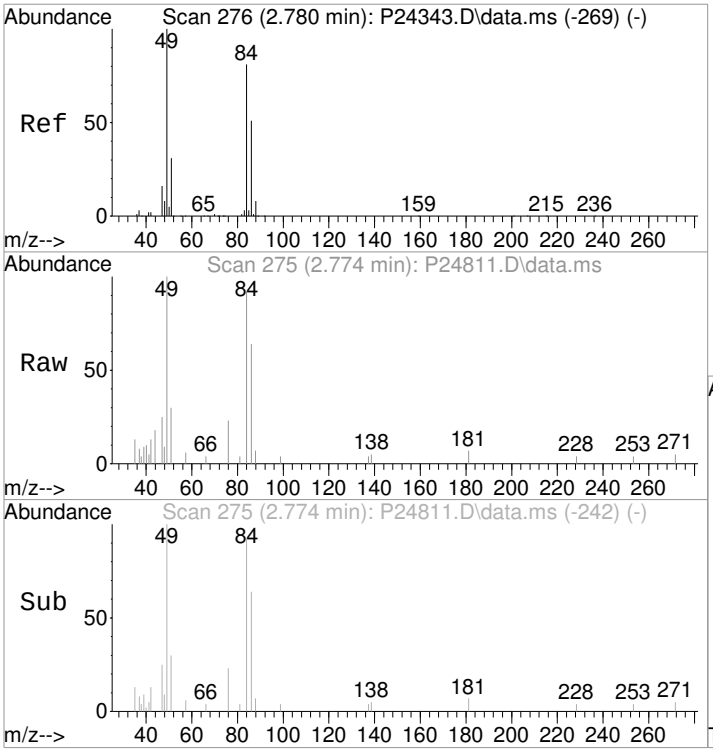


#18
Carbon Disulfide
Concen: 1.44 ppb m
RT: 2.524 min Scan# 234
Delta R.T. 0.000 min
Lab File: P24811.D
Acq: 8 Mar 2019 8:55 pm

Tgt Ion: 76 Resp: 12313

Ion	Ratio	Lower	Upper
76	100		
78	5.9	0.0	30.1
77	0.0	0.0	22.9

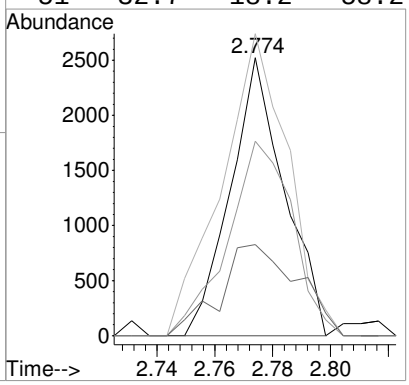


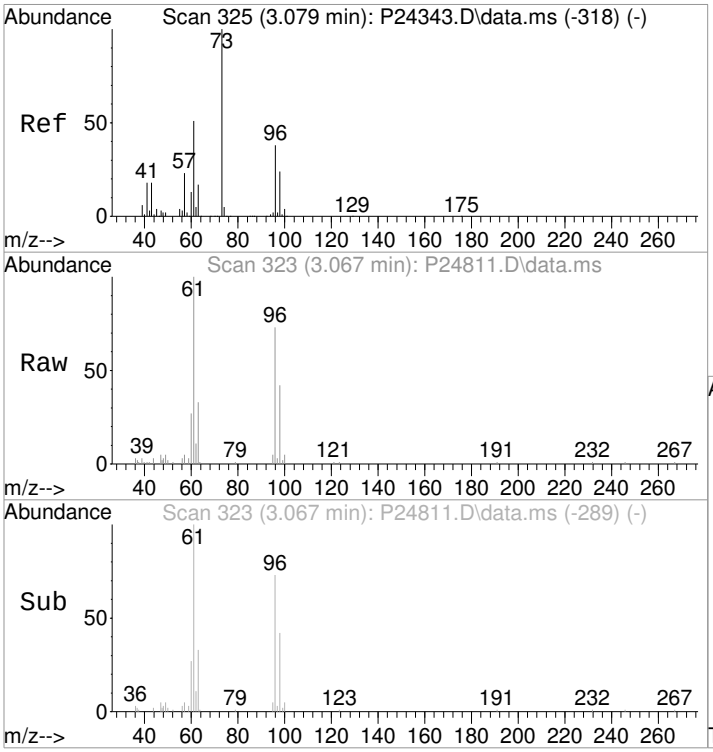


#22
Methylene Chloride
Concen: 0.91 ppb
RT: 2.774 min Scan# 275
Delta R.T. 0.000 min
Lab File: P24811.D
Acq: 8 Mar 2019 8:55 pm

Tgt Ion: 84 Resp: 3260

Ion	Ratio	Lower	Upper
84	100		
86	70.0	42.7	82.7
49	108.6	103.1	143.1
51	32.7	18.2	58.2

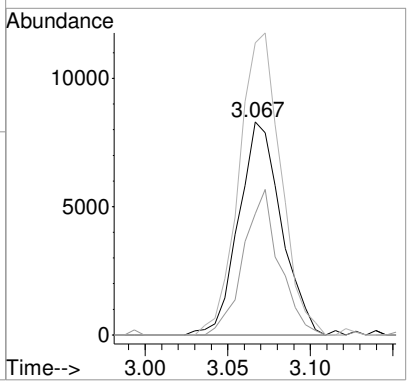


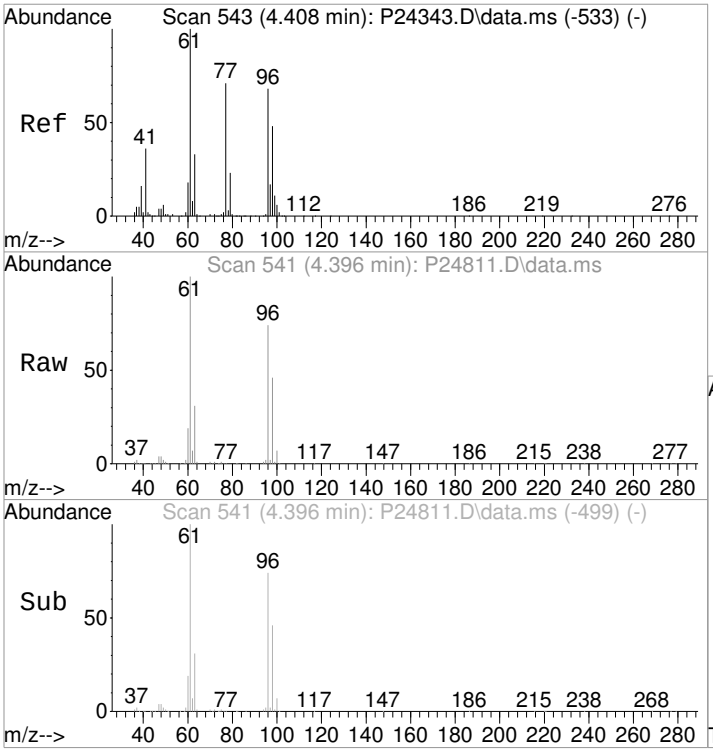


#26
trans-1,2-Dichloroethene
Concen: 4.68 ppb
RT: 3.067 min Scan# 323
Delta R.T. 0.000 min
Lab File: P24811.D
Acq: 8 Mar 2019 8:55 pm

Tgt Ion: 96 Resp: 14911

Ion	Ratio	Lower	Upper
96	100		
98	56.9	43.5	83.5
61	137.1	114.4	154.4

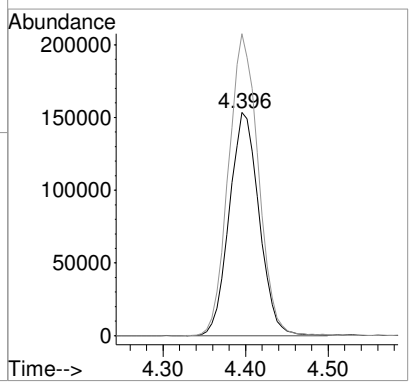


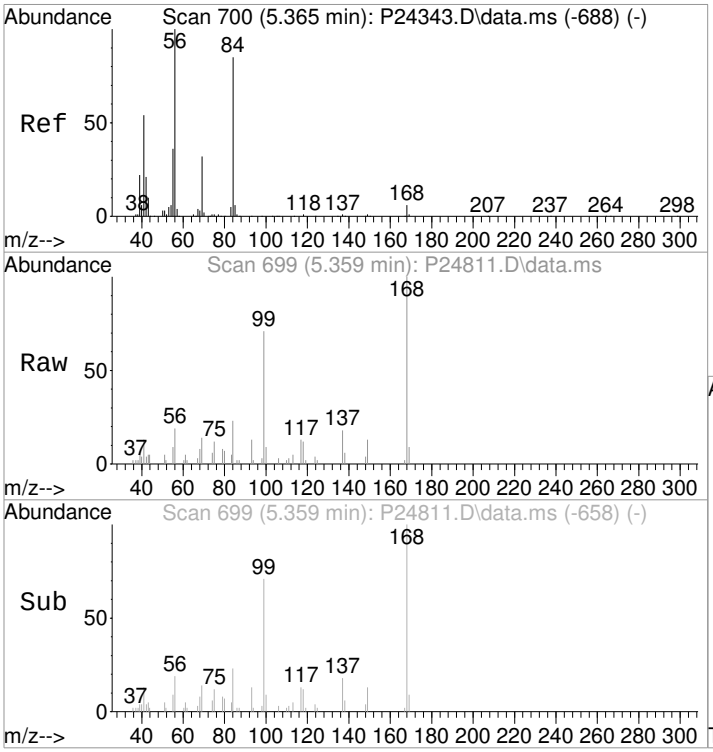


#34
cis-1,2-Dichloroethene
Concen: 107.79 ppb
RT: 4.396 min Scan# 541
Delta R.T. -0.006 min
Lab File: P24811.D
Acq: 8 Mar 2019 8:55 pm

Tgt Ion: 96 Resp: 384893

Ion	Ratio	Lower	Upper
96	100		
61	135.3	128.1	168.1

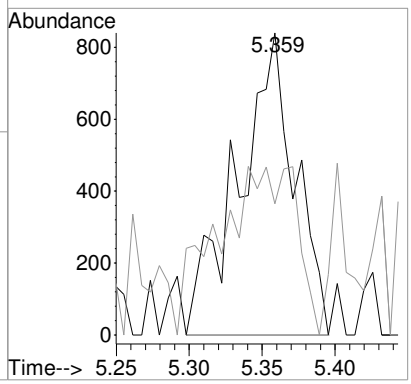


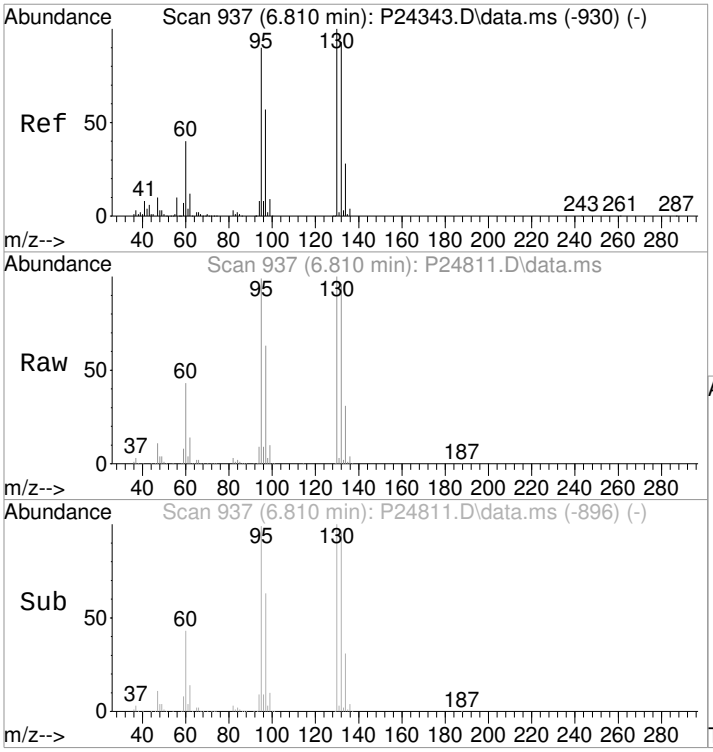


#44
Cyclohexane
Concen: 0.78 ppb m
RT: 5.359 min Scan# 699
Delta R.T. 0.000 min
Lab File: P24811.D
Acq: 8 Mar 2019 8:55 pm

Tgt Ion: 41 Resp: 2271

Ion	Ratio	Lower	Upper
41	100		
39	43.5	20.3	60.3

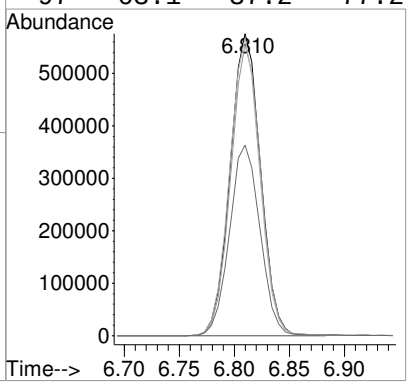


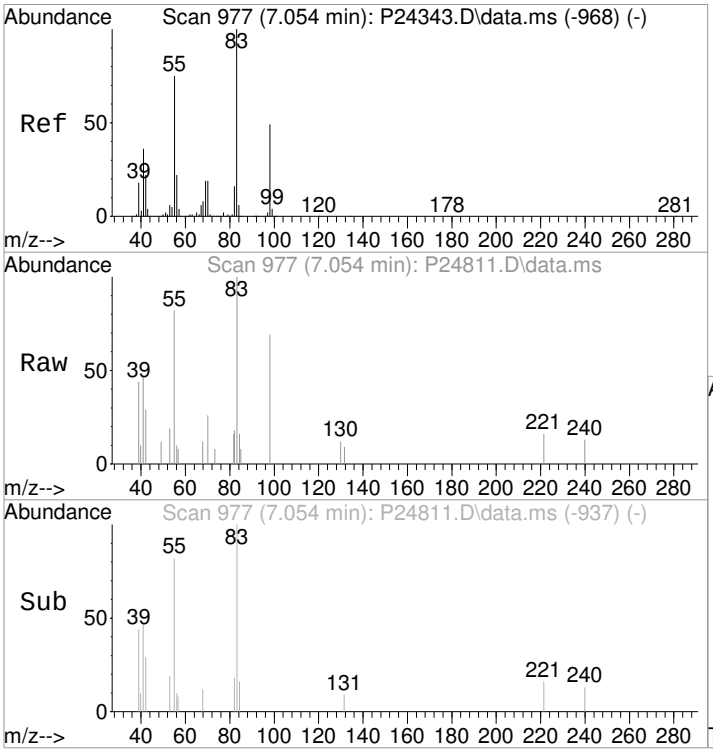


#54
Trichloroethene
Concen: 315.54 ppb
RT: 6.810 min Scan# 937
Delta R.T. 0.000 min
Lab File: P24811.D
Acq: 8 Mar 2019 8:55 pm

Tgt Ion:130 Resp: 1102725

Ion	Ratio	Lower	Upper
130	100		
132	96.4	72.6	112.6
95	98.5	69.8	109.8
97	63.1	37.2	77.2

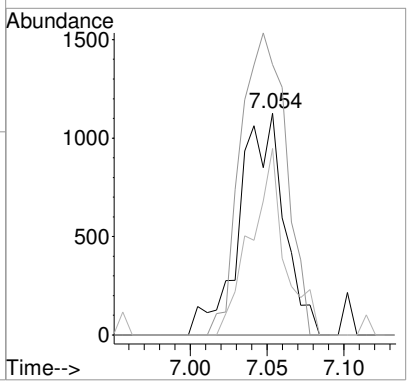


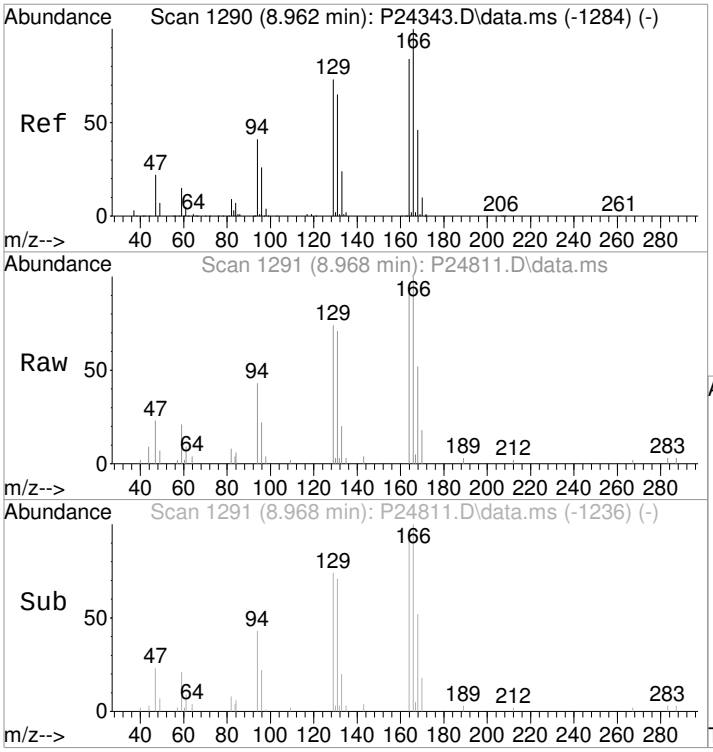


#55
Methylcyclohexane
Concen: 0.52 ppb m
RT: 7.054 min Scan# 977
Delta R.T. 0.006 min
Lab File: P24811.D
Acq: 8 Mar 2019 8:55 pm

Tgt Ion: 55 Resp: 2279

Ion	Ratio	Lower	Upper
55	100		
83	121.9	113.1	153.1
98	84.1	45.0	85.0

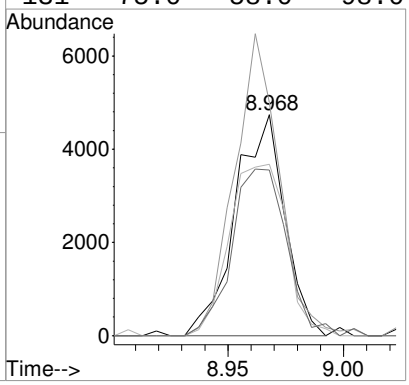


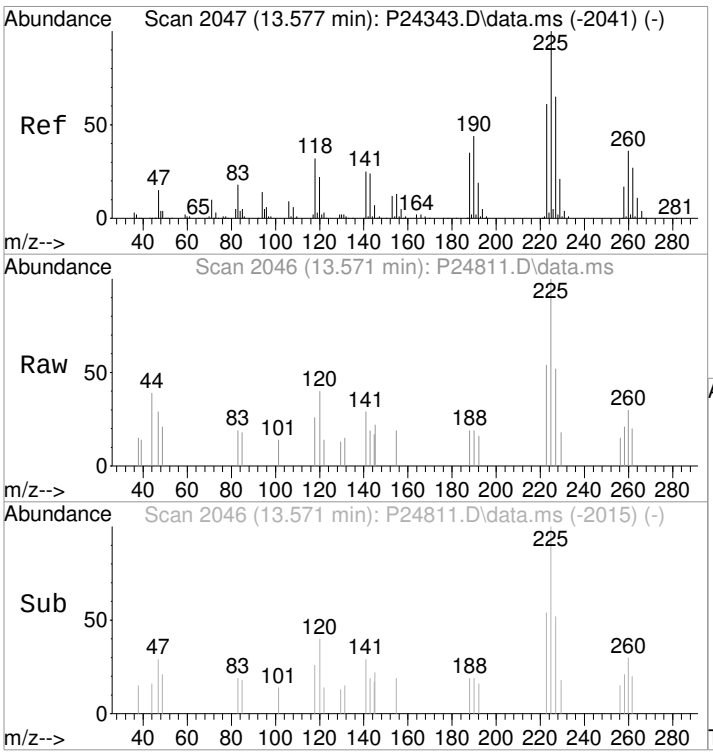


#72
Tetrachloroethene
Concen: 2.65 ppb
RT: 8.968 min Scan# 1291
Delta R.T. 0.006 min
Lab File: P24811.D
Acq: 8 Mar 2019 8:55 pm

Tgt Ion:164 Resp: 7013

Ion	Ratio	Lower	Upper
164	100		
166	105.5	99.6	139.6
129	77.6	66.7	106.7
131	75.0	58.0	98.0

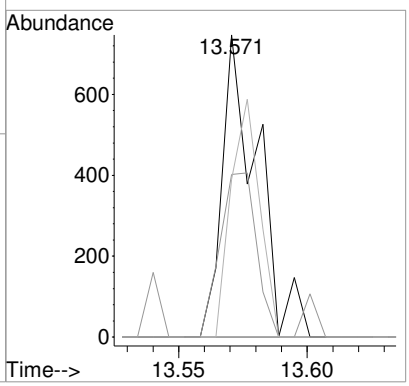




#116
Hexachlorobt
Concen: 0.34 ppb
RT: 13.571 min Scan# 2046
Delta R.T. -0.006 min
Lab File: P24811.D
Acq: 8 Mar 2019 8:55 pm

Tgt Ion:225 Resp: 720

Ion	Ratio	Lower	Upper
225	100		
223	53.8	41.5	81.5
227	52.2	44.7	84.7

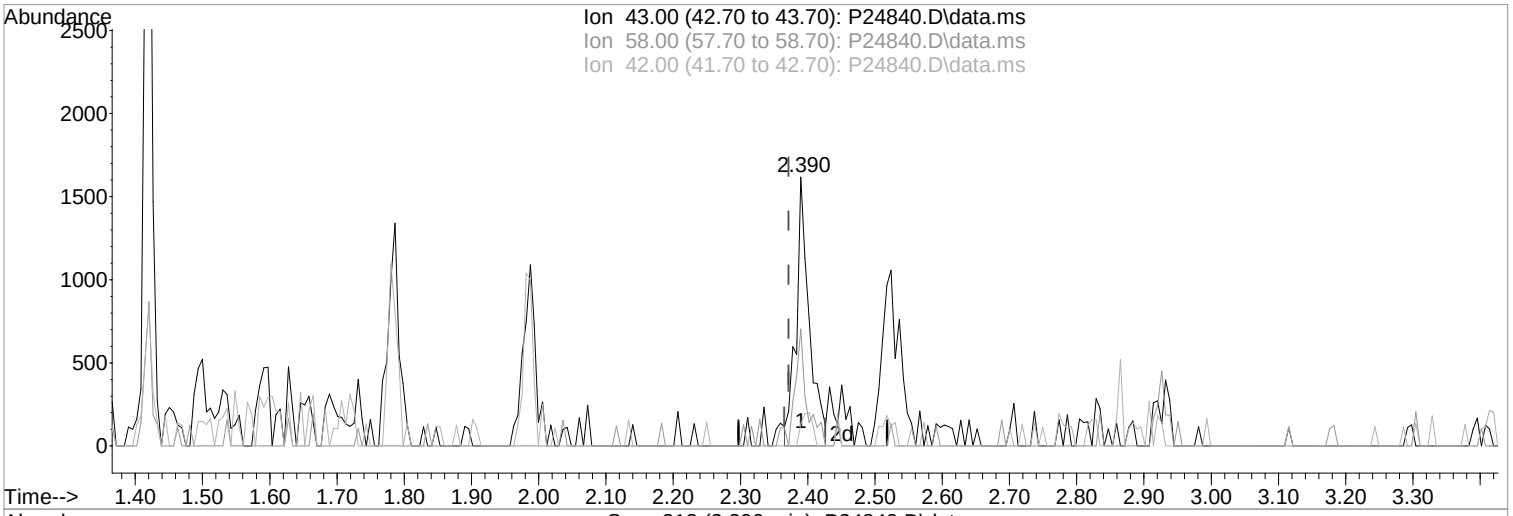


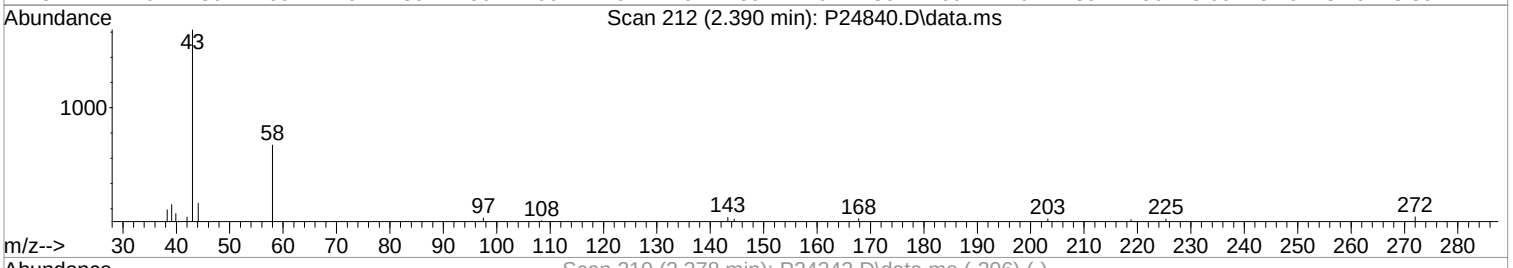
1st 03/12/19
2nd 03/13/19

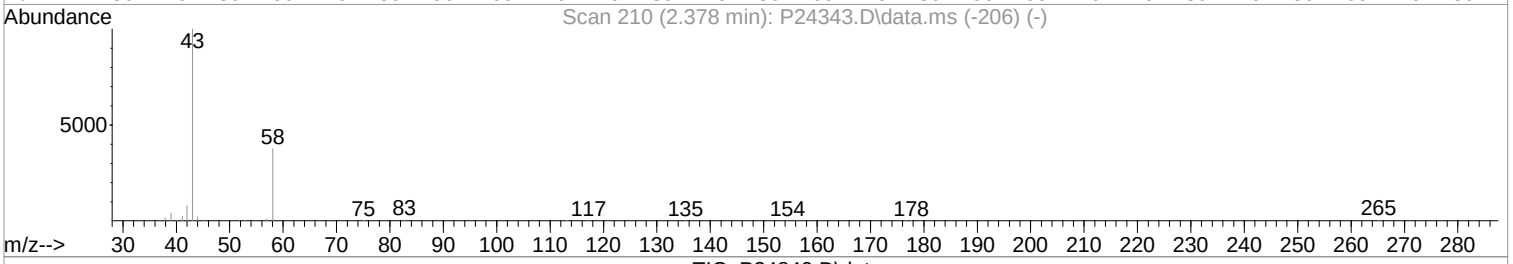
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24840.D
Acq On : 12 Mar 2019 2:36 pm
Operator : K.Ruest
Sample : R1901880-008|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 12 15:17:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24840.D\data.ms

(15) Acetone (P)

2.390min (+0.018) 1.49 ppb m

response 2191

Ion	Exp%	Act%
43.00	100	100
58.00	38.10	43.51
42.00	7.80	8.28
0.00	0.00	0.00

Manual Integration:

After

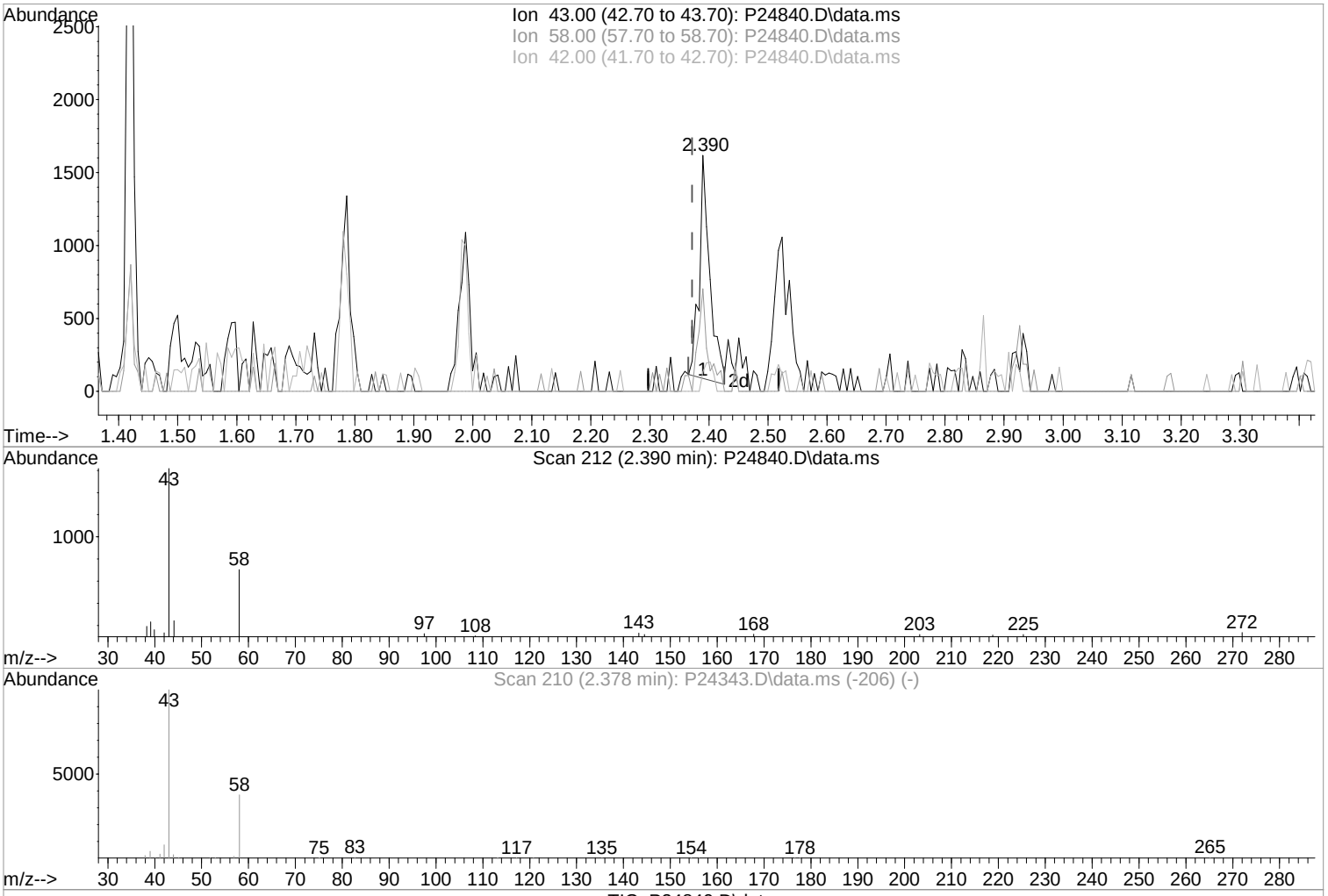
Poor integration.

03/12/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24840.D
Acq On : 12 Mar 2019 2:36 pm
Operator : K.Ruest
Sample : R1901880-008|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 12 15:17:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24840.D\data.ms

(15) Acetone (P)

2.390min (+0.018) 1.28 ppb

response 1891

Ion	Exp%	Act%
43.00	100	100
58.00	38.10	43.51
42.00	7.80	8.28
0.00	0.00	0.00

Manual Integration:

Before

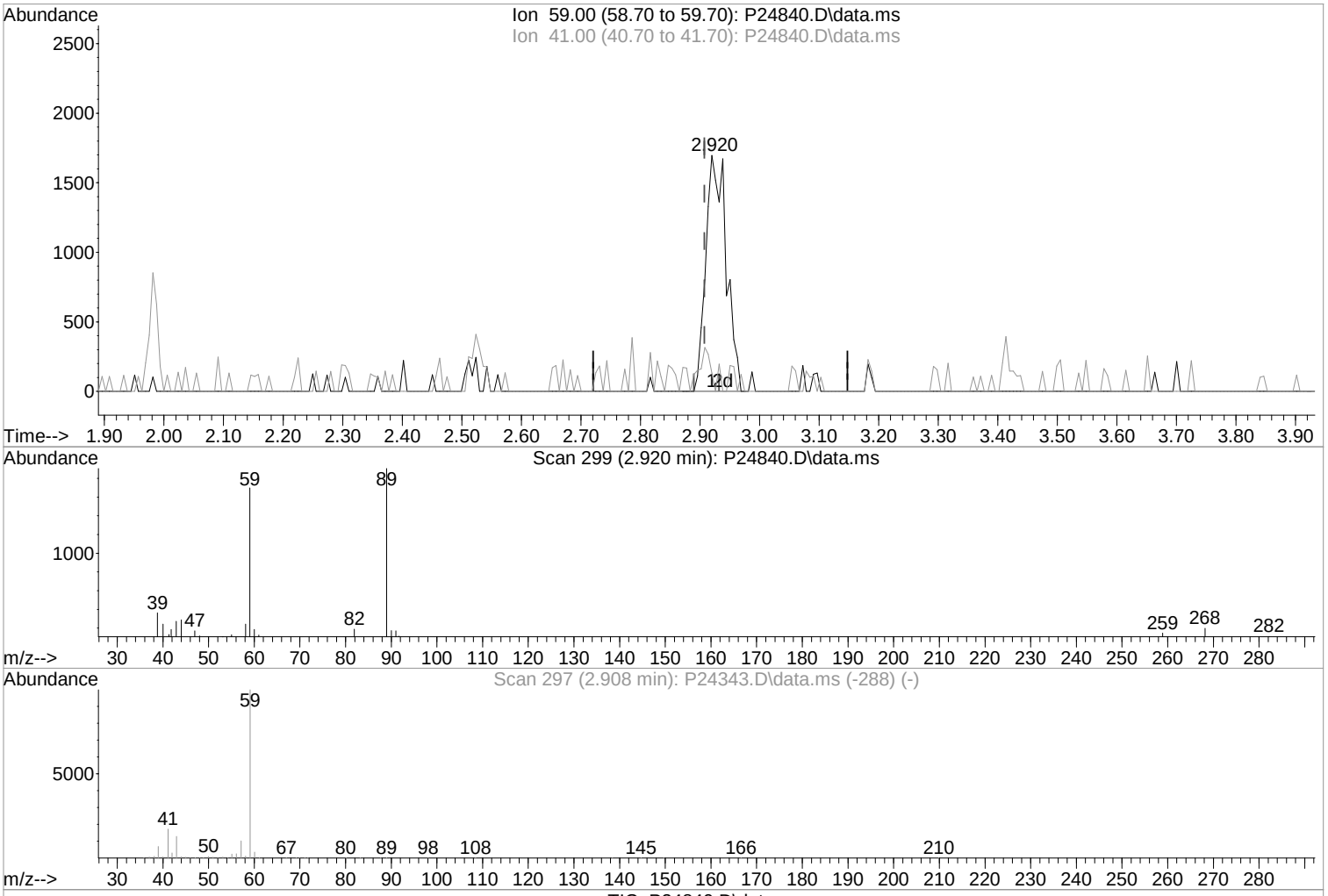
03/12/19

1st 03/12/19
2nd 03/13/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24840.D
Acq On : 12 Mar 2019 2:36 pm
Operator : K.Ruest
Sample : R1901880-008|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 12 15:17:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24840.D\data.ms

(23) TBA

2.920min (+0.012) 6.65 ppb m

response 4045

Ion	Exp%	Act%
59.00	100	100
41.00	18.20	7.78
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Split Peak

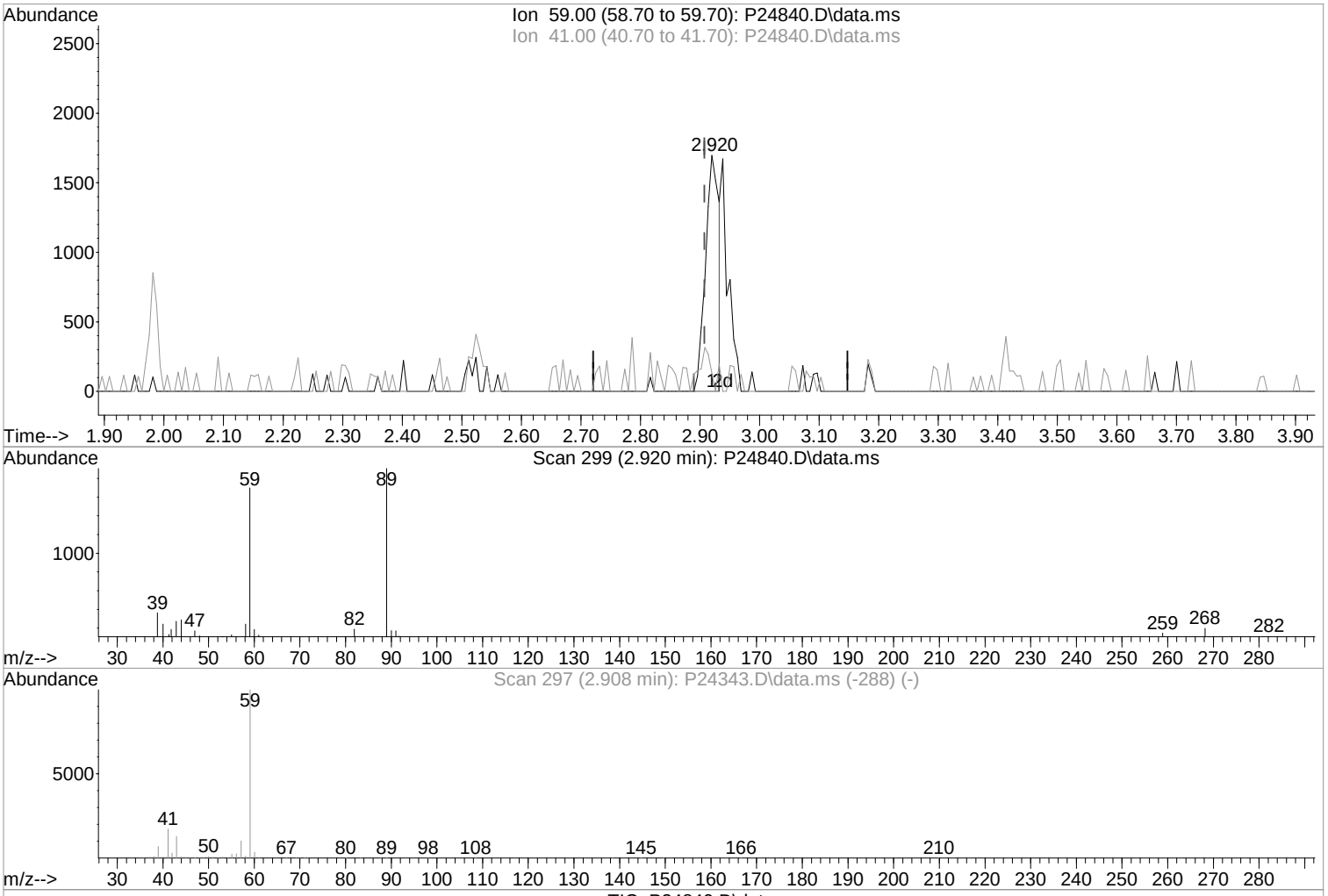
03/12/19

1st 03/12/19
2nd 03/13/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24840.D
Acq On : 12 Mar 2019 2:36 pm
Operator : K.Ruest
Sample : R1901880-008|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 12 15:17:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24840.D\data.ms

(23) TBA

2.920min (+0.012) 4.38 ppb

response 2662

Ion	Exp%	Act%
59.00	100	100
41.00	18.20	7.78
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

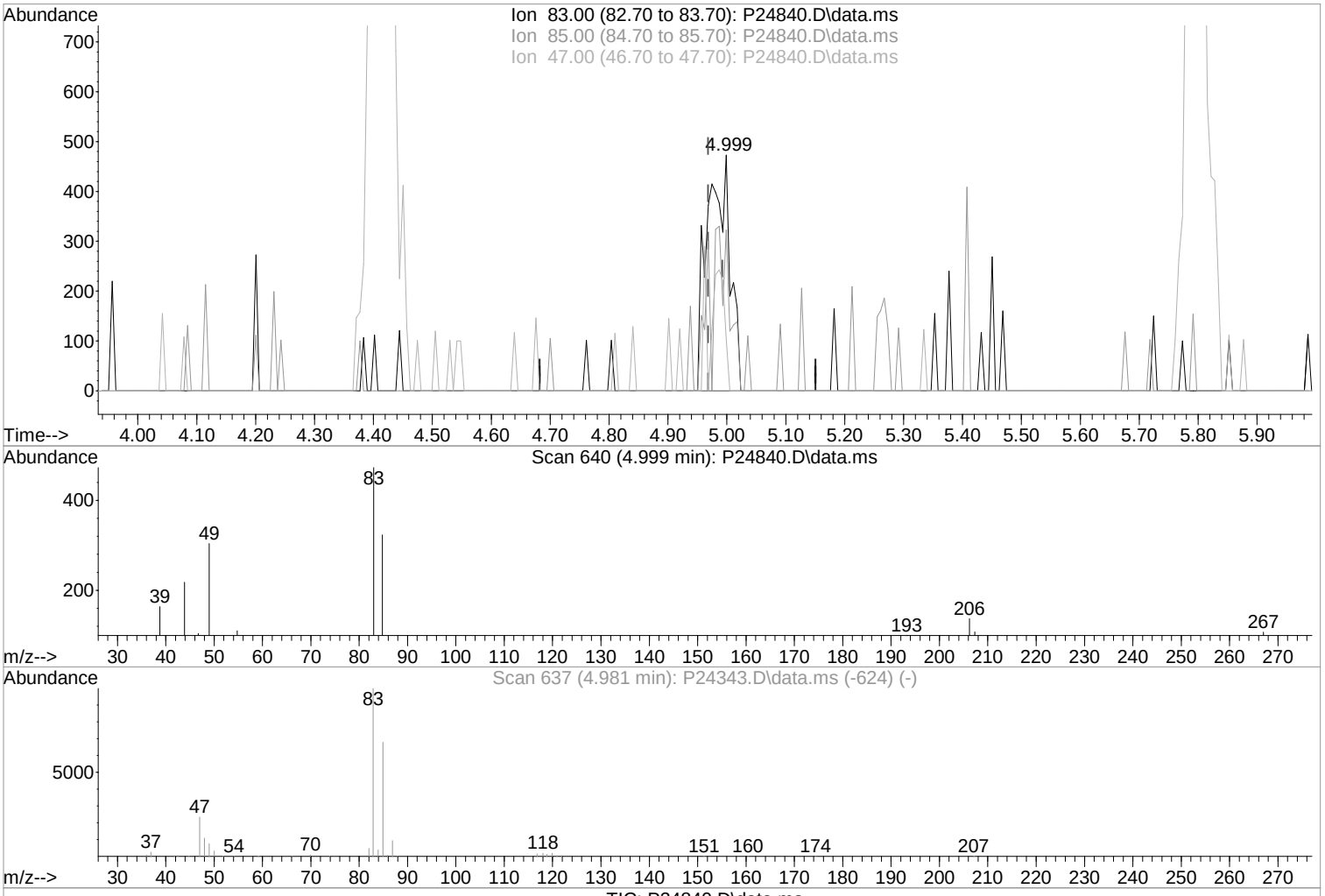
03/12/19

1st 03/12/19
2nd 03/13/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24840.D
Acq On : 12 Mar 2019 2:36 pm
Operator : K.Ruest
Sample : R1901880-008|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 12 15:17:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24840.D\data.ms

(40) Chloroform (P)

4.999min (+0.031) 0.24 ppb m

response 1275

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	68.29
47.00	23.40	21.99
0.00	0.00	0.00

Manual Integration:

After

Split Peak

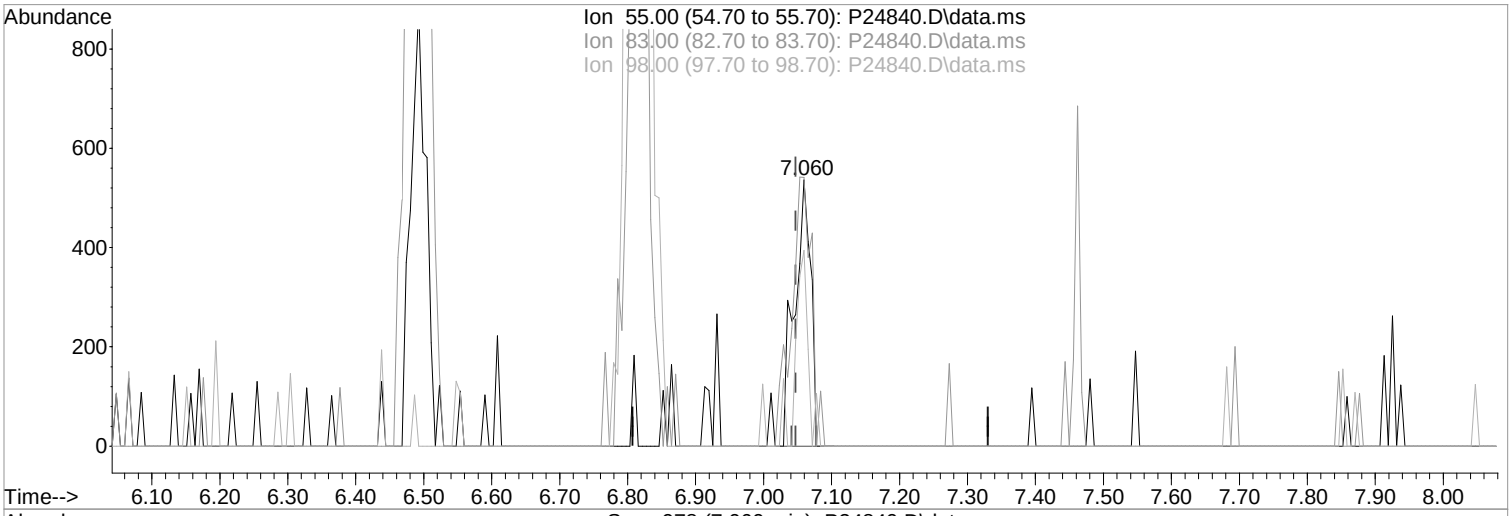
03/12/19

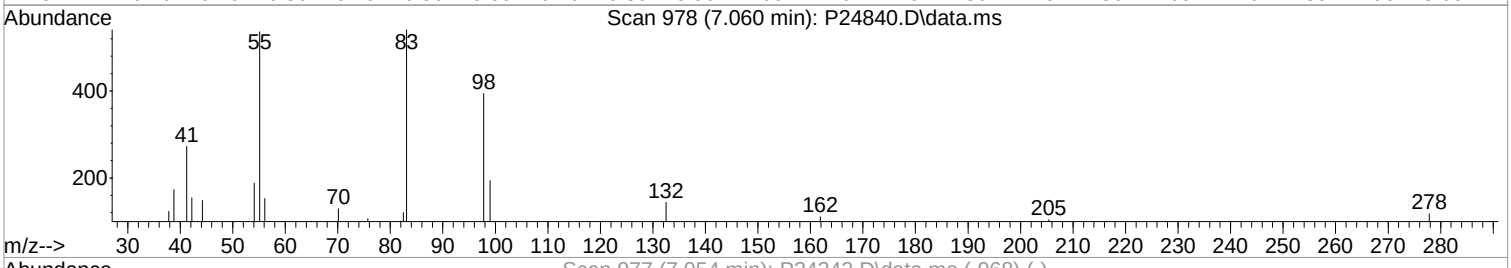
1st 03/12/19
2nd 03/13/19

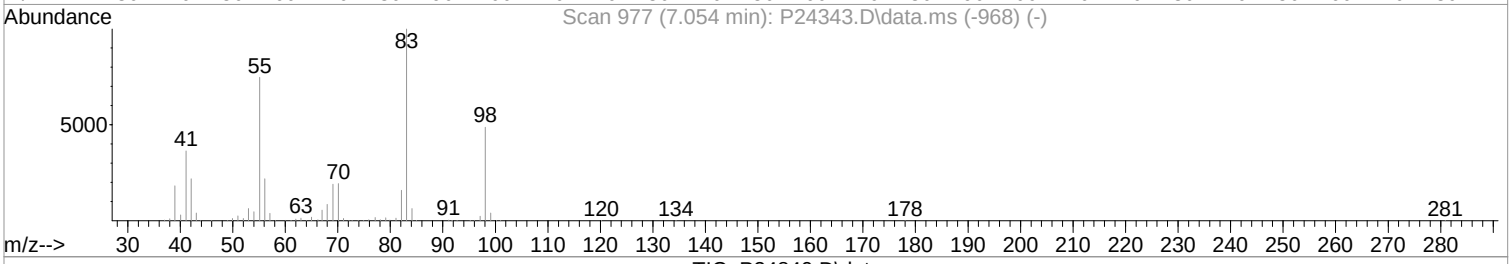
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24840.D
Acq On : 12 Mar 2019 2:36 pm
Operator : K.Ruest
Sample : R1901880-008|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 12 15:17:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24840.D\data.ms

(55) Methylcyclohexane (P)

7.060min (+0.012) 0.21 ppb m

response 900

Ion	Exp%	Act%
55.00	100	100
83.00	133.10	100.93#
98.00	65.00	73.51
0.00	0.00	0.00

Manual Integration:

After

Split Peak

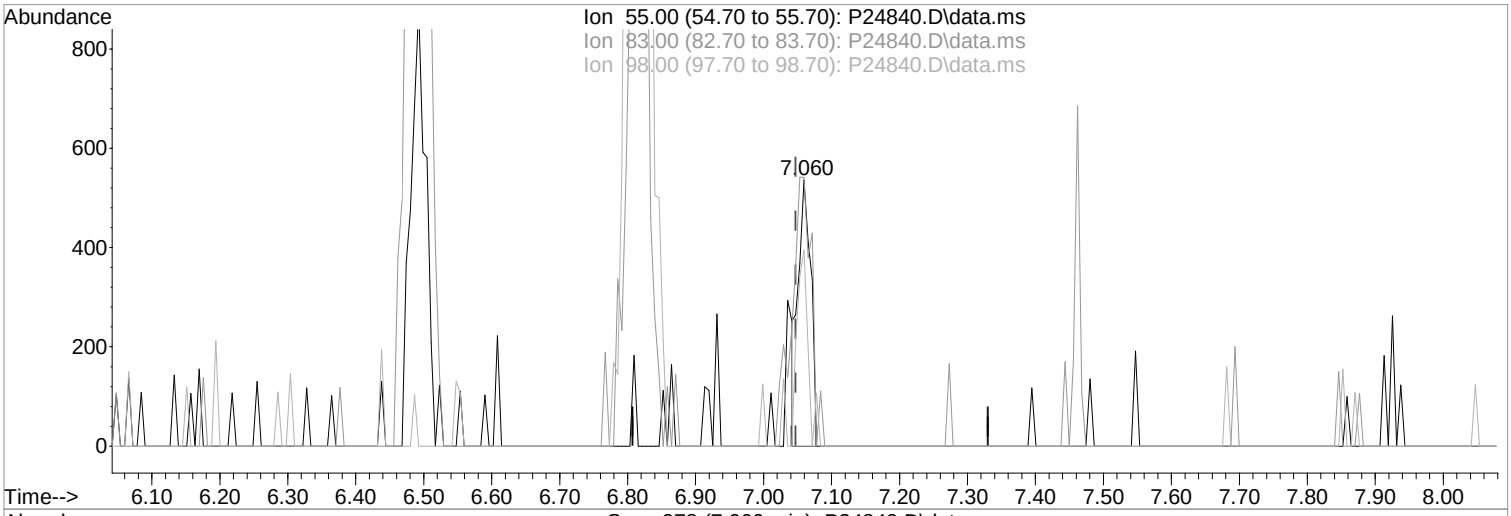
03/12/19

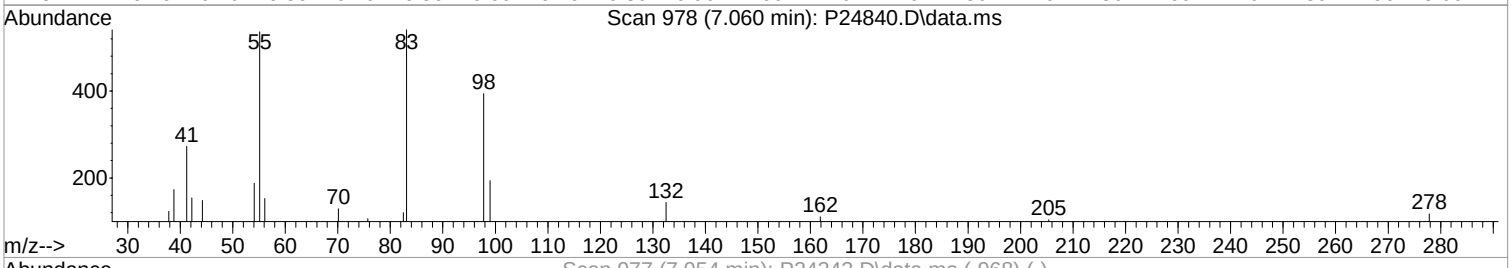
1st 03/12/19
2nd 03/13/19

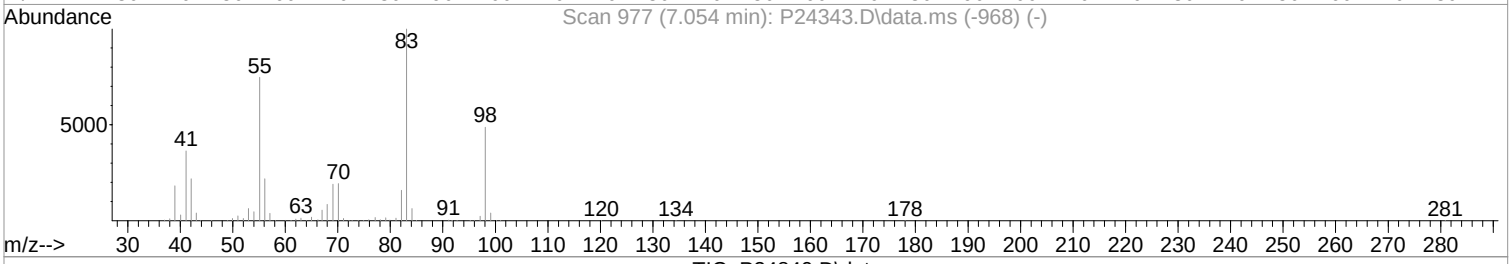
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24840.D
Acq On : 12 Mar 2019 2:36 pm
Operator : K.Ruest
Sample : R1901880-008|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 12 15:17:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24840.D\data.ms

(55) Methylcyclohexane (P)

7.060min (+0.012) 0.16 ppb

response 701

Ion	Exp%	Act%
55.00	100	100
83.00	133.10	100.93#
98.00	65.00	73.51
0.00	0.00	0.00

Manual Integration:

Before

03/12/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24840.D
Acq On : 12 Mar 2019 2:36 pm
Operator : K.Ruest
Sample : R1901880-008|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 7 Sample Multiplier: 1

DL

Quant Time: Mar 12 15:50:52 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

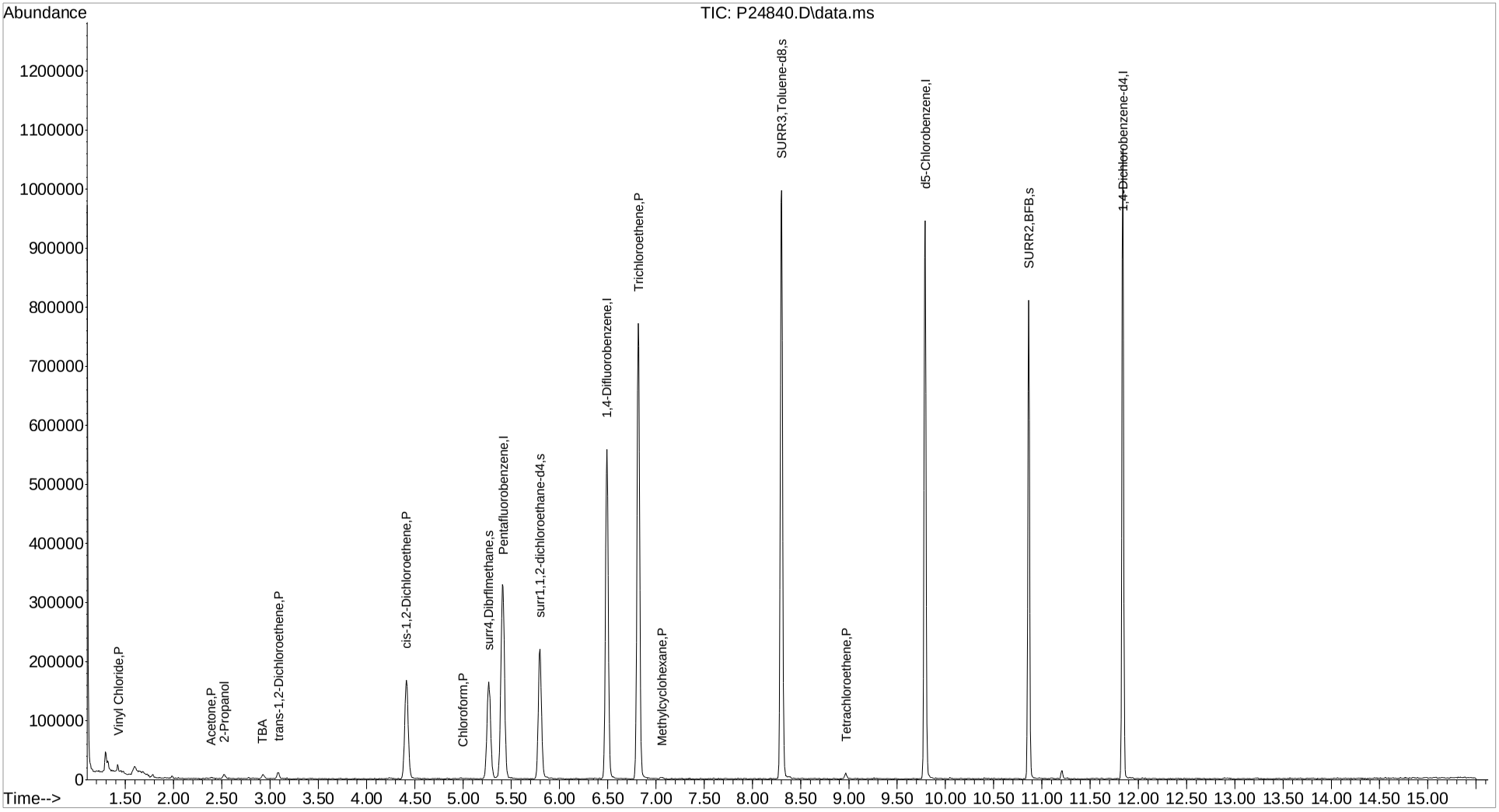
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.414	168	307932	50.00	ppb		0.02
43) 1,4-Difluorobenzene	6.493	114	490061	50.00	ppb		0.01
71) d5-Chlorobenzene	9.791	117	434880	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	216827	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.267	113	135999	50.50	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.00%				
48) surr1,1,2-dichloroetha...	5.798	65	182508	53.43	ppb		0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 106.86%				
65) SURR3,Toluene-d8	8.303	98	649366	50.83	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.66%				
70) SURR2,BFB	10.864	95	225544	49.30	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.60%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.427	62	2263	0.51	ppb	#	1
15) Acetone	2.390	43	2191m	1.49	ppb		
16) 2-Propanol	2.524	45	8046	21.02	ppb		88
23) TBA	2.920	59	4045m	6.65	ppb		
26) trans-1,2-Dichloroethene	3.085	96	3463	1.08	ppb	#	86
34) cis-1,2-Dichloroethene	4.414	96	97824	27.31	ppb		88
40) Chloroform	4.999	83	1275m	0.24	ppb		
54) Trichloroethene	6.816	130	283095	82.60	ppb		93
55) Methylcyclohexane	7.060	55	900m	0.21	ppb		
72) Tetrachloroethene	8.968	164	2174	0.83	ppb	#	79

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

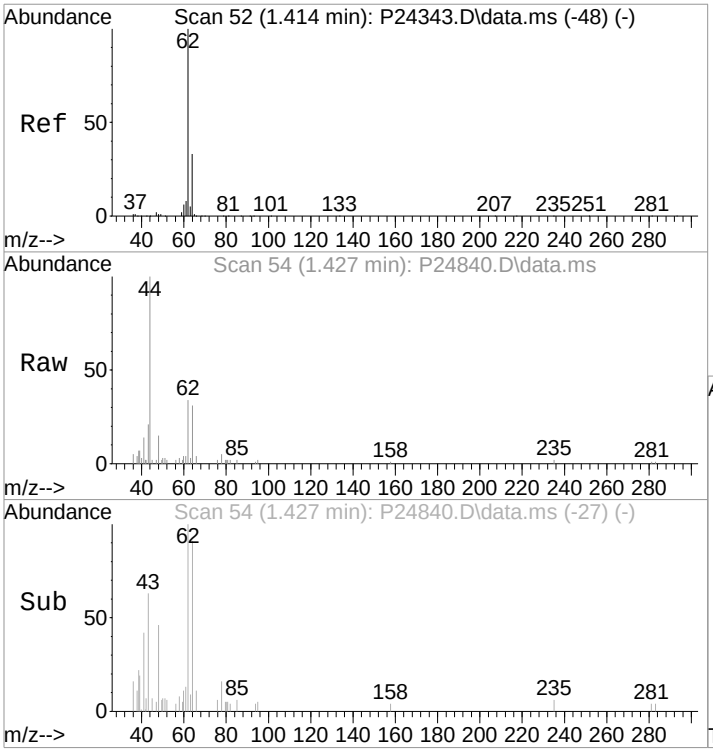
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24840.D
Acq On : 12 Mar 2019 2:36 pm
Operator : K.Ruest
Sample : R1901880-008|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 12 15:50:52 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



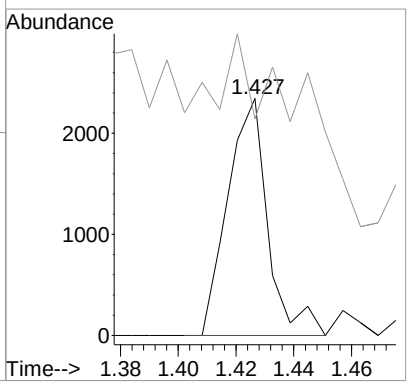
1st 03/12/19
2nd 03/13/19

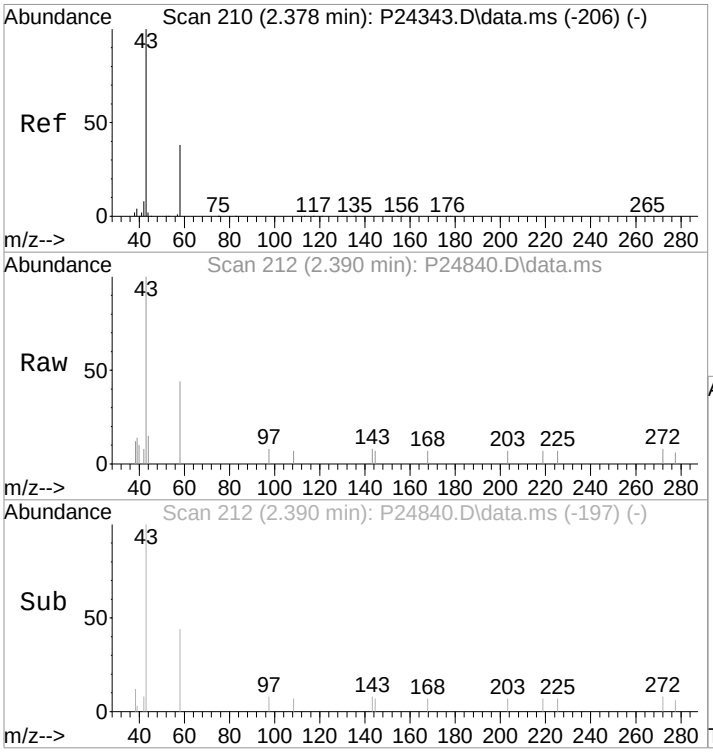


#4
Vinyl Chloride
Concen: 0.51 ppb
RT: 1.427 min Scan# 54
Delta R.T. 0.018 min
Lab File: P24840.D
Acq: 12 Mar 2019 2:36 pm

Tgt Ion: 62 Resp: 2263

Ion	Ratio	Lower	Upper
62	100		
64	91.3	13.2	53.2#

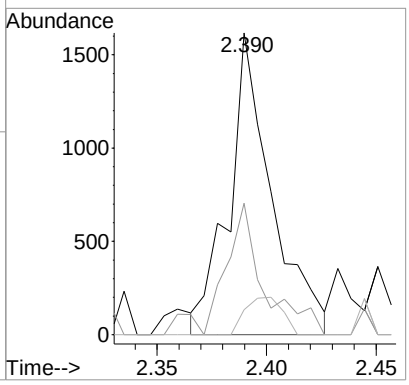


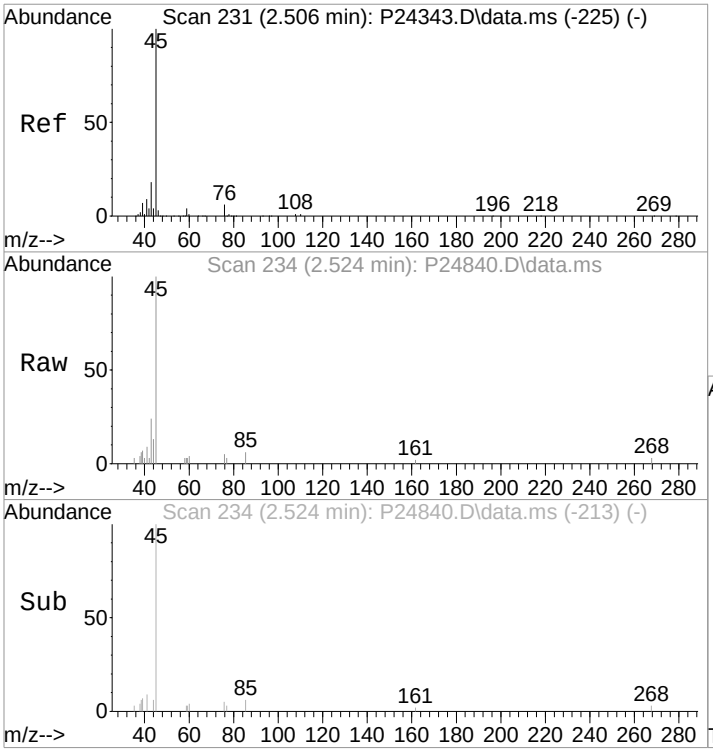


#15
Acetone
Concen: 1.49 ppb m
RT: 2.390 min Scan# 212
Delta R.T. 0.018 min
Lab File: P24840.D
Acq: 12 Mar 2019 2:36 pm

Tgt Ion: 43 Resp: 2191

Ion	Ratio	Lower	Upper
43	100		
58	43.5	18.1	58.1
42	8.3	0.0	27.8

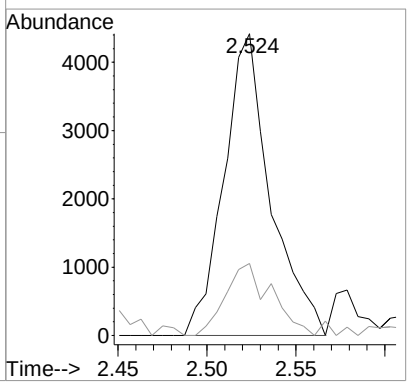


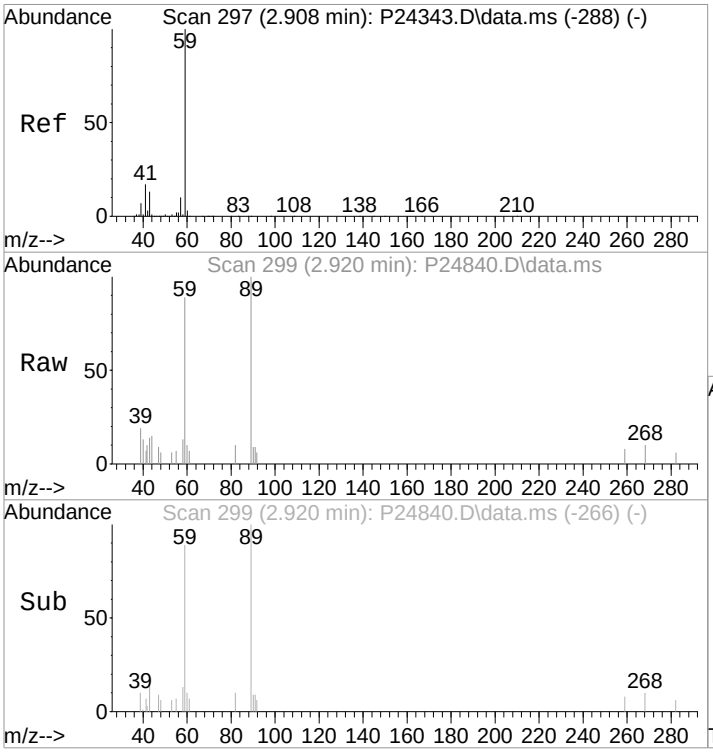


#16
2-Propanol
Concen: 21.02 ppb
RT: 2.524 min Scan# 234
Delta R.T. 0.018 min
Lab File: P24840.D
Acq: 12 Mar 2019 2:36 pm

Tgt Ion: 45 Resp: 8046

Ion	Ratio	Lower	Upper
45	100		
43	23.9	0.0	38.5

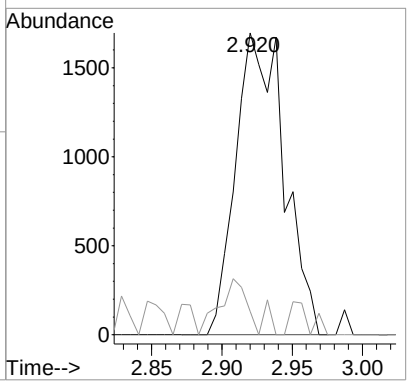


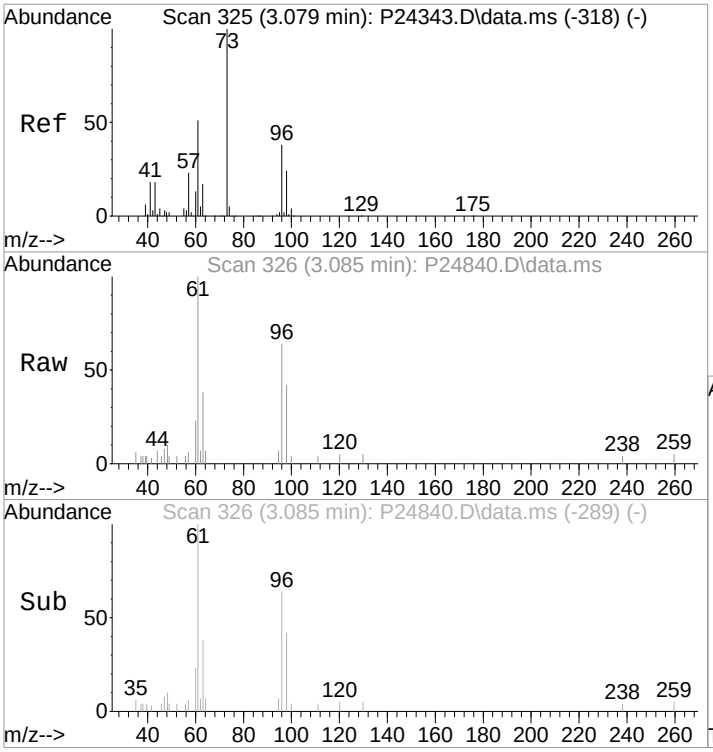


#23
TBA
Concen: 6.65 ppb m
RT: 2.920 min Scan# 299
Delta R.T. 0.012 min
Lab File: P24840.D
Acq: 12 Mar 2019 2:36 pm

Tgt Ion: 59 Resp: 4045

Ion	Ratio	Lower	Upper
59	100		
41	7.8	0.0	38.2

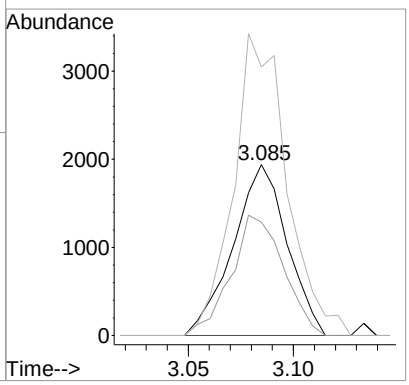


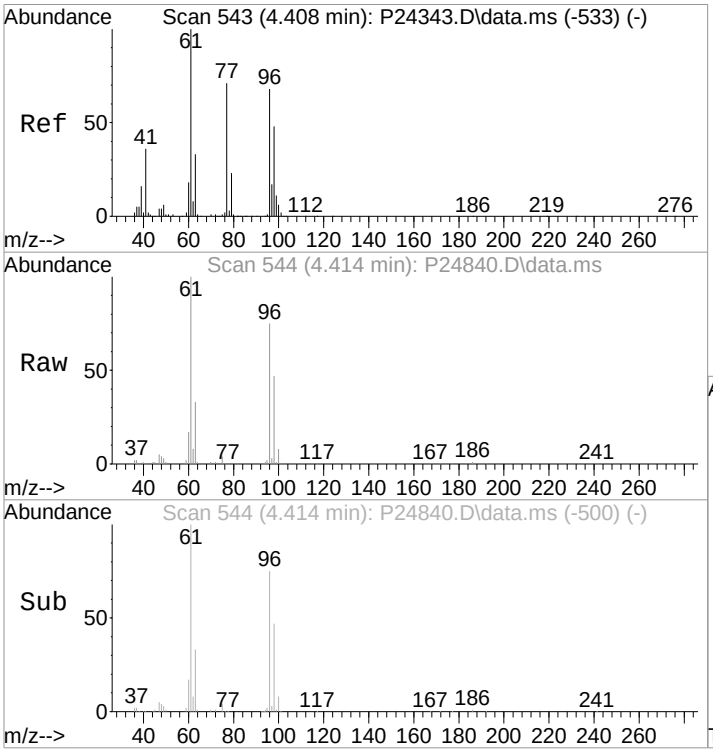


#26
trans-1,2-Dichloroethene
Concen: 1.08 ppb
RT: 3.085 min Scan# 326
Delta R.T. 0.018 min
Lab File: P24840.D
Acq: 12 Mar 2019 2:36 pm

Tgt Ion: 96 Resp: 3463

Ion	Ratio	Lower	Upper
96	100		
98	66.3	43.5	83.5
61	157.1	114.4	154.4#

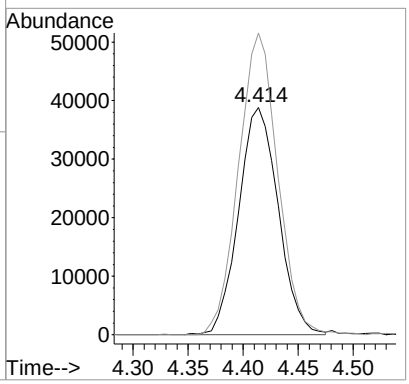


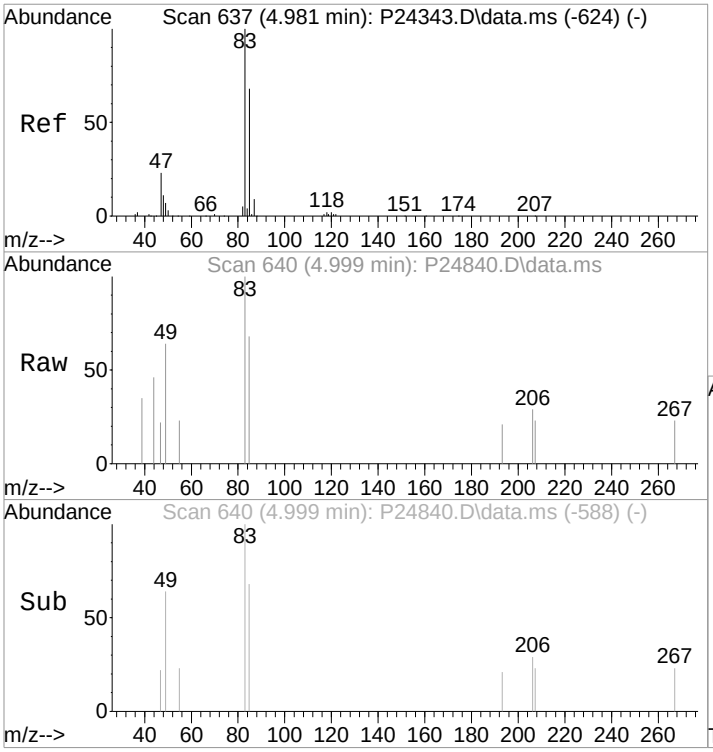


#34
cis-1,2-Dichloroethene
Concen: 27.31 ppb
RT: 4.414 min Scan# 544
Delta R.T. 0.012 min
Lab File: P24840.D
Acq: 12 Mar 2019 2:36 pm

Tgt Ion: 96 Resp: 97824

Ion	Ratio	Lower	Upper
96	100		
61	132.8	128.1	168.1

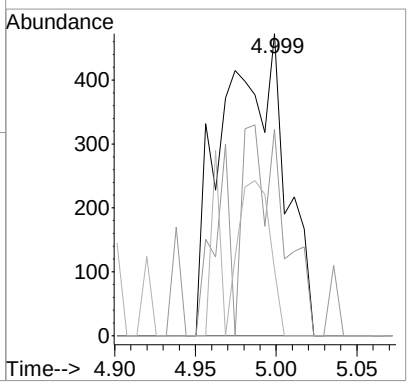


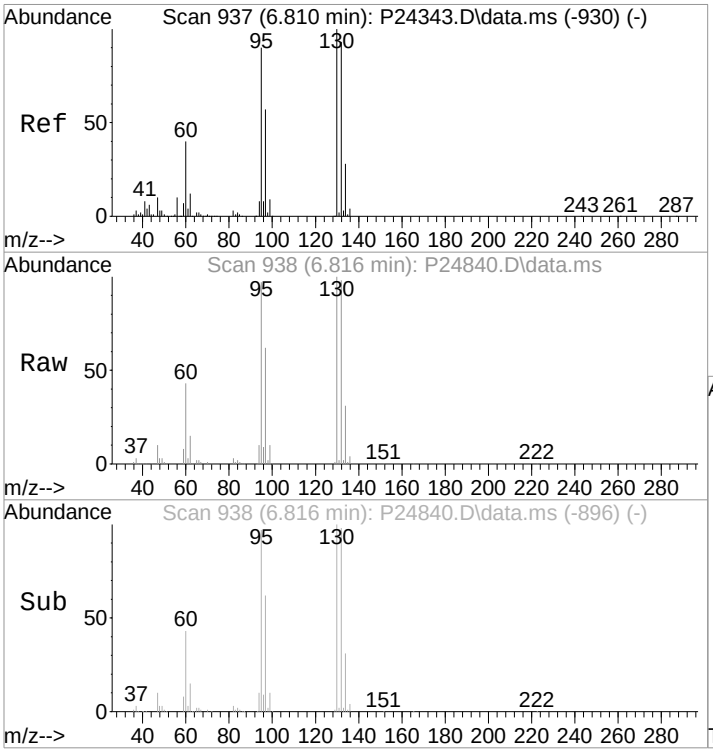


#40
Chloroform
Concen: 0.24 ppb m
RT: 4.999 min Scan# 640
Delta R.T. 0.031 min
Lab File: P24840.D
Acq: 12 Mar 2019 2:36 pm

Tgt Ion: 83 Resp: 1275

Ion	Ratio	Lower	Upper
83	100		
85	68.3	47.9	87.9
47	22.0	3.4	43.4

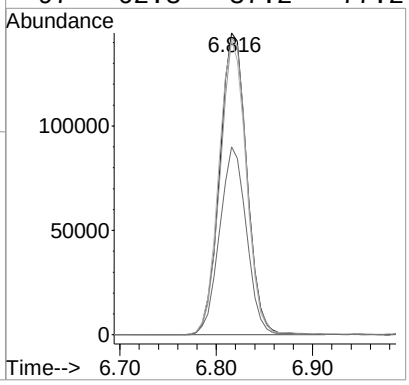


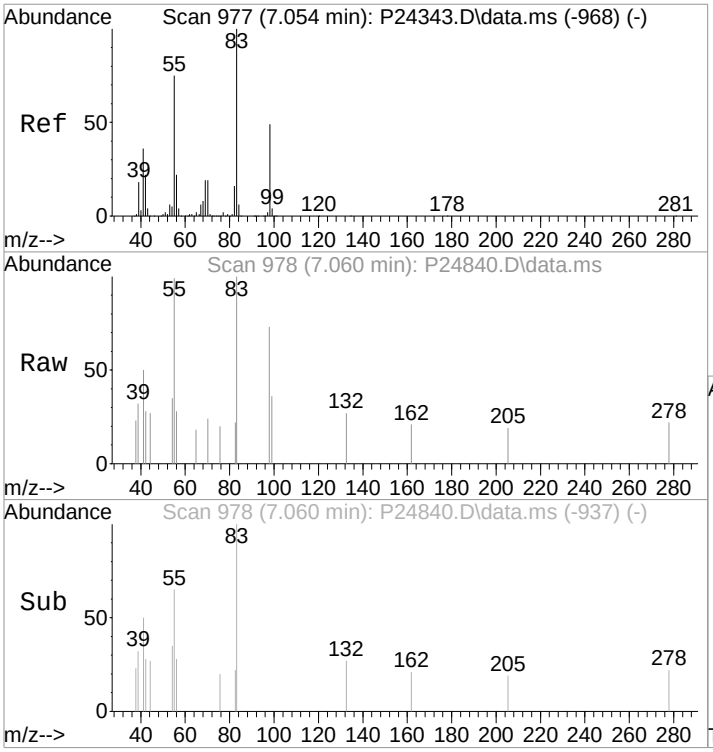


#54
Trichloroethene
Concen: 82.60 ppb
RT: 6.816 min Scan# 938
Delta R.T. 0.006 min
Lab File: P24840.D
Acq: 12 Mar 2019 2:36 pm

Tgt Ion:130 Resp: 283095

Ion	Ratio	Lower	Upper
130	100		
132	98.2	72.6	112.6
95	97.5	69.8	109.8
97	62.3	37.2	77.2

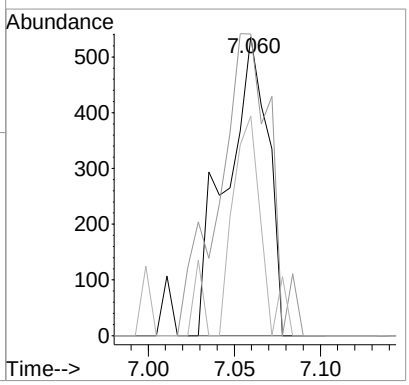


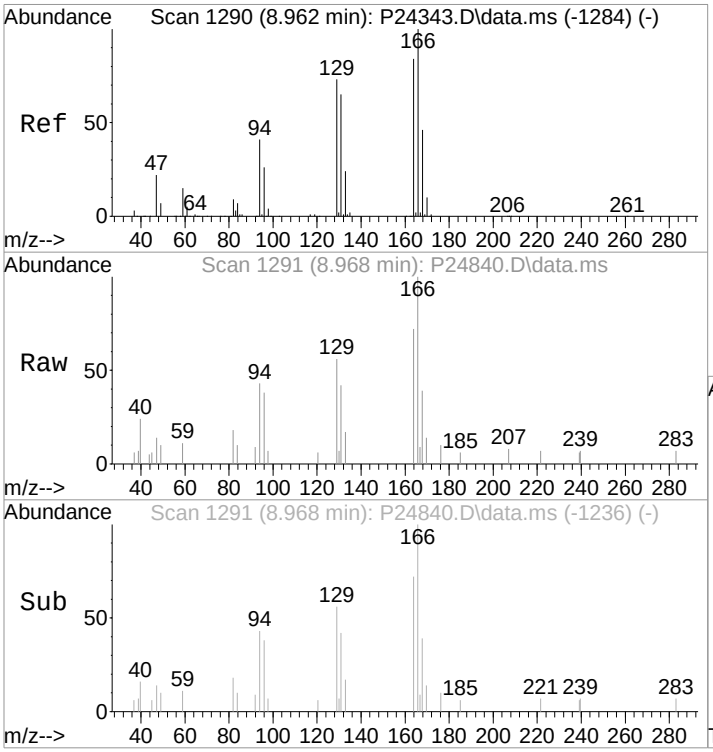


#55
Methylcyclohexane
Concen: 0.21 ppb m
RT: 7.060 min Scan# 978
Delta R.T. 0.012 min
Lab File: P24840.D
Acq: 12 Mar 2019 2:36 pm

Tgt Ion: 55 Resp: 900

Ion	Ratio	Lower	Upper
55	100		
83	100.9	113.1	153.1#
98	73.5	45.0	85.0

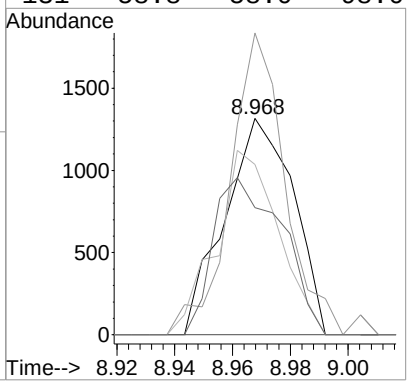




#72
Tetrachloroethene
Concen: 0.83 ppb
RT: 8.968 min Scan# 1291
Delta R.T. 0.006 min
Lab File: P24840.D
Acq: 12 Mar 2019 2:36 pm

Tgt Ion:164 Resp: 2174

Ion	Ratio	Lower	Upper
164	100		
166	151.4	99.6	139.6#
129	78.7	66.7	106.7
131	58.8	58.0	98.0

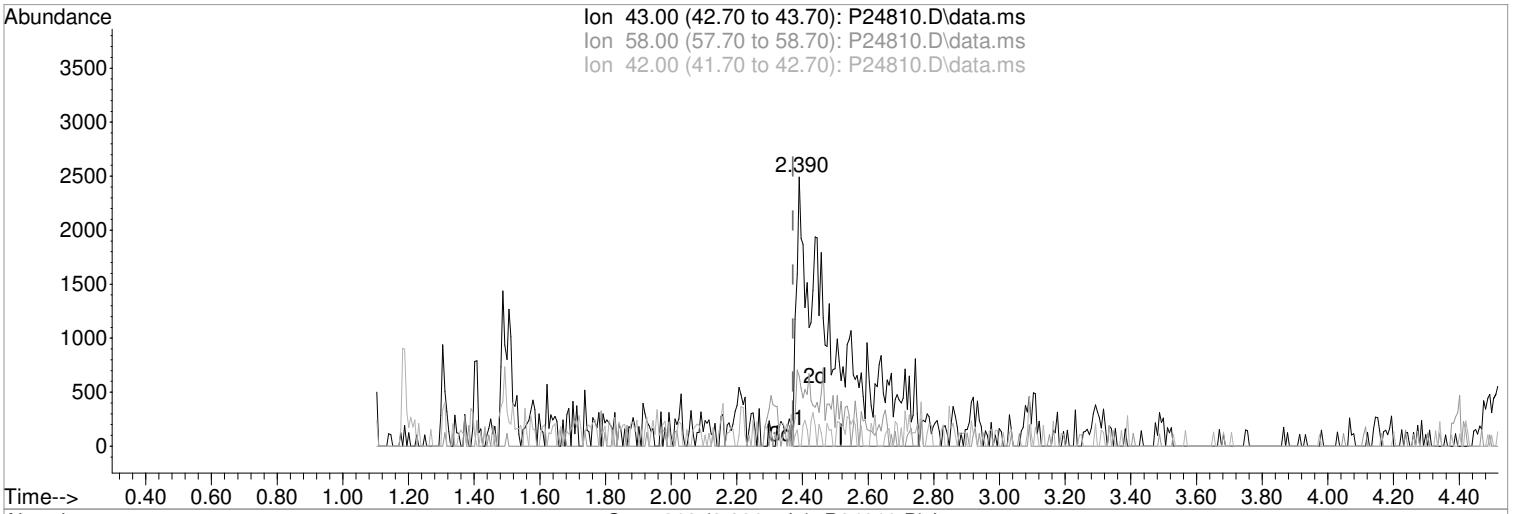


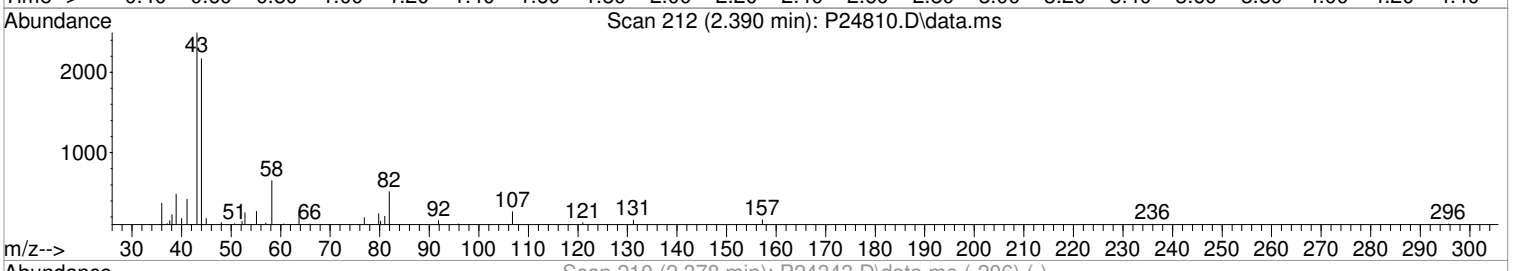
1st FW 03/12/19
2nd WR 03/12/19

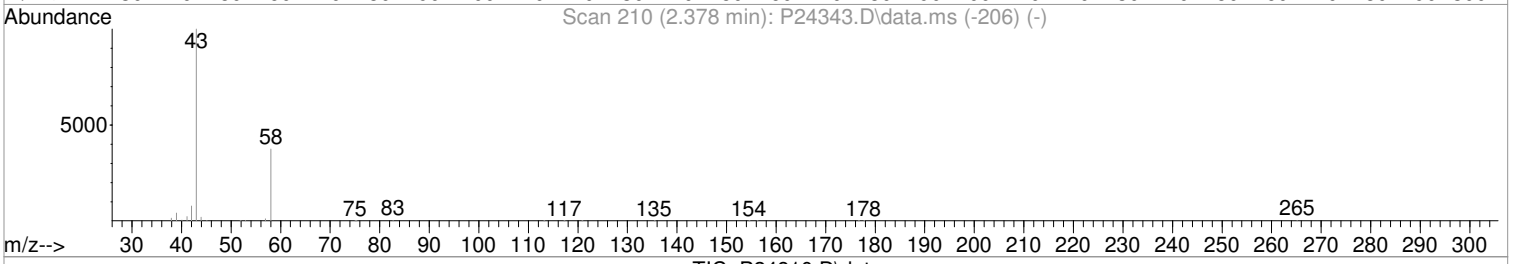
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24810.D
Acq On : 8 Mar 2019 8:33 pm
Operator : F.NAEGLER
Sample : R1901880-009|1.0 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Mar 11 09:26:31 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration







TIC: P24810.D\data.ms

(15) Acetone (P)

2.390min (+0.018) 12.82 ppb m

response 19327

Ion	Exp%	Act%
43.00	100	100
58.00	38.10	26.06
42.00	7.80	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

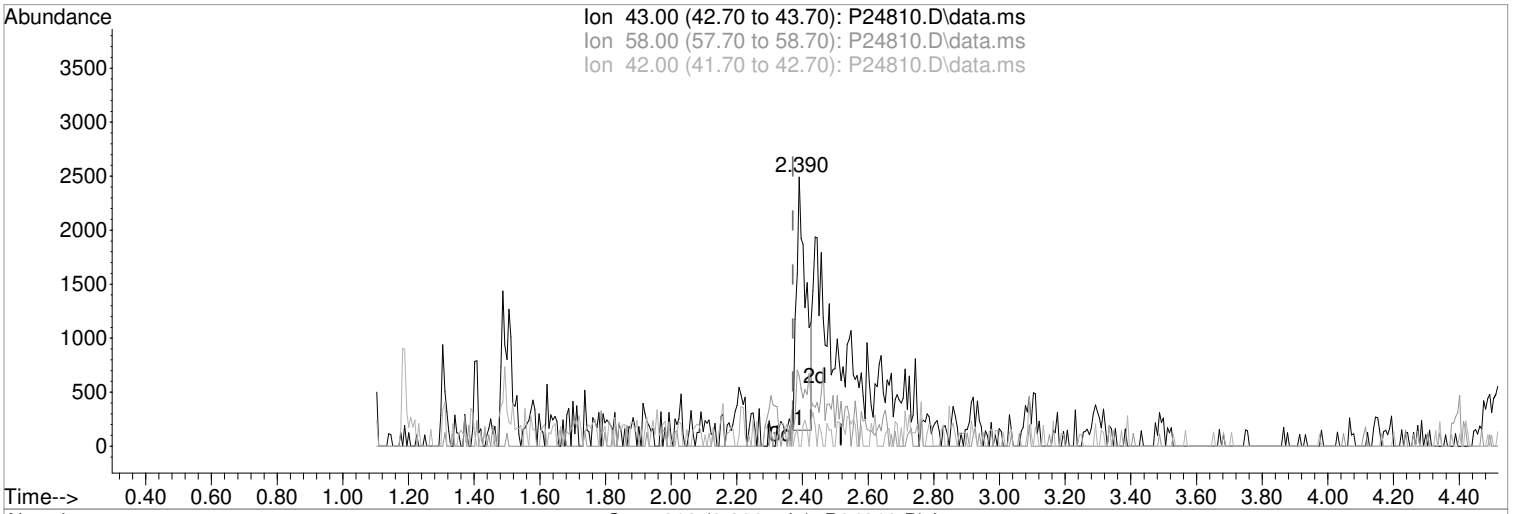
03/12/19

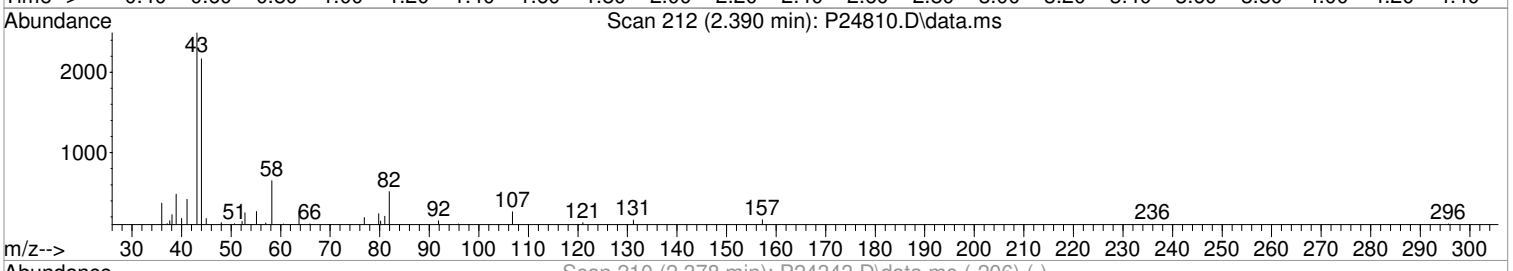
1st FW 03/12/19
2nd 03/12/19

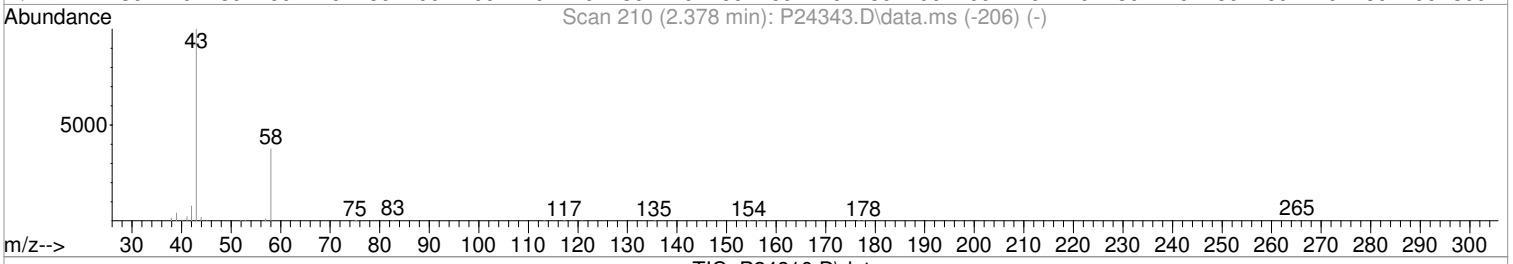
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24810.D
Acq On : 8 Mar 2019 8:33 pm
Operator : F.NAEGLER
Sample : R1901880-009|1.0 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Mar 11 09:26:31 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration







TIC: P24810.D\data.ms

(15) Acetone (P)

2.390min (+0.018) 3.09 ppb

response 4664

Ion	Exp%	Act%
43.00	100	100
58.00	38.10	26.06
42.00	7.80	0.00
0.00	0.00	0.00

Manual Integration:

Before

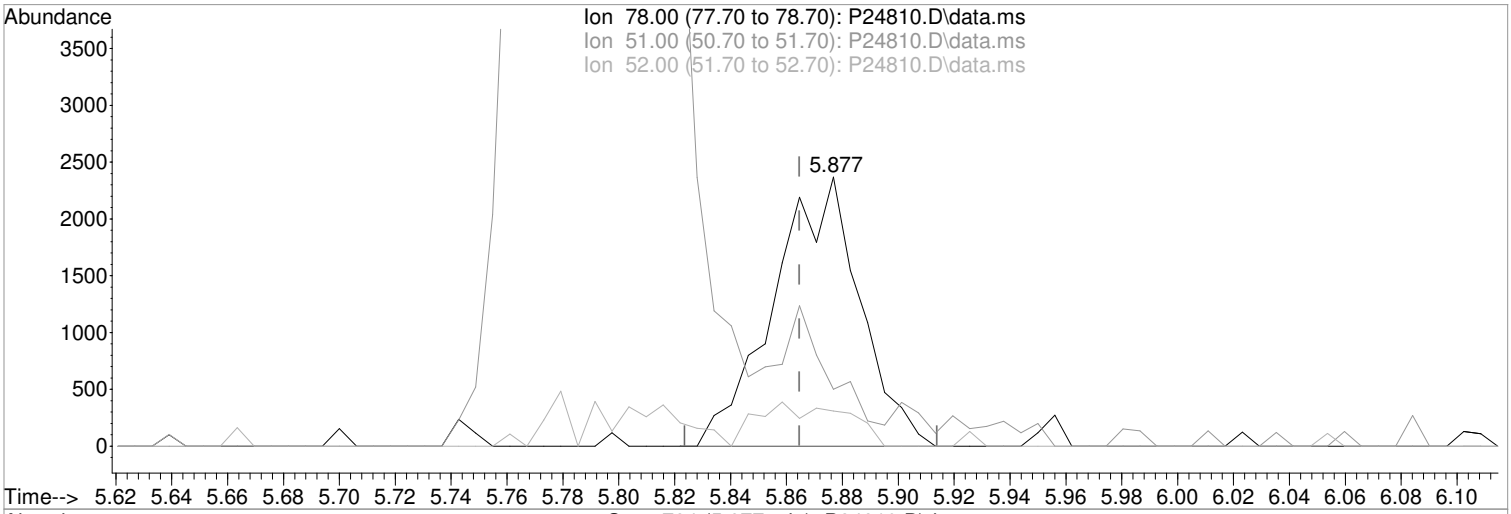
03/12/19

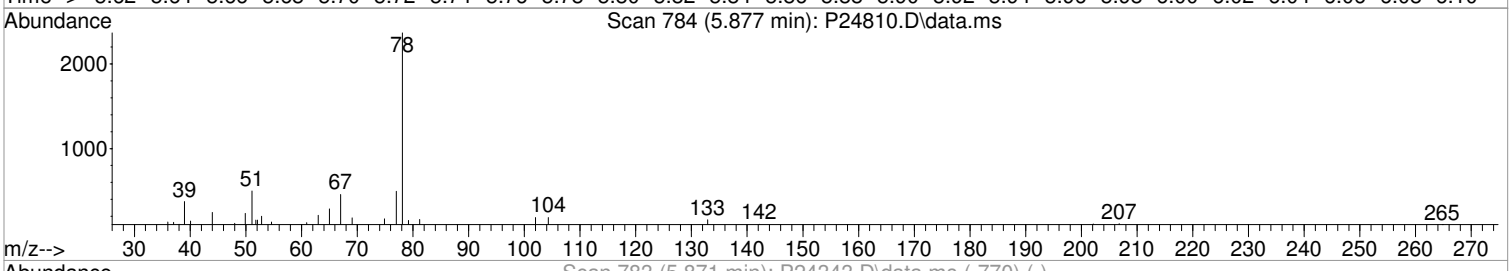
1st FW 03/12/19
2nd 03/12/19

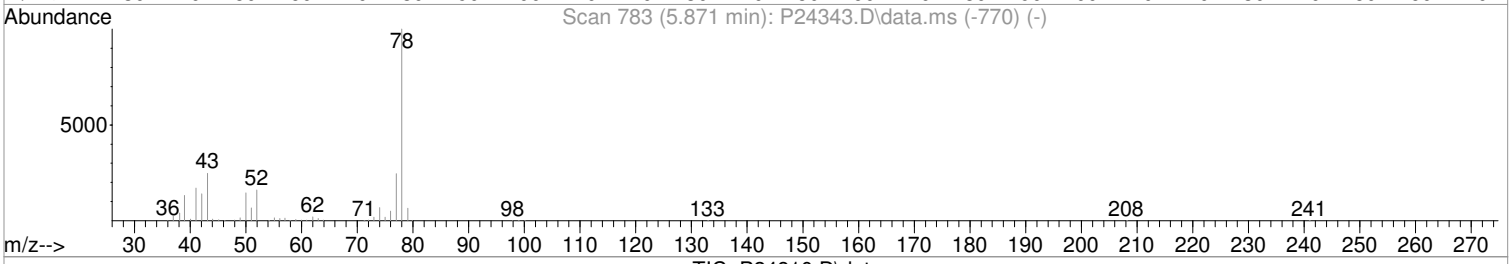
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24810.D
Acq On : 8 Mar 2019 8:33 pm
Operator : F.NAEGLER
Sample : R1901880-009|1.0 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Mar 11 09:26:31 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration







TIC: P24810.D\data.ms

(49) Benzene (P)

5.877min (+0.012) 0.35 ppb m

response 5067

Ion	Exp%	Act%
78.00	100	100
51.00	16.00	21.12
52.00	16.20	6.55
0.00	0.00	0.00

Manual Integration:

After

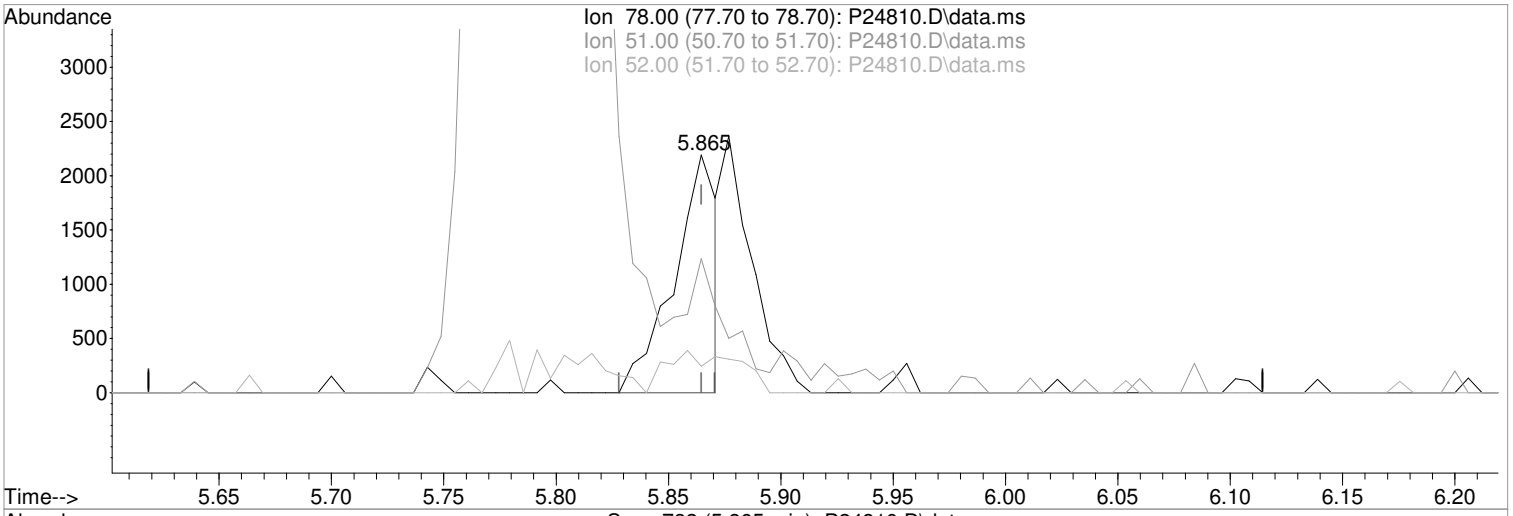
Poor integration.

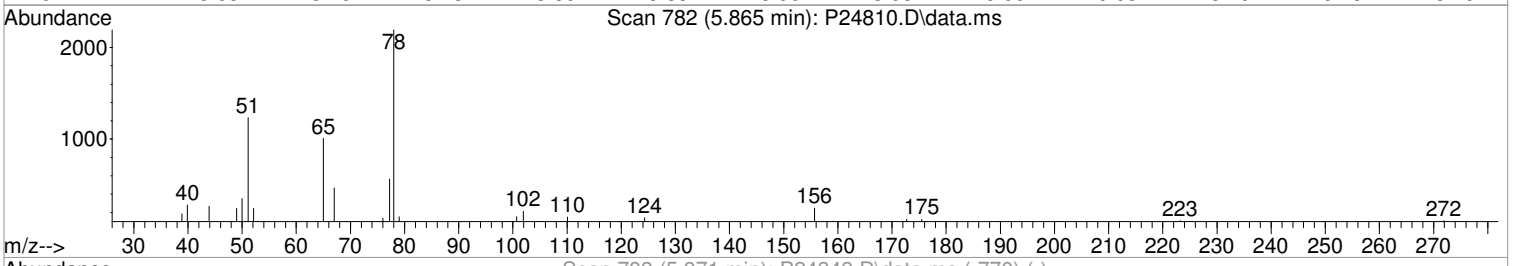
03/12/19

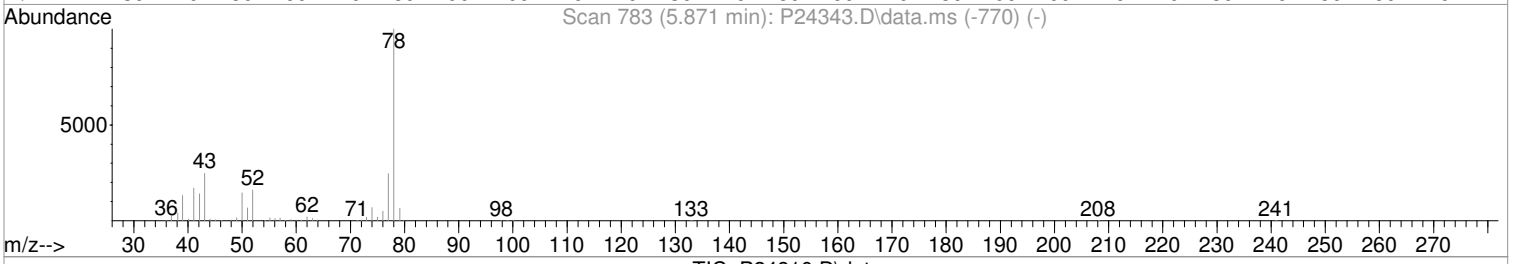
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24810.D
Acq On : 8 Mar 2019 8:33 pm
Operator : F.NAEGLER
Sample : R1901880-009|1.0 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Mar 11 09:26:31 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration







TIC: P24810.D\data.ms

(49) Benzene (P)

5.865min (-0.000) 0.20 ppb

response 2902

Ion	Exp%	Act%
78.00	100	100
51.00	16.00	56.34#
52.00	16.20	11.13
0.00	0.00	0.00

Manual Integration:

Before

03/12/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24810.D
Acq On : 8 Mar 2019 8:33 pm
Operator : F.NAEGLER
Sample : R1901880-009|1.0 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Mar 12 10:35:59 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge rpt 1/10
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

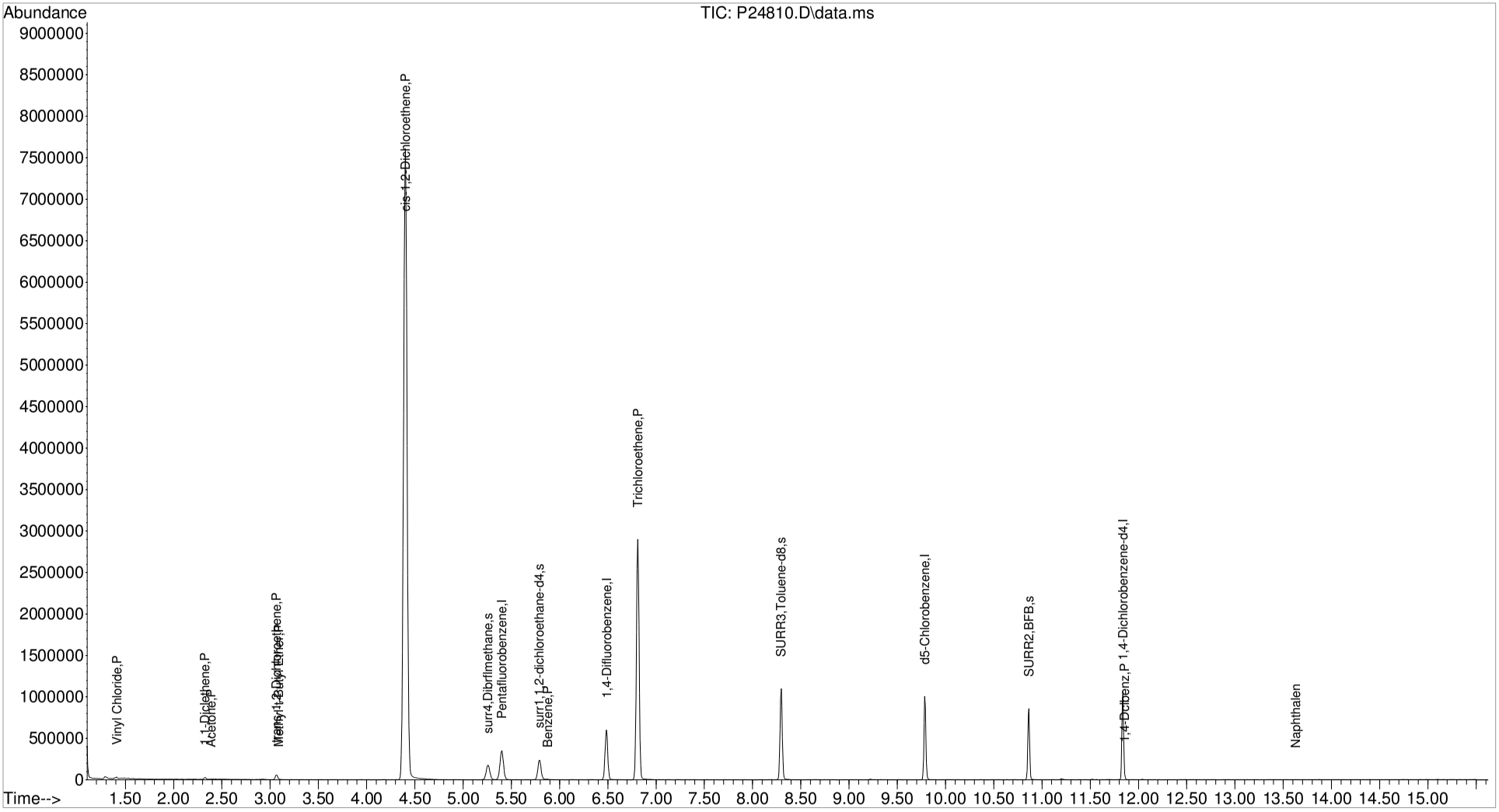
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
Internal Standards								
1) Pentafluorobenzene	5.401	168	314796	50.00	ppb		0.00	
43) 1,4-Difluorobenzene	6.486	114	513619	50.00	ppb		0.00	
71) d5-Chlorobenzene	9.785	117	447136	50.00	ppb		0.00	
86) 1,4-Dichlorobenzene-d4	11.839	152	218252	50.00	ppb		0.00	
System Monitoring Compounds								
45) surr4,Dibrflmethane	5.255	113	145650	51.60	ppb		0.00	
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.20%					
48) surr1,1,2-dichloroetha...	5.791	65	195522	54.61	ppb		0.00	
Spiked Amount 50.000	Range 73 - 125		Recovery = 109.22%					
65) SURR3,Toluene-d8	8.297	98	685365	51.19	ppb		0.00	
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.38%					
70) SURR2,BFB	10.864	95	240152	50.08	ppb		0.00	
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.16%					
Target Compounds							Qvalue	
4) Vinyl Chloride	1.408	62	9203	2.01	ppb	#	18	
5) Bromomethane	1.652	94	1383	Below Cal		#	37	
13) 1,1-Diclethene	2.323	96	7439	2.53	ppb		91	
15) Acetone	2.390	43	19327m	12.82	ppb			
25) Methyl-t-Butyl Ether	3.091	73	3801	0.33	ppb		79	
26) trans-1,2-Dichloroethene	3.066	96	20233	6.19	ppb	#	85	
34) cis-1,2-Dichloroethene	4.401	96	4487319	1225.25	ppb		85	E-Over Calibration
49) Benzene	5.877	78	5067m	0.35	ppb			
54) Trichloroethene	6.810	130	1039974	289.50	ppb		94	E-Over Calibration
106) 1,4-Dclbenz	11.857	146	4358	0.59	ppb		81	
117) Naphthalen	13.631	128	557	0.77	ppb		64	

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

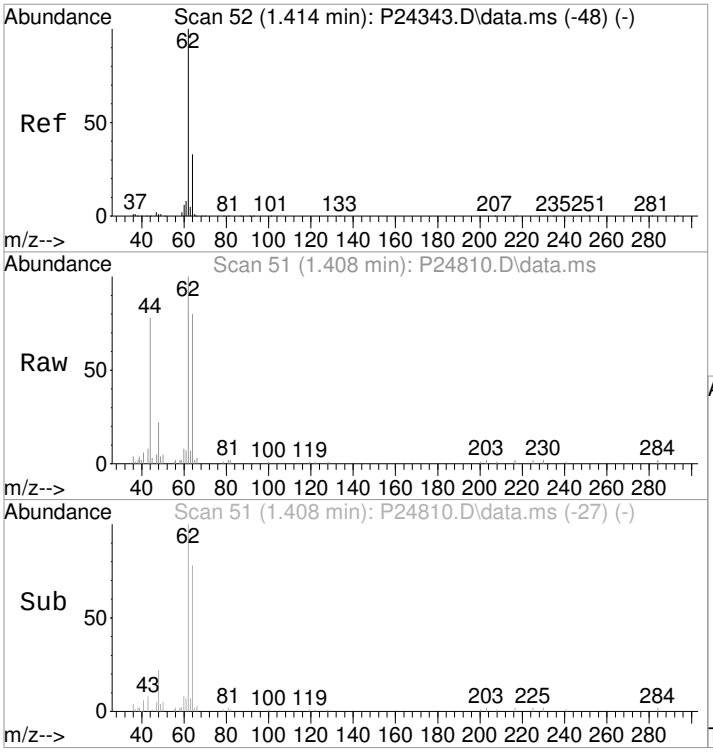
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24810.D
Acq On : 8 Mar 2019 8:33 pm
Operator : F.NAEGLER
Sample : R1901880-009|1.0 Inst : MSVOA-12
Misc : LIRO 8043 T4
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Mar 12 10:35:59 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



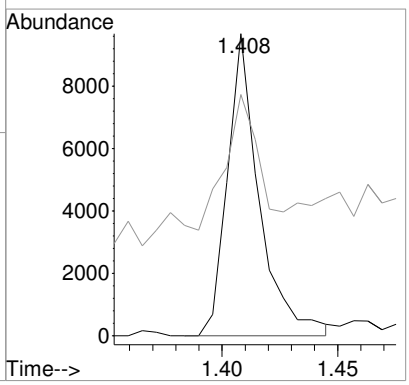
1st FJ 03/12/19
2nd 03/12/19

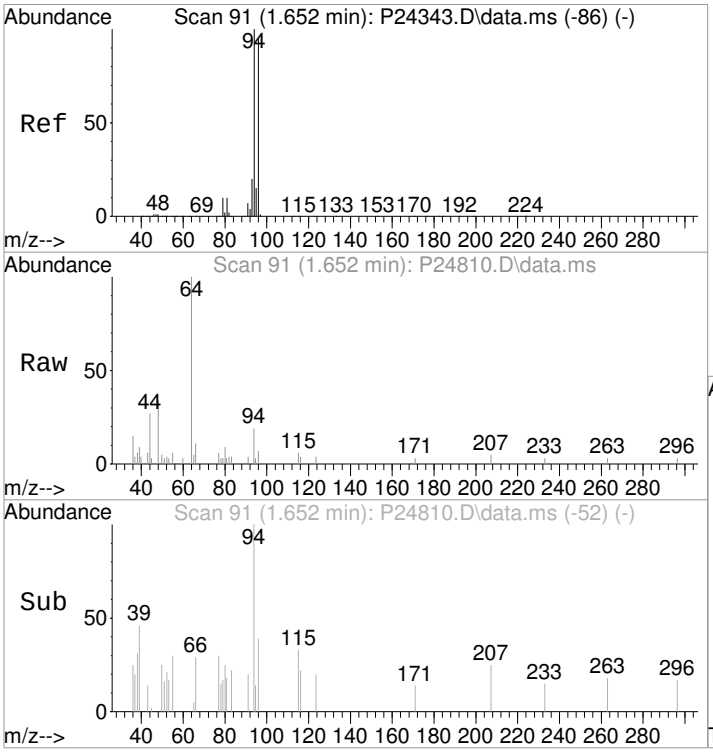


#4
Vinyl Chloride
Concen: 2.01 ppb
RT: 1.408 min Scan# 51
Delta R.T. -0.000 min
Lab File: P24810.D
Acq: 8 Mar 2019 8:33 pm

Tgt Ion: 62 Resp: 9203

Ion	Ratio	Lower	Upper
62	100		
64	79.8	13.2	53.2#

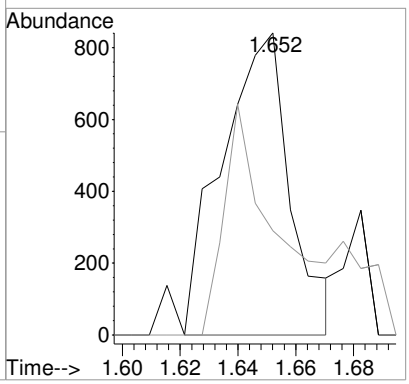


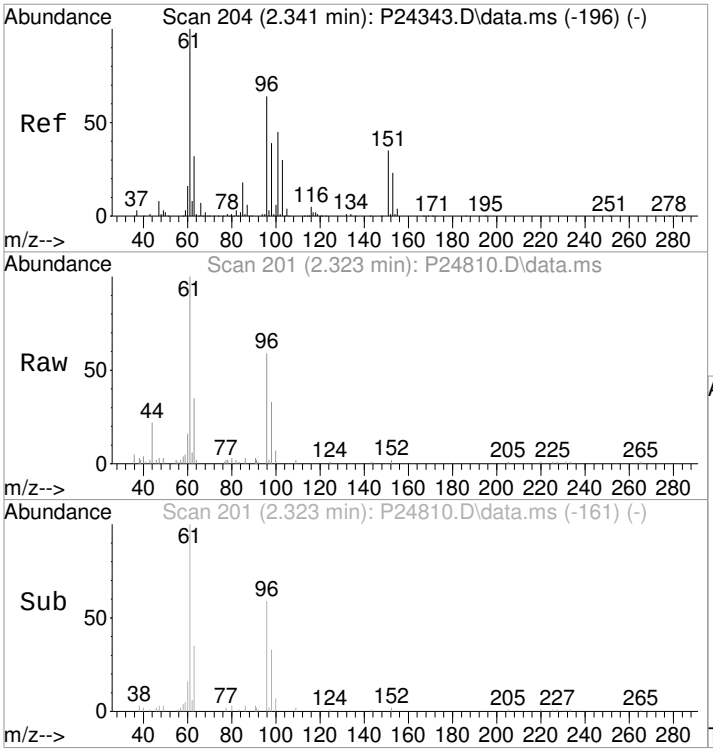


#5
Bromomethane
Concen: Below Cal
RT: 1.652 min Scan# 91
Delta R.T. 0.013 min
Lab File: P24810.D
Acq: 8 Mar 2019 8:33 pm

Tgt Ion: 94 Resp: 1383

Ion	Ratio	Lower	Upper
94	100		
96	34.5	75.4	115.4#

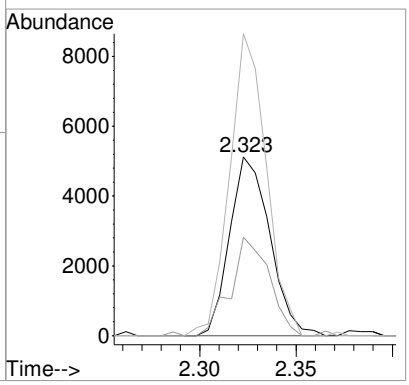


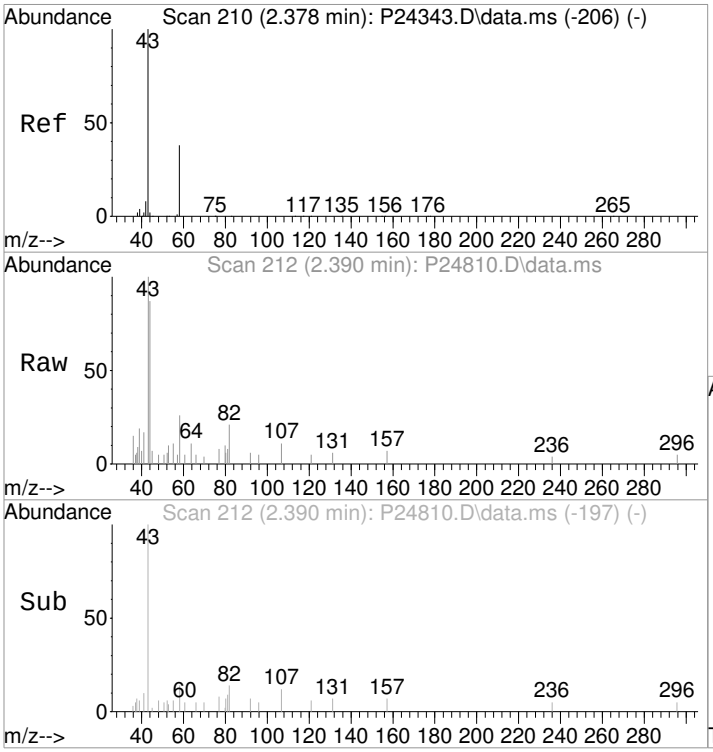


#13
1,1-Diclethene
Concen: 2.53 ppb
RT: 2.323 min Scan# 201
Delta R.T. -0.006 min
Lab File: P24810.D
Acq: 8 Mar 2019 8:33 pm

Tgt Ion: 96 Resp: 7439

Ion	Ratio	Lower	Upper
96	100		
98	55.0	40.8	80.8
61	168.8	136.2	176.2

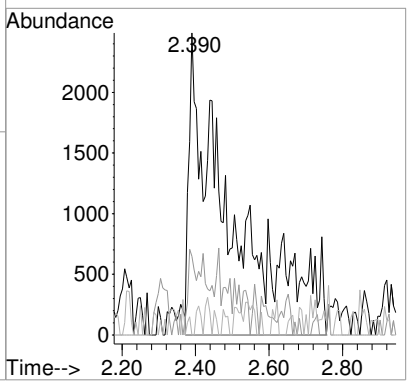


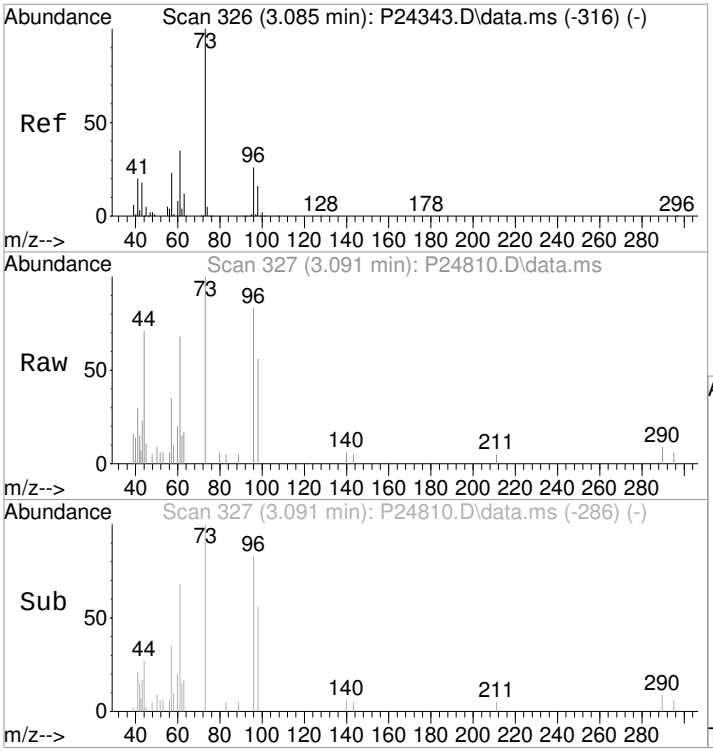


#15
Acetone
Concen: 12.82 ppb m
RT: 2.390 min Scan# 212
Delta R.T. 0.018 min
Lab File: P24810.D
Acq: 8 Mar 2019 8:33 pm

Tgt Ion: 43 Resp: 19327

Ion	Ratio	Lower	Upper
43	100		
58	26.1	18.1	58.1
42	0.0	0.0	27.8

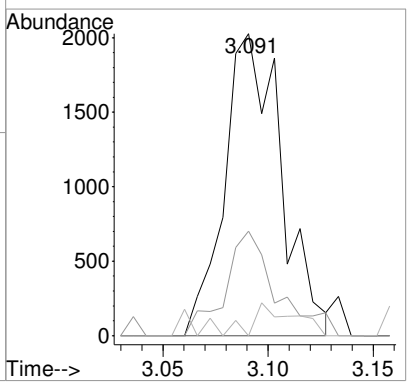


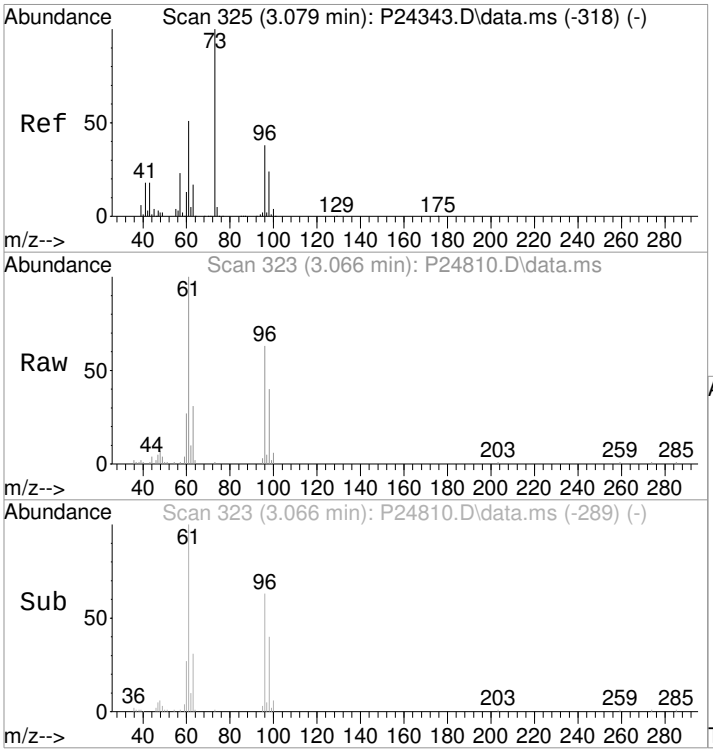


#25
Methyl-t-Butyl Ether
Concen: 0.33 ppb
RT: 3.091 min Scan# 327
Delta R.T. 0.012 min
Lab File: P24810.D
Acq: 8 Mar 2019 8:33 pm

Tgt Ion: 73 Resp: 3801

Ion	Ratio	Lower	Upper
73	100		
57	34.6	3.7	43.7
55	0.0	0.0	25.2

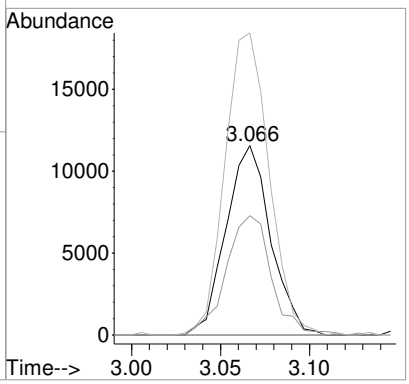


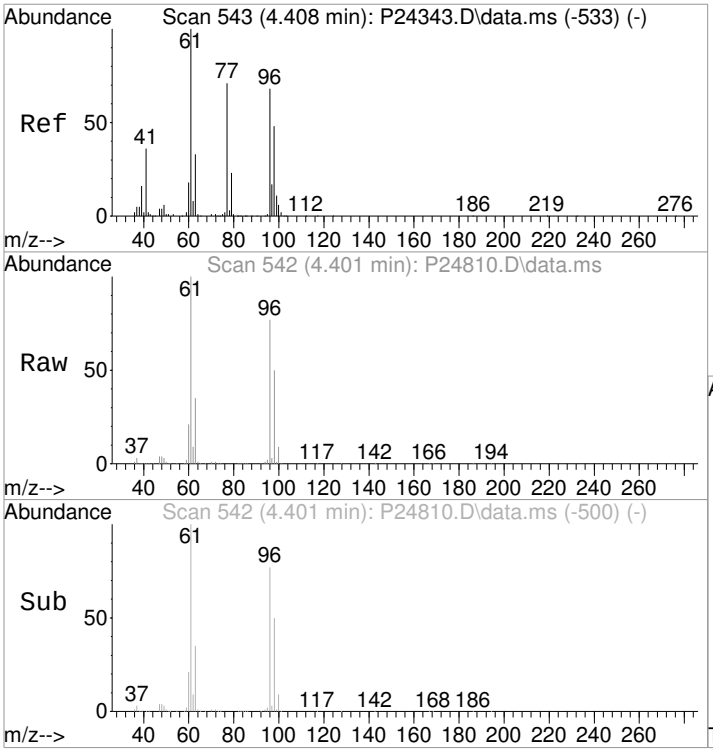


#26
trans-1,2-Dichloroethene
Concen: 6.19 ppb
RT: 3.066 min Scan# 323
Delta R.T. -0.000 min
Lab File: P24810.D
Acq: 8 Mar 2019 8:33 pm

Tgt Ion: 96 Resp: 20233

Ion	Ratio	Lower	Upper
96	100		
98	63.1	43.5	83.5
61	159.6	114.4	154.4#

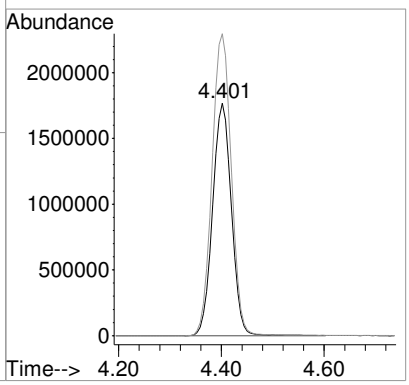


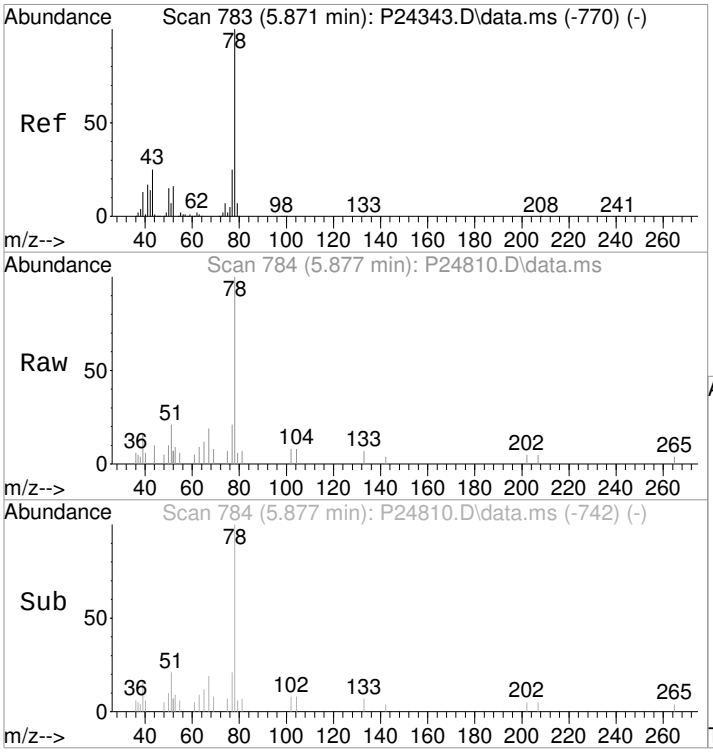


#34
cis-1,2-Dichloroethene
Concen: 1225.25 ppb
RT: 4.401 min Scan# 542
Delta R.T. -0.000 min
Lab File: P24810.D
Acq: 8 Mar 2019 8:33 pm

Tgt Ion: 96 Resp: 4487319

Ion	Ratio	Lower	Upper
96	100		
61	129.8	128.1	168.1

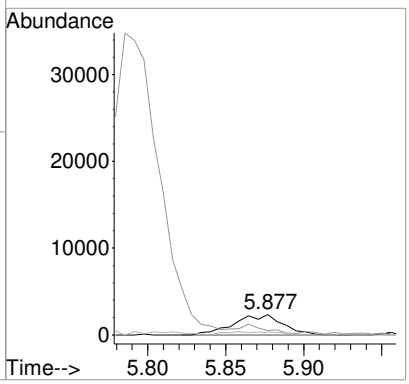


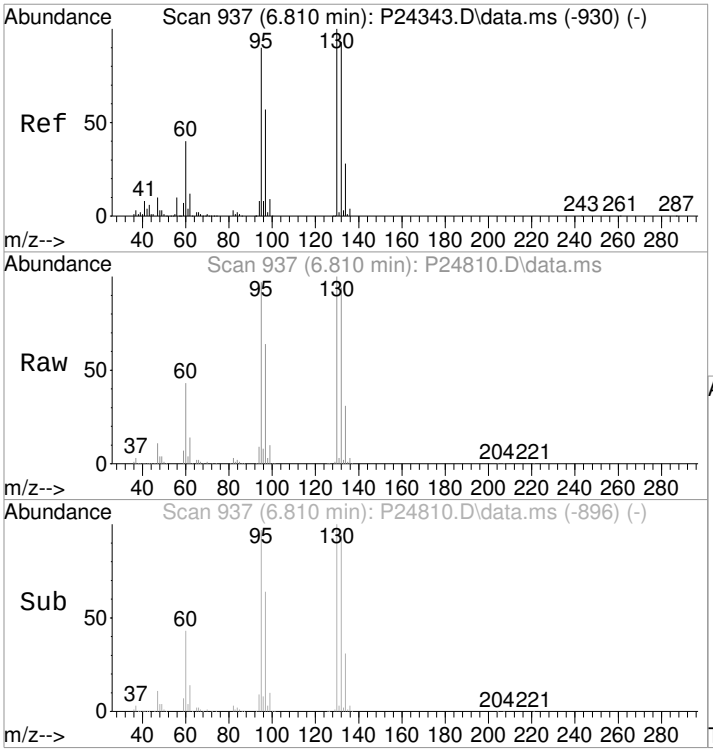


#49
Benzene
Concen: 0.35 ppb m
RT: 5.877 min Scan# 784
Delta R.T. 0.012 min
Lab File: P24810.D
Acq: 8 Mar 2019 8:33 pm

Tgt Ion: 78 Resp: 5067

Ion	Ratio	Lower	Upper
78	100		
51	21.1	0.0	36.0
52	6.5	0.0	36.2

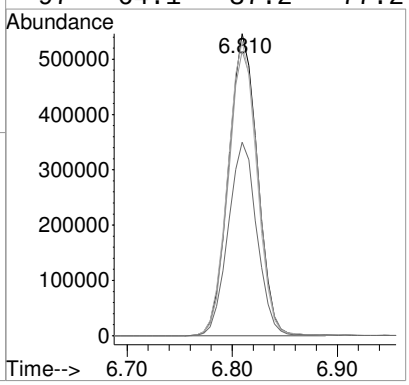


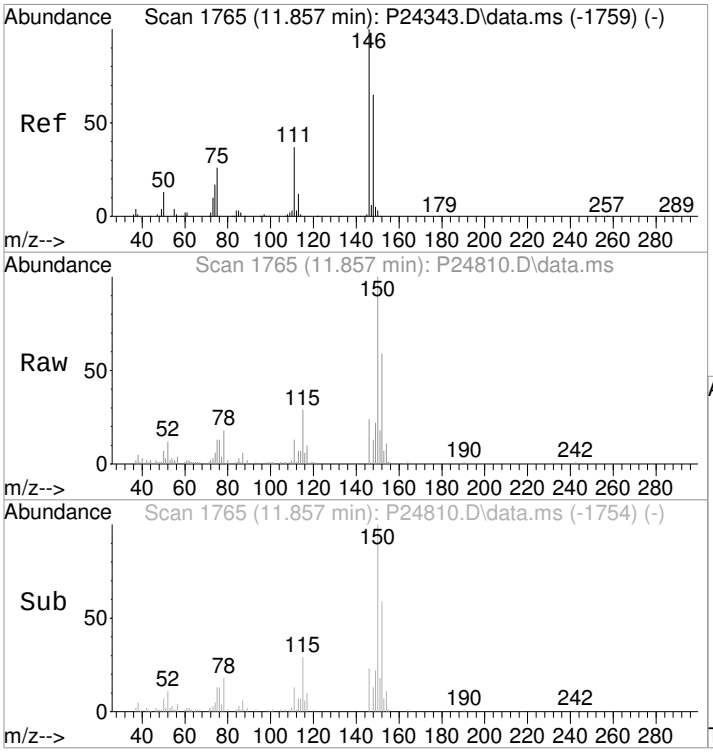


#54
Trichloroethene
Concen: 289.50 ppb
RT: 6.810 min Scan# 937
Delta R.T. -0.000 min
Lab File: P24810.D
Acq: 8 Mar 2019 8:33 pm

Tgt Ion:130 Resp: 1039974

Ion	Ratio	Lower	Upper
130	100		
132	94.3	72.6	112.6
95	97.5	69.8	109.8
97	64.1	37.2	77.2

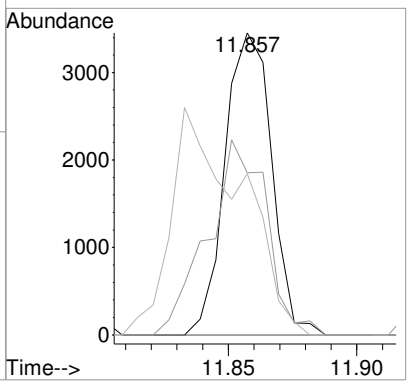


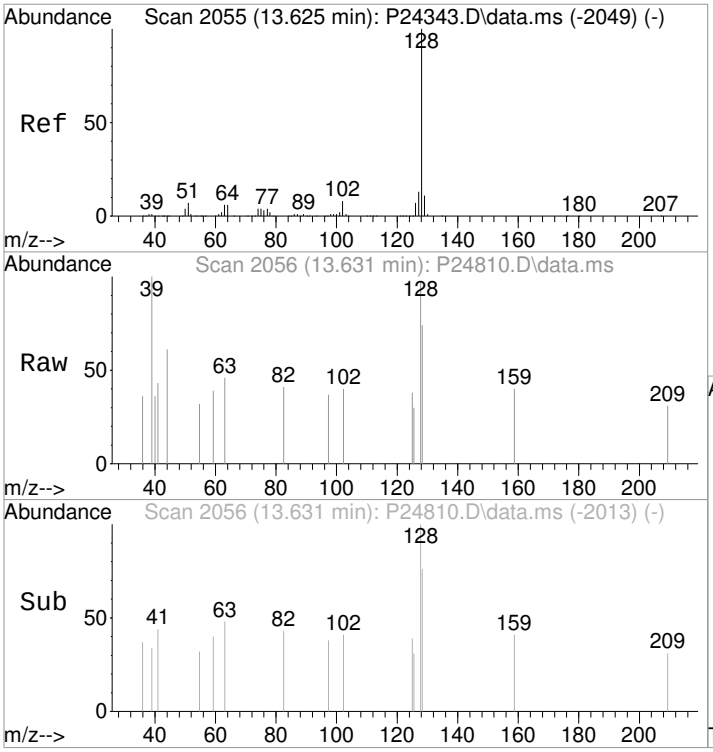


#106
1,4-Dclbenz
Concen: 0.59 ppb
RT: 11.857 min Scan# 1765
Delta R.T. -0.000 min
Lab File: P24810.D
Acq: 8 Mar 2019 8:33 pm

Tgt Ion:146 Resp: 4358

Ion	Ratio	Lower	Upper
146	100		
148	53.7	44.6	84.6
111	53.4	16.7	56.7

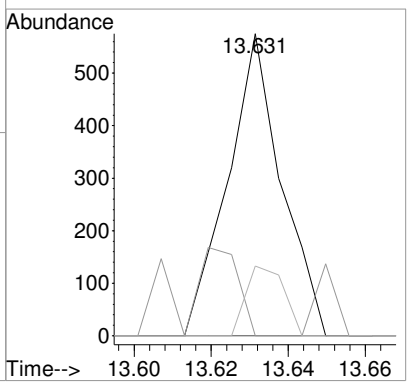




#117
Naphthalen
Concen: 0.77 ppb
RT: 13.631 min Scan# 2056
Delta R.T. 0.006 min
Lab File: P24810.D
Acq: 8 Mar 2019 8:33 pm

Tgt Ion:128 Resp: 557

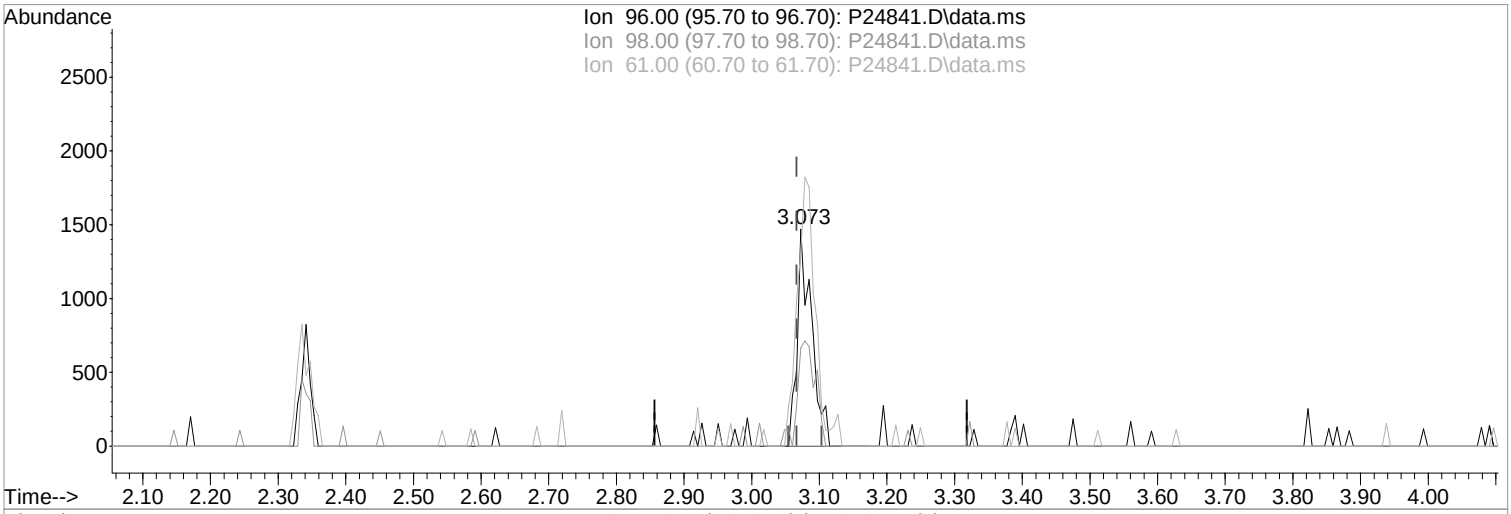
Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	32.9
102	23.1	0.0	28.2

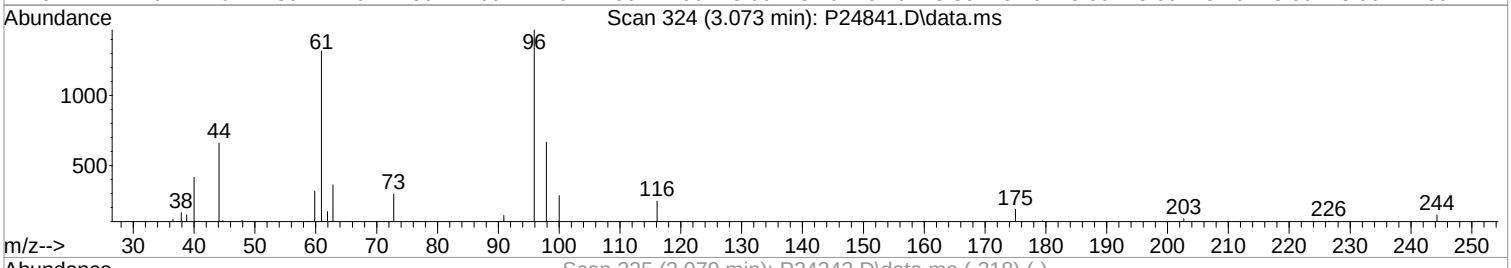


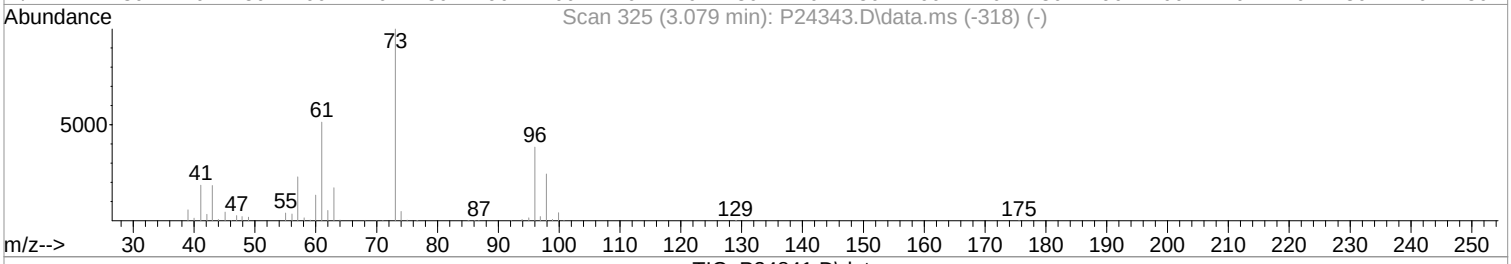
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24841.D
Acq On : 12 Mar 2019 2:58 pm
Operator : K.Ruest
Sample : R1901880-009|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 12 15:17:49 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24841.D\data.ms

(26) trans-1,2-Dichloroethene (P)

3.073min (+0.006) 0.70 ppb m

response 2177

Ion	Exp%	Act%
96.00	100	100
98.00	63.50	45.24
61.00	134.40	89.66#
0.00	0.00	0.00

Manual Integration:

After

Split Peak

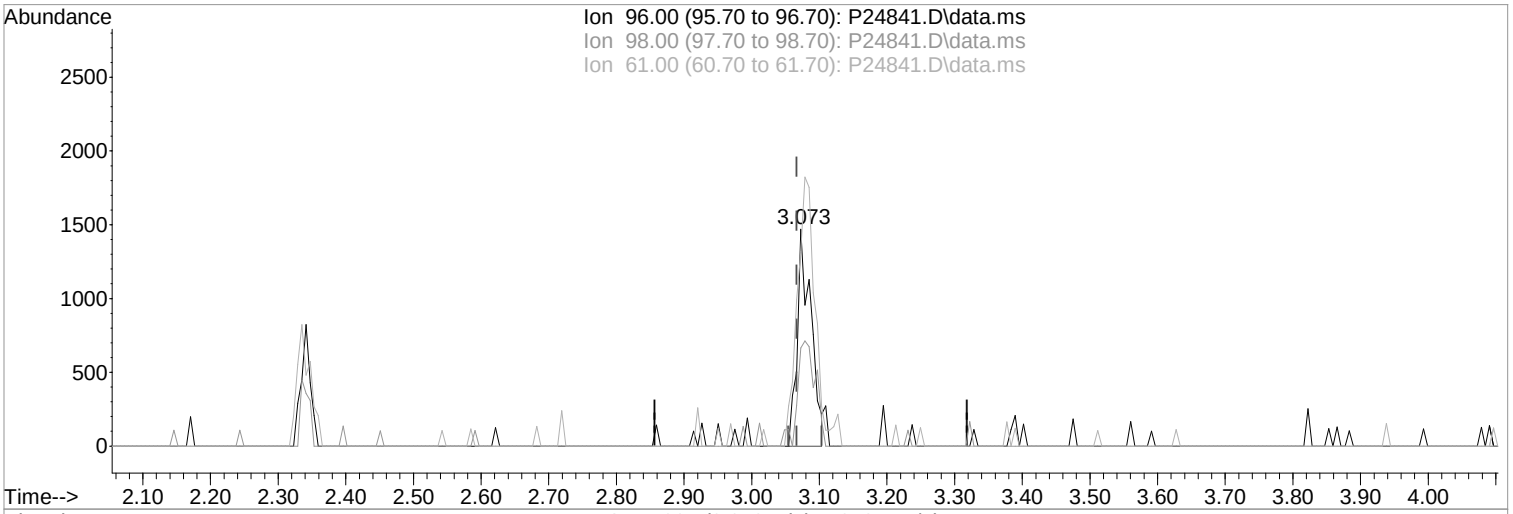
03/12/19

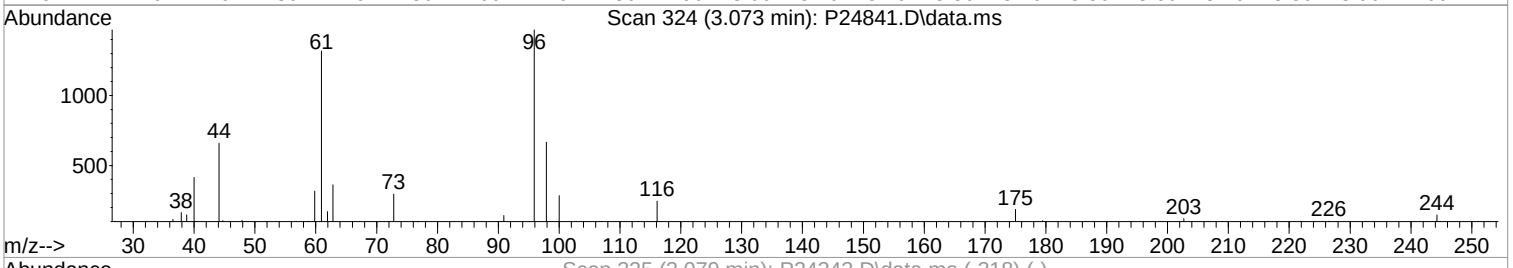
1st 03/12/19
2nd 03/13/19

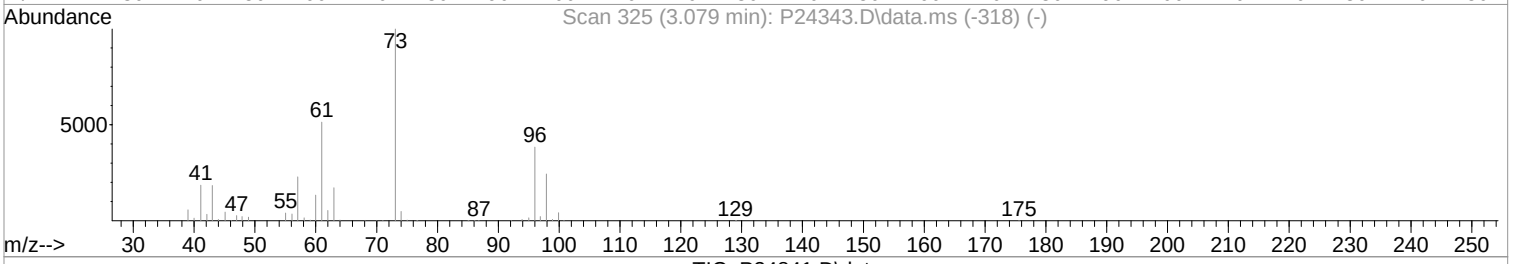
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24841.D
Acq On : 12 Mar 2019 2:58 pm
Operator : K.Ruest
Sample : R1901880-009|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 12 15:17:49 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24841.D\data.ms

(26) trans-1,2-Dichloroethene (P)

3.073min (+0.006) 0.66 ppb

response 2078

Ion	Exp%	Act%
96.00	100	100
98.00	63.50	45.24
61.00	134.40	89.66#
0.00	0.00	0.00

Manual Integration:

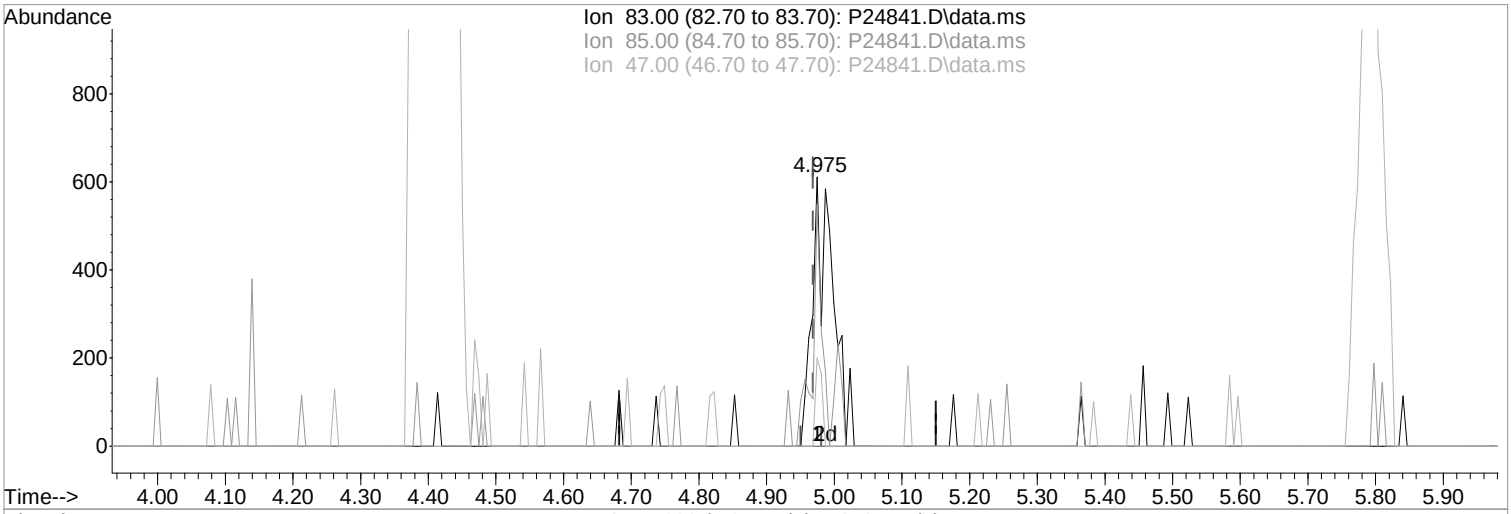
Before

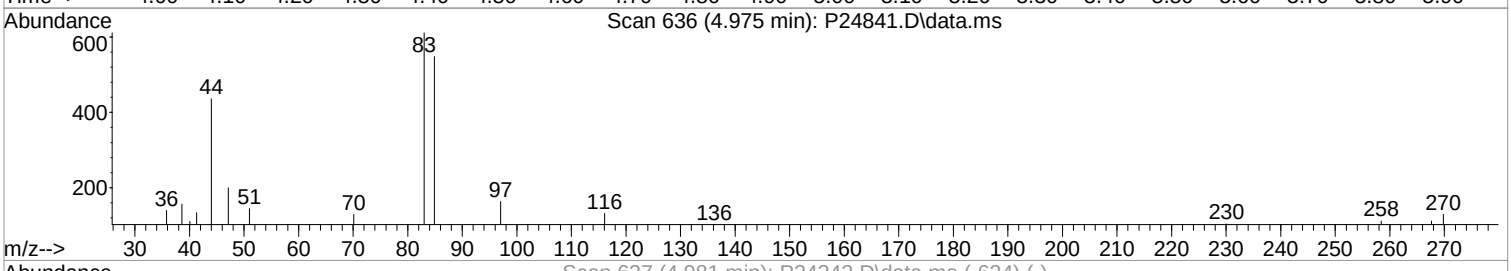
03/12/19

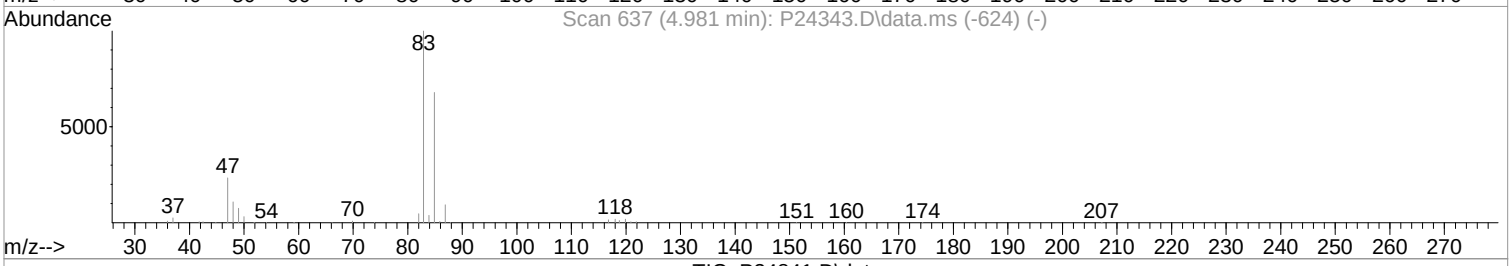
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24841.D
Acq On : 12 Mar 2019 2:58 pm
Operator : K.Ruest
Sample : R1901880-009|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 12 15:17:49 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24841.D\data.ms

(40) Chloroform (P)

4.975min (+0.006) 0.25 ppb m

response 1314

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	89.69#
47.00	23.40	32.73
0.00	0.00	0.00

Manual Integration:

After

Split Peak

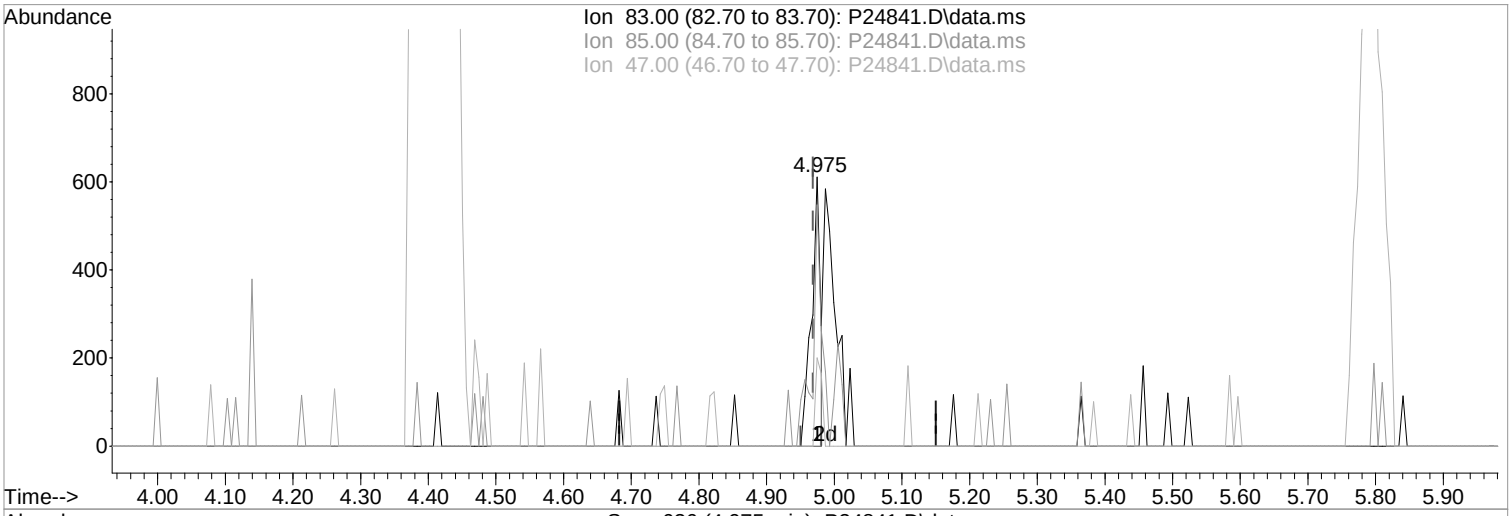
03/12/19

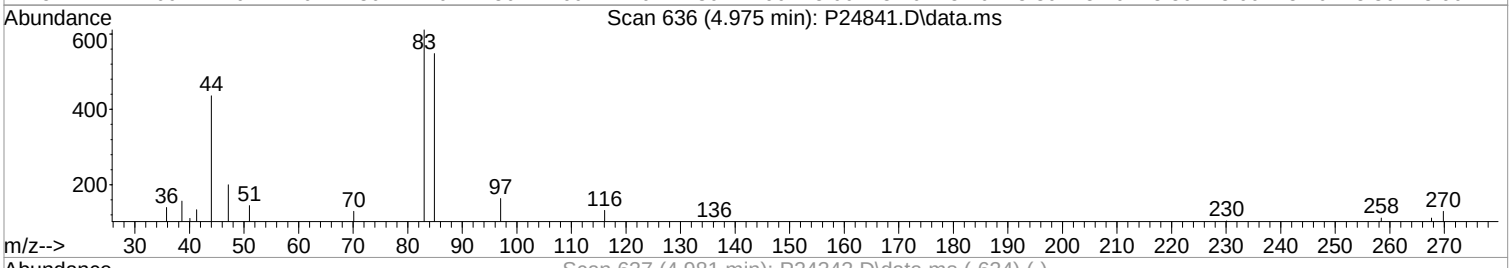
1st 03/12/19
2nd 03/13/19

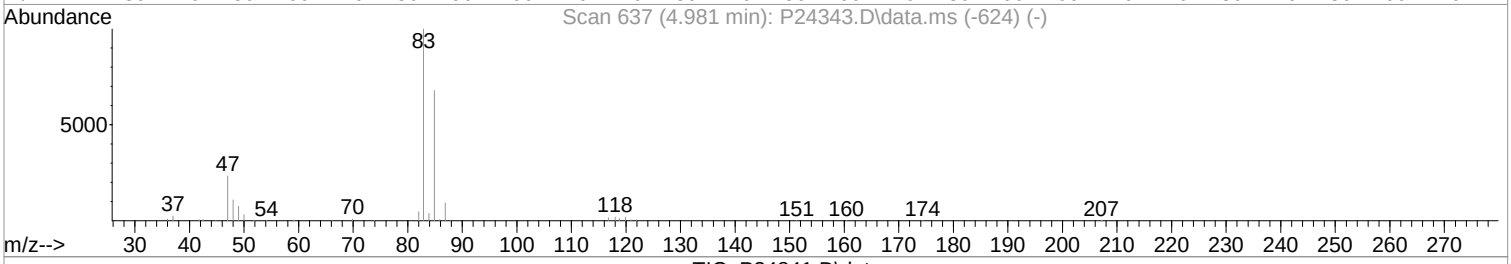
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24841.D
Acq On : 12 Mar 2019 2:58 pm
Operator : K.Ruest
Sample : R1901880-009|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 12 15:17:49 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24841.D\data.ms

(40) Chloroform (P)

4.975min (+0.006) 0.11 ppb

response 564

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	89.69#
47.00	23.40	32.73
0.00	0.00	0.00

Manual Integration:

Before

03/12/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24841.D
Acq On : 12 Mar 2019 2:58 pm
Operator : K.Ruest
Sample : R1901880-009|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 8 Sample Multiplier: 1

DL

Quant Time: Mar 12 15:53:00 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

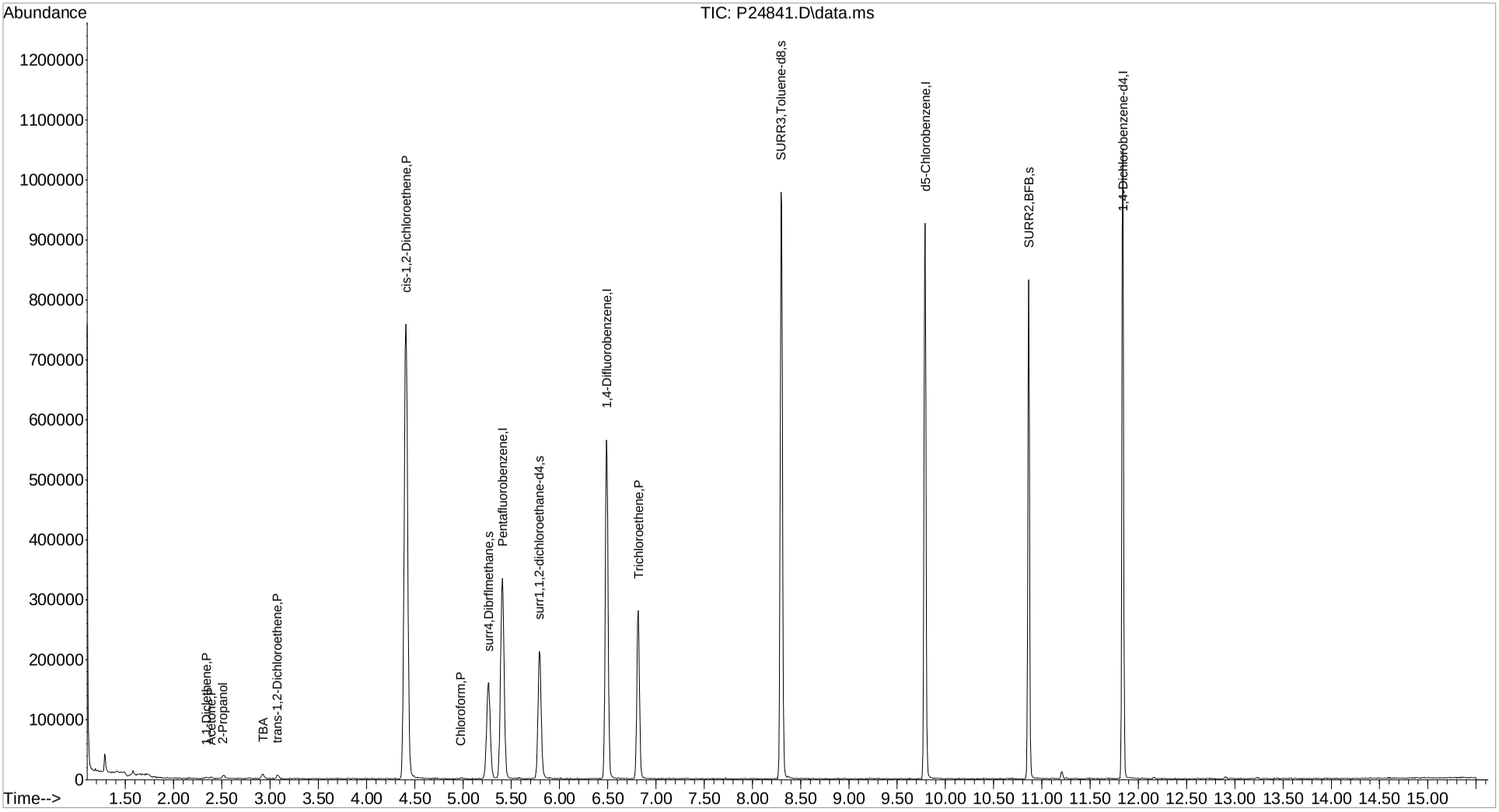
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.407	168	301675	50.00	ppb	0.01
43) 1,4-Difluorobenzene	6.487	114	496336	50.00	ppb	0.00
71) d5-Chlorobenzene	9.791	117	431969	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	212462	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.261	113	132896	48.73	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.46%			
48) surr1,1,2-dichloroetha...	5.792	65	176367	50.98	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.96%			
65) SURR3,Toluene-d8	8.297	98	635722	49.14	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.28%			
70) SURR2,BFB	10.864	95	226329	48.84	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.68%			
Target Compounds						Qvalue
13) 1,1-Diclethene	2.341	96	805	0.29	ppb	# 39
15) Acetone	2.390	43	2617	1.81	ppb	76
16) 2-Propanol	2.512	45	5987	15.96	ppb	83
23) TBA	2.926	59	4314	7.24	ppb	71
26) trans-1,2-Dichloroethene	3.073	96	2177m	0.70	ppb	
34) cis-1,2-Dichloroethene	4.408	96	456500	130.07	ppb	91
40) Chloroform	4.975	83	1314m	0.25	ppb	
54) Trichloroethene	6.816	130	101858	29.34	ppb	93

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

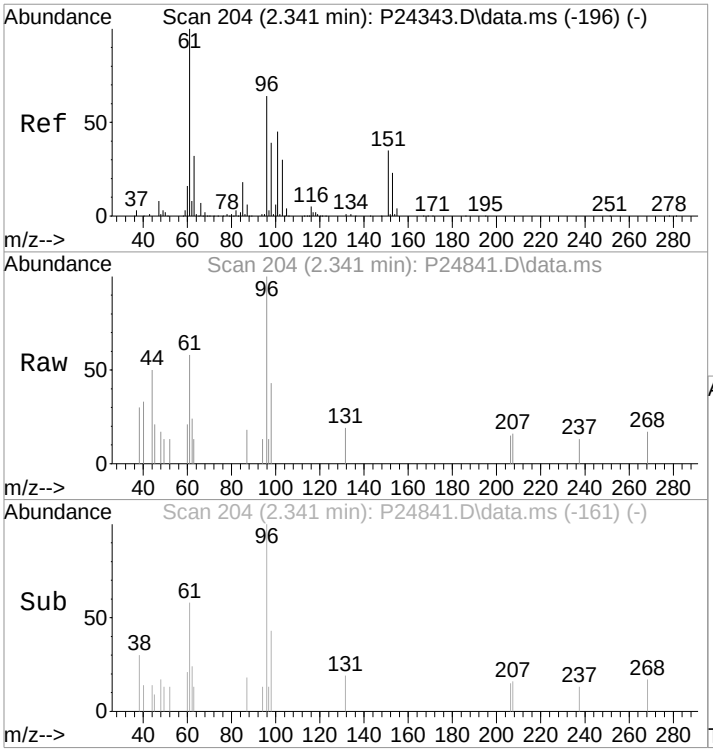
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24841.D
Acq On : 12 Mar 2019 2:58 pm
Operator : K.Ruest
Sample : R1901880-009|10 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 12 15:53:00 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



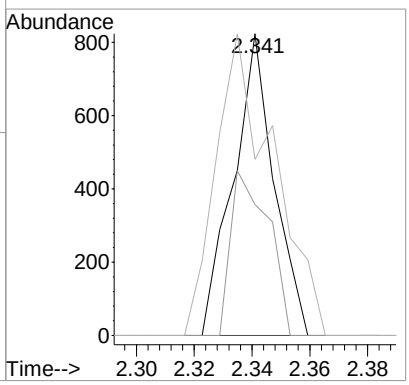
1st 03/12/19
2nd 03/13/19

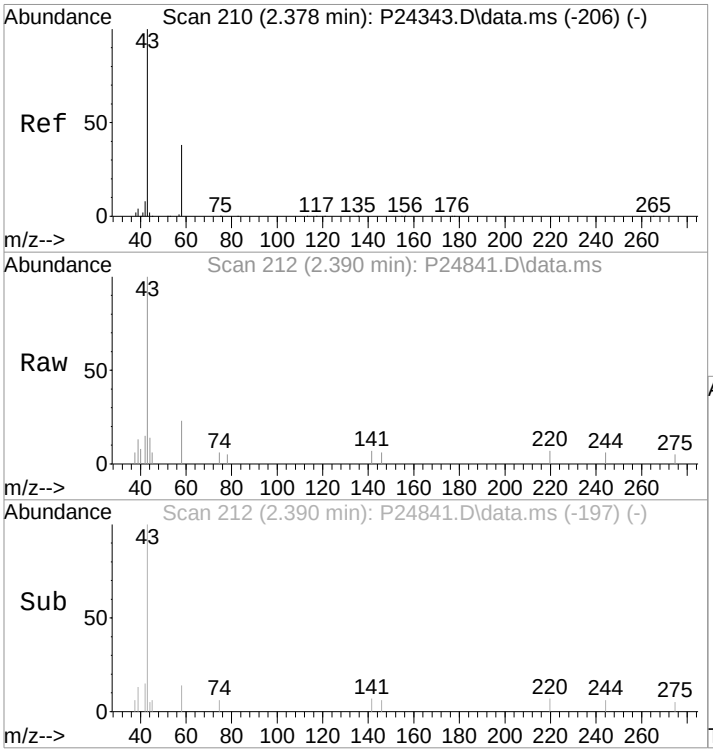


#13
1,1-Diclethene
Concen: 0.29 ppb
RT: 2.341 min Scan# 204
Delta R.T. 0.012 min
Lab File: P24841.D
Acq: 12 Mar 2019 2:58 pm

Tgt Ion: 96 Resp: 805

Ion	Ratio	Lower	Upper
96	100		
98	43.3	40.8	80.8
61	58.3	136.2	176.2#

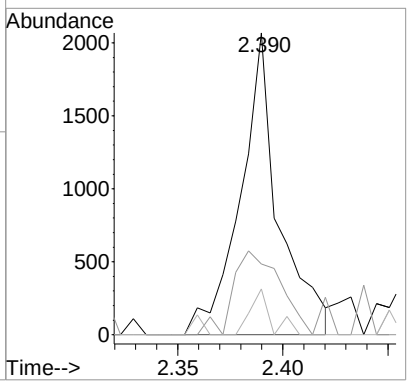


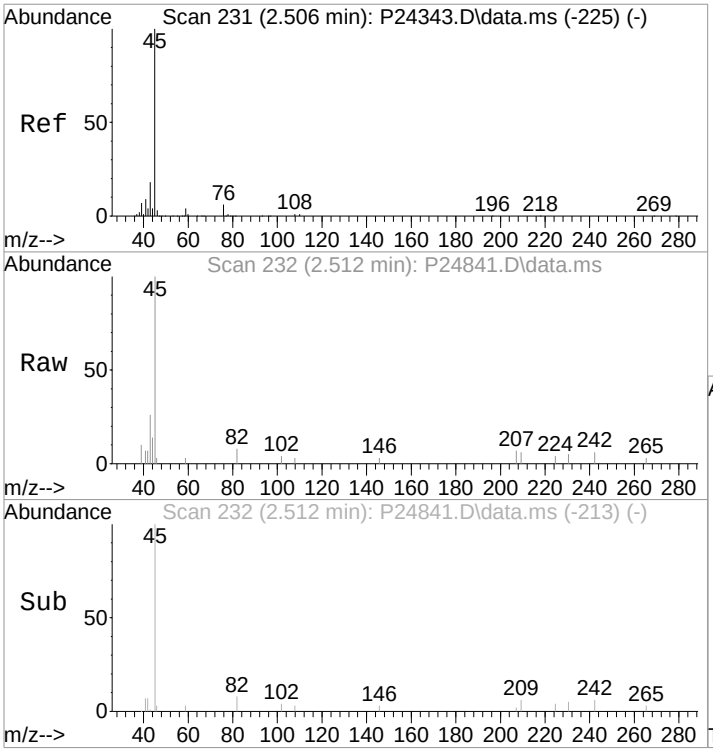


#15
Acetone
Concen: 1.81 ppb
RT: 2.390 min Scan# 212
Delta R.T. 0.018 min
Lab File: P24841.D
Acq: 12 Mar 2019 2:58 pm

Tgt Ion: 43 Resp: 2617

Ion	Ratio	Lower	Upper
43	100		
58	23.5	18.1	58.1
42	15.1	0.0	27.8

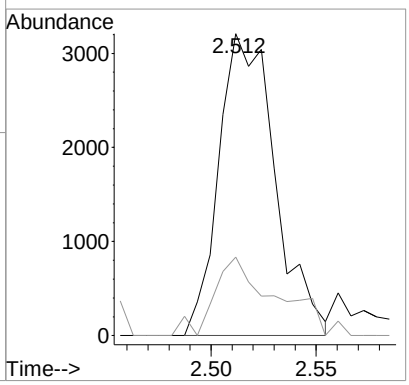


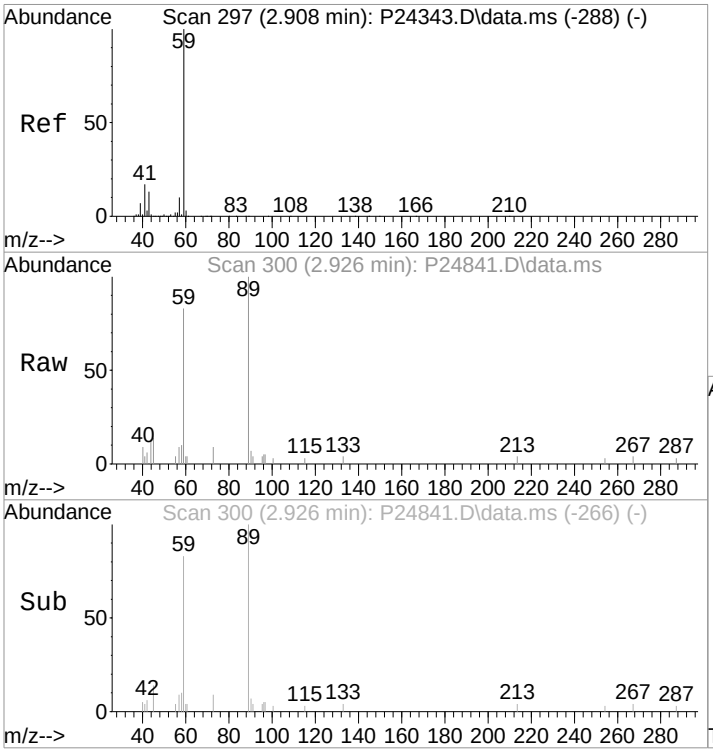


#16
2-Propanol
Concen: 15.96 ppb
RT: 2.512 min Scan# 232
Delta R.T. 0.006 min
Lab File: P24841.D
Acq: 12 Mar 2019 2:58 pm

Tgt Ion: 45 Resp: 5987

Ion	Ratio	Lower	Upper
45	100		
43	25.9	0.0	38.5

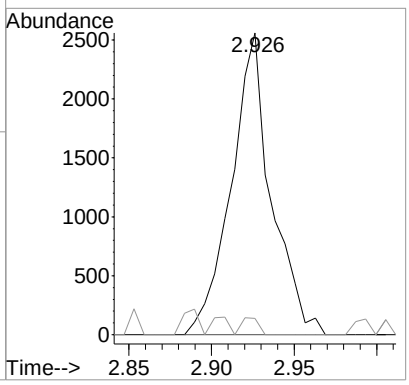


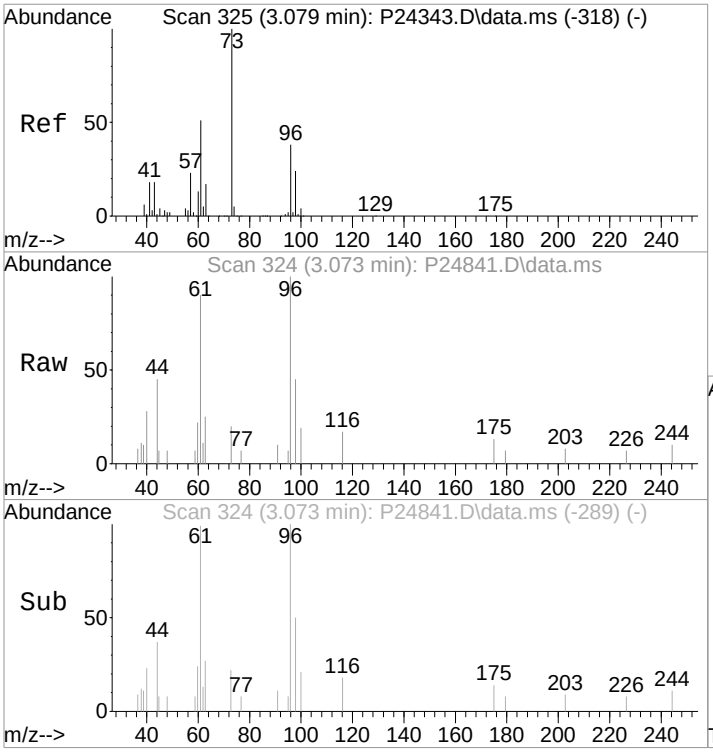


#23
TBA
Concen: 7.24 ppb
RT: 2.926 min Scan# 300
Delta R.T. 0.018 min
Lab File: P24841.D
Acq: 12 Mar 2019 2:58 pm

Tgt Ion: 59 Resp: 4314

Ion	Ratio	Lower	Upper
59	100		
41	5.4	0.0	38.2

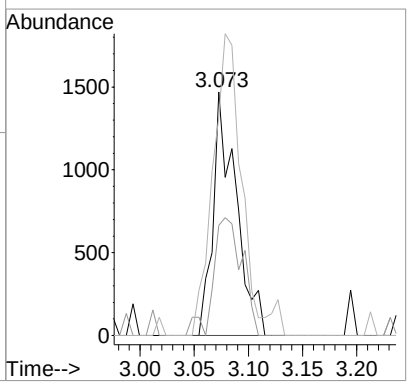


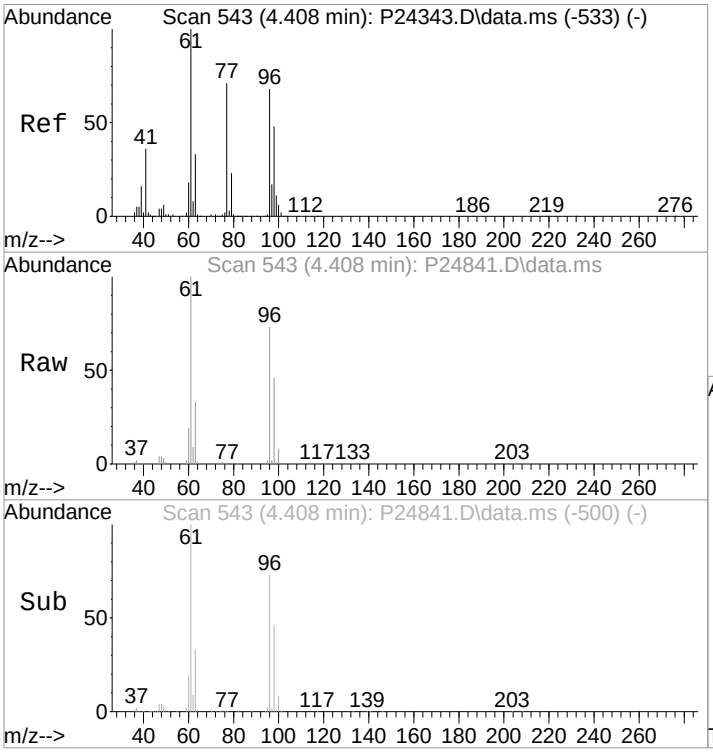


#26
trans-1,2-Dichloroethene
Concen: 0.70 ppb m
RT: 3.073 min Scan# 324
Delta R.T. 0.006 min
Lab File: P24841.D
Acq: 12 Mar 2019 2:58 pm

Tgt Ion: 96 Resp: 2177

Ion	Ratio	Lower	Upper
96	100		
98	45.2	43.5	83.5
61	89.7	114.4	154.4#

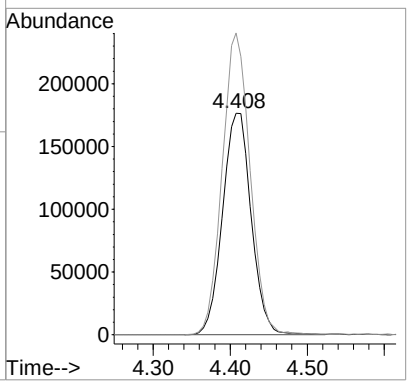


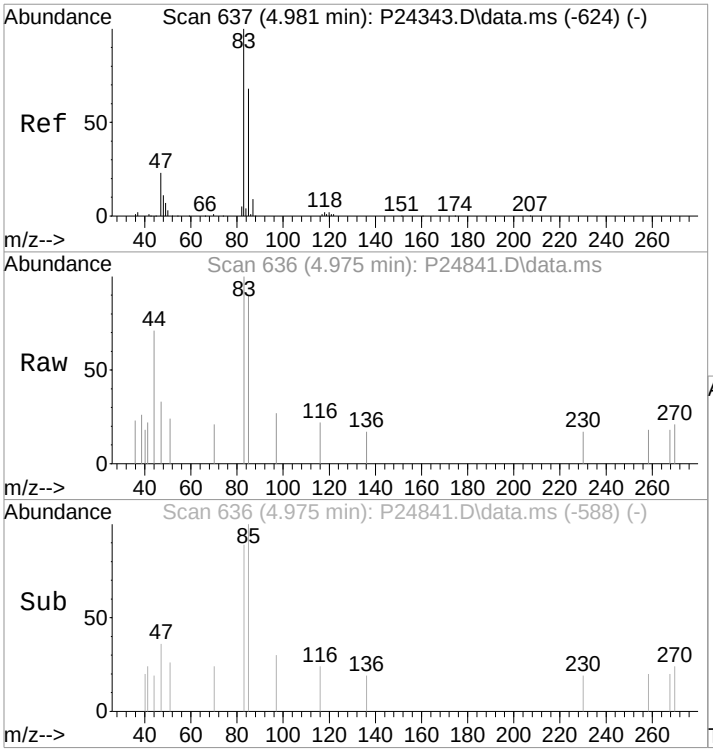


#34
cis-1,2-Dichloroethene
Concen: 130.07 ppb
RT: 4.408 min Scan# 543
Delta R.T. 0.006 min
Lab File: P24841.D
Acq: 12 Mar 2019 2:58 pm

Tgt Ion: 96 Resp: 456500

Ion	Ratio	Lower	Upper
96	100		
61	136.2	128.1	168.1

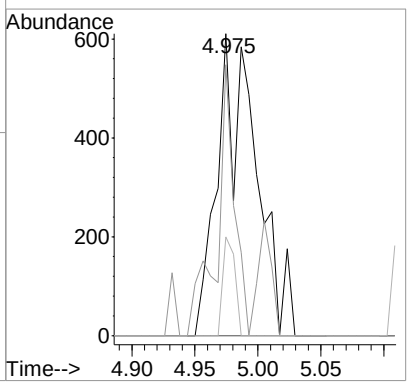


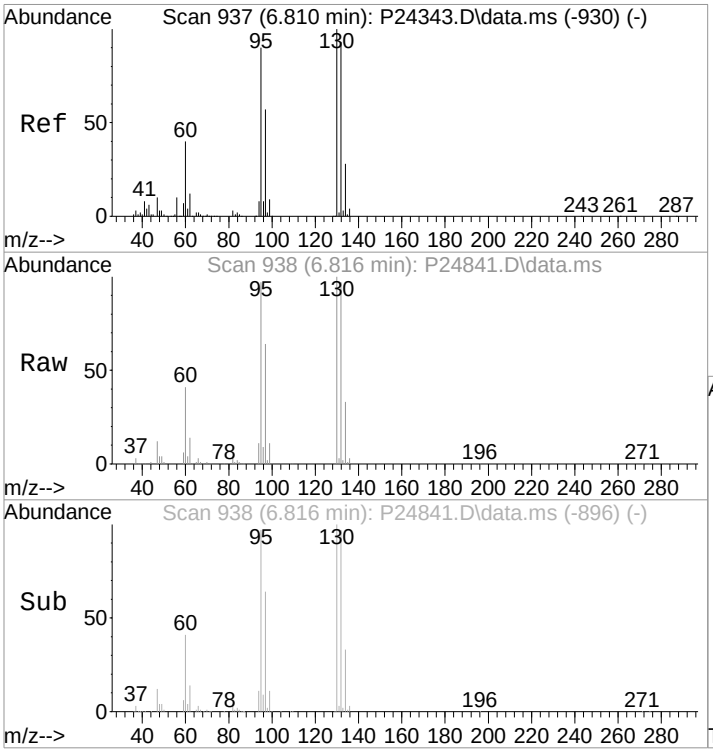


#40
Chloroform
Concen: 0.25 ppb m
RT: 4.975 min Scan# 636
Delta R.T. 0.006 min
Lab File: P24841.D
Acq: 12 Mar 2019 2:58 pm

Tgt Ion: 83 Resp: 1314

Ion	Ratio	Lower	Upper
83	100		
85	89.7	47.9	87.9#
47	32.7	3.4	43.4

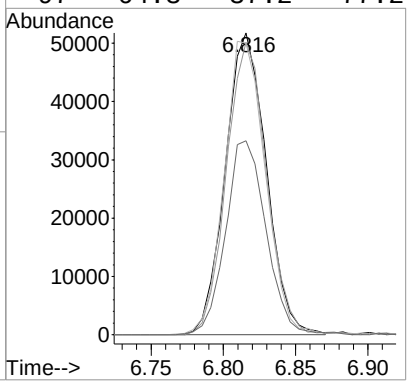




#54
Trichloroethene
Concen: 29.34 ppb
RT: 6.816 min Scan# 938
Delta R.T. 0.006 min
Lab File: P24841.D
Acq: 12 Mar 2019 2:58 pm

Tgt Ion:130 Resp: 101858

Ion	Ratio	Lower	Upper
130	100		
132	96.8	72.6	112.6
95	96.5	69.8	109.8
97	64.3	37.2	77.2



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24757.D
Acq On : 7 Mar 2019 12:32 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 07 16:34:35 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

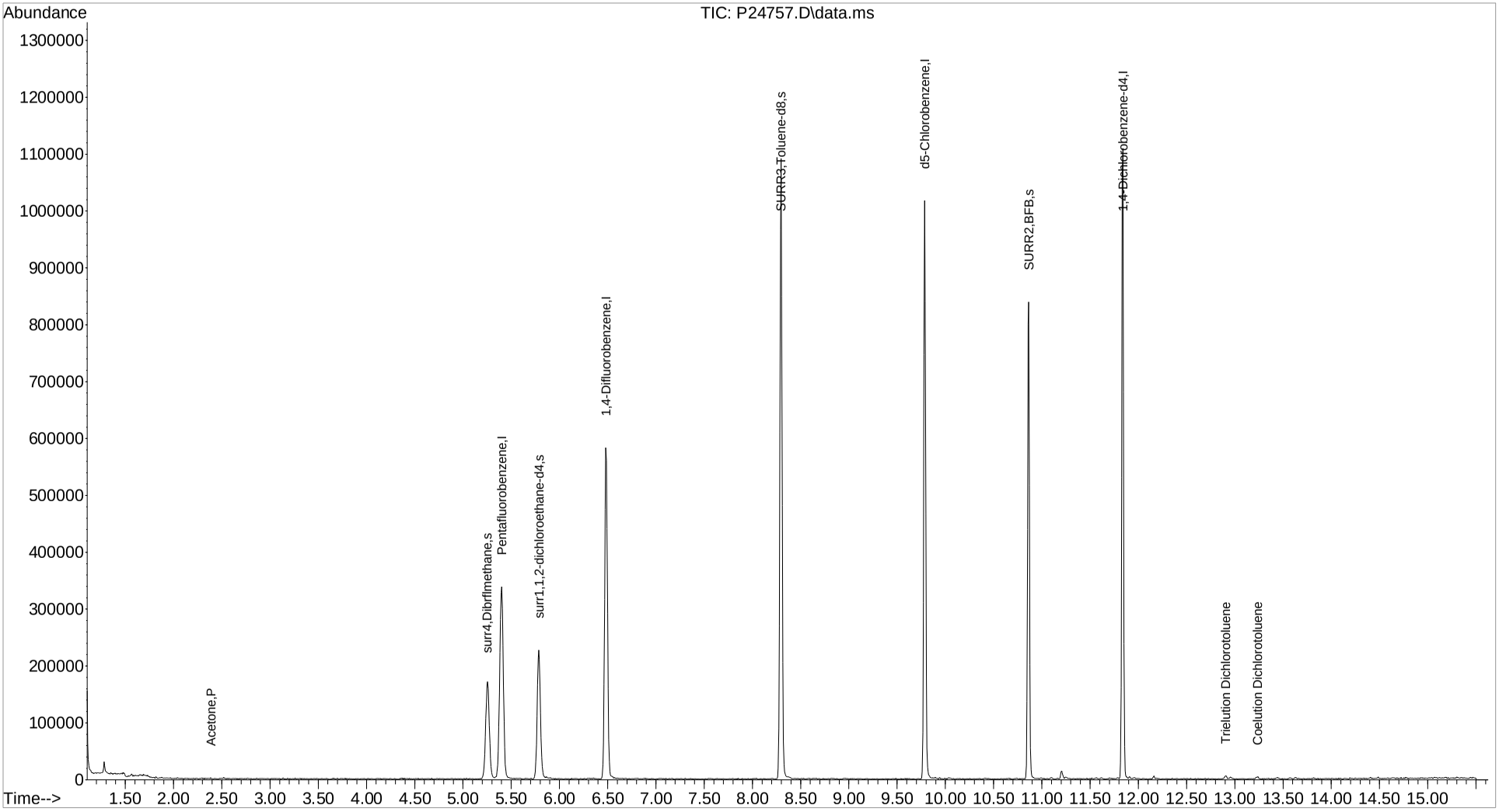
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.401	168	310095	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.481	114	511013	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	450120	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	228359	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.249	113	141856	50.52	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.04%				
48) surr1,1,2-dichloroetha...	5.786	65	188137	52.82	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 105.64%				
65) SURR3,Toluene-d8	8.297	98	666443	50.03	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.06%				
70) SURR2,BFB	10.864	95	239761	50.26	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.52%				
Target Compounds							Qvalue
15) Acetone	2.384	43	821	0.55	ppb		78
112) Trielution Dichlorotol...	12.906	125	1888	0.30	ppb	#	75
114) Coelution Dichlorotoluene	13.235	125	1388	0.20	ppb	#	82

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

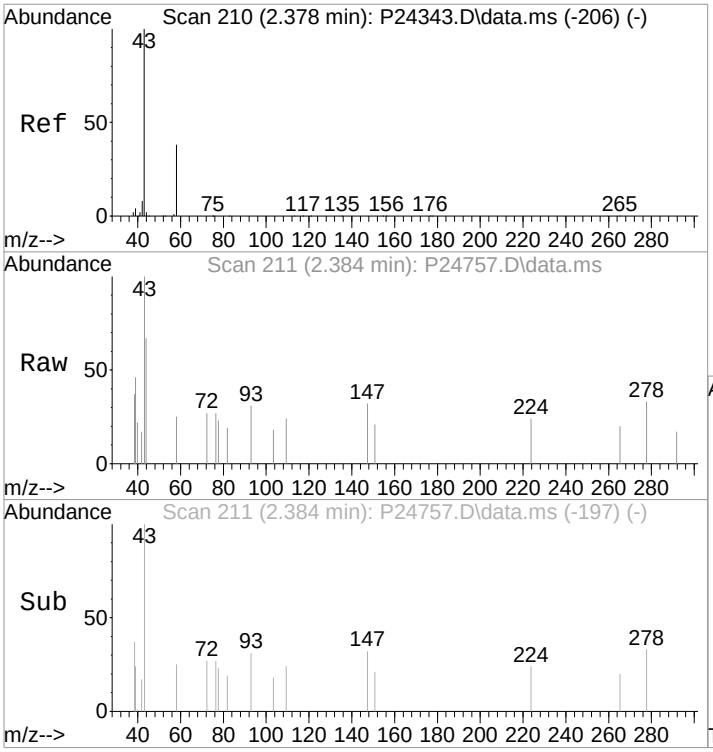
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24757.D
Acq On : 7 Mar 2019 12:32 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 07 16:34:35 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



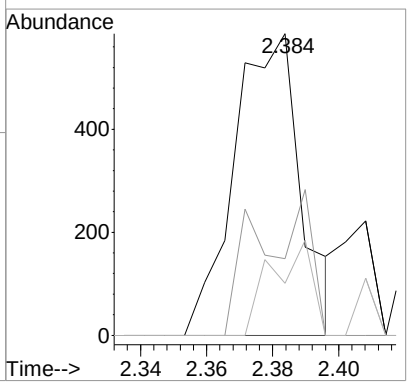
1st 03/07/19
2nd 03/12/19

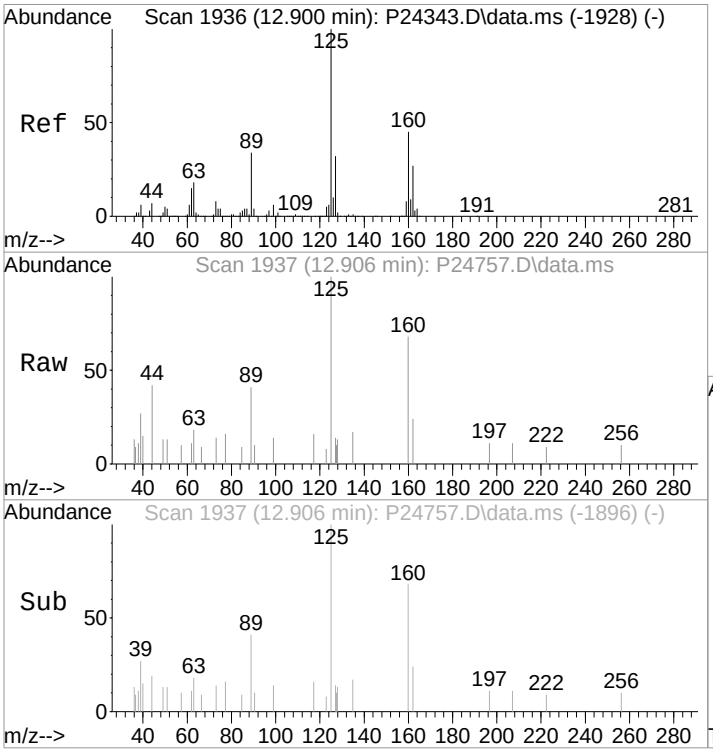


#15
Acetone
Concen: 0.55 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24757.D
Acq: 7 Mar 2019 12:32 pm

Tgt Ion: 43 Resp: 821

Ion	Ratio	Lower	Upper
43	100		
58	25.4	18.1	58.1
42	17.2	0.0	27.8

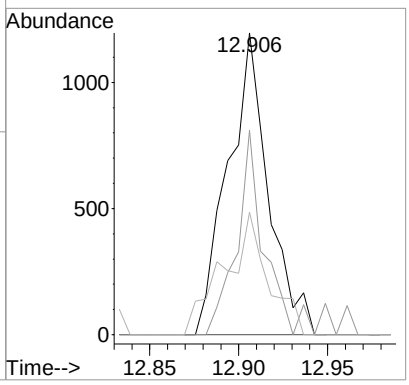


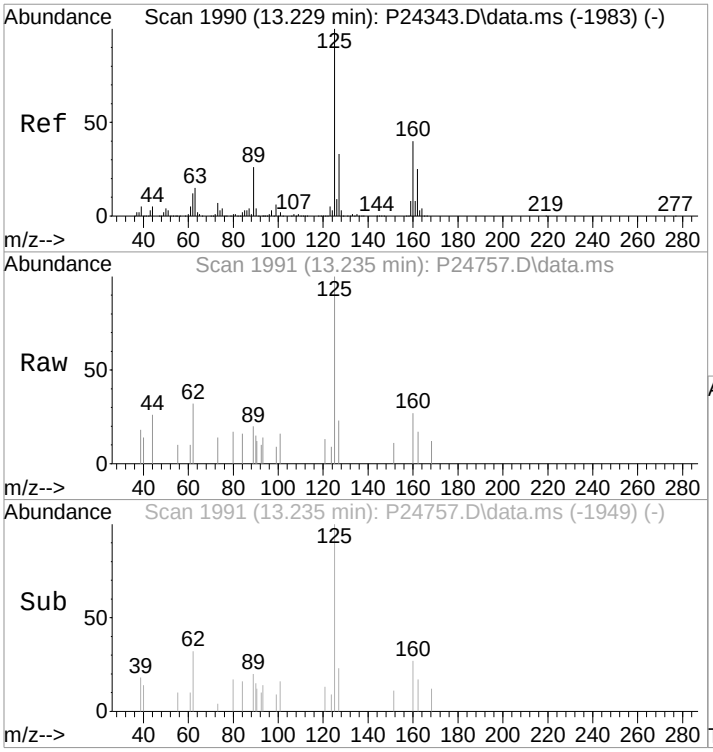


#112
Trielution Dichlorotoluene
Concen: 0.30 ppb
RT: 12.906 min Scan# 1937
Delta R.T. 0.000 min
Lab File: P24757.D
Acq: 7 Mar 2019 12:32 pm

Tgt Ion:125 Resp: 1888

Ion	Ratio	Lower	Upper
125	100		
160	67.8	35.8	53.8#
89	40.6	27.0	40.4#

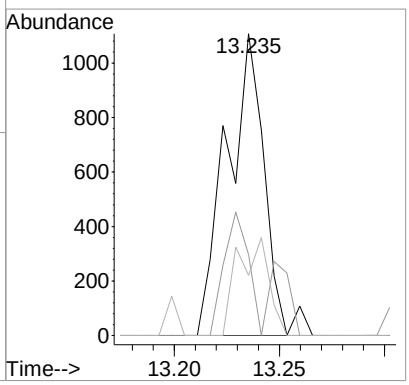




#114
Coelution Dichlorotoluene
Concen: 0.20 ppb
RT: 13.235 min Scan# 1991
Delta R.T. 0.006 min
Lab File: P24757.D
Acq: 7 Mar 2019 12:32 pm

Tgt Ion:125 Resp: 1388

Ion	Ratio	Lower	Upper
125	100		
160	26.8	32.4	48.6#
89	19.9	20.7	31.1#



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24791.D
Acq On : 8 Mar 2019 1:39 pm
Operator : F.NAEGLER
Sample : MBLK Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 11:10:40 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

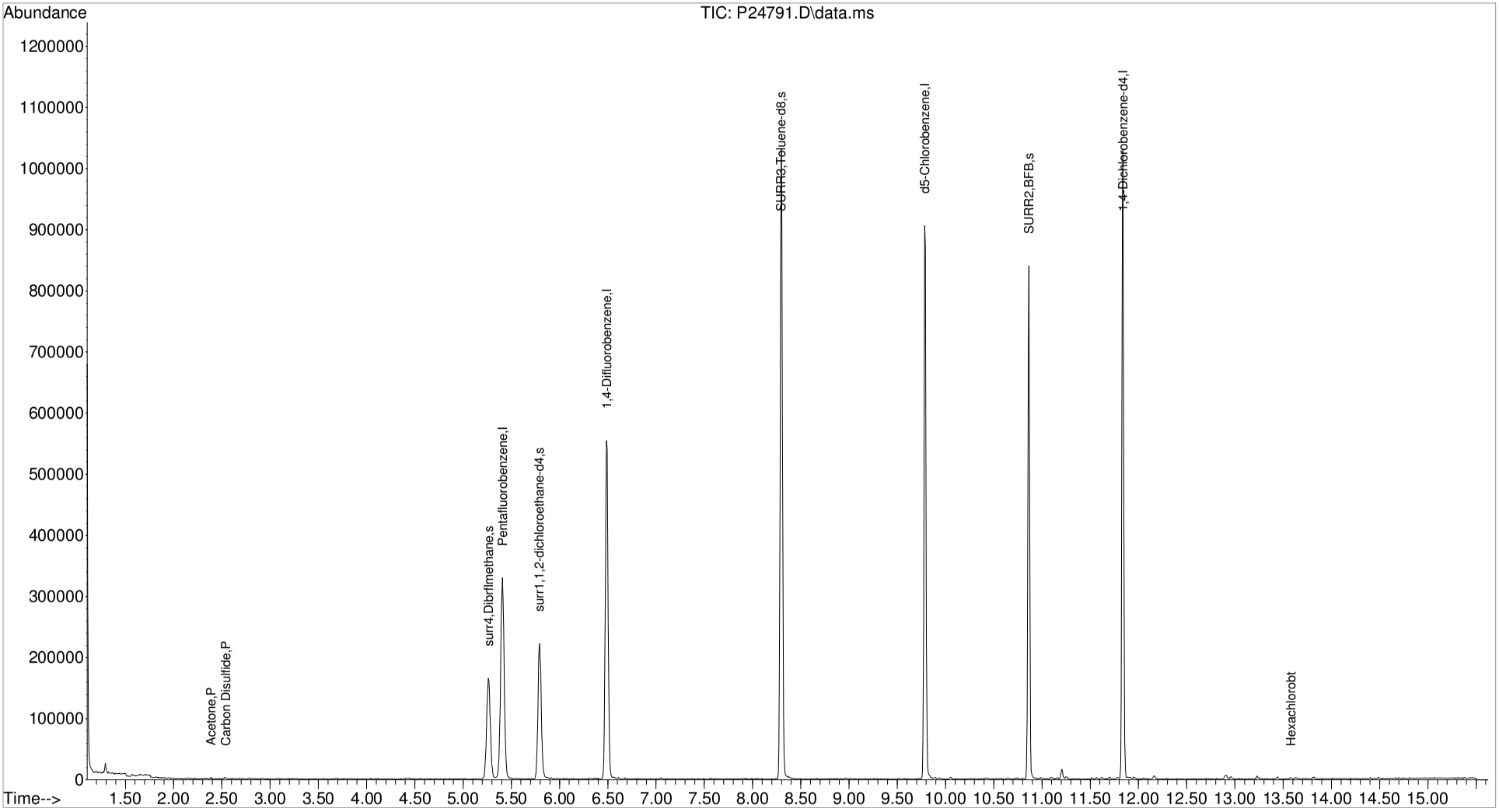
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.408	168	299551	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	481681	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	425343	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	217746	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.261	113	135215	51.08	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.16%				
48) surr1,1,2-dichloroetha...	5.792	65	182166	54.26	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 108.52%				
65) SURR3,Toluene-d8	8.297	98	652206	51.95	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 103.90%				
70) SURR2,BFB	10.864	95	228690	50.86	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.72%				
Target Compounds							Qvalue
5) Bromomethane	1.652	94	1180	Below Cal			82
15) Acetone	2.390	43	959	0.67	ppb	#	60
18) Carbon Disulfide	2.536	76	1870	0.22	ppb		77
116) Hexachlorobt	13.583	225	437	0.21	ppb	#	79

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

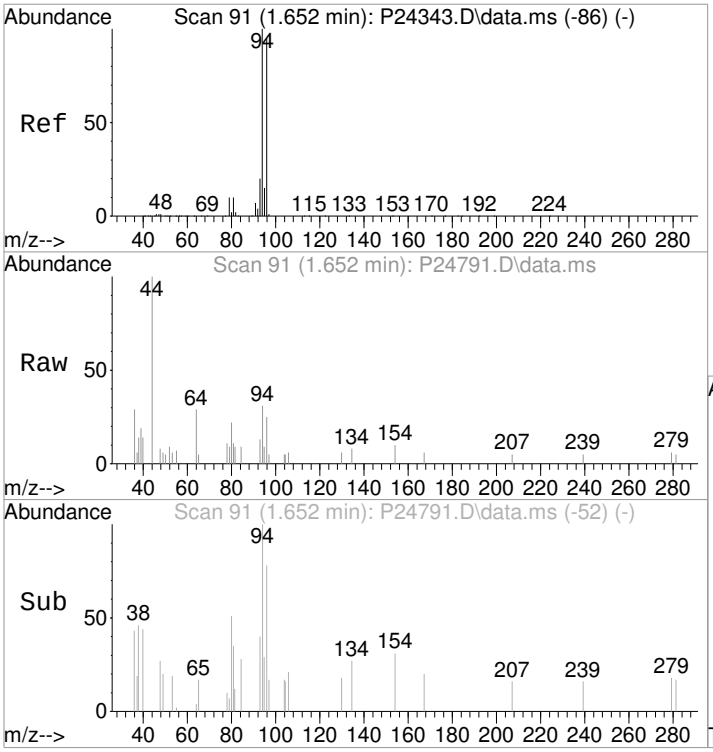
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24791.D
Acq On : 8 Mar 2019 1:39 pm
Operator : F.NAEGLER
Sample : MBLK Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 11:10:40 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



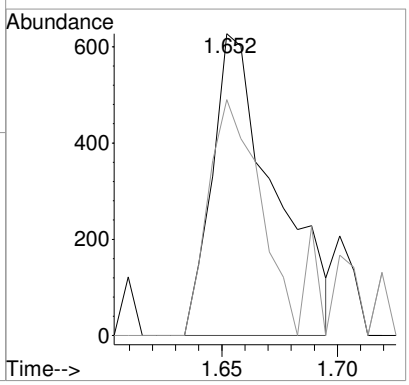
1st FJ 03/12/19
2nd 03/12/19

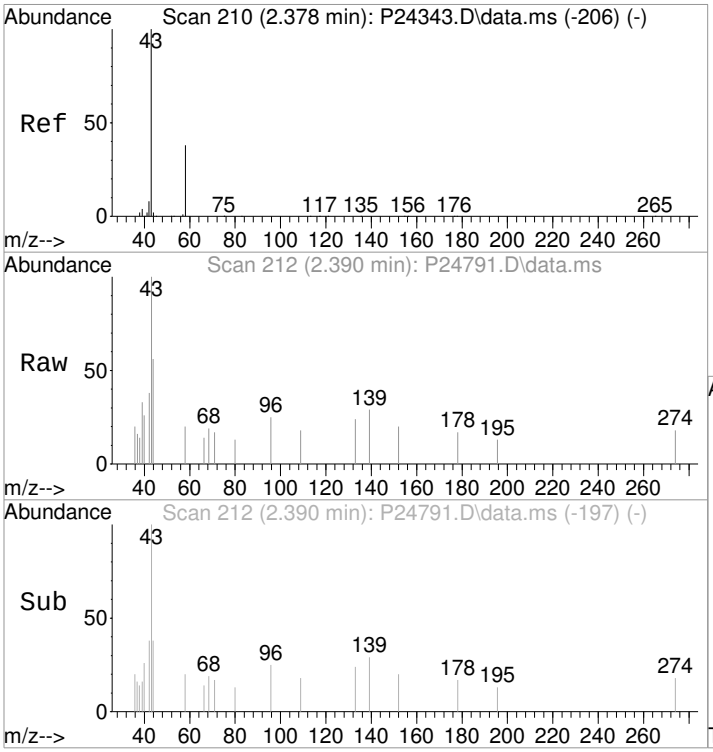


#5
Bromomethane
Concen: Below Cal
RT: 1.652 min Scan# 91
Delta R.T. 0.013 min
Lab File: P24791.D
Acq: 8 Mar 2019 1:39 pm

Tgt Ion: 94 Resp: 1180

Ion	Ratio	Lower	Upper
94	100		
96	78.1	75.4	115.4

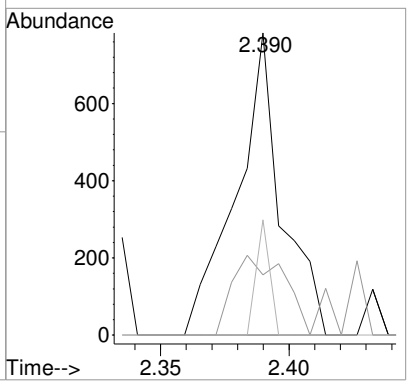


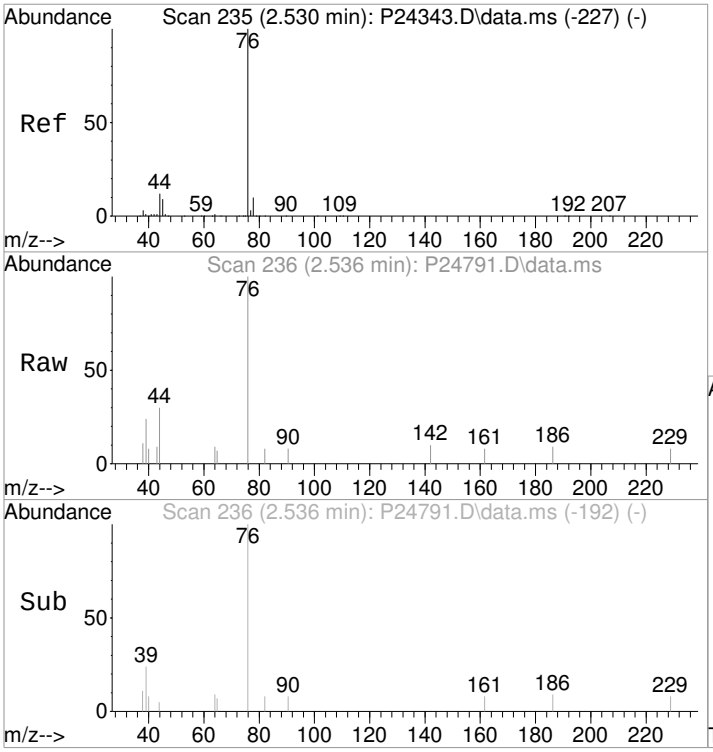


#15
Acetone
Concen: 0.67 ppb
RT: 2.390 min Scan# 212
Delta R.T. 0.018 min
Lab File: P24791.D
Acq: 8 Mar 2019 1:39 pm

Tgt Ion: 43 Resp: 959

Ion	Ratio	Lower	Upper
43	100		
58	19.9	18.1	58.1
42	38.2	0.0	27.8#

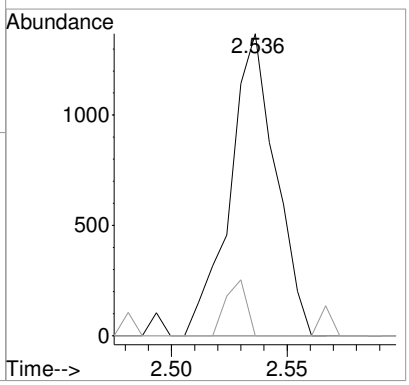


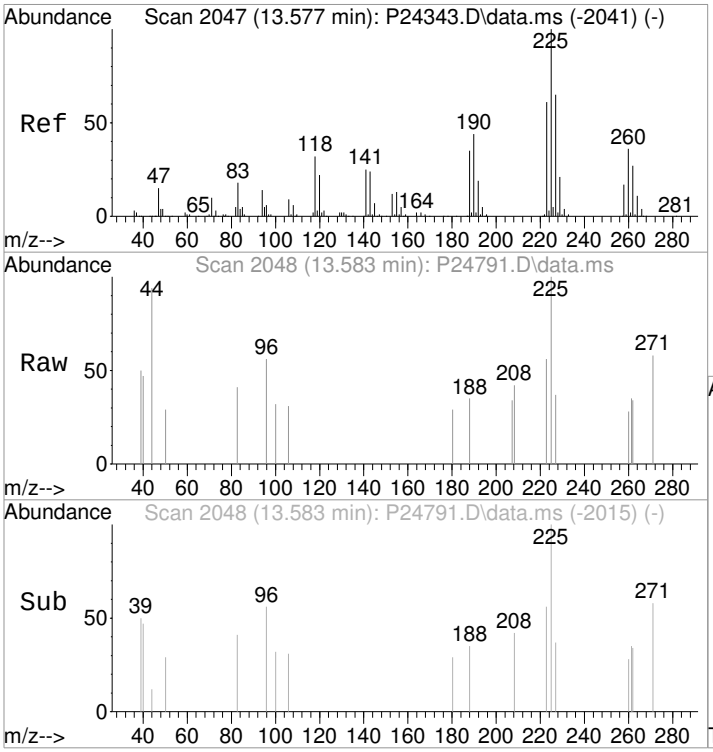


#18
Carbon Disulfide
Concen: 0.22 ppb
RT: 2.536 min Scan# 236
Delta R.T. 0.012 min
Lab File: P24791.D
Acq: 8 Mar 2019 1:39 pm

Tgt Ion: 76 Resp: 1870

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	30.1
77	0.0	0.0	22.9

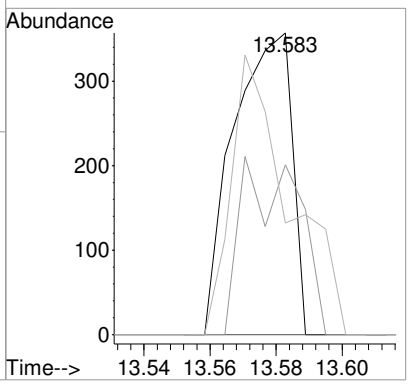




#116
Hexachlorobt
Concen: 0.21 ppb
RT: 13.583 min Scan# 2048
Delta R.T. 0.006 min
Lab File: P24791.D
Acq: 8 Mar 2019 1:39 pm

Tgt Ion:225 Resp: 437

Ion	Ratio	Lower	Upper
225	100		
223	56.3	41.5	81.5
227	37.0	44.7	84.7#



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24791.D
Acq On : 8 Mar 2019 1:39 pm
Operator : F.NAEGLER
Sample : MBLK Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24791.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.261	671	683	694	rBV2	165381	443765	26.36%	5.312%
2	5.408	696	707	717	rVV	327040	832369	49.45%	9.963%
3	5.792	761	770	783	rBV2	221629	526743	31.29%	6.305%
4	6.487	874	884	895	rBV	553980	1121137	66.61%	13.419%
5	8.297	1174	1181	1192	rBV	1031822	1683258	100.00%	20.147%
6	9.785	1419	1425	1438	rBV	906308	1319972	78.42%	15.799%
7	10.864	1596	1602	1610	rBV	839592	1067868	63.44%	12.782%
8	11.205	1653	1658	1663	rBV2	16263	22506	1.34%	0.269%
9	11.839	1756	1762	1768	rBV	1029924	1337064	79.43%	16.004%

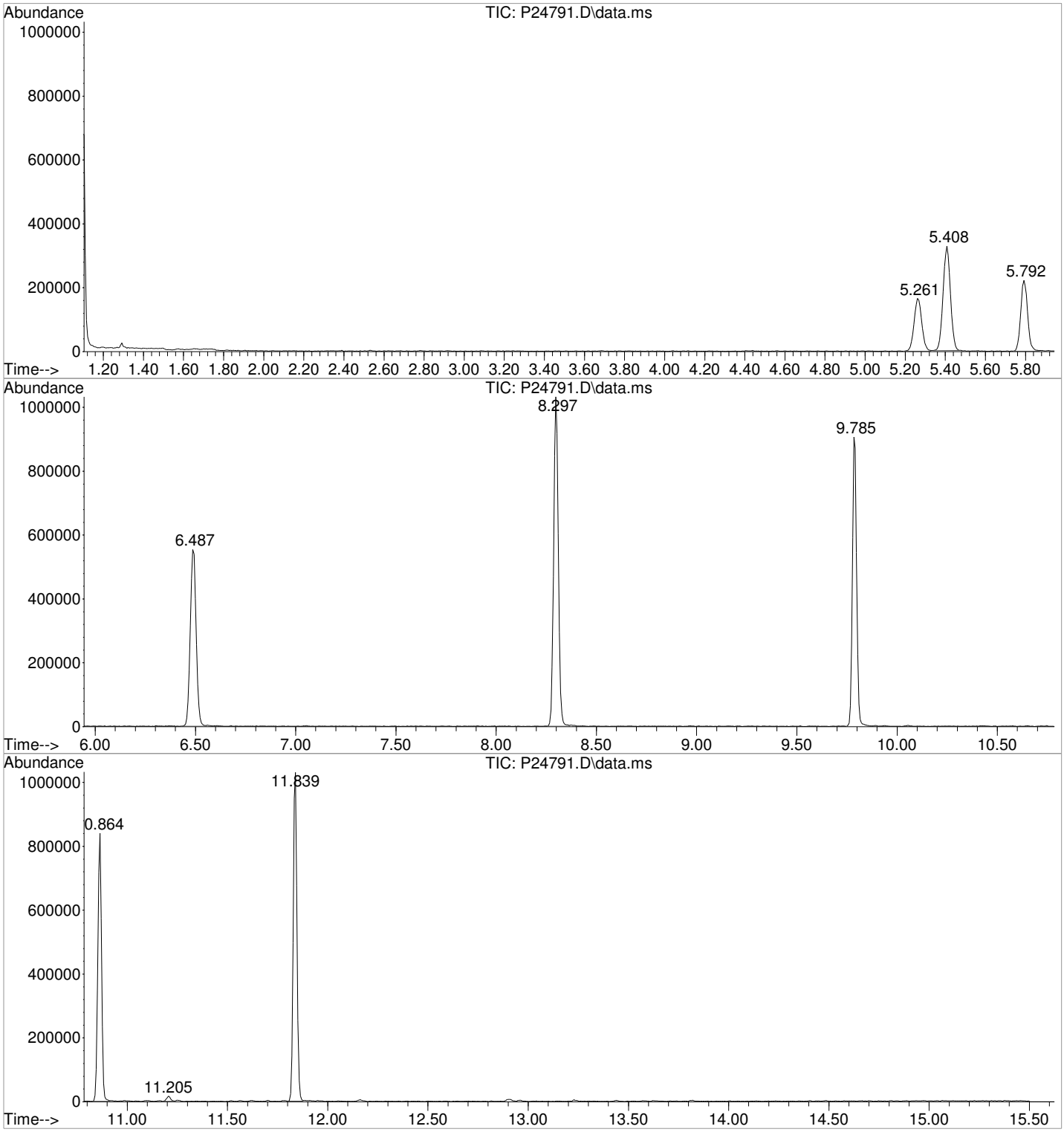
Sum of corrected areas: 8354682

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24791.D
Acq On : 8 Mar 2019 1:39 pm
Operator : F.NAEGLER
Sample : MBLK Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24791.D
Acq On : 8 Mar 2019 1:39 pm
Operator : F.NAEGLER
Sample : MBLK Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24791.D
Acq On : 8 Mar 2019 1:39 pm
Operator : F.NAEGLER
Sample : MBLK Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24833.D
Acq On : 12 Mar 2019 11:51 am
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 15:30:32 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

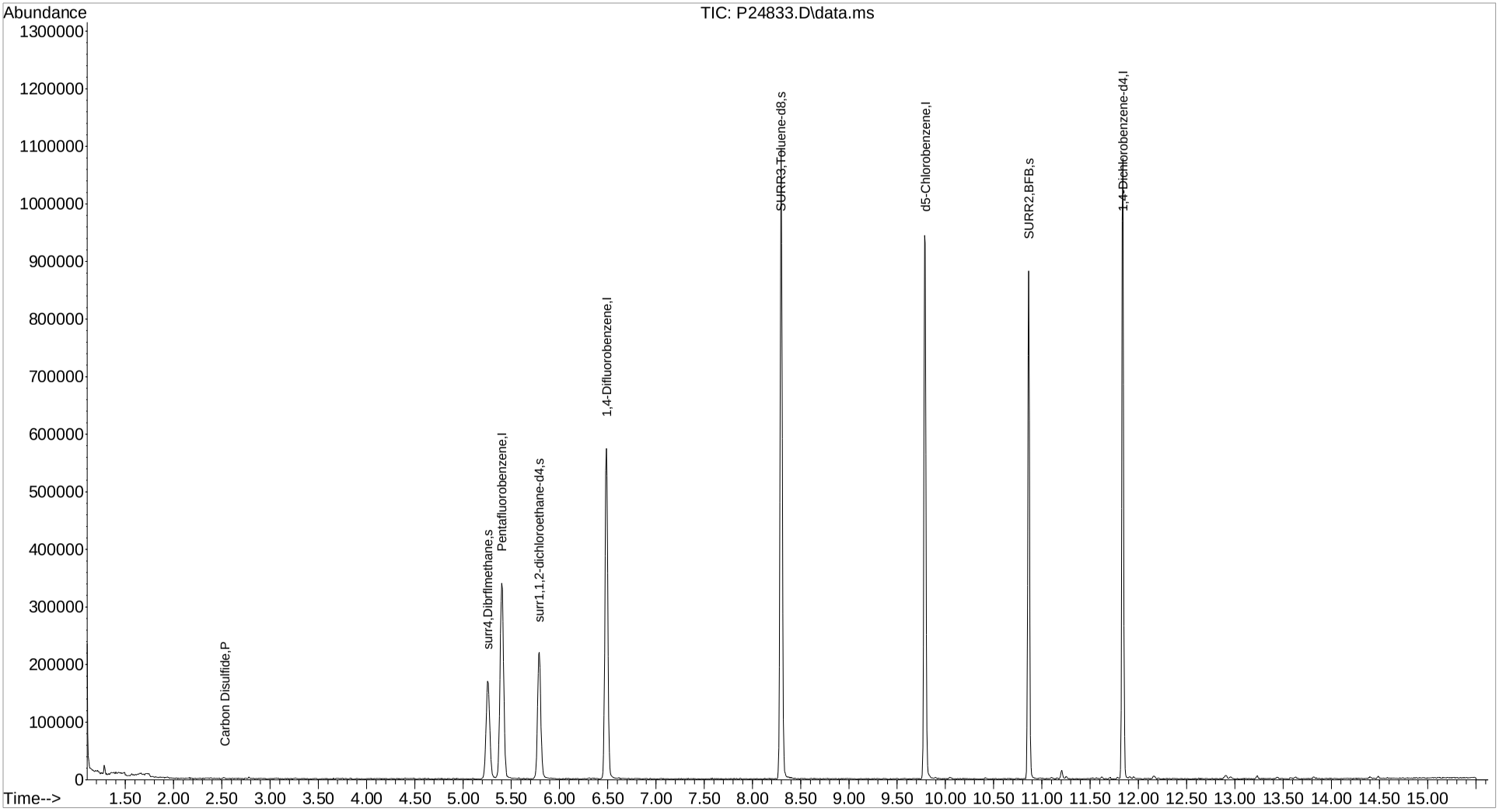
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.401	168	311098	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.486	114	507380	50.00	ppb	0.00
71) d5-Chlorobenzene	9.791	117	447562	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	220584	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.255	113	143055	51.31	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.62%			
48) surr1,1,2-dichloroetha...	5.785	65	183487	51.88	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.76%			
65) SURR3,Toluene-d8	8.297	98	671937	50.81	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.62%			
70) SURR2,BFB	10.864	95	244161	51.55	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 103.10%			
Target Compounds						Qvalue
18) Carbon Disulfide	2.530	76	1867	0.21	ppb	70

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

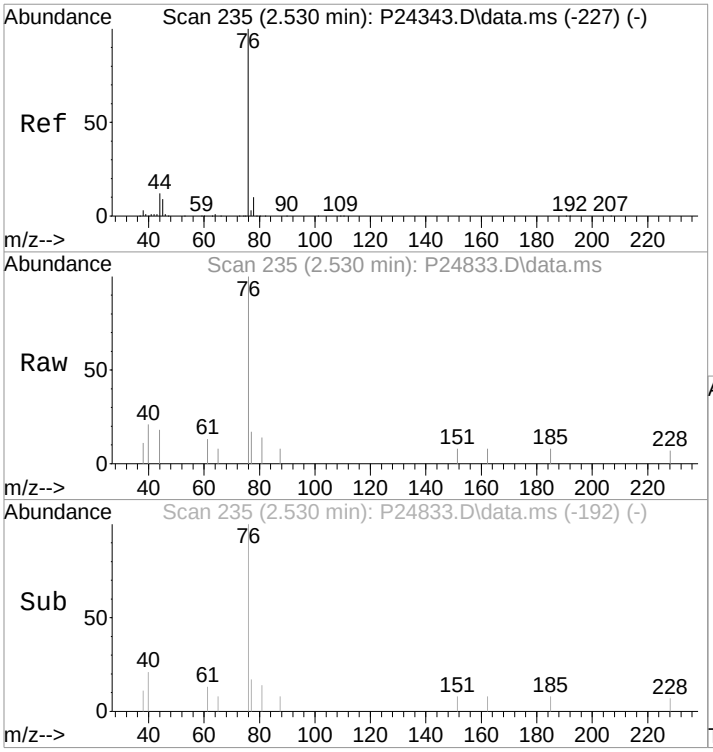
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24833.D
Acq On : 12 Mar 2019 11:51 am
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 15:30:32 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



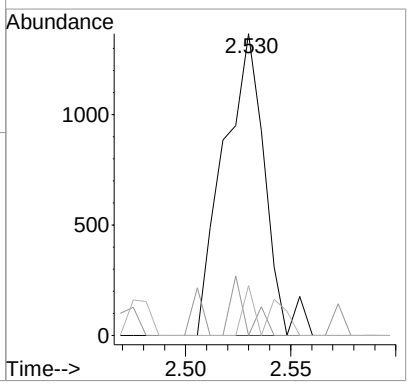
1st 03/12/19
2nd 03/13/19



#18
Carbon Disulfide
Concen: 0.21 ppb
RT: 2.530 min Scan# 235
Delta R.T. 0.006 min
Lab File: P24833.D
Acq: 12 Mar 2019 11:51 am

Tgt Ion: 76 Resp: 1867

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	30.1
77	16.5	0.0	22.9



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24833.D
Acq On : 12 Mar 2019 11:51 am
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24833.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.255	670	682	693	rBV	169705	461940	26.85%	5.374%
2	5.401	695	706	718	rVV	337965	866445	50.36%	10.080%
3	5.791	759	770	783	rBV	219652	527914	30.68%	6.142%
4	6.486	871	884	896	rBV	574897	1171268	68.07%	13.626%
5	8.297	1173	1181	1191	rBV	1095428	1720630	100.00%	20.018%
6	9.785	1420	1425	1437	rBV	943175	1354908	78.74%	15.763%
7	10.864	1597	1602	1609	rBV	882191	1117577	64.95%	13.002%
8	11.205	1653	1658	1662	rBV4	15437	21707	1.26%	0.253%
9	11.839	1756	1762	1769	rBV	1077336	1353130	78.64%	15.742%

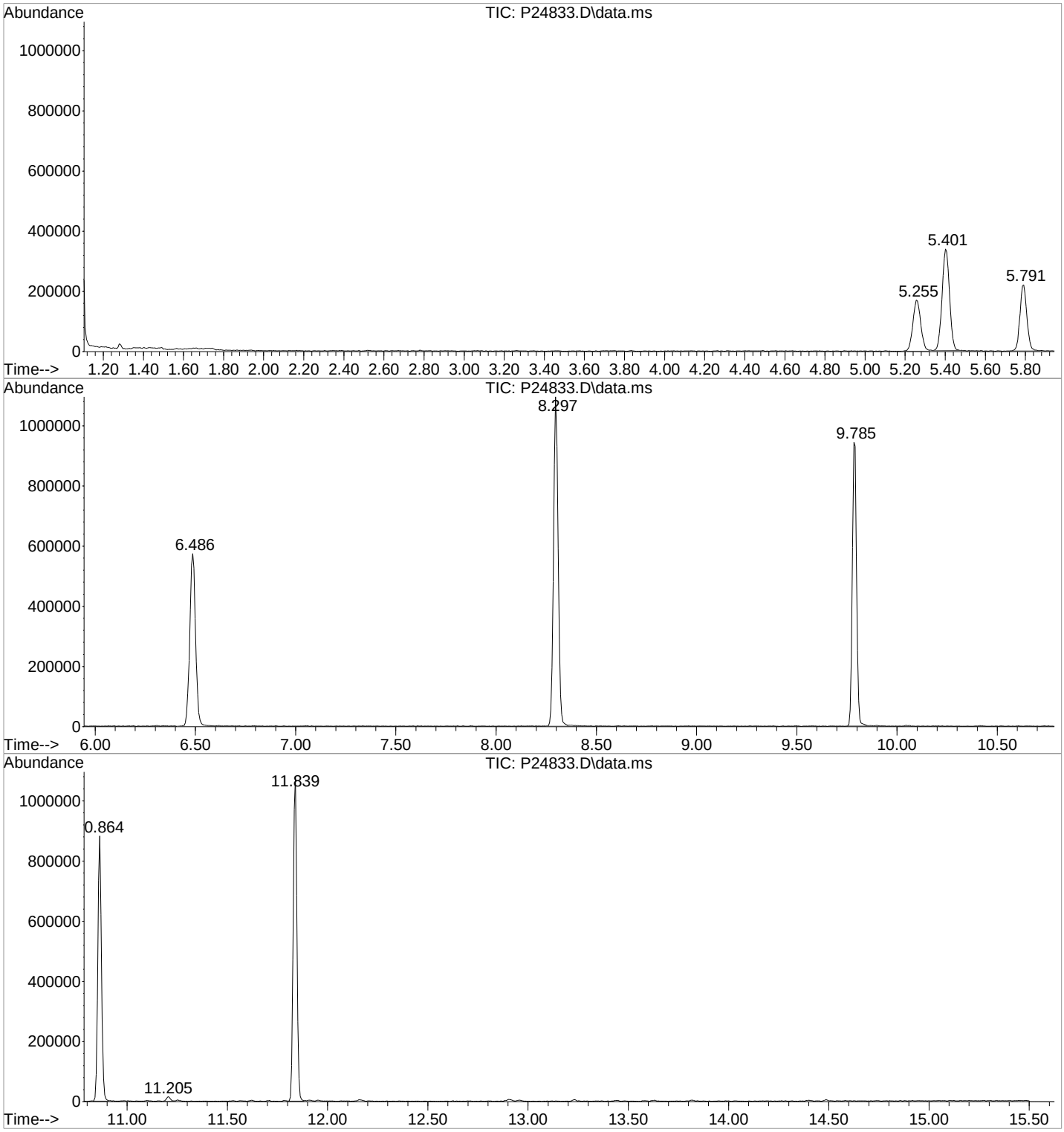
Sum of corrected areas: 8595519

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24833.D
Acq On : 12 Mar 2019 11:51 am
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



1st 03/12/19
2nd 03/13/19

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\031219\\
Data File : P24833.D
Acq On : 12 Mar 2019 11:51 amm
Operator : K.Ruestt
Sample : VBLK Inst : MSVOA-122
Misc :
ALS Vial : 2 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

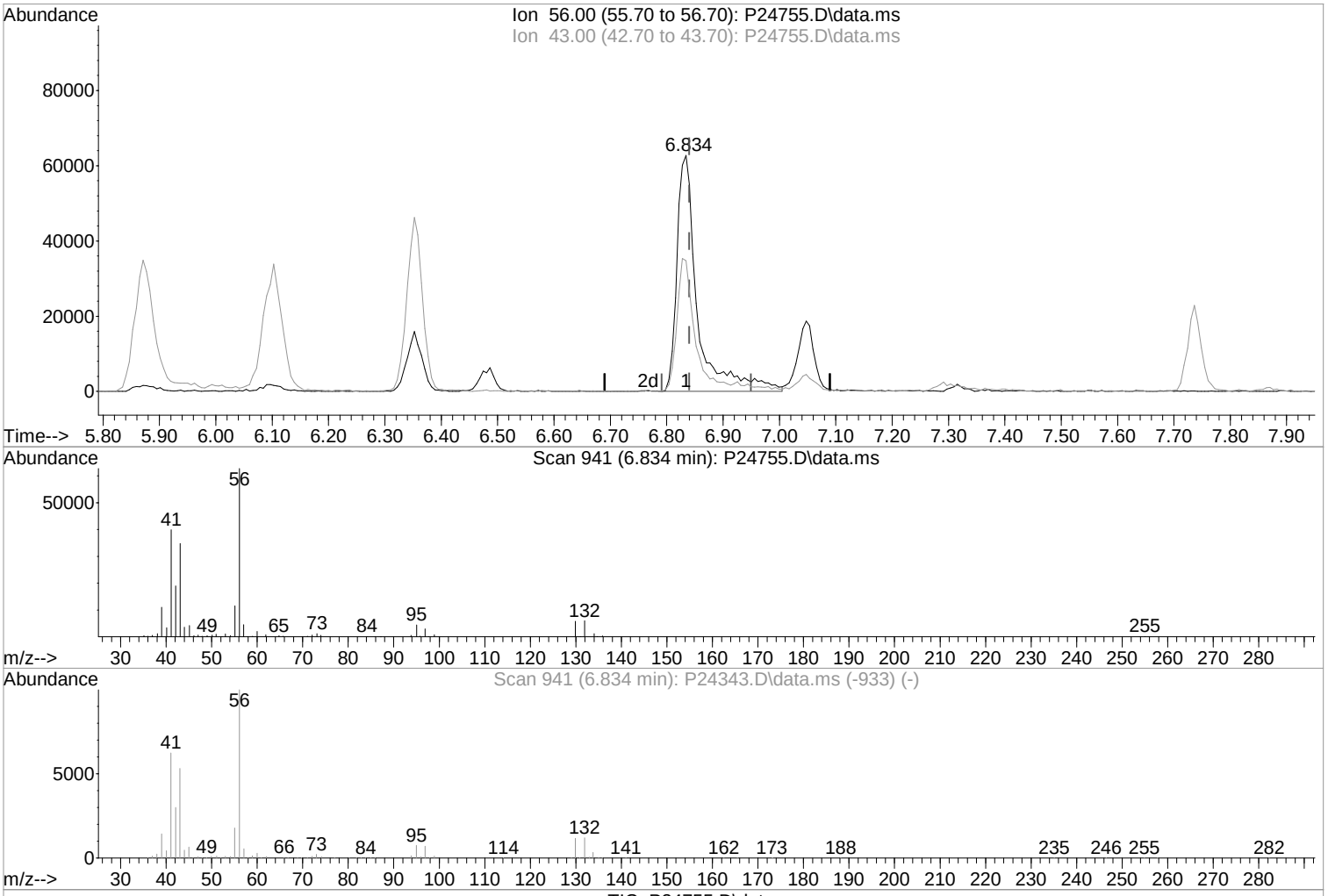
No Library Search Compounds Detected
****

1st 03/07/19
2nd 03/12/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24755.D
Acq On : 7 Mar 2019 11:34 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 11:50:08 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24755.D\data.ms

(53) 1-Butanol

6.834min (-0.006) 714.16 ppb m

response 159276

Ion	Exp%	Act%
56.00	100	100
43.00	54.40	49.15
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

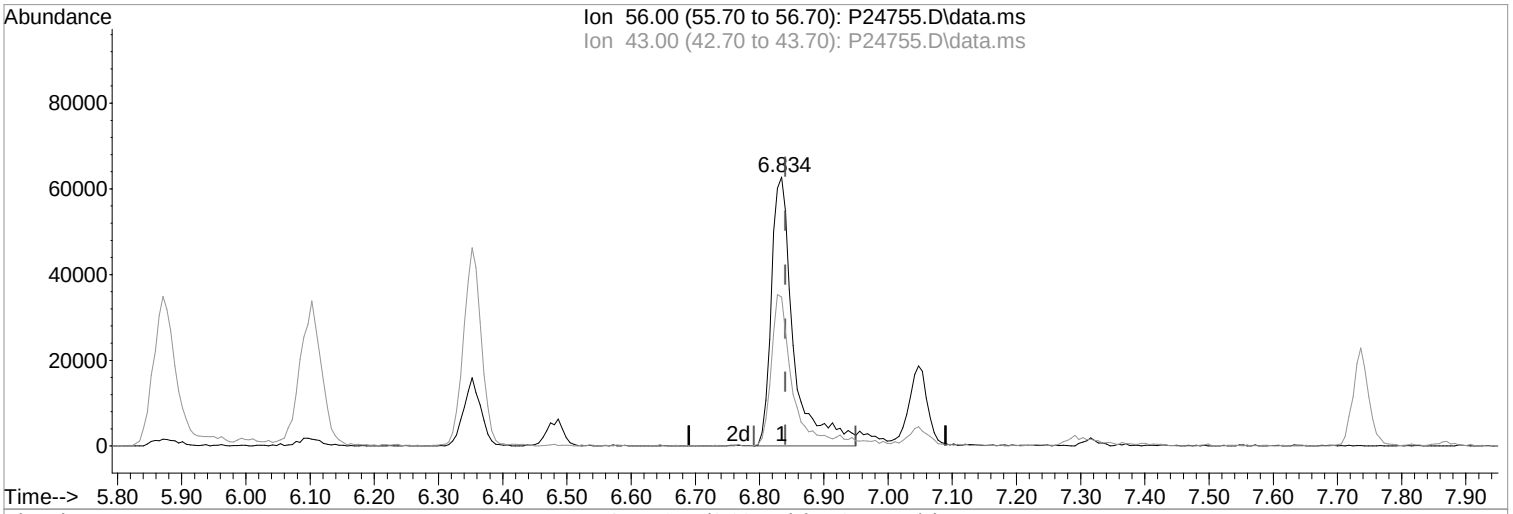
03/07/19

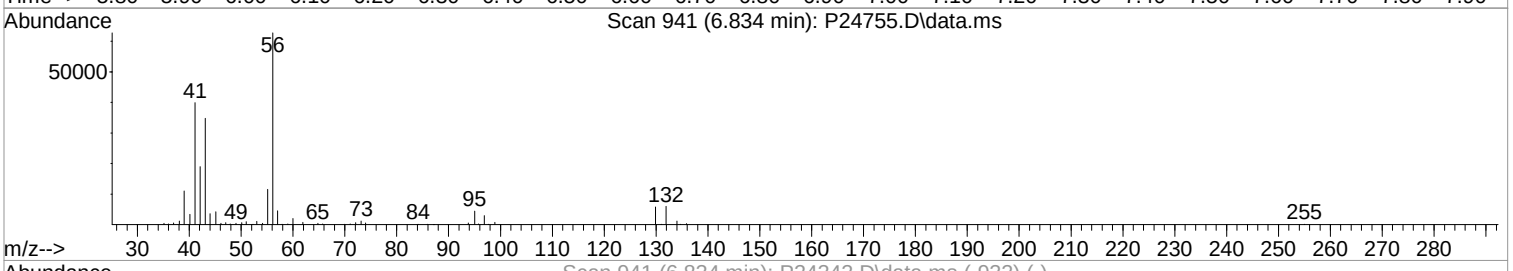
1st 03/07/19
2nd 03/12/19

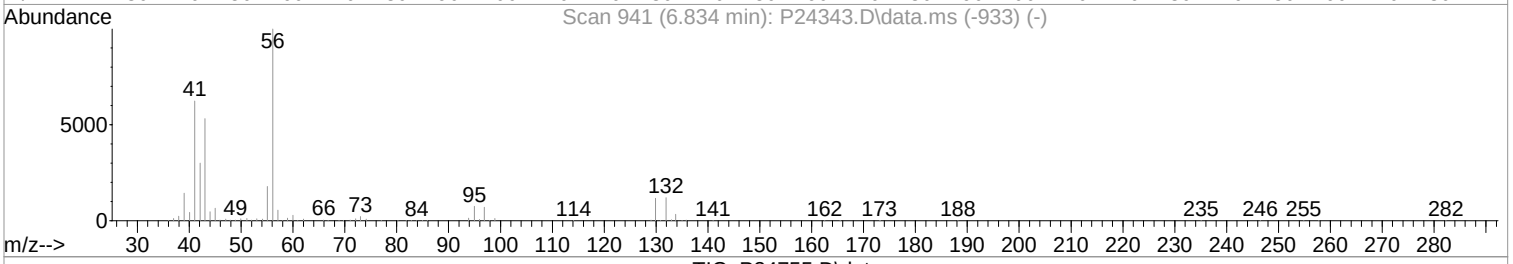
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24755.D
Acq On : 7 Mar 2019 11:34 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 11:50:08 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24755.D\data.ms

(53) 1-Butanol

6.834min (-0.006) 682.44 ppb

response 152202

Ion	Exp%	Act%
56.00	100	100
43.00	54.40	51.43
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

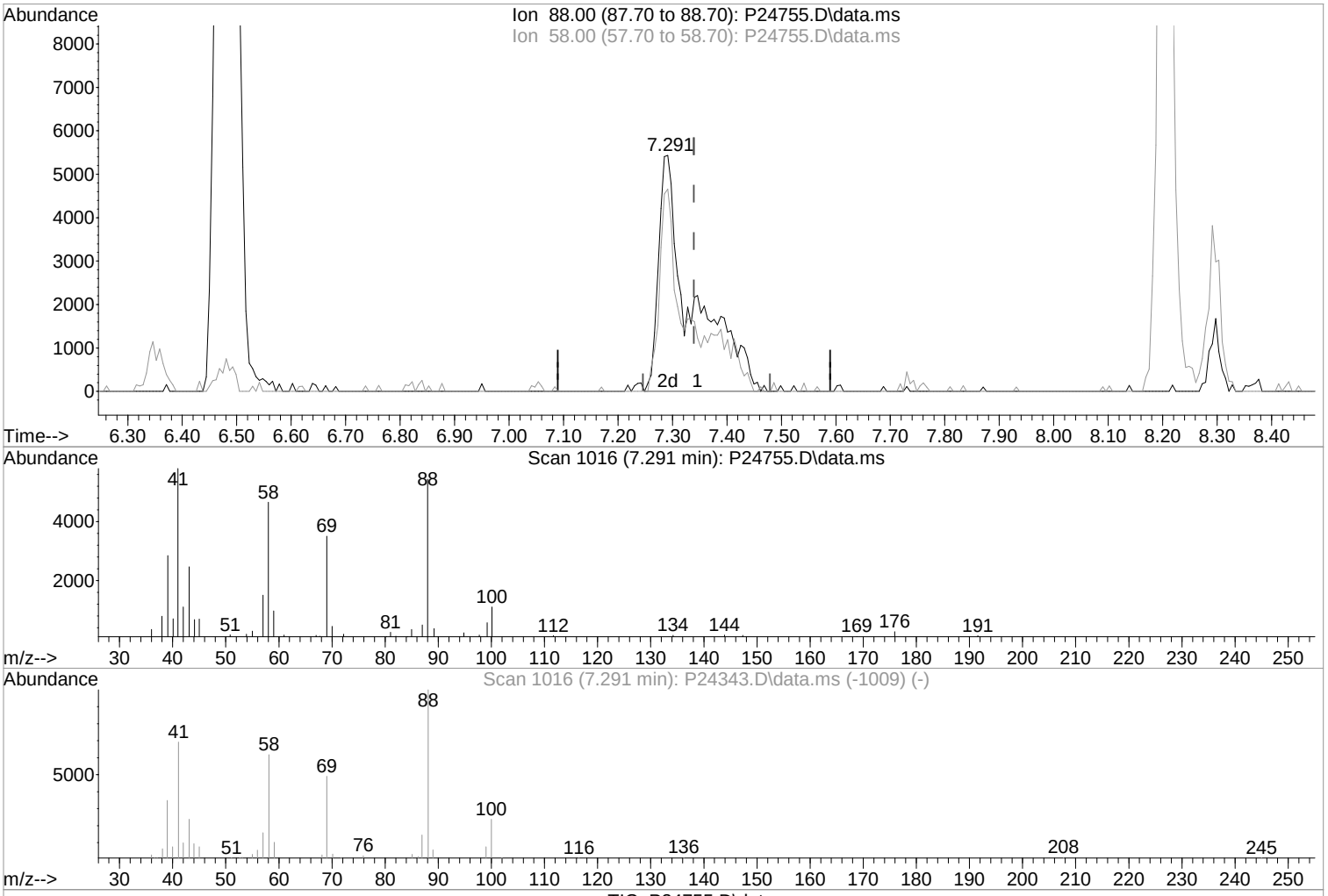
03/07/19

1st 03/07/19
2nd 03/12/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24755.D
Acq On : 7 Mar 2019 11:34 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 11:50:08 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24755.D\data.ms

(58) 1,4-Dioxane

7.291min (-0.049) 306.36 ppb m

response 23412

Ion	Exp%	Act%
88.00	100	100
58.00	63.20	85.74#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Split Peak

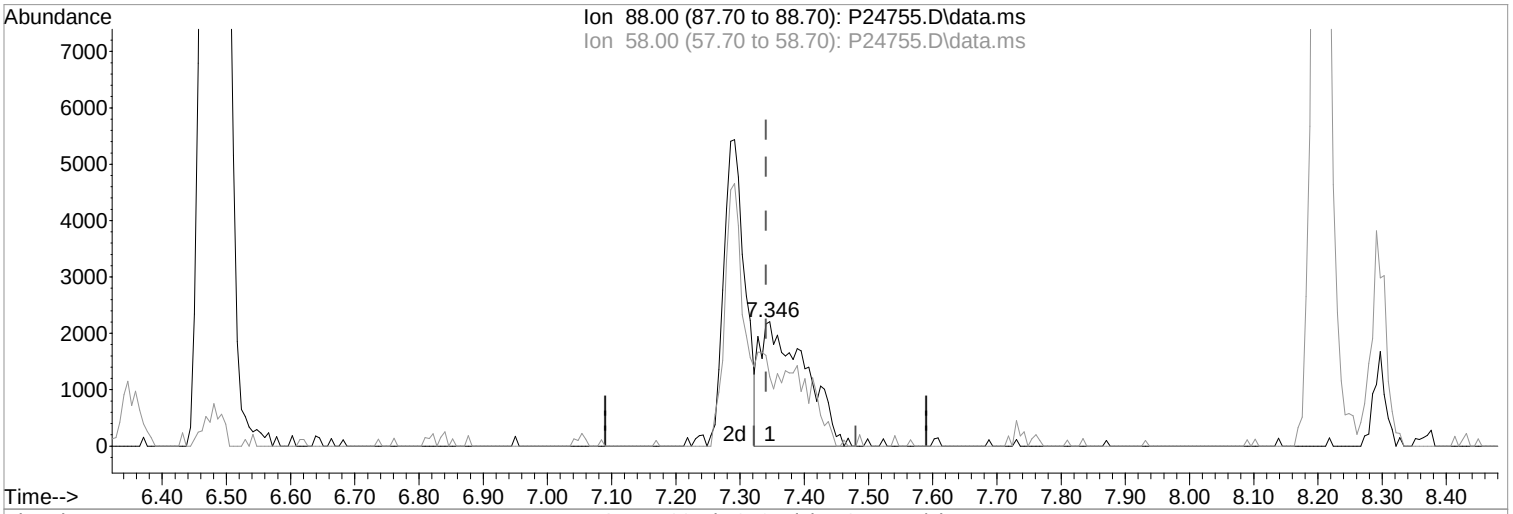
03/07/19

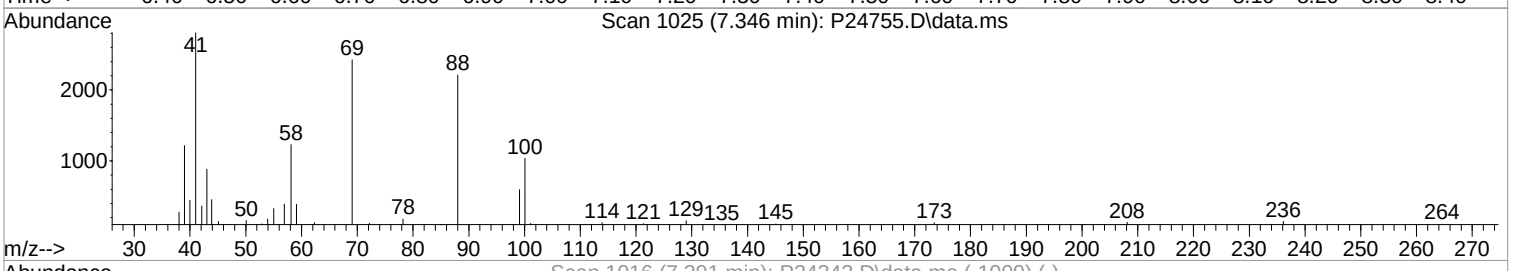
1st 03/07/19
2nd 03/12/19

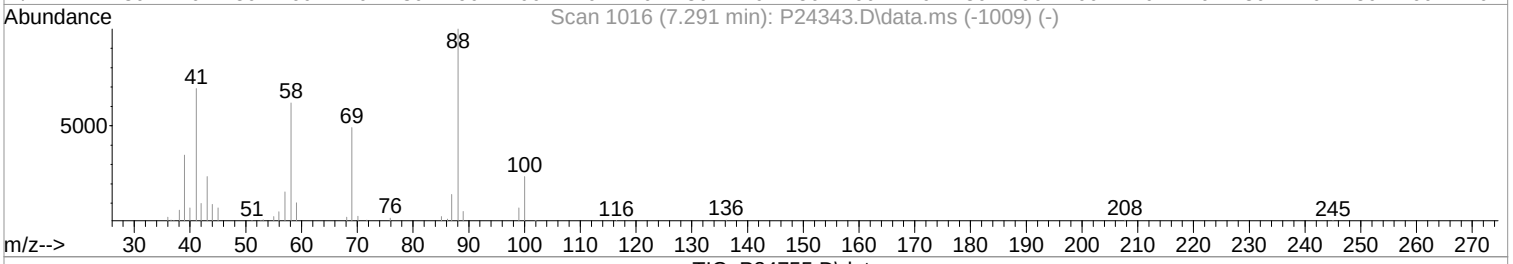
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24755.D
Acq On : 7 Mar 2019 11:34 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 11:50:08 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24755.D\data.ms

(58) 1,4-Dioxane

7.346min (+0.006) 143.31 ppb

response 10952

Ion	Exp%	Act%
88.00	100	100
58.00	63.20	55.78
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

03/07/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24755.D
Acq On : 7 Mar 2019 11:34 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 11:51:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.395	168	356456	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.480	114	564315	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	499423	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	252074	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.249	113	157988	50.95	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.90%				
48) surr1,1,2-dichloroetha...	5.785	65	204282	51.93	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.86%				
65) SURR3,Toluene-d8	8.297	98	736970	50.10	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.20%				
70) SURR2,BFB	10.864	95	260760	49.50	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.00%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	90587	20.98	ppb		97
3) Chloromethane	1.329	50	107612	18.65	ppb		99
4) Vinyl Chloride	1.408	62	103288	19.94	ppb		99
5) Bromomethane	1.646	94	62191	19.51	ppb		96
6) Chloroethane	1.713	64	50895	16.23	ppb		91
7) Freon 21	1.859	67	125114	19.13	ppb		100
8) Trichlorofluoromethane	1.908	101	87979	17.50	ppb		96
9) Diethyl Ether	2.140	59	76247	19.84	ppb		97
10) Freon 123a	2.140	67	82395	19.77	ppb		95
11) Freon 123	2.195	83	103387	21.60	ppb		98
12) Acrolein	2.237	56	40237	40.96	ppb		98
13) 1,1-Diclethene	2.329	96	62944	18.93	ppb		96
14) Freon 113	2.335	101	51942	17.54	ppb		94
15) Acetone	2.372	43	29600	17.34	ppb		97
16) 2-Propanol	2.500	45	109789	247.75	ppb		100
17) Iodomethane	2.463	142	74876	17.24	ppb		98
18) Carbon Disulfide	2.524	76	216757	21.76	ppb		98
19) Acetonitrile	2.621	40	22222	102.14	ppb		90
20) Allyl Chloride	2.658	76	39860	20.04	ppb	#	89
21) Methyl Acetate	2.682	43	80389	17.35	ppb		99
22) Methylene Chloride	2.774	84	76450	18.47	ppb		95
23) TBA	2.896	59	207466	294.58	ppb		89
24) Acrylonitrile	3.024	53	216066	95.93	ppb		96
25) Methyl-t-Butyl Ether	3.079	73	252792	19.63	ppb		100
26) trans-1,2-Dichloroethene	3.066	96	69383	18.76	ppb		96
28) 1,1-Diclethane	3.560	63	134459	19.60	ppb		96
29) Vinyl Acetate	3.652	86	19161	22.63	ppb	#	84
30) DIPE	3.688	45	276102	22.24	ppb		99
31) 2-Chloro-1,3-Butadiene	3.688	53	115198	21.47	ppb		95
32) ETBE	4.213	59	238487	19.22	ppb		95
33) 2,2-Dichloropropane	4.389	77	95434	17.66	ppb		96
34) cis-1,2-Dichloroethene	4.396	96	76998	18.57	ppb		91
35) 2-Butanone	4.444	43	50059	17.45	ppb		98
36) Propionitrile	4.524	54	78353	83.96	ppb		97
37) Bromochloromethane	4.786	130	48539	18.85	ppb		94
38) Methacrylonitrile	4.792	67	43858	18.06	ppb		94
39) Tetrahydrofuran	4.883	42	32973	17.74	ppb		94
40) Chloroform	4.962	83	119122	19.34	ppb		94
41) 1,1,1-Trichloroethane	5.261	97	84736	17.67	ppb		96

1st 03/07/19
2nd 03/12/19

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24755.D
Acq On : 7 Mar 2019 11:34 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 11:51:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.102	73	245571	20.87	ppb		98
44) Cyclohexane	5.347	41	73272	22.15	ppb		94
46) Carbontetrachloride	5.548	117	61388	16.33	ppb		100
47) 1,1-Dichloropropene	5.560	75	86871	18.02	ppb		98
49) Benzene	5.871	78	297625	18.46	ppb		98
50) 1,2-Dichloroethane	5.907	62	100613	19.49	ppb		99
51) Iso-Butyl Alcohol	5.871	43	90610	268.15	ppb		100
52) n-Heptane	6.352	43	90646	18.46	ppb		91
53) 1-Butanol	6.834	56	159276m	714.16	ppb		
54) Trichloroethene	6.810	130	65626	16.63	ppb		96
55) Methylcyclohexane	7.047	55	106557	21.40	ppb		96
56) 1,2-Diclpropane	7.084	63	79351	18.52	ppb		99
57) Dibromomethane	7.230	93	44231	18.24	ppb		95
58) 1,4-Dioxane	7.291	88	23412m	306.36	ppb		
59) Methyl Methacrylate	7.316	69	67311	17.59	ppb		95
60) Bromodichloromethane	7.456	83	86193	19.12	ppb		96
61) 2-Nitropropane	7.736	41	33186	37.09	ppb		94
62) 2-Chloroethylvinyl Ether	7.864	63	2052	2.13	ppb		88
63) cis-1,3-Dichloropropene	7.998	75	124420	19.53	ppb		98
64) 4-Methyl-2-pentanone	8.200	43	96248	17.71	ppb		97
66) Toluene	8.370	91	298500	17.88	ppb		98
67) trans-1,3-Dichloropropene	8.639	75	107139	19.20	ppb		96
68) Ethyl Methacrylate	8.779	69	120120	18.69	ppb		98
69) 1,1,2-Trichloroethane	8.821	97	69426	17.75	ppb		93
72) Tetrachloroethene	8.962	164	48593	16.25	ppb		86
73) 2-Hexanone	9.114	43	65319	16.23	ppb		98
74) 1,3-Dichloropropane	8.992	76	134012	18.63	ppb		96
75) Dibromochloromethane	9.218	129	59891	17.85	ppb		93
76) N-Butyl Acetate	9.273	43	135172	18.39	ppb		97
77) 1,2-Dibromoethane	9.315	107	70460	17.96	ppb		97
78) Chlorobenzene	9.815	112	187817	17.57	ppb		98
79) 3-CBTF	9.833	180	102325	19.63	ppb		96
80) 4-CBTF	9.888	180	92873	19.71	ppb		95
81) 1,1,1,2-Tetrachloroethane	9.901	131	59854	17.30	ppb		97
82) Ethylbenzene	9.931	106	97893	16.98	ppb		99
83) (m+p)Xylene	10.047	106	236975	33.62	ppb		100
84) o-Xylene	10.400	106	116521	16.80	ppb	#	86
85) Styrene	10.419	104	209504	18.64	ppb		98
87) Bromoform	10.565	173	36636	17.21	ppb		100
88) 2-CBTF	10.650	180	96362	18.62	ppb		96
89) Isopropylbenzene	10.736	105	280407	16.91	ppb		99
90) Cyclohexanone	10.803	55	81344	77.40	ppb		98
91) trans-1,4-Dichloro-2-B...	11.047	53	25473	18.56	ppb		91
92) 1,1,2,2-Tetrachloroethane	10.998	83	104006	18.80	ppb		96
93) Bromobenzene	10.986	156	77595	17.40	ppb		95
94) 1,2,3-Trichloropropane	11.028	110	31059	17.70	ppb	#	89
95) n-Propylbenzene	11.095	91	335547	17.66	ppb		96
96) 2-Chlorotoluene	11.156	91	209543	17.51	ppb		99
97) 3-Chlorotoluene	11.211	91	241620	20.63	ppb		99
98) 4-Chlorotoluene	11.248	91	236771	17.74	ppb		100
99) 1,3,5-Trimethylbenzene	11.248	105	236569	17.19	ppb		97
100) tert-Butylbenzene	11.522	119	198299	16.57	ppb		99
101) 1,2,4-Trimethylbenzene	11.559	105	243179	17.09	ppb		96
102) 3,4-DCBTF	11.620	214	78116	18.31	ppb		93
103) sec-Butylbenzene	11.699	105	297969	17.17	ppb		95
104) p-Isopropyltoluene	11.827	119	247164	17.15	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24755.D
Acq On : 7 Mar 2019 11:34 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 11:51:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.784	146	142518	17.55	ppb	99
106) 1,4-Dclbenz	11.857	146	146261	17.06	ppb	99
107) 2,4-DCBTF	11.912	214	71222	18.23	ppb	98
108) 2,5-DCBTF	11.949	214	82820	18.80	ppb	100
109) n-Butylbenzene	12.156	91	234889	18.59	ppb	99
110) 1,2-Dclbenz	12.156	146	147051	17.70	ppb	97
111) 1,2-Dibromo-3-chloropr...	12.778	157	18527	13.59	ppb	92
112) Trielution Dichlorotol...	12.900	125	424856	62.16	ppb	97
113) 1,3,5 Trichlorobenzene	12.955	180	119163	19.92	ppb	98
114) Coelution Dichlorotoluene	13.229	125	312317	41.42	ppb	98
115) 1,2,4-Tcbenzene	13.436	180	112885	19.37	ppb	96
116) Hexachlorobt	13.577	225	40140	16.33	ppb	94
117) Naphthalen	13.625	128	313902	15.49	ppb	100
118) 1,2,3-Tclbenzene	13.814	180	112263	18.68	ppb	97
119) 2,4,5-Trichlorotolene	14.400	159	45814	18.40	ppb	95
120) 2,3,6-Trichlorotoluene	14.485	159	43577	15.40	ppb	99

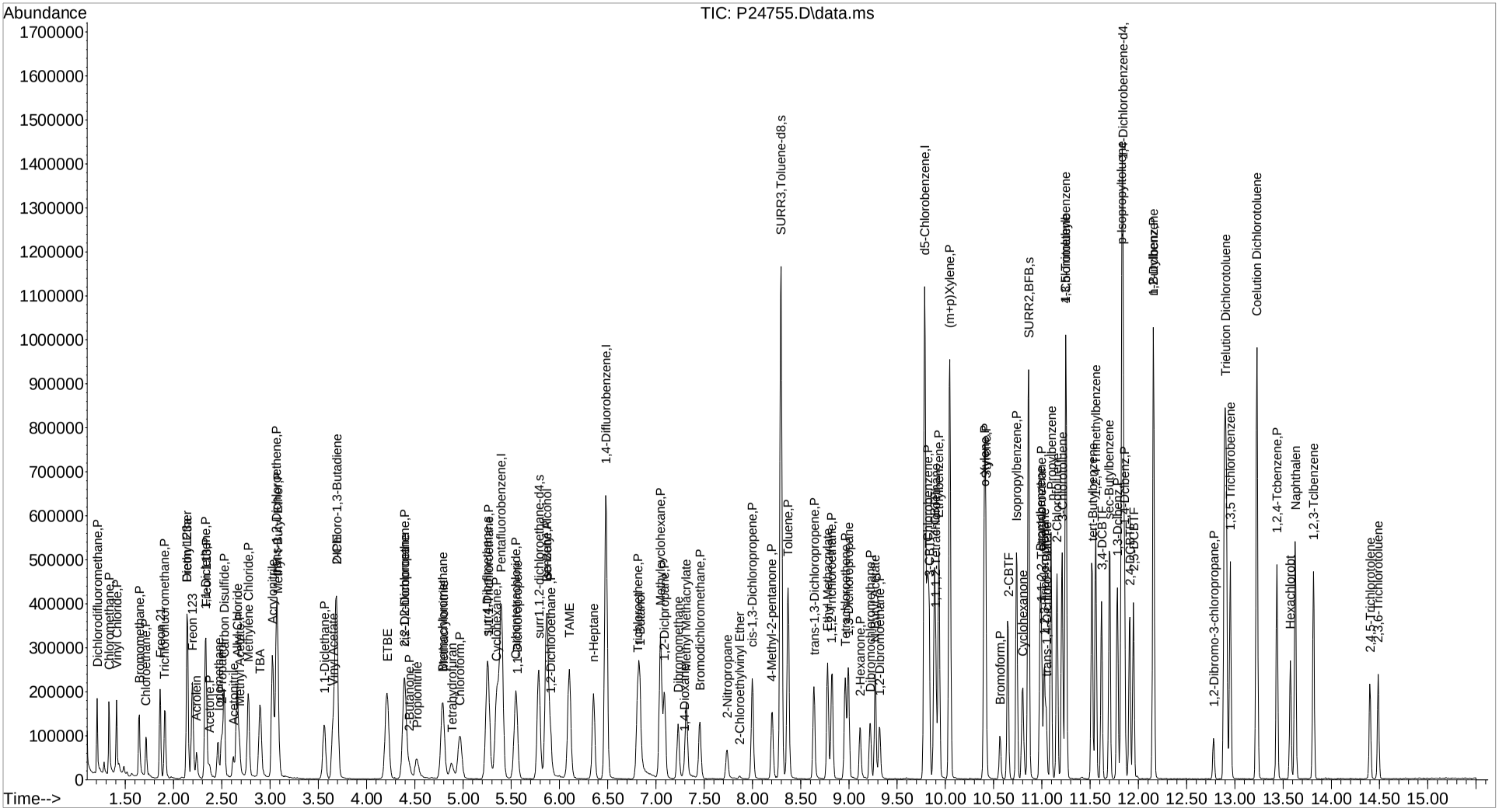
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24755.D
Acq On : 7 Mar 2019 11:34 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 11:51:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

1st 03/07/19
2nd 03/12/19

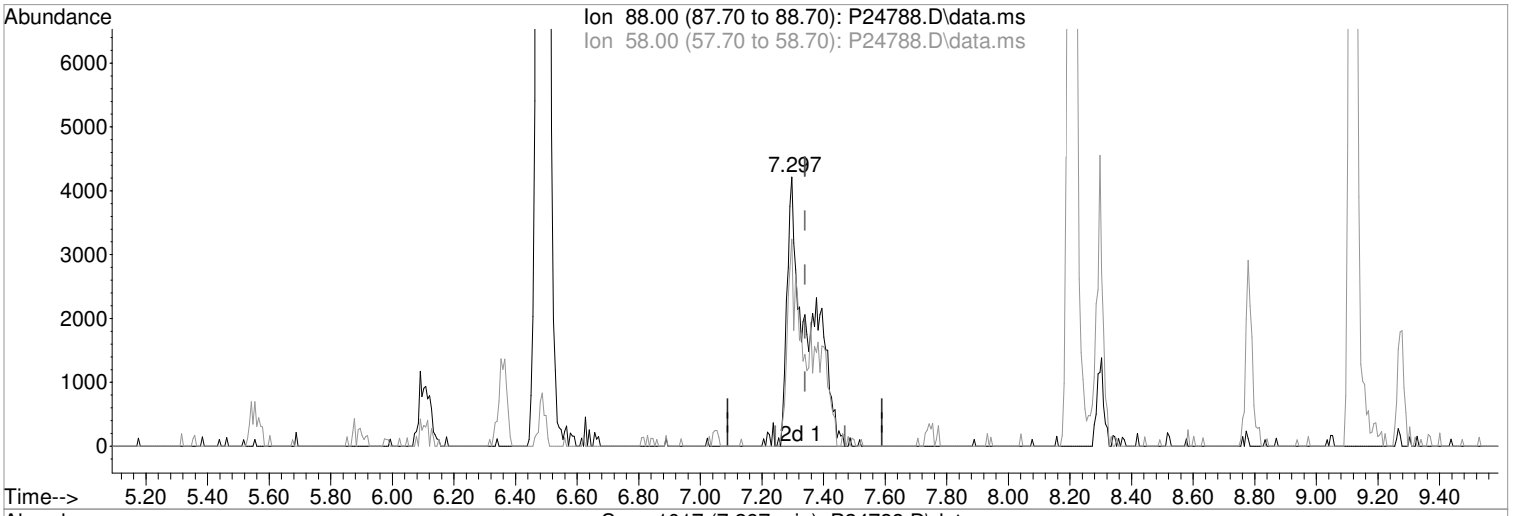


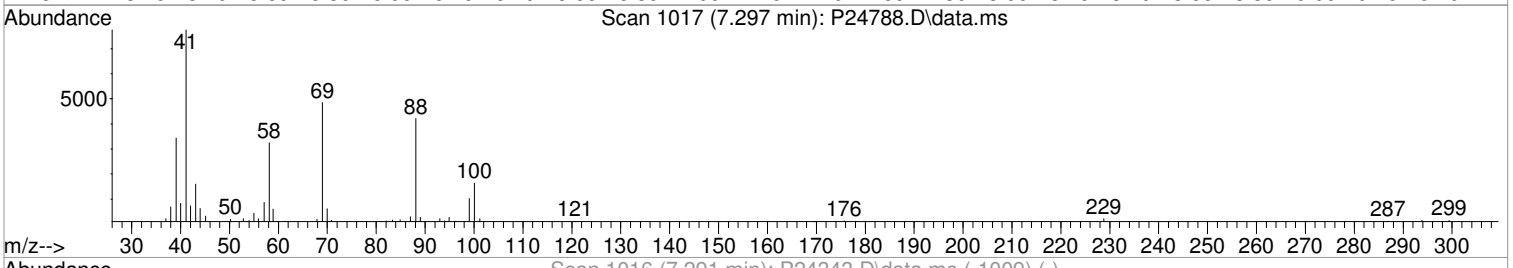
1st FN 03/08/19
2nd 03/12/19

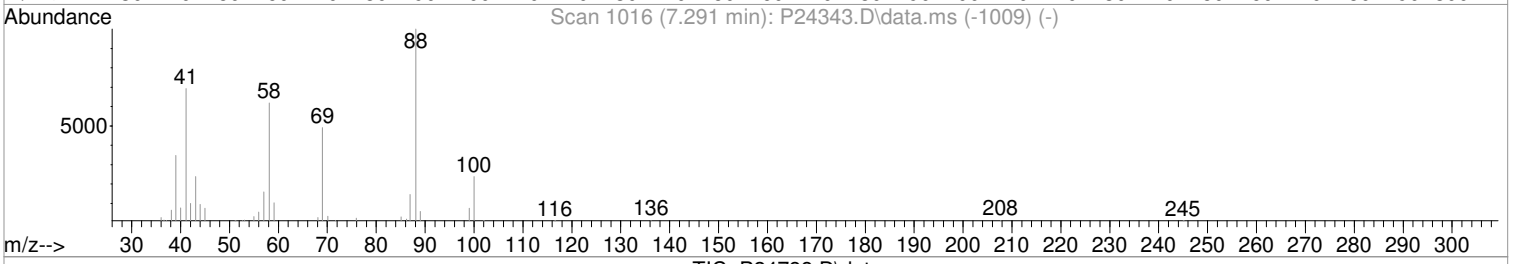
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24788.D
Acq On : 8 Mar 2019 12:28 pm
Operator : F.NAEGLER
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 12:51:59 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration







TIC: P24788.D\data.ms

(58) 1,4-Dioxane

7.297min (-0.043) 276.19 ppb m

response 20560

Ion	Exp%	Act%
88.00	100	100
58.00	63.20	77.00
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

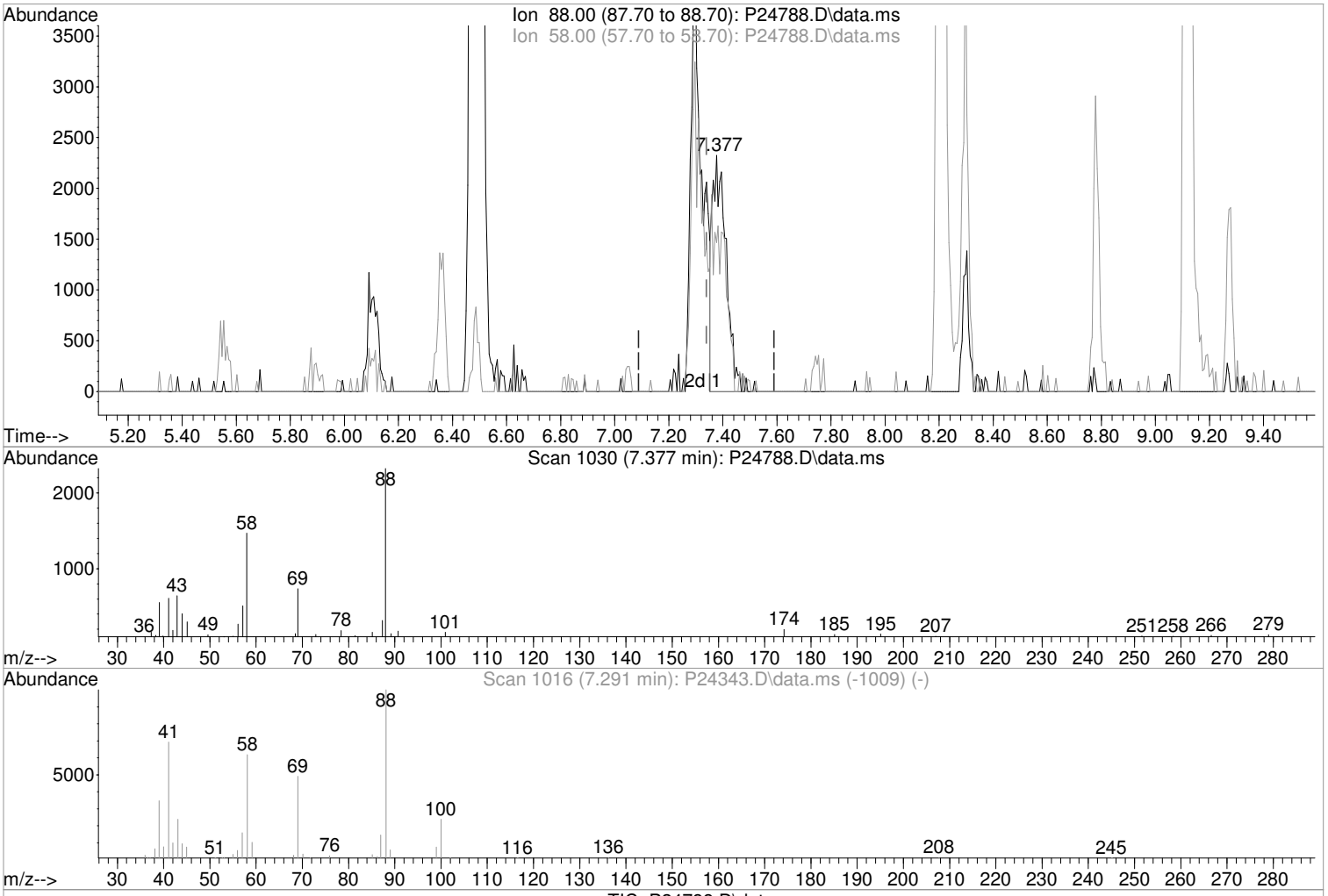
Poor integration.

