2020 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 - March 9, 2021

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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). The building onsite is currently being used for a curling center, a distillery manufacturing spirits, and warehousing. 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 August 2020 and the Site Inspection conducted November 5, 2020. 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 November 5, 2020. The following sections discuss the findings of the 2020 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). The SVI mitigation system was last inspected in April 2015.

LiRo 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, however, the did not provide contact information or access. Copies of the access request letters are 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 the August 2020 groundwater sampling and the Site-wide inspection performed on November 5, 2020. 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, concrete collars, 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. A few wells (IW-11, IW-14 and IW-15) have cracks in the concrete surface collars. Two wells (MW-22 and MW-22A) could not be located. These are off-site wells located adjacent to a newly constructed community center building and are believed to have been covered or destroyed during construction of the community center. Two wells (MW-15A and MW-14A) could not be accessed for inspection. MW-15A is located on private property at 54 Lester Street and MW-14A is located on private property at 103 Harrison Street. The 54 Lester Street 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 both property owners in-person, however, the owners were 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 electronic 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

Twelve 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, February 2019 and August 2020. 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. Purge Logs are presented in Appendix H.

Four monitoring wells, MW-14A, MW-15A, MW-22, and MW-22A were not sampled during the August 2020 groundwater sampling event. As noted in Section 4.2.1 of this report, these wells could not be accessed or located.

4.3 Groundwater Data Evaluation

The groundwater analytical data generated during this reporting period (August 2020) 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 was conducted by a qualified third party data validator. Data Usability Summary Reports (DUSRs) are attached as Appendix E.

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 and toluene in MW-10, shows that all results for VOCs in August 2020 were either non-detect or below the NYS groundwater cleanup standards. At MW-7A, vinyl chloride was detected at 24 µg/L (the NYS Standard for vinyl chloride is 2 µg/L) and cis-1,2-dichloroethene was detected at 160 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.

At MW-10, toluene was detected at 83 µg/L (the NYS Standard for toluene is 5 µg/L). Toluene has historically been intermittently detected at concentrations exceeding NYS groundwater cleanup standards at MW-10.

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 August 2020 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 August 2020 concentrations generally indicate an increase in VOC concentrations in these wells. Notable exceptions to the increases are decreases in TCE, trans-1,2-DCE, cis-1,2-DCE, vinyl chloride and acetone in MW-11, decreases in PCE at MW-19R and decreases of acetone in all of the overburden plume wells.

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 August 2020 concentrations indicate minor fluctuations of VOC concentrations in these wells. Notable exceptions are decreases in concentrations of TCE and trans-1,2-DCE in MW-19AR and MW-21A, decreases in trans-1,2-DCE in MW-13A, decreases in vinyl chloride in MW-13A and MW-5AR, increases in vinyl chloride in MW-19AR and MW-21A, and increases in toluene in MW-5AR and MW-13A.

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 2 of the 9 plume wells that were sampled. Sodium persulfate was detected at a concentration of 2.54 milligrams per liter (mg/L) in both of the samples with detections.

Overburden well pH values ranged from 7.57 to 8.02 standard units (s.u.) and bedrock well pH values ranged from 6.90 to 7.71 s.u..

5.0 Conclusions and Recommendations

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

- 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 and toluene at MW-10, VOCs in the perimeter wells are either non-detect or below NYS groundwater standards, indicating that the plume has not migrated beyond the previously 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-11, and MW-19R). The total VOC concentration of 4,963 µg/L in MW-6 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 six bedrock plume wells (MW-19AR and MW-21A). Total VOC concentrations of 1,814.2 µg/L in MW-20A is very near the target concentration of 1,000 µg/L. The total VOC concentrations of 57,994 µg/L in MW-5AR and 8,214 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 two of the six bedrock plume wells sampled at a concentration of 2.54 mg/L.
- Groundwater pH was below 10.5 s.u. in all monitoring wells.

The identified maintenance issues (minor well pad and road box issues) in the 2019 PRR were addressed. New bolts were installed on wells missing bolts and a new lid was installed on IW-25. Monitoring wells MW-22 and MW-22A were not located and are believed to be destroyed. LiRo will continue attempts to access to monitoring well MW-14A and MW-15A so that they can be included in future groundwater monitoring events and to 127 Harrison Street to inspect the SVI mitigation system.

Based on the groundwater monitoring data, the remedial actions completed have been 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

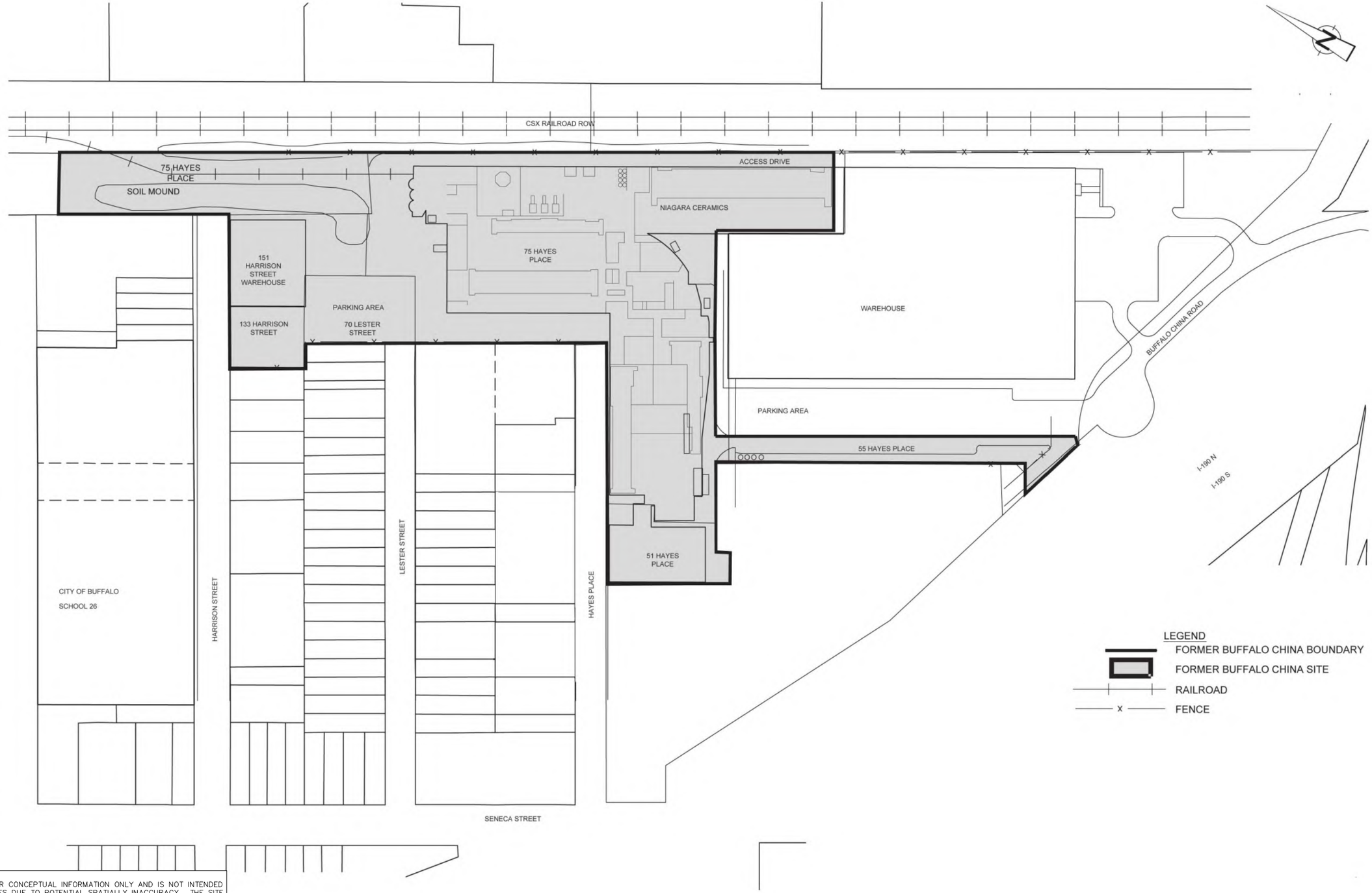
The PRR Certification Form is attached as Appendix G.

7.0 Corrective Measures

The Certifying Period was extended due to a combination of causes. In February/early March, LiRo had not received approval to proceed so the required sampling could not be conducted. Subsequently, the COVID lockdown was implemented causing further delay.

To address the curling center change in site use, LiRo will prepare a Corrective Measures Work Plan (CWMP) and submit the CWMP to NYSDEC by March 9, 20201.

Figures



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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:	A.M.K.
CLIENT:	HAYES PLACE MANAGEMENT GROUP, INC.
DATE:	NOVEMBER 2020
SCALE:	NOT TO SCALE
JOB TITLE AND LOCATION:	FORMER BUFFALO CHINA
DRAWING TITLE:	SITE LAYOUT
LIRO JOB NO.:	16–344–1389
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FIGURE NO.	2.1

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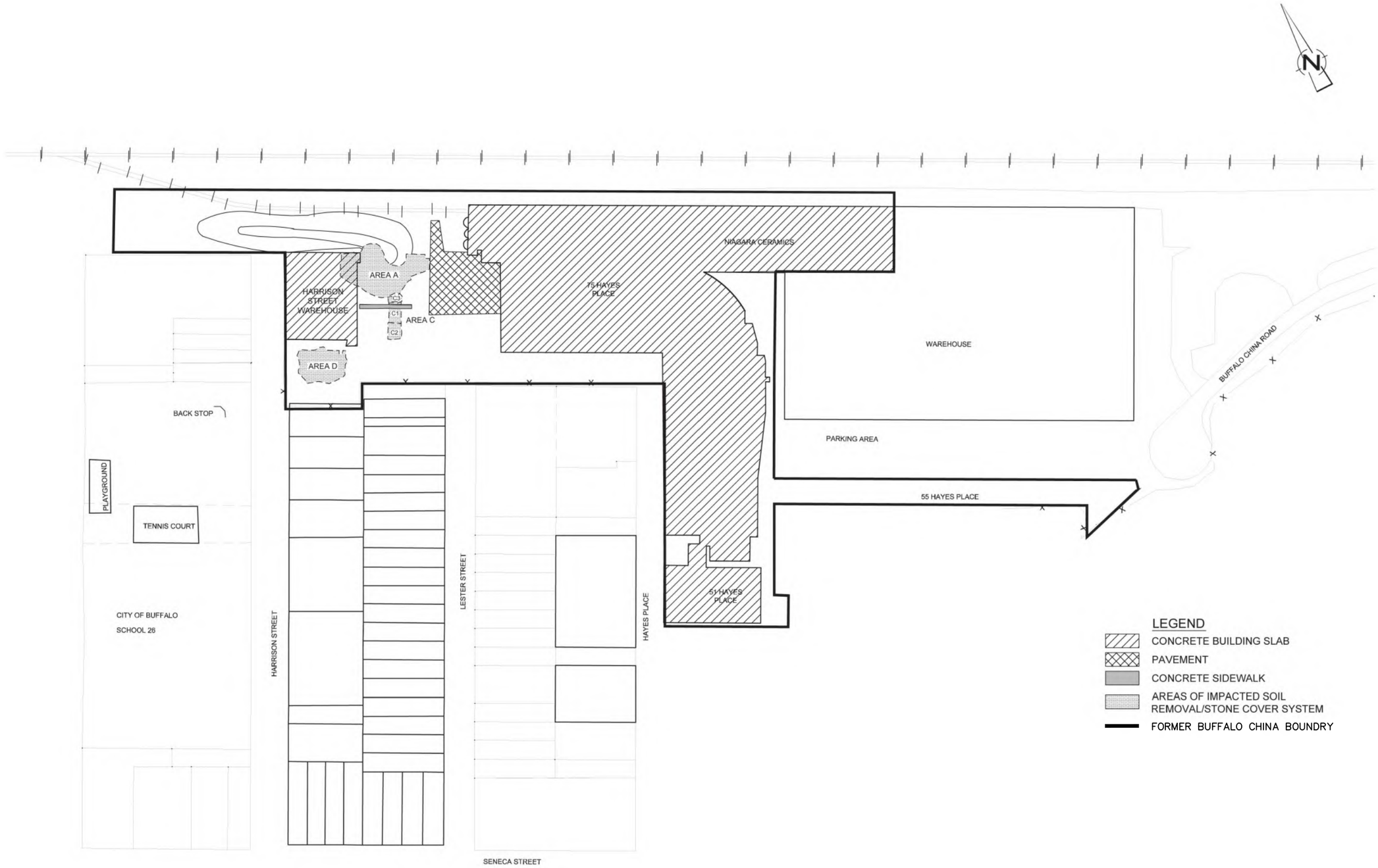

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NO.	DATE	DESCRIPTION
		REVISIONS

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

PROJ. ENG.:	
DESIGNED BY:	
CHECKED BY:	
DRAWN BY:	A.M.K.
CLIENT:	HAYES PLACE MANAGEMENT GROUP, INC.
DATE:	NOVEMBER 2020
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DRAWING TITLE:	EXISTING SITE COVER TO BE MAINTAINED
LIRO JOB NO.:	16-344-1389
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FIGURE NO.	2.2

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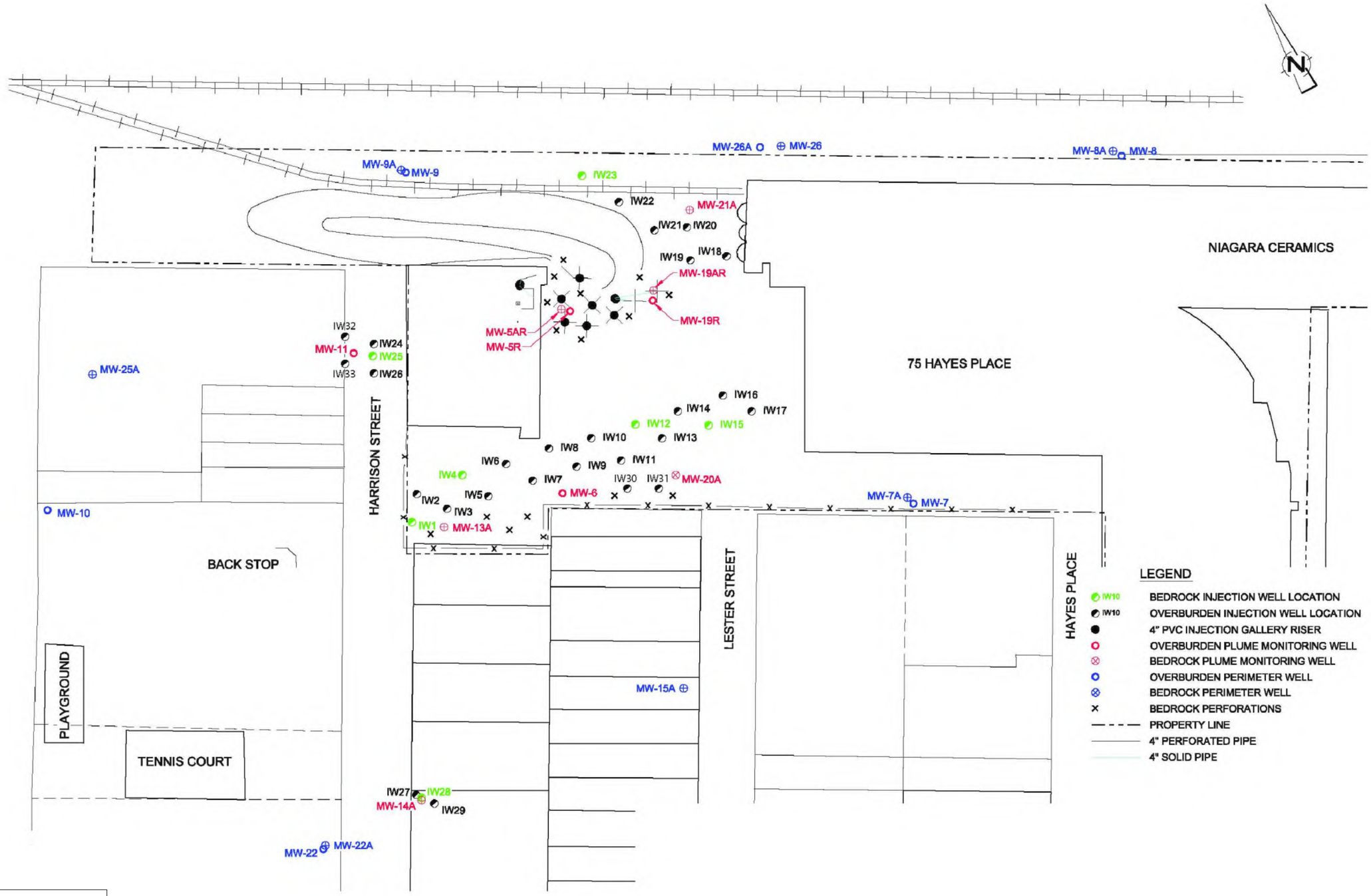

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NO.	DATE	DESCRIPTION
		REVISIONS

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
DESIGNED BY:			SHEET 4 OF 4
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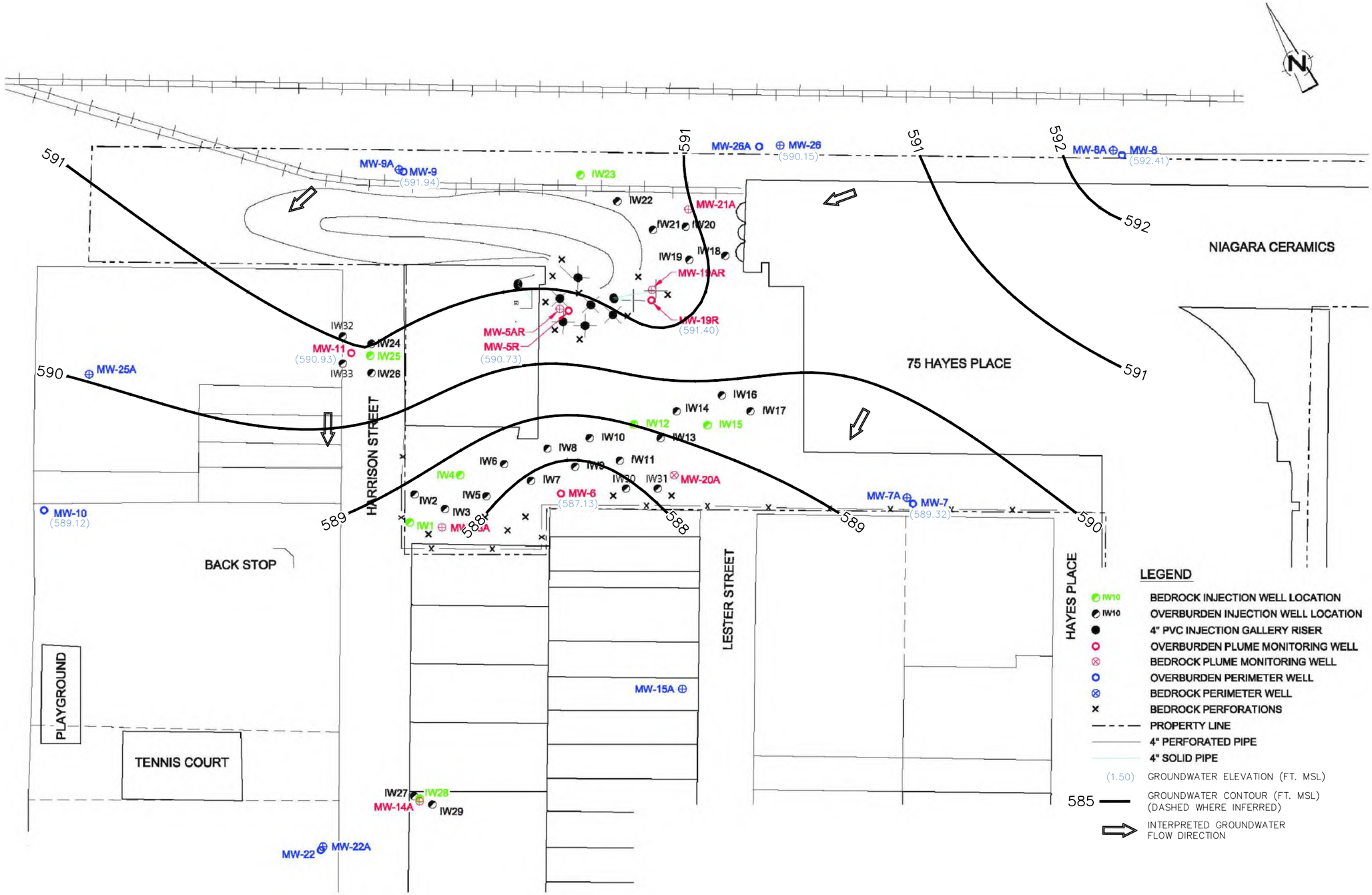

LEGEND

- 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)
- INTERPRETED GROUNDWATER FLOW DIRECTION

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:	A.M.K.
CLIENT:	HAYES PLACE MANAGEMENT GROUP, INC.
DATE:	NOVEMBER 2020
SCALE:	NOT TO SCALE
JOB TITLE AND LOCATION:	FORMER BUFFALO CHINA
LIRO JOB NO.:	16-344-1389
SHEET OF	5 6
DRAWING TITLE:	OVERBURDEN GROUNDWATER SURFACE ELEVATION CONTOURS - FEBRUARY 2019
FIGURE NO.	4.1

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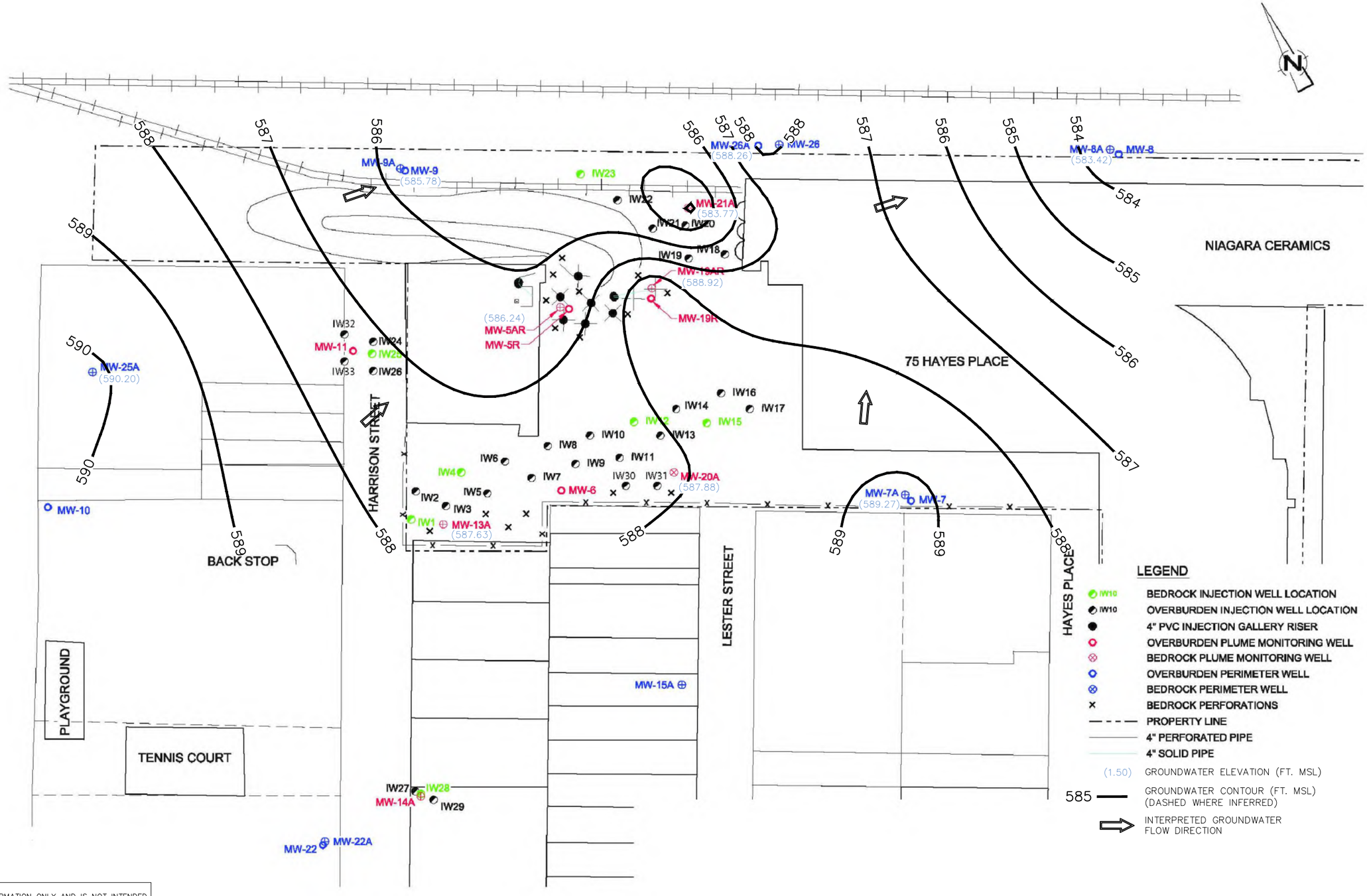

LEGEND

- 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)
- INTERPRETED GROUNDWATER FLOW DIRECTION

SOURCE:
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LIRO JOB NO.:	16-344-1389
SHEET OF	6 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
AUGUST 2020
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	8/6/2020	598.10	7.37	590.73
MW-6	8/6/2020	594.15	7.02	587.13
MW-7	8/4/2020	592.03	2.71	589.32
MW-8	8/5/2020	594.00	1.59	592.41
MW-9	8/5/2020	594.81	2.87	591.94
MW-10	8/5/2020	596.45	7.33	589.12
MW-11	8/6/2020	595.04	4.11	590.93
MW-19R	8/11/2020	593.28	1.88	591.40
MW-22	--	592.34	NM	NA
MW-25	--	598.13	NM	NA
MW-26	8/4/2020	593.22	3.07	590.15
Bedrock				
MW-5AR	8/6/2020	596.29	10.05	586.24
MW-7A	8/4/2020	592.31	3.04	589.27
MW-8A	8/5/2020	594.10	10.68	583.42
MW-9A	8/5/2020	594.94	9.16	585.78
MW-13A	8/6/2020	594.75	7.12	587.63
MW-14A	--	593.37	NM	NA
MW-15A	--	592.70	NM	NA
MW-19AR	8/11/2020	593.40	4.48	588.92
MW-20A	8/6/2020	593.06	5.18	587.88
MW-21A	8/11/2020	590.98	7.21	583.77
MW-22A	--	592.23	NM	NA
MW-25A	8/5/2020	598.13	7.93	590.20
MW-26A	8/4/2020	593.05	4.79	588.26

Notes:
AMSL - Above Mean Sea Level

TABLE 4.2

ANALYTICAL RESULTS SUMMARY
VOCs in PERIMETER WELLS - AUGUST 2020
FORMER BUFFALO CHINA SITE (No. C915209)

				Perimeter Overburden Monitoring Well	*Perimeter Bedrock Monitoring Well*	*Perimeter Overburden Monitoring Well*	*Perimeter Bedrock Monitoring Well*	*Perimeter Overburden Monitoring Well*	*Perimeter Bedrock Monitoring Well*	*Perimeter Bedrock Monitoring Well*	*Perimeter Overburden Monitoring Well*	*Perimeter Bedrock Monitoring Well*	*Perimeter Overburden Monitoring Well*	*Perimeter Bedrock Monitoring Well*	*Perimeter Bedrock Monitoring Well*	*Perimeter Overburden Monitoring Well*	*Perimeter Bedrock Monitoring Well*
			Location ID:	*MW-7*	*MW-7A*	*MW-8*	*MW-8A*	*MW-9*	*MW-9A*	*MW-9A DUP*	*MW-10*	*MW-15A*	*MW-22*	*MW-22A*	*MW-25A*	*MW-26*	*MW-26A*
			Sample ID:	*MW-7*	*MW-7A*	*MW-8*	*MW-8A*	*MW-9*	*MW-9A*	*MW-9A DUP*	*MW-10*				*MW-25A*	*MW-26*	*MW-26A*
			Sample Date:	*8/4/2020*	*8/4/2020*	*8/5/2020*	*8/5/2020*	*8/5/2020*	*8/5/2020*	*8/5/2020*	*8/6/2020*				*8/5/2020*	*8/4/2020*	*8/4/2020*
		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	ND	NS	NS	NS	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
1,1,2-Trichloroethane	ug/L	NC	1	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
1,1-Dichloroethene (1,1-DCE)	ug/L	NC	5	ND	0.24 *J*	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
1,2,3-Trichlorobenzene	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
1,2,4-Trichlorobenzene	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	NC	0.04	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
1,2-Dibromoethane	ug/L	NC	0.0006	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
1,2-Dichlorobenzene	ug/L	NC	3	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
1,2-Dichloroethane	ug/L	NC	0.6	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
1,2-Dichloropropane	ug/L	NC	1	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
1,3-Dichlorobenzene	ug/L	NC	3	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
1,4-Dichlorobenzene	ug/L	NC	3	ND	ND	ND	ND	ND	ND	3.0 *J*	NS	NS	NS	NS	ND	ND	ND
1,4-Dioxane	ug/L	NC	NC	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
2-Butanone (MEK)	ug/L	50	NC	ND	ND	ND	ND	ND	ND	ND	1.9 *J*	NS	NS	NS	ND	ND	ND
2-Hexanone	ug/L	50	NC	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
4-Methyl-2-pentanone	ug/L	NC	NC	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Acetone	ug/L	50	NC	ND	ND	ND	ND	ND	ND	ND	8.9 *J*	NS	NS	NS	ND	ND	ND
Benzene	ug/L	NC	1	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Bromochloromethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Bromodichloromethane	ug/L	50	NC	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Bromoform	ug/L	50	NC	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Bromomethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Carbon Disulfide	ug/L	60	60	ND	ND	ND	ND	ND	8.4 *J*	5.8 *J*	2.8 *J*	NS	NS	NS	ND	ND	ND
Carbon Tetrachloride	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Chlorobenzene	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Chloroethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Chloroform	ug/L	NC	7	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Chloromethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Cyclohexane	ug/L	NC	NC	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Dibromochloromethane	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Dichlorodifluoromethane (CFC 12)	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Methylene Chloride (Dichloromethane)	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Ethylbenzene	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Isopropylbenzene (Cumene)	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Methyl Acetate	ug/L	NC	NC	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Methyl tert-Butyl Ether	ug/L	10	NC	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Methylcyclohexane	ug/L	NC	NC	ND	0.22 *J*	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Styrene	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Tetrachloroethene (PCE)	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Toluene	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	**83 JH**	NS	NS	NS	ND	ND	ND
Trichloroethene (TCE)	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	0.29 *J*	ND	ND
Trichlorofluoromethane (CFC 11)	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Vinyl Chloride	ug/L	NC	2	ND	**24**	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
cis-1,2-Dichloroethene	ug/L	NC	5	ND	**160**	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
cis-1,3-Dichloropropene	ug/L	NC	NC	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
m,p-Xylenes	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
o-Xylene	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
trans-1,2-Dichloroethene	ug/L	NC	5	ND	0.78 *J*	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
trans-1,3-Dichloropropene	ug/L	NC	NC	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND
Total VOCs	ug/L	NC	NC	ND	185.2	ND	ND	ND	8.4	5.8	99.6	NS	NS	NS	0.29	ND	ND
Field Parameters																	
Conductivity, field	mS/cm	NC	NC	0.593	1.64	0.829	0.699	1.54	1.48	1.48	1.74	NS	NS	NS	0.583	2.49	1.00
Dissolved oxygen (DO), field	mg/L	NC	NC	9.73	9.96	0	0	0	0	0	0	NS	NS	NS	0	6.26	0
Oxidation reduction potential (ORP), field	millivolts	NC	NC	-90	-65	-47	-156	123	-222	-222	-104	NS	NS	NS	-42	-41	38
pH, field	s.u.	NC	6.5-8.5	7.73	7.8	6.94	8.03	6.99	7.35	7.35	7.1	NS	NS	NS	6.92	7.93	8.16
Temperature, field	Deg. C	NC	NC	18.08	16.75	18.16	14.3	17.39	12.92	12.92	18.79	NS	NS	NS	18.22	18.35	19.58
Turbidity, field	NTU	NC	NC	222	117	23.9	109	27.5	111	111	482	NS	NS	NS	33.3	175	35.5

Notes:
1.0 - Exceeds criteria
ND - Not detected
J - Estimated concentration
H- High
NS - Not sampled
NC - No criteria
ug/L - Micrograms per liter
mg/L - Milligrams per liter

TABLE 4.3

ANALYTICAL RESULTS SUMMARY
VOCs in OVERBURDEN PLUME WELLS - AUGUST 2020
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:	***8/6/2020***	***8/6/2020***	***8/6/2020***	***8/11/2020***
		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	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/L	NC	1	ND	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	**32 JH**	ND	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	ND	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	ND	ND	ND	ND
Benzene	ug/L	NC	1	ND	**2.0 J**	ND	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	ND	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	ND	ND	4.4 J	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	5	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
Methyl tert-Butyl Ether	ug/L	10	NC	ND	ND	ND	ND
Methylcyclohexane	ug/L	NC	NC	ND	ND	ND	ND
Styrene	ug/L	NC	5	ND	ND	ND	ND
Tetrachloroethene (PCE)	ug/L	NC	5	1.5 J	ND	ND	0.31 J
Toluene	ug/L	NC	5	ND	ND	ND	ND
Trichloroethene (TCE)	ug/L	NC	5	**460**	**140**	**95**	**82**
Trichlorofluoromethane (CFC 11)	ug/L	NC	5	ND	ND	ND	ND
Vinyl Chloride	ug/L	NC	2	ND	**570**	ND	1.4 J
cis-1,2-Dichloroethene	ug/L	NC	5	**190**	**4200 J**	**150**	**63 J**
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	**32 JH**	**19 H**	2.5 JH	**5.2 J**
trans-1,3-Dichloropropene	ug/L	NC	NC	ND	ND	ND	ND
Total VOCs	ug/L	NC	NC	683.5	4963	251.9	151.9
Field Parameters							
Conductivity, field	mS/cm	NC	NC	0.797	1.68	0.514	0.78
Dissolved oxygen (DO), field	mg/L	NC	NC	0	0	0	0
Oxidation reduction potential (ORP), field	millivolts	NC	NC	20	-204	47	161
pH, field	s.u.	NC	6.5-8.5	8.02	7.67	7.62	7.57
Temperature, field	Deg. C	NC	NC	21.26	13.83	20.51	21.1
Turbidity, field	NTU	NC	NC	434	33.1	52.3	75.6
Sodium Persulfate	mg/L	NC	NC	0	0	0	0

Notes:
1.0 - Exceeds criteria
ND - Not detected
J - Estimated concentration
D - Diluted
NC - No criteria
ug/L - Micrograms per liter
mg/L - Milligrams per liter

TABLE 4.4

ANALYTICAL RESULTS SUMMARY
VOCs in BEDROCK PLUME WELLS - AUGUST 2020
FORMER BUFFALO CHINA SITE (No. C915209)

				Plume Bedrock Monitoring Well	*Plume Bedrock Monitoring Well*	*Plume Bedrock Monitoring Well*	*Plume Bedrock Monitoring Well*	*Plume Bedrock Monitoring Well*	*Plume Bedrock Monitoring Well*
			Location ID:	*MW-5AR*	*MW-13A*	*MW-14A*	*MW-19AR*	*MW-20A*	*MW-21A*
			Sample ID:	*MW-5AR*	*MW-13A*		*MW-19AR*	*MW-20A*	*MW-21*
			Sample Date:	*8/6/2020*	*8/6/2020*		*8/11/2020*	*8/6/2020*	*8/11/2020*
		New York State Water Quality							
Parameters	*Units*	*Guidance Values*	*Standards*						
Volatile Organic Analytes									
1,1,1-Trichloroethane (TCA)	ug/L	NC	5	2.8 J	ND	NS	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/L	NC	5	**260 J**	**14 J**	NS	ND	ND	ND
1,1,2-Trichloroethane	ug/L	NC	1	**31 J**	ND	NS	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	NC	5	ND	ND	NS	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	ug/L	NC	5	ND	ND	NS	ND	ND	ND
1,1-Dichloroethene (1,1-DCE)	ug/L	NC	5	3.3 J	ND	NS	ND	3.6 JH	0.69 JH
1,2,3-Trichlorobenzene	ug/L	NC	5	ND	ND	NS	ND	ND	ND
1,2,4-Trichlorobenzene	ug/L	NC	5	ND	ND	NS	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	NC	0.04	ND	ND	NS	ND	ND	ND
1,2-Dibromoethane	ug/L	NC	0.0006	ND	ND	NS	ND	ND	ND
1,2-Dichlorobenzene	ug/L	NC	3	ND	ND	NS	ND	ND	0.28 J
1,2-Dichloroethane	ug/L	NC	0.6	ND	ND	NS	ND	ND	ND
1,2-Dichloropropane	ug/L	NC	1	ND	ND	NS	ND	ND	ND
1,3-Dichlorobenzene	ug/L	NC	3	ND	ND	NS	ND	ND	ND
1,4-Dichlorobenzene	ug/L	NC	3	ND	ND	NS	ND	ND	ND
1,4-Dioxane	ug/L	NC	NC	ND	ND	NS	ND	ND	ND
2-Butanone (MEK)	ug/L	50	NC	**63 J**	ND	NS	ND	ND	ND
2-Hexanone	ug/L	50	NC	ND	ND	NS	ND	ND	ND
4-Methyl-2-pentanone	ug/L	NC	NC	ND	ND	NS	ND	ND	ND
Acetone	ug/L	50	NC	**500 J**	ND	NS	ND	ND	ND
Benzene	ug/L	NC	1	**3.3 J**	ND	NS	ND	ND	0.27 J
Bromochloromethane	ug/L	NC	5	ND	ND	NS	ND	ND	ND
Bromodichloromethane	ug/L	50	NC	ND	ND	NS	ND	ND	ND
Bromoform	ug/L	50	NC	ND	ND	NS	ND	ND	ND
Bromomethane	ug/L	NC	5	ND	ND	NS	ND	ND	ND
Carbon Disulfide	ug/L	60	60	26 J	ND	NS	ND	ND	ND
Carbon Tetrachloride	ug/L	NC	5	ND	ND	NS	ND	ND	ND
Chlorobenzene	ug/L	NC	5	ND	ND	NS	ND	ND	ND
Chloroethane	ug/L	NC	5	ND	ND	NS	ND	ND	ND
Chloroform	ug/L	NC	7	ND	ND	NS	ND	ND	ND
Chloromethane	ug/L	NC	5	**12 J**	ND	NS	ND	ND	ND
Cyclohexane	ug/L	NC	NC	ND	ND	NS	2.1 J	ND	ND
Dibromochloromethane	ug/L	NC	5	ND	ND	NS	ND	ND	ND
Dichlorodifluoromethane (CFC 12)	ug/L	NC	5	ND	ND	NS	ND	ND	ND
Methylene Chloride (Dichloromethane)	ug/L	NC	5	ND	ND	NS	ND	ND	ND
Ethylbenzene	ug/L	NC	5	ND	ND	NS	ND	ND	ND
Isopropylbenzene (Cumene)	ug/L	NC	5	ND	ND	NS	ND	ND	ND
Methyl Acetate	ug/L	NC	NC	ND	ND	NS	ND	ND	ND
Methyl tert-Butyl Ether	ug/L	10	NC	ND	ND	NS	ND	ND	ND
Methylcyclohexane	ug/L	NC	NC	ND	ND	NS	1.9 J	ND	ND
Styrene	ug/L	NC	5	ND	ND	NS	ND	ND	ND
Tetrachloroethene (PCE)	ug/L	NC	5	**38 J**	**19 J**	NS	ND	ND	ND
Toluene	ug/L	NC	5	**15 J**	ND	NS	ND	ND	ND
Trichloroethene (TCE)	ug/L	NC	5	**32000 J**	**3200**	NS	**18**	2.5 J	0.72 J
Trichlorofluoromethane (CFC 11)	ug/L	NC	5	ND	ND	NS	ND	ND	ND
Vinyl Chloride	ug/L	NC	2	**140 J**	**61 J**	NS	**37**	**300**	**74**
cis-1,2-Dichloroethene	ug/L	NC	5	**23000 J**	**4800**	NS	**240**	**1500**	**170**
cis-1,3-Dichloropropene	ug/L	NC	NC	ND	ND	NS	ND	ND	ND
m,p-Xylenes	ug/L	NC	5	ND	ND	NS	ND	ND	ND
o-Xylene	ug/L	NC	5	ND	ND	NS	ND	ND	ND
trans-1,2-Dichloroethene	ug/L	NC	5	**1900 J**	**100 JH**	NS	2.4 J	**8.1 JH**	**5.7**
trans-1,3-Dichloropropene	ug/L	NC	NC	ND	ND	NS	ND	ND	ND
Total VOCs	ug/L	NC	NC	57994.4	8194	NS	301.4	1814.2	251.7
Field Parameters									
Conductivity, field	mS/cm	NC	NC	40.4	1.72	NS	2.14	2.3	2.73
Dissolved oxygen (DO), field	mg/L	NC	NC	0	0	NS	0	0	0
Oxidation reduction potential (ORP), field	millivolts	NC	NC	29	-81	NS	-178	-98	11
pH, field	s.u.	NC	6.5-8.5	6.9	7.56	NS	7.71	7.51	7.55
Temperature, field	Deg. C	NC	NC	16.28	13.79	NS	19.26	13.57	16.75
Turbidity, field	NTU	NC	NC	998	436	NS	803	142	136
Sodium Persulfate	mg/L	NC	NC	2.54	0	NS	0	0	2.54

Notes:
1.0 - Exceeds criteria
ND - Not detected
J - Estimated concentration
H - High
NS - Not sampled
NC – No criteria
ug/L - Micrograms per liter
mg/L - Milligrams per liter

Appendix A
Site Inspection Forms

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

INSPECTION DATE: 11/5/20

INSPECTED BY: A. Kosas

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* X *No* _____

If yes, please describe the changes: Community Center built on Harrison Street.

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)	
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: 11/5/20

INSPECTED BY: A. Koons

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: 11/5/20

INSPECTED BY: A. Kenos

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	
MW-13A	(Good)	Fair	Needs Repair	
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: 11/5/26

INSPECTED BY: A. Koons

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	

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	crack in collar
IW-12	(Good)	Fair	Needs Repair	
IW-13	(Good)	Fair	Needs Repair	
IW-14	Good	(Fair)	Needs Repair	cracks in collar
IW-15	Good	(Fair)	Needs Repair	cracks in collar
IW-16	(Good)	Fair	Needs Repair	

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

INSPECTION DATE: 11/5/20

INSPECTED BY: A. Koons

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	
IW-25	(Good)	Fair	Needs Repair	
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 east.

Asphalt cover system, view towards north.

Site Photos

Area C stone cover system, view towards south,

Area A stone cover system, view towards northwest.

Site Photos

Demolished Harrison Street Warehouse, view towards east.

Vicinity of MW-22 and MW-22A that can no longer be located because of Community Center construction, view towards north.

Site Photos

Typical cracked concrete road boxes (see inspection form for list of wells).

New curb box lid for IW-25.

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

September 8, 2020

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. We would like the schedule the inspection for the week of September 14, 2020.

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 Ms. Megan Kuczka, the NYSDEC project manager for the site at (716)-851-7220. Arrangements could also be made to have Ms. Kuczka 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 716-417-9150 or by email at koonsa@liro.com.

Sincerely,

LiRo Engineers, Inc.

Andrew Koons
Geologist

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

October 19, 2020

Ms. Rena 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,

Thank you for signing and returning the access agreement that we sent in order to inspect and test the sub-slab depressurization system that was installed in your basement. We have been attempting to reach you by phone to set up a date and time for the inspection, however, it appears that we do not have a working number for you. If you could please call me at (716) 417-9150 or send me an email at koonsa@liro.com we will set up a date and time that is convenient for you to allow us to inspect the basement system at your home. I have also included a self-addressed stamped envelope that you could use to provide your contact information if that is preferable to you. Simply return the copy of the letter that is enclosed with your preferred method of contact and information so that we can schedule the inspection.

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

We sincerely appreciate your cooperation in this matter.

Sincerely,

LiRo Engineers, Inc.

Andrew Koons
Geologist

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

March 3, 2020

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

7002 2030 0002 1842 3624

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Postage	$ .50
Certified Fee	3.55
Return Reciept Fee (Endorsement Required)	2.85
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 6.90

Postmark Here

Sent To: MR. Richard RUNGE
Street, Apt. No.; or PO Box No.: 127 Harrison Street
City, State, ZIP+4: BUFFALO NY 14210

PS Form 3800, June 2002 — See Reverse for Instructions

7002 2030 0002 1842 3631

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Postage	$ .50
Certified Fee	3.55
Return Reciept Fee (Endorsement Required)	2.85
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 6.90

Postmark Here

Sent To: Ms. Ashley Soto
Street, Apt. No.; or PO Box No.: 54 Lester Street
City, State, ZIP+4: BUFFALO NY 14210

PS Form 3800, June 2002 — See Reverse for Instructions

U.S. Postal Service™
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Domestic Mail Only

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Buffalo, NY 14210

OFFICIAL USE

Certified Mail Fee	$3.55
$	
Extra Services & Fees *(check box, add fee as appropriate)*	$0.00
☐ Return Receipt (hardcopy)	$ $0.00
☐ Return Receipt (electronic)	$ $0.00
☐ Certified Mail Restricted Delivery	$ $0.00
☐ Adult Signature Required	$ $0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.55
$	
Total Postage and Fees	$4.10
$	

0213
33

BUFFALO NY 14213 WESTSIDE STATION SEP 8 2020

Postmark Here

09/08/2020

Sent To

Street and Apt. No., or PO Box No.

City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7019 2280 0000 4919 6869

Appendix D
Laboratory Analytical Reports

August 20, 2020 Service Request No:R2006930

Mr. Stephen Frank
The LiRo Group
690 Delaware Ave.
Buffalo, NY 14209

Laboratory Results for: Buffalo China

Dear Mr.Frank,

Enclosed are the results of the sample(s) submitted to our laboratory August 05, 2020
For your reference, these analyses have been assigned our service request number **R2006930.**

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, 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), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

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

ADDRESS 1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
PHONE +1 585 288 5380 | FAX +1 585 288 8475
ALS Group USA, Corp.
dba ALS Environmental

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

Table of Contents

Table of Contents (continued)

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: R2006930
Date Received: 08/05/2020

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Five water samples were received for analysis at ALS Environmental on 08/05/2020. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Volatiles by GC/MS:

Method 8260C, 08/11/2020: 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) above the MRL 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 08/19/2020

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-7A			Lab ID: R2006930-001			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1-Dichloroethene (1,1-DCE)	0.24	J	0.20	5.0	ug/L	8260C
Methylcyclohexane	0.22	J	0.20	10	ug/L	8260C
Vinyl Chloride	24		0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	160		0.23	5.0	ug/L	8260C
trans-1,2-Dichloroethene	0.78	J	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:**R2006930
Project: Buffalo China/16-344-1389

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2006930-001	MW-7A	8/4/2020	1230
R2006930-002	MW-7	8/4/2020	1310
R2006930-003	MW-26	8/4/2020	1515
R2006930-004	MW-26A	8/4/2020	1420
R2006930-005	Trip Blank	8/4/2020	

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

003319

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	Project Number
Buffalo China	16-344-1389
Project Manager	**Report CC**
Steve Frank	
Company/Address	
LiRo Engineers	
690 Delaware Ave	
Buffalo NY 14209	
Phone #	**Email**
	FrankS@liro.com + KoorsA@liro.com
Sampler's Signature	**Sampler's Printed Name**
Andrew Koors	Andrew Koors

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

PRESERVATIVE: 1

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 _____

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-7A		8/4/20	1230	H_2O	3	X							
MW-7			1310	H_2O	3	X							
MW-26			1515	H_2O	3	X							
MW-26A			1420	H_2O	3	X							
Trip Blank		—	—	H_2O	3	X							

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED NY

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
X 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
Edata ____Yes ____No

INVOICE INFORMATION
PO # 16-344-1389
BILL TO: LiRo Engineers

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Andrew Koors	Signature:	Signature	Signature	Signature	Signature
Printed Name: Andrew Koors	Printed Name: Gregory D. Esmerian	Printed Name	Printed Name	Printed Name	Printed Name
Firm: LiRo Engineers	Firm: ALS	Firm	Firm	Firm	
Date/Time: 8/4/20	Date/Time: 8.5.2020 0915	Date/Time	Date/Time	Date/Time	

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

R2006930 5
The LIRo Group
Buffalo China

Cooler Receipt and Preservation Check Form

R2006930 5
The LIRo Group
Buffalo China

Project/Client Liro Engineers Folder Number

Cooler received on 8-52020 by: RE

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)

3. Temperature Readings Date: 8-52020 Time: 11:12 ID: IR#7 (IR#10) From: Temp Blank (Sample Bottle)

Observed Temp (°C)	6.8						
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 RE on 8520 at 1514

5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 8/5/2020 Time: 1575 by: dw

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	-	-						
		HCl	**	**						

**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: 2554

Explain all Discrepancies/ Other Comments:

* Trip Blank: 1 of 3 vials

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: JR

PC Secondary Review: WI

*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:** R2006930
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2006930-001.01					
	8260C				
		8/5/2020	1524	SMO / GLAFORCE	
		8/5/2020	1533	R-001 / GLAFORCE	
		8/11/2020	1136	In Lab / KRUEST	
		8/11/2020	1143	R-001-S12 / KRUEST	
R2006930-001.02					
		8/5/2020	1524	SMO / GLAFORCE	
		8/5/2020	1533	R-001 / GLAFORCE	
R2006930-001.03					
		8/5/2020	1524	SMO / GLAFORCE	
		8/5/2020	1533	R-001 / GLAFORCE	
R2006930-002.01					
	8260C				
		8/5/2020	1524	SMO / GLAFORCE	
		8/5/2020	1533	R-001 / GLAFORCE	
		8/11/2020	1136	In Lab / KRUEST	
		8/11/2020	1143	R-001-S12 / KRUEST	
R2006930-002.02					
		8/5/2020	1524	SMO / GLAFORCE	
		8/5/2020	1533	R-001 / GLAFORCE	
R2006930-002.03					
		8/5/2020	1524	SMO / GLAFORCE	
		8/5/2020	1533	R-001 / GLAFORCE	
R2006930-003.01					
	8260C				
		8/5/2020	1524	SMO / GLAFORCE	
		8/5/2020	1533	R-001 / GLAFORCE	
		8/11/2020	1136	In Lab / KRUEST	
		8/11/2020	1143	R-001-S12 / KRUEST	
R2006930-003.02					
		8/5/2020	1524	SMO / GLAFORCE	
		8/5/2020	1533	R-001 / GLAFORCE	
R2006930-003.03					
		8/5/2020	1524	SMO / GLAFORCE	

Client: The LiRo Group **Service Request:** R2006930
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
		8/5/2020	1533	R-001 / GLAFORCE	
R2006930-004.01					
	8260C				
		8/5/2020	1524	SMO / GLAFORCE	
		8/5/2020	1533	R-001 / GLAFORCE	
		8/11/2020	1136	In Lab / KRUEST	
		8/11/2020	1143	R-001-S12 / KRUEST	
R2006930-004.02					
		8/5/2020	1524	SMO / GLAFORCE	
		8/5/2020	1533	R-001 / GLAFORCE	
R2006930-004.03					
		8/5/2020	1524	SMO / GLAFORCE	
		8/5/2020	1533	R-001 / GLAFORCE	
R2006930-005.01					
	8260C				
		8/5/2020	1524	SMO / GLAFORCE	
		8/5/2020	1533	R-001 / GLAFORCE	
		8/11/2020	1136	In Lab / KRUEST	
		8/11/2020	1143	R-001-S12 / KRUEST	
R2006930-005.02					
		8/5/2020	1524	SMO / GLAFORCE	
		8/5/2020	1533	R-001 / GLAFORCE	
R2006930-005.03					
		8/5/2020	1524	SMO / GLAFORCE	
		8/5/2020	1533	R-001 / GLAFORCE	

Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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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 Method Reporting Limit. Also known as:
LOQ 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:** R2006930
Project: Buffalo China/16-344-1389

Sample Name: MW-7A **Date Collected:** 08/4/20
Lab Code: R2006930-001 **Date Received:** 08/5/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-7 **Date Collected:** 08/4/20
Lab Code: R2006930-002 **Date Received:** 08/5/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-26 **Date Collected:** 08/4/20
Lab Code: R2006930-003 **Date Received:** 08/5/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-26A **Date Collected:** 08/4/20
Lab Code: R2006930-004 **Date Received:** 08/5/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: Trip Blank **Date Collected:** 08/4/20
Lab Code: R2006930-005 **Date Received:** 08/5/20
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
9034 Sulfide Acid Soluble	9030B
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
7199	3060A
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

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Analytical Report

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20 12:30
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	MW-7A	**Units:**	ug/L
Lab Code:	R2006930-001	**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	0.20	1	08/11/20 19:21	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,1,2-Trichloroethane	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,1-Dichloroethene (1,1-DCE)	**0.24**	**J**	5.0	0.20	1	08/11/20 19:21	
1,2,3-Trichlorobenzene	5.0	U	5.0	0.25	1	08/11/20 19:21	
1,2,4-Trichlorobenzene	5.0	U	5.0	0.34	1	08/11/20 19:21	
1,2-Dibromo-3-chloropropane (DBCP)	5.0	U	5.0	0.45	1	08/11/20 19:21	
1,2-Dibromoethane	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,2-Dichlorobenzene	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,2-Dichloroethane	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,2-Dichloropropane	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,3-Dichlorobenzene	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,4-Dichlorobenzene	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,4-Dioxane	100	U	100	13	1	08/11/20 19:21	
2-Butanone (MEK)	10	U	10	0.78	1	08/11/20 19:21	
2-Hexanone	10	U	10	0.20	1	08/11/20 19:21	
4-Methyl-2-pentanone	10	U	10	0.20	1	08/11/20 19:21	
Acetone	10	U	10	5.0	1	08/11/20 19:21	
Benzene	5.0	U	5.0	0.20	1	08/11/20 19:21	
Bromochloromethane	5.0	U	5.0	0.20	1	08/11/20 19:21	
Bromodichloromethane	5.0	U	5.0	0.20	1	08/11/20 19:21	
Bromoform	5.0	U	5.0	0.25	1	08/11/20 19:21	
Bromomethane	5.0	U	5.0	0.70	1	08/11/20 19:21	
Carbon Disulfide	10	U	10	0.42	1	08/11/20 19:21	
Carbon Tetrachloride	5.0	U	5.0	0.34	1	08/11/20 19:21	
Chlorobenzene	5.0	U	5.0	0.20	1	08/11/20 19:21	
Chloroethane	5.0	U	5.0	0.23	1	08/11/20 19:21	
Chloroform	5.0	U	5.0	0.24	1	08/11/20 19:21	
Chloromethane	5.0	U	5.0	0.28	1	08/11/20 19:21	
Cyclohexane	10	U	10	0.26	1	08/11/20 19:21	
Dibromochloromethane	5.0	U	5.0	0.20	1	08/11/20 19:21	
Dichlorodifluoromethane (CFC 12)	5.0	U	5.0	0.21	1	08/11/20 19:21	
Dichloromethane	5.0	U	5.0	0.65	1	08/11/20 19:21	
Ethylbenzene	5.0	U	5.0	0.20	1	08/11/20 19:21	
Isopropylbenzene (Cumene)	5.0	U	5.0	0.20	1	08/11/20 19:21	
Methyl Acetate	10	U	10	0.33	1	08/11/20 19:21	
Methyl tert-Butyl Ether	5.0	U	5.0	0.20	1	08/11/20 19:21	
Methylcyclohexane	**0.22**	**J**	10	0.20	1	08/11/20 19:21	
Styrene	5.0	U	5.0	0.20	1	08/11/20 19:21	
Tetrachloroethene (PCE)	5.0	U	5.0	0.21	1	08/11/20 19:21	
Toluene	5.0	U	5.0	0.20	1	08/11/20 19:21	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20 12:30
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	MW-7A	**Units:**	ug/L
Lab Code:	R2006930-001	**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	08/11/20 19:21	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	08/11/20 19:21	
Vinyl Chloride	**24**		5.0	0.20	1	08/11/20 19:21	
cis-1,2-Dichloroethene	**160**		5.0	0.23	1	08/11/20 19:21	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	08/11/20 19:21	
m,p-Xylenes	5.0	U	5.0	0.20	1	08/11/20 19:21	
o-Xylene	5.0	U	5.0	0.20	1	08/11/20 19:21	
trans-1,2-Dichloroethene	**0.78**	**J**	5.0	0.20	1	08/11/20 19:21	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	08/11/20 19:21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	08/11/20 19:21	
Dibromofluoromethane	91	89 - 119	08/11/20 19:21	
Toluene-d8	99	87 - 121	08/11/20 19:21	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20 13:10
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	MW-7	**Units:**	ug/L
Lab Code:	R2006930-002	**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	0.20	1	08/11/20 19:00	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/11/20 19:00	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/11/20 19:00	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/11/20 19:00	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,4-Dioxane	100 U	100	13	1	08/11/20 19:00	
2-Butanone (MEK)	10 U	10	0.78	1	08/11/20 19:00	
2-Hexanone	10 U	10	0.20	1	08/11/20 19:00	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/11/20 19:00	
Acetone	10 U	10	5.0	1	08/11/20 19:00	
Benzene	5.0 U	5.0	0.20	1	08/11/20 19:00	
Bromochloromethane	5.0 U	5.0	0.20	1	08/11/20 19:00	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/11/20 19:00	
Bromoform	5.0 U	5.0	0.25	1	08/11/20 19:00	
Bromomethane	5.0 U	5.0	0.70	1	08/11/20 19:00	
Carbon Disulfide	10 U	10	0.42	1	08/11/20 19:00	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/11/20 19:00	
Chlorobenzene	5.0 U	5.0	0.20	1	08/11/20 19:00	
Chloroethane	5.0 U	5.0	0.23	1	08/11/20 19:00	
Chloroform	5.0 U	5.0	0.24	1	08/11/20 19:00	
Chloromethane	5.0 U	5.0	0.28	1	08/11/20 19:00	
Cyclohexane	10 U	10	0.26	1	08/11/20 19:00	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/11/20 19:00	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/11/20 19:00	
Dichloromethane	5.0 U	5.0	0.65	1	08/11/20 19:00	
Ethylbenzene	5.0 U	5.0	0.20	1	08/11/20 19:00	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/11/20 19:00	
Methyl Acetate	10 U	10	0.33	1	08/11/20 19:00	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/11/20 19:00	
Methylcyclohexane	10 U	10	0.20	1	08/11/20 19:00	
Styrene	5.0 U	5.0	0.20	1	08/11/20 19:00	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/11/20 19:00	
Toluene	5.0 U	5.0	0.20	1	08/11/20 19:00	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20 13:10
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	MW-7	**Units:**	ug/L
Lab Code:	R2006930-002	**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)	5.0 U	5.0	0.20	1	08/11/20 19:00	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/11/20 19:00	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/11/20 19:00	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/11/20 19:00	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/11/20 19:00	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/11/20 19:00	
o-Xylene	5.0 U	5.0	0.20	1	08/11/20 19:00	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/11/20 19:00	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/11/20 19:00	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	08/11/20 19:00	
Dibromofluoromethane	96	89 - 119	08/11/20 19:00	
Toluene-d8	101	87 - 121	08/11/20 19:00	

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20 15:15
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	MW-26	**Units:**	ug/L
Lab Code:	R2006930-003	**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)	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/11/20 18:38	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/11/20 18:38	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/11/20 18:38	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,4-Dioxane	100 U	100	13	1	08/11/20 18:38	
2-Butanone (MEK)	10 U	10	0.78	1	08/11/20 18:38	
2-Hexanone	10 U	10	0.20	1	08/11/20 18:38	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/11/20 18:38	
Acetone	10 U	10	5.0	1	08/11/20 18:38	
Benzene	5.0 U	5.0	0.20	1	08/11/20 18:38	
Bromochloromethane	5.0 U	5.0	0.20	1	08/11/20 18:38	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/11/20 18:38	
Bromoform	5.0 U	5.0	0.25	1	08/11/20 18:38	
Bromomethane	5.0 U	5.0	0.70	1	08/11/20 18:38	
Carbon Disulfide	10 U	10	0.42	1	08/11/20 18:38	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/11/20 18:38	
Chlorobenzene	5.0 U	5.0	0.20	1	08/11/20 18:38	
Chloroethane	5.0 U	5.0	0.23	1	08/11/20 18:38	
Chloroform	5.0 U	5.0	0.24	1	08/11/20 18:38	
Chloromethane	5.0 U	5.0	0.28	1	08/11/20 18:38	
Cyclohexane	10 U	10	0.26	1	08/11/20 18:38	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/11/20 18:38	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/11/20 18:38	
Dichloromethane	5.0 U	5.0	0.65	1	08/11/20 18:38	
Ethylbenzene	5.0 U	5.0	0.20	1	08/11/20 18:38	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/11/20 18:38	
Methyl Acetate	10 U	10	0.33	1	08/11/20 18:38	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/11/20 18:38	
Methylcyclohexane	10 U	10	0.20	1	08/11/20 18:38	
Styrene	5.0 U	5.0	0.20	1	08/11/20 18:38	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/11/20 18:38	
Toluene	5.0 U	5.0	0.20	1	08/11/20 18:38	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20 15:15
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	MW-26	**Units:**	ug/L
Lab Code:	R2006930-003	**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)	5.0 U	5.0	0.20	1	08/11/20 18:38	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/11/20 18:38	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/11/20 18:38	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/11/20 18:38	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/11/20 18:38	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/11/20 18:38	
o-Xylene	5.0 U	5.0	0.20	1	08/11/20 18:38	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/11/20 18:38	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/11/20 18:38	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 122	08/11/20 18:38	
Dibromofluoromethane	91	89 - 119	08/11/20 18:38	
Toluene-d8	100	87 - 121	08/11/20 18:38	

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20 14:20
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	MW-26A	**Units:**	ug/L
Lab Code:	R2006930-004	**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	0.20	1	08/11/20 18:16	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/11/20 18:16	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/11/20 18:16	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/11/20 18:16	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,4-Dioxane	100 U	100	13	1	08/11/20 18:16	
2-Butanone (MEK)	10 U	10	0.78	1	08/11/20 18:16	
2-Hexanone	10 U	10	0.20	1	08/11/20 18:16	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/11/20 18:16	
Acetone	10 U	10	5.0	1	08/11/20 18:16	
Benzene	5.0 U	5.0	0.20	1	08/11/20 18:16	
Bromochloromethane	5.0 U	5.0	0.20	1	08/11/20 18:16	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/11/20 18:16	
Bromoform	5.0 U	5.0	0.25	1	08/11/20 18:16	
Bromomethane	5.0 U	5.0	0.70	1	08/11/20 18:16	
Carbon Disulfide	10 U	10	0.42	1	08/11/20 18:16	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/11/20 18:16	
Chlorobenzene	5.0 U	5.0	0.20	1	08/11/20 18:16	
Chloroethane	5.0 U	5.0	0.23	1	08/11/20 18:16	
Chloroform	5.0 U	5.0	0.24	1	08/11/20 18:16	
Chloromethane	5.0 U	5.0	0.28	1	08/11/20 18:16	
Cyclohexane	10 U	10	0.26	1	08/11/20 18:16	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/11/20 18:16	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/11/20 18:16	
Dichloromethane	5.0 U	5.0	0.65	1	08/11/20 18:16	
Ethylbenzene	5.0 U	5.0	0.20	1	08/11/20 18:16	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/11/20 18:16	
Methyl Acetate	10 U	10	0.33	1	08/11/20 18:16	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/11/20 18:16	
Methylcyclohexane	10 U	10	0.20	1	08/11/20 18:16	
Styrene	5.0 U	5.0	0.20	1	08/11/20 18:16	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/11/20 18:16	
Toluene	5.0 U	5.0	0.20	1	08/11/20 18:16	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20 14:20
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	MW-26A	**Units:**	ug/L
Lab Code:	R2006930-004	**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)	5.0 U	5.0	0.20	1	08/11/20 18:16	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/11/20 18:16	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/11/20 18:16	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/11/20 18:16	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/11/20 18:16	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/11/20 18:16	
o-Xylene	5.0 U	5.0	0.20	1	08/11/20 18:16	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/11/20 18:16	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/11/20 18:16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	08/11/20 18:16	
Dibromofluoromethane	97	89 - 119	08/11/20 18:16	
Toluene-d8	103	87 - 121	08/11/20 18:16	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R2006930-005	**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	0.20	1	08/11/20 17:54	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/11/20 17:54	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/11/20 17:54	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/11/20 17:54	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,4-Dioxane	100 U	100	13	1	08/11/20 17:54	
2-Butanone (MEK)	10 U	10	0.78	1	08/11/20 17:54	
2-Hexanone	10 U	10	0.20	1	08/11/20 17:54	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/11/20 17:54	
Acetone	10 U	10	5.0	1	08/11/20 17:54	
Benzene	5.0 U	5.0	0.20	1	08/11/20 17:54	
Bromochloromethane	5.0 U	5.0	0.20	1	08/11/20 17:54	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/11/20 17:54	
Bromoform	5.0 U	5.0	0.25	1	08/11/20 17:54	
Bromomethane	5.0 U	5.0	0.70	1	08/11/20 17:54	
Carbon Disulfide	10 U	10	0.42	1	08/11/20 17:54	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/11/20 17:54	
Chlorobenzene	5.0 U	5.0	0.20	1	08/11/20 17:54	
Chloroethane	5.0 U	5.0	0.23	1	08/11/20 17:54	
Chloroform	5.0 U	5.0	0.24	1	08/11/20 17:54	
Chloromethane	5.0 U	5.0	0.28	1	08/11/20 17:54	
Cyclohexane	10 U	10	0.26	1	08/11/20 17:54	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/11/20 17:54	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/11/20 17:54	
Dichloromethane	5.0 U	5.0	0.65	1	08/11/20 17:54	
Ethylbenzene	5.0 U	5.0	0.20	1	08/11/20 17:54	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/11/20 17:54	
Methyl Acetate	10 U	10	0.33	1	08/11/20 17:54	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/11/20 17:54	
Methylcyclohexane	10 U	10	0.20	1	08/11/20 17:54	
Styrene	5.0 U	5.0	0.20	1	08/11/20 17:54	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/11/20 17:54	
Toluene	5.0 U	5.0	0.20	1	08/11/20 17:54	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R2006930-005	**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)	5.0 U	5.0	0.20	1	08/11/20 17:54	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/11/20 17:54	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/11/20 17:54	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/11/20 17:54	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/11/20 17:54	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/11/20 17:54	
o-Xylene	5.0 U	5.0	0.20	1	08/11/20 17:54	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/11/20 17:54	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/11/20 17:54	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	08/11/20 17:54	
Dibromofluoromethane	92	89 - 119	08/11/20 17:54	
Toluene-d8	98	87 - 121	08/11/20 17:54	

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
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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:** R2006930
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-7A	R2006930-001	94	91	99
MW-7	R2006930-002	97	96	101
MW-26	R2006930-003	92	91	100
MW-26A	R2006930-004	97	97	103
Trip Blank	R2006930-005	95	92	98
Method Blank	RQ2008888-04	96	93	100
Lab Control Sample	RQ2008888-03	98	93	98

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	08/11/20 12:19
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:	RQ2008888-04	**File ID:**	I:\ACQUDATA\msvoa12\Data\081120\P38356.D\
Analysis Method:	8260C	**Analysis Lot:**	690412
Prep Method:	EPA 5030C		

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2008888-03	I:\ACQUDATA\msvoa12\Data\081120\P38353.D\	08/11/20 11:09
Trip Blank	R2006930-005	I:\ACQUDATA\msvoa12\Data\081120\P38371.D\	08/11/20 17:54
MW-26A	R2006930-004	I:\ACQUDATA\msvoa12\Data\081120\P38372.D\	08/11/20 18:16
MW-26	R2006930-003	I:\ACQUDATA\msvoa12\Data\081120\P38373.D\	08/11/20 18:38
MW-7	R2006930-002	I:\ACQUDATA\msvoa12\Data\081120\P38374.D\	08/11/20 19:00
MW-7A	R2006930-001	I:\ACQUDATA\msvoa12\Data\081120\P38375.D\	08/11/20 19:21

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2008888-04	**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	0.20	1	08/11/20 12:19	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/11/20 12:19	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/11/20 12:19	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/11/20 12:19	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/11/20 12:19	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/11/20 12:19	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/11/20 12:19	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/11/20 12:19	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/11/20 12:19	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/11/20 12:19	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 12:19	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/11/20 12:19	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/11/20 12:19	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 12:19	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 12:19	
1,4-Dioxane	100 U	100	13	1	08/11/20 12:19	
2-Butanone (MEK)	10 U	10	0.78	1	08/11/20 12:19	
2-Hexanone	10 U	10	0.20	1	08/11/20 12:19	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/11/20 12:19	
Acetone	10 U	10	5.0	1	08/11/20 12:19	
Benzene	5.0 U	5.0	0.20	1	08/11/20 12:19	
Bromochloromethane	5.0 U	5.0	0.20	1	08/11/20 12:19	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/11/20 12:19	
Bromoform	5.0 U	5.0	0.25	1	08/11/20 12:19	
Bromomethane	5.0 U	5.0	0.70	1	08/11/20 12:19	
Carbon Disulfide	10 U	10	0.42	1	08/11/20 12:19	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/11/20 12:19	
Chlorobenzene	5.0 U	5.0	0.20	1	08/11/20 12:19	
Chloroethane	5.0 U	5.0	0.23	1	08/11/20 12:19	
Chloroform	5.0 U	5.0	0.24	1	08/11/20 12:19	
Chloromethane	5.0 U	5.0	0.28	1	08/11/20 12:19	
Cyclohexane	10 U	10	0.26	1	08/11/20 12:19	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/11/20 12:19	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/11/20 12:19	
Dichloromethane	5.0 U	5.0	0.65	1	08/11/20 12:19	
Ethylbenzene	5.0 U	5.0	0.20	1	08/11/20 12:19	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/11/20 12:19	
Methyl Acetate	10 U	10	0.33	1	08/11/20 12:19	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/11/20 12:19	
Methylcyclohexane	10 U	10	0.20	1	08/11/20 12:19	
Styrene	5.0 U	5.0	0.20	1	08/11/20 12:19	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/11/20 12:19	
Toluene	5.0 U	5.0	0.20	1	08/11/20 12:19	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2008888-04	**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	08/11/20 12:19	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/11/20 12:19	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/11/20 12:19	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/11/20 12:19	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/11/20 12:19	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/11/20 12:19	
o-Xylene	5.0 U	5.0	0.20	1	08/11/20 12:19	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/11/20 12:19	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/11/20 12:19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	08/11/20 12:19	
Dibromofluoromethane	93	89 - 119	08/11/20 12:19	
Toluene-d8	100	87 - 121	08/11/20 12:19	

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	08/11/20 11:09
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: RQ2008888-03 **File ID:**I:\ACQUDATA\msvoa12\Data\081120\P38353.D\

Analysis Method: 8260C **Analysis Lot:**690412
Prep Method: EPA 5030C

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ2008888-04	I:\ACQUDATA\msvoa12\Data\081120\P38356.D\	08/11/20 12:19
Trip Blank	R2006930-005	I:\ACQUDATA\msvoa12\Data\081120\P38371.D\	08/11/20 17:54
MW-26A	R2006930-004	I:\ACQUDATA\msvoa12\Data\081120\P38372.D\	08/11/20 18:16
MW-26	R2006930-003	I:\ACQUDATA\msvoa12\Data\081120\P38373.D\	08/11/20 18:38
MW-7	R2006930-002	I:\ACQUDATA\msvoa12\Data\081120\P38374.D\	08/11/20 19:00
MW-7A	R2006930-001	I:\ACQUDATA\msvoa12\Data\081120\P38375.D\	08/11/20 19:21

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

Service Request: R2006930
Date Analyzed: 08/11/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2008888-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	18.9	20.0	95	75-125
1,1,2,2-Tetrachloroethane	8260C	20.4	20.0	102	78-126
1,1,2-Trichloroethane	8260C	19.6	20.0	98	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	19.7	20.0	98	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	19.1	20.0	96	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	23.4	20.0	117	71-118
1,2,3-Trichlorobenzene	8260C	19.3	20.0	97	67-136
1,2,4-Trichlorobenzene	8260C	20.9	20.0	104	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	15.9	20.0	80	55-136
1,2-Dibromoethane	8260C	18.0	20.0	90	82-127
1,2-Dichlorobenzene	8260C	19.7	20.0	98	80-119
1,2-Dichloroethane	8260C	18.0	20.0	90	71-127
1,2-Dichloropropane	8260C	19.2	20.0	96	80-119
1,3-Dichlorobenzene	8260C	20.5	20.0	103	83-121
1,4-Dichlorobenzene	8260C	19.6	20.0	98	79-119
1,4-Dioxane	8260C	324	400	81	44-154
2-Butanone (MEK)	8260C	20.4	20.0	102	61-137
2-Hexanone	8260C	19.2	20.0	96	63-124
4-Methyl-2-pentanone	8260C	20.6	20.0	103	66-124
Acetone	8260C	17.1	20.0	85	40-161
Benzene	8260C	20.1	20.0	100	79-119
Bromochloromethane	8260C	18.0	20.0	90	81-126
Bromodichloromethane	8260C	18.4	20.0	92	81-123
Bromoform	8260C	17.2	20.0	86	65-146
Bromomethane	8260C	17.3	20.0	86	42-166
Carbon Disulfide	8260C	20.1	20.0	101	66-128
Carbon Tetrachloride	8260C	19.8	20.0	99	70-127
Chlorobenzene	8260C	19.3	20.0	97	80-121
Chloroethane	8260C	18.4	20.0	92	62-131
Chloroform	8260C	18.2	20.0	91	79-120
Chloromethane	8260C	22.2	20.0	111	65-135
Cyclohexane	8260C	19.5	20.0	98	69-120
Dibromochloromethane	8260C	17.7	20.0	89	72-128

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

Service Request: R2006930
Date Analyzed: 08/11/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2008888-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	19.4	20.0	97	59-155
Dichloromethane	8260C	18.2	20.0	91	73-122
Ethylbenzene	8260C	20.2	20.0	101	76-120
Isopropylbenzene (Cumene)	8260C	21.9	20.0	109	77-128
Methyl Acetate	8260C	15.0	20.0	75	61-133
Methyl tert-Butyl Ether	8260C	19.9	20.0	100	75-118
Methylcyclohexane	8260C	21.6	20.0	108	51-129
Styrene	8260C	20.2	20.0	101	80-124
Tetrachloroethene (PCE)	8260C	19.6	20.0	98	72-125
Toluene	8260C	20.7	20.0	104	79-119
Trichloroethene (TCE)	8260C	17.1	20.0	85	74-122
Trichlorofluoromethane (CFC 11)	8260C	20.9	20.0	105	71-136
Vinyl Chloride	8260C	21.7	20.0	109	74-159
cis-1,2-Dichloroethene	8260C	19.1	20.0	96	80-121
cis-1,3-Dichloropropene	8260C	17.6	20.0	88	77-122
m,p-Xylenes	8260C	41.7	40.0	104	80-126
o-Xylene	8260C	21.0	20.0	105	79-123
trans-1,2-Dichloroethene	8260C	21.4	20.0	107	73-118
trans-1,3-Dichloropropene	8260C	17.0	20.0	85	71-133

Client: The LiRo Group **Service Request:**R2006930
Project: Buffalo China/16-344-1389 **Date Analyzed:**08/11/20 10:10

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\081120\P38351.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 690412

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.58	27339	Pass
75	95	30	60	46.62	68600	Pass
95	95	100	100	100.00	147157	Pass
96	95	5	9	6.40	9419	Pass
173	174	0	2	0.47	569	Pass
174	95	50	120	81.51	119941	Pass
175	174	5	9	7.48	8973	Pass
176	174	95	101	98.05	117603	Pass
177	176	5	9	6.61	7776	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2008888-02	I:\ACQUDATA\msvoa12\Data\081120\P38352.D\	08/11/20 10:43	
Lab Control Sample	RQ2008888-03	I:\ACQUDATA\msvoa12\Data\081120\P38353.D\	08/11/20 11:09	
Method Blank	RQ2008888-04	I:\ACQUDATA\msvoa12\Data\081120\P38356.D\	08/11/20 12:19	
Trip Blank	R2006930-005	I:\ACQUDATA\msvoa12\Data\081120\P38371.D\	08/11/20 17:54	
MW-26A	R2006930-004	I:\ACQUDATA\msvoa12\Data\081120\P38372.D\	08/11/20 18:16	
MW-26	R2006930-003	I:\ACQUDATA\msvoa12\Data\081120\P38373.D\	08/11/20 18:38	
MW-7	R2006930-002	I:\ACQUDATA\msvoa12\Data\081120\P38374.D\	08/11/20 19:00	
MW-7A	R2006930-001	I:\ACQUDATA\msvoa12\Data\081120\P38375.D\	08/11/20 19:21	

Client: The LiRo Group **Service Request:** R2006930
Project: Buffalo China/16-344-1389 **Date Analyzed:** 08/11/20 10:43

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

File ID: I:\ACQUDATA\msvoa12\Data\081120\P38352.D\ **Lab Code:** RQ2008888-02
Instrument ID: R-MS-12 **Analysis Lot:** 690412
Analysis Method: 8260C **Signal ID:** 1

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	251,361	11.84	500,711	6.53	466,437	9.80
	Upper Limit ==>	502,722	12.01	1,001,422	6.70	932,874	9.97
	Lower Limit ==>	125,681	11.67	250,356	6.36	233,219	9.63
Associated Analyses							
Lab Control Sample	RQ2008888-03	211239	11.84	477464	6.53	428011	9.80
Method Blank	RQ2008888-04	181369	11.84	426583	6.54	378274	9.80
Trip Blank	R2006930-005	198467	11.84	454244	6.53	404940	9.80
MW-26A	R2006930-004	183320	11.84	429518	6.53	387967	9.80
MW-26	R2006930-003	190990	11.84	438816	6.54	389700	9.80
MW-7	R2006930-002	202279	11.84	456735	6.53	413151	9.80
MW-7A	R2006930-001	192908	11.84	450255	6.53	405394	9.80

Client: The LiRo Group **Service Request:** R2006930
Project: Buffalo China/16-344-1389 **Date Analyzed:** 08/11/20 10:43

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

File ID: I:\ACQUDATA\msvoa12\Data\081120\P38352.D\ **Lab Code:** RQ2008888-02
Instrument ID: R-MS-12 **Analysis Lot:** 690412
Analysis Method: 8260C **Signal ID:** 1

		Pentafluorobenzene	
		Area	**RT**
	Result ==>	327,494	5.46
	Upper Limit ==>	654,988	5.63
	Lower Limit ==>	163,747	5.29
Associated Analyses			
Lab Control Sample	RQ2008888-03	308148	5.46
Method Blank	RQ2008888-04	278662	5.46
Trip Blank	R2006930-005	288924	5.46
MW-26A	R2006930-004	278022	5.46
MW-26	R2006930-003	281952	5.46
MW-7	R2006930-002	297077	5.46
MW-7A	R2006930-001	292297	5.46

Raw Data

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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Volatile Organic Compounds by GC/MS

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Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20 12:30
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	MW-7A	**Units:**	ug/L
Lab Code:	R2006930-001	**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	0.20	1	08/11/20 19:21	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,1,2-Trichloroethane	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,1-Dichloroethene (1,1-DCE)	**0.24**	**J**	5.0	0.20	1	08/11/20 19:21	
1,2,3-Trichlorobenzene	5.0	U	5.0	0.25	1	08/11/20 19:21	
1,2,4-Trichlorobenzene	5.0	U	5.0	0.34	1	08/11/20 19:21	
1,2-Dibromo-3-chloropropane (DBCP)	5.0	U	5.0	0.45	1	08/11/20 19:21	
1,2-Dibromoethane	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,2-Dichlorobenzene	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,2-Dichloroethane	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,2-Dichloropropane	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,3-Dichlorobenzene	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,4-Dichlorobenzene	5.0	U	5.0	0.20	1	08/11/20 19:21	
1,4-Dioxane	100	U	100	13	1	08/11/20 19:21	
2-Butanone (MEK)	10	U	10	0.78	1	08/11/20 19:21	
2-Hexanone	10	U	10	0.20	1	08/11/20 19:21	
4-Methyl-2-pentanone	10	U	10	0.20	1	08/11/20 19:21	
Acetone	10	U	10	5.0	1	08/11/20 19:21	
Benzene	5.0	U	5.0	0.20	1	08/11/20 19:21	
Bromochloromethane	5.0	U	5.0	0.20	1	08/11/20 19:21	
Bromodichloromethane	5.0	U	5.0	0.20	1	08/11/20 19:21	
Bromoform	5.0	U	5.0	0.25	1	08/11/20 19:21	
Bromomethane	5.0	U	5.0	0.70	1	08/11/20 19:21	
Carbon Disulfide	10	U	10	0.42	1	08/11/20 19:21	
Carbon Tetrachloride	5.0	U	5.0	0.34	1	08/11/20 19:21	
Chlorobenzene	5.0	U	5.0	0.20	1	08/11/20 19:21	
Chloroethane	5.0	U	5.0	0.23	1	08/11/20 19:21	
Chloroform	5.0	U	5.0	0.24	1	08/11/20 19:21	
Chloromethane	5.0	U	5.0	0.28	1	08/11/20 19:21	
Cyclohexane	10	U	10	0.26	1	08/11/20 19:21	
Dibromochloromethane	5.0	U	5.0	0.20	1	08/11/20 19:21	
Dichlorodifluoromethane (CFC 12)	5.0	U	5.0	0.21	1	08/11/20 19:21	
Dichloromethane	5.0	U	5.0	0.65	1	08/11/20 19:21	
Ethylbenzene	5.0	U	5.0	0.20	1	08/11/20 19:21	
Isopropylbenzene (Cumene)	5.0	U	5.0	0.20	1	08/11/20 19:21	
Methyl Acetate	10	U	10	0.33	1	08/11/20 19:21	
Methyl tert-Butyl Ether	5.0	U	5.0	0.20	1	08/11/20 19:21	
Methylcyclohexane	**0.22**	**J**	10	0.20	1	08/11/20 19:21	
Styrene	5.0	U	5.0	0.20	1	08/11/20 19:21	
Tetrachloroethene (PCE)	5.0	U	5.0	0.21	1	08/11/20 19:21	
Toluene	5.0	U	5.0	0.20	1	08/11/20 19:21	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20 12:30
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	MW-7A	**Units:**	ug/L
Lab Code:	R2006930-001	**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	08/11/20 19:21	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	08/11/20 19:21	
Vinyl Chloride	**24**		5.0	0.20	1	08/11/20 19:21	
cis-1,2-Dichloroethene	**160**		5.0	0.23	1	08/11/20 19:21	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	08/11/20 19:21	
m,p-Xylenes	5.0	U	5.0	0.20	1	08/11/20 19:21	
o-Xylene	5.0	U	5.0	0.20	1	08/11/20 19:21	
trans-1,2-Dichloroethene	**0.78**	**J**	5.0	0.20	1	08/11/20 19:21	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	08/11/20 19:21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	08/11/20 19:21	
Dibromofluoromethane	91	89 - 119	08/11/20 19:21	
Toluene-d8	99	87 - 121	08/11/20 19:21	

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20 13:10
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	MW-7	**Units:**	ug/L
Lab Code:	R2006930-002	**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	0.20	1	08/11/20 19:00	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/11/20 19:00	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/11/20 19:00	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/11/20 19:00	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 19:00	
1,4-Dioxane	100 U	100	13	1	08/11/20 19:00	
2-Butanone (MEK)	10 U	10	0.78	1	08/11/20 19:00	
2-Hexanone	10 U	10	0.20	1	08/11/20 19:00	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/11/20 19:00	
Acetone	10 U	10	5.0	1	08/11/20 19:00	
Benzene	5.0 U	5.0	0.20	1	08/11/20 19:00	
Bromochloromethane	5.0 U	5.0	0.20	1	08/11/20 19:00	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/11/20 19:00	
Bromoform	5.0 U	5.0	0.25	1	08/11/20 19:00	
Bromomethane	5.0 U	5.0	0.70	1	08/11/20 19:00	
Carbon Disulfide	10 U	10	0.42	1	08/11/20 19:00	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/11/20 19:00	
Chlorobenzene	5.0 U	5.0	0.20	1	08/11/20 19:00	
Chloroethane	5.0 U	5.0	0.23	1	08/11/20 19:00	
Chloroform	5.0 U	5.0	0.24	1	08/11/20 19:00	
Chloromethane	5.0 U	5.0	0.28	1	08/11/20 19:00	
Cyclohexane	10 U	10	0.26	1	08/11/20 19:00	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/11/20 19:00	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/11/20 19:00	
Dichloromethane	5.0 U	5.0	0.65	1	08/11/20 19:00	
Ethylbenzene	5.0 U	5.0	0.20	1	08/11/20 19:00	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/11/20 19:00	
Methyl Acetate	10 U	10	0.33	1	08/11/20 19:00	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/11/20 19:00	
Methylcyclohexane	10 U	10	0.20	1	08/11/20 19:00	
Styrene	5.0 U	5.0	0.20	1	08/11/20 19:00	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/11/20 19:00	
Toluene	5.0 U	5.0	0.20	1	08/11/20 19:00	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20 13:10
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	MW-7	**Units:**	ug/L
Lab Code:	R2006930-002	**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)	5.0 U	5.0	0.20	1	08/11/20 19:00	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/11/20 19:00	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/11/20 19:00	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/11/20 19:00	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/11/20 19:00	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/11/20 19:00	
o-Xylene	5.0 U	5.0	0.20	1	08/11/20 19:00	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/11/20 19:00	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/11/20 19:00	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	08/11/20 19:00	
Dibromofluoromethane	96	89 - 119	08/11/20 19:00	
Toluene-d8	101	87 - 121	08/11/20 19:00	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20 15:15
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	MW-26	**Units:**	ug/L
Lab Code:	R2006930-003	**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)	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/11/20 18:38	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/11/20 18:38	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/11/20 18:38	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 18:38	
1,4-Dioxane	100 U	100	13	1	08/11/20 18:38	
2-Butanone (MEK)	10 U	10	0.78	1	08/11/20 18:38	
2-Hexanone	10 U	10	0.20	1	08/11/20 18:38	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/11/20 18:38	
Acetone	10 U	10	5.0	1	08/11/20 18:38	
Benzene	5.0 U	5.0	0.20	1	08/11/20 18:38	
Bromochloromethane	5.0 U	5.0	0.20	1	08/11/20 18:38	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/11/20 18:38	
Bromoform	5.0 U	5.0	0.25	1	08/11/20 18:38	
Bromomethane	5.0 U	5.0	0.70	1	08/11/20 18:38	
Carbon Disulfide	10 U	10	0.42	1	08/11/20 18:38	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/11/20 18:38	
Chlorobenzene	5.0 U	5.0	0.20	1	08/11/20 18:38	
Chloroethane	5.0 U	5.0	0.23	1	08/11/20 18:38	
Chloroform	5.0 U	5.0	0.24	1	08/11/20 18:38	
Chloromethane	5.0 U	5.0	0.28	1	08/11/20 18:38	
Cyclohexane	10 U	10	0.26	1	08/11/20 18:38	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/11/20 18:38	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/11/20 18:38	
Dichloromethane	5.0 U	5.0	0.65	1	08/11/20 18:38	
Ethylbenzene	5.0 U	5.0	0.20	1	08/11/20 18:38	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/11/20 18:38	
Methyl Acetate	10 U	10	0.33	1	08/11/20 18:38	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/11/20 18:38	
Methylcyclohexane	10 U	10	0.20	1	08/11/20 18:38	
Styrene	5.0 U	5.0	0.20	1	08/11/20 18:38	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/11/20 18:38	
Toluene	5.0 U	5.0	0.20	1	08/11/20 18:38	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20 15:15
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	MW-26	**Units:**	ug/L
Lab Code:	R2006930-003	**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)	5.0 U	5.0	0.20	1	08/11/20 18:38	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/11/20 18:38	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/11/20 18:38	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/11/20 18:38	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/11/20 18:38	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/11/20 18:38	
o-Xylene	5.0 U	5.0	0.20	1	08/11/20 18:38	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/11/20 18:38	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/11/20 18:38	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 122	08/11/20 18:38	
Dibromofluoromethane	91	89 - 119	08/11/20 18:38	
Toluene-d8	100	87 - 121	08/11/20 18:38	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20 14:20
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	MW-26A	**Units:**	ug/L
Lab Code:	R2006930-004	**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	0.20	1	08/11/20 18:16	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/11/20 18:16	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/11/20 18:16	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/11/20 18:16	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 18:16	
1,4-Dioxane	100 U	100	13	1	08/11/20 18:16	
2-Butanone (MEK)	10 U	10	0.78	1	08/11/20 18:16	
2-Hexanone	10 U	10	0.20	1	08/11/20 18:16	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/11/20 18:16	
Acetone	10 U	10	5.0	1	08/11/20 18:16	
Benzene	5.0 U	5.0	0.20	1	08/11/20 18:16	
Bromochloromethane	5.0 U	5.0	0.20	1	08/11/20 18:16	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/11/20 18:16	
Bromoform	5.0 U	5.0	0.25	1	08/11/20 18:16	
Bromomethane	5.0 U	5.0	0.70	1	08/11/20 18:16	
Carbon Disulfide	10 U	10	0.42	1	08/11/20 18:16	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/11/20 18:16	
Chlorobenzene	5.0 U	5.0	0.20	1	08/11/20 18:16	
Chloroethane	5.0 U	5.0	0.23	1	08/11/20 18:16	
Chloroform	5.0 U	5.0	0.24	1	08/11/20 18:16	
Chloromethane	5.0 U	5.0	0.28	1	08/11/20 18:16	
Cyclohexane	10 U	10	0.26	1	08/11/20 18:16	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/11/20 18:16	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/11/20 18:16	
Dichloromethane	5.0 U	5.0	0.65	1	08/11/20 18:16	
Ethylbenzene	5.0 U	5.0	0.20	1	08/11/20 18:16	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/11/20 18:16	
Methyl Acetate	10 U	10	0.33	1	08/11/20 18:16	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/11/20 18:16	
Methylcyclohexane	10 U	10	0.20	1	08/11/20 18:16	
Styrene	5.0 U	5.0	0.20	1	08/11/20 18:16	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/11/20 18:16	
Toluene	5.0 U	5.0	0.20	1	08/11/20 18:16	

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20 14:20
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	MW-26A	**Units:**	ug/L
Lab Code:	R2006930-004	**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)	5.0 U	5.0	0.20	1	08/11/20 18:16	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/11/20 18:16	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/11/20 18:16	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/11/20 18:16	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/11/20 18:16	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/11/20 18:16	
o-Xylene	5.0 U	5.0	0.20	1	08/11/20 18:16	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/11/20 18:16	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/11/20 18:16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	08/11/20 18:16	
Dibromofluoromethane	97	89 - 119	08/11/20 18:16	
Toluene-d8	103	87 - 121	08/11/20 18:16	

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R2006930-005	**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	0.20	1	08/11/20 17:54	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/11/20 17:54	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/11/20 17:54	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/11/20 17:54	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/11/20 17:54	
1,4-Dioxane	100 U	100	13	1	08/11/20 17:54	
2-Butanone (MEK)	10 U	10	0.78	1	08/11/20 17:54	
2-Hexanone	10 U	10	0.20	1	08/11/20 17:54	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/11/20 17:54	
Acetone	10 U	10	5.0	1	08/11/20 17:54	
Benzene	5.0 U	5.0	0.20	1	08/11/20 17:54	
Bromochloromethane	5.0 U	5.0	0.20	1	08/11/20 17:54	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/11/20 17:54	
Bromoform	5.0 U	5.0	0.25	1	08/11/20 17:54	
Bromomethane	5.0 U	5.0	0.70	1	08/11/20 17:54	
Carbon Disulfide	10 U	10	0.42	1	08/11/20 17:54	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/11/20 17:54	
Chlorobenzene	5.0 U	5.0	0.20	1	08/11/20 17:54	
Chloroethane	5.0 U	5.0	0.23	1	08/11/20 17:54	
Chloroform	5.0 U	5.0	0.24	1	08/11/20 17:54	
Chloromethane	5.0 U	5.0	0.28	1	08/11/20 17:54	
Cyclohexane	10 U	10	0.26	1	08/11/20 17:54	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/11/20 17:54	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/11/20 17:54	
Dichloromethane	5.0 U	5.0	0.65	1	08/11/20 17:54	
Ethylbenzene	5.0 U	5.0	0.20	1	08/11/20 17:54	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/11/20 17:54	
Methyl Acetate	10 U	10	0.33	1	08/11/20 17:54	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/11/20 17:54	
Methylcyclohexane	10 U	10	0.20	1	08/11/20 17:54	
Styrene	5.0 U	5.0	0.20	1	08/11/20 17:54	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/11/20 17:54	
Toluene	5.0 U	5.0	0.20	1	08/11/20 17:54	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2006930
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/04/20
Sample Matrix:	Water	**Date Received:**	08/05/20 09:50
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R2006930-005	**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)	5.0 U	5.0	0.20	1	08/11/20 17:54	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/11/20 17:54	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/11/20 17:54	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/11/20 17:54	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/11/20 17:54	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/11/20 17:54	
o-Xylene	5.0 U	5.0	0.20	1	08/11/20 17:54	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/11/20 17:54	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/11/20 17:54	

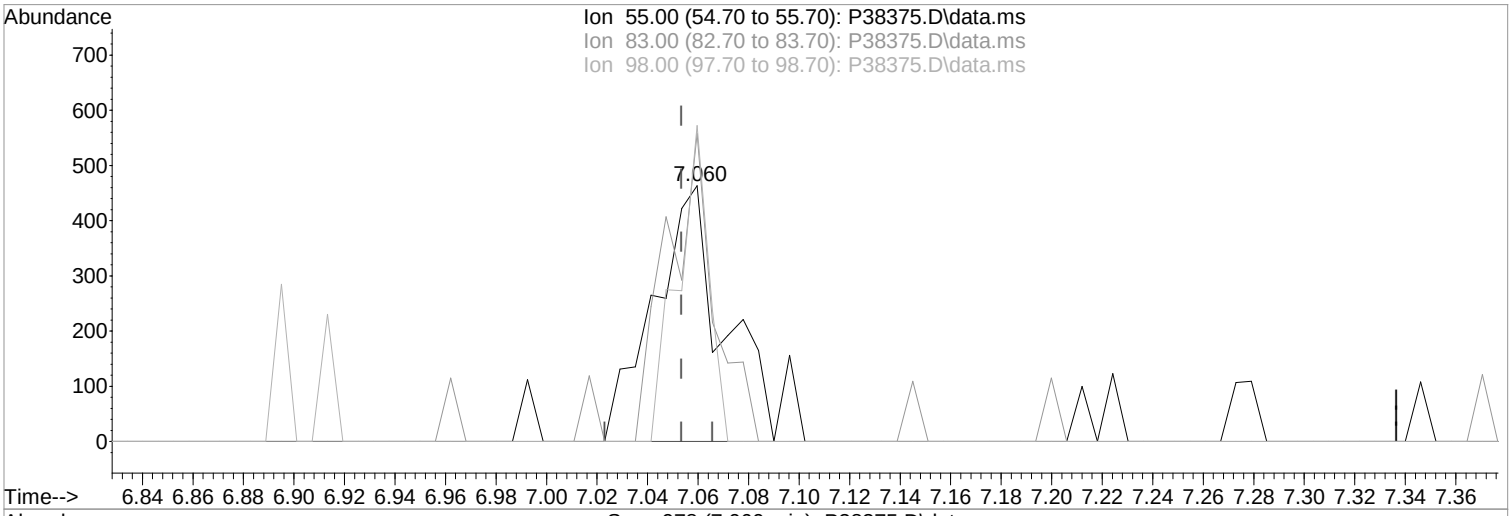
Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	08/11/20 17:54	
Dibromofluoromethane	92	89 - 119	08/11/20 17:54	
Toluene-d8	98	87 - 121	08/11/20 17:54	

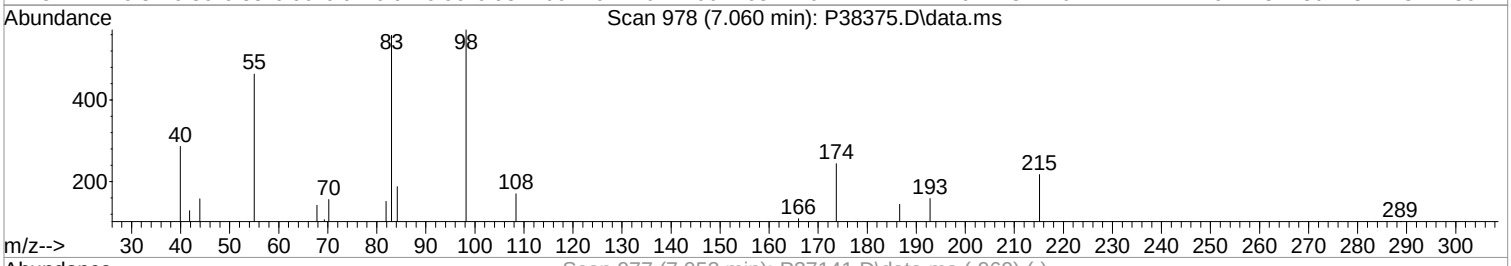
1st 08/17/20
2nd 08/17/20

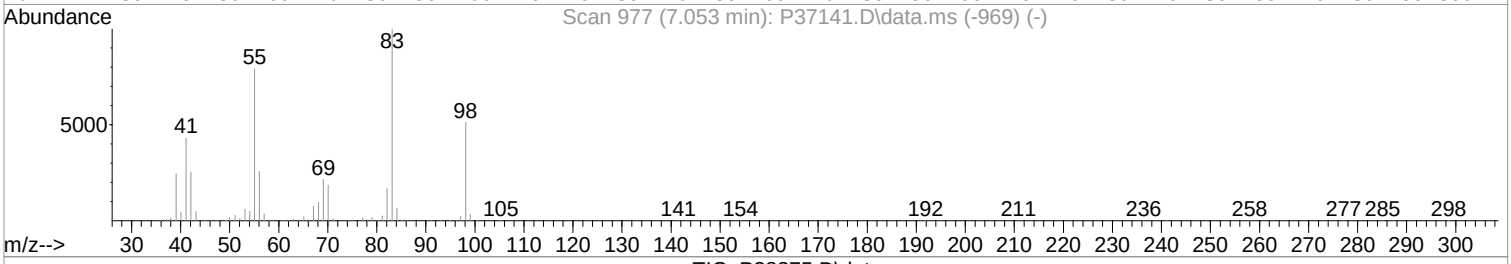
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38375.D
Acq On : 11 Aug 2020 7:21 pm
Operator : K.Ruest
Sample : R2006930-001|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 12 10:46:25 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38375.D\data.ms

(55) Methylcyclohexane (P)

7.060min (+0.006) 0.22 ppb m

response 883

Ion	Exp%	Act%
55.00	100	100
83.00	126.20	120.52
98.00	64.70	123.54#
0.00	0.00	0.00

Manual Integration:

After

Split Peak

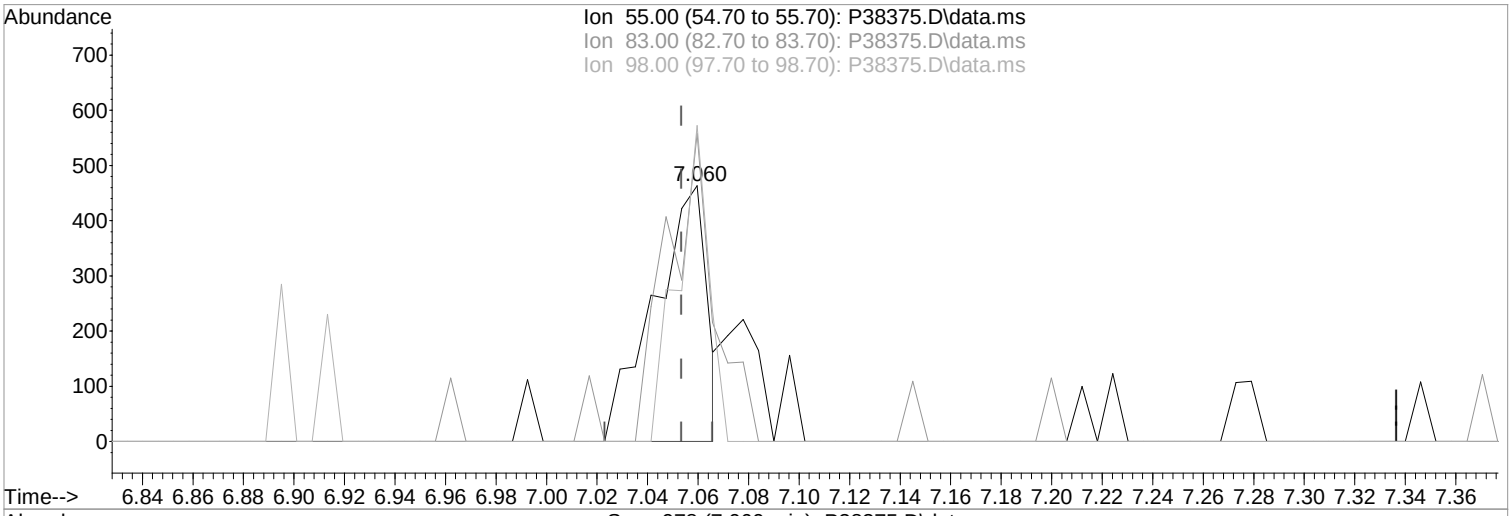
08/17/20

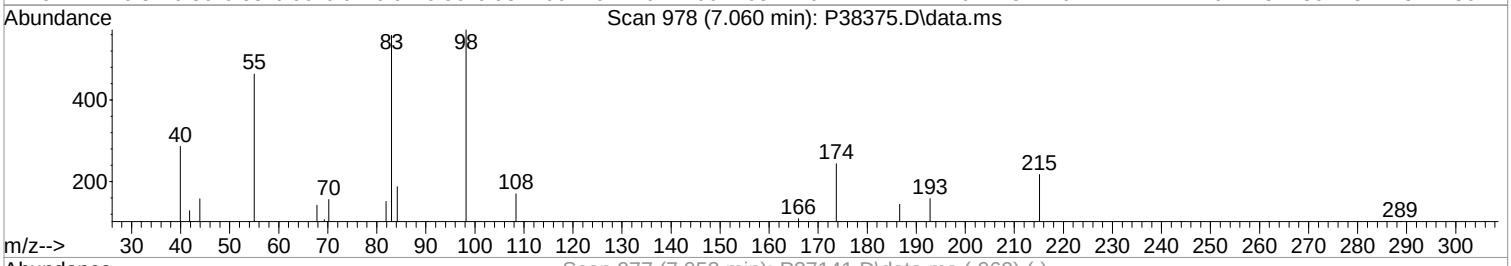
1st 08/17/20
2nd 08/17/20

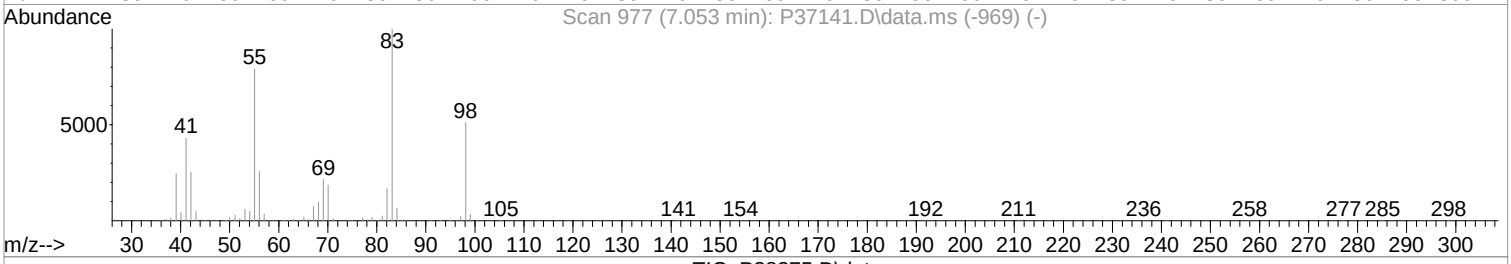
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38375.D
Acq On : 11 Aug 2020 7:21 pm
Operator : K.Ruest
Sample : R2006930-001|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 12 10:46:25 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38375.D\data.ms

(55) Methylcyclohexane (P)

7.060min (+0.006) 0.17 ppb

response 672

Ion	Exp%	Act%
55.00	100	100
83.00	126.20	120.52
98.00	64.70	123.54#
0.00	0.00	0.00

Manual Integration:

Before

08/17/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38375.D
Acq On : 11 Aug 2020 7:21 pm
Operator : K.Ruest
Sample : R2006930-001|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 17 14:53:30 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

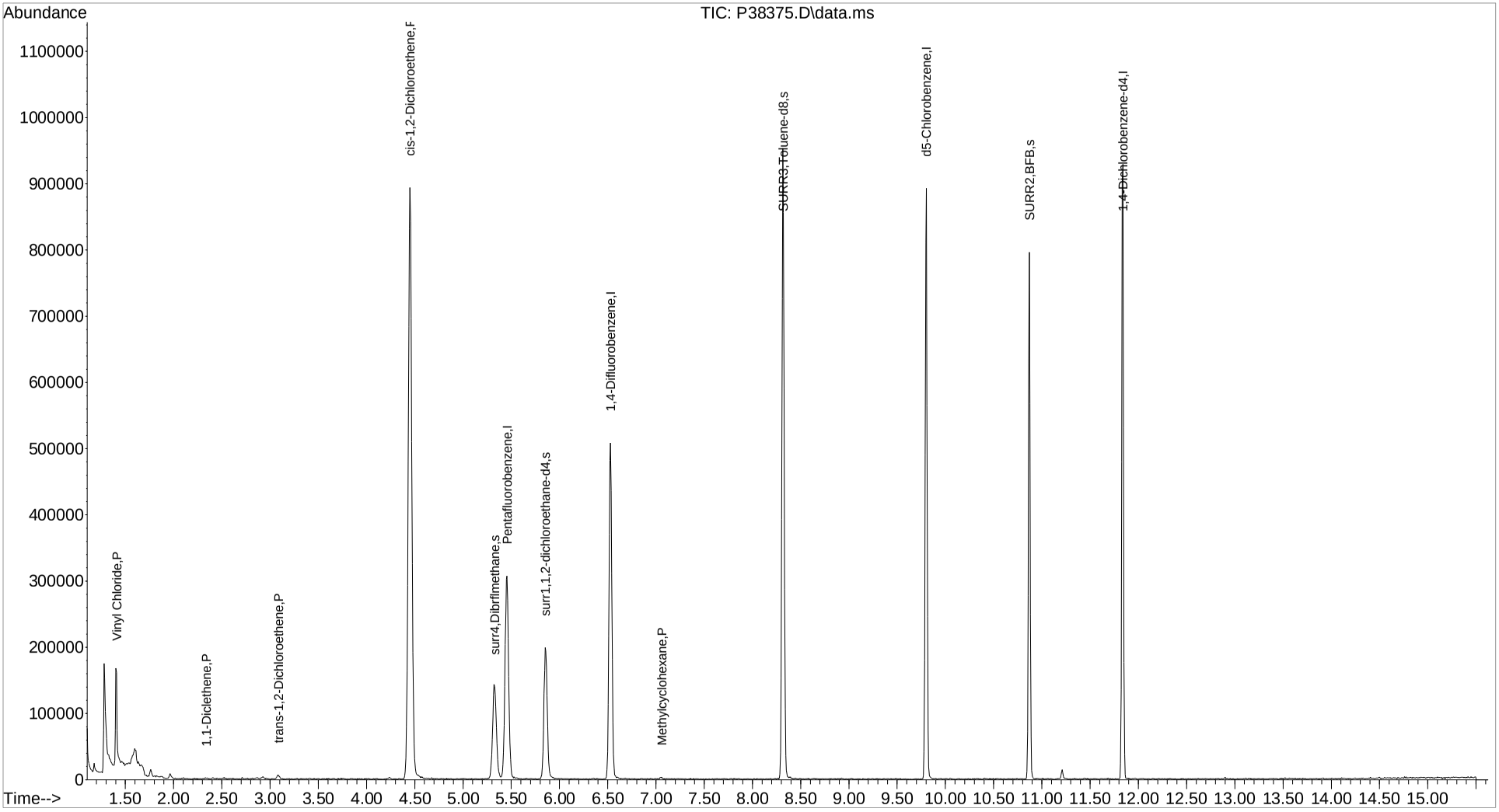
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	292297	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	450255	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	405394	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	192908	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	117732	45.54	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 91.08%				
48) surr1,1,2-dichloroetha...	5.852	65	168307	47.02	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 94.04%				
65) SURR3,Toluene-d8	8.315	98	595828	49.59	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.18%				
70) SURR2,BFB	10.870	95	208288	47.04	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.08%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.408	62	93089	24.45	ppb		84
13) 1,1-Diclethene	2.335	96	552	0.24	ppb		99
15) Acetone	2.408	43	958	Below Cal			69
26) trans-1,2-Dichloroethene	3.085	96	2040	0.77	ppb	#	62
34) cis-1,2-Dichloroethene	4.450	96	538103	159.51	ppb		99
55) Methylcyclohexane	7.060	55	883m	0.22	ppb		

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

Quantitation Report (QT Reviewed)

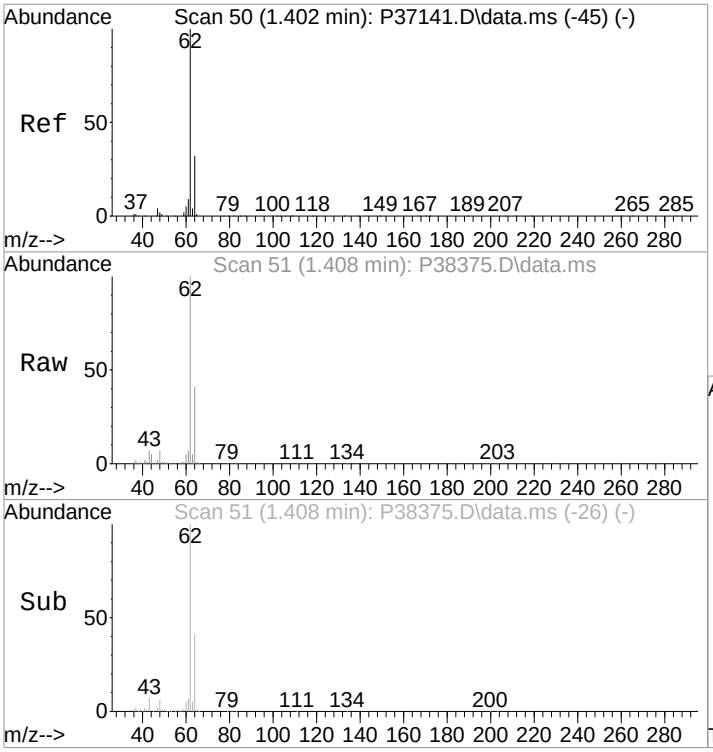
Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38375.D
Acq On : 11 Aug 2020 7:21 pm
Operator : K.Ruest
Sample : R2006930-001|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 17 14:53:30 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



1st 08/17/20
2nd 08/17/20

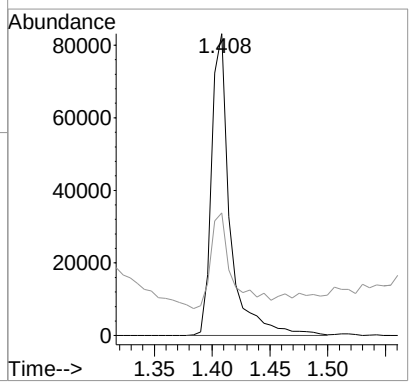
1st 08/17/20
2nd 08/17/20

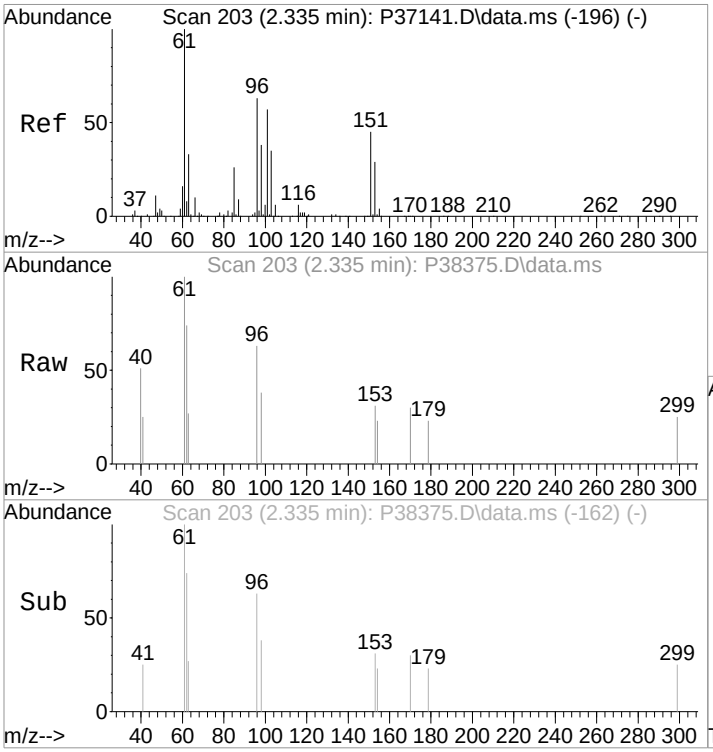


#4
Vinyl Chloride
Concen: 24.45 ppb
RT: 1.408 min Scan# 51
Delta R.T. 0.006 min
Lab File: P38375.D
Acq: 11 Aug 2020 7:21 pm

Tgt Ion: 62 Resp: 93089

Ion	Ratio	Lower	Upper
62	100		
64	40.6	11.6	51.6

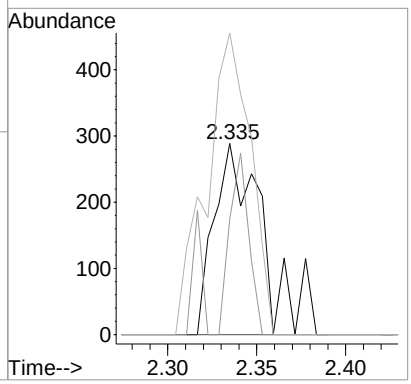


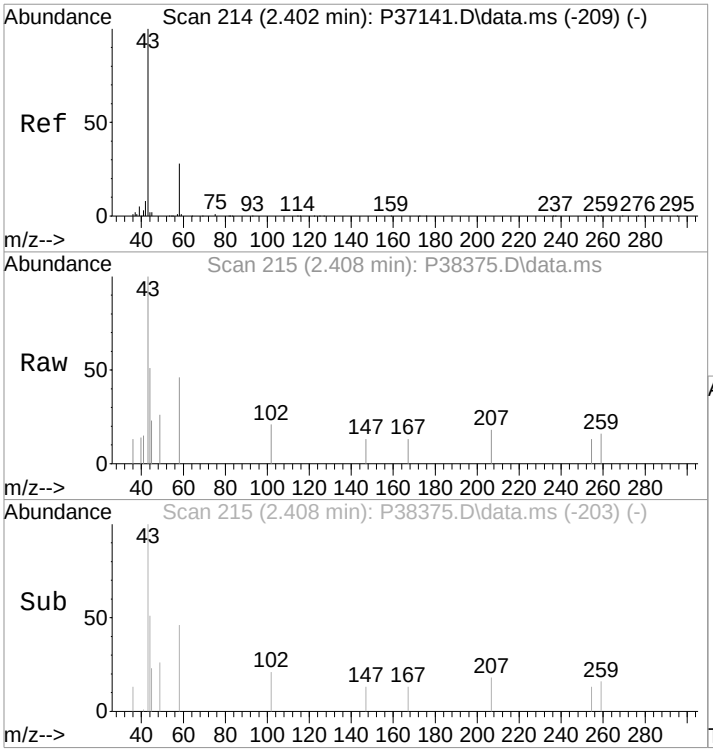


#13
1,1-Diclethene
Concen: 0.24 ppb
RT: 2.335 min Scan# 203
Delta R.T. 0.000 min
Lab File: P38375.D
Acq: 11 Aug 2020 7:21 pm

Tgt Ion: 96 Resp: 552

Ion	Ratio	Lower	Upper
96	100		
98	60.6	40.4	80.4
61	157.8	139.0	179.0

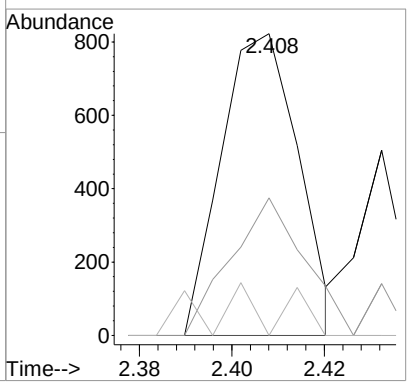


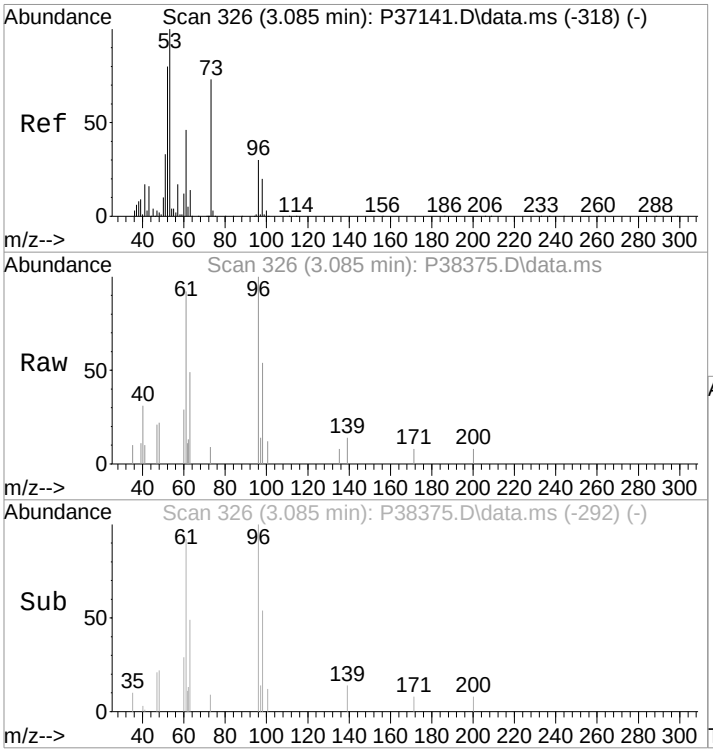


#15
Acetone
Concen: Below Cal
RT: 2.408 min Scan# 215
Delta R.T. 0.001 min
Lab File: P38375.D
Acq: 11 Aug 2020 7:21 pm

Tgt Ion: 43 Resp: 958

Ion	Ratio	Lower	Upper
43	100		
58	45.6	8.2	48.2
42	0.0	0.0	27.7

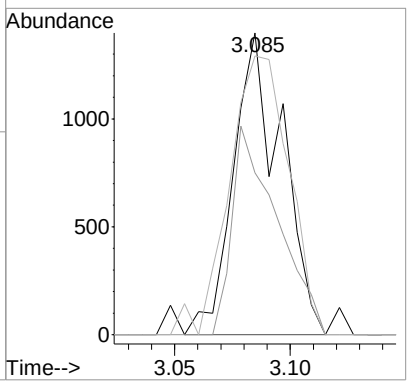


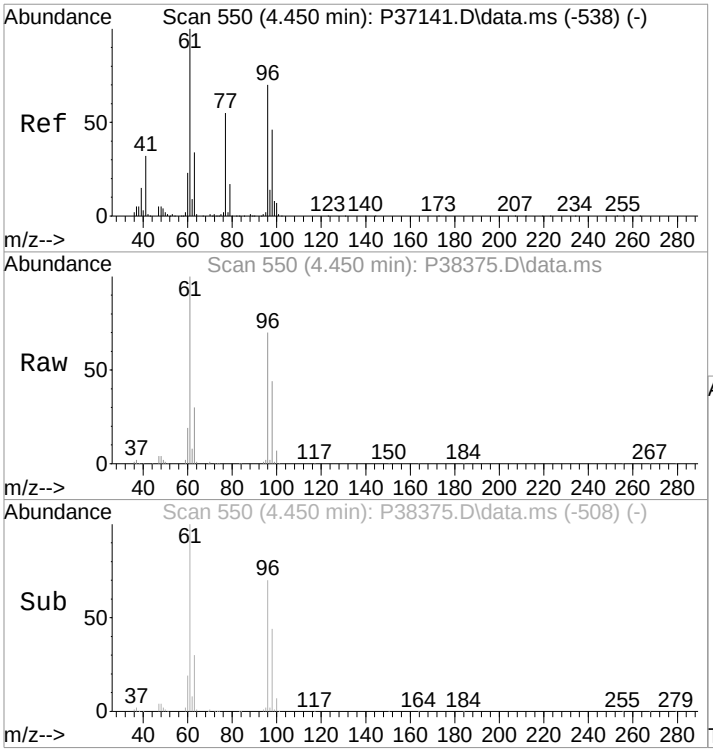


#26
trans-1,2-Dichloroethene
Concen: 0.77 ppb
RT: 3.085 min Scan# 326
Delta R.T. 0.000 min
Lab File: P38375.D
Acq: 11 Aug 2020 7:21 pm

Tgt Ion: 96 Resp: 2040

Ion	Ratio	Lower	Upper
96	100		
98	53.6	46.8	86.8
61	92.4	132.8	172.8#

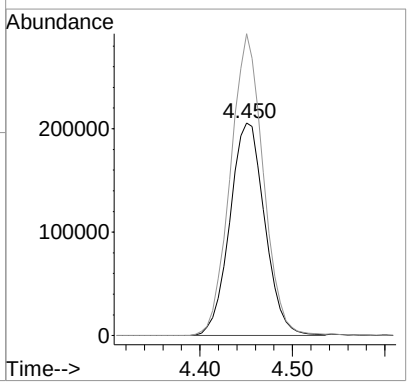


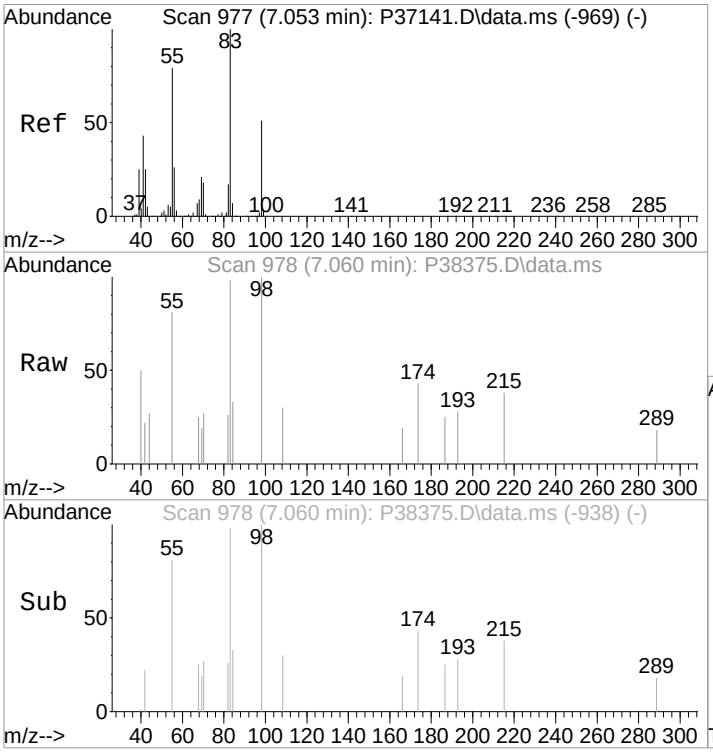


#34
cis-1,2-Dichloroethene
Concen: 159.51 ppb
RT: 4.450 min Scan# 550
Delta R.T. 0.000 min
Lab File: P38375.D
Acq: 11 Aug 2020 7:21 pm

Tgt Ion: 96 Resp: 538103

Ion	Ratio	Lower	Upper
96	100		
61	142.1	123.1	163.1

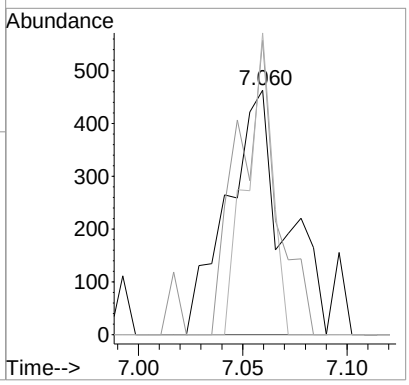




#55
Methylcyclohexane
Concen: 0.22 ppb m
RT: 7.060 min Scan# 978
Delta R.T. 0.006 min
Lab File: P38375.D
Acq: 11 Aug 2020 7:21 pm

Tgt Ion: 55 Resp: 883

Ion	Ratio	Lower	Upper
55	100		
83	120.5	106.2	146.2
98	123.5	44.7	84.7#



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38374.D
Acq On : 11 Aug 2020 7:00 pm
Operator : K.Ruest
Sample : R2006930-002|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 17 14:49:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

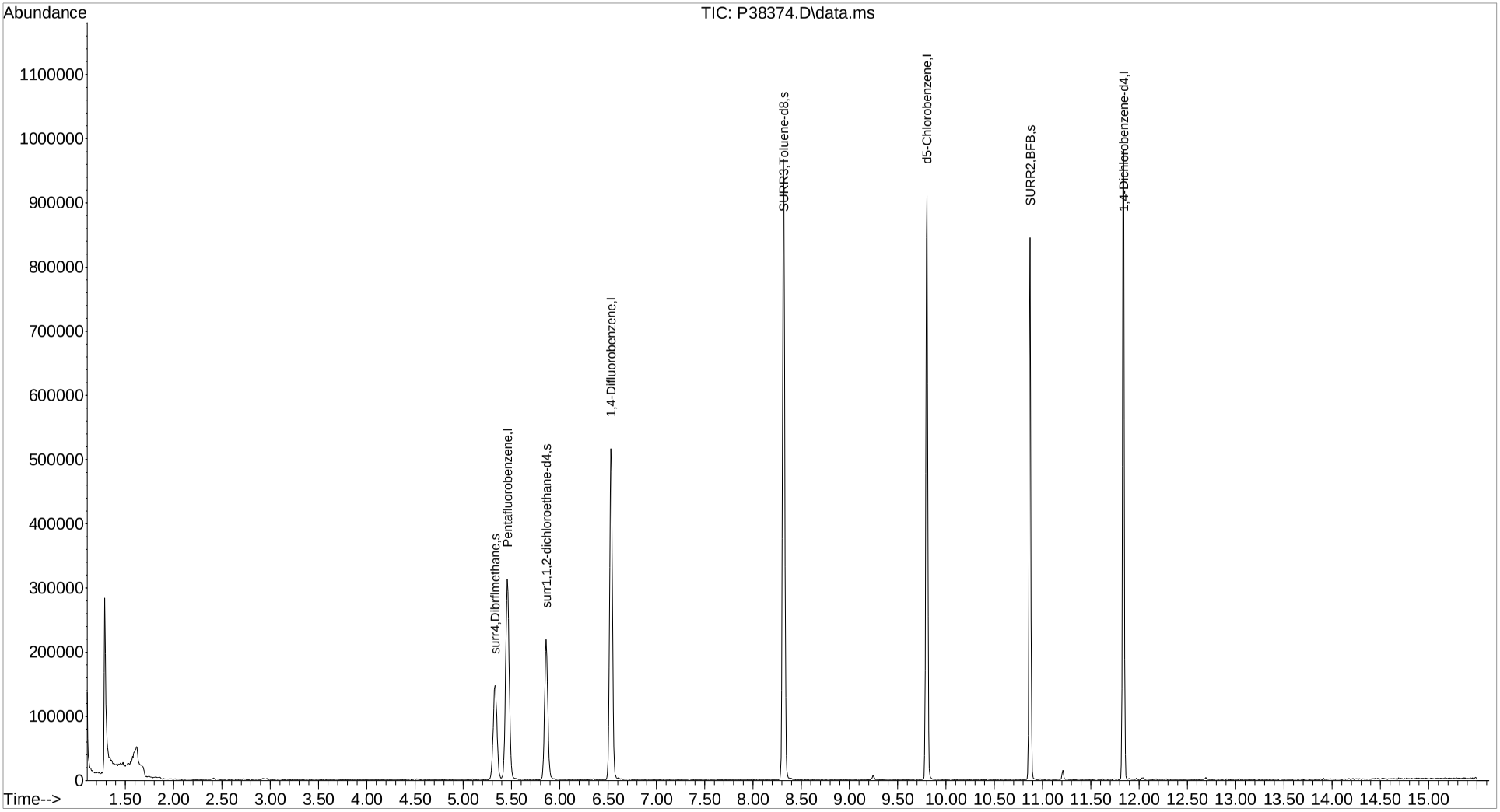
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.456	168	297077	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.529	114	456735	50.00	ppb	0.00
71) d5-Chlorobenzene	9.803	117	413151	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	202279	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.328	113	125979	48.04	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.08%			
48) surr1,1,2-dichloroetha...	5.859	65	175359	48.30	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 96.60%			
65) SURR3,Toluene-d8	8.316	98	616397	50.57	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.14%			
70) SURR2,BFB	10.870	95	217548	48.44	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.88%			
Target Compounds						Qvalue
15) Acetone	2.414	43	2209	Below Cal		88

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

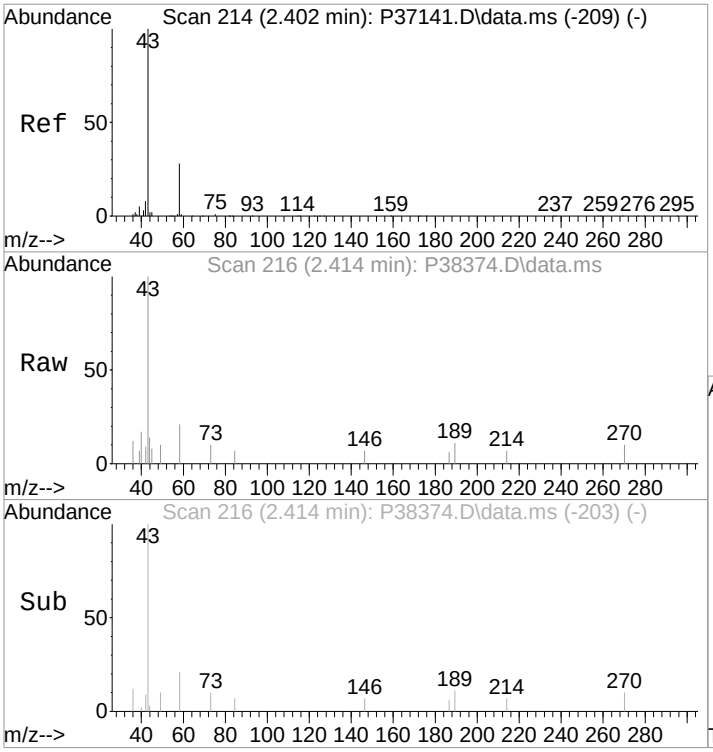
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38374.D
Acq On : 11 Aug 2020 7:00 pm
Operator : K.Ruest
Sample : R2006930-002|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 17 14:49:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



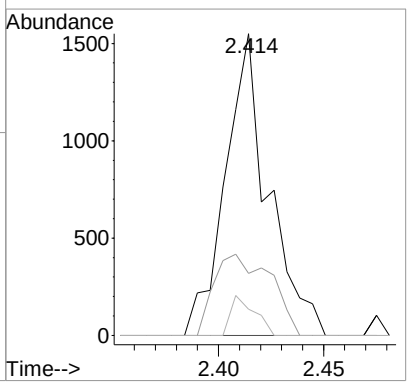
1st 08/17/20
2nd 08/17/20



#15
Acetone
Concen: Below Cal
RT: 2.414 min Scan# 216
Delta R.T. 0.007 min
Lab File: P38374.D
Acq: 11 Aug 2020 7:00 pm

Tgt Ion: 43 Resp: 2209

Ion	Ratio	Lower	Upper
43	100		
58	20.6	8.2	48.2
42	8.6	0.0	27.7



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38373.D
Acq On : 11 Aug 2020 6:38 pm
Operator : K.Ruest
Sample : R2006930-003|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 17 14:45:20 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

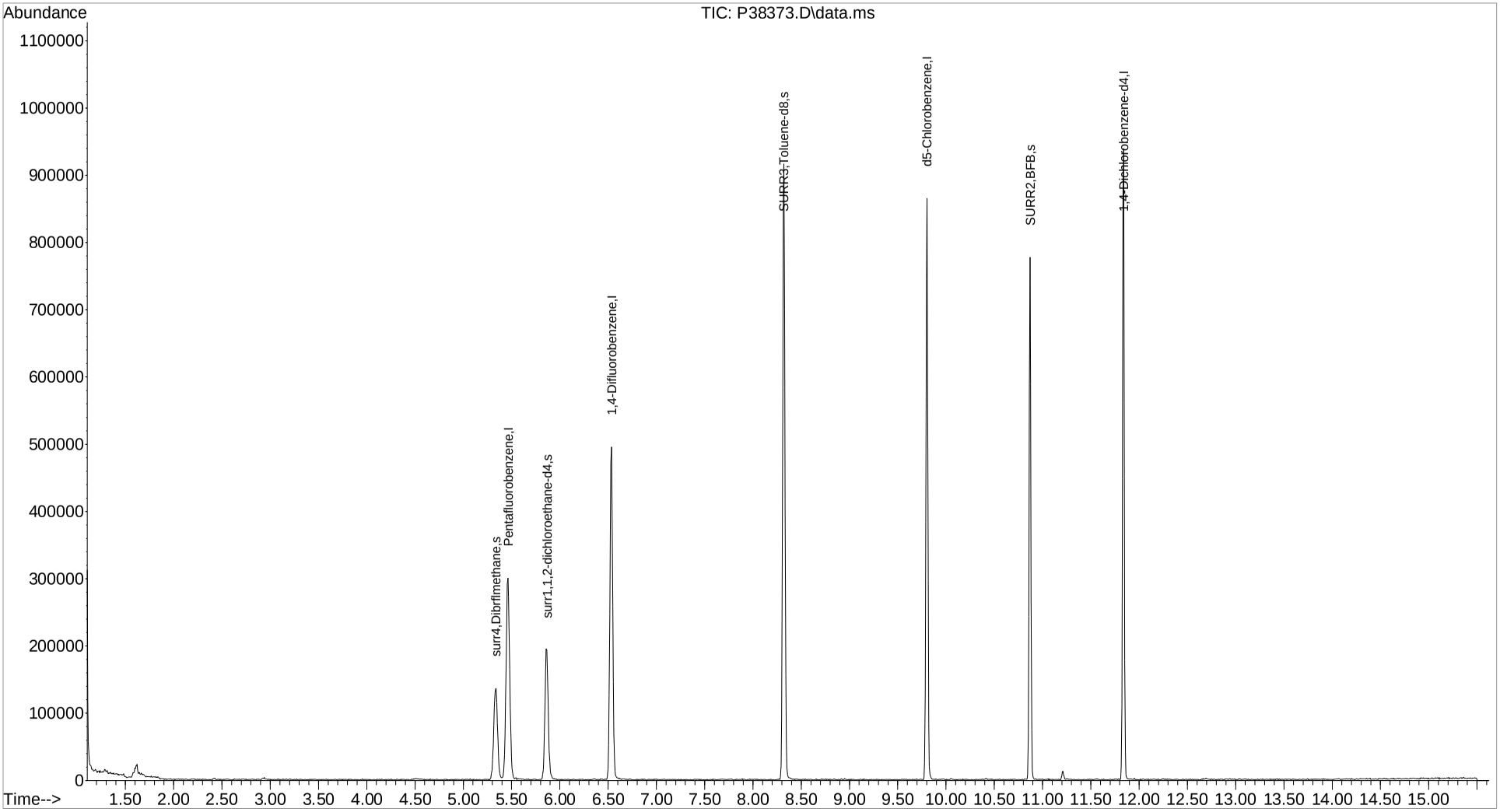
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.462	168	281952	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.535	114	438816	50.00	ppb	0.00
71) d5-Chlorobenzene	9.803	117	389700	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	190990	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.340	113	115252	45.74	ppb	0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 91.48%			
48) surr1,1,2-dichloroetha...	5.865	65	161057	46.17	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 92.34%			
65) SURR3,Toluene-d8	8.321	98	585337	49.98	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.96%			
70) SURR2,BFB	10.870	95	199131	46.15	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 92.30%			
Target Compounds						Qvalue
15) Acetone	2.408	43	1270	Below Cal		87

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

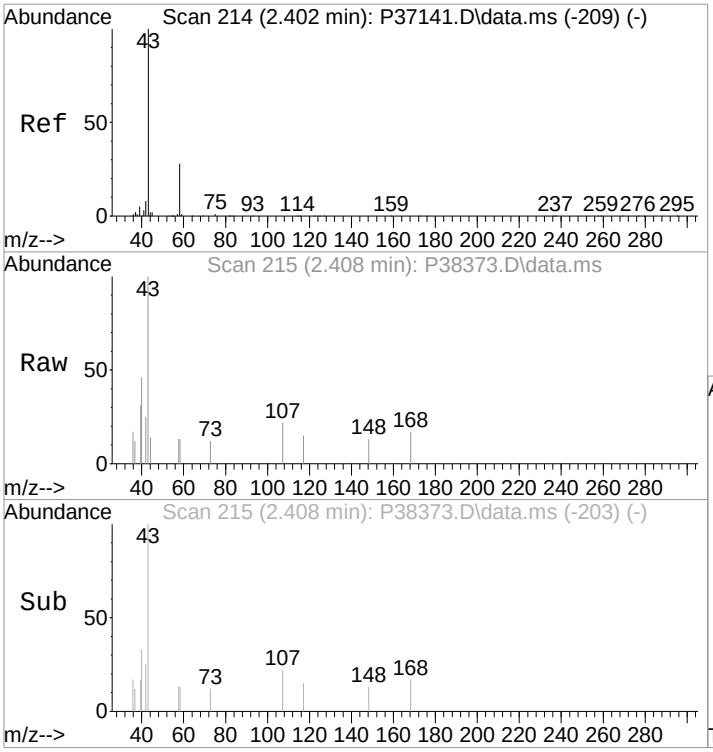
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38373.D
Acq On : 11 Aug 2020 6:38 pm
Operator : K.Ruest
Sample : R2006930-003|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 17 14:45:20 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



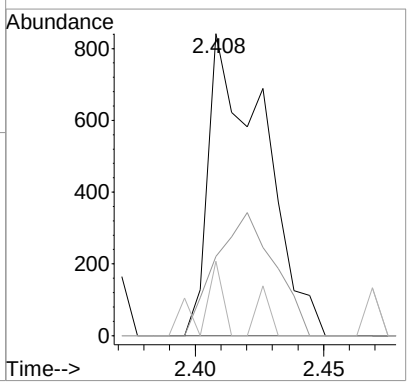
1st 08/17/20
2nd 08/17/20



#15
Acetone
Concen: Below Cal
RT: 2.408 min Scan# 215
Delta R.T. 0.001 min
Lab File: P38373.D
Acq: 11 Aug 2020 6:38 pm

Tgt Ion: 43 Resp: 1270

Ion	Ratio	Lower	Upper
43	100		
58	26.2	8.2	48.2
42	24.6	0.0	27.7



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38372.D
Acq On : 11 Aug 2020 6:16 pm
Operator : K.Ruest
Sample : R2006930-004|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 17 14:43:49 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

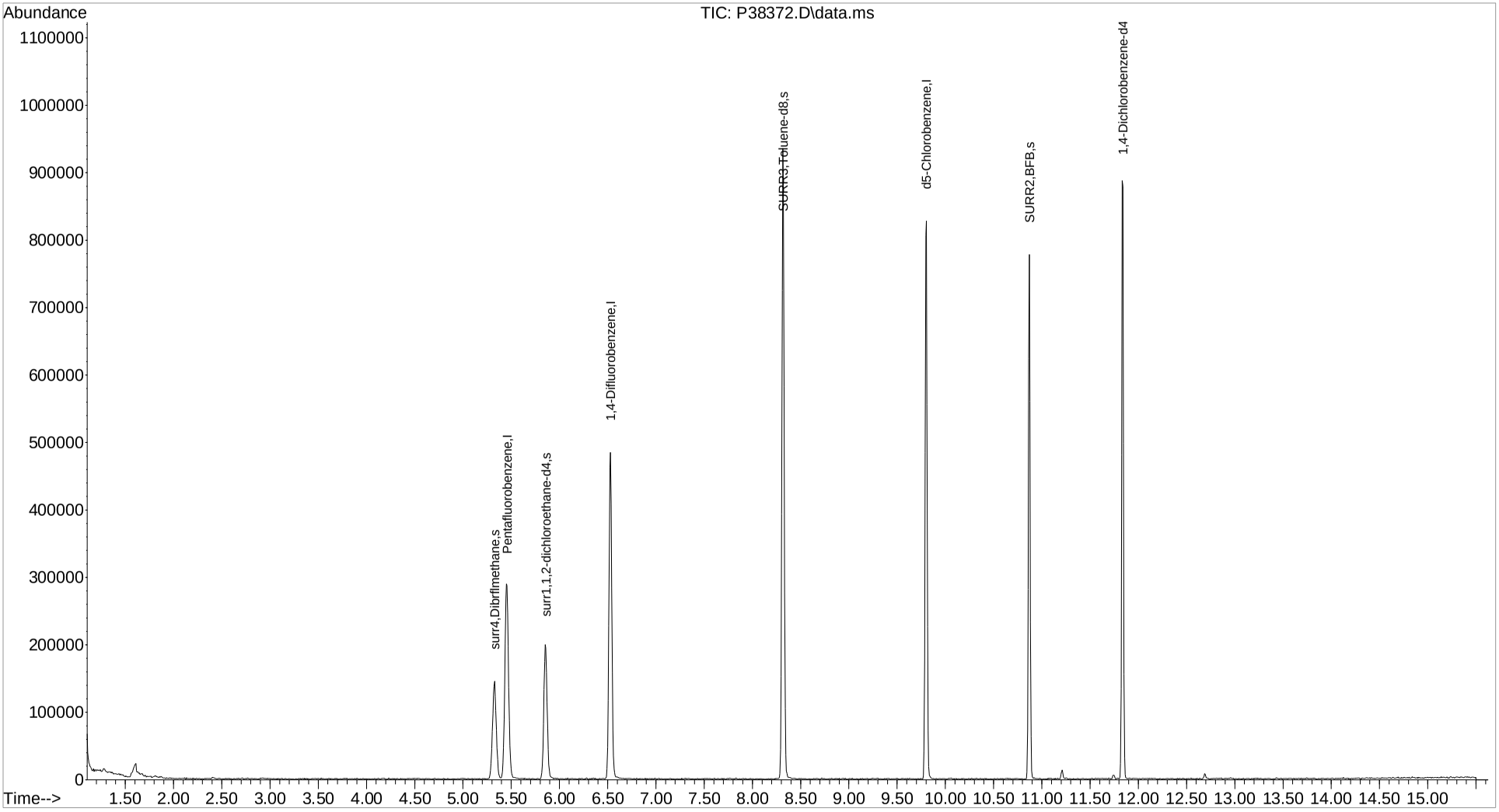
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.456	168	278022	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.529	114	429518	50.00	ppb	0.00
71) d5-Chlorobenzene	9.803	117	387967	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	183320	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.328	113	119073	48.28	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.56%			
48) surr1,1,2-dichloroetha...	5.859	65	167115	48.94	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 97.88%			
65) SURR3,Toluene-d8	8.316	98	589550	51.43	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.86%			
70) SURR2,BFB	10.870	95	203907	48.28	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.56%			
Target Compounds						Qvalue
15) Acetone	2.402	43	1509	Below Cal		90

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

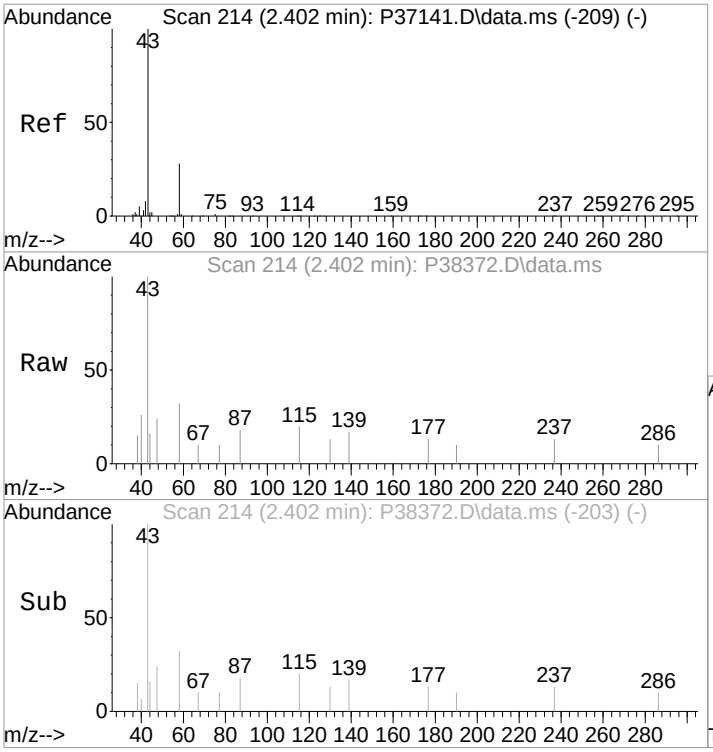
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38372.D
Acq On : 11 Aug 2020 6:16 pm
Operator : K.Ruest
Sample : R2006930-004|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 17 14:43:49 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



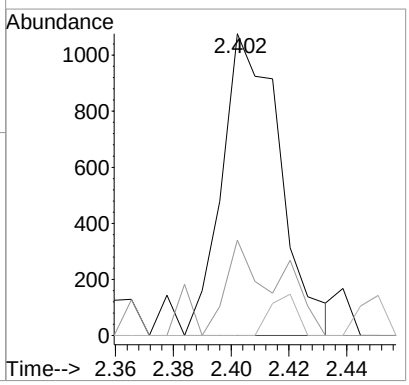
1st 08/17/20
2nd 08/17/20



#15
Acetone
Concen: Below Cal
RT: 2.402 min Scan# 214
Delta R.T. -0.005 min
Lab File: P38372.D
Acq: 11 Aug 2020 6:16 pm

Tgt Ion: 43 Resp: 1509

Ion	Ratio	Lower	Upper
43	100		
58	31.6	8.2	48.2
42	0.0	0.0	27.7



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38371.D
Acq On : 11 Aug 2020 5:54 pm
Operator : K.Ruest
Sample : R2006930-005|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 17 14:42:06 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

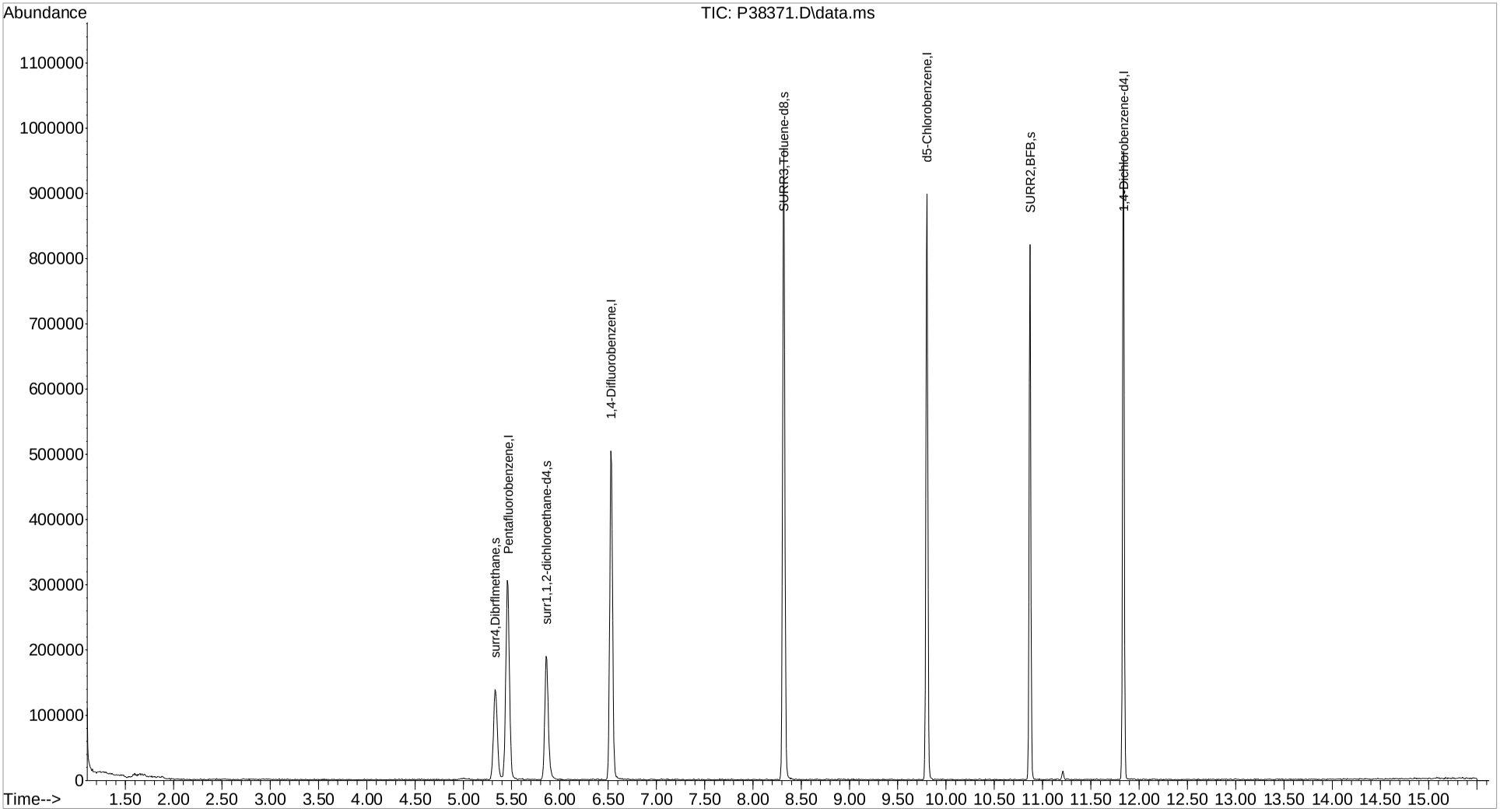
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.462	168	288924	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.529	114	454244	50.00	ppb	0.00
71) d5-Chlorobenzene	9.803	117	404940	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	198467	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.328	113	119663	45.88	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 91.76%			
48) surr1,1,2-dichloroetha...	5.859	65	169867	47.04	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 94.08%			
65) SURR3,Toluene-d8	8.322	98	593758	48.98	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.96%			
70) SURR2,BFB	10.870	95	212760	47.63	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.26%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38371.D
Acq On : 11 Aug 2020 5:54 pm
Operator : K.Ruest
Sample : R2006930-005|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 17 14:42:06 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



1st 08/17/20
2nd 08/17/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38356.D
Acq On : 11 Aug 2020 12:19 pm
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 11 13:18:36 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

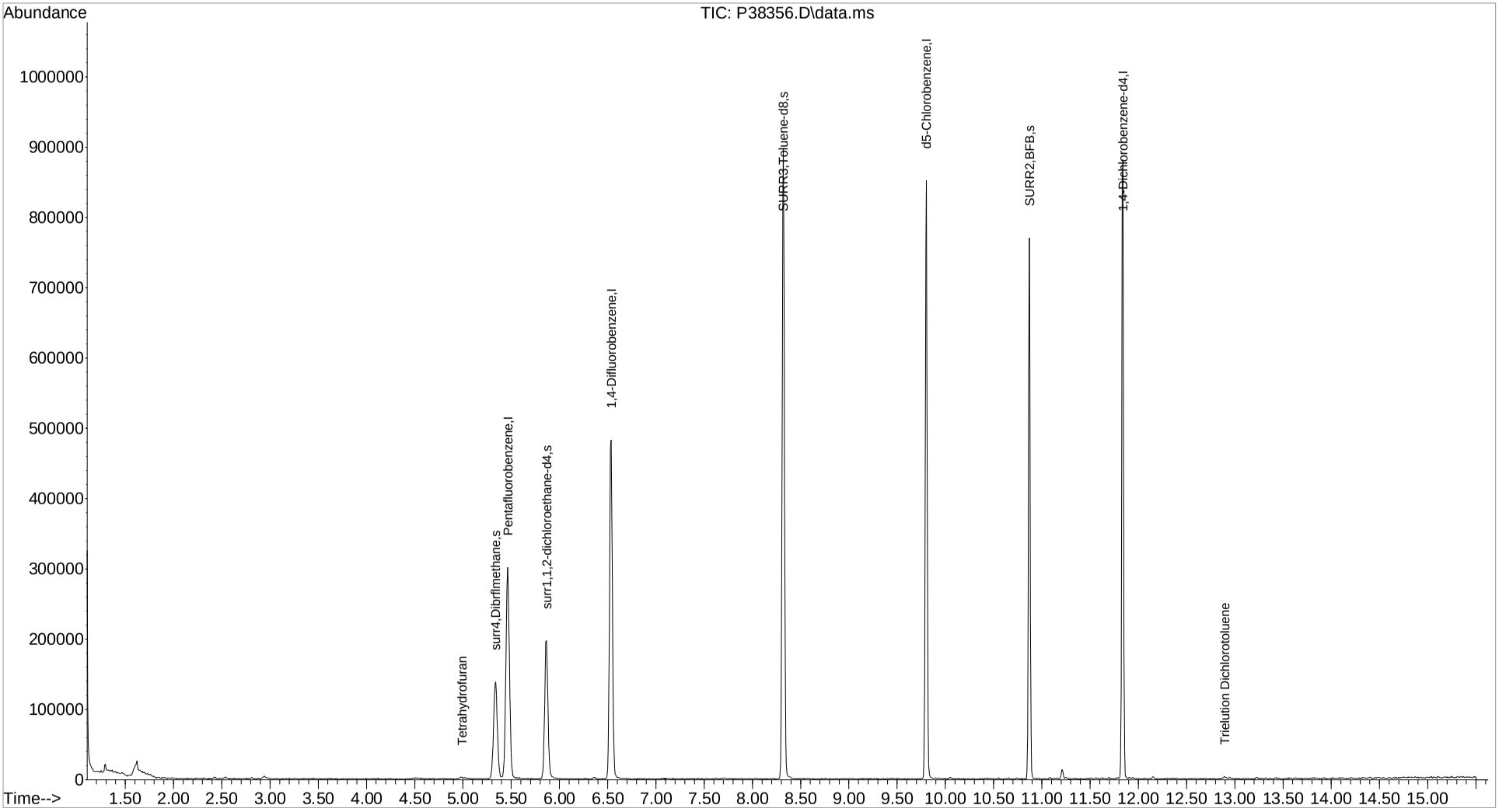
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.462	168	278662	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.535	114	426583	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	378274	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	181369	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.340	113	113643	46.39	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 92.78%				
48) surr1,1,2-dichloroetha...	5.865	65	161800	47.71	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 95.42%				
65) SURR3,Toluene-d8	8.322	98	566621	49.77	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.54%				
70) SURR2,BFB	10.870	95	200502	47.80	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.60%				
Target Compounds							Qvalue
15) Acetone	2.426	43	1852	Below Cal			95
18) Carbon Disulfide	2.542	76	2015	Below Cal			69
39) Tetrahydrofuran	4.987	42	1947	1.17	ppb		79
112) Trielution Dichlorotol...	12.894	125	1282	0.25	ppb	#	73

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

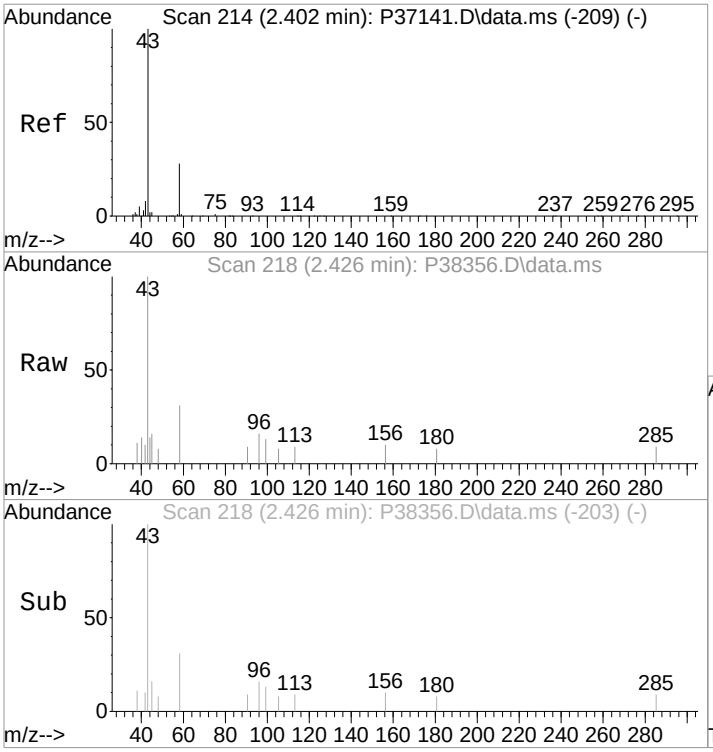
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38356.D
Acq On : 11 Aug 2020 12:19 pm
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 11 13:18:36 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



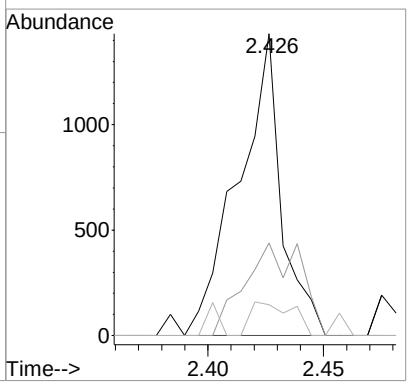
1st 08/11/20
2nd 08/17/20

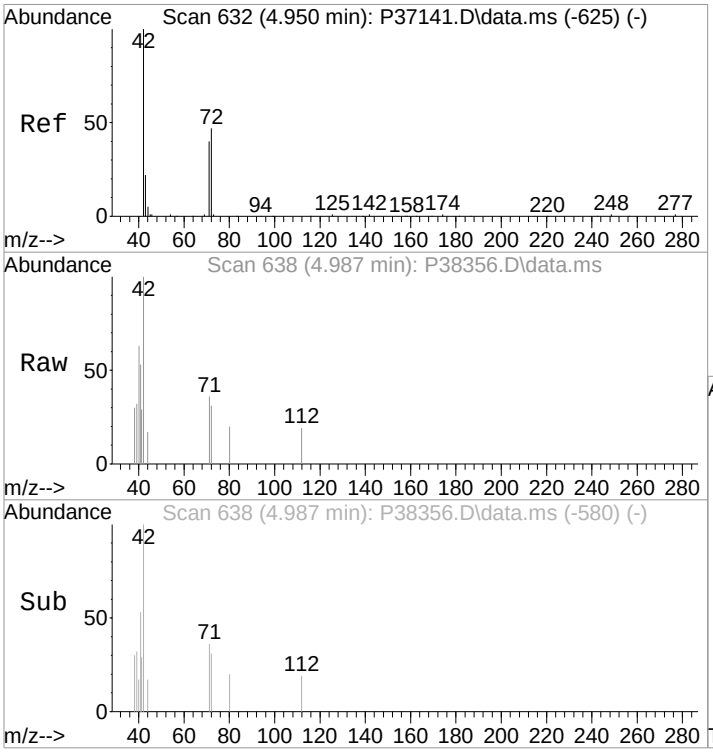


#15
Acetone
Concen: Below Cal
RT: 2.426 min Scan# 218
Delta R.T. 0.019 min
Lab File: P38356.D
Acq: 11 Aug 2020 12:19 pm

Tgt Ion: 43 Resp: 1852

Ion	Ratio	Lower	Upper
43	100		
58	30.7	8.2	48.2
42	10.2	0.0	27.7

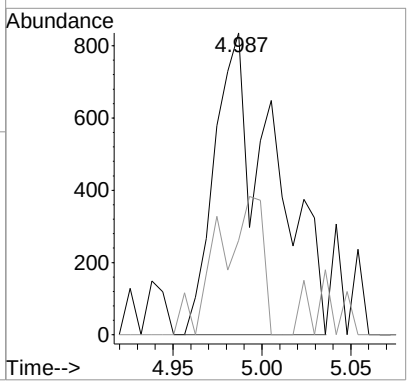


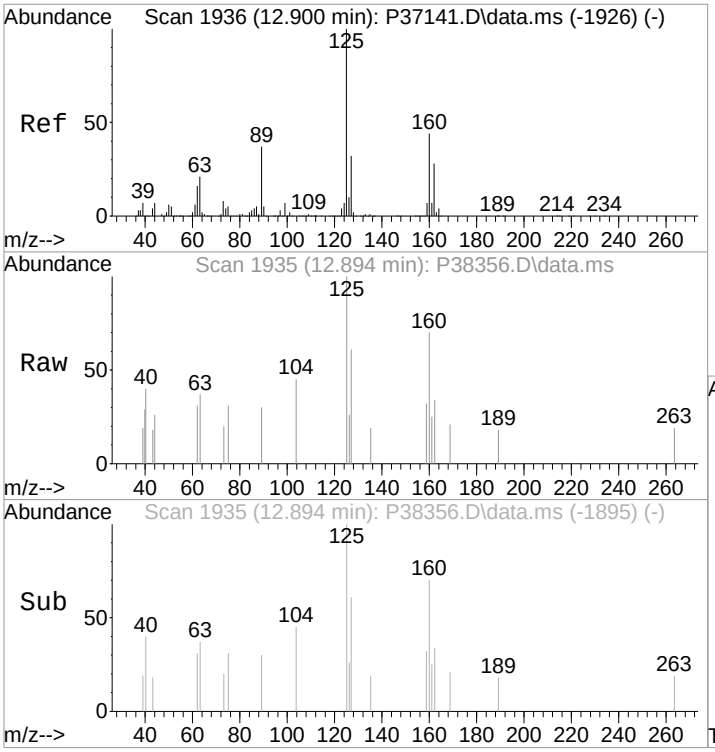


#39
Tetrahydrofuran
Concen: 1.17 ppb
RT: 4.987 min Scan# 638
Delta R.T. 0.037 min
Lab File: P38356.D
Acq: 11 Aug 2020 12:19 pm

Tgt Ion: 42 Resp: 1947

Ion	Ratio	Lower	Upper
42	100		
72	31.3	25.2	65.2

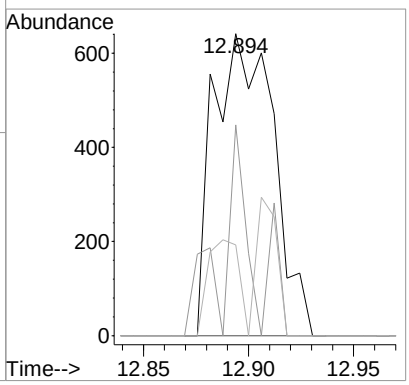




#112
Trielution Dichlorotoluene
Concen: 0.25 ppb
RT: 12.894 min Scan# 1935
Delta R.T. -0.006 min
Lab File: P38356.D
Acq: 11 Aug 2020 12:19 pm

Tgt Ion:125 Resp: 1282

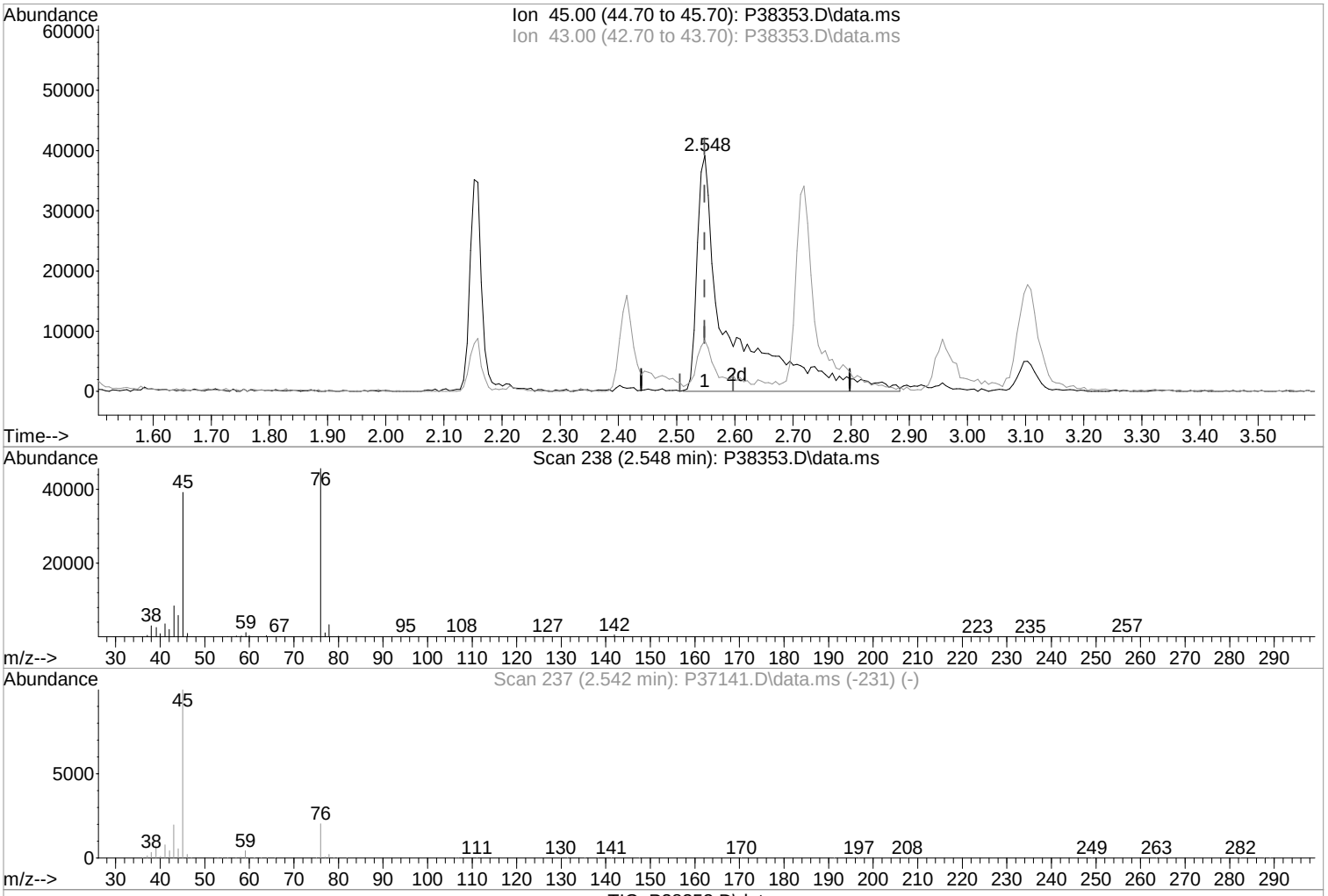
Ion	Ratio	Lower	Upper
125	100		
160	69.8	35.3	52.9#
89	30.1	29.9	44.9



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38353.D
Acq On : 11 Aug 2020 11:09 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 11:23:58 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38353.D\data.ms

(16) 2-Propanol

2.548min (+0.000) 373.54 ppb m

response 148131

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	21.60
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

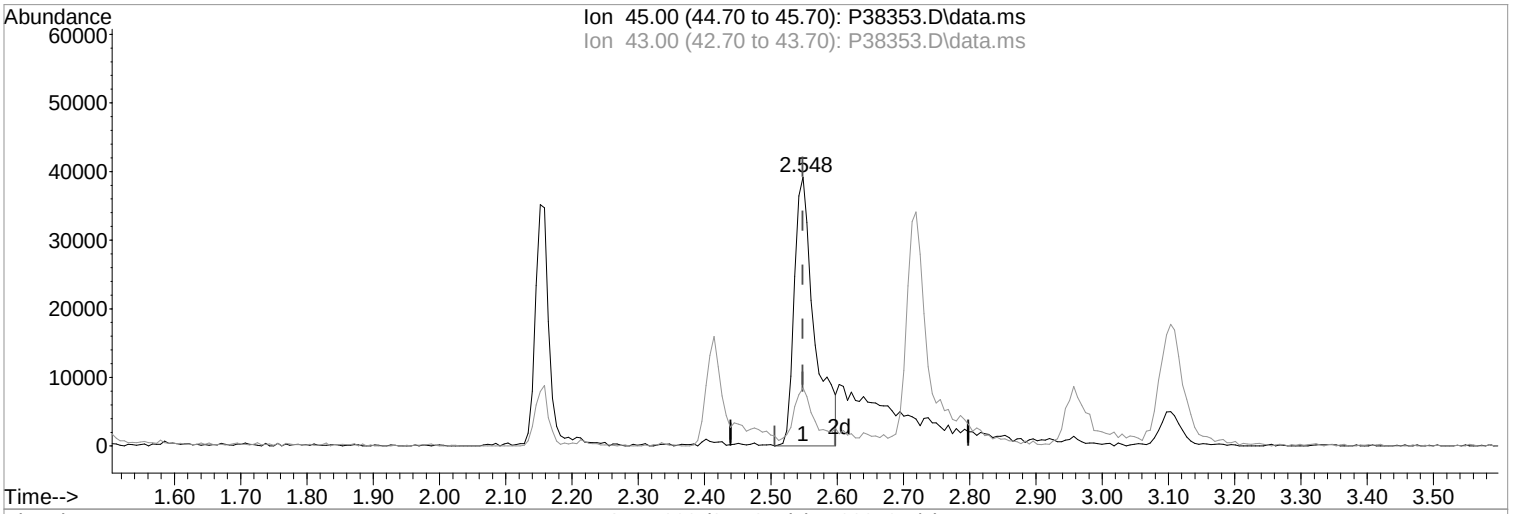
Poor integration.

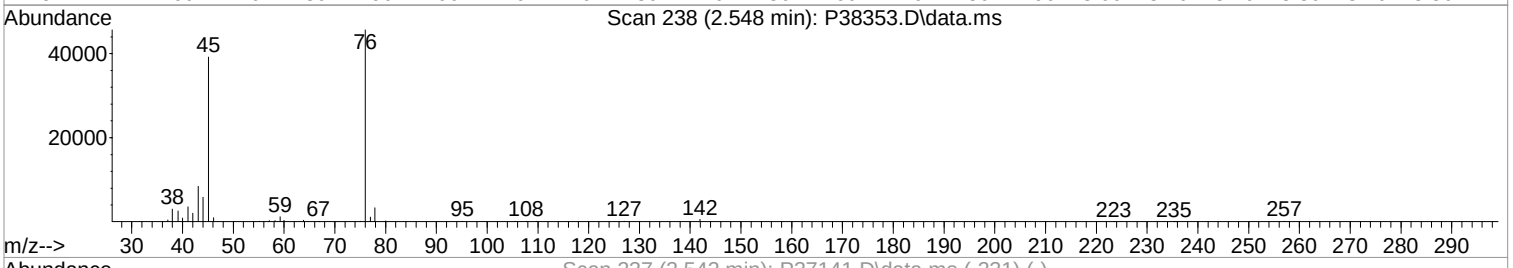
08/11/20

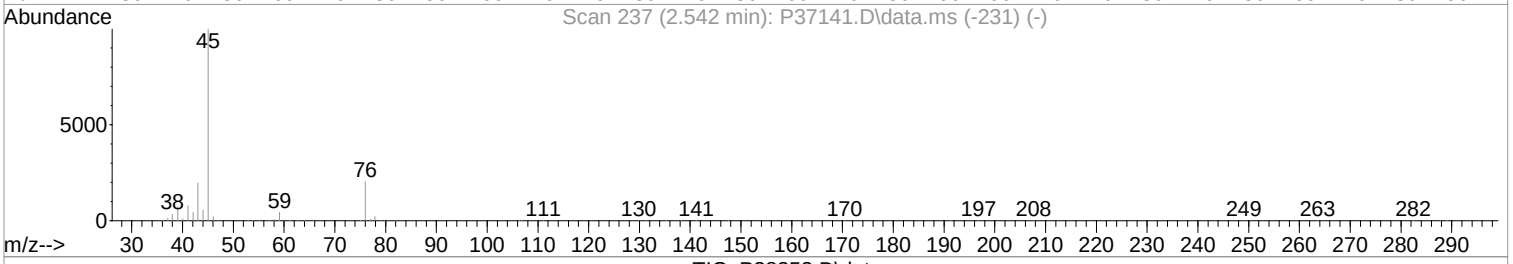
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38353.D
Acq On : 11 Aug 2020 11:09 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 11:23:58 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38353.D\data.ms

(16) 2-Propanol

2.548min (+0.000) 210.49 ppb

response 83470

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	21.60
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

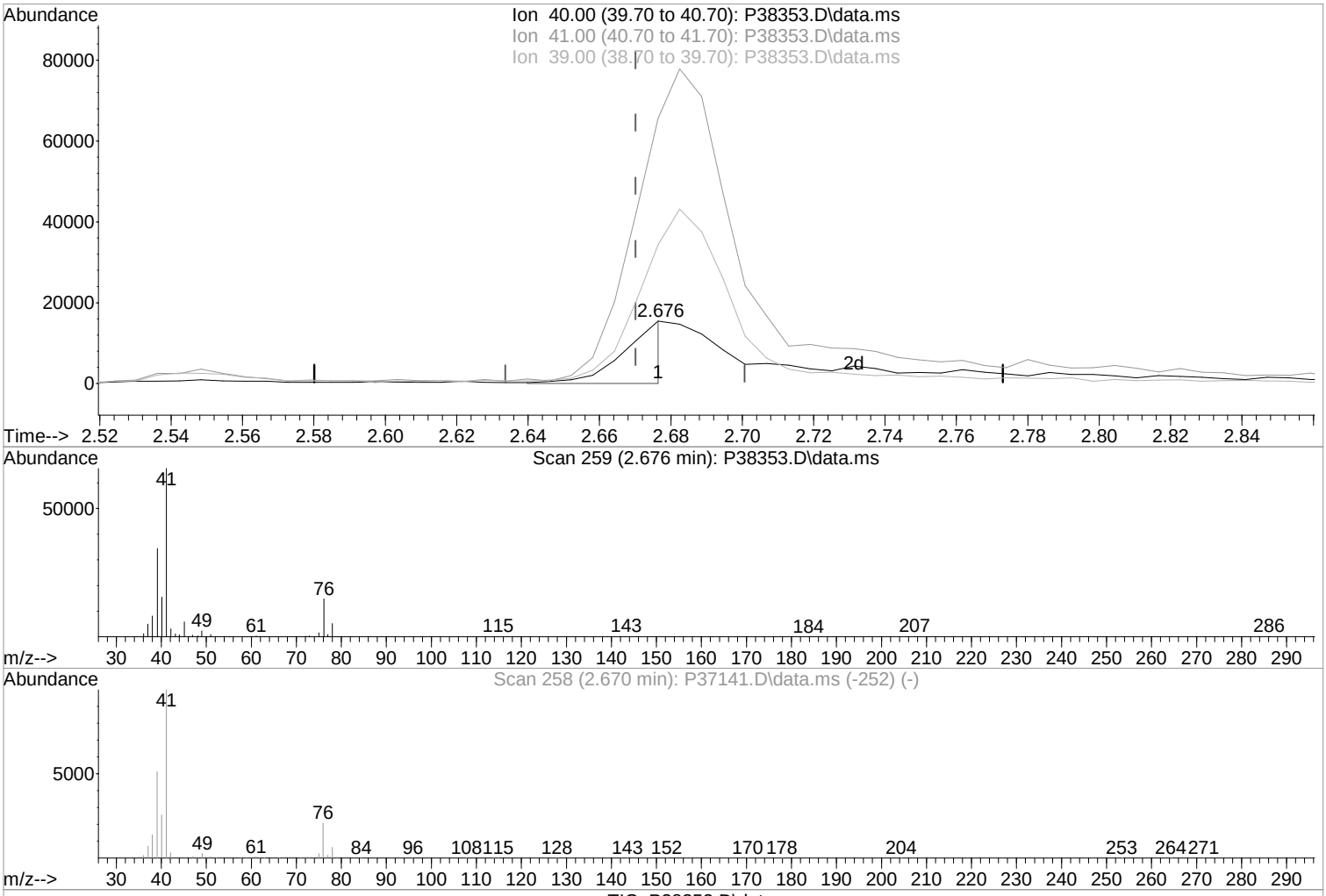
08/11/20

1st 08/11/20
2nd 08/17/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38353.D
Acq On : 11 Aug 2020 11:09 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 11:23:58 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38353.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 58.66 ppb m

response 12908

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	424.73#
39.00	200.50	222.31#
0.00	0.00	0.00

Manual Integration:

After

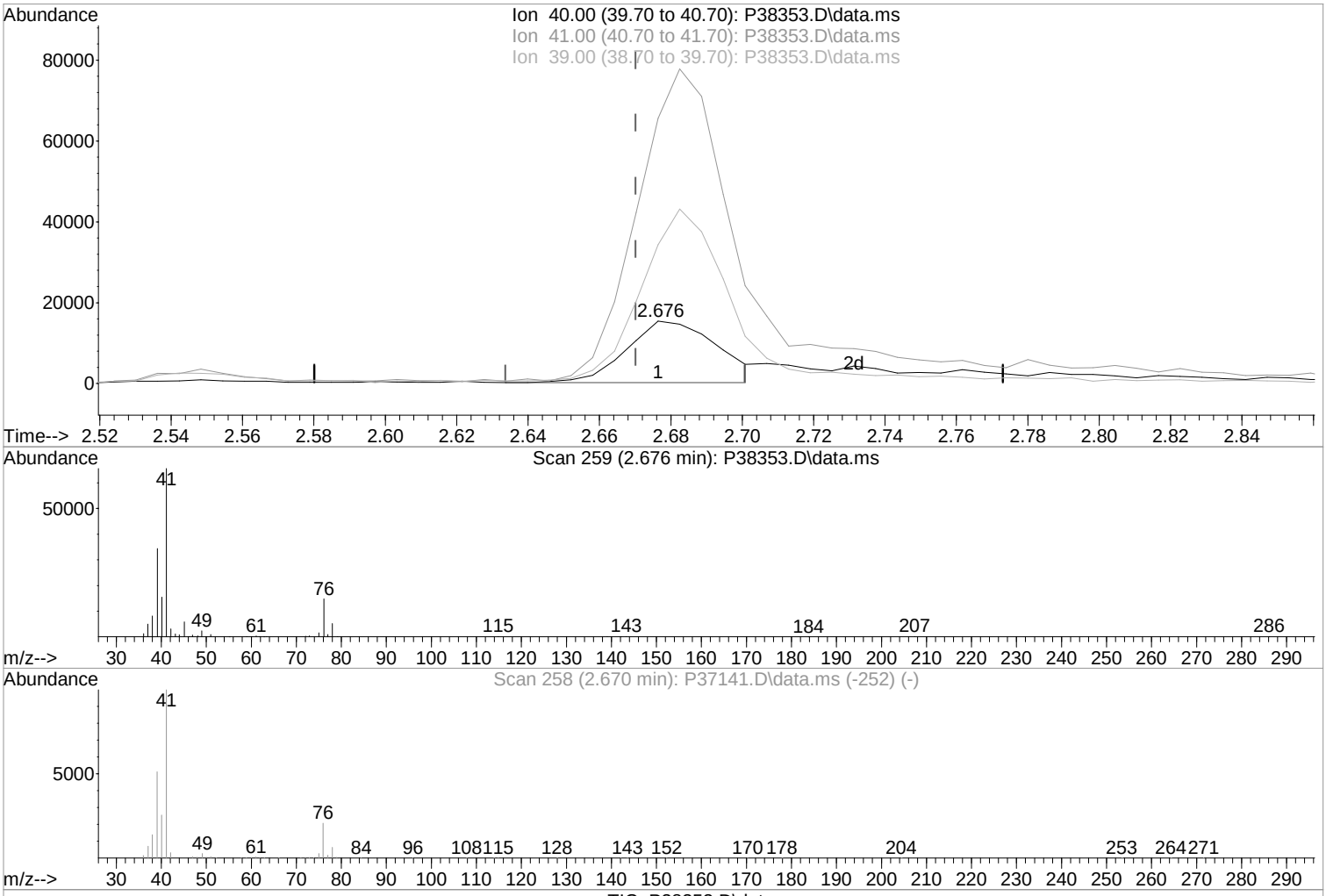
Poor integration.

08/11/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38353.D
Acq On : 11 Aug 2020 11:09 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 11:23:58 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38353.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 121.30 ppb

response 26693

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	424.73#
39.00	200.50	222.31#
0.00	0.00	0.00

Manual Integration:

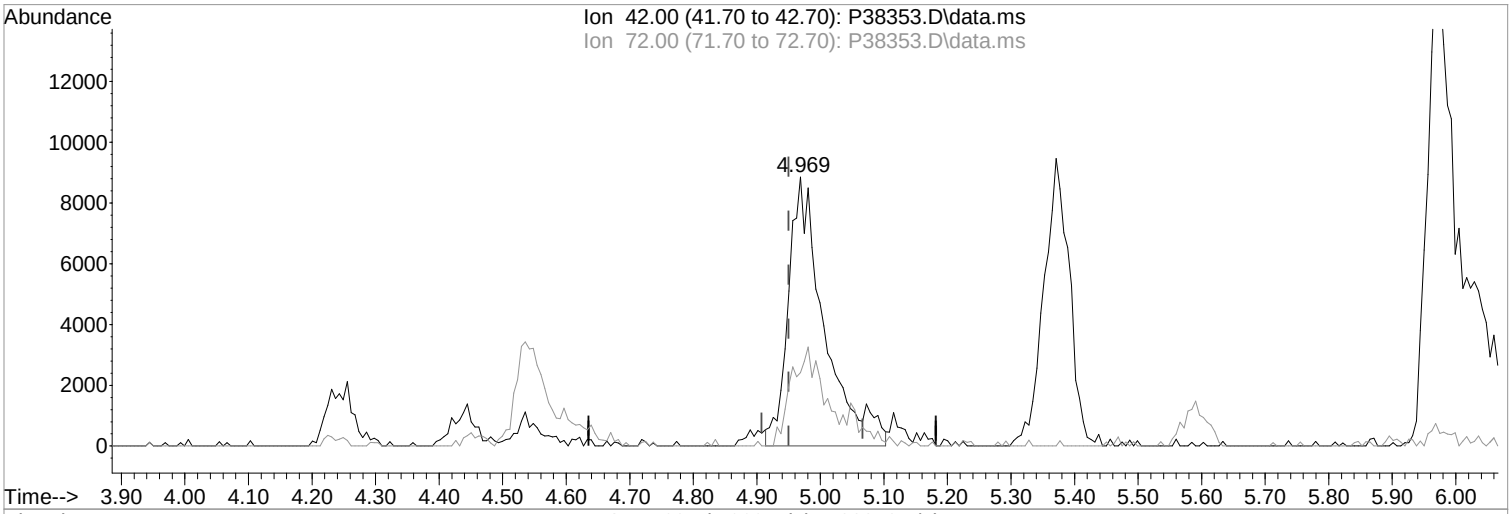
Before

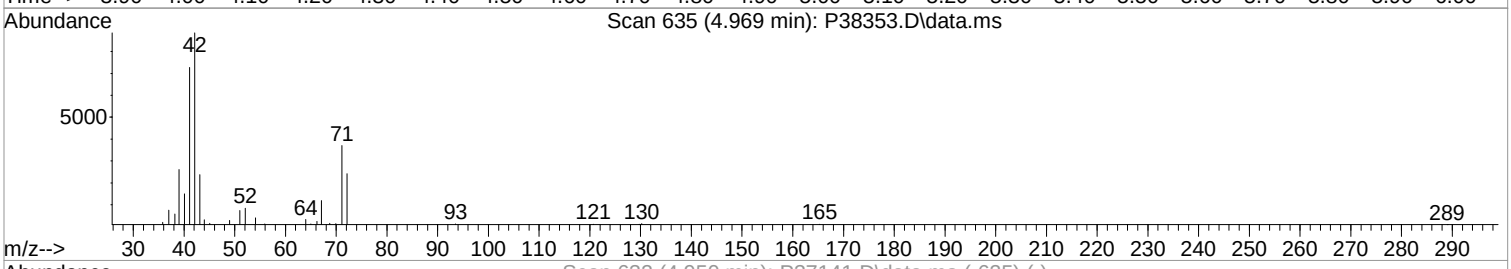
08/11/20

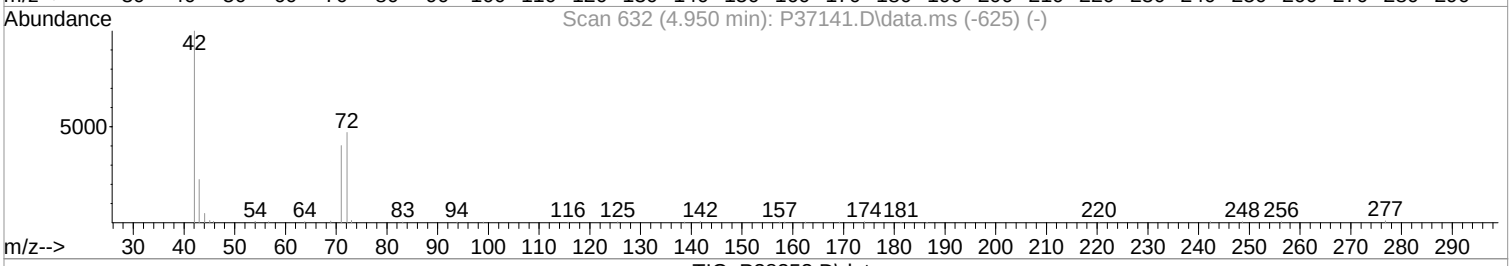
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38353.D
Acq On : 11 Aug 2020 11:09 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 11:23:58 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38353.D\data.ms

(39) Tetrahydrofuran

4.969min (+0.018) 18.91 ppb m

response 34897

Ion	Exp%	Act%
42.00	100	100
72.00	45.20	27.34
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

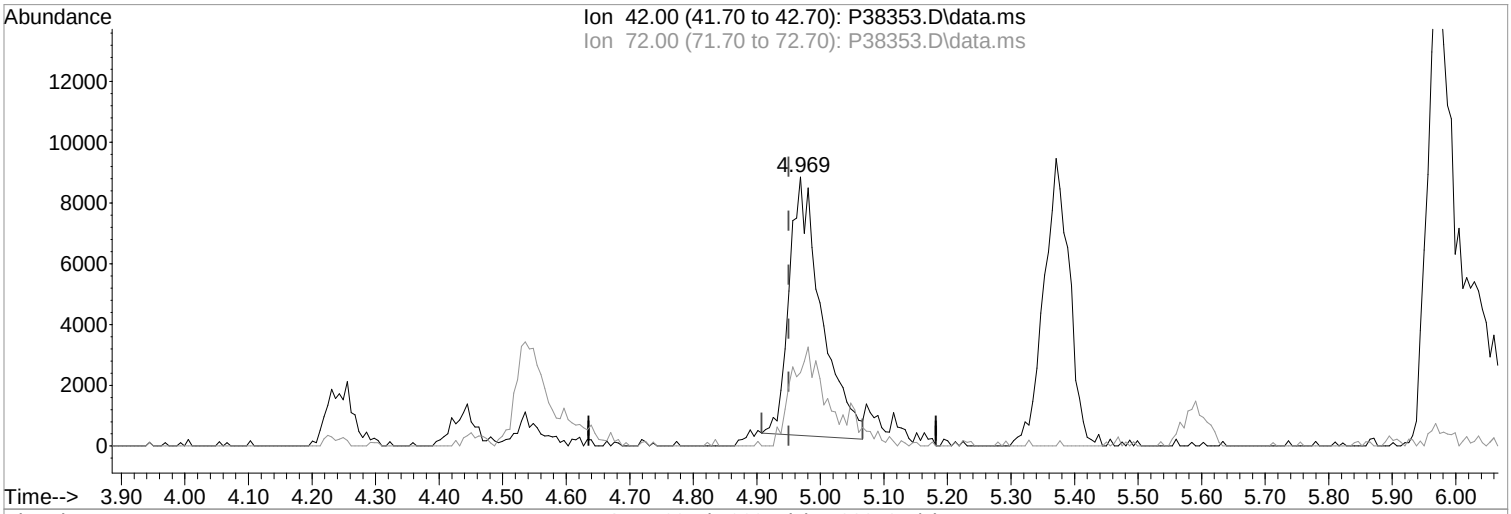
Poor integration.

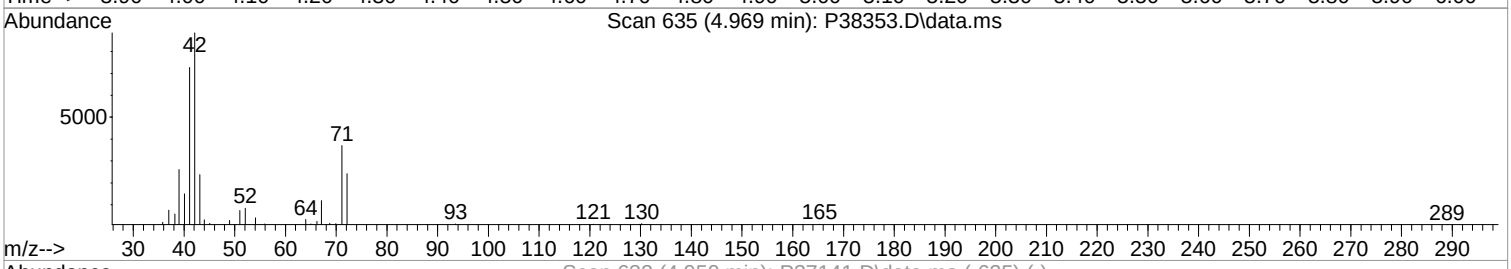
08/11/20

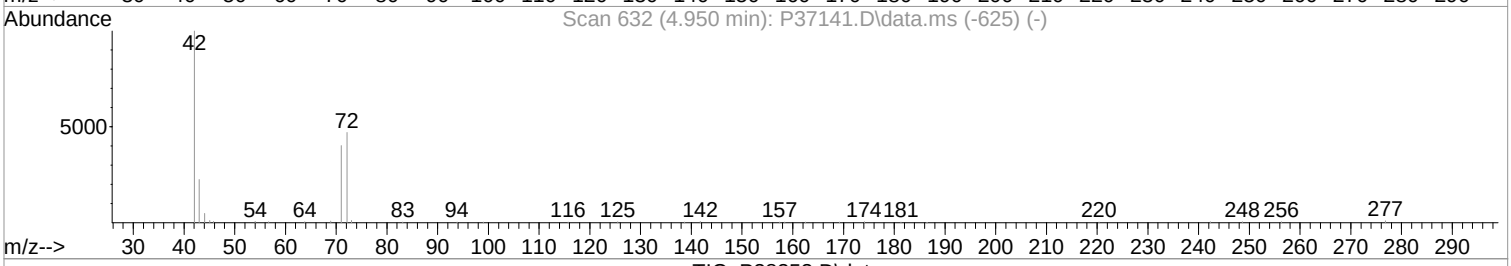
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38353.D
Acq On : 11 Aug 2020 11:09 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 11:23:58 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38353.D\data.ms

(39) Tetrahydrofuran

4.969min (+0.018) 16.24 ppb

response 29967

Ion	Exp%	Act%
42.00	100	100
72.00	45.20	27.34
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

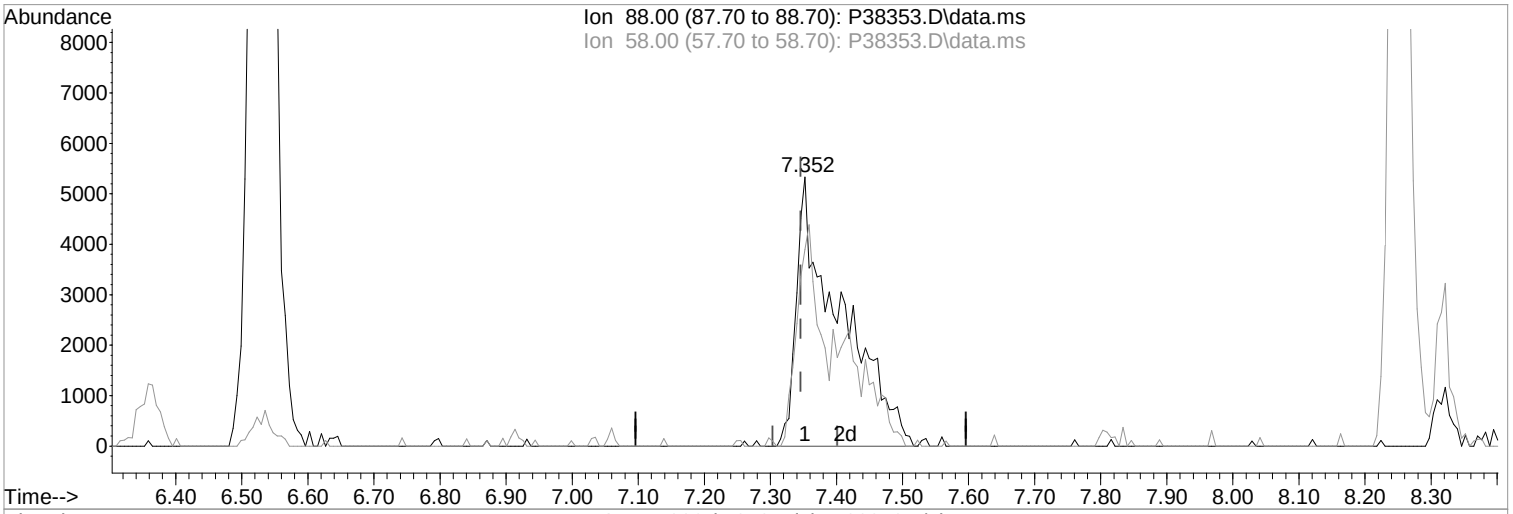
Before

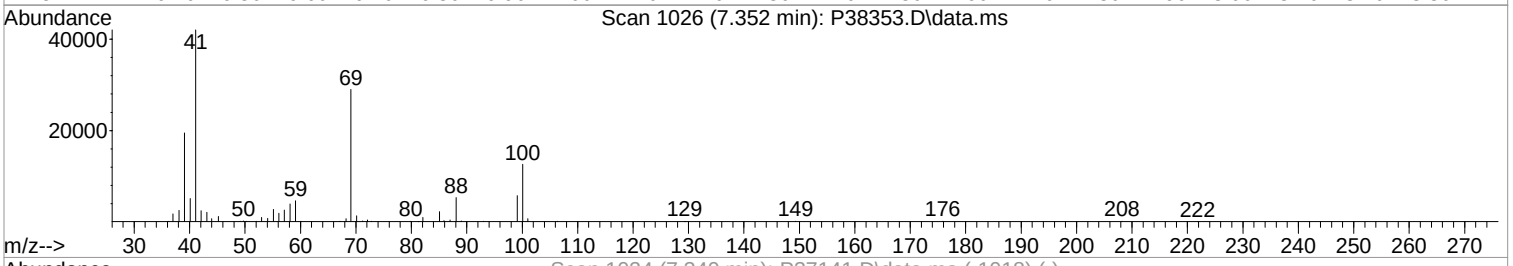
08/11/20

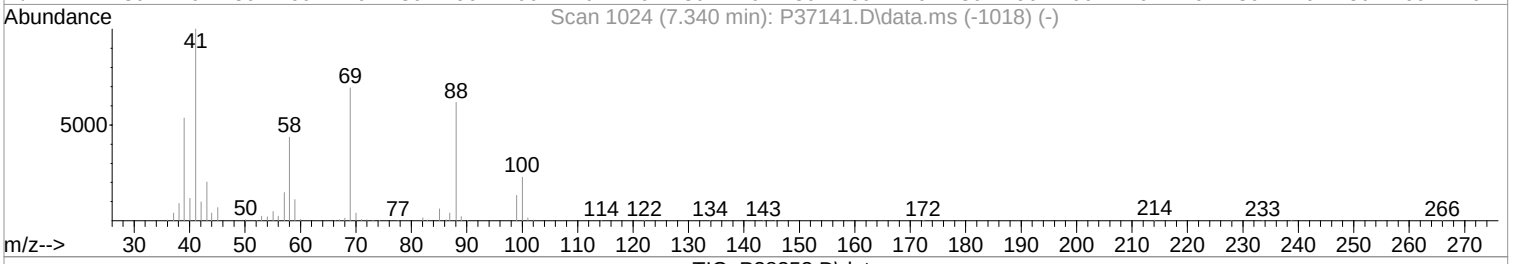
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38353.D
Acq On : 11 Aug 2020 11:09 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 11:23:58 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38353.D\data.ms

(58) 1,4-Dioxane

7.352min (+0.006) 323.90 ppb m

response 24469

Ion	Exp%	Act%
88.00	100	100
58.00	70.60	73.05
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

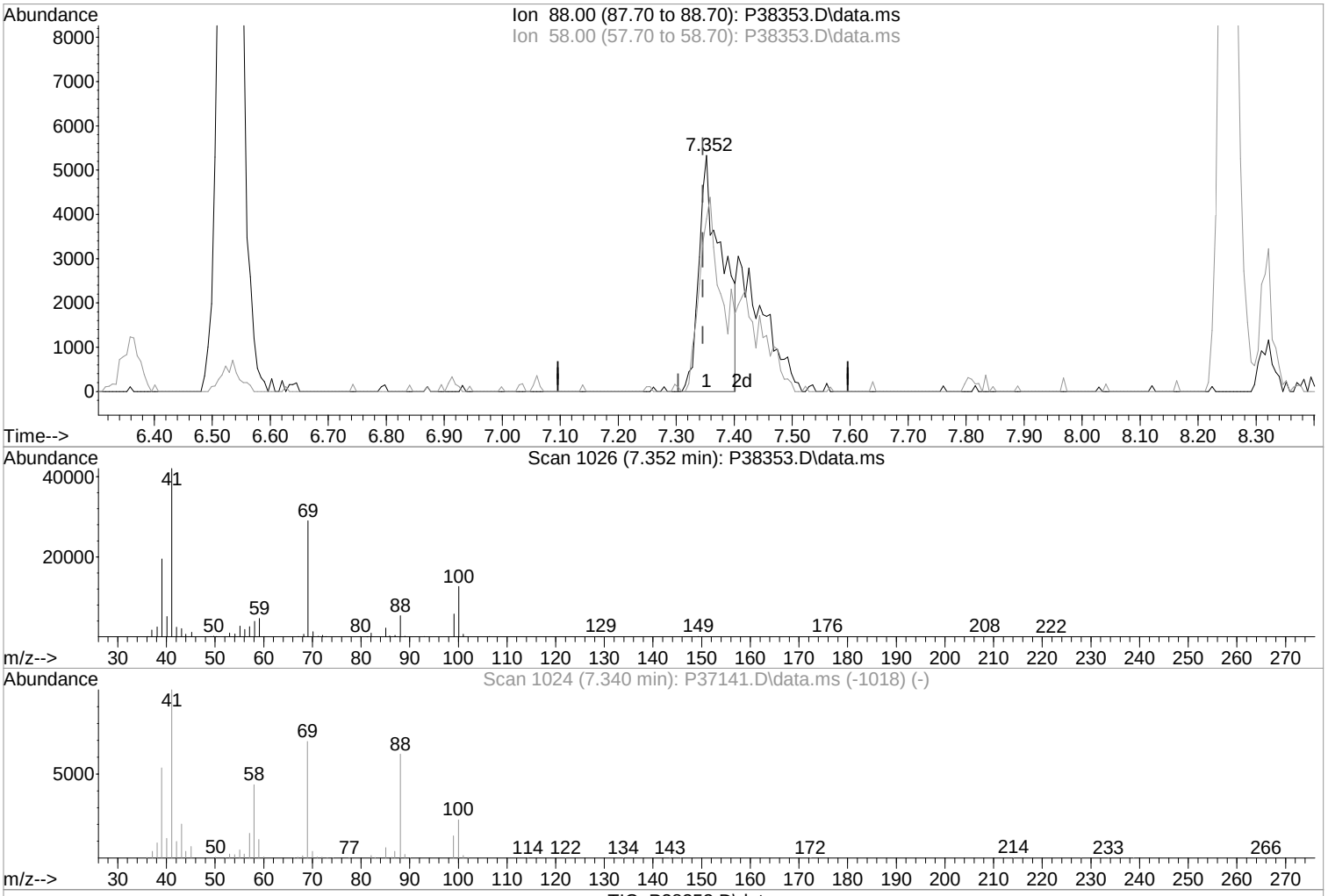
Split Peak

08/11/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38353.D
Acq On : 11 Aug 2020 11:09 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 11:23:58 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38353.D\data.ms

(58) 1,4-Dioxane

7.352min (+0.006) 196.05 ppb

response 14811

Ion	Exp%	Act%
88.00	100	100
58.00	70.60	73.05
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

08/11/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38353.D
Acq On : 11 Aug 2020 11:09 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 11:25:30 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	308148	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	477464	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	428011	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	211239	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	127679	46.57	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 93.14%				
48) surr1,1,2-dichloroetha...	5.859	65	177582	46.79	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 93.58%				
65) SURR3,Toluene-d8	8.316	98	625141	49.06	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.12%				
70) SURR2,BFB	10.870	95	230492	49.09	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.18%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	66425	19.37	ppb		98
3) Chloromethane	1.335	50	94870	22.16	ppb		96
4) Vinyl Chloride	1.414	62	87282	21.75	ppb		97
5) Bromomethane	1.652	94	55253	17.26	ppb		94
6) Chloroethane	1.725	64	40707	18.44	ppb		100
7) Freon 21	1.878	67	84876	16.60	ppb		97
8) Trichlorofluoromethane	1.914	101	86579	20.94	ppb		98
9) Diethyl Ether	2.152	59	62098	20.78	ppb		92
10) Freon 123a	2.164	67	52283	14.83	ppb		89
11) Freon 123	2.219	83	61930	14.89	ppb		99
12) Acrolein	2.274	56	27835	34.40	ppb		98
13) 1,1-Diclethene	2.341	96	55735	23.39	ppb		90
14) Freon 113	2.341	101	54693	19.70	ppb		93
15) Acetone	2.414	43	35111	17.07	ppb		93
16) 2-Propanol	2.548	45	148131m	373.54	ppb		
17) Iodomethane	2.481	142	49904	18.72	ppb		98
18) Carbon Disulfide	2.536	76	158797	20.12	ppb		98
19) Acetonitrile	2.676	40	12908m	58.66	ppb		
20) Allyl Chloride	2.682	76	32967	19.52	ppb	#	73
21) Methyl Acetate	2.719	43	68545	14.96	ppb		96
22) Methylene Chloride	2.811	84	61834	18.20	ppb		98
23) TBA	2.957	59	226670	352.94	ppb		95
24) Acrylonitrile	3.091	53	205649	103.81	ppb		92
25) Methyl-t-Butyl Ether	3.103	73	219466	19.90	ppb		98
26) trans-1,2-Dichloroethene	3.097	96	59501	21.44	ppb		93
28) 1,1-Diclethane	3.609	63	117070	19.14	ppb		94
29) Vinyl Acetate	3.707	86	14902	28.70	ppb	#	59
30) DIPE	3.713	45	242954	22.73	ppb		87
31) 2-Chloro-1,3-Butadiene	3.719	53	99793	20.27	ppb		87
32) ETBE	4.243	59	200710	20.12	ppb		93
33) 2,2-Dichloropropane	4.438	77	85242	18.93	ppb		99
34) cis-1,2-Dichloroethene	4.457	96	68018	19.13	ppb	#	79
35) 2-Butanone	4.542	43	48785	20.36	ppb		99
36) Propionitrile	4.646	54	77631	90.37	ppb		96
37) Bromochloromethane	4.865	130	37968	18.05	ppb		98
38) Methacrylonitrile	4.908	67	38642	18.99	ppb		99
39) Tetrahydrofuran	4.969	42	34897m	18.91	ppb		
40) Chloroform	5.042	83	102478	18.20	ppb		95
41) 1,1,1-Trichloroethane	5.310	97	84340	18.93	ppb		94

1st 08/11/20
2nd 08/17/20

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38353.D
Acq On : 11 Aug 2020 11:09 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 11:25:30 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.139	73	204017	20.53	ppb		94
44) Cyclohexane	5.365	41	61144	19.53	ppb		99
46) Carbontetrachloride	5.578	117	62142	19.82	ppb		87
47) 1,1-Dichloropropene	5.590	75	84023	18.93	ppb		100
49) Benzene	5.914	78	276855	20.08	ppb		94
50) 1,2-Dichloroethane	5.975	62	86850	18.03	ppb		98
51) Iso-Butyl Alcohol	5.975	43	102811	347.68	ppb		99
52) n-Heptane	6.359	43	99161	23.21	ppb		98
53) 1-Butanol	6.913	56	168076	913.39	ppb		97
54) Trichloroethene	6.846	130	58321	17.05	ppb		98
55) Methylcyclohexane	7.060	55	91687	21.58	ppb		88
56) 1,2-Diclpropane	7.139	63	70237	19.25	ppb		100
57) Dibromomethane	7.279	93	38936	18.49	ppb		95
58) 1,4-Dioxane	7.352	88	24469m	323.90	ppb		
59) Methyl Methacrylate	7.358	69	61494	19.34	ppb		96
60) Bromodichloromethane	7.505	83	71175	18.43	ppb		99
63) cis-1,3-Dichloropropene	8.035	75	92739	17.60	ppb		97
64) 4-Methyl-2-pentanone	8.248	43	101181	20.56	ppb		99
66) Toluene	8.389	91	302553	20.72	ppb		99
67) trans-1,3-Dichloropropene	8.675	75	81511	17.01	ppb		97
68) Ethyl Methacrylate	8.803	69	112039	20.89	ppb		94
69) 1,1,2-Trichloroethane	8.864	97	63826	19.58	ppb		92
72) Tetrachloroethene	8.968	164	51126	19.56	ppb		93
73) 2-Hexanone	9.151	43	73217	19.25	ppb		97
74) 1,3-Dichloropropane	9.029	76	112833	18.75	ppb		94
75) Dibromochloromethane	9.248	129	47176	17.72	ppb		99
76) N-Butyl Acetate	9.291	43	136505	19.34	ppb		98
77) 1,2-Dibromoethane	9.346	107	59129	18.05	ppb		94
78) Chlorobenzene	9.827	112	184486	19.33	ppb		97
79) 3-CBTF	9.840	180	94016	21.27	ppb		97
80) 4-CBTF	9.894	180	84872	21.35	ppb		95
81) 1,1,1,2-Tetrachloroethane	9.913	131	54181	18.45	ppb		90
82) Ethylbenzene	9.937	106	101284	20.22	ppb		94
83) (m+p)Xylene	10.053	106	250109	41.71	ppb		96
84) o-Xylene	10.413	106	122774	20.97	ppb	#	87
85) Styrene	10.425	104	200634	20.17	ppb		96
87) Bromoform	10.589	173	29917	17.20	ppb		91
88) 2-CBTF	10.657	180	93072	21.72	ppb		96
89) Isopropylbenzene	10.742	105	319088	21.88	ppb		97
90) Cyclohexanone	10.833	55	78133	89.16	ppb		98
91) trans-1,4-Dichloro-2-B...	11.065	53	23146	19.16	ppb		96
92) 1,1,2,2-Tetrachloroethane	11.016	83	96083	20.38	ppb		99
93) Bromobenzene	10.992	156	75196	19.76	ppb		99
94) 1,2,3-Trichloropropane	11.047	110	29441	19.31	ppb		95
95) n-Propylbenzene	11.089	91	379571	22.68	ppb		99
96) 2-Chlorotoluene	11.156	91	231280	21.28	ppb		99
97) 3-Chlorotoluene	11.211	91	219935	21.16	ppb		99
98) 4-Chlorotoluene	11.254	91	253883	20.86	ppb		98
99) 1,3,5-Trimethylbenzene	11.242	105	266653	21.40	ppb		99
100) tert-Butylbenzene	11.516	119	219821	21.08	ppb		99
101) 1,2,4-Trimethylbenzene	11.553	105	266725	21.27	ppb		100
102) 3,4-DCBTF	11.620	214	74364	21.65	ppb		99
103) sec-Butylbenzene	11.693	105	324070	21.66	ppb		99
104) p-Isopropyltoluene	11.815	119	274178	21.26	ppb		97
105) 1,3-Dclbenz	11.784	146	153062	20.53	ppb		99
106) 1,4-Dclbenz	11.858	146	148644	19.60	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38353.D
Acq On : 11 Aug 2020 11:09 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 11:25:30 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

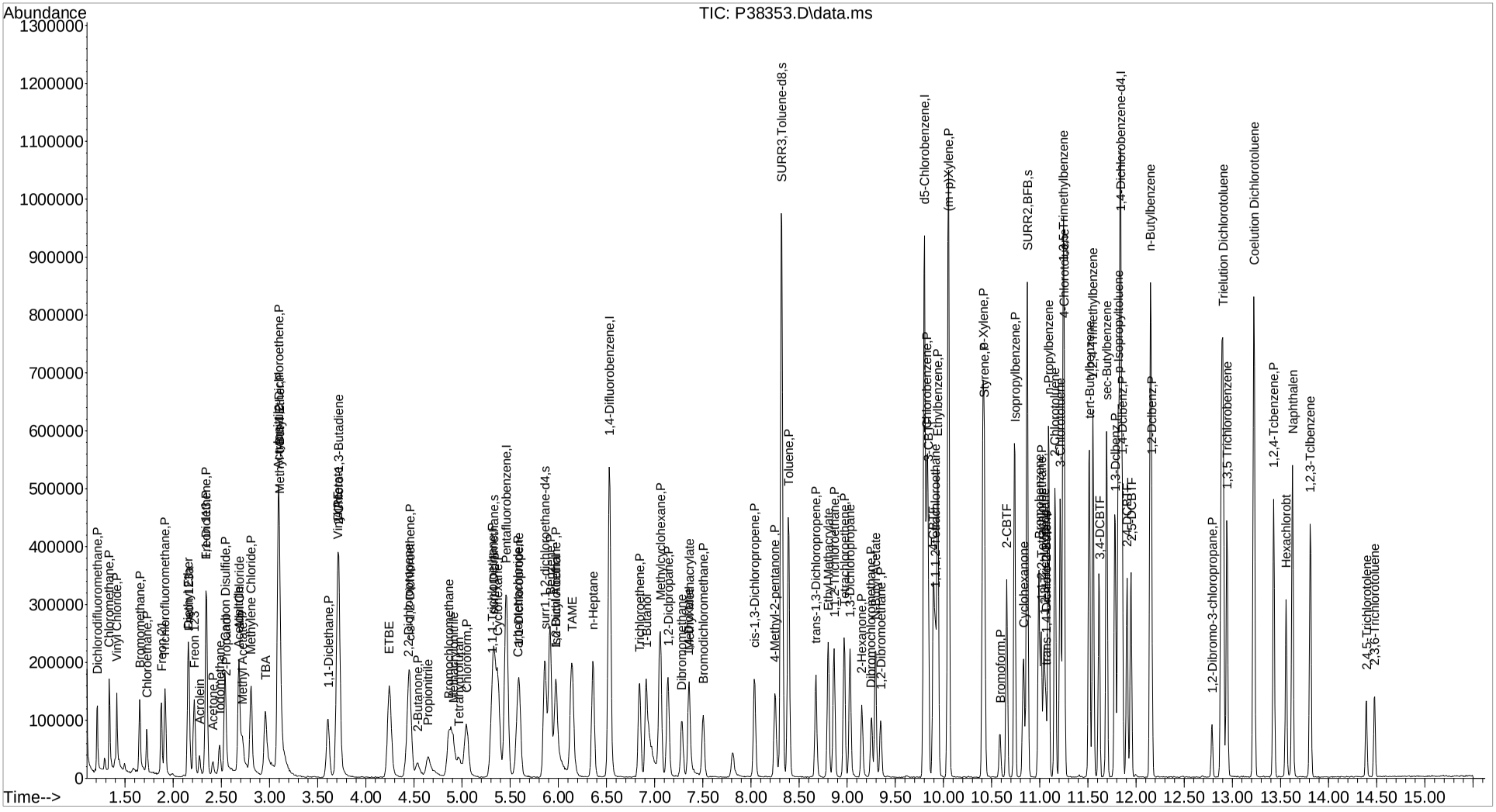
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 2,4-DCBTF	11.906	214	69254	21.53	ppb	98
108) 2,5-DCBTF	11.949	214	77135	21.93	ppb	99
109) n-Butylbenzene	12.150	91	257836	21.24	ppb	97
110) 1,2-Dclbenz	12.162	146	148915	19.68	ppb	97
111) 1,2-Dibromo-3-chloropr...	12.790	157	16832	15.95	ppb	96
112) Trielution Dichlorotol...	12.900	125	374831	61.85	ppb	99
113) 1,3,5 Trichlorobenzene	12.943	180	108699	20.89	ppb	99
114) Coelution Dichlorotoluene	13.223	125	275742	41.42	ppb	98
115) 1,2,4-Tcbenzene	13.430	180	113822	20.85	ppb	100
116) Hexachlorobt	13.558	225	46677	21.31	ppb	92
117) Naphthalen	13.625	128	326017	20.44	ppb	99
118) 1,2,3-Tclbenzene	13.808	180	109173	19.34	ppb	95
119) 2,4,5-Trichlorotolene	14.394	159	28120	8.14	ppb	94
120) 2,3,6-Trichlorotoluene	14.479	159	26877	8.57	ppb	97

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38353.D
Acq On : 11 Aug 2020 11:09 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 11:25:30 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

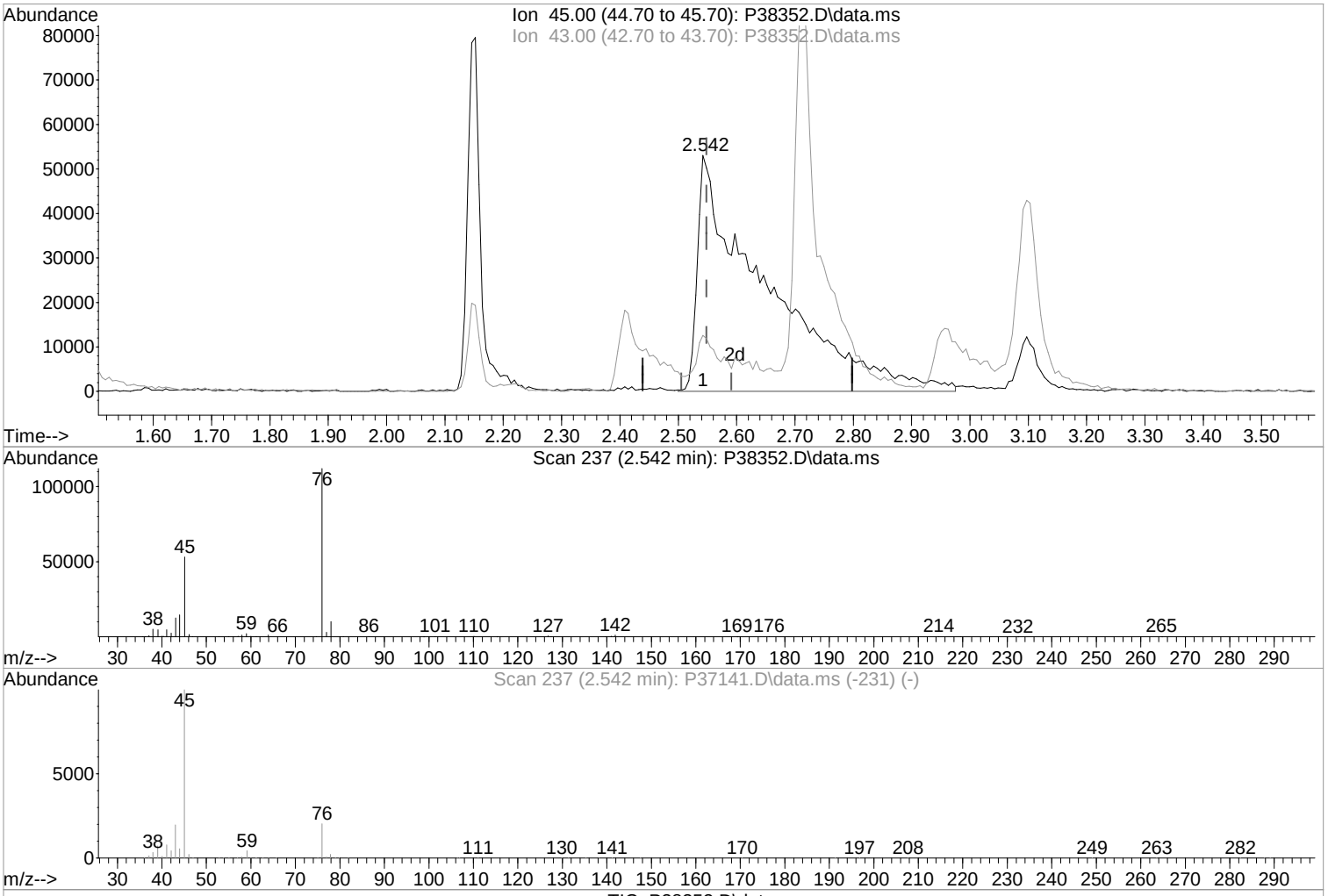


1st 08/11/20
2nd 08/17/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38352.D
Acq On : 11 Aug 2020 10:43 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 10:57:59 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38352.D\data.ms

(16) 2-Propanol

2.542min (-0.006) 1010.37 ppb m

response 425827

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	23.78
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

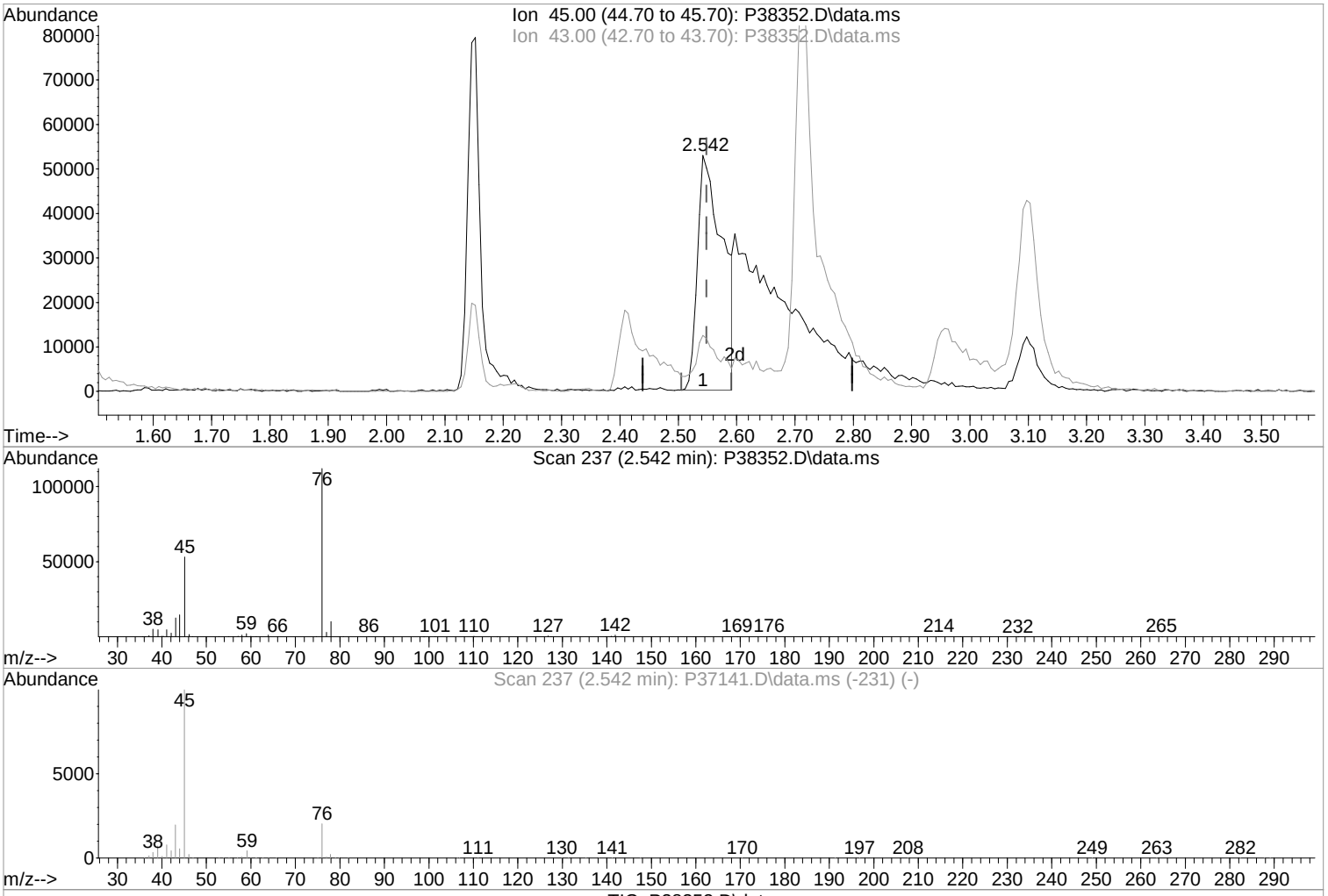
08/11/20

1st 08/11/20
2nd 08/17/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38352.D
Acq On : 11 Aug 2020 10:43 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 10:57:59 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38352.D\data.ms

(16) 2-Propanol

2.542min (-0.006) 368.95 ppb

response 155497

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	23.78
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

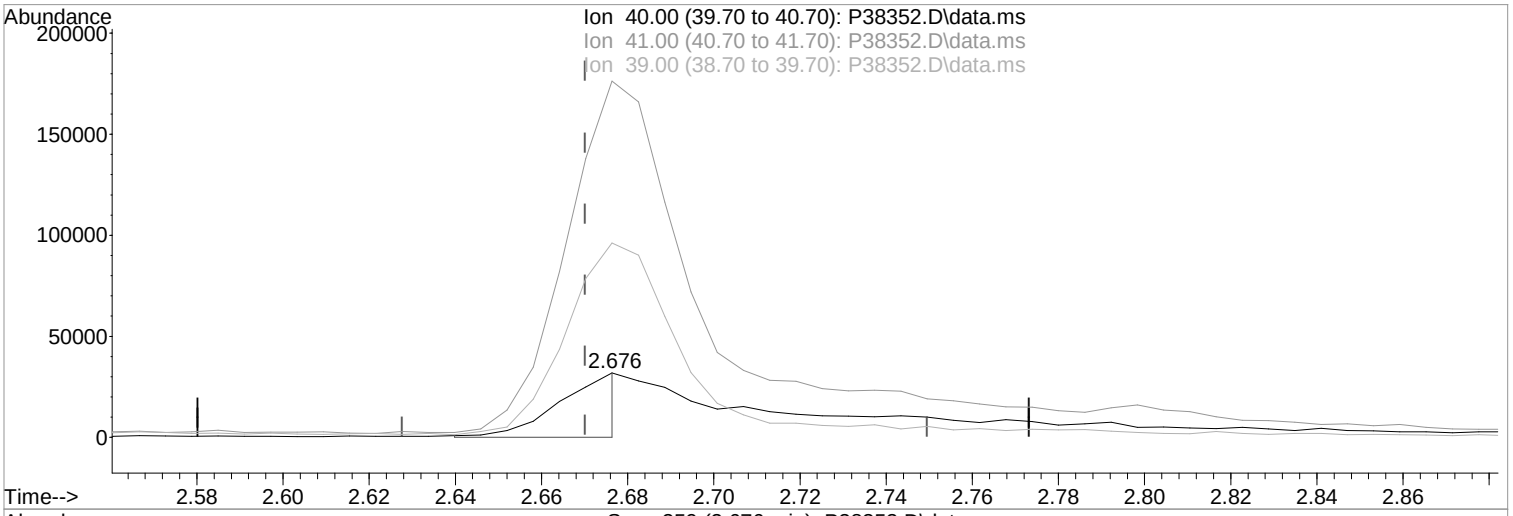
08/11/20

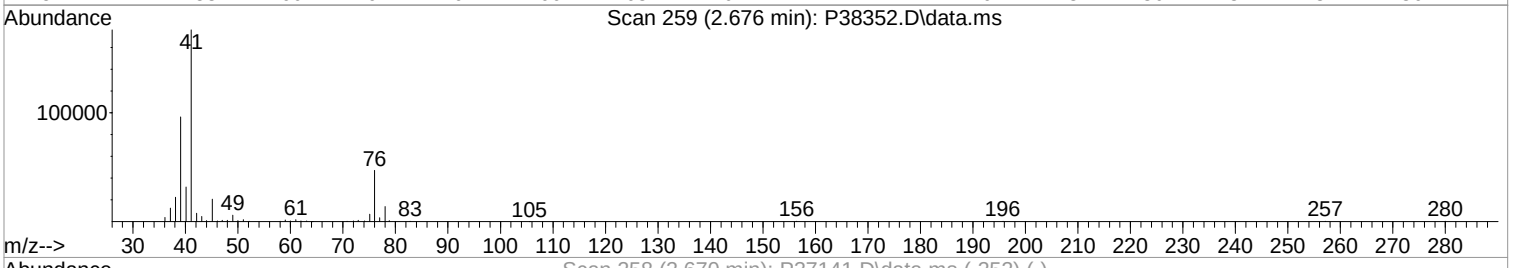
1st 08/11/20
2nd 08/17/20

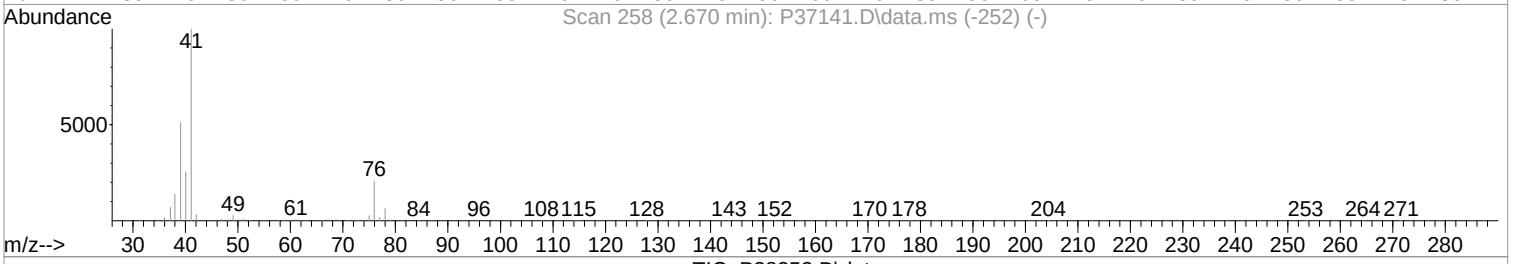
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38352.D
Acq On : 11 Aug 2020 10:43 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 10:57:59 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38352.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 136.10 ppb m

response 31829

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	554.47#
39.00	200.50	302.26#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/11/20

1st 08/11/20
2nd 08/17/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38352.D
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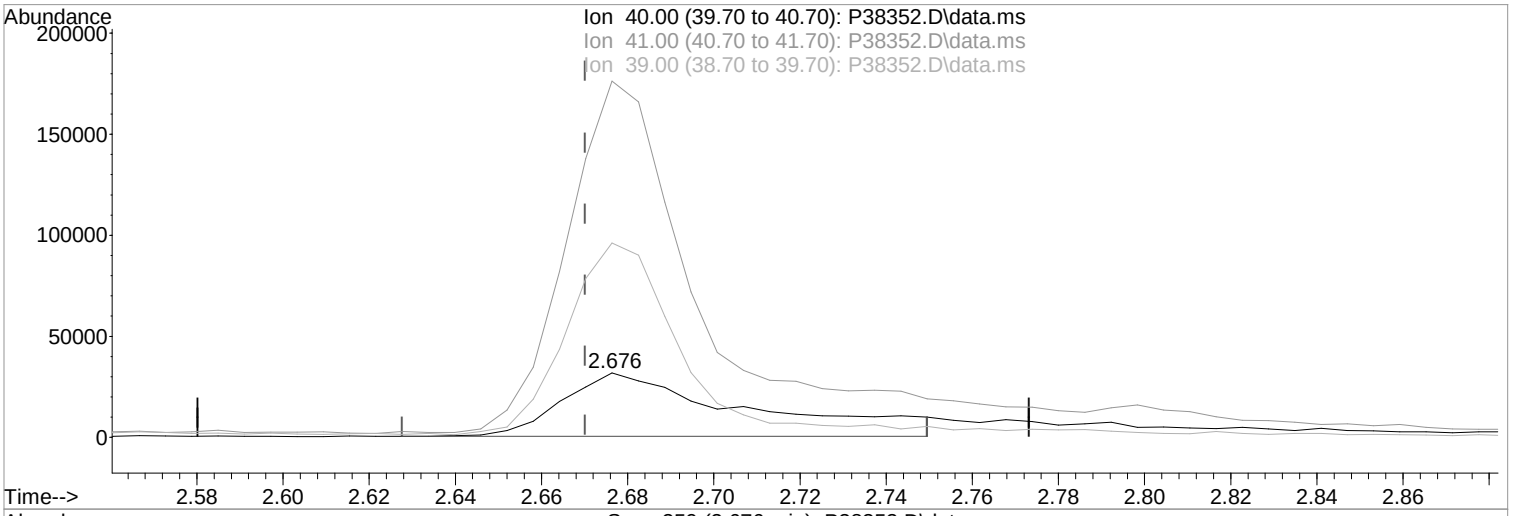
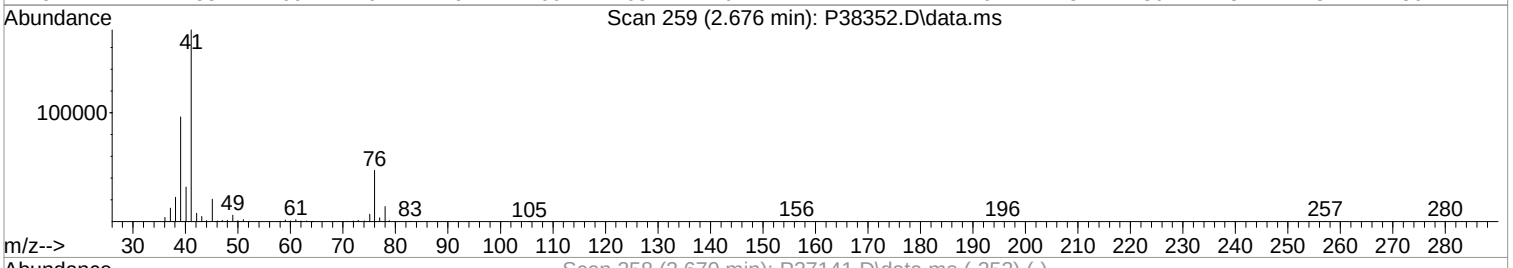
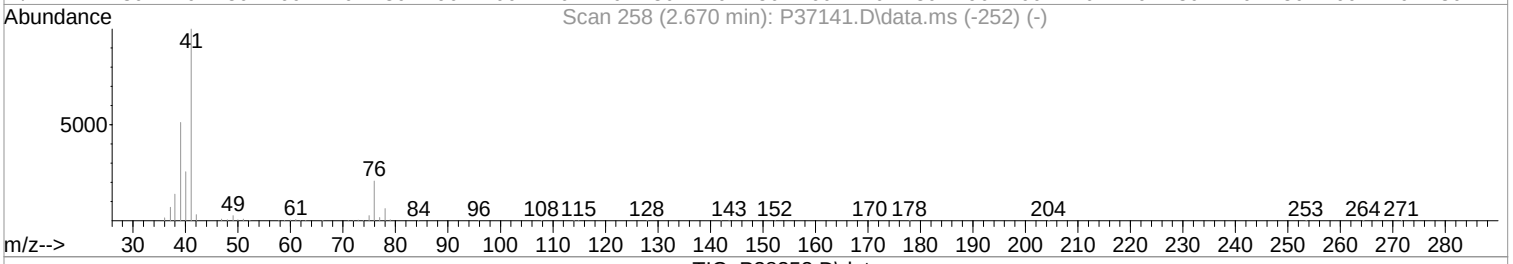
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38352.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 397.56 ppb

response 92979

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	554.47#
39.00	200.50	302.26#
0.00	0.00	0.00

Manual Integration:

Before

08/11/20

1st 08/11/20
2nd 08/17/20

Quantitation Report (Qedit)

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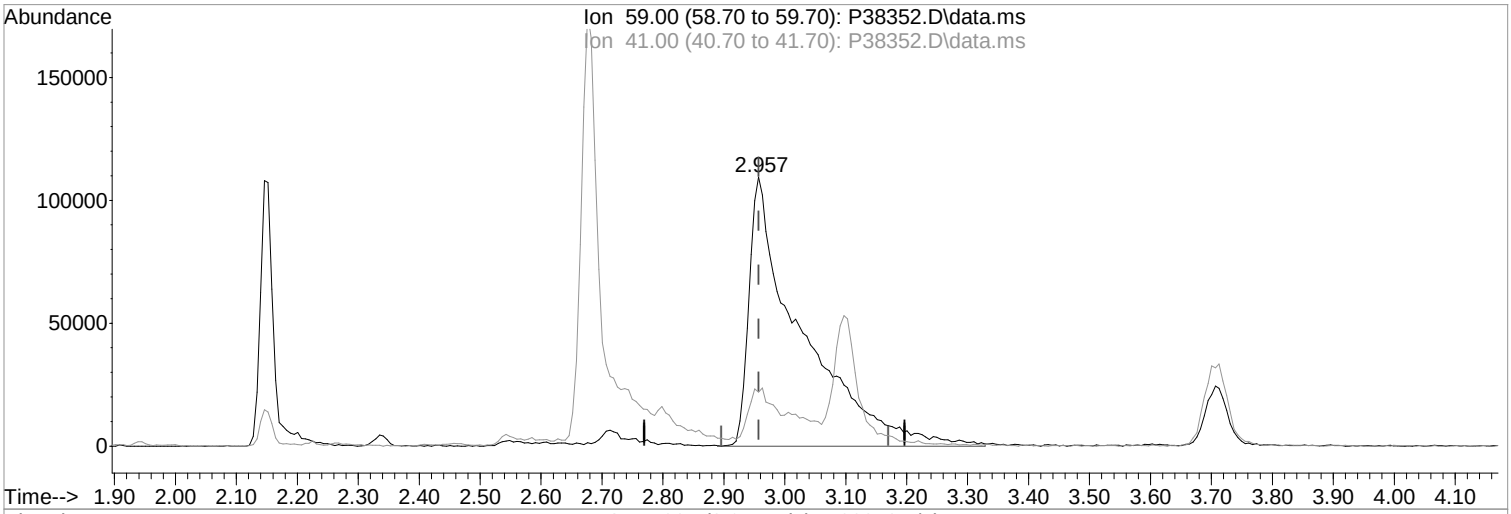
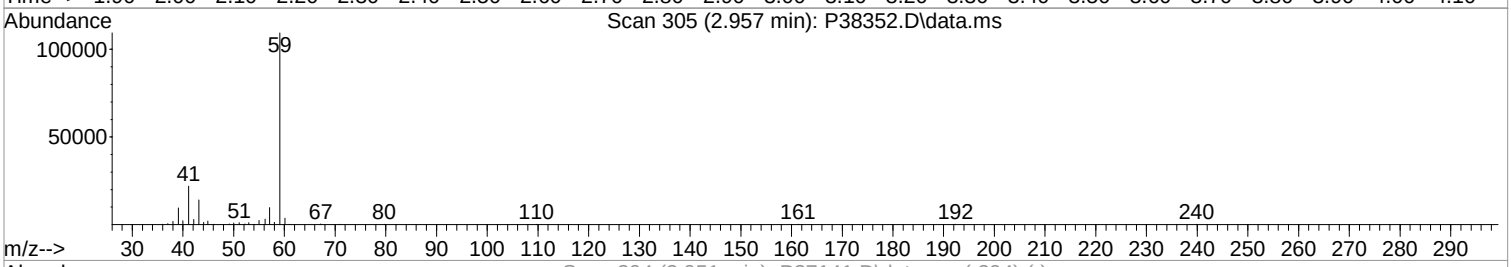
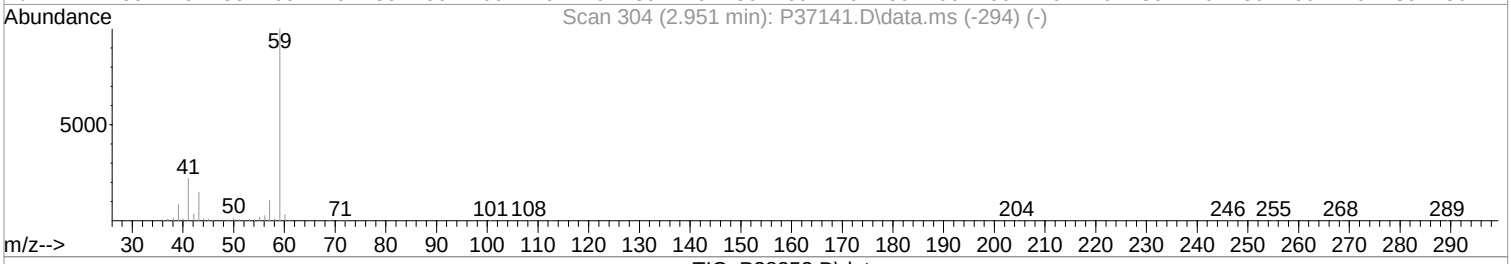
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38352.D\data.ms

(23) TBA

2.957min (+0.000) 947.48 ppb m

response 646703

Ion	Exp%	Act%
59.00	100	100
41.00	22.00	20.05
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

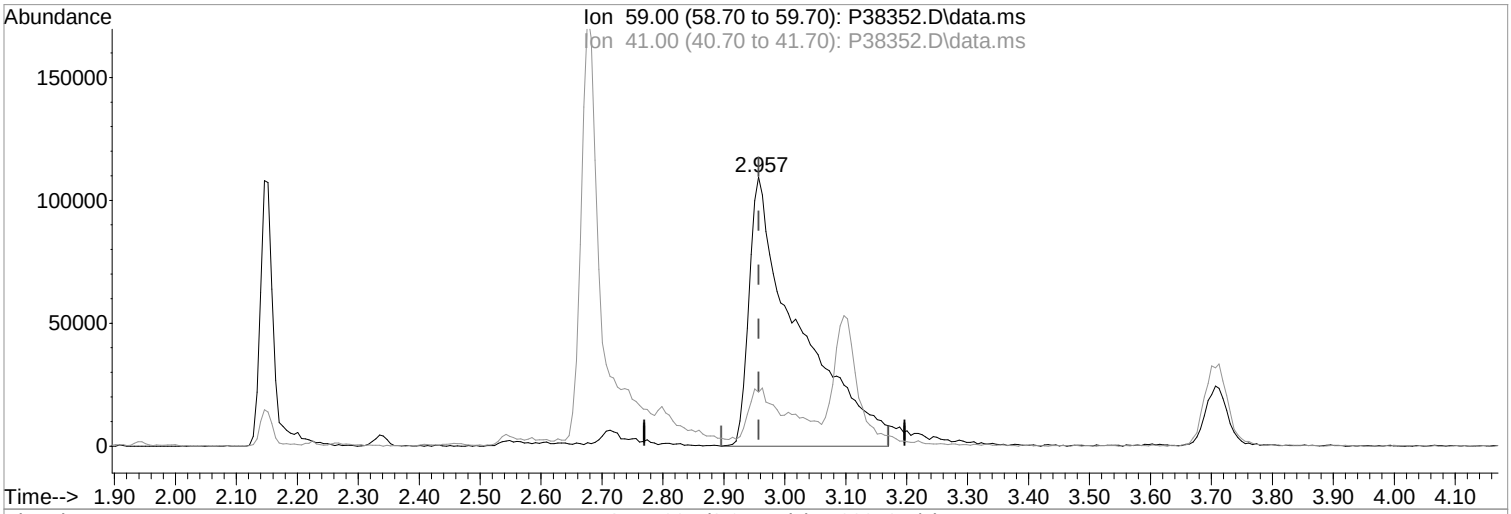
08/11/20

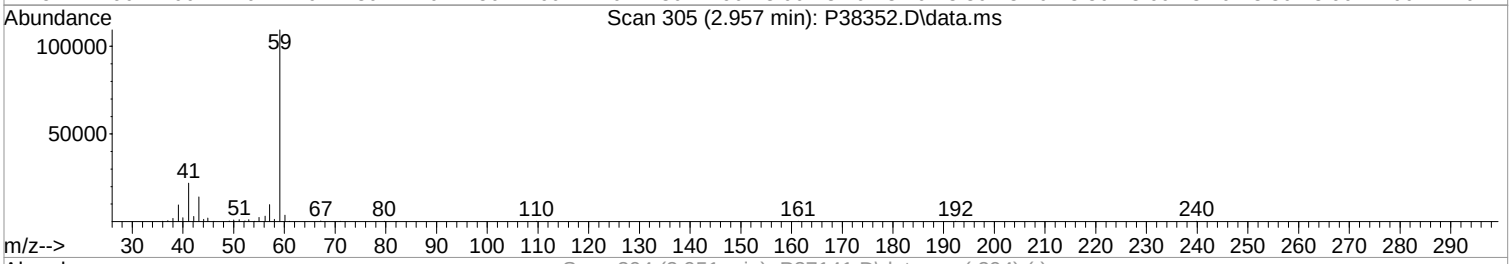
1st 08/11/20
2nd 08/17/20

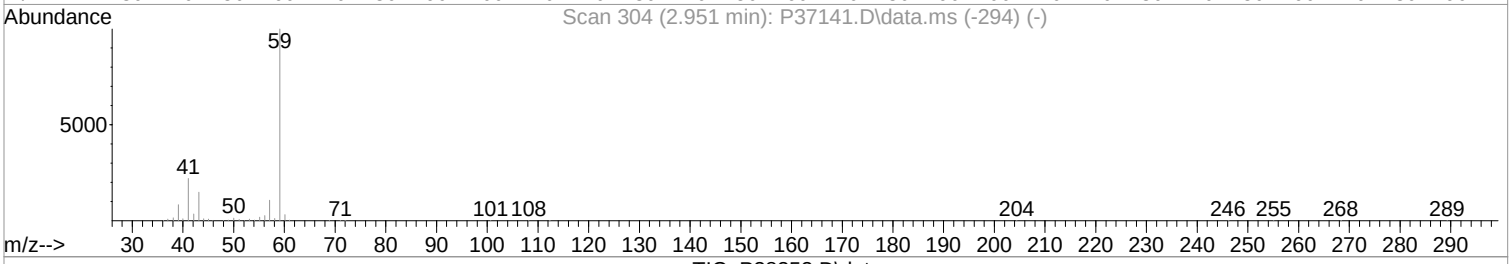
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38352.D
Acq On : 11 Aug 2020 10:43 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 10:57:59 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38352.D\data.ms

(23) TBA

2.957min (+0.000) 898.36 ppb

response 613173

Ion	Exp%	Act%
59.00	100	100
41.00	22.00	20.05
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

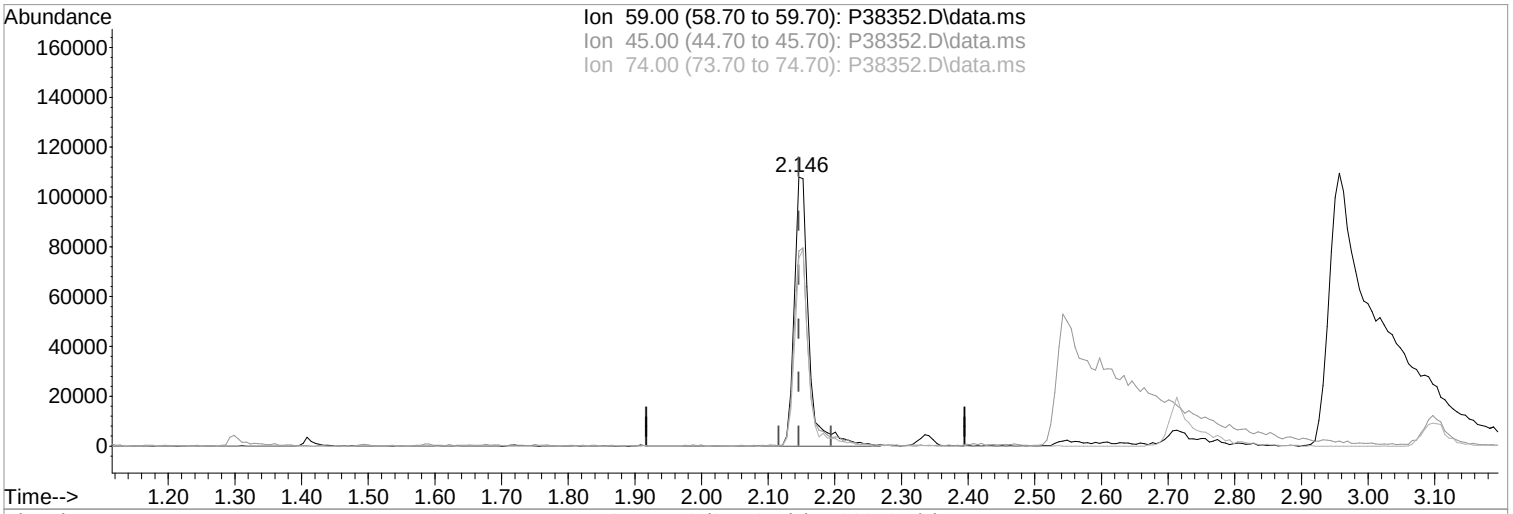
Before

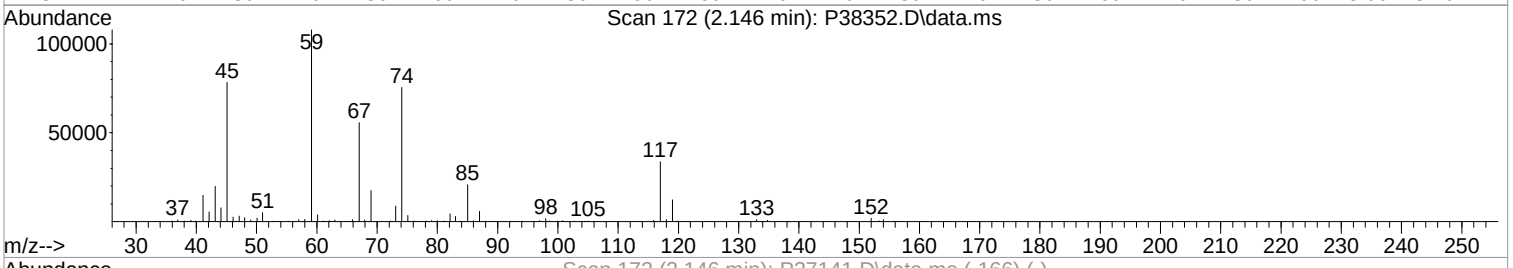
08/11/20

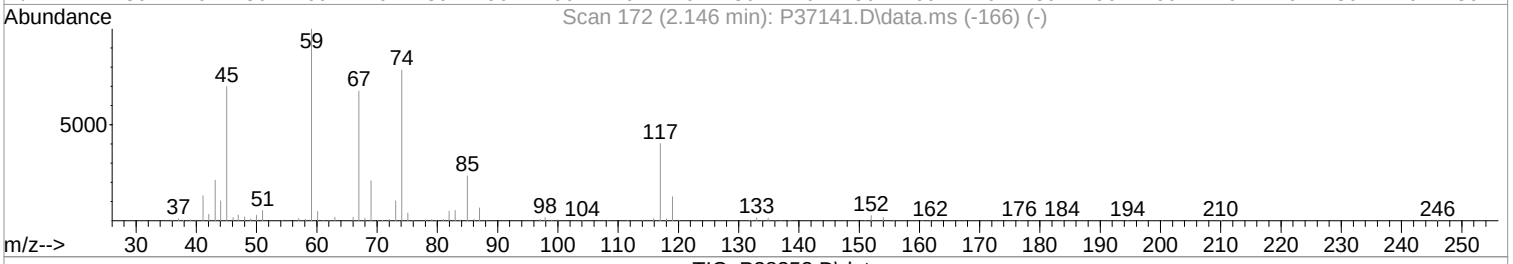
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38352.D
Acq On : 11 Aug 2020 10:43 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 10:57:59 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38352.D\data.ms

(9) Diethyl Ether

2.146min (+0.000) 51.90 ppb m

response 164797

Ion	Exp%	Act%
59.00	100	100
45.00	70.50	72.54
74.00	78.50	69.94
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

08/11/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38352.D
Acq On : 11 Aug 2020 10:43 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 10:57:59 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
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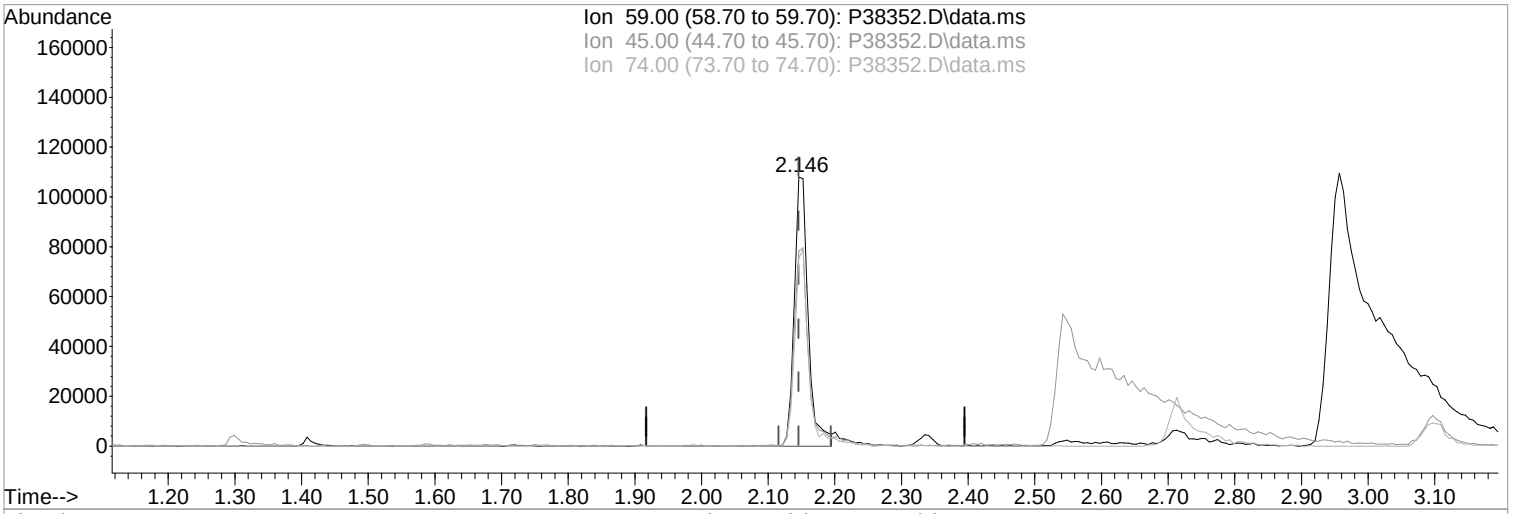

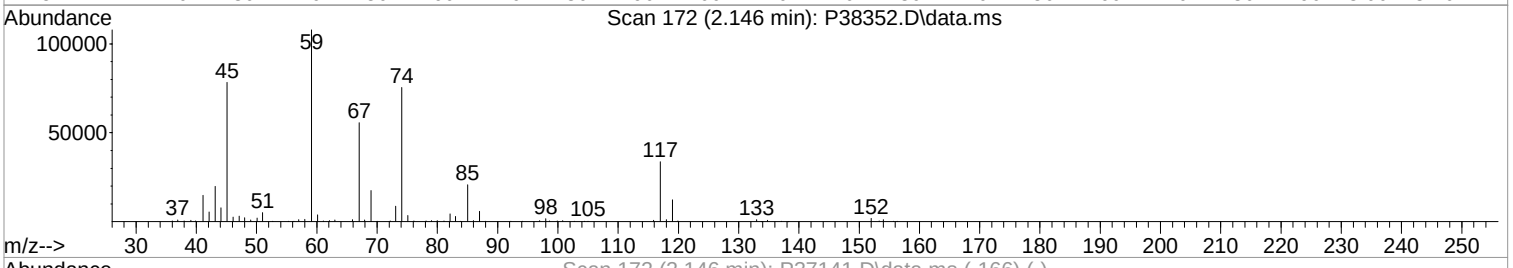

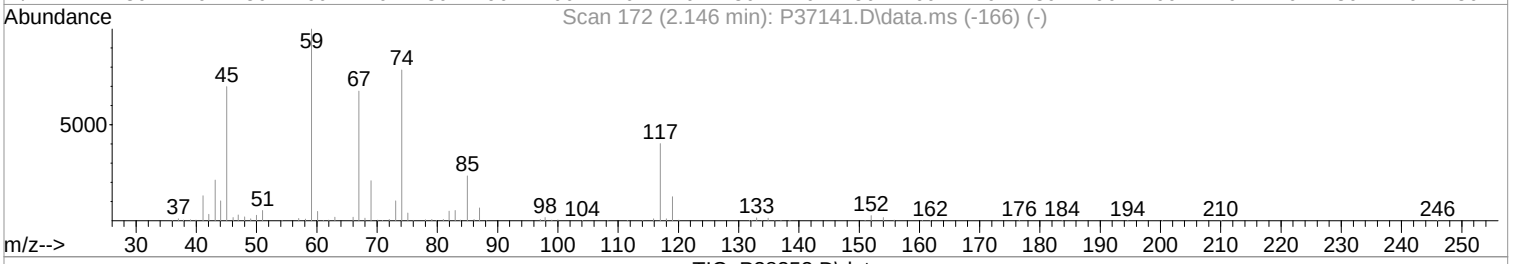

TIC: P38352.D\data.ms

(9) Diethyl Ether

2.146min (+0.000) 49.37 ppb

response 156761

Ion	Exp%	Act%
59.00	100	100
45.00	70.50	72.54
74.00	78.50	69.94
0.00	0.00	0.00

Manual Integration:

Before

08/11/20

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38352.D
Acq On : 11 Aug 2020 10:43 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 10:59:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
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	101	0.00
2	P	Dichlorodifluoromethane	50.0000	40.7610	18.5	72	0.00
3	P	Chloromethane	50.0000	48.4328	3.1	90	0.00
4	P	Vinyl Chloride	50.0000	49.7455	0.5	88	0.00
5	P	Bromomethane	50.0000	36.5763	26.8#	84	0.02
6	P	Chloroethane	50.0000	43.8622	12.3	92	0.02
7		Freon 21	50.0000	49.9136	0.2	94	0.00
8	P	Trichlorofluoromethane	50.0000	46.5865	6.8	88	0.00
9		Diethyl Ether	50.0000	51.9011	-3.8	93	0.00
10		Freon 123a	50.0000	47.7951	4.4	92	0.00
11		Freon 123	50.0000	46.3448	7.3	93	0.00
12		Acrolein	250.0000	287.2703	-14.9	110	0.00
13	P	1,1-Diclethene	50.0000	43.9564	12.1	83	0.00
14	P	Freon 113	50.0000	45.0715	9.9	86	0.00
15	P	Acetone	50.0000	32.3754	35.2#	71	0.00
16		2-Propanol	1000.0000	1010.3747	-1.0	98	0.00
17		Iodomethane	50.0000	57.4313	-14.9	79	0.00
18	P	Carbon Disulfide	50.0000	46.0026	8.0	86	0.00
19		Acetonitrile	250.0000	136.0955	45.6#	45	0.00
20		Allyl Chloride	50.0000	44.2121	11.6	85	0.00
21	P	Methyl Acetate	50.0000	49.9398	0.1	98	0.00
22	P	Methylene Chloride	50.0000	42.5164	15.0	84	0.00
23		TBA	1000.0000	947.4846	5.3	92	0.00
24		Acrylonitrile	250.0000	256.9404	-2.8	99	0.00
25	P	Methyl-t-Butyl Ether	50.0000	46.2258	7.5	85	0.00
26	P	trans-1,2-Dichloroethene	50.0000	44.6376	10.7	82	0.00
27		Halothane	-1.0000	0.0000	0.0	0	-4.17#
28	P	1,1-Diclethane	50.0000	43.8202	12.4	83	0.00
29		Vinyl Acetate	50.0000	48.1597	3.7	91	0.00
30		DIPE	50.0000	51.0152	-2.0	94	0.00
31		2-Chloro-1,3-Butadiene	50.0000	48.2975	3.4	88	0.00
32		ETBE	50.0000	48.3831	3.2	90	0.00
33		2,2-Dichloropropane	50.0000	44.3948	11.2	81	0.00
34	P	cis-1,2-Dichloroethene	50.0000	43.5519	12.9	83	0.00
35	P	2-Butanone	50.0000	49.0250	2.0	97	0.00
36		Propionitrile	250.0000	243.9251	2.4	98	0.00
37		Bromochloromethane	50.0000	44.1253	11.7	86	0.00
38		Methacrylonitrile	50.0000	48.6224	2.8	94	0.00
39		Tetrahydrofuran	50.0000	47.5098	5.0	96	0.02
40	P	Chloroform	50.0000	44.7375	10.5	83	0.00
41	P	1,1,1-Trichloroethane	50.0000	43.6615	12.7	80	0.00
42		TAME	50.0000	47.3999	5.2	88	0.00
43	I	1,4-Difluorobenzene	50.0000	50.0000	0.0	97	0.00
44	P	Cyclohexane	50.0000	49.4073	1.2	92	0.00
45	s	surr4,Dibrflmethane	50.0000	48.4335	3.1	91	0.00
46	P	Carbontetrachloride	50.0000	46.5299	6.9	78	0.00
47		1,1-Dichloropropene	50.0000	46.8848	6.2	87	0.00
48	s	surr1,1,2-dichloroethane-d4	50.0000	48.4778	3.0	93	0.00
49	P	Benzene	50.0000	45.9947	8.0	84	0.00
50	P	1,2-Dichloroethane	50.0000	43.5028	13.0	81	0.00
51		Iso-Butyl Alcohol	1000.0000	942.0270	5.8	88	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38352.D
Acq On : 11 Aug 2020 10:43 am
Operator : K.Ruest
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Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 10:59:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
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	53.5291	-7.1	97	0.00
53		1-Butanol	2500.0000	2432.6297	2.7	88	0.00
54	P	Trichloroethene	50.0000	41.1664	17.7	80	0.00
55	P	Methylcyclohexane	50.0000	55.0069	-10.0	101	0.00
56	P	1,2-Diclpropane	50.0000	47.0607	5.9	87	0.00
57		Dibromomethane	50.0000	45.7358	8.5	86	0.00
58		1,4-Dioxane	1000.0000	814.7395	18.5	79	0.00
59		Methyl Methacrylate	50.0000	48.8586	2.3	89	0.00
60	P	Bromodichloromethane	50.0000	45.7154	8.6	79	0.00
61		2-Nitropropane	-1.0000	0.0000	0.0	83	0.00
62		2-Chloroethylvinyl Ether	50.0000	31.9439	36.1#	61	0.00
63	P	cis-1,3-Dichloropropene	50.0000	45.2349	9.5	80	0.00
64	P	4-Methyl-2-pentanone	50.0000	50.3029	-0.6	93	0.00
65	s	SURR3,Toluene-d8	50.0000	50.3314	-0.7	95	0.00
66	P	Toluene	50.0000	48.1307	3.7	86	0.00
67	P	trans-1,3-Dichloropropene	50.0000	45.3183	9.4	81	0.00
68		Ethyl Methacrylate	50.0000	50.7086	-1.4	89	0.00
69	P	1,1,2-Trichloroethane	50.0000	44.5438	10.9	82	0.00
70	s	SURR2,BFB	50.0000	50.1442	-0.3	96	0.00
71	I	d5-Chlorobenzene	50.0000	50.0000	0.0	102	0.00
72	P	Tetrachloroethene	50.0000	42.6982	14.6	85	0.00
73	P	2-Hexanone	50.0000	47.3775	5.2	94	0.00
74		1,3-Dichloropropane	50.0000	43.1918	13.6	84	0.00
75	P	Dibromochloromethane	50.0000	43.6670	12.7	79	0.00
76		N-Butyl Acetate	50.0000	49.1699	1.7	92	0.00
77	P	1,2-Dibromoethane	50.0000	44.1957	11.6	85	0.00
78	P	Chlorobenzene	50.0000	42.8389	14.3	85	0.00
79		3-CBTF	50.0000	50.1379	-0.3	95	0.00
80		4-CBTF	50.0000	49.4875	1.0	94	0.00
81		1,1,1,2-Tetrachloroethane	50.0000	42.3633	15.3	81	0.00
82	P	Ethylbenzene	50.0000	44.7630	10.5	87	0.00
83	P	(m+p)Xylene	100.0000	94.0730	5.9	87	0.00
84	P	o-Xylene	50.0000	46.3391	7.3	86	0.00
85	P	Styrene	50.0000	47.7250	4.5	86	0.00
86	I	1,4-Dichlorobenzene-d4	50.0000	50.0000	0.0	103	0.00
87	P	Bromoform	50.0000	38.5598	22.9#	77	0.00
88		2-CBTF	50.0000	46.1583	7.7	96	0.00
89	P	Isopropylbenzene	50.0000	43.8445	12.3	87	0.00
90		Cyclohexanone	1000.0000	490.0318	51.0#	50	0.00
91		trans-1,4-Dichloro-2-Butene	50.0000	43.0158	14.0	87	0.00
92	P	1,1,2,2-Tetrachloroethane	50.0000	43.3768	13.2	87	0.00
93		Bromobenzene	50.0000	42.2680	15.5	88	0.00
94		1,2,3-Trichloropropane	50.0000	42.4998	15.0	87	0.00
95		n-Propylbenzene	50.0000	47.1534	5.7	89	0.00
96		2-Chlorotoluene	50.0000	43.8579	12.3	87	0.00
97		3-Chlorotoluene	50.0000	44.6672	10.7	91	0.00
98		4-Chlorotoluene	50.0000	43.8835	12.2	86	0.00
99		1,3,5-Trimethylbenzene	50.0000	45.3533	9.3	88	0.00
100		tert-Butylbenzene	50.0000	44.5220	11.0	88	0.00
101		1,2,4-Trimethylbenzene	50.0000	44.4197	11.2	85	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38352.D
Acq On : 11 Aug 2020 10:43 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 10:59:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
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	47.4575	5.1	97	0.00
103		sec-Butylbenzene	50.0000	46.0236	8.0	88	0.00
104		p-Isopropyltoluene	50.0000	45.4857	9.0	87	0.00
105	P	1,3-Dclbenz	50.0000	41.9864	16.0	87	0.00
106	P	1,4-Dclbenz	50.0000	42.3614	15.3	87	0.00
107		2,4-DCBTF	50.0000	45.5212	9.0	92	0.00
108		2,5-DCBTF	50.0000	46.0732	7.9	95	0.00
109		n-Butylbenzene	50.0000	45.4035	9.2	85	0.00
110	P	1,2-Dclbenz	50.0000	42.2016	15.6	86	0.00
111	P	1,2-Dibromo-3-chloropropane	50.0000	41.9291	16.1	82	0.00
112		Trielution Dichlorotoluene	150.0000	135.6284	9.6	88	0.00
113		1,3,5 Trichlorobenzene	50.0000	44.5517	10.9	89	0.00
114		Coelution Dichlorotoluene	100.0000	91.6857	8.3	86	0.00
115	P	1,2,4-Tcbenzene	50.0000	45.5155	9.0	87	0.00
116		Hexachlorobt	50.0000	43.5277	12.9	86	0.00
117		Naphthalen	50.0000	46.6812	6.6	82	0.00
118		1,2,3-Tclbenzene	50.0000	44.4804	11.0	87	0.00
119		2,4,5-Trichlorotolene	50.0000	30.1214	39.8#	57	0.00
120		2,3,6-Trichlorotoluene	50.0000	32.3145	35.4#	60	0.00

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38352.D
Acq On : 11 Aug 2020 10:43 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 10:59:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	327494	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	500711	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	466437	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	251361	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	139254	48.43	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.86%				
48) surr1,1,2-dichloroetha...	5.853	65	192957	48.48	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 96.96%				
65) SURR3,Toluene-d8	8.316	98	672559	50.33	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.66%				
70) SURR2,BFB	10.870	95	246898	50.14	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.28%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	148528	40.76	ppb		97
3) Chloromethane	1.329	50	220342	48.43	ppb		99
4) Vinyl Chloride	1.408	62	212173	49.75	ppb		99
5) Bromomethane	1.646	94	124429	36.58	ppb		94
6) Chloroethane	1.719	64	102933	43.86	ppb		91
7) Freon 21	1.872	67	271260	49.91	ppb		95
8) Trichlorofluoromethane	1.908	101	204698	46.59	ppb		96
9) Diethyl Ether	2.146	59	164797m	51.90	ppb		
10) Freon 123a	2.158	67	179082	47.80	ppb		97
11) Freon 123	2.213	83	204913	46.34	ppb		98
12) Acrolein	2.268	56	247032	287.27	ppb		95
13) 1,1-Diclethene	2.335	96	111320	43.96	ppb		96
14) Freon 113	2.335	101	133008	45.07	ppb		98
15) Acetone	2.408	43	65428	32.38	ppb		95
16) 2-Propanol	2.542	45	425827m	1010.37	ppb		
17) Iodomethane	2.475	142	162753	57.43	ppb		99
18) Carbon Disulfide	2.530	76	381495	46.00	ppb		99
19) Acetonitrile	2.676	40	31829m	136.10	ppb		
20) Allyl Chloride	2.676	76	79349	44.21	ppb	#	77
21) Methyl Acetate	2.713	43	243214	49.94	ppb		95
22) Methylene Chloride	2.804	84	153477	42.52	ppb		95
23) TBA	2.957	59	646703m	947.48	ppb		
24) Acrylonitrile	3.085	53	540963	256.94	ppb		98
25) Methyl-t-Butyl Ether	3.097	73	541809	46.23	ppb		96
26) trans-1,2-Dichloroethene	3.091	96	131665	44.64	ppb		92
28) 1,1-Diclethane	3.597	63	284906	43.82	ppb		93
29) Vinyl Acetate	3.694	86	26839	48.16	ppb	#	71
30) DIPE	3.707	45	579596	51.02	ppb		97
31) 2-Chloro-1,3-Butadiene	3.713	53	252723	48.30	ppb		98
32) ETBE	4.237	59	512864	48.38	ppb		98
33) 2,2-Dichloropropane	4.438	77	212441	44.39	ppb		99
34) cis-1,2-Dichloroethene	4.450	96	164611	43.55	ppb		95
35) 2-Butanone	4.536	43	124824	49.03	ppb		92
36) Propionitrile	4.652	54	222703	243.93	ppb		98
37) Bromochloromethane	4.859	130	98661	44.13	ppb		93
38) Methacrylonitrile	4.902	67	105157	48.62	ppb		96
39) Tetrahydrofuran	4.969	42	93187	47.51	ppb		80
40) Chloroform	5.042	83	255390	44.74	ppb		96
41) 1,1,1-Trichloroethane	5.304	97	206729	43.66	ppb		98

1st 08/11/20
2nd 08/17/20

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38352.D
Acq On : 11 Aug 2020 10:43 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 10:59:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.133	73	500493	47.40	ppb	95
44) Cyclohexane	5.371	41	162222	49.41	ppb	99
46) Carbontetrachloride	5.566	117	152982	46.53	ppb	94
47) 1,1-Dichloropropene	5.584	75	218235	46.88	ppb	97
49) Benzene	5.914	78	664932	45.99	ppb	97
50) 1,2-Dichloroethane	5.968	62	219783	43.50	ppb	97
51) Iso-Butyl Alcohol	5.975	43	292122	942.03	ppb	92
52) n-Heptane	6.359	43	239829	53.53	ppb	97
53) 1-Butanol	6.919	56	469431	2432.63	ppb	98
54) Trichloroethene	6.840	130	147671	41.17	ppb	97
55) Methylcyclohexane	7.054	55	245079	55.01	ppb	93
56) 1,2-Diclpropane	7.133	63	180113	47.06	ppb	96
57) Dibromomethane	7.279	93	100990	45.74	ppb	98
58) 1,4-Dioxane	7.352	88	64547	814.74	ppb	91
59) Methyl Methacrylate	7.358	69	162924	48.86	ppb	99
60) Bromodichloromethane	7.505	83	185121	45.72	ppb	98
62) 2-Chloroethylvinyl Ether	7.901	63	53300	31.94	ppb	91
63) cis-1,3-Dichloropropene	8.035	75	249895	45.23	ppb	99
64) 4-Methyl-2-pentanone	8.248	43	259597	50.30	ppb	98
66) Toluene	8.389	91	736862	48.13	ppb	99
67) trans-1,3-Dichloropropene	8.675	75	227676	45.32	ppb	93
68) Ethyl Methacrylate	8.803	69	285195	50.71	ppb	99
69) 1,1,2-Trichloroethane	8.864	97	152263	44.54	ppb	100
72) Tetrachloroethene	8.968	164	121627	42.70	ppb	96
73) 2-Hexanone	9.151	43	196413	47.38	ppb	95
74) 1,3-Dichloropropane	9.029	76	283320	43.19	ppb	98
75) Dibromochloromethane	9.254	129	126665	43.67	ppb	95
76) N-Butyl Acetate	9.291	43	378190	49.17	ppb	99
77) 1,2-Dibromoethane	9.346	107	157789	44.20	ppb	99
78) Chlorobenzene	9.827	112	445630	42.84	ppb	96
79) 3-CBTF	9.840	180	241509	50.14	ppb	93
80) 4-CBTF	9.894	180	214435	49.49	ppb	96
81) 1,1,1,2-Tetrachloroethane	9.913	131	135593	42.36	ppb	98
82) Ethylbenzene	9.937	106	244344	44.76	ppb	97
83) (m+p)Xylene	10.053	106	614787	94.07	ppb	95
84) o-Xylene	10.407	106	295647	46.34	ppb	99
85) Styrene	10.425	104	517311	47.73	ppb	99
87) Bromoform	10.589	173	79824	38.56	ppb	98
88) 2-CBTF	10.657	180	235378	46.16	ppb	99
89) Isopropylbenzene	10.736	105	760825	43.84	ppb	98
90) Cyclohexanone	10.833	55	510978	490.03	ppb	93
91) trans-1,4-Dichloro-2-B...	11.065	53	61833	43.02	ppb	97
92) 1,1,2,2-Tetrachloroethane	11.016	83	243320	43.38	ppb	99
93) Bromobenzene	10.992	156	191371	42.27	ppb	94
94) 1,2,3-Trichloropropane	11.047	110	77094	42.50	ppb	99
95) n-Propylbenzene	11.089	91	938903	47.15	ppb	99
96) 2-Chlorotoluene	11.156	91	567207	43.86	ppb	98
97) 3-Chlorotoluene	11.211	91	552523	44.67	ppb	99
98) 4-Chlorotoluene	11.254	91	635443	43.88	ppb	99
99) 1,3,5-Trimethylbenzene	11.242	105	672406	45.35	ppb	99
100) tert-Butylbenzene	11.516	119	552536	44.52	ppb	97
101) 1,2,4-Trimethylbenzene	11.553	105	662806	44.42	ppb	99
102) 3,4-DCBTF	11.620	214	193984	47.46	ppb	95
103) sec-Butylbenzene	11.693	105	819286	46.02	ppb	98
104) p-Isopropyltoluene	11.815	119	698082	45.49	ppb	99
105) 1,3-Dclbenz	11.784	146	372426	41.99	ppb	99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38352.D
Acq On : 11 Aug 2020 10:43 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 10:59:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

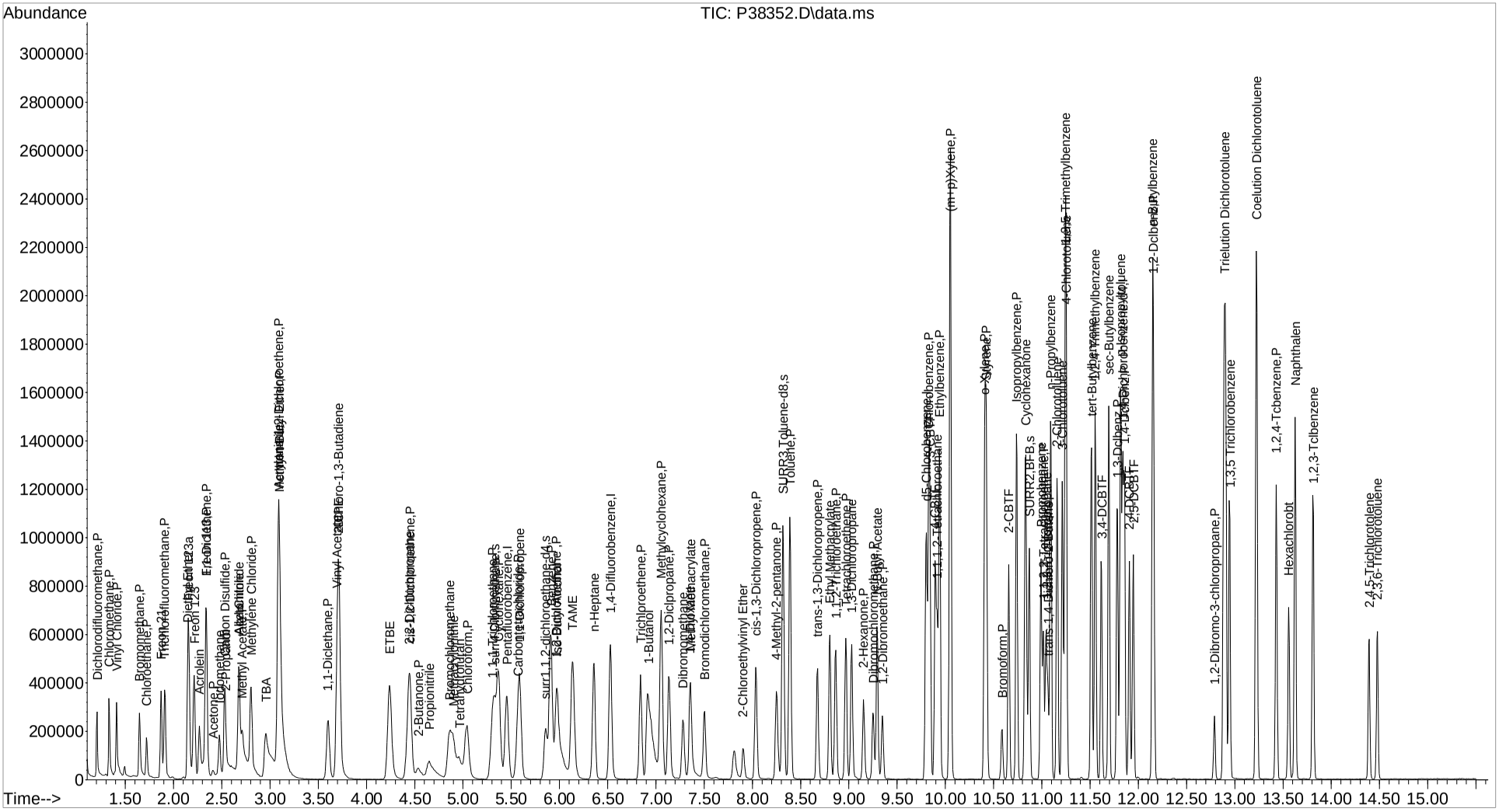
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.858	146	382344	42.36	ppb	97
107) 2,4-DCBTF	11.906	214	174251	45.52	ppb	97
108) 2,5-DCBTF	11.949	214	192872	46.07	ppb	97
109) n-Butylbenzene	12.150	91	655980	45.40	ppb	98
110) 1,2-Dclbenz	12.156	146	379988	42.20	ppb	100
111) 1,2-Dibromo-3-chloropr...	12.790	157	52662	41.93	ppb	94
112) Trielution Dichlorotol...	12.894	125	978124	135.63	ppb	98
113) 1,3,5 Trichlorobenzene	12.949	180	275817	44.55	ppb	93
114) Coelution Dichlorotoluene	13.223	125	726260	91.69	ppb	99
115) 1,2,4-Tcbenzene	13.430	180	295615	45.52	ppb	99
116) Hexachlorobt	13.558	225	113470	43.53	ppb	96
117) Naphthalen	13.625	128	885840	46.68	ppb	100
118) 1,2,3-Tclbenzene	13.814	180	298851	44.48	ppb	93
119) 2,4,5-Trichlorotolene	14.394	159	123792	30.12	ppb	96
120) 2,3,6-Trichlorotoluene	14.479	159	120619	32.31	ppb	96

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38352.D
Acq On : 11 Aug 2020 10:43 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 10:59:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

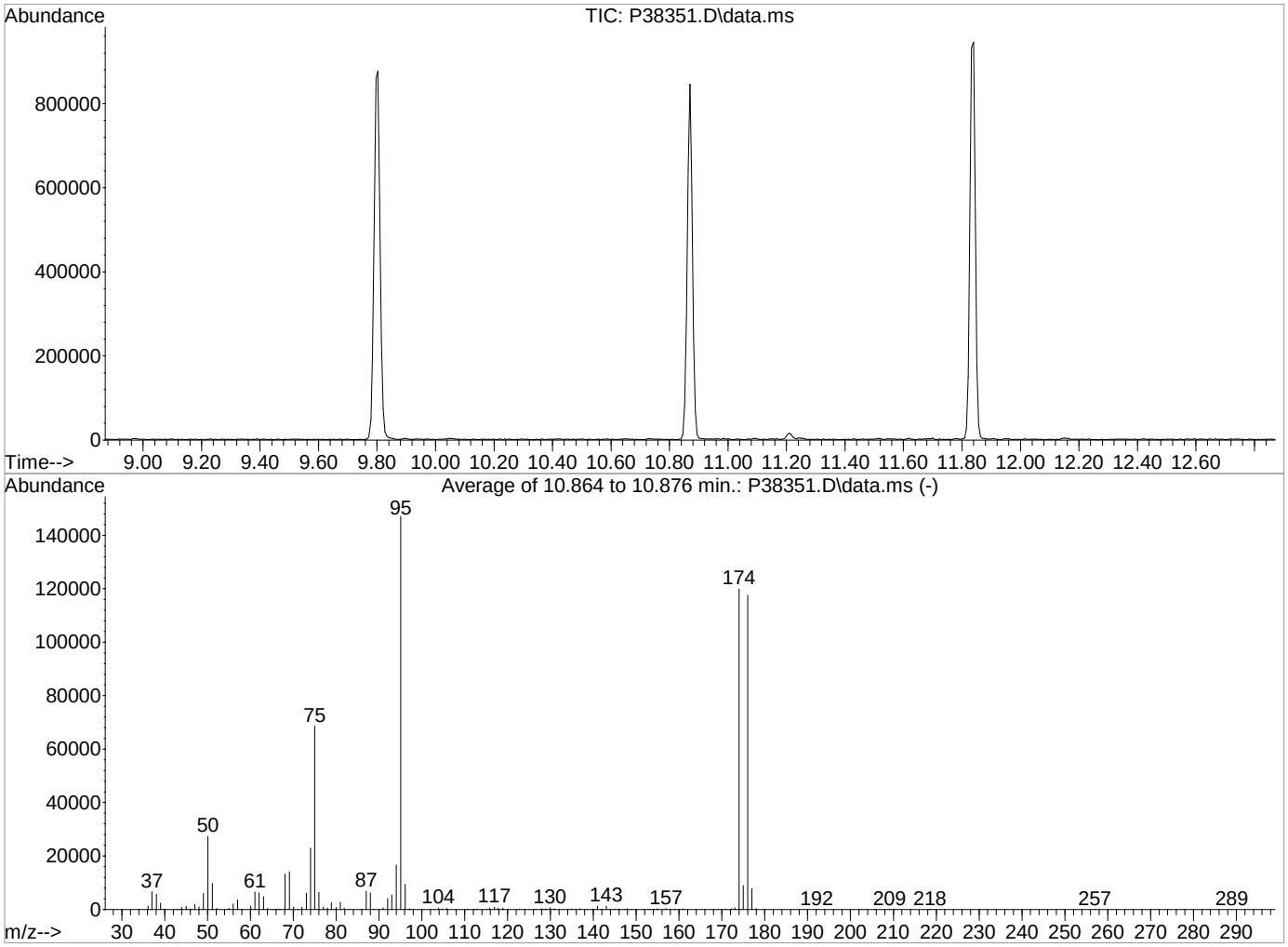


1st 08/11/20
2nd 08/17/20

Data Path : I:\ACQUDATA\msvoa12\Data\081120\
Data File : P38351.D
Acq On : 11 Aug 2020 10:10 am
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: INTP90.P

Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Tue Jul 14 10:28:25 2020



AutoFind: Scans 1602, 1603, 1604; Background Corrected with Scan 1595

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.6	27339	PASS
75	95	30	60	46.6	68600	PASS
95	95	100	100	100.0	147157	PASS
96	95	5	9	6.4	9419	PASS
173	174	0.00	2	0.5	569	PASS
174	95	50	120	81.5	119941	PASS
175	174	5	9	7.5	8973	PASS
176	174	95	101	98.1	117603	PASS
177	176	5	9	6.6	7776	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 14 10:30:29 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	334568	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	515318	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	459990	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	236872	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	149975	50.68	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.36%				
48) surr1,1,2-dichloroetha...	5.859	65	203903	49.78	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 99.56%				
65) SURR3,Toluene-d8	8.315	98	695379	50.56	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.12%				
70) SURR2,BFB	10.870	95	252353	49.80	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.60%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	187436	50.35	ppb		97
3) Chloromethane	1.329	50	244052	52.51	ppb		100
4) Vinyl Chloride	1.408	62	231300	53.08	ppb		96
5) Bromomethane	1.634	94	171405	49.32	ppb		98
6) Chloroethane	1.713	64	104668	43.66	ppb		94
7) Freon 21	1.872	67	206316	37.16	ppb		99
8) Trichlorofluoromethane	1.908	101	208190	46.38	ppb		94
9) Diethyl Ether	2.152	59	174090	53.67	ppb		94
10) Freon 123a	2.158	67	132478	34.61	ppb		96
11) Freon 123	2.213	83	163604	36.22	ppb		95
12) Acrolein	2.268	56	68538	78.02	ppb		98
13) 1,1-Diclethene	2.341	96	144500	55.85	ppb		89
14) Freon 113	2.341	101	143393	47.56	ppb		98
15) Acetone	2.408	43	103956	54.53	ppb		98
16) 2-Propanol	2.548	45	420199	975.94	ppb		100
17) Iodomethane	2.475	142	131810	45.53	ppb		95
18) Carbon Disulfide	2.530	76	409841	48.40	ppb		99
19) Acetonitrile	2.676	40	74847m	313.27	ppb		
20) Allyl Chloride	2.682	76	93302	50.89	ppb	#	87
21) Methyl Acetate	2.713	43	202010	40.60	ppb		94
22) Methylene Chloride	2.804	84	175954	47.71	ppb		95
23) TBA	2.957	59	720228	1032.90	ppb		96
24) Acrylonitrile	3.085	53	544941	253.36	ppb		97
25) Methyl-t-Butyl Ether	3.103	73	642572	53.66	ppb		100
26) trans-1,2-Dichloroethene	3.091	96	163244	54.17	ppb		97
28) 1,1-Diclethane	3.603	63	321376	48.38	ppb		97
29) Vinyl Acetate	3.700	86	40790	71.31	ppb	#	82
30) DIPE	3.713	45	671647	57.87	ppb		93
31) 2-Chloro-1,3-Butadiene	3.713	53	280748	52.52	ppb		99
32) ETBE	4.243	59	585046	54.03	ppb		99
33) 2,2-Dichloropropane	4.444	77	247426	50.61	ppb		96
34) cis-1,2-Dichloroethene	4.456	96	186726	48.36	ppb		96
35) 2-Butanone	4.530	43	132074	50.78	ppb		97
36) Propionitrile	4.645	54	221603	237.59	ppb		99
37) Bromochloromethane	4.865	130	110747	48.48	ppb		93
38) Methacrylonitrile	4.901	67	113983	51.59	ppb		91
39) Tetrahydrofuran	4.962	42	100268	50.04	ppb		90
40) Chloroform	5.042	83	286737	49.58	ppb		96
41) 1,1,1-Trichloroethane	5.310	97	239607	49.54	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 14 10:30:29 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.139	73	611809	56.72	ppb		99
44) Cyclohexane	5.371	41	154885	45.84	ppb		93
46) Carbontetrachloride	5.572	117	178746	52.83	ppb		97
47) 1,1-Dichloropropene	5.590	75	238981	49.89	ppb		97
49) Benzene	5.913	78	729728	49.05	ppb		97
50) 1,2-Dichloroethane	5.974	62	245285	47.17	ppb		97
51) Iso-Butyl Alcohol	5.968	43	345496	1082.56	ppb		98
52) n-Heptane	6.358	43	238715	51.77	ppb		98
53) 1-Butanol	6.907	56	570198	2871.06	ppb		99
54) Trichloroethene	6.846	130	169749	45.98	ppb		95
55) Methylcyclohexane	7.053	55	217610	47.46	ppb		95
56) 1,2-Diclpropane	7.139	63	196048	49.77	ppb		99
57) Dibromomethane	7.279	93	108704	47.83	ppb		86
58) 1,4-Dioxane	7.346	88	81445	998.89	ppb		97
59) Methyl Methacrylate	7.358	69	183644	53.51	ppb		96
60) Bromodichloromethane	7.505	83	207175	49.71	ppb		99
62) 2-Chloroethylvinyl Ether	7.907	63	84995	49.50	ppb		96
63) cis-1,3-Dichloropropene	8.035	75	283883	49.93	ppb		98
64) 4-Methyl-2-pentanone	8.248	43	251431	47.34	ppb		99
66) Toluene	8.395	91	795384	50.48	ppb		96
67) trans-1,3-Dichloropropene	8.675	75	259568	50.20	ppb		95
68) Ethyl Methacrylate	8.803	69	308987	53.38	ppb		96
69) 1,1,2-Trichloroethane	8.864	97	174398	49.57	ppb		95
72) Tetrachloroethene	8.968	164	128828	45.86	ppb		94
73) 2-Hexanone	9.151	43	190978	46.71	ppb		94
74) 1,3-Dichloropropane	9.029	76	308828	47.74	ppb		95
75) Dibromochloromethane	9.248	129	154228	53.91	ppb		98
76) N-Butyl Acetate	9.291	43	372558	49.12	ppb		99
77) 1,2-Dibromoethane	9.346	107	174860	49.66	ppb		97
78) Chlorobenzene	9.827	112	502579	48.99	ppb		96
79) 3-CBTF	9.839	180	251302	52.90	ppb		98
80) 4-CBTF	9.894	180	223150	52.22	ppb		96
81) 1,1,1,2-Tetrachloroethane	9.919	131	162847	51.59	ppb		98
82) Ethylbenzene	9.943	106	265618	49.34	ppb		96
83) (m+p)Xylene	10.053	106	660624	102.50	ppb		100
84) o-Xylene	10.413	106	325258	51.69	ppb		93
85) Styrene	10.425	104	544471	50.93	ppb		96
87) Bromoform	10.589	173	96752	49.60	ppb		96
88) 2-CBTF	10.656	180	251989	52.44	ppb		100
89) Isopropylbenzene	10.742	105	822440	50.29	ppb		99
90) Cyclohexanone	10.827	55	1034293	1052.57	ppb		99
91) trans-1,4-Dichloro-2-B...	11.065	53	67669	49.96	ppb		93
92) 1,1,2,2-Tetrachloroethane	11.016	83	277887	52.57	ppb		98
93) Bromobenzene	10.992	156	198259	46.47	ppb		95
94) 1,2,3-Trichloropropane	11.047	110	78326	45.82	ppb	#	85
95) n-Propylbenzene	11.095	91	991309	52.83	ppb		97
96) 2-Chlorotoluene	11.156	91	602352	49.42	ppb		98
97) 3-Chlorotoluene	11.211	91	597806	51.28	ppb		99
98) 4-Chlorotoluene	11.254	91	684154	50.14	ppb		99
99) 1,3,5-Trimethylbenzene	11.242	105	706432	50.56	ppb		99
100) tert-Butylbenzene	11.516	119	592510	50.66	ppb		98
101) 1,2,4-Trimethylbenzene	11.553	105	715551	50.89	ppb		97
102) 3,4-DCBTF	11.620	214	198562	51.55	ppb		98
103) sec-Butylbenzene	11.693	105	881080	52.52	ppb		100
104) p-Isopropyltoluene	11.815	119	739799	51.15	ppb		99
105) 1,3-Dclbenz	11.784	146	395521	47.32	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 14 10:30:29 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

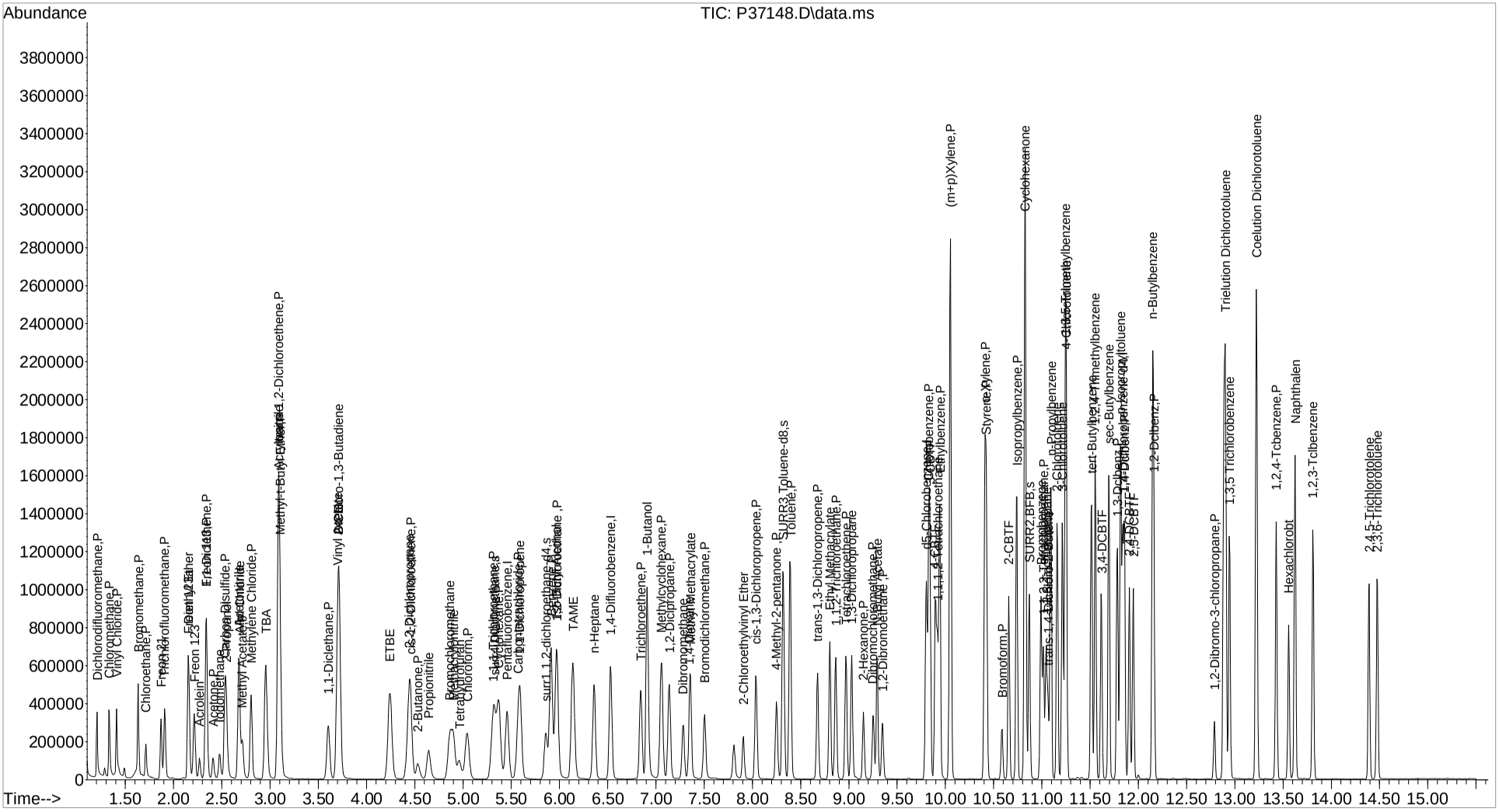
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	396370	46.60	ppb	100
107) 2,4-DCBTF	11.906	214	190538	52.82	ppb	99
108) 2,5-DCBTF	11.949	214	203704	51.64	ppb	97
109) n-Butylbenzene	12.150	91	700129	51.42	ppb	99
110) 1,2-Dclbenz	12.162	146	395795	46.65	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.790	157	60256	50.91	ppb	94
112) Trielution Dichlorotol...	12.900	125	1105573	162.68	ppb	98
113) 1,3,5 Trichlorobenzene	12.943	180	302573	51.86	ppb	99
114) Coelution Dichlorotoluene	13.223	125	837862	112.24	ppb	98
115) 1,2,4-Tcbenzene	13.430	180	311462	50.89	ppb	98
116) Hexachlorobt	13.558	225	116122	47.27	ppb	97
117) Naphthalen	13.625	128	1006622	56.29	ppb	99
118) 1,2,3-Tclbenzene	13.808	180	301180	47.57	ppb	98
119) 2,4,5-Trichlorotolene	14.393	159	220356	56.90	ppb	98
120) 2,3,6-Trichlorotoluene	14.479	159	207550	59.00	ppb	98

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 14 10:30:29 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

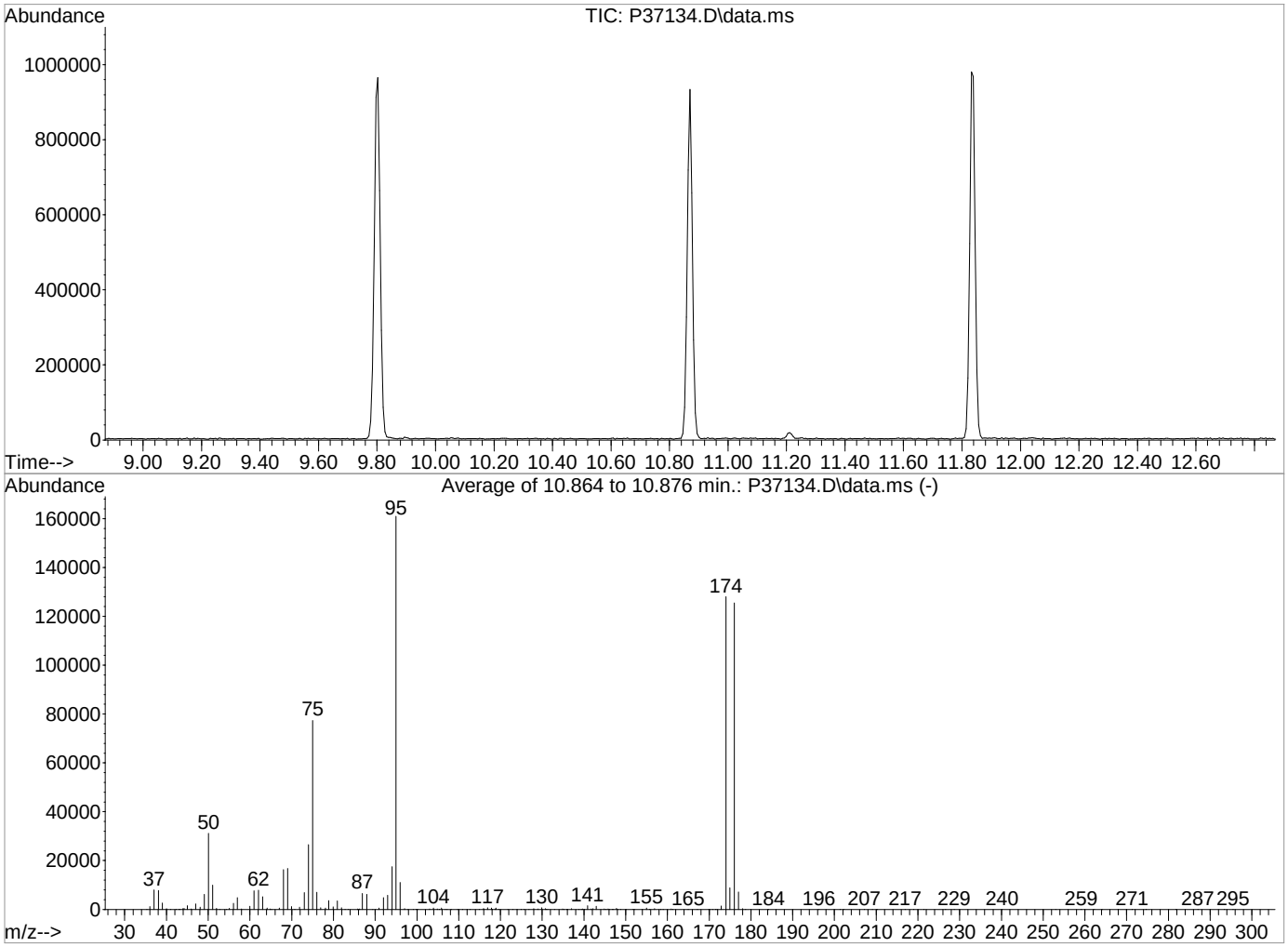


1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37134.D
Acq On : 13 Jul 2020 10:43 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\W071320.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Mon Jul 13 13:05:56 2020



AutoFind: Scans 1602, 1603, 1604; Background Corrected with Scan 1595

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.3	31112	PASS
75	95	30	60	48.1	77408	PASS
95	95	100	100	100.0	161024	PASS
96	95	5	9	6.9	11059	PASS
173	174	0.00	2	1.1	1384	PASS
174	95	50	120	79.5	128075	PASS
175	174	5	9	6.9	8837	PASS
176	174	95	101	98.0	125485	PASS
177	176	5	9	5.6	7080	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37135.D
Acq On : 13 Jul 2020 11:13 am
Operator : K.Ruest
Sample : IBLK Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 14 10:46:04 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

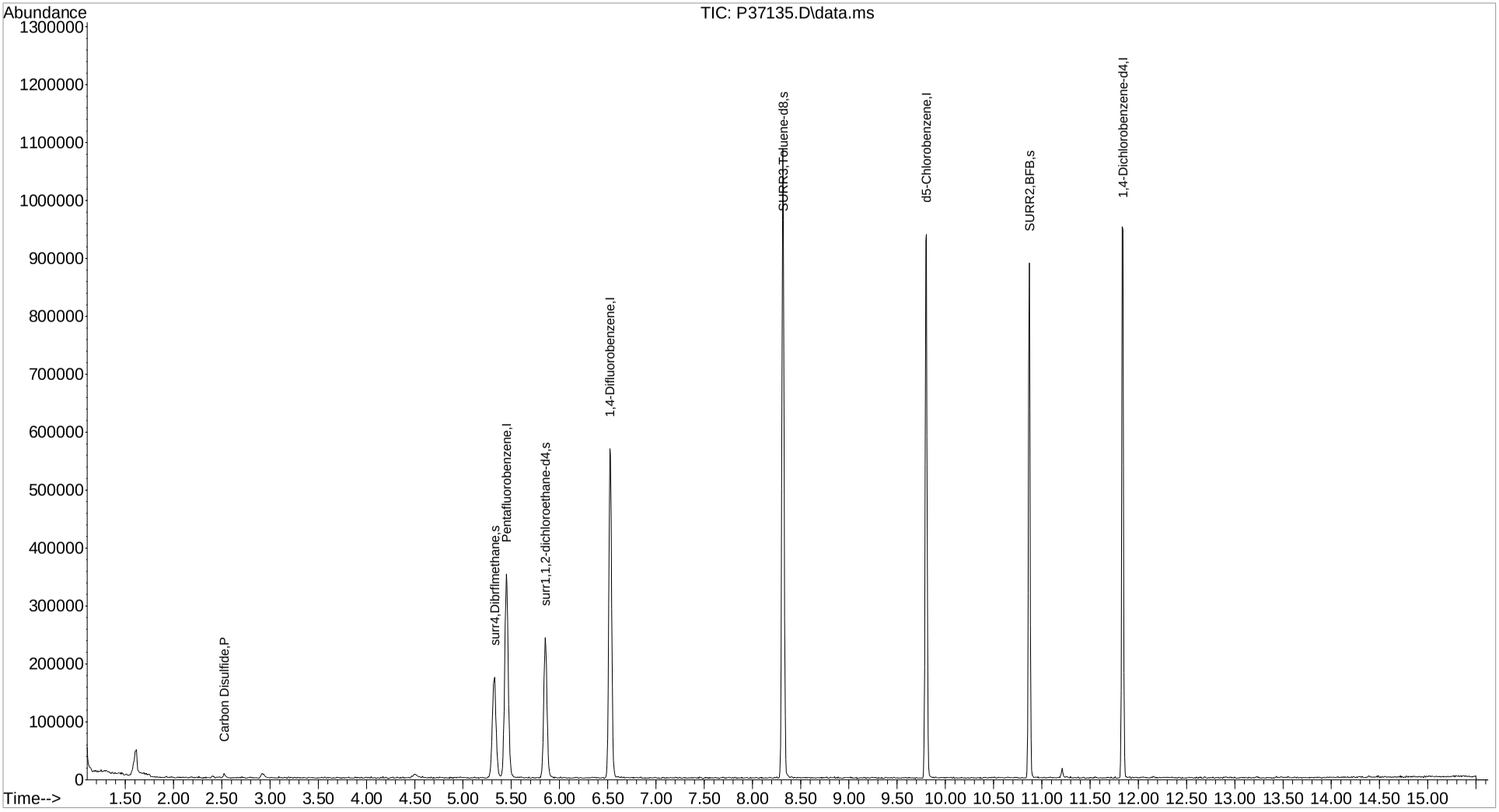
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	323608	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	504388	50.00	ppb	0.00
71) d5-Chlorobenzene	9.803	117	429543	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	193982	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.328	113	146271	50.50	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.00%			
48) surr1,1,2-dichloroetha...	5.853	65	201706	50.31	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 100.62%			
65) SURR3,Toluene-d8	8.316	98	668568	49.67	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.34%			
70) SURR2,BFB	10.870	95	226429	45.65	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 91.30%			
Target Compounds						Qvalue
15) Acetone	2.414	43	2899	Below Cal		83
18) Carbon Disulfide	2.524	76	6828	0.42	ppb	92

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

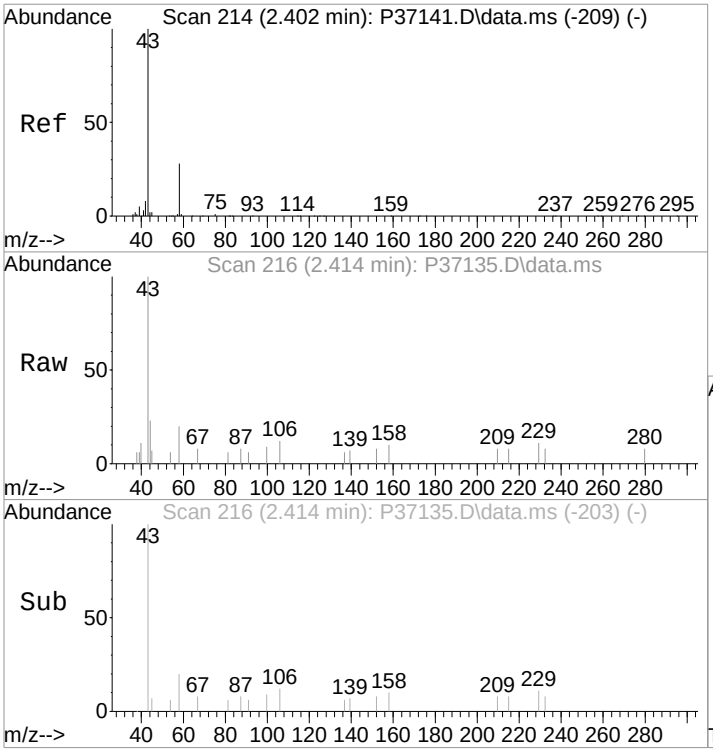
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37135.D
Acq On : 13 Jul 2020 11:13 am
Operator : K.Ruest
Sample : IBLK Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 14 10:46:04 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



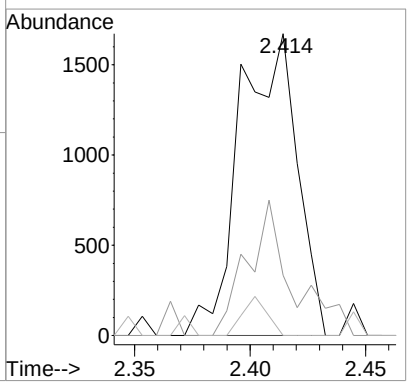
1st 07/14/20
2nd 07/14/20

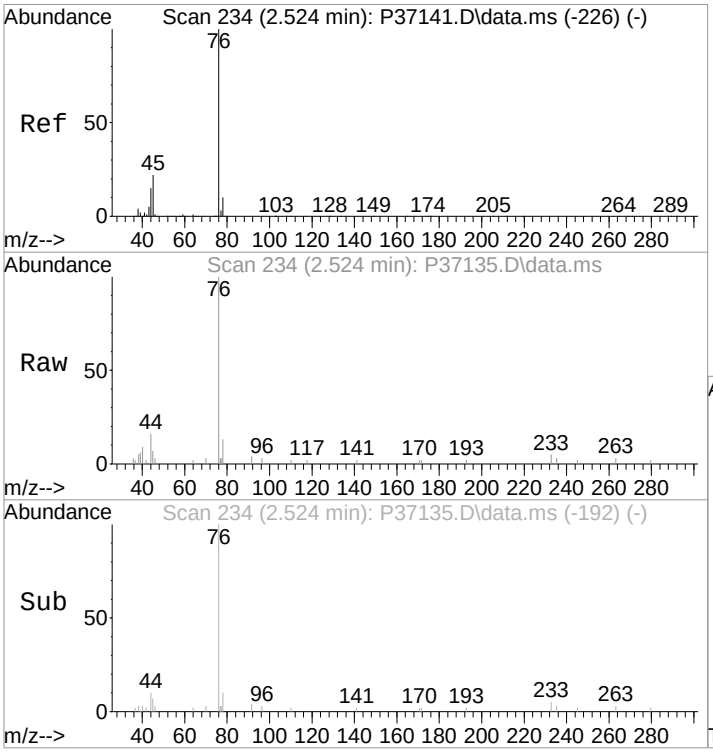


#15
Acetone
Concen: Below Cal
RT: 2.414 min Scan# 216
Delta R.T. 0.007 min
Lab File: P37135.D
Acq: 13 Jul 2020 11:13 am

Tgt Ion: 43 Resp: 2899

Ion	Ratio	Lower	Upper
43	100		
58	19.9	8.2	48.2
42	0.0	0.0	27.7

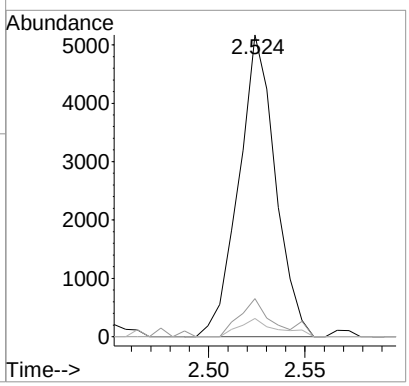




#18
Carbon Disulfide
Concen: 0.42 ppb
RT: 2.524 min Scan# 234
Delta R.T. 0.001 min
Lab File: P37135.D
Acq: 13 Jul 2020 11:13 am

Tgt Ion: 76 Resp: 6828

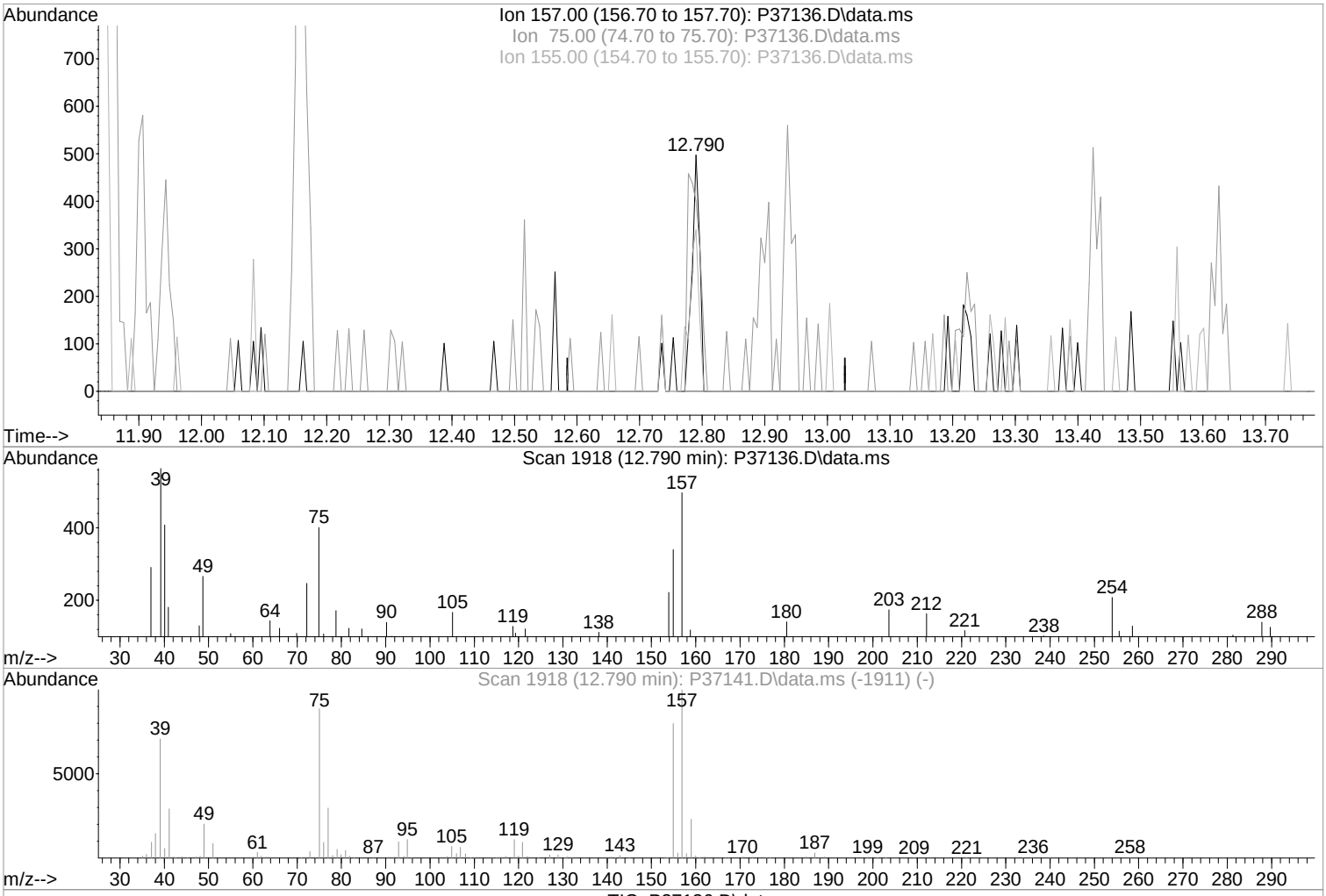
Ion	Ratio	Lower	Upper
76	100		
78	12.3	0.0	29.5
77	5.9	0.0	22.5