03/08/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24788.D
Acq On : 8 Mar 2019 12:28 pm
Operator : F.NAEGLER
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 12:51:59 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



TIC: P24788.D\data.ms

(58) 1,4-Dioxane

7.377min (+0.037) 109.50 ppb

response 8151

Ion	Exp%	Act%
88.00	100	100
58.00	63.20	63.24
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

03/08/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24788.D
Acq On : 8 Mar 2019 12:28 pm
Operator : F.NAEGLER
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 12:53:24 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.407	168	338404	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	549710	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	478541	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	240872	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.267	113	156597	51.84	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.68%				
48) surr1,1,2-dichloroetha...	5.798	65	202216	52.77	ppb		0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 105.54%				
65) SURR3,Toluene-d8	8.297	98	733115	51.16	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.32%				
70) SURR2,BFB	10.864	95	258702	50.41	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.82%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.219	85	87701	21.40	ppb		98
3) Chloromethane	1.347	50	103591	18.91	ppb		99
4) Vinyl Chloride	1.420	62	95891	19.50	ppb		99
5) Bromomethane	1.658	94	60526	20.03	ppb		99
6) Chloroethane	1.731	64	50899	17.10	ppb		96
7) Freon 21	1.872	67	120857	19.46	ppb		97
8) Trichlorofluoromethane	1.926	101	89289	18.71	ppb		94
9) Diethyl Ether	2.152	59	71894	19.70	ppb		96
10) Freon 123a	2.158	67	80003	20.22	ppb		99
11) Freon 123	2.207	83	95951	21.12	ppb		93
12) Acrolein	2.256	56	36413	39.05	ppb		97
13) 1,1-Diclethene	2.341	96	60764	19.25	ppb		92
14) Freon 113	2.353	101	55870	19.87	ppb		96
15) Acetone	2.384	43	29344	18.11	ppb		85
16) 2-Propanol	2.512	45	89399	212.50	ppb		97
17) Iodomethane	2.475	142	66009	16.17	ppb		98
18) Carbon Disulfide	2.536	76	201442	21.30	ppb		96
19) Acetonitrile	2.634	40	17351	84.00	ppb		88
20) Allyl Chloride	2.670	76	38183	20.22	ppb		98
21) Methyl Acetate	2.695	43	75704	17.21	ppb		99
22) Methylene Chloride	2.786	84	72067	18.34	ppb		93
23) TBA	2.908	59	183064	273.80	ppb		97
24) Acrylonitrile	3.042	53	192070	89.82	ppb		98
25) Methyl-t-Butyl Ether	3.091	73	234871	19.21	ppb		97
26) trans-1,2-Dichloroethene	3.085	96	66715	19.00	ppb		90
28) 1,1-Diclethane	3.572	63	128937	19.80	ppb		96
29) Vinyl Acetate	3.670	86	18062	22.47	ppb	#	93
30) DIPE	3.700	45	247652	21.01	ppb		98
31) 2-Chloro-1,3-Butadiene	3.694	53	105089	20.63	ppb		93
32) ETBE	4.225	59	218495	18.55	ppb		92
33) 2,2-Dichloropropane	4.402	77	94944	18.51	ppb		98
34) cis-1,2-Dichloroethene	4.408	96	74134	18.83	ppb		91
35) 2-Butanone	4.450	43	48719	17.89	ppb		90
36) Propionitrile	4.536	54	70708	79.81	ppb		98
37) Bromochloromethane	4.810	130	44470	18.19	ppb		89
38) Methacrylonitrile	4.810	67	39815	17.27	ppb		93
39) Tetrahydrofuran	4.889	42	28764	16.30	ppb		96
40) Chloroform	4.981	83	110110	18.83	ppb		98
41) 1,1,1-Trichloroethane	5.279	97	87025	19.12	ppb		94

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24788.D
Acq On : 8 Mar 2019 12:28 pm
Operator : F.NAEGLER
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 12:53:24 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.109	73	223366	19.99	ppb		96
44) Cyclohexane	5.365	41	66241	20.55	ppb		91
46) Carbontetrachloride	5.548	117	62269	17.01	ppb		95
47) 1,1-Dichloropropene	5.566	75	92121	19.62	ppb		96
49) Benzene	5.871	78	291735	18.58	ppb		97
50) 1,2-Dichloroethane	5.907	62	92527	18.40	ppb		92
51) Iso-Butyl Alcohol	5.883	43	86975	264.23	ppb		99
52) n-Heptane	6.359	43	100026	20.91	ppb		91
53) 1-Butanol	6.840	56	145131	668.03	ppb		96
54) Trichloroethene	6.816	130	66763	17.36	ppb		97
55) Methylcyclohexane	7.053	55	102543	21.14	ppb		89
56) 1,2-Diclpropane	7.090	63	77447	18.56	ppb		94
57) Dibromomethane	7.236	93	41207	17.45	ppb		92
58) 1,4-Dioxane	7.297	88	20560m	276.19	ppb		
59) Methyl Methacrylate	7.322	69	64150	17.21	ppb		98
60) Bromodichloromethane	7.462	83	77459	17.64	ppb		98
61) 2-Nitropropane	7.736	41	30758	35.29	ppb		91
63) cis-1,3-Dichloropropene	8.005	75	115785	18.65	ppb		96
64) 4-Methyl-2-pentanone	8.206	43	90593	17.11	ppb		94
66) Toluene	8.370	91	296918	18.26	ppb		97
67) trans-1,3-Dichloropropene	8.639	75	104671	19.26	ppb		97
68) Ethyl Methacrylate	8.779	69	113703	18.16	ppb		98
69) 1,1,2-Trichloroethane	8.828	97	63489	16.67	ppb		99
72) Tetrachloroethene	8.962	164	48944	17.08	ppb		96
73) 2-Hexanone	9.120	43	67326	17.46	ppb		98
74) 1,3-Dichloropropane	8.998	76	122697	17.80	ppb		99
75) Dibromochloromethane	9.224	129	55368	17.22	ppb		100
76) N-Butyl Acetate	9.273	43	126702	17.99	ppb		95
77) 1,2-Dibromoethane	9.321	107	63802	16.97	ppb		96
78) Chlorobenzene	9.815	112	181250	17.69	ppb		97
79) 3-CBTF	9.833	180	91632	18.35	ppb		100
80) 4-CBTF	9.888	180	80376	17.80	ppb		95
81) 1,1,1,2-Tetrachloroethane	9.900	131	54667	16.49	ppb		91
82) Ethylbenzene	9.931	106	95701	17.33	ppb		98
83) (m+p)Xylene	10.047	106	237773	35.21	ppb		98
84) o-Xylene	10.406	106	117871	17.74	ppb		95
85) Styrene	10.419	104	200634	18.63	ppb		99
87) Bromoform	10.565	173	33515	16.48	ppb		97
88) 2-CBTF	10.650	180	85421	17.28	ppb		94
89) Isopropylbenzene	10.742	105	285997	18.05	ppb		99
90) Cyclohexanone	10.803	55	73010	72.70	ppb		98
91) trans-1,4-Dichloro-2-B...	11.047	53	22418	17.10	ppb		86
92) 1,1,2,2-Tetrachloroethane	10.998	83	91722	17.35	ppb		94
93) Bromobenzene	10.986	156	73361	17.21	ppb		94
94) 1,2,3-Trichloropropane	11.028	110	29506	17.60	ppb	#	91
95) n-Propylbenzene	11.095	91	346152	19.07	ppb		100
96) 2-Chlorotoluene	11.156	91	205132	17.93	ppb		99
97) 3-Chlorotoluene	11.211	91	215582	19.27	ppb		97
98) 4-Chlorotoluene	11.248	91	230398	18.06	ppb		99
99) 1,3,5-Trimethylbenzene	11.248	105	243362	18.51	ppb		97
100) tert-Butylbenzene	11.522	119	200379	17.52	ppb		97
101) 1,2,4-Trimethylbenzene	11.559	105	248369	18.26	ppb		99
102) 3,4-DCBTF	11.620	214	72102	17.69	ppb		96
103) sec-Butylbenzene	11.705	105	307973	18.57	ppb		98
104) p-Isopropyltoluene	11.827	119	253716	18.42	ppb		98
105) 1,3-Dclbenz	11.784	146	139610	17.99	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24788.D
Acq On : 8 Mar 2019 12:28 pm
Operator : F.NAEGLER
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 12:53:24 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	138736	16.94	ppb	98
107) 2,4-DCBTF	11.912	214	66897	17.92	ppb	95
108) 2,5-DCBTF	11.949	214	76448	18.16	ppb	96
109) n-Butylbenzene	12.156	91	246607	20.43	ppb	100
110) 1,2-Dclbenz	12.156	146	140905	17.75	ppb	96
111) 1,2-Dibromo-3-chloropr...	12.778	157	18329	14.07	ppb	93
112) Trielution Dichlorotol...	12.900	125	406984	62.31	ppb	96
113) 1,3,5 Trichlorobenzene	12.955	180	112481	19.68	ppb	96
114) Coelution Dichlorotoluene	13.229	125	294804	40.92	ppb	96
115) 1,2,4-Tcbenzene	13.436	180	111109	19.95	ppb	99
116) Hexachlorobt	13.577	225	45891	19.54	ppb	94
117) Naphthalen	13.625	128	293687	15.18	ppb	99
118) 1,2,3-Tclbenzene	13.814	180	104017	18.11	ppb	97
119) 2,4,5-Trichlorotolene	14.400	159	40416	17.19	ppb	96
120) 2,3,6-Trichlorotoluene	14.485	159	38933	14.54	ppb	97

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24788.D
Acq On : 8 Mar 2019 12:28 pm
Operator : F.NAEGLER
Sample : LCS-FP Inst : MSVOA-12
Misc :
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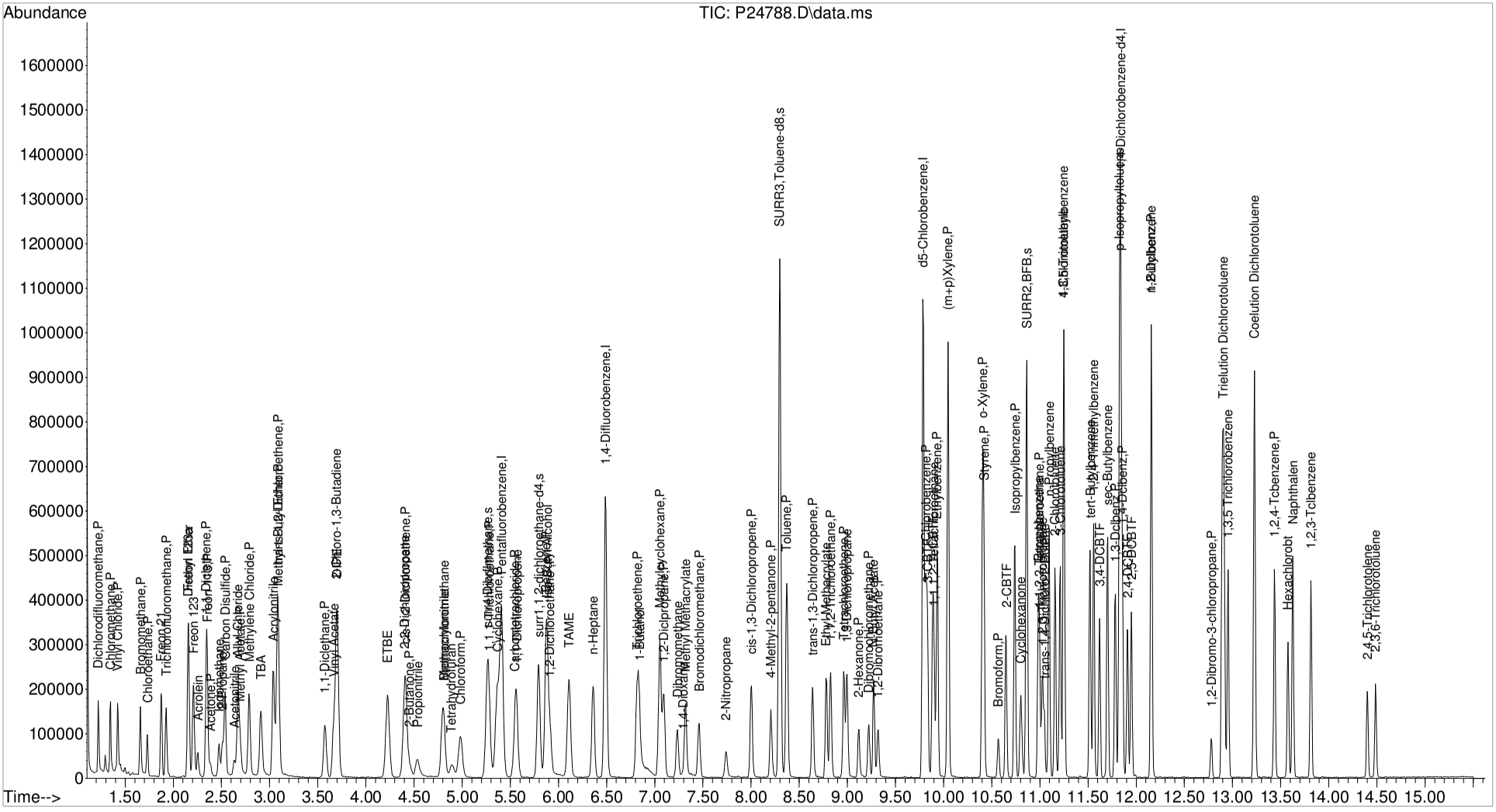
Quant Time: Mar 08 12:53:24 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



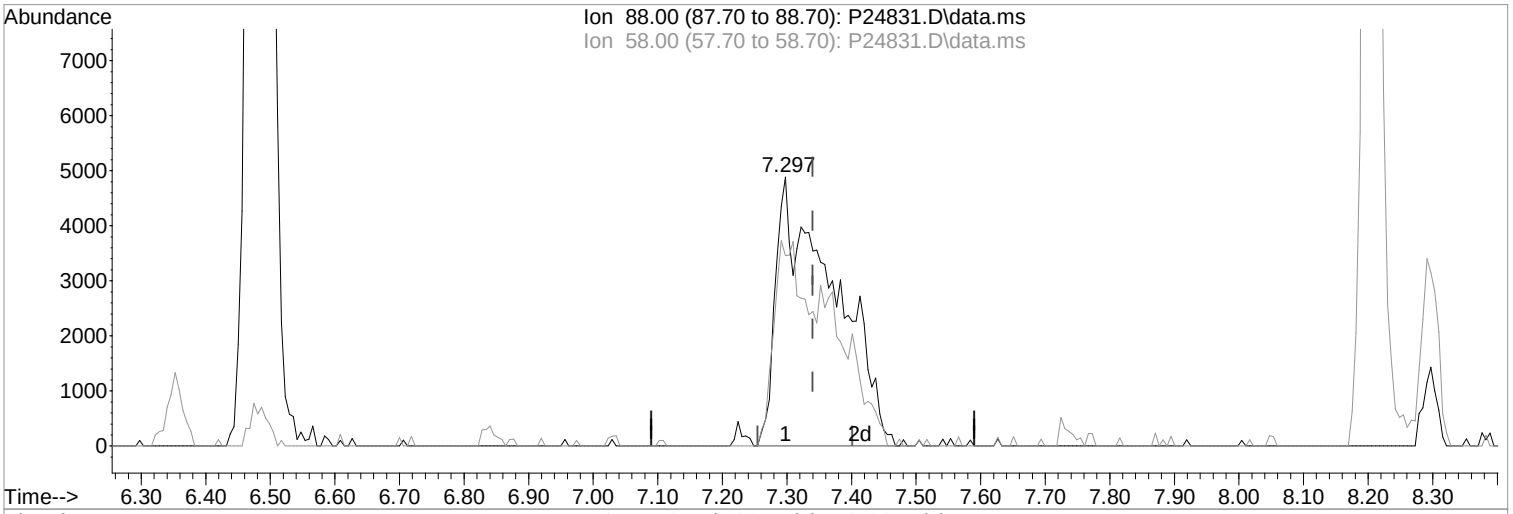
1st FJ 03/08/19
2nd 03/12/19

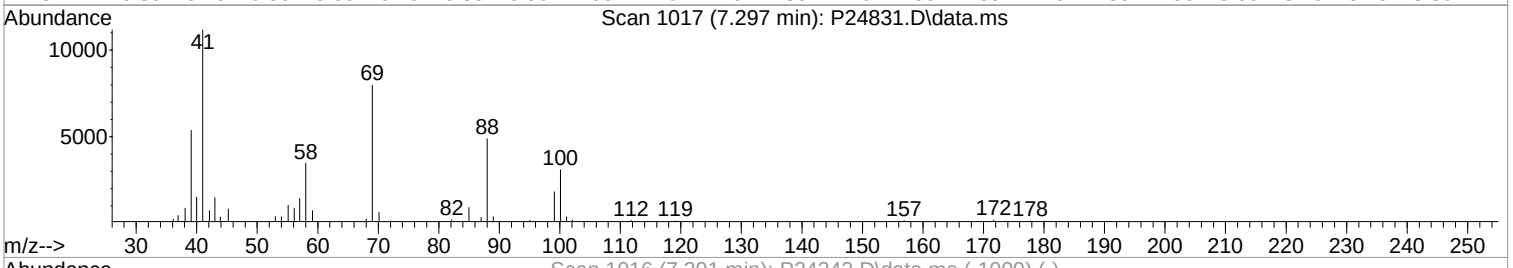
1st 03/12/19
2nd 03/13/19

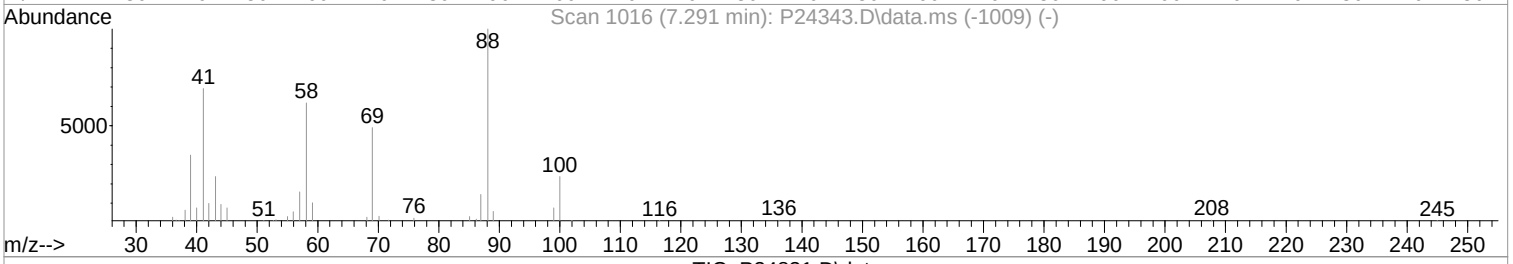
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24831.D
Acq On : 12 Mar 2019 11:02 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 11:22:00 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24831.D\data.ms

(58) 1,4-Dioxane

7.297min (-0.043) 400.19 ppb m

response 30504

Ion	Exp%	Act%
88.00	100	100
58.00	63.20	70.77
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Split Peak

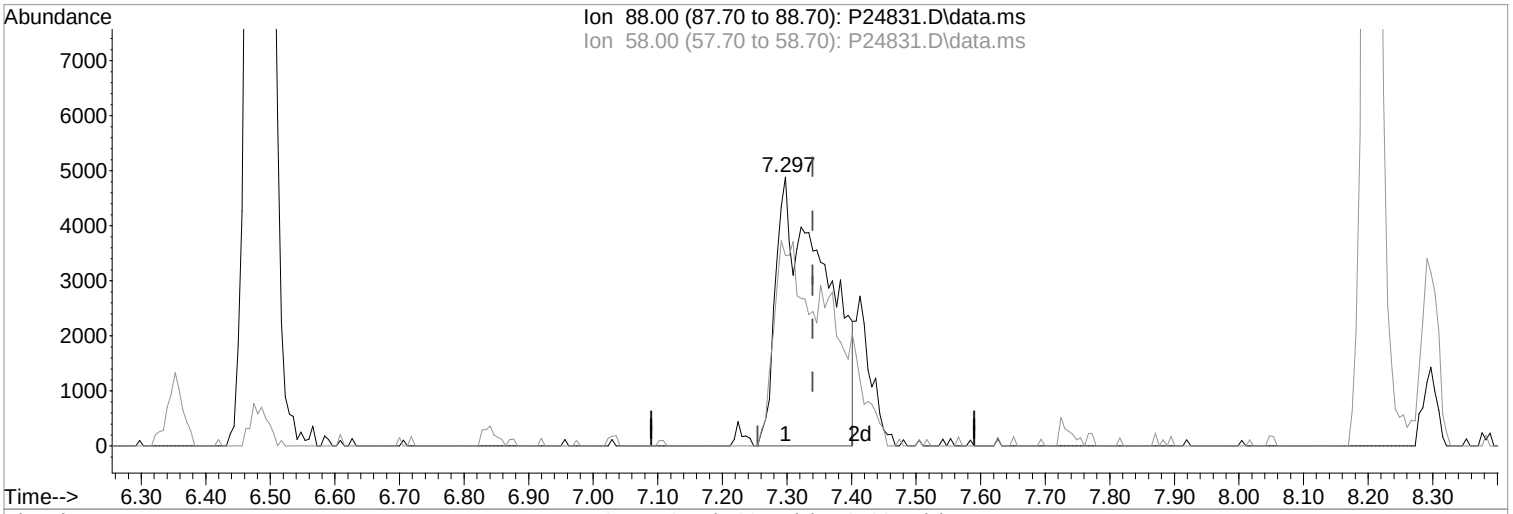
03/12/19

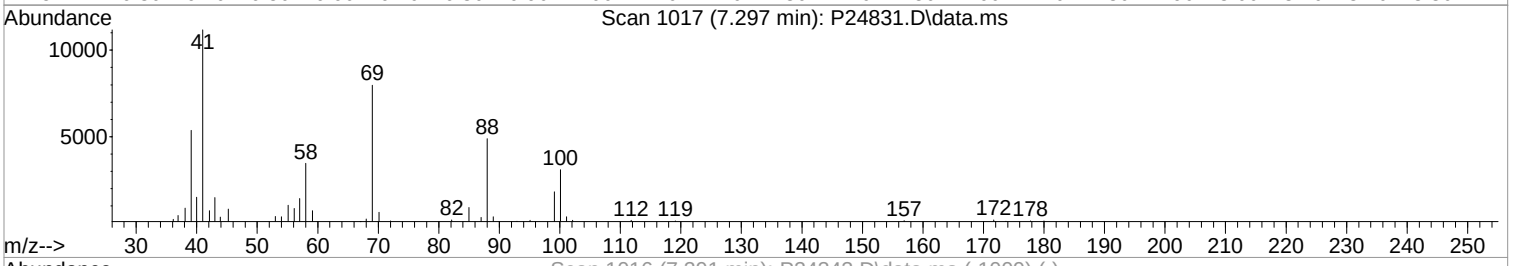
1st 03/12/19
2nd 03/13/19

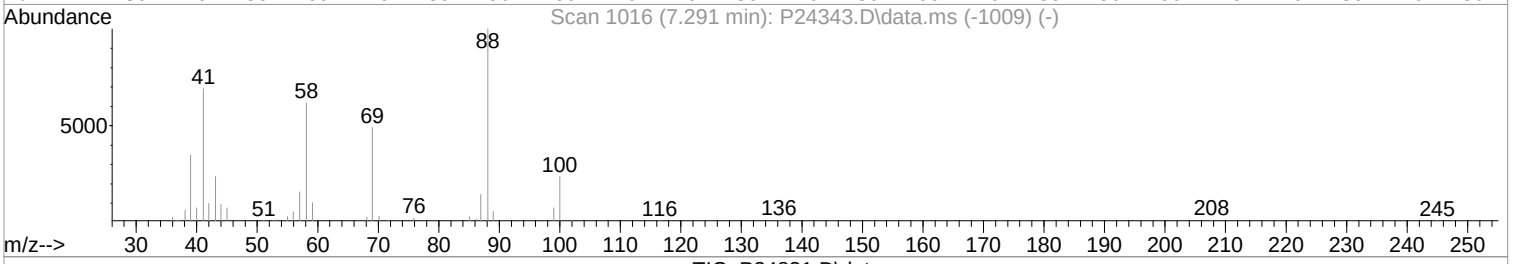
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24831.D
Acq On : 12 Mar 2019 11:02 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 11:22:00 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24831.D\data.ms

(58) 1,4-Dioxane

7.297min (-0.043) 341.10 ppb

response 26000

Ion	Exp%	Act%
88.00	100	100
58.00	63.20	70.77
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

03/12/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24831.D
Acq On : 12 Mar 2019 11:02 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 11:23:46 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.395	168	349749	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.487	114	562868	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	498267	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	247307	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	159098	51.44	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.88%				
48) surr1,1,2-dichloroetha...	5.785	65	205869	52.47	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 104.94%				
65) SURR3,Toluene-d8	8.297	98	742287	50.59	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.18%				
70) SURR2,BFB	10.864	95	265178	50.46	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.92%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	82350	19.44	ppb		95
3) Chloromethane	1.329	50	104086	18.38	ppb		99
4) Vinyl Chloride	1.408	62	99912	19.65	ppb		99
5) Bromomethane	1.640	94	63912	20.48	ppb		90
6) Chloroethane	1.713	64	45313	14.73	ppb		97
7) Freon 21	1.859	67	121046	18.86	ppb		99
8) Trichlorofluoromethane	1.908	101	83466	16.93	ppb		100
9) Diethyl Ether	2.140	59	76672	20.33	ppb		96
10) Freon 123a	2.140	67	86439	21.14	ppb		92
11) Freon 123	2.195	83	102905	21.91	ppb		96
12) Acrolein	2.237	56	40344	41.86	ppb		93
13) 1,1-Diclethene	2.329	96	61245	18.77	ppb		94
14) Freon 113	2.335	101	51042	17.57	ppb		89
15) Acetone	2.371	43	34335	20.50	ppb		93
16) 2-Propanol	2.500	45	136182	313.20	ppb		93
17) Iodomethane	2.457	142	67629	16.04	ppb		97
18) Carbon Disulfide	2.524	76	210820	21.57	ppb		98
19) Acetonitrile	2.615	40	21077	98.73	ppb		97
20) Allyl Chloride	2.658	76	37386	19.15	ppb		93
21) Methyl Acetate	2.682	43	91017	20.02	ppb		97
22) Methylene Chloride	2.774	84	73138	18.01	ppb		99
23) TBA	2.902	59	255469	369.70	ppb		98
24) Acrylonitrile	3.024	53	227318	102.86	ppb		96
25) Methyl-t-Butyl Ether	3.079	73	256382	20.29	ppb		98
26) trans-1,2-Dichloroethene	3.066	96	65764	18.12	ppb		100
28) 1,1-Diclethane	3.560	63	128181	19.04	ppb		99
29) Vinyl Acetate	3.658	86	19369	23.31	ppb	#	72
30) DIPE	3.688	45	272887	22.40	ppb		96
31) 2-Chloro-1,3-Butadiene	3.688	53	109360	20.77	ppb		97
32) ETBE	4.213	59	240698	19.77	ppb		90
33) 2,2-Dichloropropane	4.389	77	89251	16.84	ppb		95
34) cis-1,2-Dichloroethene	4.395	96	78299	19.24	ppb		92
35) 2-Butanone	4.444	43	53894	19.15	ppb		91
36) Propionitrile	4.524	54	93481	102.09	ppb		97
37) Bromochloromethane	4.786	130	46447	18.39	ppb		100
38) Methacrylonitrile	4.798	67	45961	19.29	ppb		94
39) Tetrahydrofuran	4.877	42	36492	20.01	ppb		93
40) Chloroform	4.969	83	116871	19.34	ppb		91
41) 1,1,1-Trichloroethane	5.267	97	83511	17.75	ppb		95

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24831.D
Acq On : 12 Mar 2019 11:02 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 11:23:46 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.102	73	252959	21.91	ppb	95
44) Cyclohexane	5.353	41	68976	20.90	ppb	97
46) Carbontetrachloride	5.542	117	60226	16.07	ppb	98
47) 1,1-Dichloropropene	5.554	75	88218	18.35	ppb	98
49) Benzene	5.865	78	290232	18.05	ppb	100
50) 1,2-Dichloroethane	5.907	62	100629	19.55	ppb	98
51) Iso-Butyl Alcohol	5.871	43	120058	356.21	ppb	100
52) n-Heptane	6.352	43	87131	17.79	ppb	94
53) 1-Butanol	6.834	56	219262	985.66	ppb	98
54) Trichloroethene	6.810	130	64304	16.33	ppb	95
55) Methylcyclohexane	7.047	55	104307	21.00	ppb	98
56) 1,2-Diclpropane	7.084	63	80092	18.74	ppb	92
57) Dibromomethane	7.230	93	45837	18.95	ppb	94
58) 1,4-Dioxane	7.297	88	30504m	400.19	ppb	
59) Methyl Methacrylate	7.316	69	76137	19.94	ppb	91
60) Bromodichloromethane	7.456	83	82808	18.42	ppb	99
61) 2-Nitropropane	7.736	41	38037	42.62	ppb	89
62) 2-Chloroethylvinyl Ether	7.864	63	2820	2.76	ppb	67
63) cis-1,3-Dichloropropene	7.998	75	119077	18.74	ppb	99
64) 4-Methyl-2-pentanone	8.206	43	107043	19.75	ppb	98
66) Toluene	8.370	91	293515	17.63	ppb	95
67) trans-1,3-Dichloropropene	8.639	75	108514	19.50	ppb	97
68) Ethyl Methacrylate	8.779	69	126625	19.75	ppb	98
69) 1,1,2-Trichloroethane	8.828	97	69096	17.71	ppb	97
72) Tetrachloroethene	8.962	164	47195	15.82	ppb	97
73) 2-Hexanone	9.114	43	78812	19.63	ppb	96
74) 1,3-Dichloropropane	8.998	76	130519	18.19	ppb	99
75) Dibromochloromethane	9.224	129	62568	18.69	ppb	95
76) N-Butyl Acetate	9.273	43	147548	20.12	ppb	94
77) 1,2-Dibromoethane	9.321	107	70862	18.11	ppb	98
78) Chlorobenzene	9.815	112	180597	16.93	ppb	99
79) 3-CBTF	9.833	180	109161	20.99	ppb	97
80) 4-CBTF	9.888	180	96811	20.59	ppb	93
81) 1,1,1,2-Tetrachloroethane	9.900	131	60689	17.58	ppb	99
82) Ethylbenzene	9.937	106	96269	16.74	ppb	99
83) (m+p)Xylene	10.047	106	225336	32.04	ppb	98
84) o-Xylene	10.406	106	116833	16.89	ppb	98
85) Styrene	10.419	104	197887	17.65	ppb	98
87) Bromoform	10.571	173	38547	18.46	ppb	94
88) 2-CBTF	10.650	180	102465	20.19	ppb	96
89) Isopropylbenzene	10.742	105	275936	16.96	ppb	97
90) Cyclohexanone	10.803	55	98954	95.97	ppb	96
91) trans-1,4-Dichloro-2-B...	11.047	53	25171	18.70	ppb	97
92) 1,1,2,2-Tetrachloroethane	10.998	83	107814	19.87	ppb	98
93) Bromobenzene	10.986	156	77270	17.66	ppb	92
94) 1,2,3-Trichloropropane	11.028	110	33749	19.60	ppb	97
95) n-Propylbenzene	11.095	91	319609	17.15	ppb	99
96) 2-Chlorotoluene	11.156	91	203012	17.29	ppb	98
97) 3-Chlorotoluene	11.211	91	249561	21.72	ppb	96
98) 4-Chlorotoluene	11.248	91	227827	17.40	ppb	99
99) 1,3,5-Trimethylbenzene	11.248	105	227729	16.87	ppb	99
100) tert-Butylbenzene	11.522	119	193481	16.48	ppb	96
101) 1,2,4-Trimethylbenzene	11.559	105	234465	16.79	ppb	98
102) 3,4-DCBTF	11.620	214	84044	20.08	ppb	99
103) sec-Butylbenzene	11.705	105	287420	16.88	ppb	100
104) p-Isopropyltoluene	11.827	119	242704	17.16	ppb	97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24831.D
Acq On : 12 Mar 2019 11:02 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 11:23:46 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

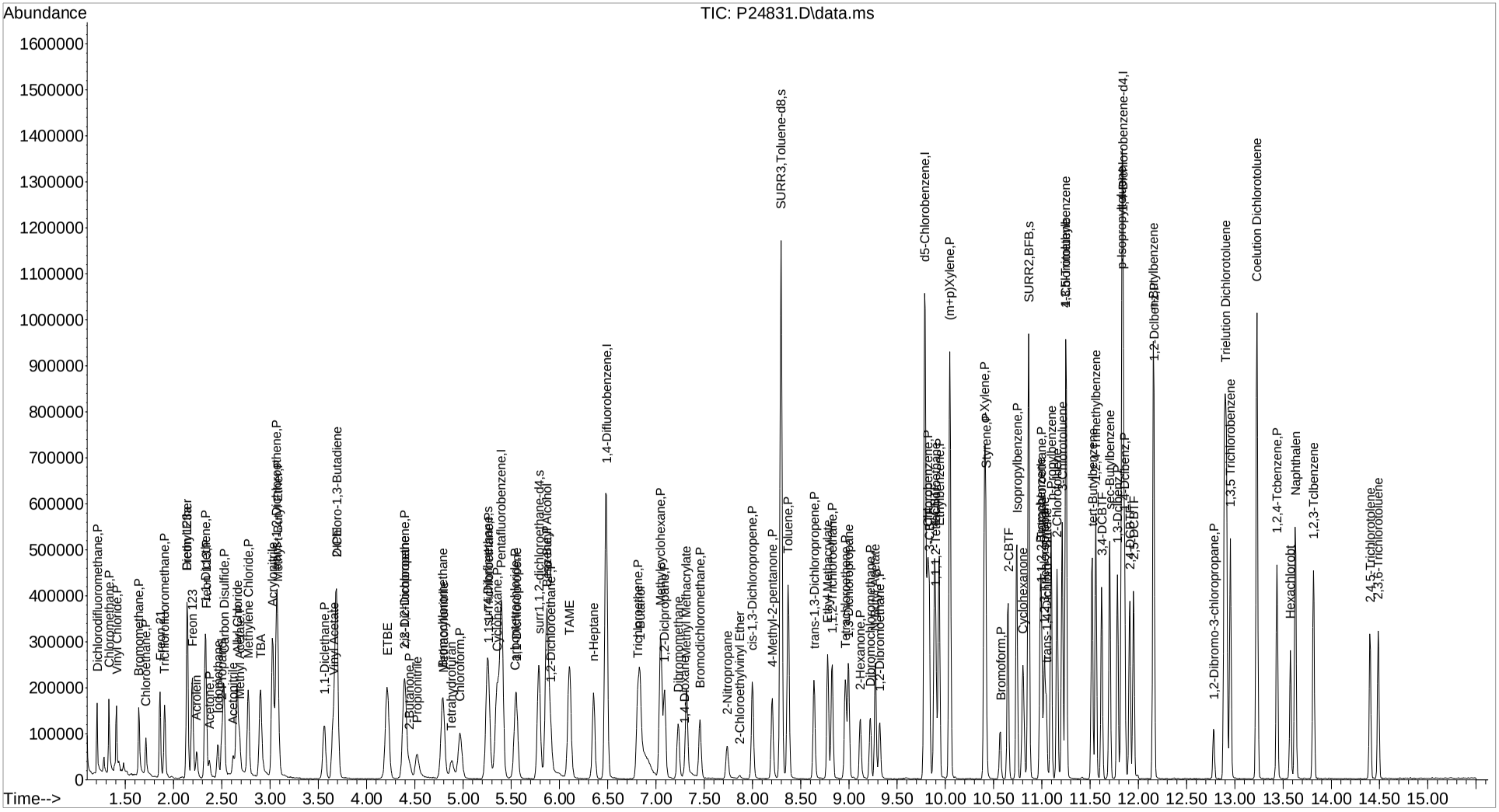
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.784	146	137302	17.23	ppb	96
106) 1,4-Dclbenz	11.857	146	140242	16.68	ppb	98
107) 2,4-DCBTF	11.912	214	76882	20.06	ppb	90
108) 2,5-DCBTF	11.949	214	86231	19.95	ppb	97
109) n-Butylbenzene	12.156	91	230721	18.62	ppb	99
110) 1,2-Dclbenz	12.162	146	140862	17.28	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.784	157	23091	17.27	ppb	88
112) Trielution Dichlorotol...	12.900	125	445122	66.38	ppb	97
113) 1,3,5 Trichlorobenzene	12.955	180	123395	21.03	ppb	99
114) Coelution Dichlorotoluene	13.229	125	331852	44.86	ppb	98
115) 1,2,4-Tcbenzene	13.436	180	112162	19.61	ppb	97
116) Hexachlorobt	13.577	225	41090	17.04	ppb	99
117) Naphthalen	13.625	128	338429	16.96	ppb	99
118) 1,2,3-Tclbenzene	13.814	180	114661	19.44	ppb	97
119) 2,4,5-Trichlorotolene	14.400	159	65962	25.52	ppb	91
120) 2,3,6-Trichlorotoluene	14.485	159	60720	20.82	ppb	90

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24831.D
Acq On : 12 Mar 2019 11:02 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 11:23:46 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

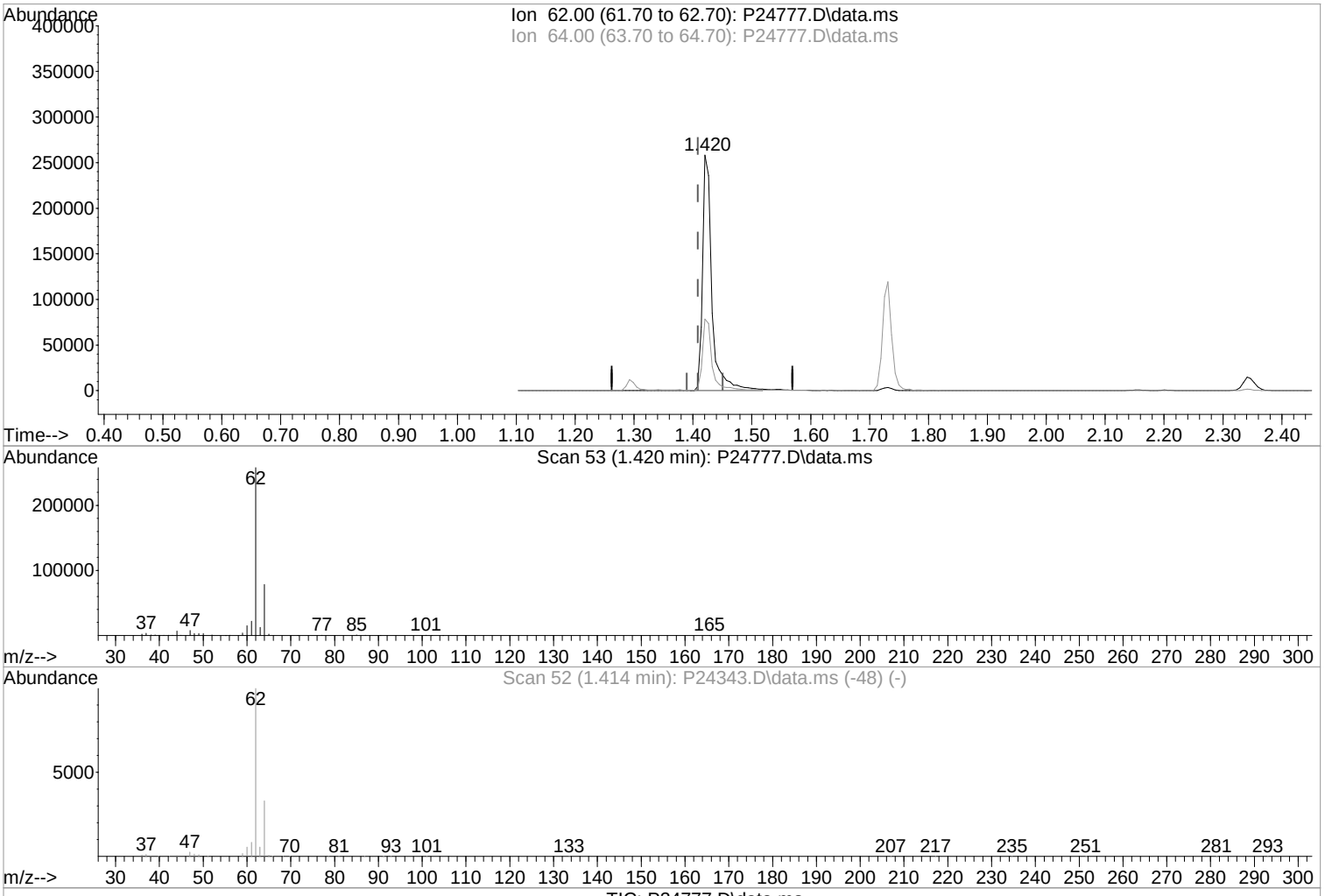


1st 03/12/19
2nd 03/12/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24777.D
Acq On : 7 Mar 2019 7:54 pm
Operator : K.Ruest
Sample : R1901880-001MS|200 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 08 10:39:08 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



TIC: P24777.D\data.ms

(4) Vinyl Chloride (P)

1.420min (+0.012) 65.07 ppb m

response 284366

Ion	Exp%	Act%
62.00	100	100
64.00	33.20	30.40
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

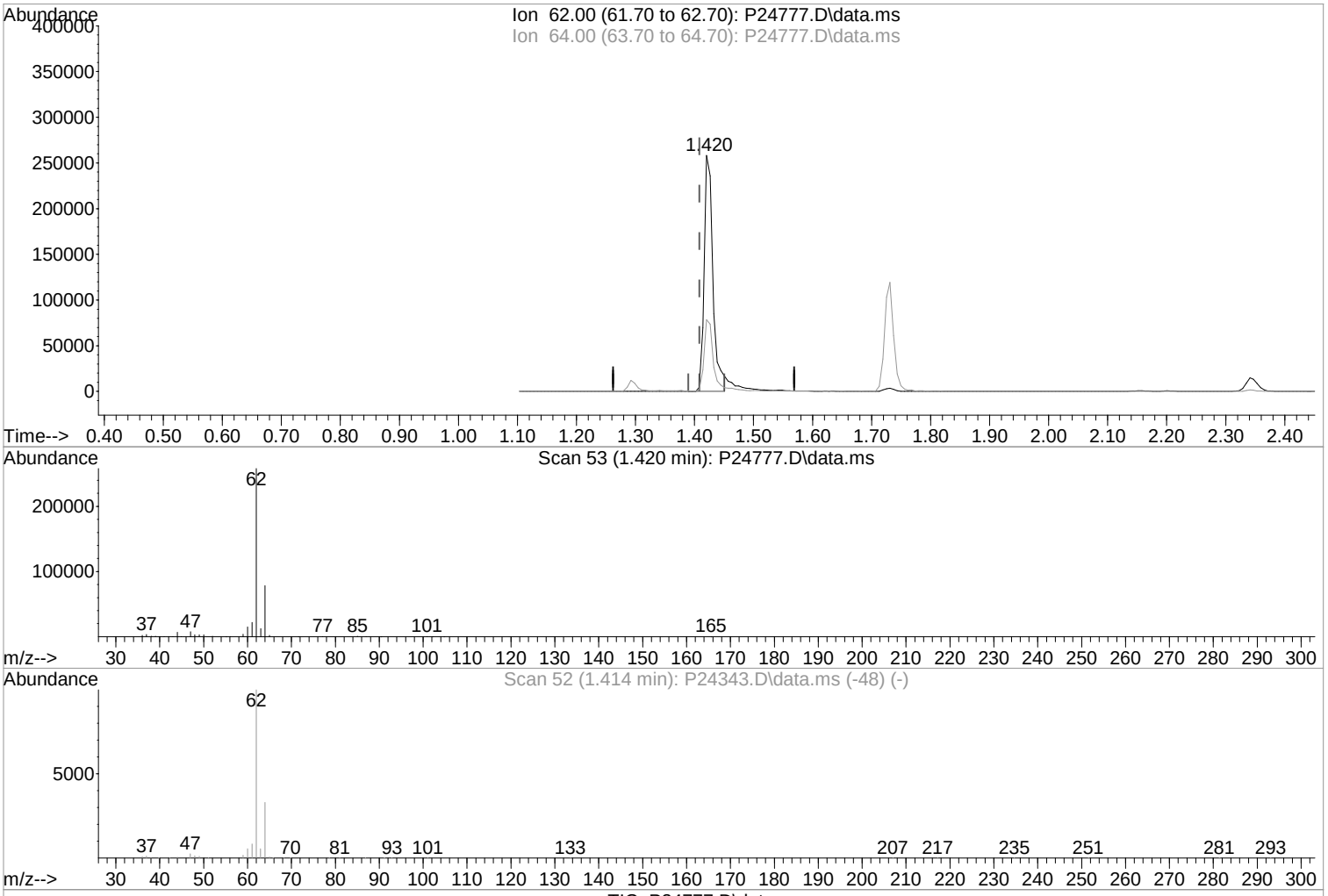
Poor integration.

03/12/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24777.D
Acq On : 7 Mar 2019 7:54 pm
Operator : K.Ruest
Sample : R1901880-001MS|200 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 08 10:39:08 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



TIC: P24777.D\data.ms

(4) Vinyl Chloride (P)

1.420min (+0.012) 60.71 ppb

response 265301

Ion	Exp%	Act%
62.00	100	100
64.00	33.20	30.40
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

03/12/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24777.D
Acq On : 7 Mar 2019 7:54 pm
Operator : K.Ruest
Sample : R1901880-001MS|200 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 12 11:05:18 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.407	168	300681	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.493	114	491924	50.00	ppb		0.01
71) d5-Chlorobenzene	9.791	117	433646	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	221692	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.267	113	140416	51.94	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.88%				
48) surr1,1,2-dichloroetha...	5.798	65	183851	53.62	ppb		0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 107.24%				
65) SURR3,Toluene-d8	8.297	98	656732	51.22	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.44%				
70) SURR2,BFB	10.864	95	232180	50.56	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.12%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.219	85	233421	64.10	ppb		97
3) Chloromethane	1.347	50	280675	57.66	ppb		100
4) Vinyl Chloride	1.420	62	284366m	65.07	ppb		
5) Bromomethane	1.658	94	133500	50.91	ppb		100
6) Chloroethane	1.731	64	129424	48.93	ppb		92
7) Freon 21	1.871	67	308875	55.98	ppb		100
8) Trichlorofluoromethane	1.926	101	235373	55.52	ppb		99
9) Diethyl Ether	2.152	59	178134	54.94	ppb		97
10) Freon 123a	2.158	67	207115	58.92	ppb		96
11) Freon 123	2.207	83	254253	62.98	ppb		99
12) Acrolein	2.256	56	88854	107.24	ppb		98
13) 1,1-Diclethene	2.347	96	154823	55.20	ppb		97
14) Freon 113	2.347	101	149598	59.89	ppb		92
15) Acetone	2.384	43	78314	54.39	ppb		96
16) 2-Propanol	2.512	45	280057	749.21	ppb		99
17) Iodomethane	2.475	142	217594	53.34	ppb		100
18) Carbon Disulfide	2.536	76	496956	59.14	ppb		98
19) Acetonitrile	2.634	40	54738	298.26	ppb		99
20) Allyl Chloride	2.670	76	98916	58.95	ppb	#	90
21) Methyl Acetate	2.694	43	199603	51.06	ppb		99
22) Methylene Chloride	2.786	84	181265	51.92	ppb	#	88
23) TBA	2.914	59	524880	883.53	ppb		95
24) Acrylonitrile	3.036	53	499741	263.03	ppb		98
25) Methyl-t-Butyl Ether	3.091	73	585245	53.88	ppb		97
26) trans-1,2-Dichloroethene	3.079	96	195752	62.73	ppb		91
28) 1,1-Diclethane	3.578	63	342825	59.24	ppb		98
29) Vinyl Acetate	3.670	86	39379	55.12	ppb	#	80
30) DIPE	3.700	45	644488	61.54	ppb		97
31) 2-Chloro-1,3-Butadiene	3.700	53	224753	49.66	ppb		100
32) ETBE	4.225	59	557749	53.28	ppb		93
33) 2,2-Dichloropropane	4.401	77	239344	52.52	ppb		92
34) cis-1,2-Dichloroethene	4.414	96	636593	181.98	ppb		92
35) 2-Butanone	4.456	43	119851	49.52	ppb		95
36) Propionitrile	4.536	54	193562	245.89	ppb		97
37) Bromochloromethane	4.804	130	111951	51.55	ppb		98
38) Methacrylonitrile	4.804	67	96038	46.89	ppb		99
39) Tetrahydrofuran	4.895	42	78735	50.23	ppb		100
40) Chloroform	4.987	83	303522	58.43	ppb		95
41) 1,1,1-Trichloroethane	5.273	97	234419	57.97	ppb		97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24777.D
Acq On : 7 Mar 2019 7:54 pm
Operator : K.Ruest
Sample : R1901880-001MS|200 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 12 11:05:18 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.108	73	556627	56.07	ppb	97
44) Cyclohexane	5.371	41	170907	59.26	ppb	99
46) Carbontetrachloride	5.548	117	173428	52.93	ppb	99
47) 1,1-Dichloropropene	5.566	75	220085	52.37	ppb	97
49) Benzene	5.877	78	692383	49.28	ppb	97
50) 1,2-Dichloroethane	5.913	62	232186	51.61	ppb	95
51) Iso-Butyl Alcohol	5.883	43	248926	845.07	ppb	98
52) n-Heptane	6.358	43	244373	57.08	ppb	94
53) 1-Butanol	6.840	56	406886	2092.87	ppb	97
54) Trichloroethene	6.816	130	570210	165.73	ppb	95
55) Methylcyclohexane	7.053	55	251325	57.89	ppb	93
56) 1,2-Diclpropane	7.090	63	202164	54.14	ppb	96
57) Dibromomethane	7.230	93	103539	48.98	ppb	89
58) 1,4-Dioxane	7.297	88	57457	862.51	ppb	97
59) Methyl Methacrylate	7.322	69	157571	47.23	ppb	93
60) Bromodichloromethane	7.462	83	200090	50.92	ppb	98
61) 2-Nitropropane	7.742	41	75967	97.39	ppb	100
62) 2-Chloroethylvinyl Ether	7.864	63	26458	24.01	ppb	84
63) cis-1,3-Dichloropropene	8.004	75	284636	51.24	ppb	97
64) 4-Methyl-2-pentanone	8.206	43	235776	49.76	ppb	96
66) Toluene	8.370	91	699095	48.04	ppb	99
67) trans-1,3-Dichloropropene	8.638	75	244670	50.30	ppb	97
68) Ethyl Methacrylate	8.779	69	273862	48.88	ppb	94
69) 1,1,2-Trichloroethane	8.827	97	162467	47.66	ppb	99
72) Tetrachloroethene	8.968	164	126918	48.88	ppb	95
73) 2-Hexanone	9.114	43	167372	47.89	ppb	95
74) 1,3-Dichloropropane	8.998	76	299241	47.91	ppb	96
75) Dibromochloromethane	9.224	129	135030	46.36	ppb	93
76) N-Butyl Acetate	9.272	43	343015	53.75	ppb	94
77) 1,2-Dibromoethane	9.321	107	162345	47.66	ppb	99
78) Chlorobenzene	9.815	112	438079	47.19	ppb	98
79) 3-CBTF	9.833	180	242341	53.54	ppb	99
80) 4-CBTF	9.888	180	221111	54.04	ppb	97
81) 1,1,1,2-Tetrachloroethane	9.900	131	147340	49.04	ppb	99
82) Ethylbenzene	9.937	106	235969	47.14	ppb	96
83) (m+p)Xylene	10.047	106	554358	90.58	ppb	97
84) o-Xylene	10.406	106	277168	46.03	ppb	99
85) Styrene	10.419	104	423026	43.35	ppb	99
87) Bromoform	10.565	173	82097	43.85	ppb	100
88) 2-CBTF	10.650	180	234236	51.47	ppb	98
89) Isopropylbenzene	10.742	105	718387	49.27	ppb	100
90) Cyclohexanone	10.803	55	194469	210.40	ppb	92
91) trans-1,4-Dichloro-2-B...	11.047	53	54482	45.15	ppb	91
92) 1,1,2,2-Tetrachloroethane	10.998	83	235024	48.31	ppb	98
93) Bromobenzene	10.986	156	174374	44.45	ppb	89
94) 1,2,3-Trichloropropane	11.028	110	71354	46.24	ppb	94
95) n-Propylbenzene	11.095	91	847588	50.74	ppb	97
96) 2-Chlorotoluene	11.156	91	499684	47.47	ppb	98
97) 3-Chlorotoluene	11.211	91	511734	49.69	ppb	98
98) 4-Chlorotoluene	11.254	91	544968	46.42	ppb	98
99) 1,3,5-Trimethylbenzene	11.248	105	562848	46.51	ppb	99
100) tert-Butylbenzene	11.522	119	514940	48.92	ppb	99
101) 1,2,4-Trimethylbenzene	11.559	105	573221	45.79	ppb	100
102) 3,4-DCBTF	11.620	214	185757	49.51	ppb	96
103) sec-Butylbenzene	11.705	105	778691	51.02	ppb	99
104) p-Isopropyltoluene	11.827	119	628779	49.61	ppb	100

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24777.D
Acq On : 7 Mar 2019 7:54 pm
Operator : K.Ruest
Sample : R1901880-001MS|200 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 12 11:05:18 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

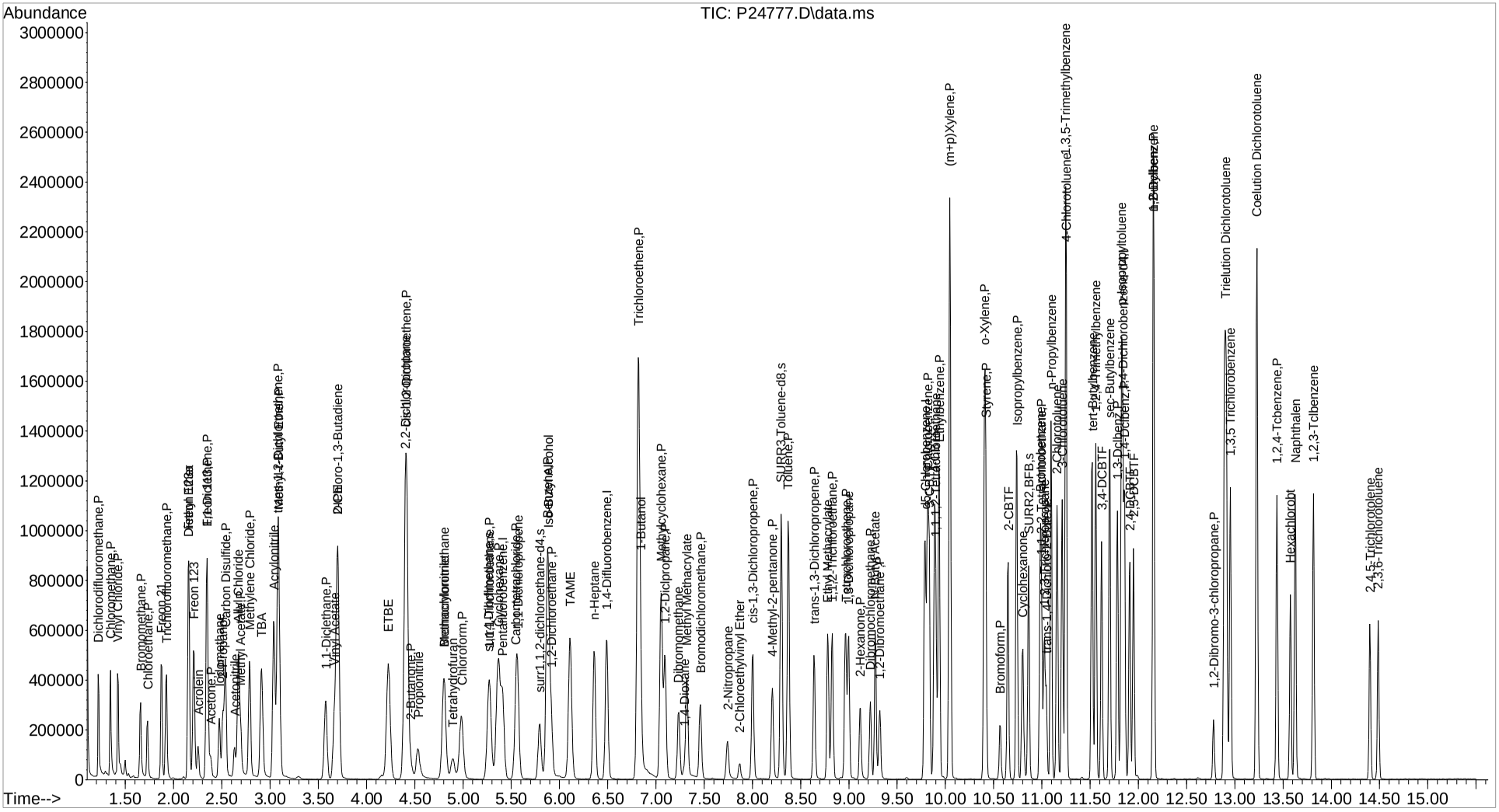
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.784	146	345594	48.38	ppb	98
106) 1,4-Dclbenz	11.857	146	336439	44.63	ppb	96
107) 2,4-DCBTF	11.912	214	173913	50.61	ppb	98
108) 2,5-DCBTF	11.949	214	193259	49.88	ppb	97
109) n-Butylbenzene	12.156	91	603837	54.35	ppb	98
110) 1,2-Dclbenz	12.156	146	341010	46.66	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.778	157	47854	39.93	ppb	96
112) Trielution Dichlorotol...	12.900	125	940185	156.40	ppb	98
113) 1,3,5 Trichlorobenzene	12.955	180	287929	54.73	ppb	96
114) Coelution Dichlorotoluene	13.229	125	689142	103.92	ppb	98
115) 1,2,4-Tcbenzene	13.436	180	270413	52.75	ppb	98
116) Hexachlorobt	13.577	225	110483	51.12	ppb	98
117) Naphthalen	13.625	128	659082	36.38	ppb	99
118) 1,2,3-Tclbenzene	13.814	180	271242	51.31	ppb	98
119) 2,4,5-Trichlorotolene	14.400	159	123296	47.12	ppb	98
120) 2,3,6-Trichlorotoluene	14.485	159	121048	41.23	ppb	97

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24777.D
Acq On : 7 Mar 2019 7:54 pm
Operator : K.Ruest
Sample : R1901880-001MS|200 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 20 Sample Multiplier: 1

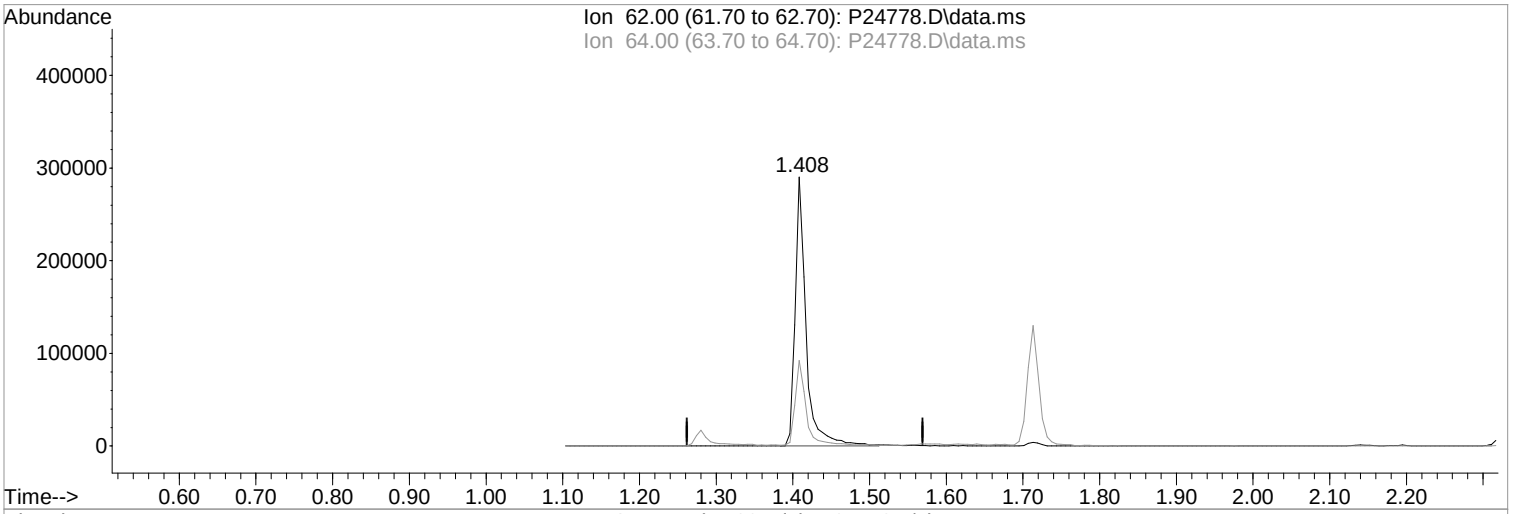
Quant Time: Mar 12 11:05:18 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

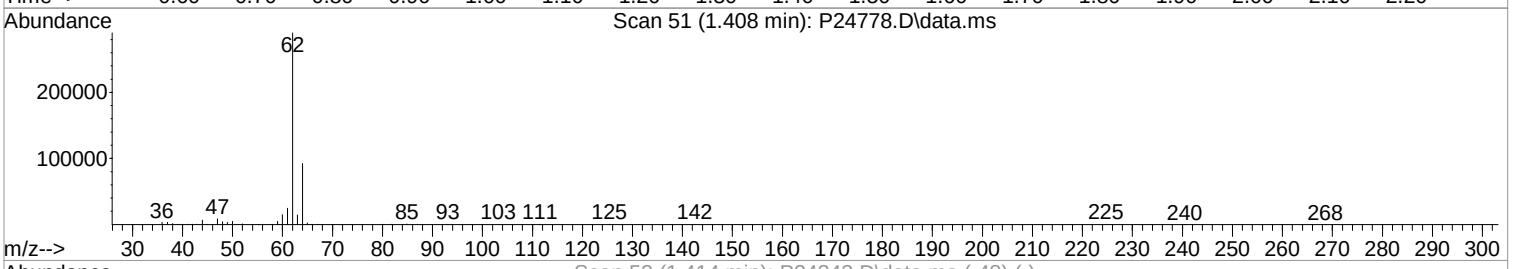


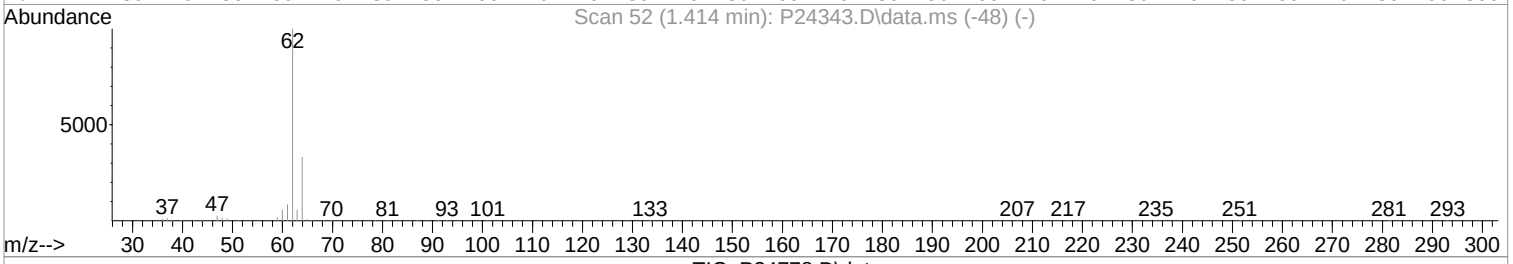
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24778.D
Acq On : 7 Mar 2019 8:15 pm
Operator : K.Ruest
Sample : R1901880-001DMS|200 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 08 10:39:18 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration







TIC: P24778.D\data.ms

(4) Vinyl Chloride (P)

1.408min (+0.000) 65.44 ppb m

response 290340

Ion	Exp%	Act%
62.00	100	100
64.00	33.20	31.80
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

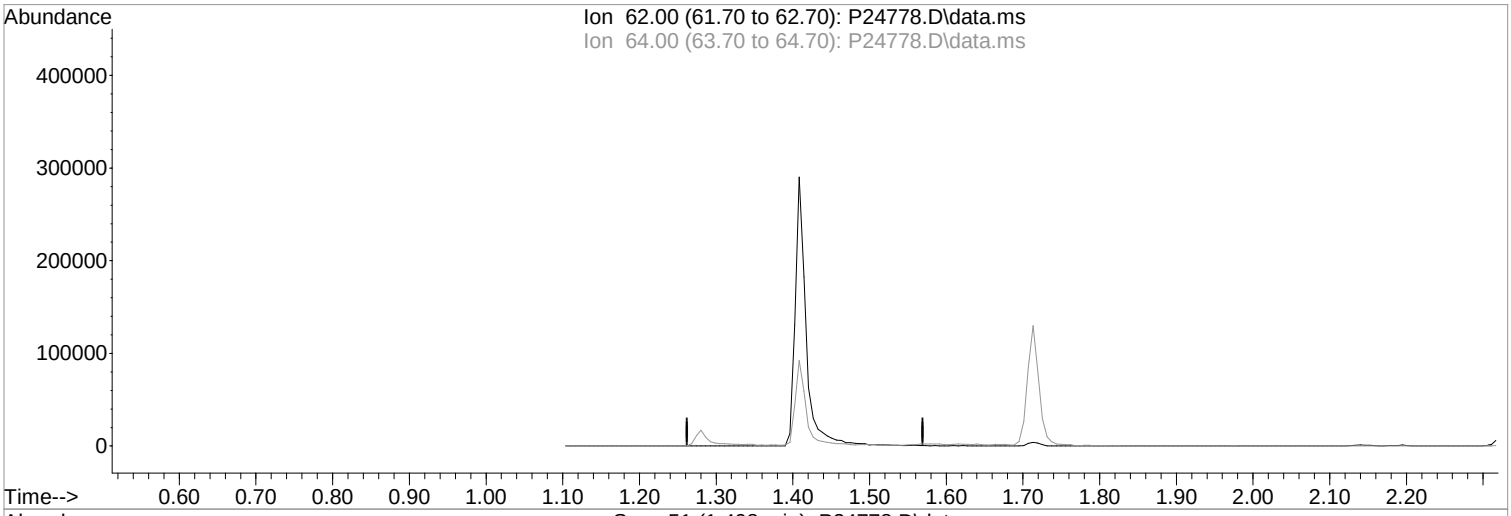
Peak not found.

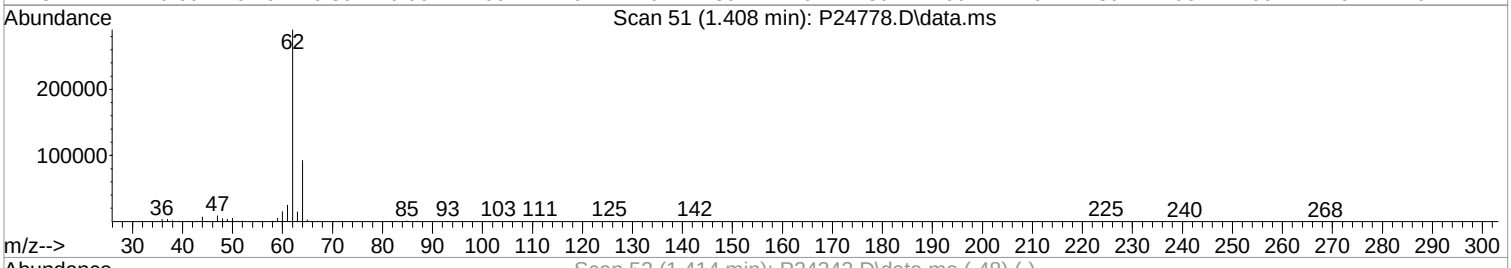
03/12/19

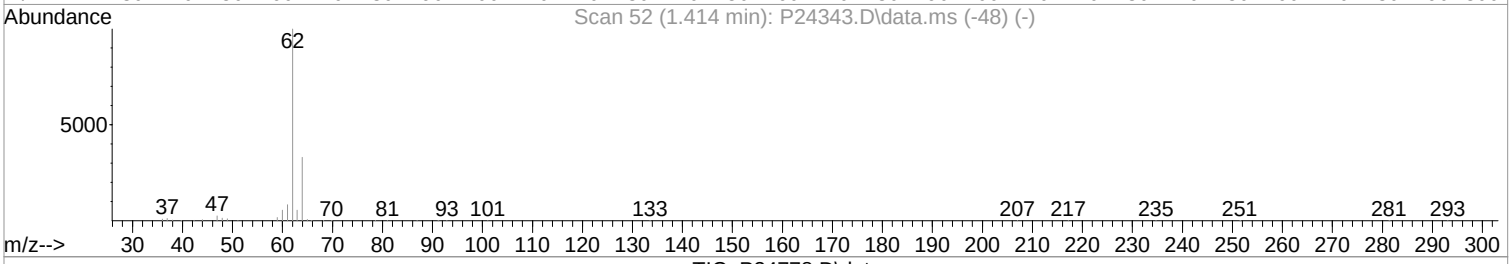
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24778.D
Acq On : 7 Mar 2019 8:15 pm
Operator : K.Ruest
Sample : R1901880-001DMS|200 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 08 10:39:18 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration







TIC: P24778.D\data.ms

(4) Vinyl Chloride (P)

1.408min (-1.408) 0.00 ppb

response 0

Ion	Exp%	Act%
62.00	100	0.00
64.00	33.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

03/12/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24778.D
Acq On : 7 Mar 2019 8:15 pm
Operator : K.Ruest
Sample : R1901880-001DMS|200 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 12 11:07:04 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.401	168	305262	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.480	114	501759	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	439477	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	226694	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	144894	52.55	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 105.10%				
48) surr1,1,2-dichloroetha...	5.785	65	188248	53.82	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 107.64%				
65) SURR3,Toluene-d8	8.297	98	665198	50.86	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.72%				
70) SURR2,BFB	10.864	95	234112	49.98	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.96%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	246453	66.66	ppb		100
3) Chloromethane	1.329	50	293822	59.45	ppb		100
4) Vinyl Chloride	1.408	62	290340m	65.44	ppb		
5) Bromomethane	1.640	94	145841	54.84	ppb		92
6) Chloroethane	1.713	64	137111	51.06	ppb		95
7) Freon 21	1.859	67	323550	57.76	ppb		99
8) Trichlorofluoromethane	1.908	101	255080	59.26	ppb		99
9) Diethyl Ether	2.140	59	182255	55.37	ppb		97
10) Freon 123a	2.140	67	211796	59.34	ppb		97
11) Freon 123	2.195	83	260777	63.62	ppb		99
12) Acrolein	2.237	56	91527	108.81	ppb		99
13) 1,1-Diclethene	2.329	96	162456	57.05	ppb		88
14) Freon 113	2.335	101	153871	60.68	ppb		94
15) Acetone	2.372	43	90586	61.96	ppb		97
16) 2-Propanol	2.500	45	369517	973.70	ppb		100
17) Iodomethane	2.457	142	226669	54.64	ppb		97
18) Carbon Disulfide	2.524	76	522234	61.21	ppb		98
19) Acetonitrile	2.615	40	72740	390.40	ppb		96
20) Allyl Chloride	2.658	76	103781	60.92	ppb	#	91
21) Methyl Acetate	2.682	43	209828	52.87	ppb		99
22) Methylene Chloride	2.774	84	187194	52.81	ppb		93
23) TBA	2.902	59	579863	961.43	ppb		96
24) Acrylonitrile	3.024	53	525081	272.22	ppb		98
25) Methyl-t-Butyl Ether	3.073	73	606728	55.02	ppb		99
26) trans-1,2-Dichloroethene	3.067	96	206824	65.29	ppb		91
28) 1,1-Diclethane	3.560	63	362835	61.76	ppb		99
29) Vinyl Acetate	3.652	86	42044	57.97	ppb		97
30) DIPE	3.688	45	661476	62.21	ppb		97
31) 2-Chloro-1,3-Butadiene	3.688	53	239142	52.05	ppb		95
32) ETBE	4.213	59	578389	54.43	ppb		94
33) 2,2-Dichloropropane	4.389	77	251318	54.32	ppb		92
34) cis-1,2-Dichloroethene	4.396	96	641115	180.52	ppb		92
35) 2-Butanone	4.438	43	123986	50.46	ppb		92
36) Propionitrile	4.517	54	210232	263.06	ppb		99
37) Bromochloromethane	4.786	130	117466	53.28	ppb		96
38) Methacrylonitrile	4.792	67	105335	50.66	ppb		93
39) Tetrahydrofuran	4.877	42	85613	53.80	ppb		98
40) Chloroform	4.969	83	314371	59.61	ppb		94
41) 1,1,1-Trichloroethane	5.261	97	250016	60.89	ppb		98

1st 03/12/19
2nd 03/12/19

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24778.D
Acq On : 7 Mar 2019 8:15 pm
Operator : K.Ruest
Sample : R1901880-001DMS|200 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 12 11:07:04 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.103	73	579918	57.54	ppb	98
44) Cyclohexane	5.353	41	176370	59.95	ppb	100
46) Carbontetrachloride	5.536	117	193450	57.89	ppb	99
47) 1,1-Dichloropropene	5.548	75	233352	54.44	ppb	99
49) Benzene	5.865	78	739965	51.63	ppb	99
50) 1,2-Dichloroethane	5.907	62	245288	53.45	ppb	98
51) Iso-Butyl Alcohol	5.871	43	260625	867.44	ppb	99
52) n-Heptane	6.352	43	257251	58.91	ppb	95
53) 1-Butanol	6.834	56	433044	2183.76	ppb	100
54) Trichloroethene	6.810	130	580466	165.41	ppb	95
55) Methylcyclohexane	7.047	55	260252	58.77	ppb	90
56) 1,2-Diclpropane	7.084	63	212707	55.84	ppb	97
57) Dibromomethane	7.230	93	110807	51.40	ppb	94
58) 1,4-Dioxane	7.285	88	69996	1030.14	ppb	96
59) Methyl Methacrylate	7.316	69	167368	49.18	ppb	96
60) Bromodichloromethane	7.456	83	209862	52.36	ppb	98
61) 2-Nitropropane	7.736	41	85232	107.13	ppb	100
62) 2-Chloroethylvinyl Ether	7.864	63	27124	24.12	ppb	90
63) cis-1,3-Dichloropropene	7.998	75	299953	52.94	ppb	99
64) 4-Methyl-2-pentanone	8.200	43	241939	50.06	ppb	97
66) Toluene	8.370	91	737383	49.68	ppb	100
67) trans-1,3-Dichloropropene	8.639	75	265529	53.52	ppb	98
68) Ethyl Methacrylate	8.779	69	292268	51.15	ppb	99
69) 1,1,2-Trichloroethane	8.822	97	171395	49.29	ppb	100
72) Tetrachloroethene	8.962	164	136580	51.90	ppb	96
73) 2-Hexanone	9.114	43	174428	49.24	ppb	98
74) 1,3-Dichloropropane	8.992	76	322647	50.97	ppb	95
75) Dibromochloromethane	9.218	129	149493	50.64	ppb	98
76) N-Butyl Acetate	9.273	43	359082	55.52	ppb	95
77) 1,2-Dibromoethane	9.315	107	167562	48.54	ppb	100
78) Chlorobenzene	9.815	112	463602	49.28	ppb	97
79) 3-CBTF	9.833	180	251166	54.76	ppb	97
80) 4-CBTF	9.888	180	228746	55.17	ppb	96
81) 1,1,1,2-Tetrachloroethane	9.901	131	156253	51.31	ppb	99
82) Ethylbenzene	9.931	106	252363	49.75	ppb	94
83) (m+p)Xylene	10.047	106	588811	94.93	ppb	99
84) o-Xylene	10.400	106	292389	47.91	ppb	89
85) Styrene	10.419	104	449246	45.43	ppb	99
87) Bromoform	10.565	173	89770	46.90	ppb	96
88) 2-CBTF	10.650	180	241605	51.92	ppb	98
89) Isopropylbenzene	10.736	105	768250	51.52	ppb	99
90) Cyclohexanone	10.797	55	209121	221.26	ppb	99
91) trans-1,4-Dichloro-2-B...	11.047	53	61054	49.48	ppb	95
92) 1,1,2,2-Tetrachloroethane	10.998	83	251973	50.66	ppb	100
93) Bromobenzene	10.986	156	186606	46.52	ppb	96
94) 1,2,3-Trichloropropane	11.028	110	77156	48.90	ppb	93
95) n-Propylbenzene	11.095	91	908641	53.19	ppb	98
96) 2-Chlorotoluene	11.156	91	523174	48.60	ppb	98
97) 3-Chlorotoluene	11.211	91	544965	51.75	ppb	99
98) 4-Chlorotoluene	11.248	91	578763	48.21	ppb	99
99) 1,3,5-Trimethylbenzene	11.248	105	599050	48.41	ppb	98
100) tert-Butylbenzene	11.522	119	559441	51.97	ppb	99
101) 1,2,4-Trimethylbenzene	11.559	105	604695	47.24	ppb	99
102) 3,4-DCBTF	11.620	214	195932	51.07	ppb	96
103) sec-Butylbenzene	11.699	105	838990	53.76	ppb	97
104) p-Isopropyltoluene	11.827	119	658493	50.81	ppb	99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24778.D
Acq On : 7 Mar 2019 8:15 pm
Operator : K.Ruest
Sample : R1901880-001DMS|200 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 12 11:07:04 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.784	146	369918	50.64	ppb	98
106) 1,4-Dclbenz	11.857	146	365357	47.39	ppb	99
107) 2,4-DCBTF	11.912	214	183903	52.34	ppb	97
108) 2,5-DCBTF	11.949	214	200045	50.49	ppb	98
109) n-Butylbenzene	12.156	91	642920	56.59	ppb	98
110) 1,2-Dclbenz	12.156	146	361962	48.44	ppb	97
111) 1,2-Dibromo-3-chloropr...	12.784	157	51216	41.79	ppb	90
112) Trielution Dichlorotol...	12.900	125	967226	157.35	ppb	97
113) 1,3,5 Trichlorobenzene	12.955	180	290671	54.04	ppb	100
114) Coelution Dichlorotoluene	13.229	125	704154	103.84	ppb	97
115) 1,2,4-Tcbenzene	13.436	180	283019	53.99	ppb	98
116) Hexachlorobt	13.577	225	121170	54.82	ppb	97
117) Naphthalen	13.625	128	682330	36.83	ppb	100
118) 1,2,3-Tclbenzene	13.814	180	281202	52.02	ppb	99
119) 2,4,5-Trichlorotolene	14.400	159	126924	47.37	ppb	96
120) 2,3,6-Trichlorotoluene	14.485	159	120705	40.36	ppb	95

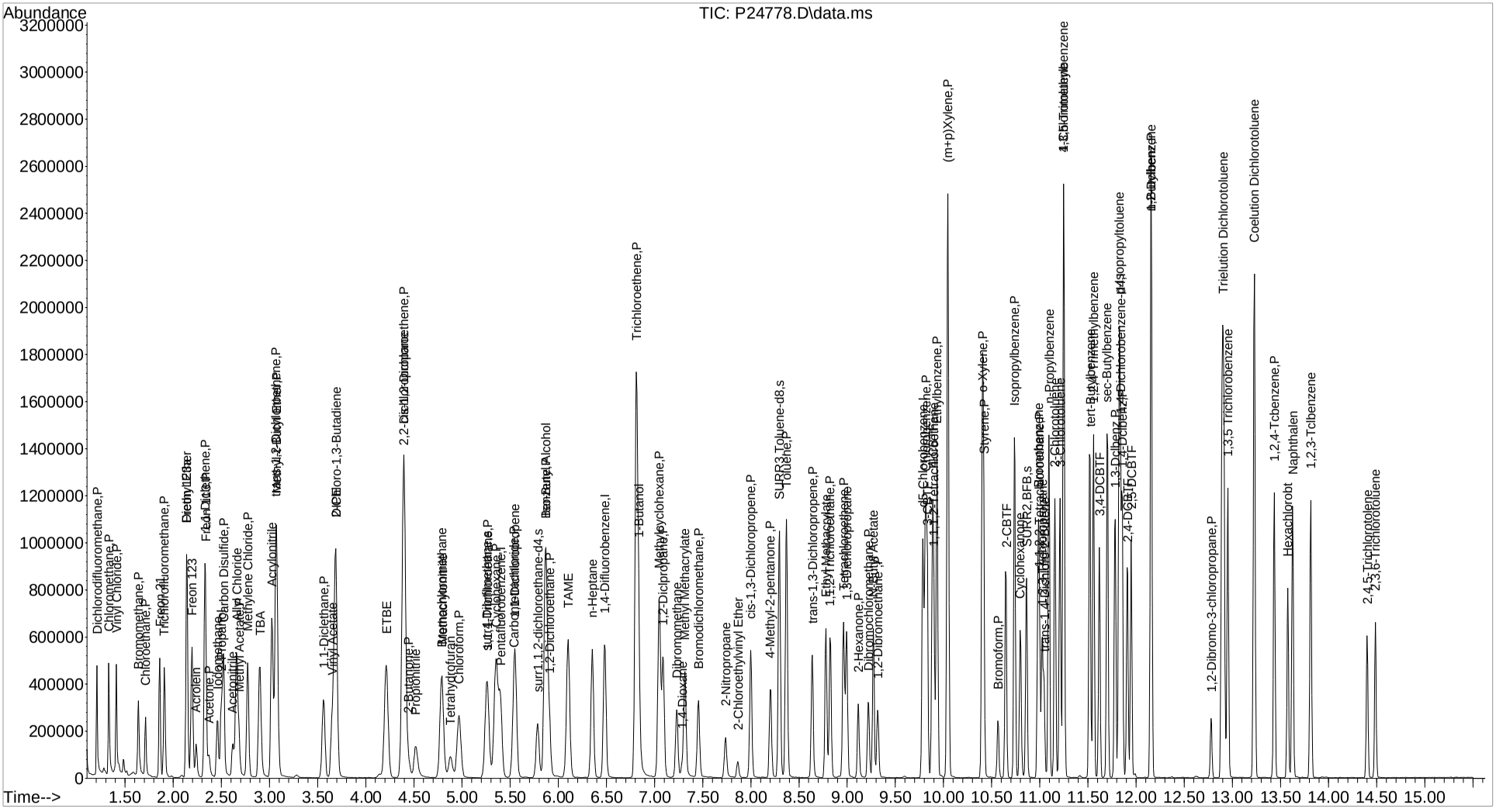
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24778.D
Acq On : 7 Mar 2019 8:15 pm
Operator : K.Ruest
Sample : R1901880-001DMS|200 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 21 Sample Multiplier: 1

1st 03/12/19
2nd 03/12/19

Quant Time: Mar 12 11:07:04 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24754.D
Acq On : 7 Mar 2019 11:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 11:21:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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	Pentafluorobenzene	1.0000	1.0000	0.0	105	0.01
2	P	Dichlorodifluoromethane	0.6056	0.6543	-8.0	102	0.00
3	P	Chloromethane	0.8095	0.7833	3.2	101	0.01
4	P	Vinyl Chloride	0.7267	0.7810	-7.5	103	0.00
5	P	Bromomethane	0.5125	0.4119	5.6 ~~-19.6~~	103	0.01
6	P	Chloroethane	0.4398	0.4357	0.9	105	0.01
7		Freon 21	0.9175	0.9319	-1.6	98	0.00
8	P	Trichlorofluoromethane	0.7050	0.6660	5.5	98	0.01
9		Diethyl Ether	0.5392	0.5249	2.7	98	0.00
10		Freon 123a	0.5846	0.5871	-0.4	100	0.01
11		Freon 123	0.6713	0.6528	2.8	98	0.00
12		Acrolein	0.1378	0.1403	-1.8	106	0.01
13	P	1,1-Diclethene	0.4664	0.4623	0.9	100	0.01
14	P	Freon 113	0.4154	0.4044	2.6	104	0.01
15	P	Acetone	0.2394	0.2148	10.3	86	0.00
16		2-Propanol	0.0622	0.0412	33.8#	69	0.00
17		Iodomethane	0.5130	0.6077	9.4 ~~-18.5~~	91	0.01
18	P	Carbon Disulfide	1.3974	1.4285	-2.2	106	0.00
19		Acetonitrile	0.0305	0.0321	-5.2	89	0.01
20		Allyl Chloride	0.2790	0.2935	-5.2	103	0.00
21	P	Methyl Acetate	0.6500	0.5516	15.1	81	0.00
22	P	Methylene Chloride	0.5806	0.5502	5.2	99	0.00
23		TBA	0.0988	0.0699	29.3#	72	0.00
24		Acrylonitrile	0.3159	0.2807	11.1	87	0.00
25	P	Methyl-t-Butyl Ether	1.8063	1.7069	5.5	95	0.00
26	P	trans-1,2-Dichloroethene	0.5189	0.5081	2.1	100	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-4.08#
28	P	1,1-Diclethane	0.9623	1.0011	-4.0	102	0.01
29		Vinyl Acetate	0.1188	0.1314	-10.6	117	0.00
30		DIPE	1.7415	1.8193	-4.5	102	0.00
31		2-Chloro-1,3-Butadiene	0.7526	0.7824	-4.0	108	0.00
32		ETBE	1.7407	1.7396	0.1	100	0.00
33		2,2-Dichloropropane	0.7578	0.7414	2.2	104	0.00
34	P	cis-1,2-Dichloroethene	0.5817	0.5701	2.0	100	0.00
35	P	2-Butanone	0.4024	0.3373	16.2	88	0.00
36		Propionitrile	0.1309	0.1072	18.1	78	0.00
37		Bromochloromethane	0.3611	0.3391	6.1	95	0.00
38		Methacrylonitrile	0.3406	0.2923	14.2	86	0.00
39		Tetrahydrofuran	0.2607	0.2139	18.0	82	0.01
40	P	Chloroform	0.8638	0.8559	0.9	101	0.00
41	P	1,1,1-Trichloroethane	0.6725	0.6621	1.5	98	0.00
42		TAME	1.6509	1.6052	2.8	94	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	108	0.00
44	P	Cyclohexane	0.2931	0.2950	-0.6	104	0.00
45	s	surr4,Dibrflmethane	0.2748	0.2898	-5.5	110	0.00
46	P	Carbontetrachloride	0.3330	0.3121	6.3	97	0.00
47		1,1-Dichloropropene	0.4272	0.4183	2.1	103	0.00
48	s	surr1,1,2-dichloroethane-d4	0.3485	0.3736	-7.2	112	0.00
49	P	Benzene	1.4282	1.3686	4.2	100	0.00
50	P	1,2-Dichloroethane	0.4573	0.4412	3.5	98	0.00
51		Iso-Butyl Alcohol	0.0299	0.0212	29.1#	73	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24754.D
Acq On : 7 Mar 2019 11:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 11:21:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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)
52		n-Heptane	0.4352	0.4448	-2.2	114	0.00
53		1-Butanol	0.0198	0.0142	NT28.3#	70	0.00
54	P	Trichloroethene	0.3497	0.3196	8.6	93	0.00
55	P	Methylcyclohexane	0.4413	0.4308	2.4	100	0.00
56	P	1,2-Diclpropane	0.3796	0.3704	2.4	103	0.00
57		Dibromomethane	0.2148	0.2028	5.6	97	0.00
58		1,4-Dioxane	0.0068	0.0046	32.4#	73	-0.05
59		Methyl Methacrylate	0.3391	0.2987	11.9	90	0.00
60	P	Bromodichloromethane	0.3994	0.3797	4.9	99	0.00
61		2-Nitropropane	0.0793	0.0719	9.3	97	0.00
62		2-Chloroethylvinyl Ether	0.1132	0.0793	~~29.9#~~	67	0.00
63	P	cis-1,3-Dichloropropene	0.5646	0.5564	1.5	98	0.00
64	P	4-Methyl-2-pentanone	0.4816	0.4087	15.1	89	0.00
65	s	SURR3,Toluene-d8	1.3033	1.3210	-1.4	108	0.00
66	P	Toluene	1.4790	1.4253	3.6	99	0.00
67	P	trans-1,3-Dichloropropene	0.4944	0.4973	-0.6	98	0.00
68		Ethyl Methacrylate	0.5694	0.5374	5.6	92	0.00
69	P	1,1,2-Trichloroethane	0.3465	0.3136	9.5	95	0.00
70	s	SURR2,BFB	0.4668	0.4673	-0.1	107	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	106	0.00
72	P	Tetrachloroethene	0.2994	0.2676	10.6	97	0.00
73	P	2-Hexanone	0.4030	0.3269	18.9	86	0.00
74		1,3-Dichloropropane	0.7201	0.6586	8.5	95	0.00
75	P	Dibromochloromethane	0.3359	0.3132	6.8	96	0.00
76		N-Butyl Acetate	0.7358	0.6708	8.8	90	0.00
77	P	1,2-Dibromoethane	0.3927	0.3517	10.4	92	0.00
78	P	Chlorobenzene	1.0703	0.9825	8.2	98	0.00
79		3-CBTF	0.5218	0.4878	6.5	95	0.00
80		4-CBTF	0.4717	0.4388	7.0	94	0.00
81		1,1,1,2-Tetrachloroethane	0.3464	0.3127	9.7	94	0.00
82	P	Ethylbenzene	0.5771	0.5352	7.3	99	0.00
83	P	(m+p)Xylene	0.7057	0.6554	7.1	99	0.00
84	P	o-Xylene	0.6943	0.6546	5.7	100	0.00
85	P	Styrene	1.1252	1.1192	0.5	100	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	106	0.00
87	P	Bromoform	0.4222	0.3781	10.4	90	0.00
88		2-CBTF	1.0263	0.9110	11.2	93	0.00
89	P	Isopropylbenzene	3.2888	3.1140	5.3	100	0.00
90		Cyclohexanone	0.2085	0.1555	25.4#	73	0.00
91		trans-1,4-Dichloro-2-Butene	0.2722	0.2233	18.0	86	0.00
92	P	1,1,2,2-Tetrachloroethane	1.0971	0.9666	11.9	91	0.00
93		Bromobenzene	0.8848	0.7880	10.9	96	0.00
94		1,2,3-Trichloropropane	0.3480	0.3028	13.0	87	0.00
95		n-Propylbenzene	3.7678	3.6961	1.9	103	0.00
96		2-Chlorotoluene	2.3743	2.2668	4.5	102	0.00
97		3-Chlorotoluene	2.3228	2.2296	4.0	97	0.00
98		4-Chlorotoluene	2.6479	2.5353	4.3	102	0.00
99		1,3,5-Trimethylbenzene	2.7293	2.5939	5.0	101	0.00
100		tert-Butylbenzene	2.3741	2.2607	4.8	99	0.00
101		1,2,4-Trimethylbenzene	2.8232	2.6590	5.8	101	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24754.D
Acq On : 7 Mar 2019 11:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 11:21:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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)
102		3,4-DCBTF	0.8462	0.7787	8.0	97	0.00
103		sec-Butylbenzene	3.4421	3.3969	1.3	103	0.00
104		p-Isopropyltoluene	2.8587	2.8097	1.7	102	0.00
105	P	1,3-Dclbenz	1.6112	1.5145	6.0	99	0.00
106	P	1,4-Dclbenz	1.7003	1.5280	10.1	98	0.00
107		2,4-DCBTF	0.7750	0.6988	9.8	94	0.00
108		2,5-DCBTF	0.8739	0.8155	6.7	100	0.00
109		n-Butylbenzene	2.5058	2.6949	-7.5	107	0.00
110	P	1,2-Dclbenz	1.6482	1.5338	6.9	99	0.00
111	P	1,2-Dibromo-3-chloropropane	0.2703	0.2065	23.6#	76	0.00
112		Trielution Dichlorotoluene	1.3558	1.3865	-2.3	104	0.00
113		1,3,5 Trichlorobenzene	1.1864	1.1658	1.7	107	0.00
114		Coelution Dichlorotoluene	1.4956	1.5337	-2.5	105	0.00
115	P	1,2,4-Tcbenzene	1.1561	1.1686	-1.1	105	0.00
116		Hexachlorobt	0.4875	0.4282	12.2	107	0.00
117		Naphthalen	3.3933	3.2772	19.8 ~~-3.4~~	87	0.00
118		1,2,3-Tclbenzene	1.1924	1.1512	3.5	100	0.00
119		2,4,5-Trichlorotolene	0.5335	0.5737	~~-7.5~~ 3.4	98	0.00
120		2,3,6-Trichlorotoluene	0.6055	0.6574	~~-8.6~~ 3.7	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24754.D
Acq On : 7 Mar 2019 11:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 11:21:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.407	168	347968	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	558549	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	494060	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	255662	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.261	113	161881	52.74	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 105.48%				
48) surr1,1,2-dichloroetha...	5.792	65	208661	53.60	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 107.20%				
65) SURR3,Toluene-d8	8.297	98	737868	50.68	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.36%				
70) SURR2,BFB	10.864	95	261011	50.06	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.12%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	227667	54.02	ppb		99
3) Chloromethane	1.341	50	272556	48.38	ppb		98
4) Vinyl Chloride	1.414	62	271773	53.74	ppb		95
5) Bromomethane	1.652	94	143319	47.18	ppb		96
6) Chloroethane	1.725	64	151598	49.53	ppb		96
7) Freon 21	1.865	67	324258	50.78	ppb		99
8) Trichlorofluoromethane	1.920	101	231762	47.24	ppb		99
9) Diethyl Ether	2.146	59	182638	48.67	ppb		98
10) Freon 123a	2.152	67	204308	50.22	ppb		100
11) Freon 123	2.201	83	227162	48.62	ppb		99
12) Acrolein	2.250	56	244067	254.53	ppb		98
13) 1,1-Diclethene	2.341	96	160858	49.56	ppb		91
14) Freon 113	2.347	101	140713	48.68	ppb		95
15) Acetone	2.378	43	74760	44.86	ppb		97
16) 2-Propanol	2.506	45	286425	662.12	ppb		98
17) Iodomethane	2.469	142	211446	45.28	ppb		98
18) Carbon Disulfide	2.530	76	497083	51.11	ppb		98
19) Acetonitrile	2.628	40	55782	262.64	ppb		91
20) Allyl Chloride	2.664	76	102125	52.59	ppb		94
21) Methyl Acetate	2.689	43	191922	42.42	ppb		99
22) Methylene Chloride	2.780	84	191441	47.38	ppb		96
23) TBA	2.902	59	486490	707.62	ppb		93
24) Acrylonitrile	3.030	53	488290	222.08	ppb		98
25) Methyl-t-Butyl Ether	3.085	73	593962	47.25	ppb		100
26) trans-1,2-Dichloroethene	3.073	96	176811	48.96	ppb		93
28) 1,1-Diclethane	3.572	63	348351	52.02	ppb		99
29) Vinyl Acetate	3.658	86	45731	55.32	ppb	#	80
30) DIPE	3.694	45	633068	52.23	ppb		99
31) 2-Chloro-1,3-Butadiene	3.694	53	272267	51.99	ppb		99
32) ETBE	4.219	59	605309	49.97	ppb		93
33) 2,2-Dichloropropane	4.402	77	257996	48.92	ppb		97
34) cis-1,2-Dichloroethene	4.402	96	198393	49.01	ppb		99
35) 2-Butanone	4.444	43	117363	41.91	ppb		93
36) Propionitrile	4.524	54	186543	204.77	ppb		99
37) Bromochloromethane	4.792	130	118007	46.95	ppb		94
38) Methacrylonitrile	4.798	67	101707	42.91	ppb		97
39) Tetrahydrofuran	4.889	42	74439	41.03	ppb		94
40) Chloroform	4.975	83	297828	49.54	ppb		95
41) 1,1,1-Trichloroethane	5.267	97	230389	49.23	ppb		97

1st 03/07/19
2nd 03/12/19

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24754.D
Acq On : 7 Mar 2019 11:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 11:21:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.109	73	558545	48.62	ppb	99
44) Cyclohexane	5.359	41	164791	50.32	ppb	98
46) Carbontetrachloride	5.548	117	174312	46.86	ppb	98
47) 1,1-Dichloropropene	5.560	75	233658	48.97	ppb	99
49) Benzene	5.871	78	764438	47.91	ppb	99
50) 1,2-Dichloroethane	5.907	62	246450	48.25	ppb	97
51) Iso-Butyl Alcohol	5.877	43	236724	707.79	ppb	99
52) n-Heptane	6.359	43	248459	51.11	ppb	97
53) 1-Butanol	6.834	56	396719	1797.17	ppb	98
54) Trichloroethene	6.810	130	178504	45.69	ppb	97
55) Methylcyclohexane	7.047	55	240610	48.81	ppb	92
56) 1,2-Diclpropane	7.090	63	206867	48.79	ppb	97
57) Dibromomethane	7.230	93	113291	47.20	ppb	93
58) 1,4-Dioxane	7.291	88	51503	680.91	ppb	82
59) Methyl Methacrylate	7.316	69	166843	44.04	ppb	92
60) Bromodichloromethane	7.462	83	212072	47.53	ppb	98
61) 2-Nitropropane	7.736	41	80311	90.68	ppb	99
62) 2-Chloroethylvinyl Ether	7.864	63	44306	34.43	ppb	96
63) cis-1,3-Dichloropropene	7.998	75	310755	49.27	ppb	97
64) 4-Methyl-2-pentanone	8.206	43	228298	42.44	ppb	95
66) Toluene	8.370	91	796087	48.18	ppb	99
67) trans-1,3-Dichloropropene	8.639	75	277755	50.29	ppb	96
68) Ethyl Methacrylate	8.779	69	300170	47.19	ppb	99
69) 1,1,2-Trichloroethane	8.828	97	175163	45.25	ppb	98
72) Tetrachloroethene	8.962	164	132209	44.69	ppb	85
73) 2-Hexanone	9.114	43	161519	40.56	ppb	98
74) 1,3-Dichloropropane	8.998	76	325381	45.73	ppb	95
75) Dibromochloromethane	9.224	129	154725	46.62	ppb	92
76) N-Butyl Acetate	9.273	43	331404	45.58	ppb	95
77) 1,2-Dibromoethane	9.321	107	173757	44.78	ppb	100
78) Chlorobenzene	9.815	112	485438	45.90	ppb	99
79) 3-CBTF	9.833	180	240999	46.74	ppb	98
80) 4-CBTF	9.888	180	216817	46.51	ppb	94
81) 1,1,1,2-Tetrachloroethane	9.901	131	154499	45.13	ppb	98
82) Ethylbenzene	9.931	106	264431	46.37	ppb	99
83) (m+p)Xylene	10.047	106	647580	92.87	ppb	100
84) o-Xylene	10.407	106	323414	47.14	ppb	98
85) Styrene	10.419	104	552928	49.73	ppb	99
87) Bromoform	10.565	173	96673	44.78	ppb	98
88) 2-CBTF	10.650	180	232920	44.38	ppb	99
89) Isopropylbenzene	10.742	105	796125	47.34	ppb	100
90) Cyclohexanone	10.803	55	794983	745.84	ppb	100
91) trans-1,4-Dichloro-2-B...	11.047	53	57079	41.01	ppb	90
92) 1,1,2,2-Tetrachloroethane	10.998	83	247130	44.05	ppb	99
93) Bromobenzene	10.986	156	201458	44.53	ppb	93
94) 1,2,3-Trichloropropane	11.028	110	77410	43.50	ppb	99
95) n-Propylbenzene	11.095	91	944940	49.05	ppb	98
96) 2-Chlorotoluene	11.156	91	579524	47.73	ppb	98
97) 3-Chlorotoluene	11.211	91	570033	48.00	ppb	99
98) 4-Chlorotoluene	11.248	91	648191	47.88	ppb	96
99) 1,3,5-Trimethylbenzene	11.248	105	663160	47.52	ppb	99
100) tert-Butylbenzene	11.522	119	577966	47.61	ppb	98
101) 1,2,4-Trimethylbenzene	11.559	105	679806	47.09	ppb	99
102) 3,4-DCBTF	11.620	214	199077	46.01	ppb	95
103) sec-Butylbenzene	11.705	105	868470	49.34	ppb	98
104) p-Isopropyltoluene	11.827	119	718329	49.14	ppb	99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24754.D
Acq On : 7 Mar 2019 11:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 11:21:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.784	146	387199	47.00	ppb	98
106) 1,4-Dclbenz	11.857	146	390663	44.94	ppb	99
107) 2,4-DCBTF	11.912	214	178657	45.08	ppb	96
108) 2,5-DCBTF	11.949	214	208501	46.66	ppb	98
109) n-Butylbenzene	12.156	91	688984	53.77	ppb	97
110) 1,2-Dclbenz	12.156	146	392132	46.53	ppb	100
111) 1,2-Dibromo-3-chloropr...	12.784	157	52803	38.20	ppb	93
112) Trielution Dichlorotol...	12.900	125	1063464	153.40	ppb	98
113) 1,3,5 Trichlorobenzene	12.955	180	298052	49.13	ppb	99
114) Coelution Dichlorotoluene	13.229	125	784242	102.55	ppb	97
115) 1,2,4-Tcbenzene	13.436	180	298778	50.54	ppb	99
116) Hexachlorobt	13.577	225	109476	43.92	ppb	99
117) Naphthalen	13.625	128	837867	40.11	ppb	99
118) 1,2,3-Tclbenzene	13.814	180	294308	48.27	ppb	97
119) 2,4,5-Trichlorotolene	14.400	159	146671	48.32	ppb	98
120) 2,3,6-Trichlorotoluene	14.485	159	168061	48.13	ppb	94

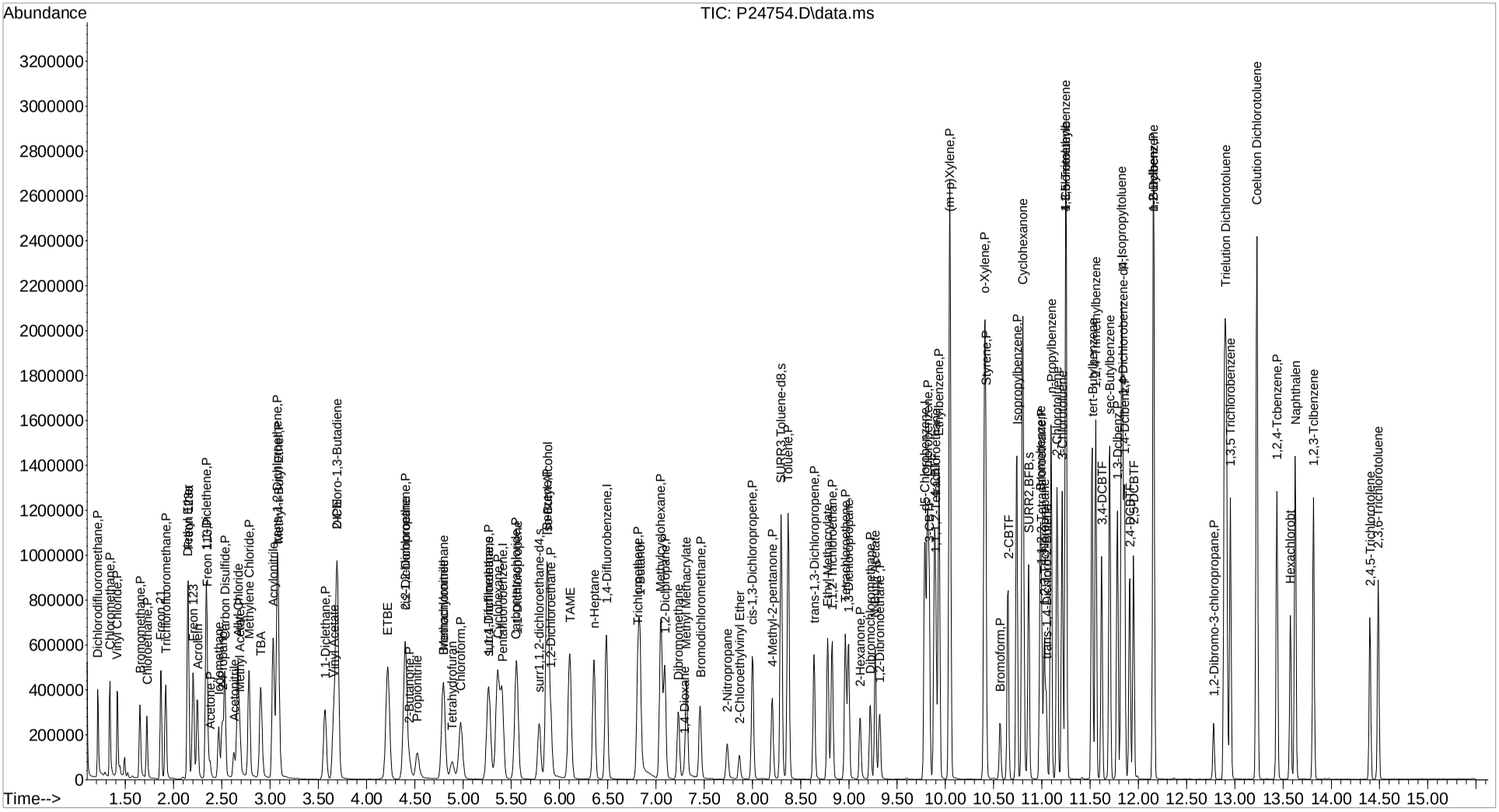
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24754.D
Acq On : 7 Mar 2019 11:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

1st 03/07/19
2nd 03/12/19

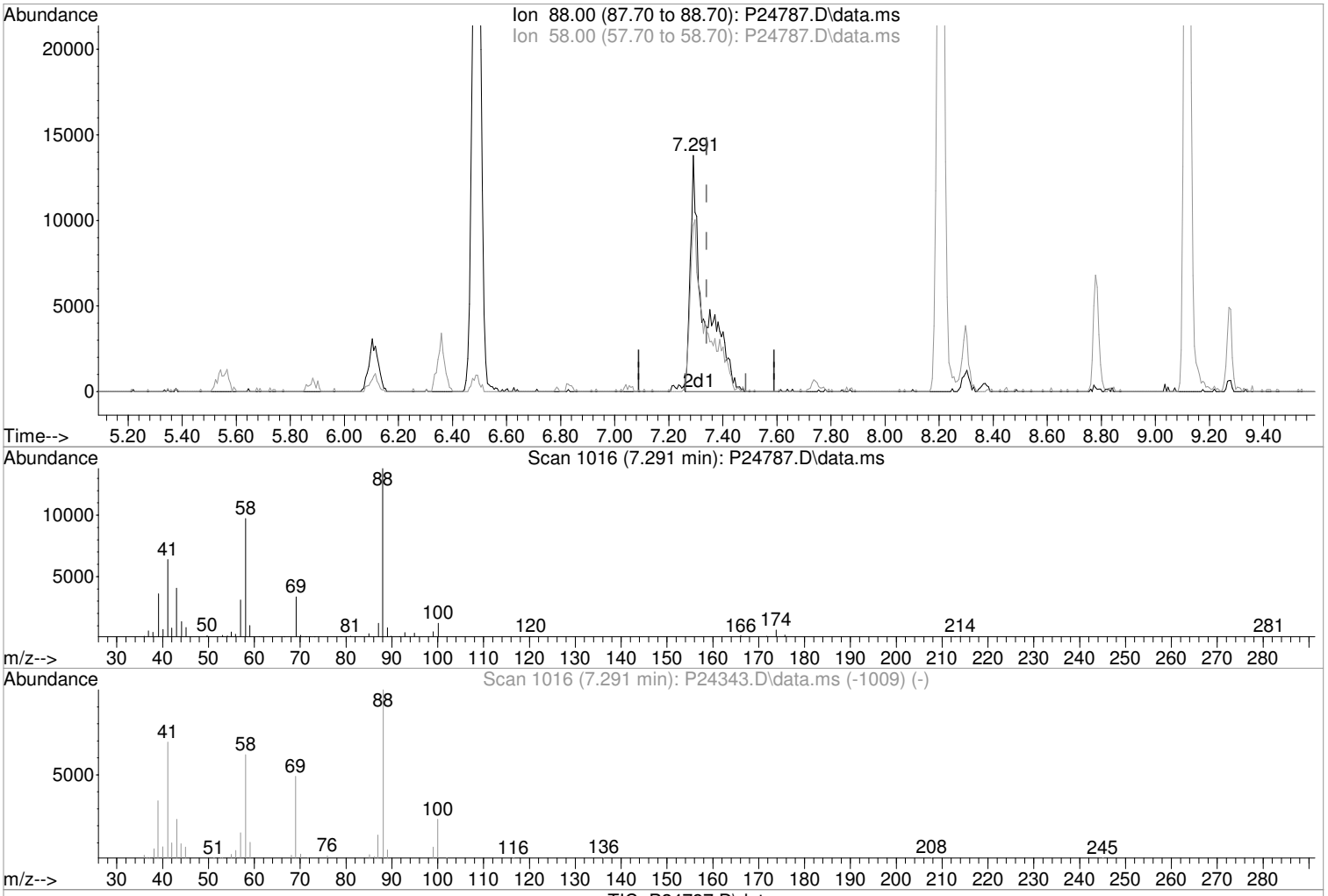
Quant Time: Mar 07 11:21:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24787.D
Acq On : 8 Mar 2019 11:51 am
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 08 12:14:29 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



TIC: P24787.D\data.ms

(58) 1,4-Dioxane

7.291min (-0.049) 667.88 ppb m

response 49993

Ion	Exp%	Act%
88.00	100	100
58.00	63.20	70.46
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

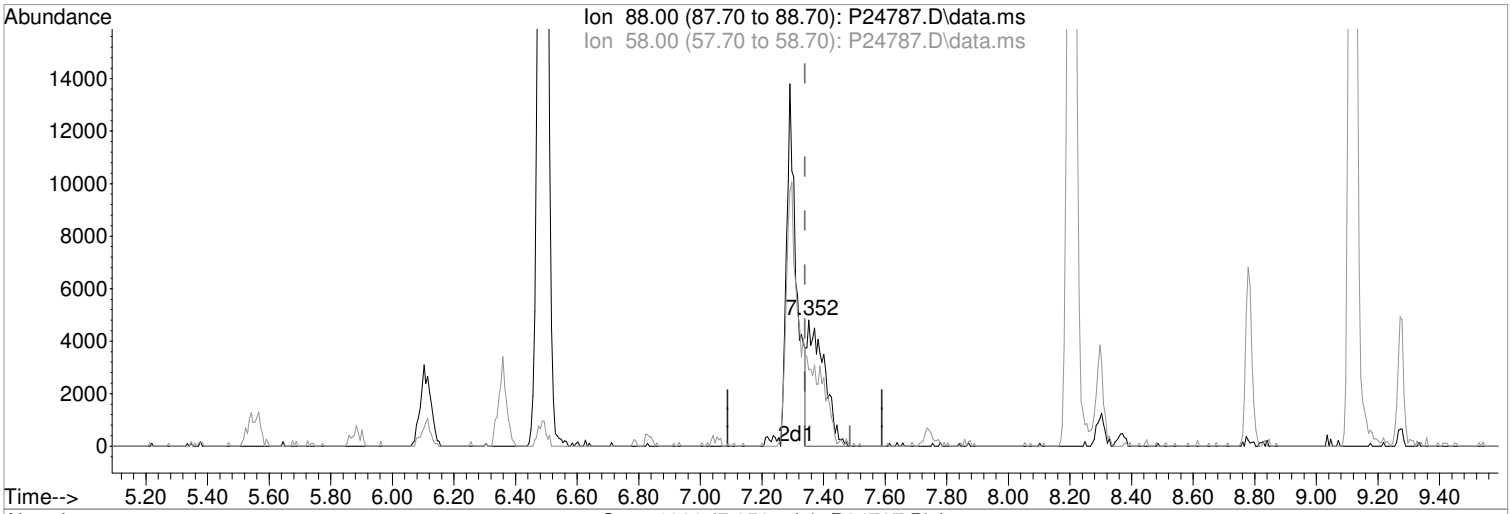
Poor integration.

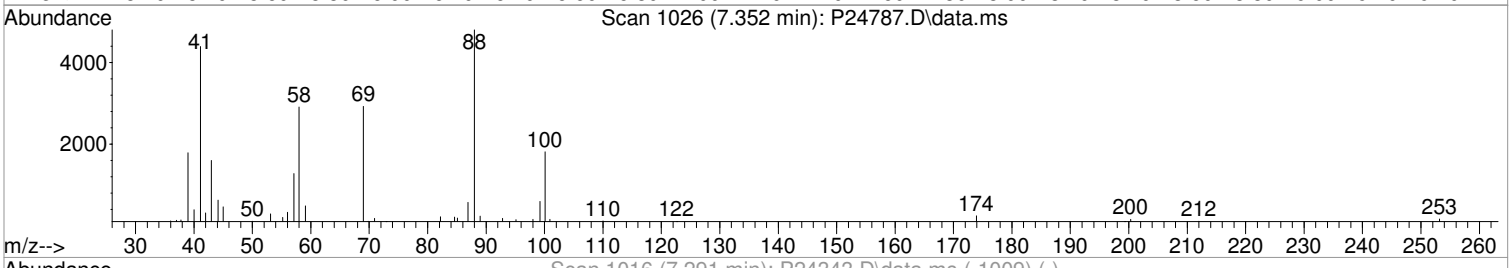
03/08/19

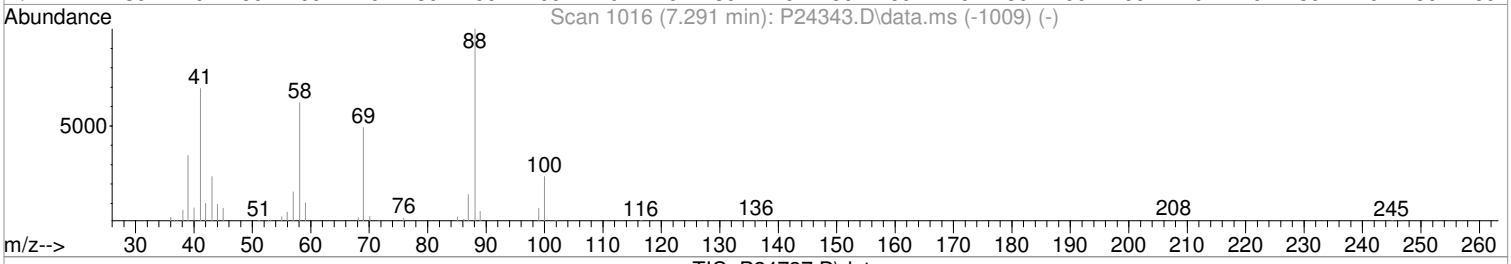
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24787.D
Acq On : 8 Mar 2019 11:51 am
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 08 12:14:29 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration







TIC: P24787.D\data.ms

(58) 1,4-Dioxane

7.352min (+0.012) 248.36 ppb

response 18591

Ion	Exp%	Act%
88.00	100	100
58.00	63.20	60.59
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

03/08/19

1st FW 03/08/19
2nd WR 03/12/19

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24787.D
Acq On : 8 Mar 2019 11:51 am
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 08 12:15:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
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	Amount	Calc.	%Dev	Area%	Dev(min)	
1	I	Pentafluorobenzene	50.000	50.000	0.0	102	0.01	
2	P	Dichlorodifluoromethane	50.000	51.859	-3.7	95	0.01	
3	P	Chloromethane	50.000	49.041	1.9	100	0.02	
4	P	Vinyl Chloride	50.000	53.003	-6.0	98	0.01	
5	P	Bromomethane	50.000	47.220	5.6	100	0.02	
6	P	Chloroethane	50.000	49.600	0.8	102	0.02	
7		Freon 21	50.000	56.732	-13.5	106	0.02	
8	P	Trichlorofluoromethane	50.000	47.150	5.7	94	0.02	
9		Diethyl Ether	50.000	49.714	0.6	97	0.01	
10		Freon 123a	50.000	56.621	-13.2	109	0.02	
11		Freon 123	50.000	54.891	-9.8	108	0.01	
12		Acrolein	250.000	243.639	2.5	98	0.02	
13	P	1,1-Diclethene	50.000	49.073	1.9	96	0.02	
14	P	Freon 113	50.000	48.592	2.8	100	0.01	
15	P	Acetone	50.000	40.926	18.1	76	0.01	
16		2-Propanol	1000.000	623.439	37.7#	63	0.00	NT
17		Iodomethane	50.000	44.912	10.2	88	0.02	
18	P	Carbon Disulfide	50.000	51.221	-2.4	103	0.01	
19		Acetonitrile	250.000	256.806	-2.7	84	0.01	
20		Allyl Chloride	50.000	49.633	0.7	95	0.01	
21	P	Methyl Acetate	50.000	43.555	12.9	81	0.01	
22	P	Methylene Chloride	50.000	46.322	7.4	94	0.01	
23		TBA	1000.000	699.223	30.1#	69	0.00	NT
24		Acrylonitrile	250.000	225.068	10.0	85	0.00	
25	P	Methyl-t-Butyl Ether	50.000	47.716	4.6	93	0.01	
26	P	trans-1,2-Dichloroethene	50.000	48.012	4.0	95	0.02	
27		Halothane	-1.000	0.000	0.0	0	-4.08#	
28	P	1,1-Diclethane	50.000	51.490	-3.0	98	0.01	
29		Vinyl Acetate	50.000	53.332	-6.7	109	0.02	
30		DIPE	50.000	56.224	-12.4	106	0.01	
31		2-Chloro-1,3-Butadiene	50.000	51.589	-3.2	103	0.01	
32		ETBE	50.000	53.046	-6.1	103	0.01	
33		2,2-Dichloropropane	50.000	48.798	2.4	101	0.01	
34	P	cis-1,2-Dichloroethene	50.000	49.299	1.4	97	0.01	
35	P	2-Butanone	50.000	41.300	17.4	84	0.01	
36		Propionitrile	250.000	202.372	19.1	75	0.00	
37		Bromochloromethane	50.000	47.421	5.2	93	0.01	
38		Methacrylonitrile	50.000	43.562	12.9	85	0.01	
39		Tetrahydrofuran	50.000	41.684	16.6	81	0.02	
40	P	Chloroform	50.000	49.648	0.7	98	0.01	
41	P	1,1,1-Trichloroethane	50.000	49.022	2.0	95	0.00	
42		TAME	50.000	51.487	-3.0	97	0.00	
43	I	1,4-Difluorobenzene	50.000	50.000	0.0	107	0.00	
44	P	Cyclohexane	50.000	56.329	-12.7	115	0.00	
45	s	surr4,Dibrflmethane	50.000	51.467	-2.9	106	0.01	
46	P	Carbontetrachloride	50.000	45.914	8.2	94	0.01	
47		1,1-Dichloropropene	50.000	47.765	4.5	99	0.00	
48	s	surr1,1,2-dichloroethane-d4	50.000	53.009	-6.0	109	0.00	
49	P	Benzene	50.000	46.841	6.3	96	0.01	
50	P	1,2-Dichloroethane	50.000	48.048	3.9	96	0.00	
51		Iso-Butyl Alcohol	1000.000	713.498	28.7#	73	0.00	NT

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24787.D
Acq On : 8 Mar 2019 11:51 am
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 08 12:15:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
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	Amount	Calc.	%Dev	Area%	Dev(min)	
52		n-Heptane	50.000	51.942	-3.9	115	0.00	
53		1-Butanol	2500.000	1761.580	29.5#	68	0.00	NT
54	P	Trichloroethene	50.000	44.163	11.7	89	0.00	
55	P	Methylcyclohexane	50.000	57.183	-14.4	116	0.00	
56	P	1,2-Diclpropane	50.000	48.486	3.0	101	0.00	
57		Dibromomethane	50.000	45.541	8.9	92	0.00	
58		1,4-Dioxane	1000.000	667.875	33.2#	70	-0.05	(1)
59		Methyl Methacrylate	50.000	43.610	12.8	89	0.00	
60	P	Bromodichloromethane	50.000	47.587	4.8	98	0.00	
61		2-Nitropropane	100.000	88.326	11.7	94	0.00	
62		2-Chloroethylvinyl Ether	50.000	30.745	38.5#	59	0.00	NT
63	P	cis-1,3-Dichloropropene	50.000	48.541	2.9	95	0.00	
64	P	4-Methyl-2-pentanone	50.000	40.711	18.6	84	0.00	
65	s	SURR3,Toluene-d8	50.000	49.808	0.4	105	0.00	
66	P	Toluene	50.000	47.218	5.6	96	0.00	
67	P	trans-1,3-Dichloropropene	50.000	50.074	-0.1	96	0.00	
68		Ethyl Methacrylate	50.000	46.233	7.5	89	0.00	
69	P	1,1,2-Trichloroethane	50.000	44.590	10.8	93	0.00	
70	s	SURR2,BFB	50.000	50.284	-0.6	107	0.00	
71	I	d5-Chlorobenzene	50.000	50.000	0.0	103	0.00	
72	P	Tetrachloroethene	50.000	45.373	9.3	95	0.00	
73	P	2-Hexanone	50.000	40.186	19.6	83	0.00	
74		1,3-Dichloropropane	50.000	46.279	7.4	94	0.00	
75	P	Dibromochloromethane	50.000	46.069	7.9	93	0.00	
76		N-Butyl Acetate	50.000	46.783	6.4	90	0.00	
77	P	1,2-Dibromoethane	50.000	44.931	10.1	90	0.00	
78	P	Chlorobenzene	50.000	46.199	7.6	96	0.00	
79		3-CBTF	50.000	51.055	-2.1	101	0.00	
80		4-CBTF	50.000	51.730	-3.5	101	0.00	
81		1,1,1,2-Tetrachloroethane	50.000	45.602	8.8	93	0.00	
82	P	Ethylbenzene	50.000	46.403	7.2	97	0.00	
83	P	(m+p)Xylene	100.000	93.803	6.2	98	0.00	
84	P	o-Xylene	50.000	47.740	4.5	98	0.00	
85	P	Styrene	50.000	49.322	1.4	96	0.00	
86	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	103	0.00	
87	P	Bromoform	50.000	43.585	12.8	85	0.00	
88		2-CBTF	50.000	48.119	3.8	97	0.00	
89	P	Isopropylbenzene	50.000	47.862	4.3	98	0.00	
90		Cyclohexanone	1000.000	764.114	23.6#	73	0.00	NT
91		trans-1,4-Dichloro-2-Butene	50.000	42.649	14.7	86	0.00	
92	P	1,1,2,2-Tetrachloroethane	50.000	44.984	10.0	90	0.00	
93		Bromobenzene	50.000	45.293	9.4	95	0.00	
94		1,2,3-Trichloropropane	50.000	43.812	12.4	85	0.00	
95		n-Propylbenzene	50.000	49.761	0.5	101	0.00	
96		2-Chlorotoluene	50.000	48.490	3.0	100	0.00	
97		3-Chlorotoluene	50.000	52.383	-4.8	102	0.00	
98		4-Chlorotoluene	50.000	48.659	2.7	100	0.00	
99		1,3,5-Trimethylbenzene	50.000	48.554	2.9	100	0.00	
100		tert-Butylbenzene	50.000	48.215	3.6	97	0.00	
101		1,2,4-Trimethylbenzene	50.000	48.178	3.6	100	0.00	

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24787.D
Acq On : 8 Mar 2019 11:51 am
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 08 12:15:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
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	Amount	Calc.	%Dev	Area%	Dev(min)	
102		3,4-DCBTF	50.000	49.085	1.8	100	0.00	
103		sec-Butylbenzene	50.000	50.076	-0.2	101	0.00	
104		p-Isopropyltoluene	50.000	49.846	0.3	100	0.00	
105	P	1,3-Dclbenz	50.000	47.676	4.6	97	0.00	
106	P	1,4-Dclbenz	50.000	46.139	7.7	97	0.00	
107		2,4-DCBTF	50.000	50.066	-0.1	101	0.00	
108		2,5-DCBTF	50.000	49.203	1.6	102	0.00	
109		n-Butylbenzene	50.000	54.801	-9.6	106	0.00	
110	P	1,2-Dclbenz	50.000	47.213	5.6	97	0.00	
111	P	1,2-Dibromo-3-chloropropane	50.000	39.288	21.4#	76	0.00	(2)
112		Trielution Dichlorotoluene	150.000	165.674	-10.4	109	0.00	
113		1,3,5 Trichlorobenzene	50.000	52.437	-4.9	111	0.00	
114		Coelution Dichlorotoluene	100.000	108.840	-8.8	108	0.00	
115	P	1,2,4-Tcbenzene	50.000	51.962	-3.9	105	0.00	
116		Hexachlorobt	50.000	45.560	8.9	108	0.00	
117		Naphthalen	50.000	40.463	19.1	84	0.00	
118		1,2,3-Tclbenzene	50.000	49.741	0.5	99	0.00	
119		2,4,5-Trichlorotolene	50.000	48.104	3.8	95	0.00	
120		2,3,6-Trichlorotoluene	50.000	47.546	4.9	95	0.00	

(#) = Out of Range SPCC's out = 0 CCC's out = 0

1st FNJ 03/08/19
2nd WR 03/12/19

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24787.D
Acq On : 8 Mar 2019 11:51 am
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 08 12:15:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.408	168	337032	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	552755	50.00	ppb		0.00
71) d5-Chlorobenzene	9.791	117	480658	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	247185	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.267	113	156332	51.47	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.94%				
48) surr1,1,2-dichloroetha...	5.792	65	204239	53.01	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 106.02%				
65) SURR3,Toluene-d8	8.297	98	717650	49.81	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.62%				
70) SURR2,BFB	10.864	95	259485	50.28	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.56%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.219	85	211679	51.86	ppb		98
3) Chloromethane	1.347	50	267587	49.04	ppb		96
4) Vinyl Chloride	1.421	62	259636	53.00	ppb		96
5) Bromomethane	1.658	94	138942	47.22	ppb		97
6) Chloroethane	1.731	64	147051	49.60	ppb		97
7) Freon 21	1.878	67	350854	56.73	ppb		99
8) Trichlorofluoromethane	1.927	101	224065	47.15	ppb		97
9) Diethyl Ether	2.152	59	180684	49.71	ppb		97
10) Freon 123a	2.158	67	223111	56.62	ppb		99
11) Freon 123	2.207	83	248399	54.89	ppb		100
12) Acrolein	2.256	56	226279	243.64	ppb		98
13) 1,1-Diclethene	2.347	96	154272	49.07	ppb		98
14) Freon 113	2.347	101	136050	48.59	ppb		89
15) Acetone	2.384	43	66056	40.93	ppb		92
16) 2-Propanol	2.506	45	261218	623.44	ppb		98
17) Iodomethane	2.475	142	203017	44.91	ppb		99
18) Carbon Disulfide	2.536	76	482477	51.22	ppb		99
19) Acetonitrile	2.628	40	52828	256.81	ppb	#	80
20) Allyl Chloride	2.670	76	93358	49.63	ppb	#	88
21) Methyl Acetate	2.695	43	190845	43.56	ppb		99
22) Methylene Chloride	2.786	84	181284	46.32	ppb		92
23) TBA	2.908	59	465608	699.22	ppb		95
24) Acrylonitrile	3.036	53	479312	225.07	ppb		100
25) Methyl-t-Butyl Ether	3.091	73	580965	47.72	ppb		99
26) trans-1,2-Dichloroethene	3.085	96	167924	48.01	ppb		95
28) 1,1-Diclethane	3.573	63	333984	51.49	ppb		99
29) Vinyl Acetate	3.670	86	42705	53.33	ppb		100
30) DIPE	3.701	45	660009	56.22	ppb		97
31) 2-Chloro-1,3-Butadiene	3.701	53	261694	51.59	ppb		94
32) ETBE	4.225	59	622398	53.05	ppb		94
33) 2,2-Dichloropropane	4.408	77	249277	48.80	ppb		98
34) cis-1,2-Dichloroethene	4.414	96	193305	49.30	ppb		89
35) 2-Butanone	4.450	43	112031	41.30	ppb		97
36) Propionitrile	4.530	54	178566	202.37	ppb		98
37) Bromochloromethane	4.804	130	115440	47.42	ppb		95
38) Methacrylonitrile	4.804	67	100012	43.56	ppb		98
39) Tetrahydrofuran	4.895	42	73241	41.68	ppb		96
40) Chloroform	4.981	83	289079	49.65	ppb		95
41) 1,1,1-Trichloroethane	5.273	97	222218	49.02	ppb		96

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24787.D
Acq On : 8 Mar 2019 11:51 am
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 08 12:15:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.109	73	572940	51.49	ppb	97
44) Cyclohexane	5.365	41	182549	56.33	ppb	98
46) Carbontetrachloride	5.554	117	169033	45.91	ppb	91
47) 1,1-Dichloropropene	5.560	75	225556	47.76	ppb	96
49) Benzene	5.877	78	739548	46.84	ppb	100
50) 1,2-Dichloroethane	5.907	62	242895	48.05	ppb	94
51) Iso-Butyl Alcohol	5.877	43	236159	713.50	ppb	95
52) n-Heptane	6.359	43	249895	51.94	ppb	99
53) 1-Butanol	6.834	56	384828	1761.58	ppb	98
54) Trichloroethene	6.816	130	170732	44.16	ppb	96
55) Methylcyclohexane	7.054	55	278957	57.18	ppb	95
56) 1,2-Diclpropane	7.096	63	203448	48.49	ppb	99
57) Dibromomethane	7.230	93	108164	45.54	ppb	91
58) 1,4-Dioxane	7.291	88	49993m	667.88	ppb	
59) Methyl Methacrylate	7.316	69	163495	43.61	ppb	94
60) Bromodichloromethane	7.462	83	210123	47.59	ppb	98
61) 2-Nitropropane	7.742	41	77414	88.33	ppb	94
62) 2-Chloroethylvinyl Ether	7.870	63	38783	30.74	ppb	87
63) cis-1,3-Dichloropropene	8.005	75	302962	48.54	ppb	98
64) 4-Methyl-2-pentanone	8.206	43	216741	40.71	ppb	97
66) Toluene	8.370	91	772025	47.22	ppb	98
67) trans-1,3-Dichloropropene	8.639	75	273679	50.07	ppb	99
68) Ethyl Methacrylate	8.779	69	291039	46.23	ppb	94
69) 1,1,2-Trichloroethane	8.828	97	170808	44.59	ppb	94
72) Tetrachloroethene	8.962	164	130593	45.37	ppb	97
73) 2-Hexanone	9.114	43	155678	40.19	ppb	94
74) 1,3-Dichloropropane	8.998	76	320379	46.28	ppb	99
75) Dibromochloromethane	9.224	129	148743	46.07	ppb	97
76) N-Butyl Acetate	9.273	43	330911	46.78	ppb	95
77) 1,2-Dibromoethane	9.321	107	169629	44.93	ppb	100
78) Chlorobenzene	9.815	112	475329	46.20	ppb	96
79) 3-CBTF	9.834	180	256121	51.05	ppb	96
80) 4-CBTF	9.888	180	234588	51.73	ppb	98
81) 1,1,1,2-Tetrachloroethane	9.901	131	151870	45.60	ppb	98
82) Ethylbenzene	9.931	106	257441	46.40	ppb	100
83) (m+p)Xylene	10.047	106	636322	93.80	ppb	99
84) o-Xylene	10.407	106	318623	47.74	ppb	95
85) Styrene	10.419	104	533480	49.32	ppb	98
87) Bromoform	10.571	173	90974	43.58	ppb	97
88) 2-CBTF	10.650	180	244148	48.12	ppb	94
89) Isopropylbenzene	10.742	105	778185	47.86	ppb	99
90) Cyclohexanone	10.803	55	787456	764.11	ppb	100
91) trans-1,4-Dichloro-2-B...	11.047	53	57386	42.65	ppb	89
92) 1,1,2,2-Tetrachloroethane	10.998	83	243984	44.98	ppb	99
93) Bromobenzene	10.986	156	198121	45.29	ppb	92
94) 1,2,3-Trichloropropane	11.028	110	75383	43.81	ppb	92
95) n-Propylbenzene	11.095	91	926884	49.76	ppb	100
96) 2-Chlorotoluene	11.156	91	569172	48.49	ppb	96
97) 3-Chlorotoluene	11.211	91	601511	52.38	ppb	99
98) 4-Chlorotoluene	11.248	91	636958	48.66	ppb	98
99) 1,3,5-Trimethylbenzene	11.248	105	655145	48.55	ppb	99
100) tert-Butylbenzene	11.522	119	565902	48.22	ppb	98
101) 1,2,4-Trimethylbenzene	11.559	105	672428	48.18	ppb	100
102) 3,4-DCBTF	11.620	214	205347	49.09	ppb	97
103) sec-Butylbenzene	11.705	105	852112	50.08	ppb	98
104) p-Isopropyltoluene	11.827	119	704451	49.85	ppb	98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24787.D
Acq On : 8 Mar 2019 11:51 am
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 08 12:15:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration

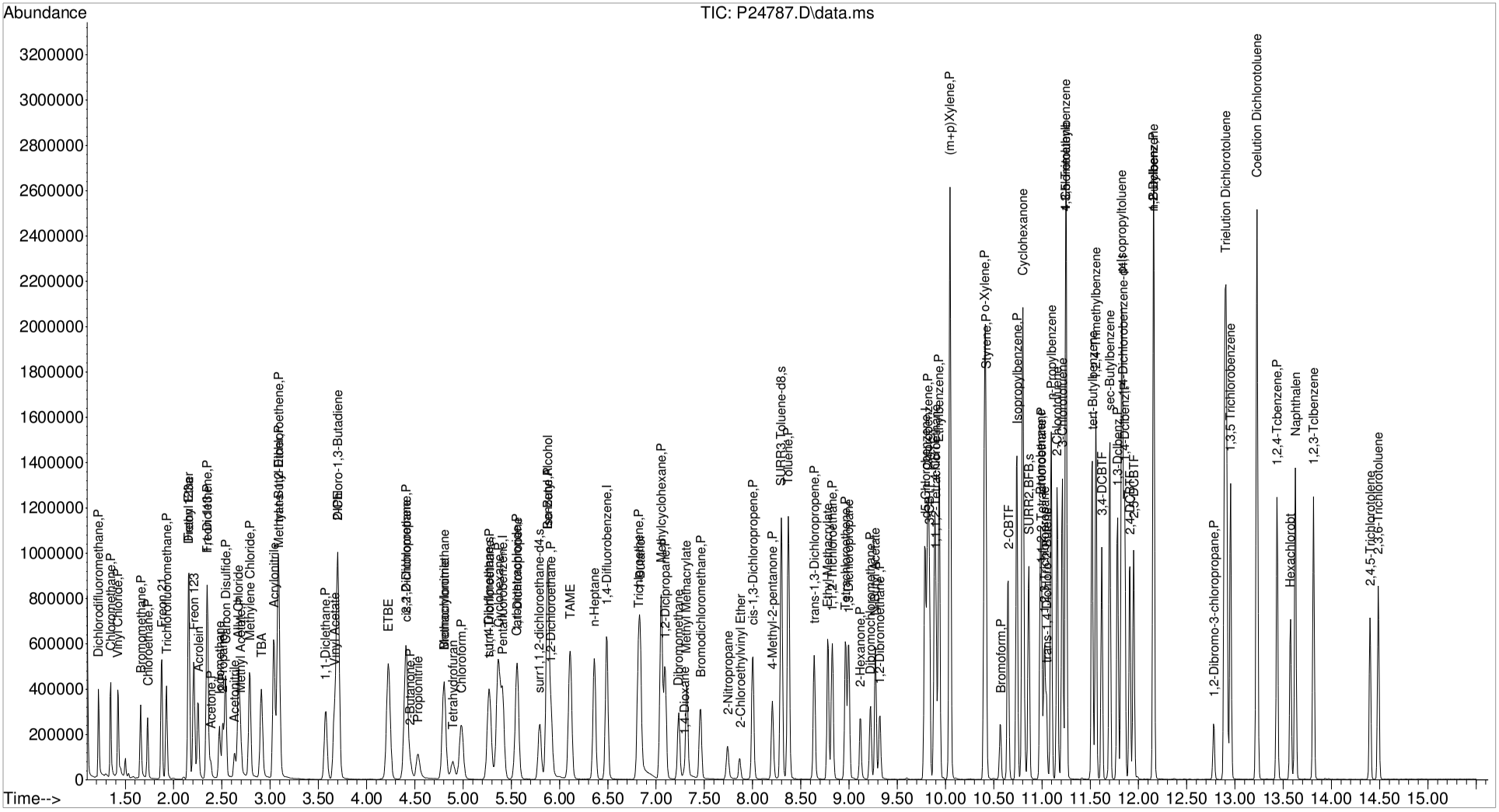
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.784	146	379743	47.68	ppb	98
106) 1,4-Dclbenz	11.857	146	387824	46.14	ppb	98
107) 2,4-DCBTF	11.912	214	191818	50.07	ppb	99
108) 2,5-DCBTF	11.949	214	212562	49.20	ppb	98
109) n-Butylbenzene	12.156	91	678884	54.80	ppb	99
110) 1,2-Dclbenz	12.156	146	384690	47.21	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.784	157	52504	39.29	ppb	89
112) Trielution Dichlorotol...	12.906	125	1110462	165.67	ppb	97
113) 1,3,5 Trichlorobenzene	12.955	180	307567	52.44	ppb	97
114) Coelution Dichlorotoluene	13.229	125	804745	108.84	ppb	96
115) 1,2,4-Tcbenzene	13.436	180	296988	51.96	ppb	98
116) Hexachlorobt	13.577	225	109800	45.56	ppb	95
117) Naphthalen	13.625	128	817163	40.46	ppb	99
118) 1,2,3-Tclbenzene	13.814	180	293211	49.74	ppb	98
119) 2,4,5-Trichlorotolene	14.400	159	141030	48.10	ppb	95
120) 2,3,6-Trichlorotoluene	14.485	159	160121	47.55	ppb	91

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24787.D
Acq On : 8 Mar 2019 11:51 am
Operator : F.NAEGLER
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 08 12:15:12 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Apr 23 09:26:35 2018
Response via : Initial Calibration



1st FJ 03/08/19
2nd 03/12/19

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24830.D
Acq On : 12 Mar 2019 10:33 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 10:48:24 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	50.0000	50.0000	0.0	103	0.01
2	P	Dichlorodifluoromethane	50.0000	55.6135	-11.2	103	0.01
3	P	Chloromethane	50.0000	53.9198	-7.8	111	0.01
4	P	Vinyl Chloride	50.0000	58.6581	-17.3	109	0.00
5	P	Bromomethane	50.0000	50.4052	-0.8	108	0.01
6	P	Chloroethane	50.0000	50.9302	-1.9	106	0.01
7		Freon 21	50.0000	52.7386	-5.5	99	0.01
8	P	Trichlorofluoromethane	50.0000	53.0115	-6.0	107	0.01
9		Diethyl Ether	50.0000	50.9449	-1.9	101	0.01
10		Freon 123a	50.0000	53.1362	-6.3	103	0.01
11		Freon 123	50.0000	53.2082	-6.4	105	0.01
12		Acrolein	250.0000	273.8126	-9.5	111	0.01
13	P	1,1-Diclethene	50.0000	54.7072	-9.4	108	0.01
14	P	Freon 113	50.0000	54.1261	-8.3	113	0.01
15	P	Acetone	50.0000	46.5453	6.9	88	0.00
16		2-Propanol	1000.0000	884.4143	11.6	90	0.00
17		Iodomethane	50.0000	44.5982	10.8	88	0.01
18	P	Carbon Disulfide	50.0000	49.2452	1.5	99	0.00
19		Acetonitrile	250.0000	204.1342	18.3	68	0.01
20		Allyl Chloride	50.0000	56.7615	-13.5	109	0.01
21	P	Methyl Acetate	50.0000	49.2968	1.4	93	0.00
22	P	Methylene Chloride	50.0000	49.4419	1.1	101	0.01
23		TBA	1000.0000	995.0093	0.5	100	0.00
24		Acrylonitrile	250.0000	260.3273	-4.1	100	0.00
25	P	Methyl-t-Butyl Ether	50.0000	50.9741	-1.9	100	0.00
26	P	trans-1,2-Dichloroethene	50.0000	52.1065	-4.2	104	0.01
27		Halothane	-1.0000	0.0000	0.0	0	-4.08#
28	P	1,1-Diclethane	50.0000	54.9584	-9.9	105	0.01
29		Vinyl Acetate	50.0000	57.5144	-15.0	119	0.01
30		DIPE	50.0000	54.5264	-9.1	104	0.00
31		2-Chloro-1,3-Butadiene	50.0000	49.4019	1.2	100	0.00
32		ETBE	50.0000	52.5603	-5.1	103	0.01
33		2,2-Dichloropropane	50.0000	52.8897	-5.8	110	0.00
34	P	cis-1,2-Dichloroethene	50.0000	51.9794	-4.0	104	0.00
35	P	2-Butanone	50.0000	48.2771	3.4	99	0.02
36		Propionitrile	250.0000	262.2838	-4.9	98	0.00
37		Bromochloromethane	50.0000	50.1196	-0.2	99	0.01
38		Methacrylonitrile	50.0000	50.4244	-0.8	99	0.01
39		Tetrahydrofuran	50.0000	50.8773	-1.8	99	0.01
40	P	Chloroform	50.0000	53.0380	-6.1	106	0.00
41	P	1,1,1-Trichloroethane	50.0000	54.0368	-8.1	105	0.00
42		TAME	50.0000	52.7019	-5.4	100	0.00
43	I	1,4-Difluorobenzene	50.0000	50.0000	0.0	104	0.00
44	P	Cyclohexane	50.0000	53.1835	-6.4	106	0.00
45	s	surr4,Dibrflmethane	50.0000	51.8235	-3.6	104	0.00
46	P	Carbontetrachloride	50.0000	52.7180	-5.4	106	0.00
47		1,1-Dichloropropene	50.0000	53.0804	-6.2	108	0.00
48	s	surr1,1,2-dichloroethane-d4	50.0000	53.0848	-6.2	107	0.00
49	P	Benzene	50.0000	51.0026	-2.0	103	0.00
50	P	1,2-Dichloroethane	50.0000	51.8990	-3.8	102	0.00
51		Iso-Butyl Alcohol	1000.0000	953.0171	4.7	95	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24830.D
Acq On : 12 Mar 2019 10:33 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 10:48:24 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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	Amount	Calc.	%Dev	Area%	Dev(min)
52		n-Heptane	50.0000	55.4494	-10.9	120	0.00
53		1-Butanol	2500.0000	2584.8293	-3.4	98	0.00
54	P	Trichloroethene	50.0000	50.1419	-0.3	99	0.00
55	P	Methylcyclohexane	50.0000	52.7481	-5.5	104	0.00
56	P	1,2-Diclpropane	50.0000	52.3604	-4.7	107	0.00
57		Dibromomethane	50.0000	51.6563	-3.3	102	0.00
58		1,4-Dioxane	1000.0000	857.3068	14.3	89	0.00
59		Methyl Methacrylate	50.0000	50.2070	-0.4	100	0.00
60	P	Bromodichloromethane	50.0000	52.3665	-4.7	106	0.00
61		2-Nitropropane	100.0000	108.0014	-8.0	112	0.00
62		2-Chloroethylvinyl Ether	50.0000	36.6046	26.8#	69	0.00
63	P	cis-1,3-Dichloropropene	50.0000	53.5450	-7.1	103	0.00
64	P	4-Methyl-2-pentanone	50.0000	47.5188	5.0	96	0.00
65	s	SURR3,Toluene-d8	50.0000	51.1381	-2.3	106	0.00
66	P	Toluene	50.0000	52.2960	-4.6	104	0.00
67	P	trans-1,3-Dichloropropene	50.0000	53.4026	-6.8	101	0.00
68		Ethyl Methacrylate	50.0000	53.1136	-6.2	101	0.00
69	P	1,1,2-Trichloroethane	50.0000	49.2663	1.5	100	0.00
70	s	SURR2,BFB	50.0000	52.6215	-5.2	109	0.00
71	I	d5-Chlorobenzene	50.0000	50.0000	0.0	101	0.00
72	P	Tetrachloroethene	50.0000	50.4085	-0.8	105	0.00
73	P	2-Hexanone	50.0000	48.9191	2.2	100	0.00
74		1,3-Dichloropropane	50.0000	50.1831	-0.4	101	0.00
75	P	Dibromochloromethane	50.0000	50.9676	-1.9	101	0.00
76		N-Butyl Acetate	50.0000	52.4682	-4.9	99	0.00
77	P	1,2-Dibromoethane	50.0000	50.7788	-1.6	100	0.00
78	P	Chlorobenzene	50.0000	50.1613	-0.3	103	0.00
79		3-CBTF	50.0000	51.9170	-3.8	101	0.00
80		4-CBTF	50.0000	52.3889	-4.8	101	0.00
81		1,1,1,2-Tetrachloroethane	50.0000	50.4184	-0.8	101	0.00
82	P	Ethylbenzene	50.0000	52.3021	-4.6	108	0.00
83	P	(m+p)Xylene	100.0000	102.1893	-2.2	105	0.00
84	P	o-Xylene	50.0000	51.4256	-2.9	104	0.00
85	P	Styrene	50.0000	53.8580	-7.7	104	0.00
86	I	1,4-Dichlorobenzene-d4	50.0000	50.0000	0.0	103	0.00
87	P	Bromoform	50.0000	52.0959	-4.2	102	0.00
88		2-CBTF	50.0000	48.9872	2.0	99	0.00
89	P	Isopropylbenzene	50.0000	52.2731	-4.5	107	0.00
90		Cyclohexanone	1000.0000	226.7571	77.3#	22	0.00
91		trans-1,4-Dichloro-2-Butene	50.0000	48.4845	3.0	98	0.00
92	P	1,1,2,2-Tetrachloroethane	50.0000	51.2642	-2.5	102	0.00
93		Bromobenzene	50.0000	48.1432	3.7	101	0.00
94		1,2,3-Trichloropropane	50.0000	49.9914	0.0	97	0.00
95		n-Propylbenzene	50.0000	52.8550	-5.7	108	0.00
96		2-Chlorotoluene	50.0000	50.9067	-1.8	105	0.00
97		3-Chlorotoluene	50.0000	51.7404	-3.5	101	0.00
98		4-Chlorotoluene	50.0000	51.8624	-3.7	107	0.00
99		1,3,5-Trimethylbenzene	50.0000	51.4723	-2.9	106	0.00
100		tert-Butylbenzene	50.0000	50.3160	-0.6	101	0.00
101		1,2,4-Trimethylbenzene	50.0000	49.9105	0.2	103	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24830.D
Acq On : 12 Mar 2019 10:33 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 10:48:24 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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	Amount	Calc.	%Dev	Area%	Dev(min)
102		3,4-DCBTF	50.0000	47.3467	5.3	96	0.00
103		sec-Butylbenzene	50.0000	51.8096	-3.6	105	0.00
104		p-Isopropyltoluene	50.0000	50.5976	-1.2	102	0.00
105	P	1,3-Dclbenz	50.0000	49.9940	0.0	102	0.00
106	P	1,4-Dclbenz	50.0000	48.5903	2.8	102	0.00
107		2,4-DCBTF	50.0000	47.0675	5.9	95	0.00
108		2,5-DCBTF	50.0000	45.7701	8.5	95	0.00
109		n-Butylbenzene	50.0000	54.2176	-8.4	104	0.00
110	P	1,2-Dclbenz	50.0000	49.7874	0.4	102	0.00
111	P	1,2-Dibromo-3-chloropropane	50.0000	49.5261	0.9	95	0.00
112		Trielution Dichlorotoluene	150.0000	155.6959	-3.8	102	0.00
113		1,3,5 Trichlorobenzene	50.0000	49.9078	0.2	105	0.00
114		Coelution Dichlorotoluene	100.0000	105.4937	-5.5	105	0.00
115	P	1,2,4-Tcbenzene	50.0000	52.9879	-6.0	107	0.00
116		Hexachlorobt	50.0000	47.7072	4.6	113	0.00
117		Naphthalen	50.0000	45.5797	8.8	95	0.00
118		1,2,3-Tclbenzene	50.0000	52.3210	-4.6	104	0.00
119		2,4,5-Trichlorotolene	50.0000	57.5335	-15.1	118	0.00
120		2,3,6-Trichlorotoluene	50.0000	55.6961	-11.4	116	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24830.D
Acq On : 12 Mar 2019 10:33 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 10:48:24 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.407	168	340092	50.00	ppb	0.01
43) 1,4-Difluorobenzene	6.487	114	541207	50.00	ppb	0.00
71) d5-Chlorobenzene	9.791	117	474342	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	247278	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.261	113	154125	51.82	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.64%			
48) surr1,1,2-dichloroetha...	5.792	65	200257	53.08	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 106.16%			
65) SURR3,Toluene-d8	8.297	98	721420	51.14	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.28%			
70) SURR2,BFB	10.864	95	265873	52.62	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 105.24%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.219	85	229065	55.61	ppb	98
3) Chloromethane	1.341	50	296881	53.92	ppb	97
4) Vinyl Chloride	1.414	62	289944	58.66	ppb	98
5) Bromomethane	1.652	94	149516	50.41	ppb	98
6) Chloroethane	1.725	64	152365	50.93	ppb	100
7) Freon 21	1.872	67	329121	52.74	ppb	98
8) Trichlorofluoromethane	1.920	101	254206	53.01	ppb	100
9) Diethyl Ether	2.152	59	186838	50.94	ppb	99
10) Freon 123a	2.152	67	211280	53.14	ppb	98
11) Freon 123	2.207	83	242968	53.21	ppb	99
12) Acrolein	2.250	56	256612	273.81	ppb	100
13) 1,1-Diclethene	2.341	96	173547	54.71	ppb	99
14) Freon 113	2.347	101	152921	54.13	ppb	99
15) Acetone	2.378	43	75808	46.55	ppb	88
16) 2-Propanol	2.512	45	373930	884.41	ppb	94
17) Iodomethane	2.469	142	203327	44.60	ppb	99
18) Carbon Disulfide	2.530	76	468079	49.25	ppb	97
19) Acetonitrile	2.627	40	42374	204.13	ppb	94
20) Allyl Chloride	2.670	76	107735	56.76	ppb	96
21) Methyl Acetate	2.688	43	217964	49.30	ppb	97
22) Methylene Chloride	2.786	84	195252	49.44	ppb	98
23) TBA	2.908	59	668586	995.01	ppb	90
24) Acrylonitrile	3.036	53	559434	260.33	ppb	98
25) Methyl-t-Butyl Ether	3.085	73	626264	50.97	ppb	98
26) trans-1,2-Dichloroethene	3.079	96	183900	52.11	ppb	94
28) 1,1-Diclethane	3.572	63	359720	54.96	ppb	98
29) Vinyl Acetate	3.664	86	46472	57.51	ppb	96
30) DIPE	3.694	45	645897	54.53	ppb	97
31) 2-Chloro-1,3-Butadiene	3.694	53	252877	49.40	ppb	97
32) ETBE	4.225	59	622297	52.56	ppb	94
33) 2,2-Dichloropropane	4.402	77	272633	52.89	ppb	98
34) cis-1,2-Dichloroethene	4.408	96	205665	51.98	ppb	93
35) 2-Butanone	4.456	43	132147	48.28	ppb	96
36) Propionitrile	4.530	54	233531	262.28	ppb	94
37) Bromochloromethane	4.804	130	123117	50.12	ppb	97
38) Methacrylonitrile	4.804	67	116817	50.42	ppb	94
39) Tetrahydrofuran	4.889	42	90206	50.88	ppb	89
40) Chloroform	4.975	83	311620	53.04	ppb	94
41) 1,1,1-Trichloroethane	5.273	97	247176	54.04	ppb	97

1st 03/12/19
2nd 03/13/19

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24830.D
Acq On : 12 Mar 2019 10:33 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 10:48:24 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	TAME	6.109	73	591784	52.70	ppb		99
44)	Cyclohexane	5.365	41	168755	53.18	ppb		99
46)	Carbontetrachloride	5.548	117	190026	52.72	ppb		97
47)	1,1-Dichloropropene	5.560	75	245421	53.08	ppb		96
49)	Benzene	5.871	78	788439	51.00	ppb		99
50)	1,2-Dichloroethane	5.907	62	256884	51.90	ppb		97
51)	Iso-Butyl Alcohol	5.883	43	308847	953.02	ppb		99
52)	n-Heptane	6.358	43	261194	55.45	ppb		97
53)	1-Butanol	6.840	56	552875	2584.83	ppb		99
54)	Trichloroethene	6.816	130	189798	50.14	ppb		90
55)	Methylcyclohexane	7.053	55	251947	52.75	ppb		96
56)	1,2-Diclpropane	7.090	63	215117	52.36	ppb		99
57)	Dibromomethane	7.230	93	120126	51.66	ppb		87
58)	1,4-Dioxane	7.346	88	62832	857.31	ppb		100
59)	Methyl Methacrylate	7.322	69	184293	50.21	ppb		95
60)	Bromodichloromethane	7.456	83	226395	52.37	ppb		97
61)	2-Nitropropane	7.742	41	92681	108.00	ppb		98
62)	2-Chloroethylvinyl Ether	7.870	63	45882	36.60	ppb		89
63)	cis-1,3-Dichloropropene	8.005	75	327210	53.55	ppb		100
64)	4-Methyl-2-pentanone	8.206	43	247698	47.52	ppb		98
66)	Toluene	8.370	91	837186	52.30	ppb		99
67)	trans-1,3-Dichloropropene	8.639	75	285774	53.40	ppb		97
68)	Ethyl Methacrylate	8.779	69	327367	53.11	ppb		98
69)	1,1,2-Trichloroethane	8.828	97	184779	49.27	ppb		95
72)	Tetrachloroethene	8.968	164	143181	50.41	ppb		92
73)	2-Hexanone	9.120	43	187021	48.92	ppb		99
74)	1,3-Dichloropropane	8.998	76	342838	50.18	ppb		100
75)	Dibromochloromethane	9.224	129	162395	50.97	ppb		94
76)	N-Butyl Acetate	9.273	43	366246	52.47	ppb		98
77)	1,2-Dibromoethane	9.321	107	189186	50.78	ppb		96
78)	Chlorobenzene	9.815	112	509316	50.16	ppb		96
79)	3-CBTF	9.833	180	257025	51.92	ppb		97
80)	4-CBTF	9.888	180	234454	52.39	ppb		98
81)	1,1,1,2-Tetrachloroethane	9.900	131	165705	50.42	ppb		99
82)	Ethylbenzene	9.937	106	286354	52.30	ppb		93
83)	(m+p)Xylene	10.047	106	684103	102.19	ppb		98
84)	o-Xylene	10.406	106	338712	51.43	ppb		95
85)	Styrene	10.419	104	574889	53.86	ppb		98
87)	Bromoform	10.571	173	108780	52.10	ppb		93
88)	2-CBTF	10.650	180	248644	48.99	ppb		98
89)	Isopropylbenzene	10.742	105	850218	52.27	ppb		99
90)	Cyclohexanone	10.803	55	233772	226.76	ppb		99
91)	trans-1,4-Dichloro-2-B...	11.047	53	65262	48.48	ppb		93
92)	1,1,2,2-Tetrachloroethane	10.998	83	278151	51.26	ppb		100
93)	Bromobenzene	10.986	156	210667	48.14	ppb	#	86
94)	1,2,3-Trichloropropane	11.028	110	86048	49.99	ppb		96
95)	n-Propylbenzene	11.095	91	984886	52.86	ppb		98
96)	2-Chlorotoluene	11.156	91	597765	50.91	ppb		98
97)	3-Chlorotoluene	11.211	91	594358	51.74	ppb		98
98)	4-Chlorotoluene	11.254	91	679148	51.86	ppb		99
99)	1,3,5-Trimethylbenzene	11.248	105	694781	51.47	ppb		100
100)	tert-Butylbenzene	11.522	119	590778	50.32	ppb		98
101)	1,2,4-Trimethylbenzene	11.559	105	696869	49.91	ppb		99
102)	3,4-DCBTF	11.620	214	198149	47.35	ppb		96
103)	sec-Butylbenzene	11.705	105	881950	51.81	ppb		98
104)	p-Isopropyltoluene	11.827	119	715344	50.60	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24830.D
Acq On : 12 Mar 2019 10:33 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 10:48:24 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.784	146	398358	49.99	ppb	98
106) 1,4-Dclbenz	11.857	146	408584	48.59	ppb	96
107) 2,4-DCBTF	11.912	214	180398	47.07	ppb	98
108) 2,5-DCBTF	11.949	214	197808	45.77	ppb	98
109) n-Butylbenzene	12.156	91	671909	54.22	ppb	99
110) 1,2-Dclbenz	12.162	146	405818	49.79	ppb	97
111) 1,2-Dibromo-3-chloropr...	12.784	157	66211	49.53	ppb	93
112) Trielution Dichlorotol...	12.906	125	1043972	155.70	ppb	98
113) 1,3,5 Trichlorobenzene	12.955	180	292841	49.91	ppb	99
114) Coelution Dichlorotoluene	13.229	125	780298	105.49	ppb	96
115) 1,2,4-Tcbenzene	13.436	180	302963	52.99	ppb	100
116) Hexachlorobt	13.577	225	115018	47.71	ppb	99
117) Naphthalen	13.625	128	920057	45.58	ppb	99
118) 1,2,3-Tclbenzene	13.814	180	308533	52.32	ppb	97
119) 2,4,5-Trichlorotolene	14.400	159	176273	57.53	ppb	97
120) 2,3,6-Trichlorotoluene	14.485	159	194127	55.70	ppb	96

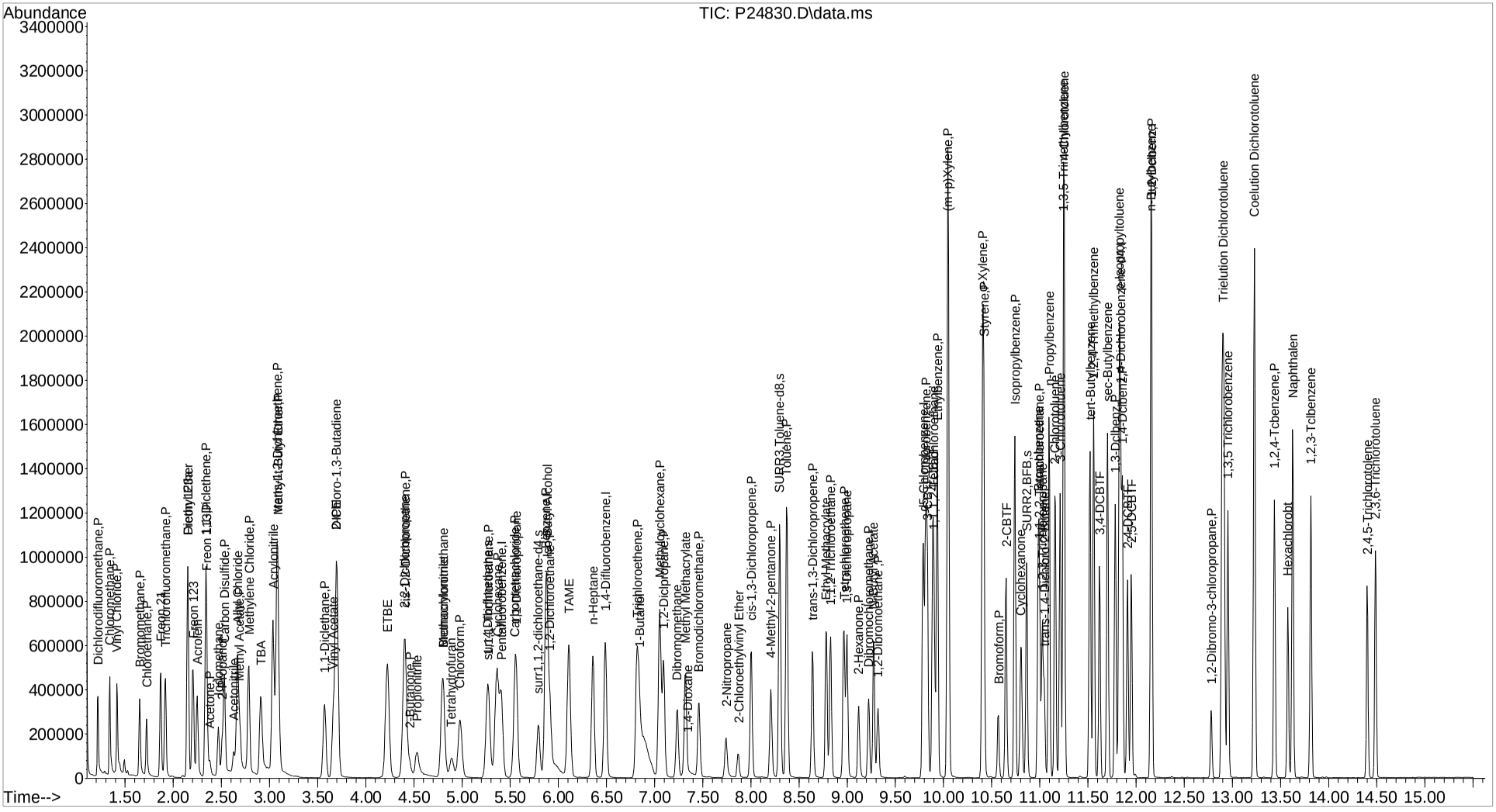
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24830.D
Acq On : 12 Mar 2019 10:33 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 12 10:48:24 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

1st 03/12/19
2nd 03/13/19

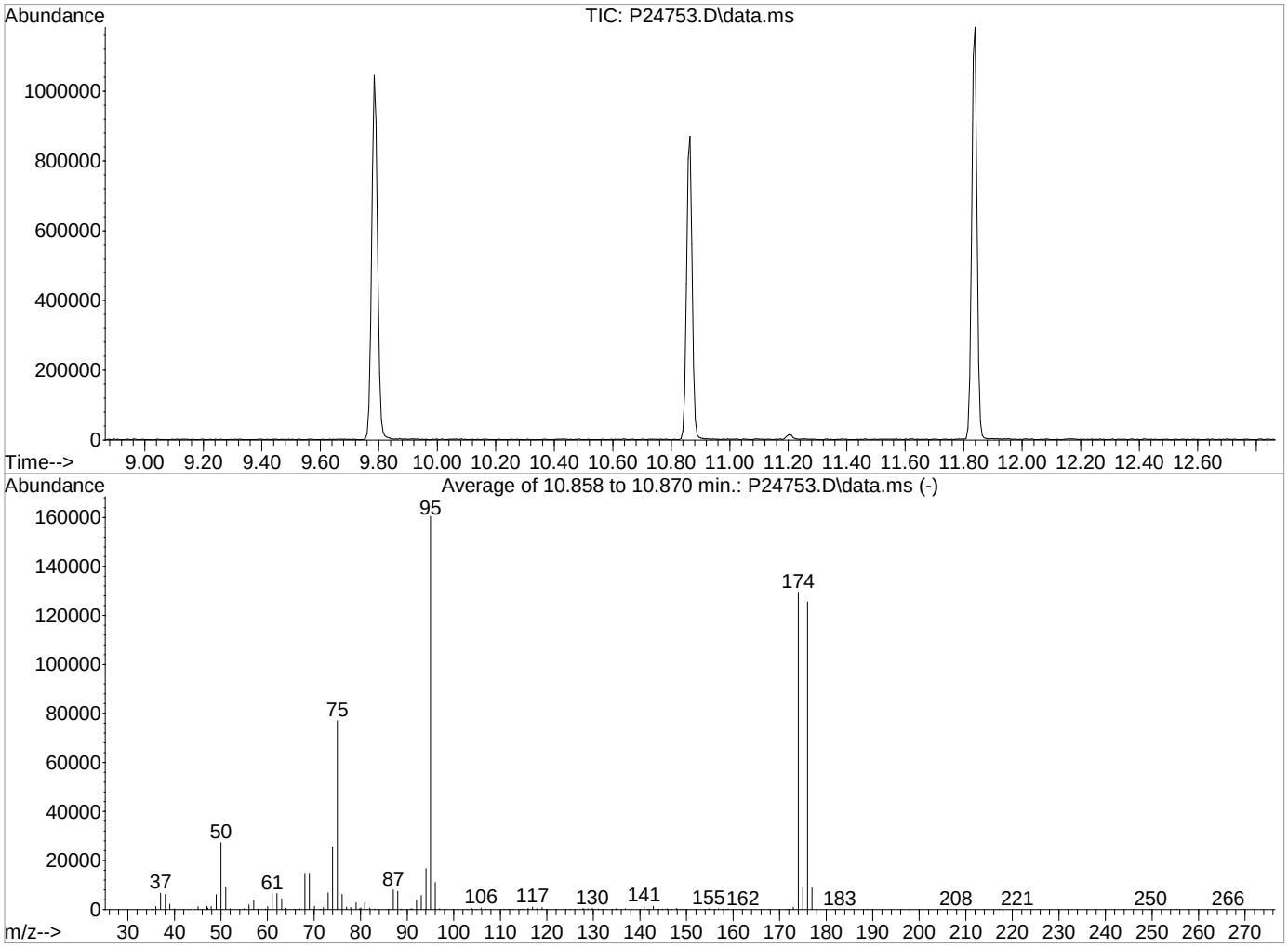


1st 03/07/19
2nd 03/12/19

Data Path : I:\ACQUDATA\msvoa12\Data\030719\
Data File : P24753.D
Acq On : 7 Mar 2019 10:35 am
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: INTP90.P

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Feb 21 11:43:56 2019



AutoFind: Scans 1601, 1602, 1603; Background Corrected with Scan 1594

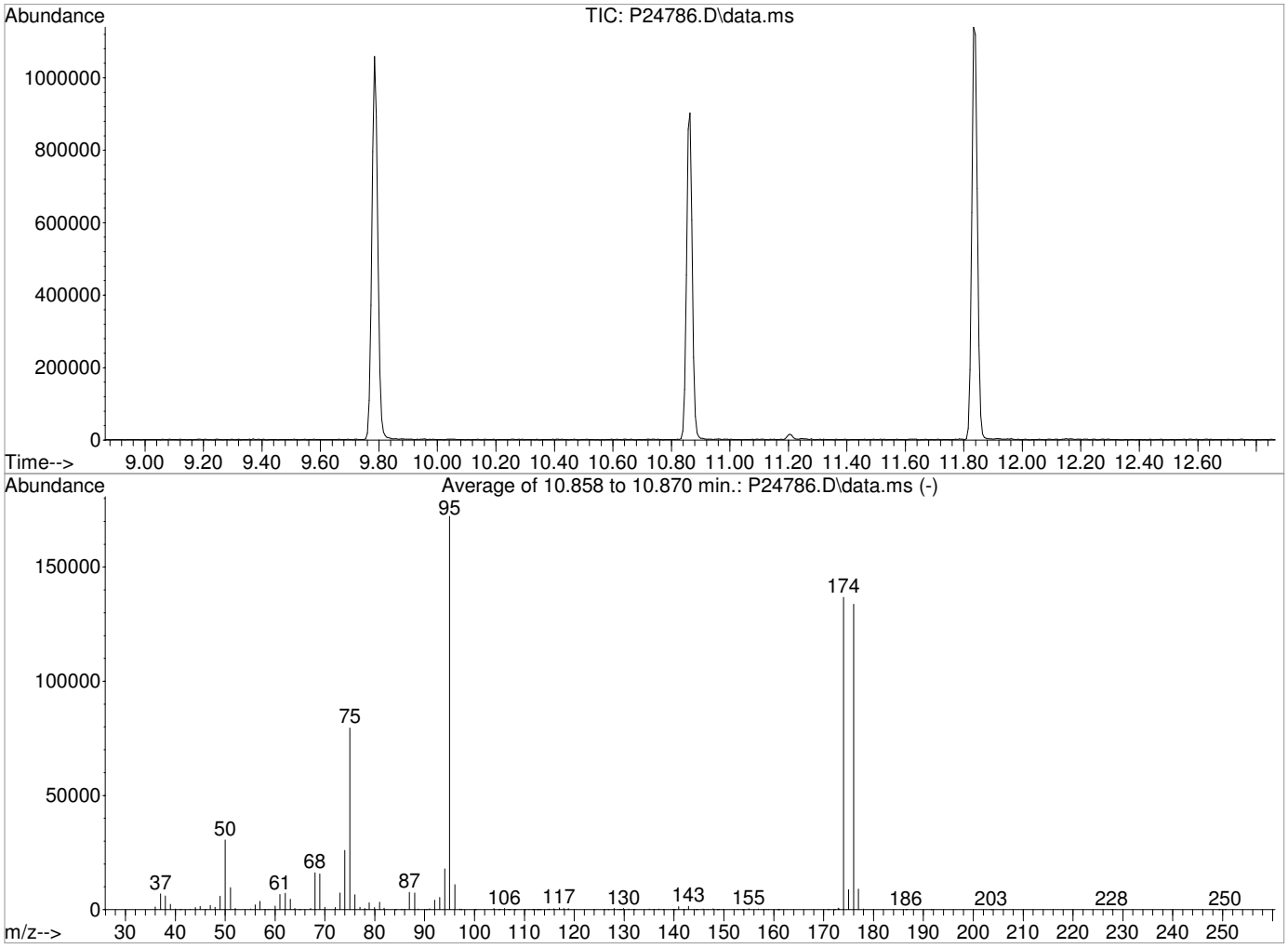
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.0	27293	PASS
75	95	30	60	47.9	76928	PASS
95	95	100	100	100.0	160517	PASS
96	95	5	9	6.8	10973	PASS
173	174	0.00	2	0.7	926	PASS
174	95	50	120	80.7	129496	PASS
175	174	5	9	7.2	9317	PASS
176	174	95	101	96.9	125517	PASS
177	176	5	9	7.0	8817	PASS

1st FJ 03/08/19
2nd 03/12/19

Data Path : I:\ACQUDATA\msvoa12\Data\030819\
Data File : P24786.D
Acq On : 8 Mar 2019 11:21 am
Operator : F.NAEGLER
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: INTP90.P

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Mon Apr 23 09:26:35 2018



AutoFind: Scans 1601, 1602, 1603; Background Corrected with Scan 1593

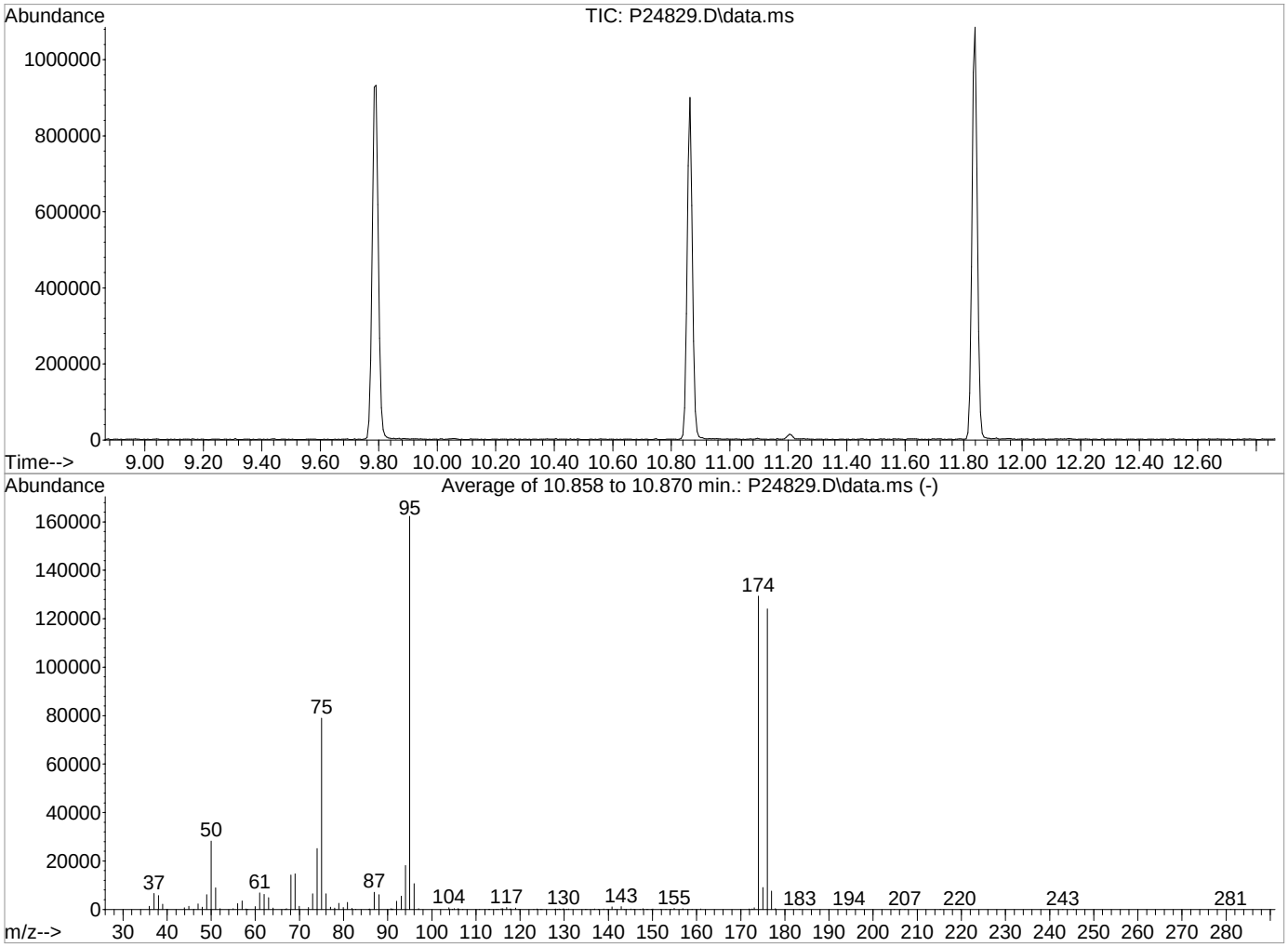
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.7	30563	PASS
75	95	30	60	46.2	79568	PASS
95	95	100	100	100.0	172213	PASS
96	95	5	9	6.3	10918	PASS
173	174	0.00	2	0.5	718	PASS
174	95	50	120	79.4	136805	PASS
175	174	5	9	6.4	8707	PASS
176	174	95	101	97.8	133779	PASS
177	176	5	9	6.7	9012	PASS

1st 03/12/19
2nd 03/13/19

Data Path : I:\ACQUDATA\msvoa12\Data\031219\
Data File : P24829.D
Acq On : 12 Mar 2019 10:03 am
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: INTP90.P

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Feb 21 11:43:56 2019



AutoFind: Scans 1601, 1602, 1603; Background Corrected with Scan 1594

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.4	28235	PASS
75	95	30	60	48.7	79027	PASS
95	95	100	100	100.0	162347	PASS
96	95	5	9	6.6	10680	PASS
173	174	0.00	2	0.6	726	PASS
174	95	50	120	79.7	129400	PASS
175	174	5	9	7.0	9050	PASS
176	174	95	101	95.8	124027	PASS
177	176	5	9	6.1	7589	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24389.D
Acq On : 21 Feb 2019 11:09 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 22 09:21:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.395	168	329151	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.481	114	520474	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	451968	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	229694	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.249	113	143326	50.11	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.22%				
48) surr1,1,2-dichloroetha...	5.786	65	187044	51.56	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.12%				
65) SURR3,Toluene-d8	8.297	98	678960	50.05	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.10%				
70) SURR2,BFB	10.858	95	246212	50.67	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.34%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	76835	19.27	ppb		99
3) Chloromethane	1.329	50	100661	18.89	ppb		95
4) Vinyl Chloride	1.408	62	99828	20.87	ppb		100
5) Bromomethane	1.640	94	61491	20.95	ppb		99
6) Chloroethane	1.713	64	48757	16.84	ppb		95
7) Freon 21	1.859	67	126766	20.99	ppb		99
8) Trichlorofluoromethane	1.908	101	92324	19.89	ppb		98
9) Diethyl Ether	2.140	59	76423	21.53	ppb		96
10) Freon 123a	2.140	67	86117	22.38	ppb		93
11) Freon 123	2.195	83	107958	24.43	ppb		96
12) Acrolein	2.237	56	43694	48.17	ppb		97
13) 1,1-Diclethene	2.329	96	62595	20.39	ppb		91
14) Freon 113	2.335	101	54837	20.05	ppb		97
15) Acetone	2.372	43	39186	24.86	ppb		88
16) 2-Propanol	2.500	45	166129	405.99	ppb		95
17) Iodomethane	2.457	142	61393	15.55	ppb		96
18) Carbon Disulfide	2.524	76	199637	21.70	ppb		95
19) Acetonitrile	2.622	40	29145	145.07	ppb		91
20) Allyl Chloride	2.658	76	39503	21.50	ppb		99
21) Methyl Acetate	2.683	43	92829	21.69	ppb		99
22) Methylene Chloride	2.774	84	73813	19.31	ppb		95
23) TBA	2.902	59	296146	455.38	ppb		97
24) Acrylonitrile	3.024	53	235654	113.30	ppb		100
25) Methyl-t-Butyl Ether	3.073	73	261027	21.95	ppb		99
26) trans-1,2-Dichloroethene	3.067	96	68119	19.94	ppb		91
28) 1,1-Diclethane	3.560	63	133165	21.02	ppb		99
29) Vinyl Acetate	3.658	86	18885	24.15	ppb	#	86
30) DIPE	3.688	45	260407	22.71	ppb		98
31) 2-Chloro-1,3-Butadiene	3.688	53	108444	21.89	ppb		96
32) ETBE	4.213	59	241243	21.05	ppb		95
33) 2,2-Dichloropropane	4.396	77	84735	16.98	ppb		97
34) cis-1,2-Dichloroethene	4.396	96	77033	20.12	ppb		98
35) 2-Butanone	4.444	43	58094	21.93	ppb		93
36) Propionitrile	4.518	54	95468	110.79	ppb		98
37) Bromochloromethane	4.792	130	48363	20.34	ppb		95
38) Methacrylonitrile	4.786	67	48405	21.59	ppb		100
39) Tetrahydrofuran	4.883	42	37895	22.08	ppb		88
40) Chloroform	4.975	83	118371	20.82	ppb		96
41) 1,1,1-Trichloroethane	5.267	97	89799	20.28	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24389.D
Acq On : 21 Feb 2019 11:09 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 22 09:21:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.103	73	244720	22.52	ppb		99
44) Cyclohexane	5.347	41	68601	22.48	ppb		98
46) Carbontetrachloride	5.542	117	66908	19.30	ppb		96
47) 1,1-Dichloropropene	5.554	75	89288	20.08	ppb		96
49) Benzene	5.865	78	300514	20.21	ppb		100
50) 1,2-Dichloroethane	5.901	62	99610	20.93	ppb		98
51) Iso-Butyl Alcohol	5.871	43	134403	431.25	ppb		98
52) n-Heptane	6.353	43	78156	17.25	ppb		94
53) 1-Butanol	6.834	56	222176	1080.11	ppb		99
54) Trichloroethene	6.810	130	71153	19.55	ppb		97
55) Methylcyclohexane	7.048	55	103856	22.61	ppb		92
56) 1,2-Diclpropane	7.090	63	78608	19.90	ppb		96
57) Dibromomethane	7.230	93	46201	20.66	ppb		98
58) 1,4-Dioxane	7.291	88	32746	464.60	ppb		99
59) Methyl Methacrylate	7.316	69	80992	22.94	ppb		97
60) Bromodichloromethane	7.456	83	81479	19.60	ppb		97
61) 2-Nitropropane	7.736	41	33872	41.04	ppb		93
63) cis-1,3-Dichloropropene	7.999	75	117733	20.03	ppb		98
64) 4-Methyl-2-pentanone	8.206	43	111228	22.19	ppb		98
66) Toluene	8.370	91	311806	20.25	ppb		99
67) trans-1,3-Dichloropropene	8.639	75	105791	20.56	ppb		95
68) Ethyl Methacrylate	8.779	69	133044	22.45	ppb		91
69) 1,1,2-Trichloroethane	8.828	97	70867	19.65	ppb		96
72) Tetrachloroethene	8.962	164	50821	18.78	ppb	#	82
73) 2-Hexanone	9.114	43	77731	21.34	ppb		99
74) 1,3-Dichloropropane	8.992	76	132244	20.32	ppb		96
75) Dibromochloromethane	9.218	129	58234	19.18	ppb		98
76) N-Butyl Acetate	9.273	43	155219	23.34	ppb		97
77) 1,2-Dibromoethane	9.315	107	71007	20.00	ppb		98
78) Chlorobenzene	9.815	112	190074	19.65	ppb		97
79) 3-CBTF	9.834	180	101455	21.51	ppb		97
80) 4-CBTF	9.888	180	88088	20.66	ppb		97
81) 1,1,1,2-Tetrachloroethane	9.901	131	62030	19.81	ppb		95
82) Ethylbenzene	9.931	106	102673	19.68	ppb		92
83) (m+p)Xylene	10.047	106	249024	39.04	ppb		99
84) o-Xylene	10.400	106	125595	20.01	ppb		93
85) Styrene	10.419	104	207886	20.44	ppb		96
87) Bromoform	10.565	173	34916	18.00	ppb		94
88) 2-CBTF	10.650	180	99119	21.02	ppb		98
89) Isopropylbenzene	10.736	105	305434	20.22	ppb		97
90) Cyclohexanone	10.803	55	101918	106.43	ppb		97
91) trans-1,4-Dichloro-2-B...	11.047	53	28095	22.47	ppb		90
92) 1,1,2,2-Tetrachloroethane	10.998	83	107363	21.30	ppb		97
93) Bromobenzene	10.986	156	81021	19.93	ppb		98
94) 1,2,3-Trichloropropane	11.028	110	34322	21.47	ppb	#	90
95) n-Propylbenzene	11.095	91	354490	20.48	ppb		98
96) 2-Chlorotoluene	11.156	91	217438	19.93	ppb		99
97) 3-Chlorotoluene	11.211	91	245721	23.03	ppb		99
98) 4-Chlorotoluene	11.248	91	243520	20.02	ppb		97
99) 1,3,5-Trimethylbenzene	11.248	105	253742	20.24	ppb		99
100) tert-Butylbenzene	11.522	119	216624	19.86	ppb		99
101) 1,2,4-Trimethylbenzene	11.559	105	255796	19.72	ppb		99
102) 3,4-DCBTF	11.620	214	76537	19.69	ppb		96
103) sec-Butylbenzene	11.705	105	326598	20.65	ppb		98
104) p-Isopropyltoluene	11.821	119	267982	20.41	ppb		100
105) 1,3-Dclbenz	11.784	146	144838	19.57	ppb		95

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24389.D
Acq On : 21 Feb 2019 11:09 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 22 09:21:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.858	146	149356	19.12	ppb	99
107) 2,4-DCBTF	11.912	214	68868	19.34	ppb	96
108) 2,5-DCBTF	11.949	214	77836	19.39	ppb	95
109) n-Butylbenzene	12.156	91	250648	21.77	ppb	98
110) 1,2-Dclbenz	12.156	146	151113	19.96	ppb	97
111) 1,2-Dibromo-3-chloropr...	12.784	157	24123	19.43	ppb	86
112) Trielution Dichlorotol...	12.900	125	420999	67.59	ppb	96
113) 1,3,5 Trichlorobenzene	12.955	180	116702	21.41	ppb	98
114) Coelution Dichlorotoluene	13.229	125	312439	45.47	ppb	95
115) 1,2,4-Tcbenzene	13.437	180	113675	21.40	ppb	99
116) Hexachlorobt	13.577	225	42724	19.08	ppb	99
117) Naphthalen	13.625	128	367712	19.75	ppb	99
118) 1,2,3-Tclbenzene	13.814	180	114448	20.89	ppb	98
119) 2,4,5-Trichlorotolene	14.400	159	40325	17.86	ppb	94
120) 2,3,6-Trichlorotoluene	14.485	159	39363	15.28	ppb	98

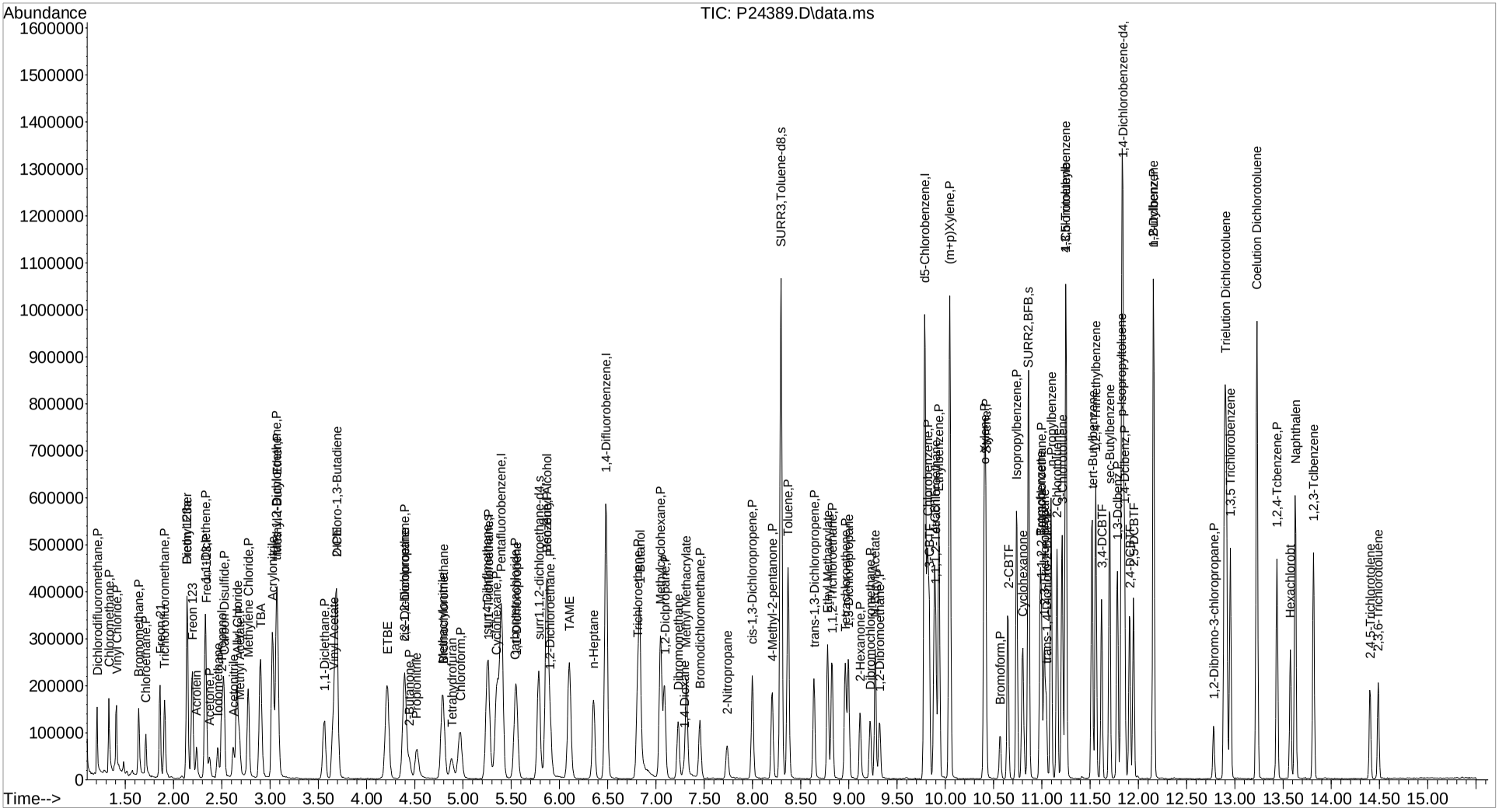
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24389.D
Acq On : 21 Feb 2019 11:09 pm
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 22 09:21:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

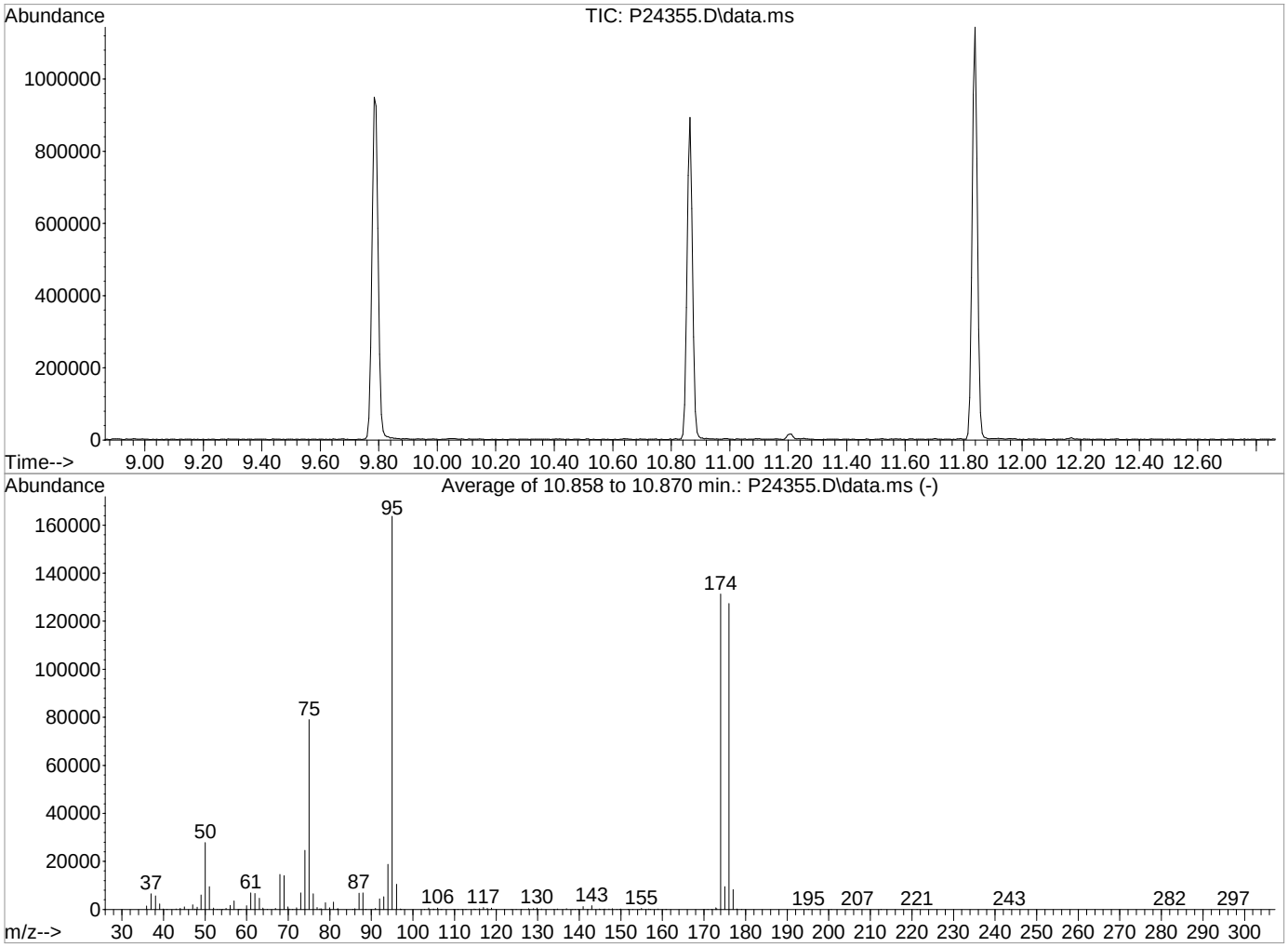


BFB

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24355.D
Acq On : 21 Feb 2019 10:25 am
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: INTP90.P

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Feb 21 10:22:17 2019



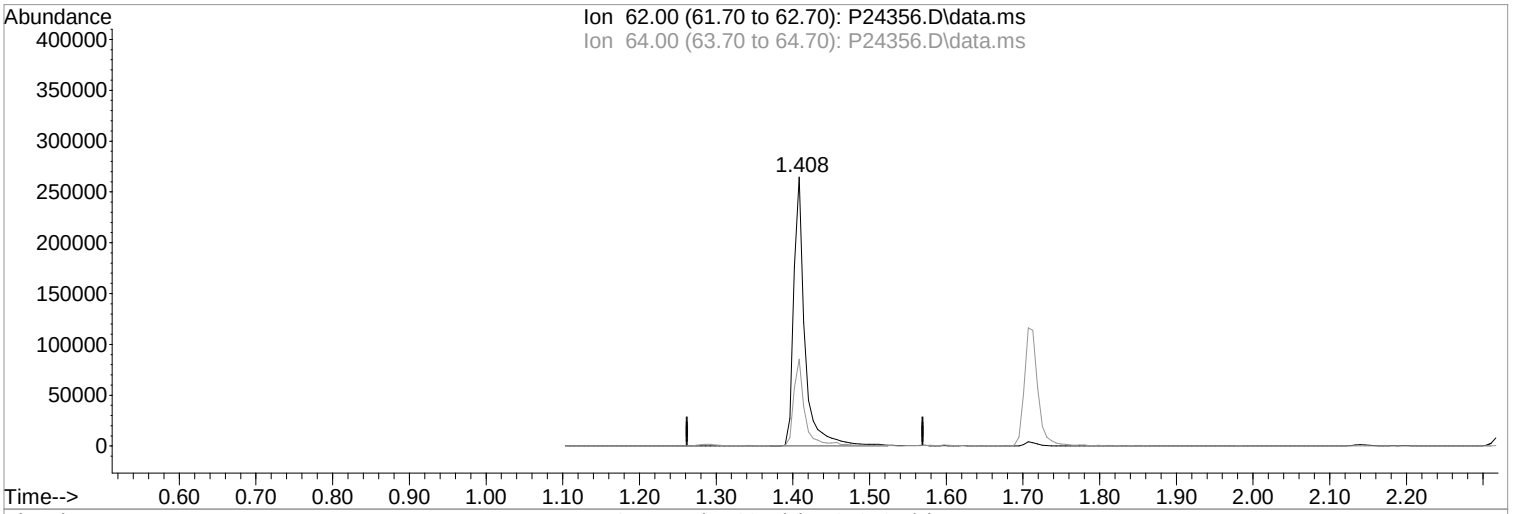
AutoFind: Scans 1601, 1602, 1603; Background Corrected with Scan 1594

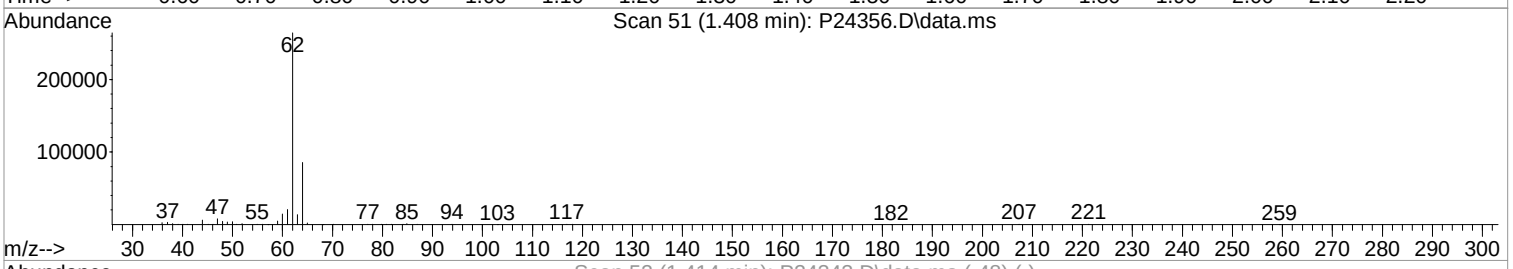
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.0	27816	PASS
75	95	30	60	48.3	79059	PASS
95	95	100	100	100.0	163755	PASS
96	95	5	9	6.4	10535	PASS
173	174	0.00	2	0.5	653	PASS
174	95	50	120	80.2	131299	PASS
175	174	5	9	7.2	9462	PASS
176	174	95	101	97.0	127368	PASS
177	176	5	9	6.5	8297	PASS

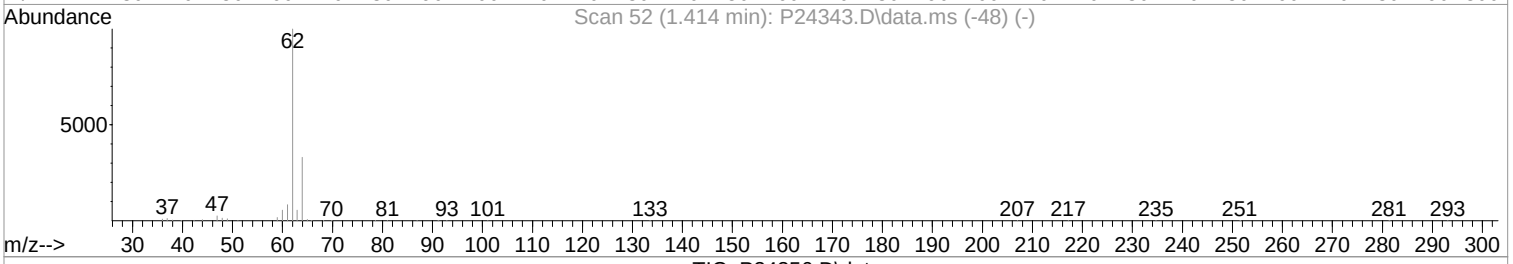
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:27 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24356.D\data.ms

(4) Vinyl Chloride (P)

1.408min (-0.000) 52.50 ppb m

response 270118

Ion	Exp%	Act%
62.00	100	100
64.00	33.20	32.35
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

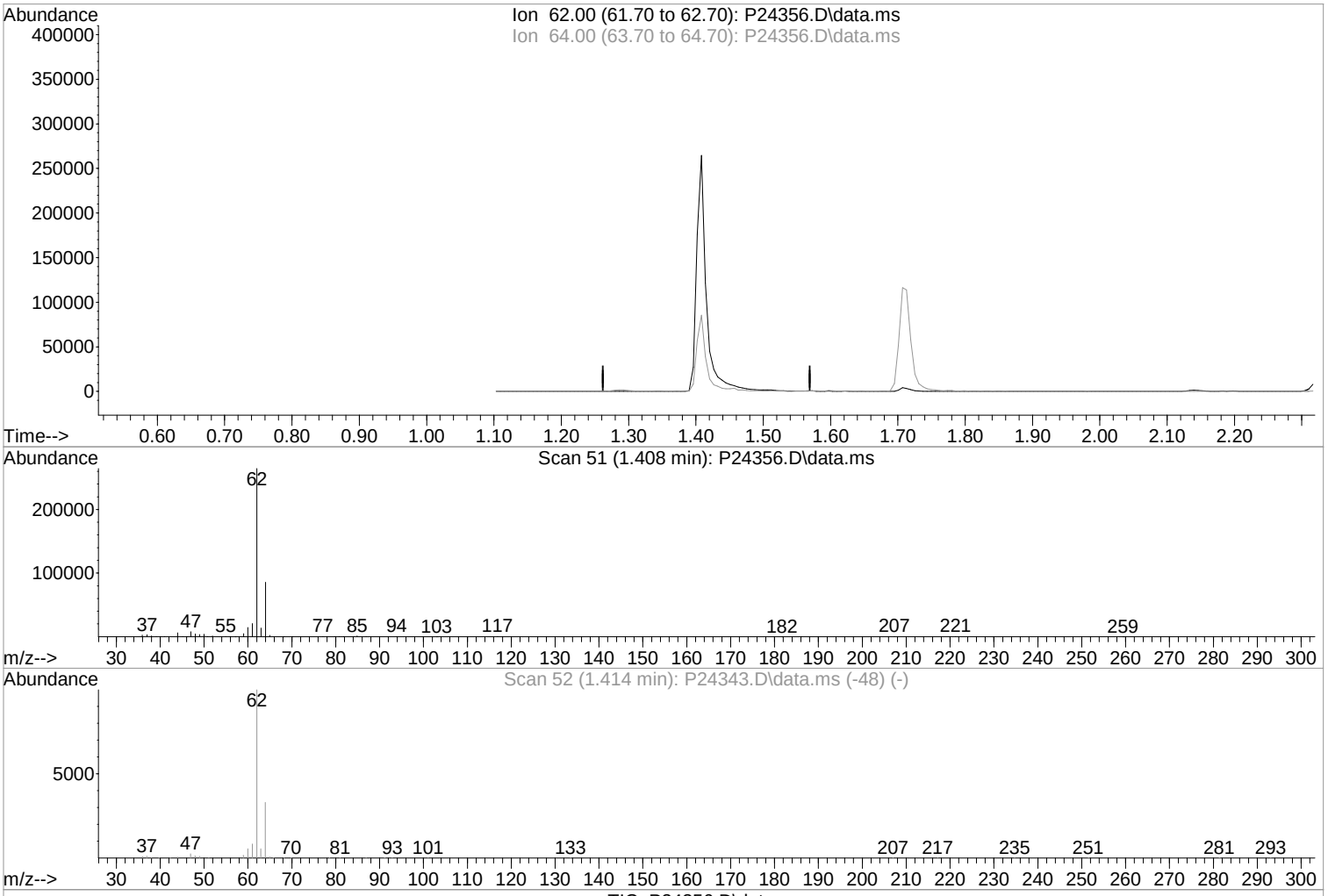
Peak not found.

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:27 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24356.D\data.ms

(4) Vinyl Chloride (P)

1.408min (-1.408) 0.00 ppb

response 0

Ion	Exp%	Act%
62.00	100	0.00
64.00	33.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/21/19

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:48 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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	Pentafluorobenzene	1.0000	1.0000	0.0	107	0.00
2	P	Dichlorodifluoromethane	0.6056	0.6545	-8.1	104	0.00
3	P	Chloromethane	0.8095	0.7616	5.9	100	0.00
4	P	Vinyl Chloride	0.7267	0.7631	-5.0	102	0.00
5	P	Bromomethane	0.5125	0.4162	4.6 ~~-18.8~~	106	0.00
6	P	Chloroethane	0.4398	0.4023	8.5	99	0.00
7		Freon 21	0.9175	0.9591	-4.5	102	0.00
8	P	Trichlorofluoromethane	0.7050	0.6651	5.7	99	0.00
9		Diethyl Ether	0.5392	0.4903	9.1	93	0.00
10		Freon 123a	0.5846	0.6144	-5.1	106	0.00
11		Freon 123	0.6713	0.7284	-8.5	112	0.00
12		Acrolein	0.1378	0.1310	4.9	100	0.00
13	P	1,1-Diclethene	0.4664	0.4584	1.7	101	0.00
14	P	Freon 113	0.4154	0.4146	0.2	108	0.00
15	P	Acetone	0.2394	0.2482	-3.7	102	0.00
16		2-Propanol	0.0622	0.0591	5.0	100	0.00
17		Iodomethane	0.5130	0.5998	10.5 ~~-16.9~~	92	0.00
18	P	Carbon Disulfide	1.3974	1.4386	-2.9	108	0.00
19		Acetonitrile	0.0305	0.0495	-62.3#	140	0.00
20		Allyl Chloride	0.2790	0.2654	4.9	95	0.00
21	P	Methyl Acetate	0.6500	0.6316	2.8	95	0.00
22	P	Methylene Chloride	0.5806	0.5256	9.5	96	0.00
23		TBA	0.0988	0.0878	11.1	93	0.00
24		Acrylonitrile	0.3159	0.2901	8.2	91	0.00
25	P	Methyl-t-Butyl Ether	1.8063	1.6670	7.7	94	0.00
26	P	trans-1,2-Dichloroethene	0.5189	0.4947	4.7	99	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-4.08#
28	P	1,1-Diclethane	0.9623	0.9322	3.1	96	0.00
29		Vinyl Acetate	0.1188	0.1185	0.3	107	0.00
30		DIPE	1.7415	1.7559	-0.8	100	0.00
31		2-Chloro-1,3-Butadiene	0.7526	0.7656	-1.7	107	0.00
32		ETBE	1.7407	1.7307	0.6	101	0.00
33		2,2-Dichloropropane	0.7578	0.7219	4.7	103	0.00
34	P	cis-1,2-Dichloroethene	0.5817	0.5497	5.5	98	0.00
35	P	2-Butanone	0.4024	0.3713	7.7	99	0.00
36		Propionitrile	0.1309	0.1184	9.5	88	-0.01
37		Bromochloromethane	0.3611	0.3432	5.0	98	0.00
38		Methacrylonitrile	0.3406	0.3012	11.6	91	0.00
39		Tetrahydrofuran	0.2607	0.2302	11.7	90	0.00
40	P	Chloroform	0.8638	0.8247	4.5	99	0.00
41	P	1,1,1-Trichloroethane	0.6725	0.6548	2.6	99	0.00
42		TAME	1.6509	1.6480	0.2	99	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	107	0.00
44	P	Cyclohexane	0.2931	0.3081	-5.1	108	0.00
45	s	surr4,Dibrflmethane	0.2748	0.2850	-3.7	107	0.00
46	P	Carbontetrachloride	0.3330	0.3362	-1.0	103	0.00
47		1,1-Dichloropropene	0.4272	0.4168	2.4	101	0.00
48	s	surr1,1,2-dichloroethane-d4	0.3485	0.3663	-5.1	109	0.00
49	P	Benzene	1.4282	1.3223	7.4	95	0.00
50	P	1,2-Dichloroethane	0.4573	0.4271	6.6	94	0.00
51		Iso-Butyl Alcohol	0.0299	0.0254	15.1	87	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:48 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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)
52		n-Heptane	0.4352	0.4443	-2.1	113	0.00
53		1-Butanol	0.0198	0.0182	8.1	89	0.00
54	P	Trichloroethene	0.3497	0.3396	2.9	98	0.00
55	P	Methylcyclohexane	0.4413	0.4749	-7.6	109	0.00
56	P	1,2-Diclpropane	0.3796	0.3586	5.5	99	0.00
57		Dibromomethane	0.2148	0.2026	5.7	96	0.00
58		1,4-Dioxane	0.0068	0.0067	1.5	105	-0.05
59		Methyl Methacrylate	0.3391	0.3133	7.6	94	0.00
60	P	Bromodichloromethane	0.3994	0.3873	3.0	100	0.00
61		2-Nitropropane	0.0793	0.0708	10.7	95	0.00
62		2-Chloroethylvinyl Ether	0.1132	0.1191	0.3 ~~-5.2~~	100	0.00
63	P	cis-1,3-Dichloropropene	0.5646	0.5457	3.3	95	0.00
64	P	4-Methyl-2-pentanone	0.4816	0.4624	4.0	100	0.00
65	s	SURR3,Toluene-d8	1.3033	1.3187	-1.2	107	0.00
66	P	Toluene	1.4790	1.4247	3.7	98	0.00
67	P	trans-1,3-Dichloropropene	0.4944	0.4888	1.1	95	0.00
68		Ethyl Methacrylate	0.5694	0.5469	4.0	93	0.00
69	P	1,1,2-Trichloroethane	0.3465	0.3132	9.6	94	0.00
70	s	SURR2,BFB	0.4668	0.4760	-2.0	108	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	105	0.00
72	P	Tetrachloroethene	0.2994	0.2872	4.1	103	0.00
73	P	2-Hexanone	0.4030	0.3769	6.5	99	0.00
74		1,3-Dichloropropane	0.7201	0.6581	8.6	95	0.00
75	P	Dibromochloromethane	0.3359	0.3161	5.9	96	0.00
76		N-Butyl Acetate	0.7358	0.7352	0.1	98	0.00
77	P	1,2-Dibromoethane	0.3927	0.3554	9.5	92	0.00
78	P	Chlorobenzene	1.0703	1.0105	5.6	100	0.00
79		3-CBTF	0.5218	0.5409	-3.7	104	0.00
80		4-CBTF	0.4717	0.5000	-6.0	106	0.00
81		1,1,1,2-Tetrachloroethane	0.3464	0.3212	7.3	96	0.00
82	P	Ethylbenzene	0.5771	0.5589	3.2	103	0.00
83	P	(m+p)Xylene	0.7057	0.6845	3.0	103	0.00
84	P	o-Xylene	0.6943	0.6742	2.9	102	0.00
85	P	Styrene	1.1252	1.1146	0.9	99	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	106	0.00
87	P	Bromoform	0.4222	0.3933	6.8	94	0.00
88		2-CBTF	1.0263	1.0146	1.1	104	0.00
89	P	Isopropylbenzene	3.2888	3.2253	1.9	104	0.00
90		Cyclohexanone	0.2085	0.1766	15.3	84	-0.01
91		trans-1,4-Dichloro-2-Butene	0.2722	0.2315	15.0	89	0.00
92	P	1,1,2,2-Tetrachloroethane	1.0971	0.9982	9.0	94	0.00
93		Bromobenzene	0.8848	0.8042	9.1	98	0.00
94		1,2,3-Trichloropropane	0.3480	0.3238	7.0	93	0.00
95		n-Propylbenzene	3.7678	3.7389	0.8	105	0.00
96		2-Chlorotoluene	2.3743	2.2677	4.5	102	0.00
97		3-Chlorotoluene	2.3228	2.3069	0.7	100	0.00
98		4-Chlorotoluene	2.6479	2.5298	4.5	102	0.00
99		1,3,5-Trimethylbenzene	2.7293	2.6619	2.5	104	0.00
100		tert-Butylbenzene	2.3741	2.3556	0.8	104	0.00
101		1,2,4-Trimethylbenzene	2.8232	2.6780	5.1	102	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:48 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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)
102		3,4-DCBTF	0.8462	0.8328	1.6	103	0.00
103		sec-Butylbenzene	3.4421	3.5085	-1.9	107	0.00
104		p-Isopropyltoluene	2.8587	2.9138	-1.9	106	0.00
105	P	1,3-Dclbenz	1.6112	1.5081	6.4	99	0.00
106	P	1,4-Dclbenz	1.7003	1.5451	9.1	99	0.00
107		2,4-DCBTF	0.7750	0.7725	0.3	104	0.00
108		2,5-DCBTF	0.8739	0.8536	2.3	105	0.00
109		n-Butylbenzene	2.5058	2.7433	-9.5	109	0.00
110	P	1,2-Dclbenz	1.6482	1.5236	7.6	98	0.00
111	P	1,2-Dibromo-3-chloropropane	0.2703	0.2353	12.9	87	0.00
112		Trielution Dichlorotoluene	1.3558	1.4364	-5.9	108	0.00
113		1,3,5 Trichlorobenzene	1.1864	1.2086	-1.9	111	0.00
114		Coelution Dichlorotoluene	1.4956	1.5949	-6.6	109	0.00
115	P	1,2,4-Tcbenzene	1.1561	1.2163	-5.2	110	0.00
116		Hexachlorobt	0.4875	0.5063	-3.9	127	0.00
117		Naphthalen	3.3933	3.5268	13.6 ~~-3.9~~	93	0.00
118		1,2,3-Tclbenzene	1.1924	1.2096	-1.4	105	0.00
119		2,4,5-Trichlorotolene	0.5335	0.6371	-5.2 ~~-19.4~~	109	0.00
120		2,3,6-Trichlorotoluene	0.6055	0.7156	-3.3 ~~-18.2~~	109	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:48 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.401	168	353986	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.480	114	553650	50.00	ppb	0.00
71) d5-Chlorobenzene	9.785	117	490288	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	256128	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.249	113	157783	51.86	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.72%			
48) surr1,1,2-dichloroetha...	5.785	65	202821	52.56	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 105.12%			
65) SURR3,Toluene-d8	8.297	98	730113	50.59	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.18%			
70) SURR2,BFB	10.864	95	263536	50.99	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.98%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.207	85	231700	54.05	ppb	99
3) Chloromethane	1.329	50	269586	47.04	ppb	100
4) Vinyl Chloride	1.408	62	270118m	52.50	ppb	
5) Bromomethane	1.634	94	147342	47.68	ppb	98
6) Chloroethane	1.707	64	142396	45.73	ppb	96
7) Freon 21	1.859	67	339494	52.27	ppb	99
8) Trichlorofluoromethane	1.908	101	235421	47.17	ppb	98
9) Diethyl Ether	2.140	59	173552	45.46	ppb	96
10) Freon 123a	2.140	67	217495	52.55	ppb	99
11) Freon 123	2.195	83	257847	54.25	ppb	98
12) Acrolein	2.237	56	231803	237.63	ppb	95
13) 1,1-Diclethene	2.329	96	162250	49.14	ppb	92
14) Freon 113	2.335	101	146767	49.91	ppb	99
15) Acetone	2.371	43	87847	51.82	ppb	94
16) 2-Propanol	2.499	45	418261	950.44	ppb	98
17) Iodomethane	2.457	142	212323	44.73	ppb	98
18) Carbon Disulfide	2.524	76	509252	51.47	ppb	98
19) Acetonitrile	2.615	40	87688	405.85	ppb	93
20) Allyl Chloride	2.658	76	93965	47.56	ppb	97
21) Methyl Acetate	2.682	43	223588	48.58	ppb	96
22) Methylene Chloride	2.774	84	186066	45.27	ppb	97
23) TBA	2.902	59	621775	889.02	ppb	97
24) Acrylonitrile	3.024	53	513378	229.52	ppb	99
25) Methyl-t-Butyl Ether	3.079	73	590099	46.15	ppb	97
26) trans-1,2-Dichloroethene	3.066	96	175134	47.68	ppb	99
28) 1,1-Diclethane	3.560	63	329987	48.44	ppb	99
29) Vinyl Acetate	3.652	86	41940	49.87	ppb	98
30) DIPE	3.688	45	621558	50.41	ppb	98
31) 2-Chloro-1,3-Butadiene	3.682	53	270999	50.86	ppb	99
32) ETBE	4.212	59	612661	49.72	ppb	96
33) 2,2-Dichloropropane	4.389	77	255538	47.63	ppb	96
34) cis-1,2-Dichloroethene	4.401	96	194586	47.25	ppb	92
35) 2-Butanone	4.444	43	131443	46.14	ppb	95
36) Propionitrile	4.517	54	209544	226.11	ppb	100
37) Bromochloromethane	4.786	130	121505	47.52	ppb	97
38) Methacrylonitrile	4.792	67	106636	44.22	ppb	97
39) Tetrahydrofuran	4.883	42	81505	44.17	ppb	92
40) Chloroform	4.968	83	291925	47.74	ppb	96
41) 1,1,1-Trichloroethane	5.267	97	231801	48.69	ppb	99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:48 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.102	73	583370	49.91	ppb		96
44) Cyclohexane	5.353	41	170573	52.55	ppb		98
46) Carbontetrachloride	5.542	117	186130	50.48	ppb		100
47) 1,1-Dichloropropene	5.554	75	230740	48.78	ppb		99
49) Benzene	5.865	78	732067	46.29	ppb		100
50) 1,2-Dichloroethane	5.901	62	236470	46.70	ppb		97
51) Iso-Butyl Alcohol	5.877	43	281291	848.48	ppb		100
52) n-Heptane	6.352	43	245986	51.05	ppb		97
53) 1-Butanol	6.834	56	502641	2297.16	ppb		100
54) Trichloroethene	6.810	130	188005	48.55	ppb		97
55) Methylcyclohexane	7.047	55	262921	53.81	ppb		97
56) 1,2-Diclpropane	7.090	63	198561	47.24	ppb		97
57) Dibromomethane	7.230	93	112150	47.14	ppb		98
58) 1,4-Dioxane	7.291	88	74617	995.22	ppb		87
59) Methyl Methacrylate	7.316	69	173458	46.19	ppb		99
60) Bromodichloromethane	7.456	83	214442	48.49	ppb		97
61) 2-Nitropropane	7.736	41	78380	89.28	ppb		95
62) 2-Chloroethylvinyl Ether	7.864	63	65934	49.86	ppb		89
63) cis-1,3-Dichloropropene	7.998	75	302101	48.33	ppb		97
64) 4-Methyl-2-pentanone	8.206	43	256011	48.01	ppb		99
66) Toluene	8.370	91	788798	48.17	ppb		98
67) trans-1,3-Dichloropropene	8.638	75	270616	49.43	ppb		100
68) Ethyl Methacrylate	8.779	69	302783	48.02	ppb		99
69) 1,1,2-Trichloroethane	8.827	97	173402	45.19	ppb		98
72) Tetrachloroethene	8.962	164	140812	47.96	ppb		95
73) 2-Hexanone	9.114	43	184812	46.77	ppb		96
74) 1,3-Dichloropropane	8.998	76	322647	45.69	ppb		97
75) Dibromochloromethane	9.224	129	154966	47.05	ppb		94
76) N-Butyl Acetate	9.272	43	360481	49.96	ppb		97
77) 1,2-Dibromoethane	9.315	107	174241	45.25	ppb		98
78) Chlorobenzene	9.815	112	495449	47.21	ppb		98
79) 3-CBTF	9.833	180	265201	51.83	ppb		99
80) 4-CBTF	9.888	180	245131	52.99	ppb		98
81) 1,1,1,2-Tetrachloroethane	9.900	131	157469	46.35	ppb		97
82) Ethylbenzene	9.937	106	274033	48.42	ppb	#	90
83) (m+p)Xylene	10.047	106	671198	97.00	ppb		97
84) o-Xylene	10.406	106	330544	48.55	ppb		99
85) Styrene	10.419	104	546471	49.53	ppb		99
87) Bromoform	10.565	173	100731	46.57	ppb		100
88) 2-CBTF	10.650	180	259873	49.43	ppb		99
89) Isopropylbenzene	10.742	105	826085	49.03	ppb		98
90) Cyclohexanone	10.797	55	904631	847.17	ppb		100
91) trans-1,4-Dichloro-2-B...	11.047	53	59287	42.52	ppb		97
92) 1,1,2,2-Tetrachloroethane	10.998	83	255658	45.49	ppb		99
93) Bromobenzene	10.986	156	205968	45.44	ppb		95
94) 1,2,3-Trichloropropane	11.028	110	82922	46.51	ppb		100
95) n-Propylbenzene	11.095	91	957635	49.62	ppb		100
96) 2-Chlorotoluene	11.156	91	580815	47.75	ppb		99
97) 3-Chlorotoluene	11.211	91	590872	49.66	ppb		99
98) 4-Chlorotoluene	11.254	91	647963	47.77	ppb		97
99) 1,3,5-Trimethylbenzene	11.248	105	681780	48.76	ppb		99
100) tert-Butylbenzene	11.522	119	603338	49.61	ppb		99
101) 1,2,4-Trimethylbenzene	11.559	105	685905	47.43	ppb		97
102) 3,4-DCBTF	11.620	214	213315	49.21	ppb		98
103) sec-Butylbenzene	11.705	105	898626	50.97	ppb		99
104) p-Isopropyltoluene	11.827	119	746309	50.96	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:48 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.784	146	386278	46.80	ppb	98
106) 1,4-Dclbenz	11.857	146	395733	45.44	ppb	100
107) 2,4-DCBTF	11.912	214	197850	49.84	ppb	100
108) 2,5-DCBTF	11.955	214	218627	48.84	ppb	97
109) n-Butylbenzene	12.156	91	702638	54.74	ppb	98
110) 1,2-Dclbenz	12.162	146	390242	46.22	ppb	97
111) 1,2-Dibromo-3-chloropr...	12.784	157	60257	43.52	ppb	90
112) Trielution Dichlorotol...	12.900	125	1103717	158.92	ppb	99
113) 1,3,5 Trichlorobenzene	12.955	180	309567	50.94	ppb	99
114) Coelution Dichlorotoluene	13.229	125	817010	106.64	ppb	97
115) 1,2,4-Tcbenzene	13.436	180	311518	52.60	ppb	99
116) Hexachlorobt	13.577	225	129681	51.93	ppb	98
117) Naphthalen	13.625	128	903316	43.18	ppb	99
118) 1,2,3-Tclbenzene	13.814	180	309821	50.72	ppb	98
119) 2,4,5-Trichlorotolene	14.406	159	163174	52.59	ppb	96
120) 2,3,6-Trichlorotoluene	14.485	159	183297	51.63	ppb	94

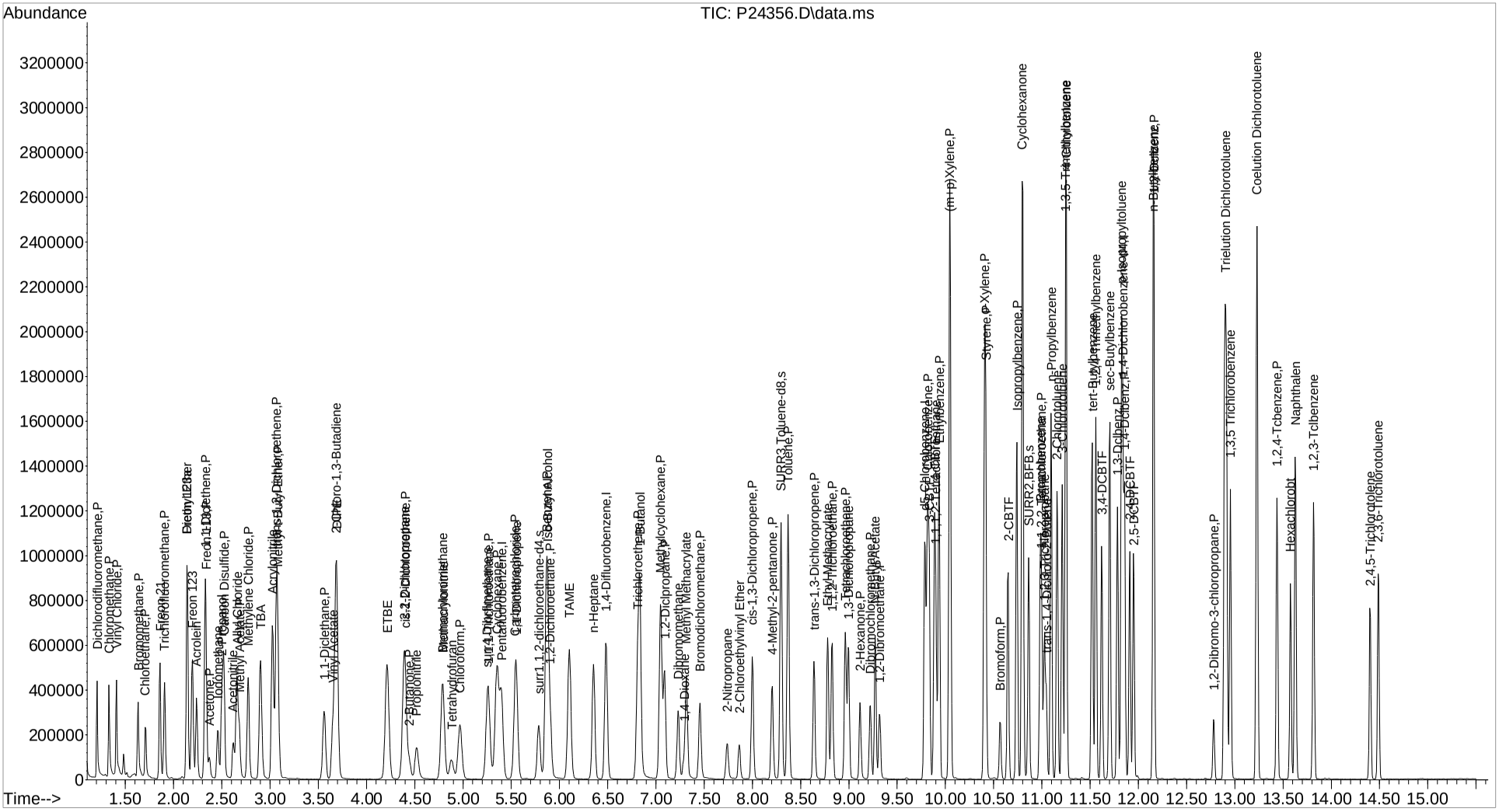
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 02/21/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24356.D
Acq On : 21 Feb 2019 10:58 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:04:48 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24357.D
Acq On : 21 Feb 2019 11:24 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:07:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.407	168	337905	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	538827	50.00	ppb		0.00
71) d5-Chlorobenzene	9.791	117	459654	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	241518	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.261	113	148649	50.20	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.40%				
48) surr1,1,2-dichloroetha...	5.792	65	193211	51.44	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.88%				
65) SURR3,Toluene-d8	8.297	98	686676	48.89	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.78%				
70) SURR2,BFB	10.864	95	246046	48.91	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.82%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	73146	17.87	ppb		98
3) Chloromethane	1.341	50	91815	16.78	ppb		97
4) Vinyl Chloride	1.414	62	92754	18.89	ppb		99
5) Bromomethane	1.640	94	61098	20.25	ppb		96
6) Chloroethane	1.719	64	44441	14.95	ppb		91
7) Freon 21	1.865	67	117593	18.97	ppb		97
8) Trichlorofluoromethane	1.914	101	87250	18.31	ppb		98
9) Diethyl Ether	2.152	59	73983	20.30	ppb		96
10) Freon 123a	2.152	67	78648	19.91	ppb		92
11) Freon 123	2.201	83	99811	22.00	ppb		97
12) Acrolein	2.250	56	42481	45.62	ppb		95
13) 1,1-Diclethene	2.341	96	60012	19.04	ppb		98
14) Freon 113	2.341	101	56858	20.26	ppb		99
15) Acetone	2.384	43	36584	22.61	ppb		97
16) 2-Propanol	2.512	45	160415	381.87	ppb		99
17) Iodomethane	2.469	142	57625	14.41	ppb		98
18) Carbon Disulfide	2.530	76	179033	18.96	ppb		98
19) Acetonitrile	2.627	40	37375	181.22	ppb		95
20) Allyl Chloride	2.670	76	37861	20.08	ppb		92
21) Methyl Acetate	2.688	43	83155	18.93	ppb		99
22) Methylene Chloride	2.786	84	73146	18.64	ppb		97
23) TBA	2.908	59	287475	430.60	ppb		99
24) Acrylonitrile	3.036	53	226586	106.12	ppb		96
25) Methyl-t-Butyl Ether	3.085	73	255629	20.94	ppb		99
26) trans-1,2-Dichloroethene	3.073	96	62086	17.71	ppb		91
28) 1,1-Diclethane	3.572	63	127149	19.55	ppb		97
29) Vinyl Acetate	3.670	86	17810	22.18	ppb	#	69
30) DIPE	3.700	45	246544	20.95	ppb		99
31) 2-Chloro-1,3-Butadiene	3.694	53	93808	18.44	ppb		96
32) ETBE	4.225	59	226229	19.23	ppb		92
33) 2,2-Dichloropropane	4.402	77	93200	18.20	ppb		98
34) cis-1,2-Dichloroethene	4.408	96	78486	19.96	ppb		92
35) 2-Butanone	4.450	43	55173	20.29	ppb		100
36) Propionitrile	4.530	54	93535	105.73	ppb		96
37) Bromochloromethane	4.798	130	46537	19.07	ppb		90
38) Methacrylonitrile	4.798	67	47570	20.67	ppb		84
39) Tetrahydrofuran	4.895	42	35864	20.36	ppb		88
40) Chloroform	4.975	83	112913	19.34	ppb		90
41) 1,1,1-Trichloroethane	5.273	97	86002	18.92	ppb		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24357.D
Acq On : 21 Feb 2019 11:24 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:07:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.109	73	235440	21.10	ppb	97
44) Cyclohexane	5.359	41	66161	20.94	ppb	89
46) Carbontetrachloride	5.542	117	63868	17.80	ppb	91
47) 1,1-Dichloropropene	5.560	75	86548	18.80	ppb	96
49) Benzene	5.871	78	285072	18.52	ppb	99
50) 1,2-Dichloroethane	5.913	62	94447	19.17	ppb	97
51) Iso-Butyl Alcohol	5.883	43	118898	368.51	ppb	99
52) n-Heptane	6.358	43	87400	18.64	ppb	96
53) 1-Butanol	6.840	56	208922	981.08	ppb	99
54) Trichloroethene	6.816	130	68609	18.21	ppb	95
55) Methylcyclohexane	7.047	55	98490	20.71	ppb	88
56) 1,2-Diclpropane	7.090	63	75695	18.51	ppb	98
57) Dibromomethane	7.230	93	42905	18.53	ppb	95
58) 1,4-Dioxane	7.291	88	34650	474.87	ppb	93
59) Methyl Methacrylate	7.322	69	74404	20.36	ppb	95
60) Bromodichloromethane	7.462	83	78206	18.17	ppb	98
61) 2-Nitropropane	7.736	41	34044	39.85	ppb	90
63) cis-1,3-Dichloropropene	8.005	75	115938	19.06	ppb	96
64) 4-Methyl-2-pentanone	8.206	43	104483	20.13	ppb	97
66) Toluene	8.370	91	294038	18.45	ppb	96
67) trans-1,3-Dichloropropene	8.639	75	104857	19.68	ppb	98
68) Ethyl Methacrylate	8.785	69	126229	20.57	ppb	94
69) 1,1,2-Trichloroethane	8.828	97	68243	18.28	ppb	96
72) Tetrachloroethene	8.968	164	50758	18.44	ppb	93
73) 2-Hexanone	9.120	43	75831	20.47	ppb	98
74) 1,3-Dichloropropane	8.998	76	128893	19.47	ppb	98
75) Dibromochloromethane	9.224	129	58496	18.95	ppb	98
76) N-Butyl Acetate	9.273	43	138559	20.48	ppb	100
77) 1,2-Dibromoethane	9.321	107	70730	19.59	ppb	99
78) Chlorobenzene	9.815	112	183549	18.65	ppb	97
79) 3-CBTF	9.833	180	105602	22.01	ppb	98
80) 4-CBTF	9.888	180	92950	21.43	ppb	92
81) 1,1,1,2-Tetrachloroethane	9.900	131	61214	19.22	ppb	98
82) Ethylbenzene	9.937	106	95916	18.08	ppb	99
83) (m+p)Xylene	10.047	106	240657	37.10	ppb	99
84) o-Xylene	10.406	106	118852	18.62	ppb	89
85) Styrene	10.419	104	202987	19.62	ppb	98
87) Bromoform	10.571	173	38638	18.95	ppb	99
88) 2-CBTF	10.650	180	102456	20.67	ppb	97
89) Isopropylbenzene	10.742	105	289959	18.25	ppb	99
90) Cyclohexanone	10.797	55	96627	95.96	ppb	97
91) trans-1,4-Dichloro-2-B...	11.047	53	26784	20.37	ppb	97
92) 1,1,2,2-Tetrachloroethane	10.998	83	101338	19.12	ppb	99
93) Bromobenzene	10.986	156	78333	18.33	ppb	95
94) 1,2,3-Trichloropropane	11.028	110	32301	19.21	ppb	91
95) n-Propylbenzene	11.095	91	335826	18.45	ppb	99
96) 2-Chlorotoluene	11.156	91	208125	18.15	ppb	99
97) 3-Chlorotoluene	11.211	91	236287	21.06	ppb	97
98) 4-Chlorotoluene	11.254	91	235667	18.43	ppb	95
99) 1,3,5-Trimethylbenzene	11.248	105	237072	17.98	ppb	100
100) tert-Butylbenzene	11.522	119	206327	17.99	ppb	97
101) 1,2,4-Trimethylbenzene	11.559	105	245026	17.97	ppb	99
102) 3,4-DCBTF	11.620	214	82973	20.30	ppb	96
103) sec-Butylbenzene	11.705	105	307067	18.47	ppb	100
104) p-Isopropyltoluene	11.827	119	251904	18.24	ppb	98
105) 1,3-Dclbenz	11.784	146	139009	17.86	ppb	97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24357.D
Acq On : 21 Feb 2019 11:24 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 21 12:07:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	143477	17.47	ppb	99
107) 2,4-DCBTF	11.912	214	77251	20.64	ppb	98
108) 2,5-DCBTF	11.955	214	85353	20.22	ppb	97
109) n-Butylbenzene	12.156	91	237407	19.61	ppb	99
110) 1,2-Dclbenz	12.156	146	144537	18.16	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.784	157	24572	18.82	ppb	88
112) Trielution Dichlorotol...	12.900	125	424904	64.88	ppb	95
113) 1,3,5 Trichlorobenzene	12.955	180	121626	21.22	ppb	98
114) Coelution Dichlorotoluene	13.229	125	315672	43.70	ppb	98
115) 1,2,4-Tcbenzene	13.436	180	112032	20.06	ppb	97
116) Hexachlorobt	13.577	225	43817	18.61	ppb	96
117) Naphthalen	13.625	128	338432	17.36	ppb	100
118) 1,2,3-Tclbenzene	13.814	180	113863	19.77	ppb	99
119) 2,4,5-Trichlorotolene	14.400	159	49524	20.40	ppb	95
120) 2,3,6-Trichlorotoluene	14.485	159	48158	17.41	ppb	98

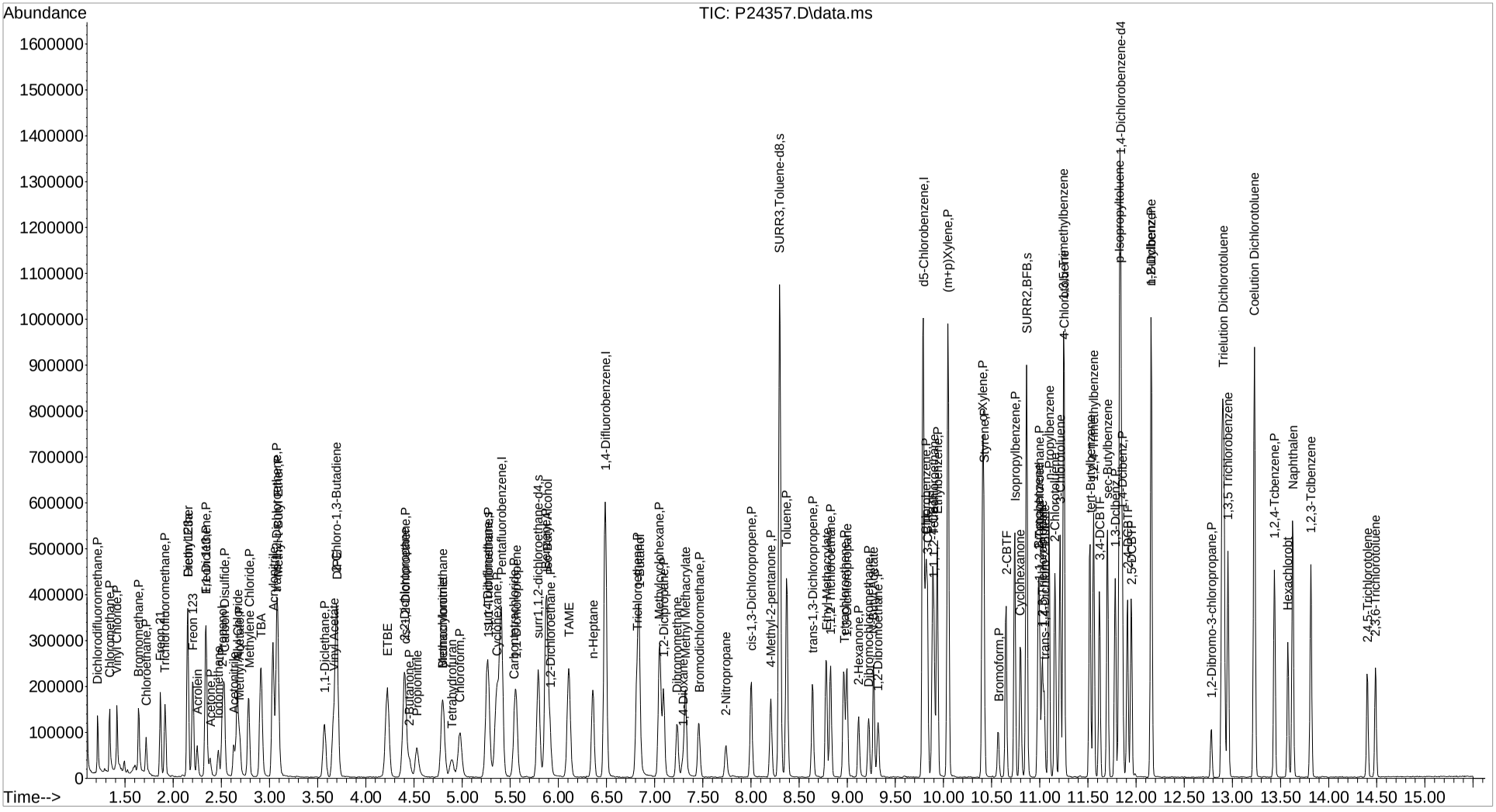
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 02/21/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24357.D
Acq On : 21 Feb 2019 11:24 am
Operator : K.Ruest
Sample : LCS-ACID Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

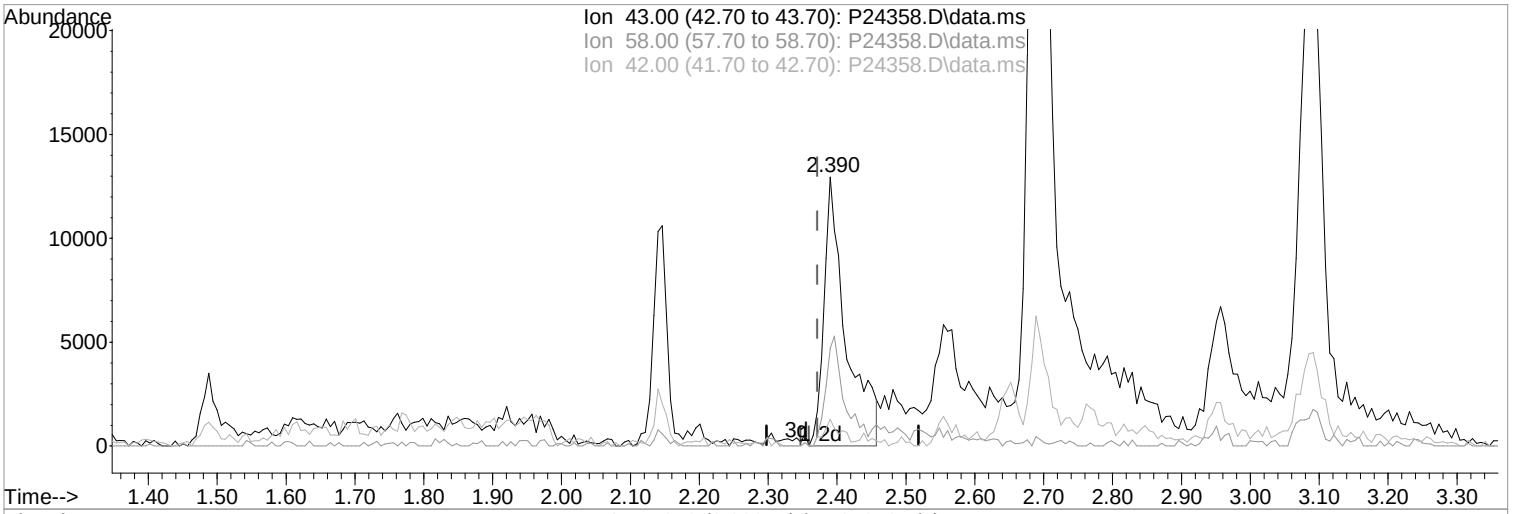
Quant Time: Feb 21 12:07:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

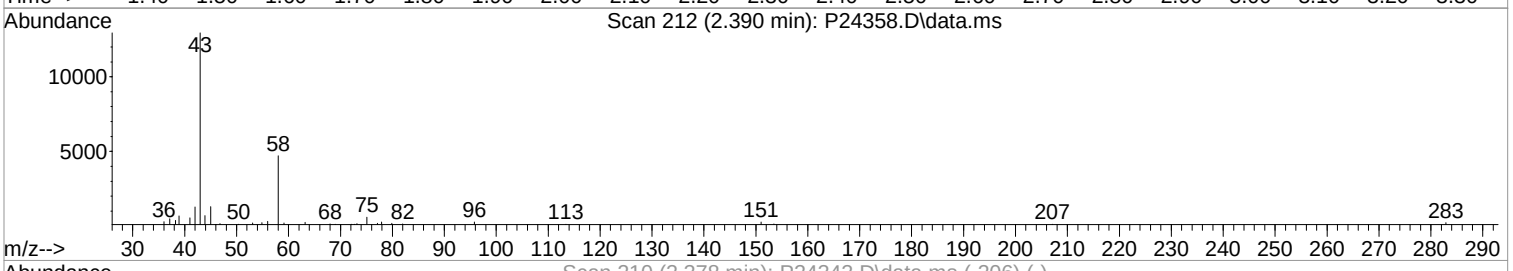


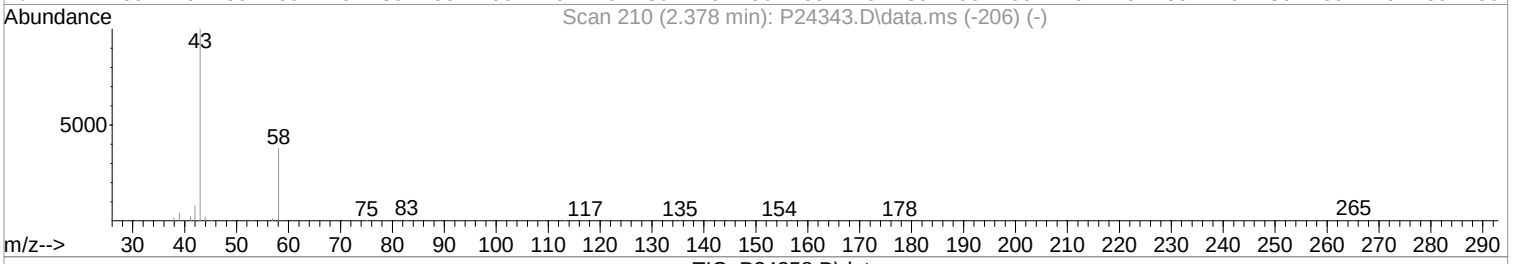
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(15) Acetone (P)

2.390min (+0.018) 18.63 ppb m

response 28982

Ion	Exp%	Act%
43.00	100	100
58.00	38.10	36.37
42.00	7.80	9.91
0.00	0.00	0.00

Manual Integration:

After

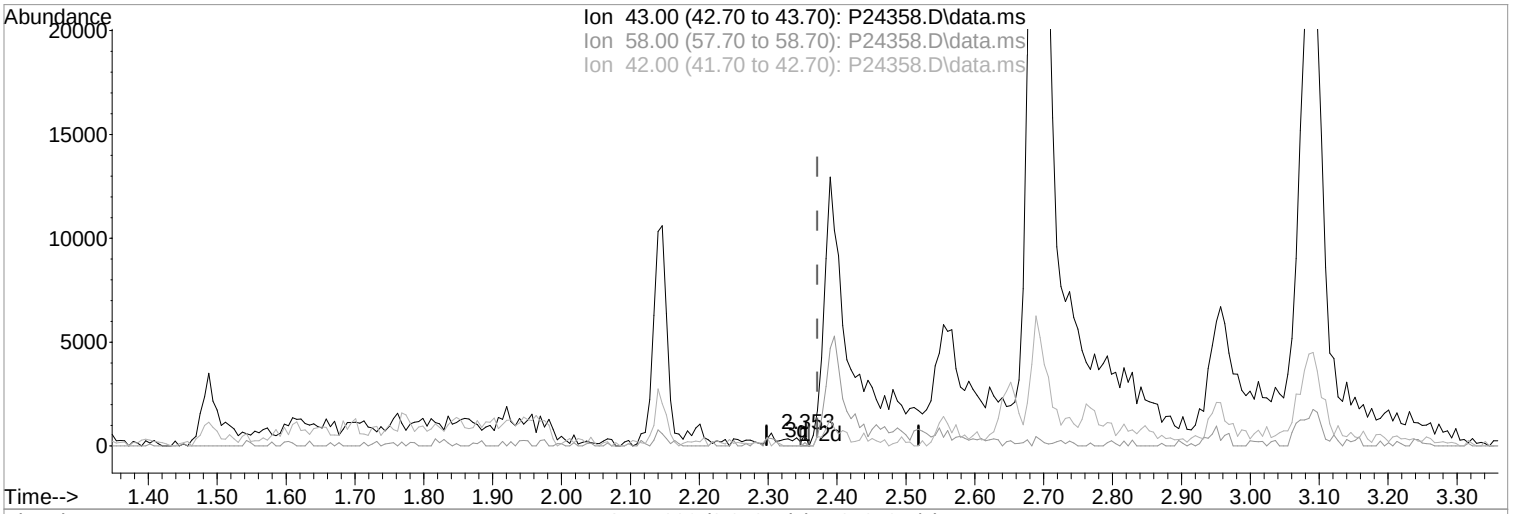
Peak not found.

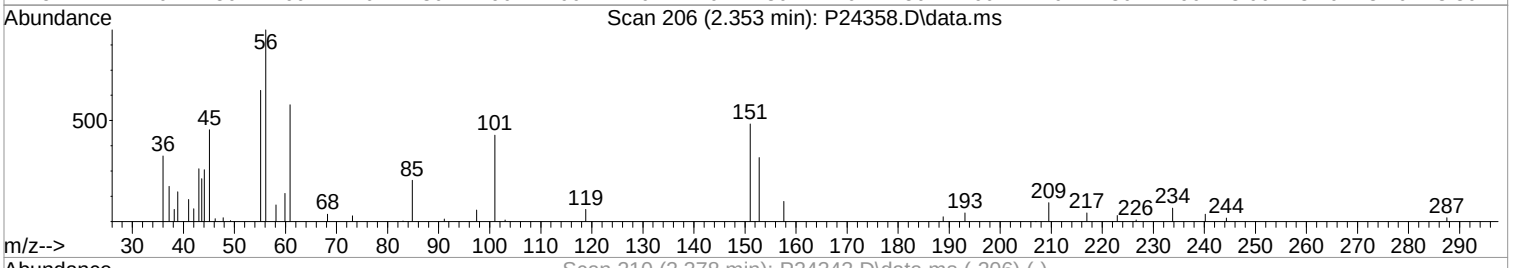
02/21/19

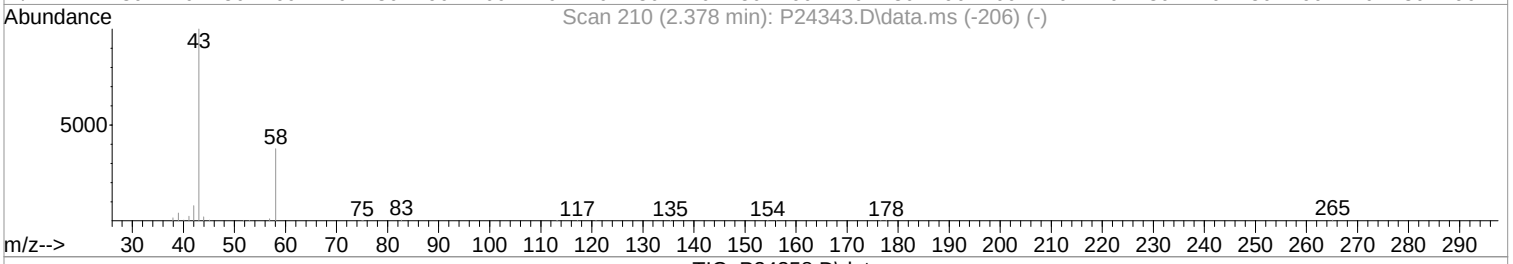
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(15) Acetone (P)

2.353min (-0.018) 0.14 ppb

response 212

Ion	Exp%	Act%
43.00	100	100
58.00	38.10	28.50
42.00	7.80	25.91
0.00	0.00	0.00

Manual Integration:

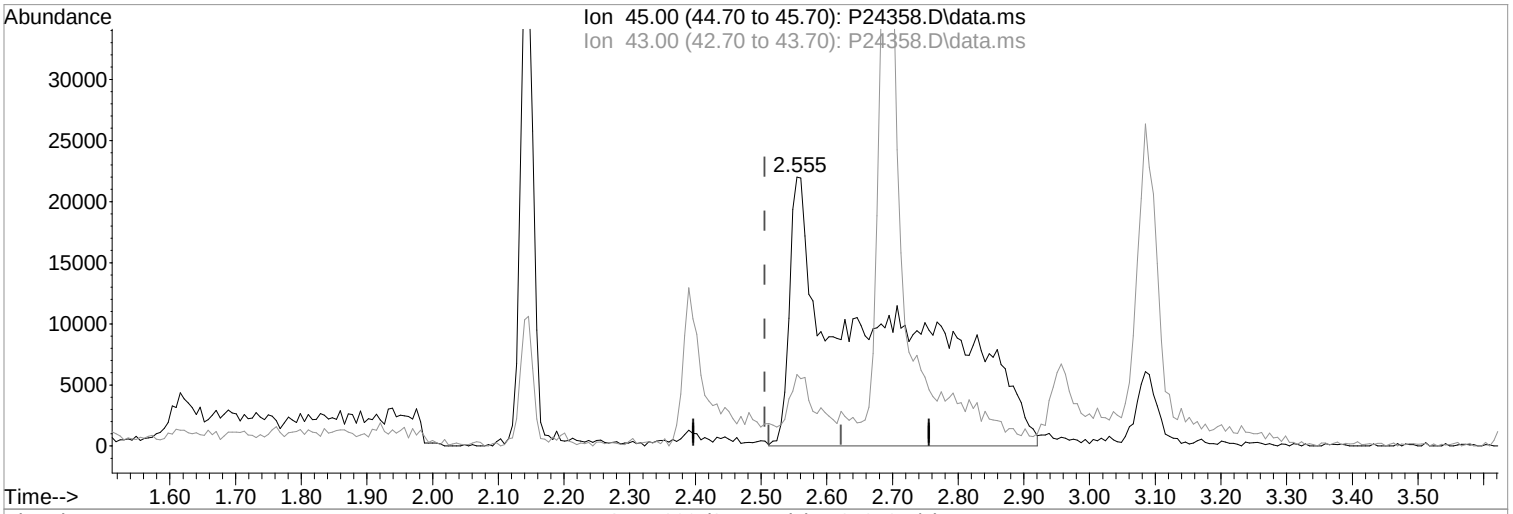
Before

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(16) 2-Propanol

2.555min (+0.049) 522.92 ppb m

response 211151

Ion	Exp%	Act%
45.00	100	100
43.00	18.50	26.55
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

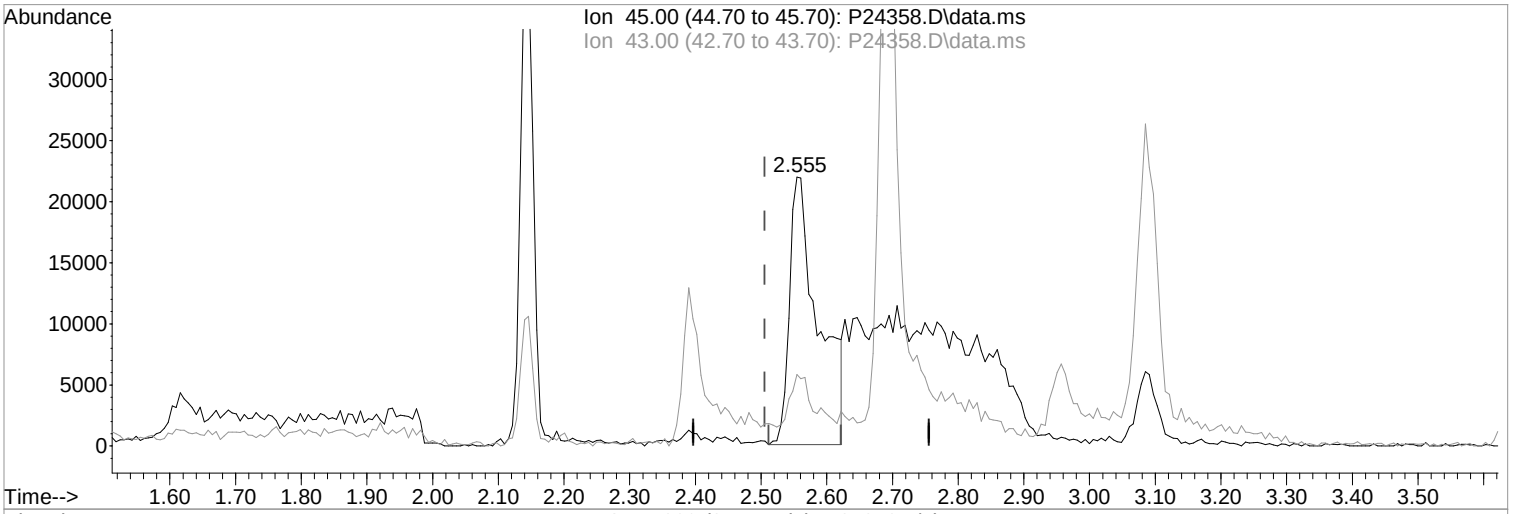
Poor integration.

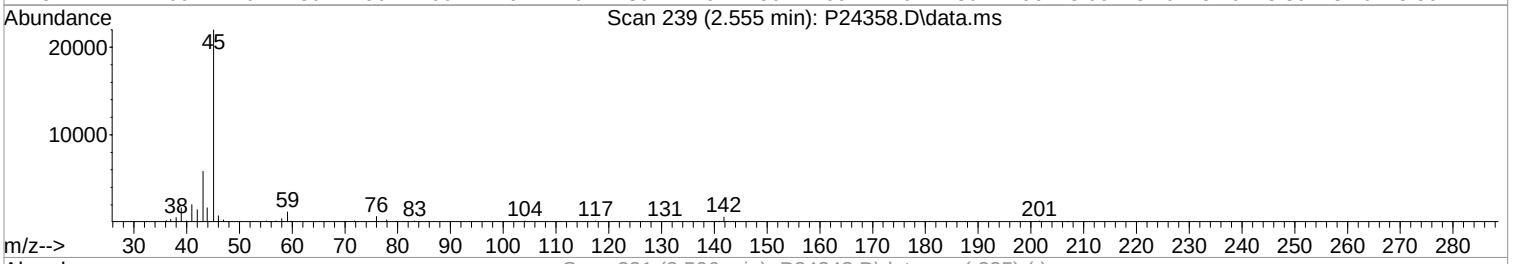
02/21/19

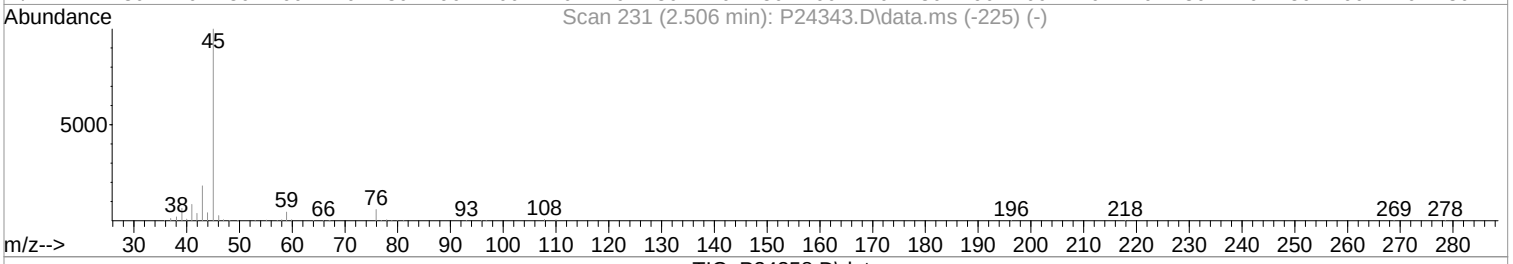
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(16) 2-Propanol

2.555min (+0.049) 165.47 ppb

response 66814

Ion	Exp%	Act%
45.00	100	100
43.00	18.50	26.55
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

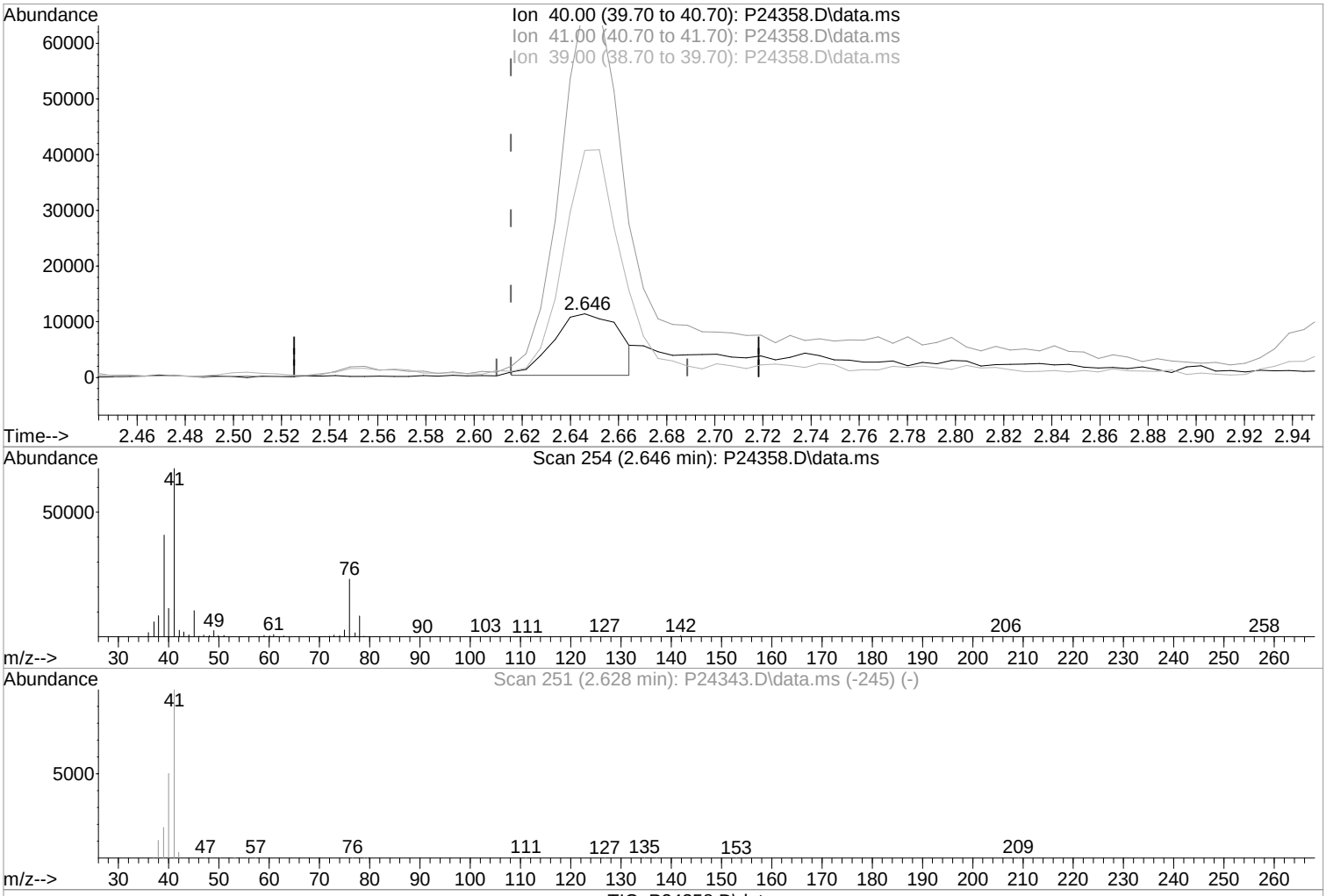
Before

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(19) Acetonitrile

2.646min (+0.031) 106.29 ppb m

response 21072

Ion	Exp%	Act%
40.00	100	100
41.00	199.30	592.11#
39.00	38.60	357.37#
0.00	0.00	0.00

Manual Integration:

After

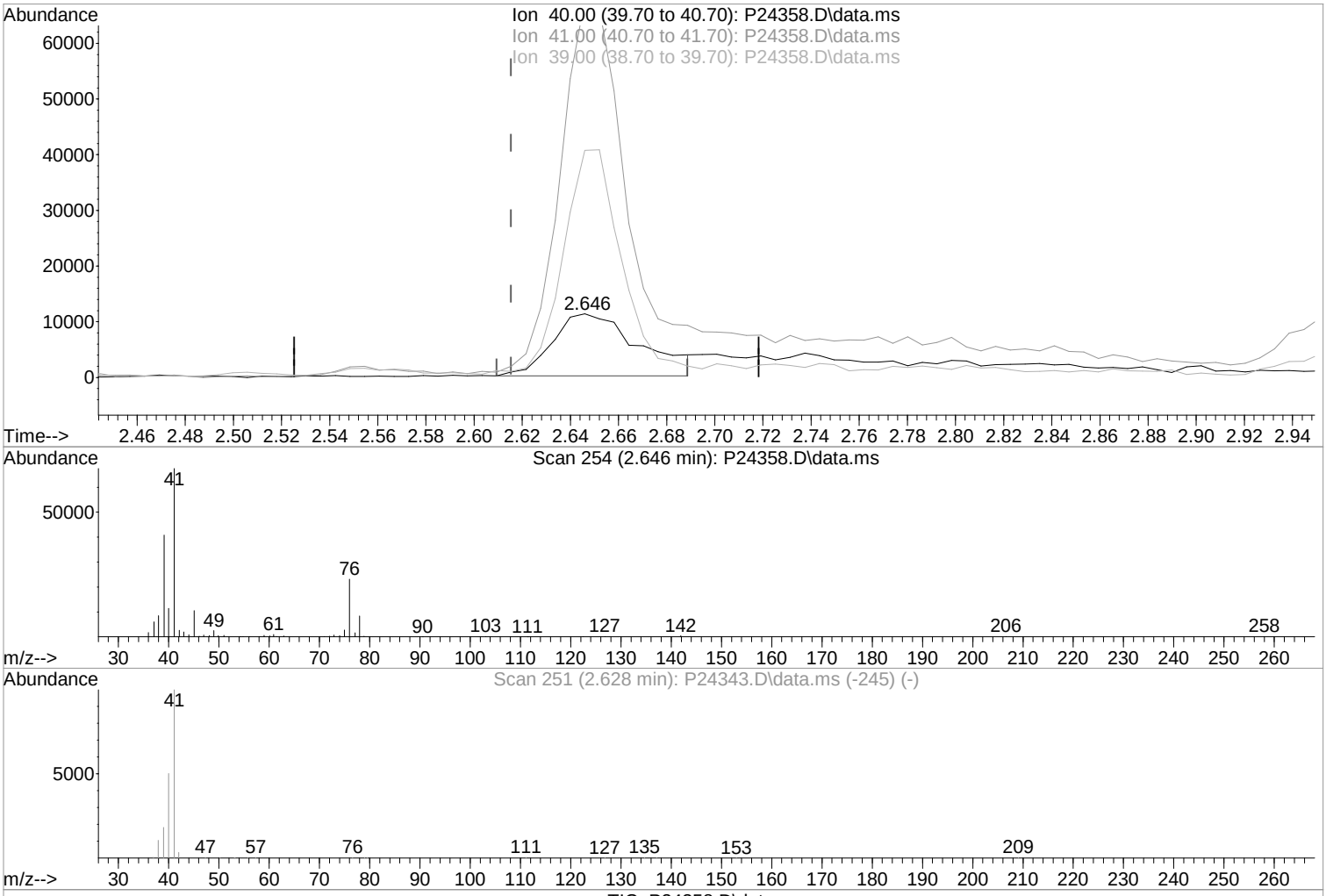
Poor integration.

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(19) Acetonitrile

2.646min (+0.031) 140.80 ppb

response 27914

Ion	Exp%	Act%
40.00	100	100
41.00	199.30	592.11#
39.00	38.60	357.37#
0.00	0.00	0.00

Manual Integration:

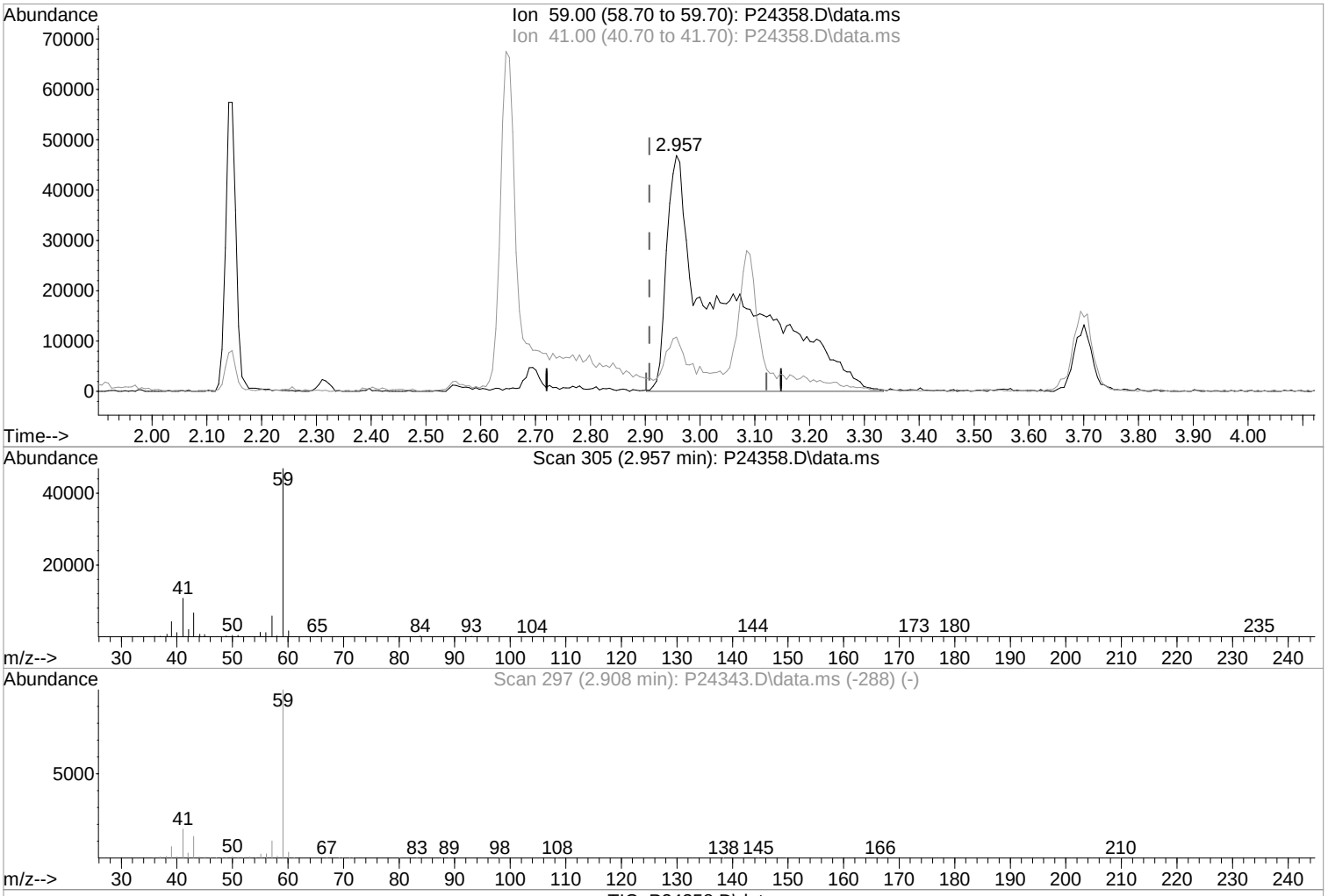
Before

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(23) TBA

2.957min (+0.049) 547.71 ppb m

response 351486

Ion	Exp%	Act%
59.00	100	100
41.00	18.20	22.96
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

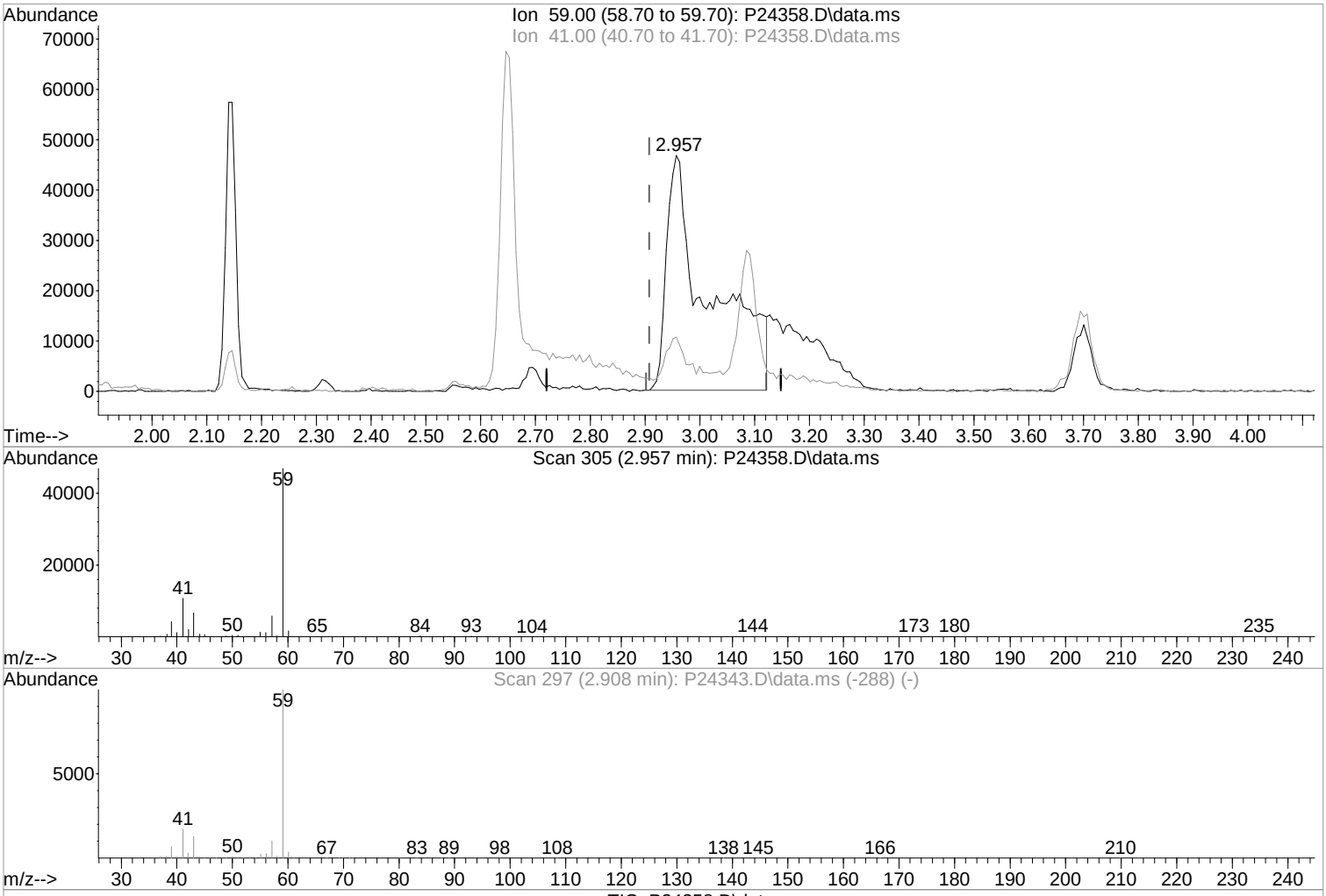
Poor integration.

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(23) TBA

2.957min (+0.049) 397.65 ppb

response 255187

Ion	Exp%	Act%
59.00	100	100
41.00	18.20	22.96
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

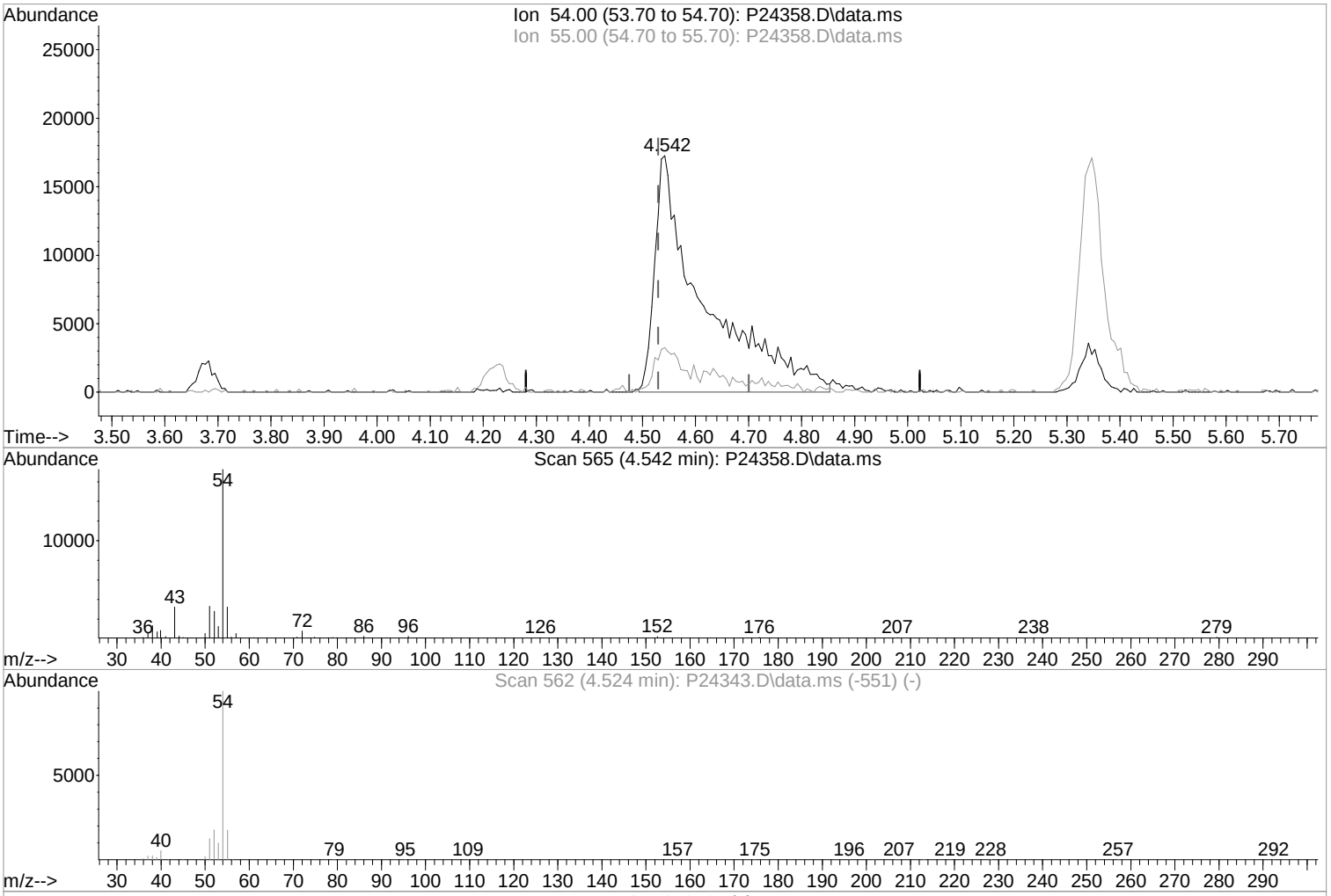
Before

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(36) Propionitrile

4.542min (+0.012) 130.53 ppb m

response 110998

Ion	Exp%	Act%
54.00	100	100
55.00	18.00	18.83
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

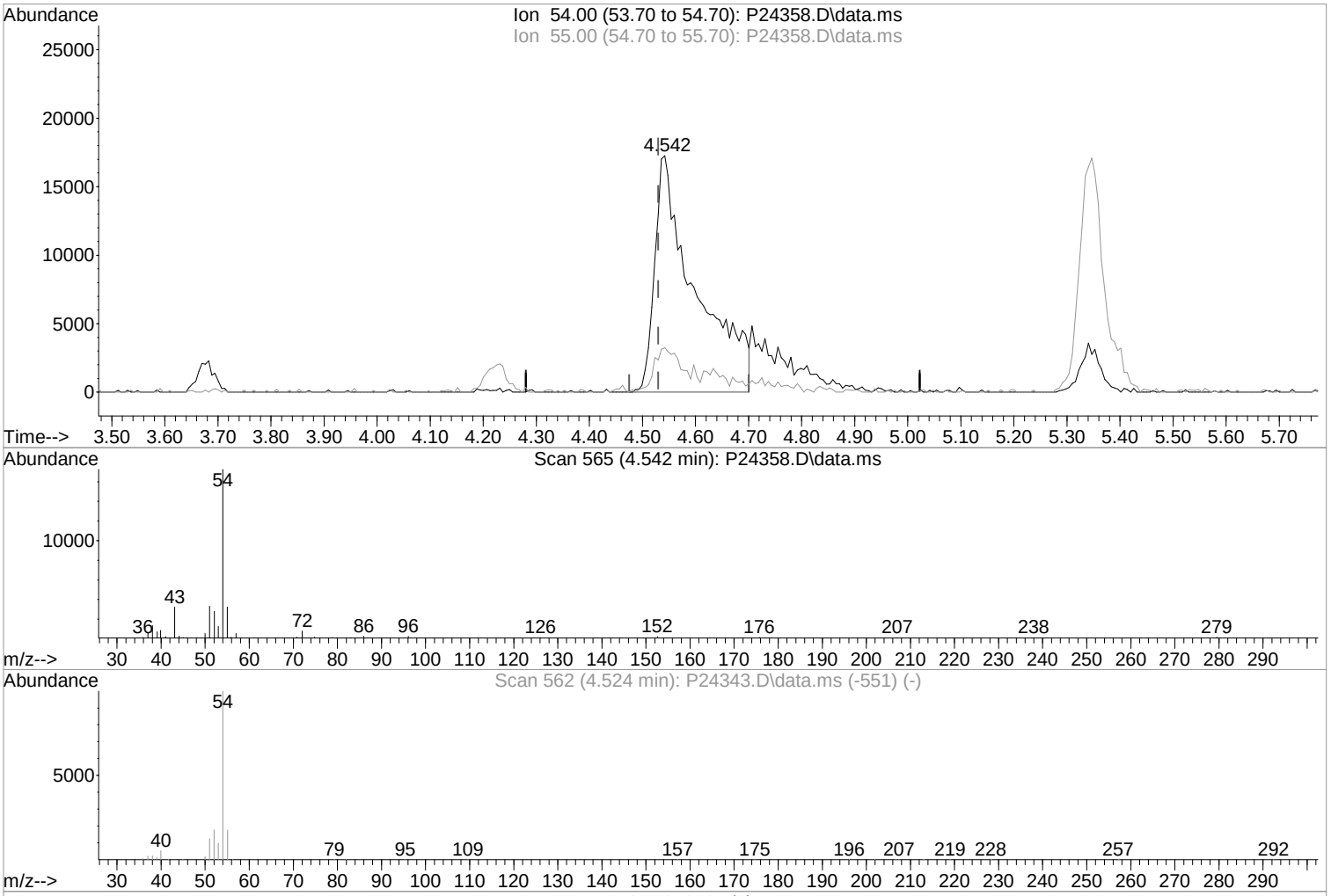
Poor integration.

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(36) Propionitrile

4.542min (+0.012) 107.62 ppb

response 91513

Ion	Exp%	Act%
54.00	100	100
55.00	18.00	18.83
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

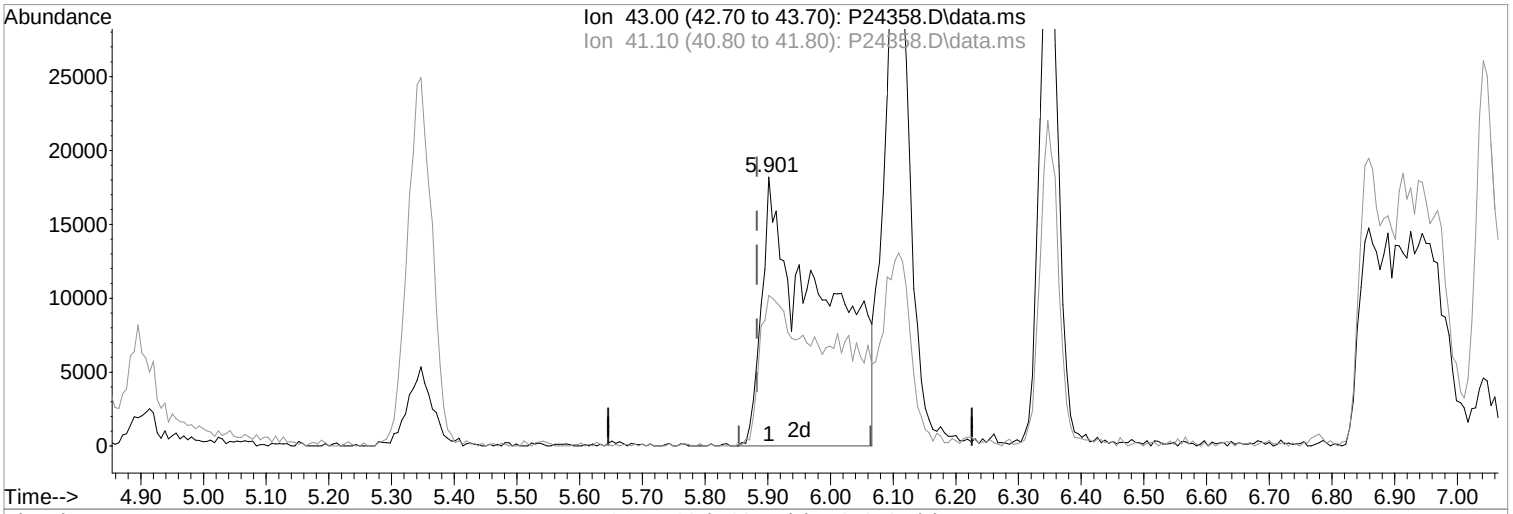
Before

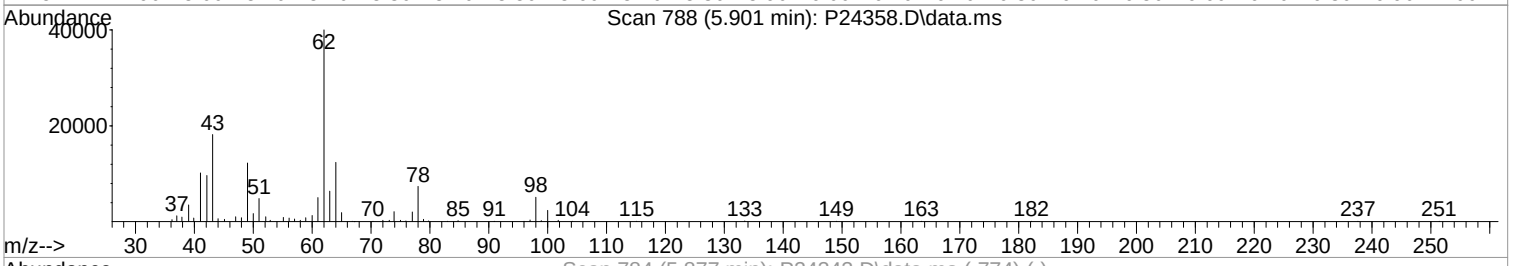
02/21/19

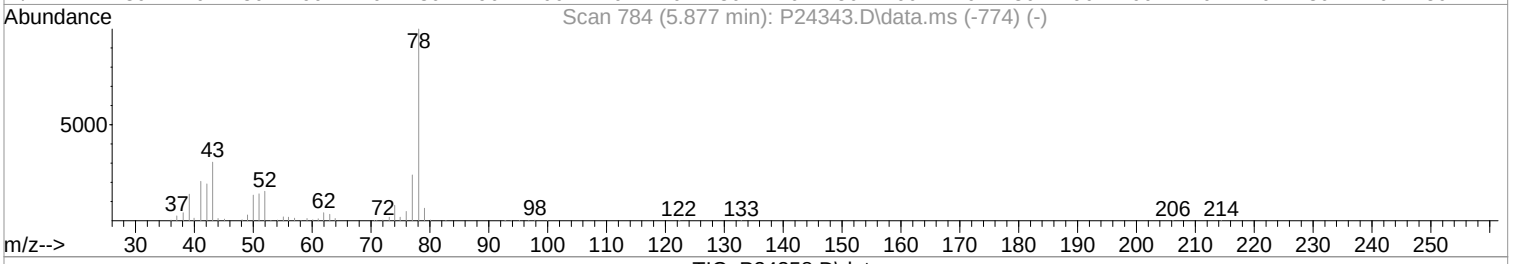
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(51) Iso-Butyl Alcohol

5.901min (+0.018) 391.55 ppb m

response 123197

Ion	Exp%	Act%
43.00	100	100
41.10	67.00	55.96
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

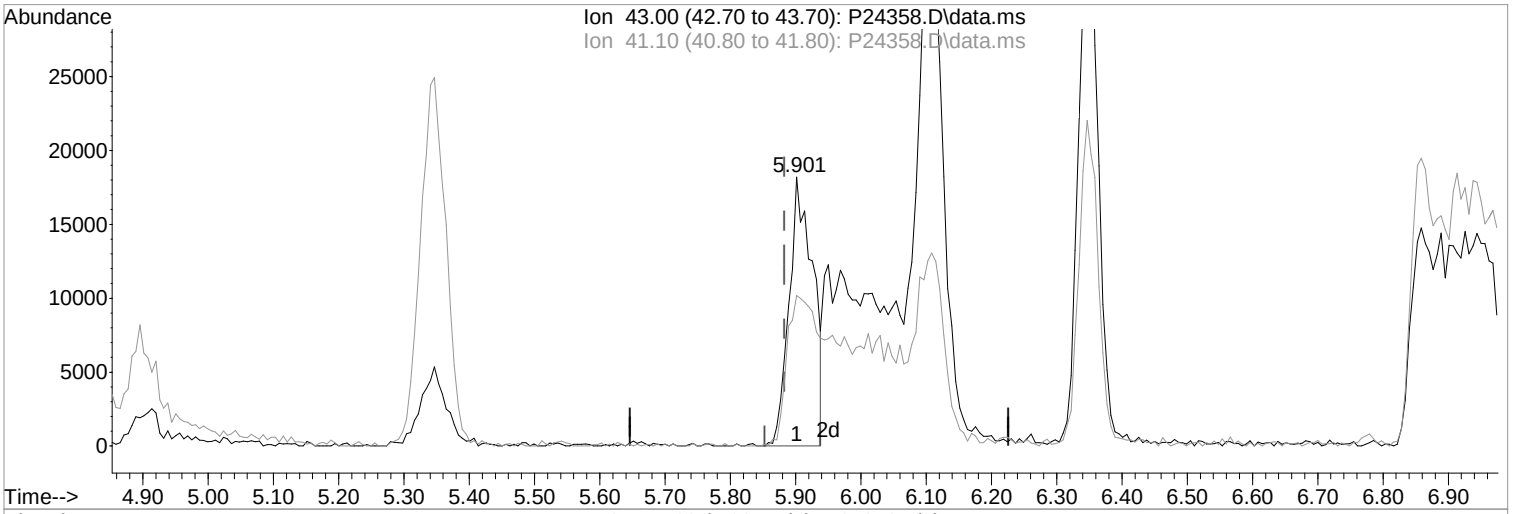
Poor integration.

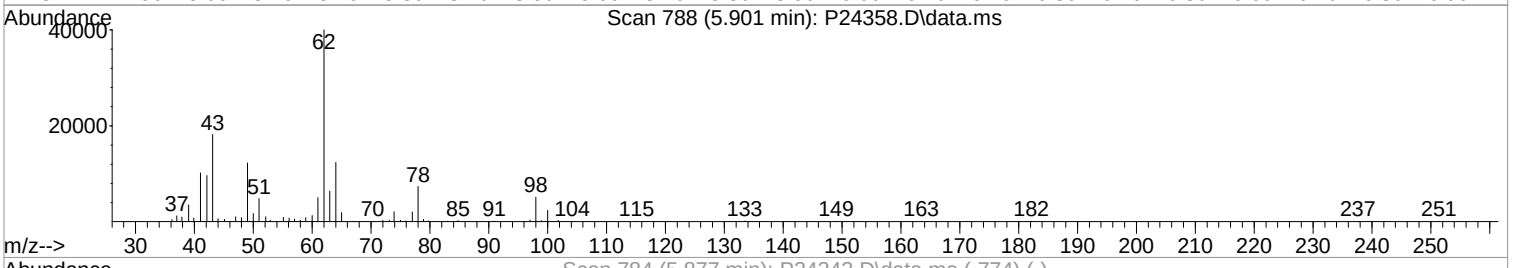
02/21/19

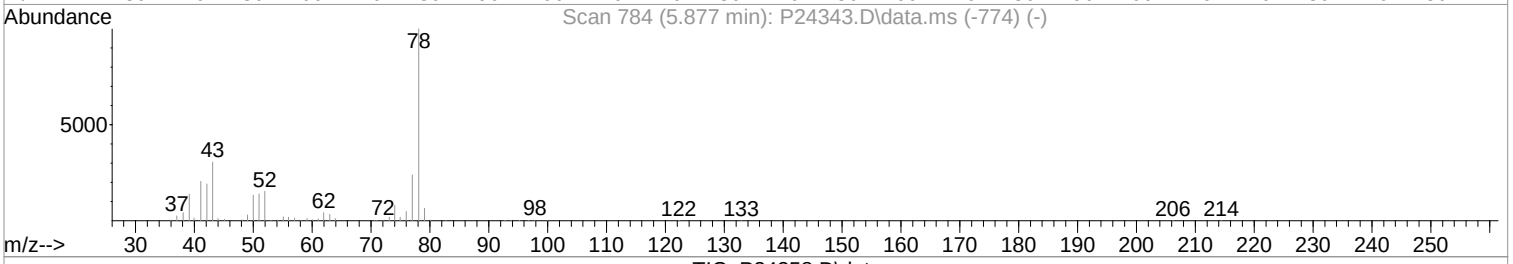
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(51) Iso-Butyl Alcohol

5.901min (+0.018) 146.31 ppb

response 46036

Ion	Exp%	Act%
43.00	100	100
41.10	67.00	55.96
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

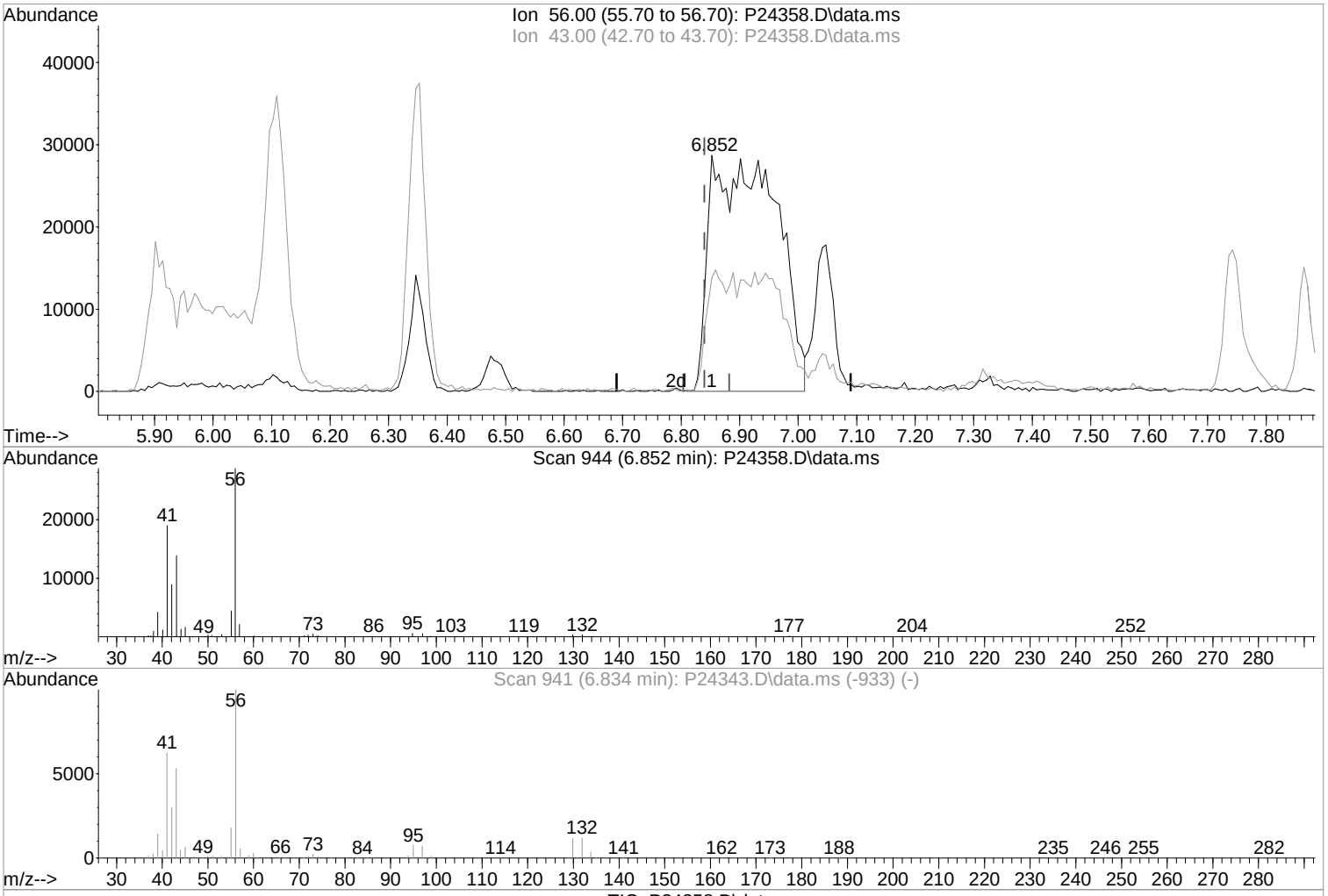
Before

02/21/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24358.D\data.ms

(53) 1-Butanol

6.852min (+0.012) 1098.07 ppb m

response 228029

Ion	Exp%	Act%
56.00	100	100
43.00	54.40	52.98
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

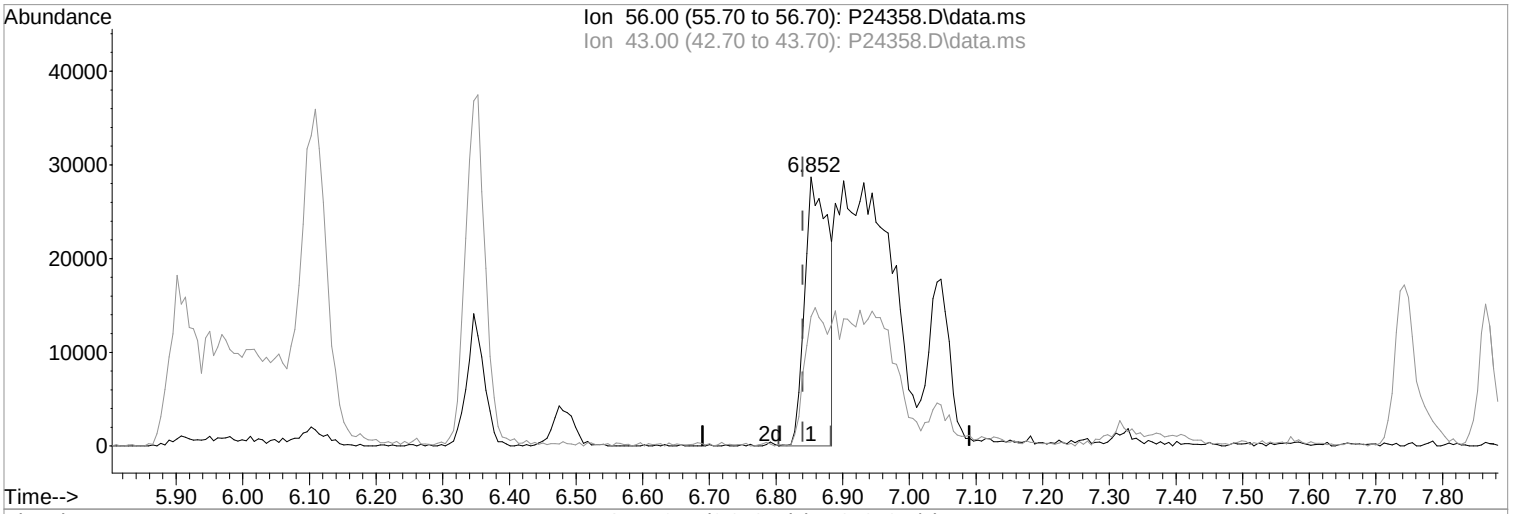
Poor integration.

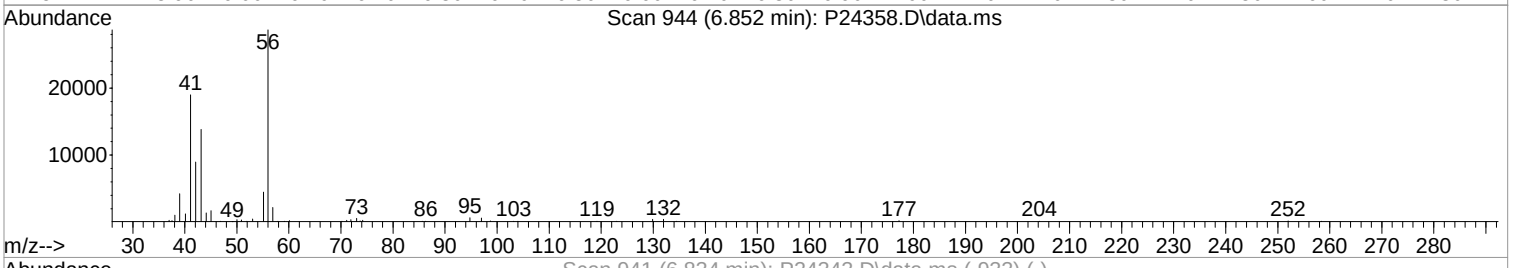
02/21/19

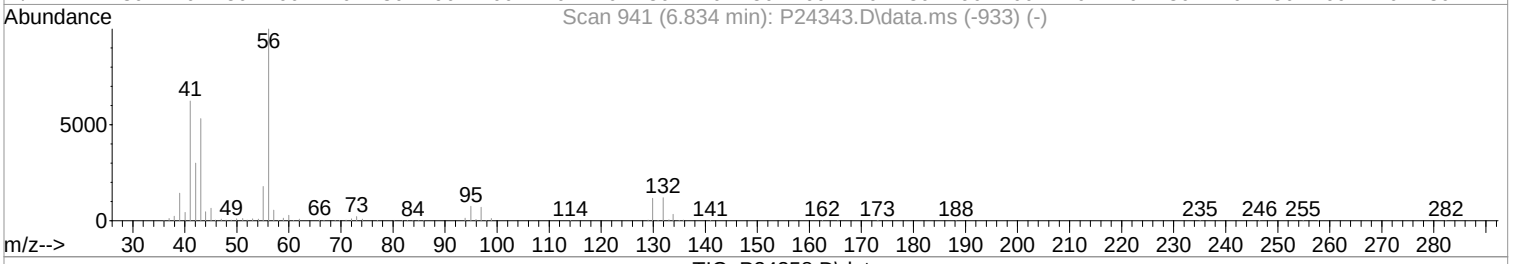
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(53) 1-Butanol

6.852min (+0.012) 339.10 ppb

response 70418

Ion	Exp%	Act%
56.00	100	100
43.00	54.40	171.56#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

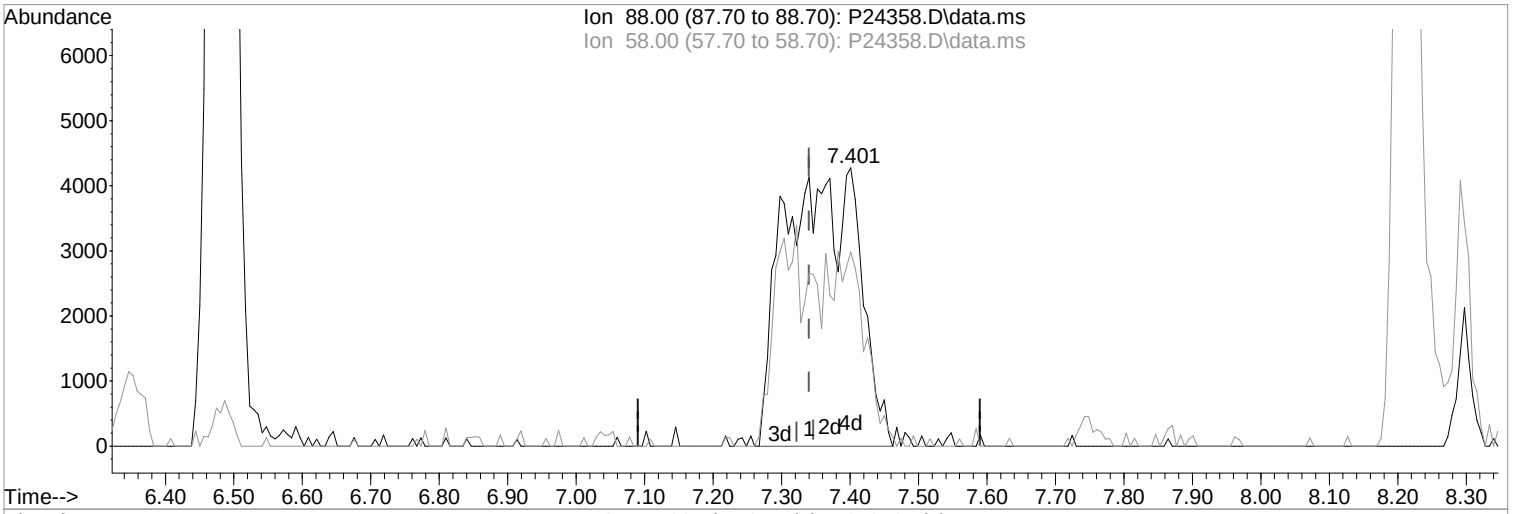
Before

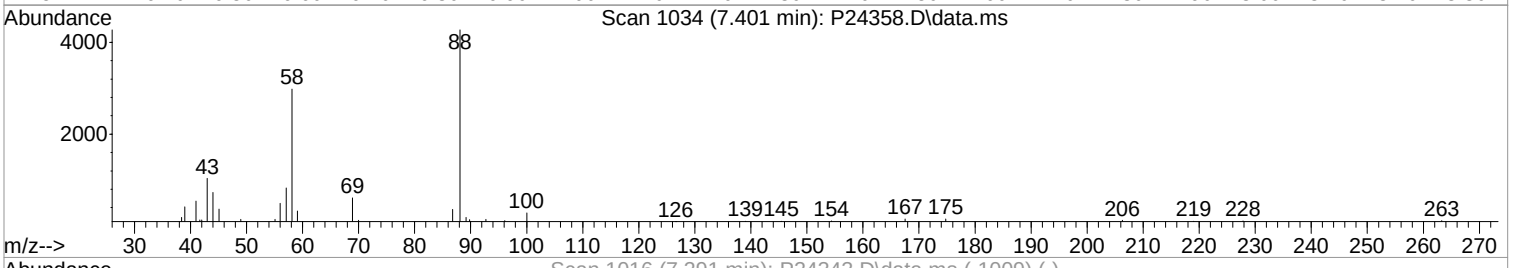
02/21/19

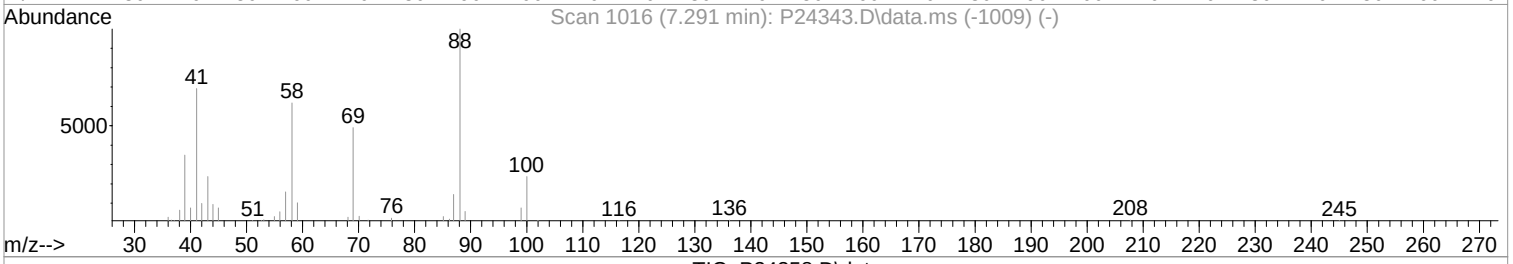
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(58) 1,4-Dioxane

7.401min (+0.061) 452.02 ppb m

response 32164

Ion	Exp%	Act%
88.00	100	100
58.00	63.20	69.79
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

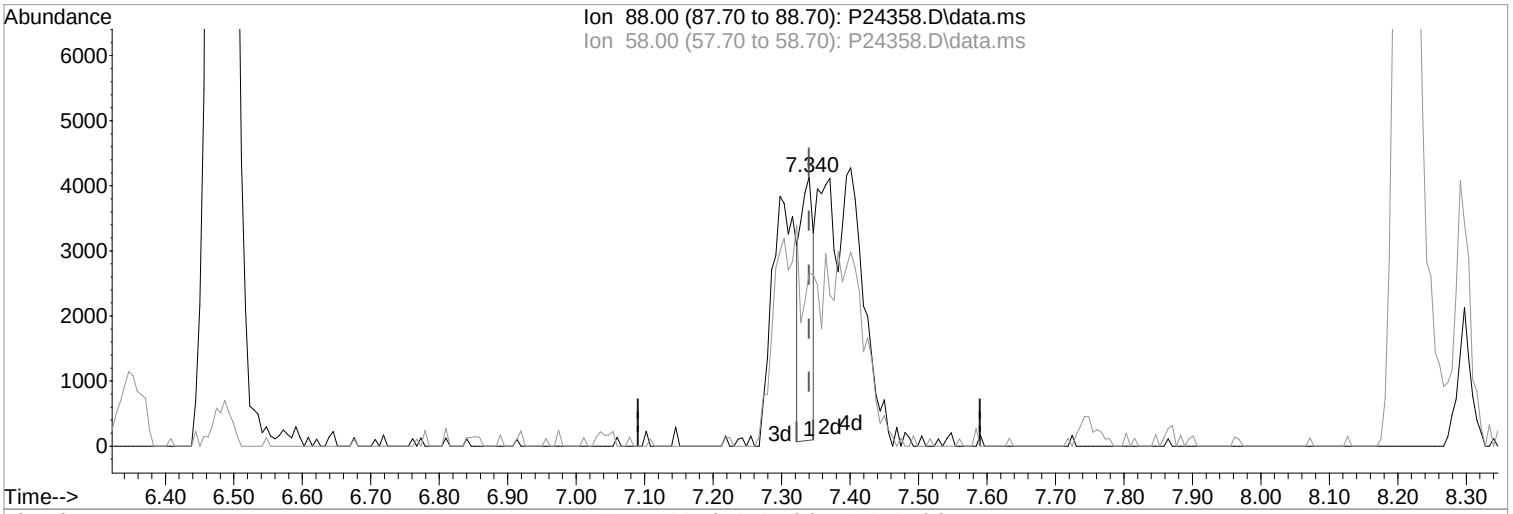
Poor integration.

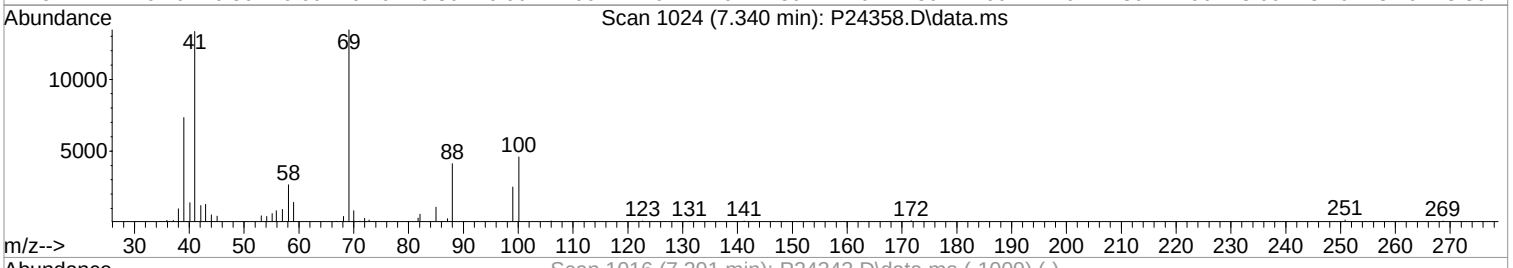
02/21/19

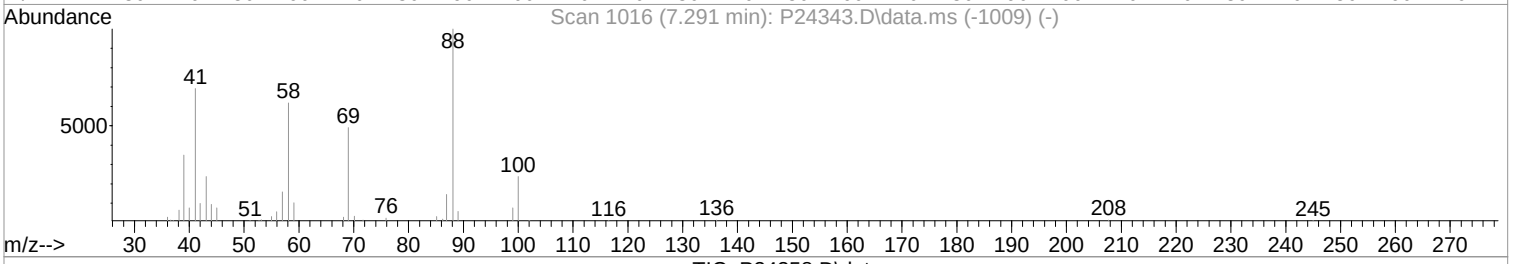
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(58) 1,4-Dioxane

7.340min (+0.000) 74.16 ppb

response 5277

Ion	Exp%	Act%
88.00	100	100
58.00	63.20	64.32
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

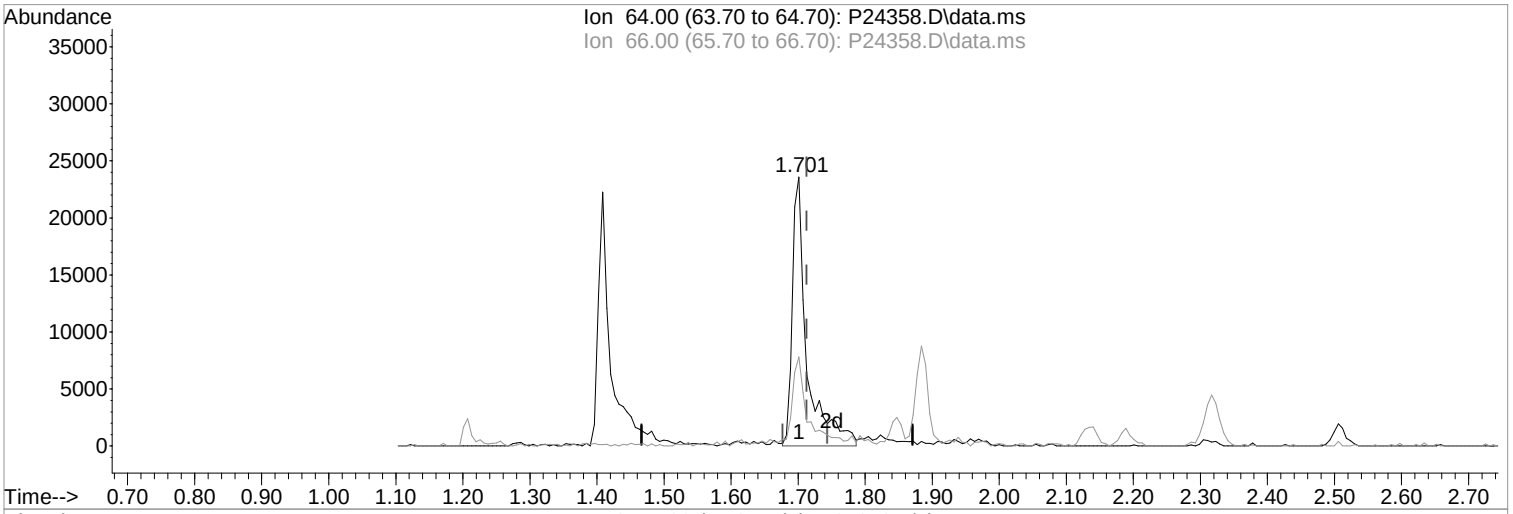
Before

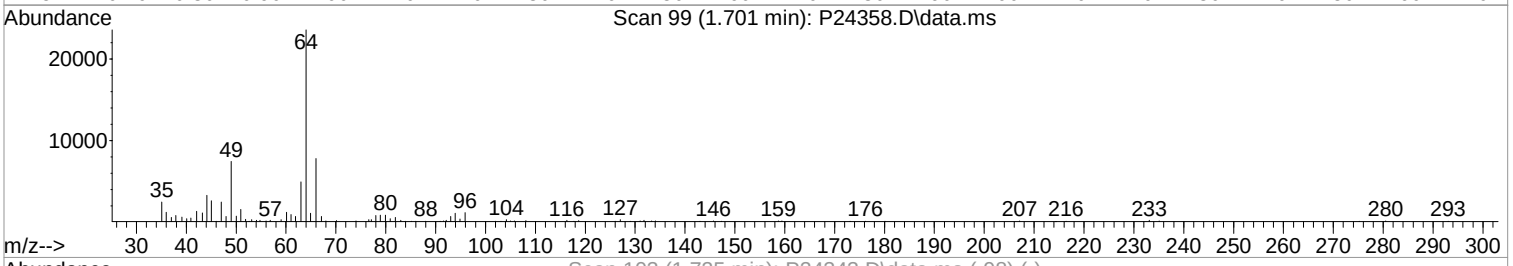
02/21/19

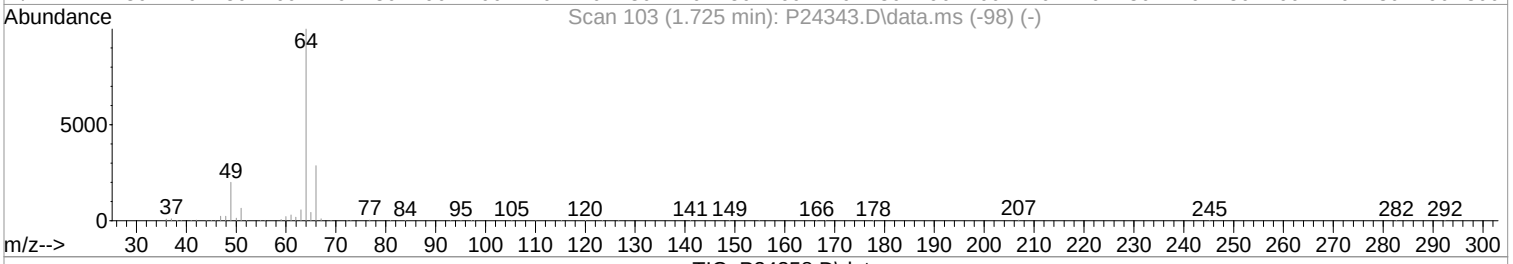
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(6) Chloroethane (P)

1.701min (-0.012) 12.47 ppb m

response 35635

Ion	Exp%	Act%
64.00	100	100
66.00	28.70	33.14
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

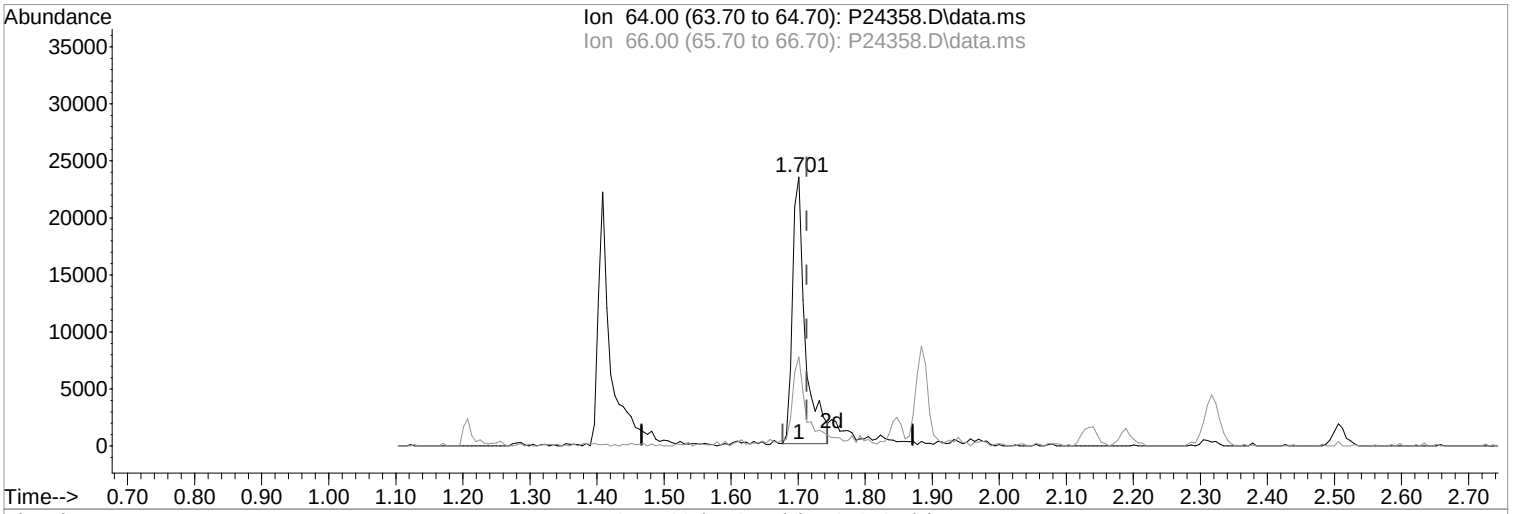
Poor integration.

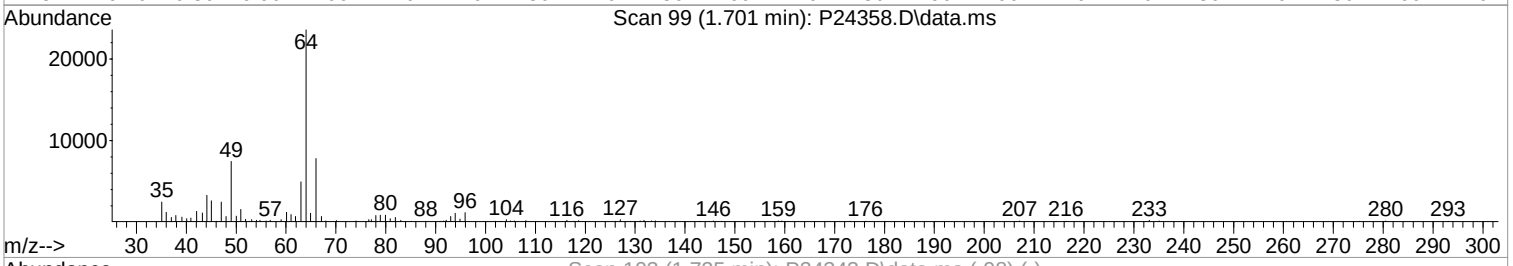
02/21/19

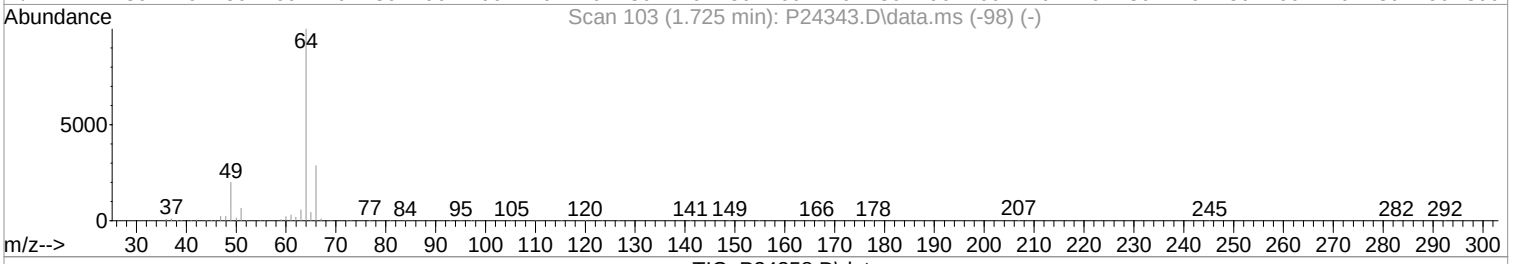
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:08:41 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24358.D\data.ms

(6) Chloroethane (P)

1.701min (-0.012) 10.89 ppb

response 31103

Ion	Exp%	Act%
64.00	100	100
66.00	28.70	33.14
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/21/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:12:15 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.395	168	324805	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.481	114	525448	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	457597	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	237787	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	145806	50.50	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.00%				
48) surr1,1,2-dichloroetha...	5.786	65	192314	52.51	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 105.02%				
65) SURR3,Toluene-d8	8.297	98	688084	50.24	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.48%				
70) SURR2,BFB	10.864	95	243906	49.72	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.44%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	66516	16.91	ppb		98
3) Chloromethane	1.329	50	96694	18.39	ppb		97
4) Vinyl Chloride	1.408	62	90695	19.21	ppb		100
5) Bromomethane	1.628	94	65994	22.86	ppb		96
6) Chloroethane	1.701	64	35635m	12.47	ppb		
7) Freon 21	1.847	67	126118	21.16	ppb		95
8) Trichlorofluoromethane	1.884	101	87605	19.13	ppb		99
9) Diethyl Ether	2.140	59	75883	21.66	ppb		98
10) Freon 123a	2.134	67	82535	21.73	ppb		96
11) Freon 123	2.189	83	104839	24.04	ppb		96
12) Acrolein	2.250	56	39484	44.11	ppb		82
13) 1,1-Diclethene	2.317	96	58802	19.41	ppb		96
14) Freon 113	2.317	101	49631	18.39	ppb		96
15) Acetone	2.390	43	28982m	18.63	ppb		
16) 2-Propanol	2.555	45	211151m	522.92	ppb		
17) Iodomethane	2.451	142	44772	12.07	ppb		96
18) Carbon Disulfide	2.506	76	196088	21.60	ppb		97
19) Acetonitrile	2.646	40	21072m	106.29	ppb		
20) Allyl Chloride	2.652	76	36691	20.24	ppb		94
21) Methyl Acetate	2.695	43	101133	23.95	ppb		99
22) Methylene Chloride	2.774	84	65821	17.45	ppb		94
23) TBA	2.957	59	351486m	547.71	ppb		
24) Acrylonitrile	3.036	53	249442	121.54	ppb		98
25) Methyl-t-Butyl Ether	3.091	73	260755	22.22	ppb		99
26) trans-1,2-Dichloroethene	3.061	96	63673	18.89	ppb		92
28) 1,1-Diclethane	3.554	63	127594	20.41	ppb		99
29) Vinyl Acetate	3.658	86	18305	23.72	ppb	#	73
30) DIPE	3.701	45	259460	22.93	ppb		95
31) 2-Chloro-1,3-Butadiene	3.682	53	102800	21.03	ppb		96
32) ETBE	4.219	59	239790	21.21	ppb		94
33) 2,2-Dichloropropane	4.390	77	91993	18.69	ppb		96
34) cis-1,2-Dichloroethene	4.396	96	74033	19.59	ppb		94
35) 2-Butanone	4.463	43	61094	23.37	ppb		92
36) Propionitrile	4.542	54	110998m	130.53	ppb		
37) Bromochloromethane	4.786	130	46807	19.95	ppb		98
38) Methacrylonitrile	4.804	67	47677	21.55	ppb		94
39) Tetrahydrofuran	4.896	42	37274	22.01	ppb		91
40) Chloroform	4.969	83	115947	20.66	ppb		91
41) 1,1,1-Trichloroethane	5.255	97	80682	18.47	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:12:15 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.109	73	251660	23.47	ppb		97
44) Cyclohexane	5.347	41	68723	22.31	ppb		92
46) Carbontetrachloride	5.542	117	58904	16.83	ppb		97
47) 1,1-Dichloropropene	5.548	75	79574	17.73	ppb		98
49) Benzene	5.865	78	277339	18.48	ppb		99
50) 1,2-Dichloroethane	5.901	62	99652	20.74	ppb		96
51) Iso-Butyl Alcohol	5.901	43	123197m	391.55	ppb		
52) n-Heptane	6.353	43	77806	17.01	ppb		95
53) 1-Butanol	6.852	56	228029m	1098.07	ppb		
54) Trichloroethene	6.810	130	66868	18.20	ppb		95
55) Methylcyclohexane	7.041	55	105999	22.86	ppb		91
56) 1,2-Diclpropane	7.090	63	75732	18.99	ppb		98
57) Dibromomethane	7.230	93	44778	19.83	ppb		94
58) 1,4-Dioxane	7.401	88	32164m	452.02	ppb		
59) Methyl Methacrylate	7.322	69	78899	22.14	ppb		97
60) Bromodichloromethane	7.456	83	79801	19.01	ppb		95
61) 2-Nitropropane	7.743	41	32555	39.07	ppb		92
62) 2-Chloroethylvinyl Ether	7.864	63	36671	30.59	ppb		93
63) cis-1,3-Dichloropropene	7.999	75	115930	19.54	ppb		99
64) 4-Methyl-2-pentanone	8.212	43	112192	22.17	ppb		96
66) Toluene	8.370	91	296207	19.06	ppb		99
67) trans-1,3-Dichloropropene	8.639	75	109129	21.00	ppb		98
68) Ethyl Methacrylate	8.785	69	136126	22.75	ppb		92
69) 1,1,2-Trichloroethane	8.828	97	72674	19.96	ppb		96
72) Tetrachloroethene	8.962	164	48181	17.58	ppb		90
73) 2-Hexanone	9.120	43	84322	22.86	ppb		97
74) 1,3-Dichloropropane	8.998	76	130408	19.79	ppb		98
75) Dibromochloromethane	9.218	129	58149	18.92	ppb		94
76) N-Butyl Acetate	9.273	43	158432	23.53	ppb		95
77) 1,2-Dibromoethane	9.322	107	72464	20.16	ppb		99
78) Chlorobenzene	9.815	112	183411	18.72	ppb		97
79) 3-CBTF	9.834	180	105412	22.07	ppb		94
80) 4-CBTF	9.888	180	93035	21.55	ppb		94
81) 1,1,1,2-Tetrachloroethane	9.901	131	59337	18.71	ppb		99
82) Ethylbenzene	9.931	106	96247	18.22	ppb		99
83) (m+p)Xylene	10.047	106	233726	36.19	ppb		98
84) o-Xylene	10.407	106	117889	18.55	ppb		97
85) Styrene	10.419	104	202692	19.68	ppb		98
87) Bromoform	10.571	173	37221	18.54	ppb		100
88) 2-CBTF	10.651	180	103906	21.29	ppb		92
89) Isopropylbenzene	10.742	105	275900	17.64	ppb		99
90) Cyclohexanone	10.809	55	170503	171.99	ppb		99
91) trans-1,4-Dichloro-2-B...	11.047	53	29739	22.98	ppb		94
92) 1,1,2,2-Tetrachloroethane	10.998	83	106677	20.45	ppb		93
93) Bromobenzene	10.986	156	77744	18.48	ppb		91
94) 1,2,3-Trichloropropane	11.028	110	35268	21.31	ppb	#	89
95) n-Propylbenzene	11.096	91	322410	17.99	ppb		99
96) 2-Chlorotoluene	11.157	91	206261	18.27	ppb		99
97) 3-Chlorotoluene	11.211	91	239880	21.72	ppb		98
98) 4-Chlorotoluene	11.254	91	235484	18.70	ppb		96
99) 1,3,5-Trimethylbenzene	11.248	105	232202	17.89	ppb		98
100) tert-Butylbenzene	11.522	119	198313	17.56	ppb		97
101) 1,2,4-Trimethylbenzene	11.559	105	244286	18.19	ppb		95
102) 3,4-DCBTF	11.620	214	84029	20.88	ppb		94
103) sec-Butylbenzene	11.705	105	283974	17.35	ppb		96
104) p-Isopropyltoluene	11.827	119	240125	17.66	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:12:15 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.784	146	143834	18.77	ppb	97
106) 1,4-Dclbenz	11.858	146	146211	18.08	ppb	98
107) 2,4-DCBTF	11.912	214	78571	21.32	ppb	95
108) 2,5-DCBTF	11.949	214	86843	20.90	ppb	99
109) n-Butylbenzene	12.156	91	223268	18.74	ppb	96
110) 1,2-Dclbenz	12.156	146	148462	18.94	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.784	157	25500	19.84	ppb	92
112) Trielution Dichlorotol...	12.900	125	451770	70.07	ppb	95
113) 1,3,5 Trichlorobenzene	12.955	180	123688	21.92	ppb	99
114) Coelution Dichlorotoluene	13.229	125	329276	46.29	ppb	97
115) 1,2,4-Tcbenzene	13.437	180	116759	21.24	ppb	94
116) Hexachlorobt	13.577	225	39446	17.01	ppb	94
117) Naphthalen	13.626	128	365797	19.00	ppb	98
118) 1,2,3-Tclbenzene	13.815	180	116913	20.62	ppb	97
119) 2,4,5-Trichlorotolene	14.400	159	70861	28.04	ppb	95
120) 2,3,6-Trichlorotoluene	14.485	159	65664	23.04	ppb	95

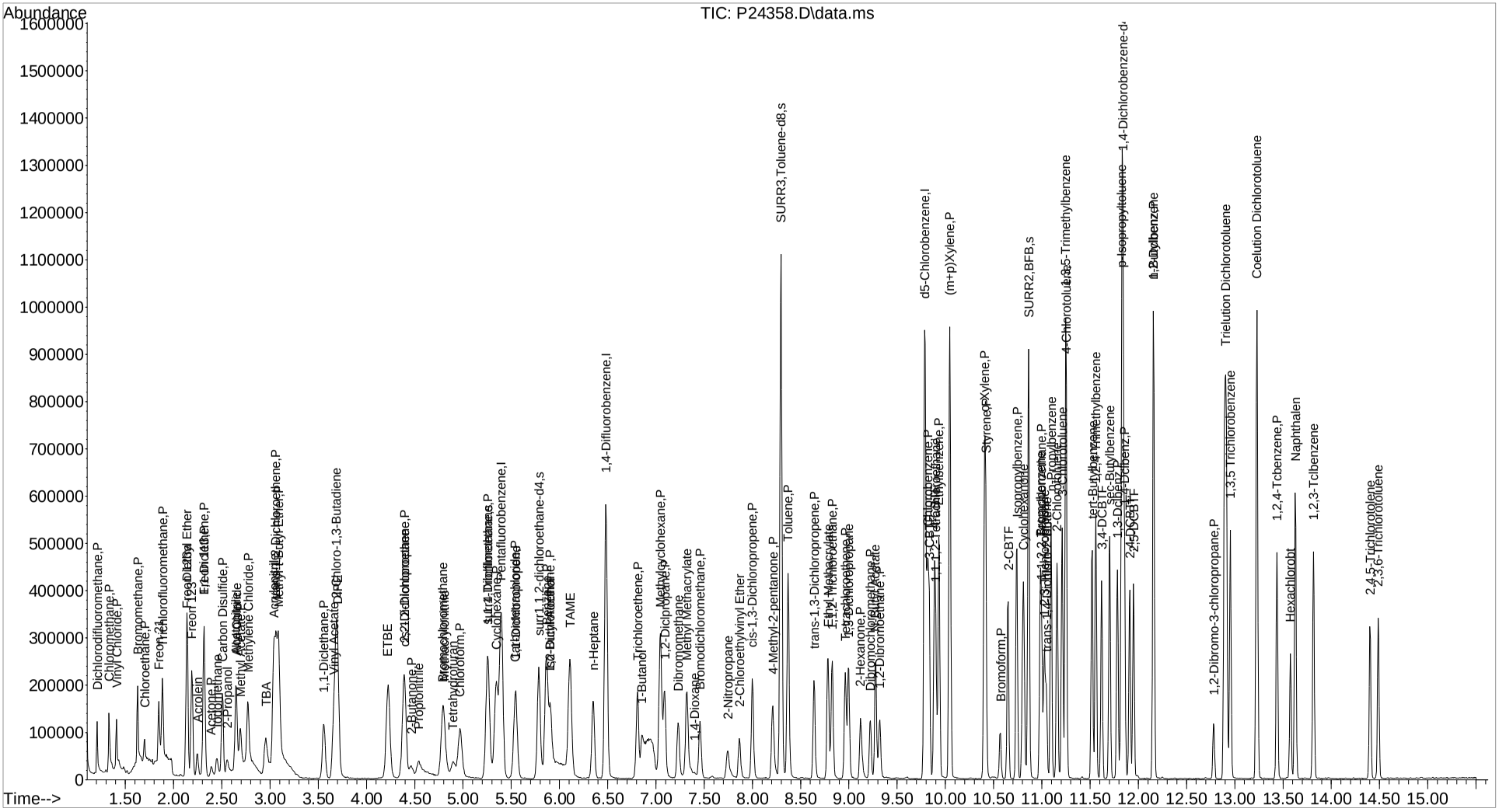
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 02/21/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24358.D
Acq On : 21 Feb 2019 11:46 am
Operator : K.Ruest
Sample : LCS-MEOH Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 12:12:15 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24360.D
Acq On : 21 Feb 2019 12:34 pm
Operator : K.Ruest
Sample : MEDBLK|50 Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 22 10:52:51 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

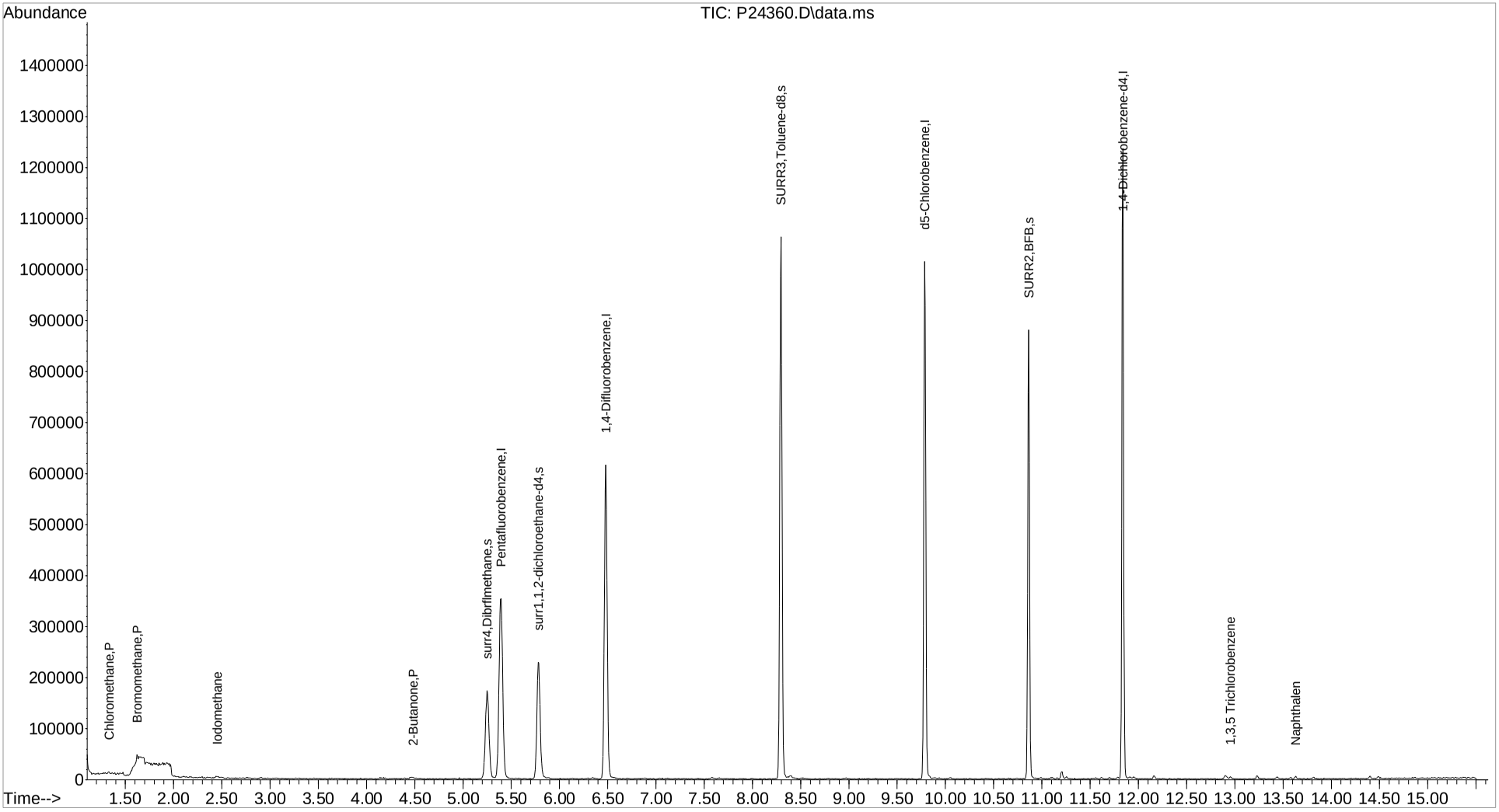
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.395	168	337453	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.480	114	546258	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	473519	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	255385	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.249	113	140609	46.84	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 93.68%				
48) surr1,1,2-dichloroetha...	5.779	65	193138	50.72	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.44%				
65) SURR3,Toluene-d8	8.297	98	687455	48.28	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.56%				
70) SURR2,BFB	10.864	95	244501	47.94	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.88%				
Target Compounds							Qvalue
3) Chloromethane	1.329	50	2223	0.41	ppb		89
5) Bromomethane	1.622	94	5331	0.98	ppb		92
17) Iodomethane	2.451	142	3045	2.79	ppb		70
35) 2-Butanone	4.481	43	5359	1.97	ppb		85
113) 1,3,5 Trichlorobenzene	12.955	180	1408	0.23	ppb	#	78
117) Naphthalen	13.625	128	2673	0.87	ppb		94

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

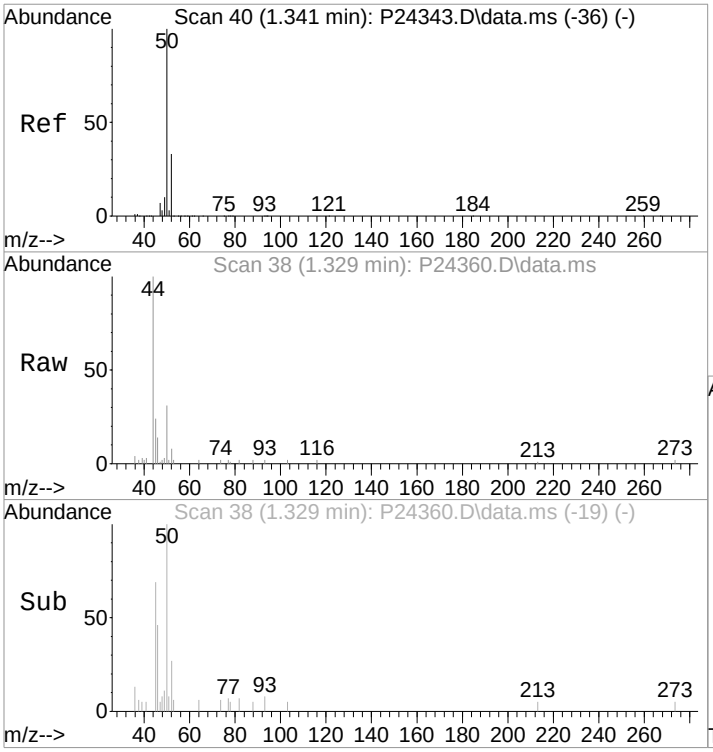
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24360.D
Acq On : 21 Feb 2019 12:34 pm
Operator : K.Ruest
Sample : MEDBLK|50 Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 22 10:52:51 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



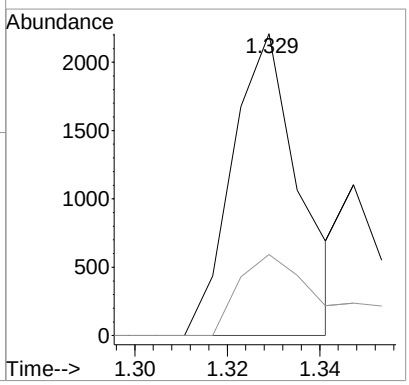
1st 02/22/19

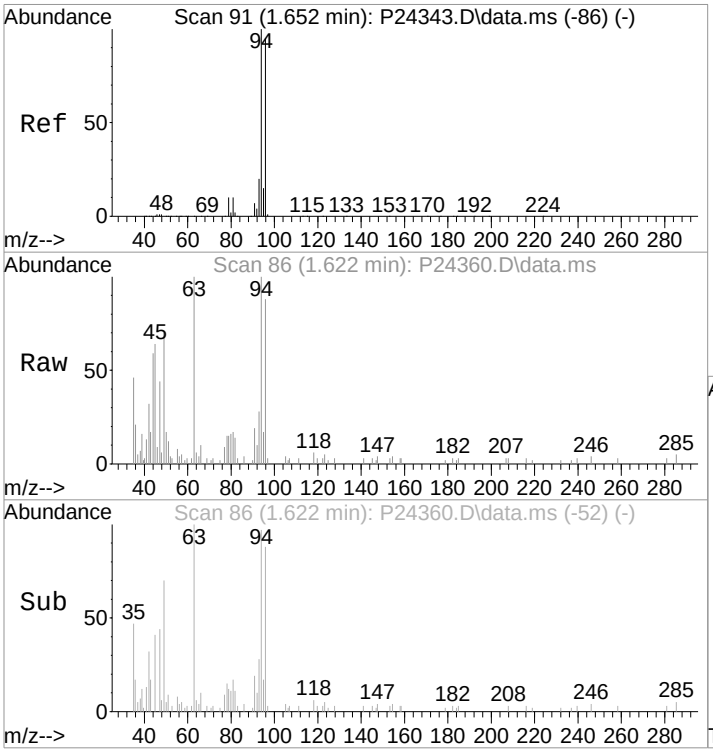


#3
Chloromethane
Concen: 0.41 ppb
RT: 1.329 min Scan# 38
Delta R.T. 0.000 min
Lab File: P24360.D
Acq: 21 Feb 2019 12:34 pm

Tgt Ion: 50 Resp: 2223

Ion	Ratio	Lower	Upper
50	100		
52	26.8	13.0	53.0

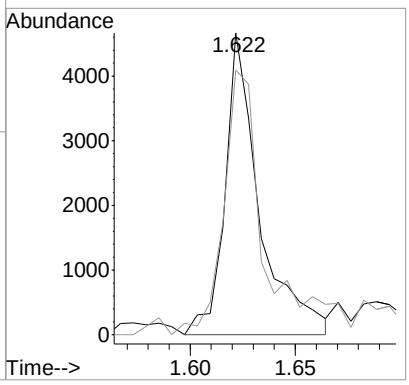


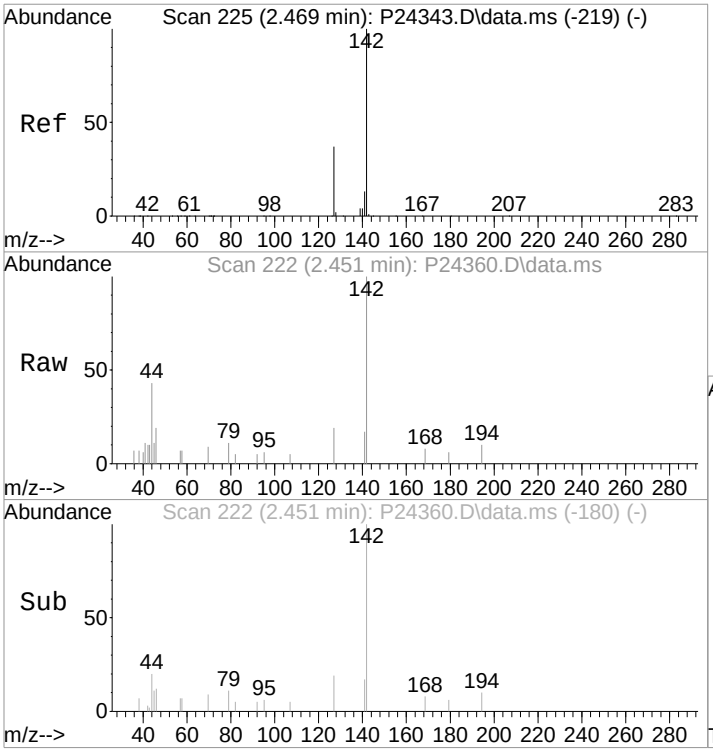


#5
Bromomethane
Concen: 0.98 ppb
RT: 1.622 min Scan# 86
Delta R.T. -0.017 min
Lab File: P24360.D
Acq: 21 Feb 2019 12:34 pm

Tgt Ion: 94 Resp: 5331

Ion	Ratio	Lower	Upper
94	100		
96	87.7	75.4	115.4

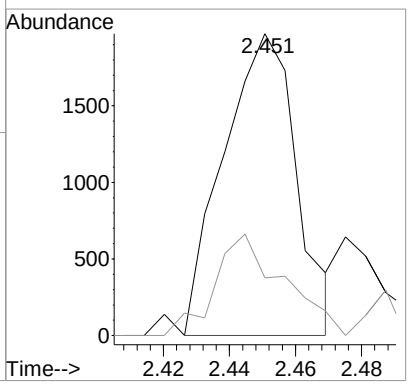


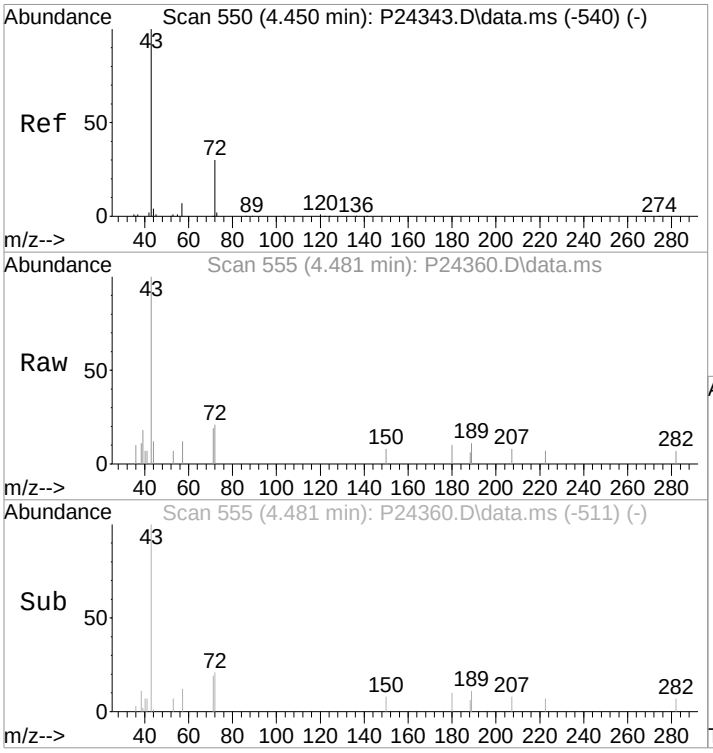


#17
Iodomethane
Concen: 2.79 ppb
RT: 2.451 min Scan# 222
Delta R.T. -0.005 min
Lab File: P24360.D
Acq: 21 Feb 2019 12:34 pm

Tgt Ion:142 Resp: 3045

Ion	Ratio	Lower	Upper
142	100		
127	19.1	16.7	56.7

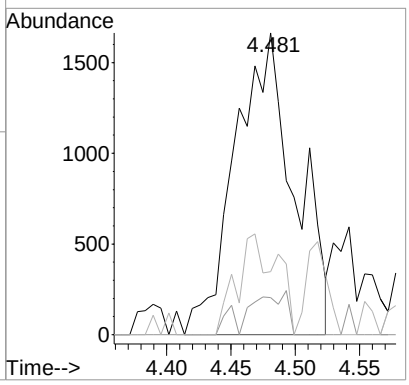


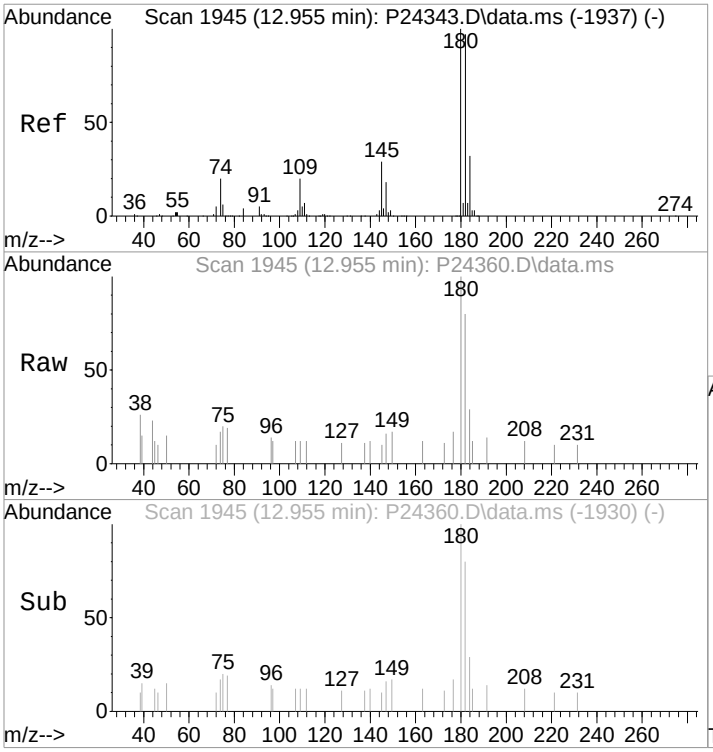


#35
2-Butanone
Concen: 1.97 ppb
RT: 4.481 min Scan# 555
Delta R.T. 0.043 min
Lab File: P24360.D
Acq: 21 Feb 2019 12:34 pm

Tgt Ion: 43 Resp: 5359

Ion	Ratio	Lower	Upper
43	100		
57	12.3	0.0	27.7
72	20.9	9.5	49.5

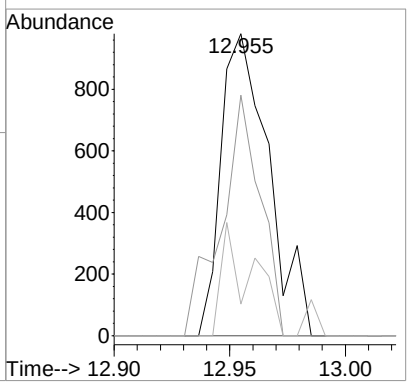


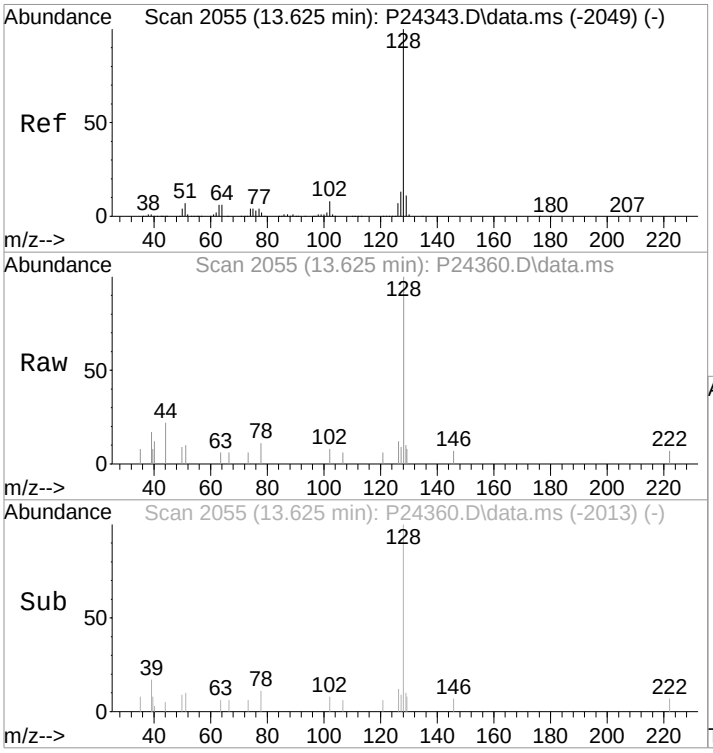


#113
1,3,5 Trichlorobenzene
Concen: 0.23 ppb
RT: 12.955 min Scan# 1945
Delta R.T. 0.000 min
Lab File: P24360.D
Acq: 21 Feb 2019 12:34 pm

Tgt Ion:180 Resp: 1408

Ion	Ratio	Lower	Upper
180	100		
182	79.6	77.7	116.5
145	10.4	23.3	34.9#

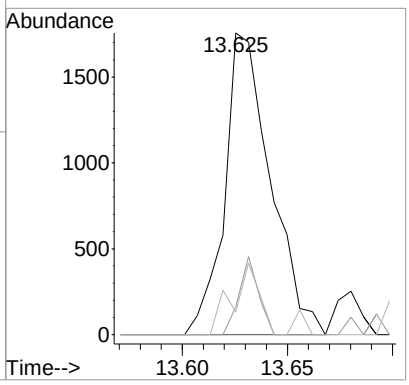




#117
Naphthalen
Concen: 0.87 ppb
RT: 13.625 min Scan# 2055
Delta R.T. 0.000 min
Lab File: P24360.D
Acq: 21 Feb 2019 12:34 pm

Tgt Ion:128 Resp: 2673

Ion	Ratio	Lower	Upper
128	100		
127	9.3	0.0	32.9
102	7.6	0.0	28.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24360.D
Acq On : 21 Feb 2019 12:34 pm
Operator : K.Ruest
Sample : MEDBLK|50 Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24360.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.622	71	86	88	rBV6	41518	113856	6.51%	1.245%
2	5.249	671	681	695	rBV2	172420	459809	26.29%	5.027%
3	5.395	695	705	717	rVB	352247	929857	53.17%	10.166%
4	5.779	756	768	781	rBV	228674	554371	31.70%	6.061%
5	6.480	875	883	892	rBV	613881	1221292	69.83%	13.352%
6	8.297	1173	1181	1191	rBV	1062258	1748855	100.00%	19.120%
7	9.785	1419	1425	1437	rBV	1014059	1429461	81.74%	15.628%
8	10.864	1595	1602	1608	rBV	880439	1138066	65.07%	12.442%
9	11.211	1653	1659	1663	rBV3	14510	23299	1.33%	0.255%
10	11.839	1756	1762	1770	rBV	1234823	1527954	87.37%	16.705%

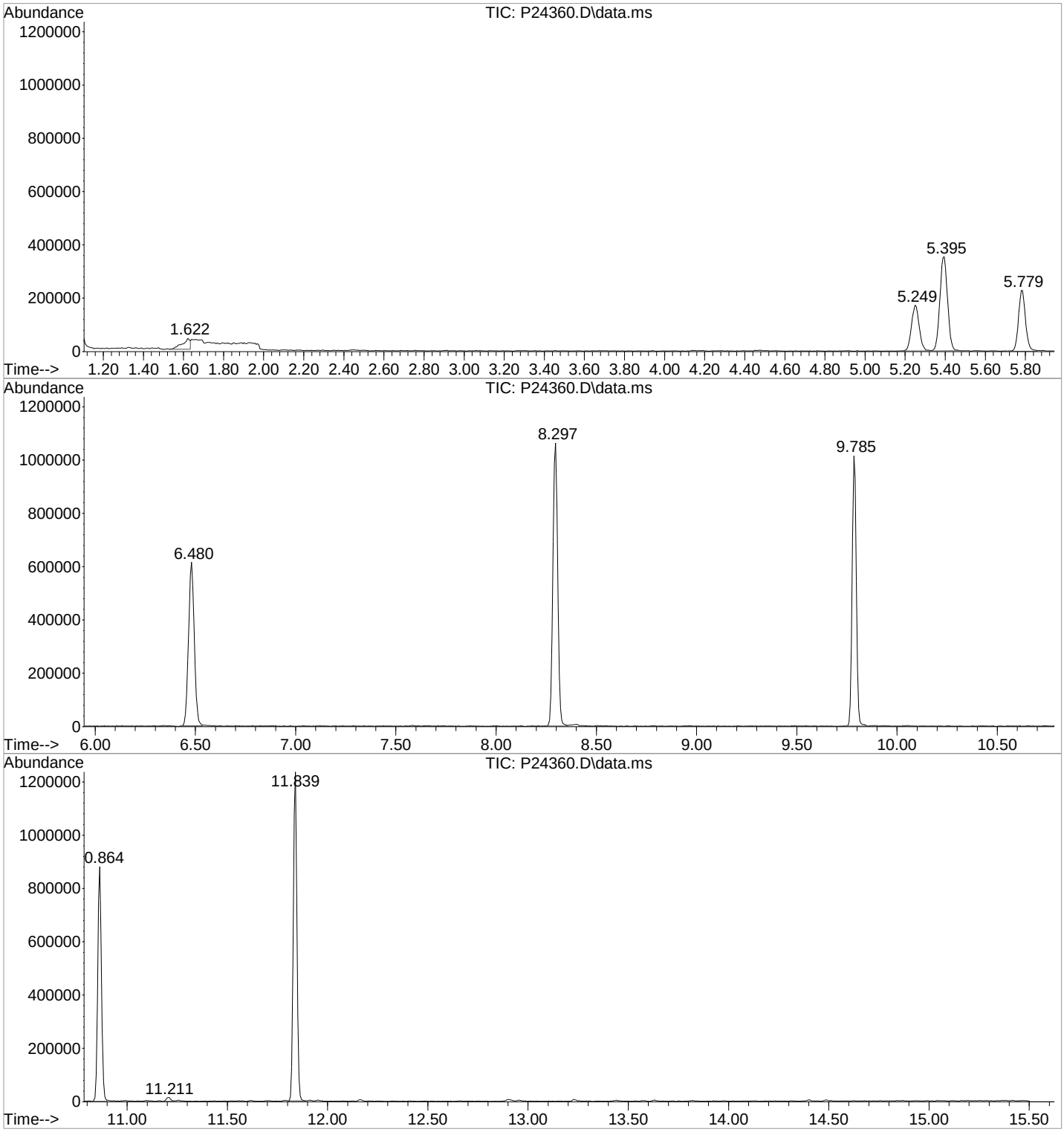
Sum of corrected areas: 9146820

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24360.D
Acq On : 21 Feb 2019 12:34 pm
Operator : K.Ruest
Sample : MEDBLK|50 Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\\
Data File : P24360.D
Acq On : 21 Feb 2019 12:34 pmm
Operator : K.Ruestt
Sample : MEDBLK|50 Inst : MSVOA-122
Misc :
ALS Vial : 1 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

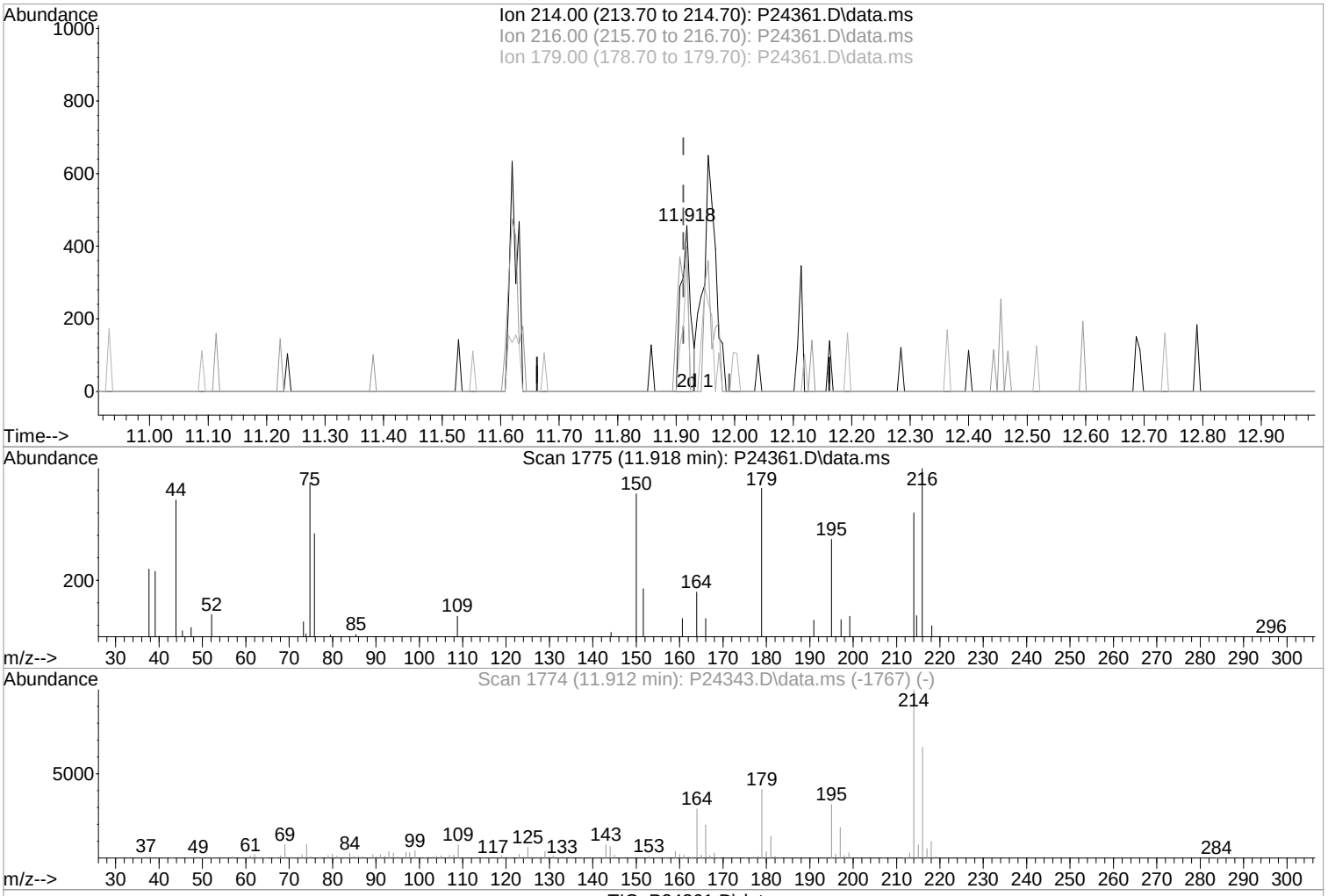
					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24361.D
Acq On : 21 Feb 2019 12:56 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 13:55:47 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24361.D\data.ms

(107) 2,4-DCBTF

11.918min (+0.006) 0.15 ppb m

response 511

Ion	Exp%	Act%
214.00	100	100
216.00	65.70	124.69#
179.00	40.90	113.75#
0.00	0.00	0.00

Manual Integration:

After

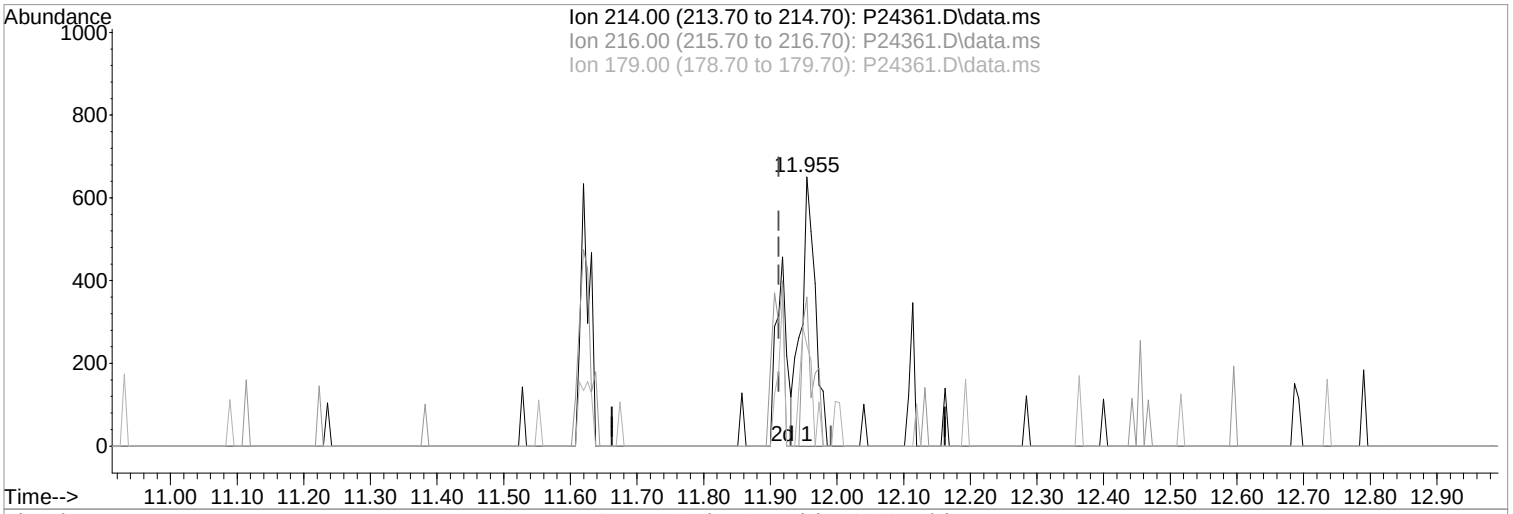
Wrong peak selected.

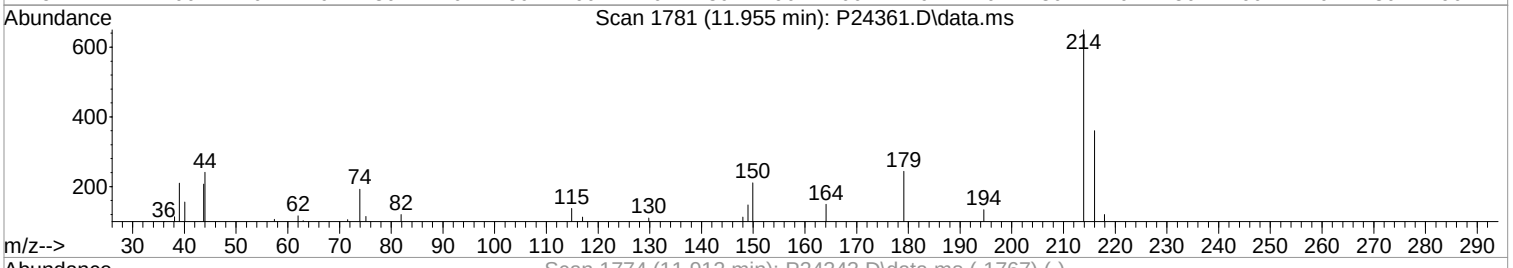
02/22/19

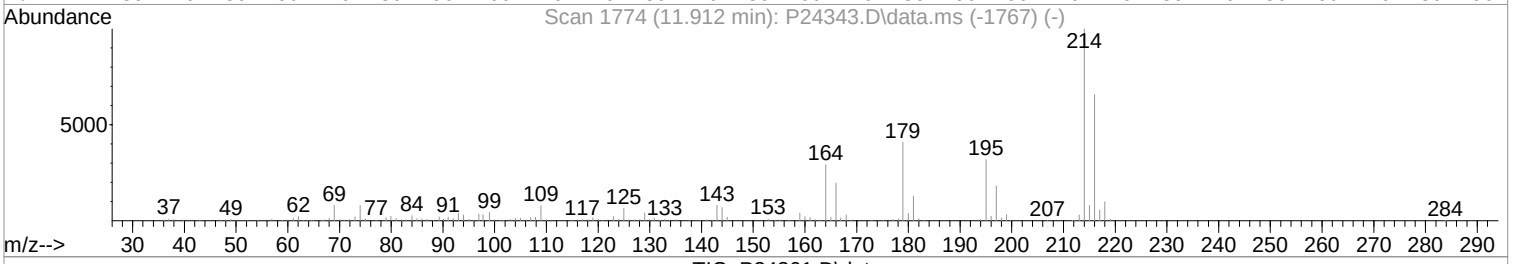
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24361.D
Acq On : 21 Feb 2019 12:56 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 13:55:47 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24361.D\data.ms

(107) 2,4-DCBTF

11.955min (+0.043) 0.28 ppb

response 956

Ion	Exp%	Act%
214.00	100	100
216.00	65.70	55.38
179.00	40.90	37.54
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24361.D
Acq On : 21 Feb 2019 12:56 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 22 10:56:16 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

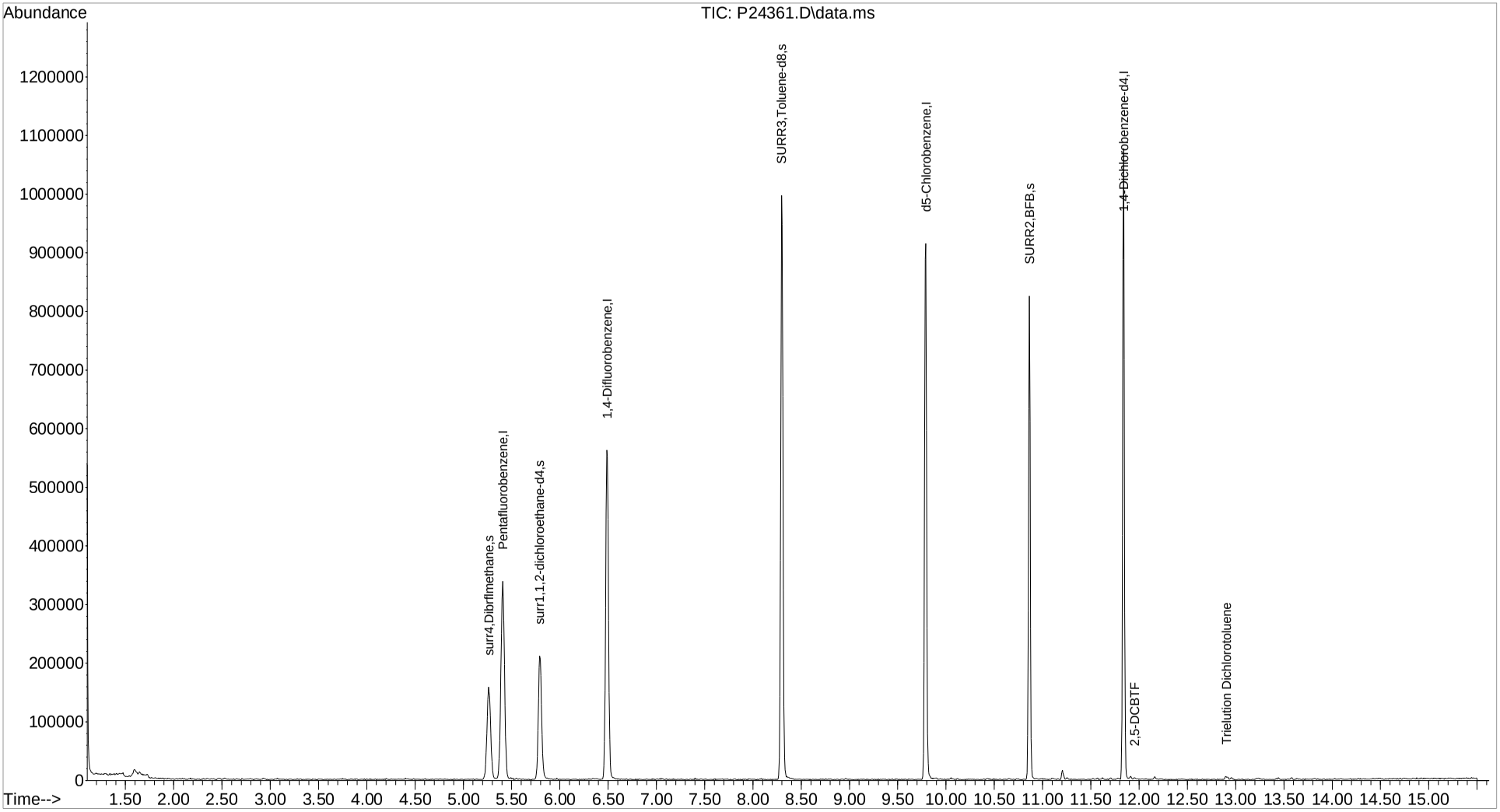
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.407	168	312408	50.00	ppb	0.01
43) 1,4-Difluorobenzene	6.486	114	501562	50.00	ppb	0.00
71) d5-Chlorobenzene	9.791	117	428849	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	219464	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.261	113	130722	47.43	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 94.86%			
48) surr1,1,2-dichloroetha...	5.792	65	175082	50.08	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 100.16%			
65) SURR3,Toluene-d8	8.297	98	634045	48.50	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.00%			
70) SURR2,BFB	10.864	95	222339	47.48	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.96%			
Target Compounds						Qvalue
108) 2,5-DCBTF	11.955	214	956	0.25	ppb	# 81
112) Trielution Dichlorotol...	12.900	125	2459	0.41	ppb	# 81

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

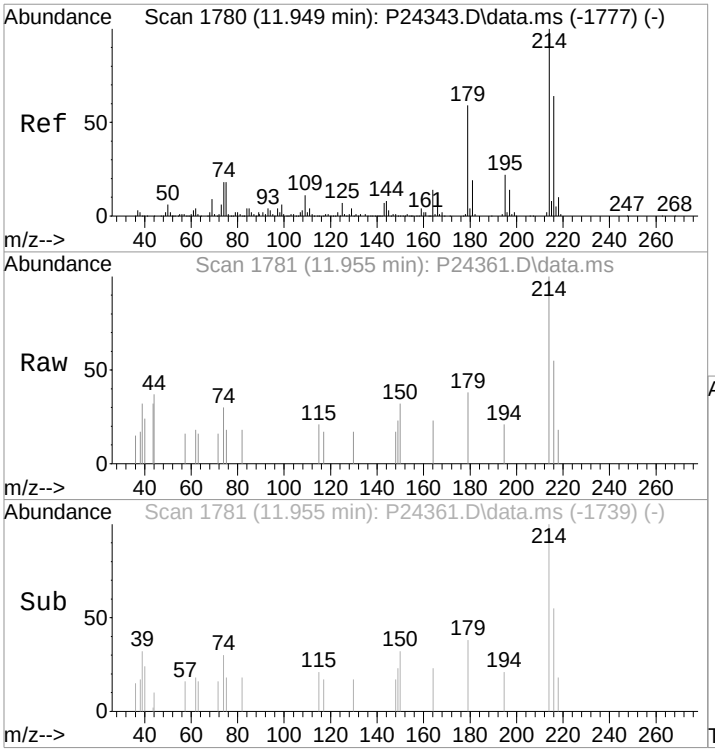
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24361.D
Acq On : 21 Feb 2019 12:56 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 22 10:56:16 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



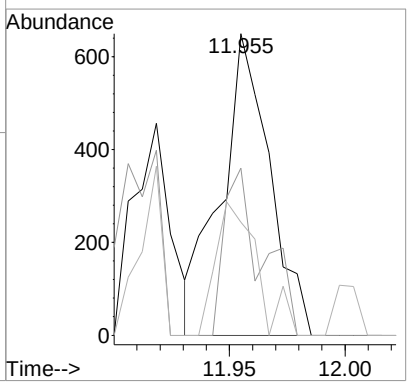
1st 02/22/19

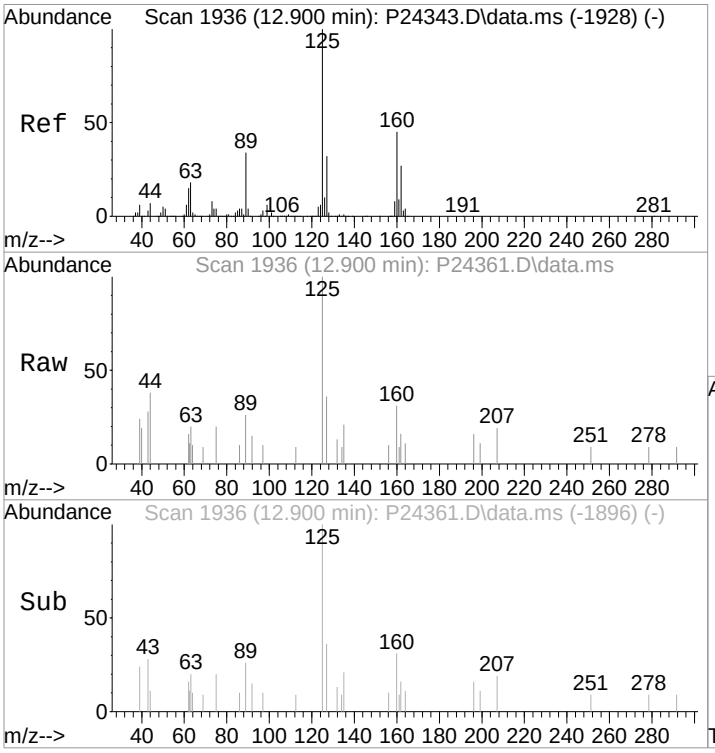


#108
2,5-DCBTF
Concen: 0.25 ppb
RT: 11.955 min Scan# 1781
Delta R.T. 0.006 min
Lab File: P24361.D
Acq: 21 Feb 2019 12:56 pm

Tgt Ion:214 Resp: 956

Ion	Ratio	Lower	Upper
214	100		
216	55.4	51.4	77.0
179	37.5	46.4	69.6#

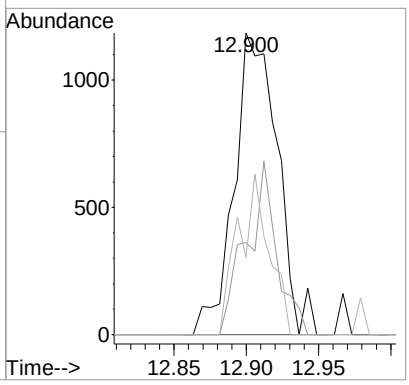




#112
Trielution Dichlorotoluene
Concen: 0.41 ppb
RT: 12.900 min Scan# 1936
Delta R.T. -0.006 min
Lab File: P24361.D
Acq: 21 Feb 2019 12:56 pm

Tgt Ion:125 Resp: 2459

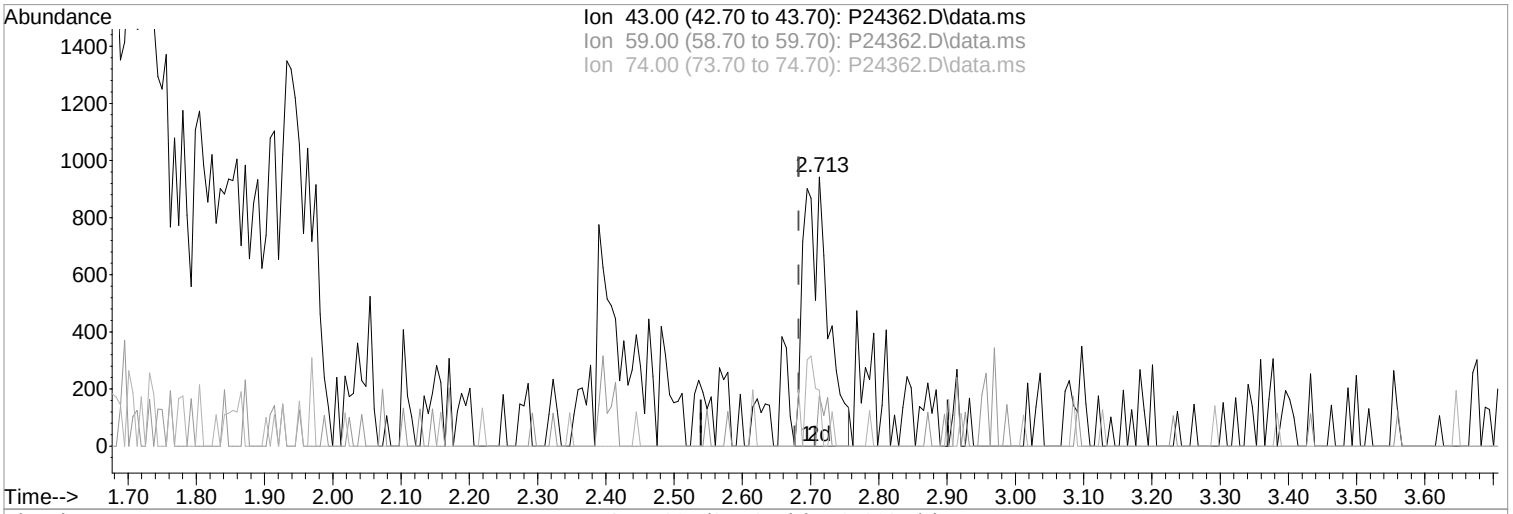
Ion	Ratio	Lower	Upper
125	100		
160	30.5	35.8	53.8#
89	25.5	27.0	40.4#

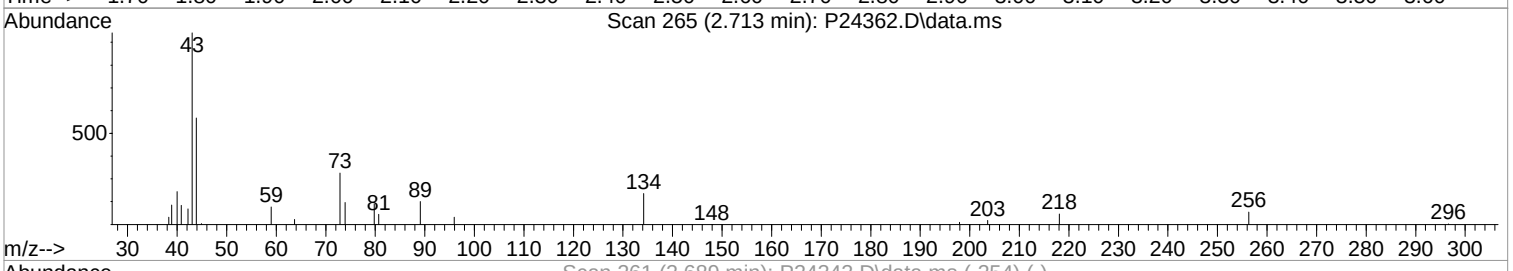


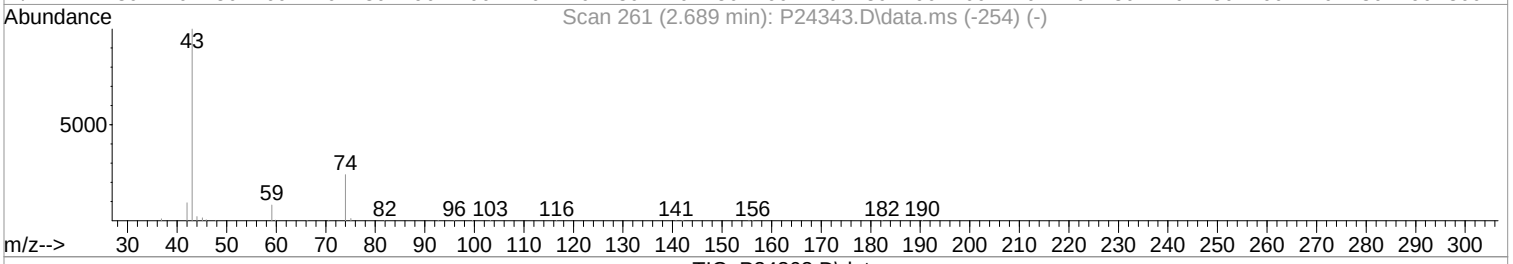
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pm
Operator : K.Ruest
Sample : R1901228-002|78 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 21 13:56:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24362.D\data.ms

(21) Methyl Acetate (P)

2.713min (+0.031) 0.58 ppb m

response 2307

Ion	Exp%	Act%
43.00	100	100
59.00	8.40	18.79
74.00	23.60	20.81
0.00	0.00	0.00

Manual Integration:

After

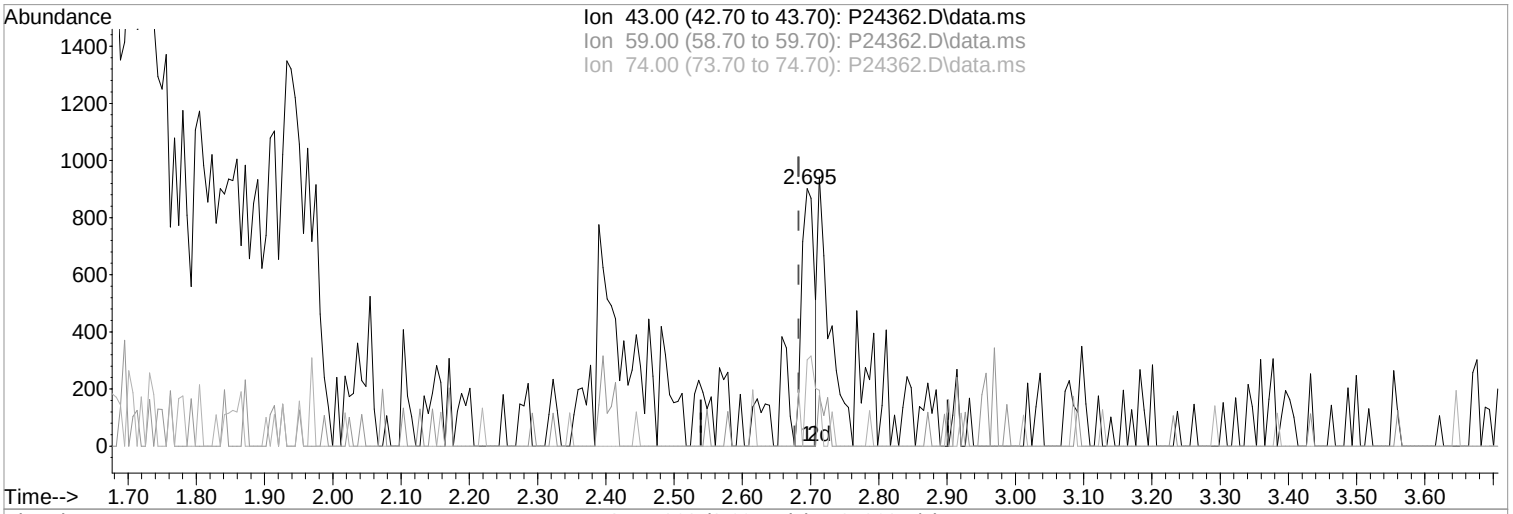
Split Peak

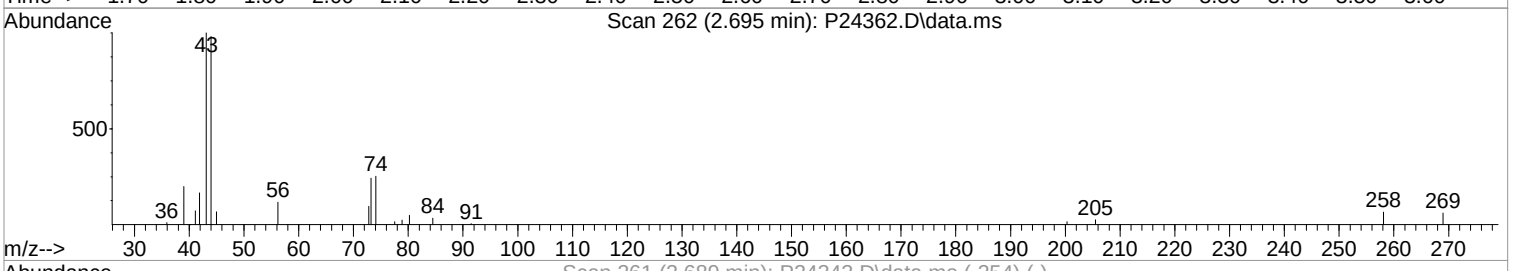
02/22/19

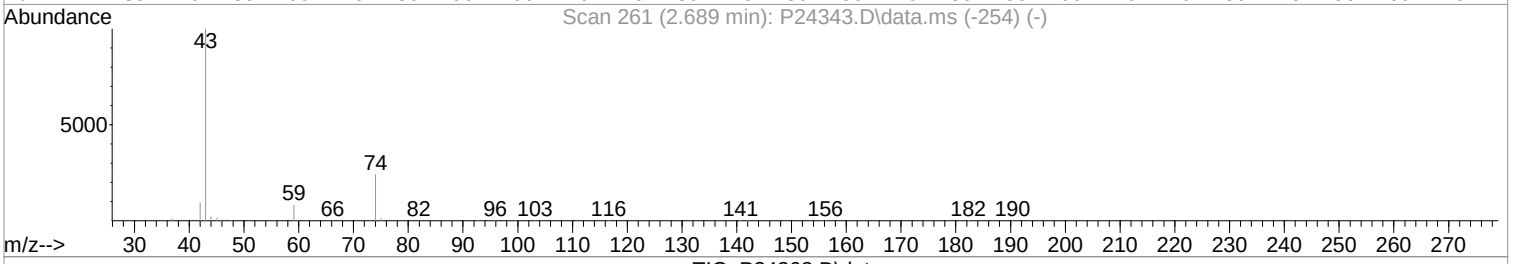
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pm
Operator : K.Ruest
Sample : R1901228-002|78 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 21 13:56:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24362.D\data.ms

(21) Methyl Acetate (P)

2.695min (+0.012) 0.29 ppb

response 1161

Ion	Exp%	Act%
43.00	100	100
59.00	8.40	0.00
74.00	23.60	33.52
0.00	0.00	0.00

Manual Integration:

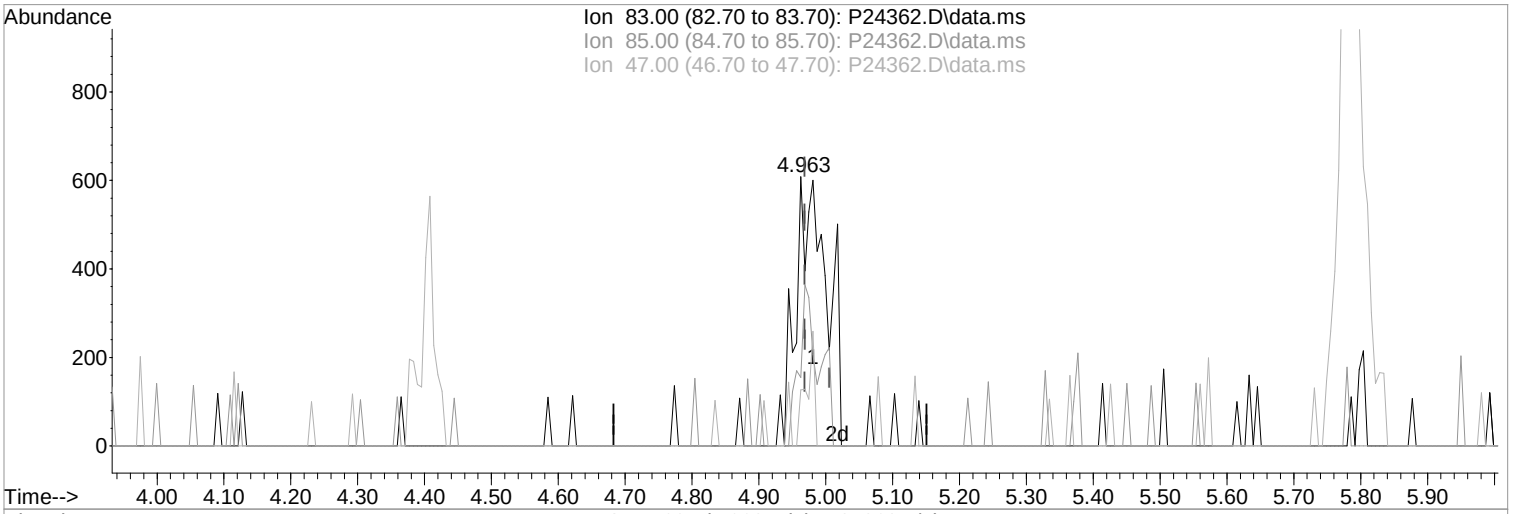
Before

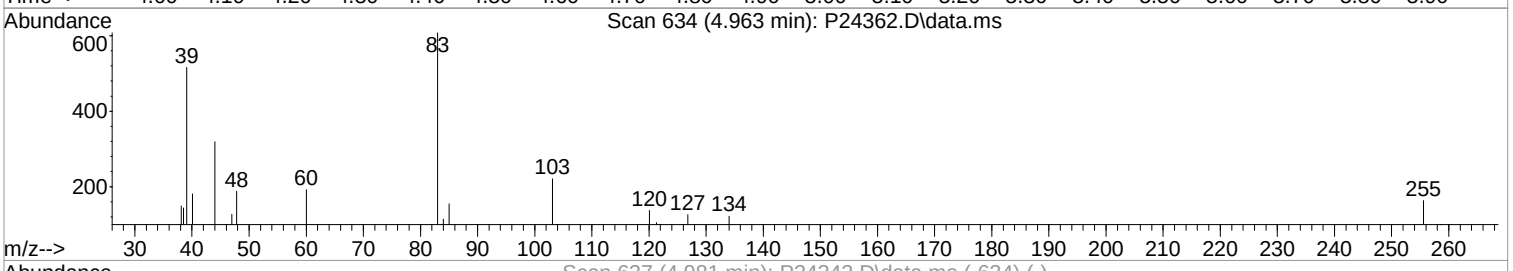
02/22/19

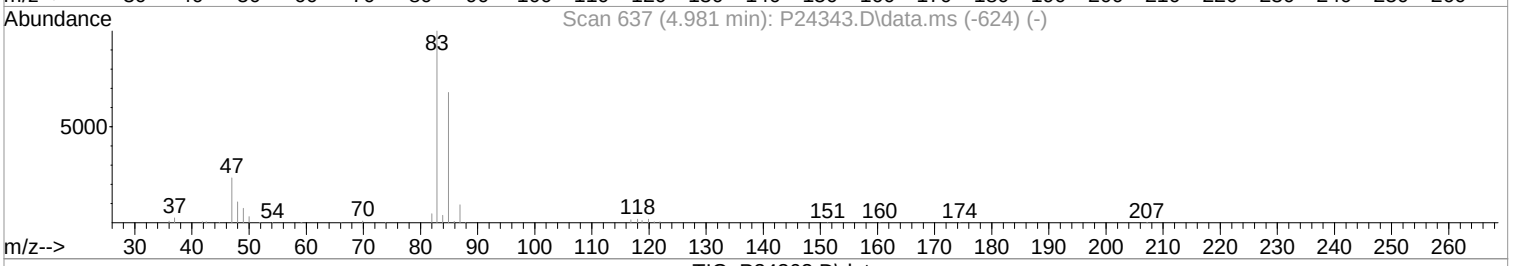
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pm
Operator : K.Ruest
Sample : R1901228-002|78 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 21 13:56:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24362.D\data.ms

(40) Chloroform (P)

4.963min (-0.006) 0.37 ppb m

response 1941

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	25.49#
47.00	23.40	20.89
0.00	0.00	0.00

Manual Integration:

After

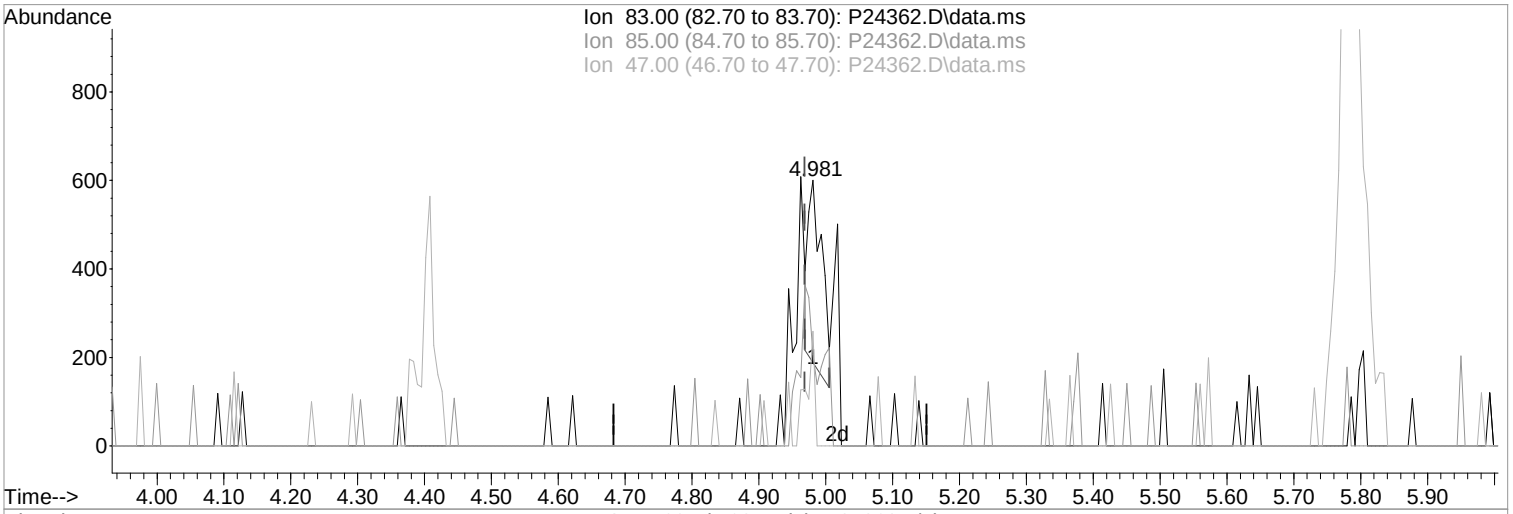
Split Peak

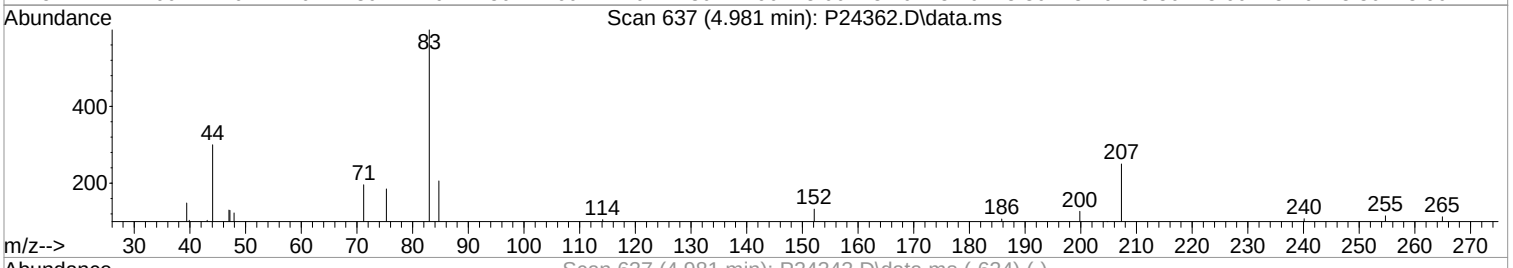
02/22/19

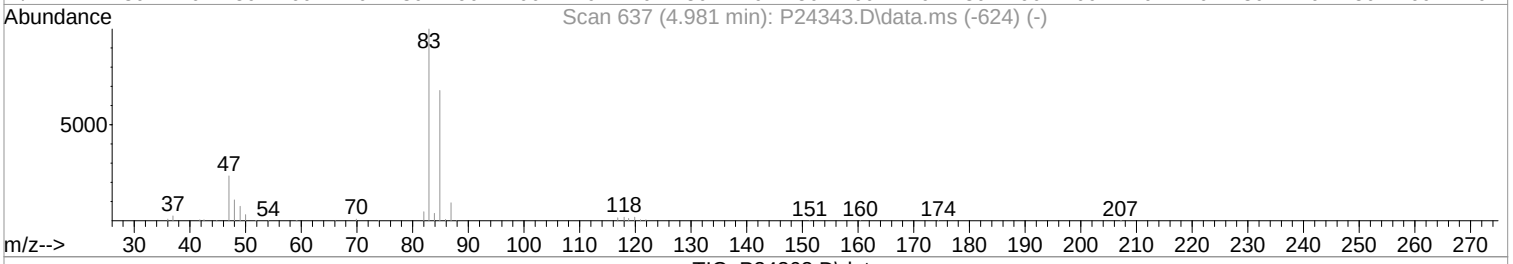
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pm
Operator : K.Ruest
Sample : R1901228-002|78 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 21 13:56:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24362.D\data.ms

(40) Chloroform (P)

4.981min (+0.012) 0.11 ppb

response 587

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	34.33#
47.00	23.40	43.17
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pm
Operator : K.Ruest
Sample : R1901228-002|78 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 3 Sample Multiplier: 1

DL

Quant Time: Feb 22 10:59:47 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

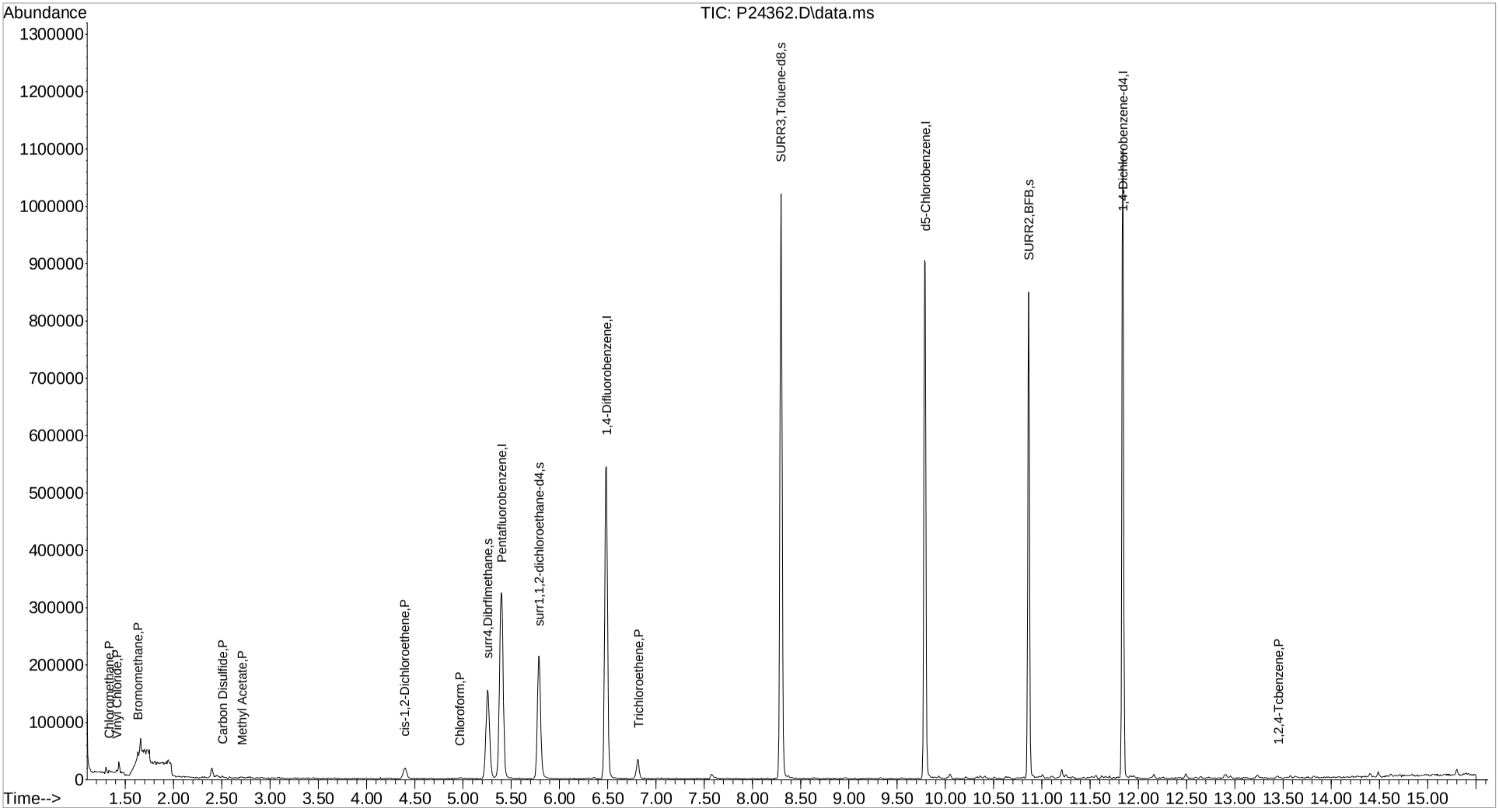
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.402	168	306420	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.487	114	493379	50.00	ppb		0.00
71) d5-Chlorobenzene	9.791	117	430038	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	228183	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	128694	47.47	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 94.94%				
48) surr1,1,2-dichloroetha...	5.792	65	181152	52.68	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 105.36%				
65) SURR3,Toluene-d8	8.297	98	639222	49.70	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.40%				
70) SURR2,BFB	10.864	95	226364	49.14	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.28%				
Target Compounds							Qvalue
3) Chloromethane	1.329	50	2623	0.53	ppb		88
4) Vinyl Chloride	1.415	62	2466	0.55	ppb		90
5) Bromomethane	1.628	94	5435	1.20	ppb		90
18) Carbon Disulfide	2.506	76	2935	0.34	ppb		89
21) Methyl Acetate	2.713	43	2307m	0.58	ppb		
34) cis-1,2-Dichloroethene	4.396	96	10870	3.05	ppb	#	73
40) Chloroform	4.963	83	1941m	0.37	ppb		
54) Trichloroethene	6.816	130	13046	3.78	ppb		90
115) 1,2,4-Tcbenzene	13.449	180	1091	0.21	ppb	#	62

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

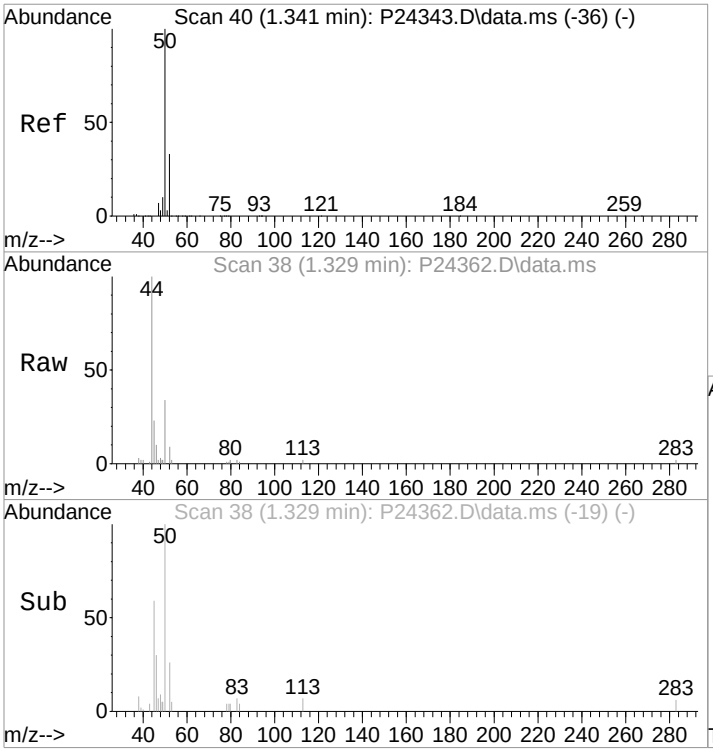
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pm
Operator : K.Ruest
Sample : R1901228-002|78 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 22 10:59:47 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



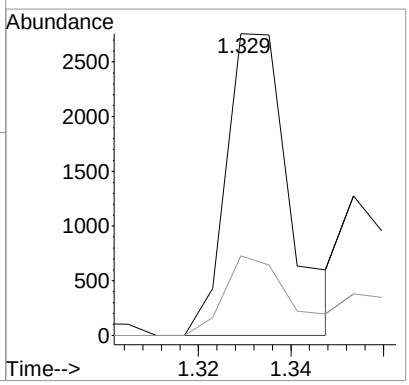
1st 02/22/19

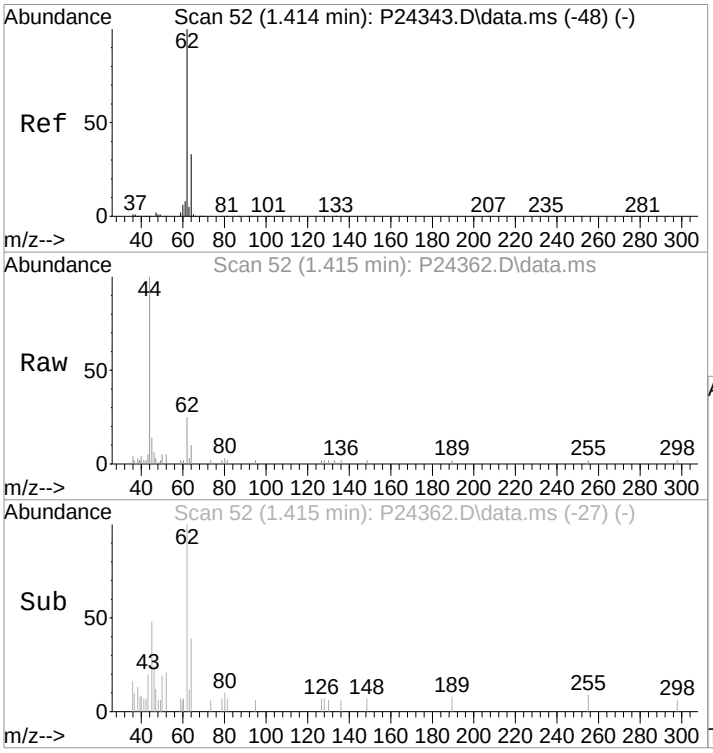


#3
Chloromethane
Concen: 0.53 ppb
RT: 1.329 min Scan# 38
Delta R.T. 0.000 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion: 50 Resp: 2623

Ion	Ratio	Lower	Upper
50	100		
52	26.4	13.0	53.0

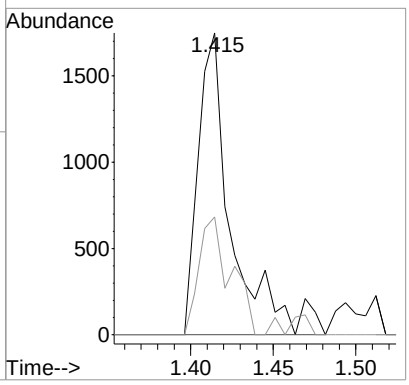


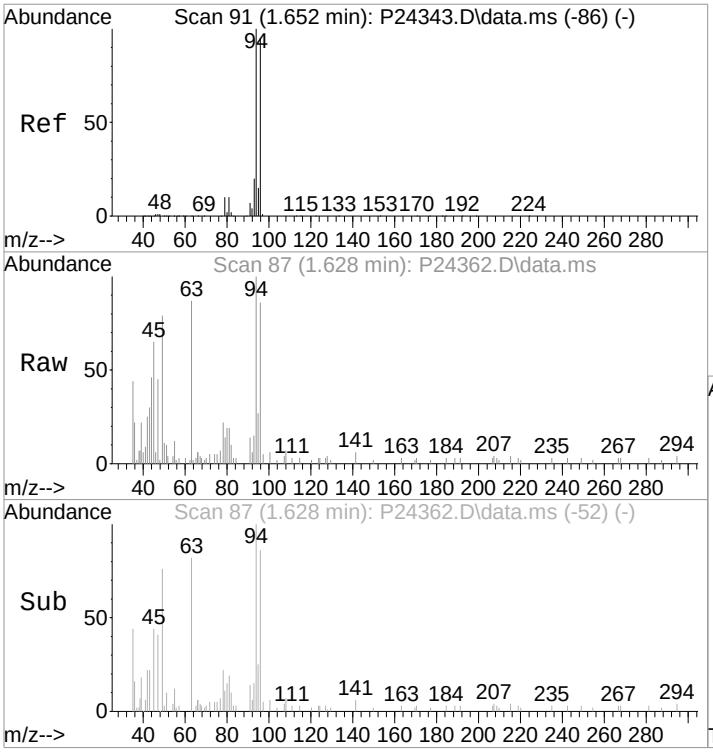


#4
Vinyl Chloride
Concen: 0.55 ppb
RT: 1.415 min Scan# 52
Delta R.T. 0.006 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion: 62 Resp: 2466

Ion	Ratio	Lower	Upper
62	100		
64	39.1	13.2	53.2

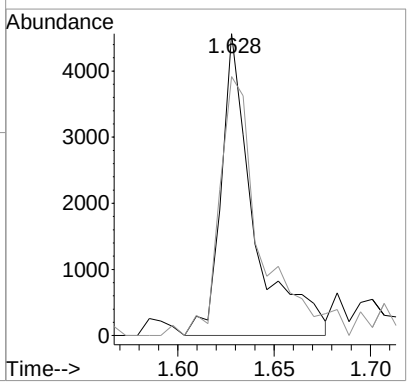


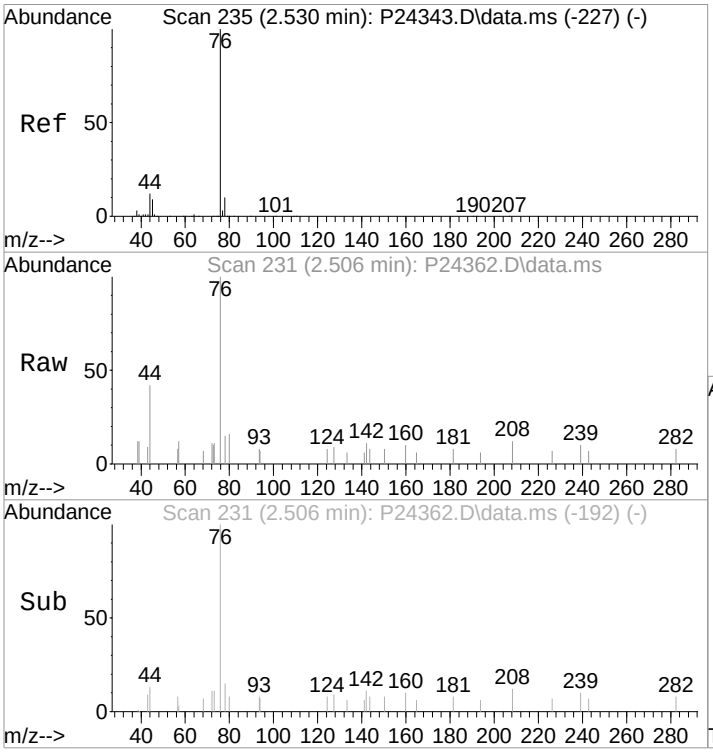


#5
Bromomethane
Concen: 1.20 ppb
RT: 1.628 min Scan# 87
Delta R.T. -0.011 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion: 94 Resp: 5435

Ion	Ratio	Lower	Upper
94	100		
96	85.7	75.4	115.4

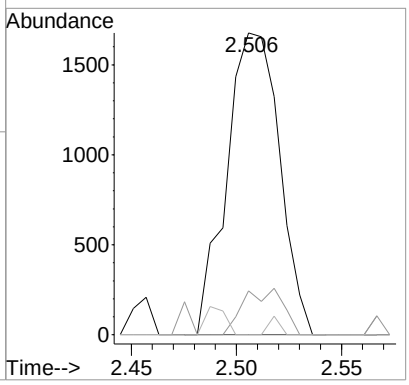


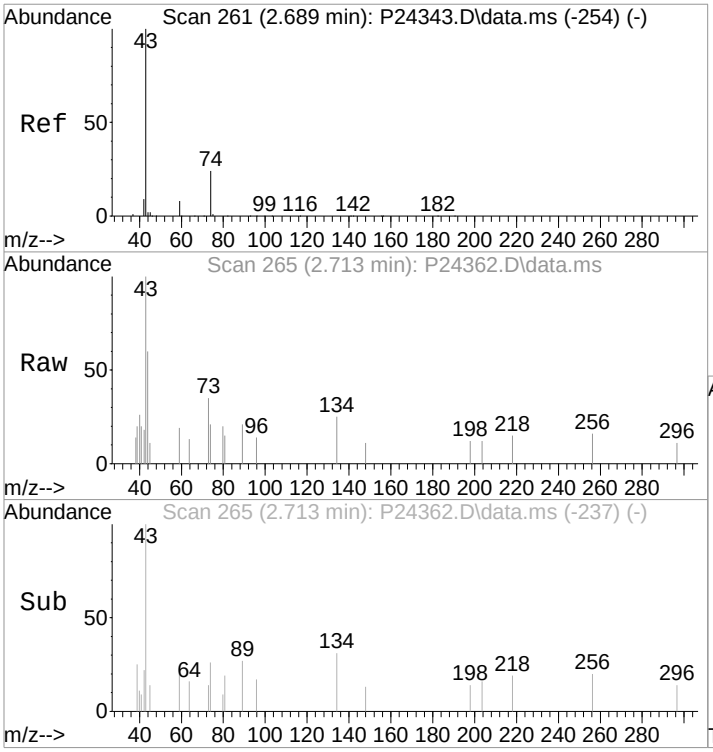


#18
Carbon Disulfide
Concen: 0.34 ppb
RT: 2.506 min Scan# 231
Delta R.T. -0.018 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion: 76 Resp: 2935

Ion	Ratio	Lower	Upper
76	100		
78	14.6	0.0	30.1
77	0.0	0.0	22.9

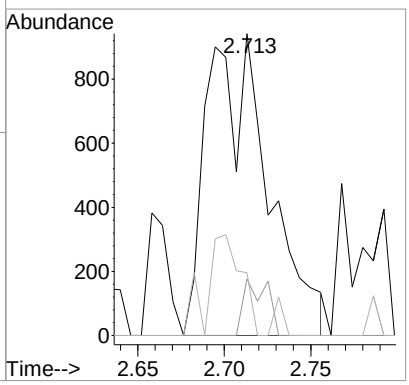


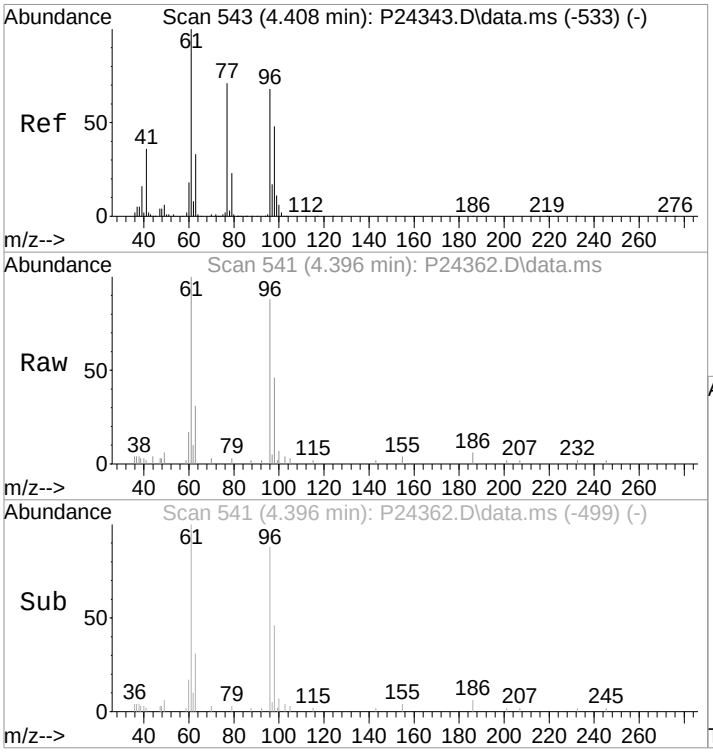


#21
Methyl Acetate
Concen: 0.58 ppb m
RT: 2.713 min Scan# 265
Delta R.T. 0.031 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion: 43 Resp: 2307

Ion	Ratio	Lower	Upper
43	100		
59	18.8	0.0	28.4
74	20.8	3.6	43.6

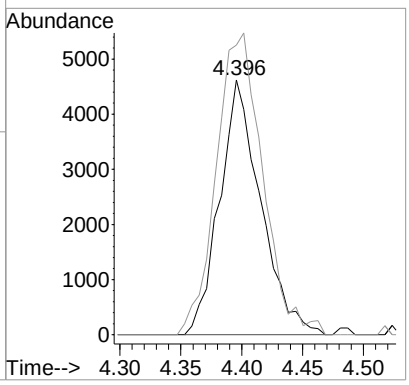


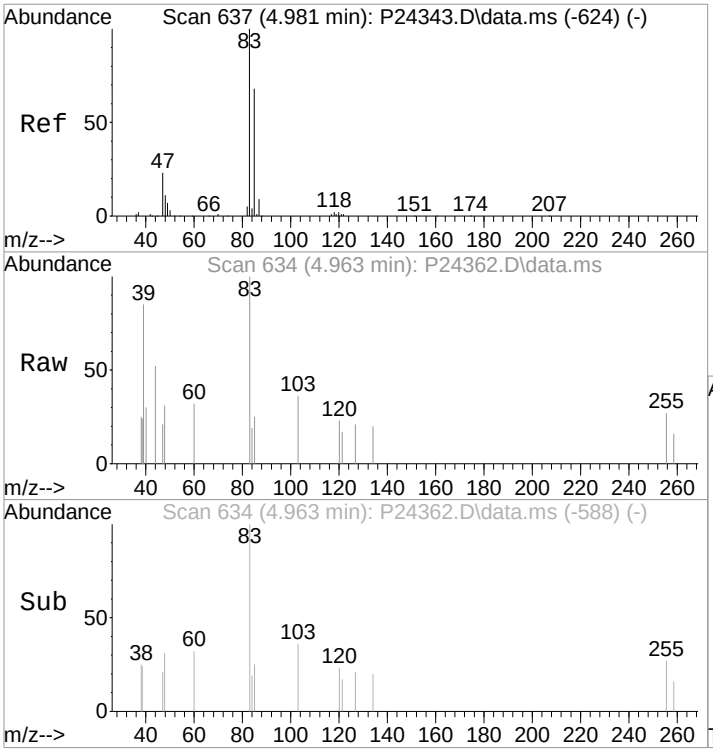


#34
cis-1,2-Dichloroethene
Concen: 3.05 ppb
RT: 4.396 min Scan# 541
Delta R.T. -0.006 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion: 96 Resp: 10870

Ion	Ratio	Lower	Upper
96	100		
61	113.7	128.1	168.1#

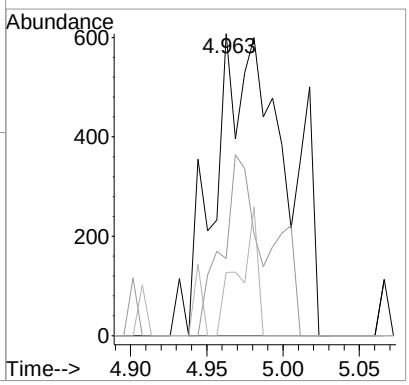


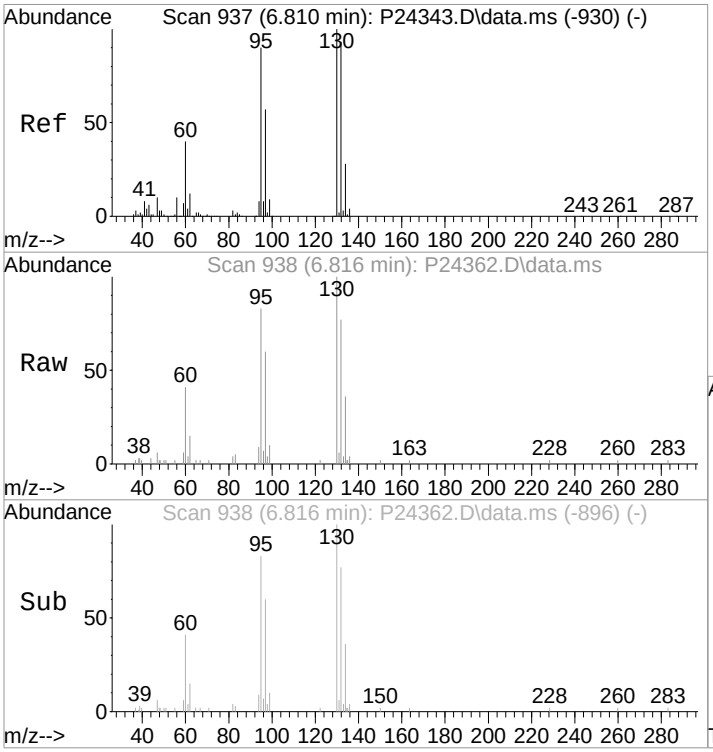


#40
Chloroform
Concen: 0.37 ppb m
RT: 4.963 min Scan# 634
Delta R.T. -0.006 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion: 83 Resp: 1941

Ion	Ratio	Lower	Upper
83	100		
85	25.5	47.9	87.9#
47	20.9	3.4	43.4

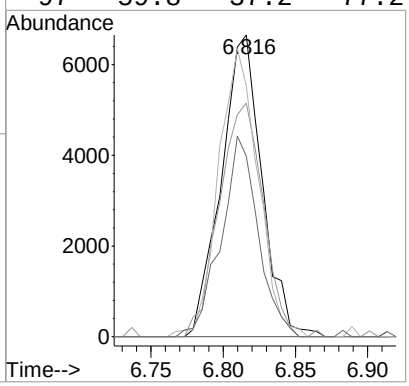


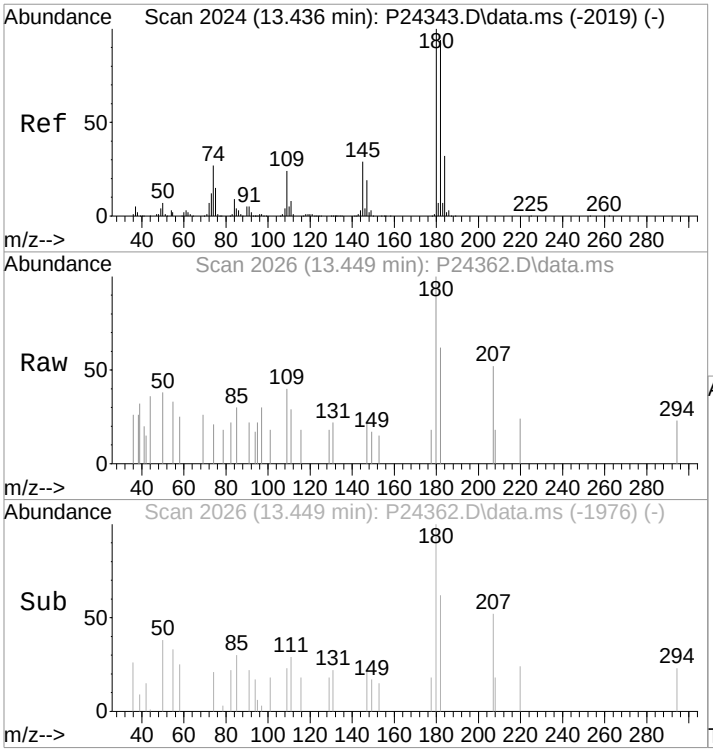


#54
Trichloroethene
Concen: 3.78 ppb
RT: 6.816 min Scan# 938
Delta R.T. 0.006 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion:130 Resp: 13046

Ion	Ratio	Lower	Upper
130	100		
132	77.3	72.6	112.6
95	83.0	69.8	109.8
97	59.8	37.2	77.2

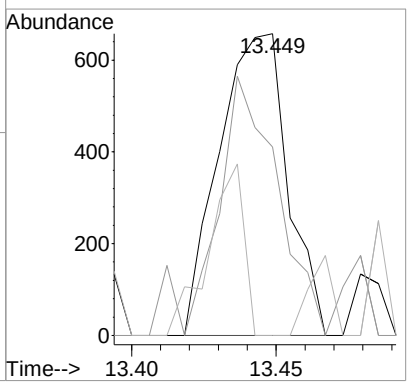




#115
1,2,4-Tcbenzene
Concen: 0.21 ppb
RT: 13.449 min Scan# 2026
Delta R.T. 0.012 min
Lab File: P24362.D
Acq: 21 Feb 2019 1:18 pm

Tgt Ion:180 Resp: 1091

Ion	Ratio	Lower	Upper
180	100		
182	62.5	74.2	114.2#
145	0.0	8.7	48.7#



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pm
Operator : K.Ruest
Sample : R1901228-002|78 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24362.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.433	53	55	58	rVB	19743	17706	1.08%	0.205%
2	1.628	72	87	89	rBV7	41574	115523	7.08%	1.336%
3	1.658	89	92	94	rVV	30594	30586	1.87%	0.354%
4	2.396	207	213	217	rBV	17292	28096	1.72%	0.325%
5	4.402	532	542	551	rBV	19263	52626	3.22%	0.609%
6	5.255	672	682	693	rBV2	154584	417249	25.57%	4.825%
7	5.395	695	705	719	rVB	323134	854895	52.39%	9.886%
8	5.786	757	769	783	rBV	215356	524177	32.12%	6.062%
9	6.487	874	884	896	rBV	544495	1122664	68.79%	12.983%
10	6.810	929	937	945	rBV2	33440	68561	4.20%	0.793%
11	7.578	1058	1063	1069	rBV3	8614	19051	1.17%	0.220%
12	8.297	1174	1181	1192	rBV	1019374	1631905	100.00%	18.872%
13	9.785	1419	1425	1438	rBV	903961	1313377	80.48%	15.188%
14	10.864	1596	1602	1608	rBV	847532	1053385	64.55%	12.182%
15	11.205	1648	1658	1663	rBV5	15417	27240	1.67%	0.315%
16	11.839	1756	1762	1772	rVB	1097890	1370230	83.97%	15.846%

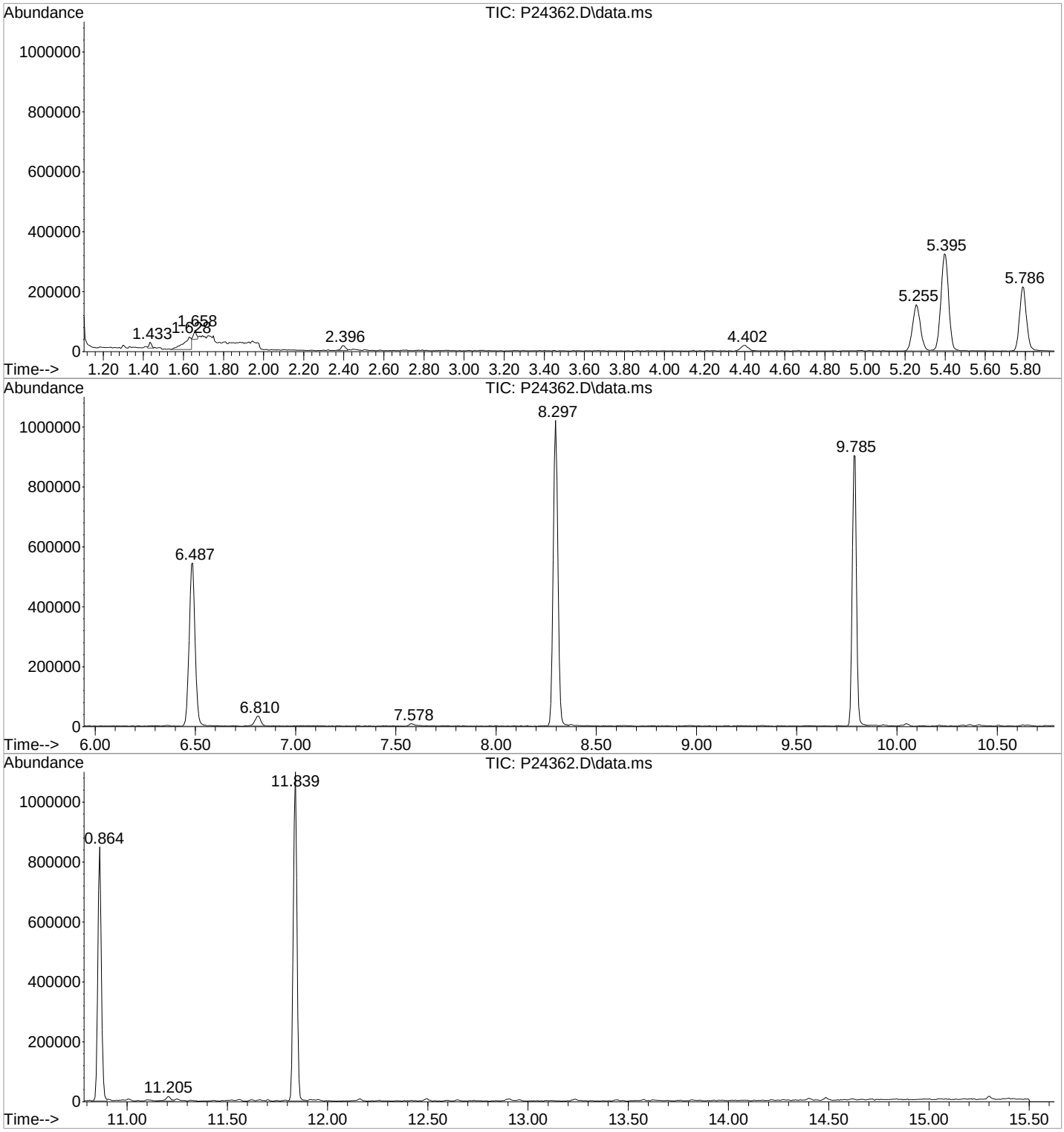
Sum of corrected areas: 8647271

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pm
Operator : K.Ruest
Sample : R1901228-002|78 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\\
Data File : P24362.D
Acq On : 21 Feb 2019 1:18 pmm
Operator : K.Ruestt
Sample : R1901228-002|78 Inst : MSVOA-122
Misc : DAY MED T44
ALS Vial : 3 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

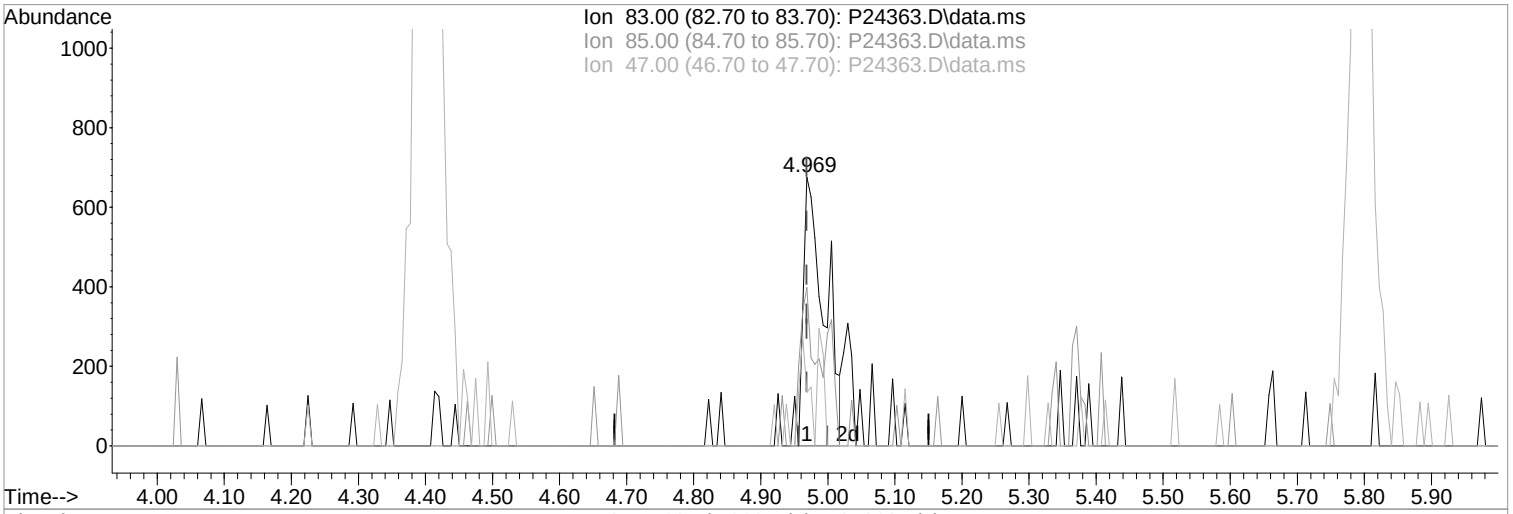
					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

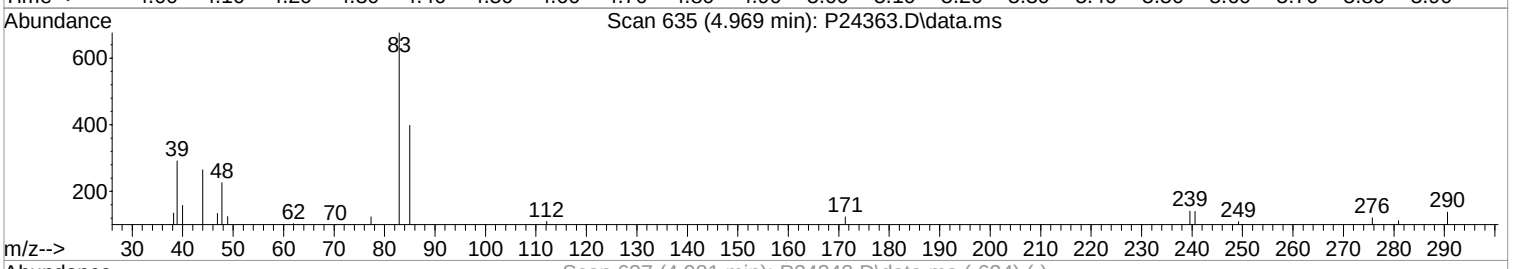
No Library Search Compounds Detected
****

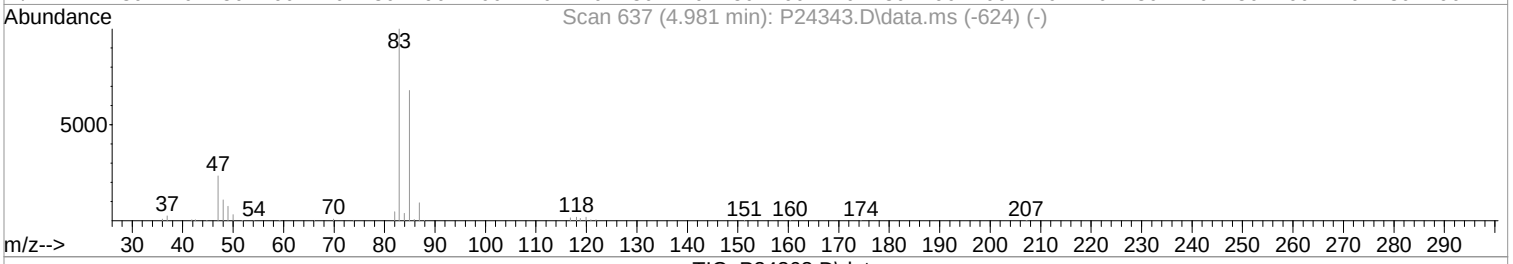
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 21 13:56:42 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24363.D\data.ms

(40) Chloroform (P)

4.969min (+0.000) 0.27 ppb m

response 1514

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	58.88
47.00	23.40	19.82
0.00	0.00	0.00

Manual Integration:

After

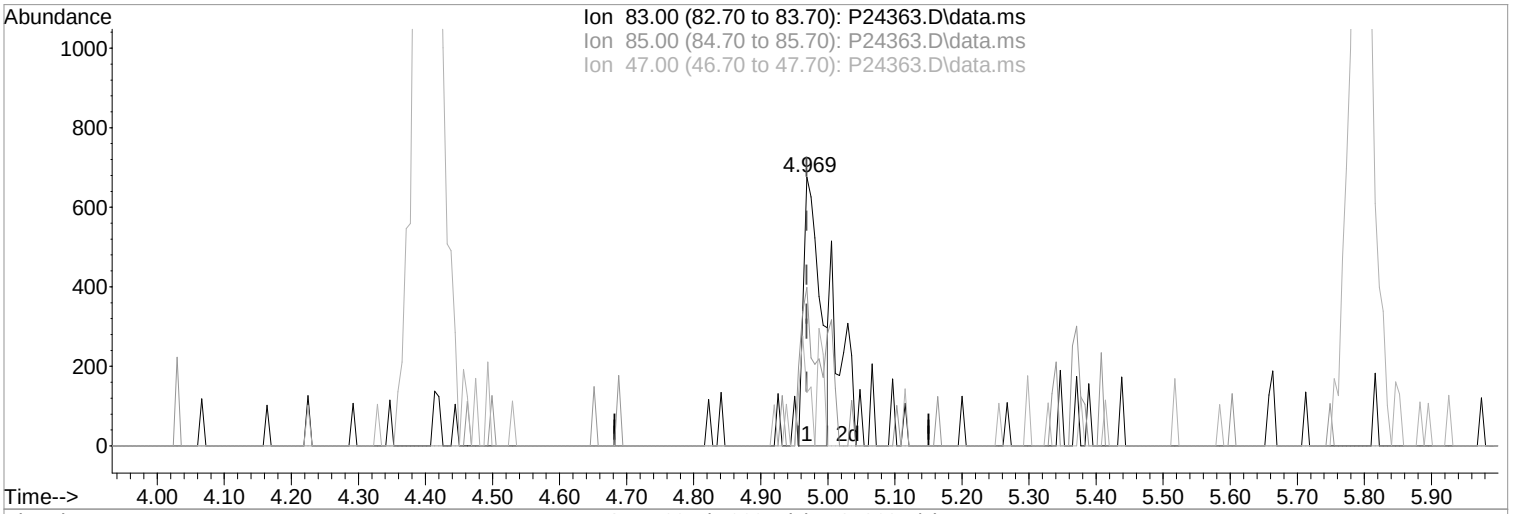
Split Peak

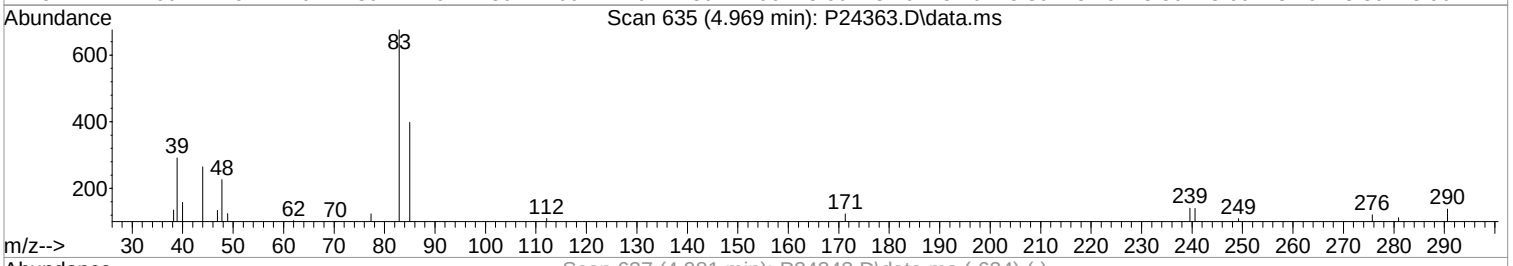
02/22/19

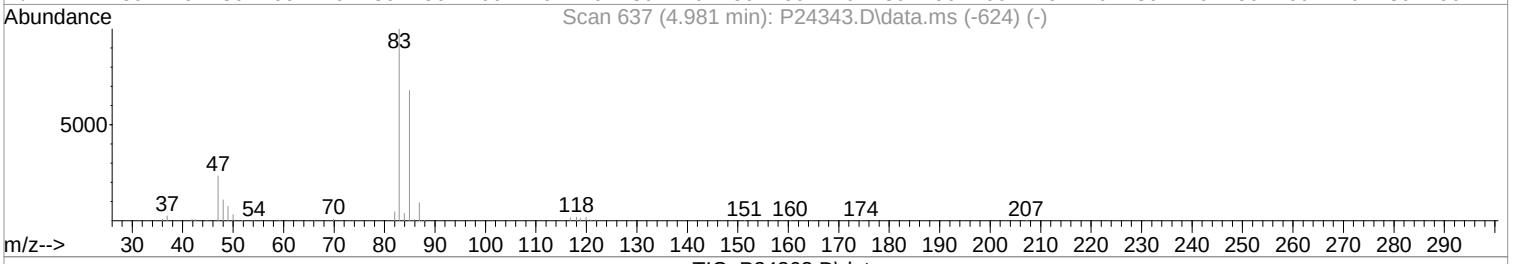
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 21 13:56:42 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24363.D\data.ms

(40) Chloroform (P)

4.969min (+0.000) 0.21 ppb

response 1149

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	58.88
47.00	23.40	19.82
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

DL

Quant Time: Feb 22 11:56:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

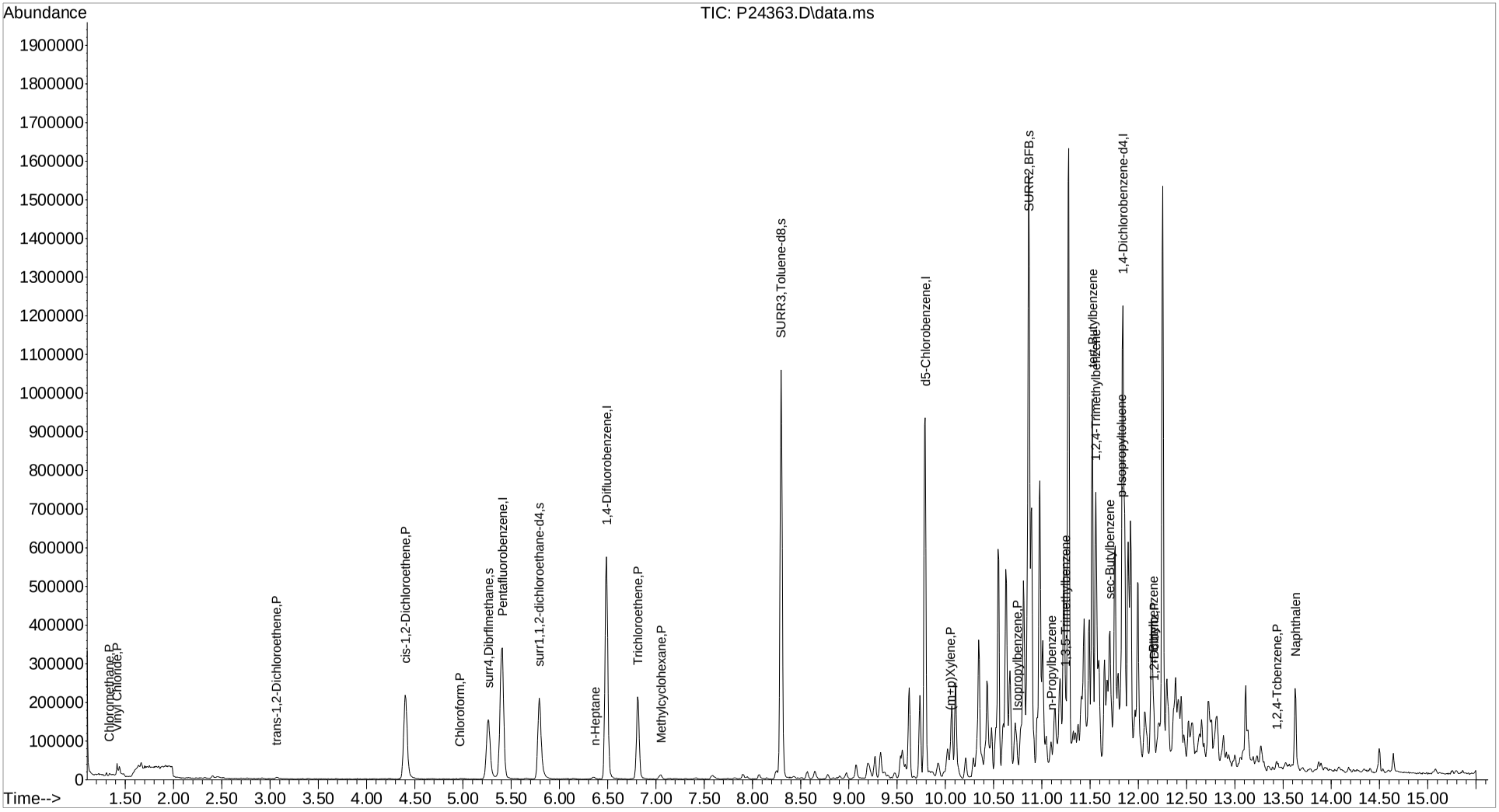
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.408	168	319836	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	511049	50.00	ppb		0.00
71) d5-Chlorobenzene	9.791	117	446233	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	228098	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.261	113	135258	48.16	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.32%				
48) surr1,1,2-dichloroetha...	5.792	65	192063	53.92	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 107.84%				
65) SURR3,Toluene-d8	8.297	98	663505	49.81	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.62%				
70) SURR2,BFB	10.864	95	244061	51.16	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.32%				
Target Compounds							Qvalue
3) Chloromethane	1.335	50	2462	0.48	ppb		85
4) Vinyl Chloride	1.414	62	23916	5.14	ppb		88
26) trans-1,2-Dichloroethene	3.067	96	1067	0.32	ppb	#	82
34) cis-1,2-Dichloroethene	4.402	96	133191	35.79	ppb		85
40) Chloroform	4.969	83	1514m	0.27	ppb		
52) n-Heptane	6.365	43	2352	0.53	ppb		76
54) Trichloroethene	6.810	130	81456	22.79	ppb		94
55) Methylcyclohexane	7.054	55	3734	0.83	ppb	#	86
83) (m+p)Xylene	10.053	106	3858	0.61	ppb	#	69
89) Isopropylbenzene	10.742	105	19380	1.29	ppb		95
95) n-Propylbenzene	11.095	91	20734	1.21	ppb		98
99) 1,3,5-Trimethylbenzene	11.248	105	26534	2.13	ppb		88
100) tert-Butylbenzene	11.522	119	4782	0.44	ppb		93
101) 1,2,4-Trimethylbenzene	11.559	105	241384	18.74	ppb		100
103) sec-Butylbenzene	11.705	105	26423	1.68	ppb		94
104) p-Isopropyltoluene	11.827	119	11153	0.86	ppb		93
109) n-Butylbenzene	12.156	91	34826	3.05	ppb		84
110) 1,2-Dclbenz	12.162	146	1903	0.25	ppb	#	18
115) 1,2,4-Tcbenzene	13.436	180	1213	0.23	ppb	#	56
117) Naphthalen	13.625	128	129723	7.45	ppb		98

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

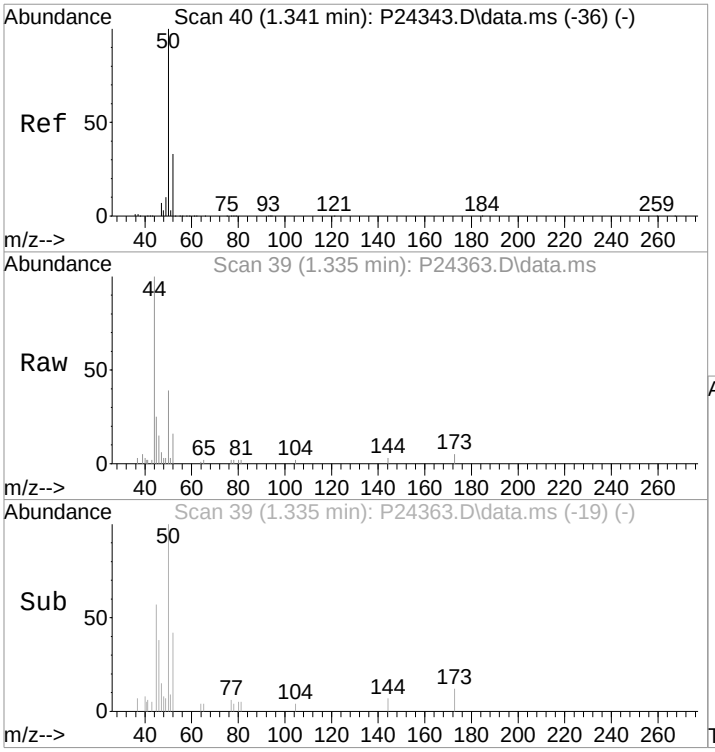
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 22 11:56:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



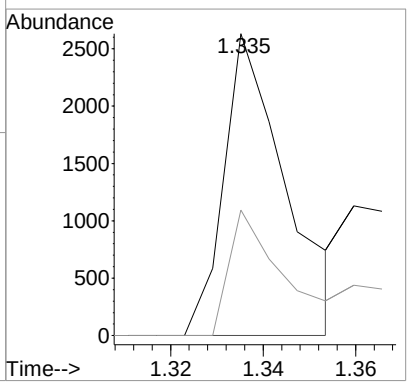
1st 02/22/19

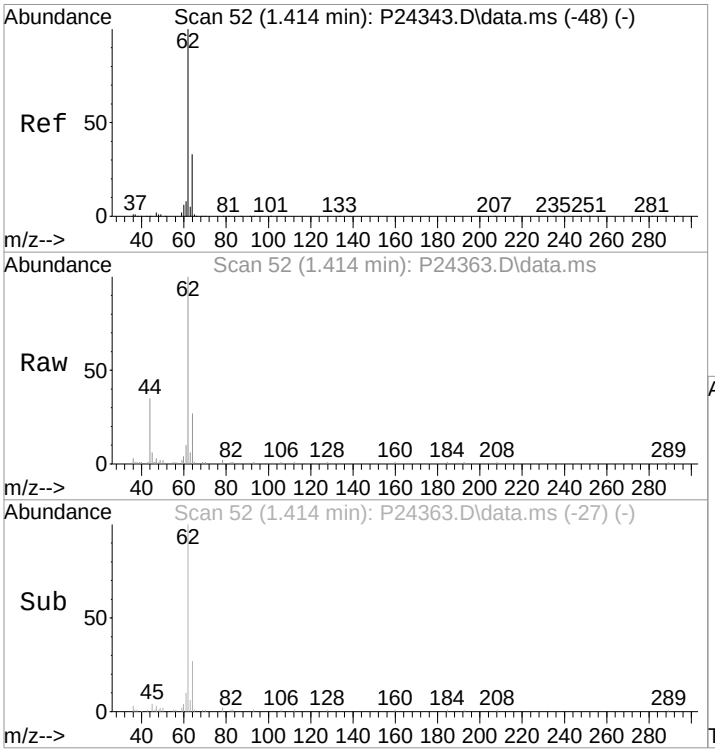


#3
Chloromethane
Concen: 0.48 ppb
RT: 1.335 min Scan# 39
Delta R.T. 0.006 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 50 Resp: 2462

Ion	Ratio	Lower	Upper
50	100		
52	41.5	13.0	53.0

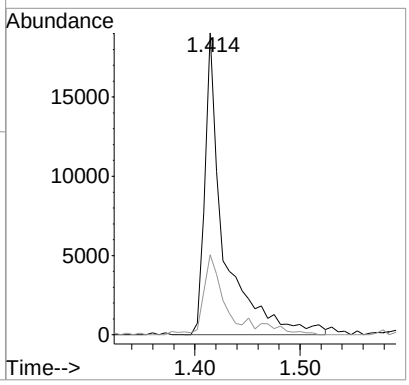


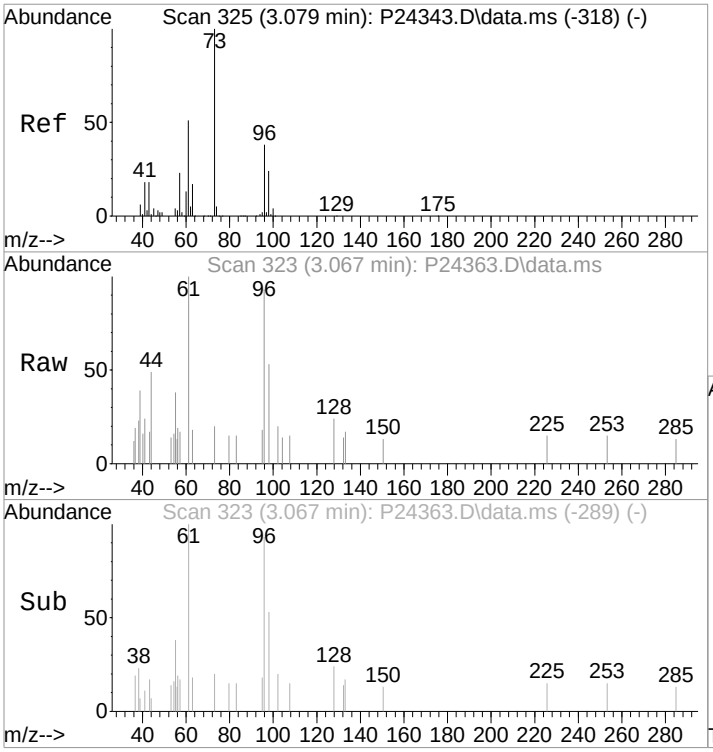


#4
Vinyl Chloride
Concen: 5.14 ppb
RT: 1.414 min Scan# 52
Delta R.T. 0.006 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 62 Resp: 23916

Ion	Ratio	Lower	Upper
62	100		
64	26.5	13.2	53.2

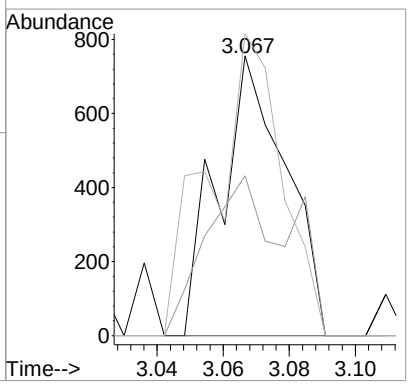


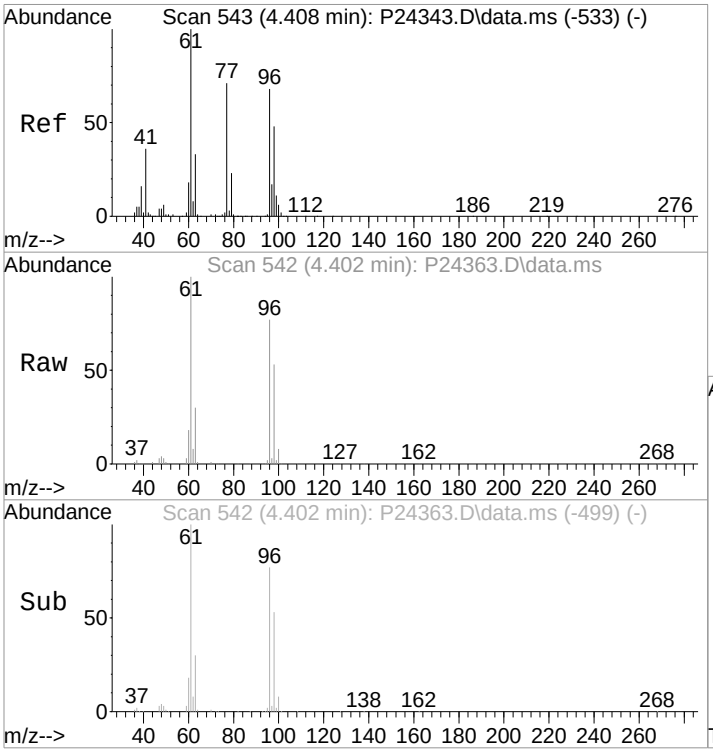


#26
trans-1,2-Dichloroethene
Concen: 0.32 ppb
RT: 3.067 min Scan# 323
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 96 Resp: 1067

Ion	Ratio	Lower	Upper
96	100		
98	57.1	43.5	83.5
61	107.9	114.4	154.4#

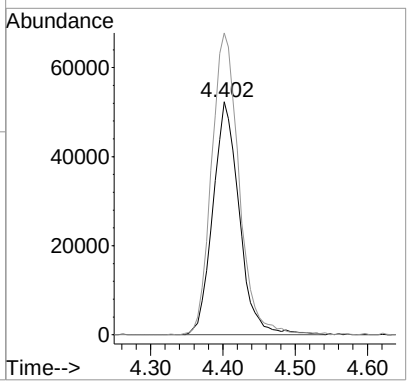


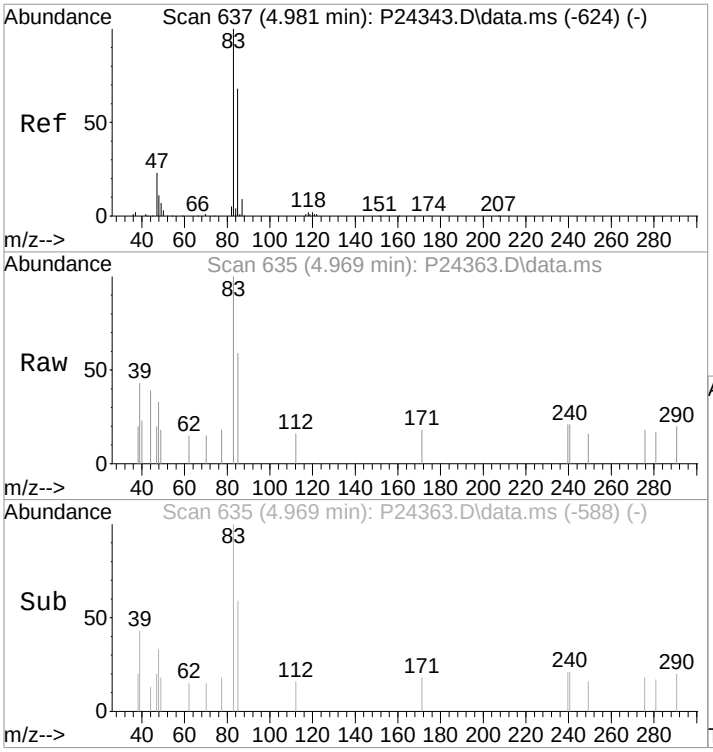


#34
cis-1,2-Dichloroethene
Concen: 35.79 ppb
RT: 4.402 min Scan# 542
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 96 Resp: 133191

Ion	Ratio	Lower	Upper
96	100		
61	129.5	128.1	168.1

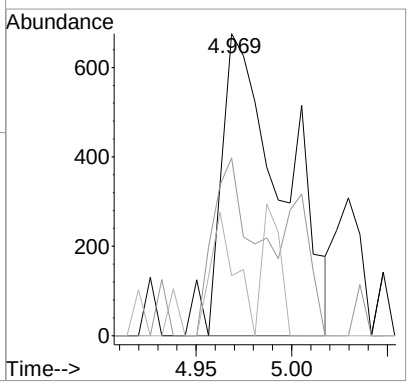


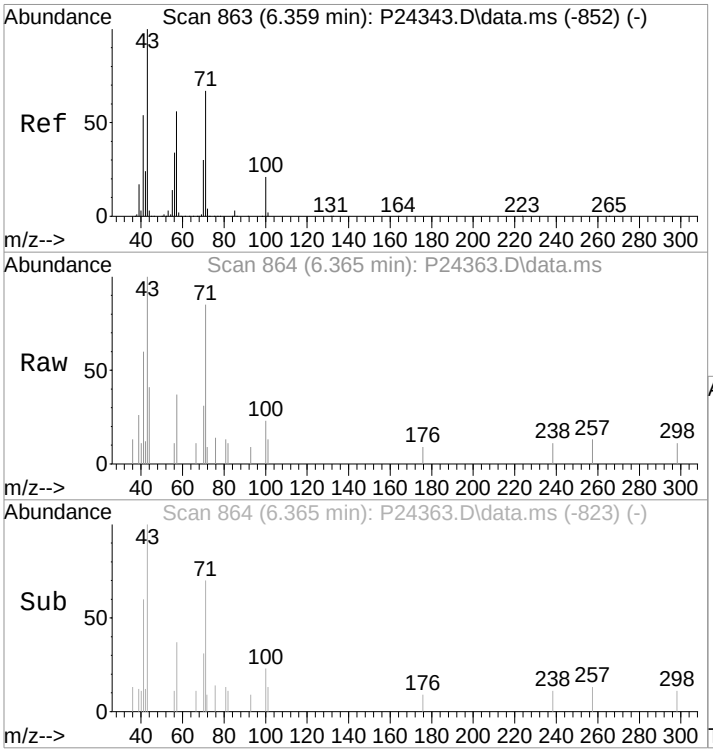


#40
Chloroform
Concen: 0.27 ppb m
RT: 4.969 min Scan# 635
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 83 Resp: 1514

Ion	Ratio	Lower	Upper
83	100		
85	58.9	47.9	87.9
47	19.8	3.4	43.4

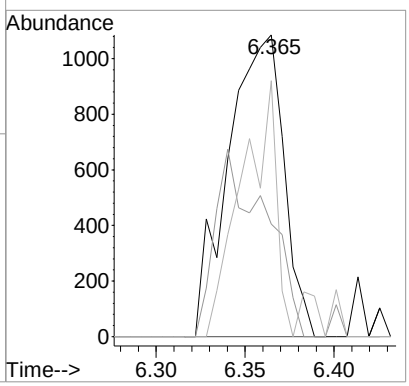


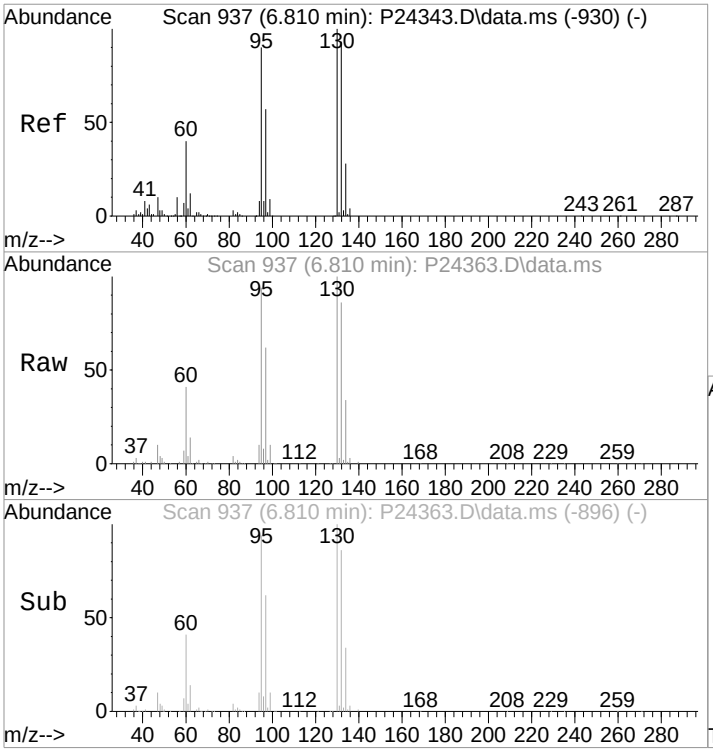


#52
n-Heptane
Concen: 0.53 ppb
RT: 6.365 min Scan# 864
Delta R.T. 0.012 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 43 Resp: 2352

Ion	Ratio	Lower	Upper
43	100		
57	37.3	35.5	75.5
71	84.8	47.0	87.0

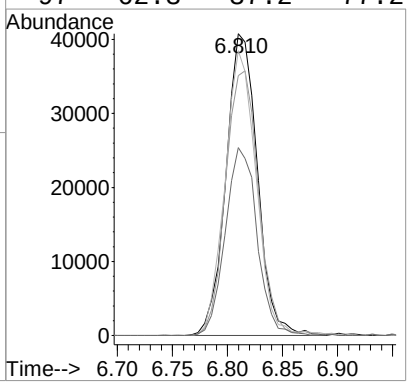


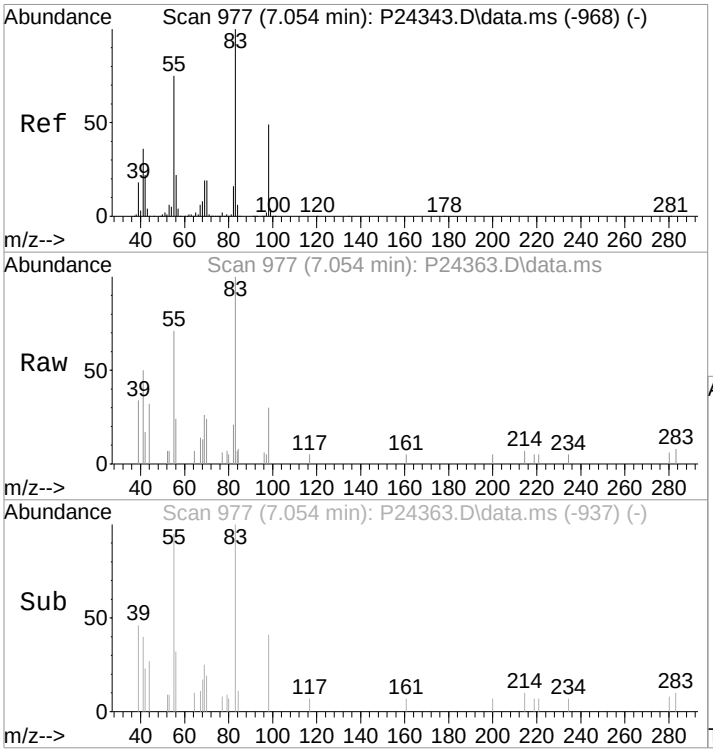


#54
Trichloroethene
Concen: 22.79 ppb
RT: 6.810 min Scan# 937
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:130 Resp: 81456

Ion	Ratio	Lower	Upper
130	100		
132	86.1	72.6	112.6
95	94.3	69.8	109.8
97	62.3	37.2	77.2

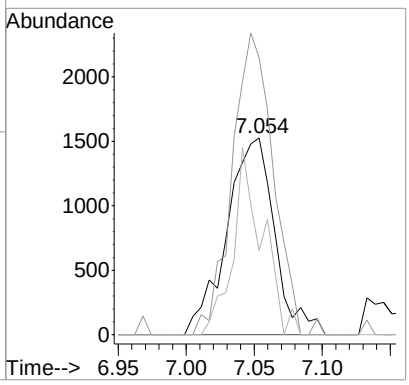


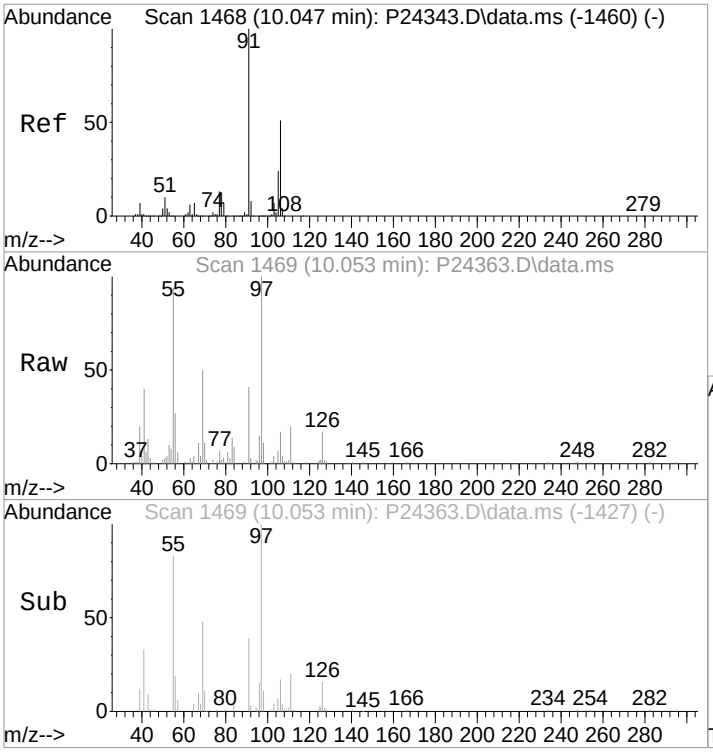


#55
Methylcyclohexane
Concen: 0.83 ppb
RT: 7.054 min Scan# 977
Delta R.T. 0.006 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 55 Resp: 3734

Ion	Ratio	Lower	Upper
55	100		
83	140.7	113.1	153.1
98	42.8	45.0	85.0#

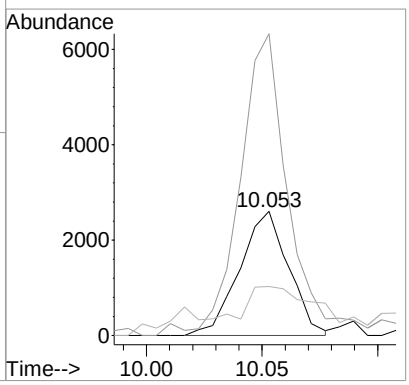


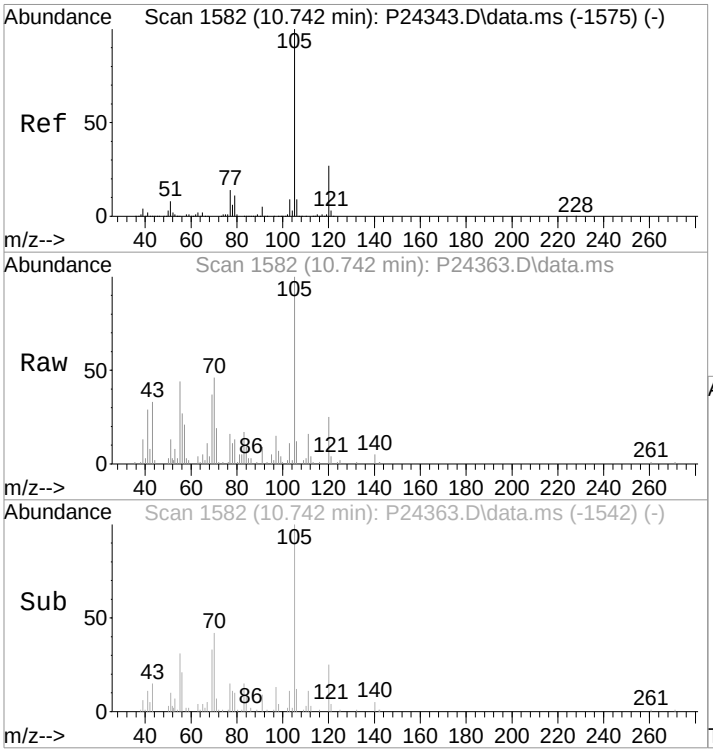


#83
(m+p)Xylene
Concen: 0.61 ppb
RT: 10.053 min Scan# 1469
Delta R.T. 0.006 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:106 Resp: 3858

Ion	Ratio	Lower	Upper
106	100		
91	242.9	175.0	215.0#
77	39.4	6.3	46.3

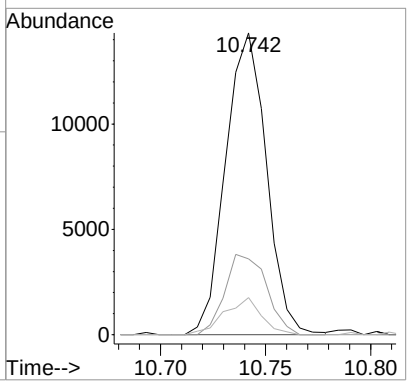


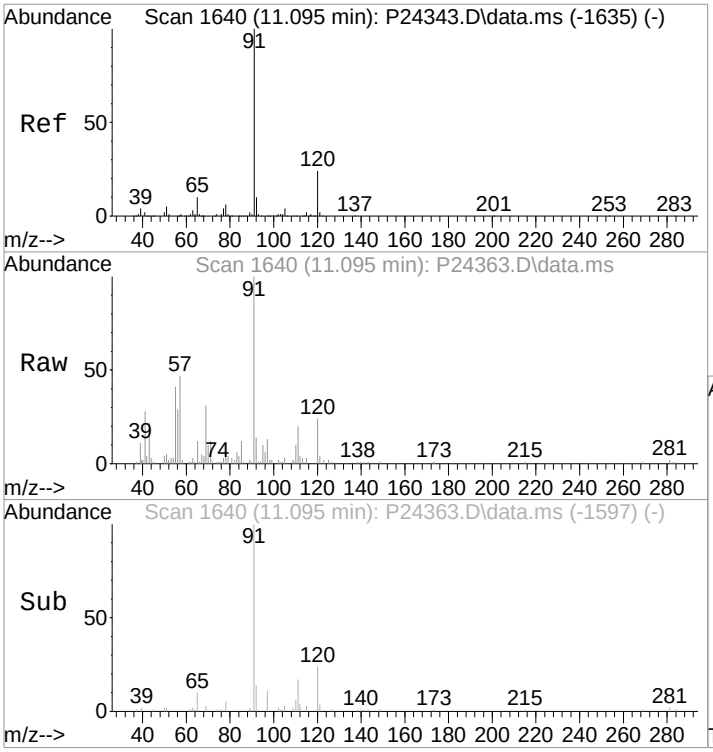


#89
Isopropylbenzene
Concen: 1.29 ppb
RT: 10.742 min Scan# 1582
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:105 Resp: 19380

Ion	Ratio	Lower	Upper
105	100		
120	25.2	7.2	47.2
106	12.3	0.0	28.8

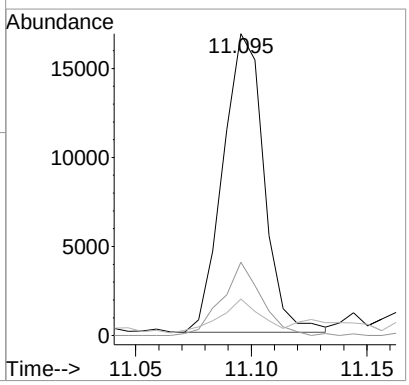


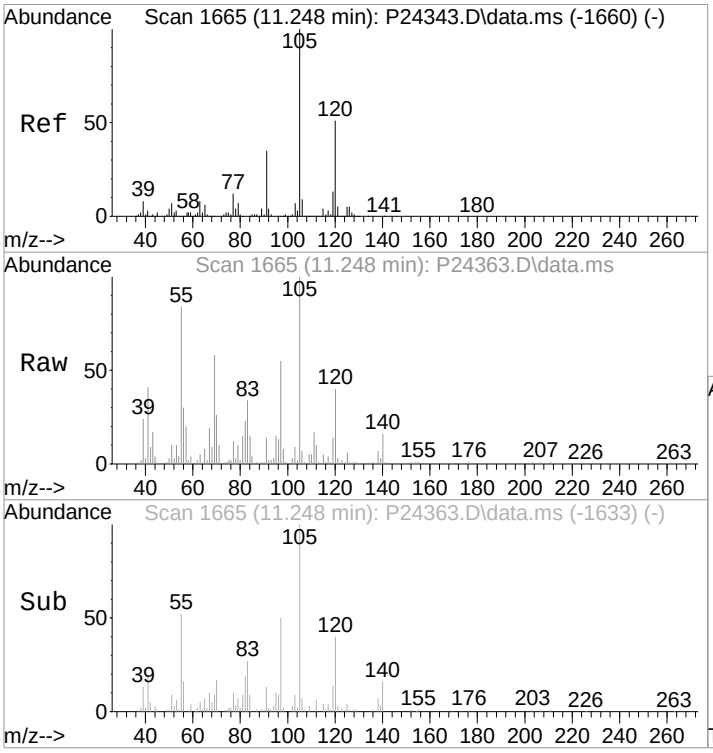


#95
n-Propylbenzene
Concen: 1.21 ppb
RT: 11.095 min Scan# 1640
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 91 Resp: 20734

Ion	Ratio	Lower	Upper
91	100		
120	24.3	4.4	44.4
65	12.1	0.0	30.4

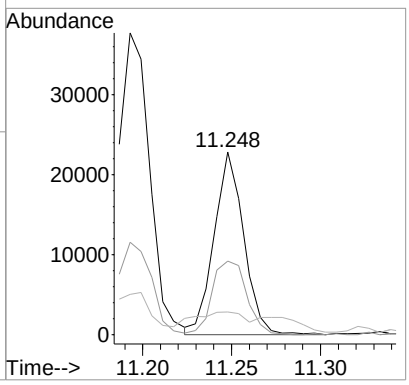


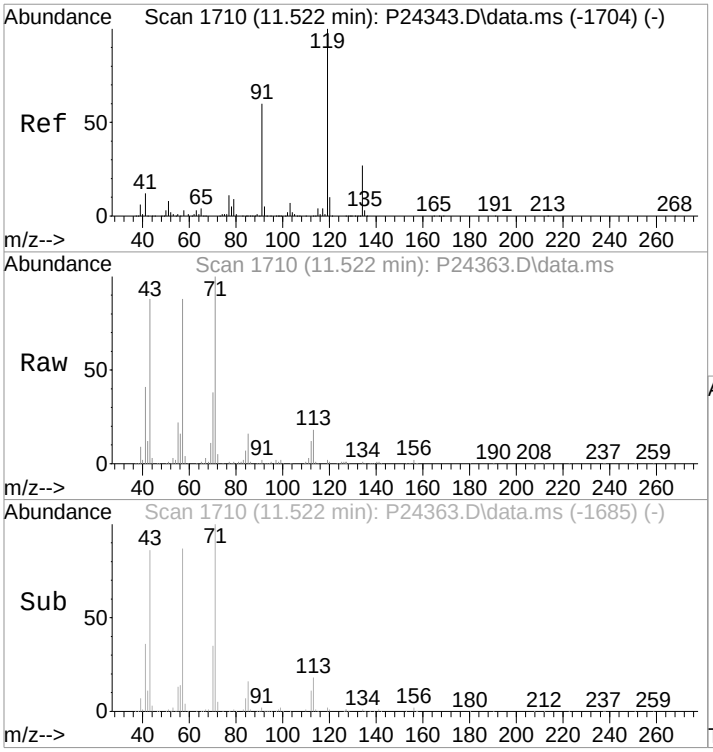


#99
1,3,5-Trimethylbenzene
Concen: 2.13 ppb
RT: 11.248 min Scan# 1665
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:105 Resp: 26534

Ion	Ratio	Lower	Upper
105	100		
120	40.4	30.8	70.8
77	12.4	0.0	32.5

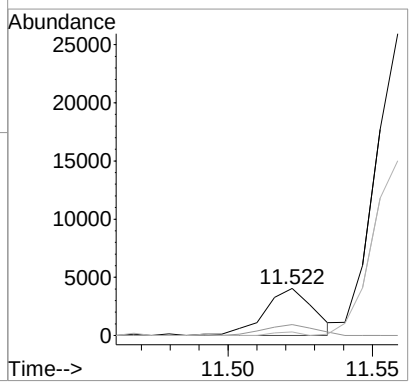


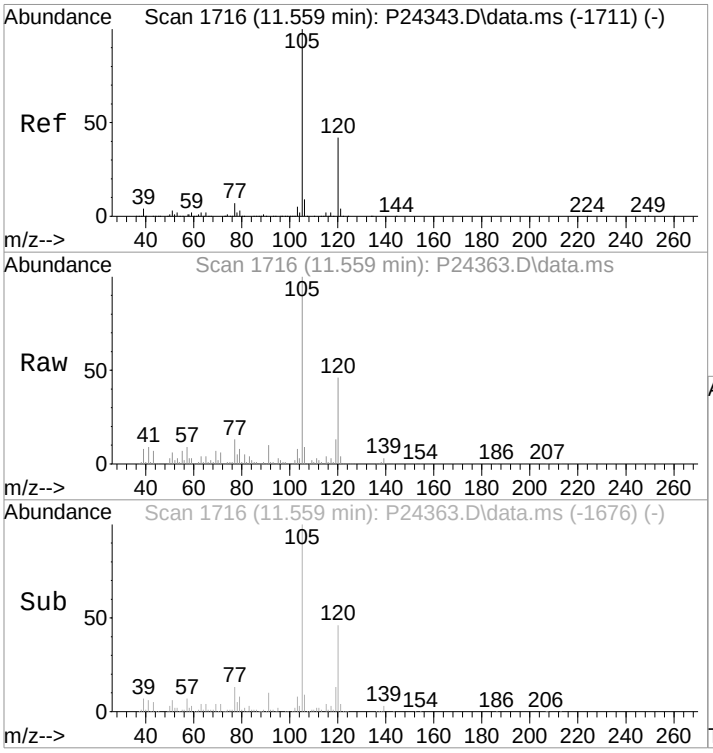


#100
tert-Butylbenzene
Concen: 0.44 ppb
RT: 11.522 min Scan# 1710
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:119 Resp: 4782

Ion	Ratio	Lower	Upper
119	100		
134	23.1	7.0	47.0
103	7.7	0.0	26.6

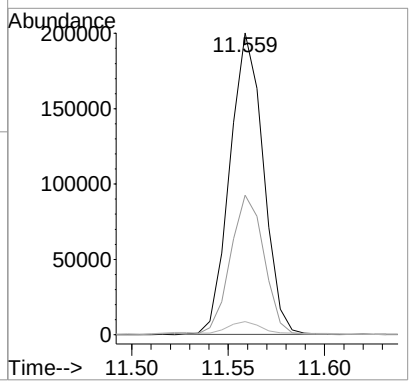


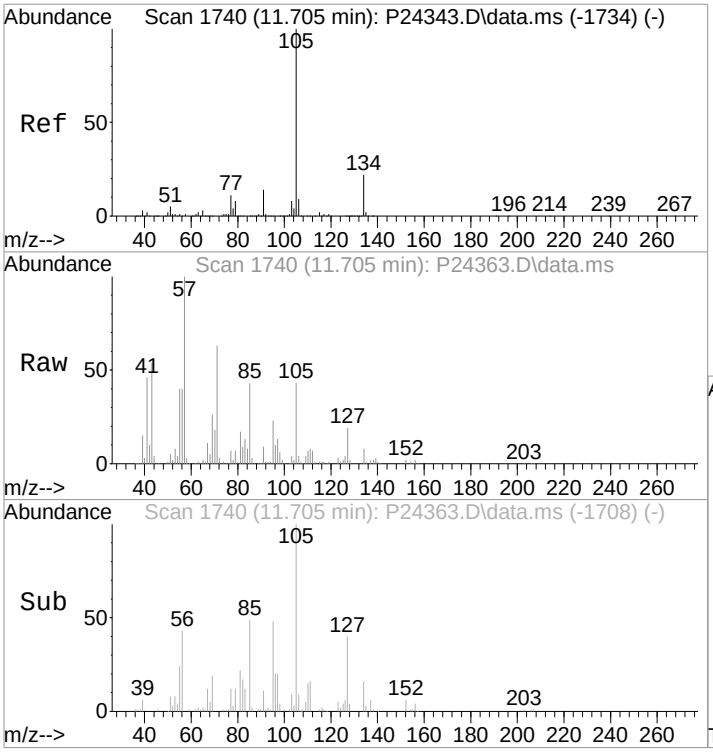


#101
1,2,4-Trimethylbenzene
Concen: 18.74 ppb
RT: 11.559 min Scan# 1716
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:105 Resp: 241384

Ion	Ratio	Lower	Upper
105	100		
120	46.2	26.4	66.4
65	4.3	0.0	24.1

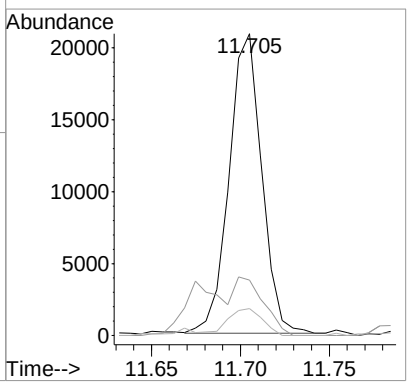


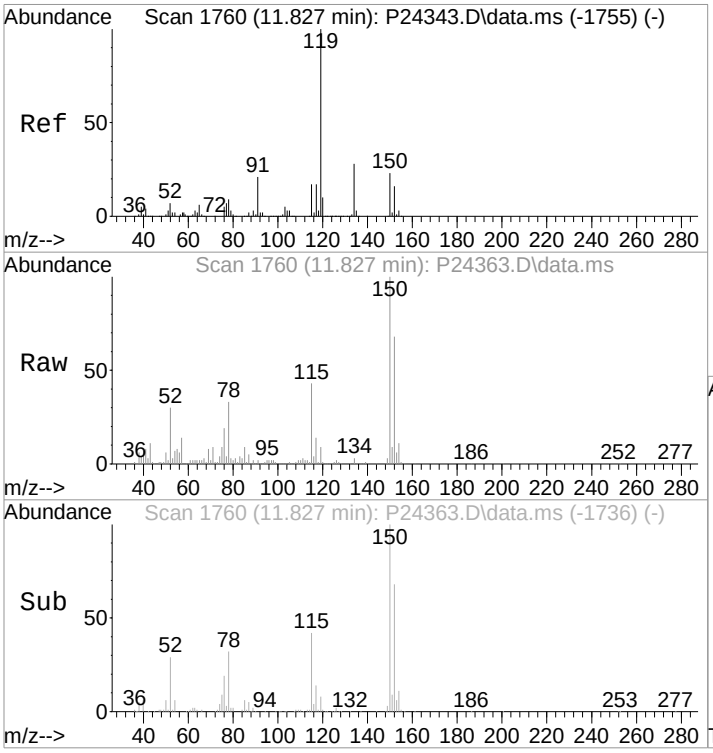


#103
sec-Butylbenzene
Concen: 1.68 ppb
RT: 11.705 min Scan# 1740
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:105 Resp: 26423

Ion	Ratio	Lower	Upper
105	100		
134	18.4	1.8	41.8
103	8.9	0.0	27.9

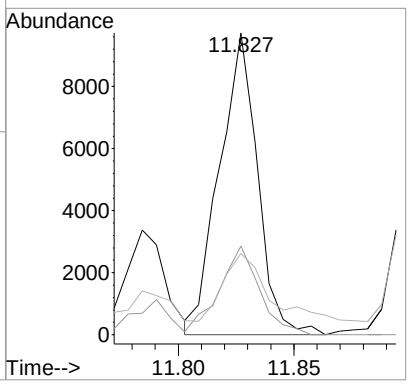


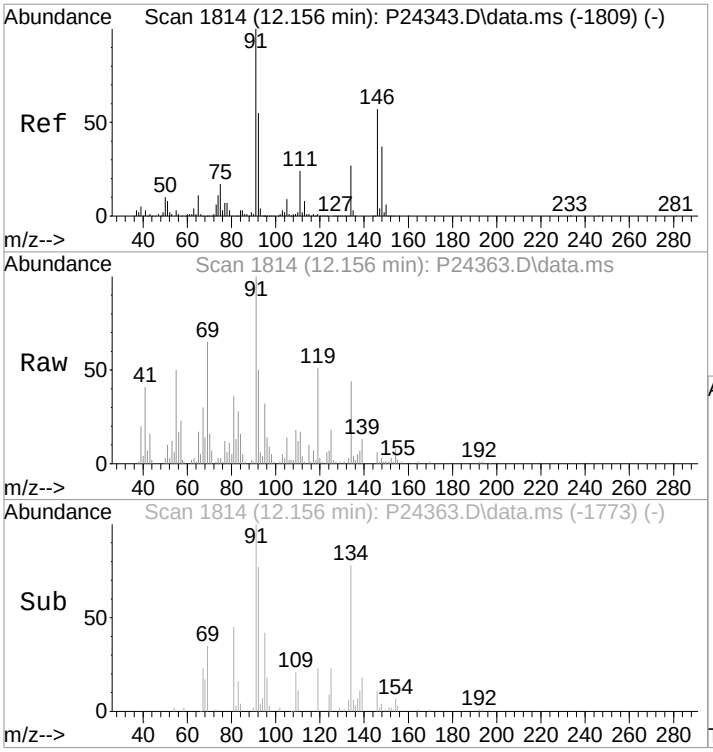


#104
p-Isopropyltoluene
Concen: 0.86 ppb
RT: 11.827 min Scan# 1760
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:119 Resp: 11153

Ion	Ratio	Lower	Upper
119	100		
134	29.4	7.6	47.6
91	26.9	1.3	41.3

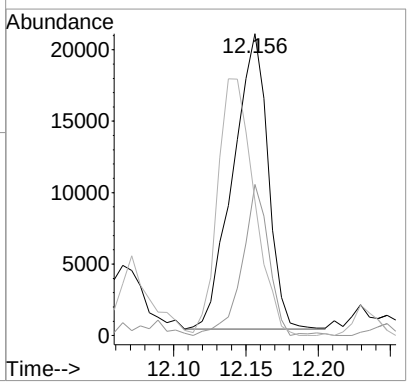


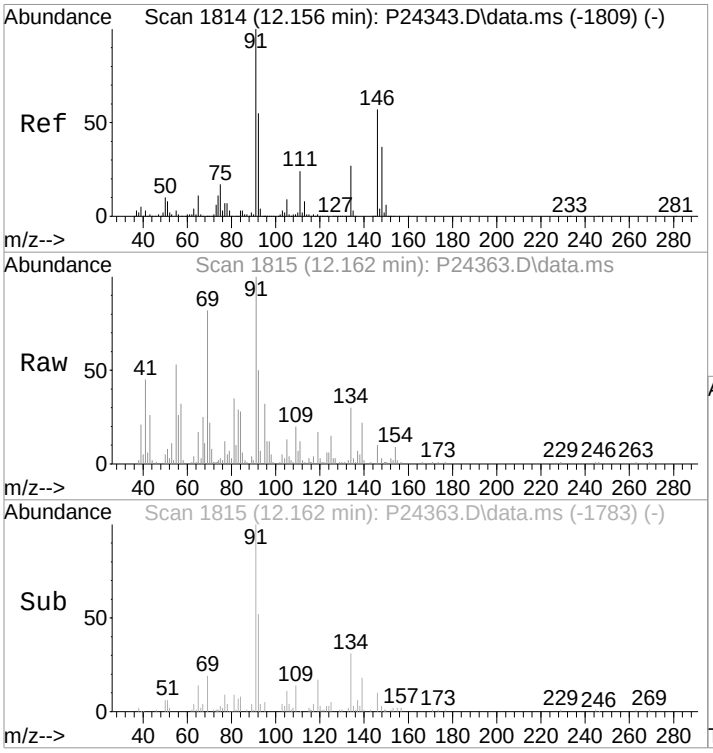


#109
n-Butylbenzene
Concen: 3.05 ppb
RT: 12.156 min Scan# 1814
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion: 91 Resp: 34826

Ion	Ratio	Lower	Upper
91	100		
92	50.0	34.7	74.7
134	44.5	6.8	46.8

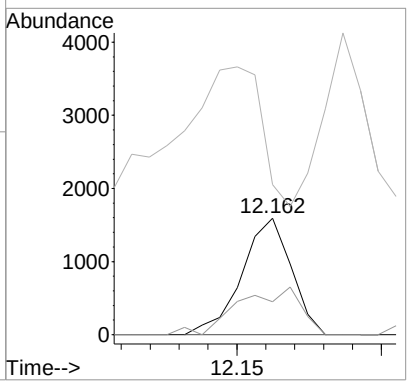


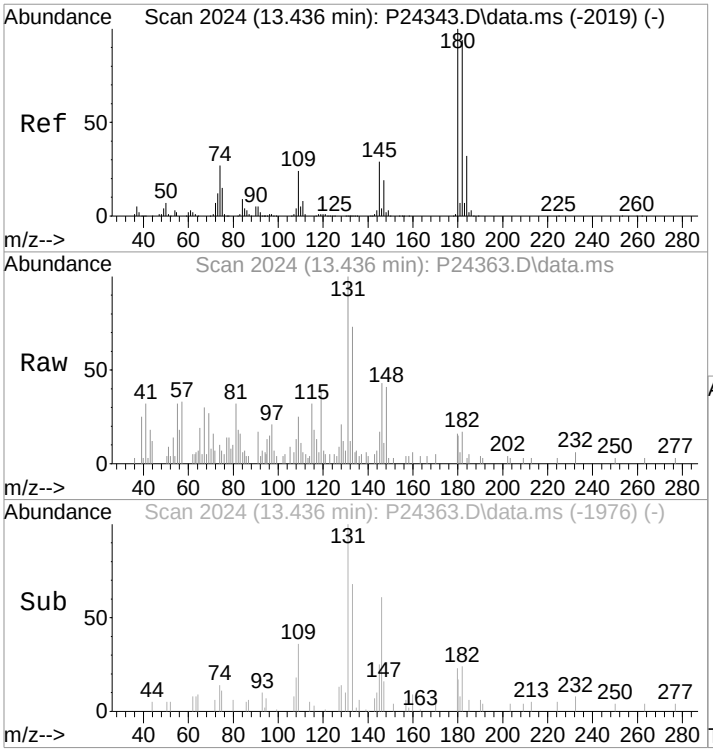


#110
1,2-Dclbenz
Concen: 0.25 ppb
RT: 12.162 min Scan# 1815
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:146 Resp: 1903

Ion	Ratio	Lower	Upper
146	100		
148	28.4	44.5	84.5#
111	128.7	21.6	61.6#

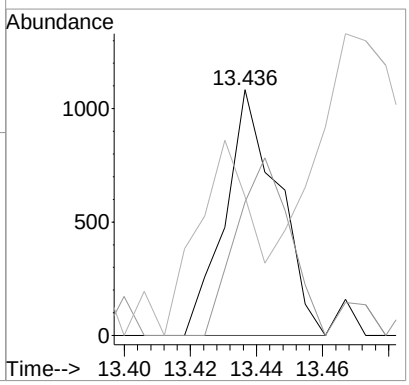


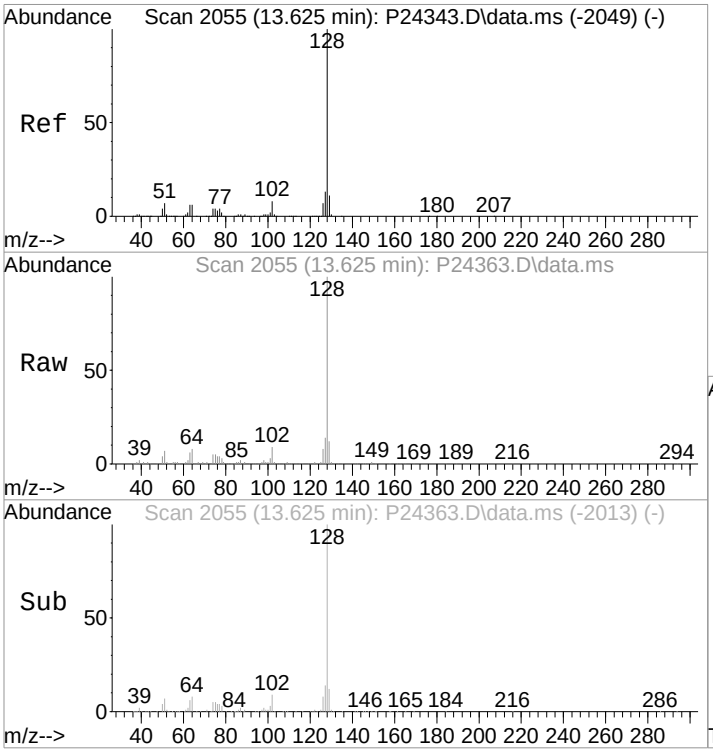


#115
1,2,4-Tcbenzene
Concen: 0.23 ppb
RT: 13.436 min Scan# 2024
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:180 Resp: 1213

Ion	Ratio	Lower	Upper
180	100		
182	54.3	74.2	114.2#
145	56.5	8.7	48.7#

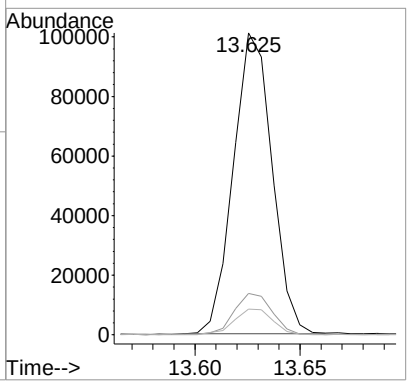




#117
Naphthalen
Concen: 7.45 ppb
RT: 13.625 min Scan# 2055
Delta R.T. 0.000 min
Lab File: P24363.D
Acq: 21 Feb 2019 1:40 pm

Tgt Ion:128 Resp: 129723

Ion	Ratio	Lower	Upper
128	100		
127	13.7	0.0	32.9
102	8.5	0.0	28.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24363.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.414	49	52	54	rBV	28798	24653	1.06%	0.070%
2	1.640	76	89	91	rBV6	28748	97734	4.21%	0.278%
3	4.402	533	542	557	rBV2	217372	568886	24.49%	1.617%
4	5.261	672	683	694	rBV2	153680	441761	19.01%	1.256%
5	5.408	696	707	722	rVB	338368	903228	38.88%	2.568%
6	5.792	761	770	788	rBV	208638	534620	23.01%	1.520%
7	6.487	876	884	897	rBV	575305	1167430	50.25%	3.319%
8	6.810	927	937	946	rBV	212246	423196	18.22%	1.203%
9	7.047	966	976	982	rBV4	10996	25589	1.10%	0.073%
10	7.895	1107	1115	1121	rBV2	11599	24646	1.06%	0.070%
11	8.255	1167	1174	1175	rBV2	20980	36473	1.57%	0.104%
12	8.297	1175	1181	1191	rVB	1055319	1716103	73.86%	4.878%
13	8.572	1219	1226	1231	rBV2	19112	30325	1.31%	0.086%
14	8.645	1231	1238	1246	rVB3	20422	37565	1.62%	0.107%
15	8.974	1287	1292	1298	rVB2	15756	24496	1.05%	0.070%
16	9.071	1300	1308	1314	rBV2	36474	65561	2.82%	0.186%
17	9.193	1324	1328	1336	rBV2	38258	93727	4.03%	0.266%
18	9.273	1336	1341	1345	rVB	55003	80874	3.48%	0.230%
19	9.328	1345	1350	1354	rBV	65400	102119	4.40%	0.290%
20	9.474	1370	1374	1379	rBV3	13979	24653	1.06%	0.070%
21	9.535	1379	1384	1385	rVV	57619	69340	2.98%	0.197%
22	9.553	1385	1387	1391	rVV2	72789	112583	4.85%	0.320%
23	9.626	1394	1399	1404	rVB	232730	337848	14.54%	0.960%
24	9.736	1410	1417	1421	rBV	214416	303629	13.07%	0.863%
25	9.791	1421	1426	1431	rVV	921884	1312598	56.50%	3.731%
26	9.925	1443	1448	1455	rVB4	34243	64866	2.79%	0.184%
27	10.023	1455	1464	1467	rBV3	71470	146817	6.32%	0.417%
28	10.065	1467	1471	1474	rBV	140254	174784	7.52%	0.497%
29	10.108	1474	1478	1489	rVB	247363	384988	16.57%	1.094%
30	10.212	1489	1495	1501	rBV2	53388	83177	3.58%	0.236%
31	10.291	1504	1508	1510	rBV2	49442	65893	2.84%	0.187%
32	10.346	1510	1517	1525	rBV3	327948	516636	22.24%	1.469%
33	10.431	1525	1531	1536	rBV2	216648	359287	15.46%	1.021%
34	10.480	1536	1539	1542	rVB2	106591	126115	5.43%	0.359%
35	10.547	1542	1550	1555	rBV	569015	881612	37.95%	2.506%
36	10.602	1555	1559	1560	rBV	109659	148431	6.39%	0.422%
37	10.626	1560	1563	1567	rBV	409156	504502	21.71%	1.434%
38	10.669	1567	1570	1575	rVB2	240638	347637	14.96%	0.988%
39	10.724	1575	1579	1585	rVB3	109189	190133	8.18%	0.541%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

40	10.809	1585	1593	1597	rBV	476600	859941	37.01%	2.445%
41	10.864	1597	1602	1605	rBV3	1402734	2004769	86.29%	5.699%
42	10.894	1605	1607	1613	rVB	660407	736932	31.72%	2.095%
43	10.949	1613	1616	1617	rBV	117064	118838	5.12%	0.338%
44	10.980	1617	1621	1624	rBV	613824	724757	31.19%	2.060%
45	11.010	1624	1626	1630	rVB2	268997	263541	11.34%	0.749%
46	11.047	1630	1632	1636	rVB2	68726	69203	2.98%	0.197%
47	11.095	1636	1640	1642	rBV3	53792	66935	2.88%	0.190%
48	11.138	1642	1647	1651	rBV3	119238	210549	9.06%	0.599%
49	11.187	1651	1655	1658	rBV3	168777	261508	11.26%	0.743%
50	11.230	1658	1662	1666	rBV	442342	553890	23.84%	1.575%
51	11.278	1666	1670	1675	rVB2	1538865	1917759	82.54%	5.452%
52	11.327	1675	1678	1679	rBV2	32230	26849	1.16%	0.076%
53	11.376	1683	1686	1688	rBV	47951	50187	2.16%	0.143%
54	11.412	1688	1692	1693	rBV2	115026	153696	6.62%	0.437%
55	11.437	1693	1696	1700	rVB4	278511	340160	14.64%	0.967%
56	11.492	1701	1705	1707	rBV	274176	314531	13.54%	0.894%
57	11.522	1707	1710	1713	rBV	790036	800598	34.46%	2.276%
58	11.559	1713	1716	1719	rBV	541985	649248	27.94%	1.846%
59	11.650	1726	1731	1733	rBV	249936	338534	14.57%	0.962%
60	11.675	1733	1735	1737	rVV2	195762	256032	11.02%	0.728%
61	11.705	1737	1740	1744	rVV3	321573	516436	22.23%	1.468%
62	11.760	1744	1749	1752	rVV	539340	828747	35.67%	2.356%
63	11.790	1752	1754	1756	rVV3	208127	249341	10.73%	0.709%
64	11.839	1756	1762	1768	rVV2	1157111	2323315	100.00%	6.605%
65	11.894	1768	1771	1773	rVV	543217	749469	32.26%	2.131%
66	11.918	1773	1775	1779	rVV	596632	704385	30.32%	2.002%
67	11.967	1779	1783	1784	rVV3	105434	138759	5.97%	0.394%
68	11.992	1784	1787	1795	rVB	451894	647608	27.87%	1.841%
69	12.065	1795	1799	1806	rBV5	117564	227606	9.80%	0.647%
70	12.138	1806	1811	1818	rBV3	346457	621822	26.76%	1.768%
71	12.211	1818	1823	1825	rBV4	77732	139148	5.99%	0.396%
72	12.254	1825	1830	1834	rVV	1448228	1704073	73.35%	4.844%
73	12.296	1834	1837	1843	rVB5	187525	318099	13.69%	0.904%
74	12.388	1844	1852	1854	rBV3	189592	387359	16.67%	1.101%
75	12.412	1854	1856	1859	rVV2	113258	172029	7.40%	0.489%
76	12.443	1859	1861	1864	rVB	119647	122161	5.26%	0.347%
77	12.473	1864	1866	1870	rVB5	55577	67614	2.91%	0.192%
78	12.522	1870	1874	1876	rBV3	91963	128324	5.52%	0.365%
79	12.559	1876	1880	1884	rVB4	80121	152607	6.57%	0.434%
80	12.638	1888	1893	1894	rBV4	47379	76382	3.29%	0.217%
81	12.656	1894	1896	1899	rVB2	70648	63886	2.75%	0.182%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

82	12.723	1903	1907	1911	rBV3	143688	262978	11.32%	0.748%
83	12.815	1915	1922	1927	rVB4	114720	271440	11.68%	0.772%
84	12.882	1927	1933	1936	rBV3	65318	96787	4.17%	0.275%
85	12.937	1940	1942	1947	rVB3	31060	43382	1.87%	0.123%
86	12.998	1950	1952	1956	rVB3	30313	35207	1.52%	0.100%
87	13.059	1956	1962	1964	rBV5	24050	42646	1.84%	0.121%
88	13.113	1967	1971	1973	rBV	167285	175951	7.57%	0.500%
89	13.229	1986	1990	1993	rBV3	20928	28261	1.22%	0.080%
90	13.272	1993	1997	2001	rVB4	43447	60524	2.61%	0.172%
91	13.436	2020	2024	2030	rBV7	21394	41898	1.80%	0.119%
92	13.528	2034	2039	2042	rBV6	16923	30541	1.31%	0.087%
93	13.625	2051	2055	2063	rVB	212535	286574	12.33%	0.815%
94	14.497	2192	2198	2202	rBV	61409	87095	3.75%	0.248%
95	14.644	2218	2222	2227	rVB	46324	51602	2.22%	0.147%
96	15.083	2286	2294	2298	rBV4	13275	26714	1.15%	0.076%
97	15.497	2359	2362	2363	rVB2	23879	23288	1.00%	0.066%

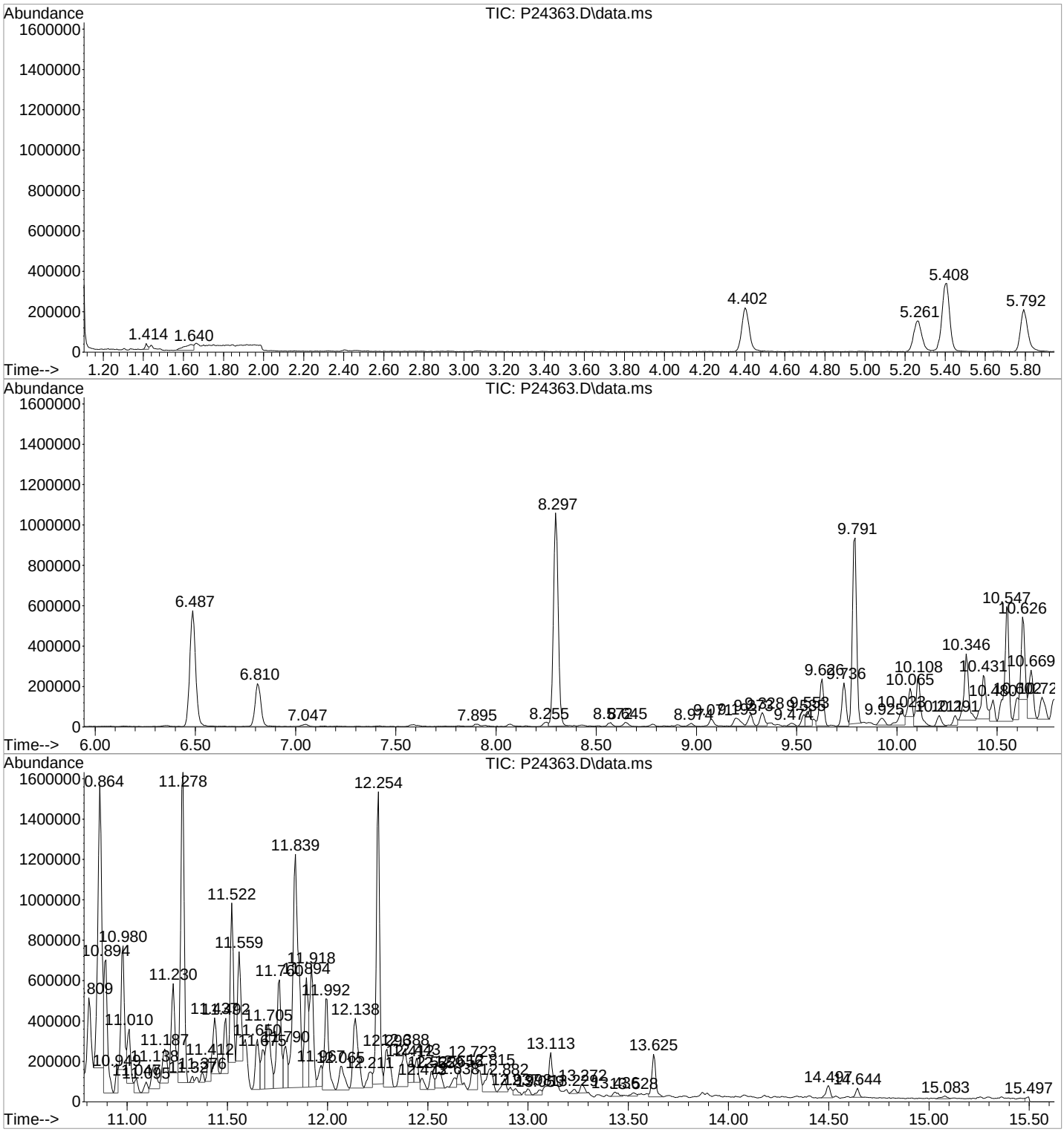
Sum of corrected areas: 35177030

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

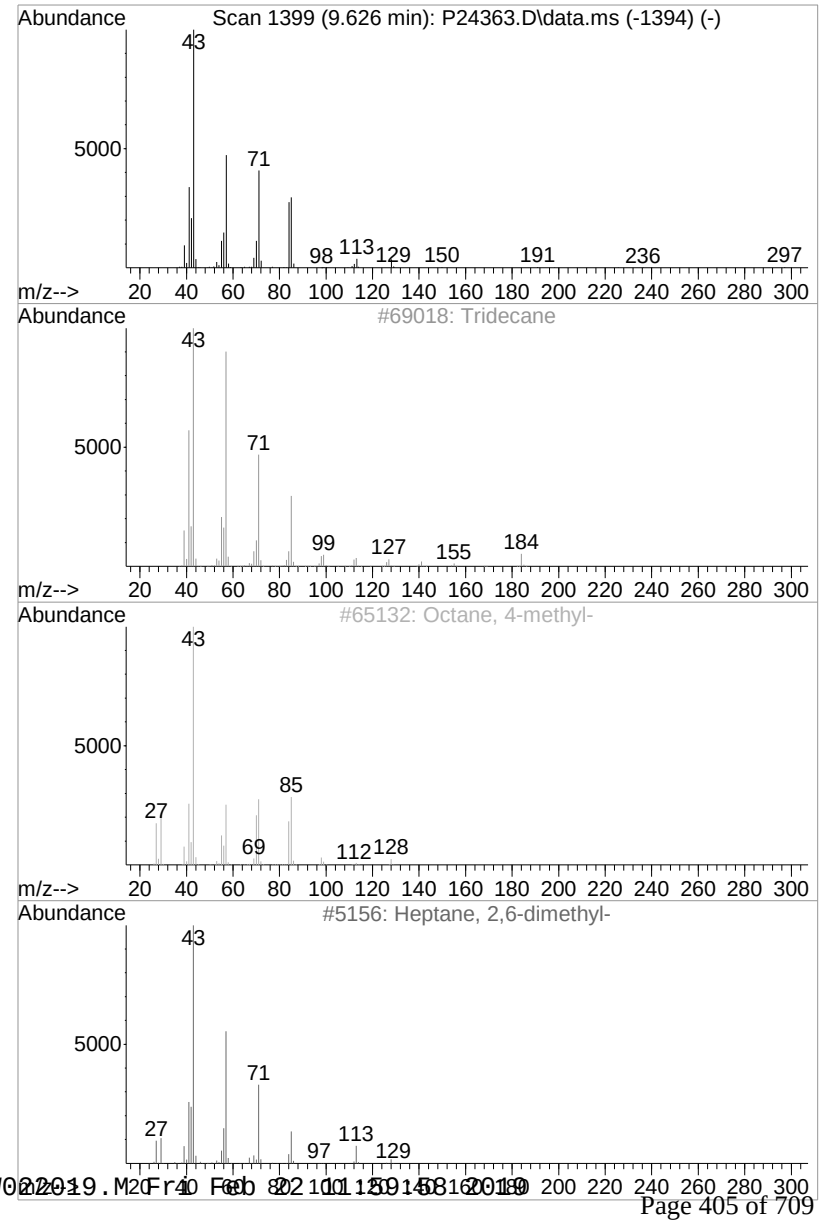
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

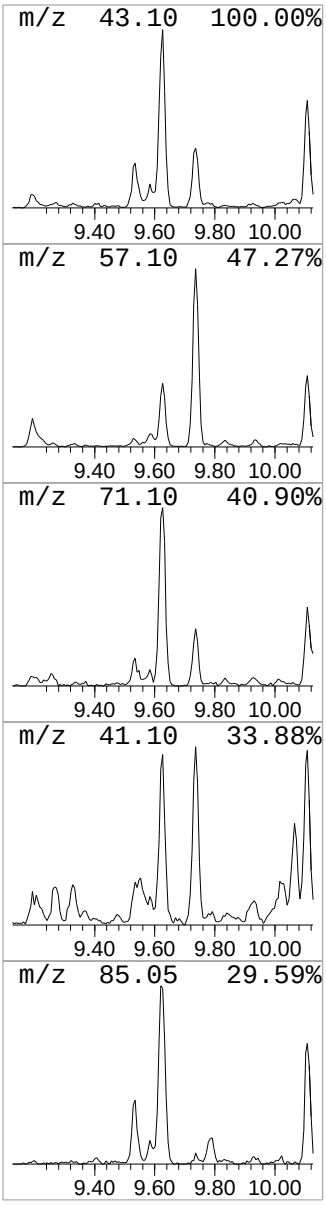
****

Peak Number 1 unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.626	12.87 ppb	337848	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tridecane	184	C13H28	000629-50-5	64
2	Octane, 4-methyl-	128	C9H20	002216-34-4	59
3	Heptane, 2,6-dimethyl-	128	C9H20	001072-05-5	59
4	Octane, 2-methyl-	128	C9H20	003221-61-2	52
5	Heptane, 2,3-dimethyl-	128	C9H20	003074-71-3	50





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

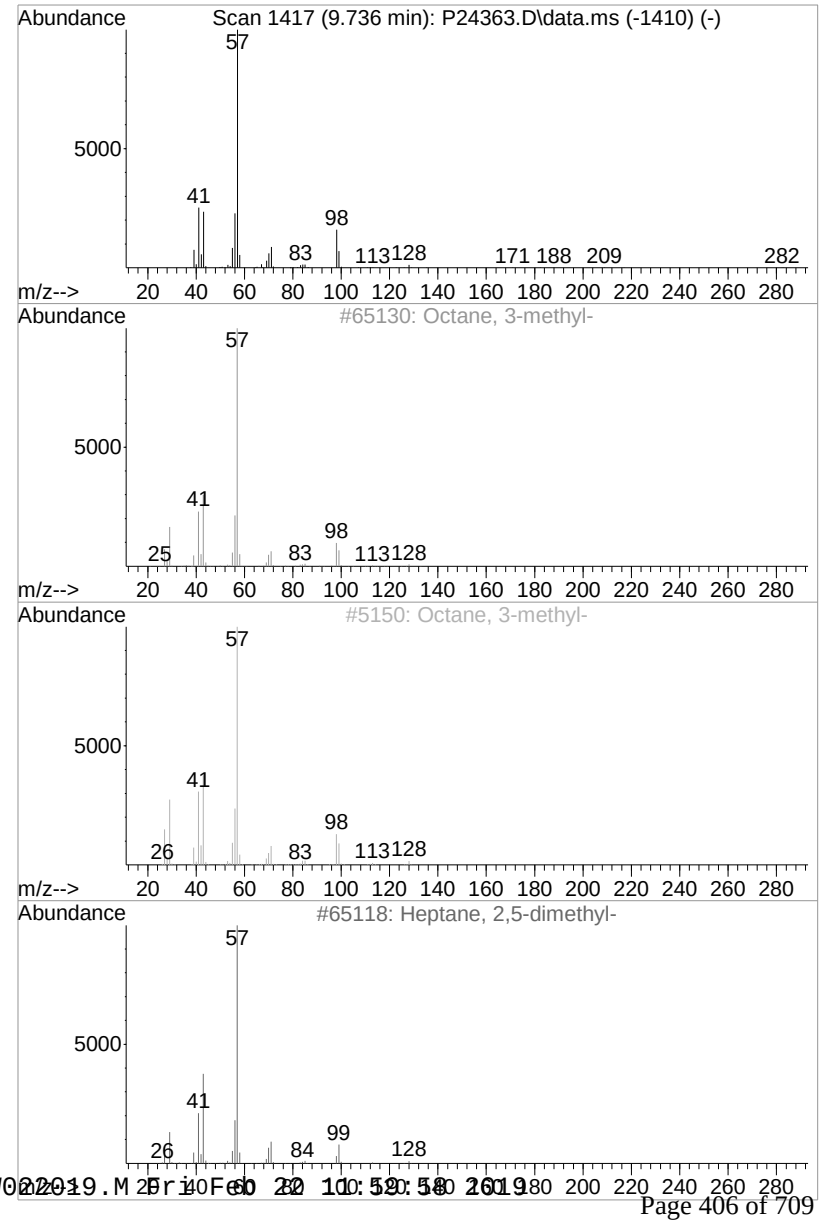
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

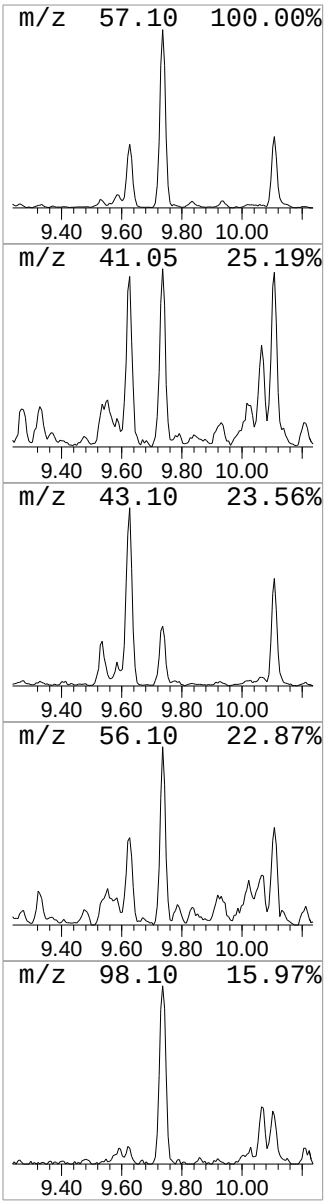
****

Peak Number 2 Octane, 3-methyl- Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.736	11.57 ppb	303629	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	91
2	Octane, 3-methyl-	128	C9H20	002216-33-3	91
3	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	80
4	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	72
5	Nonane, 3-methyl-	142	C10H22	005911-04-6	53





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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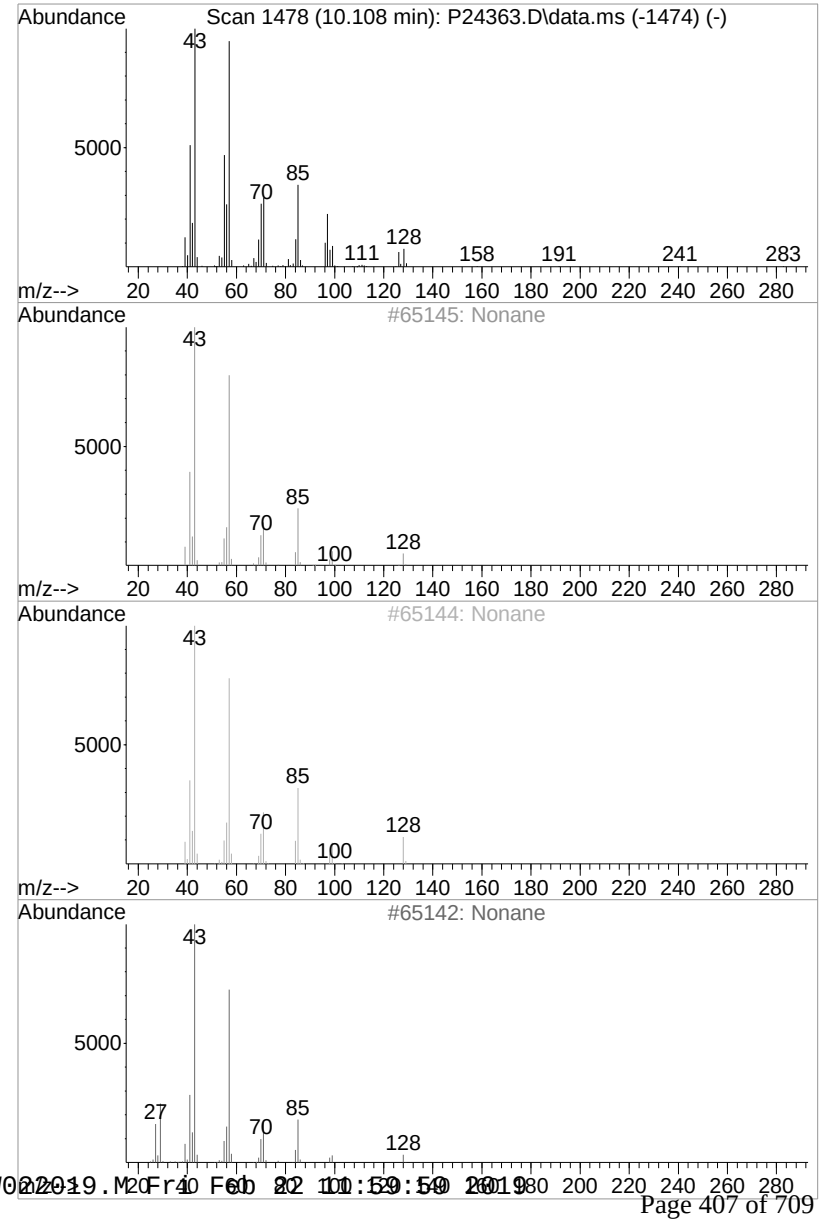
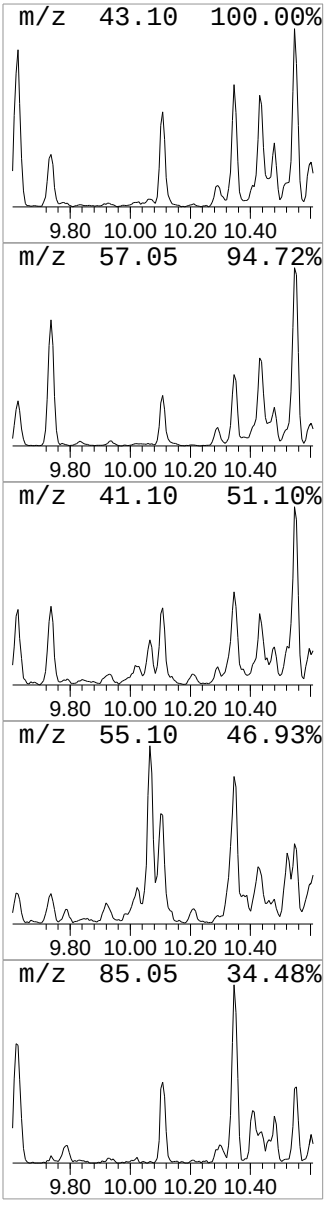
Peak Number 3 unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.108	14.67 ppb	384988	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonane	128	C9H20	000111-84-2	70
2	Nonane	128	C9H20	000111-84-2	70
3	Nonane	128	C9H20	000111-84-2	62
4	Nonane	128	C9H20	000111-84-2	60
5	1-Decanol, 2-ethyl-	186	C12H26O	021078-65-9	53





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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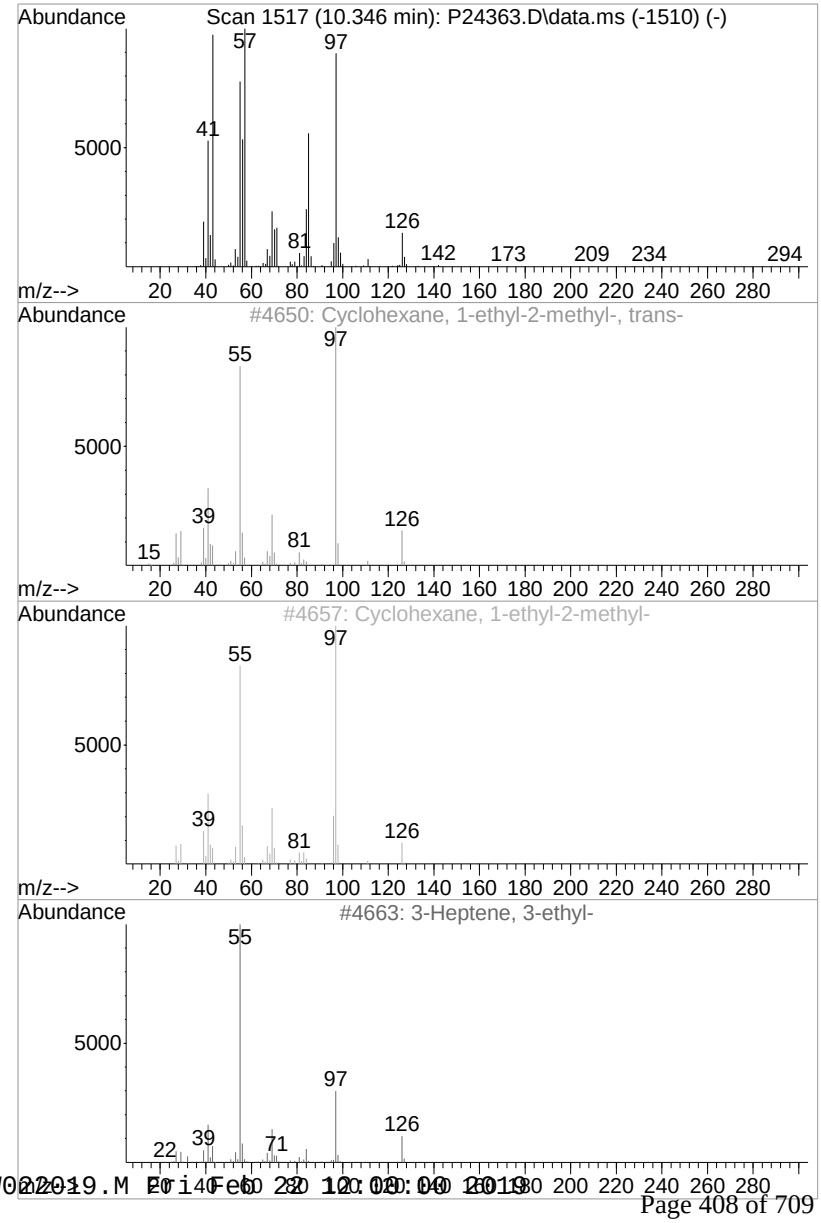
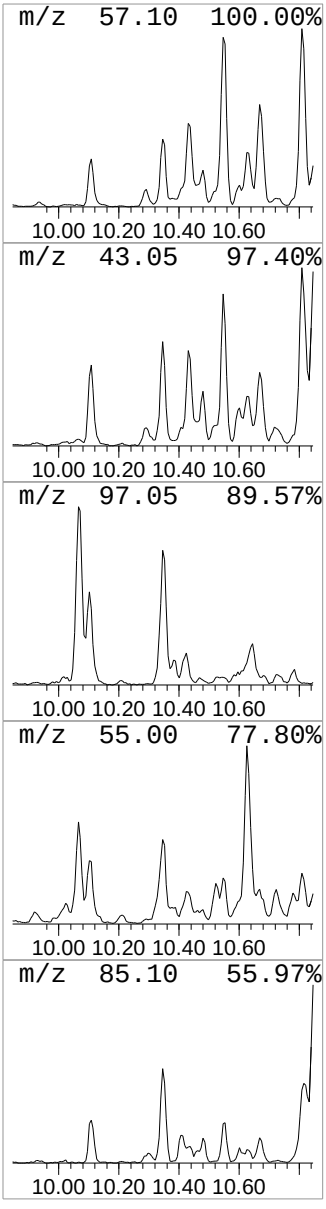
Peak Number 4 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.346	19.68 ppb	516636	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-78-8	50
2	Cyclohexane, 1-ethyl-2-methyl-	126	C9H18	003728-54-9	45
3	3-Heptene, 3-ethyl-	126	C9H18	074764-46-8	43
4	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	38
5	Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-77-7	38





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

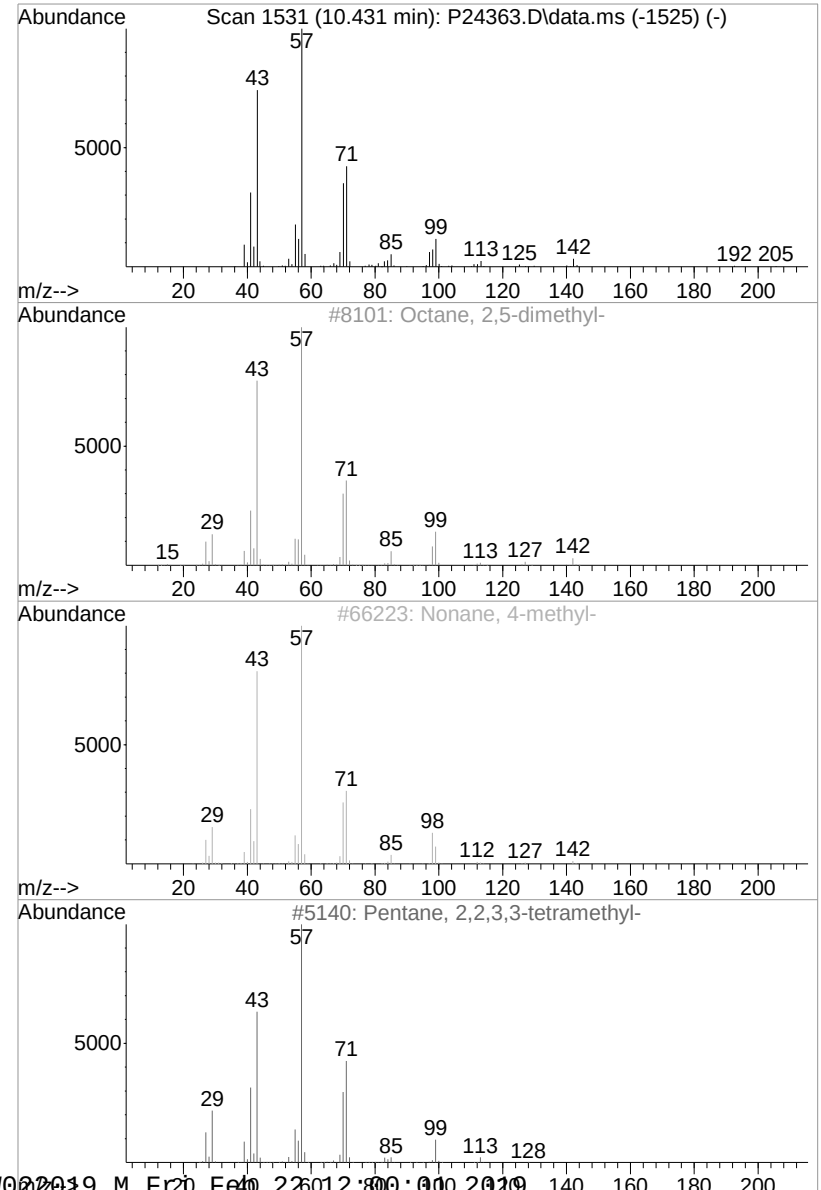
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

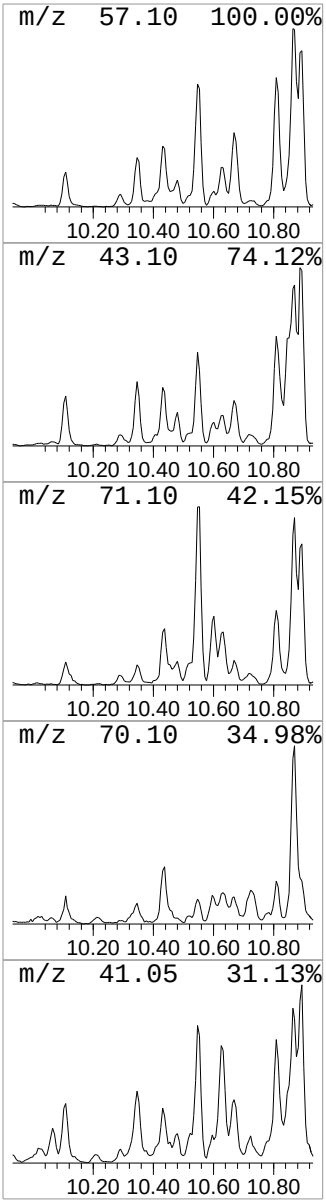
****

Peak Number 5 Octane, 2,5-dimethyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.431	13.69 ppb	359287	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,5-dimethyl-	142	C10H22	015869-89-3	94
2	Nonane, 4-methyl-	142	C10H22	017301-94-9	87
3	Pentane, 2,2,3,3-tetramethyl-	128	C9H20	007154-79-2	78
4	Nonane, 4-methyl-	142	C10H22	017301-94-9	76
5	Heptane, 2,3,4-trimethyl-	142	C10H22	052896-95-4	72





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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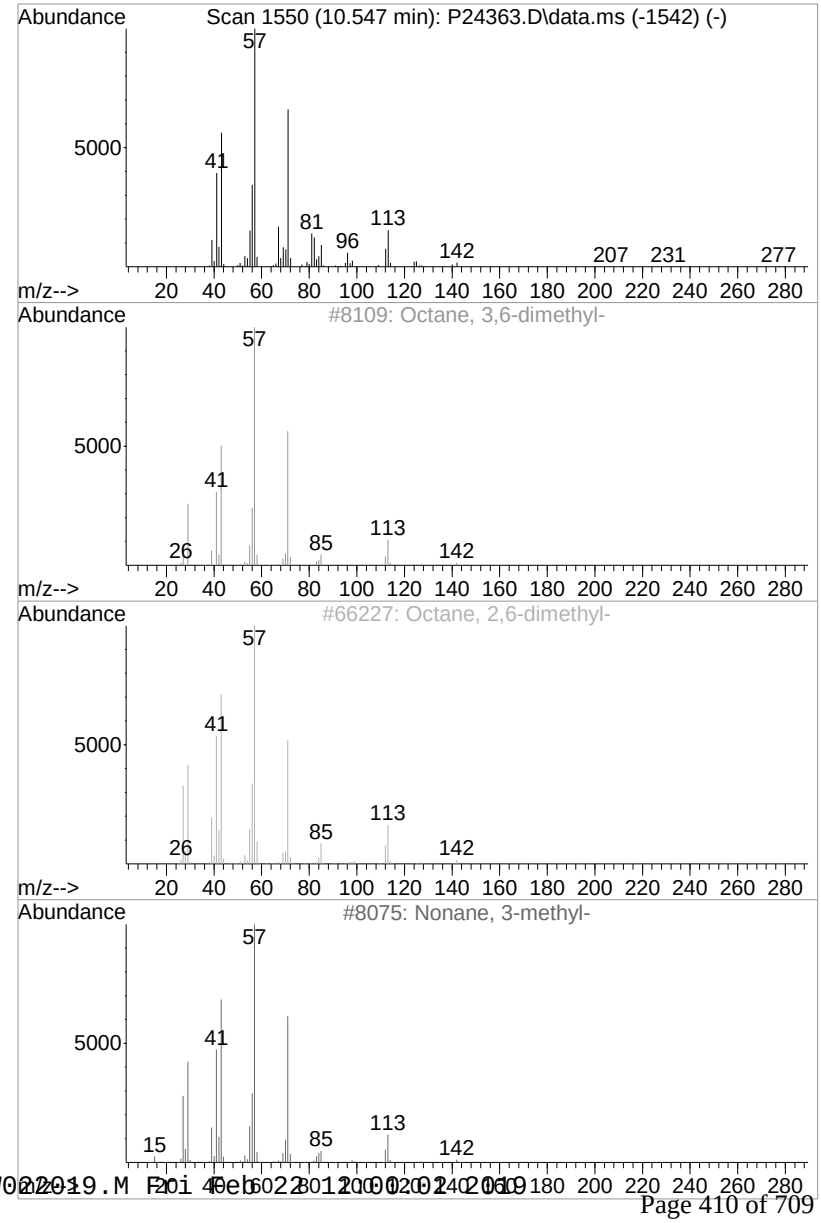
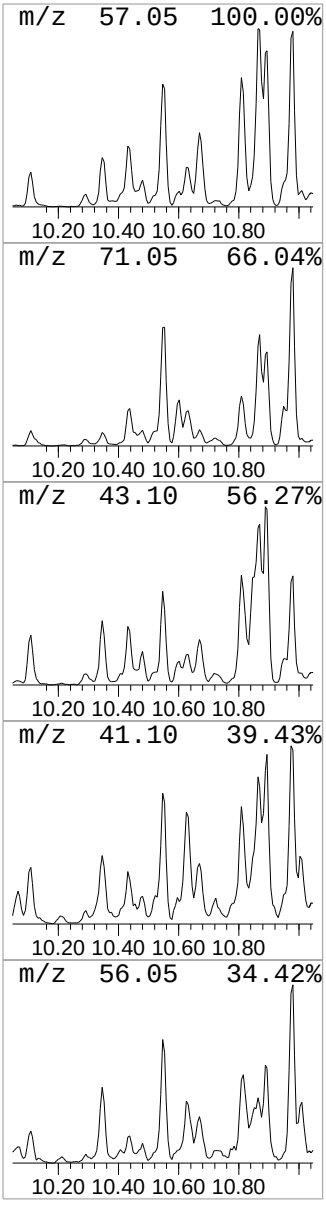
Peak Number 6 Octane, 3,6-dimethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.547	33.58 ppb	881612	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	94
2	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	87
3	Nonane, 3-methyl-	142	C10H22	005911-04-6	81
4	Nonane, 3-methyl-	142	C10H22	005911-04-6	81
5	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	80





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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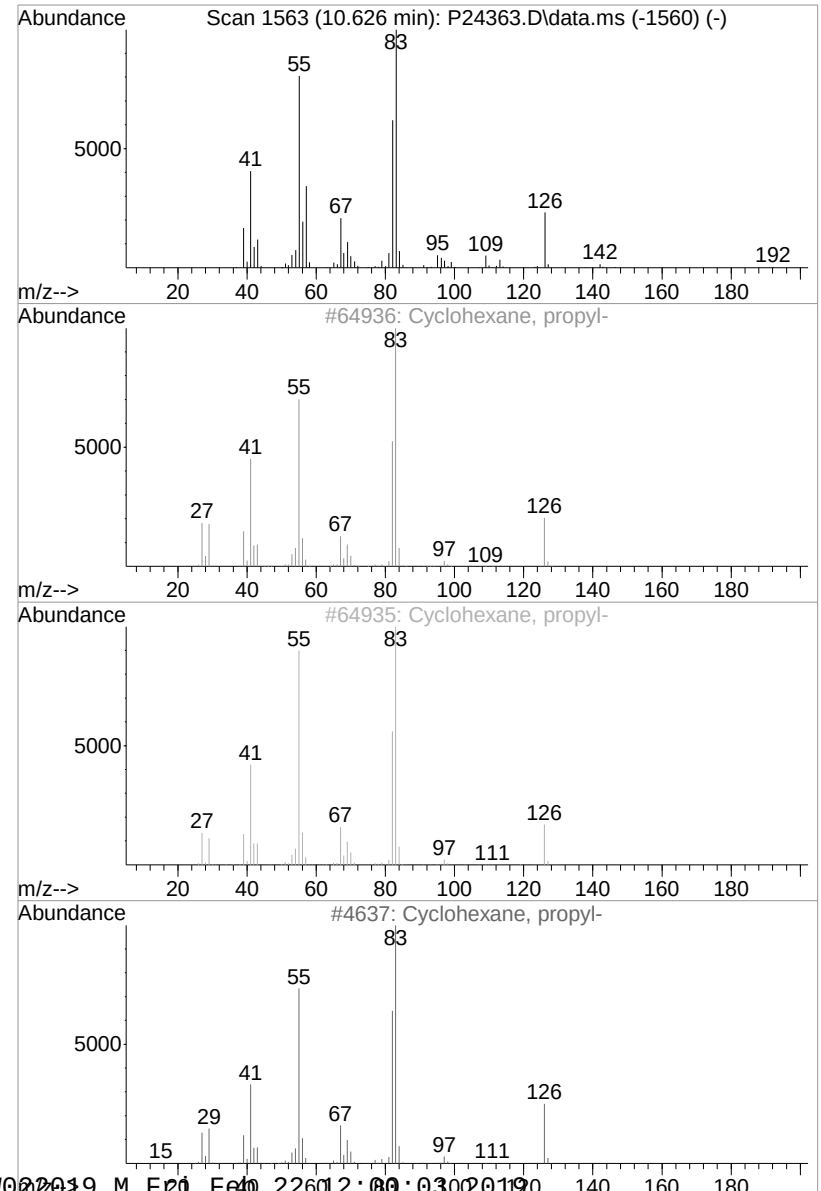
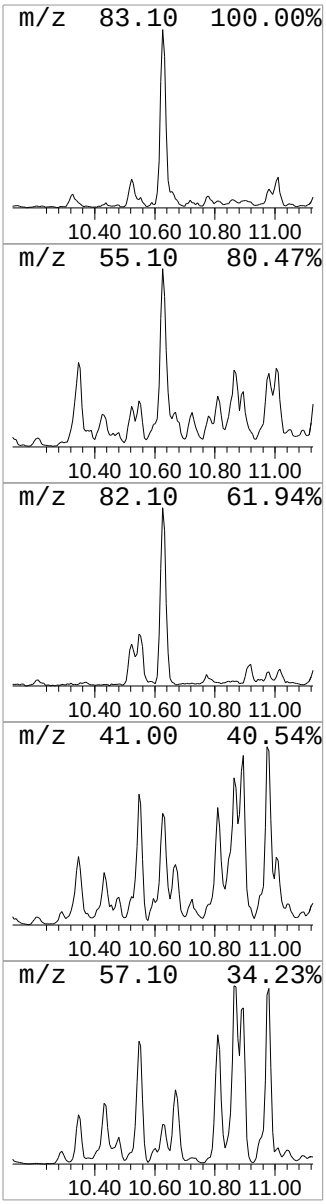
Peak Number 7 Cyclohexane, propyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.626	19.22 ppb	504502	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
2	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
3	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
4	Cyclohexane, propyl-	126	C9H18	001678-92-8	80
5	Cyclohexane, octyl-	196	C14H28	001795-15-9	80





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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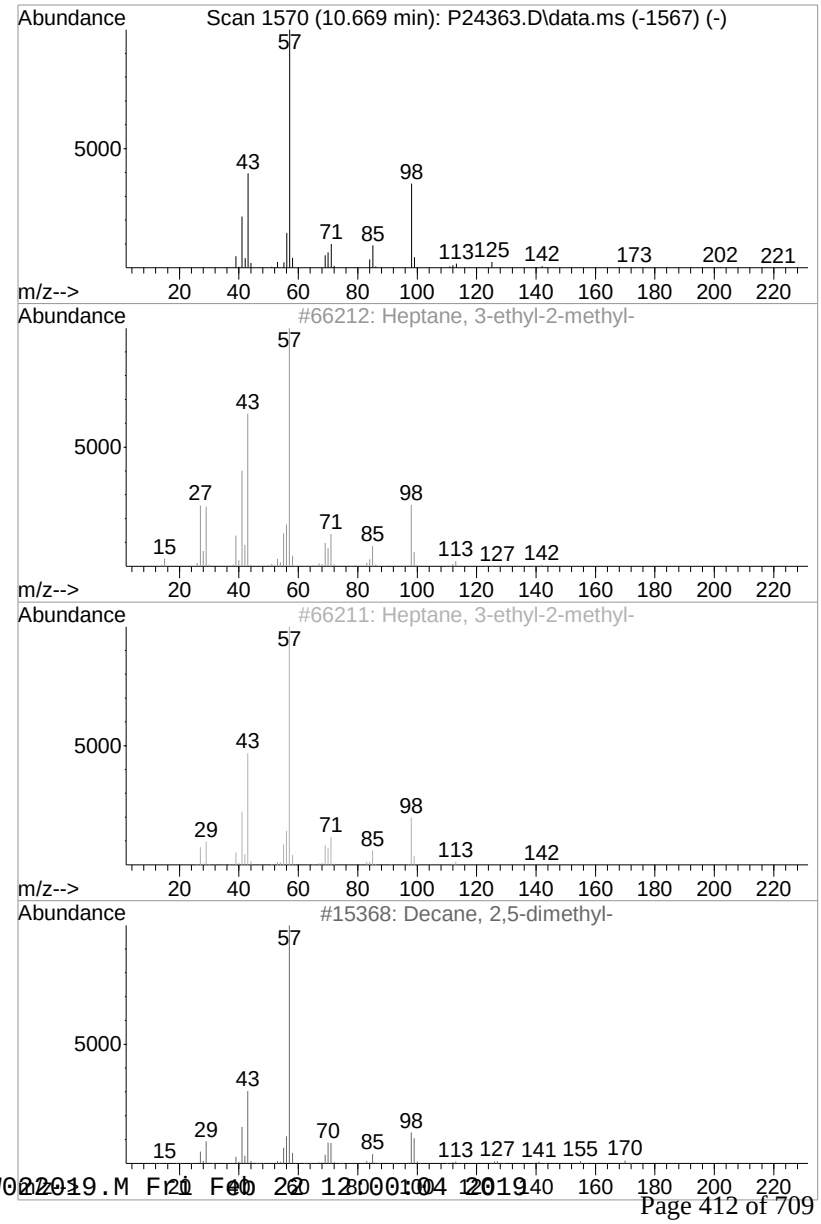
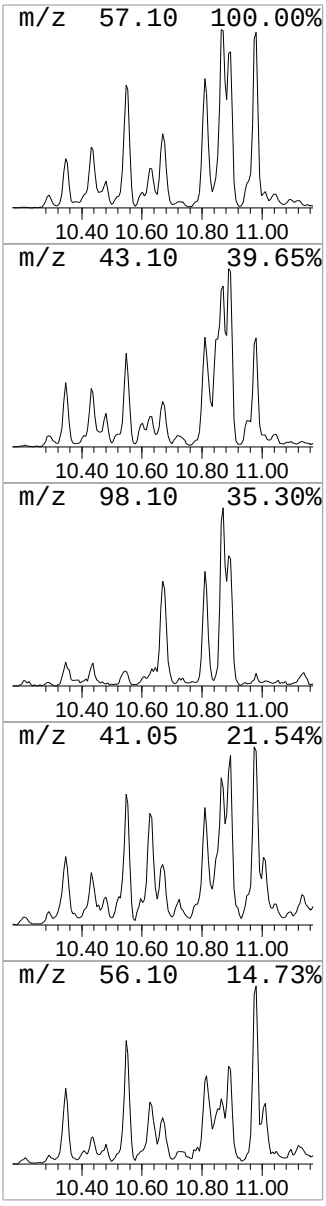
Peak Number 8 unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.669	13.24 ppb	347637	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	72
2	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	64
3	Decane, 2,5-dimethyl-	170	C12H26	017312-50-4	64
4	Octane, 2,4,6-trimethyl-	156	C11H24	062016-37-9	50
5	Undecane, 2,6-dimethyl-	184	C13H28	017301-23-4	47





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

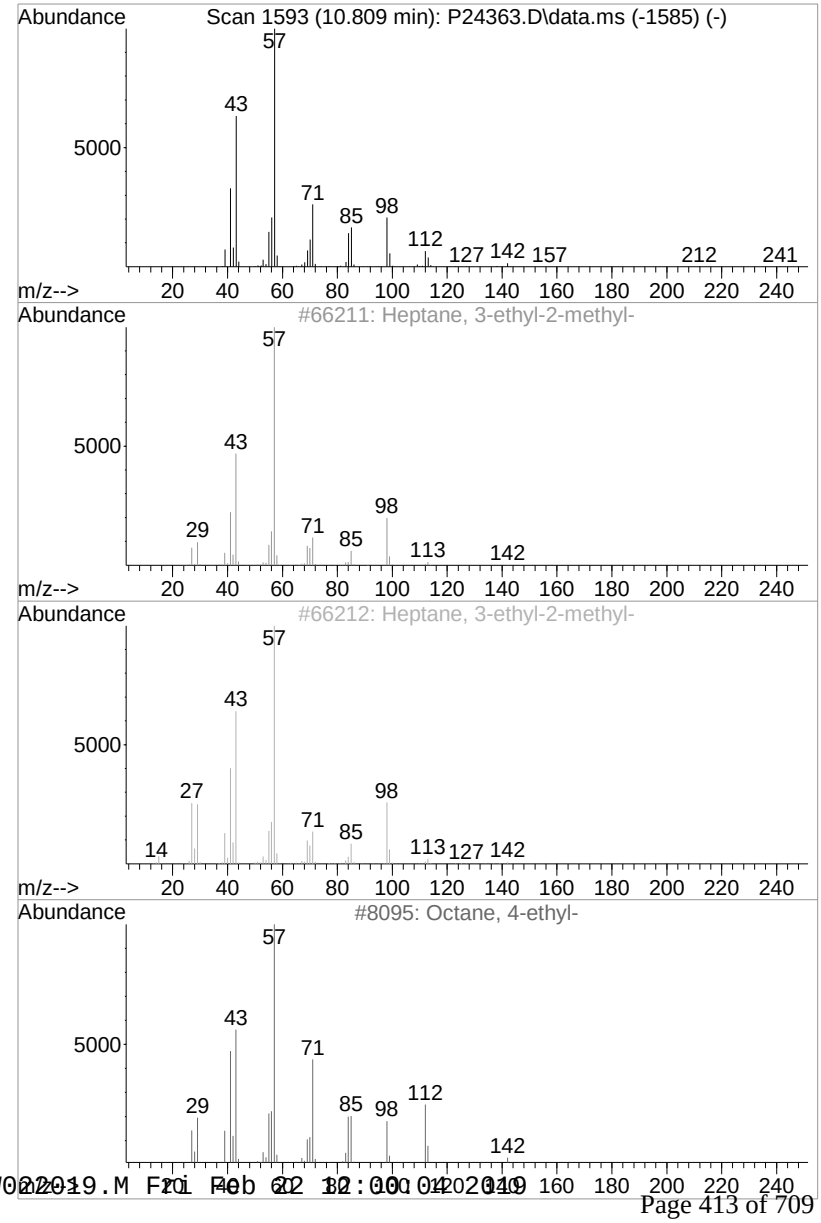
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

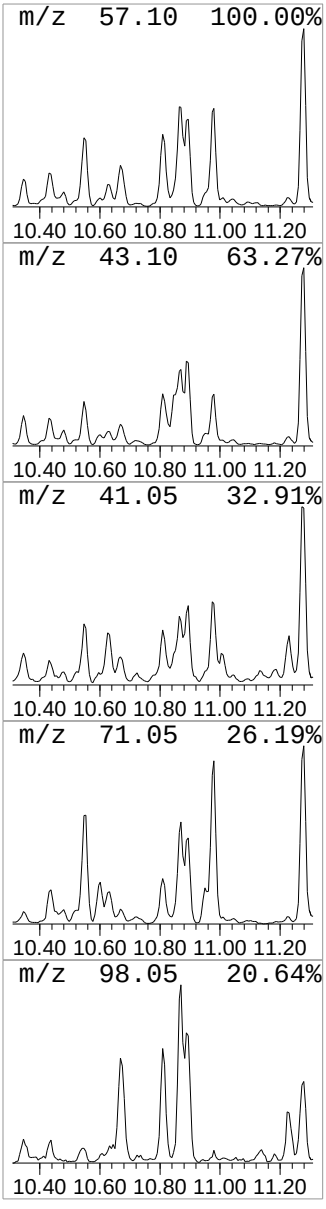
****

Peak Number 9 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.809	32.76 ppb	859941	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	53
2	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	50
3	Octane, 4-ethyl-	142	C10H22	015869-86-0	50
4	Undecane, 5,6-dimethyl-	184	C13H28	017615-91-7	50
5	Dodecane, 6-methyl-	184	C13H28	006044-71-9	50





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

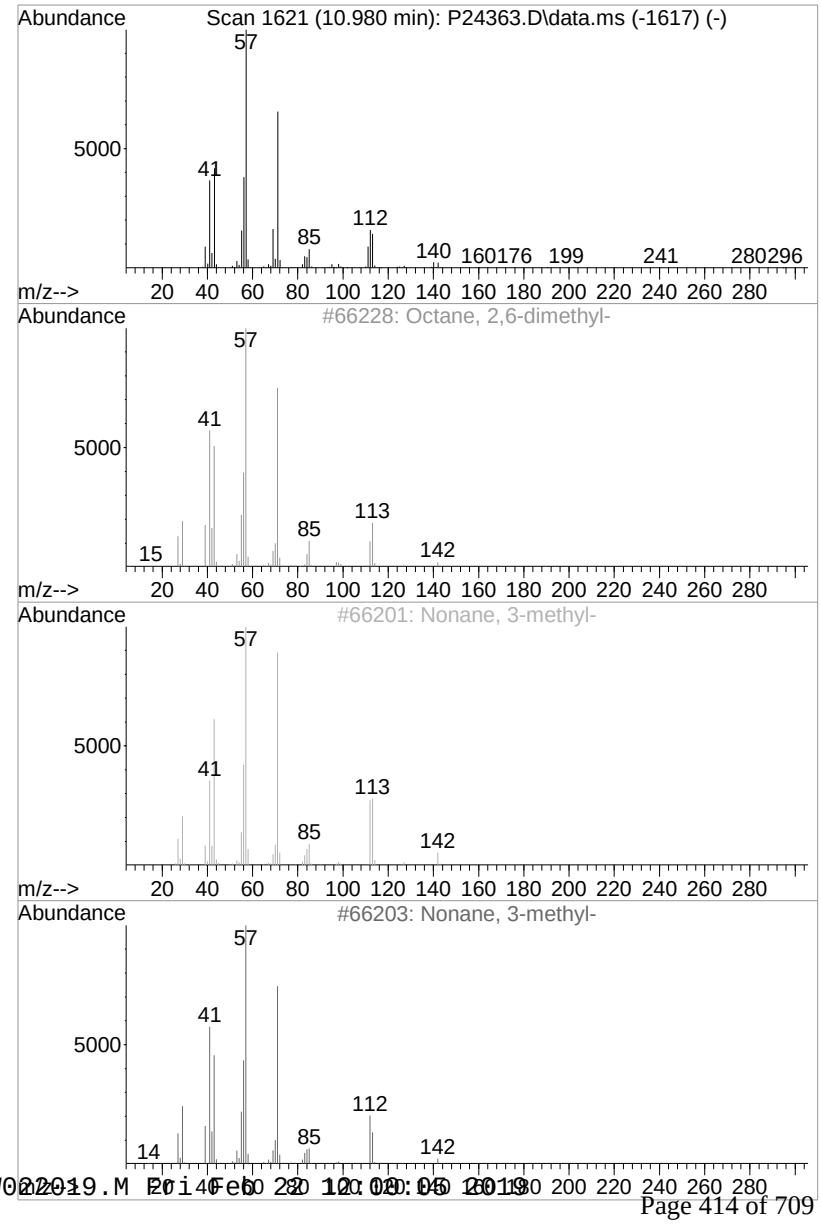
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

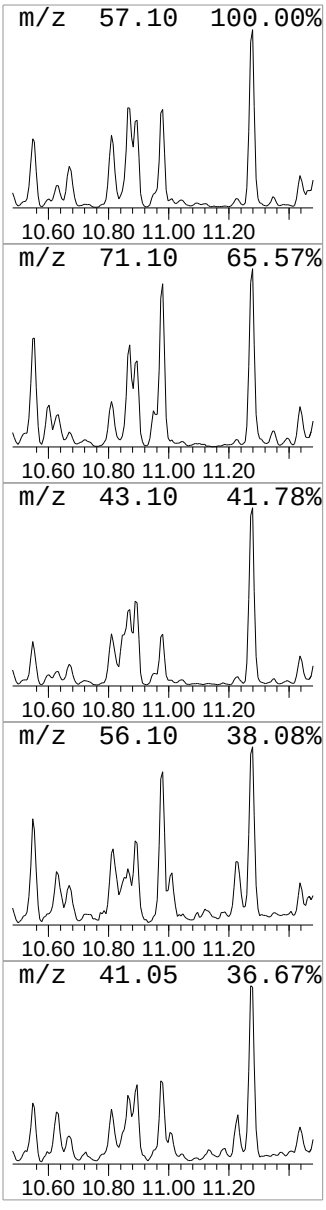
****

Peak Number 10 Octane, 2,6-dimethyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.980	15.60 ppb	724757	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	87
2	Nonane, 3-methyl-	142	C10H22	005911-04-6	87
3	Nonane, 3-methyl-	142	C10H22	005911-04-6	87
4	Nonane, 3-methyl-	142	C10H22	005911-04-6	86
5	Nonane, 3-methyl-	142	C10H22	005911-04-6	68





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

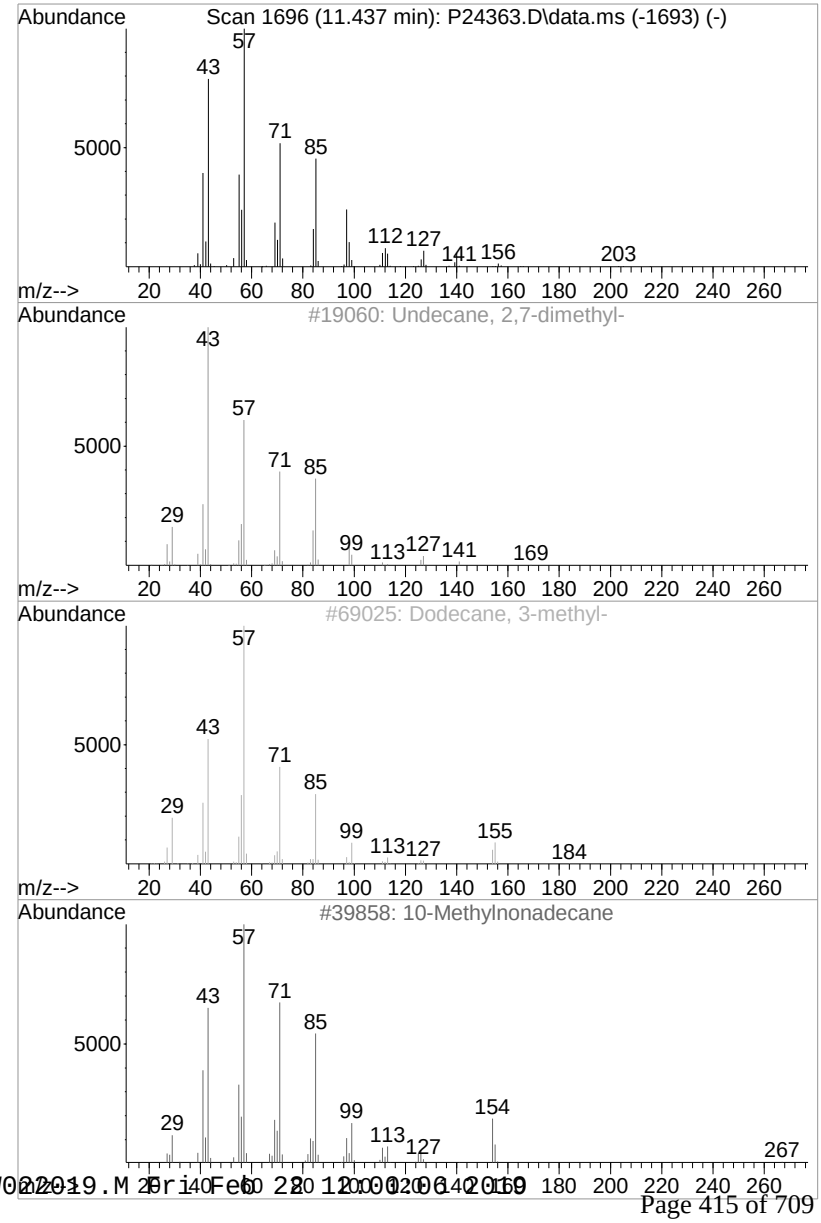
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

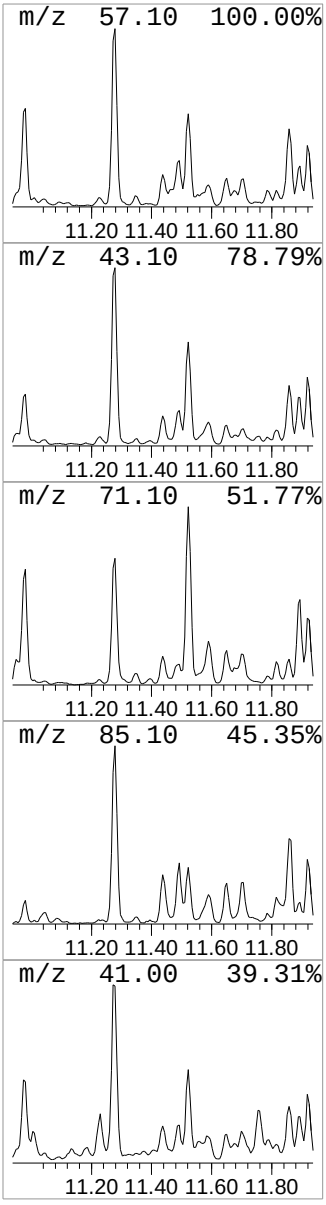
****

Peak Number 11 unknown Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.437	7.32 ppb	340160	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 2,7-dimethyl-	184	C13H28	017301-24-5	64
2	Dodecane, 3-methyl-	184	C13H28	017312-57-1	59
3	10-Methylnonadecane	282	C20H42	000000-00-0	53
4	Decane, 3,8-dimethyl-	170	C12H26	017312-55-9	53
5	Dodecane	170	C12H26	000112-40-3	53





Library Search Compound Report

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Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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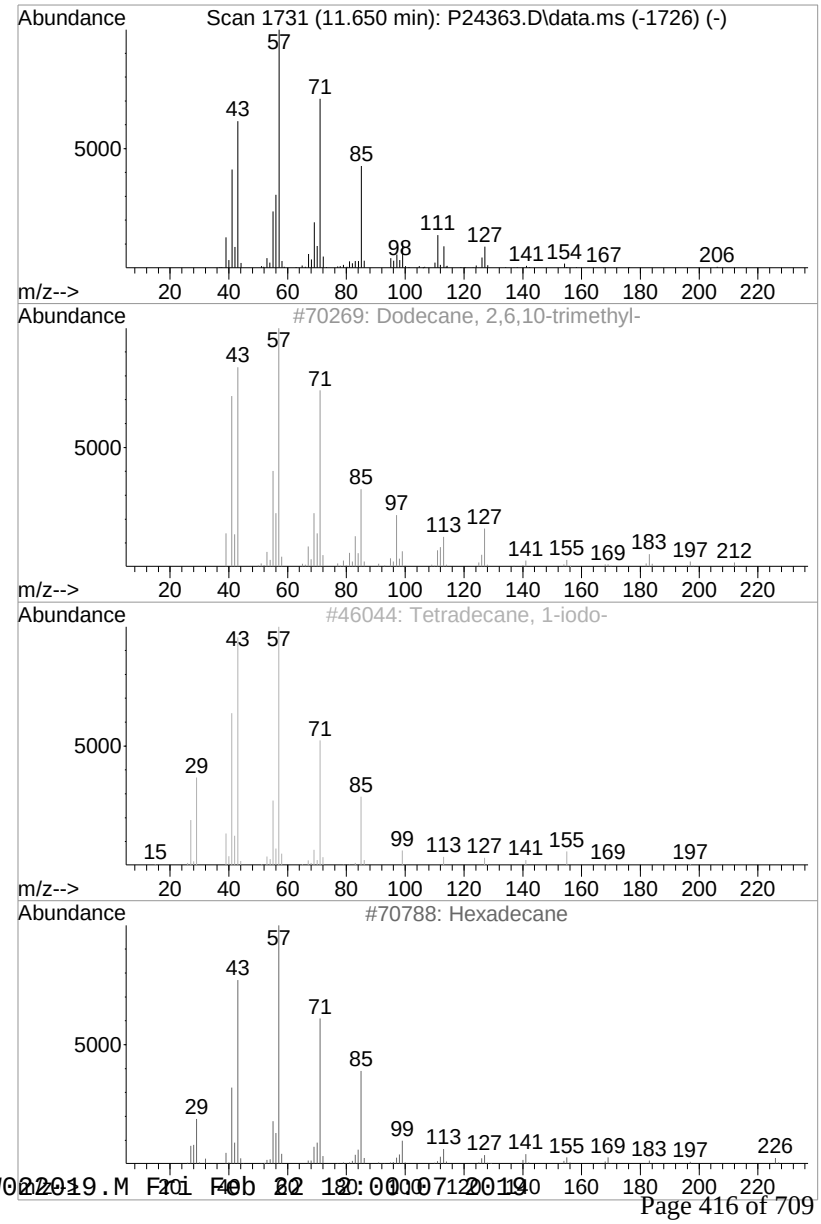
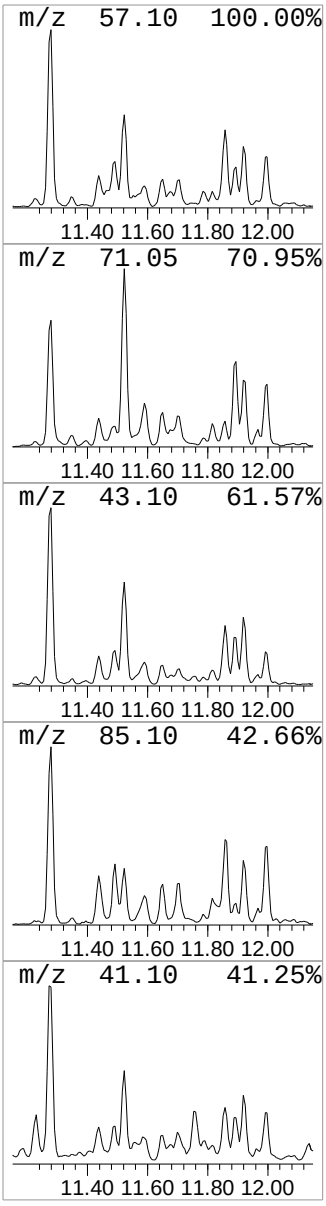
Peak Number 12 unknown Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.650	7.29 ppb	338534	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane, 2,6,10-trimethyl-	212	C15H32	003891-98-3	64
2	Tetradecane, 1-iodo-	324	C14H29I	019218-94-1	64
3	Hexadecane	226	C16H34	000544-76-3	64
4	Undecane, 3-methyl-	170	C12H26	001002-43-3	64
5	Hexadecane, 7,9-dimethyl-	254	C18H38	021164-95-4	59





Library Search Compound Report

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Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