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(111) 1,2-Dibromo-3-chloropropane (P)

12.790min (+0.000) 0.40 ppb m

response 429

Ion	Exp%	Act%
157.00	100	100
75.00	88.70	80.68
155.00	79.80	68.41
0.00	0.00	0.00

Manual Integration:

After

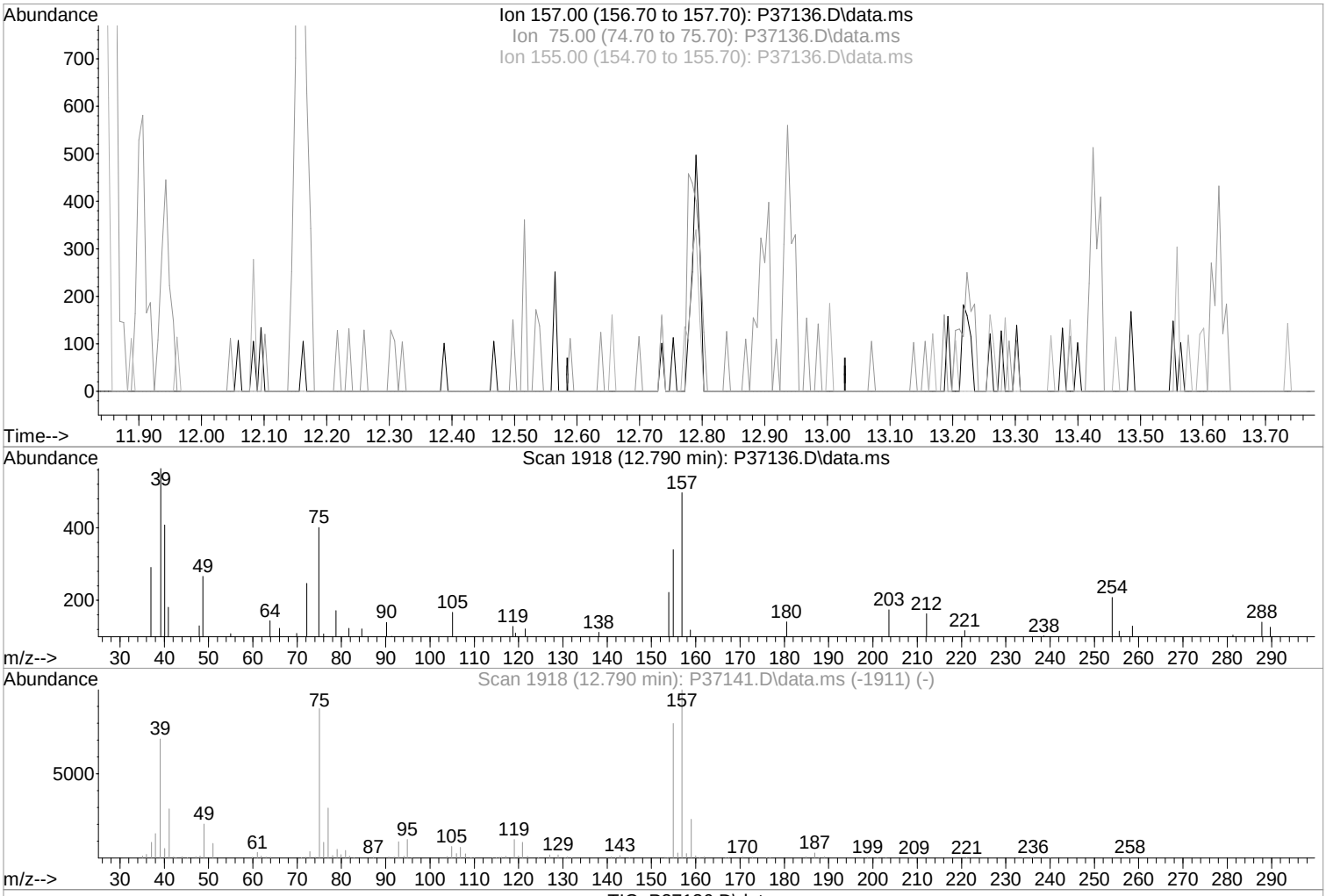
Peak not found.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(111) 1,2-Dibromo-3-chloropropane (P)

12.790min (-12.790) 0.00 ppb

response 0

Ion	Exp%	Act%
157.00	100	0.00
75.00	88.70	0.00#
155.00	79.80	0.00#
0.00	0.00	0.00

Manual Integration:

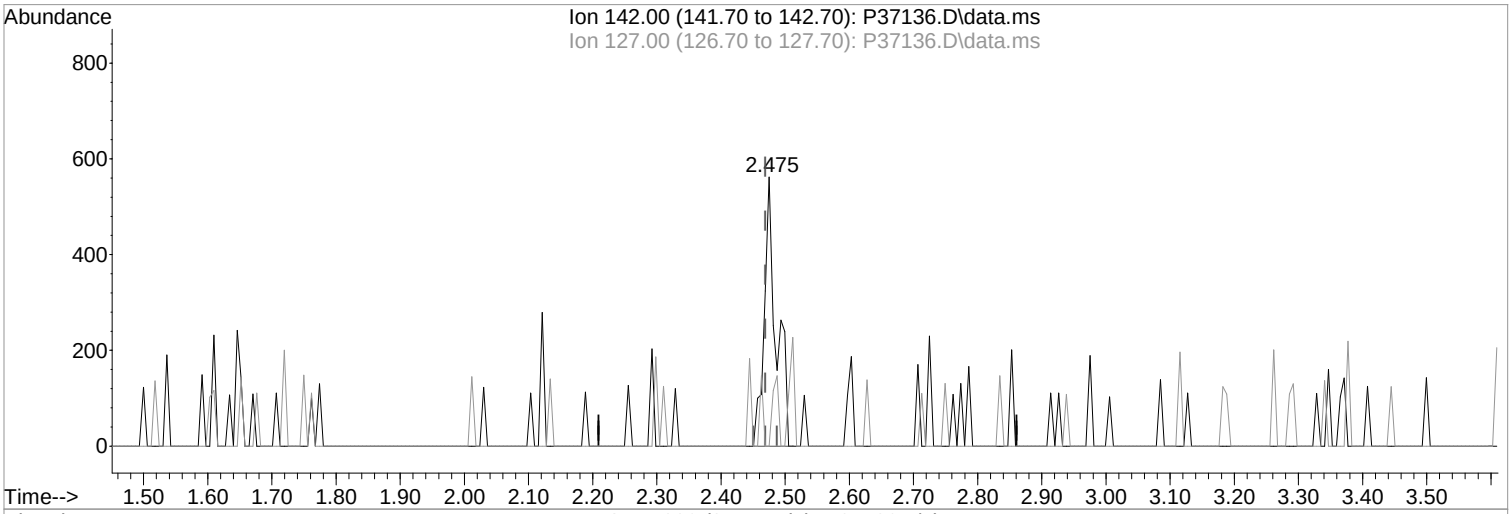
Before

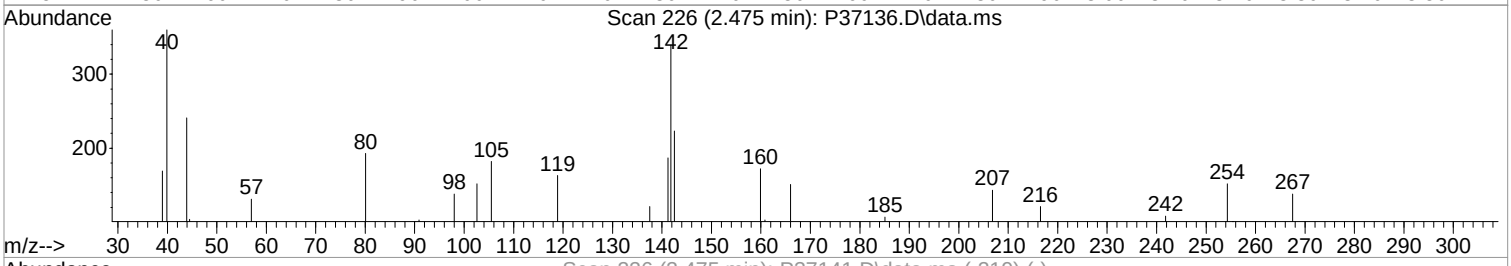
07/13/20

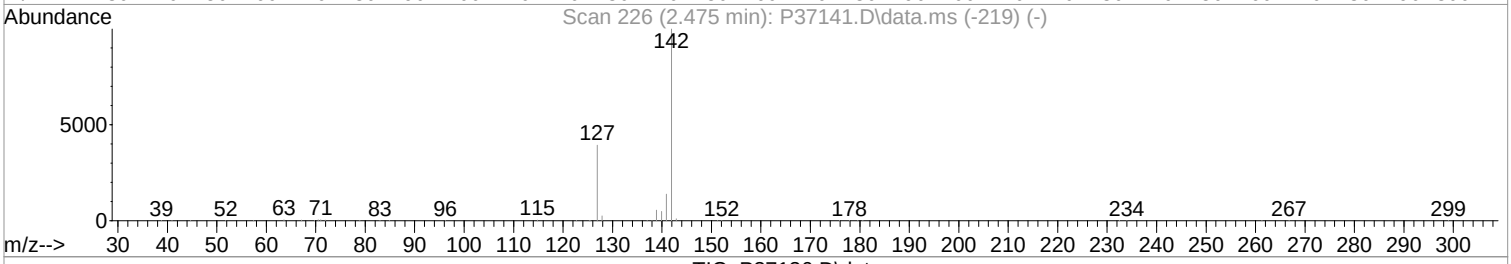
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(17) Iodomethane

2.475min (+0.006) 0.29 ppb m

response 734

Ion	Exp%	Act%
142.00	100	100
127.00	39.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

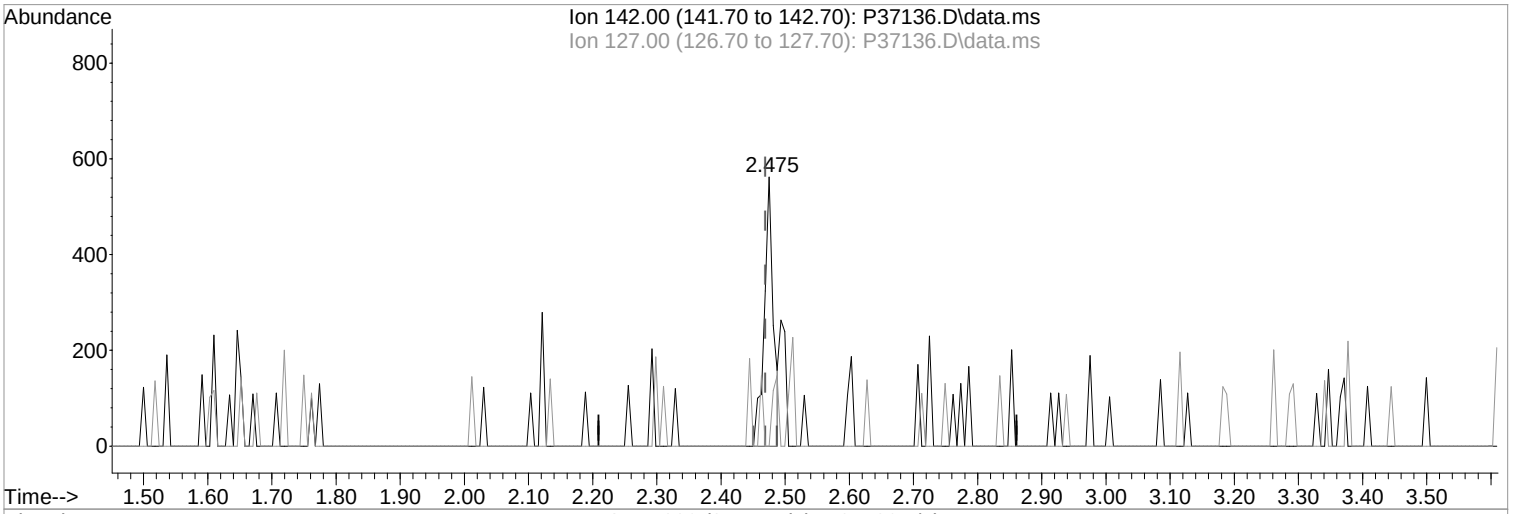
Split Peak

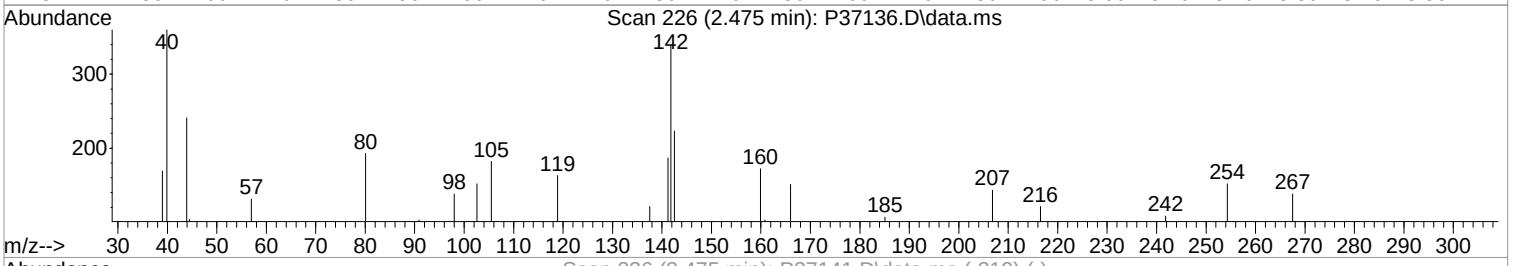
07/13/20

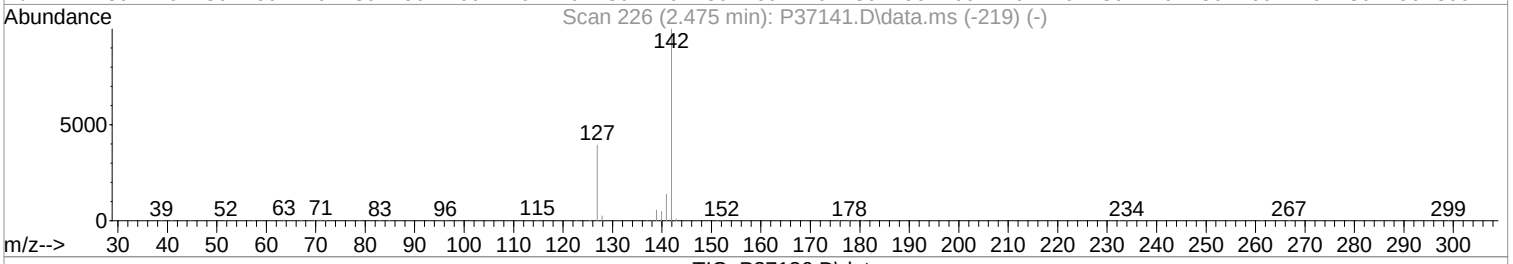
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(17) Iodomethane

2.475min (+0.006) 0.21 ppb

response 550

Ion	Exp%	Act%
142.00	100	100
127.00	39.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

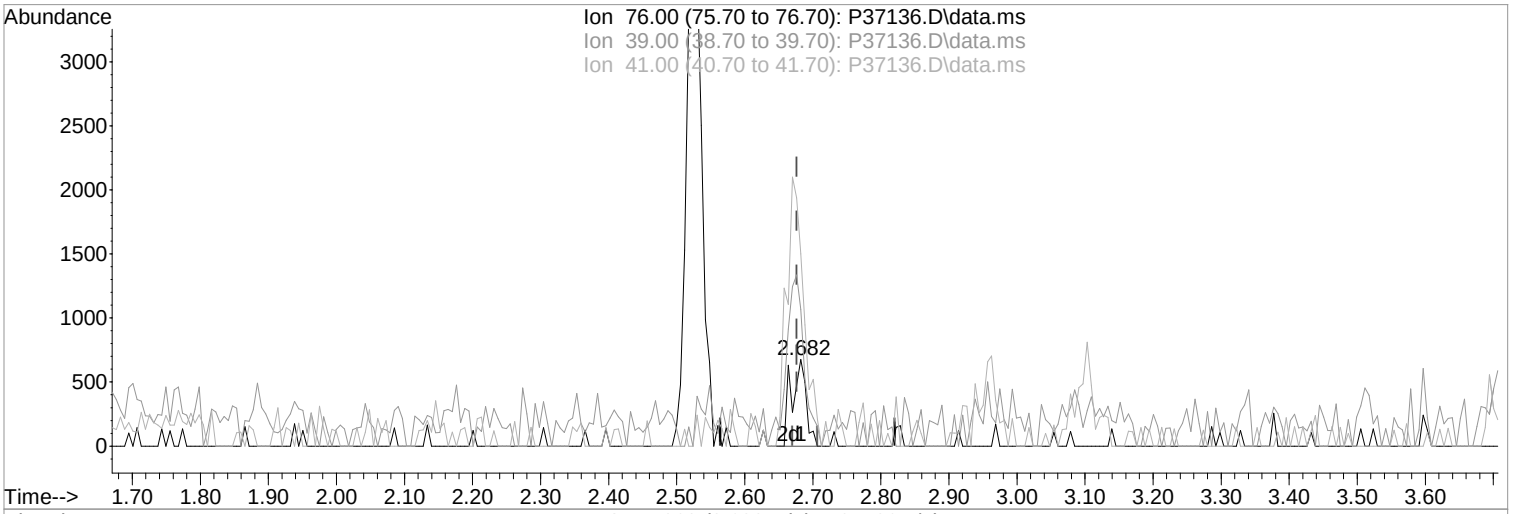
07/13/20

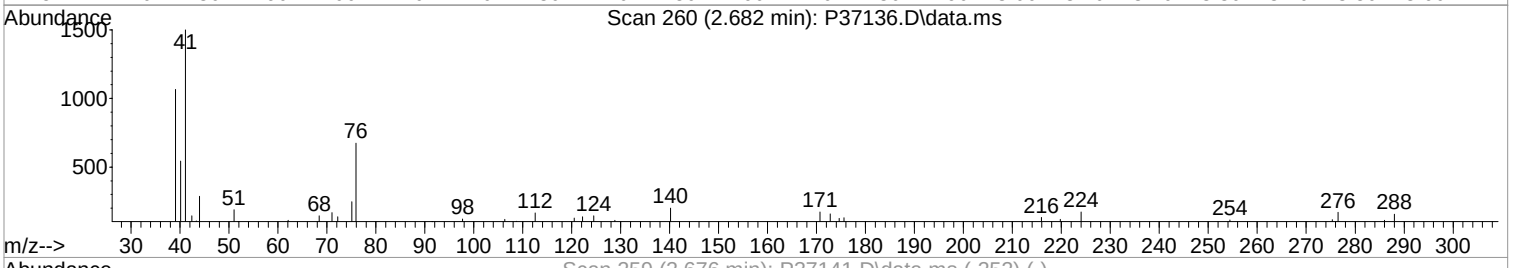
1st 07/14/20
2nd 07/14/20

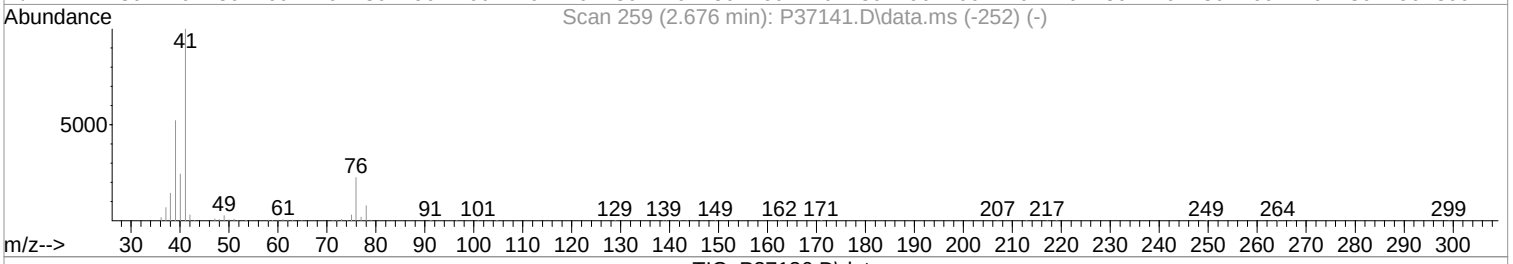
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(20) Allyl Chloride

2.682min (+0.006) 0.62 ppb m

response 1010

Ion	Exp%	Act%
76.00	100	100
39.00	231.00	157.93#
41.00	443.30	222.37#
0.00	0.00	0.00

Manual Integration:

After

Split Peak

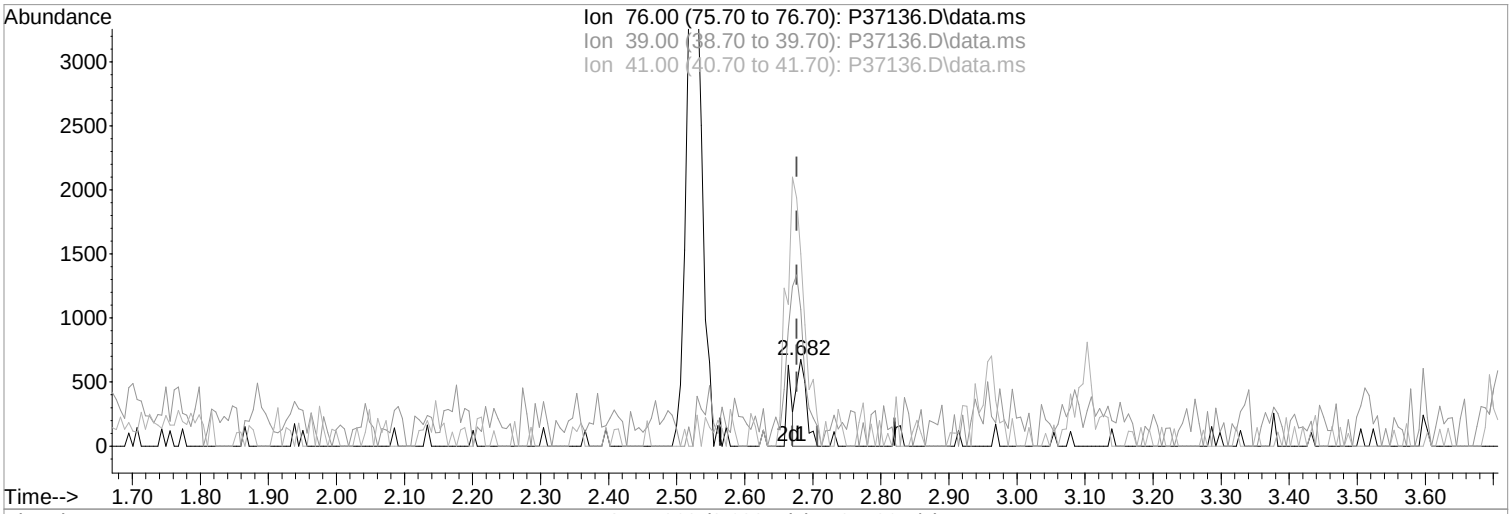
07/13/20

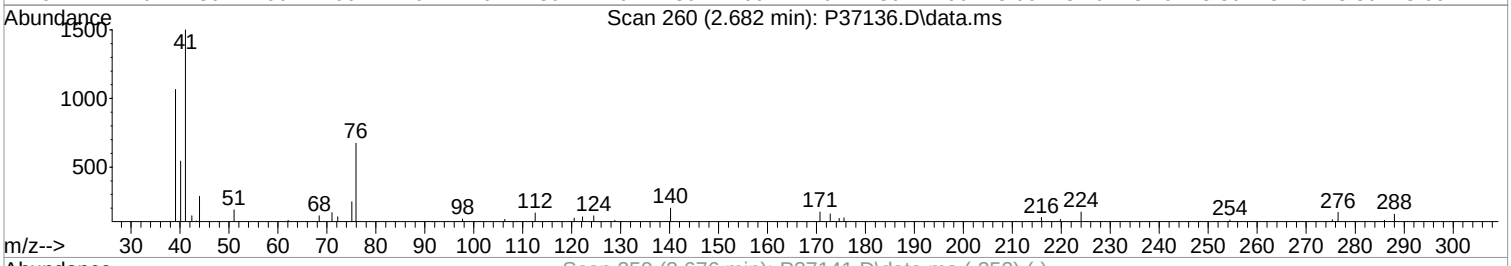
1st 07/14/20
2nd 07/14/20

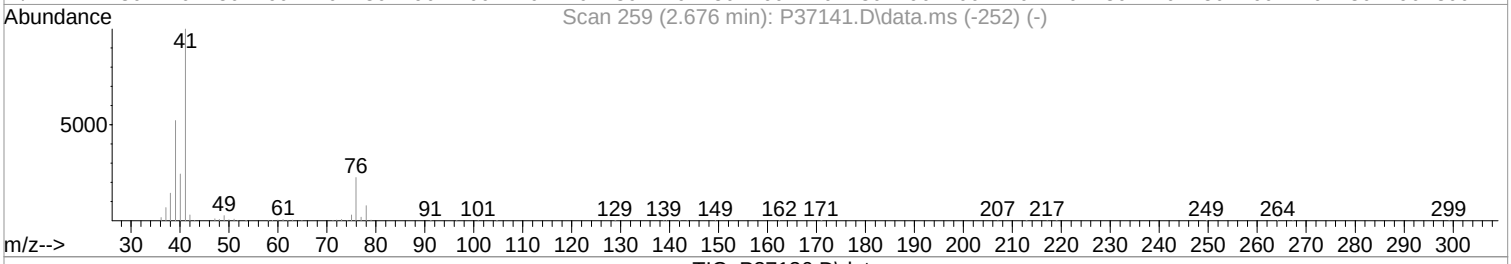
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(20) Allyl Chloride

2.682min (+0.006) 0.42 ppb

response 682

Ion	Exp%	Act%
76.00	100	100
39.00	231.00	157.93#
41.00	443.30	222.37#
0.00	0.00	0.00

Manual Integration:

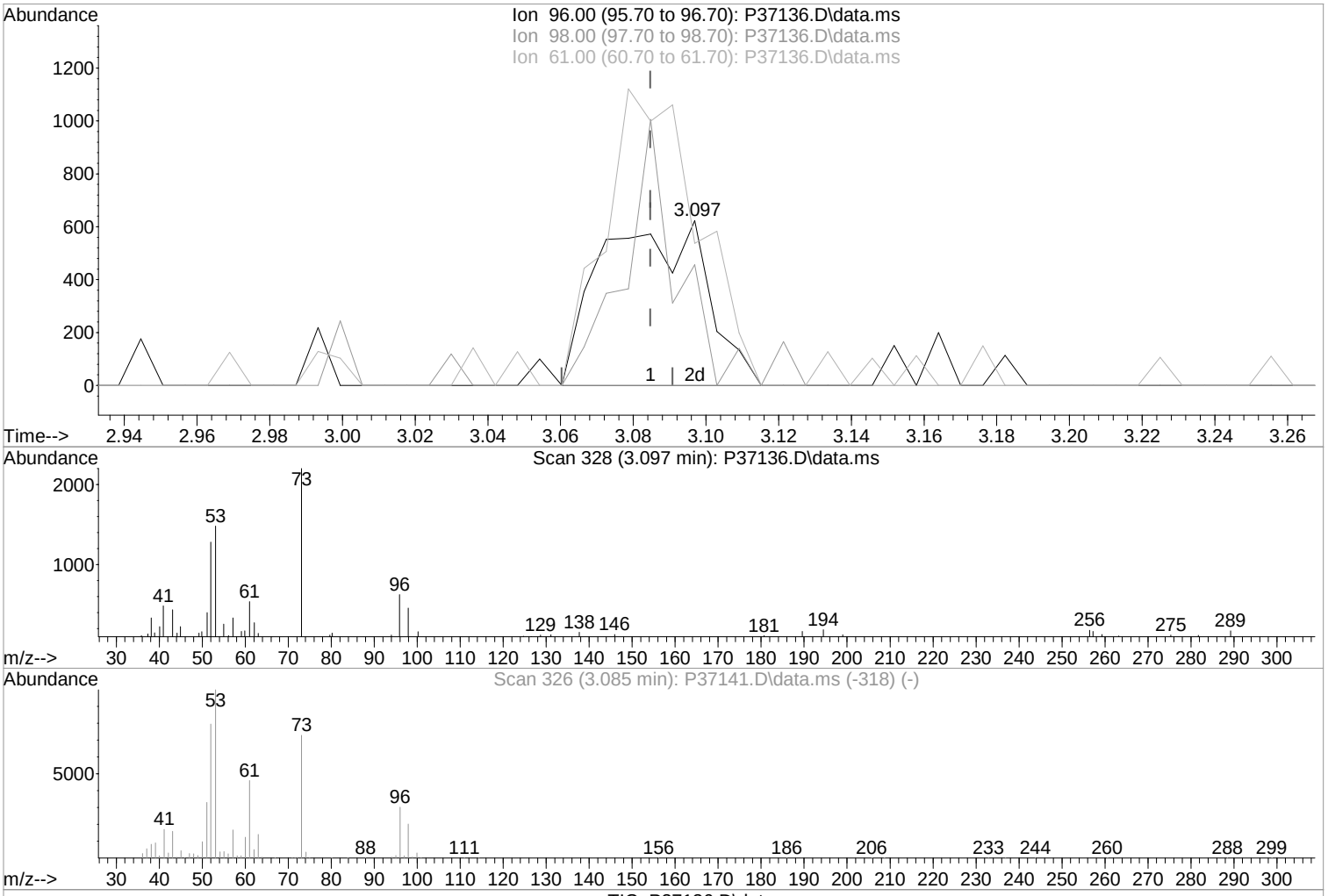
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(26) trans-1,2-Dichloroethene (P)

3.097min (+0.012) 0.47 ppb m

response 1252

Ion	Exp%	Act%
96.00	100	100
98.00	66.80	73.24
61.00	152.80	86.06#
0.00	0.00	0.00

Manual Integration:

After

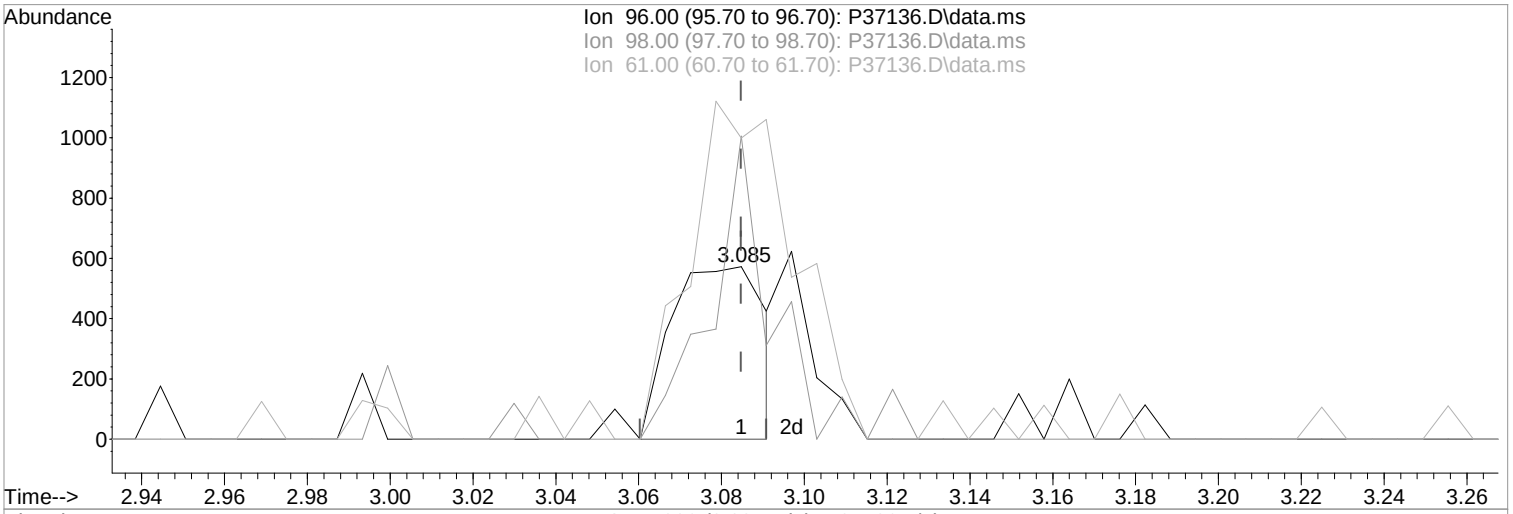
Split Peak

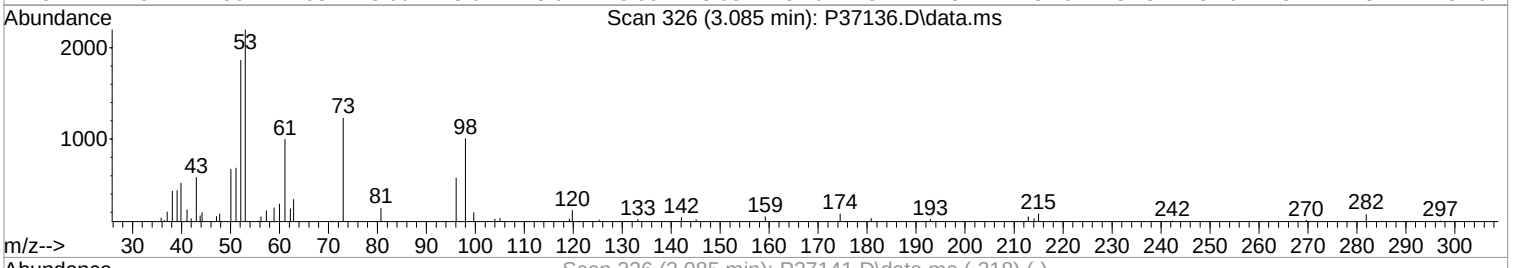
07/13/20

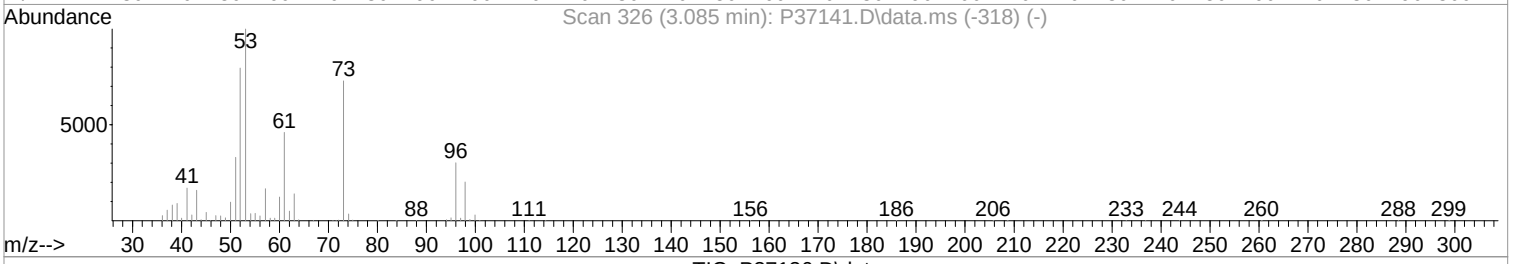
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(26) trans-1,2-Dichloroethene (P)

3.085min (+0.000) 0.34 ppb

response 901

Ion	Exp%	Act%
96.00	100	100
98.00	66.80	175.57#
61.00	152.80	174.35#
0.00	0.00	0.00

Manual Integration:

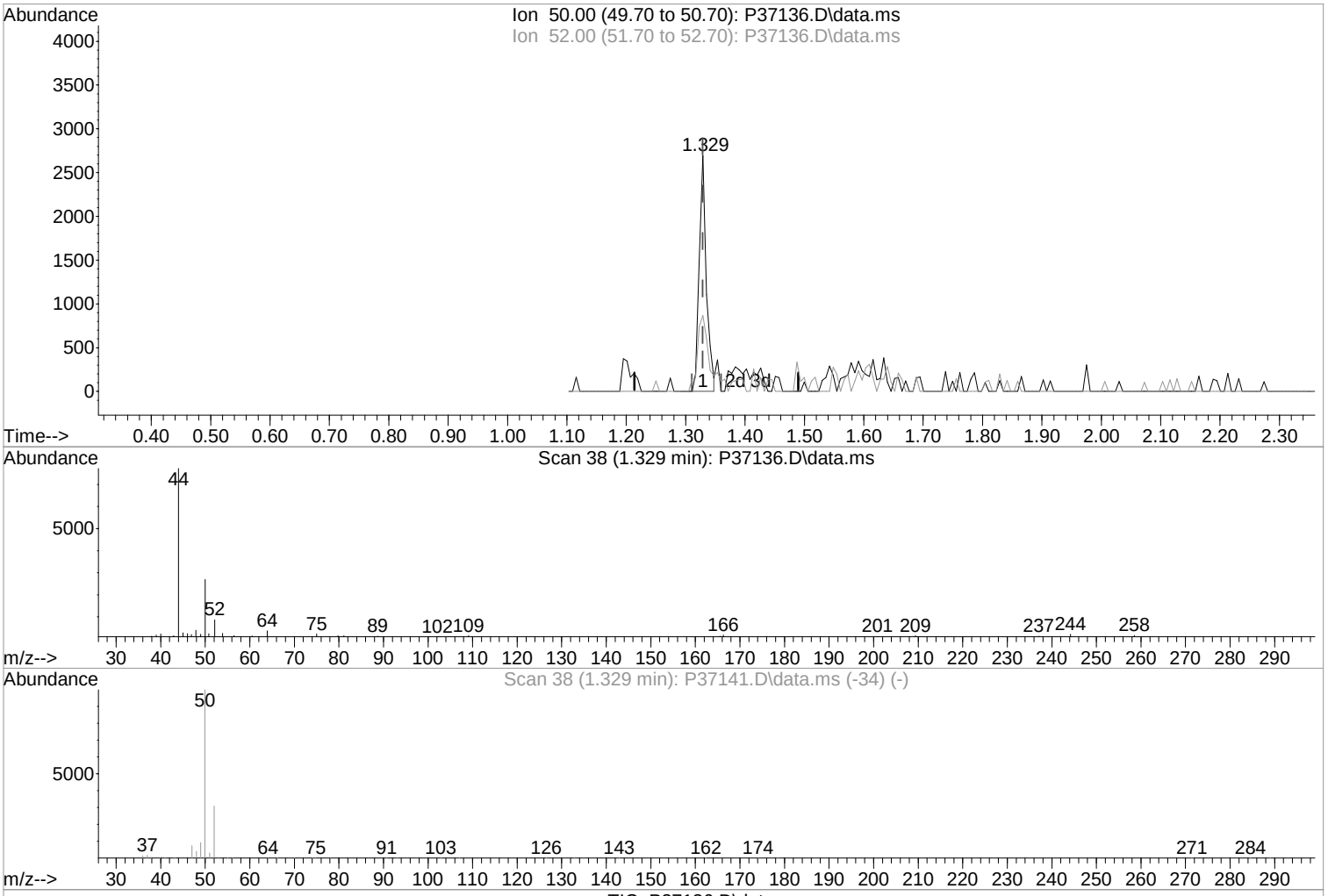
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(3) Chloromethane (P)

1.329min (+0.000) 0.54 ppb m

response 2259

Ion	Exp%	Act%
50.00	100	100
52.00	30.80	32.18
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

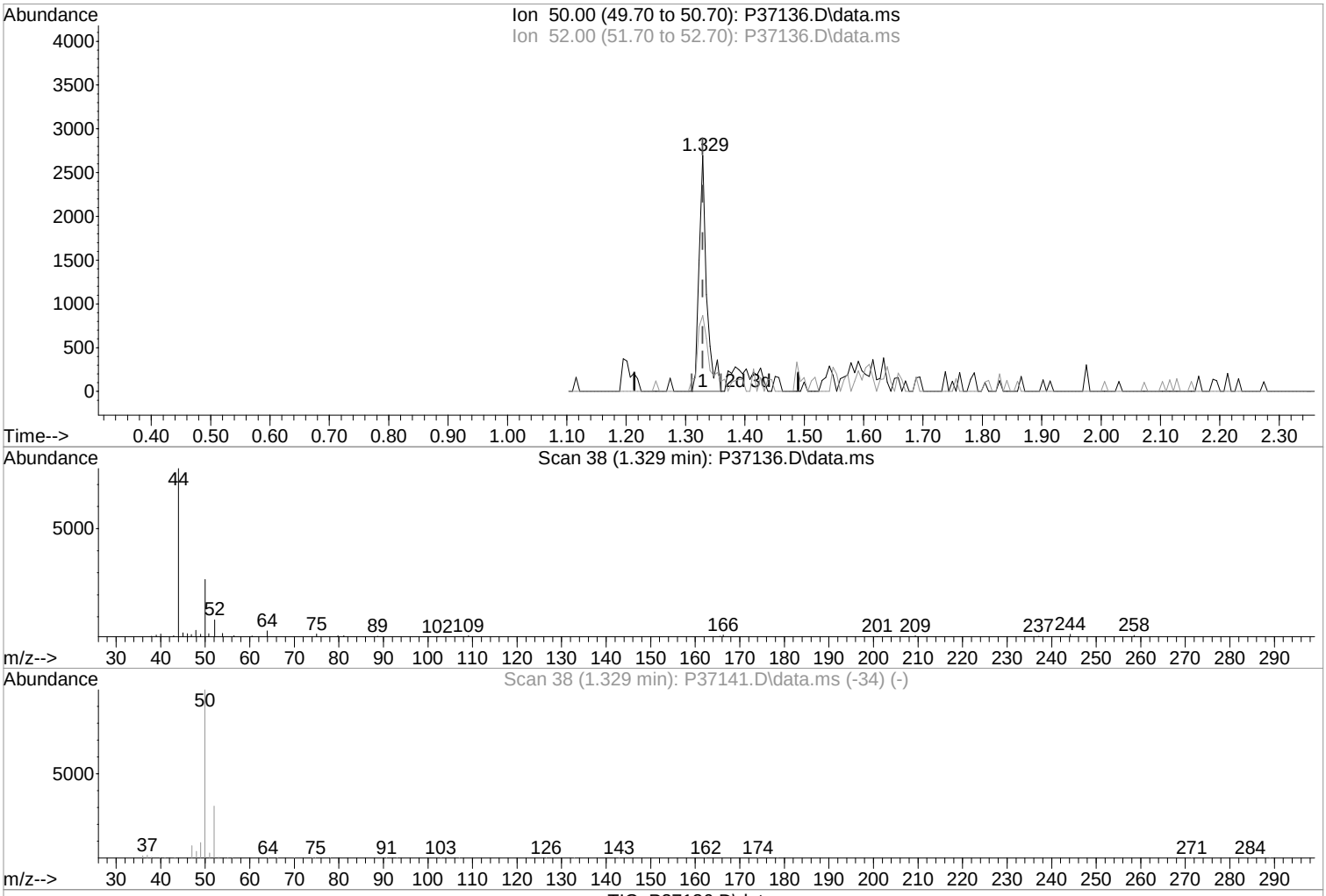
Poor integration.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(3) Chloromethane (P)

1.329min (+0.000) 0.58 ppb

response 2391

Ion	Exp%	Act%
50.00	100	100
52.00	30.80	32.18
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

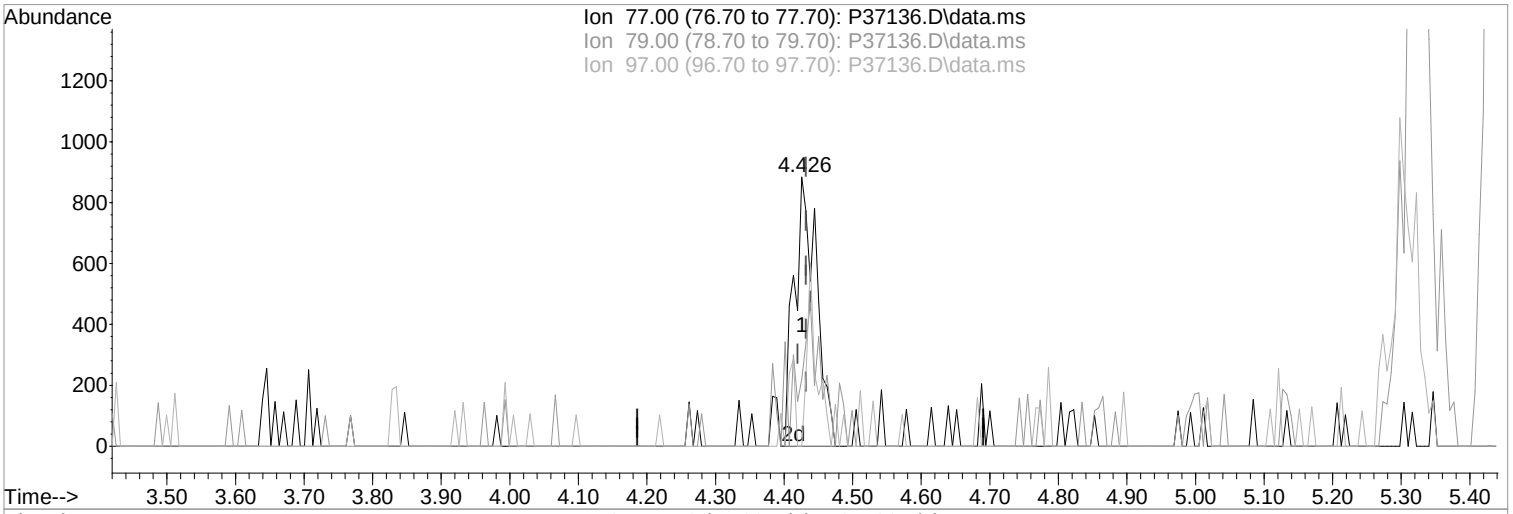
07/13/20

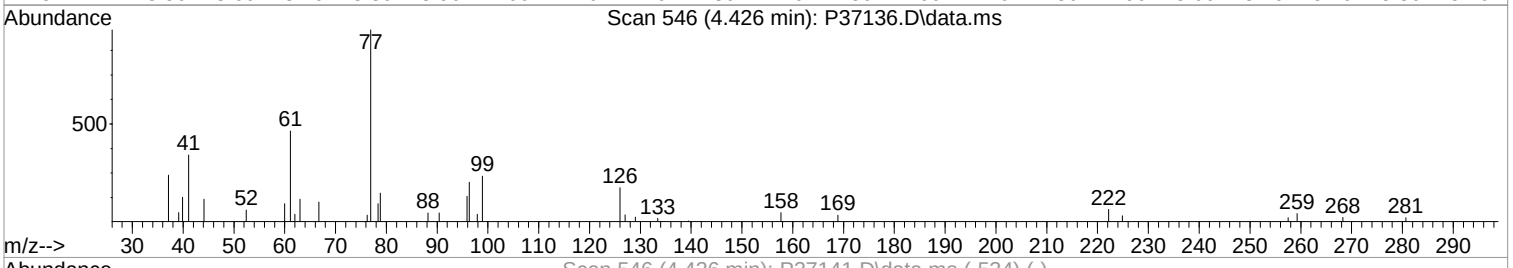
1st 07/14/20
2nd 07/14/20

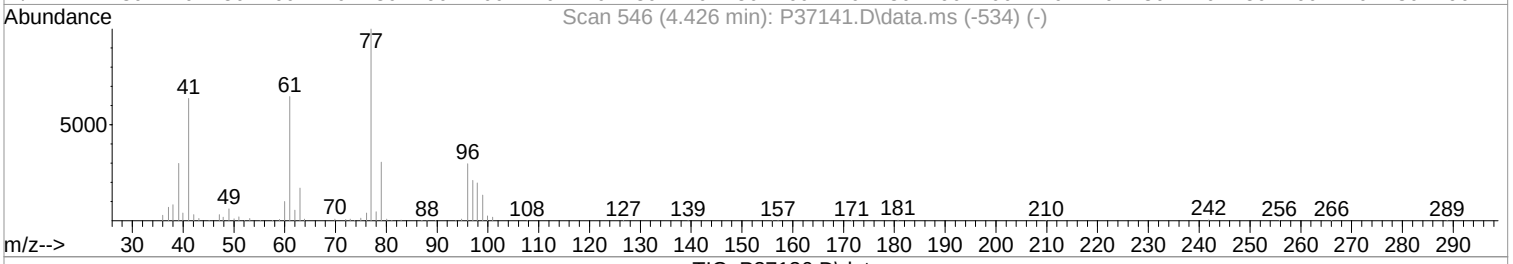
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(33) 2,2-Dichloropropane

4.426min (-0.006) 0.46 ppb m

response 1993

Ion	Exp%	Act%
77.00	100	100
79.00	30.40	24.77
97.00	21.00	0.00#
0.00	0.00	0.00

Manual Integration:

After

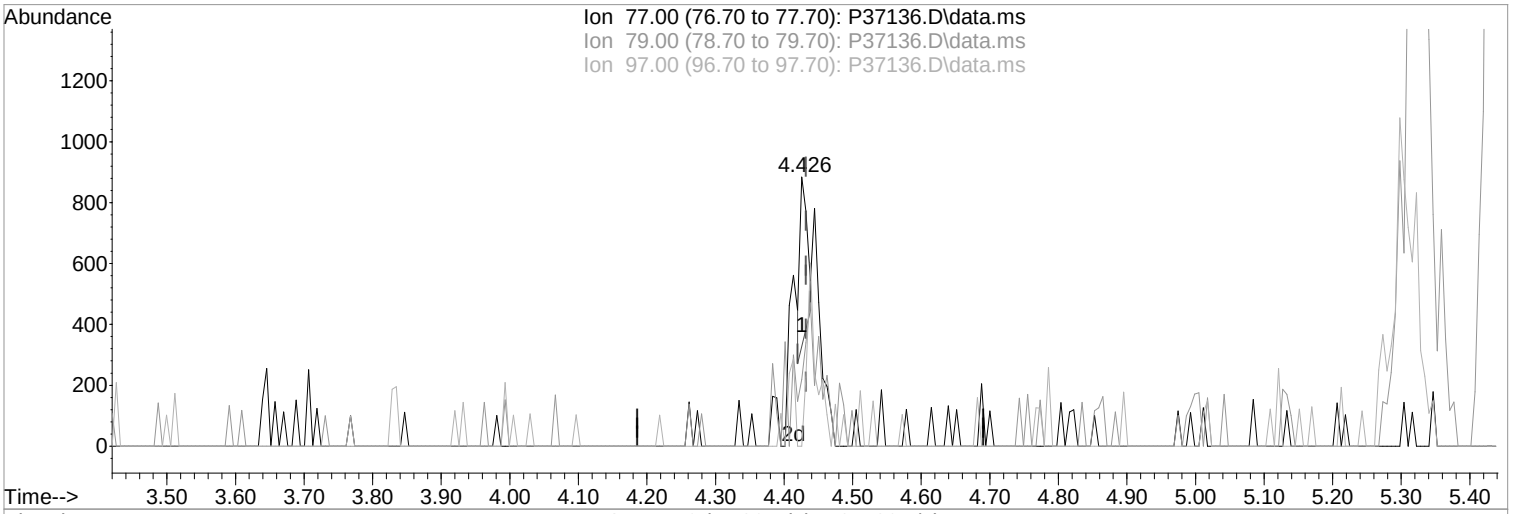
Split Peak

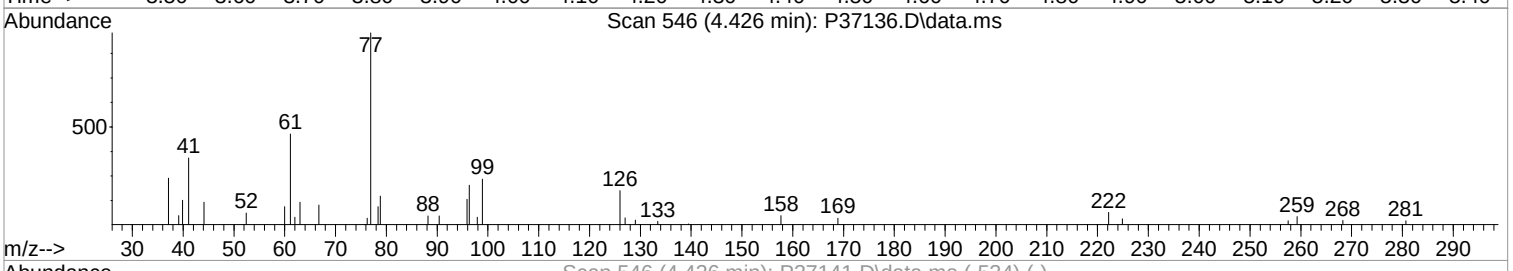
07/13/20

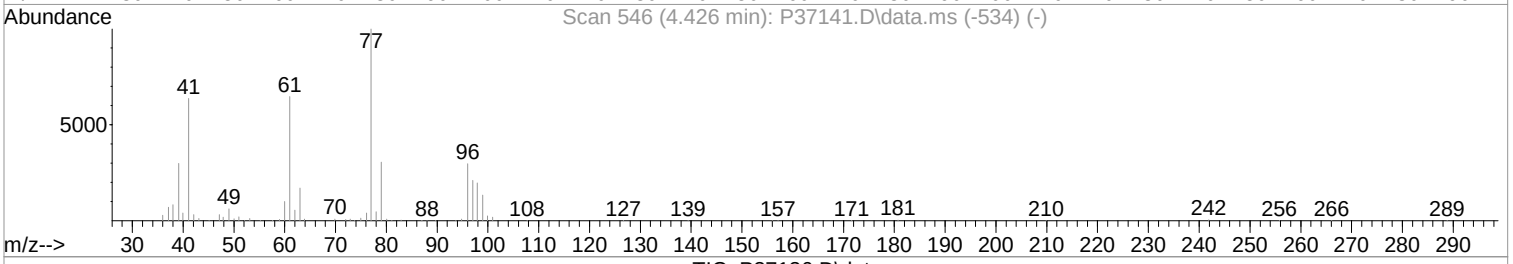
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(33) 2,2-Dichloropropane

4.426min (-0.006) 0.09 ppb

response 410

Ion	Exp%	Act%
77.00	100	100
79.00	30.40	24.77
97.00	21.00	0.00#
0.00	0.00	0.00

Manual Integration:

Before

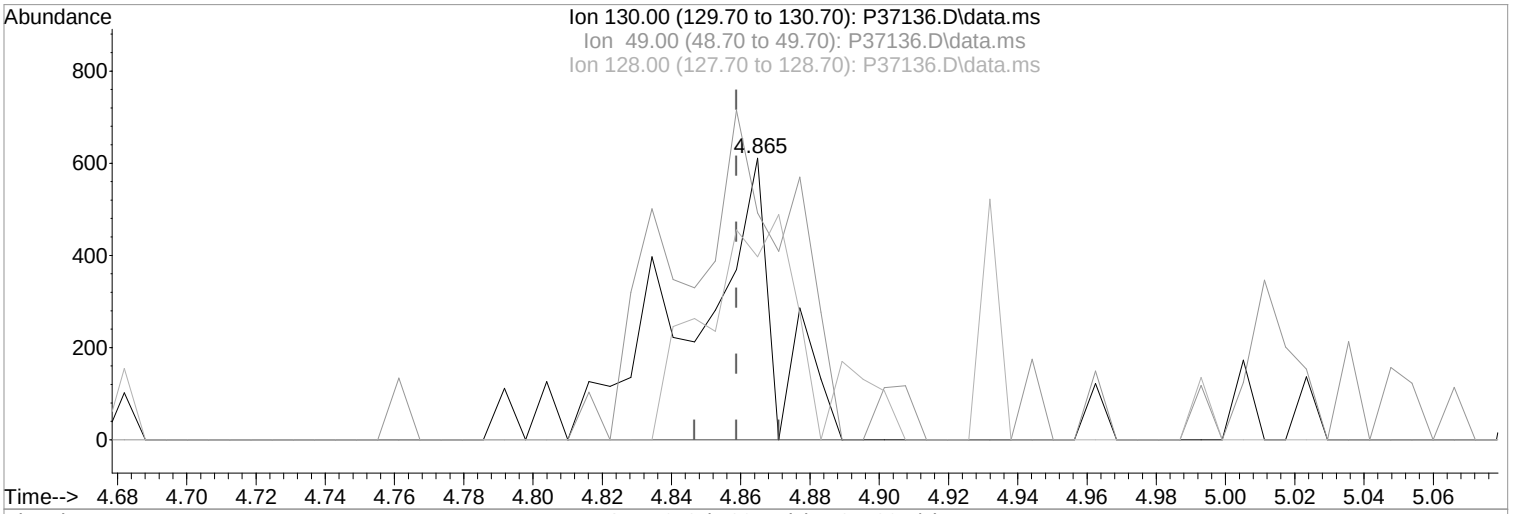
07/13/20

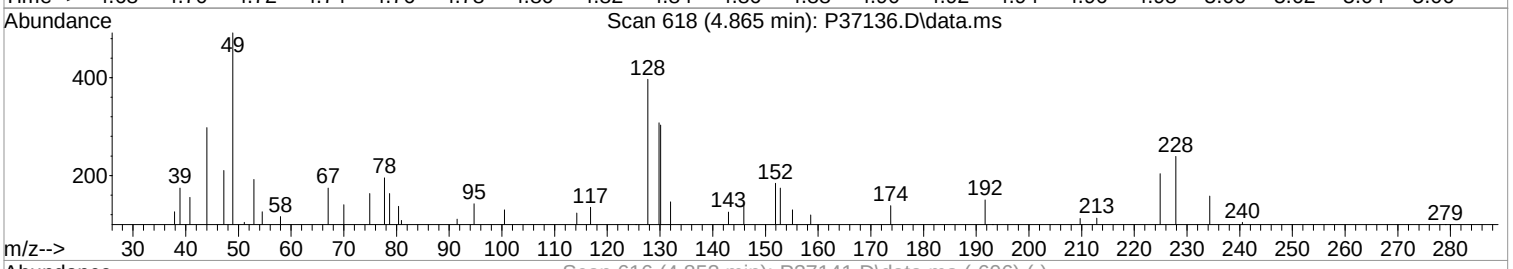
1st 07/14/20
2nd 07/14/20

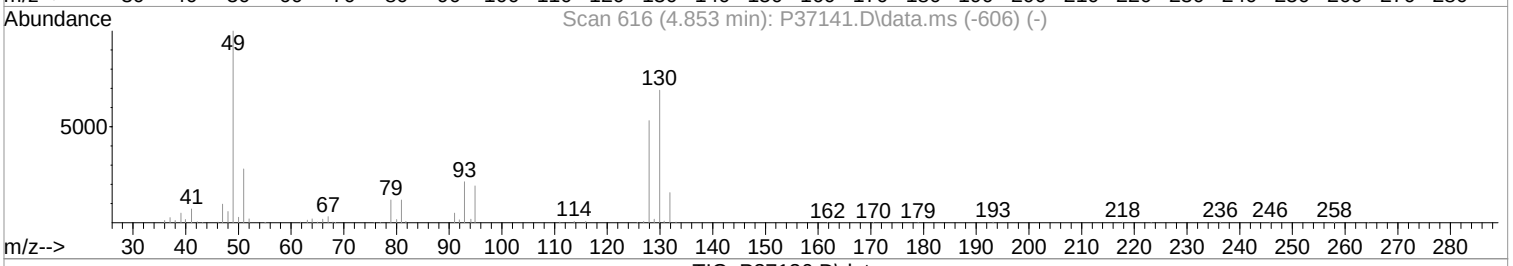
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(37) Bromochloromethane

4.865min (+0.006) 0.52 ppb m

response 1056

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	159.74
128.00	77.00	128.90#
0.00	0.00	0.00

Manual Integration:

After

Split Peak

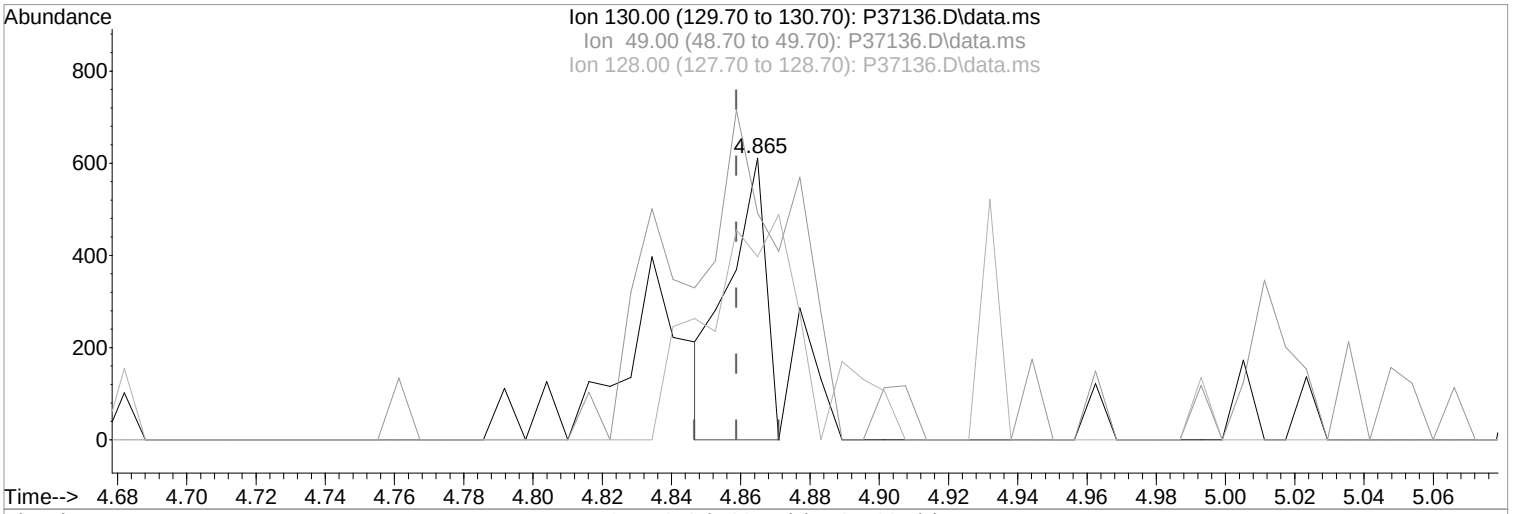
07/13/20

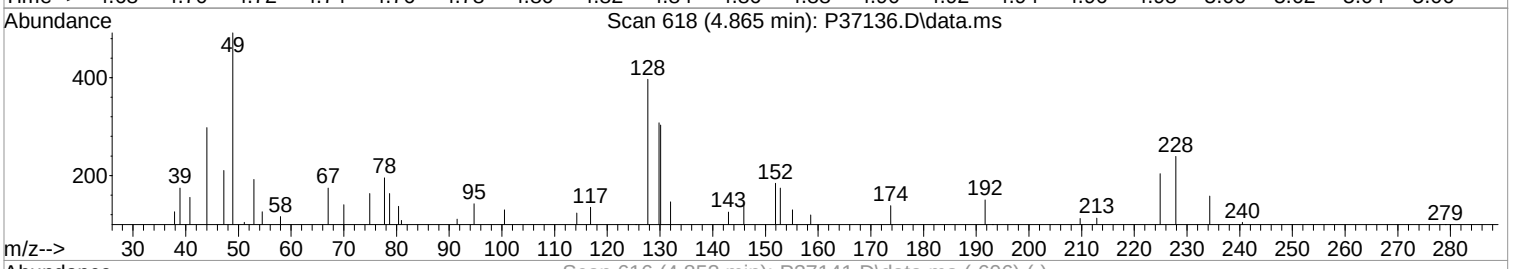
1st 07/14/20
2nd 07/14/20

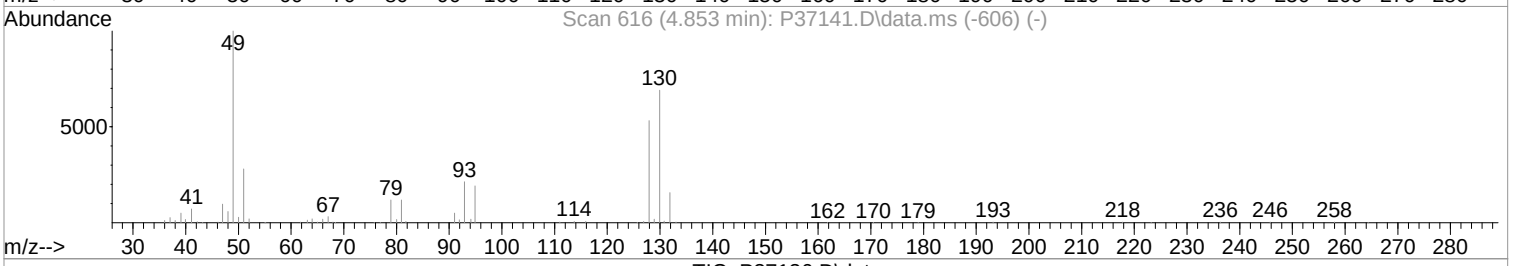
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(37) Bromochloromethane

4.865min (+0.006) 0.23 ppb

response 461

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	80.52#
128.00	77.00	64.98
0.00	0.00	0.00

Manual Integration:

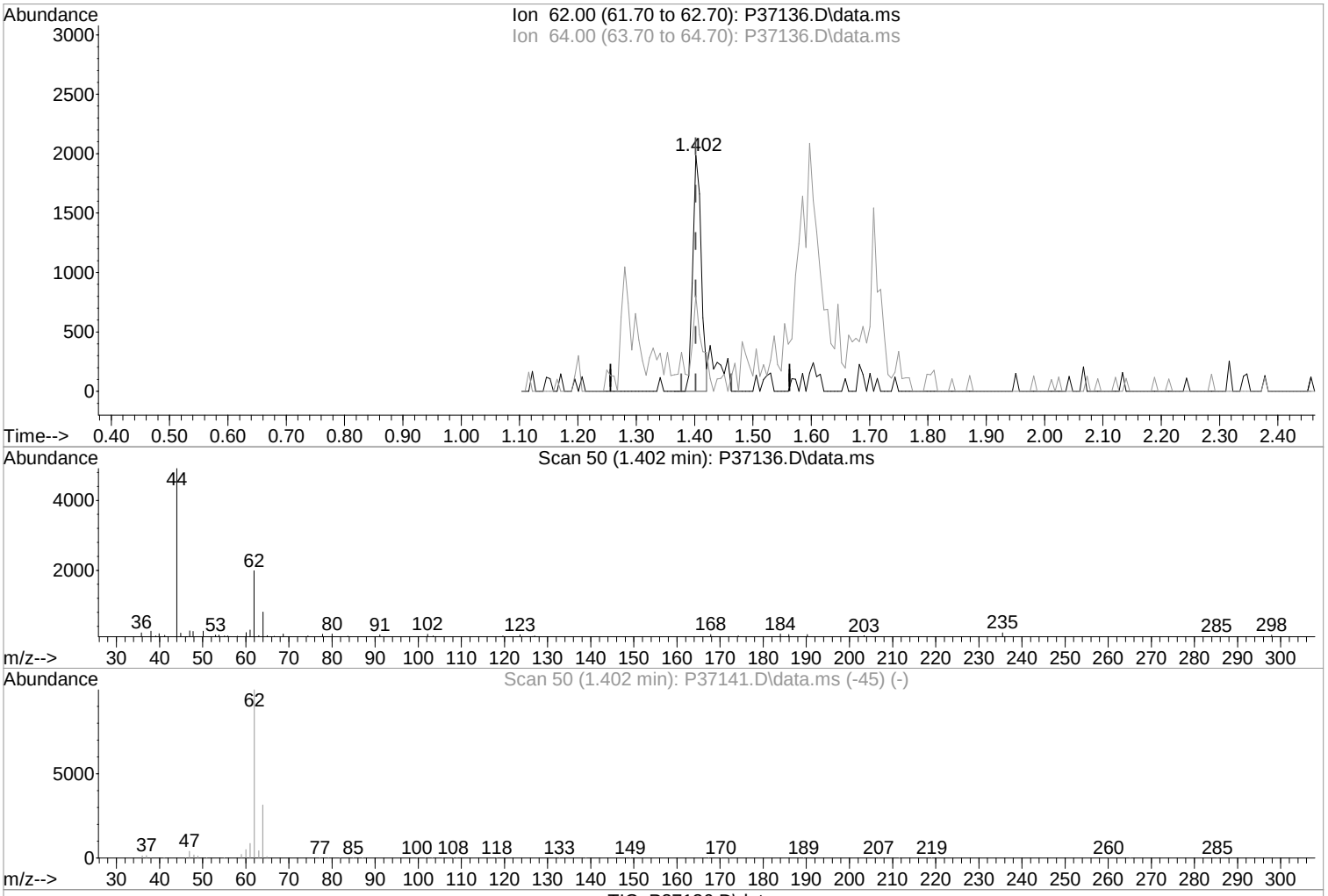
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(4) Vinyl Chloride (P)

1.402min (+0.000) 0.51 ppb m

response 2012

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	40.48
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

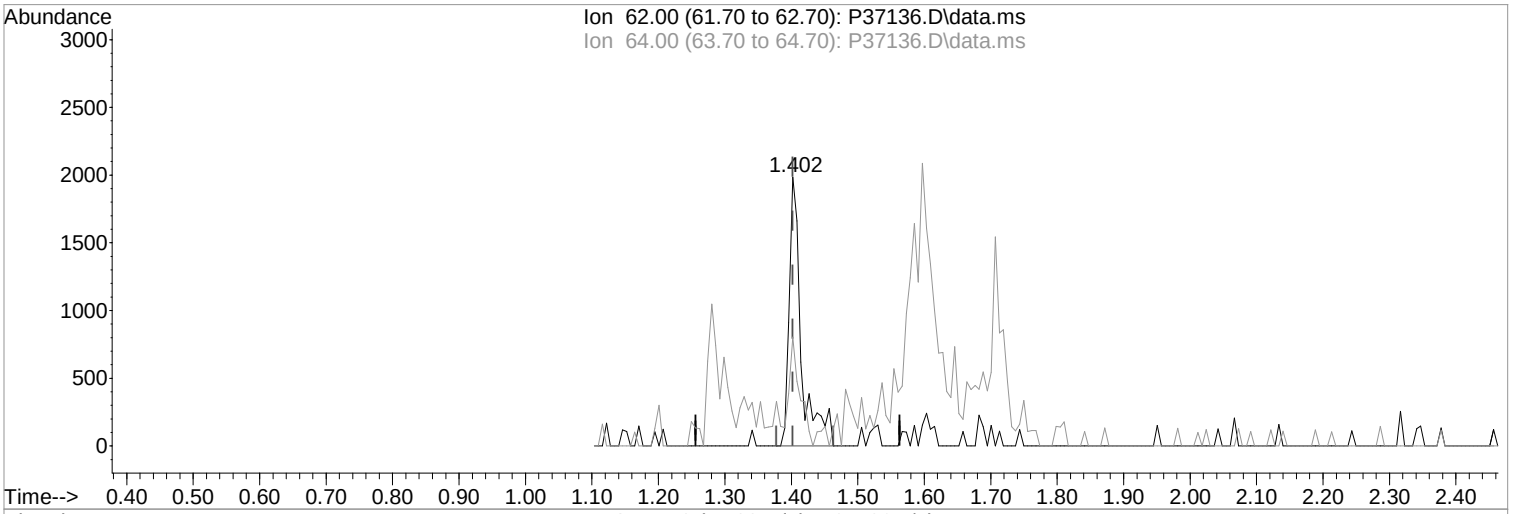
07/13/20

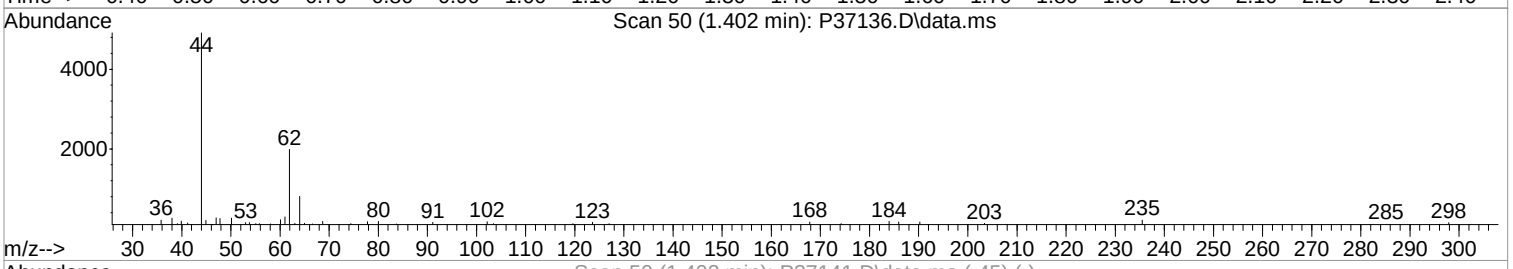
1st 07/14/20
2nd 07/14/20

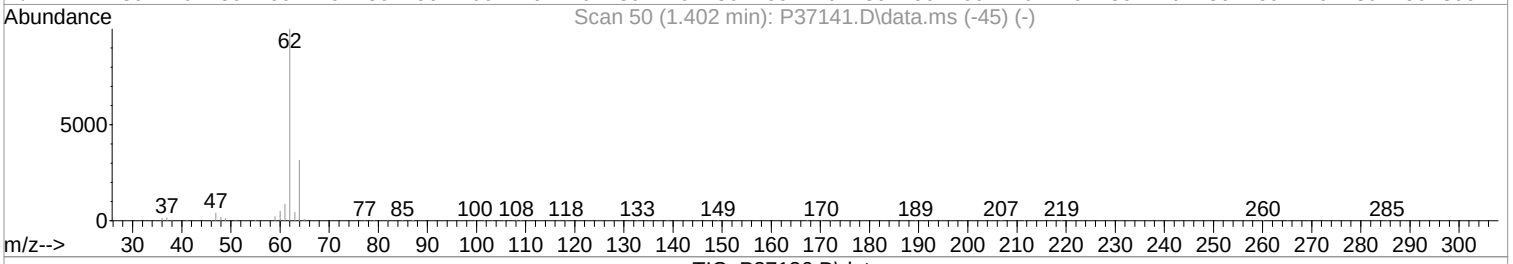
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(4) Vinyl Chloride (P)

1.402min (+0.000) 0.65 ppb

response 2546

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	40.48
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

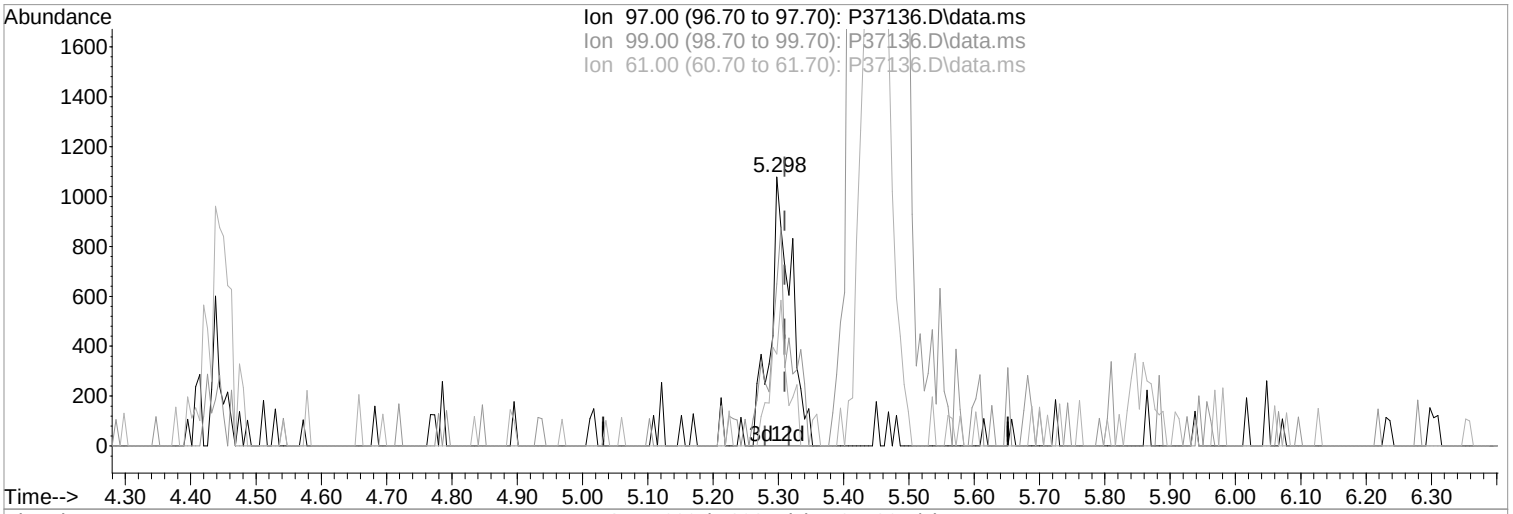
Before

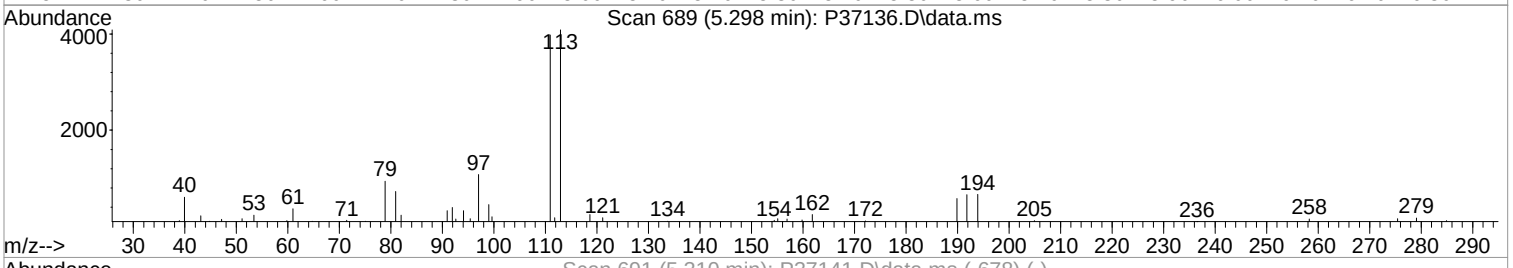
07/13/20

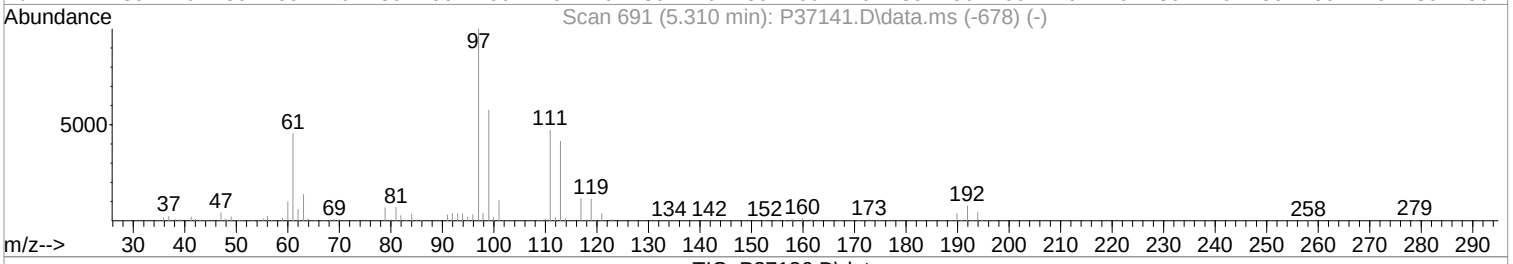
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.298min (-0.012) 0.56 ppb m

response 2394

Ion	Exp%	Act%
97.00	100	100
99.00	57.60	41.93
61.00	45.60	34.23
0.00	0.00	0.00

Manual Integration:

After

Split Peak

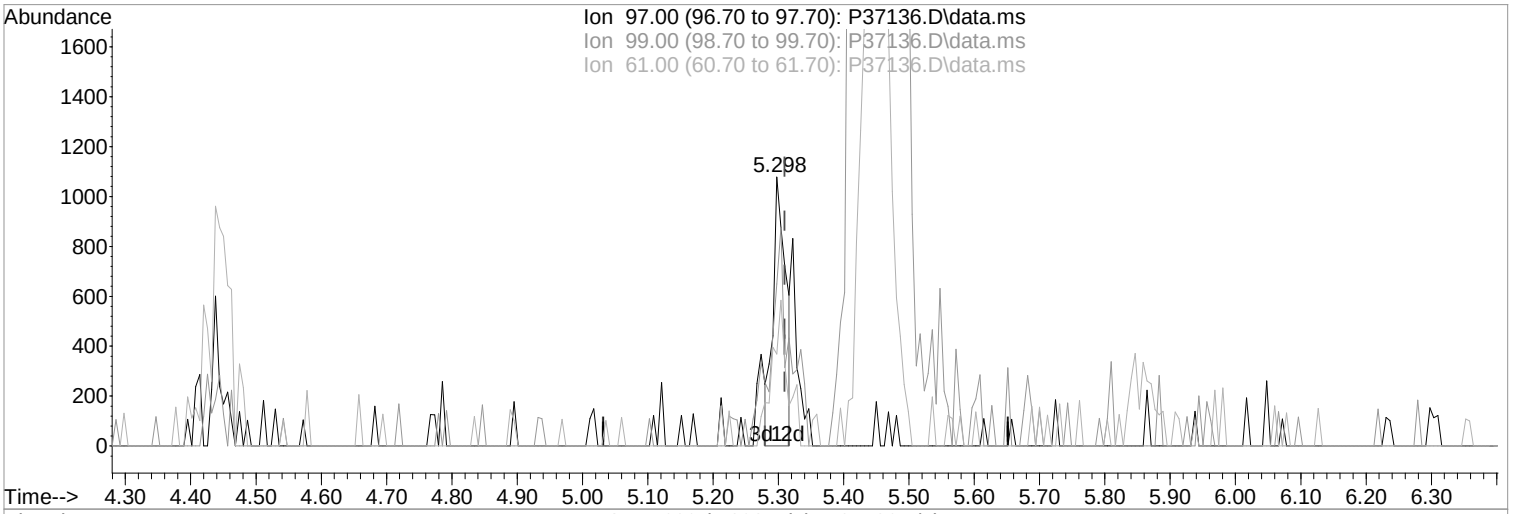
07/13/20

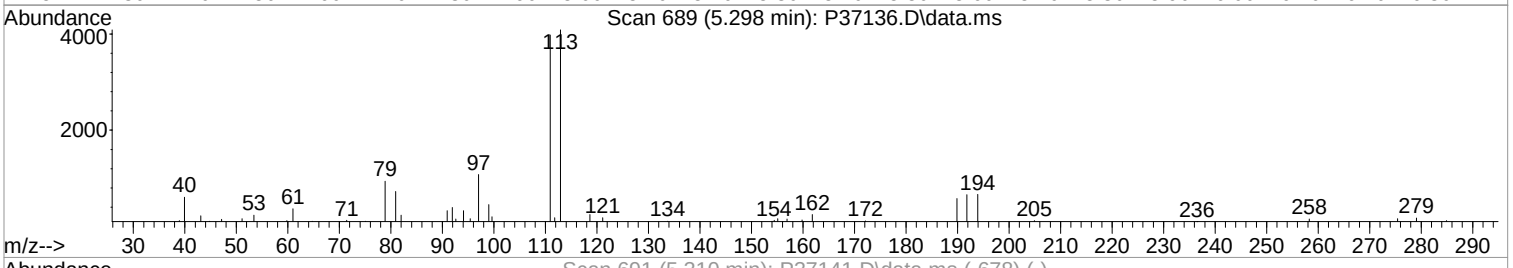
1st 07/14/20
2nd 07/14/20

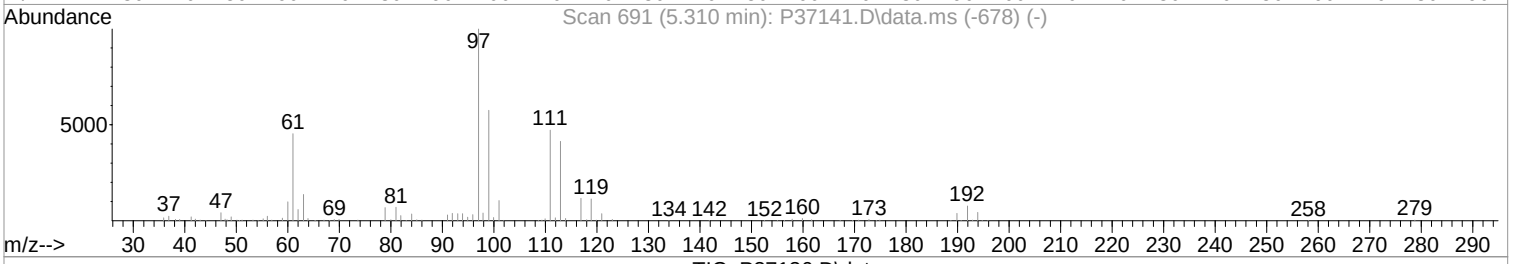
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.298min (-0.012) 0.35 ppb

response 1481

Ion	Exp%	Act%
97.00	100	100
99.00	57.60	60.20
61.00	45.60	34.23
0.00	0.00	0.00

Manual Integration:

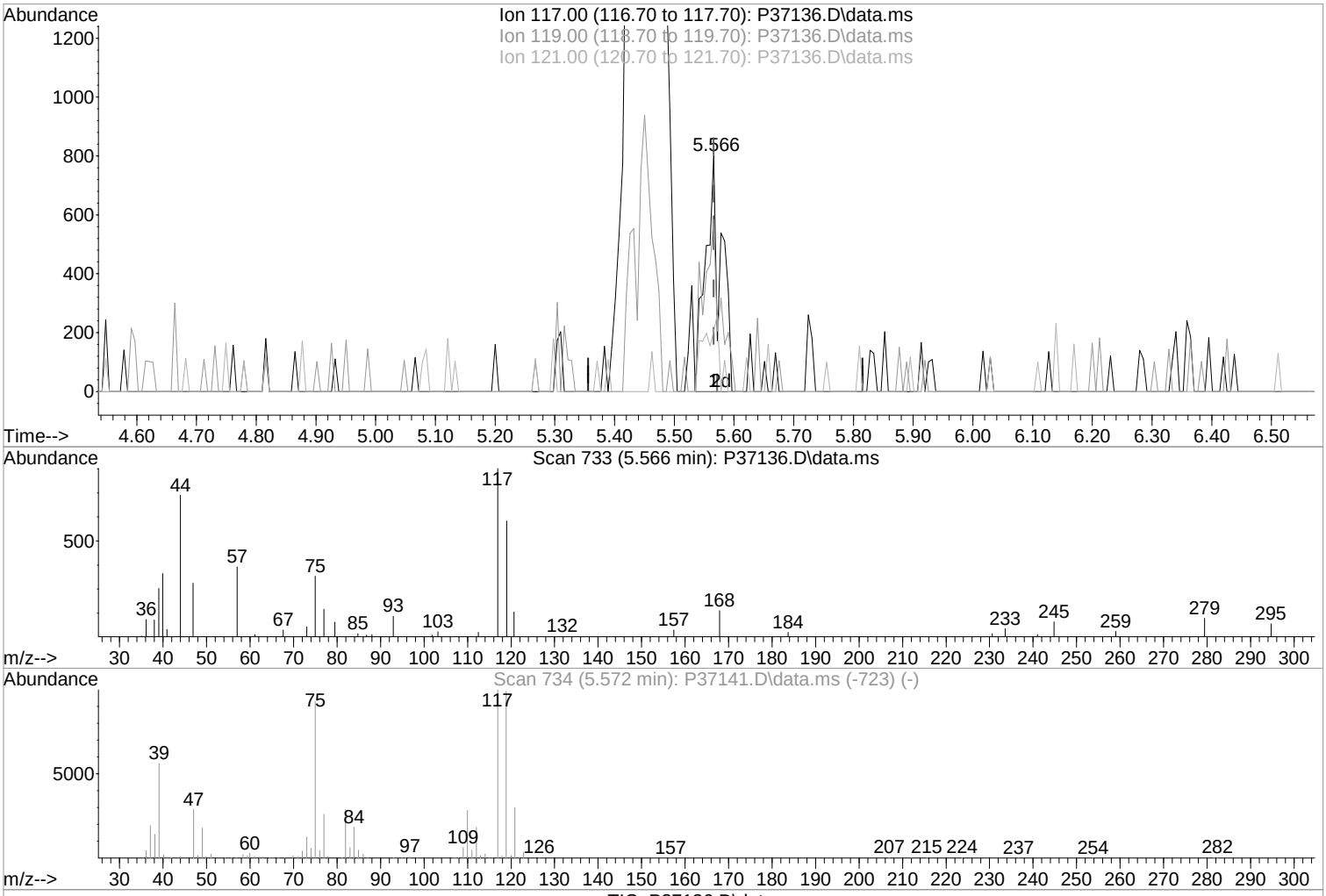
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(46) Carbontetrachloride (P)

5.566min (+0.000) 0.42 ppb m

response 1466

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	72.69#
121.00	29.80	25.44
0.00	0.00	0.00

Manual Integration:

After

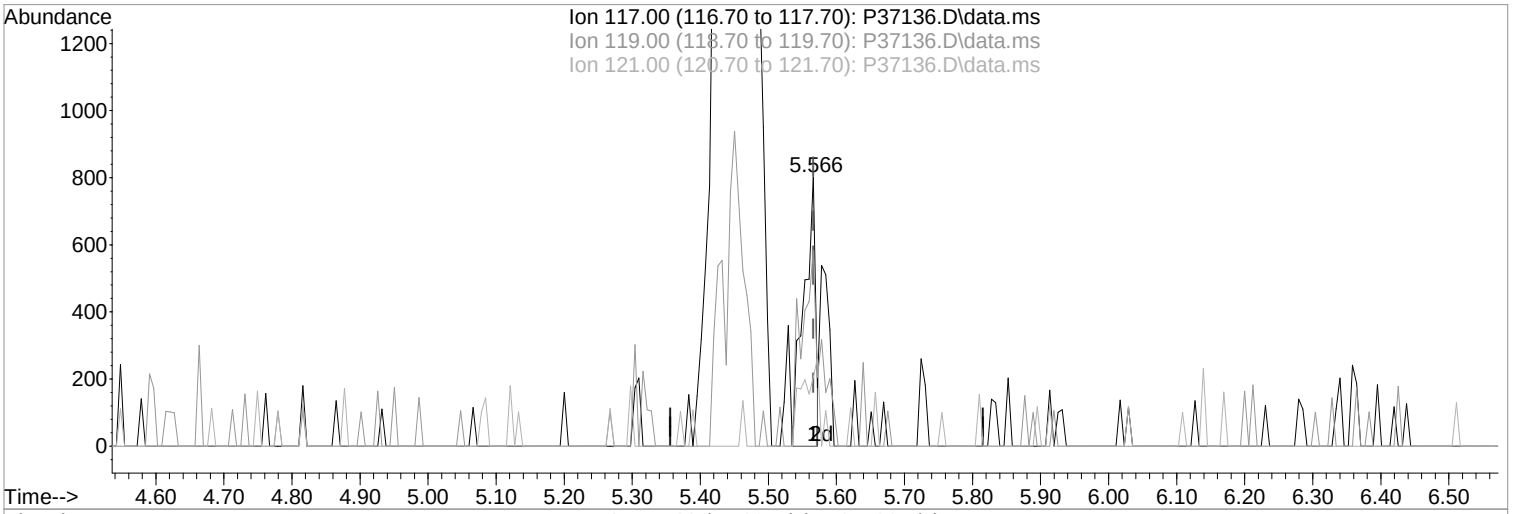
Split Peak

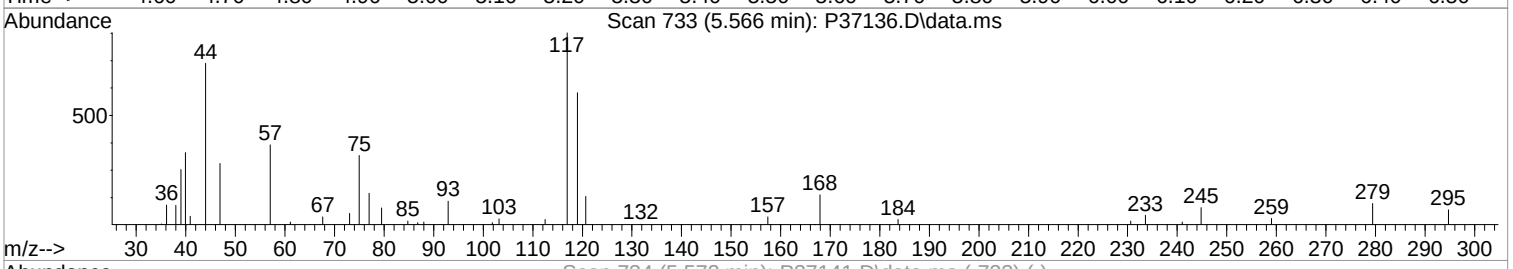
07/13/20

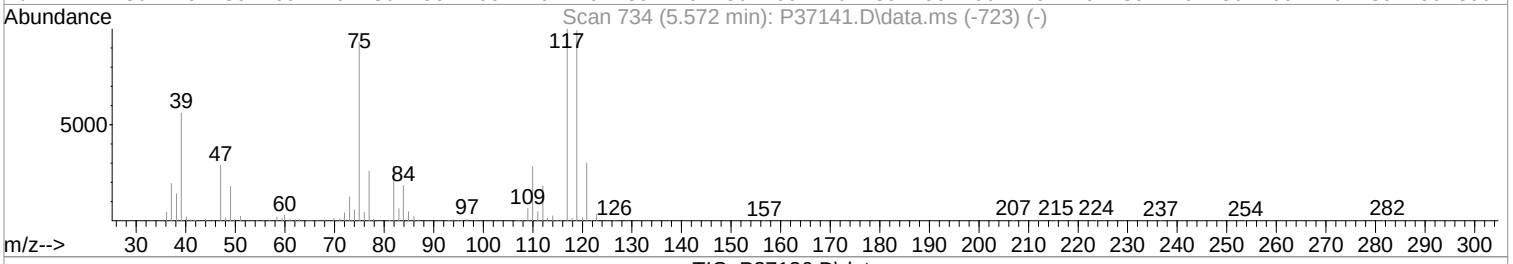
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(46) Carbontetrachloride (P)

5.566min (+0.000) 0.27 ppb

response 955

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	72.69#
121.00	29.80	25.44
0.00	0.00	0.00

Manual Integration:

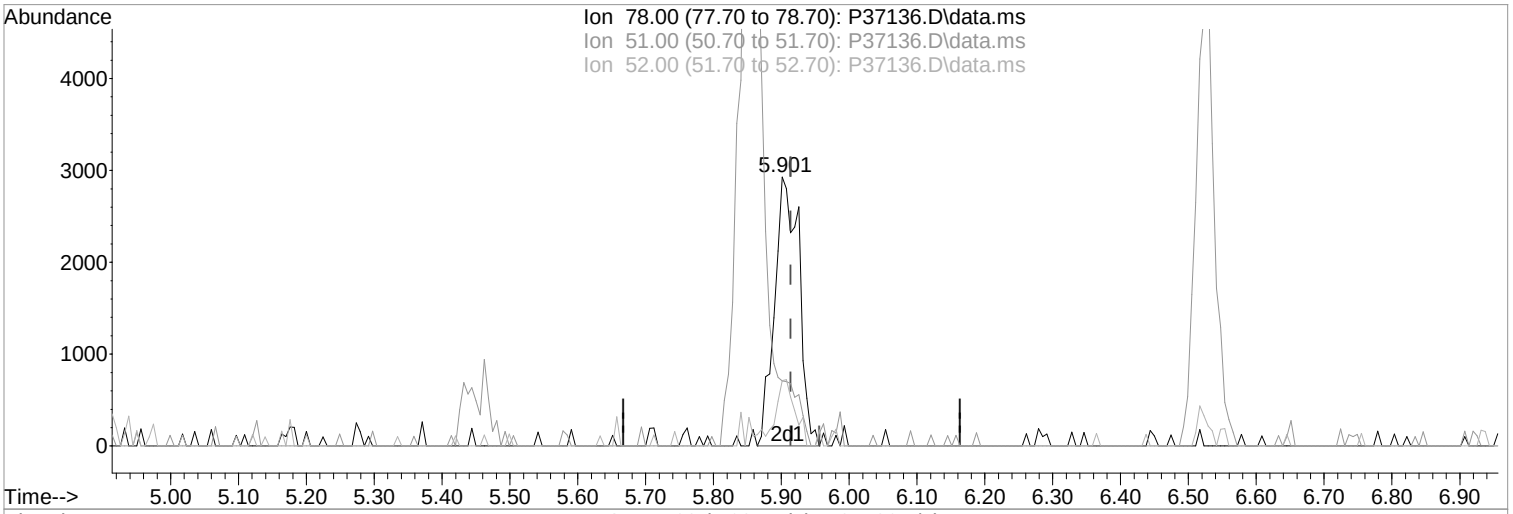
Before

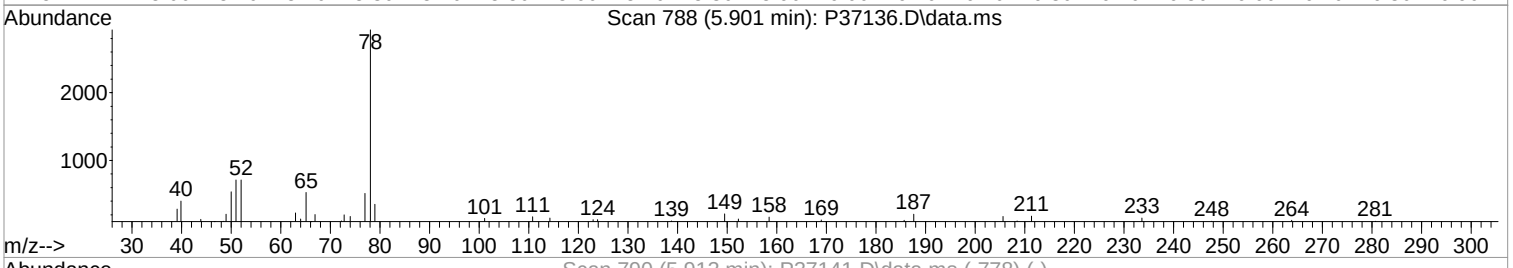
07/13/20

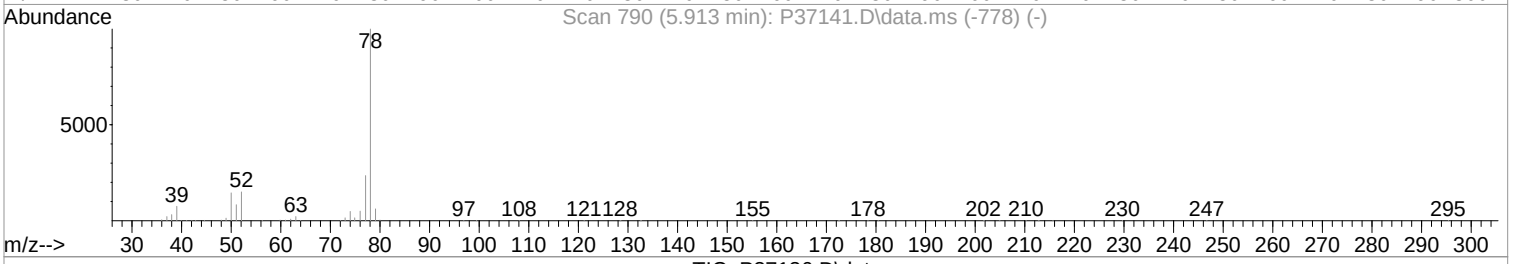
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(49) Benzene (P)

5.901min (-0.012) 0.48 ppb m

response 7301

Ion	Exp%	Act%
78.00	100	100
51.00	15.60	24.25
52.00	15.00	24.32
0.00	0.00	0.00

Manual Integration:

After

Split Peak

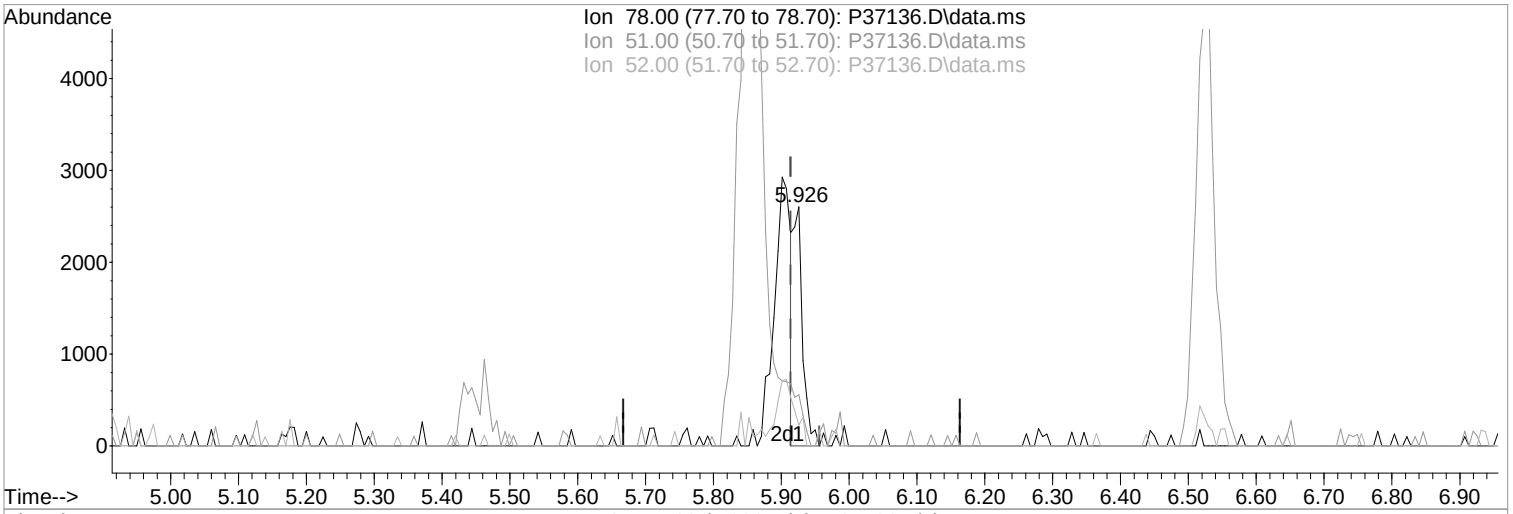
07/13/20

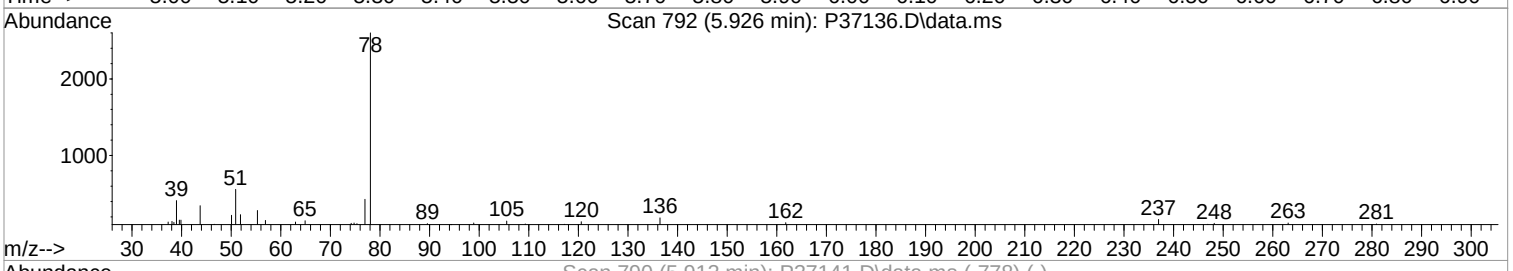
1st 07/14/20
2nd 07/14/20

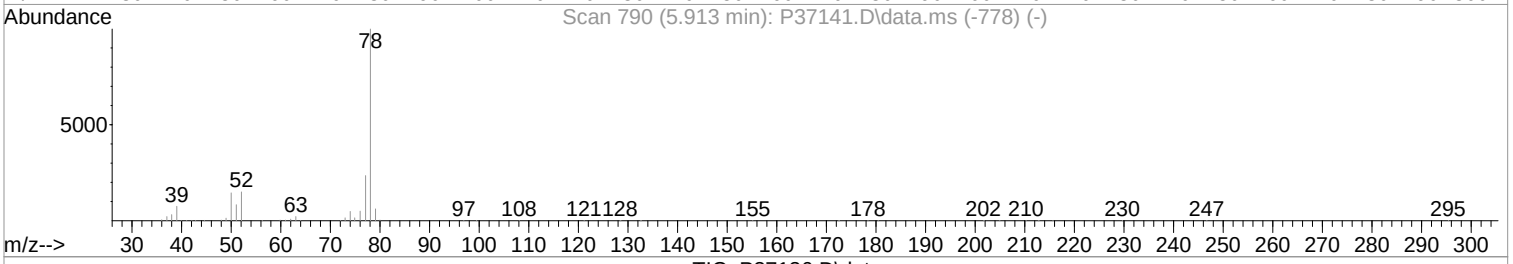
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(49) Benzene (P)

5.926min (+0.012) 0.16 ppb

response 2466

Ion	Exp%	Act%
78.00	100	100
51.00	15.60	21.48
52.00	15.00	8.72
0.00	0.00	0.00

Manual Integration:

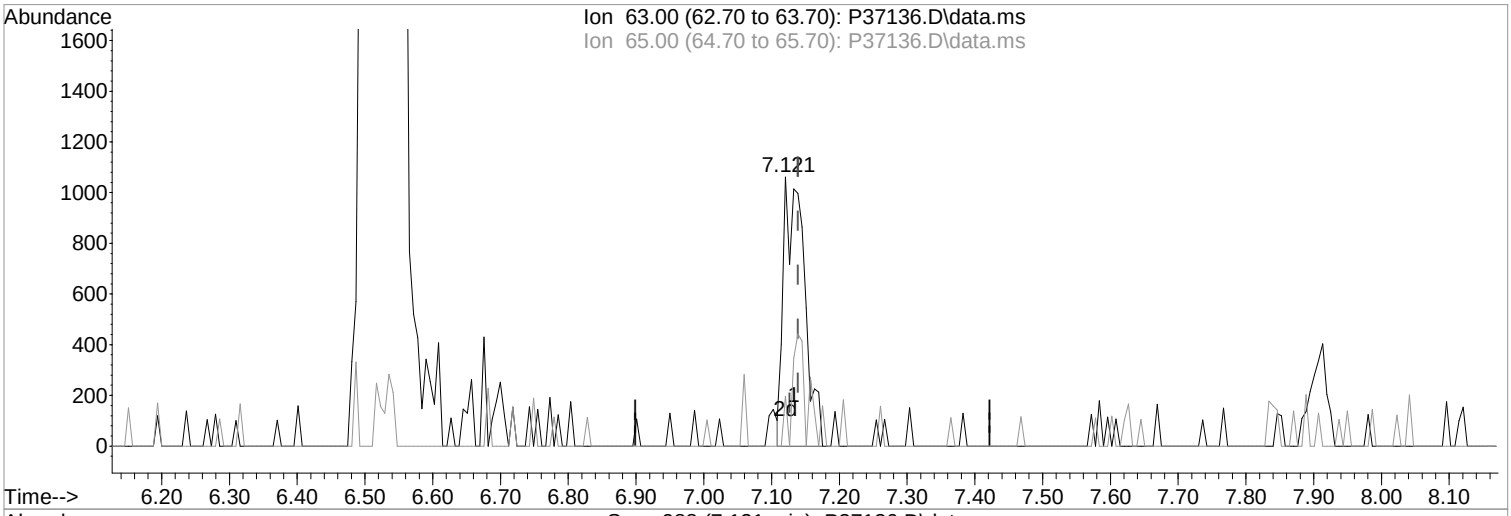
Before

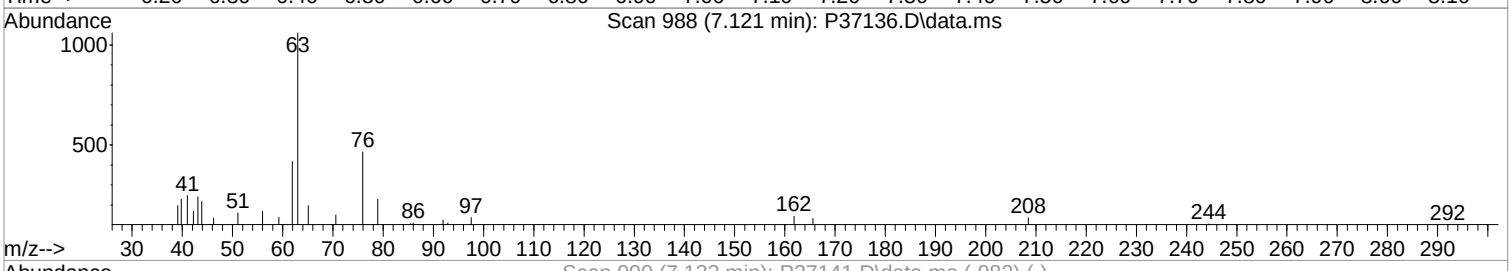
07/13/20

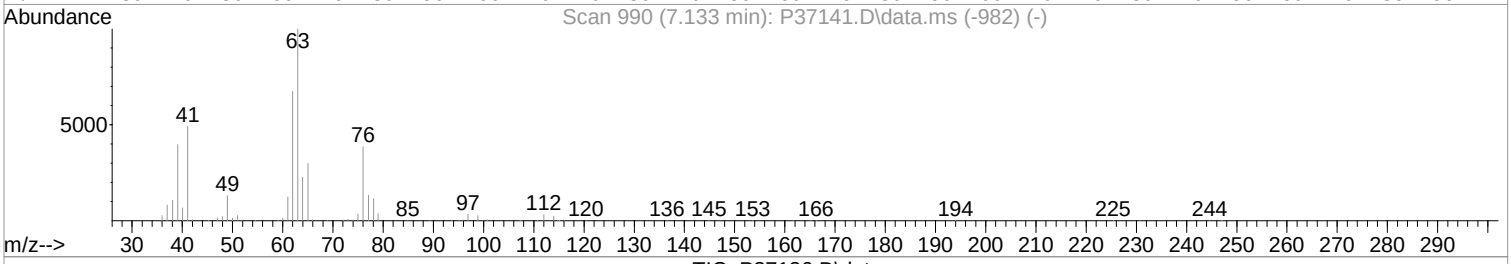
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(56) 1,2-Diclpropane (P)

7.121min (-0.018) 0.56 ppb m

response 2273

Ion	Exp%	Act%
63.00	100	100
65.00	29.90	18.57
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Split Peak

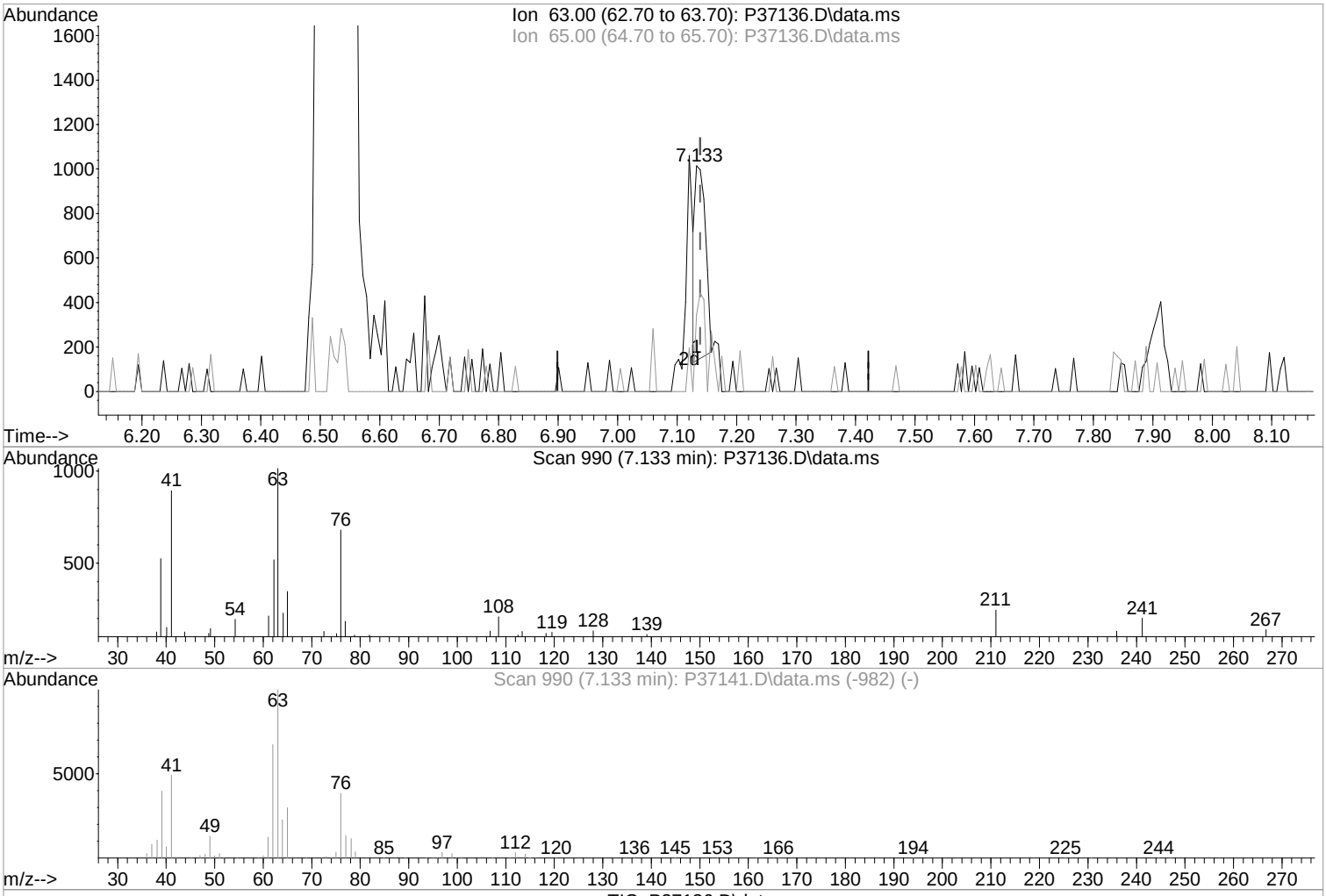
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(56) 1,2-Diclpropane (P)

7.133min (-0.006) 0.26 ppb

response 1036

Ion	Exp%	Act%
63.00	100	100
65.00	29.90	34.19
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

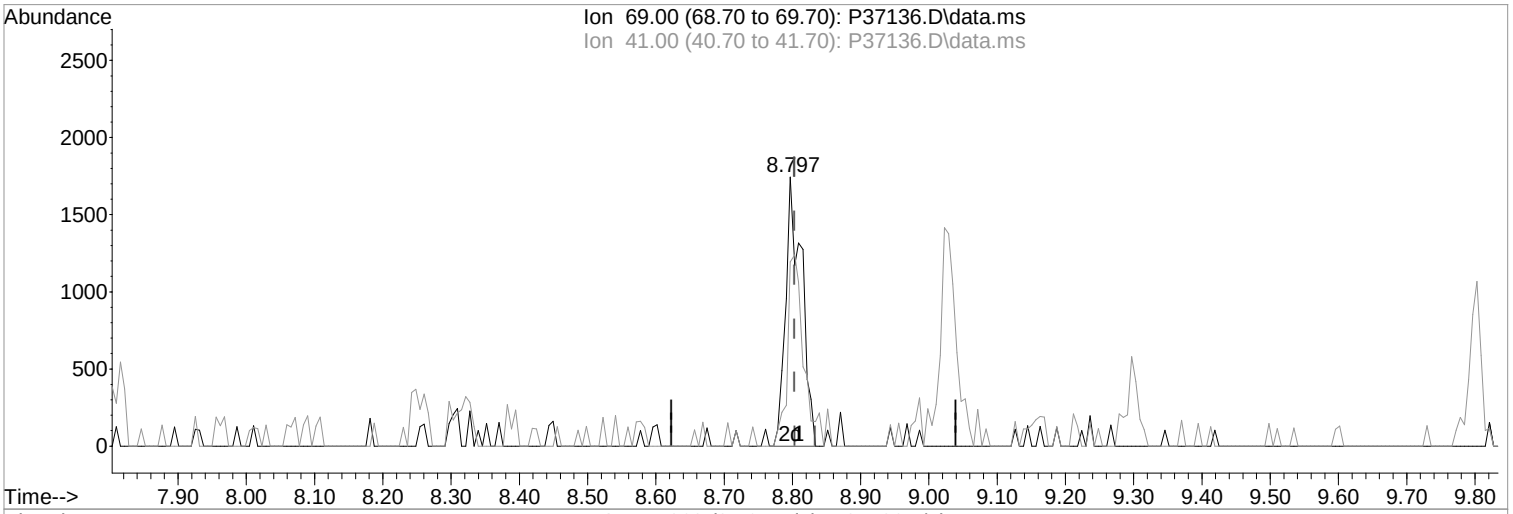
Before

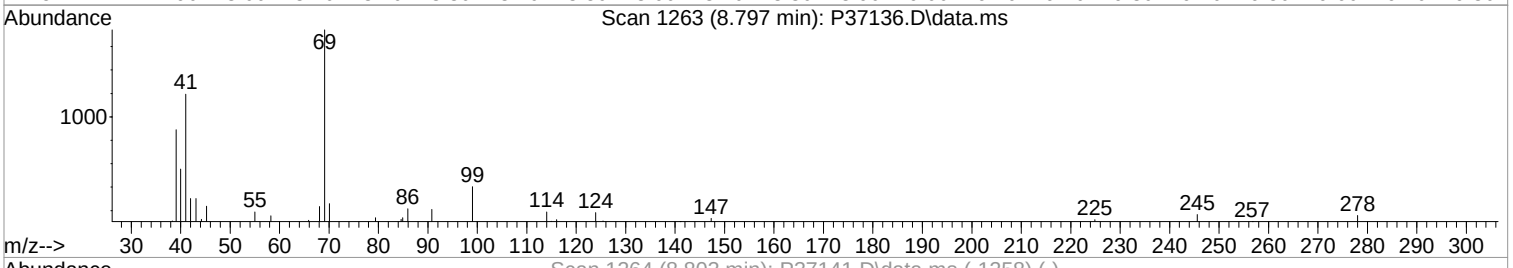
07/13/20

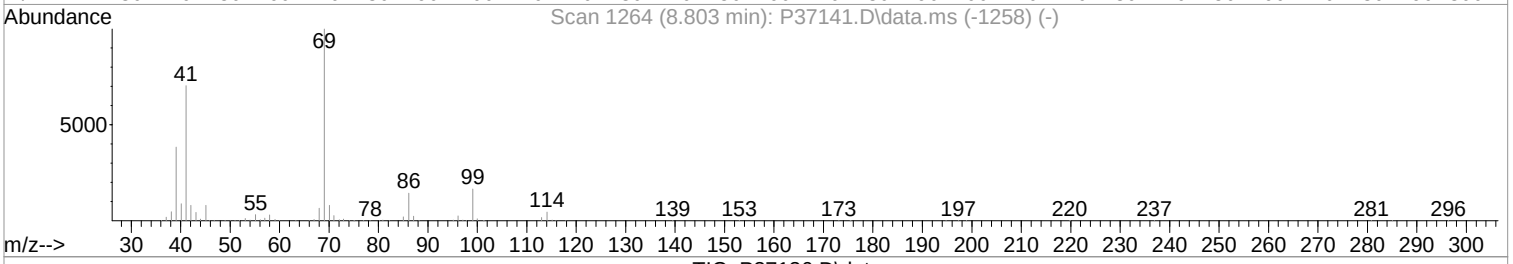
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(68) Ethyl Methacrylate

8.797min (-0.006) 0.48 ppb m

response 2851

Ion	Exp%	Act%
69.00	100	100
41.00	70.50	68.46
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

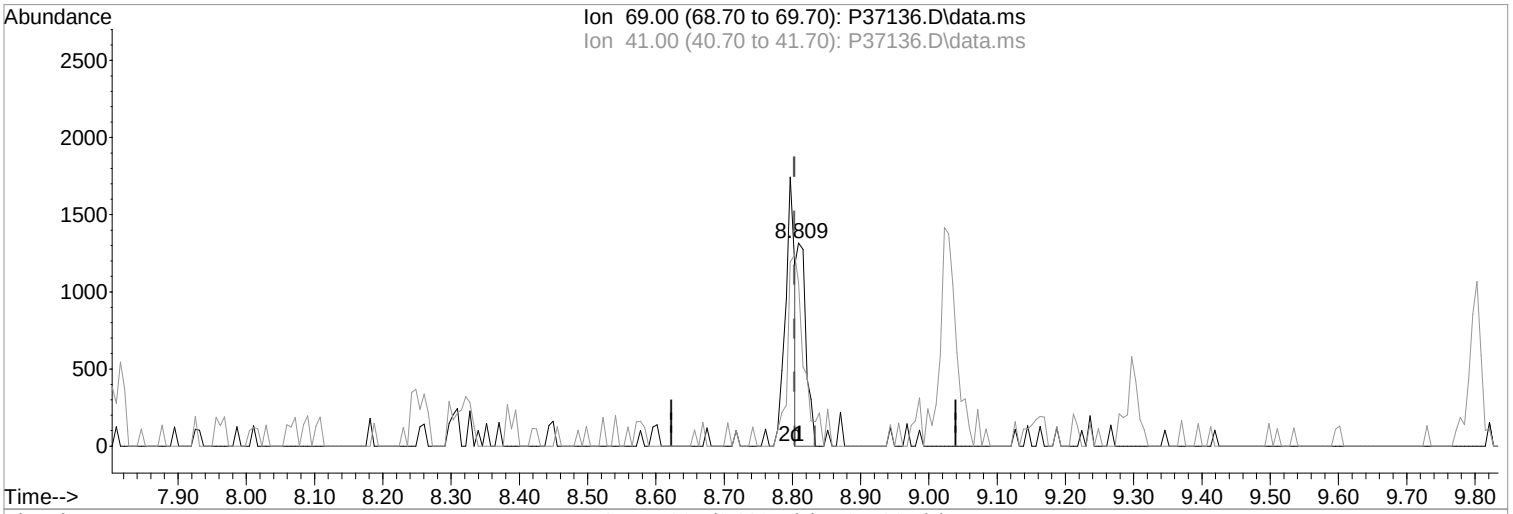
Split Peak

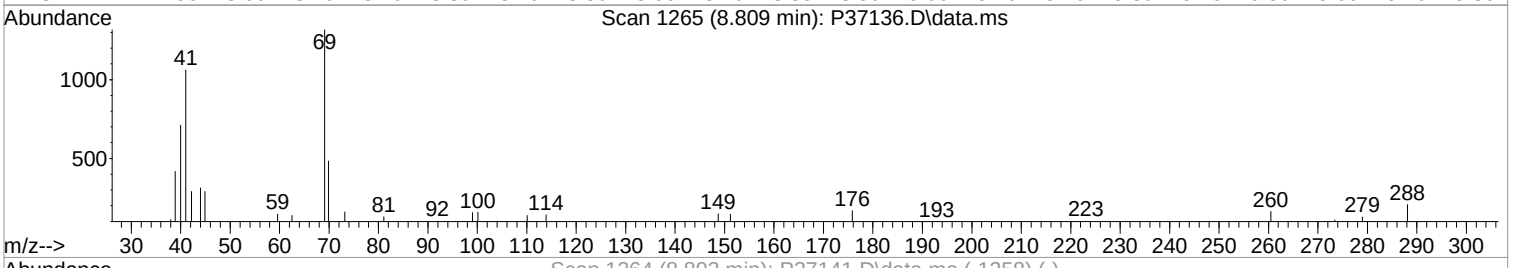
07/13/20

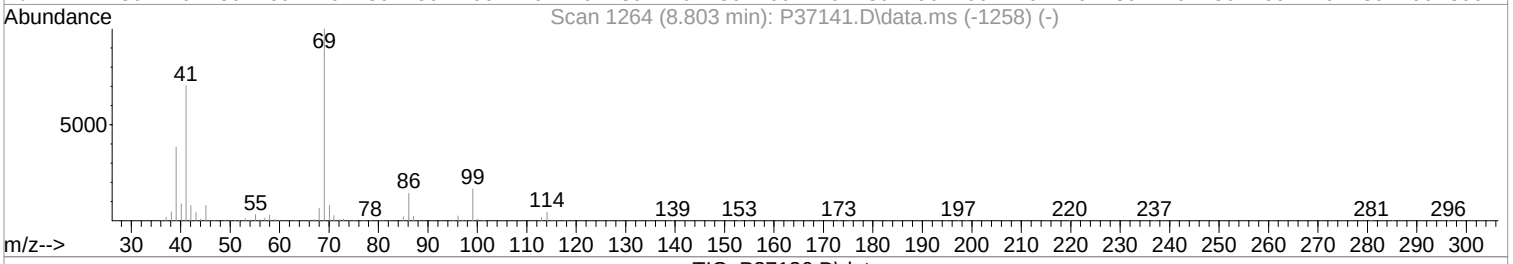
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(68) Ethyl Methacrylate

8.809min (+0.006) 0.21 ppb

response 1217

Ion	Exp%	Act%
69.00	100	100
41.00	70.50	80.64
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

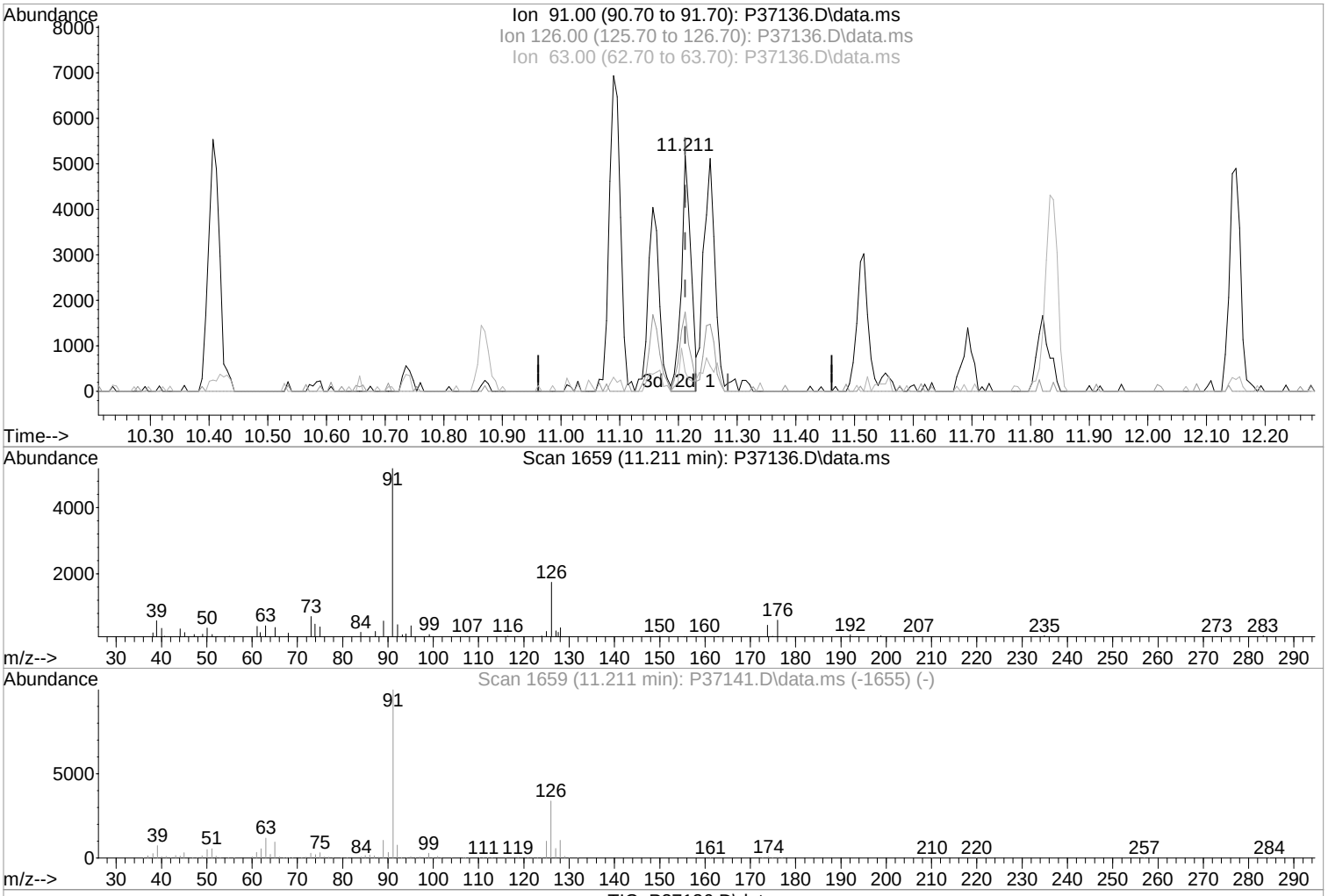
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(97) 3-Chlorotoluene

11.211min (+0.000) 0.56 ppb m

response 5899

Ion	Exp%	Act%
91.00	100	100
126.00	33.90	33.58
63.00	11.90	8.22#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

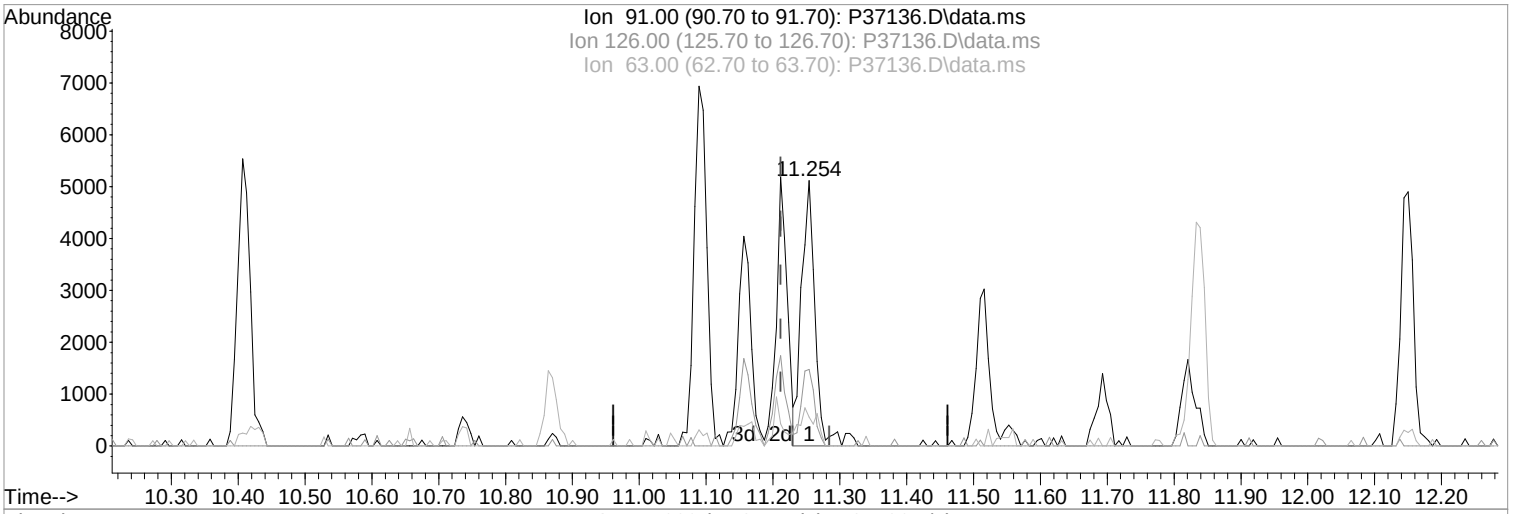
07/13/20

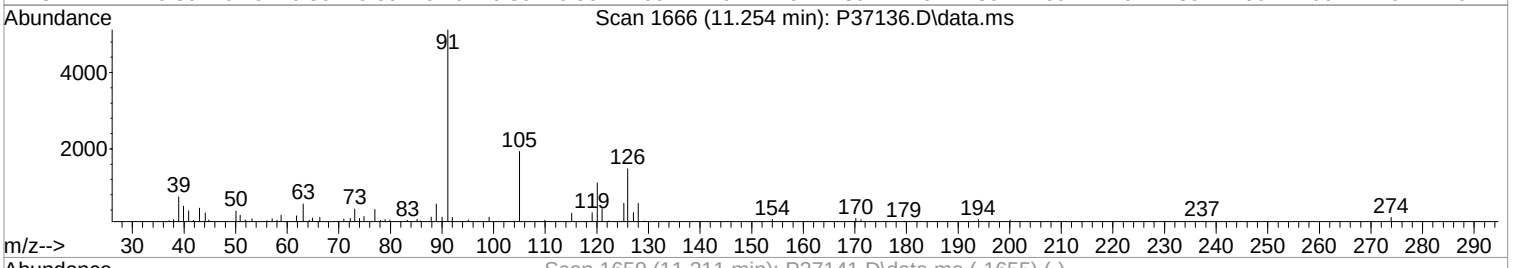
1st 07/14/20
2nd 07/14/20

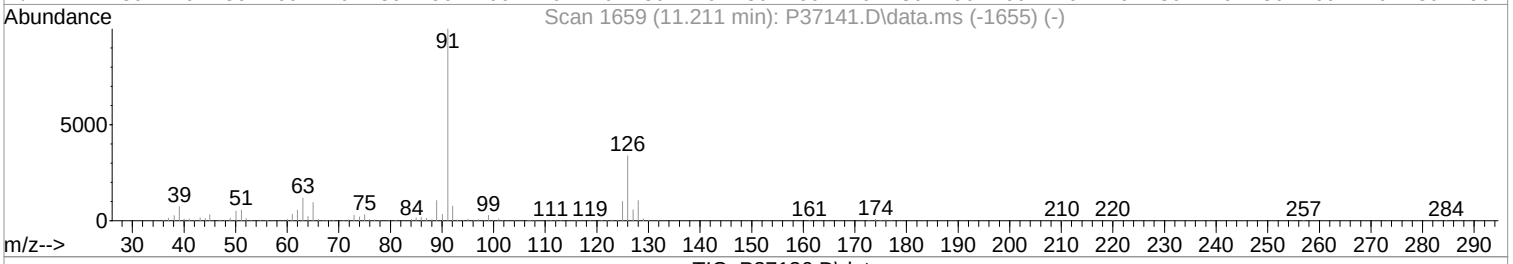
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(97) 3-Chlorotoluene

11.254min (+0.043) 0.66 ppb

response 6910

Ion	Exp%	Act%
91.00	100	100
126.00	33.90	28.87
63.00	11.90	10.92
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:09:05 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.450	168	296624	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	527689	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	457342	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	212791	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	28851	9.52	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 19.04%#				
48) surr1,1,2-dichloroetha...	5.846	65	43566	10.39	ppb		-0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 20.78%#				
65) SURR3,Toluene-d8	8.315	98	153399	10.89	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 21.78%#				
70) SURR2,BFB	10.870	95	51035	9.84	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 19.68%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.201	85	1930	0.58	ppb		85
3) Chloromethane	1.329	50	2259m	0.54	ppb		
4) Vinyl Chloride	1.402	62	2012m	0.51	ppb		
5) Bromomethane	1.634	94	2097	0.65	ppb	#	75
6) Chloroethane	1.707	64	1365	0.64	ppb		77
7) Freon 21	1.865	67	2554	0.52	ppb		77
8) Trichlorofluoromethane	1.902	101	2365	0.59	ppb		84
9) Diethyl Ether	2.146	59	1149	0.40	ppb		86
10) Freon 123a	2.152	67	1726	0.51	ppb		80
11) Freon 123	2.207	83	2477	0.62	ppb		79
12) Acrolein	2.268	56	1516	1.95	ppb		87
13) 1,1-Diclethene	2.335	96	1317	0.57	ppb	#	85
14) Freon 113	2.329	101	1462	0.55	ppb		95
15) Acetone	2.414	43	2664	1.55	ppb		90
16) 2-Propanol	2.548	45	2812	7.36	ppb		74
17) Iodomethane	2.475	142	734m	0.29	ppb		
18) Carbon Disulfide	2.524	76	6697	0.77	ppb		93
20) Allyl Chloride	2.682	76	1010m	0.62	ppb		
21) Methyl Acetate	2.713	43	2265	0.51	ppb		83
22) Methylene Chloride	2.798	84	1814	0.55	ppb		94
23) TBA	2.957	59	5087	8.23	ppb		87
24) Acrylonitrile	3.091	53	4287	2.25	ppb	#	74
25) Methyl-t-Butyl Ether	3.097	73	5093	0.48	ppb		82
26) trans-1,2-Dichloroethene	3.097	96	1252m	0.47	ppb		
28) 1,1-Diclethane	3.603	63	3117	0.53	ppb		77
30) DIPE	3.713	45	4795	0.47	ppb	#	65
31) 2-Chloro-1,3-Butadiene	3.707	53	1929	0.41	ppb		99
32) ETBE	4.237	59	4795	0.50	ppb		83
33) 2,2-Dichloropropane	4.426	77	1993m	0.46	ppb		
34) cis-1,2-Dichloroethene	4.438	96	1724	0.50	ppb	#	83
36) Propionitrile	4.658	54	2243	2.71	ppb		85
37) Bromochloromethane	4.865	130	1056m	0.52	ppb		
40) Chloroform	5.036	83	3440	0.63	ppb		82
41) 1,1,1-Trichloroethane	5.298	97	2394m	0.56	ppb		
42) TAME	6.145	73	4866	0.51	ppb		77
46) Carbontetrachloride	5.566	117	1466m	0.42	ppb		
47) 1,1-Dichloropropene	5.590	75	2440	0.49	ppb		89
49) Benzene	5.901	78	7301m	0.48	ppb		
50) 1,2-Dichloroethane	5.974	62	2974	0.56	ppb		92

1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:09:05 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
51)	Iso-Butyl Alcohol	5.981	43	2288	7.00	ppb		96
52)	n-Heptane	6.346	43	2621	0.56	ppb	#	66
53)	1-Butanol	6.932	56	3607	17.74	ppb		99
54)	Trichloroethene	6.828	130	2041	0.54	ppb	#	72
55)	Methylcyclohexane	7.060	55	2032	0.43	ppb		87
56)	1,2-Diclpropane	7.121	63	2273m	0.56	ppb		
57)	Dibromomethane	7.279	93	1306	0.56	ppb		94
58)	1,4-Dioxane	7.358	88	766	9.19	ppb		80
59)	Methyl Methacrylate	7.346	69	1717	0.49	ppb	#	77
60)	Bromodichloromethane	7.499	83	1873	0.44	ppb		93
62)	2-Chloroethylvinyl Ether	7.913	63	666	0.38	ppb	#	35
63)	cis-1,3-Dichloropropene	8.041	75	3034	0.52	ppb		94
64)	4-Methyl-2-pentanone	8.248	43	2466	0.45	ppb		71
66)	Toluene	8.395	91	8114	0.50	ppb		98
67)	trans-1,3-Dichloropropene	8.675	75	2746	0.52	ppb		89
68)	Ethyl Methacrylate	8.797	69	2851m	0.48	ppb		
69)	1,1,2-Trichloroethane	8.864	97	1842	0.51	ppb	#	70
72)	Tetrachloroethene	8.974	164	1617	0.58	ppb	#	74
73)	2-Hexanone	9.157	43	1861	0.46	ppb		85
74)	1,3-Dichloropropane	9.029	76	3256	0.51	ppb		88
75)	Dibromochloromethane	9.248	129	1047	0.37	ppb		85
76)	N-Butyl Acetate	9.291	43	2869	0.38	ppb		79
77)	1,2-Dibromoethane	9.346	107	1595	0.46	ppb		94
78)	Chlorobenzene	9.827	112	5656	0.55	ppb		96
79)	3-CBTF	9.846	180	2418	0.51	ppb		98
80)	4-CBTF	9.894	180	2143	0.50	ppb		91
81)	1,1,1,2-Tetrachloroethane	9.919	131	1464	0.47	ppb	#	83
82)	Ethylbenzene	9.943	106	2952	0.55	ppb	#	55
83)	(m+p)Xylene	10.053	106	6535	1.02	ppb	#	86
84)	o-Xylene	10.413	106	2618	0.42	ppb	#	74
85)	Styrene	10.425	104	5090	0.48	ppb		86
87)	Bromoform	10.583	173	682	0.39	ppb	#	62
88)	2-CBTF	10.656	180	2421	0.56	ppb	#	73
89)	Isopropylbenzene	10.742	105	8469	0.58	ppb		95
90)	Cyclohexanone	10.827	55	8423	9.54	ppb		91
91)	trans-1,4-Dichloro-2-B...	11.065	53	604	0.49	ppb	#	28
92)	1,1,2,2-Tetrachloroethane	11.016	83	2464	0.52	ppb		83
93)	Bromobenzene	10.992	156	2330	0.61	ppb	#	76
94)	1,2,3-Trichloropropane	11.034	110	553	0.36	ppb	#	64
95)	n-Propylbenzene	11.089	91	9315	0.55	ppb		95
96)	2-Chlorotoluene	11.156	91	5484	0.50	ppb		82
97)	3-Chlorotoluene	11.211	91	5899m	0.56	ppb		
98)	4-Chlorotoluene	11.254	91	6844	0.56	ppb		95
99)	1,3,5-Trimethylbenzene	11.242	105	6363	0.51	ppb		88
100)	tert-Butylbenzene	11.510	119	5221	0.50	ppb		94
101)	1,2,4-Trimethylbenzene	11.553	105	6856	0.54	ppb		95
102)	3,4-DCBTF	11.620	214	2060	0.60	ppb		91
103)	sec-Butylbenzene	11.693	105	7651	0.51	ppb		90
104)	p-Isopropyltoluene	11.815	119	6660	0.51	ppb		99
105)	1,3-Dclbenz	11.784	146	4479	0.60	ppb		91
106)	1,4-Dclbenz	11.857	146	4008	0.52	ppb		87
107)	2,4-DCBTF	11.906	214	2254	0.70	ppb	#	66
108)	2,5-DCBTF	11.949	214	2014	0.58	ppb	#	86
109)	n-Butylbenzene	12.150	91	6520	0.53	ppb		90
110)	1,2-Dclbenz	12.162	146	4387	0.58	ppb		88
111)	1,2-Dibromo-3-chloropr...	12.790	157	429m	0.40	ppb		

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:09:05 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

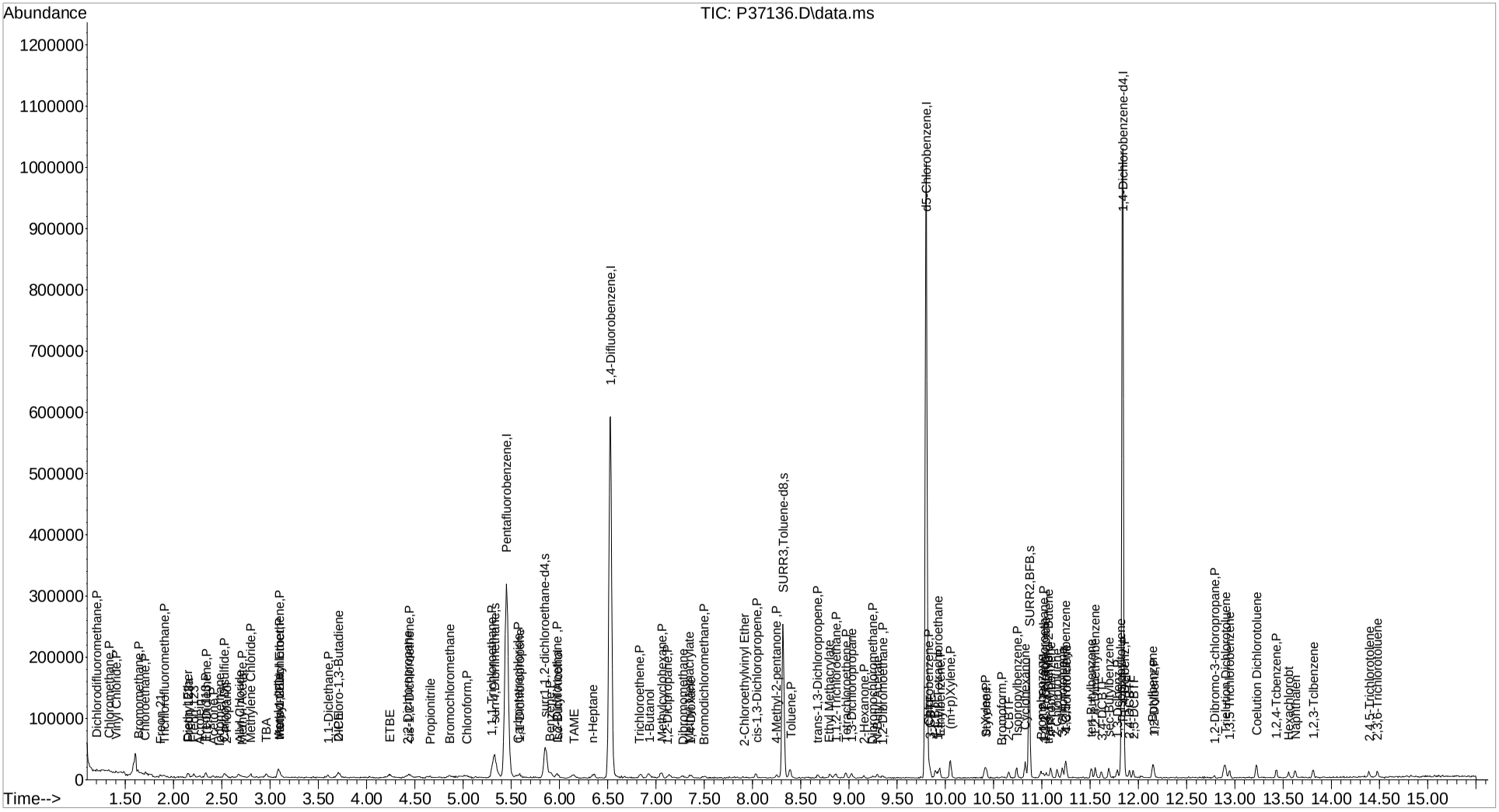
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
112) Trielution Dichlorotol...	12.900	125	9442	1.55	ppb	#	86
113) 1,3,5 Trichlorobenzene	12.943	180	2858	0.55	ppb	#	84
114) Coelution Dichlorotoluene	13.229	125	6250	0.93	ppb	#	85
115) 1,2,4-Tcbenzene	13.430	180	2717	0.49	ppb		92
116) Hexachlorobt	13.558	225	1209	0.55	ppb		87
117) Naphthalen	13.625	128	6752	0.42	ppb		93
118) 1,2,3-Tclbenzene	13.814	180	2990	0.53	ppb		94
119) 2,4,5-Trichlorotolene	14.394	159	1428	0.41	ppb	#	55
120) 2,3,6-Trichlorotoluene	14.479	159	1563	0.49	ppb	#	89

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

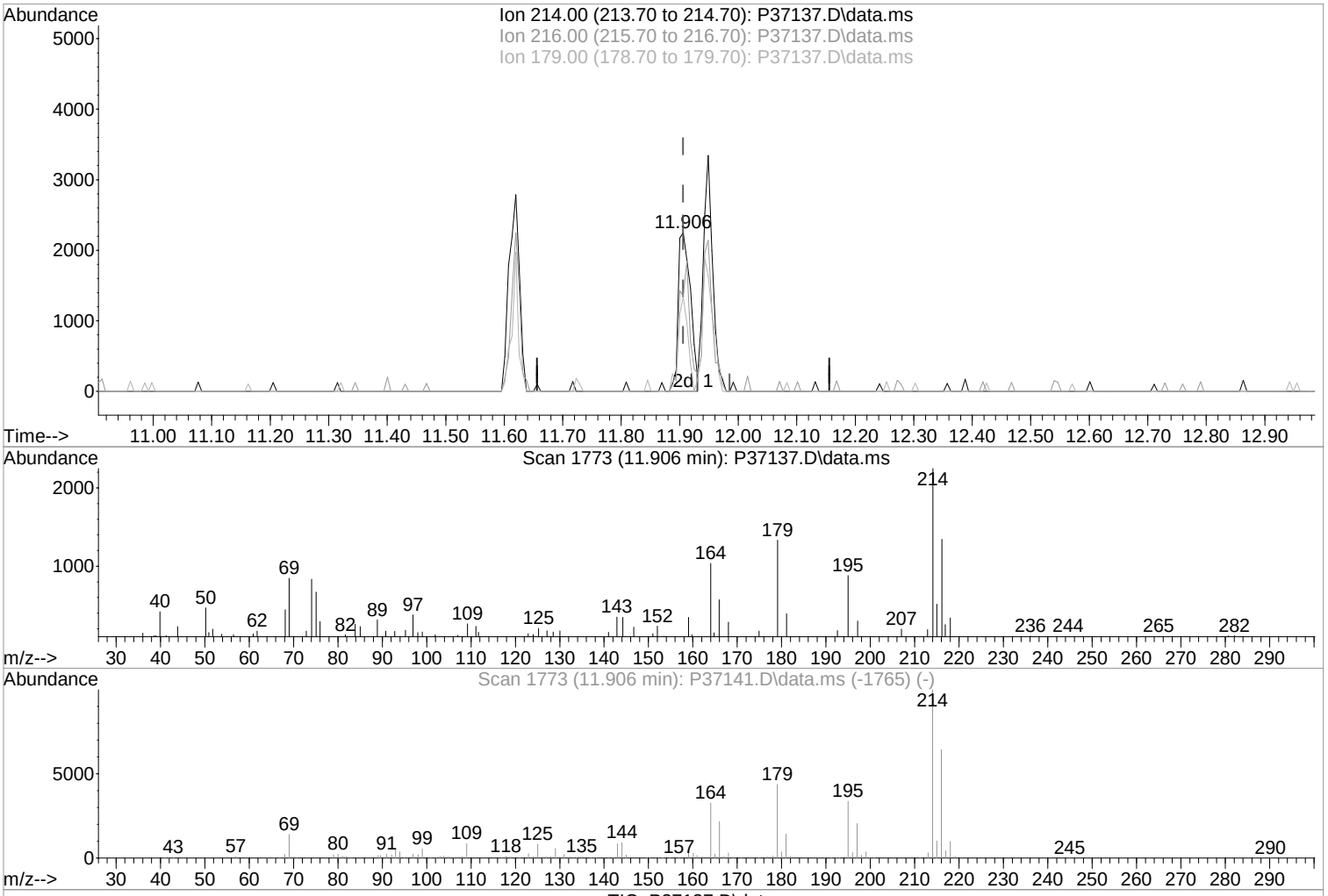
Quant Time: Jul 13 16:09:05 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(107) 2,4-DCBTF

11.906min (+0.000) 1.08 ppb m

response 3306

Ion	Exp%	Act%
214.00	100	100
216.00	64.40	59.80
179.00	43.70	59.27#
0.00	0.00	0.00

Manual Integration:

After

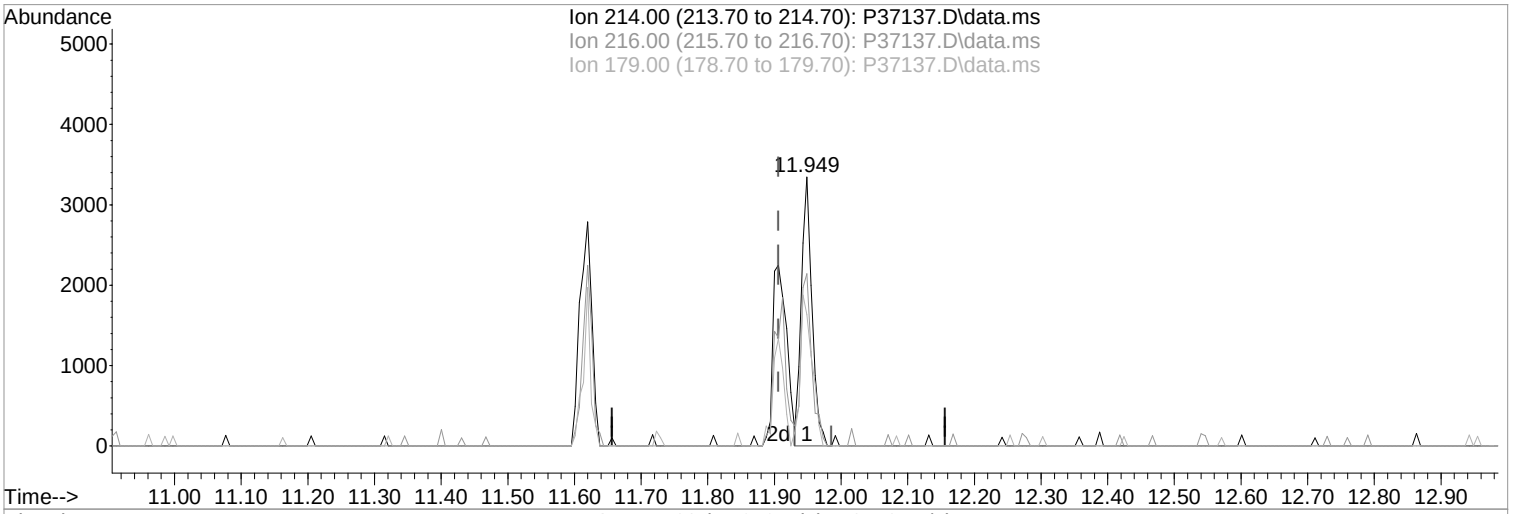
Wrong peak selected.