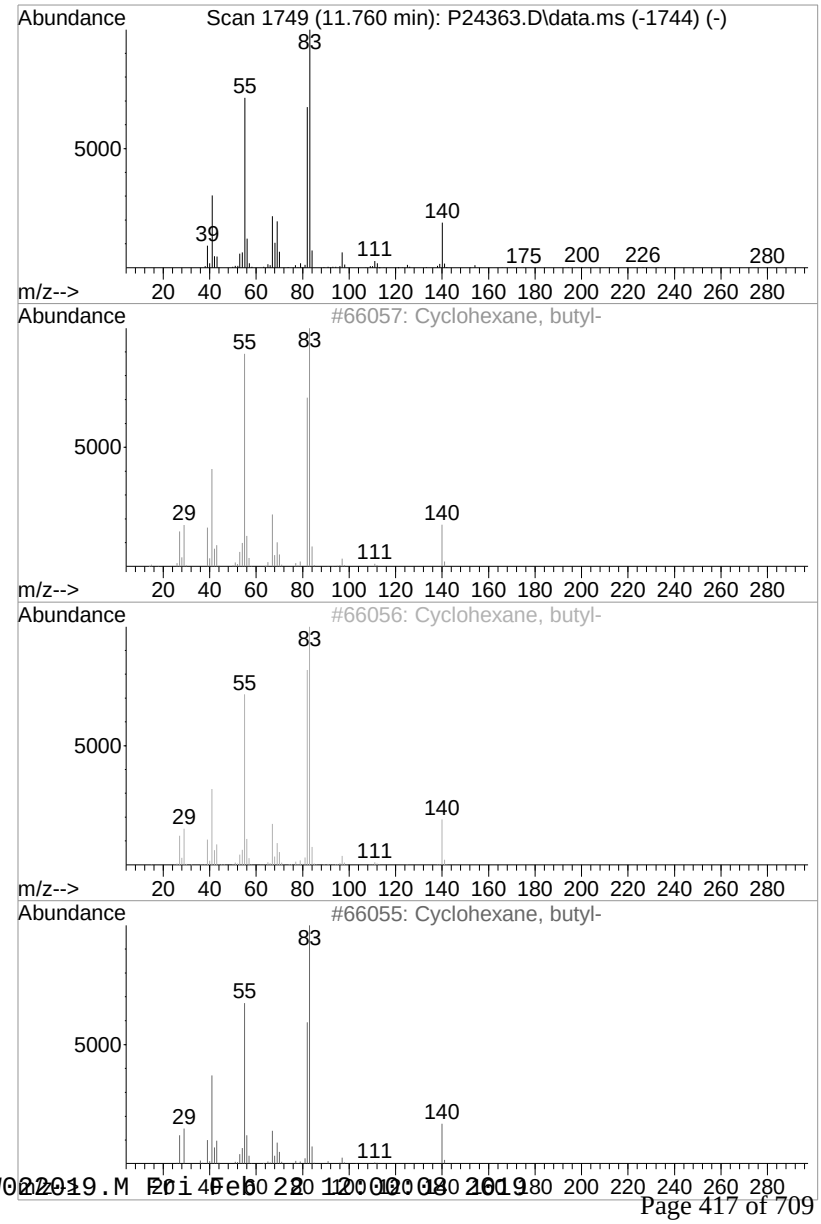
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

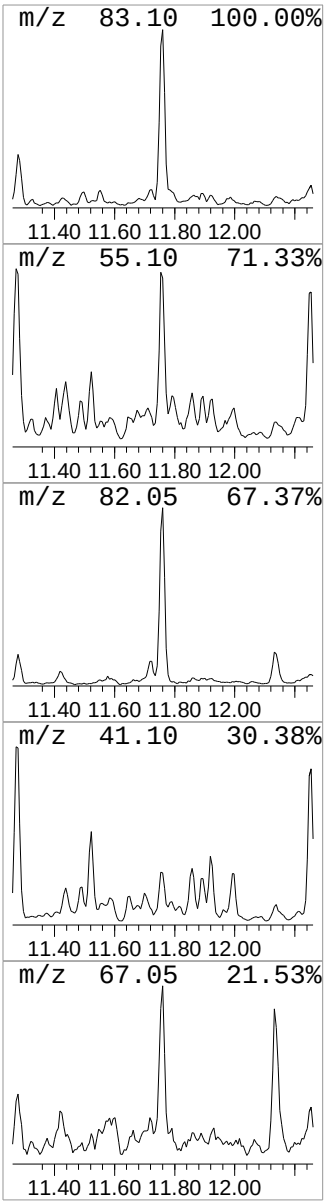
****

Peak Number 13 Cyclohexane, butyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.760	17.84 ppb	828747	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, butyl-	140	C10H20	001678-93-9	91
2	Cyclohexane, butyl-	140	C10H20	001678-93-9	90
3	Cyclohexane, butyl-	140	C10H20	001678-93-9	87
4	Cyclohexane, butyl-	140	C10H20	001678-93-9	86
5	n-Amylcyclohexane	154	C11H22	029949-27-7	83





Library Search Compound Report

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Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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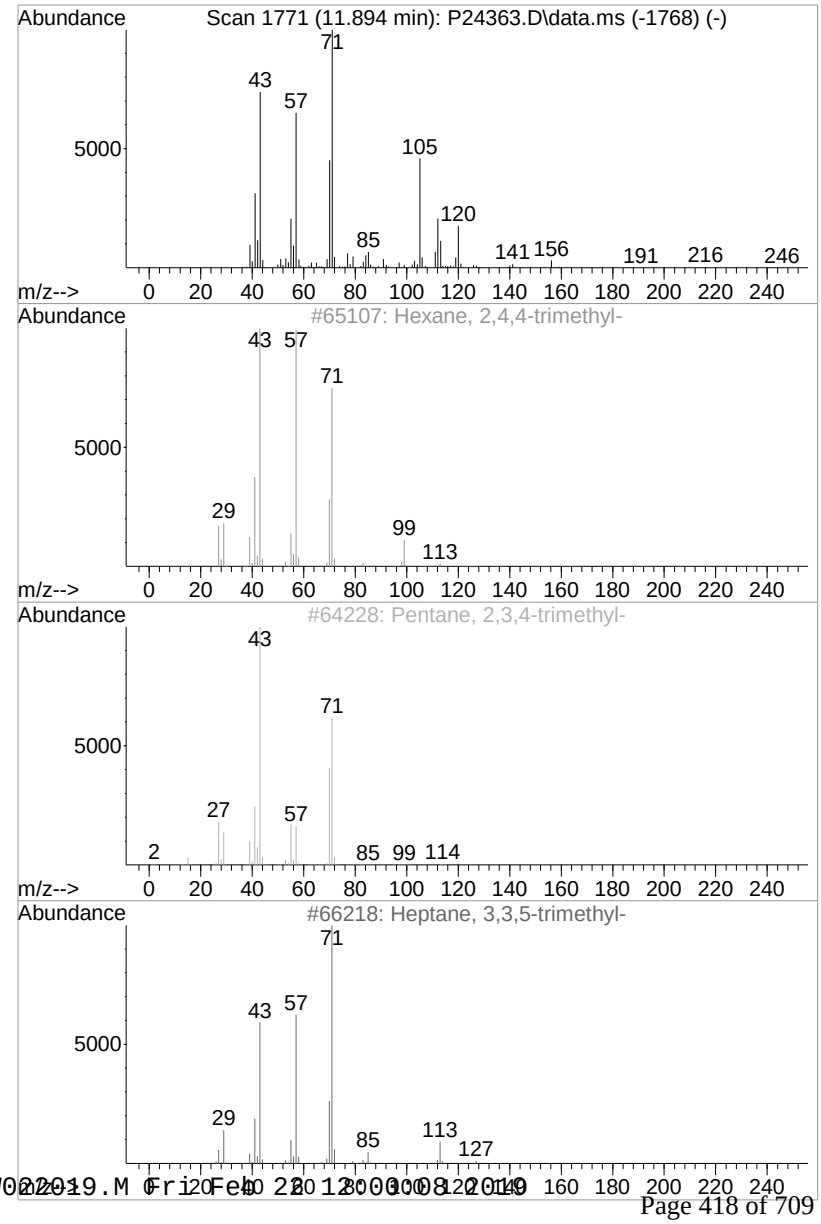
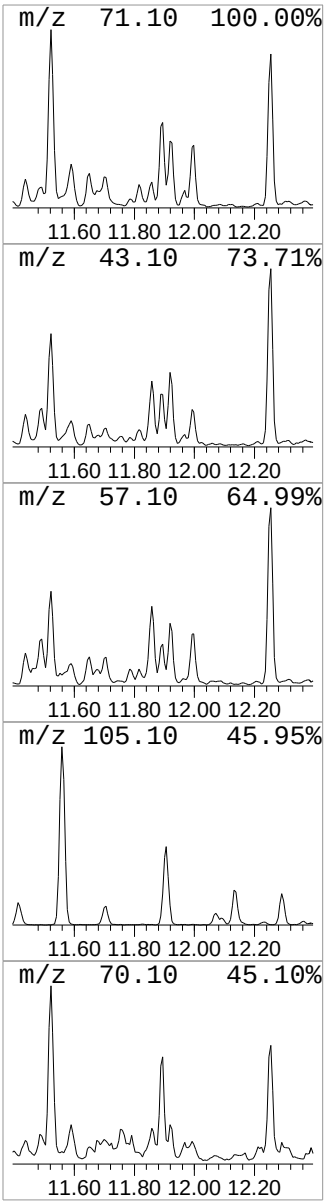
Peak Number 14 unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.894	16.13 ppb	749469	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane, 2,4,4-trimethyl-	128	C9H20	016747-30-1	50
2	Pentane, 2,3,4-trimethyl-	114	C8H18	000565-75-3	49
3	Heptane, 3,3,5-trimethyl-	142	C10H22	007154-80-5	47
4	Heptane, 2,5,5-trimethyl-	142	C10H22	001189-99-7	43
5	Heptane, 3,3,5-trimethyl-	142	C10H22	007154-80-5	42





Library Search Compound Report

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Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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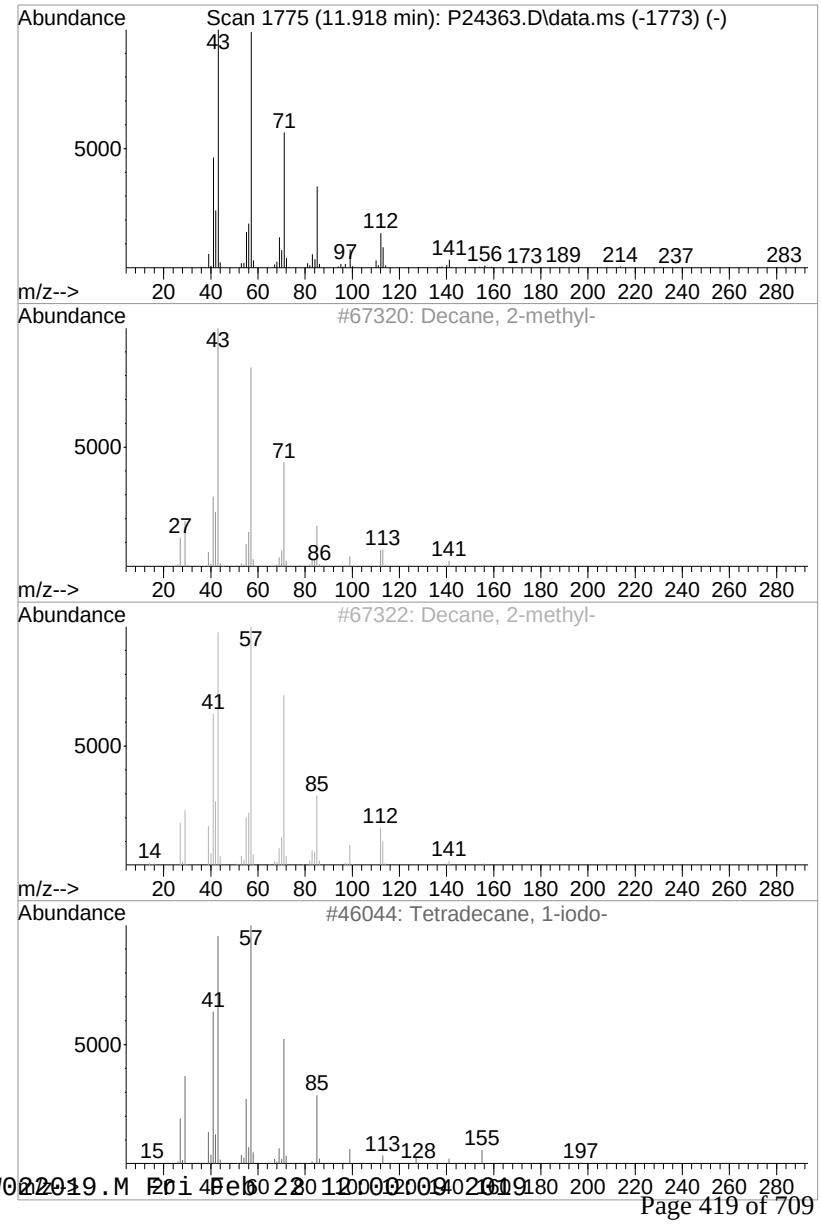
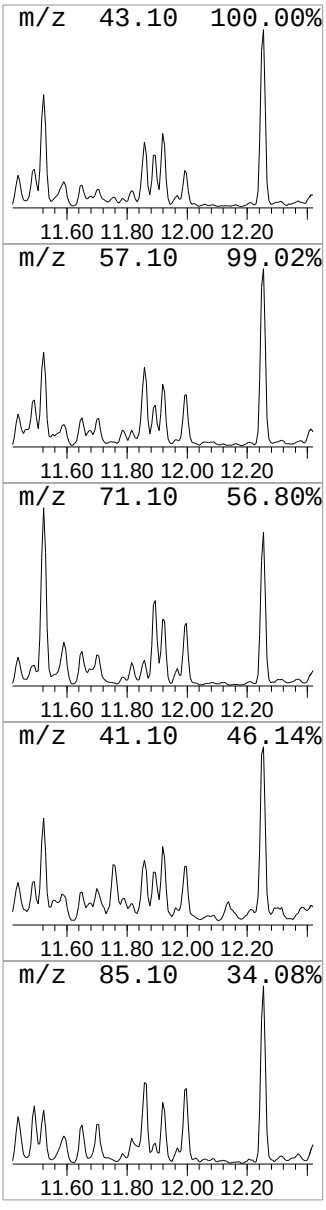
Peak Number 15 Decane, 2-methyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.919	15.16 ppb	704385	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 2-methyl-	156	C11H24	006975-98-0	93
2	Decane, 2-methyl-	156	C11H24	006975-98-0	68
3	Tetradecane, 1-iodo-	324	C14H29I	019218-94-1	64
4	Nonane, 4,5-dimethyl-	156	C11H24	017302-23-7	64
5	Decane, 2,9-dimethyl-	170	C12H26	001002-17-1	64





Library Search Compound Report

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Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

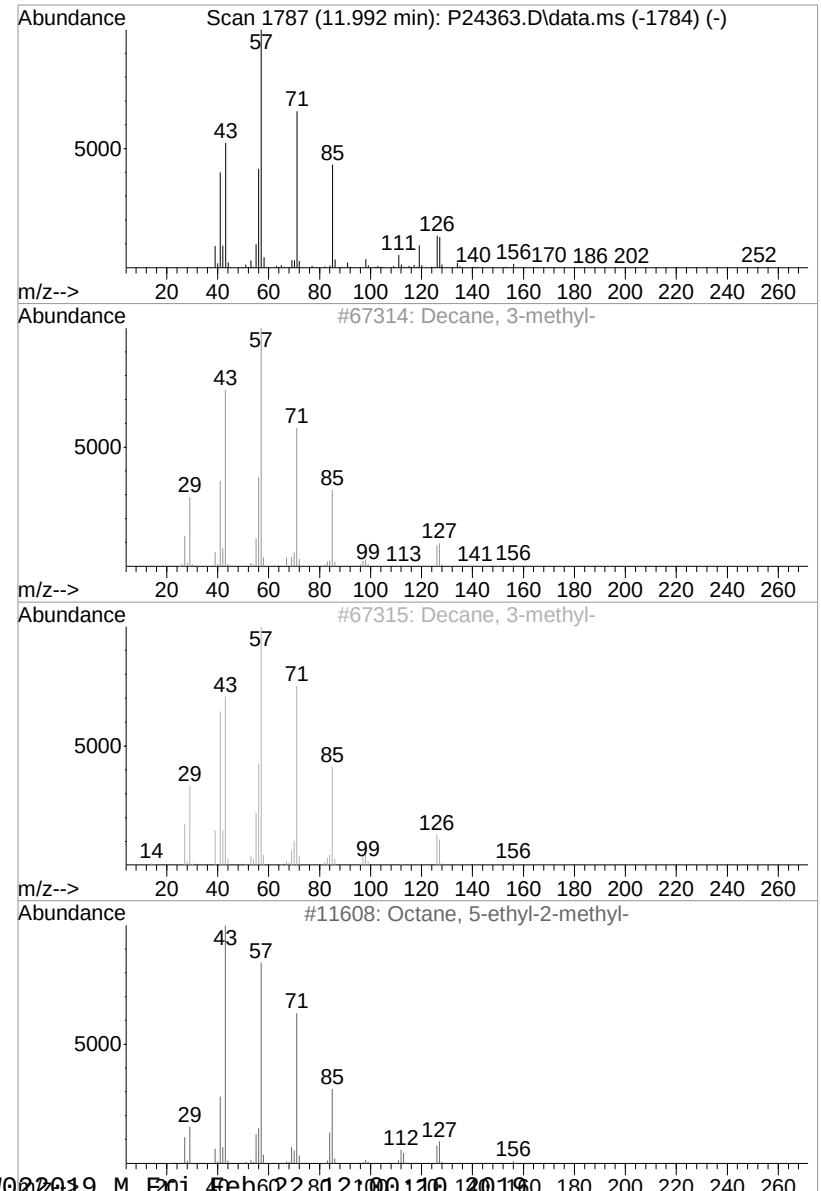
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

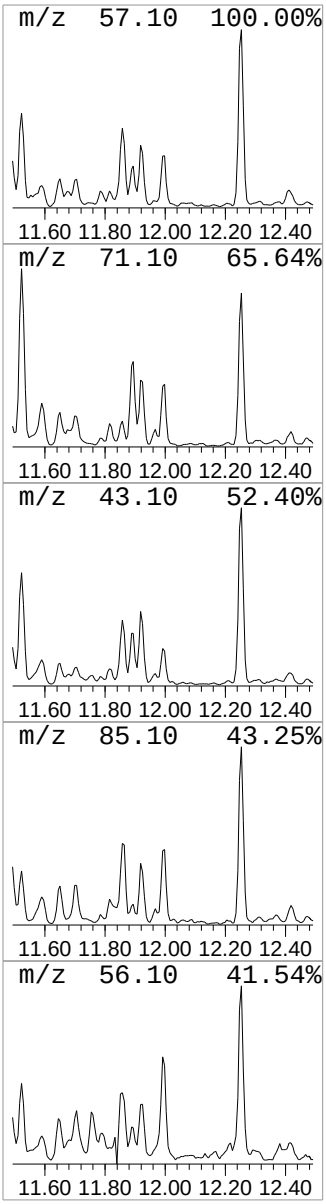
****

Peak Number 16 unknown Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.992	13.94 ppb	647608	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 3-methyl-	156	C11H24	013151-34-3	78
2	Decane, 3-methyl-	156	C11H24	013151-34-3	64
3	Octane, 5-ethyl-2-methyl-	156	C11H24	062016-18-6	59
4	Dodecane, 2,5-dimethyl-	198	C14H30	056292-65-0	53
5	Decane, 3,8-dimethyl-	170	C12H26	017312-55-9	50





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
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Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

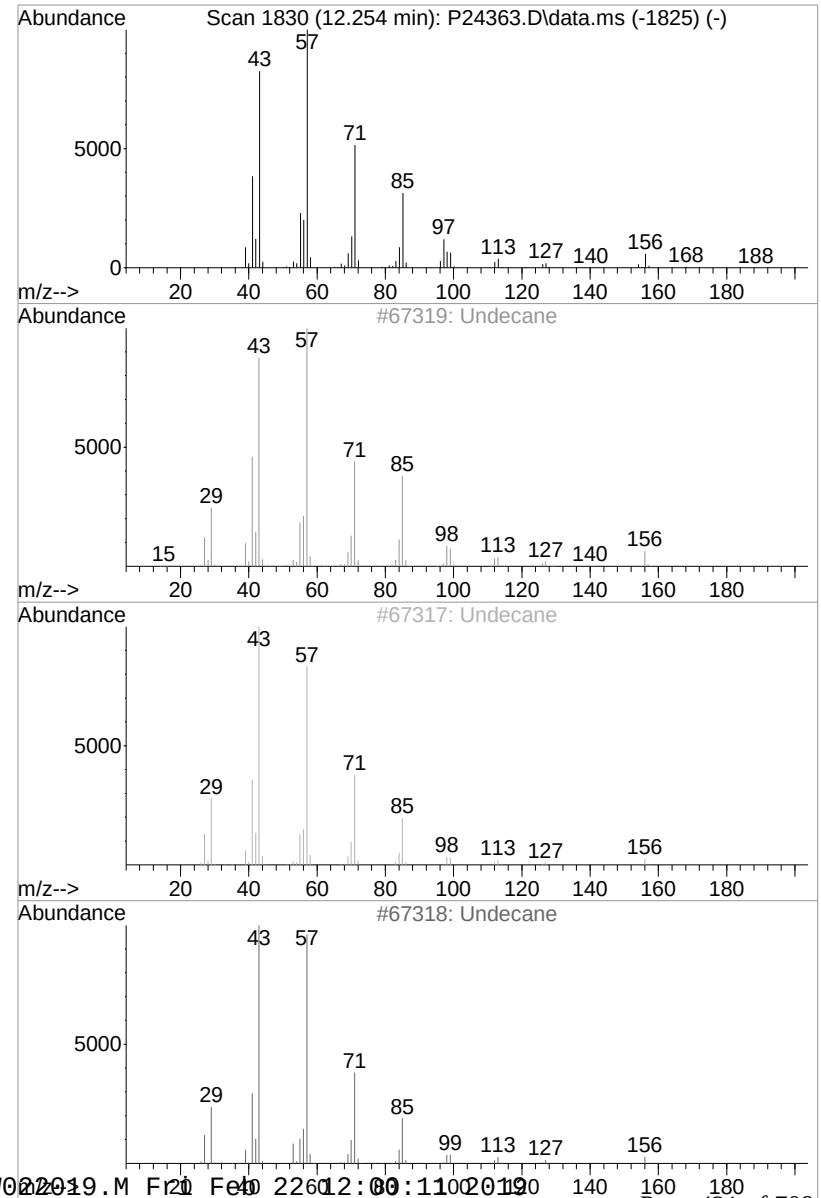
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

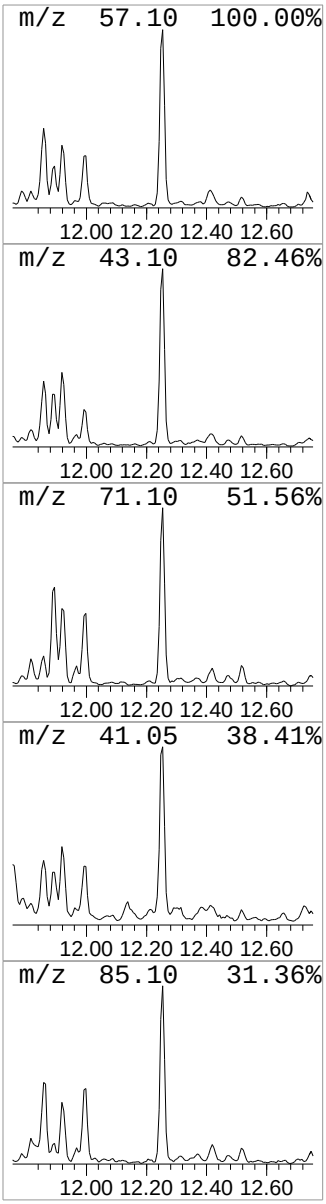
****

Peak Number 17 Undecane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.254	36.67 ppb	1704070	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane	156	C11H24	001120-21-4	94
2	Undecane	156	C11H24	001120-21-4	93
3	Undecane	156	C11H24	001120-21-4	90
4	Undecane	156	C11H24	001120-21-4	90
5	Hexadecane	226	C16H34	000544-76-3	72





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
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Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

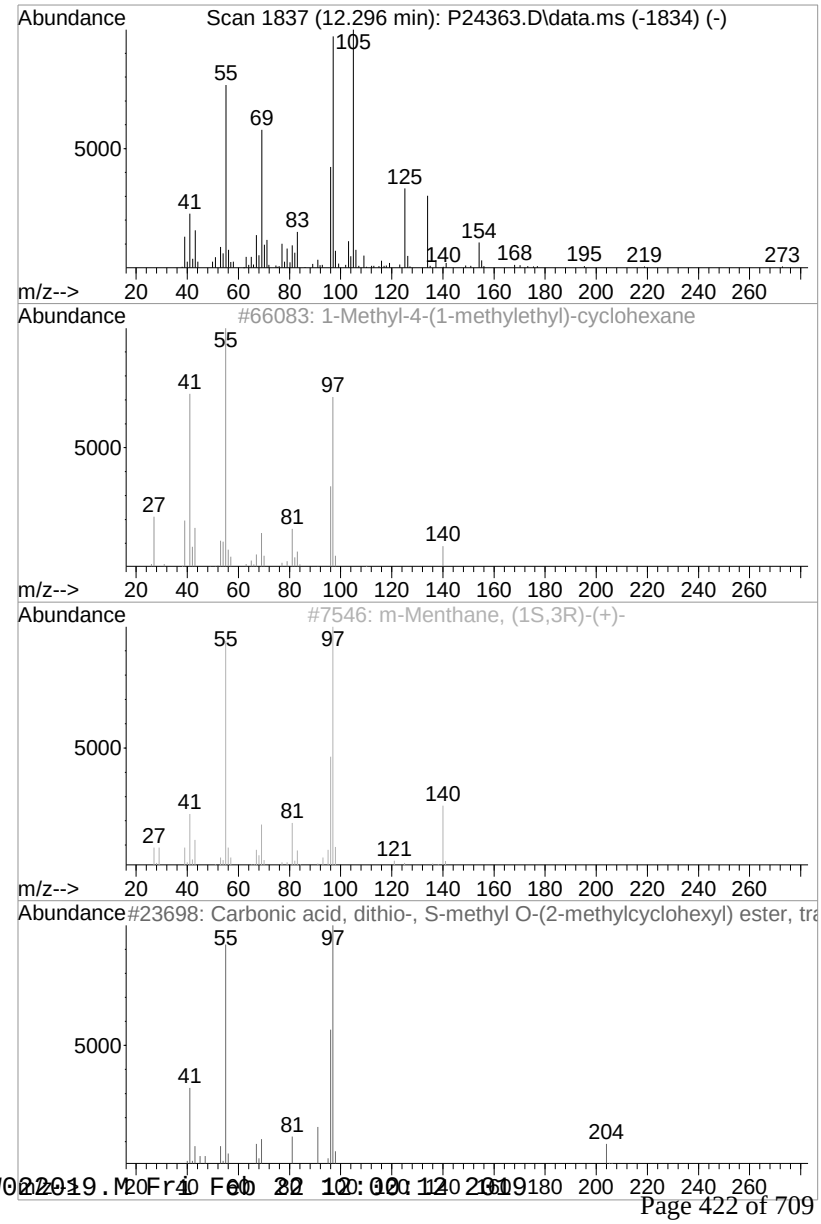
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

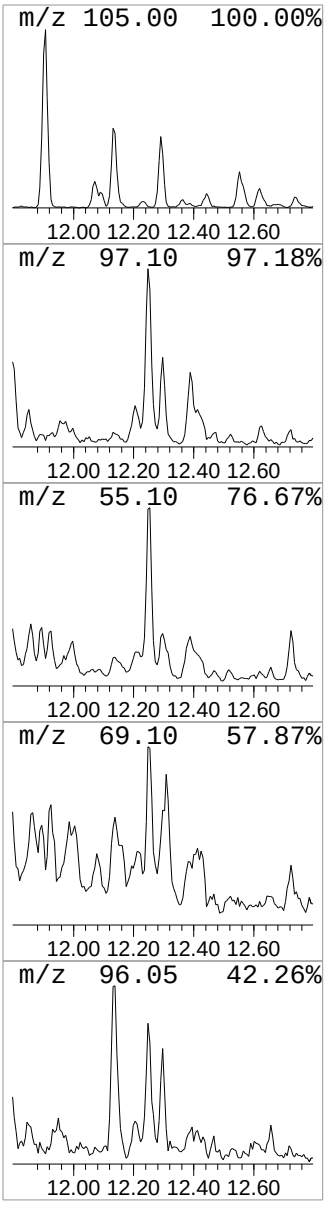
****

Peak Number 18 unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.297	6.85 ppb	318099	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Methyl-4-(1-methylethyl)-cyclo...	140	C10H20	000099-82-1	47
2	m-Menthane, (1S,3R)-(+)-	140	C10H20	013837-66-6	47
3	Carbonic acid, dithio-, S-methyl...	204	C9H16OS2	015288-13-8	47
4	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	001678-82-6	47
5	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	006069-98-3	47





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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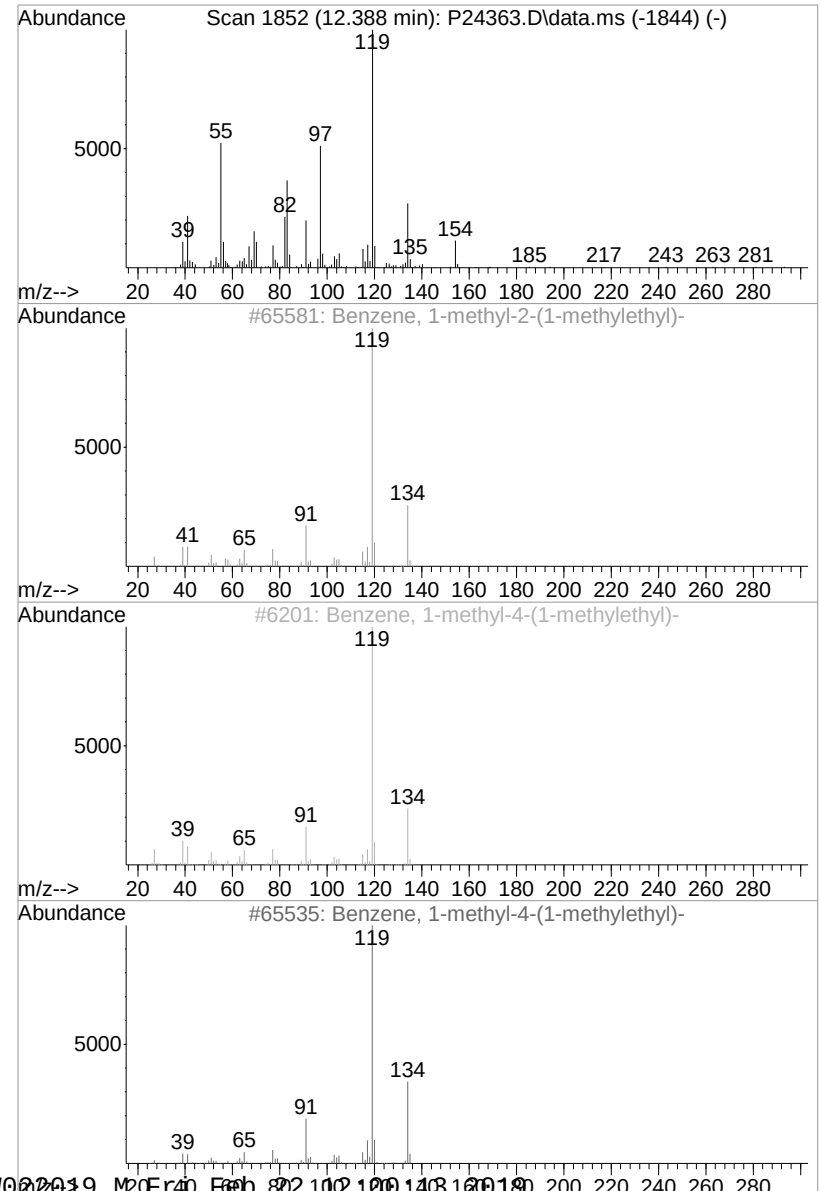
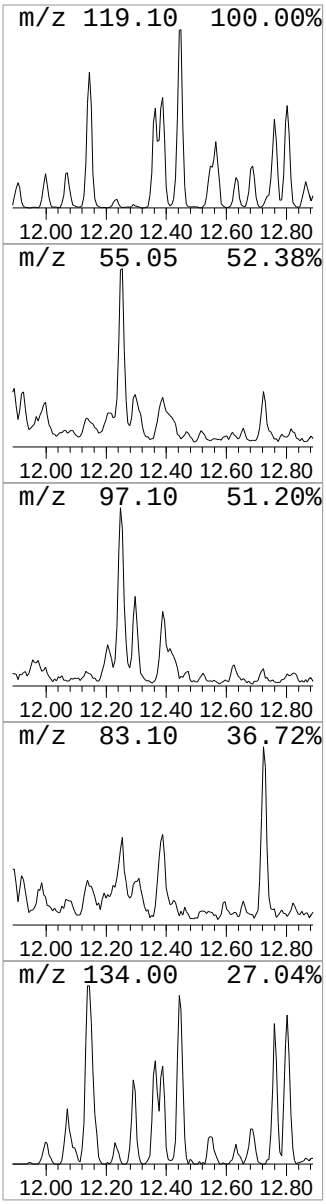
Peak Number 19 Benzene, 1-methyl-2-(1-meth... Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.388	8.34 ppb	387359	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	92
2	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	90
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	90
4	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	60
5	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	60





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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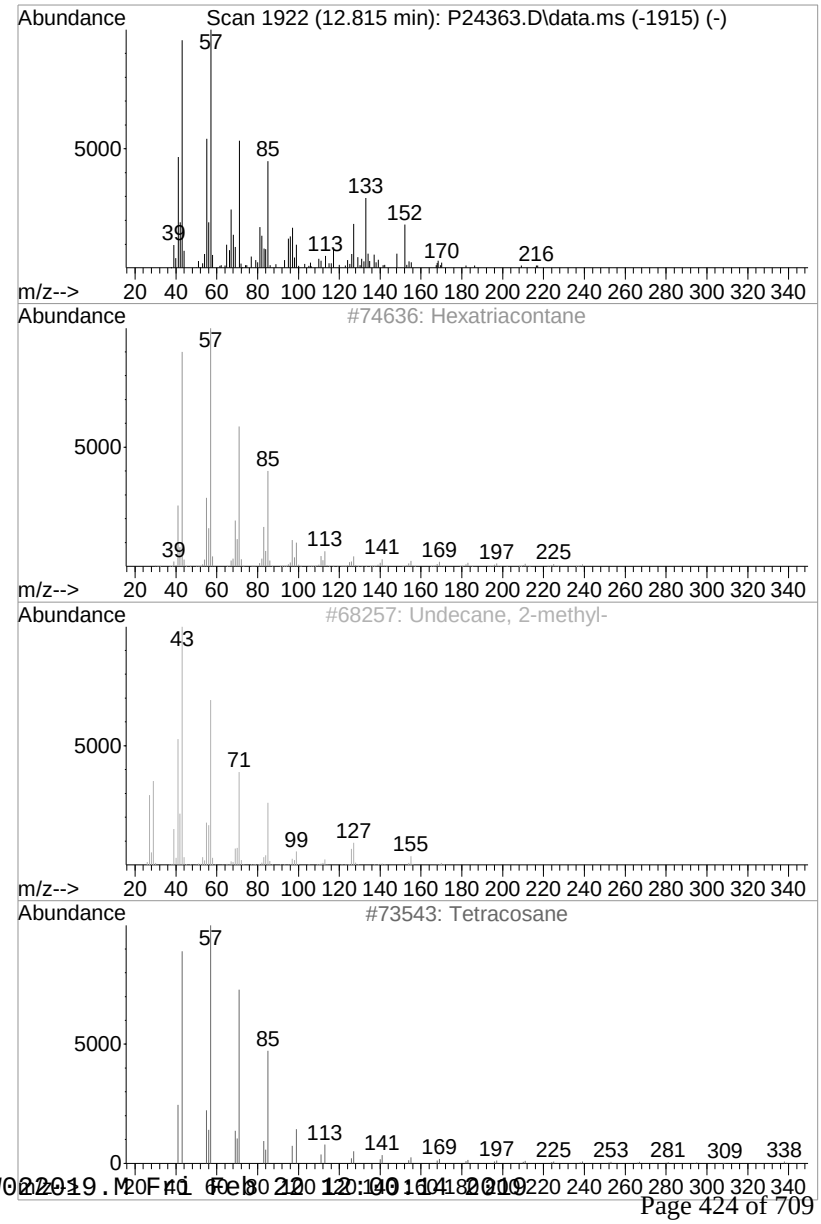
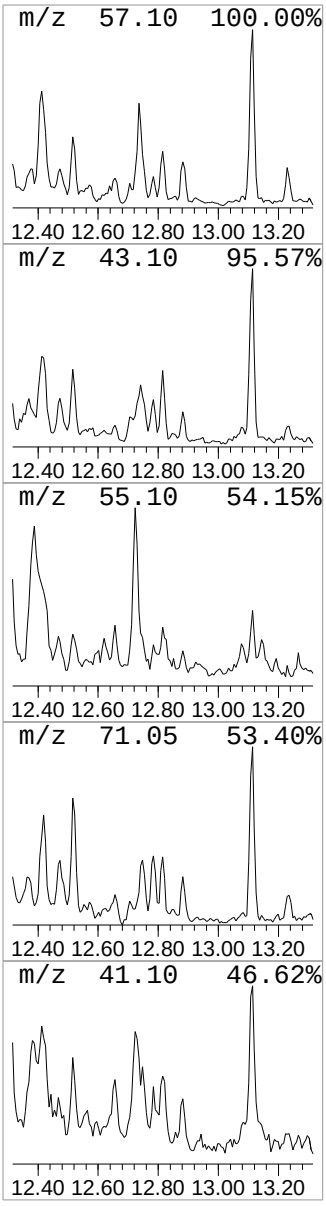
Peak Number 20 unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.815	5.84 ppb	271440	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexatriacontane	507	C36H74	000630-06-8	46
2	Undecane, 2-methyl-	170	C12H26	007045-71-8	46
3	Tetracosane	338	C24H50	000646-31-1	43
4	Dotriacontane	451	C32H66	000544-85-4	43
5	Decane, 2,3,6-trimethyl-	184	C13H28	062238-12-4	38





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24363.D
Acq On : 21 Feb 2019 1:40 pm
Operator : K.Ruest
Sample : R1901228-003|80.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

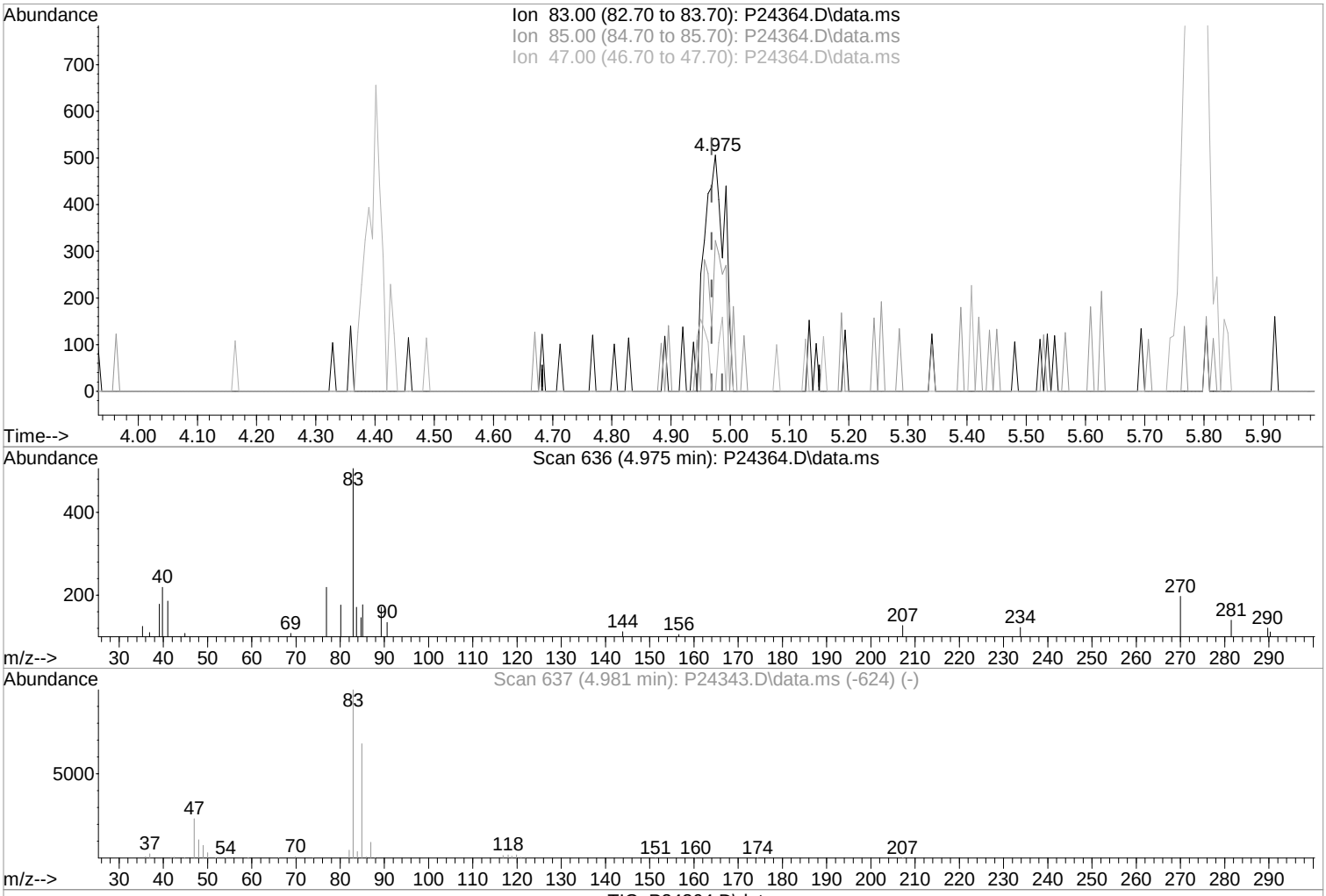
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					Internal Standard		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	9.626	12.9	ppb	337848	3	9.791	1312600	50.0
Octane, 3-methyl-	9.736	11.6	ppb	303629	3	9.791	1312600	50.0
unknown	10.108	14.7	ppb	384988	3	9.791	1312600	50.0
unknown	10.346	19.7	ppb	516636	3	9.791	1312600	50.0
Octane, 2,5-dim...	10.431	13.7	ppb	359287	3	9.791	1312600	50.0
Octane, 3,6-dim...	10.547	33.6	ppb	881612	3	9.791	1312600	50.0
Cyclohexane, pr...	10.626	19.2	ppb	504502	3	9.791	1312600	50.0
unknown	10.669	13.2	ppb	347637	3	9.791	1312600	50.0
unknown	10.809	32.8	ppb	859941	3	9.791	1312600	50.0
Octane, 2,6-dim...	10.980	15.6	ppb	724757	4	11.839	2323320	50.0
unknown	11.437	7.3	ppb	340160	4	11.839	2323320	50.0
unknown	11.650	7.3	ppb	338534	4	11.839	2323320	50.0
Cyclohexane, bu...	11.760	17.8	ppb	828747	4	11.839	2323320	50.0
unknown	11.894	16.1	ppb	749469	4	11.839	2323320	50.0
Decane, 2-methyl-	11.919	15.2	ppb	704385	4	11.839	2323320	50.0
unknown	11.992	13.9	ppb	647608	4	11.839	2323320	50.0
Undecane	12.254	36.7	ppb	1704070	4	11.839	2323320	50.0
unknown	12.297	6.8	ppb	318099	4	11.839	2323320	50.0
Benzene, 1-meth...	12.388	8.3	ppb	387359	4	11.839	2323320	50.0
unknown	12.815	5.8	ppb	271440	4	11.839	2323320	50.0

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24364.D
Acq On : 21 Feb 2019 2:02 pm
Operator : K.Ruest
Sample : R1901228-004|71.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 21 14:18:43 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24364.D\data.ms

(40) Chloroform (P)

4.975min (+0.006) 0.22 ppb m

response 1221

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	34.98#
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

After

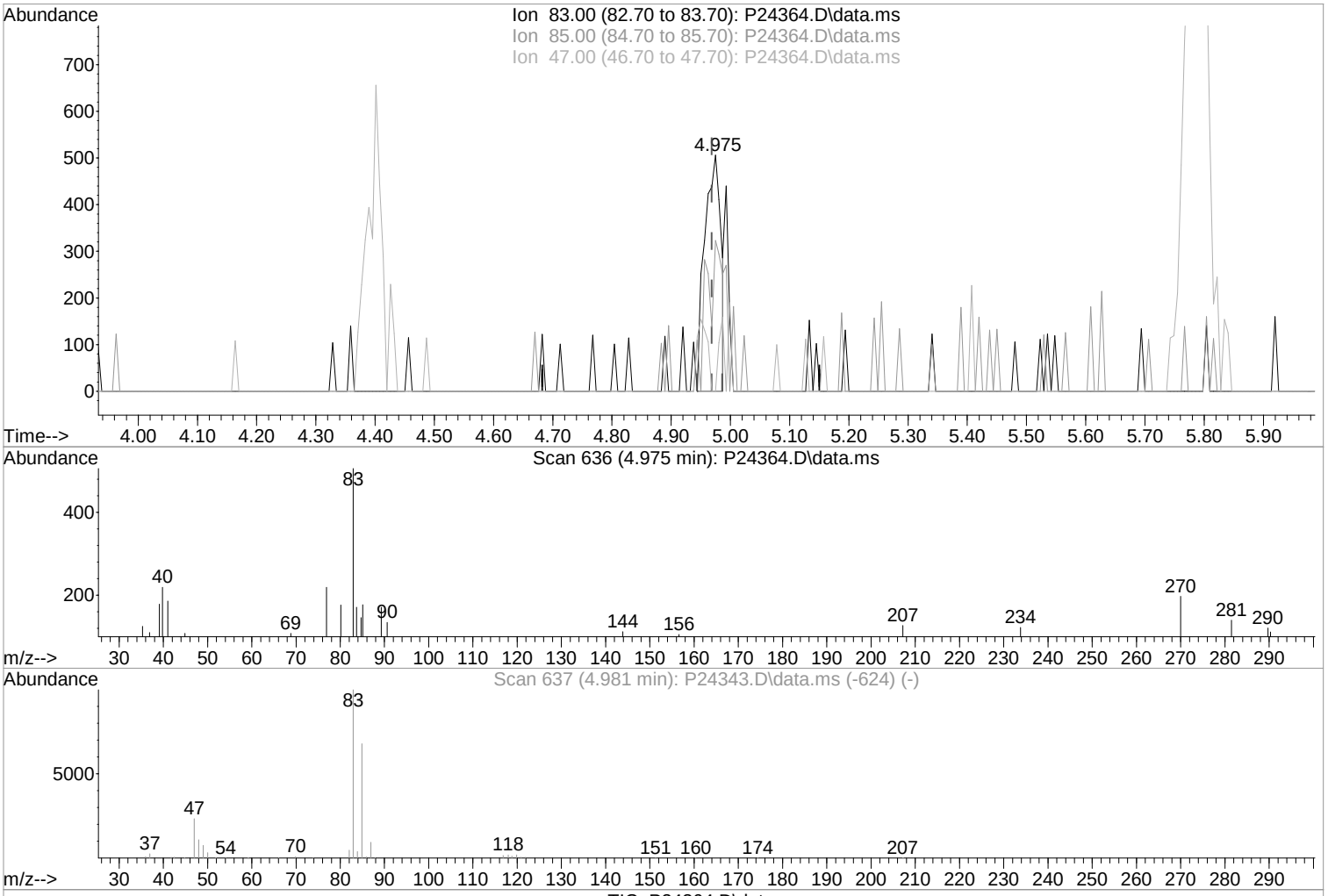
Split Peak

02/22/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24364.D
Acq On : 21 Feb 2019 2:02 pm
Operator : K.Ruest
Sample : R1901228-004|71.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 21 14:18:43 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24364.D\data.ms

(40) Chloroform (P)

4.975min (+0.006) 0.17 ppb

response 966

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	47.71#
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24364.D
Acq On : 21 Feb 2019 2:02 pm
Operator : K.Ruest
Sample : R1901228-004|71.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 5 Sample Multiplier: 1

DL

Quant Time: Feb 22 12:04:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

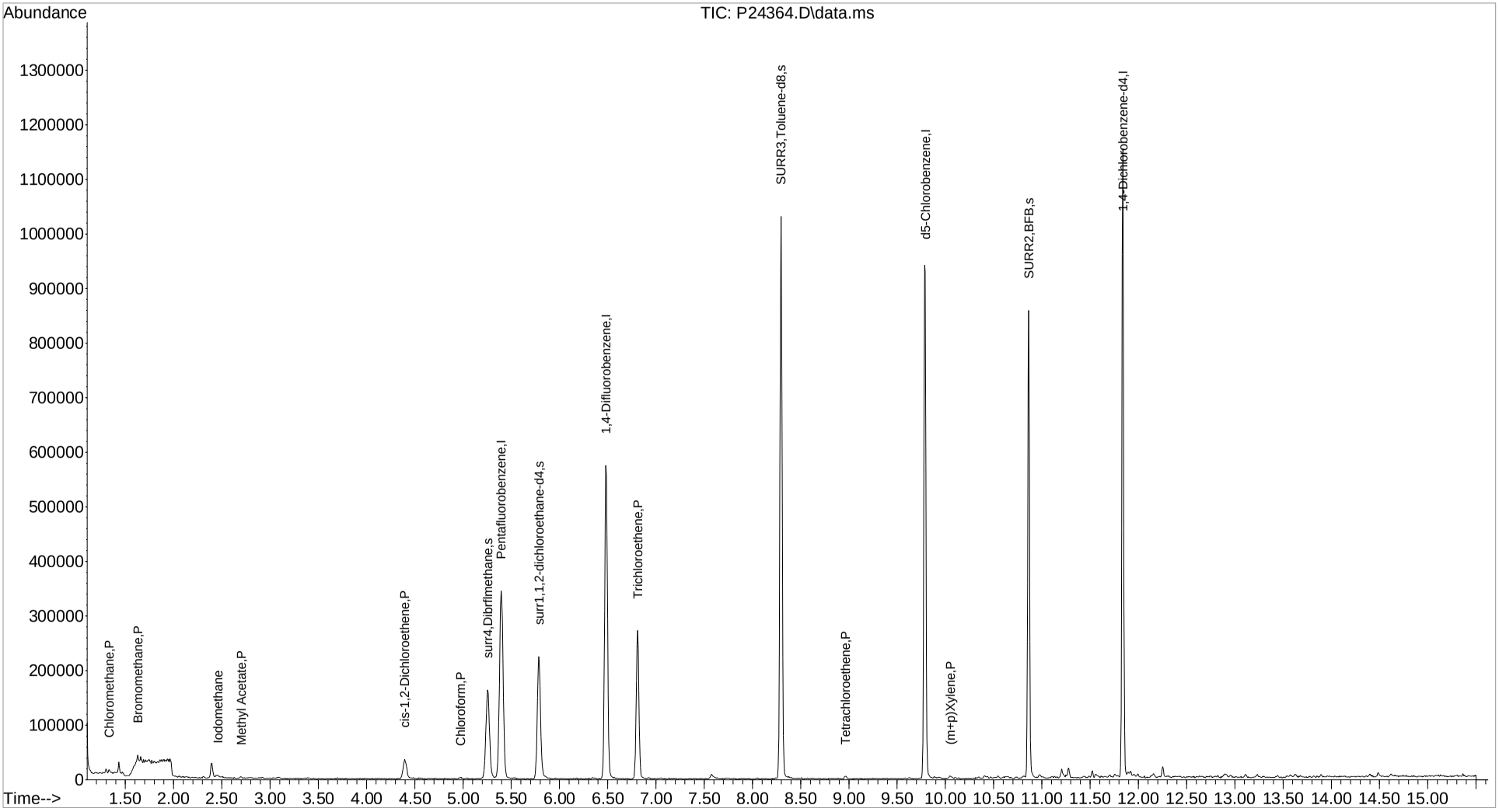
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.395	168	322084	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.480	114	516669	50.00	ppb		0.00
71) d5-Chlorobenzene	9.791	117	446327	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	233006	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	132436	46.65	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 93.30%				
48) surr1,1,2-dichloroetha...	5.785	65	188678	52.39	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 104.78%				
65) SURR3,Toluene-d8	8.297	98	651831	48.40	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.80%				
70) SURR2,BFB	10.864	95	239503	49.65	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.30%				
Target Compounds							Qvalue
3) Chloromethane	1.329	50	2618	0.50	ppb		78
5) Bromomethane	1.628	94	4869	0.90	ppb		99
17) Iodomethane	2.457	142	4143	3.07	ppb		99
21) Methyl Acetate	2.701	43	1878	0.45	ppb	#	43
34) cis-1,2-Dichloroethene	4.395	96	19919	5.32	ppb		85
40) Chloroform	4.975	83	1221m	0.22	ppb		
54) Trichloroethene	6.810	130	99817	27.62	ppb		97
72) Tetrachloroethene	8.962	164	852	0.32	ppb	#	53
83) (m+p)Xylene	10.053	106	1312	0.21	ppb	#	47

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

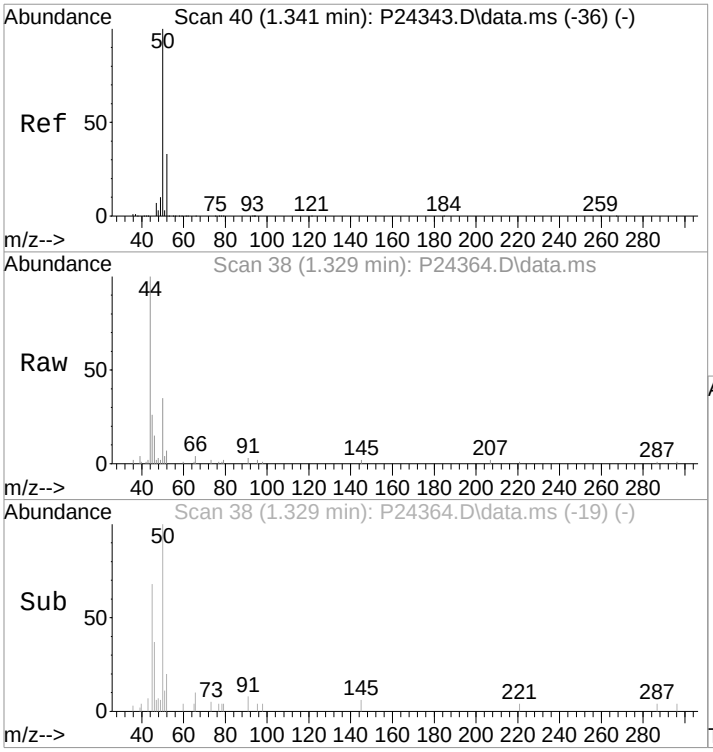
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24364.D
Acq On : 21 Feb 2019 2:02 pm
Operator : K.Ruest
Sample : R1901228-004|71.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 22 12:04:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



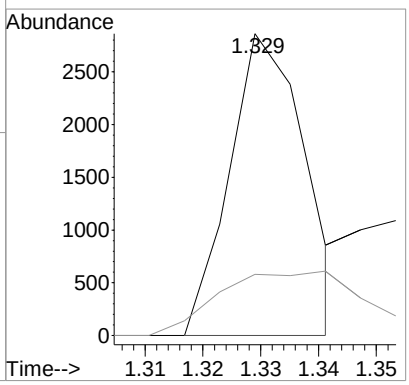
1st 02/22/19

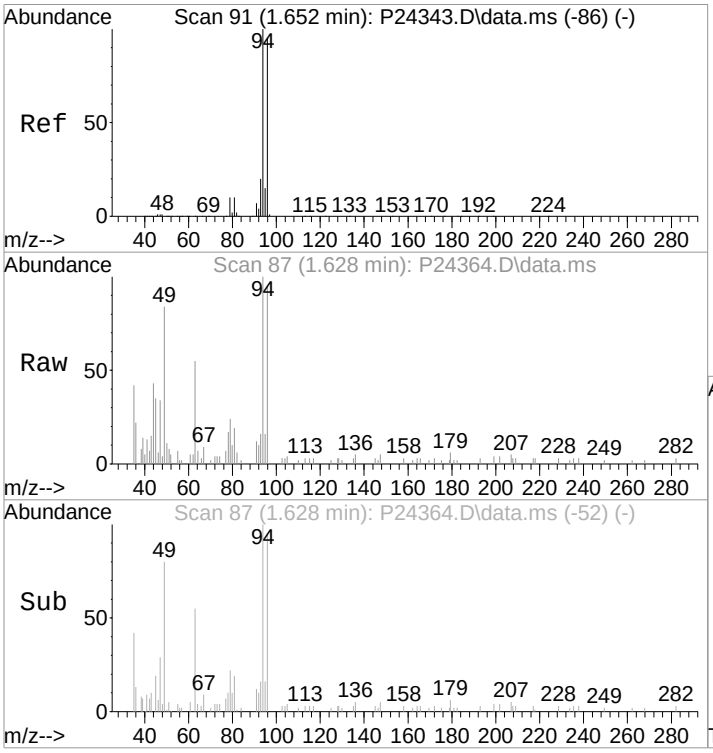


#3
Chloromethane
Concen: 0.50 ppb
RT: 1.329 min Scan# 38
Delta R.T. 0.000 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion: 50 Resp: 2618

Ion	Ratio	Lower	Upper
50	100		
52	20.3	13.0	53.0

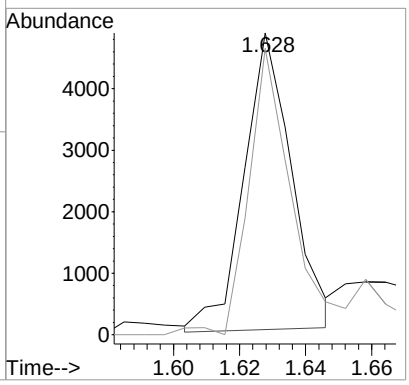


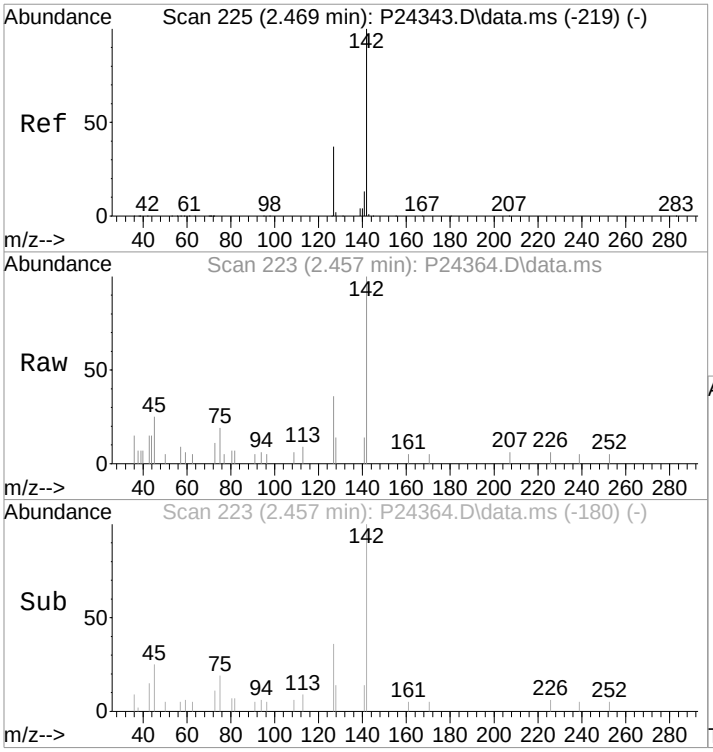


#5
Bromomethane
Concen: 0.90 ppb
RT: 1.628 min Scan# 87
Delta R.T. -0.011 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion: 94 Resp: 4869

Ion	Ratio	Lower	Upper
94	100		
96	94.8	75.4	115.4

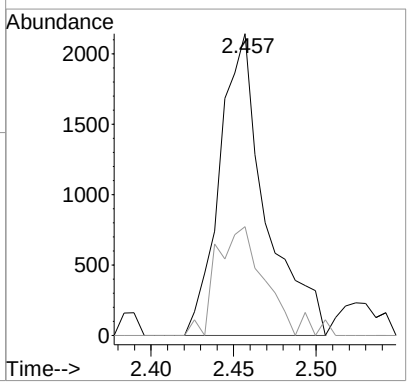


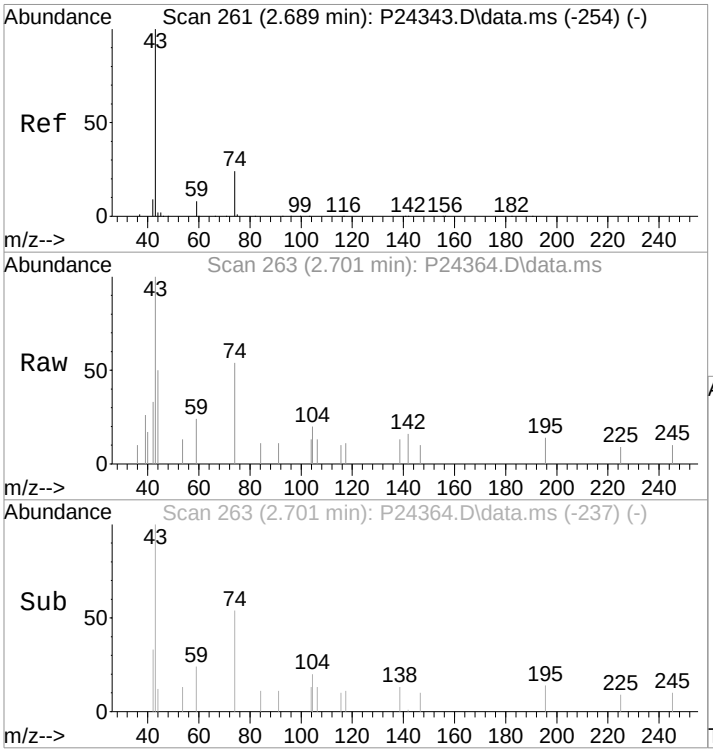


#17
Iodomethane
Concen: 3.07 ppb
RT: 2.457 min Scan# 223
Delta R.T. 0.001 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion:142 Resp: 4143

Ion	Ratio	Lower	Upper
142	100		
127	36.0	16.7	56.7

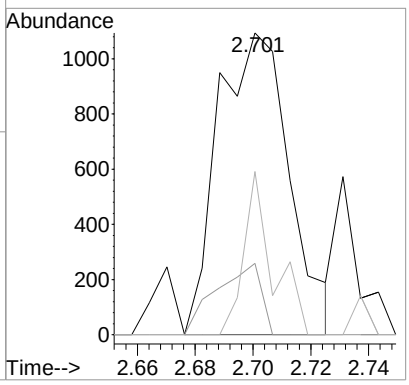


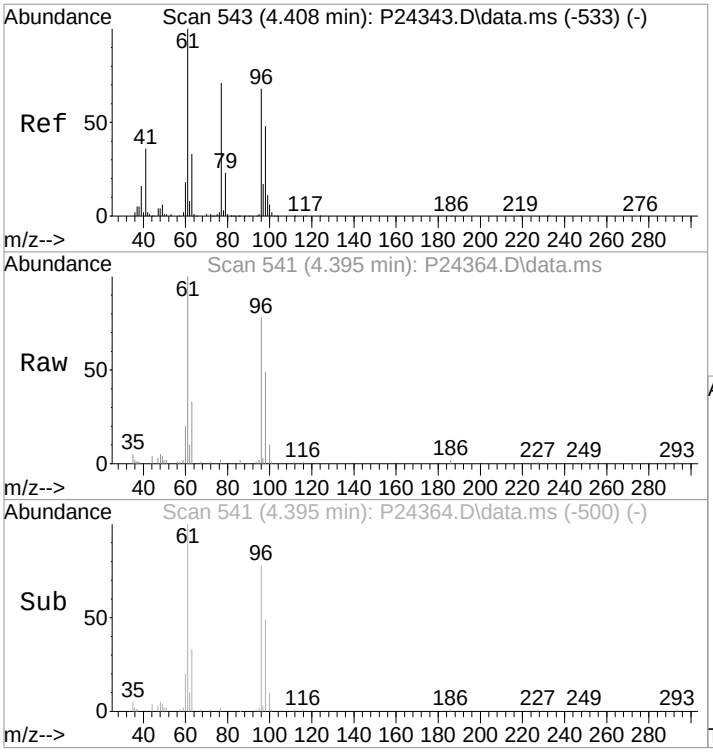


#21
Methyl Acetate
Concen: 0.45 ppb
RT: 2.701 min Scan# 263
Delta R.T. 0.018 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion: 43 Resp: 1878

Ion	Ratio	Lower	Upper
43	100		
59	23.7	0.0	28.4
74	54.0	3.6	43.6#

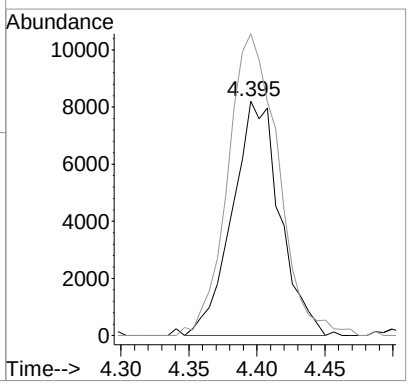


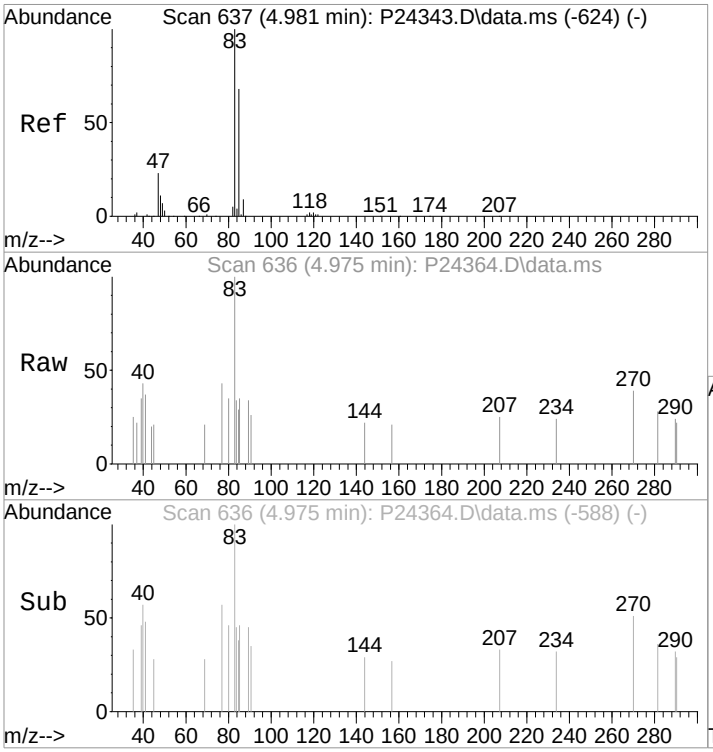


#34
cis-1,2-Dichloroethene
Concen: 5.32 ppb
RT: 4.395 min Scan# 541
Delta R.T. -0.006 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion: 96 Resp: 19919

Ion	Ratio	Lower	Upper
96	100		
61	128.8	128.1	168.1

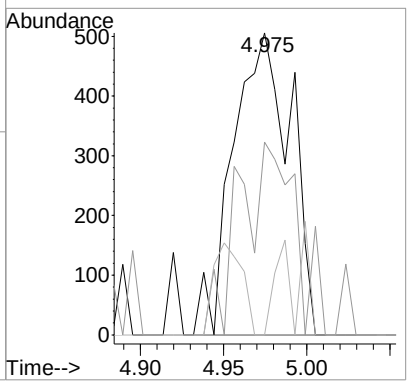


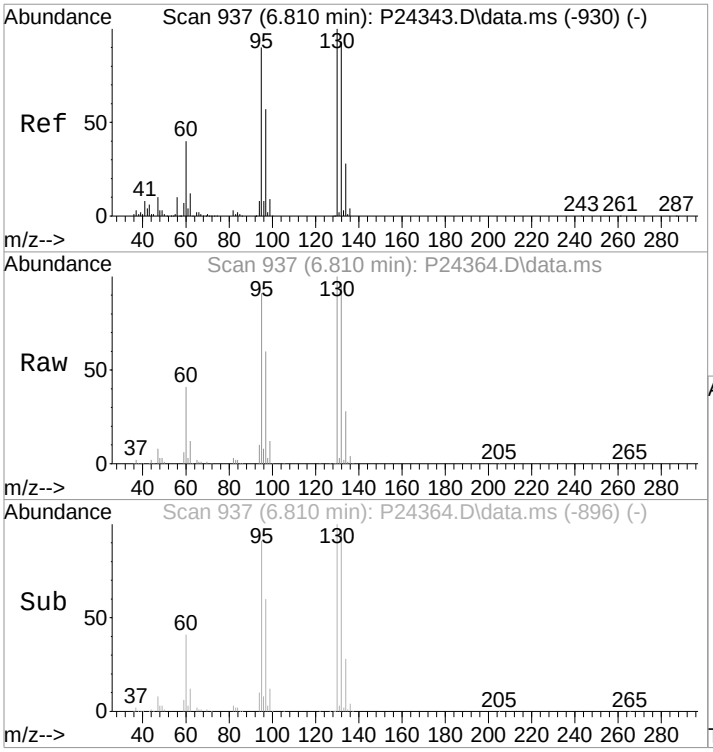


#40
Chloroform
Concen: 0.22 ppb m
RT: 4.975 min Scan# 636
Delta R.T. 0.006 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion: 83 Resp: 1221

Ion	Ratio	Lower	Upper
83	100		
85	35.0	47.9	87.9#
47	0.0	3.4	43.4#

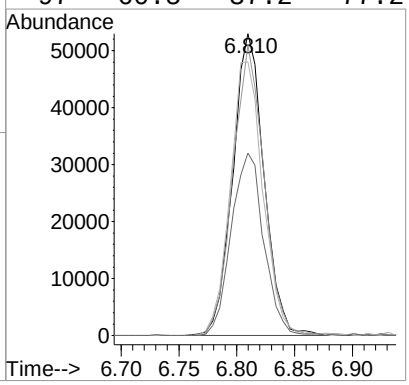


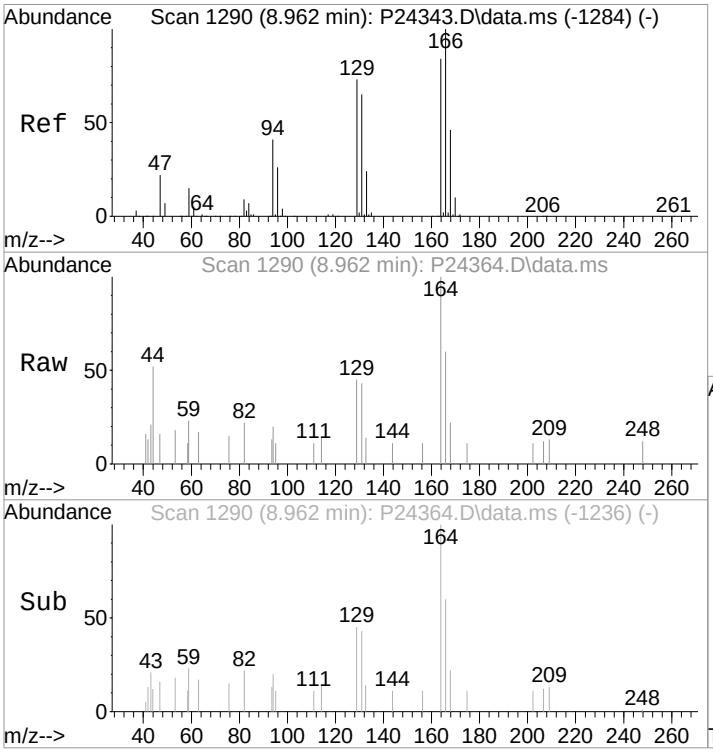


#54
Trichloroethene
Concen: 27.62 ppb
RT: 6.810 min Scan# 937
Delta R.T. 0.000 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion:130 Resp: 99817

Ion	Ratio	Lower	Upper
130	100		
132	96.2	72.6	112.6
95	90.7	69.8	109.8
97	60.5	37.2	77.2

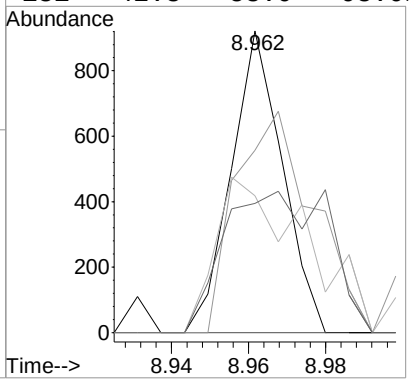


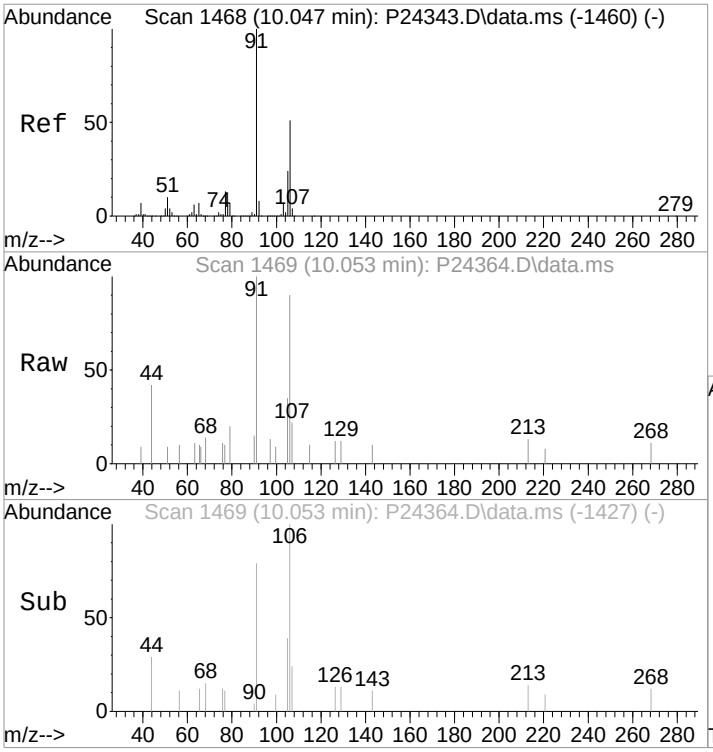


#72
Tetrachloroethene
Concen: 0.32 ppb
RT: 8.962 min Scan# 1290
Delta R.T. 0.000 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion:164 Resp: 852

Ion	Ratio	Lower	Upper
164	100		
166	60.4	99.6	139.6#
129	45.3	66.7	106.7#
131	42.8	58.0	98.0#

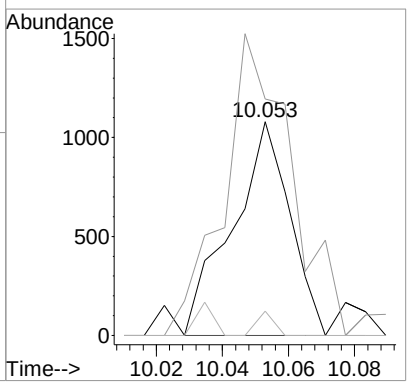




#83
(m+p)Xylene
Concen: 0.21 ppb
RT: 10.053 min Scan# 1469
Delta R.T. 0.006 min
Lab File: P24364.D
Acq: 21 Feb 2019 2:02 pm

Tgt Ion:106 Resp: 1312

Ion	Ratio	Lower	Upper
106	100		
91	110.7	175.0	215.0#
77	11.4	6.3	46.3



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24364.D
Acq On : 21 Feb 2019 2:02 pm
Operator : K.Ruest
Sample : R1901228-004|71.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24364.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.433	52	55	58	rVB	20218	17237	1.04%	0.181%
2	1.628	72	87	90	rBV6	38194	120430	7.24%	1.265%
3	2.396	208	213	218	rBV	26923	41531	2.50%	0.436%
4	4.395	533	541	550	rBV2	35776	89432	5.38%	0.939%
5	5.255	669	682	693	rBV	163076	437203	26.29%	4.591%
6	5.395	696	705	718	rVB	342739	895497	53.85%	9.404%
7	5.785	759	769	779	rBV2	223976	530055	31.87%	5.567%
8	6.480	874	883	896	rBV	574219	1173073	70.54%	12.319%
9	6.810	926	937	949	rBV	272403	534818	32.16%	5.617%
10	7.578	1057	1063	1071	rBV2	8798	20068	1.21%	0.211%
11	8.297	1174	1181	1191	rBV	1029591	1663067	100.00%	17.465%
12	9.785	1419	1425	1439	rBV	940025	1365073	82.08%	14.336%
13	10.864	1597	1602	1615	rVB	856388	1112251	66.88%	11.681%
14	11.205	1652	1658	1664	rBV5	16709	27141	1.63%	0.285%
15	11.278	1666	1670	1674	rVB2	17990	24081	1.45%	0.253%
16	11.839	1756	1762	1769	rBV	1151873	1430547	86.02%	15.023%
17	12.254	1826	1830	1835	rBV	19044	23279	1.40%	0.244%
18	12.900	1930	1936	1942	rBV9	6839	17394	1.05%	0.183%

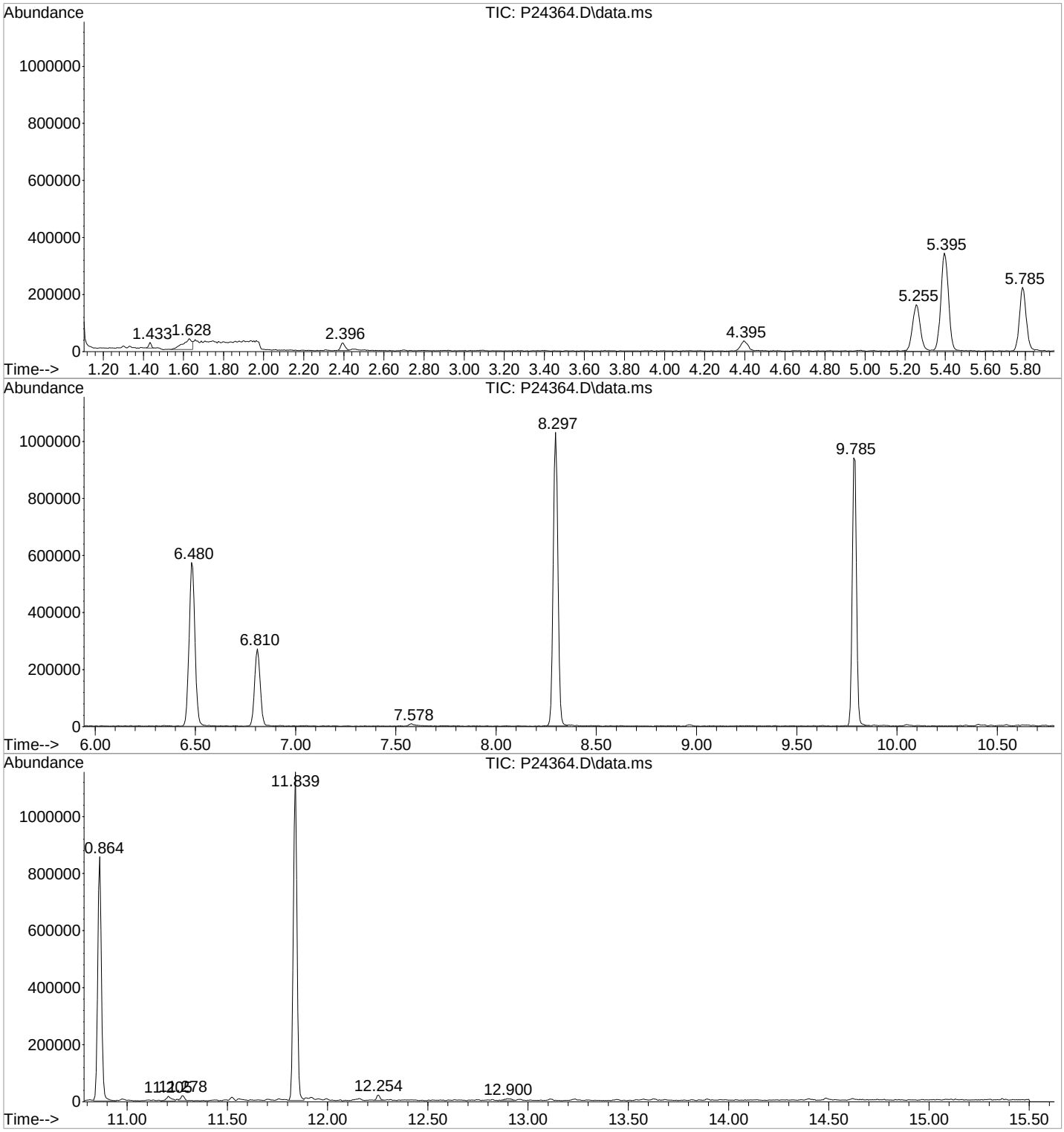
Sum of corrected areas: 9522177

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24364.D
Acq On : 21 Feb 2019 2:02 pm
Operator : K.Ruest
Sample : R1901228-004|71.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\\
Data File : P24364.D
Acq On : 21 Feb 2019 2:02 pmm
Operator : K.Ruestt
Sample : R1901228-004|71.5 Inst : MSVOA-122
Misc : DAY MED T44
ALS Vial : 5 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

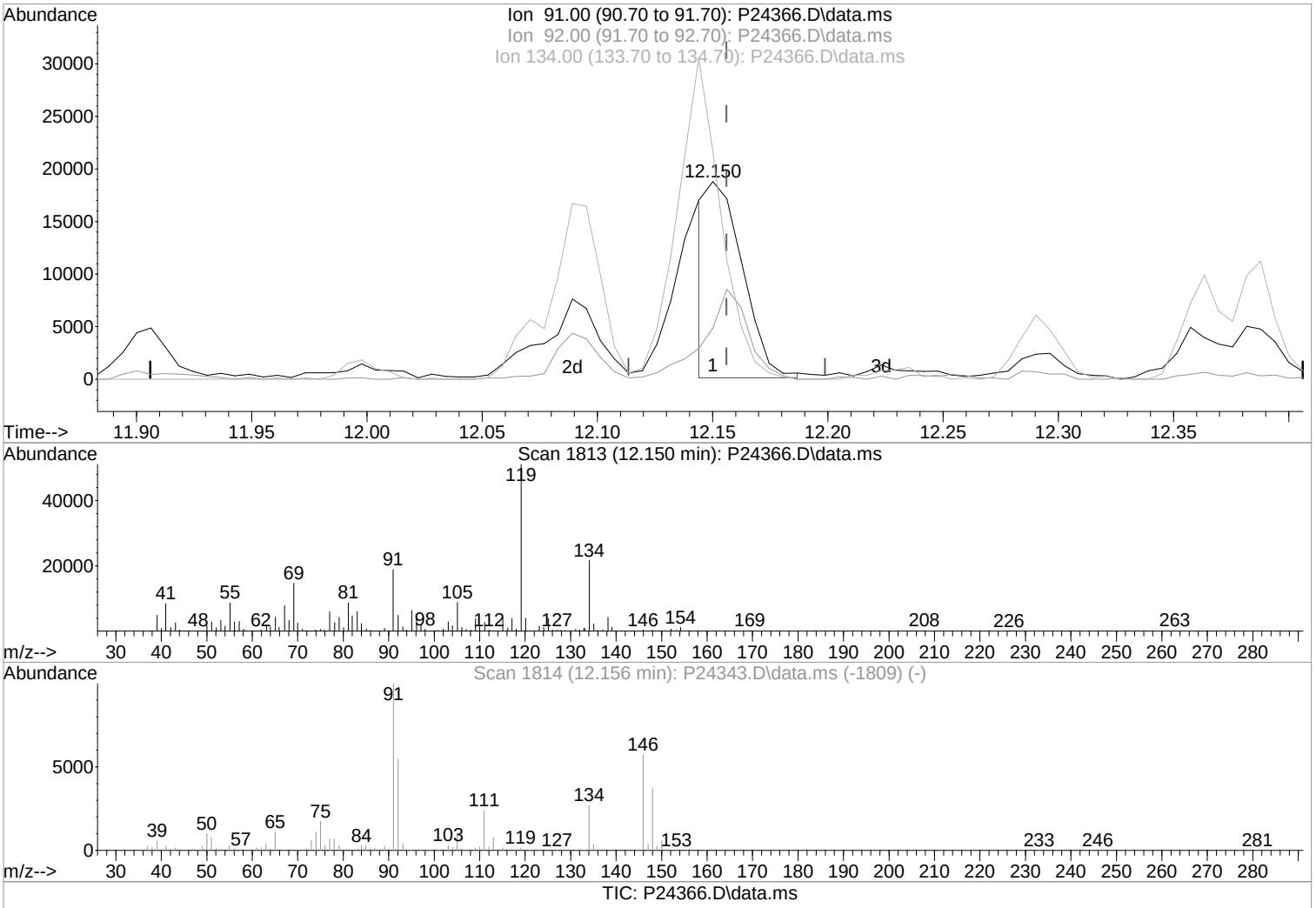
					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 21 15:04:01 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24366.D\data.ms

(109) n-Butylbenzene

12.150min (-0.006) 1.90 ppb m

response 19990

Ion	Exp%	Act%
91.00	100	100
92.00	54.70	25.98#
134.00	26.80	115.11#
0.00	0.00	0.00

Manual Integration:

After

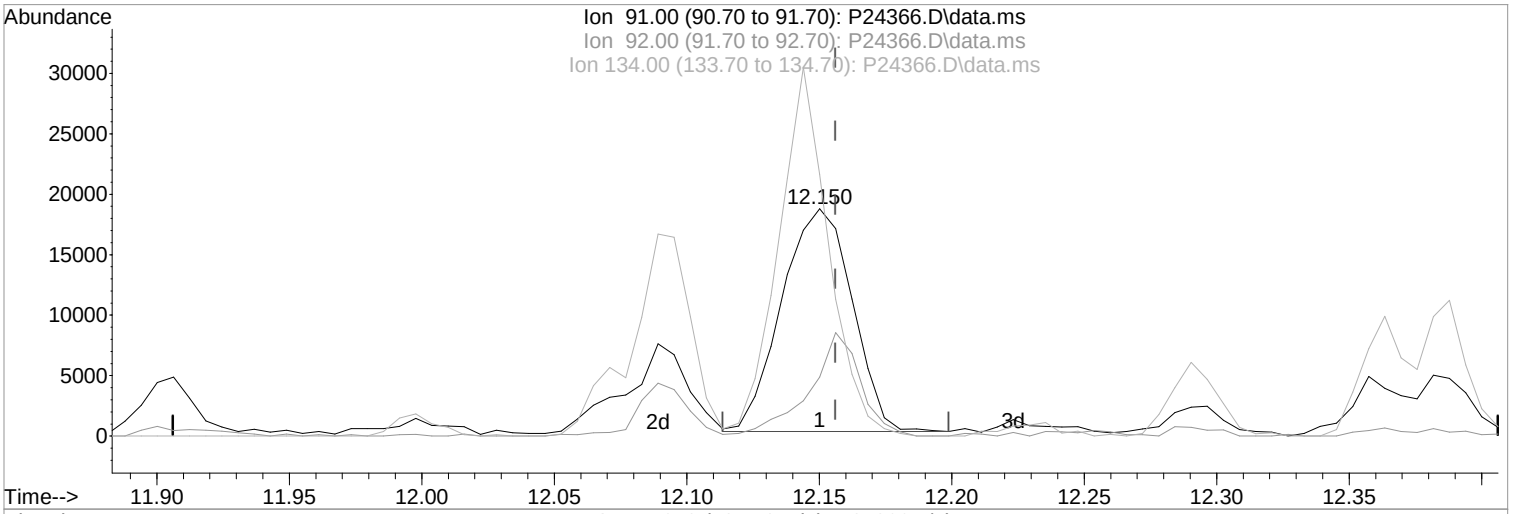
Poor integration.

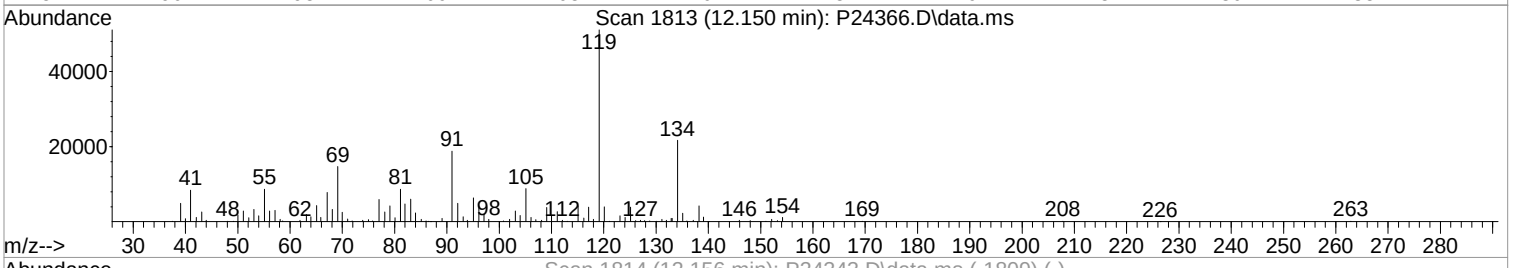
02/22/19

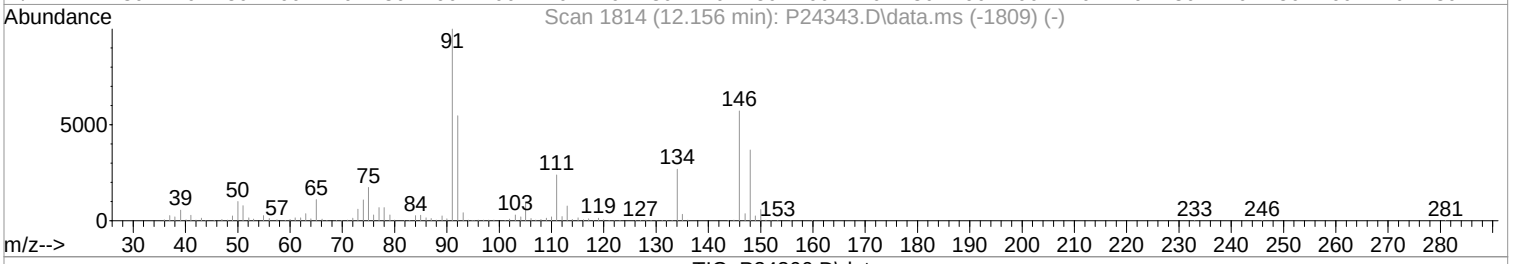
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 21 15:04:01 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24366.D\data.ms

(109) n-Butylbenzene

12.150min (-0.006) 3.24 ppb

response 34049

Ion	Exp%	Act%
91.00	100	100
92.00	54.70	25.98#
134.00	26.80	115.11#
0.00	0.00	0.00

Manual Integration:

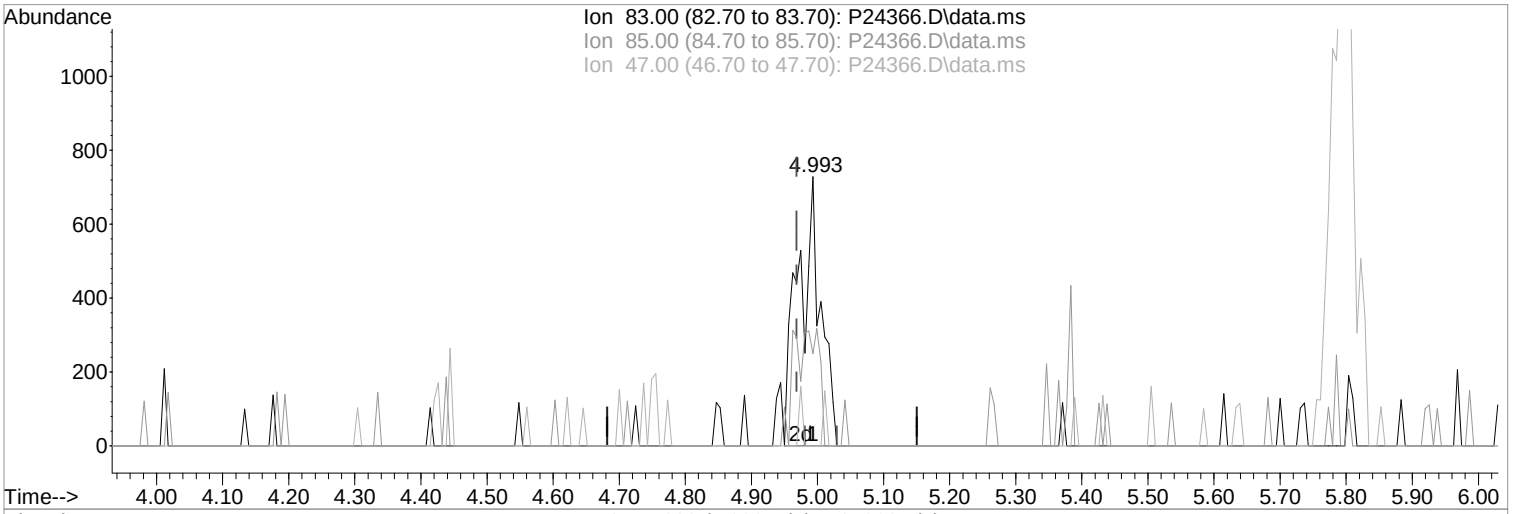
Before

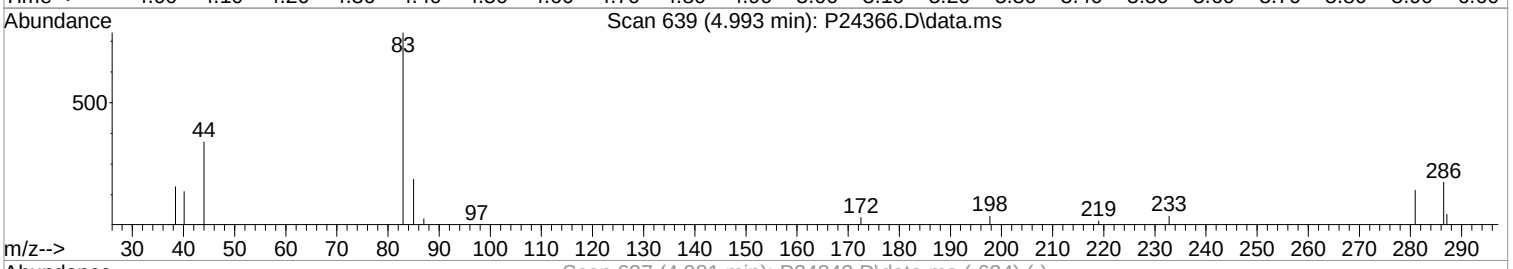
02/22/19

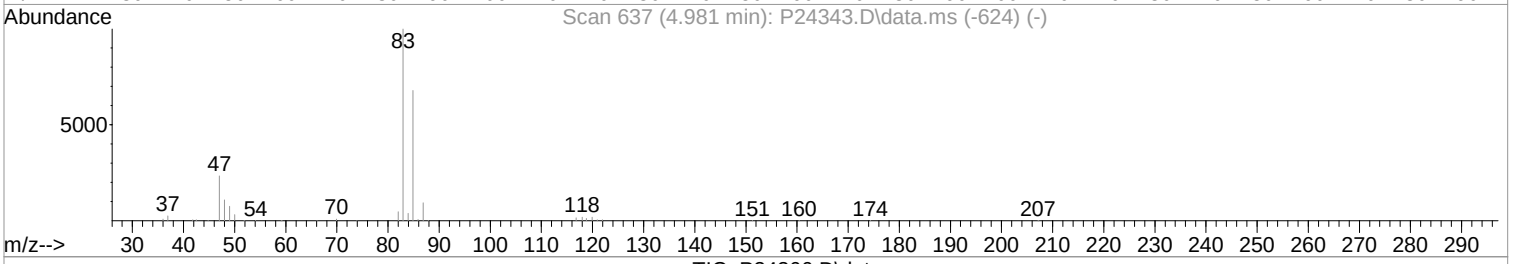
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 21 15:04:01 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24366.D\data.ms

(40) Chloroform (P)

4.993min (+0.024) 0.31 ppb m

response 1697

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	34.34#
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

After

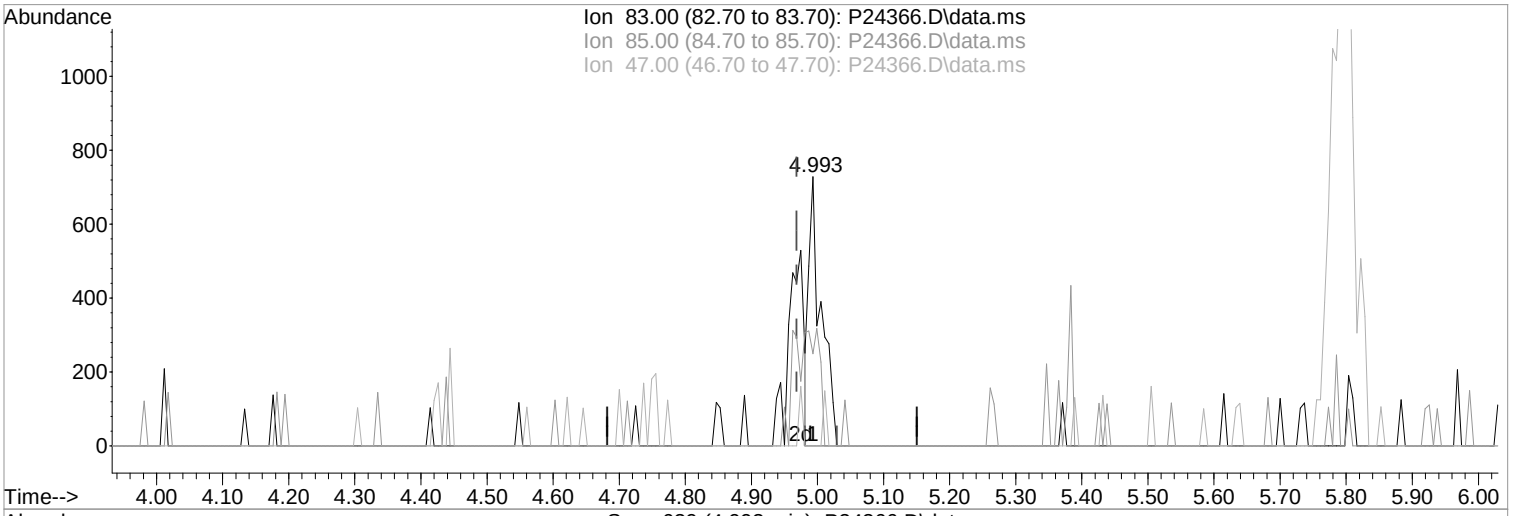
Split Peak

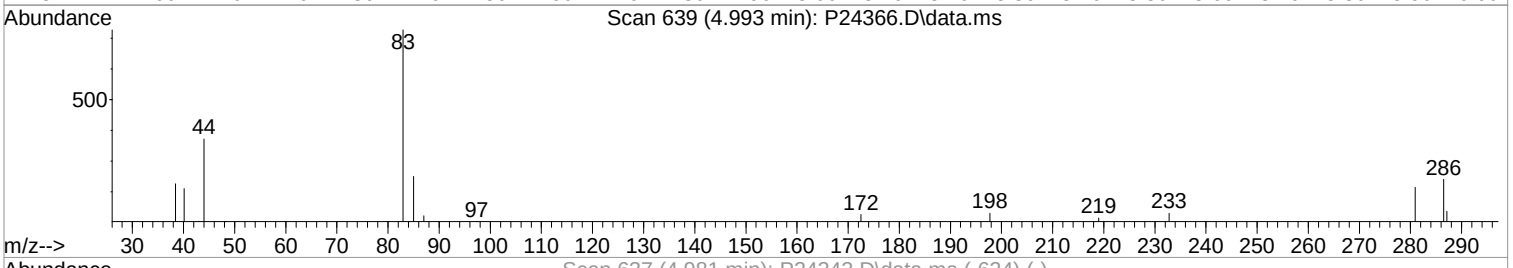
02/22/19

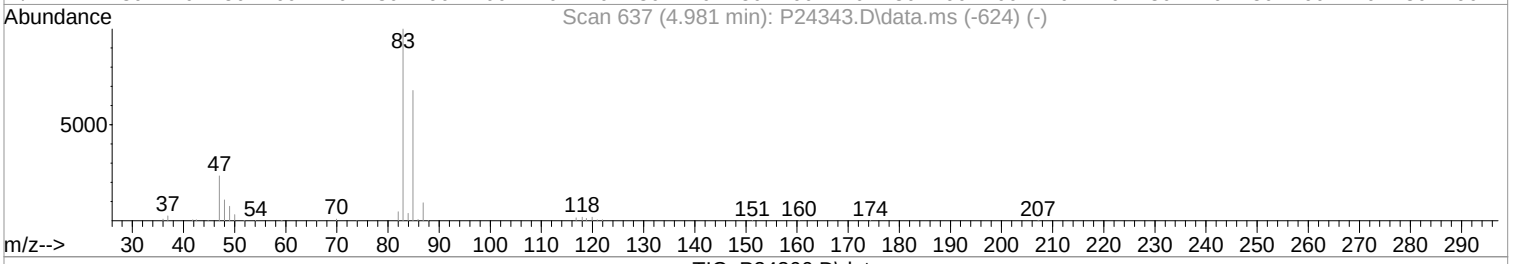
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 21 15:04:01 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24366.D\data.ms

(40) Chloroform (P)

4.993min (+0.024) 0.18 ppb

response 958

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	34.34#
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

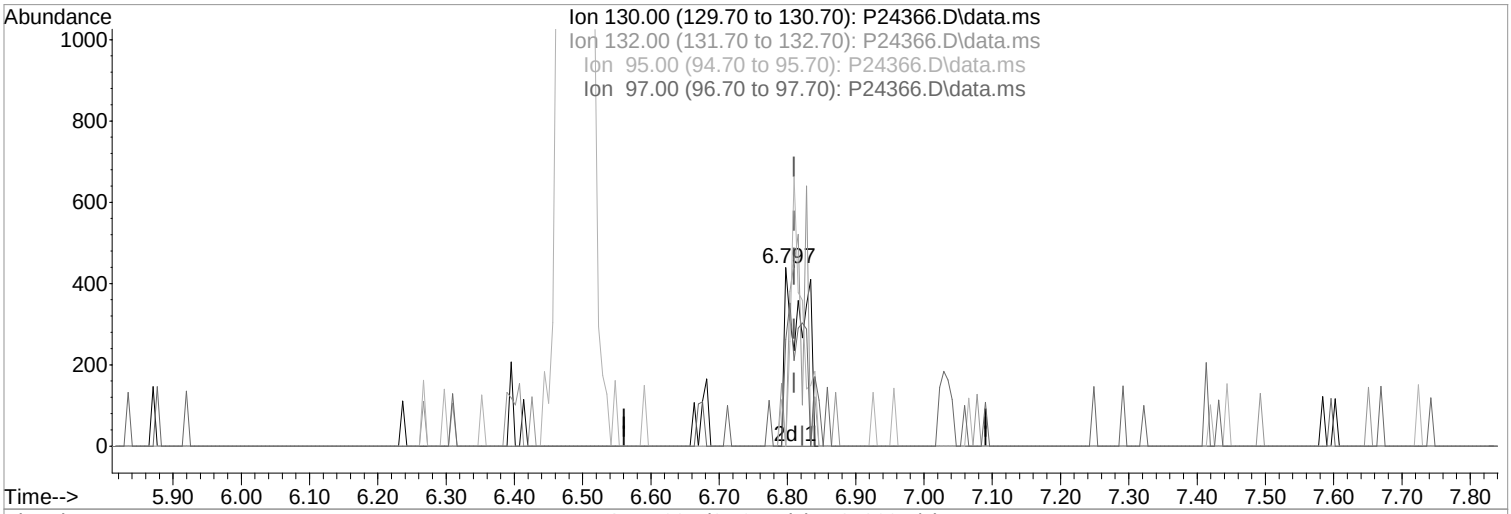
Before

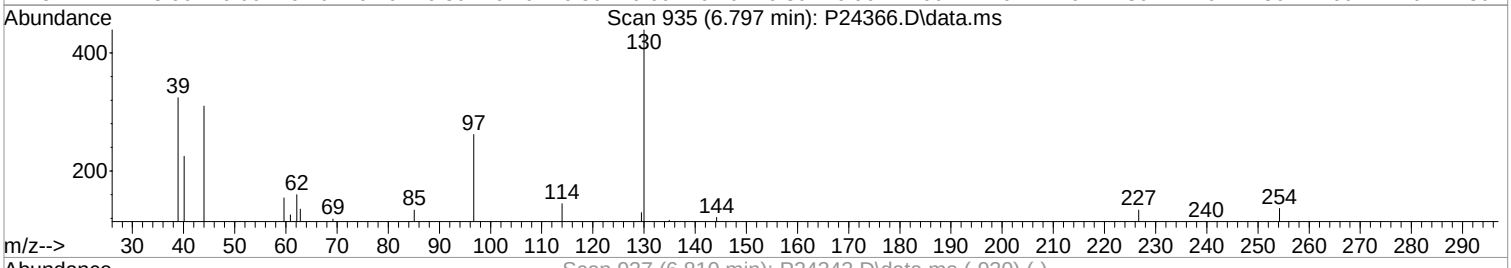
02/22/19

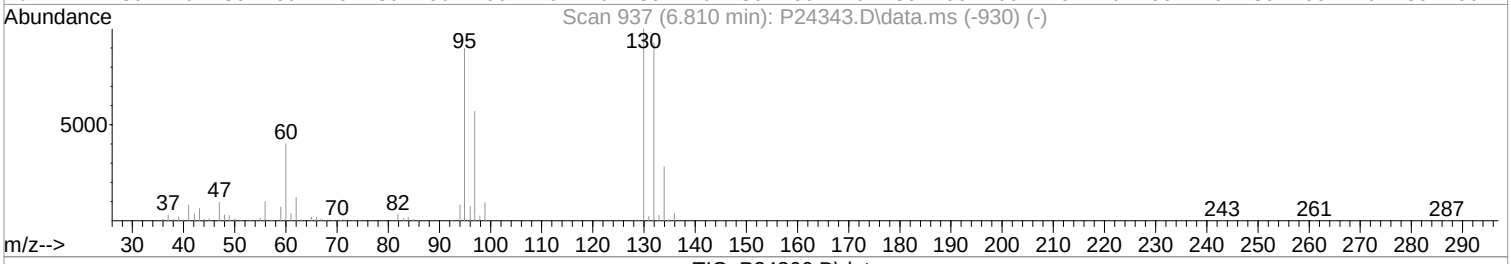
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 21 15:04:01 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24366.D\data.ms

(54) Trichloroethene (P)

6.797min (-0.012) 0.25 ppb m

response 866

Ion	Exp%	Act%
130.00	100	100
132.00	92.60	0.00#
95.00	89.80	0.00#
97.00	57.20	59.68

Manual Integration:

After

Split Peak

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

DL

Quant Time: Feb 22 12:07:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

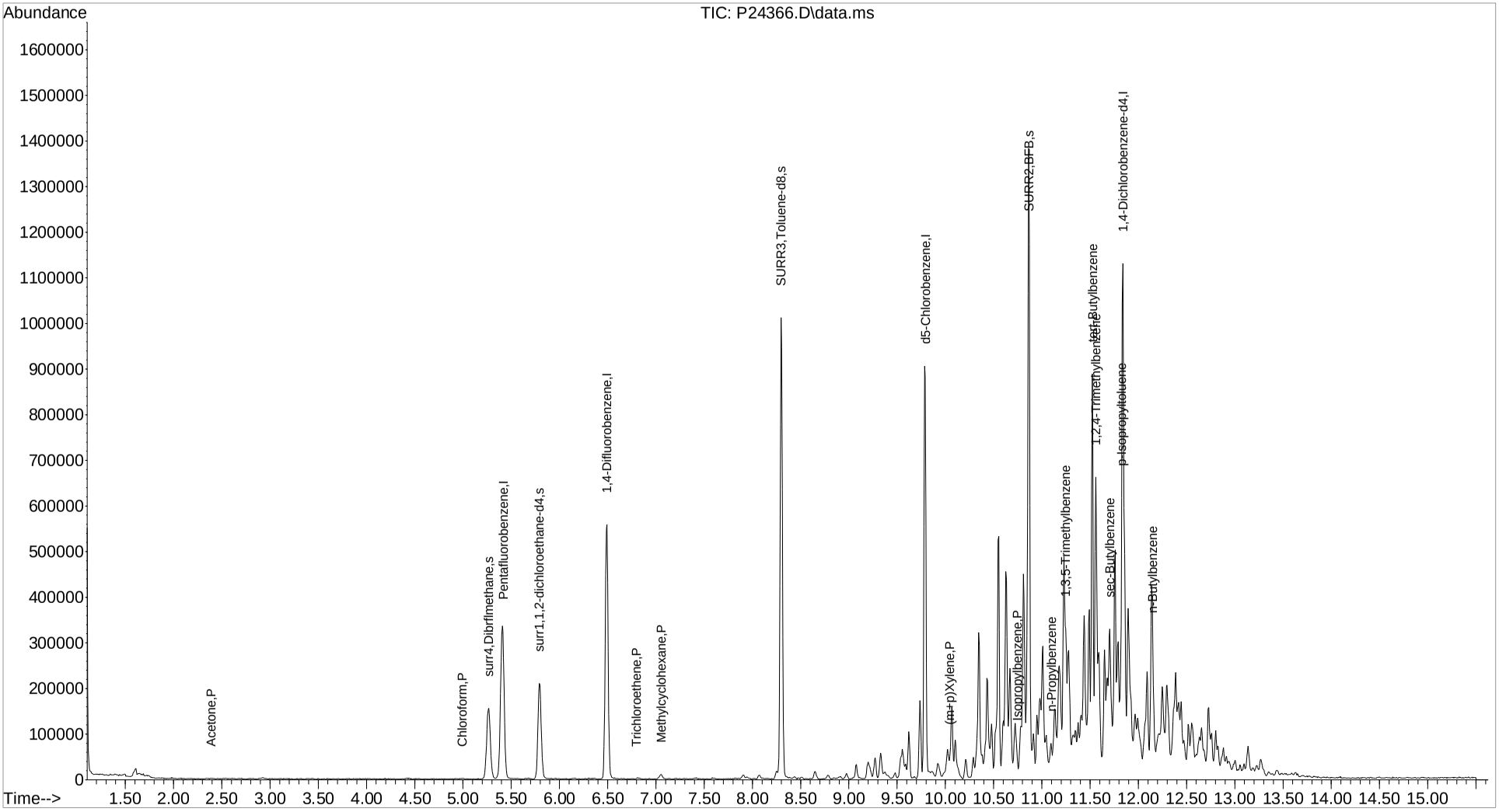
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.414	168	316165	50.00	ppb		0.02
43) 1,4-Difluorobenzene	6.493	114	499446	50.00	ppb		0.01
71) d5-Chlorobenzene	9.791	117	422996	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	209448	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.267	113	130584	47.58	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.16%				
48) surr1,1,2-dichloroetha...	5.792	65	178047	51.14	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.28%				
65) SURR3,Toluene-d8	8.297	98	643644	49.44	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.88%				
70) SURR2,BFB	10.864	95	225448	48.35	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.70%				
Target Compounds							Qvalue
15) Acetone	2.384	43	1143	0.75	ppb		97
40) Chloroform	4.993	83	1697m	0.31	ppb		
54) Trichloroethene	6.797	130	866m	0.25	ppb		
55) Methylcyclohexane	7.054	55	3365	0.76	ppb	#	86
83) (m+p)Xylene	10.047	106	2352	0.39	ppb	#	73
89) Isopropylbenzene	10.742	105	5851	0.42	ppb		90
95) n-Propylbenzene	11.095	91	15442	0.98	ppb		96
99) 1,3,5-Trimethylbenzene	11.248	105	89770	7.85	ppb		98
100) tert-Butylbenzene	11.522	119	3185	0.32	ppb		93
101) 1,2,4-Trimethylbenzene	11.559	105	212046	17.93	ppb		96
103) sec-Butylbenzene	11.705	105	18472	1.28	ppb		98
104) p-Isopropyltoluene	11.827	119	24020	2.01	ppb		96
109) n-Butylbenzene	12.150	91	19990m	1.90	ppb		

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

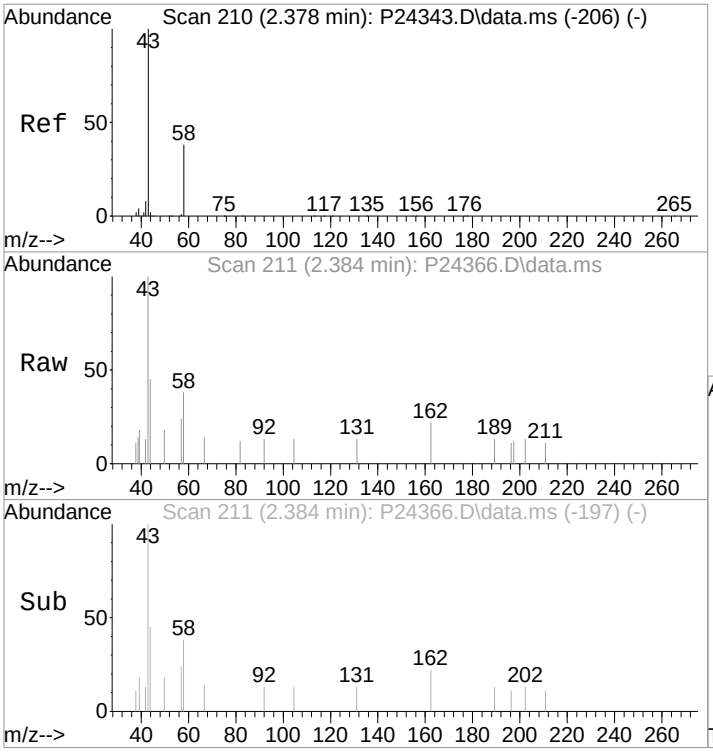
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 12:07:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



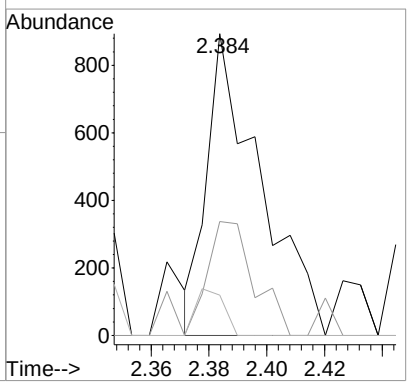
1st 02/22/19

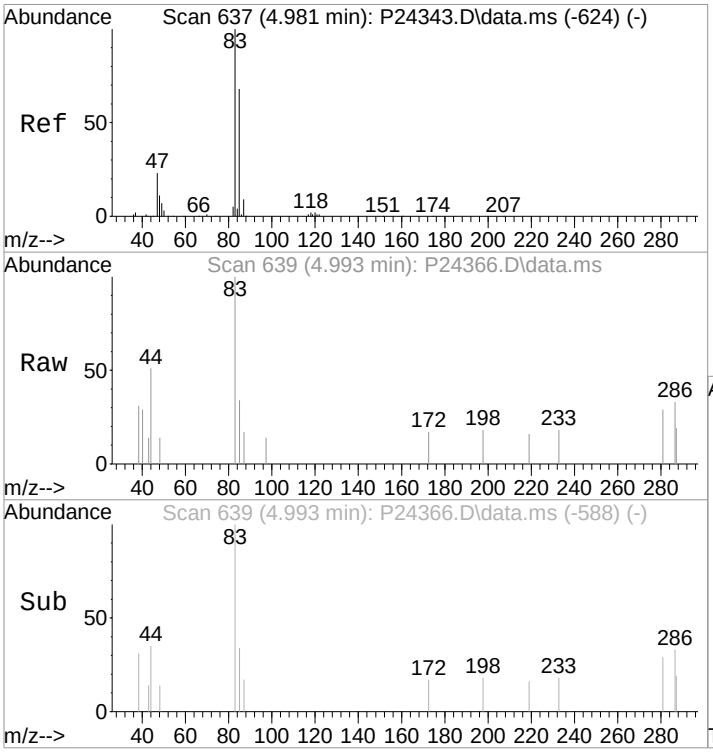


#15
Acetone
Concen: 0.75 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion: 43 Resp: 1143

Ion	Ratio	Lower	Upper
43	100		
58	37.7	18.1	58.1
42	13.3	0.0	27.8

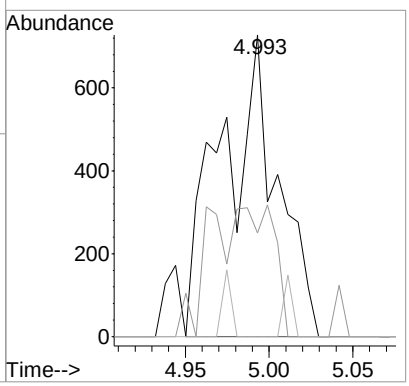


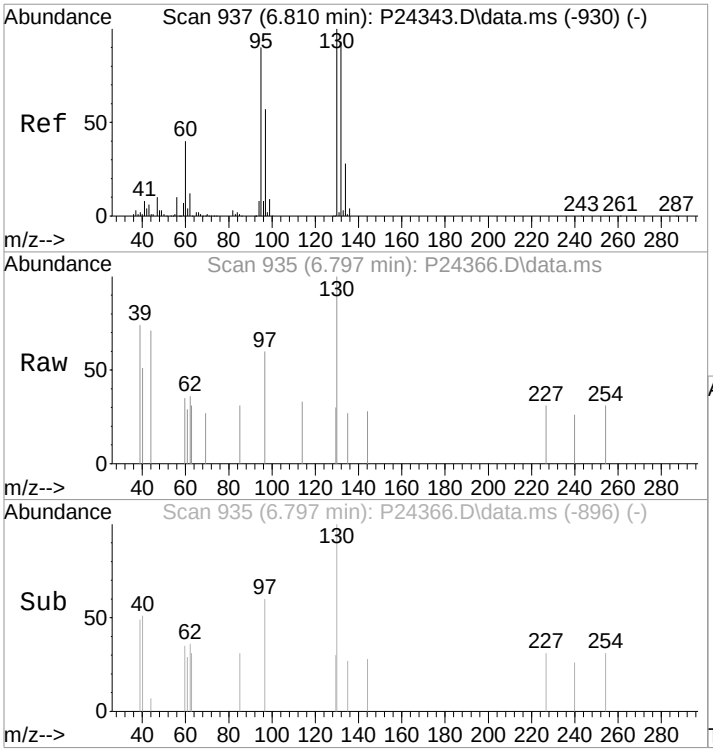


#40
Chloroform
Concen: 0.31 ppb m
RT: 4.993 min Scan# 639
Delta R.T. 0.024 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion: 83 Resp: 1697

Ion	Ratio	Lower	Upper
83	100		
85	34.3	47.9	87.9#
47	0.0	3.4	43.4#

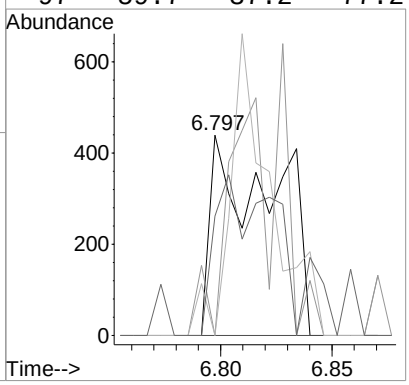


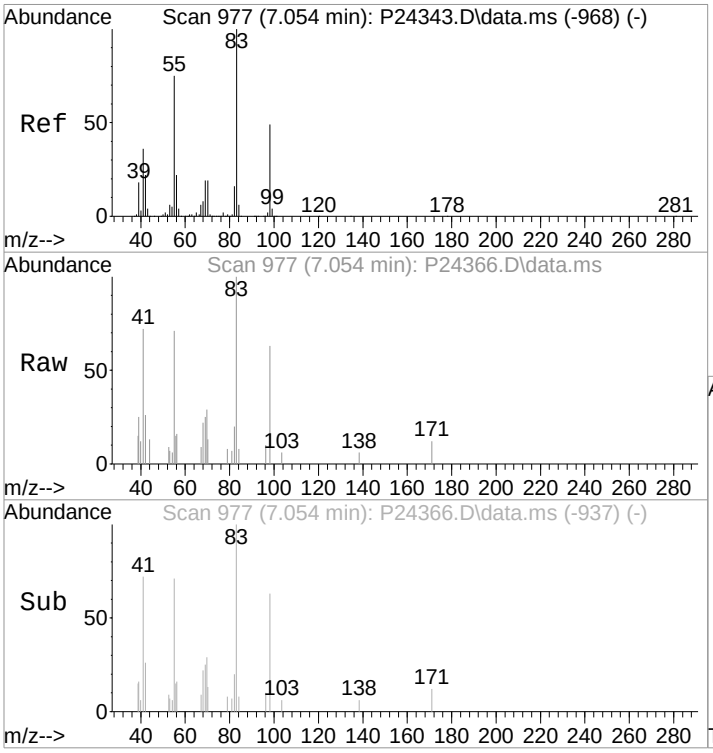


#54
Trichloroethene
Concen: 0.25 ppb m
RT: 6.797 min Scan# 935
Delta R.T. -0.012 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion:130 Resp: 866

Ion	Ratio	Lower	Upper
130	100		
132	0.0	72.6	112.6#
95	0.0	69.8	109.8#
97	59.7	37.2	77.2

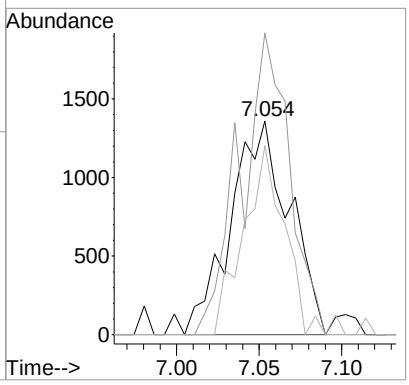


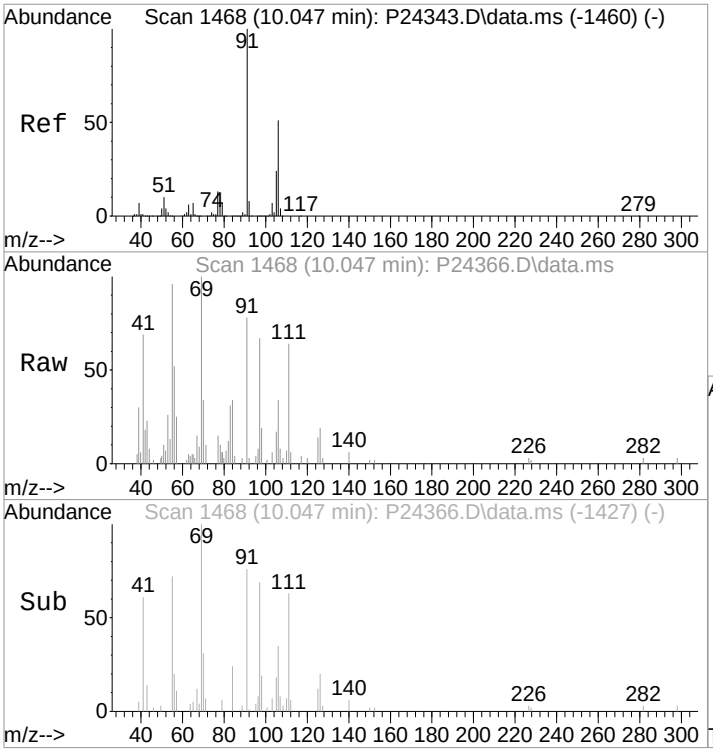


#55
Methylcyclohexane
Concen: 0.76 ppb
RT: 7.054 min Scan# 977
Delta R.T. 0.006 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion: 55 Resp: 3365

Ion	Ratio	Lower	Upper
55	100		
83	141.1	113.1	153.1
98	88.5	45.0	85.0#

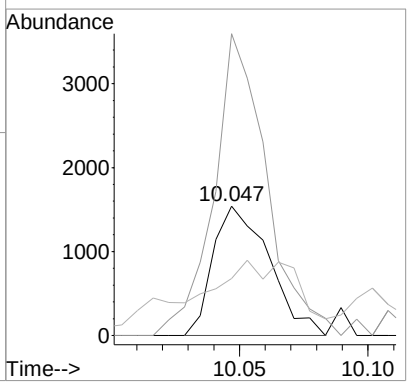


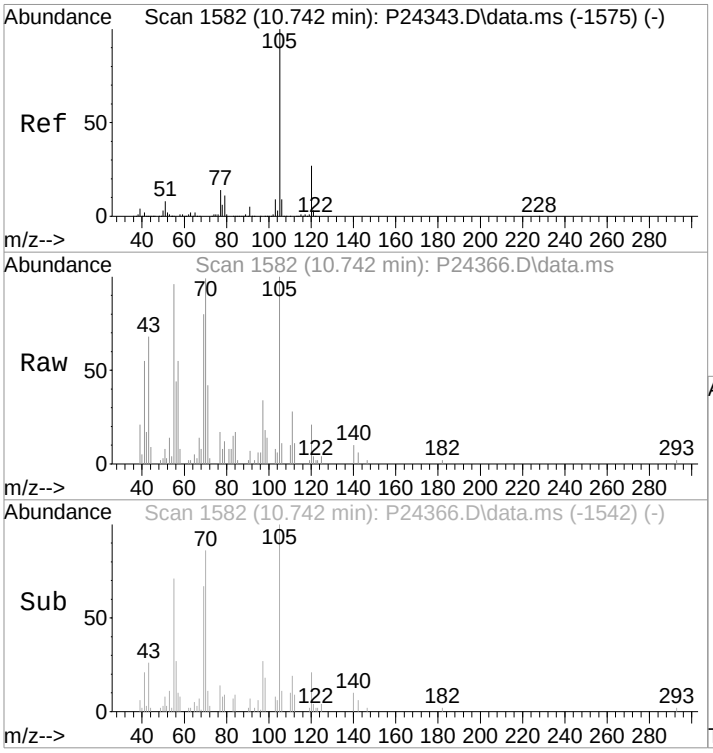


#83
(m+p)Xylene
Concen: 0.39 ppb
RT: 10.047 min Scan# 1468
Delta R.T. 0.000 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion:106 Resp: 2352

Ion	Ratio	Lower	Upper
106	100		
91	233.3	175.0	215.0#
77	44.1	6.3	46.3

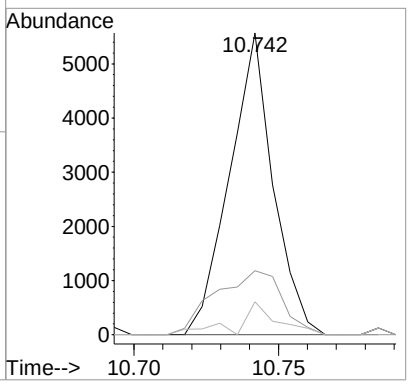


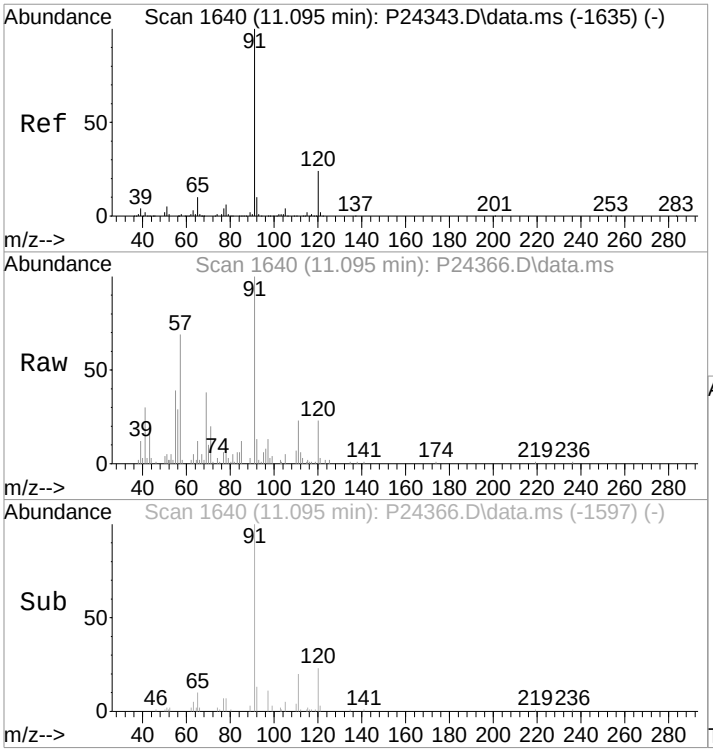


#89
Isopropylbenzene
Concen: 0.42 ppb
RT: 10.742 min Scan# 1582
Delta R.T. 0.000 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion:105 Resp: 5851

Ion	Ratio	Lower	Upper
105	100		
120	21.2	7.2	47.2
106	10.9	0.0	28.8

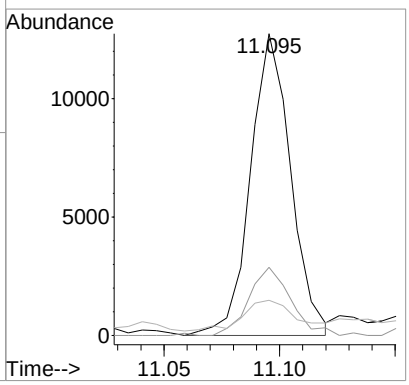


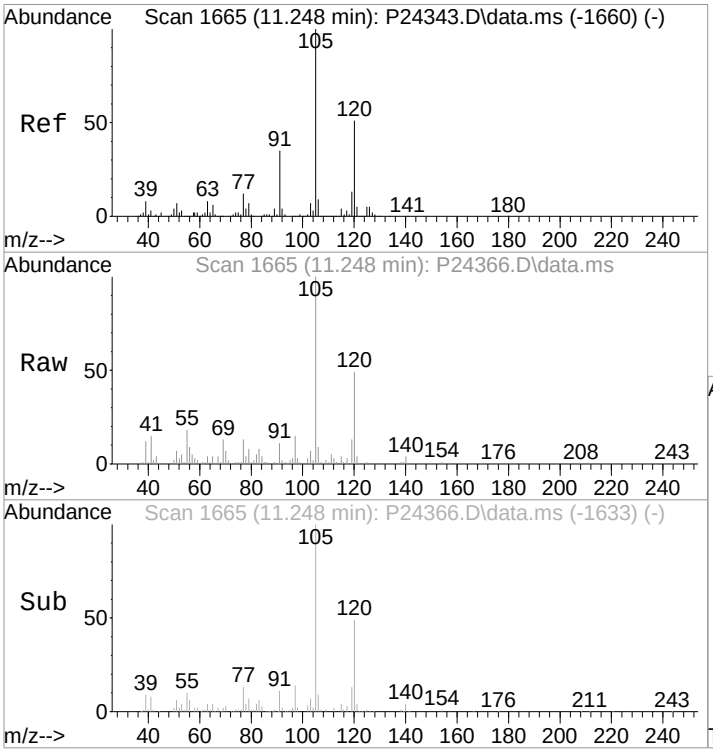


#95
n-Propylbenzene
Concen: 0.98 ppb
RT: 11.095 min Scan# 1640
Delta R.T. 0.000 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion: 91 Resp: 15442

Ion	Ratio	Lower	Upper
91	100		
120	22.6	4.4	44.4
65	11.6	0.0	30.4

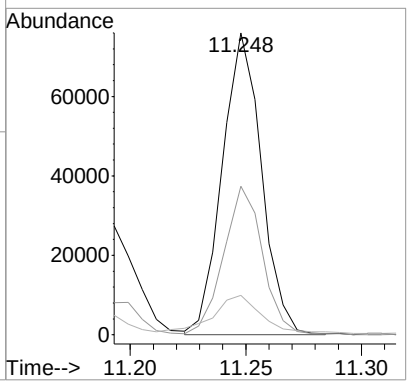


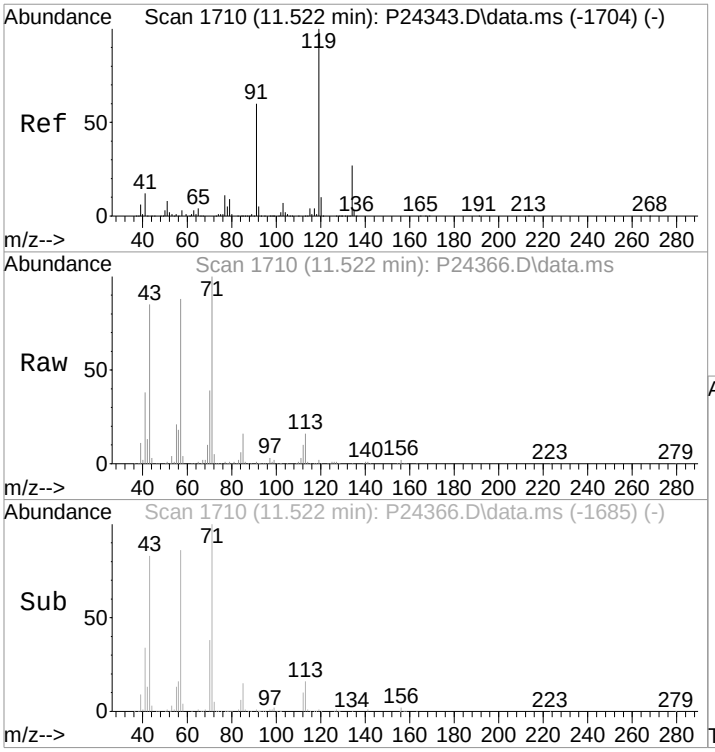


#99
1,3,5-Trimethylbenzene
Concen: 7.85 ppb
RT: 11.248 min Scan# 1665
Delta R.T. 0.000 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion:105 Resp: 89770

Ion	Ratio	Lower	Upper
105	100		
120	49.2	30.8	70.8
77	13.0	0.0	32.5

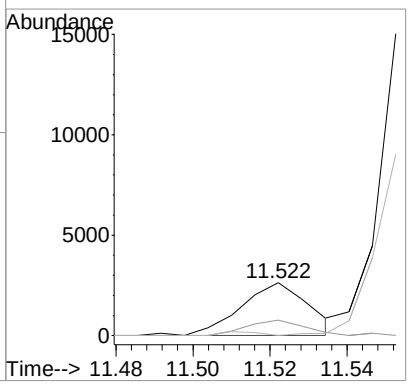


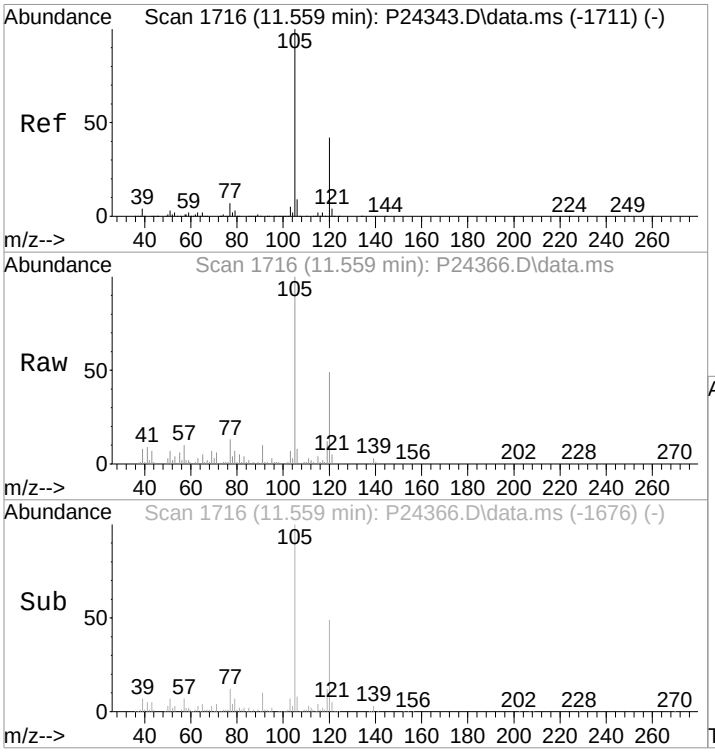


#100
tert-Butylbenzene
Concen: 0.32 ppb
RT: 11.522 min Scan# 1710
Delta R.T. 0.000 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion:119 Resp: 3185

Ion	Ratio	Lower	Upper
119	100		
134	29.4	7.0	47.0
103	0.0	0.0	26.6

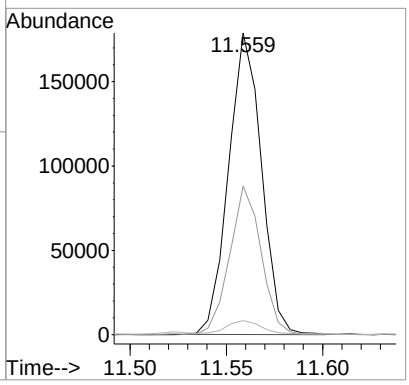


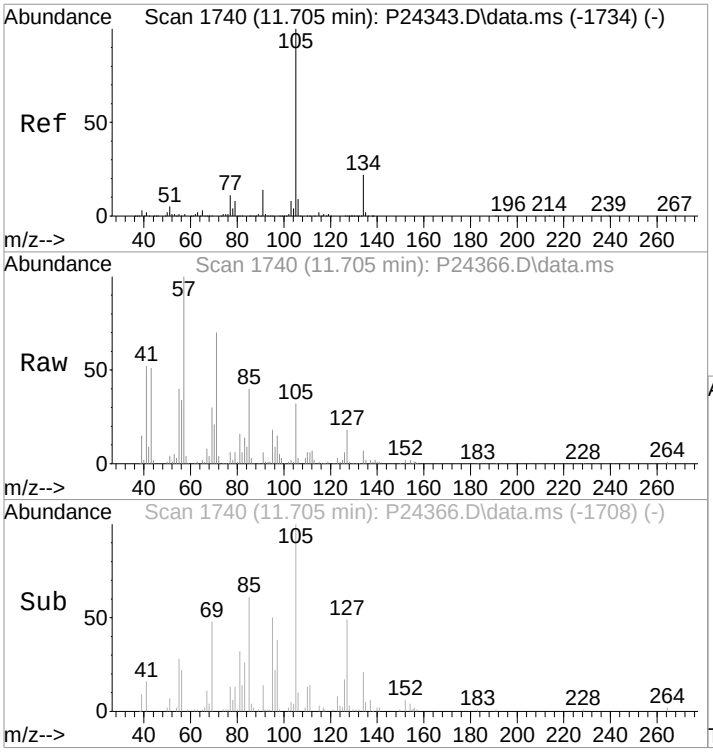


#101
1,2,4-Trimethylbenzene
Concen: 17.93 ppb
RT: 11.559 min Scan# 1716
Delta R.T. 0.000 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion:105 Resp: 212046

Ion	Ratio	Lower	Upper
105	100		
120	49.3	26.4	66.4
65	4.7	0.0	24.1

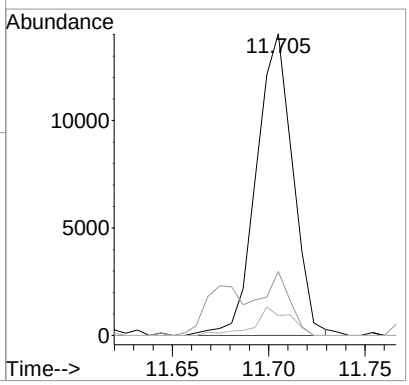


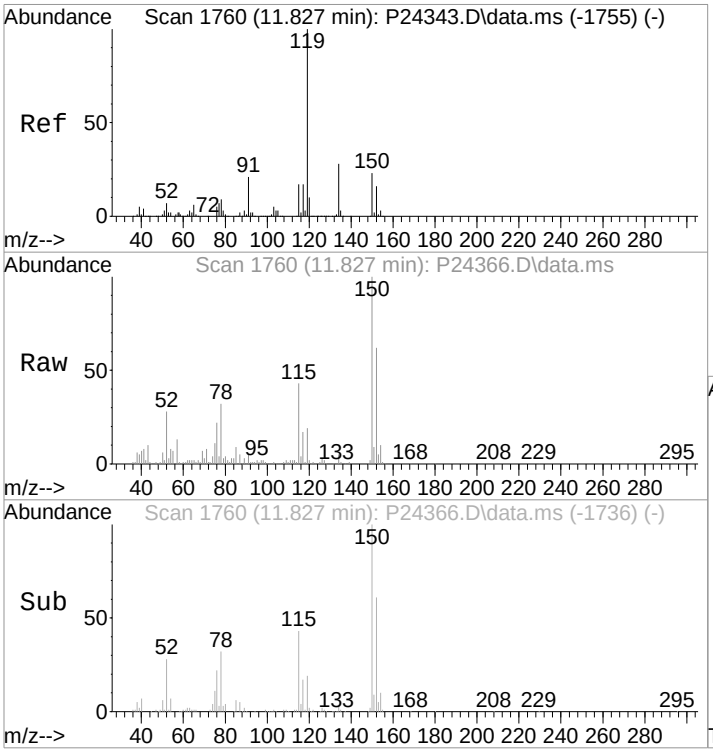


#103
sec-Butylbenzene
Concen: 1.28 ppb
RT: 11.705 min Scan# 1740
Delta R.T. 0.000 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion:105 Resp: 18472

Ion	Ratio	Lower	Upper
105	100		
134	21.2	1.8	41.8
103	6.6	0.0	27.9

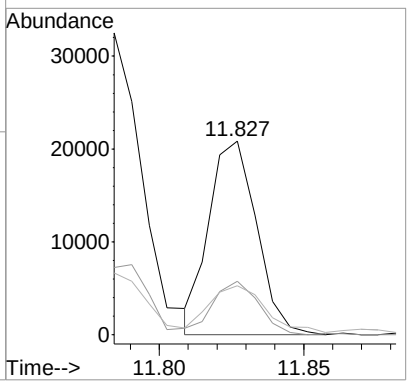


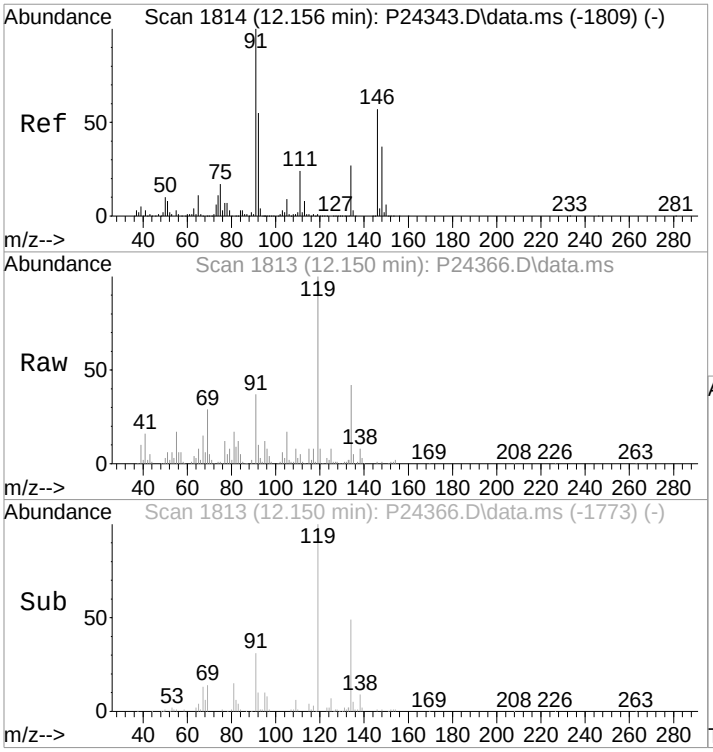


#104
p-Isopropyltoluene
Concen: 2.01 ppb
RT: 11.827 min Scan# 1760
Delta R.T. 0.000 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion:119 Resp: 24020

Ion	Ratio	Lower	Upper
119	100		
134	27.7	7.6	47.6
91	25.3	1.3	41.3

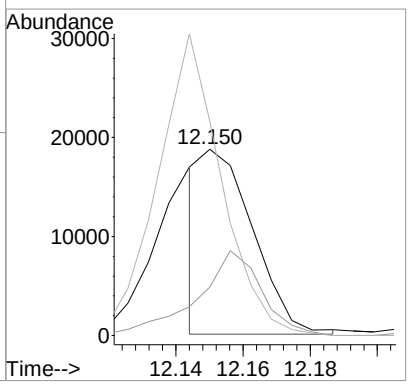




#109
n-Butylbenzene
Concen: 1.90 ppb m
RT: 12.150 min Scan# 1813
Delta R.T. -0.006 min
Lab File: P24366.D
Acq: 21 Feb 2019 2:46 pm

Tgt Ion: 91 Resp: 19990

Ion	Ratio	Lower	Upper
91	100		
92	26.0	34.7	74.7#
134	115.1	6.8	46.8#



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24366.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.609	77	84	86	rBV5	16606	30451	1.58%	0.125%
2	5.267	673	684	694	rBV2	154832	427019	22.17%	1.748%
3	5.408	696	707	718	rVV2	334147	865526	44.93%	3.544%
4	5.792	760	770	783	rBV2	209631	510683	26.51%	2.091%
5	6.493	874	885	897	rBV	557454	1129079	58.61%	4.623%
6	7.054	970	977	981	rBV5	10223	21660	1.12%	0.089%
7	8.248	1168	1173	1175	rBV	17054	26252	1.36%	0.107%
8	8.297	1175	1181	1189	rVB	1007300	1636450	84.95%	6.700%
9	8.651	1233	1239	1244	rVB3	16903	31005	1.61%	0.127%
10	8.974	1286	1292	1297	rVB3	12517	19542	1.01%	0.080%
11	9.078	1304	1309	1313	rBV	29301	39618	2.06%	0.162%
12	9.199	1322	1329	1336	rBV3	36726	89380	4.64%	0.366%
13	9.273	1336	1341	1345	rVB	44212	67539	3.51%	0.277%
14	9.327	1345	1350	1355	rBV	54385	88449	4.59%	0.362%
15	9.553	1378	1387	1391	rVV2	63939	154168	8.00%	0.631%
16	9.620	1395	1398	1403	rVB	101642	134791	7.00%	0.552%
17	9.736	1411	1417	1421	rBV	172076	246173	12.78%	1.008%
18	9.785	1421	1425	1431	rVV	896245	1259605	65.39%	5.157%
19	9.864	1435	1438	1443	rVB5	10856	19512	1.01%	0.080%
20	9.919	1443	1447	1453	rBV6	28544	53336	2.77%	0.218%
21	10.022	1455	1464	1467	rBV2	59152	117777	6.11%	0.482%
22	10.065	1467	1471	1475	rVB	118723	144386	7.50%	0.591%
23	10.102	1475	1477	1490	rVB3	85386	148820	7.73%	0.609%
24	10.211	1490	1495	1500	rBV2	43017	67225	3.49%	0.275%
25	10.291	1503	1508	1510	rBV	43678	59066	3.07%	0.242%
26	10.346	1510	1517	1522	rBV3	297032	463082	24.04%	1.896%
27	10.431	1525	1531	1536	rBV2	187991	311555	16.17%	1.276%
28	10.480	1536	1539	1542	rVB	97884	117471	6.10%	0.481%
29	10.553	1542	1551	1555	rBV	509193	790682	41.05%	3.237%
30	10.602	1555	1559	1560	rBV	100103	129255	6.71%	0.529%
31	10.626	1560	1563	1567	rVB	339839	424307	22.03%	1.737%
32	10.669	1567	1570	1575	rVB2	208027	292924	15.21%	1.199%
33	10.724	1575	1579	1584	rVB4	100492	167205	8.68%	0.685%
34	10.785	1584	1589	1590	rBV2	94135	135343	7.03%	0.554%
35	10.809	1590	1593	1597	rBV	336149	416483	21.62%	1.705%
36	10.864	1597	1602	1607	rVB3	1319855	1839234	95.48%	7.531%
37	10.913	1607	1610	1613	rVB2	65745	76080	3.95%	0.311%
38	10.949	1613	1616	1618	rBV2	106396	127224	6.60%	0.521%
39	10.980	1618	1621	1623	rBV	79782	107312	5.57%	0.439%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

40	11.010	1623	1626	1629	rVB2	210663	253272	13.15%	1.037%
41	11.047	1629	1632	1636	rVB2	60686	81083	4.21%	0.332%
42	11.095	1636	1640	1642	rBV3	42485	51241	2.66%	0.210%
43	11.132	1642	1646	1650	rBV4	102168	176420	9.16%	0.722%
44	11.181	1650	1654	1658	rBV3	157953	278111	14.44%	1.139%
45	11.230	1658	1662	1667	rBV2	379644	672745	34.92%	2.754%
46	11.278	1667	1670	1675	rVB3	207529	314724	16.34%	1.289%
47	11.327	1675	1678	1680	rBV3	21759	33400	1.73%	0.137%
48	11.376	1683	1686	1688	rBV	43269	38696	2.01%	0.158%
49	11.406	1688	1691	1693	rBV	50586	66625	3.46%	0.273%
50	11.437	1693	1696	1701	rVB4	240217	288381	14.97%	1.181%
51	11.492	1701	1705	1707	rBV	253190	294713	15.30%	1.207%
52	11.522	1707	1710	1713	rBV	718691	745242	38.69%	3.051%
53	11.559	1713	1716	1719	rBV	480418	558980	29.02%	2.289%
54	11.650	1726	1731	1733	rBV	234675	311723	16.18%	1.276%
55	11.675	1733	1735	1737	rVV2	167760	224573	11.66%	0.919%
56	11.705	1737	1740	1744	rVV2	271276	425429	22.09%	1.742%
57	11.760	1744	1749	1751	rVV	438962	608485	31.59%	2.491%
58	11.790	1751	1754	1756	rVV3	232436	319449	16.58%	1.308%
59	11.839	1756	1762	1768	rVV2	1056097	1926264	100.00%	7.887%
60	11.894	1768	1771	1779	rVB2	292304	526619	27.34%	2.156%
61	11.967	1779	1783	1785	rBV3	59807	76691	3.98%	0.314%
62	11.992	1785	1787	1795	rVB5	90251	177398	9.21%	0.726%
63	12.089	1795	1803	1807	rBV2	191660	351682	18.26%	1.440%
64	12.138	1807	1811	1818	rVB4	365160	605210	31.42%	2.478%
65	12.211	1818	1823	1825	rBV6	40774	79825	4.14%	0.327%
66	12.248	1826	1829	1833	rVB2	100958	115619	6.00%	0.473%
67	12.296	1833	1837	1844	rVB5	153569	290768	15.09%	1.191%
68	12.388	1844	1852	1854	rBV2	181084	370070	19.21%	1.515%
69	12.443	1859	1861	1864	rVB	91466	92082	4.78%	0.377%
70	12.516	1870	1873	1876	rBV3	77581	103934	5.40%	0.426%
71	12.552	1876	1879	1884	rVV3	82231	151619	7.87%	0.621%
72	12.632	1888	1892	1894	rVV3	54853	95608	4.96%	0.391%
73	12.656	1894	1896	1903	rVV4	77097	123104	6.39%	0.504%
74	12.729	1903	1908	1911	rVV2	123675	207229	10.76%	0.848%
75	12.760	1911	1913	1916	rVV	69466	74535	3.87%	0.305%
76	12.802	1916	1920	1922	rVV	77190	102139	5.30%	0.418%
77	12.821	1922	1923	1927	rVV2	44469	45267	2.35%	0.185%
78	12.882	1927	1933	1936	rVV4	43481	73014	3.79%	0.299%
79	12.912	1936	1938	1940	rVV	25759	27197	1.41%	0.111%
80	12.937	1940	1942	1947	rVB5	18581	28580	1.48%	0.117%
81	13.004	1947	1953	1956	rVB5	22830	38523	2.00%	0.158%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

82	13.138	1970	1975	1981	rVB4	53469	83473	4.33%	0.342%
83	13.229	1986	1990	1993	rVV2	14556	24813	1.29%	0.102%
84	13.266	1993	1996	2006	rVB7	36746	81176	4.21%	0.332%
85	13.436	2019	2024	2029	rBV7	11202	22388	1.16%	0.092%

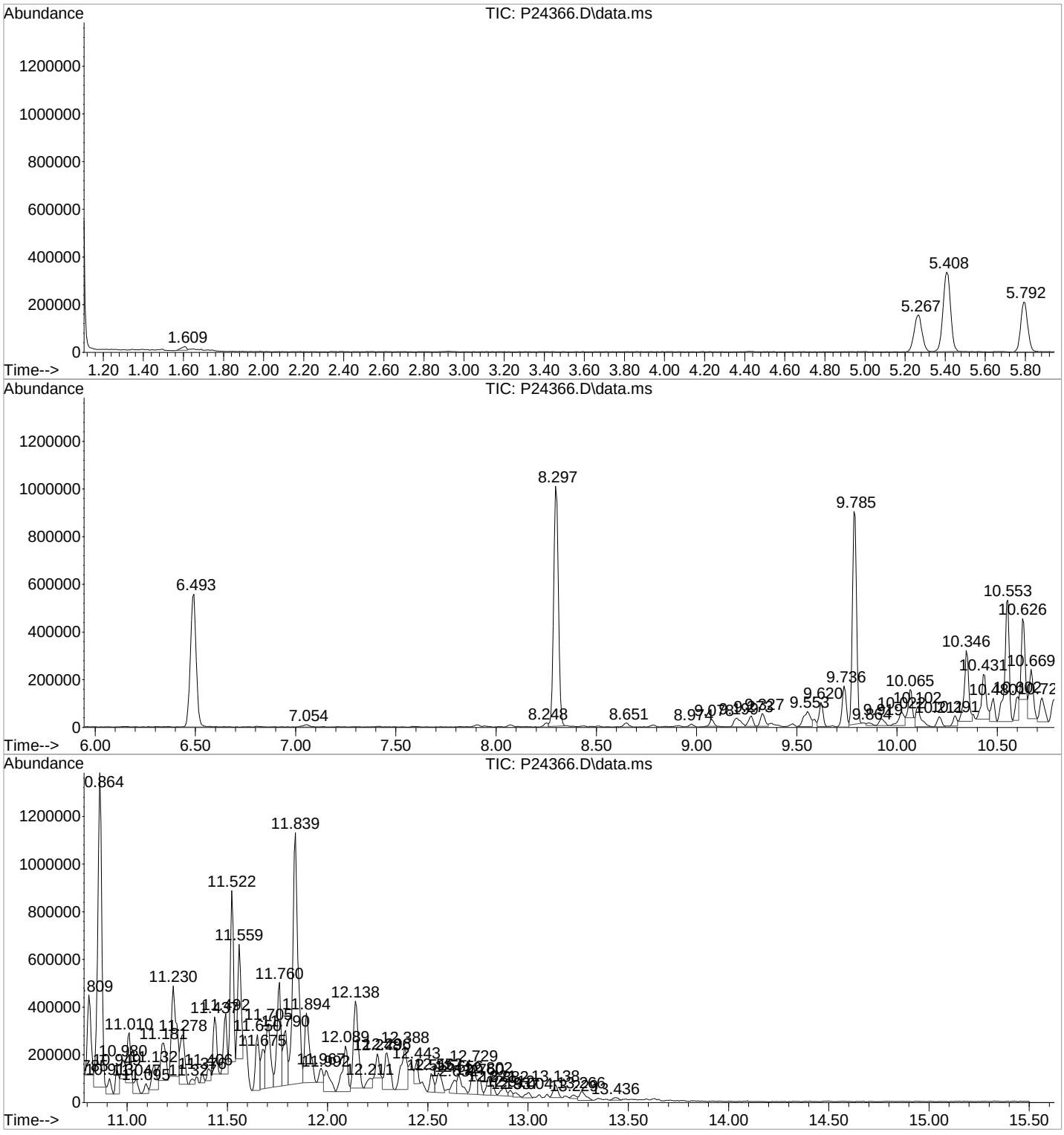
Sum of corrected areas: 24423788

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

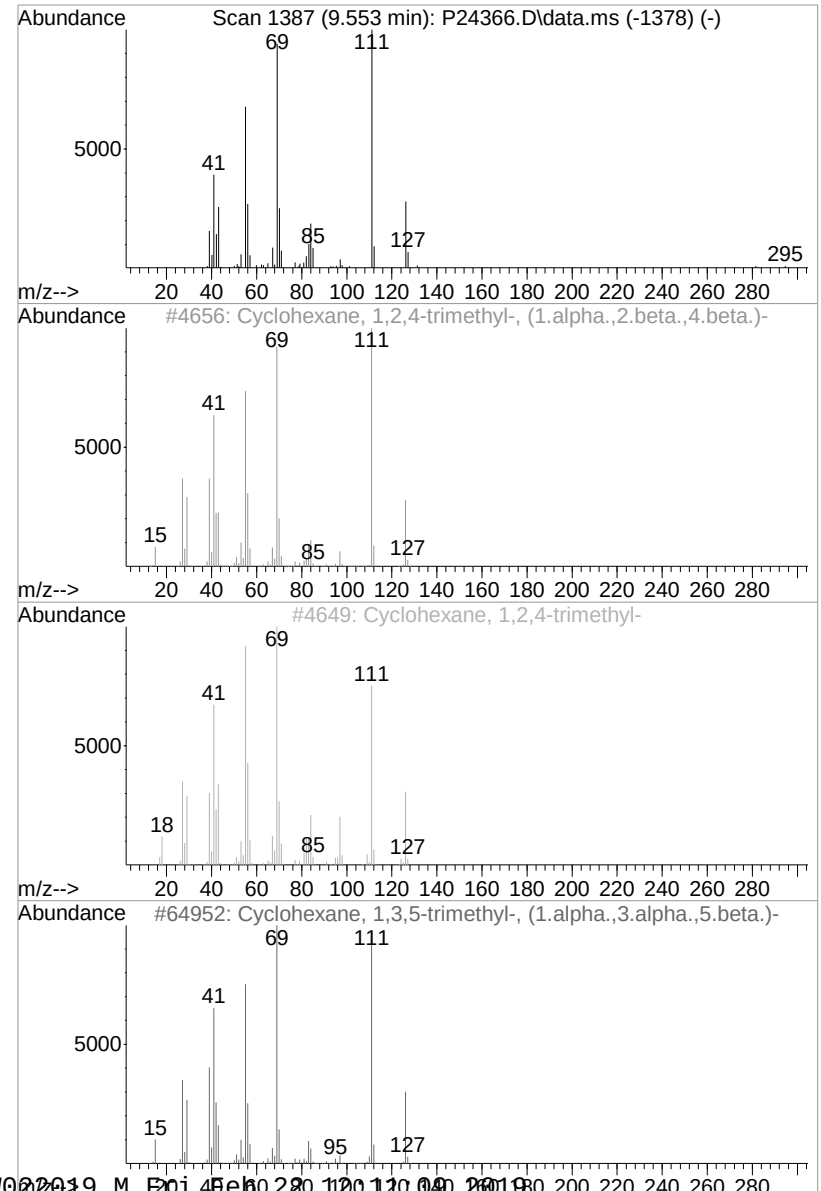
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

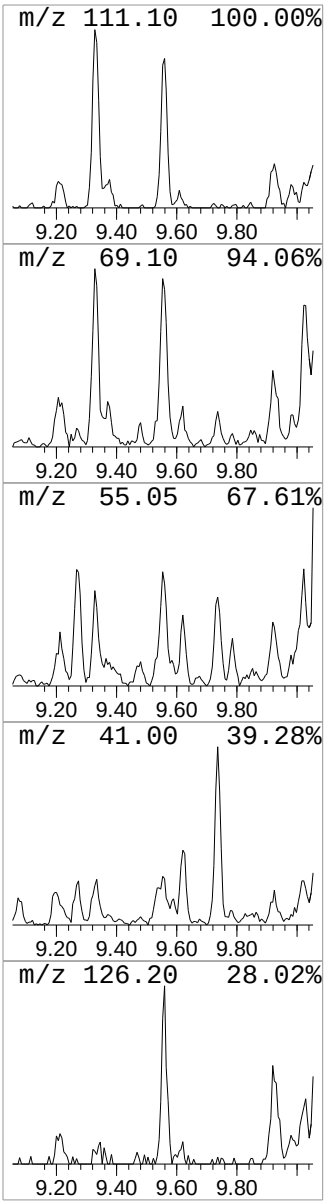
****

Peak Number 1 Cyclohexane, 1,2,4-trimethy... Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.553	6.12 ppb	154168	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,2,4-trimethyl-, (...	126	C9H18	007667-60-9	91
2	Cyclohexane, 1,2,4-trimethyl-	126	C9H18	002234-75-5	91
3	Cyclohexane, 1,3,5-trimethyl-, (...	126	C9H18	001795-26-2	86
4	Cyclohexane, 1,2,4-trimethyl-, (...	126	C9H18	007667-60-9	86
5	Cyclohexane, 1,2,4-trimethyl-	126	C9H18	002234-75-5	81





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

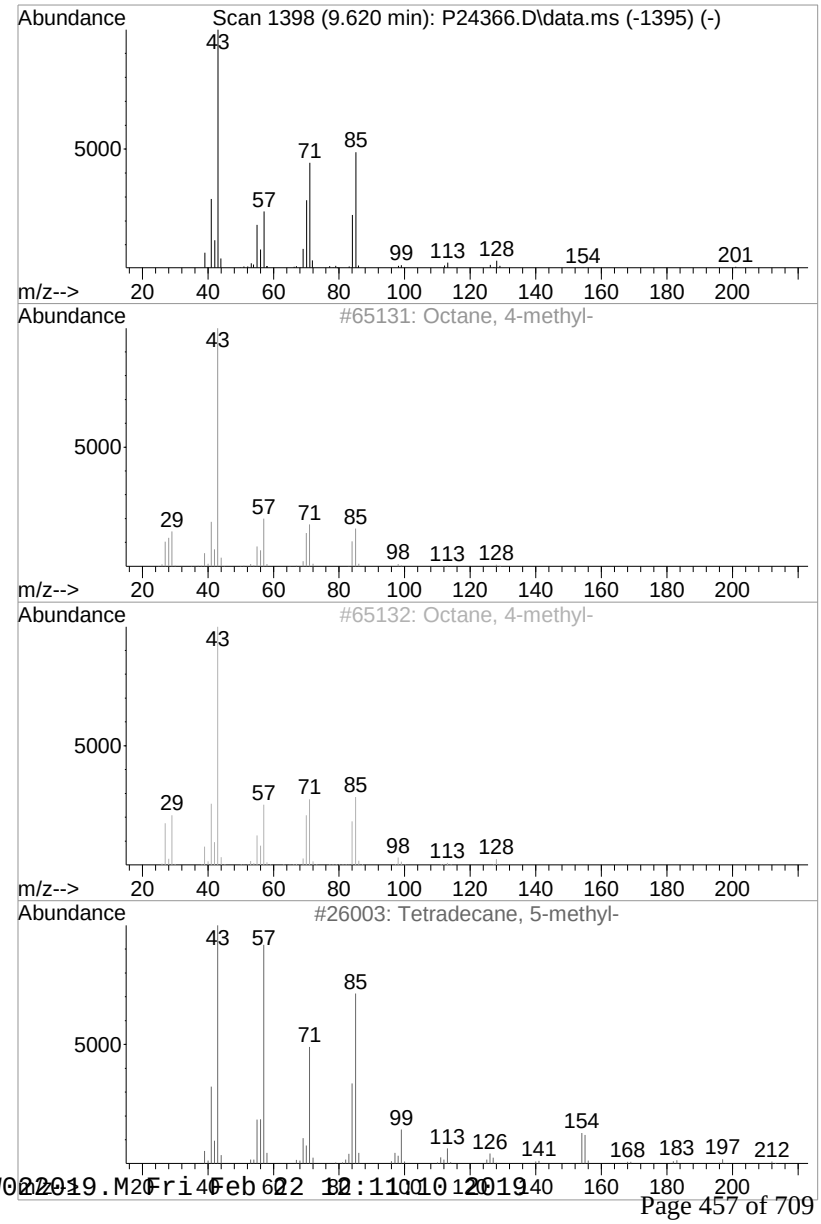
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

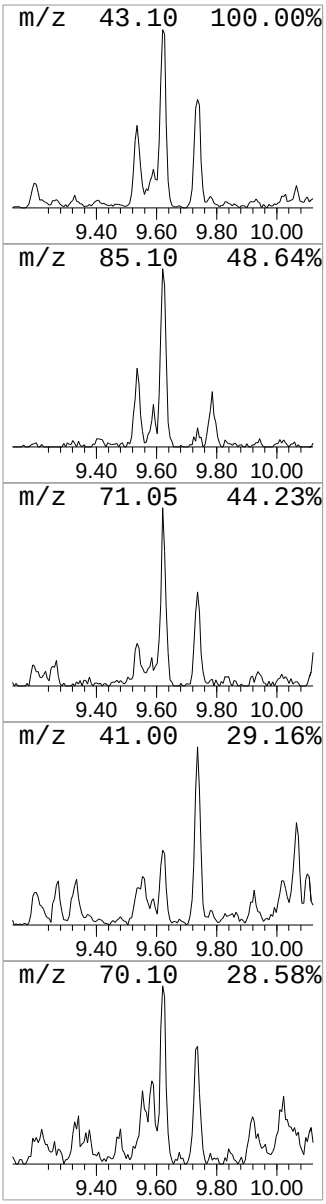
****

Peak Number 2 unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.620	5.35 ppb	134791	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 4-methyl-	128	C9H20	002216-34-4	64
2	Octane, 4-methyl-	128	C9H20	002216-34-4	58
3	Tetradecane, 5-methyl-	212	C15H32	025117-32-2	50
4	Hexane, 2,3,4-trimethyl-	128	C9H20	000921-47-1	50
5	Hexane, 2,3,5-trimethyl-	128	C9H20	001069-53-0	50





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

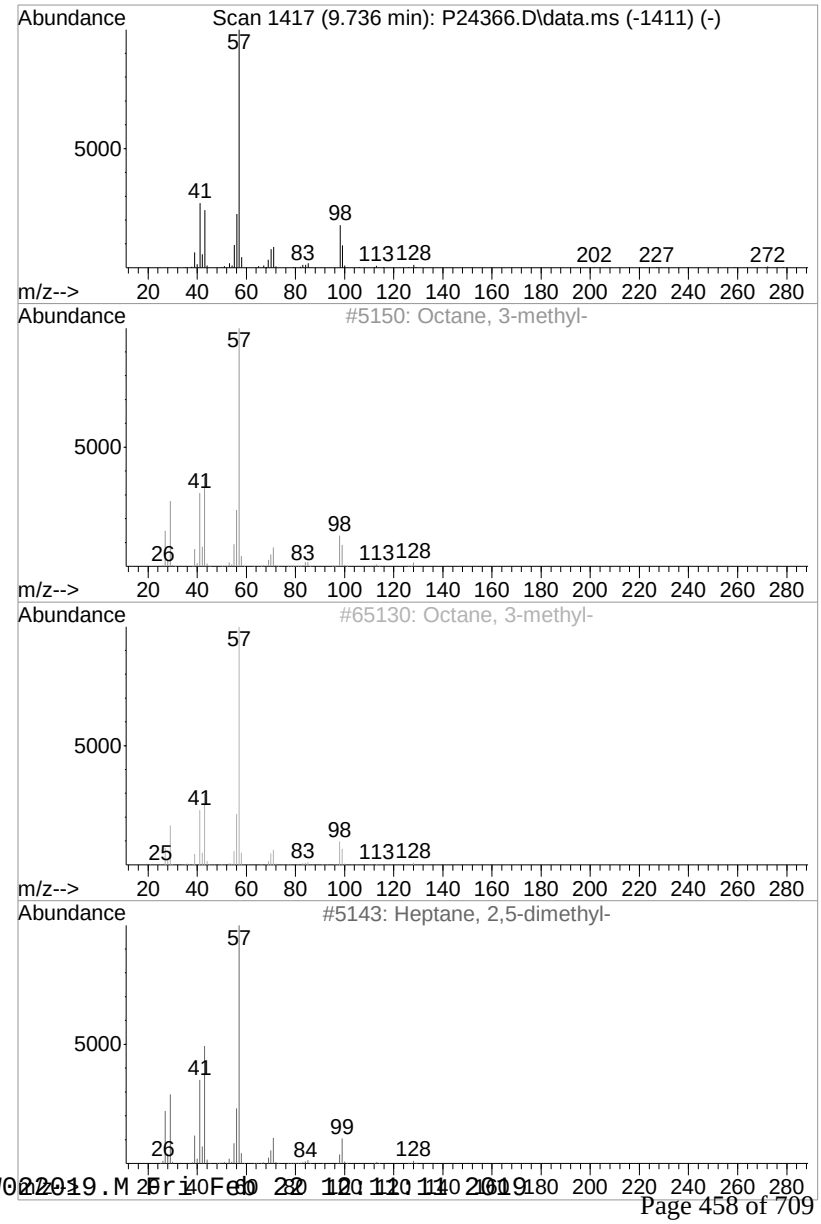
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

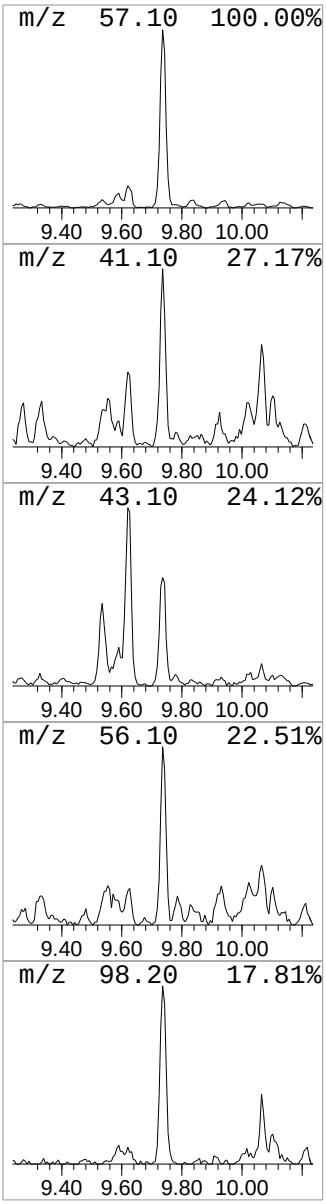
****

Peak Number 3 Octane, 3-methyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.736	9.77 ppb	246173	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	91
2	Octane, 3-methyl-	128	C9H20	002216-33-3	87
3	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	87
4	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	80
5	Butane, 2,2,3,3-tetramethyl-	114	C8H18	000594-82-1	50





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

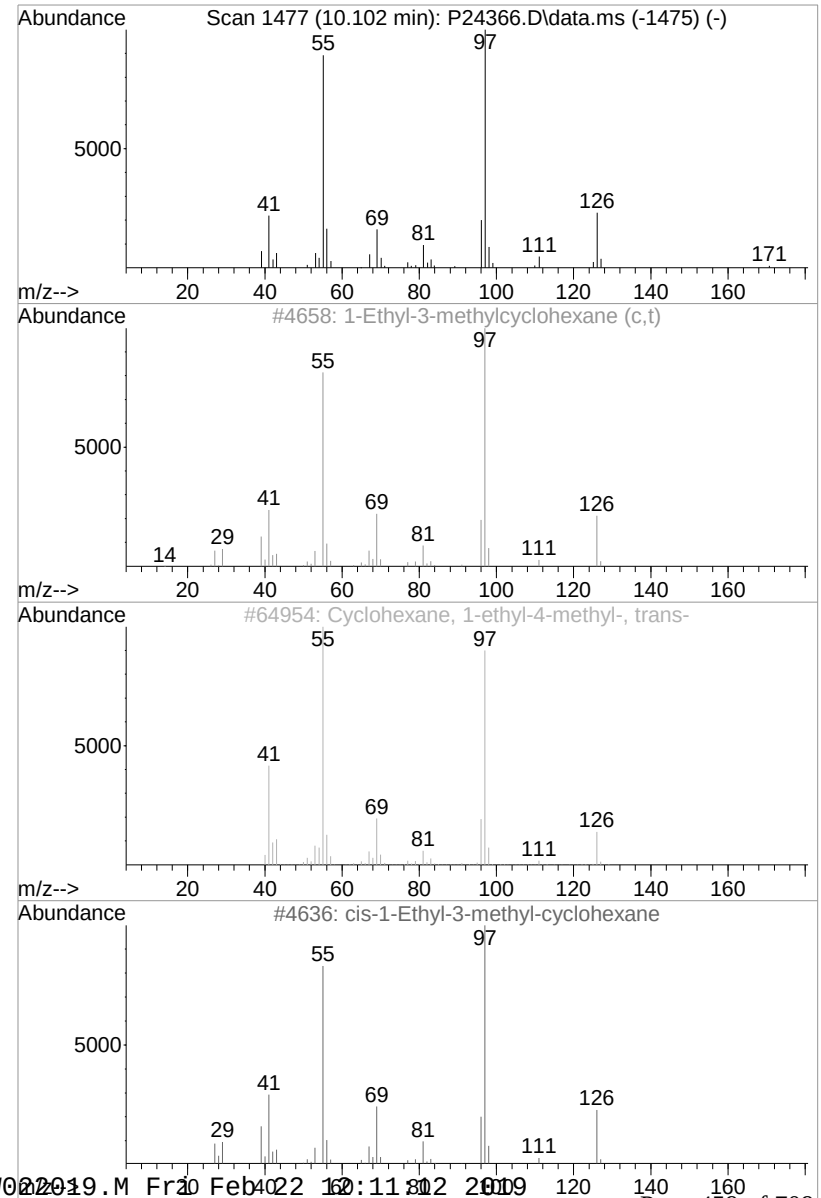
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

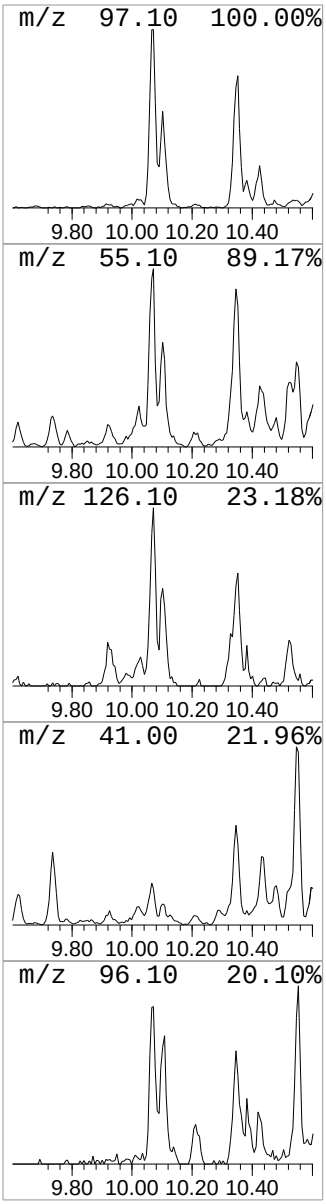
****

Peak Number 4 1-Ethyl-3-methylcyclohexane... Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.102	5.91 ppb	148820	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Ethyl-3-methylcyclohexane (c,t)	126	C9H18	003728-55-0	91
2	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	91
3	cis-1-Ethyl-3-methyl-cyclohexane	126	C9H18	019489-10-2	91
4	Cyclohexane, 1-ethyl-2-methyl-	126	C9H18	003728-54-9	90
5	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	004926-78-7	86





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

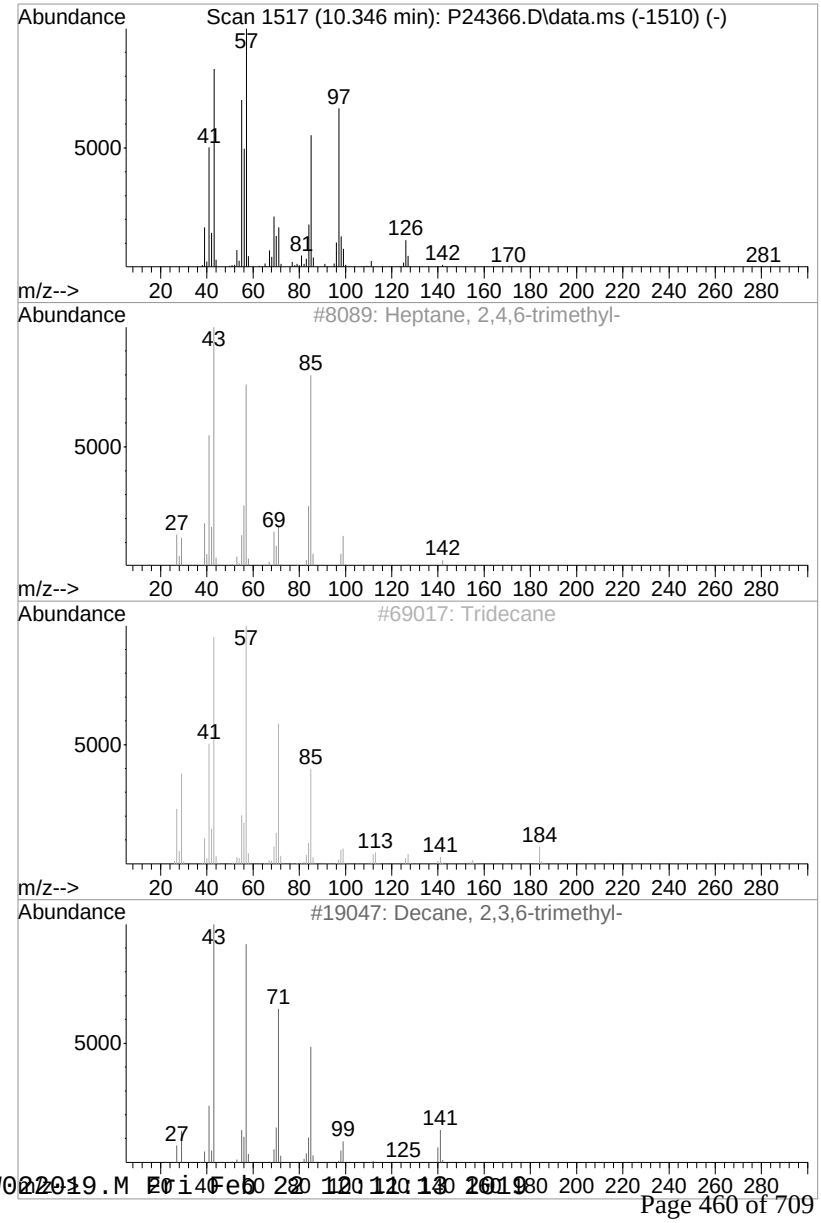
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

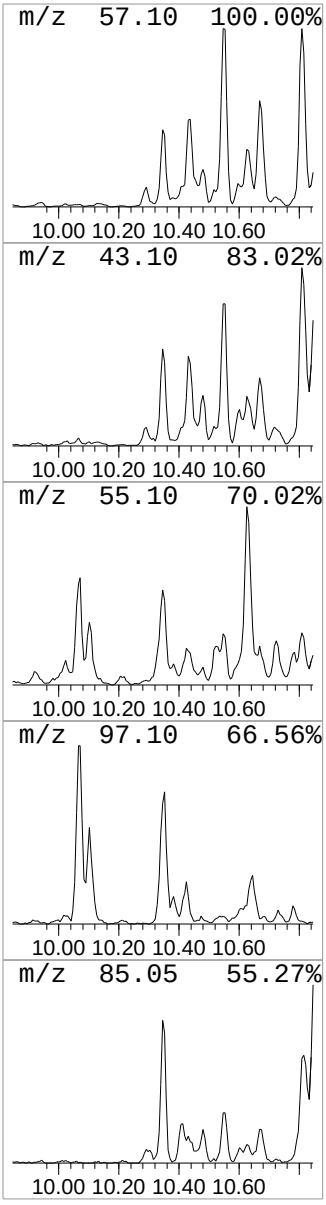
****

Peak Number 5 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.346	18.38 ppb	463082	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 2,4,6-trimethyl-	142	C10H22	002613-61-8	38
2	Tridecane	184	C13H28	000629-50-5	35
3	Decane, 2,3,6-trimethyl-	184	C13H28	062238-12-4	35
4	Undecane, 5,7-dimethyl-	184	C13H28	017312-83-3	35
5	Hexane, 2,4-dimethyl-	114	C8H18	000589-43-5	35





Library Search Compound Report

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Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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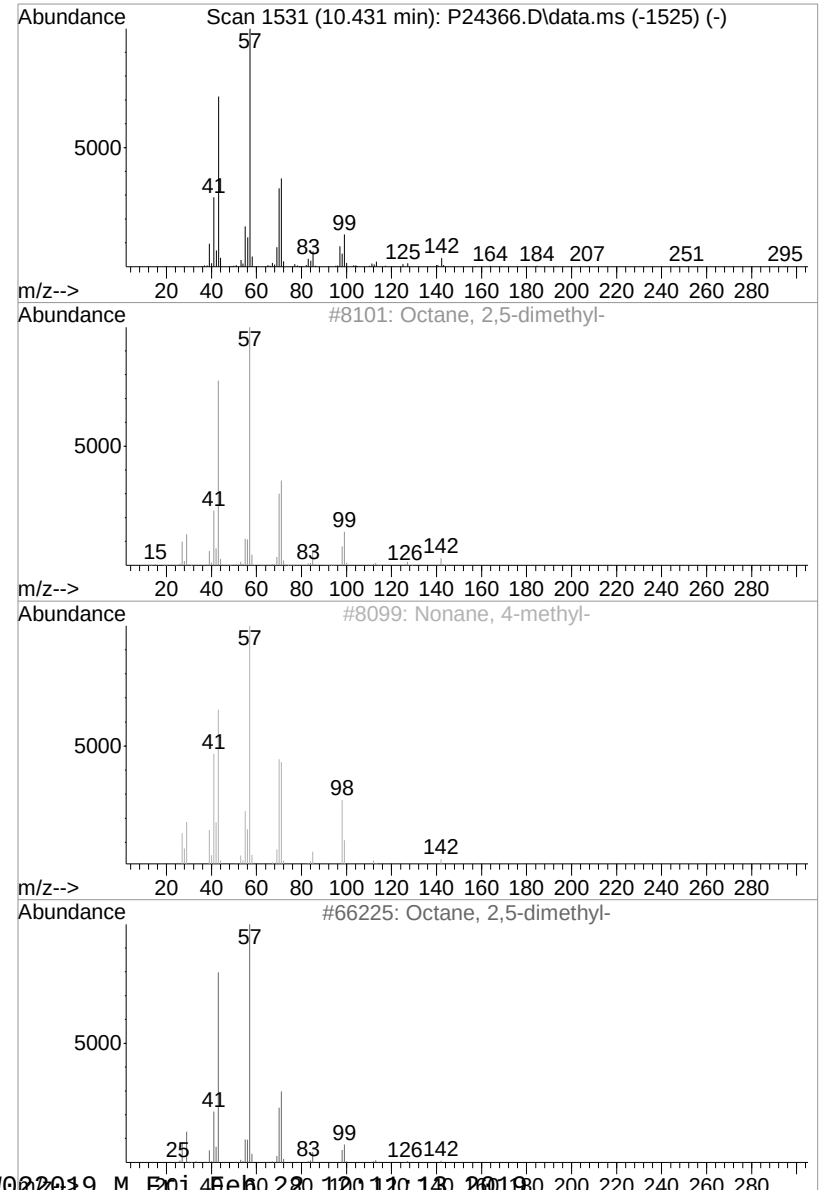
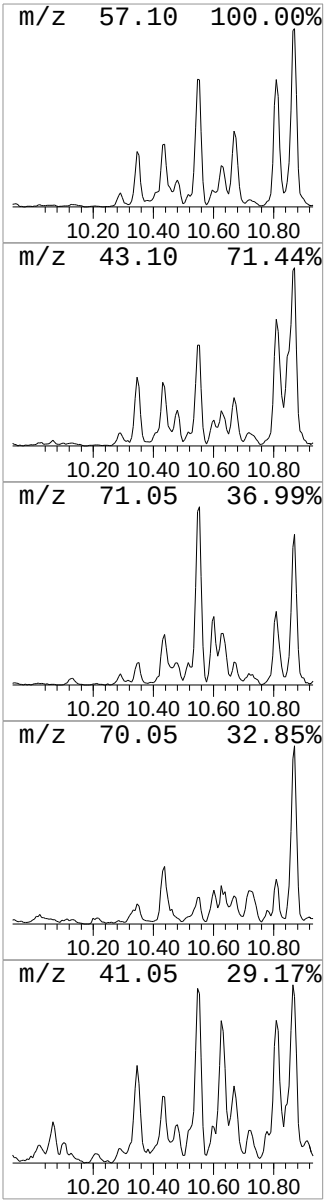
Peak Number 6 Octane, 2,5-dimethyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.431	12.37 ppb	311555	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,5-dimethyl-	142	C10H22	015869-89-3	91
2	Nonane, 4-methyl-	142	C10H22	017301-94-9	87
3	Octane, 2,5-dimethyl-	142	C10H22	015869-89-3	83
4	Octane, 3,5-dimethyl-	142	C10H22	015869-93-9	72
5	Pentane, 2,2,3,3-tetramethyl-	128	C9H20	007154-79-2	64





Library Search Compound Report

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Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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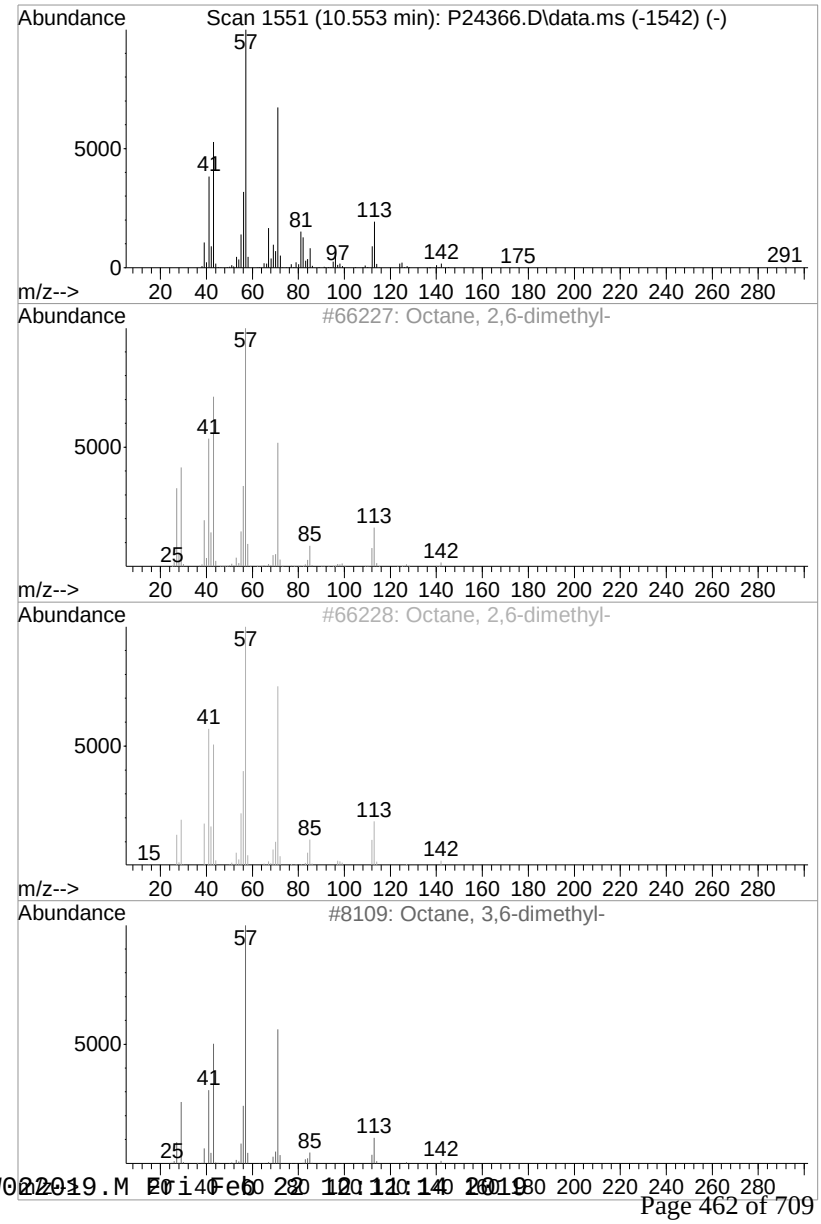
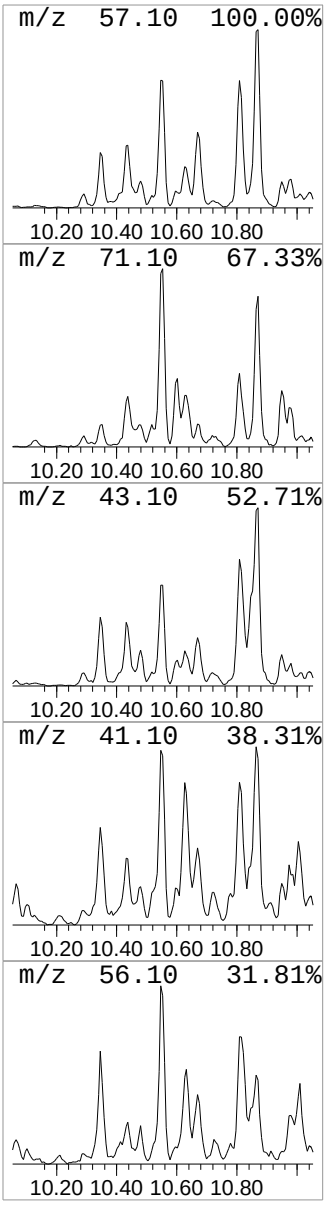
Peak Number 7 Octane, 2,6-dimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.553	31.39 ppb	790682	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	87
2	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	83
3	Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	81
4	Nonane, 3-methyl-	142	C10H22	005911-04-6	68
5	Undecane, 6,6-dimethyl-	184	C13H28	017312-76-4	64





Library Search Compound Report

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Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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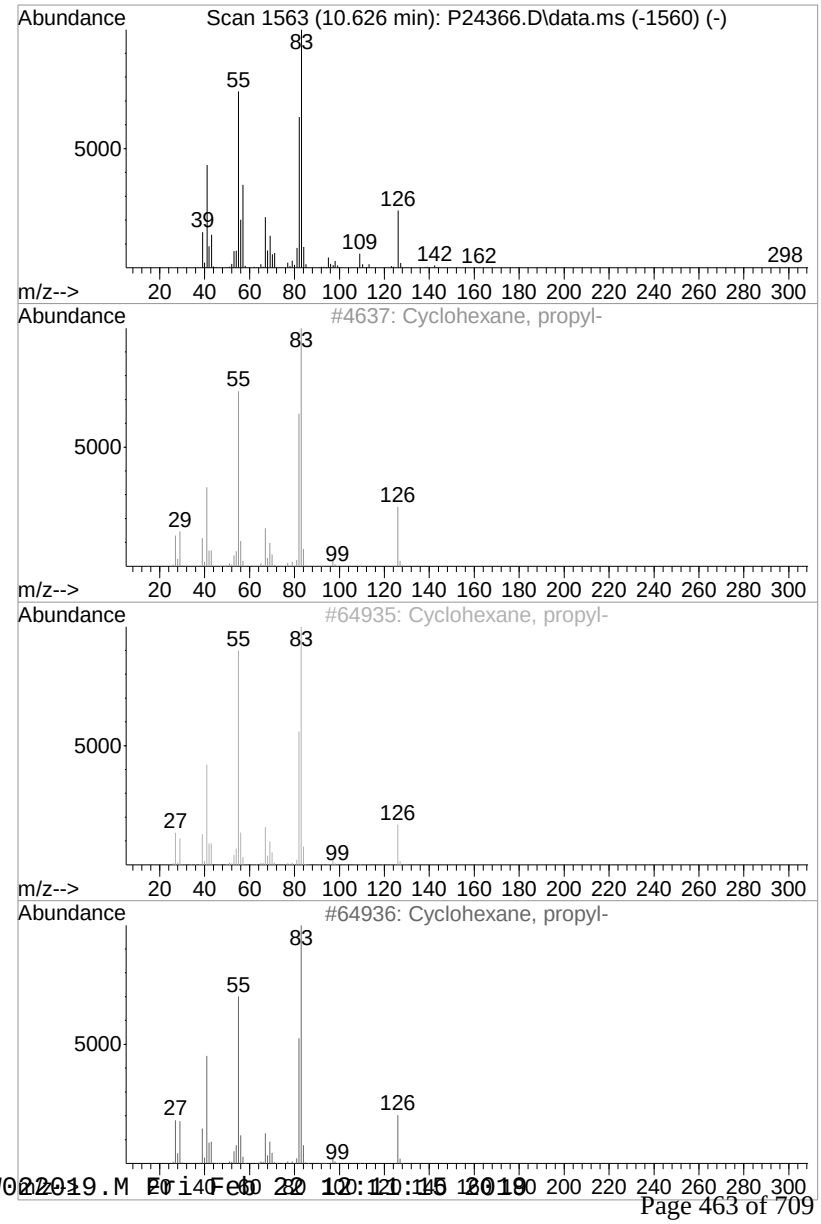
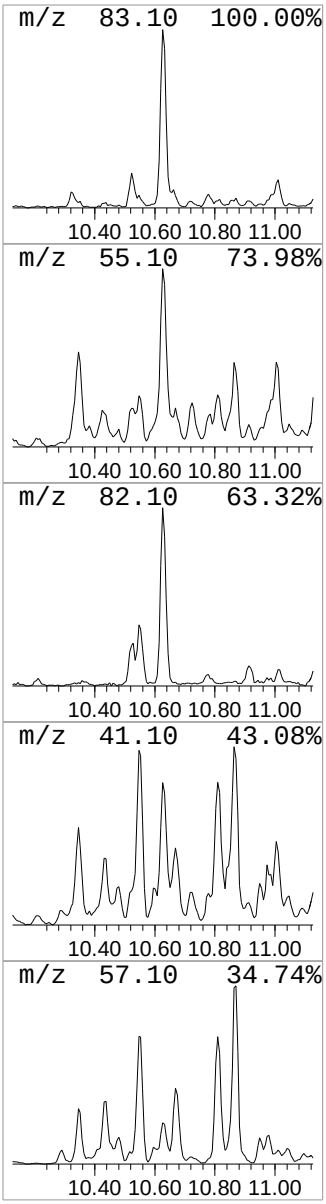
Peak Number 8 Cyclohexane, propyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.626	16.84 ppb	424307	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, propyl-	126	C9H18	001678-92-8	90
2	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
3	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
4	Cyclohexane, propyl-	126	C9H18	001678-92-8	74
5	Cyclohexane, 1,1'-(1,5-pentanedi...	236	C17H32	054833-31-7	72





Library Search Compound Report

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Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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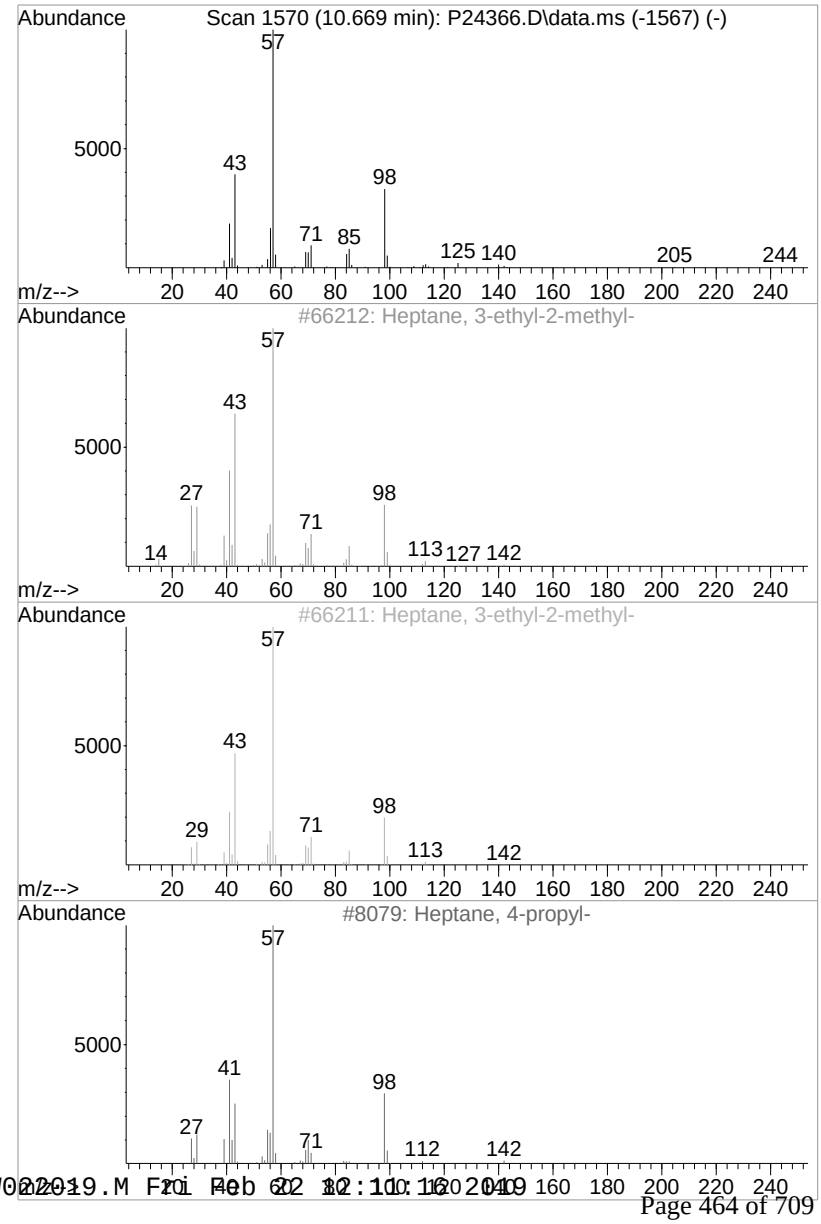
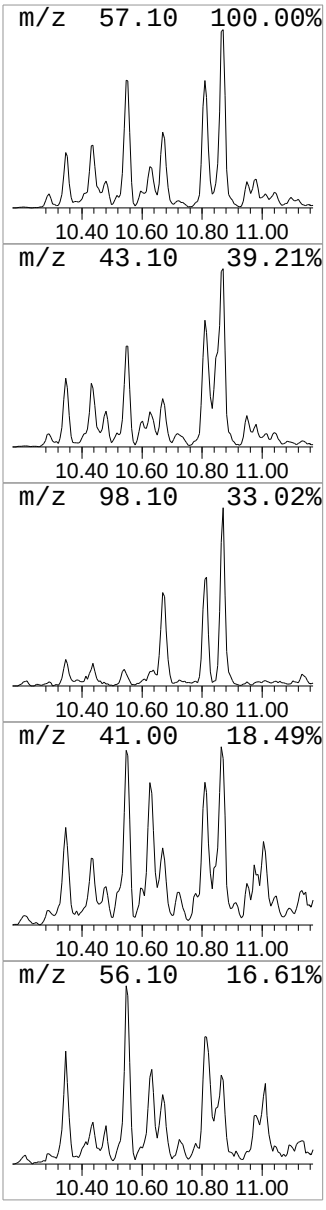
Peak Number 9 unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.669	11.63 ppb	292924	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	59
2	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	59
3	Heptane, 4-propyl-	142	C10H22	003178-29-8	56
4	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	45
5	Undecane, 2,6-dimethyl-	184	C13H28	017301-23-4	43





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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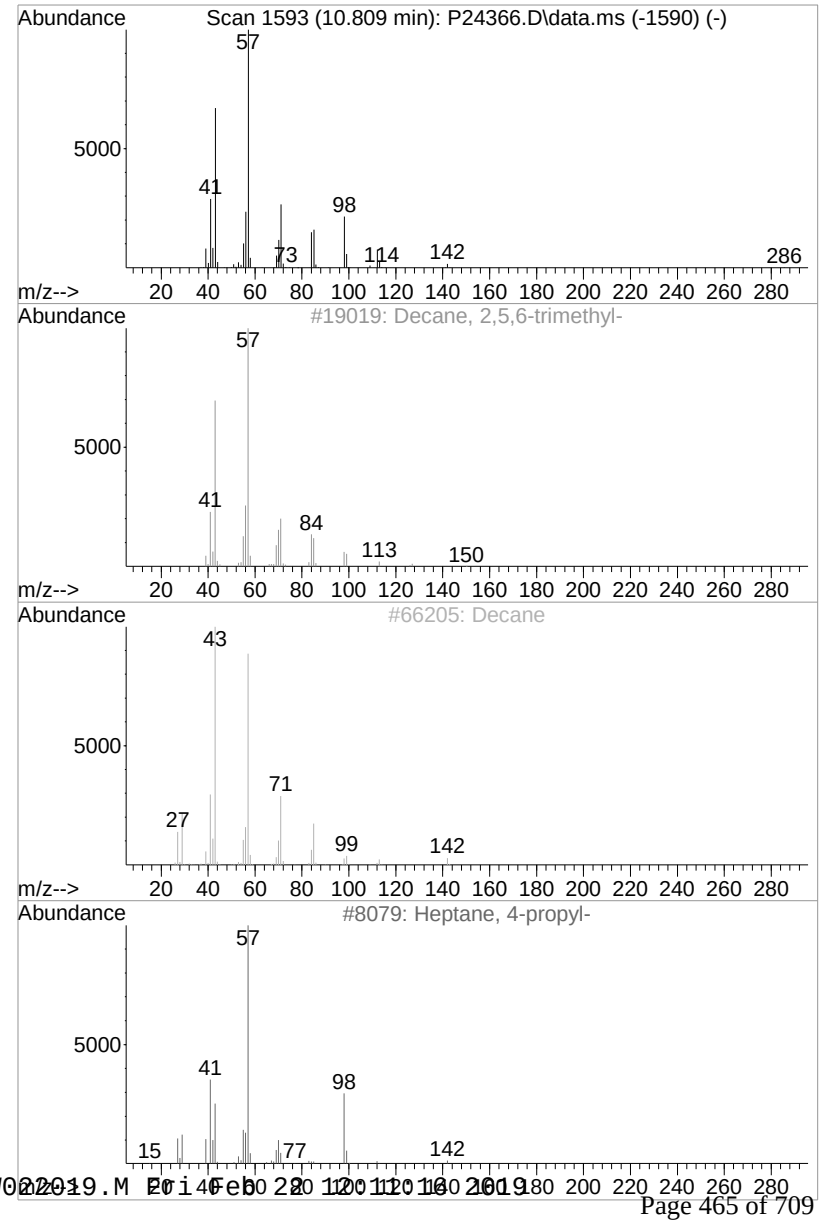
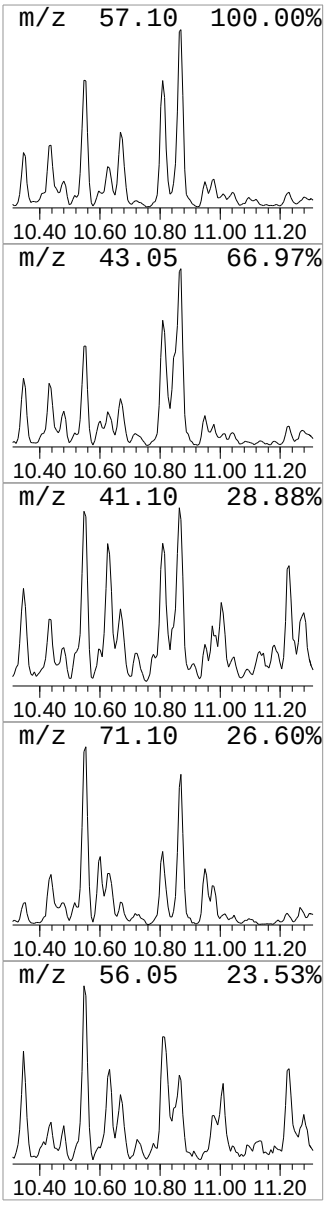
Peak Number 10 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.809	16.53 ppb	416483	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 2,5,6-trimethyl-	184	C13H28	062108-23-0	53
2	Decane	142	C10H22	000124-18-5	50
3	Heptane, 4-propyl-	142	C10H22	003178-29-8	49
4	Octane, 2,3-dimethyl-	142	C10H22	007146-60-3	47
5	Decane	142	C10H22	000124-18-5	47





Library Search Compound Report

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Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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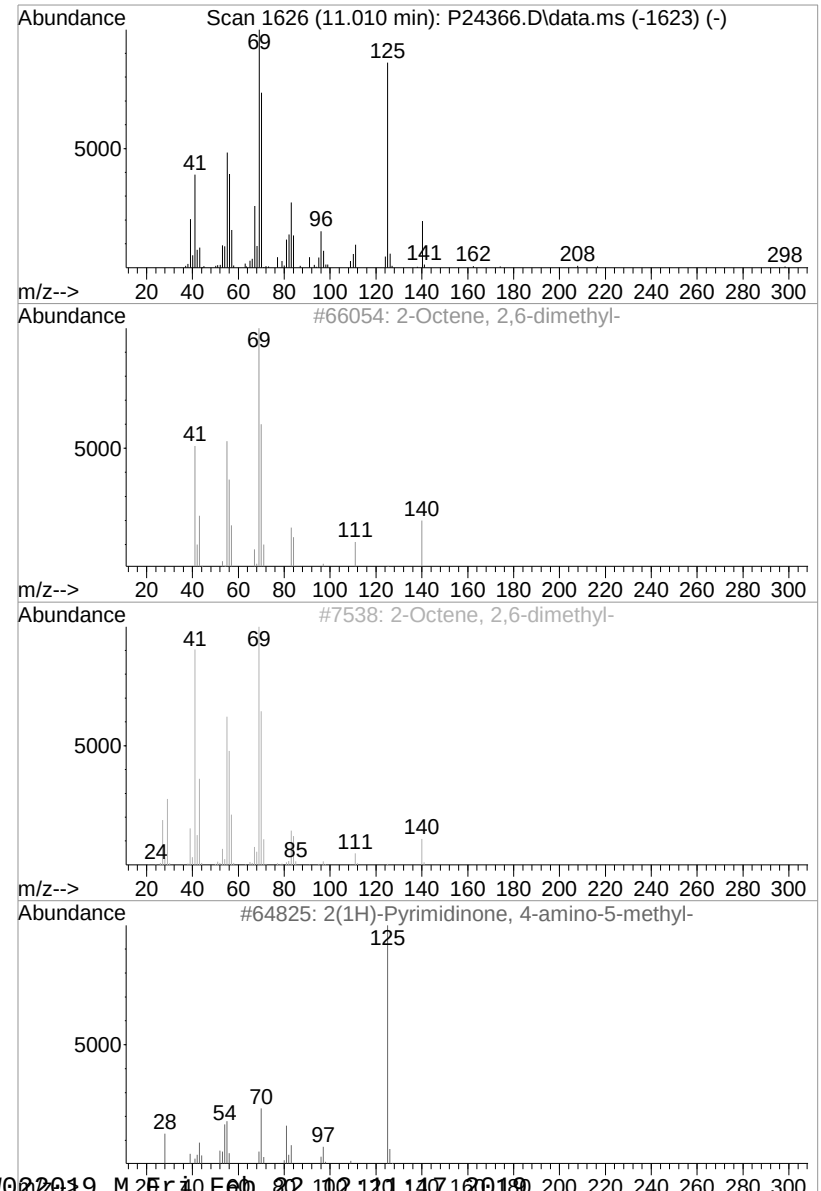
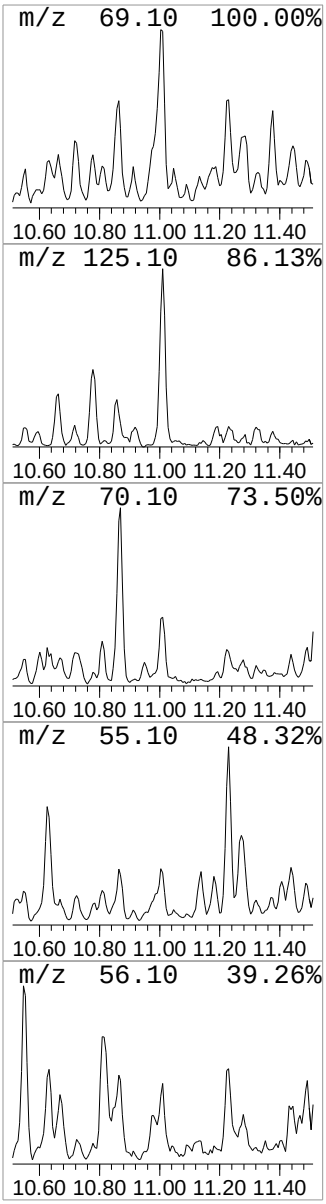
Peak Number 11 unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.010	6.57 ppb	253272	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Octene, 2,6-dimethyl-	140	C10H20	004057-42-5	55
2	2-Octene, 2,6-dimethyl-	140	C10H20	004057-42-5	50
3	2(1H)-Pyrimidinone, 4-amino-5-me...	125	C5H7N3O	000554-01-8	46
4	4-Nonene, 2,3,3-trimethyl-, (Z)-	168	C12H24	063830-68-2	43
5	2(1H)-Pyrimidinone, 4-amino-5-me...	125	C5H7N3O	000554-01-8	38





Library Search Compound Report

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Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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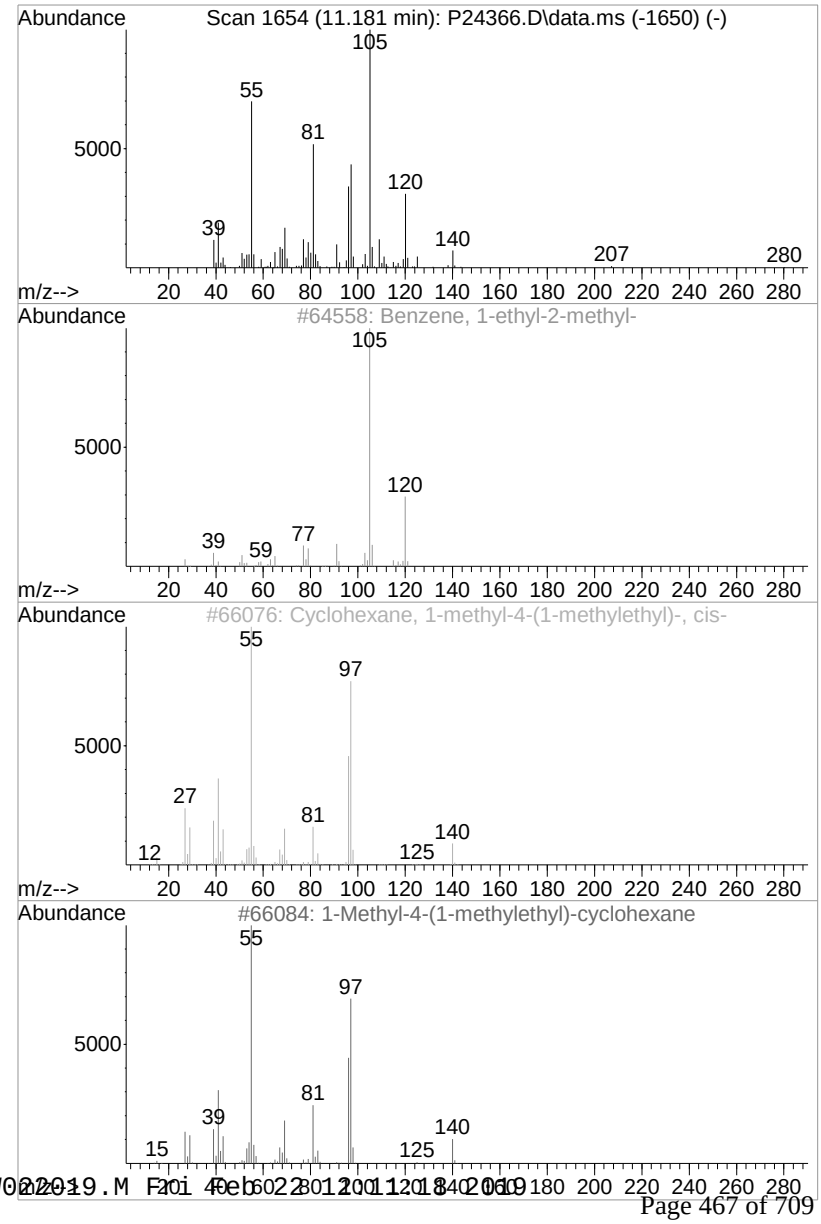
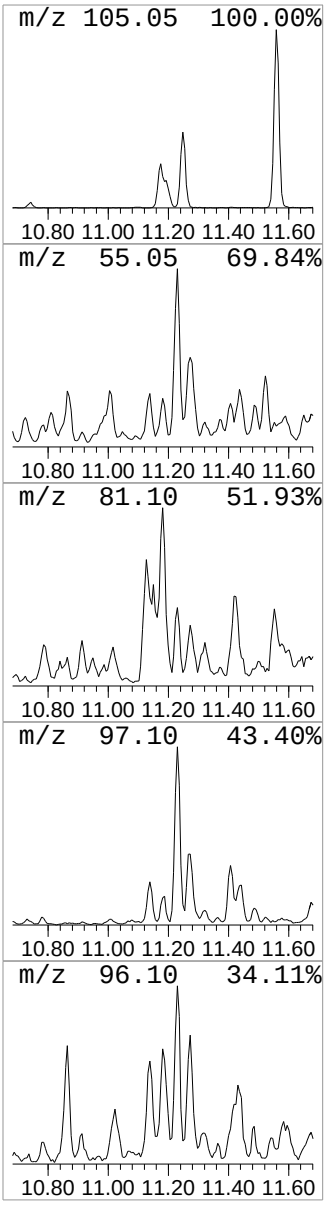
Peak Number 12 unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.181	7.22 ppb	278111	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	70
2	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	006069-98-3	46
3	1-Methyl-4-(1-methylethyl)-cyclo...	140	C10H20	000099-82-1	46
4	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	38
5	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	38





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
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Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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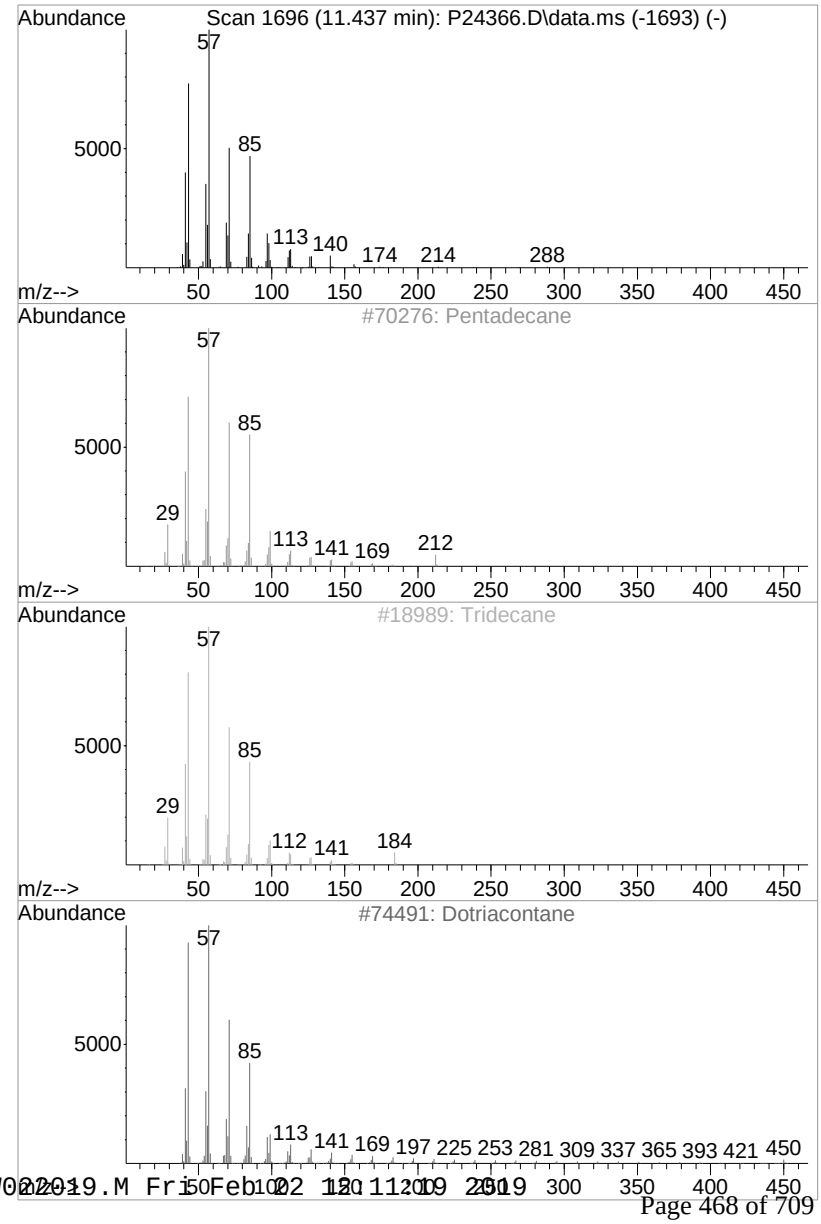
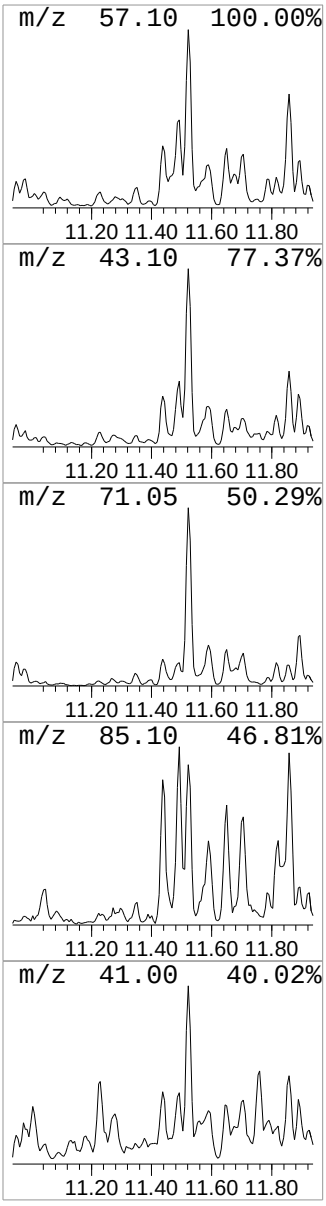
Peak Number 13 Pentadecane Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.437	7.49 ppb	288381	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecane	212	C15H32	000629-62-9	86
2	Tridecane	184	C13H28	000629-50-5	86
3	Dotriacontane	451	C32H66	000544-85-4	80
4	Decane, 2,3,6-trimethyl-	184	C13H28	062238-12-4	64
5	Undecane, 2,7-dimethyl-	184	C13H28	017301-24-5	64





Library Search Compound Report

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Operator : K.Ruest
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Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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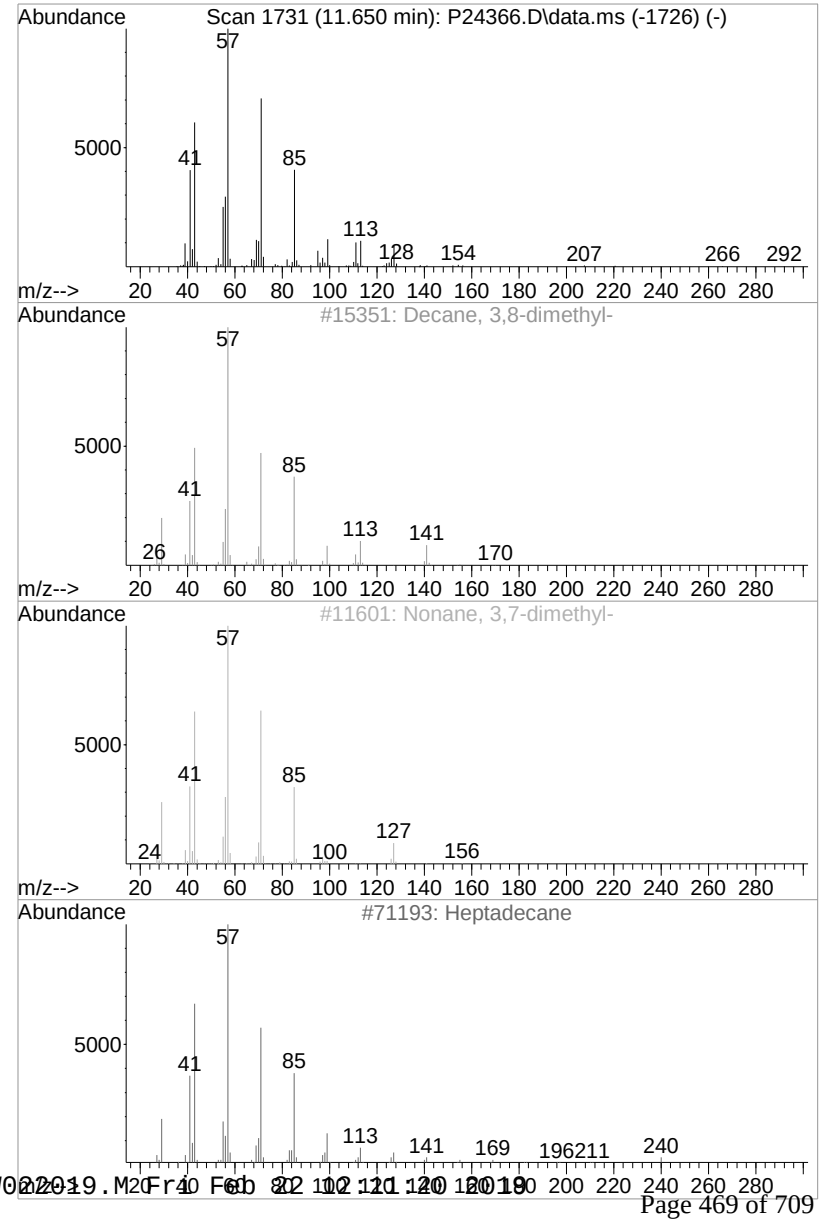
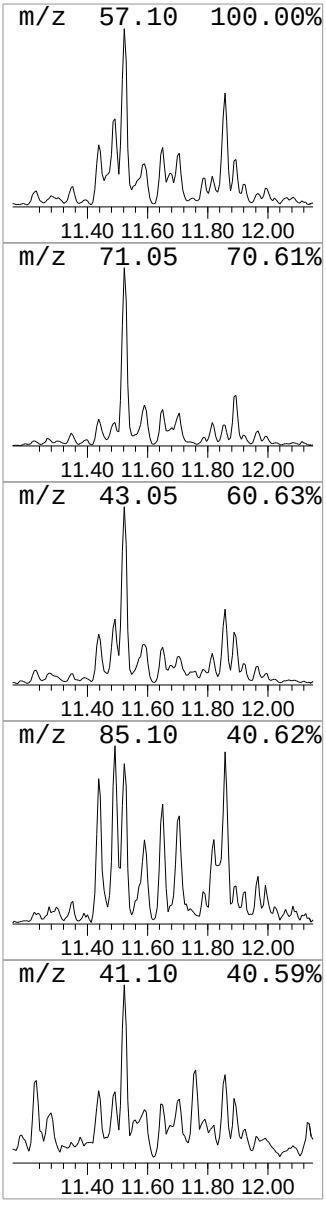
Peak Number 14 unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.650	8.09 ppb	311723	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 3,8-dimethyl-	170	C12H26	017312-55-9	78
2	Nonane, 3,7-dimethyl-	156	C11H24	017302-32-8	74
3	Heptadecane	240	C17H36	000629-78-7	72
4	Tetradecane	198	C14H30	000629-59-4	64
5	Hexadecane	226	C16H34	000544-76-3	59





Library Search Compound Report

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Operator : K.Ruest
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Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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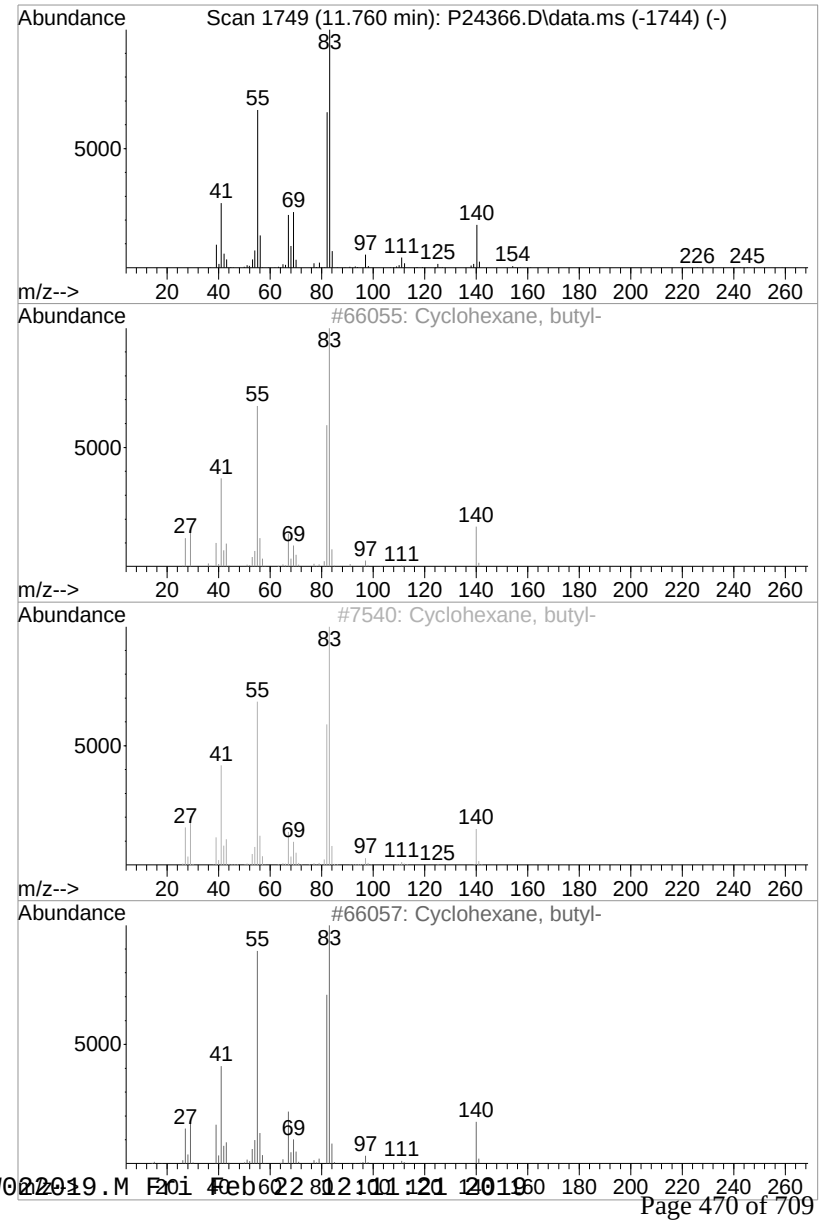
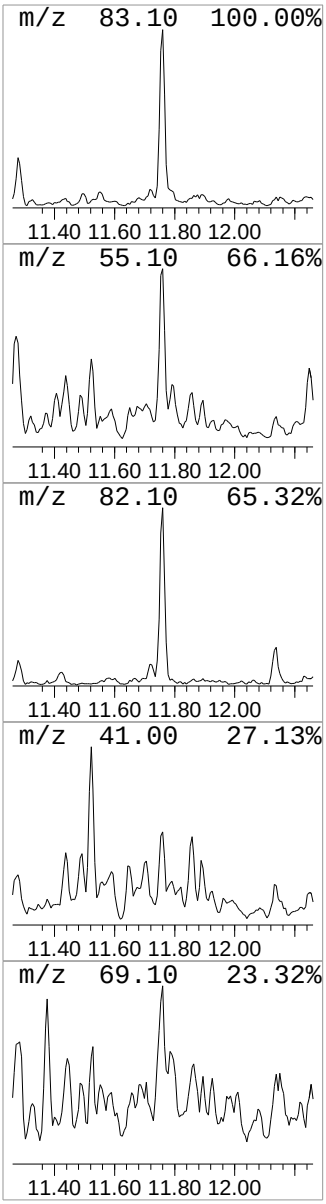
Peak Number 15 unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.760	15.79 ppb	608485	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, butyl-	140	C10H20	001678-93-9	83
2	Cyclohexane, butyl-	140	C10H20	001678-93-9	80
3	Cyclohexane, butyl-	140	C10H20	001678-93-9	78
4	Cyclohexane, octyl-	196	C14H28	001795-15-9	72
5	Cyclohexane, 1,1'-(1,4-butanediy...	222	C16H30	006165-44-2	72





Library Search Compound Report

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Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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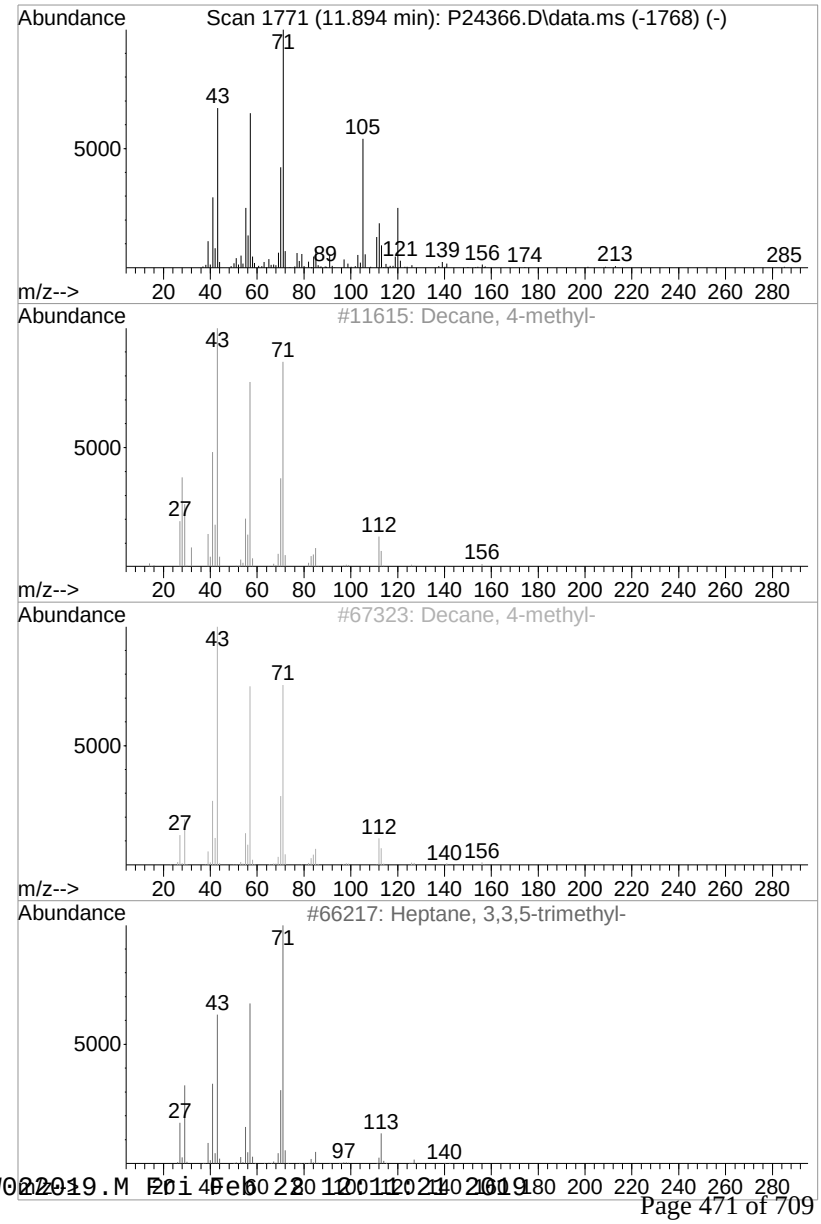
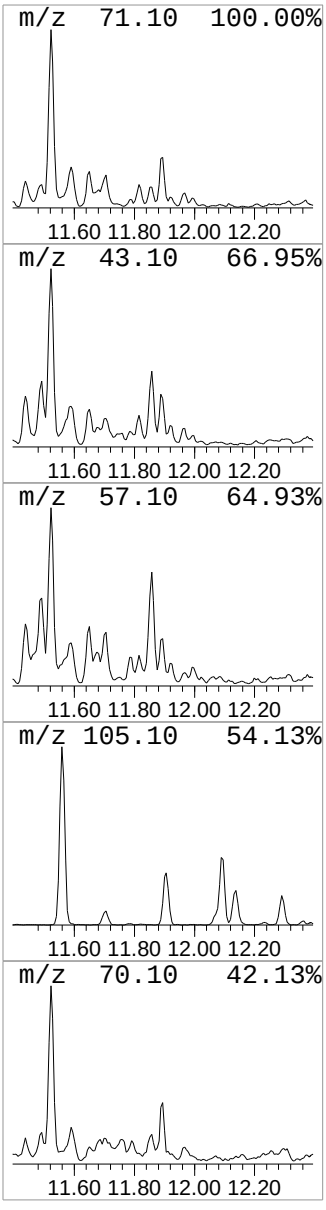
Peak Number 16 unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.894	13.67 ppb	526619	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 4-methyl-	156	C11H24	002847-72-5	76
2	Decane, 4-methyl-	156	C11H24	002847-72-5	68
3	Heptane, 3,3,5-trimethyl-	142	C10H22	007154-80-5	50
4	Octane, 3,3-dimethyl-	142	C10H22	004110-44-5	50
5	1,1-Dimethylpropyl 2-ethylhexanoate	214	C13H26O2	005421-13-6	47





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

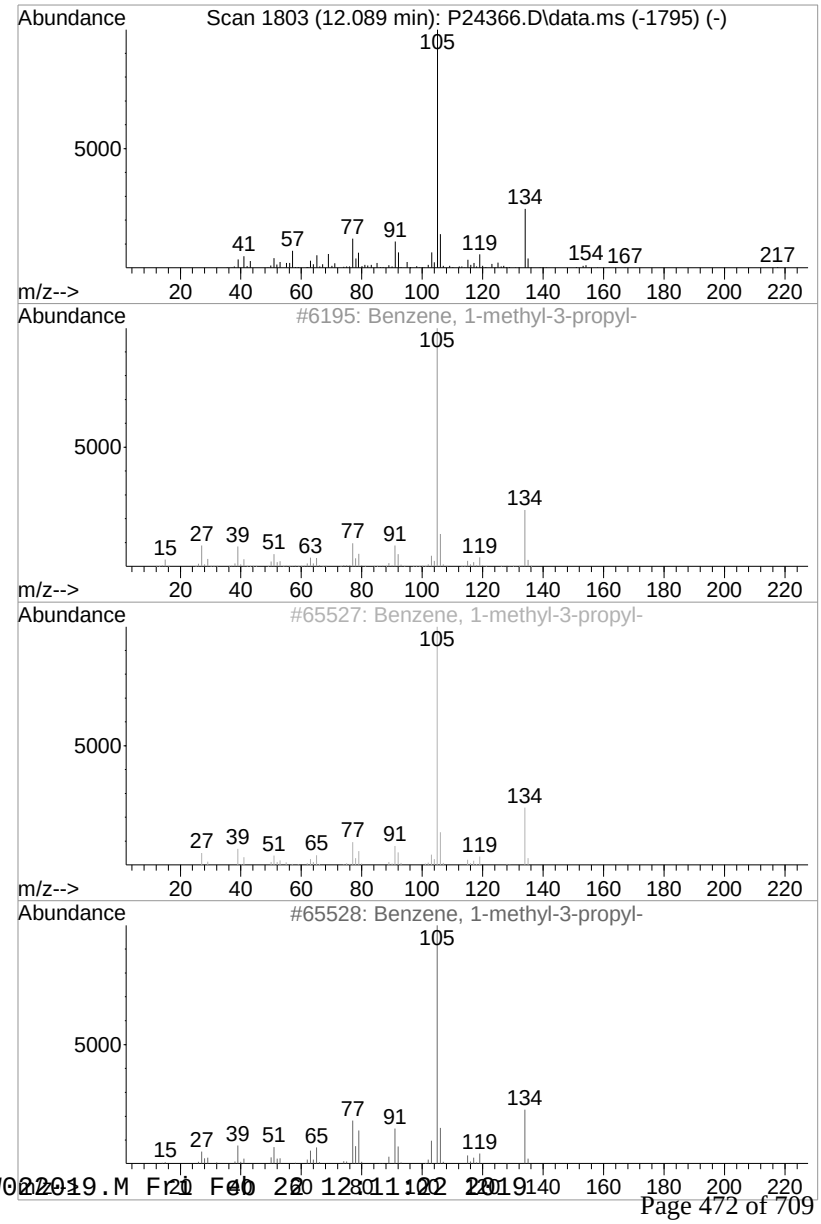
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

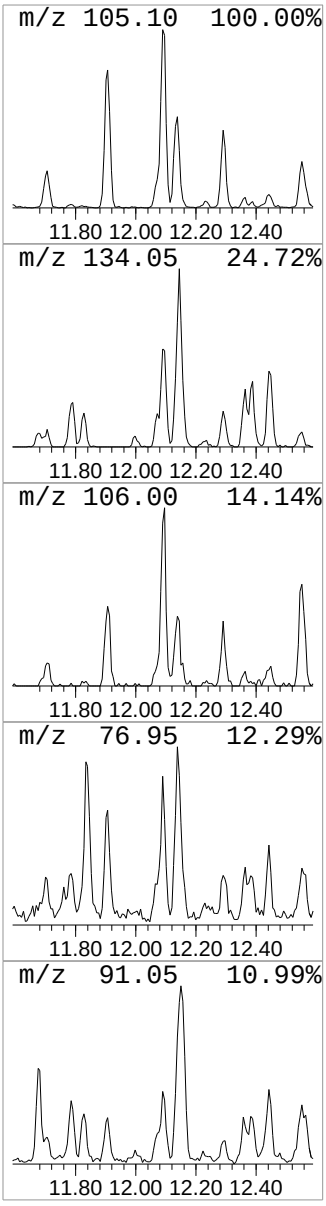
****

Peak Number 17 Benzene, 1-methyl-3-propyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.089	9.13 ppb	351682	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	95
2	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	95
3	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	91
4	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	90
5	Benzene, 1-methyl-4-propyl-	134	C10H14	001074-55-1	90





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

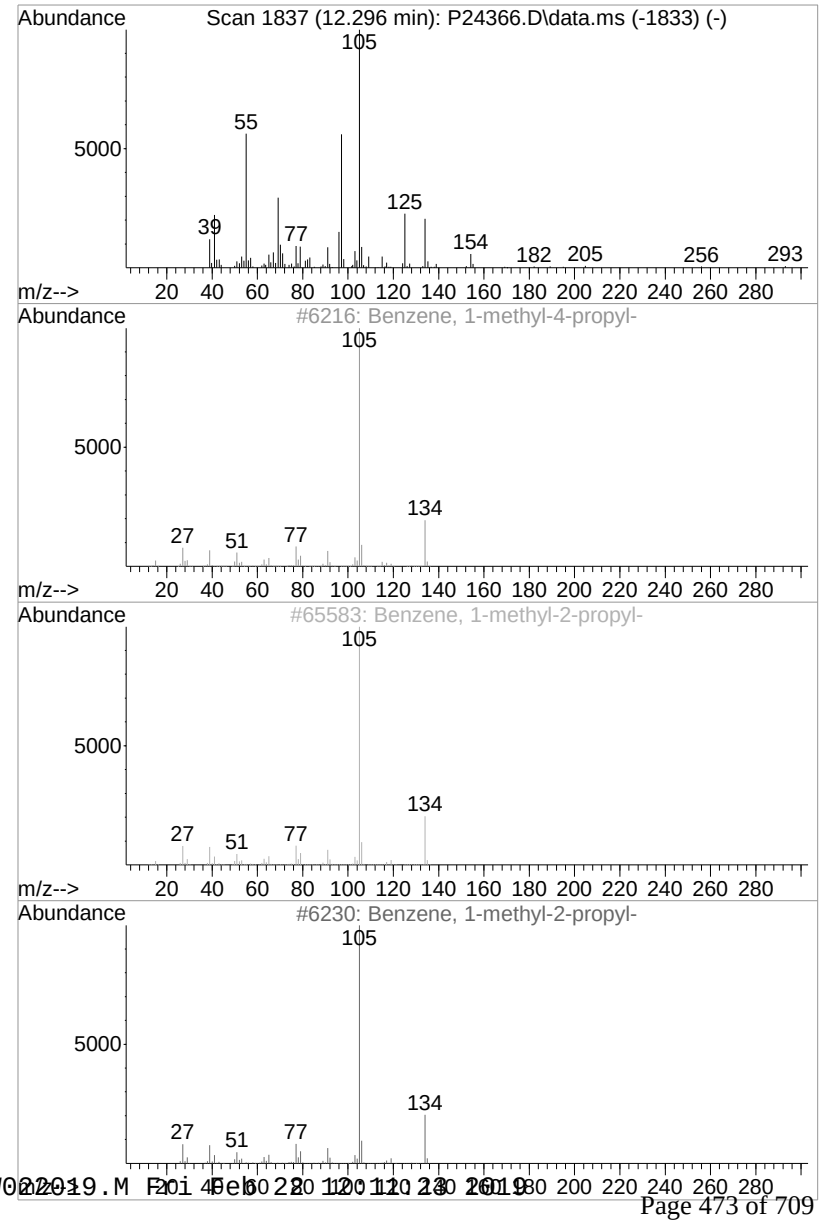
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

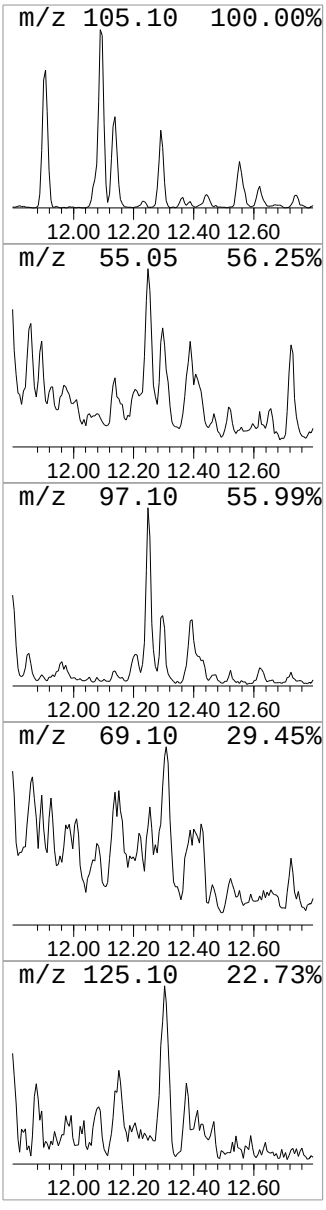
****

Peak Number 18 Benzene, 1-methyl-4-propyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.296	7.55 ppb	290768	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-propyl-	134	C10H14	001074-55-1	38
2	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	30
3	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	30
4	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	30
5	Benzeneacetaldehyde, .alpha.-met...	134	C9H10O	000093-53-8	30





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

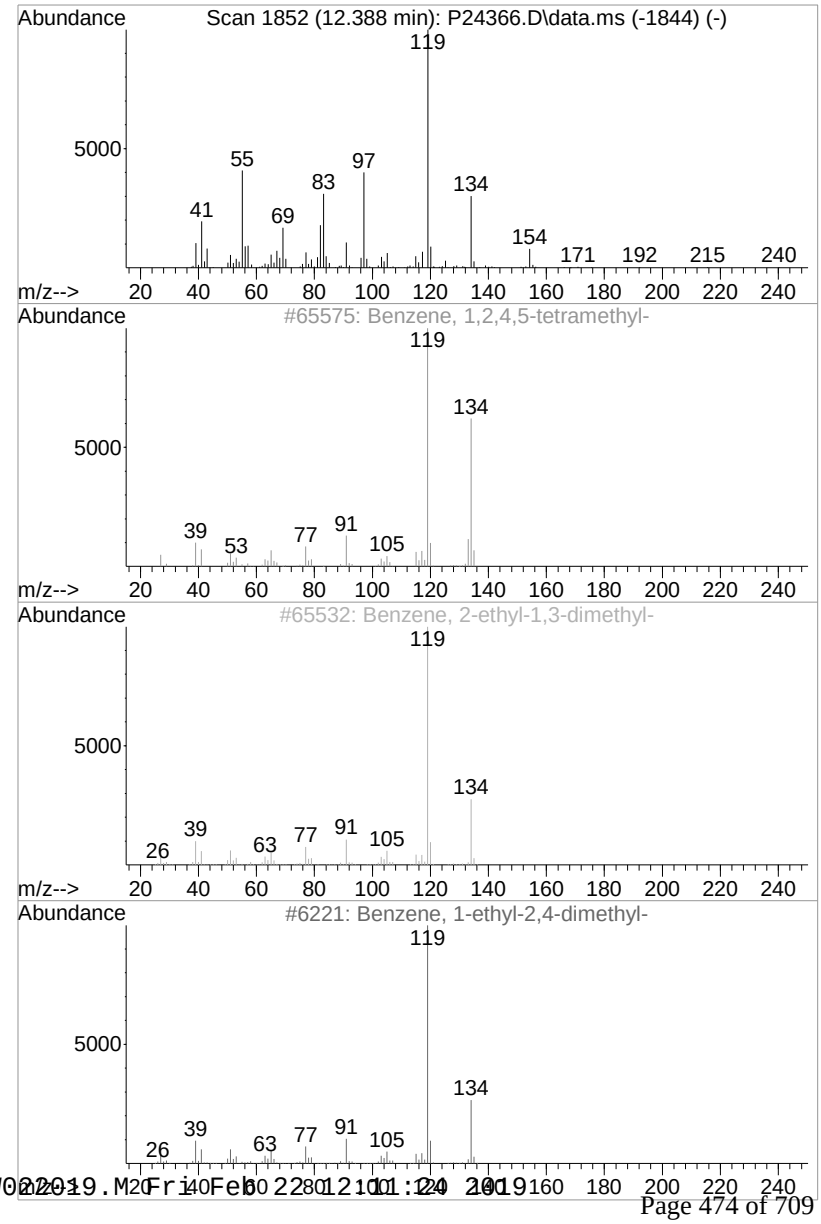
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

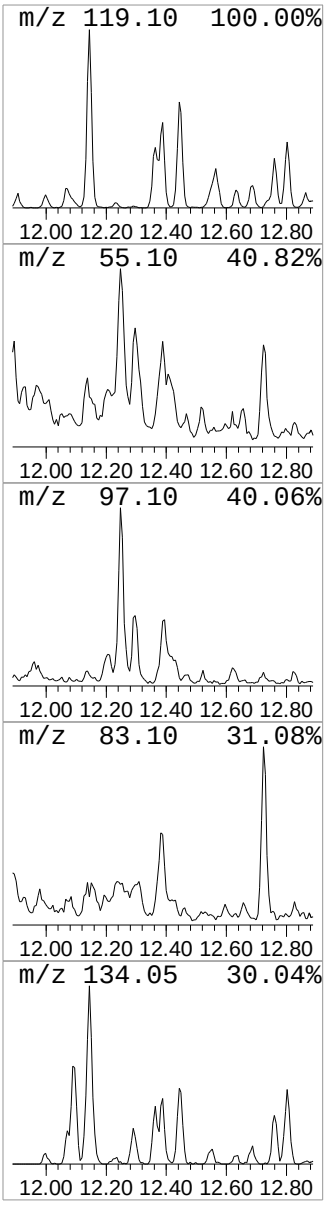
****

Peak Number 19 unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.388	9.61 ppb	370070	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	60
2	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	60
3	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	60
4	Benzene, 1-ethyl-3,5-dimethyl-	134	C10H14	000934-74-7	60
5	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	60





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

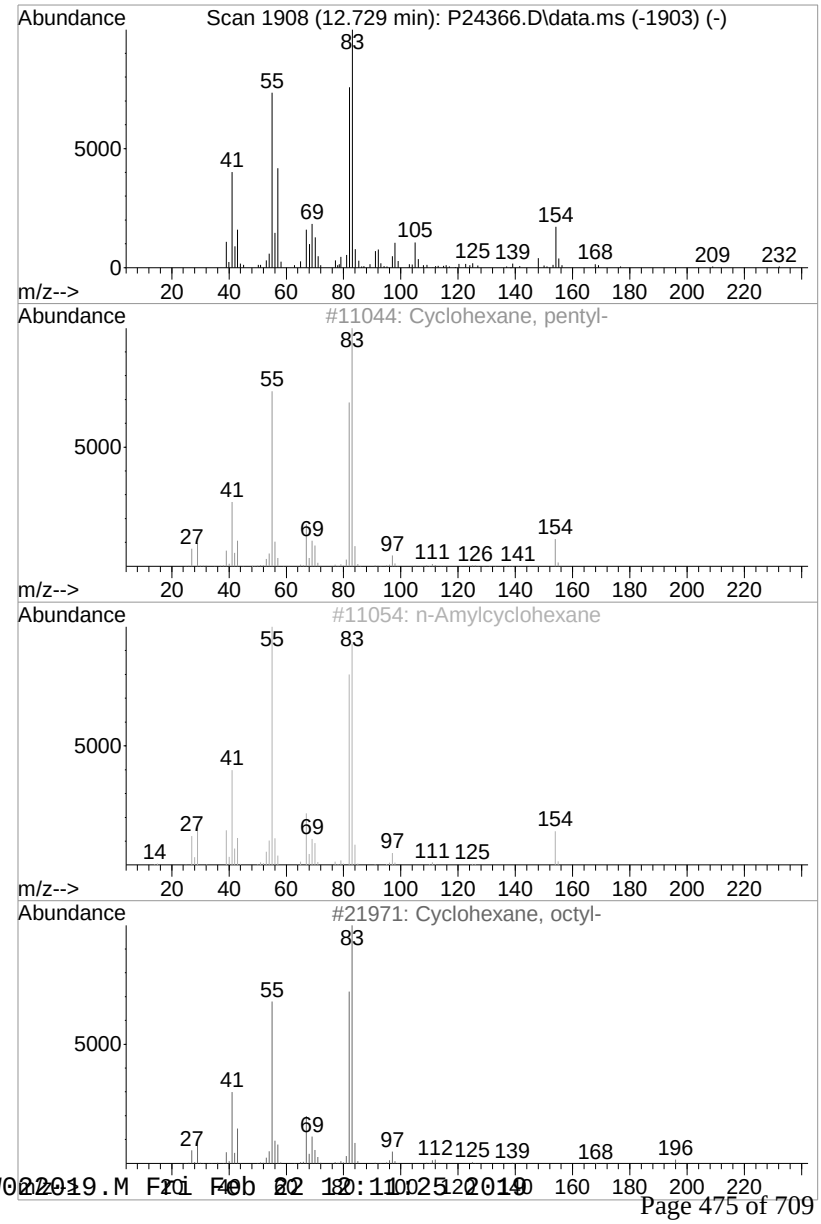
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

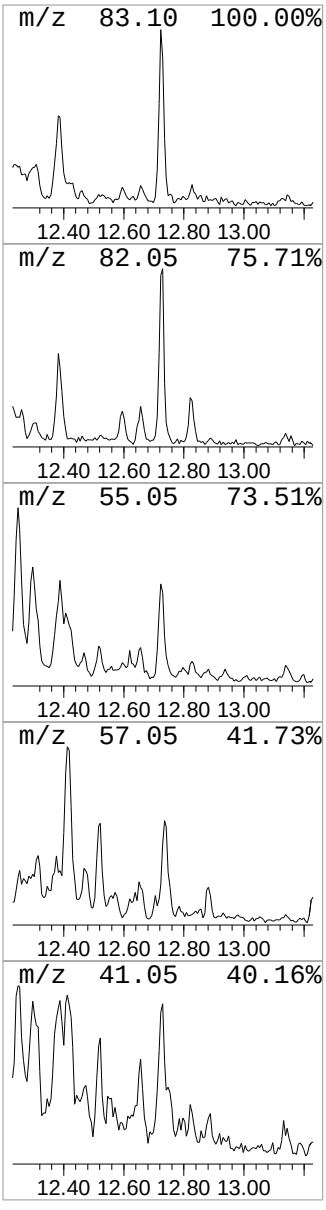
****

Peak Number 20 unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.729	5.38 ppb	207229	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, pentyl-	154	C11H22	004292-92-6	83
2	n-Amylcyclohexane	154	C11H22	029949-27-7	72
3	Cyclohexane, octyl-	196	C14H28	001795-15-9	64
4	Cyclohexane, octyl-	196	C14H28	001795-15-9	64
5	Cyclohexane, butyl-	140	C10H20	001678-93-9	64





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24366.D
Acq On : 21 Feb 2019 2:46 pm
Operator : K.Ruest
Sample : R1901228-006|3675 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

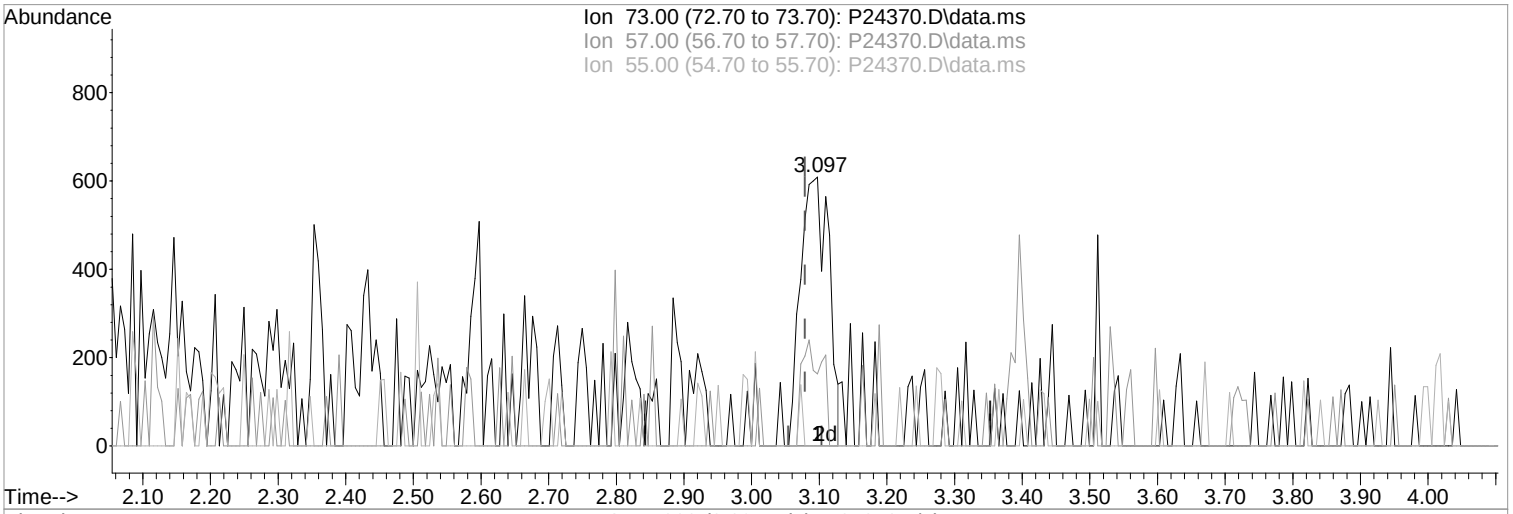
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

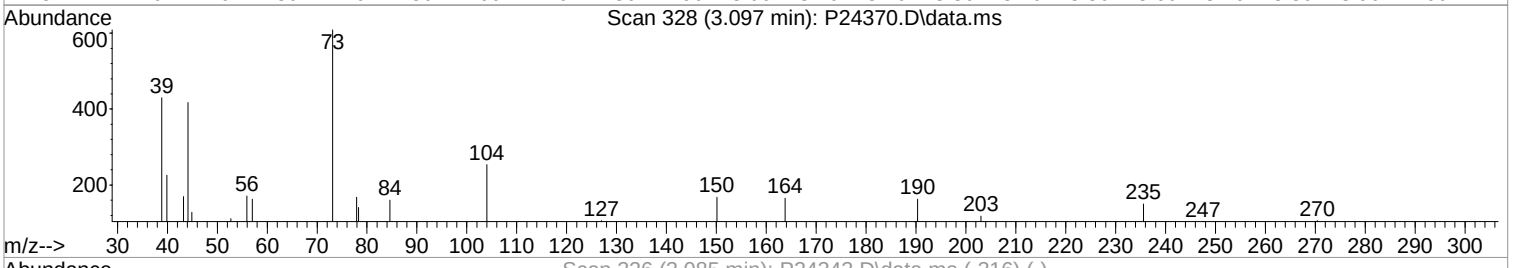
					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Cyclohexane, 1,...	9.553	6.1	ppb	154168	3	9.791	1259610	50.0
unknown	9.620	5.3	ppb	134791	3	9.791	1259610	50.0
Octane, 3-methyl-	9.736	9.8	ppb	246173	3	9.791	1259610	50.0
1-Ethyl-3-methy...	10.102	5.9	ppb	148820	3	9.791	1259610	50.0
unknown	10.346	18.4	ppb	463082	3	9.791	1259610	50.0
Octane, 2,5-dim...	10.431	12.4	ppb	311555	3	9.791	1259610	50.0
Octane, 2,6-dim...	10.553	31.4	ppb	790682	3	9.791	1259610	50.0
Cyclohexane, pr...	10.626	16.8	ppb	424307	3	9.791	1259610	50.0
unknown	10.669	11.6	ppb	292924	3	9.791	1259610	50.0
unknown	10.809	16.5	ppb	416483	3	9.791	1259610	50.0
unknown	11.010	6.6	ppb	253272	4	11.839	1926260	50.0
unknown	11.181	7.2	ppb	278111	4	11.839	1926260	50.0
Pentadecane	11.437	7.5	ppb	288381	4	11.839	1926260	50.0
unknown	11.650	8.1	ppb	311723	4	11.839	1926260	50.0
unknown	11.760	15.8	ppb	608485	4	11.839	1926260	50.0
unknown	11.894	13.7	ppb	526619	4	11.839	1926260	50.0
Benzene, 1-meth...	12.089	9.1	ppb	351682	4	11.839	1926260	50.0
Benzene, 1-meth...	12.296	7.5	ppb	290768	4	11.839	1926260	50.0
unknown	12.388	9.6	ppb	370070	4	11.839	1926260	50.0
unknown	12.729	5.4	ppb	207229	4	11.839	1926260	50.0

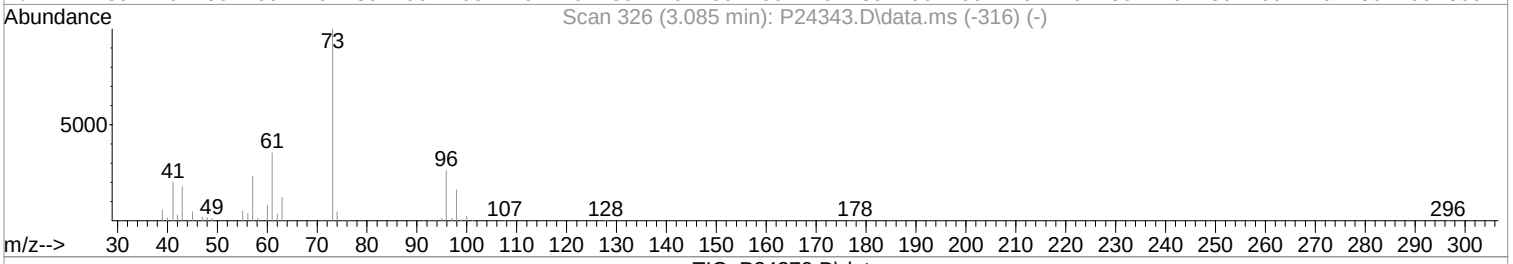
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 21 16:43:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24370.D\data.ms

(25) Methyl-t-Butyl Ether (P)

3.097min (+0.019) 0.16 ppb m

response 1776

Ion	Exp%	Act%
73.00	100	100
57.00	23.70	26.77
55.00	5.20	0.00
0.00	0.00	0.00

Manual Integration:

After

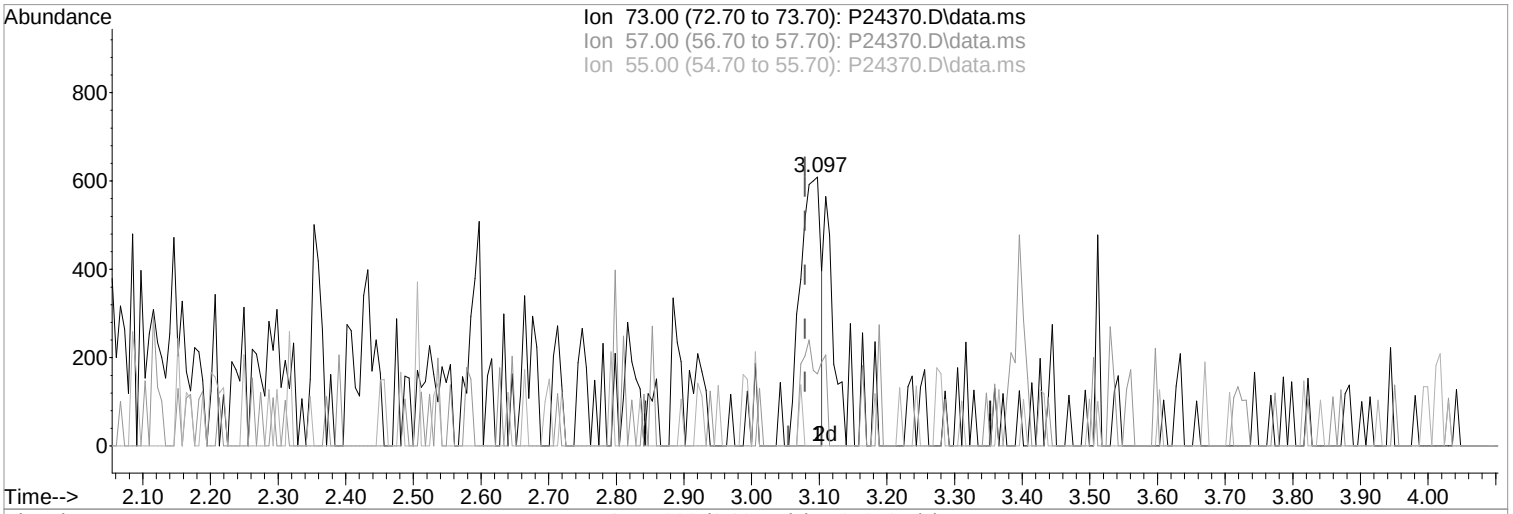
Split Peak

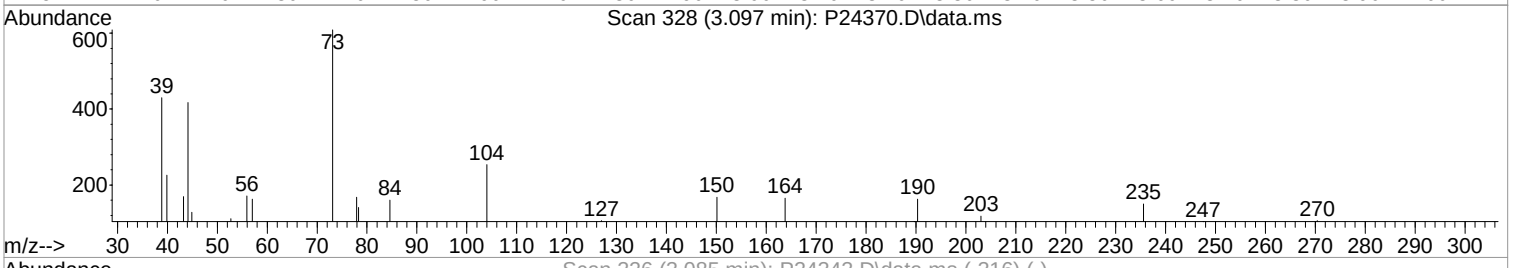
02/22/19

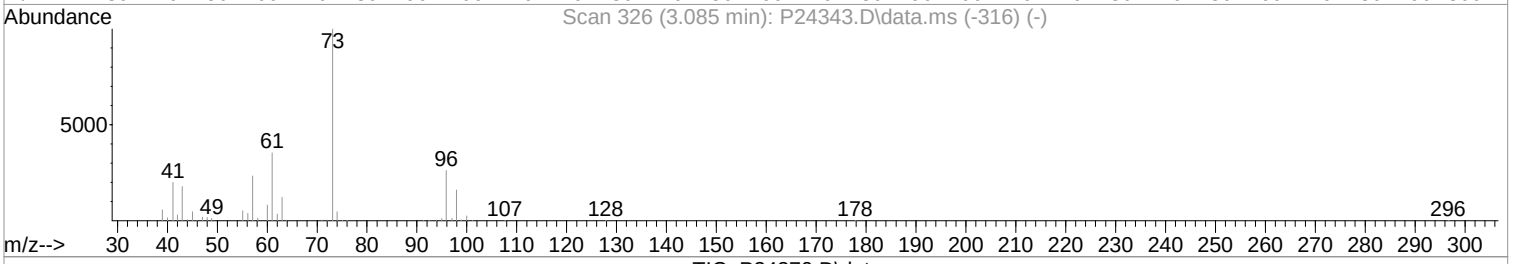
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 21 16:43:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24370.D\data.ms

(25) Methyl-t-Butyl Ether (P)

3.097min (+0.019) 0.11 ppb

response 1276

Ion	Exp%	Act%
73.00	100	100
57.00	23.70	26.77
55.00	5.20	0.00
0.00	0.00	0.00

Manual Integration:

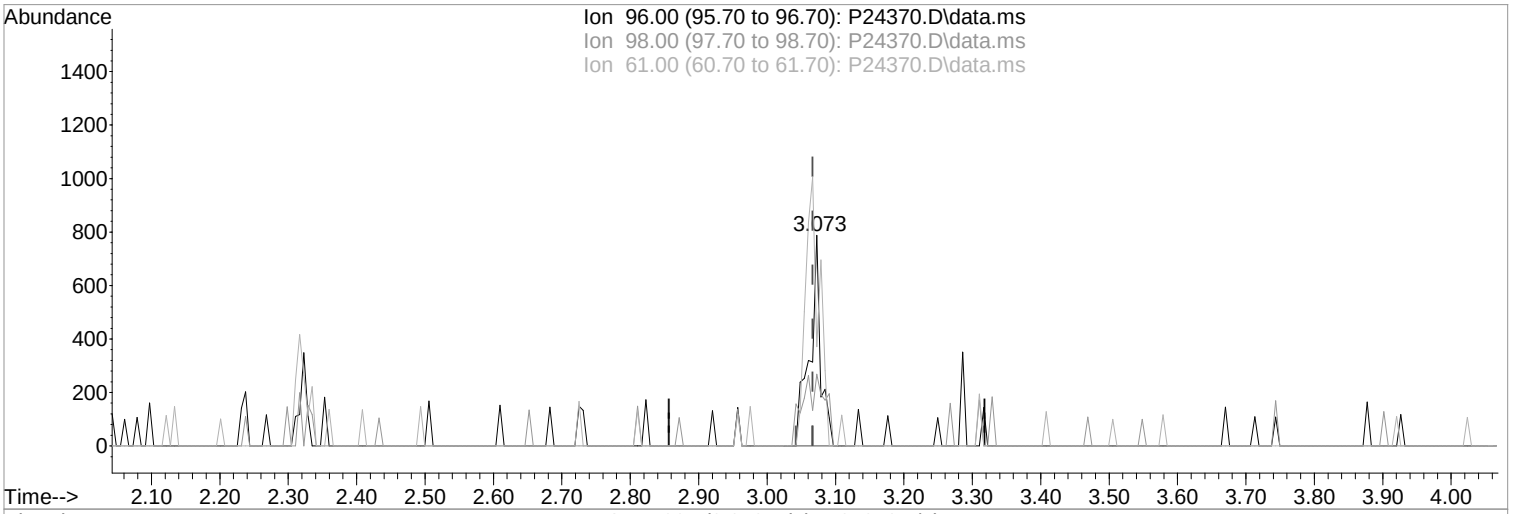
Before

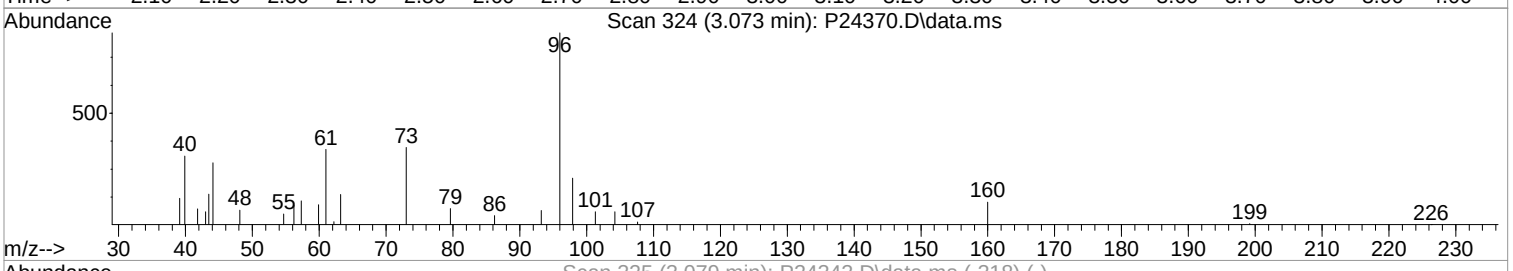
02/22/19

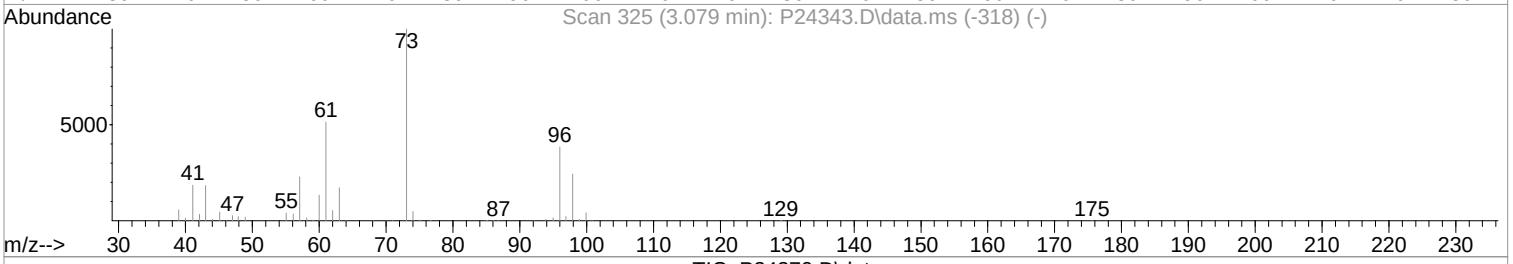
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 21 16:43:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24370.D\data.ms

(26) trans-1,2-Dichloroethene (P)

3.073min (+0.006) 0.27 ppb m

response 882

Ion	Exp%	Act%
96.00	100	100
98.00	63.50	34.01#
61.00	134.40	47.08#
0.00	0.00	0.00

Manual Integration:

After

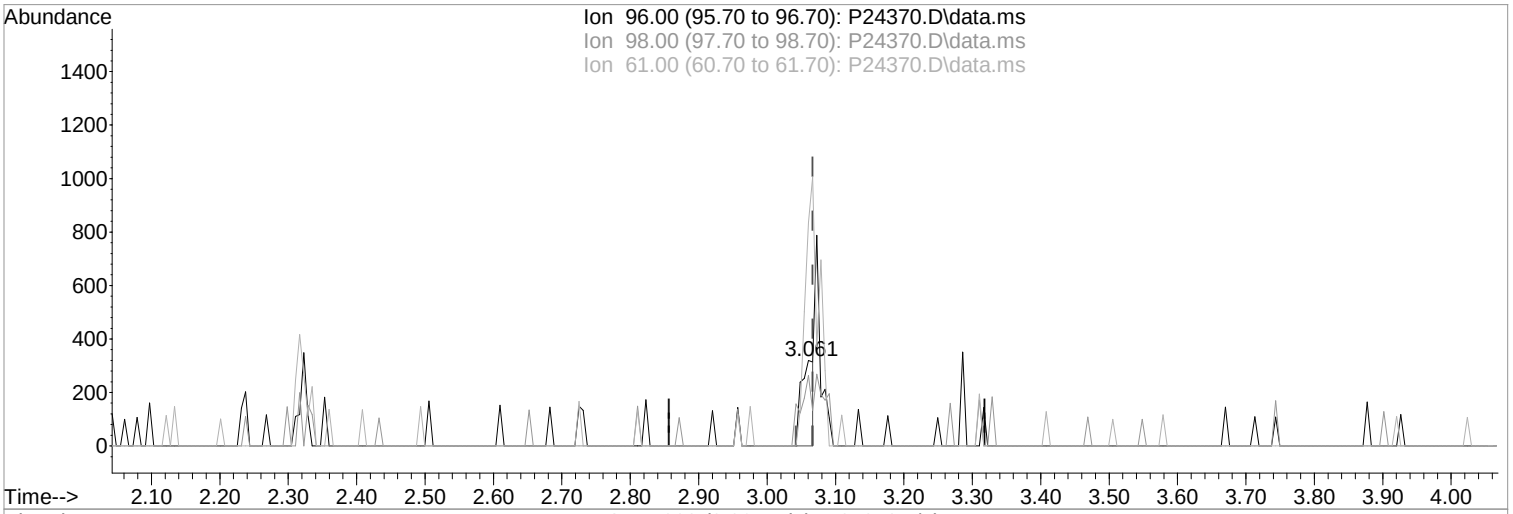
Split Peak

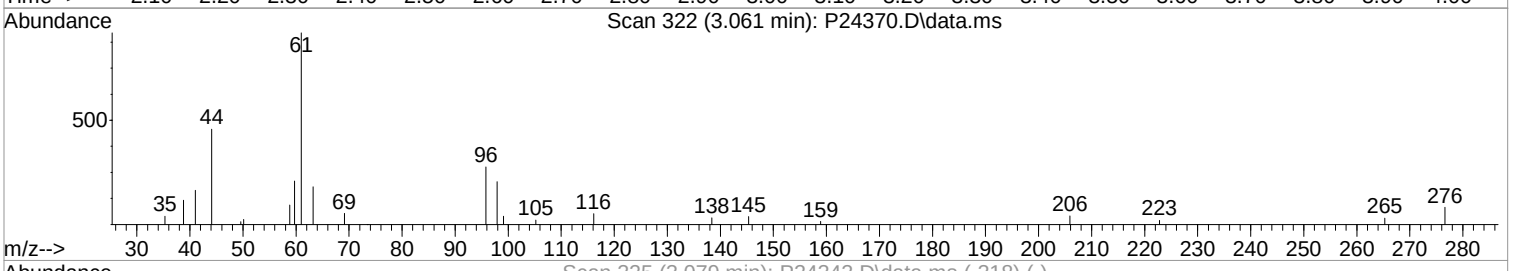
02/22/19

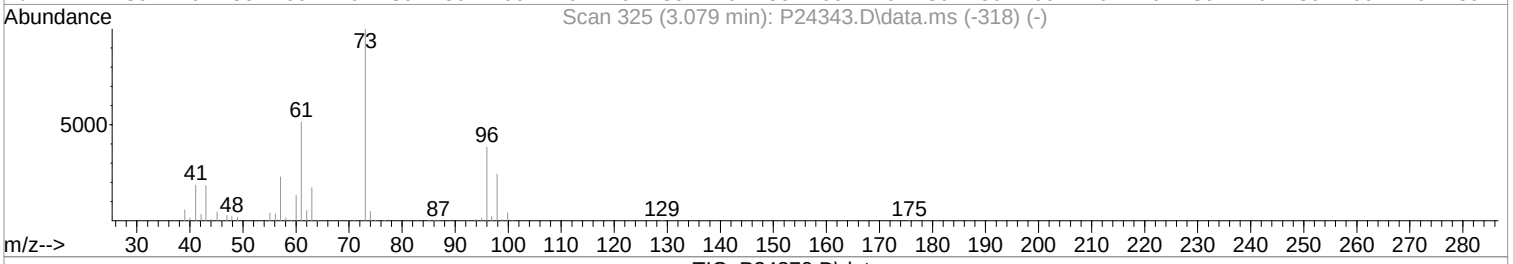
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 21 16:43:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24370.D\data.ms

(26) trans-1,2-Dichloroethene (P)

3.061min (-0.006) 0.13 ppb

response 411

Ion	Exp%	Act%
96.00	100	100
98.00	63.50	82.50
61.00	134.40	261.25#
0.00	0.00	0.00

Manual Integration:

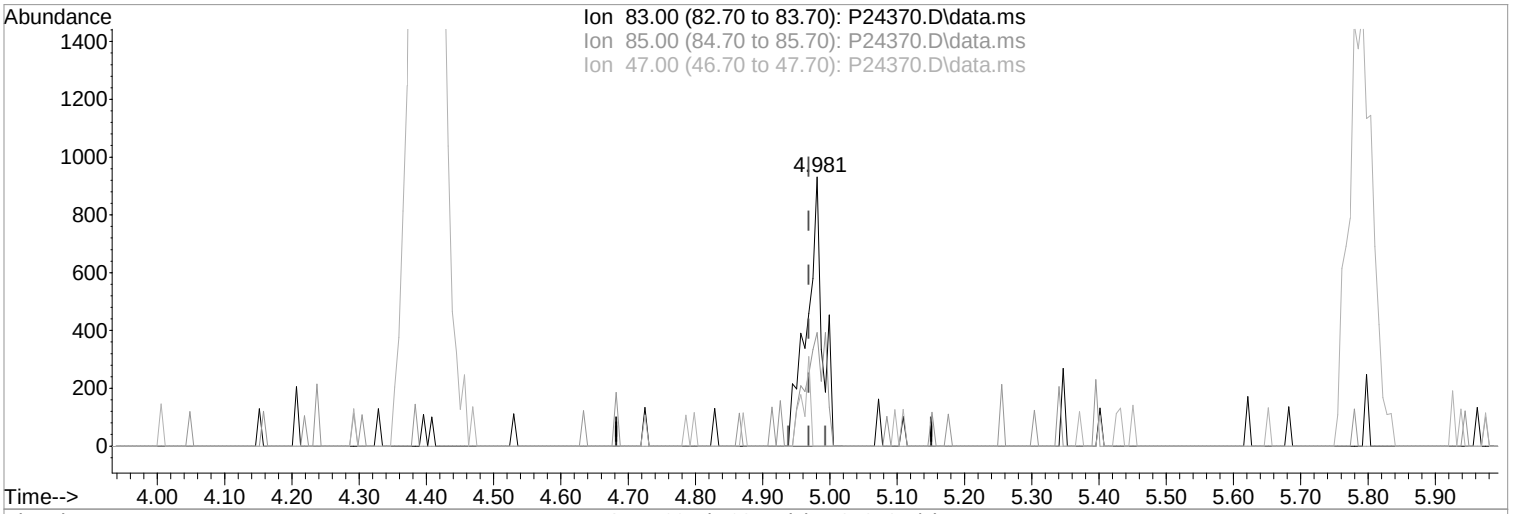
Before

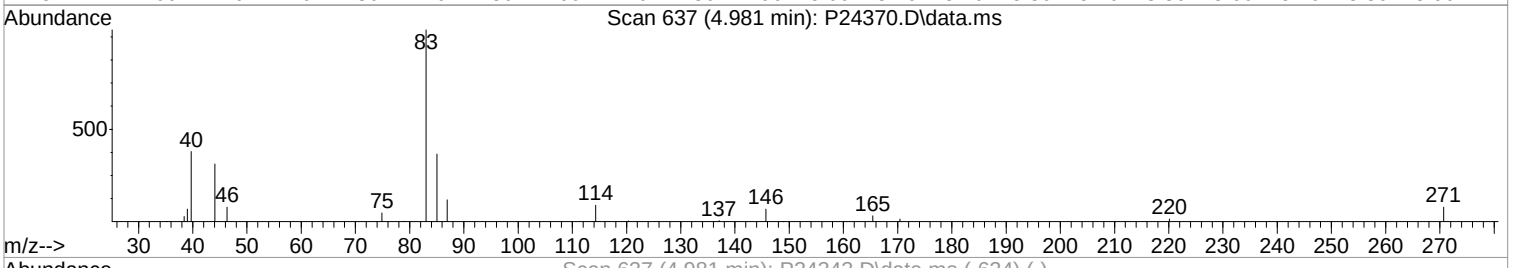
02/22/19

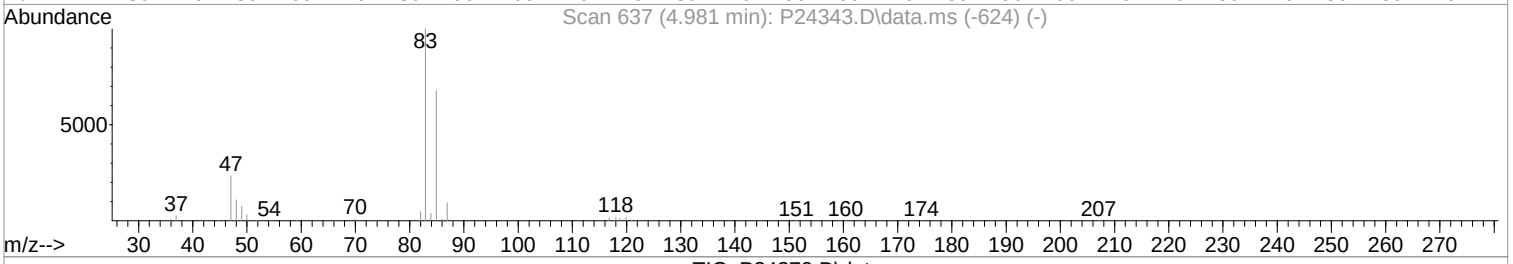
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 21 16:43:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24370.D\data.ms

(40) Chloroform (P)

4.981min (+0.012) 0.28 ppb m

response 1495

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	42.21#
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

After

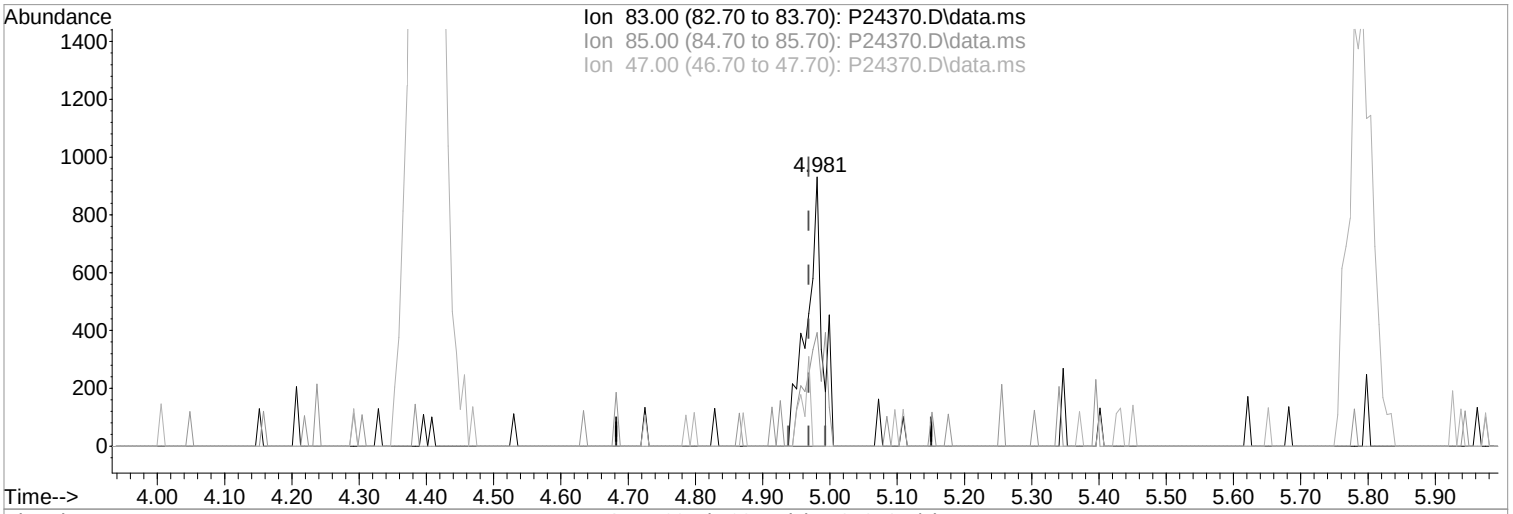
Split Peak

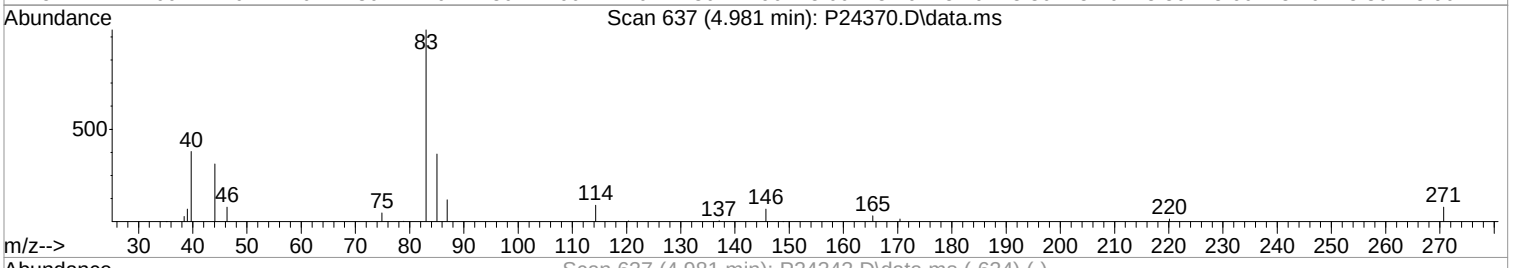
02/22/19

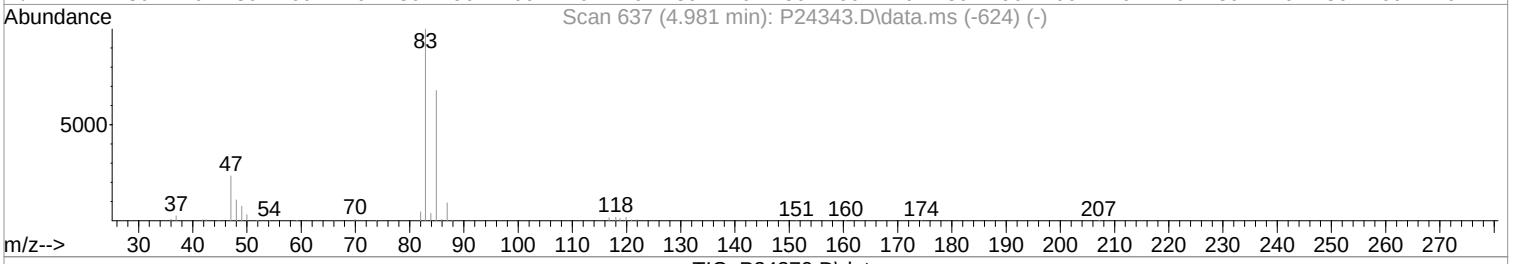
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 21 16:43:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24370.D\data.ms

(40) Chloroform (P)

4.981min (+0.012) 0.24 ppb

response 1329

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	42.21#
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

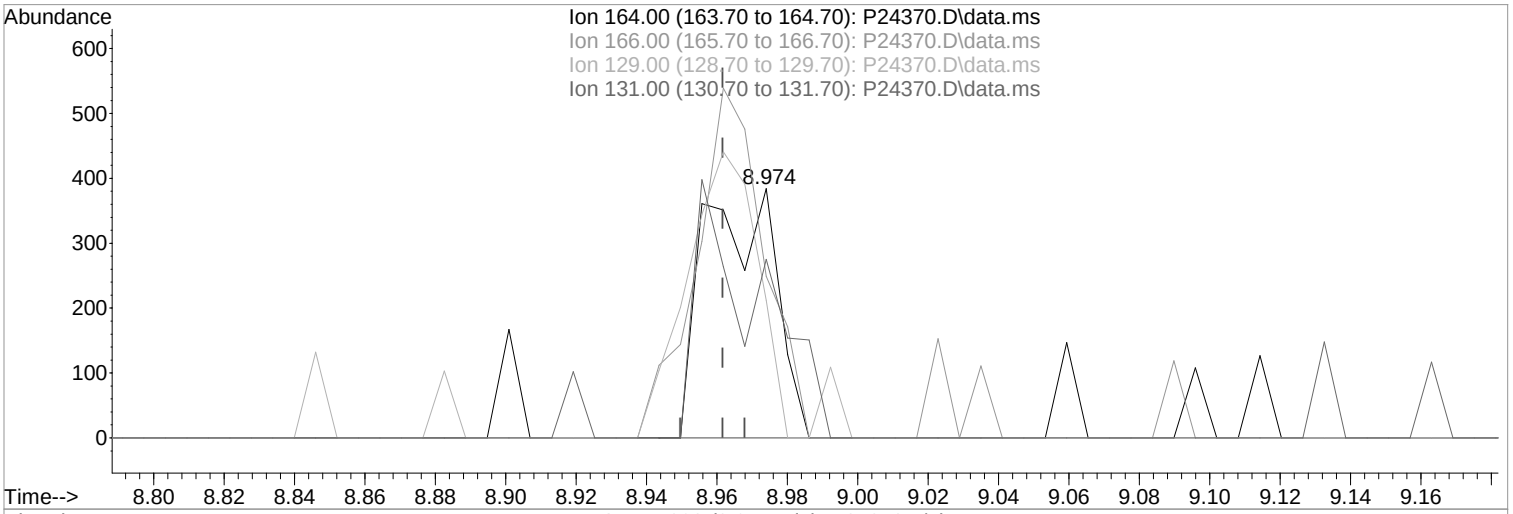
Before

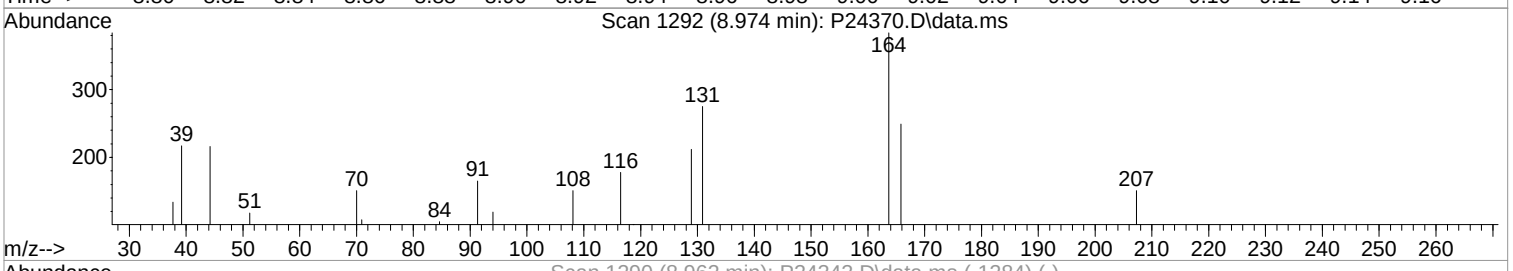
02/22/19

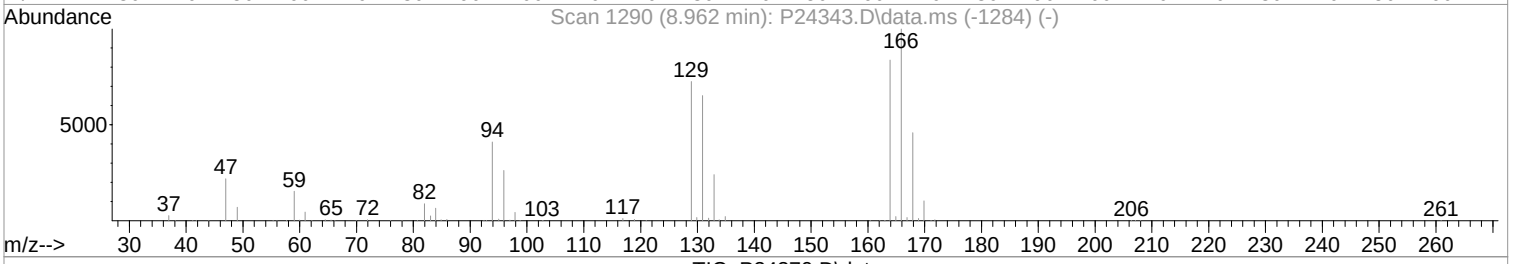
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 21 16:43:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24370.D\data.ms

(72) Tetrachloroethene (P)

8.974min (+0.012) 0.20 ppb m

response 542

Ion	Exp%	Act%
164.00	100	100
166.00	119.60	64.84#
129.00	86.70	55.21#
131.00	78.00	71.61

Manual Integration:

After

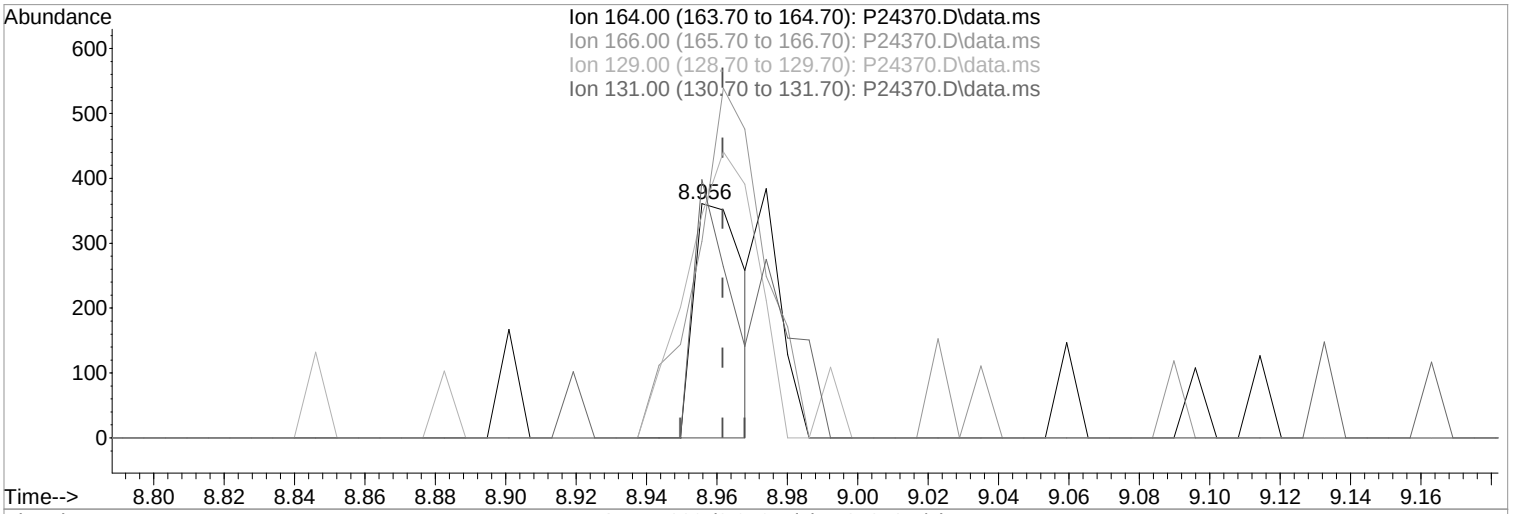
Split Peak

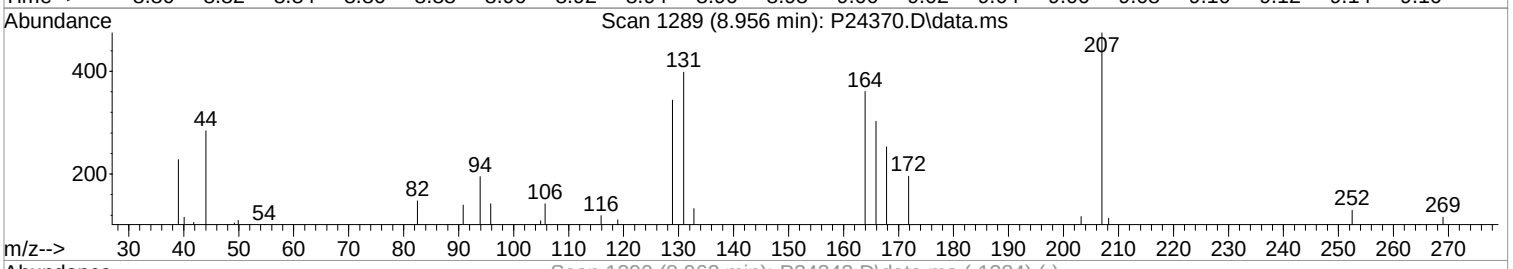
02/22/19

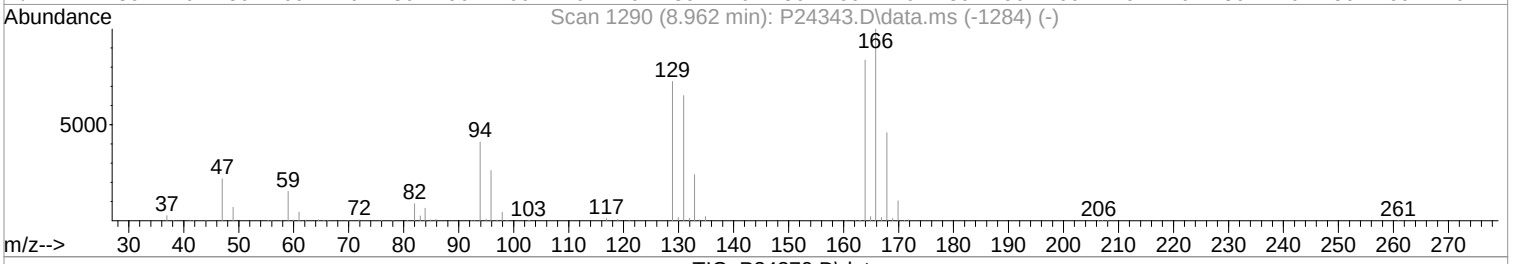
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 21 16:43:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24370.D\data.ms

(72) Tetrachloroethene (P)

8.956min (-0.006) 0.13 ppb

response 355

Ion	Exp%	Act%
164.00	100	100
166.00	119.60	83.93#
129.00	86.70	95.29
131.00	78.00	110.25#

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 22 12:19:45 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

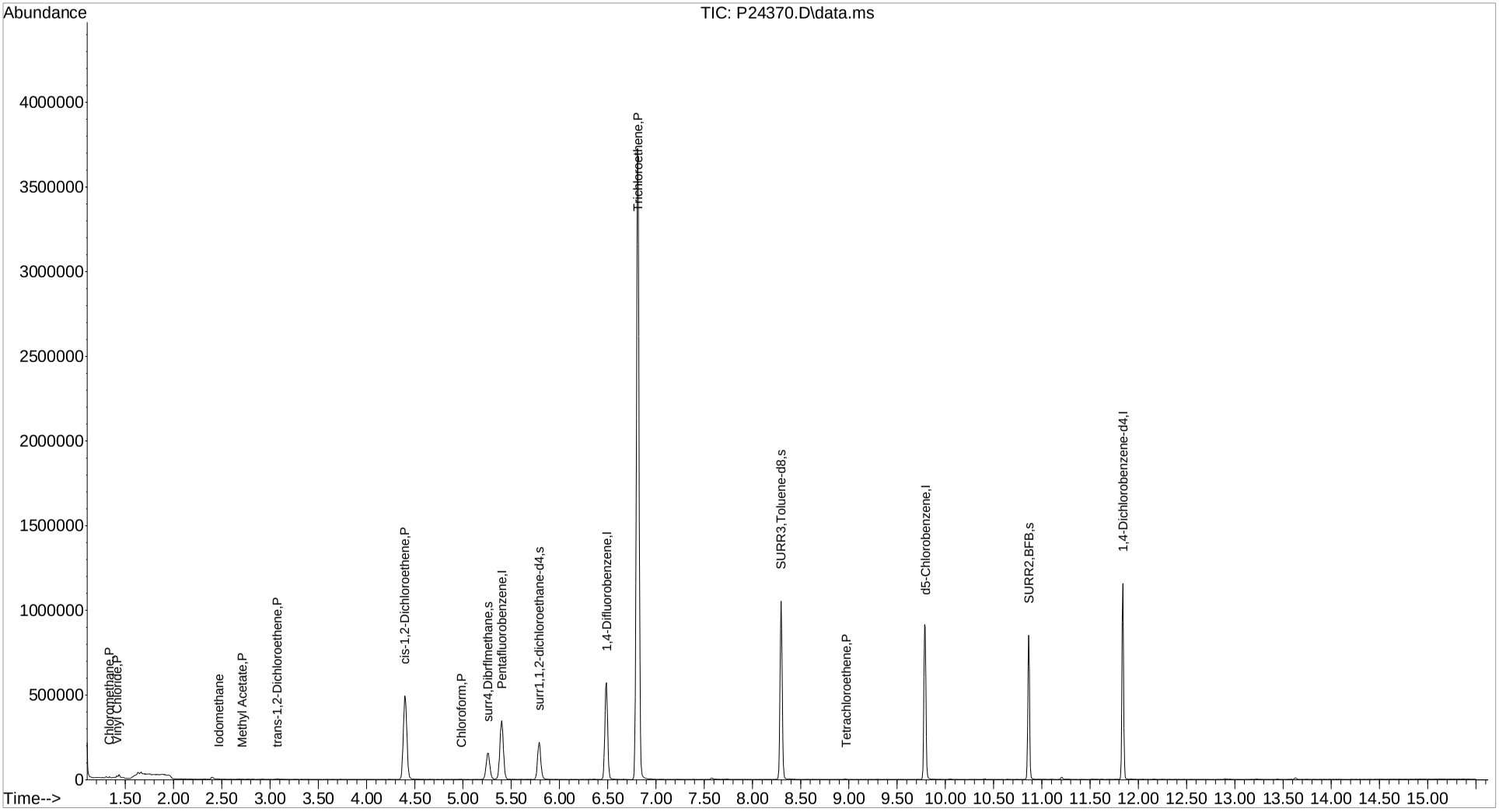
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Pentafluorobenzene	5.402	168	314032	50.00	ppb	0.00	
43) 1,4-Difluorobenzene	6.487	114	498581	50.00	ppb	0.00	
71) d5-Chlorobenzene	9.791	117	441748	50.00	ppb	0.00	
86) 1,4-Dichlorobenzene-d4	11.839	152	231136	50.00	ppb	0.00	
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	129429	47.24	ppb	0.00	
Spiked Amount 50.000	Range 89 - 119		Recovery = 94.48%				
48) surr1,1,2-dichloroetha...	5.792	65	186297	53.61	ppb	0.00	
Spiked Amount 50.000	Range 73 - 125		Recovery = 107.22%				
65) SURR3,Toluene-d8	8.297	98	651431	50.12	ppb	0.00	
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.24%				
70) SURR2,BFB	10.864	95	233283	50.12	ppb	0.00	
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.24%				
Target Compounds						Qvalue	
3) Chloromethane	1.335	50	2363	0.46	ppb	99	
4) Vinyl Chloride	1.415	62	6231	1.37	ppb	99	
17) Iodomethane	2.463	142	2576	2.73	ppb	79	
21) Methyl Acetate	2.707	43	1923	0.47	ppb	78	
26) trans-1,2-Dichloroethene	3.073	96	882m	0.27	ppb		
34) cis-1,2-Dichloroethene	4.396	96	294339	80.56	ppb	89	
40) Chloroform	4.981	83	1495m	0.28	ppb		
54) Trichloroethene	6.810	130	1366816	391.96	ppb	93	E-Over Calibration
72) Tetrachloroethene	8.974	164	542m	0.20	ppb		

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

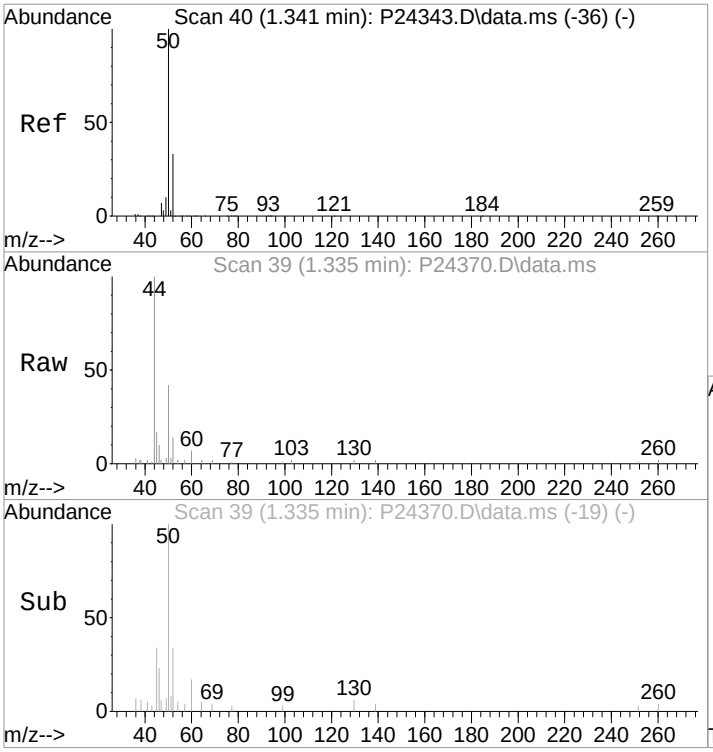
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 22 12:19:45 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



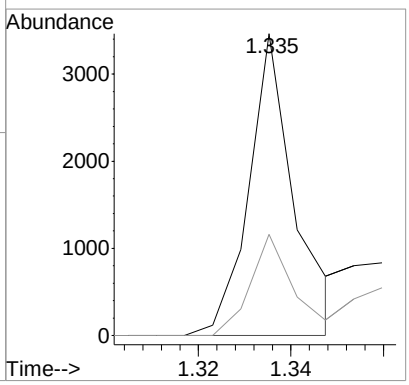
1st 02/22/19

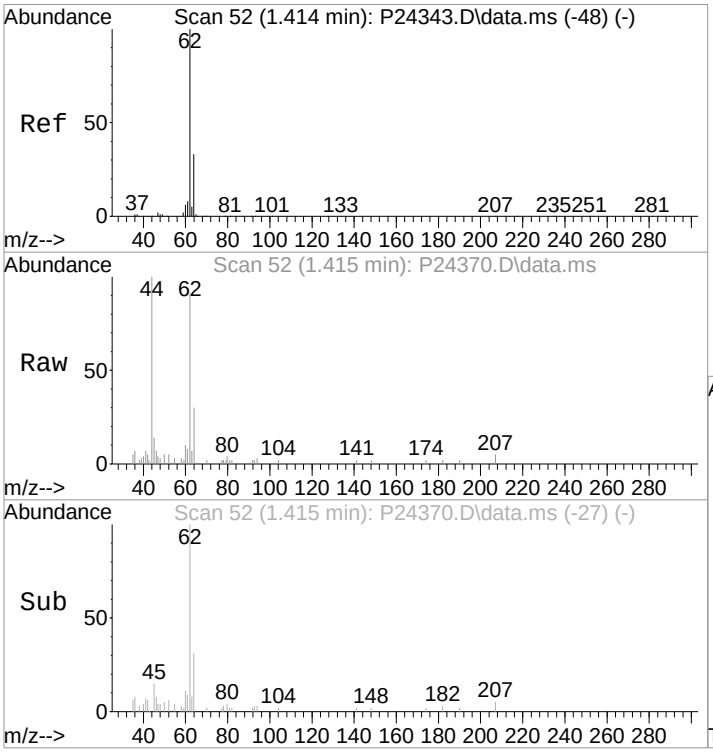


#3
Chloromethane
Concen: 0.46 ppb
RT: 1.335 min Scan# 39
Delta R.T. 0.006 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion: 50 Resp: 2363

Ion	Ratio	Lower	Upper
50	100		
52	33.5	13.0	53.0

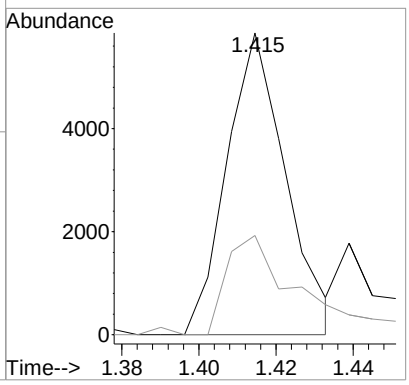


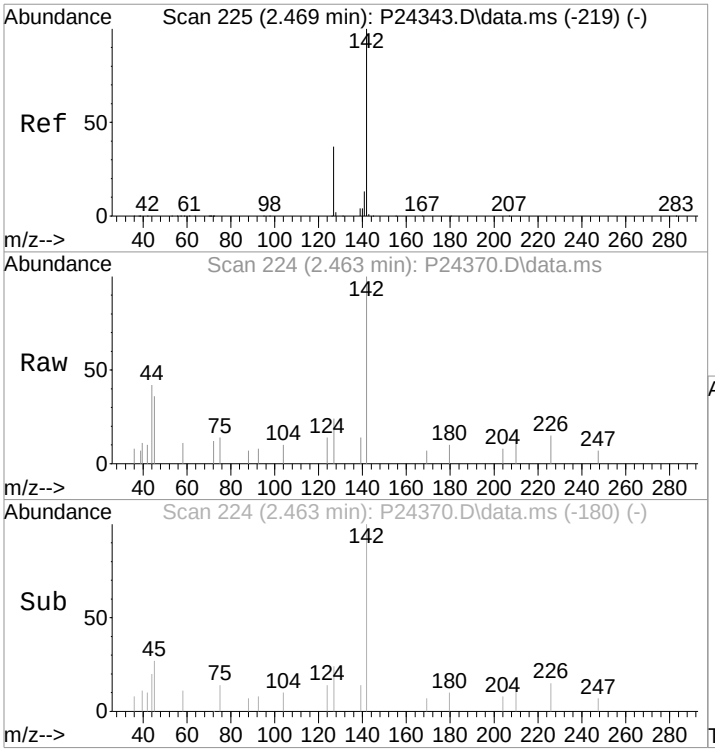


#4
Vinyl Chloride
Concen: 1.37 ppb
RT: 1.415 min Scan# 52
Delta R.T. 0.006 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion: 62 Resp: 6231

Ion	Ratio	Lower	Upper
62	100		
64	32.9	13.2	53.2

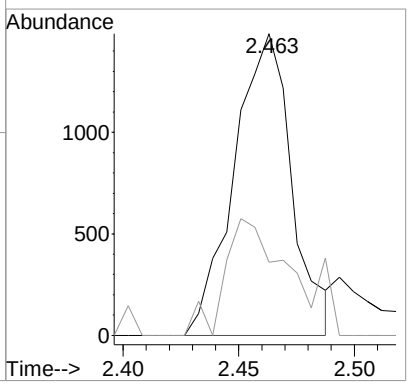


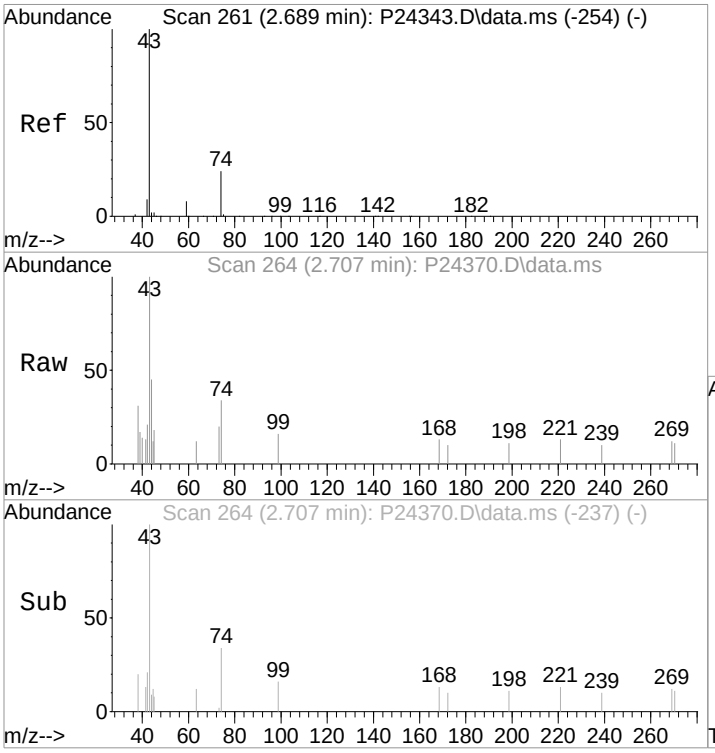


#17
Iodomethane
Concen: 2.73 ppb
RT: 2.463 min Scan# 224
Delta R.T. 0.007 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion:142 Resp: 2576

Ion	Ratio	Lower	Upper
142	100		
127	24.2	16.7	56.7

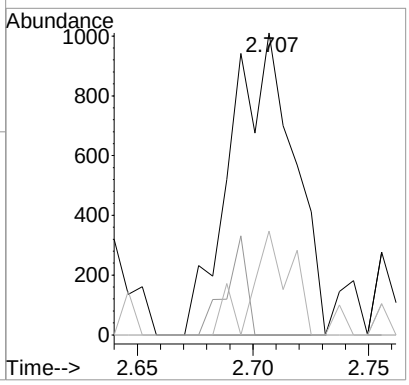


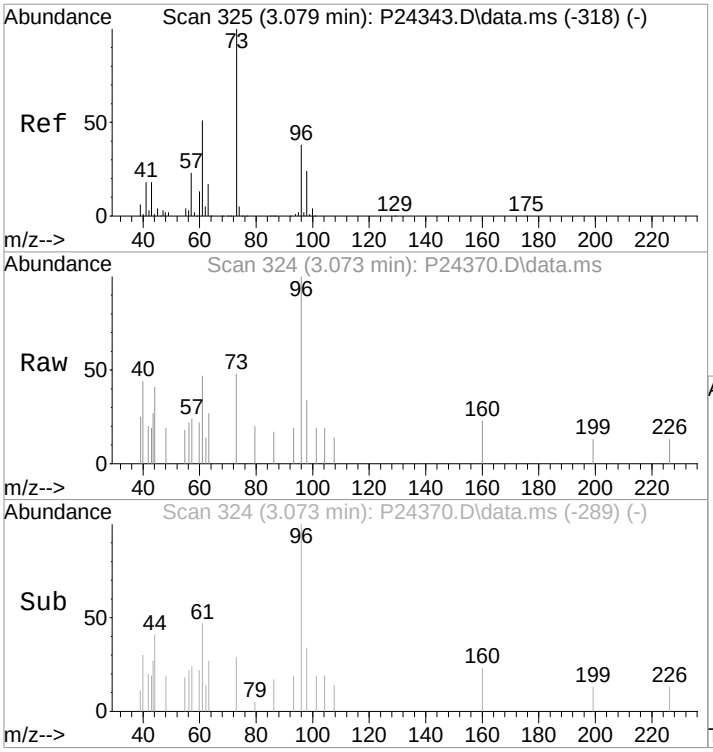


#21
Methyl Acetate
Concen: 0.47 ppb
RT: 2.707 min Scan# 264
Delta R.T. 0.025 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion: 43 Resp: 1923

Ion	Ratio	Lower	Upper
43	100		
59	0.0	0.0	28.4
74	34.4	3.6	43.6

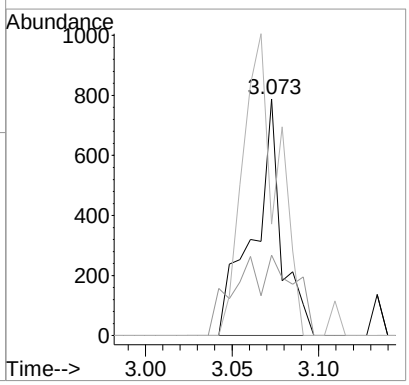


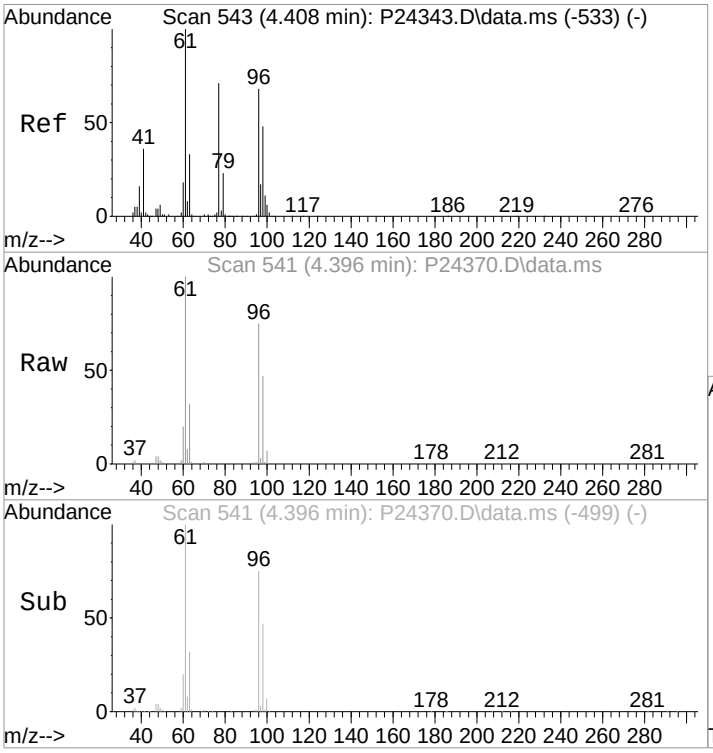


#26
trans-1,2-Dichloroethene
Concen: 0.27 ppb m
RT: 3.073 min Scan# 324
Delta R.T. 0.006 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion: 96 Resp: 882

Ion	Ratio	Lower	Upper
96	100		
98	34.0	43.5	83.5#
61	47.1	114.4	154.4#

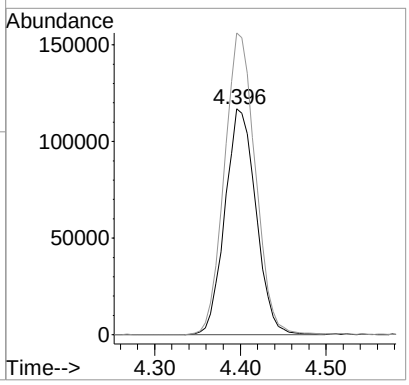


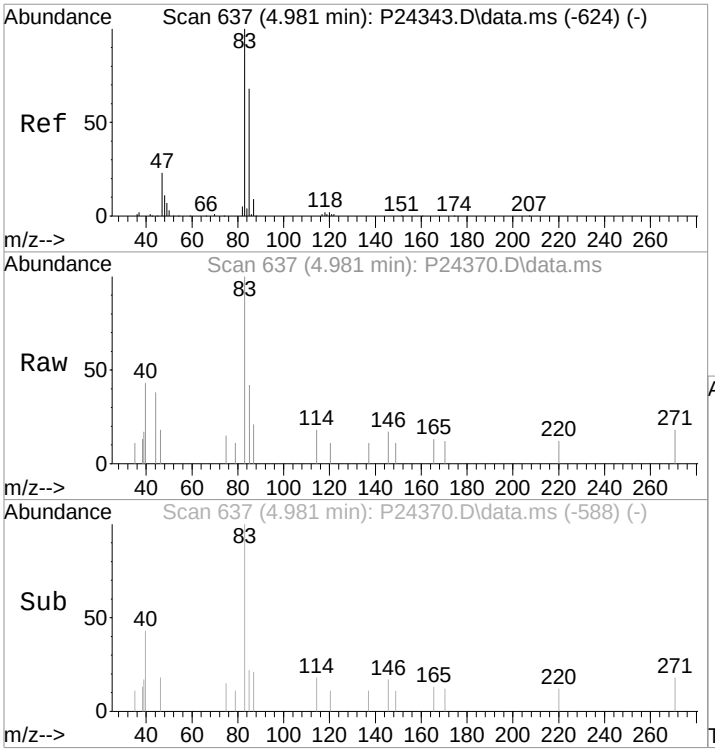


#34
cis-1,2-Dichloroethene
Concen: 80.56 ppb
RT: 4.396 min Scan# 541
Delta R.T. -0.006 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion: 96 Resp: 294339

Ion	Ratio	Lower	Upper
96	100		
61	133.6	128.1	168.1

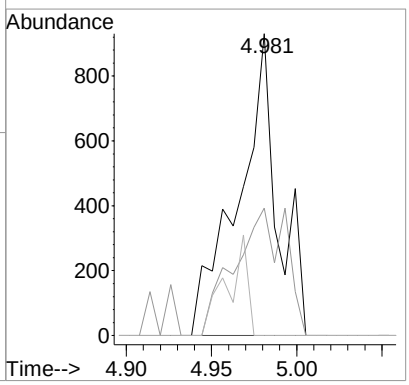


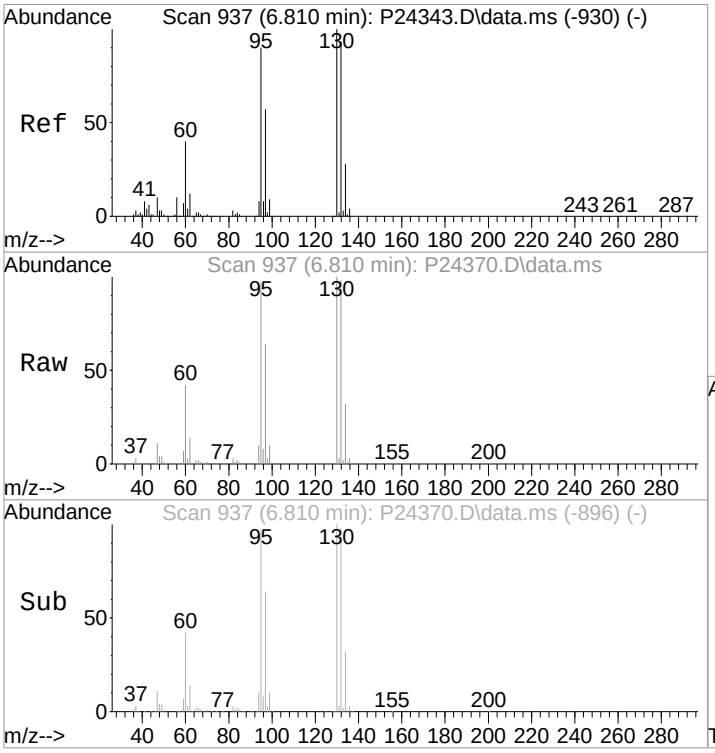


#40
Chloroform
Concen: 0.28 ppb m
RT: 4.981 min Scan# 637
Delta R.T. 0.012 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion: 83 Resp: 1495

Ion	Ratio	Lower	Upper
83	100		
85	42.2	47.9	87.9#
47	0.0	3.4	43.4#

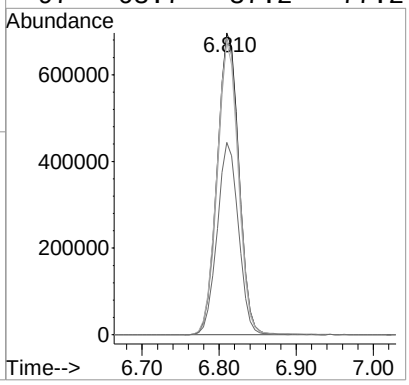


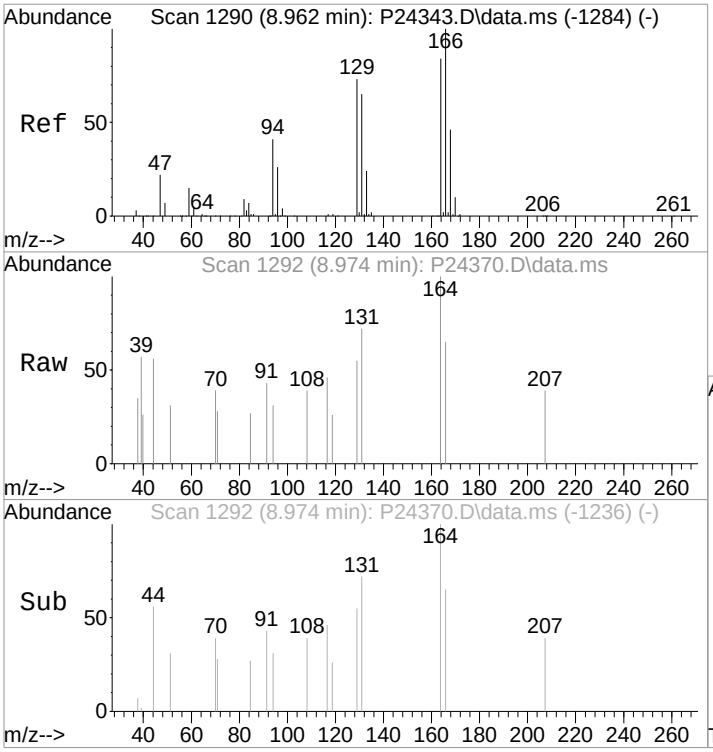


#54
Trichloroethene
Concen: 391.96 ppb
RT: 6.810 min Scan# 937
Delta R.T. 0.000 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion:130 Resp: 1366816

Ion	Ratio	Lower	Upper
130	100		
132	98.3	72.6	112.6
95	97.0	69.8	109.8
97	63.7	37.2	77.2

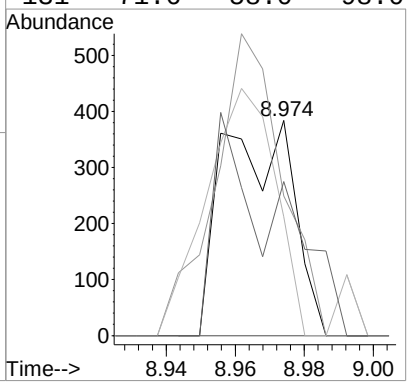




#72
Tetrachloroethene
Concen: 0.20 ppb m
RT: 8.974 min Scan# 1292
Delta R.T. 0.012 min
Lab File: P24370.D
Acq: 21 Feb 2019 4:13 pm

Tgt Ion:164 Resp: 542

Ion	Ratio	Lower	Upper
164	100		
166	64.8	99.6	139.6#
129	55.2	66.7	106.7#
131	71.6	58.0	98.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24370.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.634	74	88	90	rBV4	36504	109147	1.51%	0.641%
2	4.396	532	541	556	rBV	493589	1256511	17.40%	7.376%
3	5.261	674	683	694	rBV	155788	417154	5.78%	2.449%
4	5.402	694	706	717	rBV	345670	872437	12.08%	5.122%
5	5.792	758	770	783	rBV	221382	534659	7.41%	3.139%
6	6.487	874	884	893	rBV	571417	1144030	15.85%	6.716%
7	6.810	927	937	954	rBV	3726584	7219865	100.00%	42.385%
8	8.297	1174	1181	1192	rBV	1050924	1657366	22.96%	9.730%
9	9.785	1420	1425	1436	rBV	915457	1346785	18.65%	7.906%
10	10.864	1596	1602	1613	rBV	852188	1074112	14.88%	6.306%
11	11.839	1756	1762	1770	rBV	1157802	1401997	19.42%	8.231%

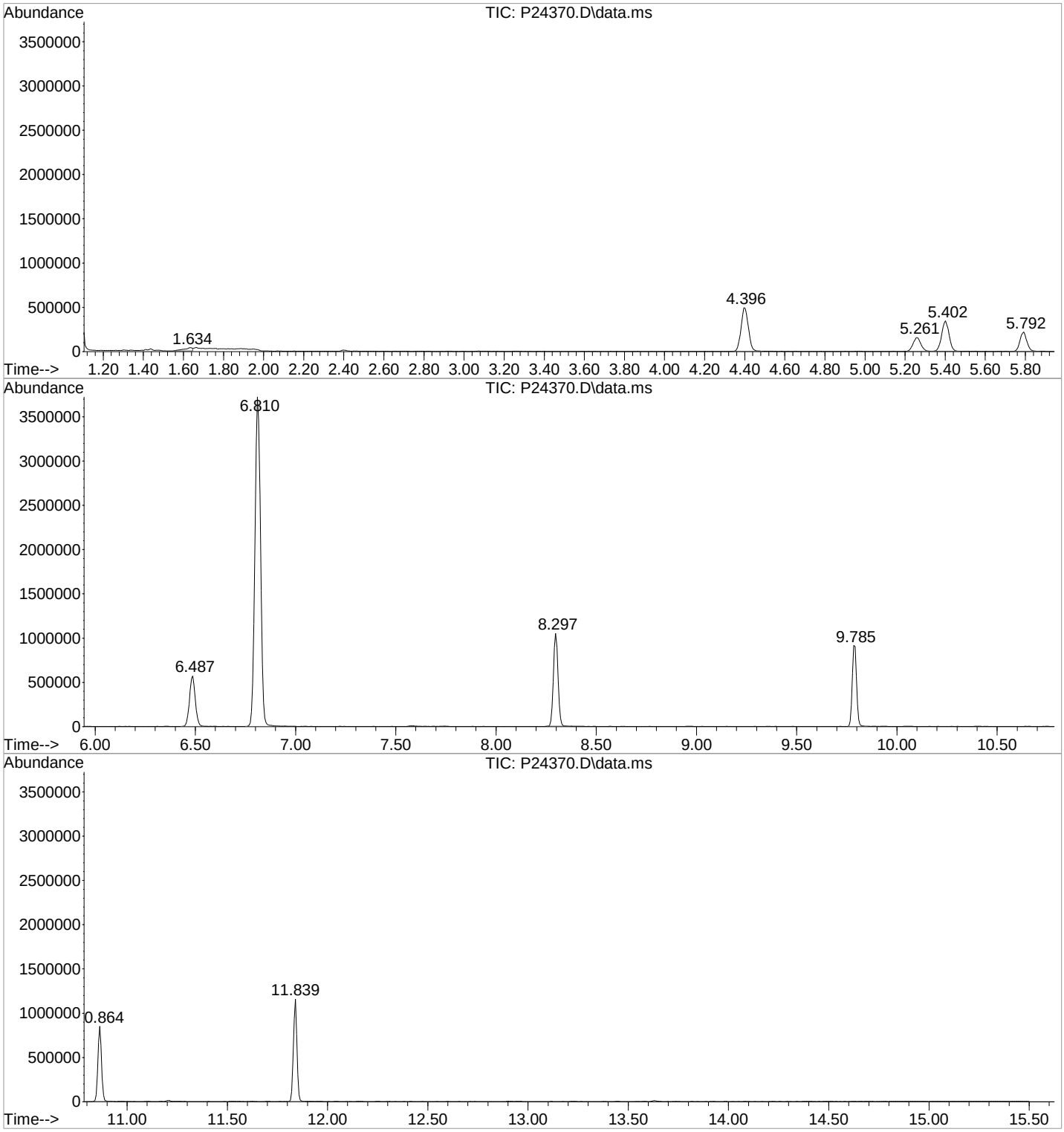
Sum of corrected areas: 17034063

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

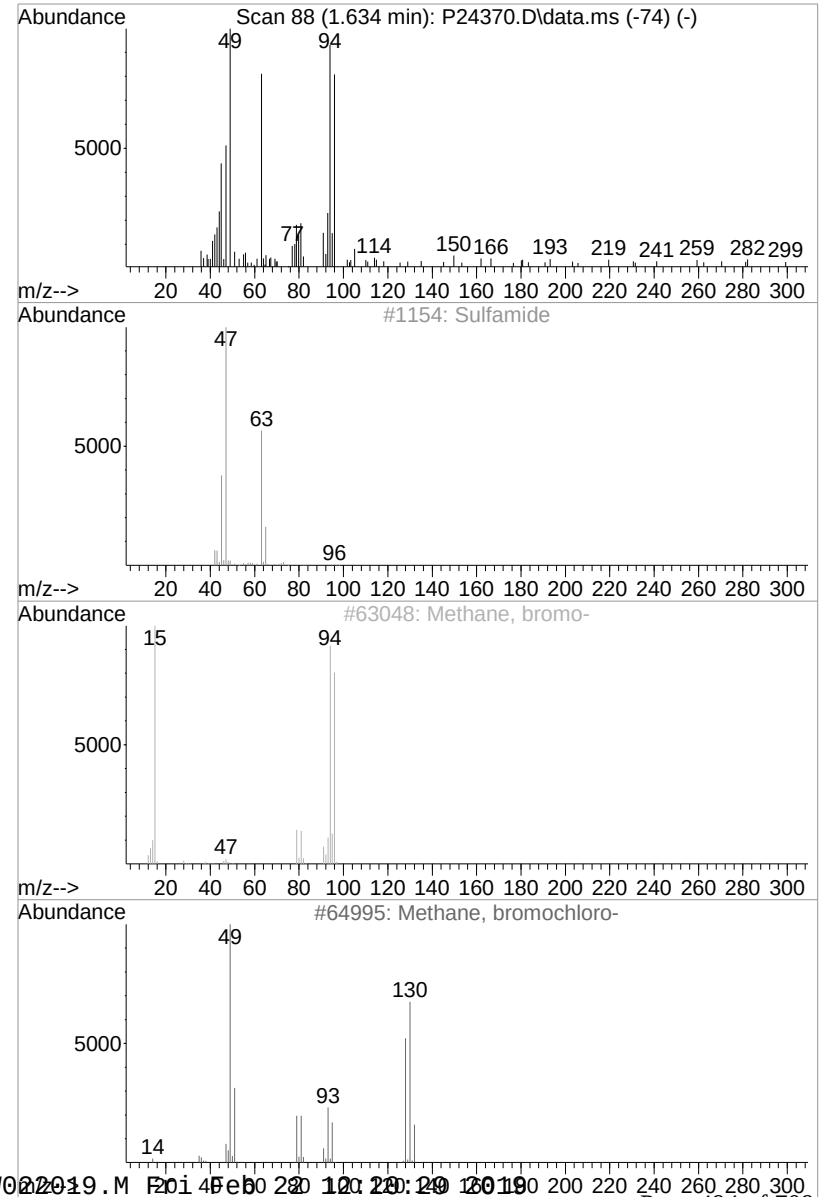
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

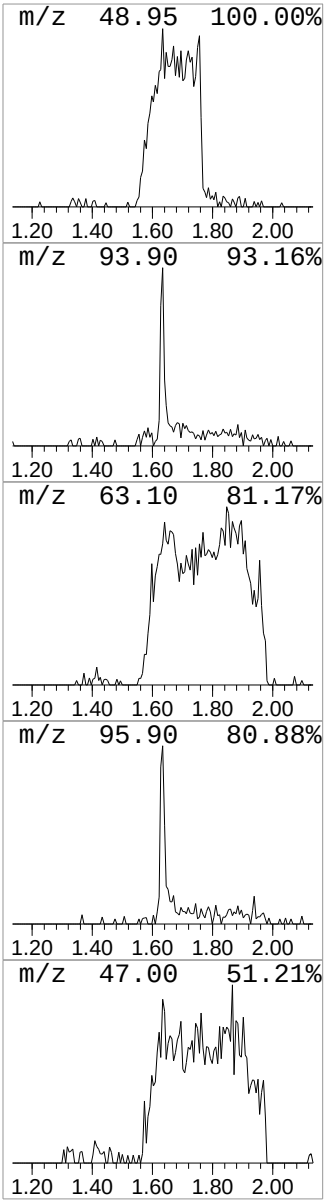
****

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.634	6.26 ppb	109147	Pentafluorobenzene	5.402

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Sulfamide	96	H4N2O2S	000000-00-0	12
2	Methane, bromo-	94	CH3Br	000074-83-9	11
3	Methane, bromochloro-	128	CH2BrCl	000074-97-5	10
4	Methane, bromo-	94	CH3Br	000074-83-9	10
5	Methane, bromo-	94	CH3Br	000074-83-9	10





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24370.D
Acq On : 21 Feb 2019 4:13 pm
Operator : K.Ruest
Sample : R1901365-005|41.5 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

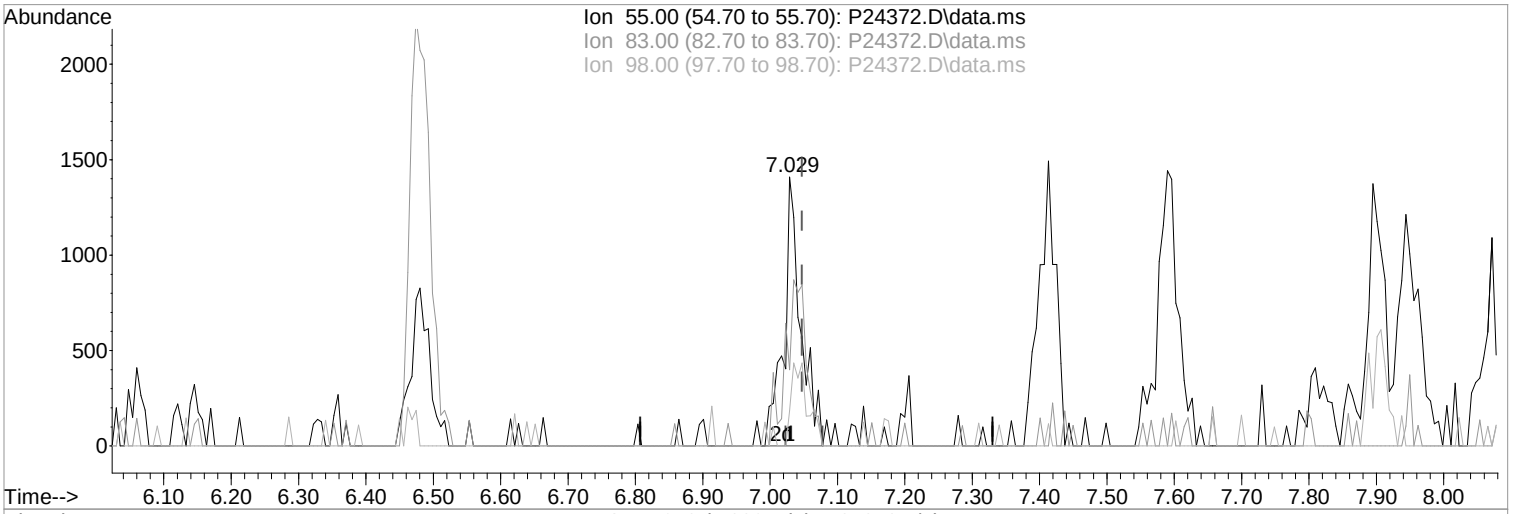
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

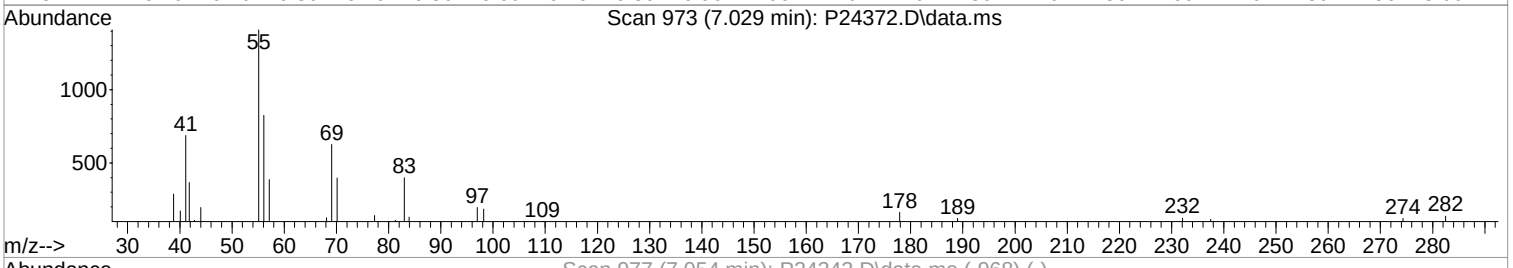
					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	1.634	6.3	ppb	109147	1	5.402	872437	50.0

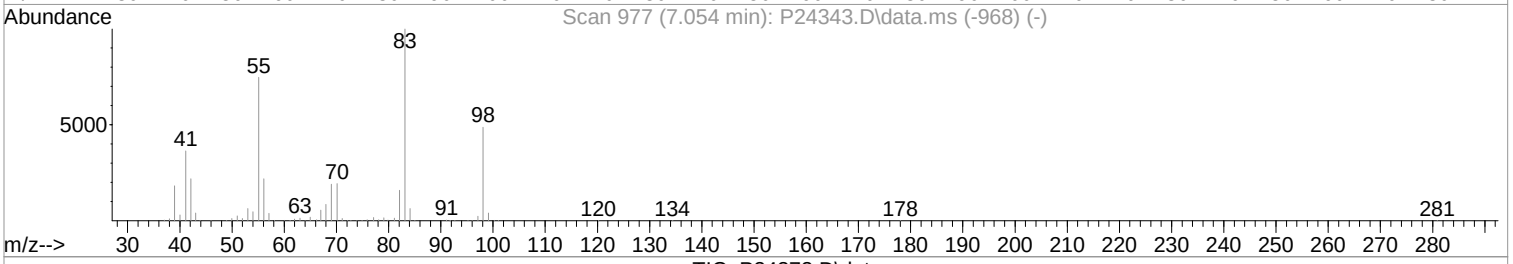
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 21 17:12:45 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24372.D\data.ms

(55) Methylcyclohexane (P)

7.029min (-0.018) 0.56 ppb m

response 2496

Ion	Exp%	Act%
55.00	100	100
83.00	133.10	28.39#
98.00	65.00	13.13#
0.00	0.00	0.00

Manual Integration:

After

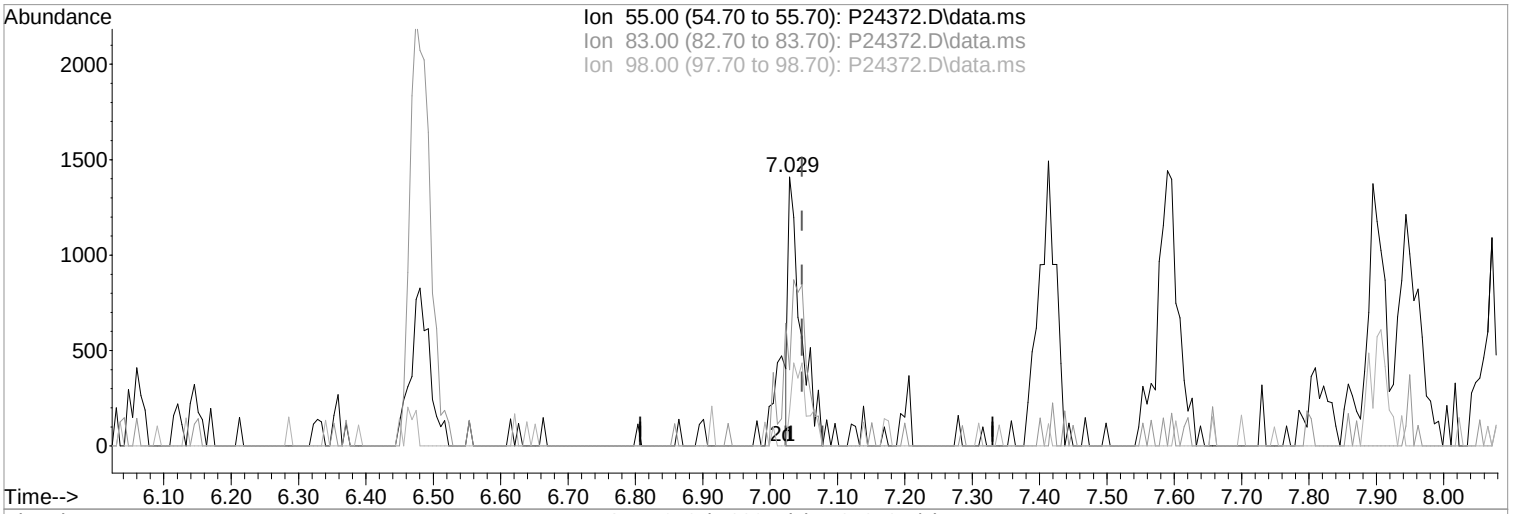
Split Peak

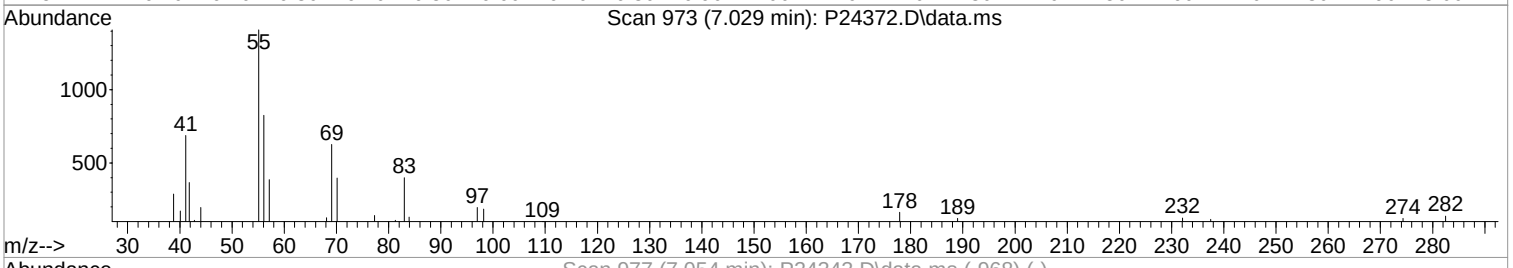
02/22/19

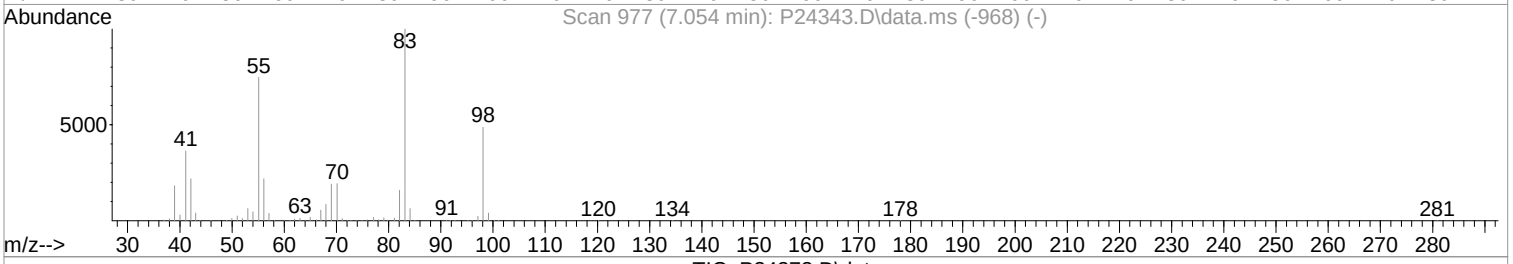
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 21 17:12:45 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24372.D\data.ms

(55) Methylcyclohexane (P)

7.029min (-0.018) 0.41 ppb

response 1857

Ion	Exp%	Act%
55.00	100	100
83.00	133.10	28.39#
98.00	65.00	13.13#
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 22 12:41:21 2019 high NT's
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

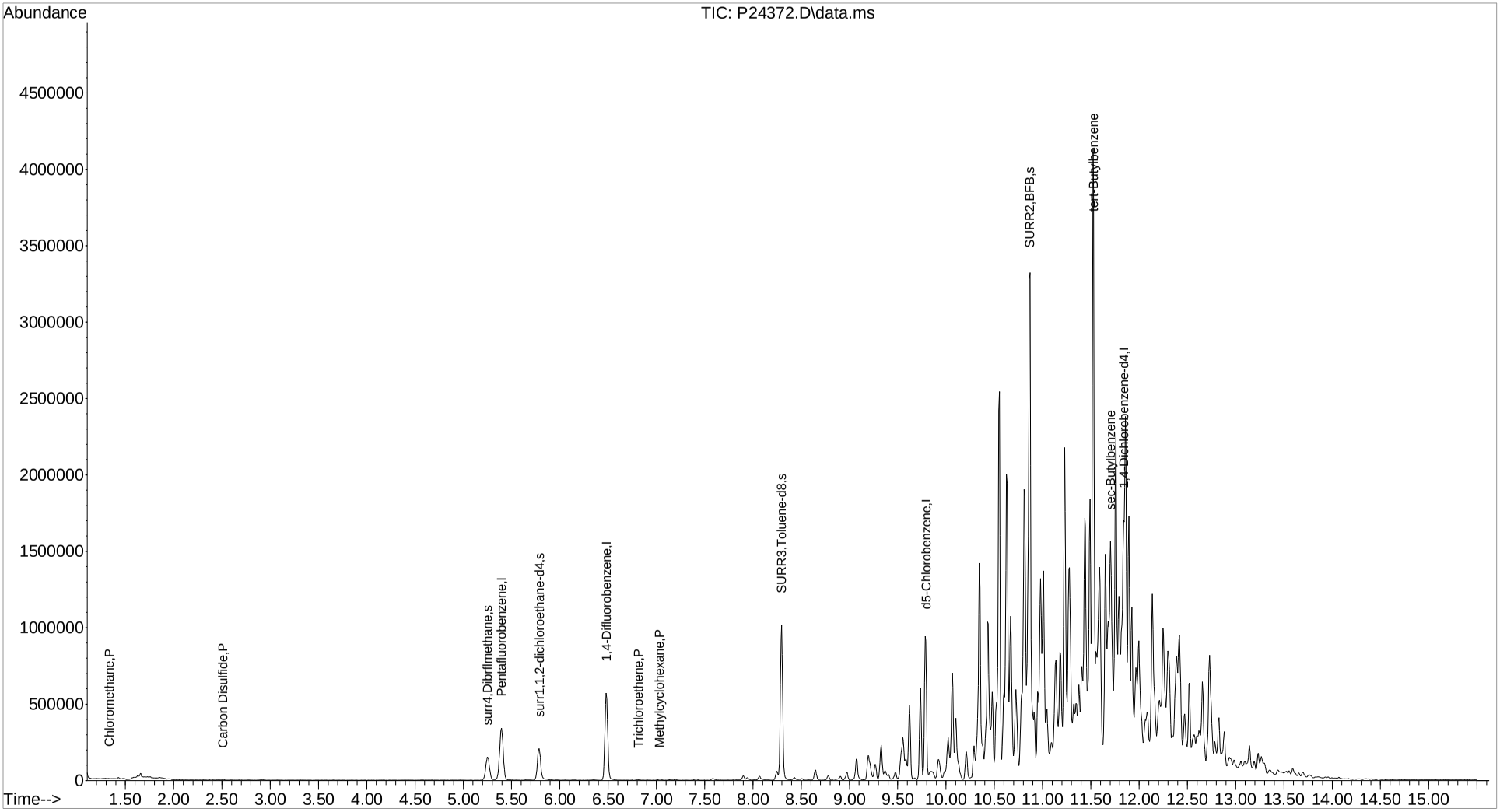
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.395	168	319967	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.480	114	509123	50.00	ppb		0.00
71) d5-Chlorobenzene	9.791	117	445563	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	226557	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.249	113	132685	47.43	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 94.86%				
48) surr1,1,2-dichloroetha...	5.785	65	182246	51.35	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.70%				
65) SURR3,Toluene-d8	8.297	98	653487	49.24	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.48%				
70) SURR2,BFB	10.864	95	245365	51.62	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 103.24%				
Target Compounds							Qvalue
3) Chloromethane	1.329	50	1441	0.28	ppb		97
18) Carbon Disulfide	2.506	76	2962	0.33	ppb		90
54) Trichloroethene	6.810	130	2177	0.61	ppb	#	76
55) Methylcyclohexane	7.029	55	2496m	0.56	ppb		
100) tert-Butylbenzene	11.522	119	3342	0.31	ppb		96
103) sec-Butylbenzene	11.705	105	11467	0.74	ppb		93

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

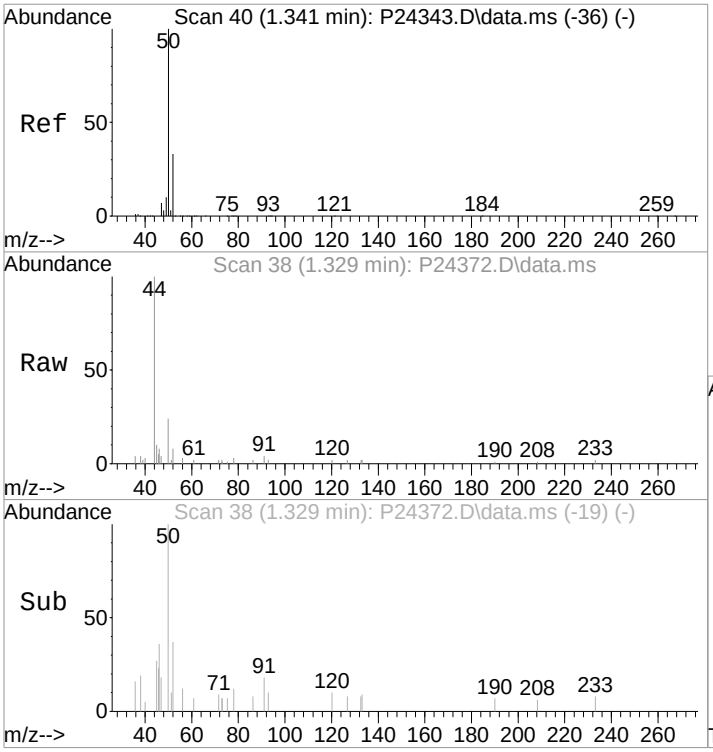
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 22 12:41:21 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



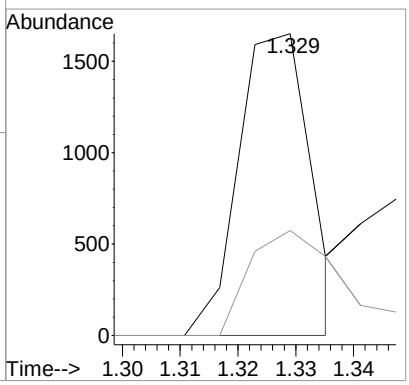
1st 02/22/19

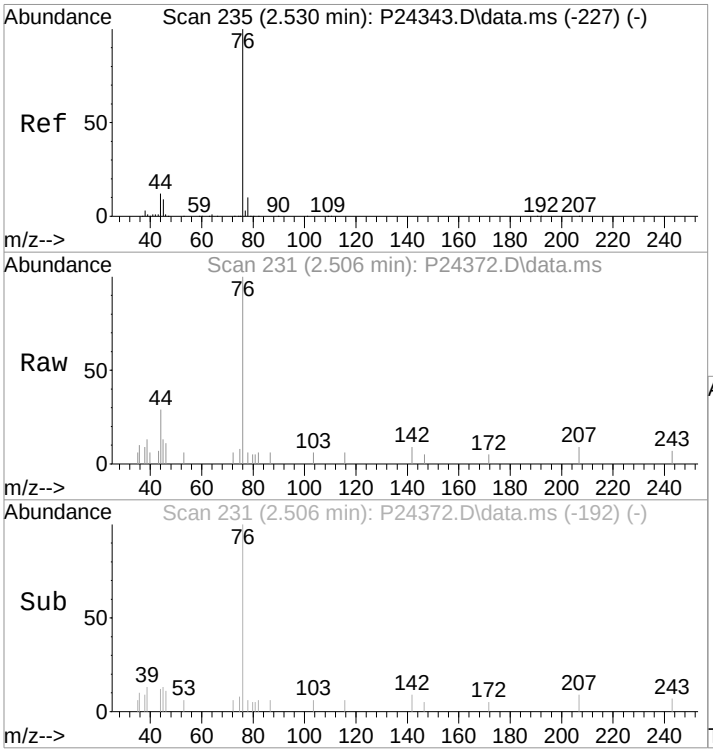


#3
Chloromethane
Concen: 0.28 ppb
RT: 1.329 min Scan# 38
Delta R.T. 0.000 min
Lab File: P24372.D
Acq: 21 Feb 2019 4:57 pm

Tgt Ion: 50 Resp: 1441

Ion	Ratio	Lower	Upper
50	100		
52	34.8	13.0	53.0

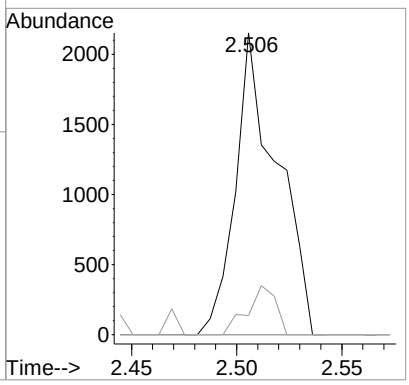


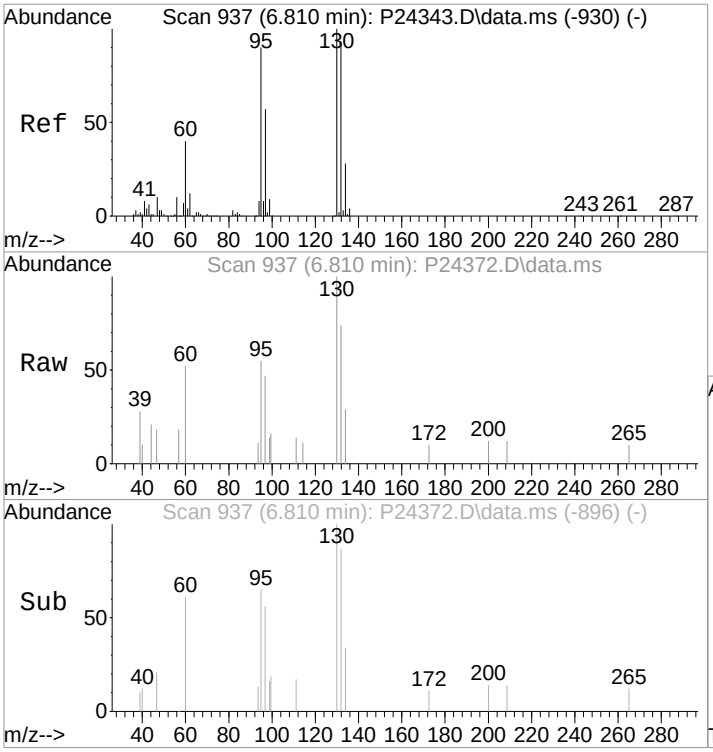


#18
Carbon Disulfide
Concen: 0.33 ppb
RT: 2.506 min Scan# 231
Delta R.T. -0.018 min
Lab File: P24372.D
Acq: 21 Feb 2019 4:57 pm

Tgt Ion: 76 Resp: 2962

Ion	Ratio	Lower	Upper
76	100		
78	6.4	0.0	30.1
77	0.0	0.0	22.9

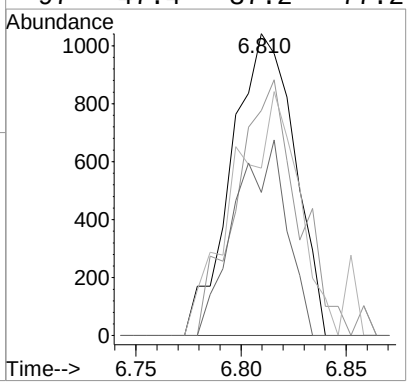


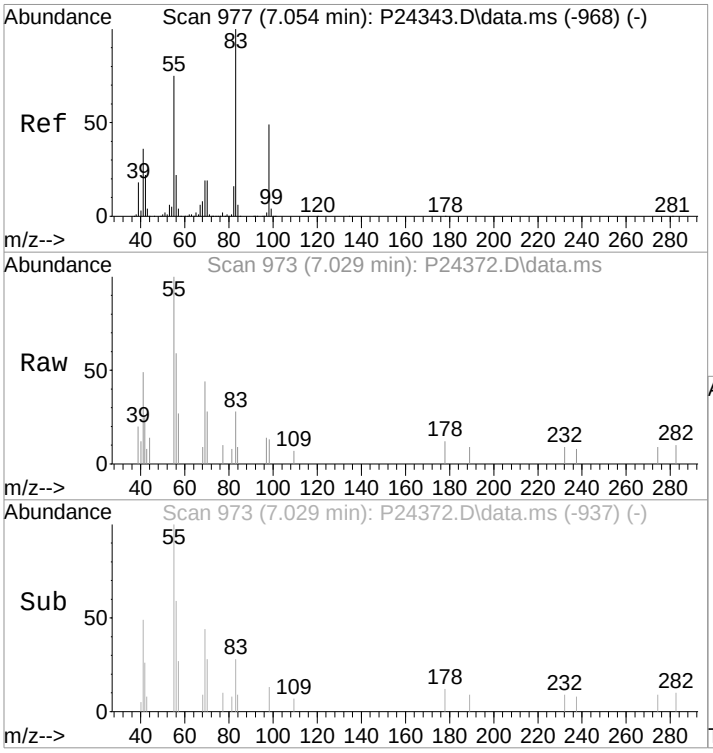


#54
Trichloroethene
Concen: 0.61 ppb
RT: 6.810 min Scan# 937
Delta R.T. 0.000 min
Lab File: P24372.D
Acq: 21 Feb 2019 4:57 pm

Tgt Ion:130 Resp: 2177

Ion	Ratio	Lower	Upper
130	100		
132	74.5	72.6	112.6
95	55.5	69.8	109.8#
97	47.4	37.2	77.2

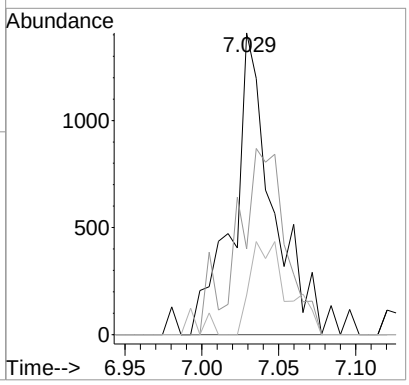


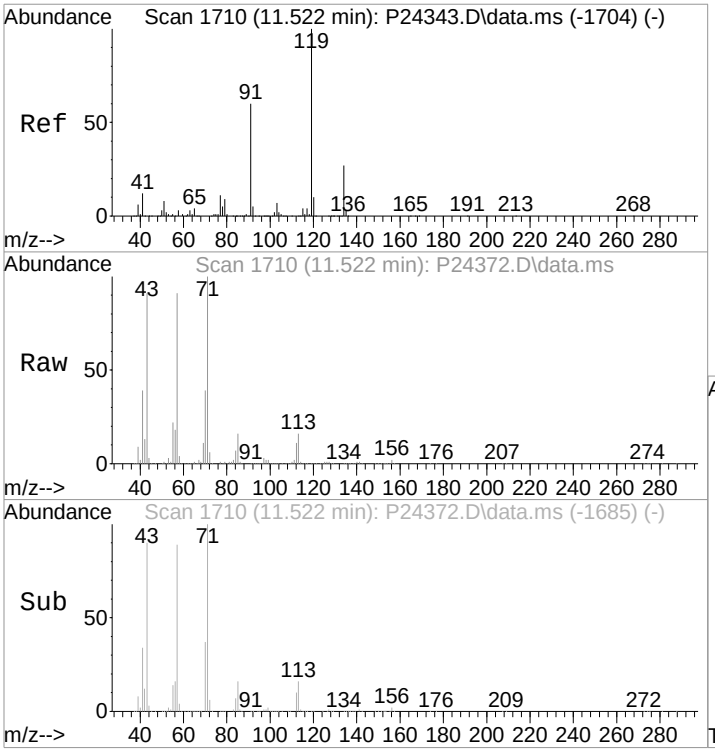


#55
Methylcyclohexane
Concen: 0.56 ppb m
RT: 7.029 min Scan# 973
Delta R.T. -0.018 min
Lab File: P24372.D
Acq: 21 Feb 2019 4:57 pm

Tgt Ion: 55 Resp: 2496

Ion	Ratio	Lower	Upper
55	100		
83	28.4	113.1	153.1#
98	13.1	45.0	85.0#

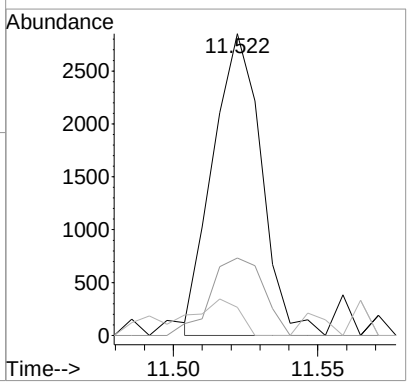


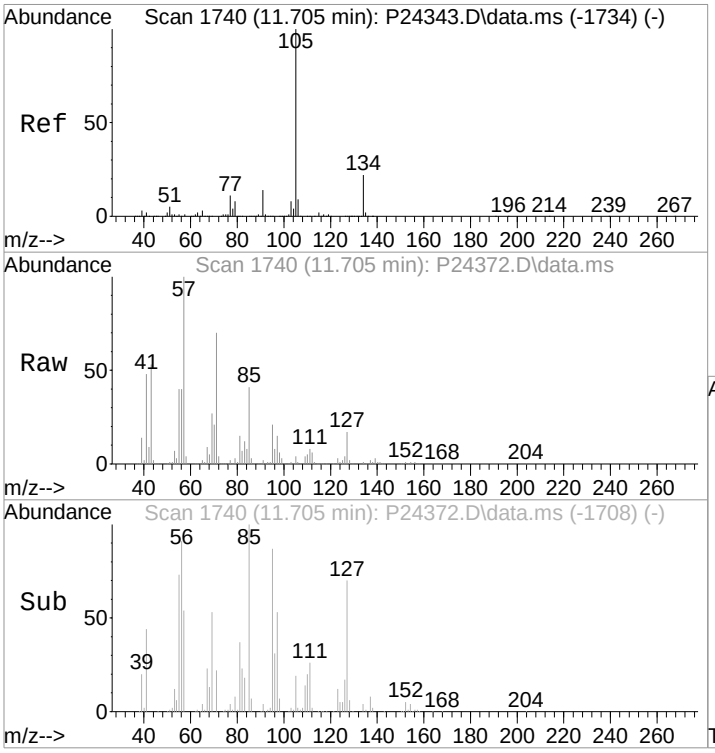


#100
tert-Butylbenzene
Concen: 0.31 ppb
RT: 11.522 min Scan# 1710
Delta R.T. 0.000 min
Lab File: P24372.D
Acq: 21 Feb 2019 4:57 pm

Tgt Ion:119 Resp: 3342

Ion	Ratio	Lower	Upper
119	100		
134	25.6	7.0	47.0
103	9.3	0.0	26.6

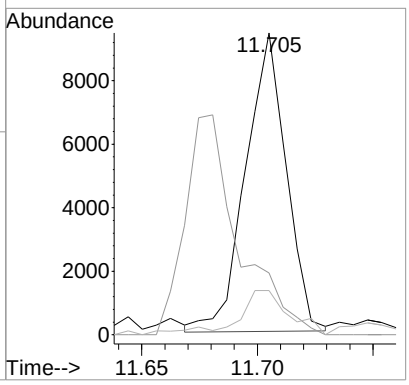




#103
sec-Butylbenzene
Concen: 0.74 ppb
RT: 11.705 min Scan# 1740
Delta R.T. 0.000 min
Lab File: P24372.D
Acq: 21 Feb 2019 4:57 pm

Tgt Ion:105 Resp: 11467

Ion	Ratio	Lower	Upper
105	100		
134	20.5	1.8	41.8
103	14.7	0.0	27.9



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24372.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.249	671	681	691	rBV2	151493	420041	7.26%	0.432%
2	5.395	694	705	715	rVB	337162	872200	15.08%	0.898%
3	5.785	758	769	781	rBV2	207004	516466	8.93%	0.532%
4	6.480	872	883	899	rBV	570574	1170786	20.25%	1.205%
5	8.248	1166	1173	1175	rBV2	59032	94332	1.63%	0.097%
6	8.297	1175	1181	1192	rVB	1013559	1710263	29.58%	1.760%
7	8.651	1231	1239	1245	rBV	66777	114810	1.99%	0.118%
8	8.974	1286	1292	1298	rVB	55379	83452	1.44%	0.086%
9	9.071	1298	1308	1319	rBV	139257	248425	4.30%	0.256%
10	9.193	1323	1328	1336	rBV2	158152	363546	6.29%	0.374%
11	9.267	1336	1340	1345	rVB2	95157	148203	2.56%	0.153%
12	9.327	1345	1350	1354	rBV	219931	340094	5.88%	0.350%
13	9.474	1367	1374	1378	rBV2	46429	71183	1.23%	0.073%
14	9.553	1378	1387	1390	rVV2	272395	611602	10.58%	0.629%
15	9.584	1390	1392	1395	rVV2	133126	204997	3.55%	0.211%
16	9.620	1395	1398	1404	rVB	488151	671994	11.62%	0.692%
17	9.736	1411	1417	1421	rBV	598249	829400	14.34%	0.854%
18	9.785	1421	1425	1431	rVV	932330	1369949	23.69%	1.410%
19	9.846	1431	1435	1442	rVB7	43428	125876	2.18%	0.130%
20	9.925	1442	1448	1454	rBV3	122422	240837	4.17%	0.248%
21	10.022	1459	1464	1467	rVV	249659	424086	7.33%	0.436%
22	10.065	1467	1471	1474	rVV	668244	964669	16.68%	0.993%
23	10.102	1474	1477	1489	rVB2	400949	716708	12.40%	0.738%
24	10.211	1489	1495	1501	rBV2	181094	289205	5.00%	0.298%
25	10.291	1503	1508	1511	rBV2	207440	323881	5.60%	0.333%
26	10.346	1511	1517	1525	rVV2	1360127	2396803	41.45%	2.467%
27	10.431	1525	1531	1536	rVV	967775	1837730	31.78%	1.891%
28	10.480	1536	1539	1542	rVV	504987	648574	11.22%	0.668%
29	10.553	1542	1551	1555	rVV	2464528	3878278	67.07%	3.992%
30	10.602	1555	1559	1560	rVV2	504867	677844	11.72%	0.698%
31	10.626	1560	1563	1567	rVV	1916448	2977252	51.49%	3.064%
32	10.669	1567	1570	1575	rVV	983554	1531729	26.49%	1.576%
33	10.724	1575	1579	1584	rVB2	497328	808836	13.99%	0.832%
34	10.809	1589	1593	1597	rVV2	1794450	3089549	53.43%	3.180%
35	10.870	1597	1603	1609	rVV3	3207860	5782162	100.00%	5.951%
36	10.949	1613	1616	1618	rVV	457201	600332	10.38%	0.618%
37	10.980	1618	1621	1623	rVV	1196172	1633781	28.26%	1.682%
38	11.010	1623	1626	1630	rVV3	1242501	1841964	31.86%	1.896%
39	11.047	1630	1632	1636	rVV2	335010	400476	6.93%	0.412%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

40	11.089	1636	1639	1642	rVV2	111740	179368	3.10%	0.185%
41	11.138	1642	1647	1651	rVV4	645667	1262898	21.84%	1.300%
42	11.181	1651	1654	1658	rVV3	695065	1174042	20.30%	1.208%
43	11.230	1658	1662	1666	rVV	2028333	2959716	51.19%	3.046%
44	11.278	1666	1670	1675	rVV3	1237153	2426083	41.96%	2.497%
45	11.327	1675	1678	1679	rVV2	342363	445159	7.70%	0.458%
46	11.345	1679	1681	1683	rVV2	342565	450263	7.79%	0.463%
47	11.376	1683	1686	1688	rVV	461702	660484	11.42%	0.680%
48	11.406	1688	1691	1693	rVV	578773	867091	15.00%	0.892%
49	11.437	1693	1696	1700	rVV4	1546744	2477296	42.84%	2.550%
50	11.492	1701	1705	1707	rVV	1669340	2310911	39.97%	2.378%
51	11.522	1707	1710	1714	rVV	3957075	5280884	91.33%	5.435%
52	11.589	1717	1721	1727	rVV	1209693	2343468	40.53%	2.412%
53	11.650	1727	1731	1734	rVV2	1290031	1907708	32.99%	1.963%
54	11.681	1734	1736	1737	rVV	851827	904213	15.64%	0.931%
55	11.705	1737	1740	1745	rVV3	1367983	2525818	43.68%	2.600%
56	11.760	1745	1749	1752	rVV	2074579	3084114	53.34%	3.174%
57	11.790	1752	1754	1757	rVV3	1001180	1484124	25.67%	1.527%
58	11.857	1757	1765	1768	rVV3	2171398	5235812	90.55%	5.389%
59	11.894	1768	1771	1774	rVV	1514938	1973121	34.12%	2.031%
60	11.925	1774	1776	1780	rVV2	914131	1142735	19.76%	1.176%
61	11.967	1780	1783	1785	rVV3	516851	773586	13.38%	0.796%
62	11.998	1785	1788	1795	rVV2	687881	1253526	21.68%	1.290%
63	12.083	1795	1802	1806	rVV7	215164	500852	8.66%	0.515%
64	12.138	1806	1811	1818	rVV3	980723	1728071	29.89%	1.779%
65	12.211	1818	1823	1825	rVV4	280340	551233	9.53%	0.567%
66	12.248	1826	1829	1834	rVV	750033	1319889	22.83%	1.358%
67	12.296	1834	1837	1843	rVV4	592379	1241948	21.48%	1.278%
68	12.388	1846	1852	1854	rVV4	553284	1034070	17.88%	1.064%
69	12.418	1854	1857	1862	rVB2	722164	1180761	20.42%	1.215%
70	12.473	1862	1866	1870	rVB4	212520	275058	4.76%	0.283%
71	12.522	1870	1874	1877	rVB	422216	499125	8.63%	0.514%
72	12.571	1877	1882	1885	rBV4	86405	154830	2.68%	0.159%
73	12.656	1893	1896	1902	rVV4	572351	934678	16.16%	0.962%
74	12.729	1902	1908	1915	rVV4	745064	1658140	28.68%	1.707%
75	12.784	1915	1917	1920	rVV3	178163	254285	4.40%	0.262%
76	12.827	1920	1924	1927	rVV2	334043	521260	9.01%	0.536%
77	12.882	1930	1933	1937	rVV2	240518	340515	5.89%	0.350%
78	12.937	1938	1942	1947	rVV6	71351	168120	2.91%	0.173%
79	12.985	1947	1950	1955	rVB6	52179	80152	1.39%	0.082%
80	13.144	1972	1976	1980	rVB	146780	198005	3.42%	0.204%
81	13.193	1981	1984	1987	rVB4	55954	64732	1.12%	0.067%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

82	13.235	1987	1991	1993	rBV	106957	139591	2.41%	0.144%
83	13.351	2006	2010	2018	rVB10	30765	74856	1.29%	0.077%
84	13.589	2046	2049	2057	rVB3	48722	87027	1.51%	0.090%

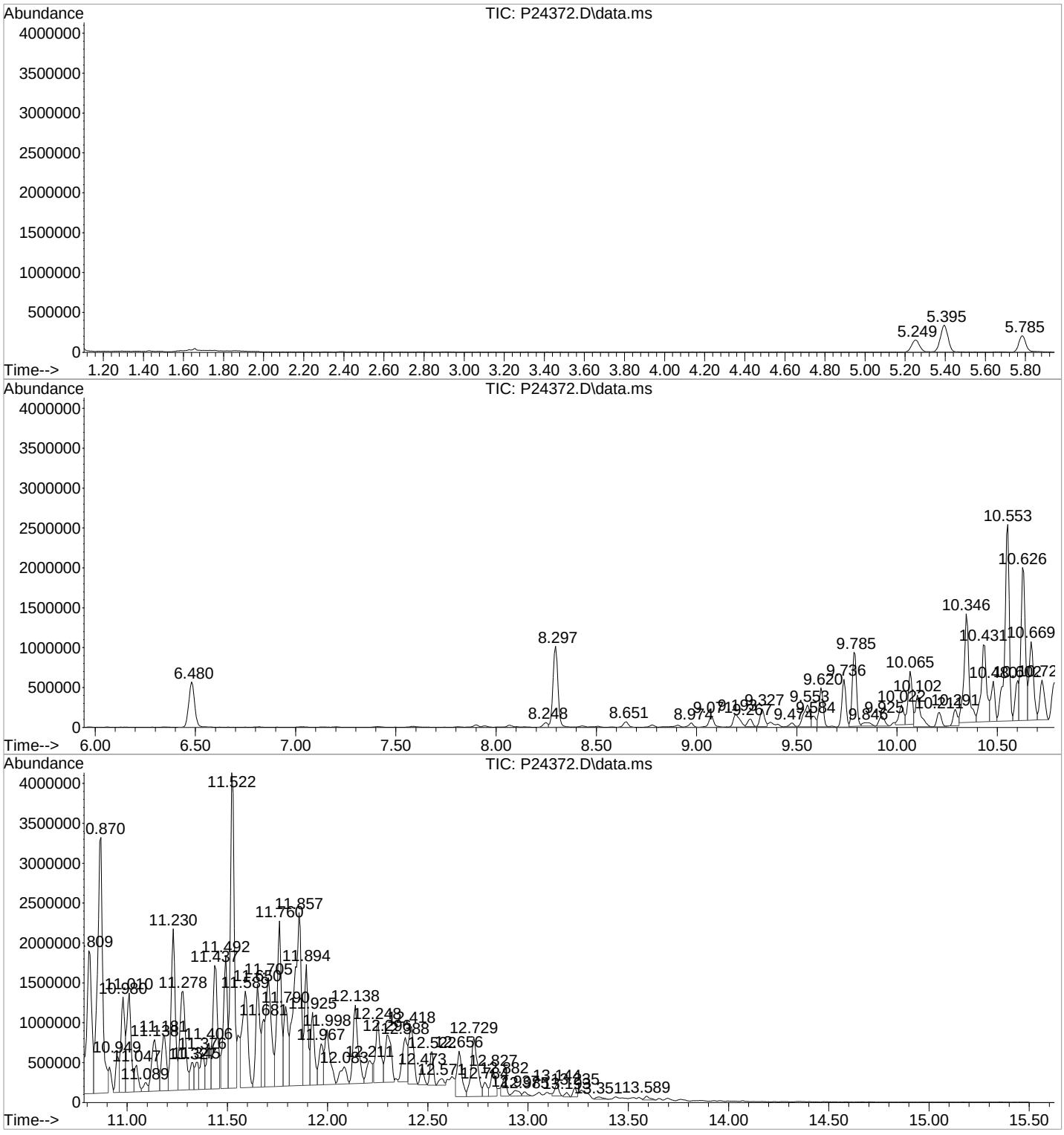
Sum of corrected areas: 97161933

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

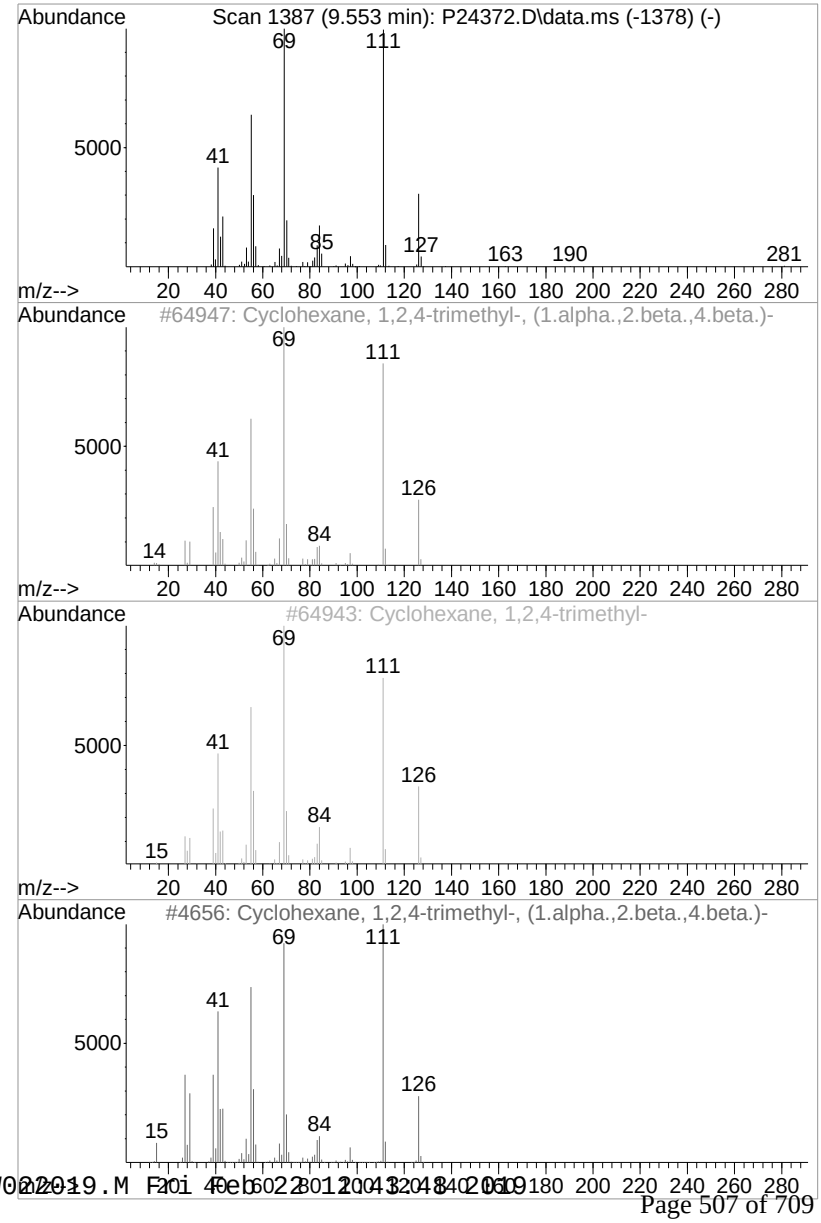
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

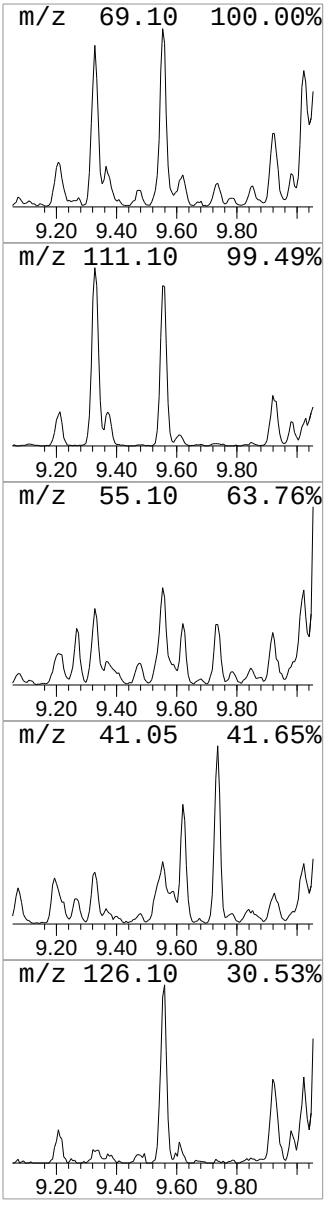
****

Peak Number 1 Cyclohexane, 1,2,4-trimethy... Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.553	22.32 ppb	611602	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,2,4-trimethyl-, (...	126	C9H18	007667-60-9	94
2	Cyclohexane, 1,2,4-trimethyl-	126	C9H18	002234-75-5	94
3	Cyclohexane, 1,2,4-trimethyl-, (...	126	C9H18	007667-60-9	91
4	Cyclohexane, 1,3,5-trimethyl-	126	C9H18	001839-63-0	87
5	Cyclohexane, 1,3,5-trimethyl-, (...	126	C9H18	001795-26-2	87





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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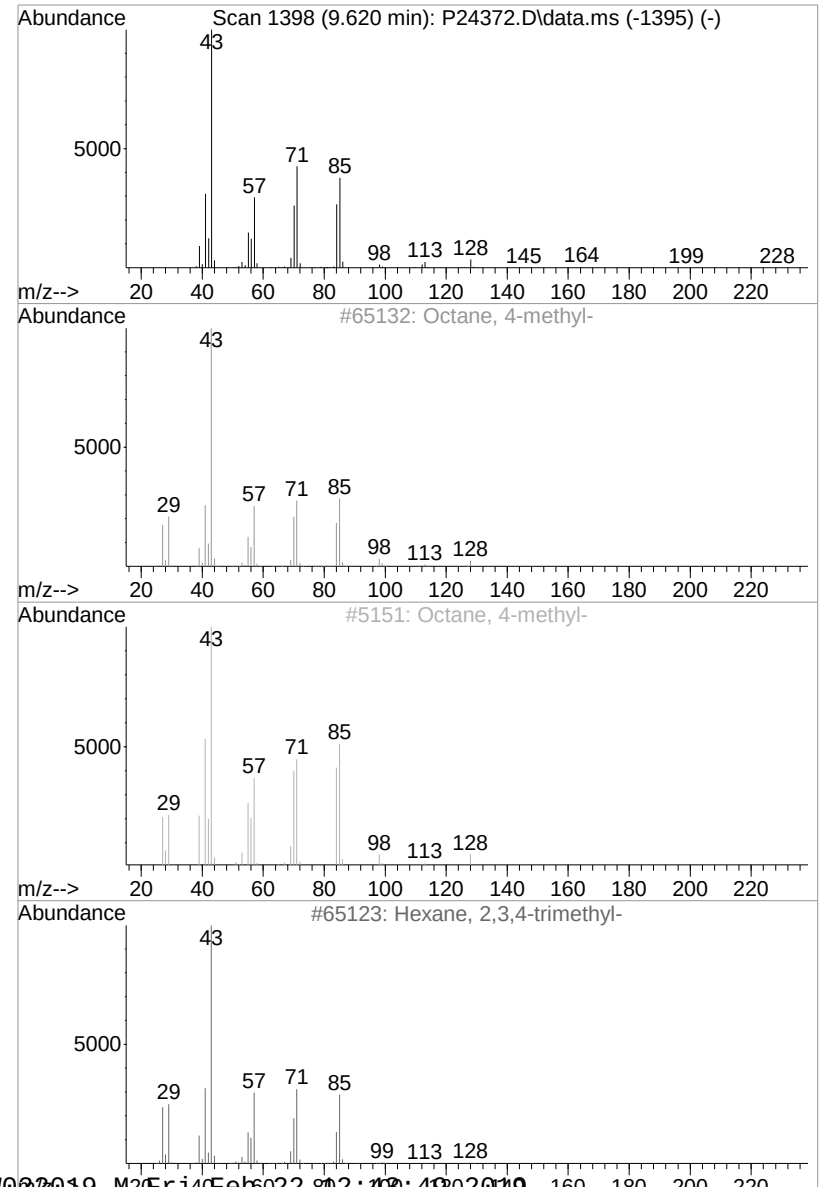
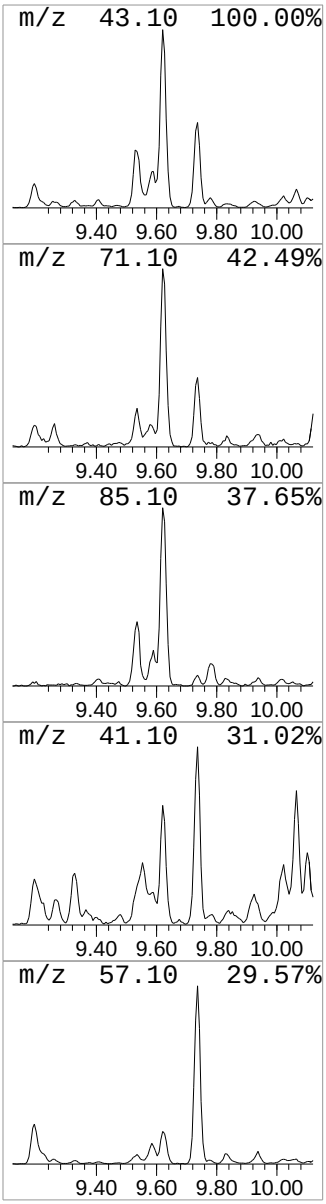
Peak Number 2 unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.620	24.53 ppb	671994	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 4-methyl-	128	C9H20	002216-34-4	81
2	Octane, 4-methyl-	128	C9H20	002216-34-4	76
3	Hexane, 2,3,4-trimethyl-	128	C9H20	000921-47-1	72
4	Hexane, 2,3,4-trimethyl-	128	C9H20	000921-47-1	64
5	Octane, 4-methyl-	128	C9H20	002216-34-4	64





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

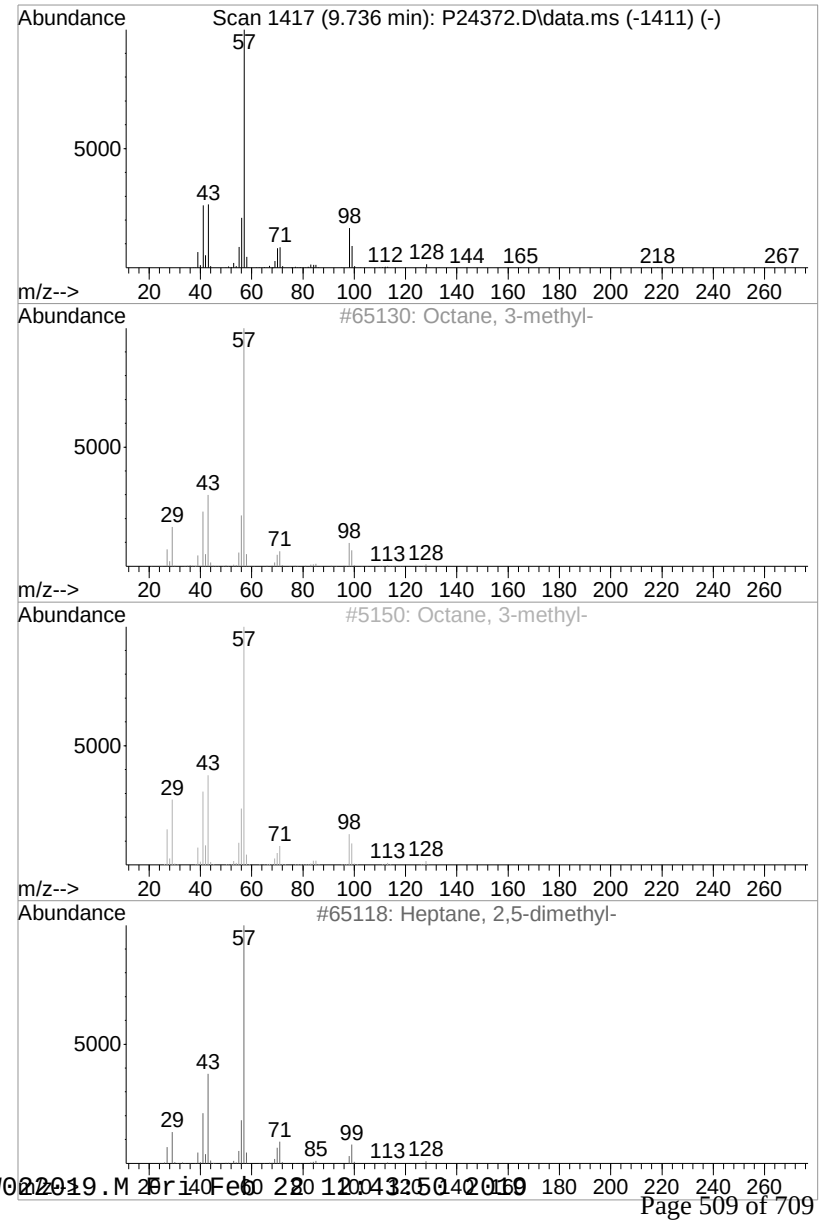
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

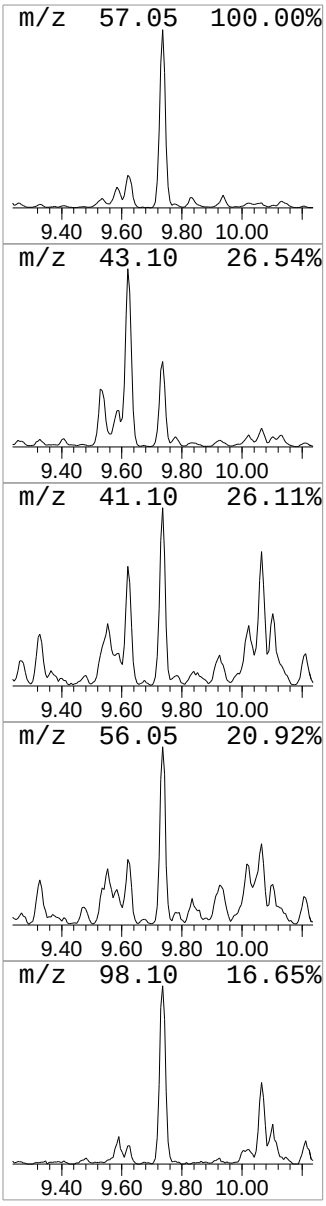
****

Peak Number 3 Octane, 3-methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.736	30.27 ppb	829400	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	91
2	Octane, 3-methyl-	128	C9H20	002216-33-3	83
3	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	80
4	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	72
5	Decane, 5-methyl-	156	C11H24	013151-35-4	64





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

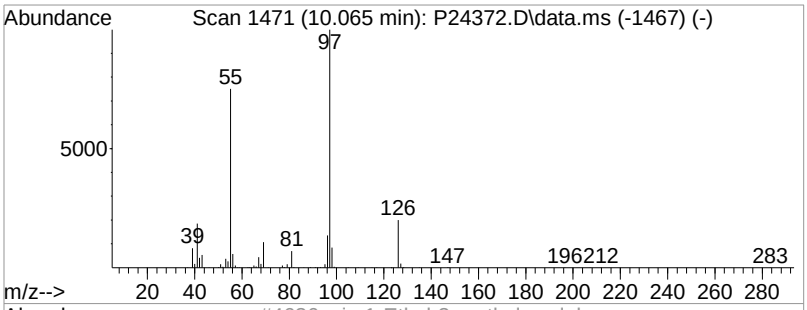
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

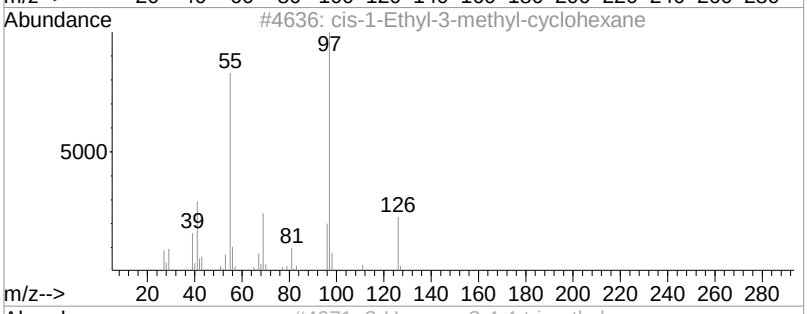
****

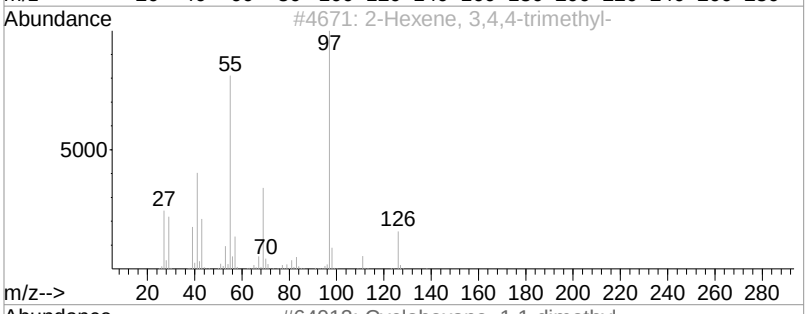
Peak Number 4 unknown Concentration Rank 7

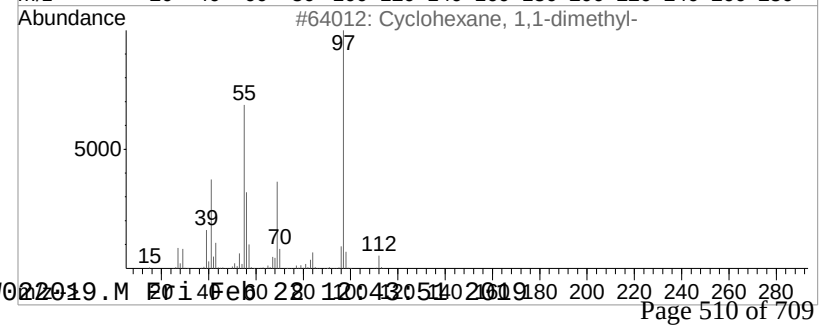
R.T.	EstConc	Area	Relative to ISTD	R.T.
10.065	35.21 ppb	964669	d5-Chlorobenzene	9.791

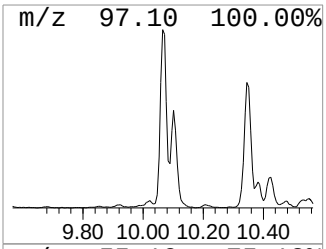
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	cis-1-Ethyl-3-methyl-cyclohexane	126	C9H18	019489-10-2	78
2	2-Hexene, 3,4,4-trimethyl-	126	C9H18	053941-19-8	72
3	Cyclohexane, 1,1-dimethyl-	112	C8H16	000590-66-9	64
4	Furan, 2,3-dihydro-4-(1-methylpr...	126	C8H14O	034379-54-9	64
5	4-Octen-3-one	126	C8H14O	014129-48-7	64

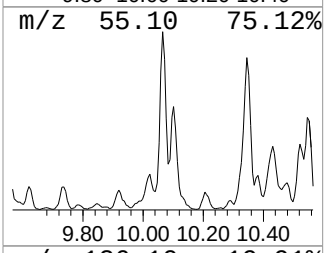


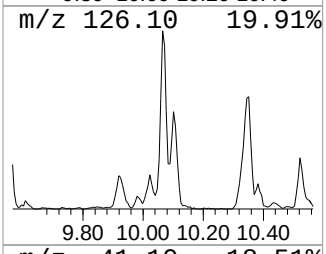


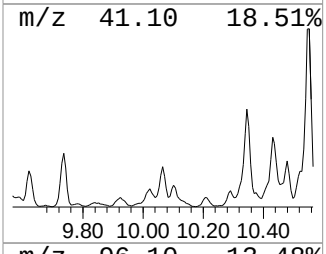


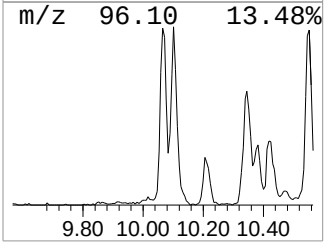












Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

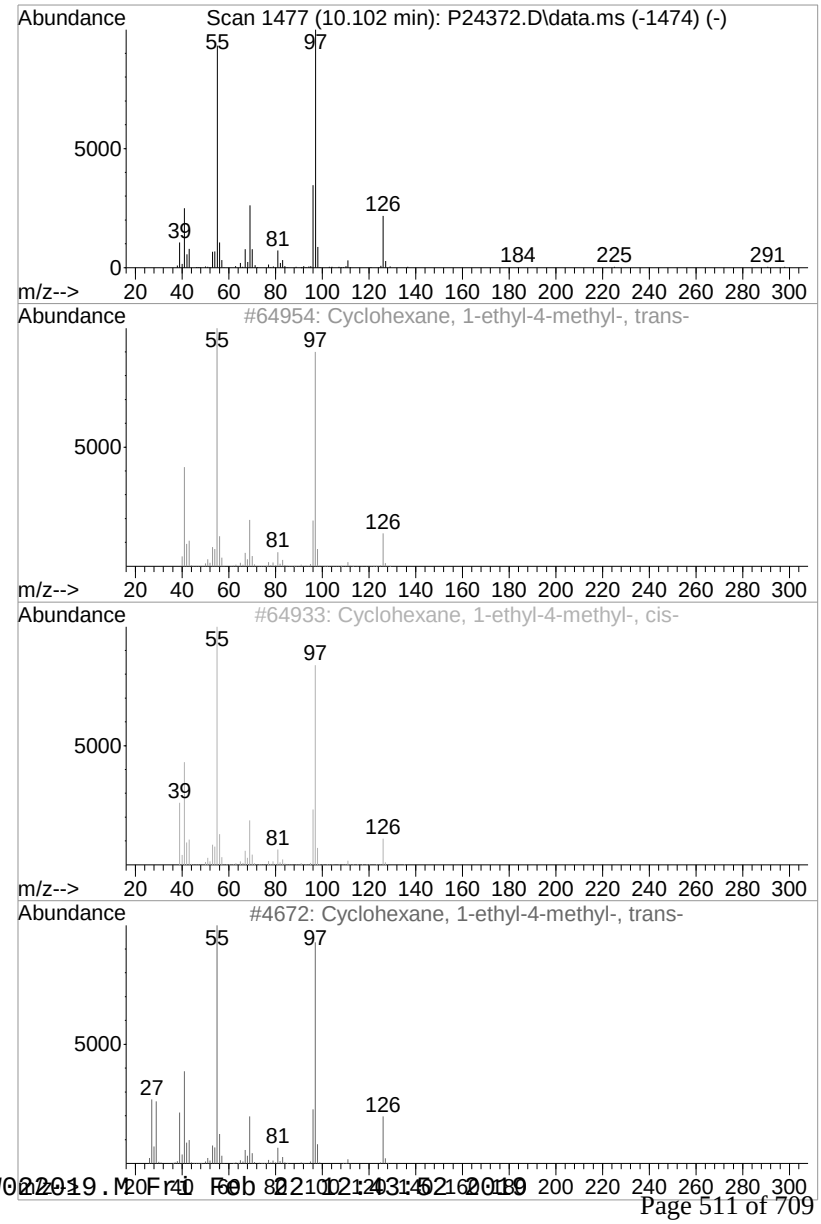
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

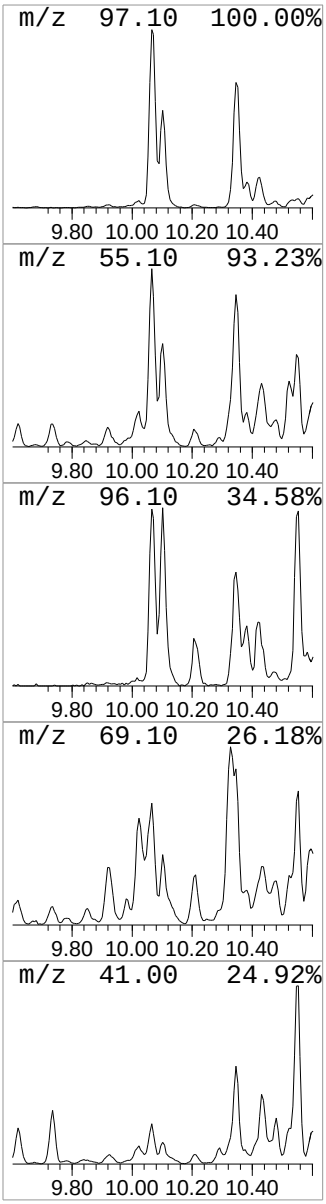
****

Peak Number 5 Cyclohexane, 1-ethyl-4-meth... Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.102	26.16 ppb	716708	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	91
2	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	004926-78-7	91
3	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	91
4	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	91
5	1-Ethyl-3-methylcyclohexane (c,t)	126	C9H18	003728-55-0	90





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

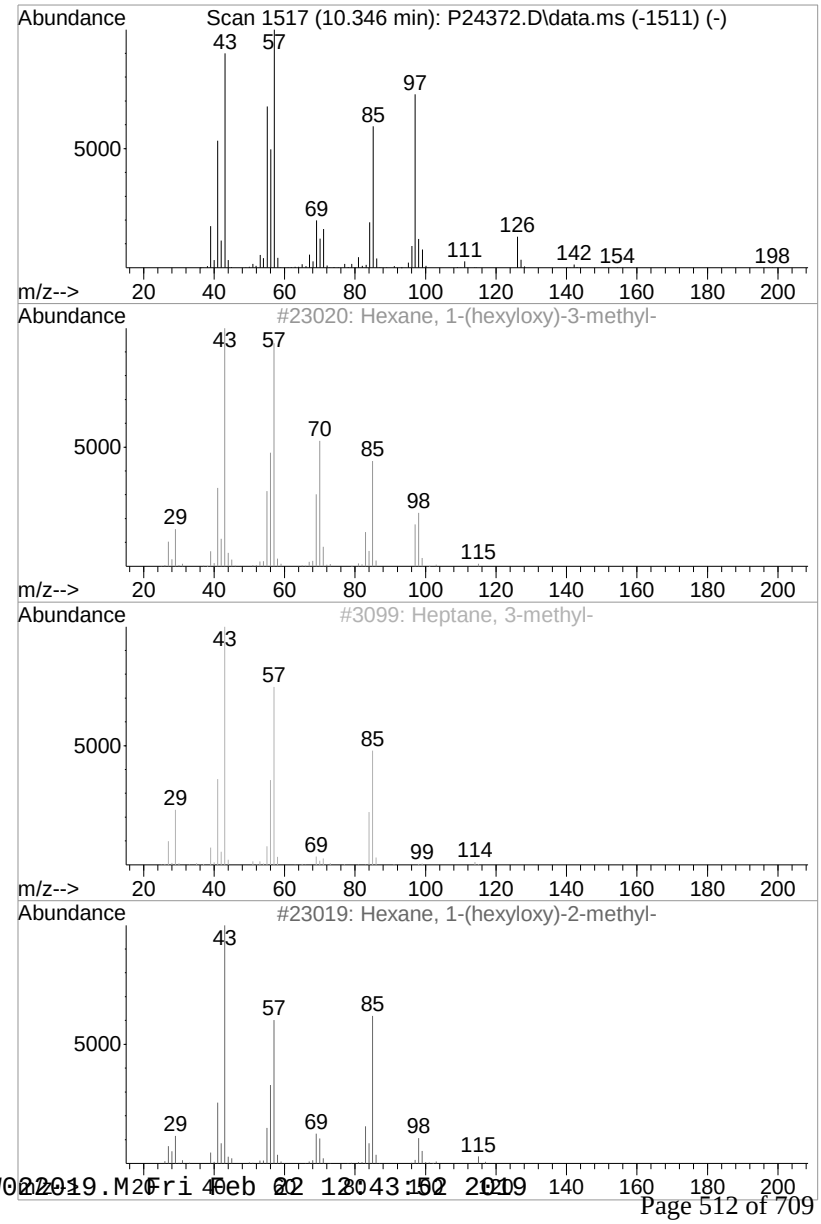
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

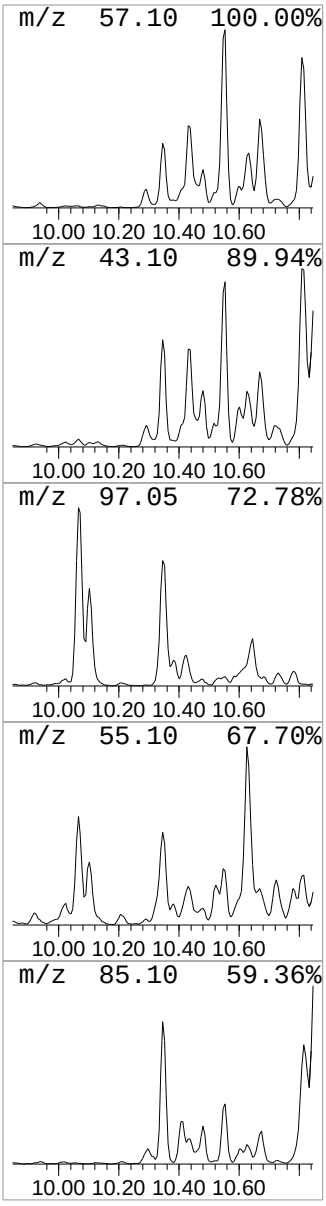
****

Peak Number 6 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.346	87.48 ppb	2396800	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane, 1-(hexyloxy)-3-methyl-	200	C13H28O	074421-18-4	50
2	Heptane, 3-methyl-	114	C8H18	000589-81-1	47
3	Hexane, 1-(hexyloxy)-2-methyl-	200	C13H28O	074421-17-3	46
4	Heptane, 2,4,6-trimethyl-	142	C10H22	002613-61-8	43
5	Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-78-8	38





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

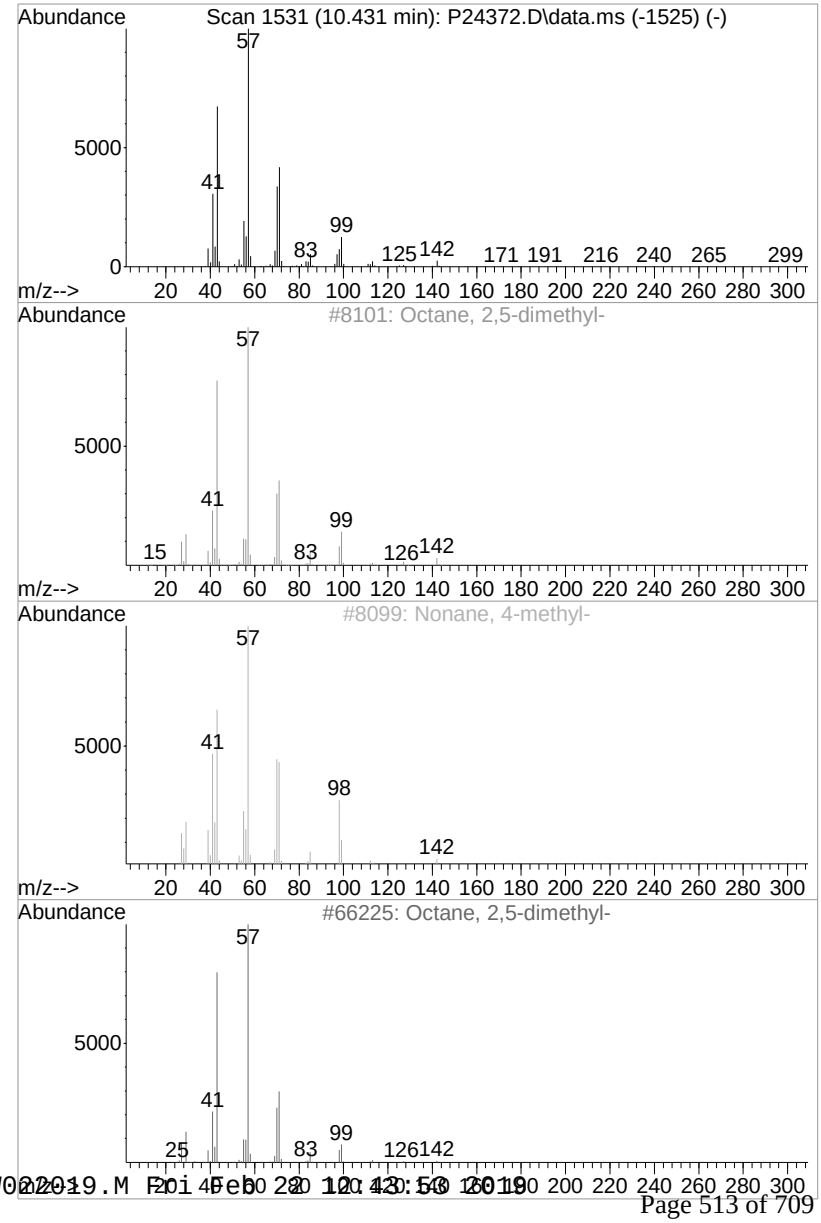
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

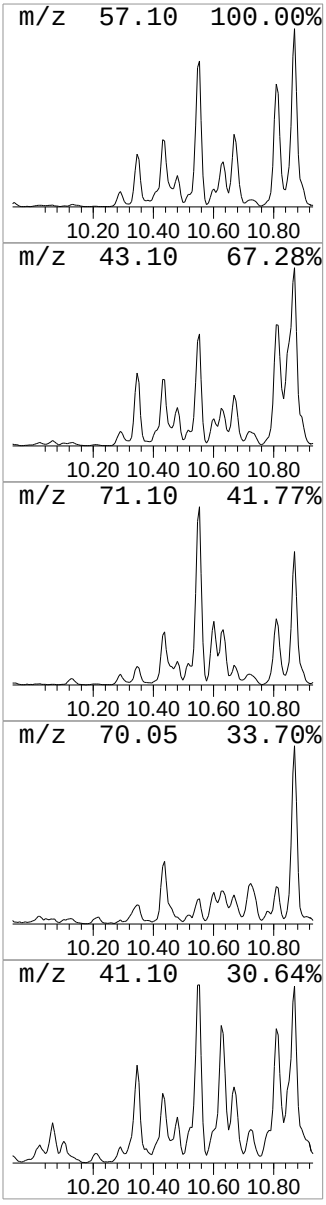
****

Peak Number 7 Octane, 2,5-dimethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.431	67.07 ppb	1837730	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,5-dimethyl-	142	C10H22	015869-89-3	93
2	Nonane, 4-methyl-	142	C10H22	017301-94-9	90
3	Octane, 2,5-dimethyl-	142	C10H22	015869-89-3	86
4	Pentane, 2,2,3,3-tetramethyl-	128	C9H20	007154-79-2	72
5	Pentane, 2,2,3,3-tetramethyl-	128	C9H20	007154-79-2	72





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

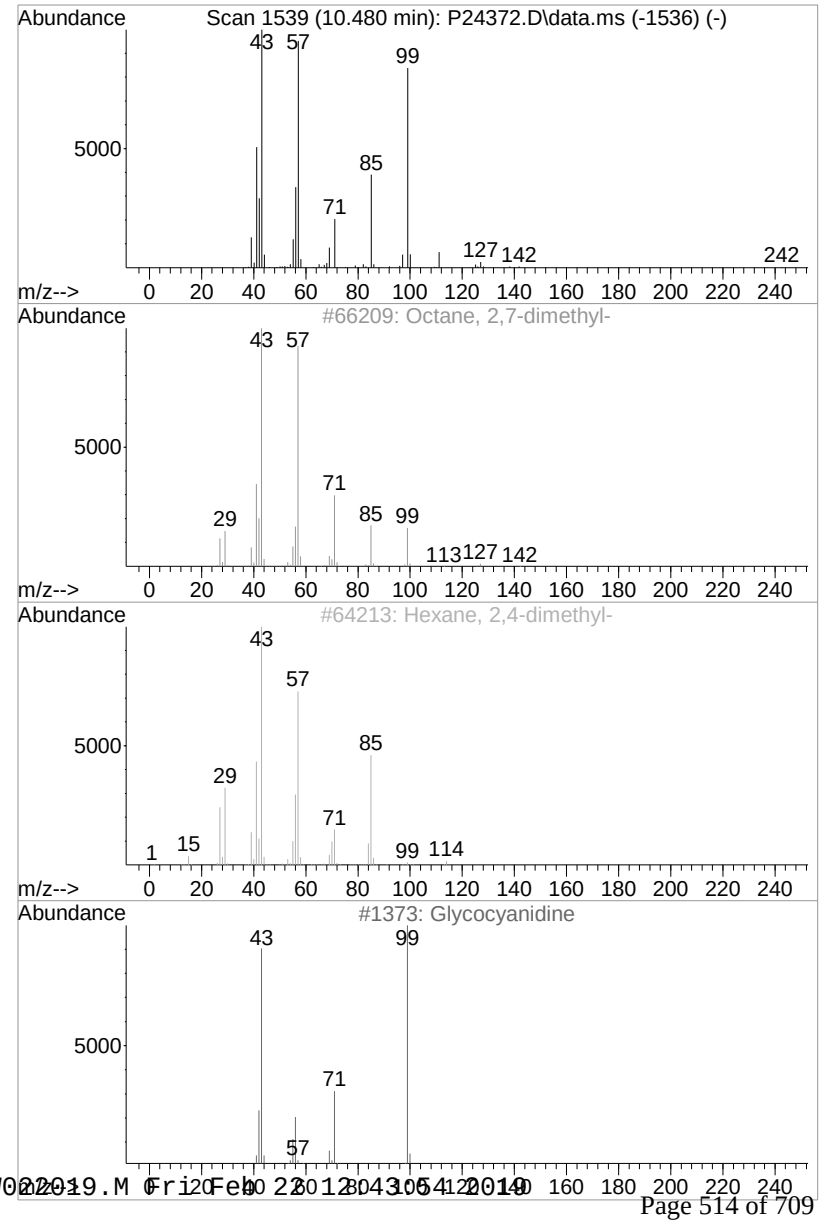
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

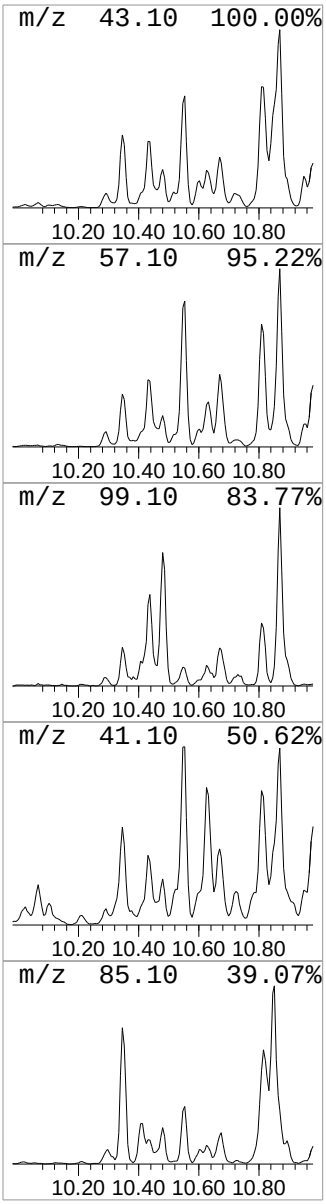
****

Peak Number 8 unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.480	23.67 ppb	648574	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,7-dimethyl-	142	C10H22	001072-16-8	45
2	Hexane, 2,4-dimethyl-	114	C8H18	000589-43-5	43
3	Glycocyanidine	99	C3H5N3O	000503-86-6	43
4	2(3H)-Furanone, 5-ethyldihydro-5...	128	C7H12O2	002865-82-9	40
5	Hexane, 2,4-dimethyl-	114	C8H18	000589-43-5	38





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

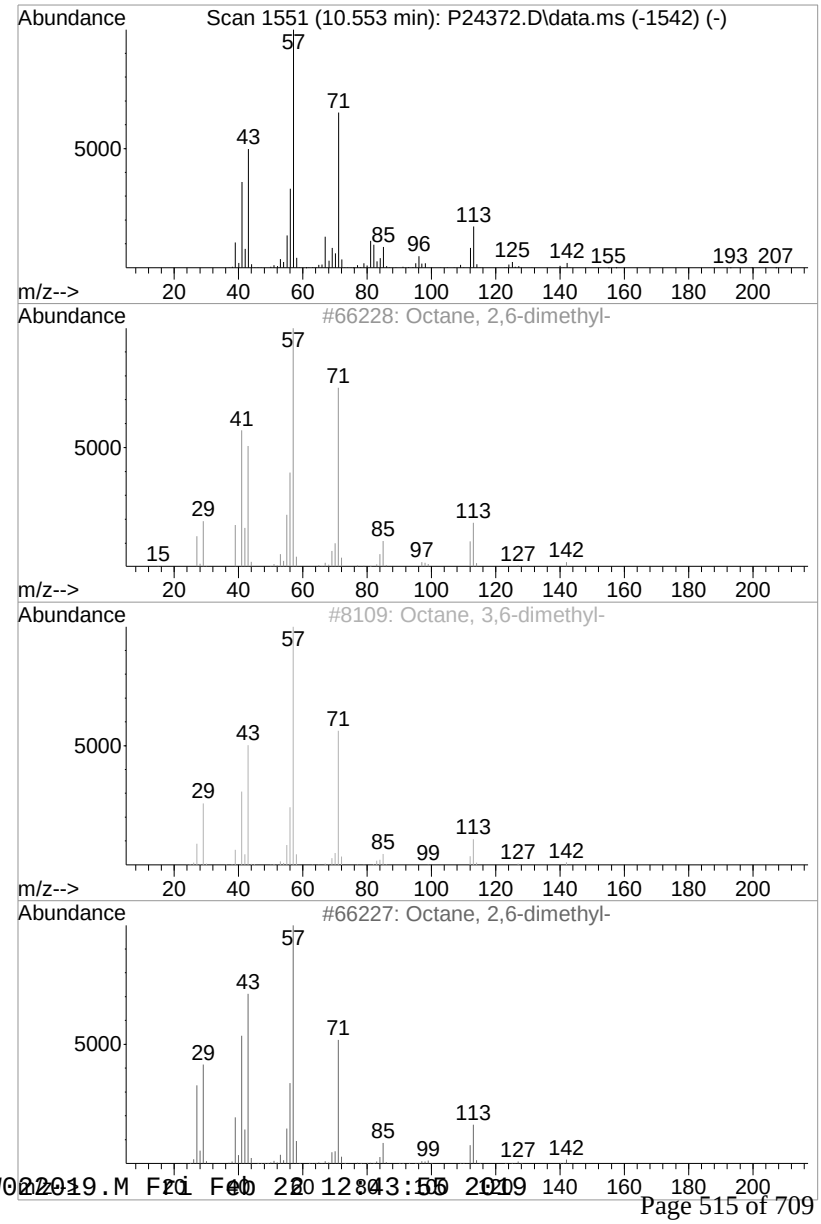
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

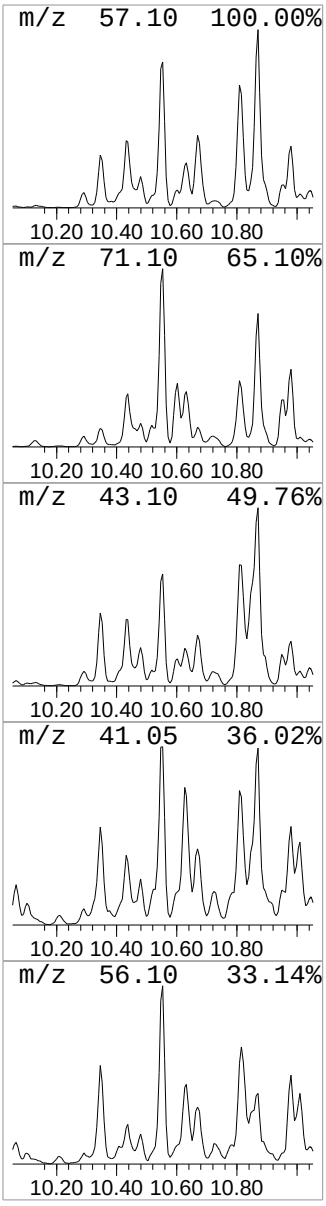
****

Peak Number 9 Octane, 2,6-dimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.553	141.55 ppb	3878280	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	87
2	Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	87
3	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	87
4	Nonane, 3-methyl-	142	C10H22	005911-04-6	74
5	Nonane, 3-methyl-	142	C10H22	005911-04-6	72





Library Search Compound Report

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Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

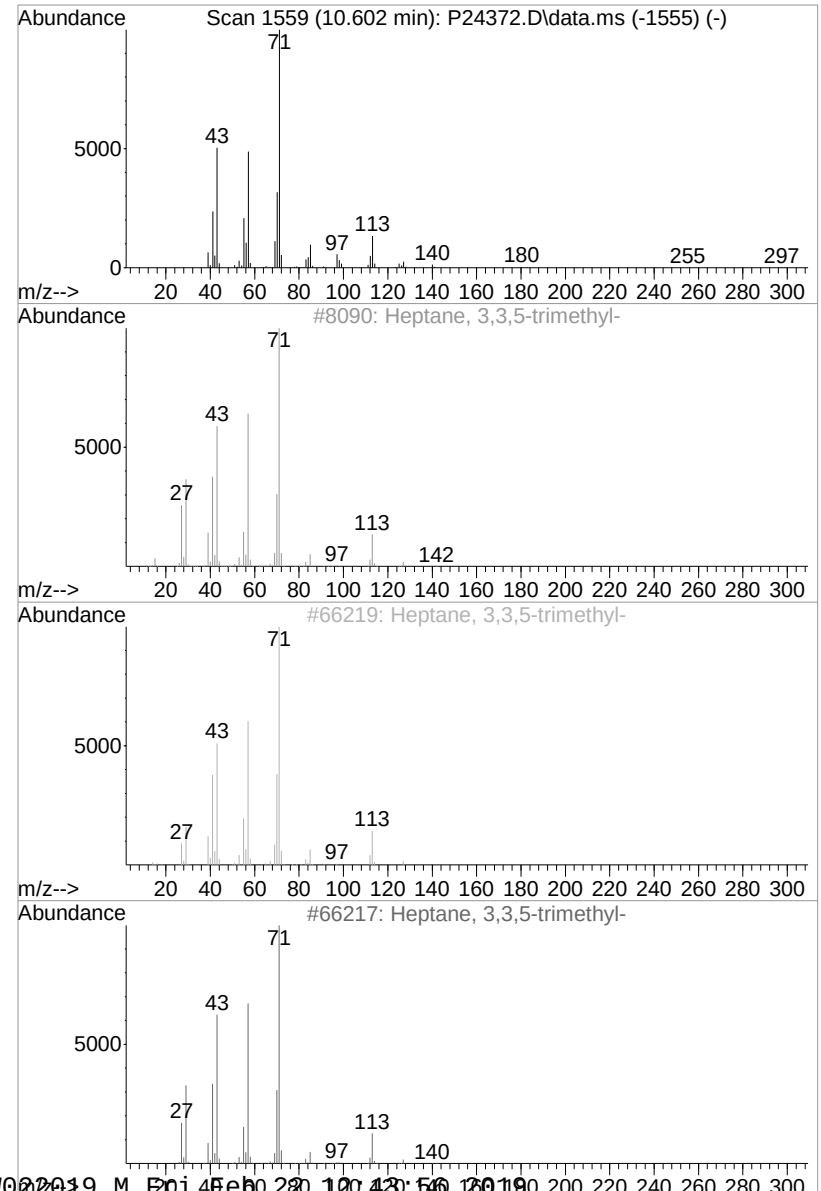
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

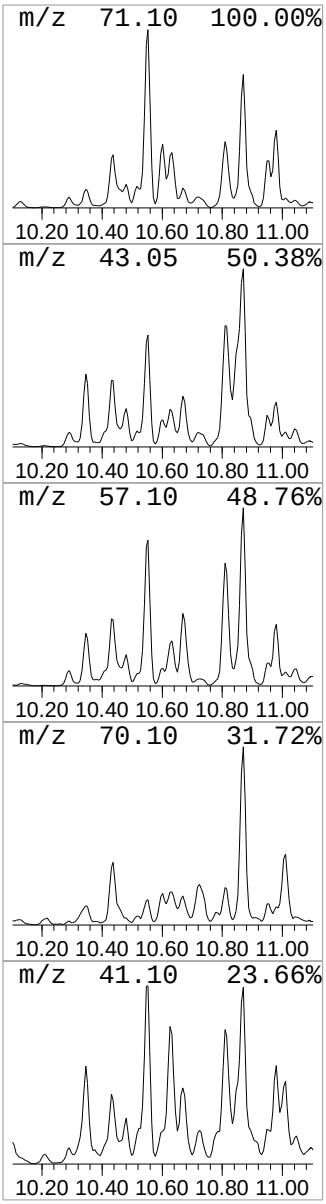
****

Peak Number 10 unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.602	24.74 ppb	677844	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 3,3,5-trimethyl-	142	C10H22	007154-80-5	78
2	Heptane, 3,3,5-trimethyl-	142	C10H22	007154-80-5	78
3	Heptane, 3,3,5-trimethyl-	142	C10H22	007154-80-5	78
4	Hexane, 3,3,4,4-tetramethyl-	142	C10H22	005171-84-6	72
5	Octane, 3,3-dimethyl-	142	C10H22	004110-44-5	72





Library Search Compound Report

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Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 11 Cyclohexane, propyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.626	108.66 ppb	2977250	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
2	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
3	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
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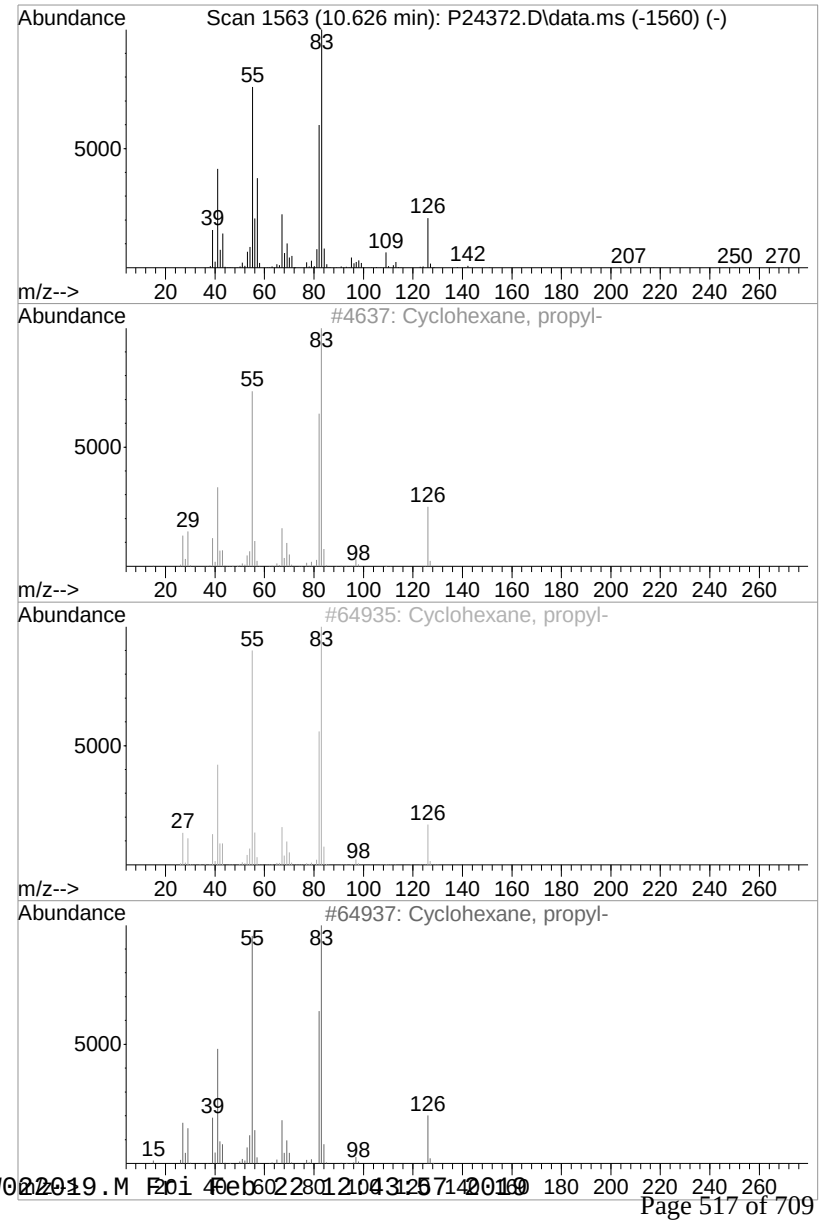
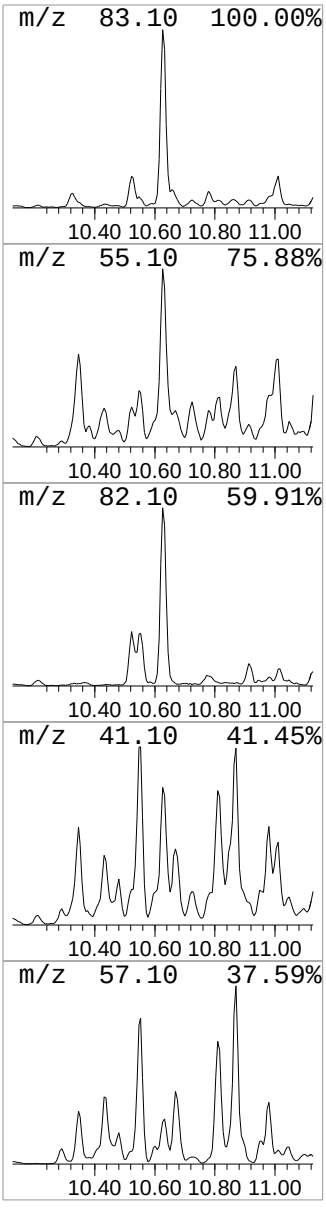
5	Cyclohexane, ethyl-	112	C8H16	001678-91-7	64





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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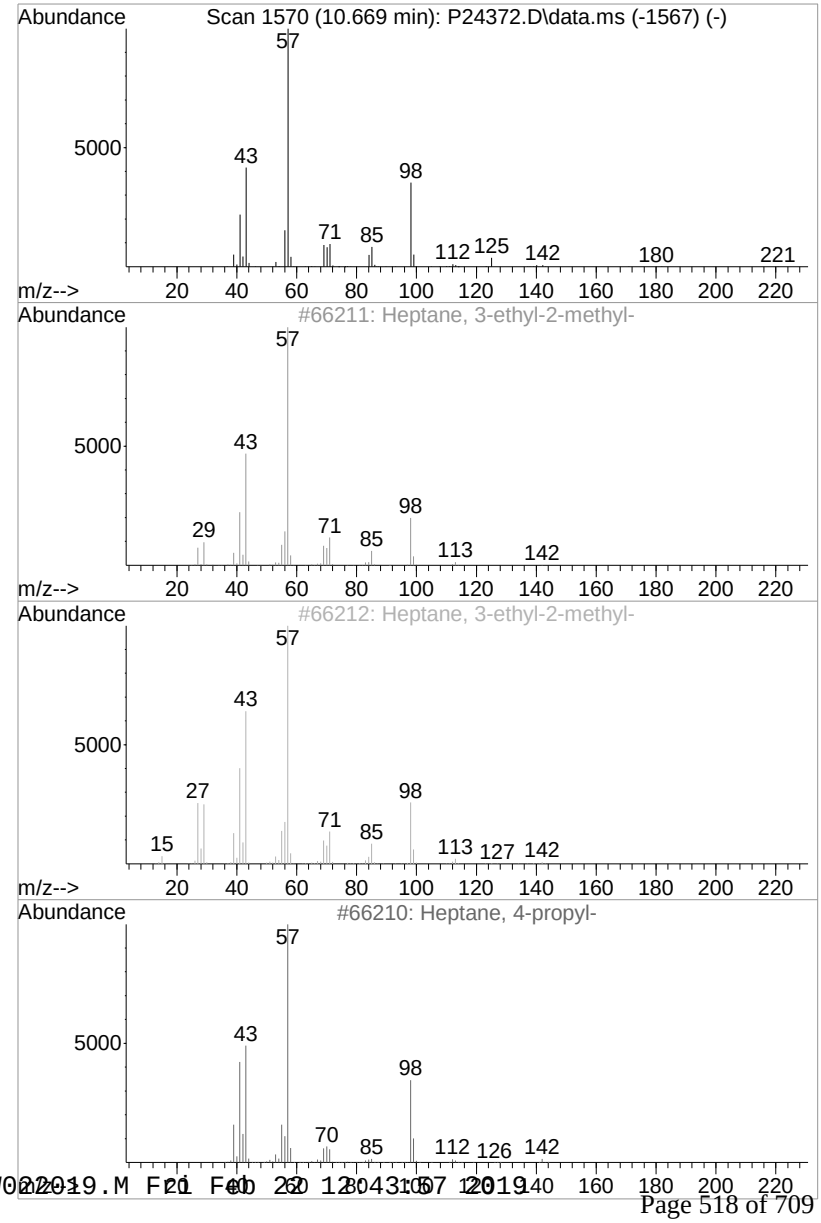
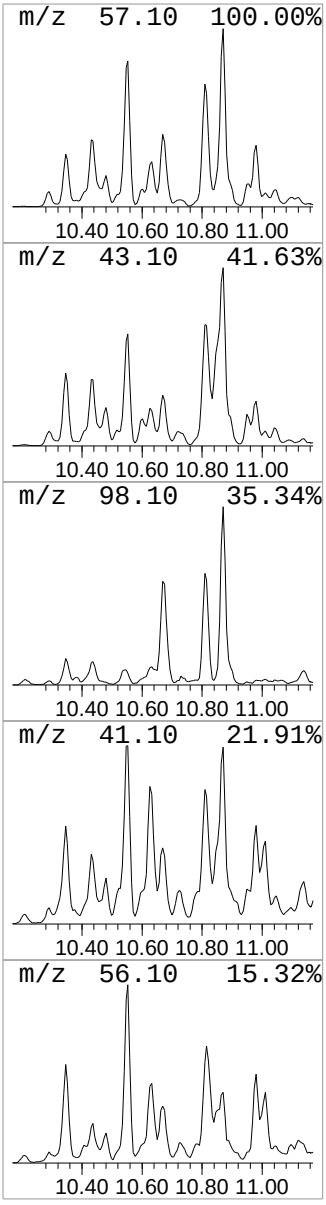
Peak Number 12 Heptane, 3-ethyl-2-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.669	55.90 ppb	1531730	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	86
2	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	80
3	Heptane, 4-propyl-	142	C10H22	003178-29-8	56
4	Undecane, 2,6-dimethyl-	184	C13H28	017301-23-4	53
5	Decane, 2,5-dimethyl-	170	C12H26	017312-50-4	50





Library Search Compound Report

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Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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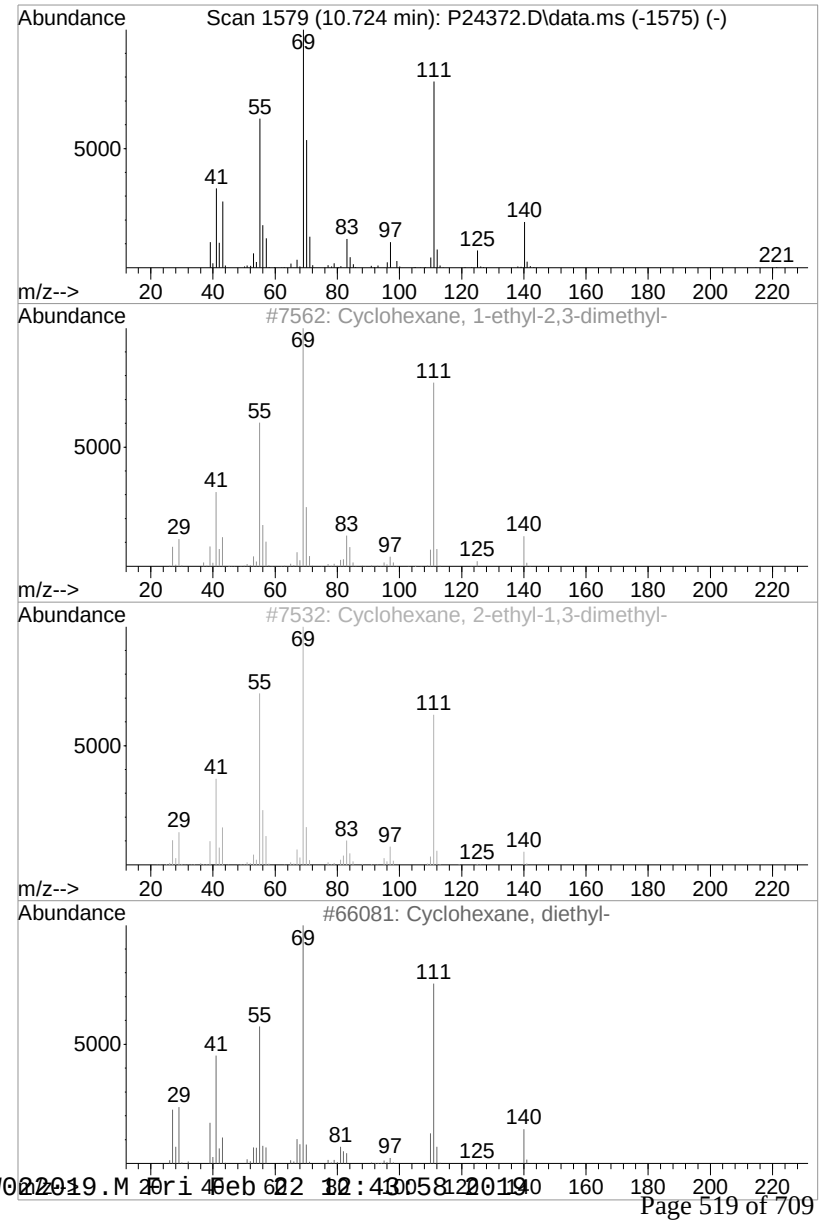
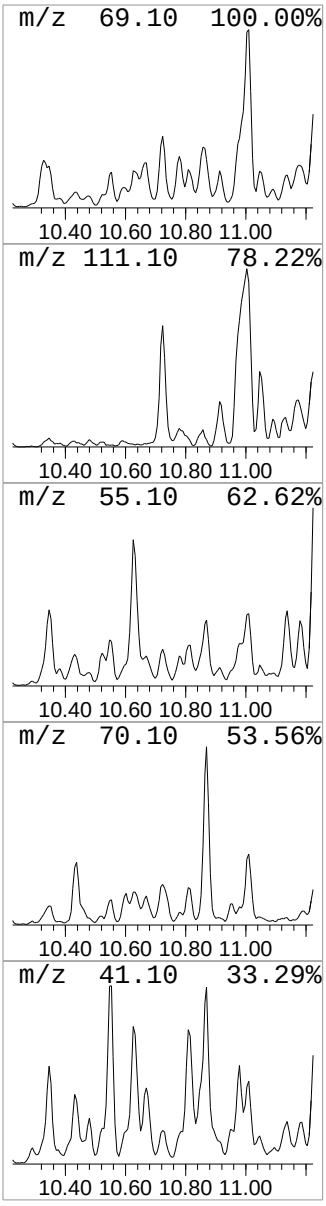
Peak Number 13 unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.724	29.52 ppb	808836	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-ethyl-2,3-dimethyl-	140	C10H20	007058-05-1	80
2	Cyclohexane, 2-ethyl-1,3-dimethyl-	140	C10H20	007045-67-2	64
3	Cyclohexane, diethyl-	140	C10H20	001331-43-7	59
4	Cyclohexane, 1-ethyl-1,4-dimethy...	140	C10H20	062238-30-6	59
5	Cyclohexane, 1,3,5-trimethyl-	126	C9H18	001839-63-0	59





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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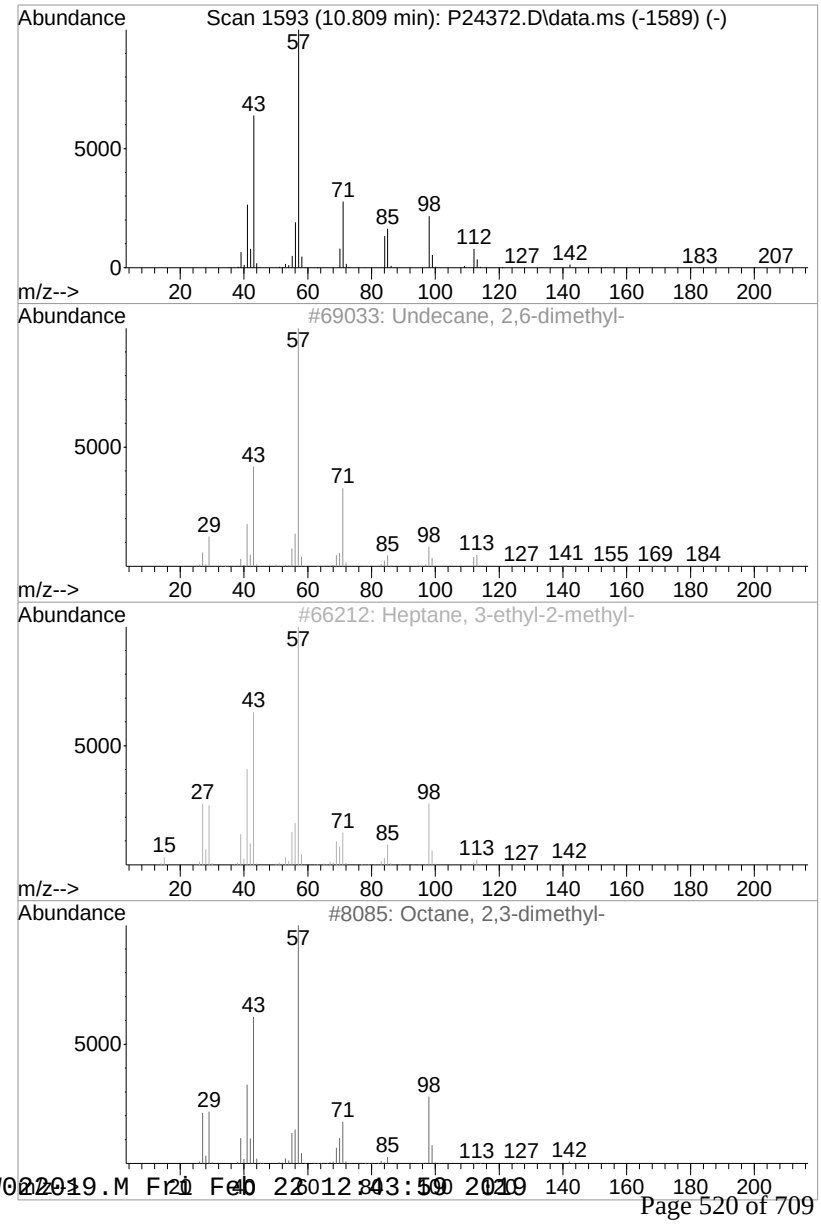
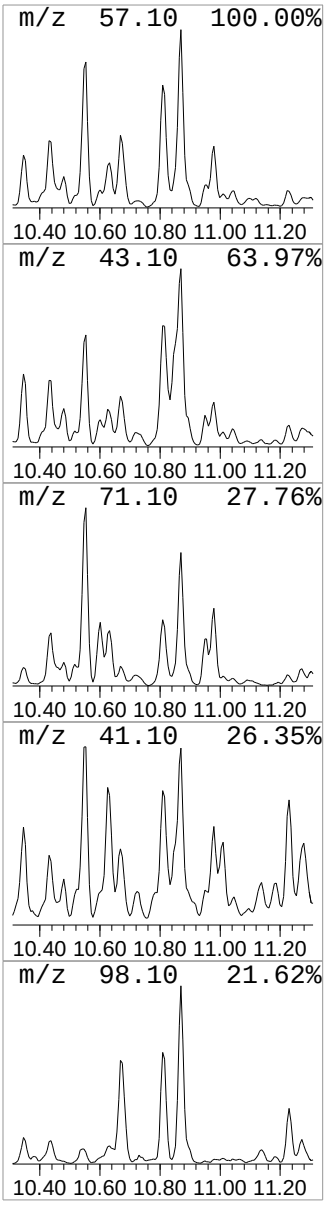
Peak Number 14 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.809	112.76 ppb	3089550	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 2,6-dimethyl-	184	C13H28	017301-23-4	53
2	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	53
3	Octane, 2,3-dimethyl-	142	C10H22	007146-60-3	52
4	Decane	142	C10H22	000124-18-5	50
5	Nonane, 2-methyl-	142	C10H22	000871-83-0	50





Library Search Compound Report

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Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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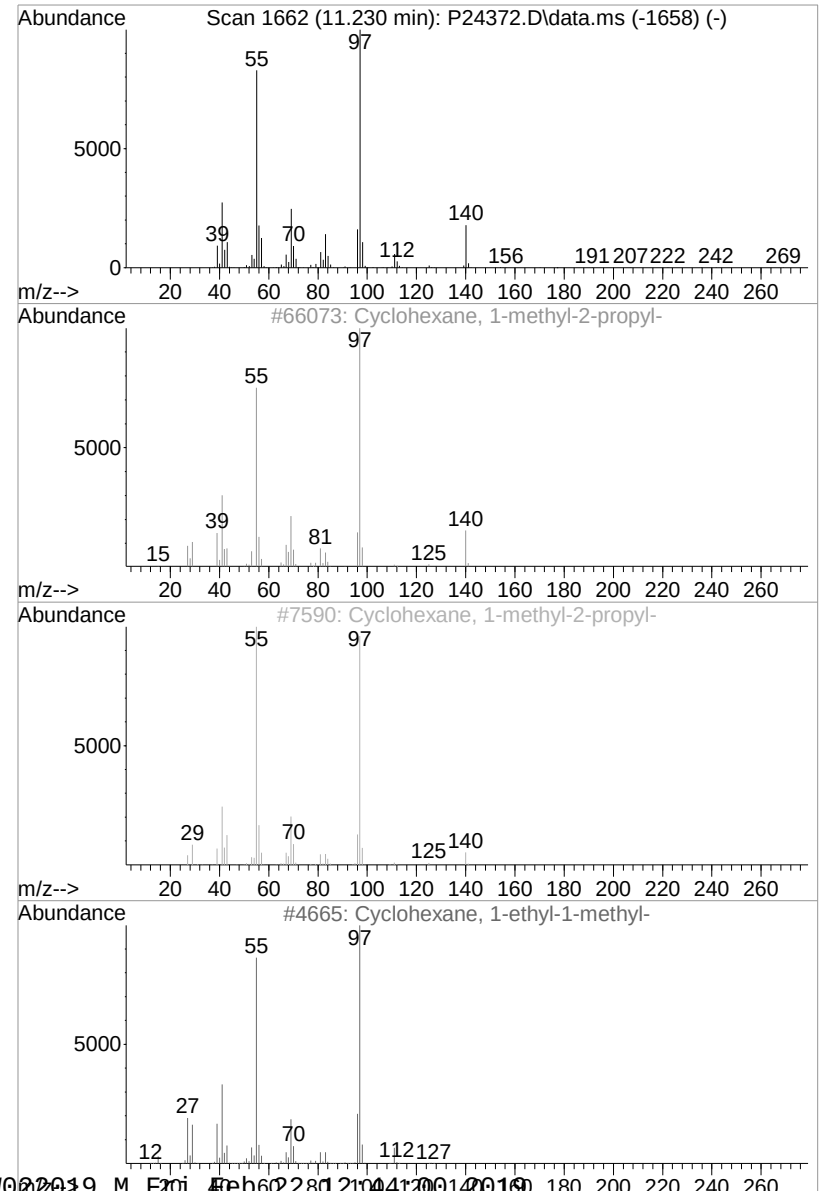
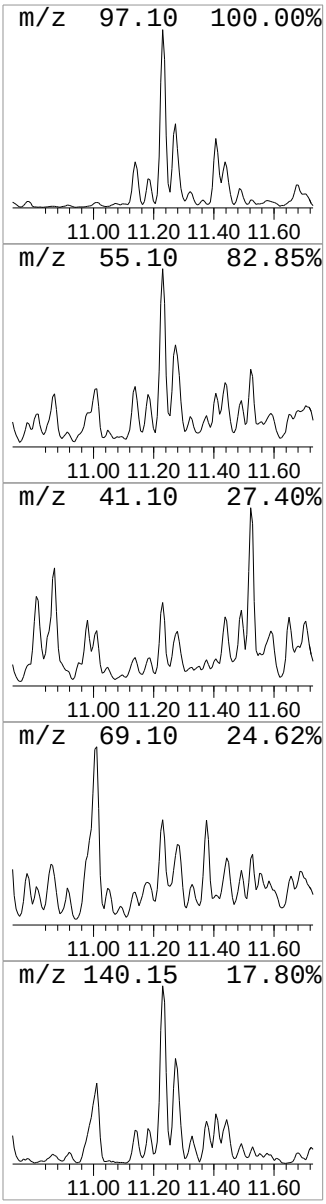
Peak Number 15 Cyclohexane, 1-methyl-2-pro... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.230	28.26 ppb	2959720	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	87
2	Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	87
3	Cyclohexane, 1-ethyl-1-methyl-	126	C9H18	004926-90-3	74
4	3-Hexene, 3-ethyl-2,5-dimethyl-	140	C10H20	062338-08-3	74
5	Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-77-7	72





Library Search Compound Report

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Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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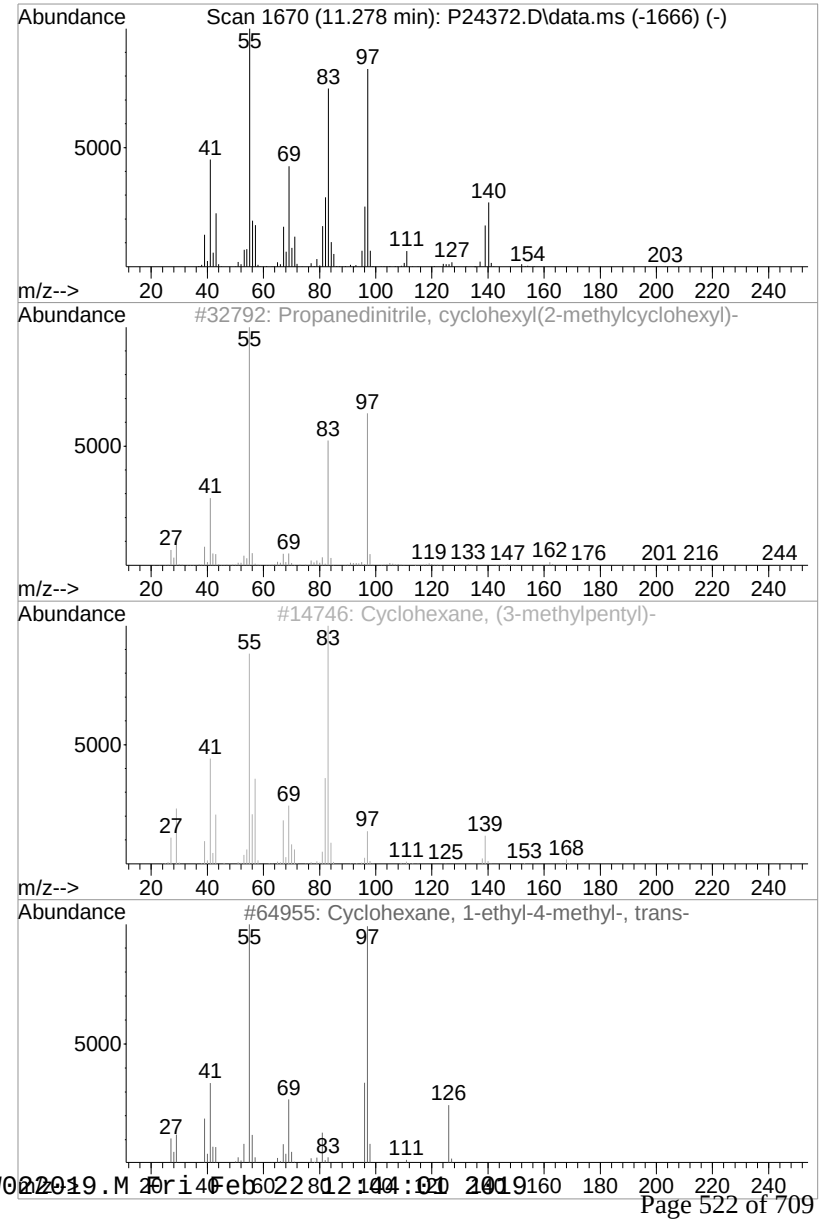
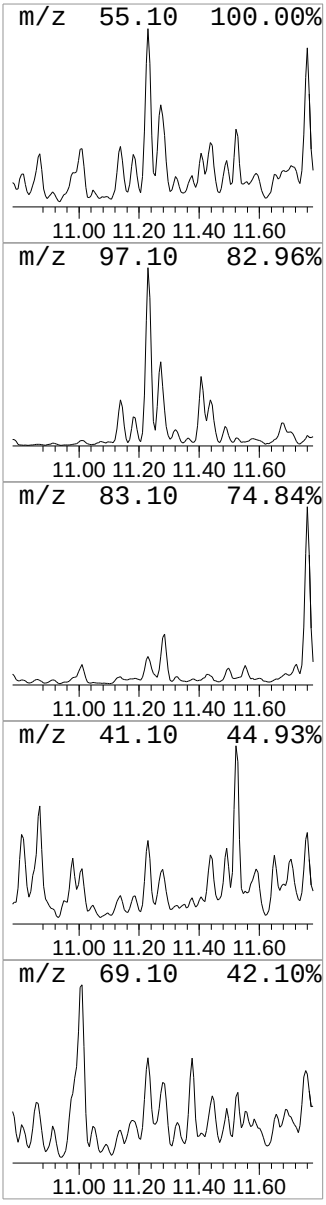
Peak Number 16 unknown Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.278	23.17 ppb	2426080	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanedinitrile, cyclohexyl(2-m...	244	C16H24N2	074764-55-9	50
2	Cyclohexane, (3-methylpentyl)-	168	C12H24	061142-38-9	43
3	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	38
4	Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	38
5	Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	38





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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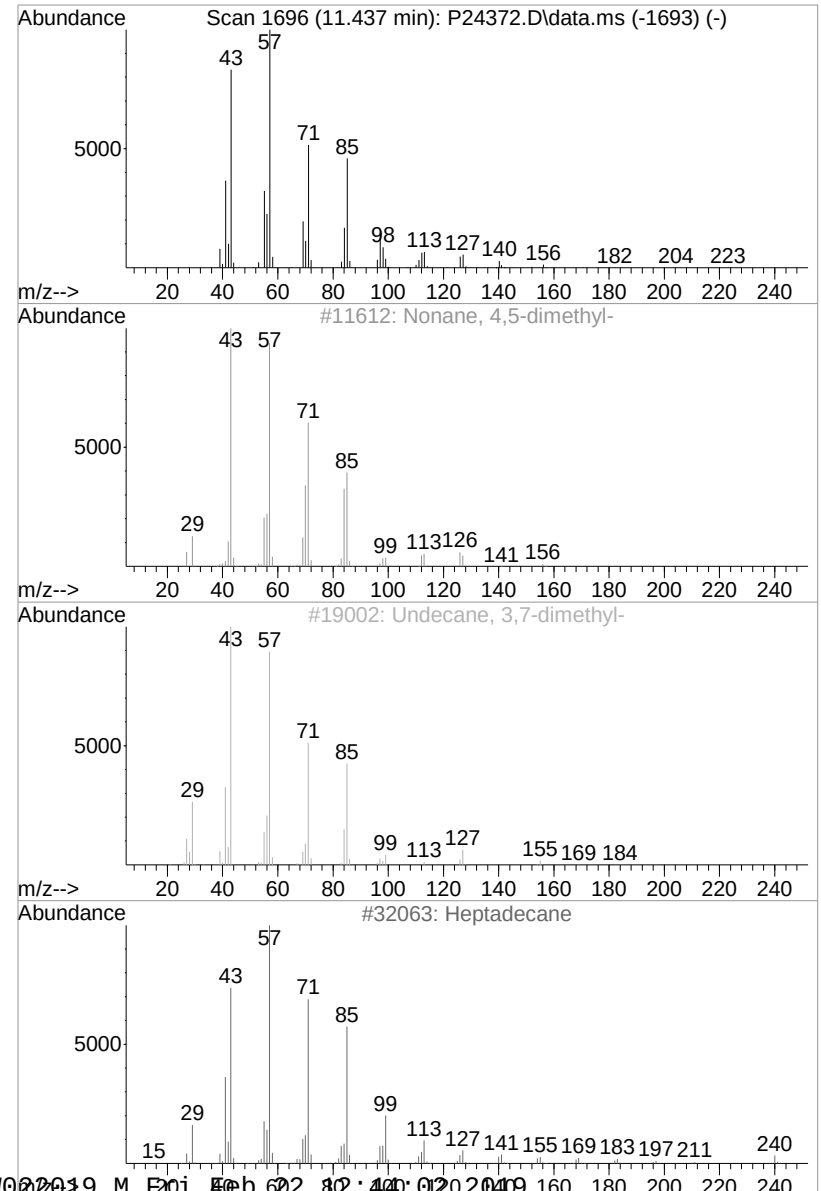
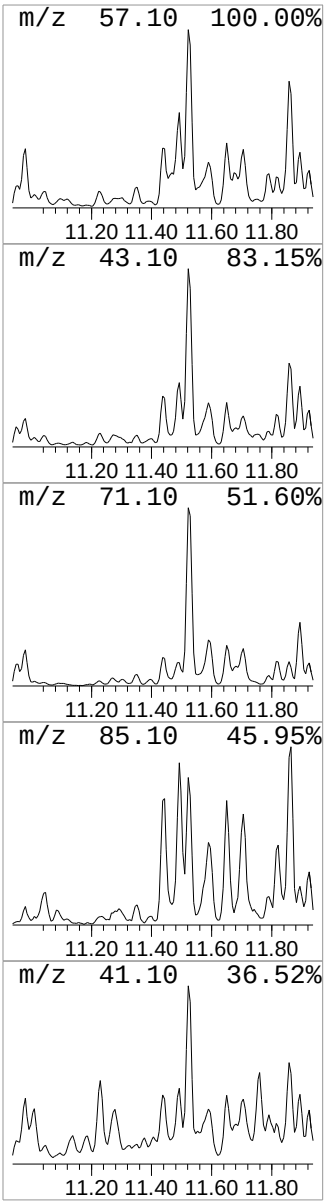
Peak Number 17 Nonane, 4,5-dimethyl- Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.437	23.66 ppb	2477300	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonane, 4,5-dimethyl-	156	C11H24	017302-23-7	91
2	Undecane, 3,7-dimethyl-	184	C13H28	017301-29-0	72
3	Heptadecane	240	C17H36	000629-78-7	72
4	Dotriacontane	451	C32H66	000544-85-4	72
5	10-Methylnonadecane	282	C20H42	000000-00-0	72





Library Search Compound Report

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Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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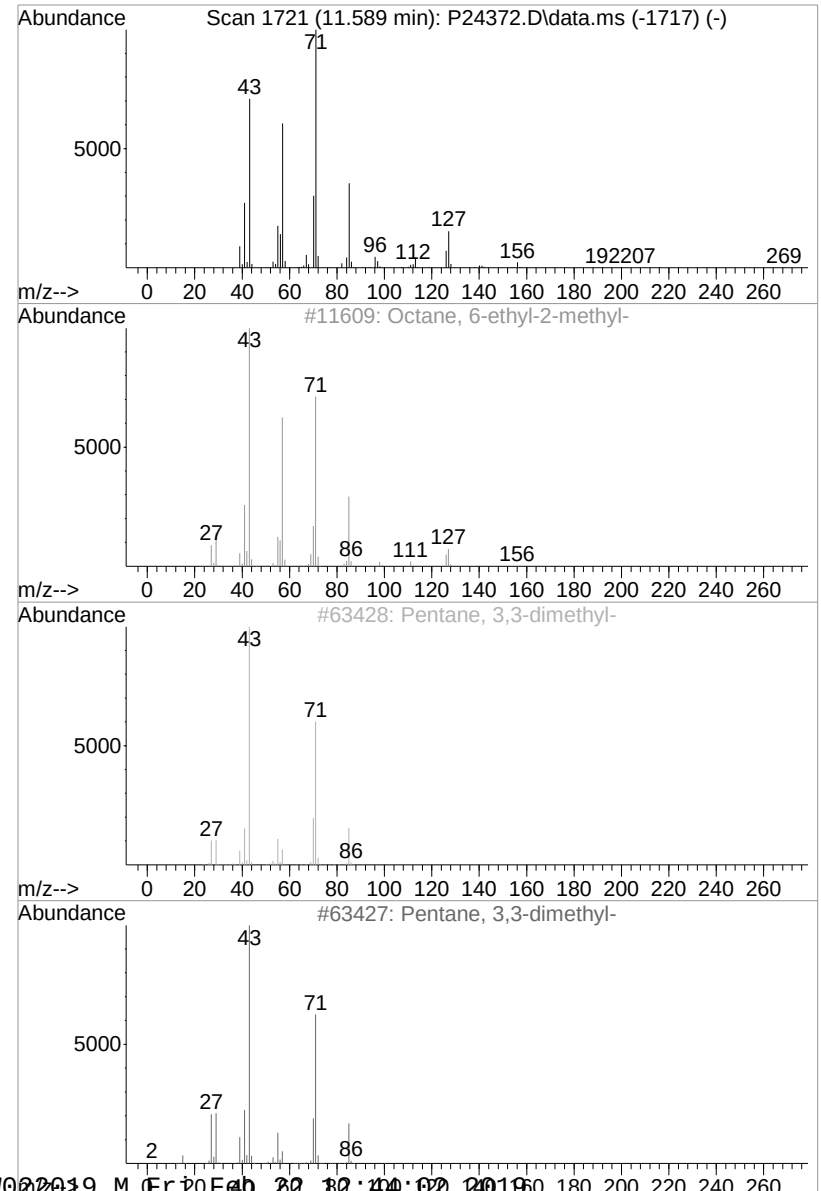
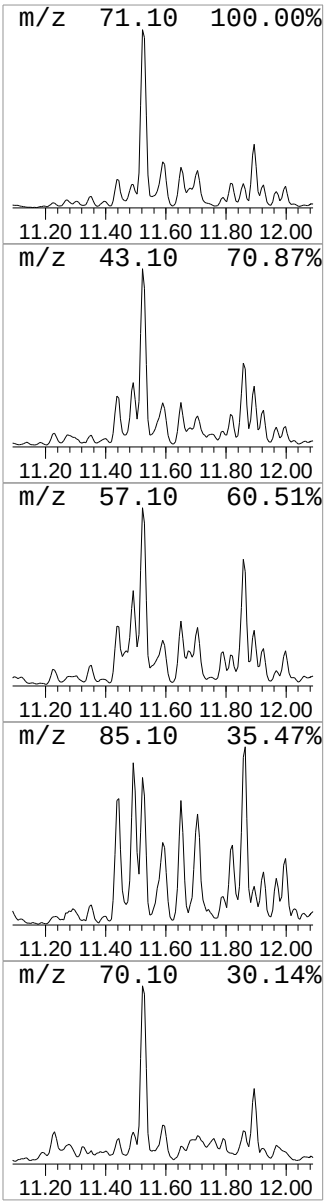
Peak Number 18 unknown Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.589	22.38 ppb	2343470	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 6-ethyl-2-methyl-	156	C11H24	062016-19-7	72
2	Pentane, 3,3-dimethyl-	100	C7H16	000562-49-2	64
3	Pentane, 3,3-dimethyl-	100	C7H16	000562-49-2	64
4	Decane, 3,3,8-trimethyl-	184	C13H28	062338-16-3	59
5	1,1-Dimethylpropyl 2-ethylhexanoate	214	C13H26O2	005421-13-6	53





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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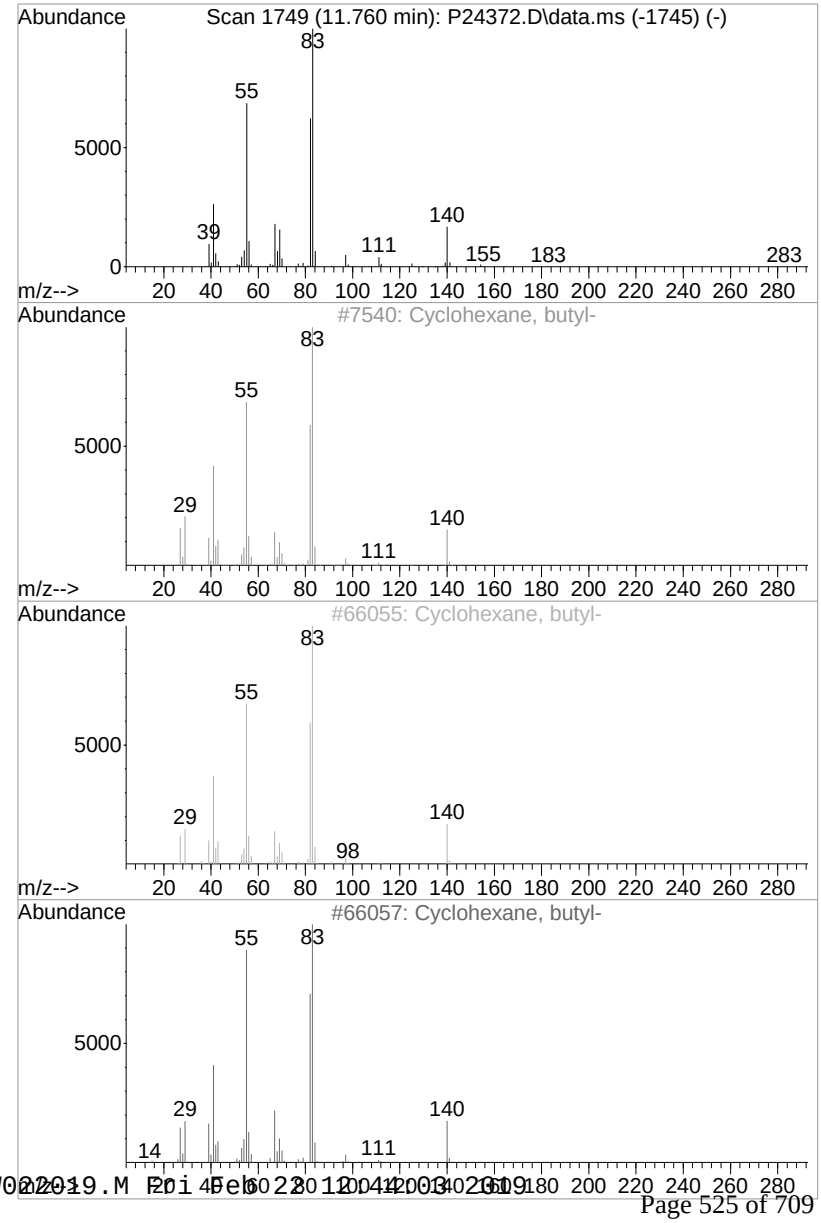
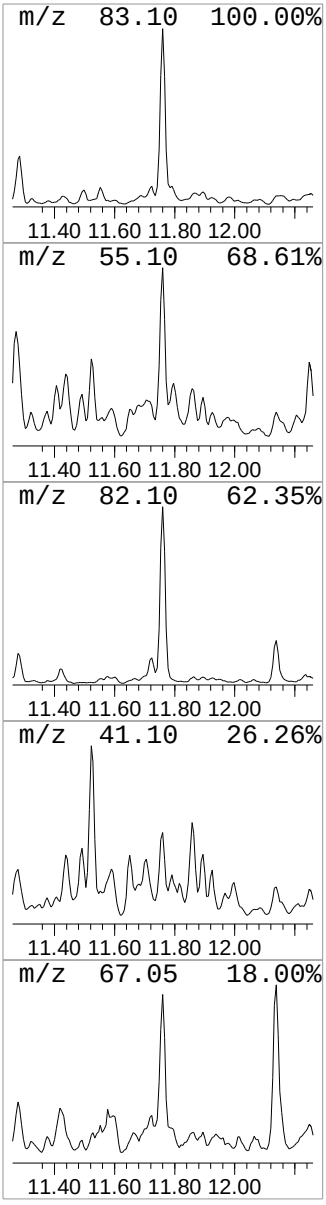
Peak Number 19 Cyclohexane, butyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.760	29.45 ppb	3084110	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, butyl-	140	C10H20	001678-93-9	91
2	Cyclohexane, butyl-	140	C10H20	001678-93-9	91
3	Cyclohexane, butyl-	140	C10H20	001678-93-9	91
4	Cyclohexane, pentyl-	154	C11H22	004292-92-6	87
5	Cyclohexane, pentyl-	154	C11H22	004292-92-6	87





Library Search Compound Report

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Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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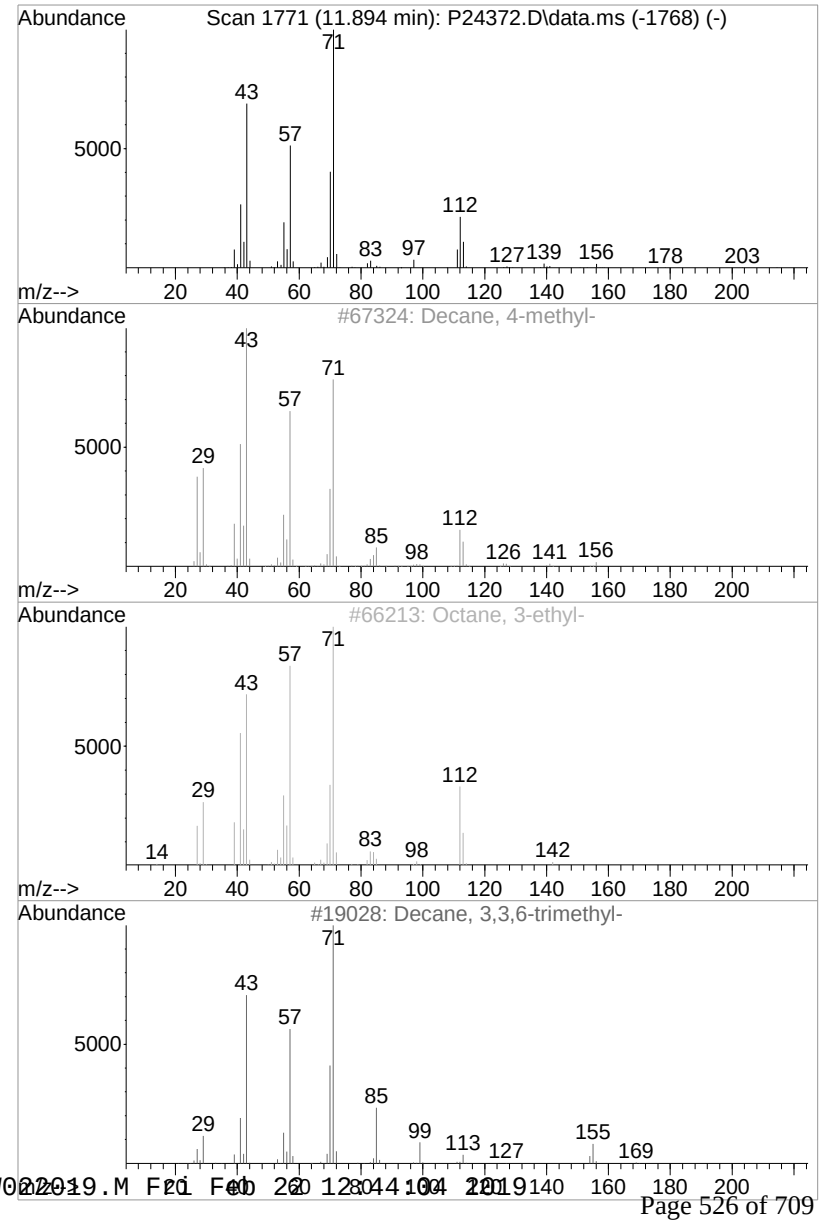
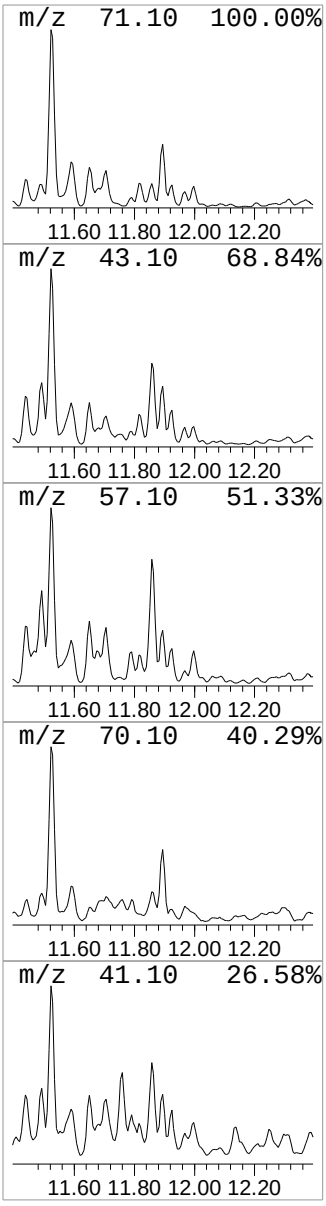
Peak Number 20 unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.894	18.84 ppb	1973120	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 4-methyl-	156	C11H24	002847-72-5	78
2	Octane, 3-ethyl-	142	C10H22	005881-17-4	64
3	Decane, 3,3,6-trimethyl-	184	C13H28	062338-14-1	59
4	1,1-Dimethylpropyl 2-ethylhexanoate	214	C13H26O2	005421-13-6	59
5	Decane, 2,7,7-trimethyl-	184	C13H28	062338-15-2	59





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24372.D
Acq On : 21 Feb 2019 4:57 pm
Operator : K.Ruest
Sample : R1901365-008|148 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

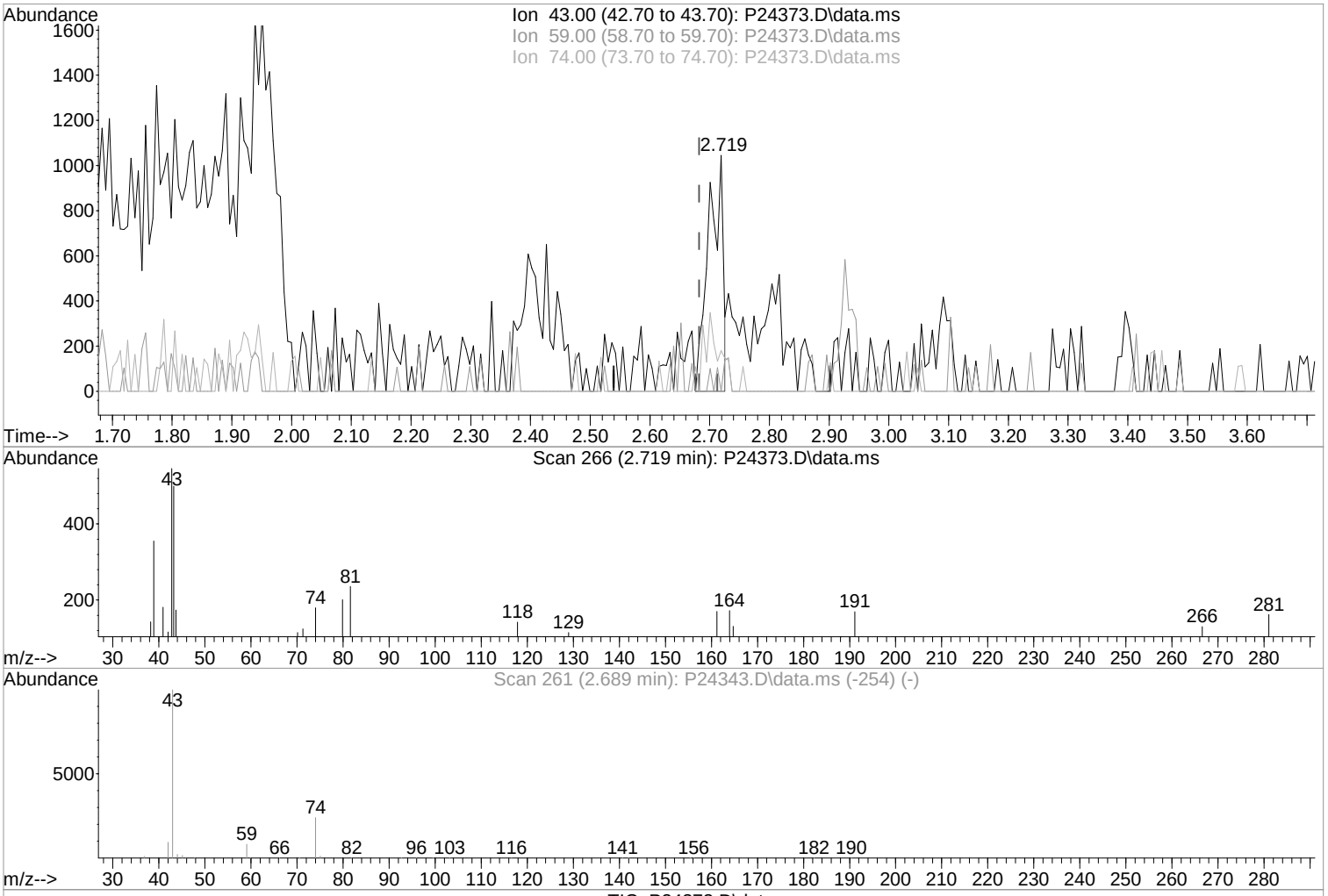
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Cyclohexane, 1,...	9.553	22.3	ppb	611602	3	9.791	1369950	50.0
unknown	9.620	24.5	ppb	671994	3	9.791	1369950	50.0
Octane, 3-methyl-	9.736	30.3	ppb	829400	3	9.791	1369950	50.0
unknown	10.065	35.2	ppb	964669	3	9.791	1369950	50.0
Cyclohexane, 1-...	10.102	26.2	ppb	716708	3	9.791	1369950	50.0
unknown	10.346	87.5	ppb	2396800	3	9.791	1369950	50.0
Octane, 2,5-dim...	10.431	67.1	ppb	1837730	3	9.791	1369950	50.0
unknown	10.480	23.7	ppb	648574	3	9.791	1369950	50.0
Octane, 2,6-dim...	10.553	141.6	ppb	3878280	3	9.791	1369950	50.0
unknown	10.602	24.7	ppb	677844	3	9.791	1369950	50.0
Cyclohexane, pr...	10.626	108.7	ppb	2977250	3	9.791	1369950	50.0
Heptane, 3-ethy...	10.669	55.9	ppb	1531730	3	9.791	1369950	50.0
unknown	10.724	29.5	ppb	808836	3	9.791	1369950	50.0
unknown	10.809	112.8	ppb	3089550	3	9.791	1369950	50.0
Cyclohexane, 1-...	11.230	28.3	ppb	2959720	4	11.839	5235810	50.0
unknown	11.278	23.2	ppb	2426080	4	11.839	5235810	50.0
Nonane, 4,5-dim...	11.437	23.7	ppb	2477300	4	11.839	5235810	50.0
unknown	11.589	22.4	ppb	2343470	4	11.839	5235810	50.0
Cyclohexane, bu...	11.760	29.4	ppb	3084110	4	11.839	5235810	50.0
unknown	11.894	18.8	ppb	1973120	4	11.839	5235810	50.0

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 21 17:40:05 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24373.D\data.ms

(21) Methyl Acetate (P)

2.719min (+0.037) 0.43 ppb m

response 1752

Ion	Exp%	Act%
43.00	100	100
59.00	8.40	0.00
74.00	23.60	32.97
0.00	0.00	0.00

Manual Integration:

After

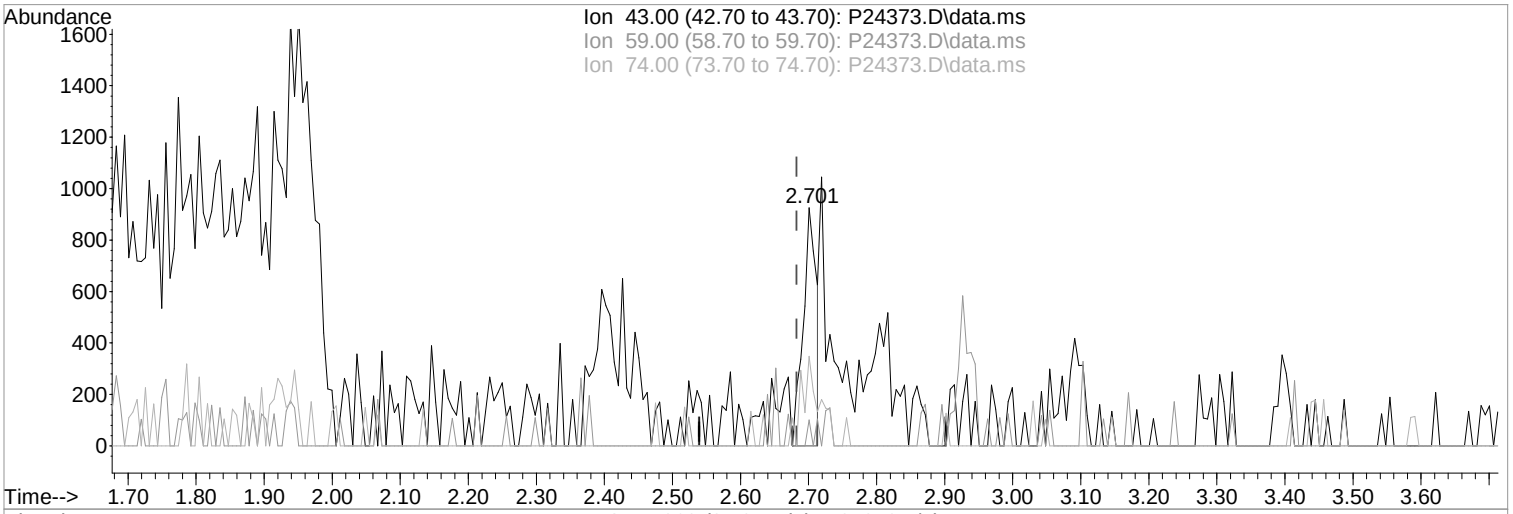
Split Peak

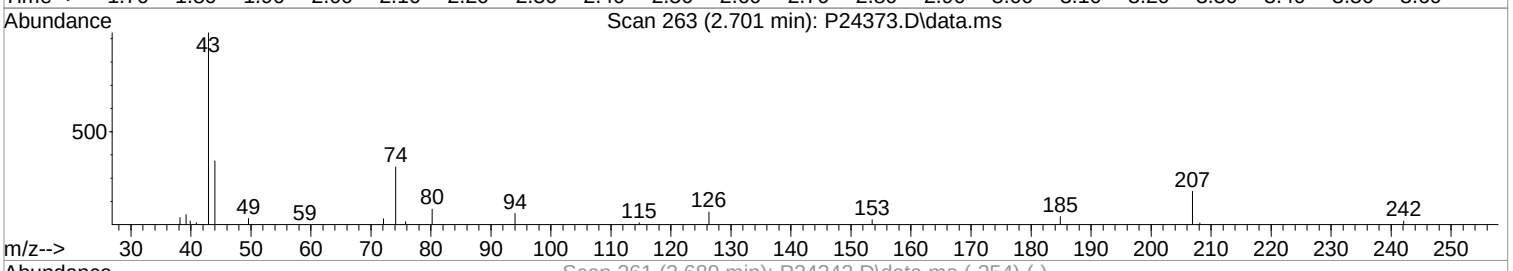
02/22/19

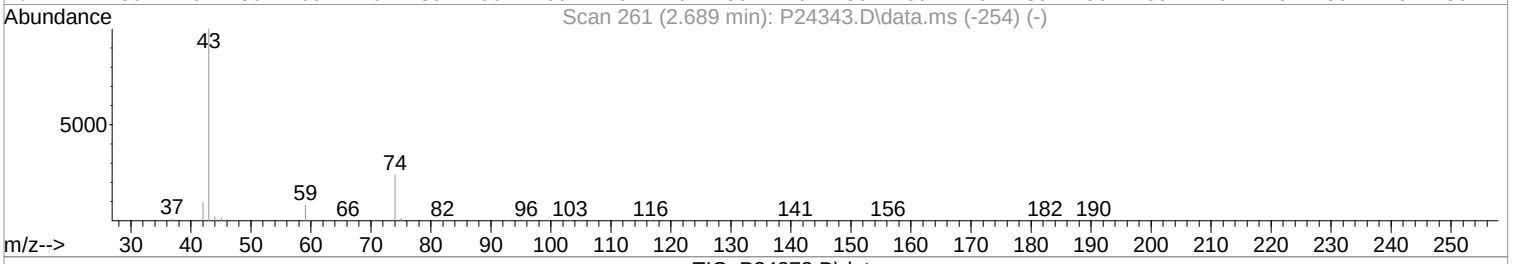
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 21 17:40:05 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24373.D\data.ms

(21) Methyl Acetate (P)

2.701min (+0.018) 0.30 ppb

response 1249

Ion	Exp%	Act%
43.00	100	100
59.00	8.40	10.91
74.00	23.60	37.58
0.00	0.00	0.00

Manual Integration:

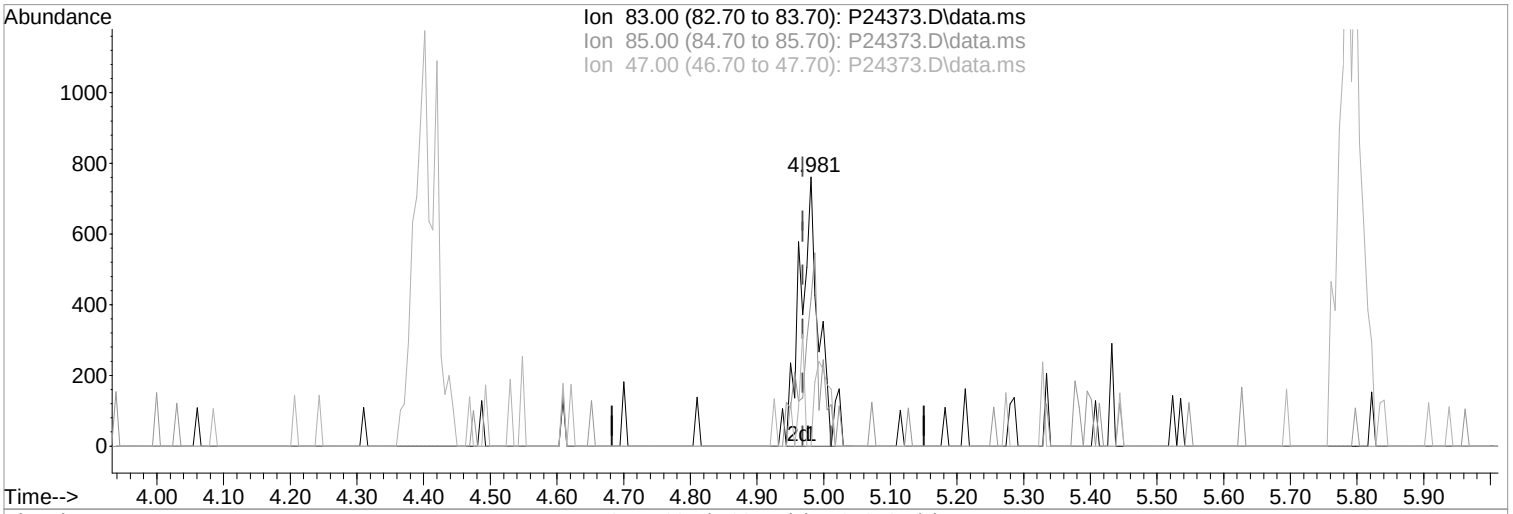
Before

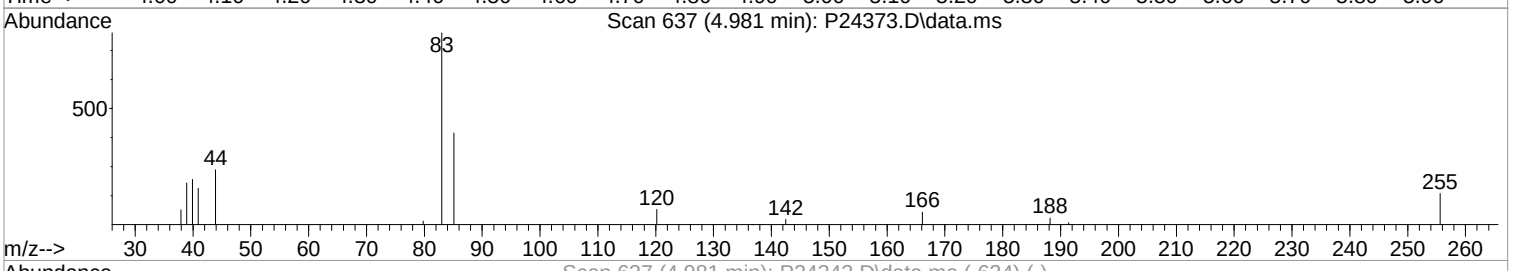
02/22/19

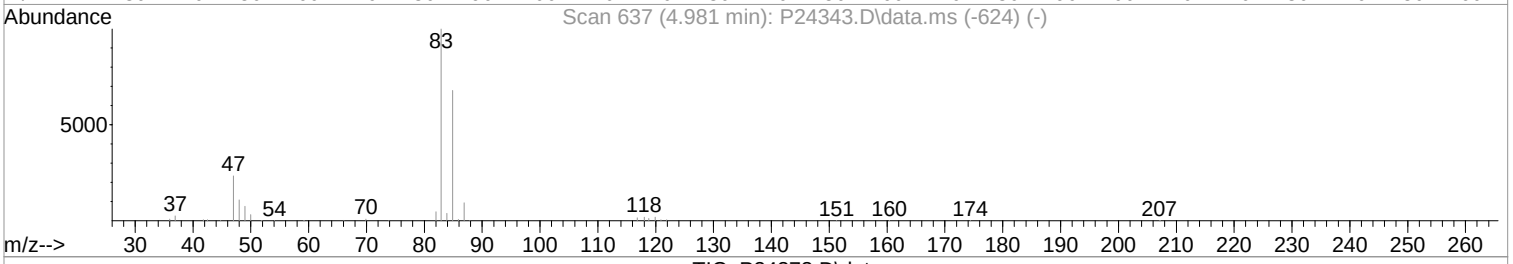
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 21 17:40:05 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24373.D\data.ms

(40) Chloroform (P)

4.981min (+0.012) 0.27 ppb m

response 1504

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	54.66
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

After

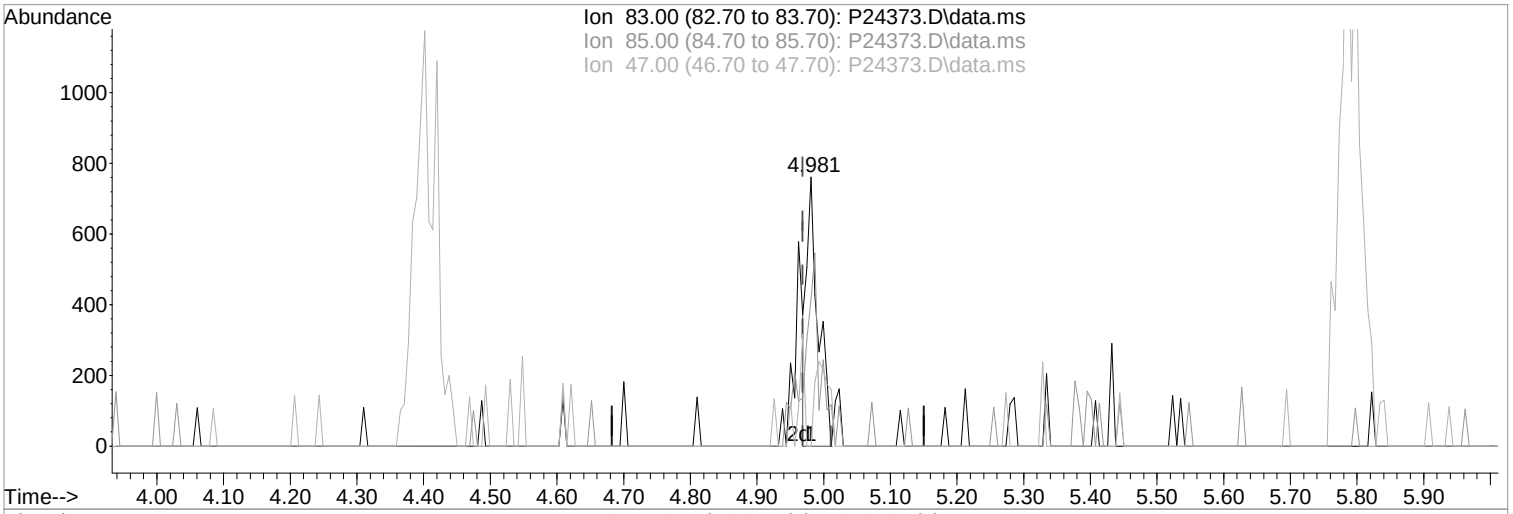
Split Peak

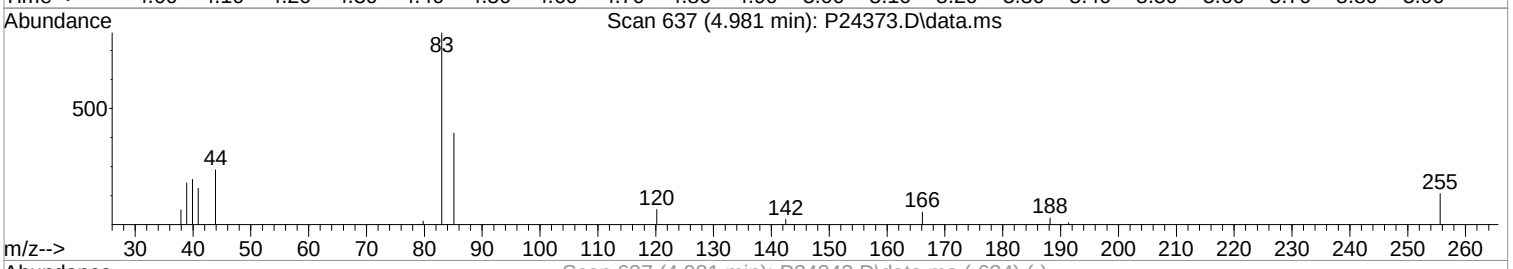
02/22/19

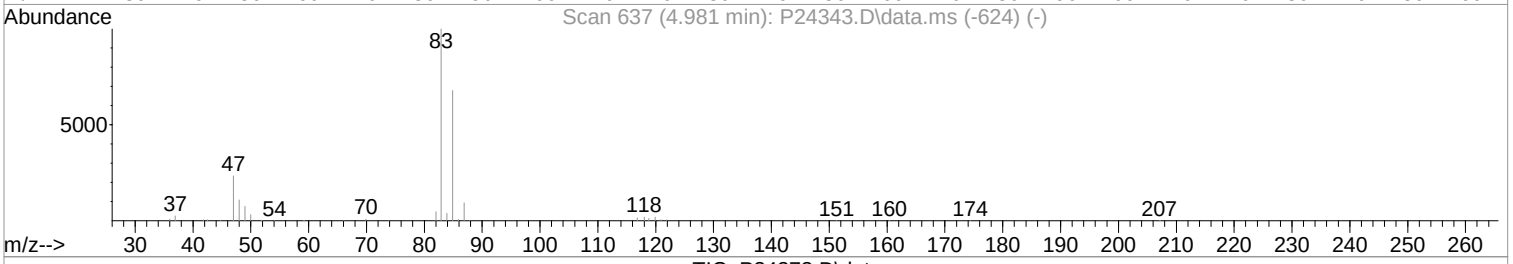
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 21 17:40:05 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24373.D\data.ms

(40) Chloroform (P)

4.981min (+0.012) 0.17 ppb

response 915

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	54.66
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 22 14:37:17 2019 DL
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

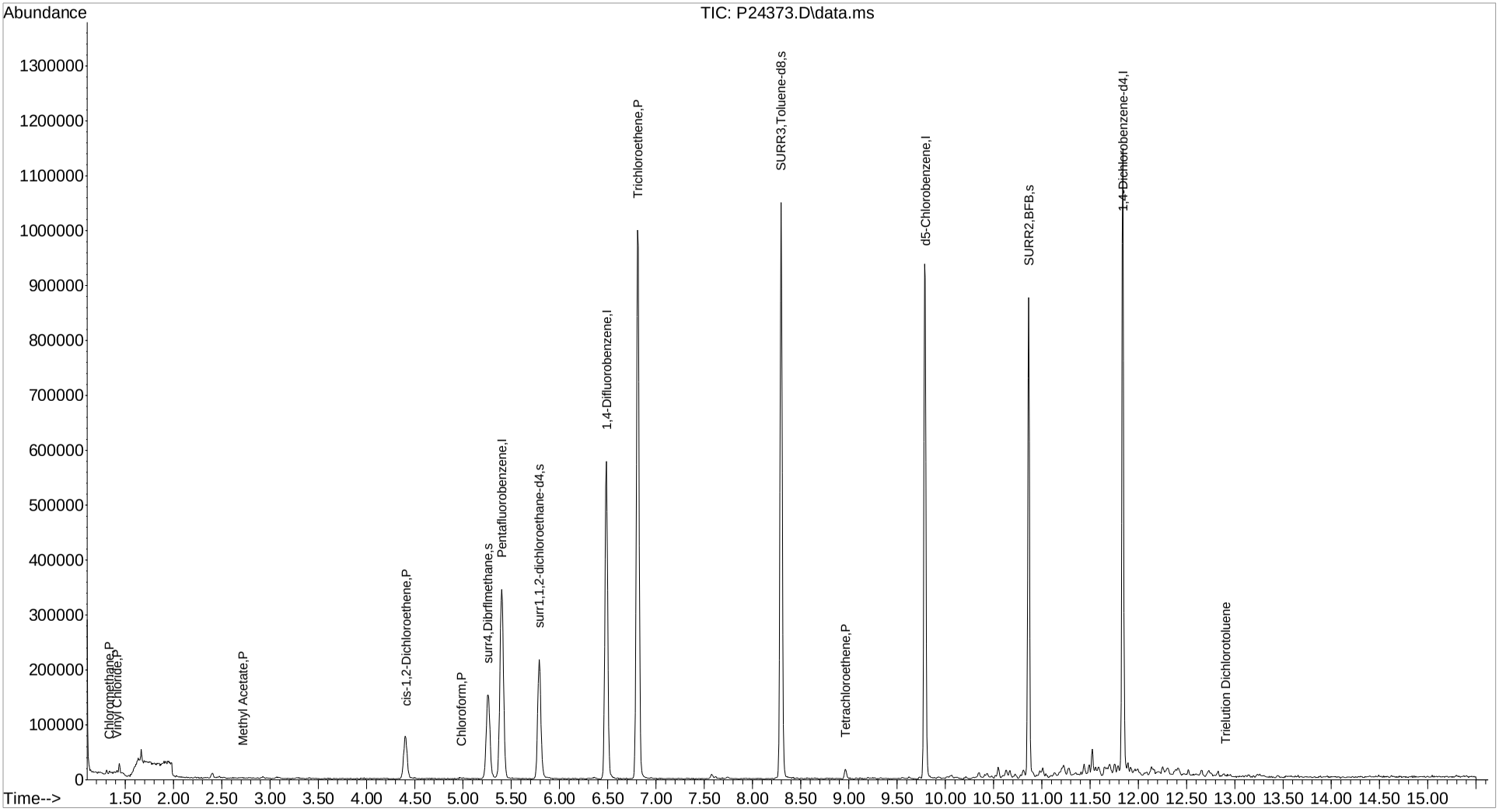
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.401	168	317061	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.487	114	504809	50.00	ppb		0.00
71) d5-Chlorobenzene	9.791	117	440204	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	227870	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	132896	47.91	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.82%				
48) surr1,1,2-dichloroetha...	5.792	65	182305	51.81	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.62%				
65) SURR3,Toluene-d8	8.297	98	656869	49.92	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.84%				
70) SURR2,BFB	10.864	95	235769	50.03	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.06%				
Target Compounds							Qvalue
3) Chloromethane	1.335	50	2847	0.55	ppb		87
4) Vinyl Chloride	1.414	62	2239	0.49	ppb		90
21) Methyl Acetate	2.719	43	1752m	0.43	ppb		
34) cis-1,2-Dichloroethene	4.408	96	46214	12.53	ppb	#	80
40) Chloroform	4.981	83	1504m	0.27	ppb		
54) Trichloroethene	6.810	130	374665	106.12	ppb		97
72) Tetrachloroethene	8.962	164	3528	1.34	ppb	#	87
112) Trielution Dichlorotol...	12.906	125	1762	0.29	ppb	#	88

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

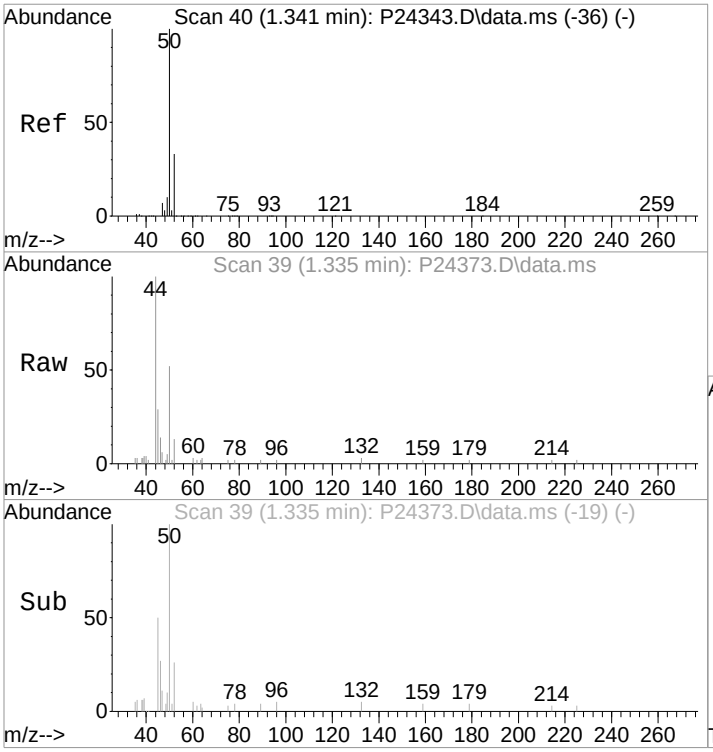
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 22 14:37:17 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



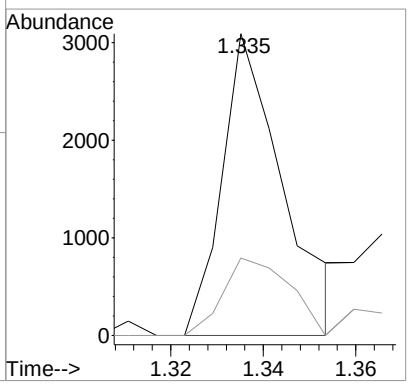
1st 02/22/19

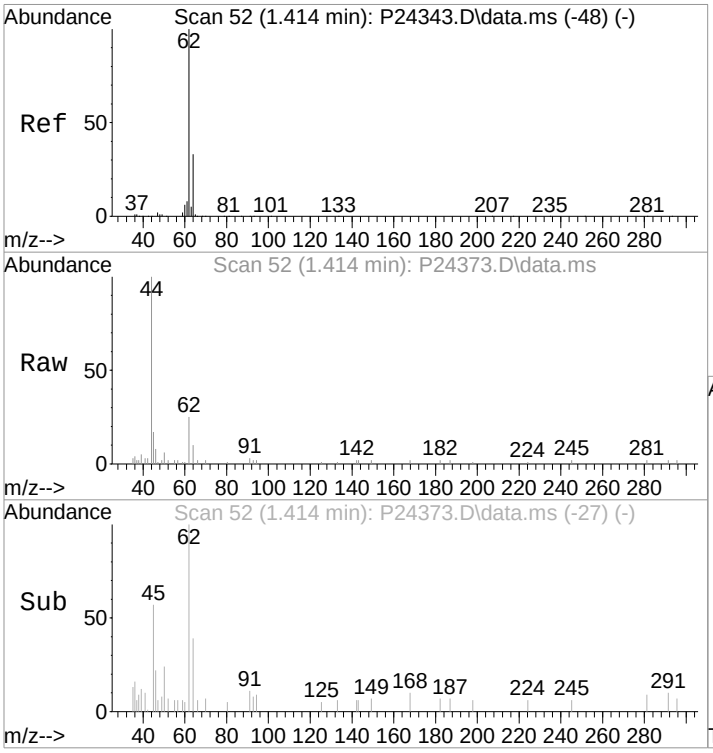


#3
Chloromethane
Concen: 0.55 ppb
RT: 1.335 min Scan# 39
Delta R.T. 0.006 min
Lab File: P24373.D
Acq: 21 Feb 2019 5:19 pm

Tgt Ion: 50 Resp: 2847

Ion	Ratio	Lower	Upper
50	100		
52	25.7	13.0	53.0

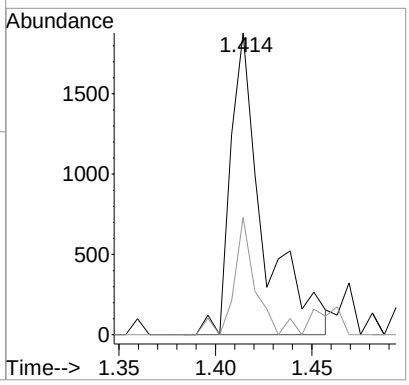


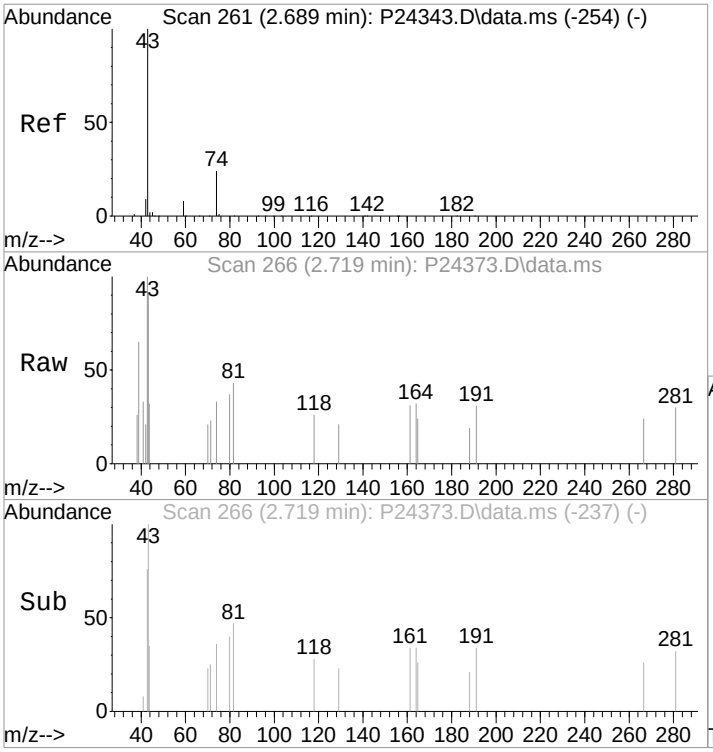


#4
Vinyl Chloride
Concen: 0.49 ppb
RT: 1.414 min Scan# 52
Delta R.T. 0.006 min
Lab File: P24373.D
Acq: 21 Feb 2019 5:19 pm

Tgt Ion: 62 Resp: 2239

Ion	Ratio	Lower	Upper
62	100		
64	38.9	13.2	53.2

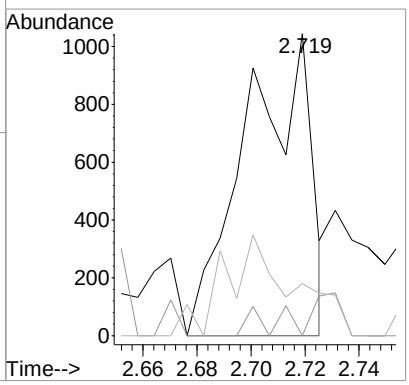


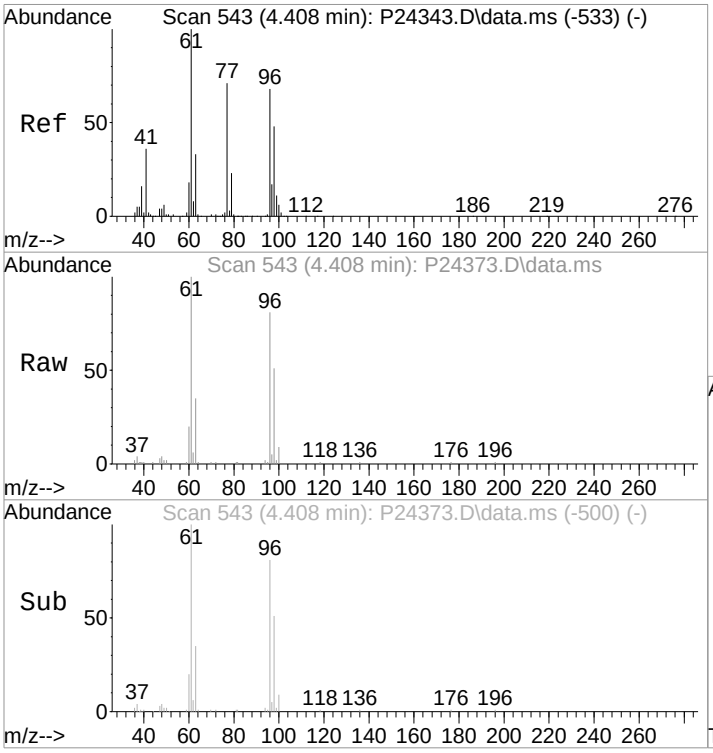


#21
Methyl Acetate
Concen: 0.43 ppb m
RT: 2.719 min Scan# 266
Delta R.T. 0.037 min
Lab File: P24373.D
Acq: 21 Feb 2019 5:19 pm

Tgt Ion: 43 Resp: 1752

Ion	Ratio	Lower	Upper
43	100		
59	0.0	0.0	28.4
74	33.0	3.6	43.6

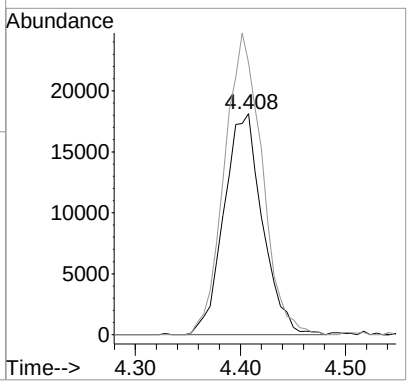


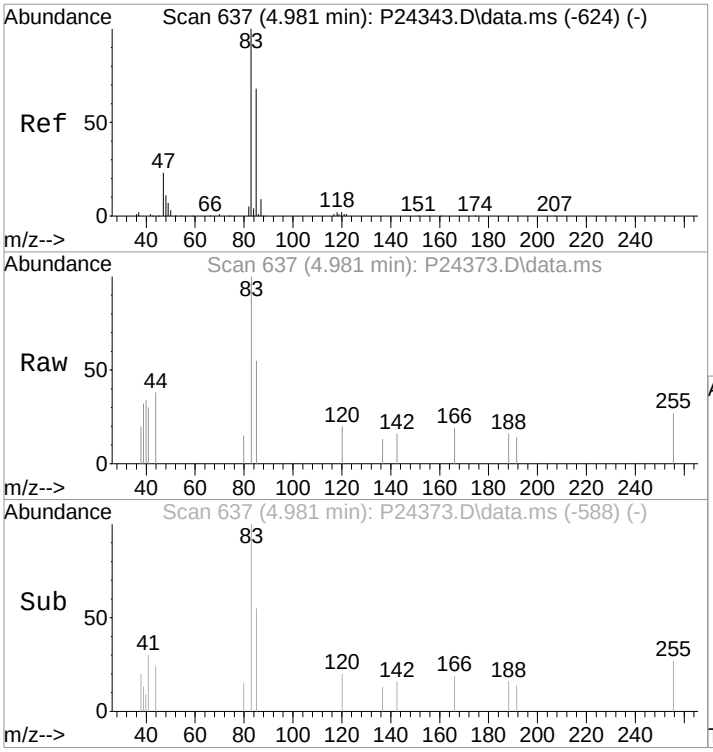


#34
cis-1,2-Dichloroethene
Concen: 12.53 ppb
RT: 4.408 min Scan# 543
Delta R.T. 0.006 min
Lab File: P24373.D
Acq: 21 Feb 2019 5:19 pm

Tgt Ion: 96 Resp: 46214

Ion	Ratio	Lower	Upper
96	100		
61	123.0	128.1	168.1#

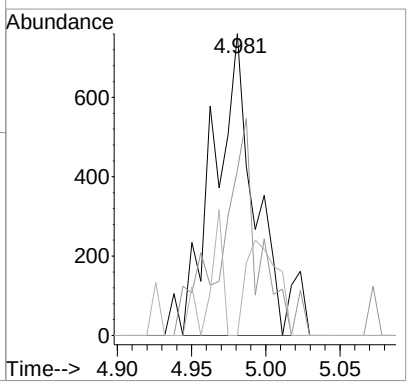


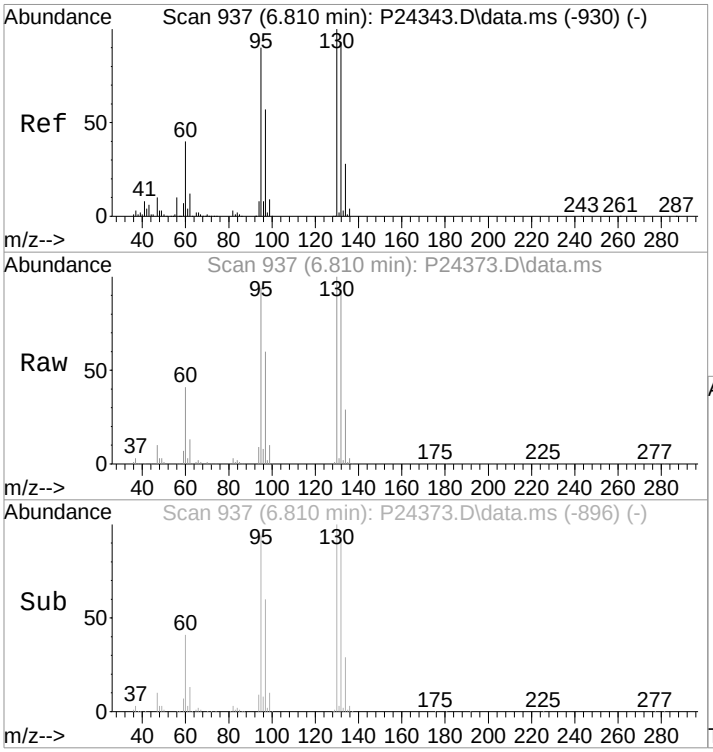


#40
Chloroform
Concen: 0.27 ppb m
RT: 4.981 min Scan# 637
Delta R.T. 0.012 min
Lab File: P24373.D
Acq: 21 Feb 2019 5:19 pm

Tgt Ion: 83 Resp: 1504

Ion	Ratio	Lower	Upper
83	100		
85	54.7	47.9	87.9
47	0.0	3.4	43.4#

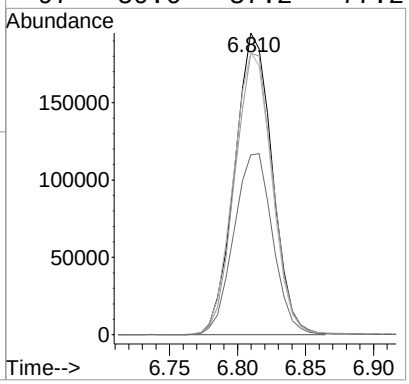


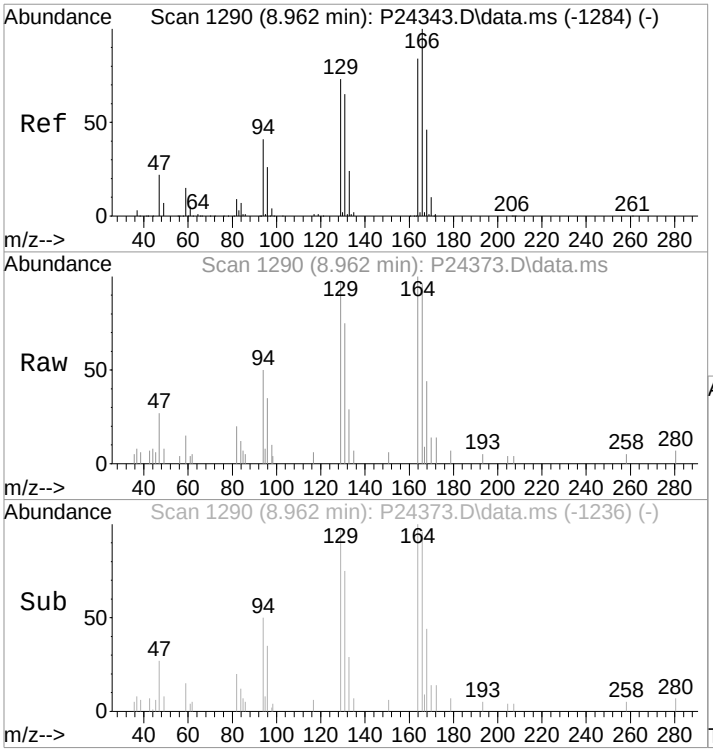


#54
Trichloroethene
Concen: 106.12 ppb
RT: 6.810 min Scan# 937
Delta R.T. 0.000 min
Lab File: P24373.D
Acq: 21 Feb 2019 5:19 pm

Tgt Ion:130 Resp: 374665

Ion	Ratio	Lower	Upper
130	100		
132	93.2	72.6	112.6
95	93.5	69.8	109.8
97	59.6	37.2	77.2

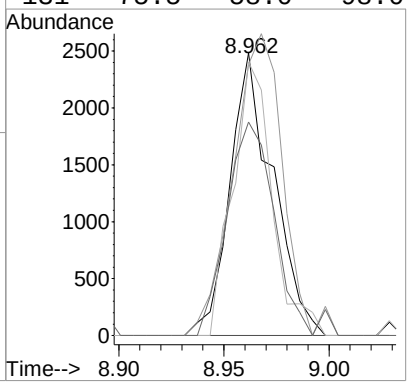


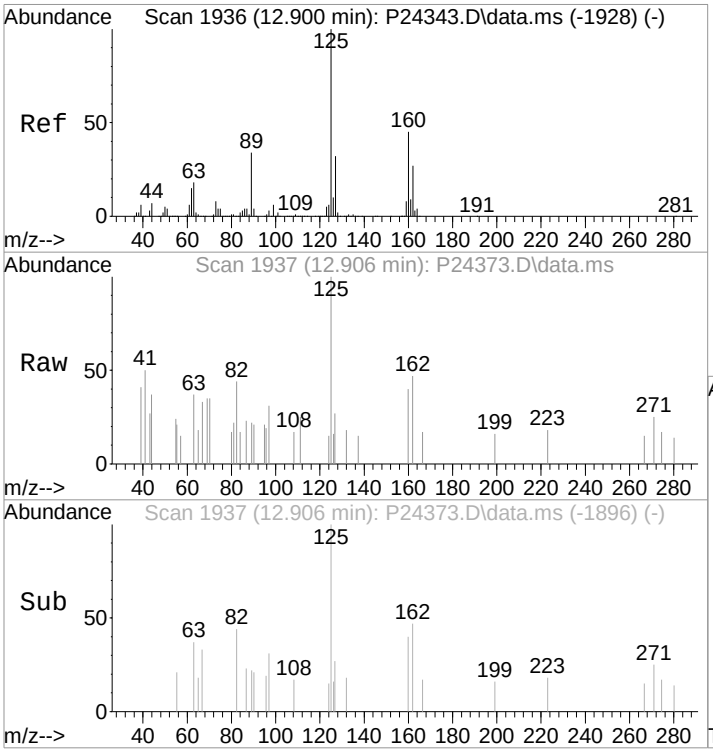


#72
Tetrachloroethene
Concen: 1.34 ppb
RT: 8.962 min Scan# 1290
Delta R.T. 0.000 min
Lab File: P24373.D
Acq: 21 Feb 2019 5:19 pm

Tgt Ion:164 Resp: 3528

Ion	Ratio	Lower	Upper
164	100		
166	95.9	99.6	139.6#
129	96.8	66.7	106.7
131	75.5	58.0	98.0

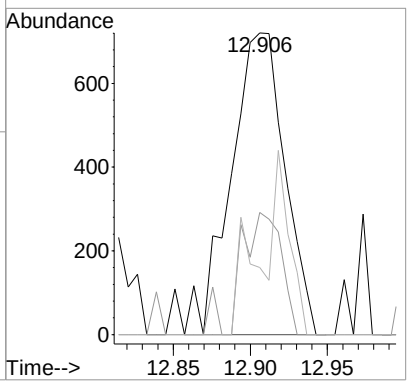




#112
Trielution Dichlorotoluene
Concen: 0.29 ppb
RT: 12.906 min Scan# 1937
Delta R.T. 0.000 min
Lab File: P24373.D
Acq: 21 Feb 2019 5:19 pm

Tgt Ion:125 Resp: 1762

Ion	Ratio	Lower	Upper
125	100		
160	40.5	35.8	53.8
89	22.2	27.0	40.4#



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24373.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.634	74	88	91	rBV5	34140	119274	6.08%	1.053%
2	1.664	91	93	97	rVB	26293	30058	1.53%	0.265%
3	1.981	143	145	149	rVB4	24227	20392	1.04%	0.180%
4	4.402	533	542	551	rBV	77884	198746	10.13%	1.755%
5	5.261	671	683	695	rBV3	152409	427311	21.77%	3.773%
6	5.401	695	706	717	rVB	343419	885541	45.12%	7.818%
7	5.792	760	770	781	rBV2	217195	520469	26.52%	4.595%
8	6.487	874	884	901	rBV	578747	1158134	59.01%	10.225%
9	6.810	927	937	951	rBV	998852	1962662	100.00%	17.328%
10	8.297	1174	1181	1190	rBV	1047185	1673047	85.24%	14.771%
11	8.962	1285	1290	1296	rBV3	18282	30633	1.56%	0.270%
12	9.785	1419	1425	1438	rBV	936838	1357621	69.17%	11.986%
13	10.547	1547	1550	1555	rVB3	19901	25646	1.31%	0.226%
14	10.632	1560	1564	1567	rVV3	14618	24707	1.26%	0.218%
15	10.669	1567	1570	1574	rVV3	14441	20737	1.06%	0.183%
16	10.864	1596	1602	1613	rVB	872716	1118668	57.00%	9.876%
17	11.223	1659	1661	1666	rVB3	16890	23730	1.21%	0.210%
18	11.284	1666	1671	1675	rVB6	12765	21741	1.11%	0.192%
19	11.437	1692	1696	1700	rBV5	18733	22637	1.15%	0.200%
20	11.522	1707	1710	1714	rVV	45149	55309	2.82%	0.488%
21	11.589	1718	1721	1726	rVB5	15585	25296	1.29%	0.223%
22	11.650	1728	1731	1733	rBV2	14855	21547	1.10%	0.190%
23	11.705	1737	1740	1744	rVB5	15870	23443	1.19%	0.207%
24	11.754	1744	1748	1751	rBV5	16209	22345	1.14%	0.197%
25	11.839	1756	1762	1769	rVV	1135624	1425397	72.63%	12.584%
26	12.138	1805	1811	1813	rBV5	15077	24446	1.25%	0.216%
27	12.303	1834	1838	1842	rVV5	11377	21656	1.10%	0.191%
28	12.412	1854	1856	1862	rVB5	13417	22170	1.13%	0.196%
29	12.656	1891	1896	1902	rVB9	11588	20905	1.07%	0.185%
30	12.729	1902	1908	1911	rBV5	11288	22356	1.14%	0.197%

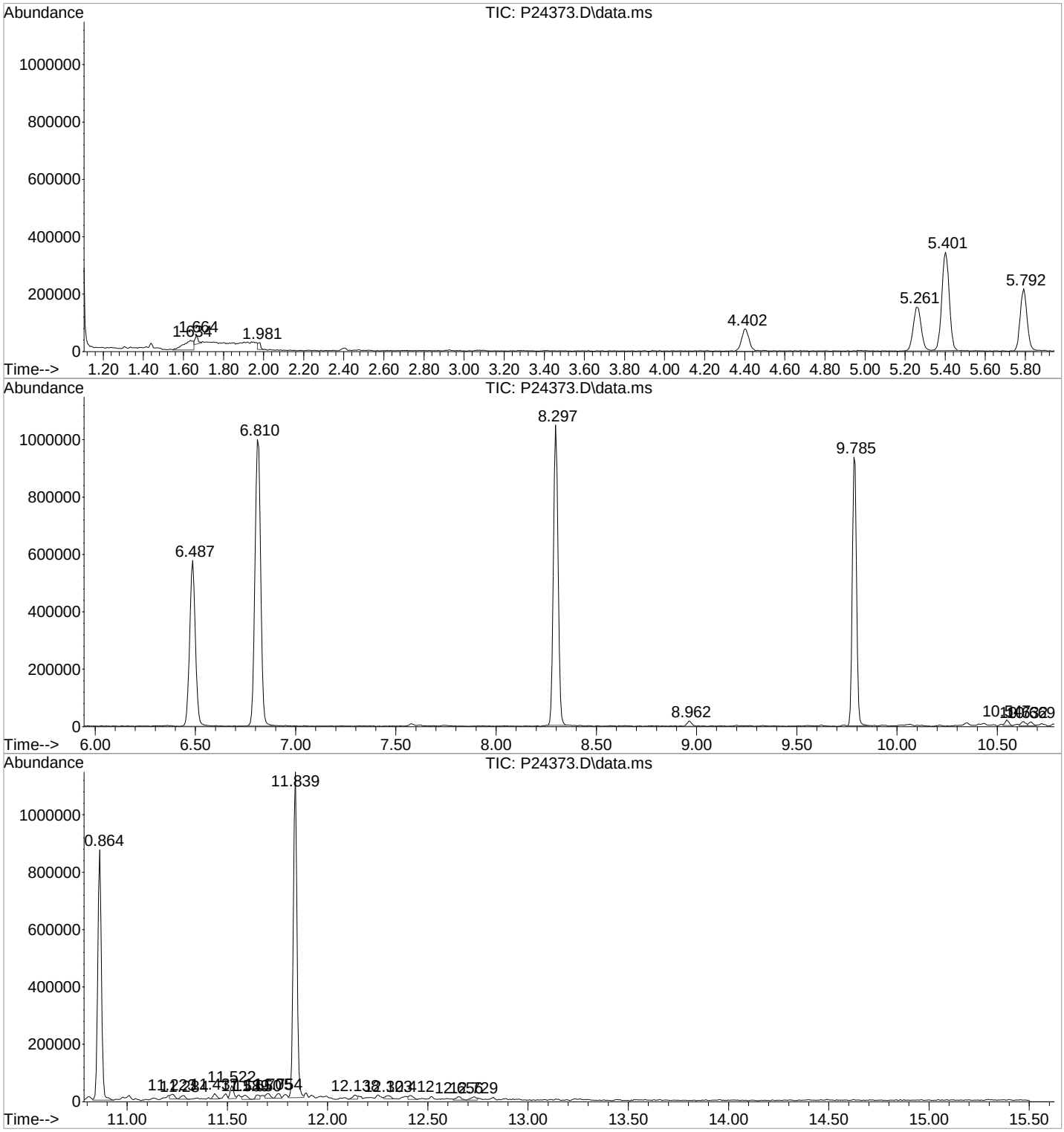
Sum of corrected areas: 11326624

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

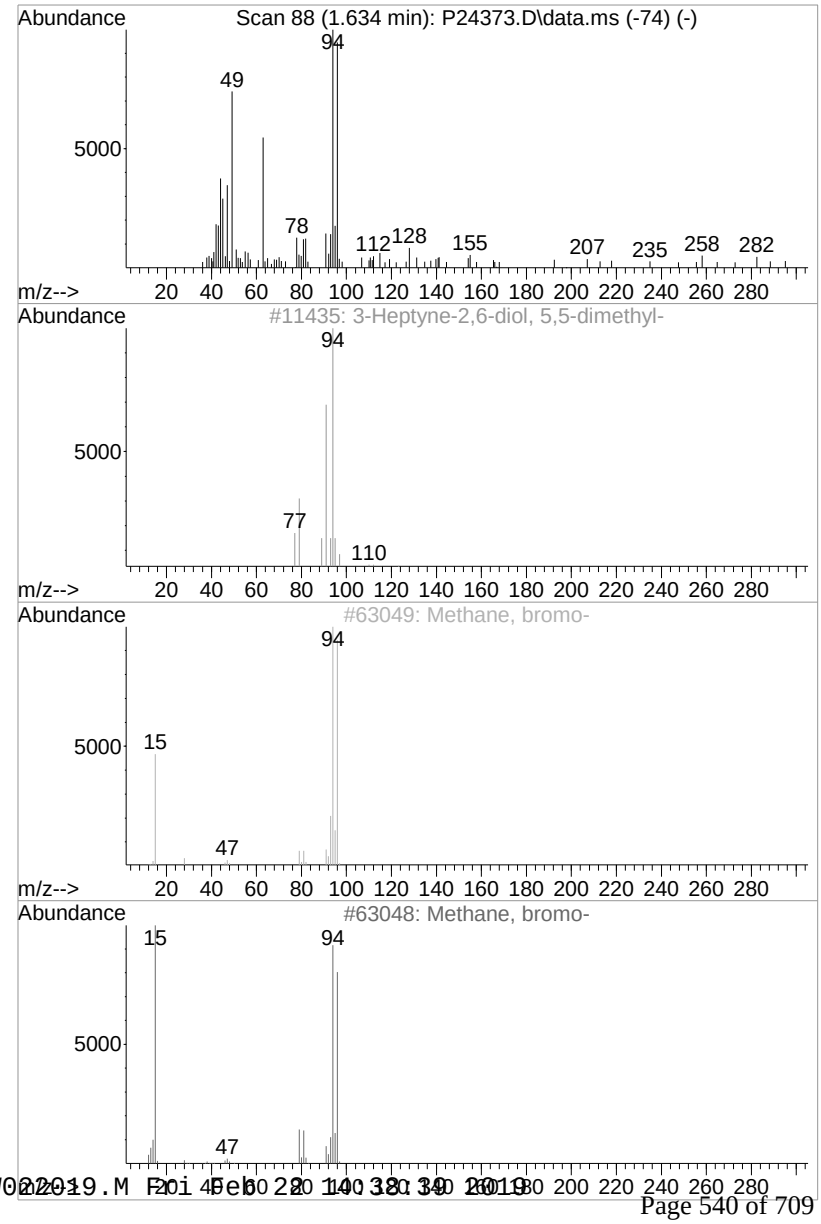
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

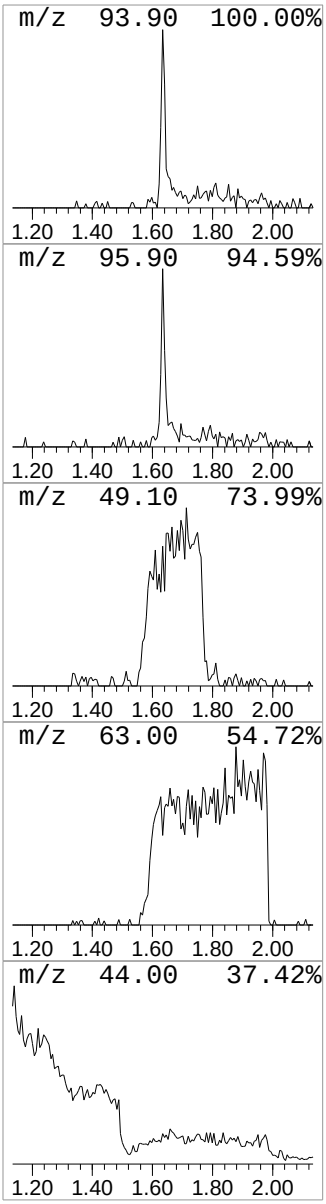
****

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.634	6.73 ppb	119274	Pentafluorobenzene	5.401

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Heptyne-2,6-diol, 5,5-dimethyl-	156	C9H16O2	061228-11-3	23
2	Methane, bromo-	94	CH3Br	000074-83-9	11
3	Methane, bromo-	94	CH3Br	000074-83-9	11
4	Methane, bromo-	94	CH3Br	000074-83-9	10
5	Ethyne, dichloro-	94	C2Cl2	007572-29-4	9





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24373.D
Acq On : 21 Feb 2019 5:19 pm
Operator : K.Ruest
Sample : R1901228-001|101 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

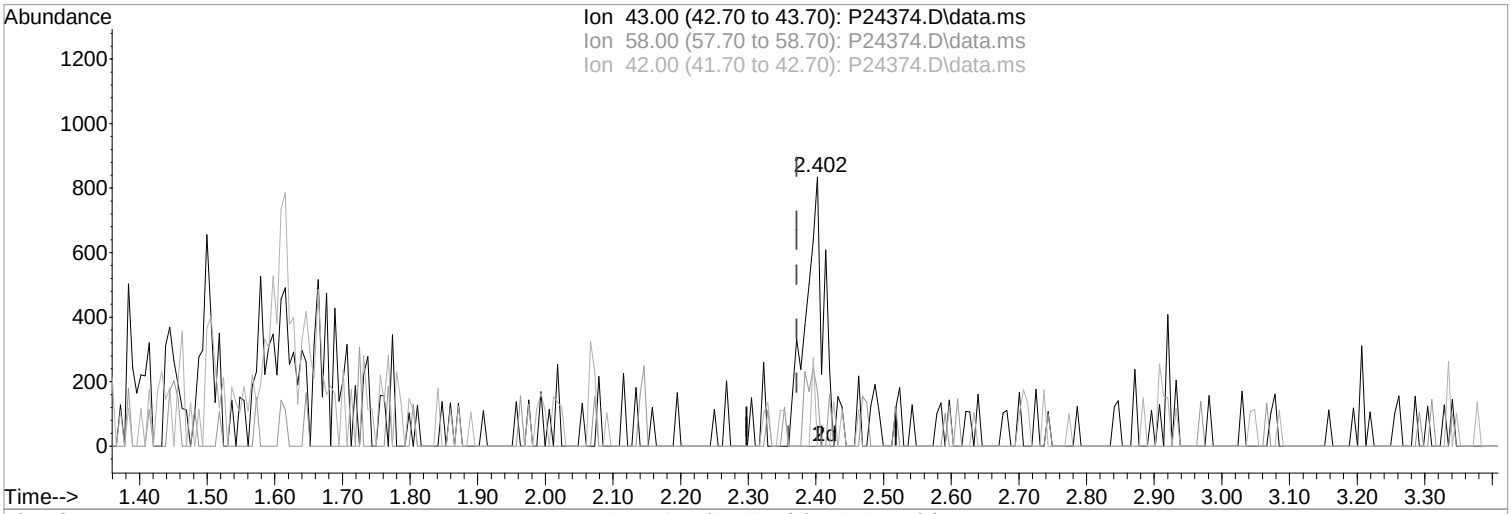
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

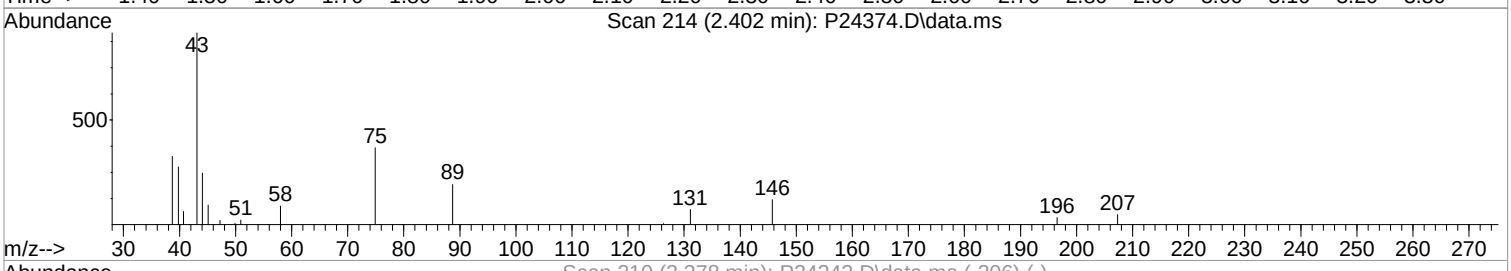
					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	1.634	6.7	ppb	119274	1	5.401	885541	50.0

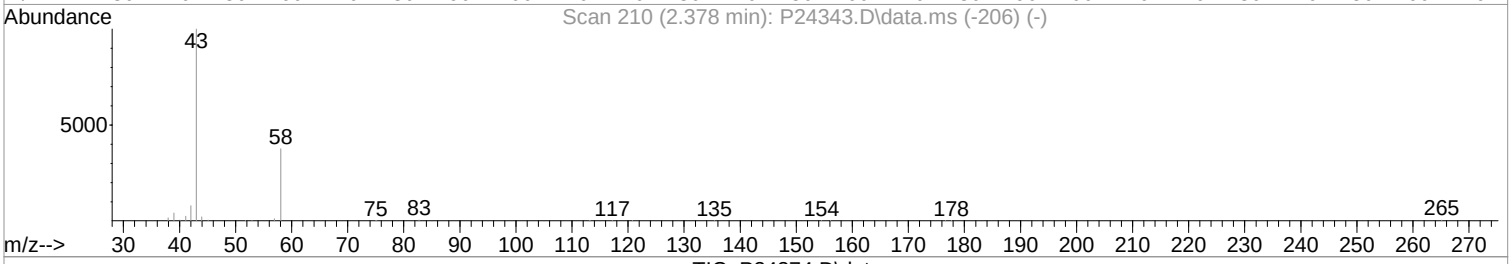
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24374.D
Acq On : 21 Feb 2019 5:41 pm
Operator : K.Ruest
Sample : R1901228-008|4325 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 21 18:01:28 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24374.D\data.ms

(15) Acetone (P)

2.402min (+0.031) 1.03 ppb m

response 1519

Ion	Exp%	Act%
43.00	100	100
58.00	38.10	20.50
42.00	7.80	0.00
0.00	0.00	0.00

Manual Integration:

After

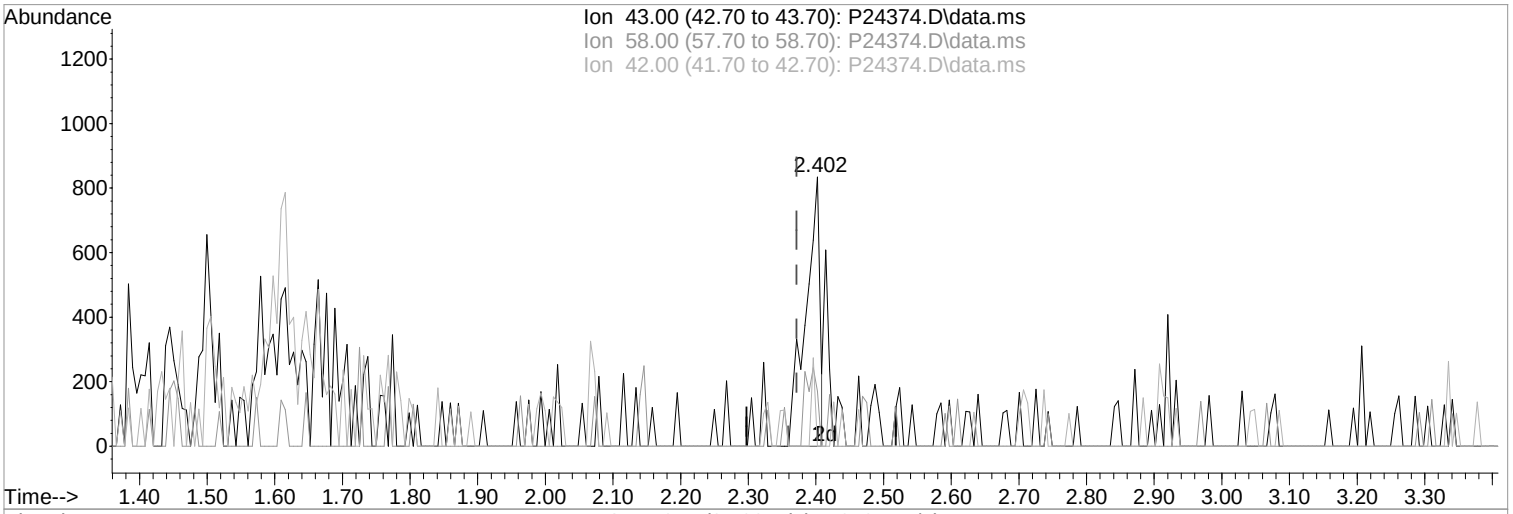
Split Peak

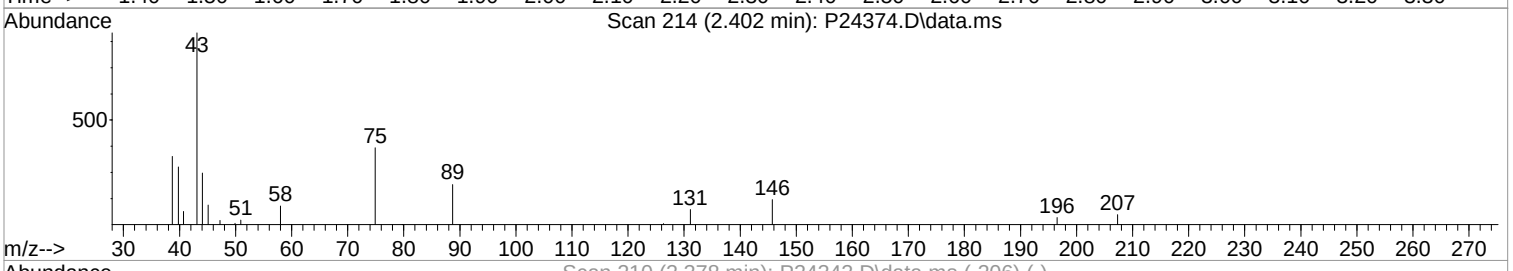
02/22/19

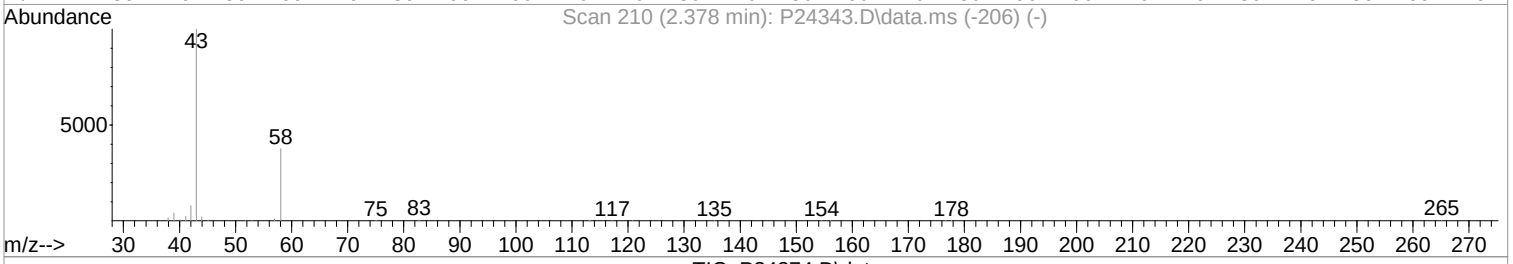
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24374.D
Acq On : 21 Feb 2019 5:41 pm
Operator : K.Ruest
Sample : R1901228-008|4325 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 21 18:01:28 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24374.D\data.ms

(15) Acetone (P)

2.402min (+0.031) 0.82 ppb

response 1209

Ion	Exp%	Act%
43.00	100	100
58.00	38.10	20.50
42.00	7.80	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24374.D
Acq On : 21 Feb 2019 5:41 pm
Operator : K.Ruest
Sample : R1901228-008|4325 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 22 14:39:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

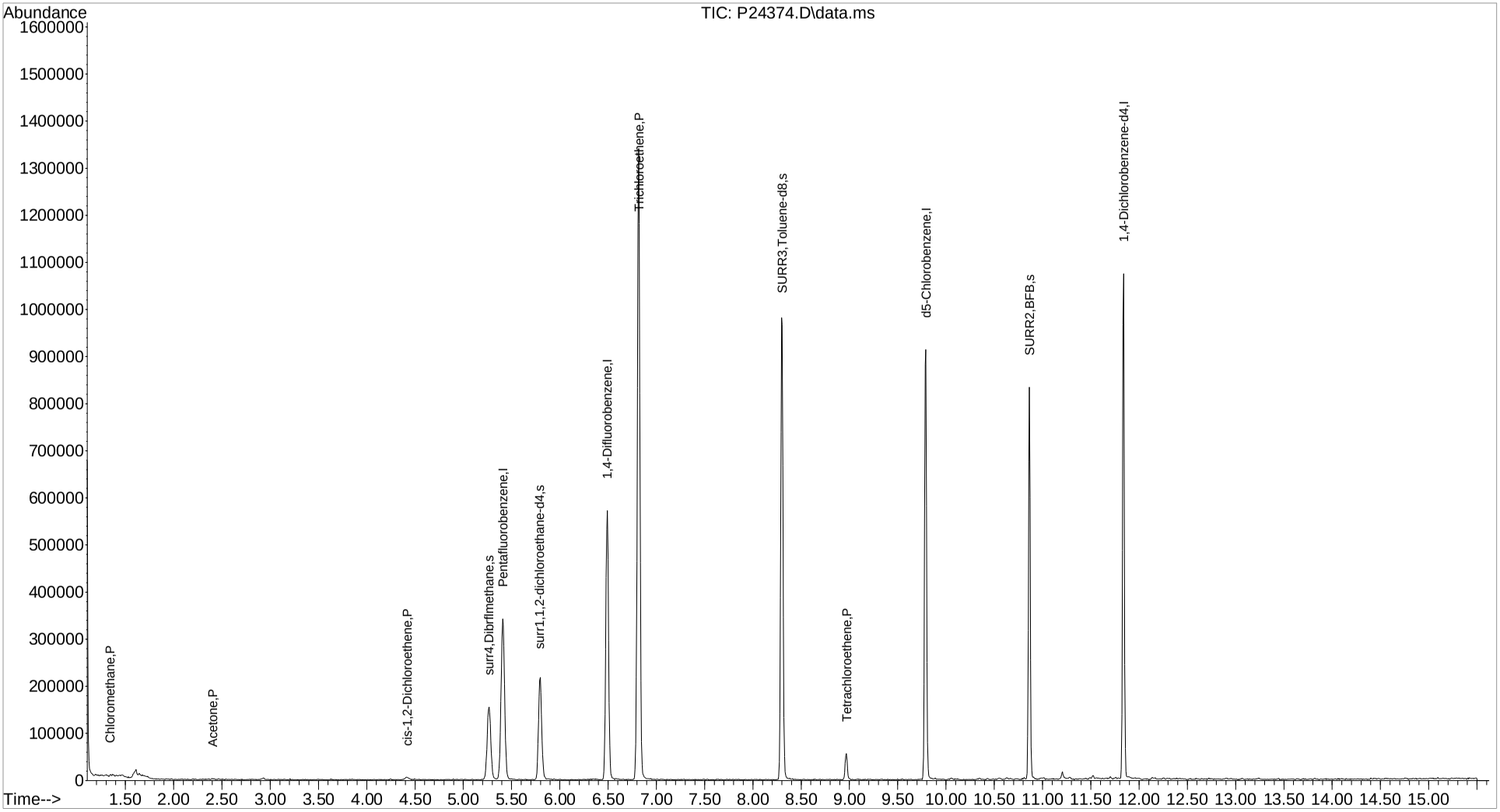
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.408	168	308441	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.493	114	498749	50.00	ppb		0.01
71) d5-Chlorobenzene	9.791	117	428416	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	224566	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.267	113	130959	47.78	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.56%				
48) surr1,1,2-dichloroetha...	5.792	65	178369	51.31	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.62%				
65) SURR3,Toluene-d8	8.303	98	642742	49.44	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.88%				
70) SURR2,BFB	10.864	95	228995	49.18	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.36%				
Target Compounds							Qvalue
3) Chloromethane	1.341	50	1015	0.20	ppb		89
15) Acetone	2.402	43	1519m	1.03	ppb		
34) cis-1,2-Dichloroethene	4.420	96	2183	0.61	ppb	#	82
54) Trichloroethene	6.816	130	485876	139.29	ppb		91
72) Tetrachloroethene	8.968	164	12130	4.73	ppb		93

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

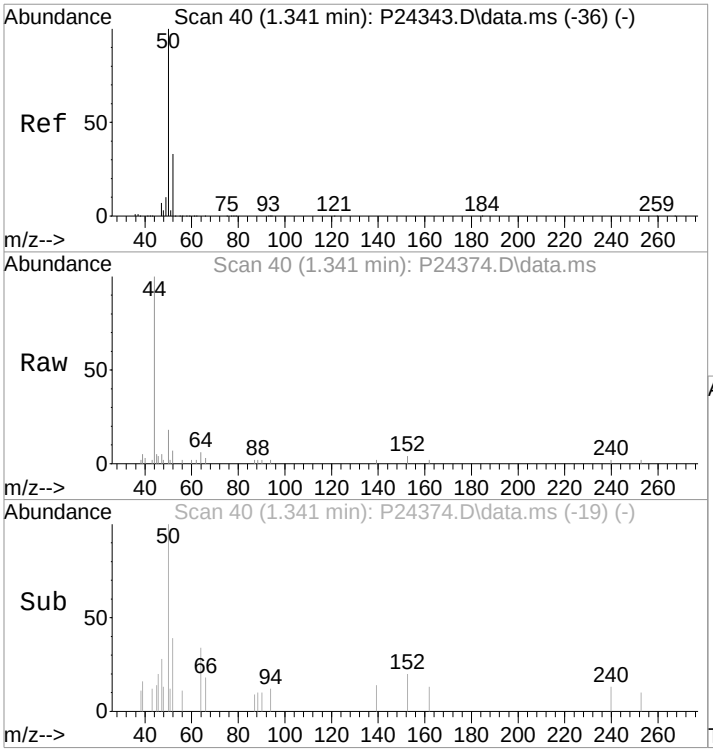
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24374.D
Acq On : 21 Feb 2019 5:41 pm
Operator : K.Ruest
Sample : R1901228-008|4325 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 22 14:39:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



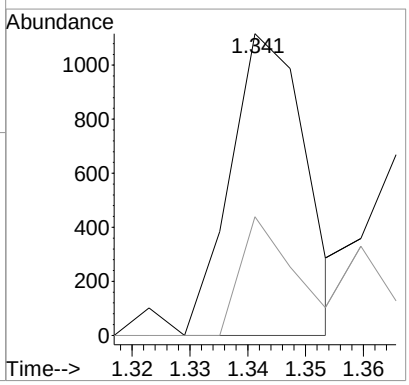
1st 02/22/19

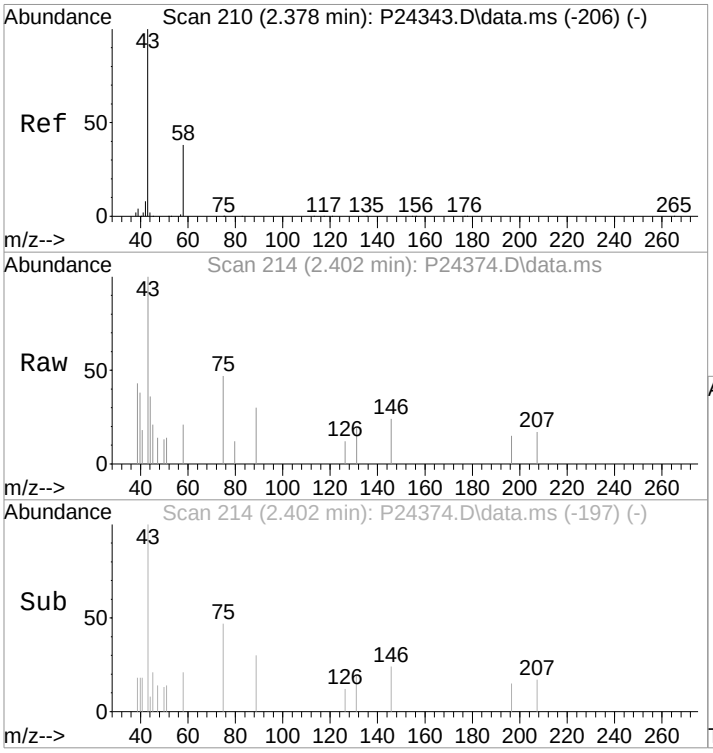


#3
Chloromethane
Concen: 0.20 ppb
RT: 1.341 min Scan# 40
Delta R.T. 0.012 min
Lab File: P24374.D
Acq: 21 Feb 2019 5:41 pm

Tgt Ion: 50 Resp: 1015

Ion	Ratio	Lower	Upper
50	100		
52	39.3	13.0	53.0

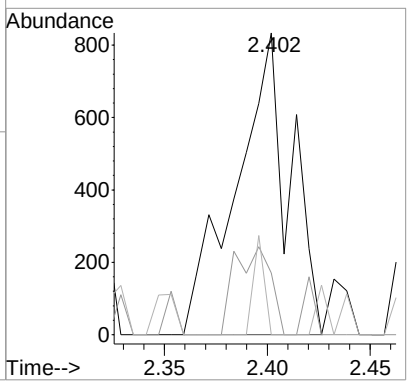


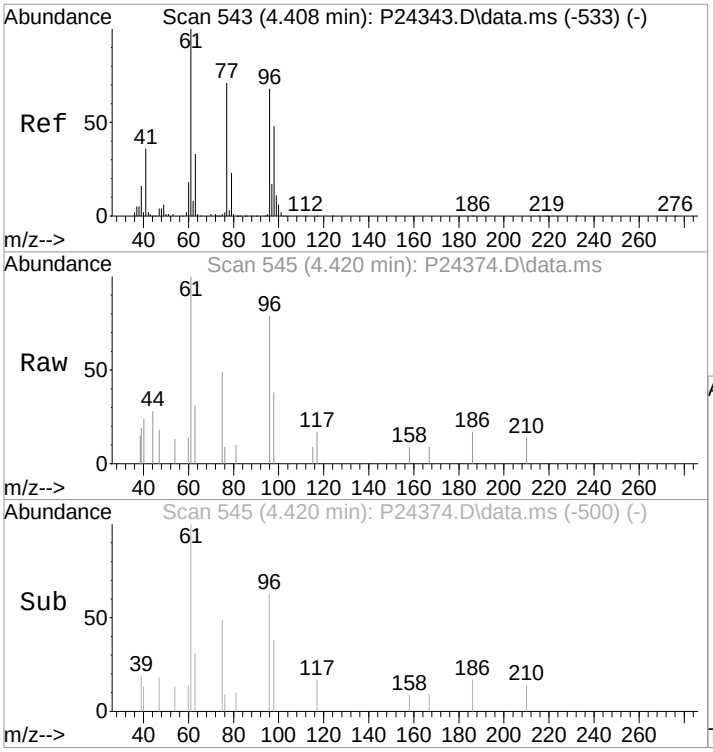


#15
Acetone
Concen: 1.03 ppb m
RT: 2.402 min Scan# 214
Delta R.T. 0.031 min
Lab File: P24374.D
Acq: 21 Feb 2019 5:41 pm

Tgt Ion: 43 Resp: 1519

Ion	Ratio	Lower	Upper
43	100		
58	20.5	18.1	58.1
42	0.0	0.0	27.8

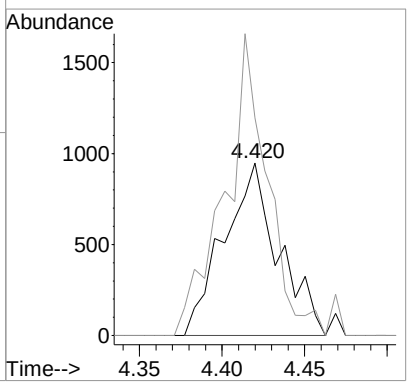


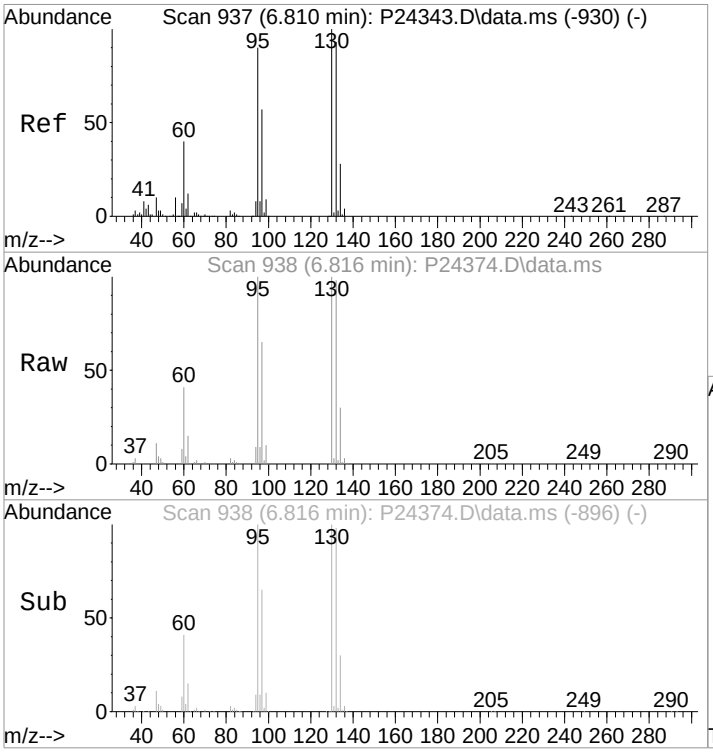


#34
cis-1,2-Dichloroethene
Concen: 0.61 ppb
RT: 4.420 min Scan# 545
Delta R.T. 0.018 min
Lab File: P24374.D
Acq: 21 Feb 2019 5:41 pm

Tgt Ion: 96 Resp: 2183

Ion	Ratio	Lower	Upper
96	100		
61	126.0	128.1	168.1#

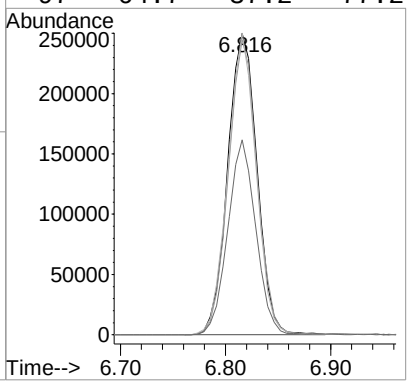


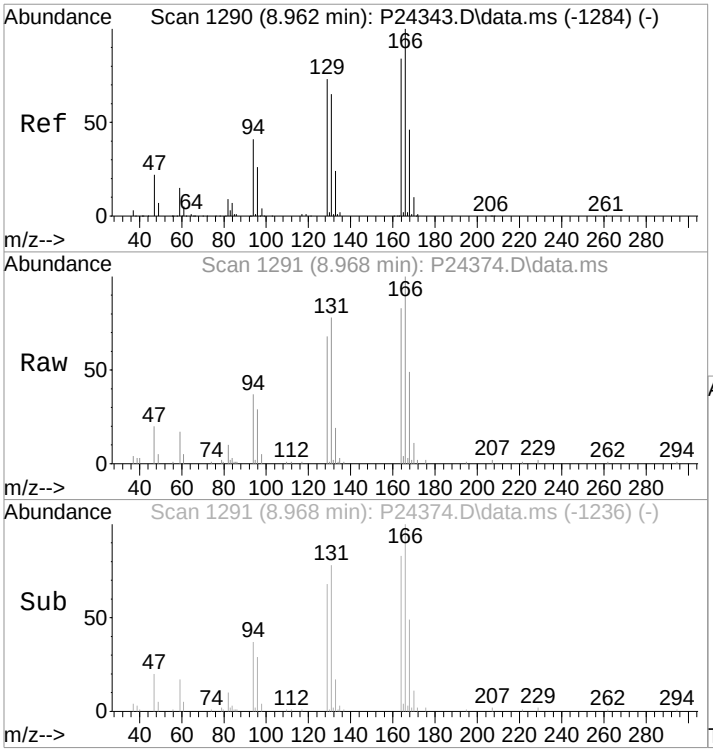


#54
Trichloroethene
Concen: 139.29 ppb
RT: 6.816 min Scan# 938
Delta R.T. 0.006 min
Lab File: P24374.D
Acq: 21 Feb 2019 5:41 pm

Tgt Ion:130 Resp: 485876

Ion	Ratio	Lower	Upper
130	100		
132	97.9	72.6	112.6
95	100.2	69.8	109.8
97	64.7	37.2	77.2

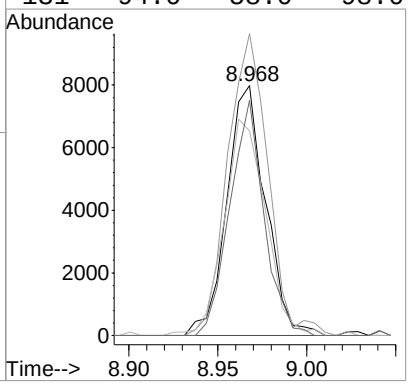




#72
Tetrachloroethene
Concen: 4.73 ppb
RT: 8.968 min Scan# 1291
Delta R.T. 0.006 min
Lab File: P24374.D
Acq: 21 Feb 2019 5:41 pm

Tgt Ion:164 Resp: 12130

Ion	Ratio	Lower	Upper
164	100		
166	120.8	99.6	139.6
129	81.9	66.7	106.7
131	94.0	58.0	98.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24374.D
Acq On : 21 Feb 2019 5:41 pm
Operator : K.Ruest
Sample : R1901228-008|4325 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24374.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.609	76	84	88	rBV8	17237	38189	1.50%	0.348%
2	5.267	673	684	697	rBV2	154306	419008	16.45%	3.822%
3	5.408	697	707	720	rVB	340781	863645	33.90%	7.877%
4	5.798	760	771	781	rBV	217805	509328	19.99%	4.646%
5	6.493	876	885	897	rBV	571151	1130698	44.39%	10.313%
6	6.816	928	938	953	rBV	1340062	2547287	100.00%	23.234%
7	8.297	1174	1181	1193	rBV	980692	1640497	64.40%	14.963%
8	8.968	1285	1291	1296	rBV2	56001	89544	3.52%	0.817%
9	9.791	1420	1426	1435	rBV	913299	1301734	51.10%	11.873%
10	10.864	1596	1602	1608	rBV	832351	1051118	41.26%	9.587%
11	11.205	1650	1658	1665	rBV4	16324	26421	1.04%	0.241%
12	11.839	1756	1762	1769	rBV	1071867	1346060	52.84%	12.278%

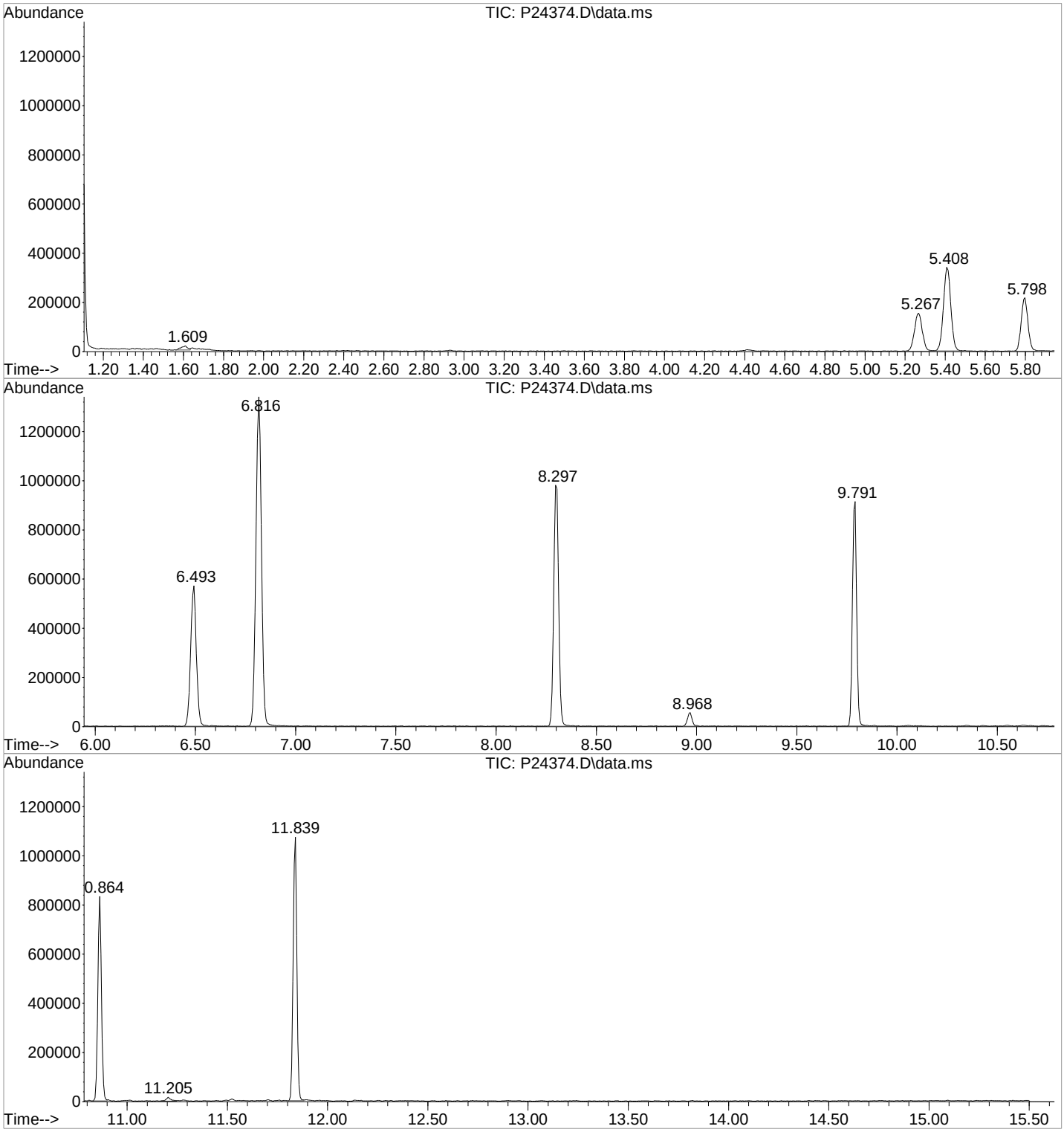
Sum of corrected areas: 10963529

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24374.D
Acq On : 21 Feb 2019 5:41 pm
Operator : K.Ruest
Sample : R1901228-008|4325 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\\
Data File : P24374.D
Acq On : 21 Feb 2019 5:41 pmm
Operator : K.Ruestt
Sample : R1901228-008|4325 Inst : MSVOA-122
Misc : DAY MED T44
ALS Vial : 15 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

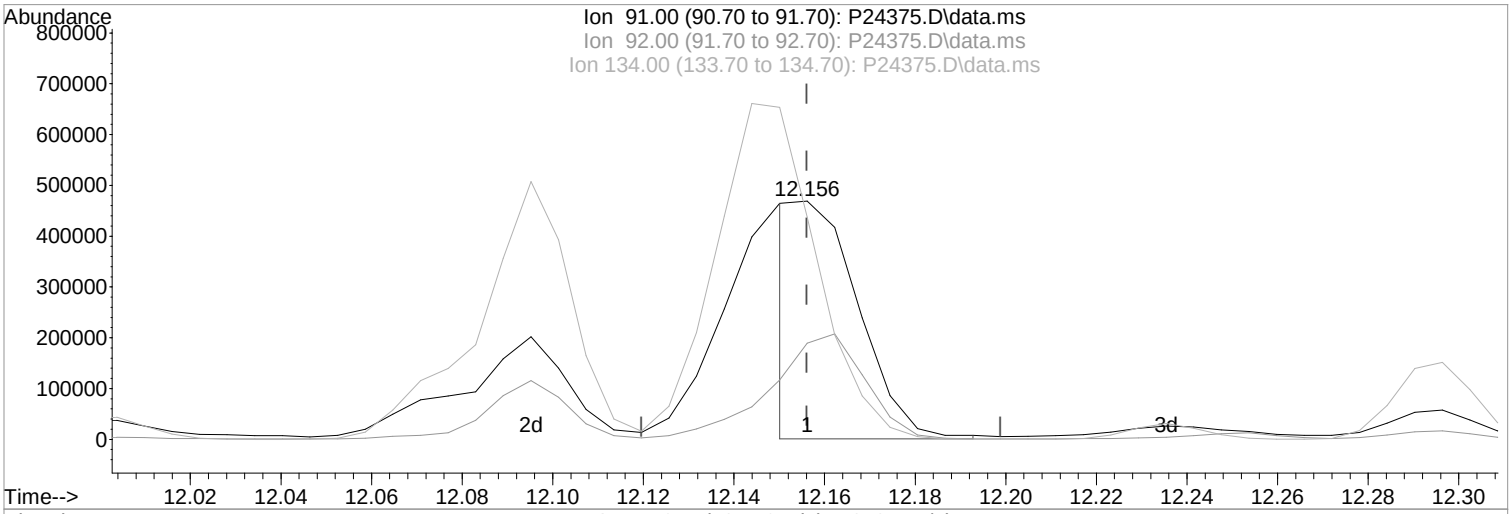
					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

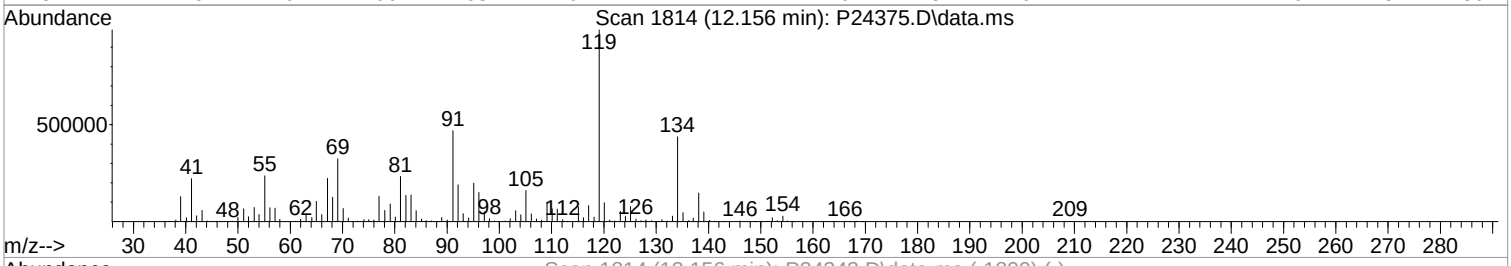
No Library Search Compounds Detected
****

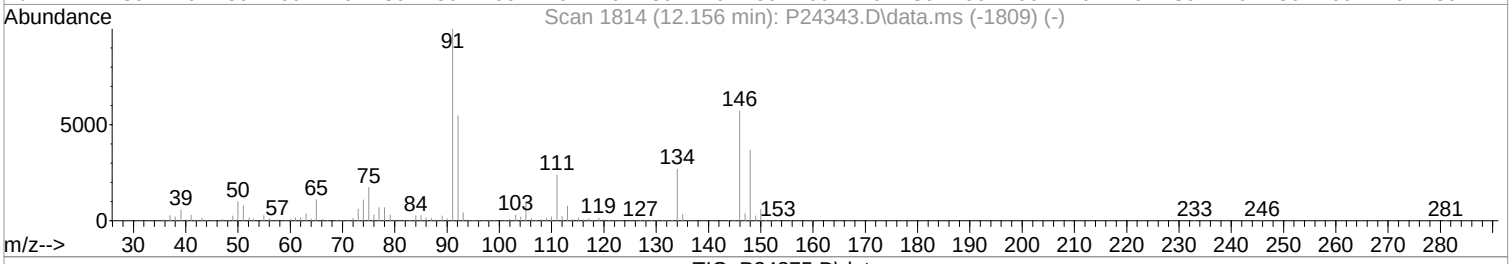
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 22 09:05:25 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24375.D\data.ms

(109) n-Butylbenzene

12.156min (+0.000) 33.32 ppb m

response 455067

Ion	Exp%	Act%
91.00	100	100
92.00	54.70	40.32
134.00	26.80	93.26#
0.00	0.00	0.00

Manual Integration:

After

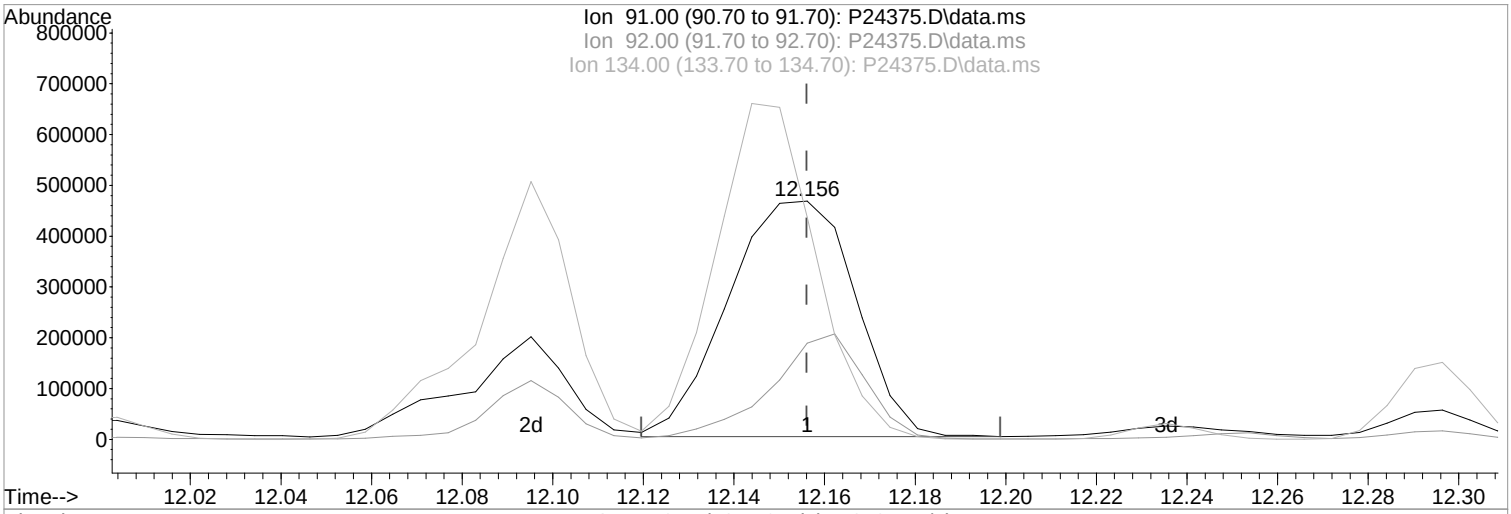
Poor integration.