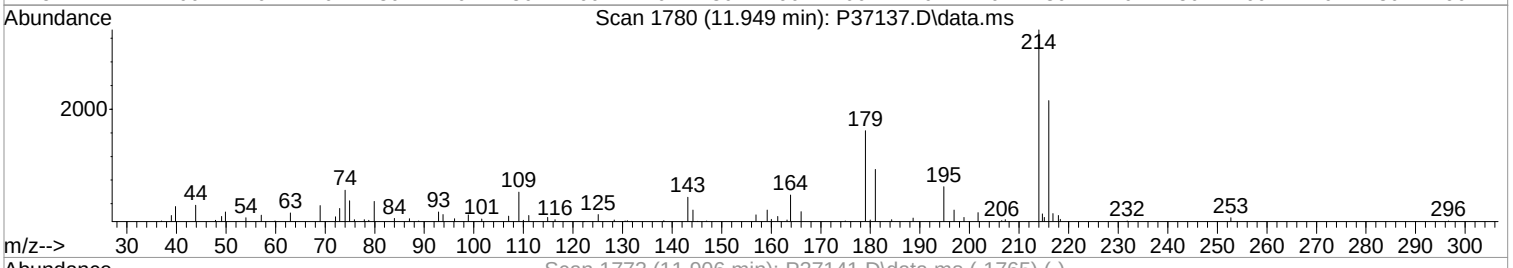
07/13/20

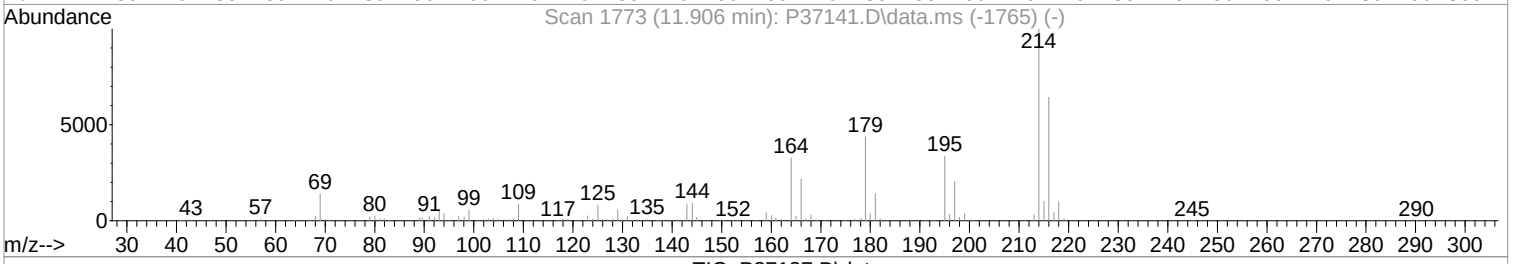
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(107) 2,4-DCBTF

11.949min (+0.043) 1.22 ppb

response 3733

Ion	Exp%	Act%
214.00	100	100
216.00	64.40	59.96
179.00	43.70	45.72
0.00	0.00	0.00

Manual Integration:

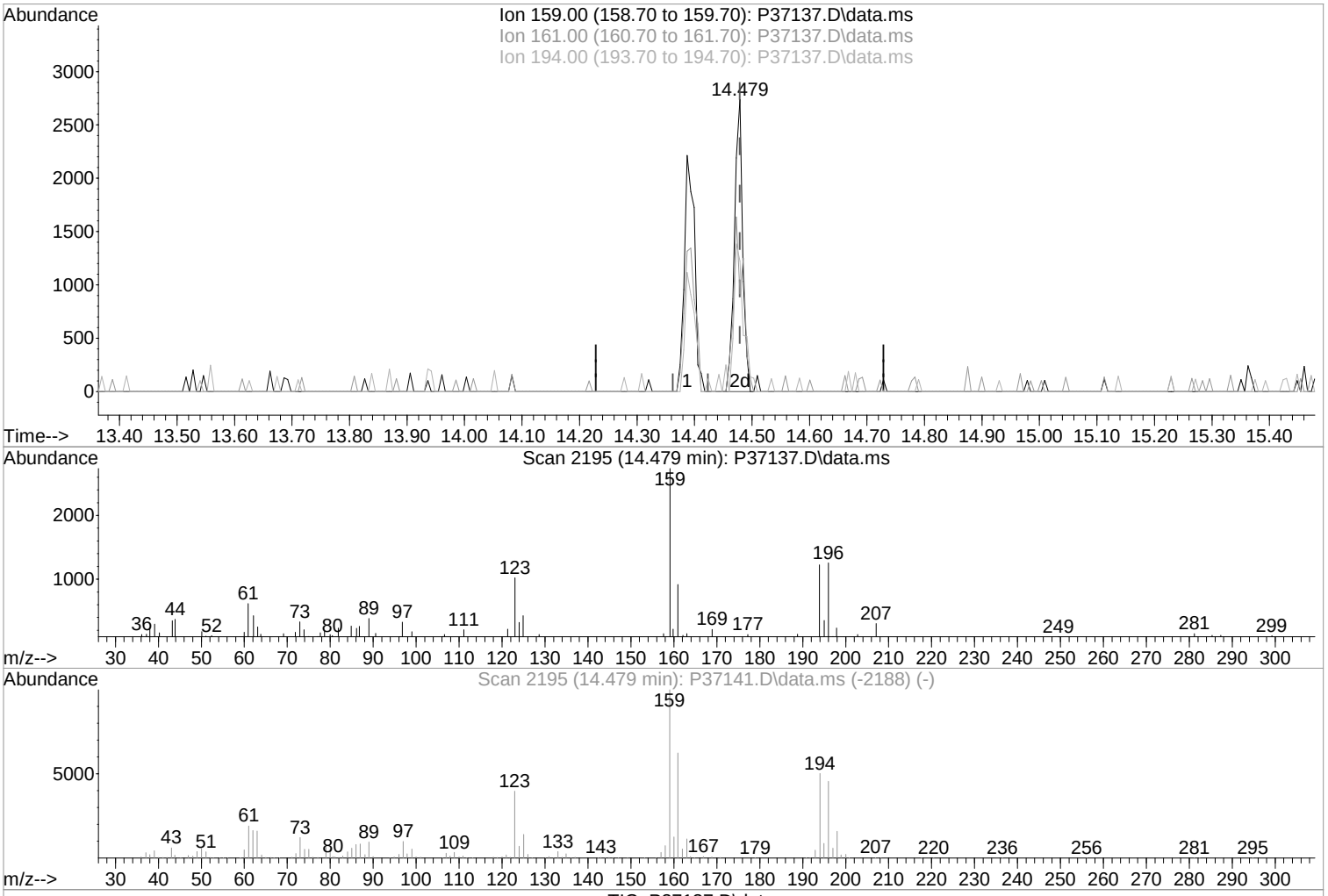
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(120) 2,3,6-Trichlorotoluene

14.479min (+0.000) 0.91 ppb m

response 2715

Ion	Exp%	Act%
159.00	100	100
161.00	62.40	33.47#
194.00	50.20	44.76
0.00	0.00	0.00

Manual Integration:

After

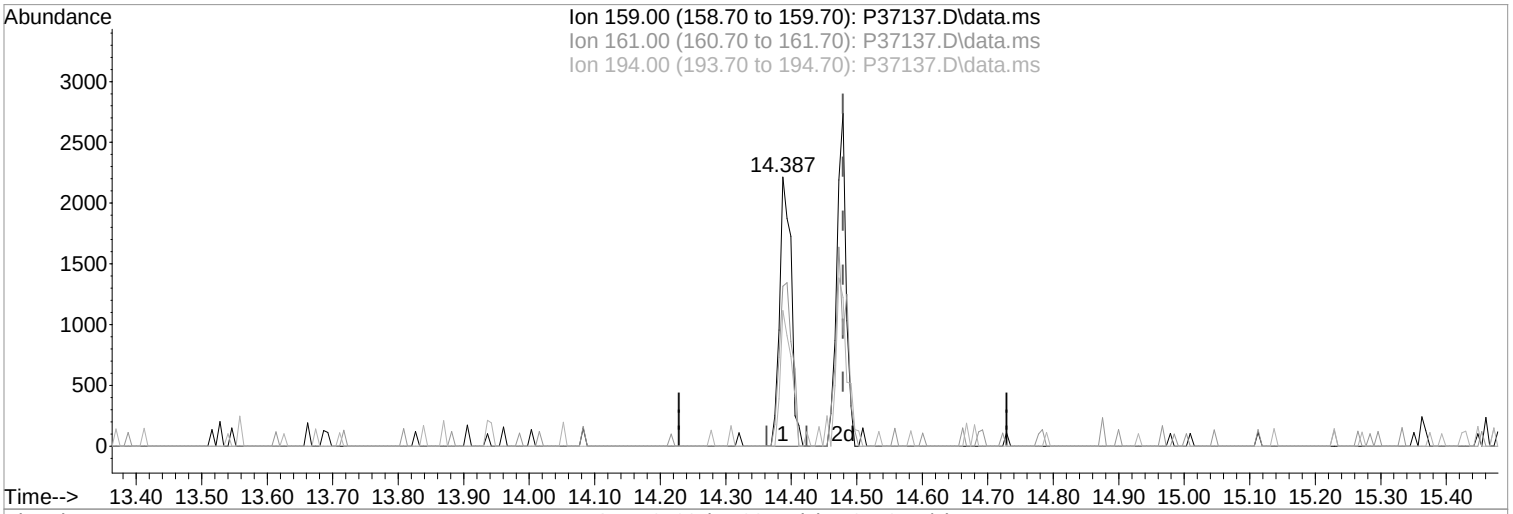
Wrong peak selected.

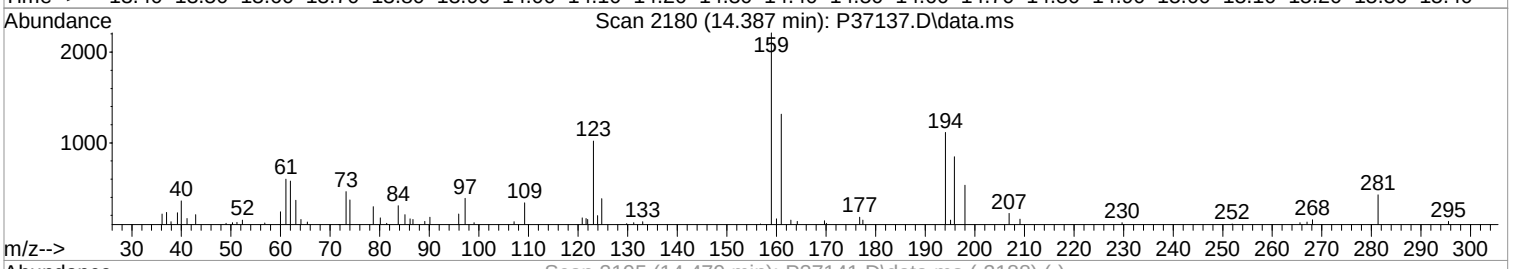
07/13/20

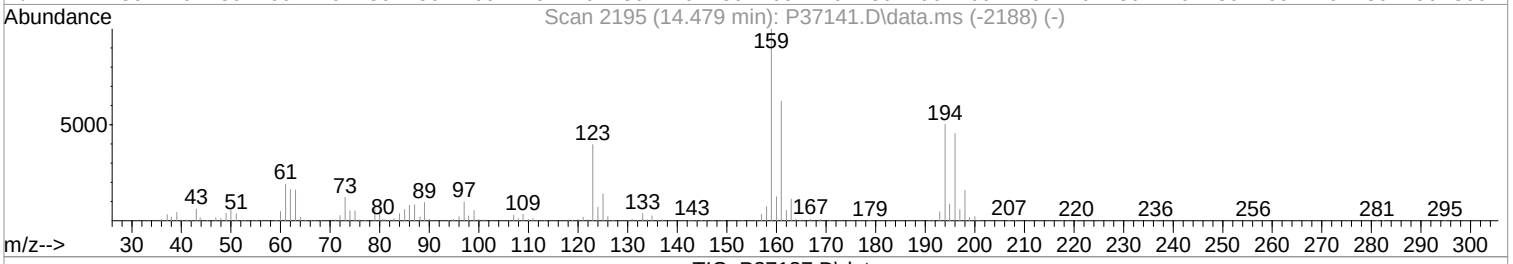
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(120) 2,3,6-Trichlorotoluene

14.387min (-0.091) 0.91 ppb

response 2722

Ion	Exp%	Act%
159.00	100	100
161.00	62.40	59.44
194.00	50.20	50.41
0.00	0.00	0.00

Manual Integration:

Before

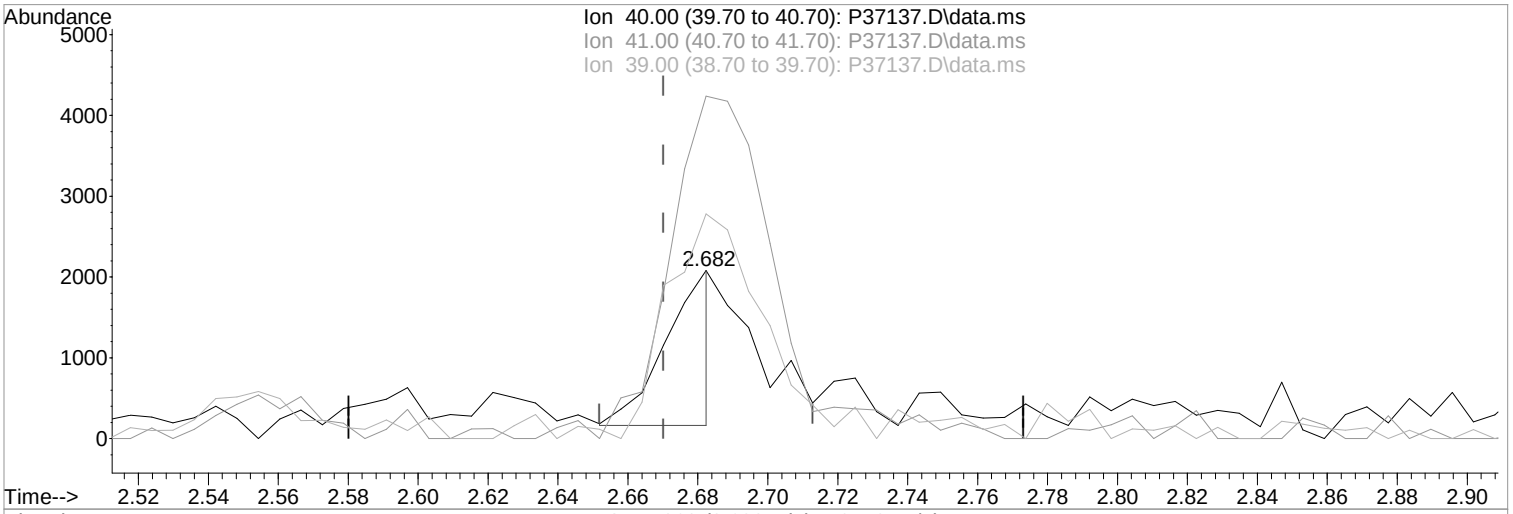
07/13/20

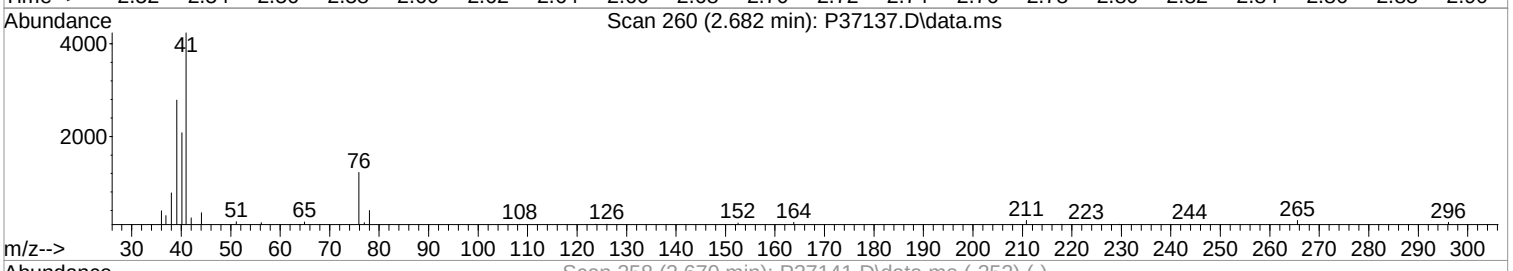
1st 07/14/20
2nd 07/14/20

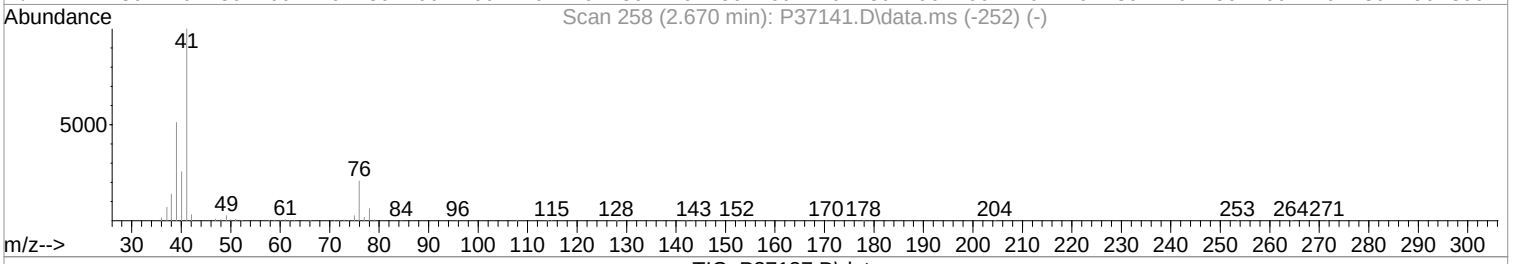
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(19) Acetonitrile

2.682min (+0.012) 8.29 ppb m

response 1843

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	203.51#
39.00	200.50	133.67#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

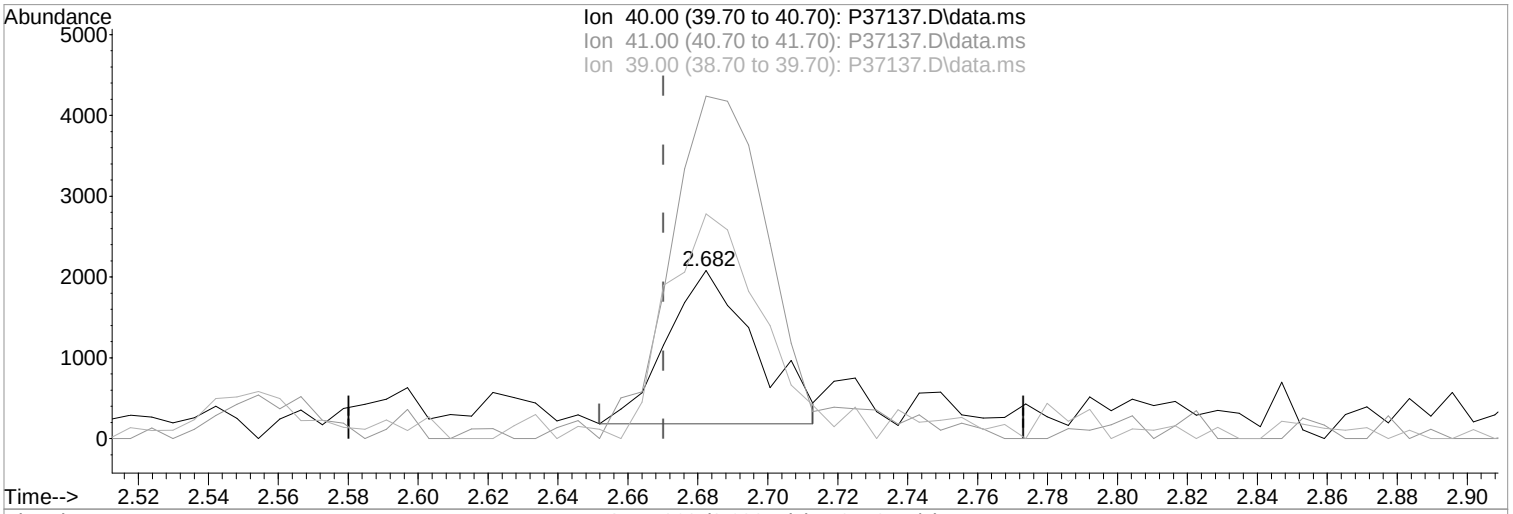
07/13/20

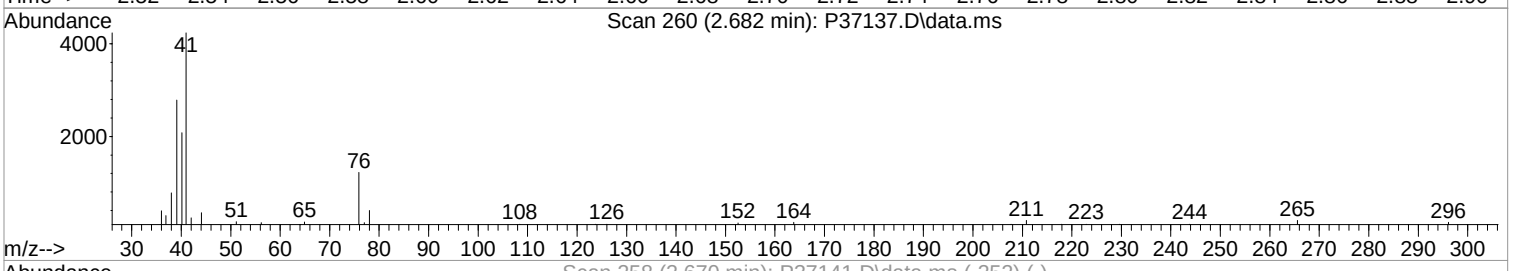
1st 07/14/20
2nd 07/14/20

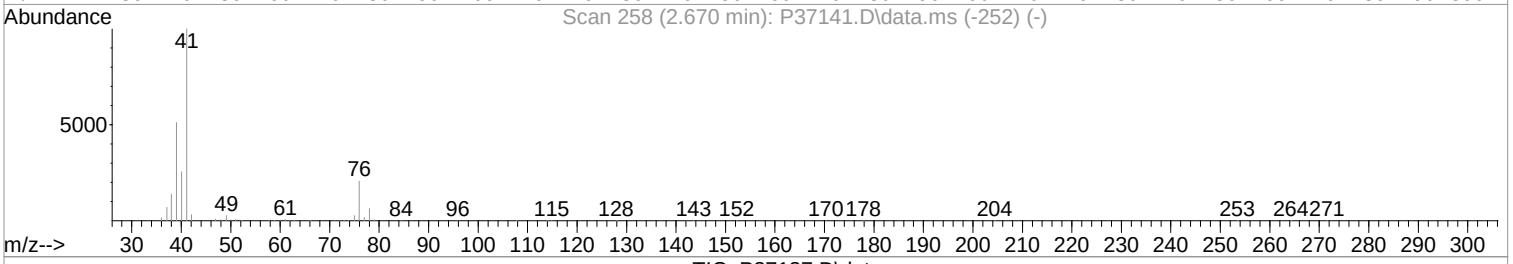
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(19) Acetonitrile

2.682min (+0.012) 14.98 ppb

response 3330

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	203.51#
39.00	200.50	133.67#
0.00	0.00	0.00

Manual Integration:

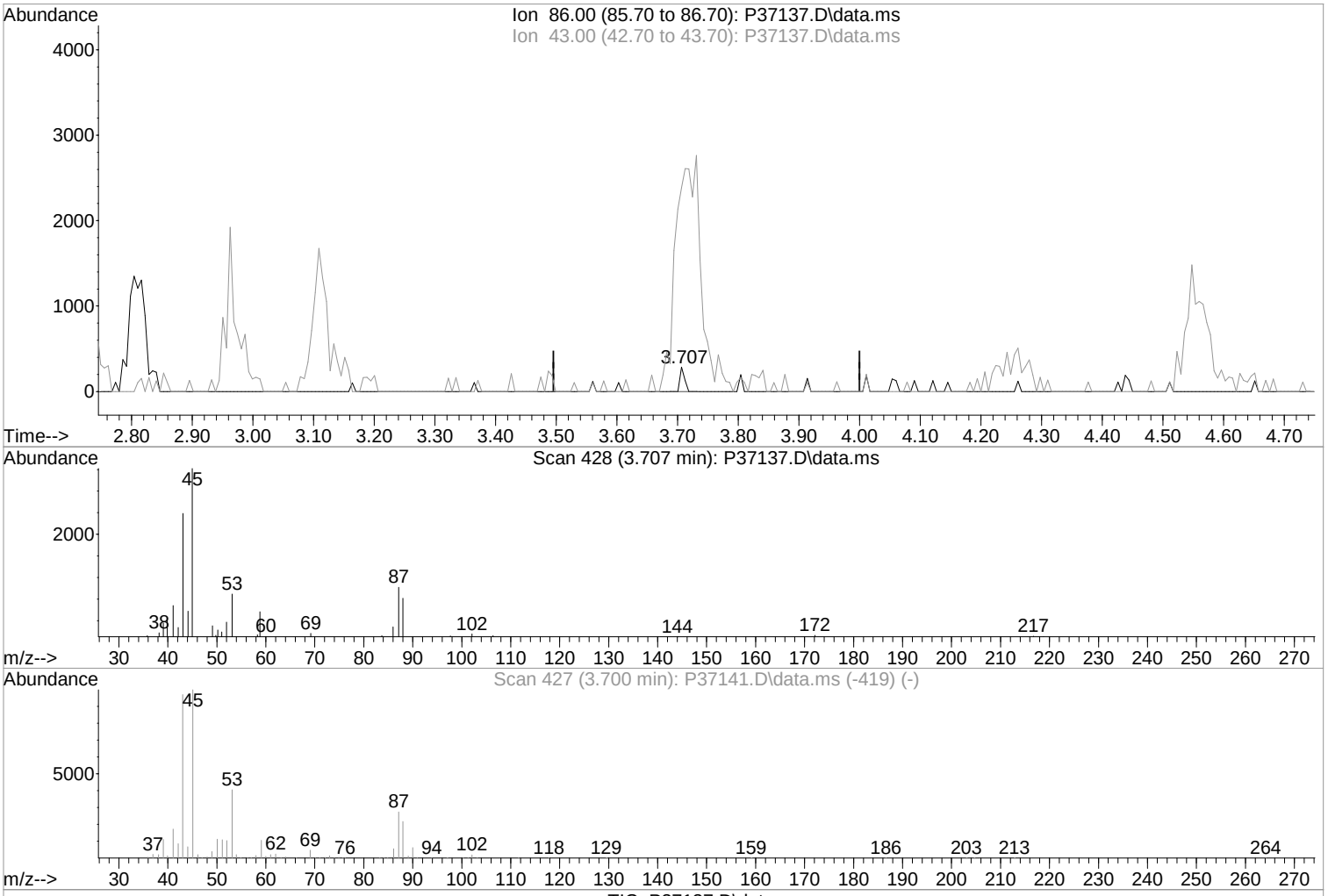
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(29) Vinyl Acetate

3.707min (+0.012) 0.33 ppb m

response 151

Ion	Exp%	Act%
86.00	100	100
43.00	1783.00	837.54#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

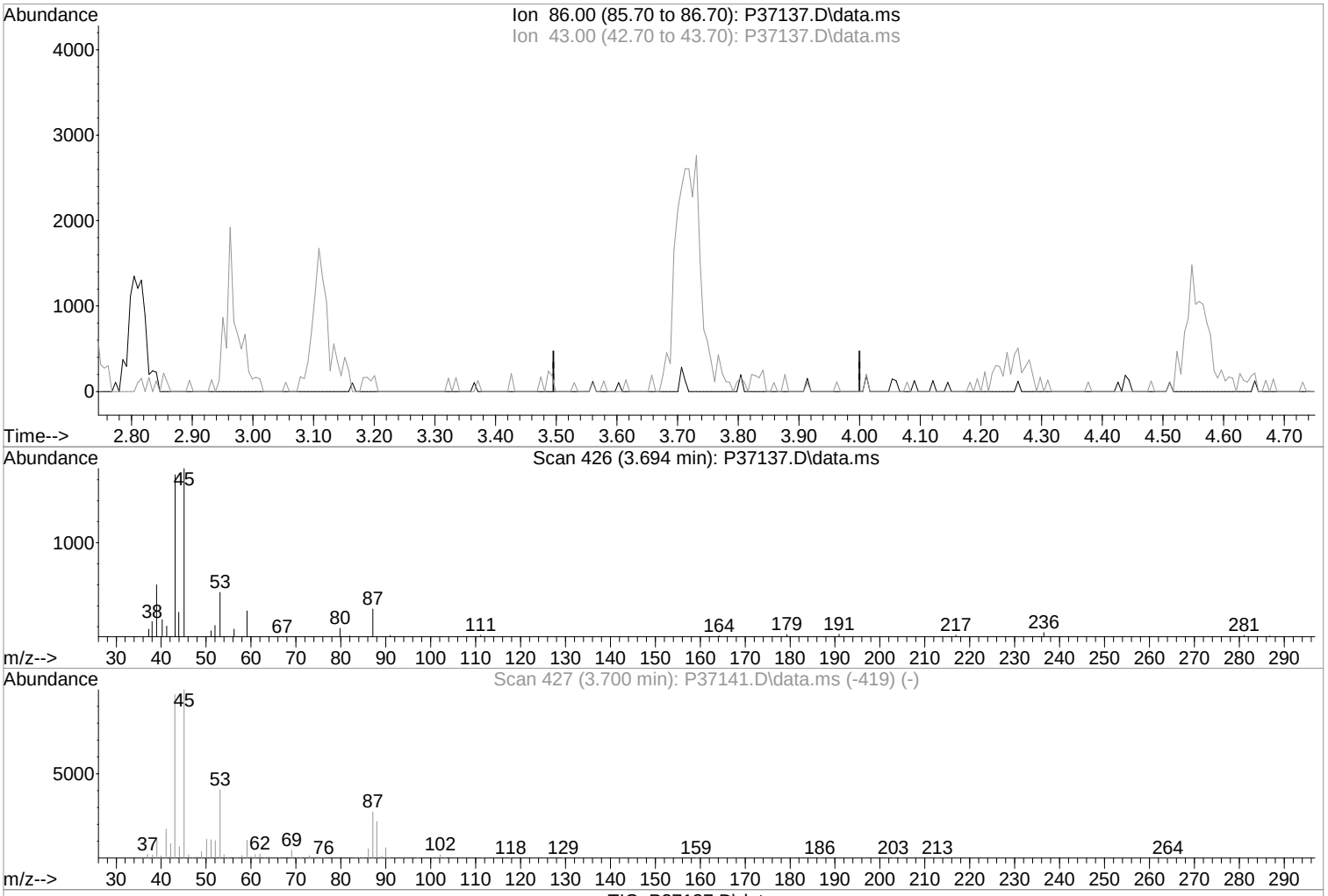
Peak not found.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(29) Vinyl Acetate

3.694min (-3.694) 0.00 ppb

response 0

Ion	Exp%	Act%
86.00	100	0.00
43.00	1783.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

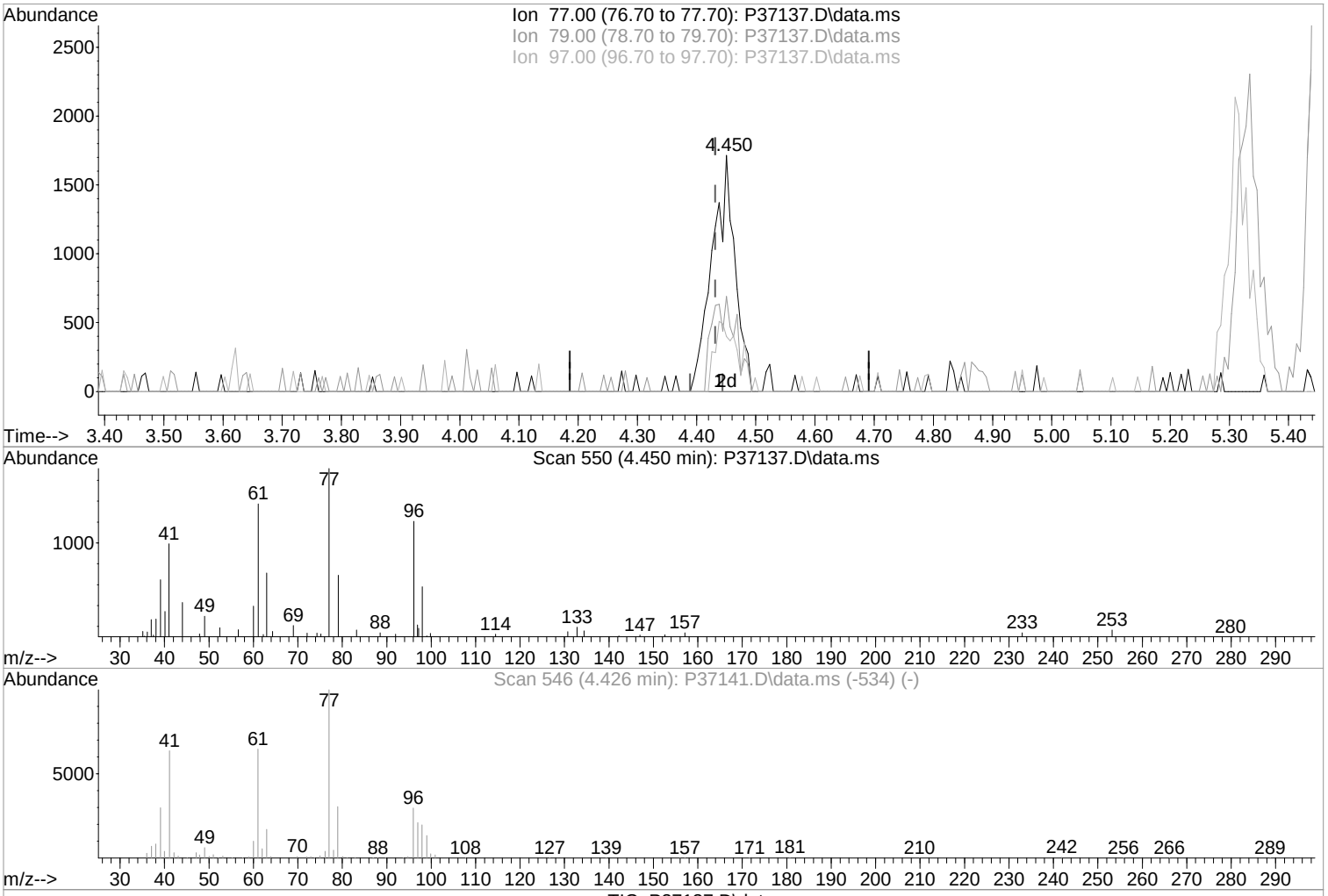
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(33) 2,2-Dichloropropane

4.450min (+0.018) 1.02 ppb m

response 4606

Ion	Exp%	Act%
77.00	100	100
79.00	30.40	40.32
97.00	21.00	12.60
0.00	0.00	0.00

Manual Integration:

After

Split Peak

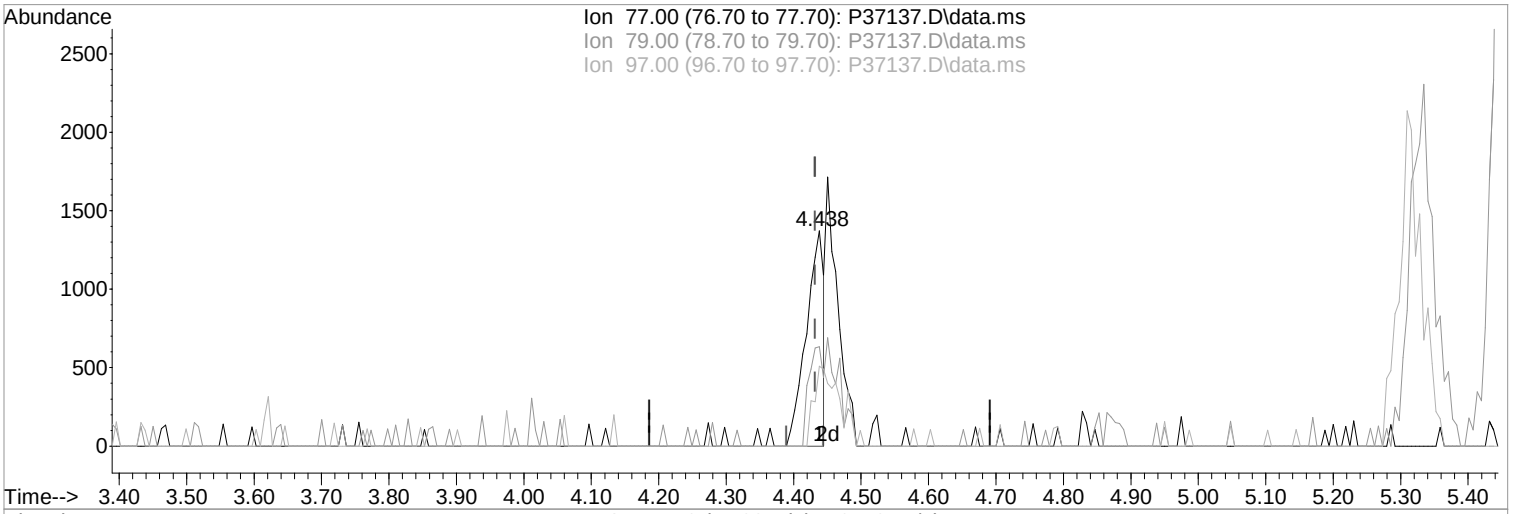
07/13/20

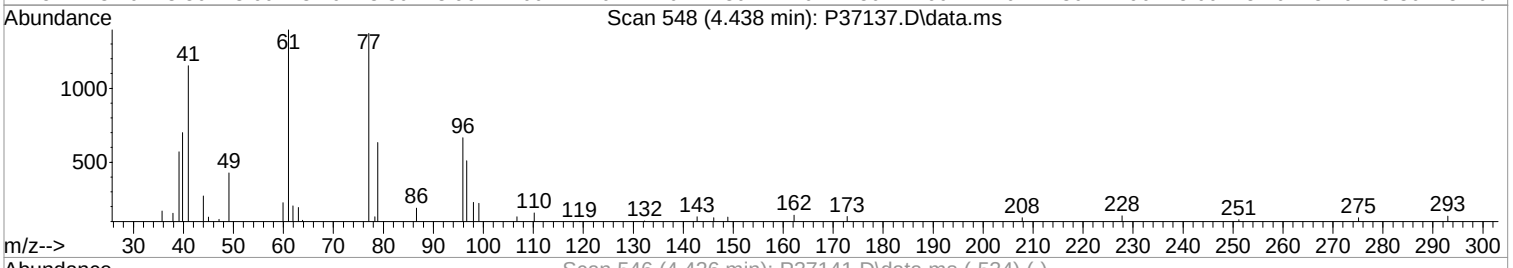
1st 07/14/20
2nd 07/14/20

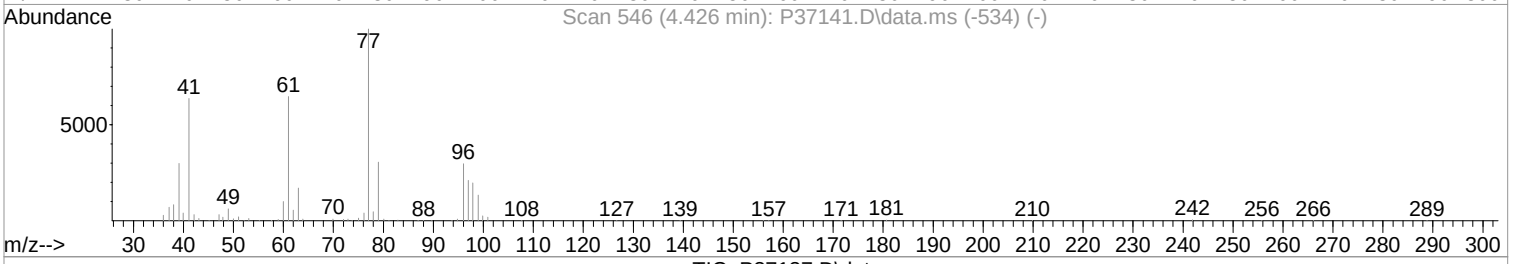
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(33) 2,2-Dichloropropane

4.438min (+0.006) 0.54 ppb

response 2453

Ion	Exp%	Act%
77.00	100	100
79.00	30.40	46.21
97.00	21.00	37.17
0.00	0.00	0.00

Manual Integration:

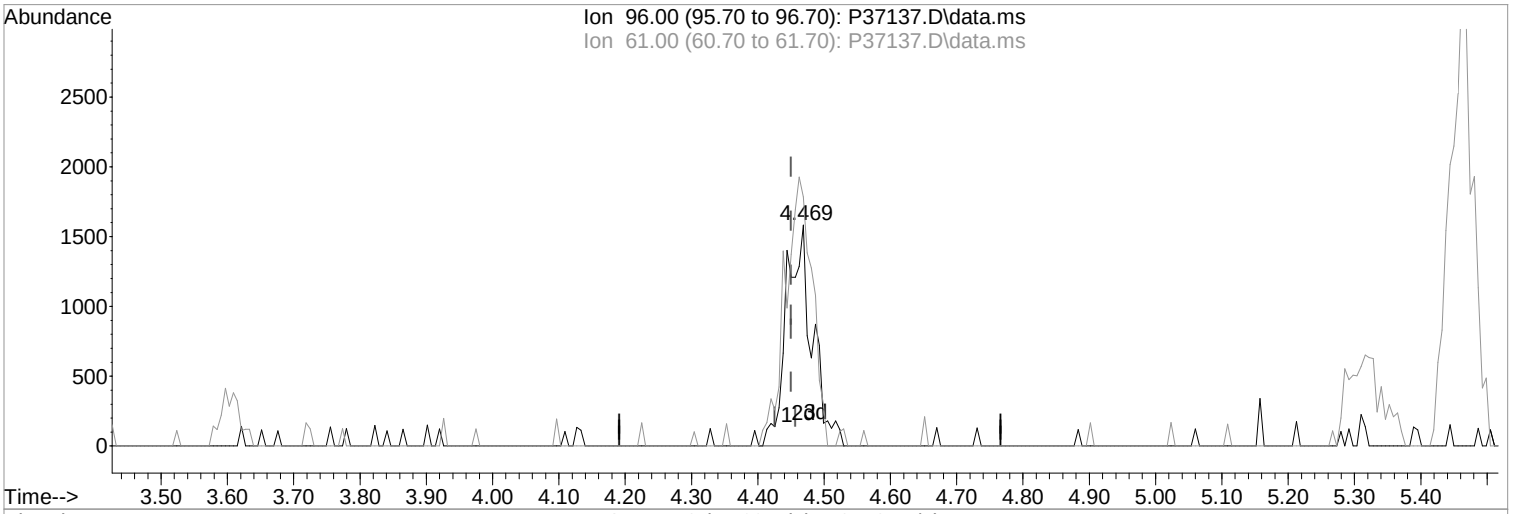
Before

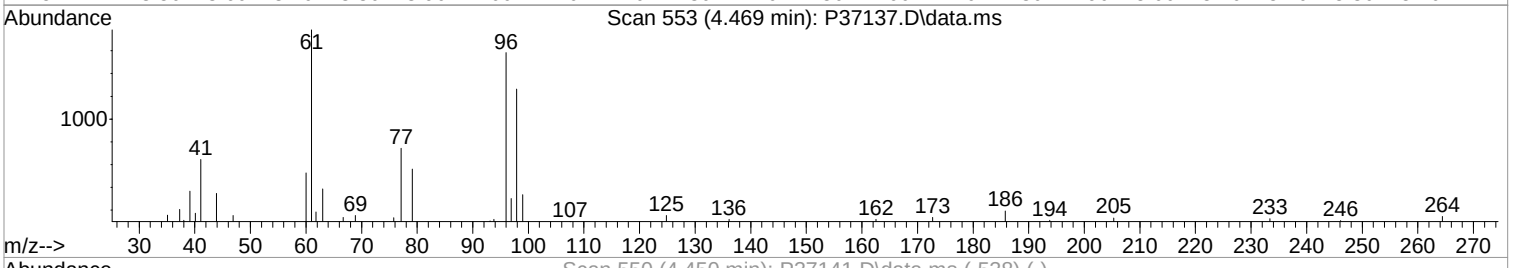
07/13/20

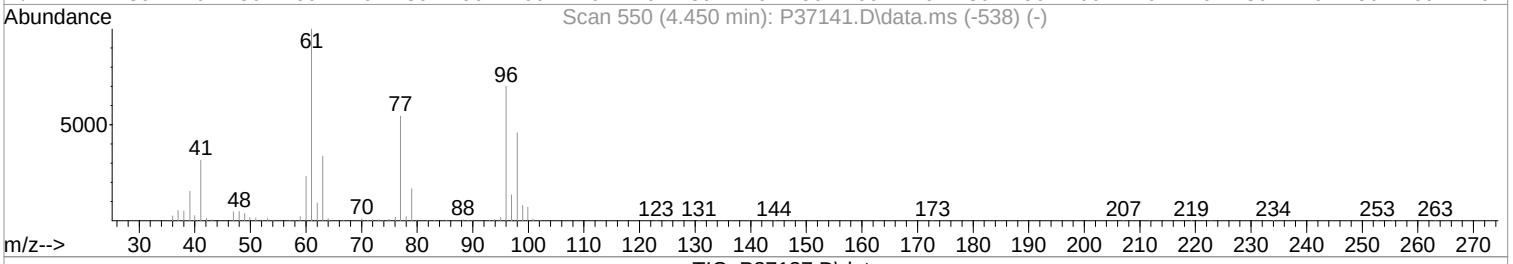
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

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

4.469min (+0.018) 1.20 ppb m

response 4326

Ion	Exp%	Act%
96.00	100	100
61.00	143.10	112.76#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

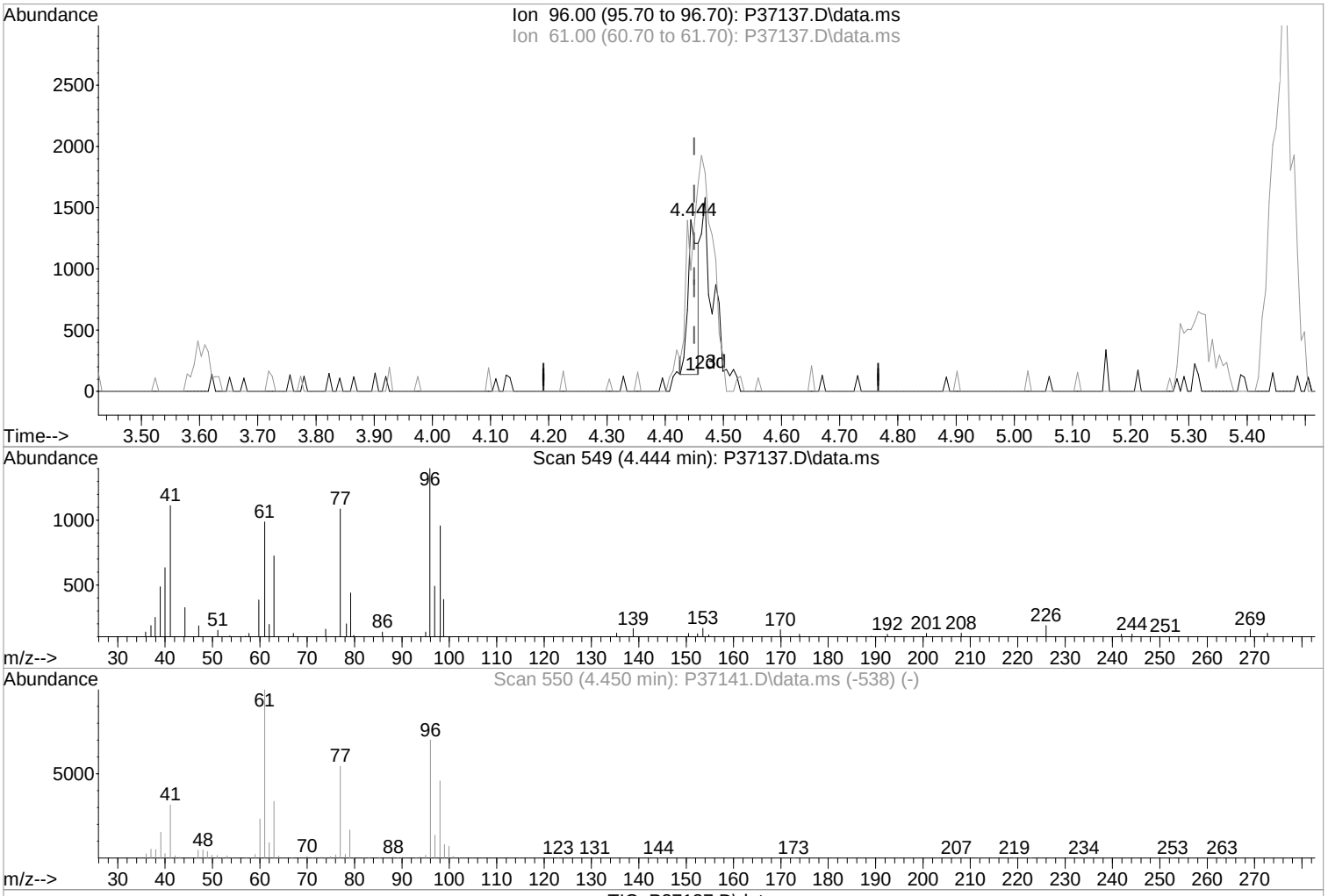
Split Peak

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

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

4.444min (-0.006) 0.41 ppb

response 1486

Ion	Exp%	Act%
96.00	100	100
61.00	143.10	70.47#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

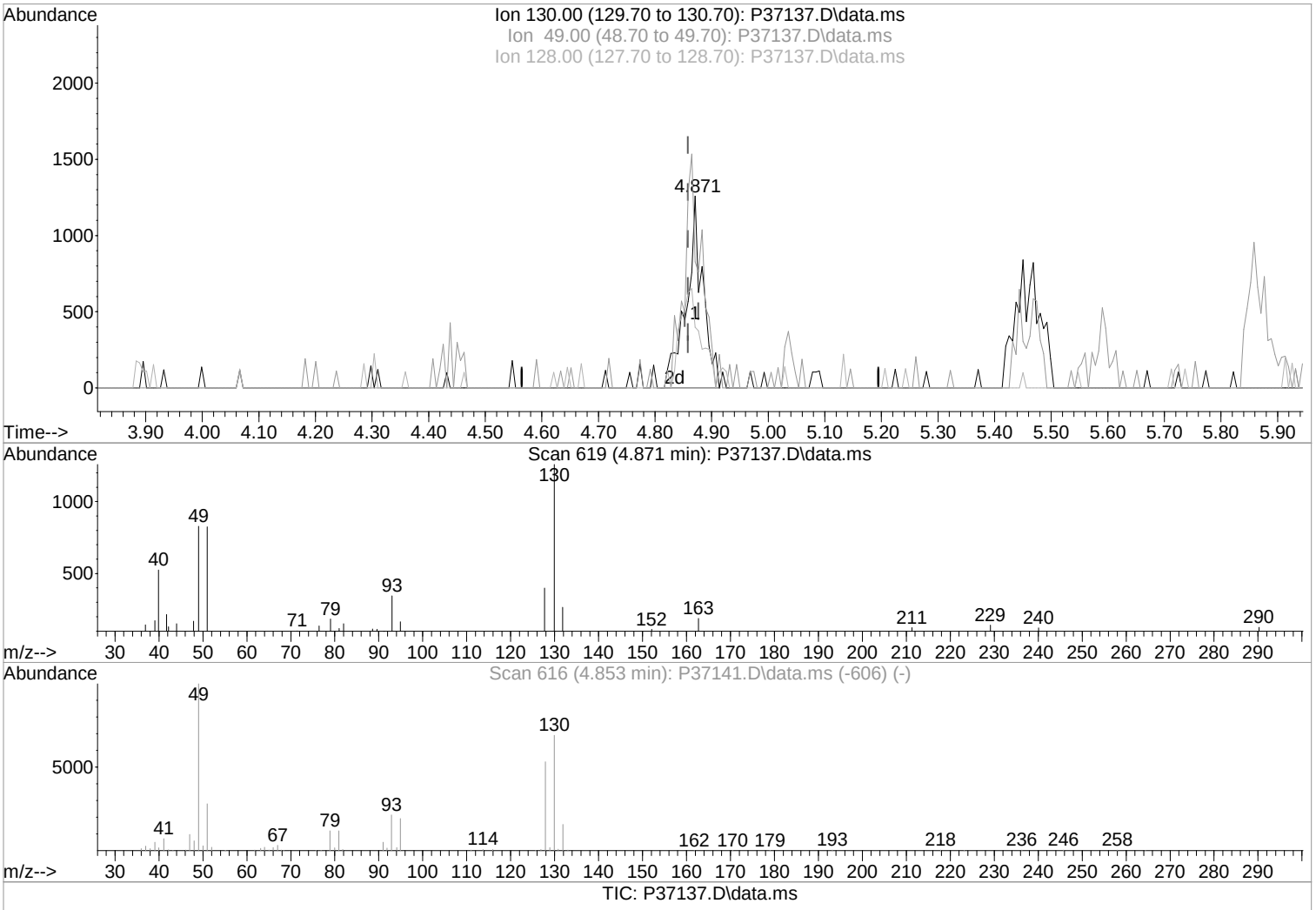
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(37) Bromochloromethane

4.871min (+0.012) 1.21 ppb m

response 2557

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	65.77#
128.00	77.00	31.69#
0.00	0.00	0.00

Manual Integration:

After

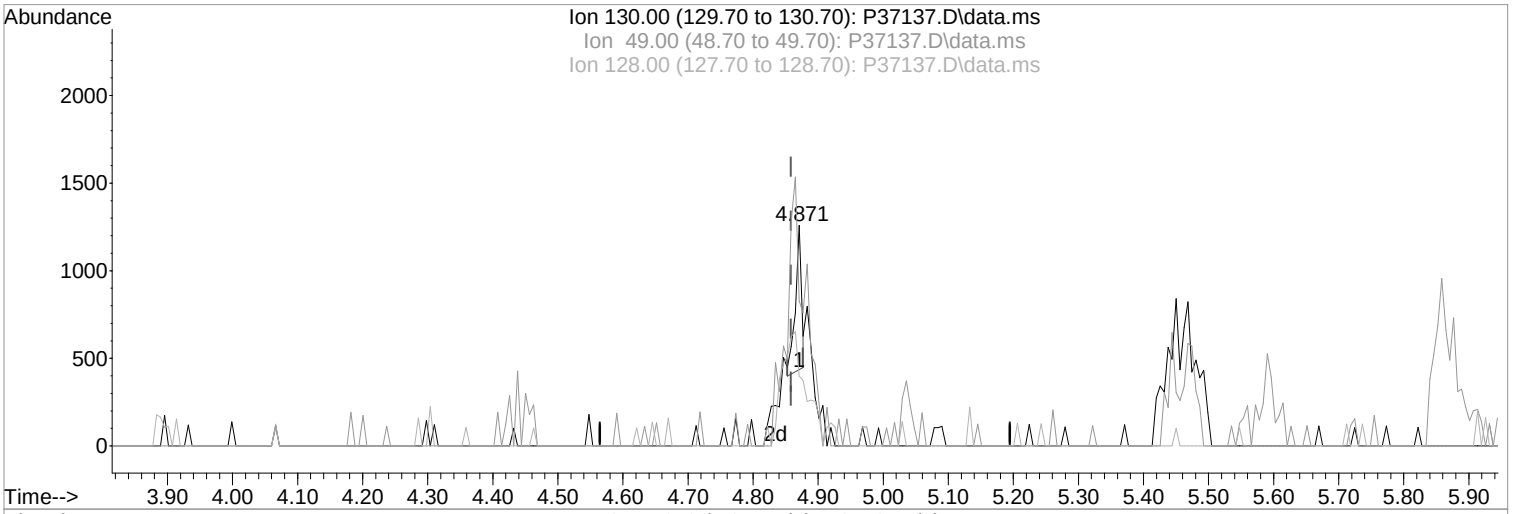
Split Peak

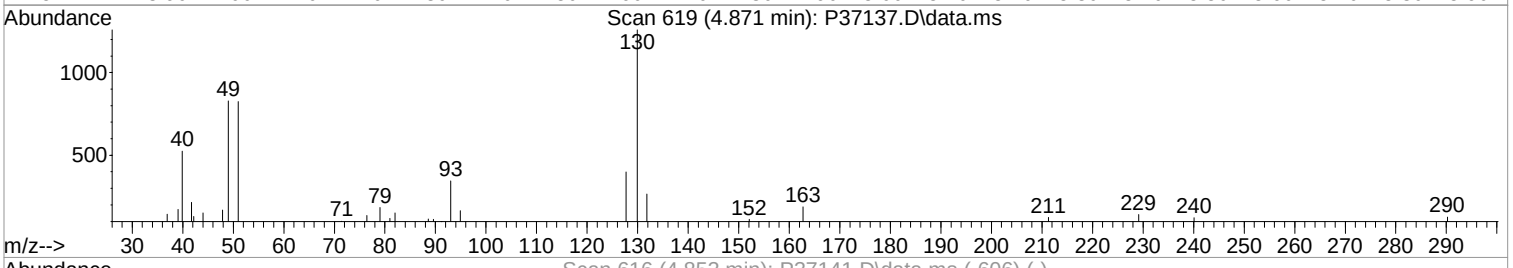
07/13/20

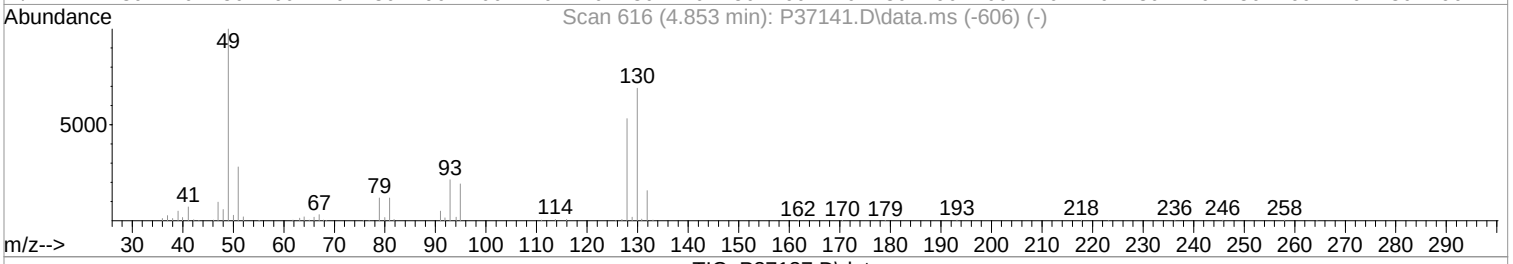
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(37) Bromochloromethane

4.871min (+0.012) 0.26 ppb

response 557

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	65.77#
128.00	77.00	31.69#
0.00	0.00	0.00

Manual Integration:

Before

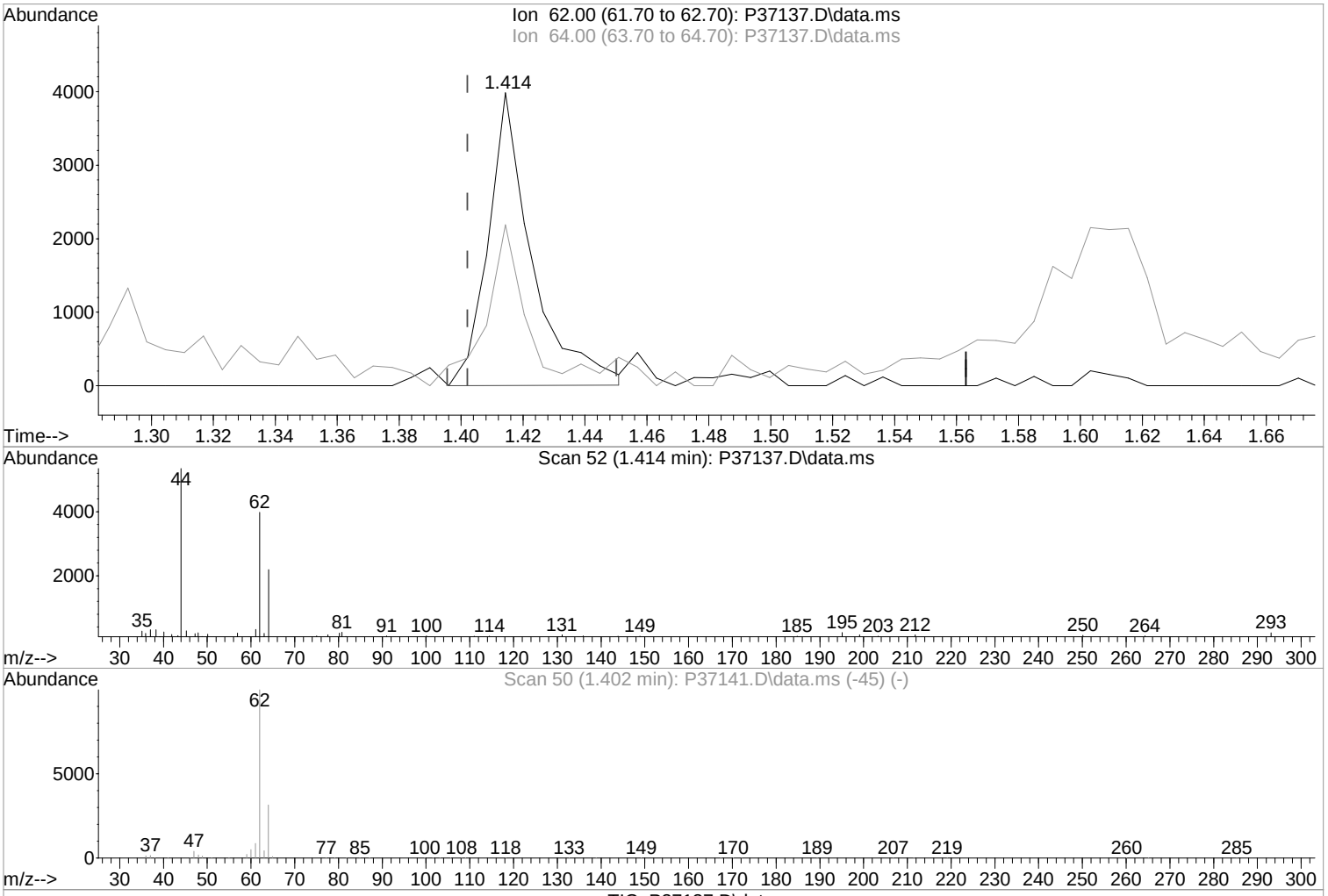
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(4) Vinyl Chloride (P)

1.414min (+0.012) 0.95 ppb m

response 3919

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	55.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

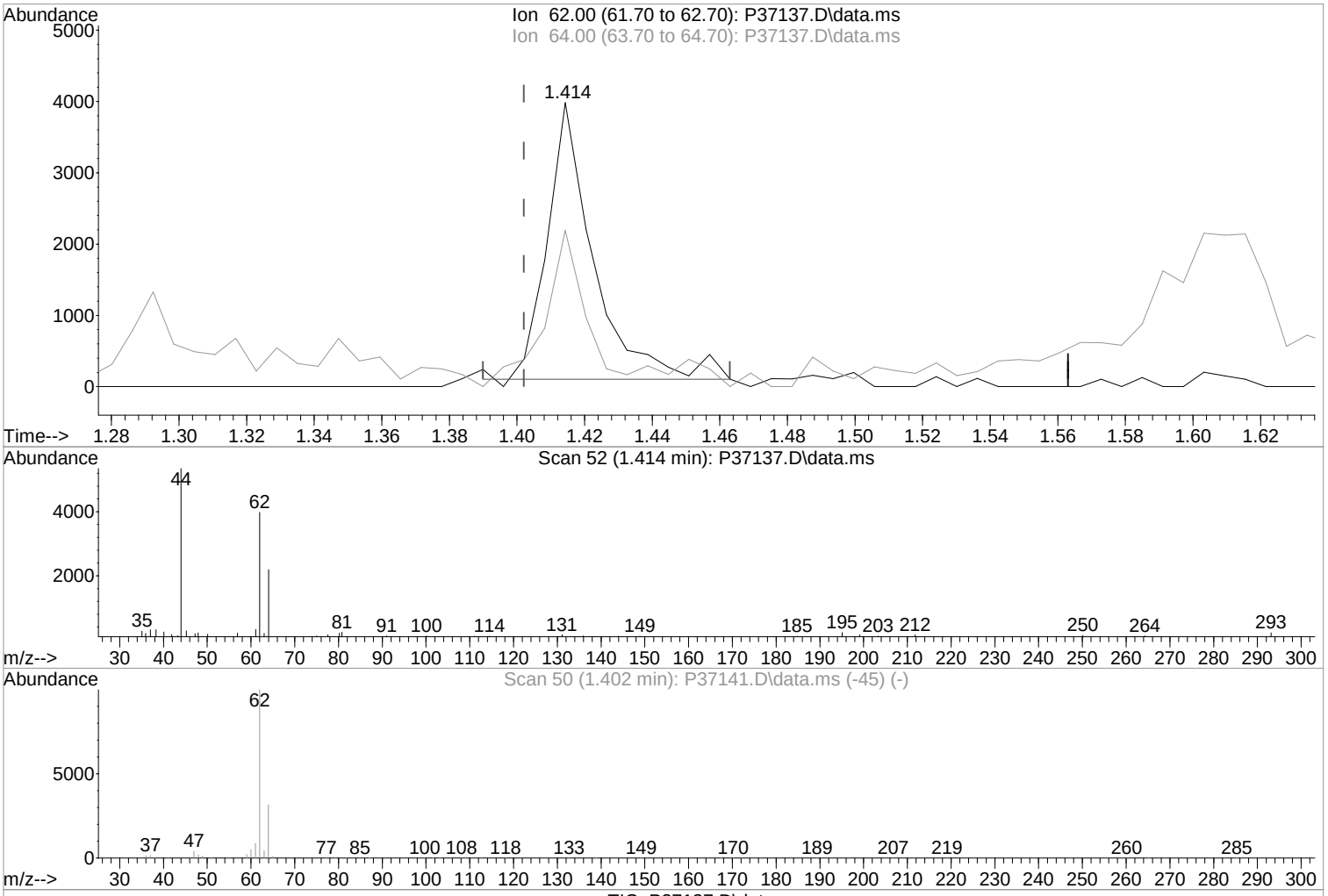
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(4) Vinyl Chloride (P)

1.414min (+0.012) 0.90 ppb

response 3674

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	55.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

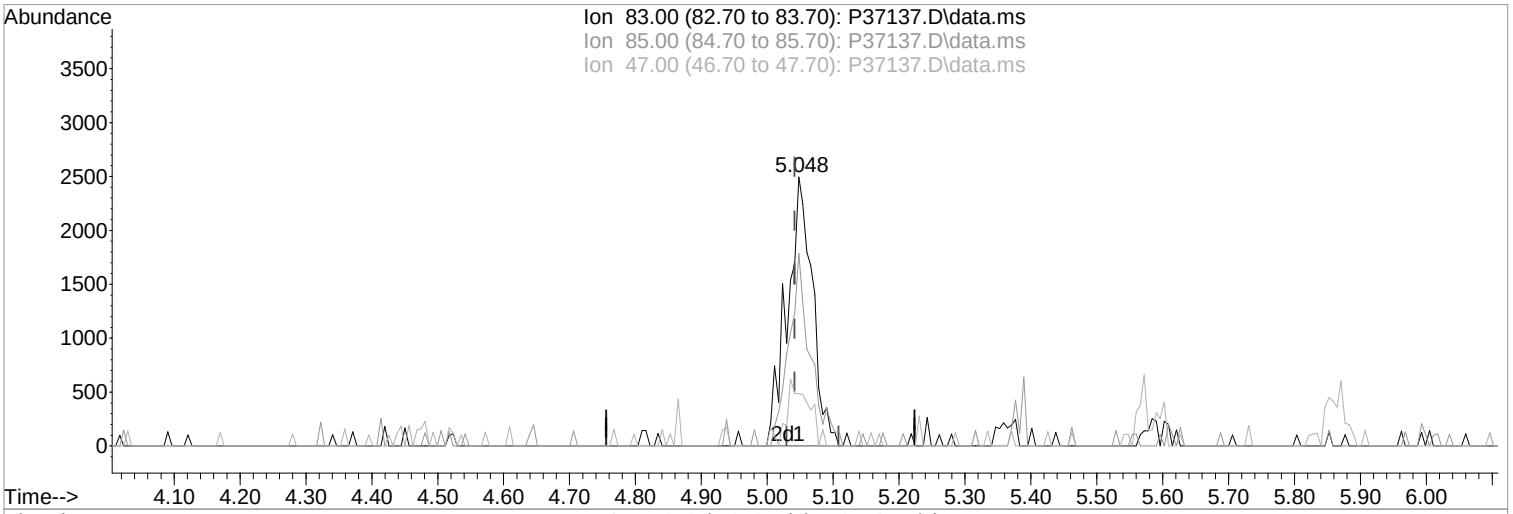
07/13/20

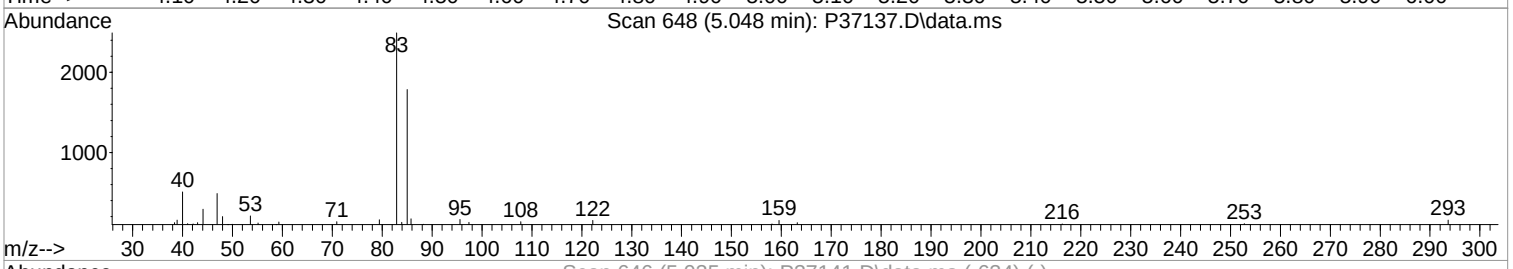
1st 07/14/20
2nd 07/14/20

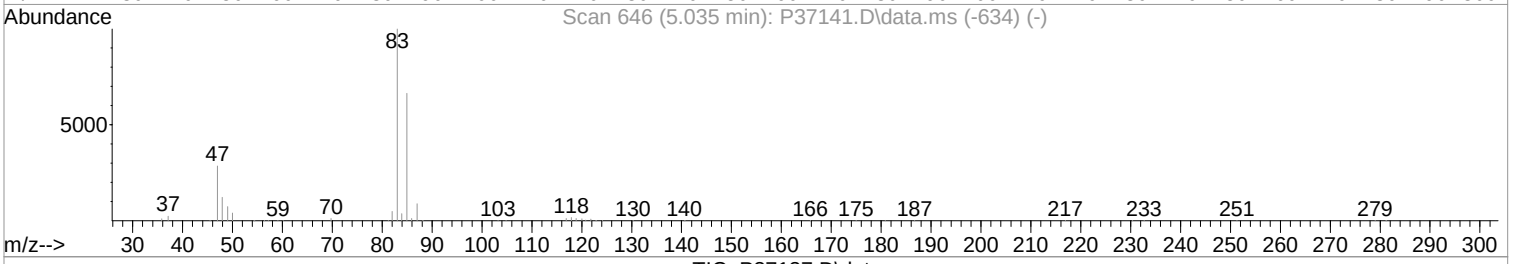
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(40) Chloroform (P)

5.048min (+0.006) 1.17 ppb m

response 6624

Ion	Exp%	Act%
83.00	100	100
85.00	66.50	71.54
47.00	28.70	19.48
0.00	0.00	0.00

Manual Integration:

After

Split Peak

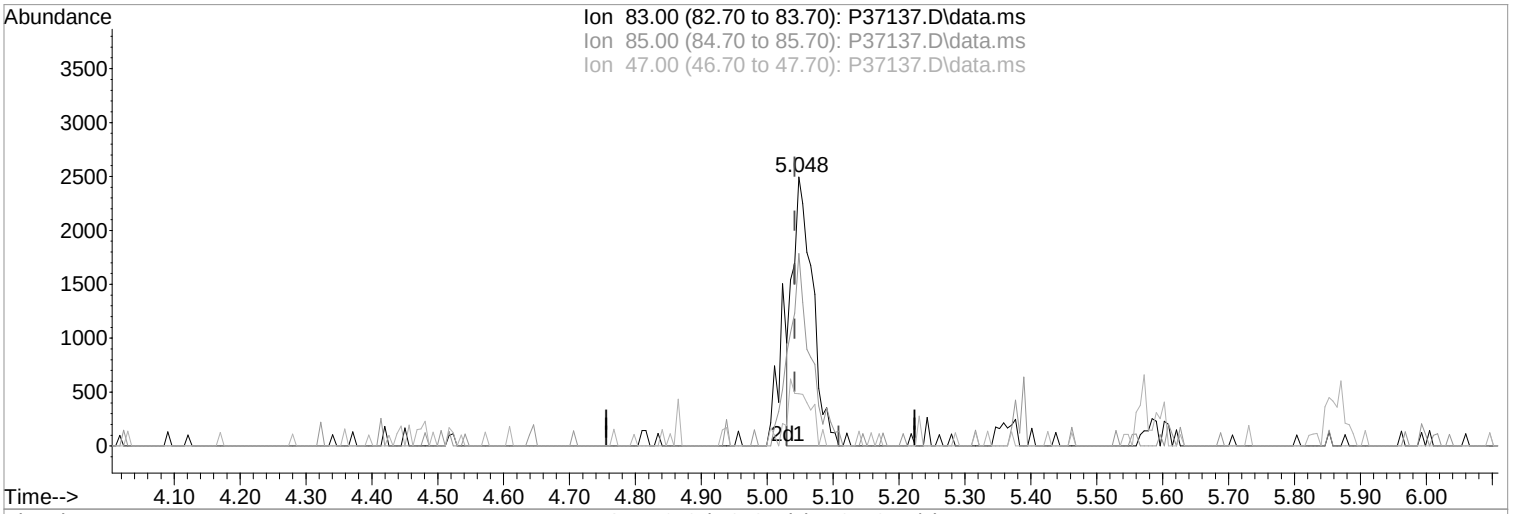
07/13/20

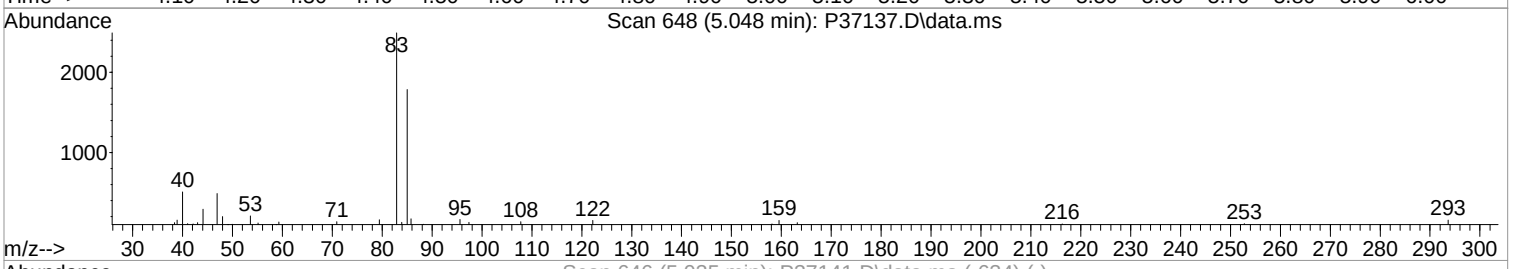
1st 07/14/20
2nd 07/14/20

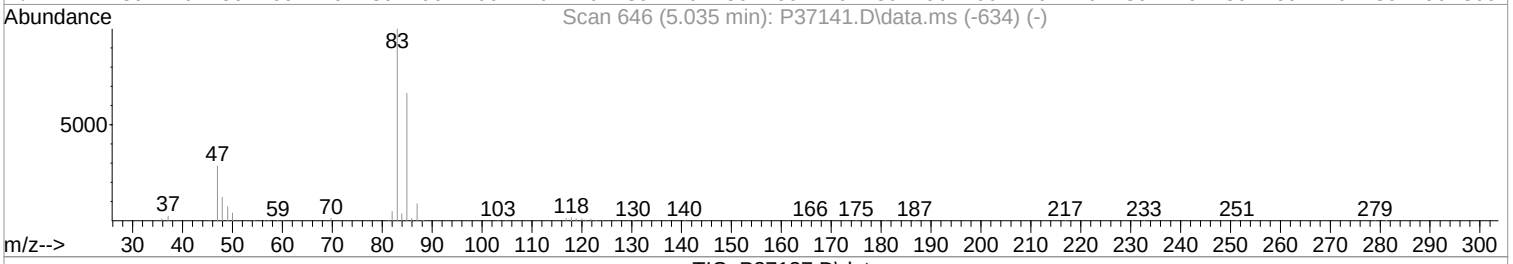
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(40) Chloroform (P)

5.048min (+0.006) 0.92 ppb

response 5225

Ion	Exp%	Act%
83.00	100	100
85.00	66.50	71.54
47.00	28.70	19.48
0.00	0.00	0.00

Manual Integration:

Before

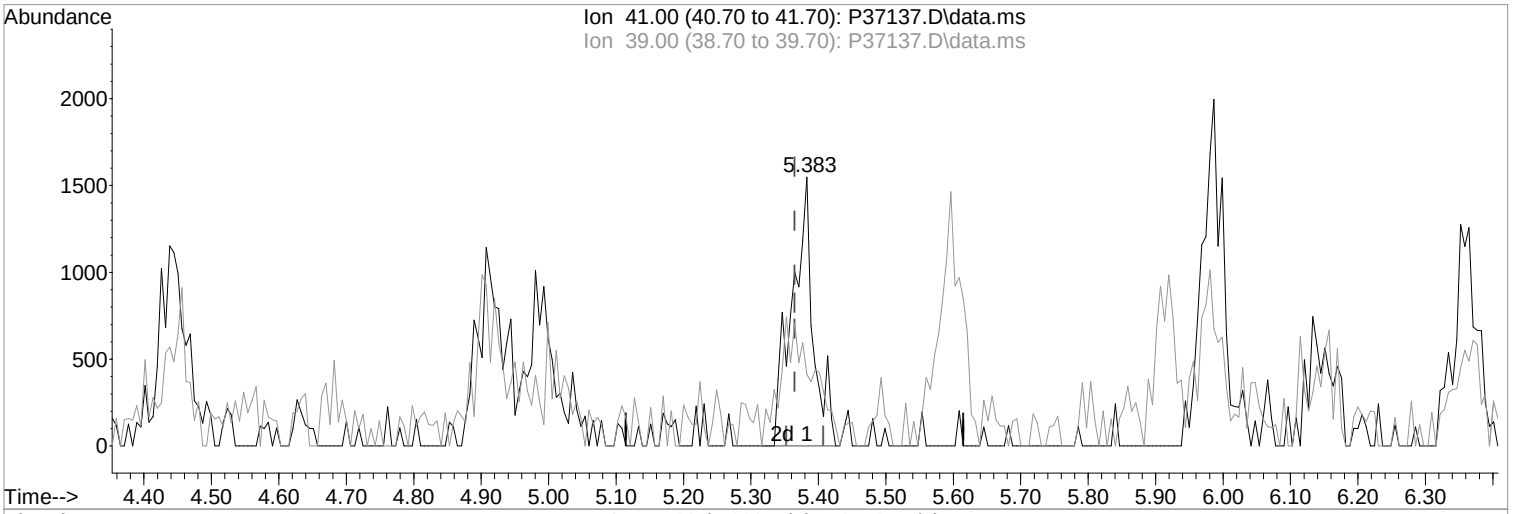
07/13/20

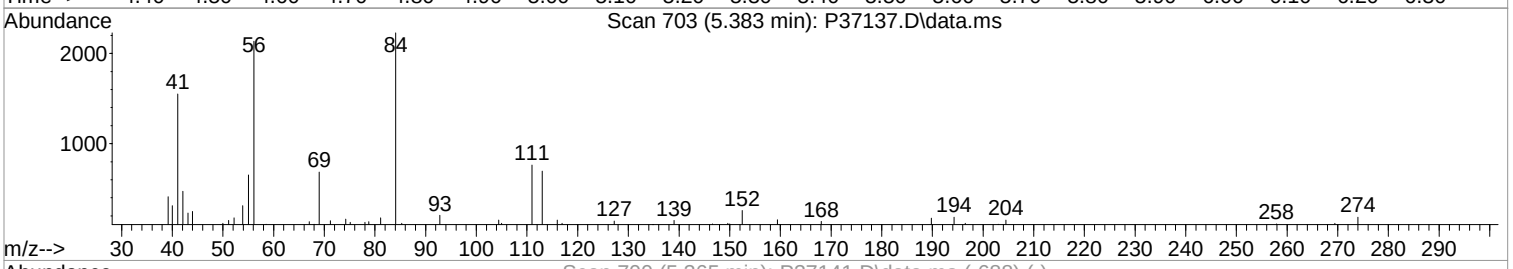
1st 07/14/20
2nd 07/14/20

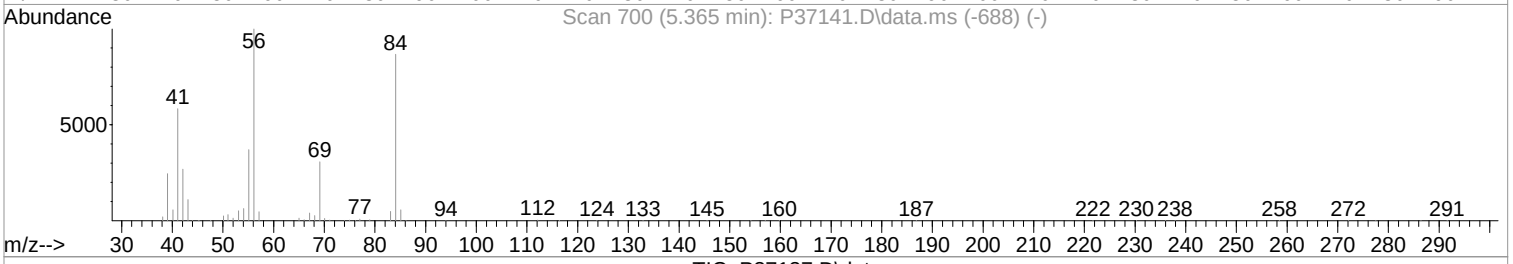
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(44) Cyclohexane (P)

5.383min (+0.018) 1.04 ppb m

response 3421

Ion	Exp%	Act%
41.00	100	100
39.00	42.20	26.53
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Split Peak

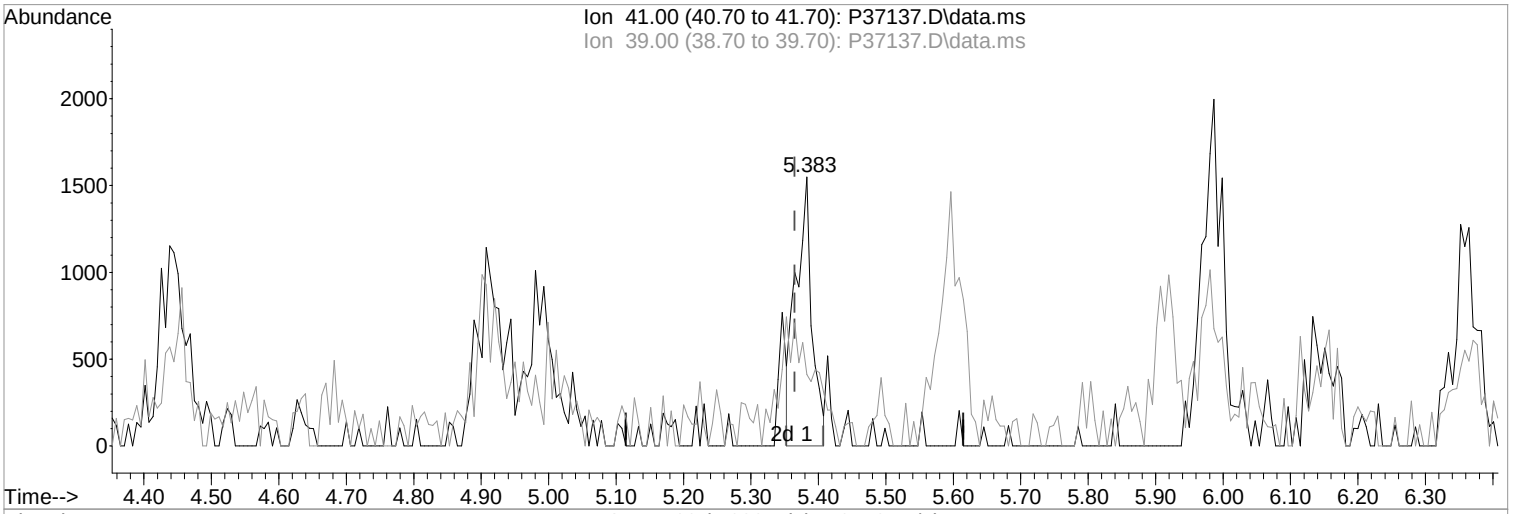
07/13/20

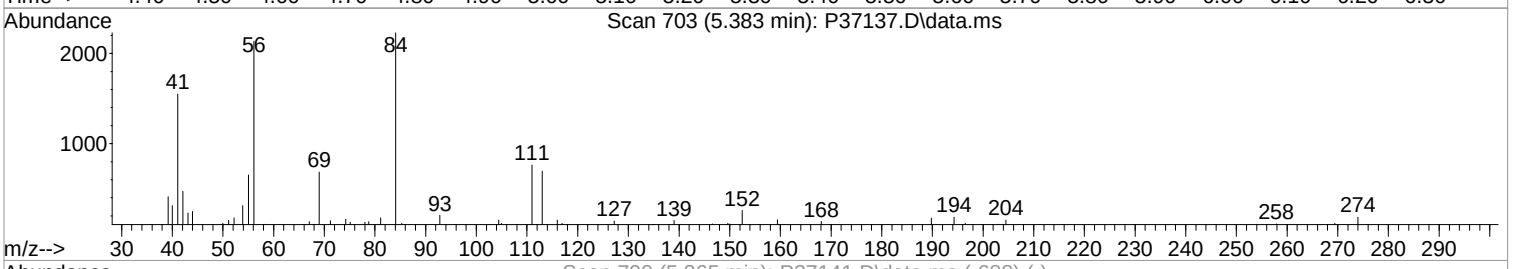
1st 07/14/20
2nd 07/14/20

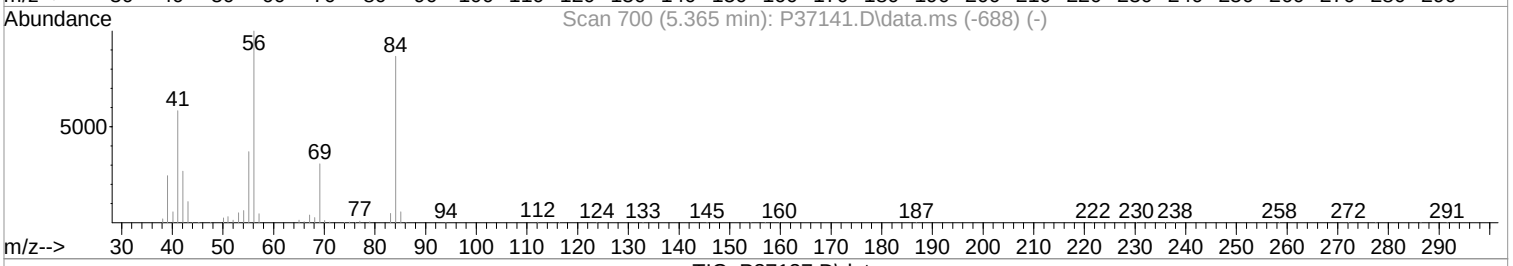
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(44) Cyclohexane (P)

5.383min (+0.018) 0.78 ppb

response 2582

Ion	Exp%	Act%
41.00	100	100
39.00	42.20	26.53
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

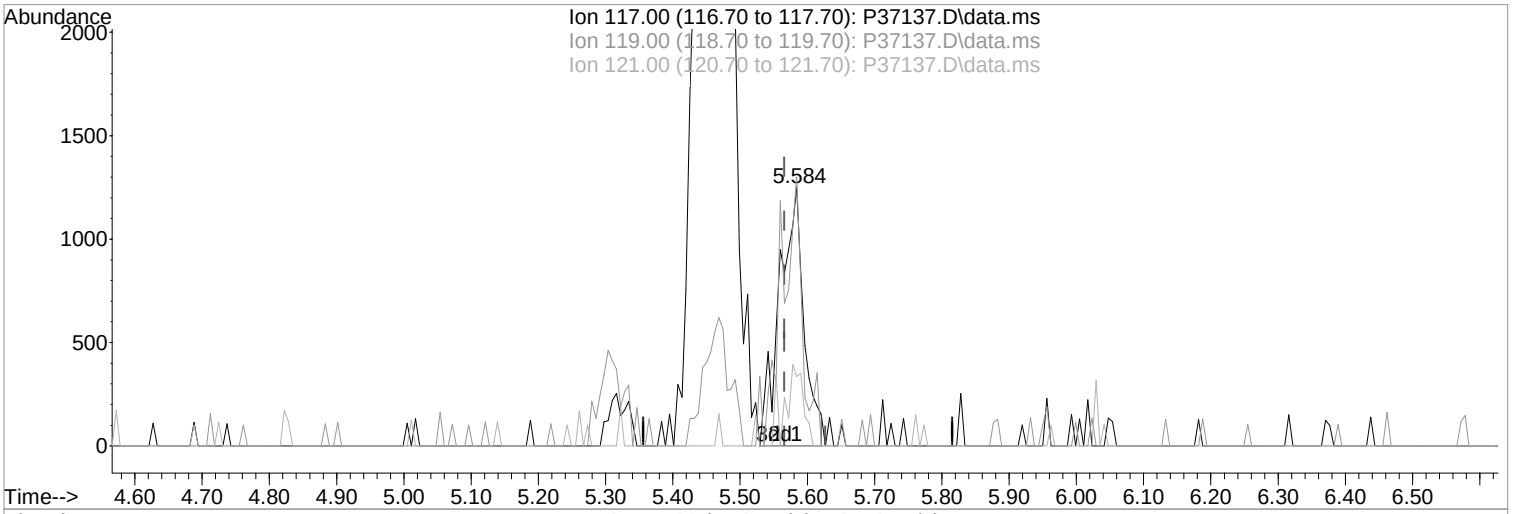
Before

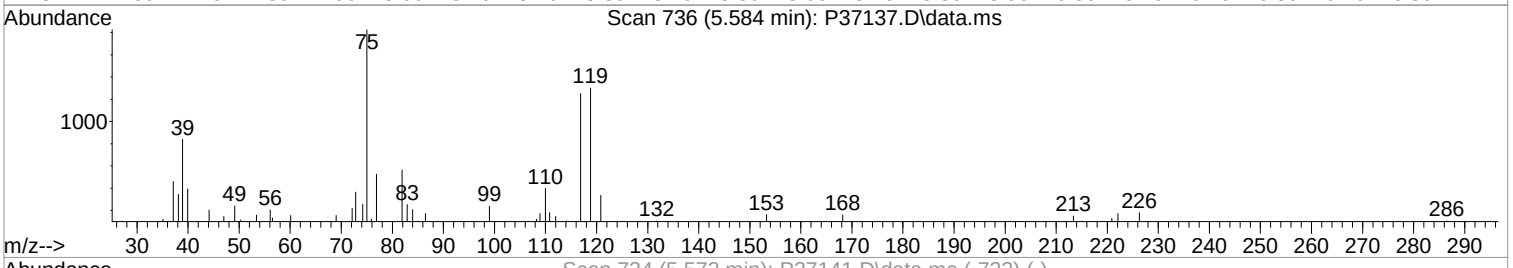
07/13/20

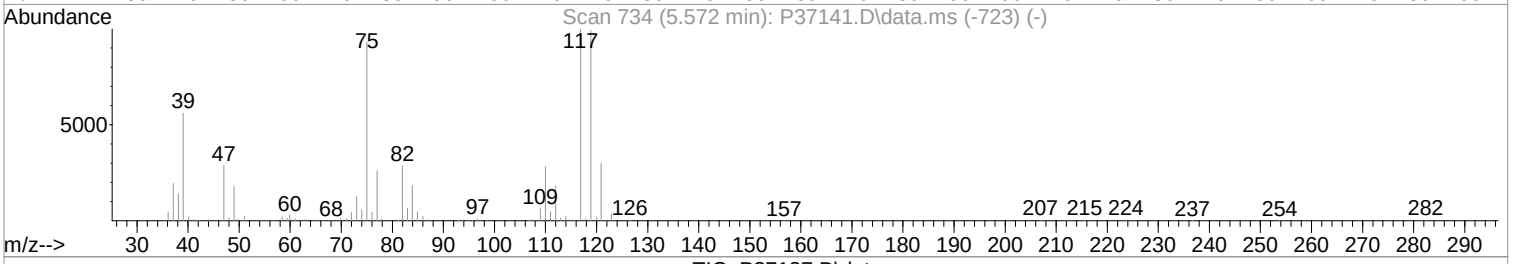
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(46) Carbontetrachloride (P)

5.584min (+0.018) 0.95 ppb m

response 3176

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	103.92
121.00	29.80	26.86
0.00	0.00	0.00

Manual Integration:

After

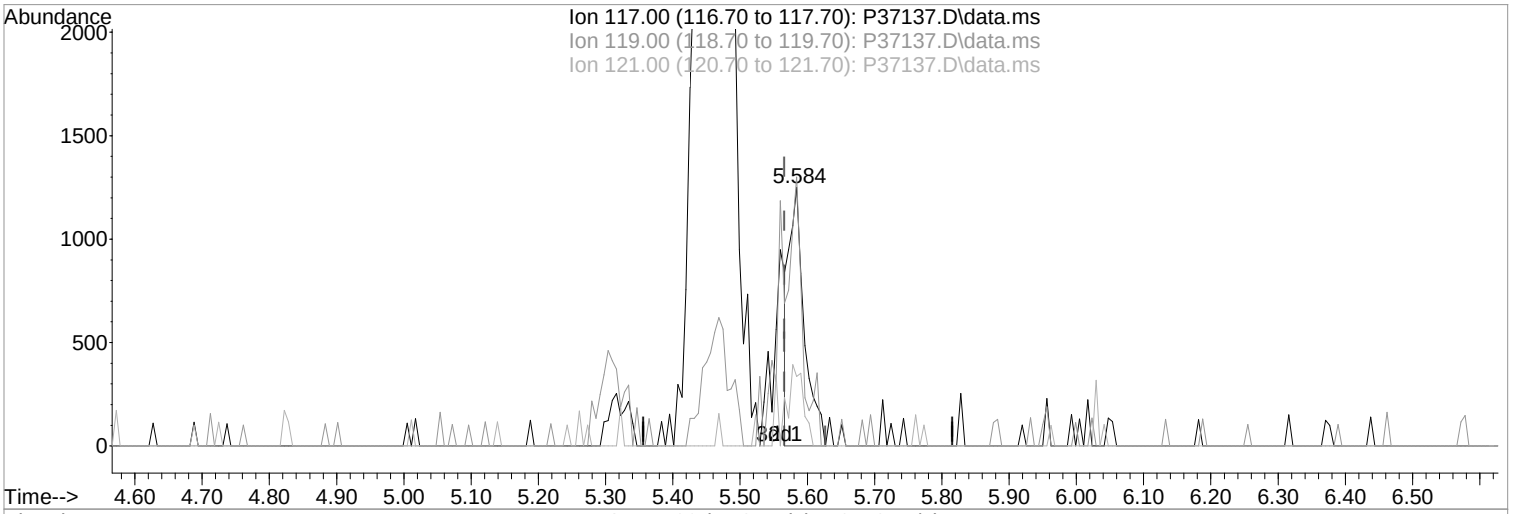
Split Peak

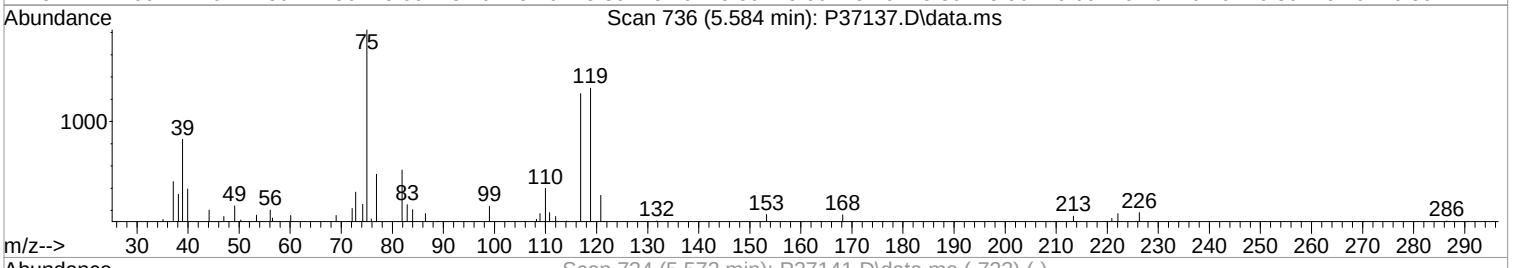
07/13/20

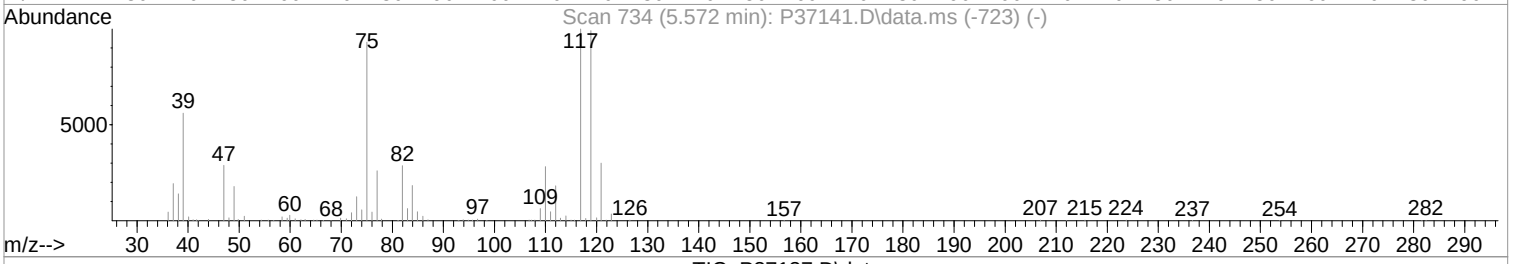
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(46) Carbontetrachloride (P)

5.584min (+0.018) 0.60 ppb

response 2012

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	103.92
121.00	29.80	26.86
0.00	0.00	0.00

Manual Integration:

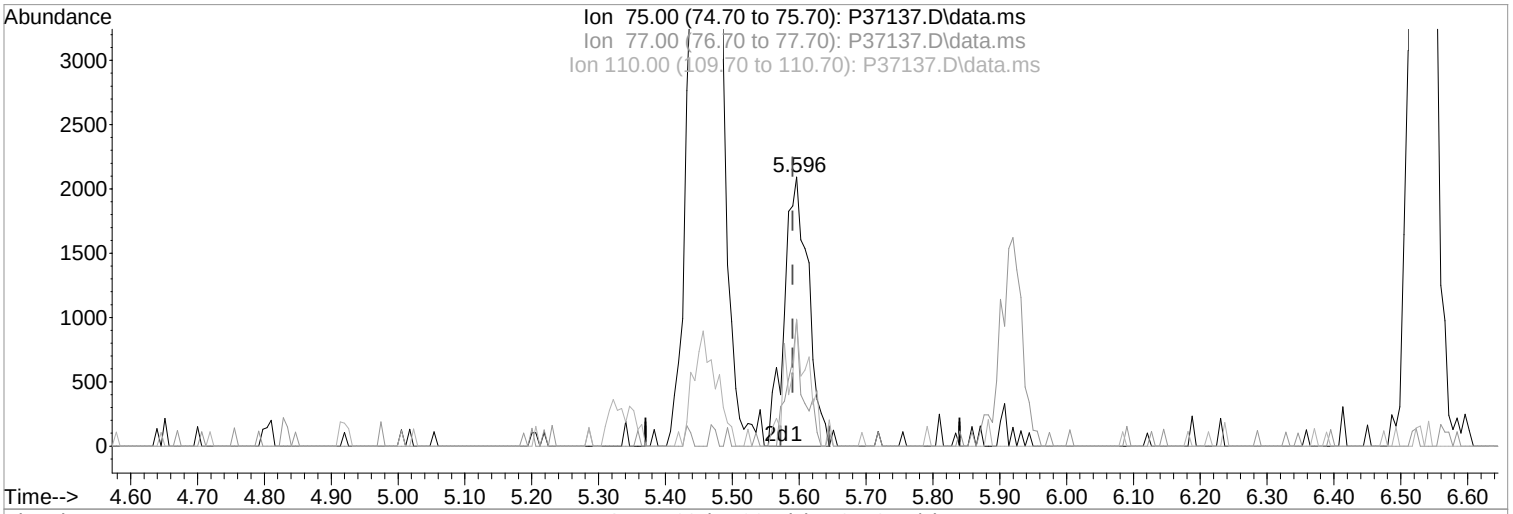
Before

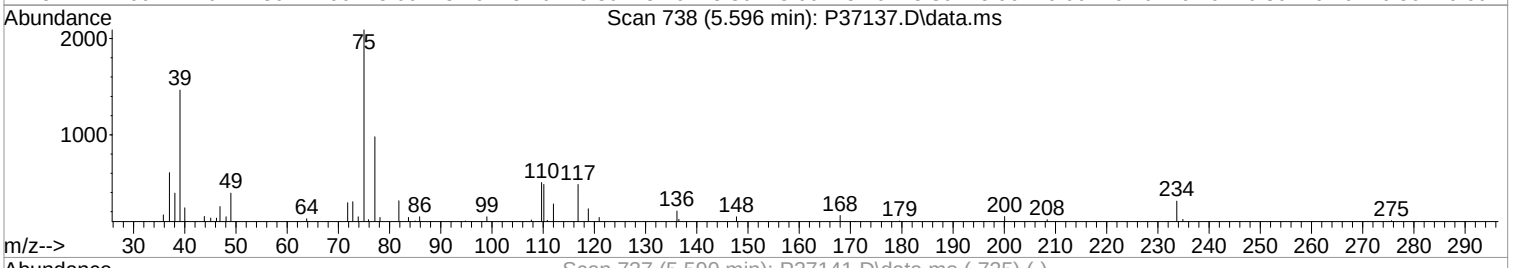
07/13/20

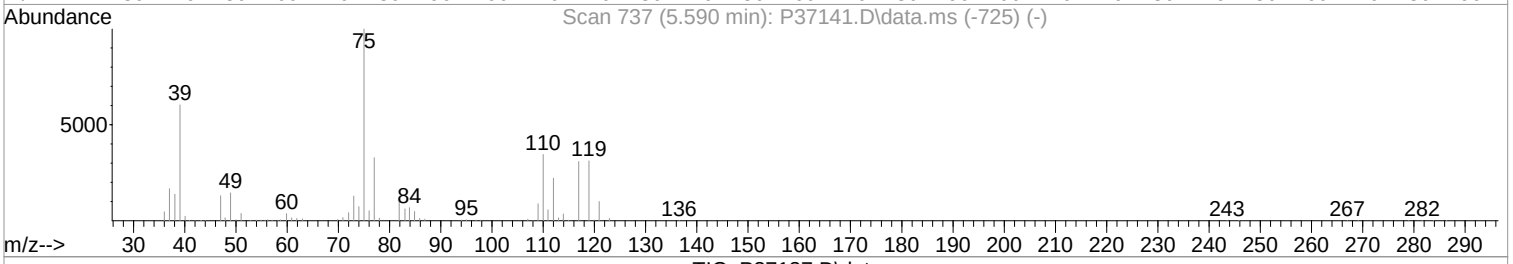
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(47) 1,1-Dichloropropene

5.596min (+0.006) 1.10 ppb m

response 5220

Ion	Exp%	Act%
75.00	100	100
77.00	32.80	46.80
110.00	34.60	24.04
0.00	0.00	0.00

Manual Integration:

After

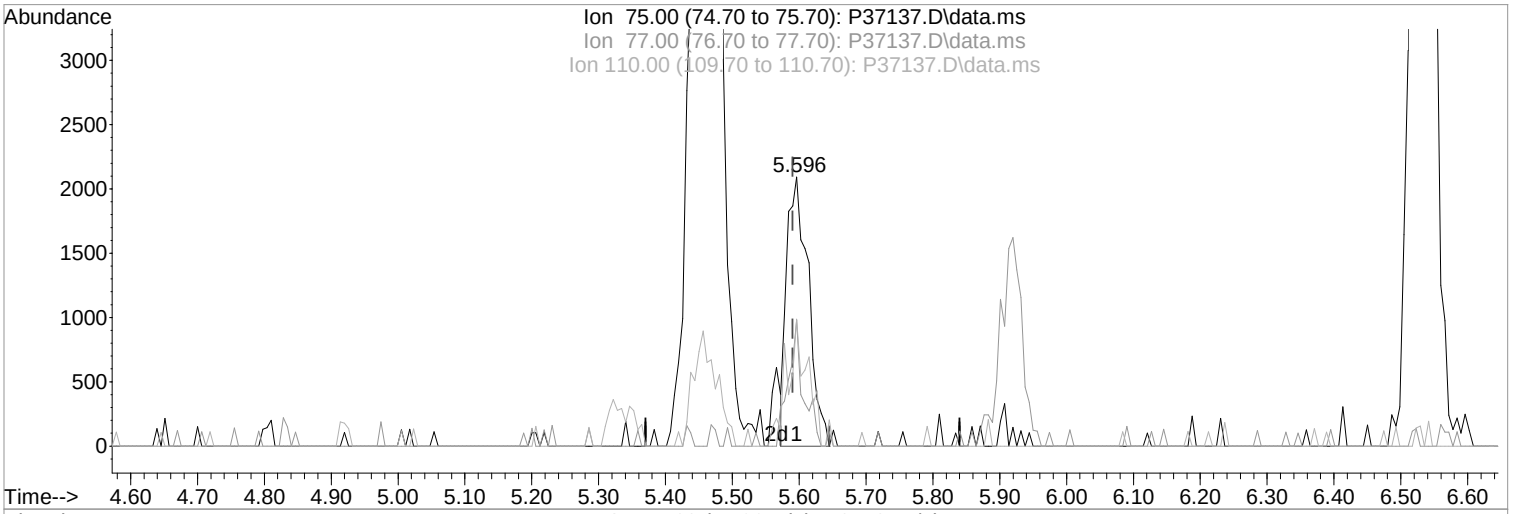
Split Peak

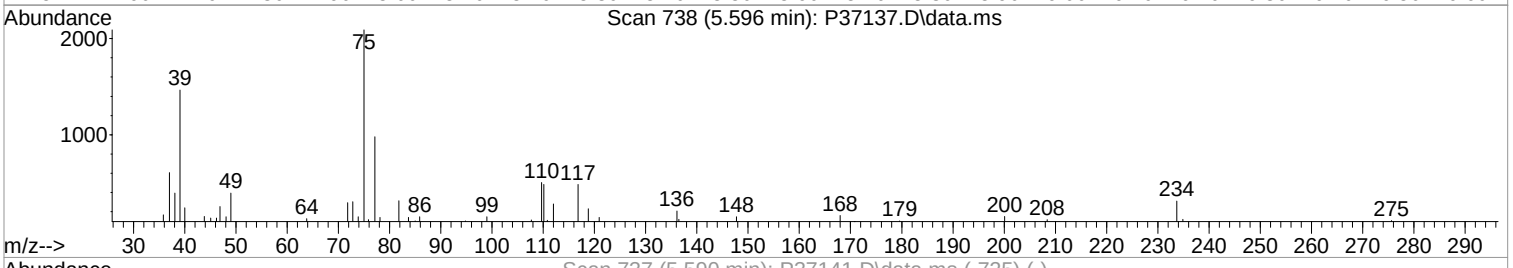
07/13/20

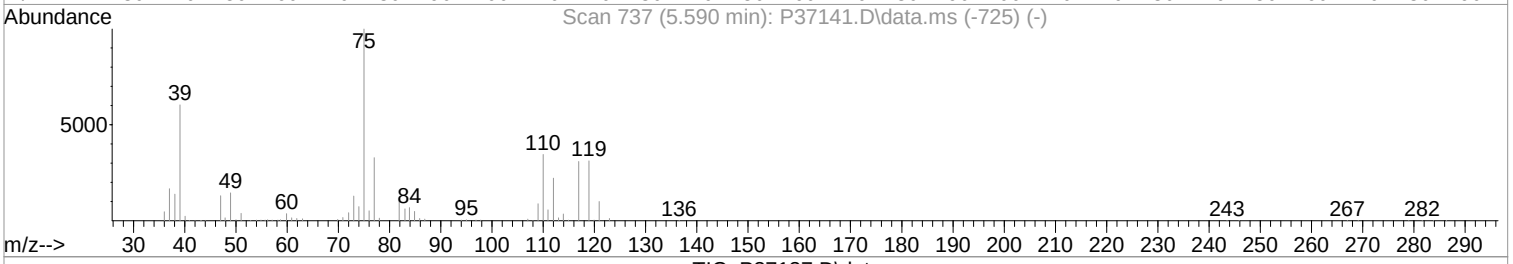
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(47) 1,1-Dichloropropene

5.596min (+0.006) 0.99 ppb

response 4697

Ion	Exp%	Act%
75.00	100	100
77.00	32.80	46.80
110.00	34.60	47.13
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:14:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.462	168	309333	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.535	114	501639	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	433933	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	201205	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	32643	11.33	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 22.66%#				
48) surr1,1,2-dichloroetha...	5.859	65	45754	11.47	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 22.94%#				
65) SURR3,Toluene-d8	8.321	98	150618	11.25	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 22.50%#				
70) SURR2,BFB	10.870	95	52855	10.72	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 21.44%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	3965	1.15	ppb		88
3) Chloromethane	1.335	50	3928	0.91	ppb		70
4) Vinyl Chloride	1.414	62	3919m	0.95	ppb		
5) Bromomethane	1.646	94	3520	1.05	ppb	#	70
6) Chloroethane	1.719	64	2258	1.02	ppb		99
7) Freon 21	1.878	67	5307	1.03	ppb		95
8) Trichlorofluoromethane	1.914	101	4219	1.02	ppb		92
9) Diethyl Ether	2.158	59	3060	1.02	ppb		97
10) Freon 123a	2.164	67	3682	1.04	ppb		90
11) Freon 123	2.225	83	4395	1.05	ppb	#	78
12) Acrolein	2.274	56	4163	5.13	ppb	#	65
13) 1,1-Diclethene	2.341	96	2672	1.12	ppb		99
14) Freon 113	2.347	101	3025	1.09	ppb		84
15) Acetone	2.414	43	3562	1.98	ppb		84
16) 2-Propanol	2.554	45	8496	21.33	ppb		99
17) Iodomethane	2.493	142	891	0.33	ppb		78
18) Carbon Disulfide	2.542	76	11415	1.25	ppb		97
19) Acetonitrile	2.682	40	1843m	8.29	ppb		
20) Allyl Chloride	2.688	76	2002	1.18	ppb	#	37
21) Methyl Acetate	2.719	43	5486	1.19	ppb		80
22) Methylene Chloride	2.816	84	4352	1.28	ppb	#	62
23) TBA	2.969	59	12830	19.90	ppb		98
24) Acrylonitrile	3.097	53	11569	5.82	ppb		98
25) Methyl-t-Butyl Ether	3.103	73	12053	1.09	ppb		86
26) trans-1,2-Dichloroethene	3.097	96	3049	1.09	ppb	#	87
28) 1,1-Diclethane	3.609	63	7193	1.17	ppb		87
29) Vinyl Acetate	3.707	86	151m	0.33	ppb		
30) DIPE	3.719	45	11843	1.10	ppb	#	77
31) 2-Chloro-1,3-Butadiene	3.731	53	5223	1.06	ppb	#	70
32) ETBE	4.267	59	9583	0.96	ppb		85
33) 2,2-Dichloropropane	4.450	77	4606m	1.02	ppb		
34) cis-1,2-Dichloroethene	4.469	96	4326m	1.20	ppb		
35) 2-Butanone	4.548	43	3470	1.44	ppb		92
36) Propionitrile	4.651	54	4656	5.40	ppb		85
37) Bromochloromethane	4.871	130	2557m	1.21	ppb		
38) Methacrylonitrile	4.926	67	2318	1.13	ppb	#	45
39) Tetrahydrofuran	4.975	42	3829	2.03	ppb	#	68
40) Chloroform	5.048	83	6624m	1.17	ppb		
41) 1,1,1-Trichloroethane	5.310	97	4862	1.09	ppb		87

1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:14:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.151	73	10956	1.10	ppb		90
44) Cyclohexane	5.383	41	3421m	1.04	ppb		
46) Carbontetrachloride	5.584	117	3176m	0.95	ppb		
47) 1,1-Dichloropropene	5.596	75	5220m	1.10	ppb		
49) Benzene	5.920	78	16370	1.13	ppb		97
50) 1,2-Dichloroethane	5.974	62	5324	1.05	ppb		90
51) Iso-Butyl Alcohol	5.980	43	6676	21.49	ppb		95
52) n-Heptane	6.365	43	4968	1.11	ppb	#	82
53) 1-Butanol	6.919	56	8293	42.90	ppb		94
54) Trichloroethene	6.846	130	4243	1.18	ppb	#	82
55) Methylcyclohexane	7.047	55	4897	1.10	ppb	#	65
56) 1,2-Diclpropane	7.139	63	4016	1.04	ppb		95
57) Dibromomethane	7.279	93	2228	1.01	ppb		97
58) 1,4-Dioxane	7.352	88	1726	21.78	ppb		89
59) Methyl Methacrylate	7.364	69	3218	0.96	ppb	#	81
60) Bromodichloromethane	7.505	83	3913	0.96	ppb		82
62) 2-Chloroethylvinyl Ether	7.919	63	1714	1.02	ppb		100
63) cis-1,3-Dichloropropene	8.047	75	5085	0.92	ppb		91
64) 4-Methyl-2-pentanone	8.254	43	5097	0.99	ppb		92
66) Toluene	8.389	91	16928	1.10	ppb		98
67) trans-1,3-Dichloropropene	8.675	75	4432	0.88	ppb		74
68) Ethyl Methacrylate	8.809	69	5268	0.93	ppb		99
69) 1,1,2-Trichloroethane	8.858	97	3780	1.10	ppb		94
72) Tetrachloroethene	8.974	164	2777	1.05	ppb		87
73) 2-Hexanone	9.157	43	3759	0.97	ppb	#	63
74) 1,3-Dichloropropane	9.029	76	7241	1.19	ppb		90
75) Dibromochloromethane	9.254	129	2462	0.91	ppb	#	87
76) N-Butyl Acetate	9.297	43	6507	0.91	ppb		86
77) 1,2-Dibromoethane	9.346	107	3845	1.16	ppb		92
78) Chlorobenzene	9.827	112	9976	1.03	ppb		82
79) 3-CBTF	9.833	180	4479	1.00	ppb	#	71
80) 4-CBTF	9.900	180	3893	0.97	ppb		88
81) 1,1,1,2-Tetrachloroethane	9.919	131	2910	0.98	ppb	#	76
82) Ethylbenzene	9.937	106	4920	0.97	ppb	#	72
83) (m+p)Xylene	10.053	106	12839	2.11	ppb		96
84) o-Xylene	10.406	106	6458	1.09	ppb	#	78
85) Styrene	10.425	104	9756	0.97	ppb		91
87) Bromoform	10.589	173	1698	1.02	ppb		82
88) 2-CBTF	10.662	180	4670	1.14	ppb	#	92
89) Isopropylbenzene	10.742	105	15504	1.12	ppb		95
90) Cyclohexanone	10.827	55	18052	21.63	ppb		98
91) trans-1,4-Dichloro-2-B...	11.065	53	1154	0.99	ppb		95
92) 1,1,2,2-Tetrachloroethane	11.016	83	4823	1.07	ppb		88
93) Bromobenzene	10.992	156	3728	1.03	ppb	#	92
94) 1,2,3-Trichloropropane	11.047	110	1795	1.24	ppb	#	75
95) n-Propylbenzene	11.095	91	16934	1.06	ppb		98
96) 2-Chlorotoluene	11.162	91	11875	1.15	ppb		96
97) 3-Chlorotoluene	11.211	91	11250	1.14	ppb		98
98) 4-Chlorotoluene	11.248	91	12460	1.07	ppb		94
99) 1,3,5-Trimethylbenzene	11.242	105	13278	1.12	ppb		90
100) tert-Butylbenzene	11.516	119	10906	1.10	ppb		85
101) 1,2,4-Trimethylbenzene	11.553	105	13195	1.10	ppb		95
102) 3,4-DCBTF	11.620	214	3497	1.07	ppb	#	67
103) sec-Butylbenzene	11.693	105	15581	1.09	ppb		93
104) p-Isopropyltoluene	11.815	119	13296	1.08	ppb		96
105) 1,3-Dclbenz	11.784	146	7697	1.08	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:14:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

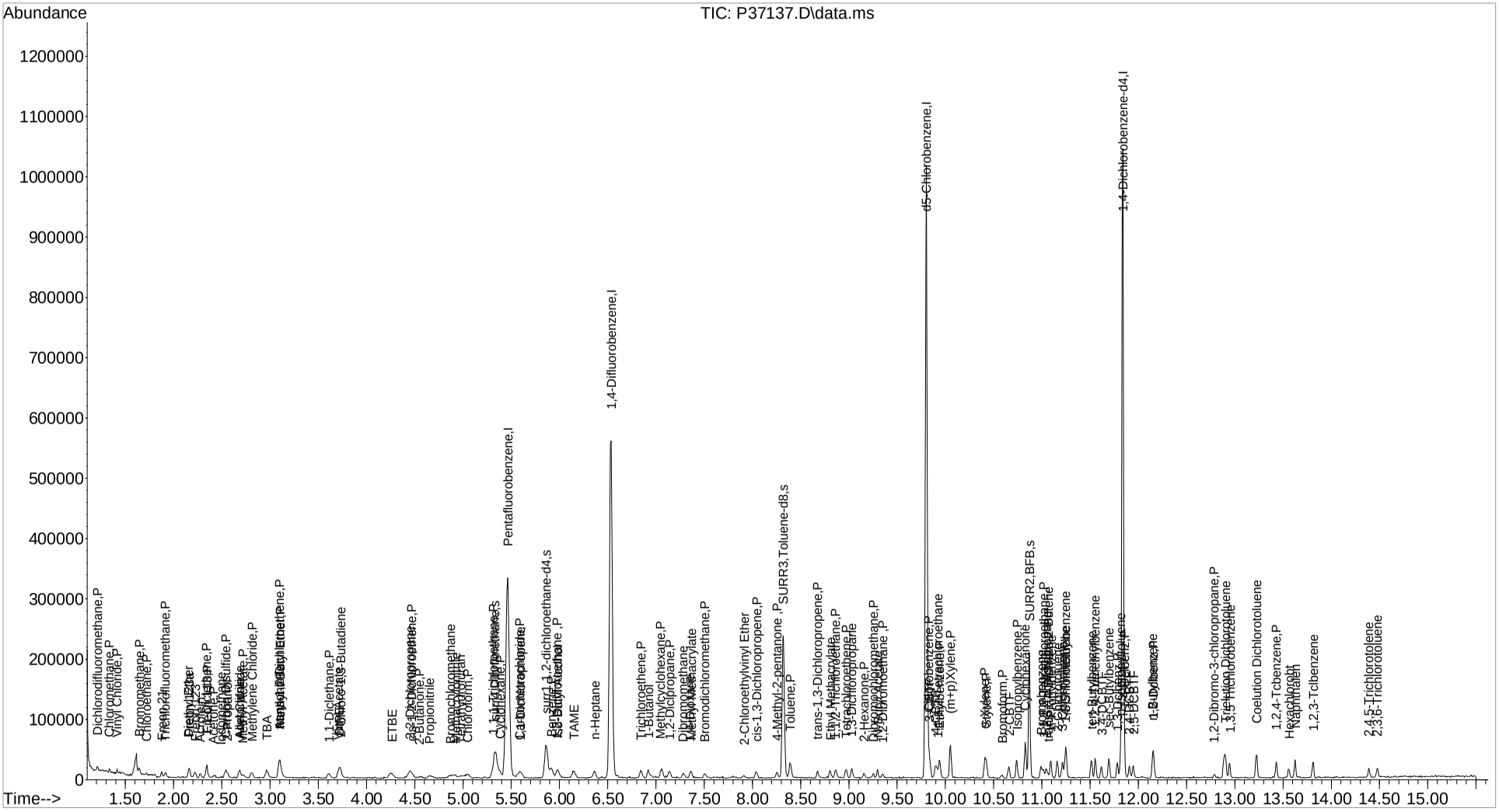
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
106) 1,4-Dclbenz	11.857	146	8673	1.20	ppb		93
107) 2,4-DCBTF	11.906	214	3306m	1.08	ppb		
108) 2,5-DCBTF	11.949	214	3733	1.14	ppb		90
109) n-Butylbenzene	12.150	91	11866	1.03	ppb		97
110) 1,2-Dclbenz	12.156	146	7675	1.06	ppb	#	66
111) 1,2-Dibromo-3-chloropr...	12.784	157	898	0.89	ppb	#	68
112) Trielution Dichlorotol...	12.900	125	17943	3.11	ppb	#	85
113) 1,3,5 Trichlorobenzene	12.949	180	5485	1.11	ppb		97
114) Coelution Dichlorotoluene	13.223	125	12874	2.03	ppb		93
115) 1,2,4-Tcbenzene	13.430	180	5169	0.99	ppb	#	71
116) Hexachlorobt	13.564	225	2392	1.15	ppb	#	70
117) Naphthalen	13.625	128	13920	0.92	ppb		90
118) 1,2,3-Tclbenzene	13.814	180	5697	1.06	ppb		94
119) 2,4,5-Trichlorotolene	14.387	159	2722	0.83	ppb		96
120) 2,3,6-Trichlorotoluene	14.479	159	2715m	0.91	ppb		

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

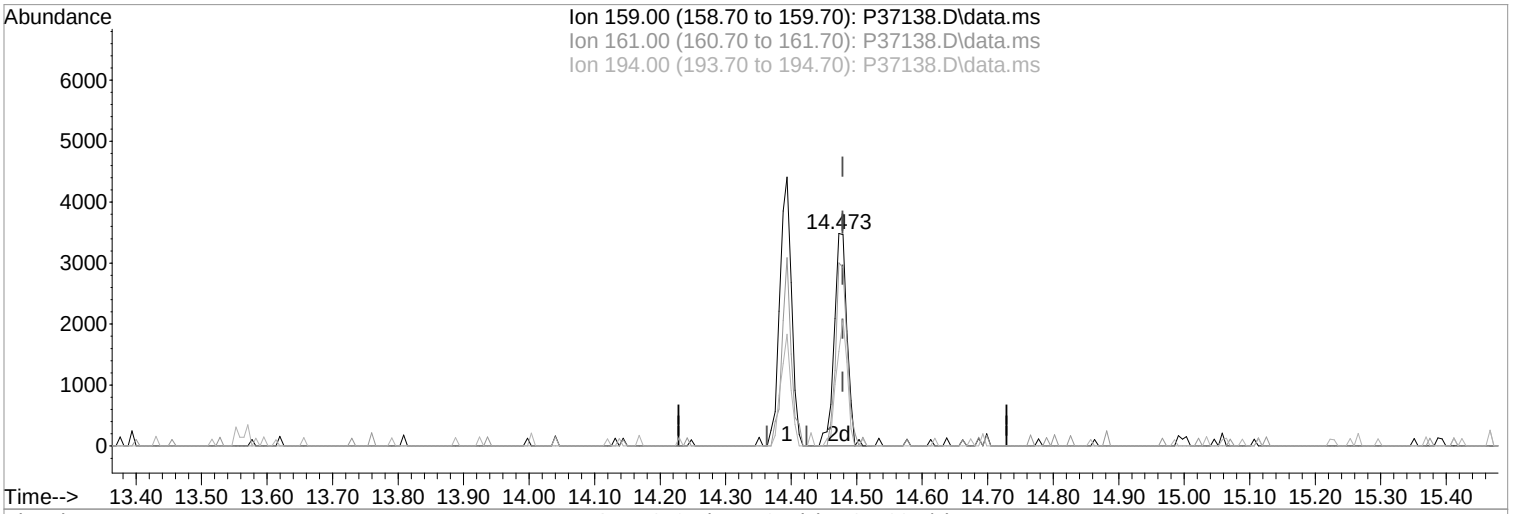
Quant Time: Jul 13 16:14:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

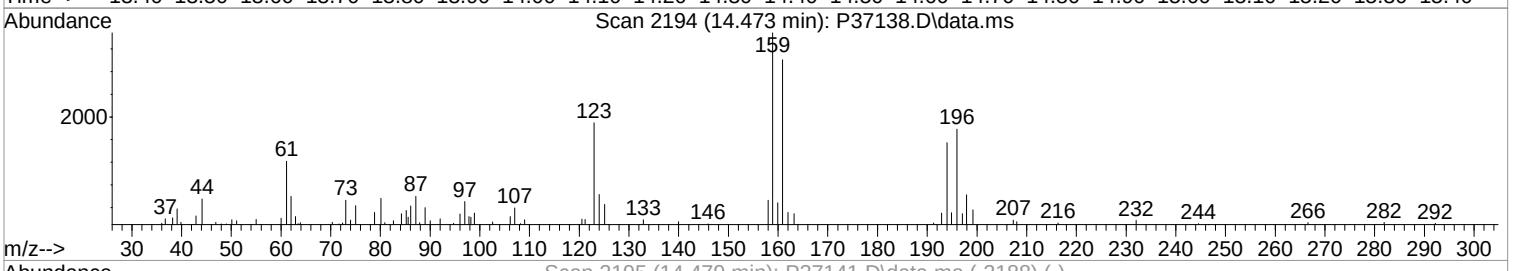


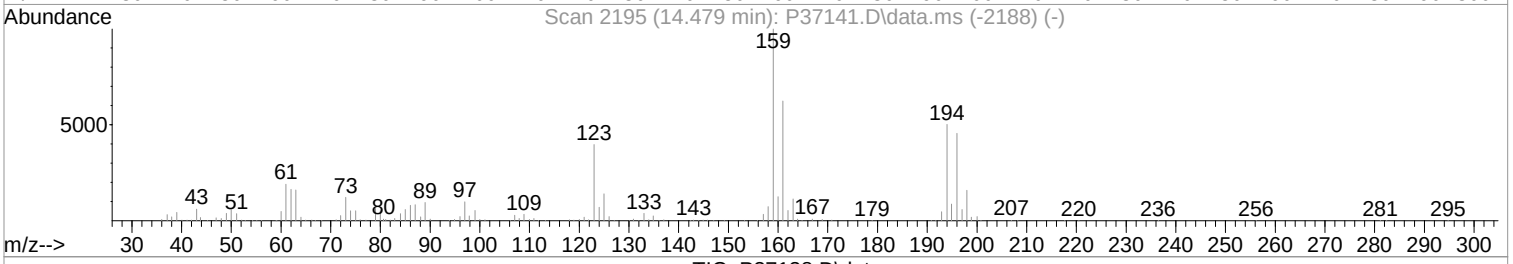
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(120) 2,3,6-Trichlorotoluene

14.473min (-0.006) 1.52 ppb m

response 4721

Ion	Exp%	Act%
159.00	100	100
161.00	62.40	86.26#
194.00	50.20	44.42
0.00	0.00	0.00

Manual Integration:

After

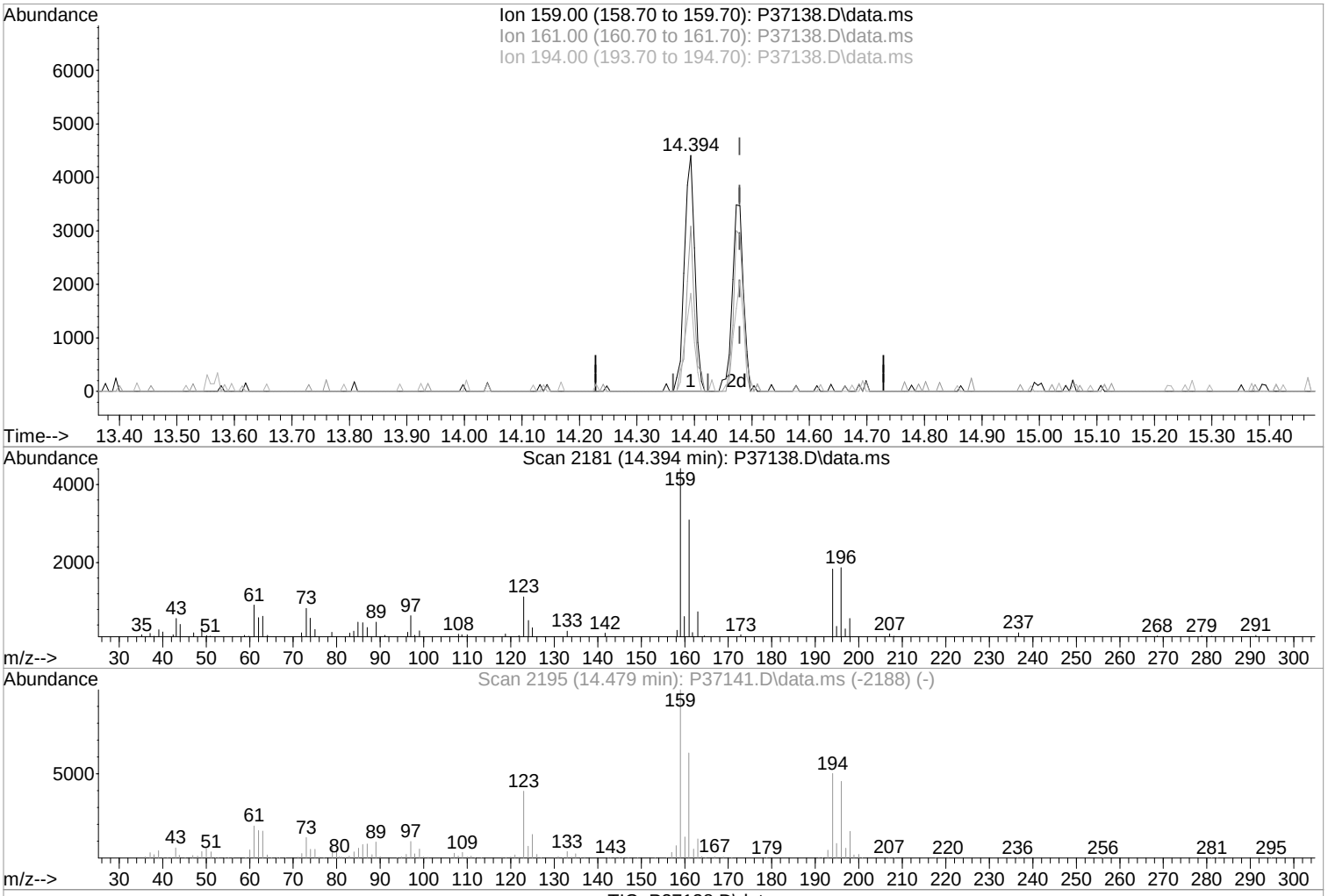
Wrong peak selected.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37138.D\data.ms

(120) 2,3,6-Trichlorotoluene

14.394min (-0.085) 1.78 ppb

response 5518

Ion	Exp%	Act%
159.00	100	100
161.00	62.40	70.03
194.00	50.20	41.58
0.00	0.00	0.00

Manual Integration:

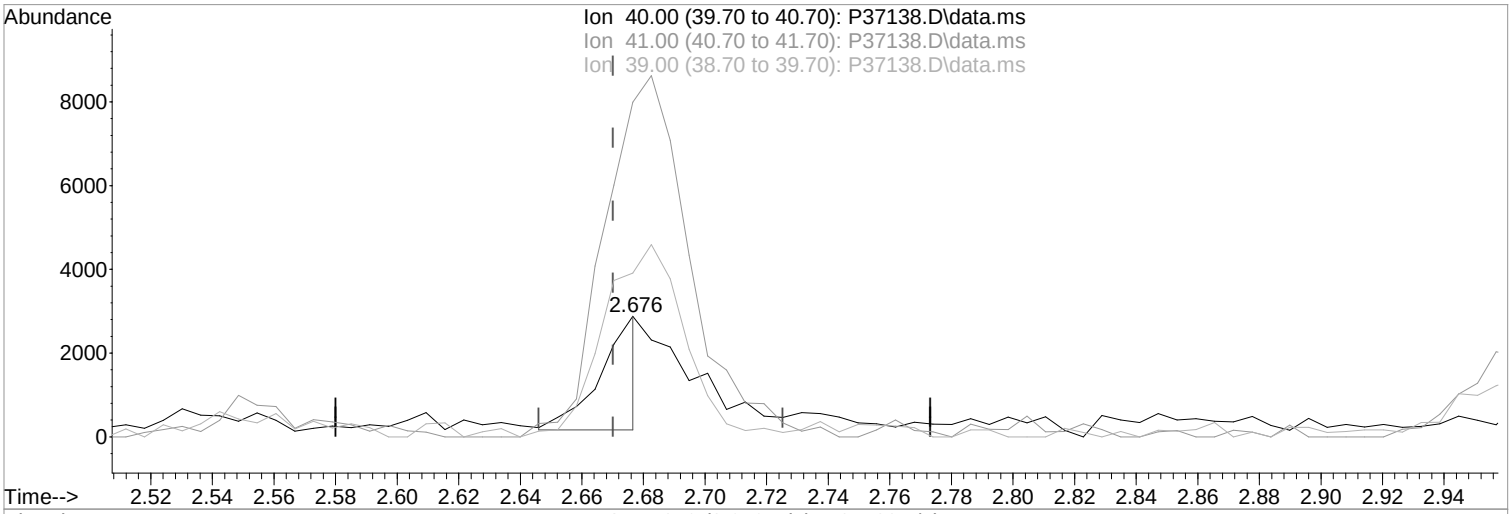
Before

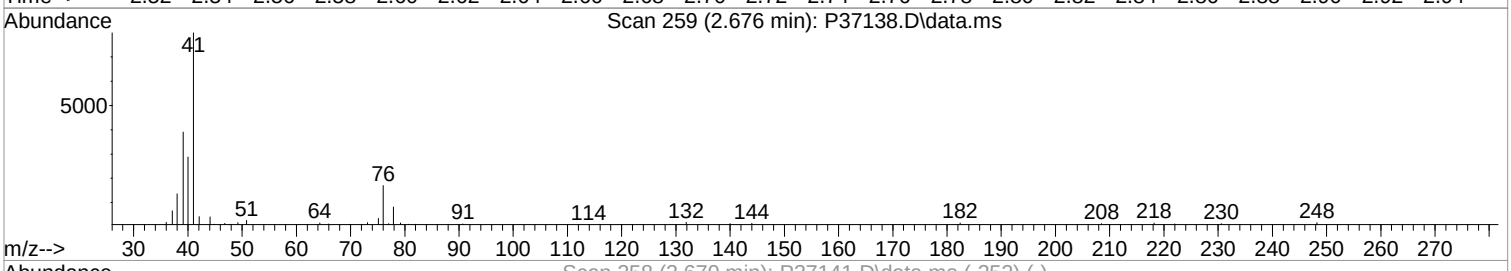
07/13/20

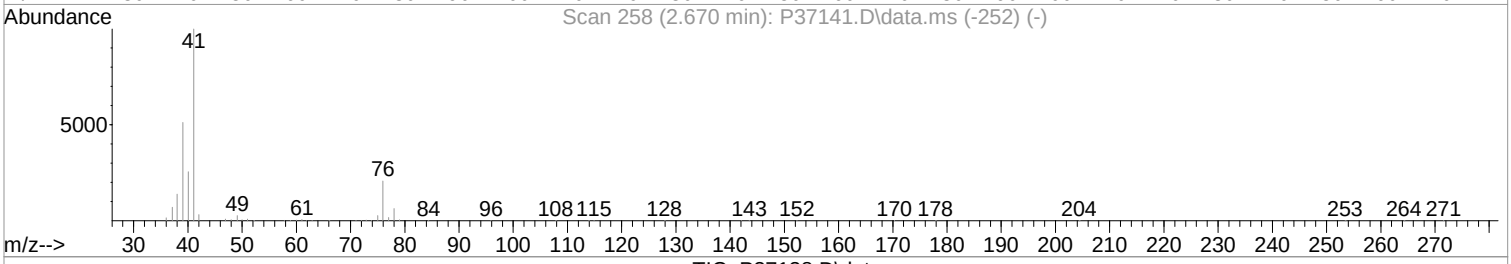
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 10.91 ppb m

response 2415

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	277.40#
39.00	200.50	135.61#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

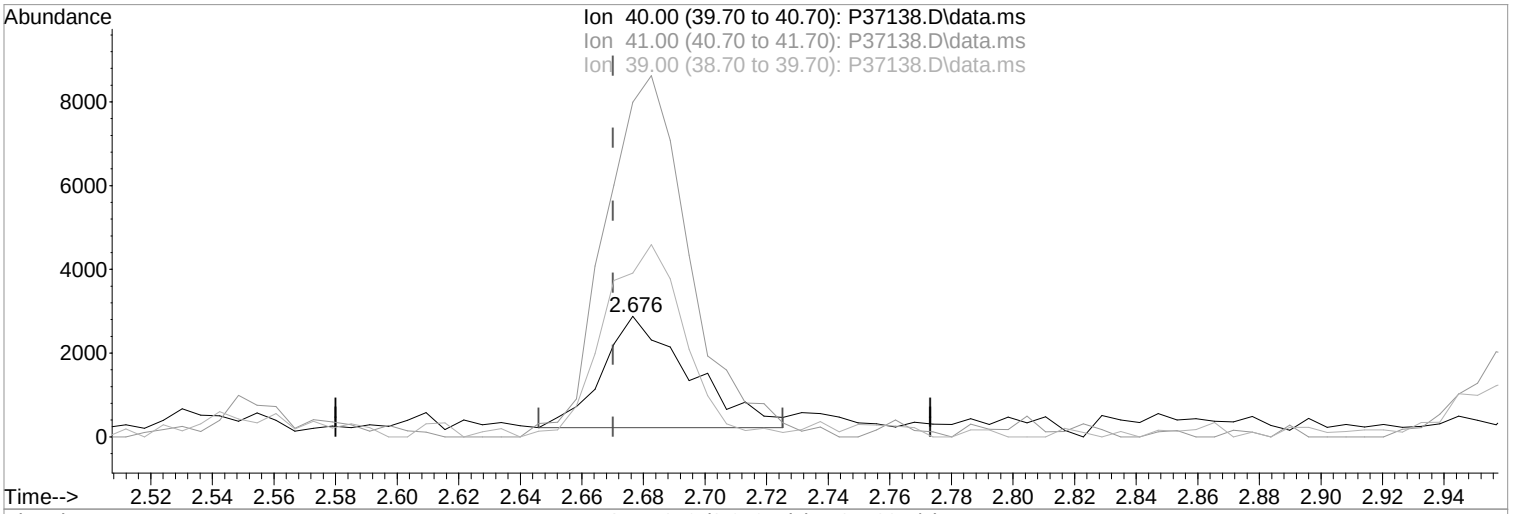
07/13/20

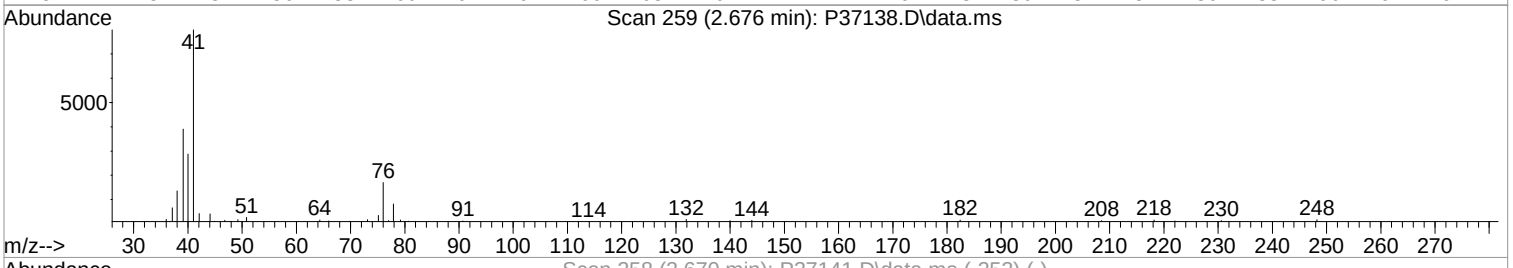
1st 07/14/20
2nd 07/14/20

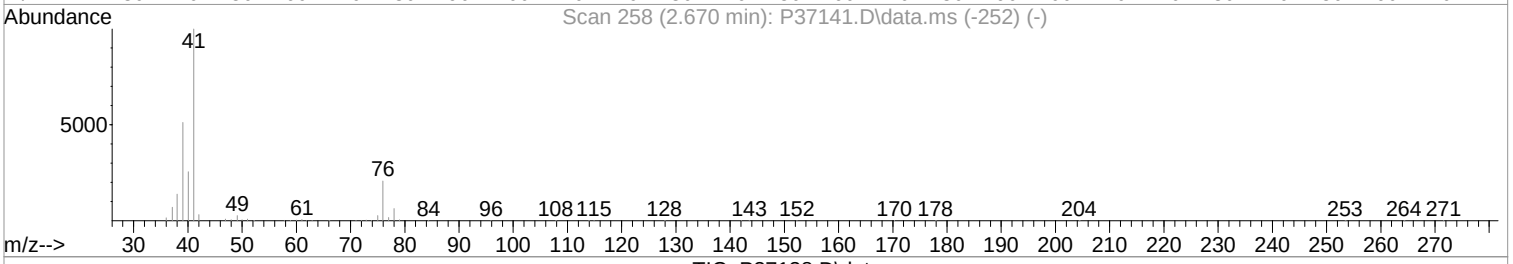
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 23.70 ppb

response 5244

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	277.40#
39.00	200.50	135.61#
0.00	0.00	0.00

Manual Integration:

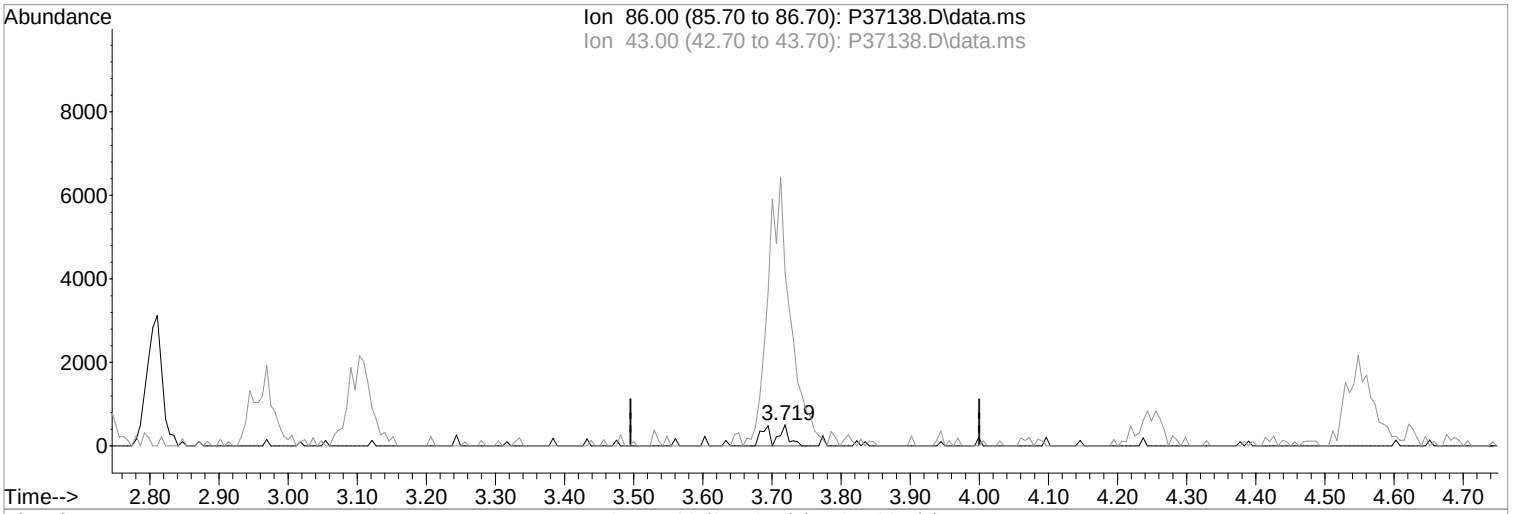
Before

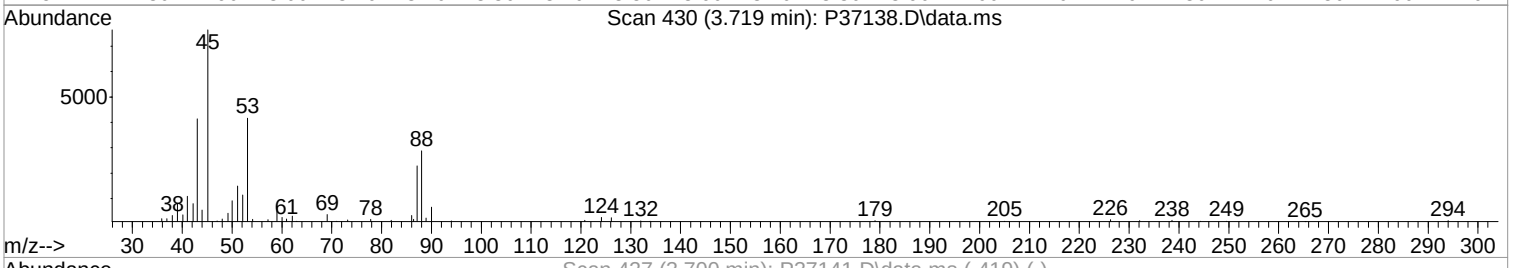
07/13/20

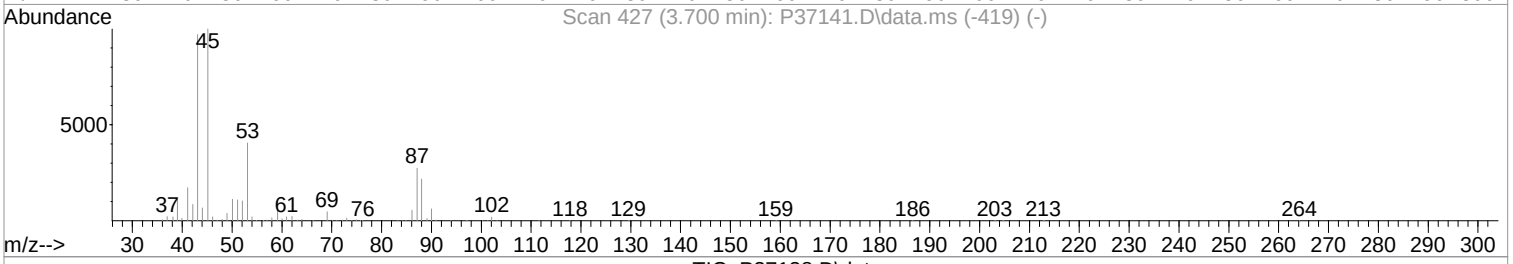
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(29) Vinyl Acetate

3.719min (+0.025) 2.05 ppb m

response 920

Ion	Exp%	Act%
86.00	100	100
43.00	1783.00	1239.22#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

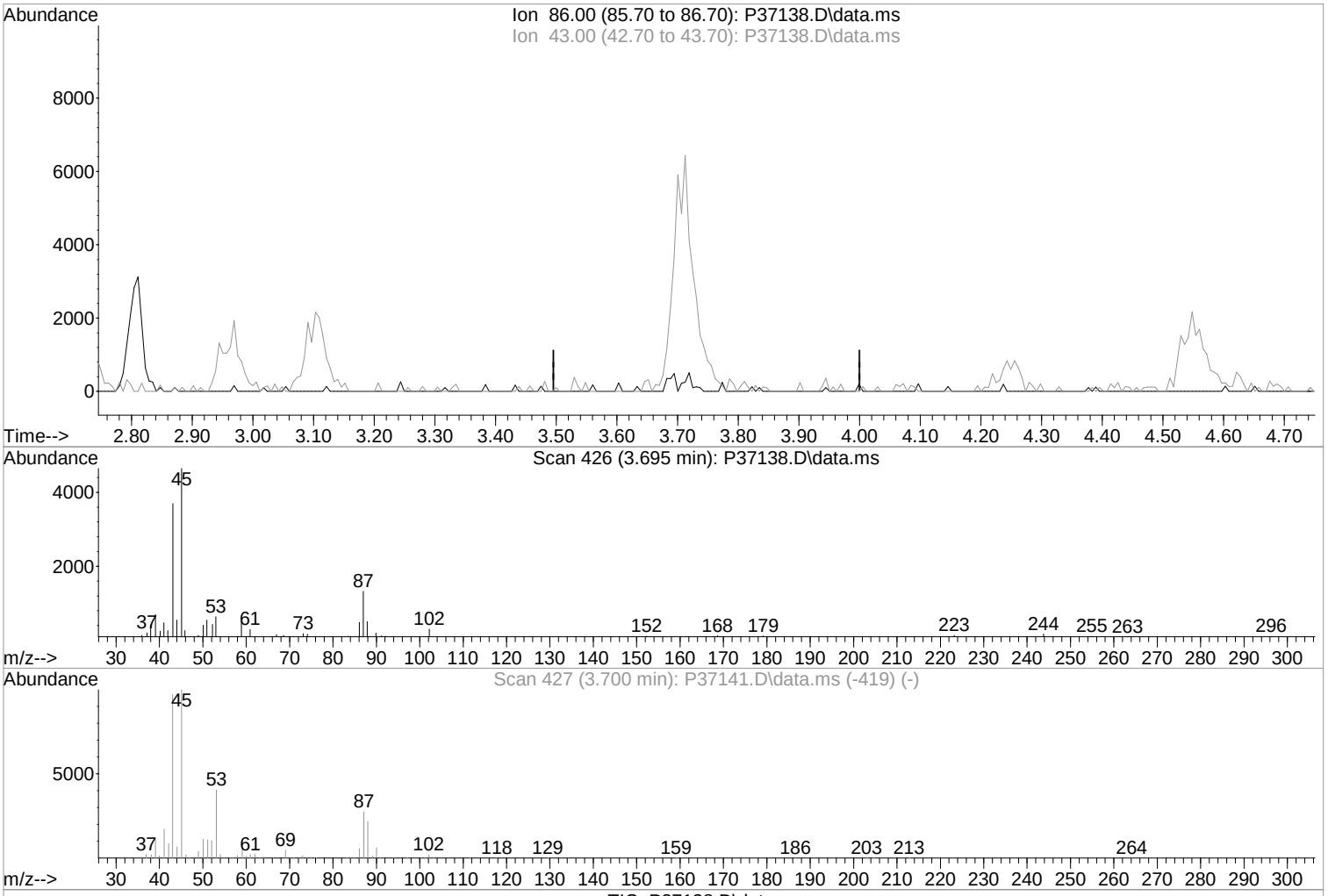
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37138.D\data.ms

(29) Vinyl Acetate

3.694min (-3.694) 0.00 ppb

response 0

Ion	Exp%	Act%
86.00	100	0.00
43.00	1783.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

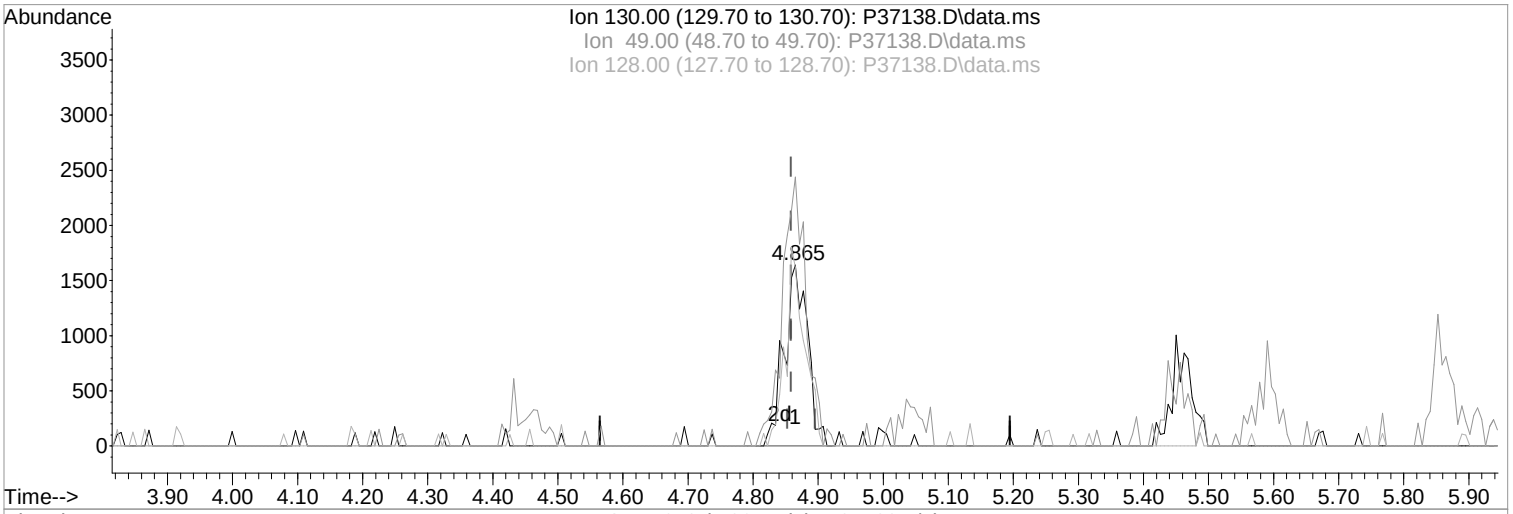
Before

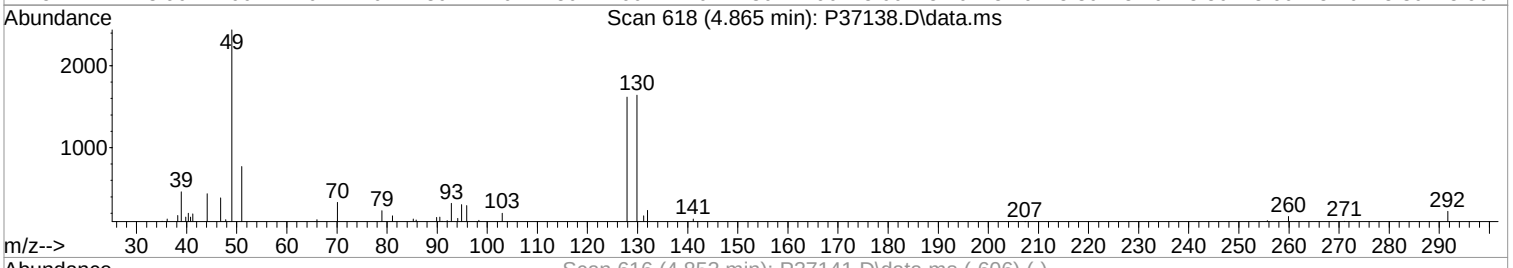
07/13/20

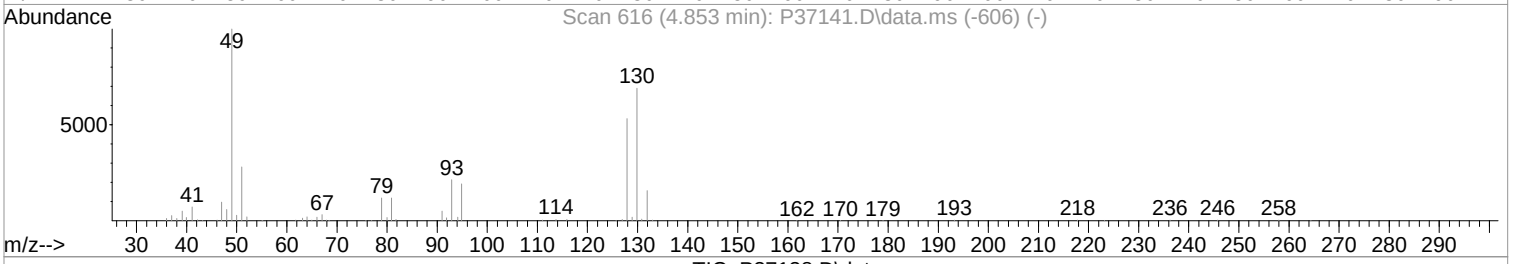
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(37) Bromochloromethane