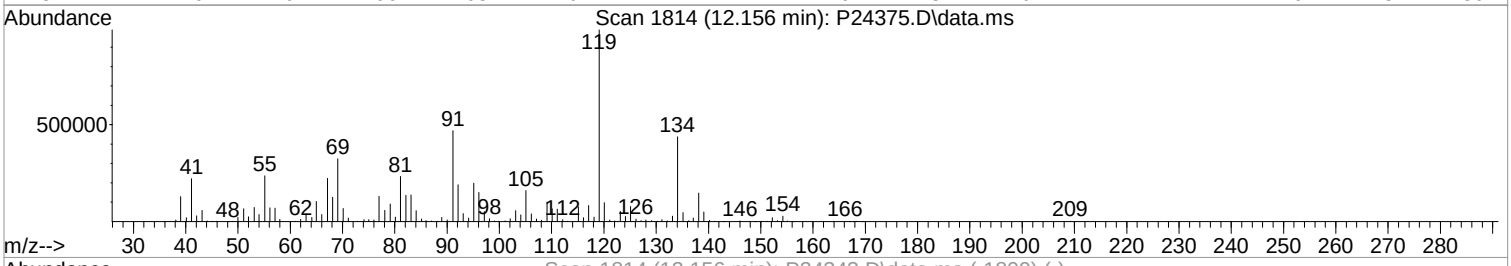
02/22/19

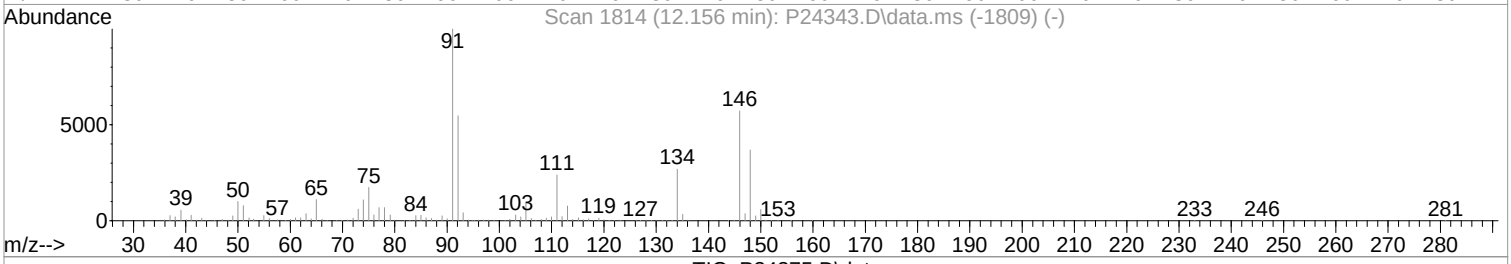
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 22 09:05:25 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24375.D\data.ms

(109) n-Butylbenzene

12.156min (+0.000) 66.13 ppb

response 903262

Ion	Exp%	Act%
91.00	100	100
92.00	54.70	40.32
134.00	26.80	93.26#
0.00	0.00	0.00

Manual Integration:

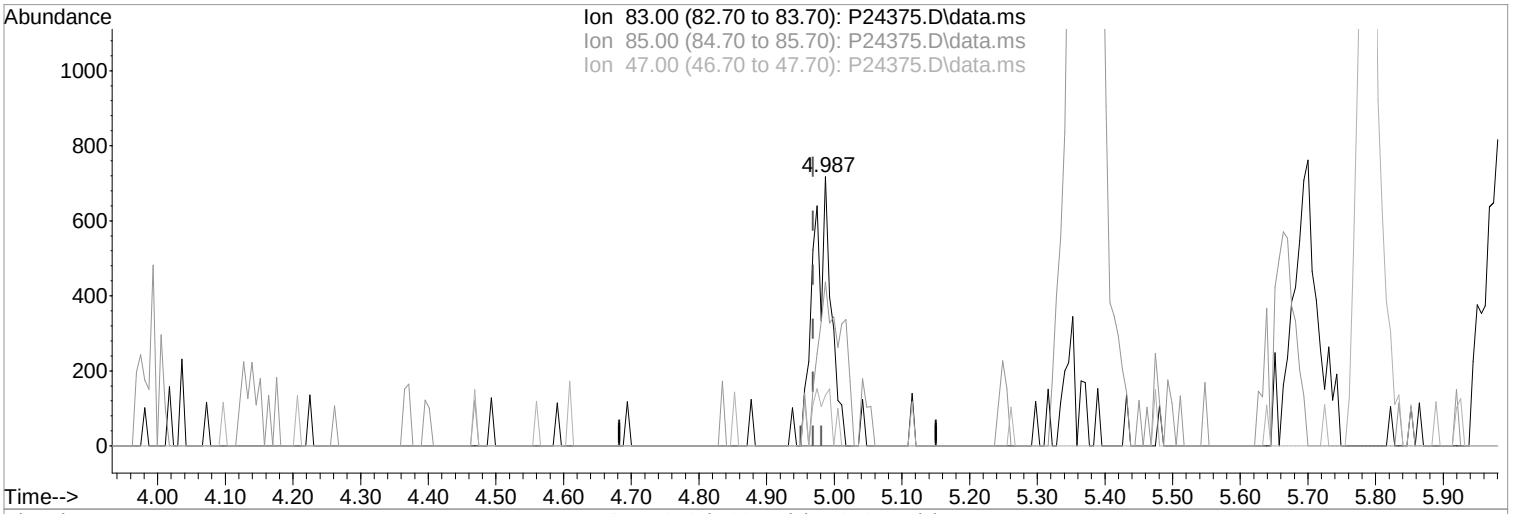
Before

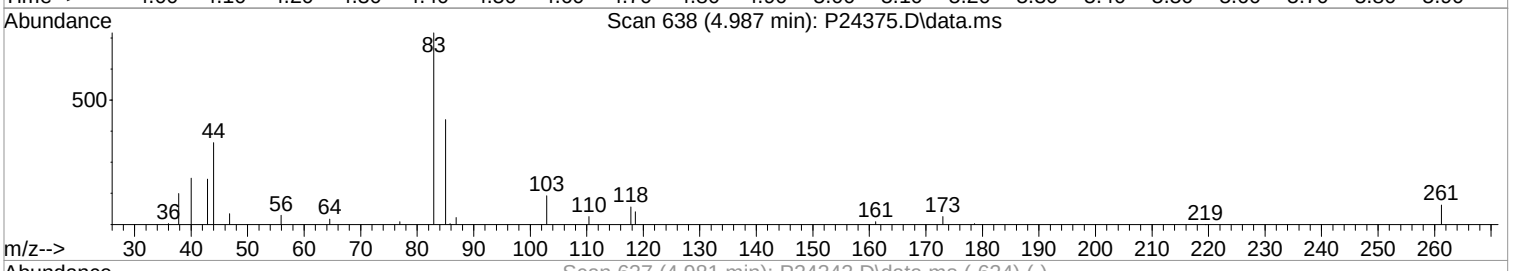
02/22/19

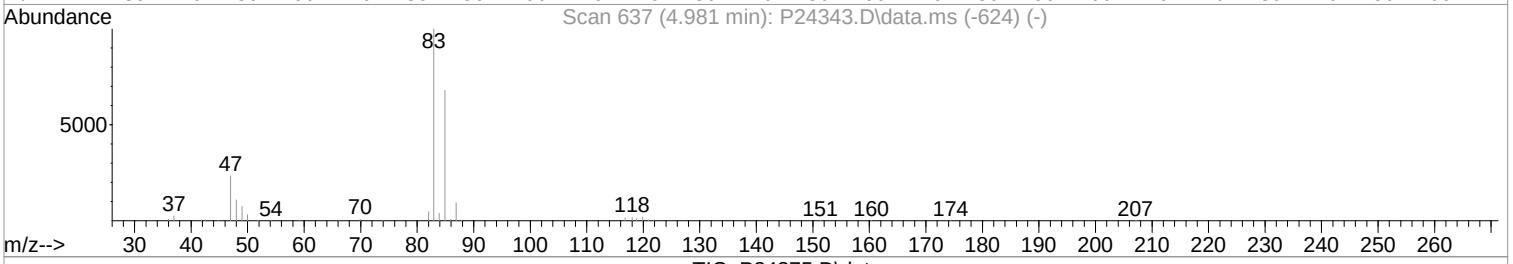
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 22 09:05:25 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24375.D\data.ms

(40) Chloroform (P)

4.987min (+0.018) 0.24 ppb m

response 1291

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	60.95
47.00	23.40	18.83
0.00	0.00	0.00

Manual Integration:

After

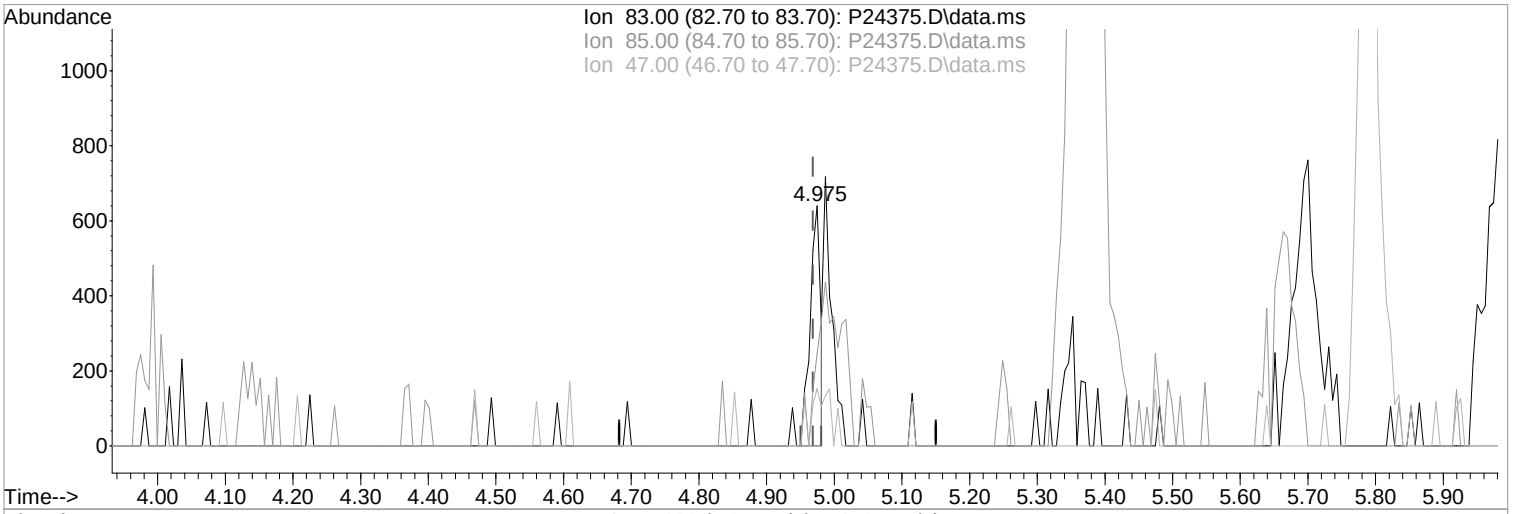
Split Peak

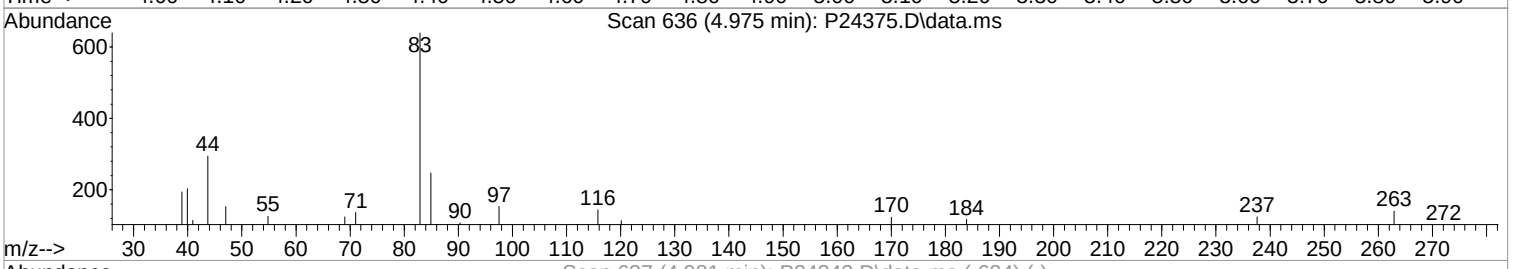
02/22/19

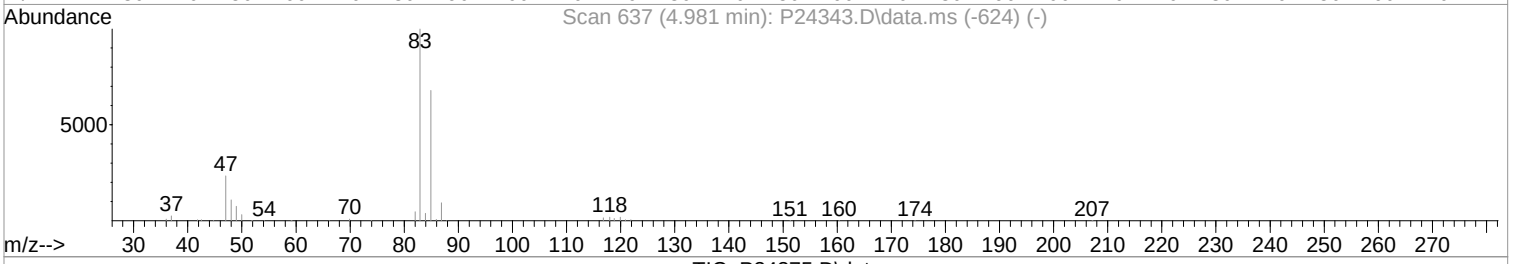
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 22 09:05:25 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24375.D\data.ms

(40) Chloroform (P)

4.975min (+0.006) 0.13 ppb

response 685

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	38.59#
47.00	23.40	23.91
0.00	0.00	0.00

Manual Integration:

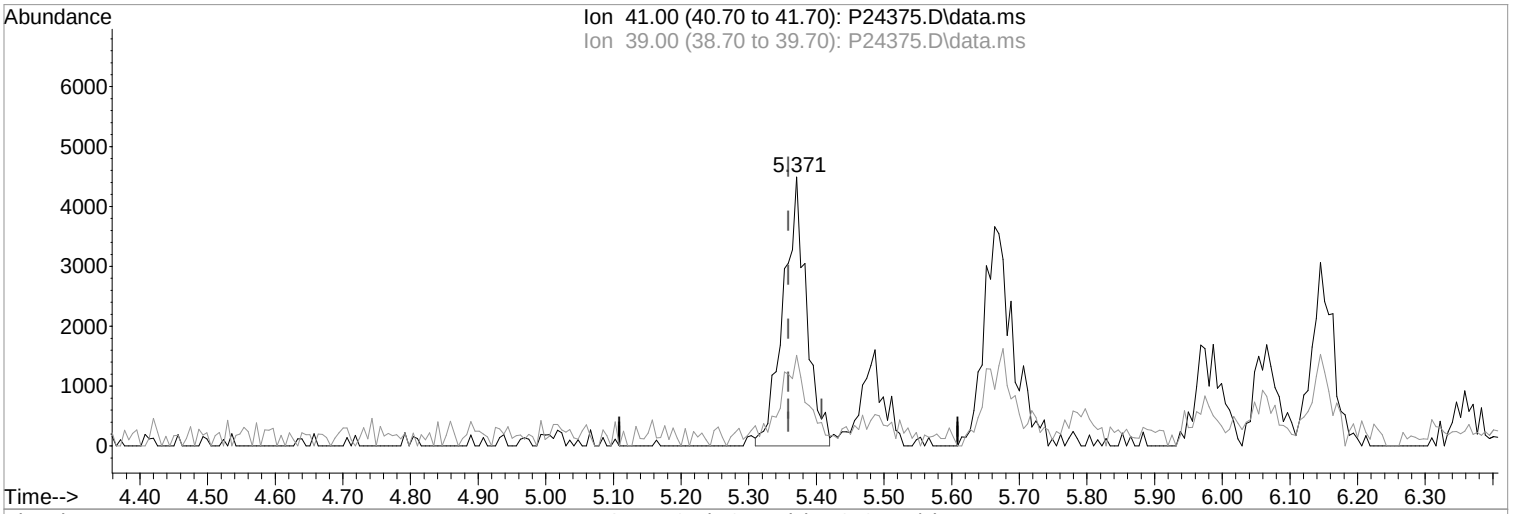
Before

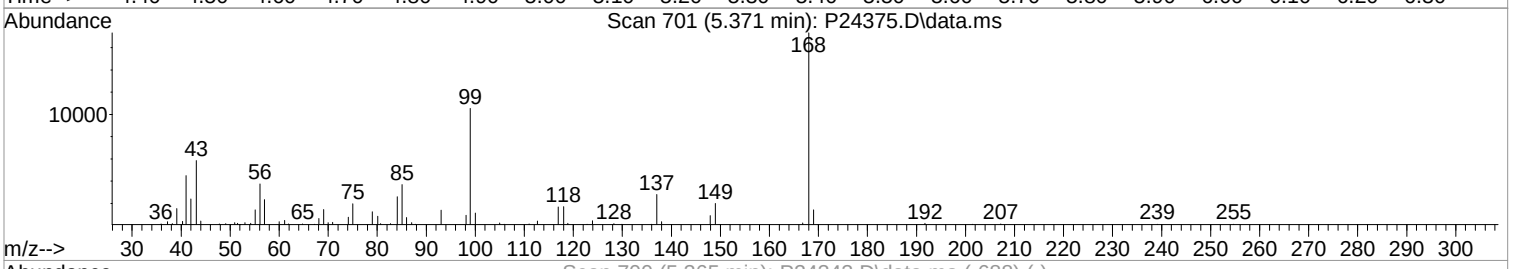
02/22/19

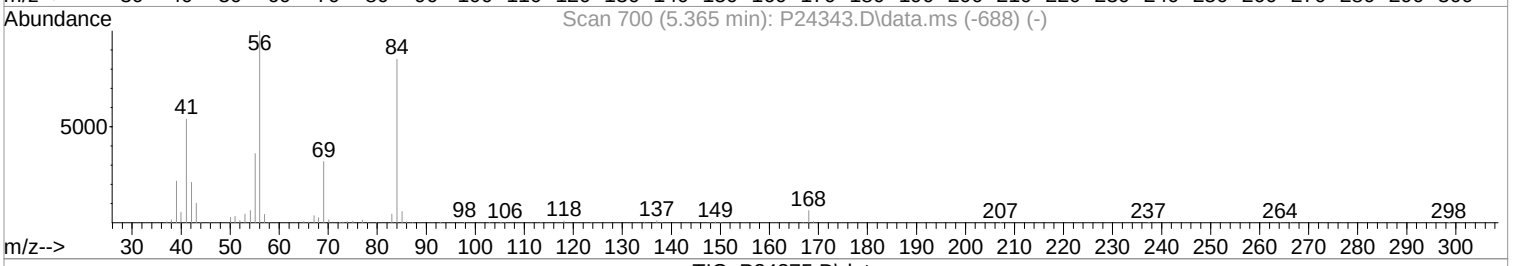
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 22 09:05:25 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24375.D\data.ms

(44) Cyclohexane (P)

5.371min (+0.012) 3.58 ppb m

response 10713

Ion	Exp%	Act%
41.00	100	100
39.00	40.30	33.69
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

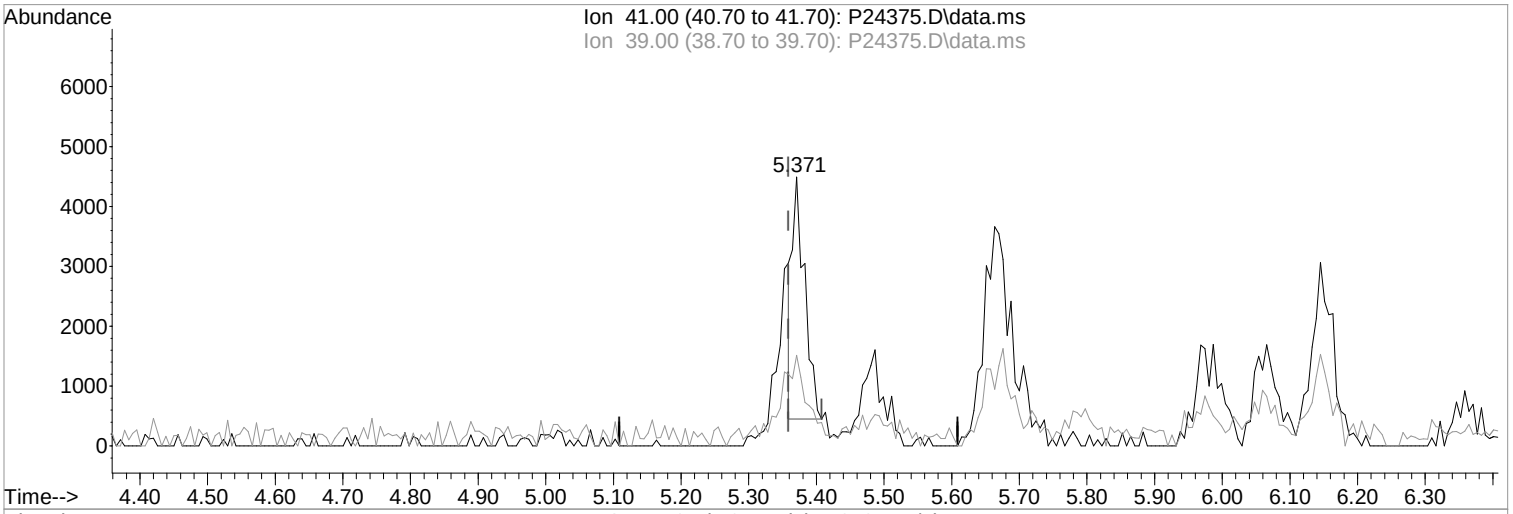
Split Peak

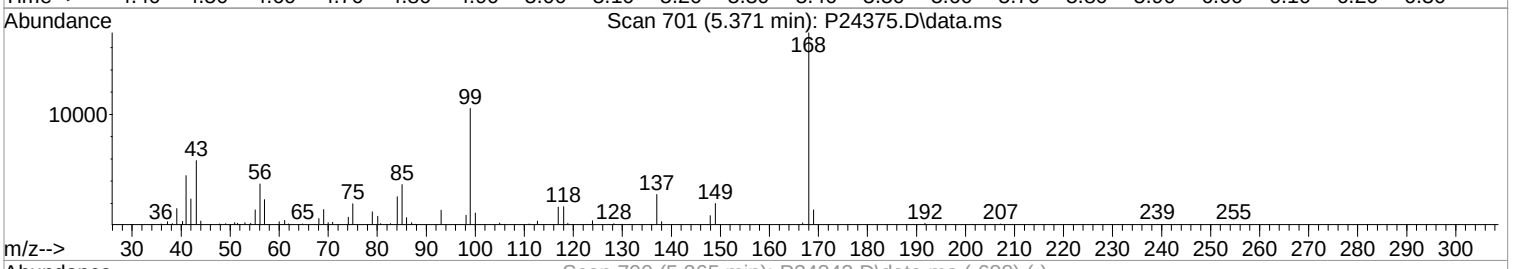
02/22/19

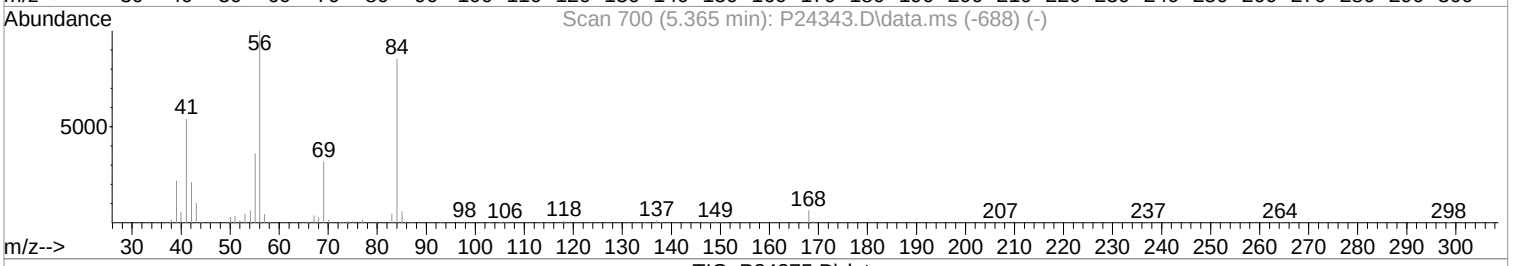
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 22 09:05:25 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24375.D\data.ms

(44) Cyclohexane (P)

5.371min (+0.012) 1.72 ppb

response 5139

Ion	Exp%	Act%
41.00	100	100
39.00	40.30	33.69
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 22 14:45:55 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

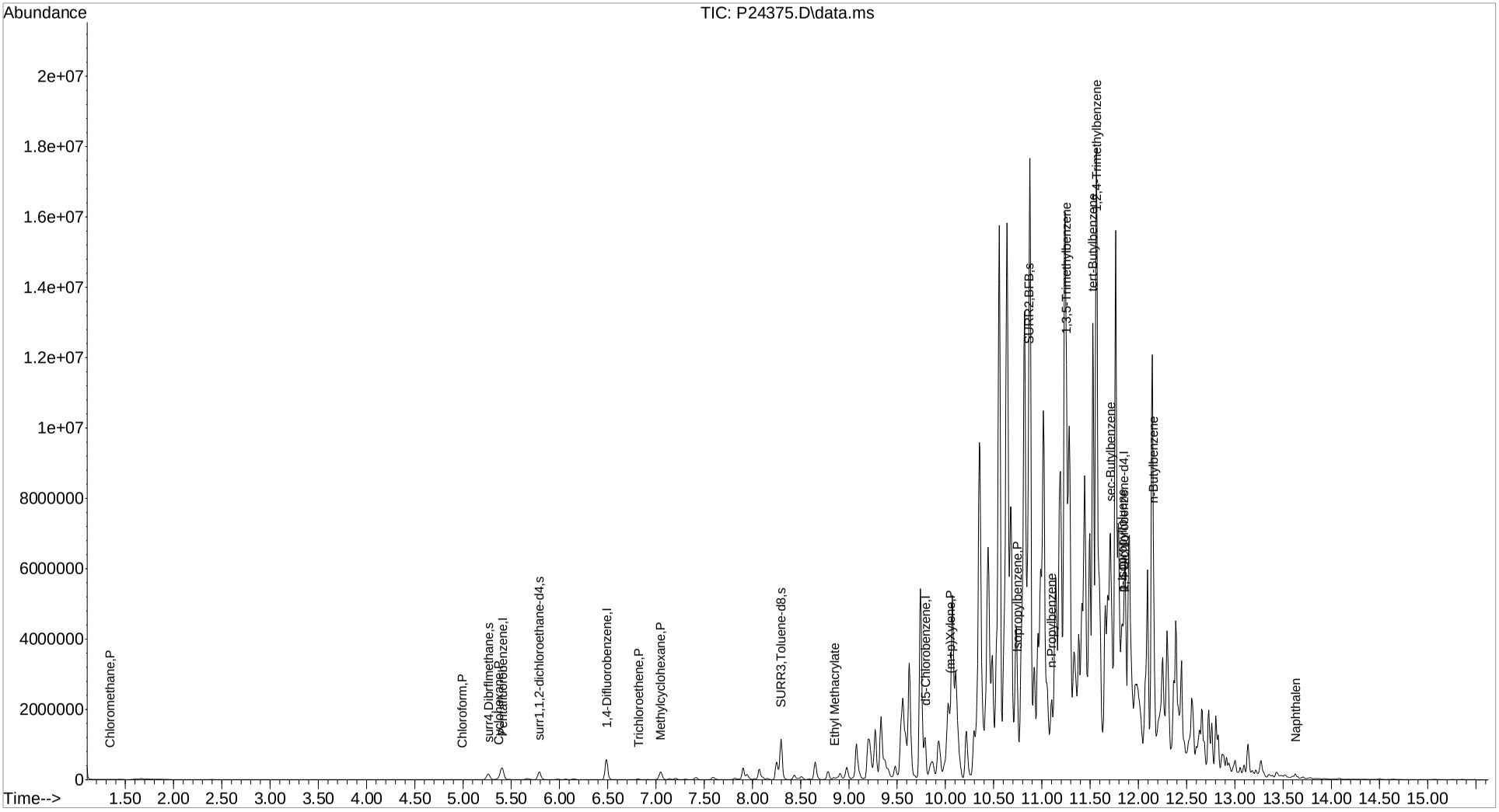
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
Internal Standards								
1) Pentafluorobenzene	5.407	168	316263	50.00	ppb		0.01	
43) 1,4-Difluorobenzene	6.487	114	510710	50.00	ppb		0.00	
71) d5-Chlorobenzene	9.791	117	467224	50.00	ppb		0.00	
86) 1,4-Dichlorobenzene-d4	11.845	152	272535	50.00	ppb		0.00	
System Monitoring Compounds								
45) surr4,Dibrflmethane	5.261	113	134706	48.00	ppb		0.00	
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.00%					
48) surr1,1,2-dichloroetha...	5.792	65	190254	53.44	ppb		0.00	
Spiked Amount 50.000	Range 73 - 125		Recovery = 106.88%					
65) SURR3,Toluene-d8	8.297	98	678887	51.00	ppb		0.00	
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.00%					
70) SURR2,BFB	10.864	95	394147	82.67	ppb		0.00	
Spiked Amount 50.000	Range 85 - 122		Recovery = 165.34%#					
Target Compounds							Qvalue	
3) Chloromethane	1.341	50	1568	0.31	ppb		95	
40) Chloroform	4.987	83	1291m	0.24	ppb			
44) Cyclohexane	5.371	41	10713m	3.58	ppb			
54) Trichloroethene	6.822	130	8174	2.29	ppb	#	84	
55) Methylcyclohexane	7.047	55	82830	18.38	ppb		90	
68) Ethyl Methacrylate	8.846	69	15694	2.70	ppb		86	
83) (m+p)Xylene	10.053	106	57753	8.76	ppb		87	
89) Isopropylbenzene	10.748	105	170190	9.49	ppb		98	
95) n-Propylbenzene	11.101	91	492748	23.99	ppb		96	
99) 1,3,5-Trimethylbenzene	11.254	105	2747280	184.67	ppb		98	
100) tert-Butylbenzene	11.528	119	80358	6.21	ppb		99	
101) 1,2,4-Trimethylbenzene	11.565	105	5735559	372.72	ppb		85	E-Over Calibration
103) sec-Butylbenzene	11.711	105	545394	29.07	ppb		100	
104) p-Isopropyltoluene	11.833	119	694124	44.55	ppb		97	
109) n-Butylbenzene	12.156	91	455067m	33.32	ppb			
117) Naphthalen	13.625	128	72636	3.88	ppb		99	

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

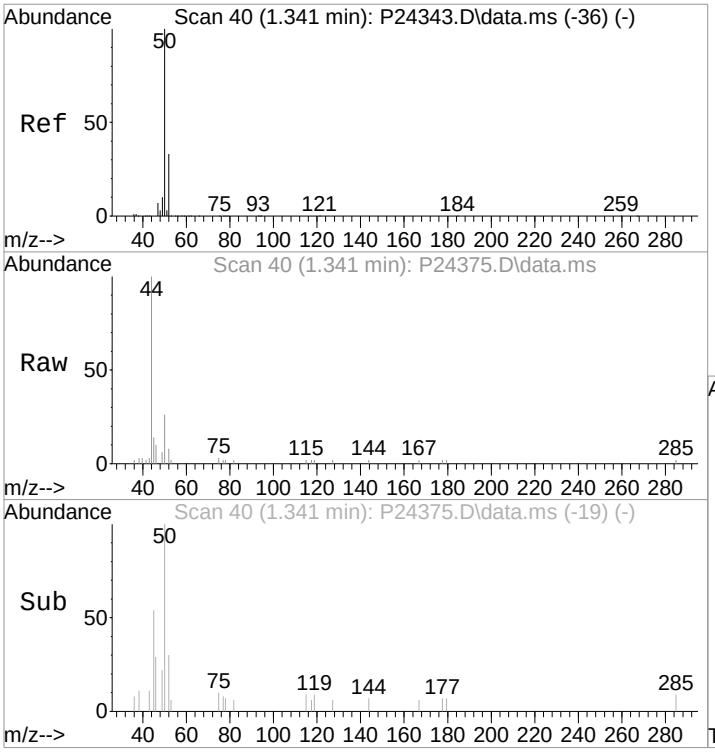
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 22 14:45:55 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



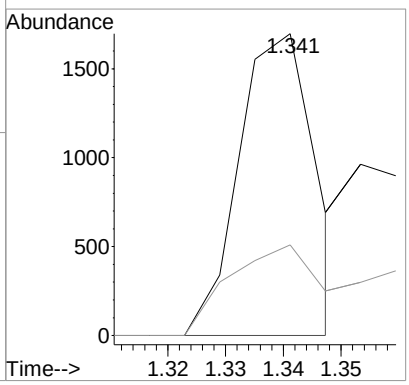
1st 02/22/19

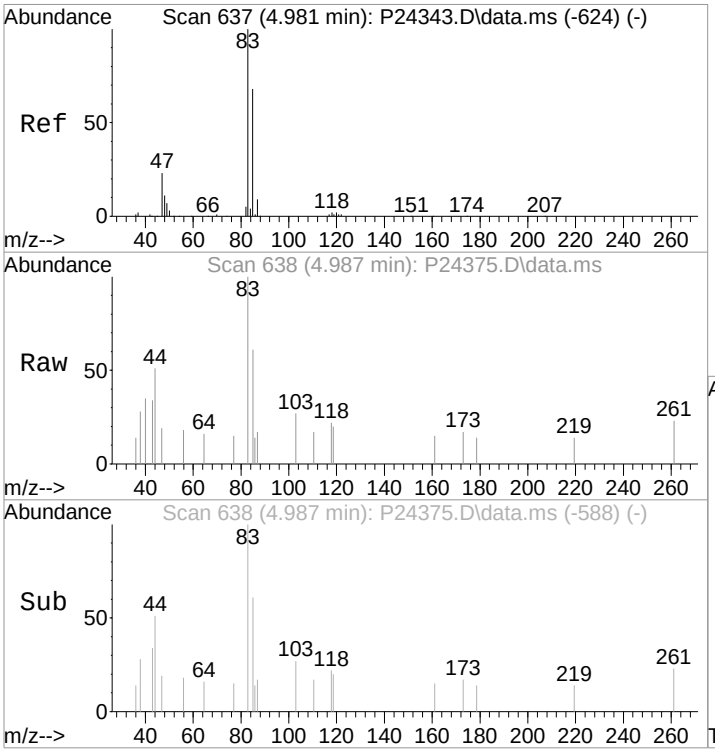


#3
Chloromethane
Concen: 0.31 ppb
RT: 1.341 min Scan# 40
Delta R.T. 0.012 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion: 50 Resp: 1568

Ion	Ratio	Lower	Upper
50	100		
52	30.0	13.0	53.0

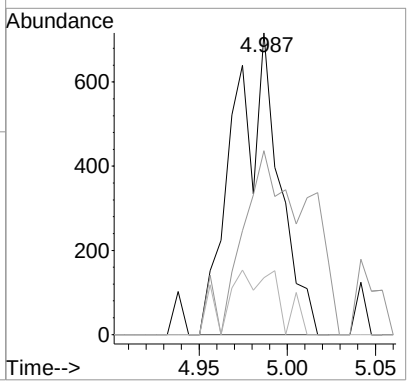


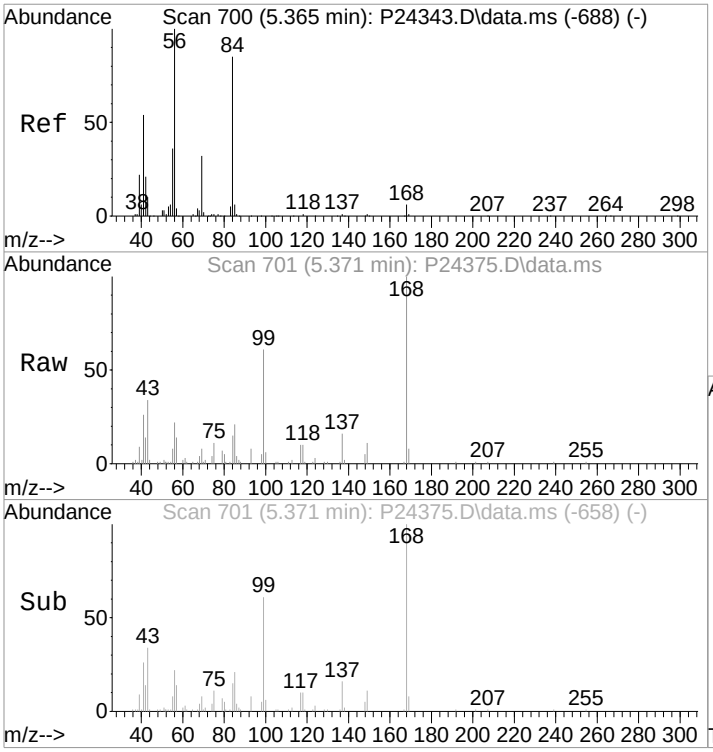


#40
Chloroform
Concen: 0.24 ppb m
RT: 4.987 min Scan# 638
Delta R.T. 0.018 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion: 83 Resp: 1291

Ion	Ratio	Lower	Upper
83	100		
85	60.9	47.9	87.9
47	18.8	3.4	43.4

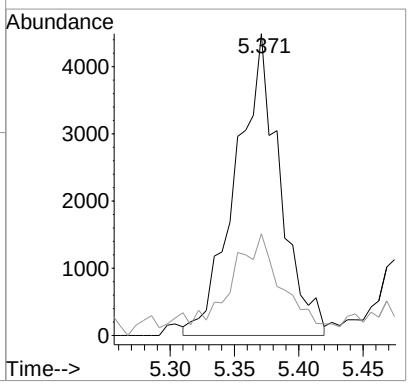


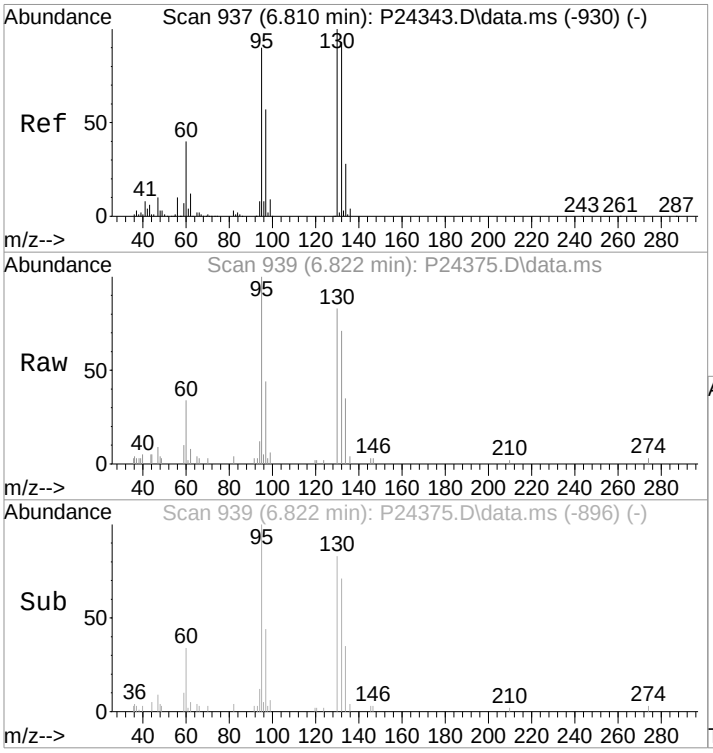


#44
Cyclohexane
Concen: 3.58 ppb m
RT: 5.371 min Scan# 701
Delta R.T. 0.012 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion: 41 Resp: 10713

Ion	Ratio	Lower	Upper
41	100		
39	33.7	20.3	60.3

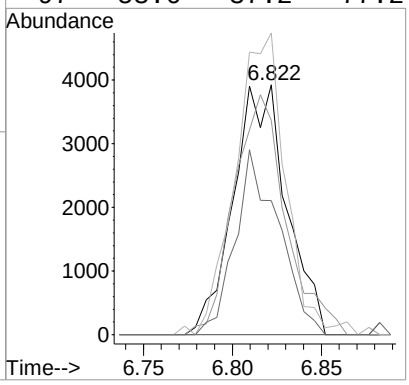


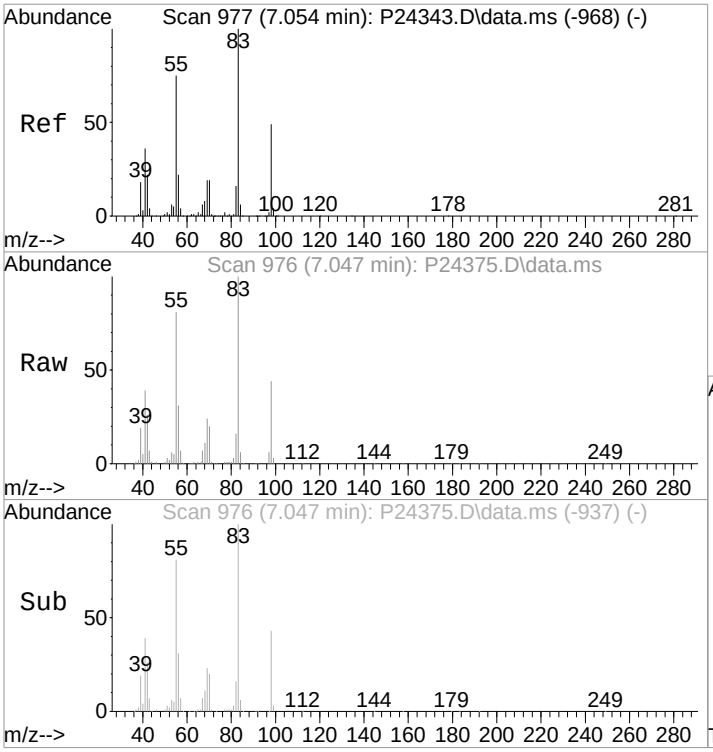


#54
Trichloroethene
Concen: 2.29 ppb
RT: 6.822 min Scan# 939
Delta R.T. 0.012 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:130 Resp: 8174

Ion	Ratio	Lower	Upper
130	100		
132	85.8	72.6	112.6
95	120.8	69.8	109.8#
97	53.6	37.2	77.2

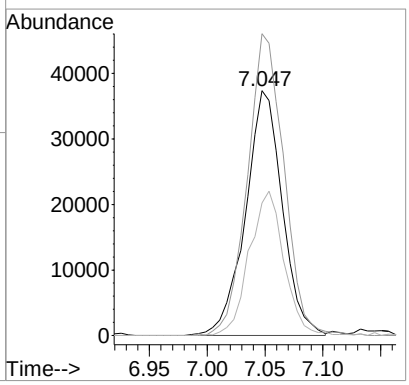


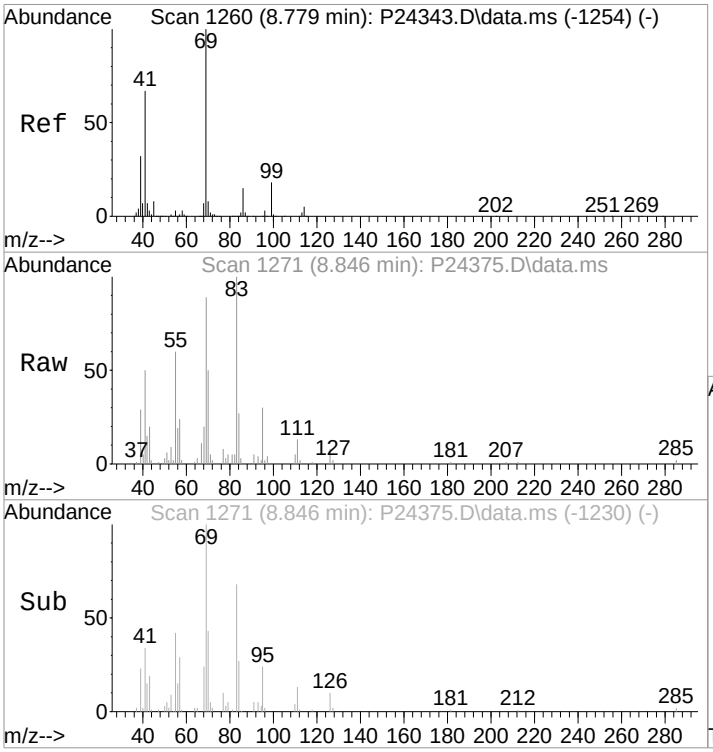


#55
Methylcyclohexane
Concen: 18.38 ppb
RT: 7.047 min Scan# 976
Delta R.T. 0.000 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion: 55 Resp: 82830

Ion	Ratio	Lower	Upper
55	100		
83	123.4	113.1	153.1
98	54.1	45.0	85.0

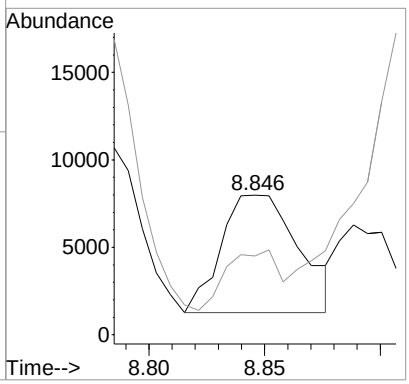


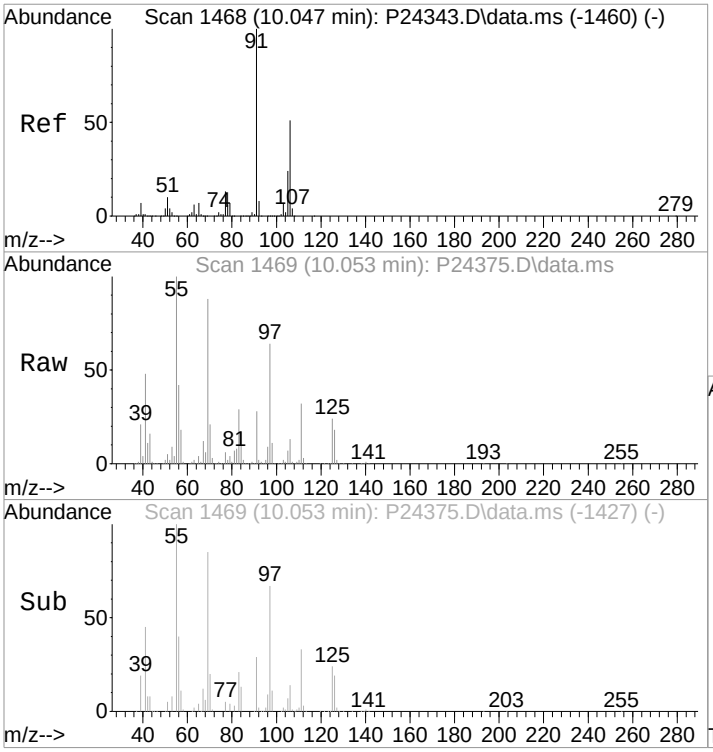


#68
Ethyl Methacrylate
Concen: 2.70 ppb
RT: 8.846 min Scan# 1271
Delta R.T. 0.067 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion: 69 Resp: 15694

Ion	Ratio	Lower	Upper
69	100		
41	56.5	47.6	87.6

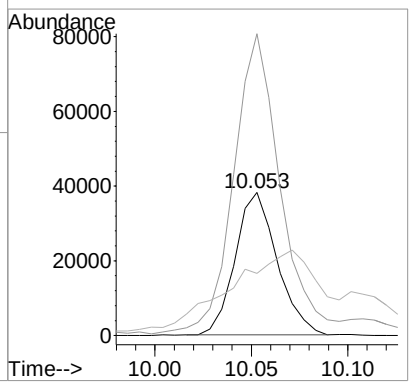


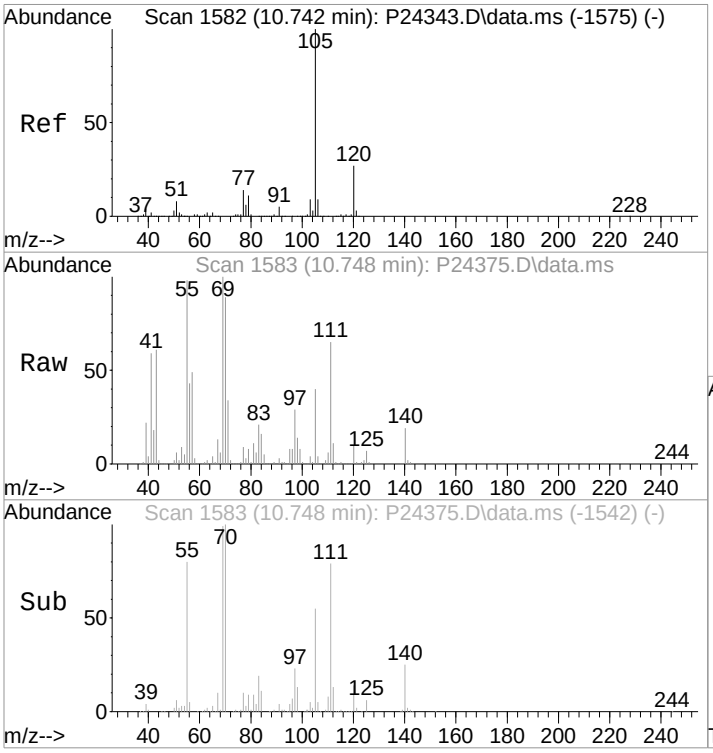


#83
(m+p)Xylene
Concen: 8.76 ppb
RT: 10.053 min Scan# 1469
Delta R.T. 0.006 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:106 Resp: 57753

Ion	Ratio	Lower	Upper
106	100		
91	210.9	175.0	215.0
77	43.4	6.3	46.3

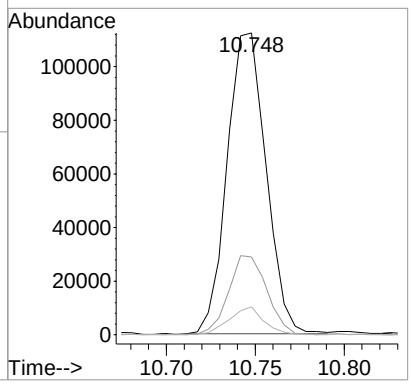


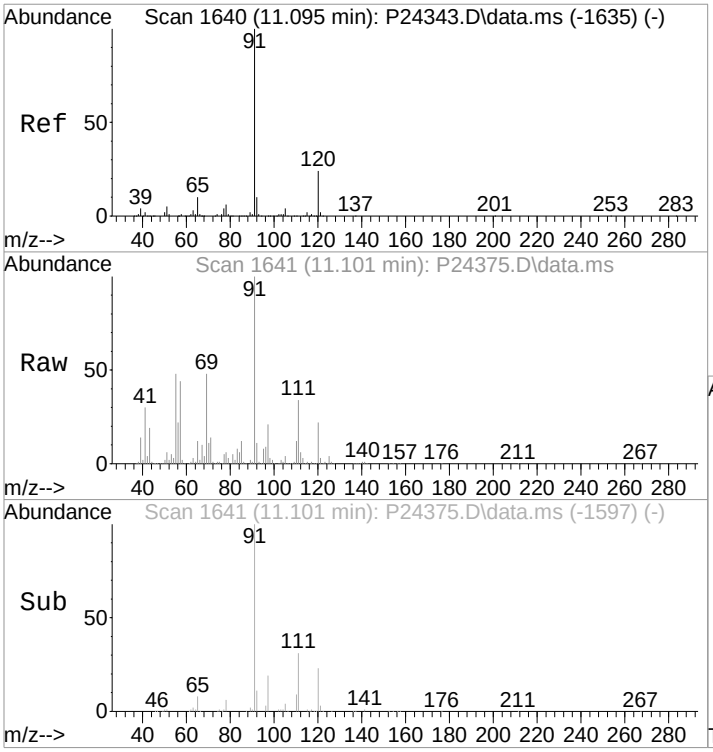


#89
Isopropylbenzene
Concen: 9.49 ppb
RT: 10.748 min Scan# 1583
Delta R.T. 0.006 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:105 Resp: 170190

Ion	Ratio	Lower	Upper
105	100		
120	25.8	7.2	47.2
106	9.2	0.0	28.8

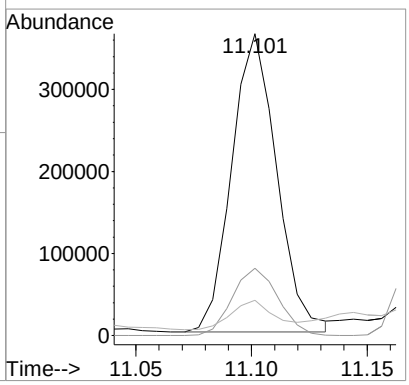


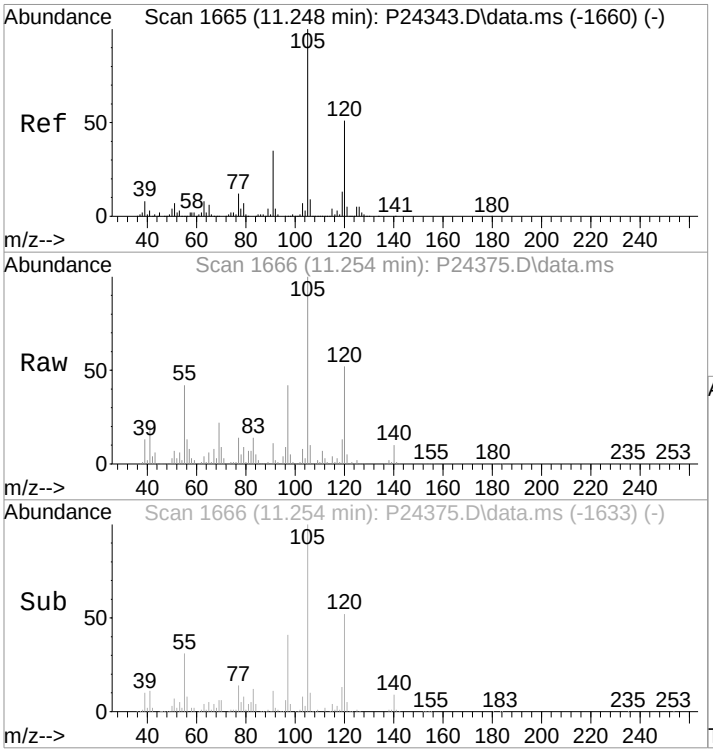


#95
n-Propylbenzene
Concen: 23.99 ppb
RT: 11.101 min Scan# 1641
Delta R.T. 0.006 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion: 91 Resp: 492748

Ion	Ratio	Lower	Upper
91	100		
120	22.2	4.4	44.4
65	11.6	0.0	30.4

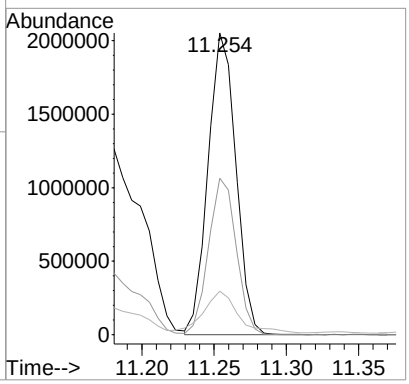


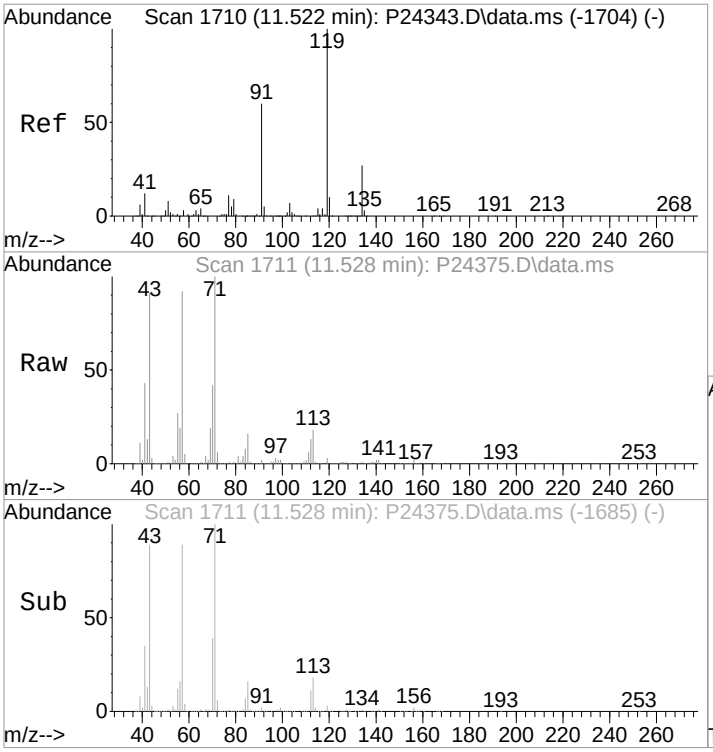


#99
1,3,5-Trimethylbenzene
Concen: 184.67 ppb
RT: 11.254 min Scan# 1666
Delta R.T. 0.006 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:105 Resp: 2747280

Ion	Ratio	Lower	Upper
105	100		
120	51.9	30.8	70.8
77	14.5	0.0	32.5

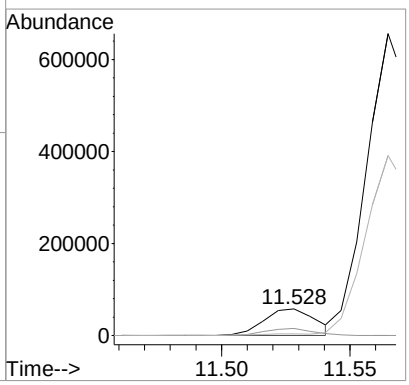


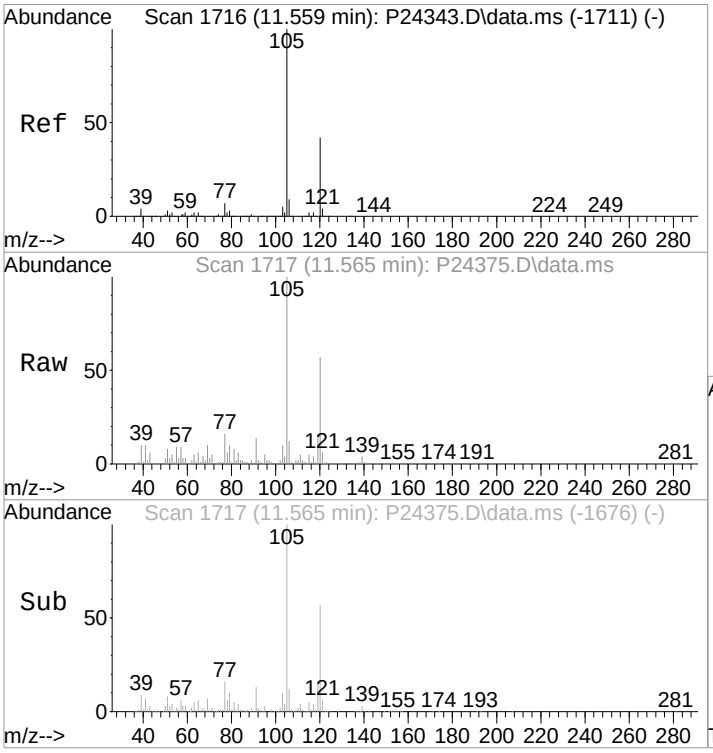


#100
tert-Butylbenzene
Concen: 6.21 ppb
RT: 11.528 min Scan# 1711
Delta R.T. 0.006 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:119 Resp: 80358

Ion	Ratio	Lower	Upper
119	100		
134	26.3	7.0	47.0
103	6.6	0.0	26.6

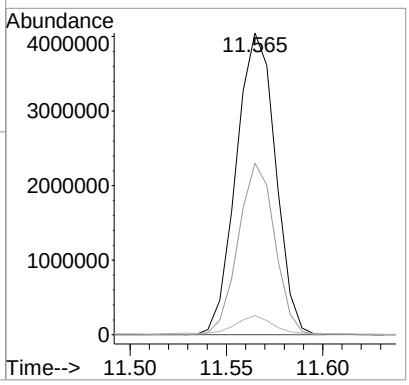


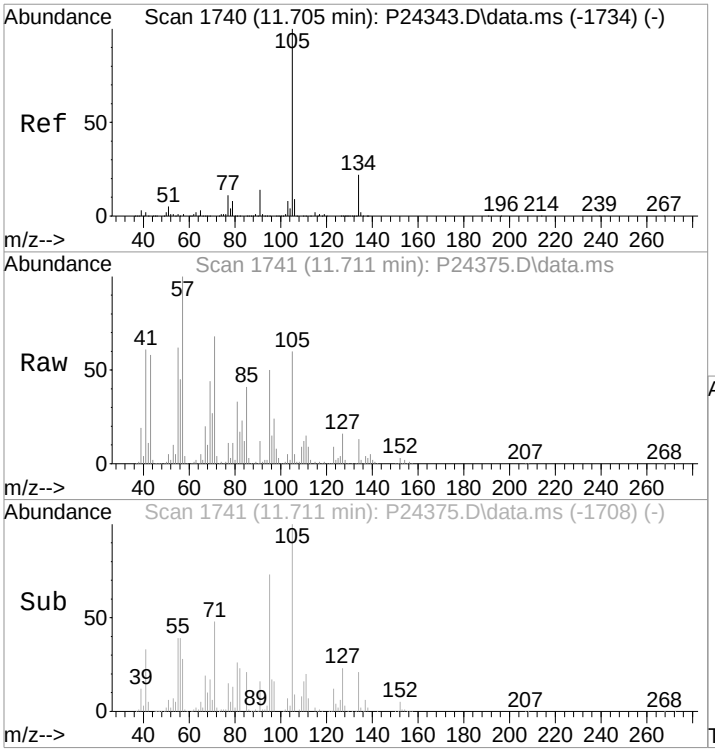


#101
1,2,4-Trimethylbenzene
Concen: 372.72 ppb
RT: 11.565 min Scan# 1717
Delta R.T. 0.006 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:105 Resp: 5735559

Ion	Ratio	Lower	Upper
105	100		
120	56.8	26.4	66.4
65	6.3	0.0	24.1

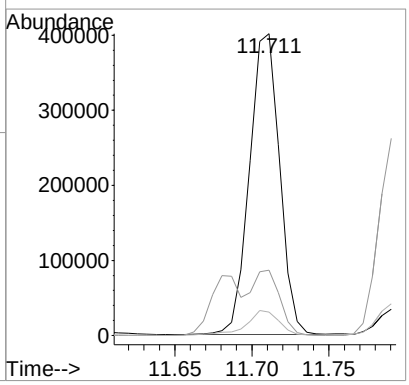


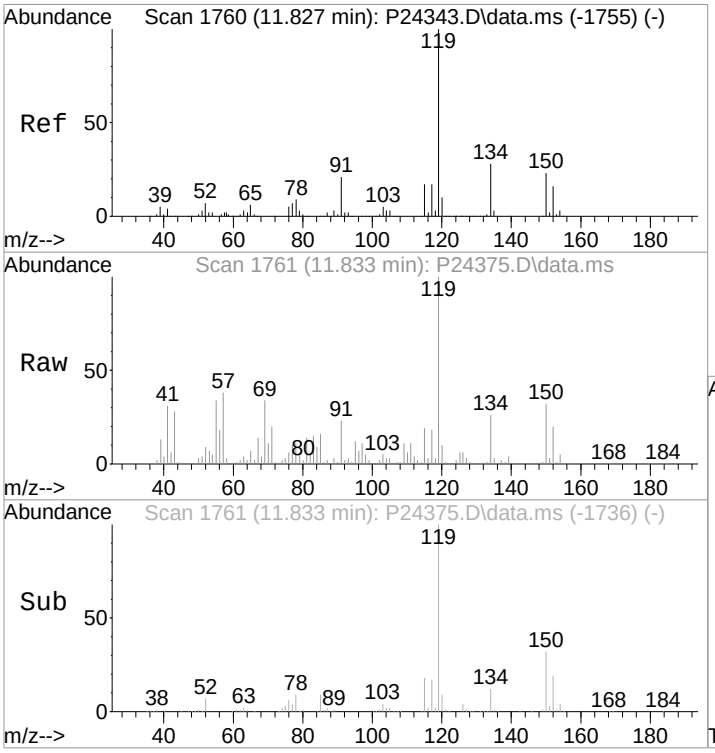


#103
sec-Butylbenzene
Concen: 29.07 ppb
RT: 11.711 min Scan# 1741
Delta R.T. 0.006 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:105 Resp: 545394

Ion	Ratio	Lower	Upper
105	100		
134	21.6	1.8	41.8
103	7.7	0.0	27.9

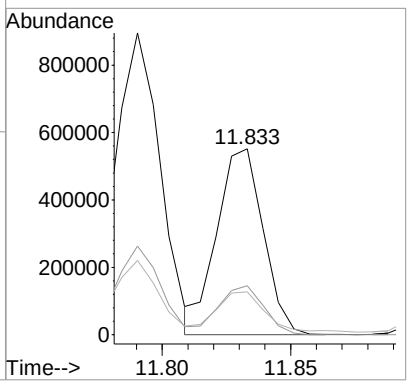


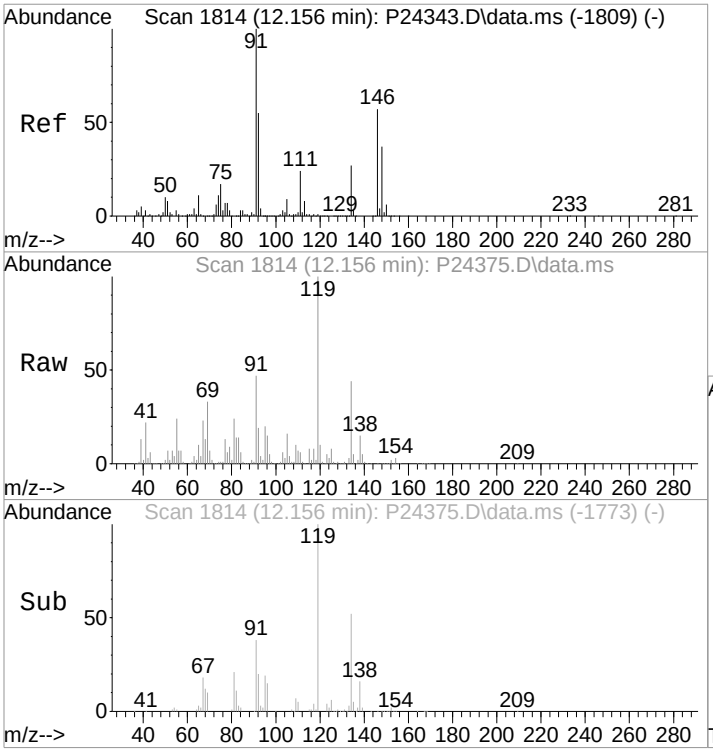


#104
p-Isopropyltoluene
Concen: 44.55 ppb
RT: 11.833 min Scan# 1761
Delta R.T. 0.006 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:119 Resp: 694124

Ion	Ratio	Lower	Upper
119	100		
134	26.4	7.6	47.6
91	23.2	1.3	41.3

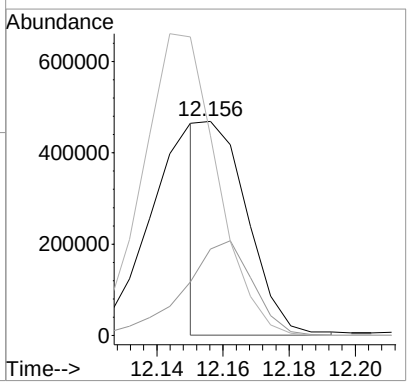


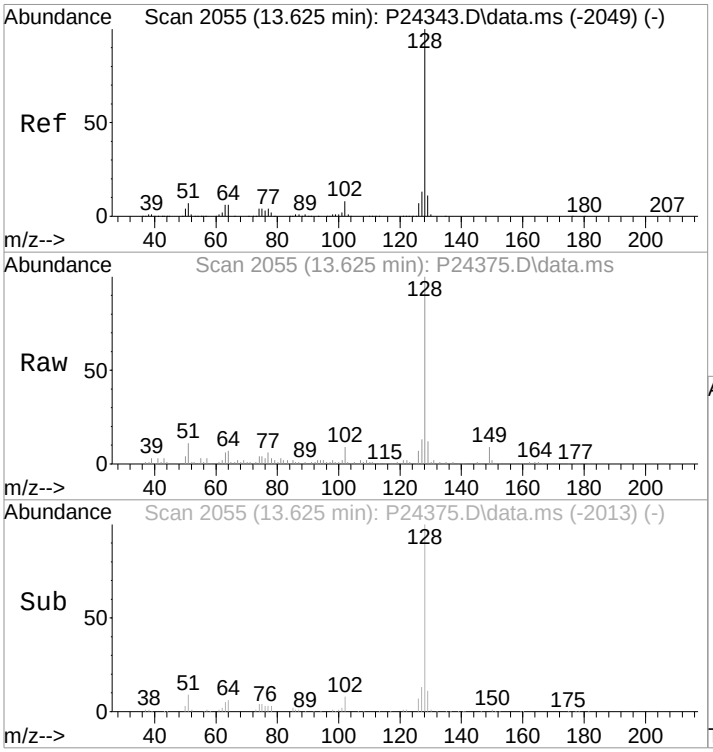


#109
n-Butylbenzene
Concen: 33.32 ppb m
RT: 12.156 min Scan# 1814
Delta R.T. 0.000 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion: 91 Resp: 455067

Ion	Ratio	Lower	Upper
91	100		
92	40.3	34.7	74.7
134	93.3	6.8	46.8#

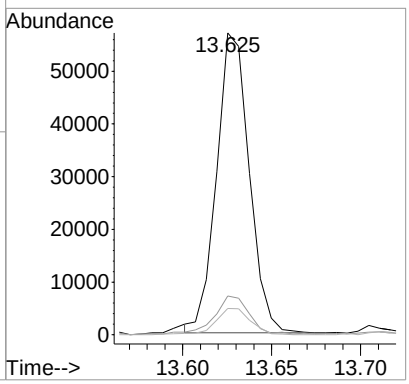




#117
Naphthalen
Concen: 3.88 ppb
RT: 13.625 min Scan# 2055
Delta R.T. 0.000 min
Lab File: P24375.D
Acq: 21 Feb 2019 6:03 pm

Tgt Ion:128 Resp: 72636

Ion	Ratio	Lower	Upper
128	100		
127	12.9	0.0	32.9
102	8.8	0.0	28.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24375.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.261	671	683	692	rBV	161363	430889	1.41%	0.091%
2	5.401	692	706	717	rVV	330632	933397	3.05%	0.197%
3	5.792	761	770	783	rVB	220633	518367	1.70%	0.109%
4	6.487	875	884	897	rBV	576627	1175490	3.84%	0.248%
5	7.047	965	976	985	rBV2	221874	515589	1.69%	0.109%
6	7.901	1111	1116	1120	rBV	314526	542306	1.77%	0.114%
7	8.072	1139	1144	1153	rBV	275579	545881	1.79%	0.115%
8	8.248	1166	1173	1176	rBV	502321	895796	2.93%	0.189%
9	8.297	1176	1181	1192	rVB	1150686	2177966	7.12%	0.460%
10	8.651	1233	1239	1251	rVB	502924	950971	3.11%	0.201%
11	8.785	1251	1261	1267	rBV	231346	441686	1.44%	0.093%
12	8.974	1286	1292	1300	rVB2	325775	636064	2.08%	0.134%
13	9.077	1300	1309	1320	rBV	995168	2021278	6.61%	0.427%
14	9.206	1323	1330	1336	rBV3	1122367	3095981	10.13%	0.654%
15	9.273	1336	1341	1346	rVB	1203168	1933047	6.32%	0.408%
16	9.334	1346	1351	1361	rBV	1572517	3205730	10.49%	0.677%
17	9.480	1369	1375	1380	rBV	315631	552488	1.81%	0.117%
18	9.559	1380	1388	1395	rBV4	2185308	6876995	22.49%	1.452%
19	9.626	1395	1399	1407	rVB	3189786	5818327	19.03%	1.228%
20	9.742	1411	1418	1423	rBV	5377168	9982369	32.65%	2.107%
21	9.791	1423	1426	1431	rVB	1049608	1495373	4.89%	0.316%
22	9.864	1431	1438	1443	rBV5	367989	955371	3.12%	0.202%
23	9.931	1443	1449	1455	rBV3	941730	2046874	6.70%	0.432%
24	10.029	1455	1465	1468	rBV2	1954503	4527061	14.81%	0.956%
25	10.071	1468	1472	1476	rVV	4132054	7204034	23.56%	1.521%
26	10.108	1476	1478	1490	rVB2	3020970	6035944	19.74%	1.274%
27	10.218	1490	1496	1502	rBV	1321283	2452142	8.02%	0.518%
28	10.297	1503	1509	1511	rBV2	1269628	2023296	6.62%	0.427%
29	10.352	1511	1518	1526	rBV4	8367435	16722189	54.70%	3.530%
30	10.443	1526	1533	1537	rBV4	5220646	10283982	33.64%	2.171%
31	10.486	1537	1540	1544	rVB2	2055049	2857860	9.35%	0.603%
32	10.559	1544	1552	1557	rBV2	14280560	25458546	83.27%	5.374%
33	10.638	1557	1565	1569	rBV2	14175418	29139371	95.31%	6.151%
34	10.681	1569	1572	1576	rVB2	6126589	9298023	30.41%	1.963%
35	10.736	1576	1581	1586	rVB3	3256196	5686751	18.60%	1.200%
36	10.821	1586	1595	1599	rBV3	12253137	27521048	90.02%	5.810%
37	10.876	1599	1604	1609	rVB2	15558681	25863198	84.60%	5.460%
38	10.919	1609	1611	1614	rVB2	1466444	1634906	5.35%	0.345%
39	10.961	1614	1618	1619	rBV	2441055	2911689	9.52%	0.615%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

40	10.986	1619	1622	1624	rVV2	3314609	4915099	16.08%	1.038%
41	11.016	1624	1627	1632	rVB3	7734306	11406231	37.31%	2.408%
42	11.101	1637	1641	1643	rBV	1000478	1304140	4.27%	0.275%
43	11.144	1643	1648	1651	rBV3	3964648	7097300	23.21%	1.498%
44	11.193	1651	1656	1659	rBV4	5099716	8882177	29.05%	1.875%
45	11.242	1659	1664	1668	rBV2	12084122	22367744	73.16%	4.722%
46	11.284	1668	1671	1676	rVB3	7712052	12319891	40.30%	2.601%
47	11.333	1676	1679	1684	rBV5	1299286	2018897	6.60%	0.426%
48	11.382	1684	1687	1689	rBV	1763570	1957111	6.40%	0.413%
49	11.418	1689	1693	1694	rBV	2048380	2575826	8.43%	0.544%
50	11.443	1694	1697	1702	rVB5	5724763	7970821	26.07%	1.683%
51	11.498	1702	1706	1708	rBV2	4080205	5199404	17.01%	1.098%
52	11.528	1708	1711	1714	rBV	8889409	10368188	33.91%	2.189%
53	11.565	1714	1717	1728	rVB	16602911	30572645	100.00%	6.454%
54	11.656	1728	1732	1734	rBV2	3610614	5293687	17.32%	1.118%
55	11.681	1734	1736	1738	rBV	1107628	1348677	4.41%	0.285%
56	11.711	1738	1741	1745	rVB3	3847506	5630196	18.42%	1.189%
57	11.766	1745	1750	1753	rBV	12456915	16391401	53.61%	3.460%
58	11.833	1758	1761	1762	rVV2	1899353	2598946	8.50%	0.549%
59	11.864	1763	1766	1769	rVV	3705150	4775909	15.62%	1.008%
60	11.906	1769	1773	1780	rVB2	4930074	8933808	29.22%	1.886%
61	11.973	1780	1784	1785	rBV3	698624	954034	3.12%	0.201%
62	12.095	1796	1804	1807	rBV2	4943676	8238005	26.95%	1.739%
63	12.144	1807	1812	1819	rVV3	11113331	18792320	61.47%	3.967%
64	12.254	1820	1830	1834	rVV	2588880	6698771	21.91%	1.414%
65	12.296	1834	1837	1843	rVV4	3412389	5897567	19.29%	1.245%
66	12.370	1844	1849	1850	rVV	2052551	2872926	9.40%	0.606%
67	12.388	1850	1852	1858	rVV2	3775827	6256089	20.46%	1.321%
68	12.449	1858	1862	1869	rVV	2690580	4337645	14.19%	0.916%
69	12.552	1871	1879	1885	rVV5	1705357	3983532	13.03%	0.841%
70	12.601	1885	1887	1888	rVV2	380634	372843	1.22%	0.079%
71	12.632	1889	1892	1894	rVV3	861507	1360243	4.45%	0.287%
72	12.656	1894	1896	1900	rVV2	1493574	2203146	7.21%	0.465%
73	12.729	1904	1908	1911	rBV3	1555082	2241083	7.33%	0.473%
74	12.760	1911	1913	1917	rVV	1187156	1272127	4.16%	0.269%
75	12.802	1917	1920	1923	rVV	1424932	1957539	6.40%	0.413%
76	12.827	1923	1924	1928	rVB	939893	698424	2.28%	0.147%
77	12.869	1928	1931	1936	rBV4	404173	813350	2.66%	0.172%
78	12.912	1936	1938	1940	rVV	330985	321205	1.05%	0.068%
79	12.936	1940	1942	1947	rVB	258007	343471	1.12%	0.073%
80	13.004	1947	1953	1959	rVB4	349627	586672	1.92%	0.124%
81	13.138	1971	1975	1980	rVB2	804625	1178673	3.86%	0.249%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

82	13.272	1991	1997	2007	rVB5	473671	1024464	3.35%	0.216%

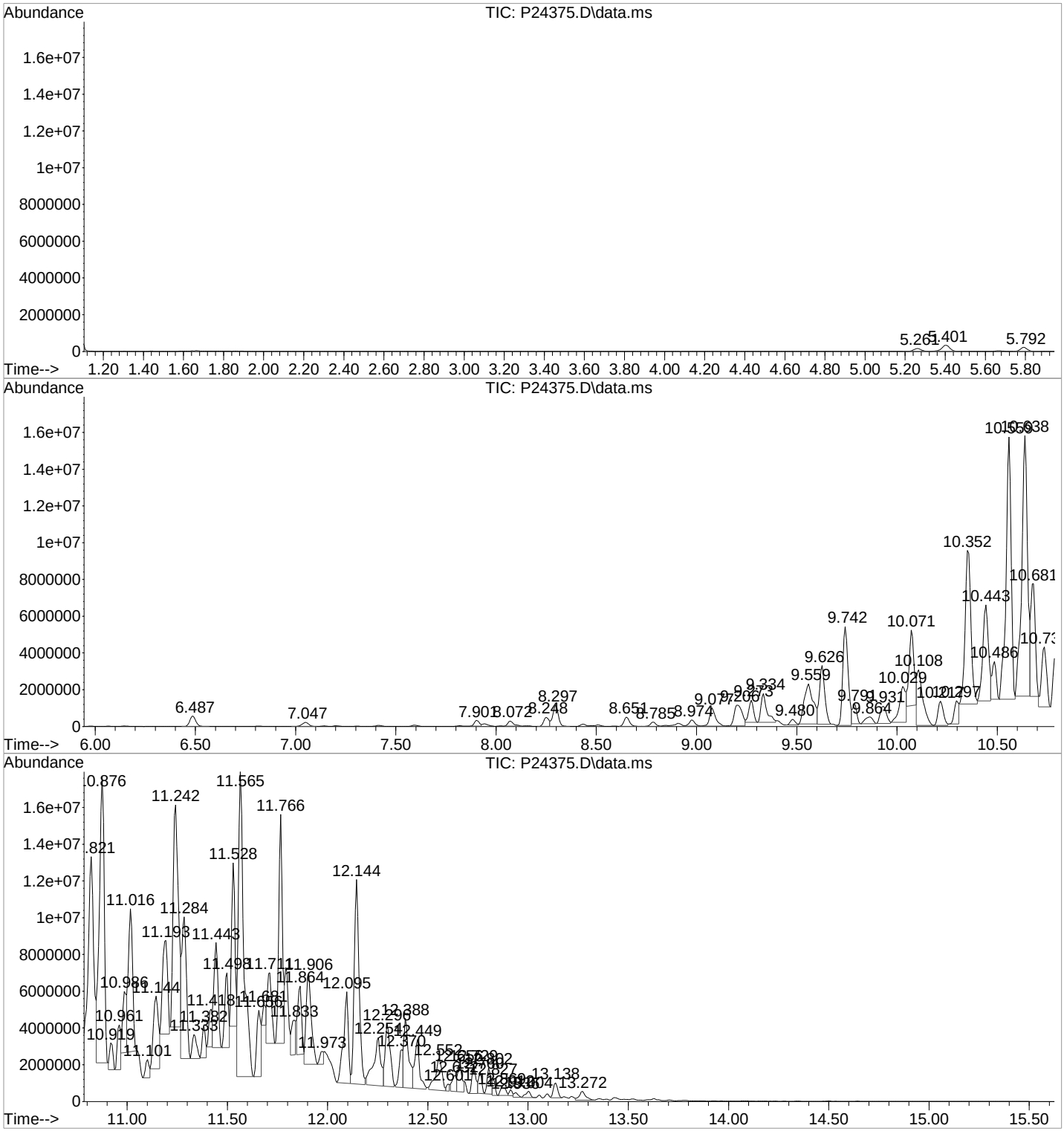
Sum of corrected areas: 473700502

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

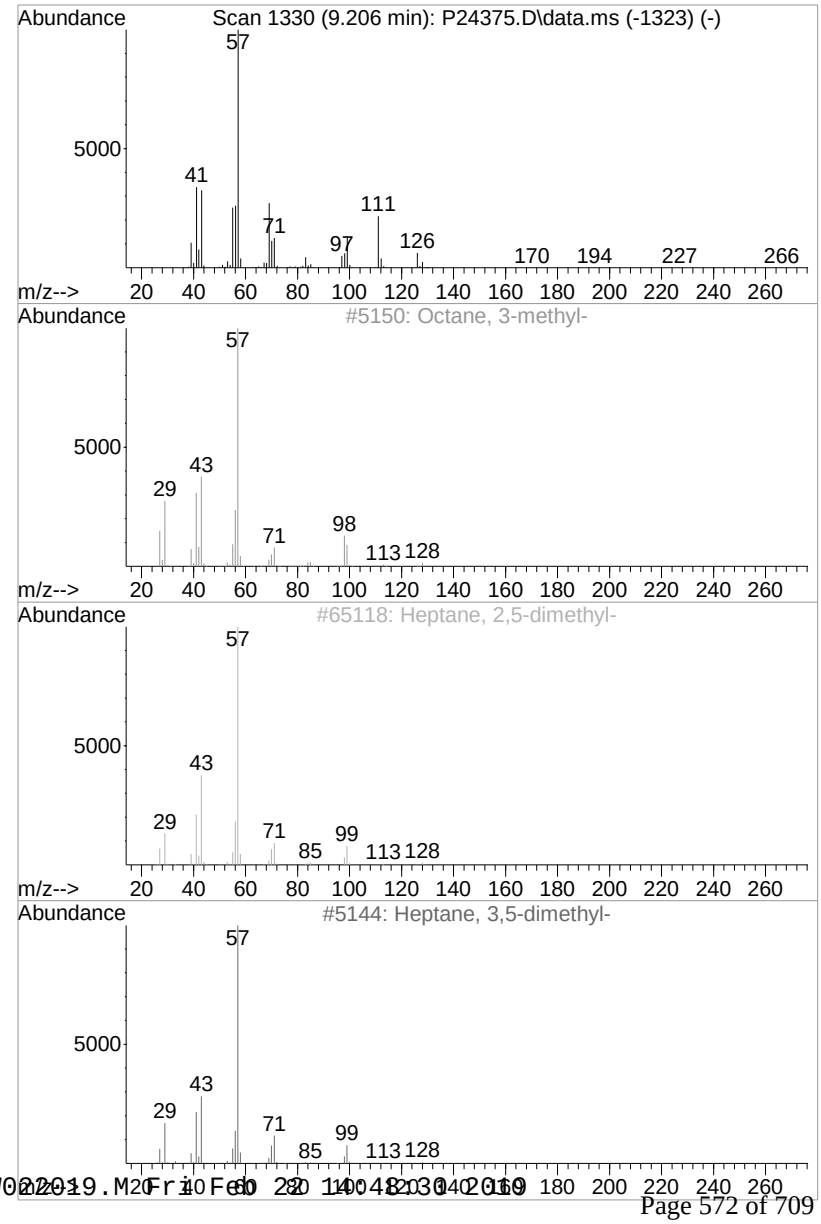
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

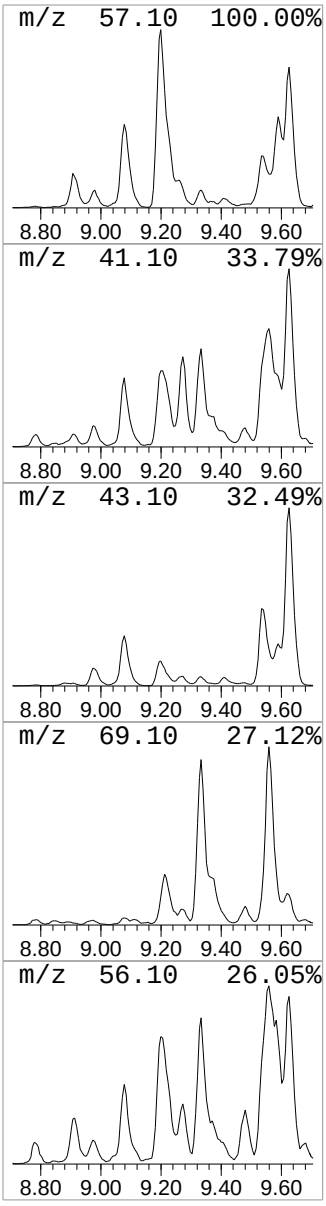
****

Peak Number 1 unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.206	103.52 ppb	3095980	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	49
2	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	47
3	Heptane, 3,5-dimethyl-	128	C9H20	000926-82-9	47
4	Heptane, 3,5-dimethyl-	128	C9H20	000926-82-9	47
5	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	43





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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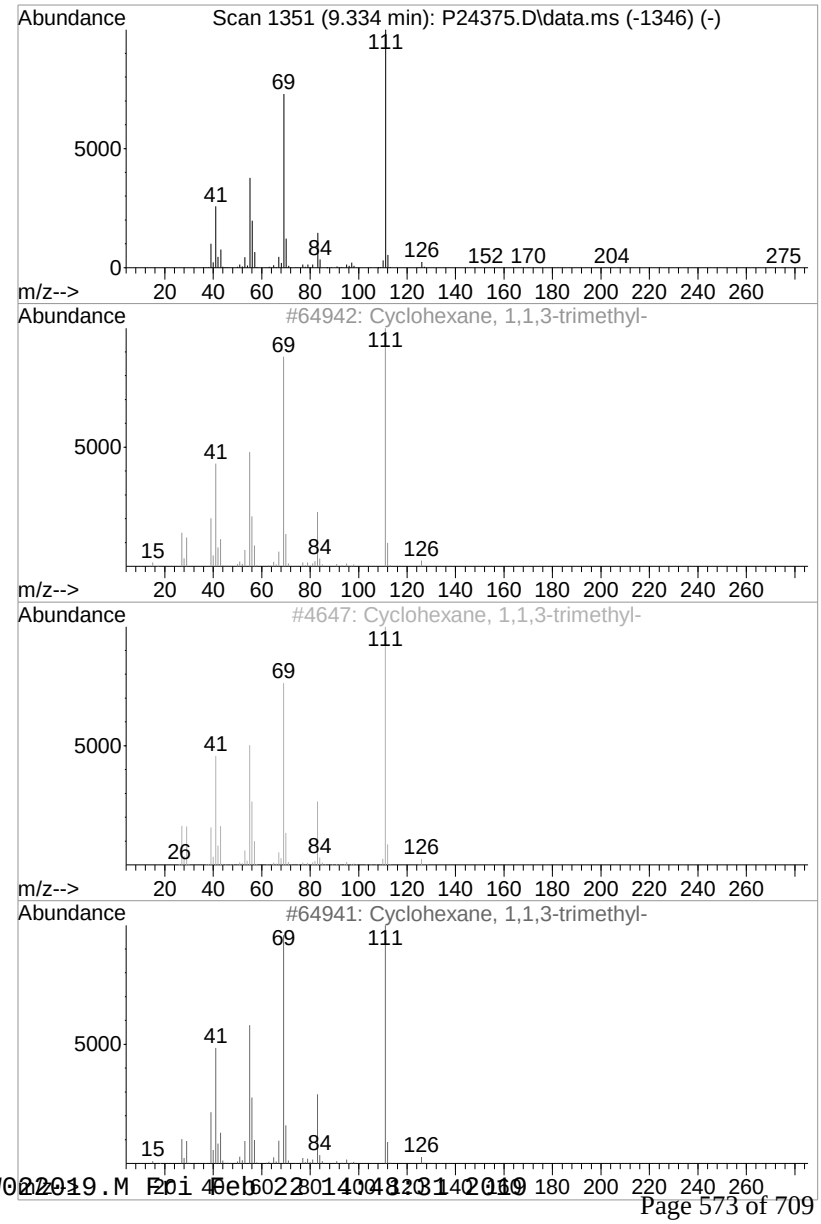
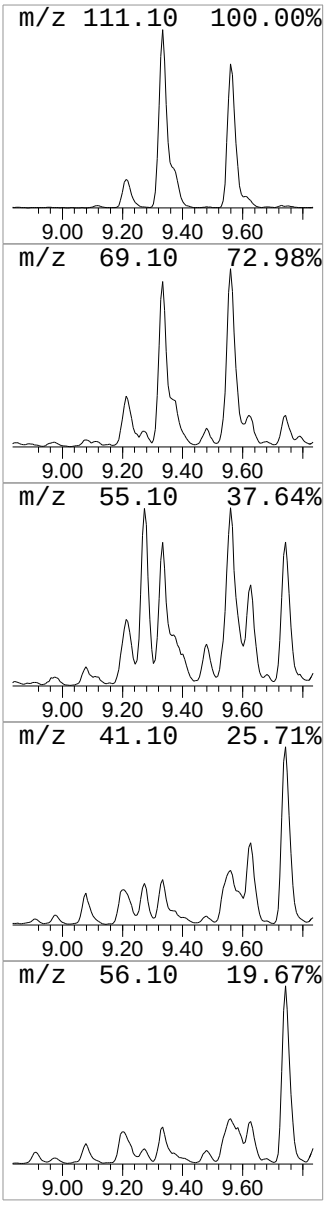
Peak Number 2 unknown Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.334	107.19 ppb	3205730	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,1,3-trimethyl-	126	C9H18	003073-66-3	83
2	Cyclohexane, 1,1,3-trimethyl-	126	C9H18	003073-66-3	70
3	Cyclohexane, 1,1,3-trimethyl-	126	C9H18	003073-66-3	49
4	Cyclohexane, 1,3,5-trimethyl-	126	C9H18	001839-63-0	42
5	Cyclohexane, 1-ethyl-1,4-dimethy...	140	C10H20	062238-30-6	39





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

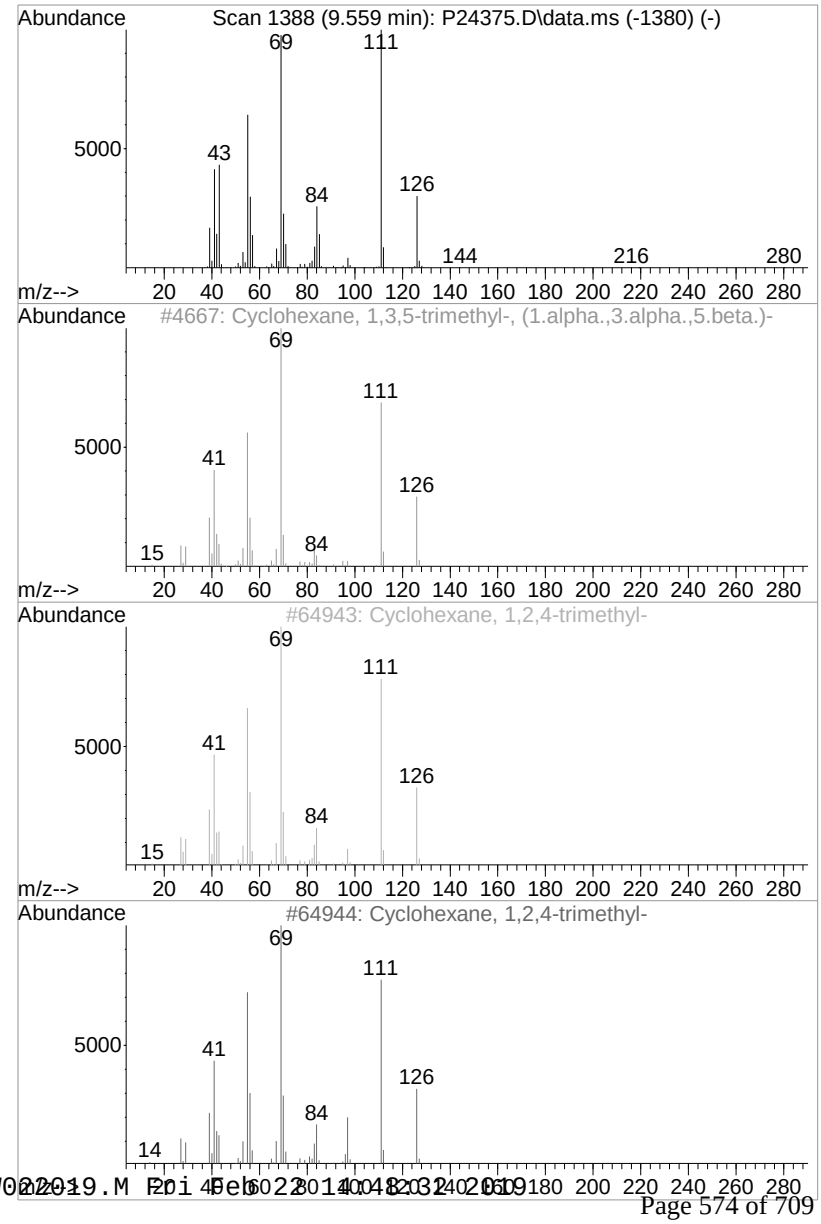
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

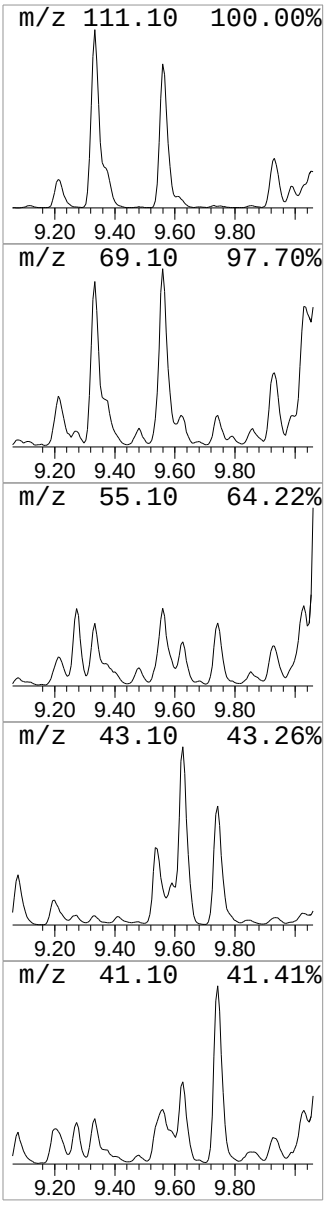
****

Peak Number 3 Cyclohexane, 1,3,5-trimethy... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.559	229.94 ppb	6877000	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,3,5-trimethyl-, (...	126	C9H18	001795-26-2	93
2	Cyclohexane, 1,2,4-trimethyl-	126	C9H18	002234-75-5	87
3	Cyclohexane, 1,2,4-trimethyl-	126	C9H18	002234-75-5	87
4	Cyclohexane, 1,2,4-trimethyl-, (...	126	C9H18	007667-60-9	80
5	Cyclohexane, 1,2,4-trimethyl-, (...	126	C9H18	007667-60-9	80





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

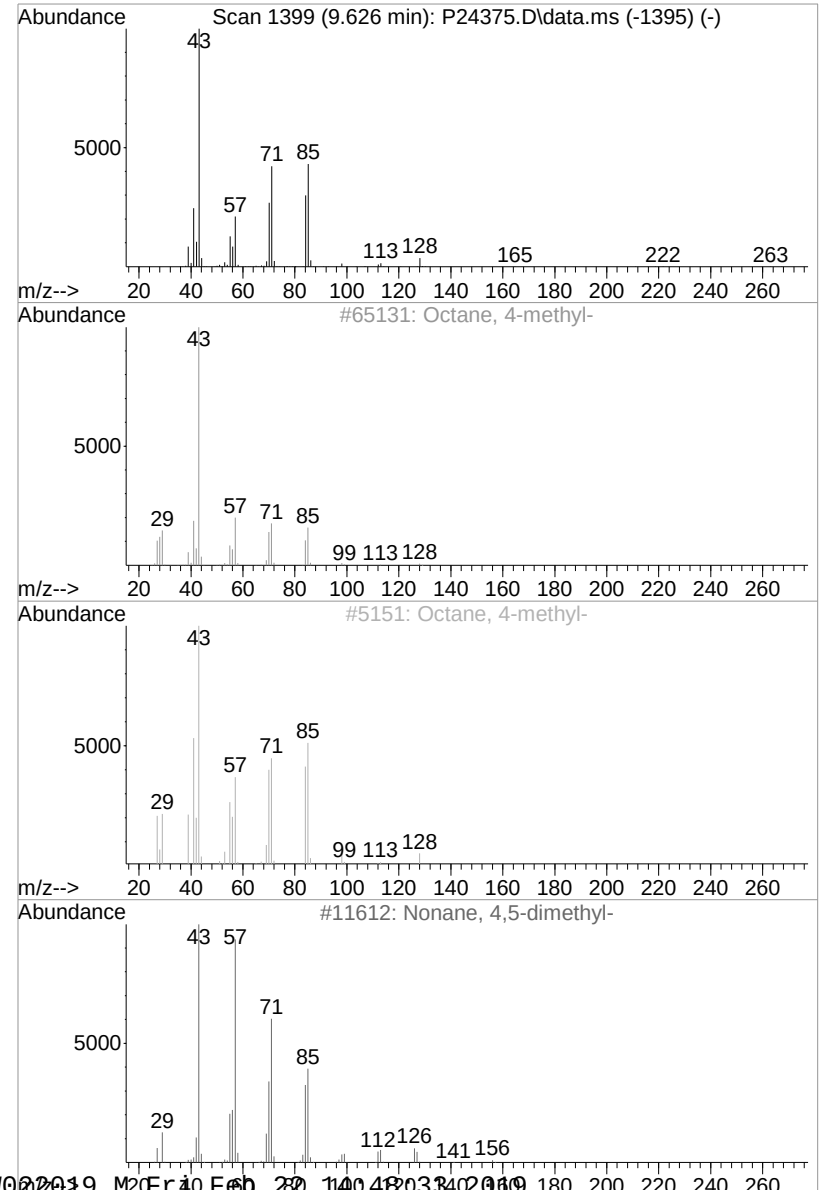
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

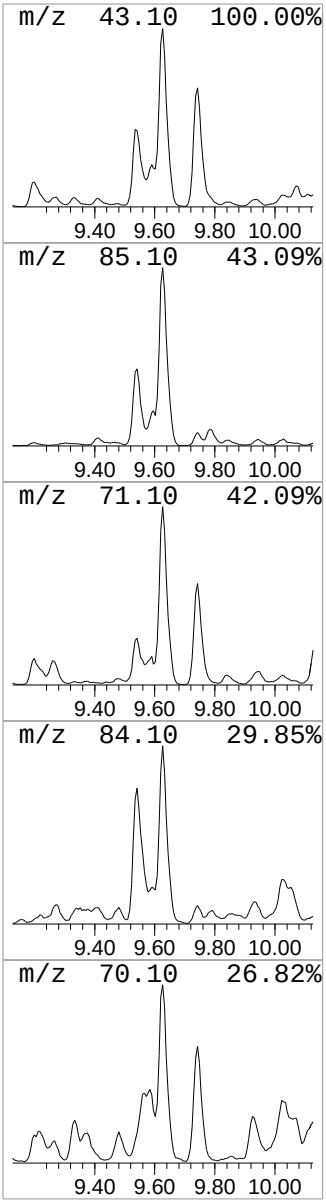
****

Peak Number 4 Octane, 4-methyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.626	194.54 ppb	5818330	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 4-methyl-	128	C9H20	002216-34-4	91
2	Octane, 4-methyl-	128	C9H20	002216-34-4	90
3	Nonane, 4,5-dimethyl-	156	C11H24	017302-23-7	78
4	Hexane, 2,3,4-trimethyl-	128	C9H20	000921-47-1	64
5	Ether, hexyl pentyl	172	C11H24O	032357-83-8	59





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

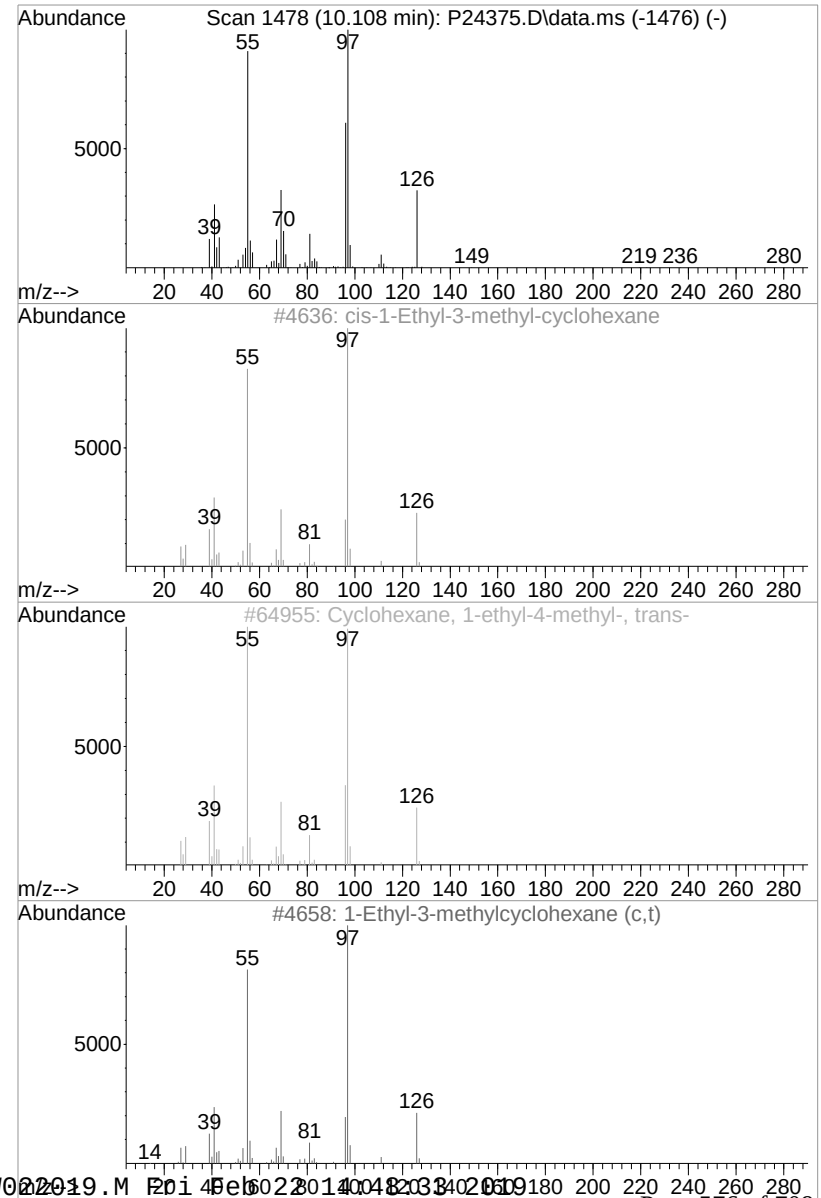
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

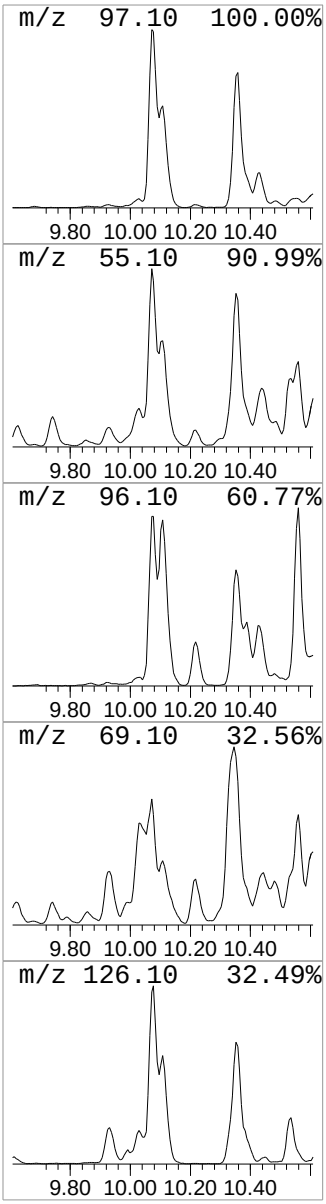
****

Peak Number 5 cis-1-Ethyl-3-methyl-cycloh... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.108	201.82 ppb	6035940	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	cis-1-Ethyl-3-methyl-cyclohexane	126	C9H18	019489-10-2	87
2	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	80
3	1-Ethyl-3-methylcyclohexane (c,t)	126	C9H18	003728-55-0	80
4	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	004926-78-7	64
5	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	006069-98-3	64





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

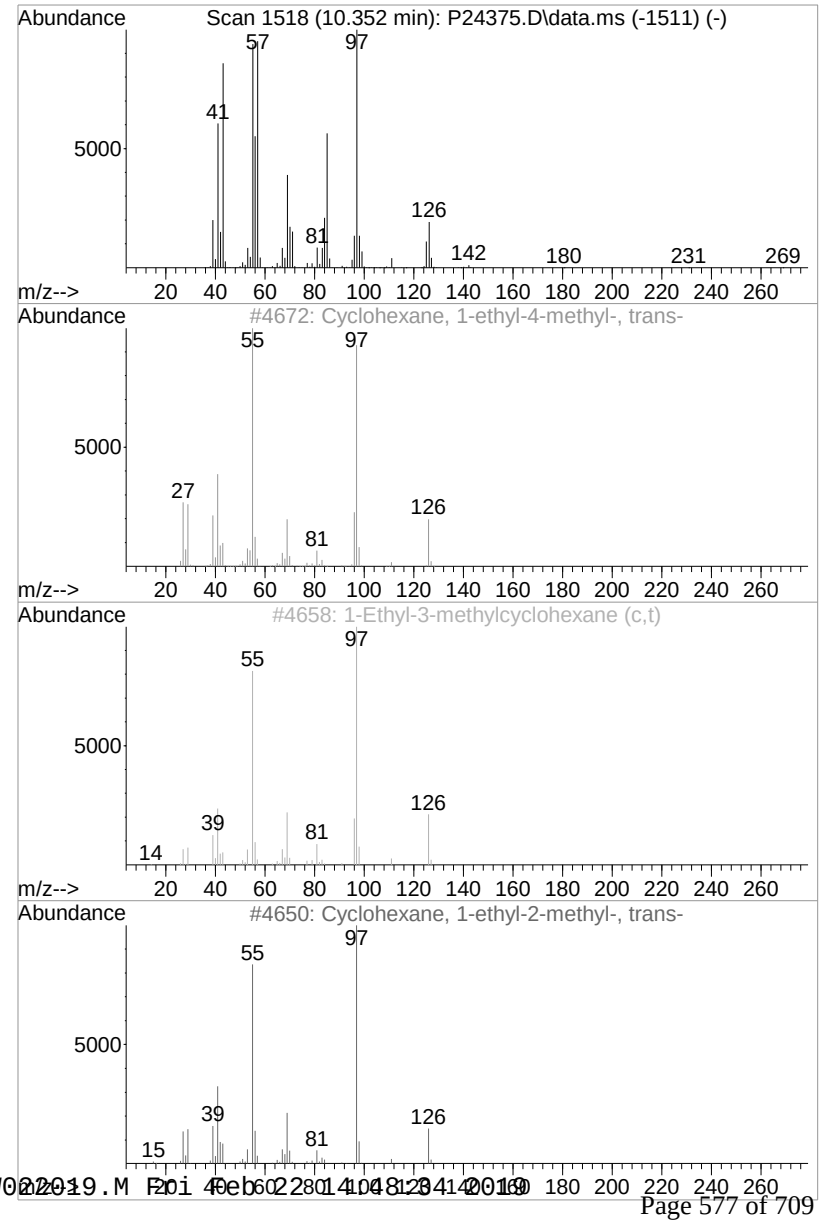
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

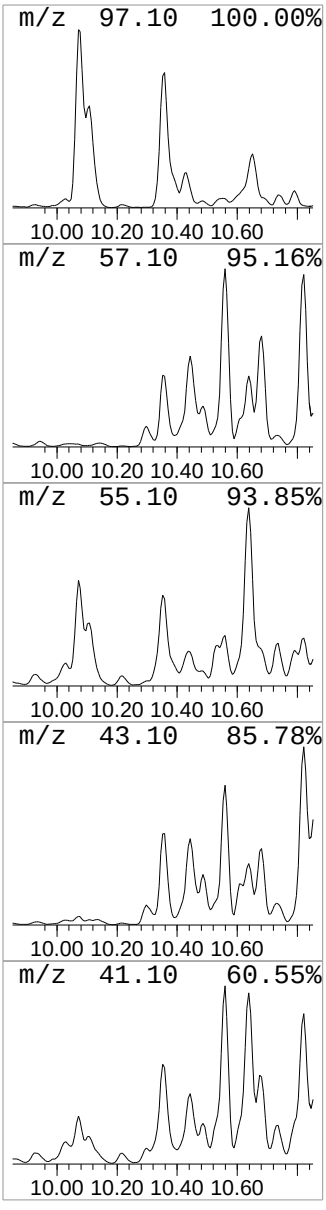
****

Peak Number 6 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.352	559.13 ppb	16722200	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	43
2	1-Ethyl-3-methylcyclohexane (c,t)	126	C9H18	003728-55-0	43
3	Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-78-8	43
4	3-Heptene, 3-ethyl-	126	C9H18	074764-46-8	43
5	cis-1-Ethyl-3-methyl-cyclohexane	126	C9H18	019489-10-2	43





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

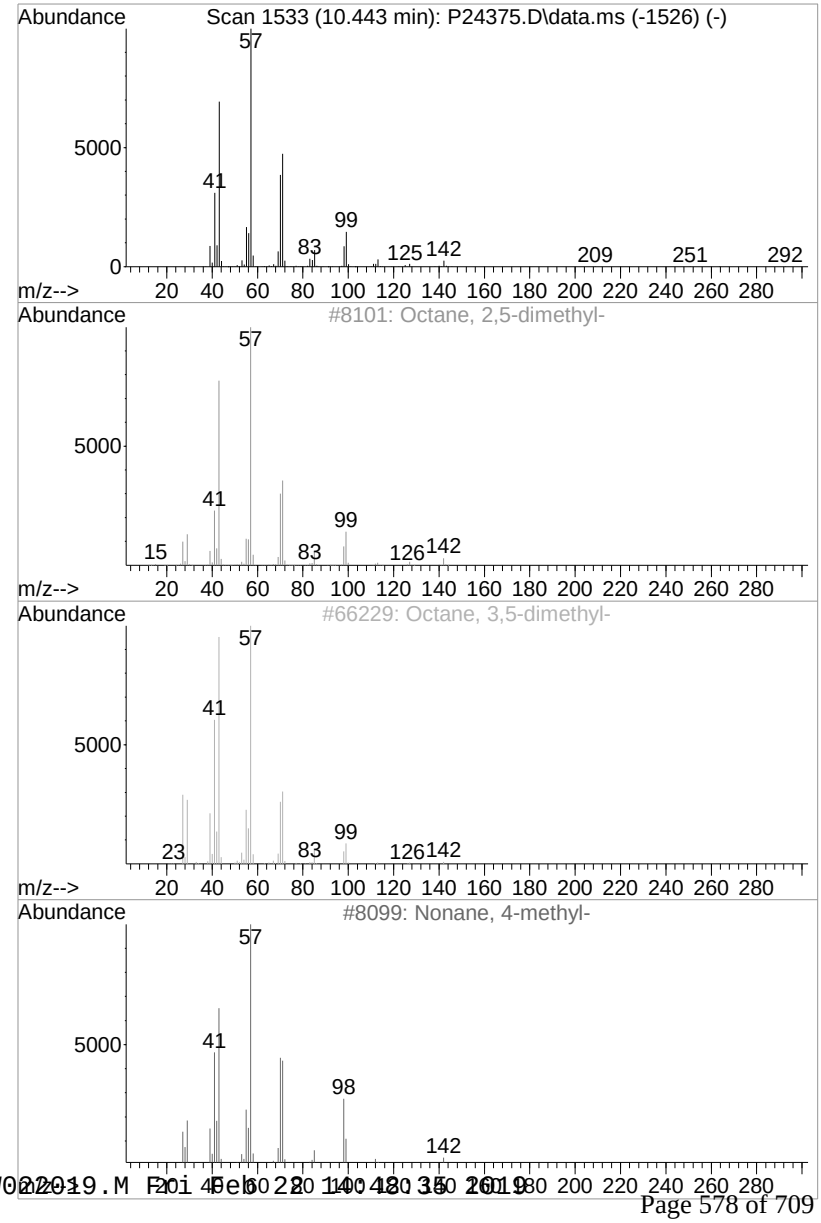
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

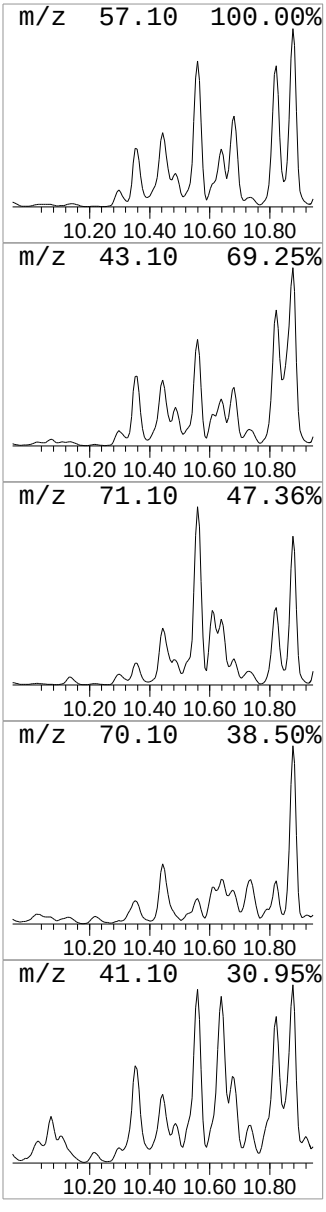
****

Peak Number 7 Octane, 2,5-dimethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.443	343.86 ppb	10284000	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,5-dimethyl-	142	C10H22	015869-89-3	91
2	Octane, 3,5-dimethyl-	142	C10H22	015869-93-9	90
3	Nonane, 4-methyl-	142	C10H22	017301-94-9	90
4	Octane, 2,5-dimethyl-	142	C10H22	015869-89-3	80
5	Pentane, 2,2,3,3-tetramethyl-	128	C9H20	007154-79-2	78





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

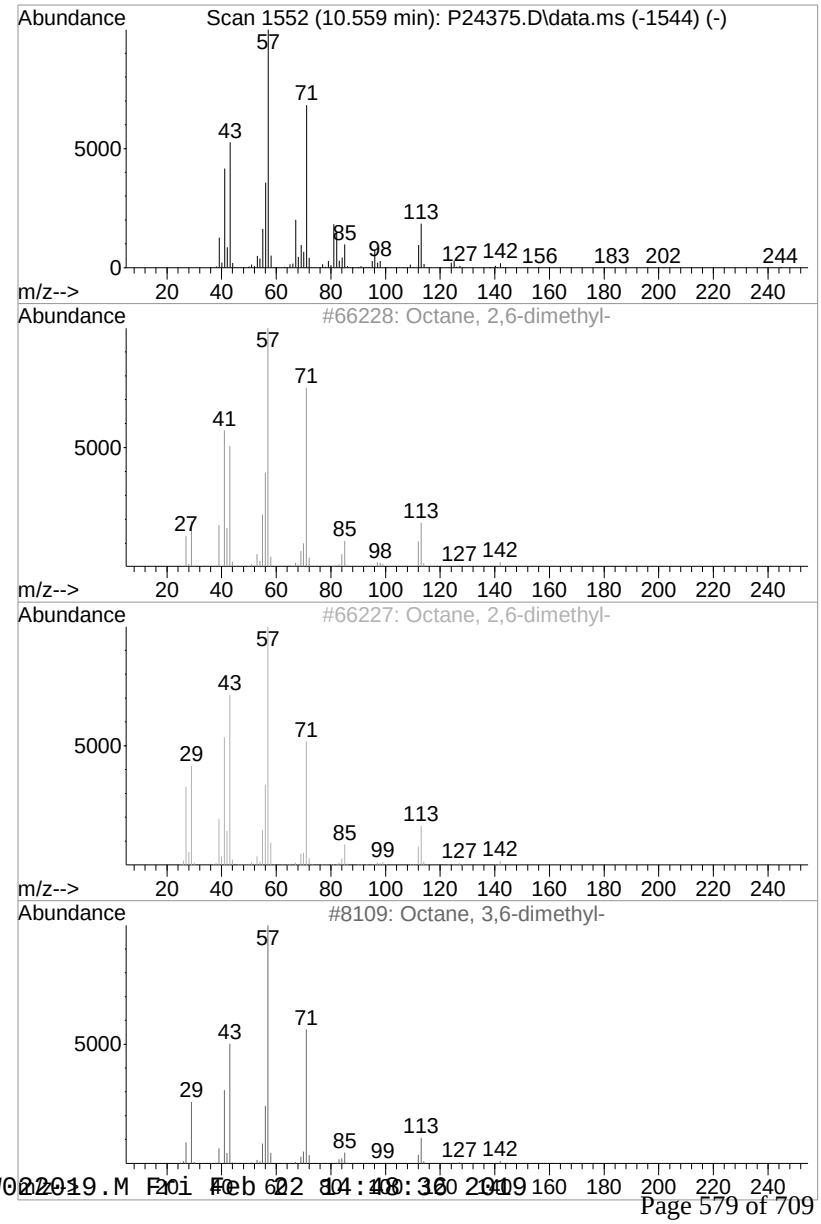
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

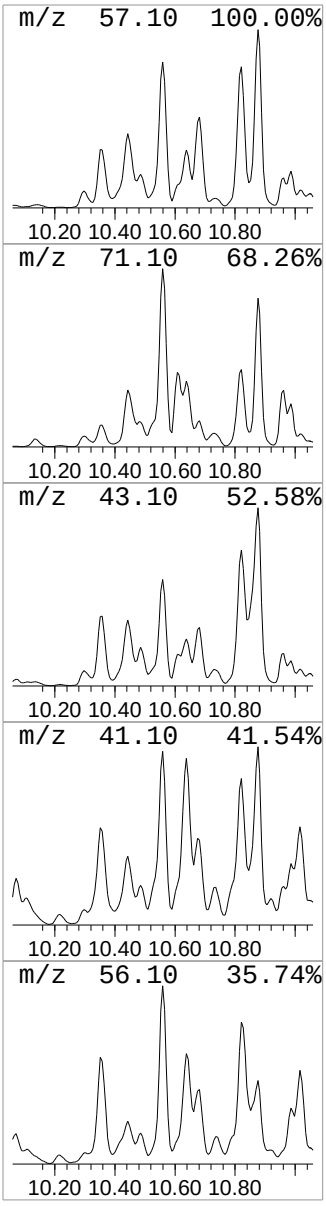
****

Peak Number 8 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.559	851.24 ppb	25458500	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	81
2	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	81
3	Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	76
4	Nonane, 3-methyl-	142	C10H22	005911-04-6	70
5	Nonane, 3-methyl-	142	C10H22	005911-04-6	64





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

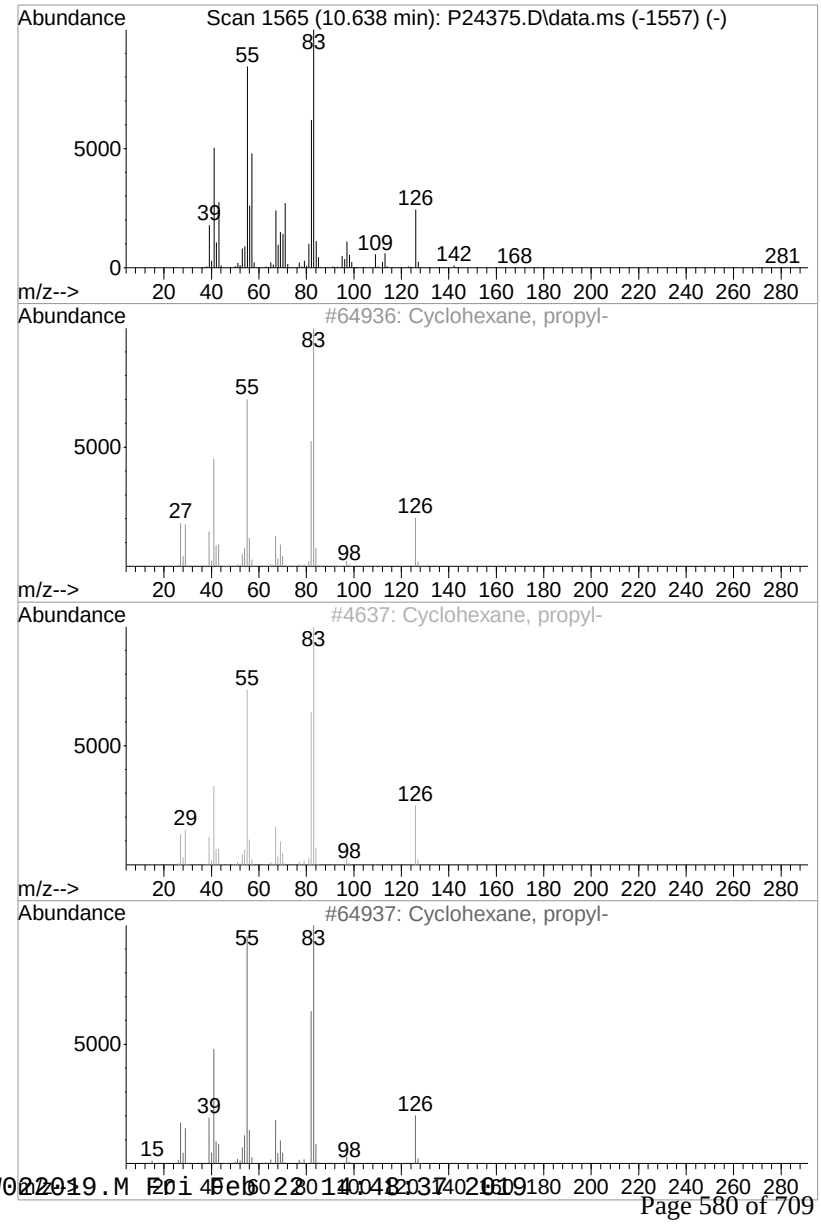
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

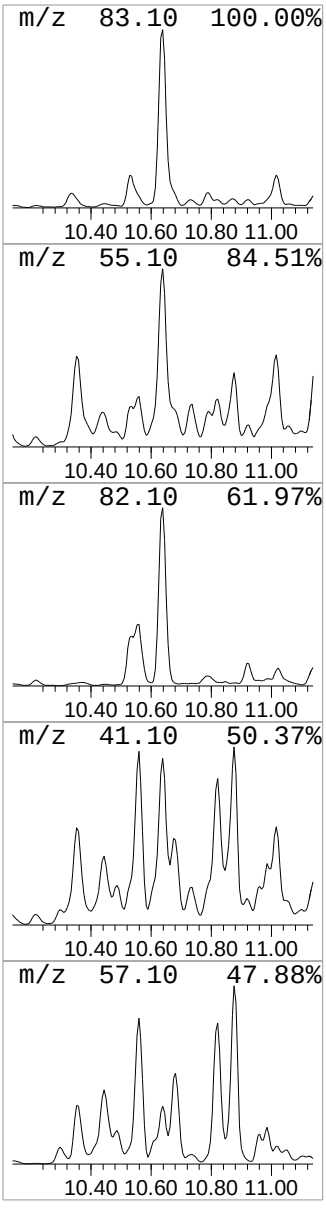
****

Peak Number 9 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.638	974.32 ppb	29139400	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, propyl-	126	C9H18	001678-92-8	68
2	Cyclohexane, propyl-	126	C9H18	001678-92-8	64
3	Cyclohexane, propyl-	126	C9H18	001678-92-8	64
4	Cyclohexane, butyl-	140	C10H20	001678-93-9	59
5	Cyclohexane, hexyl-	168	C12H24	004292-75-5	59





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

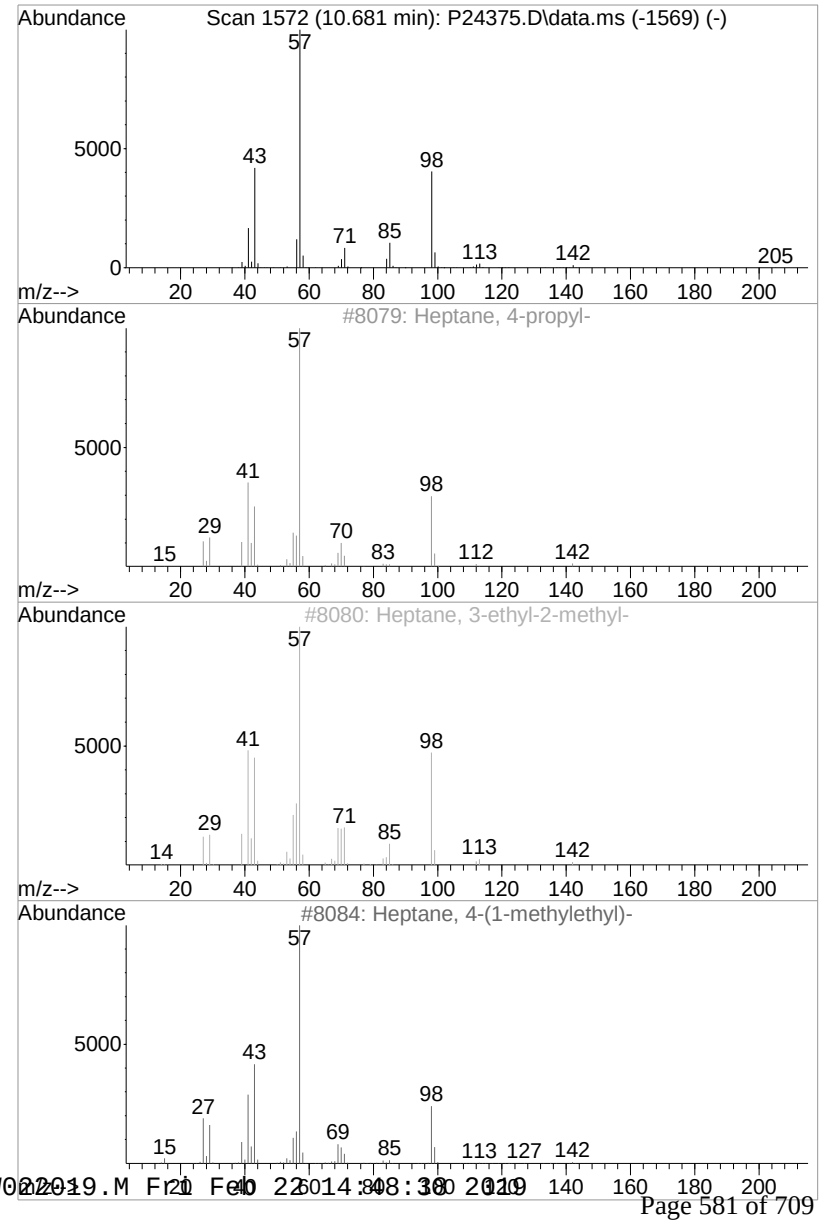
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

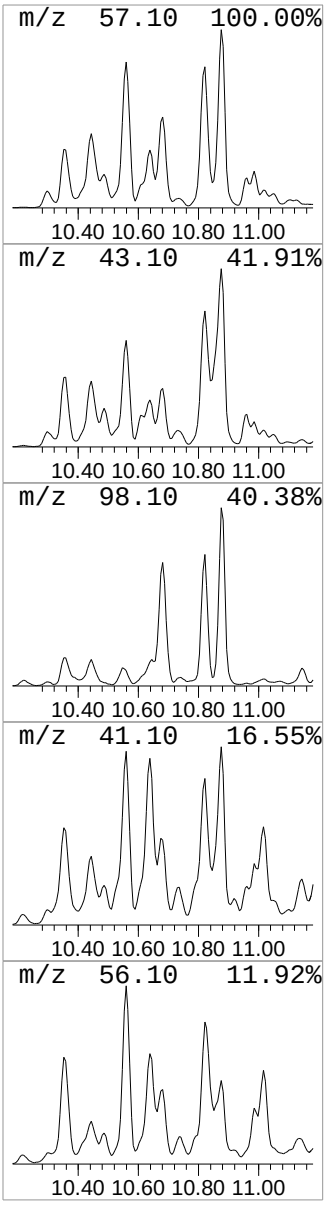
****

Peak Number 10 unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.681	310.89 ppb	9298020	d5-Chlorobenzene	9.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 4-propyl-	142	C10H22	003178-29-8	64
2	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	59
3	Heptane, 4-(1-methylethyl)-	142	C10H22	052896-87-4	47
4	Octane, 2,4,6-trimethyl-	156	C11H24	062016-37-9	43
5	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	42





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

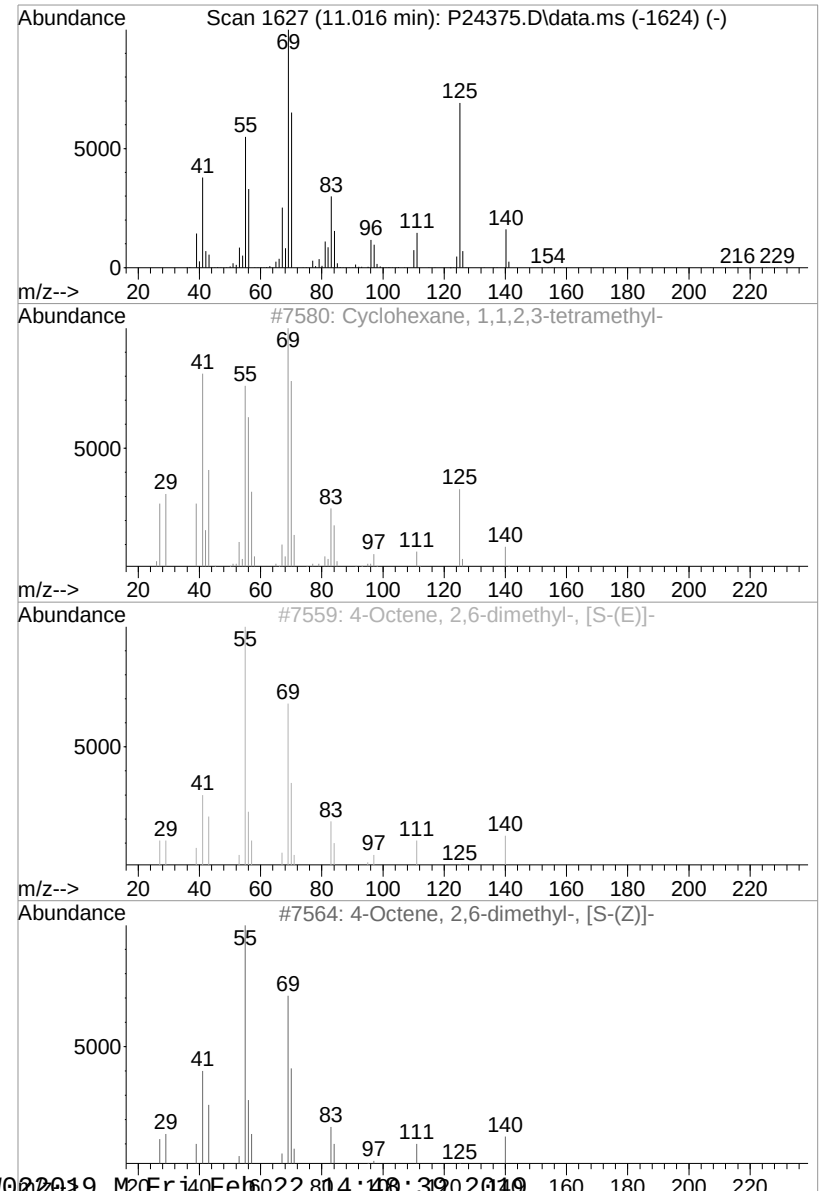
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

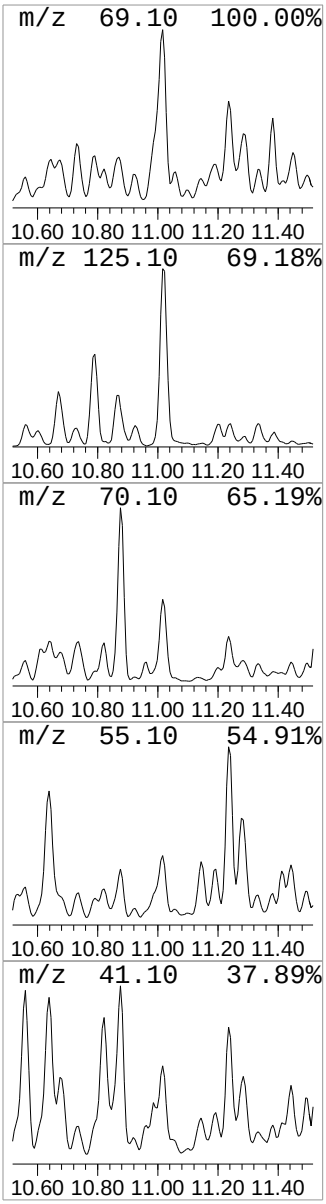
****

Peak Number 11 Cyclohexane, 1,1,2,3-tetram... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.016	219.44 ppb	11406200	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,1,2,3-tetramethyl-	140	C10H20	006783-92-2	90
2	4-Octene, 2,6-dimethyl-, [S-(E)]-	140	C10H20	062960-76-3	58
3	4-Octene, 2,6-dimethyl-, [S-(Z)]-	140	C10H20	062960-77-4	58
4	2-Octene, 2,6-dimethyl-	140	C10H20	004057-42-5	52
5	2-Octene, 2,6-dimethyl-	140	C10H20	004057-42-5	49





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

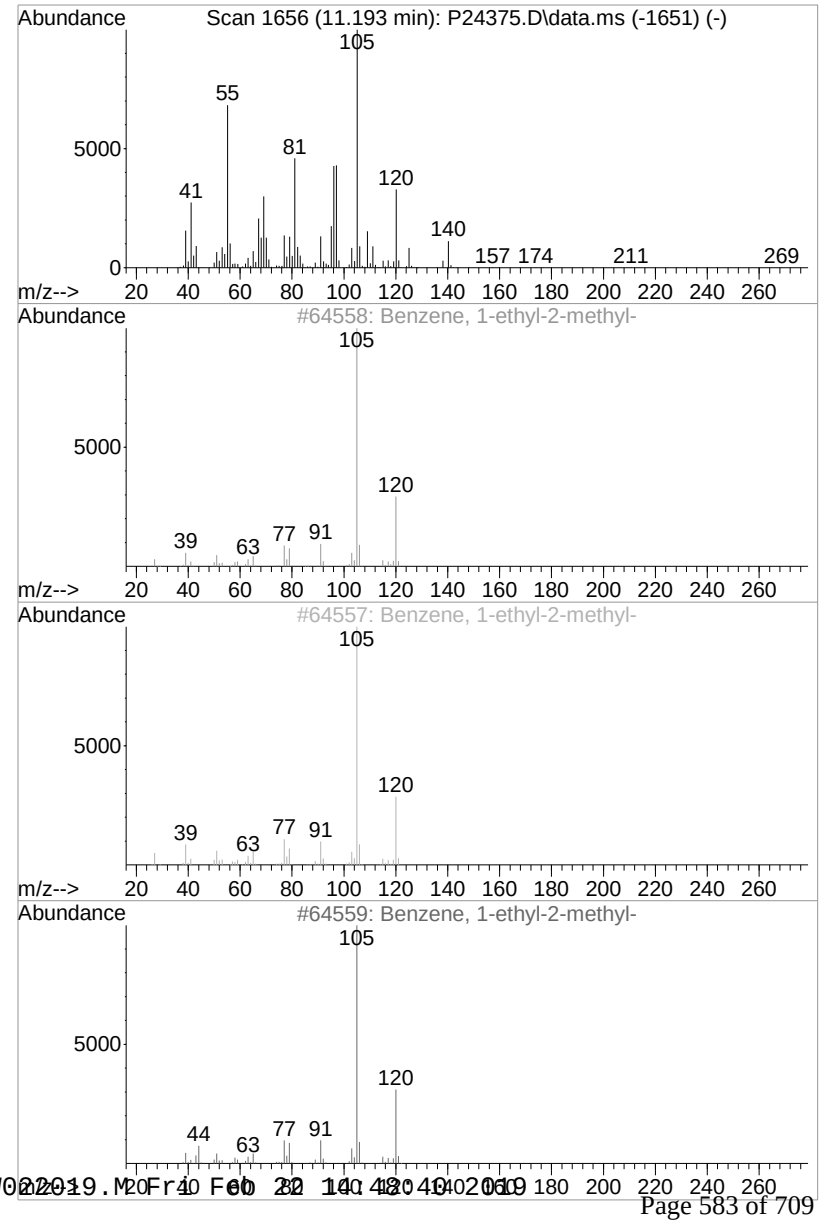
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

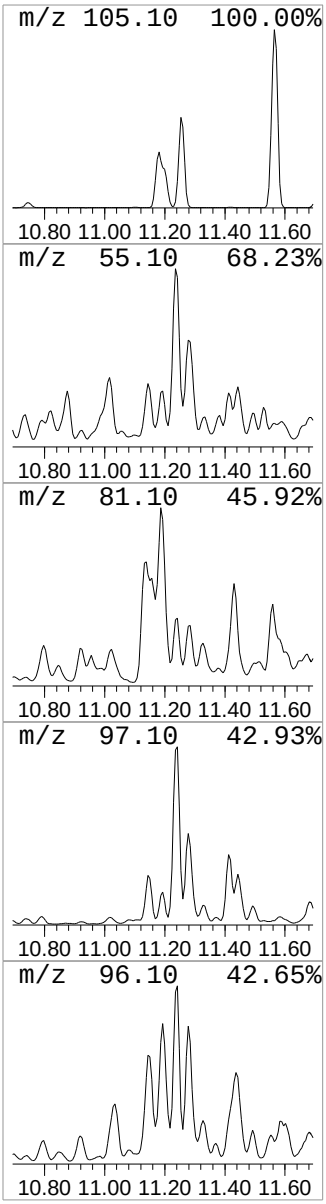
****

Peak Number 12 unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.193	170.88 ppb	8882180	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	56
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	56
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	56
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	56
5	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	53





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

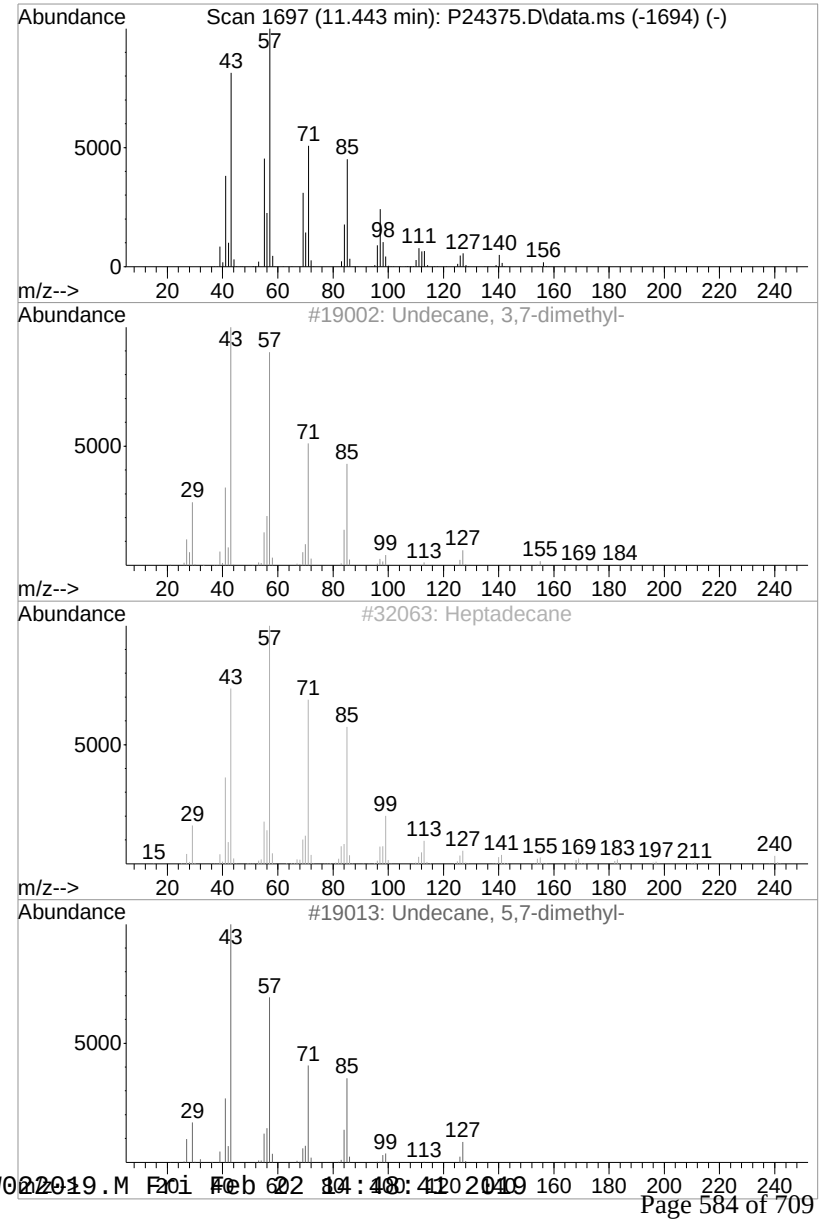
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

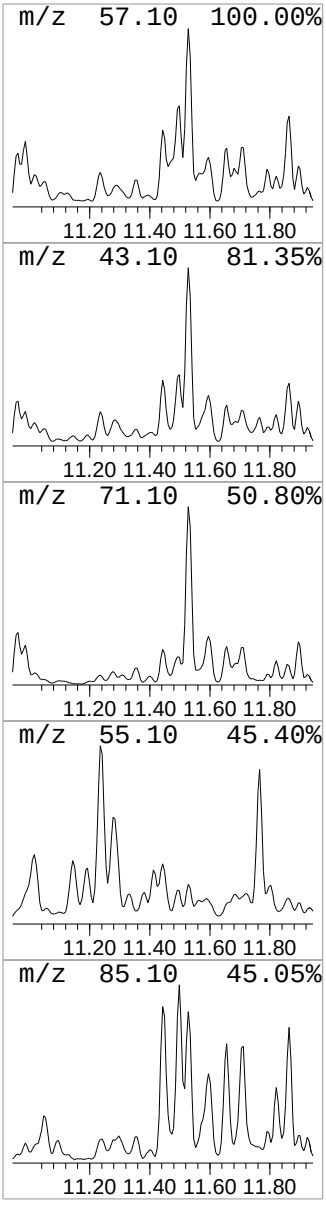
****

Peak Number 13 unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.443	153.35 ppb	7970820	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 3,7-dimethyl-	184	C13H28	017301-29-0	64
2	Heptadecane	240	C17H36	000629-78-7	59
3	Undecane, 5,7-dimethyl-	184	C13H28	017312-83-3	59
4	Dodecane	170	C12H26	000112-40-3	59
5	Undecane, 2,4-dimethyl-	184	C13H28	017312-80-0	53





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

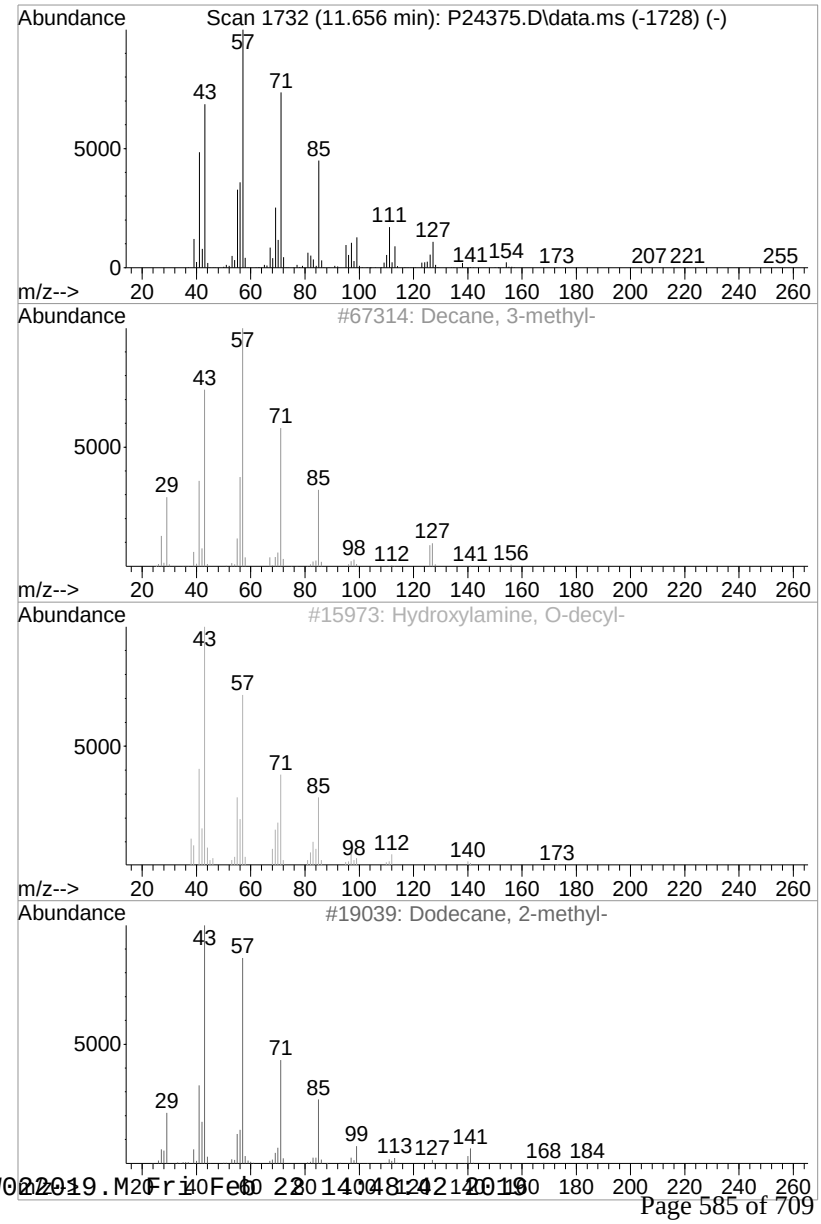
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

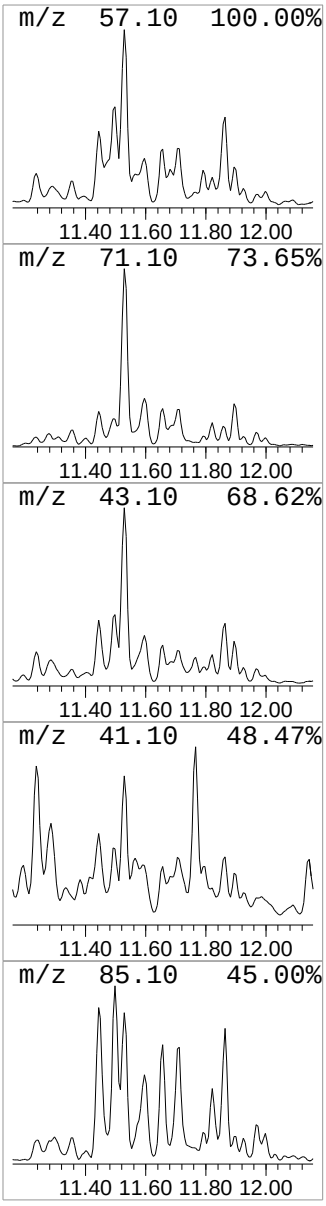
****

Peak Number 14 unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.656	101.84 ppb	5293690	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 3-methyl-	156	C11H24	013151-34-3	72
2	Hydroxylamine, O-decyl-	173	C10H23NO	029812-79-1	64
3	Dodecane, 2-methyl-	184	C13H28	001560-97-0	59
4	Tetradecane, 1-iodo-	324	C14H29I	019218-94-1	59
5	Nonane, 3,7-dimethyl-	156	C11H24	017302-32-8	58





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

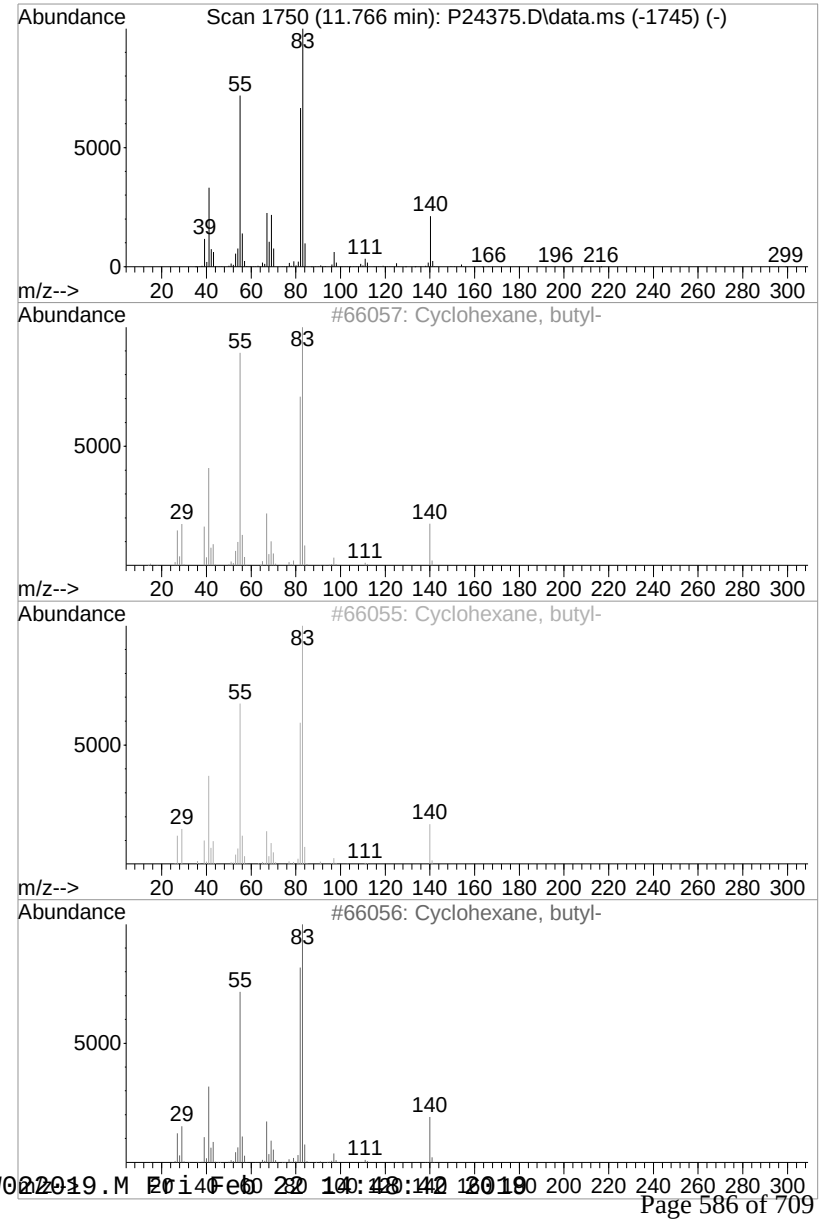
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

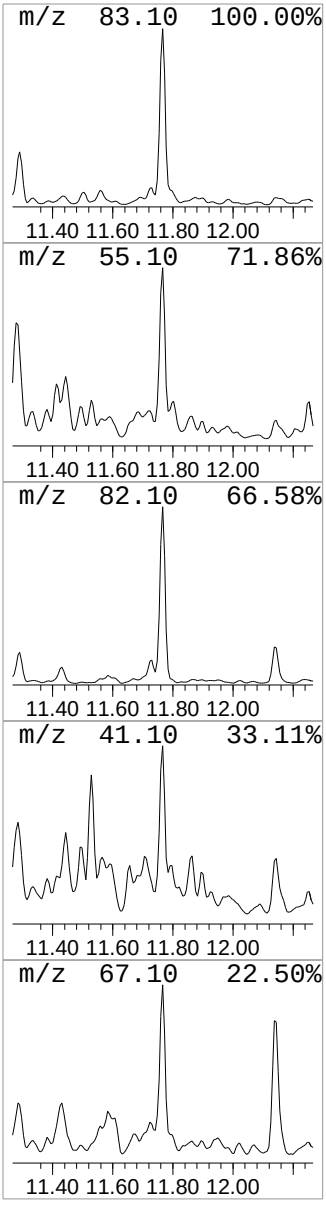
****

Peak Number 15 Cyclohexane, butyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.766	315.35 ppb	16391400	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, butyl-	140	C10H20	001678-93-9	91
2	Cyclohexane, butyl-	140	C10H20	001678-93-9	90
3	Cyclohexane, butyl-	140	C10H20	001678-93-9	90
4	Cyclohexane, butyl-	140	C10H20	001678-93-9	87
5	Cyclohexane, octyl-	196	C14H28	001795-15-9	87





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

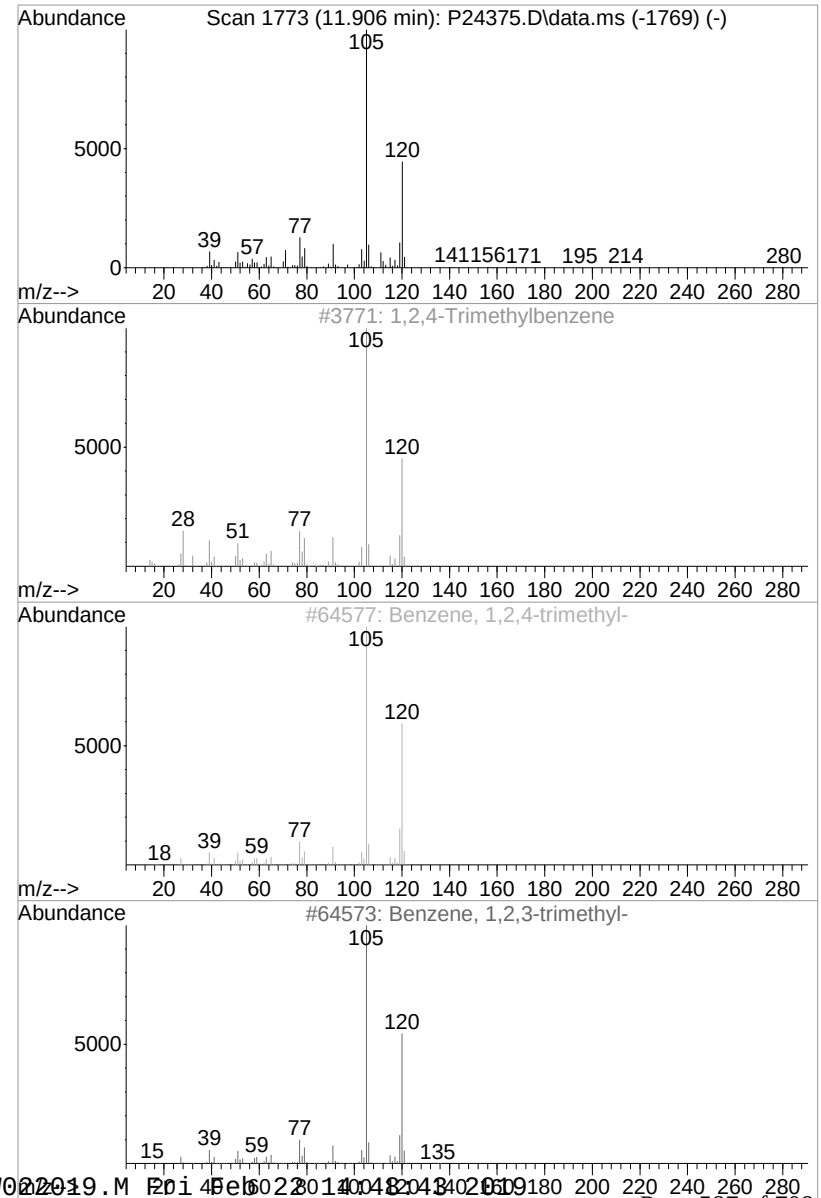
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

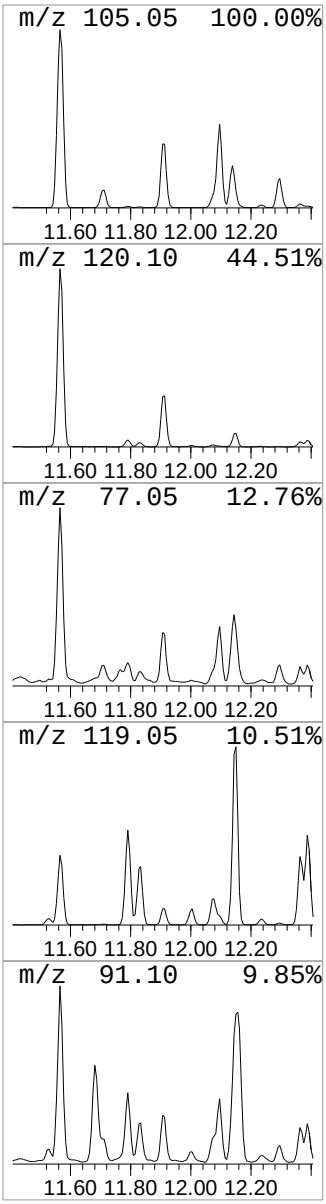
****

Peak Number 16 Benzene, 1,2,3-trimethyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.906	171.87 ppb	8933810	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2,4-Trimethylbenzene	120	C9H12	000095-36-3	97
2	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	95
3	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
4	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	94
5	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

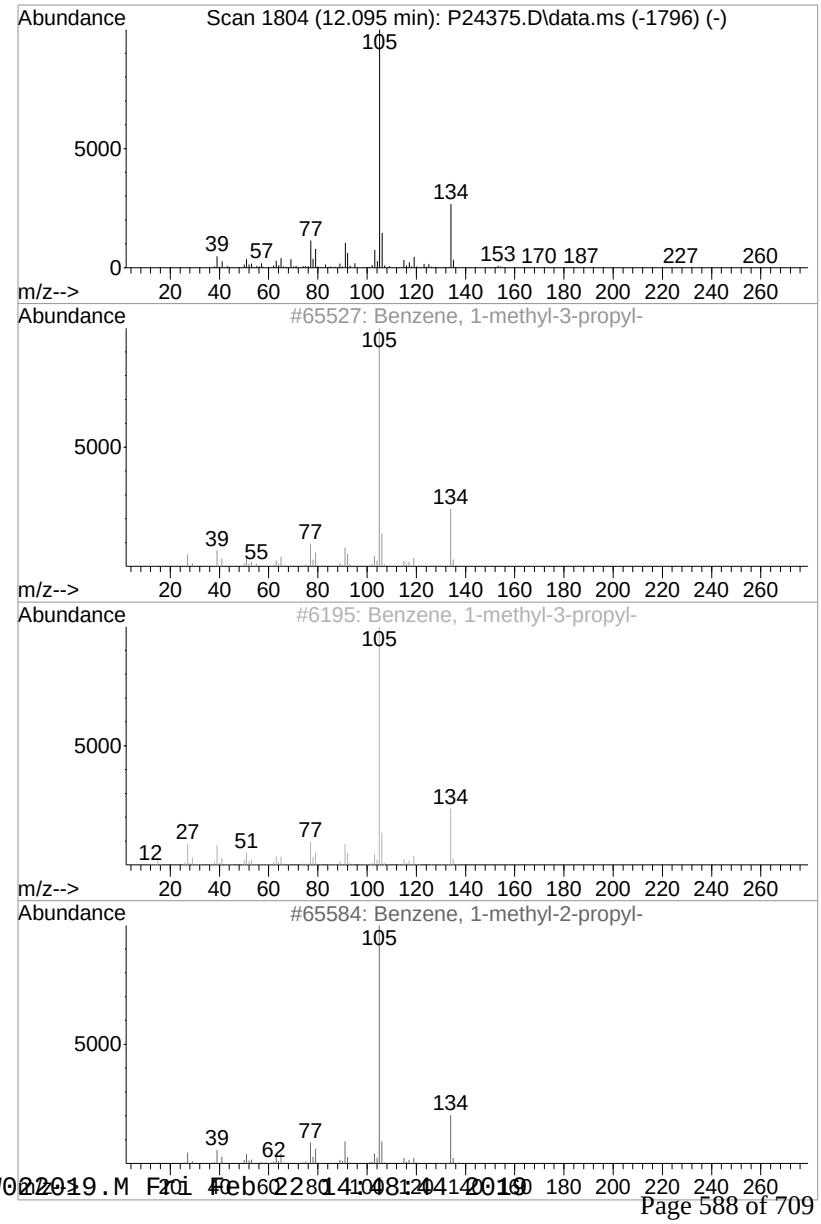
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

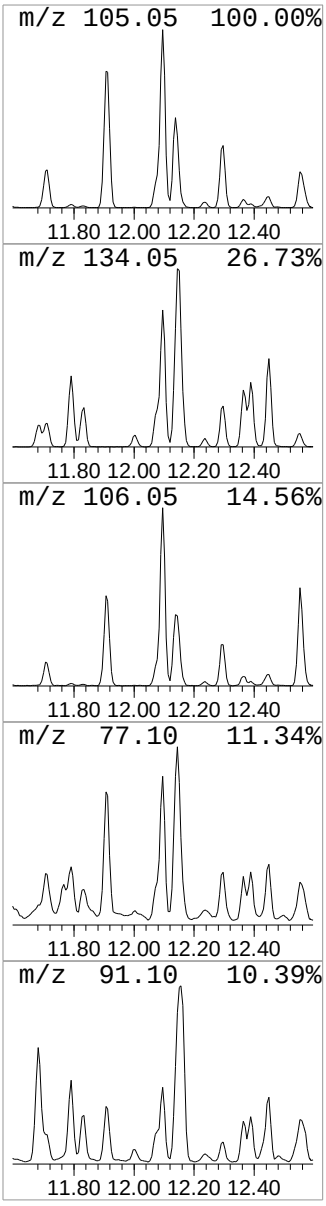
****

Peak Number 17 Benzene, 1-methyl-3-propyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.095	158.49 ppb	8238010	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	95
2	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	95
3	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	91
4	Benzene, (1-methylpropyl)-	134	C10H14	000135-98-8	87
5	Benzene, (1-methylpropyl)-	134	C10H14	000135-98-8	87





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

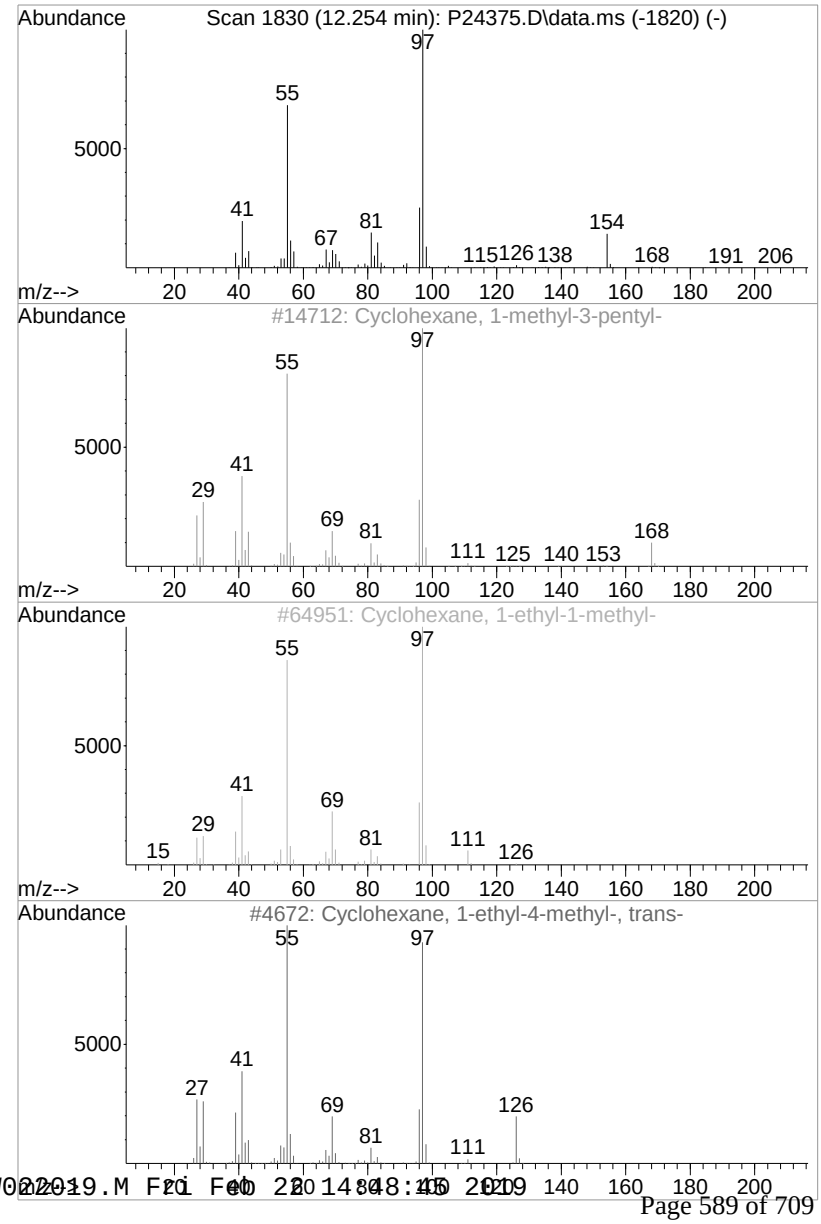
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

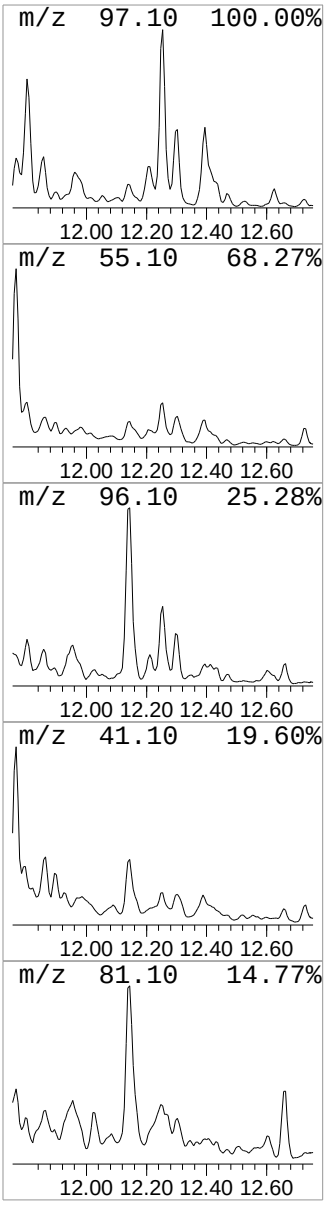
****

Peak Number 18 unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.254	128.88 ppb	6698770	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-methyl-3-pentyl-	168	C12H24	054411-02-8	72
2	Cyclohexane, 1-ethyl-1-methyl-	126	C9H18	004926-90-3	64
3	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	64
4	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	004926-78-7	64
5	Cyclohexane, 1-bromo-2-methyl-	176	C7H13Br	006294-39-9	59





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

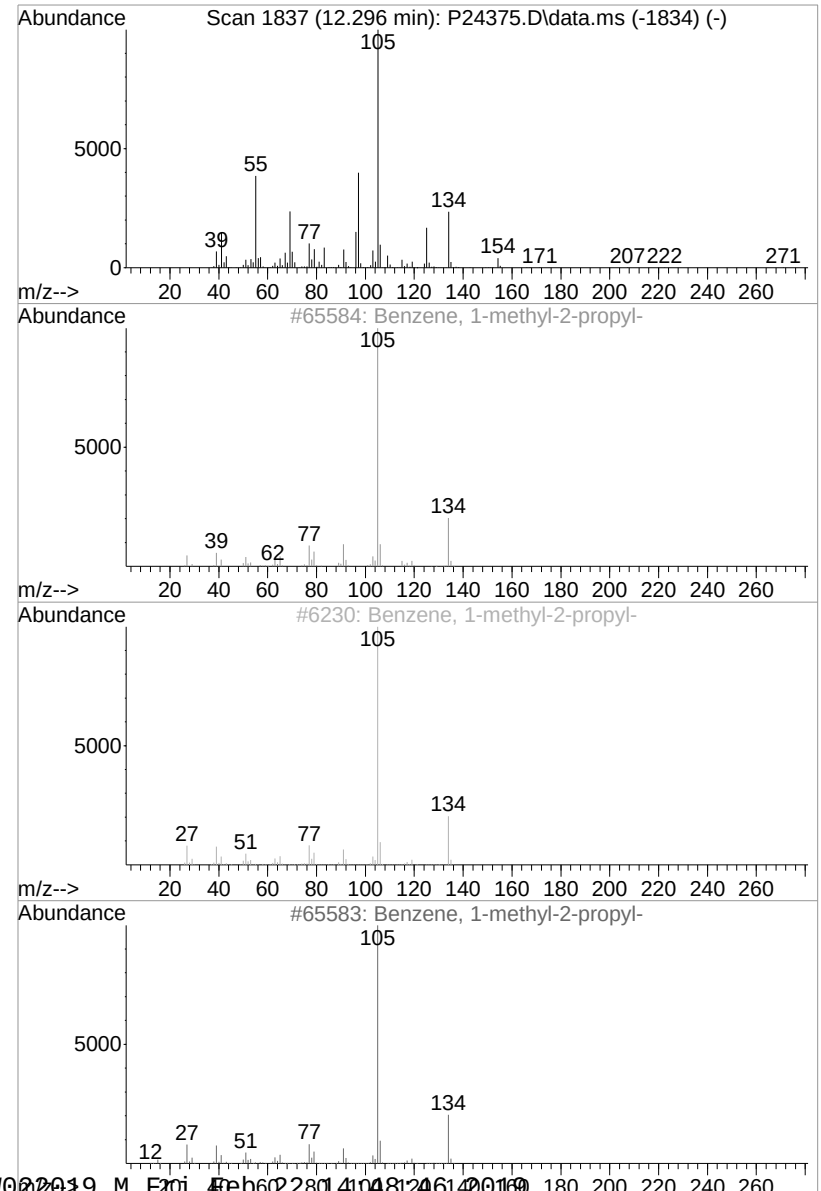
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

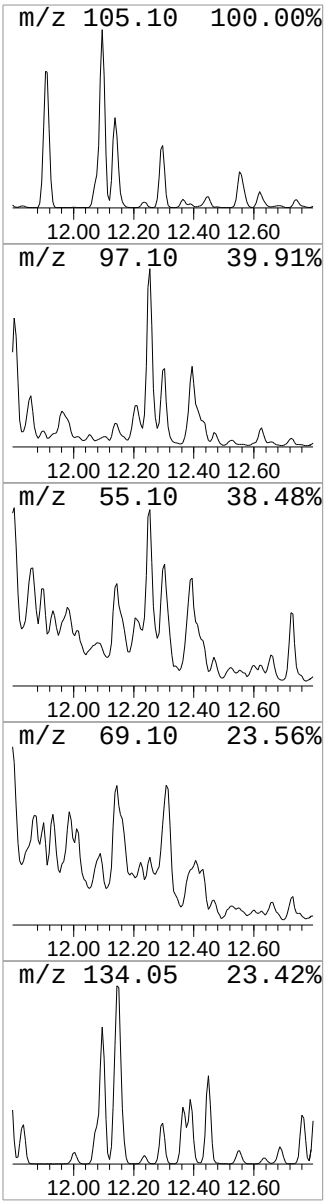
****

Peak Number 19 unknown Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.296	113.46 ppb	5897570	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	83
2	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	46
3	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	46
4	Benzene, 1-methyl-4-propyl-	134	C10H14	001074-55-1	46
5	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	46





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

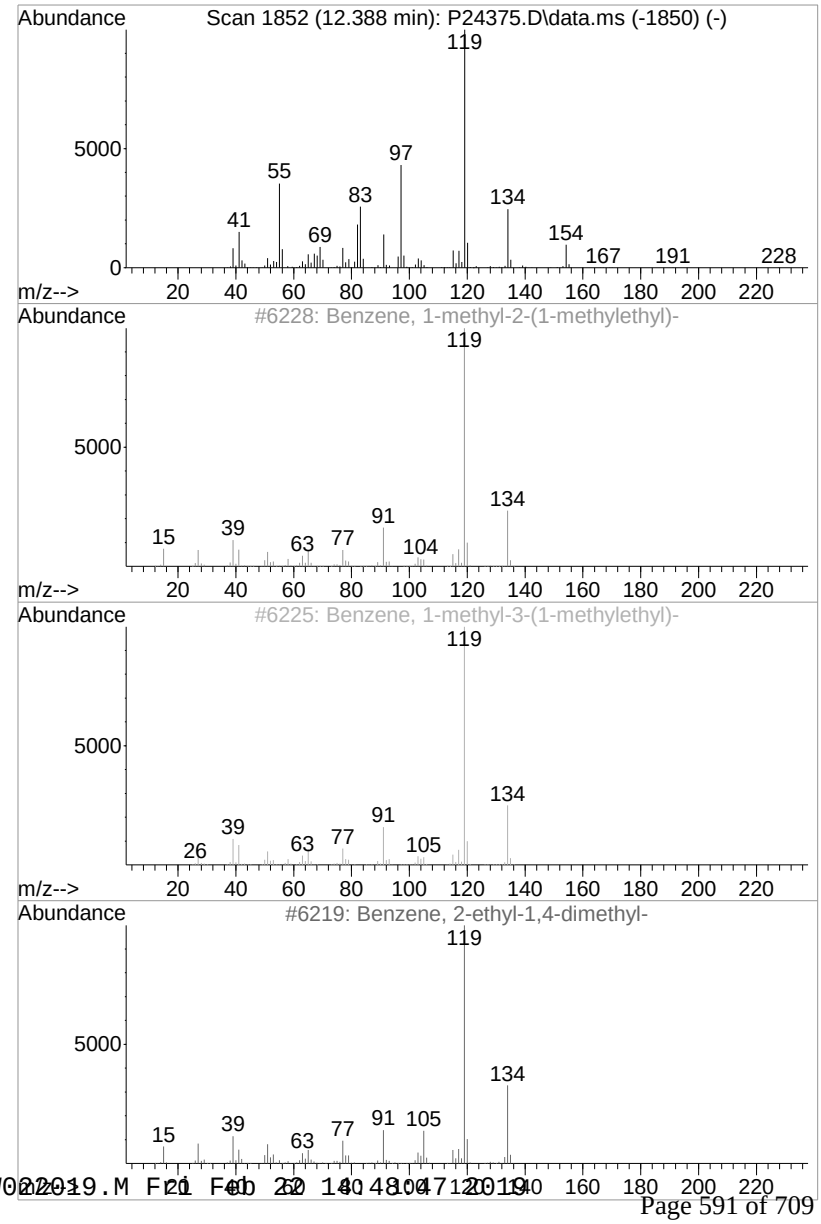
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

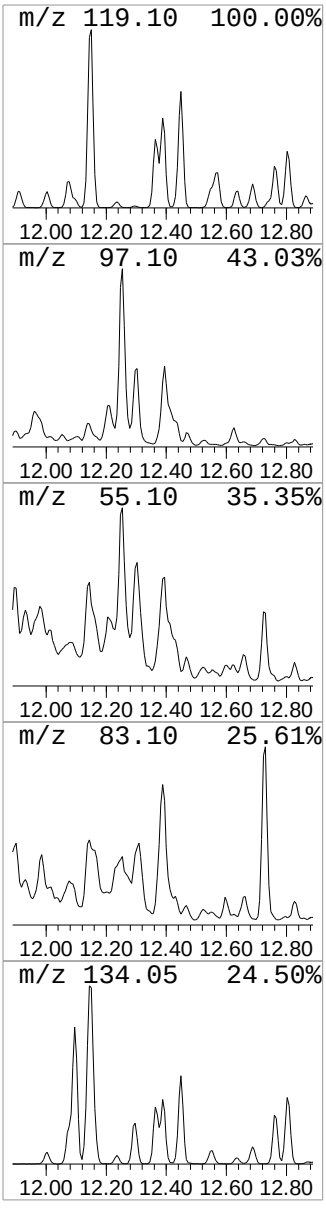
****

Peak Number 20 unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.388	120.36 ppb	6256090	1,4-Dichlorobenzene-d4	11.845

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	78
2	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	60
3	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	60
4	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	60
5	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	60





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24375.D
Acq On : 21 Feb 2019 6:03 pm
Operator : K.Ruest
Sample : R1901228-006|147 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

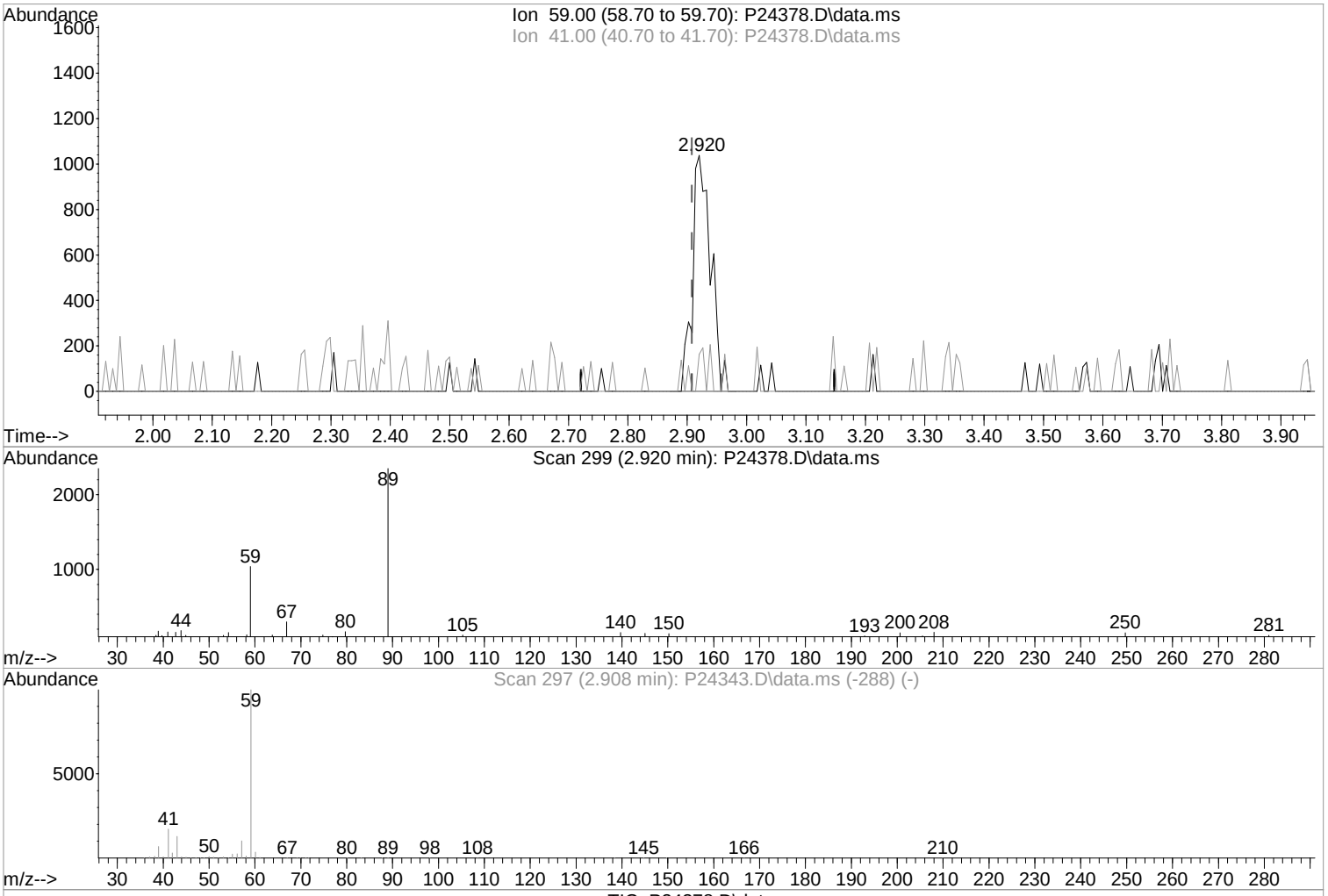
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	9.206	103.5	ppb	3095980	3	9.791	1495370	50.0
unknown	9.334	107.2	ppb	3205730	3	9.791	1495370	50.0
Cyclohexane, 1,...	9.559	229.9	ppb	6877000	3	9.791	1495370	50.0
Octane, 4-methyl-	9.626	194.5	ppb	5818330	3	9.791	1495370	50.0
cis-1-Ethyl-3-m...	10.108	201.8	ppb	6035940	3	9.791	1495370	50.0
unknown	10.352	559.1	ppb	16722200	3	9.791	1495370	50.0
Octane, 2,5-dim...	10.443	343.9	ppb	10284000	3	9.791	1495370	50.0
unknown	10.559	851.2	ppb	25458500	3	9.791	1495370	50.0
unknown	10.638	974.3	ppb	29139400	3	9.791	1495370	50.0
unknown	10.681	310.9	ppb	9298020	3	9.791	1495370	50.0
Cyclohexane, 1,...	11.016	219.4	ppb	11406200	4	11.845	2598950	50.0
unknown	11.193	170.9	ppb	8882180	4	11.845	2598950	50.0
unknown	11.443	153.3	ppb	7970820	4	11.845	2598950	50.0
unknown	11.656	101.8	ppb	5293690	4	11.845	2598950	50.0
Cyclohexane, bu...	11.766	315.4	ppb	16391400	4	11.845	2598950	50.0
Benzene, 1,2,3-...	11.906	171.9	ppb	8933810	4	11.845	2598950	50.0
Benzene, 1-meth...	12.095	158.5	ppb	8238010	4	11.845	2598950	50.0
unknown	12.254	128.9	ppb	6698770	4	11.845	2598950	50.0
unknown	12.296	113.5	ppb	5897570	4	11.845	2598950	50.0
unknown	12.388	120.4	ppb	6256090	4	11.845	2598950	50.0

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24378.D
Acq On : 21 Feb 2019 7:08 pm
Operator : K.Ruest
Sample : R1901421-001|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 22 09:08:02 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24378.D\data.ms

(23) TBA

2.920min (+0.012) 3.49 ppb m

response 2207

Ion	Exp%	Act%
59.00	100	100
41.00	18.20	15.70
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

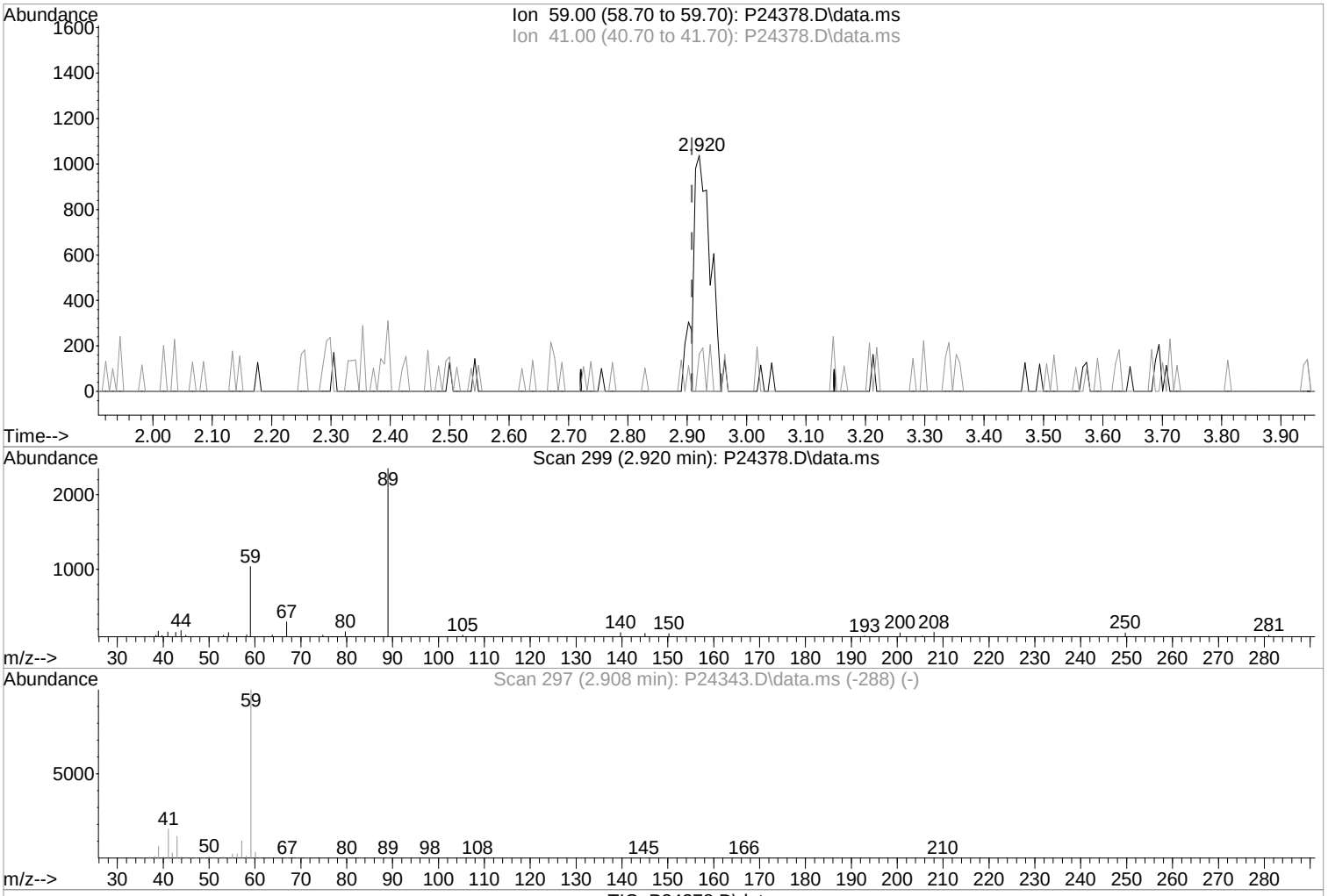
Split Peak

02/22/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24378.D
Acq On : 21 Feb 2019 7:08 pm
Operator : K.Ruest
Sample : R1901421-001|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 22 09:08:02 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24378.D\data.ms

(23) TBA

2.920min (+0.012) 2.96 ppb

response 1874

Ion	Exp%	Act%
59.00	100	100
41.00	18.20	15.70
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24378.D
Acq On : 21 Feb 2019 7:08 pm
Operator : K.Ruest
Sample : R1901421-001|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 22 14:50:21 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

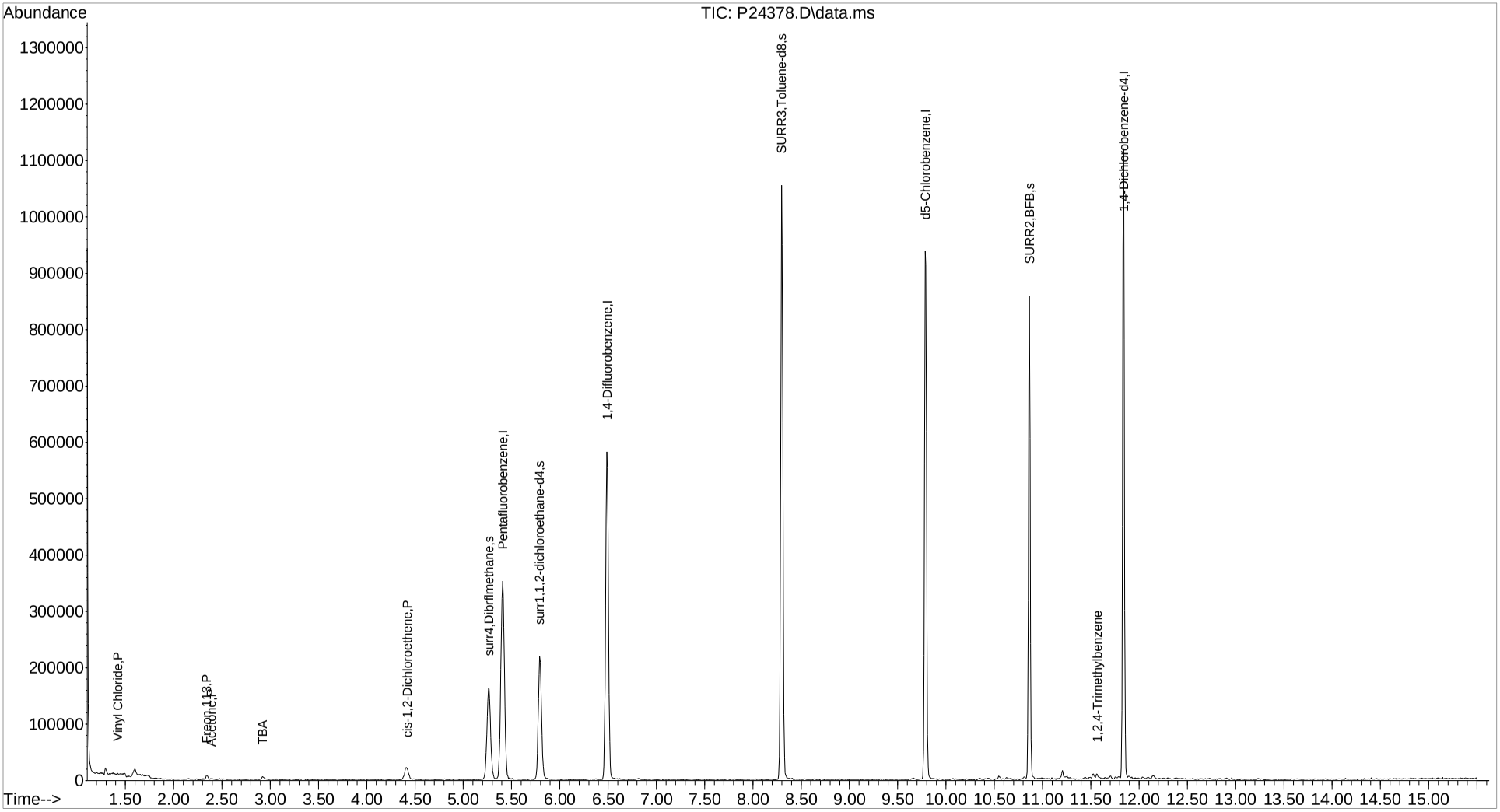
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.408	168	320433	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	509029	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	440199	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	225933	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.261	113	134246	47.99	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.98%				
48) surr1,1,2-dichloroetha...	5.792	65	185940	52.41	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 104.82%				
65) SURR3,Toluene-d8	8.297	98	647254	48.78	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.56%				
70) SURR2,BFB	10.864	95	230598	48.52	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.04%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.421	62	1521	0.33	ppb	#	62
14) Freon 113	2.341	101	2621	0.98	ppb		83
15) Acetone	2.384	43	943	0.61	ppb		87
23) TBA	2.920	59	2207m	3.49	ppb		
34) cis-1,2-Dichloroethene	4.420	96	11600	3.11	ppb	#	59
101) 1,2,4-Trimethylbenzene	11.565	105	3378	0.26	ppb		81

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

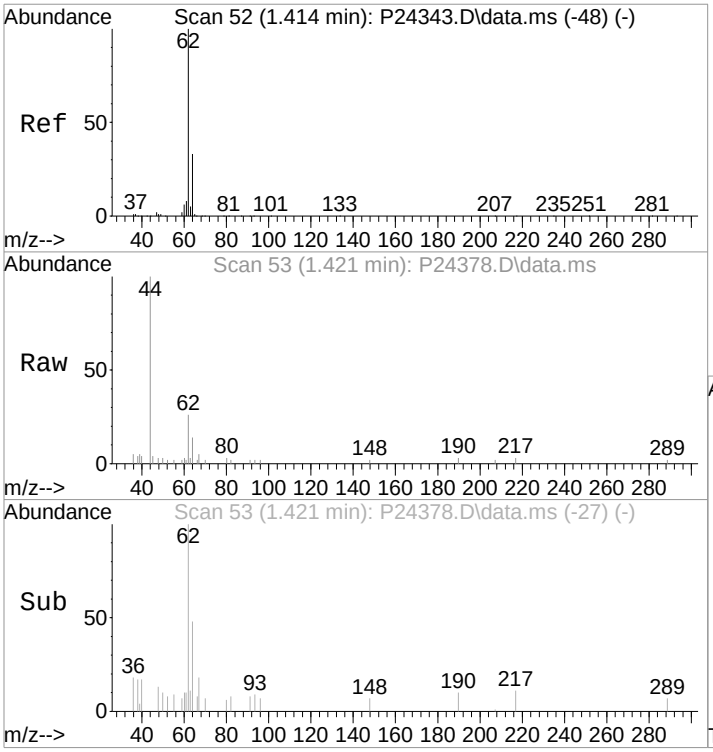
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24378.D
Acq On : 21 Feb 2019 7:08 pm
Operator : K.Ruest
Sample : R1901421-001|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 22 14:50:21 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



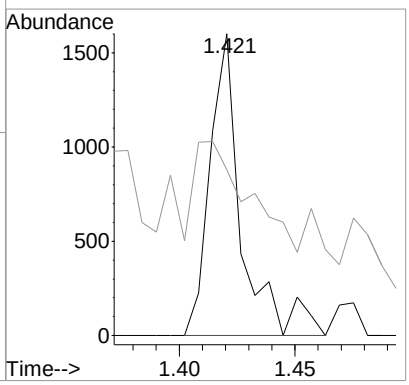
1st 02/22/19

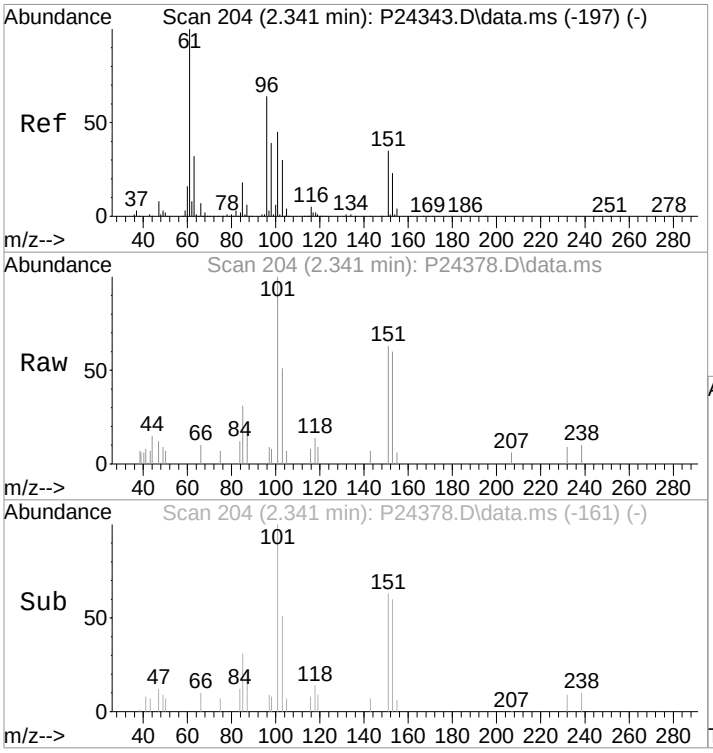


#4
Vinyl Chloride
Concen: 0.33 ppb
RT: 1.421 min Scan# 53
Delta R.T. 0.012 min
Lab File: P24378.D
Acq: 21 Feb 2019 7:08 pm

Tgt Ion: 62 Resp: 1521

Ion	Ratio	Lower	Upper
62	100		
64	54.9	13.2	53.2#

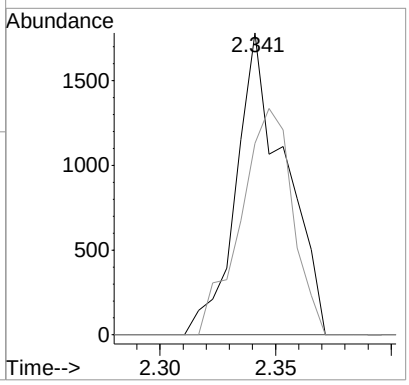


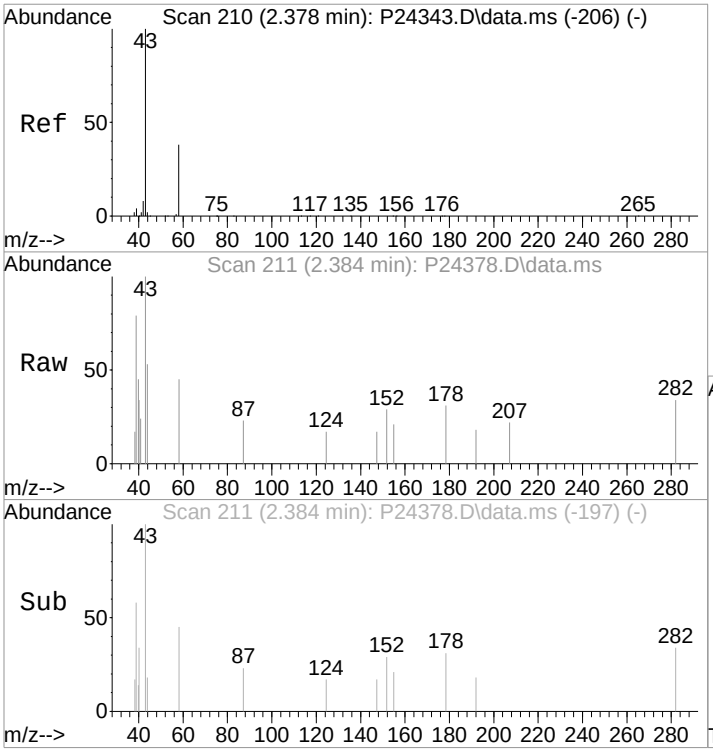


#14
Freon 113
Concen: 0.98 ppb
RT: 2.341 min Scan# 204
Delta R.T. 0.006 min
Lab File: P24378.D
Acq: 21 Feb 2019 7:08 pm

Tgt Ion:101 Resp: 2621

Ion	Ratio	Lower	Upper
101	100		
151	63.4	58.4	98.4

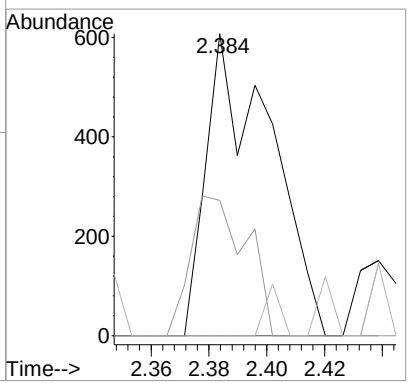


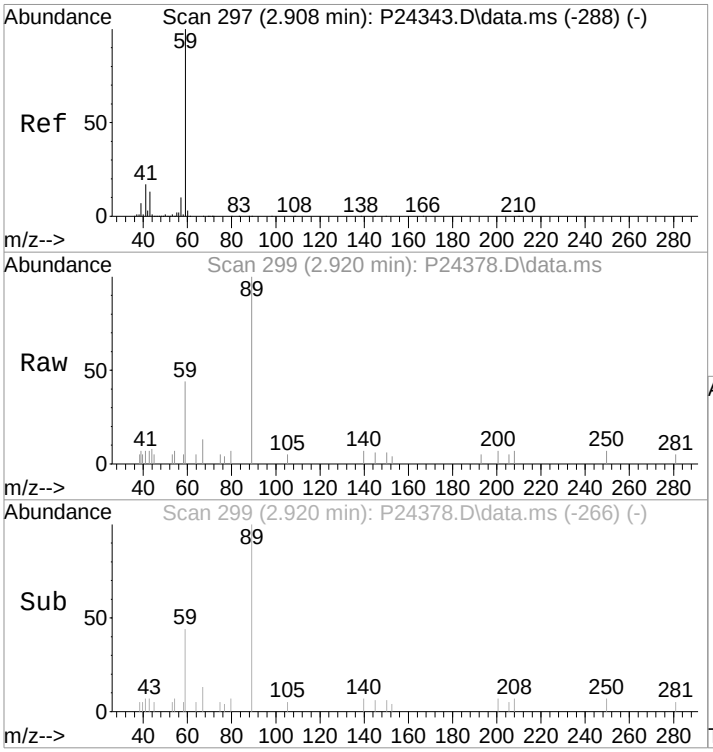


#15
Acetone
Concen: 0.61 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24378.D
Acq: 21 Feb 2019 7:08 pm

Tgt Ion: 43 Resp: 943

Ion	Ratio	Lower	Upper
43	100		
58	44.7	18.1	58.1
42	0.0	0.0	27.8

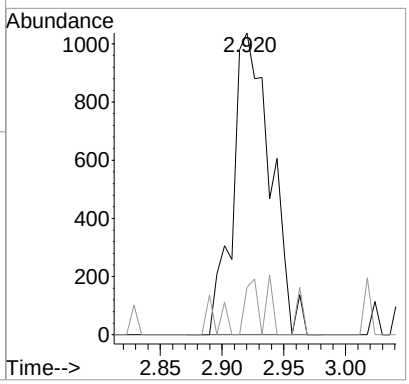


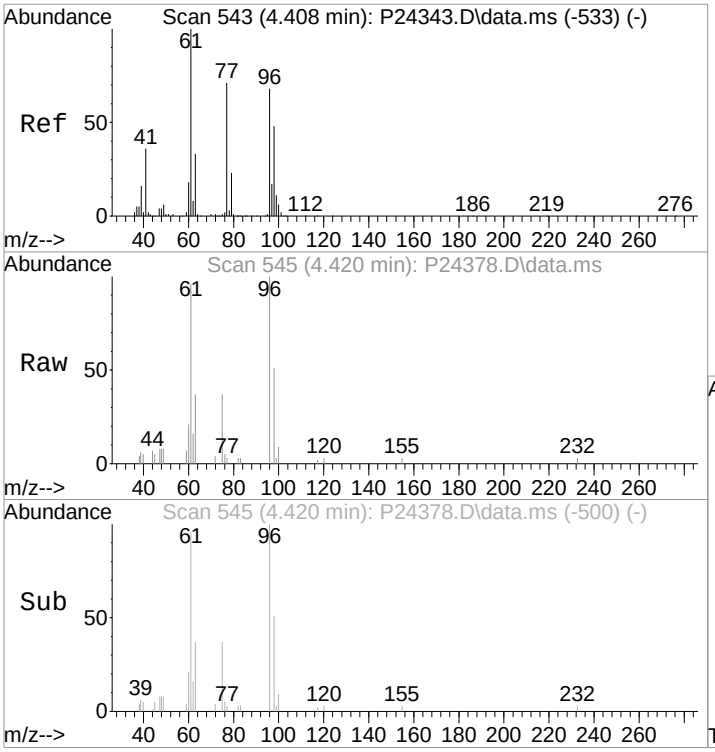


#23
TBA
Concen: 3.49 ppb m
RT: 2.920 min Scan# 299
Delta R.T. 0.012 min
Lab File: P24378.D
Acq: 21 Feb 2019 7:08 pm

Tgt Ion: 59 Resp: 2207

Ion	Ratio	Lower	Upper
59	100		
41	15.7	0.0	38.2

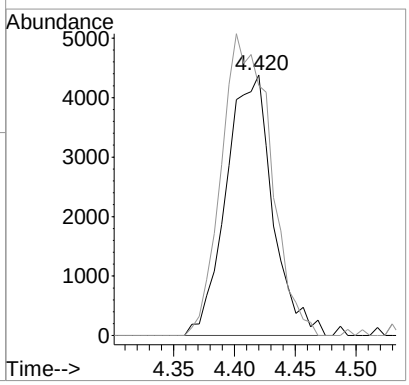


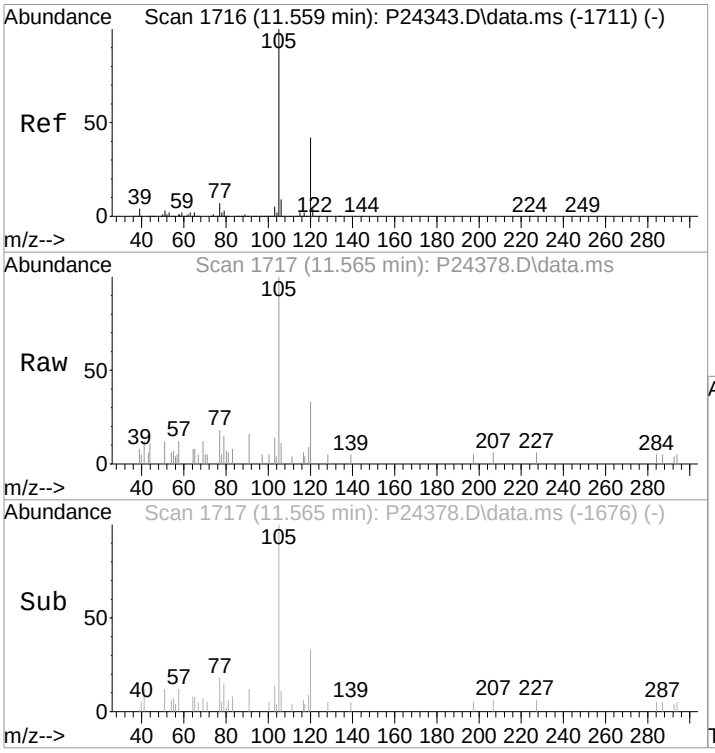


#34
cis-1,2-Dichloroethene
Concen: 3.11 ppb
RT: 4.420 min Scan# 545
Delta R.T. 0.018 min
Lab File: P24378.D
Acq: 21 Feb 2019 7:08 pm

Tgt Ion: 96 Resp: 11600

Ion	Ratio	Lower	Upper
96	100		
61	95.9	128.1	168.1#

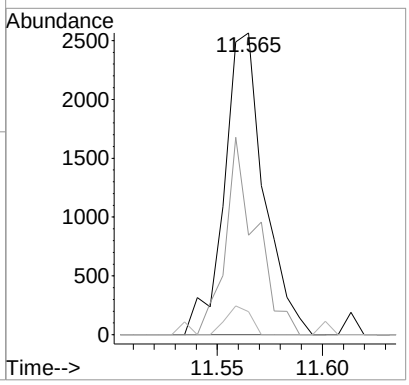




#101
1,2,4-Trimethylbenzene
Concen: 0.26 ppb
RT: 11.565 min Scan# 1717
Delta R.T. 0.006 min
Lab File: P24378.D
Acq: 21 Feb 2019 7:08 pm

Tgt Ion:105 Resp: 3378

Ion	Ratio	Lower	Upper
105	100		
120	33.0	26.4	66.4
65	7.7	0.0	24.1



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24379.D
Acq On : 21 Feb 2019 7:30 pm
Operator : K.Ruest
Sample : R1901421-002|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 22 14:52:31 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

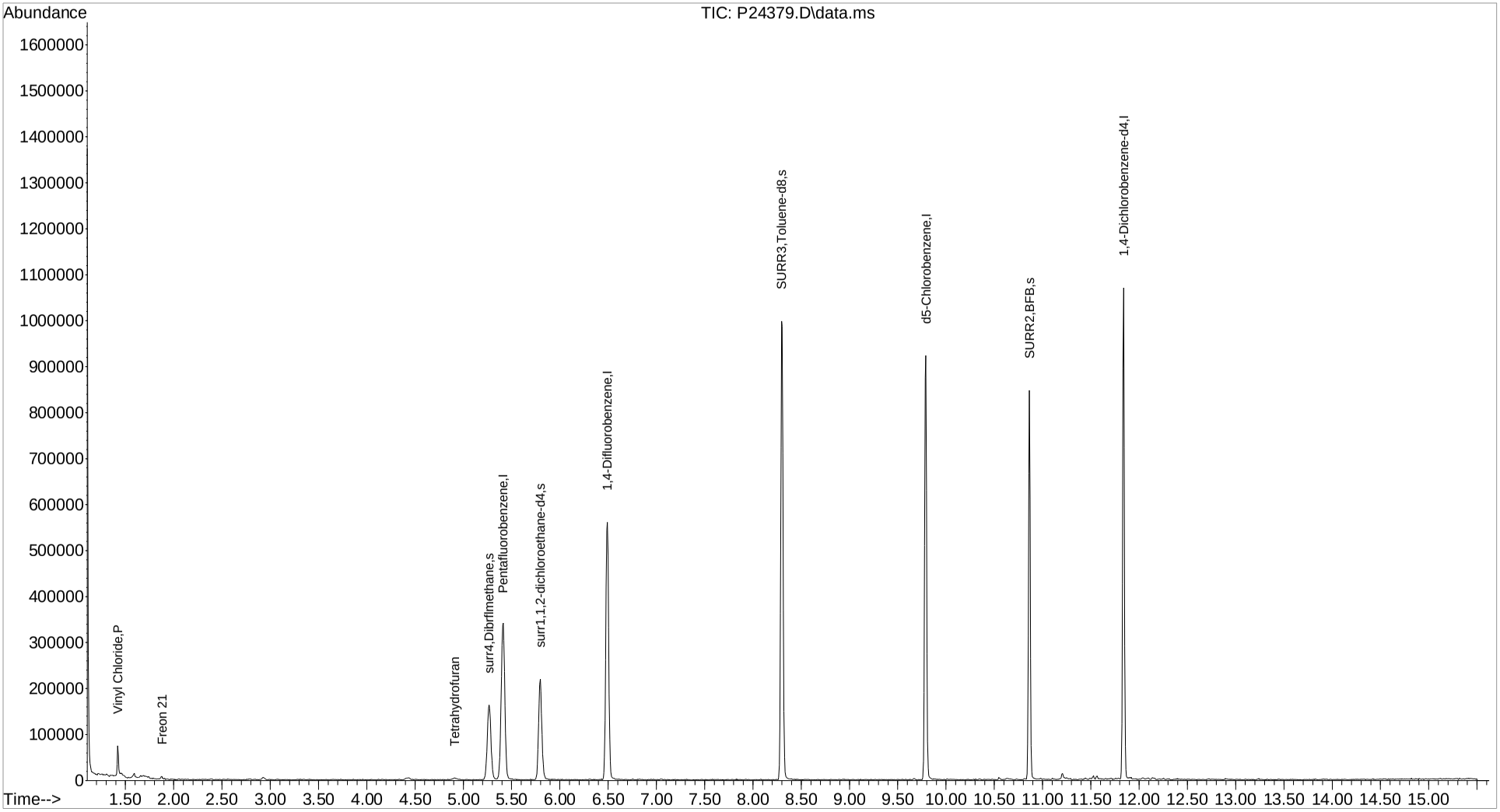
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.407	168	319772	50.00	ppb	0.01
43) 1,4-Difluorobenzene	6.493	114	507624	50.00	ppb	0.01
71) d5-Chlorobenzene	9.791	117	430038	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	219662	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.267	113	136878	49.07	ppb	0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.14%			
48) surr1,1,2-dichloroetha...	5.798	65	181248	51.22	ppb	0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.44%			
65) SURR3,Toluene-d8	8.297	98	654893	49.49	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.98%			
70) SURR2,BFB	10.864	95	226472	47.79	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.58%			
Target Compounds						Qvalue
4) Vinyl Chloride	1.420	62	38776	8.34	ppb	98
7) Freon 21	1.878	67	3692	0.63	ppb	97
39) Tetrahydrofuran	4.908	42	3579	2.15	ppb	82

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

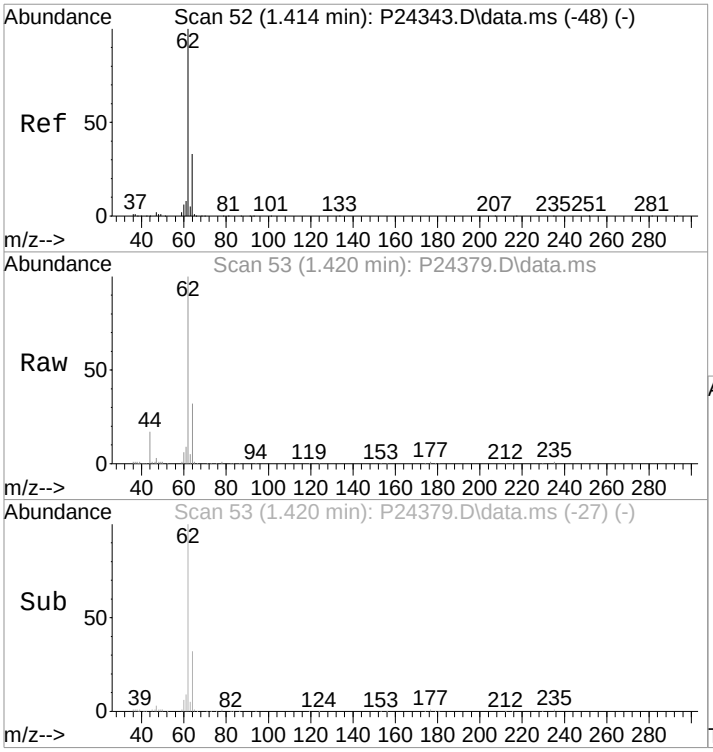
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24379.D
Acq On : 21 Feb 2019 7:30 pm
Operator : K.Ruest
Sample : R1901421-002|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 22 14:52:31 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



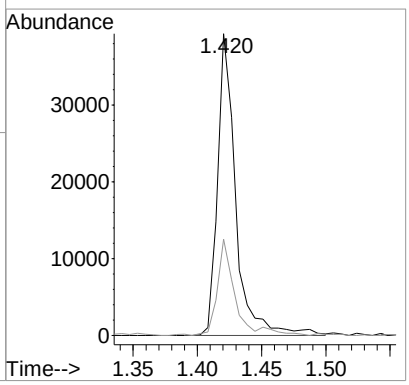
1st 02/22/19

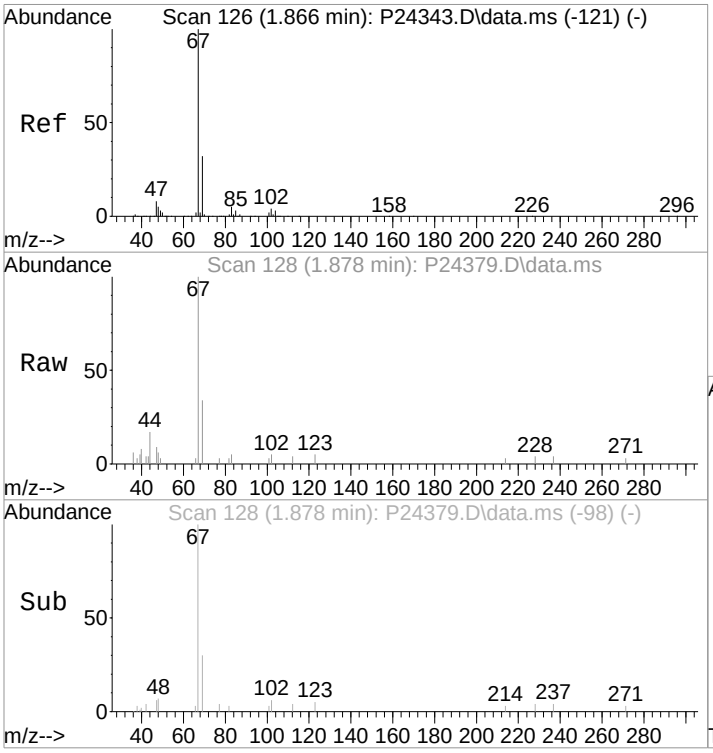


#4
Vinyl Chloride
Concen: 8.34 ppb
RT: 1.420 min Scan# 53
Delta R.T. 0.012 min
Lab File: P24379.D
Acq: 21 Feb 2019 7:30 pm

Tgt Ion: 62 Resp: 38776

Ion	Ratio	Lower	Upper
62	100		
64	31.9	13.2	53.2

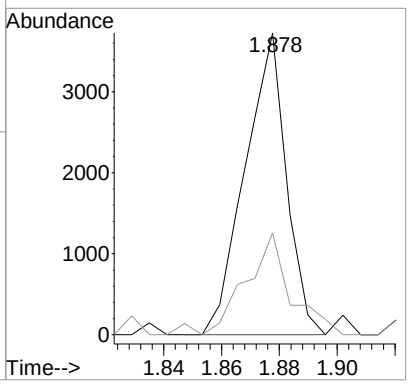


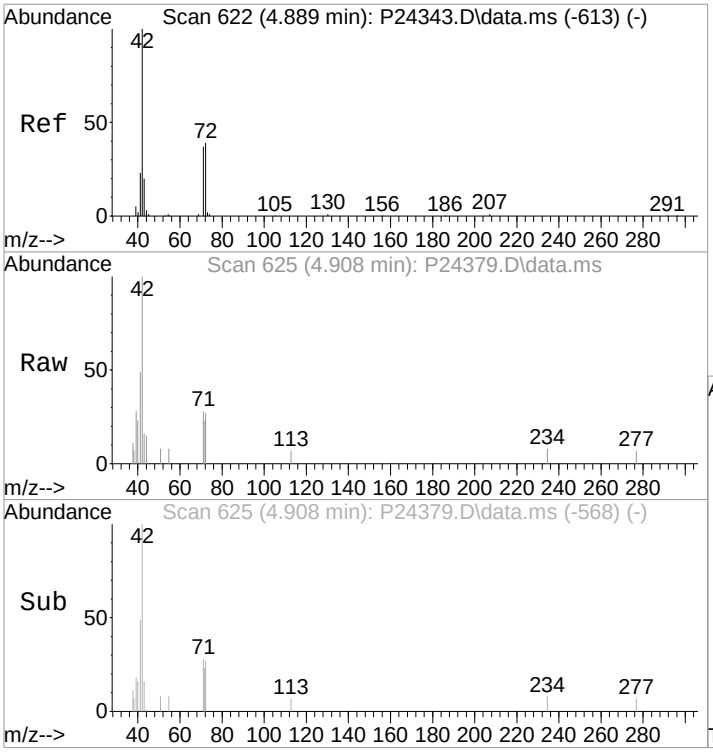


#7
Freon 21
Concen: 0.63 ppb
RT: 1.878 min Scan# 128
Delta R.T. 0.018 min
Lab File: P24379.D
Acq: 21 Feb 2019 7:30 pm

Tgt Ion: 67 Resp: 3692

Ion	Ratio	Lower	Upper
67	100		
69	33.7	11.9	51.9

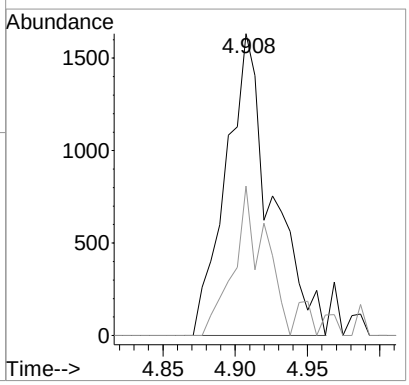




#39
Tetrahydrofuran
Concen: 2.15 ppb
RT: 4.908 min Scan# 625
Delta R.T. 0.030 min
Lab File: P24379.D
Acq: 21 Feb 2019 7:30 pm

Tgt Ion: 42 Resp: 3579

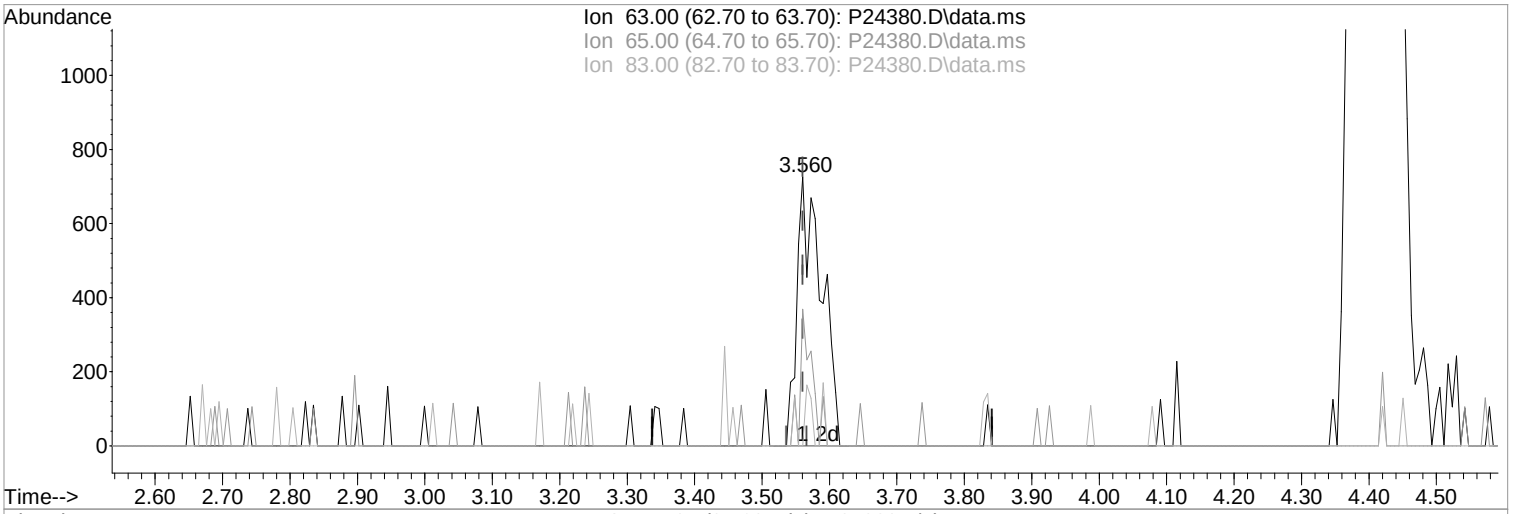
Ion	Ratio	Lower	Upper
42	100		
72	49.5	18.5	58.5

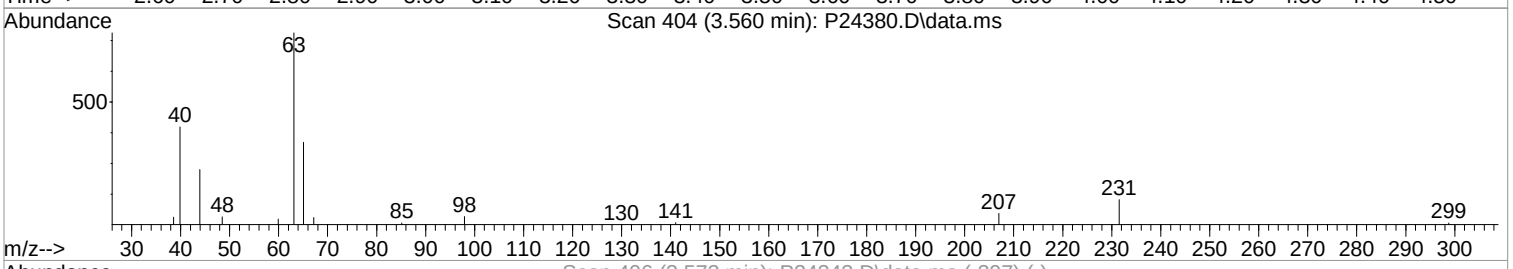


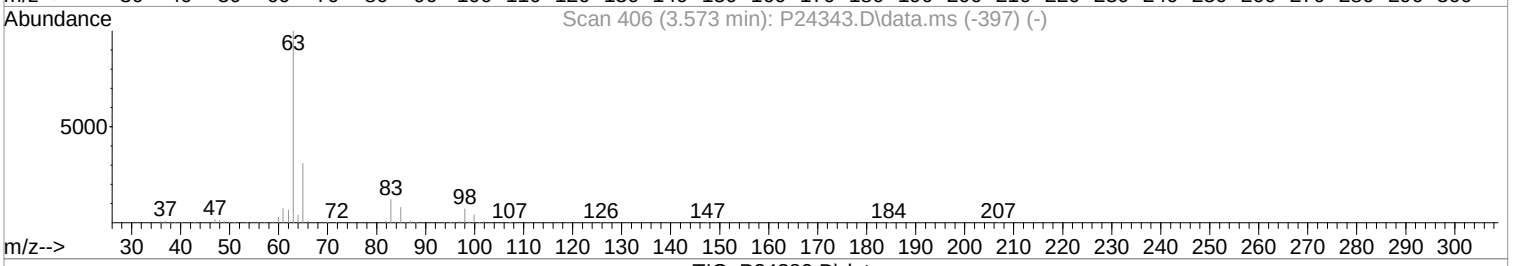
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24380.D
Acq On : 21 Feb 2019 7:52 pm
Operator : K.Ruest
Sample : R1901421-003|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 22 09:08:55 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24380.D\data.ms

(28) 1,1-Diclethane (P)

3.560min (+0.000) 0.31 ppb m

response 1838

Ion	Exp%	Act%
63.00	100	100
65.00	31.00	50.83
83.00	12.10	0.00
0.00	0.00	0.00

Manual Integration:

After

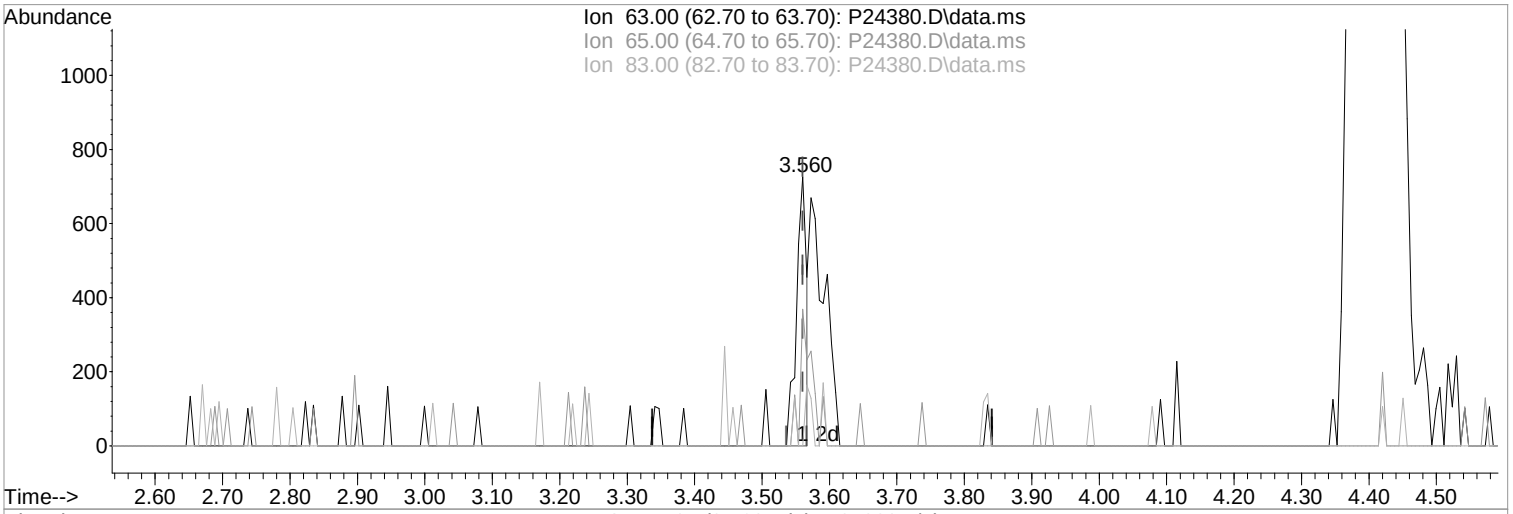
Split Peak

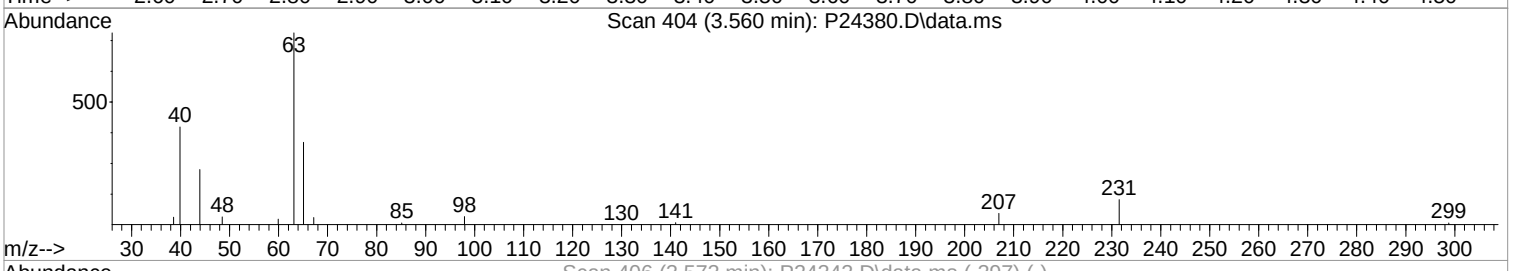
02/22/19

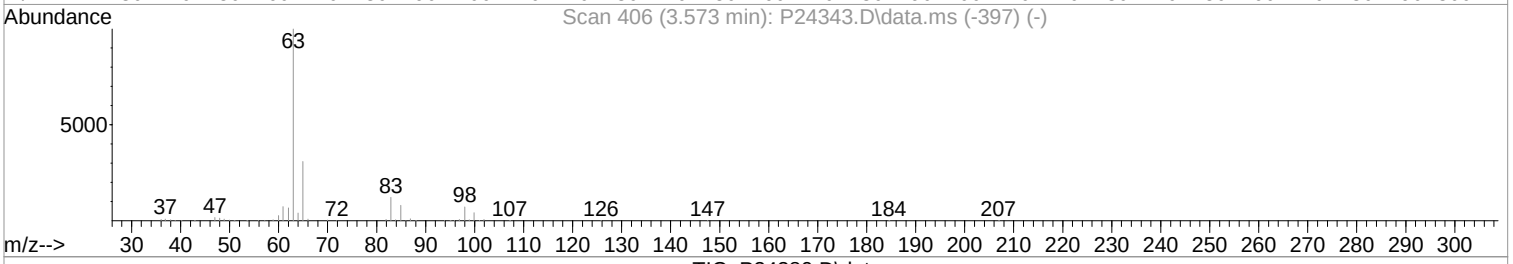
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24380.D
Acq On : 21 Feb 2019 7:52 pm
Operator : K.Ruest
Sample : R1901421-003|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 22 09:08:55 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24380.D\data.ms

(28) 1,1-Diclethane (P)

3.560min (+0.000) 0.13 ppb

response 762

Ion	Exp%	Act%
63.00	100	100
65.00	31.00	50.83
83.00	12.10	0.00
0.00	0.00	0.00

Manual Integration:

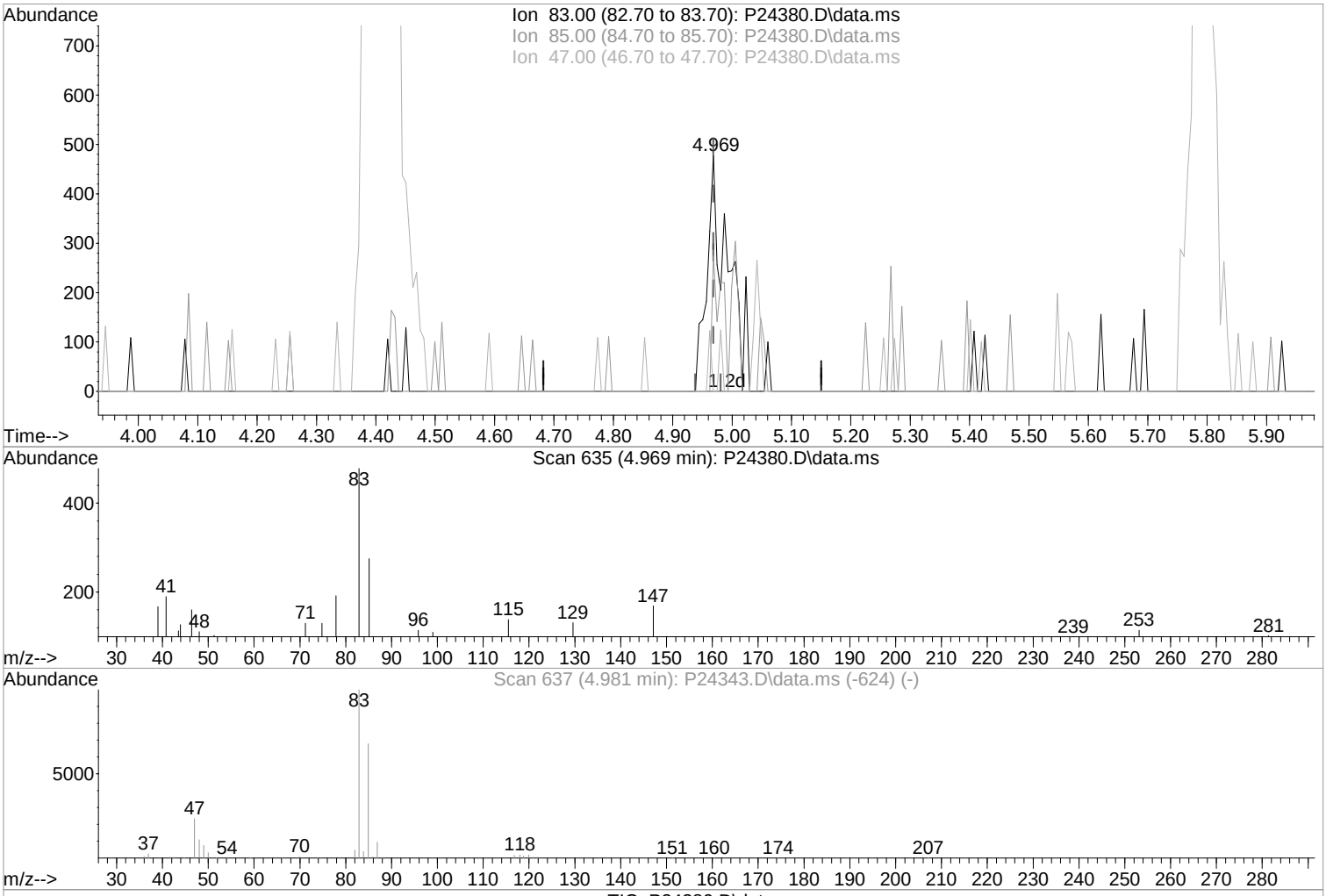
Before

02/22/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24380.D
Acq On : 21 Feb 2019 7:52 pm
Operator : K.Ruest
Sample : R1901421-003|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 22 09:08:55 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24380.D\data.ms

(40) Chloroform (P)

4.969min (+0.000) 0.22 ppb m

response 1188

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	57.53
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

After

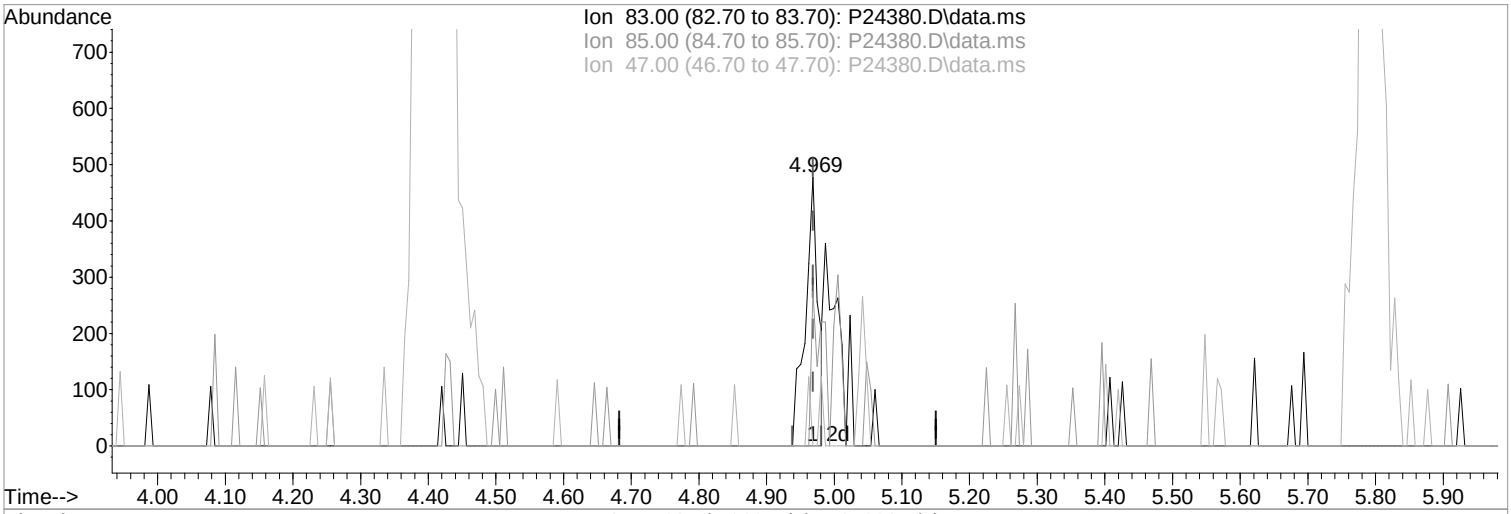
Split Peak

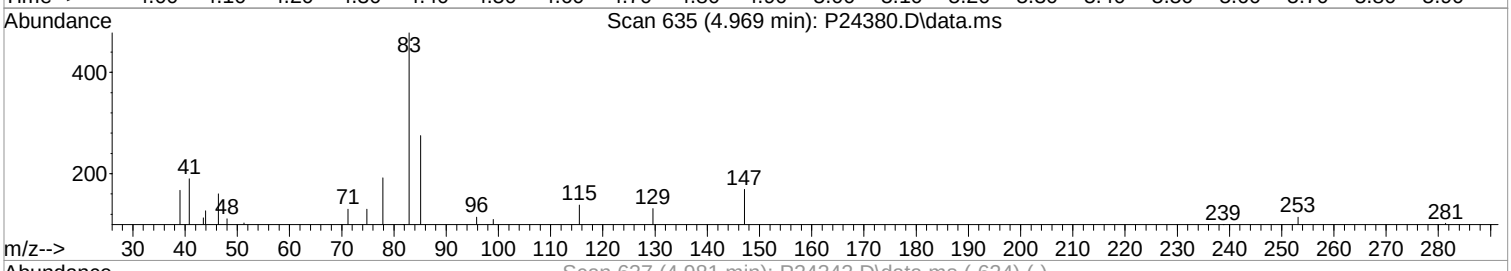
02/22/19

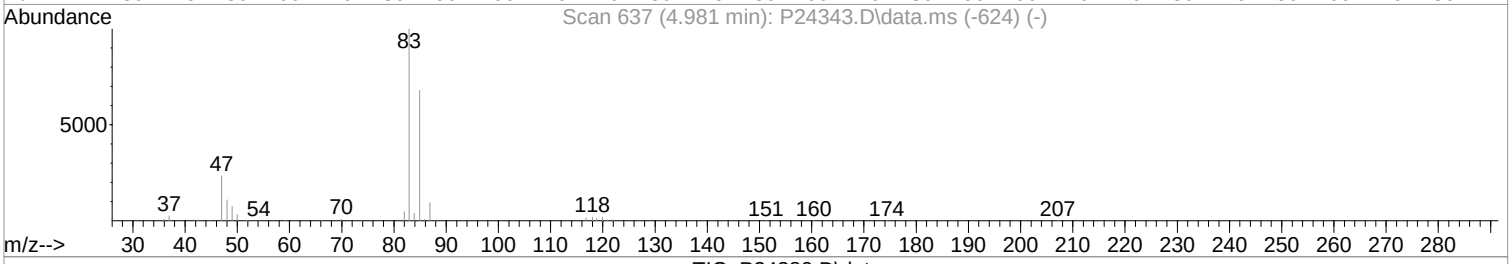
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24380.D
Acq On : 21 Feb 2019 7:52 pm
Operator : K.Ruest
Sample : R1901421-003|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 22 09:08:55 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24380.D\data.ms

(40) Chloroform (P)

4.969min (+0.000) 0.12 ppb

response 632

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	57.53
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24380.D
Acq On : 21 Feb 2019 7:52 pm
Operator : K.Ruest
Sample : R1901421-003|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 22 14:55:01 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

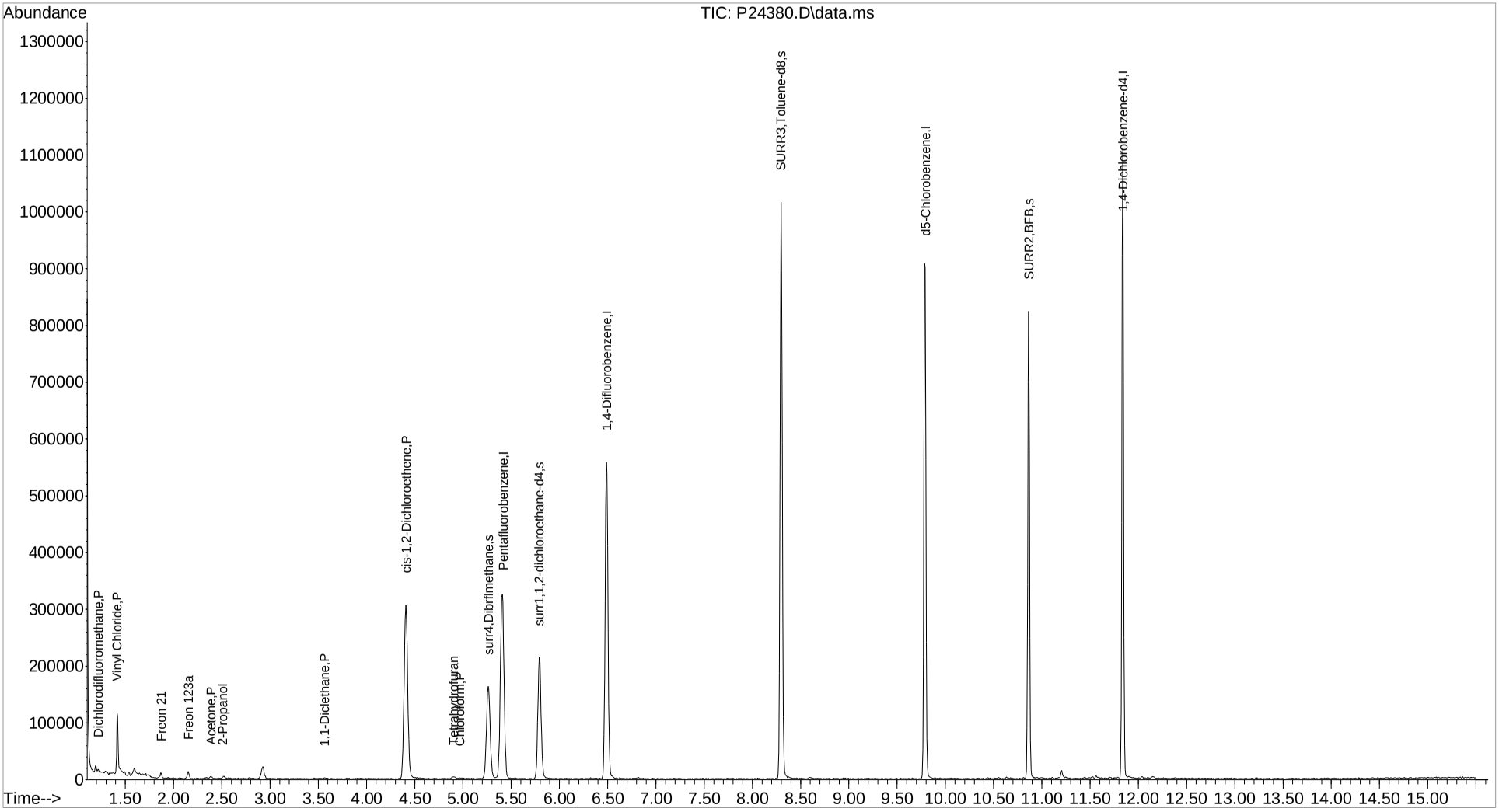
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.414	168	308873	50.00	ppb	0.02
43) 1,4-Difluorobenzene	6.487	114	494090	50.00	ppb	0.00
71) d5-Chlorobenzene	9.791	117	426656	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	217662	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.261	113	139462	51.36	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.72%			
48) surr1,1,2-dichloroetha...	5.792	65	179295	52.06	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 104.12%			
65) SURR3,Toluene-d8	8.297	98	645319	50.11	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.22%			
70) SURR2,BFB	10.864	95	229318	49.71	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.42%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.219	85	849	0.23	ppb	85
4) Vinyl Chloride	1.414	62	73020	16.27	ppb	98
7) Freon 21	1.872	67	6554	1.16	ppb	98
10) Freon 123a	2.152	67	4528	1.25	ppb	91
15) Acetone	2.384	43	4087	2.76	ppb	85
16) 2-Propanol	2.512	45	4073	10.61	ppb	67
28) 1,1-Diclethane	3.560	63	1838m	0.31	ppb	
34) cis-1,2-Dichloroethene	4.408	96	173854	48.38	ppb	92
39) Tetrahydrofuran	4.902	42	2618	1.63	ppb	82
40) Chloroform	4.969	83	1188m	0.22	ppb	

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

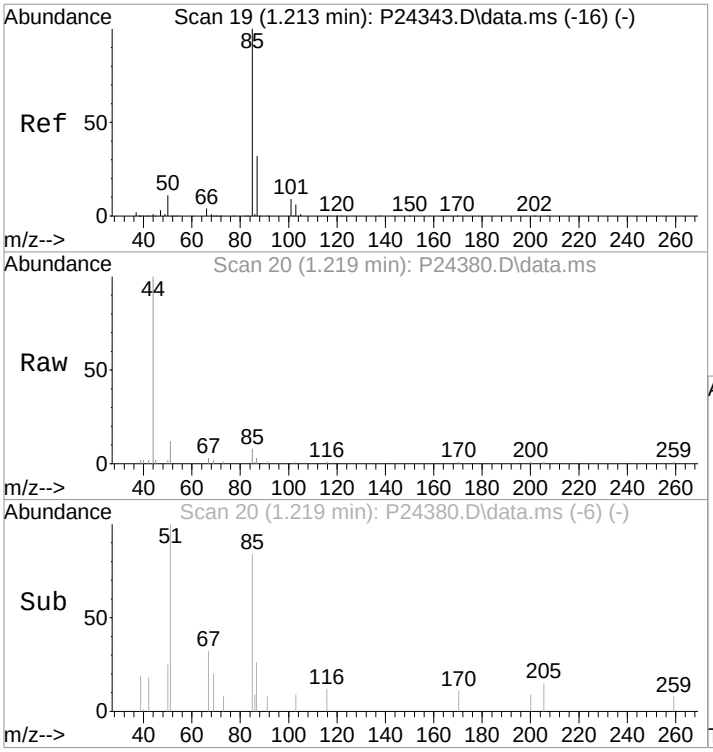
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24380.D
Acq On : 21 Feb 2019 7:52 pm
Operator : K.Ruest
Sample : R1901421-003|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 22 14:55:01 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



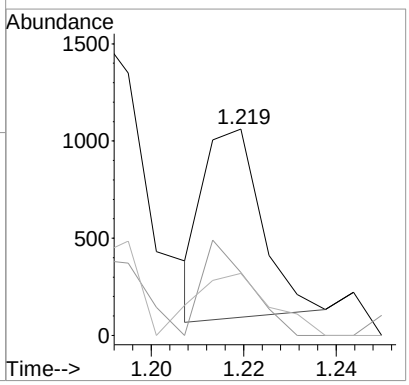
1st 02/22/19

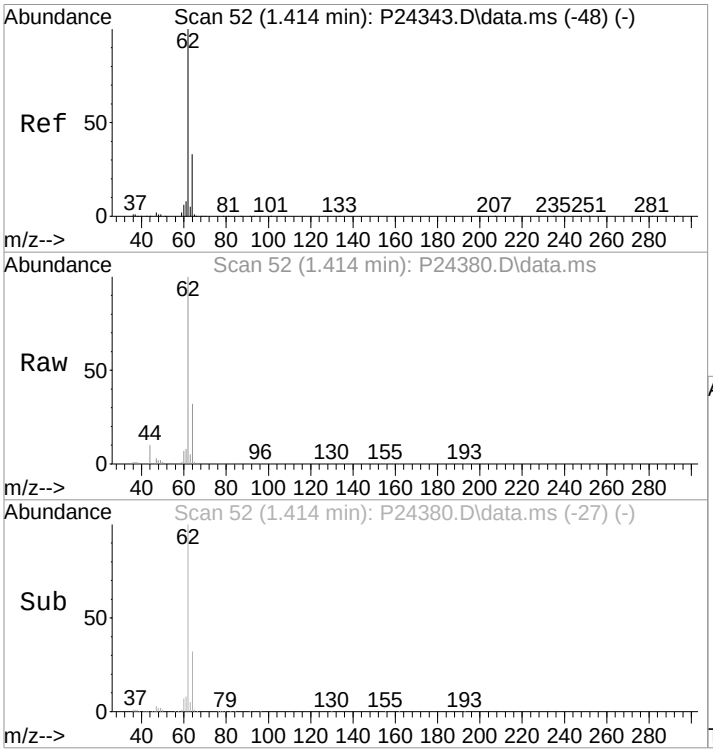


#2
Dichlorodifluoromethane
Concen: 0.23 ppb
RT: 1.219 min Scan# 20
Delta R.T. 0.012 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 85 Resp: 849

Ion	Ratio	Lower	Upper
85	100		
87	30.6	12.4	52.4
50	30.1	0.0	31.1

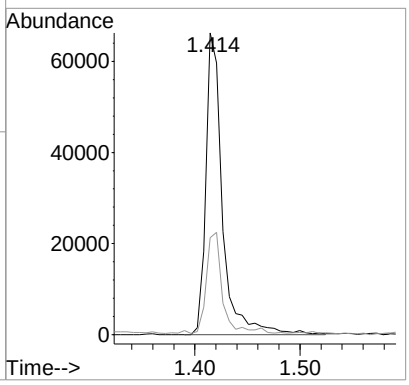


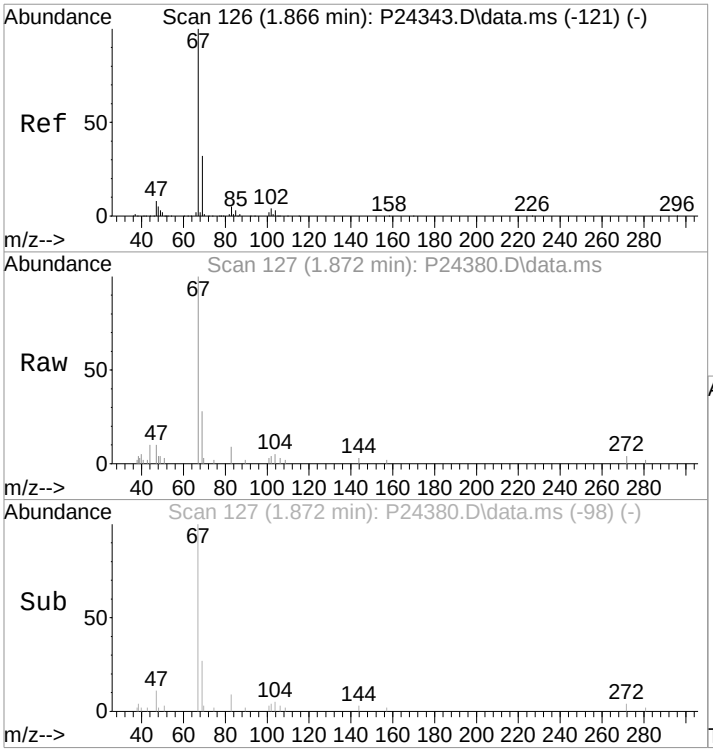


#4
Vinyl Chloride
Concen: 16.27 ppb
RT: 1.414 min Scan# 52
Delta R.T. 0.006 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 62 Resp: 73020

Ion	Ratio	Lower	Upper
62	100		
64	32.1	13.2	53.2

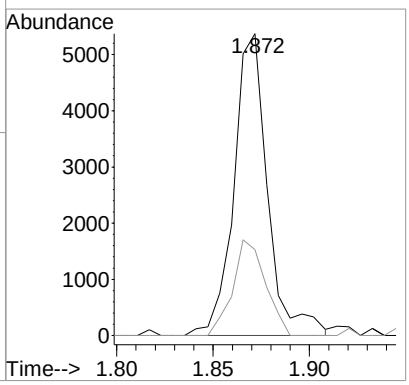


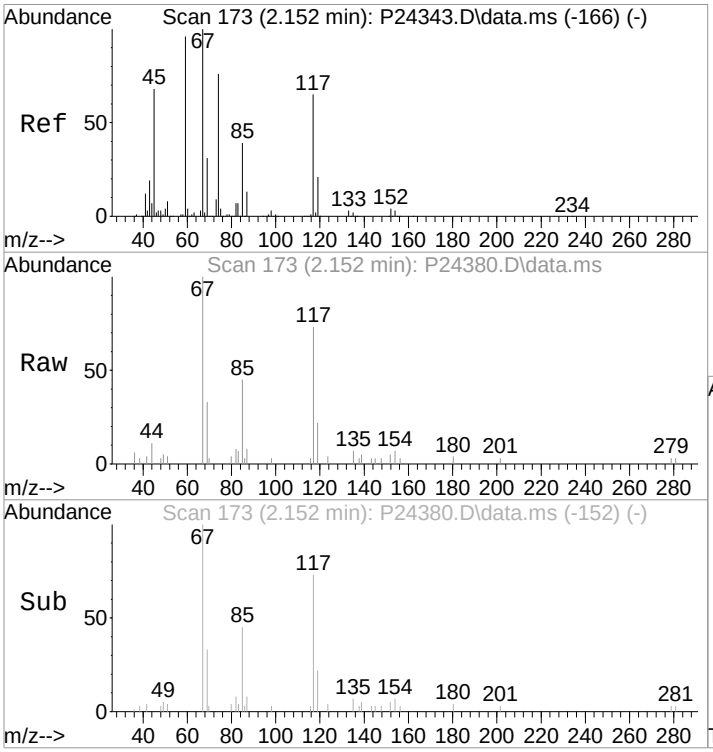


#7
Freon 21
Concen: 1.16 ppb
RT: 1.872 min Scan# 127
Delta R.T. 0.012 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 67 Resp: 6554

Ion	Ratio	Lower	Upper
67	100		
69	31.0	11.9	51.9

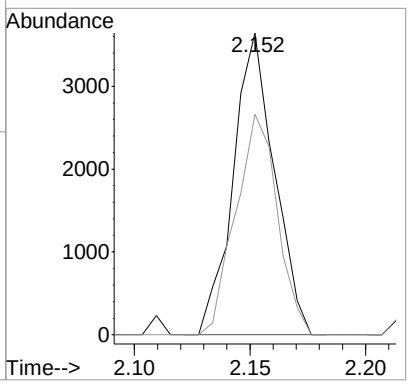


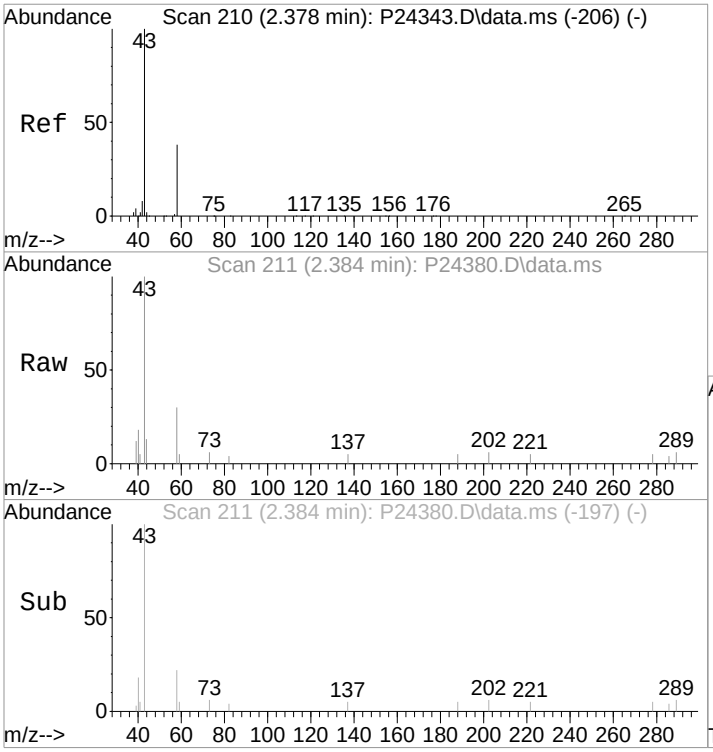


#10
Freon 123a
Concen: 1.25 ppb
RT: 2.152 min Scan# 173
Delta R.T. 0.012 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 67 Resp: 4528

Ion	Ratio	Lower	Upper
67	100		
117	73.0	45.7	85.7

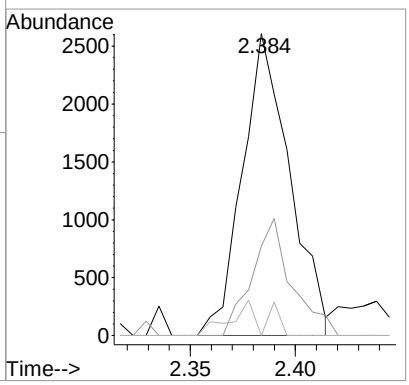


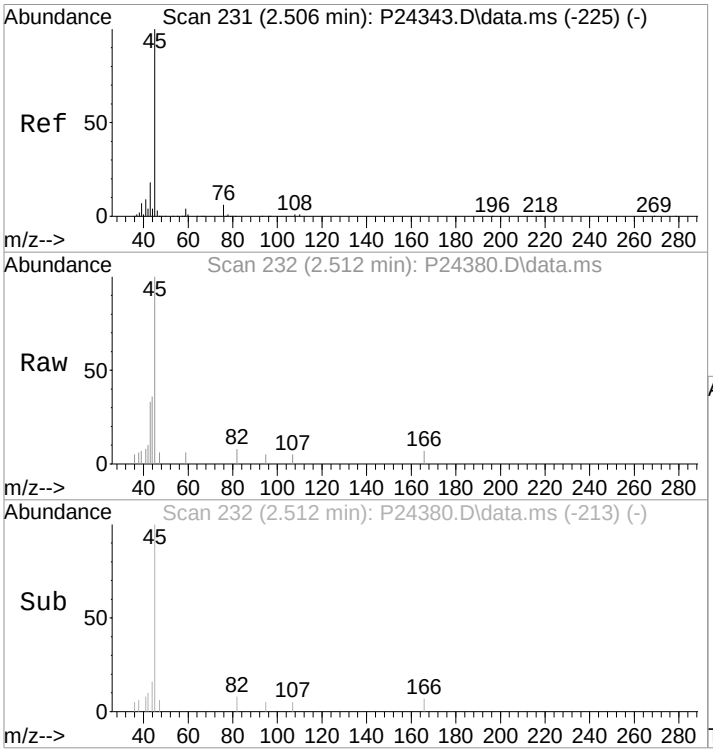


#15
Acetone
Concen: 2.76 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 43 Resp: 4087

Ion	Ratio	Lower	Upper
43	100		
58	29.6	18.1	58.1
42	0.0	0.0	27.8

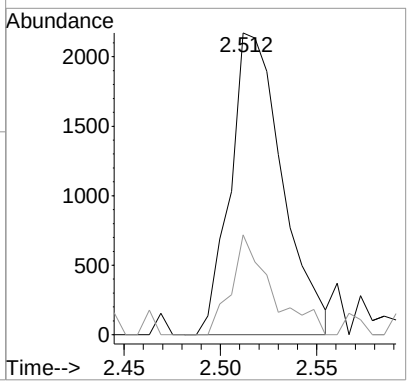


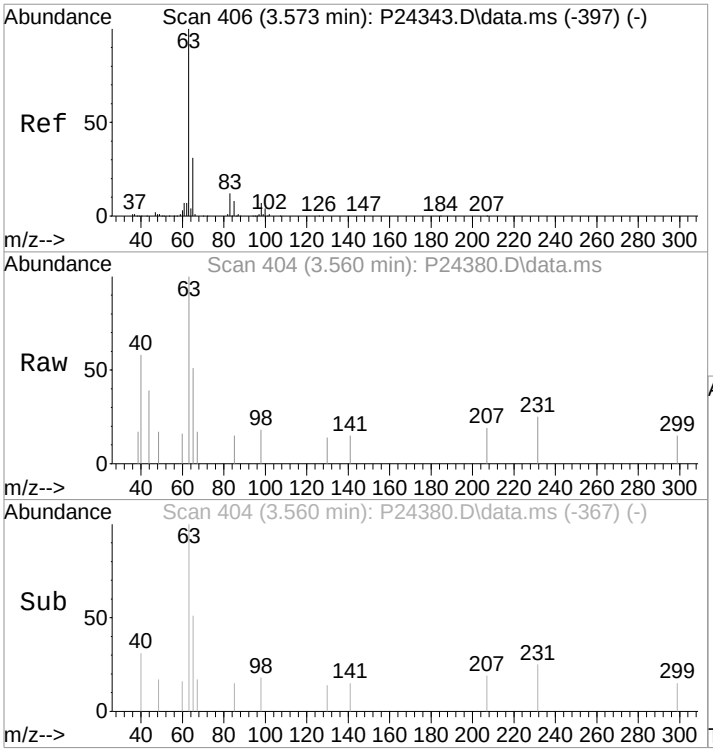


#16
2-Propanol
Concen: 10.61 ppb
RT: 2.512 min Scan# 232
Delta R.T. 0.006 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 45 Resp: 4073

Ion	Ratio	Lower	Upper
45	100		
43	33.1	0.0	38.5

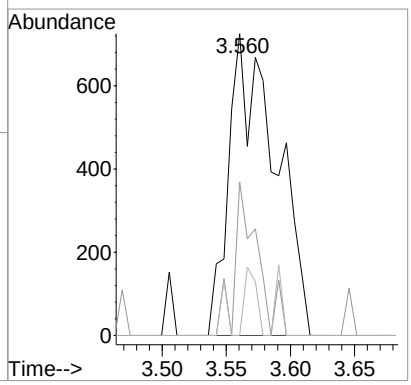


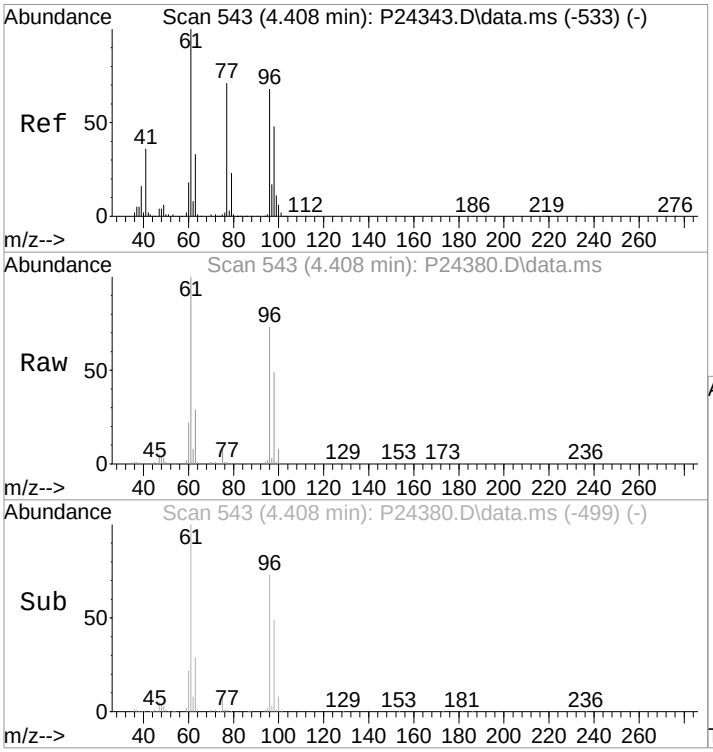


#28
1,1-Diclethane
Concen: 0.31 ppb m
RT: 3.560 min Scan# 404
Delta R.T. 0.000 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 63 Resp: 1838

Ion	Ratio	Lower	Upper
63	100		
65	50.8	11.0	51.0
83	0.0	0.0	32.1

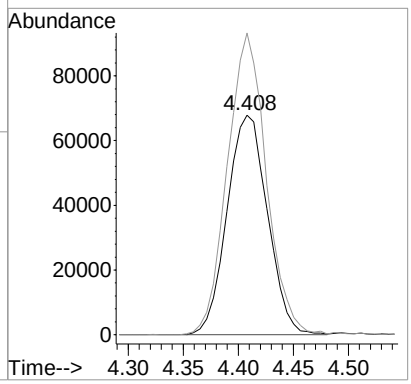


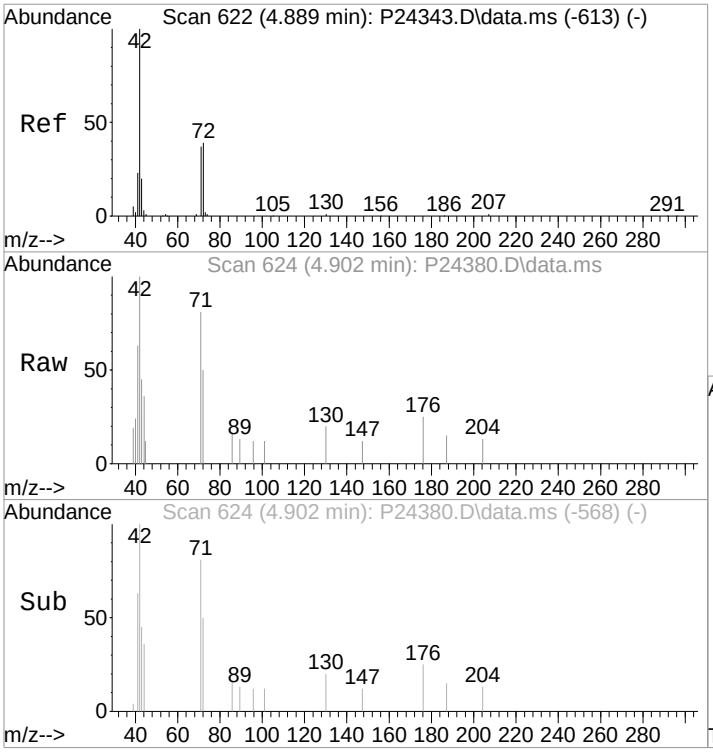


#34
cis-1,2-Dichloroethene
Concen: 48.38 ppb
RT: 4.408 min Scan# 543
Delta R.T. 0.006 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 96 Resp: 173854