4.865min (+0.006) 1.95 ppb m

response 4104

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	148.63
128.00	77.00	98.60#
0.00	0.00	0.00

Manual Integration:

After

Split Peak

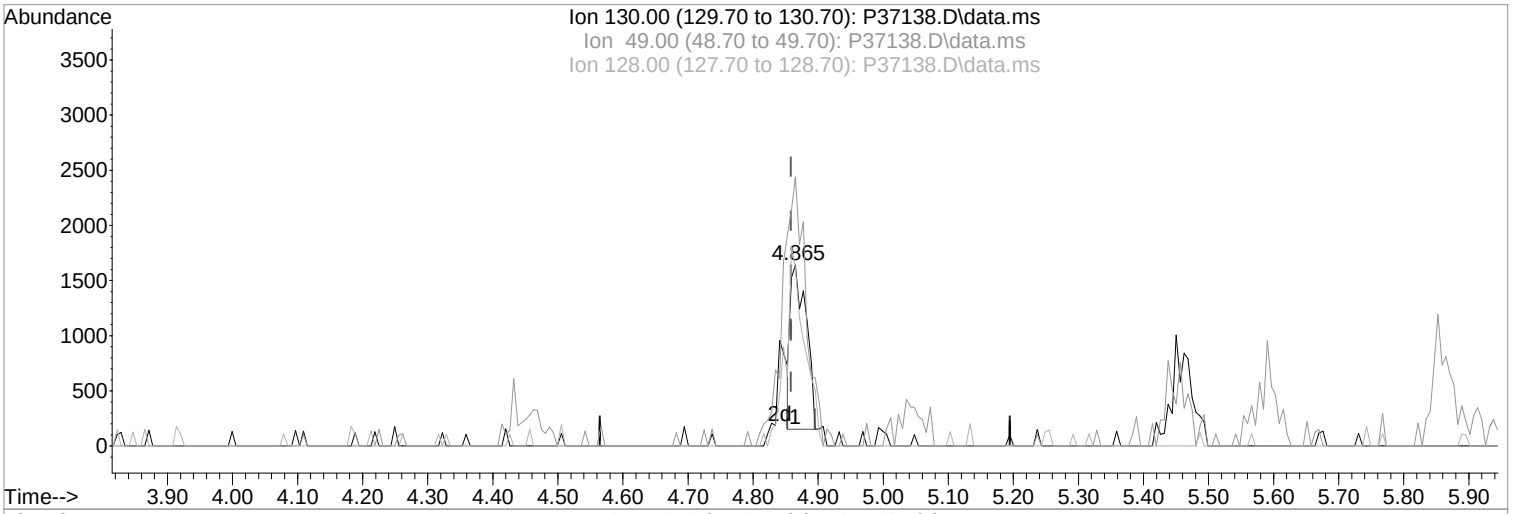
07/13/20

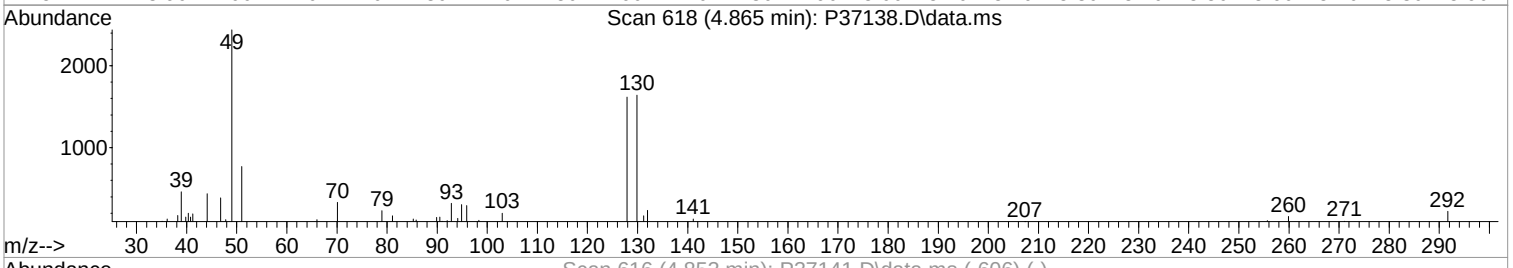
1st 07/14/20
2nd 07/14/20

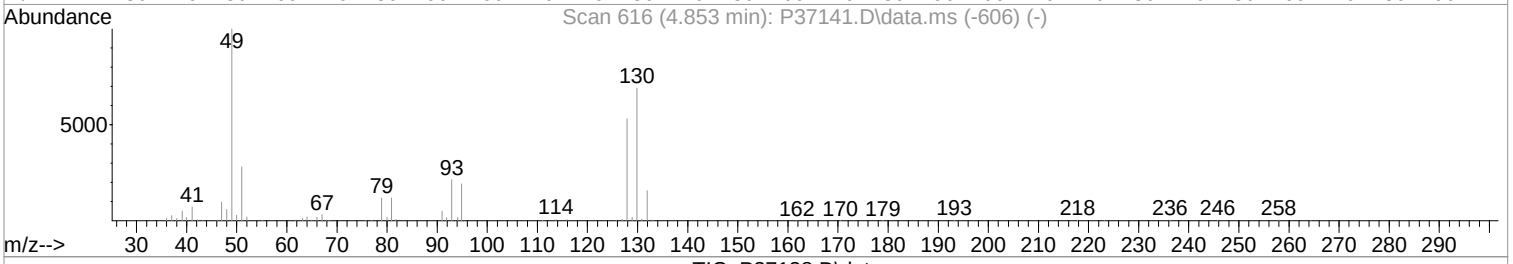
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(37) Bromochloromethane

4.865min (+0.006) 1.18 ppb

response 2485

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	148.63
128.00	77.00	98.60#
0.00	0.00	0.00

Manual Integration:

Before

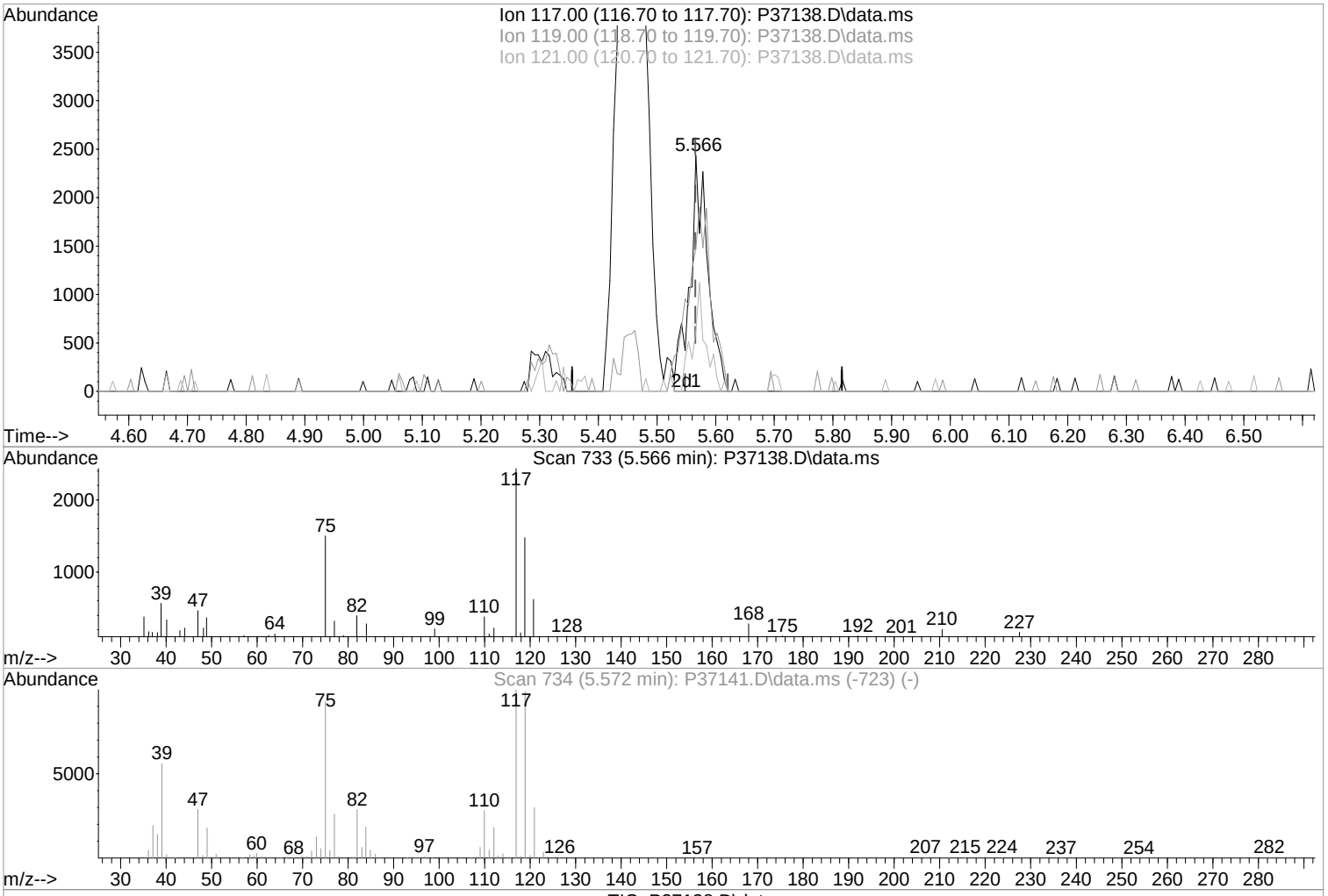
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37138.D\data.ms

(46) Carbontetrachloride (P)

5.566min (+0.000) 1.57 ppb m

response 5194

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	60.59#
121.00	29.80	25.45
0.00	0.00	0.00

Manual Integration:

After

Split Peak

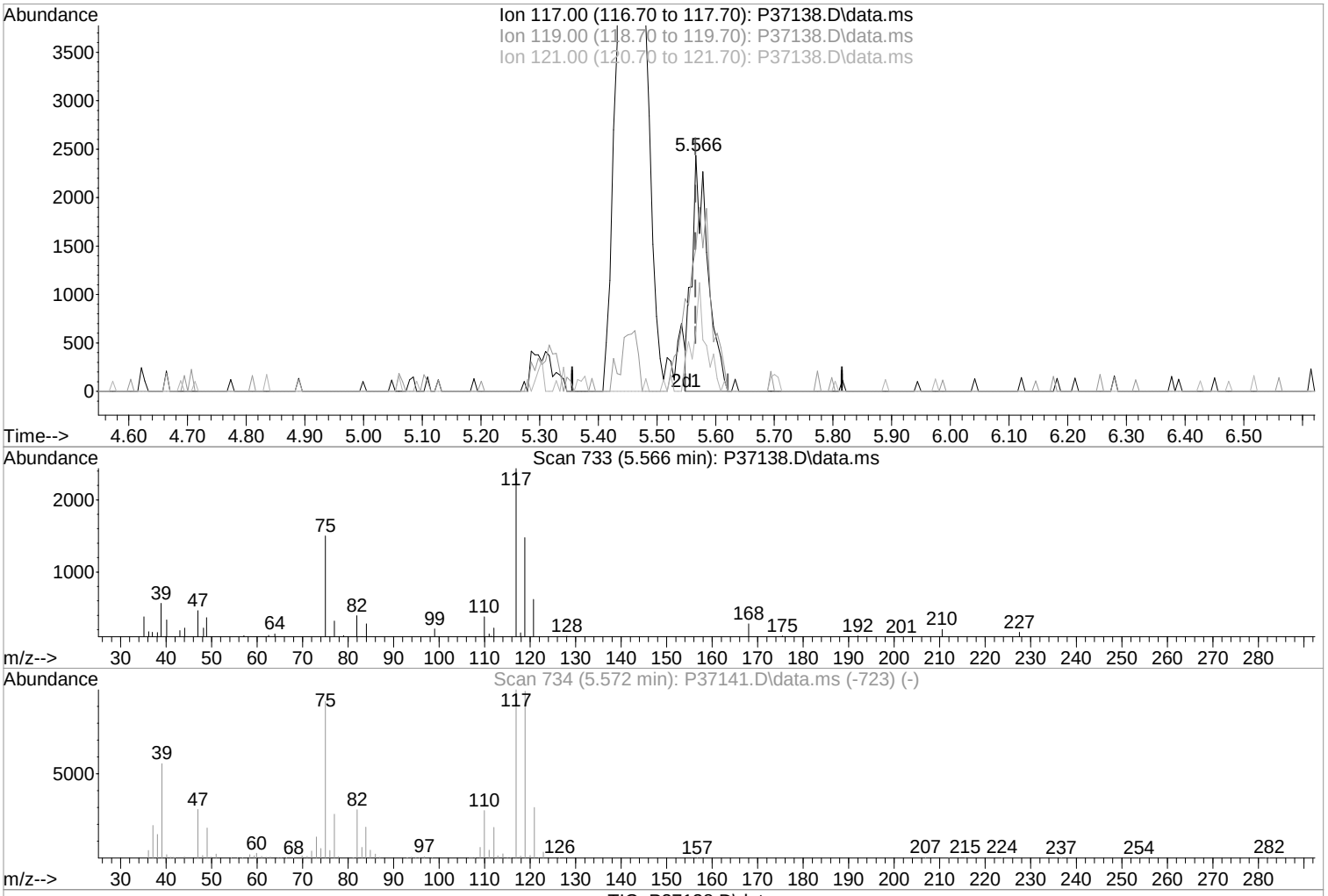
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37138.D\data.ms

(46) Carbontetrachloride (P)

5.566min (+0.000) 1.39 ppb

response 4594

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	60.59#
121.00	29.80	25.45
0.00	0.00	0.00

Manual Integration:

Before

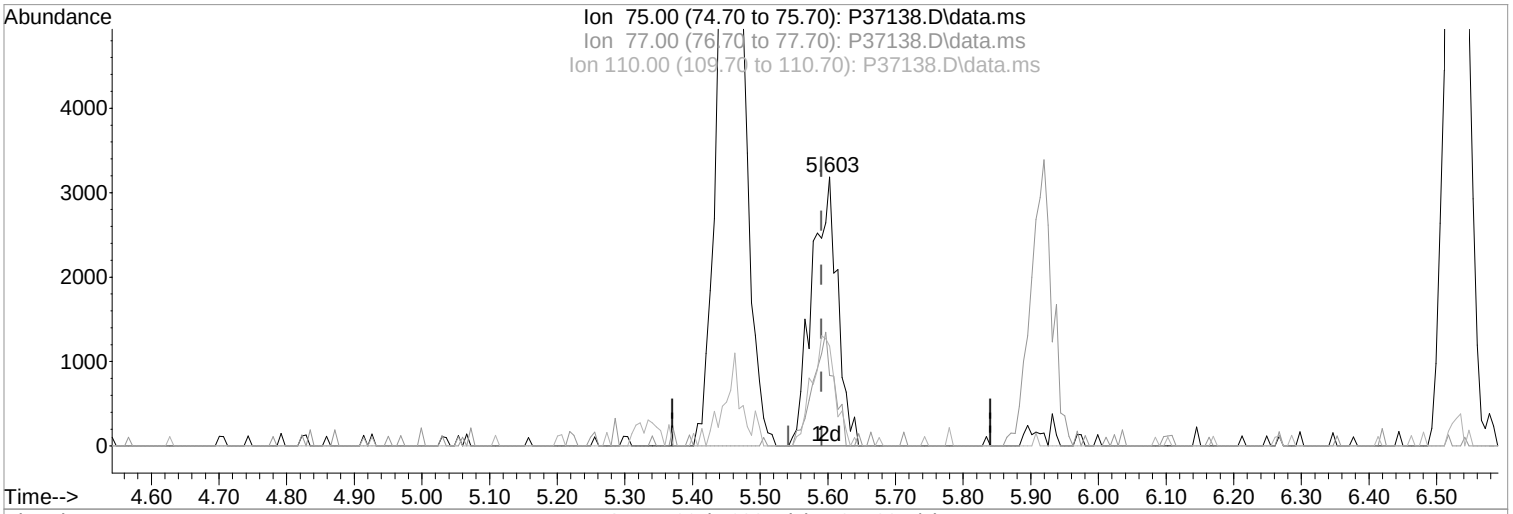
07/13/20

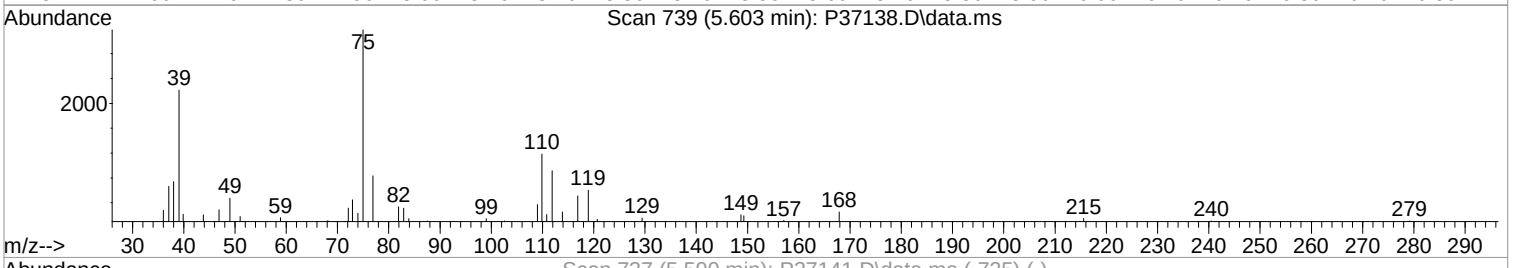
1st 07/14/20
2nd 07/14/20

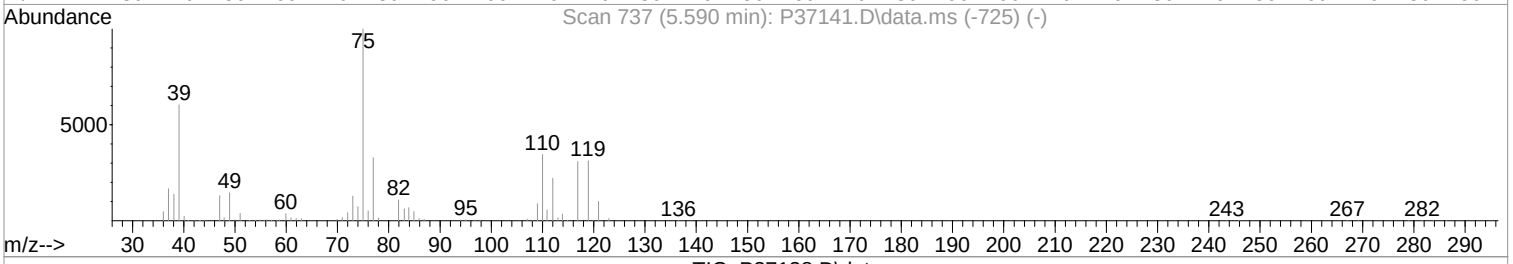
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(47) 1,1-Dichloropropene

5.603min (+0.012) 1.78 ppb m

response 8392

Ion	Exp%	Act%
75.00	100	100
77.00	32.80	26.25
110.00	34.60	37.14
0.00	0.00	0.00

Manual Integration:

After

Split Peak

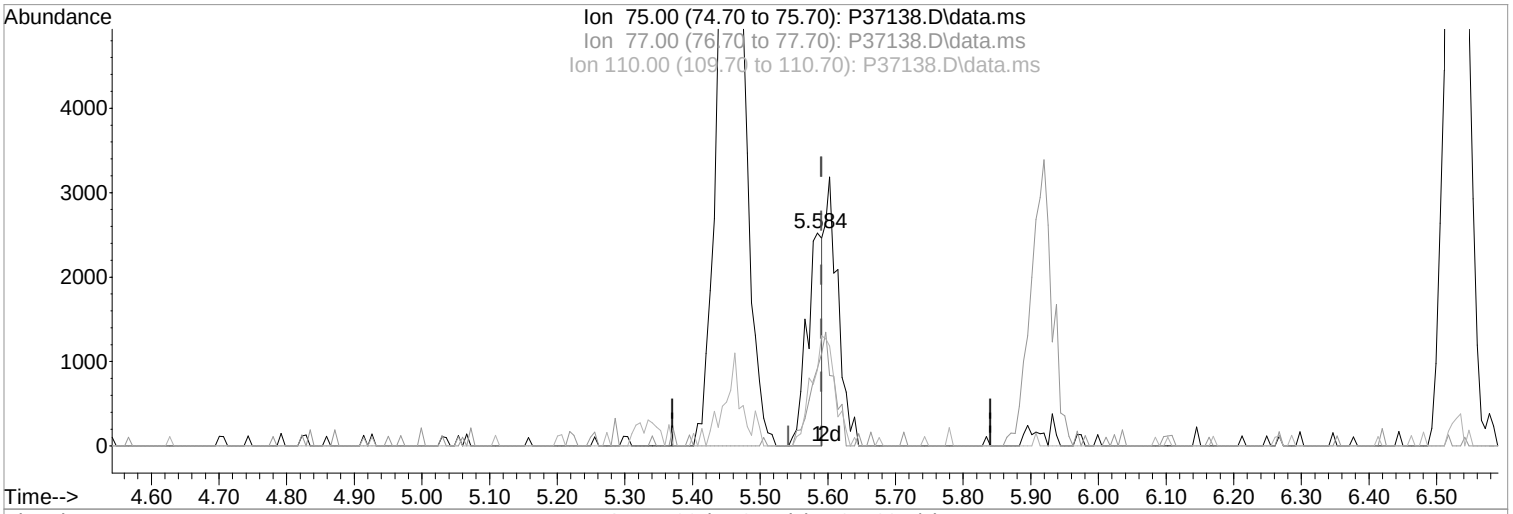
07/13/20

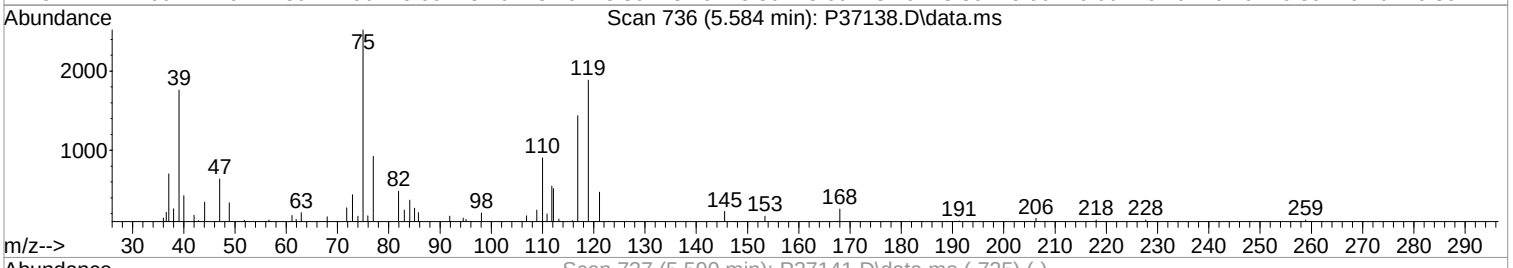
1st 07/14/20
2nd 07/14/20

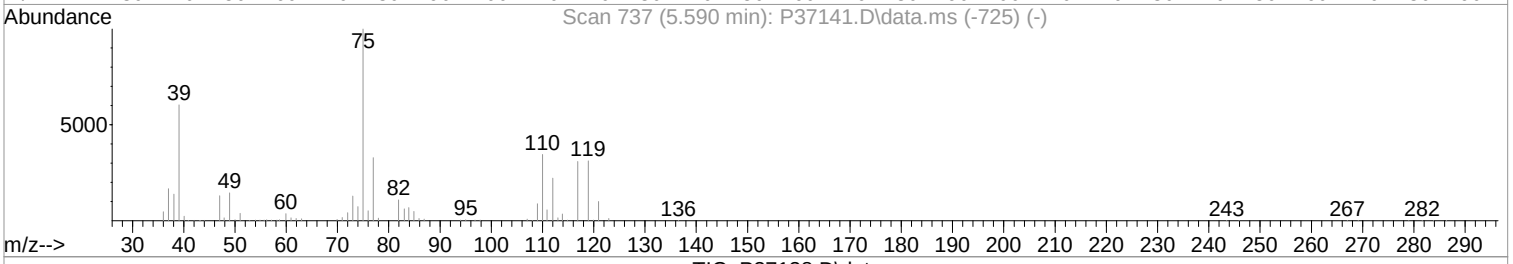
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(47) 1,1-Dichloropropene

5.584min (-0.006) 0.85 ppb

response 4029

Ion	Exp%	Act%
75.00	100	100
77.00	32.80	36.54
110.00	34.60	35.83
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:18:46 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.463	168	307931	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	498048	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	435838	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	208145	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.335	113	31267	10.93	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 21.86%#				
48) surr1,1,2-dichloroetha...	5.859	65	42263	10.67	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 21.34%#				
65) SURR3,Toluene-d8	8.316	98	144841	10.90	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 21.80%#				
70) SURR2,BFB	10.870	95	49350	10.08	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 20.16%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	6142	1.79	ppb		88
3) Chloromethane	1.335	50	8243	1.91	ppb		89
4) Vinyl Chloride	1.408	62	6994	1.71	ppb		91
5) Bromomethane	1.640	94	6779	2.04	ppb		89
6) Chloroethane	1.719	64	4235	1.92	ppb		97
7) Freon 21	1.872	67	10321	2.02	ppb		93
8) Trichlorofluoromethane	1.908	101	7659	1.85	ppb		96
9) Diethyl Ether	2.152	59	5387	1.80	ppb	#	60
10) Freon 123a	2.164	67	7570	2.15	ppb		97
11) Freon 123	2.213	83	8437	2.03	ppb		94
12) Acrolein	2.274	56	7985	9.88	ppb		94
13) 1,1-Diclethene	2.341	96	4767	2.00	ppb		92
14) Freon 113	2.341	101	5786	2.09	ppb		81
15) Acetone	2.414	43	6502	3.64	ppb		87
16) 2-Propanol	2.548	45	13095	33.02	ppb		86
17) Iodomethane	2.475	142	1394	0.52	ppb		85
18) Carbon Disulfide	2.536	76	19144	2.11	ppb		95
19) Acetonitrile	2.676	40	2415m	10.91	ppb		
20) Allyl Chloride	2.683	76	3112	1.84	ppb	#	93
21) Methyl Acetate	2.719	43	9302	2.03	ppb		89
22) Methylene Chloride	2.805	84	6734	1.98	ppb		91
23) TBA	2.957	59	24574	38.29	ppb		92
24) Acrylonitrile	3.091	53	18967	9.58	ppb		97
25) Methyl-t-Butyl Ether	3.103	73	20547	1.86	ppb		94
26) trans-1,2-Dichloroethene	3.091	96	6006	2.17	ppb		99
28) 1,1-Diclethane	3.603	63	12202	2.00	ppb		93
29) Vinyl Acetate	3.719	86	920m	2.05	ppb		
30) DIPE	3.719	45	19472	1.82	ppb	#	72
31) 2-Chloro-1,3-Butadiene	3.713	53	9458	1.92	ppb		89
32) ETBE	4.243	59	18775	1.88	ppb		93
33) 2,2-Dichloropropane	4.432	77	9189	2.04	ppb		87
34) cis-1,2-Dichloroethene	4.463	96	7466	2.08	ppb	#	71
35) 2-Butanone	4.548	43	5608	2.34	ppb		91
36) Propionitrile	4.652	54	9021	10.51	ppb		95
37) Bromochloromethane	4.865	130	4104m	1.95	ppb		
38) Methacrylonitrile	4.914	67	3858	1.90	ppb	#	72
39) Tetrahydrofuran	4.975	42	4444	2.36	ppb		100
40) Chloroform	5.054	83	10793	1.92	ppb		83
41) 1,1,1-Trichloroethane	5.310	97	8204	1.84	ppb		83

1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:18:46 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.145	73	16914	1.70	ppb		89
44) Cyclohexane	5.371	41	6706	2.05	ppb		91
46) Carbontetrachloride	5.566	117	5194m	1.57	ppb		
47) 1,1-Dichloropropene	5.603	75	8392m	1.78	ppb		
49) Benzene	5.920	78	29026	2.02	ppb		95
50) 1,2-Dichloroethane	5.975	62	9278	1.85	ppb		88
51) Iso-Butyl Alcohol	5.975	43	9824	31.85	ppb		88
52) n-Heptane	6.365	43	7823	1.76	ppb	#	84
53) 1-Butanol	6.920	56	15075	78.54	ppb		96
54) Trichloroethene	6.840	130	7527	2.11	ppb	#	74
55) Methylcyclohexane	7.054	55	7711	1.74	ppb		89
56) 1,2-Diclpropane	7.139	63	6689	1.75	ppb		90
57) Dibromomethane	7.285	93	4510	2.05	ppb	#	75
58) 1,4-Dioxane	7.352	88	3230	41.05	ppb		93
59) Methyl Methacrylate	7.352	69	6187	1.87	ppb	#	74
60) Bromodichloromethane	7.511	83	7816	1.94	ppb		98
62) 2-Chloroethylvinyl Ether	7.907	63	2747	1.65	ppb		96
63) cis-1,3-Dichloropropene	8.035	75	9781	1.78	ppb		90
64) 4-Methyl-2-pentanone	8.255	43	9118	1.78	ppb		89
66) Toluene	8.389	91	29180	1.92	ppb		97
67) trans-1,3-Dichloropropene	8.675	75	8285	1.66	ppb		94
68) Ethyl Methacrylate	8.803	69	9144	1.63	ppb		80
69) 1,1,2-Trichloroethane	8.864	97	5795	1.70	ppb	#	83
72) Tetrachloroethene	8.968	164	5134	1.93	ppb	#	72
73) 2-Hexanone	9.157	43	6269	1.62	ppb		87
74) 1,3-Dichloropropane	9.029	76	10821	1.77	ppb		91
75) Dibromochloromethane	9.248	129	4659	1.72	ppb		85
76) N-Butyl Acetate	9.297	43	12295	1.71	ppb		95
77) 1,2-Dibromoethane	9.352	107	5979	1.79	ppb		81
78) Chlorobenzene	9.828	112	18918	1.95	ppb		97
79) 3-CBTF	9.846	180	8451	1.88	ppb	#	75
80) 4-CBTF	9.901	180	7782	1.92	ppb		94
81) 1,1,1,2-Tetrachloroethane	9.913	131	5817	1.94	ppb		90
82) Ethylbenzene	9.943	106	9419	1.85	ppb	#	89
83) (m+p)Xylene	10.053	106	21557	3.53	ppb	#	81
84) o-Xylene	10.413	106	10306	1.73	ppb		97
85) Styrene	10.425	104	17218	1.70	ppb		95
87) Bromoform	10.590	173	3117	1.82	ppb	#	71
88) 2-CBTF	10.657	180	8401	1.99	ppb		89
89) Isopropylbenzene	10.742	105	27202	1.89	ppb		93
90) Cyclohexanone	10.827	55	33126	38.36	ppb		86
91) trans-1,4-Dichloro-2-B...	11.065	53	2171	1.80	ppb	#	79
92) 1,1,2,2-Tetrachloroethane	11.016	83	8656	1.86	ppb		93
93) Bromobenzene	10.992	156	7236	1.93	ppb		95
94) 1,2,3-Trichloropropane	11.041	110	3332	2.22	ppb	#	58
95) n-Propylbenzene	11.089	91	30684	1.86	ppb		97
96) 2-Chlorotoluene	11.157	91	21524	2.01	ppb		94
97) 3-Chlorotoluene	11.211	91	18084	1.77	ppb		93
98) 4-Chlorotoluene	11.254	91	22372	1.87	ppb		98
99) 1,3,5-Trimethylbenzene	11.248	105	22970	1.87	ppb		93
100) tert-Butylbenzene	11.510	119	20761	2.02	ppb		95
101) 1,2,4-Trimethylbenzene	11.553	105	22601	1.83	ppb		90
102) 3,4-DCBTF	11.620	214	6581	1.94	ppb	#	82
103) sec-Butylbenzene	11.693	105	28174	1.91	ppb		97
104) p-Isopropyltoluene	11.815	119	23538	1.85	ppb		97
105) 1,3-Dclbenz	11.784	146	14101	1.92	ppb		94

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:18:46 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

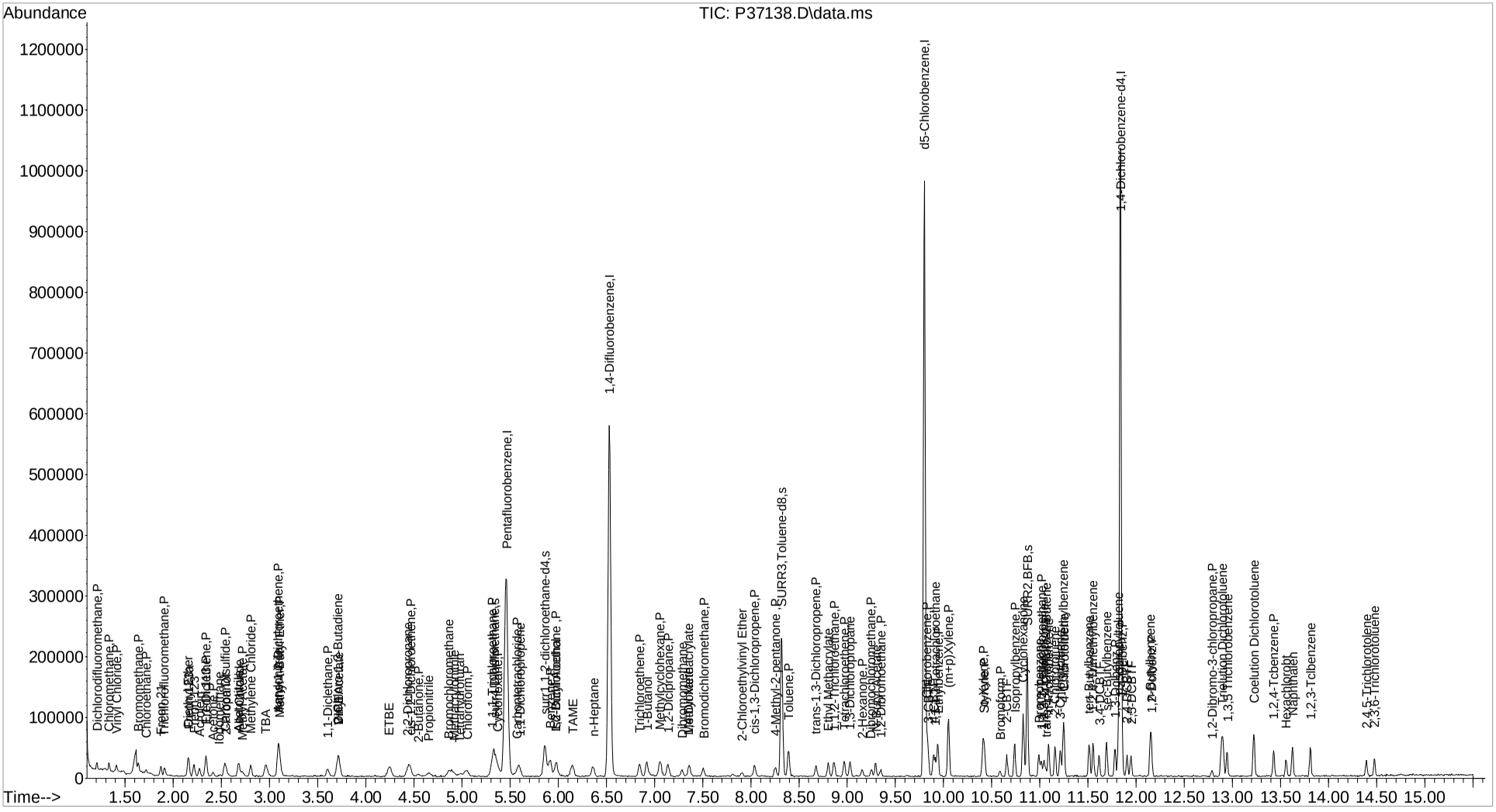
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
106) 1,4-Dclbenz	11.858	146	14046	1.88	ppb		96
107) 2,4-DCBTF	11.906	214	5487	1.73	ppb	#	85
108) 2,5-DCBTF	11.949	214	6611	1.95	ppb		88
109) n-Butylbenzene	12.150	91	21430	1.79	ppb		95
110) 1,2-Dclbenz	12.162	146	14264	1.91	ppb		97
111) 1,2-Dibromo-3-chloropr...	12.790	157	1827	1.76	ppb		91
112) Trielution Dichlorotol...	12.894	125	30328	5.08	ppb		89
113) 1,3,5 Trichlorobenzene	12.949	180	8728	1.70	ppb	#	92
114) Coelution Dichlorotoluene	13.223	125	23322	3.56	ppb		92
115) 1,2,4-Tcbenzene	13.430	180	9461	1.76	ppb		90
116) Hexachlorobt	13.559	225	4067	1.88	ppb		93
117) Naphthalen	13.626	128	27476	1.75	ppb		97
118) 1,2,3-Tclbenzene	13.815	180	9996	1.80	ppb		84
119) 2,4,5-Trichlorotolene	14.394	159	5518	1.62	ppb		90
120) 2,3,6-Trichlorotoluene	14.473	159	4721m	1.52	ppb		

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:18:46 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

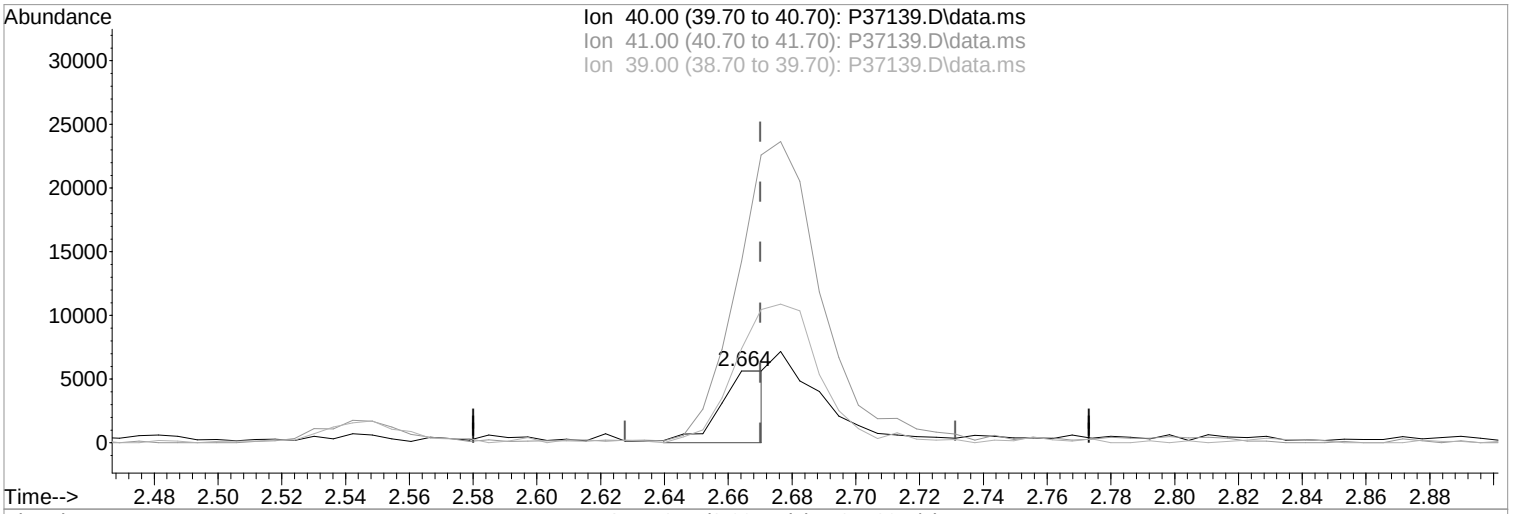


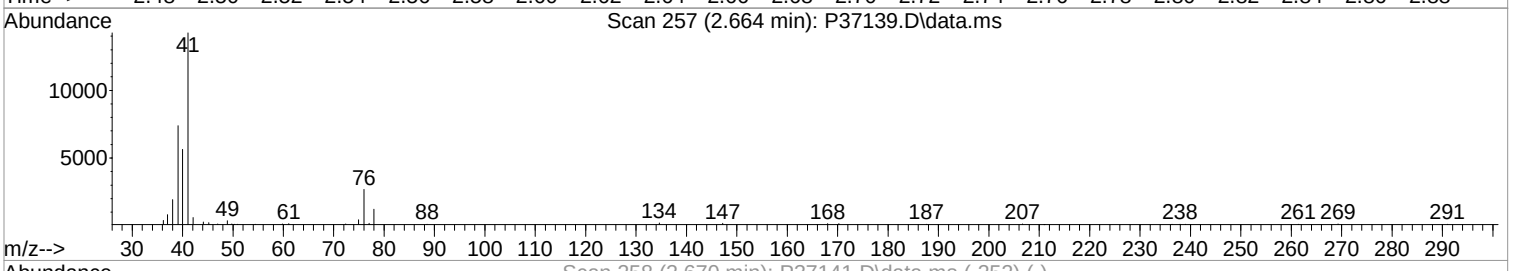
1st 07/14/20
2nd 07/14/20

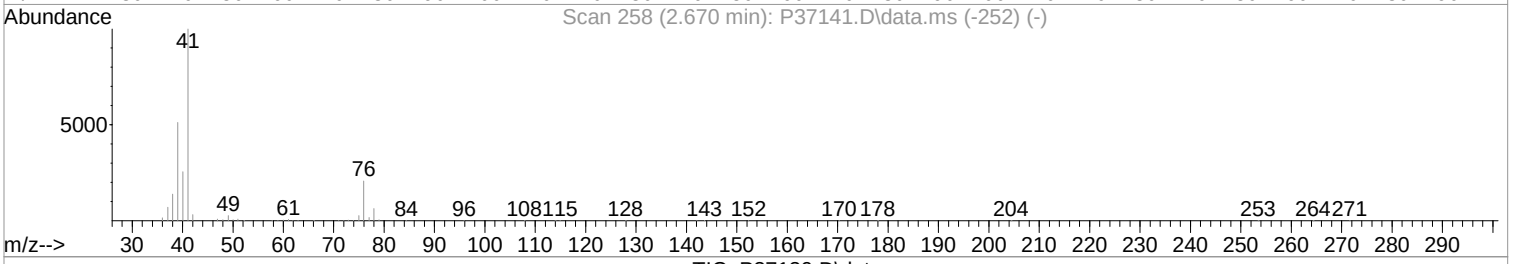
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(19) Acetonitrile

2.664min (-0.006) 25.74 ppb m

response 5783

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	252.38#
39.00	200.50	130.76#
0.00	0.00	0.00

Manual Integration:

After

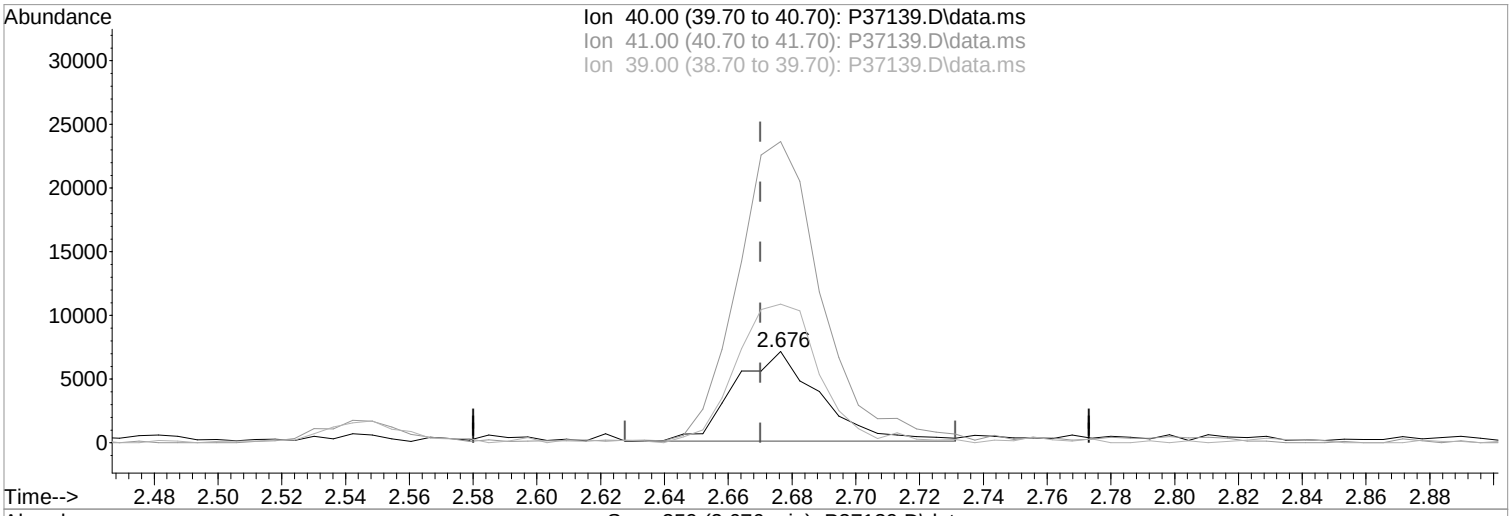
Poor integration.

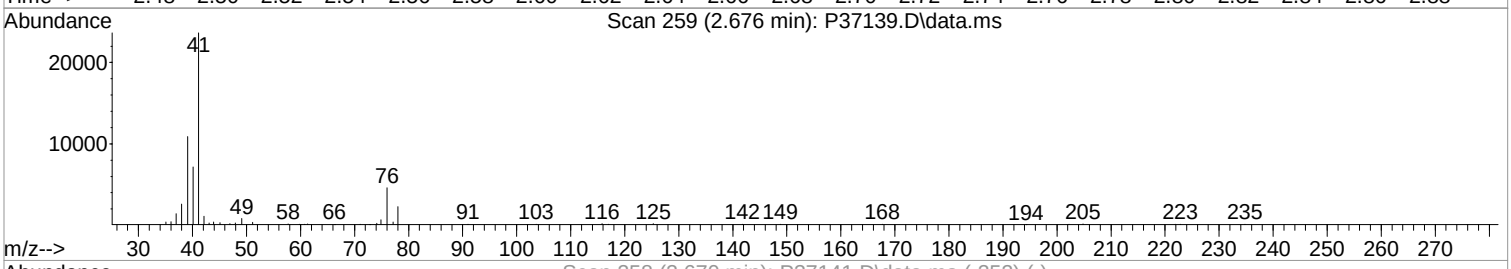
07/13/20

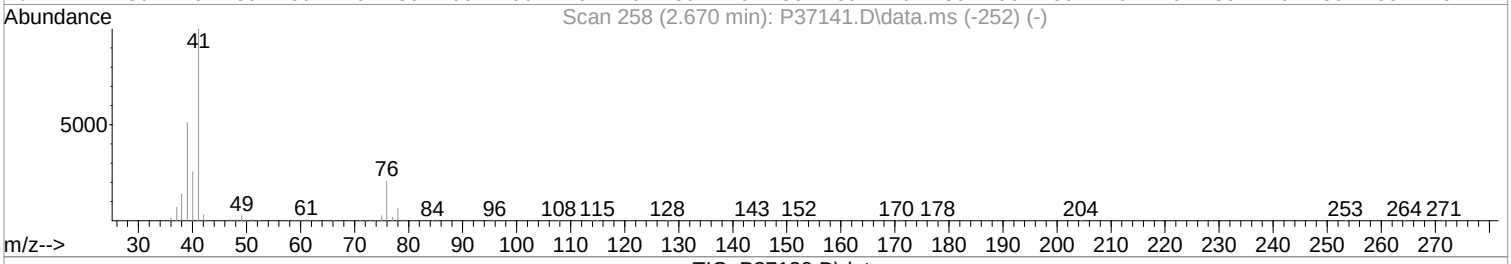
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 58.50 ppb

response 13142

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	329.88#
39.00	200.50	151.97#
0.00	0.00	0.00

Manual Integration:

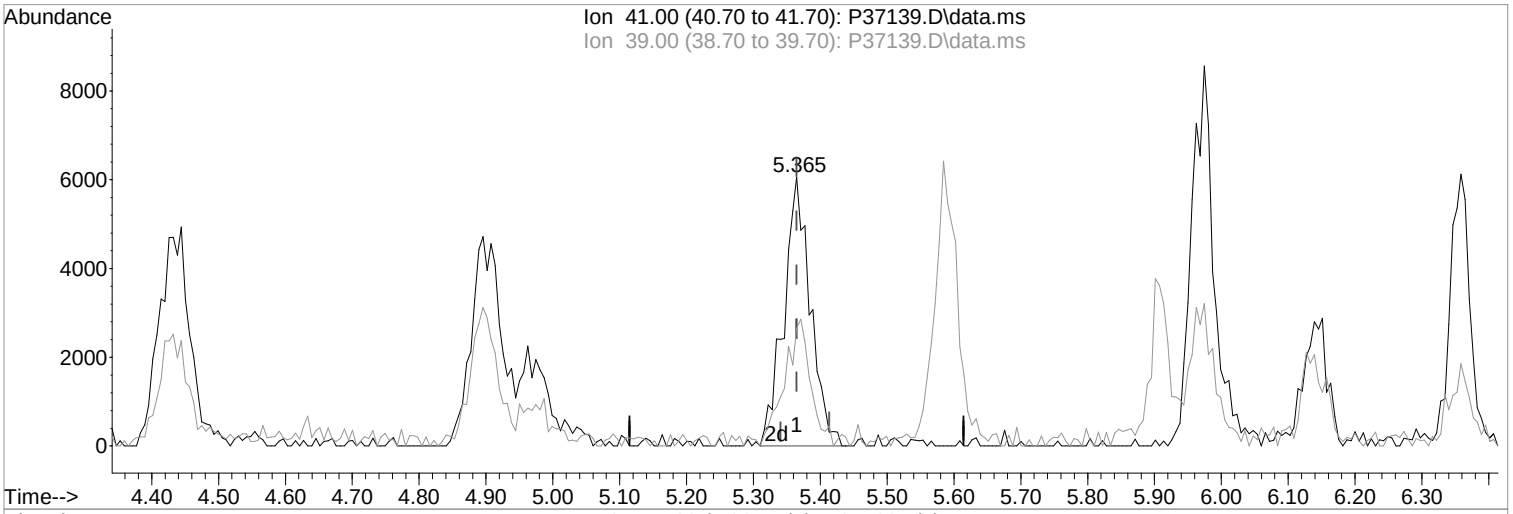
Before

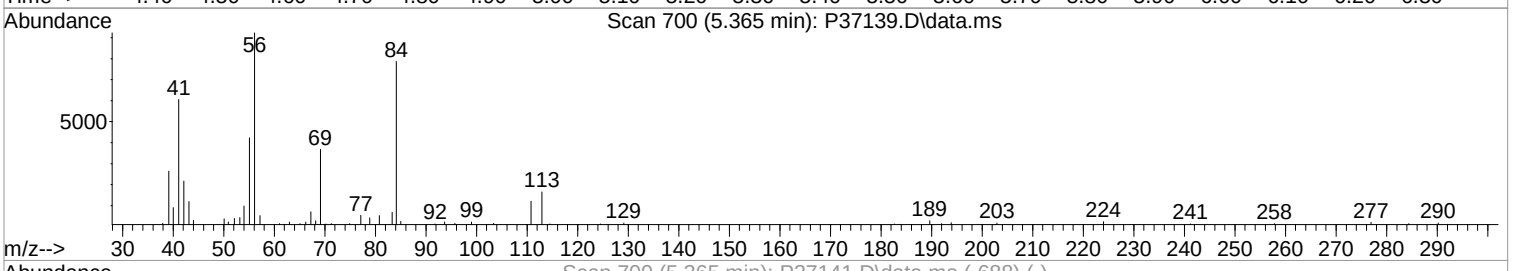
07/13/20

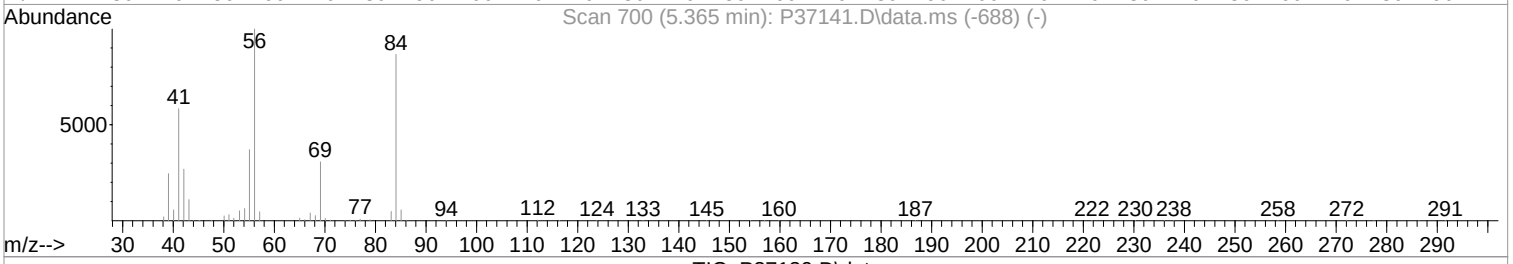
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(44) Cyclohexane (P)

5.365min (+0.000) 4.97 ppb m

response 16745

Ion	Exp%	Act%
41.00	100	100
39.00	42.20	43.71
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

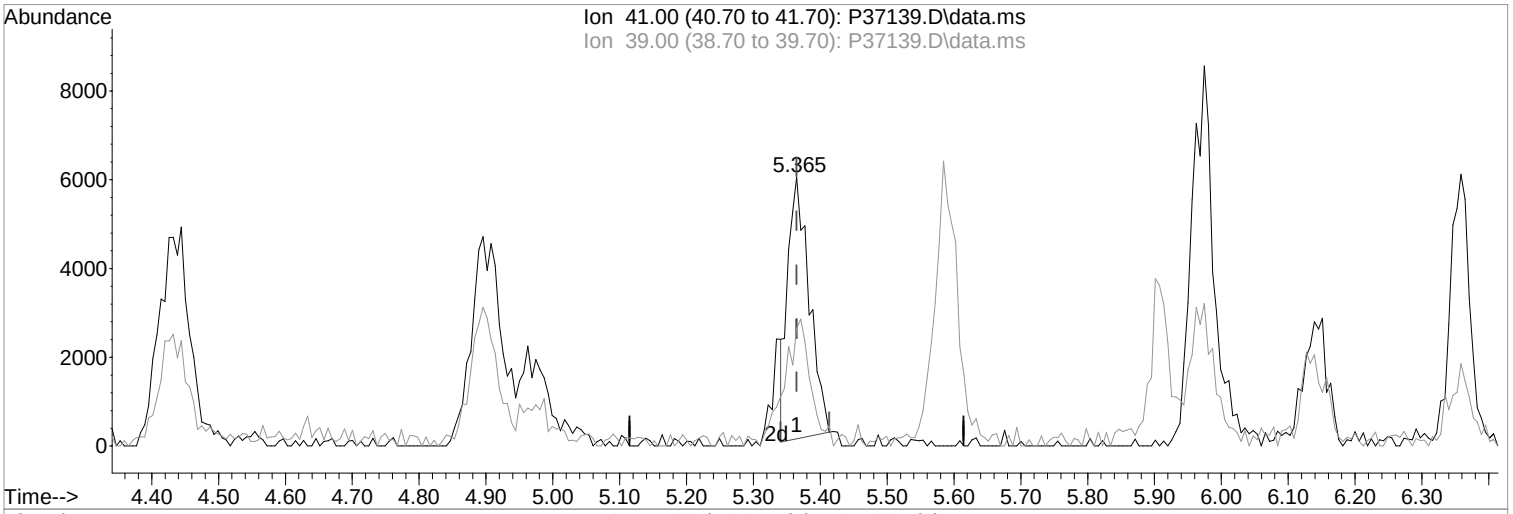
Poor integration.

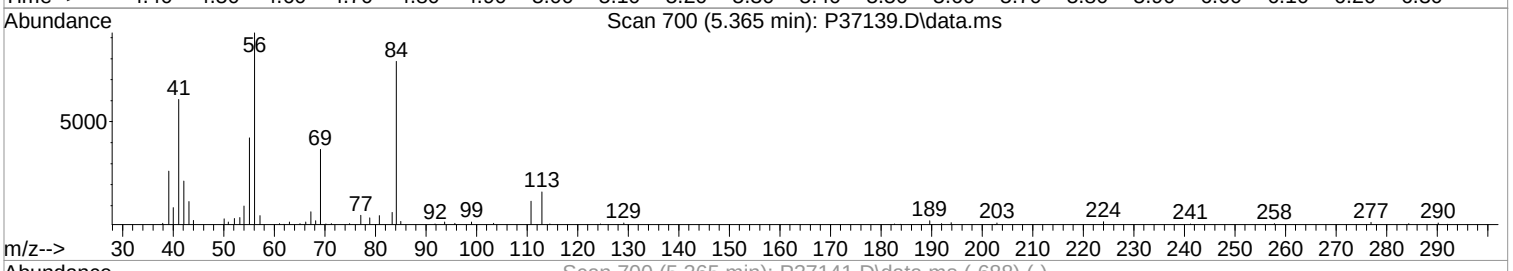
07/13/20

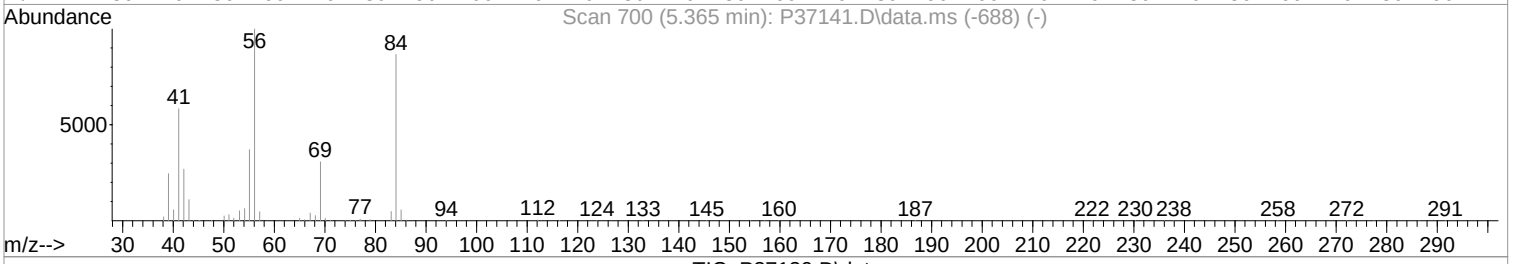
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(44) Cyclohexane (P)

5.365min (+0.000) 3.89 ppb

response 13088

Ion	Exp%	Act%
41.00	100	100
39.00	42.20	43.71
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

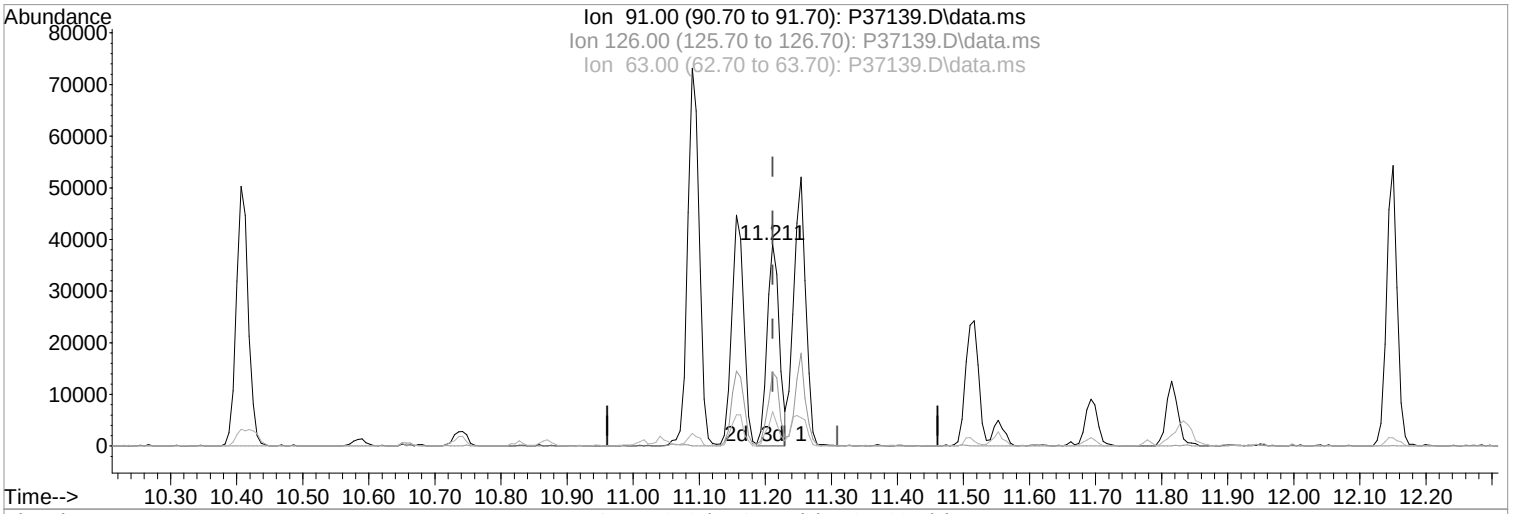
07/13/20

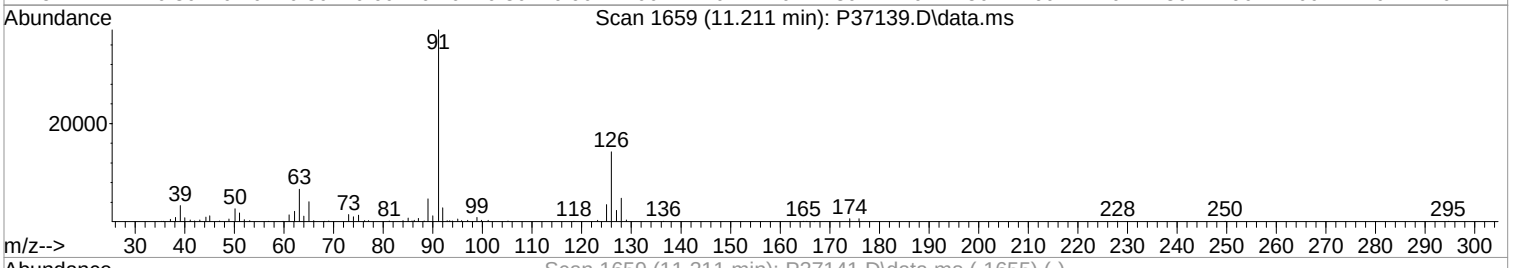
1st 07/14/20
2nd 07/14/20

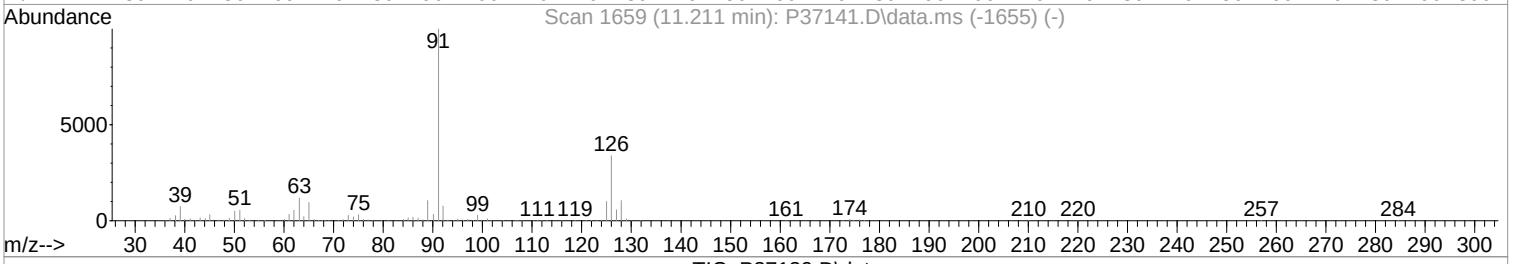
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(97) 3-Chlorotoluene

11.211min (+0.000) 4.77 ppb m

response 50195

Ion	Exp%	Act%
91.00	100	100
126.00	33.90	36.46
63.00	11.90	17.07#
0.00	0.00	0.00

Manual Integration:

After

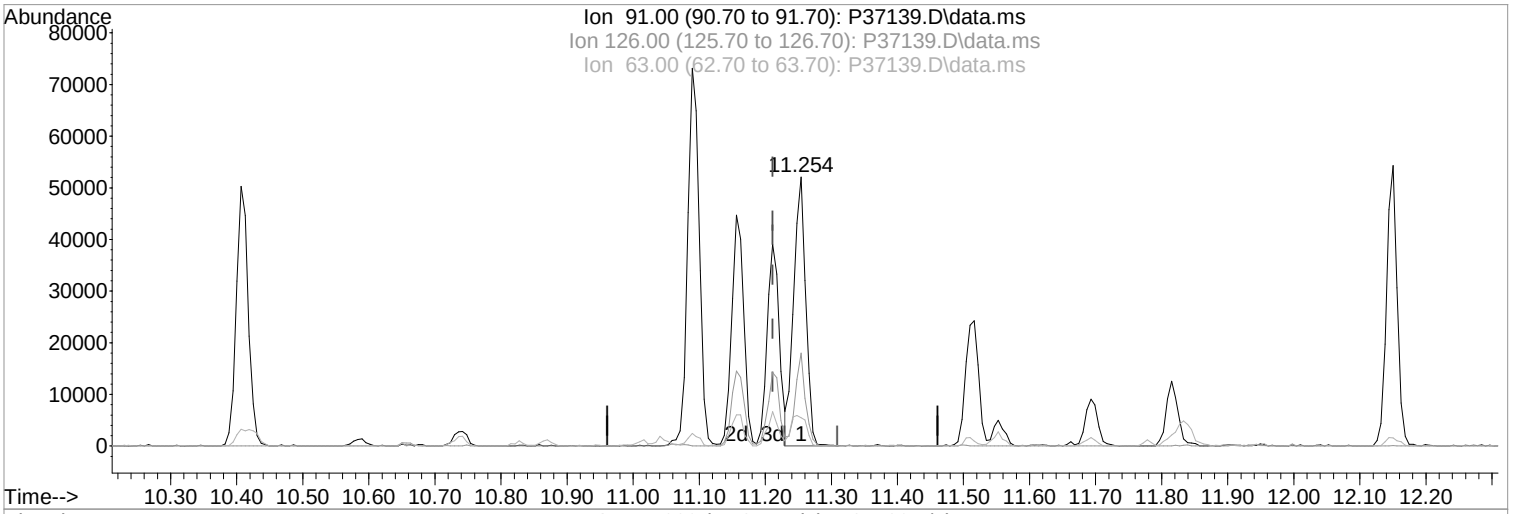
Poor integration.

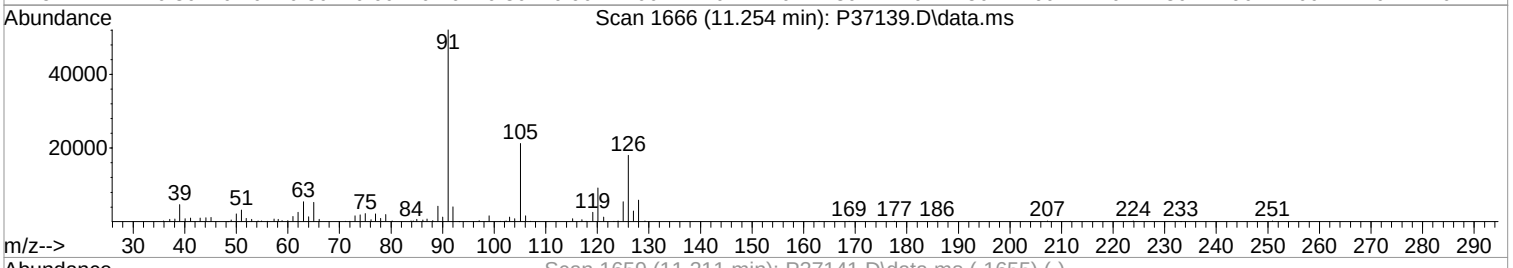
07/13/20

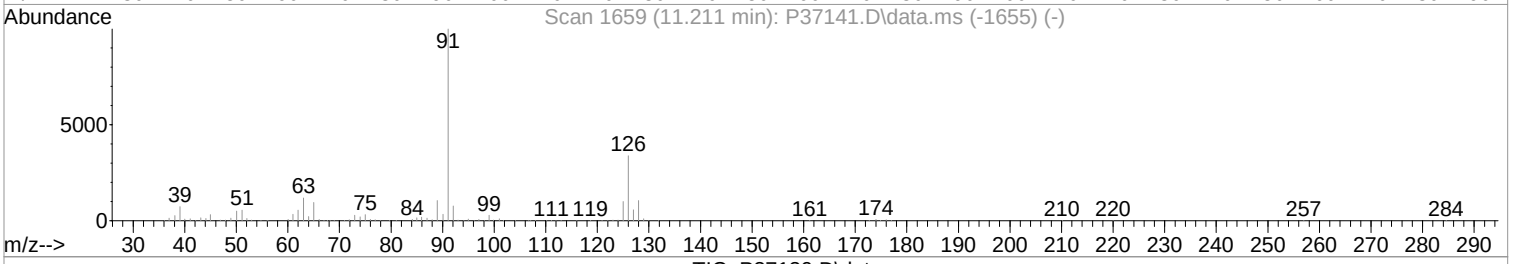
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(97) 3-Chlorotoluene

11.254min (+0.043) 6.31 ppb

response 66366

Ion	Exp%	Act%
91.00	100	100
126.00	33.90	34.57
63.00	11.90	10.50
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:21:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	312583	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	513354	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	442654	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	213927	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.316	113	30384	10.31	ppb		-0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 20.62%#				
48) surr1,1,2-dichloroetha...	5.859	65	45823	11.23	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 22.46%#				
65) SURR3,Toluene-d8	8.316	98	148671	10.85	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 21.70%#				
70) SURR2,BFB	10.870	95	54520	10.80	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 21.60%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.201	85	13614	3.91	ppb		98
3) Chloromethane	1.329	50	21678	4.96	ppb		99
4) Vinyl Chloride	1.402	62	20800	5.01	ppb		95
5) Bromomethane	1.628	94	20221	5.99	ppb		94
6) Chloroethane	1.713	64	10542	4.70	ppb		94
7) Freon 21	1.866	67	22991	4.44	ppb		94
8) Trichlorofluoromethane	1.908	101	20176	4.81	ppb		96
9) Diethyl Ether	2.146	59	16224	5.35	ppb		91
10) Freon 123a	2.152	67	18302	5.12	ppb		97
11) Freon 123	2.207	83	22040	5.22	ppb		97
12) Acrolein	2.268	56	19636	23.92	ppb		98
13) 1,1-Diclethene	2.335	96	11564	4.78	ppb		93
14) Freon 113	2.341	101	15210	5.40	ppb		80
15) Acetone	2.408	43	13486	7.43	ppb		86
16) 2-Propanol	2.542	45	37063	92.07	ppb		98
17) Iodomethane	2.481	142	4243	1.57	ppb		81
18) Carbon Disulfide	2.524	76	40723	4.42	ppb		94
19) Acetonitrile	2.664	40	5783m	25.74	ppb		
20) Allyl Chloride	2.676	76	7812	4.56	ppb	#	80
21) Methyl Acetate	2.713	43	21716	4.67	ppb		98
22) Methylene Chloride	2.798	84	17778	5.16	ppb		92
23) TBA	2.957	59	64781	99.44	ppb		98
24) Acrylonitrile	3.085	53	51656	25.71	ppb		91
25) Methyl-t-Butyl Ether	3.097	73	55706	4.98	ppb		92
26) trans-1,2-Dichloroethene	3.085	96	14647	5.20	ppb		99
28) 1,1-Diclethane	3.603	63	31934	5.15	ppb		92
29) Vinyl Acetate	3.701	86	1394	3.06	ppb	#	87
30) DIPE	3.707	45	51980	4.79	ppb		89
31) 2-Chloro-1,3-Butadiene	3.713	53	25100	5.03	ppb		89
32) ETBE	4.237	59	48608	4.80	ppb		97
33) 2,2-Dichloropropane	4.438	77	23449	5.13	ppb		93
34) cis-1,2-Dichloroethene	4.450	96	18732	5.15	ppb		95
35) 2-Butanone	4.530	43	12900	5.31	ppb		90
36) Propionitrile	4.639	54	21499	24.67	ppb		96
37) Bromochloromethane	4.865	130	11045	5.17	ppb		98
38) Methacrylonitrile	4.889	67	10718	5.19	ppb	#	80
39) Tetrahydrofuran	4.969	42	9768	5.12	ppb		96
40) Chloroform	5.036	83	28677	5.01	ppb		86
41) 1,1,1-Trichloroethane	5.304	97	22134	4.90	ppb		93

1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:21:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.139	73	48357	4.80	ppb		85
44) Cyclohexane	5.365	41	16745m	4.97	ppb		
46) Carbontetrachloride	5.560	117	16677	4.89	ppb		85
47) 1,1-Dichloropropene	5.584	75	23805	4.90	ppb		95
49) Benzene	5.907	78	73495	4.95	ppb		95
50) 1,2-Dichloroethane	5.968	62	25754	4.97	ppb		94
51) Iso-Butyl Alcohol	5.975	43	28407	89.35	ppb		85
52) n-Heptane	6.353	43	22072	4.80	ppb		88
53) 1-Butanol	6.913	56	39667	200.50	ppb		97
54) Trichloroethene	6.846	130	18122	4.93	ppb		92
55) Methylcyclohexane	7.054	55	21076	4.61	ppb		89
56) 1,2-Diclpropane	7.133	63	18888	4.80	ppb		92
57) Dibromomethane	7.285	93	10534	4.65	ppb		96
58) 1,4-Dioxane	7.352	88	6963	85.85	ppb		97
59) Methyl Methacrylate	7.358	69	16250	4.75	ppb		96
60) Bromodichloromethane	7.505	83	19052	4.59	ppb		92
62) 2-Chloroethylvinyl Ether	7.907	63	6544	3.82	ppb		100
63) cis-1,3-Dichloropropene	8.035	75	25650	4.53	ppb		94
64) 4-Methyl-2-pentanone	8.248	43	24564	4.64	ppb		97
66) Toluene	8.389	91	78552	5.00	ppb		99
67) trans-1,3-Dichloropropene	8.675	75	23662	4.59	ppb		92
68) Ethyl Methacrylate	8.803	69	26266	4.55	ppb		83
69) 1,1,2-Trichloroethane	8.864	97	17780	5.07	ppb		95
72) Tetrachloroethene	8.968	164	13899	5.14	ppb	#	88
73) 2-Hexanone	9.157	43	19776	5.03	ppb		96
74) 1,3-Dichloropropane	9.029	76	29352	4.72	ppb		87
75) Dibromochloromethane	9.254	129	13152	4.78	ppb		83
76) N-Butyl Acetate	9.291	43	32125	4.40	ppb		96
77) 1,2-Dibromoethane	9.346	107	16673	4.92	ppb		97
78) Chlorobenzene	9.827	112	50311	5.10	ppb		96
79) 3-CBTF	9.840	180	21567	4.72	ppb		98
80) 4-CBTF	9.901	180	19490	4.74	ppb		98
81) 1,1,1,2-Tetrachloroethane	9.919	131	14662	4.83	ppb		91
82) Ethylbenzene	9.937	106	24714	4.77	ppb		97
83) (m+p)Xylene	10.053	106	60287	9.72	ppb		96
84) o-Xylene	10.407	106	32362	5.34	ppb		90
85) Styrene	10.425	104	50370	4.90	ppb		92
87) Bromoform	10.583	173	7636	4.33	ppb		86
88) 2-CBTF	10.657	180	22366	5.15	ppb		97
89) Isopropylbenzene	10.736	105	75652	5.12	ppb		91
90) Cyclohexanone	10.827	55	90806	102.32	ppb		97
91) trans-1,4-Dichloro-2-B...	11.065	53	5988	4.84	ppb		92
92) 1,1,2,2-Tetrachloroethane	11.016	83	23587	4.94	ppb		94
93) Bromobenzene	10.992	156	19215	4.99	ppb		89
94) 1,2,3-Trichloropropane	11.041	110	8208	5.32	ppb		94
95) n-Propylbenzene	11.089	91	90546	5.34	ppb		98
96) 2-Chlorotoluene	11.156	91	55925	5.08	ppb		98
97) 3-Chlorotoluene	11.211	91	50195m	4.77	ppb		
98) 4-Chlorotoluene	11.254	91	65386	5.31	ppb		94
99) 1,3,5-Trimethylbenzene	11.242	105	64125	5.08	ppb		93
100) tert-Butylbenzene	11.516	119	54602	5.17	ppb		94
101) 1,2,4-Trimethylbenzene	11.553	105	65389	5.15	ppb		94
102) 3,4-DCBTF	11.614	214	16100	4.63	ppb		95
103) sec-Butylbenzene	11.693	105	78628	5.19	ppb		99
104) p-Isopropyltoluene	11.815	119	65769	5.04	ppb		99
105) 1,3-Dclbenz	11.784	146	36600	4.85	ppb		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:21:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

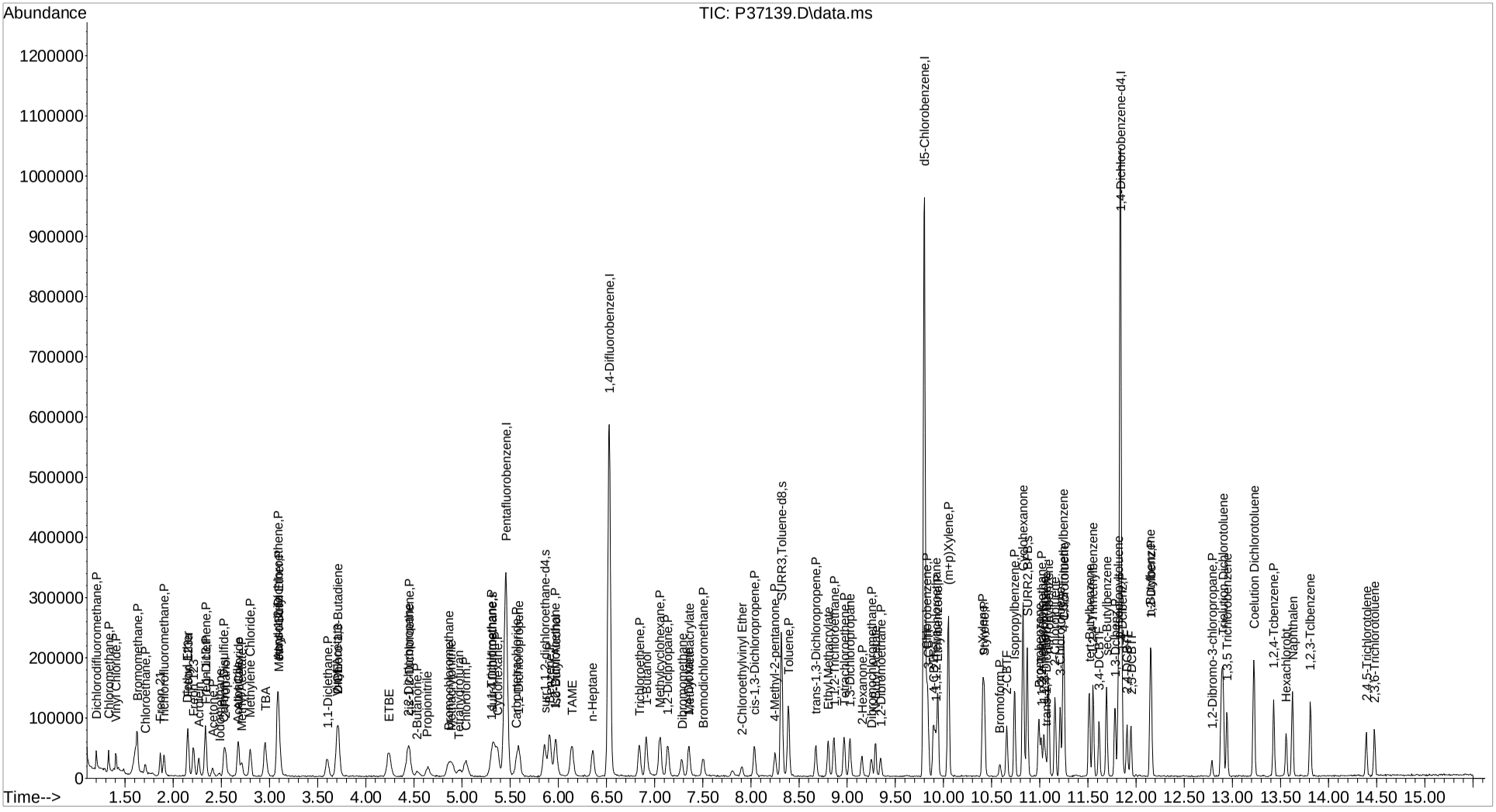
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.858	146	38046	4.95	ppb	90
107) 2,4-DCBTF	11.906	214	16585	5.09	ppb	92
108) 2,5-DCBTF	11.949	214	16450	4.71	ppb	95
109) n-Butylbenzene	12.150	91	61052	4.97	ppb	91
110) 1,2-Dclbenz	12.156	146	38497	5.02	ppb	100
111) 1,2-Dibromo-3-chloropr...	12.790	157	4682	4.38	ppb	91
112) Trielution Dichlorotol...	12.900	125	88998	14.50	ppb	98
113) 1,3,5 Trichlorobenzene	12.943	180	24537	4.66	ppb	96
114) Coelution Dichlorotoluene	13.223	125	65055	9.65	ppb	92
115) 1,2,4-Tcbenzene	13.430	180	26071	4.72	ppb	93
116) Hexachlorobt	13.558	225	9547	4.30	ppb	91
117) Naphthalen	13.625	128	83729	5.18	ppb	99
118) 1,2,3-Tclbenzene	13.808	180	27762	4.86	ppb	97
119) 2,4,5-Trichlorotolene	14.394	159	14781	4.23	ppb	97
120) 2,3,6-Trichlorotoluene	14.479	159	13029	4.09	ppb	90

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:21:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

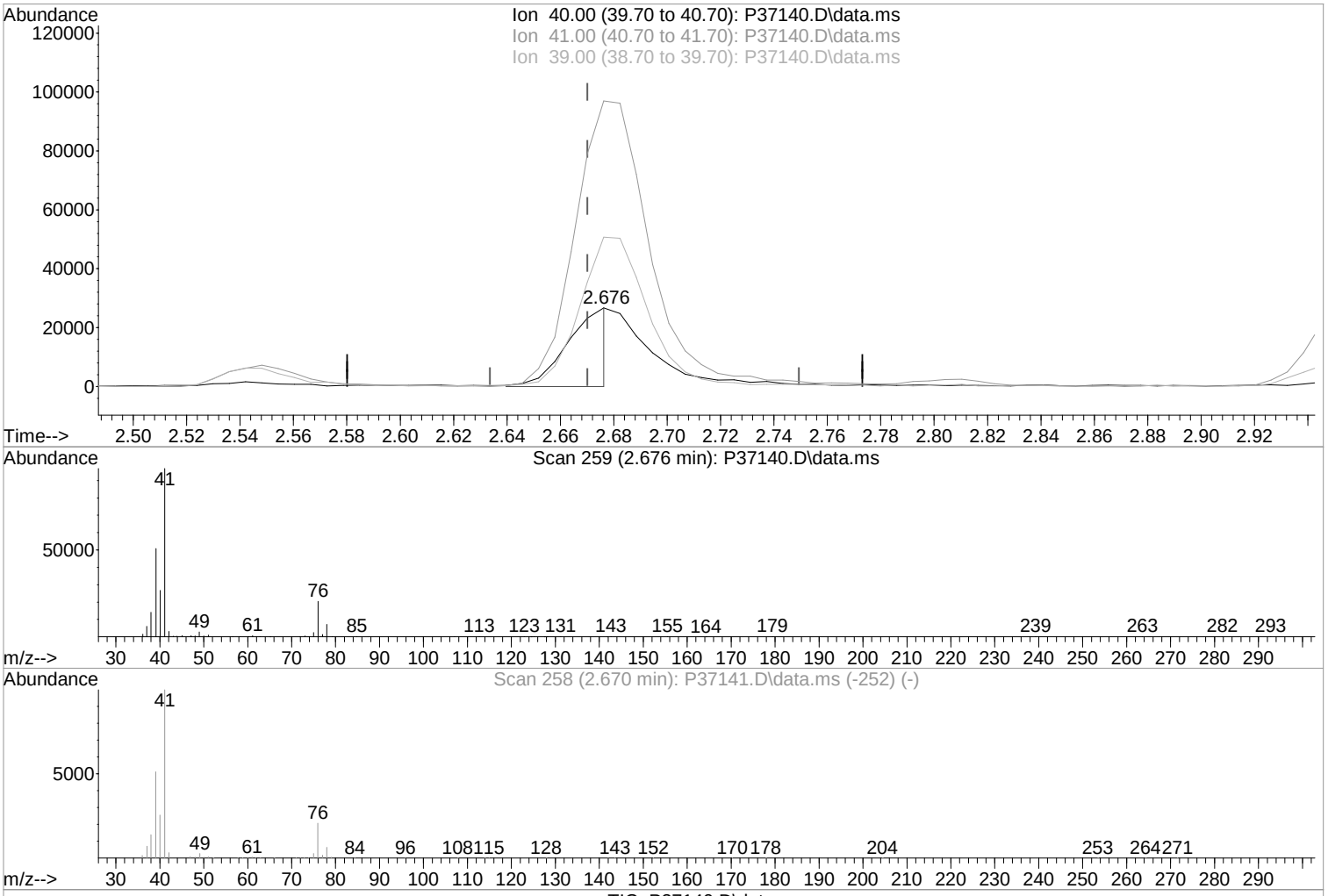


1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37140.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 126.91 ppb m

response 28917

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	363.21#
39.00	200.50	190.02
0.00	0.00	0.00

Manual Integration:

After

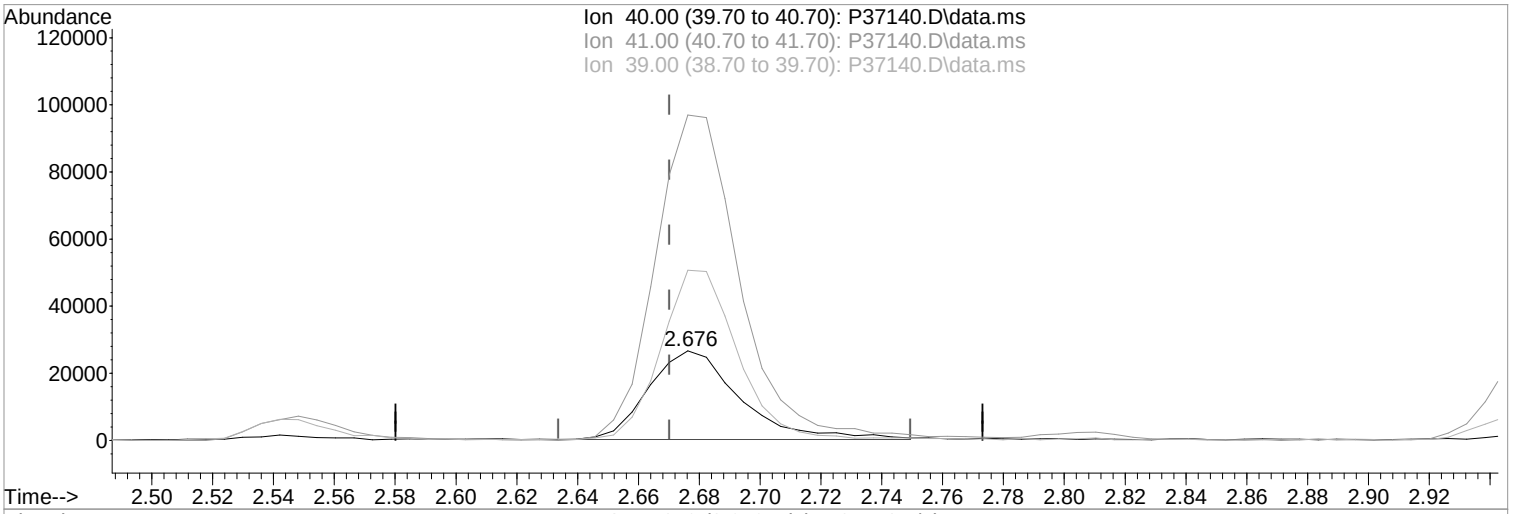
Poor integration.

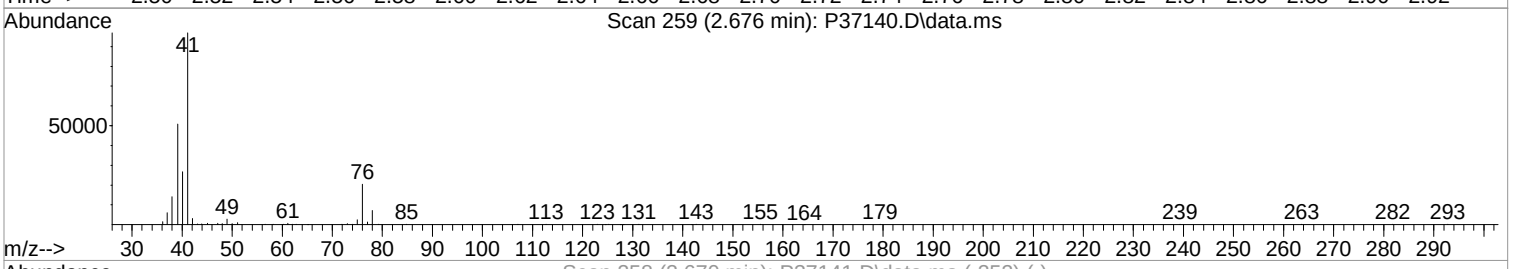
07/13/20

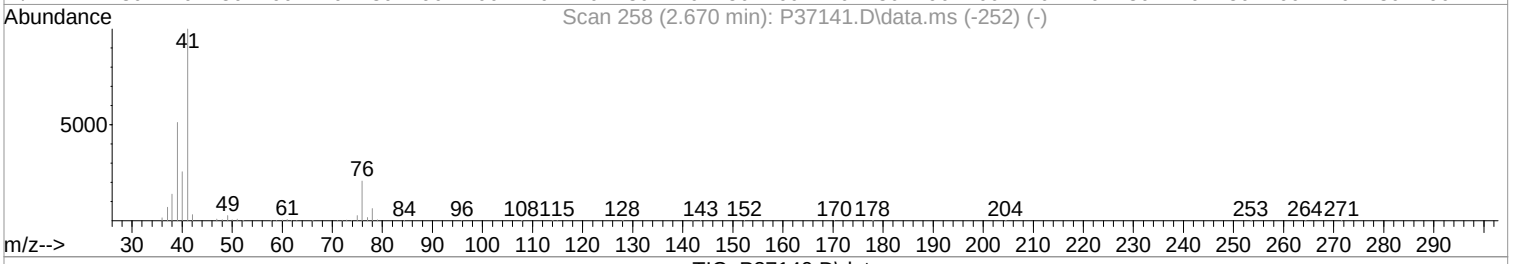
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37140.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 241.84 ppb

response 55105

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	363.21#
39.00	200.50	190.02
0.00	0.00	0.00

Manual Integration:

Before

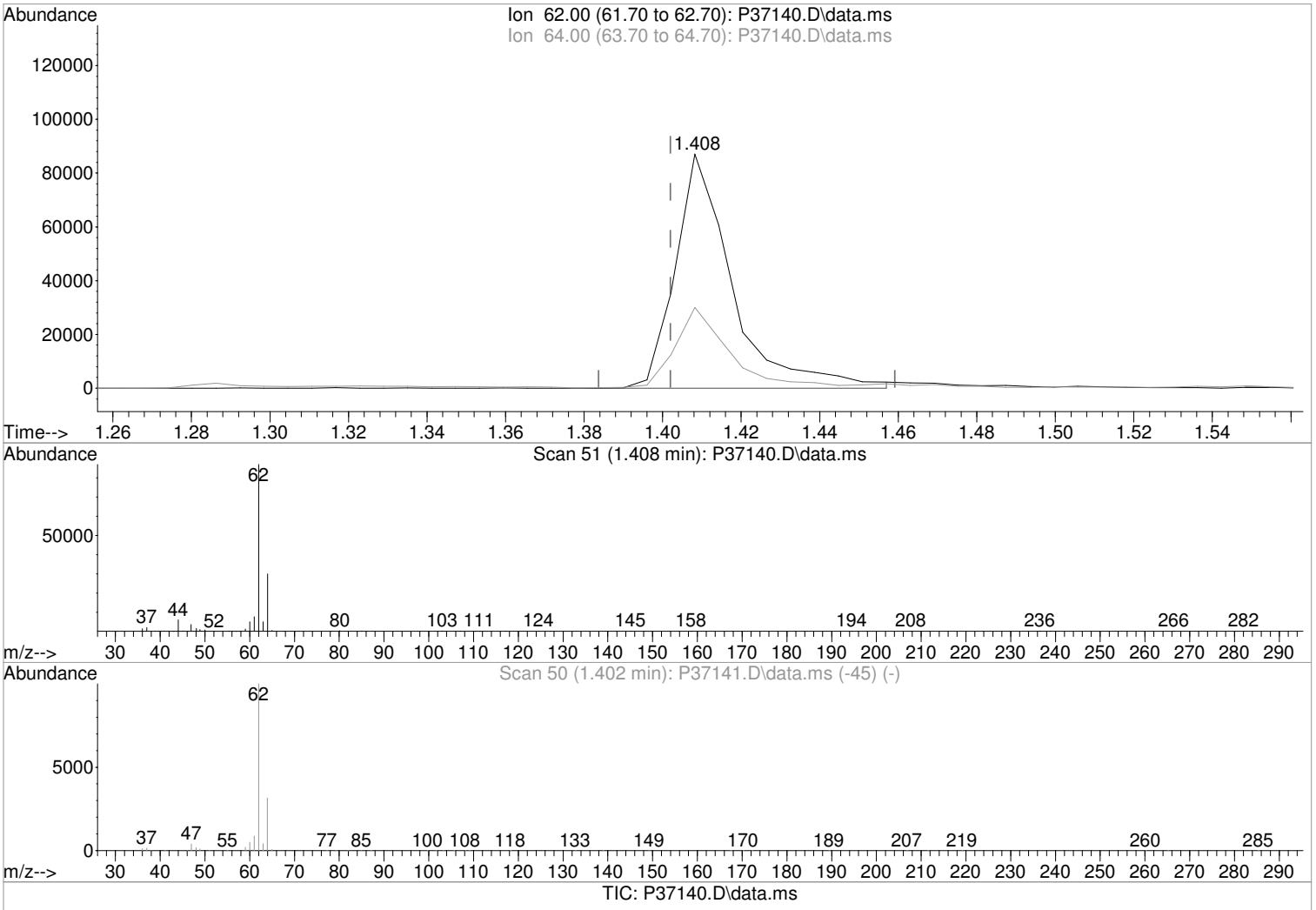
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:38:53 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37140.D\data.ms

(4) Vinyl Chloride (P)

1.408min (+0.006) 20.85 ppb m

response 87713

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	34.49
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

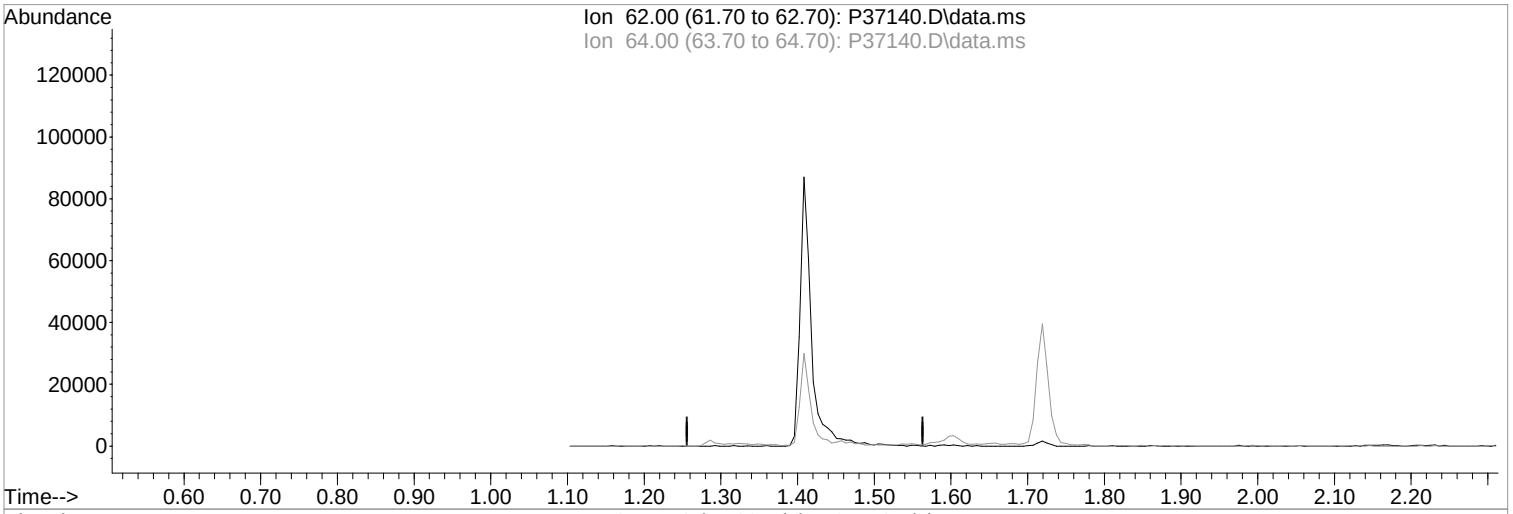
Peak not found.

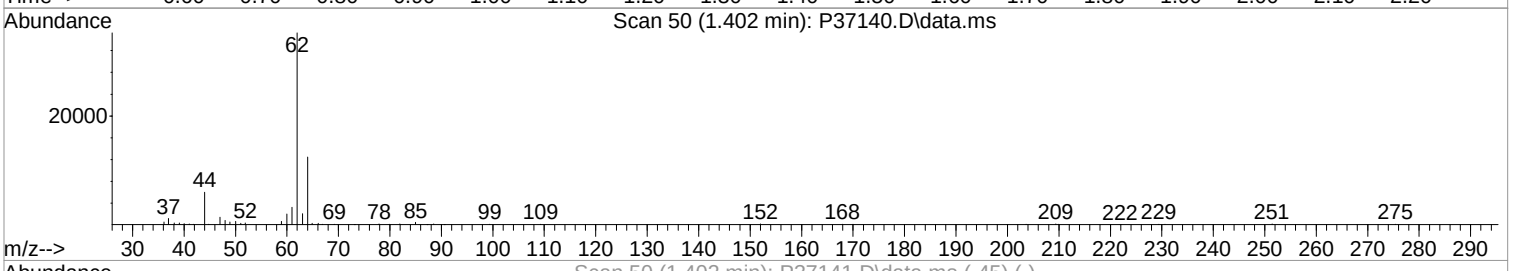
07/14/20

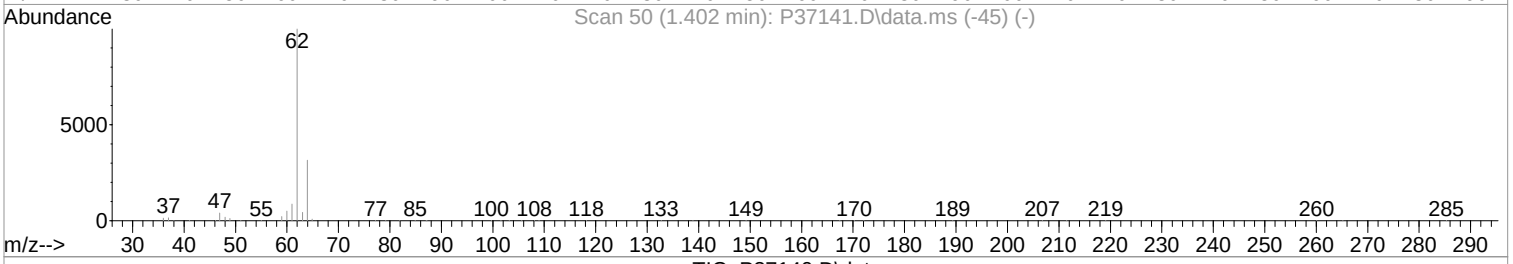
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37140.D\data.ms

(4) Vinyl Chloride (P)

1.402min (-1.402) 0.00 ppb

response 0

Ion	Exp%	Act%
62.00	100	0.00
64.00	31.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

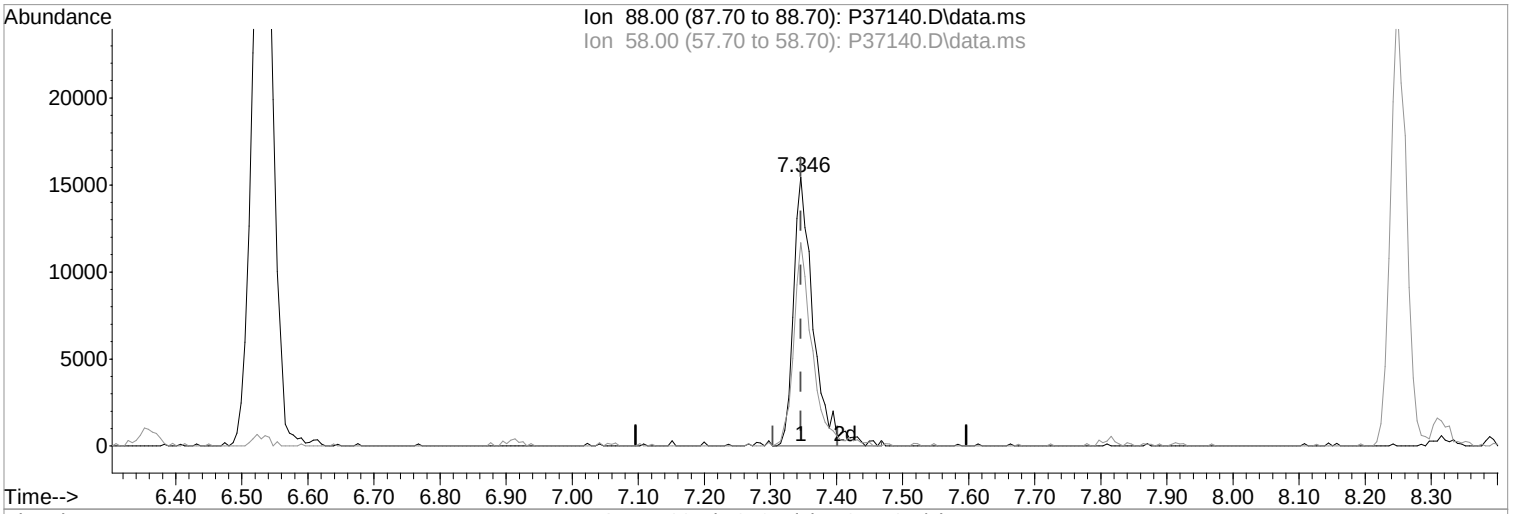
Before

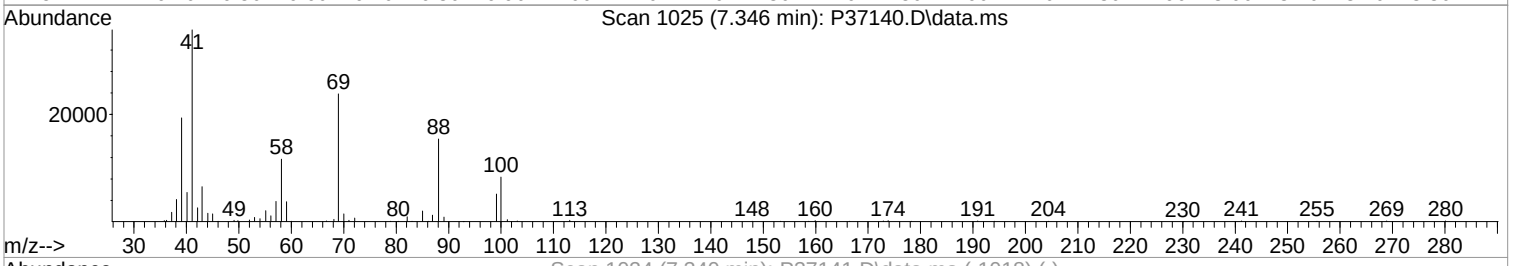
07/13/20

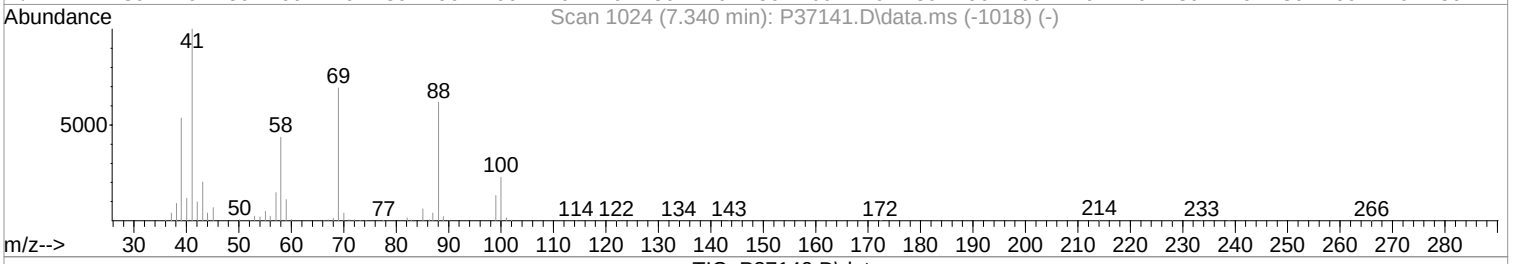
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37140.D\data.ms

(58) 1,4-Dioxane

7.346min (0.000) 401.80 ppb m

response 32420

Ion	Exp%	Act%
88.00	100	100
58.00	70.60	75.59
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

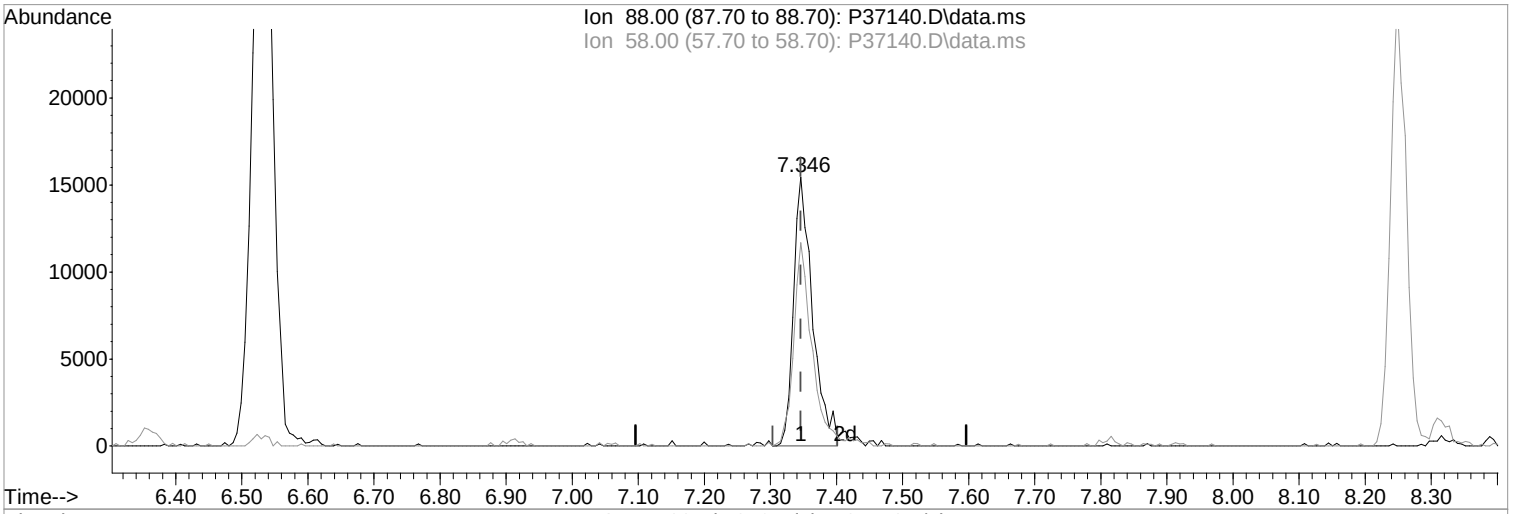
07/13/20

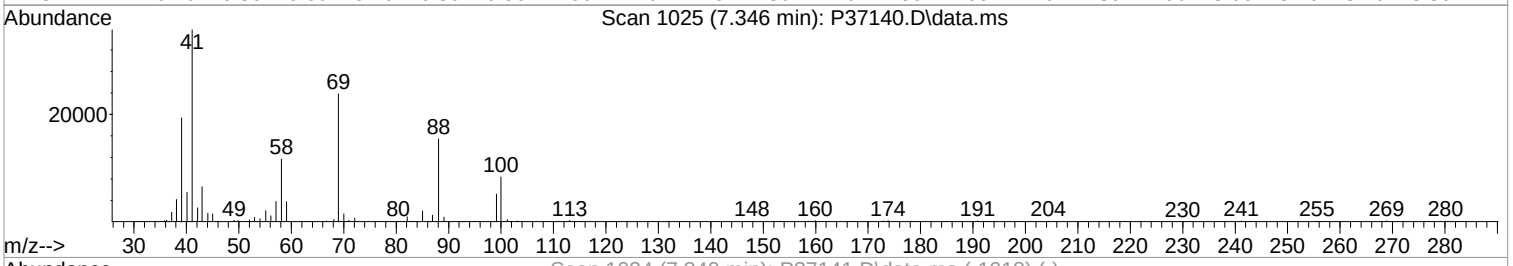
1st 07/14/20
2nd 07/14/20

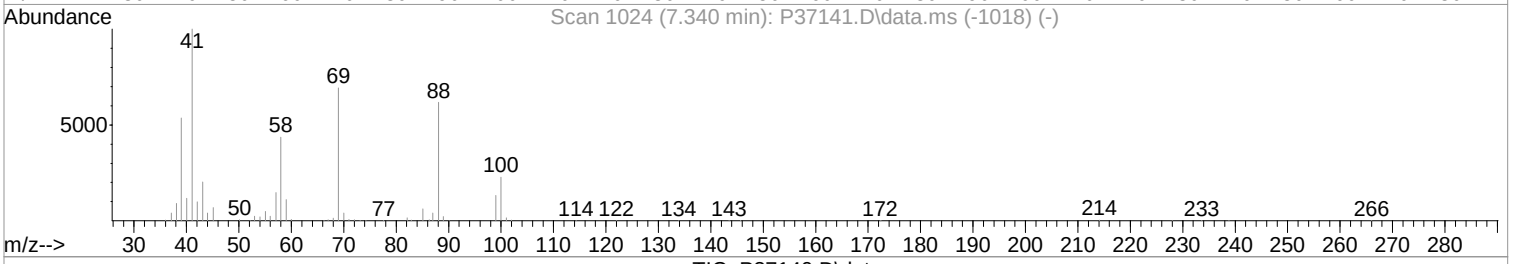
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37140.D\data.ms

(58) 1,4-Dioxane

7.346min (0.000) 382.26 ppb

response 30844

Ion	Exp%	Act%
88.00	100	100
58.00	70.60	75.59
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

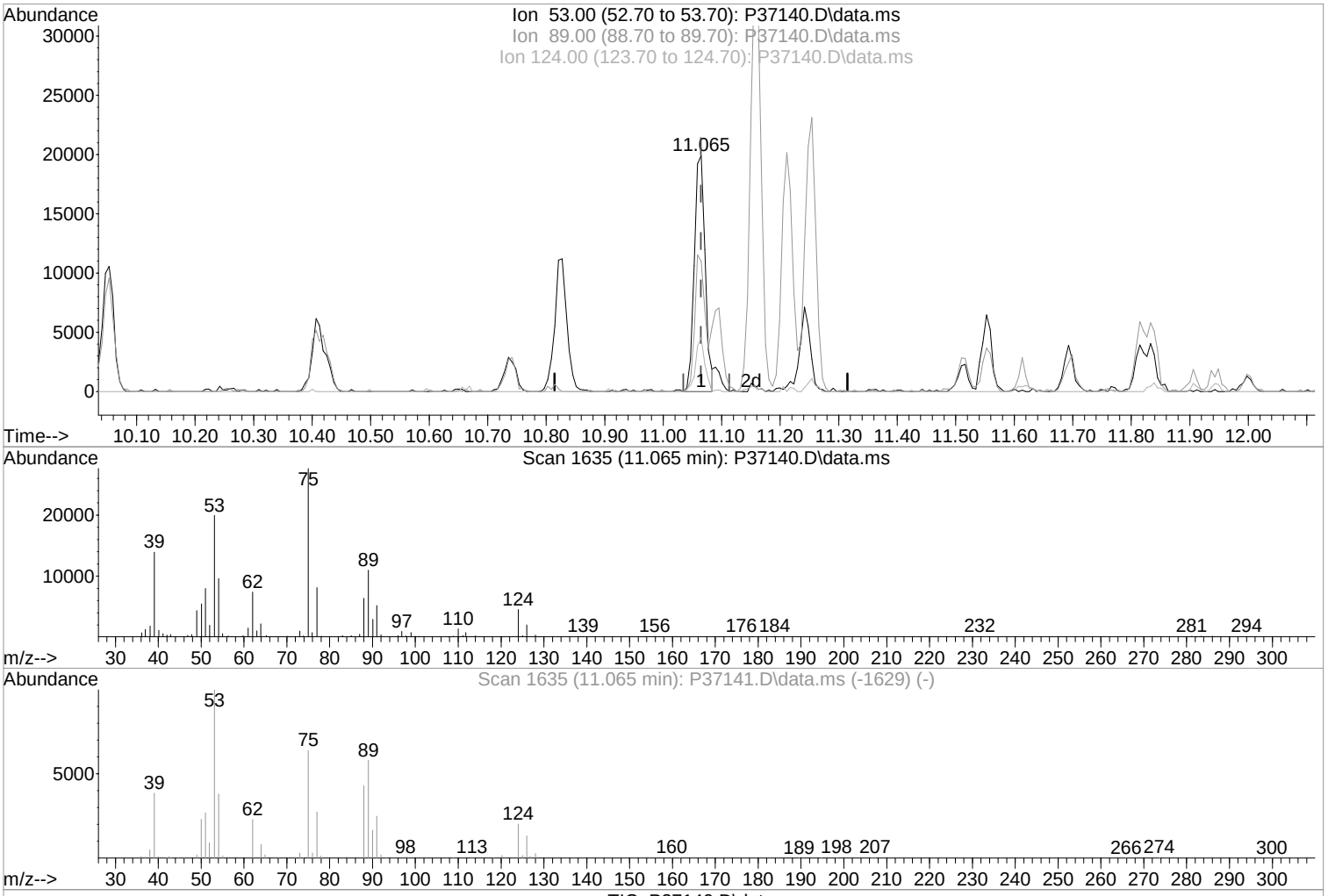
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37140.D\data.ms

(91) trans-1,4-Dichloro-2-Butene

11.065min (+0.000) 19.37 ppb m

response 25688

Ion	Exp%	Act%
53.00	100	100
89.00	58.00	55.11
124.00	20.10	22.80
0.00	0.00	0.00

Manual Integration:

After

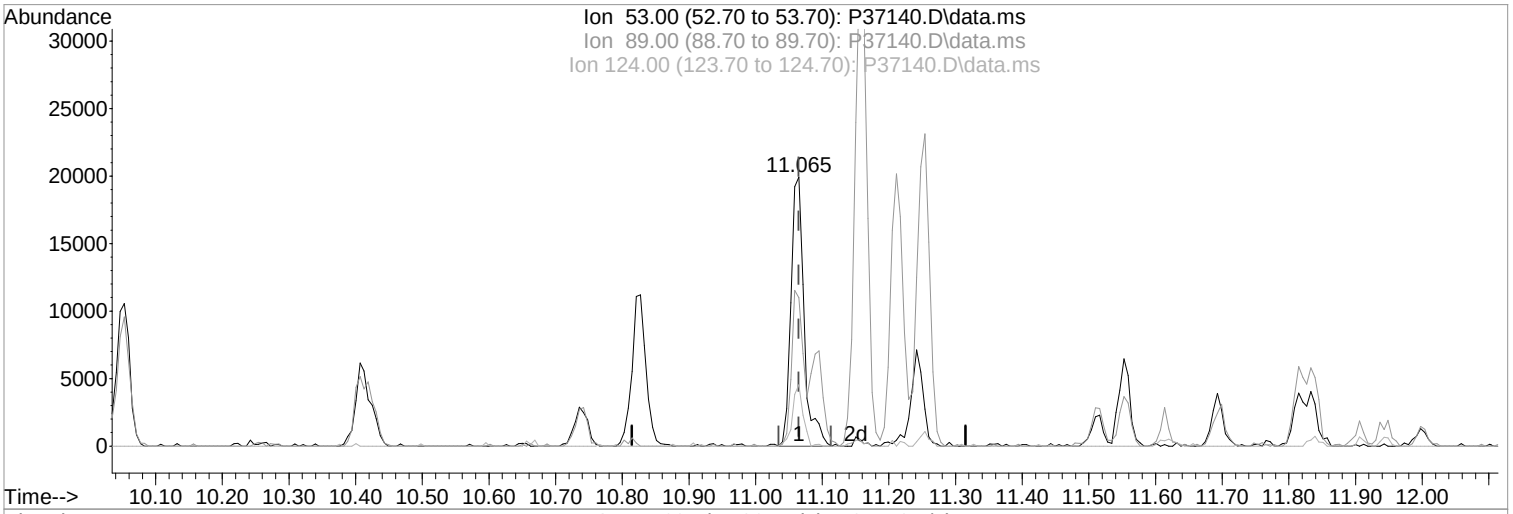
Poor integration.

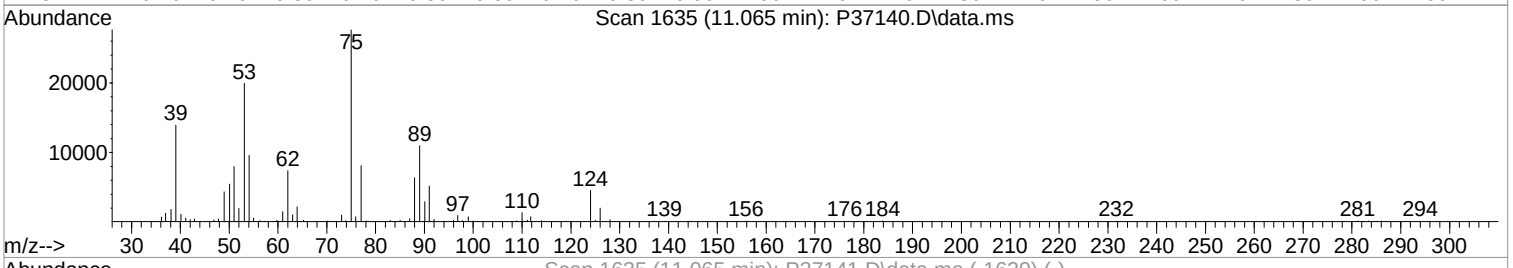
07/13/20

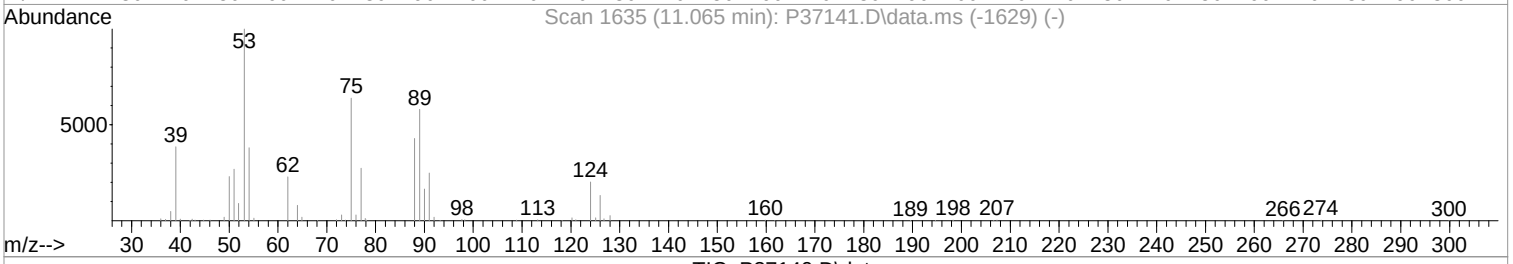
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37140.D\data.ms

(91) trans-1,4-Dichloro-2-Butene

11.065min (+0.000) 20.63 ppb

response 27359

Ion	Exp%	Act%
53.00	100	100
89.00	58.00	55.11
124.00	20.10	22.80
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:38:53 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.462	168	317057	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	510707	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	450883	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	229412	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	55863	19.05	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 38.10%#				
48) surr1,1,2-dichloroetha...	5.859	65	76633	18.88	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 37.76%#				
65) SURR3,Toluene-d8	8.315	98	261795	19.21	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 38.42%#				
70) SURR2,BFB	10.870	95	94435	18.81	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 37.62%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	78333	22.16	ppb		97
3) Chloromethane	1.335	50	93088	20.99	ppb		100
4) Vinyl Chloride	1.408	62	87713m	20.85	ppb		
5) Bromomethane	1.640	94	61209	17.87	ppb		99
6) Chloroethane	1.719	64	43067	18.92	ppb		90
7) Freon 21	1.872	67	113977	21.68	ppb		99
8) Trichlorofluoromethane	1.914	101	95413	22.43	ppb		96
9) Diethyl Ether	2.152	59	70112	22.80	ppb		96
10) Freon 123a	2.164	67	72802	20.06	ppb		99
11) Freon 123	2.219	83	83408	19.48	ppb		96
12) Acrolein	2.268	56	92913	111.60	ppb		99
13) 1,1-Diclethene	2.341	96	52198	21.29	ppb		98
14) Freon 113	2.341	101	60124	21.04	ppb		97
15) Acetone	2.408	43	42768	23.22	ppb		94
16) 2-Propanol	2.548	45	167788	410.91	ppb		96
17) Iodomethane	2.481	142	60009	21.87	ppb		95
18) Carbon Disulfide	2.530	76	179013	19.14	ppb		99
19) Acetonitrile	2.676	40	28917m	126.91	ppb		
20) Allyl Chloride	2.682	76	35407	20.38	ppb	#	90
21) Methyl Acetate	2.713	43	93828	19.90	ppb		94
22) Methylene Chloride	2.804	84	71840	20.56	ppb		96
23) TBA	2.957	59	271502	410.87	ppb		95
24) Acrylonitrile	3.085	53	219059	107.47	ppb		93
25) Methyl-t-Butyl Ether	3.103	73	247784	21.84	ppb		97
26) trans-1,2-Dichloroethene	3.091	96	61262	21.45	ppb		99
28) 1,1-Diclethane	3.609	63	132054	20.98	ppb		94
29) Vinyl Acetate	3.700	86	11401	24.67	ppb	#	37
30) DIPE	3.713	45	233173	21.20	ppb		97
31) 2-Chloro-1,3-Butadiene	3.719	53	113191	22.36	ppb		93
32) ETBE	4.243	59	223639	21.79	ppb		97
33) 2,2-Dichloropropane	4.438	77	100723	21.74	ppb		99
34) cis-1,2-Dichloroethene	4.456	96	76070	20.62	ppb		98
35) 2-Butanone	4.542	43	53315	21.63	ppb		91
36) Propionitrile	4.639	54	91137	103.11	ppb		93
37) Bromochloromethane	4.865	130	46612	21.49	ppb		97
38) Methacrylonitrile	4.901	67	43628	20.84	ppb		97
39) Tetrahydrofuran	4.968	42	39685	20.51	ppb		99
40) Chloroform	5.048	83	119569	20.61	ppb		97
41) 1,1,1-Trichloroethane	5.310	97	97656	21.30	ppb		93

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:38:53 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.139	73	217569	21.28	ppb		99
44) Cyclohexane	5.365	41	63731	19.03	ppb		84
46) Carbontetrachloride	5.566	117	70864	20.89	ppb		84
47) 1,1-Dichloropropene	5.590	75	100938	20.87	ppb		94
49) Benzene	5.913	78	306203	20.75	ppb		97
50) 1,2-Dichloroethane	5.974	62	111601	21.66	ppb		97
51) Iso-Butyl Alcohol	5.968	43	123183	389.46	ppb		100
52) n-Heptane	6.358	43	91513	20.03	ppb		91
53) 1-Butanol	6.907	56	193530	983.26	ppb		98
54) Trichloroethene	6.846	130	72894	19.92	ppb		97
55) Methylcyclohexane	7.053	55	88144	19.40	ppb		93
56) 1,2-Diclpropane	7.139	63	81304	20.77	ppb		99
57) Dibromomethane	7.279	93	47589	21.13	ppb		84
58) 1,4-Dioxane	7.346	88	32420m	401.80	ppb		
59) Methyl Methacrylate	7.358	69	70667	20.78	ppb		93
60) Bromodichloromethane	7.505	83	87282	21.13	ppb		95
62) 2-Chloroethylvinyl Ether	7.907	63	30632	17.99	ppb		99
63) cis-1,3-Dichloropropene	8.035	75	114751	20.37	ppb		94
64) 4-Methyl-2-pentanone	8.248	43	109500	20.80	ppb		100
66) Toluene	8.395	91	330234	21.15	ppb		98
67) trans-1,3-Dichloropropene	8.675	75	104598	20.41	ppb		98
68) Ethyl Methacrylate	8.803	69	123867	21.56	ppb		100
69) 1,1,2-Trichloroethane	8.864	97	72937	20.92	ppb		96
72) Tetrachloroethene	8.968	164	56229	20.42	ppb		93
73) 2-Hexanone	9.151	43	82297	20.53	ppb		97
74) 1,3-Dichloropropane	9.029	76	131977	20.81	ppb		96
75) Dibromochloromethane	9.248	129	57831	20.62	ppb		91
76) N-Butyl Acetate	9.291	43	153070	20.59	ppb		99
77) 1,2-Dibromoethane	9.346	107	72944	21.14	ppb		96
78) Chlorobenzene	9.827	112	209488	20.83	ppb		96
79) 3-CBTF	9.839	180	91740	19.70	ppb		98
80) 4-CBTF	9.894	180	81422	19.44	ppb		97
81) 1,1,1,2-Tetrachloroethane	9.913	131	62545	20.22	ppb		96
82) Ethylbenzene	9.943	106	111431	21.12	ppb	#	89
83) (m+p)Xylene	10.053	106	270402	42.80	ppb		98
84) o-Xylene	10.406	106	127348	20.65	ppb		96
85) Styrene	10.425	104	222427	21.23	ppb		98
87) Bromoform	10.589	173	37064	19.62	ppb		96
88) 2-CBTF	10.656	180	90084	19.36	ppb		97
89) Isopropylbenzene	10.736	105	331307	20.92	ppb		98
90) Cyclohexanone	10.827	55	370896	389.72	ppb		98
91) trans-1,4-Dichloro-2-B...	11.065	53	25688m	19.37	ppb		
92) 1,1,2,2-Tetrachloroethane	11.016	83	106588	20.82	ppb		96
93) Bromobenzene	10.992	156	87053	21.07	ppb		95
94) 1,2,3-Trichloropropane	11.047	110	35229	21.28	ppb		94
95) n-Propylbenzene	11.089	91	393451	21.65	ppb		99
96) 2-Chlorotoluene	11.156	91	246460	20.88	ppb		98
97) 3-Chlorotoluene	11.211	91	219017	19.43	ppb		98
98) 4-Chlorotoluene	11.254	91	275783	20.87	ppb		98
99) 1,3,5-Trimethylbenzene	11.242	105	280236	20.71	ppb		98
100) tert-Butylbenzene	11.516	119	227033	20.04	ppb		99
101) 1,2,4-Trimethylbenzene	11.553	105	287540	21.11	ppb		98
102) 3,4-DCBTF	11.620	214	71854	19.26	ppb		95
103) sec-Butylbenzene	11.693	105	335505	20.65	ppb		98
104) p-Isopropyltoluene	11.815	119	286013	20.42	ppb		97
105) 1,3-Dclbenz	11.784	146	163378	20.18	ppb		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:38:53 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	165908	20.14	ppb	96
107) 2,4-DCBTF	11.906	214	65163	18.65	ppb	98
108) 2,5-DCBTF	11.949	214	71921	19.21	ppb	96
109) n-Butylbenzene	12.150	91	270835	20.54	ppb	96
110) 1,2-Dclbenz	12.156	146	163610	19.91	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.790	157	21529	18.78	ppb	97
112) Trielution Dichlorotol...	12.894	125	385212	58.52	ppb	94
113) 1,3,5 Trichlorobenzene	12.943	180	107108	18.96	ppb	94
114) Coelution Dichlorotoluene	13.223	125	291536	40.33	ppb	97
115) 1,2,4-Tcbenzene	13.430	180	118721	20.03	ppb	100
116) Hexachlorobt	13.558	225	42982	18.07	ppb	98
117) Naphthalen	13.625	128	384484	22.20	ppb	98
118) 1,2,3-Tclbenzene	13.814	180	120975	19.73	ppb	96
119) 2,4,5-Trichlorotolene	14.393	159	71909	19.17	ppb	98
120) 2,3,6-Trichlorotoluene	14.479	159	65464	19.17	ppb	98

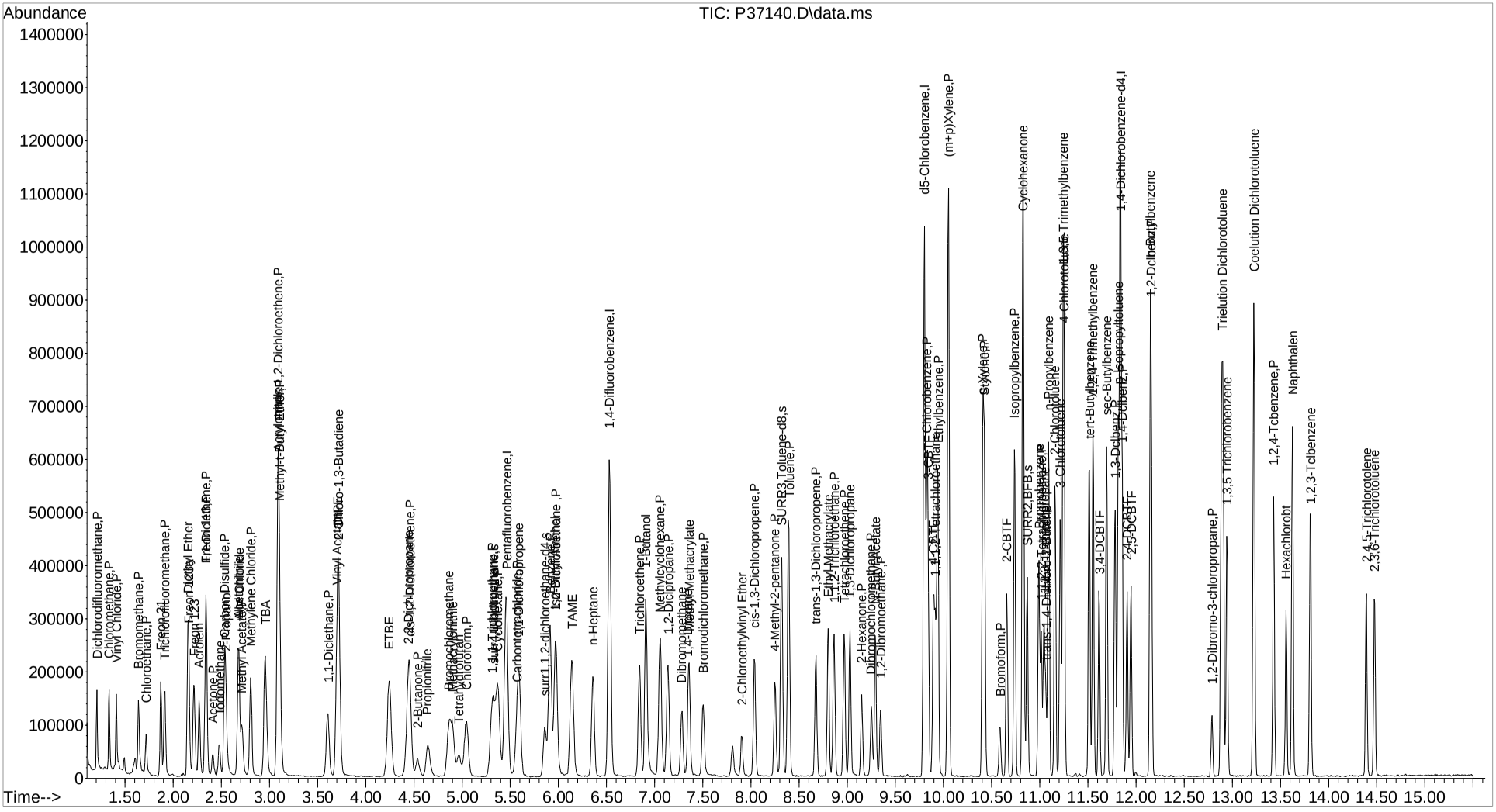
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:38:53 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

1st 07/14/20
2nd 07/14/20

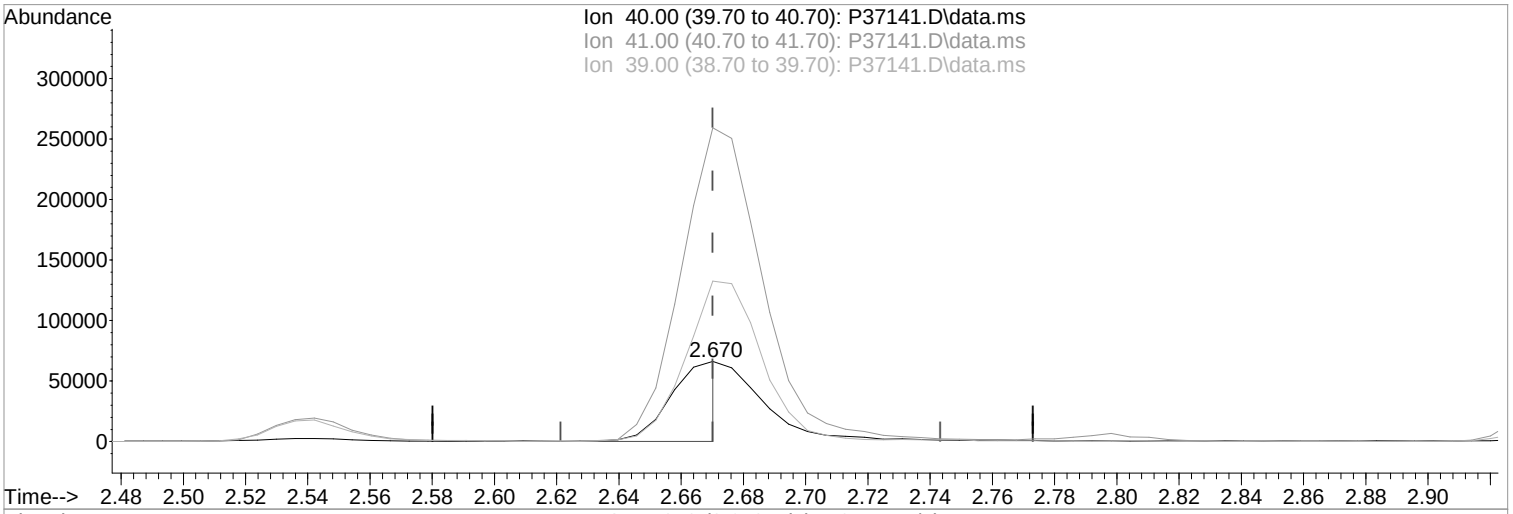


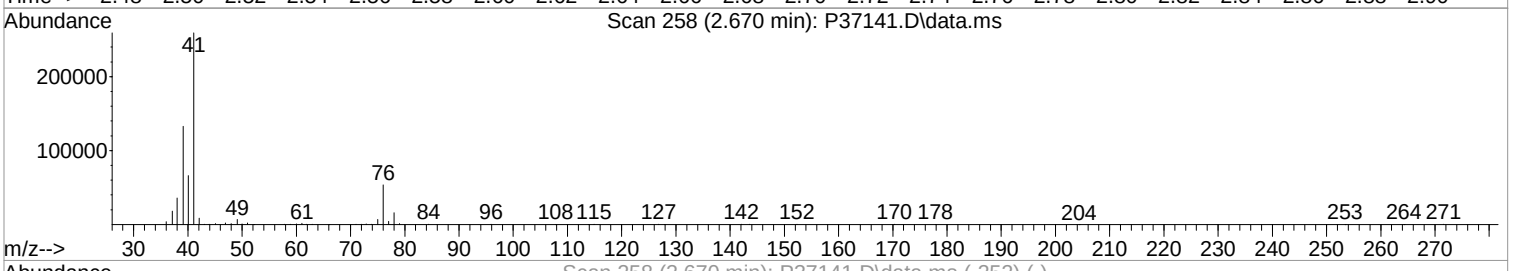
1st 07/14/20
2nd 07/14/20

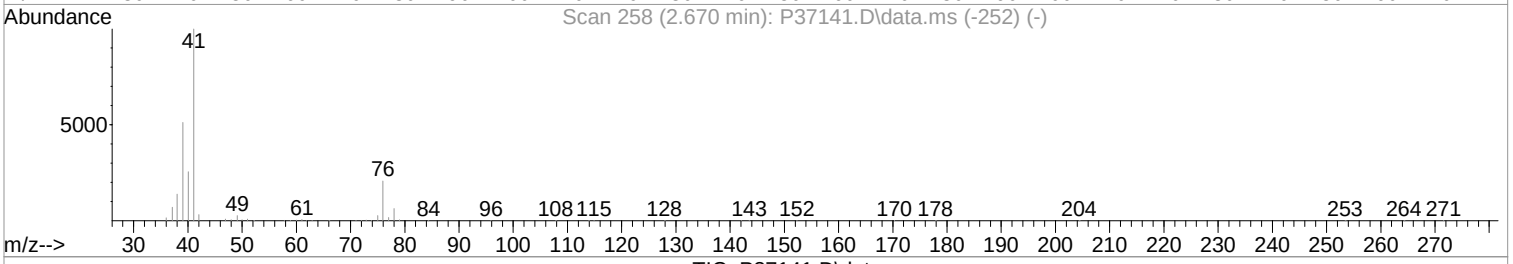
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37141.D\data.ms

(19) Acetonitrile

2.670min (-0.000) 306.00 ppb m

response 71444

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	391.78
39.00	200.50	200.48
0.00	0.00	0.00

Manual Integration:

After

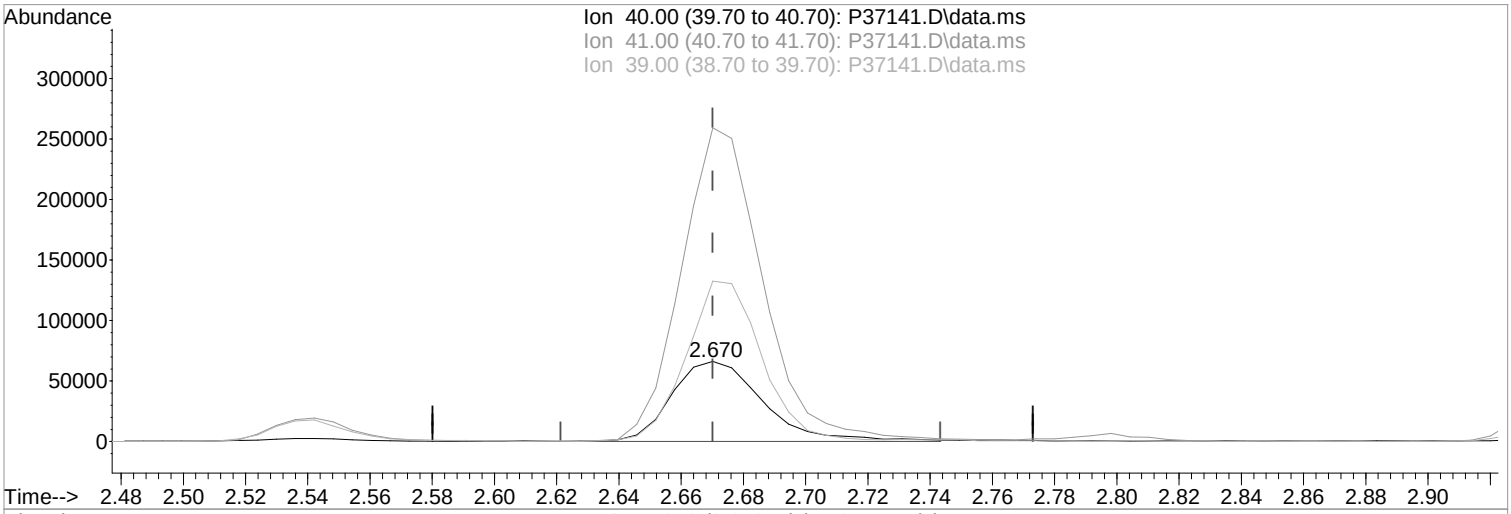
Poor integration.

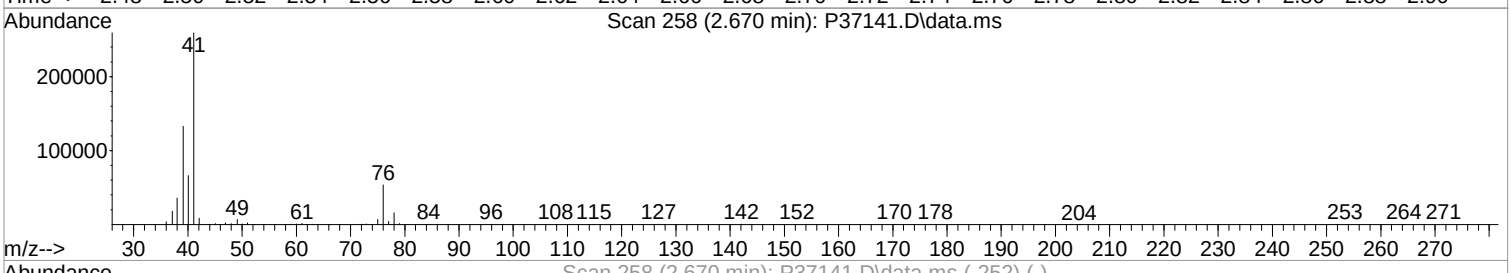
07/13/20

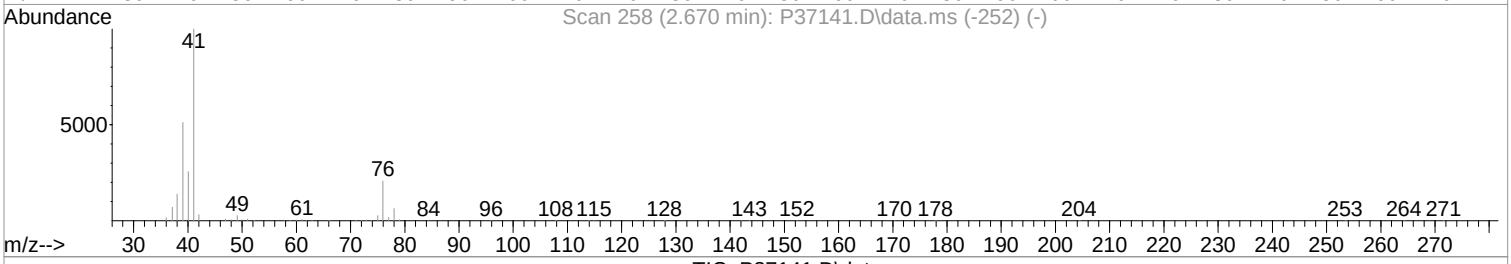
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37141.D\data.ms

(19) Acetonitrile

2.670min (-0.000) 580.40 ppb

response 135509

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	391.78
39.00	200.50	200.48
0.00	0.00	0.00

Manual Integration:

Before

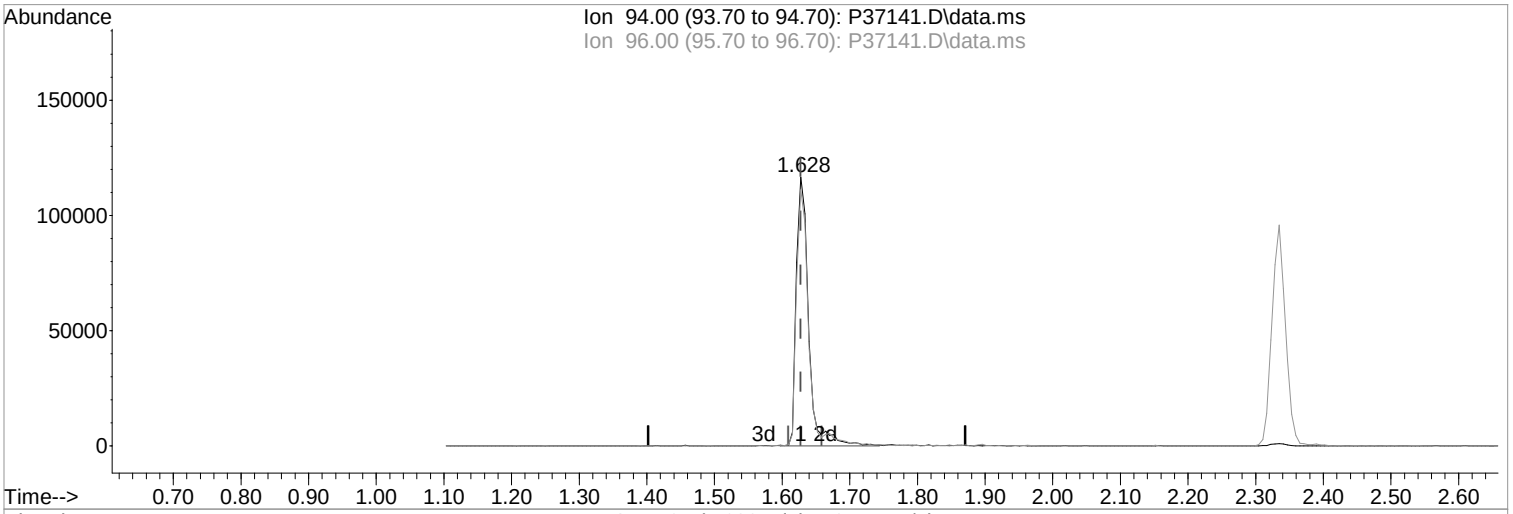
07/13/20

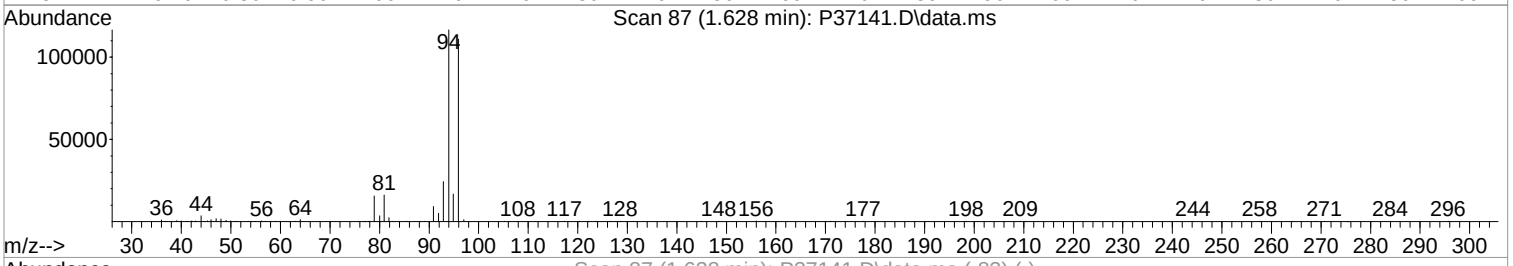
1st 07/14/20
2nd 07/14/20

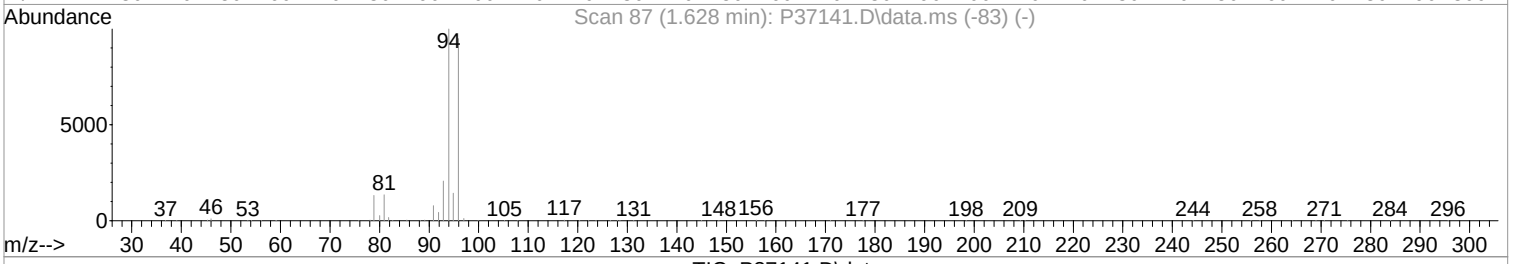
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37141.D\data.ms

(5) Bromomethane (P)

1.628min (-0.000) 42.25 ppb m

response 148315

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	95.17
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

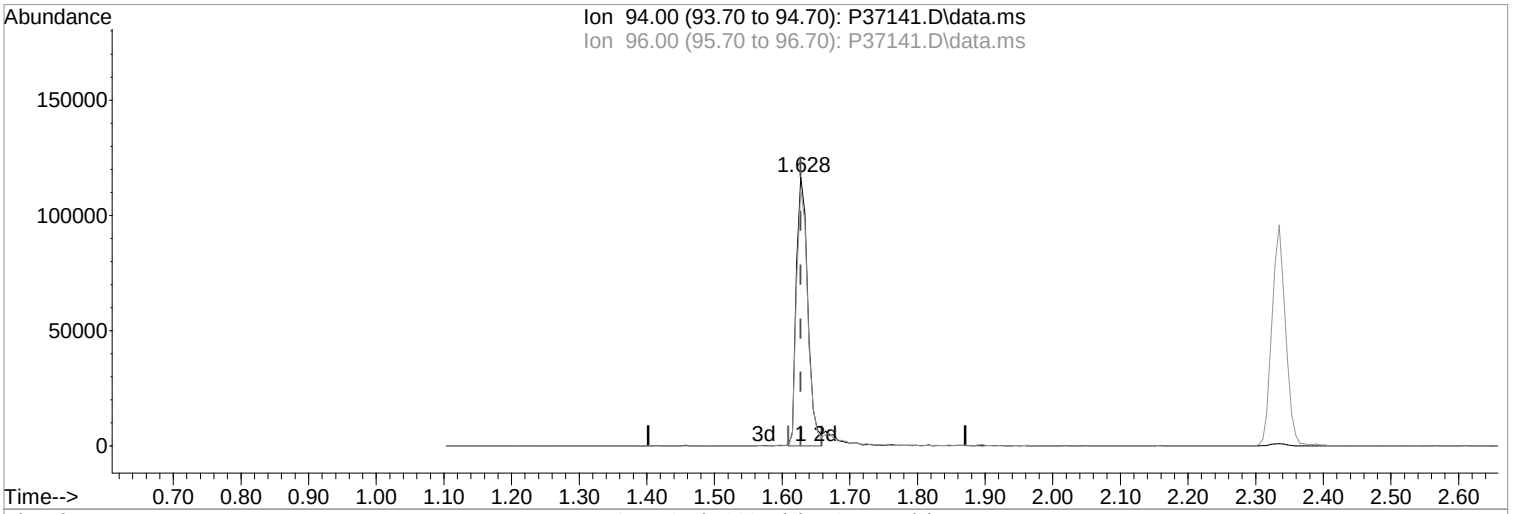
Poor integration.