Ion	Ratio	Lower	Upper
96	100		
61	137.5	128.1	168.1

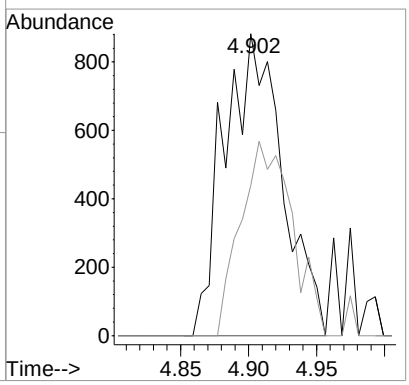


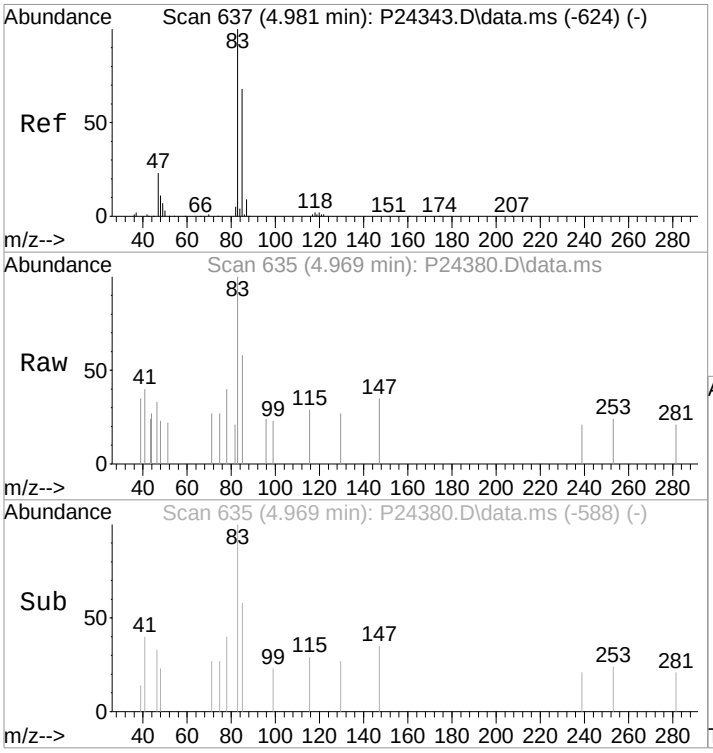


#39
Tetrahydrofuran
Concen: 1.63 ppb
RT: 4.902 min Scan# 624
Delta R.T. 0.025 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 42 Resp: 2618

Ion	Ratio	Lower	Upper
42	100		
72	49.7	18.5	58.5

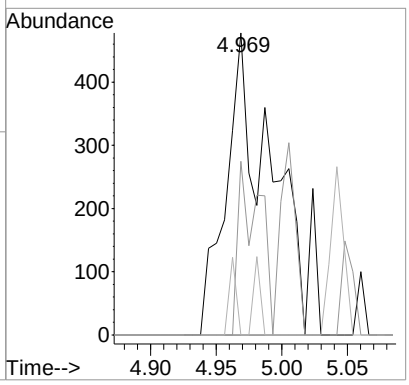




#40
Chloroform
Concen: 0.22 ppb m
RT: 4.969 min Scan# 635
Delta R.T. 0.000 min
Lab File: P24380.D
Acq: 21 Feb 2019 7:52 pm

Tgt Ion: 83 Resp: 1188

Ion	Ratio	Lower	Upper
83	100		
85	57.5	47.9	87.9
47	0.0	3.4	43.4#



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24381.D
Acq On : 21 Feb 2019 8:14 pm
Operator : K.Ruest
Sample : R1901421-004|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 22 14:56:32 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

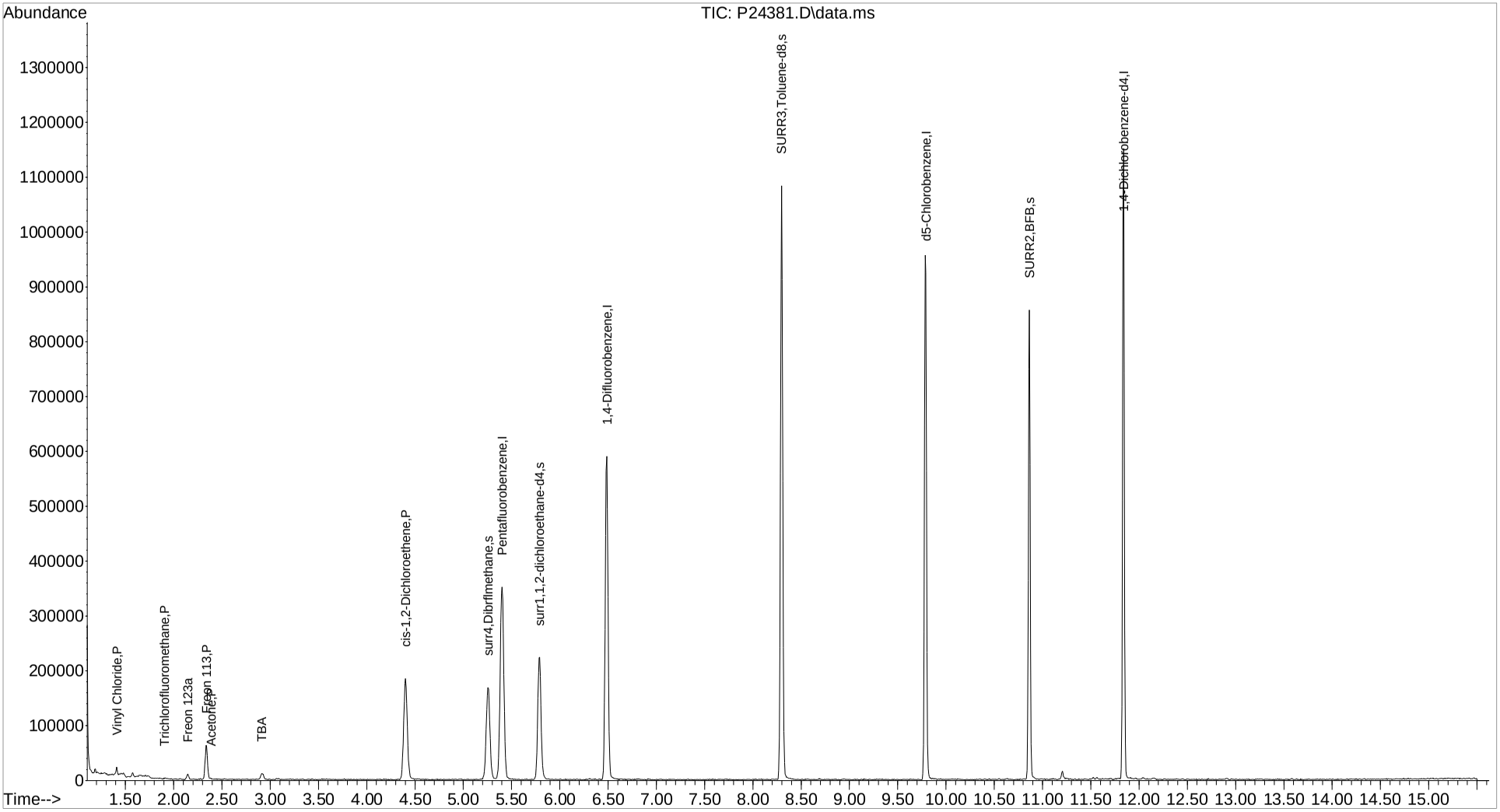
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.401	168	328235	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.487	114	524963	50.00	ppb	0.00
71) d5-Chlorobenzene	9.791	117	450334	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	236724	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.255	113	142557	49.42	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.84%			
48) surr1,1,2-dichloroetha...	5.786	65	189292	51.73	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.46%			
65) SURR3,Toluene-d8	8.297	98	677733	49.53	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.06%			
70) SURR2,BFB	10.864	95	239299	48.83	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.66%			
Target Compounds						Qvalue
4) Vinyl Chloride	1.408	62	7244	1.52	ppb	91
8) Trichlorofluoromethane	1.908	101	1026	0.22	ppb	85
10) Freon 123a	2.146	67	4196	1.09	ppb	99
14) Freon 113	2.335	101	23354	8.56	ppb	89
15) Acetone	2.384	43	1497	0.95	ppb	83
23) TBA	2.914	59	5977	9.22	ppb	70
34) cis-1,2-Dichloroethene	4.402	96	103677	27.15	ppb	85

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

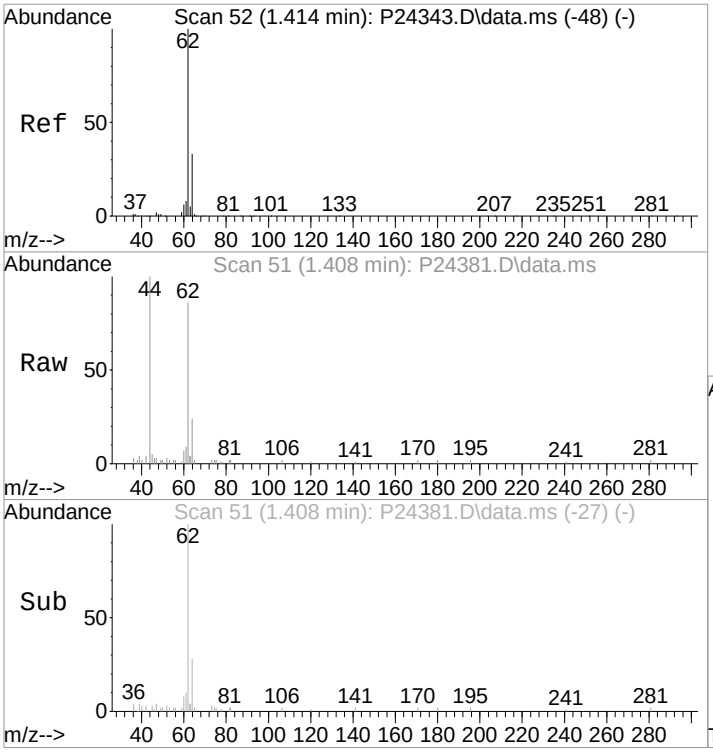
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24381.D
Acq On : 21 Feb 2019 8:14 pm
Operator : K.Ruest
Sample : R1901421-004|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 22 14:56:32 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



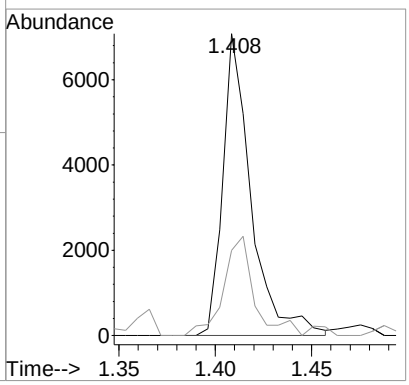
1st 02/22/19

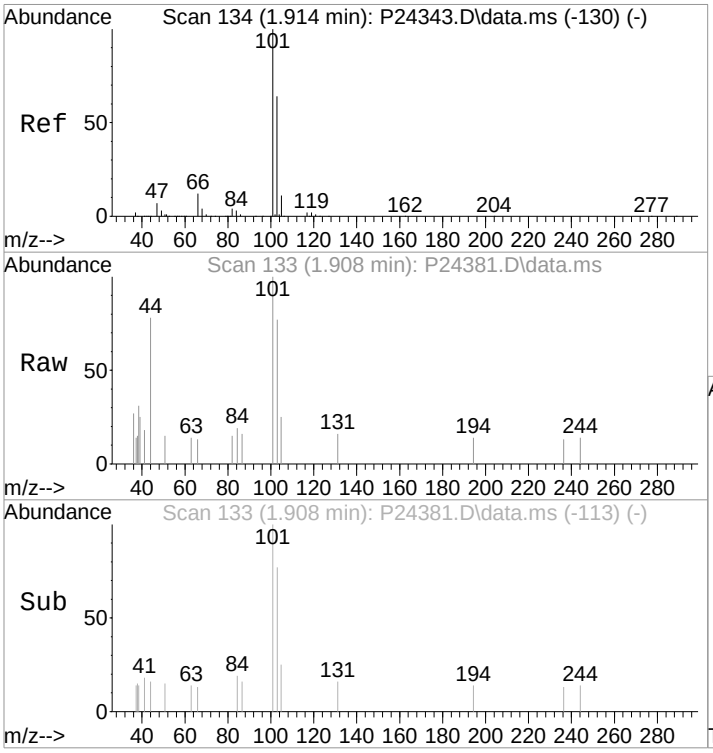


#4
Vinyl Chloride
Concen: 1.52 ppb
RT: 1.408 min Scan# 51
Delta R.T. 0.000 min
Lab File: P24381.D
Acq: 21 Feb 2019 8:14 pm

Tgt Ion: 62 Resp: 7244

Ion	Ratio	Lower	Upper
62	100		
64	28.2	13.2	53.2

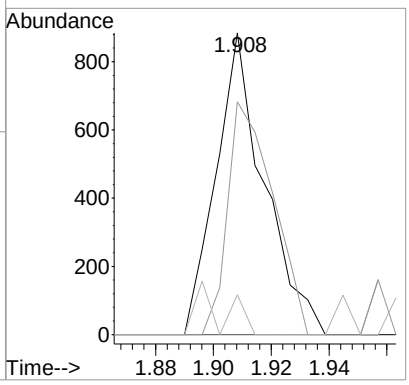


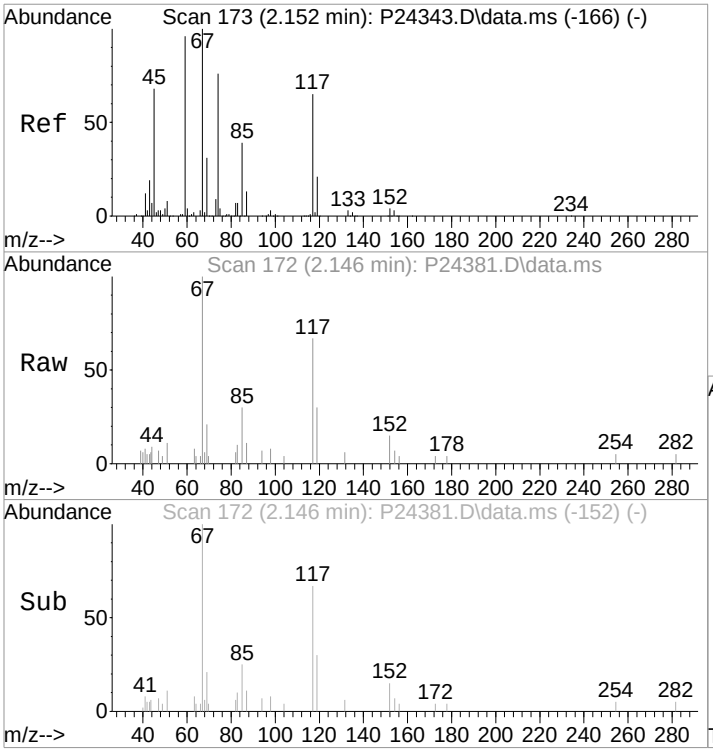


#8
Trichlorofluoromethane
Concen: 0.22 ppb
RT: 1.908 min Scan# 133
Delta R.T. 0.000 min
Lab File: P24381.D
Acq: 21 Feb 2019 8:14 pm

Tgt Ion:101 Resp: 1026

Ion	Ratio	Lower	Upper
101	100		
103	77.2	43.6	83.6
66	13.2	0.0	31.9

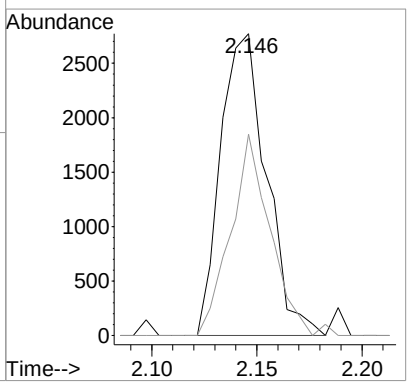


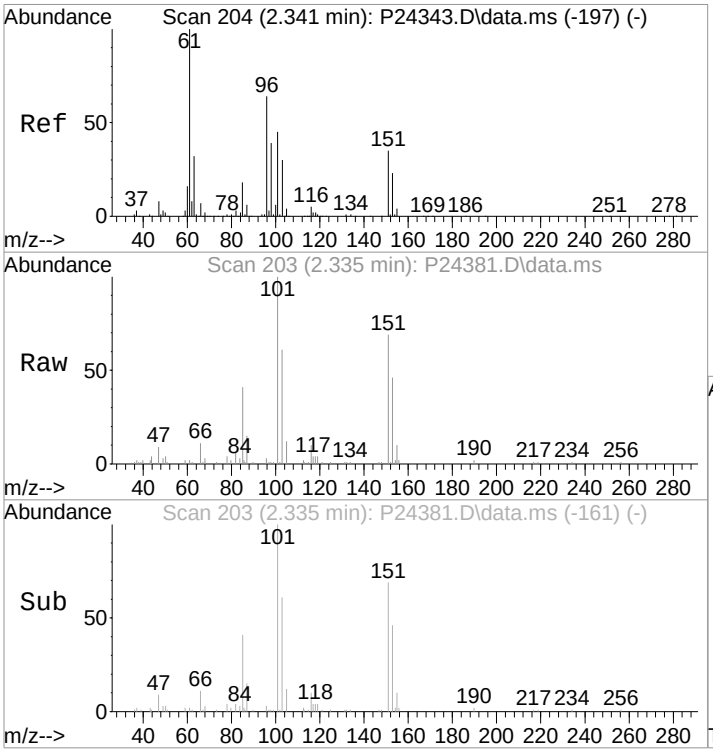


#10
Freon 123a
Concen: 1.09 ppb
RT: 2.146 min Scan# 172
Delta R.T. 0.006 min
Lab File: P24381.D
Acq: 21 Feb 2019 8:14 pm

Tgt Ion: 67 Resp: 4196

Ion	Ratio	Lower	Upper
67	100		
117	66.7	45.7	85.7

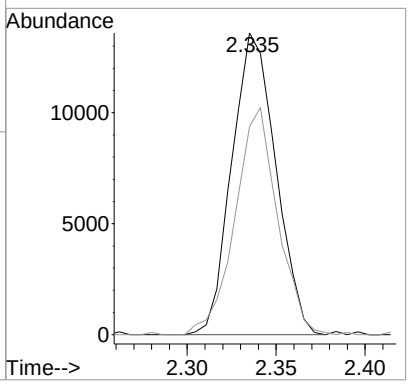


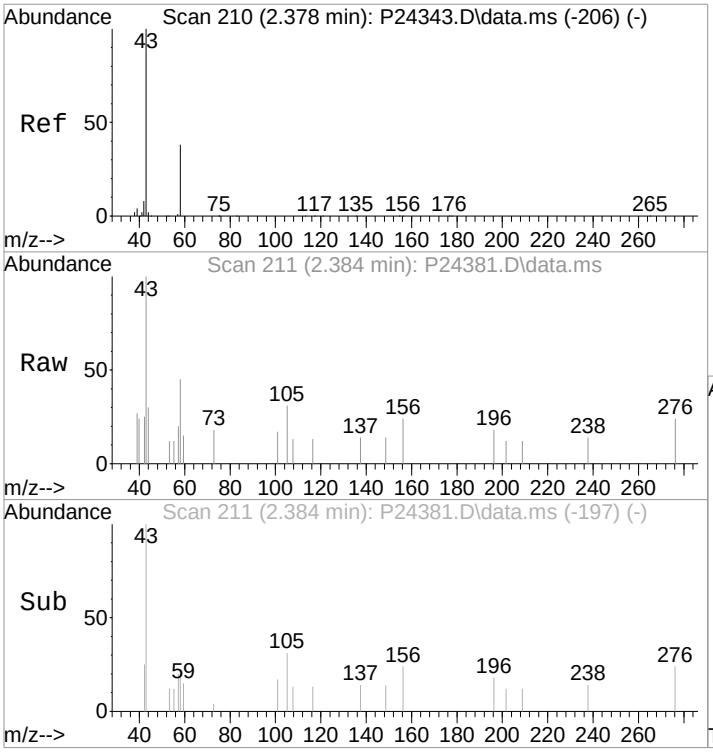


#14
Freon 113
Concen: 8.56 ppb
RT: 2.335 min Scan# 203
Delta R.T. 0.000 min
Lab File: P24381.D
Acq: 21 Feb 2019 8:14 pm

Tgt Ion:101 Resp: 23354

Ion	Ratio	Lower	Upper
101	100		
151	68.9	58.4	98.4

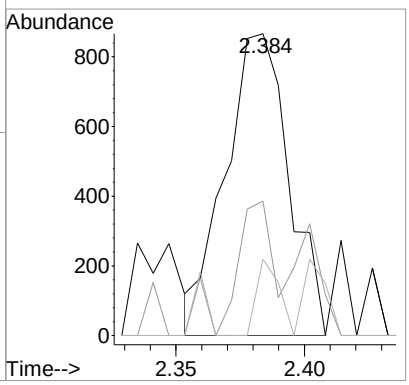


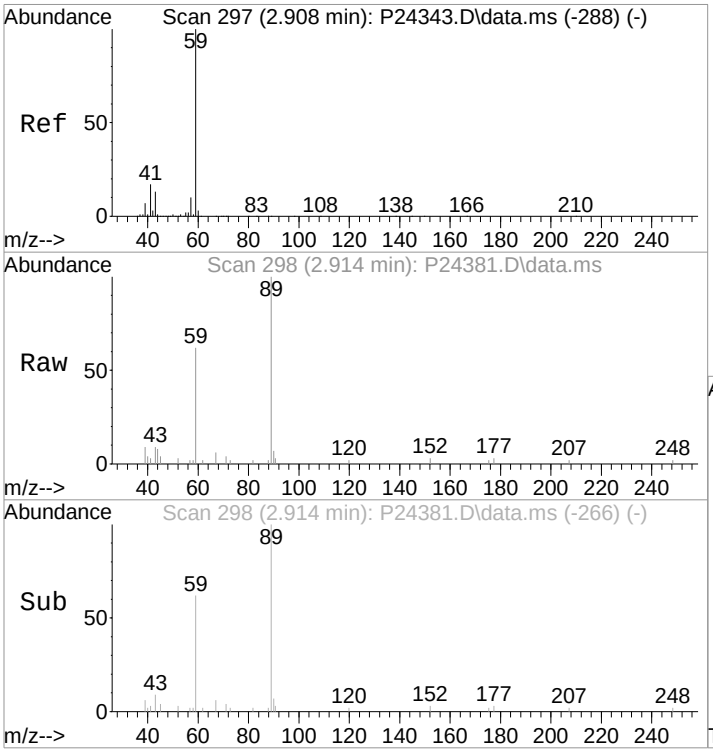


#15
Acetone
Concen: 0.95 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24381.D
Acq: 21 Feb 2019 8:14 pm

Tgt Ion: 43 Resp: 1497

Ion	Ratio	Lower	Upper
43	100		
58	44.5	18.1	58.1
42	25.3	0.0	27.8

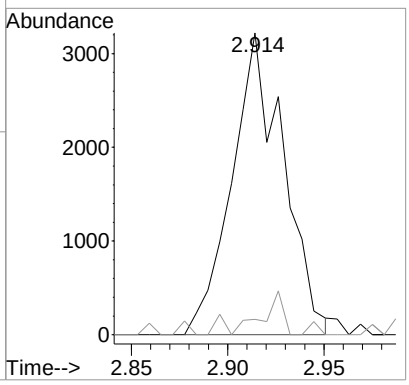


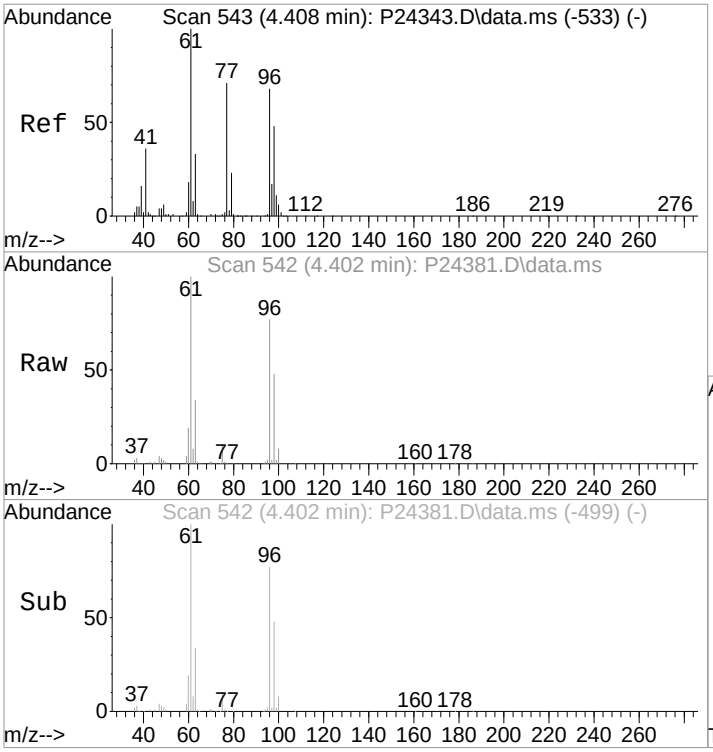


#23
TBA
Concen: 9.22 ppb
RT: 2.914 min Scan# 298
Delta R.T. 0.006 min
Lab File: P24381.D
Acq: 21 Feb 2019 8:14 pm

Tgt Ion: 59 Resp: 5977

Ion	Ratio	Lower	Upper
59	100		
41	5.1	0.0	38.2

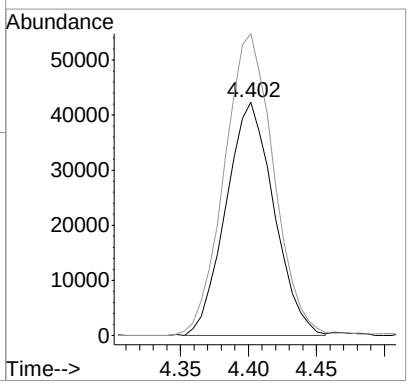




#34
cis-1,2-Dichloroethene
Concen: 27.15 ppb
RT: 4.402 min Scan# 542
Delta R.T. 0.000 min
Lab File: P24381.D
Acq: 21 Feb 2019 8:14 pm

Tgt Ion: 96 Resp: 103677

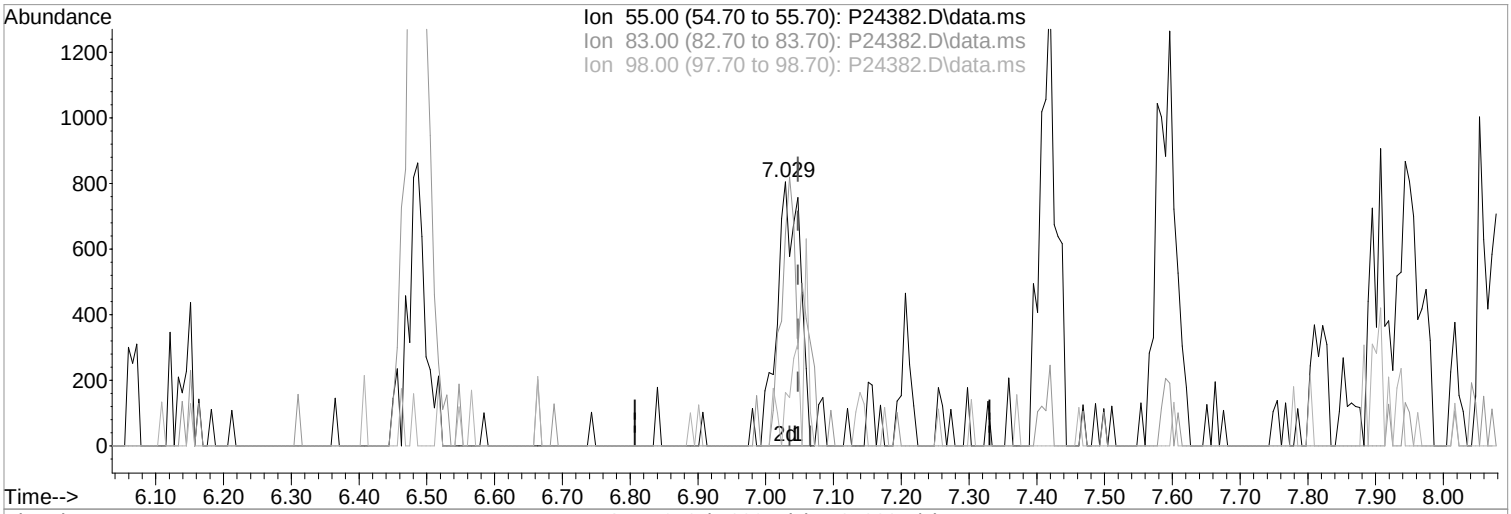
Ion	Ratio	Lower	Upper
96	100		
61	129.4	128.1	168.1

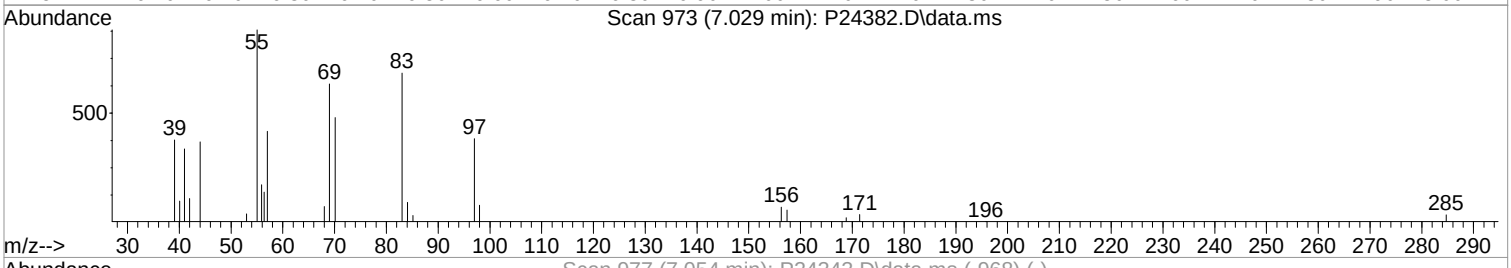


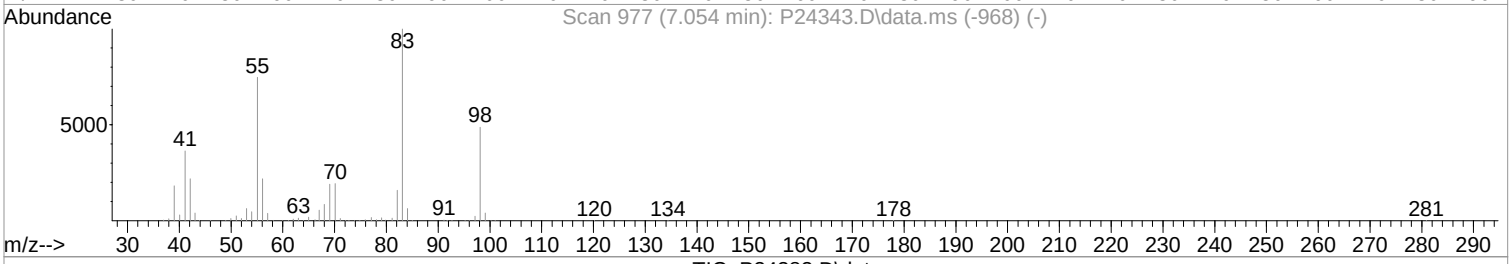
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 22 09:13:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24382.D\data.ms

(55) Methylcyclohexane (P)

7.029min (-0.018) 0.42 ppb m

response 1901

Ion	Exp%	Act%
55.00	100	100
83.00	133.10	80.37#
98.00	65.00	20.25#
0.00	0.00	0.00

Manual Integration:

After

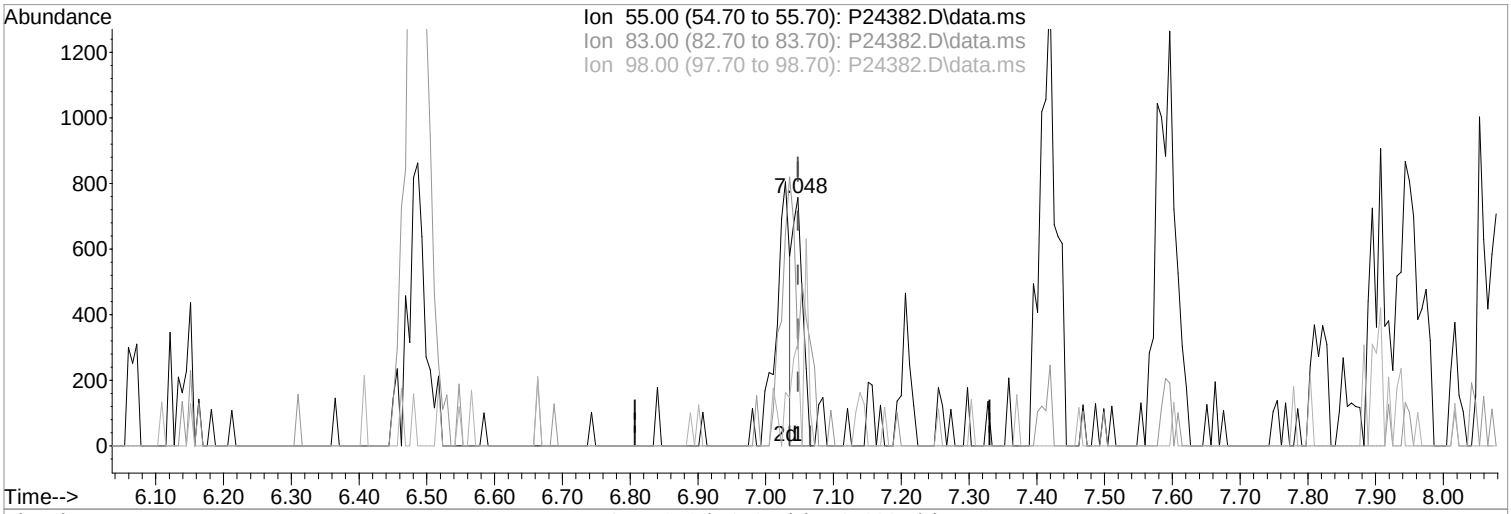
Split Peak

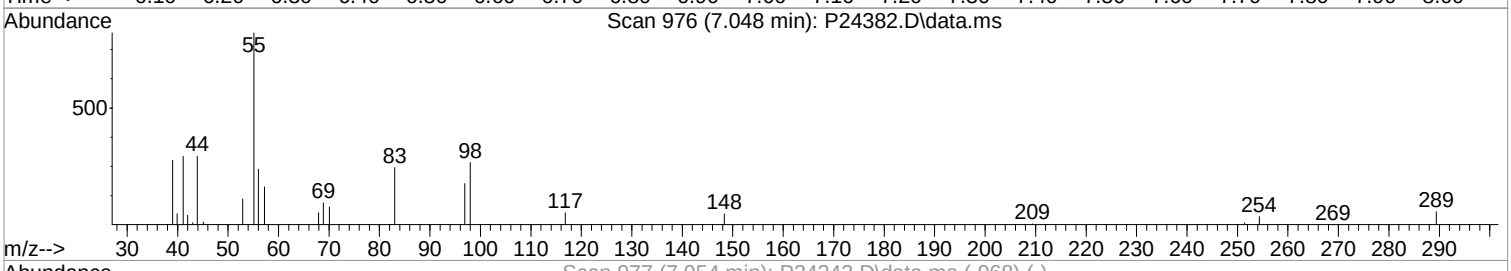
02/22/19

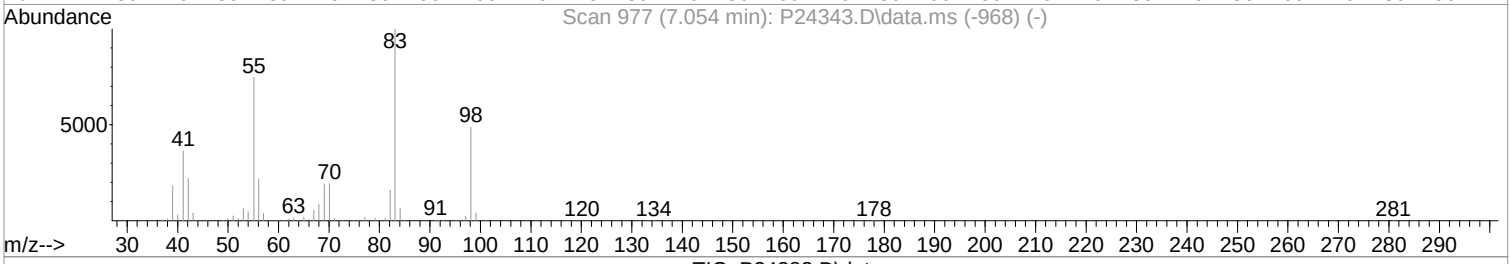
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 22 09:13:19 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24382.D\data.ms

(55) Methylcyclohexane (P)

7.048min (+0.000) 0.17 ppb

response 783

Ion	Exp%	Act%
55.00	100	100
83.00	133.10	39.10#
98.00	65.00	41.48#
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

high NT's

Quant Time: Feb 22 14:59:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

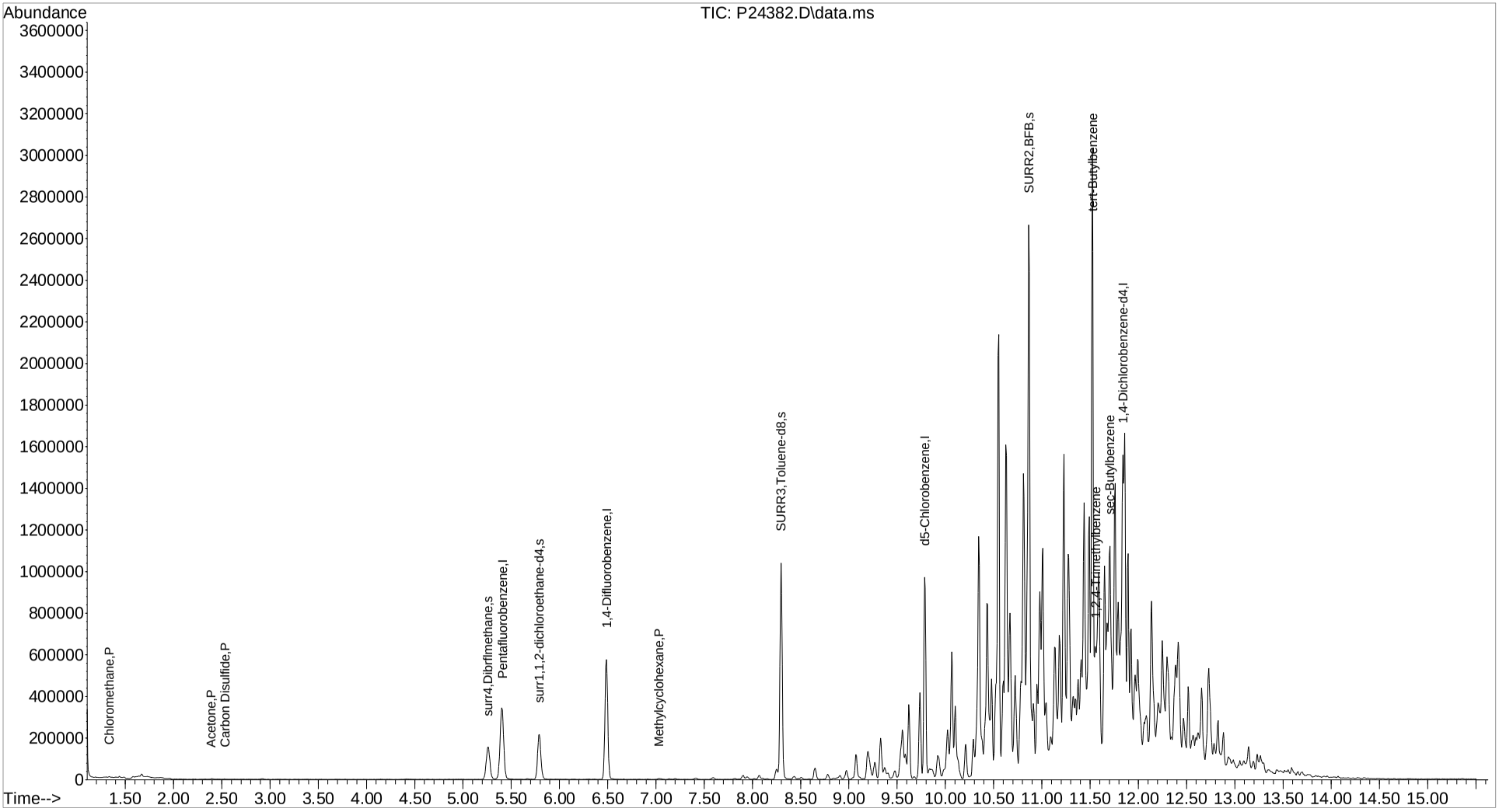
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.408	168	318117	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	508098	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	443202	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	225186	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	131244	47.01	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 94.02%				
48) surr1,1,2-dichloroetha...	5.792	65	181838	51.34	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.68%				
65) SURR3,Toluene-d8	8.297	98	654670	49.43	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.86%				
70) SURR2,BFB	10.864	95	244470	51.54	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 103.08%				
Target Compounds							Qvalue
3) Chloromethane	1.335	50	1300	0.25	ppb		77
15) Acetone	2.384	43	1198	0.79	ppb	#	73
18) Carbon Disulfide	2.530	76	2055	0.23	ppb		90
55) Methylcyclohexane	7.029	55	1901m	0.42	ppb		
100) tert-Butylbenzene	11.522	119	2892	0.27	ppb		78
101) 1,2,4-Trimethylbenzene	11.559	105	2604	0.20	ppb	#	49
103) sec-Butylbenzene	11.705	105	8764	0.57	ppb		83

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

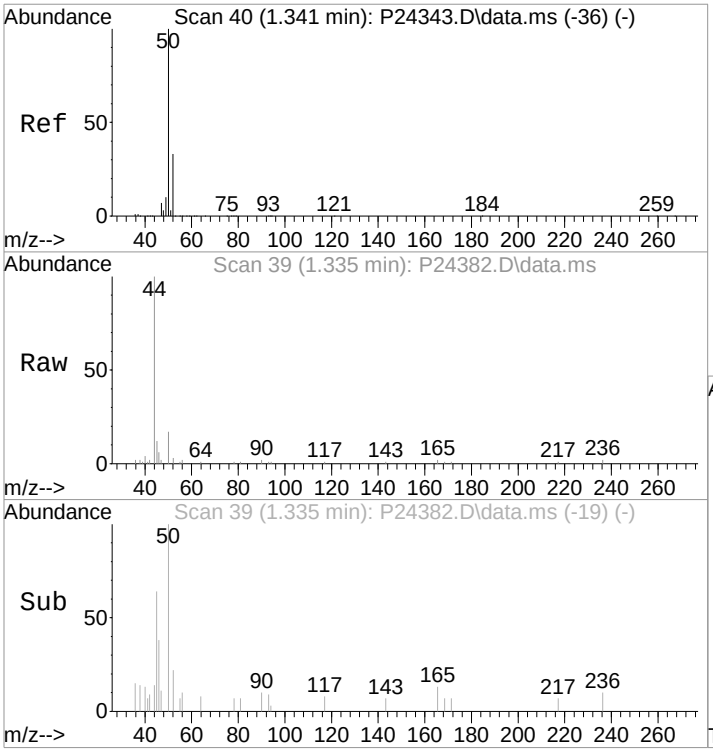
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 22 14:59:06 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



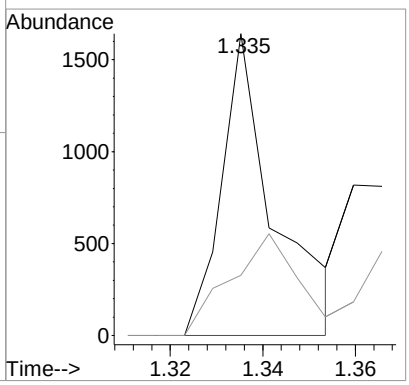
1st 02/22/19

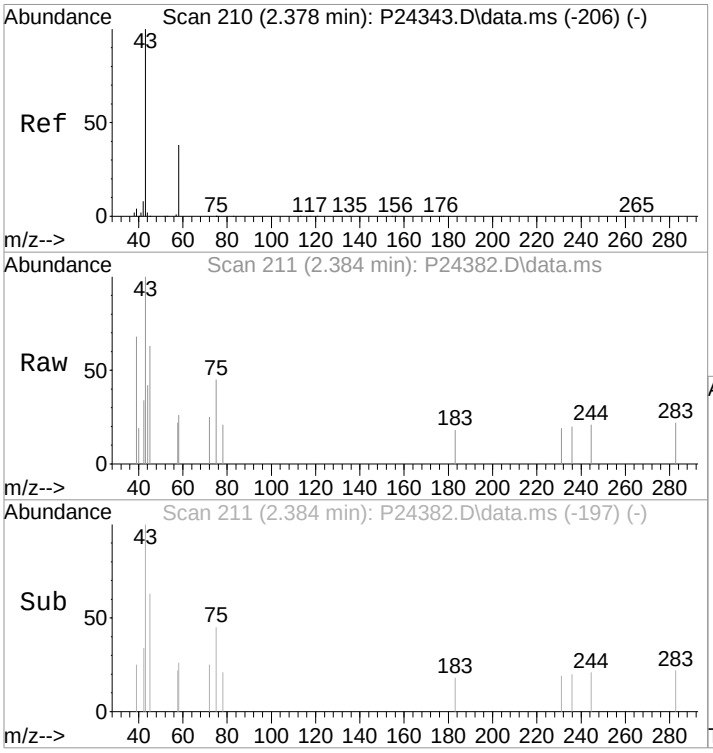


#3
Chloromethane
Concen: 0.25 ppb
RT: 1.335 min Scan# 39
Delta R.T. 0.006 min
Lab File: P24382.D
Acq: 21 Feb 2019 8:36 pm

Tgt Ion: 50 Resp: 1300

Ion	Ratio	Lower	Upper
50	100		
52	19.9	13.0	53.0

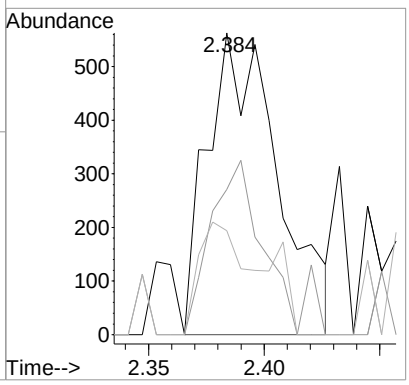


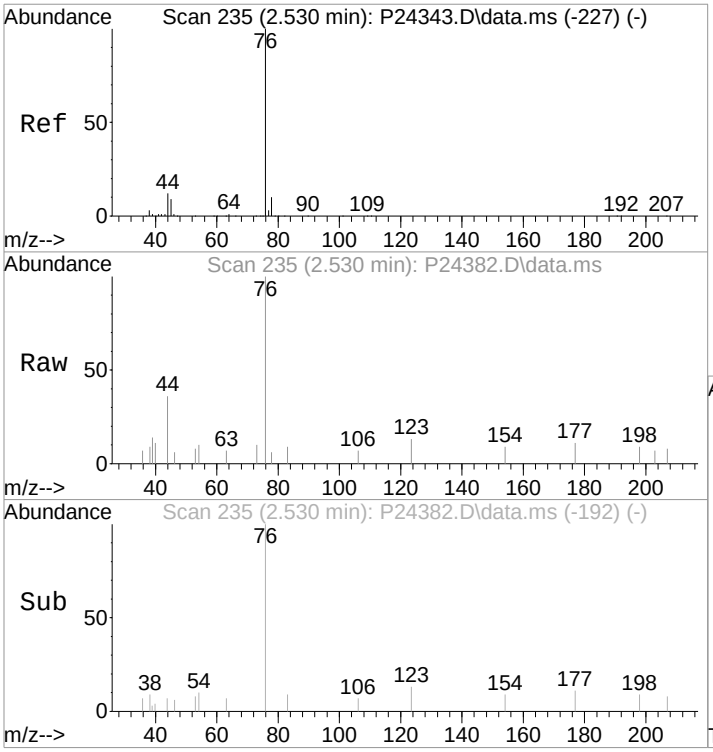


#15
Acetone
Concen: 0.79 ppb
RT: 2.384 min Scan# 211
Delta R.T. 0.012 min
Lab File: P24382.D
Acq: 21 Feb 2019 8:36 pm

Tgt Ion: 43 Resp: 1198

Ion	Ratio	Lower	Upper
43	100		
58	48.1	18.1	58.1
42	34.5	0.0	27.8#

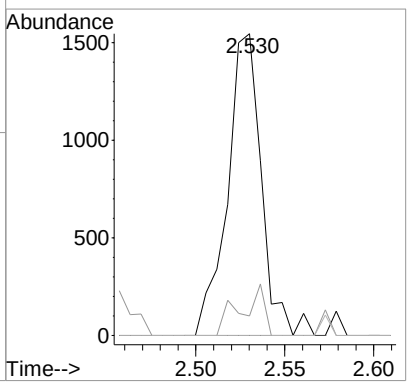


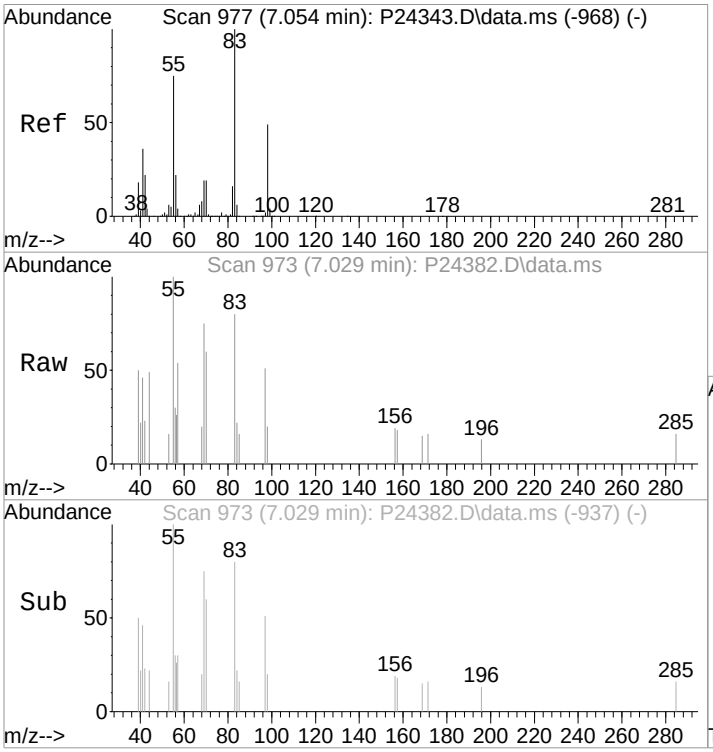


#18
Carbon Disulfide
Concen: 0.23 ppb
RT: 2.530 min Scan# 235
Delta R.T. 0.006 min
Lab File: P24382.D
Acq: 21 Feb 2019 8:36 pm

Tgt Ion: 76 Resp: 2055

Ion	Ratio	Lower	Upper
76	100		
78	6.5	0.0	30.1
77	0.0	0.0	22.9

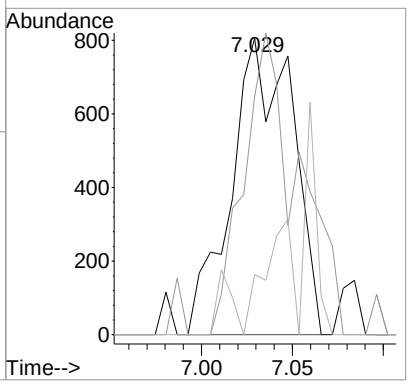


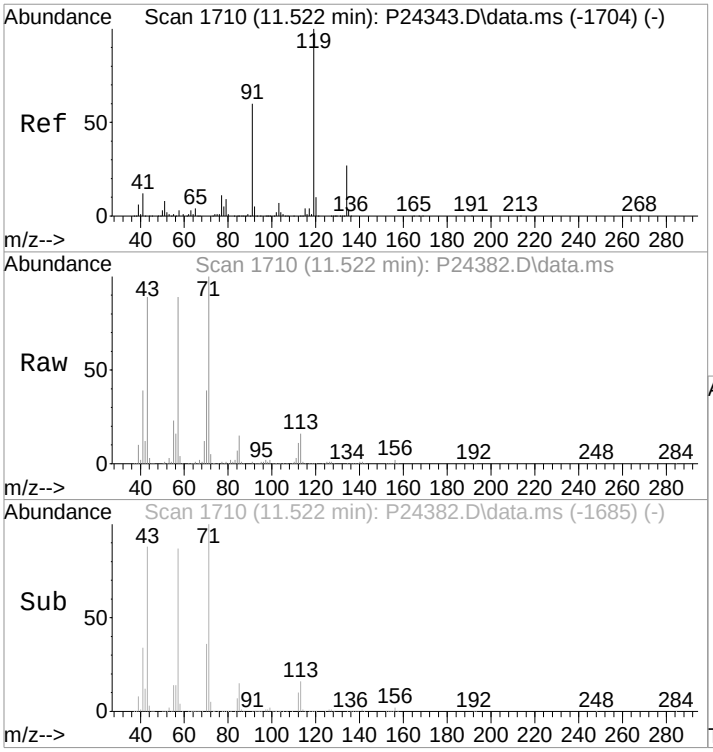


#55
Methylcyclohexane
Concen: 0.42 ppb m
RT: 7.029 min Scan# 973
Delta R.T. -0.018 min
Lab File: P24382.D
Acq: 21 Feb 2019 8:36 pm

Tgt Ion: 55 Resp: 1901

Ion	Ratio	Lower	Upper
55	100		
83	80.4	113.1	153.1#
98	20.2	45.0	85.0#

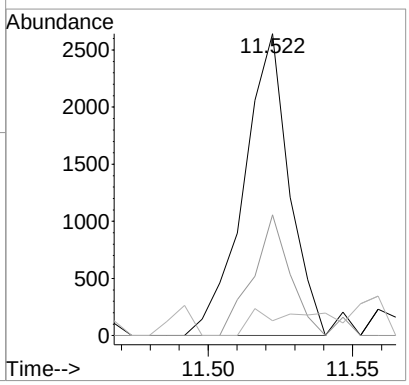


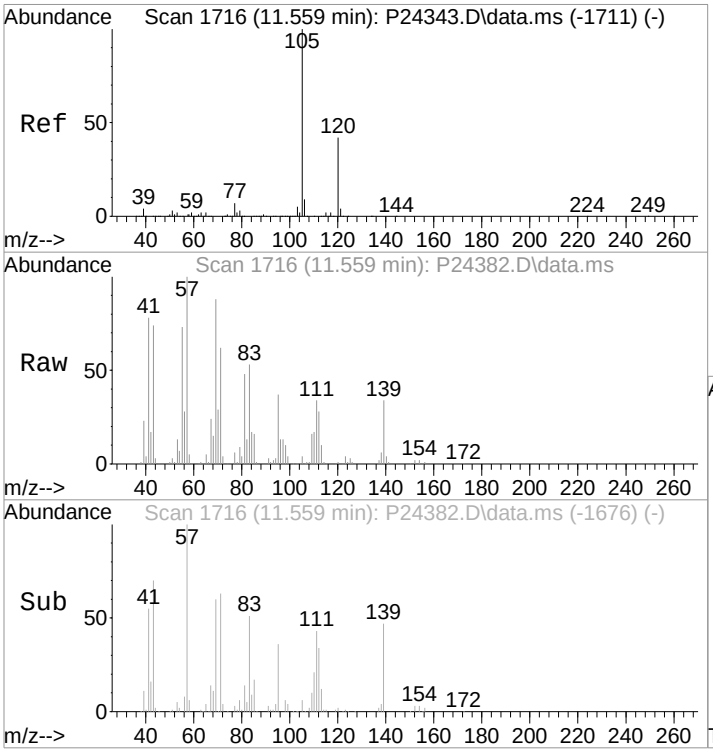


#100
tert-Butylbenzene
Concen: 0.27 ppb
RT: 11.522 min Scan# 1710
Delta R.T. 0.000 min
Lab File: P24382.D
Acq: 21 Feb 2019 8:36 pm

Tgt Ion:119 Resp: 2892

Ion	Ratio	Lower	Upper
119	100		
134	40.0	7.0	47.0
103	10.6	0.0	26.6

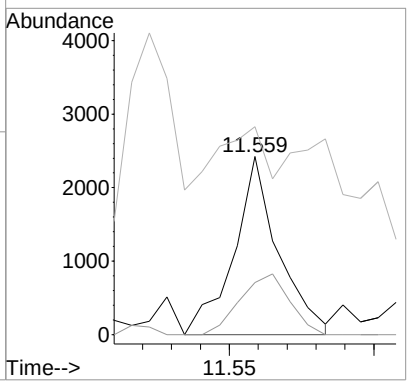


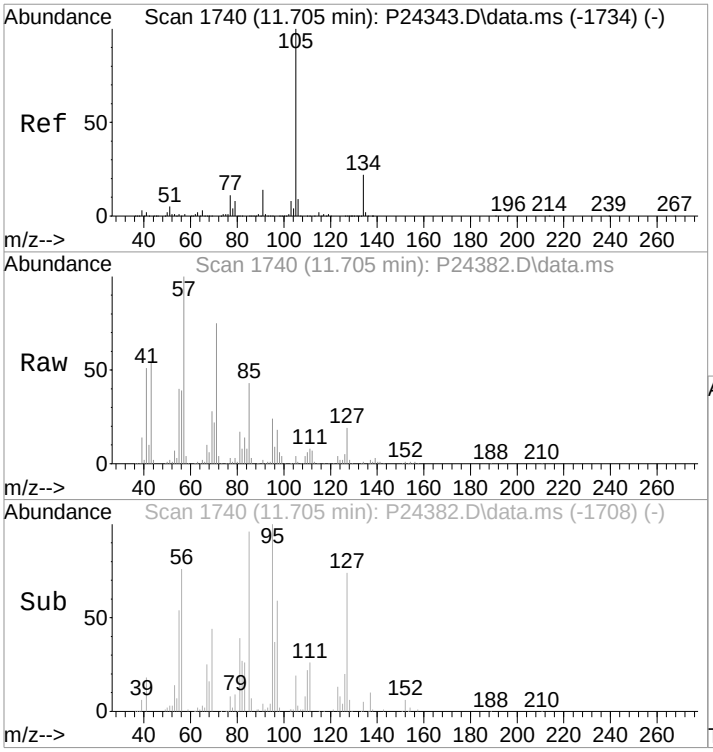


#101
1,2,4-Trimethylbenzene
Concen: 0.20 ppb
RT: 11.559 min Scan# 1716
Delta R.T. 0.000 min
Lab File: P24382.D
Acq: 21 Feb 2019 8:36 pm

Tgt Ion:105 Resp: 2604

Ion	Ratio	Lower	Upper
105	100		
120	29.4	26.4	66.4
65	116.6	0.0	24.1#

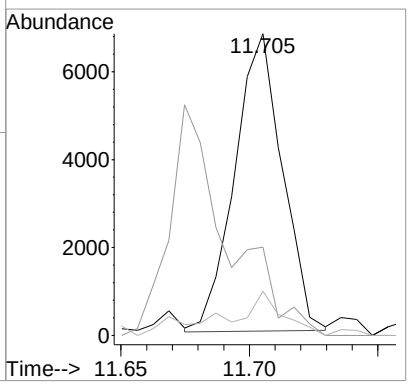




#103
sec-Butylbenzene
Concen: 0.57 ppb
RT: 11.705 min Scan# 1740
Delta R.T. 0.000 min
Lab File: P24382.D
Acq: 21 Feb 2019 8:36 pm

Tgt Ion:105 Resp: 8764

Ion	Ratio	Lower	Upper
105	100		
134	29.3	1.8	41.8
103	14.6	0.0	27.9



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24382.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.261	672	683	695	rBV2	157017	427803	10.25%	0.615%
2	5.402	695	706	717	rVV2	343061	883043	21.16%	1.269%
3	5.792	761	770	779	rBV2	216599	519203	12.44%	0.746%
4	6.487	876	884	892	rBV	575962	1156210	27.70%	1.662%
5	8.249	1167	1173	1176	rBV	49904	92400	2.21%	0.133%
6	8.297	1176	1181	1190	rVB	1037039	1685521	40.38%	2.423%
7	8.651	1233	1239	1246	rVB2	55213	98014	2.35%	0.141%
8	8.974	1286	1292	1298	rVB	42601	70803	1.70%	0.102%
9	9.072	1298	1308	1318	rBV	119238	215045	5.15%	0.309%
10	9.200	1323	1329	1336	rBV3	131676	312878	7.50%	0.450%
11	9.267	1336	1340	1345	rVB3	75225	124602	2.99%	0.179%
12	9.328	1345	1350	1354	rBV	191793	299279	7.17%	0.430%
13	9.474	1369	1374	1378	rBV2	33923	56176	1.35%	0.081%
14	9.553	1378	1387	1391	rVV2	233545	534279	12.80%	0.768%
15	9.584	1391	1392	1395	rVV2	116823	136121	3.26%	0.196%
16	9.620	1395	1398	1404	rVB	355675	489850	11.74%	0.704%
17	9.736	1411	1417	1421	rBV	412895	588783	14.11%	0.846%
18	9.785	1421	1425	1431	rVV	945925	1324516	31.73%	1.904%
19	9.919	1442	1447	1454	rBV4	102221	210581	5.05%	0.303%
20	10.023	1459	1464	1467	rVV2	213953	358835	8.60%	0.516%
21	10.065	1467	1471	1474	rVV	582947	829959	19.88%	1.193%
22	10.102	1474	1477	1490	rVB2	349399	631026	15.12%	0.907%
23	10.212	1490	1495	1501	rBV2	165592	263744	6.32%	0.379%
24	10.291	1503	1508	1510	rBV2	178510	241459	5.78%	0.347%
25	10.346	1510	1517	1525	rVV3	1104417	1935578	46.37%	2.782%
26	10.431	1525	1531	1536	rVV3	773053	1438094	34.45%	2.067%
27	10.480	1536	1539	1542	rVV2	402013	488525	11.70%	0.702%
28	10.553	1542	1551	1555	rVV	2051465	3172521	76.01%	4.560%
29	10.602	1555	1559	1560	rVV2	378604	499050	11.96%	0.717%
30	10.626	1560	1563	1567	rVV	1510353	2320445	55.59%	3.335%
31	10.669	1567	1570	1575	rVV2	695312	1065034	25.52%	1.531%
32	10.724	1575	1579	1584	rVB2	422809	664808	15.93%	0.956%
33	10.785	1584	1589	1590	rBV2	394731	562452	13.48%	0.808%
34	10.809	1590	1593	1597	rVV2	1349652	2095877	50.21%	3.013%
35	10.864	1597	1602	1608	rVV3	2538006	4174015	100.00%	6.000%
36	10.913	1608	1610	1613	rVB	241339	255801	6.13%	0.368%
37	10.949	1613	1616	1618	rBV	334905	403923	9.68%	0.581%
38	10.980	1618	1621	1623	rVV	762422	1069718	25.63%	1.538%
39	11.010	1623	1626	1629	rVV2	967946	1344003	32.20%	1.932%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

40	11.047	1629	1632	1636	rVB2	229045	303615	7.27%	0.436%
41	11.089	1637	1639	1642	rBV2	54019	59282	1.42%	0.085%
42	11.132	1642	1646	1651	rVV2	477521	875777	20.98%	1.259%
43	11.181	1651	1654	1658	rVV2	528557	828345	19.85%	1.191%
44	11.230	1658	1662	1666	rVV	1392761	1970766	47.22%	2.833%
45	11.272	1666	1669	1675	rVV3	906499	1662259	39.82%	2.389%
46	11.327	1675	1678	1680	rVV3	218058	342383	8.20%	0.492%
47	11.376	1683	1686	1688	rVV	293089	397714	9.53%	0.572%
48	11.406	1688	1691	1693	rVV	385637	561140	13.44%	0.807%
49	11.437	1693	1696	1700	rVV4	1134639	1656816	39.69%	2.381%
50	11.492	1701	1705	1707	rVV	1062931	1489274	35.68%	2.141%
51	11.522	1707	1710	1714	rVV	2826746	3507359	84.03%	5.041%
52	11.553	1714	1715	1717	rVV2	431183	456466	10.94%	0.656%
53	11.589	1717	1721	1726	rVB3	824848	1523296	36.49%	2.190%
54	11.650	1726	1731	1733	rBV2	855492	1142992	27.38%	1.643%
55	11.675	1733	1735	1737	rVV2	528958	717451	17.19%	1.031%
56	11.705	1737	1740	1744	rVV4	893414	1464492	35.09%	2.105%
57	11.760	1744	1749	1752	rVV2	1190029	1863425	44.64%	2.678%
58	11.791	1752	1754	1757	rVV2	615440	878651	21.05%	1.263%
59	11.839	1758	1762	1763	rVV	1317815	1726009	41.35%	2.481%
60	11.858	1763	1765	1768	rVV	1419519	1651615	39.57%	2.374%
61	11.894	1768	1771	1773	rVV	836342	964004	23.10%	1.386%
62	11.925	1773	1776	1780	rVV3	470068	600627	14.39%	0.863%
63	11.967	1780	1783	1785	rVV3	244601	350450	8.40%	0.504%
64	11.992	1785	1787	1795	rVB2	410122	754648	18.08%	1.085%
65	12.059	1795	1798	1799	rBV2	108809	107122	2.57%	0.154%
66	12.138	1806	1811	1818	rBV3	676891	1196765	28.67%	1.720%
67	12.205	1818	1822	1826	rVV5	197665	445076	10.66%	0.640%
68	12.248	1826	1829	1834	rVV	502138	874282	20.95%	1.257%
69	12.297	1834	1837	1843	rVV4	431166	877443	21.02%	1.261%
70	12.388	1846	1852	1854	rVV4	401013	830627	19.90%	1.194%
71	12.412	1854	1856	1862	rVV3	517360	827638	19.83%	1.190%
72	12.467	1862	1865	1870	rVV5	158067	237973	5.70%	0.342%
73	12.516	1870	1873	1877	rVV2	314874	393374	9.42%	0.565%
74	12.571	1877	1882	1884	rVV5	86456	160053	3.83%	0.230%
75	12.595	1884	1886	1888	rVV2	81080	104798	2.51%	0.151%
76	12.620	1888	1890	1892	rVV2	106822	138432	3.32%	0.199%
77	12.656	1892	1896	1902	rVB5	344353	535791	12.84%	0.770%
78	12.729	1902	1908	1915	rBV4	438783	903841	21.65%	1.299%
79	12.784	1915	1917	1920	rVV3	76080	94523	2.26%	0.136%
80	12.827	1920	1924	1929	rVV5	192793	274755	6.58%	0.395%
81	12.882	1930	1933	1937	rVB2	157552	195927	4.69%	0.282%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

82	12.937	1938	1942	1947	rBV6	39557	77151	1.85%	0.111%
83	13.052	1956	1961	1964	rBV6	35628	51460	1.23%	0.074%
84	13.144	1972	1976	1980	rVB3	101912	146799	3.52%	0.211%
85	13.193	1980	1984	1987	rVB4	39015	51271	1.23%	0.074%
86	13.229	1987	1990	1993	rBV	72565	94928	2.27%	0.136%
87	13.266	1993	1996	2000	rVB5	39492	45822	1.10%	0.066%
88	13.351	2006	2010	2021	rVB10	20122	54220	1.30%	0.078%
89	13.589	2046	2049	2057	rVB5	36882	62730	1.50%	0.090%

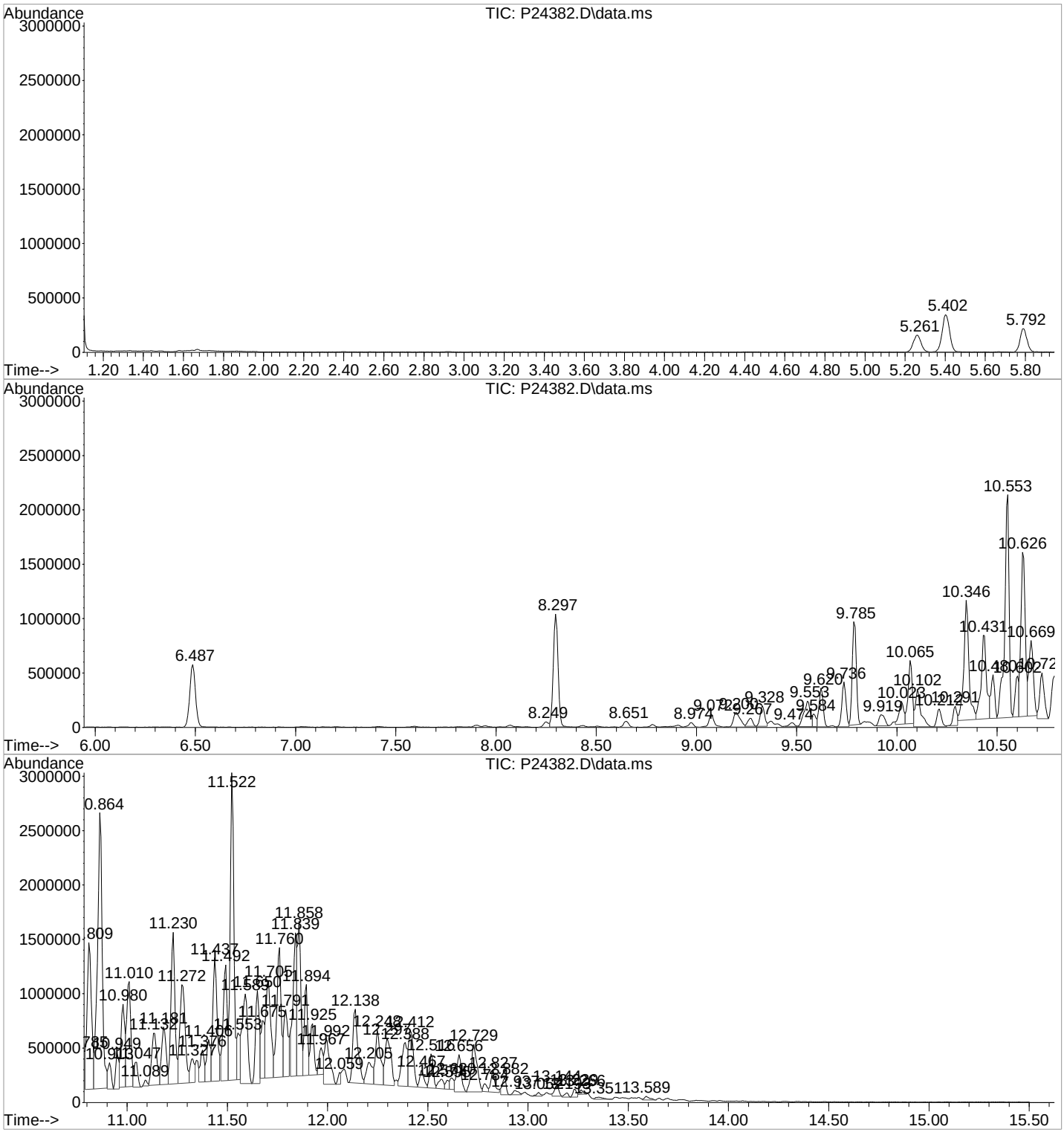
Sum of corrected areas: 69571631

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

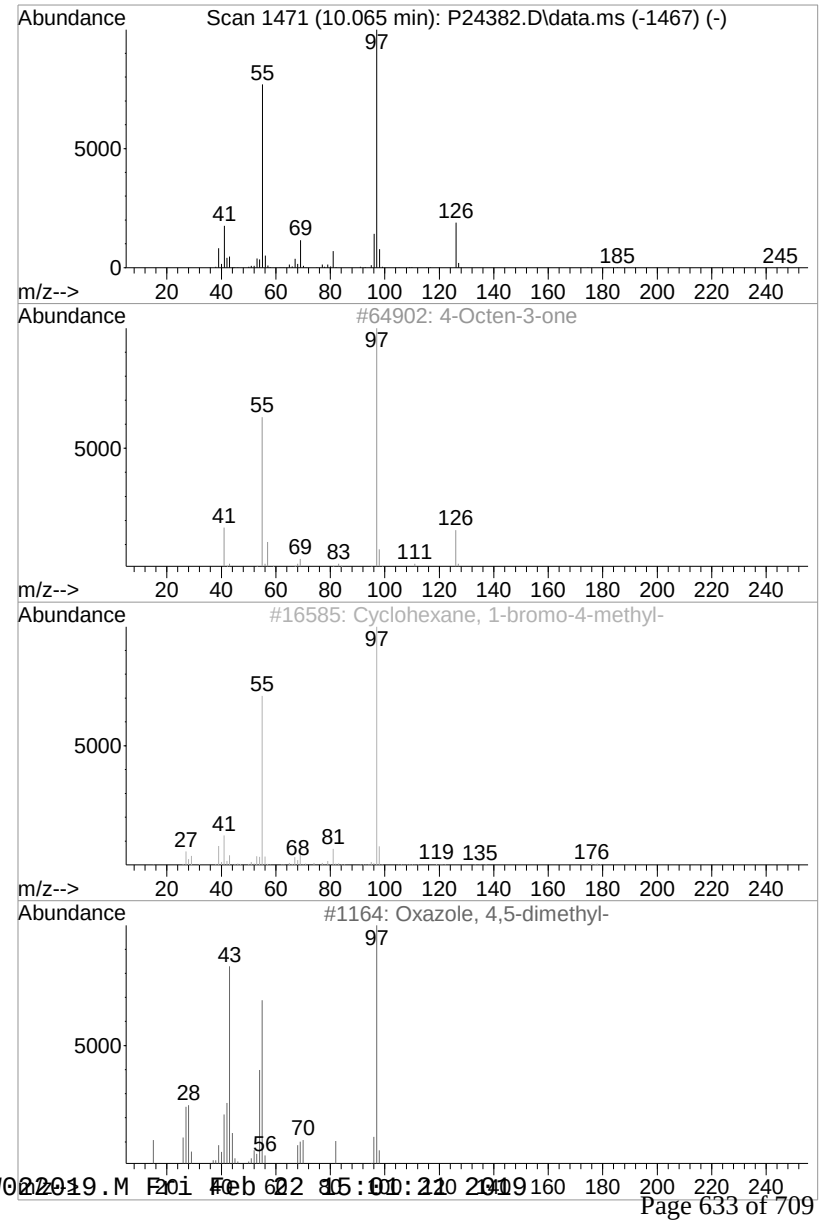
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

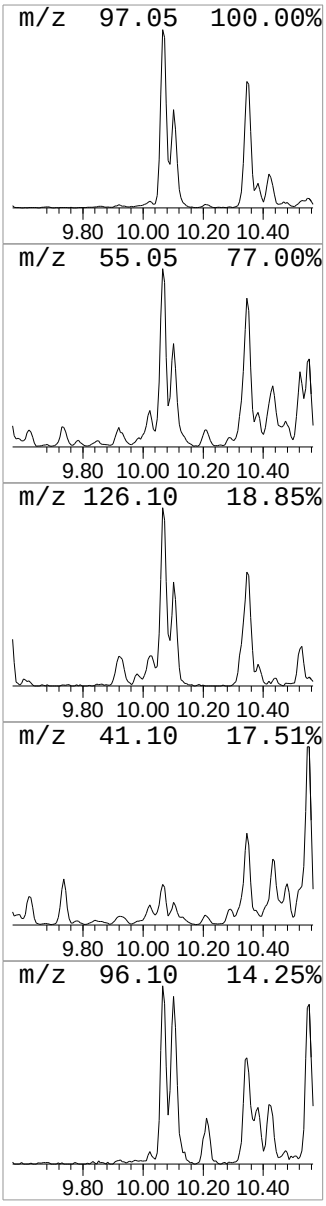
****

Peak Number 1 unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.065	31.33 ppb	829959	d5-Chlorobenzene	9.785

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Octen-3-one	126	C8H14O	014129-48-7	64
2	Cyclohexane, 1-bromo-4-methyl-	176	C7H13Br	006294-40-2	64
3	Oxazole, 4,5-dimethyl-	97	C5H7NO	020662-83-3	64
4	Propanedinitrile, cyclohexyl(2-m...	244	C16H24N2	074764-55-9	59
5	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	004926-78-7	59





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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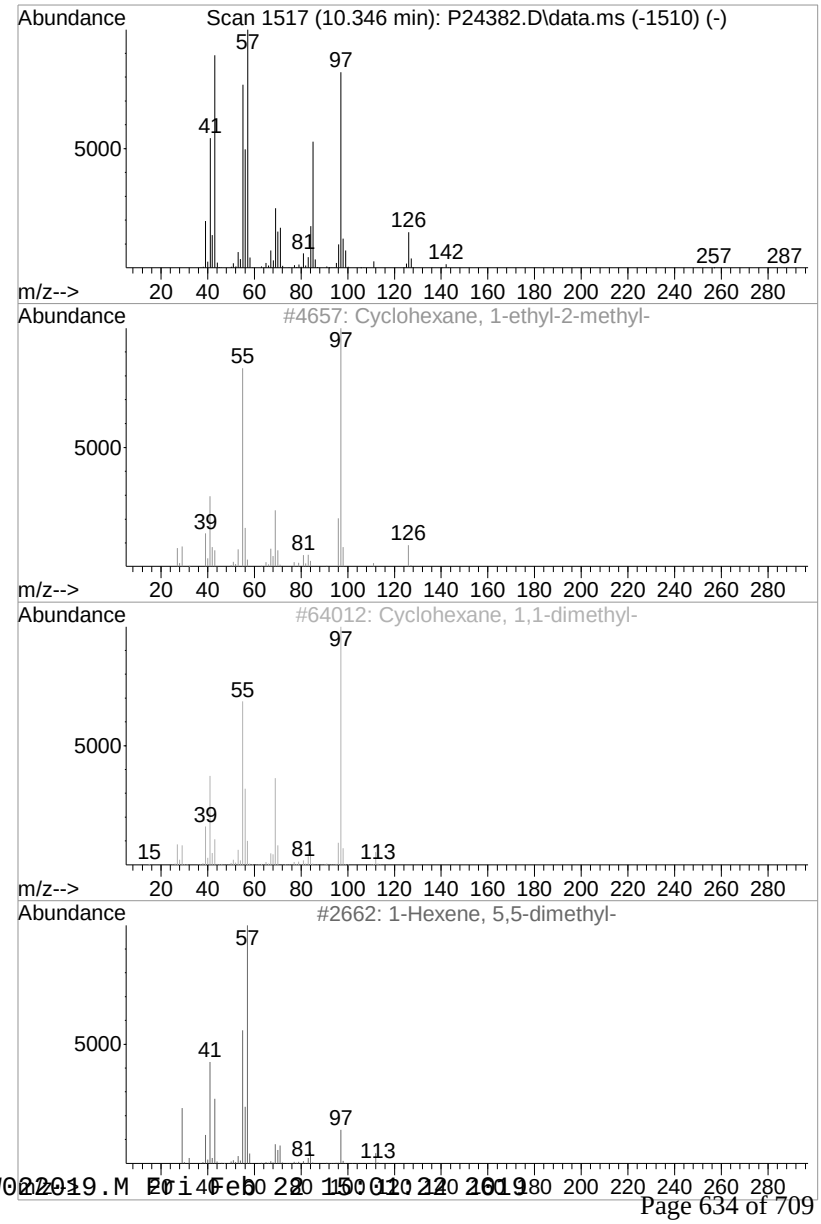
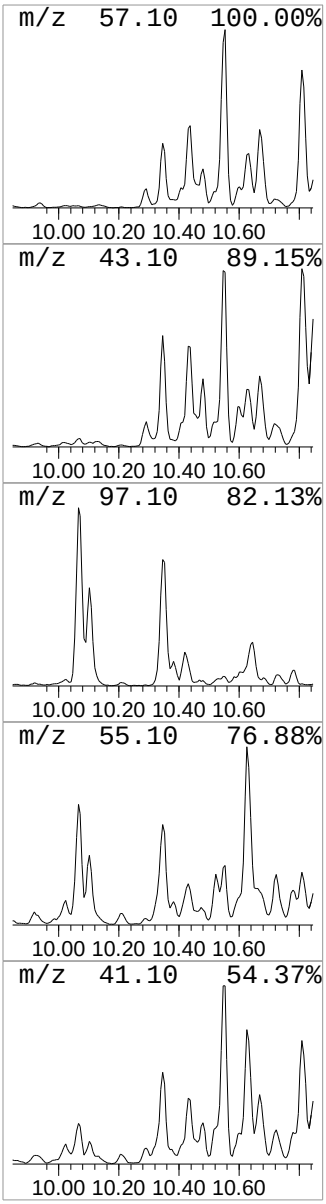
Peak Number 2 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.346	73.07 ppb	1935580	d5-Chlorobenzene	9.785

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-ethyl-2-methyl-	126	C9H18	003728-54-9	49
2	Cyclohexane, 1,1-dimethyl-	112	C8H16	000590-66-9	47
3	1-Hexene, 5,5-dimethyl-	112	C8H16	007116-86-1	47
4	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	46
5	Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-78-8	46





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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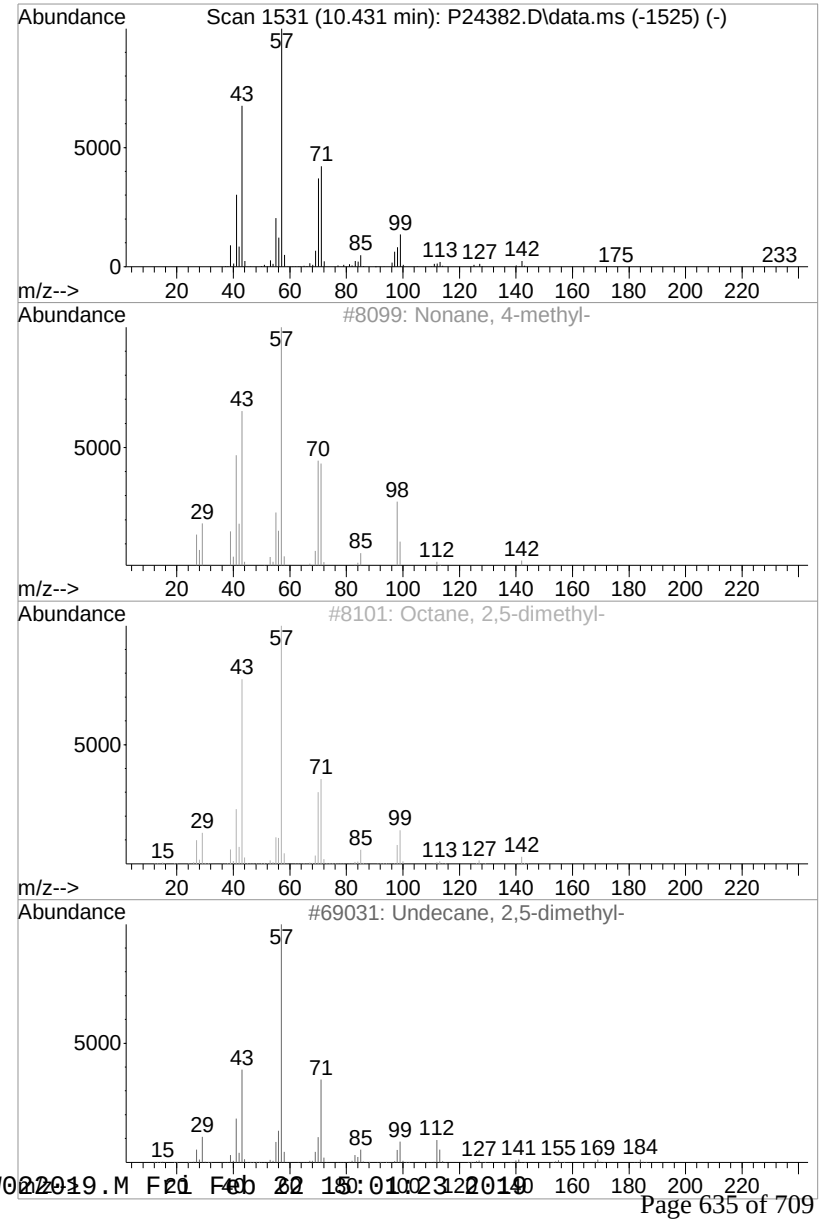
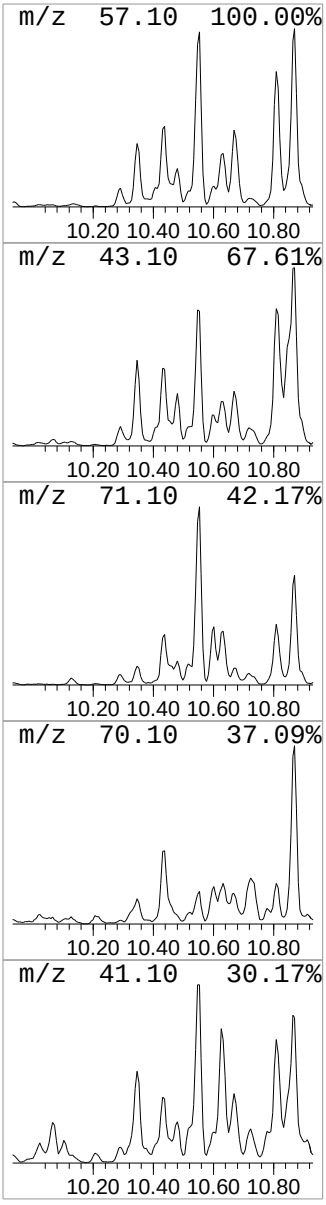
Peak Number 3 Nonane, 4-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.431	54.29 ppb	1438090	d5-Chlorobenzene	9.785

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonane, 4-methyl-	142	C10H22	017301-94-9	90
2	Octane, 2,5-dimethyl-	142	C10H22	015869-89-3	81
3	Undecane, 2,5-dimethyl-	184	C13H28	017301-22-3	64
4	Heptane, 2,3,4-trimethyl-	142	C10H22	052896-95-4	64
5	Nonane, 4-methyl-	142	C10H22	017301-94-9	58





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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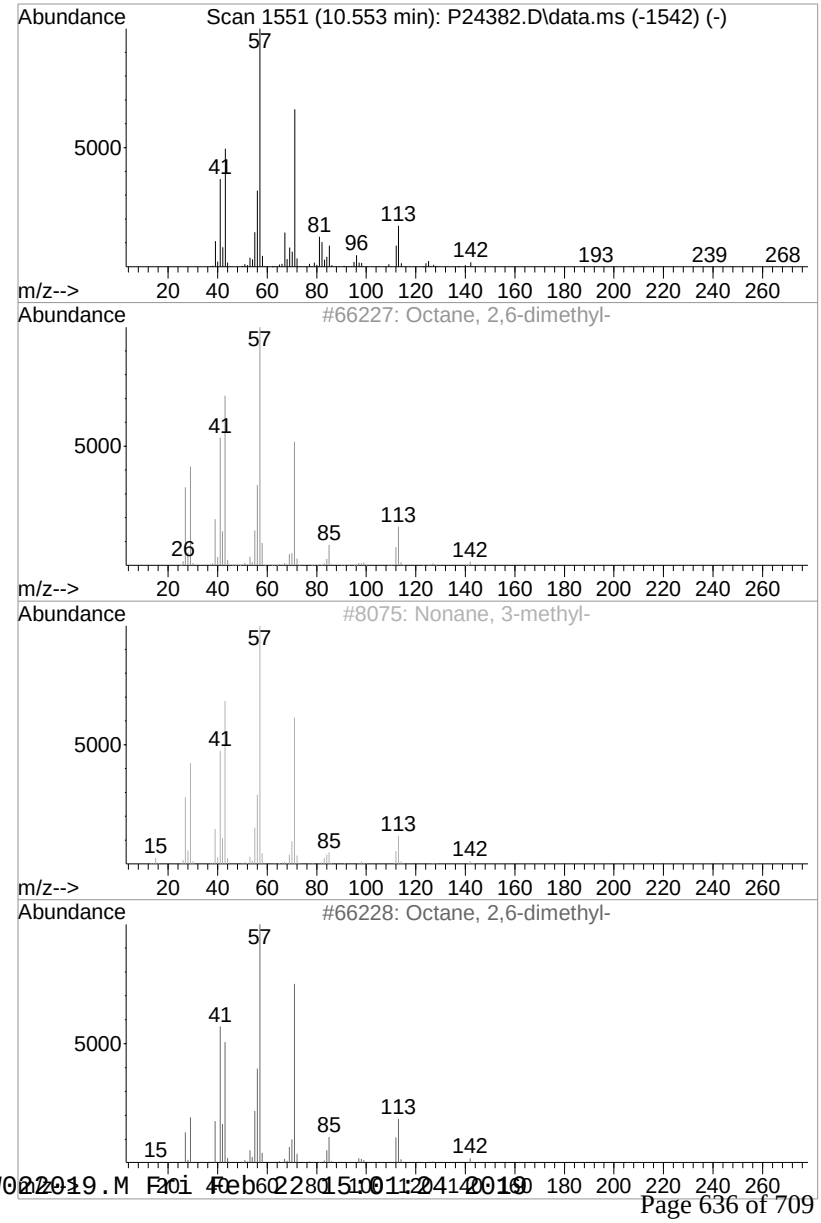
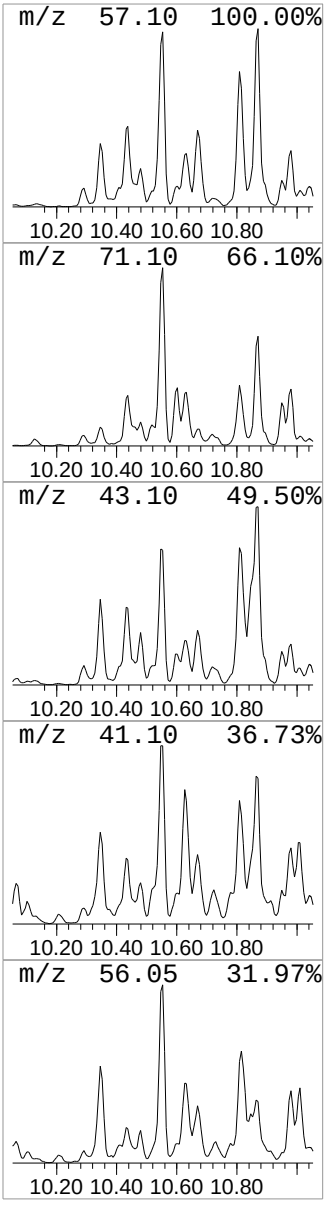
Peak Number 4 Octane, 2,6-dimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.553	119.76 ppb	3172520	d5-Chlorobenzene	9.785

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	87
2	Nonane, 3-methyl-	142	C10H22	005911-04-6	87
3	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	87
4	Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	87
5	Nonane, 3-methyl-	142	C10H22	005911-04-6	81





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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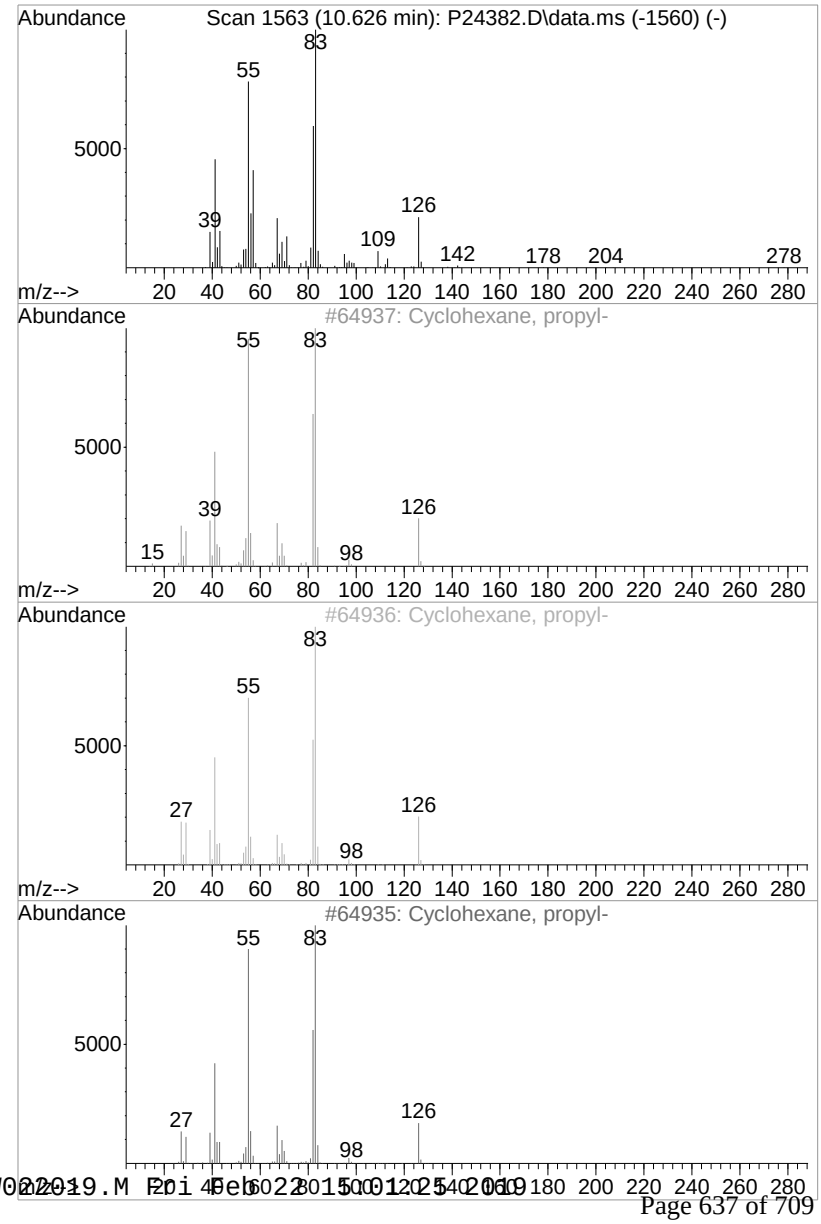
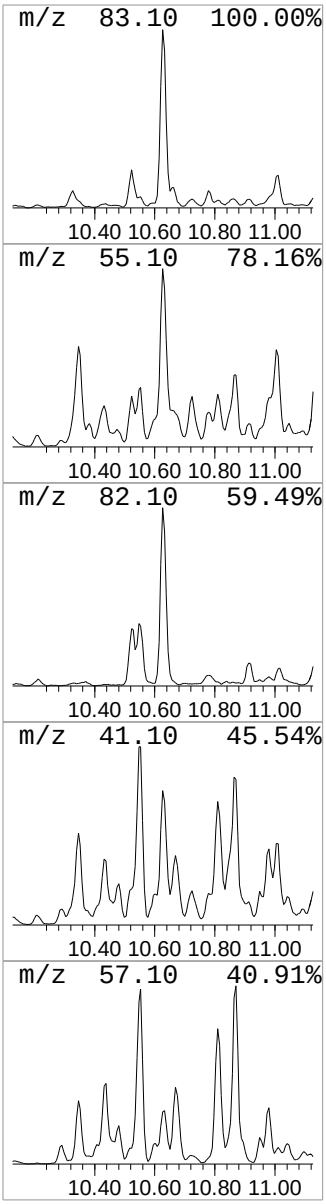
Peak Number 5 Cyclohexane, propyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.626	87.60 ppb	2320450	d5-Chlorobenzene	9.785

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
2	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
3	Cyclohexane, propyl-	126	C9H18	001678-92-8	87
4	Cyclohexane, propyl-	126	C9H18	001678-92-8	81
5	Cyclohexane, ethyl-	112	C8H16	001678-91-7	81





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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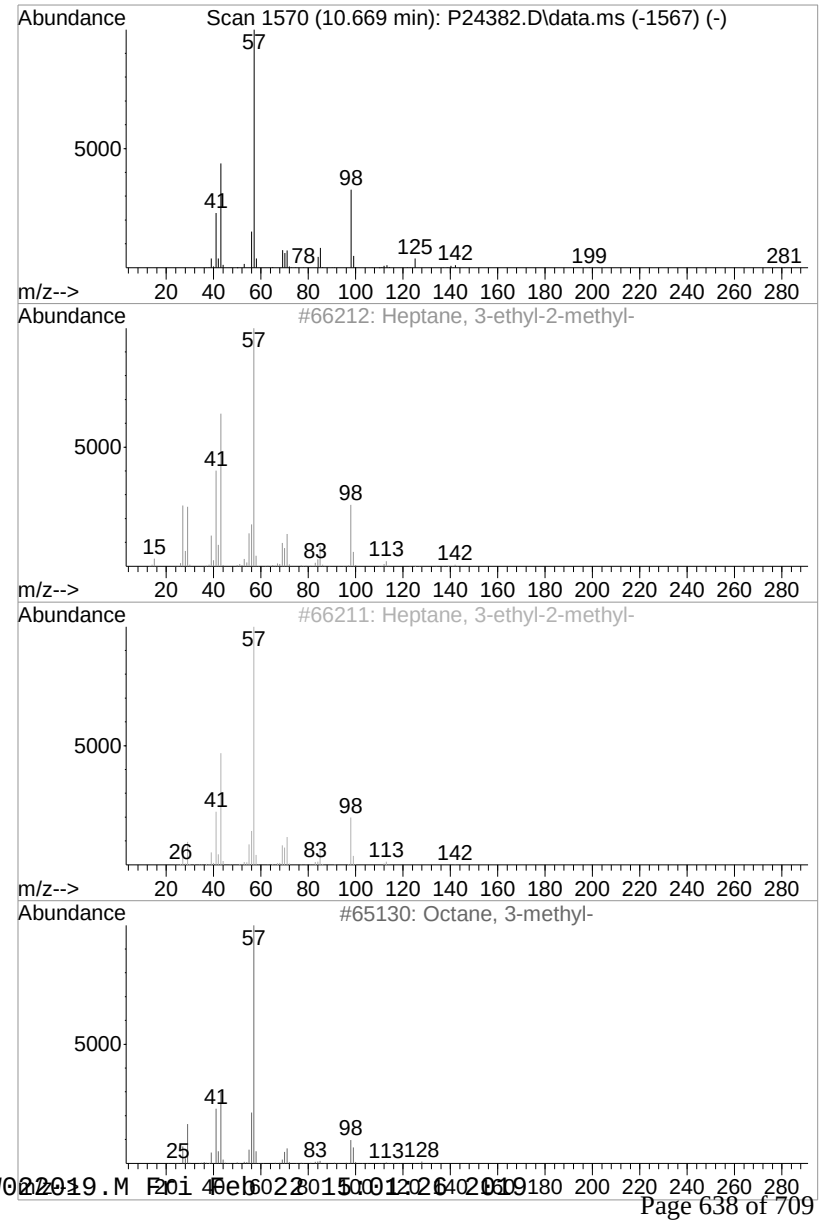
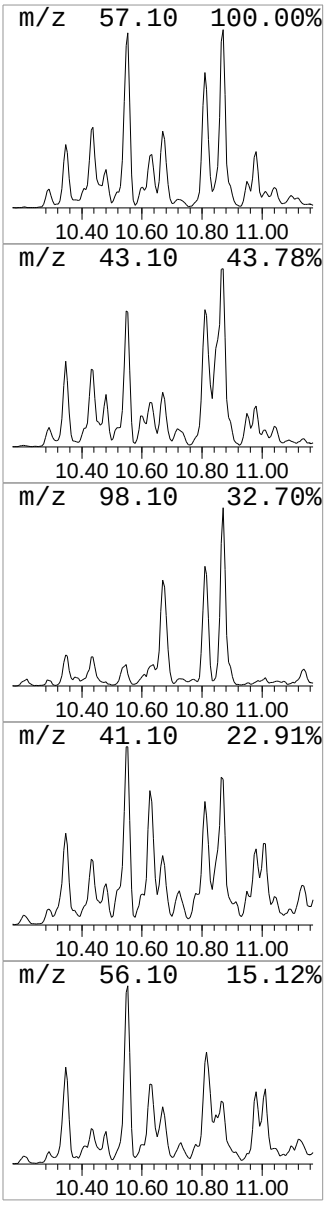
Peak Number 6 unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.669	40.20 ppb	1065030	d5-Chlorobenzene	9.785

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	56
2	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	50
3	Octane, 3-methyl-	128	C9H20	002216-33-3	47
4	Heptane, 4-(1-methylethyl)-	142	C10H22	052896-87-4	45
5	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	43





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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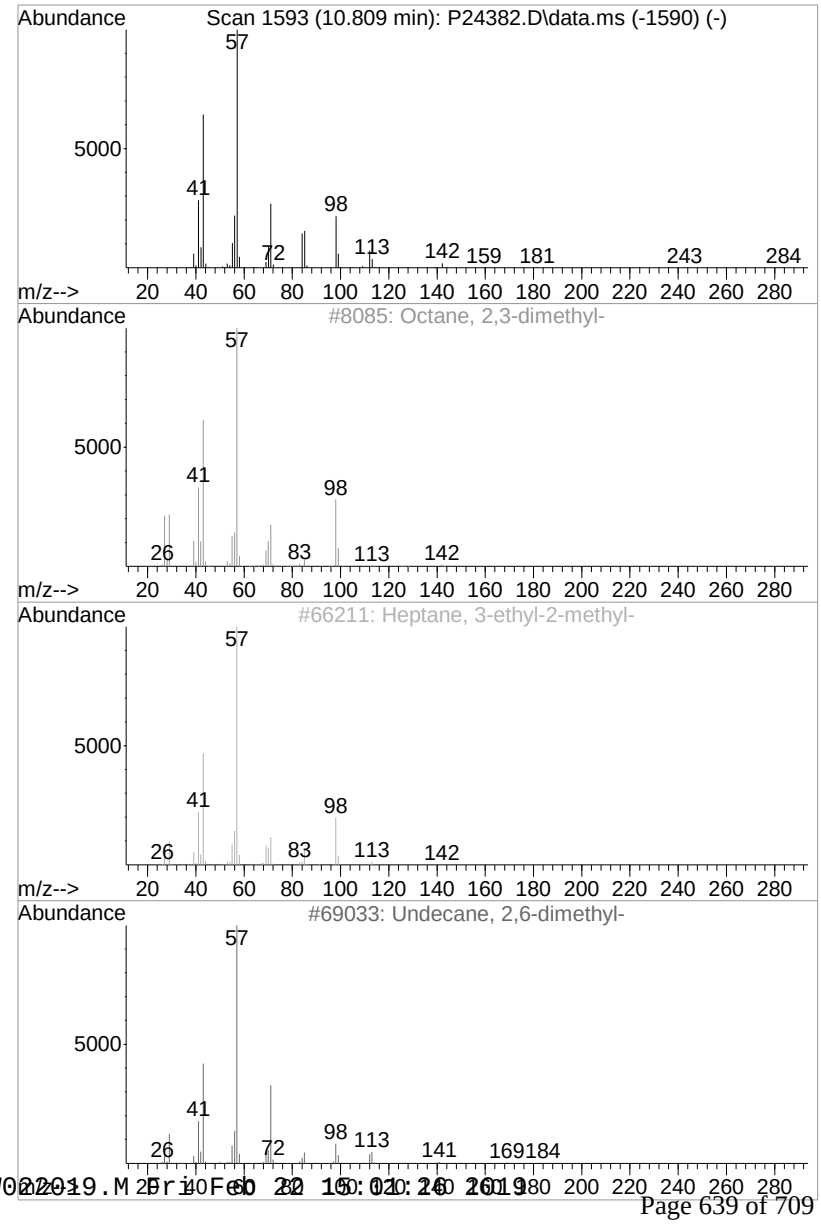
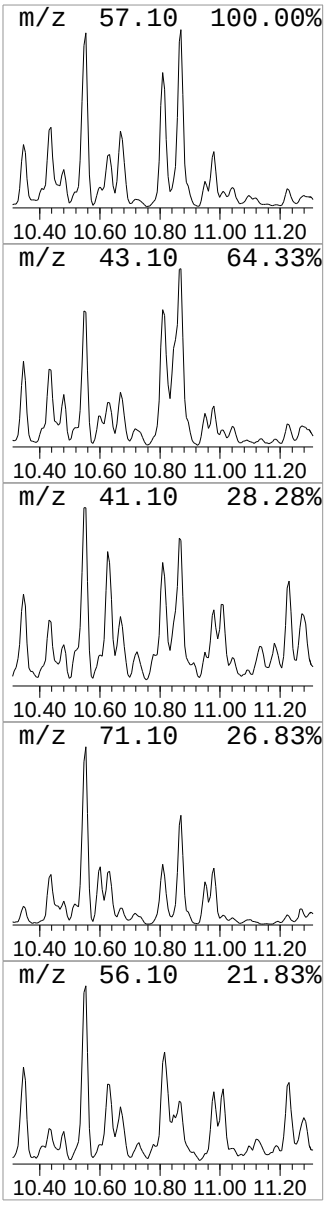
Peak Number 7 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.809	79.12 ppb	2095880	d5-Chlorobenzene	9.785

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,3-dimethyl-	142	C10H22	007146-60-3	50
2	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	47
3	Undecane, 2,6-dimethyl-	184	C13H28	017301-23-4	47
4	Decane	142	C10H22	000124-18-5	46
5	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	45





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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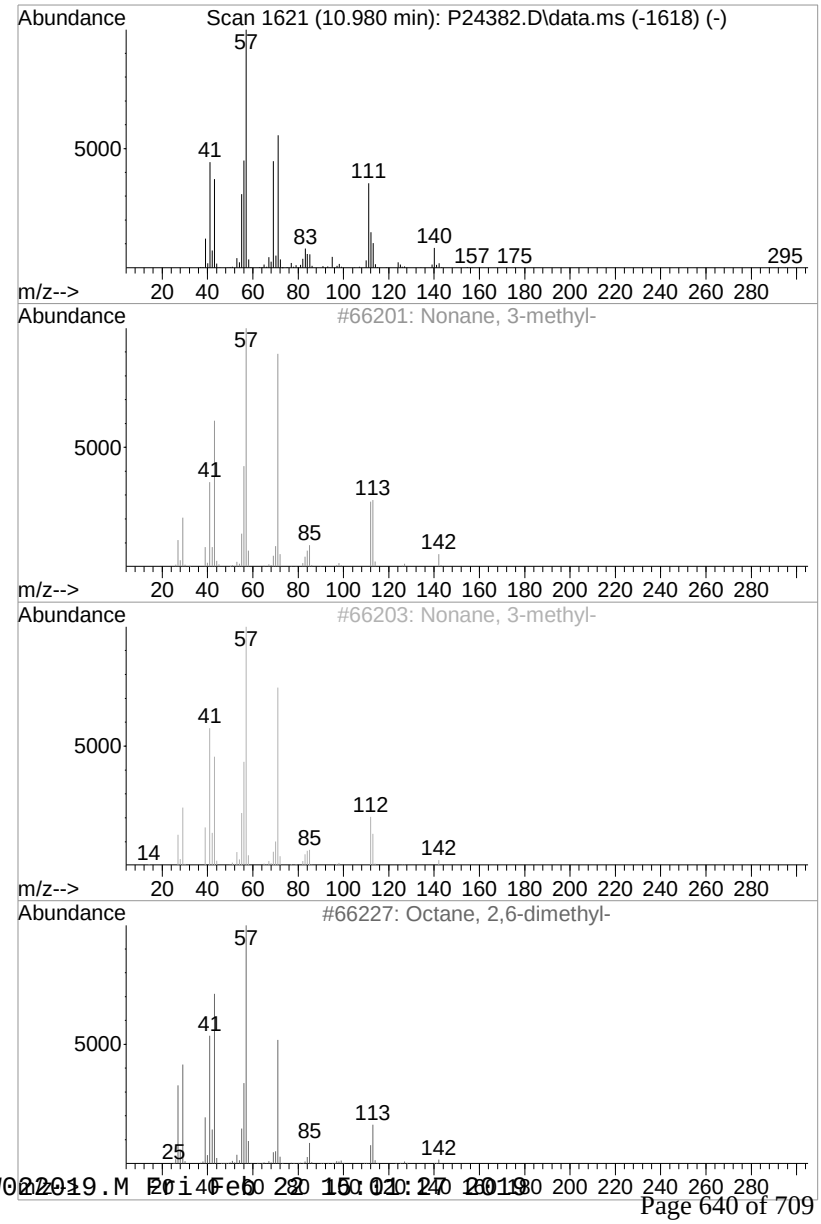
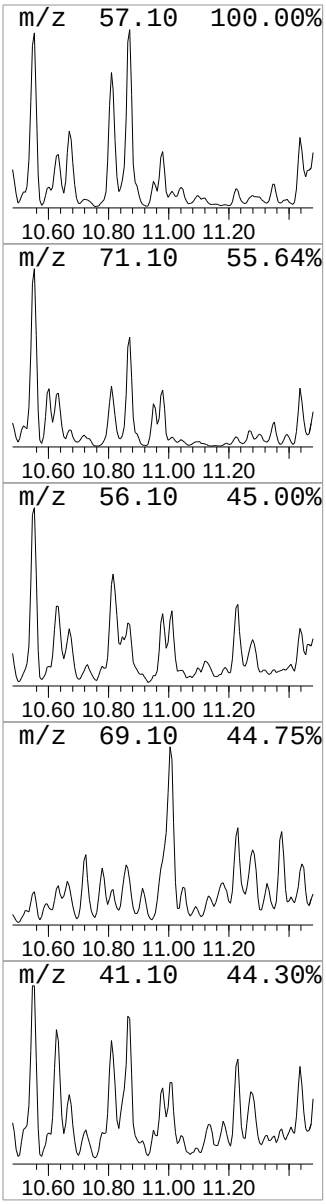
Peak Number 8 unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.980	30.99 ppb	1069720	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonane, 3-methyl-	142	C10H22	005911-04-6	81
2	Nonane, 3-methyl-	142	C10H22	005911-04-6	53
3	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	53
4	Octane, 1,1'-oxybis-	242	C16H34O	000629-82-3	50
5	Nonane, 3-methyl-	142	C10H22	005911-04-6	50





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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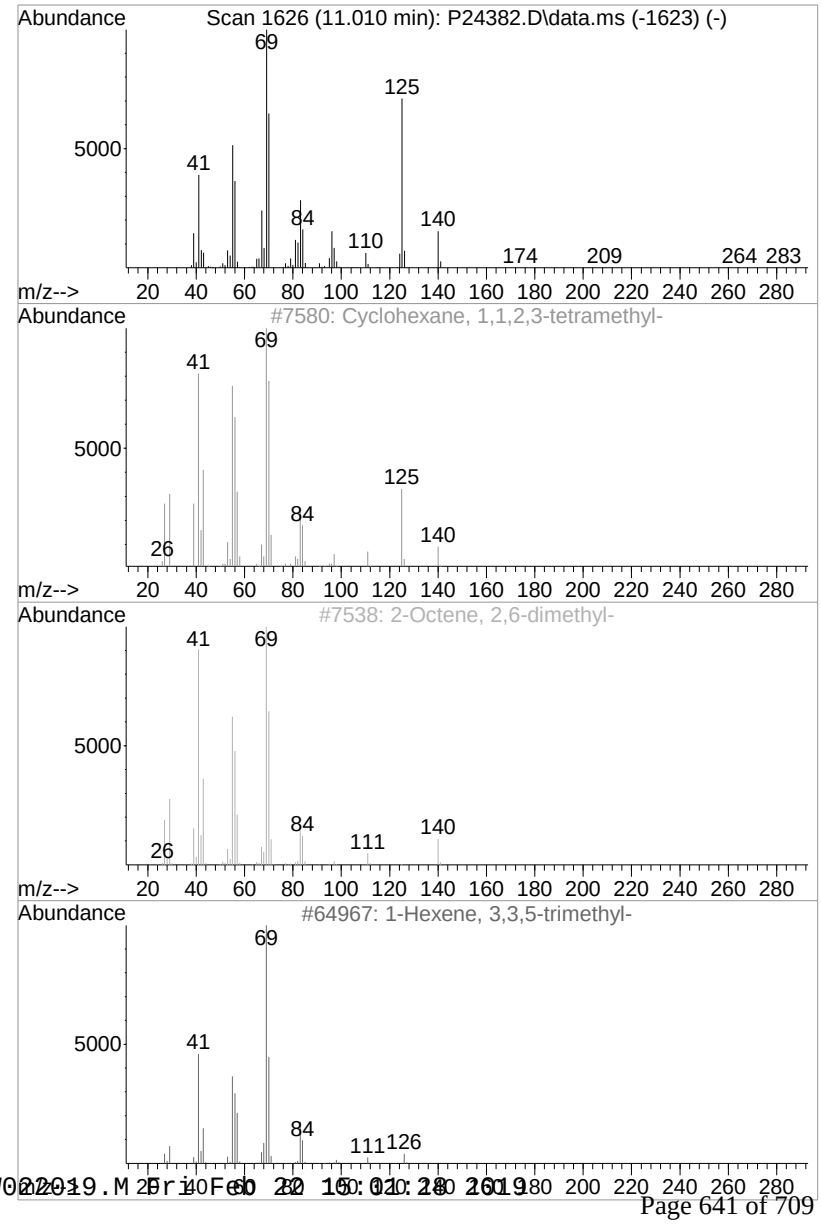
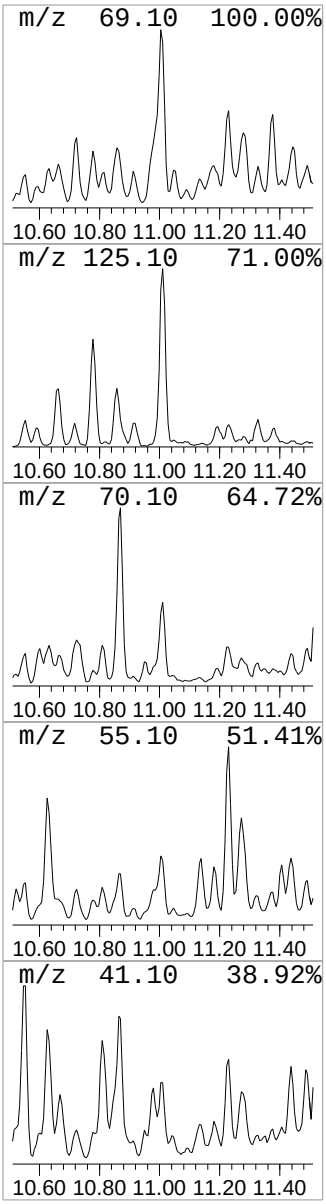
Peak Number 9 Cyclohexane, 1,1,2,3-tetram... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.010	38.93 ppb	1344000	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,1,2,3-tetramethyl-	140	C10H20	006783-92-2	90
2	2-Octene, 2,6-dimethyl-	140	C10H20	004057-42-5	58
3	1-Hexene, 3,3,5-trimethyl-	126	C9H18	013427-43-5	58
4	4-Octene, 2,6-dimethyl-, [S-(E)]-	140	C10H20	062960-76-3	58
5	4-Octene, 2,6-dimethyl-, [S-(Z)]-	140	C10H20	062960-77-4	58





Library Search Compound Report

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Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

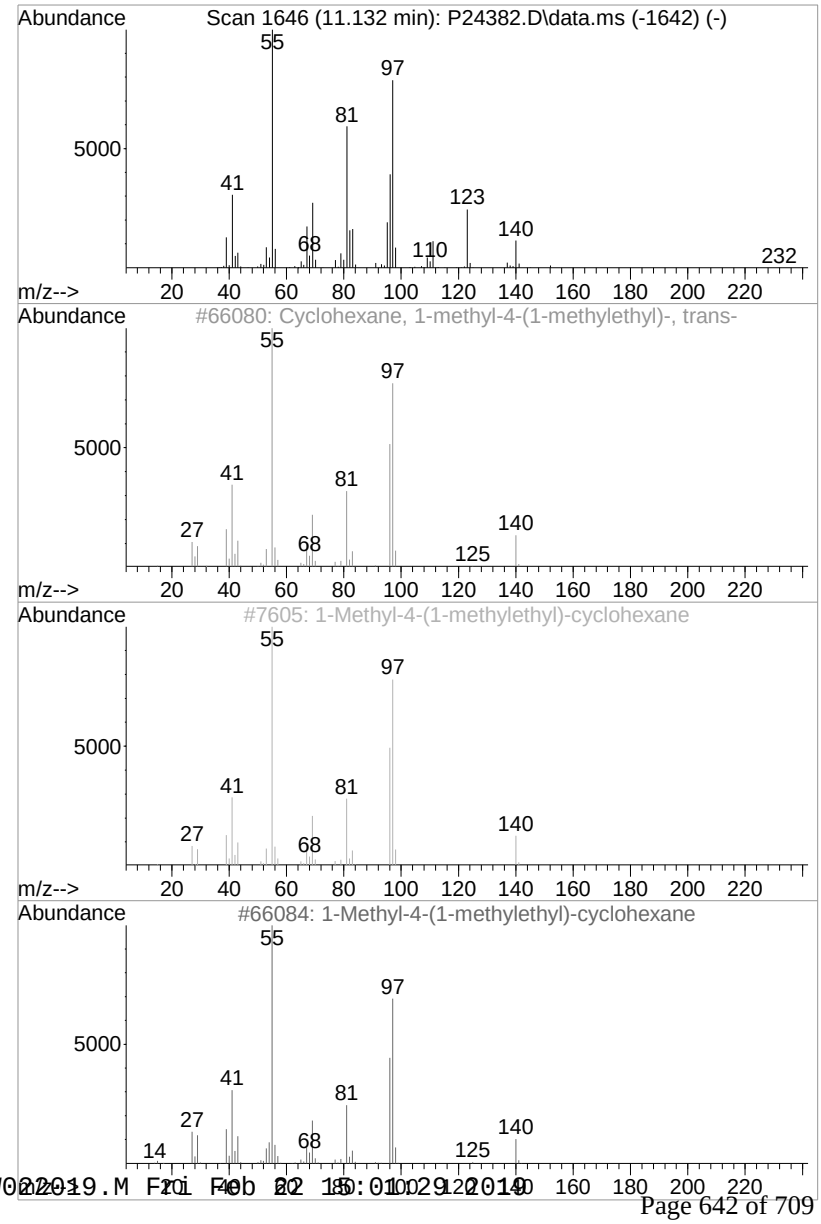
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

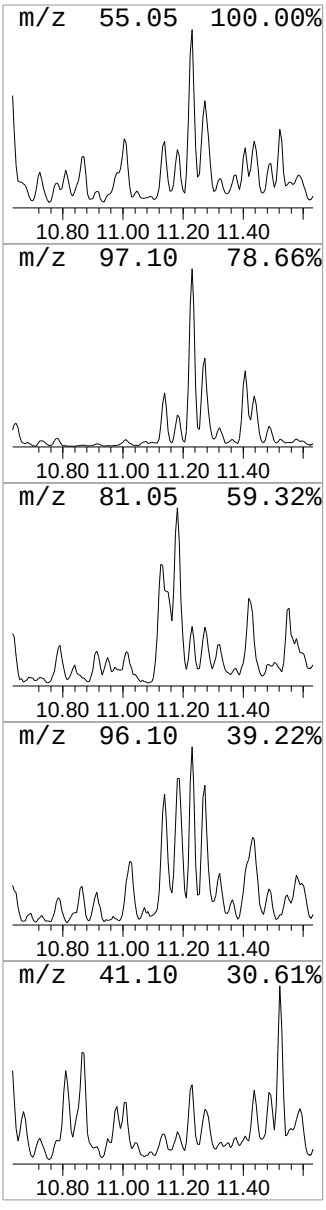
****

Peak Number 10 unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.132	25.37 ppb	875777	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	001678-82-6	76
2	1-Methyl-4-(1-methylethyl)-cyclo...	140	C10H20	000099-82-1	76
3	1-Methyl-4-(1-methylethyl)-cyclo...	140	C10H20	000099-82-1	68
4	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	001678-82-6	64
5	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	006069-98-3	64





Library Search Compound Report

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Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

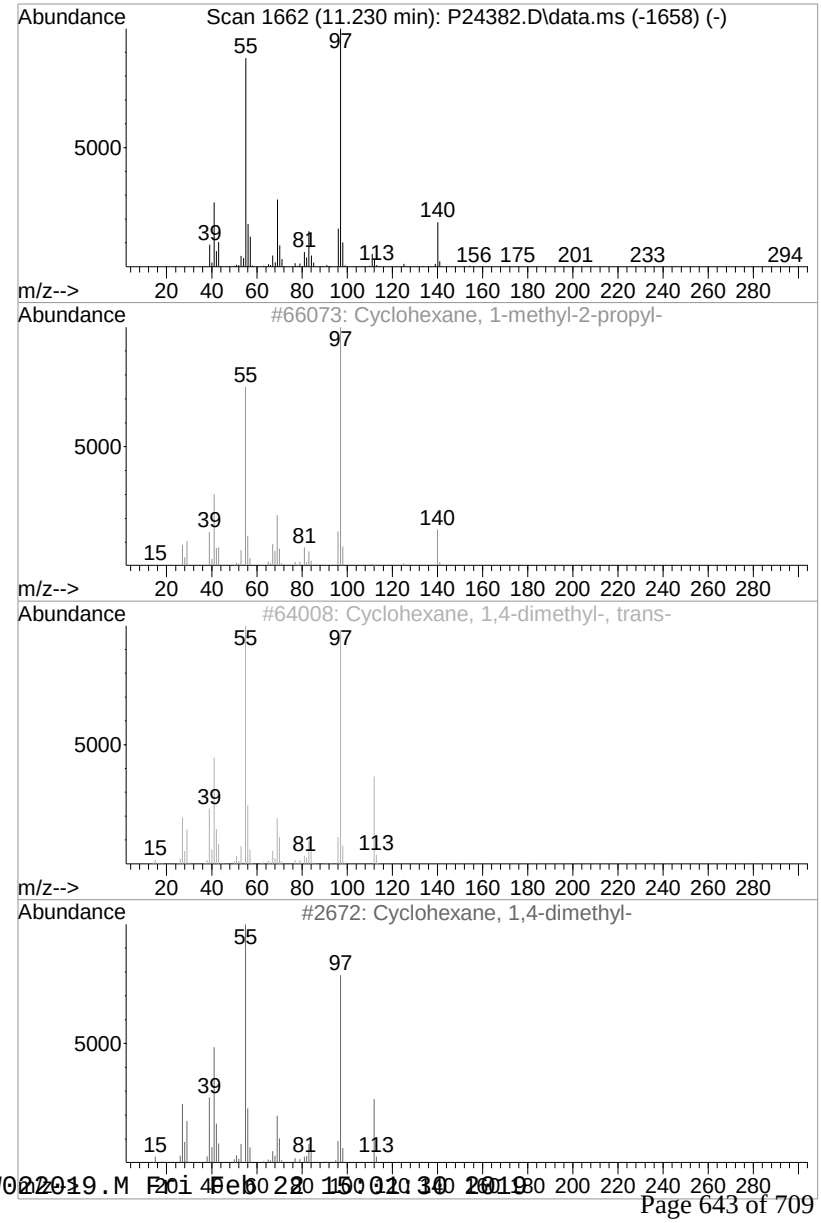
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

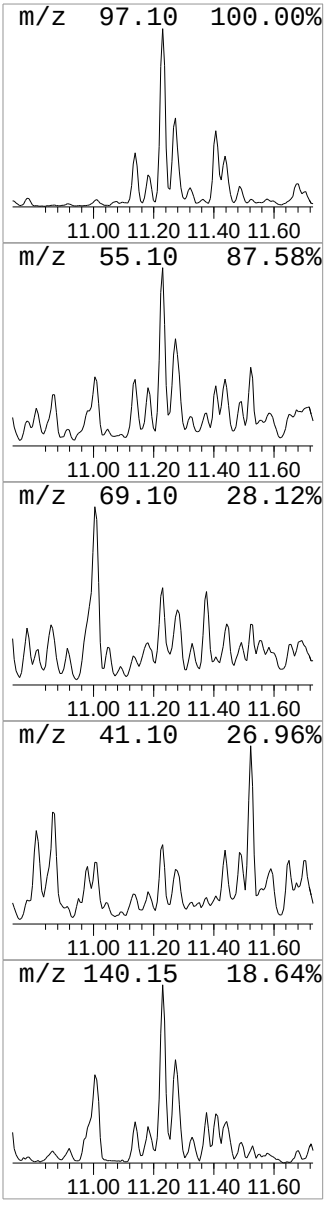
****

Peak Number 11 Cyclohexane, 1-methyl-2-pro... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.230	57.09 ppb	1970770	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	90
2	Cyclohexane, 1,4-dimethyl-, trans-	112	C8H16	002207-04-7	72
3	Cyclohexane, 1,4-dimethyl-	112	C8H16	000589-90-2	72
4	Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	72
5	Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-77-7	64





Library Search Compound Report

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Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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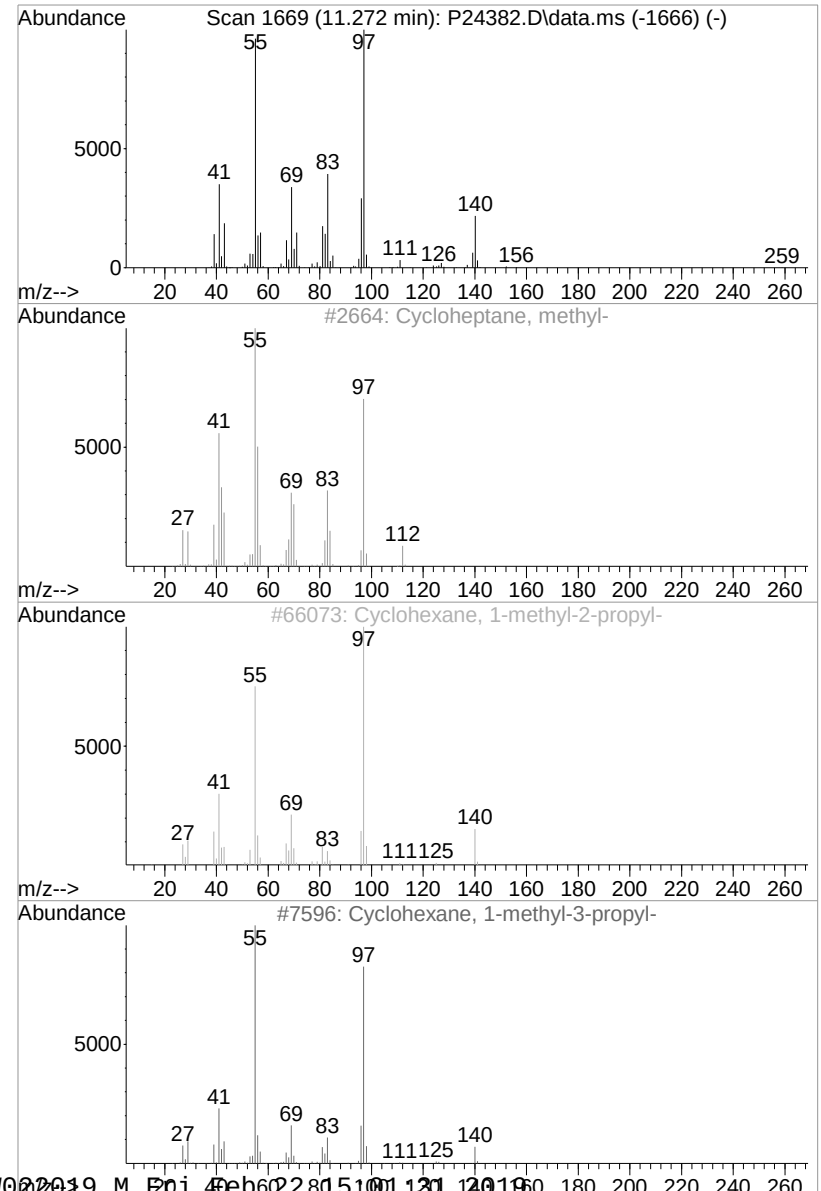
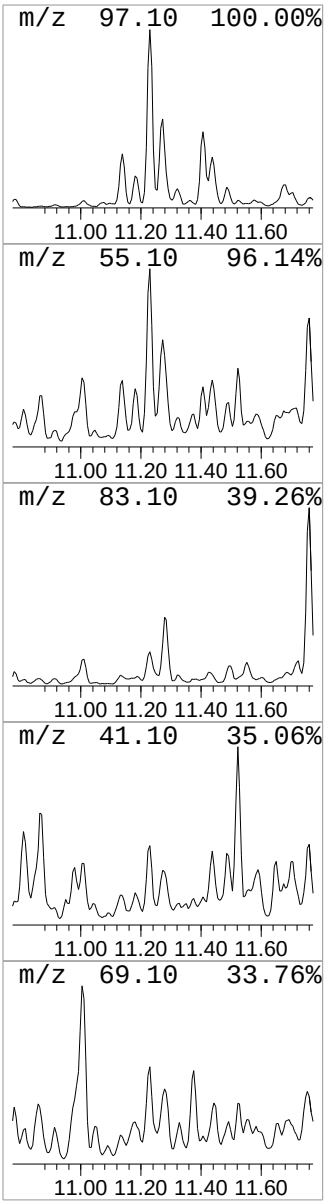
Peak Number 12 unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.272	48.15 ppb	1662260	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cycloheptane, methyl-	112	C8H16	004126-78-7	59
2	Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	52
3	Cyclohexane, 1-methyl-3-propyl-	140	C10H20	004291-80-9	50
4	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	001678-82-6	47
5	m-Menthane, (1S,3S)-(+)-	140	C10H20	013837-67-7	47





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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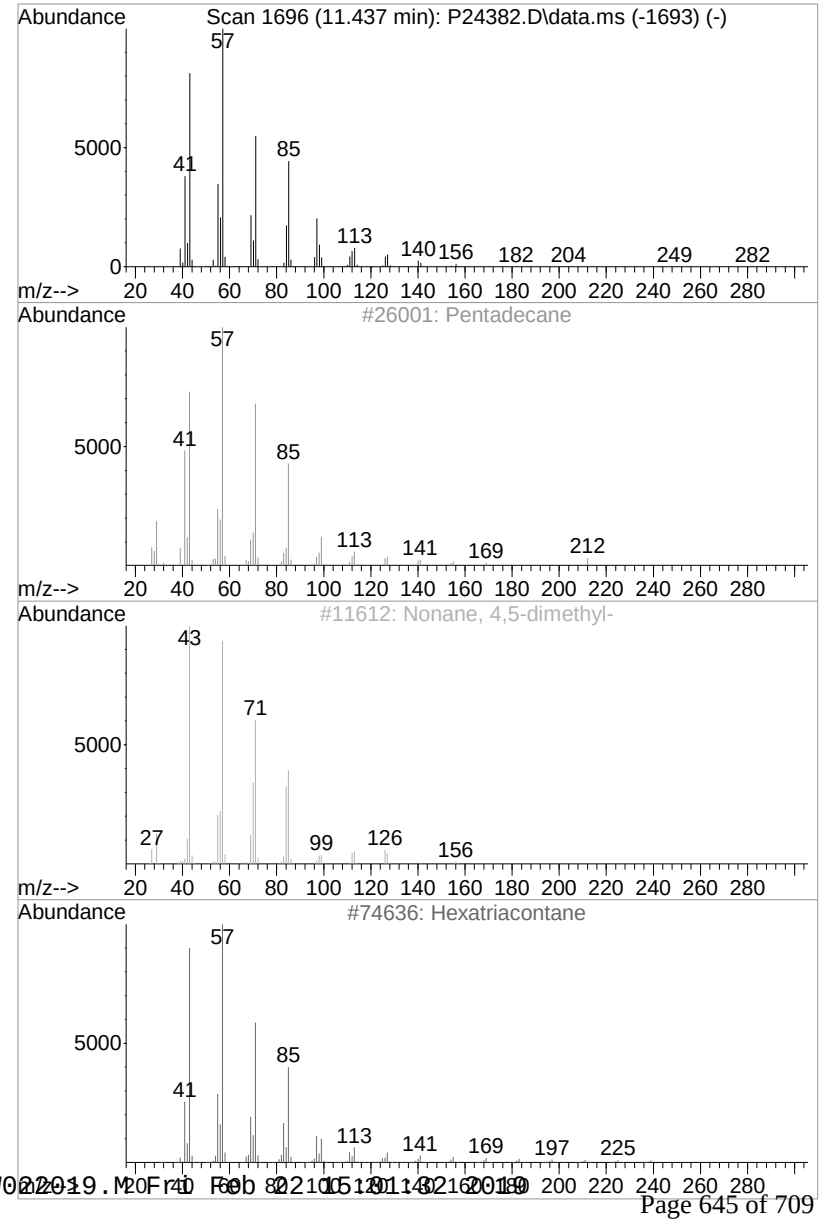
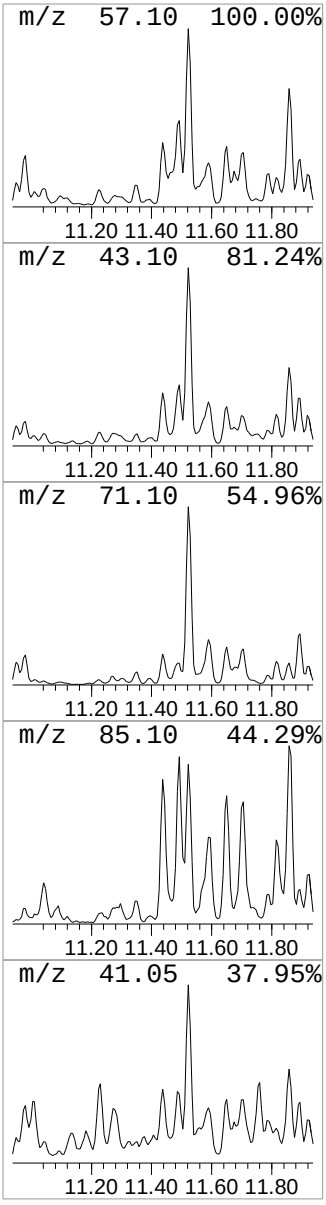
Peak Number 13 unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.437	48.00 ppb	1656820	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecane	212	C15H32	000629-62-9	80
2	Nonane, 4,5-dimethyl-	156	C11H24	017302-23-7	76
3	Hexatriacontane	507	C36H74	000630-06-8	72
4	Eicosane	282	C20H42	000112-95-8	64
5	Heptadecane	240	C17H36	000629-78-7	64





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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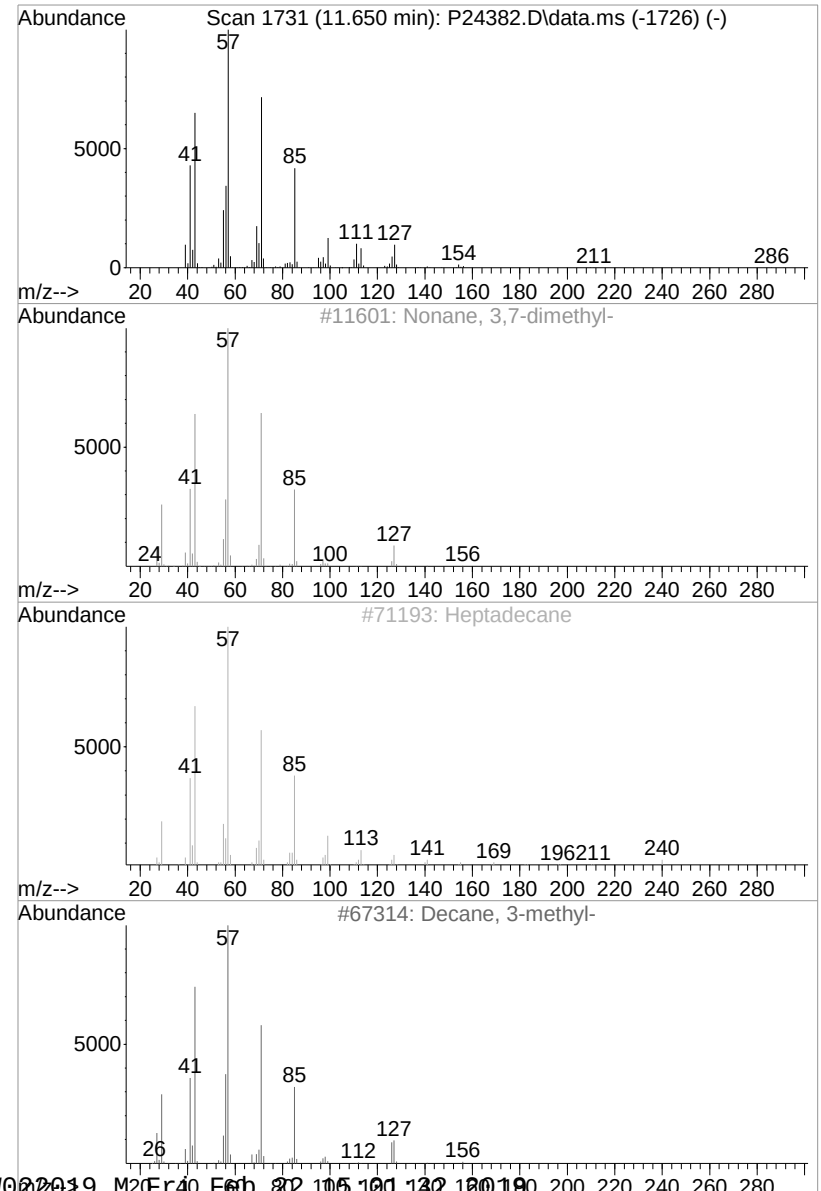
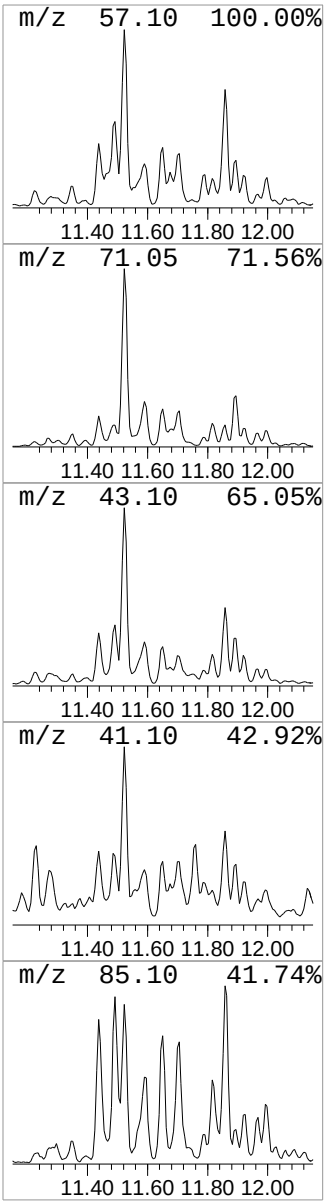
Peak Number 14 unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.650	33.11 ppb	1142990	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonane, 3,7-dimethyl-	156	C11H24	017302-32-8	76
2	Heptadecane	240	C17H36	000629-78-7	72
3	Decane, 3-methyl-	156	C11H24	013151-34-3	68
4	Decane, 2,4,6-trimethyl-	184	C13H28	062108-27-4	64
5	Hexadecane	226	C16H34	000544-76-3	59





Library Search Compound Report

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Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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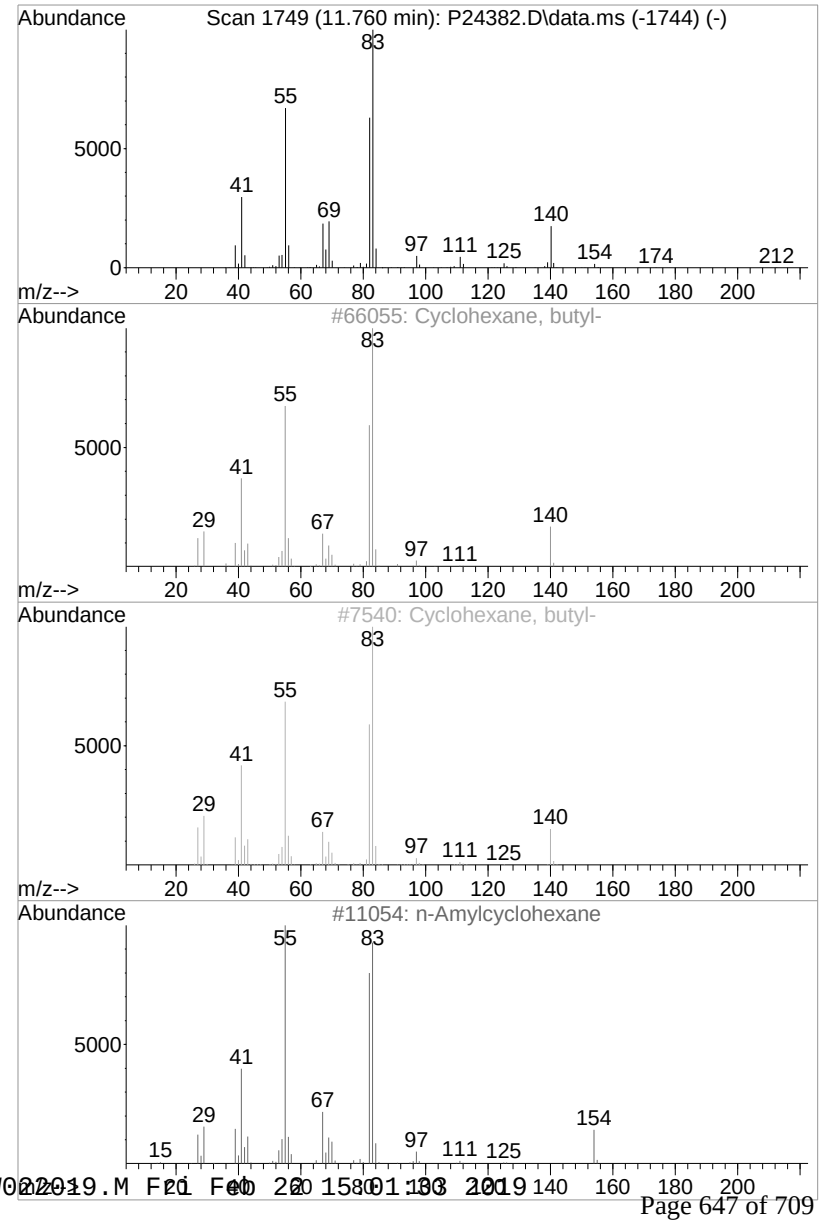
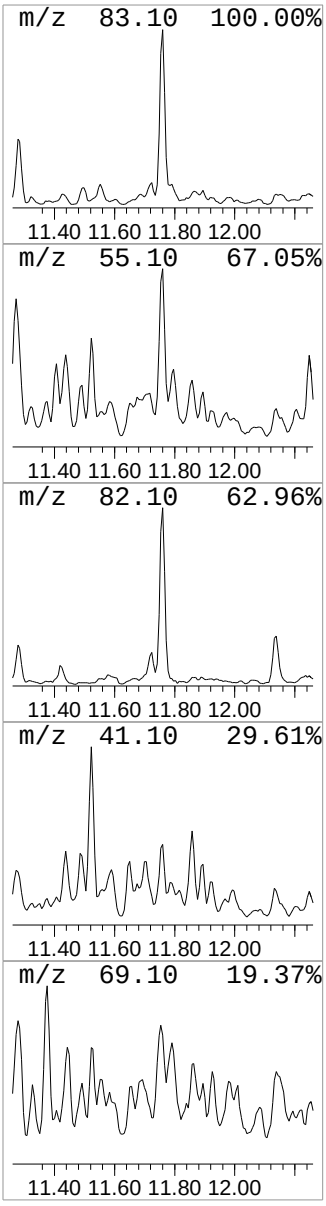
Peak Number 15 Cyclohexane, butyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.760	53.98 ppb	1863430	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, butyl-	140	C10H20	001678-93-9	87
2	Cyclohexane, butyl-	140	C10H20	001678-93-9	86
3	n-Amylcyclohexane	154	C11H22	029949-27-7	86
4	Cyclohexane, pentyl-	154	C11H22	004292-92-6	86
5	Cyclohexane, ethyl-	112	C8H16	001678-91-7	83





Library Search Compound Report

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Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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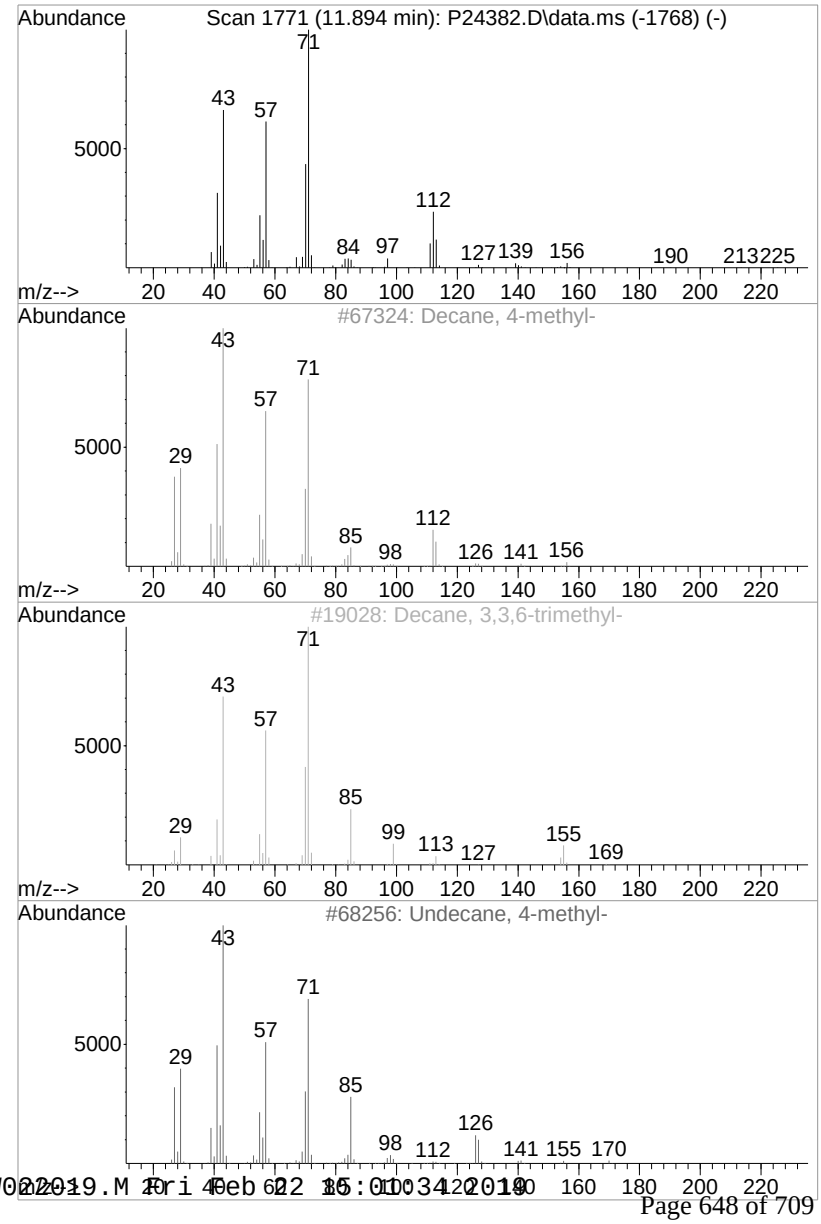
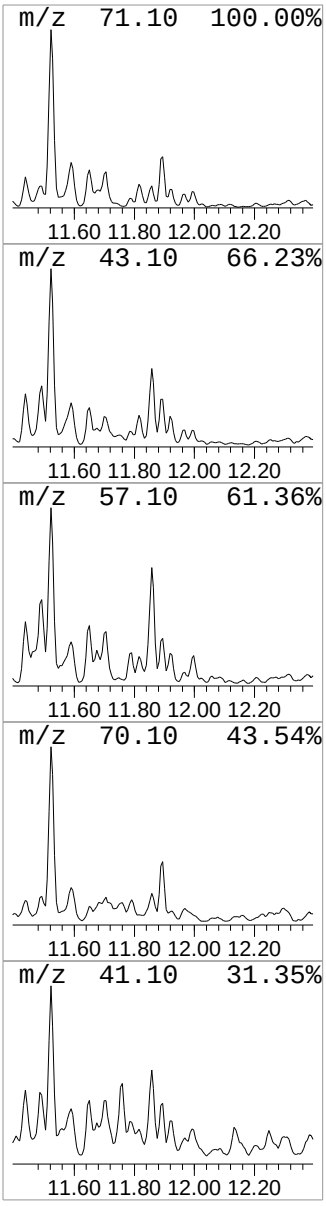
Peak Number 16 unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.894	27.93 ppb	964004	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 4-methyl-	156	C11H24	002847-72-5	72
2	Decane, 3,3,6-trimethyl-	184	C13H28	062338-14-1	59
3	Undecane, 4-methyl-	170	C12H26	002980-69-0	59
4	Decane, 2,7,7-trimethyl-	184	C13H28	062338-15-2	53
5	1,1-Dimethylpropyl 2-ethylhexanoate	214	C13H26O2	005421-13-6	53





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Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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Peak Number 17 Naphthalene, decahydro- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.138	34.67 ppb	1196770	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, decahydro-	138	C10H18	000091-17-8	97
2	Naphthalene, decahydro-	138	C10H18	000091-17-8	97
3	Naphthalene, decahydro-, trans-	138	C10H18	000493-02-7	96
4	Naphthalene, decahydro-, trans-	138	C10H18	000493-02-7	94
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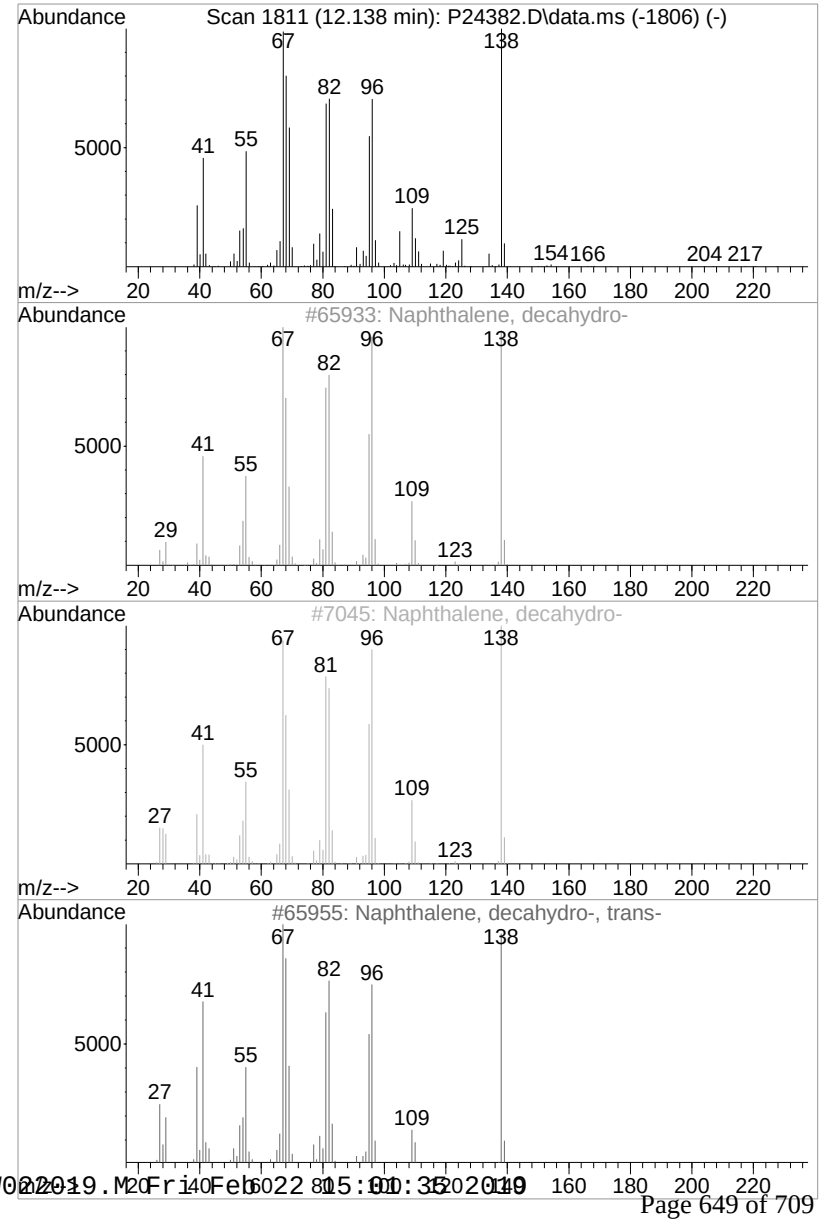

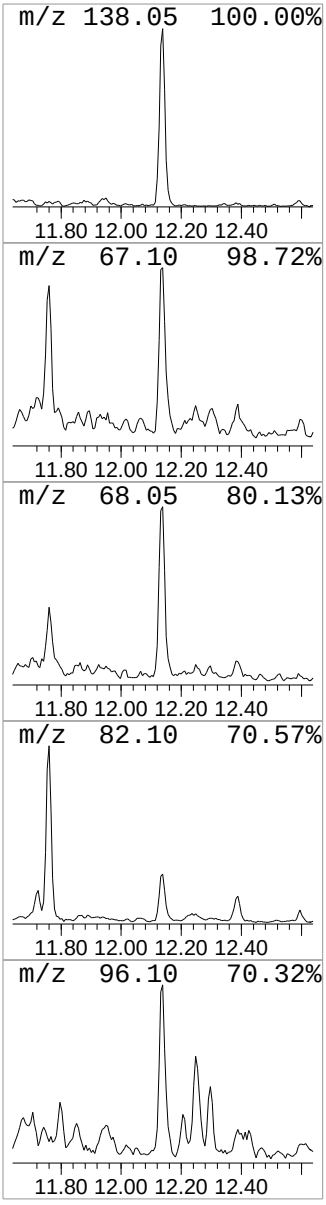

Library Search Compound Report

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Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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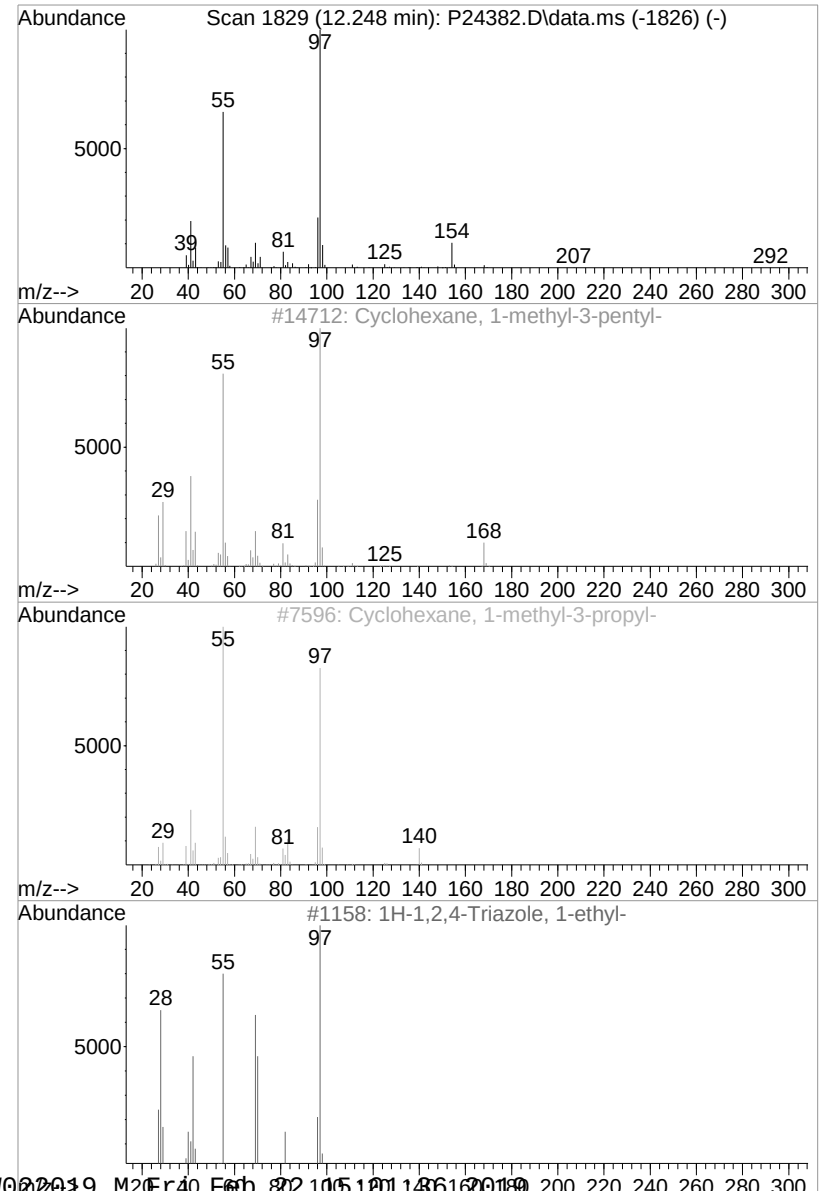
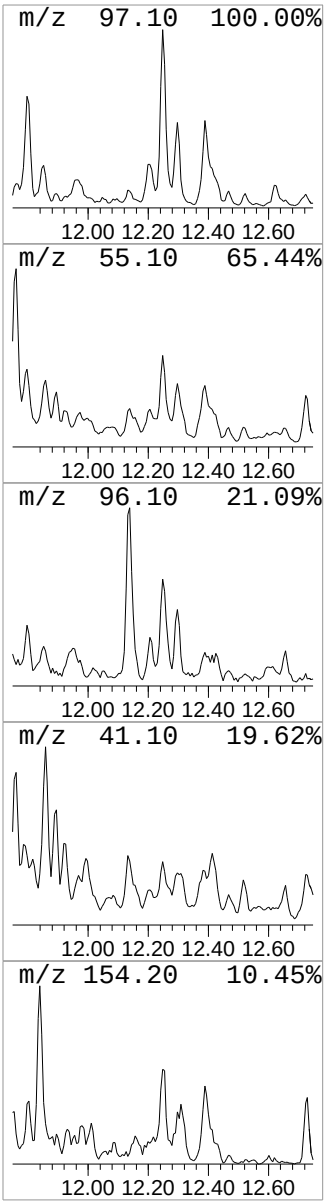
Peak Number 18 unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.248	25.33 ppb	874282	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-methyl-3-pentyl-	168	C12H24	054411-02-8	72
2	Cyclohexane, 1-methyl-3-propyl-	140	C10H20	004291-80-9	64
3	1H-1,2,4-Triazole, 1-ethyl-	97	C4H7N3	016778-70-4	59
4	Thiophene, 2-pentyl-	154	C9H14S	004861-58-9	52
5	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	50





Library Search Compound Report

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Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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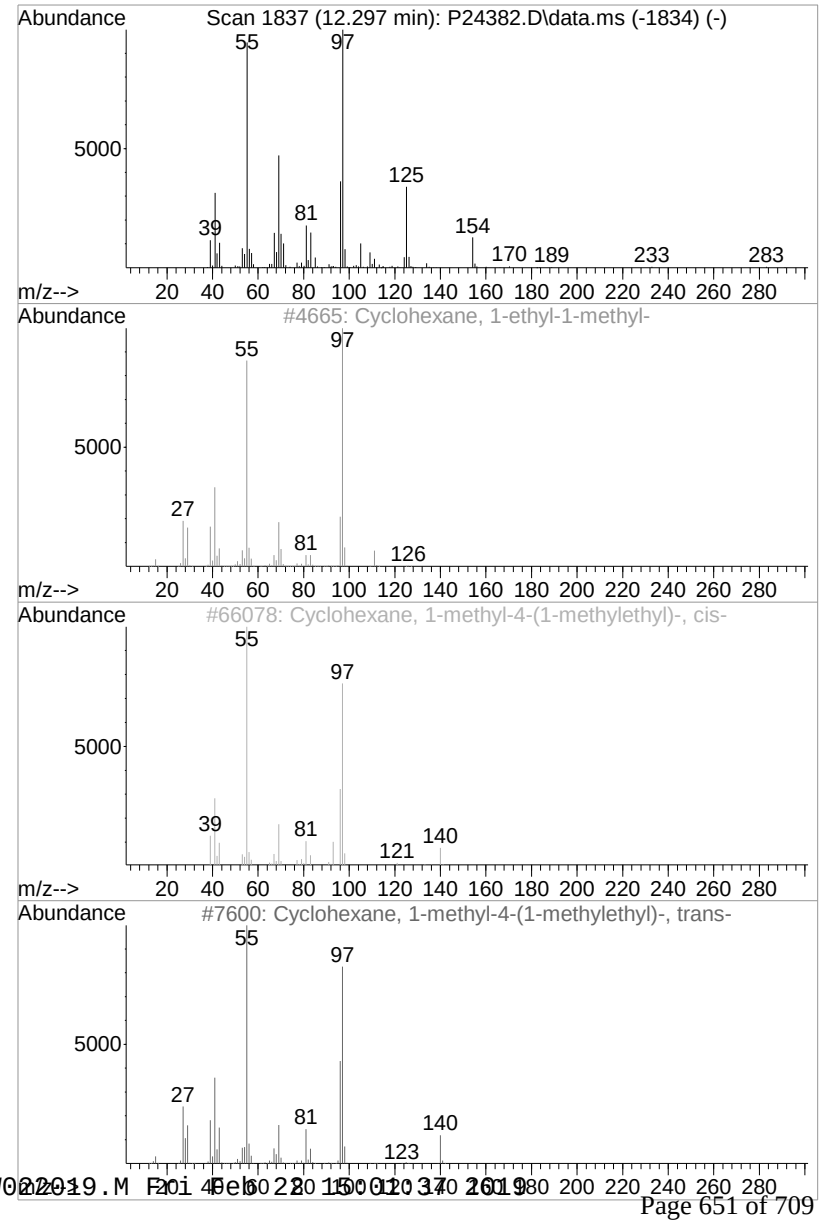
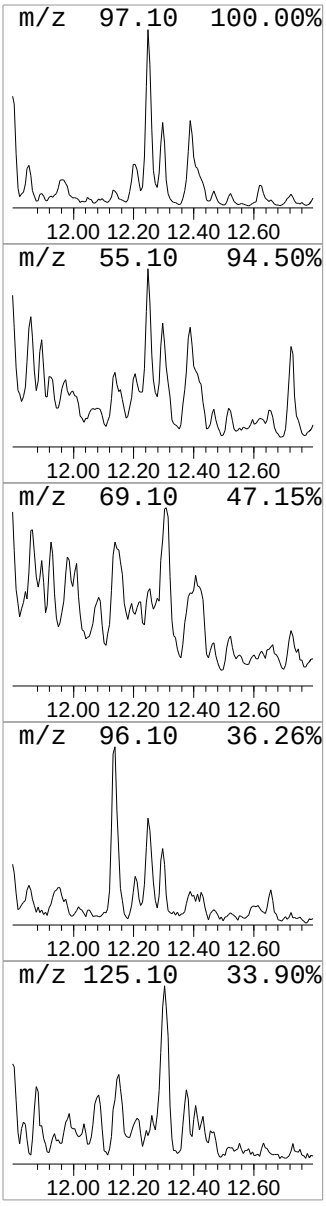
Peak Number 19 unknown Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.297	25.42 ppb	877443	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-ethyl-1-methyl-	126	C9H18	004926-90-3	53
2	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	006069-98-3	50
3	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	001678-82-6	50
4	Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	001678-82-6	50
5	Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	50





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Data File : P24382.D
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Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

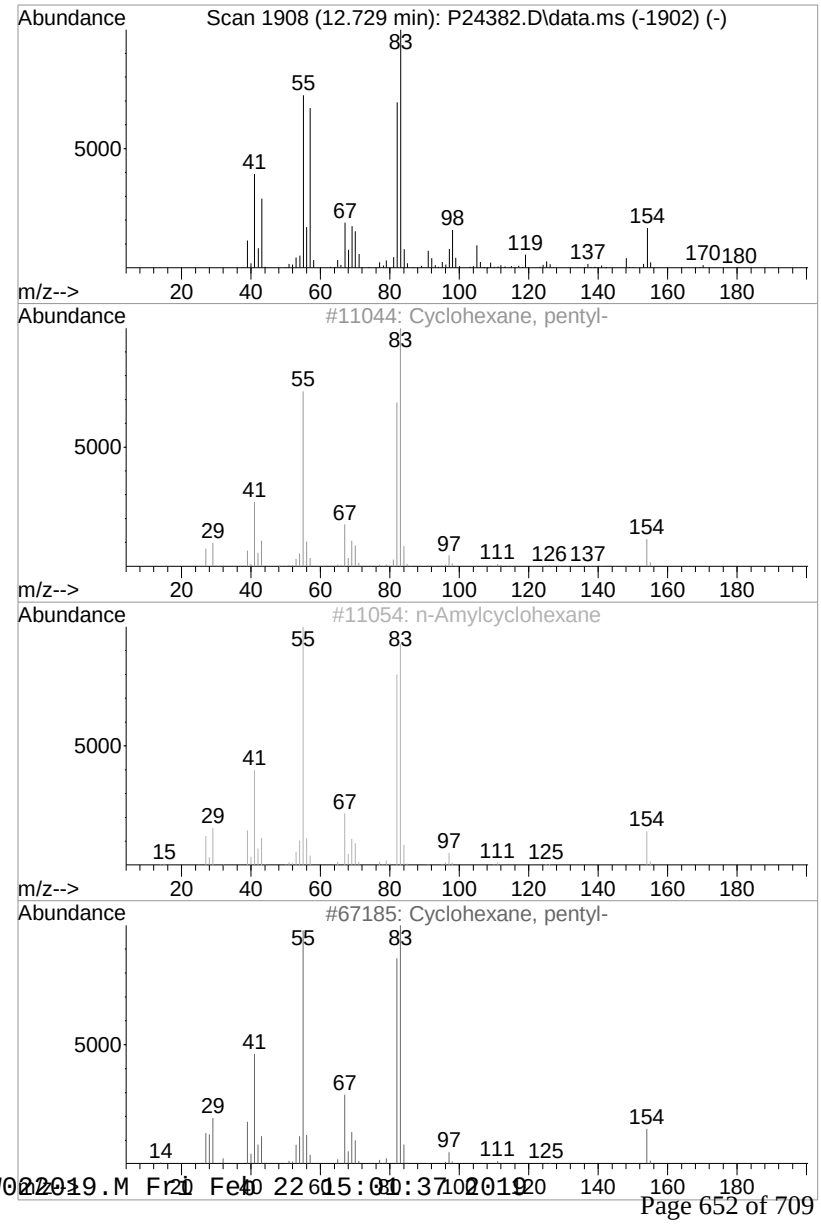
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

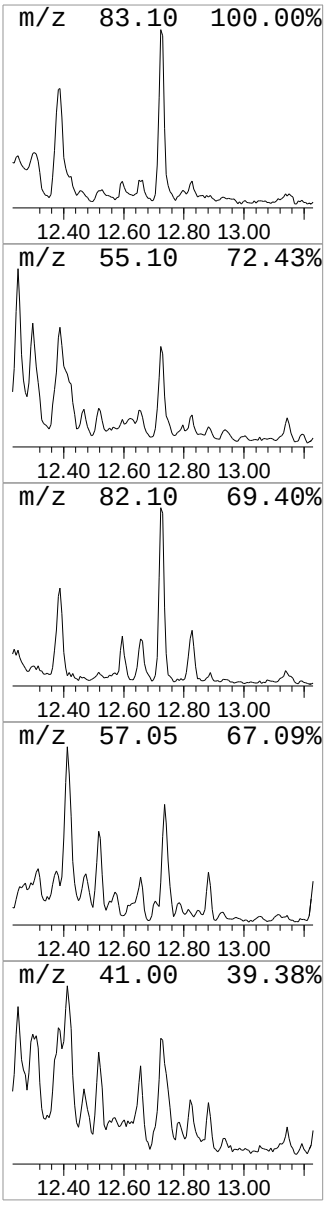
****

Peak Number 20 unknown Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.729	26.18 ppb	903841	1,4-Dichlorobenzene-d4	11.839

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, pentyl-	154	C11H22	004292-92-6	74
2	n-Amylcyclohexane	154	C11H22	029949-27-7	68
3	Cyclohexane, pentyl-	154	C11H22	004292-92-6	64
4	Cyclohexane, (4-methylpentyl)-	168	C12H24	061142-20-9	58
5	Cyclohexane, butyl-	140	C10H20	001678-93-9	53





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24382.D
Acq On : 21 Feb 2019 8:36 pm
Operator : K.Ruest
Sample : R1901365-007|182 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

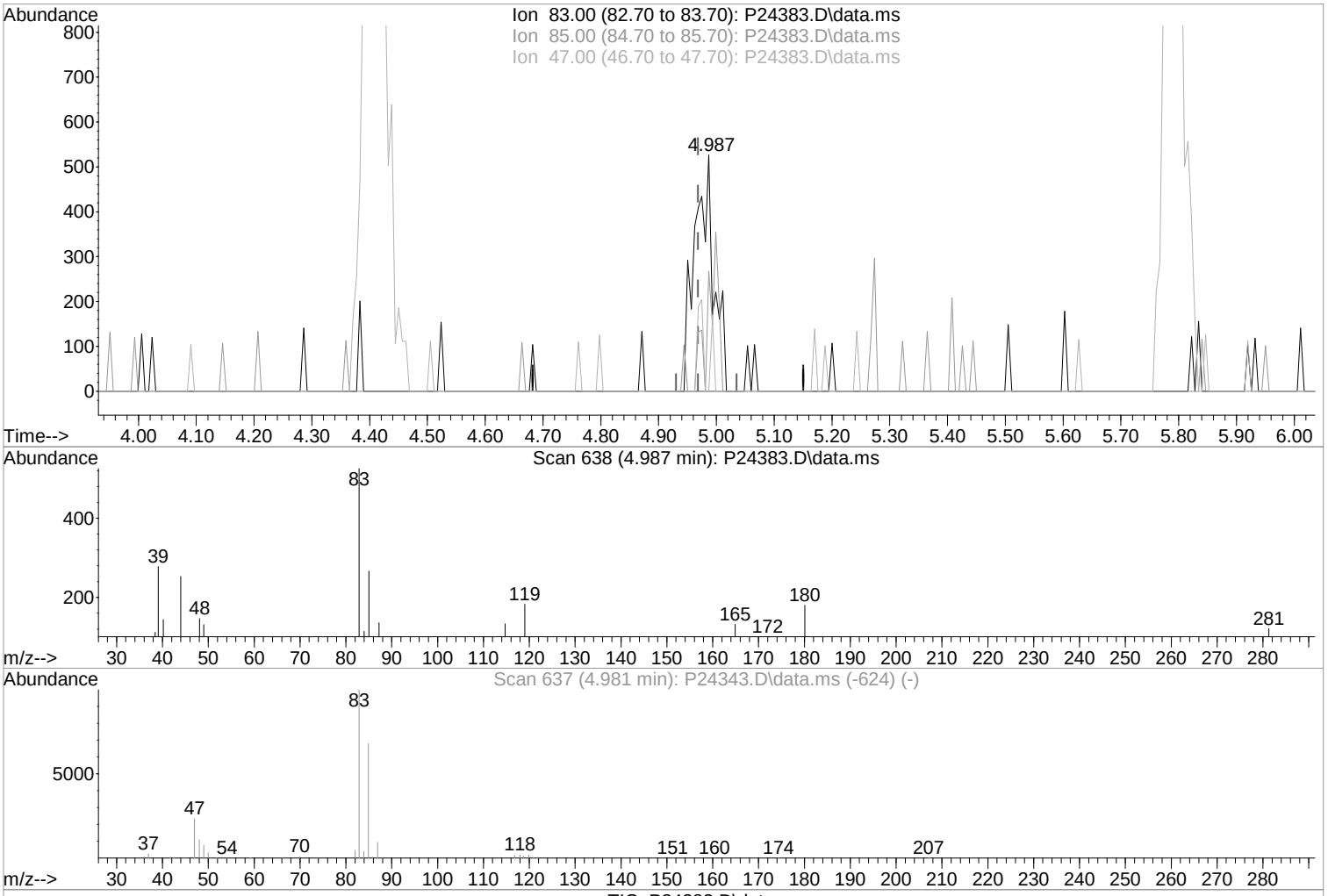
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	10.065	31.3	ppb	829959	3	9.785	1324520	50.0
unknown	10.346	73.1	ppb	1935580	3	9.785	1324520	50.0
Nonane, 4-methyl-	10.431	54.3	ppb	1438090	3	9.785	1324520	50.0
Octane, 2,6-dim...	10.553	119.8	ppb	3172520	3	9.785	1324520	50.0
Cyclohexane, pr...	10.626	87.6	ppb	2320450	3	9.785	1324520	50.0
unknown	10.669	40.2	ppb	1065030	3	9.785	1324520	50.0
unknown	10.809	79.1	ppb	2095880	3	9.785	1324520	50.0
unknown	10.980	31.0	ppb	1069720	4	11.839	1726010	50.0
Cyclohexane, 1,...	11.010	38.9	ppb	1344000	4	11.839	1726010	50.0
unknown	11.132	25.4	ppb	875777	4	11.839	1726010	50.0
Cyclohexane, 1-...	11.230	57.1	ppb	1970770	4	11.839	1726010	50.0
unknown	11.272	48.1	ppb	1662260	4	11.839	1726010	50.0
unknown	11.437	48.0	ppb	1656820	4	11.839	1726010	50.0
unknown	11.650	33.1	ppb	1142990	4	11.839	1726010	50.0
Cyclohexane, bu...	11.760	54.0	ppb	1863430	4	11.839	1726010	50.0
unknown	11.894	27.9	ppb	964004	4	11.839	1726010	50.0
Naphthalene, de...	12.138	34.7	ppb	1196770	4	11.839	1726010	50.0
unknown	12.248	25.3	ppb	874282	4	11.839	1726010	50.0
unknown	12.297	25.4	ppb	877443	4	11.839	1726010	50.0
unknown	12.729	26.2	ppb	903841	4	11.839	1726010	50.0

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24383.D
Acq On : 21 Feb 2019 8:58 pm
Operator : K.Ruest
Sample : R1901365-005|183 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 22 09:14:17 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24383.D\data.ms

(40) Chloroform (P)

4.987min (+0.018) 0.22 ppb m

response 1216

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	50.76
47.00	23.40	0.00#
0.00	0.00	0.00

Manual Integration:

After

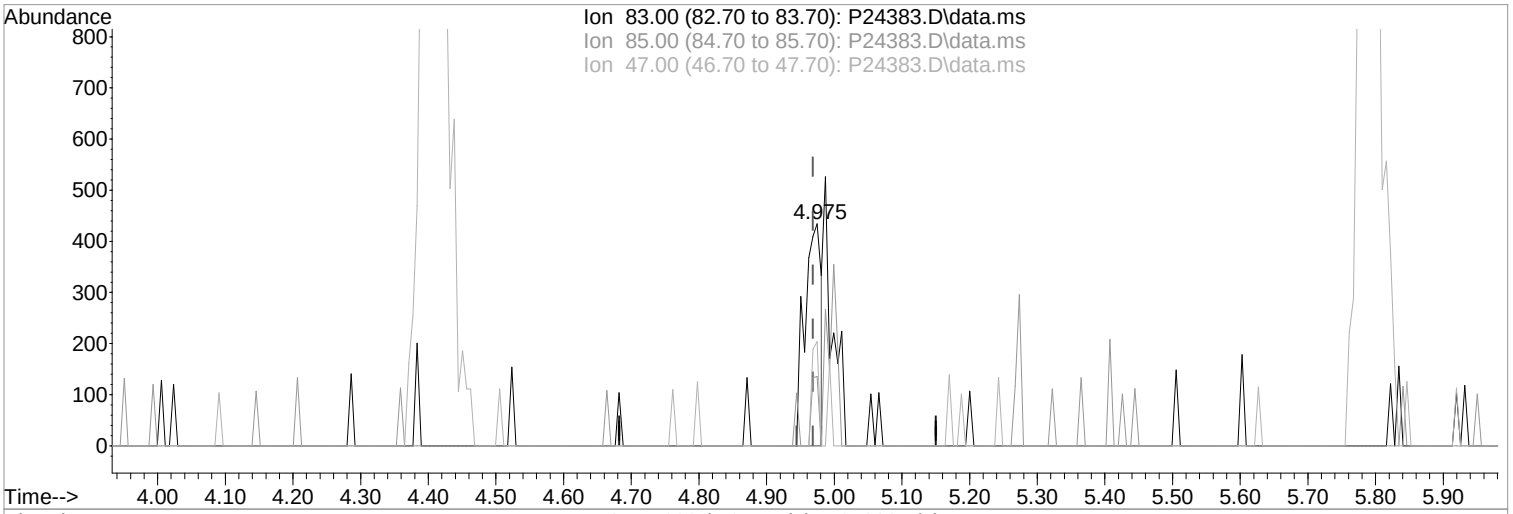
Split Peak

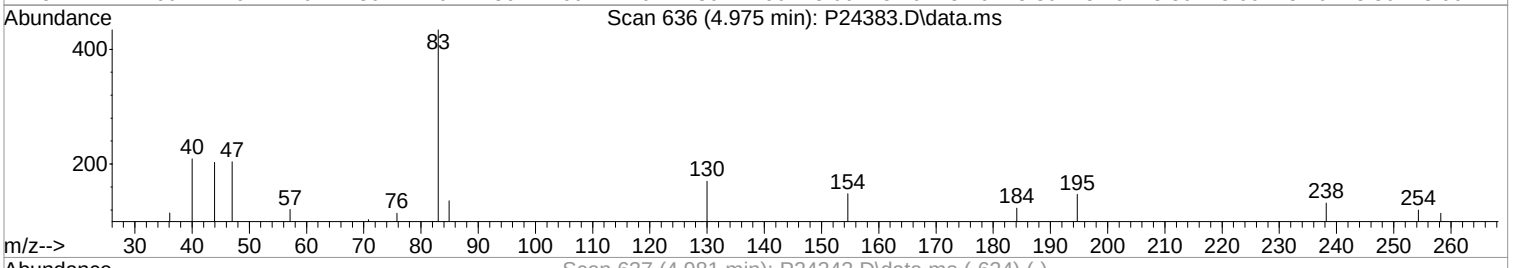
02/22/19

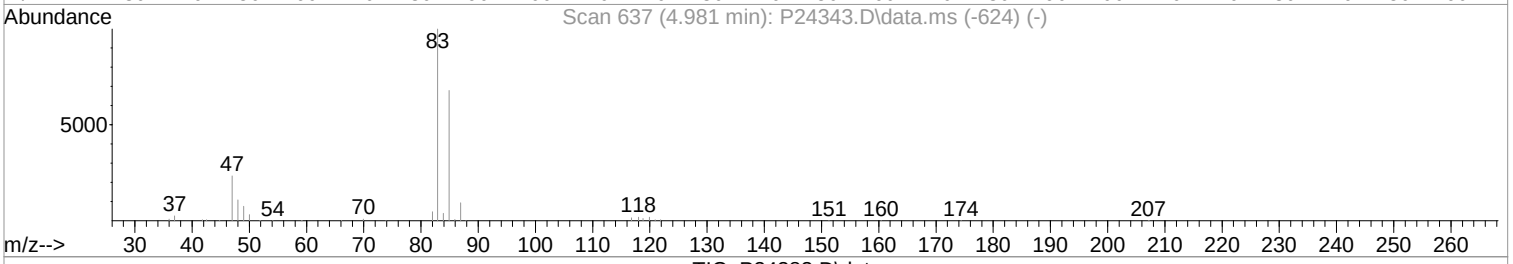
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24383.D
Acq On : 21 Feb 2019 8:58 pm
Operator : K.Ruest
Sample : R1901365-005|183 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 22 09:14:17 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24383.D\data.ms

(40) Chloroform (P)

4.975min (+0.006) 0.13 ppb

response 739

Ion	Exp%	Act%
83.00	100	100
85.00	67.90	31.34#
47.00	23.40	47.00#
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24383.D
Acq On : 21 Feb 2019 8:58 pm
Operator : K.Ruest
Sample : R1901365-005|183 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 23 Sample Multiplier: 1

DL

Quant Time: Feb 22 15:02:45 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

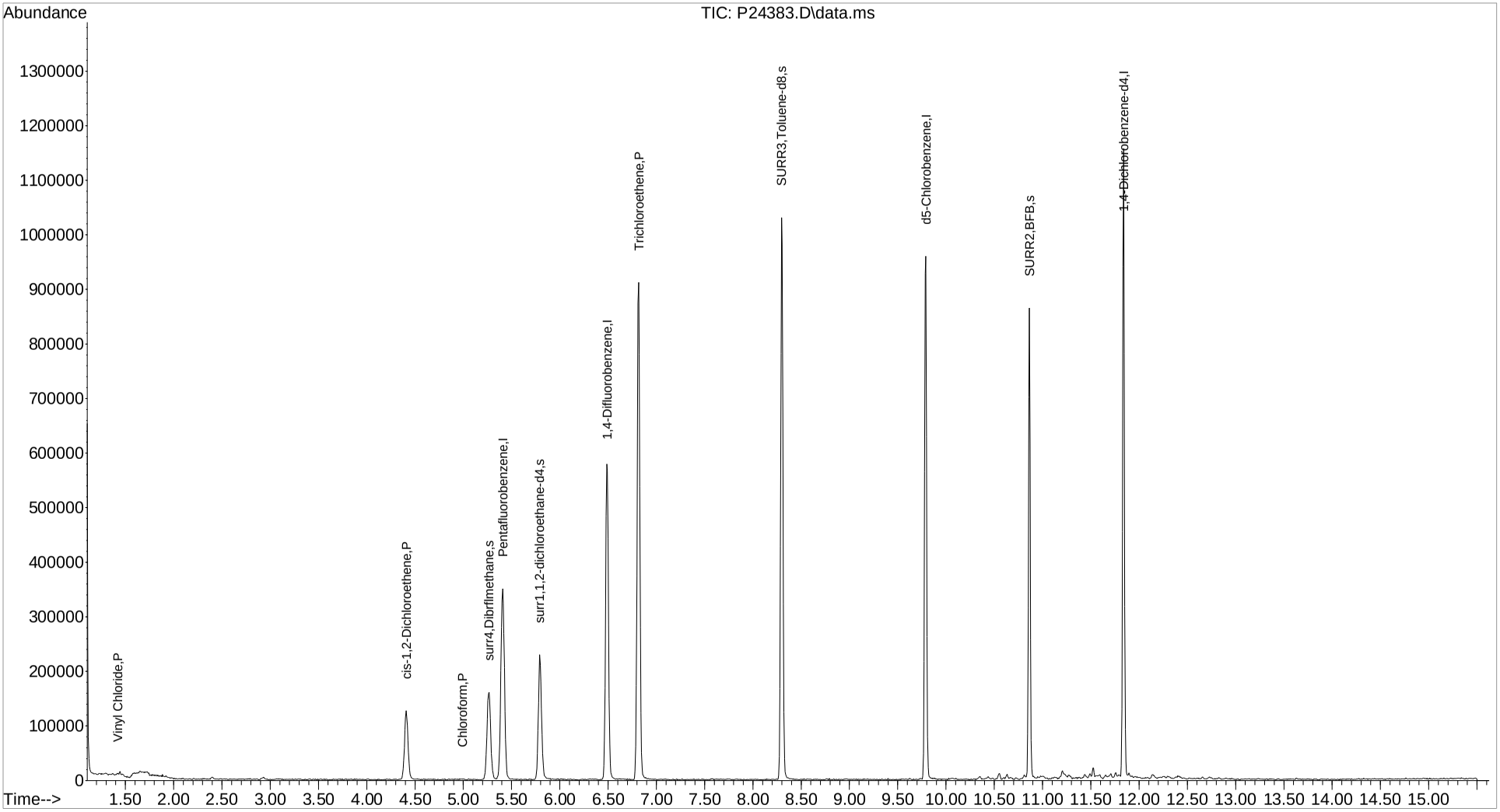
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.408	168	325099	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.493	114	514111	50.00	ppb		0.01
71) d5-Chlorobenzene	9.791	117	449956	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	233889	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.267	113	135212	47.86	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.72%				
48) surr1,1,2-dichloroetha...	5.792	65	186253	51.97	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.94%				
65) SURR3,Toluene-d8	8.297	98	669098	49.93	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.86%				
70) SURR2,BFB	10.864	95	230142	47.95	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.90%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.421	62	1688	0.36	ppb		69
34) cis-1,2-Dichloroethene	4.408	96	75230	19.89	ppb	#	80
40) Chloroform	4.987	83	1216m	0.22	ppb		
54) Trichloroethene	6.816	130	333725	92.81	ppb		96

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

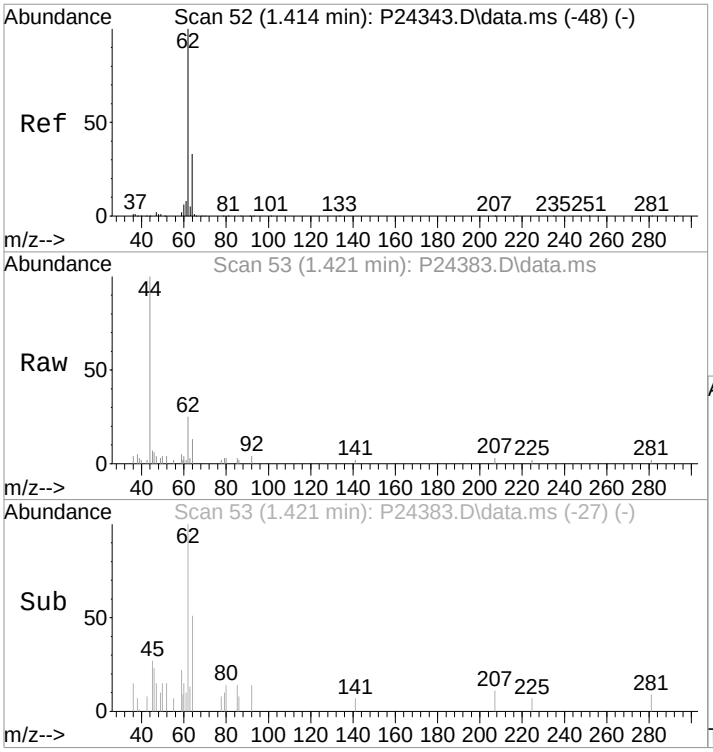
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24383.D
Acq On : 21 Feb 2019 8:58 pm
Operator : K.Ruest
Sample : R1901365-005|183 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 22 15:02:45 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



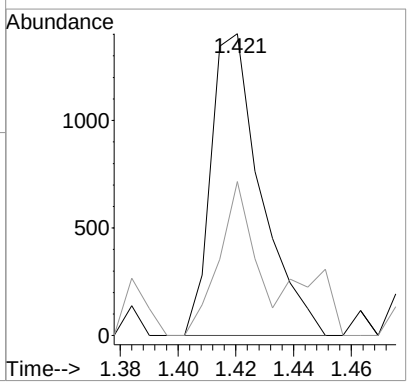
1st 02/22/19

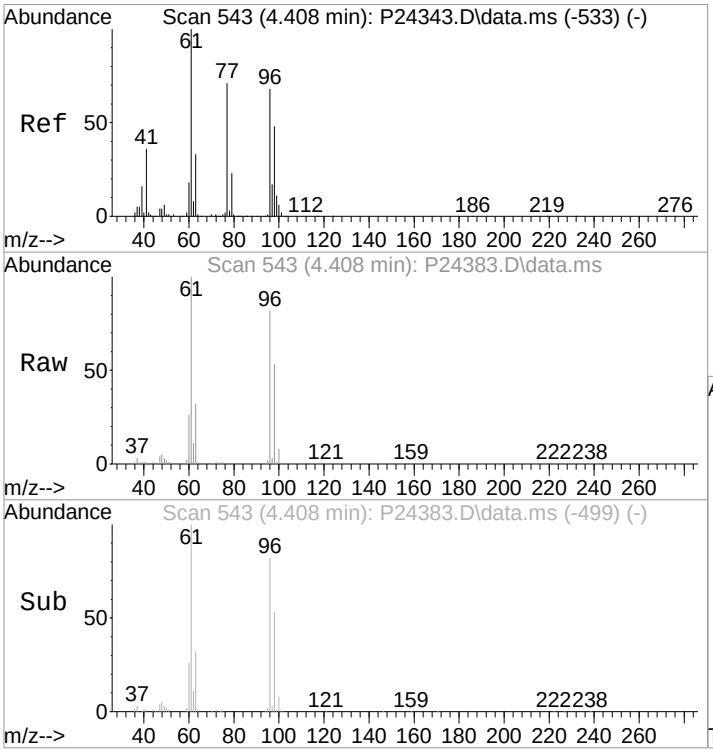


#4
Vinyl Chloride
Concen: 0.36 ppb
RT: 1.421 min Scan# 53
Delta R.T. 0.012 min
Lab File: P24383.D
Acq: 21 Feb 2019 8:58 pm

Tgt Ion: 62 Resp: 1688

Ion	Ratio	Lower	Upper
62	100		
64	51.0	13.2	53.2

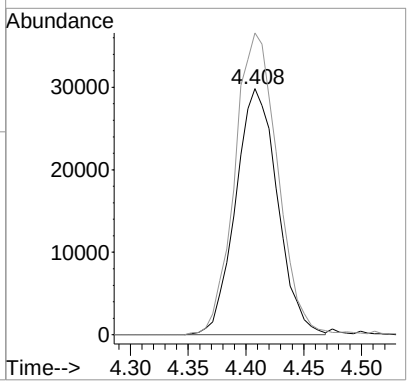


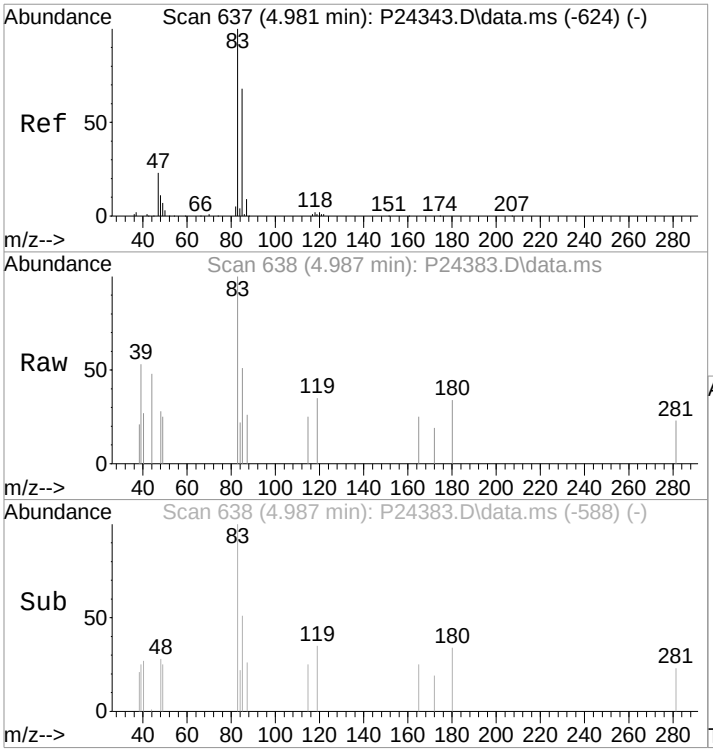


#34
cis-1,2-Dichloroethene
Concen: 19.89 ppb
RT: 4.408 min Scan# 543
Delta R.T. 0.006 min
Lab File: P24383.D
Acq: 21 Feb 2019 8:58 pm

Tgt Ion: 96 Resp: 75230

Ion	Ratio	Lower	Upper
96	100		
61	122.6	128.1	168.1#

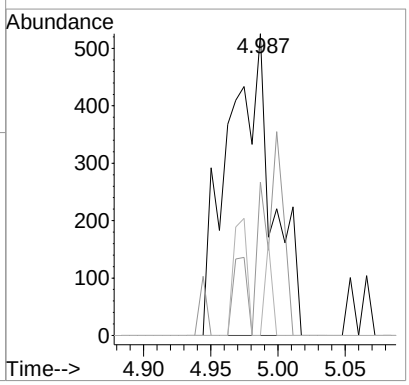


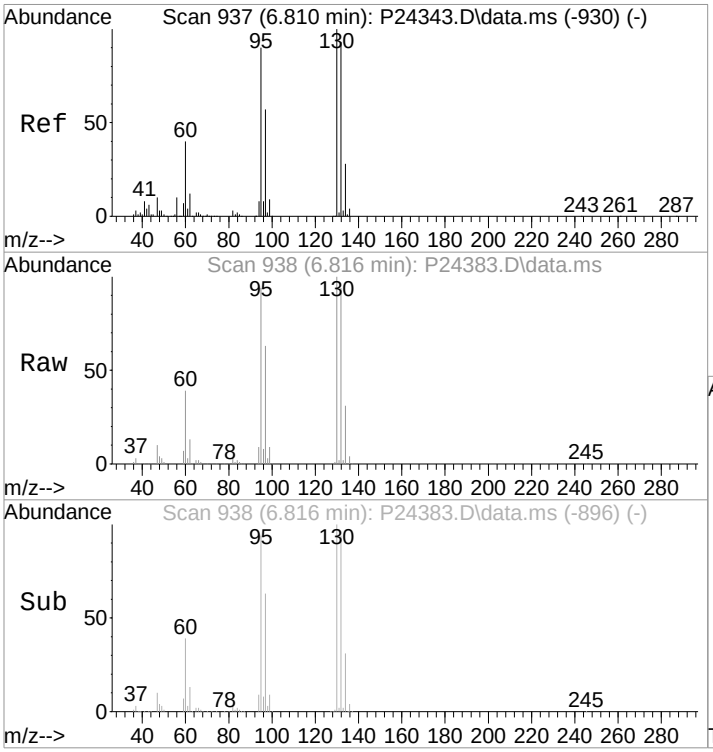


#40
Chloroform
Concen: 0.22 ppb m
RT: 4.987 min Scan# 638
Delta R.T. 0.018 min
Lab File: P24383.D
Acq: 21 Feb 2019 8:58 pm

Tgt Ion: 83 Resp: 1216

Ion	Ratio	Lower	Upper
83	100		
85	50.8	47.9	87.9
47	0.0	3.4	43.4#

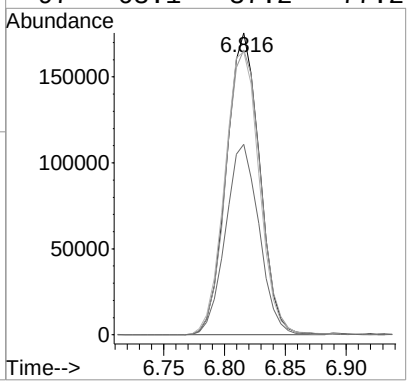




#54
Trichloroethene
Concen: 92.81 ppb
RT: 6.816 min Scan# 938
Delta R.T. 0.006 min
Lab File: P24383.D
Acq: 21 Feb 2019 8:58 pm

Tgt Ion:130 Resp: 333725

Ion	Ratio	Lower	Upper
130	100		
132	94.4	72.6	112.6
95	93.7	69.8	109.8
97	63.1	37.2	77.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24383.D
Acq On : 21 Feb 2019 8:58 pm
Operator : K.Ruest
Sample : R1901365-005|183 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 23 Sample Multiplier: 1

Integration Parameters: INTP90.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 500 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P24383.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.408	528	543	557	rBV	126791	323148	18.12%	3.001%
2	5.267	670	684	697	rBV3	160234	443199	24.86%	4.115%
3	5.408	697	707	721	rVB	349314	902862	50.63%	8.383%
4	5.792	761	770	782	rBV	228913	526283	29.51%	4.887%
5	6.487	875	884	899	rBV	578435	1180525	66.21%	10.962%
6	6.816	930	938	949	rBV	911055	1783109	100.00%	16.557%
7	8.297	1174	1181	1191	rBV	1029821	1693000	94.95%	15.720%
8	9.791	1420	1426	1438	rBV	958841	1366969	76.66%	12.693%
9	10.864	1597	1602	1608	rBV	859307	1061236	59.52%	9.854%
10	11.205	1650	1658	1661	rBV6	15571	30354	1.70%	0.282%
11	11.522	1707	1710	1713	rVB	16625	18704	1.05%	0.174%
12	11.839	1757	1762	1769	rVV	1150437	1421382	79.71%	13.198%
13	12.144	1806	1812	1819	rBV8	7629	18754	1.05%	0.174%

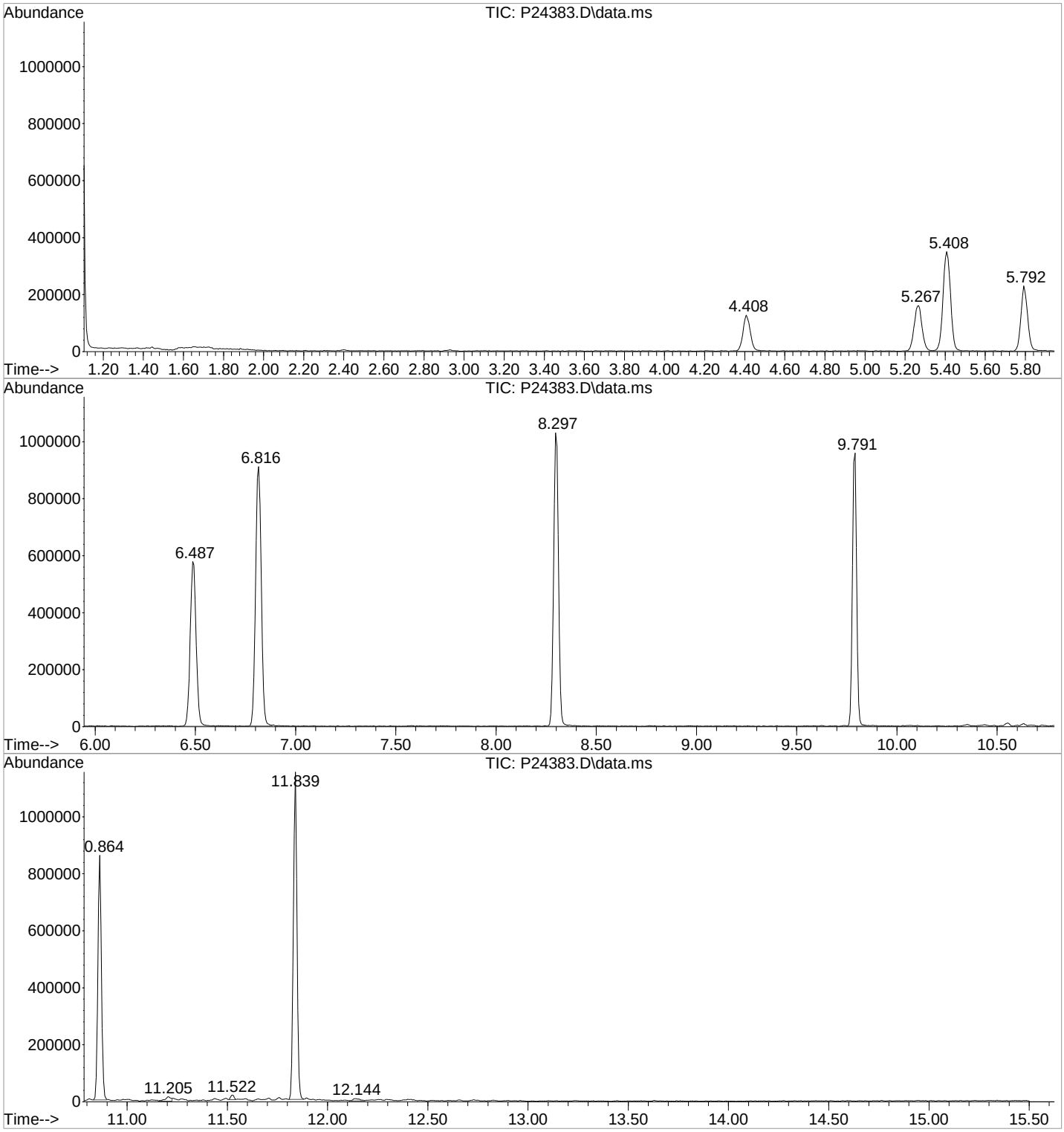
Sum of corrected areas: 10769525

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24383.D
Acq On : 21 Feb 2019 8:58 pm
Operator : K.Ruest
Sample : R1901365-005|183 Inst : MSVOA-12
Misc : DAY MED T4
ALS Vial : 23 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\022119\\
Data File : P24383.D
Acq On : 21 Feb 2019 8:58 pmm
Operator : K.Ruestt
Sample : R1901365-005|183 Inst : MSVOA-122
Misc : DAY MED T44
ALS Vial : 23 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

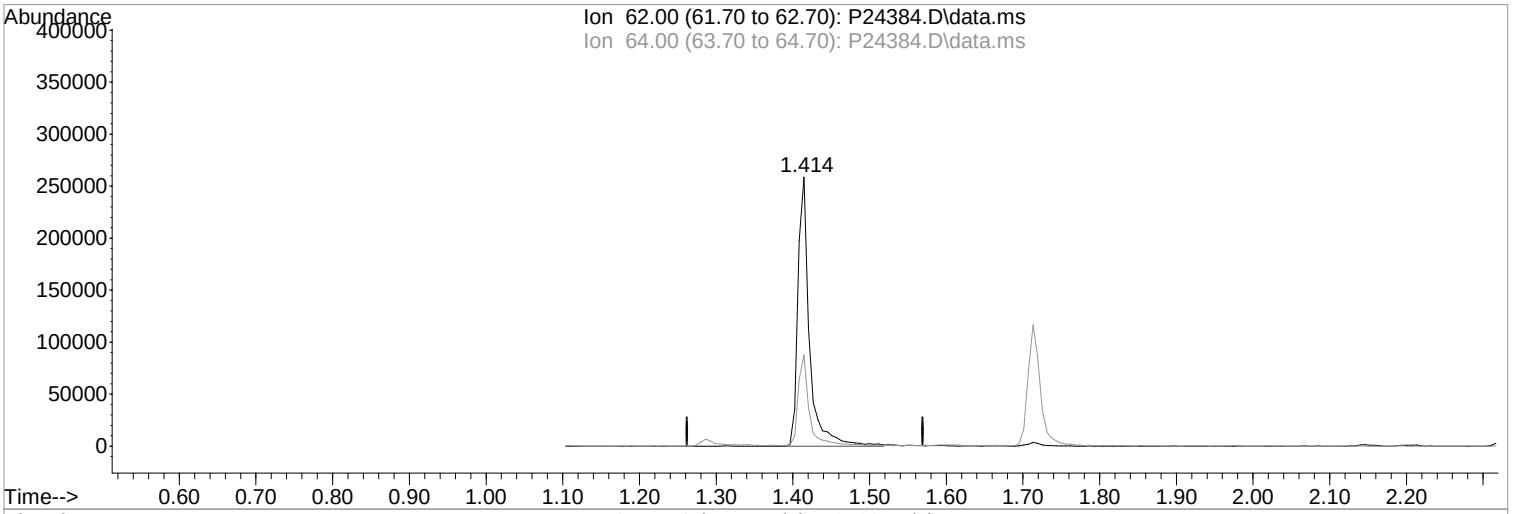
					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

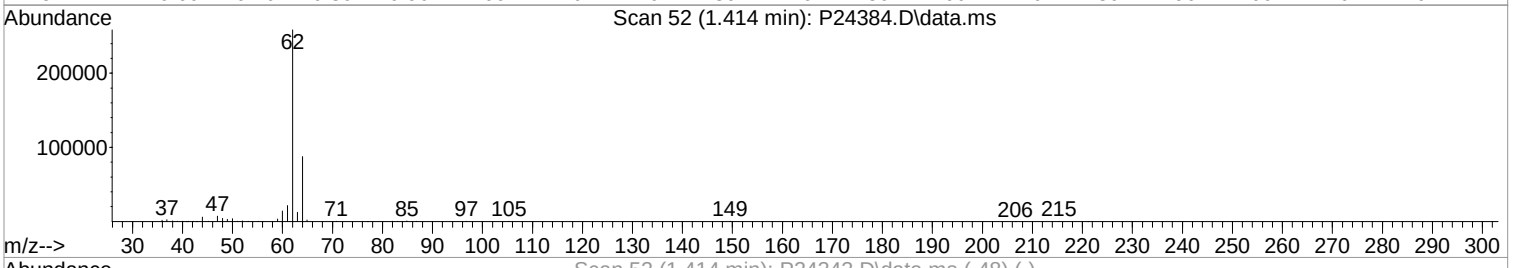
No Library Search Compounds Detected
****

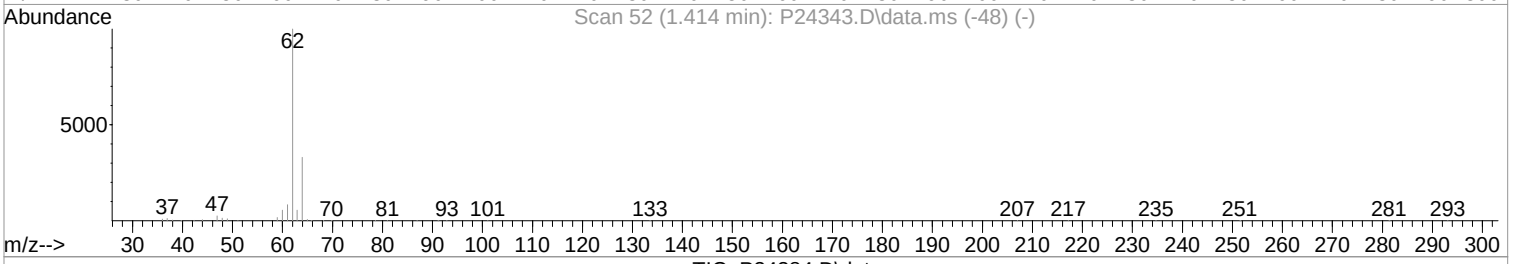
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24384.D
Acq On : 21 Feb 2019 9:20 pm
Operator : K.Ruest
Sample : R1901421-001MS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 09:15:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration







TIC: P24384.D\data.ms

(4) Vinyl Chloride (P)

1.414min (+0.006) 58.52 ppb m

response 273319

Ion	Exp%	Act%
62.00	100	100
64.00	33.20	33.86
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

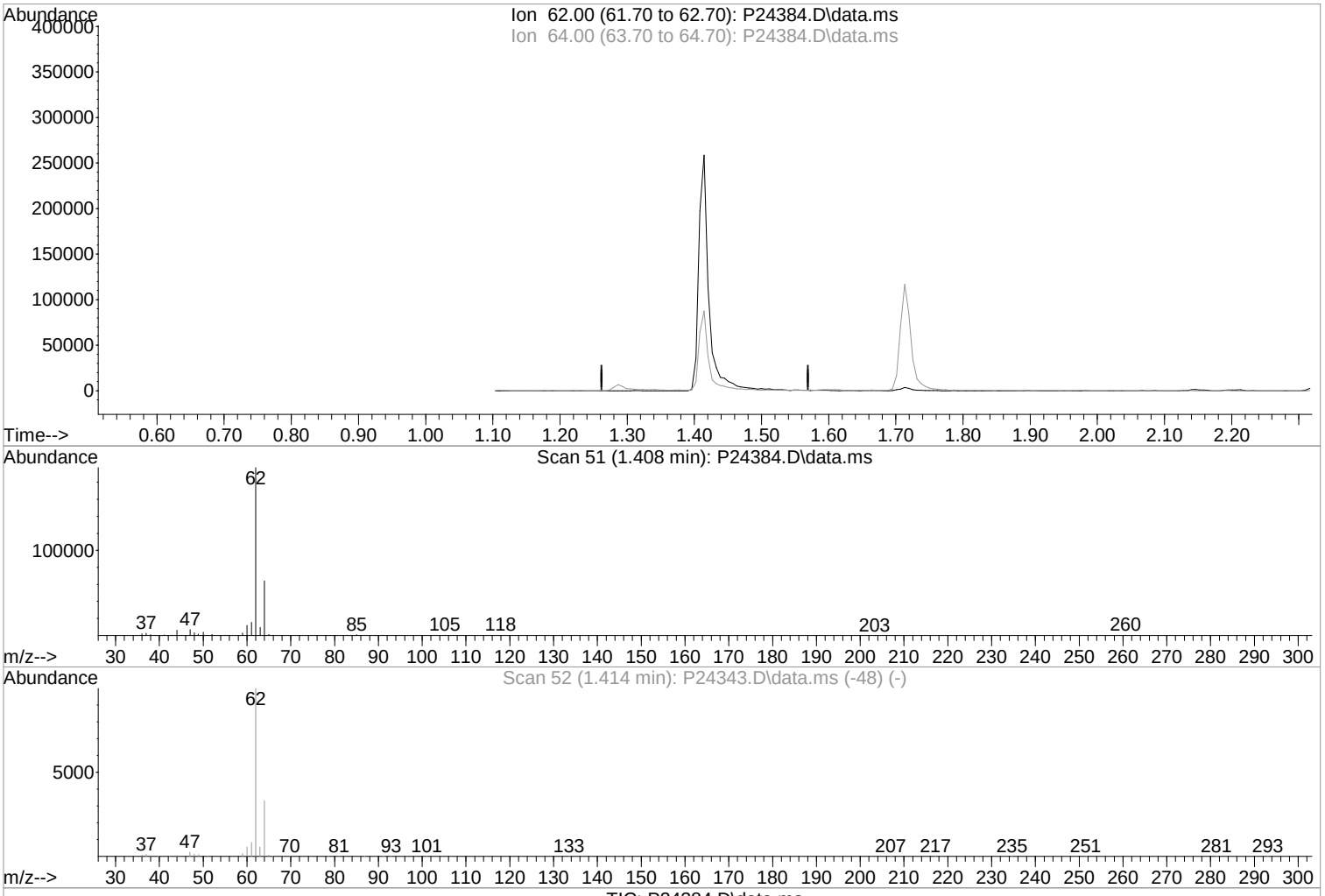
Peak not found.

02/22/19

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24384.D
Acq On : 21 Feb 2019 9:20 pm
Operator : K.Ruest
Sample : R1901421-001MS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 09:15:10 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



TIC: P24384.D\data.ms

(4) Vinyl Chloride (P)

1.408min (-1.408) 0.00 ppb

response 0

Ion	Exp%	Act%
62.00	100	0.00
64.00	33.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24384.D
Acq On : 21 Feb 2019 9:20 pm
Operator : K.Ruest
Sample : R1901421-001MS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 15:18:34 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.401	168	321361	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.487	114	510221	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	449631	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	237929	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.255	113	136800	48.79	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.58%				
48) surr1,1,2-dichloroetha...	5.786	65	184407	51.85	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.70%				
65) SURR3,Toluene-d8	8.297	98	654798	49.23	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.46%				
70) SURR2,BFB	10.864	95	238885	50.15	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.30%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	199796	51.33	ppb		98
3) Chloromethane	1.335	50	273042	52.48	ppb		96
4) Vinyl Chloride	1.414	62	273319m	58.52	ppb		
5) Bromomethane	1.634	94	143439	51.19	ppb		99
6) Chloroethane	1.713	64	130240	46.07	ppb		95
7) Freon 21	1.866	67	311712	52.86	ppb		100
8) Trichlorofluoromethane	1.914	101	236658	52.23	ppb		97
9) Diethyl Ether	2.146	59	184485	53.24	ppb		98
10) Freon 123a	2.146	67	212038	56.44	ppb		99
11) Freon 123	2.201	83	267765	62.06	ppb		98
12) Acrolein	2.244	56	103311	116.66	ppb		89
13) 1,1-Diclethene	2.335	96	164996	55.04	ppb		98
14) Freon 113	2.341	101	151644	56.80	ppb		99
15) Acetone	2.378	43	99169	64.44	ppb		94
16) 2-Propanol	2.512	45	460418	1152.45	ppb		98
17) Iodomethane	2.463	142	228088	52.37	ppb		98
18) Carbon Disulfide	2.524	76	504864	56.21	ppb		98
19) Acetonitrile	2.622	40	95245	485.58	ppb		92
20) Allyl Chloride	2.664	76	105003	58.55	ppb		97
21) Methyl Acetate	2.689	43	218584	52.32	ppb		97
22) Methylene Chloride	2.780	84	188818	50.60	ppb		95
23) TBA	2.908	59	767506	1208.80	ppb		97
24) Acrylonitrile	3.030	53	585889	288.53	ppb		98
25) Methyl-t-Butyl Ether	3.085	73	628979	54.18	ppb		99
26) trans-1,2-Dichloroethene	3.073	96	182102	54.60	ppb		95
28) 1,1-Diclethane	3.566	63	351923	56.90	ppb		100
29) Vinyl Acetate	3.652	86	42623	55.83	ppb	#	84
30) DIPE	3.694	45	639047	57.09	ppb		99
31) 2-Chloro-1,3-Butadiene	3.688	53	273076	56.46	ppb		99
32) ETBE	4.219	59	573685	51.28	ppb		95
33) 2,2-Dichloropropane	4.396	77	247334	50.78	ppb		97
34) cis-1,2-Dichloroethene	4.402	96	213274	57.04	ppb		97
35) 2-Butanone	4.450	43	143261	55.39	ppb		99
36) Propionitrile	4.530	54	238436	283.40	ppb		97
37) Bromochloromethane	4.798	130	114452	49.31	ppb		95
38) Methacrylonitrile	4.792	67	117789	53.81	ppb		94
39) Tetrahydrofuran	4.883	42	97505	58.20	ppb		92
40) Chloroform	4.969	83	299662	53.98	ppb		98
41) 1,1,1-Trichloroethane	5.273	97	245530	56.81	ppb		97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24384.D
Acq On : 21 Feb 2019 9:20 pm
Operator : K.Ruest
Sample : R1901421-001MS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 15:18:34 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.109	73	590718	55.67	ppb	98
44) Cyclohexane	5.359	41	166539	55.67	ppb	100
46) Carbontetrachloride	5.548	117	177327	52.18	ppb	98
47) 1,1-Dichloropropene	5.554	75	245022	56.21	ppb	98
49) Benzene	5.871	78	762354	52.31	ppb	98
50) 1,2-Dichloroethane	5.907	62	245663	52.65	ppb	96
51) Iso-Butyl Alcohol	5.877	43	325661	1065.93	ppb	99
52) n-Heptane	6.359	43	221202	49.81	ppb	100
53) 1-Butanol	6.834	56	553261	2743.72	ppb	99
54) Trichloroethene	6.810	130	184361	51.66	ppb	93
55) Methylcyclohexane	7.054	55	248987	55.29	ppb	99
56) 1,2-Diclpropane	7.090	63	204688	52.85	ppb	97
57) Dibromomethane	7.230	93	111124	50.69	ppb	97
58) 1,4-Dioxane	7.291	88	86826	1256.64	ppb	93
59) Methyl Methacrylate	7.316	69	195414	56.47	ppb	95
60) Bromodichloromethane	7.456	83	198225	48.64	ppb	98
61) 2-Nitropropane	7.736	41	82703	102.23	ppb	97
63) cis-1,3-Dichloropropene	7.998	75	298954	51.89	ppb	97
64) 4-Methyl-2-pentanone	8.206	43	271448	55.24	ppb	97
66) Toluene	8.370	91	815460	54.03	ppb	99
67) trans-1,3-Dichloropropene	8.639	75	264238	52.38	ppb	98
68) Ethyl Methacrylate	8.779	69	326306	56.16	ppb	97
69) 1,1,2-Trichloroethane	8.828	97	175003	49.49	ppb	97
72) Tetrachloroethene	8.962	164	138173	51.32	ppb	91
73) 2-Hexanone	9.114	43	198535	54.78	ppb	93
74) 1,3-Dichloropropane	8.998	76	320242	49.45	ppb	98
75) Dibromochloromethane	9.224	129	141933	46.99	ppb	99
76) N-Butyl Acetate	9.273	43	368278	55.66	ppb	96
77) 1,2-Dibromoethane	9.321	107	174983	49.55	ppb	99
78) Chlorobenzene	9.815	112	494410	51.37	ppb	99
79) 3-CBTF	9.834	180	250277	53.33	ppb	98
80) 4-CBTF	9.888	180	231660	54.61	ppb	97
81) 1,1,1,2-Tetrachloroethane	9.901	131	155910	50.05	ppb	98
82) Ethylbenzene	9.937	106	274513	52.89	ppb	97
83) (m+p)Xylene	10.047	106	673949	106.21	ppb	100
84) o-Xylene	10.407	106	334529	53.58	ppb	92
85) Styrene	10.419	104	547558	54.12	ppb	100
87) Bromoform	10.571	173	89750	44.67	ppb	98
88) 2-CBTF	10.650	180	250643	51.32	ppb	98
89) Isopropylbenzene	10.742	105	835900	53.41	ppb	100
90) Cyclohexanone	10.797	55	261504	263.62	ppb	100
91) trans-1,4-Dichloro-2-B...	11.047	53	69317	53.52	ppb	91
92) 1,1,2,2-Tetrachloroethane	10.998	83	271097	51.93	ppb	98
93) Bromobenzene	10.986	156	201437	47.84	ppb	90
94) 1,2,3-Trichloropropane	11.028	110	83460	50.39	ppb	97
95) n-Propylbenzene	11.095	91	985316	54.96	ppb	97
96) 2-Chlorotoluene	11.156	91	583300	51.63	ppb	98
97) 3-Chlorotoluene	11.211	91	597701	54.08	ppb	99
98) 4-Chlorotoluene	11.248	91	650063	51.59	ppb	98
99) 1,3,5-Trimethylbenzene	11.248	105	685246	52.76	ppb	99
100) tert-Butylbenzene	11.522	119	600803	53.18	ppb	100
101) 1,2,4-Trimethylbenzene	11.559	105	697964	51.95	ppb	99
102) 3,4-DCBTF	11.620	214	199093	49.44	ppb	96
103) sec-Butylbenzene	11.705	105	895778	54.69	ppb	99
104) p-Isopropyltoluene	11.827	119	738709	54.30	ppb	99
105) 1,3-Dclbenz	11.784	146	378829	49.41	ppb	98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24384.D
Acq On : 21 Feb 2019 9:20 pm
Operator : K.Ruest
Sample : R1901421-001MS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 15:18:34 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.858	146	375835	46.45	ppb	98
107) 2,4-DCBTF	11.912	214	181902	49.32	ppb	98
108) 2,5-DCBTF	11.949	214	205535	49.43	ppb	99
109) n-Butylbenzene	12.156	91	693712	58.18	ppb	100
110) 1,2-Dclbenz	12.156	146	379080	48.33	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.784	157	59849	46.53	ppb	89
112) Trielution Dichlorotol...	12.900	125	1052439	163.13	ppb	98
113) 1,3,5 Trichlorobenzene	12.955	180	286126	50.68	ppb	99
114) Coelution Dichlorotoluene	13.229	125	779630	109.55	ppb	96
115) 1,2,4-Tcbenzene	13.436	180	288498	52.44	ppb	94
116) Hexachlorobt	13.577	225	117374	50.60	ppb	97
117) Naphthalen	13.625	128	914603	47.11	ppb	98
118) 1,2,3-Tclbenzene	13.814	180	294429	51.89	ppb	98
119) 2,4,5-Trichlorotolene	14.400	159	141670	49.80	ppb	97
120) 2,3,6-Trichlorotoluene	14.485	159	133395	42.15	ppb	95

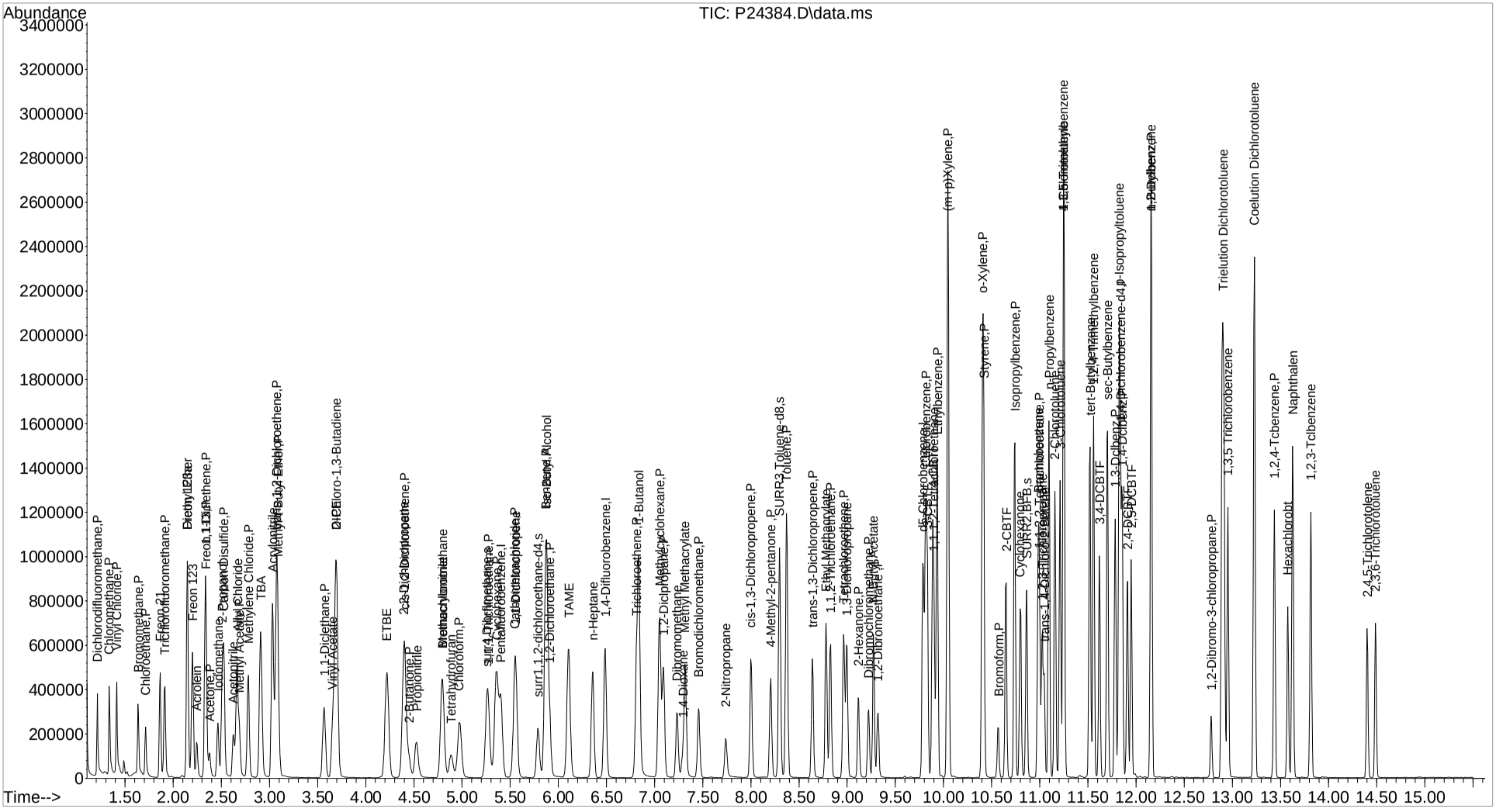
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24384.D
Acq On : 21 Feb 2019 9:20 pm
Operator : K.Ruest
Sample : R1901421-001MS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 15:18:34 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24385.D
Acq On : 21 Feb 2019 9:41 pm
Operator : K.Ruest
Sample : R1901421-001DMS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 15:20:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.407	168	318171	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	507700	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	438798	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	225821	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.261	113	135414	48.54	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.08%				
48) surr1,1,2-dichloroetha...	5.792	65	179948	50.85	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.70%				
65) SURR3,Toluene-d8	8.297	98	644693	48.72	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.44%				
70) SURR2,BFB	10.864	95	231982	48.94	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.88%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.219	85	183968	47.74	ppb		99
3) Chloromethane	1.341	50	255472	49.60	ppb		99
4) Vinyl Chloride	1.420	62	248643	53.77	ppb		99
5) Bromomethane	1.640	94	133856	48.20	ppb		97
6) Chloroethane	1.719	64	116792	41.73	ppb		89
7) Freon 21	1.872	67	298948	51.20	ppb		100
8) Trichlorofluoromethane	1.914	101	227877	50.79	ppb		96
9) Diethyl Ether	2.152	59	178652	52.07	ppb		98
10) Freon 123a	2.152	67	199263	53.57	ppb		98
11) Freon 123	2.207	83	251246	58.81	ppb		98
12) Acrolein	2.250	56	99071	112.99	ppb		100
13) 1,1-Diclethene	2.341	96	156427	52.71	ppb		94
14) Freon 113	2.347	101	142795	54.02	ppb		99
15) Acetone	2.384	43	94655	62.12	ppb		92
16) 2-Propanol	2.512	45	450567	1139.10	ppb		100
17) Iodomethane	2.469	142	217820	50.63	ppb		99
18) Carbon Disulfide	2.530	76	478371	53.80	ppb		98
19) Acetonitrile	2.628	40	91474	471.03	ppb		99
20) Allyl Chloride	2.664	76	97597	54.96	ppb		94
21) Methyl Acetate	2.689	43	209870	50.74	ppb		100
22) Methylene Chloride	2.786	84	177292	47.99	ppb		96
23) TBA	2.914	59	750497	1193.86	ppb		98
24) Acrylonitrile	3.036	53	562576	279.83	ppb		99
25) Methyl-t-Butyl Ether	3.085	73	616205	53.61	ppb		98
26) trans-1,2-Dichloroethene	3.079	96	166087	50.30	ppb		94
28) 1,1-Diclethane	3.572	63	333503	54.46	ppb		99
29) Vinyl Acetate	3.664	86	42526	56.26	ppb	#	86
30) DIPE	3.701	45	610462	55.09	ppb		98
31) 2-Chloro-1,3-Butadiene	3.694	53	257591	53.79	ppb		99
32) ETBE	4.225	59	553338	49.96	ppb		96
33) 2,2-Dichloropropane	4.402	77	227378	47.15	ppb		99
34) cis-1,2-Dichloroethene	4.408	96	203494	54.97	ppb		94
35) 2-Butanone	4.450	43	139650	54.53	ppb		92
36) Propionitrile	4.530	54	238405	286.21	ppb		98
37) Bromochloromethane	4.804	130	113271	49.29	ppb		90
38) Methacrylonitrile	4.804	67	112186	51.76	ppb		93
39) Tetrahydrofuran	4.895	42	93553	56.40	ppb		95
40) Chloroform	4.981	83	289733	52.71	ppb		98
41) 1,1,1-Trichloroethane	5.279	97	229650	53.66	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24385.D
Acq On : 21 Feb 2019 9:41 pm
Operator : K.Ruest
Sample : R1901421-001DMS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 15:20:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.109	73	576635	54.89	ppb		98
44) Cyclohexane	5.365	41	154457	51.89	ppb		95
46) Carbontetrachloride	5.554	117	174826	51.70	ppb		97
47) 1,1-Dichloropropene	5.560	75	233439	53.82	ppb		95
49) Benzene	5.871	78	723162	49.87	ppb		99
50) 1,2-Dichloroethane	5.907	62	237470	51.14	ppb		96
51) Iso-Butyl Alcohol	5.883	43	313238	1030.36	ppb		97
52) n-Heptane	6.359	43	207500	46.96	ppb		98
53) 1-Butanol	6.840	56	548136	2731.80	ppb		99
54) Trichloroethene	6.810	130	174823	49.23	ppb		97
55) Methylcyclohexane	7.054	55	228868	51.08	ppb		97
56) 1,2-Diclpropane	7.090	63	195207	50.65	ppb		98
57) Dibromomethane	7.230	93	110600	50.70	ppb		89
58) 1,4-Dioxane	7.291	88	86790	1262.35	ppb		95
59) Methyl Methacrylate	7.322	69	185591	53.90	ppb		100
60) Bromodichloromethane	7.456	83	201617	49.71	ppb		98
61) 2-Nitropropane	7.742	41	86125	106.99	ppb		92
63) cis-1,3-Dichloropropene	8.005	75	286724	50.02	ppb		98
64) 4-Methyl-2-pentanone	8.206	43	268983	55.01	ppb		97
66) Toluene	8.370	91	768633	51.18	ppb		100
67) trans-1,3-Dichloropropene	8.639	75	256537	51.10	ppb		98
68) Ethyl Methacrylate	8.779	69	317012	54.83	ppb		98
69) 1,1,2-Trichloroethane	8.828	97	165808	47.13	ppb		98
72) Tetrachloroethene	8.962	164	132978	50.61	ppb		93
73) 2-Hexanone	9.114	43	193341	54.67	ppb		98
74) 1,3-Dichloropropane	8.998	76	311869	49.35	ppb		99
75) Dibromochloromethane	9.224	129	140811	47.77	ppb		98
76) N-Butyl Acetate	9.273	43	349121	54.07	ppb		97
77) 1,2-Dibromoethane	9.321	107	167703	48.66	ppb		95
78) Chlorobenzene	9.815	112	466884	49.71	ppb		97
79) 3-CBTF	9.833	180	244033	53.29	ppb		98
80) 4-CBTF	9.888	180	217880	52.63	ppb		97
81) 1,1,1,2-Tetrachloroethane	9.901	131	152542	50.17	ppb		99
82) Ethylbenzene	9.937	106	261856	51.70	ppb		97
83) (m+p)Xylene	10.047	106	641425	103.58	ppb		99
84) o-Xylene	10.407	106	316112	51.88	ppb		92
85) Styrene	10.419	104	520447	52.71	ppb		98
87) Bromoform	10.565	173	88850	46.59	ppb		100
88) 2-CBTF	10.650	180	239611	51.69	ppb		99
89) Isopropylbenzene	10.742	105	789081	53.12	ppb		99
90) Cyclohexanone	10.797	55	256630	272.58	ppb		100
91) trans-1,4-Dichloro-2-B...	11.047	53	68086	55.39	ppb		97
92) 1,1,2,2-Tetrachloroethane	10.998	83	260664	52.61	ppb		96
93) Bromobenzene	10.986	156	194599	48.70	ppb		92
94) 1,2,3-Trichloropropane	11.028	110	81295	51.72	ppb	#	90
95) n-Propylbenzene	11.095	91	931836	54.76	ppb		98
96) 2-Chlorotoluene	11.156	91	558705	52.10	ppb		98
97) 3-Chlorotoluene	11.211	91	565998	53.95	ppb		99
98) 4-Chlorotoluene	11.248	91	620727	51.91	ppb		98
99) 1,3,5-Trimethylbenzene	11.248	105	653949	53.05	ppb		99
100) tert-Butylbenzene	11.522	119	572133	53.36	ppb		97
101) 1,2,4-Trimethylbenzene	11.559	105	666354	52.26	ppb		99
102) 3,4-DCBTF	11.620	214	184661	48.32	ppb		97
103) sec-Butylbenzene	11.705	105	830880	53.45	ppb		99
104) p-Isopropyltoluene	11.827	119	696023	53.91	ppb		99
105) 1,3-Dclbenz	11.784	146	367249	50.47	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24385.D
Acq On : 21 Feb 2019 9:41 pm
Operator : K.Ruest
Sample : R1901421-001DMS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 15:20:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	365905	47.65	ppb	99
107) 2,4-DCBTF	11.912	214	170582	48.74	ppb	97
108) 2,5-DCBTF	11.949	214	189516	48.02	ppb	95
109) n-Butylbenzene	12.156	91	663197	58.60	ppb	99
110) 1,2-Dclbenz	12.156	146	367875	49.42	ppb	97
111) 1,2-Dibromo-3-chloropr...	12.784	157	59253	48.53	ppb	86
112) Trielution Dichlorotol...	12.900	125	1015349	165.82	ppb	98
113) 1,3,5 Trichlorobenzene	12.955	180	275887	51.49	ppb	99
114) Coelution Dichlorotoluene	13.229	125	743343	110.05	ppb	97
115) 1,2,4-Tcbenzene	13.436	180	281441	53.90	ppb	97
116) Hexachlorobt	13.577	225	112199	50.96	ppb	97
117) Naphthalen	13.625	128	912421	49.54	ppb	99
118) 1,2,3-Tclbenzene	13.814	180	284813	52.89	ppb	97
119) 2,4,5-Trichlorotolene	14.400	159	136683	50.46	ppb	97
120) 2,3,6-Trichlorotoluene	14.485	159	127965	42.53	ppb	93

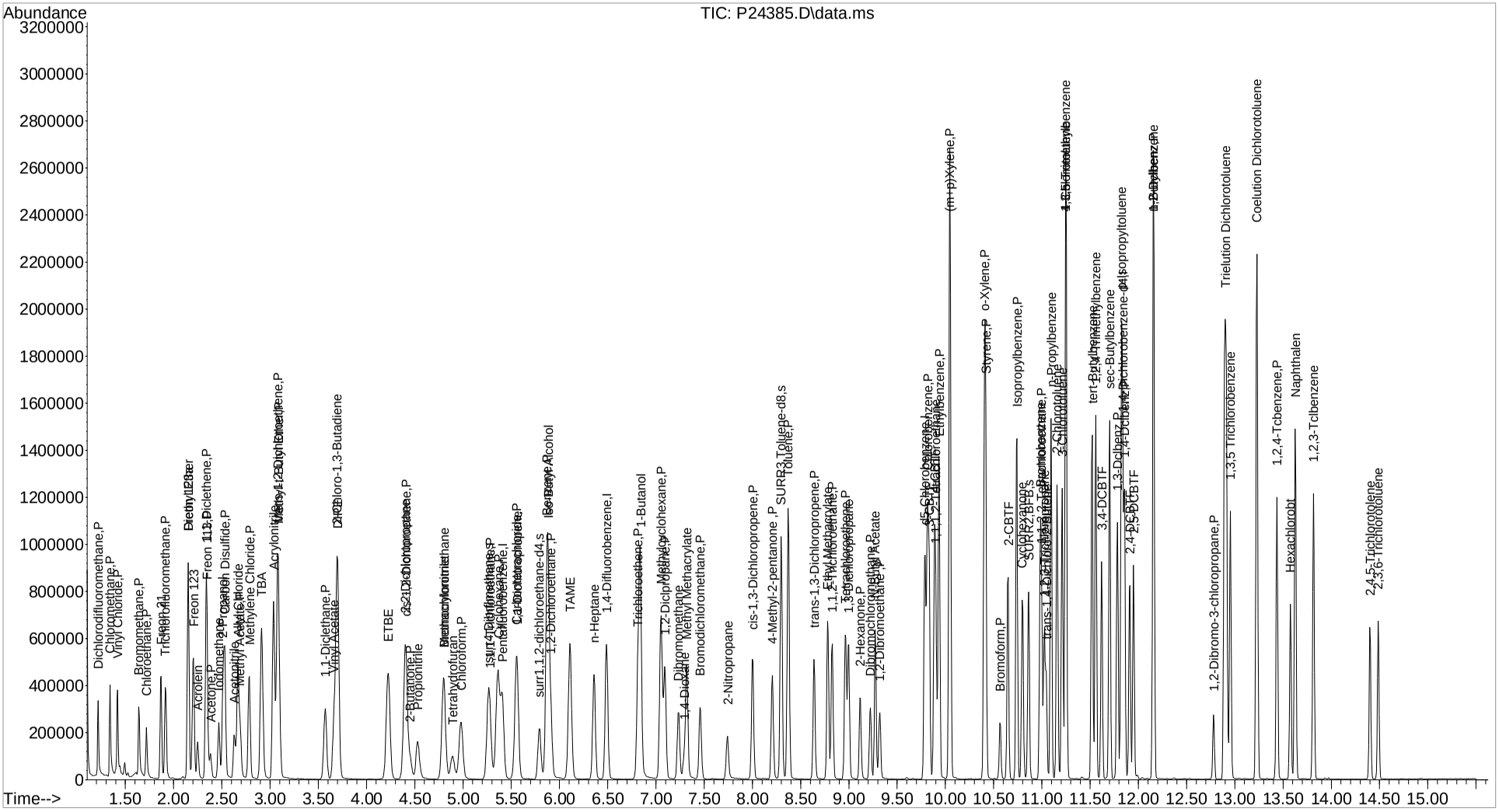
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 02/22/19

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24385.D
Acq On : 21 Feb 2019 9:41 pm
Operator : K.Ruest
Sample : R1901421-001DMS|1.0 Inst : MSVOA-12
Misc : GLOBAL 8260 T2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 22 15:20:11 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

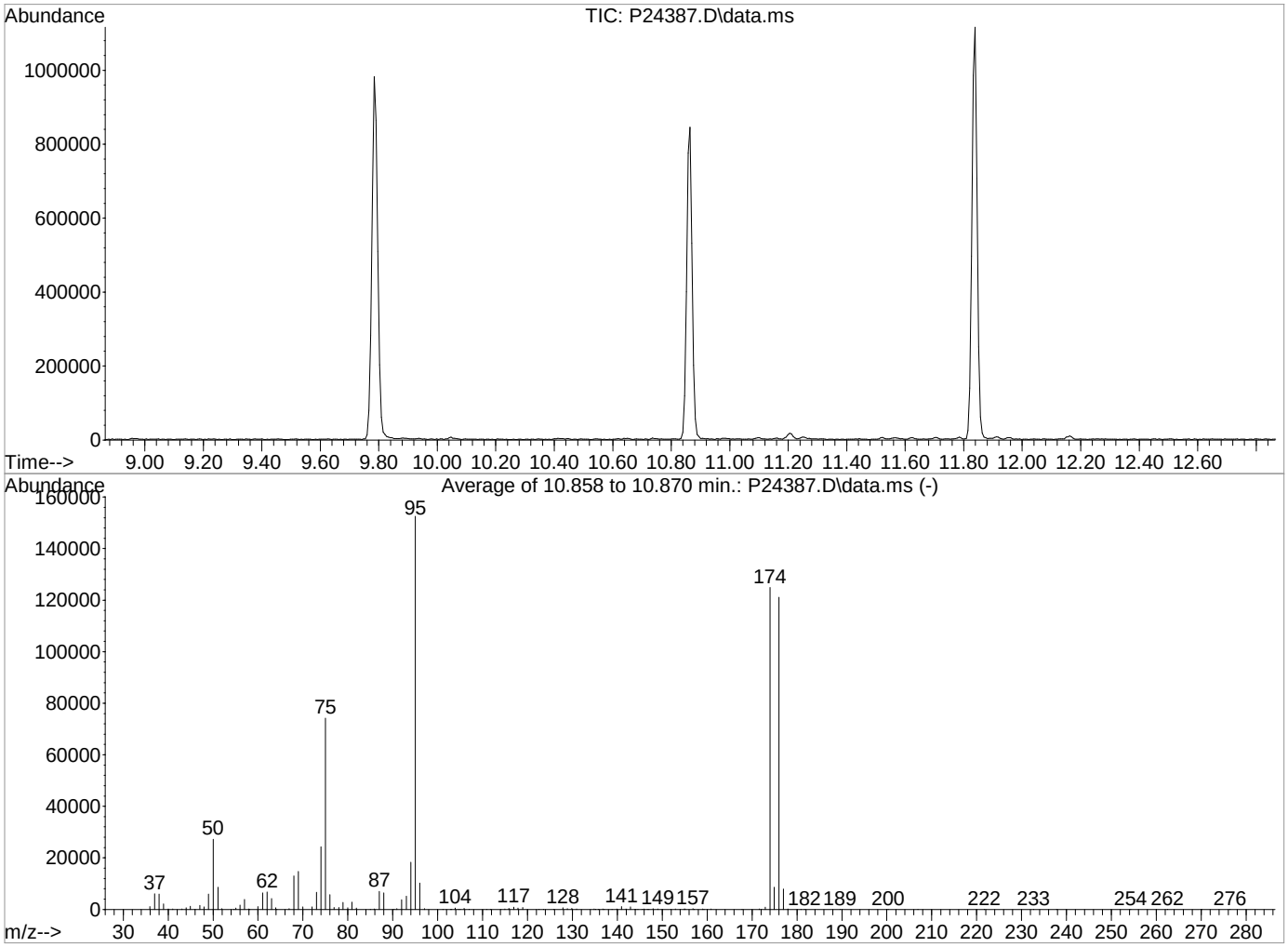


BFB

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24387.D
Acq On : 21 Feb 2019 10:25 pm
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File: INTP90.P

Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Feb 21 11:43:56 2019



AutoFind: Scans 1601, 1602, 1603; Background Corrected with Scan 1594

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.9	27240	PASS
75	95	30	60	48.6	74205	PASS
95	95	100	100	100.0	152576	PASS
96	95	5	9	6.7	10286	PASS
173	174	0.00	2	0.7	862	PASS
174	95	50	120	81.9	124973	PASS
175	174	5	9	6.9	8640	PASS
176	174	95	101	96.9	121091	PASS
177	176	5	9	6.6	7957	PASS

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24388.D
Acq On : 21 Feb 2019 10:47 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 22 09:18:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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	Pentafluorobenzene	1.0000	1.0000	0.0	96	0.01
2	P	Dichlorodifluoromethane	0.6056	0.7256	-19.8	104	0.01
3	P	Chloromethane	0.8095	0.9127	-12.7	108	0.01
4	P	Vinyl Chloride	0.7267	0.8847	-21.7#	106	0.01
5	P	Bromomethane	0.5125	0.4564	-4.7 ~~-10.9~~	105	0.00
6	P	Chloroethane	0.4398	0.4725	-7.4	105	0.01
7		Freon 21	0.9175	1.0641	-16.0	102	0.01
8	P	Trichlorofluoromethane	0.7050	0.7901	-12.1	106	0.01
9		Diethyl Ether	0.5392	0.5750	-6.6	99	0.01
10		Freon 123a	0.5846	0.6786	-16.1	105	0.01
11		Freon 123	0.6713	0.7738	-15.3	107	0.01
12		Acrolein	0.1378	0.1329	3.6	92	0.01
13	P	1,1-Diclethene	0.4664	0.5309	-13.8	105	0.01
14	P	Freon 113	0.4154	0.4742	-14.2	111	0.01
15	P	Acetone	0.2394	0.2927	-22.3#	108	0.01
16		2-Propanol	0.0622	0.0714	-14.8	109	0.00
17		Iodomethane	0.5130	0.6488	3.6 ~~-26.5#~~	89	0.02
18	P	Carbon Disulfide	1.3974	1.4528	-4.0	98	0.01
19		Acetonitrile	0.0305	0.0537	-76.1#	136	0.02
20		Allyl Chloride	0.2790	0.2705	3.0	87	0.01
21	P	Methyl Acetate	0.6500	0.7449	-14.6	101	0.01
22	P	Methylene Chloride	0.5806	0.6173	-6.3	101	0.01
23		TBA	0.0988	0.1142	-15.6	108	0.00
24		Acrylonitrile	0.3159	0.3563	-12.8	101	0.00
25	P	Methyl-t-Butyl Ether	1.8063	1.9364	-7.2	99	0.01
26	P	trans-1,2-Dichloroethene	0.5189	0.5677	-9.4	103	0.01
27		Halothane	0.0000	0.0000	0.0	0#	-4.08#
28	P	1,1-Diclethane	0.9623	1.1200	-16.4	104	0.01
29		Vinyl Acetate	0.1188	0.0961	19.1	78	0.01
30		DIPE	1.7415	2.0018	-14.9	103	0.01
31		2-Chloro-1,3-Butadiene	0.7526	0.8142	-8.2	102	0.00
32		ETBE	1.7407	1.9612	-12.7	103	0.01
33		2,2-Dichloropropane	0.7578	0.7466	1.5	96	0.00
34	P	cis-1,2-Dichloroethene	0.5817	0.6334	-8.9	102	0.01
35	P	2-Butanone	0.4024	0.4386	-9.0	105	0.01
36		Propionitrile	0.1309	0.1459	-11.5	98	0.00
37		Bromochloromethane	0.3611	0.3846	-6.5	99	0.00
38		Methacrylonitrile	0.3406	0.3672	-7.8	99	0.01
39		Tetrahydrofuran	0.2607	0.2804	-7.6	98	0.02
40	P	Chloroform	0.8638	0.9476	-9.7	102	0.01
41	P	1,1,1-Trichloroethane	0.6725	0.7823	-16.3	106	0.00
42		TAME	1.6509	1.8637	-12.9	100	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	98	0.00
44	P	Cyclohexane	0.2931	0.3344	-14.1	107	0.00
45	s	surr4,Dibrflmethane	0.2748	0.2777	-1.1	96	0.01
46	P	Carbontetrachloride	0.3330	0.3690	-10.8	104	0.00
47		1,1-Dichloropropene	0.4272	0.4851	-13.6	109	0.00
48	s	surr1,1,2-dichloroethane-d4	0.3485	0.3731	-7.1	102	0.00
49	P	Benzene	1.4282	1.5463	-8.3	103	0.01
50	P	1,2-Dichloroethane	0.4573	0.4944	-8.1	100	0.01
51		Iso-Butyl Alcohol	0.0299	0.0323	-8.0	101	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24388.D
Acq On : 21 Feb 2019 10:47 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 22 09:18:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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)
52		n-Heptane	0.4352	0.4578	-5.2	107	0.00
53		1-Butanol	0.0198	0.0221	-11.6	100	0.00
54	P	Trichloroethene	0.3497	0.3840	-9.8	102	0.00
55	P	Methylcyclohexane	0.4413	0.5023	-13.8	106	0.00
56	P	1,2-Diclpropane	0.3796	0.4163	-9.7	106	0.00
57		Dibromomethane	0.2148	0.2341	-9.0	102	0.00
58		1,4-Dioxane	0.0068	0.0083	-22.1#	119	-0.05
59		Methyl Methacrylate	0.3391	0.3674	-8.3	101	0.00
60	P	Bromodichloromethane	0.3994	0.4208	-5.4	100	0.00
61		2-Nitropropane	0.0793	0.0801	-1.0	99	0.00
62		2-Chloroethylvinyl Ether	0.1132	0.1313	-8.9 ~~-16.0~~	101	0.00
63	P	cis-1,3-Dichloropropene	0.5646	0.5994	-6.2	96	0.00
64	P	4-Methyl-2-pentanone	0.4816	0.5348	-11.0	106	0.00
65	s	SURR3,Toluene-d8	1.3033	1.3119	-0.7	98	0.00
66	P	Toluene	1.4790	1.6301	-10.2	104	0.00
67	P	trans-1,3-Dichloropropene	0.4944	0.5365	-8.5	96	0.00
68		Ethyl Methacrylate	0.5694	0.6384	-12.1	100	0.00
69	P	1,1,2-Trichloroethane	0.3465	0.3609	-4.2	100	0.00
70	s	SURR2,BFB	0.4668	0.4664	0.1	98	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	96	0.00
72	P	Tetrachloroethene	0.2994	0.3214	-7.3	105	0.00
73	P	2-Hexanone	0.4030	0.4442	-10.2	106	0.00
74		1,3-Dichloropropane	0.7201	0.7432	-3.2	98	0.00
75	P	Dibromochloromethane	0.3359	0.3388	-0.9	95	0.00
76		N-Butyl Acetate	0.7358	0.8412	-14.3	102	0.00
77	P	1,2-Dibromoethane	0.3927	0.4023	-2.4	95	0.00
78	P	Chlorobenzene	1.0703	1.1369	-6.2	103	0.00
79		3-CBTF	0.5218	0.5577	-6.9	98	0.00
80		4-CBTF	0.4717	0.5050	-7.1	98	0.00
81		1,1,1,2-Tetrachloroethane	0.3464	0.3559	-2.7	98	0.00
82	P	Ethylbenzene	0.5771	0.6258	-8.4	105	0.00
83	P	(m+p)Xylene	0.7057	0.7702	-9.1	106	0.00
84	P	o-Xylene	0.6943	0.7650	-10.2	106	0.00
85	P	Styrene	1.1252	1.2449	-10.6	101	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	94	0.00
87	P	Bromoform	0.4222	0.4262	-0.9	90	0.00
88		2-CBTF	1.0263	1.0789	-5.1	97	0.00
89	P	Isopropylbenzene	3.2888	3.7923	-15.3	107	0.00
90		Cyclohexanone	0.2085	0.2182	-4.7	91	-0.01
91		trans-1,4-Dichloro-2-Butene	0.2722	0.2808	-3.2	95	0.00
92	P	1,1,2,2-Tetrachloroethane	1.0971	1.1539	-5.2	95	0.00
93		Bromobenzene	0.8848	0.9257	-4.6	100	0.00
94		1,2,3-Trichloropropane	0.3480	0.3920	-12.6	99	0.00
95		n-Propylbenzene	3.7678	4.4251	-17.4	109	0.00
96		2-Chlorotoluene	2.3743	2.6647	-12.2	105	0.00
97		3-Chlorotoluene	2.3228	2.6030	-12.1	100	0.00
98		4-Chlorotoluene	2.6479	2.9714	-12.2	106	0.00
99		1,3,5-Trimethylbenzene	2.7293	3.0713	-12.5	106	0.00
100		tert-Butylbenzene	2.3741	2.7340	-15.2	106	0.00
101		1,2,4-Trimethylbenzene	2.8232	3.1183	-10.5	104	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24388.D
Acq On : 21 Feb 2019 10:47 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 22 09:18:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 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)
102		3,4-DCBTF	0.8462	0.8806	-4.1	96	0.00
103		sec-Butylbenzene	3.4421	4.0796	-18.5	109	0.00
104		p-Isopropyltoluene	2.8587	3.3184	-16.1	107	0.00
105	P	1,3-Dclbenz	1.6112	1.7499	-8.6	101	0.00
106	P	1,4-Dclbenz	1.7003	1.7674	-3.9	100	0.00
107		2,4-DCBTF	0.7750	0.8012	-3.4	95	0.00
108		2,5-DCBTF	0.8739	0.8872	-1.5	96	0.00
109		n-Butylbenzene	2.5058	3.0562	-22.0#	107	0.00
110	P	1,2-Dclbenz	1.6482	1.7642	-7.0	100	0.00
111	P	1,2-Dibromo-3-chloropropane	0.2703	0.2779	-2.8	90	0.00
112		Trielution Dichlorotoluene	1.3558	1.5717	-15.9	104	0.00
113		1,3,5 Trichlorobenzene	1.1864	1.2945	-9.1	105	0.00
114		Coelution Dichlorotoluene	1.4956	1.7395	-16.3	105	0.00
115	P	1,2,4-Tcbenzene	1.1561	1.3399	-15.9	106	0.00
116		Hexachlorobt	0.4875	0.5496	-12.7	121	0.00
117		Naphthalen	3.3933	4.3133	~~-27.1#~~ -5.9	100	0.00
118		1,2,3-Tclbenzene	1.1924	1.3789	-15.6	105	0.00
119		2,4,5-Trichlorotolene	0.5335	0.6047	~~-13.3~~ -0.8	91	0.00
120		2,3,6-Trichlorotoluene	0.6055	0.6779	~~-12.0~~ 1.3	91	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24388.D
Acq On : 21 Feb 2019 10:47 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 22 09:18:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.407	168	318449	50.00	ppb		0.01
43) 1,4-Difluorobenzene	6.487	114	509393	50.00	ppb		0.00
71) d5-Chlorobenzene	9.785	117	448640	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	225441	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.267	113	141463	50.54	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.08%				
48) surr1,1,2-dichloroetha...	5.792	65	190037	53.52	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 107.04%				
65) SURR3,Toluene-d8	8.297	98	668294	50.33	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.66%				
70) SURR2,BFB	10.864	95	237573	49.96	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.92%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.219	85	231072	59.91	ppb		98
3) Chloromethane	1.341	50	290636	56.37	ppb		98
4) Vinyl Chloride	1.420	62	281725	60.87	ppb		97
5) Bromomethane	1.646	94	145352	52.36	ppb		98
6) Chloroethane	1.725	64	150461	53.71	ppb		94
7) Freon 21	1.872	67	338851	57.99	ppb		98
8) Trichlorofluoromethane	1.920	101	251596	56.03	ppb		98
9) Diethyl Ether	2.152	59	183102	53.32	ppb		96
10) Freon 123a	2.152	67	216089	58.04	ppb		100
11) Freon 123	2.207	83	246409	57.63	ppb		98
12) Acrolein	2.250	56	211622	241.15	ppb		98
13) 1,1-Diclethene	2.341	96	169059	56.91	ppb		96
14) Freon 113	2.347	101	151020	57.09	ppb		94
15) Acetone	2.384	43	93201	61.11	ppb		98
16) 2-Propanol	2.512	45	454694	1148.53	ppb		98
17) Iodomethane	2.475	142	206595	48.14	ppb		99
18) Carbon Disulfide	2.536	76	462649	51.98	ppb		99
19) Acetonitrile	2.634	40	85459	439.67	ppb		99
20) Allyl Chloride	2.670	76	86146	48.47	ppb		93
21) Methyl Acetate	2.695	43	237225	57.30	ppb		98
22) Methylene Chloride	2.786	84	196584	53.16	ppb		99
23) TBA	2.914	59	727434	1156.17	ppb		95
24) Acrylonitrile	3.036	53	567260	281.91	ppb		97
25) Methyl-t-Butyl Ether	3.091	73	616632	53.60	ppb		100
26) trans-1,2-Dichloroethene	3.079	96	180771	54.70	ppb		97
28) 1,1-Diclethane	3.572	63	356653	58.19	ppb		99
29) Vinyl Acetate	3.664	86	30600	40.44	ppb	#	80
30) DIPE	3.700	45	637467	57.47	ppb		98
31) 2-Chloro-1,3-Butadiene	3.694	53	259272	54.09	ppb		97
32) ETBE	4.225	59	624544	56.34	ppb		93
33) 2,2-Dichloropropane	4.402	77	237755	49.26	ppb		98
34) cis-1,2-Dichloroethene	4.414	96	201699	54.44	ppb		92
35) 2-Butanone	4.450	43	139664	54.49	ppb		94
36) Propionitrile	4.530	54	232376	278.72	ppb		99
37) Bromochloromethane	4.798	130	122468	53.24	ppb		98
38) Methacrylonitrile	4.804	67	116931	53.90	ppb		93
39) Tetrahydrofuran	4.895	42	89279	53.78	ppb		92
40) Chloroform	4.981	83	301776	54.85	ppb		94
41) 1,1,1-Trichloroethane	5.273	97	249118	58.16	ppb		97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24388.D
Acq On : 21 Feb 2019 10:47 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 22 09:18:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.109	73	593479	56.44	ppb	98
44) Cyclohexane	5.365	41	170359	57.04	ppb	98
46) Carbontetrachloride	5.548	117	187958	55.40	ppb	100
47) 1,1-Dichloropropene	5.560	75	247124	56.79	ppb	98
49) Benzene	5.877	78	787675	54.14	ppb	98
50) 1,2-Dichloroethane	5.913	62	251848	54.06	ppb	97
51) Iso-Butyl Alcohol	5.883	43	328657	1077.48	ppb	98
52) n-Heptane	6.359	43	233217	52.60	ppb	95
53) 1-Butanol	6.840	56	563149	2797.30	ppb	99
54) Trichloroethene	6.816	130	195622	54.91	ppb	95
55) Methylcyclohexane	7.054	55	255892	56.92	ppb	94
56) 1,2-Diclpropane	7.096	63	212082	54.85	ppb	99
57) Dibromomethane	7.236	93	119225	54.47	ppb	95
58) 1,4-Dioxane	7.291	88	84276	1221.71	ppb	91
59) Methyl Methacrylate	7.322	69	187161	54.17	ppb	94
60) Bromodichloromethane	7.462	83	214329	52.67	ppb	97
61) 2-Nitropropane	7.736	41	81598	101.02	ppb	95
62) 2-Chloroethylvinyl Ether	7.870	63	66883	54.43	ppb	91
63) cis-1,3-Dichloropropene	8.005	75	305347	53.09	ppb	98
64) 4-Methyl-2-pentanone	8.206	43	272404	55.52	ppb	95
66) Toluene	8.370	91	830346	55.11	ppb	99
67) trans-1,3-Dichloropropene	8.639	75	273304	54.26	ppb	98
68) Ethyl Methacrylate	8.779	69	325183	56.05	ppb	98
69) 1,1,2-Trichloroethane	8.828	97	183841	52.08	ppb	97
72) Tetrachloroethene	8.968	164	144200	53.68	ppb	97
73) 2-Hexanone	9.114	43	199305	55.12	ppb	97
74) 1,3-Dichloropropane	8.998	76	333448	51.60	ppb	98
75) Dibromochloromethane	9.224	129	152000	50.44	ppb	97
76) N-Butyl Acetate	9.273	43	377404	57.16	ppb	97
77) 1,2-Dibromoethane	9.321	107	180484	51.22	ppb	96
78) Chlorobenzene	9.815	112	510058	53.11	ppb	98
79) 3-CBTF	9.833	180	250192	53.43	ppb	98
80) 4-CBTF	9.888	180	226554	53.52	ppb	95
81) 1,1,1,2-Tetrachloroethane	9.901	131	159669	51.36	ppb	98
82) Ethylbenzene	9.937	106	280764	54.22	ppb	99
83) (m+p)Xylene	10.047	106	691090	109.15	ppb	99
84) o-Xylene	10.407	106	343205	55.09	ppb	100
85) Styrene	10.419	104	558509	55.32	ppb	98
87) Bromoform	10.571	173	96090	50.48	ppb	94
88) 2-CBTF	10.650	180	243237	52.56	ppb	97
89) Isopropylbenzene	10.742	105	854937	57.65	ppb	98
90) Cyclohexanone	10.797	55	983782	1046.69	ppb	100
91) trans-1,4-Dichloro-2-B...	11.047	53	63294	51.58	ppb	93
92) 1,1,2,2-Tetrachloroethane	10.998	83	260137	52.59	ppb	96
93) Bromobenzene	10.986	156	208700	52.31	ppb	92
94) 1,2,3-Trichloropropane	11.028	110	88371	56.31	ppb	92
95) n-Propylbenzene	11.095	91	997595	58.72	ppb	98
96) 2-Chlorotoluene	11.156	91	600731	56.11	ppb	100
97) 3-Chlorotoluene	11.211	91	586824	56.03	ppb	98
98) 4-Chlorotoluene	11.248	91	669865	56.11	ppb	99
99) 1,3,5-Trimethylbenzene	11.248	105	692402	56.26	ppb	100
100) tert-Butylbenzene	11.522	119	616366	57.58	ppb	99
101) 1,2,4-Trimethylbenzene	11.559	105	702993	55.23	ppb	100
102) 3,4-DCBTF	11.620	214	198525	52.03	ppb	98
103) sec-Butylbenzene	11.705	105	919717	59.26	ppb	99
104) p-Isopropyltoluene	11.827	119	748102	58.04	ppb	99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24388.D
Acq On : 21 Feb 2019 10:47 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 22 09:18:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration

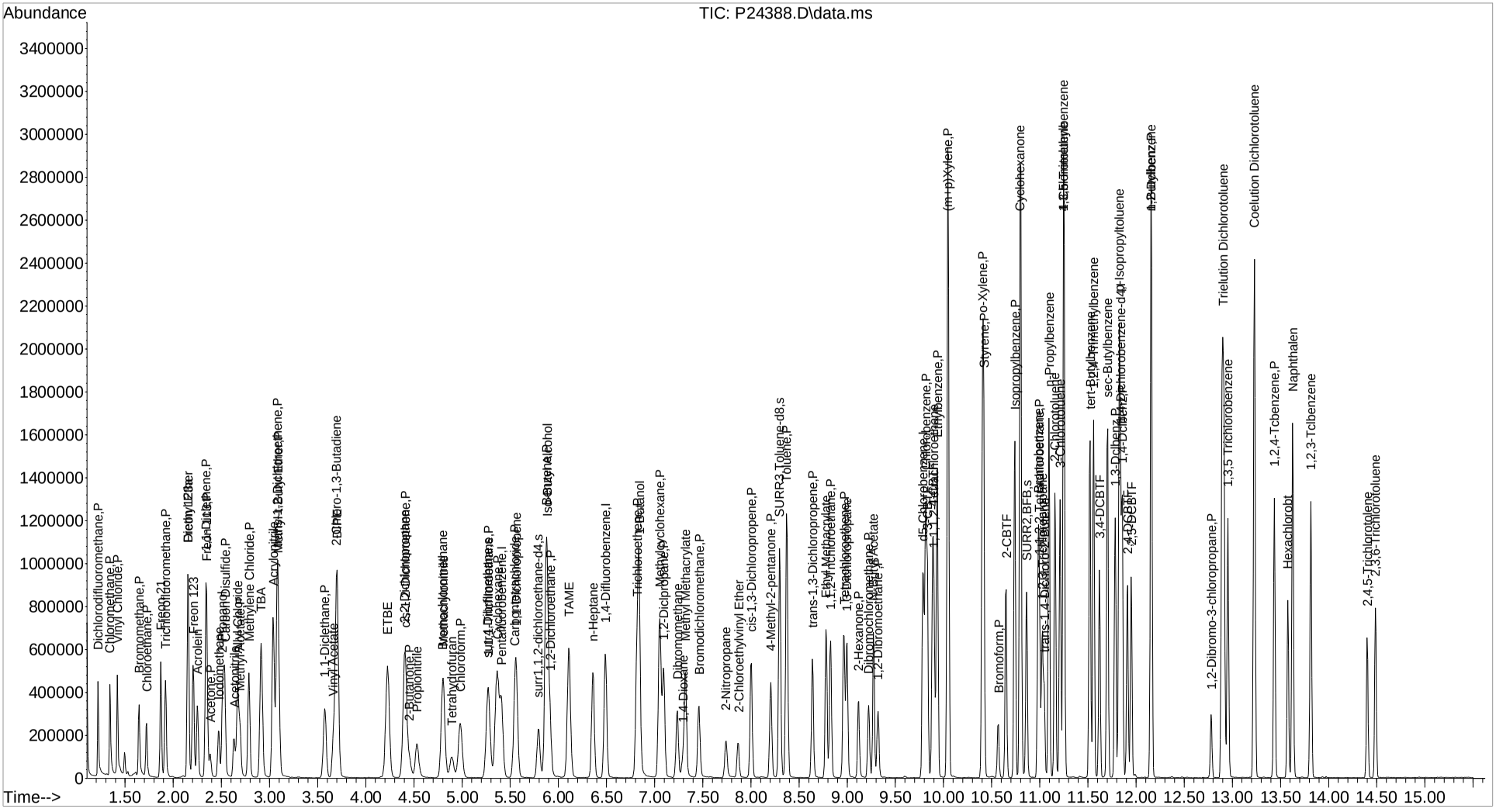
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.784	146	394489	54.30	ppb	98
106) 1,4-Dclbenz	11.857	146	398440	51.97	ppb	97
107) 2,4-DCBTF	11.912	214	180624	51.69	ppb	97
108) 2,5-DCBTF	11.949	214	200004	50.76	ppb	98
109) n-Butylbenzene	12.156	91	688987	60.98	ppb	99
110) 1,2-Dclbenz	12.156	146	397726	53.52	ppb	100
111) 1,2-Dibromo-3-chloropr...	12.784	157	62651	51.40	ppb	89
112) Trielution Dichlorotol...	12.900	125	1063000	173.89	ppb	97
113) 1,3,5 Trichlorobenzene	12.955	180	291844	54.56	ppb	96
114) Coelution Dichlorotoluene	13.229	125	784289	116.30	ppb	97
115) 1,2,4-Tcbenzene	13.436	180	302069	57.95	ppb	100
116) Hexachlorobt	13.577	225	123912	56.37	ppb	96
117) Naphthalen	13.625	128	972395	52.94	ppb	99
118) 1,2,3-Tclbenzene	13.814	180	310859	57.82	ppb	97
119) 2,4,5-Trichlorotolene	14.400	159	136317	50.42	ppb	95
120) 2,3,6-Trichlorotoluene	14.485	159	152828	49.37	ppb	93

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\022119\
Data File : P24388.D
Acq On : 21 Feb 2019 10:47 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 22 09:18:50 2019
Quant Method : I:\ACQUDATA\msvoa12\Methods\W022019.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Thu Feb 21 11:43:56 2019
Response via : Initial Calibration



ALS Group USA, Corp.

DBA ALS Environmetal

QC/QC Report

Date Analyzed: 2/20/19 11:05

ICAL Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA12\DATA\022019\P24336.D Analytical Method: 8260C/624.1

Instrument ID: R-MS-12

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Results Pass/Fail
50	95	15	40	17.1	27218	PASS
75	95	30	60	46.3	73712	PASS
95	95	100	100	100.0	159339	PASS
96	95	5	9	6.7	10612	PASS
173	174	0	2	0.3	399	PASS
174	95	50	120	83.3	132755	PASS
175	174	5	9	7.8	10302	PASS
176	174	95	101	98.4	130637	PASS
177	176	5	9	6.6	8625	PASS

Sample Name	Lab Code	File ID:	Date Analyzes:	Q
IBLK	IBLK	I:\ACQUDATA\msvoa12\Data\022019\P24337.D	2/20/19 11:27	
0.5ppb	0.5ppb	I:\ACQUDATA\msvoa12\Data\022019\P24338.D	2/20/19 12:01	
1.0ppb	1.0ppb	I:\ACQUDATA\msvoa12\Data\022019\P24339.D	2/20/19 12:23	
2.0ppb	2.0ppb	I:\ACQUDATA\msvoa12\Data\022019\P24340.D	2/20/19 12:45	
5.0ppb	5.0ppb	I:\ACQUDATA\msvoa12\Data\022019\P24341.D	2/20/19 13:07	
20ppb	20ppb	I:\ACQUDATA\msvoa12\Data\022019\P24342.D	2/20/19 13:28	
50ppb	50ppb	I:\ACQUDATA\msvoa12\Data\022019\P24343.D	2/20/19 13:50	
100ppb	100ppb	I:\ACQUDATA\msvoa12\Data\022019\P24344.D	2/20/19 14:12	
150ppb	150ppb	I:\ACQUDATA\msvoa12\Data\022019\P24345.D	2/20/19 14:34	
200ppb	200ppb	I:\ACQUDATA\msvoa12\Data\022019\P24346.D	2/20/19 14:55	
ICV 50	ICV 50	I:\ACQUDATA\msvoa12\Data\022019\P24351.D	2/20/19 16:44	

Analysis: 8260/624 Waters	Analyst: K. Quest	pH strips: N/A	Tune Method: W022019
Date: 2/20/19	Balance ID: N/A	ResCl strips: N/A	Run Method: ↓
Instr. 12	50 mL Class A used for dilution FV	Syringes: 193643	LIMS Run#: (ICAL)

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./			RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK									PZ4332		
2	↓									PZ4333		
3										PZ4334		
4	↓									PZ4335		
1	TUNE			Atomx						PZ4336	YT	(auto) 11:05
2	IBLK	5ppm	500ppm	SU SD	FV					PZ4337	YB	
1	0.5ppb	5uL	—	—	50mls					PZ4338	Y	
2	1.0	10uL	—	—						PZ4339	Y	
3	2.0	20uL	—	—						PZ4340	Y	
4	5.0	50uL	—	1uL						PZ4341	Y	
5	20	—	2uL	2uL						PZ4342	Y	
6	50	—	5uL	5uL						PZ4343	Y	
7	100	—	10uL	10uL						PZ4344	Y	
8	150	—	15uL	20uL						PZ4345	Y	
9	200	—	20uL	—	↓					PZ4346	Y	
10	- BLK									PZ4347	—	
10	↓									PZ4348	—	
11										PZ4349	—	
11	↓									PZ4350	—	
12	ICV 50									PZ4351	YQ	

LCD
YR 2/20/19

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

Combined IS/Surr : ———

500 ↓ Primary CCC+ : 197026
Primary RF+ : 197154 | 10uL → 1.0mL MeOH
Primary TC : 196747 | = 5ppm
Primary HSL : 196788
Primary ——— : ———

200 Secondary RF+ : 197077 - 12.5uL
500 ↓ Secondary CCC+ : 195846
Secondary HSL : 197007 | 5uL
Secondary TC : 196714 | = 2mls = ICV
Secondary ——— : ———

Surrogate 50 : 196918
Internal Std 50 : 196919
Reagents: ———

Runlog-MSVOAr4 1/17/17

Client: The LiRo Group
Project: Buffalo China

Service Request: R1901880
Calibration Date: 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015
Instrument ID: R-MS-12

Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1900015-01	0.5ppb	I:\ACQUDATA\msvoa12\Data\022019\P24338.D	02/20/2019 12:01
02	RC1900015-02	1.0ppb	I:\ACQUDATA\msvoa12\Data\022019\P24339.D	02/20/2019 12:23
03	RC1900015-03	2.0ppb	I:\ACQUDATA\msvoa12\Data\022019\P24340.D	02/20/2019 12:45
04	RC1900015-04	5.0ppb	I:\ACQUDATA\msvoa12\Data\022019\P24341.D	02/20/2019 13:07
05	RC1900015-05	20ppb	I:\ACQUDATA\msvoa12\Data\022019\P24342.D	02/20/2019 13:28
06	RC1900015-06	50ppb	I:\ACQUDATA\msvoa12\Data\022019\P24343.D	02/20/2019 13:50
07	RC1900015-07	100ppb	I:\ACQUDATA\msvoa12\Data\022019\P24344.D	02/20/2019 14:12
08	RC1900015-08	150ppb	I:\ACQUDATA\msvoa12\Data\022019\P24345.D	02/20/2019 14:34
09	RC1900015-09	200ppb	I:\ACQUDATA\msvoa12\Data\022019\P24346.D	02/20/2019 14:55

Analyte

1,1,1-Trichloroethane (TCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4799	02	1.000	0.6617	03	2.000	0.6312	04	5.000	0.6477
05	20.000	0.6722	06	50.000	0.7108	07	100.000	0.7357	08	150.000	0.7847
09	200.000	0.7287									

1,1,2,2-Tetrachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.055	02	1.000	1.091	03	2.000	1.039	04	5.000	1.07
05	20.000	1.171	06	50.000	1.131	07	100.000	1.092	08	150.000	1.162
09	200.000	1.063									

1,1,2-Trichloro-1,2,2-trifluoroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3449	02	1.000	0.469	03	2.000	0.4194	04	5.000	0.3698
05	20.000	0.4034	06	50.000	0.4112	07	100.000	0.4357	08	150.000	0.4555
09	200.000	0.4294									

1,1,2-Trichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3707	02	1.000	0.3297	03	2.000	0.315	04	5.000	0.3556
05	20.000	0.3555	06	50.000	0.3551	07	100.000	0.3371	08	150.000	0.3519
09	200.000	0.3479									

1,1-Dichloroethane (1,1-DCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7219	02	1.000	0.9373	03	2.000	0.9478	04	5.000	0.9376
05	20.000	1.01	06	50.000	1.036	07	100.000	1.022	08	150.000	1.067
09	200.000	0.9811									

1,1-Dichloroethene (1,1-DCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3905	02	1.000	0.4693	03	2.000	0.4397	04	5.000	0.4442
05	20.000	0.4752	06	50.000	0.4876	07	100.000	0.4974	08	150.000	0.5131
09	200.000	0.4804									

Client: The LiRo Group **Service Request:** R1901880
Project: Buffalo China **Calibration Date:** 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

1,2,3-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	1.002	03	2.000	1.073	04	5.000	1.145	05	20.000	1.251
06	50.000	1.227	07	100.000	1.292	08	150.000	1.316	09	200.000	1.232

1,2,4-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9338	02	1.000	1.024	03	2.000	1.078	04	5.000	1.122
05	20.000	1.24	06	50.000	1.179	07	100.000	1.279	08	150.000	1.314
09	200.000	1.234									

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.263	03	2.000	0.1985	04	5.000	0.2405	05	20.000	0.2672
06	50.000	0.2884	07	100.000	0.2962	08	150.000	0.3107	09	200.000	0.2981

1,2-Dibromoethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3813	02	1.000	0.3632	03	2.000	0.3848	04	5.000	0.385
05	20.000	0.427	06	50.000	0.4046	07	100.000	0.3936	08	150.000	0.4054
09	200.000	0.3897									

1,2-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.485	02	1.000	1.748	03	2.000	1.652	04	5.000	1.647
05	20.000	1.655	06	50.000	1.652	07	100.000	1.664	08	150.000	1.72
09	200.000	1.61									

1,2-Dichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3426	02	1.000	0.503	03	2.000	0.4596	04	5.000	0.4317
05	20.000	0.4825	06	50.000	0.487	07	100.000	0.4674	08	150.000	0.4772
09	200.000	0.4645									

1,2-Dichloropropane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3275	02	1.000	0.3887	03	2.000	0.3994	04	5.000	0.3625
05	20.000	0.3867	06	50.000	0.3867	07	100.000	0.3762	08	150.000	0.3986
09	200.000	0.3898									

1,3-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.494	02	1.000	1.584	03	2.000	1.607	04	5.000	1.671
05	20.000	1.632	06	50.000	1.617	07	100.000	1.609	08	150.000	1.706
09	200.000	1.58									

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.765	02	1.000	1.858	03	2.000	1.751	04	5.000	1.646

Client: The LiRo Group
Project: Buffalo China

Service Request: R1901880
Calibration Date: 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015
Instrument ID: R-MS-12

Signal ID: 1

Analyte

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	1.655	06	50.000	1.658	07	100.000	1.637	08	150.000	1.717
09	200.000	1.615									

1,4-Dioxane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.006925	04	100.000	0.007207	05	400.000	0.006777	06	1000.000	0.006837
07	2000.000	0.006608	08	3000.000	0.00643	09	4000.000	0.006613			

2-Butanone (MEK)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.4125	04	5.000	0.3724	05	20.000	0.3747	06	50.000	0.4029
07	100.000	0.4157	08	150.000	0.4312	09	200.000	0.4076			

2-Hexanone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.3857	04	5.000	0.371	05	20.000	0.4028	06	50.000	0.4008
07	100.000	0.422	08	150.000	0.427	09	200.000	0.4116			

4-Bromofluorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.5377	05	20.000	0.4344	06	50.000	0.4693	07	100.000	0.4482
08	200.000	0.4443									

4-Methyl-2-pentanone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.4573	04	5.000	0.4562	05	20.000	0.4805	06	50.000	0.4948
07	100.000	0.486	08	150.000	0.5013	09	200.000	0.4949			

Acetone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.2364	05	20.000	0.2341	06	50.000	0.262	07	100.000	0.2438
08	150.000	0.2357	09	200.000	0.2247						

Benzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.258	02	1.000	1.474	03	2.000	1.457	04	5.000	1.389
05	20.000	1.459	06	50.000	1.48	07	100.000	1.419	08	150.000	1.49
09	200.000	1.428									

Bromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3163	02	1.000	0.3644	03	2.000	0.3401	04	5.000	0.3421
05	20.000	0.3951	06	50.000	0.3747	07	100.000	0.3684	08	150.000	0.3868
09	200.000	0.3625									

Client: The LiRo Group **Service Request:** R1901880
Project: Buffalo China **Calibration Date:** 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

Bromodichloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3847	02	1.000	0.38	03	2.000	0.3514	04	5.000	0.3708
05	20.000	0.3977	06	50.000	0.4131	07	100.000	0.4189	08	150.000	0.4449
09	200.000	0.4332									

Bromoform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3818	03	2.000	0.3375	04	5.000	0.3589	05	20.000	0.4239
06	50.000	0.4446	07	100.000	0.4529	08	150.000	0.5054	09	200.000	0.4727

Bromomethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.7211	03	2.000	0.6451	04	5.000	0.5568	05	20.000	0.4537
06	50.000	0.4204	07	100.000	0.4216	08	150.000	0.4553	09	200.000	0.4259

Carbon Disulfide

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.222	02	1.000	1.496	03	2.000	1.355	04	5.000	1.271
05	20.000	1.436	06	50.000	1.425	07	100.000	1.468	08	150.000	1.498
09	200.000	1.407									

Carbon Tetrachloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2686	02	1.000	0.3061	03	2.000	0.3378	04	5.000	0.3008
05	20.000	0.3096	06	50.000	0.3471	07	100.000	0.3583	08	150.000	0.3884
09	200.000	0.3805									

Chlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.006	02	1.000	1.147	03	2.000	1.064	04	5.000	1.066
05	20.000	1.088	06	50.000	1.06	07	100.000	1.055	08	150.000	1.104
09	200.000	1.043									

Chloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4703	02	1.000	0.4735	03	2.000	0.4034	04	5.000	0.4091
05	20.000	0.4424	06	50.000	0.4356	07	100.000	0.4422	08	150.000	0.4588
09	200.000	0.4233									

Chloroform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7513	02	1.000	0.8711	03	2.000	0.8819	04	5.000	0.7994
05	20.000	0.8991	06	50.000	0.8931	07	100.000	0.8863	08	150.000	0.9281
09	200.000	0.864									

Chloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7068	02	1.000	1.019	03	2.000	0.695	04	5.000	0.7453

Client: The LiRo Group **Service Request:** R1901880
Project: Buffalo China **Calibration Date:** 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

Chloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	0.8151	06	50.000	0.8132	07	100.000	0.8384	08	150.000	0.8444
09	200.000	0.8076									

Cyclohexane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.291	03	2.000	0.2639	04	5.000	0.2675	05	20.000	0.3124
06	50.000	0.3055	07	100.000	0.2911	08	150.000	0.3071	09	200.000	0.3066

Dibromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3441	02	1.000	0.288	03	2.000	0.3031	04	5.000	0.2981
05	20.000	0.3438	06	50.000	0.3437	07	100.000	0.3509	08	150.000	0.3794
09	200.000	0.3715									

Dibromofluoromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.2878	05	20.000	0.2586	06	50.000	0.2844	07	100.000	0.2717
08	200.000	0.2713									

Dichlorodifluoromethane (CFC 12)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4483	02	1.000	0.6508	03	2.000	0.5299	04	5.000	0.5005
05	20.000	0.646	06	50.000	0.6736	07	100.000	0.6688	08	150.000	0.6868
09	200.000	0.6454									

Dichloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5561	02	1.000	0.6012	03	2.000	0.6496	04	5.000	0.5661
05	20.000	0.5783	06	50.000	0.5865	07	100.000	0.562	08	150.000	0.5813
09	200.000	0.5444									

Ethylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5052	02	1.000	0.578	03	2.000	0.5779	04	5.000	0.5985
05	20.000	0.5736	06	50.000	0.5699	07	100.000	0.5873	08	150.000	0.6162
09	200.000	0.5874									

Isopropylbenzene (Cumene)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.768	02	1.000	3.226	03	2.000	3.63	04	5.000	3.502
05	20.000	3.261	06	50.000	3.305	07	100.000	3.326	08	150.000	3.471
09	200.000	3.111									

Methyl Acetate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.5967	03	2.000	0.6458	04	5.000	0.578	05	20.000	0.7057
06	50.000	0.7132	07	100.000	0.6522	08	150.000	0.644	09	200.000	0.6647

Client: The LiRo Group
Project: Buffalo China

Service Request: R1901880
Calibration Date: 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015
Instrument ID: R-MS-12

Signal ID: 1

Analyte

Methyl tert-Butyl Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.588	02	1.000	1.911	03	2.000	1.728	04	5.000	1.739
05	20.000	1.919	06	50.000	1.891	07	100.000	1.812	08	150.000	1.89
09	200.000	1.779									

Methylcyclohexane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.4299	03	2.000	0.4065	04	5.000	0.4073	05	20.000	0.4771
06	50.000	0.465	07	100.000	0.429	08	150.000	0.4509	09	200.000	0.4644

Styrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9646	02	1.000	1.026	03	2.000	1.012	04	5.000	1.097
05	20.000	1.205	06	50.000	1.187	07	100.000	1.191	08	150.000	1.249
09	200.000	1.195									

Tetrachloroethene (PCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2484	02	1.000	0.3248	03	2.000	0.3114	04	5.000	0.3029
05	20.000	0.2865	06	50.000	0.2927	07	100.000	0.3041	08	150.000	0.3218
09	200.000	0.302									

Toluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.276	02	1.000	1.467	03	2.000	1.505	04	5.000	1.469
05	20.000	1.505	06	50.000	1.545	07	100.000	1.496	08	150.000	1.561
09	200.000	1.487									

Toluene-d8

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	1.541	05	20.000	1.236	06	50.000	1.312	07	100.000	1.236
08	200.000	1.191									

Trichloroethene (TCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2931	02	1.000	0.351	03	2.000	0.3662	04	5.000	0.3263
05	20.000	0.3459	06	50.000	0.369	07	100.000	0.356	08	150.000	0.3761
09	200.000	0.3637									

Trichlorofluoromethane (CFC 11)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5643	02	1.000	0.8218	03	2.000	0.6764	04	5.000	0.6449
05	20.000	0.6966	06	50.000	0.7185	07	100.000	0.7384	08	150.000	0.7734
09	200.000	0.7107									

Vinyl Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6243	02	1.000	0.6421	03	2.000	0.6127	04	5.000	0.6303

Client: The LiRo Group
Project: Buffalo China

Service Request: R1901880
Calibration Date: 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015
Instrument ID: R-MS-12

Signal ID: 1

Analyte

Vinyl Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	0.799	06	50.000	0.8026	07	100.000	0.8082	08	150.000	0.8447
09	200.000	0.7765									

cis-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3875	02	1.000	0.6955	03	2.000	0.6069	04	5.000	0.5376
05	20.000	0.6176	06	50.000	0.6008	07	100.000	0.5917	08	150.000	0.6199
09	200.000	0.5779									

cis-1,3-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4669	02	1.000	0.5266	03	2.000	0.5154	04	5.000	0.5423
05	20.000	0.5974	06	50.000	0.6118	07	100.000	0.5858	08	150.000	0.6243
09	200.000	0.6106									

m,p-Xylenes

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6141	02	2.000	0.7586	03	4.000	0.6982	04	10.000	0.7128
05	40.000	0.6999	06	100.000	0.6972	07	200.000	0.7134	08	300.000	0.7448
09	400.000	0.7118									

o-Xylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6377	02	1.000	0.653	03	2.000	0.6916	04	5.000	0.6922
05	20.000	0.7061	06	50.000	0.6954	07	100.000	0.7072	08	150.000	0.7484
09	200.000	0.7168									

trans-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4771	02	1.000	0.5226	03	2.000	0.5166	04	5.000	0.4938
05	20.000	0.5174	06	50.000	0.5337	07	100.000	0.5357	08	150.000	0.5559
09	200.000	0.517									

trans-1,3-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3861	02	1.000	0.4461	03	2.000	0.4651	04	5.000	0.4533
05	20.000	0.5349	06	50.000	0.5469	07	100.000	0.514	08	150.000	0.5516
09	200.000	0.5515									

Client: The LiRo Group
Project: Buffalo China

Service Request: R1901880
Calibration Date: 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015
Instrument ID: R-MS-12

Signal ID: 1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
1,1,1-Trichloroethane (TCA)	TRG	Average RF	% RSD	13.0	≤20	0.6725	0.100
1,1,2,2-Tetrachloroethane	TRG	Average RF	% RSD	4.3	≤20	1.097	0.300
1,1,2-Trichloro-1,2,2-trifluoroethane	TRG	Average RF	% RSD	9.4	≤20	0.4154	0.100
1,1,2-Trichloroethane	TRG	Average RF	% RSD	4.8	≤20	0.3465	0.100
1,1-Dichloroethane (1,1-DCA)	TRG	Average RF	% RSD	10.5	≤20	0.9623	0.200
1,1-Dichloroethene (1,1-DCE)	TRG	Average RF	% RSD	7.9	≤20	0.4664	0.100
1,2,3-Trichlorobenzene	TRG	Average RF	% RSD	9.2	≤20	1.192	
1,2,4-Trichlorobenzene	TRG	Average RF	% RSD	10.9	≤20	1.156	0.200
1,2-Dibromo-3-chloropropane (DBCP)	TRG	Average RF	% RSD	13.6	≤20	0.2703	0.050
1,2-Dibromoethane	TRG	Average RF	% RSD	4.6	≤20	0.3927	0.100
1,2-Dichlorobenzene	TRG	Average RF	% RSD	4.5	≤20	1.648	0.400
1,2-Dichloroethane	TRG	Average RF	% RSD	10.4	≤20	0.4573	0.100
1,2-Dichloropropane	TRG	Average RF	% RSD	5.9	≤20	0.3796	0.100
1,3-Dichlorobenzene	TRG	Average RF	% RSD	3.7	≤20	1.611	0.600
1,4-Dichlorobenzene	TRG	Average RF	% RSD	4.7	≤20	1.7	0.500
1,4-Dioxane	TRG	Average RF	% RSD	3.7	≤20	0.006771	
2-Butanone (MEK)	TRG	Average RF	% RSD	5.4	≤20	0.4024	0.05
2-Hexanone	TRG	Average RF	% RSD	4.9	≤20	0.403	0.05
4-Bromofluorobenzene	SURR	Average RF	% RSD	8.9	≤20	0.4668	
4-Methyl-2-pentanone	TRG	Average RF	% RSD	3.8	≤20	0.4816	0.05
Acetone	TRG	Average RF	% RSD	5.3	≤20	0.2394	0.05
Benzene	TRG	Average RF	% RSD	5.0	≤20	1.428	0.500
Bromochloromethane	TRG	Average RF	% RSD	6.8	≤20	0.3611	
Bromodichloromethane	TRG	Average RF	% RSD	7.7	≤20	0.3994	0.200
Bromoform	TRG	Average RF	% RSD	13.8	≤20	0.4222	0.100
Bromomethane	TRG	Quadratic	COD	0.9976	≥0.99	0.5125	0.100
Carbon Disulfide	TRG	Average RF	% RSD	7.0	≤20	1.397	0.100
Carbon Tetrachloride	TRG	Average RF	% RSD	11.9	≤20	0.333	0.05
Chlorobenzene	TRG	Average RF	% RSD	3.7	≤20	1.07	0.500
Chloroethane	TRG	Average RF	% RSD	5.7	≤20	0.4398	0.100
Chloroform	TRG	Average RF	% RSD	6.3	≤20	0.8638	0.200
Chloromethane	TRG	Average RF	% RSD	11.9	≤20	0.8095	0.100
Cyclohexane	TRG	Average RF	% RSD	6.3	≤20	0.2931	0.100
Dibromochloromethane	TRG	Average RF	% RSD	9.6	≤20	0.3359	0.100

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: The LiRo Group
Project: Buffalo China

Service Request: R1901880
Calibration Date: 2/20/2019

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015
Instrument ID: R-MS-12

Signal ID: 1

		Calibration Evaluation				Calibration Evaluation	
Analyte Name	Compound Type	Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Dibromofluoromethane	SURR	Average RF	% RSD	4.2	≤20	0.2748	
Dichlorodifluoromethane (CFC 12)	TRG	Average RF	% RSD	14.5	≤20	0.6056	0.100
Dichloromethane	TRG	Average RF	% RSD	5.3	≤20	0.5806	0.100
Ethylbenzene	TRG	Average RF	% RSD	5.3	≤20	0.5771	0.100
Isopropylbenzene (Cumene)	TRG	Average RF	% RSD	7.6	≤20	3.289	0.100
Methyl Acetate	TRG	Average RF	% RSD	7.2	≤20	0.65	0.100
Methyl tert-Butyl Ether	TRG	Average RF	% RSD	6.1	≤20	1.806	0.100
Methylcyclohexane	TRG	Average RF	% RSD	6.1	≤20	0.4413	0.100
Styrene	TRG	Average RF	% RSD	9.1	≤20	1.125	0.300
Tetrachloroethene (PCE)	TRG	Average RF	% RSD	7.6	≤20	0.2994	0.200
Toluene	TRG	Average RF	% RSD	5.6	≤20	1.479	0.400
Toluene-d8	SURR	Average RF	% RSD	10.7	≤20	1.303	
Trichloroethene (TCE)	TRG	Average RF	% RSD	7.4	≤20	0.3497	0.200
Trichlorofluoromethane (CFC 11)	TRG	Average RF	% RSD	10.5	≤20	0.705	0.100
Vinyl Chloride	TRG	Average RF	% RSD	13.2	≤20	0.7267	0.100
cis-1,2-Dichloroethene	TRG	Average RF	% RSD	14.4	≤20	0.5817	0.100
cis-1,3-Dichloropropene	TRG	Average RF	% RSD	9.6	≤20	0.5646	0.200
m,p-Xylenes	TRG	Average RF	% RSD	5.7	≤20	0.7057	0.100
o-Xylene	TRG	Average RF	% RSD	4.7	≤20	0.6943	0.300
trans-1,2-Dichloroethene	TRG	Average RF	% RSD	4.5	≤20	0.5189	0.100
trans-1,3-Dichloropropene	TRG	Average RF	% RSD	12.0	≤20	0.4944	0.100

Client: The LiRo Group
Project: Buffalo China

Service Request: R1901880
Calibration Date: 2/20/2019

Initial Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015
Instrument ID: R-MS-12

Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
10	RC1900015-10	ICV 50	I:\ACQUDATA\msvoa12\Data\022019\P24351.D	02/20/2019 16:44

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	51.4	6.725E-1	6.913E-1	2.79	±30	Average RF
1,1,2,2-Tetrachloroethane	50.0	49.9	1.097E0	1.094E0	-0.297	±30	Average RF
1,1,2-Trichloroethane	50.0	47.6	3.465E-1	3.297E-1	-4.864	±30	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	53.6	4.154E-1	4.452E-1	7.17	±30	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	51.0	9.623E-1	9.807E-1	1.91	±30	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	49.3	4.664E-1	4.597E-1	-1.434	±30	Average RF
1,2,3-Trichlorobenzene	50.0	52.9	1.192E0	1.262E0	5.87	±30	Average RF
1,2,4-Trichlorobenzene	50.0	55.2	1.156E0	1.275E0	10.31	±30	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	48.6	2.703E-1	2.63E-1	-2.700	±30	Average RF
1,2-Dibromoethane	50.0	47.8	3.927E-1	3.757E-1	-4.325	±30	Average RF
1,2-Dichlorobenzene	50.0	47.0	1.648E0	1.549E0	-6.035	±30	Average RF
1,2-Dichloroethane	50.0	49.2	4.573E-1	4.5E-1	-1.589	±30	Average RF
1,2-Dichloropropane	50.0	48.8	3.796E-1	3.705E-1	-2.399	±30	Average RF
1,3-Dichlorobenzene	50.0	47.5	1.611E0	1.532E0	-4.918	±30	Average RF
1,4-Dichlorobenzene	50.0	46.2	1.7E0	1.572E0	-7.535	±30	Average RF
1,4-Dioxane	1000	1090	6.771E-3	7.373E-3	8.89	±30	Average RF
2-Butanone (MEK)	50.0	52.1	4.024E-1	4.19E-1	4.11	±30	Average RF
2-Hexanone	50.0	52.1	4.03E-1	4.199E-1	4.21	±30	Average RF
4-Methyl-2-pentanone	50.0	51.8	4.816E-1	4.99E-1	3.63	±30	Average RF
Acetone	50.0	58.0	2.394E-1	2.779E-1	16.05	±30	Average RF
Benzene	50.0	47.6	1.428E0	1.36E0	-4.764	±30	Average RF
Bromochloromethane	50.0	48.4	3.611E-1	3.493E-1	-3.274	±30	Average RF
Bromodichloromethane	50.0	48.5	3.994E-1	3.874E-1	-3.018	±30	Average RF
Bromoform	50.0	52.1	4.222E-1	4.397E-1	4.13	±30	Average RF
Bromomethane	50.0	51.4	5.125E-1	4.481E-1	2.78	±30	Quadratic
Carbon Disulfide	50.0	54.2	1.397E0	1.516E0	8.46	±30	Average RF
Carbon Tetrachloride	50.0	50.0	3.33E-1	3.331E-1	0.023	±30	Average RF
Chlorobenzene	50.0	46.7	1.07E0	9.994E-1	-6.620	±30	Average RF
Chloroethane	50.0	40.7	4.398E-1	3.584E-1	-18.519	±30	Average RF
Chloroform	50.0	50.2	8.638E-1	8.667E-1	0.330	±30	Average RF
Chloromethane	50.0	47.0	8.095E-1	7.601E-1	-6.099	±30	Average RF
Cyclohexane	50.0	53.9	2.931E-1	3.16E-1	7.78	±30	Average RF
Dibromochloromethane	50.0	50.3	3.359E-1	3.38E-1	0.652	±30	Average RF

Client: The LiRo Group
Project: Buffalo China

Service Request: R1901880
Calibration Date: 2/20/2019

Initial Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1900015
Instrument ID: R-MS-12

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	47.7	6.056E-1	5.773E-1	-4.663	±30	Average RF
Dichloromethane	50.0	46.5	5.806E-1	5.402E-1	-6.966	±30	Average RF
Ethylbenzene	50.0	47.8	5.771E-1	5.517E-1	-4.412	±30	Average RF
Isopropylbenzene (Cumene)	50.0	49.9	3.289E0	3.28E0	-0.266	±30	Average RF
Methyl Acetate	50.0	52.3	6.5E-1	6.798E-1	4.58	±30	Average RF
Methyl tert-Butyl Ether	50.0	52.3	1.806E0	1.891E0	4.68	±30	Average RF
Methylcyclohexane	50.0	55.0	4.413E-1	4.85E-1	9.92	±30	Average RF
Styrene	50.0	51.0	1.125E0	1.148E0	2.02	±30	Average RF
Tetrachloroethene (PCE)	50.0	47.7	2.994E-1	2.857E-1	-4.589	±30	Average RF
Toluene	50.0	48.6	1.479E0	1.439E0	-2.717	±30	Average RF
Trichloroethene (TCE)	50.0	47.6	3.497E-1	3.327E-1	-4.850	±30	Average RF
Trichlorofluoromethane (CFC 11)	50.0	48.6	7.05E-1	6.852E-1	-2.805	±30	Average RF
Vinyl Chloride	50.0	51.0	7.267E-1	7.419E-1	2.10	±30	Average RF
cis-1,2-Dichloroethene	50.0	49.1	5.817E-1	5.715E-1	-1.757	±30	Average RF
cis-1,3-Dichloropropene	50.0	50.0	5.646E-1	5.651E-1	0.095	±30	Average RF
m,p-Xylenes	100	98.0	7.057E-1	6.917E-1	-1.979	±30	Average RF
o-Xylene	50.0	48.6	6.943E-1	6.746E-1	-2.835	±30	Average RF
trans-1,2-Dichloroethene	50.0	49.1	5.189E-1	5.096E-1	-1.785	±30	Average RF
trans-1,3-Dichloropropene	50.0	51.4	4.944E-1	5.081E-1	2.77	±30	Average RF

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	49.8	4.668E-1	4.653E-1	-0.309	±30	Average RF
Dibromofluoromethane	50.0	50.6	2.748E-1	2.781E-1	1.21	±30	Average RF
Toluene-d8	50.0	49.6	1.303E0	1.293E0	-0.826	±30	Average RF

Client: The LiRo Group
Project: Buffalo China/16-344-1389

Service Request: R1901880
Date Analyzed: 03/07/19 11:06

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\030719\P24754.D\
Signal ID: 1

Calibration Date: 2/20/2019
Calibration ID: RC1900015
Analysis Lot: 627451
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	49.2	0.6725	0.6621	-1.5	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	44.1	1.0971	0.9666	-11.9	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	45.3	0.3465	0.3136	-9.5	NA	±20	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	48.7	0.4154	0.4044	-2.6	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	52.0	0.9623	1.0011	4.0	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	49.6	0.4664	0.4623	-0.9	NA	±20	Average RF
1,2,3-Trichlorobenzene	50.0	48.3	1.1924	1.1512	-3.5	NA	±20	Average RF
1,2,4-Trichlorobenzene	50.0	50.5	1.1561	1.1686	1.1	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	38.2	0.2703	0.2065	-23.6*	NA	±20	Average RF
1,2-Dibromoethane	50.0	44.8	0.3927	0.3517	-10.4	NA	±20	Average RF
1,2-Dichlorobenzene	50.0	46.5	1.6482	1.5338	-6.9	NA	±20	Average RF
1,2-Dichloroethane	50.0	48.2	0.4573	0.4412	-3.5	NA	±20	Average RF
1,2-Dichloropropane	50.0	48.8	0.3796	0.3704	-2.4	NA	±20	Average RF
1,3-Dichlorobenzene	50.0	47.0	1.6112	1.5145	-6.0	NA	±20	Average RF
1,4-Dichlorobenzene	50.0	44.9	1.7003	1.528	-10.1	NA	±20	Average RF
1,4-Dioxane	1000	681	0.0068	0.0046	-31.9*	NA	±20	Average RF
2-Butanone (MEK)	50.0	41.9	0.4024	0.3373	-16.2	NA	±20	Average RF
2-Hexanone	50.0	40.6	0.403	0.3269	-18.9	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	42.4	0.4816	0.4087	-15.1	NA	±20	Average RF
Acetone	50.0	44.9	0.2394	0.2148	-10.3	NA	±20	Average RF
Benzene	50.0	47.9	1.4282	1.3686	-4.2	NA	±20	Average RF
Bromochloromethane	50.0	47.0	0.3611	0.3391	-6.1	NA	±20	Average RF
Bromodichloromethane	50.0	47.5	0.3994	0.3797	-4.9	NA	±20	Average RF
Bromoform	50.0	44.8	0.4222	0.3781	-10.4	NA	±20	Average RF
Bromomethane	50.0	47.2	0.5125	0.4119	NA	-5.6	±20	Quadratic
Carbon Disulfide	50.0	51.1	1.3974	1.4285	2.2	NA	±20	Average RF
Carbon Tetrachloride	50.0	46.9	0.333	0.3121	-6.3	NA	±20	Average RF
Chlorobenzene	50.0	45.9	1.0703	0.9825	-8.2	NA	±20	Average RF
Chloroethane	50.0	49.5	0.4398	0.4357	-0.9	NA	±20	Average RF
Chloroform	50.0	49.5	0.8638	0.8559	-0.9	NA	±20	Average RF
Chloromethane	50.0	48.4	0.8095	0.7833	-3.2	NA	±20	Average RF
Cyclohexane	50.0	50.3	0.2931	0.295	0.6	NA	±20	Average RF
Dibromochloromethane	50.0	46.6	0.3359	0.3132	-6.8	NA	±20	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	54.0	0.6056	0.6543	8.0	NA	±20	Average RF
Dichloromethane	50.0	47.4	0.5806	0.5502	-5.2	NA	±20	Average RF
Ethylbenzene	50.0	46.4	0.5771	0.5352	-7.3	NA	±20	Average RF
Isopropylbenzene (Cumene)	50.0	47.3	3.2888	3.114	-5.3	NA	±20	Average RF
Methyl Acetate	50.0	42.4	0.65	0.5516	-15.2	NA	±20	Average RF
Methyl tert-Butyl Ether	50.0	47.3	1.8063	1.7069	-5.5	NA	±20	Average RF

Client: The LiRo Group
Project: Buffalo China/16-344-1389

Service Request: R1901880
Date Analyzed: 03/07/19 11:06

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\030719\P24754.D\
Signal ID: 1

Calibration Date: 2/20/2019
Calibration ID: RC1900015
Analysis Lot: 627451
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Methylcyclohexane	50.0	48.8	0.4413	0.4308	-2.4	NA	±20	Average RF
Styrene	50.0	49.7	1.1252	1.1192	-0.5	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	44.7	0.2994	0.2676	-10.6	NA	±20	Average RF
Toluene	50.0	48.2	1.479	1.4253	-3.6	NA	±20	Average RF
Trichloroethene (TCE)	50.0	45.7	0.3497	0.3196	-8.6	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	47.2	0.705	0.666	-5.5	NA	±20	Average RF
Vinyl Chloride	50.0	53.7	0.7267	0.781	7.5	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	49.0	0.5817	0.5701	-2.0	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	49.3	0.5646	0.5564	-1.5	NA	±20	Average RF
m,p-Xylenes	100	92.9	0.7057	0.6554	-7.1	NA	±20	Average RF
o-Xylene	50.0	47.1	0.6943	0.6546	-5.7	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	49.0	0.5189	0.5081	-2.1	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	50.3	0.4944	0.4973	0.6	NA	±20	Average RF
4-Bromofluorobenzene	50.0	50.1	0.4668	0.4673	0.1	NA	±20	Average RF
Dibromofluoromethane	50.0	52.7	0.2748	0.2898	5.5	NA	±20	Average RF
Toluene-d8	50.0	50.7	1.3033	1.321	1.4	NA	±20	Average RF

Client: The LiRo Group
Project: Buffalo China/16-344-1389

Service Request: R1901880
Date Analyzed: 03/08/19 11:51

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\030819\P24787.D\
Signal ID: 1

Calibration Date: 2/20/2019
Calibration ID: RC1900015
Analysis Lot: 627654
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	49.0	0.6725	0.6593	-2.0	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	45.0	1.0971	0.9871	-10.0	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	44.6	0.3465	0.309	-10.8	NA	±20	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	48.6	0.4154	0.4037	-2.8	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	51.5	0.9623	0.991	3.0	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	49.1	0.4664	0.4577	-1.9	NA	±20	Average RF
1,2,3-Trichlorobenzene	50.0	49.7	1.1924	1.1862	-0.5	NA	±20	Average RF
1,2,4-Trichlorobenzene	50.0	52.0	1.1561	1.2015	3.9	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	39.3	0.2703	0.2124	-21.4*	NA	±20	Average RF
1,2-Dibromoethane	50.0	44.9	0.3927	0.3529	-10.1	NA	±20	Average RF
1,2-Dichlorobenzene	50.0	47.2	1.6482	1.5563	-5.6	NA	±20	Average RF
1,2-Dichloroethane	50.0	48.0	0.4573	0.4394	-3.9	NA	±20	Average RF
1,2-Dichloropropane	50.0	48.5	0.3796	0.3681	-3.0	NA	±20	Average RF
1,3-Dichlorobenzene	50.0	47.7	1.6112	1.5363	-4.6	NA	±20	Average RF
1,4-Dichlorobenzene	50.0	46.1	1.7003	1.569	-7.7	NA	±20	Average RF
1,4-Dioxane	1000	668	0.0068	0.0045	-33.2*	NA	±20	Average RF
2-Butanone (MEK)	50.0	41.3	0.4024	0.3324	-17.4	NA	±20	Average RF
2-Hexanone	50.0	40.2	0.403	0.3239	-19.6	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	40.7	0.4816	0.3921	-18.6	NA	±20	Average RF
Acetone	50.0	40.9	0.2394	0.196	-18.1	NA	±20	Average RF
Benzene	50.0	46.8	1.4282	1.3379	-6.3	NA	±20	Average RF
Bromochloromethane	50.0	47.4	0.3611	0.3425	-5.2	NA	±20	Average RF
Bromodichloromethane	50.0	47.6	0.3994	0.3801	-4.8	NA	±20	Average RF
Bromoform	50.0	43.6	0.4222	0.368	-12.8	NA	±20	Average RF
Bromomethane	50.0	47.2	0.5125	0.4123	NA	-5.6	±20	Quadratic
Carbon Disulfide	50.0	51.2	1.3974	1.4315	2.4	NA	±20	Average RF
Carbon Tetrachloride	50.0	45.9	0.333	0.3058	-8.2	NA	±20	Average RF
Chlorobenzene	50.0	46.2	1.0703	0.9889	-7.6	NA	±20	Average RF
Chloroethane	50.0	49.6	0.4398	0.4363	-0.8	NA	±20	Average RF
Chloroform	50.0	49.6	0.8638	0.8577	-0.7	NA	±20	Average RF
Chloromethane	50.0	49.0	0.8095	0.794	-1.9	NA	±20	Average RF
Cyclohexane	50.0	56.3	0.2931	0.3303	12.7	NA	±20	Average RF
Dibromochloromethane	50.0	46.1	0.3359	0.3095	-7.9	NA	±20	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	51.9	0.6056	0.6281	3.7	NA	±20	Average RF
Dichloromethane	50.0	46.3	0.5806	0.5379	-7.4	NA	±20	Average RF
Ethylbenzene	50.0	46.4	0.5771	0.5356	-7.2	NA	±20	Average RF
Isopropylbenzene (Cumene)	50.0	47.9	3.2888	3.1482	-4.3	NA	±20	Average RF
Methyl Acetate	50.0	43.6	0.65	0.5663	-12.9	NA	±20	Average RF
Methyl tert-Butyl Ether	50.0	47.7	1.8063	1.7238	-4.6	NA	±20	Average RF

Client: The LiRo Group
Project: Buffalo China/16-344-1389

Service Request: R1901880
Date Analyzed: 03/08/19 11:51

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\030819\P24787.D\
Signal ID: 1

Calibration Date: 2/20/2019
Calibration ID: RC1900015
Analysis Lot: 627654
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Methylcyclohexane	50.0	57.2	0.4413	0.5047	14.4	NA	±20	Average RF
Styrene	50.0	49.3	1.1252	1.1099	-1.4	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	45.4	0.2994	0.2717	-9.3	NA	±20	Average RF
Toluene	50.0	47.2	1.479	1.3967	-5.6	NA	±20	Average RF
Trichloroethene (TCE)	50.0	44.2	0.3497	0.3089	-11.7	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	47.2	0.705	0.6648	-5.7	NA	±20	Average RF
Vinyl Chloride	50.0	53.0	0.7267	0.7704	6.0	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	49.3	0.5817	0.5736	-1.4	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	48.5	0.5646	0.5481	-2.9	NA	±20	Average RF
m,p-Xylenes	100	93.8	0.7057	0.6619	-6.2	NA	±20	Average RF
o-Xylene	50.0	47.7	0.6943	0.6629	-4.5	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	48.0	0.5189	0.4982	-4.0	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	50.1	0.4944	0.4951	0.1	NA	±20	Average RF
4-Bromofluorobenzene	50.0	50.3	0.4668	0.4694	0.6	NA	±20	Average RF
Dibromofluoromethane	50.0	51.5	0.2748	0.2828	2.9	NA	±20	Average RF
Toluene-d8	50.0	49.8	1.3033	1.2983	-0.4	NA	±20	Average RF

Client: The LiRo Group
Project: Buffalo China/16-344-1389

Service Request: R1901880
Date Analyzed: 03/12/19 10:33

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\031219\P24830.D\
Signal ID: 1

Calibration Date: 2/20/2019
Calibration ID: RC1900015
Analysis Lot: 627896
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	54.0	0.6725	0.7268	8.1	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	51.3	1.0971	1.1249	2.5	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	49.3	0.3465	0.3414	-1.5	NA	±20	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	54.1	0.4154	0.4496	8.3	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	55.0	0.9623	1.0577	9.9	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	54.7	0.4664	0.5103	9.4	NA	±20	Average RF
1,2,3-Trichlorobenzene	50.0	52.3	1.1924	1.2477	4.6	NA	±20	Average RF
1,2,4-Trichlorobenzene	50.0	53.0	1.1561	1.2252	6.0	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	49.5	0.2703	0.2678	-0.9	NA	±20	Average RF
1,2-Dibromoethane	50.0	50.8	0.3927	0.3988	1.6	NA	±20	Average RF
1,2-Dichlorobenzene	50.0	49.8	1.6482	1.6411	-0.4	NA	±20	Average RF
1,2-Dichloroethane	50.0	51.9	0.4573	0.4747	3.8	NA	±20	Average RF
1,2-Dichloropropane	50.0	52.4	0.3796	0.3975	4.7	NA	±20	Average RF
1,3-Dichlorobenzene	50.0	50.0	1.6112	1.611	0.0	NA	±20	Average RF
1,4-Dichlorobenzene	50.0	48.6	1.7003	1.6523	-2.8	NA	±20	Average RF
1,4-Dioxane	1000	857	0.0068	0.0058	-14.3	NA	±20	Average RF
2-Butanone (MEK)	50.0	48.3	0.4024	0.3886	-3.4	NA	±20	Average RF
2-Hexanone	50.0	48.9	0.403	0.3943	-2.2	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	47.5	0.4816	0.4577	-5.0	NA	±20	Average RF
Acetone	50.0	46.5	0.2394	0.2229	-6.9	NA	±20	Average RF
Benzene	50.0	51.0	1.4282	1.4568	2.0	NA	±20	Average RF
Bromochloromethane	50.0	50.1	0.3611	0.362	0.2	NA	±20	Average RF
Bromodichloromethane	50.0	52.4	0.3994	0.4183	4.7	NA	±20	Average RF
Bromoform	50.0	52.1	0.4222	0.4399	4.2	NA	±20	Average RF
Bromomethane	50.0	50.4	0.5125	0.4396	NA	0.8	±20	Quadratic
Carbon Disulfide	50.0	49.2	1.3974	1.3763	-1.5	NA	±20	Average RF
Carbon Tetrachloride	50.0	52.7	0.333	0.3511	5.4	NA	±20	Average RF
Chlorobenzene	50.0	50.2	1.0703	1.0737	0.3	NA	±20	Average RF
Chloroethane	50.0	50.9	0.4398	0.448	1.9	NA	±20	Average RF
Chloroform	50.0	53.0	0.8638	0.9163	6.1	NA	±20	Average RF
Chloromethane	50.0	53.9	0.8095	0.8729	7.8	NA	±20	Average RF
Cyclohexane	50.0	53.2	0.2931	0.3118	6.4	NA	±20	Average RF
Dibromochloromethane	50.0	51.0	0.3359	0.3424	1.9	NA	±20	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	55.6	0.6056	0.6735	11.2	NA	±20	Average RF
Dichloromethane	50.0	49.4	0.5806	0.5741	-1.1	NA	±20	Average RF
Ethylbenzene	50.0	52.3	0.5771	0.6037	4.6	NA	±20	Average RF
Isopropylbenzene (Cumene)	50.0	52.3	3.2888	3.4383	4.5	NA	±20	Average RF
Methyl Acetate	50.0	49.3	0.65	0.6409	-1.4	NA	±20	Average RF
Methyl tert-Butyl Ether	50.0	51.0	1.8063	1.8415	1.9	NA	±20	Average RF

Client: The LiRo Group
Project: Buffalo China/16-344-1389

Service Request: R1901880
Date Analyzed: 03/12/19 10:33

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\031219\P24830.D\
Signal ID: 1

Calibration Date: 2/20/2019
Calibration ID: RC1900015
Analysis Lot: 627896
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Methylcyclohexane	50.0	52.7	0.4413	0.4655	5.5	NA	±20	Average RF
Styrene	50.0	53.9	1.1252	1.212	7.7	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	50.4	0.2994	0.3019	0.8	NA	±20	Average RF
Toluene	50.0	52.3	1.479	1.5469	4.6	NA	±20	Average RF
Trichloroethene (TCE)	50.0	50.1	0.3497	0.3507	0.3	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	53.0	0.705	0.7475	6.0	NA	±20	Average RF
Vinyl Chloride	50.0	58.7	0.7267	0.8525	17.3	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	52.0	0.5817	0.6047	4.0	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	53.5	0.5646	0.6046	7.1	NA	±20	Average RF
m,p-Xylenes	100	102	0.7057	0.7211	2.2	NA	±20	Average RF
o-Xylene	50.0	51.4	0.6943	0.7141	2.9	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	52.1	0.5189	0.5407	4.2	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	53.4	0.4944	0.528	6.8	NA	±20	Average RF
4-Bromofluorobenzene	50.0	52.6	0.4668	0.4913	5.2	NA	±20	Average RF
Dibromofluoromethane	50.0	51.8	0.2748	0.2848	3.6	NA	±20	Average RF
Toluene-d8	50.0	51.1	1.3033	1.333	2.3	NA	±20	Average RF

Client: The LiRo Group **Service Request:**R1901880
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**627451
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\030719\P24753.D\	ZZZZZZZ	ZZZZZZZ	3/7/2019	10:35:00	
I:\ACQUDATA\msvoa12\Data\030719\P24754.D\	Continuing Calibration Verification	RQ1901929-02	3/7/2019	11:06:00	
I:\ACQUDATA\msvoa12\Data\030719\P24755.D\	Lab Control Sample	RQ1901929-03	3/7/2019	11:34:00	
I:\ACQUDATA\msvoa12\Data\030719\P24757.D\	Method Blank	RQ1901929-04	3/7/2019	12:32:00	
I:\ACQUDATA\msvoa12\Data\030719\P24758.D\	MW-5AR	R1901880-001	3/7/2019	13:04:00	
I:\ACQUDATA\msvoa12\Data\030719\P24760.D\	MW-20A	R1901880-002	3/7/2019	13:47:00	
I:\ACQUDATA\msvoa12\Data\030719\P24761.D\	DUP	R1901880-006	3/7/2019	14:09:00	
I:\ACQUDATA\msvoa12\Data\030719\P24762.D\	MW-19R	R1901880-005	3/7/2019	14:30:00	
I:\ACQUDATA\msvoa12\Data\030719\P24763.D\	MW-5R	R1901880-007	3/7/2019	14:52:00	
I:\ACQUDATA\msvoa12\Data\030719\P24764.D\	ZZZZZZZ	ZZZZZZZ	3/7/2019	15:13:00	
I:\ACQUDATA\msvoa12\Data\030719\P24767.D\	ZZZZZZZ	ZZZZZZZ	3/7/2019	16:18:00	
I:\ACQUDATA\msvoa12\Data\030719\P24768.D\	ZZZZZZZ	ZZZZZZZ	3/7/2019	16:39:00	
I:\ACQUDATA\msvoa12\Data\030719\P24769.D\	ZZZZZZZ	ZZZZZZZ	3/7/2019	17:01:00	
I:\ACQUDATA\msvoa12\Data\030719\P24770.D\	ZZZZZZZ	ZZZZZZZ	3/7/2019	17:23:00	
I:\ACQUDATA\msvoa12\Data\030719\P24771.D\	ZZZZZZZ	ZZZZZZZ	3/7/2019	17:44:00	
I:\ACQUDATA\msvoa12\Data\030719\P24773.D\	MW-5R	R1901880-007	3/7/2019	18:27:00	
I:\ACQUDATA\msvoa12\Data\030719\P24774.D\	MW-20A	R1901880-002	3/7/2019	18:49:00	
I:\ACQUDATA\msvoa12\Data\030719\P24775.D\	DUP	R1901880-006	3/7/2019	19:11:00	
I:\ACQUDATA\msvoa12\Data\030719\P24776.D\	MW-13A	R1901880-003	3/7/2019	19:32:00	
I:\ACQUDATA\msvoa12\Data\030719\P24777.D\	MW-5AR MS	RQ1901929-06	3/7/2019	19:54:00	
I:\ACQUDATA\msvoa12\Data\030719\P24778.D\	MW-5AR DMS	RQ1901929-07	3/7/2019	20:15:00	
I:\ACQUDATA\msvoa12\Data\030719\P24779.D\	ZZZZZZZ	ZZZZZZZ	3/7/2019	20:37:00	
I:\ACQUDATA\msvoa12\Data\030719\P24780.D\	ZZZZZZZ	ZZZZZZZ	3/7/2019	20:58:00	

Client: The LiRo Group **Service Request:**R1901880
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**627451
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\030719 \P24781.D\	ZZZZZZZ	ZZZZZZZ	3/7/2019	21:20:00	

Client: The LiRo Group **Service Request:**R1901880
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**627654
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\030819\P24786.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	11:21:00	
I:\ACQUDATA\msvoa12\Data\030819\P24787.D\	Continuing Calibration Verification	RQ1902008-02	3/8/2019	11:51:00	
I:\ACQUDATA\msvoa12\Data\030819\P24788.D\	Lab Control Sample	RQ1902008-03	3/8/2019	12:28:00	
I:\ACQUDATA\msvoa12\Data\030819\P24789.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	12:49:00	
I:\ACQUDATA\msvoa12\Data\030819\P24791.D\	Method Blank	RQ1902008-05	3/8/2019	13:39:00	
I:\ACQUDATA\msvoa12\Data\030819\P24792.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	14:04:00	
I:\ACQUDATA\msvoa12\Data\030819\P24793.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	14:26:00	
I:\ACQUDATA\msvoa12\Data\030819\P24794.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	14:47:00	
I:\ACQUDATA\msvoa12\Data\030819\P24795.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	15:09:00	
I:\ACQUDATA\msvoa12\Data\030819\P24796.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	15:31:00	
I:\ACQUDATA\msvoa12\Data\030819\P24797.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	15:52:00	
I:\ACQUDATA\msvoa12\Data\030819\P24798.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	16:14:00	
I:\ACQUDATA\msvoa12\Data\030819\P24799.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	16:36:00	
I:\ACQUDATA\msvoa12\Data\030819\P24800.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	16:57:00	
I:\ACQUDATA\msvoa12\Data\030819\P24801.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	17:19:00	
I:\ACQUDATA\msvoa12\Data\030819\P24802.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	17:40:00	
I:\ACQUDATA\msvoa12\Data\030819\P24803.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	18:02:00	
I:\ACQUDATA\msvoa12\Data\030819\P24804.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	18:24:00	
I:\ACQUDATA\msvoa12\Data\030819\P24805.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	18:45:00	
I:\ACQUDATA\msvoa12\Data\030819\P24806.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	19:07:00	
I:\ACQUDATA\msvoa12\Data\030819\P24807.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	19:29:00	
I:\ACQUDATA\msvoa12\Data\030819\P24808.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	19:50:00	
I:\ACQUDATA\msvoa12\Data\030819\P24809.D\	MW-14A	R1901880-004	3/8/2019	20:12:00	

Client: The LiRo Group **Service Request:**R1901880
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**627654
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\030819 \P24810.D\	MW-11	R1901880-009	3/8/2019	20:33:00	
I:\ACQUDATA\msvoa12\Data\030819 \P24811.D\	MW-19AR	R1901880-008	3/8/2019	20:55:00	
I:\ACQUDATA\msvoa12\Data\030819 \P24813.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	21:38:00	
I:\ACQUDATA\msvoa12\Data\030819 \P24814.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	22:00:00	
I:\ACQUDATA\msvoa12\Data\030819 \P24815.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	22:21:00	
I:\ACQUDATA\msvoa12\Data\030819 \P24816.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	22:43:00	
I:\ACQUDATA\msvoa12\Data\030819 \P24817.D\	ZZZZZZZ	ZZZZZZZ	3/8/2019	23:04:00	

Client: The LiRo Group **Service Request:**R1901880
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**627896
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\031219\P24829.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	10:03:00	
I:\ACQUDATA\msvoa12\Data\031219\P24830.D\	Continuing Calibration Verification	RQ1902040-02	3/12/2019	10:33:00	
I:\ACQUDATA\msvoa12\Data\031219\P24831.D\	Lab Control Sample	RQ1902040-03	3/12/2019	11:02:00	
I:\ACQUDATA\msvoa12\Data\031219\P24833.D\	Method Blank	RQ1902040-04	3/12/2019	11:51:00	
I:\ACQUDATA\msvoa12\Data\031219\P24834.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	12:25:00	
I:\ACQUDATA\msvoa12\Data\031219\P24835.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	12:47:00	
I:\ACQUDATA\msvoa12\Data\031219\P24836.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	13:08:00	
I:\ACQUDATA\msvoa12\Data\031219\P24837.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	13:30:00	
I:\ACQUDATA\msvoa12\Data\031219\P24838.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	13:52:00	
I:\ACQUDATA\msvoa12\Data\031219\P24839.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	14:14:00	
I:\ACQUDATA\msvoa12\Data\031219\P24840.D\	MW-19AR	R1901880-008	3/12/2019	14:36:00	
I:\ACQUDATA\msvoa12\Data\031219\P24841.D\	MW-11	R1901880-009	3/12/2019	14:58:00	
I:\ACQUDATA\msvoa12\Data\031219\P24842.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	15:20:00	
I:\ACQUDATA\msvoa12\Data\031219\P24843.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	15:42:00	
I:\ACQUDATA\msvoa12\Data\031219\P24844.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	16:03:00	
I:\ACQUDATA\msvoa12\Data\031219\P24845.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	16:25:00	
I:\ACQUDATA\msvoa12\Data\031219\P24846.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	16:47:00	
I:\ACQUDATA\msvoa12\Data\031219\P24847.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	17:09:00	
I:\ACQUDATA\msvoa12\Data\031219\P24848.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	17:31:00	
I:\ACQUDATA\msvoa12\Data\031219\P24849.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	17:53:00	
I:\ACQUDATA\msvoa12\Data\031219\P24850.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	18:15:00	
I:\ACQUDATA\msvoa12\Data\031219\P24851.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	18:36:00	
I:\ACQUDATA\msvoa12\Data\031219\P24852.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	18:58:00	

Client: The LiRo Group **Service Request:**R1901880
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**627896
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\031219 \P24853.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	19:20:00	
I:\ACQUDATA\msvoa12\Data\031219 \P24854.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	19:42:00	
I:\ACQUDATA\msvoa12\Data\031219 \P24855.D\	ZZZZZZZ	ZZZZZZZ	3/12/2019	20:04:00	

Analysis: 8260 Waters | Analyst: KDuest | pH strips: 204018 | Tune Method: W022019

Date: 3/7/19 | Balance ID: N/A | ResCl strips: — | Run Method: ↓

Instr. 12 | 50 mL Class A used for dilution FV | Syringes: 193643 | LIMS Run#: 627451

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK							PJ4750		
2	↓							PJ4751		
3	↓							PJ4752		
4	JUNE		RQ1901929.01					PJ4753	YT	(auto) 10:35
1	CCV		02					PJ4754	YC	
1	LCS.ACID		03					PJ4755	YQ	
1	VBLK		—					PJ4756	(N)	rpt 4/0
2	↓		04					PJ4757	YB	
1	R1901850.001	200	1/200mls	8043	4	1	<2	PJ4758	Y	
2	BLK					—	—	PJ4759	—	
3	002	1.0		8043	4	1	<2	PJ4760	(Y)	rpt 10
4	006	1.0		↓	↓	1	<2	PJ4761	(Y)	↓
5	005	1.0				1	<2	PJ4762	Y	
6	007	1.0				1	<2	PJ4763	(Y)	rpt 2.5
7	LCS.LMP					—	—	PJ4764	YQ	
8	BLK					—	—	PJ4765	—	
9	R1901832.004	1.0	(LMP)(DOD)	15483	2	1	7	PJ4766	(N)	PCE c/o
10	001	1.0				1	7	PJ4767	Y	
11	002	1.0				1	7	PJ4768	Y	
12	003	1.0		↓	↓	1	7	PJ4769	Y	
13	R1901952.001	1.0		14518	2	1	<2	PJ4770	Y	
14	002	1.0		↓	↓	1	<2	PJ4771	Y	
15	R1901832.004	1.0	(LMP)(DOD)	15483	2	2	7	PJ4772	(N)	cis-1,2-DCE c/o
16	R1901850.007	2.5	20/50mls	8043	4	2	<2	PJ4773	Y	(DL)
17	002	10	5/50mls			2	<2	PJ4774	Y	↓
18	006	10	↓ (MW)			2	<2	PJ4775	Y	
19	003	50	1/50mls			1	<2	PJ4776	Y	
20	MS 001	200	1/200mls			1	<2	PJ4777	Y	
21	MSD 001	200	↓	↓	↓	1	<2	PJ4778	Y	
22	R1901832.001	1.0	MS (LMP)(DOD)	15483	2	2	7	PJ4779	Y	
23	↓ 001	1.0	MSD	↓	↓	3	7	PJ4780	Y	20:58
24	Closing CCV			↓	—	—	—	PJ4781	Y	
25	BLK							PJ4782	↓	

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

500 Primary CCC+ : 197026
Primary RF+ : 197154 — 5ml → 5mls
Primary TG : 197282 — = CCV
Primary HSL : 197283
Primary : —

200 Secondary RF+ : 197077 - 5ml
500 Secondary CCC+ : 1954816
Secondary TG : 197372 — 2ml — 50mls = LCS
Secondary HSL : 197383
Secondary : —

Combined IS/Surr : —
Surrogate 50 : 1969118
Internal Std 50 : 1969119
Reagents: —

Runlog-MSVOAr4 1/17/17

Analysis: 8260 | 624 Analyst: F. Nagler pH strips: 2010 18 Tune Method: W022019.M

Date: 3/8/19 Balance ID: — ResCl strips: 101118H Run Method: ↓

Instr. MS 12 50 mL Class A used for dilution FV Syringes: 190697 | 77958 LIMS Run#: 627654

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	Resid Cl	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK			—					P24783	Y	
2	BLK								84	Y	
3	TUNE								85	(N)	
3	TUNE								86	Y	
1	CCV								87	Y	
2	LCS-FP								88	Y	
3	LCS-UNP								89	Y	
4	MBLK								90	(N)	
5	MBLK								91	Y	
6	R1901832-004	1.0		—	15483	2	3	7	92	Y	
7	R1901953-003	1.0		neg	13189	2	1	6	93	Y	
8	↓ -001	1.0		neg	↓	↓	1	6	94	Y	
9	R1901878-007	1.0		neg	20291	2	2	6	95	Y	
10	↓ -008	1.0		neg	↓	↓	2	6	96	Y	
11	R1901995-005	1.0		neg	14913	2	1	7	97	Y	
12	↓ -006	1.0		neg	15051	↓	1	7	98	Y	
13	R1901916-003	1.0		neg	15551	2	1	6	99	Y	
14	↓ -002	1.0		neg	↓	↓	1	7	P24800	Y	
15	↓ -001	5.0	10|50mL	neg	↓	↓	1	7	01	Y	
16	R1901851-001	1.0		—	18619	1	1	<2	02	Y	
17	↓ -002	1.0		—	↓	↓	1	<2	03	Y	
18	R1901917-001	1.0		neg	6140	2	1	7	04	Y	
19	↓ -002	1.0		neg	↓	↓	1	7	05	Y	
20	↓ -003	1.0	~~10|50~~ to 3/8/19	neg	↓	↓	1	7	06	Y	
21	R1901876-001	5.0	10|50mL	neg	↓	↓	1	7	07	(Y)	Rpt 1/10
22	↓ -002	5.0	↓	neg	↓	V	1	7	08	Y	
23	R1901880-004	1.0		—	8043	4	1	<2	09	Y	
24	↓ -009	1.0		—	↓	↓	1	<2	10	(Y)	Rpt 1/10
25	↓ -008	2.5	20|50mL	—	↓	J	1	<2	11	(Y)	Rpt 1/10
26	BLK								12	Y	
27	Closing CCV(DOD)								13	Y	
28	R1901892-012MS	1.0		neg	19119	2	4	7	14	Y	

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

T/G Primary 500 : 197282 - 5mL/50mL

HSL Primary ↓ : 197283 -

Fr Primary ↓ : 197154 - ↓ (CCV)

OCC Primary ↓ : 197026 -

Primary :

Fr Secondary 200 : 197077 - 5mL

T/G Secondary 500 : 197372 - 2mL

HSL Secondary ↓ : 197383 - ↓ 50mL (LCS)

OCC Secondary ↓ : 195896 - ↓

Secondary :

-125mL -5mL ↓ 50mL (SPK)

Combined IS/Surr — : —

Surrogate 50 : 196918

Internal Std 50 : 196919

Reagents:

Analysis: 8260B/624 | Analyst: F. Nagler | pH strips: 204018 | Tune Method: W022019.M

Date: 3/8/19 Cont. | Balance ID: — | ResCl strips: 1011187H | Run Method: ↓

Instr. MS12 | 50 mL Class A used for dilution FV | Syringes: 190697 / 77958 | LIMS Run#: 627654

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./ Resid Cl	RL	Tier	Vial	pH	File#	OK?	Comments
29	R1901892-012MSD	1.0	neg	19119	2	5	7	P248LS	Y	
30	R1901878-001MS	1.0	neg	20291	2	4	6	16	Y	
31	↓ -001MSD	1.0	neg	↓	↓	5	6	17	Y	
32	BLK							18	Y	
33	BLK							19	Y	

3/8/19 FF

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

T/G Primary 500 : 197282 - 5uL | 50uL

HSL Primary ↓ : 197283 -

Fr Primary : 197154 - ↓ (CCV)

DCC Primary : 197026 -

Primary :

Fr Secondary 200 : 197077 - 5uL

T/G Secondary 500 : 197372 - 2uL

HSL Secondary ↓ : 197383 - 1 | 50uL (LCS)

DCC Secondary : 195846 - 1

Secondary :

-12.5uL -5uL | 50uL (MB)

Combined IS/Surr — : —

Surrogate 50 : 196918

Internal Std 50 : 196919

Reagents:

Runlog-MSVOAr4 1/17/17

Analysis: 8260 waters	Analyst: K. Quest	pH strips: 2041018	Tune Method: WD2019
Date: 3/12/19	Balance ID: N/A	ResCl strips: N/A	Run Method: ↓
Instr. 12	50 mL Class A used for dilution FV	Syringes: 190697	LIMS Run#: 627896

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK							PZ4827		
2	↓							PZ4828		
3	TUNE		LQ1902040.01					PZ4829	YT	(auto) 10:03
1	CCV		02					PZ4830	YC	
1	LCS·ACID		03					PZ4831	YQ	
1	WBLK		—					PZ4832	(Y)	opt clo
2	↓		↓ 04					PZ4833	YB	
1	R1901899·001	1.0		9443	2	1	<2	PZ4834	Y	
2	| 002	1.0		|	|	1	<2	PZ4835	Y	
3	| 003	1.0		|	|	1	<2	PZ4836	Y	
4	↓ 004	1.0		↓	↓	1	<2	PZ4837	Y	
5	R1901899·005	1.0		19760	2	1	<2	PZ4838	Y	
6	R1902003·001	1.0		9434	2	1	<2	PZ4839	Y	
7	R1901880·008	10	5/50mls	58043	4	2	<2	PZ4840	(Y)	(DL) TCE/cis
8	↓ 009	10	↓	↓	↓	2	<2	PZ4841	(Y)	(DL) TCE
9	R1901814·001	1.0		9978	4	1	<2	PZ4842	Y	(cyclohex/heptane only)
10	| 002	1.0		|	|	1	<2	PZ4843	Y	|
11	| 003	1.0		|	|	1	<2	PZ4844	Y	|
12	↓ 004	1.0		↓	↓	1	<2	PZ4845	Y	↓
13	R1901834·001	1.0		66656	3	1	<2	PZ4846	Y	
14	| 002	1.0		|	|	1	<2	PZ4847	Y	
15	| 003	1.0		|	|	1	<2	PZ4848	Y	
16	| 004	1.0		|	|	1	<2	PZ4849	Y	
17	↓ 005	1.0		↓	↓	1	<2	PZ4850	Y	
18	R1901858·001	1.0		6673	2	1	<2	PZ4851	Y	
19	↓ 002	250	1/250mls	↓	1	1	(6)	PZ4852	Y	(foamy)
20	R1901853·001	2.0	25/50mls	18619	2	1	<2	PZ4853	Y	
21	R1901814·002	1.0	ms	9978	4	2	<2	PZ4854	YQ	
22	↓ 002	1.0	msD	↓	↓	3	<2	PZ4855	YQ	20:04 ✓
23	BLK					—	—	PZ4856	—	

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

Combined IS/Surr :

500 Primary Occ+ : 197026
Primary Fr+ : 197154 | 5uL → 50mls
Primary TG : 197282 | =CCV
Primary HSL : 197283
Primary :

200 Secondary Fr+ : 197077 - 5uL
500 Secondary Occ+ : 195846
Secondary TG : 197372 | 2uL
Secondary HSL : 197383
Secondary : | =LCS

- 10.6uL
4.2uL ✓
42mL vial = ms/D

Surrogate 50 : 196918
Internal Std 50 : 196919
Reagents:

Runlog-MSVOAr4 1/17/17

Appendix E
Data Usability Summary Reports

Data Usability Summary Report

Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

Former Buffalo China Site #16-344-1389
ALS Environmental, Inc. SDG#R1901592
March 28, 2019
Revised May 20, 2019
Sampling date: 2/15, 21/2019

Prepared by:
Jodi Zimmerman
Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package (revised May 20, 2019) for LiRo Engineers, project located at Former Buffalo China Site #16-344-1389, ALS Environmental, Inc. SDG#R1901592 submitted to Vali-Data of WNY, LLC on March 8, 2019. This DUSR has been prepared in general compliance with NYSDEC Analytical Services Protocols and USEPA National Functional Guidelines. The laboratory performed the analysis using USEPA method Volatile Organics (8260C).

VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Internal Standard (IS) Area Performance
-Surrogate Spike Recoveries
-Method Blank
-Field Duplicate Sample Precision
-Laboratory Control Samples
-MS/MSD
-Compound Quantitation
-Initial Calibration
-Continuing Calibration
-GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Method Blank.

Sample MW-6 was diluted due to high target analyte concentration.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met. Results were not recorded to three significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All criteria were met.

METHOD BLANK
All criteria were met except Carbon Disulfide was detected in RQ1901592-04 above the MDL, below the reporting limit and is qualified as estimated. Associated samples in which this target analyte was detected above the MDL and below the reporting limit should be reported with the reporting limit and 'undetected'. Associated samples in which this target analyte was detected above the reporting limit should be qualified as estimated high.

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate sample was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met.

MS/MSD
No MS/MSD was acquired.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were performed on target analytes whose %RSD >20%, with acceptable results.

CONTINUING CALIBRATION
All criteria were met.

GC/MS PERFORMANCE CHECK
All criteria were met.

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
MW-7-20190215	R1901592-001	1,1,1-Trichloroethane (TCA)		U		Y
MW-7A-20190215	R1901592-002	1,1,1-Trichloroethane (TCA)		U		Y
MW-8A-20190215	R1901592-003	1,1,1-Trichloroethane (TCA)		U		Y
MW-26-20190215	R1901592-004	1,1,1-Trichloroethane (TCA)		U		Y
MW-26A-20190215	R1901592-005	1,1,1-Trichloroethane (TCA)		U		Y
MW-9A-20190215	R1901592-006	1,1,1-Trichloroethane (TCA)		U		Y
MW-9-20190221	R1901592-007	1,1,1-Trichloroethane (TCA)		U		Y
MW-6-20190221	R1901592-008	1,1,1-Trichloroethane (TCA)		U		Y
MW-10-20190221	R1901592-009	1,1,1-Trichloroethane (TCA)		U		Y
MW-25A-20190221	R1901592-010	1,1,1-Trichloroethane (TCA)		U		Y
MW-21A-20190221	R1901592-011	1,1,1-Trichloroethane (TCA)		U		Y
TRIP BLANK	R1901592-012	1,1,1-Trichloroethane (TCA)		U		Y
RQ1901592-04	RQ1901592-04	1,1,1-Trichloroethane (TCA)		U		Y
RQ1901613-04	RQ1901613-04	1,1,1-Trichloroethane (TCA)		U		Y
RQ1901633-04	RQ1901633-04	1,1,1-Trichloroethane (TCA)		U		Y
RQ1901592-03	RQ1901592-03	1,1,1-Trichloroethane (TCA)	18.0			Y
RQ1901613-03	RQ1901613-03	1,1,1-Trichloroethane (TCA)	19.4			Y
RQ1901633-03	RQ1901633-03	1,1,1-Trichloroethane (TCA)	17.5			Y
MW-7-20190215	R1901592-001	1,1,2,2-Tetrachloroethane		U		Y
MW-7A-20190215	R1901592-002	1,1,2,2-Tetrachloroethane		U		Y
MW-8A-20190215	R1901592-003	1,1,2,2-Tetrachloroethane		U		Y
MW-26-20190215	R1901592-004	1,1,2,2-Tetrachloroethane		U		Y
MW-26A-20190215	R1901592-005	1,1,2,2-Tetrachloroethane		U		Y
MW-9A-20190215	R1901592-006	1,1,2,2-Tetrachloroethane		U		Y
MW-9-20190221	R1901592-007	1,1,2,2-Tetrachloroethane		U		Y
MW-6-20190221	R1901592-008	1,1,2,2-Tetrachloroethane		U		Y
MW-10-20190221	R1901592-009	1,1,2,2-Tetrachloroethane		U		Y
MW-25A-20190221	R1901592-010	1,1,2,2-Tetrachloroethane		U		Y
MW-21A-20190221	R1901592-011	1,1,2,2-Tetrachloroethane		U		Y
TRIP BLANK	R1901592-012	1,1,2,2-Tetrachloroethane		U		Y
RQ1901592-04	RQ1901592-04	1,1,2,2-Tetrachloroethane		U		Y
RQ1901613-04	RQ1901613-04	1,1,2,2-Tetrachloroethane		U		Y
RQ1901633-04	RQ1901633-04	1,1,2,2-Tetrachloroethane		U		Y
RQ1901592-03	RQ1901592-03	1,1,2,2-Tetrachloroethane	17.2			Y
RQ1901613-03	RQ1901613-03	1,1,2,2-Tetrachloroethane	19.6			Y
RQ1901633-03	RQ1901633-03	1,1,2,2-Tetrachloroethane	20.8			Y
MW-7-20190215	R1901592-001	1,1,2-Trichloroethane		U		Y
MW-7A-20190215	R1901592-002	1,1,2-Trichloroethane		U		Y
MW-8A-20190215	R1901592-003	1,1,2-Trichloroethane		U		Y
MW-26-20190215	R1901592-004	1,1,2-Trichloroethane		U		Y
MW-26A-20190215	R1901592-005	1,1,2-Trichloroethane		U		Y
MW-9A-20190215	R1901592-006	1,1,2-Trichloroethane		U		Y
MW-9-20190221	R1901592-007	1,1,2-Trichloroethane		U		Y
MW-6-20190221	R1901592-008	1,1,2-Trichloroethane		U		Y
MW-10-20190221	R1901592-009	1,1,2-Trichloroethane		U		Y
MW-25A-20190221	R1901592-010	1,1,2-Trichloroethane		U		Y
MW-21A-20190221	R1901592-011	1,1,2-Trichloroethane		U		Y
TRIP BLANK	R1901592-012	1,1,2-Trichloroethane		U		Y
RQ1901592-04	RQ1901592-04	1,1,2-Trichloroethane		U		Y
RQ1901613-04	RQ1901613-04	1,1,2-Trichloroethane		U		Y
RQ1901633-04	RQ1901633-04	1,1,2-Trichloroethane		U		Y
RQ1901592-03	RQ1901592-03	1,1,2-Trichloroethane	17.2			Y
RQ1901613-03	RQ1901613-03	1,1,2-Trichloroethane	18.9			Y
RQ1901633-03	RQ1901633-03	1,1,2-Trichloroethane	18.6			Y
MW-7-20190215	R1901592-001	1,1-Dichloroethane		U		Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
MW-7A-20190215	R1901592-002	1,1-Dichloroethane		U		Y
MW-8A-20190215	R1901592-003	1,1-Dichloroethane		U		Y
MW-26-20190215	R1901592-004	1,1-Dichloroethane		U		Y
MW-26A-20190215	R1901592-005	1,1-Dichloroethane		U		Y
MW-9A-20190215	R1901592-006	1,1-Dichloroethane		U		Y
MW-9-20190221	R1901592-007	1,1-Dichloroethane		U		Y
MW-6-20190221	R1901592-008	1,1-Dichloroethane		U		Y
MW-10-20190221	R1901592-009	1,1-Dichloroethane		U		Y
MW-25A-20190221	R1901592-010	1,1-Dichloroethane		U		Y
MW-21A-20190221	R1901592-011	1,1-Dichloroethane		U		Y
TRIP BLANK	R1901592-012	1,1-Dichloroethane		U		Y
RQ1901592-04	RQ1901592-04	1,1-Dichloroethane		U		Y
RQ1901613-04	RQ1901613-04	1,1-Dichloroethane		U		Y
RQ1901633-04	RQ1901633-04	1,1-Dichloroethane		U		Y
RQ1901592-03	RQ1901592-03	1,1-Dichloroethane	18.7			Y
RQ1901613-03	RQ1901613-03	1,1-Dichloroethane	19.6			Y
RQ1901633-03	RQ1901633-03	1,1-Dichloroethane	18.8			Y
MW-7-20190215	R1901592-001	1,1-Dichloroethene		U		Y
MW-7A-20190215	R1901592-002	1,1-Dichloroethene		U		Y
MW-8A-20190215	R1901592-003	1,1-Dichloroethene		U		Y
MW-26-20190215	R1901592-004	1,1-Dichloroethene		U		Y
MW-26A-20190215	R1901592-005	1,1-Dichloroethene		U		Y
MW-9A-20190215	R1901592-006	1,1-Dichloroethene		U		Y
MW-9-20190221	R1901592-007	1,1-Dichloroethene		U		Y
MW-6-20190221	R1901592-008	1,1-Dichloroethene	9.3	J		Y
MW-10-20190221	R1901592-009	1,1-Dichloroethene		U		Y
MW-25A-20190221	R1901592-010	1,1-Dichloroethene		U		Y
MW-21A-20190221	R1901592-011	1,1-Dichloroethene	1.7	J		Y
TRIP BLANK	R1901592-012	1,1-Dichloroethene		U		Y
RQ1901592-04	RQ1901592-04	1,1-Dichloroethene		U		Y
RQ1901613-04	RQ1901613-04	1,1-Dichloroethene		U		Y
RQ1901633-04	RQ1901633-04	1,1-Dichloroethene		U		Y
RQ1901592-03	RQ1901592-03	1,1-Dichloroethene	18.8			Y
RQ1901613-03	RQ1901613-03	1,1-Dichloroethene	19.0			Y
RQ1901633-03	RQ1901633-03	1,1-Dichloroethene	18.4			Y
MW-7-20190215	R1901592-001	1,2,3-Trichlorobenzene		U		Y
MW-7A-20190215	R1901592-002	1,2,3-Trichlorobenzene		U		Y
MW-8A-20190215	R1901592-003	1,2,3-Trichlorobenzene		U		Y
MW-26-20190215	R1901592-004	1,2,3-Trichlorobenzene		U		Y
MW-26A-20190215	R1901592-005	1,2,3-Trichlorobenzene		U		Y
MW-9A-20190215	R1901592-006	1,2,3-Trichlorobenzene		U		Y
MW-9-20190221	R1901592-007	1,2,3-Trichlorobenzene		U		Y
MW-6-20190221	R1901592-008	1,2,3-Trichlorobenzene		U		Y
MW-10-20190221	R1901592-009	1,2,3-Trichlorobenzene		U		Y
MW-25A-20190221	R1901592-010	1,2,3-Trichlorobenzene		U		Y
MW-21A-20190221	R1901592-011	1,2,3-Trichlorobenzene		U		Y
TRIP BLANK	R1901592-012	1,2,3-Trichlorobenzene		U		Y
RQ1901592-04	RQ1901592-04	1,2,3-Trichlorobenzene		U		Y
RQ1901613-04	RQ1901613-04	1,2,3-Trichlorobenzene		U		Y
RQ1901633-04	RQ1901633-04	1,2,3-Trichlorobenzene		U		Y
RQ1901592-03	RQ1901592-03	1,2,3-Trichlorobenzene	18.2			Y
RQ1901613-03	RQ1901613-03	1,2,3-Trichlorobenzene	19.8			Y
RQ1901633-03	RQ1901633-03	1,2,3-Trichlorobenzene	18.3			Y
MW-7-20190215	R1901592-001	1,2,4-Trichlorobenzene		U		Y
MW-7A-20190215	R1901592-002	1,2,4-Trichlorobenzene		U		Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
MW-8A-20190215	R1901592-003	1,2,4-Trichlorobenzene		U		Y
MW-26-20190215	R1901592-004	1,2,4-Trichlorobenzene		U		Y
MW-26A-20190215	R1901592-005	1,2,4-Trichlorobenzene		U		Y
MW-9A-20190215	R1901592-006	1,2,4-Trichlorobenzene		U		Y
MW-9-20190221	R1901592-007	1,2,4-Trichlorobenzene		U		Y
MW-6-20190221	R1901592-008	1,2,4-Trichlorobenzene		U		Y
MW-10-20190221	R1901592-009	1,2,4-Trichlorobenzene		U		Y
MW-25A-20190221	R1901592-010	1,2,4-Trichlorobenzene		U		Y
MW-21A-20190221	R1901592-011	1,2,4-Trichlorobenzene		U		Y
TRIP BLANK	R1901592-012	1,2,4-Trichlorobenzene		U		Y
RQ1901592-04	RQ1901592-04	1,2,4-Trichlorobenzene		U		Y
RQ1901613-04	RQ1901613-04	1,2,4-Trichlorobenzene		U		Y
RQ1901633-04	RQ1901633-04	1,2,4-Trichlorobenzene		U		Y
RQ1901592-03	RQ1901592-03	1,2,4-Trichlorobenzene	19.2			Y
RQ1901613-03	RQ1901613-03	1,2,4-Trichlorobenzene	20.0			Y
RQ1901633-03	RQ1901633-03	1,2,4-Trichlorobenzene	19.6			Y
MW-7-20190215	R1901592-001	1,2-Dibromo-3-Chloropropane		U		Y
MW-7A-20190215	R1901592-002	1,2-Dibromo-3-Chloropropane		U		Y
MW-8A-20190215	R1901592-003	1,2-Dibromo-3-Chloropropane		U		Y
MW-26-20190215	R1901592-004	1,2-Dibromo-3-Chloropropane		U		Y
MW-26A-20190215	R1901592-005	1,2-Dibromo-3-Chloropropane		U		Y
MW-9A-20190215	R1901592-006	1,2-Dibromo-3-Chloropropane		U		Y
MW-9-20190221	R1901592-007	1,2-Dibromo-3-Chloropropane		U		Y
MW-6-20190221	R1901592-008	1,2-Dibromo-3-Chloropropane		U		Y
MW-10-20190221	R1901592-009	1,2-Dibromo-3-Chloropropane		U		Y
MW-25A-20190221	R1901592-010	1,2-Dibromo-3-Chloropropane		U		Y
MW-21A-20190221	R1901592-011	1,2-Dibromo-3-Chloropropane		U		Y
TRIP BLANK	R1901592-012	1,2-Dibromo-3-Chloropropane		U		Y
RQ1901592-04	RQ1901592-04	1,2-Dibromo-3-Chloropropane		U		Y
RQ1901613-04	RQ1901613-04	1,2-Dibromo-3-Chloropropane		U		Y
RQ1901633-04	RQ1901633-04	1,2-Dibromo-3-Chloropropane		U		Y
RQ1901592-03	RQ1901592-03	1,2-Dibromo-3-Chloropropane	16.0			Y
RQ1901613-03	RQ1901613-03	1,2-Dibromo-3-Chloropropane	17.3			Y
RQ1901633-03	RQ1901633-03	1,2-Dibromo-3-Chloropropane	17.9			Y
MW-7-20190215	R1901592-001	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
MW-7A-20190215	R1901592-002	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
MW-8A-20190215	R1901592-003	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
MW-26-20190215	R1901592-004	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
MW-26A-20190215	R1901592-005	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
MW-9A-20190215	R1901592-006	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
MW-9-20190221	R1901592-007	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
MW-6-20190221	R1901592-008	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
MW-10-20190221	R1901592-009	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
MW-25A-20190221	R1901592-010	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
MW-21A-20190221	R1901592-011	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
TRIP BLANK	R1901592-012	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
RQ1901592-04	RQ1901592-04	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
RQ1901613-04	RQ1901613-04	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
RQ1901633-04	RQ1901633-04	1,2-Dibromoethane (Ethylene Dibromide)		U		Y
RQ1901592-03	RQ1901592-03	1,2-Dibromoethane (Ethylene Dibromide)	17.0			Y
RQ1901613-03	RQ1901613-03	1,2-Dibromoethane (Ethylene Dibromide)	18.8			Y
RQ1901633-03	RQ1901633-03	1,2-Dibromoethane (Ethylene Dibromide)	19.3			Y
MW-7-20190215	R1901592-001	1,2-Dichlorobenzene		U		Y
MW-7A-20190215	R1901592-002	1,2-Dichlorobenzene		U		Y
MW-8A-20190215	R1901592-003	1,2-Dichlorobenzene		U		Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
MW-26-20190215	R1901592-004	1,2-Dichlorobenzene		U		Y
MW-26A-20190215	R1901592-005	1,2-Dichlorobenzene		U		Y
MW-9A-20190215	R1901592-006	1,2-Dichlorobenzene		U		Y
MW-9-20190221	R1901592-007	1,2-Dichlorobenzene		U		Y
MW-6-20190221	R1901592-008	1,2-Dichlorobenzene		U		Y
MW-10-20190221	R1901592-009	1,2-Dichlorobenzene		U		Y
MW-25A-20190221	R1901592-010	1,2-Dichlorobenzene		U		Y
MW-21A-20190221	R1901592-011	1,2-Dichlorobenzene	0.38	J		Y
TRIP BLANK	R1901592-012	1,2-Dichlorobenzene		U		Y
RQ1901592-04	RQ1901592-04	1,2-Dichlorobenzene		U		Y
RQ1901613-04	RQ1901613-04	1,2-Dichlorobenzene		U		Y
RQ1901633-04	RQ1901633-04	1,2-Dichlorobenzene		U		Y
RQ1901592-03	RQ1901592-03	1,2-Dichlorobenzene	17.2			Y
RQ1901613-03	RQ1901613-03	1,2-Dichlorobenzene	19.1			Y
RQ1901633-03	RQ1901633-03	1,2-Dichlorobenzene	18.4			Y
MW-7-20190215	R1901592-001	1,2-Dichloroethane		U		Y
MW-7A-20190215	R1901592-002	1,2-Dichloroethane		U		Y
MW-8A-20190215	R1901592-003	1,2-Dichloroethane		U		Y
MW-26-20190215	R1901592-004	1,2-Dichloroethane		U		Y
MW-26A-20190215	R1901592-005	1,2-Dichloroethane		U		Y
MW-9A-20190215	R1901592-006	1,2-Dichloroethane		U		Y
MW-9-20190221	R1901592-007	1,2-Dichloroethane		U		Y
MW-6-20190221	R1901592-008	1,2-Dichloroethane		U		Y
MW-10-20190221	R1901592-009	1,2-Dichloroethane		U		Y
MW-25A-20190221	R1901592-010	1,2-Dichloroethane		U		Y
MW-21A-20190221	R1901592-011	1,2-Dichloroethane		U		Y
TRIP BLANK	R1901592-012	1,2-Dichloroethane		U		Y
RQ1901592-04	RQ1901592-04	1,2-Dichloroethane		U		Y
RQ1901613-04	RQ1901613-04	1,2-Dichloroethane		U		Y
RQ1901633-04	RQ1901633-04	1,2-Dichloroethane		U		Y
RQ1901592-03	RQ1901592-03	1,2-Dichloroethane	17.7			Y
RQ1901613-03	RQ1901613-03	1,2-Dichloroethane	19.7			Y
RQ1901633-03	RQ1901633-03	1,2-Dichloroethane	19.3			Y
MW-7-20190215	R1901592-001	1,2-Dichloropropane		U		Y
MW-7A-20190215	R1901592-002	1,2-Dichloropropane		U		Y
MW-8A-20190215	R1901592-003	1,2-Dichloropropane		U		Y
MW-26-20190215	R1901592-004	1,2-Dichloropropane		U		Y
MW-26A-20190215	R1901592-005	1,2-Dichloropropane		U		Y
MW-9A-20190215	R1901592-006	1,2-Dichloropropane		U		Y
MW-9-20190221	R1901592-007	1,2-Dichloropropane		U		Y
MW-6-20190221	R1901592-008	1,2-Dichloropropane		U		Y
MW-10-20190221	R1901592-009	1,2-Dichloropropane		U		Y
MW-25A-20190221	R1901592-010	1,2-Dichloropropane		U		Y
MW-21A-20190221	R1901592-011	1,2-Dichloropropane		U		Y
TRIP BLANK	R1901592-012	1,2-Dichloropropane		U		Y
RQ1901592-04	RQ1901592-04	1,2-Dichloropropane		U		Y
RQ1901613-04	RQ1901613-04	1,2-Dichloropropane		U		Y
RQ1901633-04	RQ1901633-04	1,2-Dichloropropane		U		Y
RQ1901592-03	RQ1901592-03	1,2-Dichloropropane	17.5			Y
RQ1901613-03	RQ1901613-03	1,2-Dichloropropane	19.8			Y
RQ1901633-03	RQ1901633-03	1,2-Dichloropropane	19.1			Y
MW-7-20190215	R1901592-001	1,3-Dichlorobenzene		U		Y
MW-7A-20190215	R1901592-002	1,3-Dichlorobenzene		U		Y
MW-8A-20190215	R1901592-003	1,3-Dichlorobenzene		U		Y
MW-26-20190215	R1901592-004	1,3-Dichlorobenzene		U		Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
MW-26A-20190215	R1901592-005	1,3-Dichlorobenzene		U		Y
MW-9A-20190215	R1901592-006	1,3-Dichlorobenzene		U		Y
MW-9-20190221	R1901592-007	1,3-Dichlorobenzene		U		Y
MW-6-20190221	R1901592-008	1,3-Dichlorobenzene		U		Y
MW-10-20190221	R1901592-009	1,3-Dichlorobenzene		U		Y
MW-25A-20190221	R1901592-010	1,3-Dichlorobenzene		U		Y
MW-21A-20190221	R1901592-011	1,3-Dichlorobenzene		U		Y
TRIP BLANK	R1901592-012	1,3-Dichlorobenzene		U		Y
RQ1901592-04	RQ1901592-04	1,3-Dichlorobenzene		U		Y
RQ1901613-04	RQ1901613-04	1,3-Dichlorobenzene		U		Y
RQ1901633-04	RQ1901633-04	1,3-Dichlorobenzene		U		Y
RQ1901592-03	RQ1901592-03	1,3-Dichlorobenzene	17.7			Y
RQ1901613-03	RQ1901613-03	1,3-Dichlorobenzene	18.7			Y
RQ1901633-03	RQ1901633-03	1,3-Dichlorobenzene	18.5			Y
MW-7-20190215	R1901592-001	1,4-Dichlorobenzene		U		Y
MW-7A-20190215	R1901592-002	1,4-Dichlorobenzene		U		Y
MW-8A-20190215	R1901592-003	1,4-Dichlorobenzene		U		Y
MW-26-20190215	R1901592-004	1,4-Dichlorobenzene		U		Y
MW-26A-20190215	R1901592-005	1,4-Dichlorobenzene		U		Y
MW-9A-20190215	R1901592-006	1,4-Dichlorobenzene		U		Y
MW-9-20190221	R1901592-007	1,4-Dichlorobenzene	0.24	J		Y
MW-6-20190221	R1901592-008	1,4-Dichlorobenzene		U		Y
MW-10-20190221	R1901592-009	1,4-Dichlorobenzene	0.87	J		Y
MW-25A-20190221	R1901592-010	1,4-Dichlorobenzene		U		Y
MW-21A-20190221	R1901592-011	1,4-Dichlorobenzene		U		Y
TRIP BLANK	R1901592-012	1,4-Dichlorobenzene		U		Y
RQ1901592-04	RQ1901592-04	1,4-Dichlorobenzene		U		Y
RQ1901613-04	RQ1901613-04	1,4-Dichlorobenzene		U		Y
RQ1901633-04	RQ1901633-04	1,4-Dichlorobenzene		U		Y
RQ1901592-03	RQ1901592-03	1,4-Dichlorobenzene	17.0			Y
RQ1901613-03	RQ1901613-03	1,4-Dichlorobenzene	18.2			Y
RQ1901633-03	RQ1901633-03	1,4-Dichlorobenzene	17.7			Y
MW-7-20190215	R1901592-001	1,4-Dioxane (P-Dioxane)		U		Y
MW-7A-20190215	R1901592-002	1,4-Dioxane (P-Dioxane)		U		Y
MW-8A-20190215	R1901592-003	1,4-Dioxane (P-Dioxane)		U		Y
MW-26-20190215	R1901592-004	1,4-Dioxane (P-Dioxane)		U		Y
MW-26A-20190215	R1901592-005	1,4-Dioxane (P-Dioxane)		U		Y
MW-9A-20190215	R1901592-006	1,4-Dioxane (P-Dioxane)		U		Y
MW-9-20190221	R1901592-007	1,4-Dioxane (P-Dioxane)		U		Y
MW-6-20190221	R1901592-008	1,4-Dioxane (P-Dioxane)		U		Y
MW-10-20190221	R1901592-009	1,4-Dioxane (P-Dioxane)		U		Y
MW-25A-20190221	R1901592-010	1,4-Dioxane (P-Dioxane)		U		Y
MW-21A-20190221	R1901592-011	1,4-Dioxane (P-Dioxane)		U		Y
TRIP BLANK	R1901592-012	1,4-Dioxane (P-Dioxane)		U		Y
RQ1901592-04	RQ1901592-04	1,4-Dioxane (P-Dioxane)		U		Y
RQ1901613-04	RQ1901613-04	1,4-Dioxane (P-Dioxane)		U		Y
RQ1901633-04	RQ1901633-04	1,4-Dioxane (P-Dioxane)		U		Y
RQ1901592-03	RQ1901592-03	1,4-Dioxane (P-Dioxane)	402			Y
RQ1901613-03	RQ1901613-03	1,4-Dioxane (P-Dioxane)	485			Y
RQ1901633-03	RQ1901633-03	1,4-Dioxane (P-Dioxane)	486			Y
MW-7-20190215	R1901592-001	2-Hexanone		U		Y
MW-7A-20190215	R1901592-002	2-Hexanone		U		Y
MW-8A-20190215	R1901592-003	2-Hexanone		U		Y
MW-26-20190215	R1901592-004	2-Hexanone		U		Y
MW-26A-20190215	R1901592-005	2-Hexanone		U		Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
MW-9A-20190215	R1901592-006	2-Hexanone		U		Y
MW-9-20190221	R1901592-007	2-Hexanone		U		Y
MW-6-20190221	R1901592-008	2-Hexanone		U		Y
MW-10-20190221	R1901592-009	2-Hexanone		U		Y
MW-25A-20190221	R1901592-010	2-Hexanone		U		Y
MW-21A-20190221	R1901592-011	2-Hexanone		U		Y
TRIP BLANK	R1901592-012	2-Hexanone		U		Y
RQ1901592-04	RQ1901592-04	2-Hexanone		U		Y
RQ1901613-04	RQ1901613-04	2-Hexanone		U		Y
RQ1901633-04	RQ1901633-04	2-Hexanone		U		Y
RQ1901592-03	RQ1901592-03	2-Hexanone	16.4			Y
RQ1901613-03	RQ1901613-03	2-Hexanone	18.8			Y
RQ1901633-03	RQ1901633-03	2-Hexanone	20.8			Y
MW-7-20190215	R1901592-001	Acetone	3.5	J		Y
MW-7A-20190215	R1901592-002	Acetone	2.9	J		Y
MW-8A-20190215	R1901592-003	Acetone		U		Y
MW-26-20190215	R1901592-004	Acetone		U		Y
MW-26A-20190215	R1901592-005	Acetone		U		Y
MW-9A-20190215	R1901592-006	Acetone		U		Y
MW-9-20190221	R1901592-007	Acetone	3.4	J		Y
MW-6-20190221	R1901592-008	Acetone		U		Y
MW-10-20190221	R1901592-009	Acetone		U		Y
MW-25A-20190221	R1901592-010	Acetone		U		Y
MW-21A-20190221	R1901592-011	Acetone	2.3	J		Y
TRIP BLANK	R1901592-012	Acetone		U		Y
RQ1901592-04	RQ1901592-04	Acetone		U		Y
RQ1901613-04	RQ1901613-04	Acetone		U		Y
RQ1901633-04	RQ1901633-04	Acetone		U		Y
RQ1901592-03	RQ1901592-03	Acetone	19.7			Y
RQ1901613-03	RQ1901613-03	Acetone	21.9			Y
RQ1901633-03	RQ1901633-03	Acetone	21.9			Y
MW-7-20190215	R1901592-001	Benzene		U		Y
MW-7A-20190215	R1901592-002	Benzene		U		Y
MW-8A-20190215	R1901592-003	Benzene		U		Y
MW-26-20190215	R1901592-004	Benzene		U		Y
MW-26A-20190215	R1901592-005	Benzene		U		Y
MW-9A-20190215	R1901592-006	Benzene		U		Y
MW-9-20190221	R1901592-007	Benzene		U		Y
MW-6-20190221	R1901592-008	Benzene		U		Y
MW-10-20190221	R1901592-009	Benzene		U		Y
MW-25A-20190221	R1901592-010	Benzene		U		Y
MW-21A-20190221	R1901592-011	Benzene	0.37	J		Y
TRIP BLANK	R1901592-012	Benzene		U		Y
RQ1901592-04	RQ1901592-04	Benzene		U		Y
RQ1901613-04	RQ1901613-04	Benzene		U		Y
RQ1901633-04	RQ1901633-04	Benzene		U		Y
RQ1901592-03	RQ1901592-03	Benzene	17.9			Y
RQ1901613-03	RQ1901613-03	Benzene	19.5			Y
RQ1901633-03	RQ1901633-03	Benzene	18.9			Y
MW-7-20190215	R1901592-001	Bromochloromethane		U		Y
MW-7A-20190215	R1901592-002	Bromochloromethane		U		Y
MW-8A-20190215	R1901592-003	Bromochloromethane		U		Y
MW-26-20190215	R1901592-004	Bromochloromethane		U		Y
MW-26A-20190215	R1901592-005	Bromochloromethane		U		Y
MW-9A-20190215	R1901592-006	Bromochloromethane		U		Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
MW-9-20190221	R1901592-007	Bromochloromethane		U		Y
MW-6-20190221	R1901592-008	Bromochloromethane		U		Y
MW-10-20190221	R1901592-009	Bromochloromethane		U		Y
MW-25A-20190221	R1901592-010	Bromochloromethane		U		Y
MW-21A-20190221	R1901592-011	Bromochloromethane		U		Y
TRIP BLANK	R1901592-012	Bromochloromethane		U		Y
RQ1901592-04	RQ1901592-04	Bromochloromethane		U		Y
RQ1901613-04	RQ1901613-04	Bromochloromethane		U		Y
RQ1901633-04	RQ1901633-04	Bromochloromethane		U		Y
RQ1901592-03	RQ1901592-03	Bromochloromethane	18.1			Y
RQ1901613-03	RQ1901613-03	Bromochloromethane	19.6			Y
RQ1901633-03	RQ1901633-03	Bromochloromethane	19.5			Y
MW-7-20190215	R1901592-001	Bromodichloromethane		U		Y
MW-7A-20190215	R1901592-002	Bromodichloromethane		U		Y
MW-8A-20190215	R1901592-003	Bromodichloromethane		U		Y
MW-26-20190215	R1901592-004	Bromodichloromethane		U		Y
MW-26A-20190215	R1901592-005	Bromodichloromethane		U		Y
MW-9A-20190215	R1901592-006	Bromodichloromethane		U		Y
MW-9-20190221	R1901592-007	Bromodichloromethane		U		Y
MW-6-20190221	R1901592-008	Bromodichloromethane		U		Y
MW-10-20190221	R1901592-009	Bromodichloromethane		U		Y
MW-25A-20190221	R1901592-010	Bromodichloromethane		U		Y
MW-21A-20190221	R1901592-011	Bromodichloromethane		U		Y
TRIP BLANK	R1901592-012	Bromodichloromethane		U		Y
RQ1901592-04	RQ1901592-04	Bromodichloromethane		U		Y
RQ1901613-04	RQ1901613-04	Bromodichloromethane		U		Y
RQ1901633-04	RQ1901633-04	Bromodichloromethane		U		Y
RQ1901592-03	RQ1901592-03	Bromodichloromethane	17.1			Y
RQ1901613-03	RQ1901613-03	Bromodichloromethane	19.4			Y
RQ1901633-03	RQ1901633-03	Bromodichloromethane	18.4			Y
MW-7-20190215	R1901592-001	Bromoform		U		Y
MW-7A-20190215	R1901592-002	Bromoform		U		Y
MW-8A-20190215	R1901592-003	Bromoform		U		Y
MW-26-20190215	R1901592-004	Bromoform		U		Y
MW-26A-20190215	R1901592-005	Bromoform		U		Y
MW-9A-20190215	R1901592-006	Bromoform		U		Y
MW-9-20190221	R1901592-007	Bromoform		U		Y
MW-6-20190221	R1901592-008	Bromoform		U		Y
MW-10-20190221	R1901592-009	Bromoform		U		Y
MW-25A-20190221	R1901592-010	Bromoform		U		Y
MW-21A-20190221	R1901592-011	Bromoform		U		Y
TRIP BLANK	R1901592-012	Bromoform		U		Y
RQ1901592-04	RQ1901592-04	Bromoform		U		Y
RQ1901613-04	RQ1901613-04	Bromoform		U		Y
RQ1901633-04	RQ1901633-04	Bromoform		U		Y
RQ1901592-03	RQ1901592-03	Bromoform	17.1			Y
RQ1901613-03	RQ1901613-03	Bromoform	18.1			Y
RQ1901633-03	RQ1901633-03	Bromoform	19.0			Y
MW-7-20190215	R1901592-001	Bromomethane		U		Y
MW-7A-20190215	R1901592-002	Bromomethane		U		Y
MW-8A-20190215	R1901592-003	Bromomethane		U		Y
MW-26-20190215	R1901592-004	Bromomethane		U		Y
MW-26A-20190215	R1901592-005	Bromomethane		U		Y
MW-9A-20190215	R1901592-006	Bromomethane		U		Y
MW-9-20190221	R1901592-007	Bromomethane		U		Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
MW-6-20190221	R1901592-008	Bromomethane		U		Y
MW-10-20190221	R1901592-009	Bromomethane		U		Y
MW-25A-20190221	R1901592-010	Bromomethane		U		Y
MW-21A-20190221	R1901592-011	Bromomethane		U		Y
TRIP BLANK	R1901592-012	Bromomethane		U		Y
RQ1901592-04	RQ1901592-04	Bromomethane		U		Y
RQ1901613-04	RQ1901613-04	Bromomethane		U		Y
RQ1901633-04	RQ1901633-04	Bromomethane		U		Y
RQ1901592-03	RQ1901592-03	Bromomethane	19.8			Y
RQ1901613-03	RQ1901613-03	Bromomethane	19.4			Y
RQ1901633-03	RQ1901633-03	Bromomethane	20.2			Y
MW-7-20190215	R1901592-001	Carbon Disulfide	0.26	BJ		Y
MW-7A-20190215	R1901592-002	Carbon Disulfide		U		Y
MW-8A-20190215	R1901592-003	Carbon Disulfide		U		Y
MW-26-20190215	R1901592-004	Carbon Disulfide		U		Y
MW-26A-20190215	R1901592-005	Carbon Disulfide		U		Y
MW-9A-20190215	R1901592-006	Carbon Disulfide	2.7	J		Y
MW-9-20190221	R1901592-007	Carbon Disulfide	0.26	J		Y
MW-6-20190221	R1901592-008	Carbon Disulfide		U		Y
MW-10-20190221	R1901592-009	Carbon Disulfide		U		Y
MW-25A-20190221	R1901592-010	Carbon Disulfide		U		Y
MW-21A-20190221	R1901592-011	Carbon Disulfide	1.6	J		Y
TRIP BLANK	R1901592-012	Carbon Disulfide		U		Y
RQ1901592-04	RQ1901592-04	Carbon Disulfide	0.64	J		Y
RQ1901613-04	RQ1901613-04	Carbon Disulfide		U		Y
RQ1901633-04	RQ1901633-04	Carbon Disulfide	0.25	J		Y
RQ1901592-03	RQ1901592-03	Carbon Disulfide	20.9			Y
RQ1901613-03	RQ1901613-03	Carbon Disulfide	22.0			Y
RQ1901633-03	RQ1901633-03	Carbon Disulfide	21.1			Y
MW-7-20190215	R1901592-001	Carbon Tetrachloride		U		Y
MW-7A-20190215	R1901592-002	Carbon Tetrachloride		U		Y
MW-8A-20190215	R1901592-003	Carbon Tetrachloride		U		Y
MW-26-20190215	R1901592-004	Carbon Tetrachloride		U		Y
MW-26A-20190215	R1901592-005	Carbon Tetrachloride		U		Y
MW-9A-20190215	R1901592-006	Carbon Tetrachloride		U		Y
MW-9-20190221	R1901592-007	Carbon Tetrachloride		U		Y
MW-6-20190221	R1901592-008	Carbon Tetrachloride		U		Y
MW-10-20190221	R1901592-009	Carbon Tetrachloride		U		Y
MW-25A-20190221	R1901592-010	Carbon Tetrachloride		U		Y
MW-21A-20190221	R1901592-011	Carbon Tetrachloride		U		Y
TRIP BLANK	R1901592-012	Carbon Tetrachloride		U		Y
RQ1901592-04	RQ1901592-04	Carbon Tetrachloride		U		Y
RQ1901613-04	RQ1901613-04	Carbon Tetrachloride		U		Y
RQ1901633-04	RQ1901633-04	Carbon Tetrachloride		U		Y
RQ1901592-03	RQ1901592-03	Carbon Tetrachloride	16.5			Y
RQ1901613-03	RQ1901613-03	Carbon Tetrachloride	19.0			Y
RQ1901633-03	RQ1901633-03	Carbon Tetrachloride	16.8			Y
MW-7-20190215	R1901592-001	Chlorobenzene		U		Y
MW-7A-20190215	R1901592-002	Chlorobenzene		U		Y
MW-8A-20190215	R1901592-003	Chlorobenzene		U		Y
MW-26-20190215	R1901592-004	Chlorobenzene		U		Y
MW-26A-20190215	R1901592-005	Chlorobenzene		U		Y
MW-9A-20190215	R1901592-006	Chlorobenzene		U		Y
MW-9-20190221	R1901592-007	Chlorobenzene		U		Y
MW-6-20190221	R1901592-008	Chlorobenzene		U		Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
MW-10-20190221	R1901592-009	Chlorobenzene		U		Y
MW-25A-20190221	R1901592-010	Chlorobenzene		U		Y
MW-21A-20190221	R1901592-011	Chlorobenzene		U		Y
TRIP BLANK	R1901592-012	Chlorobenzene		U		Y
RQ1901592-04	RQ1901592-04	Chlorobenzene		U		Y
RQ1901613-04	RQ1901613-04	Chlorobenzene		U		Y
RQ1901633-04	RQ1901633-04	Chlorobenzene		U		Y
RQ1901592-03	RQ1901592-03	Chlorobenzene	17.4			Y
RQ1901613-03	RQ1901613-03	Chlorobenzene	18.8			Y
RQ1901633-03	RQ1901633-03	Chlorobenzene	18.4			Y
MW-7-20190215	R1901592-001	Chloroethane		U		Y
MW-7A-20190215	R1901592-002	Chloroethane		U		Y
MW-8A-20190215	R1901592-003	Chloroethane		U		Y
MW-26-20190215	R1901592-004	Chloroethane		U		Y
MW-26A-20190215	R1901592-005	Chloroethane		U		Y
MW-9A-20190215	R1901592-006	Chloroethane		U		Y
MW-9-20190221	R1901592-007	Chloroethane		U		Y
MW-6-20190221	R1901592-008	Chloroethane		U		Y
MW-10-20190221	R1901592-009	Chloroethane		U		Y
MW-25A-20190221	R1901592-010	Chloroethane		U		Y
MW-21A-20190221	R1901592-011	Chloroethane		U		Y
TRIP BLANK	R1901592-012	Chloroethane		U		Y
RQ1901592-04	RQ1901592-04	Chloroethane		U		Y
RQ1901613-04	RQ1901613-04	Chloroethane		U		Y
RQ1901633-04	RQ1901633-04	Chloroethane		U		Y
RQ1901592-03	RQ1901592-03	Chloroethane	15.4			Y
RQ1901613-03	RQ1901613-03	Chloroethane	16.3			Y
RQ1901633-03	RQ1901633-03	Chloroethane	15.4			Y
MW-7-20190215	R1901592-001	Chloroform		U		Y
MW-7A-20190215	R1901592-002	Chloroform		U		Y
MW-8A-20190215	R1901592-003	Chloroform		U		Y
MW-26-20190215	R1901592-004	Chloroform		U		Y
MW-26A-20190215	R1901592-005	Chloroform		U		Y
MW-9A-20190215	R1901592-006	Chloroform		U		Y
MW-9-20190221	R1901592-007	Chloroform		U		Y
MW-6-20190221	R1901592-008	Chloroform		U		Y
MW-10-20190221	R1901592-009	Chloroform	1.7	J		Y
MW-25A-20190221	R1901592-010	Chloroform		U		Y
MW-21A-20190221	R1901592-011	Chloroform		U		Y
TRIP BLANK	R1901592-012	Chloroform		U		Y
RQ1901592-04	RQ1901592-04	Chloroform		U		Y
RQ1901613-04	RQ1901613-04	Chloroform		U		Y
RQ1901633-04	RQ1901633-04	Chloroform		U		Y
RQ1901592-03	RQ1901592-03	Chloroform	18.2			Y
RQ1901613-03	RQ1901613-03	Chloroform	19.4			Y
RQ1901633-03	RQ1901633-03	Chloroform	18.9			Y
MW-7-20190215	R1901592-001	Chloromethane		U		Y
MW-7A-20190215	R1901592-002	Chloromethane		U		Y
MW-8A-20190215	R1901592-003	Chloromethane		U		Y
MW-26-20190215	R1901592-004	Chloromethane		U		Y
MW-26A-20190215	R1901592-005	Chloromethane		U		Y
MW-9A-20190215	R1901592-006	Chloromethane		U		Y
MW-9-20190221	R1901592-007	Chloromethane		U		Y
MW-6-20190221	R1901592-008	Chloromethane		U		Y
MW-10-20190221	R1901592-009	Chloromethane		U		Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
MW-25A-20190221	R1901592-010	Chloromethane		U		Y
MW-21A-20190221	R1901592-011	Chloromethane		U		Y
TRIP BLANK	R1901592-012	Chloromethane		U		Y
RQ1901592-04	RQ1901592-04	Chloromethane		U		Y
RQ1901613-04	RQ1901613-04	Chloromethane		U		Y
RQ1901633-04	RQ1901633-04	Chloromethane		U		Y
RQ1901592-03	RQ1901592-03	Chloromethane	15.7			Y
RQ1901613-03	RQ1901613-03	Chloromethane	17.0			Y
RQ1901633-03	RQ1901633-03	Chloromethane	16.5			Y
MW-7-20190215	R1901592-001	Cis-1,2-Dichloroethylene		U		Y
MW-7A-20190215	R1901592-002	Cis-1,2-Dichloroethylene	44			Y
MW-8A-20190215	R1901592-003	Cis-1,2-Dichloroethylene		U		Y
MW-26-20190215	R1901592-004	Cis-1,2-Dichloroethylene		U		Y
MW-26A-20190215	R1901592-005	Cis-1,2-Dichloroethylene		U		Y
MW-9A-20190215	R1901592-006	Cis-1,2-Dichloroethylene		U		Y
MW-9-20190221	R1901592-007	Cis-1,2-Dichloroethylene		U		Y
MW-6-20190221	R1901592-008	Cis-1,2-Dichloroethylene	800	D		Y
MW-10-20190221	R1901592-009	Cis-1,2-Dichloroethylene		U		Y
MW-25A-20190221	R1901592-010	Cis-1,2-Dichloroethylene	0.26	J		Y
MW-21A-20190221	R1901592-011	Cis-1,2-Dichloroethylene	160			Y
TRIP BLANK	R1901592-012	Cis-1,2-Dichloroethylene		U		Y
RQ1901592-04	RQ1901592-04	Cis-1,2-Dichloroethylene		U		Y
RQ1901613-04	RQ1901613-04	Cis-1,2-Dichloroethylene		U		Y
RQ1901633-04	RQ1901633-04	Cis-1,2-Dichloroethylene		U		Y
RQ1901592-03	RQ1901592-03	Cis-1,2-Dichloroethylene	18.1			Y
RQ1901613-03	RQ1901613-03	Cis-1,2-Dichloroethylene	19.4			Y
RQ1901633-03	RQ1901633-03	Cis-1,2-Dichloroethylene	19.2			Y
MW-7-20190215	R1901592-001	Cis-1,3-Dichloropropene		U		Y
MW-7A-20190215	R1901592-002	Cis-1,3-Dichloropropene		U		Y
MW-8A-20190215	R1901592-003	Cis-1,3-Dichloropropene		U		Y
MW-26-20190215	R1901592-004	Cis-1,3-Dichloropropene		U		Y
MW-26A-20190215	R1901592-005	Cis-1,3-Dichloropropene		U		Y
MW-9A-20190215	R1901592-006	Cis-1,3-Dichloropropene		U		Y
MW-9-20190221	R1901592-007	Cis-1,3-Dichloropropene		U		Y
MW-6-20190221	R1901592-008	Cis-1,3-Dichloropropene		U		Y
MW-10-20190221	R1901592-009	Cis-1,3-Dichloropropene		U		Y
MW-25A-20190221	R1901592-010	Cis-1,3-Dichloropropene		U		Y
MW-21A-20190221	R1901592-011	Cis-1,3-Dichloropropene		U		Y
TRIP BLANK	R1901592-012	Cis-1,3-Dichloropropene		U		Y
RQ1901592-04	RQ1901592-04	Cis-1,3-Dichloropropene		U		Y
RQ1901613-04	RQ1901613-04	Cis-1,3-Dichloropropene		U		Y
RQ1901633-04	RQ1901633-04	Cis-1,3-Dichloropropene		U		Y
RQ1901592-03	RQ1901592-03	Cis-1,3-Dichloropropene	17.6			Y
RQ1901613-03	RQ1901613-03	Cis-1,3-Dichloropropene	19.7			Y
RQ1901633-03	RQ1901633-03	Cis-1,3-Dichloropropene	19.8			Y
MW-7-20190215	R1901592-001	Cyclohexane		U		Y
MW-7A-20190215	R1901592-002	Cyclohexane		U		Y
MW-8A-20190215	R1901592-003	Cyclohexane		U		Y
MW-26-20190215	R1901592-004	Cyclohexane		U		Y
MW-26A-20190215	R1901592-005	Cyclohexane		U		Y
MW-9A-20190215	R1901592-006	Cyclohexane		U		Y
MW-9-20190221	R1901592-007	Cyclohexane		U		Y
MW-6-20190221	R1901592-008	Cyclohexane		U		Y
MW-10-20190221	R1901592-009	Cyclohexane		U		Y
MW-25A-20190221	R1901592-010	Cyclohexane		U		Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
MW-21A-20190221	R1901592-011	Cyclohexane	0.45	J		Y
TRIP BLANK	R1901592-012	Cyclohexane		U		Y
RQ1901592-04	RQ1901592-04	Cyclohexane		U		Y
RQ1901613-04	RQ1901613-04	Cyclohexane		U		Y
RQ1901633-04	RQ1901633-04	Cyclohexane		U		Y
RQ1901592-03	RQ1901592-03	Cyclohexane	18.8			Y
RQ1901613-03	RQ1901613-03	Cyclohexane	20.5			Y
RQ1901633-03	RQ1901633-03	Cyclohexane	20.7			Y
MW-7-20190215	R1901592-001	Dibromochloromethane		U		Y
MW-7A-20190215	R1901592-002	Dibromochloromethane		U		Y
MW-8A-20190215	R1901592-003	Dibromochloromethane		U		Y
MW-26-20190215	R1901592-004	Dibromochloromethane		U		Y
MW-26A-20190215	R1901592-005	Dibromochloromethane		U		Y
MW-9A-20190215	R1901592-006	Dibromochloromethane		U		Y
MW-9-20190221	R1901592-007	Dibromochloromethane		U		Y
MW-6-20190221	R1901592-008	Dibromochloromethane		U		Y
MW-10-20190221	R1901592-009	Dibromochloromethane		U		Y
MW-25A-20190221	R1901592-010	Dibromochloromethane		U		Y
MW-21A-20190221	R1901592-011	Dibromochloromethane		U		Y
TRIP BLANK	R1901592-012	Dibromochloromethane		U		Y
RQ1901592-04	RQ1901592-04	Dibromochloromethane		U		Y
RQ1901613-04	RQ1901613-04	Dibromochloromethane		U		Y
RQ1901633-04	RQ1901633-04	Dibromochloromethane		U		Y
RQ1901592-03	RQ1901592-03	Dibromochloromethane	18.1			Y
RQ1901613-03	RQ1901613-03	Dibromochloromethane	18.6			Y
RQ1901633-03	RQ1901633-03	Dibromochloromethane	18.3			Y
MW-7-20190215	R1901592-001	Dibromofluoromethane	100			Y
MW-7A-20190215	R1901592-002	Dibromofluoromethane	104			Y
MW-8A-20190215	R1901592-003	Dibromofluoromethane	102			Y
MW-26-20190215	R1901592-004	Dibromofluoromethane	103			Y
MW-26A-20190215	R1901592-005	Dibromofluoromethane	100			Y
MW-9A-20190215	R1901592-006	Dibromofluoromethane	101			Y
MW-9-20190221	R1901592-007	Dibromofluoromethane	98			Y
MW-6-20190221	R1901592-008	Dibromofluoromethane	101			Y
MW-10-20190221	R1901592-009	Dibromofluoromethane	99			Y
MW-25A-20190221	R1901592-010	Dibromofluoromethane	100			Y
MW-21A-20190221	R1901592-011	Dibromofluoromethane	100			Y
TRIP BLANK	R1901592-012	Dibromofluoromethane	100			Y
RQ1901592-04	RQ1901592-04	Dibromofluoromethane	99			Y
RQ1901613-04	RQ1901613-04	Dibromofluoromethane	98			Y
RQ1901633-04	RQ1901633-04	Dibromofluoromethane	98			Y
RQ1901592-03	RQ1901592-03	Dibromofluoromethane	100			Y
RQ1901613-03	RQ1901613-03	Dibromofluoromethane	104			Y
RQ1901633-03	RQ1901633-03	Dibromofluoromethane	101			Y
MW-7-20190215	R1901592-001	Dichlorodifluoromethane		U		Y
MW-7A-20190215	R1901592-002	Dichlorodifluoromethane		U		Y
MW-8A-20190215	R1901592-003	Dichlorodifluoromethane		U		Y
MW-26-20190215	R1901592-004	Dichlorodifluoromethane		U		Y
MW-26A-20190215	R1901592-005	Dichlorodifluoromethane		U		Y
MW-9A-20190215	R1901592-006	Dichlorodifluoromethane		U		Y
MW-9-20190221	R1901592-007	Dichlorodifluoromethane		U		Y
MW-6-20190221	R1901592-008	Dichlorodifluoromethane		U		Y
MW-10-20190221	R1901592-009	Dichlorodifluoromethane		U		Y
MW-25A-20190221	R1901592-010	Dichlorodifluoromethane		U		Y
MW-21A-20190221	R1901592-011	Dichlorodifluoromethane		U		Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
TRIP BLANK	R1901592-012	Dichlorodifluoromethane		U		Y
RQ1901592-04	RQ1901592-04	Dichlorodifluoromethane		U		Y
RQ1901613-04	RQ1901613-04	Dichlorodifluoromethane		U		Y
RQ1901633-04	RQ1901633-04	Dichlorodifluoromethane		U		Y
RQ1901592-03	RQ1901592-03	Dichlorodifluoromethane	17.1			Y
RQ1901613-03	RQ1901613-03	Dichlorodifluoromethane	17.4			Y
RQ1901633-03	RQ1901633-03	Dichlorodifluoromethane	17.0			Y
MW-7-20190215	R1901592-001	Ethylbenzene		U		Y
MW-7A-20190215	R1901592-002	Ethylbenzene		U		Y
MW-8A-20190215	R1901592-003	Ethylbenzene		U		Y
MW-26-20190215	R1901592-004	Ethylbenzene		U		Y
MW-26A-20190215	R1901592-005	Ethylbenzene		U		Y
MW-9A-20190215	R1901592-006	Ethylbenzene		U		Y
MW-9-20190221	R1901592-007	Ethylbenzene		U		Y
MW-6-20190221	R1901592-008	Ethylbenzene		U		Y
MW-10-20190221	R1901592-009	Ethylbenzene		U		Y
MW-25A-20190221	R1901592-010	Ethylbenzene		U		Y
MW-21A-20190221	R1901592-011	Ethylbenzene		U		Y
TRIP BLANK	R1901592-012	Ethylbenzene		U		Y
RQ1901592-04	RQ1901592-04	Ethylbenzene		U		Y
RQ1901613-04	RQ1901613-04	Ethylbenzene		U		Y
RQ1901633-04	RQ1901633-04	Ethylbenzene		U		Y
RQ1901592-03	RQ1901592-03	Ethylbenzene	17.3			Y
RQ1901613-03	RQ1901613-03	Ethylbenzene	18.9			Y
RQ1901633-03	RQ1901633-03	Ethylbenzene	17.5			Y
MW-7-20190215	R1901592-001	Isopropylbenzene (Cumene)		U		Y
MW-7A-20190215	R1901592-002	Isopropylbenzene (Cumene)		U		Y
MW-8A-20190215	R1901592-003	Isopropylbenzene (Cumene)		U		Y
MW-26-20190215	R1901592-004	Isopropylbenzene (Cumene)		U		Y
MW-26A-20190215	R1901592-005	Isopropylbenzene (Cumene)		U		Y
MW-9A-20190215	R1901592-006	Isopropylbenzene (Cumene)		U		Y
MW-9-20190221	R1901592-007	Isopropylbenzene (Cumene)		U		Y
MW-6-20190221	R1901592-008	Isopropylbenzene (Cumene)		U		Y
MW-10-20190221	R1901592-009	Isopropylbenzene (Cumene)		U		Y
MW-25A-20190221	R1901592-010	Isopropylbenzene (Cumene)		U		Y
MW-21A-20190221	R1901592-011	Isopropylbenzene (Cumene)		U		Y
TRIP BLANK	R1901592-012	Isopropylbenzene (Cumene)		U		Y
RQ1901592-04	RQ1901592-04	Isopropylbenzene (Cumene)		U		Y
RQ1901613-04	RQ1901613-04	Isopropylbenzene (Cumene)		U		Y
RQ1901633-04	RQ1901633-04	Isopropylbenzene (Cumene)		U		Y
RQ1901592-03	RQ1901592-03	Isopropylbenzene (Cumene)	17.7			Y
RQ1901613-03	RQ1901613-03	Isopropylbenzene (Cumene)	18.9			Y
RQ1901633-03	RQ1901633-03	Isopropylbenzene (Cumene)	18.0			Y
MW-7-20190215	R1901592-001	M,P-Xylene (Sum Of Isomers)		U		Y
MW-7A-20190215	R1901592-002	M,P-Xylene (Sum Of Isomers)		U		Y
MW-8A-20190215	R1901592-003	M,P-Xylene (Sum Of Isomers)		U		Y
MW-26-20190215	R1901592-004	M,P-Xylene (Sum Of Isomers)		U		Y
MW-26A-20190215	R1901592-005	M,P-Xylene (Sum Of Isomers)		U		Y
MW-9A-20190215	R1901592-006	M,P-Xylene (Sum Of Isomers)		U		Y
MW-9-20190221	R1901592-007	M,P-Xylene (Sum Of Isomers)		U		Y
MW-6-20190221	R1901592-008	M,P-Xylene (Sum Of Isomers)		U		Y
MW-10-20190221	R1901592-009	M,P-Xylene (Sum Of Isomers)		U		Y
MW-25A-20190221	R1901592-010	M,P-Xylene (Sum Of Isomers)		U		Y
MW-21A-20190221	R1901592-011	M,P-Xylene (Sum Of Isomers)		U		Y
TRIP BLANK	R1901592-012	M,P-Xylene (Sum Of Isomers)		U		Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
RQ1901592-04	RQ1901592-04	M,P-Xylene (Sum Of Isomers)		U		Y
RQ1901613-04	RQ1901613-04	M,P-Xylene (Sum Of Isomers)		U		Y
RQ1901633-04	RQ1901633-04	M,P-Xylene (Sum Of Isomers)		U		Y
RQ1901592-03	RQ1901592-03	M,P-Xylene (Sum Of Isomers)	34.7			Y
RQ1901613-03	RQ1901613-03	M,P-Xylene (Sum Of Isomers)	37.7			Y
RQ1901633-03	RQ1901633-03	M,P-Xylene (Sum Of Isomers)	34.9			Y
MW-7-20190215	R1901592-001	Methyl Acetate		U		Y
MW-7A-20190215	R1901592-002	Methyl Acetate		U		Y
MW-8A-20190215	R1901592-003	Methyl Acetate		U		Y
MW-26-20190215	R1901592-004	Methyl Acetate		U		Y
MW-26A-20190215	R1901592-005	Methyl Acetate		U		Y
MW-9A-20190215	R1901592-006	Methyl Acetate		U		Y
MW-9-20190221	R1901592-007	Methyl Acetate		U		Y
MW-6-20190221	R1901592-008	Methyl Acetate		U		Y
MW-10-20190221	R1901592-009	Methyl Acetate		U		Y
MW-25A-20190221	R1901592-010	Methyl Acetate		U		Y
MW-21A-20190221	R1901592-011	Methyl Acetate		U		Y
TRIP BLANK	R1901592-012	Methyl Acetate		U		Y
RQ1901592-04	RQ1901592-04	Methyl Acetate		U		Y
RQ1901613-04	RQ1901613-04	Methyl Acetate		U		Y
RQ1901633-04	RQ1901633-04	Methyl Acetate		U		Y
RQ1901592-03	RQ1901592-03	Methyl Acetate	16.5			Y
RQ1901613-03	RQ1901613-03	Methyl Acetate	18.2			Y
RQ1901633-03	RQ1901633-03	Methyl Acetate	20.0			Y
MW-7-20190215	R1901592-001	Methyl Ethyl Ketone (2-Butanone)		U		Y
MW-7A-20190215	R1901592-002	Methyl Ethyl Ketone (2-Butanone)		U		Y
MW-8A-20190215	R1901592-003	Methyl Ethyl Ketone (2-Butanone)		U		Y
MW-26-20190215	R1901592-004	Methyl Ethyl Ketone (2-Butanone)		U		Y
MW-26A-20190215	R1901592-005	Methyl Ethyl Ketone (2-Butanone)		U		Y
MW-9A-20190215	R1901592-006	Methyl Ethyl Ketone (2-Butanone)		U		Y
MW-9-20190221	R1901592-007	Methyl Ethyl Ketone (2-Butanone)		U		Y
MW-6-20190221	R1901592-008	Methyl Ethyl Ketone (2-Butanone)		U		Y
MW-10-20190221	R1901592-009	Methyl Ethyl Ketone (2-Butanone)		U		Y
MW-25A-20190221	R1901592-010	Methyl Ethyl Ketone (2-Butanone)		U		Y
MW-21A-20190221	R1901592-011	Methyl Ethyl Ketone (2-Butanone)		U		Y
TRIP BLANK	R1901592-012	Methyl Ethyl Ketone (2-Butanone)		U		Y
RQ1901592-04	RQ1901592-04	Methyl Ethyl Ketone (2-Butanone)		U		Y
RQ1901613-04	RQ1901613-04	Methyl Ethyl Ketone (2-Butanone)		U		Y
RQ1901633-04	RQ1901633-04	Methyl Ethyl Ketone (2-Butanone)		U		Y
RQ1901592-03	RQ1901592-03	Methyl Ethyl Ketone (2-Butanone)	17.2			Y
RQ1901613-03	RQ1901613-03	Methyl Ethyl Ketone (2-Butanone)	19.4			Y
RQ1901633-03	RQ1901633-03	Methyl Ethyl Ketone (2-Butanone)	21.1			Y
MW-7-20190215	R1901592-001	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
MW-7A-20190215	R1901592-002	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
MW-8A-20190215	R1901592-003	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
MW-26-20190215	R1901592-004	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
MW-26A-20190215	R1901592-005	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
MW-9A-20190215	R1901592-006	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
MW-9-20190221	R1901592-007	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
MW-6-20190221	R1901592-008	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
MW-10-20190221	R1901592-009	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
MW-25A-20190221	R1901592-010	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
MW-21A-20190221	R1901592-011	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
TRIP BLANK	R1901592-012	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
RQ1901592-04	RQ1901592-04	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
RQ1901613-04	RQ1901613-04	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
RQ1901633-04	RQ1901633-04	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		Y
RQ1901592-03	RQ1901592-03	Methyl Isobutyl Ketone (4-Methyl-2-Pentan	16.9			Y
RQ1901613-03	RQ1901613-03	Methyl Isobutyl Ketone (4-Methyl-2-Pentan	19.4			Y
RQ1901633-03	RQ1901633-03	Methyl Isobutyl Ketone (4-Methyl-2-Pentan	21.7			Y
MW-7-20190215	R1901592-001	Methylcyclohexane		U		Y
MW-7A-20190215	R1901592-002	Methylcyclohexane		U		Y
MW-8A-20190215	R1901592-003	Methylcyclohexane		U		Y
MW-26-20190215	R1901592-004	Methylcyclohexane		U		Y
MW-26A-20190215	R1901592-005	Methylcyclohexane		U		Y
MW-9A-20190215	R1901592-006	Methylcyclohexane		U		Y
MW-9-20190221	R1901592-007	Methylcyclohexane		U		Y
MW-6-20190221	R1901592-008	Methylcyclohexane		U		Y
MW-10-20190221	R1901592-009	Methylcyclohexane		U		Y
MW-25A-20190221	R1901592-010	Methylcyclohexane		U		Y
MW-21A-20190221	R1901592-011	Methylcyclohexane	0.22	J		Y
TRIP BLANK	R1901592-012	Methylcyclohexane		U		Y
RQ1901592-04	RQ1901592-04	Methylcyclohexane		U		Y
RQ1901613-04	RQ1901613-04	Methylcyclohexane		U		Y
RQ1901633-04	RQ1901633-04	Methylcyclohexane		U		Y
RQ1901592-03	RQ1901592-03	Methylcyclohexane	18.9			Y
RQ1901613-03	RQ1901613-03	Methylcyclohexane	20.4			Y
RQ1901633-03	RQ1901633-03	Methylcyclohexane	20.7			Y
MW-7-20190215	R1901592-001	Methylene Chloride		U		Y
MW-7A-20190215	R1901592-002	Methylene Chloride		U		Y
MW-8A-20190215	R1901592-003	Methylene Chloride		U		Y
MW-26-20190215	R1901592-004	Methylene Chloride		U		Y
MW-26A-20190215	R1901592-005	Methylene Chloride		U		Y
MW-9A-20190215	R1901592-006	Methylene Chloride		U		Y
MW-9-20190221	R1901592-007	Methylene Chloride		U		Y
MW-6-20190221	R1901592-008	Methylene Chloride		U		Y
MW-10-20190221	R1901592-009	Methylene Chloride		U		Y
MW-25A-20190221	R1901592-010	Methylene Chloride		U		Y
MW-21A-20190221	R1901592-011	Methylene Chloride		U		Y
TRIP BLANK	R1901592-012	Methylene Chloride		U		Y
RQ1901592-04	RQ1901592-04	Methylene Chloride		U		Y
RQ1901613-04	RQ1901613-04	Methylene Chloride		U		Y
RQ1901633-04	RQ1901633-04	Methylene Chloride		U		Y
RQ1901592-03	RQ1901592-03	Methylene Chloride	17.2			Y
RQ1901613-03	RQ1901613-03	Methylene Chloride	18.6			Y
RQ1901633-03	RQ1901633-03	Methylene Chloride	18.8			Y
MW-7-20190215	R1901592-001	O-Xylene (1,2-Dimethylbenzene)		U		Y
MW-7A-20190215	R1901592-002	O-Xylene (1,2-Dimethylbenzene)		U		Y
MW-8A-20190215	R1901592-003	O-Xylene (1,2-Dimethylbenzene)		U		Y
MW-26-20190215	R1901592-004	O-Xylene (1,2-Dimethylbenzene)		U		Y
MW-26A-20190215	R1901592-005	O-Xylene (1,2-Dimethylbenzene)		U		Y
MW-9A-20190215	R1901592-006	O-Xylene (1,2-Dimethylbenzene)		U		Y
MW-9-20190221	R1901592-007	O-Xylene (1,2-Dimethylbenzene)		U		Y
MW-6-20190221	R1901592-008	O-Xylene (1,2-Dimethylbenzene)		U		Y
MW-10-20190221	R1901592-009	O-Xylene (1,2-Dimethylbenzene)		U		Y
MW-25A-20190221	R1901592-010	O-Xylene (1,2-Dimethylbenzene)		U		Y
MW-21A-20190221	R1901592-011	O-Xylene (1,2-Dimethylbenzene)		U		Y
TRIP BLANK	R1901592-012	O-Xylene (1,2-Dimethylbenzene)		U		Y
RQ1901592-04	RQ1901592-04	O-Xylene (1,2-Dimethylbenzene)		U		Y
RQ1901613-04	RQ1901613-04	O-Xylene (1,2-Dimethylbenzene)		U		Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
RQ1901633-04	RQ1901633-04	O-Xylene (1,2-Dimethylbenzene)		U		Y
RQ1901592-03	RQ1901592-03	O-Xylene (1,2-Dimethylbenzene)	17.7			Y
RQ1901613-03	RQ1901613-03	O-Xylene (1,2-Dimethylbenzene)	19.0			Y
RQ1901633-03	RQ1901633-03	O-Xylene (1,2-Dimethylbenzene)	18.0			Y
MW-7-20190215	R1901592-001	p-Bromofluorobenzene	102			Y
MW-7A-20190215	R1901592-002	p-Bromofluorobenzene	99			Y
MW-8A-20190215	R1901592-003	p-Bromofluorobenzene	97			Y
MW-26-20190215	R1901592-004	p-Bromofluorobenzene	97			Y
MW-26A-20190215	R1901592-005	p-Bromofluorobenzene	99			Y
MW-9A-20190215	R1901592-006	p-Bromofluorobenzene	97			Y
MW-9-20190221	R1901592-007	p-Bromofluorobenzene	98			Y
MW-6-20190221	R1901592-008	p-Bromofluorobenzene	101			Y
MW-10-20190221	R1901592-009	p-Bromofluorobenzene	97			Y
MW-25A-20190221	R1901592-010	p-Bromofluorobenzene	97			Y
MW-21A-20190221	R1901592-011	p-Bromofluorobenzene	97			Y
TRIP BLANK	R1901592-012	p-Bromofluorobenzene	99			Y
RQ1901592-04	RQ1901592-04	p-Bromofluorobenzene	100			Y
RQ1901613-04	RQ1901613-04	p-Bromofluorobenzene	97			Y
RQ1901633-04	RQ1901633-04	p-Bromofluorobenzene	96			Y
RQ1901592-03	RQ1901592-03	p-Bromofluorobenzene	98			Y
RQ1901613-03	RQ1901613-03	p-Bromofluorobenzene	100			Y
RQ1901633-03	RQ1901633-03	p-Bromofluorobenzene	99			Y
MW-7-20190215	R1901592-001	Styrene		U		Y
MW-7A-20190215	R1901592-002	Styrene		U		Y
MW-8A-20190215	R1901592-003	Styrene		U		Y
MW-26-20190215	R1901592-004	Styrene		U		Y
MW-26A-20190215	R1901592-005	Styrene		U		Y
MW-9A-20190215	R1901592-006	Styrene		U		Y
MW-9-20190221	R1901592-007	Styrene		U		Y
MW-6-20190221	R1901592-008	Styrene		U		Y
MW-10-20190221	R1901592-009	Styrene		U		Y
MW-25A-20190221	R1901592-010	Styrene		U		Y
MW-21A-20190221	R1901592-011	Styrene		U		Y
TRIP BLANK	R1901592-012	Styrene		U		Y
RQ1901592-04	RQ1901592-04	Styrene		U		Y
RQ1901613-04	RQ1901613-04	Styrene		U		Y
RQ1901633-04	RQ1901633-04	Styrene		U		Y
RQ1901592-03	RQ1901592-03	Styrene	18.4			Y
RQ1901613-03	RQ1901613-03	Styrene	19.6			Y
RQ1901633-03	RQ1901633-03	Styrene	19.1			Y
MW-7-20190215	R1901592-001	Tert-Butyl Methyl Ether		U		Y
MW-7A-20190215	R1901592-002	Tert-Butyl Methyl Ether		U		Y
MW-8A-20190215	R1901592-003	Tert-Butyl Methyl Ether		U		Y
MW-26-20190215	R1901592-004	Tert-Butyl Methyl Ether		U		Y
MW-26A-20190215	R1901592-005	Tert-Butyl Methyl Ether		U		Y
MW-9A-20190215	R1901592-006	Tert-Butyl Methyl Ether		U		Y
MW-9-20190221	R1901592-007	Tert-Butyl Methyl Ether		U		Y
MW-6-20190221	R1901592-008	Tert-Butyl Methyl Ether		U		Y
MW-10-20190221	R1901592-009	Tert-Butyl Methyl Ether		U		Y
MW-25A-20190221	R1901592-010	Tert-Butyl Methyl Ether		U		Y
MW-21A-20190221	R1901592-011	Tert-Butyl Methyl Ether		U		Y
TRIP BLANK	R1901592-012	Tert-Butyl Methyl Ether		U		Y
RQ1901592-04	RQ1901592-04	Tert-Butyl Methyl Ether		U		Y
RQ1901613-04	RQ1901613-04	Tert-Butyl Methyl Ether		U		Y
RQ1901633-04	RQ1901633-04	Tert-Butyl Methyl Ether		U		Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
RQ1901592-03	RQ1901592-03	Tert-Butyl Methyl Ether	19.1			Y
RQ1901613-03	RQ1901613-03	Tert-Butyl Methyl Ether	20.5			Y
RQ1901633-03	RQ1901633-03	Tert-Butyl Methyl Ether	20.5			Y
MW-7-20190215	R1901592-001	Tetrachloroethylene (PCE)		U		Y
MW-7A-20190215	R1901592-002	Tetrachloroethylene (PCE)		U		Y
MW-8A-20190215	R1901592-003	Tetrachloroethylene (PCE)		U		Y
MW-26-20190215	R1901592-004	Tetrachloroethylene (PCE)		U		Y
MW-26A-20190215	R1901592-005	Tetrachloroethylene (PCE)		U		Y
MW-9A-20190215	R1901592-006	Tetrachloroethylene (PCE)		U		Y
MW-9-20190221	R1901592-007	Tetrachloroethylene (PCE)		U		Y
MW-6-20190221	R1901592-008	Tetrachloroethylene (PCE)		U		Y
MW-10-20190221	R1901592-009	Tetrachloroethylene (PCE)		U		Y
MW-25A-20190221	R1901592-010	Tetrachloroethylene (PCE)		U		Y
MW-21A-20190221	R1901592-011	Tetrachloroethylene (PCE)		U		Y
TRIP BLANK	R1901592-012	Tetrachloroethylene (PCE)		U		Y
RQ1901592-04	RQ1901592-04	Tetrachloroethylene (PCE)		U		Y
RQ1901613-04	RQ1901613-04	Tetrachloroethylene (PCE)		U		Y
RQ1901633-04	RQ1901633-04	Tetrachloroethylene (PCE)		U		Y
RQ1901592-03	RQ1901592-03	Tetrachloroethylene (PCE)	17.3			Y
RQ1901613-03	RQ1901613-03	Tetrachloroethylene (PCE)	18.7			Y
RQ1901633-03	RQ1901633-03	Tetrachloroethylene (PCE)	17.4			Y
MW-7-20190215	R1901592-001	Toluene		U		Y
MW-7A-20190215	R1901592-002	Toluene		U		Y
MW-8A-20190215	R1901592-003	Toluene		U		Y
MW-26-20190215	R1901592-004	Toluene		U		Y
MW-26A-20190215	R1901592-005	Toluene		U		Y
MW-9A-20190215	R1901592-006	Toluene		U		Y
MW-9-20190221	R1901592-007	Toluene		U		Y
MW-6-20190221	R1901592-008	Toluene		U		Y
MW-10-20190221	R1901592-009	Toluene		U		Y
MW-25A-20190221	R1901592-010	Toluene		U		Y
MW-21A-20190221	R1901592-011	Toluene		U		Y
TRIP BLANK	R1901592-012	Toluene		U		Y
RQ1901592-04	RQ1901592-04	Toluene		U		Y
RQ1901613-04	RQ1901613-04	Toluene		U		Y
RQ1901633-04	RQ1901633-04	Toluene		U		Y
RQ1901592-03	RQ1901592-03	Toluene	17.6			Y
RQ1901613-03	RQ1901613-03	Toluene	19.7			Y
RQ1901633-03	RQ1901633-03	Toluene	18.9			Y
MW-7-20190215	R1901592-001	Toluene-D8	99			Y
MW-7A-20190215	R1901592-002	Toluene-D8	101			Y
MW-8A-20190215	R1901592-003	Toluene-D8	100			Y
MW-26-20190215	R1901592-004	Toluene-D8	101			Y
MW-26A-20190215	R1901592-005	Toluene-D8	100			Y
MW-9A-20190215	R1901592-006	Toluene-D8	99			Y
MW-9-20190221	R1901592-007	Toluene-D8	97			Y
MW-6-20190221	R1901592-008	Toluene-D8	100			Y
MW-10-20190221	R1901592-009	Toluene-D8	99			Y
MW-25A-20190221	R1901592-010	Toluene-D8	98			Y
MW-21A-20190221	R1901592-011	Toluene-D8	99			Y
TRIP BLANK	R1901592-012	Toluene-D8	98			Y
RQ1901592-04	RQ1901592-04	Toluene-D8	99			Y
RQ1901613-04	RQ1901613-04	Toluene-D8	98			Y
RQ1901633-04	RQ1901633-04	Toluene-D8	97			Y
RQ1901592-03	RQ1901592-03	Toluene-D8	98			Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
RQ1901613-03	RQ1901613-03	Toluene-D8	100			Y
RQ1901633-03	RQ1901633-03	Toluene-D8	99			Y
MW-7-20190215	R1901592-001	Trans-1,2-Dichloroethene		U		Y
MW-7A-20190215	R1901592-002	Trans-1,2-Dichloroethene		U		Y
MW-8A-20190215	R1901592-003	Trans-1,2-Dichloroethene		U		Y
MW-26-20190215	R1901592-004	Trans-1,2-Dichloroethene		U		Y
MW-26A-20190215	R1901592-005	Trans-1,2-Dichloroethene		U		Y
MW-9A-20190215	R1901592-006	Trans-1,2-Dichloroethene		U		Y
MW-9-20190221	R1901592-007	Trans-1,2-Dichloroethene		U		Y
MW-6-20190221	R1901592-008	Trans-1,2-Dichloroethene	7.3	J		Y
MW-10-20190221	R1901592-009	Trans-1,2-Dichloroethene		U		Y
MW-25A-20190221	R1901592-010	Trans-1,2-Dichloroethene		U		Y
MW-21A-20190221	R1901592-011	Trans-1,2-Dichloroethene	12			Y
TRIP BLANK	R1901592-012	Trans-1,2-Dichloroethene		U		Y
RQ1901592-04	RQ1901592-04	Trans-1,2-Dichloroethene		U		Y
RQ1901613-04	RQ1901613-04	Trans-1,2-Dichloroethene		U		Y
RQ1901633-04	RQ1901633-04	Trans-1,2-Dichloroethene		U		Y
RQ1901592-03	RQ1901592-03	Trans-1,2-Dichloroethene	18.2			Y
RQ1901613-03	RQ1901613-03	Trans-1,2-Dichloroethene	19.4			Y
RQ1901633-03	RQ1901633-03	Trans-1,2-Dichloroethene	18.2			Y
MW-7-20190215	R1901592-001	Trans-1,3-Dichloropropene		U		Y
MW-7A-20190215	R1901592-002	Trans-1,3-Dichloropropene		U		Y
MW-8A-20190215	R1901592-003	Trans-1,3-Dichloropropene		U		Y
MW-26-20190215	R1901592-004	Trans-1,3-Dichloropropene		U		Y
MW-26A-20190215	R1901592-005	Trans-1,3-Dichloropropene		U		Y
MW-9A-20190215	R1901592-006	Trans-1,3-Dichloropropene		U		Y
MW-9-20190221	R1901592-007	Trans-1,3-Dichloropropene		U		Y
MW-6-20190221	R1901592-008	Trans-1,3-Dichloropropene		U		Y
MW-10-20190221	R1901592-009	Trans-1,3-Dichloropropene		U		Y
MW-25A-20190221	R1901592-010	Trans-1,3-Dichloropropene		U		Y
MW-21A-20190221	R1901592-011	Trans-1,3-Dichloropropene		U		Y
TRIP BLANK	R1901592-012	Trans-1,3-Dichloropropene		U		Y
RQ1901592-04	RQ1901592-04	Trans-1,3-Dichloropropene		U		Y
RQ1901613-04	RQ1901613-04	Trans-1,3-Dichloropropene		U		Y
RQ1901633-04	RQ1901633-04	Trans-1,3-Dichloropropene		U		Y
RQ1901592-03	RQ1901592-03	Trans-1,3-Dichloropropene	18.4			Y
RQ1901613-03	RQ1901613-03	Trans-1,3-Dichloropropene	20.1			Y
RQ1901633-03	RQ1901633-03	Trans-1,3-Dichloropropene	20.0			Y
MW-7-20190215	R1901592-001	Trichloroethylene (TCE)		U		Y
MW-7A-20190215	R1901592-002	Trichloroethylene (TCE)		U		Y
MW-8A-20190215	R1901592-003	Trichloroethylene (TCE)		U		Y
MW-26-20190215	R1901592-004	Trichloroethylene (TCE)		U		Y
MW-26A-20190215	R1901592-005	Trichloroethylene (TCE)		U		Y
MW-9A-20190215	R1901592-006	Trichloroethylene (TCE)		U		Y
MW-9-20190221	R1901592-007	Trichloroethylene (TCE)		U		Y
MW-6-20190221	R1901592-008	Trichloroethylene (TCE)	110			Y
MW-10-20190221	R1901592-009	Trichloroethylene (TCE)		U		Y
MW-25A-20190221	R1901592-010	Trichloroethylene (TCE)	0.62	J		Y
MW-21A-20190221	R1901592-011	Trichloroethylene (TCE)	11			Y
TRIP BLANK	R1901592-012	Trichloroethylene (TCE)		U		Y
RQ1901592-04	RQ1901592-04	Trichloroethylene (TCE)		U		Y
RQ1901613-04	RQ1901613-04	Trichloroethylene (TCE)		U		Y
RQ1901633-04	RQ1901633-04	Trichloroethylene (TCE)		U		Y
RQ1901592-03	RQ1901592-03	Trichloroethylene (TCE)	17.1			Y
RQ1901613-03	RQ1901613-03	Trichloroethylene (TCE)	19.0			Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	validated y/n
RQ1901633-03	RQ1901633-03	Trichloroethylene (TCE)	17.6			Y
MW-7-20190215	R1901592-001	Trichlorofluoromethane		U		Y
MW-7A-20190215	R1901592-002	Trichlorofluoromethane	0.27	J		Y
MW-8A-20190215	R1901592-003	Trichlorofluoromethane		U		Y
MW-26-20190215	R1901592-004	Trichlorofluoromethane		U		Y
MW-26A-20190215	R1901592-005	Trichlorofluoromethane		U		Y
MW-9A-20190215	R1901592-006	Trichlorofluoromethane		U		Y
MW-9-20190221	R1901592-007	Trichlorofluoromethane		U		Y
MW-6-20190221	R1901592-008	Trichlorofluoromethane		U		Y
MW-10-20190221	R1901592-009	Trichlorofluoromethane		U		Y
MW-25A-20190221	R1901592-010	Trichlorofluoromethane		U		Y
MW-21A-20190221	R1901592-011	Trichlorofluoromethane		U		Y
TRIP BLANK	R1901592-012	Trichlorofluoromethane		U		Y
RQ1901592-04	RQ1901592-04	Trichlorofluoromethane		U		Y
RQ1901613-04	RQ1901613-04	Trichlorofluoromethane		U		Y
RQ1901633-04	RQ1901633-04	Trichlorofluoromethane		U		Y
RQ1901592-03	RQ1901592-03	Trichlorofluoromethane	17.3			Y
RQ1901613-03	RQ1901613-03	Trichlorofluoromethane	18.0			Y
RQ1901633-03	RQ1901633-03	Trichlorofluoromethane	17.7			Y
MW-7-20190215	R1901592-001	Trichlorotrifluoroethane		U		Y
MW-7A-20190215	R1901592-002	Trichlorotrifluoroethane		U		Y
MW-8A-20190215	R1901592-003	Trichlorotrifluoroethane		U		Y
MW-26-20190215	R1901592-004	Trichlorotrifluoroethane		U		Y
MW-26A-20190215	R1901592-005	Trichlorotrifluoroethane		U		Y
MW-9A-20190215	R1901592-006	Trichlorotrifluoroethane		U		Y
MW-9-20190221	R1901592-007	Trichlorotrifluoroethane		U		Y
MW-6-20190221	R1901592-008	Trichlorotrifluoroethane		U		Y
MW-10-20190221	R1901592-009	Trichlorotrifluoroethane		U		Y
MW-25A-20190221	R1901592-010	Trichlorotrifluoroethane		U		Y
MW-21A-20190221	R1901592-011	Trichlorotrifluoroethane		U		Y
TRIP BLANK	R1901592-012	Trichlorotrifluoroethane		U		Y
RQ1901592-04	RQ1901592-04	Trichlorotrifluoroethane		U		Y
RQ1901613-04	RQ1901613-04	Trichlorotrifluoroethane		U		Y
RQ1901633-04	RQ1901633-04	Trichlorotrifluoroethane		U		Y
RQ1901592-03	RQ1901592-03	Trichlorotrifluoroethane	18.3			Y
RQ1901613-03	RQ1901613-03	Trichlorotrifluoroethane	18.9			Y
RQ1901633-03	RQ1901633-03	Trichlorotrifluoroethane	17.5			Y
MW-7-20190215	R1901592-001	Vinyl Chloride		U		Y
MW-7A-20190215	R1901592-002	Vinyl Chloride	7.9			Y
MW-8A-20190215	R1901592-003	Vinyl Chloride		U		Y
MW-26-20190215	R1901592-004	Vinyl Chloride		U		Y
MW-26A-20190215	R1901592-005	Vinyl Chloride		U		Y
MW-9A-20190215	R1901592-006	Vinyl Chloride		U		Y
MW-9-20190221	R1901592-007	Vinyl Chloride		U		Y
MW-6-20190221	R1901592-008	Vinyl Chloride		U		Y
MW-10-20190221	R1901592-009	Vinyl Chloride		U		Y
MW-25A-20190221	R1901592-010	Vinyl Chloride		U		Y
MW-21A-20190221	R1901592-011	Vinyl Chloride		U		Y
TRIP BLANK	R1901592-012	Vinyl Chloride		U		Y
RQ1901592-04	RQ1901592-04	Vinyl Chloride		U		Y
RQ1901613-04	RQ1901613-04	Vinyl Chloride		U		Y
RQ1901633-04	RQ1901633-04	Vinyl Chloride		U		Y
RQ1901592-03	RQ1901592-03	Vinyl Chloride	17.3			Y
RQ1901613-03	RQ1901613-03	Vinyl Chloride	19.1			Y
RQ1901633-03	RQ1901633-03	Vinyl Chloride	18.7			Y

Data Usability Summary Report

Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

Former Buffalo China Site #16-344-1389
ALS Environmental, Inc. SDG#R1901880
April 17, 2019
Revised; May 21, 2019
Sampling dates: 2/22, 26/2019, 3/5/2019

Prepared by:
Jodi Zimmerman
Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package (revised; May 21, 2019) for LiRo Engineers, project located at Former Buffalo China Site #16-344-1389, ALS Environmental, Inc. SDG#R1901880 submitted to Vali-Data of WNY, LLC on April 3, 2019. This DUSR has been prepared in general compliance with NYSDEC Analytical Services Protocols and USEPA National Functional Guidelines. The laboratory performed the analysis using USEPA method Volatile Organics (8260C).

VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Internal Standard (IS) Area Performance
-Surrogate Spike Recoveries
-Method Blank
-Field Duplicate Sample Precision
-Laboratory Control Samples
-MS/MSD
-Compound Quantitation
-Initial Calibration
-Continuing Calibration
-GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Continuing Calibration.

Samples; MW-5AR, MW-20A, DUP and MW-5R were diluted due to high target analyte concentration.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met. Results were not recorded to three significant figures. This does not

affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All criteria were met.

METHOD BLANK
All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
All criteria were met except Acetone was detected in DUP but not in MW-20A. Chloroform was detected in MW-20A but not in DUP.

LABORATORY CONTROL SAMPLES
All criteria were met.

MS/MSD
All criteria were met.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were performed on target analytes whose %RSD >20%, with acceptable results.

CONTINUING CALIBRATION
All criteria were met except the RRF of 1,4-Dioxane was outside outer ASP QC limits in the continuing calibrations. This target analyte should be qualified as estimated in the associated samples, blanks and spikes.

GC/MS PERFORMANCE CHECK
All criteria were met.

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	interpreted qualifiers	validated y/n
MW-5AR-02222019	R1901880-001	1,1,1-Trichloroethane (TCA)		U		U	Y
MW-20A-02222019	R1901880-002	1,1,1-Trichloroethane (TCA)		U		U	Y
MW-13A-02262019	R1901880-003	1,1,1-Trichloroethane (TCA)		U		U	Y
MW-14A-02262019	R1901880-004	1,1,1-Trichloroethane (TCA)		U		U	Y
MW-19R-02222019	R1901880-005	1,1,1-Trichloroethane (TCA)		U		U	Y
DUP-02222019	R1901880-006	1,1,1-Trichloroethane (TCA)		U		U	Y
MW-5R-02222019	R1901880-007	1,1,1-Trichloroethane (TCA)		U		U	Y
MW-19AR-03052019	R1901880-008	1,1,1-Trichloroethane (TCA)		U		U	Y
MW-11-03052019	R1901880-009	1,1,1-Trichloroethane (TCA)		U		U	Y
RQ1901929-04	RQ1901929-04	1,1,1-Trichloroethane (TCA)		U		U	Y
RQ1902008-05	RQ1902008-05	1,1,1-Trichloroethane (TCA)		U		U	Y
RQ1902040-04	RQ1902040-04	1,1,1-Trichloroethane (TCA)		U		U	Y
RQ1901929-03	RQ1901929-03	1,1,1-Trichloroethane (TCA)	17.7				Y
RQ1902008-03	RQ1902008-03	1,1,1-Trichloroethane (TCA)	19.1				Y
RQ1902040-03	RQ1902040-03	1,1,1-Trichloroethane (TCA)	17.8				Y
MW-5ARMS-02222019	RQ1901929-06	1,1,1-Trichloroethane (TCA)	11600				Y
MW-5ARMSD-02222019	RQ1901929-07	1,1,1-Trichloroethane (TCA)	12200				Y
MW-5AR-02222019	R1901880-001	1,1,2,2-Tetrachloroethane	43	J		J	Y
MW-20A-02222019	R1901880-002	1,1,2,2-Tetrachloroethane		U		U	Y
MW-13A-02262019	R1901880-003	1,1,2,2-Tetrachloroethane		U		U	Y
MW-14A-02262019	R1901880-004	1,1,2,2-Tetrachloroethane		U		U	Y
MW-19R-02222019	R1901880-005	1,1,2,2-Tetrachloroethane		U		U	Y
DUP-02222019	R1901880-006	1,1,2,2-Tetrachloroethane		U		U	Y
MW-5R-02222019	R1901880-007	1,1,2,2-Tetrachloroethane	0.31	J		J	Y
MW-19AR-03052019	R1901880-008	1,1,2,2-Tetrachloroethane		U		U	Y
MW-11-03052019	R1901880-009	1,1,2,2-Tetrachloroethane		U		U	Y
RQ1901929-04	RQ1901929-04	1,1,2,2-Tetrachloroethane		U		U	Y
RQ1902008-05	RQ1902008-05	1,1,2,2-Tetrachloroethane		U		U	Y
RQ1902040-04	RQ1902040-04	1,1,2,2-Tetrachloroethane		U		U	Y
RQ1901929-03	RQ1901929-03	1,1,2,2-Tetrachloroethane	18.8				Y
RQ1902008-03	RQ1902008-03	1,1,2,2-Tetrachloroethane	17.4				Y
RQ1902040-03	RQ1902040-03	1,1,2,2-Tetrachloroethane	19.9				Y
MW-5ARMS-02222019	RQ1901929-06	1,1,2,2-Tetrachloroethane	9660				Y
MW-5ARMSD-02222019	RQ1901929-07	1,1,2,2-Tetrachloroethane	10100				Y
MW-5AR-02222019	R1901880-001	1,1,2-Trichloroethane		U		U	Y
MW-20A-02222019	R1901880-002	1,1,2-Trichloroethane		U		U	Y
MW-13A-02262019	R1901880-003	1,1,2-Trichloroethane		U		U	Y
MW-14A-02262019	R1901880-004	1,1,2-Trichloroethane		U		U	Y
MW-19R-02222019	R1901880-005	1,1,2-Trichloroethane		U		U	Y
DUP-02222019	R1901880-006	1,1,2-Trichloroethane		U		U	Y
MW-5R-02222019	R1901880-007	1,1,2-Trichloroethane	0.50	J		J	Y
MW-19AR-03052019	R1901880-008	1,1,2-Trichloroethane		U		U	Y
MW-11-03052019	R1901880-009	1,1,2-Trichloroethane		U		U	Y
RQ1901929-04	RQ1901929-04	1,1,2-Trichloroethane		U		U	Y
RQ1902008-05	RQ1902008-05	1,1,2-Trichloroethane		U		U	Y
RQ1902040-04	RQ1902040-04	1,1,2-Trichloroethane		U		U	Y
RQ1901929-03	RQ1901929-03	1,1,2-Trichloroethane	17.8				Y
RQ1902008-03	RQ1902008-03	1,1,2-Trichloroethane	16.7				Y
RQ1902040-03	RQ1902040-03	1,1,2-Trichloroethane	17.7				Y
MW-5ARMS-02222019	RQ1901929-06	1,1,2-Trichloroethane	9530				Y
MW-5ARMSD-02222019	RQ1901929-07	1,1,2-Trichloroethane	9860				Y
MW-5AR-02222019	R1901880-001	1,1-Dichloroethane		U		U	Y
MW-20A-02222019	R1901880-002	1,1-Dichloroethane		U		U	Y
MW-13A-02262019	R1901880-003	1,1-Dichloroethane		U		U	Y
MW-14A-02262019	R1901880-004	1,1-Dichloroethane		U		U	Y
MW-19R-02222019	R1901880-005	1,1-Dichloroethane		U		U	Y
DUP-02222019	R1901880-006	1,1-Dichloroethane		U		U	Y
MW-5R-02222019	R1901880-007	1,1-Dichloroethane		U		U	Y
MW-19AR-03052019	R1901880-008	1,1-Dichloroethane		U		U	Y
MW-11-03052019	R1901880-009	1,1-Dichloroethane		U		U	Y
RQ1901929-04	RQ1901929-04	1,1-Dichloroethane		U		U	Y
RQ1902008-05	RQ1902008-05	1,1-Dichloroethane		U		U	Y
RQ1902040-04	RQ1902040-04	1,1-Dichloroethane		U		U	Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	interpreted qualifiers	validated y/n
RQ1901929-03	RQ1901929-03	1,1-Dichloroethane	19.6				Y
RQ1902008-03	RQ1902008-03	1,1-Dichloroethane	19.8				Y
RQ1902040-03	RQ1902040-03	1,1-Dichloroethane	19.0				Y
MW-5ARMS-02222019	RQ1901929-06	1,1-Dichloroethane	11800				Y
MW-5ARMSD-02222019	RQ1901929-07	1,1-Dichloroethane	12400				Y
MW-5AR-02222019	R1901880-001	1,1-Dichloroethene		U		U	Y
MW-20A-02222019	R1901880-002	1,1-Dichloroethene	2.0	J		J	Y
MW-13A-02262019	R1901880-003	1,1-Dichloroethene		U		U	Y
MW-14A-02262019	R1901880-004	1,1-Dichloroethene		U		U	Y
MW-19R-02222019	R1901880-005	1,1-Dichloroethene		U		U	Y
DUP-02222019	R1901880-006	1,1-Dichloroethene	1.9	J		J	Y
MW-5R-02222019	R1901880-007	1,1-Dichloroethene		U		U	Y
MW-19AR-03052019	R1901880-008	1,1-Dichloroethene		U		U	Y
MW-11-03052019	R1901880-009	1,1-Dichloroethene	2.5	J		J	Y
RQ1901929-04	RQ1901929-04	1,1-Dichloroethene		U		U	Y
RQ1902008-05	RQ1902008-05	1,1-Dichloroethene		U		U	Y
RQ1902040-04	RQ1902040-04	1,1-Dichloroethene		U		U	Y
RQ1901929-03	RQ1901929-03	1,1-Dichloroethene	18.9				Y
RQ1902008-03	RQ1902008-03	1,1-Dichloroethene	19.3				Y
RQ1902040-03	RQ1902040-03	1,1-Dichloroethene	18.8				Y
MW-5ARMS-02222019	RQ1901929-06	1,1-Dichloroethene	11000				Y
MW-5ARMSD-02222019	RQ1901929-07	1,1-Dichloroethene	11400				Y
MW-5AR-02222019	R1901880-001	1,2,3-Trichlorobenzene		U		U	Y
MW-20A-02222019	R1901880-002	1,2,3-Trichlorobenzene		U		U	Y
MW-13A-02262019	R1901880-003	1,2,3-Trichlorobenzene		U		U	Y
MW-14A-02262019	R1901880-004	1,2,3-Trichlorobenzene		U		U	Y
MW-19R-02222019	R1901880-005	1,2,3-Trichlorobenzene		U		U	Y
DUP-02222019	R1901880-006	1,2,3-Trichlorobenzene		U		U	Y
MW-5R-02222019	R1901880-007	1,2,3-Trichlorobenzene		U		U	Y
MW-19AR-03052019	R1901880-008	1,2,3-Trichlorobenzene		U		U	Y
MW-11-03052019	R1901880-009	1,2,3-Trichlorobenzene		U		U	Y
RQ1901929-04	RQ1901929-04	1,2,3-Trichlorobenzene		U		U	Y
RQ1902008-05	RQ1902008-05	1,2,3-Trichlorobenzene		U		U	Y
RQ1902040-04	RQ1902040-04	1,2,3-Trichlorobenzene		U		U	Y
RQ1901929-03	RQ1901929-03	1,2,3-Trichlorobenzene	18.7				Y
RQ1902008-03	RQ1902008-03	1,2,3-Trichlorobenzene	18.1				Y
RQ1902040-03	RQ1902040-03	1,2,3-Trichlorobenzene	19.4				Y
MW-5ARMS-02222019	RQ1901929-06	1,2,3-Trichlorobenzene	10300				Y
MW-5ARMSD-02222019	RQ1901929-07	1,2,3-Trichlorobenzene	10400				Y
MW-5AR-02222019	R1901880-001	1,2,4-Trichlorobenzene		U		U	Y
MW-20A-02222019	R1901880-002	1,2,4-Trichlorobenzene		U		U	Y
MW-13A-02262019	R1901880-003	1,2,4-Trichlorobenzene		U		U	Y
MW-14A-02262019	R1901880-004	1,2,4-Trichlorobenzene		U		U	Y
MW-19R-02222019	R1901880-005	1,2,4-Trichlorobenzene		U		U	Y
DUP-02222019	R1901880-006	1,2,4-Trichlorobenzene		U		U	Y
MW-5R-02222019	R1901880-007	1,2,4-Trichlorobenzene		U		U	Y
MW-19AR-03052019	R1901880-008	1,2,4-Trichlorobenzene		U		U	Y
MW-11-03052019	R1901880-009	1,2,4-Trichlorobenzene		U		U	Y
RQ1901929-04	RQ1901929-04	1,2,4-Trichlorobenzene		U		U	Y
RQ1902008-05	RQ1902008-05	1,2,4-Trichlorobenzene		U		U	Y
RQ1902040-04	RQ1902040-04	1,2,4-Trichlorobenzene		U		U	Y
RQ1901929-03	RQ1901929-03	1,2,4-Trichlorobenzene	19.4				Y
RQ1902008-03	RQ1902008-03	1,2,4-Trichlorobenzene	20.0				Y
RQ1902040-03	RQ1902040-03	1,2,4-Trichlorobenzene	19.6				Y
MW-5ARMS-02222019	RQ1901929-06	1,2,4-Trichlorobenzene	10600				Y
MW-5ARMSD-02222019	RQ1901929-07	1,2,4-Trichlorobenzene	10800				Y
MW-5AR-02222019	R1901880-001	1,2-Dibromo-3-Chloropropane		U		U	Y
MW-20A-02222019	R1901880-002	1,2-Dibromo-3-Chloropropane		U		U	Y
MW-13A-02262019	R1901880-003	1,2-Dibromo-3-Chloropropane		U		U	Y
MW-14A-02262019	R1901880-004	1,2-Dibromo-3-Chloropropane		U		U	Y
MW-19R-02222019	R1901880-005	1,2-Dibromo-3-Chloropropane		U		U	Y
DUP-02222019	R1901880-006	1,2-Dibromo-3-Chloropropane		U		U	Y
MW-5R-02222019	R1901880-007	1,2-Dibromo-3-Chloropropane		U		U	Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	interpreted qualifiers	validated y/n
MW-19AR-03052019	R1901880-008	1,2-Dibromo-3-Chloropropane		U		U	Y
MW-11-03052019	R1901880-009	1,2-Dibromo-3-Chloropropane		U		U	Y
RQ1901929-04	RQ1901929-04	1,2-Dibromo-3-Chloropropane		U		U	Y
RQ1902008-05	RQ1902008-05	1,2-Dibromo-3-Chloropropane		U		U	Y
RQ1902040-04	RQ1902040-04	1,2-Dibromo-3-Chloropropane		U		U	Y
RQ1901929-03	RQ1901929-03	1,2-Dibromo-3-Chloropropane	13.6				Y
RQ1902008-03	RQ1902008-03	1,2-Dibromo-3-Chloropropane	14.1				Y
RQ1902040-03	RQ1902040-03	1,2-Dibromo-3-Chloropropane	17.3				Y
MW-5ARMS-02222019	RQ1901929-06	1,2-Dibromo-3-Chloropropane	7990				Y
MW-5ARMSD-02222019	RQ1901929-07	1,2-Dibromo-3-Chloropropane	8360				Y
MW-5AR-02222019	R1901880-001	1,2-Dibromoethane (Ethylene Dibromide)		U		U	Y
MW-20A-02222019	R1901880-002	1,2-Dibromoethane (Ethylene Dibromide)		U		U	Y
MW-13A-02262019	R1901880-003	1,2-Dibromoethane (Ethylene Dibromide)		U		U	Y
MW-14A-02262019	R1901880-004	1,2-Dibromoethane (Ethylene Dibromide)		U		U	Y
MW-19R-02222019	R1901880-005	1,2-Dibromoethane (Ethylene Dibromide)		U		U	Y
DUP-02222019	R1901880-006	1,2-Dibromoethane (Ethylene Dibromide)		U		U	Y
MW-5R-02222019	R1901880-007	1,2-Dibromoethane (Ethylene Dibromide)		U		U	Y
MW-19AR-03052019	R1901880-008	1,2-Dibromoethane (Ethylene Dibromide)		U		U	Y
MW-11-03052019	R1901880-009	1,2-Dibromoethane (Ethylene Dibromide)		U		U	Y
RQ1901929-04	RQ1901929-04	1,2-Dibromoethane (Ethylene Dibromide)		U		U	Y
RQ1902008-05	RQ1902008-05	1,2-Dibromoethane (Ethylene Dibromide)		U		U	Y
RQ1902040-04	RQ1902040-04	1,2-Dibromoethane (Ethylene Dibromide)		U		U	Y
RQ1901929-03	RQ1901929-03	1,2-Dibromoethane (Ethylene Dibromide)	18.0				Y
RQ1902008-03	RQ1902008-03	1,2-Dibromoethane (Ethylene Dibromide)	17.0				Y
RQ1902040-03	RQ1902040-03	1,2-Dibromoethane (Ethylene Dibromide)	18.1				Y
MW-5ARMS-02222019	RQ1901929-06	1,2-Dibromoethane (Ethylene Dibromide)	9530				Y
MW-5ARMSD-02222019	RQ1901929-07	1,2-Dibromoethane (Ethylene Dibromide)	9710				Y
MW-5AR-02222019	R1901880-001	1,2-Dichlorobenzene		U		U	Y
MW-20A-02222019	R1901880-002	1,2-Dichlorobenzene		U		U	Y
MW-13A-02262019	R1901880-003	1,2-Dichlorobenzene		U		U	Y
MW-14A-02262019	R1901880-004	1,2-Dichlorobenzene		U		U	Y
MW-19R-02222019	R1901880-005	1,2-Dichlorobenzene		U		U	Y
DUP-02222019	R1901880-006	1,2-Dichlorobenzene		U		U	Y
MW-5R-02222019	R1901880-007	1,2-Dichlorobenzene		U		U	Y
MW-19AR-03052019	R1901880-008	1,2-Dichlorobenzene		U		U	Y
MW-11-03052019	R1901880-009	1,2-Dichlorobenzene		U		U	Y
RQ1901929-04	RQ1901929-04	1,2-Dichlorobenzene		U		U	Y
RQ1902008-05	RQ1902008-05	1,2-Dichlorobenzene		U		U	Y
RQ1902040-04	RQ1902040-04	1,2-Dichlorobenzene		U		U	Y
RQ1901929-03	RQ1901929-03	1,2-Dichlorobenzene	17.7				Y
RQ1902008-03	RQ1902008-03	1,2-Dichlorobenzene	17.7				Y
RQ1902040-03	RQ1902040-03	1,2-Dichlorobenzene	17.3				Y
MW-5ARMS-02222019	RQ1901929-06	1,2-Dichlorobenzene	9330				Y
MW-5ARMSD-02222019	RQ1901929-07	1,2-Dichlorobenzene	9690				Y
MW-5AR-02222019	R1901880-001	1,2-Dichloroethane		U		U	Y
MW-20A-02222019	R1901880-002	1,2-Dichloroethane		U		U	Y
MW-13A-02262019	R1901880-003	1,2-Dichloroethane		U		U	Y
MW-14A-02262019	R1901880-004	1,2-Dichloroethane		U		U	Y
MW-19R-02222019	R1901880-005	1,2-Dichloroethane		U		U	Y
DUP-02222019	R1901880-006	1,2-Dichloroethane		U		U	Y
MW-5R-02222019	R1901880-007	1,2-Dichloroethane		U		U	Y
MW-19AR-03052019	R1901880-008	1,2-Dichloroethane		U		U	Y
MW-11-03052019	R1901880-009	1,2-Dichloroethane		U		U	Y
RQ1901929-04	RQ1901929-04	1,2-Dichloroethane		U		U	Y
RQ1902008-05	RQ1902008-05	1,2-Dichloroethane		U		U	Y
RQ1902040-04	RQ1902040-04	1,2-Dichloroethane		U		U	Y
RQ1901929-03	RQ1901929-03	1,2-Dichloroethane	19.5				Y
RQ1902008-03	RQ1902008-03	1,2-Dichloroethane	18.4				Y
RQ1902040-03	RQ1902040-03	1,2-Dichloroethane	19.5				Y
MW-5ARMS-02222019	RQ1901929-06	1,2-Dichloroethane	10300				Y
MW-5ARMSD-02222019	RQ1901929-07	1,2-Dichloroethane	10700				Y
MW-5AR-02222019	R1901880-001	1,2-Dichloropropane		U		U	Y
MW-20A-02222019	R1901880-002	1,2-Dichloropropane		U		U	Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	interpreted qualifiers	validated y/n
MW-13A-02262019	R1901880-003	1,2-Dichloropropane		U		U	Y
MW-14A-02262019	R1901880-004	1,2-Dichloropropane		U		U	Y
MW-19R-02222019	R1901880-005	1,2-Dichloropropane		U		U	Y
DUP-02222019	R1901880-006	1,2-Dichloropropane		U		U	Y
MW-5R-02222019	R1901880-007	1,2-Dichloropropane		U		U	Y
MW-19AR-03052019	R1901880-008	1,2-Dichloropropane		U		U	Y
MW-11-03052019	R1901880-009	1,2-Dichloropropane		U		U	Y
RQ1901929-04	RQ1901929-04	1,2-Dichloropropane		U		U	Y
RQ1902008-05	RQ1902008-05	1,2-Dichloropropane		U		U	Y
RQ1902040-04	RQ1902040-04	1,2-Dichloropropane		U		U	Y
RQ1901929-03	RQ1901929-03	1,2-Dichloropropane	18.5				Y
RQ1902008-03	RQ1902008-03	1,2-Dichloropropane	18.6				Y
RQ1902040-03	RQ1902040-03	1,2-Dichloropropane	18.7				Y
MW-5ARMS-02222019	RQ1901929-06	1,2-Dichloropropane	10800				Y
MW-5ARMSD-02222019	RQ1901929-07	1,2-Dichloropropane	11200				Y
MW-5AR-02222019	R1901880-001	1,3-Dichlorobenzene		U		U	Y
MW-20A-02222019	R1901880-002	1,3-Dichlorobenzene		U		U	Y
MW-13A-02262019	R1901880-003	1,3-Dichlorobenzene		U		U	Y
MW-14A-02262019	R1901880-004	1,3-Dichlorobenzene		U		U	Y
MW-19R-02222019	R1901880-005	1,3-Dichlorobenzene		U		U	Y
DUP-02222019	R1901880-006	1,3-Dichlorobenzene		U		U	Y
MW-5R-02222019	R1901880-007	1,3-Dichlorobenzene		U		U	Y
MW-19AR-03052019	R1901880-008	1,3-Dichlorobenzene		U		U	Y
MW-11-03052019	R1901880-009	1,3-Dichlorobenzene		U		U	Y
RQ1901929-04	RQ1901929-04	1,3-Dichlorobenzene		U		U	Y
RQ1902008-05	RQ1902008-05	1,3-Dichlorobenzene		U		U	Y
RQ1902040-04	RQ1902040-04	1,3-Dichlorobenzene		U		U	Y
RQ1901929-03	RQ1901929-03	1,3-Dichlorobenzene	17.5				Y
RQ1902008-03	RQ1902008-03	1,3-Dichlorobenzene	18.0				Y
RQ1902040-03	RQ1902040-03	1,3-Dichlorobenzene	17.2				Y
MW-5ARMS-02222019	RQ1901929-06	1,3-Dichlorobenzene	9680				Y
MW-5ARMSD-02222019	RQ1901929-07	1,3-Dichlorobenzene	10100				Y
MW-5AR-02222019	R1901880-001	1,4-Dichlorobenzene		U		U	Y
MW-20A-02222019	R1901880-002	1,4-Dichlorobenzene		U		U	Y
MW-13A-02262019	R1901880-003	1,4-Dichlorobenzene		U		U	Y
MW-14A-02262019	R1901880-004	1,4-Dichlorobenzene		U		U	Y
MW-19R-02222019	R1901880-005	1,4-Dichlorobenzene		U		U	Y
DUP-02222019	R1901880-006	1,4-Dichlorobenzene		U		U	Y
MW-5R-02222019	R1901880-007	1,4-Dichlorobenzene		U		U	Y
MW-19AR-03052019	R1901880-008	1,4-Dichlorobenzene		U		U	Y
MW-11-03052019	R1901880-009	1,4-Dichlorobenzene	0.59	J		J	Y
RQ1901929-04	RQ1901929-04	1,4-Dichlorobenzene		U		U	Y
RQ1902008-05	RQ1902008-05	1,4-Dichlorobenzene		U		U	Y
RQ1902040-04	RQ1902040-04	1,4-Dichlorobenzene		U		U	Y
RQ1901929-03	RQ1901929-03	1,4-Dichlorobenzene	17.1				Y
RQ1902008-03	RQ1902008-03	1,4-Dichlorobenzene	16.9				Y
RQ1902040-03	RQ1902040-03	1,4-Dichlorobenzene	16.7				Y
MW-5ARMS-02222019	RQ1901929-06	1,4-Dichlorobenzene	8930				Y
MW-5ARMSD-02222019	RQ1901929-07	1,4-Dichlorobenzene	9480				Y
MW-5AR-02222019	R1901880-001	1,4-Dioxane (P-Dioxane)		U	UJ	U	Y
MW-20A-02222019	R1901880-002	1,4-Dioxane (P-Dioxane)		U	UJ	U	Y
MW-13A-02262019	R1901880-003	1,4-Dioxane (P-Dioxane)		U	UJ	U	Y
MW-14A-02262019	R1901880-004	1,4-Dioxane (P-Dioxane)		U	UJ	U	Y
MW-19R-02222019	R1901880-005	1,4-Dioxane (P-Dioxane)		U	UJ	U	Y
DUP-02222019	R1901880-006	1,4-Dioxane (P-Dioxane)		U	UJ	U	Y
MW-5R-02222019	R1901880-007	1,4-Dioxane (P-Dioxane)		U	UJ	U	Y
MW-19AR-03052019	R1901880-008	1,4-Dioxane (P-Dioxane)		U	UJ	U	Y
MW-11-03052019	R1901880-009	1,4-Dioxane (P-Dioxane)		U	UJ	U	Y
RQ1901929-04	RQ1901929-04	1,4-Dioxane (P-Dioxane)		U	UJ	U	Y
RQ1902008-05	RQ1902008-05	1,4-Dioxane (P-Dioxane)		U	UJ	U	Y
RQ1902040-04	RQ1902040-04	1,4-Dioxane (P-Dioxane)		U	UJ	U	Y
RQ1901929-03	RQ1901929-03	1,4-Dioxane (P-Dioxane)	306		J		Y
RQ1902008-03	RQ1902008-03	1,4-Dioxane (P-Dioxane)	276		J		Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	interpreted qualifiers	validated y/n
RQ1902040-03	RQ1902040-03	1,4-Dioxane (P-Dioxane)	400		J		Y
MW-5ARMS-02222019	RQ1901929-06	1,4-Dioxane (P-Dioxane)	173000		J		Y
MW-5ARMSD-02222019	RQ1901929-07	1,4-Dioxane (P-Dioxane)	206000		J		Y
MW-5AR-02222019	R1901880-001	2-Hexanone		U		U	Y
MW-20A-02222019	R1901880-002	2-Hexanone		U		U	Y
MW-13A-02262019	R1901880-003	2-Hexanone		U		U	Y
MW-14A-02262019	R1901880-004	2-Hexanone		U		U	Y
MW-19R-02222019	R1901880-005	2-Hexanone		U		U	Y
DUP-02222019	R1901880-006	2-Hexanone		U		U	Y
MW-5R-02222019	R1901880-007	2-Hexanone		U		U	Y
MW-19AR-03052019	R1901880-008	2-Hexanone		U		U	Y
MW-11-03052019	R1901880-009	2-Hexanone		U		U	Y
RQ1901929-04	RQ1901929-04	2-Hexanone		U		U	Y
RQ1902008-05	RQ1902008-05	2-Hexanone		U		U	Y
RQ1902040-04	RQ1902040-04	2-Hexanone		U		U	Y
RQ1901929-03	RQ1901929-03	2-Hexanone	16.2				Y
RQ1902008-03	RQ1902008-03	2-Hexanone	17.5				Y
RQ1902040-03	RQ1902040-03	2-Hexanone	19.6				Y
MW-5ARMS-02222019	RQ1901929-06	2-Hexanone	9580				Y
MW-5ARMSD-02222019	RQ1901929-07	2-Hexanone	9850				Y
MW-5AR-02222019	R1901880-001	Acetone		U		U	Y
MW-20A-02222019	R1901880-002	Acetone		U		U	Y
MW-13A-02262019	R1901880-003	Acetone		U		U	Y
MW-14A-02262019	R1901880-004	Acetone	3.2	J		J	Y
MW-19R-02222019	R1901880-005	Acetone	3.2	J		J	Y
DUP-02222019	R1901880-006	Acetone	3.1	J		J	Y
MW-5R-02222019	R1901880-007	Acetone	11				Y
MW-19AR-03052019	R1901880-008	Acetone	9.0	J		J	Y
MW-11-03052019	R1901880-009	Acetone	13				Y
RQ1901929-04	RQ1901929-04	Acetone		U		U	Y
RQ1902008-05	RQ1902008-05	Acetone		U		U	Y
RQ1902040-04	RQ1902040-04	Acetone		U		U	Y
RQ1901929-03	RQ1901929-03	Acetone	17.3				Y
RQ1902008-03	RQ1902008-03	Acetone	18.1				Y
RQ1902040-03	RQ1902040-03	Acetone	20.5				Y
MW-5ARMS-02222019	RQ1901929-06	Acetone	10900				Y
MW-5ARMSD-02222019	RQ1901929-07	Acetone	12400				Y
MW-5AR-02222019	R1901880-001	Benzene		U		U	Y
MW-20A-02222019	R1901880-002	Benzene	0.26	J		J	Y
MW-13A-02262019	R1901880-003	Benzene		U		U	Y
MW-14A-02262019	R1901880-004	Benzene		U		U	Y
MW-19R-02222019	R1901880-005	Benzene		U		U	Y
DUP-02222019	R1901880-006	Benzene	0.28	J		J	Y
MW-5R-02222019	R1901880-007	Benzene		U		U	Y
MW-19AR-03052019	R1901880-008	Benzene		U		U	Y
MW-11-03052019	R1901880-009	Benzene	0.35	J		J	Y
RQ1901929-04	RQ1901929-04	Benzene		U		U	Y
RQ1902008-05	RQ1902008-05	Benzene		U		U	Y
RQ1902040-04	RQ1902040-04	Benzene		U		U	Y
RQ1901929-03	RQ1901929-03	Benzene	18.5				Y
RQ1902008-03	RQ1902008-03	Benzene	18.6				Y
RQ1902040-03	RQ1902040-03	Benzene	18.1				Y
MW-5ARMS-02222019	RQ1901929-06	Benzene	9860				Y
MW-5ARMSD-02222019	RQ1901929-07	Benzene	10300				Y
MW-5AR-02222019	R1901880-001	Bromochloromethane		U		U	Y
MW-20A-02222019	R1901880-002	Bromochloromethane		U		U	Y
MW-13A-02262019	R1901880-003	Bromochloromethane		U		U	Y
MW-14A-02262019	R1901880-004	Bromochloromethane		U		U	Y
MW-19R-02222019	R1901880-005	Bromochloromethane		U		U	Y
DUP-02222019	R1901880-006	Bromochloromethane		U		U	Y
MW-5R-02222019	R1901880-007	Bromochloromethane		U		U	Y
MW-19AR-03052019	R1901880-008	Bromochloromethane		U		U	Y
MW-11-03052019	R1901880-009	Bromochloromethane		U		U	Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	interpreted qualifiers	validated y/n
RQ1901929-04	RQ1901929-04	Bromochloromethane		U		U	Y
RQ1902008-05	RQ1902008-05	Bromochloromethane		U		U	Y
RQ1902040-04	RQ1902040-04	Bromochloromethane		U		U	Y
RQ1901929-03	RQ1901929-03	Bromochloromethane	18.9				Y
RQ1902008-03	RQ1902008-03	Bromochloromethane	18.2				Y
RQ1902040-03	RQ1902040-03	Bromochloromethane	18.4				Y
MW-5ARMS-02222019	RQ1901929-06	Bromochloromethane	10300				Y
MW-5ARMSD-02222019	RQ1901929-07	Bromochloromethane	10700				Y
MW-5AR-02222019	R1901880-001	Bromodichloromethane	61	J		J	Y
MW-20A-02222019	R1901880-002	Bromodichloromethane		U		U	Y
MW-13A-02262019	R1901880-003	Bromodichloromethane		U		U	Y
MW-14A-02262019	R1901880-004	Bromodichloromethane		U		U	Y
MW-19R-02222019	R1901880-005	Bromodichloromethane		U		U	Y
DUP-02222019	R1901880-006	Bromodichloromethane		U		U	Y
MW-5R-02222019	R1901880-007	Bromodichloromethane		U		U	Y
MW-19AR-03052019	R1901880-008	Bromodichloromethane		U		U	Y
MW-11-03052019	R1901880-009	Bromodichloromethane		U		U	Y
RQ1901929-04	RQ1901929-04	Bromodichloromethane		U		U	Y
RQ1902008-05	RQ1902008-05	Bromodichloromethane		U		U	Y
RQ1902040-04	RQ1902040-04	Bromodichloromethane		U		U	Y
RQ1901929-03	RQ1901929-03	Bromodichloromethane	19.1				Y
RQ1902008-03	RQ1902008-03	Bromodichloromethane	17.6				Y
RQ1902040-03	RQ1902040-03	Bromodichloromethane	18.4				Y
MW-5ARMS-02222019	RQ1901929-06	Bromodichloromethane	10200				Y
MW-5ARMSD-02222019	RQ1901929-07	Bromodichloromethane	10500				Y
MW-5AR-02222019	R1901880-001	Bromoform		U		U	Y
MW-20A-02222019	R1901880-002	Bromoform		U		U	Y
MW-13A-02262019	R1901880-003	Bromoform		U		U	Y
MW-14A-02262019	R1901880-004	Bromoform		U		U	Y
MW-19R-02222019	R1901880-005	Bromoform		U		U	Y
DUP-02222019	R1901880-006	Bromoform		U		U	Y
MW-5R-02222019	R1901880-007	Bromoform		U		U	Y
MW-19AR-03052019	R1901880-008	Bromoform		U		U	Y
MW-11-03052019	R1901880-009	Bromoform		U		U	Y
RQ1901929-04	RQ1901929-04	Bromoform		U		U	Y
RQ1902008-05	RQ1902008-05	Bromoform		U		U	Y
RQ1902040-04	RQ1902040-04	Bromoform		U		U	Y
RQ1901929-03	RQ1901929-03	Bromoform	17.2				Y
RQ1902008-03	RQ1902008-03	Bromoform	16.5				Y
RQ1902040-03	RQ1902040-03	Bromoform	18.5				Y
MW-5ARMS-02222019	RQ1901929-06	Bromoform	8770				Y
MW-5ARMSD-02222019	RQ1901929-07	Bromoform	9380				Y
MW-5AR-02222019	R1901880-001	Bromomethane		U		U	Y
MW-20A-02222019	R1901880-002	Bromomethane		U		U	Y
MW-13A-02262019	R1901880-003	Bromomethane		U		U	Y
MW-14A-02262019	R1901880-004	Bromomethane		U		U	Y
MW-19R-02222019	R1901880-005	Bromomethane		U		U	Y
DUP-02222019	R1901880-006	Bromomethane		U		U	Y
MW-5R-02222019	R1901880-007	Bromomethane		U		U	Y
MW-19AR-03052019	R1901880-008	Bromomethane		U		U	Y
MW-11-03052019	R1901880-009	Bromomethane		U		U	Y
RQ1901929-04	RQ1901929-04	Bromomethane		U		U	Y
RQ1902008-05	RQ1902008-05	Bromomethane		U		U	Y
RQ1902040-04	RQ1902040-04	Bromomethane		U		U	Y
RQ1901929-03	RQ1901929-03	Bromomethane	19.5				Y
RQ1902008-03	RQ1902008-03	Bromomethane	20.0				Y
RQ1902040-03	RQ1902040-03	Bromomethane	20.5				Y
MW-5ARMS-02222019	RQ1901929-06	Bromomethane	10200				Y
MW-5ARMSD-02222019	RQ1901929-07	Bromomethane	11000				Y
MW-5AR-02222019	R1901880-001	Carbon Disulfide	50	J		J	Y
MW-20A-02222019	R1901880-002	Carbon Disulfide		U		U	Y
MW-13A-02262019	R1901880-003	Carbon Disulfide	35	J		J	Y
MW-14A-02262019	R1901880-004	Carbon Disulfide		U		U	Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	interpreted qualifiers	validated y/n
MW-19R-02222019	R1901880-005	Carbon Disulfide		U		U	Y
DUP-02222019	R1901880-006	Carbon Disulfide		U		U	Y
MW-5R-02222019	R1901880-007	Carbon Disulfide	0.32	J		J	Y
MW-19AR-03052019	R1901880-008	Carbon Disulfide	3.6	J		J	Y
MW-11-03052019	R1901880-009	Carbon Disulfide		U		U	Y
RQ1901929-04	RQ1901929-04	Carbon Disulfide		U		U	Y
RQ1902008-05	RQ1902008-05	Carbon Disulfide		U		U	Y
RQ1902040-04	RQ1902040-04	Carbon Disulfide		U		U	Y
RQ1901929-03	RQ1901929-03	Carbon Disulfide	21.8				Y
RQ1902008-03	RQ1902008-03	Carbon Disulfide	21.3				Y
RQ1902040-03	RQ1902040-03	Carbon Disulfide	21.6				Y
MW-5ARMS-02222019	RQ1901929-06	Carbon Disulfide	11800				Y
MW-5ARMSD-02222019	RQ1901929-07	Carbon Disulfide	12200				Y
MW-5AR-02222019	R1901880-001	Carbon Tetrachloride		U		U	Y
MW-20A-02222019	R1901880-002	Carbon Tetrachloride		U		U	Y
MW-13A-02262019	R1901880-003	Carbon Tetrachloride		U		U	Y
MW-14A-02262019	R1901880-004	Carbon Tetrachloride		U		U	Y
MW-19R-02222019	R1901880-005	Carbon Tetrachloride		U		U	Y
DUP-02222019	R1901880-006	Carbon Tetrachloride		U		U	Y
MW-5R-02222019	R1901880-007	Carbon Tetrachloride		U		U	Y
MW-19AR-03052019	R1901880-008	Carbon Tetrachloride		U		U	Y
MW-11-03052019	R1901880-009	Carbon Tetrachloride		U		U	Y
RQ1901929-04	RQ1901929-04	Carbon Tetrachloride		U		U	Y
RQ1902008-05	RQ1902008-05	Carbon Tetrachloride		U		U	Y
RQ1902040-04	RQ1902040-04	Carbon Tetrachloride		U		U	Y
RQ1901929-03	RQ1901929-03	Carbon Tetrachloride	16.3				Y
RQ1902008-03	RQ1902008-03	Carbon Tetrachloride	17.0				Y
RQ1902040-03	RQ1902040-03	Carbon Tetrachloride	16.1				Y
MW-5ARMS-02222019	RQ1901929-06	Carbon Tetrachloride	10600				Y
MW-5ARMSD-02222019	RQ1901929-07	Carbon Tetrachloride	11600				Y
MW-5AR-02222019	R1901880-001	Chlorobenzene		U		U	Y
MW-20A-02222019	R1901880-002	Chlorobenzene		U		U	Y
MW-13A-02262019	R1901880-003	Chlorobenzene		U		U	Y
MW-14A-02262019	R1901880-004	Chlorobenzene		U		U	Y
MW-19R-02222019	R1901880-005	Chlorobenzene		U		U	Y
DUP-02222019	R1901880-006	Chlorobenzene		U		U	Y
MW-5R-02222019	R1901880-007	Chlorobenzene		U		U	Y
MW-19AR-03052019	R1901880-008	Chlorobenzene		U		U	Y
MW-11-03052019	R1901880-009	Chlorobenzene		U		U	Y
RQ1901929-04	RQ1901929-04	Chlorobenzene		U		U	Y
RQ1902008-05	RQ1902008-05	Chlorobenzene		U		U	Y
RQ1902040-04	RQ1902040-04	Chlorobenzene		U		U	Y
RQ1901929-03	RQ1901929-03	Chlorobenzene	17.6				Y
RQ1902008-03	RQ1902008-03	Chlorobenzene	17.7				Y
RQ1902040-03	RQ1902040-03	Chlorobenzene	16.9				Y
MW-5ARMS-02222019	RQ1901929-06	Chlorobenzene	9440				Y
MW-5ARMSD-02222019	RQ1901929-07	Chlorobenzene	9860				Y
MW-5AR-02222019	R1901880-001	Chloroethane		U		U	Y
MW-20A-02222019	R1901880-002	Chloroethane		U		U	Y
MW-13A-02262019	R1901880-003	Chloroethane		U		U	Y
MW-14A-02262019	R1901880-004	Chloroethane		U		U	Y
MW-19R-02222019	R1901880-005	Chloroethane		U		U	Y
DUP-02222019	R1901880-006	Chloroethane		U		U	Y
MW-5R-02222019	R1901880-007	Chloroethane		U		U	Y
MW-19AR-03052019	R1901880-008	Chloroethane		U		U	Y
MW-11-03052019	R1901880-009	Chloroethane		U		U	Y
RQ1901929-04	RQ1901929-04	Chloroethane		U		U	Y
RQ1902008-05	RQ1902008-05	Chloroethane		U		U	Y
RQ1902040-04	RQ1902040-04	Chloroethane		U		U	Y
RQ1901929-03	RQ1901929-03	Chloroethane	16.2				Y
RQ1902008-03	RQ1902008-03	Chloroethane	17.1				Y
RQ1902040-03	RQ1902040-03	Chloroethane	14.7				Y
MW-5ARMS-02222019	RQ1901929-06	Chloroethane	9790				Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	interpreted qualifiers	validated y/n
MW-5ARMSD-02222019	RQ1901929-07	Chloroethane	10200				Y
MW-5AR-02222019	R1901880-001	Chloroform	310	J		J	Y
MW-20A-02222019	R1901880-002	Chloroform		U		U	Y
MW-13A-02262019	R1901880-003	Chloroform		U		U	Y
MW-14A-02262019	R1901880-004	Chloroform		U		U	Y
MW-19R-02222019	R1901880-005	Chloroform		U		U	Y
DUP-02222019	R1901880-006	Chloroform		U		U	Y
MW-5R-02222019	R1901880-007	Chloroform	0.33	J		J	Y
MW-19AR-03052019	R1901880-008	Chloroform		U		U	Y
MW-11-03052019	R1901880-009	Chloroform		U		U	Y
RQ1901929-04	RQ1901929-04	Chloroform		U		U	Y
RQ1902008-05	RQ1902008-05	Chloroform		U		U	Y
RQ1902040-04	RQ1902040-04	Chloroform		U		U	Y
RQ1901929-03	RQ1901929-03	Chloroform	19.3				Y
RQ1902008-03	RQ1902008-03	Chloroform	18.8				Y
RQ1902040-03	RQ1902040-03	Chloroform	19.3				Y
MW-5ARMS-02222019	RQ1901929-06	Chloroform	11700				Y
MW-5ARMSD-02222019	RQ1901929-07	Chloroform	11900				Y
MW-5AR-02222019	R1901880-001	Chloromethane		U		U	Y
MW-20A-02222019	R1901880-002	Chloromethane		U		U	Y
MW-13A-02262019	R1901880-003	Chloromethane		U		U	Y
MW-14A-02262019	R1901880-004	Chloromethane		U		U	Y
MW-19R-02222019	R1901880-005	Chloromethane		U		U	Y
DUP-02222019	R1901880-006	Chloromethane		U		U	Y
MW-5R-02222019	R1901880-007	Chloromethane		U		U	Y
MW-19AR-03052019	R1901880-008	Chloromethane		U		U	Y
MW-11-03052019	R1901880-009	Chloromethane		U		U	Y
RQ1901929-04	RQ1901929-04	Chloromethane		U		U	Y
RQ1902008-05	RQ1902008-05	Chloromethane		U		U	Y
RQ1902040-04	RQ1902040-04	Chloromethane		U		U	Y
RQ1901929-03	RQ1901929-03	Chloromethane	18.6				Y
RQ1902008-03	RQ1902008-03	Chloromethane	18.9				Y
RQ1902040-03	RQ1902040-03	Chloromethane	18.4				Y
MW-5ARMS-02222019	RQ1901929-06	Chloromethane	11500				Y
MW-5ARMSD-02222019	RQ1901929-07	Chloromethane	11900				Y
MW-5AR-02222019	R1901880-001	Cis-1,2-Dichloroethylene	25000				Y
MW-20A-02222019	R1901880-002	Cis-1,2-Dichloroethylene	1100	D		D	Y
MW-13A-02262019	R1901880-003	Cis-1,2-Dichloroethylene	8500				Y
MW-14A-02262019	R1901880-004	Cis-1,2-Dichloroethylene	4.9	J		J	Y
MW-19R-02222019	R1901880-005	Cis-1,2-Dichloroethylene	59				Y
DUP-02222019	R1901880-006	Cis-1,2-Dichloroethylene	990	D		D	Y
MW-5R-02222019	R1901880-007	Cis-1,2-Dichloroethylene	160				Y
MW-19AR-03052019	R1901880-008	Cis-1,2-Dichloroethylene	270	D		D	Y
MW-11-03052019	R1901880-009	Cis-1,2-Dichloroethylene	1300	D		D	Y
RQ1901929-04	RQ1901929-04	Cis-1,2-Dichloroethylene		U		U	Y
RQ1902008-05	RQ1902008-05	Cis-1,2-Dichloroethylene		U		U	Y
RQ1902040-04	RQ1902040-04	Cis-1,2-Dichloroethylene		U		U	Y
RQ1901929-03	RQ1901929-03	Cis-1,2-Dichloroethylene	18.6				Y
RQ1902008-03	RQ1902008-03	Cis-1,2-Dichloroethylene	18.8				Y
RQ1902040-03	RQ1902040-03	Cis-1,2-Dichloroethylene	19.2				Y
MW-5ARMS-02222019	RQ1901929-06	Cis-1,2-Dichloroethylene	36400				Y
MW-5ARMSD-02222019	RQ1901929-07	Cis-1,2-Dichloroethylene	36100				Y
MW-5AR-02222019	R1901880-001	Cis-1,3-Dichloropropene		U		U	Y
MW-20A-02222019	R1901880-002	Cis-1,3-Dichloropropene		U		U	Y
MW-13A-02262019	R1901880-003	Cis-1,3-Dichloropropene		U		U	Y
MW-14A-02262019	R1901880-004	Cis-1,3-Dichloropropene		U		U	Y
MW-19R-02222019	R1901880-005	Cis-1,3-Dichloropropene		U		U	Y
DUP-02222019	R1901880-006	Cis-1,3-Dichloropropene		U		U	Y
MW-5R-02222019	R1901880-007	Cis-1,3-Dichloropropene		U		U	Y
MW-19AR-03052019	R1901880-008	Cis-1,3-Dichloropropene		U		U	Y
MW-11-03052019	R1901880-009	Cis-1,3-Dichloropropene		U		U	Y
RQ1901929-04	RQ1901929-04	Cis-1,3-Dichloropropene		U		U	Y
RQ1902008-05	RQ1902008-05	Cis-1,3-Dichloropropene		U		U	Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	interpreted qualifiers	validated y/n
RQ1902040-04	RQ1902040-04	Cis-1,3-Dichloropropene		U		U	Y
RQ1901929-03	RQ1901929-03	Cis-1,3-Dichloropropene	19.5				Y
RQ1902008-03	RQ1902008-03	Cis-1,3-Dichloropropene	18.7				Y
RQ1902040-03	RQ1902040-03	Cis-1,3-Dichloropropene	18.7				Y
MW-5ARMS-02222019	RQ1901929-06	Cis-1,3-Dichloropropene	10200				Y
MW-5ARMSD-02222019	RQ1901929-07	Cis-1,3-Dichloropropene	10600				Y
MW-5AR-02222019	R1901880-001	Cyclohexane		U		U	Y
MW-20A-02222019	R1901880-002	Cyclohexane	0.67	J		J	Y
MW-13A-02262019	R1901880-003	Cyclohexane		U		U	Y
MW-14A-02262019	R1901880-004	Cyclohexane		U		U	Y
MW-19R-02222019	R1901880-005	Cyclohexane		U		U	Y
DUP-02222019	R1901880-006	Cyclohexane	0.71	J		J	Y
MW-5R-02222019	R1901880-007	Cyclohexane		U		U	Y
MW-19AR-03052019	R1901880-008	Cyclohexane	1.9	J		J	Y
MW-11-03052019	R1901880-009	Cyclohexane		U		U	Y
RQ1901929-04	RQ1901929-04	Cyclohexane		U		U	Y
RQ1902008-05	RQ1902008-05	Cyclohexane		U		U	Y
RQ1902040-04	RQ1902040-04	Cyclohexane		U		U	Y
RQ1901929-03	RQ1901929-03	Cyclohexane	22.1				Y
RQ1902008-03	RQ1902008-03	Cyclohexane	20.6				Y
RQ1902040-03	RQ1902040-03	Cyclohexane	20.9				Y
MW-5ARMS-02222019	RQ1901929-06	Cyclohexane	11900				Y
MW-5ARMSD-02222019	RQ1901929-07	Cyclohexane	12000				Y
MW-5AR-02222019	R1901880-001	Dibromochloromethane		U		U	Y
MW-20A-02222019	R1901880-002	Dibromochloromethane		U		U	Y
MW-13A-02262019	R1901880-003	Dibromochloromethane		U		U	Y
MW-14A-02262019	R1901880-004	Dibromochloromethane		U		U	Y
MW-19R-02222019	R1901880-005	Dibromochloromethane		U		U	Y
DUP-02222019	R1901880-006	Dibromochloromethane		U		U	Y
MW-5R-02222019	R1901880-007	Dibromochloromethane		U		U	Y
MW-19AR-03052019	R1901880-008	Dibromochloromethane		U		U	Y
MW-11-03052019	R1901880-009	Dibromochloromethane		U		U	Y
RQ1901929-04	RQ1901929-04	Dibromochloromethane		U		U	Y
RQ1902008-05	RQ1902008-05	Dibromochloromethane		U		U	Y
RQ1902040-04	RQ1902040-04	Dibromochloromethane		U		U	Y
RQ1901929-03	RQ1901929-03	Dibromochloromethane	17.9				Y
RQ1902008-03	RQ1902008-03	Dibromochloromethane	17.2				Y
RQ1902040-03	RQ1902040-03	Dibromochloromethane	18.7				Y
MW-5ARMS-02222019	RQ1901929-06	Dibromochloromethane	9270				Y
MW-5ARMSD-02222019	RQ1901929-07	Dibromochloromethane	10100				Y
MW-5AR-02222019	R1901880-001	Dibromofluoromethane	102				Y
MW-20A-02222019	R1901880-002	Dibromofluoromethane	101				Y
MW-13A-02262019	R1901880-003	Dibromofluoromethane	100				Y
MW-14A-02262019	R1901880-004	Dibromofluoromethane	99				Y
MW-19R-02222019	R1901880-005	Dibromofluoromethane	99				Y
DUP-02222019	R1901880-006	Dibromofluoromethane	104				Y
MW-5R-02222019	R1901880-007	Dibromofluoromethane	105				Y
MW-19AR-03052019	R1901880-008	Dibromofluoromethane	103				Y
MW-11-03052019	R1901880-009	Dibromofluoromethane	103				Y
RQ1901929-04	RQ1901929-04	Dibromofluoromethane	101				Y
RQ1902008-05	RQ1902008-05	Dibromofluoromethane	102				Y
RQ1902040-04	RQ1902040-04	Dibromofluoromethane	103				Y
RQ1901929-03	RQ1901929-03	Dibromofluoromethane	102				Y
RQ1902008-03	RQ1902008-03	Dibromofluoromethane	104				Y
RQ1902040-03	RQ1902040-03	Dibromofluoromethane	103				Y
MW-5ARMS-02222019	RQ1901929-06	Dibromofluoromethane	104				Y
MW-5ARMSD-02222019	RQ1901929-07	Dibromofluoromethane	105				Y
MW-5AR-02222019	R1901880-001	Dichlorodifluoromethane		U		U	Y
MW-20A-02222019	R1901880-002	Dichlorodifluoromethane		U		U	Y
MW-13A-02262019	R1901880-003	Dichlorodifluoromethane		U		U	Y
MW-14A-02262019	R1901880-004	Dichlorodifluoromethane		U		U	Y
MW-19R-02222019	R1901880-005	Dichlorodifluoromethane		U		U	Y
DUP-02222019	R1901880-006	Dichlorodifluoromethane		U		U	Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	interpreted qualifiers	validated y/n
MW-5R-02222019	R1901880-007	Dichlorodifluoromethane		U		U	Y
MW-19AR-03052019	R1901880-008	Dichlorodifluoromethane		U		U	Y
MW-11-03052019	R1901880-009	Dichlorodifluoromethane		U		U	Y
RQ1901929-04	RQ1901929-04	Dichlorodifluoromethane		U		U	Y
RQ1902008-05	RQ1902008-05	Dichlorodifluoromethane		U		U	Y
RQ1902040-04	RQ1902040-04	Dichlorodifluoromethane		U		U	Y
RQ1901929-03	RQ1901929-03	Dichlorodifluoromethane	21.0				Y
RQ1902008-03	RQ1902008-03	Dichlorodifluoromethane	21.4				Y
RQ1902040-03	RQ1902040-03	Dichlorodifluoromethane	19.4				Y
MW-5ARMS-02222019	RQ1901929-06	Dichlorodifluoromethane	12800				Y
MW-5ARMSD-02222019	RQ1901929-07	Dichlorodifluoromethane	13300				Y
MW-5AR-02222019	R1901880-001	Ethylbenzene		U		U	Y
MW-20A-02222019	R1901880-002	Ethylbenzene		U		U	Y
MW-13A-02262019	R1901880-003	Ethylbenzene		U		U	Y
MW-14A-02262019	R1901880-004	Ethylbenzene		U		U	Y
MW-19R-02222019	R1901880-005	Ethylbenzene		U		U	Y
DUP-02222019	R1901880-006	Ethylbenzene		U		U	Y
MW-5R-02222019	R1901880-007	Ethylbenzene		U		U	Y
MW-19AR-03052019	R1901880-008	Ethylbenzene		U		U	Y
MW-11-03052019	R1901880-009	Ethylbenzene		U		U	Y
RQ1901929-04	RQ1901929-04	Ethylbenzene		U		U	Y
RQ1902008-05	RQ1902008-05	Ethylbenzene		U		U	Y
RQ1902040-04	RQ1902040-04	Ethylbenzene		U		U	Y
RQ1901929-03	RQ1901929-03	Ethylbenzene	17.0				Y
RQ1902008-03	RQ1902008-03	Ethylbenzene	17.3				Y
RQ1902040-03	RQ1902040-03	Ethylbenzene	16.7				Y
MW-5ARMS-02222019	RQ1901929-06	Ethylbenzene	9430				Y
MW-5ARMSD-02222019	RQ1901929-07	Ethylbenzene	9950				Y
MW-5AR-02222019	R1901880-001	Isopropylbenzene (Cumene)		U		U	Y
MW-20A-02222019	R1901880-002	Isopropylbenzene (Cumene)		U		U	Y
MW-13A-02262019	R1901880-003	Isopropylbenzene (Cumene)		U		U	Y
MW-14A-02262019	R1901880-004	Isopropylbenzene (Cumene)		U		U	Y
MW-19R-02222019	R1901880-005	Isopropylbenzene (Cumene)		U		U	Y
DUP-02222019	R1901880-006	Isopropylbenzene (Cumene)		U		U	Y
MW-5R-02222019	R1901880-007	Isopropylbenzene (Cumene)		U		U	Y
MW-19AR-03052019	R1901880-008	Isopropylbenzene (Cumene)		U		U	Y
MW-11-03052019	R1901880-009	Isopropylbenzene (Cumene)		U		U	Y
RQ1901929-04	RQ1901929-04	Isopropylbenzene (Cumene)		U		U	Y
RQ1902008-05	RQ1902008-05	Isopropylbenzene (Cumene)		U		U	Y
RQ1902040-04	RQ1902040-04	Isopropylbenzene (Cumene)		U		U	Y
RQ1901929-03	RQ1901929-03	Isopropylbenzene (Cumene)	16.9				Y
RQ1902008-03	RQ1902008-03	Isopropylbenzene (Cumene)	18.1				Y
RQ1902040-03	RQ1902040-03	Isopropylbenzene (Cumene)	17.0				Y
MW-5ARMS-02222019	RQ1901929-06	Isopropylbenzene (Cumene)	9850				Y
MW-5ARMSD-02222019	RQ1901929-07	Isopropylbenzene (Cumene)	10300				Y
MW-5AR-02222019	R1901880-001	M,P-Xylene (Sum Of Isomers)		U		U	Y
MW-20A-02222019	R1901880-002	M,P-Xylene (Sum Of Isomers)		U		U	Y
MW-13A-02262019	R1901880-003	M,P-Xylene (Sum Of Isomers)		U		U	Y
MW-14A-02262019	R1901880-004	M,P-Xylene (Sum Of Isomers)		U		U	Y
MW-19R-02222019	R1901880-005	M,P-Xylene (Sum Of Isomers)		U		U	Y
DUP-02222019	R1901880-006	M,P-Xylene (Sum Of Isomers)		U		U	Y
MW-5R-02222019	R1901880-007	M,P-Xylene (Sum Of Isomers)		U		U	Y
MW-19AR-03052019	R1901880-008	M,P-Xylene (Sum Of Isomers)		U		U	Y
MW-11-03052019	R1901880-009	M,P-Xylene (Sum Of Isomers)		U		U	Y
RQ1901929-04	RQ1901929-04	M,P-Xylene (Sum Of Isomers)		U		U	Y
RQ1902008-05	RQ1902008-05	M,P-Xylene (Sum Of Isomers)		U		U	Y
RQ1902040-04	RQ1902040-04	M,P-Xylene (Sum Of Isomers)		U		U	Y
RQ1901929-03	RQ1901929-03	M,P-Xylene (Sum Of Isomers)	33.6				Y
RQ1902008-03	RQ1902008-03	M,P-Xylene (Sum Of Isomers)	35.2				Y
RQ1902040-03	RQ1902040-03	M,P-Xylene (Sum Of Isomers)	32.0				Y
MW-5ARMS-02222019	RQ1901929-06	M,P-Xylene (Sum Of Isomers)	18100				Y
MW-5ARMSD-02222019	RQ1901929-07	M,P-Xylene (Sum Of Isomers)	19000				Y
MW-5AR-02222019	R1901880-001	Methyl Acetate		U		U	Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	interpreted qualifiers	validated y/n
MW-20A-02222019	R1901880-002	Methyl Acetate		U		U	Y
MW-13A-02262019	R1901880-003	Methyl Acetate		U		U	Y
MW-14A-02262019	R1901880-004	Methyl Acetate		U		U	Y
MW-19R-02222019	R1901880-005	Methyl Acetate		U		U	Y
DUP-02222019	R1901880-006	Methyl Acetate		U		U	Y
MW-5R-02222019	R1901880-007	Methyl Acetate		U		U	Y
MW-19AR-03052019	R1901880-008	Methyl Acetate		U		U	Y
MW-11-03052019	R1901880-009	Methyl Acetate		U		U	Y
RQ1901929-04	RQ1901929-04	Methyl Acetate		U		U	Y
RQ1902008-05	RQ1902008-05	Methyl Acetate		U		U	Y
RQ1902040-04	RQ1902040-04	Methyl Acetate		U		U	Y
RQ1901929-03	RQ1901929-03	Methyl Acetate	17.3				Y
RQ1902008-03	RQ1902008-03	Methyl Acetate	17.2				Y
RQ1902040-03	RQ1902040-03	Methyl Acetate	20.0				Y
MW-5ARMS-02222019	RQ1901929-06	Methyl Acetate	10200				Y
MW-5ARMSD-02222019	RQ1901929-07	Methyl Acetate	10600				Y
MW-5AR-02222019	R1901880-001	Methyl Ethyl Ketone (2-Butanone)		U		U	Y
MW-20A-02222019	R1901880-002	Methyl Ethyl Ketone (2-Butanone)		U		U	Y
MW-13A-02262019	R1901880-003	Methyl Ethyl Ketone (2-Butanone)		U		U	Y
MW-14A-02262019	R1901880-004	Methyl Ethyl Ketone (2-Butanone)		U		U	Y
MW-19R-02222019	R1901880-005	Methyl Ethyl Ketone (2-Butanone)		U		U	Y
DUP-02222019	R1901880-006	Methyl Ethyl Ketone (2-Butanone)		U		U	Y
MW-5R-02222019	R1901880-007	Methyl Ethyl Ketone (2-Butanone)		U		U	Y
MW-19AR-03052019	R1901880-008	Methyl Ethyl Ketone (2-Butanone)		U		U	Y
MW-11-03052019	R1901880-009	Methyl Ethyl Ketone (2-Butanone)		U		U	Y
RQ1901929-04	RQ1901929-04	Methyl Ethyl Ketone (2-Butanone)		U		U	Y
RQ1902008-05	RQ1902008-05	Methyl Ethyl Ketone (2-Butanone)		U		U	Y
RQ1902040-04	RQ1902040-04	Methyl Ethyl Ketone (2-Butanone)		U		U	Y
RQ1901929-03	RQ1901929-03	Methyl Ethyl Ketone (2-Butanone)	17.4				Y
RQ1902008-03	RQ1902008-03	Methyl Ethyl Ketone (2-Butanone)	17.9				Y
RQ1902040-03	RQ1902040-03	Methyl Ethyl Ketone (2-Butanone)	19.1				Y
MW-5ARMS-02222019	RQ1901929-06	Methyl Ethyl Ketone (2-Butanone)	9900				Y
MW-5ARMSD-02222019	RQ1901929-07	Methyl Ethyl Ketone (2-Butanone)	10100				Y
MW-5AR-02222019	R1901880-001	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		U	Y
MW-20A-02222019	R1901880-002	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		U	Y
MW-13A-02262019	R1901880-003	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		U	Y
MW-14A-02262019	R1901880-004	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		U	Y
MW-19R-02222019	R1901880-005	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		U	Y
DUP-02222019	R1901880-006	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		U	Y
MW-5R-02222019	R1901880-007	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		U	Y
MW-19AR-03052019	R1901880-008	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		U	Y
MW-11-03052019	R1901880-009	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		U	Y
RQ1901929-04	RQ1901929-04	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		U	Y
RQ1902008-05	RQ1902008-05	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		U	Y
RQ1902040-04	RQ1902040-04	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)		U		U	Y
RQ1901929-03	RQ1901929-03	Methyl Isobutyl Ketone (4-Methyl-2-Penta	17.7				Y
RQ1902008-03	RQ1902008-03	Methyl Isobutyl Ketone (4-Methyl-2-Penta	17.1				Y
RQ1902040-03	RQ1902040-03	Methyl Isobutyl Ketone (4-Methyl-2-Penta	19.7				Y
MW-5ARMS-02222019	RQ1901929-06	Methyl Isobutyl Ketone (4-Methyl-2-Penta	9950				Y
MW-5ARMSD-02222019	RQ1901929-07	Methyl Isobutyl Ketone (4-Methyl-2-Penta	10000				Y
MW-5AR-02222019	R1901880-001	Methylcyclohexane		U		U	Y
MW-20A-02222019	R1901880-002	Methylcyclohexane	0.24	J		J	Y
MW-13A-02262019	R1901880-003	Methylcyclohexane		U		U	Y
MW-14A-02262019	R1901880-004	Methylcyclohexane		U		U	Y
MW-19R-02222019	R1901880-005	Methylcyclohexane	0.26	J		J	Y
DUP-02222019	R1901880-006	Methylcyclohexane	0.36	J		J	Y
MW-5R-02222019	R1901880-007	Methylcyclohexane		U		U	Y
MW-19AR-03052019	R1901880-008	Methylcyclohexane	1.3	J		J	Y
MW-11-03052019	R1901880-009	Methylcyclohexane		U		U	Y
RQ1901929-04	RQ1901929-04	Methylcyclohexane		U		U	Y
RQ1902008-05	RQ1902008-05	Methylcyclohexane		U		U	Y
RQ1902040-04	RQ1902040-04	Methylcyclohexane		U		U	Y
RQ1901929-03	RQ1901929-03	Methylcyclohexane	21.4				Y

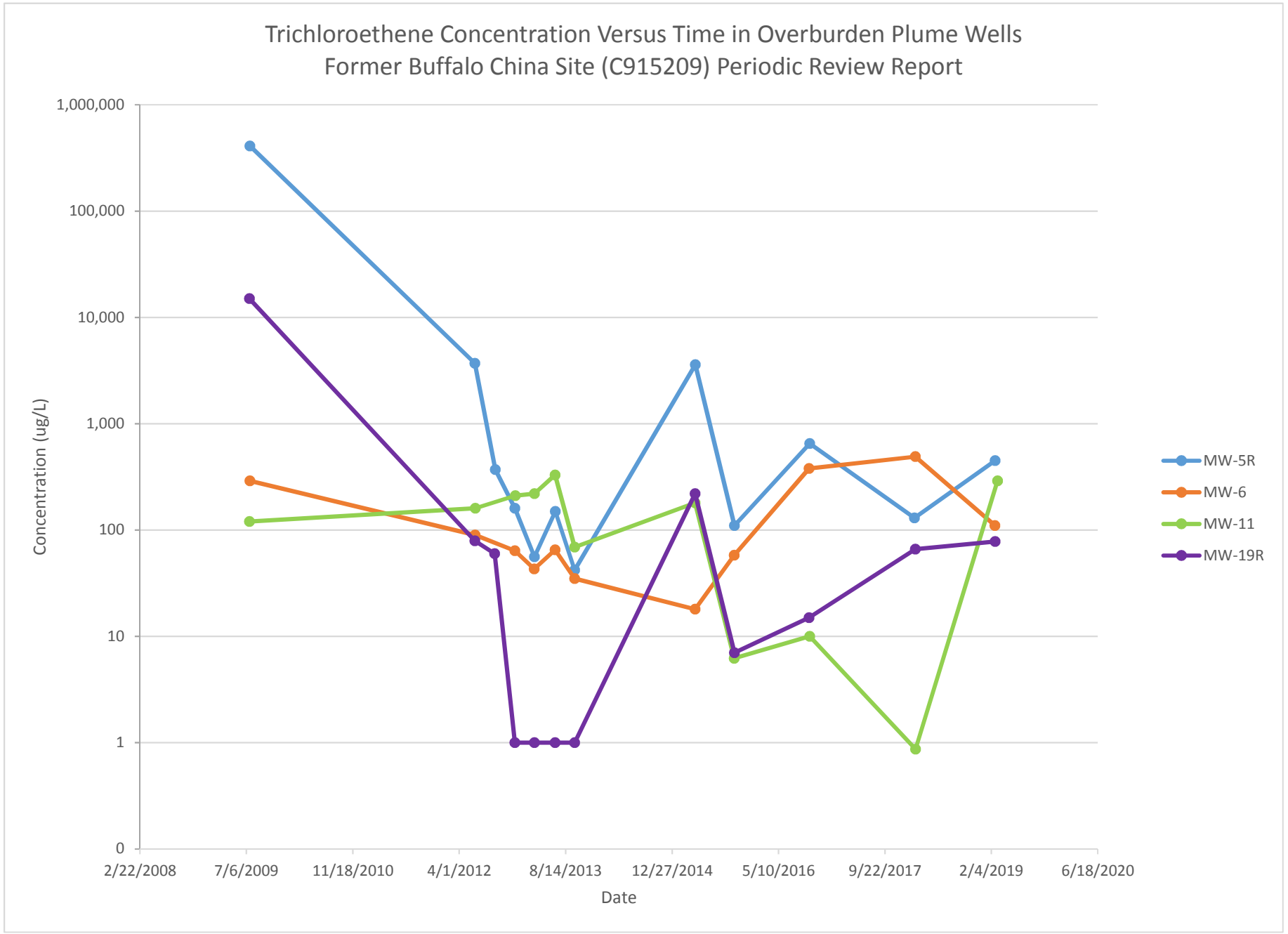
#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	interpreted qualifiers	validated y/n
RQ1902008-03	RQ1902008-03	Methylcyclohexane	21.1				Y
RQ1902040-03	RQ1902040-03	Methylcyclohexane	21.0				Y
MW-5ARMS-02222019	RQ1901929-06	Methylcyclohexane	11600				Y
MW-5ARMSD-02222019	RQ1901929-07	Methylcyclohexane	11800				Y
MW-5AR-02222019	R1901880-001	Methylene Chloride		U		U	Y
MW-20A-02222019	R1901880-002	Methylene Chloride		U		U	Y
MW-13A-02262019	R1901880-003	Methylene Chloride		U		U	Y
MW-14A-02262019	R1901880-004	Methylene Chloride		U		U	Y
MW-19R-02222019	R1901880-005	Methylene Chloride		U		U	Y
DUP-02222019	R1901880-006	Methylene Chloride		U		U	Y
MW-5R-02222019	R1901880-007	Methylene Chloride		U		U	Y
MW-19AR-03052019	R1901880-008	Methylene Chloride	2.3	J		J	Y
MW-11-03052019	R1901880-009	Methylene Chloride		U		U	Y
RQ1901929-04	RQ1901929-04	Methylene Chloride		U		U	Y
RQ1902008-05	RQ1902008-05	Methylene Chloride		U		U	Y
RQ1902040-04	RQ1902040-04	Methylene Chloride		U		U	Y
RQ1901929-03	RQ1901929-03	Methylene Chloride	18.5				Y
RQ1902008-03	RQ1902008-03	Methylene Chloride	18.3				Y
RQ1902040-03	RQ1902040-03	Methylene Chloride	18.0				Y
MW-5ARMS-02222019	RQ1901929-06	Methylene Chloride	10400				Y
MW-5ARMSD-02222019	RQ1901929-07	Methylene Chloride	10600				Y
MW-5AR-02222019	R1901880-001	O-Xylene (1,2-Dimethylbenzene)		U		U	Y
MW-20A-02222019	R1901880-002	O-Xylene (1,2-Dimethylbenzene)		U		U	Y
MW-13A-02262019	R1901880-003	O-Xylene (1,2-Dimethylbenzene)		U		U	Y
MW-14A-02262019	R1901880-004	O-Xylene (1,2-Dimethylbenzene)		U		U	Y
MW-19R-02222019	R1901880-005	O-Xylene (1,2-Dimethylbenzene)		U		U	Y
DUP-02222019	R1901880-006	O-Xylene (1,2-Dimethylbenzene)		U		U	Y
MW-5R-02222019	R1901880-007	O-Xylene (1,2-Dimethylbenzene)		U		U	Y
MW-19AR-03052019	R1901880-008	O-Xylene (1,2-Dimethylbenzene)		U		U	Y
MW-11-03052019	R1901880-009	O-Xylene (1,2-Dimethylbenzene)		U		U	Y
RQ1901929-04	RQ1901929-04	O-Xylene (1,2-Dimethylbenzene)		U		U	Y
RQ1902008-05	RQ1902008-05	O-Xylene (1,2-Dimethylbenzene)		U		U	Y
RQ1902040-04	RQ1902040-04	O-Xylene (1,2-Dimethylbenzene)		U		U	Y
RQ1901929-03	RQ1901929-03	O-Xylene (1,2-Dimethylbenzene)	16.8				Y
RQ1902008-03	RQ1902008-03	O-Xylene (1,2-Dimethylbenzene)	17.7				Y
RQ1902040-03	RQ1902040-03	O-Xylene (1,2-Dimethylbenzene)	16.9				Y
MW-5ARMS-02222019	RQ1901929-06	O-Xylene (1,2-Dimethylbenzene)	9210				Y
MW-5ARMSD-02222019	RQ1901929-07	O-Xylene (1,2-Dimethylbenzene)	9580				Y
MW-5AR-02222019	R1901880-001	p-Bromofluorobenzene	99				Y
MW-20A-02222019	R1901880-002	p-Bromofluorobenzene	102				Y
MW-13A-02262019	R1901880-003	p-Bromofluorobenzene	97				Y
MW-14A-02262019	R1901880-004	p-Bromofluorobenzene	97				Y
MW-19R-02222019	R1901880-005	p-Bromofluorobenzene	100				Y
DUP-02222019	R1901880-006	p-Bromofluorobenzene	101				Y
MW-5R-02222019	R1901880-007	p-Bromofluorobenzene	101				Y
MW-19AR-03052019	R1901880-008	p-Bromofluorobenzene	99				Y
MW-11-03052019	R1901880-009	p-Bromofluorobenzene	100				Y
RQ1901929-04	RQ1901929-04	p-Bromofluorobenzene	101				Y
RQ1902008-05	RQ1902008-05	p-Bromofluorobenzene	102				Y
RQ1902040-04	RQ1902040-04	p-Bromofluorobenzene	103				Y
RQ1901929-03	RQ1901929-03	p-Bromofluorobenzene	99				Y
RQ1902008-03	RQ1902008-03	p-Bromofluorobenzene	101				Y
RQ1902040-03	RQ1902040-03	p-Bromofluorobenzene	101				Y
MW-5ARMS-02222019	RQ1901929-06	p-Bromofluorobenzene	101				Y
MW-5ARMSD-02222019	RQ1901929-07	p-Bromofluorobenzene	100				Y
MW-5AR-02222019	R1901880-001	Styrene		U		U	Y
MW-20A-02222019	R1901880-002	Styrene		U		U	Y
MW-13A-02262019	R1901880-003	Styrene		U		U	Y
MW-14A-02262019	R1901880-004	Styrene		U		U	Y
MW-19R-02222019	R1901880-005	Styrene		U		U	Y
DUP-02222019	R1901880-006	Styrene		U		U	Y
MW-5R-02222019	R1901880-007	Styrene		U		U	Y
MW-19AR-03052019	R1901880-008	Styrene		U		U	Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	interpreted qualifiers	validated y/n
MW-11-03052019	R1901880-009	Styrene		U		U	Y
RQ1901929-04	RQ1901929-04	Styrene		U		U	Y
RQ1902008-05	RQ1902008-05	Styrene		U		U	Y
RQ1902040-04	RQ1902040-04	Styrene		U		U	Y
RQ1901929-03	RQ1901929-03	Styrene	18.6				Y
RQ1902008-03	RQ1902008-03	Styrene	18.6				Y
RQ1902040-03	RQ1902040-03	Styrene	17.6				Y
MW-5ARMS-02222019	RQ1901929-06	Styrene	8670				Y
MW-5ARMSD-02222019	RQ1901929-07	Styrene	9090				Y
MW-5AR-02222019	R1901880-001	Tert-Butyl Methyl Ether		U		U	Y
MW-20A-02222019	R1901880-002	Tert-Butyl Methyl Ether		U		U	Y
MW-13A-02262019	R1901880-003	Tert-Butyl Methyl Ether		U		U	Y
MW-14A-02262019	R1901880-004	Tert-Butyl Methyl Ether	0.28	J		J	Y
MW-19R-02222019	R1901880-005	Tert-Butyl Methyl Ether		U		U	Y
DUP-02222019	R1901880-006	Tert-Butyl Methyl Ether		U		U	Y
MW-5R-02222019	R1901880-007	Tert-Butyl Methyl Ether		U		U	Y
MW-19AR-03052019	R1901880-008	Tert-Butyl Methyl Ether		U		U	Y
MW-11-03052019	R1901880-009	Tert-Butyl Methyl Ether	0.33	J		J	Y
RQ1901929-04	RQ1901929-04	Tert-Butyl Methyl Ether		U		U	Y
RQ1902008-05	RQ1902008-05	Tert-Butyl Methyl Ether		U		U	Y
RQ1902040-04	RQ1902040-04	Tert-Butyl Methyl Ether		U		U	Y
RQ1901929-03	RQ1901929-03	Tert-Butyl Methyl Ether	19.6				Y
RQ1902008-03	RQ1902008-03	Tert-Butyl Methyl Ether	19.2				Y
RQ1902040-03	RQ1902040-03	Tert-Butyl Methyl Ether	20.3				Y
MW-5ARMS-02222019	RQ1901929-06	Tert-Butyl Methyl Ether	10800				Y
MW-5ARMSD-02222019	RQ1901929-07	Tert-Butyl Methyl Ether	11000				Y
MW-5AR-02222019	R1901880-001	Tetrachloroethylene (PCE)	63	J		J	Y
MW-20A-02222019	R1901880-002	Tetrachloroethylene (PCE)		U		U	Y
MW-13A-02262019	R1901880-003	Tetrachloroethylene (PCE)	23	J		J	Y
MW-14A-02262019	R1901880-004	Tetrachloroethylene (PCE)		U		U	Y
MW-19R-02222019	R1901880-005	Tetrachloroethylene (PCE)		U		U	Y
DUP-02222019	R1901880-006	Tetrachloroethylene (PCE)		U		U	Y
MW-5R-02222019	R1901880-007	Tetrachloroethylene (PCE)	1.2	J		J	Y
MW-19AR-03052019	R1901880-008	Tetrachloroethylene (PCE)	6.6	J		J	Y
MW-11-03052019	R1901880-009	Tetrachloroethylene (PCE)		U		U	Y
RQ1901929-04	RQ1901929-04	Tetrachloroethylene (PCE)		U		U	Y
RQ1902008-05	RQ1902008-05	Tetrachloroethylene (PCE)		U		U	Y
RQ1902040-04	RQ1902040-04	Tetrachloroethylene (PCE)		U		U	Y
RQ1901929-03	RQ1901929-03	Tetrachloroethylene (PCE)	16.2				Y
RQ1902008-03	RQ1902008-03	Tetrachloroethylene (PCE)	17.1				Y
RQ1902040-03	RQ1902040-03	Tetrachloroethylene (PCE)	15.8				Y
MW-5ARMS-02222019	RQ1901929-06	Tetrachloroethylene (PCE)	9780				Y
MW-5ARMSD-02222019	RQ1901929-07	Tetrachloroethylene (PCE)	10400				Y
MW-5AR-02222019	R1901880-001	Toluene		U		U	Y
MW-20A-02222019	R1901880-002	Toluene		U		U	Y
MW-13A-02262019	R1901880-003	Toluene		U		U	Y
MW-14A-02262019	R1901880-004	Toluene		U		U	Y
MW-19R-02222019	R1901880-005	Toluene		U		U	Y
DUP-02222019	R1901880-006	Toluene		U		U	Y
MW-5R-02222019	R1901880-007	Toluene		U		U	Y
MW-19AR-03052019	R1901880-008	Toluene		U		U	Y
MW-11-03052019	R1901880-009	Toluene		U		U	Y
RQ1901929-04	RQ1901929-04	Toluene		U		U	Y
RQ1902008-05	RQ1902008-05	Toluene		U		U	Y
RQ1902040-04	RQ1902040-04	Toluene		U		U	Y
RQ1901929-03	RQ1901929-03	Toluene	17.9				Y
RQ1902008-03	RQ1902008-03	Toluene	18.3				Y
RQ1902040-03	RQ1902040-03	Toluene	17.6				Y
MW-5ARMS-02222019	RQ1901929-06	Toluene	9610				Y
MW-5ARMSD-02222019	RQ1901929-07	Toluene	9940				Y
MW-5AR-02222019	R1901880-001	Toluene-D8	100				Y
MW-20A-02222019	R1901880-002	Toluene-D8	102				Y
MW-13A-02262019	R1901880-003	Toluene-D8	99				Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	interpreted qualifiers	validated y/n
MW-14A-02262019	R1901880-004	Toluene-D8	100				Y
MW-19R-02222019	R1901880-005	Toluene-D8	100				Y
DUP-02222019	R1901880-006	Toluene-D8	101				Y
MW-5R-02222019	R1901880-007	Toluene-D8	103				Y
MW-19AR-03052019	R1901880-008	Toluene-D8	102				Y
MW-11-03052019	R1901880-009	Toluene-D8	102				Y
RQ1901929-04	RQ1901929-04	Toluene-D8	100				Y
RQ1902008-05	RQ1902008-05	Toluene-D8	104				Y
RQ1902040-04	RQ1902040-04	Toluene-D8	102				Y
RQ1901929-03	RQ1901929-03	Toluene-D8	100				Y
RQ1902008-03	RQ1902008-03	Toluene-D8	102				Y
RQ1902040-03	RQ1902040-03	Toluene-D8	101				Y
MW-5ARMS-02222019	RQ1901929-06	Toluene-D8	102				Y
MW-5ARMSD-02222019	RQ1901929-07	Toluene-D8	102				Y
MW-5AR-02222019	R1901880-001	Trans-1,2-Dichloroethene	1700				Y
MW-20A-02222019	R1901880-002	Trans-1,2-Dichloroethene	5.0				Y
MW-13A-02262019	R1901880-003	Trans-1,2-Dichloroethene	410				Y
MW-14A-02262019	R1901880-004	Trans-1,2-Dichloroethene	0.68	J		J	Y
MW-19R-02222019	R1901880-005	Trans-1,2-Dichloroethene	4.3	J		J	Y
DUP-02222019	R1901880-006	Trans-1,2-Dichloroethene	4.4	J		J	Y
MW-5R-02222019	R1901880-007	Trans-1,2-Dichloroethene	12				Y
MW-19AR-03052019	R1901880-008	Trans-1,2-Dichloroethene	12	J		J	Y
MW-11-03052019	R1901880-009	Trans-1,2-Dichloroethene	6.2				Y
RQ1901929-04	RQ1901929-04	Trans-1,2-Dichloroethene		U		U	Y
RQ1902008-05	RQ1902008-05	Trans-1,2-Dichloroethene		U		U	Y
RQ1902040-04	RQ1902040-04	Trans-1,2-Dichloroethene		U		U	Y
RQ1901929-03	RQ1901929-03	Trans-1,2-Dichloroethene	18.8				Y
RQ1902008-03	RQ1902008-03	Trans-1,2-Dichloroethene	19.0				Y
RQ1902040-03	RQ1902040-03	Trans-1,2-Dichloroethene	18.1				Y
MW-5ARMS-02222019	RQ1901929-06	Trans-1,2-Dichloroethene	12500				Y
MW-5ARMSD-02222019	RQ1901929-07	Trans-1,2-Dichloroethene	13100				Y
MW-5AR-02222019	R1901880-001	Trans-1,3-Dichloropropene		U		U	Y
MW-20A-02222019	R1901880-002	Trans-1,3-Dichloropropene		U		U	Y
MW-13A-02262019	R1901880-003	Trans-1,3-Dichloropropene		U		U	Y
MW-14A-02262019	R1901880-004	Trans-1,3-Dichloropropene		U		U	Y
MW-19R-02222019	R1901880-005	Trans-1,3-Dichloropropene		U		U	Y
DUP-02222019	R1901880-006	Trans-1,3-Dichloropropene		U		U	Y
MW-5R-02222019	R1901880-007	Trans-1,3-Dichloropropene		U		U	Y
MW-19AR-03052019	R1901880-008	Trans-1,3-Dichloropropene		U		U	Y
MW-11-03052019	R1901880-009	Trans-1,3-Dichloropropene		U		U	Y
RQ1901929-04	RQ1901929-04	Trans-1,3-Dichloropropene		U		U	Y
RQ1902008-05	RQ1902008-05	Trans-1,3-Dichloropropene		U		U	Y
RQ1902040-04	RQ1902040-04	Trans-1,3-Dichloropropene		U		U	Y
RQ1901929-03	RQ1901929-03	Trans-1,3-Dichloropropene	19.2				Y
RQ1902008-03	RQ1902008-03	Trans-1,3-Dichloropropene	19.3				Y
RQ1902040-03	RQ1902040-03	Trans-1,3-Dichloropropene	19.5				Y
MW-5ARMS-02222019	RQ1901929-06	Trans-1,3-Dichloropropene	10100				Y
MW-5ARMSD-02222019	RQ1901929-07	Trans-1,3-Dichloropropene	10700				Y
MW-5AR-02222019	R1901880-001	Trichloroethylene (TCE)	24000				Y
MW-20A-02222019	R1901880-002	Trichloroethylene (TCE)	1.6	J		J	Y
MW-13A-02262019	R1901880-003	Trichloroethylene (TCE)	3100				Y
MW-14A-02262019	R1901880-004	Trichloroethylene (TCE)	1.1	J		J	Y
MW-19R-02222019	R1901880-005	Trichloroethylene (TCE)	78				Y
DUP-02222019	R1901880-006	Trichloroethylene (TCE)	1.6	J		J	Y
MW-5R-02222019	R1901880-007	Trichloroethylene (TCE)	450	D		D	Y
MW-19AR-03052019	R1901880-008	Trichloroethylene (TCE)	830	D		D	Y
MW-11-03052019	R1901880-009	Trichloroethylene (TCE)	290	D		D	Y
RQ1901929-04	RQ1901929-04	Trichloroethylene (TCE)		U		U	Y
RQ1902008-05	RQ1902008-05	Trichloroethylene (TCE)		U		U	Y
RQ1902040-04	RQ1902040-04	Trichloroethylene (TCE)		U		U	Y
RQ1901929-03	RQ1901929-03	Trichloroethylene (TCE)	16.6				Y
RQ1902008-03	RQ1902008-03	Trichloroethylene (TCE)	17.4				Y
RQ1902040-03	RQ1902040-03	Trichloroethylene (TCE)	16.3				Y

#sys_sample_code	lab_sample_id	chemical_name	Result value	Lab qualifiers	validator qualifiers	interpreted qualifiers	validated y/n
MW-5ARMS-02222019	RQ1901929-06	Trichloroethylene (TCE)	33100				Y
MW-5ARMSD-02222019	RQ1901929-07	Trichloroethylene (TCE)	33100				Y
MW-5AR-02222019	R1901880-001	Trichlorofluoromethane		U		U	Y
MW-20A-02222019	R1901880-002	Trichlorofluoromethane		U		U	Y
MW-13A-02262019	R1901880-003	Trichlorofluoromethane		U		U	Y
MW-14A-02262019	R1901880-004	Trichlorofluoromethane		U		U	Y
MW-19R-02222019	R1901880-005	Trichlorofluoromethane		U		U	Y
DUP-02222019	R1901880-006	Trichlorofluoromethane		U		U	Y
MW-5R-02222019	R1901880-007	Trichlorofluoromethane		U		U	Y
MW-19AR-03052019	R1901880-008	Trichlorofluoromethane		U		U	Y
MW-11-03052019	R1901880-009	Trichlorofluoromethane		U		U	Y
RQ1901929-04	RQ1901929-04	Trichlorofluoromethane		U		U	Y
RQ1902008-05	RQ1902008-05	Trichlorofluoromethane		U		U	Y
RQ1902040-04	RQ1902040-04	Trichlorofluoromethane		U		U	Y
RQ1901929-03	RQ1901929-03	Trichlorofluoromethane	17.5				Y
RQ1902008-03	RQ1902008-03	Trichlorofluoromethane	18.7				Y
RQ1902040-03	RQ1902040-03	Trichlorofluoromethane	16.9				Y
MW-5ARMS-02222019	RQ1901929-06	Trichlorofluoromethane	11100				Y
MW-5ARMSD-02222019	RQ1901929-07	Trichlorofluoromethane	11900				Y
MW-5AR-02222019	R1901880-001	Trichlorotrifluoroethane		U		U	Y
MW-20A-02222019	R1901880-002	Trichlorotrifluoroethane		U		U	Y
MW-13A-02262019	R1901880-003	Trichlorotrifluoroethane		U		U	Y
MW-14A-02262019	R1901880-004	Trichlorotrifluoroethane		U		U	Y
MW-19R-02222019	R1901880-005	Trichlorotrifluoroethane		U		U	Y
DUP-02222019	R1901880-006	Trichlorotrifluoroethane		U		U	Y
MW-5R-02222019	R1901880-007	Trichlorotrifluoroethane		U		U	Y
MW-19AR-03052019	R1901880-008	Trichlorotrifluoroethane		U		U	Y
MW-11-03052019	R1901880-009	Trichlorotrifluoroethane		U		U	Y
RQ1901929-04	RQ1901929-04	Trichlorotrifluoroethane		U		U	Y
RQ1902008-05	RQ1902008-05	Trichlorotrifluoroethane		U		U	Y
RQ1902040-04	RQ1902040-04	Trichlorotrifluoroethane		U		U	Y
RQ1901929-03	RQ1901929-03	Trichlorotrifluoroethane	17.5				Y
RQ1902008-03	RQ1902008-03	Trichlorotrifluoroethane	19.9				Y
RQ1902040-03	RQ1902040-03	Trichlorotrifluoroethane	17.6				Y
MW-5ARMS-02222019	RQ1901929-06	Trichlorotrifluoroethane	12000				Y
MW-5ARMSD-02222019	RQ1901929-07	Trichlorotrifluoroethane	12100				Y
MW-5AR-02222019	R1901880-001	Vinyl Chloride	440	J		J	Y
MW-20A-02222019	R1901880-002	Vinyl Chloride	260	D		D	Y
MW-13A-02262019	R1901880-003	Vinyl Chloride	150	J		J	Y
MW-14A-02262019	R1901880-004	Vinyl Chloride	2.5	J		J	Y
MW-19R-02222019	R1901880-005	Vinyl Chloride	0.36	J		J	Y
DUP-02222019	R1901880-006	Vinyl Chloride	240	D		D	Y
MW-5R-02222019	R1901880-007	Vinyl Chloride	0.51	J		J	Y
MW-19AR-03052019	R1901880-008	Vinyl Chloride	4.8	J		J	Y
MW-11-03052019	R1901880-009	Vinyl Chloride	2.0	J		J	Y
RQ1901929-04	RQ1901929-04	Vinyl Chloride		U		U	Y
RQ1902008-05	RQ1902008-05	Vinyl Chloride		U		U	Y
RQ1902040-04	RQ1902040-04	Vinyl Chloride		U		U	Y
RQ1901929-03	RQ1901929-03	Vinyl Chloride	19.9				Y
RQ1902008-03	RQ1902008-03	Vinyl Chloride	19.5				Y
RQ1902040-03	RQ1902040-03	Vinyl Chloride	19.7				Y
MW-5ARMS-02222019	RQ1901929-06	Vinyl Chloride	13000				Y
MW-5ARMSD-02222019	RQ1901929-07	Vinyl Chloride	13100				Y

Appendix F
Concentration versus Time Plots for Contaminants of Concern


Trichloroethene Concentration Versus Time in Overburden Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
Concentration (ug/L)
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1,000
100
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1
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2/22/2008
7/6/2009
11/18/2010
4/1/2012
8/14/2013
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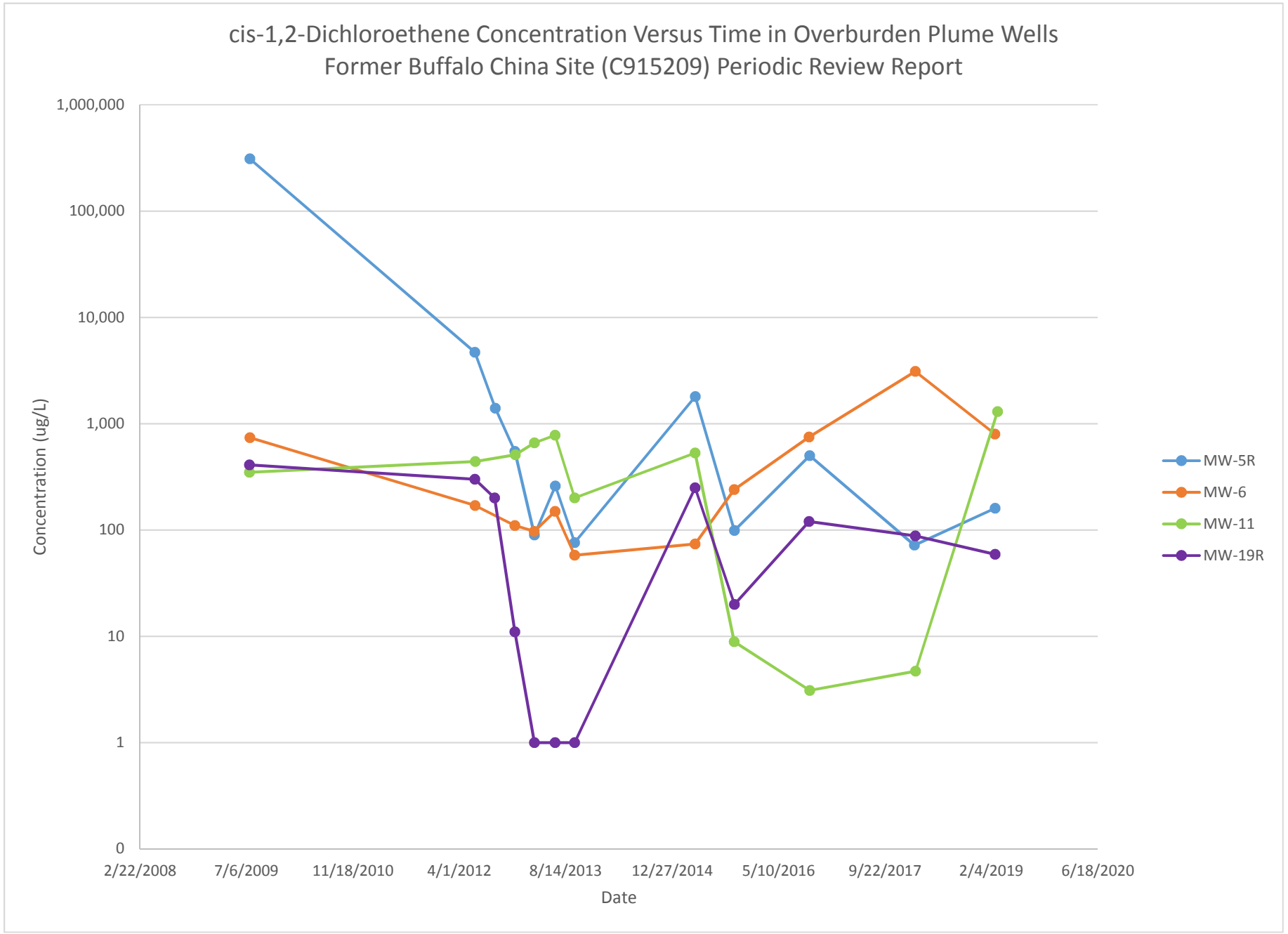
MW-6
MW-11
MW-19R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Concentration (ug/L)
2/22/2008
7/6/2009
11/18/2010
4/1/2012
8/14/2013
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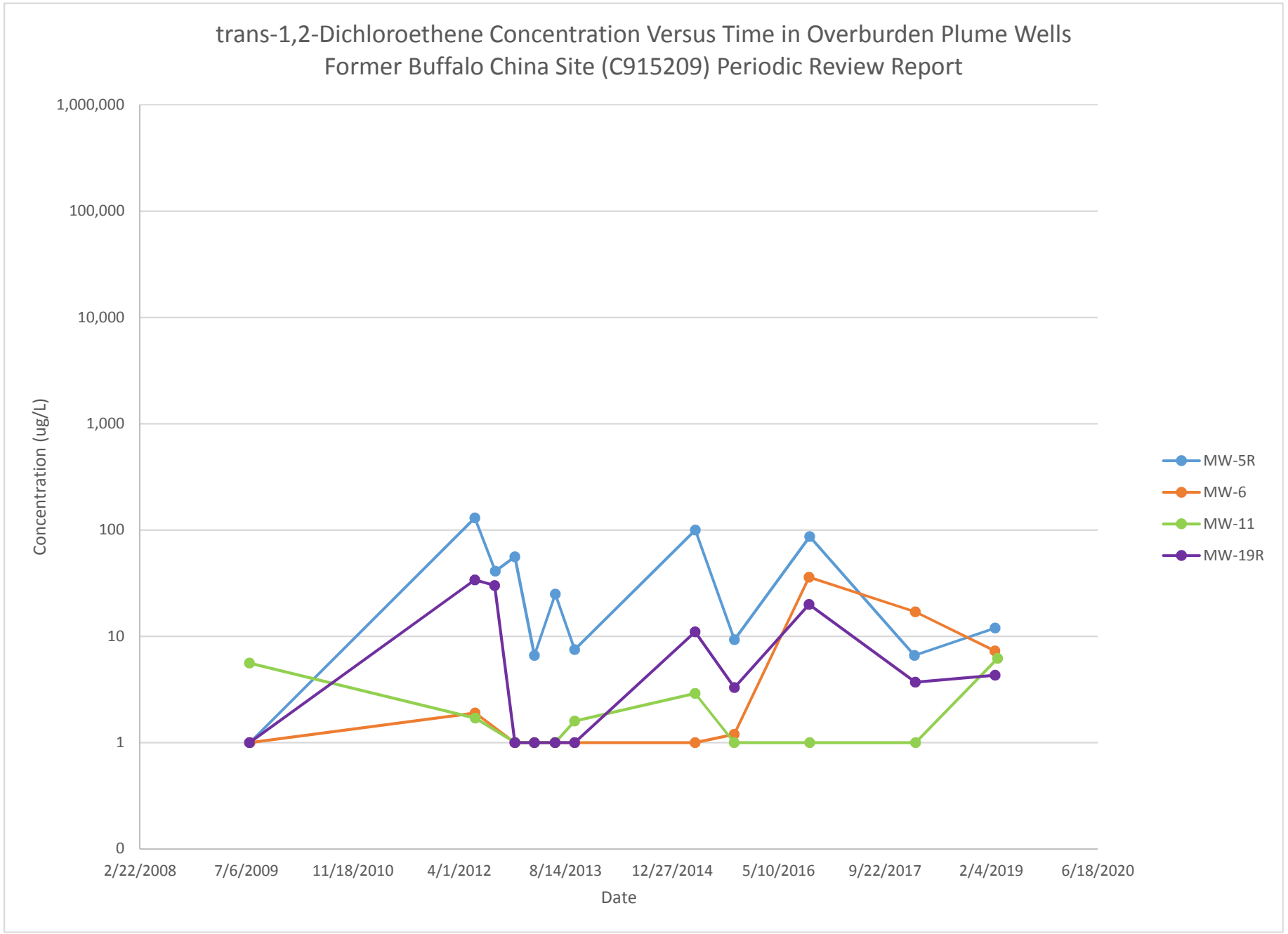
MW-6
MW-11
MW-19R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Concentration (ug/L)
2/22/2008
7/6/2009
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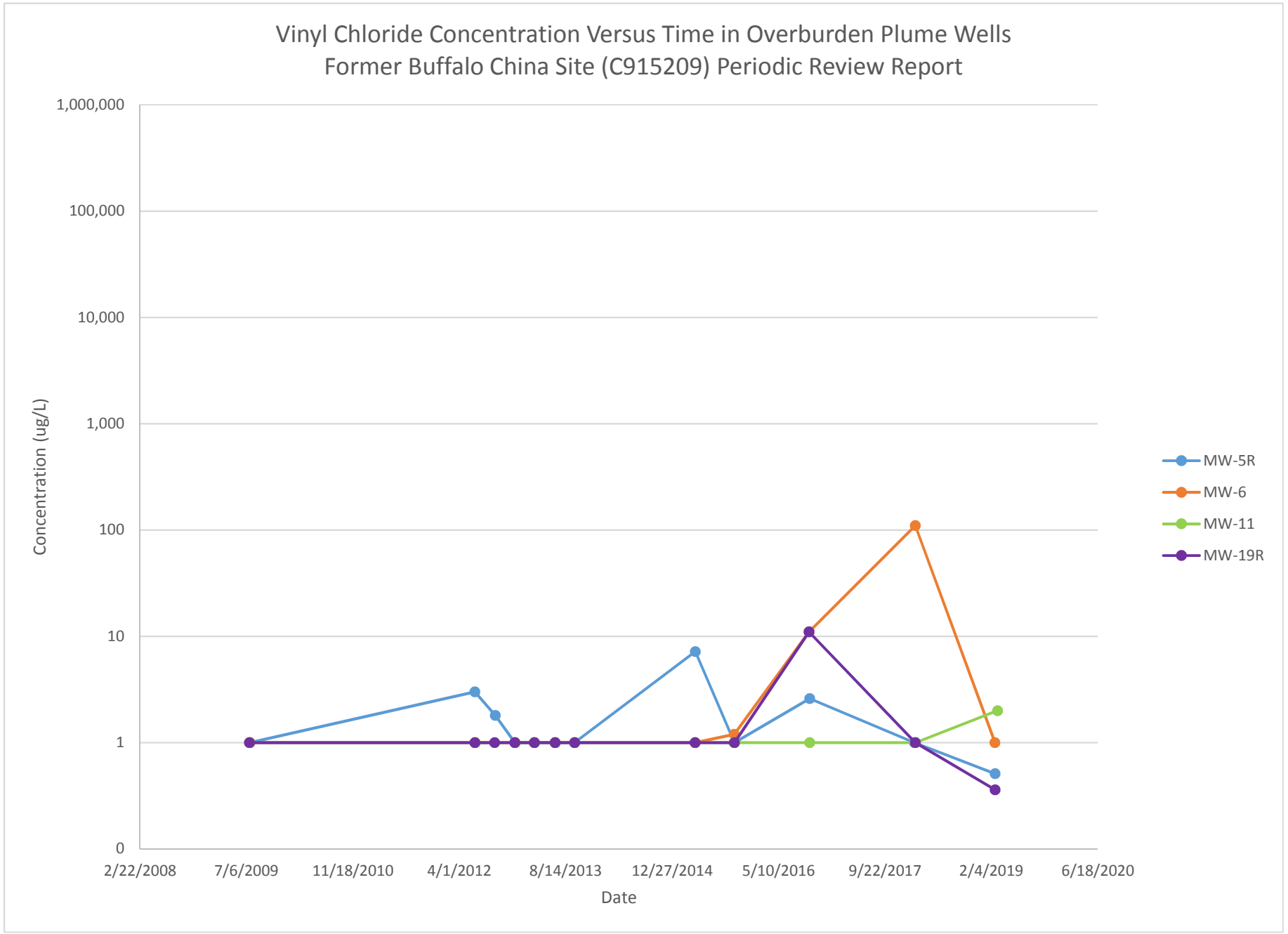
MW-6
MW-11
MW-19R


Vinyl Chloride Concentration Versus Time in Overburden Plume Wells
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Concentration (ug/L)
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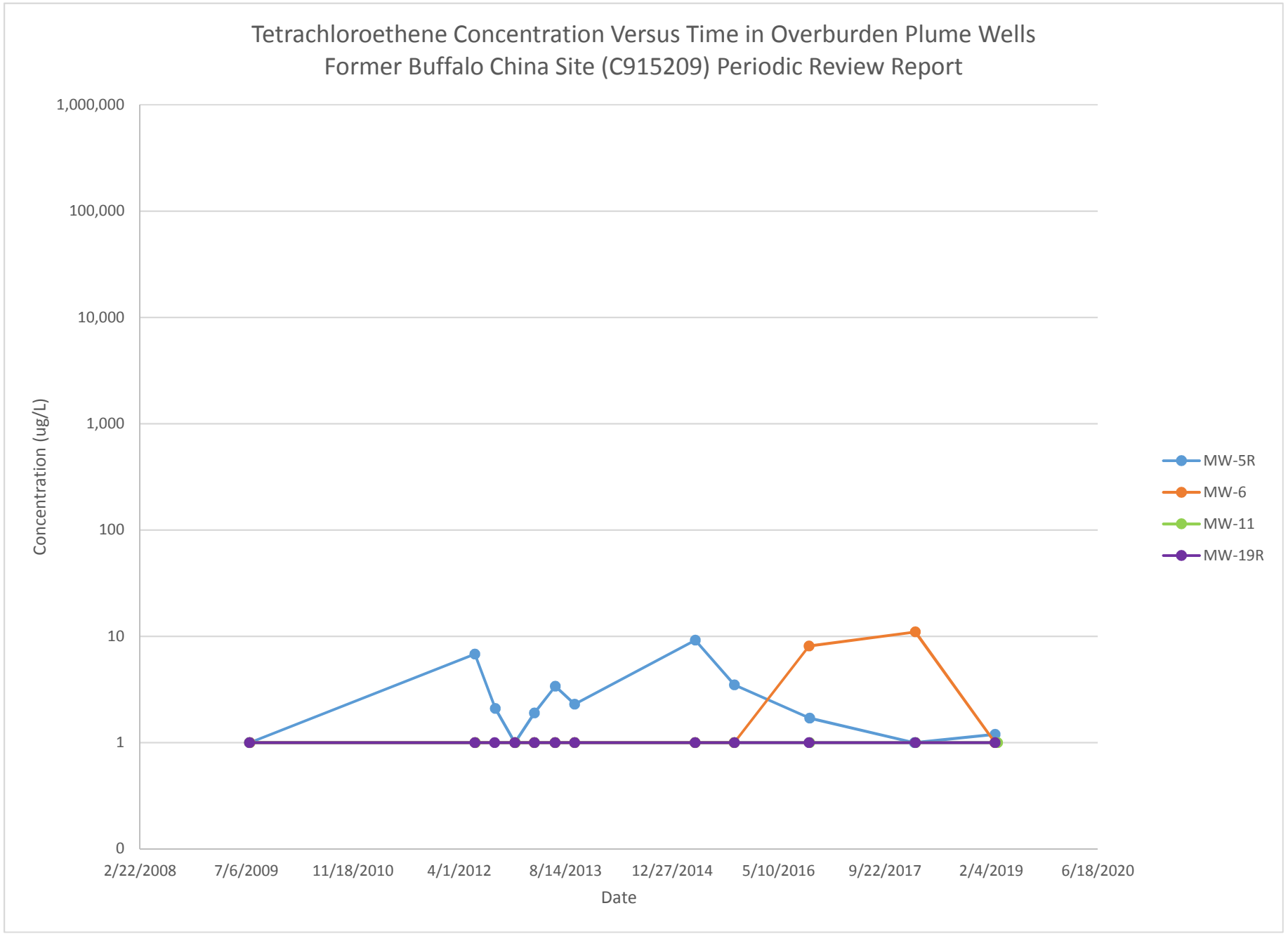
MW-19R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Former Buffalo China Site (C915209) Periodic Review Report
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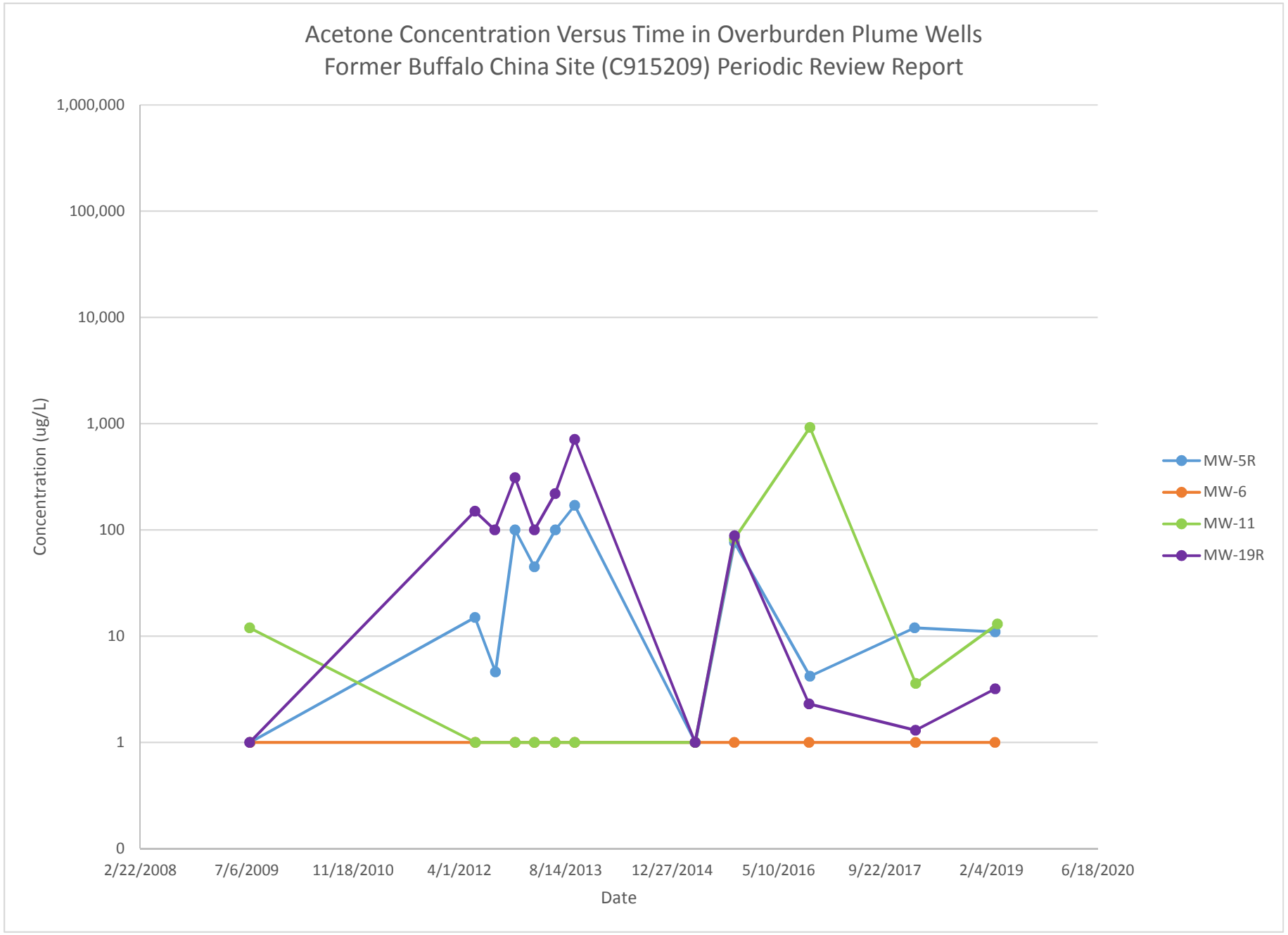
MW-19R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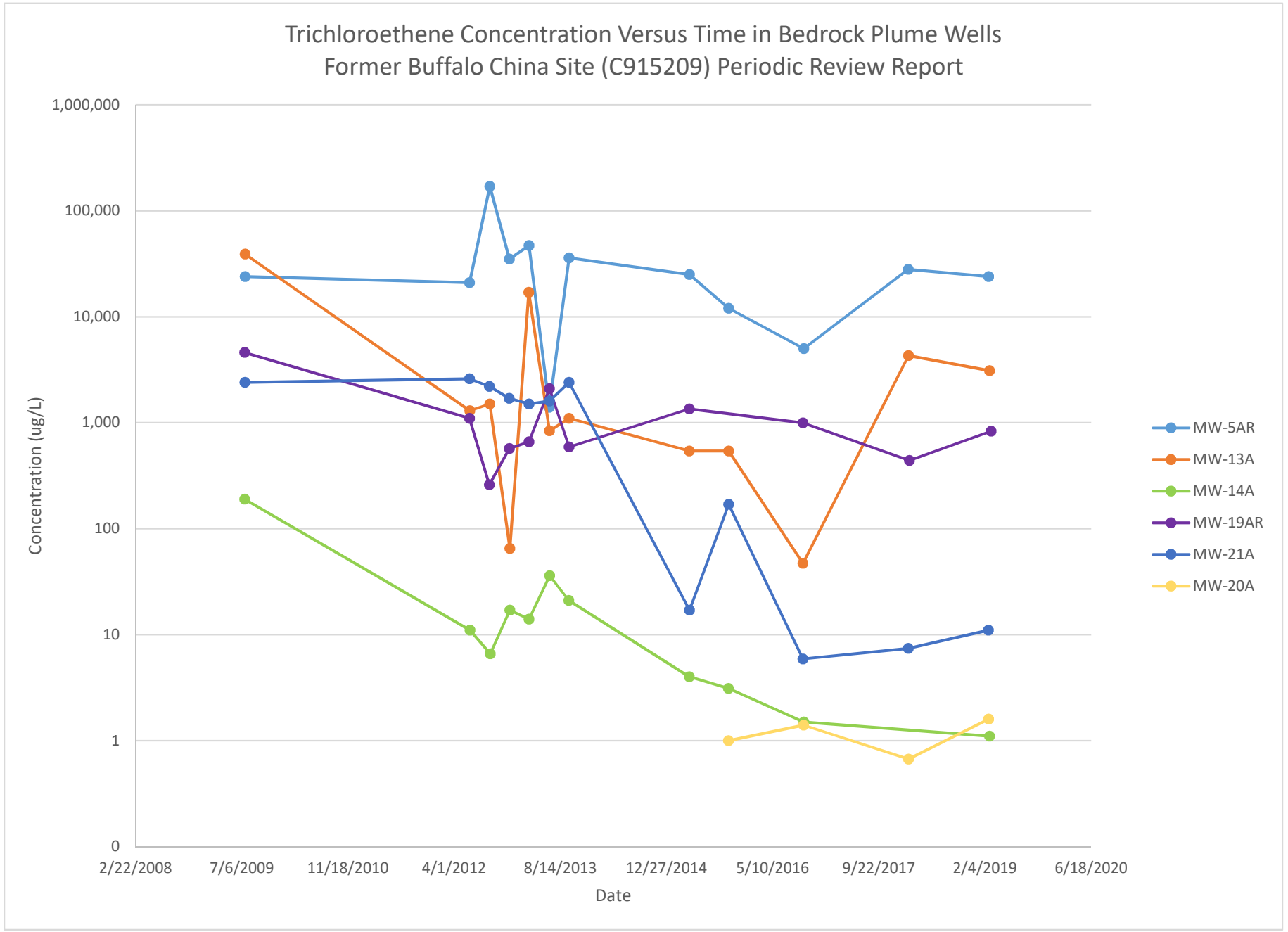
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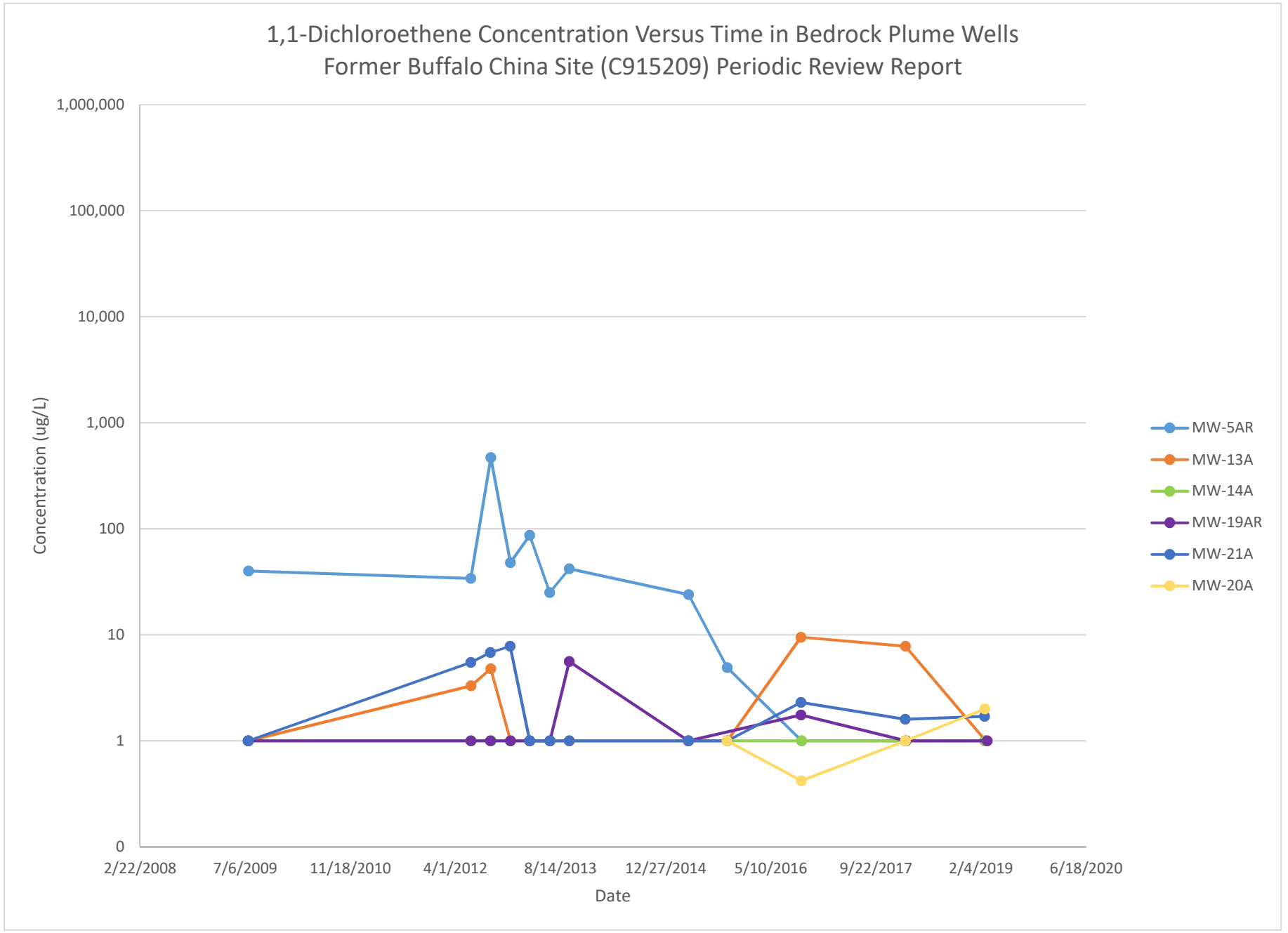
MW-20A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Concentration (ug/L)
2/22/2008
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5/10/2016
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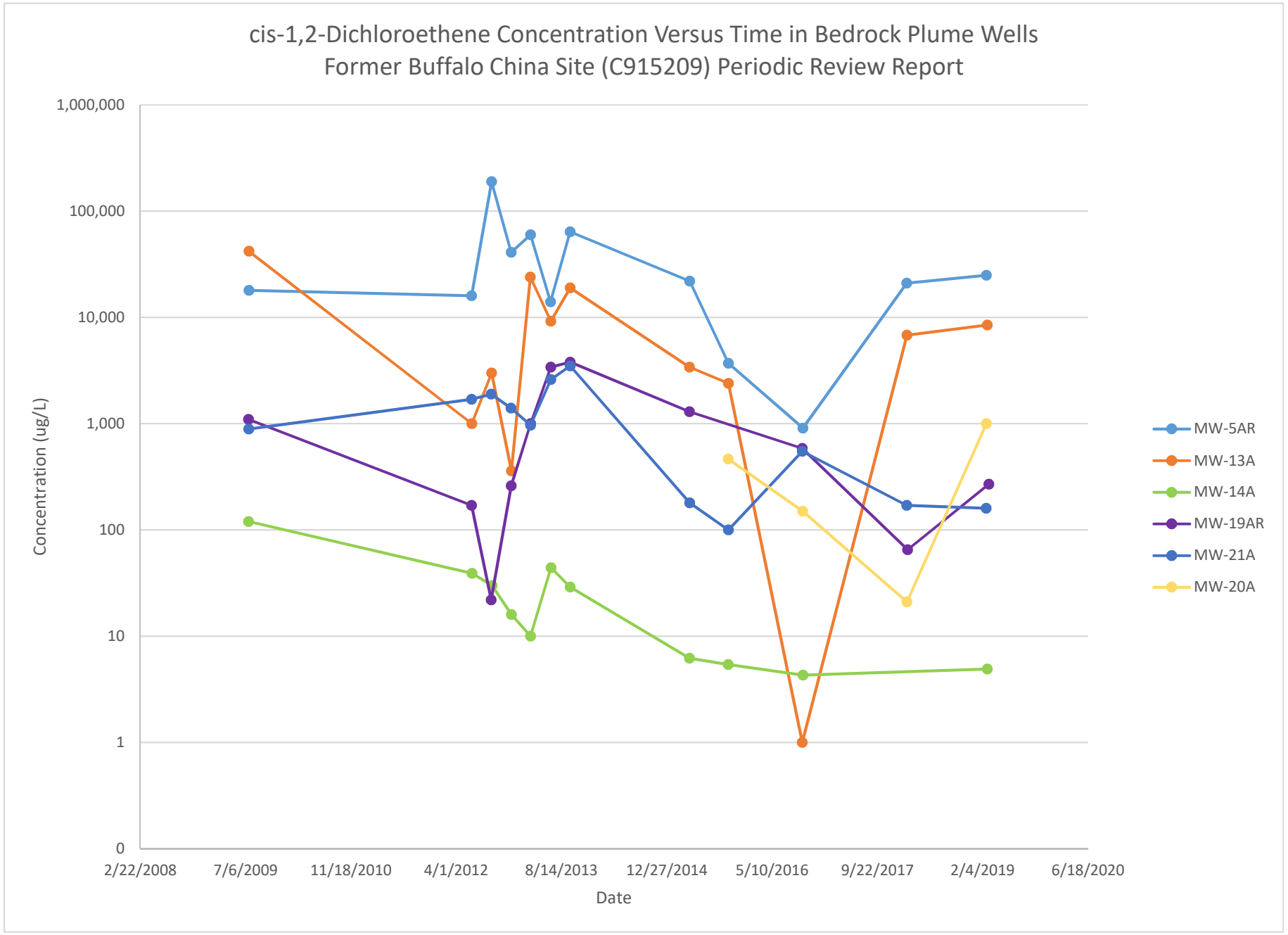
MW-20A


cis-1,2-Dichloroethene Concentration Versus Time in Bedrock Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
Concentration (ug/L)
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7/6/2009
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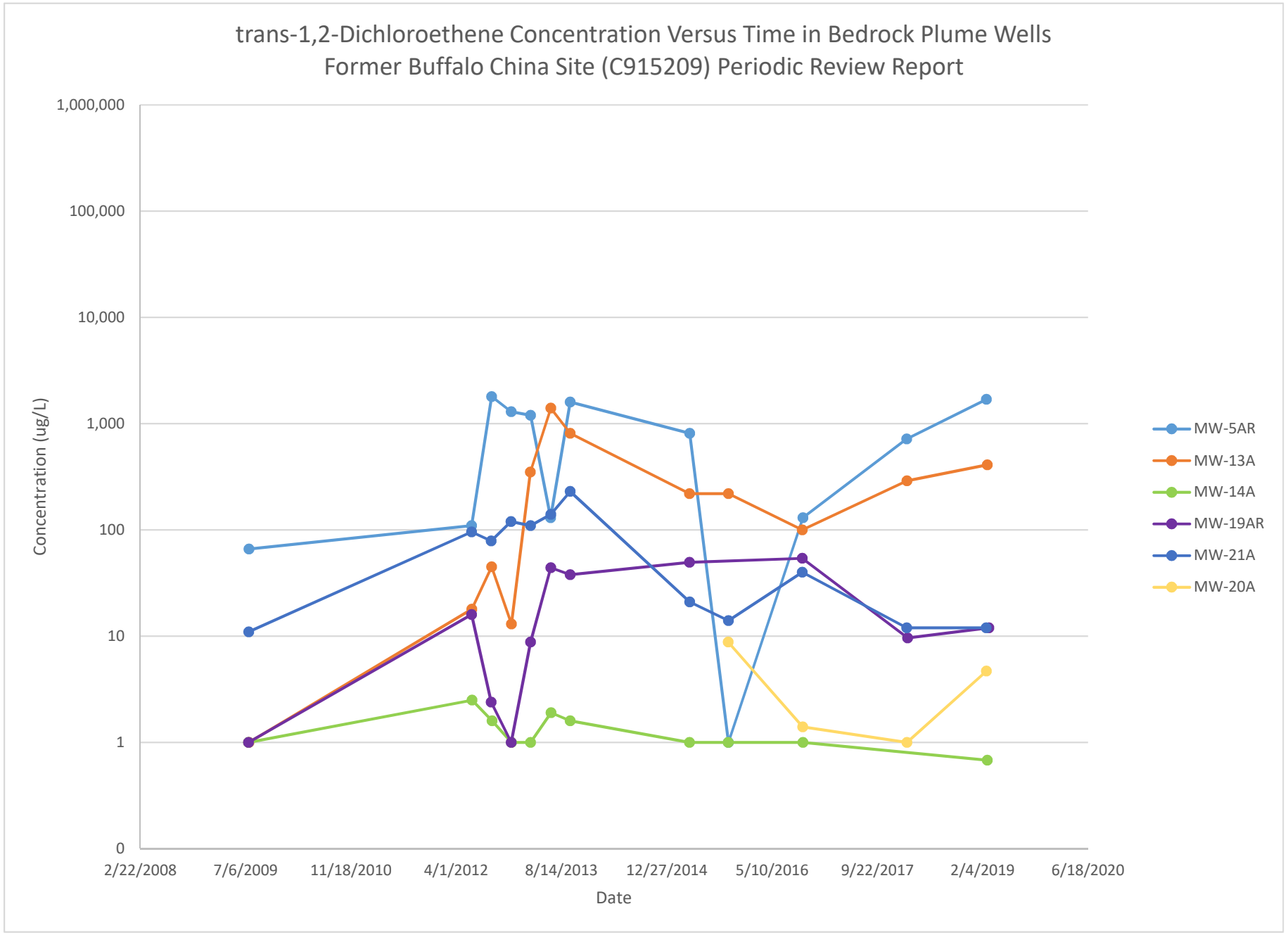
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Concentration (ug/L)
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7/6/2009
11/18/2010
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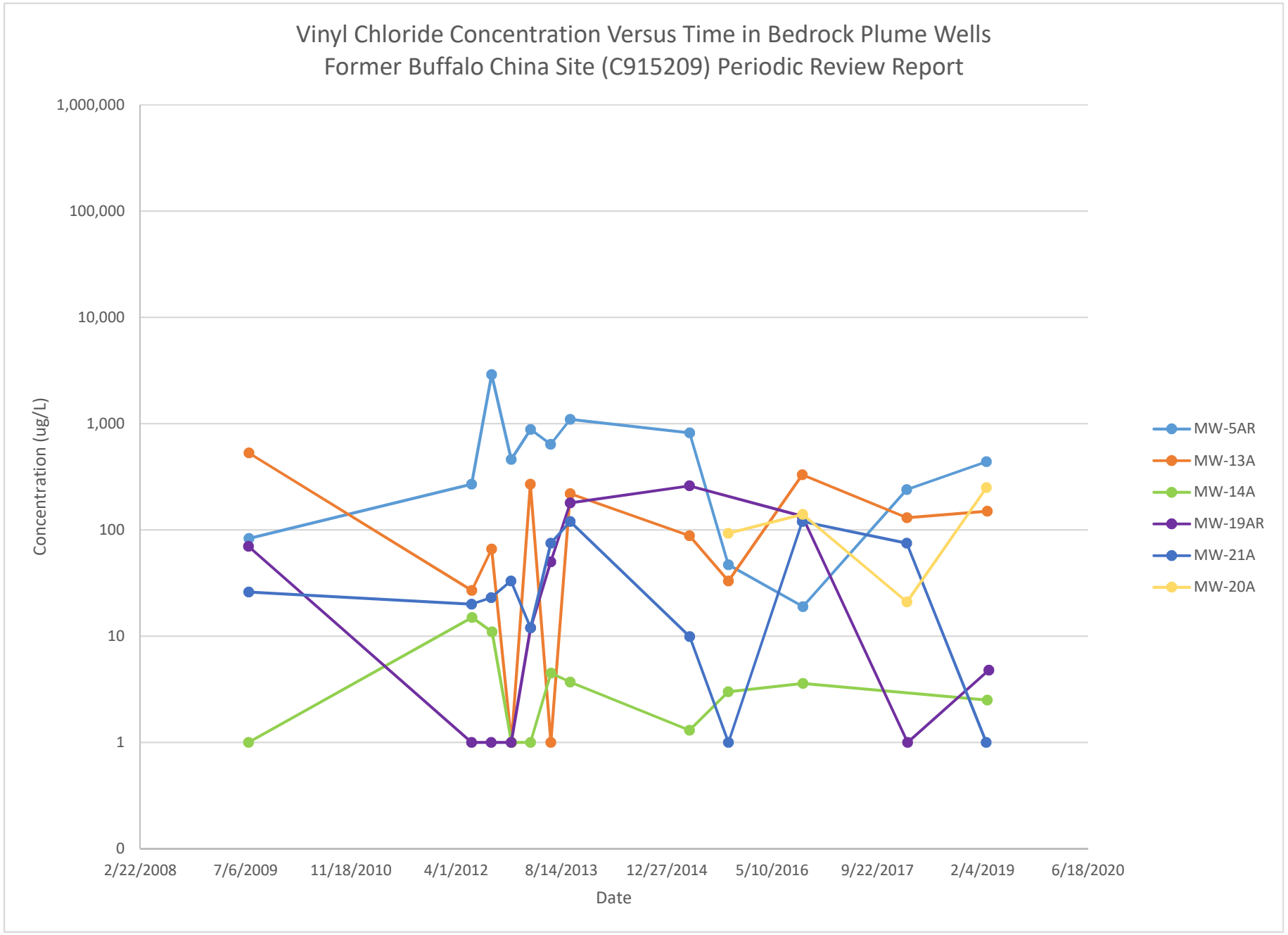
MW-20A


Vinyl Chloride Concentration Versus Time in Bedrock Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
Concentration (ug/L)
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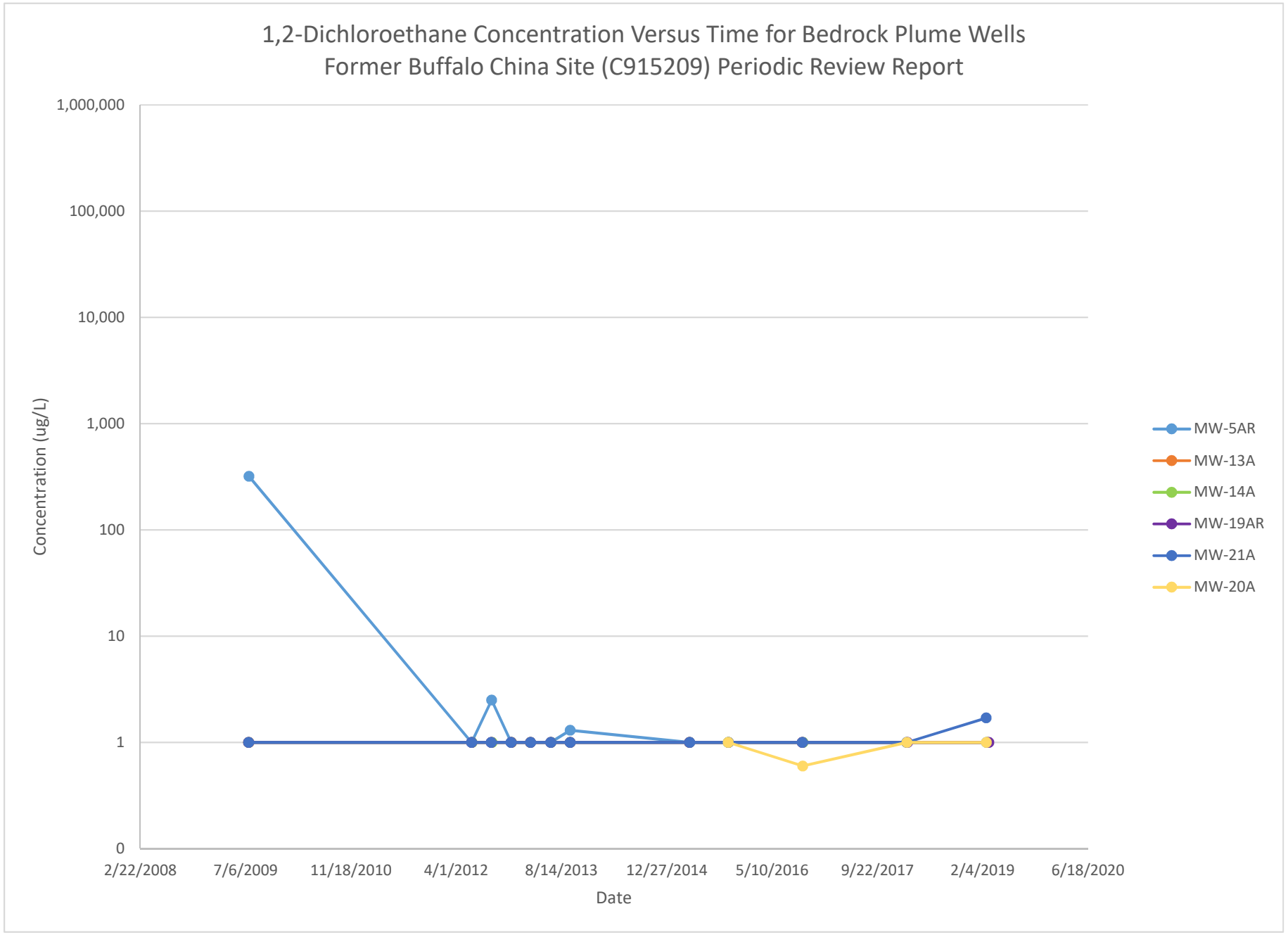
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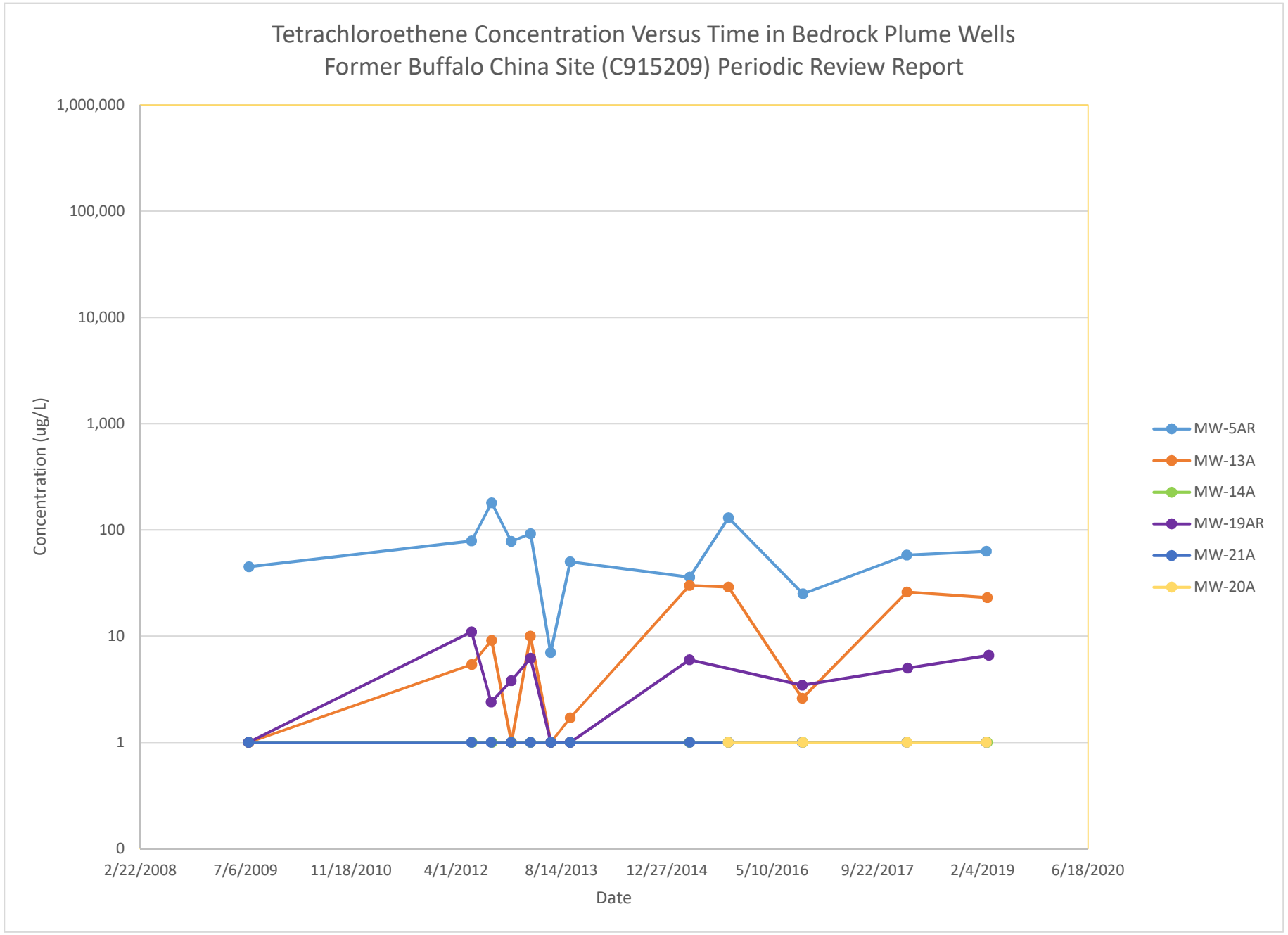
Tetrachloroethene Concentration Versus Time in Bedrock Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
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Concentration (ug/L)
2/22/2008
7/6/2009
11/18/2010
4/1/2012
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12/27/2014
5/10/2016
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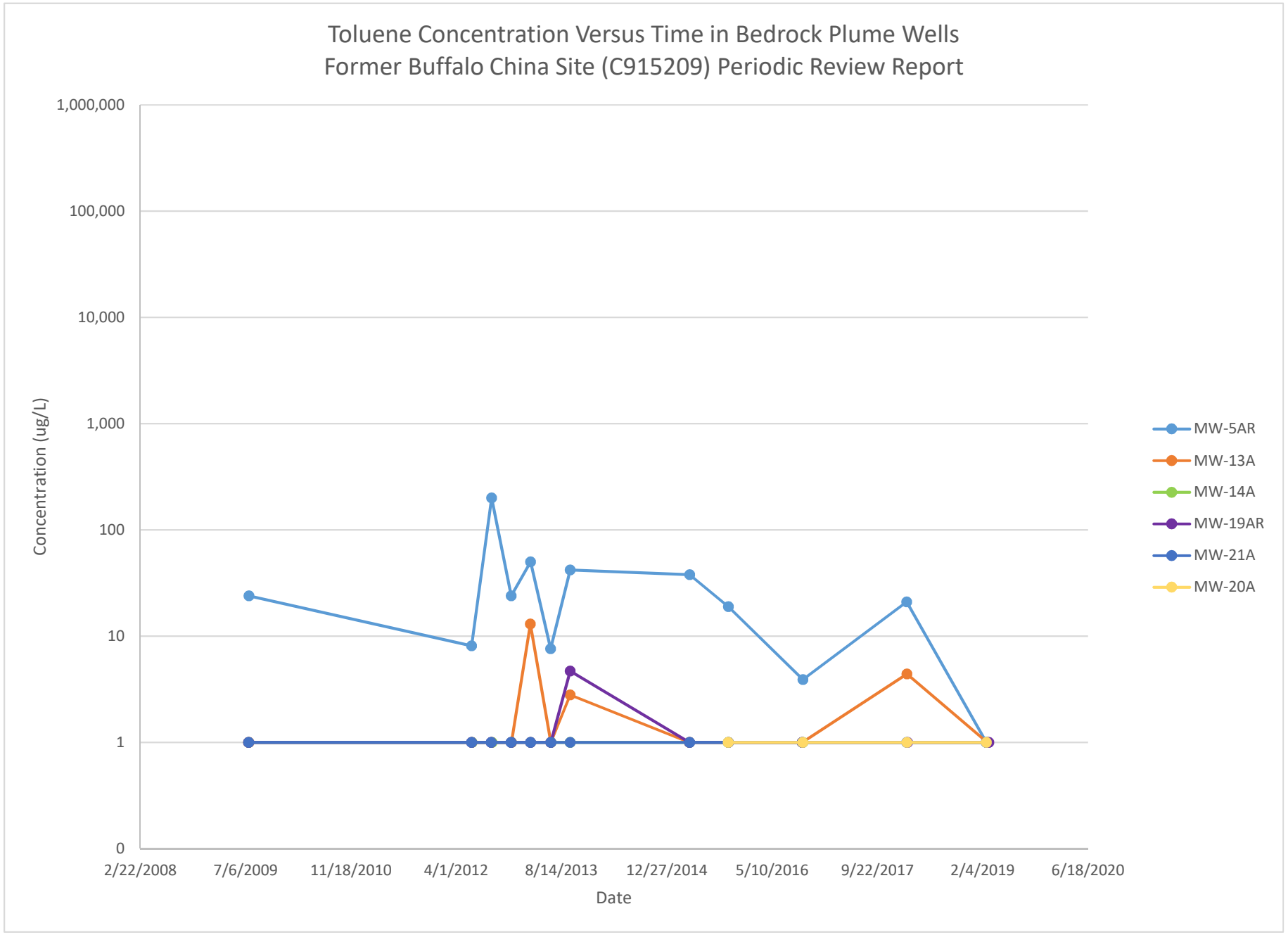
Toluene Concentration Versus Time in Bedrock Plume Wells
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10
1
0
Concentration (ug/L)
2/22/2008
7/6/2009
11/18/2010
4/1/2012
8/14/2013
12/27/2014
5/10/2016
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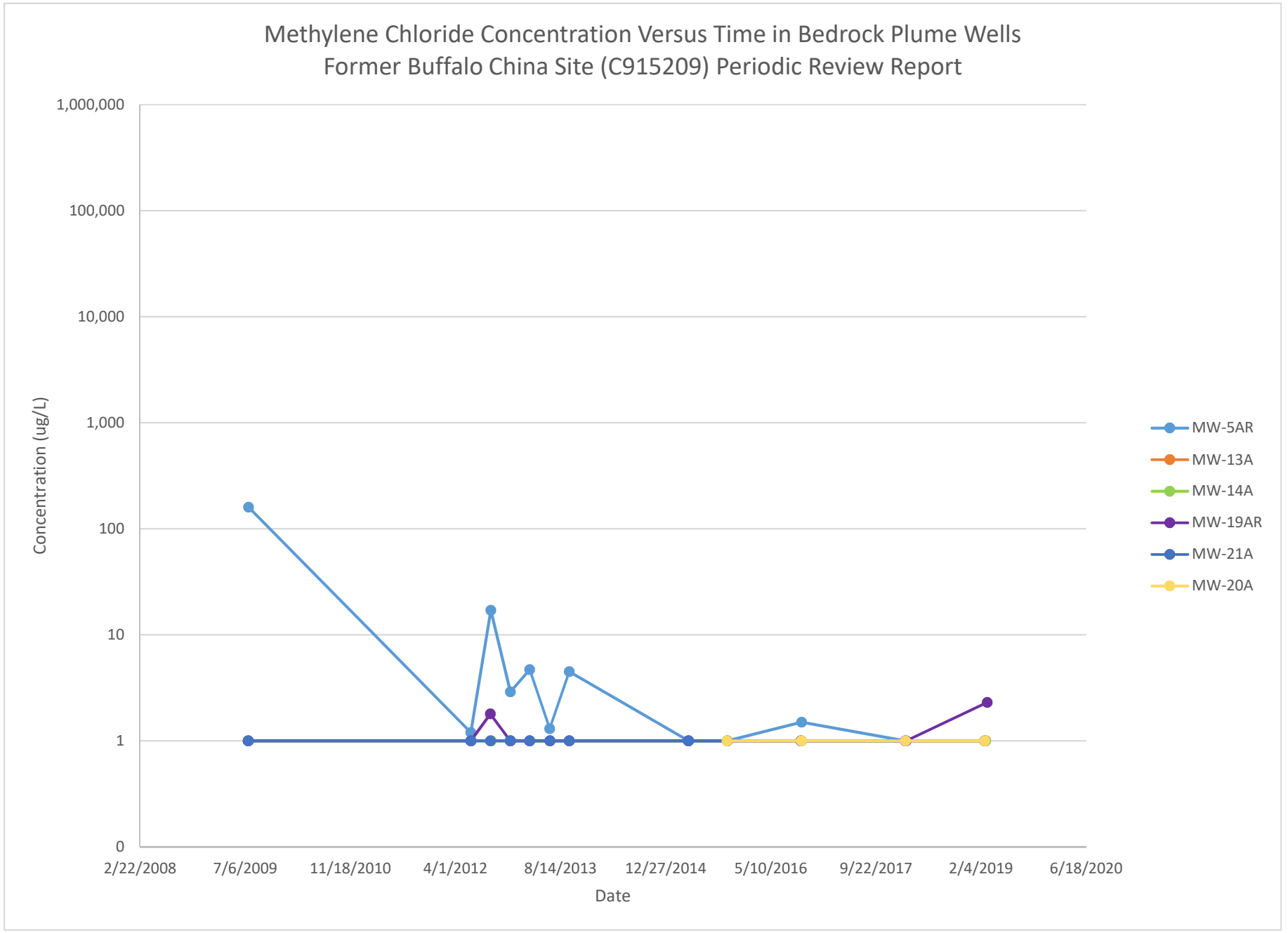
MW-20A


Methylene Chloride Concentration Versus Time in Bedrock Plume Wells
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Concentration (ug/L)
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7/6/2009
11/18/2010
4/1/2012
8/14/2013
12/27/2014
5/10/2016
9/22/2017
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6/18/2020
Date
MW-5AR
MW-13A
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MW-21A
MW-20A

Appendix G
PRR Certification Form

Enclosure 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **C915209**

Site Name Former Buffalo China Site

Site Address: 51 Hayes Place Zip Code: 14210
City/Town: Buffalo
County: Erie
Site Acreage: 9.730

Reporting Period: February 28, 2018 to February 28, 2019

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Industrial	X	☐
7. Are all ICs/ECs in place and functioning as designed?	X	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

	Box 2A	
	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	☒
If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.		
9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	☒	☐
If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.		

SITE NO. C915209	**Box 3**
Description of Institutional Controls	

Parcel	Owner	Institutional Control
123.09-4-16.2	Scott Brady	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan

INSTITUTIONAL CONTROLS (ICs):

1. The property can be used for industrial use only.
2. Prohibition of use of groundwater.
3. Prohibition of gardening and farming.
4. Annual Certification

ENGINEERING CONTROLS (ECs):

1. Implementation of the Site Management Plan for:
a. Cover System monitoring and maintenance.
b. Soils management and excavation at site area.
c. OM&M of groundwater treatment system.
d. Annual Reporting.

123.09-4-17	Scott Brady	IC/EC Plan Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan O&M Plan

INSTITUTIONAL CONTROLS (ICs):

1. The property can be used for industrial use only.
2. Prohibition of use of groundwater.
3. Prohibition of gardening and farming.
4. Annual Certification

ENGINEERING CONTROLS (ECs):

1. Implementation of the Site Management Plan for:
a. Cover System monitoring and maintenance.
b. Soils management and excavation at site area.
c. OM&M of groundwater treatment system.
d. Annual Reporting.

123.09-4-2	Scott Brady	IC/EC Plan Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan O&M Plan

INSTITUTIONAL CONTROLS (ICs):

1. The property can be used for industrial use only.

2. Prohibition of use of groundwater.
3. Prohibition of gardening and farming.
4. Annual Certification

ENGINEERING CONTROLS (ECs):

1. Implementation of the Site Management Plan for:
a. Cover System monitoring and maintenance.
b. Soils management and excavation at site area.
c. OM&M of groundwater treatment system.
d. Annual Reporting.

123.38-2-1.1 Scott Brady

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
O&M Plan
IC/EC Plan

INSTITUTIONAL CONTROLS (ICs):

1. The property can be used for industrial use only.
2. Prohibition of use of groundwater.
3. Prohibition of gardening and farming.
4. Annual Certification

ENGINEERING CONTROLS (ECs):

1. Implementation of the Site Management Plan for:
a. Cover System monitoring and maintenance.
b. Soils management and excavation at site area.
c. OM&M of groundwater treatment system.
d. Annual Reporting.

123.38-2-39 Scott Brady

IC/EC Plan
Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
O&M Plan

INSTITUTIONAL CONTROLS (ICs):

1. The property can be used for industrial use only.
2. Prohibition of use of groundwater.
3. Prohibition of gardening and farming.
4. Annual Certification

ENGINEERING CONTROLS (ECs):

1. Implementation of the Site Management Plan for:
a. Cover System monitoring and maintenance.
b. Soils management and excavation at site area.
c. OM&M of groundwater treatment system.
d. Annual Reporting.

123.38-3-1 Scott Brady

IC/EC Plan
Ground Water Use Restriction

Soil Management Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
O&M Plan

INSTITUTIONAL CONTROLS (ICs):

1. The property can be used for industrial use only.
2. Prohibition of use of groundwater.
3. Prohibition of gardening and farming.
4. Annual Certification

ENGINEERING CONTROLS (ECs):

1. Implementation of the Site Management Plan for:
a. Cover System monitoring and maintenance.
b. Soils management and excavation at site area.
c. OM&M of groundwater treatment system.
d. Annual Reporting.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
123.09-4-16.2	Groundwater Treatment System Cover System
123.09-4-17	Groundwater Treatment System Cover System
123.09-4-2	Groundwater Treatment System Cover System
123.38-2-1.1	Groundwater Treatment System Cover System
123.38-2-39	Groundwater Treatment System Cover System
123.38-3-1	Groundwater Treatment System Cover System

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
X	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. C915209

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Jon Williams (print name) at 690 Delaware Avenue Buffalo, NY 14209 (print business address)

am certifying as Remedial Party (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification — Date: 3/29/19

IC/EC CERTIFICATIONS

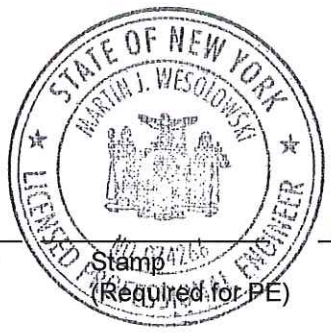
Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Martin Wesolowski at 690 Delaware Ave Buffalo NY 14209,
print name print business address

am certifying as a Professional Engineer for the Remedial Party
(Owner or Remedial Party)



Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

3/28/2019
Date