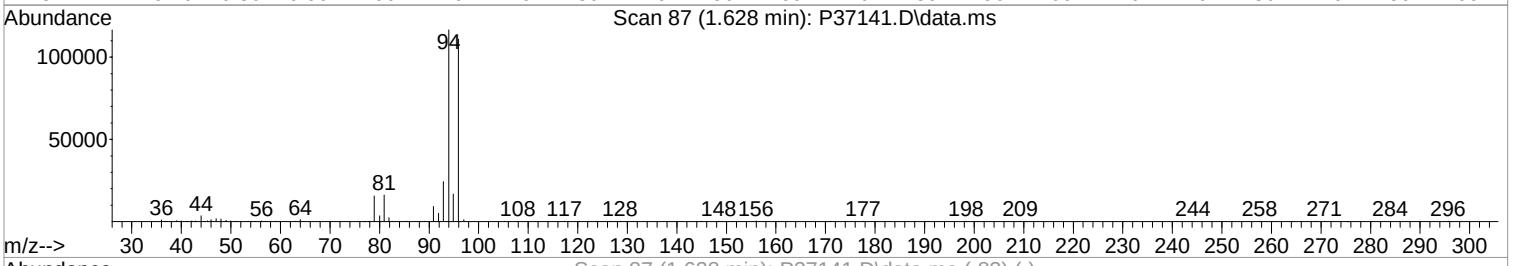
07/13/20

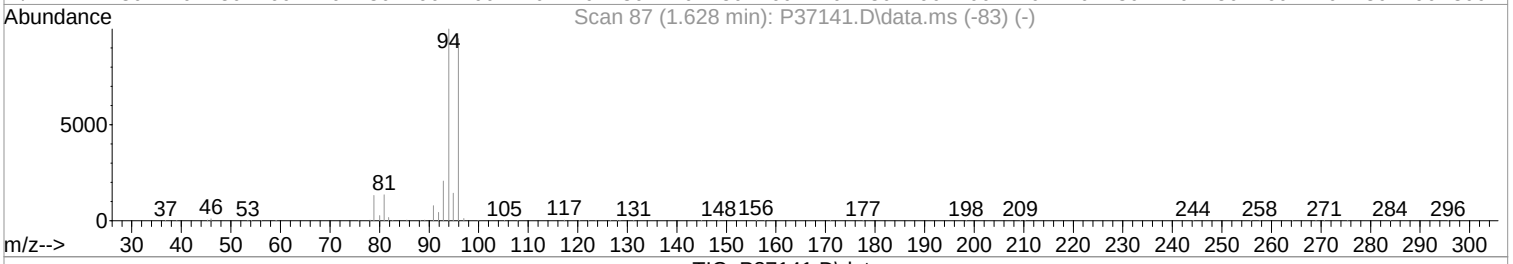
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37141.D\data.ms

(5) Bromomethane (P)

1.628min (-0.000) 39.13 ppb

response 137334

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	95.17
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

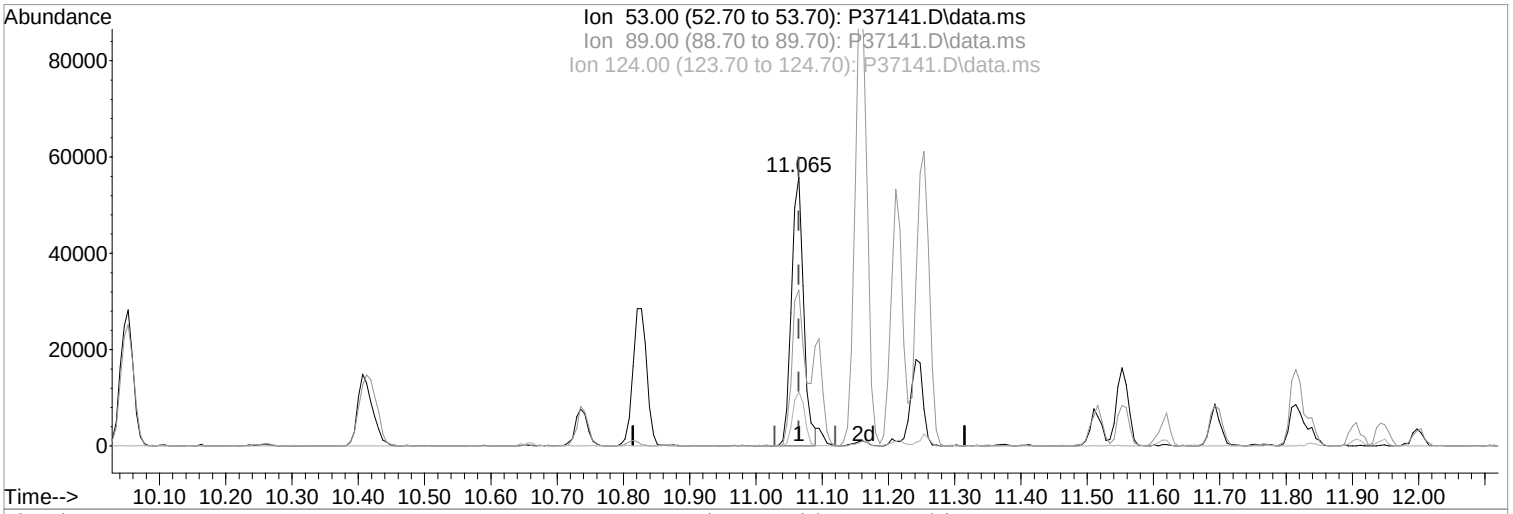
07/13/20

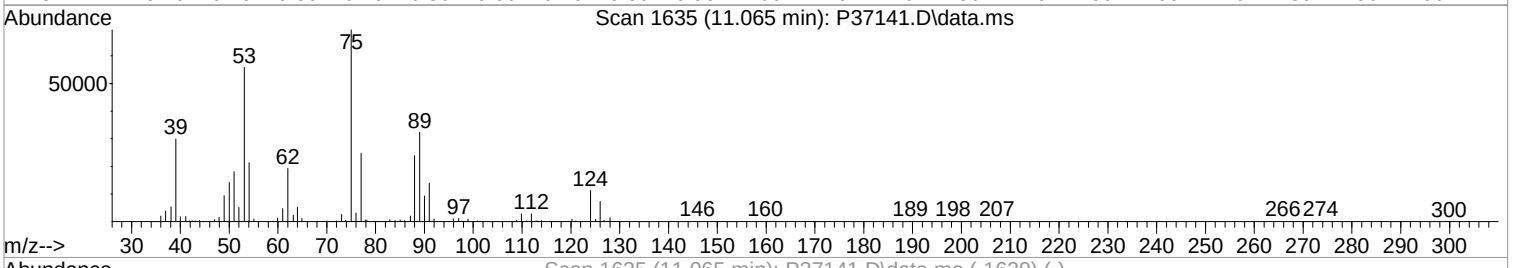
1st 07/14/20
2nd 07/14/20

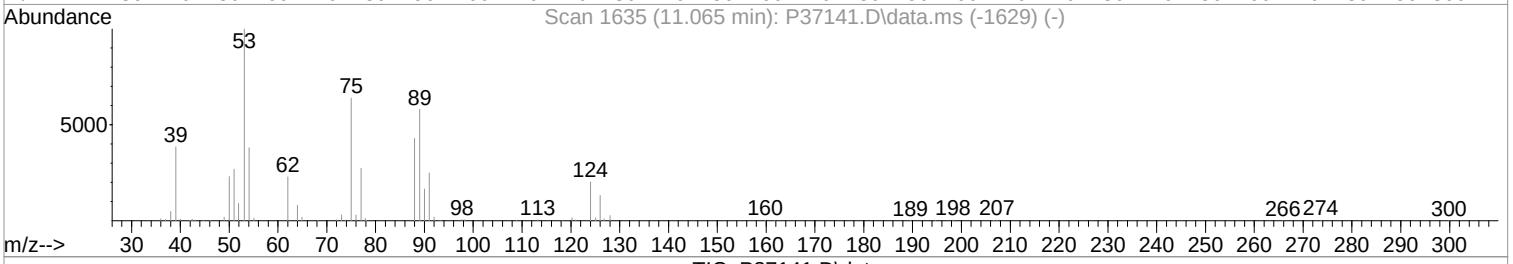
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37141.D\data.ms

(91) trans-1,4-Dichloro-2-Butene

11.065min (-0.000) 50.84 ppb m

response 71470

Ion	Exp%	Act%
53.00	100	100
89.00	58.00	58.02
124.00	20.10	20.14
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

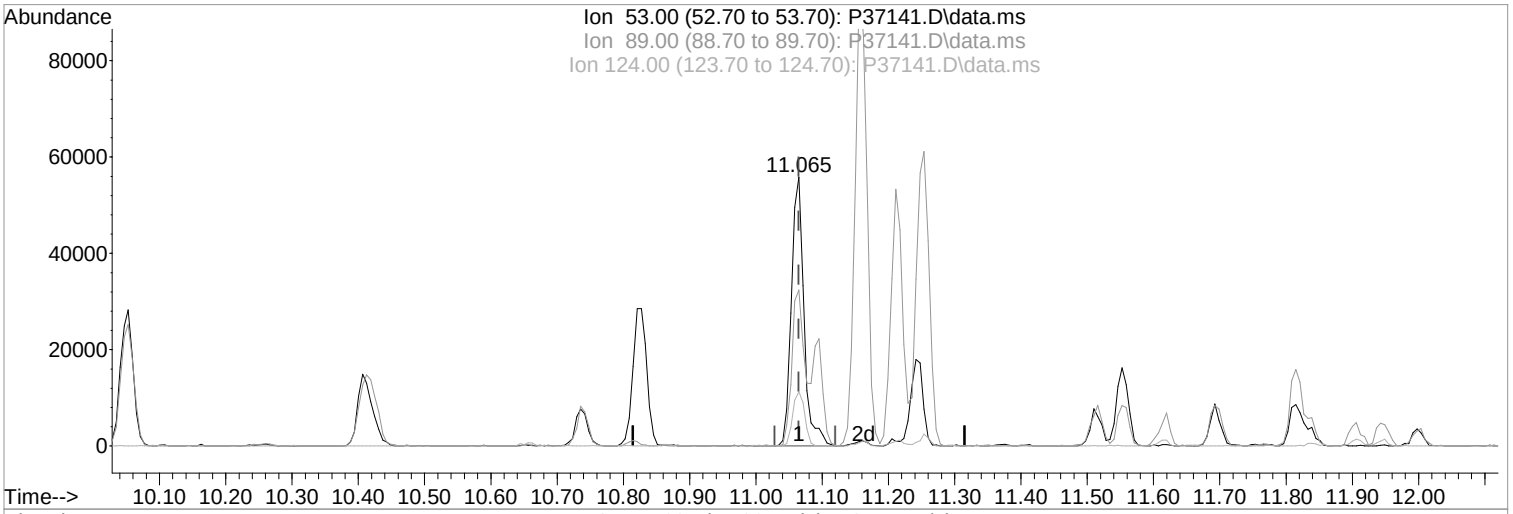
07/13/20

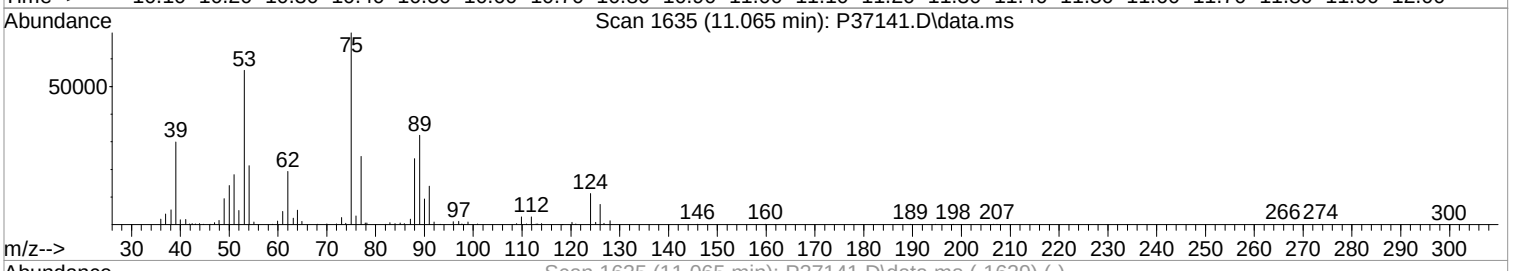
1st 07/14/20
2nd 07/14/20

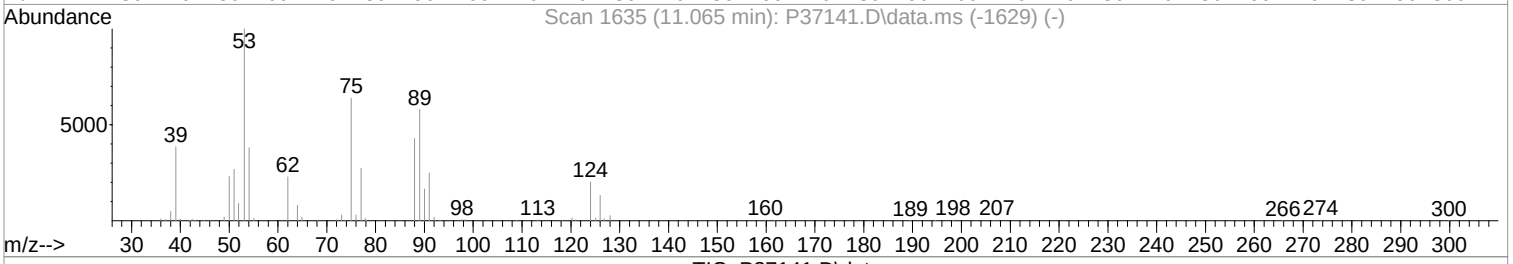
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37141.D\data.ms

(91) trans-1,4-Dichloro-2-Butene

11.065min (-0.000) 52.60 ppb

response 73948

Ion	Exp%	Act%
53.00	100	100
89.00	58.00	58.02
124.00	20.10	20.14
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:42:24 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	324870	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.529	114	516307	50.00	ppb	0.00
71) d5-Chlorobenzene	9.803	117	457341	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	243135	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.328	113	153332	51.72	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.44%			
48) surr1,1,2-dichloroetha...	5.852	65	208598	50.82	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.64%			
65) SURR3,Toluene-d8	8.315	98	710177	51.54	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 103.08%			
70) SURR2,BFB	10.870	95	257669	50.76	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.52%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.201	85	206030	56.88	ppb	100
3) Chloromethane	1.329	50	245764	54.07	ppb	100
4) Vinyl Chloride	1.402	62	239939	55.66	ppb	100
5) Bromomethane	1.628	94	148315m	42.25	ppb	
6) Chloroethane	1.707	64	112078	48.07	ppb	100
7) Freon 21	1.865	67	288303	53.52	ppb	100
8) Trichlorofluoromethane	1.902	101	233066	53.47	ppb	100
9) Diethyl Ether	2.146	59	178048	56.52	ppb	100
10) Freon 123a	2.152	67	195145	52.48	ppb	100
11) Freon 123	2.207	83	221263	50.44	ppb	100
12) Acrolein	2.262	56	224412	263.07	ppb	100
13) 1,1-Diclethene	2.335	96	134541	53.55	ppb	100
14) Freon 113	2.335	101	154967	52.94	ppb	100
15) Acetone	2.402	43	91537	48.51	ppb	100
16) 2-Propanol	2.542	45	435304	1040.42	ppb	100
17) Iodomethane	2.475	142	206293	73.38	ppb	100
18) Carbon Disulfide	2.524	76	443346	46.27	ppb	100
19) Acetonitrile	2.670	40	71444m	306.00	ppb	
20) Allyl Chloride	2.676	76	92871	52.16	ppb	100
21) Methyl Acetate	2.707	43	248103	51.36	ppb	100
22) Methylene Chloride	2.798	84	183199	51.16	ppb	100
23) TBA	2.951	59	699322	1032.85	ppb	100
24) Acrylonitrile	3.085	53	547090	261.95	ppb	100
25) Methyl-t-Butyl Ether	3.097	73	638375	54.90	ppb	100
26) trans-1,2-Dichloroethene	3.085	96	160895	54.99	ppb	100
28) 1,1-Diclethane	3.597	63	342431	53.09	ppb	100
29) Vinyl Acetate	3.700	86	29596	62.51	ppb	100
30) DIPE	3.706	45	617671	54.81	ppb	100
31) 2-Chloro-1,3-Butadiene	3.706	53	287511	55.44	ppb	100
32) ETBE	4.237	59	572104	54.41	ppb	100
33) 2,2-Dichloropropane	4.426	77	262750	55.35	ppb	100
34) cis-1,2-Dichloroethene	4.450	96	198494	52.51	ppb	100
35) 2-Butanone	4.523	43	129099	51.11	ppb	100
36) Propionitrile	4.633	54	228219	251.99	ppb	100
37) Bromochloromethane	4.853	130	114309	51.43	ppb	100
38) Methacrylonitrile	4.895	67	111970	52.19	ppb	100
39) Tetrahydrofuran	4.950	42	97404	49.12	ppb	100
40) Chloroform	5.035	83	306852	51.62	ppb	100
41) 1,1,1-Trichloroethane	5.310	97	256935	54.70	ppb	100

1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:42:24 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.133	73	566912	54.12	ppb	100
44) Cyclohexane	5.365	41	175502	51.84	ppb	100
46) Carbontetrachloride	5.572	117	196901	57.42	ppb	100
47) 1,1-Dichloropropene	5.590	75	252252	51.60	ppb	100
49) Benzene	5.913	78	788933	52.88	ppb	100
50) 1,2-Dichloroethane	5.968	62	270234	51.87	ppb	100
51) Iso-Butyl Alcohol	5.962	43	333418	1042.72	ppb	100
52) n-Heptane	6.352	43	246312	53.31	ppb	100
53) 1-Butanol	6.907	56	531988	2673.53	ppb	100
54) Trichloroethene	6.840	130	184776	49.95	ppb	100
55) Methylcyclohexane	7.053	55	242578	52.80	ppb	100
56) 1,2-Diclpropane	7.133	63	206933	52.29	ppb	100
57) Dibromomethane	7.285	93	116967	51.37	ppb	100
58) 1,4-Dioxane	7.340	88	81942	1004.53	ppb	100
59) Methyl Methacrylate	7.352	69	183993	53.51	ppb	100
60) Bromodichloromethane	7.505	83	235239	56.34	ppb	100
62) 2-Chloroethylvinyl Ether	7.901	63	87195	50.65	ppb	100
63) cis-1,3-Dichloropropene	8.035	75	313503	55.03	ppb	100
64) 4-Methyl-2-pentanone	8.248	43	278323	52.30	ppb	100
66) Toluene	8.389	91	858850	54.40	ppb	100
67) trans-1,3-Dichloropropene	8.675	75	282573	54.55	ppb	100
68) Ethyl Methacrylate	8.803	69	318717	54.88	ppb	100
69) 1,1,2-Trichloroethane	8.864	97	185338	52.58	ppb	100
72) Tetrachloroethene	8.968	164	143590	51.41	ppb	100
73) 2-Hexanone	9.151	43	208825	51.37	ppb	100
74) 1,3-Dichloropropane	9.029	76	337855	52.53	ppb	100
75) Dibromochloromethane	9.248	129	160155	56.31	ppb	100
76) N-Butyl Acetate	9.291	43	412143	54.66	ppb	100
77) 1,2-Dibromoethane	9.346	107	185062	52.87	ppb	100
78) Chlorobenzene	9.827	112	526529	51.62	ppb	100
79) 3-CBTF	9.839	180	253283	53.63	ppb	100
80) 4-CBTF	9.894	180	227727	53.60	ppb	100
81) 1,1,1,2-Tetrachloroethane	9.919	131	167482	53.37	ppb	100
82) Ethylbenzene	9.943	106	281421	52.58	ppb	100
83) (m+p)Xylene	10.053	106	704326	109.92	ppb	100
84) o-Xylene	10.406	106	345523	55.23	ppb	100
85) Styrene	10.425	104	600140	56.47	ppb	100
87) Bromoform	10.589	173	103722	51.80	ppb	100
88) 2-CBTF	10.656	180	246015	49.88	ppb	100
89) Isopropylbenzene	10.742	105	876866	52.24	ppb	100
90) Cyclohexanone	10.827	55	1028641	1019.85	ppb	100
91) trans-1,4-Dichloro-2-B...	11.065	53	71470m	50.84	ppb	
92) 1,1,2,2-Tetrachloroethane	11.016	83	278938	51.41	ppb	100
93) Bromobenzene	10.992	156	217809	49.73	ppb	100
94) 1,2,3-Trichloropropane	11.047	110	88646	50.52	ppb	100
95) n-Propylbenzene	11.089	91	1058051	54.94	ppb	100
96) 2-Chlorotoluene	11.156	91	650515	52.00	ppb	100
97) 3-Chlorotoluene	11.211	91	604579	50.60	ppb	100
98) 4-Chlorotoluene	11.254	91	737752	52.67	ppb	100
99) 1,3,5-Trimethylbenzene	11.242	105	767037	53.49	ppb	100
100) tert-Butylbenzene	11.516	119	625765	52.13	ppb	100
101) 1,2,4-Trimethylbenzene	11.553	105	779396	54.00	ppb	100
102) 3,4-DCBTF	11.620	214	199698	50.51	ppb	100
103) sec-Butylbenzene	11.693	105	934901	54.30	ppb	100
104) p-Isopropyltoluene	11.815	119	802097	54.03	ppb	100
105) 1,3-Dclbenz	11.784	146	426885	49.75	ppb	100

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:42:24 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

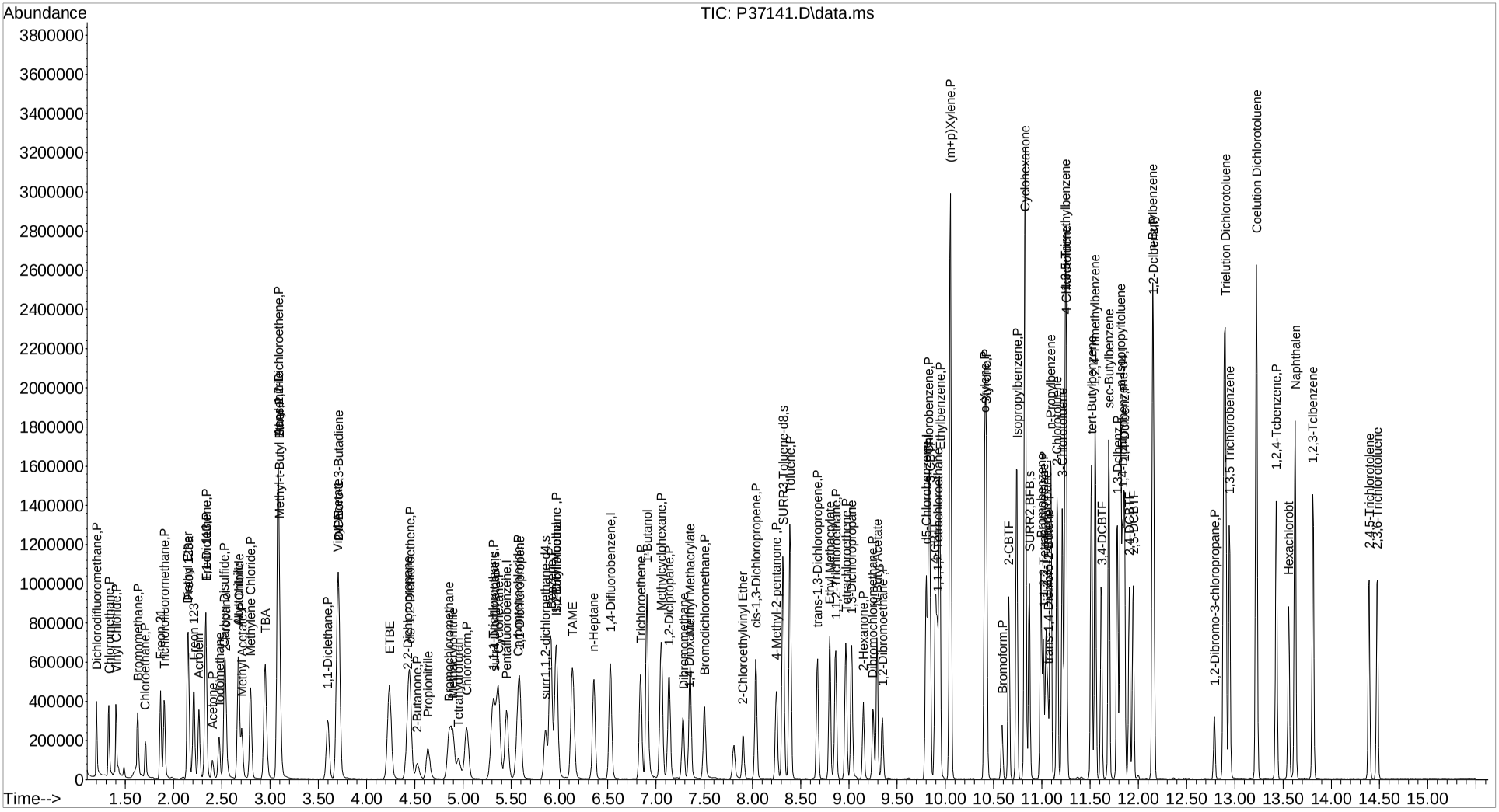
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	440719	50.48	ppb	100
107) 2,4-DCBTF	11.906	214	188645	50.95	ppb	100
108) 2,5-DCBTF	11.949	214	202423	51.02	ppb	100
109) n-Butylbenzene	12.150	91	770003	55.10	ppb	100
110) 1,2-Dclbenz	12.156	146	443002	50.86	ppb	100
111) 1,2-Dibromo-3-chloropr...	12.790	157	64394	53.00	ppb	100
112) Trielution Dichlorotol...	12.900	125	1106135	158.57	ppb	100
113) 1,3,5 Trichlorobenzene	12.943	180	310407	51.84	ppb	100
114) Coelution Dichlorotoluene	13.223	125	842606	109.97	ppb	100
115) 1,2,4-Tcbenzene	13.430	180	338853	53.94	ppb	100
116) Hexachlorobt	13.558	225	132682	52.62	ppb	100
117) Naphthalen	13.625	128	1080161	58.85	ppb	100
118) 1,2,3-Tclbenzene	13.808	180	341564	52.56	ppb	100
119) 2,4,5-Trichlorotolene	14.393	159	218674	55.01	ppb	100
120) 2,3,6-Trichlorotoluene	14.479	159	200190	55.32	ppb	100

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:42:24 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

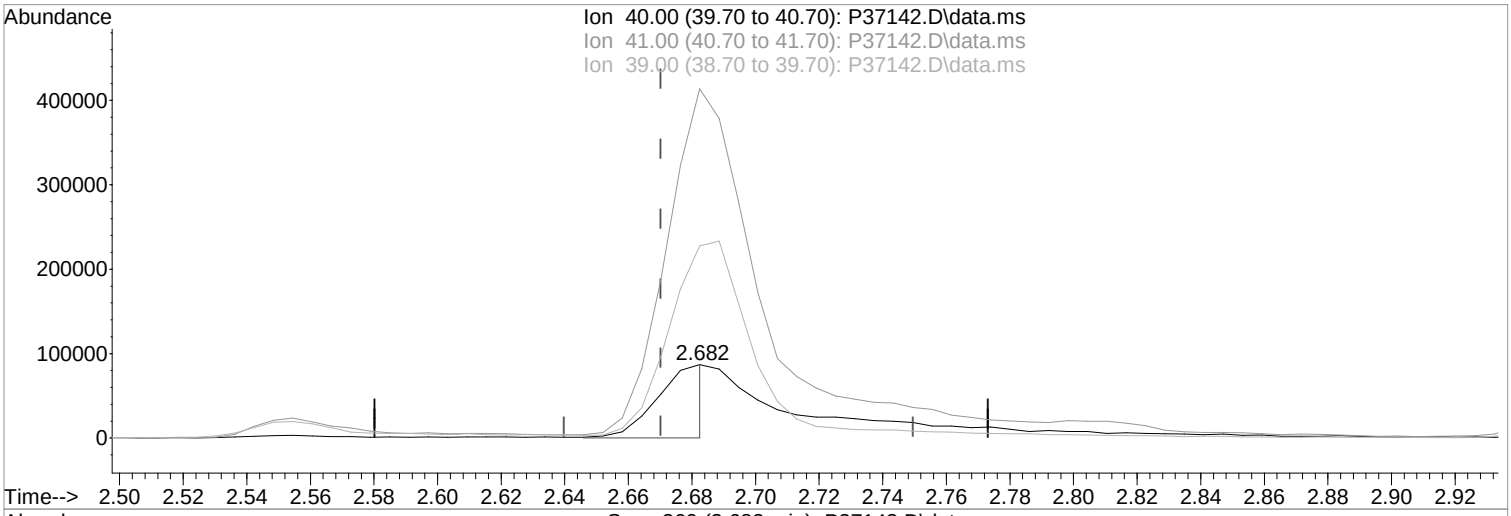


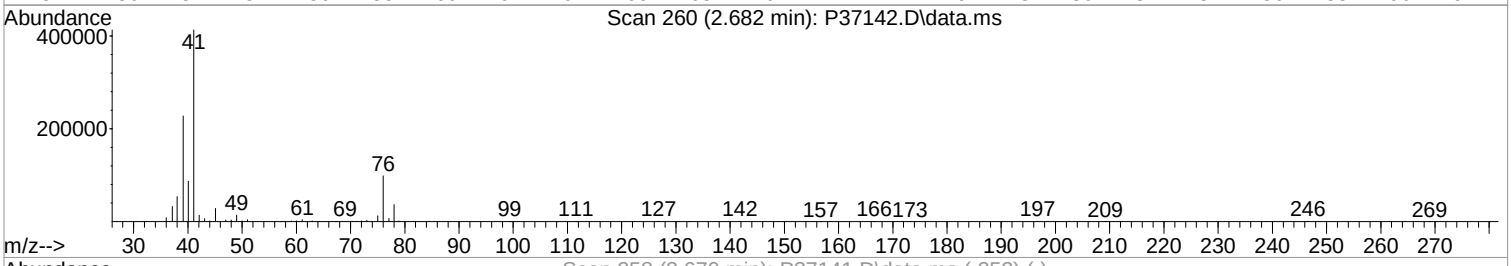
1st 07/14/20
2nd 07/14/20

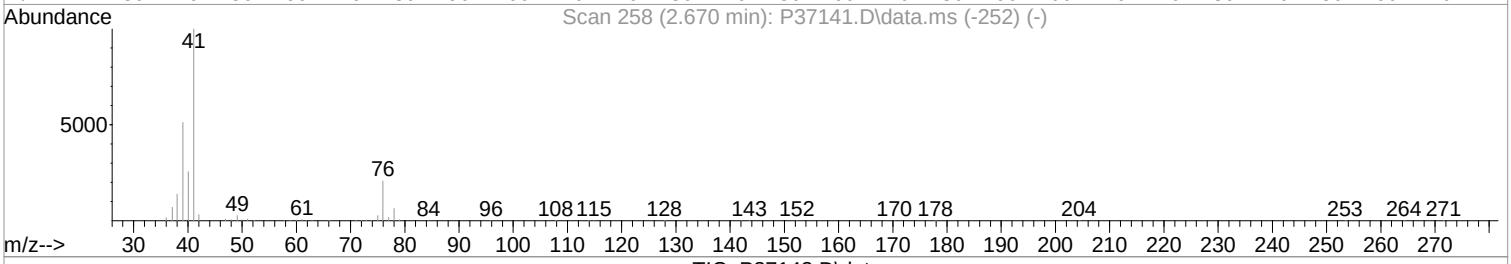
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37142.D\data.ms

(19) Acetonitrile

2.682min (+0.012) 370.39 ppb m

response 93460

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	474.90#
39.00	200.50	261.33#
0.00	0.00	0.00

Manual Integration:

After

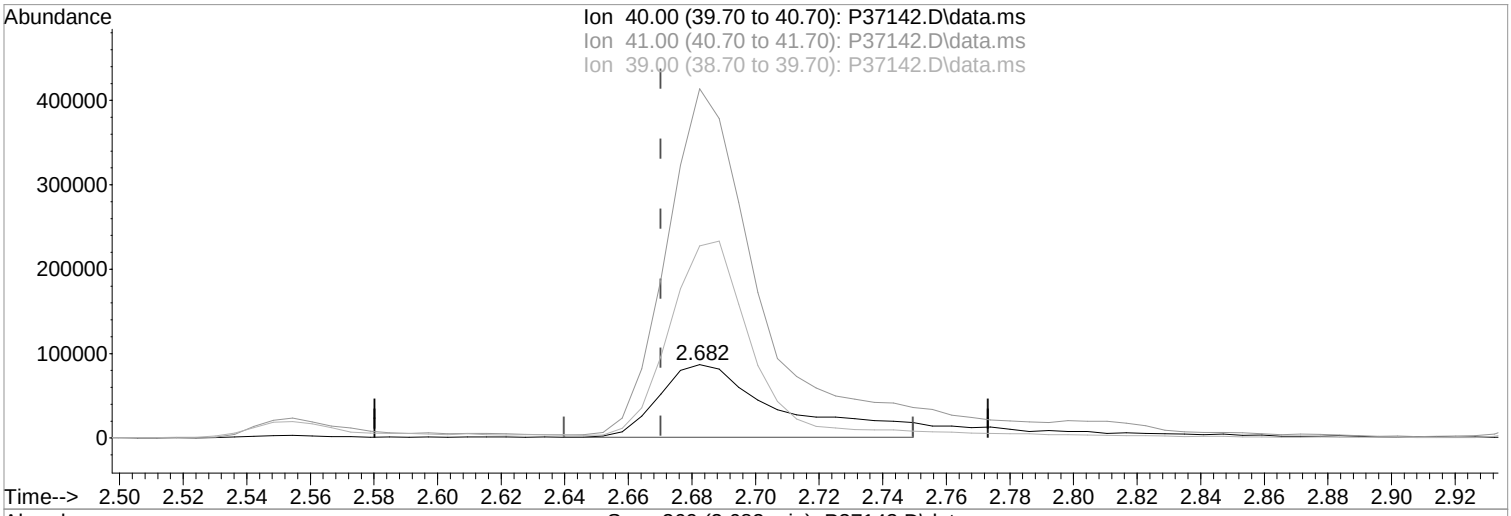
Poor integration.

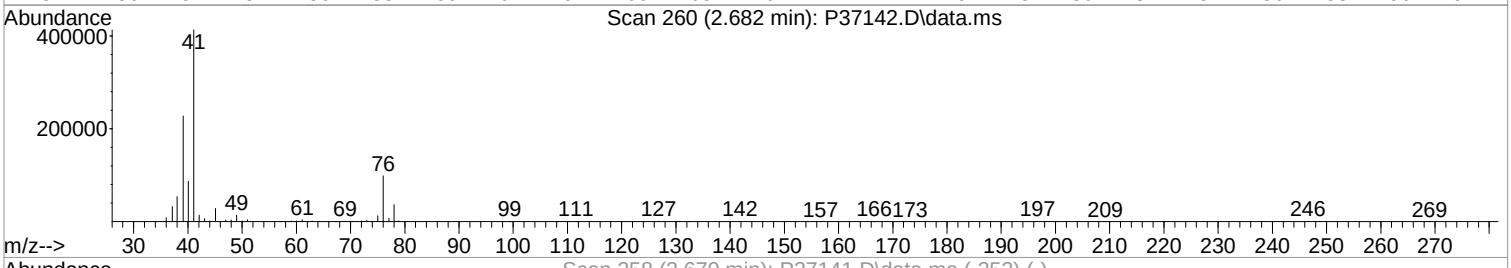
07/13/20

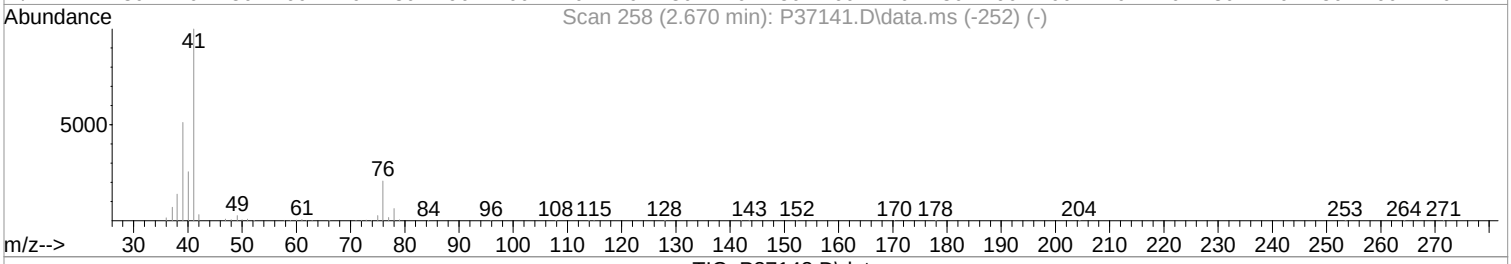
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37142.D\data.ms

(19) Acetonitrile

2.682min (+0.012) 899.83 ppb

response 227054

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	474.90#
39.00	200.50	261.33#
0.00	0.00	0.00

Manual Integration:

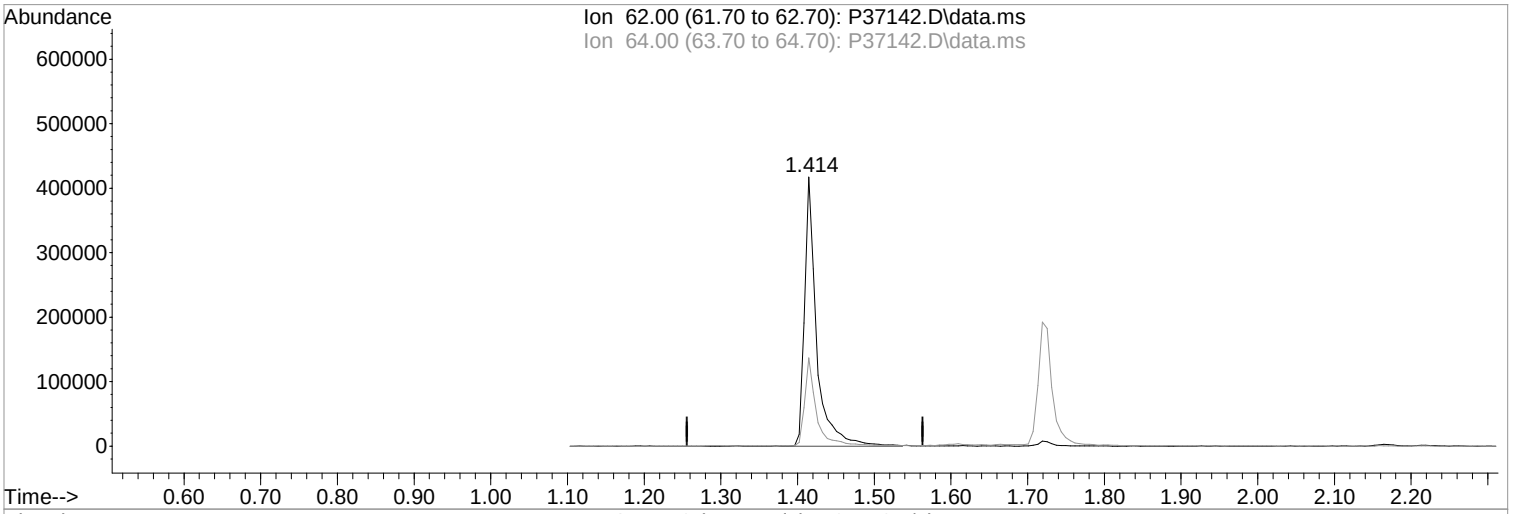
Before

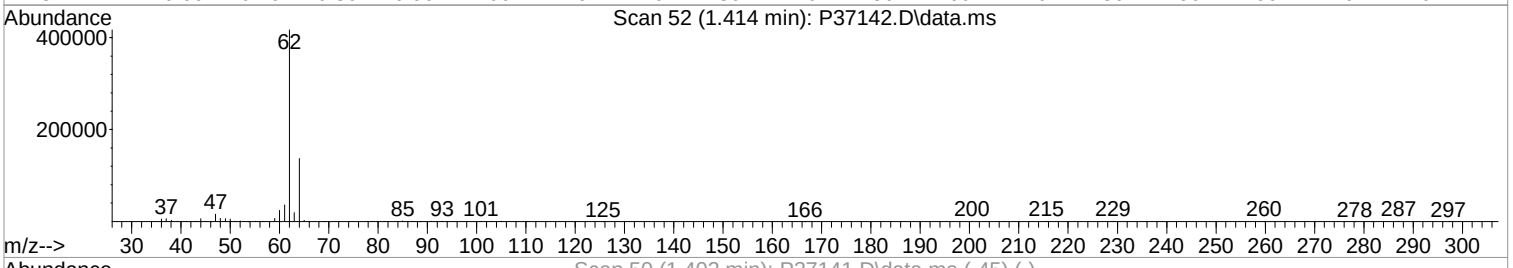
07/13/20

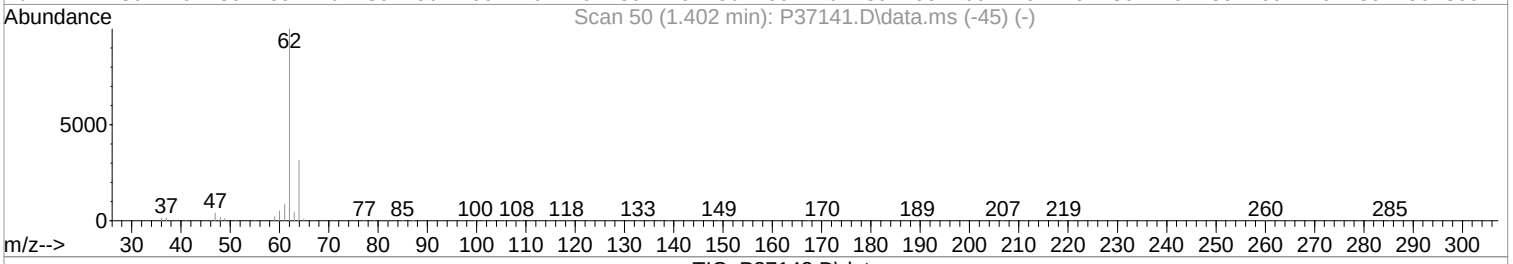
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37142.D\data.ms

(4) Vinyl Chloride (P)

1.414min (+0.012) 98.07 ppb m

response 456885

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	32.80
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

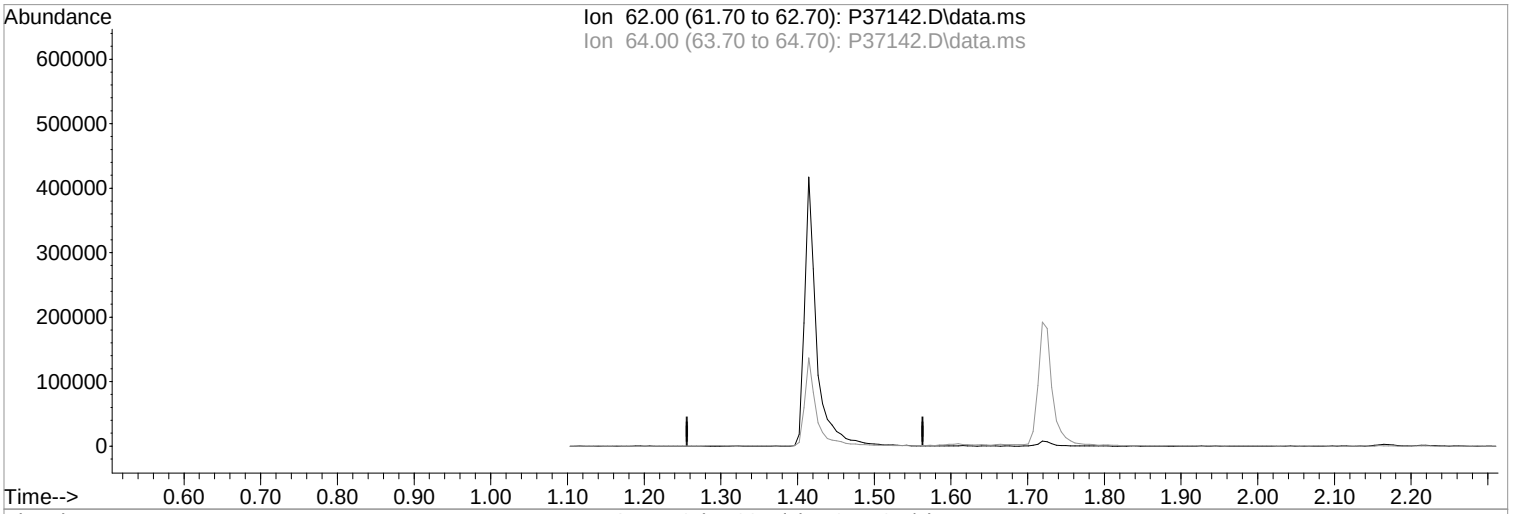
Peak not found.

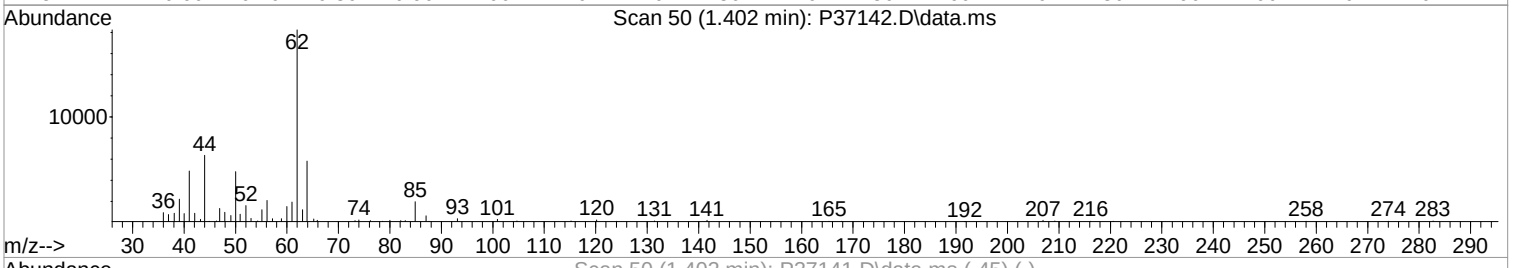
07/13/20

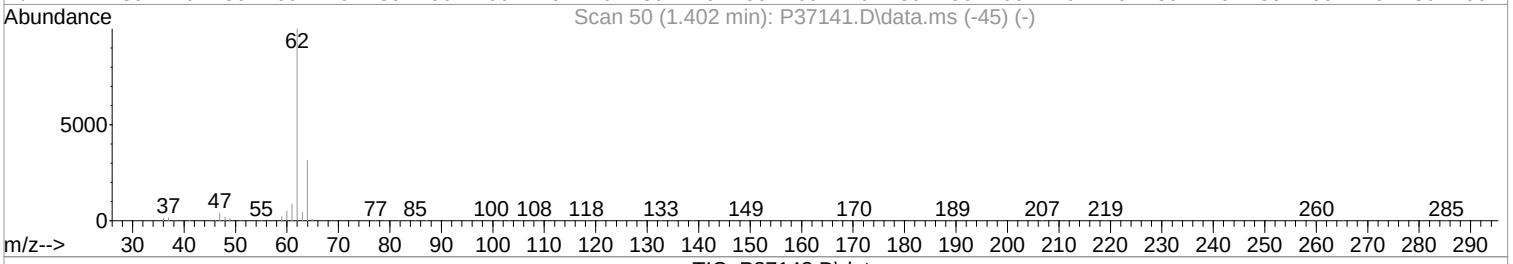
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37142.D\data.ms

(4) Vinyl Chloride (P)

1.402min (-1.402) 0.00 ppb

response 0

Ion	Exp%	Act%
62.00	100	0.00
64.00	31.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

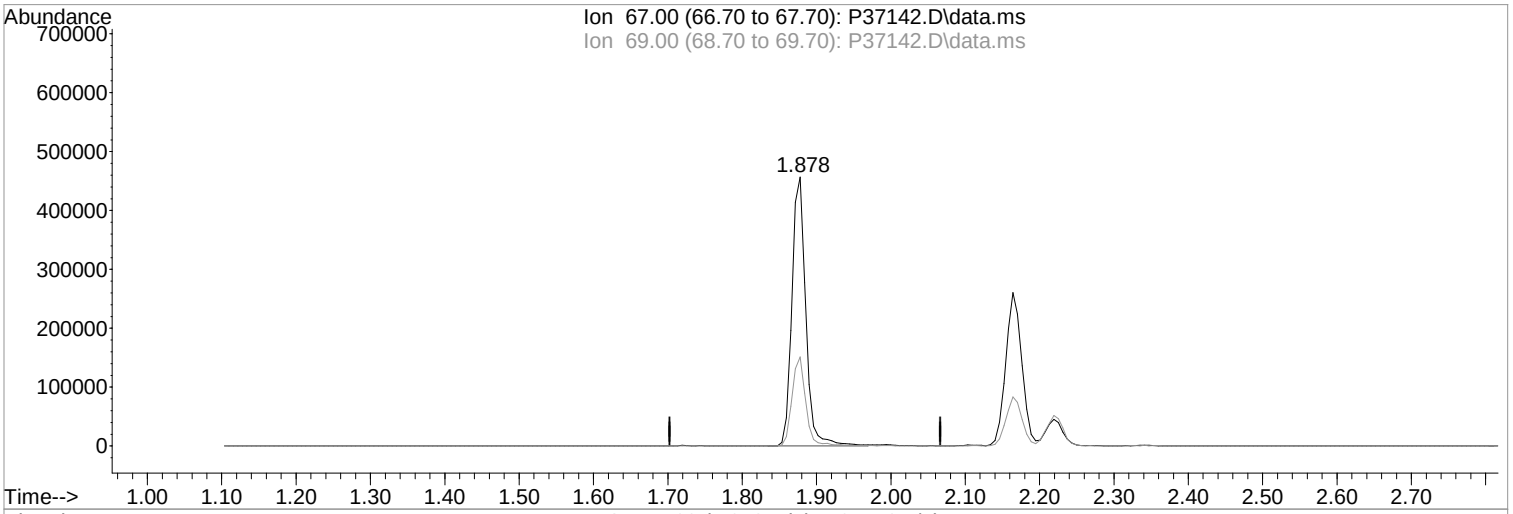
07/13/20

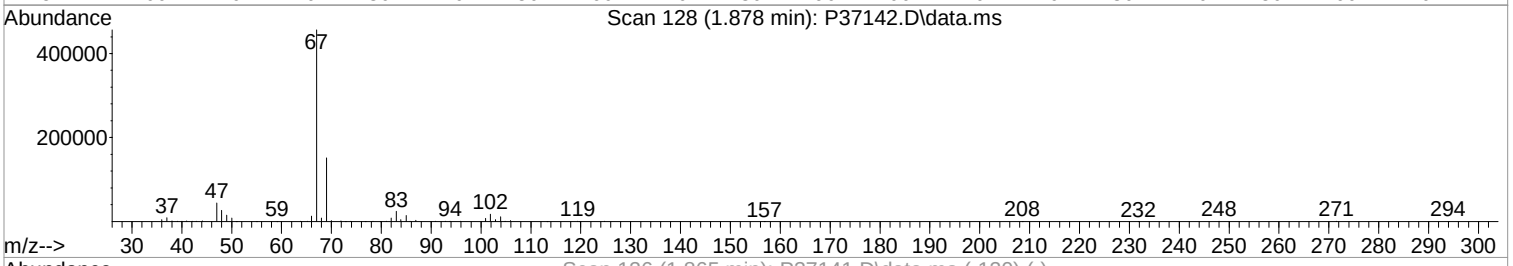
1st 07/14/20
2nd 07/14/20

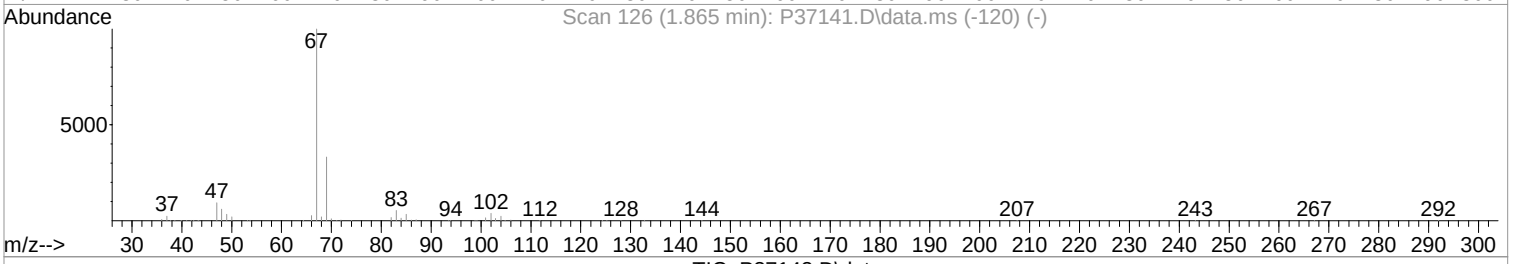
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37142.D\data.ms

(7) Freon 21

1.878min (+0.012) 101.39 ppb m

response 590319

Ion	Exp%	Act%
67.00	100	100
69.00	33.20	33.14
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Peak not found.

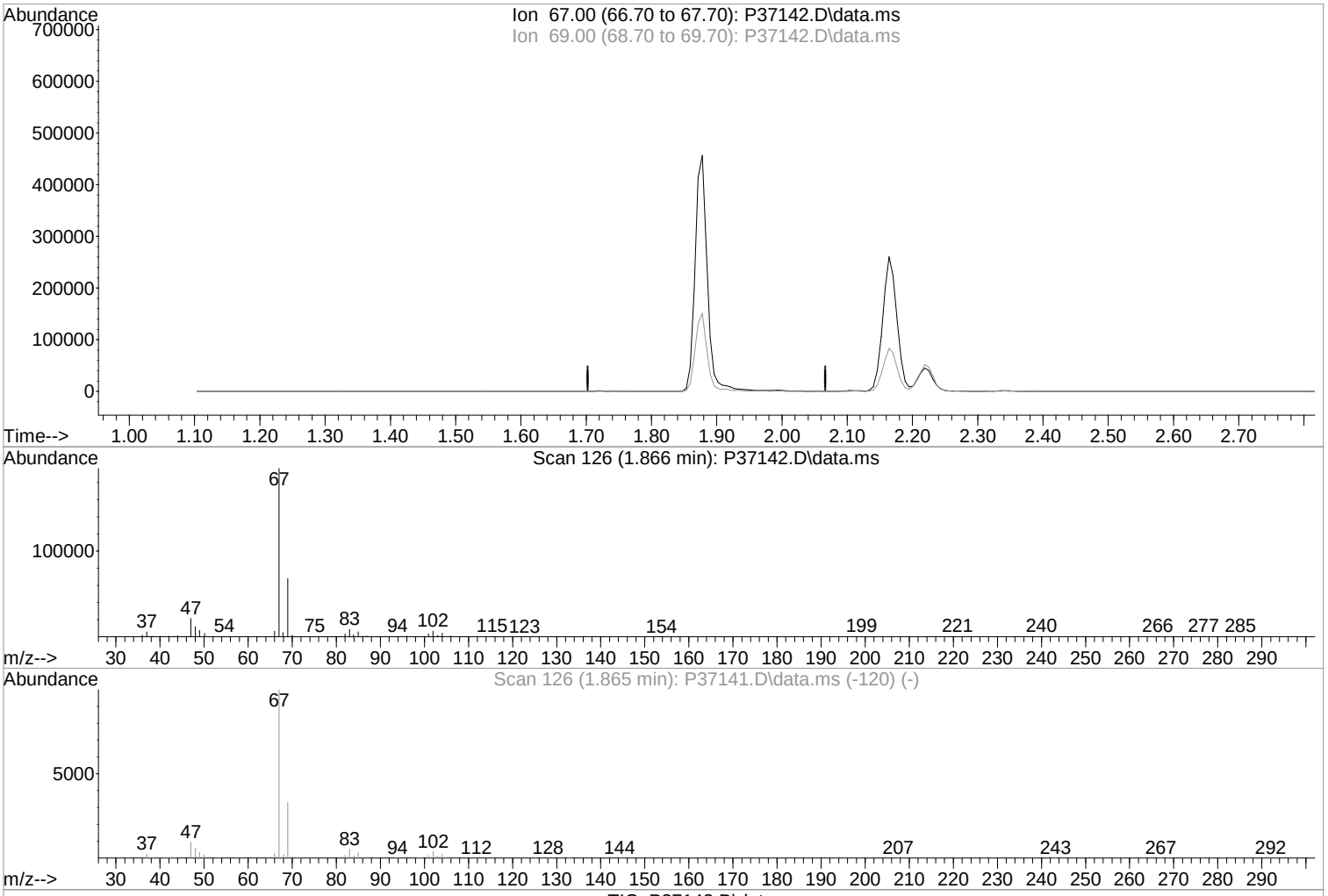
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37142.D\data.ms

(7) Freon 21

1.865min (-1.865) 0.00 ppb

response 0

Ion	Exp%	Act%
67.00	100	0.00
69.00	33.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:43:37 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.462	168	351105	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.535	114	521766	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	467596	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	245111	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.340	113	308936	103.11	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 206.22%#				
48) surr1,1,2-dichloroetha...	5.865	65	410458	98.96	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 197.92%#				
65) SURR3,Toluene-d8	8.322	98	1409409	101.22	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 202.44%#				
70) SURR2,BFB	10.870	95	510509	99.51	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 199.02%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	369920	94.50	ppb		98
3) Chloromethane	1.341	50	474574	96.61	ppb		98
4) Vinyl Chloride	1.414	62	456885m	98.07	ppb		
5) Bromomethane	1.646	94	293988	77.50	ppb		98
6) Chloroethane	1.719	64	246877	97.96	ppb		99
7) Freon 21	1.878	67	590319m	101.39	ppb		
8) Trichlorofluoromethane	1.914	101	440795	93.57	ppb		96
9) Diethyl Ether	2.158	59	343706	100.95	ppb		97
10) Freon 123a	2.164	67	389591	96.95	ppb		98
11) Freon 123	2.219	83	439563	92.72	ppb		96
12) Acrolein	2.274	56	457583	496.33	ppb		96
13) 1,1-Diclethene	2.347	96	249953	92.06	ppb		94
14) Freon 113	2.341	101	286206	90.46	ppb		97
15) Acetone	2.414	43	172272	84.48	ppb		94
16) 2-Propanol	2.554	45	925337	2046.38	ppb		99
17) Iodomethane	2.481	142	411652	135.49	ppb		98
18) Carbon Disulfide	2.536	76	866568	83.68	ppb		99
19) Acetonitrile	2.682	40	93460m	370.39	ppb		
20) Allyl Chloride	2.689	76	172180	89.48	ppb	#	78
21) Methyl Acetate	2.719	43	520147	99.62	ppb		98
22) Methylene Chloride	2.811	84	345242	89.21	ppb		96
23) TBA	2.963	59	1450743	1982.55	ppb		98
24) Acrylonitrile	3.091	53	1095399	485.29	ppb		96
25) Methyl-t-Butyl Ether	3.109	73	1240164	98.69	ppb		98
26) trans-1,2-Dichloroethene	3.097	96	298460	94.38	ppb		96
28) 1,1-Diclethane	3.609	63	638332	91.58	ppb		96
29) Vinyl Acetate	3.701	86	65659	128.32	ppb	#	32
30) DIPE	3.713	45	1245289	102.24	ppb		91
31) 2-Chloro-1,3-Butadiene	3.725	53	572958	102.22	ppb		96
32) ETBE	4.249	59	1164625	102.48	ppb		99
33) 2,2-Dichloropropane	4.444	77	504011	98.24	ppb		96
34) cis-1,2-Dichloroethene	4.463	96	367833	90.04	ppb		97
35) 2-Butanone	4.536	43	265525	97.27	ppb		96
36) Propionitrile	4.652	54	460312	470.27	ppb		100
37) Bromochloromethane	4.865	130	217727	90.65	ppb		99
38) Methacrylonitrile	4.908	67	223255	96.29	ppb		97
39) Tetrahydrofuran	4.969	42	187493	87.48	ppb		86
40) Chloroform	5.054	83	576822	89.79	ppb		92
41) 1,1,1-Trichloroethane	5.316	97	477129	93.99	ppb		92

1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:43:37 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.139	73	1148192	101.43	ppb		97
44) Cyclohexane	5.371	41	356405	104.17	ppb		93
46) Carbontetrachloride	5.572	117	368148	106.24	ppb		94
47) 1,1-Dichloropropene	5.597	75	480585	97.28	ppb		96
49) Benzene	5.920	78	1480054	98.17	ppb		97
50) 1,2-Dichloroethane	5.981	62	512779	97.40	ppb		98
51) Iso-Butyl Alcohol	5.975	43	678358	2099.28	ppb		100
52) n-Heptane	6.359	43	472430	101.19	ppb		99
53) 1-Butanol	6.913	56	1147709	5707.52	ppb		100
54) Trichloroethene	6.846	130	347320	92.92	ppb		97
55) Methylcyclohexane	7.060	55	498663	107.41	ppb		96
56) 1,2-Diclpropane	7.139	63	398857	99.73	ppb		96
57) Dibromomethane	7.285	93	227471	98.86	ppb		96
58) 1,4-Dioxane	7.352	88	170195	2064.59	ppb		88
59) Methyl Methacrylate	7.358	69	358890	103.28	ppb		99
60) Bromodichloromethane	7.505	83	447071	105.95	ppb		99
62) 2-Chloroethylvinyl Ether	7.907	63	192940	110.91	ppb		96
63) cis-1,3-Dichloropropene	8.041	75	621745	108.00	ppb		99
64) 4-Methyl-2-pentanone	8.248	43	555978	103.39	ppb		99
66) Toluene	8.395	91	1561995	97.91	ppb		97
67) trans-1,3-Dichloropropene	8.675	75	577422	110.30	ppb		96
68) Ethyl Methacrylate	8.803	69	631883	107.66	ppb		97
69) 1,1,2-Trichloroethane	8.864	97	361329	101.44	ppb		96
72) Tetrachloroethene	8.968	164	264632	92.67	ppb		98
73) 2-Hexanone	9.151	43	425573	102.39	ppb		96
74) 1,3-Dichloropropane	9.029	76	649090	98.71	ppb		94
75) Dibromochloromethane	9.254	129	323661	111.30	ppb		95
76) N-Butyl Acetate	9.291	43	821613	106.57	ppb		99
77) 1,2-Dibromoethane	9.352	107	358456	100.15	ppb		97
78) Chlorobenzene	9.827	112	998702	95.77	ppb		97
79) 3-CBTF	9.846	180	490111	101.50	ppb		95
80) 4-CBTF	9.894	180	447888	103.11	ppb		95
81) 1,1,1,2-Tetrachloroethane	9.919	131	329966	102.84	ppb		97
82) Ethylbenzene	9.943	106	545521	99.69	ppb	#	90
83) (m+p)Xylene	10.053	106	1299998	198.43	ppb		93
84) o-Xylene	10.407	106	646402	101.06	ppb		93
85) Styrene	10.425	104	1130565	104.04	ppb		99
87) Bromoform	10.589	173	212335	105.19	ppb		98
88) 2-CBTF	10.657	180	486720	97.88	ppb		99
89) Isopropylbenzene	10.742	105	1613299	95.34	ppb		100
90) Cyclohexanone	10.827	55	2183152	2147.04	ppb		96
91) trans-1,4-Dichloro-2-B...	11.065	53	143652	101.36	ppb		94
92) 1,1,2,2-Tetrachloroethane	11.016	83	543463	99.35	ppb		99
93) Bromobenzene	10.992	156	416825	94.41	ppb		98
94) 1,2,3-Trichloropropane	11.047	110	167527	94.71	ppb	#	90
95) n-Propylbenzene	11.095	91	1945764	100.21	ppb		95
96) 2-Chlorotoluene	11.156	91	1217391	96.53	ppb		100
97) 3-Chlorotoluene	11.211	91	1194110	99.13	ppb		98
98) 4-Chlorotoluene	11.254	91	1383544	97.98	ppb		99
99) 1,3,5-Trimethylbenzene	11.242	105	1436445	99.36	ppb		99
100) tert-Butylbenzene	11.516	119	1175736	97.15	ppb		99
101) 1,2,4-Trimethylbenzene	11.553	105	1452947	99.86	ppb		97
102) 3,4-DCBTF	11.620	214	411213	103.17	ppb		99
103) sec-Butylbenzene	11.693	105	1736782	100.05	ppb		99
104) p-Isopropyltoluene	11.815	119	1531436	102.33	ppb		98
105) 1,3-Dclbenz	11.784	146	833947	96.41	ppb		100

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:43:37 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

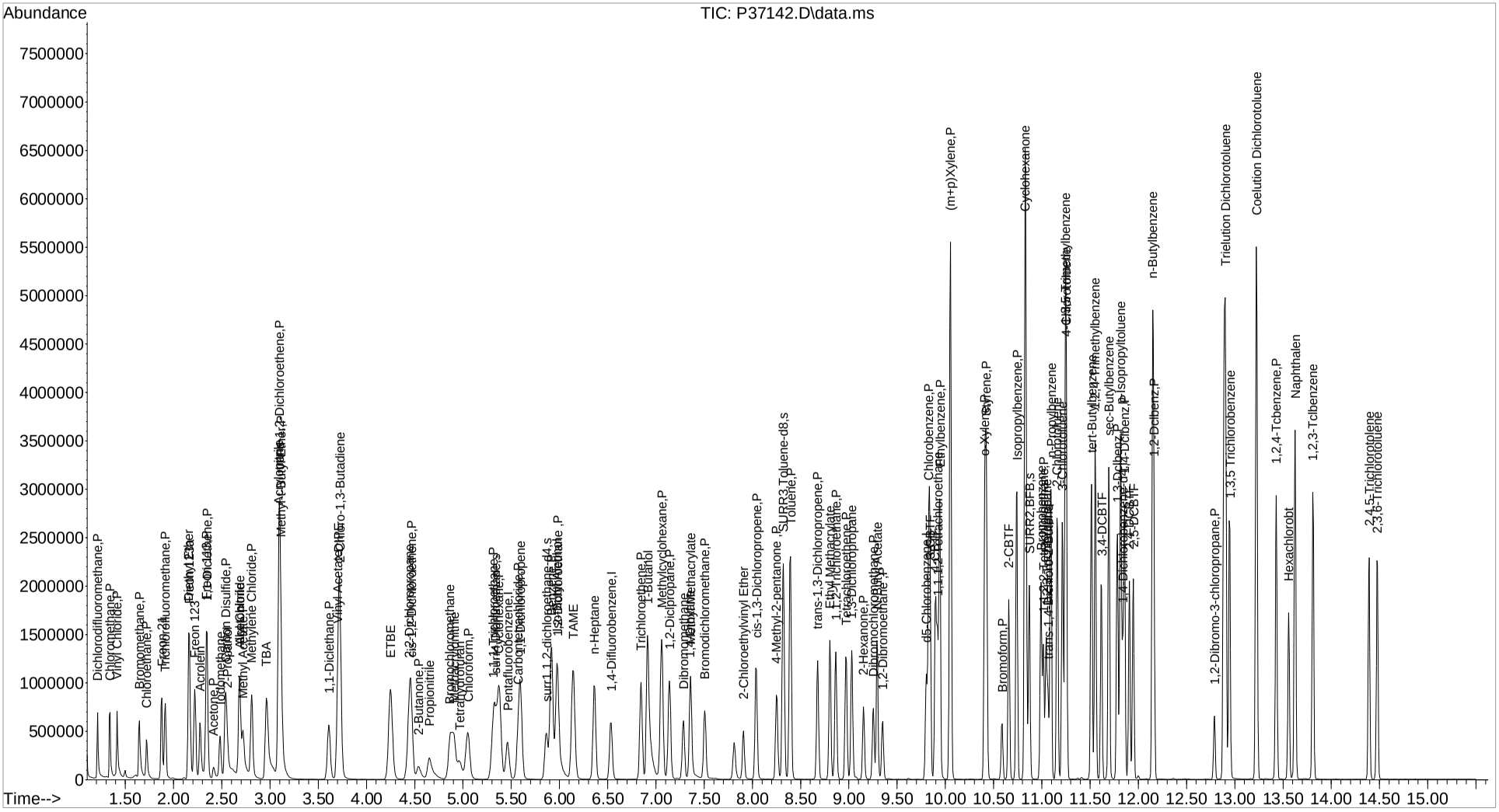
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.858	146	852359	96.84	ppb	99
107) 2,4-DCBTF	11.906	214	397366	106.45	ppb	99
108) 2,5-DCBTF	11.949	214	427662	106.93	ppb	99
109) n-Butylbenzene	12.150	91	1471600	104.45	ppb	99
110) 1,2-Dclbenz	12.162	146	855166	97.40	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.790	157	136178	111.19	ppb	94
112) Trielution Dichlorotol...	12.900	125	2330970	331.46	ppb	100
113) 1,3,5 Trichlorobenzene	12.949	180	658915	109.15	ppb	95
114) Coelution Dichlorotoluene	13.223	125	1732170	224.25	ppb	98
115) 1,2,4-Tcbenzene	13.430	180	685916	108.30	ppb	98
116) Hexachlorobt	13.558	225	256879	101.05	ppb	99
117) Naphthalen	13.625	128	2095497	113.24	ppb	97
118) 1,2,3-Tclbenzene	13.808	180	701984	107.15	ppb	97
119) 2,4,5-Trichlorotolene	14.394	159	485386	121.12	ppb	99
120) 2,3,6-Trichlorotoluene	14.479	159	443363	121.53	ppb	99

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:43:37 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

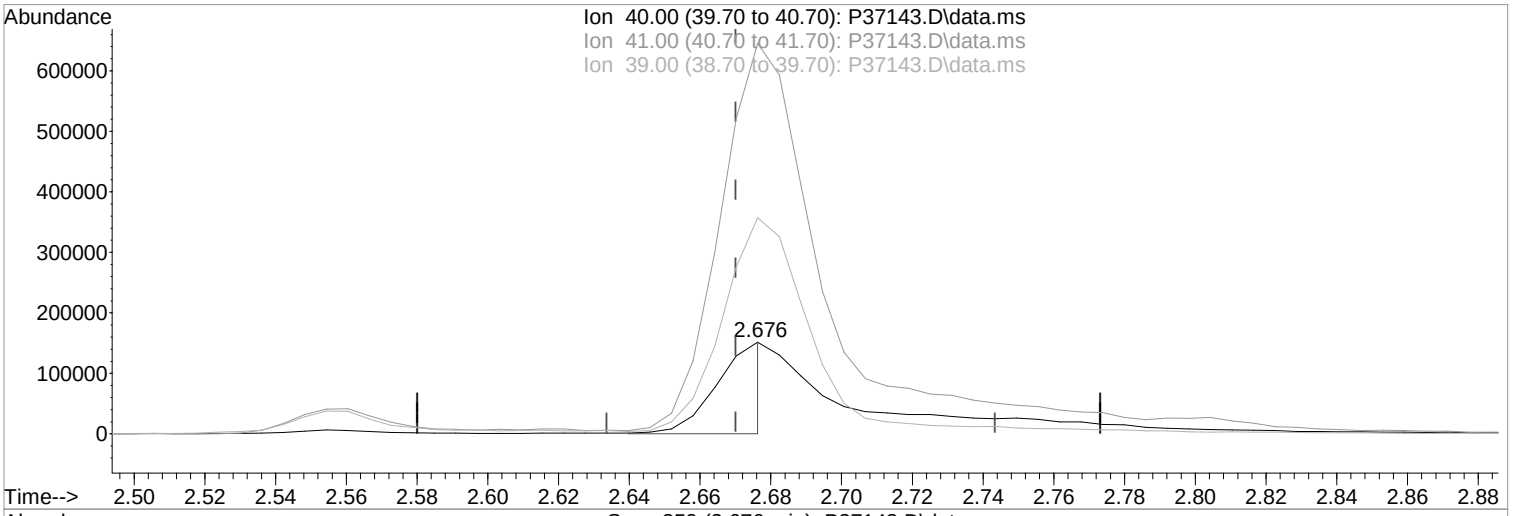


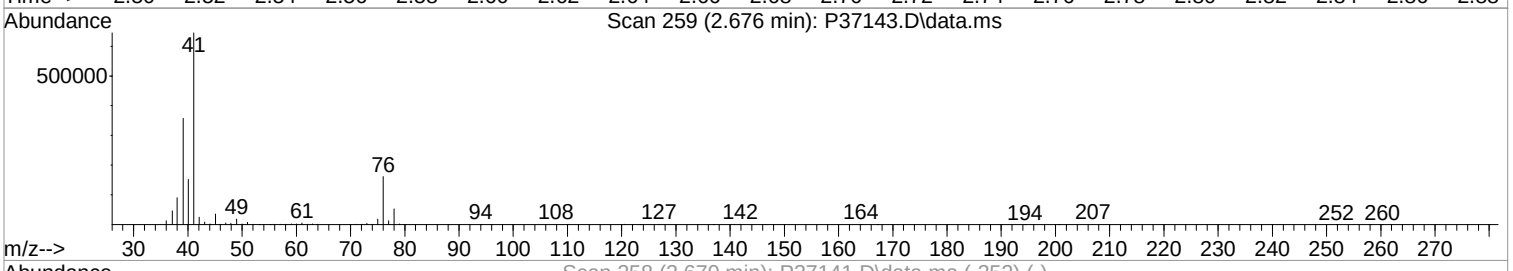
1st 07/14/20
2nd 07/14/20

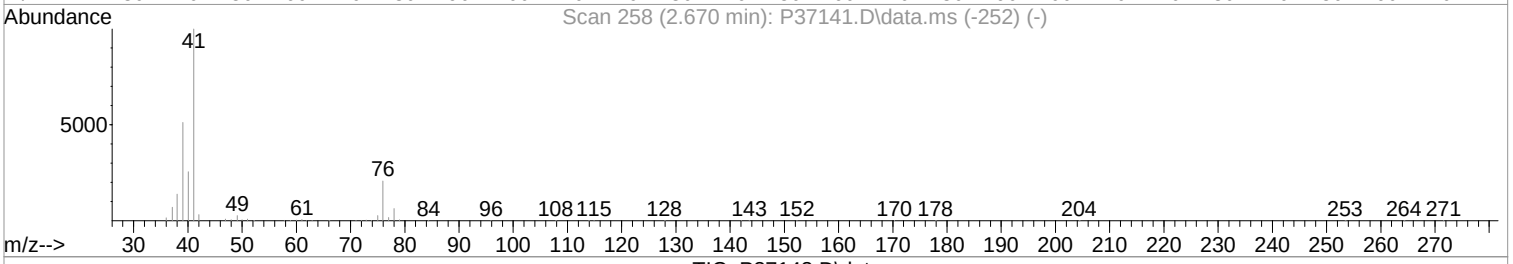
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:04:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37143.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 502.76 ppb m

response 145190

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	426.65#
39.00	200.50	236.04#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

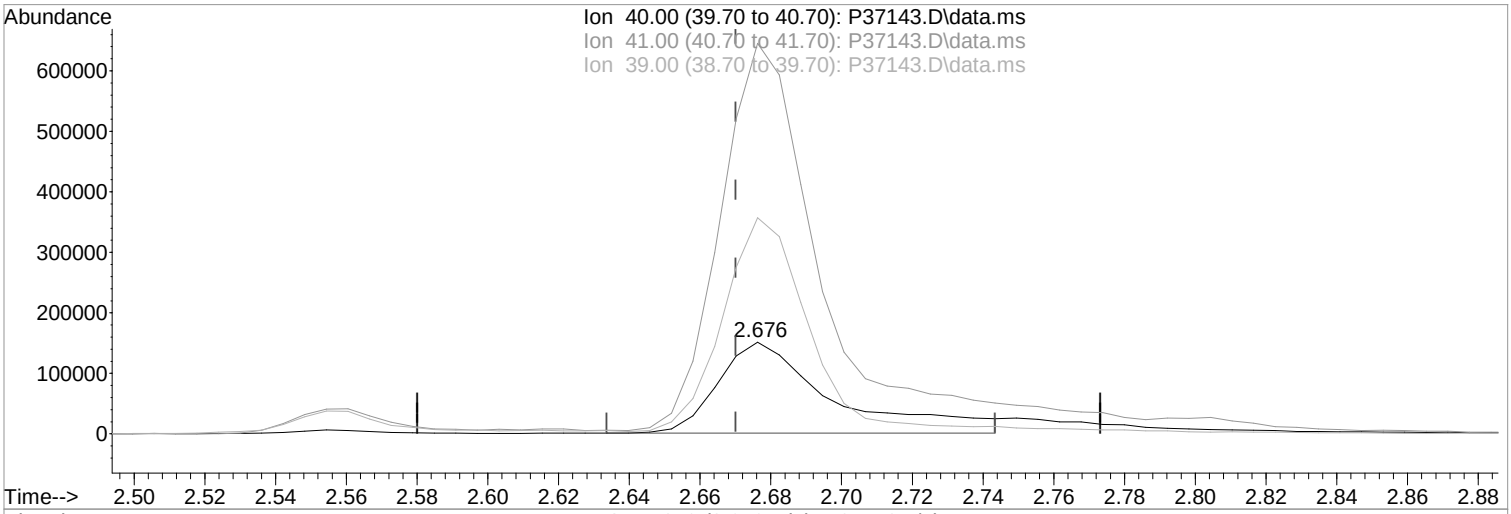
07/13/20

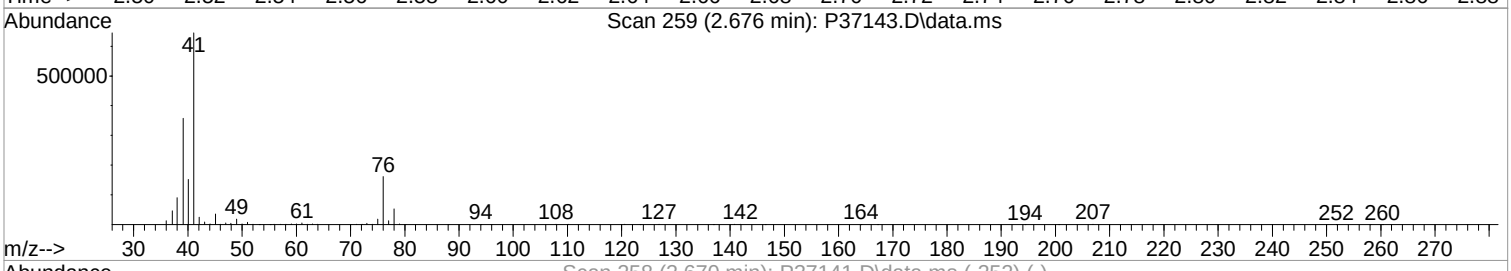
1st 07/14/20
2nd 07/14/20

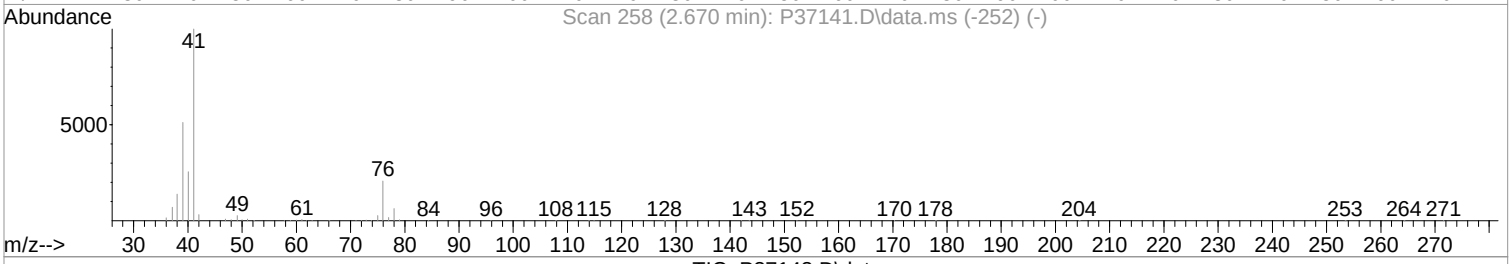
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:04:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37143.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 1172.71 ppb

response 338661

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	426.65#
39.00	200.50	236.04#
0.00	0.00	0.00

Manual Integration:

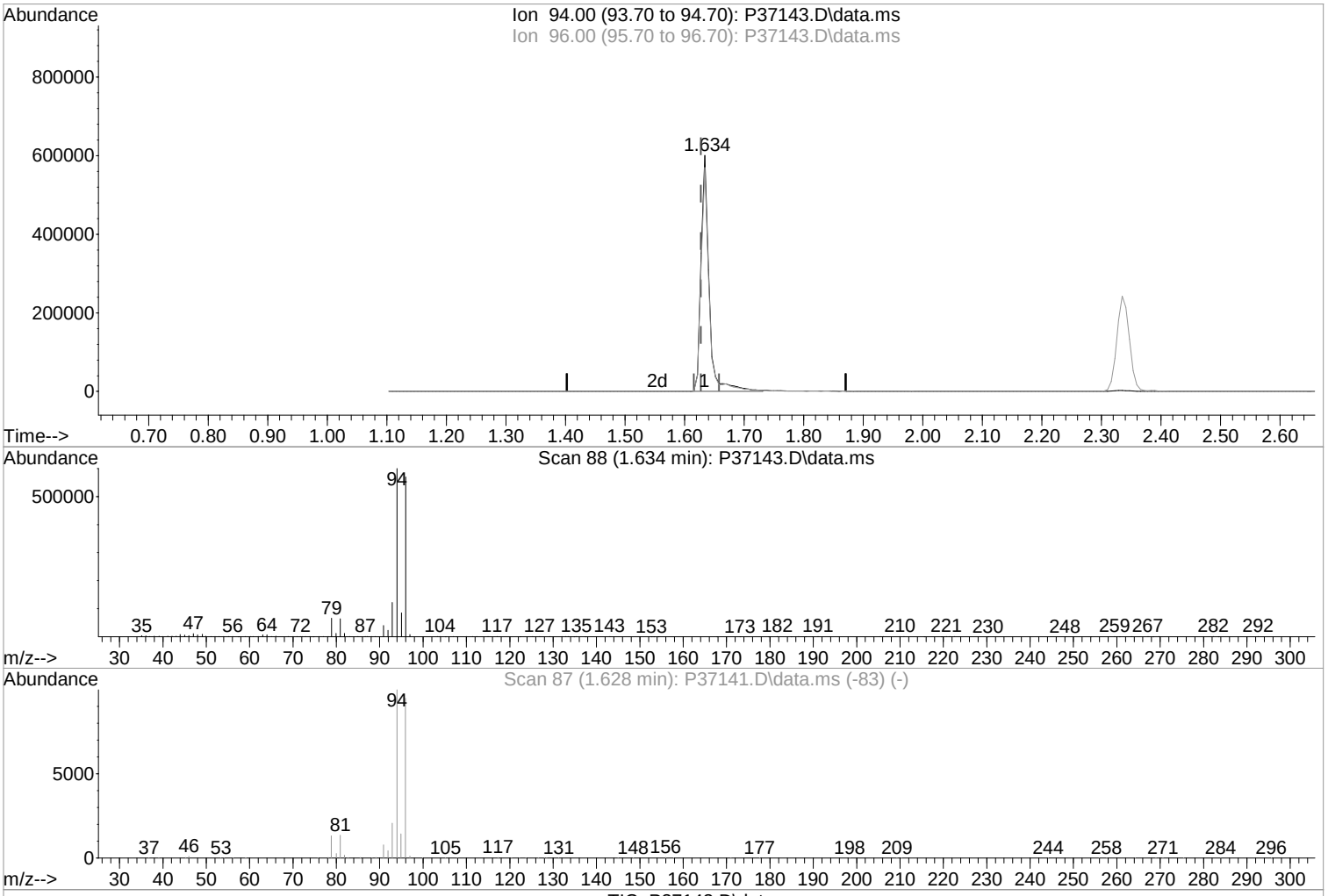
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:04:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37143.D\data.ms

(5) Bromomethane (P)

1.634min (+0.006) 132.03 ppb m

response 573215

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	94.92
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

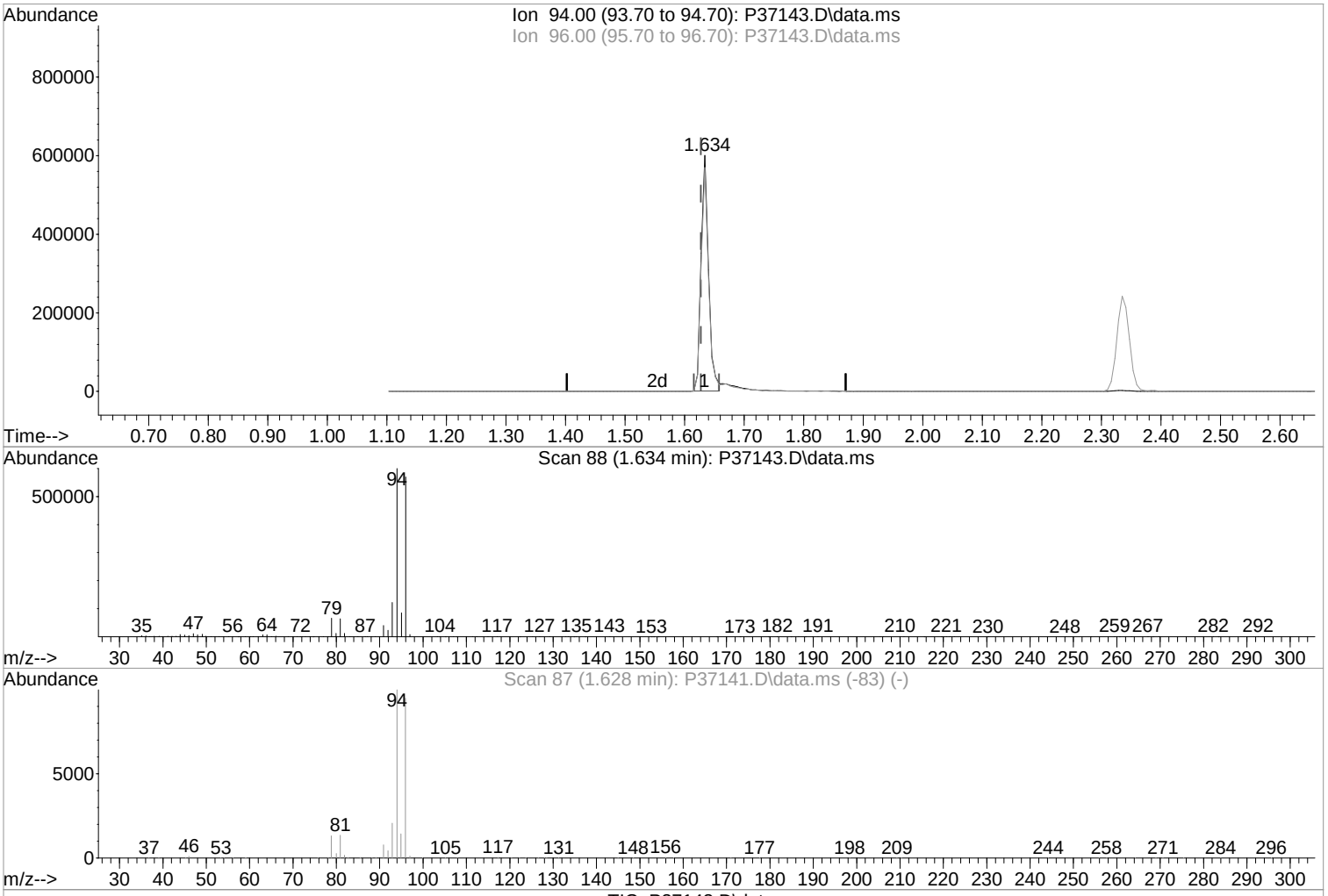
Poor integration.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:04:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37143.D\data.ms

(5) Bromomethane (P)

1.634min (+0.006) 121.45 ppb

response 527272

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	94.92
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:45:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	401830	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	556613	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	495556	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	267058	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	608081	190.25	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 380.50%#				
48) surr1,1,2-dichloroetha...	5.859	65	820523	185.44	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 370.88%#				
65) SURR3,Toluene-d8	8.322	98	2707696	182.28	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 364.56%#				
70) SURR2,BFB	10.870	95	1061612	193.98	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 387.96%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	537989	120.08	ppb		97
3) Chloromethane	1.335	50	691507	123.00	ppb		99
4) Vinyl Chloride	1.408	62	659084	123.61	ppb		99
5) Bromomethane	1.634	94	573215m	132.03	ppb		
6) Chloroethane	1.707	64	422190	146.38	ppb		94
7) Freon 21	1.865	67	817758	122.73	ppb		99
8) Trichlorofluoromethane	1.902	101	647224	120.05	ppb		96
9) Diethyl Ether	2.152	59	503901	129.32	ppb		94
10) Freon 123a	2.158	67	549534	119.49	ppb		100
11) Freon 123	2.213	83	622049	114.65	ppb		97
12) Acrolein	2.268	56	680089	644.56	ppb		96
13) 1,1-Diclethene	2.335	96	357088	114.92	ppb		89
14) Freon 113	2.335	101	407196	112.46	ppb		98
15) Acetone	2.414	43	244946	104.95	ppb		93
16) 2-Propanol	2.554	45	1467334	2835.38	ppb		99
17) Iodomethane	2.475	142	577594	166.11	ppb		100
18) Carbon Disulfide	2.530	76	1256373	106.00	ppb		99
19) Acetonitrile	2.676	40	145190m	502.76	ppb		
20) Allyl Chloride	2.676	76	262742	119.31	ppb	#	87
21) Methyl Acetate	2.713	43	752824	125.98	ppb		97
22) Methylene Chloride	2.804	84	489471	110.51	ppb		97
23) TBA	2.969	59	2308239	2756.19	ppb		97
24) Acrylonitrile	3.091	53	1621560	627.71	ppb		98
25) Methyl-t-Butyl Ether	3.103	73	1782902	123.97	ppb		98
26) trans-1,2-Dichloroethene	3.091	96	416908	115.19	ppb		96
28) 1,1-Diclethane	3.603	63	916054	114.83	ppb		98
29) Vinyl Acetate	3.707	86	95236	162.62	ppb	#	90
30) DIPE	3.713	45	1821612	130.67	ppb		99
31) 2-Chloro-1,3-Butadiene	3.719	53	833479	129.93	ppb		97
32) ETBE	4.243	59	1714823	131.85	ppb		98
33) 2,2-Dichloropropane	4.438	77	720608	122.73	ppb		99
34) cis-1,2-Dichloroethene	4.456	96	523387	111.94	ppb		97
35) 2-Butanone	4.536	43	397784	127.33	ppb		97
36) Propionitrile	4.645	54	691699	617.46	ppb		95
37) Bromochloromethane	4.865	130	317727	115.58	ppb		97
38) Methacrylonitrile	4.901	67	326539	123.05	ppb		100
39) Tetrahydrofuran	4.962	42	296586	120.92	ppb		89
40) Chloroform	5.048	83	804883	109.48	ppb		98
41) 1,1,1-Trichloroethane	5.310	97	691825	119.08	ppb		95

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:45:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.139	73	1680663	129.72	ppb		98
44) Cyclohexane	5.371	41	492794	135.01	ppb		96
46) Carbontetrachloride	5.572	117	544978	147.42	ppb		100
47) 1,1-Dichloropropene	5.590	75	683574	129.70	ppb		98
49) Benzene	5.913	78	2103233	130.78	ppb		95
50) 1,2-Dichloroethane	5.974	62	734056	130.70	ppb		99
51) Iso-Butyl Alcohol	5.974	43	1102860	3199.29	ppb		100
52) n-Heptane	6.359	43	698705	140.28	ppb		96
53) 1-Butanol	6.919	56	1842912	8590.98	ppb		100
54) Trichloroethene	6.846	130	502603	126.04	ppb		98
55) Methylcyclohexane	7.060	55	699460	141.22	ppb		97
56) 1,2-Diclpropane	7.139	63	577889	135.46	ppb		97
57) Dibromomethane	7.285	93	326706	133.10	ppb		97
58) 1,4-Dioxane	7.346	88	257579	2929.01	ppb		99
59) Methyl Methacrylate	7.358	69	537631	145.04	ppb		98
60) Bromodichloromethane	7.505	83	643433	142.94	ppb		98
62) 2-Chloroethylvinyl Ether	7.907	63	315396	169.95	ppb		96
63) cis-1,3-Dichloropropene	8.035	75	895804	145.87	ppb		98
64) 4-Methyl-2-pentanone	8.248	43	862552	150.35	ppb		99
66) Toluene	8.389	91	2226507	130.83	ppb		97
67) trans-1,3-Dichloropropene	8.675	75	845631	151.42	ppb		97
68) Ethyl Methacrylate	8.803	69	944813	150.90	ppb		98
69) 1,1,2-Trichloroethane	8.864	97	517493	136.19	ppb		94
72) Tetrachloroethene	8.968	164	391204	129.27	ppb		97
73) 2-Hexanone	9.151	43	675525	153.36	ppb		96
74) 1,3-Dichloropropane	9.029	76	941398	135.08	ppb		95
75) Dibromochloromethane	9.254	129	496799	161.20	ppb		94
76) N-Butyl Acetate	9.291	43	1268841	155.29	ppb		99
77) 1,2-Dibromoethane	9.346	107	518815	136.78	ppb		100
78) Chlorobenzene	9.827	112	1445654	130.81	ppb		98
79) 3-CBTF	9.846	180	753803	147.30	ppb		93
80) 4-CBTF	9.894	180	677363	147.14	ppb		97
81) 1,1,1,2-Tetrachloroethane	9.919	131	492697	144.89	ppb		97
82) Ethylbenzene	9.943	106	793333	136.80	ppb	#	86
83) (m+p)Xylene	10.053	106	1900617	273.74	ppb	#	82
84) o-Xylene	10.413	106	958131	141.35	ppb	#	87
85) Styrene	10.425	104	1659909	144.14	ppb		97
87) Bromoform	10.589	173	332014	150.96	ppb		100
88) 2-CBTF	10.656	180	749906	138.41	ppb		99
89) Isopropylbenzene	10.742	105	2337827	126.80	ppb		98
90) Cyclohexanone	10.827	55	3137757	2832.26	ppb		93
91) trans-1,4-Dichloro-2-B...	11.065	53	225537	146.07	ppb		91
92) 1,1,2,2-Tetrachloroethane	11.016	83	829098	139.12	ppb		98
93) Bromobenzene	10.992	156	622725	129.46	ppb		98
94) 1,2,3-Trichloropropane	11.047	110	258292	134.02	ppb		94
95) n-Propylbenzene	11.095	91	2777872	131.31	ppb		92
96) 2-Chlorotoluene	11.162	91	1785254	129.93	ppb		95
97) 3-Chlorotoluene	11.211	91	1866608	142.22	ppb		97
98) 4-Chlorotoluene	11.254	91	1953681	126.99	ppb		96
99) 1,3,5-Trimethylbenzene	11.242	105	2079610	132.02	ppb		96
100) tert-Butylbenzene	11.516	119	1754015	133.03	ppb		99
101) 1,2,4-Trimethylbenzene	11.553	105	2105397	132.81	ppb		93
102) 3,4-DCBTF	11.620	214	633179	145.80	ppb		100
103) sec-Butylbenzene	11.693	105	2504183	132.40	ppb		96
104) p-Isopropyltoluene	11.815	119	2216856	135.96	ppb		95
105) 1,3-Dclbenz	11.784	146	1230767	130.60	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:45:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

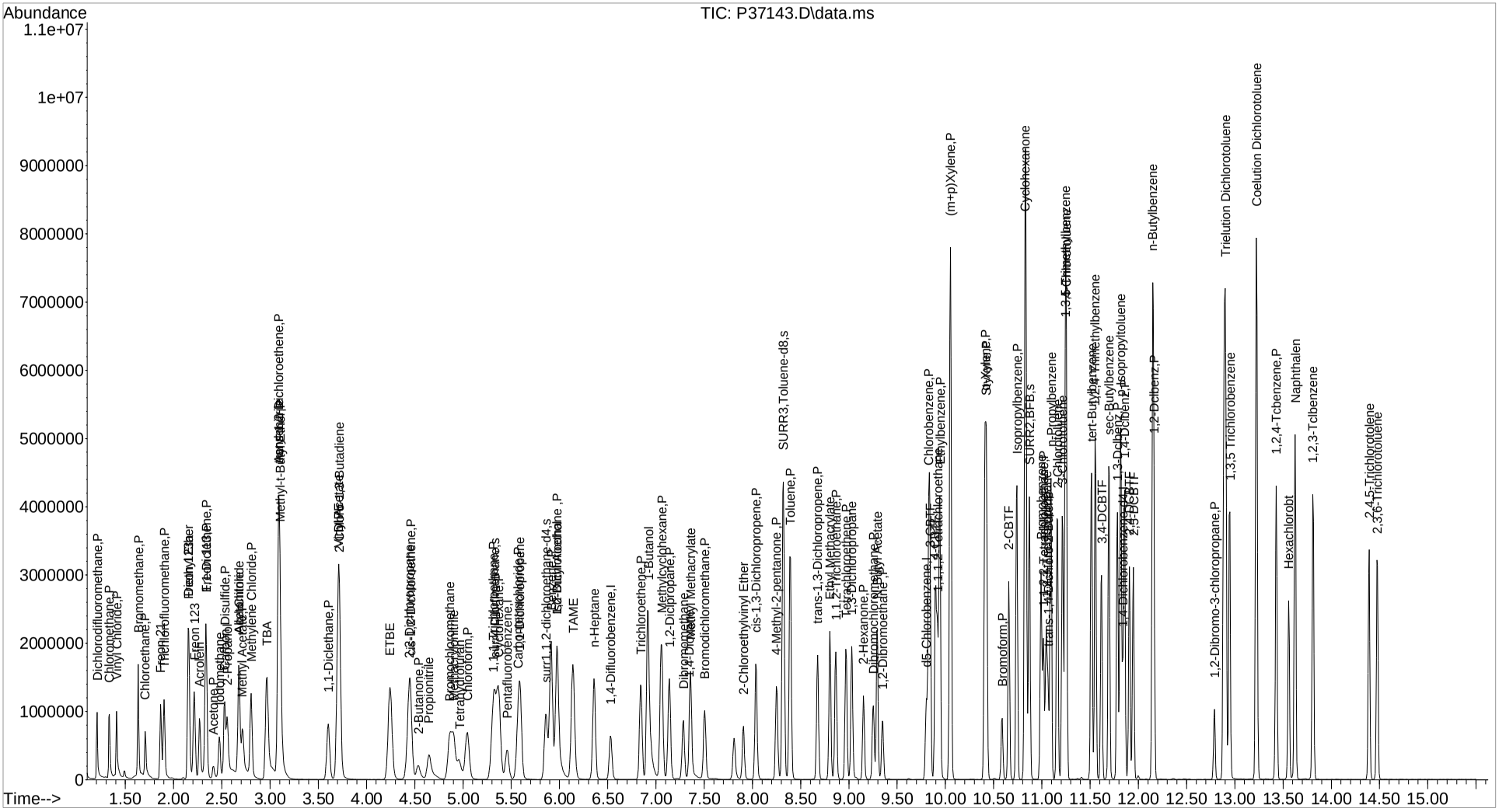
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	1266516	132.08	ppb	100
107) 2,4-DCBTF	11.906	214	589997	145.07	ppb	99
108) 2,5-DCBTF	11.949	214	637893	146.39	ppb	97
109) n-Butylbenzene	12.150	91	2152130	140.20	ppb	95
110) 1,2-Dclbenz	12.162	146	1258220	131.52	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.790	157	212205	159.03	ppb	98
112) Trielution Dichlorotol...	12.900	125	3339121	435.79	ppb	96
113) 1,3,5 Trichlorobenzene	12.949	180	956029	145.35	ppb	96
114) Coelution Dichlorotoluene	13.223	125	2450999	291.24	ppb	94
115) 1,2,4-Tcbenzene	13.430	180	994072	144.06	ppb	98
116) Hexachlorobt	13.558	225	389646	140.68	ppb	98
117) Naphthalen	13.625	128	2864370	142.07	ppb	93
118) 1,2,3-Tclbenzene	13.808	180	989842	138.67	ppb	96
119) 2,4,5-Trichlorotolene	14.394	159	712426	163.16	ppb	97
120) 2,3,6-Trichlorotoluene	14.479	159	635742	159.94	ppb	99

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:45:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

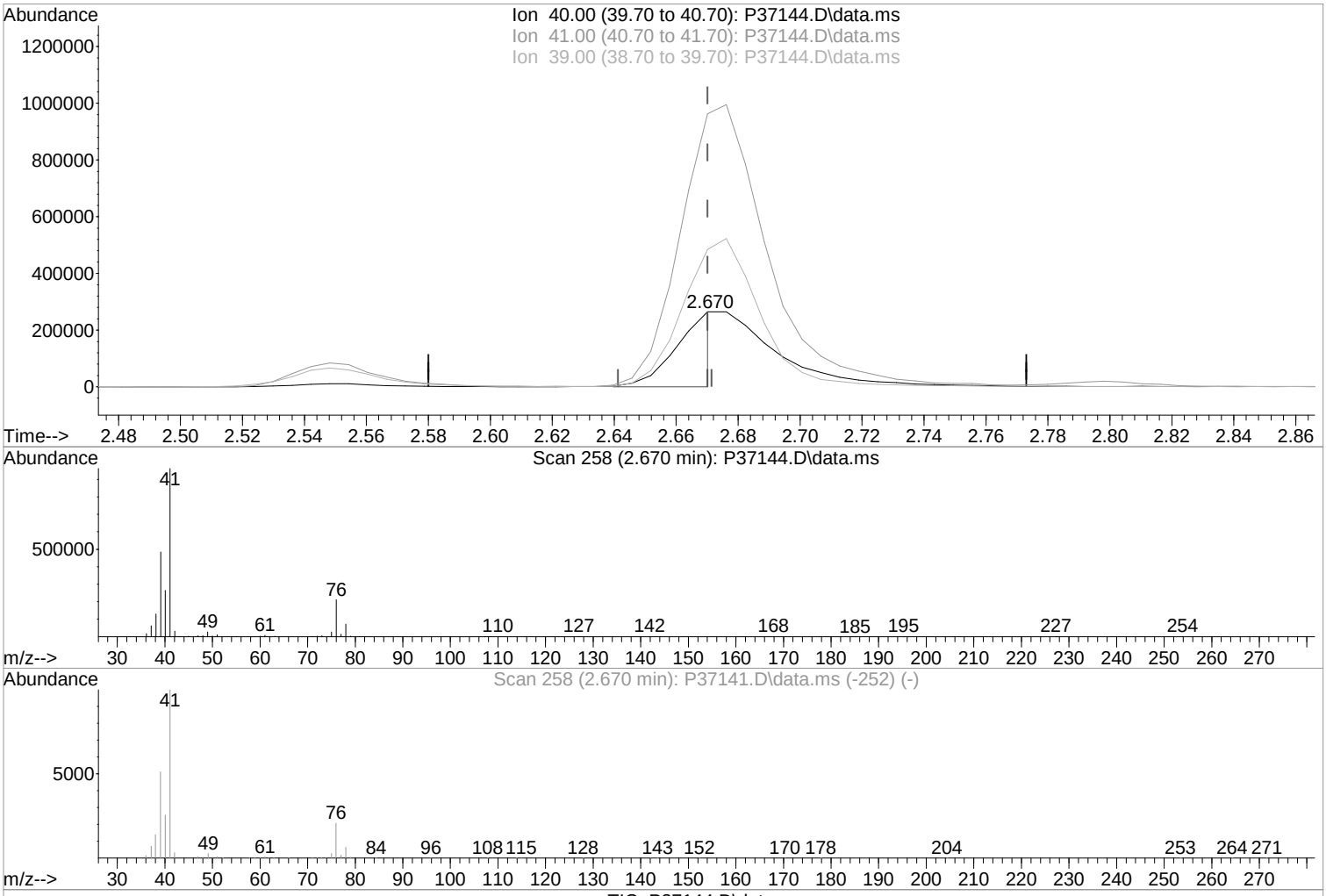


1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:04:06 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37144.D\data.ms

(19) Acetonitrile

2.670min (0.000) 930.54 ppb m

response 228407

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	363.68#
39.00	200.50	182.99
0.00	0.00	0.00

Manual Integration:

After

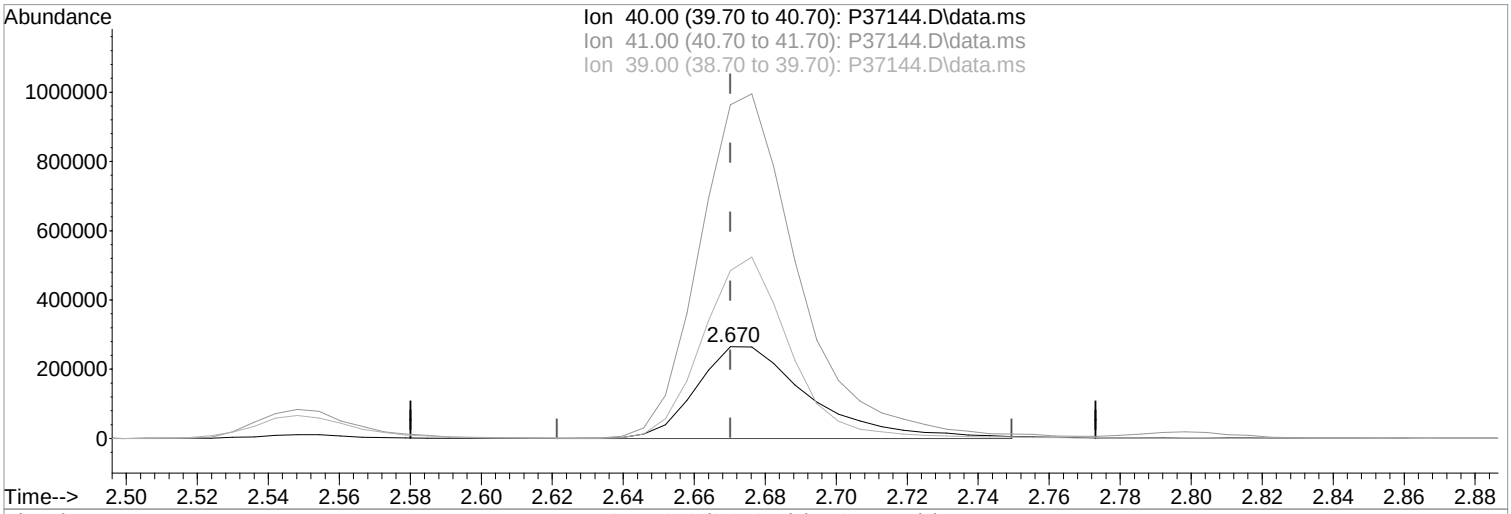
Poor integration.

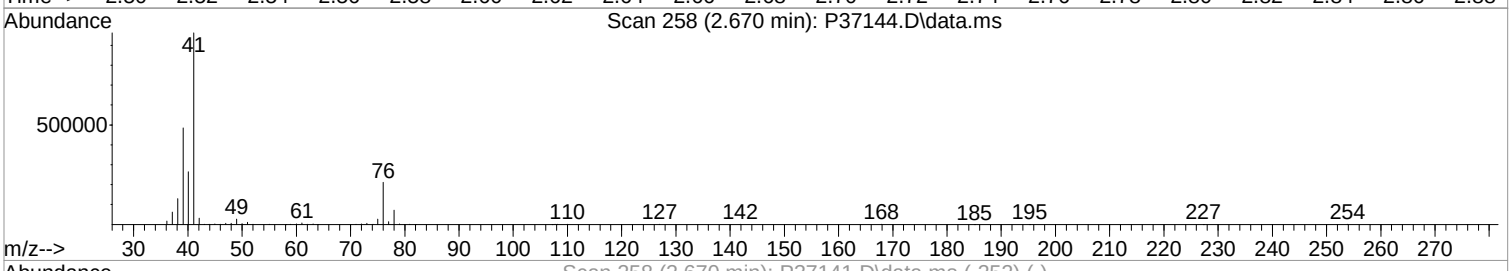
07/13/20

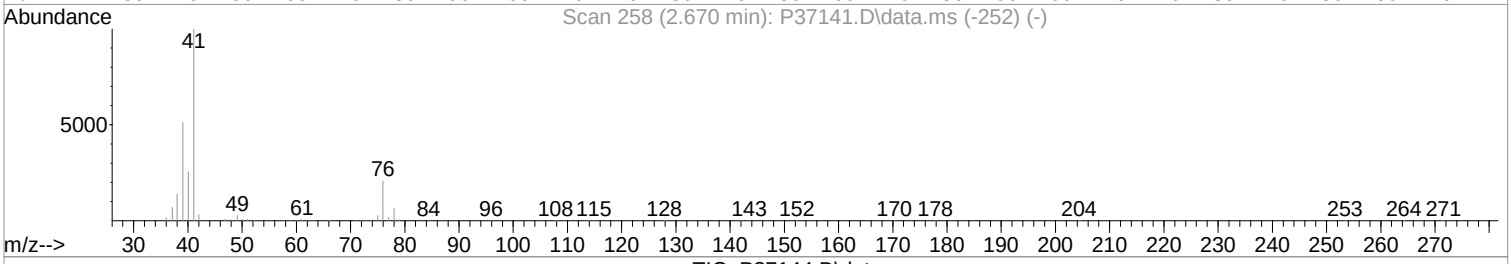
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:04:06 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37144.D\data.ms

(19) Acetonitrile

2.670min (0.000) 2383.10 ppb

response 584947

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	363.68#
39.00	200.50	182.99
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:47:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	341541	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	532005	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	468649	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	263400	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	156873	51.35	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.70%				
48) surr1,1,2-dichloroetha...	5.859	65	211137	49.93	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 99.86%				
65) SURR3,Toluene-d8	8.315	98	718104	50.58	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.16%				
70) SURR2,BFB	10.870	95	274920	52.56	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 105.12%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.201	85	759974	199.58	ppb		97
3) Chloromethane	1.329	50	1027449	215.02	ppb		97
4) Vinyl Chloride	1.402	62	940025	207.42	ppb		97
5) Bromomethane	1.628	94	758907	205.65	ppb		98
6) Chloroethane	1.701	64	453526	185.01	ppb		95
7) Freon 21	1.865	67	1188637	209.88	ppb		98
8) Trichlorofluoromethane	1.902	101	897137	195.78	ppb		95
9) Diethyl Ether	2.146	59	705277	212.96	ppb		95
10) Freon 123a	2.152	67	800491	204.78	ppb		96
11) Freon 123	2.207	83	900525	195.28	ppb		97
12) Acrolein	2.268	56	905792	1010.01	ppb		100
13) 1,1-Diclethene	2.335	96	504242	190.92	ppb		90
14) Freon 113	2.329	101	574224	186.58	ppb		97
15) Acetone	2.408	43	332614	167.67	ppb		95
16) 2-Propanol	2.548	45	2015414	4581.90	ppb		99
17) Iodomethane	2.469	142	828135	280.21	ppb		97
18) Carbon Disulfide	2.524	76	1722126	170.95	ppb		99
19) Acetonitrile	2.670	40	228407m	930.54	ppb		
20) Allyl Chloride	2.676	76	370522	197.96	ppb		94
21) Methyl Acetate	2.713	43	1014975	199.84	ppb		97
22) Methylene Chloride	2.798	84	685334	182.04	ppb		97
23) TBA	2.957	59	3070280	4313.26	ppb		100
24) Acrylonitrile	3.085	53	2241592	1020.90	ppb		94
25) Methyl-t-Butyl Ether	3.097	73	2494635	204.08	ppb		99
26) trans-1,2-Dichloroethene	3.085	96	591177	192.18	ppb		98
28) 1,1-Diclethane	3.597	63	1289413	190.16	ppb		96
29) Vinyl Acetate	3.694	86	117164	235.38	ppb	#	80
30) DIPE	3.707	45	2475774	208.95	ppb		99
31) 2-Chloro-1,3-Butadiene	3.713	53	1147233	210.40	ppb		95
32) ETBE	4.237	59	2342933	211.94	ppb		99
33) 2,2-Dichloropropane	4.432	77	1016698	203.72	ppb		97
34) cis-1,2-Dichloroethene	4.450	96	736157	185.24	ppb		96
35) 2-Butanone	4.530	43	537999	202.61	ppb		95
36) Propionitrile	4.645	54	947107	994.70	ppb		100
37) Bromochloromethane	4.859	130	441887	189.12	ppb		97
38) Methacrylonitrile	4.895	67	455331	201.88	ppb		100
39) Tetrahydrofuran	4.950	42	405964	194.73	ppb		94
40) Chloroform	5.042	83	1137764	182.07	ppb		97
41) 1,1,1-Trichloroethane	5.310	97	989898	200.47	ppb		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:47:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.133	73	2305147	209.33	ppb		98
44) Cyclohexane	5.365	41	703590	201.68	ppb		96
46) Carbontetrachloride	5.566	117	781980	221.31	ppb		99
47) 1,1-Dichloropropene	5.590	75	985391	195.62	ppb		98
49) Benzene	5.913	78	2944922	191.58	ppb		96
50) 1,2-Dichloroethane	5.974	62	1017495	189.55	ppb		98
51) Iso-Butyl Alcohol	5.974	43	1552274	4711.28	ppb		95
52) n-Heptane	6.358	43	989930	207.95	ppb		97
53) 1-Butanol	6.913	56	2491349	12150.95	ppb		99
54) Trichloroethene	6.840	130	712480	186.94	ppb		98
55) Methylcyclohexane	7.053	55	1011892	213.76	ppb		95
56) 1,2-Diclpropane	7.139	63	804012	197.18	ppb		99
57) Dibromomethane	7.279	93	447304	190.66	ppb		94
58) 1,4-Dioxane	7.346	88	372475	4431.44	ppb		97
59) Methyl Methacrylate	7.358	69	756439	213.50	ppb		98
60) Bromodichloromethane	7.505	83	924107	214.78	ppb		97
62) 2-Chloroethylvinyl Ether	7.907	63	434418	244.91	ppb		90
63) cis-1,3-Dichloropropene	8.035	75	1258222	214.36	ppb		99
64) 4-Methyl-2-pentanone	8.248	43	1163474	212.19	ppb		99
66) Toluene	8.389	91	3041109	186.96	ppb		92
67) trans-1,3-Dichloropropene	8.675	75	1185546	222.10	ppb		98
68) Ethyl Methacrylate	8.803	69	1327027	221.75	ppb		99
69) 1,1,2-Trichloroethane	8.864	97	716799	197.36	ppb		94
72) Tetrachloroethene	8.968	164	551633	192.74	ppb		98
73) 2-Hexanone	9.151	43	903712	216.94	ppb		96
74) 1,3-Dichloropropane	9.029	76	1313216	199.25	ppb		96
75) Dibromochloromethane	9.254	129	694358	238.25	ppb		98
76) N-Butyl Acetate	9.291	43	1749509	226.41	ppb		97
77) 1,2-Dibromoethane	9.346	107	734158	204.66	ppb		100
78) Chlorobenzene	9.827	112	2014847	192.78	ppb		98
79) 3-CBTF	9.846	180	1029399	212.70	ppb		95
80) 4-CBTF	9.894	180	931161	213.88	ppb		96
81) 1,1,1,2-Tetrachloroethane	9.919	131	694302	215.90	ppb		99
82) Ethylbenzene	9.943	106	1134380	206.83	ppb	#	74
83) (m+p)Xylene	10.053	106	2615466	398.32	ppb	#	72
84) o-Xylene	10.413	106	1348114	210.30	ppb	#	83
85) Styrene	10.425	104	2294183	210.65	ppb		95
87) Bromoform	10.589	173	487759	224.85	ppb		96
88) 2-CBTF	10.656	180	1029768	192.71	ppb		98
89) Isopropylbenzene	10.742	105	3164807	174.04	ppb		91
90) Cyclohexanone	10.827	55	4040929	3698.16	ppb		87
91) trans-1,4-Dichloro-2-B...	11.065	53	330500	217.02	ppb		88
92) 1,1,2,2-Tetrachloroethane	11.016	83	1149875	195.62	ppb		98
93) Bromobenzene	10.992	156	890035	187.60	ppb		98
94) 1,2,3-Trichloropropane	11.047	110	363530	191.24	ppb		96
95) n-Propylbenzene	11.095	91	3671079	175.94	ppb		83
96) 2-Chlorotoluene	11.162	91	2478611	182.89	ppb		92
97) 3-Chlorotoluene	11.211	91	2549465	196.95	ppb	#	94
98) 4-Chlorotoluene	11.254	91	2704200	178.22	ppb		91
99) 1,3,5-Trimethylbenzene	11.242	105	2909409	187.27	ppb		91
100) tert-Butylbenzene	11.516	119	2483893	191.00	ppb		95
101) 1,2,4-Trimethylbenzene	11.553	105	2912248	186.25	ppb		86
102) 3,4-DCBTF	11.620	214	905129	211.32	ppb		99
103) sec-Butylbenzene	11.693	105	3399894	182.26	ppb		89
104) p-Isopropyltoluene	11.815	119	3066347	190.66	ppb		88
105) 1,3-Dclbenz	11.784	146	1774452	190.90	ppb		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:47:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

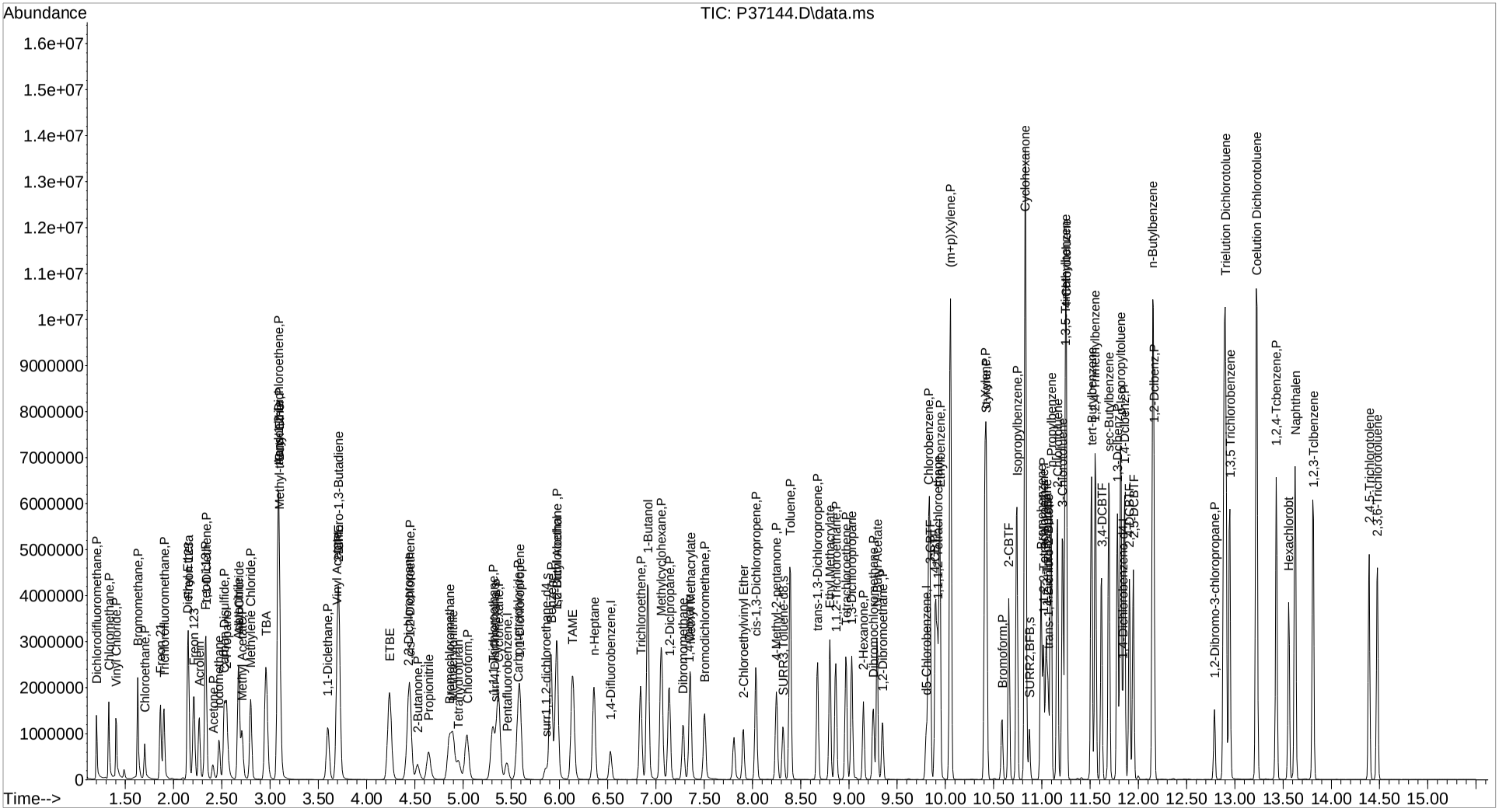
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
106) 1,4-Dclbenz	11.857	146	1805793	190.93	ppb		97
107) 2,4-DCBTF	11.906	214	845666	210.82	ppb		97
108) 2,5-DCBTF	11.949	214	933615	217.23	ppb		97
109) n-Butylbenzene	12.150	91	2958781	195.43	ppb		87
110) 1,2-Dclbenz	12.162	146	1810177	191.85	ppb		95
111) 1,2-Dibromo-3-chloropr...	12.790	157	310931	236.25	ppb		93
112) Trielution Dichlorotol...	12.900	125	4597778	608.40	ppb		89
113) 1,3,5 Trichlorobenzene	12.949	180	1382592	213.12	ppb		98
114) Coelution Dichlorotoluene	13.229	125	3316787	399.59	ppb	#	89
115) 1,2,4-Tcbenzene	13.430	180	1457753	214.19	ppb		98
116) Hexachlorobt	13.558	225	574342	210.25	ppb		97
117) Naphthalen	13.625	128	3839307	193.07	ppb		87
118) 1,2,3-Tclbenzene	13.814	180	1461401	207.57	ppb		97
119) 2,4,5-Trichlorotolene	14.393	159	998310	231.81	ppb		97
120) 2,3,6-Trichlorotoluene	14.479	159	900282	229.64	ppb		97

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:47:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

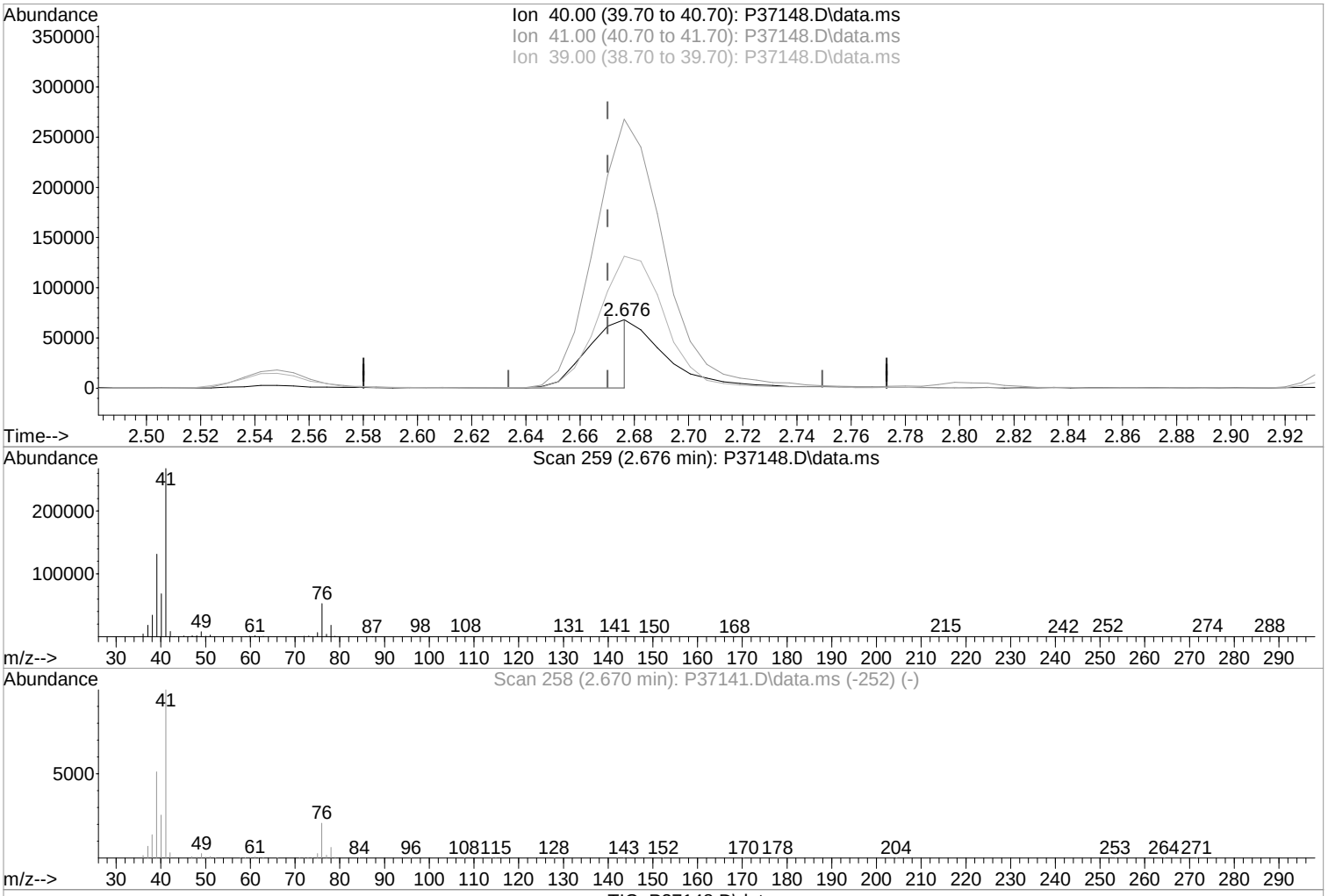


1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 14 10:29:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P37148.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 313.27 ppb m

response 74847

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	393.51
39.00	200.50	192.90
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

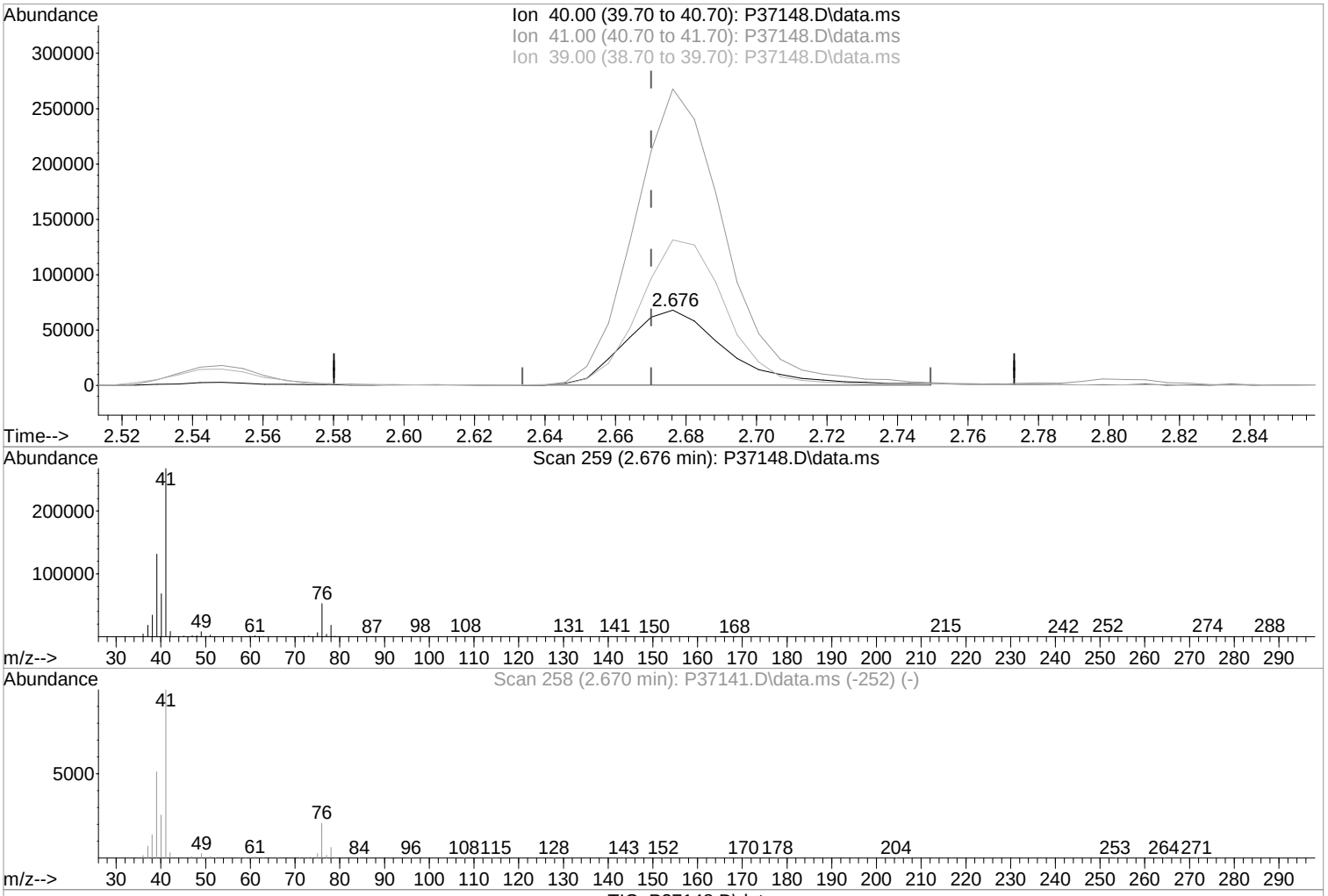
07/14/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 13 17:57:25 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration



TIC: P37148.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 563.28 ppb

response 134581

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	393.51
39.00	200.50	192.90
0.00	0.00	0.00

Manual Integration:

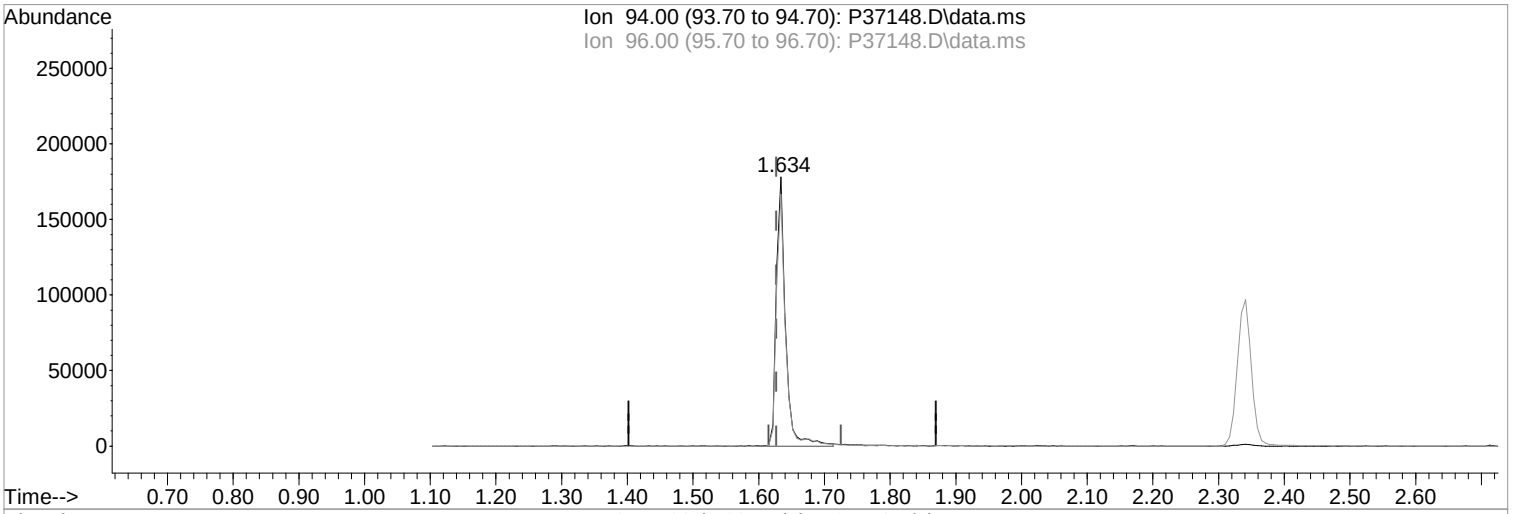
Before

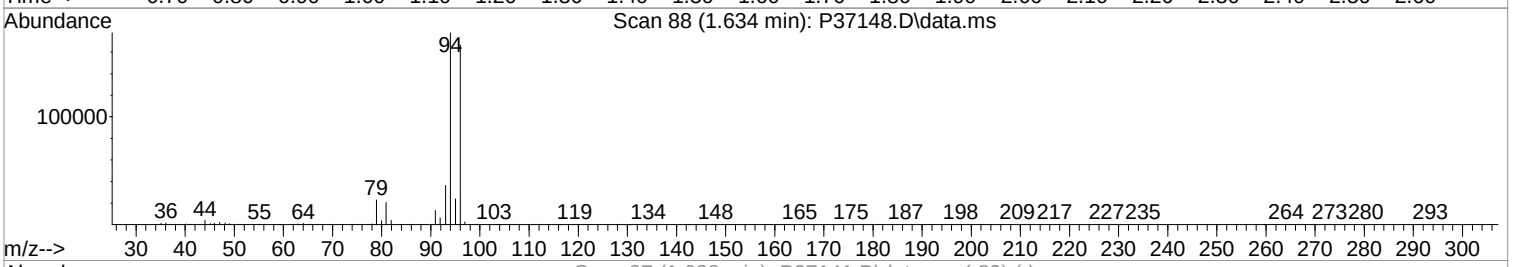
07/13/20

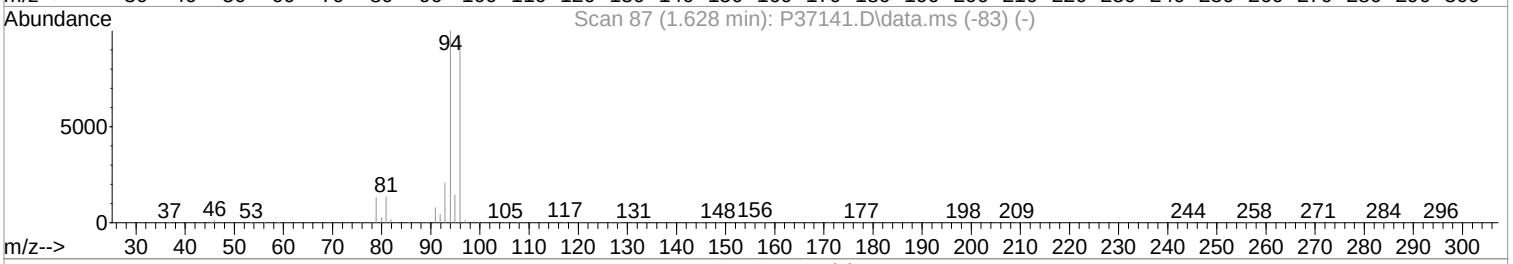
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 13 17:57:25 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration







TIC: P37148.D\data.ms

(5) Bromomethane (P)

1.634min (+0.007) 50.13 ppb m

response 174216

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	93.53
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

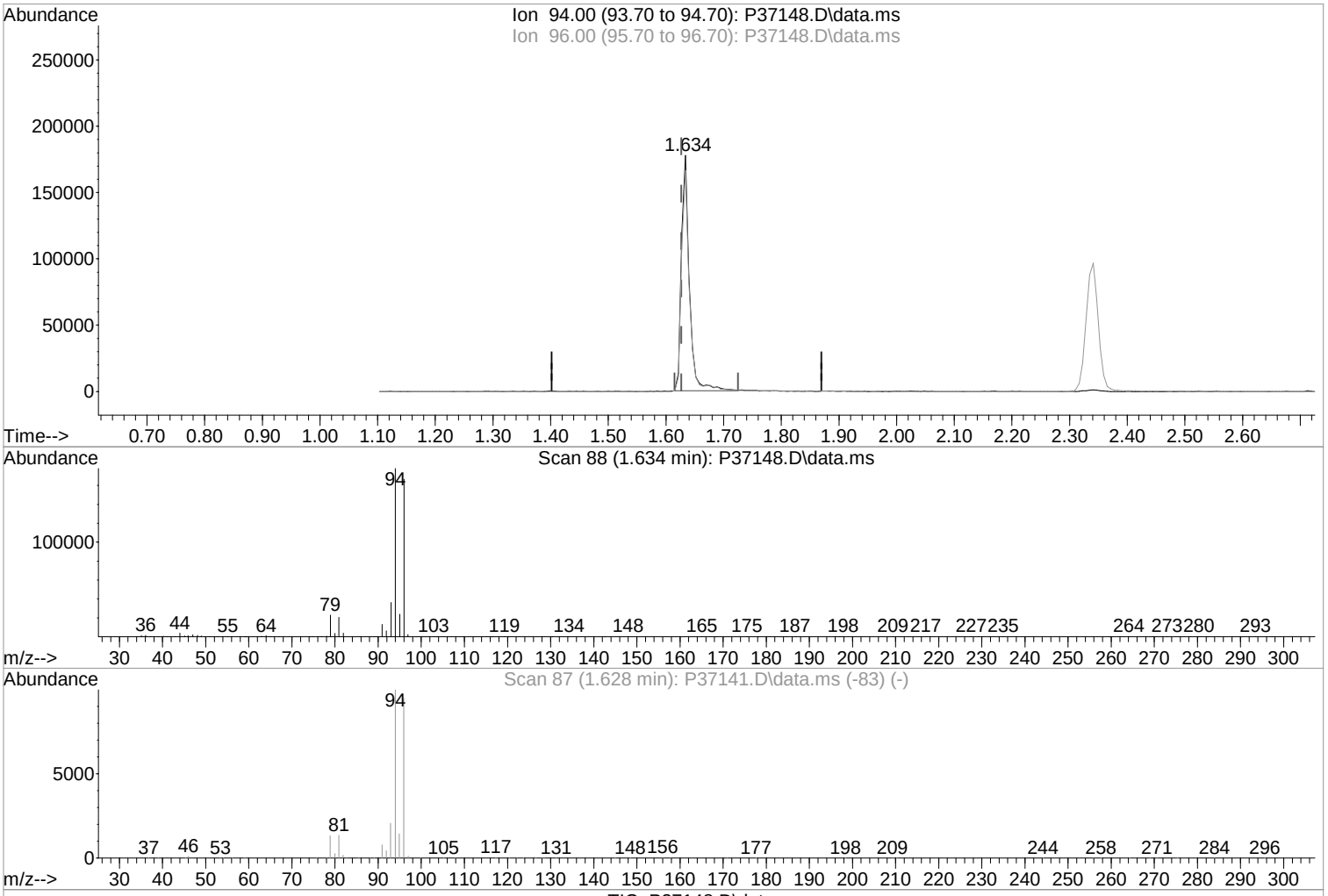
Poor integration.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 13 17:57:25 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration



TIC: P37148.D\data.ms

(5) Bromomethane (P)

1.634min (+0.007) 49.32 ppb

response 171405

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	93.53
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

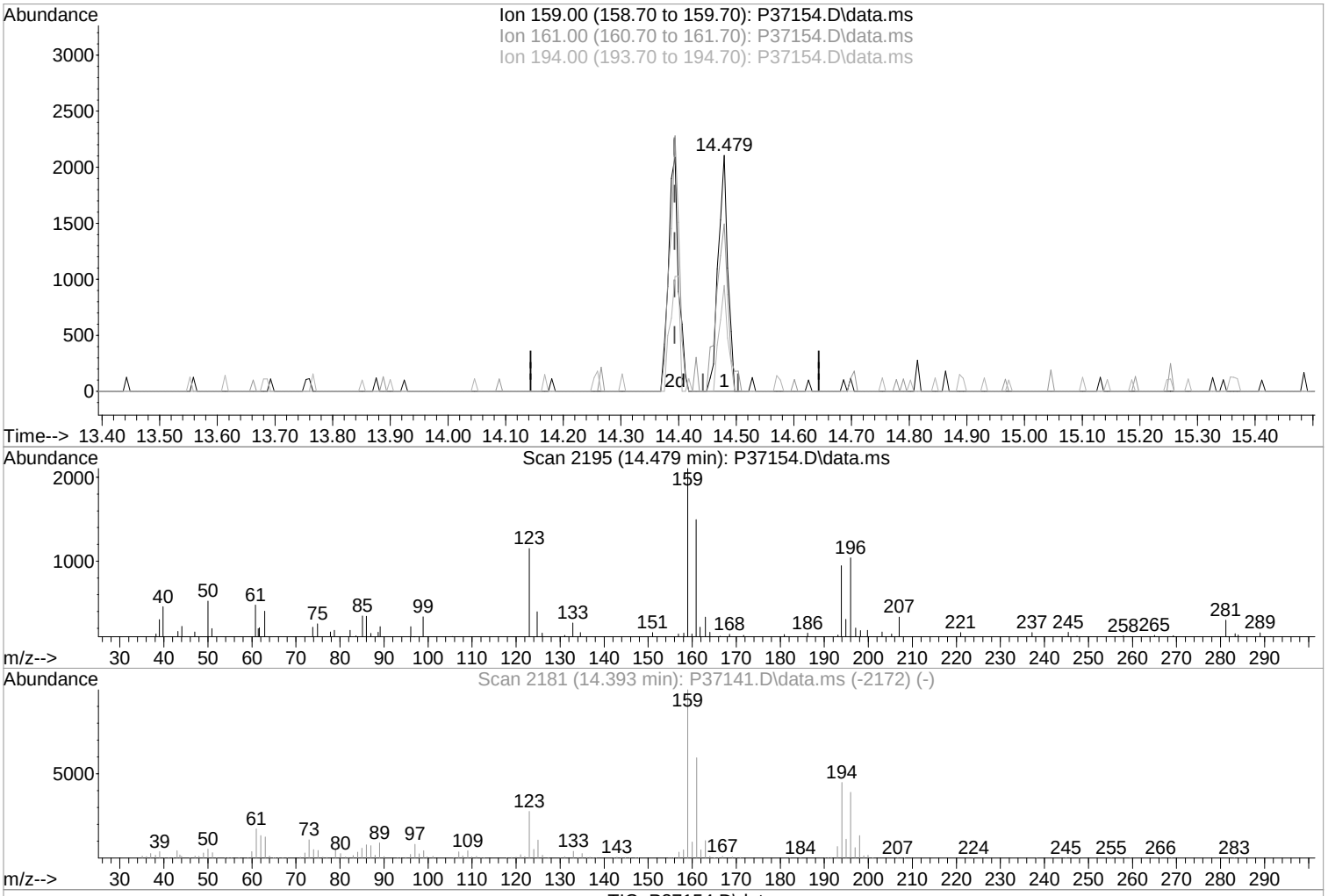
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37154.D
Acq On : 13 Jul 2020 6:18 pm
Operator : K.Ruest
Sample : ICV-50 Inst : MSVOA-12
Misc : FREONS ONLY
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 14 09:25:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration



TIC: P37154.D\data.ms

(119) 2,4,5-Trichlorotolene

14.479min (+0.085) 0.73 ppb

response 2459

Ion	Exp%	Act%
159.00	100	100
161.00	59.50	70.99
194.00	44.80	44.92
0.00	0.00	0.00

Manual Integration:

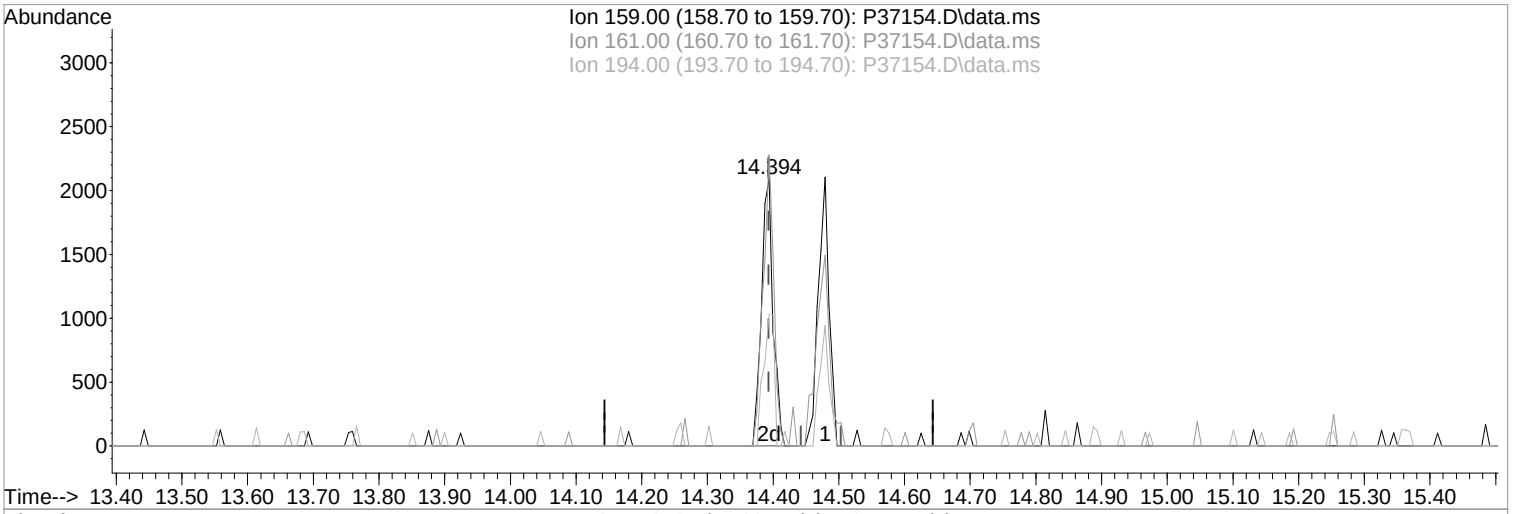
Before

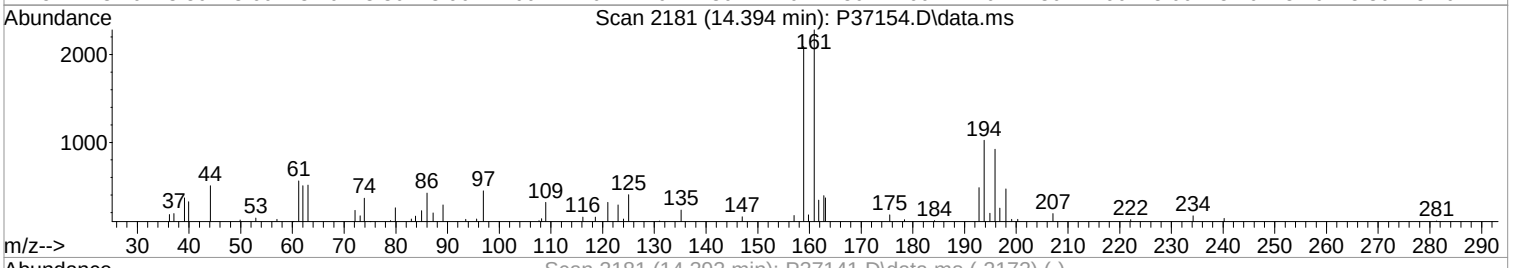
07/14/20

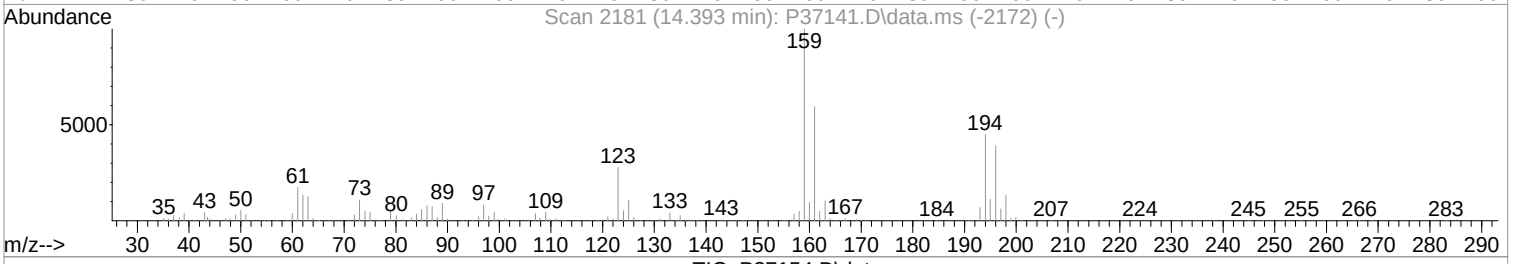
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37154.D
Acq On : 13 Jul 2020 6:18 pm
Operator : K.Ruest
Sample : ICV-50 Inst : MSVOA-12
Misc : FREONS ONLY
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 14 09:25:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration







TIC: P37154.D\data.ms

(119) 2,4,5-Trichlorotolene

14.394min (+0.000) 0.76 ppb m

response 2556

Ion	Exp%	Act%
159.00	100	100
161.00	59.50	109.09#
194.00	44.80	49.02
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

07/14/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37154.D
Acq On : 13 Jul 2020 6:18 pm
Operator : K.Ruest
Sample : ICV-50 Inst : MSVOA-12
Misc : FREONS ONLY
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 14 09:27:36 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration

F123/123a only

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	324637	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	512010	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	446825	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	206697	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.334	113	144916	49.29	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.58%				
48) surr1,1,2-dichloroetha...	5.859	65	205934	50.60	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.20%				
65) SURR3,Toluene-d8	8.322	98	680204	49.78	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.56%				
70) SURR2,BFB	10.870	95	232852	46.25	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 92.50%				
Target Compounds							Qvalue
7) Freon 21	1.872	67	218906	40.63	ppb		100
10) Freon 123a	2.164	67	134282	36.15	ppb		88
11) Freon 123	2.219	83	171809	39.20	ppb		97
13) 1,1-Diclethene	2.341	96	541	0.22	ppb	#	50
14) Freon 113	2.347	101	614	0.21	ppb		82
15) Acetone	2.414	43	4024	0.47	ppb		88
16) 2-Propanol	2.548	45	457693	1095.54	ppb		100
17) Iodomethane	2.487	142	889	0.32	ppb		71
21) Methyl Acetate	2.719	43	203916	42.24	ppb		96
26) trans-1,2-Dichloroethene	3.091	96	688	0.24	ppb	#	72
39) Tetrahydrofuran	4.993	42	2526	1.30	ppb		98
40) Chloroform	5.048	83	362	Below Cal			94
44) Cyclohexane	5.371	41	168285	50.12	ppb		97
52) n-Heptane	6.371	43	1342	0.29	ppb		90
53) 1-Butanol	6.938	56	1835	9.30	ppb	#	67
55) Methylcyclohexane	7.060	55	229862	50.45	ppb		98
72) Tetrachloroethene	8.968	164	947	0.35	ppb	#	59
76) N-Butyl Acetate	9.291	43	380777	51.68	ppb		100
78) Chlorobenzene	9.834	112	2084	0.21	ppb		95
79) 3-CBTF	9.846	180	1334	0.29	ppb		94
80) 4-CBTF	9.894	180	1383	0.33	ppb		84
83) (m+p)Xylene	10.053	106	2339	0.37	ppb	#	77
88) 2-CBTF	10.663	180	1278	0.30	ppb		90
95) n-Propylbenzene	11.089	91	5855	0.36	ppb		96
96) 2-Chlorotoluene	11.156	91	3066	0.29	ppb		85
97) 3-Chlorotoluene	11.211	91	2852	0.28	ppb	#	63
98) 4-Chlorotoluene	11.254	91	3433	0.29	ppb		88
99) 1,3,5-Trimethylbenzene	11.242	105	2827	0.23	ppb		80
100) tert-Butylbenzene	11.516	119	2124	0.21	ppb		89
101) 1,2,4-Trimethylbenzene	11.553	105	3174	0.26	ppb		97
102) 3,4-DCBTF	11.614	214	1494	0.44	ppb	#	76
103) sec-Butylbenzene	11.693	105	3916	0.27	ppb		85
104) p-Isopropyltoluene	11.821	119	3502	0.28	ppb		81
105) 1,3-Dclbenz	11.784	146	2657	0.36	ppb		97
106) 1,4-Dclbenz	11.858	146	2795	0.38	ppb	#	80
107) 2,4-DCBTF	11.912	214	1527	0.49	ppb	#	88
108) 2,5-DCBTF	11.949	214	1458	0.42	ppb	#	60
109) n-Butylbenzene	12.150	91	5090	0.43	ppb		84
110) 1,2-Dclbenz	12.156	146	2076	0.28	ppb		92

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37154.D
Acq On : 13 Jul 2020 6:18 pm
Operator : K.Ruest
Sample : ICV-50 Inst : MSVOA-12
Misc : FREONS ONLY
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 14 09:27:36 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration

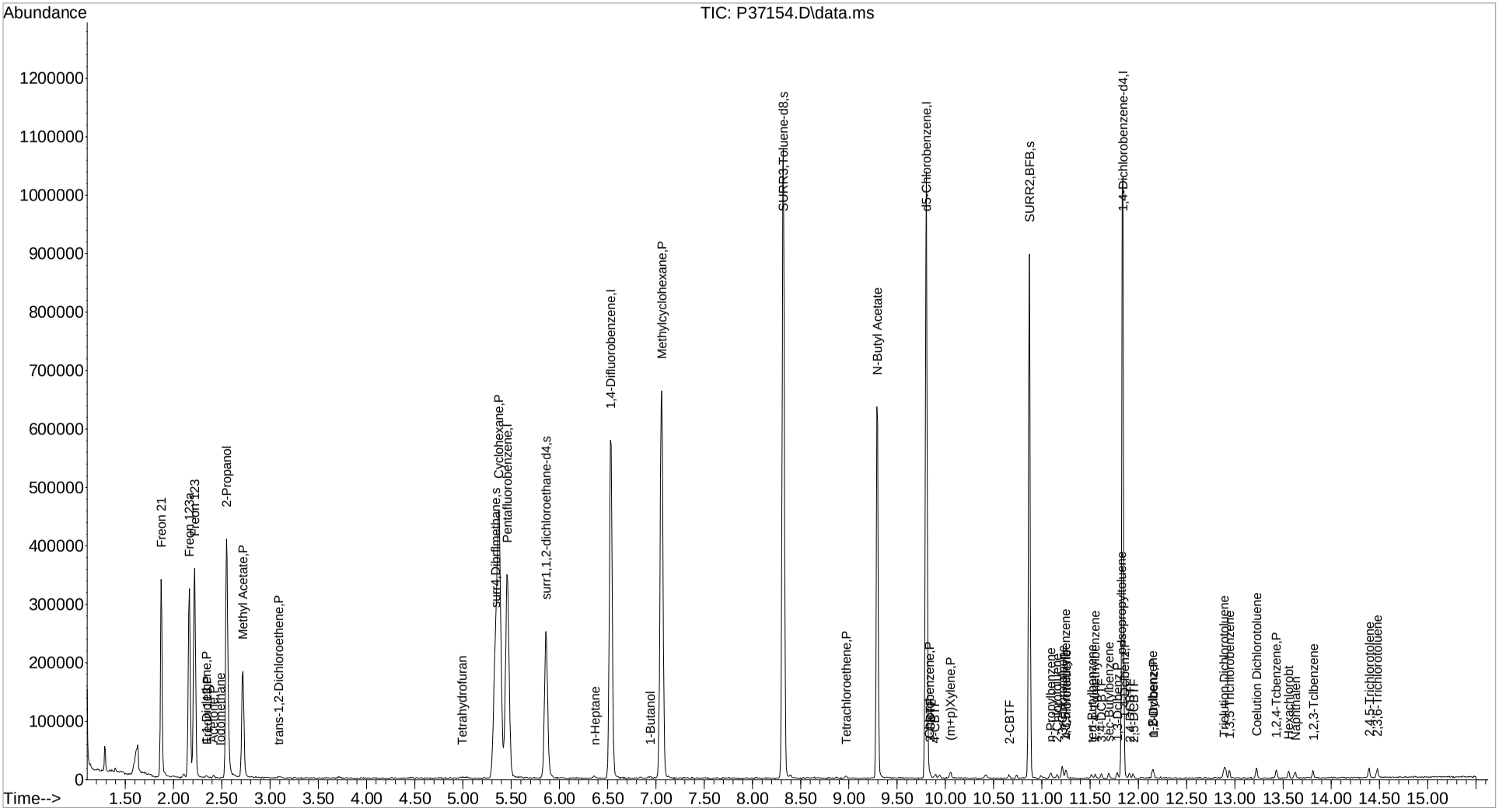
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
112) Trielution Dichlorotol...	12.888	125	8278	1.40	ppb	#	80
113) 1,3,5 Trichlorobenzene	12.943	180	2807	0.55	ppb	#	80
114) Coelution Dichlorotoluene	13.223	125	5564	0.85	ppb		92
115) 1,2,4-Tcbenzene	13.430	180	3288	0.62	ppb		93
116) Hexachlorobt	13.558	225	1792	0.84	ppb		89
117) Naphthalen	13.625	128	5709	0.37	ppb		91
118) 1,2,3-Tclbenzene	13.814	180	2744	0.50	ppb		88
119) 2,4,5-Trichlorotolene	14.394	159	2556m	0.76	ppb		
120) 2,3,6-Trichlorotoluene	14.479	159	2459	0.80	ppb		90

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37154.D
Acq On : 13 Jul 2020 6:18 pm
Operator : K.Ruest
Sample : ICV-50 Inst : MSVOA-12
Misc : FREONS ONLY
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 14 09:27:36 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration



1st 07/14/20
2nd 07/14/20

ALS Group USA, Corp.

DBA ALS Environmetal

QC/QC Report

Date Analyzed: 7/13/20 11:13

ICAL Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\071320\P37135.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	19.3	31112	PASS
75	95	30	60	48.1	77408	PASS
95	95	100	100	100.0	161024	PASS
96	95	5	9	6.9	11059	PASS
173	174	0	2	1.1	1384	PASS
174	95	50	120	79.5	128075	PASS
175	174	5	9	6.9	8837	PASS
176	174	95	101	98.0	125485	PASS
177	176	5	9	5.6	7080	PASS

Sample Name	Lab Code	File ID:	Date Analyzes:	Q
0.5ppb	0.5ppb	I:\ACQUDATA\msvoa12\Data\071320\P37136.D	7/13/20 11:45	
1.0ppb	1.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37137.D	7/13/20 12:07	
2.0ppb	2.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37138.D	7/13/20 12:29	
5.0ppb	5.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37139.D	7/13/20 12:51	
20ppb	20ppb	I:\ACQUDATA\msvoa12\Data\071320\P37140.D	7/13/20 13:12	
50ppb	50ppb	I:\ACQUDATA\msvoa12\Data\071320\P37141.D	7/13/20 13:34	
100ppb	100ppb	I:\ACQUDATA\msvoa12\Data\071320\P37142.D	7/13/20 13:56	
150ppb	150ppb	I:\ACQUDATA\msvoa12\Data\071320\P37143.D	7/13/20 14:18	
200ppb	200ppb	I:\ACQUDATA\msvoa12\Data\071320\P37144.D	7/13/20 14:40	
ICV50	ICV50	I:\ACQUDATA\msvoa12\Data\071320\P37148.D	7/13/20 16:07	

ALS Group USA, Corp.

DBA ALS Environmetal

QC/QC Report

Date Analyzed: 7/13/20 17:34

ICAL Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\071320\P37152.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	19.0	29493	PASS
75	95	30	60	51.0	79178	PASS
95	95	100	100	100.0	155200	PASS
96	95	5	9	6.5	10044	PASS
173	174	0	2	1.0	1237	PASS
174	95	50	120	77.9	120861	PASS
175	174	5	9	7.7	9306	PASS
176	174	95	101	95.6	115547	PASS
177	176	5	9	6.8	7905	PASS

Sample Name	Lab Code	File ID:	Date Analyzes:	Q
LCS-FP	LCS-FP	I:\ACQUDATA\MSVOA12\DATA\071320\P37153.D	7/13/20 17:56	
ICV-50	ICV-50	I:\ACQUDATA\MSVOA12\DATA\071320\P37154.D	7/13/20 18:18	

Analysis: 8260 waters | Analyst: K. Quast | pH strips: 221419 | Tune Method: W071320

Date: 7/13/2020 · Run#2 | Balance ID: N/A | ResCl strips: N/A | Run Method: ↓

Instr. 12 | 50 mL Class A used for dilution FV | Syringes: 205000 | LIMS Run#: 6086867

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Tier	Vial	pH	File#	OK?	Comments
16	~~15~~ TUNE		R2007451 · 01				(12)	~~P37150~~	YT	P37151 17:13 (auto)
	17 CCV		02					P37152	YC	
	18 LCS · FP		03					P37153	YQ	11DCE ↑ + MTBE ↑
	19 ICV · SD (Freons only)		—					P37154	YQ	F123/123A only
	20 MBLK · UNP		—					P37155	YB	
	21 MBLK · FP		04					P37156	YB	
	22 R2005574 · 005	1.0		19760	2	1	12	P37157	Y	
	23 R2005576 · 004	1.0		9443	2	1	12	P37158	Y	
	24 001	1.0				1	12	P37159	Y	
	25 002	1.0				1	12	P37160	Y	
	26 003	1.0				1	12	P37161	Y	
	27 R2005701 · 005	1.0		15626	4	1	12	P37162	Y	
	28 001	1.0				1	12	P37163	(Y)	rpt 25
	29 002	1.0				1	12	P37164	(N)	rpt c/o
	30 003	1.0				1	12	P37165	(N)	
	31 004	1.0				1	12	P37166	(N)	
	32 006	1.0				1	12	P37167	(Y)	rpt SD
	33 R2005635 · 006	1.0				1	12	P37168	(N)	rpt c/o
	34 001	1.0				1	12	P37169		
	35 002	1.0				1	12	P37170		
	36 003	1.0				1	12	P37171		
	37 005	1.0				1	12	P37172		
	38 007	1.0				1	12	P37173		
	39 004	1.0				1	12	P37174		
	40 MS 004	1.0				2	12	~~P37175~~	YQ	P37175 (12)
	41 MSD 004	1.0				3	12	P37176	YQ	2:19 ✓
	42 BLK					—	—	P37177	—	
	1 (7/14/2020)					—	—	P37178	—	↑ baseline - bad gastank?!
	2					—	—	P37179	—	
	3					—	—	P37180	—	
	1 BLK					—	—	P37181	—	
	2 ↓					—	—	P37182	—	

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

Combined IS/Surr :

500 Primary Qc+ : 2096.14

Primary Fr+ : 210841 | 5 mL → 50 mL

Primary T6 : 210630 | = CCV

Primary HSL : 210631

Primary :

200 Secondary Fr+ : 210514 · 5mL

500 Secondary Qc+ : 210507

Secondary T6 : 210633 | 2mL | 50 mL = LCS

Secondary HSL : 210632

Secondary :

-10.6 uL

4.2 uL ✓

4 mL vial = MS/D

Surrogate SD : 210628

Internal Std SD : 210629

Reagents:

Analysis: 8260+624 Water | Analyst: K. Quest | pH strips: N/A | Tune Method: W071320

Date: 7/13/2020 | Balance ID: N/A | ResCl strips: N/A | Run Method: ↓

Instr. 12 | 50 mL Class A used for dilution FV | Syringes: 202106+205000 | LIMS Run#: ICAL

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./			RL	Tier	Vial	pH	File#	OK?	Comments
				Atomx								
1	BLK									P37131		
2	↓									P37132		
3										P37133		
4	TUNE									P37134	YT	10:43 (auto)
1	IBLK	(5ppm)	(500ppm)	5mL 5D	FV					P37135	YB	
1	0.5 ppb	5mL	—	—	5Dmb					P37136	Y	
2	1.0	10mL	—	—						P37137	Y	
3	2.0	20mL	—	—						P37138	Y	
4	5.0	50mL	—	1mL						P37139	Y	
5	20	—	2mL	2mL						P37140	Y	
6	50	—	5mL	5mL						P37141	Y	
7	100	—	10mL	10mL						P37142	Y	
8	150	—	15mL	20mL						P37143	Y	
9	200	—	20mL	—						P37144	Y	
10	BLK									P37145	—	
11	↓									P37146	—	
12										P37147	—	
13	ICV · 5D									P37148	YQ	
14	BLK									P37149		
15	ICV · 5D - Freons only									P37150	(N)	wrong shoot (20; instead of 5D)

KQR 7/13/2020

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

500 Primary OCC+ : 209614
↓ Primary FC+ : 210811 | 10uL → 1.0 mg/l
Primary TG : 210630 | = 5ppm
Primary HSL : 210631 |
Primary : |

200 Secondary FC+ : 210514 - 12.5uL
500 Secondary OCC+ : 210507 |
↓ Secondary TG : 210633 | 5mL
Secondary HSL : 210632 |
Secondary : |

> 5Dmb = ~~CC~~ (KQ) ICV · 5D

Combined IS/Surr
Surrogate 5D : 210628
Internal Std 5D : 210629
Reagents:

Client: The LiRo Group
Project: Buffalo China

Service Request: R2006930
Calibration Date: 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
Instrument ID: R-MS-12

Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC2000094-01	0.5ppb	I:\ACQUDATA\msvoa12\Data\071320\P37136.D	07/13/2020 11:45
02	RC2000094-02	1.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37137.D	07/13/2020 12:07
03	RC2000094-03	2.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37138.D	07/13/2020 12:29
04	RC2000094-04	5.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37139.D	07/13/2020 12:51
05	RC2000094-05	20ppb	I:\ACQUDATA\msvoa12\Data\071320\P37140.D	07/13/2020 13:12
06	RC2000094-06	50ppb	I:\ACQUDATA\msvoa12\Data\071320\P37141.D	07/13/2020 13:34
07	RC2000094-07	100ppb	I:\ACQUDATA\msvoa12\Data\071320\P37142.D	07/13/2020 13:56
08	RC2000094-08	150ppb	I:\ACQUDATA\msvoa12\Data\071320\P37143.D	07/13/2020 14:18
09	RC2000094-09	200ppb	I:\ACQUDATA\msvoa12\Data\071320\P37144.D	07/13/2020 14:40

Analyte

1,1,1-Trichloroethane (TCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8071	02	1.000	0.7859	03	2.000	0.6661	04	5.000	0.7081
05	20.000	0.77	06	50.000	0.7909	07	100.000	0.6795	08	150.000	0.5739
09	200.000	0.7246									

1,1,2,2-Tetrachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.158	02	1.000	1.199	03	2.000	1.04	04	5.000	1.103
05	20.000	1.162	06	50.000	1.147	07	100.000	1.109	08	150.000	1.035
09	200.000	1.091									

1,1,2-Trichloro-1,2,2-trifluoroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4929	02	1.000	0.489	03	2.000	0.4697	04	5.000	0.4866
05	20.000	0.4741	06	50.000	0.477	07	100.000	0.4076	08	150.000	0.3378
09	200.000	0.4203									

1,1,2-Trichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3491	02	1.000	0.3768	03	2.000	0.2909	04	5.000	0.3463
05	20.000	0.357	06	50.000	0.359	07	100.000	0.3463	08	150.000	0.3099
09	200.000	0.3368									

1,1-Dichloroethane (1,1-DCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.051	02	1.000	1.163	03	2.000	0.9906	04	5.000	1.022
05	20.000	1.041	06	50.000	1.054	07	100.000	0.909	08	150.000	0.7599
09	200.000	0.9438									

1,1-Dichloroethene (1,1-DCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.444	02	1.000	0.4319	03	2.000	0.387	04	5.000	0.3699
05	20.000	0.4116	06	50.000	0.4141	07	100.000	0.356	08	150.000	0.2962
09	200.000	0.3691									

Client: The LiRo Group **Service Request:** R2006930
Project: Buffalo China **Calibration Date:** 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

1,2,3-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	1.416	03	2.000	1.201	04	5.000	1.298	05	20.000	1.318
06	50.000	1.405	07	100.000	1.432	08	150.000	1.235	09	200.000	1.387

1,2,4-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.277	02	1.000	1.285	03	2.000	1.136	04	5.000	1.219
05	20.000	1.294	06	50.000	1.394	07	100.000	1.399	08	150.000	1.241
09	200.000	1.384									

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.2232	03	2.000	0.2194	04	5.000	0.2189	05	20.000	0.2346
06	50.000	0.2648	07	100.000	0.2778	08	150.000	0.2649	09	200.000	0.2951

1,2-Dibromoethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3488	02	1.000	0.443	03	2.000	0.343	04	5.000	0.3767
05	20.000	0.4045	06	50.000	0.4046	07	100.000	0.3833	08	150.000	0.349
09	200.000	0.3916									

1,2-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.062	02	1.000	1.907	03	2.000	1.713	04	5.000	1.8
05	20.000	1.783	06	50.000	1.822	07	100.000	1.744	08	150.000	1.57
09	200.000	1.718									

1,2-Dichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5636	02	1.000	0.5307	03	2.000	0.4657	04	5.000	0.5017
05	20.000	0.5463	06	50.000	0.5234	07	100.000	0.4914	08	150.000	0.4396
09	200.000	0.4781									

1,2-Dichloropropane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4307	02	1.000	0.4003	03	2.000	0.3358	04	5.000	0.3679
05	20.000	0.398	06	50.000	0.4008	07	100.000	0.3822	08	150.000	0.3461
09	200.000	0.3778									

1,3-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.105	02	1.000	1.913	03	2.000	1.694	04	5.000	1.711
05	20.000	1.78	06	50.000	1.756	07	100.000	1.701	08	150.000	1.536
09	200.000	1.684									

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.884	02	1.000	2.155	03	2.000	1.687	04	5.000	1.778

Client: The LiRo Group
Project: Buffalo China

Service Request: R2006930
Calibration Date: 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
Instrument ID: R-MS-12

Signal ID: 1

Analyte

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	1.808	06	50.000	1.813	07	100.000	1.739	08	150.000	1.581
09	200.000	1.714									

1,4-Dioxane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.008107	04	100.000	0.006782	05	400.000	0.007935	06	1000.000	0.007935
07	2000.000	0.008155	08	3000.000	0.007713	09	4000.000	0.008752			

2-Butanone (MEK)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.4127	05	20.000	0.4204	06	50.000	0.3974	07	100.000	0.3781
08	150.000	0.33	09	200.000	0.3938						

2-Hexanone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.3596	04	5.000	0.4468	05	20.000	0.4563	06	50.000	0.4566
07	100.000	0.4551	08	150.000	0.4544	09	200.000	0.4821			

4-Bromofluorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.531	05	20.000	0.4623	06	50.000	0.4991	07	100.000	0.4892
08	200.000	0.4768									

4-Methyl-2-pentanone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.4577	04	5.000	0.4785	05	20.000	0.536	06	50.000	0.5391
07	100.000	0.5328	08	150.000	0.5165	09	200.000	0.5467			

Acetone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.0	0.5279	04	5.000	0.4314	05	20.000	0.3372	06	50.000	0.2818
07	100.000	0.2453	08	150.000	0.2032						

Benzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.384	02	1.000	1.632	03	2.000	1.457	04	5.000	1.432
05	20.000	1.499	06	50.000	1.528	07	100.000	1.418	08	150.000	1.26
09	200.000	1.384									

Bromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.356	02	1.000	0.4133	03	2.000	0.3332	04	5.000	0.3533
05	20.000	0.3675	06	50.000	0.3519	07	100.000	0.3101	08	150.000	0.2636
09	200.000	0.3235									

Client: The LiRo Group
Project: Buffalo China

Service Request: R2006930
Calibration Date: 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
Instrument ID: R-MS-12

Signal ID: 1

Analyte

Bromodichloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3549	02	1.000	0.39	03	2.000	0.3923	04	5.000	0.3711
05	20.000	0.4273	06	50.000	0.4556	07	100.000	0.4284	08	150.000	0.3853
09	200.000	0.4343									

Bromoform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.422	03	2.000	0.3744	04	5.000	0.3569	05	20.000	0.4039
06	50.000	0.4266	07	100.000	0.4331	08	150.000	0.4144	09	200.000	0.4629

Bromomethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.569	03	2.000	0.5504	04	5.000	0.6469	05	20.000	0.4826
06	50.000	0.4565	07	100.000	0.4187	08	150.000	0.4755	09	200.000	0.5555

Carbon Disulfide

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.258	02	1.000	1.845	03	2.000	1.554	04	5.000	1.303
05	20.000	1.412	06	50.000	1.365	07	100.000	1.234	08	150.000	1.042
09	200.000	1.261									

Carbon Tetrachloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2778	02	1.000	0.3166	03	2.000	0.2607	04	5.000	0.3249
05	20.000	0.3469	06	50.000	0.3814	07	100.000	0.3528	08	150.000	0.3264
09	200.000	0.3675									

Chlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.237	02	1.000	1.149	03	2.000	1.085	04	5.000	1.137
05	20.000	1.162	06	50.000	1.151	07	100.000	1.068	08	150.000	0.9724
09	200.000	1.075									

Chloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4602	02	1.000	0.365	03	2.000	0.3438	04	5.000	0.3373
05	20.000	0.3396	06	50.000	0.345	07	100.000	0.3516	08	150.000	0.3502
09	200.000	0.332									

Chloroform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.16	02	1.000	1.071	03	2.000	0.8763	04	5.000	0.9174
05	20.000	0.9428	06	50.000	0.9445	07	100.000	0.8214	08	150.000	0.6677

Chloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7616	02	1.000	0.6349	03	2.000	0.6692	04	5.000	0.6935
05	20.000	0.734	06	50.000	0.7565	07	100.000	0.6758	08	150.000	0.5736

Client: The LiRo Group
Project: Buffalo China

Service Request: R2006930
Calibration Date: 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
Instrument ID: R-MS-12

Signal ID: 1

Analyte

Chloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
09	200.000	0.7521									

Cyclohexane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.341	03	2.000	0.3366	04	5.000	0.3262	05	20.000	0.312
06	50.000	0.3399	07	100.000	0.3415	08	150.000	0.2951	09	200.000	0.3306

Dibromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2289	02	1.000	0.2837	03	2.000	0.2672	04	5.000	0.2971
05	20.000	0.3207	06	50.000	0.3502	07	100.000	0.3461	08	150.000	0.3342
09	200.000	0.3704									

Dibromofluoromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.2959	05	20.000	0.2735	06	50.000	0.297	07	100.000	0.296
08	200.000	0.2731									

Dichlorodifluoromethane (CFC 12)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6507	02	1.000	0.6409	03	2.000	0.4987	04	5.000	0.4355
05	20.000	0.6177	06	50.000	0.6342	07	100.000	0.5268	08	150.000	0.4463
09	200.000	0.5563									

Dichloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6115	02	1.000	0.7034	03	2.000	0.5467	04	5.000	0.5687
05	20.000	0.5665	06	50.000	0.5639	07	100.000	0.4917	08	150.000	0.406
09	200.000	0.5016									

Ethylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6455	02	1.000	0.5669	03	2.000	0.5403	04	5.000	0.5583
05	20.000	0.6178	06	50.000	0.6153	07	100.000	0.5833	08	150.000	0.5336
09	200.000	0.6051									

Isopropylbenzene (Cumene)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.98	02	1.000	3.853	03	2.000	3.267	04	5.000	3.536
05	20.000	3.61	06	50.000	3.606	07	100.000	3.291	08	150.000	2.918
09	200.000	3.004									

Methyl Acetate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.8867	03	2.000	0.7552	04	5.000	0.6947	05	20.000	0.7398
06	50.000	0.7637	07	100.000	0.7407	08	150.000	0.6245	09	200.000	0.7429

Client: The LiRo Group
Project: Buffalo China

Service Request: R2006930
Calibration Date: 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
Instrument ID: R-MS-12

Signal ID: 1

Analyte

Methyl tert-Butyl Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.717	02	1.000	1.948	03	2.000	1.668	04	5.000	1.782
05	20.000	1.954	06	50.000	1.965	07	100.000	1.766	08	150.000	1.479
09	200.000	1.826									

Methylcyclohexane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.4881	03	2.000	0.3871	04	5.000	0.4106	05	20.000	0.4315
06	50.000	0.4698	07	100.000	0.4779	08	150.000	0.4189	09	200.000	0.4755

Styrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.113	02	1.000	1.124	03	2.000	0.9876	04	5.000	1.138
05	20.000	1.233	06	50.000	1.312	07	100.000	1.209	08	150.000	1.117
09	200.000	1.224									

Tetrachloroethene (PCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3536	02	1.000	0.32	03	2.000	0.2945	04	5.000	0.314
05	20.000	0.3118	06	50.000	0.314	07	100.000	0.283	08	150.000	0.2631
09	200.000	0.2943									

Toluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.538	02	1.000	1.687	03	2.000	1.465	04	5.000	1.53
05	20.000	1.617	06	50.000	1.663	07	100.000	1.497	08	150.000	1.333
09	200.000	1.429									

Toluene-d8

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	1.448	05	20.000	1.282	06	50.000	1.375	07	100.000	1.351
08	200.000	1.216									

Trichloroethene (TCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3868	02	1.000	0.4229	03	2.000	0.3778	04	5.000	0.353
05	20.000	0.3568	06	50.000	0.3579	07	100.000	0.3328	08	150.000	0.301
09	200.000	0.3348									

Trichlorofluoromethane (CFC 11)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7973	02	1.000	0.682	03	2.000	0.6218	04	5.000	0.6455
05	20.000	0.7523	06	50.000	0.7174	07	100.000	0.6277	08	150.000	0.5369
09	200.000	0.6567									

Vinyl Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6783	02	1.000	0.6335	03	2.000	0.5678	04	5.000	0.6654

Client: The LiRo Group **Service Request:** R2006930
Project: Buffalo China **Calibration Date:** 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

Vinyl Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	0.6916	06	50.000	0.7386	07	100.000	0.6506	08	150.000	0.5467
09	200.000	0.6881									

cis-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5812	02	1.000	0.6992	03	2.000	0.6061	04	5.000	0.5993
05	20.000	0.5998	06	50.000	0.611	07	100.000	0.5238	08	150.000	0.4342
09	200.000	0.5388									

cis-1,3-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.575	02	1.000	0.5068	03	2.000	0.491	04	5.000	0.4997
05	20.000	0.5617	06	50.000	0.6072	07	100.000	0.5958	08	150.000	0.5365
09	200.000	0.5913									

m,p-Xylenes

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.7145	02	2.000	0.7397	03	4.000	0.6183	04	10.000	0.681
05	40.000	0.7496	06	100.000	0.77	07	200.000	0.695	08	300.000	0.6392
09	400.000	0.6976									

o-Xylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5724	02	1.000	0.7441	03	2.000	0.5912	04	5.000	0.7311
05	20.000	0.7061	06	50.000	0.7555	07	100.000	0.6912	08	150.000	0.6445
09	200.000	0.7191									

trans-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4221	02	1.000	0.4928	03	2.000	0.4876	04	5.000	0.4686
05	20.000	0.4831	06	50.000	0.4953	07	100.000	0.425	08	150.000	0.3458
09	200.000	0.4327									

trans-1,3-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5204	02	1.000	0.4418	03	2.000	0.4159	04	5.000	0.4609
05	20.000	0.512	06	50.000	0.5473	07	100.000	0.5533	08	150.000	0.5064
09	200.000	0.5571									

ALS Group USA, Corp.
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QA/QC Report

Client: The LiRo Group
Project: Buffalo China

Service Request: R2006930
Calibration Date: 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
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	10.4	≤20	0.7229	0.100
1,1,2,2-Tetrachloroethane	TRG	Average RF	% RSD	5.0	≤20	1.116	0.300
1,1,2-Trichloro-1,2,2-trifluoroethane	TRG	Average RF	% RSD	11.6	≤20	0.4505	0.100
1,1,2-Trichloroethane	TRG	Average RF	% RSD	7.7	≤20	0.3413	0.100
1,1-Dichloroethane (1,1-DCA)	TRG	Average RF	% RSD	11.4	≤20	0.9926	0.200
1,1-Dichloroethene (1,1-DCE)	TRG	Average RF	% RSD	11.7	≤20	0.3866	0.100
1,2,3-Trichlorobenzene	TRG	Average RF	% RSD	6.5	≤20	1.336	
1,2,4-Trichlorobenzene	TRG	Average RF	% RSD	6.9	≤20	1.292	0.200
1,2-Dibromo-3-chloropropane (DBCP)	TRG	Average RF	% RSD	11.8	≤20	0.2498	0.050
1,2-Dibromoethane	TRG	Average RF	% RSD	8.6	≤20	0.3827	0.100
1,2-Dichlorobenzene	TRG	Average RF	% RSD	7.6	≤20	1.791	0.400
1,2-Dichloroethane	TRG	Average RF	% RSD	8.0	≤20	0.5045	0.100
1,2-Dichloropropane	TRG	Average RF	% RSD	7.7	≤20	0.3822	0.100
1,3-Dichlorobenzene	TRG	Average RF	% RSD	9.2	≤20	1.764	0.600
1,4-Dichlorobenzene	TRG	Average RF	% RSD	8.9	≤20	1.795	0.500
1,4-Dioxane	TRG	Average RF	% RSD	7.5	≤20	0.007911	
2-Butanone (MEK)	TRG	Average RF	% RSD	8.3	≤20	0.3887	0.05
2-Hexanone	TRG	Average RF	% RSD	8.8	≤20	0.4444	0.05
4-Bromofluorobenzene	SURR	Average RF	% RSD	5.3	≤20	0.4917	
4-Methyl-2-pentanone	TRG	Average RF	% RSD	6.6	≤20	0.5153	0.05
Acetone	TRG	Quadratic	COD	0.9997	≥0.99	0.3378	0.05
Benzene	TRG	Average RF	% RSD	7.2	≤20	1.444	0.500
Bromochloromethane	TRG	Average RF	% RSD	12.1	≤20	0.3414	
Bromodichloromethane	TRG	Average RF	% RSD	8.2	≤20	0.4044	0.200
Bromoform	TRG	Average RF	% RSD	8.1	≤20	0.4118	0.100
Bromomethane	TRG	Average RF	% RSD	14.3	≤20	0.5194	0.100
Carbon Disulfide	TRG	Linear	R2	0.9914	≥0.99	1.475	0.100
Carbon Tetrachloride	TRG	Average RF	% RSD	12.1	≤20	0.3283	0.05
Chlorobenzene	TRG	Average RF	% RSD	6.7	≤20	1.115	0.500
Chloroethane	TRG	Average RF	% RSD	11.0	≤20	0.3583	0.100
Chloroform	TRG	Quadratic	COD	0.9914	≥0.99	0.9251	0.200
Chloromethane	TRG	Average RF	% RSD	9.2	≤20	0.6946	0.100
Cyclohexane	TRG	Average RF	% RSD	5.0	≤20	0.3279	0.100
Dibromochloromethane	TRG	Average RF	% RSD	14.6	≤20	0.3109	0.100

Client: The LiRo Group
Project: Buffalo China

Service Request: R2006930
Calibration Date: 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
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	4.4	≤20	0.2871	
Dichlorodifluoromethane (CFC 12)	TRG	Average RF	% RSD	15.1	≤20	0.5563	0.100
Dichloromethane	TRG	Average RF	% RSD	15.0	≤20	0.5511	0.100
Ethylbenzene	TRG	Average RF	% RSD	6.5	≤20	0.5851	0.100
Isopropylbenzene (Cumene)	TRG	Average RF	% RSD	10.5	≤20	3.452	0.100
Methyl Acetate	TRG	Average RF	% RSD	9.9	≤20	0.7435	0.100
Methyl tert-Butyl Ether	TRG	Average RF	% RSD	8.9	≤20	1.789	0.100
Methylcyclohexane	TRG	Average RF	% RSD	8.4	≤20	0.4449	0.100
Styrene	TRG	Average RF	% RSD	8.1	≤20	1.162	0.300
Tetrachloroethene (PCE)	TRG	Average RF	% RSD	8.4	≤20	0.3053	0.200
Toluene	TRG	Average RF	% RSD	7.5	≤20	1.529	0.400
Toluene-d8	SURR	Average RF	% RSD	6.7	≤20	1.334	
Trichloroethene (TCE)	TRG	Average RF	% RSD	9.8	≤20	0.3582	0.200
Trichlorofluoromethane (CFC 11)	TRG	Average RF	% RSD	11.5	≤20	0.6708	0.100
Vinyl Chloride	TRG	Average RF	% RSD	9.4	≤20	0.6512	0.100
cis-1,2-Dichloroethene	TRG	Average RF	% RSD	12.7	≤20	0.5771	0.100
cis-1,3-Dichloropropene	TRG	Average RF	% RSD	8.1	≤20	0.5517	0.200
m,p-Xylenes	TRG	Average RF	% RSD	7.1	≤20	0.7005	0.100
o-Xylene	TRG	Average RF	% RSD	9.7	≤20	0.6839	0.300
trans-1,2-Dichloroethene	TRG	Average RF	% RSD	10.9	≤20	0.4503	0.100
trans-1,3-Dichloropropene	TRG	Average RF	% RSD	10.2	≤20	0.5017	0.100

Client: The LiRo Group **Service Request:** R2006930
Project: Buffalo China **Calibration Date:** 7/13/2020

Initial Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094 **Signal ID:** 1
Instrument ID: R-MS-12

#	Lab Code	Sample Name	File Location	Acquisition Date
10	RC2000094-10	ICV50	I:\ACQUDATA\msvoa12\Data\071320\P37148.D	07/13/2020 16:07
11	RC2000094-11	ICV-50	I:\ACQUDATA\msvoa12\Data\071320\P37154.D	07/13/2020 18:18

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	49.5	7.229E-1	7.162E-1	-0.929	±30	Average RF
1,1,2,2-Tetrachloroethane	50.0	52.6	1.116E0	1.173E0	5.14	±30	Average RF
1,1,2-Trichloroethane	50.0	49.6	3.413E-1	3.384E-1	-0.854	±30	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	47.6	4.505E-1	4.286E-1	-4.874	±30	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	48.4	9.926E-1	9.606E-1	-3.231	±30	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	55.9	3.866E-1	4.319E-1	11.70	±30	Average RF
1,2,3-Trichlorobenzene	50.0	47.6	1.336E0	1.271E0	-4.862	±30	Average RF
1,2,4-Trichlorobenzene	50.0	50.9	1.292E0	1.315E0	1.78	±30	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	50.9	2.498E-1	2.544E-1	1.82	±30	Average RF
1,2-Dibromoethane	50.0	49.7	3.827E-1	3.801E-1	-0.673	±30	Average RF
1,2-Dichlorobenzene	50.0	46.6	1.791E0	1.671E0	-6.708	±30	Average RF
1,2-Dichloroethane	50.0	47.2	5.045E-1	4.76E-1	-5.651	±30	Average RF
1,2-Dichloropropane	50.0	49.8	3.822E-1	3.804E-1	-0.455	±30	Average RF
1,3-Dichlorobenzene	50.0	47.3	1.764E0	1.67E0	-5.365	±30	Average RF
1,4-Dichlorobenzene	50.0	46.6	1.795E0	1.673E0	-6.797	±30	Average RF
1,4-Dioxane	1000	999	7.911E-3	7.902E-3	-0.111	±30	Average RF
2-Butanone (MEK)	50.0	50.8	3.887E-1	3.948E-1	1.55	±30	Average RF
2-Hexanone	50.0	46.7	4.444E-1	4.152E-1	-6.576	±30	Average RF
4-Methyl-2-pentanone	50.0	47.3	5.153E-1	4.879E-1	-5.321	±30	Average RF
Acetone	50.0	54.5	3.378E-1	3.107E-1	9.06	±30	Quadratic
Benzene	50.0	49.0	1.444E0	1.416E0	-1.908	±30	Average RF
Bromochloromethane	50.0	48.5	3.414E-1	3.31E-1	-3.033	±30	Average RF
Bromodichloromethane	50.0	49.7	4.044E-1	4.02E-1	-0.577	±30	Average RF
Bromoform	50.0	49.6	4.118E-1	4.085E-1	-0.808	±30	Average RF
Bromomethane	50.0	50.1	5.194E-1	5.207E-1	0.257	±30	Average RF
Carbon Disulfide	50.0	48.4	1.475E0	1.225E0	-3.206	±30	Linear
Carbon Tetrachloride	50.0	52.8	3.283E-1	3.469E-1	5.65	±30	Average RF
Chlorobenzene	50.0	49.0	1.115E0	1.093E0	-2.019	±30	Average RF
Chloroethane	50.0	43.7	3.583E-1	3.128E-1	-12.683	±30	Average RF
Chloroform	50.0	49.6	9.251E-1	8.57E-1	-0.843	±30	Quadratic
Chloromethane	50.0	52.5	6.946E-1	7.295E-1	5.02	±30	Average RF
Cyclohexane	50.0	45.8	3.279E-1	3.006E-1	-8.329	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: The LiRo Group
Project: Buffalo China

Service Request: R2006930
Calibration Date: 7/13/2020

Initial Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
Instrument ID: R-MS-12

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Dibromochloromethane	50.0	53.9	3.109E-1	3.353E-1	7.83	±30	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	50.4	5.563E-1	5.602E-1	0.702	±30	Average RF
Dichloromethane	50.0	47.7	5.511E-1	5.259E-1	-4.575	±30	Average RF
Ethylbenzene	50.0	49.3	5.851E-1	5.774E-1	-1.315	±30	Average RF
Isopropylbenzene (Cumene)	50.0	50.3	3.452E0	3.472E0	0.589	±30	Average RF
Methyl Acetate	50.0	40.6	7.435E-1	6.038E-1	-18.795	±30	Average RF
Methyl tert-Butyl Ether	50.0	53.7	1.789E0	1.921E0	7.33	±30	Average RF
Methylcyclohexane	50.0	47.5	4.449E-1	4.223E-1	-5.086	±30	Average RF
Styrene	50.0	50.9	1.162E0	1.184E0	1.87	±30	Average RF
Tetrachloroethene (PCE)	50.0	45.9	3.053E-1	2.801E-1	-8.280	±30	Average RF
Toluene	50.0	50.5	1.529E0	1.543E0	0.961	±30	Average RF
Trichloroethene (TCE)	50.0	46.0	3.582E-1	3.294E-1	-8.040	±30	Average RF
Trichlorofluoromethane (CFC 11)	50.0	46.4	6.708E-1	6.223E-1	-7.241	±30	Average RF
Vinyl Chloride	50.0	53.1	6.512E-1	6.913E-1	6.17	±30	Average RF
cis-1,2-Dichloroethene	50.0	48.4	5.771E-1	5.581E-1	-3.283	±30	Average RF
cis-1,3-Dichloropropene	50.0	49.9	5.517E-1	5.509E-1	-0.139	±30	Average RF
m,p-Xylenes	100	103	7.005E-1	7.181E-1	2.50	±30	Average RF
o-Xylene	50.0	51.7	6.839E-1	7.071E-1	3.39	±30	Average RF
trans-1,2-Dichloroethene	50.0	54.2	4.503E-1	4.879E-1	8.35	±30	Average RF
trans-1,3-Dichloropropene	50.0	50.2	5.017E-1	5.037E-1	0.404	±30	Average RF

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	49.8	4.917E-1	4.897E-1	-0.401	±30	Average RF
Dibromofluoromethane	50.0	50.7	2.871E-1	2.91E-1	1.37	±30	Average RF
Toluene-d8	50.0	50.6	1.334E0	1.349E0	1.13	±30	Average RF

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

Service Request: R2006930
Date Analyzed: 08/11/20 10:43

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\081120\P38352.D\
Signal ID: 1

Calibration Date: 7/13/2020
Calibration ID: RC2000094
Analysis Lot: 690412
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	43.7	0.7229	0.6312	-12.7	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	43.4	1.1158	0.968	-13.2	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	44.5	0.3413	0.3041	-10.9	NA	±20	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	45.1	0.4505	0.4061	-9.9	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	43.8	0.9926	0.87	-12.4	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	44.0	0.3866	0.3399	-12.1	NA	±20	Average RF
1,2,3-Trichlorobenzene	50.0	44.5	1.3365	1.1889	-11.0	NA	±20	Average RF
1,2,4-Trichlorobenzene	50.0	45.5	1.2919	1.1761	-9.0	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	41.9	0.2498	0.2095	-16.1	NA	±20	Average RF
1,2-Dibromoethane	50.0	44.2	0.3827	0.3383	-11.6	NA	±20	Average RF
1,2-Dichlorobenzene	50.0	42.2	1.7911	1.5117	-15.6	NA	±20	Average RF
1,2-Dichloroethane	50.0	43.5	0.5045	0.4389	-13.0	NA	±20	Average RF
1,2-Dichloropropane	50.0	47.1	0.3822	0.3597	-5.9	NA	±20	Average RF
1,3-Dichlorobenzene	50.0	42.0	1.7644	1.4816	-16.0	NA	±20	Average RF
1,4-Dichlorobenzene	50.0	42.4	1.7954	1.5211	-15.3	NA	±20	Average RF
1,4-Dioxane	1000	815	0.0079	0.0064	-18.5	NA	±20	Average RF
2-Butanone (MEK)	50.0	49.0	0.3887	0.3811	-1.9	NA	±20	Average RF
2-Hexanone	50.0	47.4	0.4444	0.4211	-5.2	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	50.3	0.5153	0.5185	0.6	NA	±20	Average RF
Acetone	50.0	32.4	0.3378	0.1998	NA	-35.3*	±20	Quadratic
Benzene	50.0	46.0	1.4436	1.328	-8.0	NA	±20	Average RF
Bromochloromethane	50.0	44.1	0.3414	0.3013	-11.7	NA	±20	Average RF
Bromodichloromethane	50.0	45.7	0.4044	0.3697	-8.6	NA	±20	Average RF
Bromoform	50.0	38.6	0.4118	0.3176	-22.9*	NA	±20	Average RF
Bromomethane	50.0	36.6	0.5194	0.3799	-26.8*	NA	±20	Average RF
Carbon Disulfide	50.0	46.0	1.4748	1.1649	NA	-8.0	±20	Linear
Carbon Tetrachloride	50.0	46.5	0.3283	0.3055	-6.9	NA	±20	Average RF
Chlorobenzene	50.0	42.8	1.1151	0.9554	-14.3	NA	±20	Average RF
Chloroethane	50.0	43.9	0.3583	0.3143	-12.3	NA	±20	Average RF
Chloroform	50.0	44.7	0.9251	0.7798	NA	-10.5	±20	Quadratic
Chloromethane	50.0	48.4	0.6946	0.6728	-3.1	NA	±20	Average RF
Cyclohexane	50.0	49.4	0.3279	0.324	-1.2	NA	±20	Average RF
Dibromochloromethane	50.0	43.7	0.3109	0.2716	-12.7	NA	±20	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	40.8	0.5563	0.4535	-18.5	NA	±20	Average RF
Dichloromethane	50.0	42.5	0.5511	0.4686	-15.0	NA	±20	Average RF
Ethylbenzene	50.0	44.8	0.5851	0.5239	-10.5	NA	±20	Average RF
Isopropylbenzene (Cumene)	50.0	43.8	3.4518	3.0268	-12.3	NA	±20	Average RF
Methyl Acetate	50.0	49.9	0.7435	0.7427	-0.1	NA	±20	Average RF
Methyl tert-Butyl Ether	50.0	46.2	1.7895	1.6544	-7.5	NA	±20	Average RF

Client: The LiRo Group **Service Request:** R2006930
Project: Buffalo China/16-344-1389 **Date Analyzed:** 08/11/20 10:43

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C **Calibration Date:** 7/13/2020
File ID: I:\ACQUDATA\msvoa12\Data\081120\P38352.D\ **Calibration ID:** RC2000094
Signal ID: 1 **Analysis Lot:** 690412
Units: ppb

Methylcyclohexane	50.0	55.0	0.4449	0.4895	10.0	NA	±20	Average RF
Styrene	50.0	47.7	1.1619	1.1091	-4.5	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	42.7	0.3053	0.2608	-14.6	NA	±20	Average RF
Toluene	50.0	48.1	1.5288	1.4716	-3.7	NA	±20	Average RF
Trichloroethene (TCE)	50.0	41.2	0.3582	0.2949	-17.7	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	46.6	0.6708	0.625	-6.8	NA	±20	Average RF
Vinyl Chloride	50.0	49.7	0.6512	0.6479	-0.5	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	43.6	0.5771	0.5026	-12.9	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	45.2	0.5517	0.4991	-9.5	NA	±20	Average RF
m,p-Xylenes	100	94.1	0.7005	0.659	-5.9	NA	±20	Average RF
o-Xylene	50.0	46.3	0.6839	0.6338	-7.3	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	44.6	0.4503	0.402	-10.7	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	45.3	0.5017	0.4547	-9.4	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	50.1	0.4917	0.4931	0.3	NA	±20	Average RF
Dibromofluoromethane	50.0	48.4	0.2871	0.2781	-3.1	NA	±20	Average RF
Toluene-d8	50.0	50.3	1.3344	1.3432	0.7	NA	±20	Average RF

Client: The LiRo Group **Service Request:**R2006930
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**690412
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\081120\P38351.D\	ZZZZZZZ	ZZZZZZZ	8/11/2020	10:10:00	
I:\ACQUDATA\msvoa12\Data\081120\P38352.D\	Continuing Calibration Verification	RQ2008888-02	8/11/2020	10:43:00	
I:\ACQUDATA\msvoa12\Data\081120\P38353.D\	Lab Control Sample	RQ2008888-03	8/11/2020	11:09:00	
I:\ACQUDATA\msvoa12\Data\081120\P38356.D\	Method Blank	RQ2008888-04	8/11/2020	12:19:00	
I:\ACQUDATA\msvoa12\Data\081120\P38357.D\	ZZZZZZZ	ZZZZZZZ	8/11/2020	12:49:00	
I:\ACQUDATA\msvoa12\Data\081120\P38358.D\	ZZZZZZZ	ZZZZZZZ	8/11/2020	13:11:00	
I:\ACQUDATA\msvoa12\Data\081120\P38359.D\	ZZZZZZZ	ZZZZZZZ	8/11/2020	13:33:00	
I:\ACQUDATA\msvoa12\Data\081120\P38360.D\	ZZZZZZZ	ZZZZZZZ	8/11/2020	13:55:00	
I:\ACQUDATA\msvoa12\Data\081120\P38361.D\	ZZZZZZZ	ZZZZZZZ	8/11/2020	14:16:00	
I:\ACQUDATA\msvoa12\Data\081120\P38362.D\	ZZZZZZZ	ZZZZZZZ	8/11/2020	14:38:00	
I:\ACQUDATA\msvoa12\Data\081120\P38363.D\	ZZZZZZZ	ZZZZZZZ	8/11/2020	15:00:00	
I:\ACQUDATA\msvoa12\Data\081120\P38364.D\	ZZZZZZZ	ZZZZZZZ	8/11/2020	15:22:00	
I:\ACQUDATA\msvoa12\Data\081120\P38365.D\	ZZZZZZZ	ZZZZZZZ	8/11/2020	15:44:00	
I:\ACQUDATA\msvoa12\Data\081120\P38366.D\	ZZZZZZZ	ZZZZZZZ	8/11/2020	16:06:00	
I:\ACQUDATA\msvoa12\Data\081120\P38367.D\	ZZZZZZZ	ZZZZZZZ	8/11/2020	16:27:00	
I:\ACQUDATA\msvoa12\Data\081120\P38368.D\	ZZZZZZZ	ZZZZZZZ	8/11/2020	16:49:00	
I:\ACQUDATA\msvoa12\Data\081120\P38369.D\	ZZZZZZZ	ZZZZZZZ	8/11/2020	17:11:00	
I:\ACQUDATA\msvoa12\Data\081120\P38370.D\	ZZZZZZZ	ZZZZZZZ	8/11/2020	17:33:00	
I:\ACQUDATA\msvoa12\Data\081120\P38371.D\	Trip Blank	R2006930-005	8/11/2020	17:54:00	
I:\ACQUDATA\msvoa12\Data\081120\P38372.D\	MW-26A	R2006930-004	8/11/2020	18:16:00	
I:\ACQUDATA\msvoa12\Data\081120\P38373.D\	MW-26	R2006930-003	8/11/2020	18:38:00	
I:\ACQUDATA\msvoa12\Data\081120\P38374.D\	MW-7	R2006930-002	8/11/2020	19:00:00	
I:\ACQUDATA\msvoa12\Data\081120\P38375.D\	MW-7A	R2006930-001	8/11/2020	19:21:00	

Client: The LiRo Group **Service Request:**R2006930
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**690412
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\081120 \P38376.D\	ZZZZZZZ	ZZZZZZZ	8/11/2020	19:43:00	
I:\ACQUDATA\msvoa12\Data\081120 \P38377.D\	ZZZZZZZ	ZZZZZZZ	8/11/2020	20:05:00	

Analysis: 8260 waters | Analyst: K. Quest | pH strips: 221419 | Tune Method: W071320

Date: 8/11/2020 | Balance ID: N/A | ResCl strips: N/A | Run Method: ↓

Instr. 12 | 50 mL Class A used for dilution FV | Syringes: 205000 | LIMS Run#: 690412

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK							P35350		
2	TUNE		R2007088 · 01					P35351	YT	(auto) 10:11
1	CCV		02					P35352	YC	
1	LCS. FP		03					P35353	YQ	
1	BLK		—					P35354	(N)	rpt c/o
2	MBLK. WP		—					P35355	YB	
3	MBLK. FP		04					P35356	YB	
1	R2007048 · 003	1.0		12389	2	2	L2	P35357	Y	
2	R2006984 · 013	1.0		6813	4	1	L2	P35358	Y	
3	017	1.0				1	L2	P35359	Y	
4	014	1.0				1	L2	P35360	Y	
5	015	1.0				1	L2	P35361	Y	
6	R2006865 · 009	1.0		6813	4	1	L2	P35362	Y	
7	002	1.0				1	L2	P35363	Y	
8	008	1.0				1	L2	P35364	Y	
9	001	1.0				1	L2	P35365	Y	
10	003	1.0				1	L2	P35366	Y	
11	004	1.0				1	L2	P35367	Y	
12	005	1.0				1	L2	P35368	Y	
13	006	1.0				1	L2	P35369	Y	
14	007	1.0				1	L2	P35370	Y	
15	R2006930 · 005	1.0		5043	4	1	L2	P35371	Y	
16	004	1.0				1	L2	P35372	Y	
17	003	1.0				1	L2	P35373	Y	
18	002	1.0				1	L2	P35374	Y	
19	001	1.0				1	L2	P35375	Y	
20	R2006865 · 008	1.0	ms	6813	4	2	L2	P35376	YQ	
21	008	1.0	msD	↓	↓	3	L2	P35377	YQ	20:05 ✓
22	BLK					—	—	P35378	—	

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

500 Primary CCC: 211502
Primary FR+: 211511 — 5uL → 50mL = CCV
Primary TB: 210950
Primary HSL: 211320
Primary:

200 Secondary FR+: 211161 - 5uL
200 Secondary CCC+: 211504
Secondary TB: 211229 — 2uL
Secondary HSL: 210952
Secondary:
→ 50mL = LCS

-10.6mL / 4.2mL ✓ 42mL vial = ms/D

Combined IS/Surr:
Surrogate SD: 211225
Internal Std SD: 211226
Reagents:
→ Fresh aliquots

August 21, 2020 Service Request No:R2007055

Mr. Stephen Frank
The LiRo Group
690 Delaware Ave.
Buffalo, NY 14209

Laboratory Results for: Buffalo China

Dear Mr.Frank,

Enclosed are the results of the sample(s) submitted to our laboratory August 06, 2020
For your reference, these analyses have been assigned our service request number **R2007055.**

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, 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), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

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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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: R2007055
Date Received: 08/06/2020 - 08/07/2020

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Fifteen water samples were received for analysis at ALS Environmental on 08/06/2020 - 08/07/2020. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Volatiles by GC/MS:

Method 8260C, 08/14/2020: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8260C, 08/14/2020: 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) above the MRL 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, 08/14/2020: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) above the MRL in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Method 8260C, 690913: Sample(s) required dilution due to the foaming nature of the matrix. The reporting limits are adjusted to reflect the dilution.

Method 8260C, 08/14/2020: 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) above the MRL 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 Meghan Pedro Date 08/21/2020

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-8			Lab ID: R2007055-001			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Toluene	0.25	BJ	0.20	5.0	ug/L	8260C

CLIENT ID: MW-8A			Lab ID: R2007055-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Toluene	0.24	BJ	0.20	5.0	ug/L	8260C

CLIENT ID: MW-9A			Lab ID: R2007055-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon Disulfide	8.4	J	0.42	10	ug/L	8260C
Toluene	0.21	BJ	0.20	5.0	ug/L	8260C

CLIENT ID: MW-9A Dup			Lab ID: R2007055-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon Disulfide	5.8	J	0.42	10	ug/L	8260C

CLIENT ID: MW-25A			Lab ID: R2007055-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Trichloroethene (TCE)	0.29	J	0.20	5.0	ug/L	8260C

CLIENT ID: Trip Blank 1			Lab ID: R2007055-007			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Toluene	0.26	BJ	0.20	5.0	ug/L	8260C

CLIENT ID: MW-10			Lab ID: R2007055-008			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,4-Dichlorobenzene	3.0	J	0.20	5.0	ug/L	8260C
2-Butanone (MEK)	1.9	J	0.78	10	ug/L	8260C
Acetone	8.9	J	5.0	10	ug/L	8260C
Carbon Disulfide	2.8	J	0.42	10	ug/L	8260C
Toluene	83		0.20	5.0	ug/L	8260C

CLIENT ID: MW-11			Lab ID: R2007055-009			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Chloroform	4.4	J	2.4	50	ug/L	8260C
Trichloroethene (TCE)	95		2.0	50	ug/L	8260C
cis-1,2-Dichloroethene	150		2.3	50	ug/L	8260C
trans-1,2-Dichloroethene	2.5	J	2.0	50	ug/L	8260C

CLIENT ID: MW-13A			Lab ID: R2007055-010			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1,2,2-Tetrachloroethane	14	J	10	250	ug/L	8260C
Tetrachloroethene (PCE)	19	J	11	250	ug/L	8260C
Toluene	20	J	10	250	ug/L	8260C
Trichloroethene (TCE)	3200		10	250	ug/L	8260C
Vinyl Chloride	61	J	10	250	ug/L	8260C

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-13A			Lab ID: R2007055-010			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
cis-1,2-Dichloroethene	4800		12	250	ug/L	8260C
trans-1,2-Dichloroethene	100	J	10	250	ug/L	8260C

CLIENT ID: MW-6			Lab ID: R2007055-011			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1-Dichloroethene (1,1-DCE)	32	J	2.0	50	ug/L	8260C
Benzene	2.0	J	2.0	50	ug/L	8260C
Trichloroethene (TCE)	140		2.0	50	ug/L	8260C
Vinyl Chloride	570		2.0	50	ug/L	8260C
cis-1,2-Dichloroethene	4200	D	12	250	ug/L	8260C
trans-1,2-Dichloroethene	19	J	2.0	50	ug/L	8260C

CLIENT ID: MW-20A			Lab ID: R2007055-012			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1-Dichloroethene (1,1-DCE)	3.6	J	2.0	50	ug/L	8260C
Trichloroethene (TCE)	2.5	J	2.0	50	ug/L	8260C
Vinyl Chloride	300		2.0	50	ug/L	8260C
cis-1,2-Dichloroethene	1500		2.3	50	ug/L	8260C
trans-1,2-Dichloroethene	8.1	J	2.0	50	ug/L	8260C

CLIENT ID: MW-5R			Lab ID: R2007055-013			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Tetrachloroethene (PCE)	1.5	J	0.53	13	ug/L	8260C
Toluene	0.97	BJ	0.50	13	ug/L	8260C
Trichloroethene (TCE)	460		0.50	13	ug/L	8260C
cis-1,2-Dichloroethene	190		0.58	13	ug/L	8260C
trans-1,2-Dichloroethene	32		0.50	13	ug/L	8260C

CLIENT ID: MW-5AR			Lab ID: R2007055-014			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1,1-Trichloroethane (TCA)	2.8	J	2.0	50	ug/L	8260C
1,1,2,2-Tetrachloroethane	260		2.0	50	ug/L	8260C
1,1,2-Trichloroethane	31	J	2.0	50	ug/L	8260C
1,1-Dichloroethene (1,1-DCE)	3.3	J	2.0	50	ug/L	8260C
2-Butanone (MEK)	63	J	7.8	100	ug/L	8260C
Acetone	500		50	100	ug/L	8260C
Benzene	3.3	J	2.0	50	ug/L	8260C
Carbon Disulfide	26	J	4.2	100	ug/L	8260C
Chloroform	7.5	J	2.4	50	ug/L	8260C
Chloromethane	6.5	J	2.8	50	ug/L	8260C
Tetrachloroethene (PCE)	38	J	2.1	50	ug/L	8260C
Toluene	15	J	2.0	50	ug/L	8260C
Trichloroethene (TCE)	32000	D	50	1300	ug/L	8260C

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-5AR			Lab ID: R2007055-014			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Vinyl Chloride	140		2.0	50	ug/L	8260C
cis-1,2-Dichloroethene	23000	D	58	1300	ug/L	8260C
trans-1,2-Dichloroethene	1900	D	50	1300	ug/L	8260C

CLIENT ID: Trip Blank 2			Lab ID: R2007055-015			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Toluene	0.24	BJ	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:**R2007055
Project: Buffalo China/16-344-1389

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2007055-001	MW-8	8/5/2020	1125
R2007055-002	MW-8A	8/5/2020	1150
R2007055-003	MW-9	8/5/2020	1355
R2007055-004	MW-9A	8/5/2020	1430
R2007055-005	MW-9A Dup	8/5/2020	1435
R2007055-006	MW-25A	8/5/2020	1545
R2007055-007	Trip Blank 1	8/5/2020	
R2007055-008	MW-10	8/6/2020	0850
R2007055-009	MW-11	8/6/2020	0945
R2007055-010	MW-13A	8/6/2020	1055
R2007055-011	MW-6	8/6/2020	1125
R2007055-012	MW-20A	8/6/2020	1200
R2007055-013	MW-5R	8/6/2020	1345
R2007055-014	MW-5AR	8/6/2020	1415
R2007055-015	Trip Blank 2	8/6/2020	

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

003318

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: Steve Frank	Report CC:
Company/Address: 690 Delaware Ave, Buffalo NY, LiRo Engineers	
Phone #: 716-882-5476	Email: Franks@liro.com Koonsa@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)
MW-8		8/5/20	1125	H_2O	3	X						
MW-8A			1150		3	X						
MW-9			1355		3	X						
MW-9A			1430		3	X						
MW-9A DUP			1435		3	X						
MW-25A			1545		3	X						
Trip Blank		—	—	H_2O	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 _____

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED: NY

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
X 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
IV. Data Validation Report with Raw Data

Edata ____ Yes ____ No

INVOICE INFORMATION
PO # 16-344-1389
BILL TO: LiRo Engineers

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Andrew Koons	Signature: Gregory C. Fonce	Signature	Signature	Signature	Signature
Printed Name: Andrew Koons	Printed Name: Gregory C. Fonce	Printed Name	Printed Name	Printed Name	
Firm: LiRo	Firm: ALS	Firm	Firm	Firm	
Date/Time: 815 no	Date/Time: 8/6/2020 1010	Date/Time	Date/Time	Date/Time	

R2007055 5
The LiRo Group
Buffalo China

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

Cooler Receipt and Preservation Check Form

R2007055 5
The LIRo Group
Buffalo China

Project/Client LIRO Folder Number

Cooler received on 8/6/2020 by: a

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: 8/6/2020 Time: 1050 ID: IR#7 (IR#10) From: Temp Blank (Sample Bottle)

Observed Temp (°C)	8.3						
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 e on 8/6/20 at 1055
5035 samples placed in storage location: by on at within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 8/7/2020 Time: 1710 by: AW

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	**	**						

Bottle lot numbers: 7554

Explain all Discrepancies/ Other Comments:

Headspace: 1vial TB

Large Red large cooler w/ 1 bag of ice.

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: A

PC Secondary Review:

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

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

003317

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: Steve Frank	Report CC: Andrew Koard
Company/Address: LiRo Engineers 690 Delaware Ave Buffalo NY	
Phone #: 716.882-5476	Email: Franks@liro.com + Koarda@liro.com
Sampler's Signature:	Sampler's Printed Name: Andrew Koard

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-10		8/6/20	0850	H_2O	3	X							
MW-11			0945			X							
MW-13A			1055			X							
MW-6			1125			X							
MW-20A			1200			X							
MW-5R			1345			X							
MW-5AR			1415			X							
Trip Blank			—	H_2O	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

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
X 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
Edata _____ Yes _____ No

INVOICE INFORMATION
PO # 16-344-1389
BILL TO: LiRo Engineers

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Andrew Koard	Signature:	Signature	Signature	Signature	Signature
Printed Name: Andrew Koard	Printed Name: Gregory D. Esmerian	Printed Name	Printed Name	Printed Name	Printed Name
Firm: LiRo	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 8/6/20	Date/Time: 8-7-20 09:55	Date/Time	Date/Time	Date/Time	Date/Time

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

R2007055 5
The LIRo Group
Buffalo China

Cooler Receipt and Preservation Check Form

R2007055 5
The LIRo Group
Buffalo China

Project/Client Liro Engineers Folder Number

Cooler received on 8-7-2020 by: ME

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: 8-7-2020 Time: 10:56 ID: IR#7 (IR#10) From: Temp Blank (Sample Bottle)

Observed Temp (°C)	8.6						
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 ME on 8-7-20 at 11:00
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 8/8/2020 Time: 1855 by: SW

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	**	**						

Bottle lot numbers: 2554

Explain all Discrepancies/ Other Comments:

* Not enough ice

* MW-5AR: All 3 vials
Trip Blank: 2 of 3 vials

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: SW
PC Secondary Review: MR

*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:** R2007055
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2007055-001.01					
	8260C				
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
		8/13/2020	1600	In Lab / KRUEST	
		8/13/2020	1708	R-001-S12 / KRUEST	
R2007055-001.02					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-001.03					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-002.01					
	8260C				
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
		8/13/2020	1600	In Lab / KRUEST	
		8/13/2020	1708	R-001-S12 / KRUEST	
R2007055-002.02					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-002.03					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-003.01					
	8260C				
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
		8/13/2020	1600	In Lab / KRUEST	
		8/13/2020	1708	R-001-S12 / KRUEST	
R2007055-003.02					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-003.03					
		8/7/2020	1713	R-001 / DWARD	

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
		8/7/2020	1713	SMO / DWARD	
R2007055-004.01					
	8260C				
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
		8/13/2020	1600	In Lab / KRUEST	
		8/13/2020	1708	R-001-S12 / KRUEST	
R2007055-004.02					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-004.03					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-005.01					
	8260C				
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
		8/13/2020	1600	In Lab / KRUEST	
		8/13/2020	1708	R-001-S12 / KRUEST	
R2007055-005.02					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-005.03					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-006.01					
	8260C				
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
		8/13/2020	1600	In Lab / KRUEST	
		8/13/2020	1708	R-001-S12 / KRUEST	
R2007055-006.02					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	

ALS Group USA, Corp.
dba ALS Environmental

Internal Chain of Custody Report

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2007055-006.03					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-007.01					
	8260C				
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
		8/13/2020	1600	In Lab / KRUEST	
		8/13/2020	1708	R-001-S12 / KRUEST	
R2007055-007.02					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-007.03					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-008.01					
	8260C				
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
		8/13/2020	1600	In Lab / KRUEST	
		8/13/2020	1709	R-001-S12 / KRUEST	
R2007055-008.02					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-008.03					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-009.01					
	8260C				
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
		8/13/2020	1600	In Lab / KRUEST	
		8/13/2020	1709	R-001-S12 / KRUEST	
R2007055-009.02					
		8/7/2020	1713	R-001 / DWARD	

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
		8/7/2020	1713	SMO / DWARD	
R2007055-009.03					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-010.01					
	8260C				
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
		8/13/2020	1600	In Lab / KRUEST	
		8/13/2020	1709	R-001-S12 / KRUEST	
R2007055-010.02					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-010.03					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-011.01					
	8260C				
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
		8/13/2020	1600	In Lab / KRUEST	
		8/14/2020	1126	In Lab / KRUEST	
R2007055-011.02					
	8260C				
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
		8/14/2020	1358	R-001-S12 / KRUEST	
R2007055-011.03					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-012.01					
	8260C				
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
		8/13/2020	1600	In Lab / KRUEST	

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2007055-012.02					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-012.03					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-013.01					
	8260C				
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
		8/13/2020	1600	In Lab / KRUEST	
		8/13/2020	1709	R-001-S12 / KRUEST	
R2007055-013.02					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-013.03					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-014.01					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
		8/13/2020	1600	In Lab / KRUEST	
		8/13/2020	1709	R-001-S12 / KRUEST	
R2007055-014.02					
	8260C				
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
		8/14/2020	1126	In Lab / KRUEST	
		8/14/2020	1358	R-001-S12 / KRUEST	
R2007055-014.03					
	8260C				
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-015.01					
	8260C				
		8/7/2020	1713	R-001 / DWARD	

ALS Group USA, Corp.
dba ALS Environmental

Internal Chain of Custody Report

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	8260C				
		8/7/2020	1713	SMO / DWARD	
		8/13/2020	1600	In Lab / KRUEST	
		8/13/2020	1708	R-001-S12 / KRUEST	
R2007055-015.02					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	
R2007055-015.03					
		8/7/2020	1713	R-001 / DWARD	
		8/7/2020	1713	SMO / DWARD	

Miscellaneous 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

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 Method Reporting Limit. Also known as:
LOQ 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:** R2007055
Project: Buffalo China/16-344-1389

Sample Name: MW-8 **Date Collected:** 08/5/20
Lab Code: R2007055-001 **Date Received:** 08/6/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-8A **Date Collected:** 08/5/20
Lab Code: R2007055-002 **Date Received:** 08/6/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-9 **Date Collected:** 08/5/20
Lab Code: R2007055-003 **Date Received:** 08/6/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-9A **Date Collected:** 08/5/20
Lab Code: R2007055-004 **Date Received:** 08/6/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-9A Dup **Date Collected:** 08/5/20
Lab Code: R2007055-005 **Date Received:** 08/6/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China/16-344-1389

Sample Name: MW-25A **Date Collected:** 08/5/20
Lab Code: R2007055-006 **Date Received:** 08/6/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: Trip Blank 1 **Date Collected:** 08/5/20
Lab Code: R2007055-007 **Date Received:** 08/6/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-10 **Date Collected:** 08/6/20
Lab Code: R2007055-008 **Date Received:** 08/7/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-11 **Date Collected:** 08/6/20
Lab Code: R2007055-009 **Date Received:** 08/7/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-13A **Date Collected:** 08/6/20
Lab Code: R2007055-010 **Date Received:** 08/7/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China/16-344-1389

Sample Name: MW-6 **Date Collected:** 08/6/20
Lab Code: R2007055-011 **Date Received:** 08/7/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-6 **Date Collected:** 08/6/20
Lab Code: R2007055-011.R01 **Date Received:** 08/7/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-20A **Date Collected:** 08/6/20
Lab Code: R2007055-012 **Date Received:** 08/7/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-5R **Date Collected:** 08/6/20
Lab Code: R2007055-013 **Date Received:** 08/7/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-5AR **Date Collected:** 08/6/20
Lab Code: R2007055-014 **Date Received:** 08/7/20
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389		

Sample Name:	MW-5AR	**Date Collected:**	08/6/20
Lab Code:	R2007055-014.R01	**Date Received:**	08/7/20
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name:	Trip Blank 2	**Date Collected:**	08/6/20
Lab Code:	R2007055-015	**Date Received:**	08/7/20
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
9034 Sulfide Acid Soluble	9030B
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
7199	3060A
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
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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Volatile Organic Compounds by GC/MS

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Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 11:25
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-8	**Units:**	ug/L
Lab Code:	R2007055-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,1,2-Trichloroethane	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,2,3-Trichlorobenzene	5.0	U	5.0	0.25	1	08/14/20 02:56	
1,2,4-Trichlorobenzene	5.0	U	5.0	0.34	1	08/14/20 02:56	
1,2-Dibromo-3-chloropropane (DBCP)	5.0	U	5.0	0.45	1	08/14/20 02:56	
1,2-Dibromoethane	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,2-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,2-Dichloroethane	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,2-Dichloropropane	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,3-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,4-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,4-Dioxane	100	U	100	13	1	08/14/20 02:56	
2-Butanone (MEK)	10	U	10	0.78	1	08/14/20 02:56	
2-Hexanone	10	U	10	0.20	1	08/14/20 02:56	
4-Methyl-2-pentanone	10	U	10	0.20	1	08/14/20 02:56	
Acetone	10	U	10	5.0	1	08/14/20 02:56	
Benzene	5.0	U	5.0	0.20	1	08/14/20 02:56	
Bromochloromethane	5.0	U	5.0	0.20	1	08/14/20 02:56	
Bromodichloromethane	5.0	U	5.0	0.20	1	08/14/20 02:56	
Bromoform	5.0	U	5.0	0.25	1	08/14/20 02:56	
Bromomethane	5.0	U	5.0	0.70	1	08/14/20 02:56	
Carbon Disulfide	10	U	10	0.42	1	08/14/20 02:56	
Carbon Tetrachloride	5.0	U	5.0	0.34	1	08/14/20 02:56	
Chlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:56	
Chloroethane	5.0	U	5.0	0.23	1	08/14/20 02:56	
Chloroform	5.0	U	5.0	0.24	1	08/14/20 02:56	
Chloromethane	5.0	U	5.0	0.28	1	08/14/20 02:56	
Cyclohexane	10	U	10	0.26	1	08/14/20 02:56	
Dibromochloromethane	5.0	U	5.0	0.20	1	08/14/20 02:56	
Dichlorodifluoromethane (CFC 12)	5.0	U	5.0	0.21	1	08/14/20 02:56	
Dichloromethane	5.0	U	5.0	0.65	1	08/14/20 02:56	
Ethylbenzene	5.0	U	5.0	0.20	1	08/14/20 02:56	
Isopropylbenzene (Cumene)	5.0	U	5.0	0.20	1	08/14/20 02:56	
Methyl Acetate	10	U	10	0.33	1	08/14/20 02:56	
Methyl tert-Butyl Ether	5.0	U	5.0	0.20	1	08/14/20 02:56	
Methylcyclohexane	10	U	10	0.20	1	08/14/20 02:56	
Styrene	5.0	U	5.0	0.20	1	08/14/20 02:56	
Tetrachloroethene (PCE)	5.0	U	5.0	0.21	1	08/14/20 02:56	
Toluene	**0.25**	**BJ**	5.0	0.20	1	08/14/20 02:56	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 11:25
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-8	**Units:**	ug/L
Lab Code:	R2007055-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	08/14/20 02:56	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/14/20 02:56	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/14/20 02:56	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/14/20 02:56	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/14/20 02:56	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/14/20 02:56	
o-Xylene	5.0 U	5.0	0.20	1	08/14/20 02:56	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/14/20 02:56	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/14/20 02:56	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	08/14/20 02:56	
Dibromofluoromethane	94	89 - 119	08/14/20 02:56	
Toluene-d8	102	87 - 121	08/14/20 02:56	

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 11:50
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-8A	**Units:**	ug/L
Lab Code:	R2007055-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,1,2-Trichloroethane	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,2,3-Trichlorobenzene	5.0	U	5.0	0.25	1	08/14/20 03:18	
1,2,4-Trichlorobenzene	5.0	U	5.0	0.34	1	08/14/20 03:18	
1,2-Dibromo-3-chloropropane (DBCP)	5.0	U	5.0	0.45	1	08/14/20 03:18	
1,2-Dibromoethane	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,2-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,2-Dichloroethane	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,2-Dichloropropane	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,3-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,4-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,4-Dioxane	100	U	100	13	1	08/14/20 03:18	
2-Butanone (MEK)	10	U	10	0.78	1	08/14/20 03:18	
2-Hexanone	10	U	10	0.20	1	08/14/20 03:18	
4-Methyl-2-pentanone	10	U	10	0.20	1	08/14/20 03:18	
Acetone	10	U	10	5.0	1	08/14/20 03:18	
Benzene	5.0	U	5.0	0.20	1	08/14/20 03:18	
Bromochloromethane	5.0	U	5.0	0.20	1	08/14/20 03:18	
Bromodichloromethane	5.0	U	5.0	0.20	1	08/14/20 03:18	
Bromoform	5.0	U	5.0	0.25	1	08/14/20 03:18	
Bromomethane	5.0	U	5.0	0.70	1	08/14/20 03:18	
Carbon Disulfide	10	U	10	0.42	1	08/14/20 03:18	
Carbon Tetrachloride	5.0	U	5.0	0.34	1	08/14/20 03:18	
Chlorobenzene	5.0	U	5.0	0.20	1	08/14/20 03:18	
Chloroethane	5.0	U	5.0	0.23	1	08/14/20 03:18	
Chloroform	5.0	U	5.0	0.24	1	08/14/20 03:18	
Chloromethane	5.0	U	5.0	0.28	1	08/14/20 03:18	
Cyclohexane	10	U	10	0.26	1	08/14/20 03:18	
Dibromochloromethane	5.0	U	5.0	0.20	1	08/14/20 03:18	
Dichlorodifluoromethane (CFC 12)	5.0	U	5.0	0.21	1	08/14/20 03:18	
Dichloromethane	5.0	U	5.0	0.65	1	08/14/20 03:18	
Ethylbenzene	5.0	U	5.0	0.20	1	08/14/20 03:18	
Isopropylbenzene (Cumene)	5.0	U	5.0	0.20	1	08/14/20 03:18	
Methyl Acetate	10	U	10	0.33	1	08/14/20 03:18	
Methyl tert-Butyl Ether	5.0	U	5.0	0.20	1	08/14/20 03:18	
Methylcyclohexane	10	U	10	0.20	1	08/14/20 03:18	
Styrene	5.0	U	5.0	0.20	1	08/14/20 03:18	
Tetrachloroethene (PCE)	5.0	U	5.0	0.21	1	08/14/20 03:18	
Toluene	**0.24**	**BJ**	5.0	0.20	1	08/14/20 03:18	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 11:50
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-8A	**Units:**	ug/L
Lab Code:	R2007055-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	08/14/20 03:18	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/14/20 03:18	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/14/20 03:18	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/14/20 03:18	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/14/20 03:18	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/14/20 03:18	
o-Xylene	5.0 U	5.0	0.20	1	08/14/20 03:18	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/14/20 03:18	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/14/20 03:18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	08/14/20 03:18	
Dibromofluoromethane	95	89 - 119	08/14/20 03:18	
Toluene-d8	100	87 - 121	08/14/20 03:18	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 13:55
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-9	**Units:**	ug/L
Lab Code:	R2007055-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/14/20 03:40	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/14/20 03:40	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/14/20 03:40	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,4-Dioxane	100 U	100	13	1	08/14/20 03:40	
2-Butanone (MEK)	10 U	10	0.78	1	08/14/20 03:40	
2-Hexanone	10 U	10	0.20	1	08/14/20 03:40	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/14/20 03:40	
Acetone	10 U	10	5.0	1	08/14/20 03:40	
Benzene	5.0 U	5.0	0.20	1	08/14/20 03:40	
Bromochloromethane	5.0 U	5.0	0.20	1	08/14/20 03:40	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/14/20 03:40	
Bromoform	5.0 U	5.0	0.25	1	08/14/20 03:40	
Bromomethane	5.0 U	5.0	0.70	1	08/14/20 03:40	
Carbon Disulfide	10 U	10	0.42	1	08/14/20 03:40	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/14/20 03:40	
Chlorobenzene	5.0 U	5.0	0.20	1	08/14/20 03:40	
Chloroethane	5.0 U	5.0	0.23	1	08/14/20 03:40	
Chloroform	5.0 U	5.0	0.24	1	08/14/20 03:40	
Chloromethane	5.0 U	5.0	0.28	1	08/14/20 03:40	
Cyclohexane	10 U	10	0.26	1	08/14/20 03:40	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/14/20 03:40	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/14/20 03:40	
Dichloromethane	5.0 U	5.0	0.65	1	08/14/20 03:40	
Ethylbenzene	5.0 U	5.0	0.20	1	08/14/20 03:40	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/14/20 03:40	
Methyl Acetate	10 U	10	0.33	1	08/14/20 03:40	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/14/20 03:40	
Methylcyclohexane	10 U	10	0.20	1	08/14/20 03:40	
Styrene	5.0 U	5.0	0.20	1	08/14/20 03:40	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/14/20 03:40	
Toluene	5.0 U	5.0	0.20	1	08/14/20 03:40	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 13:55
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-9	**Units:**	ug/L
Lab Code:	R2007055-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	08/14/20 03:40	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/14/20 03:40	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/14/20 03:40	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/14/20 03:40	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/14/20 03:40	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/14/20 03:40	
o-Xylene	5.0 U	5.0	0.20	1	08/14/20 03:40	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/14/20 03:40	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/14/20 03:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	08/14/20 03:40	
Dibromofluoromethane	92	89 - 119	08/14/20 03:40	
Toluene-d8	99	87 - 121	08/14/20 03:40	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 14:30
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-9A	**Units:**	ug/L
Lab Code:	R2007055-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,1,2-Trichloroethane	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,2,3-Trichlorobenzene	5.0	U	5.0	0.25	1	08/14/20 04:01	
1,2,4-Trichlorobenzene	5.0	U	5.0	0.34	1	08/14/20 04:01	
1,2-Dibromo-3-chloropropane (DBCP)	5.0	U	5.0	0.45	1	08/14/20 04:01	
1,2-Dibromoethane	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,2-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,2-Dichloroethane	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,2-Dichloropropane	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,3-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,4-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,4-Dioxane	100	U	100	13	1	08/14/20 04:01	
2-Butanone (MEK)	10	U	10	0.78	1	08/14/20 04:01	
2-Hexanone	10	U	10	0.20	1	08/14/20 04:01	
4-Methyl-2-pentanone	10	U	10	0.20	1	08/14/20 04:01	
Acetone	10	U	10	5.0	1	08/14/20 04:01	
Benzene	5.0	U	5.0	0.20	1	08/14/20 04:01	
Bromochloromethane	5.0	U	5.0	0.20	1	08/14/20 04:01	
Bromodichloromethane	5.0	U	5.0	0.20	1	08/14/20 04:01	
Bromoform	5.0	U	5.0	0.25	1	08/14/20 04:01	
Bromomethane	5.0	U	5.0	0.70	1	08/14/20 04:01	
Carbon Disulfide	**8.4**	**J**	10	0.42	1	08/14/20 04:01	
Carbon Tetrachloride	5.0	U	5.0	0.34	1	08/14/20 04:01	
Chlorobenzene	5.0	U	5.0	0.20	1	08/14/20 04:01	
Chloroethane	5.0	U	5.0	0.23	1	08/14/20 04:01	
Chloroform	5.0	U	5.0	0.24	1	08/14/20 04:01	
Chloromethane	5.0	U	5.0	0.28	1	08/14/20 04:01	
Cyclohexane	10	U	10	0.26	1	08/14/20 04:01	
Dibromochloromethane	5.0	U	5.0	0.20	1	08/14/20 04:01	
Dichlorodifluoromethane (CFC 12)	5.0	U	5.0	0.21	1	08/14/20 04:01	
Dichloromethane	5.0	U	5.0	0.65	1	08/14/20 04:01	
Ethylbenzene	5.0	U	5.0	0.20	1	08/14/20 04:01	
Isopropylbenzene (Cumene)	5.0	U	5.0	0.20	1	08/14/20 04:01	
Methyl Acetate	10	U	10	0.33	1	08/14/20 04:01	
Methyl tert-Butyl Ether	5.0	U	5.0	0.20	1	08/14/20 04:01	
Methylcyclohexane	10	U	10	0.20	1	08/14/20 04:01	
Styrene	5.0	U	5.0	0.20	1	08/14/20 04:01	
Tetrachloroethene (PCE)	5.0	U	5.0	0.21	1	08/14/20 04:01	
Toluene	**0.21**	**BJ**	5.0	0.20	1	08/14/20 04:01	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 14:30
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-9A	**Units:**	ug/L
Lab Code:	R2007055-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	08/14/20 04:01	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/14/20 04:01	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/14/20 04:01	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/14/20 04:01	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/14/20 04:01	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/14/20 04:01	
o-Xylene	5.0 U	5.0	0.20	1	08/14/20 04:01	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/14/20 04:01	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/14/20 04:01	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	08/14/20 04:01	
Dibromofluoromethane	94	89 - 119	08/14/20 04:01	
Toluene-d8	100	87 - 121	08/14/20 04:01	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 14:35
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-9A Dup	**Units:**	ug/L
Lab Code:	R2007055-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.20	1	08/14/20 04:23	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/14/20 04:23	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/14/20 04:23	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/14/20 04:23	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/14/20 04:23	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/14/20 04:23	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/14/20 04:23	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/14/20 04:23	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/14/20 04:23	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/14/20 04:23	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 04:23	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/14/20 04:23	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/14/20 04:23	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 04:23	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 04:23	
1,4-Dioxane	100 U	100	13	1	08/14/20 04:23	
2-Butanone (MEK)	10 U	10	0.78	1	08/14/20 04:23	
2-Hexanone	10 U	10	0.20	1	08/14/20 04:23	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/14/20 04:23	
Acetone	10 U	10	5.0	1	08/14/20 04:23	
Benzene	5.0 U	5.0	0.20	1	08/14/20 04:23	
Bromochloromethane	5.0 U	5.0	0.20	1	08/14/20 04:23	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/14/20 04:23	
Bromoform	5.0 U	5.0	0.25	1	08/14/20 04:23	
Bromomethane	5.0 U	5.0	0.70	1	08/14/20 04:23	
Carbon Disulfide	**5.8 J**	10	0.42	1	08/14/20 04:23	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/14/20 04:23	
Chlorobenzene	5.0 U	5.0	0.20	1	08/14/20 04:23	
Chloroethane	5.0 U	5.0	0.23	1	08/14/20 04:23	
Chloroform	5.0 U	5.0	0.24	1	08/14/20 04:23	
Chloromethane	5.0 U	5.0	0.28	1	08/14/20 04:23	
Cyclohexane	10 U	10	0.26	1	08/14/20 04:23	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/14/20 04:23	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/14/20 04:23	
Dichloromethane	5.0 U	5.0	0.65	1	08/14/20 04:23	
Ethylbenzene	5.0 U	5.0	0.20	1	08/14/20 04:23	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/14/20 04:23	
Methyl Acetate	10 U	10	0.33	1	08/14/20 04:23	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/14/20 04:23	
Methylcyclohexane	10 U	10	0.20	1	08/14/20 04:23	
Styrene	5.0 U	5.0	0.20	1	08/14/20 04:23	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/14/20 04:23	
Toluene	5.0 U	5.0	0.20	1	08/14/20 04:23	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 14:35
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-9A Dup	**Units:**	ug/L
Lab Code:	R2007055-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0	U	5.0	0.20	1	08/14/20 04:23	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	08/14/20 04:23	
Vinyl Chloride	5.0	U	5.0	0.20	1	08/14/20 04:23	
cis-1,2-Dichloroethene	5.0	U	5.0	0.23	1	08/14/20 04:23	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	08/14/20 04:23	
m,p-Xylenes	5.0	U	5.0	0.20	1	08/14/20 04:23	
o-Xylene	5.0	U	5.0	0.20	1	08/14/20 04:23	
trans-1,2-Dichloroethene	5.0	U	5.0	0.20	1	08/14/20 04:23	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	08/14/20 04:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	08/14/20 04:23	
Dibromofluoromethane	93	89 - 119	08/14/20 04:23	
Toluene-d8	100	87 - 121	08/14/20 04:23	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 15:45
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-25A	**Units:**	ug/L
Lab Code:	R2007055-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/14/20 04:45	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/14/20 04:45	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/14/20 04:45	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,4-Dioxane	100 U	100	13	1	08/14/20 04:45	
2-Butanone (MEK)	10 U	10	0.78	1	08/14/20 04:45	
2-Hexanone	10 U	10	0.20	1	08/14/20 04:45	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/14/20 04:45	
Acetone	10 U	10	5.0	1	08/14/20 04:45	
Benzene	5.0 U	5.0	0.20	1	08/14/20 04:45	
Bromochloromethane	5.0 U	5.0	0.20	1	08/14/20 04:45	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/14/20 04:45	
Bromoform	5.0 U	5.0	0.25	1	08/14/20 04:45	
Bromomethane	5.0 U	5.0	0.70	1	08/14/20 04:45	
Carbon Disulfide	10 U	10	0.42	1	08/14/20 04:45	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/14/20 04:45	
Chlorobenzene	5.0 U	5.0	0.20	1	08/14/20 04:45	
Chloroethane	5.0 U	5.0	0.23	1	08/14/20 04:45	
Chloroform	5.0 U	5.0	0.24	1	08/14/20 04:45	
Chloromethane	5.0 U	5.0	0.28	1	08/14/20 04:45	
Cyclohexane	10 U	10	0.26	1	08/14/20 04:45	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/14/20 04:45	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/14/20 04:45	
Dichloromethane	5.0 U	5.0	0.65	1	08/14/20 04:45	
Ethylbenzene	5.0 U	5.0	0.20	1	08/14/20 04:45	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/14/20 04:45	
Methyl Acetate	10 U	10	0.33	1	08/14/20 04:45	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/14/20 04:45	
Methylcyclohexane	10 U	10	0.20	1	08/14/20 04:45	
Styrene	5.0 U	5.0	0.20	1	08/14/20 04:45	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/14/20 04:45	
Toluene	5.0 U	5.0	0.20	1	08/14/20 04:45	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 15:45
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-25A	**Units:**	ug/L
Lab Code:	R2007055-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**0.29**	**J**	5.0	0.20	1	08/14/20 04:45	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	08/14/20 04:45	
Vinyl Chloride	5.0	U	5.0	0.20	1	08/14/20 04:45	
cis-1,2-Dichloroethene	5.0	U	5.0	0.23	1	08/14/20 04:45	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	08/14/20 04:45	
m,p-Xylenes	5.0	U	5.0	0.20	1	08/14/20 04:45	
o-Xylene	5.0	U	5.0	0.20	1	08/14/20 04:45	
trans-1,2-Dichloroethene	5.0	U	5.0	0.20	1	08/14/20 04:45	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	08/14/20 04:45	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	08/14/20 04:45	
Dibromofluoromethane	91	89 - 119	08/14/20 04:45	
Toluene-d8	98	87 - 121	08/14/20 04:45	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	Trip Blank 1	**Units:**	ug/L
Lab Code:	R2007055-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,1,2-Trichloroethane	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,2,3-Trichlorobenzene	5.0	U	5.0	0.25	1	08/14/20 02:12	
1,2,4-Trichlorobenzene	5.0	U	5.0	0.34	1	08/14/20 02:12	
1,2-Dibromo-3-chloropropane (DBCP)	5.0	U	5.0	0.45	1	08/14/20 02:12	
1,2-Dibromoethane	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,2-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,2-Dichloroethane	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,2-Dichloropropane	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,3-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,4-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,4-Dioxane	100	U	100	13	1	08/14/20 02:12	
2-Butanone (MEK)	10	U	10	0.78	1	08/14/20 02:12	
2-Hexanone	10	U	10	0.20	1	08/14/20 02:12	
4-Methyl-2-pentanone	10	U	10	0.20	1	08/14/20 02:12	
Acetone	10	U	10	5.0	1	08/14/20 02:12	
Benzene	5.0	U	5.0	0.20	1	08/14/20 02:12	
Bromochloromethane	5.0	U	5.0	0.20	1	08/14/20 02:12	
Bromodichloromethane	5.0	U	5.0	0.20	1	08/14/20 02:12	
Bromoform	5.0	U	5.0	0.25	1	08/14/20 02:12	
Bromomethane	5.0	U	5.0	0.70	1	08/14/20 02:12	
Carbon Disulfide	10	U	10	0.42	1	08/14/20 02:12	
Carbon Tetrachloride	5.0	U	5.0	0.34	1	08/14/20 02:12	
Chlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:12	
Chloroethane	5.0	U	5.0	0.23	1	08/14/20 02:12	
Chloroform	5.0	U	5.0	0.24	1	08/14/20 02:12	
Chloromethane	5.0	U	5.0	0.28	1	08/14/20 02:12	
Cyclohexane	10	U	10	0.26	1	08/14/20 02:12	
Dibromochloromethane	5.0	U	5.0	0.20	1	08/14/20 02:12	
Dichlorodifluoromethane (CFC 12)	5.0	U	5.0	0.21	1	08/14/20 02:12	
Dichloromethane	5.0	U	5.0	0.65	1	08/14/20 02:12	
Ethylbenzene	5.0	U	5.0	0.20	1	08/14/20 02:12	
Isopropylbenzene (Cumene)	5.0	U	5.0	0.20	1	08/14/20 02:12	
Methyl Acetate	10	U	10	0.33	1	08/14/20 02:12	
Methyl tert-Butyl Ether	5.0	U	5.0	0.20	1	08/14/20 02:12	
Methylcyclohexane	10	U	10	0.20	1	08/14/20 02:12	
Styrene	5.0	U	5.0	0.20	1	08/14/20 02:12	
Tetrachloroethene (PCE)	5.0	U	5.0	0.21	1	08/14/20 02:12	
Toluene	**0.26**	**BJ**	5.0	0.20	1	08/14/20 02:12	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	Trip Blank 1	**Units:**	ug/L
Lab Code:	R2007055-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	08/14/20 02:12	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/14/20 02:12	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/14/20 02:12	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/14/20 02:12	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/14/20 02:12	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/14/20 02:12	
o-Xylene	5.0 U	5.0	0.20	1	08/14/20 02:12	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/14/20 02:12	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/14/20 02:12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	08/14/20 02:12	
Dibromofluoromethane	93	89 - 119	08/14/20 02:12	
Toluene-d8	102	87 - 121	08/14/20 02:12	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 08:50
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-10	**Units:**	ug/L
Lab Code:	R2007055-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/14/20 05:07	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/14/20 05:07	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/14/20 05:07	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,4-Dichlorobenzene	**3.0 J**	5.0	0.20	1	08/14/20 05:07	
1,4-Dioxane	100 U	100	13	1	08/14/20 05:07	
2-Butanone (MEK)	**1.9 J**	10	0.78	1	08/14/20 05:07	
2-Hexanone	10 U	10	0.20	1	08/14/20 05:07	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/14/20 05:07	
Acetone	**8.9 J**	10	5.0	1	08/14/20 05:07	
Benzene	5.0 U	5.0	0.20	1	08/14/20 05:07	
Bromochloromethane	5.0 U	5.0	0.20	1	08/14/20 05:07	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/14/20 05:07	
Bromoform	5.0 U	5.0	0.25	1	08/14/20 05:07	
Bromomethane	5.0 U	5.0	0.70	1	08/14/20 05:07	
Carbon Disulfide	**2.8 J**	10	0.42	1	08/14/20 05:07	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/14/20 05:07	
Chlorobenzene	5.0 U	5.0	0.20	1	08/14/20 05:07	
Chloroethane	5.0 U	5.0	0.23	1	08/14/20 05:07	
Chloroform	5.0 U	5.0	0.24	1	08/14/20 05:07	
Chloromethane	5.0 U	5.0	0.28	1	08/14/20 05:07	
Cyclohexane	10 U	10	0.26	1	08/14/20 05:07	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/14/20 05:07	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/14/20 05:07	
Dichloromethane	5.0 U	5.0	0.65	1	08/14/20 05:07	
Ethylbenzene	5.0 U	5.0	0.20	1	08/14/20 05:07	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/14/20 05:07	
Methyl Acetate	10 U	10	0.33	1	08/14/20 05:07	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/14/20 05:07	
Methylcyclohexane	10 U	10	0.20	1	08/14/20 05:07	
Styrene	5.0 U	5.0	0.20	1	08/14/20 05:07	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/14/20 05:07	
Toluene	**83**	5.0	0.20	1	08/14/20 05:07	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 08:50
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-10	**Units:**	ug/L
Lab Code:	R2007055-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	08/14/20 05:07	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/14/20 05:07	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/14/20 05:07	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/14/20 05:07	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/14/20 05:07	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/14/20 05:07	
o-Xylene	5.0 U	5.0	0.20	1	08/14/20 05:07	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/14/20 05:07	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/14/20 05:07	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	08/14/20 05:07	
Dibromofluoromethane	92	89 - 119	08/14/20 05:07	
Toluene-d8	100	87 - 121	08/14/20 05:07	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 09:45
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-11	**Units:**	ug/L
Lab Code:	R2007055-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	50 U	50	2.0	10	08/14/20 05:51	
1,1,2,2-Tetrachloroethane	50 U	50	2.0	10	08/14/20 05:51	
1,1,2-Trichloroethane	50 U	50	2.0	10	08/14/20 05:51	
1,1,2-Trichloro-1,2,2-trifluoroethane	50 U	50	2.0	10	08/14/20 05:51	
1,1-Dichloroethane (1,1-DCA)	50 U	50	2.0	10	08/14/20 05:51	
1,1-Dichloroethene (1,1-DCE)	50 U	50	2.0	10	08/14/20 05:51	
1,2,3-Trichlorobenzene	50 U	50	2.5	10	08/14/20 05:51	
1,2,4-Trichlorobenzene	50 U	50	3.4	10	08/14/20 05:51	
1,2-Dibromo-3-chloropropane (DBCP)	50 U	50	4.5	10	08/14/20 05:51	
1,2-Dibromoethane	50 U	50	2.0	10	08/14/20 05:51	
1,2-Dichlorobenzene	50 U	50	2.0	10	08/14/20 05:51	
1,2-Dichloroethane	50 U	50	2.0	10	08/14/20 05:51	
1,2-Dichloropropane	50 U	50	2.0	10	08/14/20 05:51	
1,3-Dichlorobenzene	50 U	50	2.0	10	08/14/20 05:51	
1,4-Dichlorobenzene	50 U	50	2.0	10	08/14/20 05:51	
1,4-Dioxane	1000 U	1000	130	10	08/14/20 05:51	
2-Butanone (MEK)	100 U	100	7.8	10	08/14/20 05:51	
2-Hexanone	100 U	100	2.0	10	08/14/20 05:51	
4-Methyl-2-pentanone	100 U	100	2.0	10	08/14/20 05:51	
Acetone	100 U	100	50	10	08/14/20 05:51	
Benzene	50 U	50	2.0	10	08/14/20 05:51	
Bromochloromethane	50 U	50	2.0	10	08/14/20 05:51	
Bromodichloromethane	50 U	50	2.0	10	08/14/20 05:51	
Bromoform	50 U	50	2.5	10	08/14/20 05:51	
Bromomethane	50 U	50	7.0	10	08/14/20 05:51	
Carbon Disulfide	100 U	100	4.2	10	08/14/20 05:51	
Carbon Tetrachloride	50 U	50	3.4	10	08/14/20 05:51	
Chlorobenzene	50 U	50	2.0	10	08/14/20 05:51	
Chloroethane	50 U	50	2.3	10	08/14/20 05:51	
Chloroform	**4.4 J**	50	2.4	10	08/14/20 05:51	
Chloromethane	50 U	50	2.8	10	08/14/20 05:51	
Cyclohexane	100 U	100	2.6	10	08/14/20 05:51	
Dibromochloromethane	50 U	50	2.0	10	08/14/20 05:51	
Dichlorodifluoromethane (CFC 12)	50 U	50	2.1	10	08/14/20 05:51	
Dichloromethane	50 U	50	6.5	10	08/14/20 05:51	
Ethylbenzene	50 U	50	2.0	10	08/14/20 05:51	
Isopropylbenzene (Cumene)	50 U	50	2.0	10	08/14/20 05:51	
Methyl Acetate	100 U	100	3.3	10	08/14/20 05:51	
Methyl tert-Butyl Ether	50 U	50	2.0	10	08/14/20 05:51	
Methylcyclohexane	100 U	100	2.0	10	08/14/20 05:51	
Styrene	50 U	50	2.0	10	08/14/20 05:51	
Tetrachloroethene (PCE)	50 U	50	2.1	10	08/14/20 05:51	
Toluene	50 U	50	2.0	10	08/14/20 05:51	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 09:45
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-11	**Units:**	ug/L
Lab Code:	R2007055-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**95**		50	2.0	10	08/14/20 05:51	
Trichlorofluoromethane (CFC 11)	50	U	50	2.4	10	08/14/20 05:51	
Vinyl Chloride	50	U	50	2.0	10	08/14/20 05:51	
cis-1,2-Dichloroethene	**150**		50	2.3	10	08/14/20 05:51	
cis-1,3-Dichloropropene	50	U	50	2.0	10	08/14/20 05:51	
m,p-Xylenes	50	U	50	2.0	10	08/14/20 05:51	
o-Xylene	50	U	50	2.0	10	08/14/20 05:51	
trans-1,2-Dichloroethene	**2.5**	**J**	50	2.0	10	08/14/20 05:51	
trans-1,3-Dichloropropene	50	U	50	2.3	10	08/14/20 05:51	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	08/14/20 05:51	
Dibromofluoromethane	93	89 - 119	08/14/20 05:51	
Toluene-d8	100	87 - 121	08/14/20 05:51	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 10:55
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-13A	**Units:**	ug/L
Lab Code:	R2007055-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	250	U	250	10	50	08/14/20 06:57	
1,1,2,2-Tetrachloroethane	**14**	**J**	250	10	50	08/14/20 06:57	
1,1,2-Trichloroethane	250	U	250	10	50	08/14/20 06:57	
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	10	50	08/14/20 06:57	
1,1-Dichloroethane (1,1-DCA)	250	U	250	10	50	08/14/20 06:57	
1,1-Dichloroethene (1,1-DCE)	250	U	250	10	50	08/14/20 06:57	
1,2,3-Trichlorobenzene	250	U	250	13	50	08/14/20 06:57	
1,2,4-Trichlorobenzene	250	U	250	17	50	08/14/20 06:57	
1,2-Dibromo-3-chloropropane (DBCP)	250	U	250	23	50	08/14/20 06:57	
1,2-Dibromoethane	250	U	250	10	50	08/14/20 06:57	
1,2-Dichlorobenzene	250	U	250	10	50	08/14/20 06:57	
1,2-Dichloroethane	250	U	250	10	50	08/14/20 06:57	
1,2-Dichloropropane	250	U	250	10	50	08/14/20 06:57	
1,3-Dichlorobenzene	250	U	250	10	50	08/14/20 06:57	
1,4-Dichlorobenzene	250	U	250	10	50	08/14/20 06:57	
1,4-Dioxane	5000	U	5000	650	50	08/14/20 06:57	
2-Butanone (MEK)	500	U	500	39	50	08/14/20 06:57	
2-Hexanone	500	U	500	10	50	08/14/20 06:57	
4-Methyl-2-pentanone	500	U	500	10	50	08/14/20 06:57	
Acetone	500	U	500	250	50	08/14/20 06:57	
Benzene	250	U	250	10	50	08/14/20 06:57	
Bromochloromethane	250	U	250	10	50	08/14/20 06:57	
Bromodichloromethane	250	U	250	10	50	08/14/20 06:57	
Bromoform	250	U	250	13	50	08/14/20 06:57	
Bromomethane	250	U	250	35	50	08/14/20 06:57	
Carbon Disulfide	500	U	500	21	50	08/14/20 06:57	
Carbon Tetrachloride	250	U	250	17	50	08/14/20 06:57	
Chlorobenzene	250	U	250	10	50	08/14/20 06:57	
Chloroethane	250	U	250	12	50	08/14/20 06:57	
Chloroform	250	U	250	12	50	08/14/20 06:57	
Chloromethane	250	U	250	14	50	08/14/20 06:57	
Cyclohexane	500	U	500	13	50	08/14/20 06:57	
Dibromochloromethane	250	U	250	10	50	08/14/20 06:57	
Dichlorodifluoromethane (CFC 12)	250	U	250	11	50	08/14/20 06:57	
Dichloromethane	250	U	250	33	50	08/14/20 06:57	
Ethylbenzene	250	U	250	10	50	08/14/20 06:57	
Isopropylbenzene (Cumene)	250	U	250	10	50	08/14/20 06:57	
Methyl Acetate	500	U	500	17	50	08/14/20 06:57	
Methyl tert-Butyl Ether	250	U	250	10	50	08/14/20 06:57	
Methylcyclohexane	500	U	500	10	50	08/14/20 06:57	
Styrene	250	U	250	10	50	08/14/20 06:57	
Tetrachloroethene (PCE)	**19**	**J**	250	11	50	08/14/20 06:57	
Toluene	**20**	**J**	250	10	50	08/14/20 06:57	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 10:55
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-13A	**Units:**	ug/L
Lab Code:	R2007055-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**3200**		250	10	50	08/14/20 06:57	
Trichlorofluoromethane (CFC 11)	250	U	250	12	50	08/14/20 06:57	
Vinyl Chloride	**61**	**J**	250	10	50	08/14/20 06:57	
cis-1,2-Dichloroethene	**4800**		250	12	50	08/14/20 06:57	
cis-1,3-Dichloropropene	250	U	250	10	50	08/14/20 06:57	
m,p-Xylenes	250	U	250	10	50	08/14/20 06:57	
o-Xylene	250	U	250	10	50	08/14/20 06:57	
trans-1,2-Dichloroethene	**100**	**J**	250	10	50	08/14/20 06:57	
trans-1,3-Dichloropropene	250	U	250	12	50	08/14/20 06:57	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	08/14/20 06:57	
Dibromofluoromethane	97	89 - 119	08/14/20 06:57	
Toluene-d8	105	87 - 121	08/14/20 06:57	

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 11:25
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-6	**Units:**	ug/L
Lab Code:	R2007055-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	50 U	50	2.0	10	08/14/20 06:13	
1,1,2,2-Tetrachloroethane	50 U	50	2.0	10	08/14/20 06:13	
1,1,2-Trichloroethane	50 U	50	2.0	10	08/14/20 06:13	
1,1,2-Trichloro-1,2,2-trifluoroethane	50 U	50	2.0	10	08/14/20 06:13	
1,1-Dichloroethane (1,1-DCA)	50 U	50	2.0	10	08/14/20 06:13	
1,1-Dichloroethene (1,1-DCE)	**32 J**	50	2.0	10	08/14/20 06:13	
1,2,3-Trichlorobenzene	50 U	50	2.5	10	08/14/20 06:13	
1,2,4-Trichlorobenzene	50 U	50	3.4	10	08/14/20 06:13	
1,2-Dibromo-3-chloropropane (DBCP)	50 U	50	4.5	10	08/14/20 06:13	
1,2-Dibromoethane	50 U	50	2.0	10	08/14/20 06:13	
1,2-Dichlorobenzene	50 U	50	2.0	10	08/14/20 06:13	
1,2-Dichloroethane	50 U	50	2.0	10	08/14/20 06:13	
1,2-Dichloropropane	50 U	50	2.0	10	08/14/20 06:13	
1,3-Dichlorobenzene	50 U	50	2.0	10	08/14/20 06:13	
1,4-Dichlorobenzene	50 U	50	2.0	10	08/14/20 06:13	
1,4-Dioxane	1000 U	1000	130	10	08/14/20 06:13	
2-Butanone (MEK)	100 U	100	7.8	10	08/14/20 06:13	
2-Hexanone	100 U	100	2.0	10	08/14/20 06:13	
4-Methyl-2-pentanone	100 U	100	2.0	10	08/14/20 06:13	
Acetone	100 U	100	50	10	08/14/20 06:13	
Benzene	**2.0 J**	50	2.0	10	08/14/20 06:13	
Bromochloromethane	50 U	50	2.0	10	08/14/20 06:13	
Bromodichloromethane	50 U	50	2.0	10	08/14/20 06:13	
Bromoform	50 U	50	2.5	10	08/14/20 06:13	
Bromomethane	50 U	50	7.0	10	08/14/20 06:13	
Carbon Disulfide	100 U	100	4.2	10	08/14/20 06:13	
Carbon Tetrachloride	50 U	50	3.4	10	08/14/20 06:13	
Chlorobenzene	50 U	50	2.0	10	08/14/20 06:13	
Chloroethane	50 U	50	2.3	10	08/14/20 06:13	
Chloroform	50 U	50	2.4	10	08/14/20 06:13	
Chloromethane	50 U	50	2.8	10	08/14/20 06:13	
Cyclohexane	100 U	100	2.6	10	08/14/20 06:13	
Dibromochloromethane	50 U	50	2.0	10	08/14/20 06:13	
Dichlorodifluoromethane (CFC 12)	50 U	50	2.1	10	08/14/20 06:13	
Dichloromethane	50 U	50	6.5	10	08/14/20 06:13	
Ethylbenzene	50 U	50	2.0	10	08/14/20 06:13	
Isopropylbenzene (Cumene)	50 U	50	2.0	10	08/14/20 06:13	
Methyl Acetate	100 U	100	3.3	10	08/14/20 06:13	
Methyl tert-Butyl Ether	50 U	50	2.0	10	08/14/20 06:13	
Methylcyclohexane	100 U	100	2.0	10	08/14/20 06:13	
Styrene	50 U	50	2.0	10	08/14/20 06:13	
Tetrachloroethene (PCE)	50 U	50	2.1	10	08/14/20 06:13	
Toluene	50 U	50	2.0	10	08/14/20 06:13	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 11:25
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-6	**Units:**	ug/L
Lab Code:	R2007055-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**140**		50	2.0	10	08/14/20 06:13	
Trichlorofluoromethane (CFC 11)	50	U	50	2.4	10	08/14/20 06:13	
Vinyl Chloride	**570**		50	2.0	10	08/14/20 06:13	
cis-1,2-Dichloroethene	**4200**	**D**	250	12	50	08/14/20 14:47	
cis-1,3-Dichloropropene	50	U	50	2.0	10	08/14/20 06:13	
m,p-Xylenes	50	U	50	2.0	10	08/14/20 06:13	
o-Xylene	50	U	50	2.0	10	08/14/20 06:13	
trans-1,2-Dichloroethene	**19**	**J**	50	2.0	10	08/14/20 06:13	
trans-1,3-Dichloropropene	50	U	50	2.3	10	08/14/20 06:13	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	08/14/20 06:13	
Dibromofluoromethane	96	89 - 119	08/14/20 06:13	
Toluene-d8	101	87 - 121	08/14/20 06:13	

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 12:00
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-20A	**Units:**	ug/L
Lab Code:	R2007055-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	50 U	50	2.0	10	08/14/20 06:35	
1,1,2,2-Tetrachloroethane	50 U	50	2.0	10	08/14/20 06:35	
1,1,2-Trichloroethane	50 U	50	2.0	10	08/14/20 06:35	
1,1,2-Trichloro-1,2,2-trifluoroethane	50 U	50	2.0	10	08/14/20 06:35	
1,1-Dichloroethane (1,1-DCA)	50 U	50	2.0	10	08/14/20 06:35	
1,1-Dichloroethene (1,1-DCE)	**3.6 J**	50	2.0	10	08/14/20 06:35	
1,2,3-Trichlorobenzene	50 U	50	2.5	10	08/14/20 06:35	
1,2,4-Trichlorobenzene	50 U	50	3.4	10	08/14/20 06:35	
1,2-Dibromo-3-chloropropane (DBCP)	50 U	50	4.5	10	08/14/20 06:35	
1,2-Dibromoethane	50 U	50	2.0	10	08/14/20 06:35	
1,2-Dichlorobenzene	50 U	50	2.0	10	08/14/20 06:35	
1,2-Dichloroethane	50 U	50	2.0	10	08/14/20 06:35	
1,2-Dichloropropane	50 U	50	2.0	10	08/14/20 06:35	
1,3-Dichlorobenzene	50 U	50	2.0	10	08/14/20 06:35	
1,4-Dichlorobenzene	50 U	50	2.0	10	08/14/20 06:35	
1,4-Dioxane	1000 U	1000	130	10	08/14/20 06:35	
2-Butanone (MEK)	100 U	100	7.8	10	08/14/20 06:35	
2-Hexanone	100 U	100	2.0	10	08/14/20 06:35	
4-Methyl-2-pentanone	100 U	100	2.0	10	08/14/20 06:35	
Acetone	100 U	100	50	10	08/14/20 06:35	
Benzene	50 U	50	2.0	10	08/14/20 06:35	
Bromochloromethane	50 U	50	2.0	10	08/14/20 06:35	
Bromodichloromethane	50 U	50	2.0	10	08/14/20 06:35	
Bromoform	50 U	50	2.5	10	08/14/20 06:35	
Bromomethane	50 U	50	7.0	10	08/14/20 06:35	
Carbon Disulfide	100 U	100	4.2	10	08/14/20 06:35	
Carbon Tetrachloride	50 U	50	3.4	10	08/14/20 06:35	
Chlorobenzene	50 U	50	2.0	10	08/14/20 06:35	
Chloroethane	50 U	50	2.3	10	08/14/20 06:35	
Chloroform	50 U	50	2.4	10	08/14/20 06:35	
Chloromethane	50 U	50	2.8	10	08/14/20 06:35	
Cyclohexane	100 U	100	2.6	10	08/14/20 06:35	
Dibromochloromethane	50 U	50	2.0	10	08/14/20 06:35	
Dichlorodifluoromethane (CFC 12)	50 U	50	2.1	10	08/14/20 06:35	
Dichloromethane	50 U	50	6.5	10	08/14/20 06:35	
Ethylbenzene	50 U	50	2.0	10	08/14/20 06:35	
Isopropylbenzene (Cumene)	50 U	50	2.0	10	08/14/20 06:35	
Methyl Acetate	100 U	100	3.3	10	08/14/20 06:35	
Methyl tert-Butyl Ether	50 U	50	2.0	10	08/14/20 06:35	
Methylcyclohexane	100 U	100	2.0	10	08/14/20 06:35	
Styrene	50 U	50	2.0	10	08/14/20 06:35	
Tetrachloroethene (PCE)	50 U	50	2.1	10	08/14/20 06:35	
Toluene	50 U	50	2.0	10	08/14/20 06:35	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 12:00
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-20A	**Units:**	ug/L
Lab Code:	R2007055-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**2.5**	**J**	50	2.0	10	08/14/20 06:35	
Trichlorofluoromethane (CFC 11)	50	U	50	2.4	10	08/14/20 06:35	
Vinyl Chloride	**300**		50	2.0	10	08/14/20 06:35	
cis-1,2-Dichloroethene	**1500**		50	2.3	10	08/14/20 06:35	
cis-1,3-Dichloropropene	50	U	50	2.0	10	08/14/20 06:35	
m,p-Xylenes	50	U	50	2.0	10	08/14/20 06:35	
o-Xylene	50	U	50	2.0	10	08/14/20 06:35	
trans-1,2-Dichloroethene	**8.1**	**J**	50	2.0	10	08/14/20 06:35	
trans-1,3-Dichloropropene	50	U	50	2.3	10	08/14/20 06:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	08/14/20 06:35	
Dibromofluoromethane	93	89 - 119	08/14/20 06:35	
Toluene-d8	102	87 - 121	08/14/20 06:35	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 13:45
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-5R	**Units:**	ug/L
Lab Code:	R2007055-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	13	U	13	0.50	2.5	08/14/20 05:29	
1,1,2,2-Tetrachloroethane	13	U	13	0.50	2.5	08/14/20 05:29	
1,1,2-Trichloroethane	13	U	13	0.50	2.5	08/14/20 05:29	
1,1,2-Trichloro-1,2,2-trifluoroethane	13	U	13	0.50	2.5	08/14/20 05:29	
1,1-Dichloroethane (1,1-DCA)	13	U	13	0.50	2.5	08/14/20 05:29	
1,1-Dichloroethene (1,1-DCE)	13	U	13	0.50	2.5	08/14/20 05:29	
1,2,3-Trichlorobenzene	13	U	13	0.63	2.5	08/14/20 05:29	
1,2,4-Trichlorobenzene	13	U	13	0.85	2.5	08/14/20 05:29	
1,2-Dibromo-3-chloropropane (DBCP)	13	U	13	1.2	2.5	08/14/20 05:29	
1,2-Dibromoethane	13	U	13	0.50	2.5	08/14/20 05:29	
1,2-Dichlorobenzene	13	U	13	0.50	2.5	08/14/20 05:29	
1,2-Dichloroethane	13	U	13	0.50	2.5	08/14/20 05:29	
1,2-Dichloropropane	13	U	13	0.50	2.5	08/14/20 05:29	
1,3-Dichlorobenzene	13	U	13	0.50	2.5	08/14/20 05:29	
1,4-Dichlorobenzene	13	U	13	0.50	2.5	08/14/20 05:29	
1,4-Dioxane	250	U	250	33	2.5	08/14/20 05:29	
2-Butanone (MEK)	25	U	25	2.0	2.5	08/14/20 05:29	
2-Hexanone	25	U	25	0.50	2.5	08/14/20 05:29	
4-Methyl-2-pentanone	25	U	25	0.50	2.5	08/14/20 05:29	
Acetone	25	U	25	13	2.5	08/14/20 05:29	
Benzene	13	U	13	0.50	2.5	08/14/20 05:29	
Bromochloromethane	13	U	13	0.50	2.5	08/14/20 05:29	
Bromodichloromethane	13	U	13	0.50	2.5	08/14/20 05:29	
Bromoform	13	U	13	0.63	2.5	08/14/20 05:29	
Bromomethane	13	U	13	1.8	2.5	08/14/20 05:29	
Carbon Disulfide	25	U	25	1.1	2.5	08/14/20 05:29	
Carbon Tetrachloride	13	U	13	0.85	2.5	08/14/20 05:29	
Chlorobenzene	13	U	13	0.50	2.5	08/14/20 05:29	
Chloroethane	13	U	13	0.58	2.5	08/14/20 05:29	
Chloroform	13	U	13	0.60	2.5	08/14/20 05:29	
Chloromethane	13	U	13	0.70	2.5	08/14/20 05:29	
Cyclohexane	25	U	25	0.65	2.5	08/14/20 05:29	
Dibromochloromethane	13	U	13	0.50	2.5	08/14/20 05:29	
Dichlorodifluoromethane (CFC 12)	13	U	13	0.53	2.5	08/14/20 05:29	
Dichloromethane	13	U	13	1.7	2.5	08/14/20 05:29	
Ethylbenzene	13	U	13	0.50	2.5	08/14/20 05:29	
Isopropylbenzene (Cumene)	13	U	13	0.50	2.5	08/14/20 05:29	
Methyl Acetate	25	U	25	0.83	2.5	08/14/20 05:29	
Methyl tert-Butyl Ether	13	U	13	0.50	2.5	08/14/20 05:29	
Methylcyclohexane	25	U	25	0.50	2.5	08/14/20 05:29	
Styrene	13	U	13	0.50	2.5	08/14/20 05:29	
Tetrachloroethene (PCE)	**1.5**	**J**	13	0.53	2.5	08/14/20 05:29	
Toluene	**0.97**	**BJ**	13	0.50	2.5	08/14/20 05:29	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 13:45
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-5R	**Units:**	ug/L
Lab Code:	R2007055-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**460**		13	0.50	2.5	08/14/20 05:29	
Trichlorofluoromethane (CFC 11)	13	U	13	0.60	2.5	08/14/20 05:29	
Vinyl Chloride	13	U	13	0.50	2.5	08/14/20 05:29	
cis-1,2-Dichloroethene	**190**		13	0.58	2.5	08/14/20 05:29	
cis-1,3-Dichloropropene	13	U	13	0.50	2.5	08/14/20 05:29	
m,p-Xylenes	13	U	13	0.50	2.5	08/14/20 05:29	
o-Xylene	13	U	13	0.50	2.5	08/14/20 05:29	
trans-1,2-Dichloroethene	**32**		13	0.50	2.5	08/14/20 05:29	
trans-1,3-Dichloropropene	13	U	13	0.58	2.5	08/14/20 05:29	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	08/14/20 05:29	
Dibromofluoromethane	92	89 - 119	08/14/20 05:29	
Toluene-d8	100	87 - 121	08/14/20 05:29	

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 14:15
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-5AR	**Units:**	ug/L
Lab Code:	R2007055-014	**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)	**2.8**	**J**	50	2.0	10	08/14/20 15:09	
1,1,2,2-Tetrachloroethane	**260**		50	2.0	10	08/14/20 15:09	
1,1,2-Trichloroethane	**31**	**J**	50	2.0	10	08/14/20 15:09	
1,1,2-Trichloro-1,2,2-trifluoroethane	50	U	50	2.0	10	08/14/20 15:09	
1,1-Dichloroethane (1,1-DCA)	50	U	50	2.0	10	08/14/20 15:09	
1,1-Dichloroethene (1,1-DCE)	**3.3**	**J**	50	2.0	10	08/14/20 15:09	
1,2,3-Trichlorobenzene	50	U	50	2.5	10	08/14/20 15:09	
1,2,4-Trichlorobenzene	50	U	50	3.4	10	08/14/20 15:09	
1,2-Dibromo-3-chloropropane (DBCP)	50	U	50	4.5	10	08/14/20 15:09	
1,2-Dibromoethane	50	U	50	2.0	10	08/14/20 15:09	
1,2-Dichlorobenzene	50	U	50	2.0	10	08/14/20 15:09	
1,2-Dichloroethane	50	U	50	2.0	10	08/14/20 15:09	
1,2-Dichloropropane	50	U	50	2.0	10	08/14/20 15:09	
1,3-Dichlorobenzene	50	U	50	2.0	10	08/14/20 15:09	
1,4-Dichlorobenzene	50	U	50	2.0	10	08/14/20 15:09	
1,4-Dioxane	1000	U	1000	130	10	08/14/20 15:09	
2-Butanone (MEK)	**63**	**J**	100	7.8	10	08/14/20 15:09	
2-Hexanone	100	U	100	2.0	10	08/14/20 15:09	
4-Methyl-2-pentanone	100	U	100	2.0	10	08/14/20 15:09	
Acetone	**500**		100	50	10	08/14/20 15:09	
Benzene	**3.3**	**J**	50	2.0	10	08/14/20 15:09	
Bromochloromethane	50	U	50	2.0	10	08/14/20 15:09	
Bromodichloromethane	50	U	50	2.0	10	08/14/20 15:09	
Bromoform	50	U	50	2.5	10	08/14/20 15:09	
Bromomethane	50	U	50	7.0	10	08/14/20 15:09	
Carbon Disulfide	**26**	**J**	100	4.2	10	08/14/20 15:09	
Carbon Tetrachloride	50	U	50	3.4	10	08/14/20 15:09	
Chlorobenzene	50	U	50	2.0	10	08/14/20 15:09	
Chloroethane	50	U	50	2.3	10	08/14/20 15:09	
Chloroform	**7.5**	**J**	50	2.4	10	08/14/20 15:09	
Chloromethane	**6.5**	**J**	50	2.8	10	08/14/20 15:09	
Cyclohexane	100	U	100	2.6	10	08/14/20 15:09	
Dibromochloromethane	50	U	50	2.0	10	08/14/20 15:09	
Dichlorodifluoromethane (CFC 12)	50	U	50	2.1	10	08/14/20 15:09	
Dichloromethane	50	U	50	6.5	10	08/14/20 15:09	
Ethylbenzene	50	U	50	2.0	10	08/14/20 15:09	
Isopropylbenzene (Cumene)	50	U	50	2.0	10	08/14/20 15:09	
Methyl Acetate	100	U	100	3.3	10	08/14/20 15:09	
Methyl tert-Butyl Ether	50	U	50	2.0	10	08/14/20 15:09	
Methylcyclohexane	100	U	100	2.0	10	08/14/20 15:09	
Styrene	50	U	50	2.0	10	08/14/20 15:09	
Tetrachloroethene (PCE)	**38**	**J**	50	2.1	10	08/14/20 15:09	
Toluene	**15**	**J**	50	2.0	10	08/14/20 15:09	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 14:15
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-5AR	**Units:**	ug/L
Lab Code:	R2007055-014	**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)	**32000**	**D**	1300	50	250	08/14/20 16:15	
Trichlorofluoromethane (CFC 11)	50	U	50	2.4	10	08/14/20 15:09	
Vinyl Chloride	**140**		50	2.0	10	08/14/20 15:09	
cis-1,2-Dichloroethene	**23000**	**D**	1300	58	250	08/14/20 16:15	
cis-1,3-Dichloropropene	50	U	50	2.0	10	08/14/20 15:09	
m,p-Xylenes	50	U	50	2.0	10	08/14/20 15:09	
o-Xylene	50	U	50	2.0	10	08/14/20 15:09	
trans-1,2-Dichloroethene	**1900**	**D**	1300	50	250	08/14/20 16:15	
trans-1,3-Dichloropropene	50	U	50	2.3	10	08/14/20 15:09	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	08/14/20 15:09	
Dibromofluoromethane	95	89 - 119	08/14/20 15:09	
Toluene-d8	101	87 - 121	08/14/20 15:09	

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	Trip Blank 2	**Units:**	ug/L
Lab Code:	R2007055-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,1,2-Trichloroethane	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,2,3-Trichlorobenzene	5.0	U	5.0	0.25	1	08/14/20 02:34	
1,2,4-Trichlorobenzene	5.0	U	5.0	0.34	1	08/14/20 02:34	
1,2-Dibromo-3-chloropropane (DBCP)	5.0	U	5.0	0.45	1	08/14/20 02:34	
1,2-Dibromoethane	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,2-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,2-Dichloroethane	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,2-Dichloropropane	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,3-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,4-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,4-Dioxane	100	U	100	13	1	08/14/20 02:34	
2-Butanone (MEK)	10	U	10	0.78	1	08/14/20 02:34	
2-Hexanone	10	U	10	0.20	1	08/14/20 02:34	
4-Methyl-2-pentanone	10	U	10	0.20	1	08/14/20 02:34	
Acetone	10	U	10	5.0	1	08/14/20 02:34	
Benzene	5.0	U	5.0	0.20	1	08/14/20 02:34	
Bromochloromethane	5.0	U	5.0	0.20	1	08/14/20 02:34	
Bromodichloromethane	5.0	U	5.0	0.20	1	08/14/20 02:34	
Bromoform	5.0	U	5.0	0.25	1	08/14/20 02:34	
Bromomethane	5.0	U	5.0	0.70	1	08/14/20 02:34	
Carbon Disulfide	10	U	10	0.42	1	08/14/20 02:34	
Carbon Tetrachloride	5.0	U	5.0	0.34	1	08/14/20 02:34	
Chlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:34	
Chloroethane	5.0	U	5.0	0.23	1	08/14/20 02:34	
Chloroform	5.0	U	5.0	0.24	1	08/14/20 02:34	
Chloromethane	5.0	U	5.0	0.28	1	08/14/20 02:34	
Cyclohexane	10	U	10	0.26	1	08/14/20 02:34	
Dibromochloromethane	5.0	U	5.0	0.20	1	08/14/20 02:34	
Dichlorodifluoromethane (CFC 12)	5.0	U	5.0	0.21	1	08/14/20 02:34	
Dichloromethane	5.0	U	5.0	0.65	1	08/14/20 02:34	
Ethylbenzene	5.0	U	5.0	0.20	1	08/14/20 02:34	
Isopropylbenzene (Cumene)	5.0	U	5.0	0.20	1	08/14/20 02:34	
Methyl Acetate	10	U	10	0.33	1	08/14/20 02:34	
Methyl tert-Butyl Ether	5.0	U	5.0	0.20	1	08/14/20 02:34	
Methylcyclohexane	10	U	10	0.20	1	08/14/20 02:34	
Styrene	5.0	U	5.0	0.20	1	08/14/20 02:34	
Tetrachloroethene (PCE)	5.0	U	5.0	0.21	1	08/14/20 02:34	
Toluene	**0.24**	**BJ**	5.0	0.20	1	08/14/20 02:34	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	Trip Blank 2	**Units:**	ug/L
Lab Code:	R2007055-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	08/14/20 02:34	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/14/20 02:34	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/14/20 02:34	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/14/20 02:34	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/14/20 02:34	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/14/20 02:34	
o-Xylene	5.0 U	5.0	0.20	1	08/14/20 02:34	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/14/20 02:34	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/14/20 02:34	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	08/14/20 02:34	
Dibromofluoromethane	91	89 - 119	08/14/20 02:34	
Toluene-d8	100	87 - 121	08/14/20 02:34	

QC Summary Forms

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

ALS Environmental—Rochester Laboratory
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www.alsglobal.com

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China/16-344-1389
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Sample Name	Lab Code	4-Bromofluorobenzene 85-122	Dibromofluoromethane 89-119	Toluene-d8 87-121
MW-5AR	R2007055-014	97	95	101
Method Blank	RQ2009168-06	101	96	104
Lab Control Sample	RQ2009168-03	102	98	102
MW-8	R2007055-001	98	94	102
MW-8A	R2007055-002	97	95	100
MW-9	R2007055-003	96	92	99
MW-9A	R2007055-004	99	94	100
MW-9A Dup	R2007055-005	96	93	100
MW-25A	R2007055-006	95	91	98
Trip Blank 1	R2007055-007	101	93	102
MW-10	R2007055-008	99	92	100
MW-11	R2007055-009	98	93	100
MW-13A	R2007055-010	100	97	105
MW-6	R2007055-011	99	96	101
MW-20A	R2007055-012	100	93	102
MW-5R	R2007055-013	97	92	100
Trip Blank 2	R2007055-015	97	91	100
Method Blank	RQ2009120-04	99	92	101
Lab Control Sample	RQ2009120-03	101	95	99

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

Service Request: R2007055
Date Analyzed: 08/13/20 23:39

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ2009120-04

Instrument ID:R-MS-12
File ID:I:\ACQUDATA\msvoa12\Data\081320\P38481.D\

Analysis Method: 8260C
Analysis Lot:690913

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2009120-03	I:\ACQUDATA\msvoa12\Data\081320\P38478.D\	08/13/20 22:33
Trip Blank 1	R2007055-007	I:\ACQUDATA\msvoa12\Data\081320\P38488.D\	08/14/20 02:12
Trip Blank 2	R2007055-015	I:\ACQUDATA\msvoa12\Data\081320\P38489.D\	08/14/20 02:34
MW-8	R2007055-001	I:\ACQUDATA\msvoa12\Data\081320\P38490.D\	08/14/20 02:56
MW-8A	R2007055-002	I:\ACQUDATA\msvoa12\Data\081320\P38491.D\	08/14/20 03:18
MW-9	R2007055-003	I:\ACQUDATA\msvoa12\Data\081320\P38492.D\	08/14/20 03:40
MW-9A	R2007055-004	I:\ACQUDATA\msvoa12\Data\081320\P38493.D\	08/14/20 04:01
MW-9A Dup	R2007055-005	I:\ACQUDATA\msvoa12\Data\081320\P38494.D\	08/14/20 04:23
MW-25A	R2007055-006	I:\ACQUDATA\msvoa12\Data\081320\P38495.D\	08/14/20 04:45
MW-10	R2007055-008	I:\ACQUDATA\msvoa12\Data\081320\P38496.D\	08/14/20 05:07
MW-5R	R2007055-013	I:\ACQUDATA\msvoa12\Data\081320\P38497.D\	08/14/20 05:29
MW-11	R2007055-009	I:\ACQUDATA\msvoa12\Data\081320\P38498.D\	08/14/20 05:51
MW-6	R2007055-011	I:\ACQUDATA\msvoa12\Data\081320\P38499.D\	08/14/20 06:13
MW-20A	R2007055-012	I:\ACQUDATA\msvoa12\Data\081320\P38500.D\	08/14/20 06:35
MW-13A	R2007055-010	I:\ACQUDATA\msvoa12\Data\081320\P38501.D\	08/14/20 06:57

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	08/14/20 12:05
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:	RQ2009168-06	**File ID:**	I:\ACQUDATA\msvoa12\Data\081420\P38512.D\
Analysis Method:	8260C	**Analysis Lot:**	691047
Prep Method:	EPA 5030C		

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2009168-03	I:\ACQUDATA\msvoa12\Data\081420\P38508.D\	08/14/20 10:32
MW-6	R2007055-011	I:\ACQUDATA\msvoa12\Data\081420\P38519.D\	08/14/20 14:47
MW-5AR	R2007055-014	I:\ACQUDATA\msvoa12\Data\081420\P38520.D\	08/14/20 15:09
MW-5AR	R2007055-014	I:\ACQUDATA\msvoa12\Data\081420\P38523.D\	08/14/20 16:15

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2009120-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.20	1	08/13/20 23:39	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.20	1	08/13/20 23:39	
1,1,2-Trichloroethane	5.0	U	5.0	0.20	1	08/13/20 23:39	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.20	1	08/13/20 23:39	
1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	1	08/13/20 23:39	
1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.20	1	08/13/20 23:39	
1,2,3-Trichlorobenzene	5.0	U	5.0	0.25	1	08/13/20 23:39	
1,2,4-Trichlorobenzene	5.0	U	5.0	0.34	1	08/13/20 23:39	
1,2-Dibromo-3-chloropropane (DBCP)	5.0	U	5.0	0.45	1	08/13/20 23:39	
1,2-Dibromoethane	5.0	U	5.0	0.20	1	08/13/20 23:39	
1,2-Dichlorobenzene	5.0	U	5.0	0.20	1	08/13/20 23:39	
1,2-Dichloroethane	5.0	U	5.0	0.20	1	08/13/20 23:39	
1,2-Dichloropropane	5.0	U	5.0	0.20	1	08/13/20 23:39	
1,3-Dichlorobenzene	5.0	U	5.0	0.20	1	08/13/20 23:39	
1,4-Dichlorobenzene	5.0	U	5.0	0.20	1	08/13/20 23:39	
1,4-Dioxane	100	U	100	13	1	08/13/20 23:39	
2-Butanone (MEK)	10	U	10	0.78	1	08/13/20 23:39	
2-Hexanone	10	U	10	0.20	1	08/13/20 23:39	
4-Methyl-2-pentanone	10	U	10	0.20	1	08/13/20 23:39	
Acetone	10	U	10	5.0	1	08/13/20 23:39	
Benzene	5.0	U	5.0	0.20	1	08/13/20 23:39	
Bromochloromethane	5.0	U	5.0	0.20	1	08/13/20 23:39	
Bromodichloromethane	5.0	U	5.0	0.20	1	08/13/20 23:39	
Bromoform	5.0	U	5.0	0.25	1	08/13/20 23:39	
Bromomethane	5.0	U	5.0	0.70	1	08/13/20 23:39	
Carbon Disulfide	10	U	10	0.42	1	08/13/20 23:39	
Carbon Tetrachloride	5.0	U	5.0	0.34	1	08/13/20 23:39	
Chlorobenzene	5.0	U	5.0	0.20	1	08/13/20 23:39	
Chloroethane	5.0	U	5.0	0.23	1	08/13/20 23:39	
Chloroform	5.0	U	5.0	0.24	1	08/13/20 23:39	
Chloromethane	5.0	U	5.0	0.28	1	08/13/20 23:39	
Cyclohexane	10	U	10	0.26	1	08/13/20 23:39	
Dibromochloromethane	5.0	U	5.0	0.20	1	08/13/20 23:39	
Dichlorodifluoromethane (CFC 12)	5.0	U	5.0	0.21	1	08/13/20 23:39	
Dichloromethane	5.0	U	5.0	0.65	1	08/13/20 23:39	
Ethylbenzene	5.0	U	5.0	0.20	1	08/13/20 23:39	
Isopropylbenzene (Cumene)	5.0	U	5.0	0.20	1	08/13/20 23:39	
Methyl Acetate	10	U	10	0.33	1	08/13/20 23:39	
Methyl tert-Butyl Ether	5.0	U	5.0	0.20	1	08/13/20 23:39	
Methylcyclohexane	10	U	10	0.20	1	08/13/20 23:39	
Styrene	5.0	U	5.0	0.20	1	08/13/20 23:39	
Tetrachloroethene (PCE)	5.0	U	5.0	0.21	1	08/13/20 23:39	
Toluene	**0.49**	**J**	5.0	0.20	1	08/13/20 23:39	

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Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2009120-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	08/13/20 23:39	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/13/20 23:39	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/13/20 23:39	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/13/20 23:39	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/13/20 23:39	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/13/20 23:39	
o-Xylene	5.0 U	5.0	0.20	1	08/13/20 23:39	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/13/20 23:39	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/13/20 23:39	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	08/13/20 23:39	
Dibromofluoromethane	92	89 - 119	08/13/20 23:39	
Toluene-d8	101	87 - 121	08/13/20 23:39	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2009168-06	**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	0.20	1	08/14/20 12:05	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/14/20 12:05	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/14/20 12:05	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/14/20 12:05	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/14/20 12:05	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/14/20 12:05	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/14/20 12:05	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/14/20 12:05	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/14/20 12:05	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/14/20 12:05	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 12:05	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/14/20 12:05	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/14/20 12:05	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 12:05	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 12:05	
1,4-Dioxane	100 U	100	13	1	08/14/20 12:05	
2-Butanone (MEK)	10 U	10	0.78	1	08/14/20 12:05	
2-Hexanone	10 U	10	0.20	1	08/14/20 12:05	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/14/20 12:05	
Acetone	10 U	10	5.0	1	08/14/20 12:05	
Benzene	5.0 U	5.0	0.20	1	08/14/20 12:05	
Bromochloromethane	5.0 U	5.0	0.20	1	08/14/20 12:05	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/14/20 12:05	
Bromoform	5.0 U	5.0	0.25	1	08/14/20 12:05	
Bromomethane	5.0 U	5.0	0.70	1	08/14/20 12:05	
Carbon Disulfide	10 U	10	0.42	1	08/14/20 12:05	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/14/20 12:05	
Chlorobenzene	5.0 U	5.0	0.20	1	08/14/20 12:05	
Chloroethane	5.0 U	5.0	0.23	1	08/14/20 12:05	
Chloroform	5.0 U	5.0	0.24	1	08/14/20 12:05	
Chloromethane	5.0 U	5.0	0.28	1	08/14/20 12:05	
Cyclohexane	10 U	10	0.26	1	08/14/20 12:05	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/14/20 12:05	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/14/20 12:05	
Dichloromethane	5.0 U	5.0	0.65	1	08/14/20 12:05	
Ethylbenzene	5.0 U	5.0	0.20	1	08/14/20 12:05	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/14/20 12:05	
Methyl Acetate	10 U	10	0.33	1	08/14/20 12:05	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/14/20 12:05	
Methylcyclohexane	10 U	10	0.20	1	08/14/20 12:05	
Styrene	5.0 U	5.0	0.20	1	08/14/20 12:05	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/14/20 12:05	
Toluene	5.0 U	5.0	0.20	1	08/14/20 12:05	

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Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2009168-06	**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	08/14/20 12:05	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/14/20 12:05	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/14/20 12:05	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/14/20 12:05	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/14/20 12:05	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/14/20 12:05	
o-Xylene	5.0 U	5.0	0.20	1	08/14/20 12:05	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/14/20 12:05	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/14/20 12:05	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	08/14/20 12:05	
Dibromofluoromethane	96	89 - 119	08/14/20 12:05	
Toluene-d8	104	87 - 121	08/14/20 12:05	

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

Service Request: R2007055
Date Analyzed: 08/13/20 22:33

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name: Lab Control Sample
Lab Code: RQ2009120-03

Instrument ID:R-MS-12
File ID:I:\ACQUDATA\msvoa12\Data\081320\P38478.D\

Analysis Method: 8260C
Analysis Lot:690913

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ2009120-04	I:\ACQUDATA\msvoa12\Data\081320\P38481.D\	08/13/20 23:39
Trip Blank 1	R2007055-007	I:\ACQUDATA\msvoa12\Data\081320\P38488.D\	08/14/20 02:12
Trip Blank 2	R2007055-015	I:\ACQUDATA\msvoa12\Data\081320\P38489.D\	08/14/20 02:34
MW-8	R2007055-001	I:\ACQUDATA\msvoa12\Data\081320\P38490.D\	08/14/20 02:56
MW-8A	R2007055-002	I:\ACQUDATA\msvoa12\Data\081320\P38491.D\	08/14/20 03:18
MW-9	R2007055-003	I:\ACQUDATA\msvoa12\Data\081320\P38492.D\	08/14/20 03:40
MW-9A	R2007055-004	I:\ACQUDATA\msvoa12\Data\081320\P38493.D\	08/14/20 04:01
MW-9A Dup	R2007055-005	I:\ACQUDATA\msvoa12\Data\081320\P38494.D\	08/14/20 04:23
MW-25A	R2007055-006	I:\ACQUDATA\msvoa12\Data\081320\P38495.D\	08/14/20 04:45
MW-10	R2007055-008	I:\ACQUDATA\msvoa12\Data\081320\P38496.D\	08/14/20 05:07
MW-5R	R2007055-013	I:\ACQUDATA\msvoa12\Data\081320\P38497.D\	08/14/20 05:29
MW-11	R2007055-009	I:\ACQUDATA\msvoa12\Data\081320\P38498.D\	08/14/20 05:51
MW-6	R2007055-011	I:\ACQUDATA\msvoa12\Data\081320\P38499.D\	08/14/20 06:13
MW-20A	R2007055-012	I:\ACQUDATA\msvoa12\Data\081320\P38500.D\	08/14/20 06:35
MW-13A	R2007055-010	I:\ACQUDATA\msvoa12\Data\081320\P38501.D\	08/14/20 06:57

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	08/14/20 10:32
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:	RQ2009168-03	**File ID:**	I:\ACQUDATA\msvoa12\Data\081420\P38508.D\
Analysis Method:	8260C	**Analysis Lot:**	691047
Prep Method:	EPA 5030C		

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ2009168-06	I:\ACQUDATA\msvoa12\Data\081420\P38512.D\	08/14/20 12:05
MW-6	R2007055-011	I:\ACQUDATA\msvoa12\Data\081420\P38519.D\	08/14/20 14:47
MW-5AR	R2007055-014	I:\ACQUDATA\msvoa12\Data\081420\P38520.D\	08/14/20 15:09
MW-5AR	R2007055-014	I:\ACQUDATA\msvoa12\Data\081420\P38523.D\	08/14/20 16:15

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

Service Request: R2007055
Date Analyzed: 08/13/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2009120-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	21.2	20.0	106	75-125
1,1,2,2-Tetrachloroethane	8260C	22.7	20.0	113	78-126
1,1,2-Trichloroethane	8260C	21.0	20.0	105	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	20.3	20.0	102	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	20.5	20.0	102	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	24.2	20.0	121 *	71-118
1,2,3-Trichlorobenzene	8260C	21.9	20.0	109	67-136
1,2,4-Trichlorobenzene	8260C	23.3	20.0	116	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	20.7	20.0	103	55-136
1,2-Dibromoethane	8260C	20.7	20.0	104	82-127
1,2-Dichlorobenzene	8260C	21.3	20.0	107	80-119
1,2-Dichloroethane	8260C	20.0	20.0	100	71-127
1,2-Dichloropropane	8260C	20.8	20.0	104	80-119
1,3-Dichlorobenzene	8260C	21.3	20.0	106	83-121
1,4-Dichlorobenzene	8260C	21.9	20.0	109	79-119
1,4-Dioxane	8260C	478	400	120	44-154
2-Butanone (MEK)	8260C	25.5	20.0	128	61-137
2-Hexanone	8260C	22.6	20.0	113	63-124
4-Methyl-2-pentanone	8260C	22.6	20.0	113	66-124
Acetone	8260C	21.1	20.0	106	40-161
Benzene	8260C	21.3	20.0	107	79-119
Bromochloromethane	8260C	20.0	20.0	100	81-126
Bromodichloromethane	8260C	18.5	20.0	92	81-123
Bromoform	8260C	18.3	20.0	92	65-146
Bromomethane	8260C	17.1	20.0	86	42-166
Carbon Disulfide	8260C	19.8	20.0	99	66-128
Carbon Tetrachloride	8260C	20.9	20.0	105	70-127
Chlorobenzene	8260C	20.4	20.0	102	80-121
Chloroethane	8260C	26.6	20.0	133 *	62-131
Chloroform	8260C	21.0	20.0	105	79-120
Chloromethane	8260C	24.2	20.0	121	65-135
Cyclohexane	8260C	21.1	20.0	105	69-120
Dibromochloromethane	8260C	18.7	20.0	94	72-128

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

Service Request: R2007055
Date Analyzed: 08/13/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2009120-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	24.6	20.0	123	59-155
Dichloromethane	8260C	20.5	20.0	102	73-122
Ethylbenzene	8260C	21.3	20.0	106	76-120
Isopropylbenzene (Cumene)	8260C	23.2	20.0	116	77-128
Methyl Acetate	8260C	15.6	20.0	78	61-133
Methyl tert-Butyl Ether	8260C	22.5	20.0	113	75-118
Methylcyclohexane	8260C	22.1	20.0	111	51-129
Styrene	8260C	21.8	20.0	109	80-124
Tetrachloroethene (PCE)	8260C	19.2	20.0	96	72-125
Toluene	8260C	22.6	20.0	113	79-119
Trichloroethene (TCE)	8260C	19.0	20.0	95	74-122
Trichlorofluoromethane (CFC 11)	8260C	21.9	20.0	110	71-136
Vinyl Chloride	8260C	25.5	20.0	128	74-159
cis-1,2-Dichloroethene	8260C	21.0	20.0	105	80-121
cis-1,3-Dichloropropene	8260C	19.1	20.0	95	77-122
m,p-Xylenes	8260C	44.9	40.0	112	80-126
o-Xylene	8260C	22.1	20.0	111	79-123
trans-1,2-Dichloroethene	8260C	23.7	20.0	119 *	73-118
trans-1,3-Dichloropropene	8260C	19.8	20.0	99	71-133

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

Service Request: R2007055
Date Analyzed: 08/14/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2009168-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	20.2	20.0	101	75-125
1,1,2,2-Tetrachloroethane	8260C	22.5	20.0	113	78-126
1,1,2-Trichloroethane	8260C	21.5	20.0	108	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	21.0	20.0	105	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	19.6	20.0	98	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	23.3	20.0	117	71-118
1,2,3-Trichlorobenzene	8260C	22.8	20.0	114	67-136
1,2,4-Trichlorobenzene	8260C	24.3	20.0	121	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	20.2	20.0	101	55-136
1,2-Dibromoethane	8260C	19.9	20.0	99	82-127
1,2-Dichlorobenzene	8260C	21.2	20.0	106	80-119
1,2-Dichloroethane	8260C	19.4	20.0	97	71-127
1,2-Dichloropropane	8260C	20.7	20.0	103	80-119
1,3-Dichlorobenzene	8260C	22.2	20.0	111	83-121
1,4-Dichlorobenzene	8260C	22.0	20.0	110	79-119
1,4-Dioxane	8260C	434	400	109	44-154
2-Butanone (MEK)	8260C	23.8	20.0	119	61-137
2-Hexanone	8260C	23.5	20.0	117	63-124
4-Methyl-2-pentanone	8260C	24.4	20.0	122	66-124
Acetone	8260C	19.2	20.0	96	40-161
Benzene	8260C	20.8	20.0	104	79-119
Bromochloromethane	8260C	19.9	20.0	99	81-126
Bromodichloromethane	8260C	18.9	20.0	95	81-123
Bromoform	8260C	18.9	20.0	95	65-146
Bromomethane	8260C	14.5	20.0	73	42-166
Carbon Disulfide	8260C	20.4	20.0	102	66-128
Carbon Tetrachloride	8260C	20.4	20.0	102	70-127
Chlorobenzene	8260C	20.3	20.0	101	80-121
Chloroethane	8260C	25.9	20.0	129	62-131
Chloroform	8260C	19.3	20.0	97	79-120
Chloromethane	8260C	21.6	20.0	108	65-135
Cyclohexane	8260C	20.7	20.0	103	69-120
Dibromochloromethane	8260C	20.2	20.0	101	72-128

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

Service Request: R2007055
Date Analyzed: 08/14/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2009168-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	24.0	20.0	120	59-155
Dichloromethane	8260C	19.8	20.0	99	73-122
Ethylbenzene	8260C	21.8	20.0	109	76-120
Isopropylbenzene (Cumene)	8260C	23.2	20.0	116	77-128
Methyl Acetate	8260C	17.3	20.0	87	61-133
Methyl tert-Butyl Ether	8260C	21.6	20.0	108	75-118
Methylcyclohexane	8260C	22.2	20.0	111	51-129
Styrene	8260C	22.3	20.0	111	80-124
Tetrachloroethene (PCE)	8260C	20.6	20.0	103	72-125
Toluene	8260C	21.9	20.0	109	79-119
Trichloroethene (TCE)	8260C	19.0	20.0	95	74-122
Trichlorofluoromethane (CFC 11)	8260C	22.2	20.0	111	71-136
Vinyl Chloride	8260C	23.5	20.0	118	74-159
cis-1,2-Dichloroethene	8260C	20.8	20.0	104	80-121
cis-1,3-Dichloropropene	8260C	19.7	20.0	98	77-122
m,p-Xylenes	8260C	44.8	40.0	112	80-126
o-Xylene	8260C	23.1	20.0	115	79-123
trans-1,2-Dichloroethene	8260C	22.3	20.0	111	73-118
trans-1,3-Dichloropropene	8260C	20.4	20.0	102	71-133

Client: The LiRo Group **Service Request:**R2007055
Project: Buffalo China/16-344-1389 **Date Analyzed:**08/13/20 21:50

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\081320\P38476.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 690913

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.35	28323	Pass
75	95	30	60	48.46	74795	Pass
95	95	100	100	100.00	154336	Pass
96	95	5	9	6.66	10281	Pass
173	174	0	2	0.68	873	Pass
174	95	50	120	83.09	128245	Pass
175	174	5	9	7.31	9373	Pass
176	174	95	101	95.55	122539	Pass
177	176	5	9	6.38	7821	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2009120-02	I:\ACQUDATA\msvoa12\Data\081320\P38477.D\	08/13/20 22:11	
Lab Control Sample	RQ2009120-03	I:\ACQUDATA\msvoa12\Data\081320\P38478.D\	08/13/20 22:33	
Method Blank	RQ2009120-04	I:\ACQUDATA\msvoa12\Data\081320\P38481.D\	08/13/20 23:39	
Trip Blank 1	R2007055-007	I:\ACQUDATA\msvoa12\Data\081320\P38488.D\	08/14/20 02:12	
Trip Blank 2	R2007055-015	I:\ACQUDATA\msvoa12\Data\081320\P38489.D\	08/14/20 02:34	
MW-8	R2007055-001	I:\ACQUDATA\msvoa12\Data\081320\P38490.D\	08/14/20 02:56	
MW-8A	R2007055-002	I:\ACQUDATA\msvoa12\Data\081320\P38491.D\	08/14/20 03:18	
MW-9	R2007055-003	I:\ACQUDATA\msvoa12\Data\081320\P38492.D\	08/14/20 03:40	
MW-9A	R2007055-004	I:\ACQUDATA\msvoa12\Data\081320\P38493.D\	08/14/20 04:01	
MW-9A Dup	R2007055-005	I:\ACQUDATA\msvoa12\Data\081320\P38494.D\	08/14/20 04:23	
MW-25A	R2007055-006	I:\ACQUDATA\msvoa12\Data\081320\P38495.D\	08/14/20 04:45	
MW-10	R2007055-008	I:\ACQUDATA\msvoa12\Data\081320\P38496.D\	08/14/20 05:07	
MW-5R	R2007055-013	I:\ACQUDATA\msvoa12\Data\081320\P38497.D\	08/14/20 05:29	
MW-11	R2007055-009	I:\ACQUDATA\msvoa12\Data\081320\P38498.D\	08/14/20 05:51	
MW-6	R2007055-011	I:\ACQUDATA\msvoa12\Data\081320\P38499.D\	08/14/20 06:13	
MW-20A	R2007055-012	I:\ACQUDATA\msvoa12\Data\081320\P38500.D\	08/14/20 06:35	
MW-13A	R2007055-010	I:\ACQUDATA\msvoa12\Data\081320\P38501.D\	08/14/20 06:57	

Client: The LiRo Group **Service Request:**R2007055
Project: Buffalo China/16-344-1389 **Date Analyzed:**08/14/20 09:33

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\081420\P38506.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 691047

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	17.58	26353	Pass
75	95	30	60	47.15	70664	Pass
95	95	100	100	100.00	149869	Pass
96	95	5	9	7.09	10632	Pass
173	174	0	2	0.91	1115	Pass
174	95	50	120	81.31	121861	Pass
175	174	5	9	6.99	8520	Pass
176	174	95	101	99.01	120653	Pass
177	176	5	9	6.88	8300	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2009168-02	I:\ACQUDATA\msvoa12\Data\081420\P38507.D\	08/14/20 10:02	
Lab Control Sample	RQ2009168-03	I:\ACQUDATA\msvoa12\Data\081420\P38508.D\	08/14/20 10:32	
Method Blank	RQ2009168-06	I:\ACQUDATA\msvoa12\Data\081420\P38512.D\	08/14/20 12:05	
MW-6	R2007055-011	I:\ACQUDATA\msvoa12\Data\081420\P38519.D\	08/14/20 14:47	
MW-5AR	R2007055-014	I:\ACQUDATA\msvoa12\Data\081420\P38520.D\	08/14/20 15:09	
MW-5AR	R2007055-014	I:\ACQUDATA\msvoa12\Data\081420\P38523.D\	08/14/20 16:15	

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China/16-344-1389 **Date Analyzed:** 08/13/20 22:11

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

File ID: I:\ACQUDATA\msvoa12\Data\081320\P38477.D\ **Lab Code:** RQ2009120-02
Instrument ID: R-MS-12 **Analysis Lot:** 690913
Analysis Method: 8260C **Signal ID:** 1

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	230,847	11.84	480,660	6.53	440,960	9.80
	Upper Limit ==>	461,694	12.01	961,320	6.70	881,920	9.97
	Lower Limit ==>	115,424	11.67	240,330	6.36	220,480	9.63
Associated Analyses							
Lab Control Sample	RQ2009120-03	218169	11.84	486742	6.52	440072	9.80
Method Blank	RQ2009120-04	208911	11.84	461079	6.52	419556	9.80
Trip Blank 1	R2007055-007	206501	11.84	447768	6.53	412101	9.80
Trip Blank 2	R2007055-015	207104	11.84	467753	6.52	422313	9.80
MW-8	R2007055-001	209117	11.84	462172	6.52	416224	9.80
MW-8A	R2007055-002	198225	11.84	463647	6.52	422347	9.80
MW-9	R2007055-003	203617	11.84	463272	6.53	411478	9.80
MW-9A	R2007055-004	198163	11.84	458361	6.53	410512	9.80
MW-9A Dup	R2007055-005	206127	11.84	461231	6.52	415932	9.80
MW-25A	R2007055-006	205469	11.84	465262	6.53	417975	9.80
MW-10	R2007055-008	218911	11.84	481571	6.52	441593	9.80
MW-5R	R2007055-013	202994	11.84	456682	6.53	409068	9.80
MW-11	R2007055-009	208442	11.84	473727	6.53	420909	9.80
MW-6	R2007055-011	196629	11.84	446234	6.53	402546	9.80
MW-20A	R2007055-012	208317	11.84	457215	6.53	417603	9.80
MW-13A	R2007055-010	203518	11.84	445229	6.52	412740	9.80

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China/16-344-1389 **Date Analyzed:** 08/13/20 22:11

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

File ID: I:\ACQUDATA\msvoa12\Data\081320\P38477.D\ **Lab Code:** RQ2009120-02
Instrument ID: R-MS-12 **Analysis Lot:** 690913
Analysis Method: 8260C **Signal ID:** 1

		Pentafluorobenzene	
		Area	**RT**
	Result ==>	304,960	5.45
	Upper Limit ==>	609,920	5.62
	Lower Limit ==>	152,480	5.28
Associated Analyses			
Lab Control Sample	RQ2009120-03	308902	5.44
Method Blank	RQ2009120-04	292162	5.45
Trip Blank 1	R2007055-007	294012	5.46
Trip Blank 2	R2007055-015	301936	5.45
MW-8	R2007055-001	298192	5.45
MW-8A	R2007055-002	300194	5.46
MW-9	R2007055-003	293464	5.46
MW-9A	R2007055-004	295840	5.46
MW-9A Dup	R2007055-005	294634	5.45
MW-25A	R2007055-006	301133	5.46
MW-10	R2007055-008	315401	5.45
MW-5R	R2007055-013	294392	5.46
MW-11	R2007055-009	300442	5.45
MW-6	R2007055-011	291688	5.45
MW-20A	R2007055-012	296926	5.46
MW-13A	R2007055-010	290782	5.45

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China/16-344-1389 **Date Analyzed:** 08/14/20 10:02

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

File ID: I:\ACQUDATA\msvoa12\Data\081420\P38507.D\ **Lab Code:** RQ2009168-02
Instrument ID: R-MS-12 **Analysis Lot:** 691047
Analysis Method: 8260C **Signal ID:** 1

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	220,316	11.84	471,042	6.53	431,646	9.80
	Upper Limit ==>	440,632	12.01	942,084	6.70	863,292	9.97
	Lower Limit ==>	110,158	11.67	235,521	6.36	215,823	9.63
Associated Analyses							
Lab Control Sample	RQ2009168-03	212800	11.84	459244	6.53	419046	9.80
Method Blank	RQ2009168-06	209167	11.84	448556	6.52	408572	9.80
MW-6	R2007055-011	209713	11.83	471327	6.52	416867	9.80
MW-5AR	R2007055-014	205339	11.84	455513	6.53	421271	9.80
MW-5AR	R2007055-014	203445	11.84	459637	6.52	414953	9.80

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: The LiRo Group **Service Request:**R2007055
Project: Buffalo China/16-344-1389 **Date Analyzed:**08/14/20 10:02

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

File ID: I:\ACQUDATA\msvoa12\Data\081420\P38507.D\ **Lab Code:**RQ2009168-02
Instrument ID: R-MS-12 **Analysis Lot:**691047
Analysis Method: 8260C **Signal ID:**1

		Pentafluorobenzene	
		Area	**RT**
	Result ==>	300,387	5.45
	Upper Limit ==>	600,774	5.62
	Lower Limit ==>	150,194	5.28
Associated Analyses			
Lab Control Sample	RQ2009168-03	301532	5.45
Method Blank	RQ2009168-06	292789	5.45
MW-6	R2007055-011	298772	5.44
MW-5AR	R2007055-014	297327	5.46
MW-5AR	R2007055-014	299748	5.44

Raw Data

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

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Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 11:25
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-8	**Units:**	ug/L
Lab Code:	R2007055-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,1,2-Trichloroethane	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,2,3-Trichlorobenzene	5.0	U	5.0	0.25	1	08/14/20 02:56	
1,2,4-Trichlorobenzene	5.0	U	5.0	0.34	1	08/14/20 02:56	
1,2-Dibromo-3-chloropropane (DBCP)	5.0	U	5.0	0.45	1	08/14/20 02:56	
1,2-Dibromoethane	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,2-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,2-Dichloroethane	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,2-Dichloropropane	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,3-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,4-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:56	
1,4-Dioxane	100	U	100	13	1	08/14/20 02:56	
2-Butanone (MEK)	10	U	10	0.78	1	08/14/20 02:56	
2-Hexanone	10	U	10	0.20	1	08/14/20 02:56	
4-Methyl-2-pentanone	10	U	10	0.20	1	08/14/20 02:56	
Acetone	10	U	10	5.0	1	08/14/20 02:56	
Benzene	5.0	U	5.0	0.20	1	08/14/20 02:56	
Bromochloromethane	5.0	U	5.0	0.20	1	08/14/20 02:56	
Bromodichloromethane	5.0	U	5.0	0.20	1	08/14/20 02:56	
Bromoform	5.0	U	5.0	0.25	1	08/14/20 02:56	
Bromomethane	5.0	U	5.0	0.70	1	08/14/20 02:56	
Carbon Disulfide	10	U	10	0.42	1	08/14/20 02:56	
Carbon Tetrachloride	5.0	U	5.0	0.34	1	08/14/20 02:56	
Chlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:56	
Chloroethane	5.0	U	5.0	0.23	1	08/14/20 02:56	
Chloroform	5.0	U	5.0	0.24	1	08/14/20 02:56	
Chloromethane	5.0	U	5.0	0.28	1	08/14/20 02:56	
Cyclohexane	10	U	10	0.26	1	08/14/20 02:56	
Dibromochloromethane	5.0	U	5.0	0.20	1	08/14/20 02:56	
Dichlorodifluoromethane (CFC 12)	5.0	U	5.0	0.21	1	08/14/20 02:56	
Dichloromethane	5.0	U	5.0	0.65	1	08/14/20 02:56	
Ethylbenzene	5.0	U	5.0	0.20	1	08/14/20 02:56	
Isopropylbenzene (Cumene)	5.0	U	5.0	0.20	1	08/14/20 02:56	
Methyl Acetate	10	U	10	0.33	1	08/14/20 02:56	
Methyl tert-Butyl Ether	5.0	U	5.0	0.20	1	08/14/20 02:56	
Methylcyclohexane	10	U	10	0.20	1	08/14/20 02:56	
Styrene	5.0	U	5.0	0.20	1	08/14/20 02:56	
Tetrachloroethene (PCE)	5.0	U	5.0	0.21	1	08/14/20 02:56	
Toluene	**0.25**	**BJ**	5.0	0.20	1	08/14/20 02:56	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 11:25
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-8	**Units:**	ug/L
Lab Code:	R2007055-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	08/14/20 02:56	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/14/20 02:56	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/14/20 02:56	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/14/20 02:56	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/14/20 02:56	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/14/20 02:56	
o-Xylene	5.0 U	5.0	0.20	1	08/14/20 02:56	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/14/20 02:56	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/14/20 02:56	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	08/14/20 02:56	
Dibromofluoromethane	94	89 - 119	08/14/20 02:56	
Toluene-d8	102	87 - 121	08/14/20 02:56	

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 11:50
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-8A	**Units:**	ug/L
Lab Code:	R2007055-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,1,2-Trichloroethane	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,2,3-Trichlorobenzene	5.0	U	5.0	0.25	1	08/14/20 03:18	
1,2,4-Trichlorobenzene	5.0	U	5.0	0.34	1	08/14/20 03:18	
1,2-Dibromo-3-chloropropane (DBCP)	5.0	U	5.0	0.45	1	08/14/20 03:18	
1,2-Dibromoethane	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,2-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,2-Dichloroethane	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,2-Dichloropropane	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,3-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,4-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 03:18	
1,4-Dioxane	100	U	100	13	1	08/14/20 03:18	
2-Butanone (MEK)	10	U	10	0.78	1	08/14/20 03:18	
2-Hexanone	10	U	10	0.20	1	08/14/20 03:18	
4-Methyl-2-pentanone	10	U	10	0.20	1	08/14/20 03:18	
Acetone	10	U	10	5.0	1	08/14/20 03:18	
Benzene	5.0	U	5.0	0.20	1	08/14/20 03:18	
Bromochloromethane	5.0	U	5.0	0.20	1	08/14/20 03:18	
Bromodichloromethane	5.0	U	5.0	0.20	1	08/14/20 03:18	
Bromoform	5.0	U	5.0	0.25	1	08/14/20 03:18	
Bromomethane	5.0	U	5.0	0.70	1	08/14/20 03:18	
Carbon Disulfide	10	U	10	0.42	1	08/14/20 03:18	
Carbon Tetrachloride	5.0	U	5.0	0.34	1	08/14/20 03:18	
Chlorobenzene	5.0	U	5.0	0.20	1	08/14/20 03:18	
Chloroethane	5.0	U	5.0	0.23	1	08/14/20 03:18	
Chloroform	5.0	U	5.0	0.24	1	08/14/20 03:18	
Chloromethane	5.0	U	5.0	0.28	1	08/14/20 03:18	
Cyclohexane	10	U	10	0.26	1	08/14/20 03:18	
Dibromochloromethane	5.0	U	5.0	0.20	1	08/14/20 03:18	
Dichlorodifluoromethane (CFC 12)	5.0	U	5.0	0.21	1	08/14/20 03:18	
Dichloromethane	5.0	U	5.0	0.65	1	08/14/20 03:18	
Ethylbenzene	5.0	U	5.0	0.20	1	08/14/20 03:18	
Isopropylbenzene (Cumene)	5.0	U	5.0	0.20	1	08/14/20 03:18	
Methyl Acetate	10	U	10	0.33	1	08/14/20 03:18	
Methyl tert-Butyl Ether	5.0	U	5.0	0.20	1	08/14/20 03:18	
Methylcyclohexane	10	U	10	0.20	1	08/14/20 03:18	
Styrene	5.0	U	5.0	0.20	1	08/14/20 03:18	
Tetrachloroethene (PCE)	5.0	U	5.0	0.21	1	08/14/20 03:18	
Toluene	**0.24**	**BJ**	5.0	0.20	1	08/14/20 03:18	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 11:50
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-8A	**Units:**	ug/L
Lab Code:	R2007055-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	08/14/20 03:18	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/14/20 03:18	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/14/20 03:18	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/14/20 03:18	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/14/20 03:18	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/14/20 03:18	
o-Xylene	5.0 U	5.0	0.20	1	08/14/20 03:18	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/14/20 03:18	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/14/20 03:18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	08/14/20 03:18	
Dibromofluoromethane	95	89 - 119	08/14/20 03:18	
Toluene-d8	100	87 - 121	08/14/20 03:18	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 13:55
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-9	**Units:**	ug/L
Lab Code:	R2007055-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/14/20 03:40	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/14/20 03:40	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/14/20 03:40	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 03:40	
1,4-Dioxane	100 U	100	13	1	08/14/20 03:40	
2-Butanone (MEK)	10 U	10	0.78	1	08/14/20 03:40	
2-Hexanone	10 U	10	0.20	1	08/14/20 03:40	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/14/20 03:40	
Acetone	10 U	10	5.0	1	08/14/20 03:40	
Benzene	5.0 U	5.0	0.20	1	08/14/20 03:40	
Bromochloromethane	5.0 U	5.0	0.20	1	08/14/20 03:40	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/14/20 03:40	
Bromoform	5.0 U	5.0	0.25	1	08/14/20 03:40	
Bromomethane	5.0 U	5.0	0.70	1	08/14/20 03:40	
Carbon Disulfide	10 U	10	0.42	1	08/14/20 03:40	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/14/20 03:40	
Chlorobenzene	5.0 U	5.0	0.20	1	08/14/20 03:40	
Chloroethane	5.0 U	5.0	0.23	1	08/14/20 03:40	
Chloroform	5.0 U	5.0	0.24	1	08/14/20 03:40	
Chloromethane	5.0 U	5.0	0.28	1	08/14/20 03:40	
Cyclohexane	10 U	10	0.26	1	08/14/20 03:40	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/14/20 03:40	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/14/20 03:40	
Dichloromethane	5.0 U	5.0	0.65	1	08/14/20 03:40	
Ethylbenzene	5.0 U	5.0	0.20	1	08/14/20 03:40	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/14/20 03:40	
Methyl Acetate	10 U	10	0.33	1	08/14/20 03:40	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/14/20 03:40	
Methylcyclohexane	10 U	10	0.20	1	08/14/20 03:40	
Styrene	5.0 U	5.0	0.20	1	08/14/20 03:40	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/14/20 03:40	
Toluene	5.0 U	5.0	0.20	1	08/14/20 03:40	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 13:55
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-9	**Units:**	ug/L
Lab Code:	R2007055-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	08/14/20 03:40	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/14/20 03:40	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/14/20 03:40	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/14/20 03:40	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/14/20 03:40	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/14/20 03:40	
o-Xylene	5.0 U	5.0	0.20	1	08/14/20 03:40	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/14/20 03:40	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/14/20 03:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	08/14/20 03:40	
Dibromofluoromethane	92	89 - 119	08/14/20 03:40	
Toluene-d8	99	87 - 121	08/14/20 03:40	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 14:30
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-9A	**Units:**	ug/L
Lab Code:	R2007055-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,1,2-Trichloroethane	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,2,3-Trichlorobenzene	5.0	U	5.0	0.25	1	08/14/20 04:01	
1,2,4-Trichlorobenzene	5.0	U	5.0	0.34	1	08/14/20 04:01	
1,2-Dibromo-3-chloropropane (DBCP)	5.0	U	5.0	0.45	1	08/14/20 04:01	
1,2-Dibromoethane	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,2-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,2-Dichloroethane	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,2-Dichloropropane	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,3-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,4-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 04:01	
1,4-Dioxane	100	U	100	13	1	08/14/20 04:01	
2-Butanone (MEK)	10	U	10	0.78	1	08/14/20 04:01	
2-Hexanone	10	U	10	0.20	1	08/14/20 04:01	
4-Methyl-2-pentanone	10	U	10	0.20	1	08/14/20 04:01	
Acetone	10	U	10	5.0	1	08/14/20 04:01	
Benzene	5.0	U	5.0	0.20	1	08/14/20 04:01	
Bromochloromethane	5.0	U	5.0	0.20	1	08/14/20 04:01	
Bromodichloromethane	5.0	U	5.0	0.20	1	08/14/20 04:01	
Bromoform	5.0	U	5.0	0.25	1	08/14/20 04:01	
Bromomethane	5.0	U	5.0	0.70	1	08/14/20 04:01	
Carbon Disulfide	**8.4**	**J**	10	0.42	1	08/14/20 04:01	
Carbon Tetrachloride	5.0	U	5.0	0.34	1	08/14/20 04:01	
Chlorobenzene	5.0	U	5.0	0.20	1	08/14/20 04:01	
Chloroethane	5.0	U	5.0	0.23	1	08/14/20 04:01	
Chloroform	5.0	U	5.0	0.24	1	08/14/20 04:01	
Chloromethane	5.0	U	5.0	0.28	1	08/14/20 04:01	
Cyclohexane	10	U	10	0.26	1	08/14/20 04:01	
Dibromochloromethane	5.0	U	5.0	0.20	1	08/14/20 04:01	
Dichlorodifluoromethane (CFC 12)	5.0	U	5.0	0.21	1	08/14/20 04:01	
Dichloromethane	5.0	U	5.0	0.65	1	08/14/20 04:01	
Ethylbenzene	5.0	U	5.0	0.20	1	08/14/20 04:01	
Isopropylbenzene (Cumene)	5.0	U	5.0	0.20	1	08/14/20 04:01	
Methyl Acetate	10	U	10	0.33	1	08/14/20 04:01	
Methyl tert-Butyl Ether	5.0	U	5.0	0.20	1	08/14/20 04:01	
Methylcyclohexane	10	U	10	0.20	1	08/14/20 04:01	
Styrene	5.0	U	5.0	0.20	1	08/14/20 04:01	
Tetrachloroethene (PCE)	5.0	U	5.0	0.21	1	08/14/20 04:01	
Toluene	**0.21**	**BJ**	5.0	0.20	1	08/14/20 04:01	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 14:30
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-9A	**Units:**	ug/L
Lab Code:	R2007055-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	08/14/20 04:01	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/14/20 04:01	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/14/20 04:01	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/14/20 04:01	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/14/20 04:01	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/14/20 04:01	
o-Xylene	5.0 U	5.0	0.20	1	08/14/20 04:01	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/14/20 04:01	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/14/20 04:01	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	08/14/20 04:01	
Dibromofluoromethane	94	89 - 119	08/14/20 04:01	
Toluene-d8	100	87 - 121	08/14/20 04:01	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 14:35
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-9A Dup	**Units:**	ug/L
Lab Code:	R2007055-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.20	1	08/14/20 04:23	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.20	1	08/14/20 04:23	
1,1,2-Trichloroethane	5.0	U	5.0	0.20	1	08/14/20 04:23	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.20	1	08/14/20 04:23	
1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	1	08/14/20 04:23	
1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.20	1	08/14/20 04:23	
1,2,3-Trichlorobenzene	5.0	U	5.0	0.25	1	08/14/20 04:23	
1,2,4-Trichlorobenzene	5.0	U	5.0	0.34	1	08/14/20 04:23	
1,2-Dibromo-3-chloropropane (DBCP)	5.0	U	5.0	0.45	1	08/14/20 04:23	
1,2-Dibromoethane	5.0	U	5.0	0.20	1	08/14/20 04:23	
1,2-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 04:23	
1,2-Dichloroethane	5.0	U	5.0	0.20	1	08/14/20 04:23	
1,2-Dichloropropane	5.0	U	5.0	0.20	1	08/14/20 04:23	
1,3-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 04:23	
1,4-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 04:23	
1,4-Dioxane	100	U	100	13	1	08/14/20 04:23	
2-Butanone (MEK)	10	U	10	0.78	1	08/14/20 04:23	
2-Hexanone	10	U	10	0.20	1	08/14/20 04:23	
4-Methyl-2-pentanone	10	U	10	0.20	1	08/14/20 04:23	
Acetone	10	U	10	5.0	1	08/14/20 04:23	
Benzene	5.0	U	5.0	0.20	1	08/14/20 04:23	
Bromochloromethane	5.0	U	5.0	0.20	1	08/14/20 04:23	
Bromodichloromethane	5.0	U	5.0	0.20	1	08/14/20 04:23	
Bromoform	5.0	U	5.0	0.25	1	08/14/20 04:23	
Bromomethane	5.0	U	5.0	0.70	1	08/14/20 04:23	
Carbon Disulfide	**5.8**	**J**	10	0.42	1	08/14/20 04:23	
Carbon Tetrachloride	5.0	U	5.0	0.34	1	08/14/20 04:23	
Chlorobenzene	5.0	U	5.0	0.20	1	08/14/20 04:23	
Chloroethane	5.0	U	5.0	0.23	1	08/14/20 04:23	
Chloroform	5.0	U	5.0	0.24	1	08/14/20 04:23	
Chloromethane	5.0	U	5.0	0.28	1	08/14/20 04:23	
Cyclohexane	10	U	10	0.26	1	08/14/20 04:23	
Dibromochloromethane	5.0	U	5.0	0.20	1	08/14/20 04:23	
Dichlorodifluoromethane (CFC 12)	5.0	U	5.0	0.21	1	08/14/20 04:23	
Dichloromethane	5.0	U	5.0	0.65	1	08/14/20 04:23	
Ethylbenzene	5.0	U	5.0	0.20	1	08/14/20 04:23	
Isopropylbenzene (Cumene)	5.0	U	5.0	0.20	1	08/14/20 04:23	
Methyl Acetate	10	U	10	0.33	1	08/14/20 04:23	
Methyl tert-Butyl Ether	5.0	U	5.0	0.20	1	08/14/20 04:23	
Methylcyclohexane	10	U	10	0.20	1	08/14/20 04:23	
Styrene	5.0	U	5.0	0.20	1	08/14/20 04:23	
Tetrachloroethene (PCE)	5.0	U	5.0	0.21	1	08/14/20 04:23	
Toluene	5.0	U	5.0	0.20	1	08/14/20 04:23	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 14:35
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-9A Dup	**Units:**	ug/L
Lab Code:	R2007055-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	08/14/20 04:23	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/14/20 04:23	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/14/20 04:23	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/14/20 04:23	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/14/20 04:23	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/14/20 04:23	
o-Xylene	5.0 U	5.0	0.20	1	08/14/20 04:23	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/14/20 04:23	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/14/20 04:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	08/14/20 04:23	
Dibromofluoromethane	93	89 - 119	08/14/20 04:23	
Toluene-d8	100	87 - 121	08/14/20 04:23	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 15:45
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-25A	**Units:**	ug/L
Lab Code:	R2007055-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/14/20 04:45	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/14/20 04:45	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/14/20 04:45	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 04:45	
1,4-Dioxane	100 U	100	13	1	08/14/20 04:45	
2-Butanone (MEK)	10 U	10	0.78	1	08/14/20 04:45	
2-Hexanone	10 U	10	0.20	1	08/14/20 04:45	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/14/20 04:45	
Acetone	10 U	10	5.0	1	08/14/20 04:45	
Benzene	5.0 U	5.0	0.20	1	08/14/20 04:45	
Bromochloromethane	5.0 U	5.0	0.20	1	08/14/20 04:45	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/14/20 04:45	
Bromoform	5.0 U	5.0	0.25	1	08/14/20 04:45	
Bromomethane	5.0 U	5.0	0.70	1	08/14/20 04:45	
Carbon Disulfide	10 U	10	0.42	1	08/14/20 04:45	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/14/20 04:45	
Chlorobenzene	5.0 U	5.0	0.20	1	08/14/20 04:45	
Chloroethane	5.0 U	5.0	0.23	1	08/14/20 04:45	
Chloroform	5.0 U	5.0	0.24	1	08/14/20 04:45	
Chloromethane	5.0 U	5.0	0.28	1	08/14/20 04:45	
Cyclohexane	10 U	10	0.26	1	08/14/20 04:45	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/14/20 04:45	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/14/20 04:45	
Dichloromethane	5.0 U	5.0	0.65	1	08/14/20 04:45	
Ethylbenzene	5.0 U	5.0	0.20	1	08/14/20 04:45	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/14/20 04:45	
Methyl Acetate	10 U	10	0.33	1	08/14/20 04:45	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/14/20 04:45	
Methylcyclohexane	10 U	10	0.20	1	08/14/20 04:45	
Styrene	5.0 U	5.0	0.20	1	08/14/20 04:45	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/14/20 04:45	
Toluene	5.0 U	5.0	0.20	1	08/14/20 04:45	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20 15:45
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	MW-25A	**Units:**	ug/L
Lab Code:	R2007055-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**0.29**	**J**	5.0	0.20	1	08/14/20 04:45	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	08/14/20 04:45	
Vinyl Chloride	5.0	U	5.0	0.20	1	08/14/20 04:45	
cis-1,2-Dichloroethene	5.0	U	5.0	0.23	1	08/14/20 04:45	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	08/14/20 04:45	
m,p-Xylenes	5.0	U	5.0	0.20	1	08/14/20 04:45	
o-Xylene	5.0	U	5.0	0.20	1	08/14/20 04:45	
trans-1,2-Dichloroethene	5.0	U	5.0	0.20	1	08/14/20 04:45	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	08/14/20 04:45	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	08/14/20 04:45	
Dibromofluoromethane	91	89 - 119	08/14/20 04:45	
Toluene-d8	98	87 - 121	08/14/20 04:45	

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	Trip Blank 1	**Units:**	ug/L
Lab Code:	R2007055-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,1,2-Trichloroethane	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,2,3-Trichlorobenzene	5.0	U	5.0	0.25	1	08/14/20 02:12	
1,2,4-Trichlorobenzene	5.0	U	5.0	0.34	1	08/14/20 02:12	
1,2-Dibromo-3-chloropropane (DBCP)	5.0	U	5.0	0.45	1	08/14/20 02:12	
1,2-Dibromoethane	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,2-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,2-Dichloroethane	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,2-Dichloropropane	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,3-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,4-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:12	
1,4-Dioxane	100	U	100	13	1	08/14/20 02:12	
2-Butanone (MEK)	10	U	10	0.78	1	08/14/20 02:12	
2-Hexanone	10	U	10	0.20	1	08/14/20 02:12	
4-Methyl-2-pentanone	10	U	10	0.20	1	08/14/20 02:12	
Acetone	10	U	10	5.0	1	08/14/20 02:12	
Benzene	5.0	U	5.0	0.20	1	08/14/20 02:12	
Bromochloromethane	5.0	U	5.0	0.20	1	08/14/20 02:12	
Bromodichloromethane	5.0	U	5.0	0.20	1	08/14/20 02:12	
Bromoform	5.0	U	5.0	0.25	1	08/14/20 02:12	
Bromomethane	5.0	U	5.0	0.70	1	08/14/20 02:12	
Carbon Disulfide	10	U	10	0.42	1	08/14/20 02:12	
Carbon Tetrachloride	5.0	U	5.0	0.34	1	08/14/20 02:12	
Chlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:12	
Chloroethane	5.0	U	5.0	0.23	1	08/14/20 02:12	
Chloroform	5.0	U	5.0	0.24	1	08/14/20 02:12	
Chloromethane	5.0	U	5.0	0.28	1	08/14/20 02:12	
Cyclohexane	10	U	10	0.26	1	08/14/20 02:12	
Dibromochloromethane	5.0	U	5.0	0.20	1	08/14/20 02:12	
Dichlorodifluoromethane (CFC 12)	5.0	U	5.0	0.21	1	08/14/20 02:12	
Dichloromethane	5.0	U	5.0	0.65	1	08/14/20 02:12	
Ethylbenzene	5.0	U	5.0	0.20	1	08/14/20 02:12	
Isopropylbenzene (Cumene)	5.0	U	5.0	0.20	1	08/14/20 02:12	
Methyl Acetate	10	U	10	0.33	1	08/14/20 02:12	
Methyl tert-Butyl Ether	5.0	U	5.0	0.20	1	08/14/20 02:12	
Methylcyclohexane	10	U	10	0.20	1	08/14/20 02:12	
Styrene	5.0	U	5.0	0.20	1	08/14/20 02:12	
Tetrachloroethene (PCE)	5.0	U	5.0	0.21	1	08/14/20 02:12	
Toluene	**0.26**	**BJ**	5.0	0.20	1	08/14/20 02:12	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/05/20
Sample Matrix:	Water	**Date Received:**	08/06/20 10:10
Sample Name:	Trip Blank 1	**Units:**	ug/L
Lab Code:	R2007055-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	08/14/20 02:12	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/14/20 02:12	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/14/20 02:12	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/14/20 02:12	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/14/20 02:12	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/14/20 02:12	
o-Xylene	5.0 U	5.0	0.20	1	08/14/20 02:12	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/14/20 02:12	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/14/20 02:12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	08/14/20 02:12	
Dibromofluoromethane	93	89 - 119	08/14/20 02:12	
Toluene-d8	102	87 - 121	08/14/20 02:12	

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 08:50
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-10	**Units:**	ug/L
Lab Code:	R2007055-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/14/20 05:07	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/14/20 05:07	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/14/20 05:07	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/14/20 05:07	
1,4-Dichlorobenzene	**3.0 J**	5.0	0.20	1	08/14/20 05:07	
1,4-Dioxane	100 U	100	13	1	08/14/20 05:07	
2-Butanone (MEK)	**1.9 J**	10	0.78	1	08/14/20 05:07	
2-Hexanone	10 U	10	0.20	1	08/14/20 05:07	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/14/20 05:07	
Acetone	**8.9 J**	10	5.0	1	08/14/20 05:07	
Benzene	5.0 U	5.0	0.20	1	08/14/20 05:07	
Bromochloromethane	5.0 U	5.0	0.20	1	08/14/20 05:07	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/14/20 05:07	
Bromoform	5.0 U	5.0	0.25	1	08/14/20 05:07	
Bromomethane	5.0 U	5.0	0.70	1	08/14/20 05:07	
Carbon Disulfide	**2.8 J**	10	0.42	1	08/14/20 05:07	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/14/20 05:07	
Chlorobenzene	5.0 U	5.0	0.20	1	08/14/20 05:07	
Chloroethane	5.0 U	5.0	0.23	1	08/14/20 05:07	
Chloroform	5.0 U	5.0	0.24	1	08/14/20 05:07	
Chloromethane	5.0 U	5.0	0.28	1	08/14/20 05:07	
Cyclohexane	10 U	10	0.26	1	08/14/20 05:07	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/14/20 05:07	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/14/20 05:07	
Dichloromethane	5.0 U	5.0	0.65	1	08/14/20 05:07	
Ethylbenzene	5.0 U	5.0	0.20	1	08/14/20 05:07	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/14/20 05:07	
Methyl Acetate	10 U	10	0.33	1	08/14/20 05:07	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/14/20 05:07	
Methylcyclohexane	10 U	10	0.20	1	08/14/20 05:07	
Styrene	5.0 U	5.0	0.20	1	08/14/20 05:07	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/14/20 05:07	
Toluene	**83**	5.0	0.20	1	08/14/20 05:07	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 08:50
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-10	**Units:**	ug/L
Lab Code:	R2007055-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	08/14/20 05:07	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/14/20 05:07	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/14/20 05:07	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/14/20 05:07	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/14/20 05:07	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/14/20 05:07	
o-Xylene	5.0 U	5.0	0.20	1	08/14/20 05:07	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/14/20 05:07	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/14/20 05:07	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	08/14/20 05:07	
Dibromofluoromethane	92	89 - 119	08/14/20 05:07	
Toluene-d8	100	87 - 121	08/14/20 05:07	

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 09:45
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-11	**Units:**	ug/L
Lab Code:	R2007055-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	50 U	50	2.0	10	08/14/20 05:51	
1,1,2,2-Tetrachloroethane	50 U	50	2.0	10	08/14/20 05:51	
1,1,2-Trichloroethane	50 U	50	2.0	10	08/14/20 05:51	
1,1,2-Trichloro-1,2,2-trifluoroethane	50 U	50	2.0	10	08/14/20 05:51	
1,1-Dichloroethane (1,1-DCA)	50 U	50	2.0	10	08/14/20 05:51	
1,1-Dichloroethene (1,1-DCE)	50 U	50	2.0	10	08/14/20 05:51	
1,2,3-Trichlorobenzene	50 U	50	2.5	10	08/14/20 05:51	
1,2,4-Trichlorobenzene	50 U	50	3.4	10	08/14/20 05:51	
1,2-Dibromo-3-chloropropane (DBCP)	50 U	50	4.5	10	08/14/20 05:51	
1,2-Dibromoethane	50 U	50	2.0	10	08/14/20 05:51	
1,2-Dichlorobenzene	50 U	50	2.0	10	08/14/20 05:51	
1,2-Dichloroethane	50 U	50	2.0	10	08/14/20 05:51	
1,2-Dichloropropane	50 U	50	2.0	10	08/14/20 05:51	
1,3-Dichlorobenzene	50 U	50	2.0	10	08/14/20 05:51	
1,4-Dichlorobenzene	50 U	50	2.0	10	08/14/20 05:51	
1,4-Dioxane	1000 U	1000	130	10	08/14/20 05:51	
2-Butanone (MEK)	100 U	100	7.8	10	08/14/20 05:51	
2-Hexanone	100 U	100	2.0	10	08/14/20 05:51	
4-Methyl-2-pentanone	100 U	100	2.0	10	08/14/20 05:51	
Acetone	100 U	100	50	10	08/14/20 05:51	
Benzene	50 U	50	2.0	10	08/14/20 05:51	
Bromochloromethane	50 U	50	2.0	10	08/14/20 05:51	
Bromodichloromethane	50 U	50	2.0	10	08/14/20 05:51	
Bromoform	50 U	50	2.5	10	08/14/20 05:51	
Bromomethane	50 U	50	7.0	10	08/14/20 05:51	
Carbon Disulfide	100 U	100	4.2	10	08/14/20 05:51	
Carbon Tetrachloride	50 U	50	3.4	10	08/14/20 05:51	
Chlorobenzene	50 U	50	2.0	10	08/14/20 05:51	
Chloroethane	50 U	50	2.3	10	08/14/20 05:51	
Chloroform	**4.4 J**	50	2.4	10	08/14/20 05:51	
Chloromethane	50 U	50	2.8	10	08/14/20 05:51	
Cyclohexane	100 U	100	2.6	10	08/14/20 05:51	
Dibromochloromethane	50 U	50	2.0	10	08/14/20 05:51	
Dichlorodifluoromethane (CFC 12)	50 U	50	2.1	10	08/14/20 05:51	
Dichloromethane	50 U	50	6.5	10	08/14/20 05:51	
Ethylbenzene	50 U	50	2.0	10	08/14/20 05:51	
Isopropylbenzene (Cumene)	50 U	50	2.0	10	08/14/20 05:51	
Methyl Acetate	100 U	100	3.3	10	08/14/20 05:51	
Methyl tert-Butyl Ether	50 U	50	2.0	10	08/14/20 05:51	
Methylcyclohexane	100 U	100	2.0	10	08/14/20 05:51	
Styrene	50 U	50	2.0	10	08/14/20 05:51	
Tetrachloroethene (PCE)	50 U	50	2.1	10	08/14/20 05:51	
Toluene	50 U	50	2.0	10	08/14/20 05:51	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 09:45
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-11	**Units:**	ug/L
Lab Code:	R2007055-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**95**		50	2.0	10	08/14/20 05:51	
Trichlorofluoromethane (CFC 11)	50	U	50	2.4	10	08/14/20 05:51	
Vinyl Chloride	50	U	50	2.0	10	08/14/20 05:51	
cis-1,2-Dichloroethene	**150**		50	2.3	10	08/14/20 05:51	
cis-1,3-Dichloropropene	50	U	50	2.0	10	08/14/20 05:51	
m,p-Xylenes	50	U	50	2.0	10	08/14/20 05:51	
o-Xylene	50	U	50	2.0	10	08/14/20 05:51	
trans-1,2-Dichloroethene	**2.5**	**J**	50	2.0	10	08/14/20 05:51	
trans-1,3-Dichloropropene	50	U	50	2.3	10	08/14/20 05:51	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	08/14/20 05:51	
Dibromofluoromethane	93	89 - 119	08/14/20 05:51	
Toluene-d8	100	87 - 121	08/14/20 05:51	

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 10:55
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-13A	**Units:**	ug/L
Lab Code:	R2007055-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	250	U	250	10	50	08/14/20 06:57	
1,1,2,2-Tetrachloroethane	**14**	**J**	250	10	50	08/14/20 06:57	
1,1,2-Trichloroethane	250	U	250	10	50	08/14/20 06:57	
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	10	50	08/14/20 06:57	
1,1-Dichloroethane (1,1-DCA)	250	U	250	10	50	08/14/20 06:57	
1,1-Dichloroethene (1,1-DCE)	250	U	250	10	50	08/14/20 06:57	
1,2,3-Trichlorobenzene	250	U	250	13	50	08/14/20 06:57	
1,2,4-Trichlorobenzene	250	U	250	17	50	08/14/20 06:57	
1,2-Dibromo-3-chloropropane (DBCP)	250	U	250	23	50	08/14/20 06:57	
1,2-Dibromoethane	250	U	250	10	50	08/14/20 06:57	
1,2-Dichlorobenzene	250	U	250	10	50	08/14/20 06:57	
1,2-Dichloroethane	250	U	250	10	50	08/14/20 06:57	
1,2-Dichloropropane	250	U	250	10	50	08/14/20 06:57	
1,3-Dichlorobenzene	250	U	250	10	50	08/14/20 06:57	
1,4-Dichlorobenzene	250	U	250	10	50	08/14/20 06:57	
1,4-Dioxane	5000	U	5000	650	50	08/14/20 06:57	
2-Butanone (MEK)	500	U	500	39	50	08/14/20 06:57	
2-Hexanone	500	U	500	10	50	08/14/20 06:57	
4-Methyl-2-pentanone	500	U	500	10	50	08/14/20 06:57	
Acetone	500	U	500	250	50	08/14/20 06:57	
Benzene	250	U	250	10	50	08/14/20 06:57	
Bromochloromethane	250	U	250	10	50	08/14/20 06:57	
Bromodichloromethane	250	U	250	10	50	08/14/20 06:57	
Bromoform	250	U	250	13	50	08/14/20 06:57	
Bromomethane	250	U	250	35	50	08/14/20 06:57	
Carbon Disulfide	500	U	500	21	50	08/14/20 06:57	
Carbon Tetrachloride	250	U	250	17	50	08/14/20 06:57	
Chlorobenzene	250	U	250	10	50	08/14/20 06:57	
Chloroethane	250	U	250	12	50	08/14/20 06:57	
Chloroform	250	U	250	12	50	08/14/20 06:57	
Chloromethane	250	U	250	14	50	08/14/20 06:57	
Cyclohexane	500	U	500	13	50	08/14/20 06:57	
Dibromochloromethane	250	U	250	10	50	08/14/20 06:57	
Dichlorodifluoromethane (CFC 12)	250	U	250	11	50	08/14/20 06:57	
Dichloromethane	250	U	250	33	50	08/14/20 06:57	
Ethylbenzene	250	U	250	10	50	08/14/20 06:57	
Isopropylbenzene (Cumene)	250	U	250	10	50	08/14/20 06:57	
Methyl Acetate	500	U	500	17	50	08/14/20 06:57	
Methyl tert-Butyl Ether	250	U	250	10	50	08/14/20 06:57	
Methylcyclohexane	500	U	500	10	50	08/14/20 06:57	
Styrene	250	U	250	10	50	08/14/20 06:57	
Tetrachloroethene (PCE)	**19**	**J**	250	11	50	08/14/20 06:57	
Toluene	**20**	**J**	250	10	50	08/14/20 06:57	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 10:55
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-13A	**Units:**	ug/L
Lab Code:	R2007055-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**3200**		250	10	50	08/14/20 06:57	
Trichlorofluoromethane (CFC 11)	250	U	250	12	50	08/14/20 06:57	
Vinyl Chloride	**61**	**J**	250	10	50	08/14/20 06:57	
cis-1,2-Dichloroethene	**4800**		250	12	50	08/14/20 06:57	
cis-1,3-Dichloropropene	250	U	250	10	50	08/14/20 06:57	
m,p-Xylenes	250	U	250	10	50	08/14/20 06:57	
o-Xylene	250	U	250	10	50	08/14/20 06:57	
trans-1,2-Dichloroethene	**100**	**J**	250	10	50	08/14/20 06:57	
trans-1,3-Dichloropropene	250	U	250	12	50	08/14/20 06:57	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	08/14/20 06:57	
Dibromofluoromethane	97	89 - 119	08/14/20 06:57	
Toluene-d8	105	87 - 121	08/14/20 06:57	

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 11:25
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-6	**Units:**	ug/L
Lab Code:	R2007055-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	50 U	50	2.0	10	08/14/20 06:13	
1,1,2,2-Tetrachloroethane	50 U	50	2.0	10	08/14/20 06:13	
1,1,2-Trichloroethane	50 U	50	2.0	10	08/14/20 06:13	
1,1,2-Trichloro-1,2,2-trifluoroethane	50 U	50	2.0	10	08/14/20 06:13	
1,1-Dichloroethane (1,1-DCA)	50 U	50	2.0	10	08/14/20 06:13	
1,1-Dichloroethene (1,1-DCE)	**32 J**	50	2.0	10	08/14/20 06:13	
1,2,3-Trichlorobenzene	50 U	50	2.5	10	08/14/20 06:13	
1,2,4-Trichlorobenzene	50 U	50	3.4	10	08/14/20 06:13	
1,2-Dibromo-3-chloropropane (DBCP)	50 U	50	4.5	10	08/14/20 06:13	
1,2-Dibromoethane	50 U	50	2.0	10	08/14/20 06:13	
1,2-Dichlorobenzene	50 U	50	2.0	10	08/14/20 06:13	
1,2-Dichloroethane	50 U	50	2.0	10	08/14/20 06:13	
1,2-Dichloropropane	50 U	50	2.0	10	08/14/20 06:13	
1,3-Dichlorobenzene	50 U	50	2.0	10	08/14/20 06:13	
1,4-Dichlorobenzene	50 U	50	2.0	10	08/14/20 06:13	
1,4-Dioxane	1000 U	1000	130	10	08/14/20 06:13	
2-Butanone (MEK)	100 U	100	7.8	10	08/14/20 06:13	
2-Hexanone	100 U	100	2.0	10	08/14/20 06:13	
4-Methyl-2-pentanone	100 U	100	2.0	10	08/14/20 06:13	
Acetone	100 U	100	50	10	08/14/20 06:13	
Benzene	**2.0 J**	50	2.0	10	08/14/20 06:13	
Bromochloromethane	50 U	50	2.0	10	08/14/20 06:13	
Bromodichloromethane	50 U	50	2.0	10	08/14/20 06:13	
Bromoform	50 U	50	2.5	10	08/14/20 06:13	
Bromomethane	50 U	50	7.0	10	08/14/20 06:13	
Carbon Disulfide	100 U	100	4.2	10	08/14/20 06:13	
Carbon Tetrachloride	50 U	50	3.4	10	08/14/20 06:13	
Chlorobenzene	50 U	50	2.0	10	08/14/20 06:13	
Chloroethane	50 U	50	2.3	10	08/14/20 06:13	
Chloroform	50 U	50	2.4	10	08/14/20 06:13	
Chloromethane	50 U	50	2.8	10	08/14/20 06:13	
Cyclohexane	100 U	100	2.6	10	08/14/20 06:13	
Dibromochloromethane	50 U	50	2.0	10	08/14/20 06:13	
Dichlorodifluoromethane (CFC 12)	50 U	50	2.1	10	08/14/20 06:13	
Dichloromethane	50 U	50	6.5	10	08/14/20 06:13	
Ethylbenzene	50 U	50	2.0	10	08/14/20 06:13	
Isopropylbenzene (Cumene)	50 U	50	2.0	10	08/14/20 06:13	
Methyl Acetate	100 U	100	3.3	10	08/14/20 06:13	
Methyl tert-Butyl Ether	50 U	50	2.0	10	08/14/20 06:13	
Methylcyclohexane	100 U	100	2.0	10	08/14/20 06:13	
Styrene	50 U	50	2.0	10	08/14/20 06:13	
Tetrachloroethene (PCE)	50 U	50	2.1	10	08/14/20 06:13	
Toluene	50 U	50	2.0	10	08/14/20 06:13	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 11:25
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-6	**Units:**	ug/L
Lab Code:	R2007055-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**140**		50	2.0	10	08/14/20 06:13	
Trichlorofluoromethane (CFC 11)	50	U	50	2.4	10	08/14/20 06:13	
Vinyl Chloride	**570**		50	2.0	10	08/14/20 06:13	
cis-1,2-Dichloroethene	**4200**	**D**	250	12	50	08/14/20 14:47	
cis-1,3-Dichloropropene	50	U	50	2.0	10	08/14/20 06:13	
m,p-Xylenes	50	U	50	2.0	10	08/14/20 06:13	
o-Xylene	50	U	50	2.0	10	08/14/20 06:13	
trans-1,2-Dichloroethene	**19**	**J**	50	2.0	10	08/14/20 06:13	
trans-1,3-Dichloropropene	50	U	50	2.3	10	08/14/20 06:13	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	08/14/20 06:13	
Dibromofluoromethane	96	89 - 119	08/14/20 06:13	
Toluene-d8	101	87 - 121	08/14/20 06:13	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 12:00
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-20A	**Units:**	ug/L
Lab Code:	R2007055-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	50 U	50	2.0	10	08/14/20 06:35	
1,1,2,2-Tetrachloroethane	50 U	50	2.0	10	08/14/20 06:35	
1,1,2-Trichloroethane	50 U	50	2.0	10	08/14/20 06:35	
1,1,2-Trichloro-1,2,2-trifluoroethane	50 U	50	2.0	10	08/14/20 06:35	
1,1-Dichloroethane (1,1-DCA)	50 U	50	2.0	10	08/14/20 06:35	
1,1-Dichloroethene (1,1-DCE)	**3.6 J**	50	2.0	10	08/14/20 06:35	
1,2,3-Trichlorobenzene	50 U	50	2.5	10	08/14/20 06:35	
1,2,4-Trichlorobenzene	50 U	50	3.4	10	08/14/20 06:35	
1,2-Dibromo-3-chloropropane (DBCP)	50 U	50	4.5	10	08/14/20 06:35	
1,2-Dibromoethane	50 U	50	2.0	10	08/14/20 06:35	
1,2-Dichlorobenzene	50 U	50	2.0	10	08/14/20 06:35	
1,2-Dichloroethane	50 U	50	2.0	10	08/14/20 06:35	
1,2-Dichloropropane	50 U	50	2.0	10	08/14/20 06:35	
1,3-Dichlorobenzene	50 U	50	2.0	10	08/14/20 06:35	
1,4-Dichlorobenzene	50 U	50	2.0	10	08/14/20 06:35	
1,4-Dioxane	1000 U	1000	130	10	08/14/20 06:35	
2-Butanone (MEK)	100 U	100	7.8	10	08/14/20 06:35	
2-Hexanone	100 U	100	2.0	10	08/14/20 06:35	
4-Methyl-2-pentanone	100 U	100	2.0	10	08/14/20 06:35	
Acetone	100 U	100	50	10	08/14/20 06:35	
Benzene	50 U	50	2.0	10	08/14/20 06:35	
Bromochloromethane	50 U	50	2.0	10	08/14/20 06:35	
Bromodichloromethane	50 U	50	2.0	10	08/14/20 06:35	
Bromoform	50 U	50	2.5	10	08/14/20 06:35	
Bromomethane	50 U	50	7.0	10	08/14/20 06:35	
Carbon Disulfide	100 U	100	4.2	10	08/14/20 06:35	
Carbon Tetrachloride	50 U	50	3.4	10	08/14/20 06:35	
Chlorobenzene	50 U	50	2.0	10	08/14/20 06:35	
Chloroethane	50 U	50	2.3	10	08/14/20 06:35	
Chloroform	50 U	50	2.4	10	08/14/20 06:35	
Chloromethane	50 U	50	2.8	10	08/14/20 06:35	
Cyclohexane	100 U	100	2.6	10	08/14/20 06:35	
Dibromochloromethane	50 U	50	2.0	10	08/14/20 06:35	
Dichlorodifluoromethane (CFC 12)	50 U	50	2.1	10	08/14/20 06:35	
Dichloromethane	50 U	50	6.5	10	08/14/20 06:35	
Ethylbenzene	50 U	50	2.0	10	08/14/20 06:35	
Isopropylbenzene (Cumene)	50 U	50	2.0	10	08/14/20 06:35	
Methyl Acetate	100 U	100	3.3	10	08/14/20 06:35	
Methyl tert-Butyl Ether	50 U	50	2.0	10	08/14/20 06:35	
Methylcyclohexane	100 U	100	2.0	10	08/14/20 06:35	
Styrene	50 U	50	2.0	10	08/14/20 06:35	
Tetrachloroethene (PCE)	50 U	50	2.1	10	08/14/20 06:35	
Toluene	50 U	50	2.0	10	08/14/20 06:35	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 12:00
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-20A	**Units:**	ug/L
Lab Code:	R2007055-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**2.5**	**J**	50	2.0	10	08/14/20 06:35	
Trichlorofluoromethane (CFC 11)	50	U	50	2.4	10	08/14/20 06:35	
Vinyl Chloride	**300**		50	2.0	10	08/14/20 06:35	
cis-1,2-Dichloroethene	**1500**		50	2.3	10	08/14/20 06:35	
cis-1,3-Dichloropropene	50	U	50	2.0	10	08/14/20 06:35	
m,p-Xylenes	50	U	50	2.0	10	08/14/20 06:35	
o-Xylene	50	U	50	2.0	10	08/14/20 06:35	
trans-1,2-Dichloroethene	**8.1**	**J**	50	2.0	10	08/14/20 06:35	
trans-1,3-Dichloropropene	50	U	50	2.3	10	08/14/20 06:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	08/14/20 06:35	
Dibromofluoromethane	93	89 - 119	08/14/20 06:35	
Toluene-d8	102	87 - 121	08/14/20 06:35	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 13:45
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-5R	**Units:**	ug/L
Lab Code:	R2007055-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	13	U	13	0.50	2.5	08/14/20 05:29	
1,1,2,2-Tetrachloroethane	13	U	13	0.50	2.5	08/14/20 05:29	
1,1,2-Trichloroethane	13	U	13	0.50	2.5	08/14/20 05:29	
1,1,2-Trichloro-1,2,2-trifluoroethane	13	U	13	0.50	2.5	08/14/20 05:29	
1,1-Dichloroethane (1,1-DCA)	13	U	13	0.50	2.5	08/14/20 05:29	
1,1-Dichloroethene (1,1-DCE)	13	U	13	0.50	2.5	08/14/20 05:29	
1,2,3-Trichlorobenzene	13	U	13	0.63	2.5	08/14/20 05:29	
1,2,4-Trichlorobenzene	13	U	13	0.85	2.5	08/14/20 05:29	
1,2-Dibromo-3-chloropropane (DBCP)	13	U	13	1.2	2.5	08/14/20 05:29	
1,2-Dibromoethane	13	U	13	0.50	2.5	08/14/20 05:29	
1,2-Dichlorobenzene	13	U	13	0.50	2.5	08/14/20 05:29	
1,2-Dichloroethane	13	U	13	0.50	2.5	08/14/20 05:29	
1,2-Dichloropropane	13	U	13	0.50	2.5	08/14/20 05:29	
1,3-Dichlorobenzene	13	U	13	0.50	2.5	08/14/20 05:29	
1,4-Dichlorobenzene	13	U	13	0.50	2.5	08/14/20 05:29	
1,4-Dioxane	250	U	250	33	2.5	08/14/20 05:29	
2-Butanone (MEK)	25	U	25	2.0	2.5	08/14/20 05:29	
2-Hexanone	25	U	25	0.50	2.5	08/14/20 05:29	
4-Methyl-2-pentanone	25	U	25	0.50	2.5	08/14/20 05:29	
Acetone	25	U	25	13	2.5	08/14/20 05:29	
Benzene	13	U	13	0.50	2.5	08/14/20 05:29	
Bromochloromethane	13	U	13	0.50	2.5	08/14/20 05:29	
Bromodichloromethane	13	U	13	0.50	2.5	08/14/20 05:29	
Bromoform	13	U	13	0.63	2.5	08/14/20 05:29	
Bromomethane	13	U	13	1.8	2.5	08/14/20 05:29	
Carbon Disulfide	25	U	25	1.1	2.5	08/14/20 05:29	
Carbon Tetrachloride	13	U	13	0.85	2.5	08/14/20 05:29	
Chlorobenzene	13	U	13	0.50	2.5	08/14/20 05:29	
Chloroethane	13	U	13	0.58	2.5	08/14/20 05:29	
Chloroform	13	U	13	0.60	2.5	08/14/20 05:29	
Chloromethane	13	U	13	0.70	2.5	08/14/20 05:29	
Cyclohexane	25	U	25	0.65	2.5	08/14/20 05:29	
Dibromochloromethane	13	U	13	0.50	2.5	08/14/20 05:29	
Dichlorodifluoromethane (CFC 12)	13	U	13	0.53	2.5	08/14/20 05:29	
Dichloromethane	13	U	13	1.7	2.5	08/14/20 05:29	
Ethylbenzene	13	U	13	0.50	2.5	08/14/20 05:29	
Isopropylbenzene (Cumene)	13	U	13	0.50	2.5	08/14/20 05:29	
Methyl Acetate	25	U	25	0.83	2.5	08/14/20 05:29	
Methyl tert-Butyl Ether	13	U	13	0.50	2.5	08/14/20 05:29	
Methylcyclohexane	25	U	25	0.50	2.5	08/14/20 05:29	
Styrene	13	U	13	0.50	2.5	08/14/20 05:29	
Tetrachloroethene (PCE)	**1.5**	**J**	13	0.53	2.5	08/14/20 05:29	
Toluene	**0.97**	**BJ**	13	0.50	2.5	08/14/20 05:29	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 13:45
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-5R	**Units:**	ug/L
Lab Code:	R2007055-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	**460**		13	0.50	2.5	08/14/20 05:29	
Trichlorofluoromethane (CFC 11)	13	U	13	0.60	2.5	08/14/20 05:29	
Vinyl Chloride	13	U	13	0.50	2.5	08/14/20 05:29	
cis-1,2-Dichloroethene	**190**		13	0.58	2.5	08/14/20 05:29	
cis-1,3-Dichloropropene	13	U	13	0.50	2.5	08/14/20 05:29	
m,p-Xylenes	13	U	13	0.50	2.5	08/14/20 05:29	
o-Xylene	13	U	13	0.50	2.5	08/14/20 05:29	
trans-1,2-Dichloroethene	**32**		13	0.50	2.5	08/14/20 05:29	
trans-1,3-Dichloropropene	13	U	13	0.58	2.5	08/14/20 05:29	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	08/14/20 05:29	
Dibromofluoromethane	92	89 - 119	08/14/20 05:29	
Toluene-d8	100	87 - 121	08/14/20 05:29	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 14:15
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-5AR	**Units:**	ug/L
Lab Code:	R2007055-014	**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)	**2.8**	**J**	50	2.0	10	08/14/20 15:09	
1,1,2,2-Tetrachloroethane	**260**		50	2.0	10	08/14/20 15:09	
1,1,2-Trichloroethane	**31**	**J**	50	2.0	10	08/14/20 15:09	
1,1,2-Trichloro-1,2,2-trifluoroethane	50	U	50	2.0	10	08/14/20 15:09	
1,1-Dichloroethane (1,1-DCA)	50	U	50	2.0	10	08/14/20 15:09	
1,1-Dichloroethene (1,1-DCE)	**3.3**	**J**	50	2.0	10	08/14/20 15:09	
1,2,3-Trichlorobenzene	50	U	50	2.5	10	08/14/20 15:09	
1,2,4-Trichlorobenzene	50	U	50	3.4	10	08/14/20 15:09	
1,2-Dibromo-3-chloropropane (DBCP)	50	U	50	4.5	10	08/14/20 15:09	
1,2-Dibromoethane	50	U	50	2.0	10	08/14/20 15:09	
1,2-Dichlorobenzene	50	U	50	2.0	10	08/14/20 15:09	
1,2-Dichloroethane	50	U	50	2.0	10	08/14/20 15:09	
1,2-Dichloropropane	50	U	50	2.0	10	08/14/20 15:09	
1,3-Dichlorobenzene	50	U	50	2.0	10	08/14/20 15:09	
1,4-Dichlorobenzene	50	U	50	2.0	10	08/14/20 15:09	
1,4-Dioxane	1000	U	1000	130	10	08/14/20 15:09	
2-Butanone (MEK)	**63**	**J**	100	7.8	10	08/14/20 15:09	
2-Hexanone	100	U	100	2.0	10	08/14/20 15:09	
4-Methyl-2-pentanone	100	U	100	2.0	10	08/14/20 15:09	
Acetone	**500**		100	50	10	08/14/20 15:09	
Benzene	**3.3**	**J**	50	2.0	10	08/14/20 15:09	
Bromochloromethane	50	U	50	2.0	10	08/14/20 15:09	
Bromodichloromethane	50	U	50	2.0	10	08/14/20 15:09	
Bromoform	50	U	50	2.5	10	08/14/20 15:09	
Bromomethane	50	U	50	7.0	10	08/14/20 15:09	
Carbon Disulfide	**26**	**J**	100	4.2	10	08/14/20 15:09	
Carbon Tetrachloride	50	U	50	3.4	10	08/14/20 15:09	
Chlorobenzene	50	U	50	2.0	10	08/14/20 15:09	
Chloroethane	50	U	50	2.3	10	08/14/20 15:09	
Chloroform	**7.5**	**J**	50	2.4	10	08/14/20 15:09	
Chloromethane	**6.5**	**J**	50	2.8	10	08/14/20 15:09	
Cyclohexane	100	U	100	2.6	10	08/14/20 15:09	
Dibromochloromethane	50	U	50	2.0	10	08/14/20 15:09	
Dichlorodifluoromethane (CFC 12)	50	U	50	2.1	10	08/14/20 15:09	
Dichloromethane	50	U	50	6.5	10	08/14/20 15:09	
Ethylbenzene	50	U	50	2.0	10	08/14/20 15:09	
Isopropylbenzene (Cumene)	50	U	50	2.0	10	08/14/20 15:09	
Methyl Acetate	100	U	100	3.3	10	08/14/20 15:09	
Methyl tert-Butyl Ether	50	U	50	2.0	10	08/14/20 15:09	
Methylcyclohexane	100	U	100	2.0	10	08/14/20 15:09	
Styrene	50	U	50	2.0	10	08/14/20 15:09	
Tetrachloroethene (PCE)	**38**	**J**	50	2.1	10	08/14/20 15:09	
Toluene	**15**	**J**	50	2.0	10	08/14/20 15:09	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20 14:15
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	MW-5AR	**Units:**	ug/L
Lab Code:	R2007055-014	**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)	**32000**	**D**	1300	50	250	08/14/20 16:15	
Trichlorofluoromethane (CFC 11)	50	U	50	2.4	10	08/14/20 15:09	
Vinyl Chloride	**140**		50	2.0	10	08/14/20 15:09	
cis-1,2-Dichloroethene	**23000**	**D**	1300	58	250	08/14/20 16:15	
cis-1,3-Dichloropropene	50	U	50	2.0	10	08/14/20 15:09	
m,p-Xylenes	50	U	50	2.0	10	08/14/20 15:09	
o-Xylene	50	U	50	2.0	10	08/14/20 15:09	
trans-1,2-Dichloroethene	**1900**	**D**	1300	50	250	08/14/20 16:15	
trans-1,3-Dichloropropene	50	U	50	2.3	10	08/14/20 15:09	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	08/14/20 15:09	
Dibromofluoromethane	95	89 - 119	08/14/20 15:09	
Toluene-d8	101	87 - 121	08/14/20 15:09	

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	Trip Blank 2	**Units:**	ug/L
Lab Code:	R2007055-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,1,2-Trichloroethane	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,2,3-Trichlorobenzene	5.0	U	5.0	0.25	1	08/14/20 02:34	
1,2,4-Trichlorobenzene	5.0	U	5.0	0.34	1	08/14/20 02:34	
1,2-Dibromo-3-chloropropane (DBCP)	5.0	U	5.0	0.45	1	08/14/20 02:34	
1,2-Dibromoethane	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,2-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,2-Dichloroethane	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,2-Dichloropropane	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,3-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,4-Dichlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:34	
1,4-Dioxane	100	U	100	13	1	08/14/20 02:34	
2-Butanone (MEK)	10	U	10	0.78	1	08/14/20 02:34	
2-Hexanone	10	U	10	0.20	1	08/14/20 02:34	
4-Methyl-2-pentanone	10	U	10	0.20	1	08/14/20 02:34	
Acetone	10	U	10	5.0	1	08/14/20 02:34	
Benzene	5.0	U	5.0	0.20	1	08/14/20 02:34	
Bromochloromethane	5.0	U	5.0	0.20	1	08/14/20 02:34	
Bromodichloromethane	5.0	U	5.0	0.20	1	08/14/20 02:34	
Bromoform	5.0	U	5.0	0.25	1	08/14/20 02:34	
Bromomethane	5.0	U	5.0	0.70	1	08/14/20 02:34	
Carbon Disulfide	10	U	10	0.42	1	08/14/20 02:34	
Carbon Tetrachloride	5.0	U	5.0	0.34	1	08/14/20 02:34	
Chlorobenzene	5.0	U	5.0	0.20	1	08/14/20 02:34	
Chloroethane	5.0	U	5.0	0.23	1	08/14/20 02:34	
Chloroform	5.0	U	5.0	0.24	1	08/14/20 02:34	
Chloromethane	5.0	U	5.0	0.28	1	08/14/20 02:34	
Cyclohexane	10	U	10	0.26	1	08/14/20 02:34	
Dibromochloromethane	5.0	U	5.0	0.20	1	08/14/20 02:34	
Dichlorodifluoromethane (CFC 12)	5.0	U	5.0	0.21	1	08/14/20 02:34	
Dichloromethane	5.0	U	5.0	0.65	1	08/14/20 02:34	
Ethylbenzene	5.0	U	5.0	0.20	1	08/14/20 02:34	
Isopropylbenzene (Cumene)	5.0	U	5.0	0.20	1	08/14/20 02:34	
Methyl Acetate	10	U	10	0.33	1	08/14/20 02:34	
Methyl tert-Butyl Ether	5.0	U	5.0	0.20	1	08/14/20 02:34	
Methylcyclohexane	10	U	10	0.20	1	08/14/20 02:34	
Styrene	5.0	U	5.0	0.20	1	08/14/20 02:34	
Tetrachloroethene (PCE)	5.0	U	5.0	0.21	1	08/14/20 02:34	
Toluene	**0.24**	**BJ**	5.0	0.20	1	08/14/20 02:34	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/06/20
Sample Matrix:	Water	**Date Received:**	08/07/20 09:35
Sample Name:	Trip Blank 2	**Units:**	ug/L
Lab Code:	R2007055-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	08/14/20 02:34	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/14/20 02:34	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/14/20 02:34	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/14/20 02:34	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/14/20 02:34	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/14/20 02:34	
o-Xylene	5.0 U	5.0	0.20	1	08/14/20 02:34	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/14/20 02:34	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/14/20 02:34	

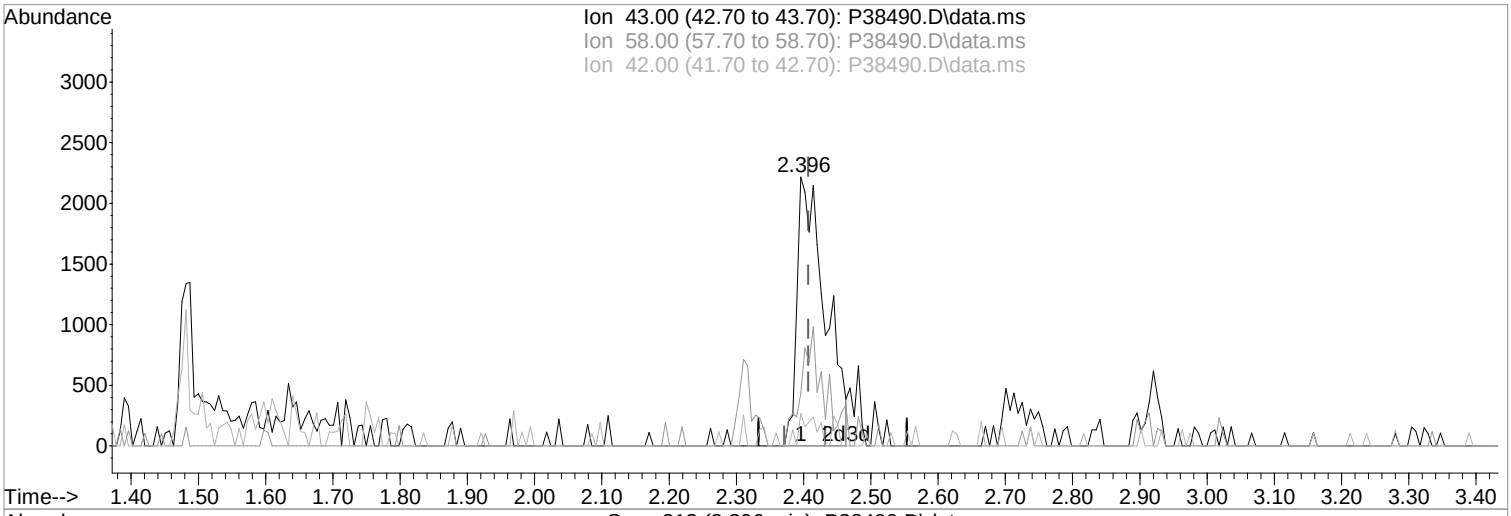
Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	08/14/20 02:34	
Dibromofluoromethane	91	89 - 119	08/14/20 02:34	
Toluene-d8	100	87 - 121	08/14/20 02:34	

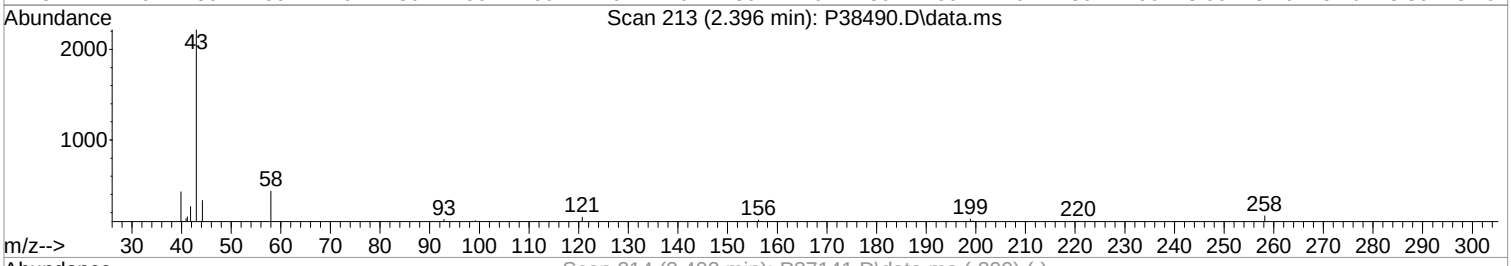
1st 08/17/20
2nd 08/18/20

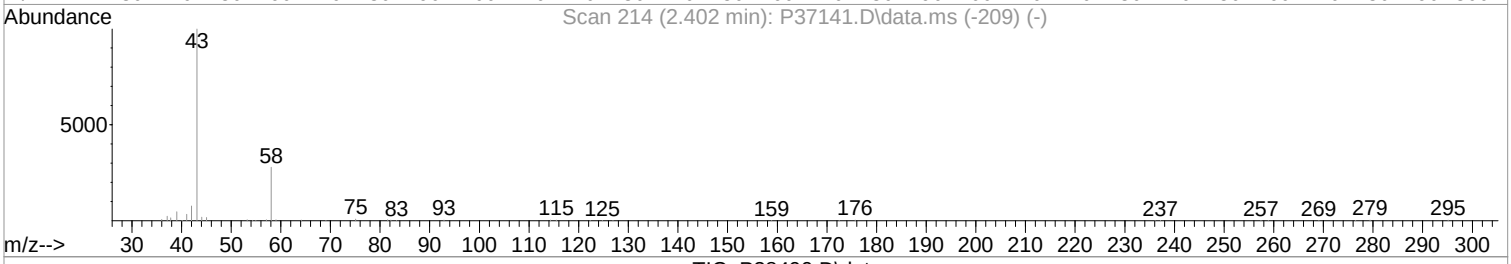
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38490.D
Acq On : 14 Aug 2020 2:56 am
Operator : K.Ruest
Sample : R2007055-001|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Aug 14 11:21:16 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38490.D\data.ms

(15) Acetone (P)

2.396min (-0.011) 1.91 ppb m

response 6420

Ion	Exp%	Act%
43.00	100	100
58.00	28.20	19.58
42.00	7.70	12.00
0.00	0.00	0.00

Manual Integration:

After

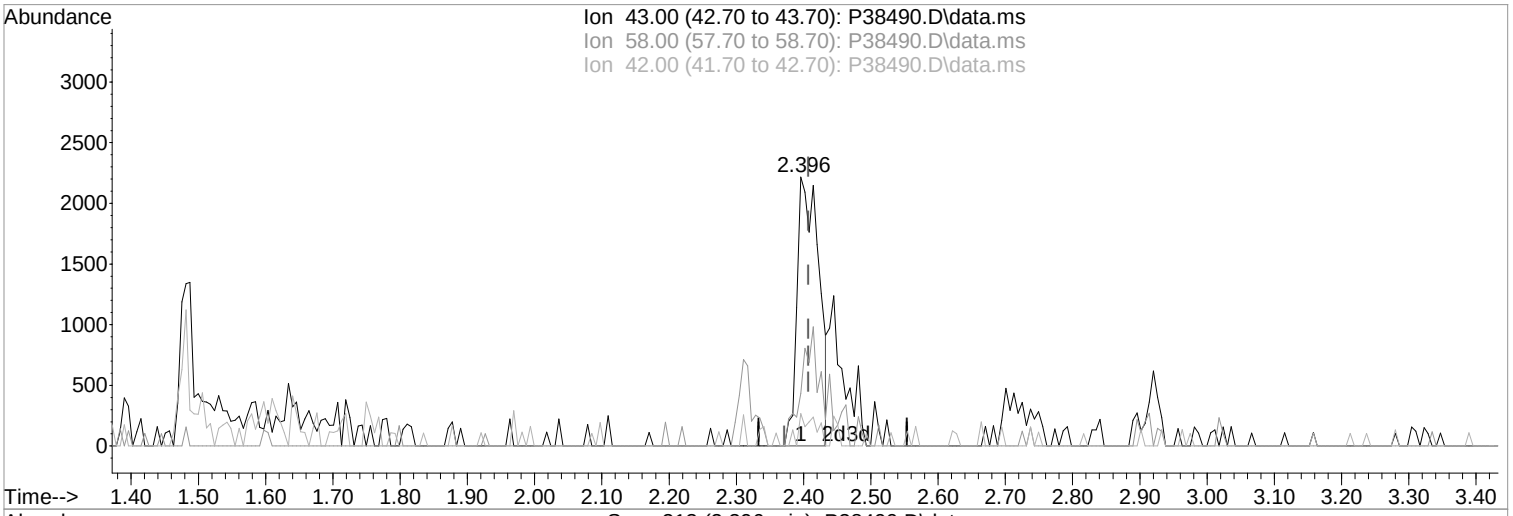
Poor integration.

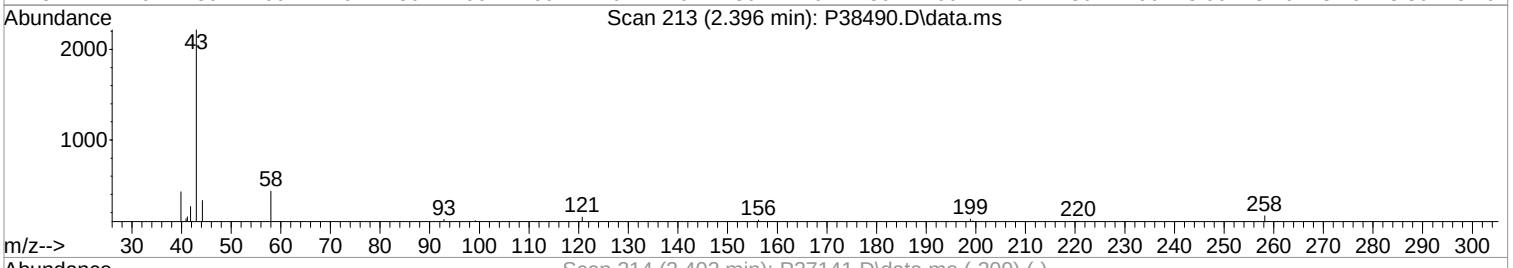
08/17/20

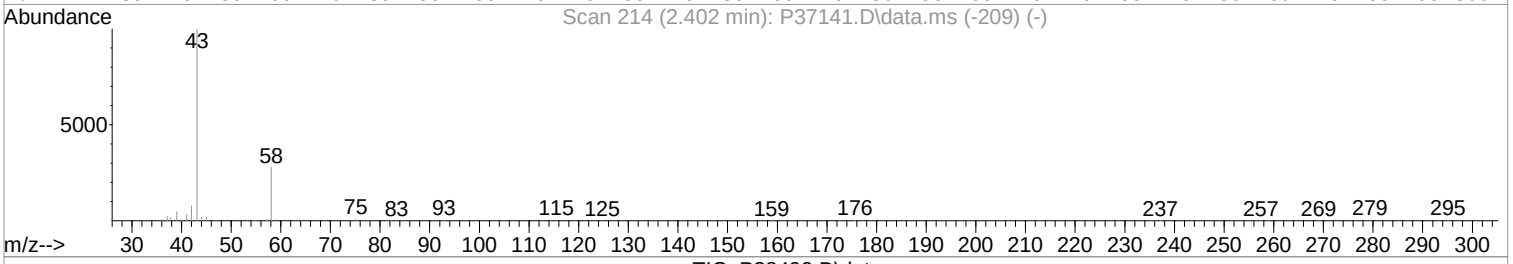
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38490.D
Acq On : 14 Aug 2020 2:56 am
Operator : K.Ruest
Sample : R2007055-001|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Aug 14 11:21:16 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38490.D\data.ms

(15) Acetone (P)

2.396min (-0.011) 1.15 ppb

response 4991

Ion	Exp%	Act%
43.00	100	100
58.00	28.20	19.58
42.00	7.70	12.00
0.00	0.00	0.00

Manual Integration:

Before

08/17/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38490.D
Acq On : 14 Aug 2020 2:56 am
Operator : K.Ruest
Sample : R2007055-001|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Aug 17 16:34:30 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

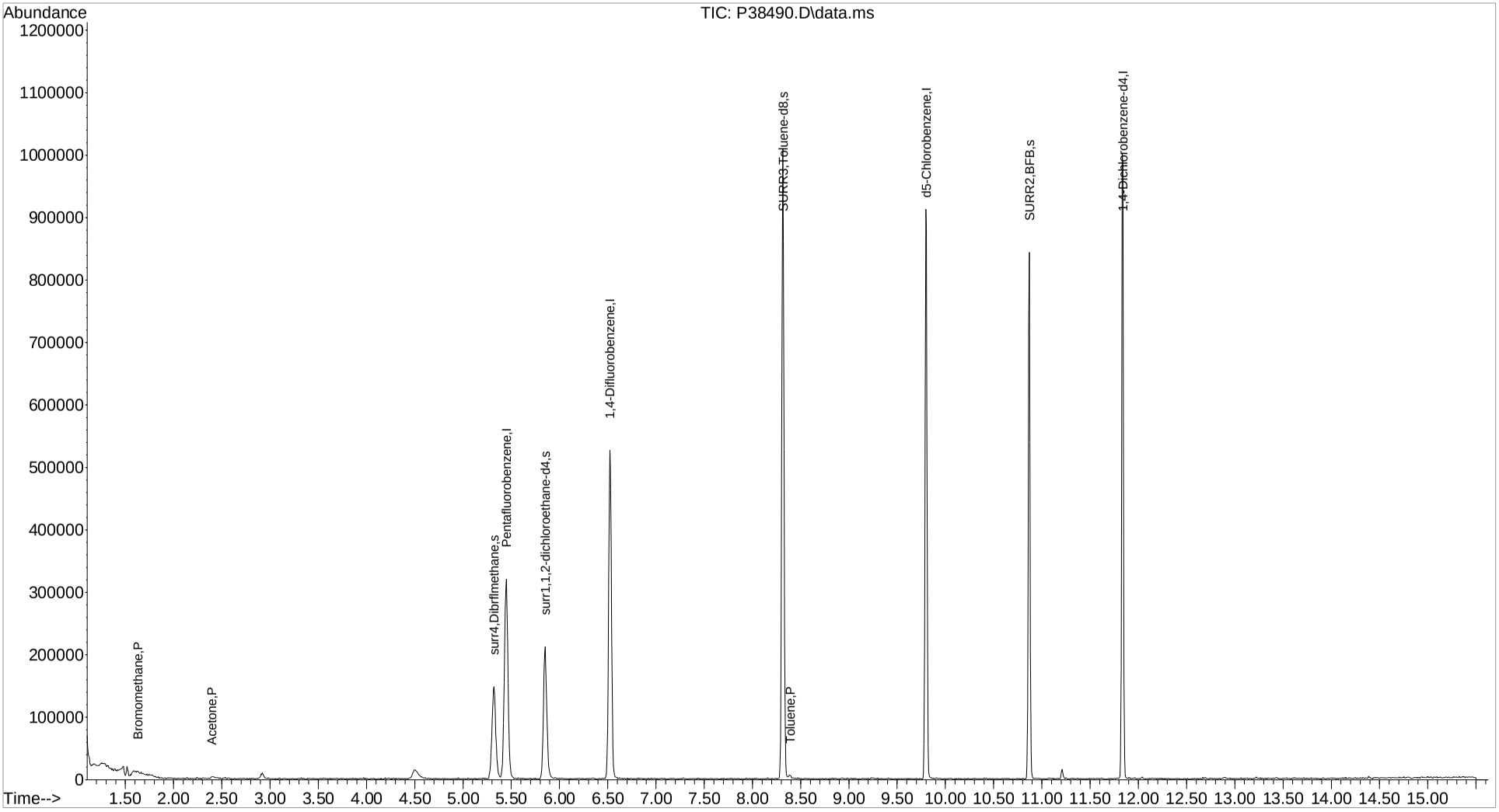
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	298192	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	462172	50.00	ppb	0.00
71) d5-Chlorobenzene	9.803	117	416224	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	209117	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.322	113	124650	46.97	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 93.94%			
48) surr1,1,2-dichloroetha...	5.853	65	179224	48.78	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 97.56%			
65) SURR3,Toluene-d8	8.315	98	629328	51.02	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.04%			
70) SURR2,BFB	10.870	95	222147	48.88	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.76%			
Target Compounds						Qvalue
5) Bromomethane	1.628	94	931	0.30	ppb	# 59
15) Acetone	2.396	43	6420m	1.91	ppb	
66) Toluene	8.389	91	3581	0.25	ppb	# 76

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

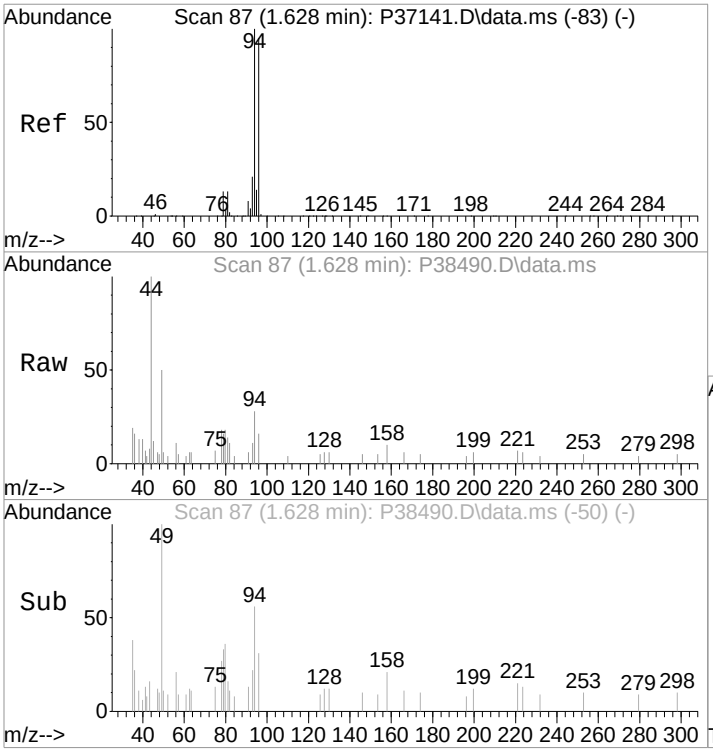
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38490.D
Acq On : 14 Aug 2020 2:56 am
Operator : K.Ruest
Sample : R2007055-001|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Aug 17 16:34:30 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



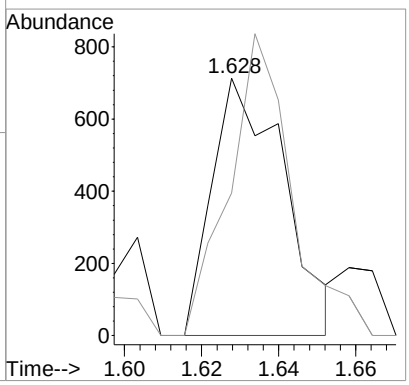
1st 08/17/20
2nd 08/18/20

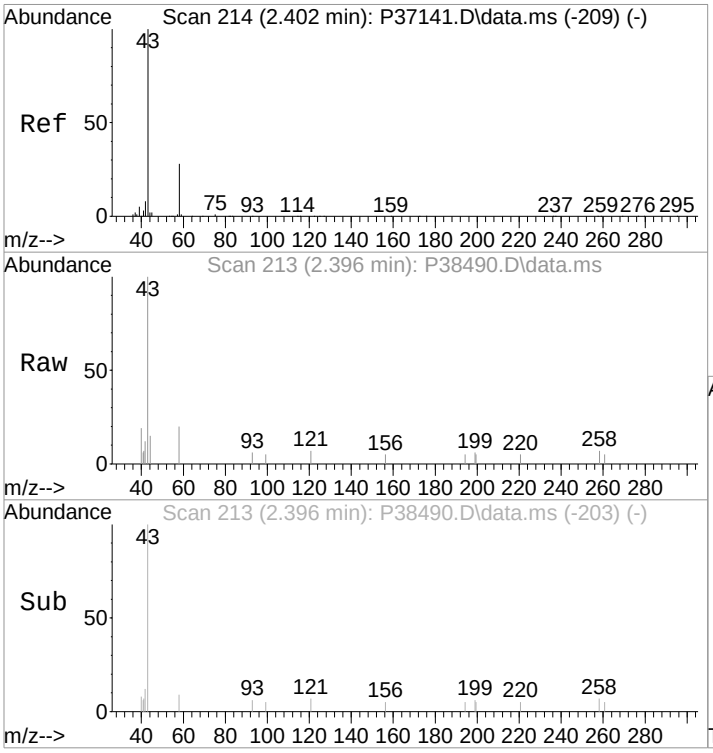


#5
Bromomethane
Concen: 0.30 ppb
RT: 1.628 min Scan# 87
Delta R.T. 0.001 min
Lab File: P38490.D
Acq: 14 Aug 2020 2:56 am

Tgt Ion: 94 Resp: 931

Ion	Ratio	Lower	Upper
94	100		
96	55.4	75.2	115.2#

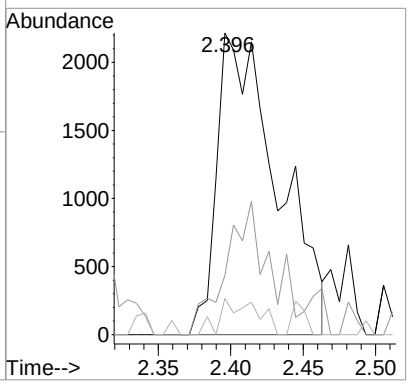


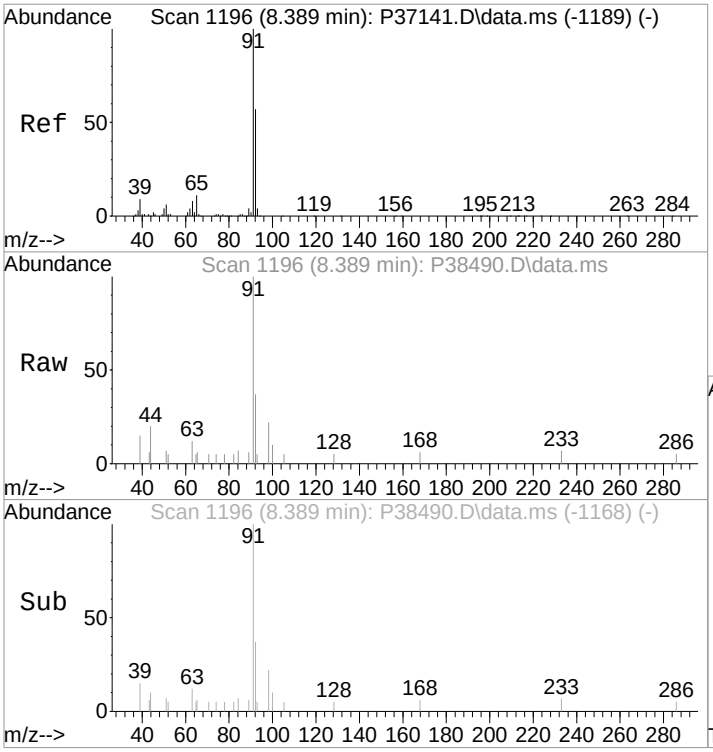


#15
Acetone
Concen: 1.91 ppb m
RT: 2.396 min Scan# 213
Delta R.T. -0.011 min
Lab File: P38490.D
Acq: 14 Aug 2020 2:56 am

Tgt Ion: 43 Resp: 6420

Ion	Ratio	Lower	Upper
43	100		
58	19.6	8.2	48.2
42	12.0	0.0	27.7

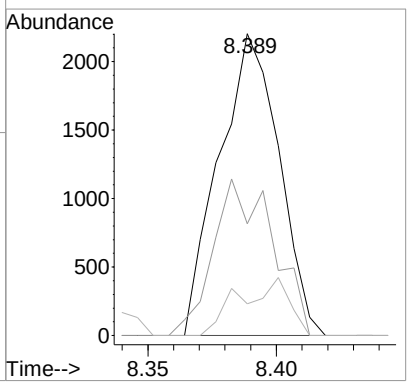




#66
Toluene
Concen: 0.25 ppb
RT: 8.389 min Scan# 1196
Delta R.T. 0.000 min
Lab File: P38490.D
Acq: 14 Aug 2020 2:56 am

Tgt Ion: 91 Resp: 3581

Ion	Ratio	Lower	Upper
91	100		
92	37.0	37.5	77.5#
65	10.6	0.0	31.3



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38491.D
Acq On : 14 Aug 2020 3:18 am
Operator : K.Ruest
Sample : R2007055-002|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Aug 17 16:36:04 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

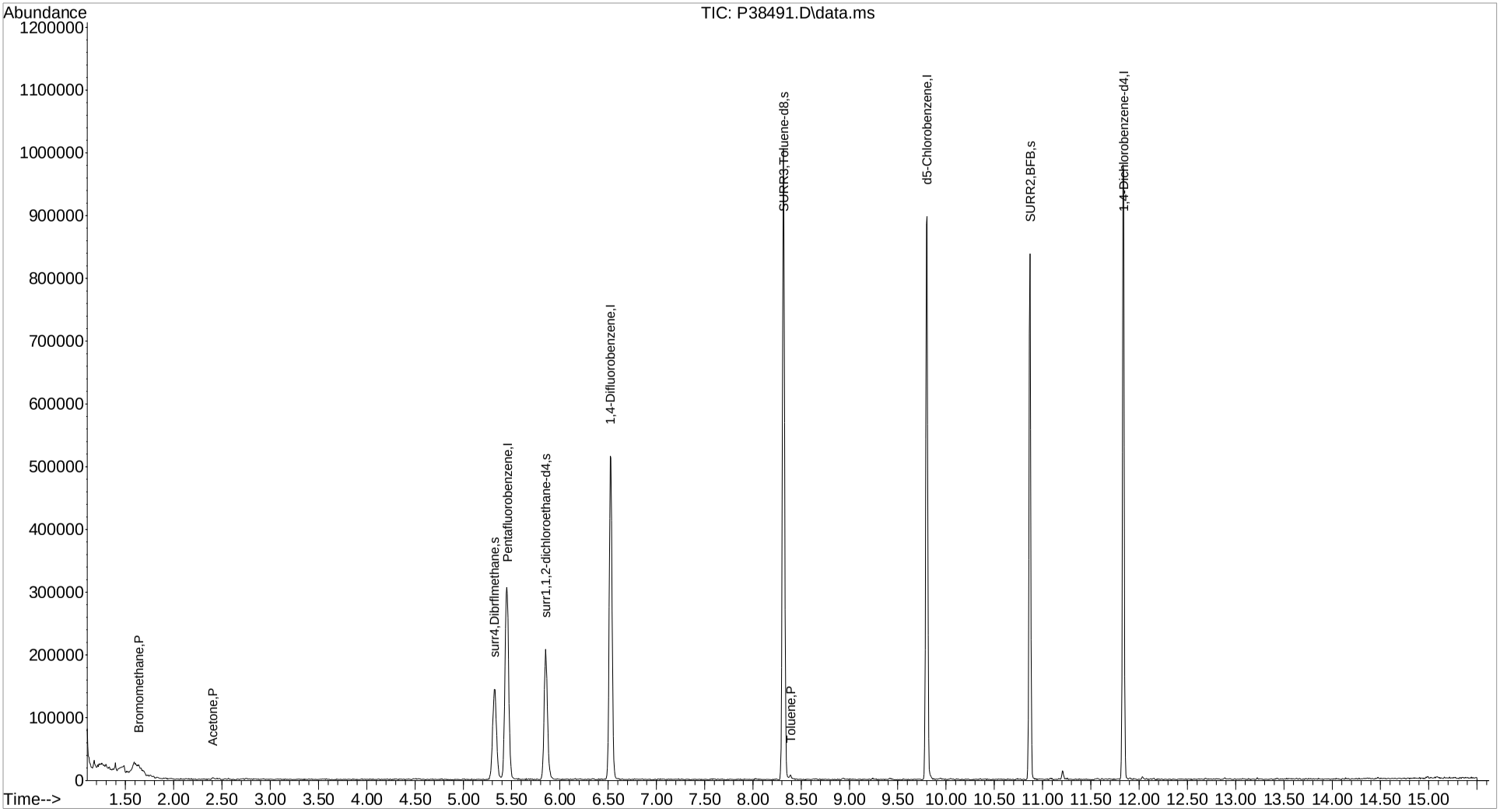
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.456	168	300194	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	463647	50.00	ppb	0.00
71) d5-Chlorobenzene	9.803	117	422347	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	198225	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.322	113	125919	47.30	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 94.60%			
48) surr1,1,2-dichloroetha...	5.852	65	175653	47.66	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 95.32%			
65) SURR3,Toluene-d8	8.315	98	617065	49.87	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.74%			
70) SURR2,BFB	10.870	95	220004	48.25	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.50%			
Target Compounds						Qvalue
5) Bromomethane	1.640	94	1284	0.41	ppb	# 73
15) Acetone	2.402	43	4387	0.82	ppb	89
66) Toluene	8.389	91	3463	0.24	ppb	98

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

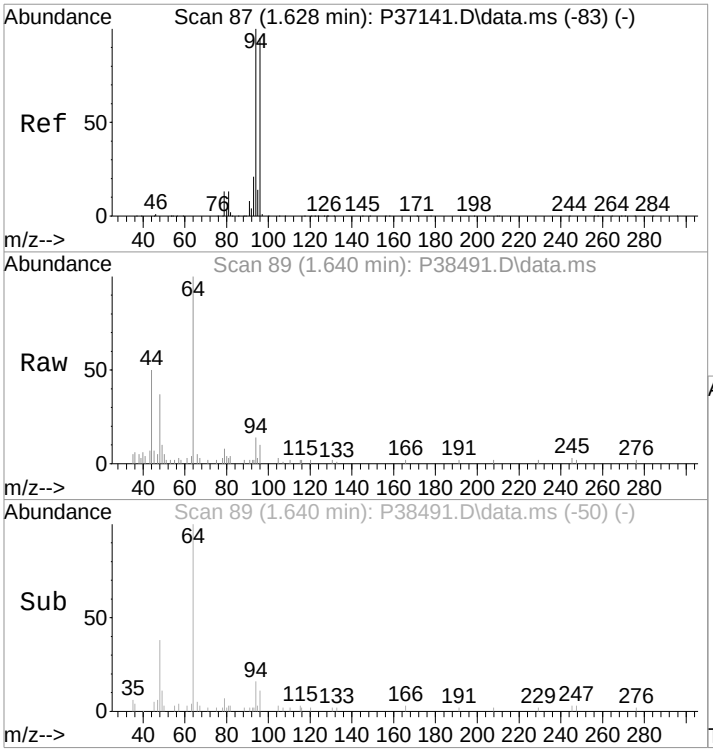
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38491.D
Acq On : 14 Aug 2020 3:18 am
Operator : K.Ruest
Sample : R2007055-002|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Aug 17 16:36:04 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



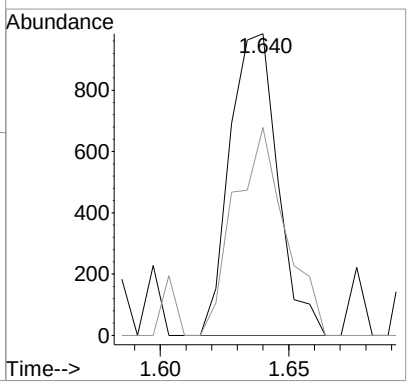
1st 08/17/20
2nd 08/18/20

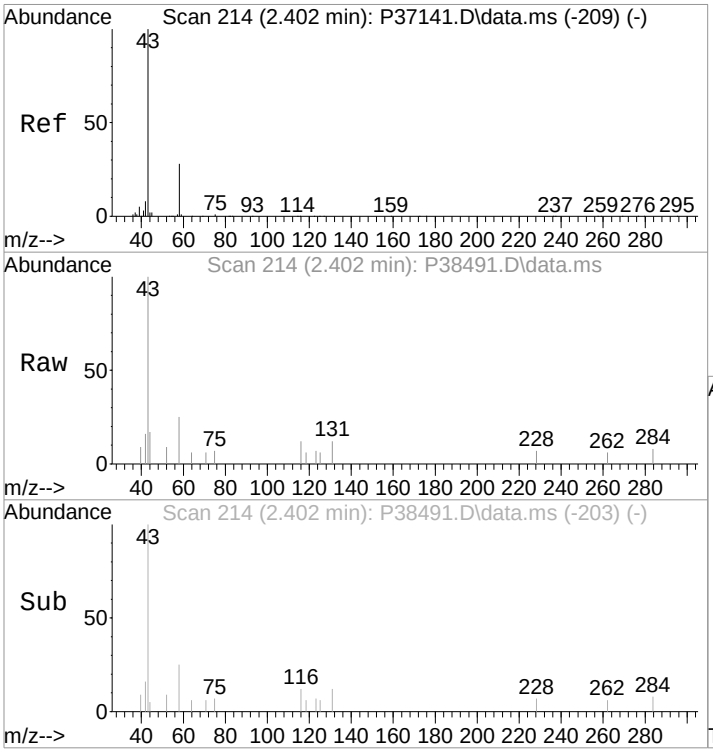


#5
Bromomethane
Concen: 0.41 ppb
RT: 1.640 min Scan# 89
Delta R.T. 0.013 min
Lab File: P38491.D
Acq: 14 Aug 2020 3:18 am

Tgt Ion: 94 Resp: 1284

Ion	Ratio	Lower	Upper
94	100		
96	68.9	75.2	115.2#

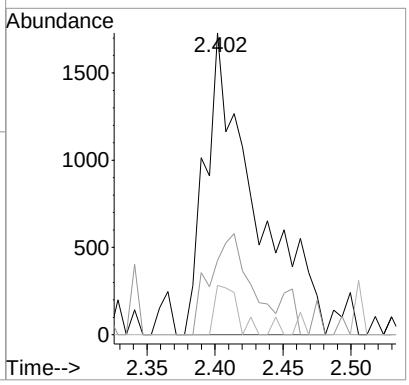


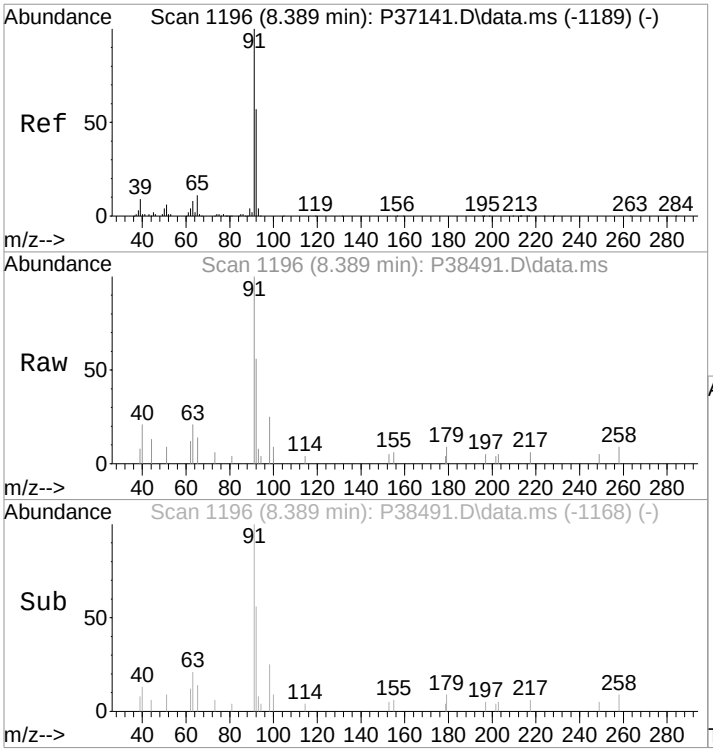


#15
Acetone
Concen: 0.82 ppb
RT: 2.402 min Scan# 214
Delta R.T. -0.005 min
Lab File: P38491.D
Acq: 14 Aug 2020 3:18 am

Tgt Ion: 43 Resp: 4387

Ion	Ratio	Lower	Upper
43	100		
58	24.6	8.2	48.2
42	16.4	0.0	27.7

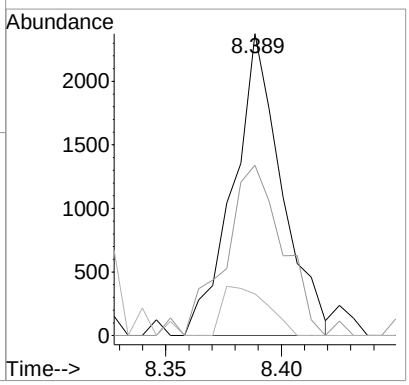




#66
Toluene
Concen: 0.24 ppb
RT: 8.389 min Scan# 1196
Delta R.T. 0.000 min
Lab File: P38491.D
Acq: 14 Aug 2020 3:18 am

Tgt Ion: 91 Resp: 3463

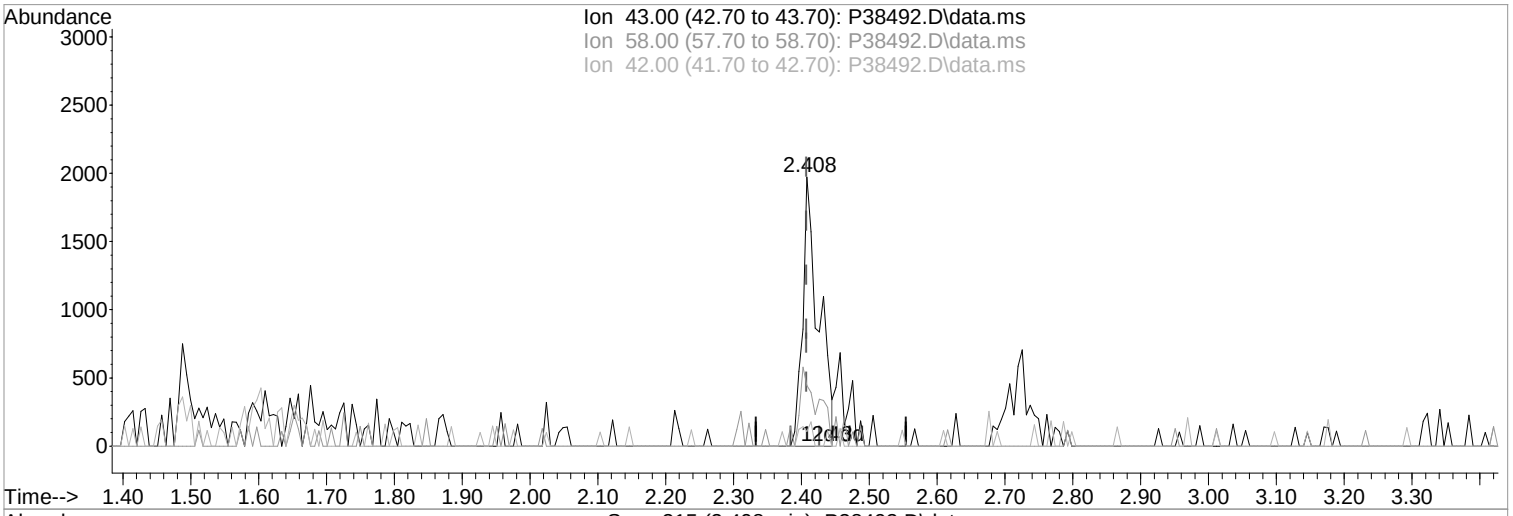
Ion	Ratio	Lower	Upper
91	100		
92	56.4	37.5	77.5
65	13.8	0.0	31.3

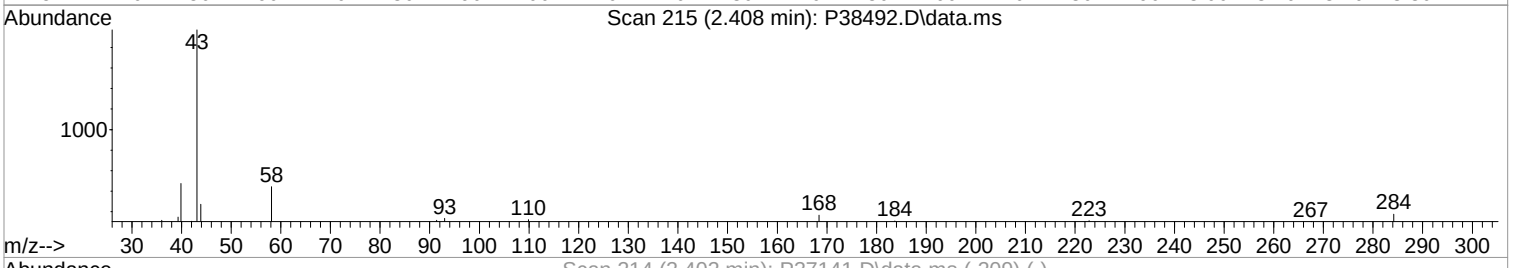


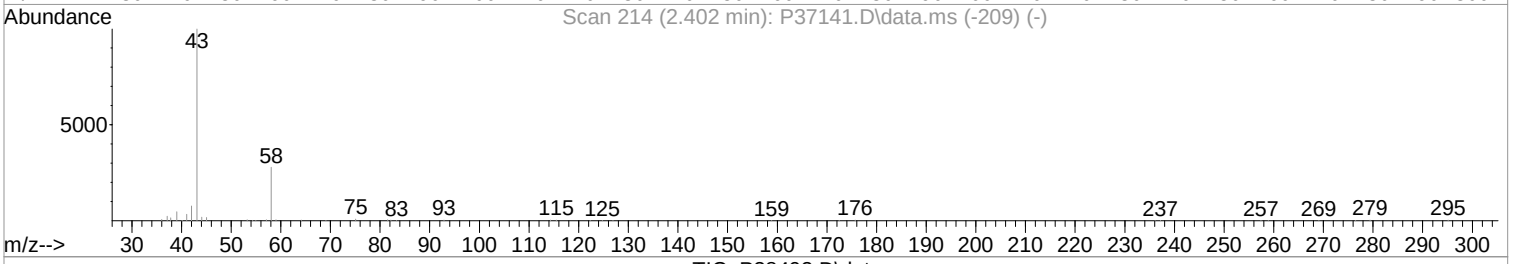
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38492.D
Acq On : 14 Aug 2020 3:40 am
Operator : K.Ruest
Sample : R2007055-003|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Aug 14 11:21:52 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38492.D\data.ms

(15) Acetone (P)

2.408min (+0.001) 0.26 ppb m

response 3240

Ion	Exp%	Act%
43.00	100	100
58.00	28.20	22.50
42.00	7.70	5.37
0.00	0.00	0.00

Manual Integration:

After

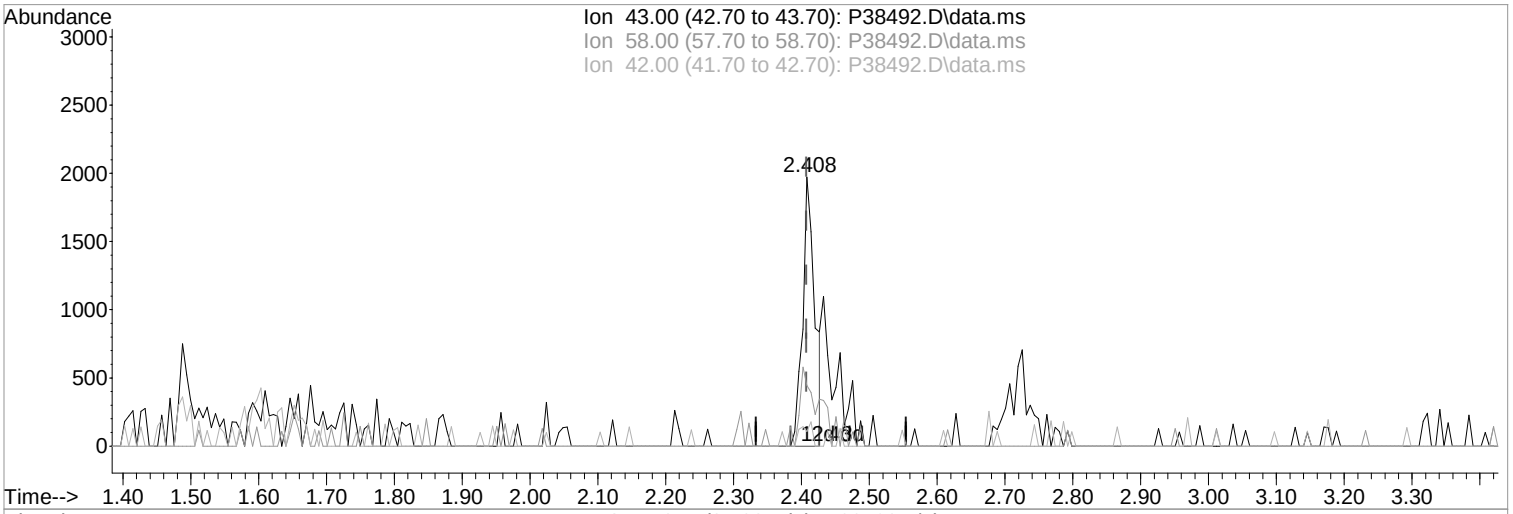
Poor integration.

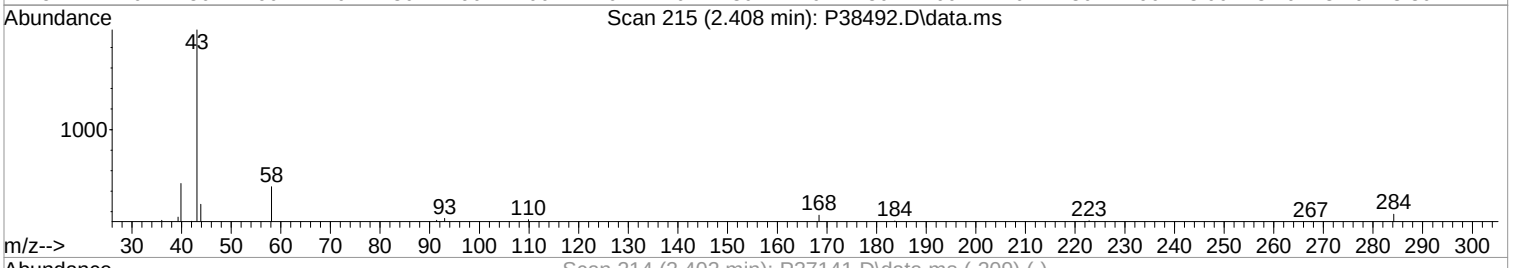
08/17/20

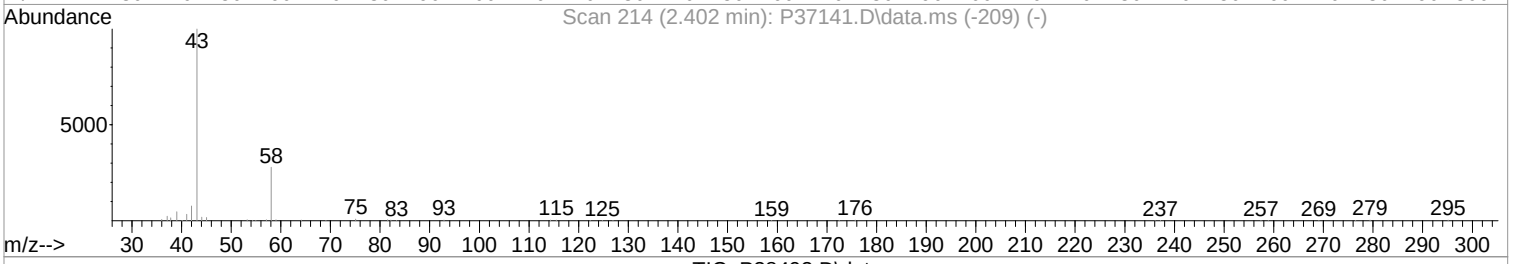
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38492.D
Acq On : 14 Aug 2020 3:40 am
Operator : K.Ruest
Sample : R2007055-003|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Aug 14 11:21:52 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38492.D\data.ms

(15) Acetone (P)

2.408min (+0.001) -1.00 ppb

response 2470

Ion	Exp%	Act%
43.00	100	100
58.00	28.20	22.50
42.00	7.70	5.37
0.00	0.00	0.00

Manual Integration:

Before

08/17/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38492.D
Acq On : 14 Aug 2020 3:40 am
Operator : K.Ruest
Sample : R2007055-003|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Aug 17 16:38:06 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

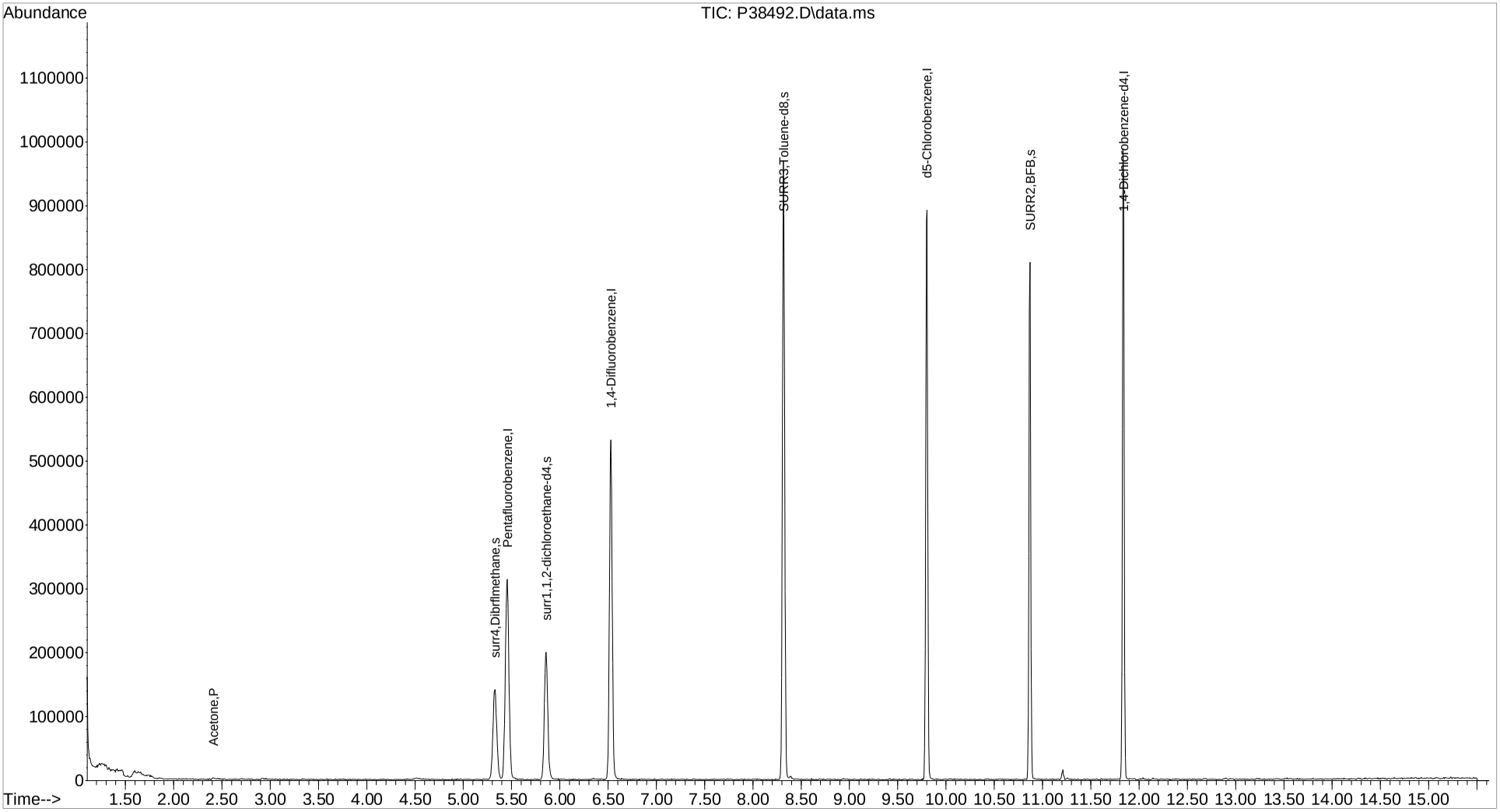
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.456	168	293464	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.529	114	463272	50.00	ppb	0.00
71) d5-Chlorobenzene	9.803	117	411478	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	203617	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.328	113	122346	45.99	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 91.98%			
48) surr1,1,2-dichloroetha...	5.859	65	172150	46.75	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 93.50%			
65) SURR3,Toluene-d8	8.316	98	609160	49.27	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.54%			
70) SURR2,BFB	10.870	95	217869	47.82	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.64%			
Target Compounds						Qvalue
15) Acetone	2.408	43	3240m	0.26	ppb	

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

Quantitation Report (QT Reviewed)

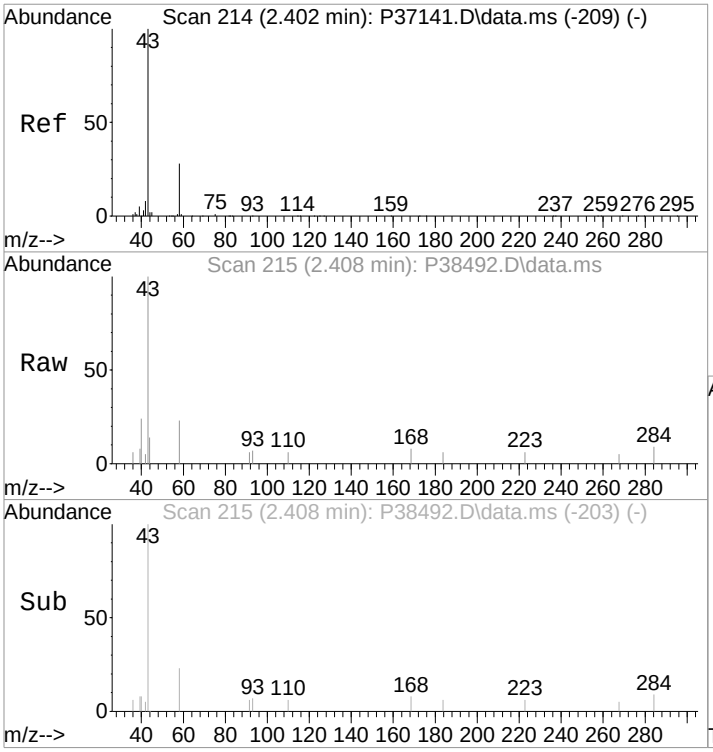
Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38492.D
Acq On : 14 Aug 2020 3:40 am
Operator : K.Ruest
Sample : R2007055-003|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Aug 17 16:38:06 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



1st 08/17/20
2nd 08/18/20

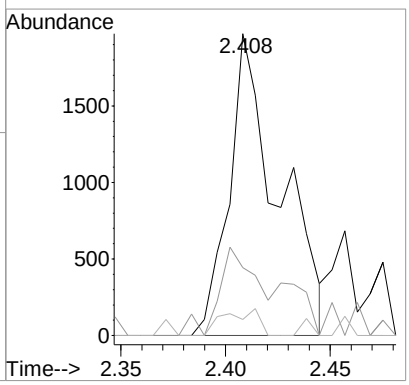
1st 08/17/20
2nd 08/18/20



#15
Acetone
Concen: 0.26 ppb m
RT: 2.408 min Scan# 215
Delta R.T. 0.001 min
Lab File: P38492.D
Acq: 14 Aug 2020 3:40 am

Tgt Ion: 43 Resp: 3240

Ion	Ratio	Lower	Upper
43	100		
58	22.5	8.2	48.2
42	5.4	0.0	27.7

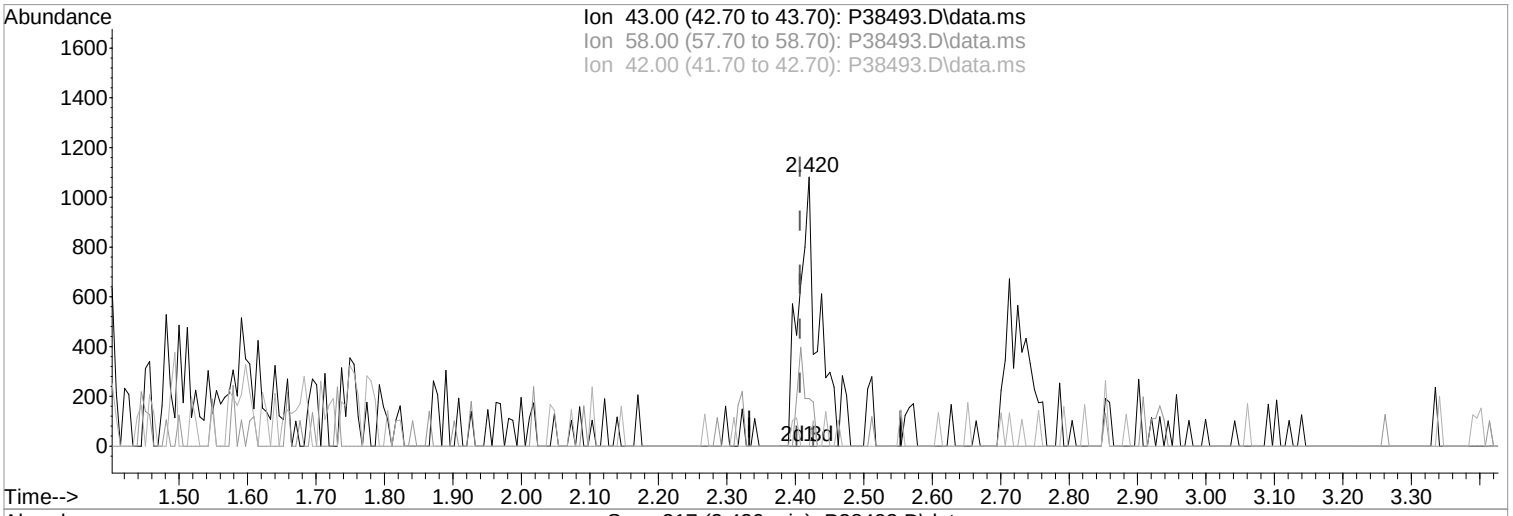


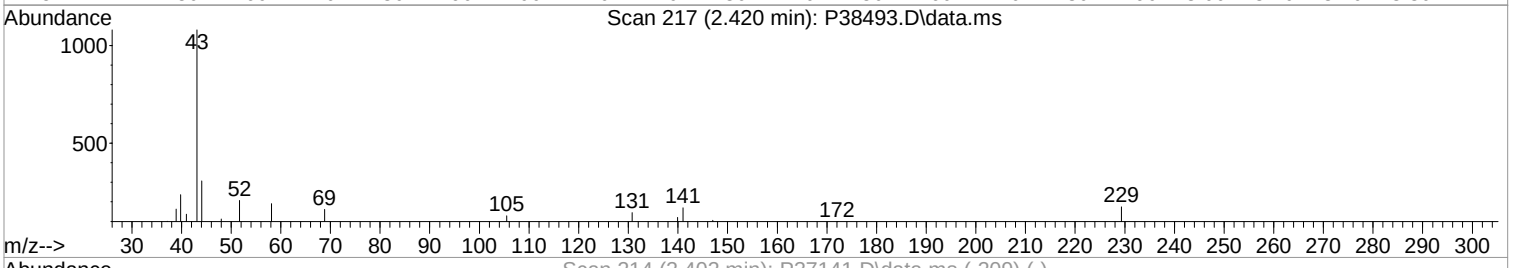
1st 08/17/20
2nd 08/18/20

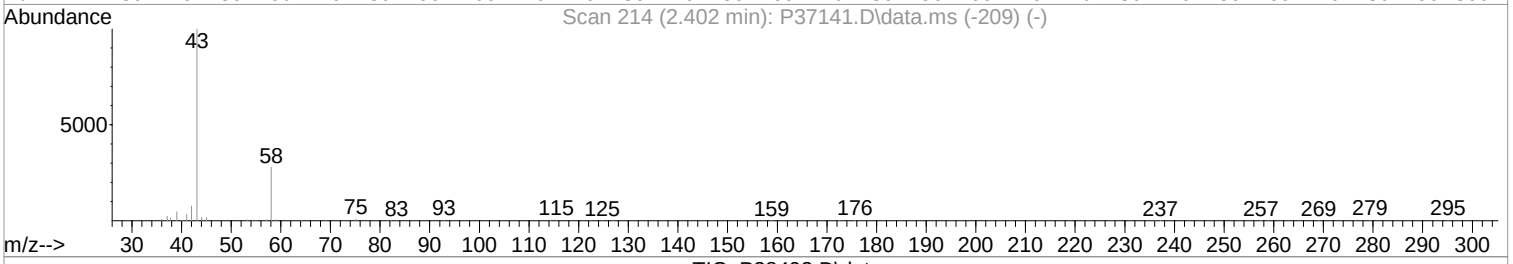
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38493.D
Acq On : 14 Aug 2020 4:01 am
Operator : K.Ruest
Sample : R2007055-004|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Aug 14 11:22:04 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38493.D\data.ms

(15) Acetone (P)

2.420min (+0.013) -1.00 ppb m

response 2092

Ion	Exp%	Act%
43.00	100	100
58.00	28.20	17.67
42.00	7.70	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

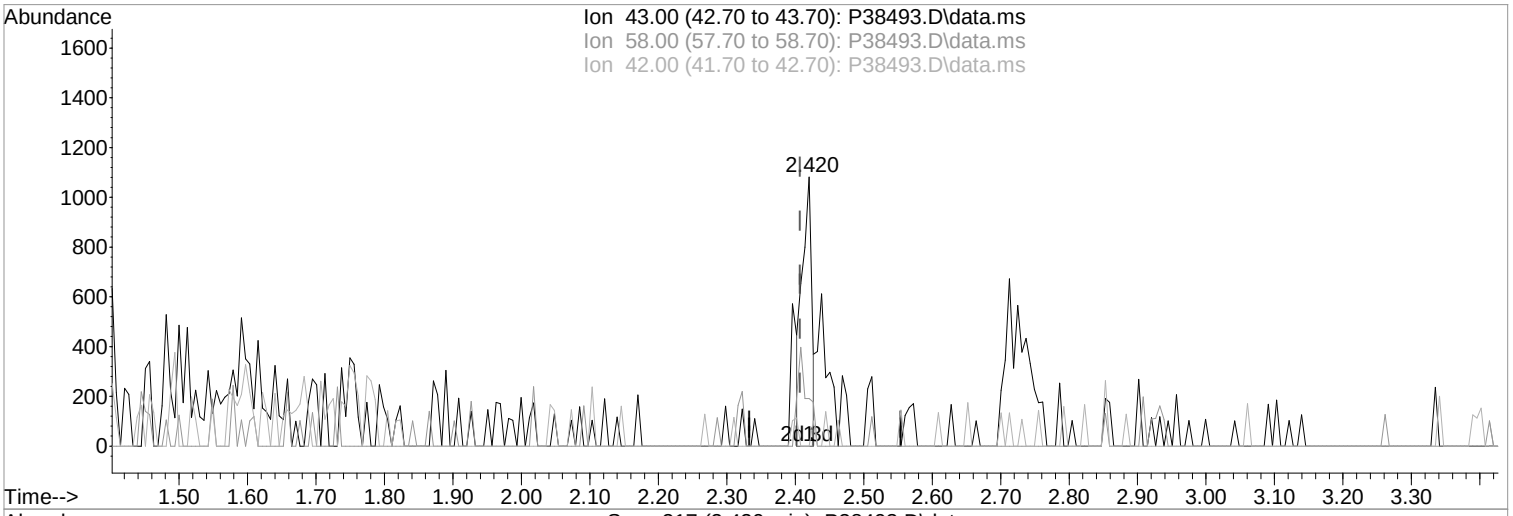
08/17/20

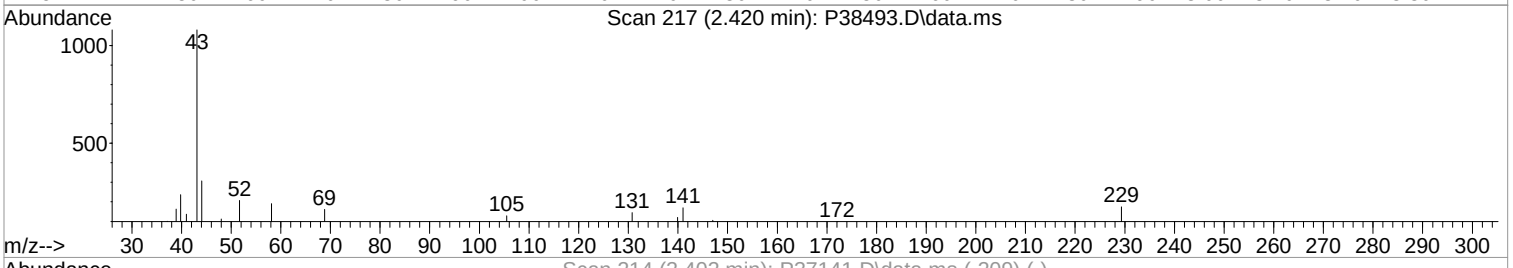
1st 08/17/20
2nd 08/18/20

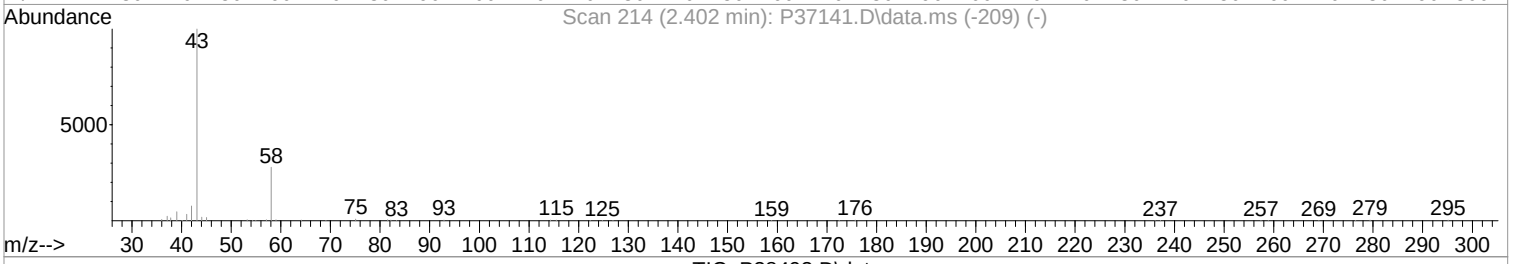
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38493.D
Acq On : 14 Aug 2020 4:01 am
Operator : K.Ruest
Sample : R2007055-004|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Aug 14 11:22:04 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38493.D\data.ms

(15) Acetone (P)

2.420min (+0.013) -1.00 ppb

response 1061

Ion	Exp%	Act%
43.00	100	100
58.00	28.20	17.67
42.00	7.70	0.00
0.00	0.00	0.00

Manual Integration:

Before

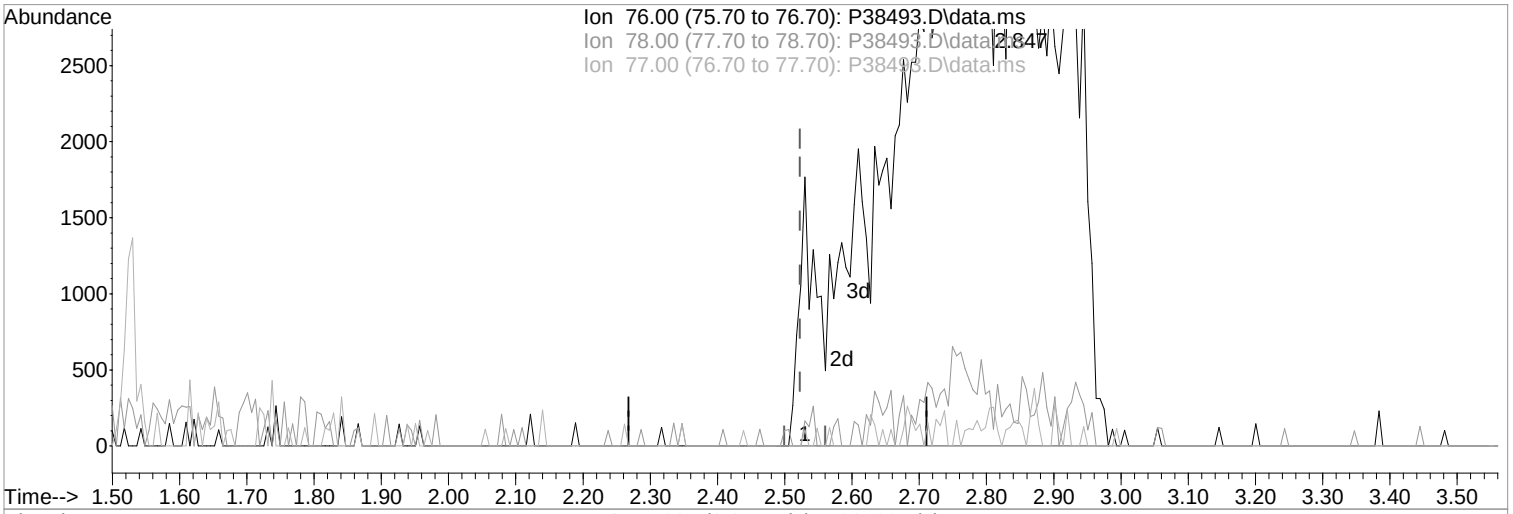
08/17/20

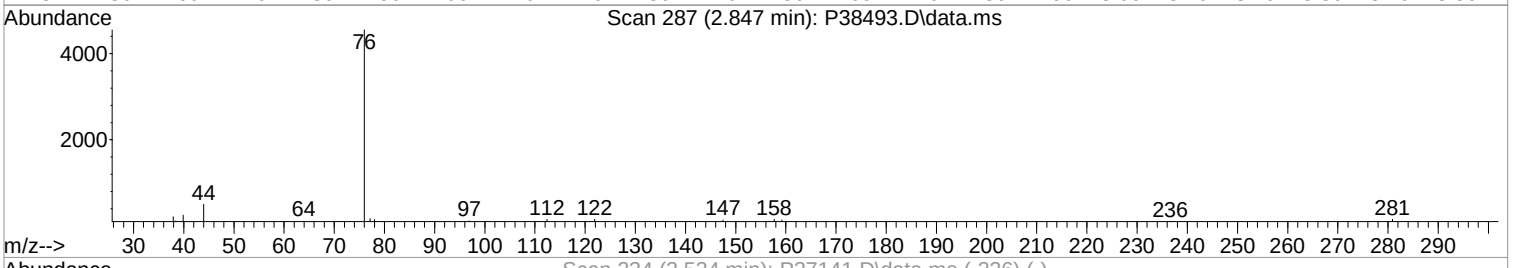
1st 08/17/20
2nd 08/18/20

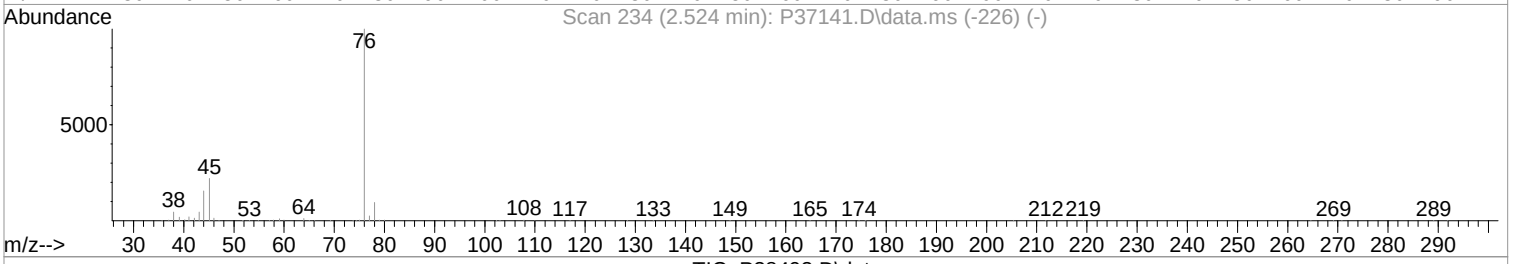
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38493.D
Acq On : 14 Aug 2020 4:01 am
Operator : K.Ruest
Sample : R2007055-004|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Aug 14 11:22:04 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38493.D\data.ms

(18) Carbon Disulfide (P)

2.847min (+0.324) 8.43 ppb m

response 65703

Ion	Exp%	Act%
76.00	100	100
78.00	9.50	3.27
77.00	2.50	3.69
0.00	0.00	0.00

Manual Integration:

After

Other - so2 interference

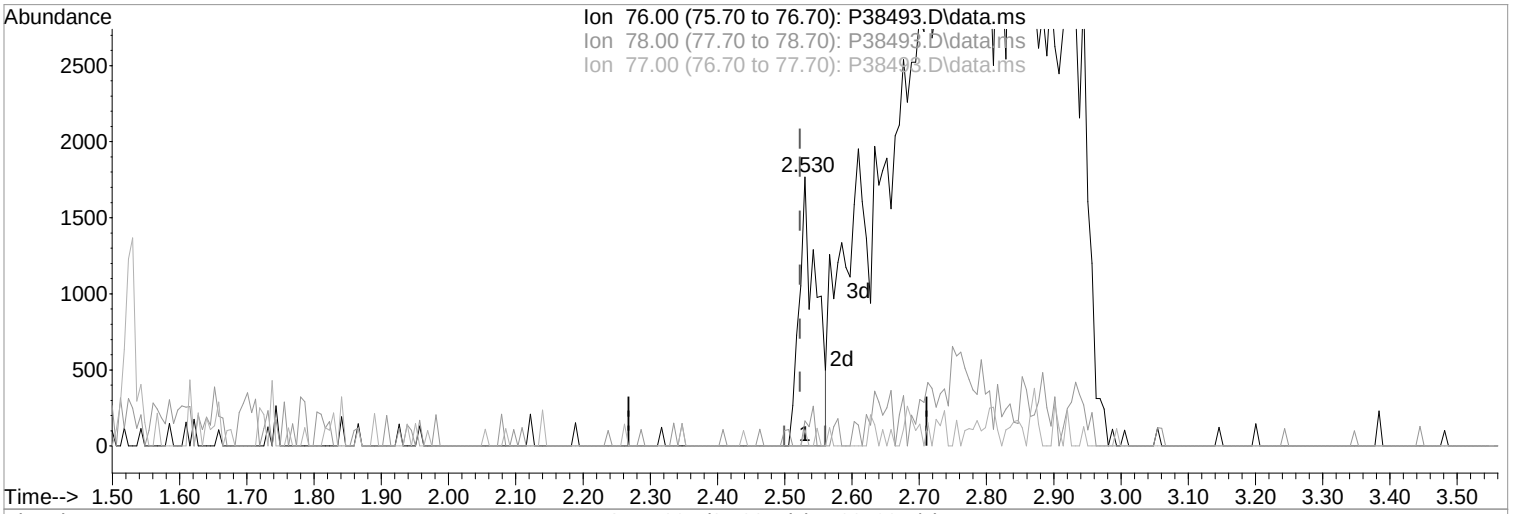
08/17/20

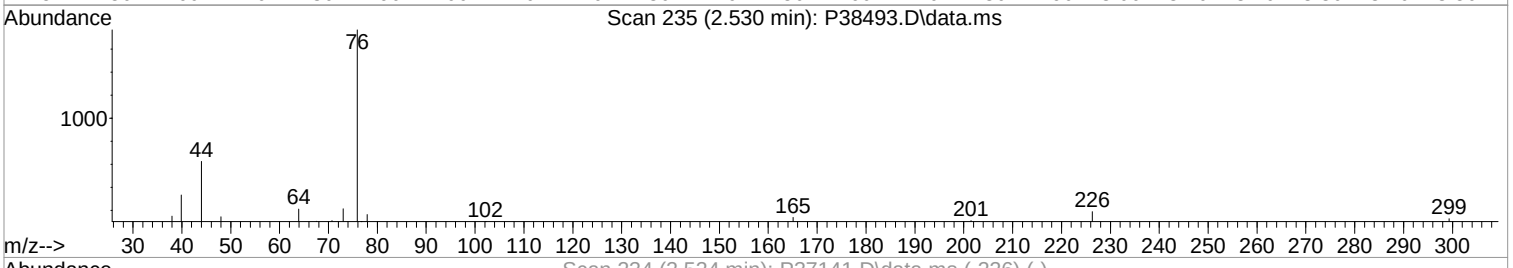
1st 08/17/20
2nd 08/18/20

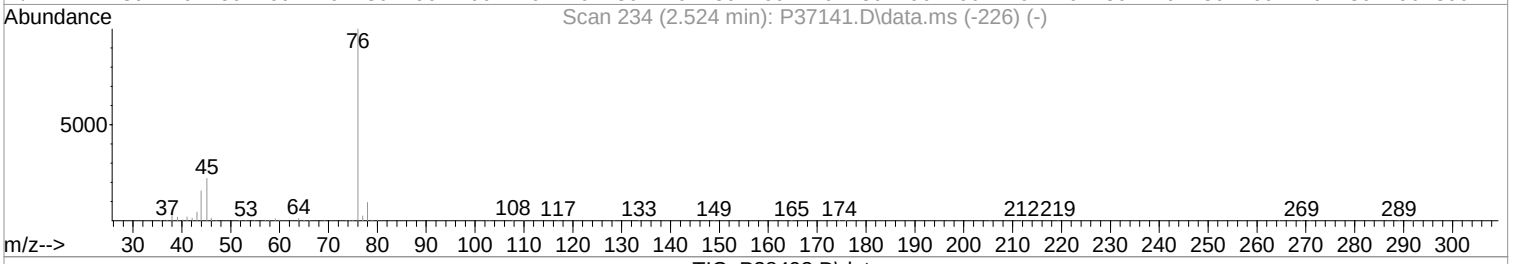
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38493.D
Acq On : 14 Aug 2020 4:01 am
Operator : K.Ruest
Sample : R2007055-004|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Aug 14 11:22:04 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38493.D\data.ms

(18) Carbon Disulfide (P)

2.530min (+0.007) 0.00 ppb

response 3094

Ion	Exp%	Act%
76.00	100	100
78.00	9.50	8.76
77.00	2.50	5.61
0.00	0.00	0.00

Manual Integration:

Before

08/17/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38493.D
Acq On : 14 Aug 2020 4:01 am
Operator : K.Ruest
Sample : R2007055-004|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Aug 17 16:40:20 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

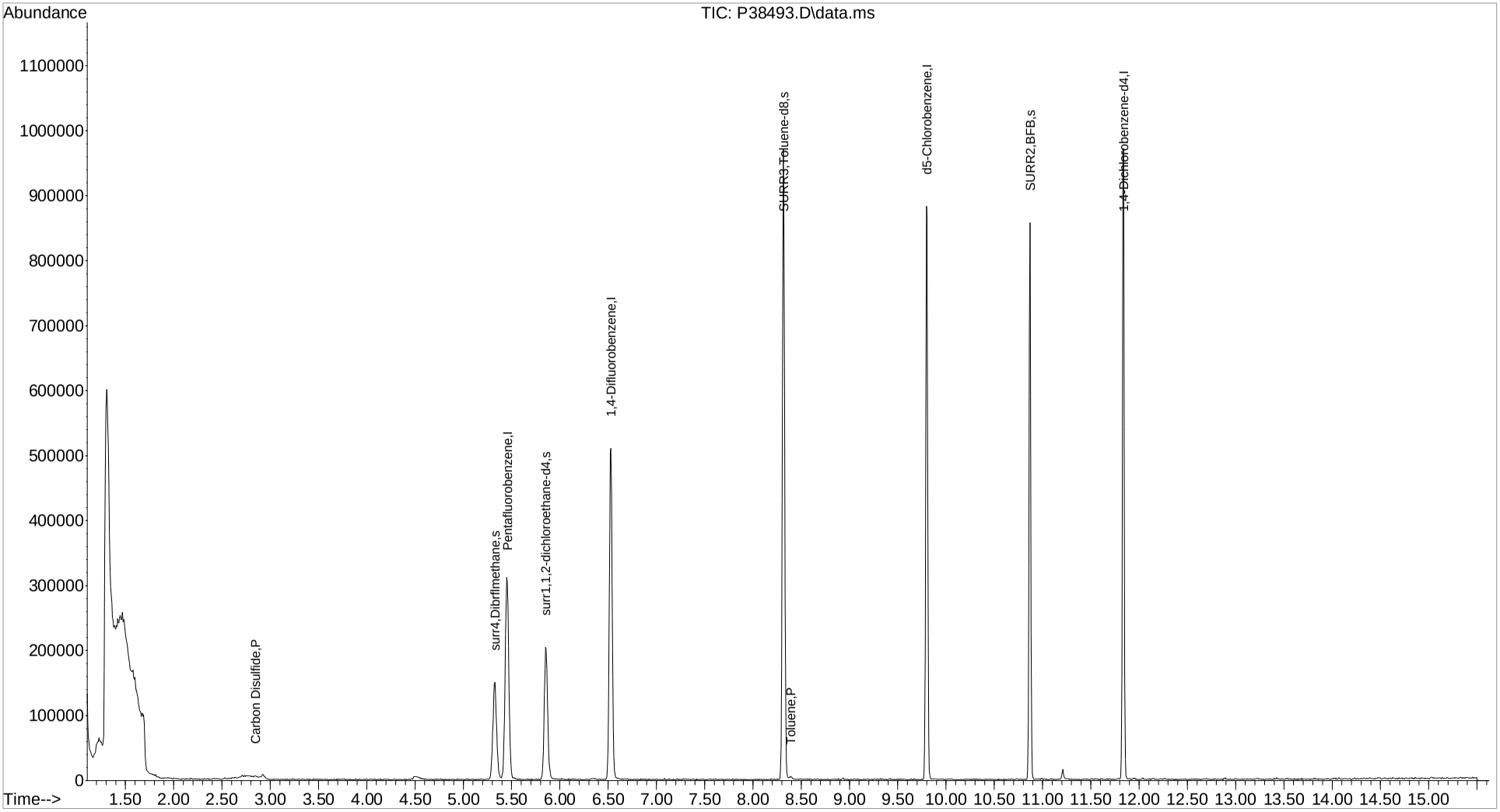
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.456	168	295840	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.529	114	458361	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	410512	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	198163	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.328	113	124114	47.16	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 94.32%			
48) surr1,1,2-dichloroetha...	5.853	65	173590	47.64	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 95.28%			
65) SURR3,Toluene-d8	8.315	98	610664	49.92	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.84%			
70) SURR2,BFB	10.870	95	222706	49.41	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.82%			
Target Compounds						Qvalue
15) Acetone	2.420	43	2092m	Below Cal		
18) Carbon Disulfide	2.847	76	65703m	8.43	ppb	
66) Toluene	8.389	91	2883	0.21	ppb	81

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

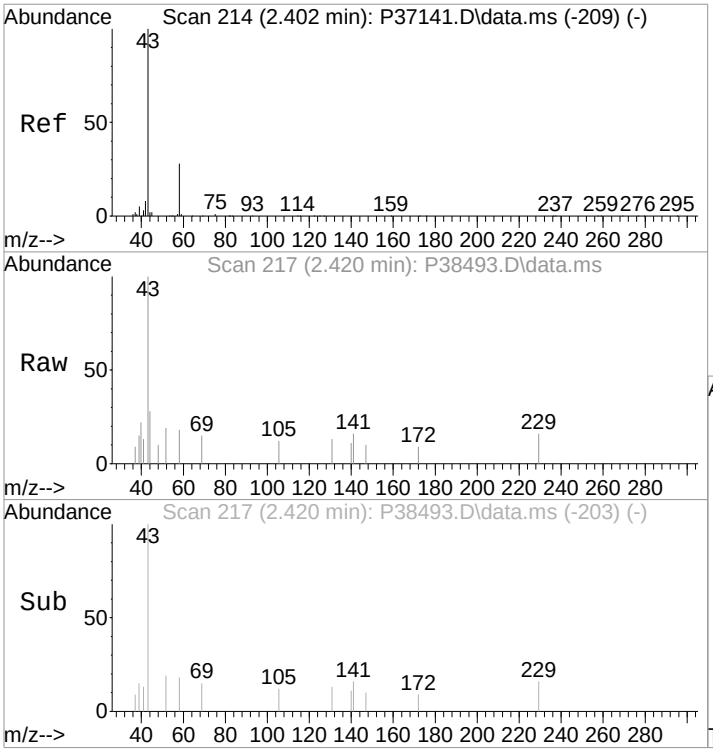
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38493.D
Acq On : 14 Aug 2020 4:01 am
Operator : K.Ruest
Sample : R2007055-004|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Aug 17 16:40:20 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



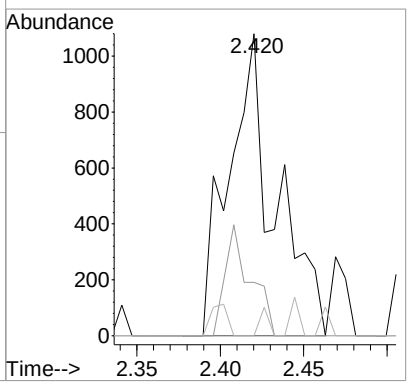
1st 08/17/20
2nd 08/18/20

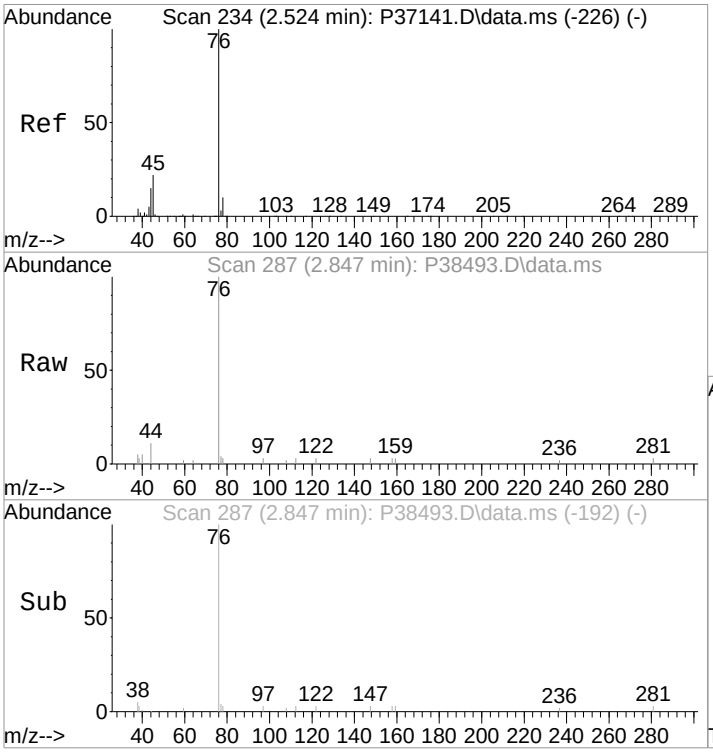


#15
Acetone
Concen: Below Cal m
RT: 2.420 min Scan# 217
Delta R.T. 0.013 min
Lab File: P38493.D
Acq: 14 Aug 2020 4:01 am

Tgt Ion: 43 Resp: 2092

Ion	Ratio	Lower	Upper
43	100		
58	17.7	8.2	48.2
42	0.0	0.0	27.7

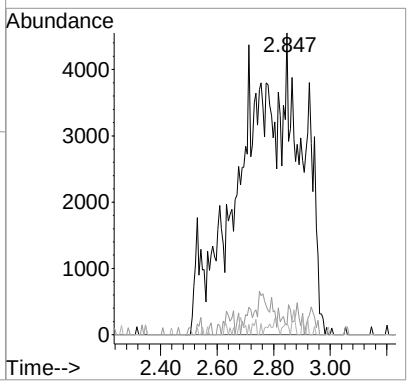


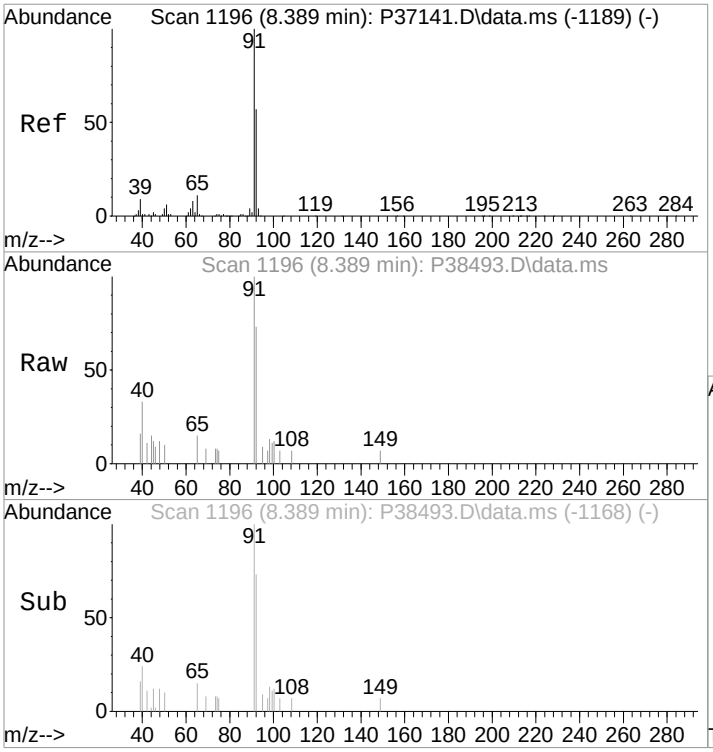


#18
Carbon Disulfide
Concen: 8.43 ppb m
RT: 2.847 min Scan# 287
Delta R.T. 0.324 min
Lab File: P38493.D
Acq: 14 Aug 2020 4:01 am

Tgt Ion: 76 Resp: 65703

Ion	Ratio	Lower	Upper
76	100		
78	3.3	0.0	29.5
77	3.7	0.0	22.5

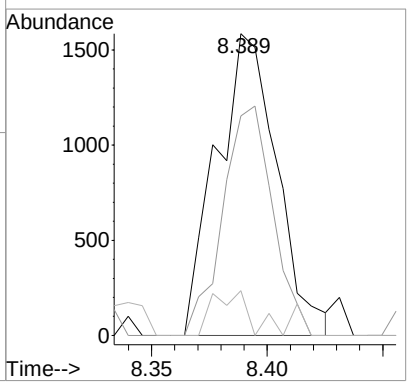




#66
Toluene
Concen: 0.21 ppb
RT: 8.389 min Scan# 1196
Delta R.T. 0.000 min
Lab File: P38493.D
Acq: 14 Aug 2020 4:01 am

Tgt Ion: 91 Resp: 2883

Ion	Ratio	Lower	Upper
91	100		
92	72.8	37.5	77.5
65	14.8	0.0	31.3

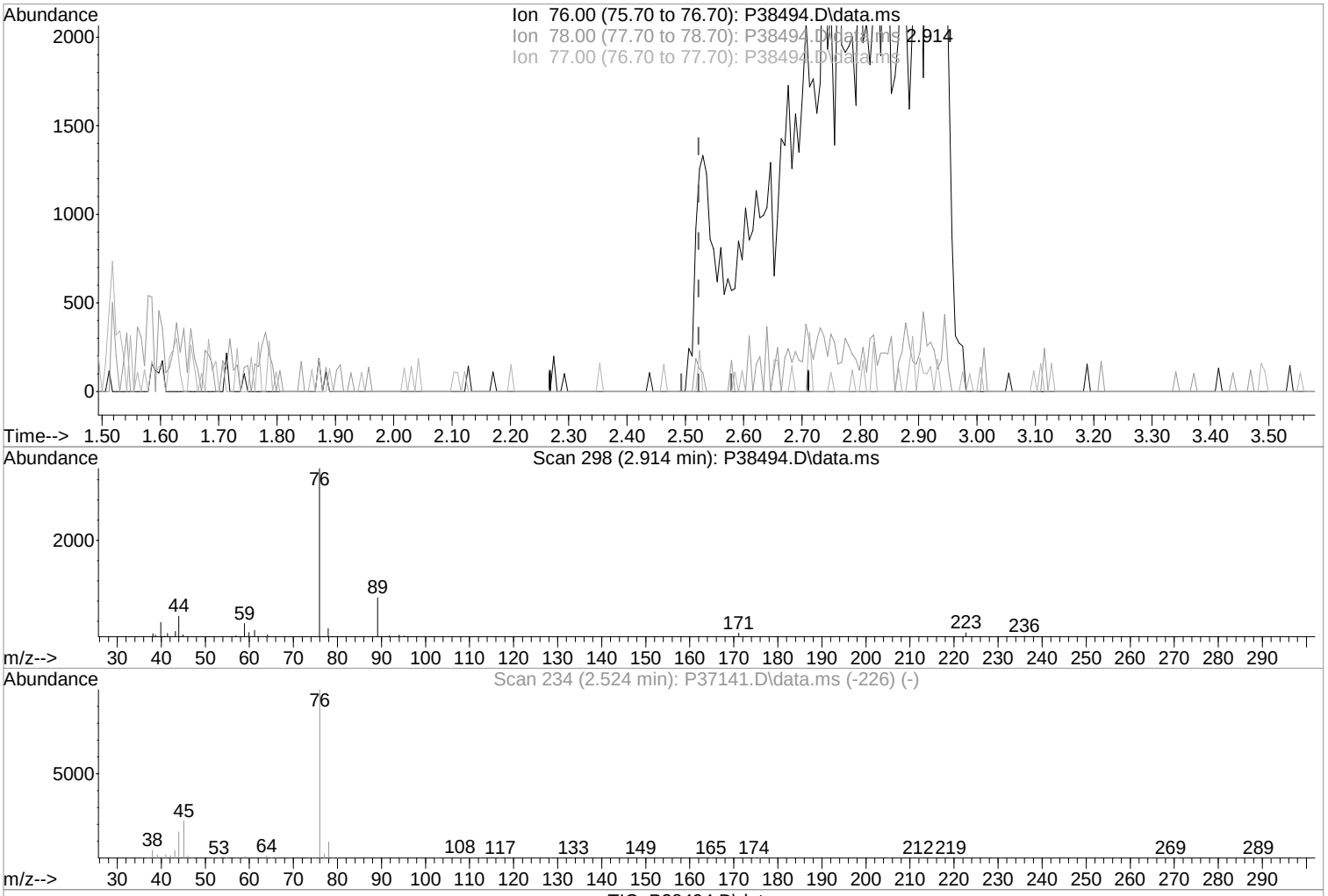


1st 08/17/20
2nd 08/18/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38494.D
Acq On : 14 Aug 2020 4:23 am
Operator : K.Ruest
Sample : R2007055-005|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Aug 14 11:22:29 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38494.D\data.ms

(18) Carbon Disulfide (P)

2.914min (+0.391) 5.76 ppb m

response 45680

Ion	Exp%	Act%
76.00	100	100
78.00	9.50	7.54
77.00	2.50	2.92
0.00	0.00	0.00

Manual Integration:

After

Other - so2 interference

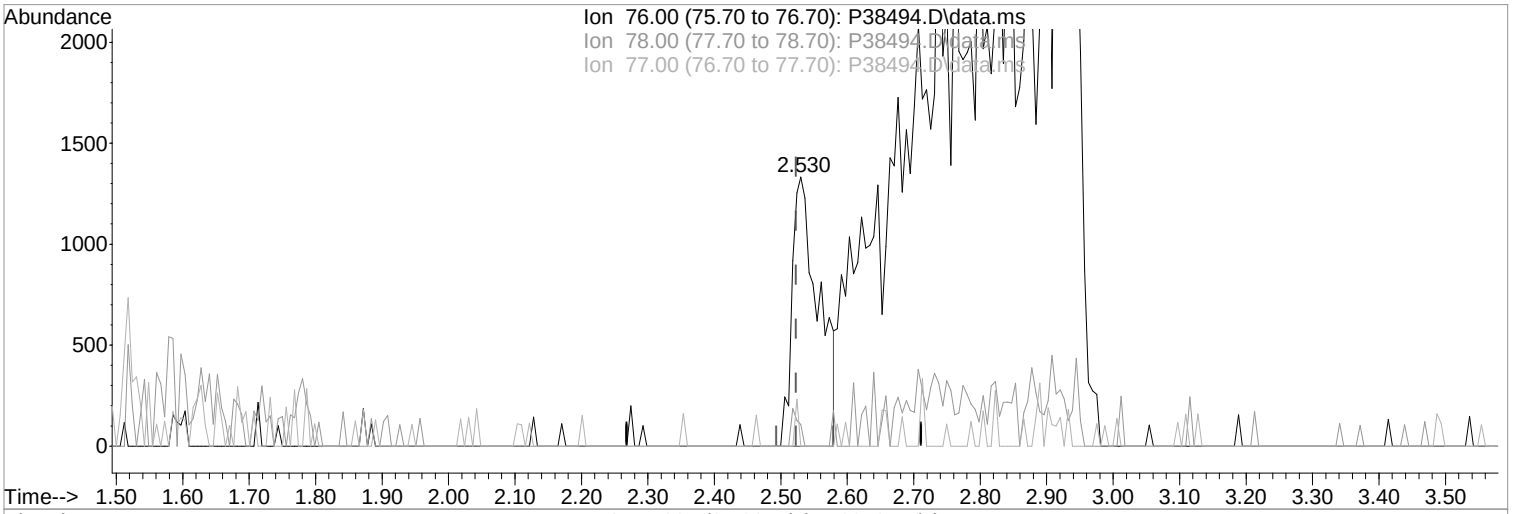
08/17/20

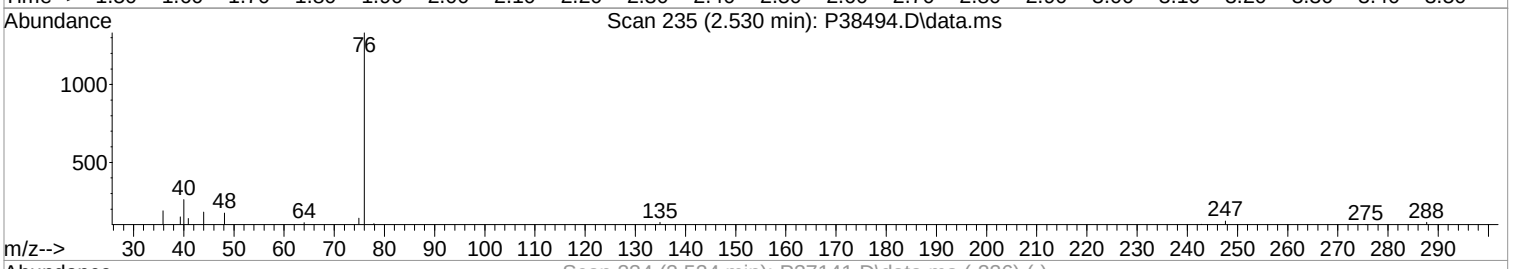
1st 08/17/20
2nd 08/18/20

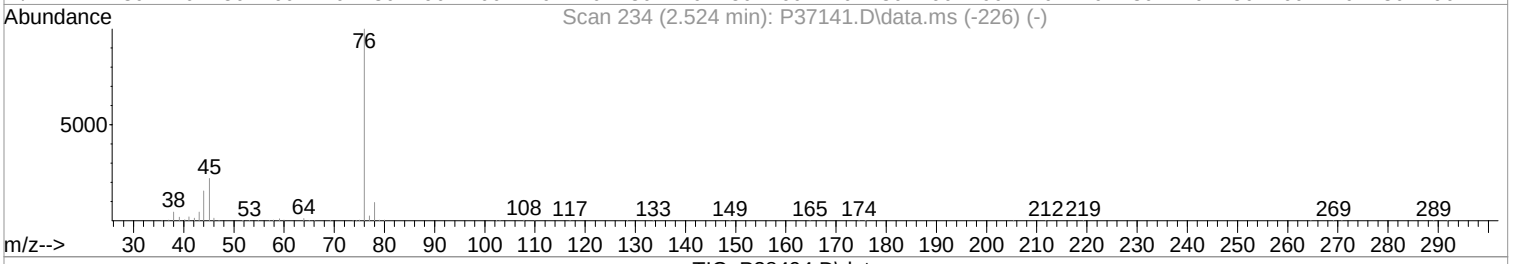
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38494.D
Acq On : 14 Aug 2020 4:23 am
Operator : K.Ruest
Sample : R2007055-005|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Aug 14 11:22:29 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38494.D\data.ms

(18) Carbon Disulfide (P)

2.530min (+0.007) 0.08 ppb

response 3666

Ion	Exp%	Act%
76.00	100	100
78.00	9.50	8.03
77.00	2.50	0.00
0.00	0.00	0.00

Manual Integration:

Before

08/17/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38494.D
Acq On : 14 Aug 2020 4:23 am
Operator : K.Ruest
Sample : R2007055-005|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Aug 17 16:42:59 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

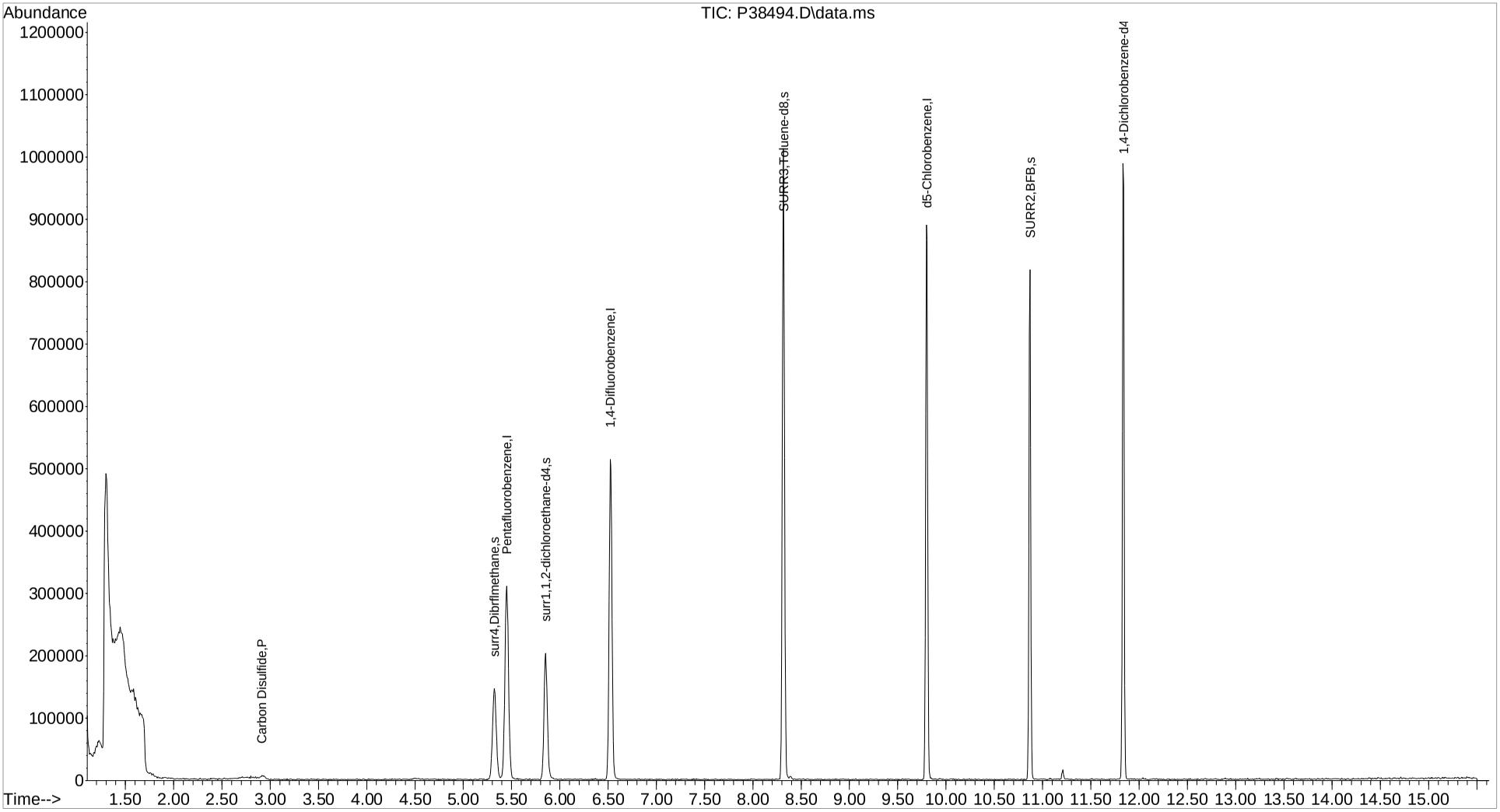
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	294634	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	461231	50.00	ppb	0.00
71) d5-Chlorobenzene	9.803	117	415932	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	206127	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.322	113	123023	46.45	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 92.90%			
48) surr1,1,2-dichloroetha...	5.853	65	168890	46.06	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 92.12%			
65) SURR3,Toluene-d8	8.316	98	614589	49.93	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.86%			
70) SURR2,BFB	10.870	95	218151	48.10	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.20%			
Target Compounds						Qvalue
18) Carbon Disulfide	2.914	76	45680m	5.76	ppb	

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

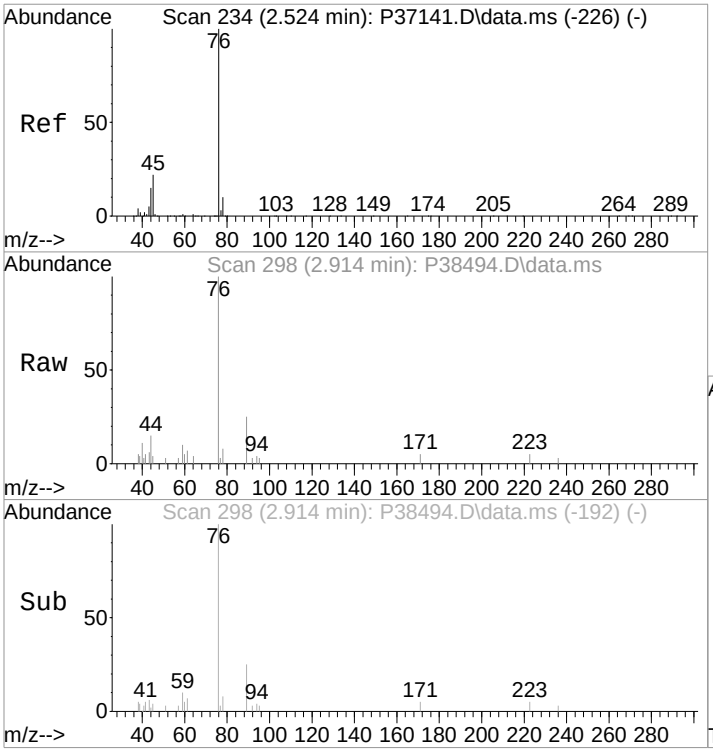
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38494.D
Acq On : 14 Aug 2020 4:23 am
Operator : K.Ruest
Sample : R2007055-005|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Aug 17 16:42:59 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



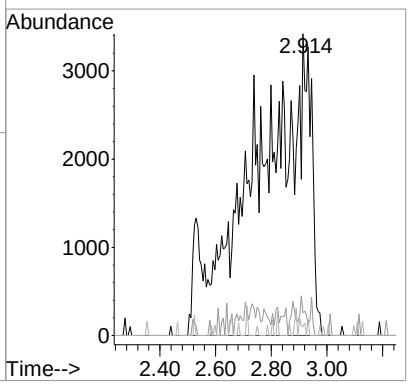
1st 08/17/20
2nd 08/18/20



#18
Carbon Disulfide
Concen: 5.76 ppb m
RT: 2.914 min Scan# 298
Delta R.T. 0.391 min
Lab File: P38494.D
Acq: 14 Aug 2020 4:23 am

Tgt Ion: 76 Resp: 45680

Ion	Ratio	Lower	Upper
76	100		
78	7.5	0.0	29.5
77	2.9	0.0	22.5

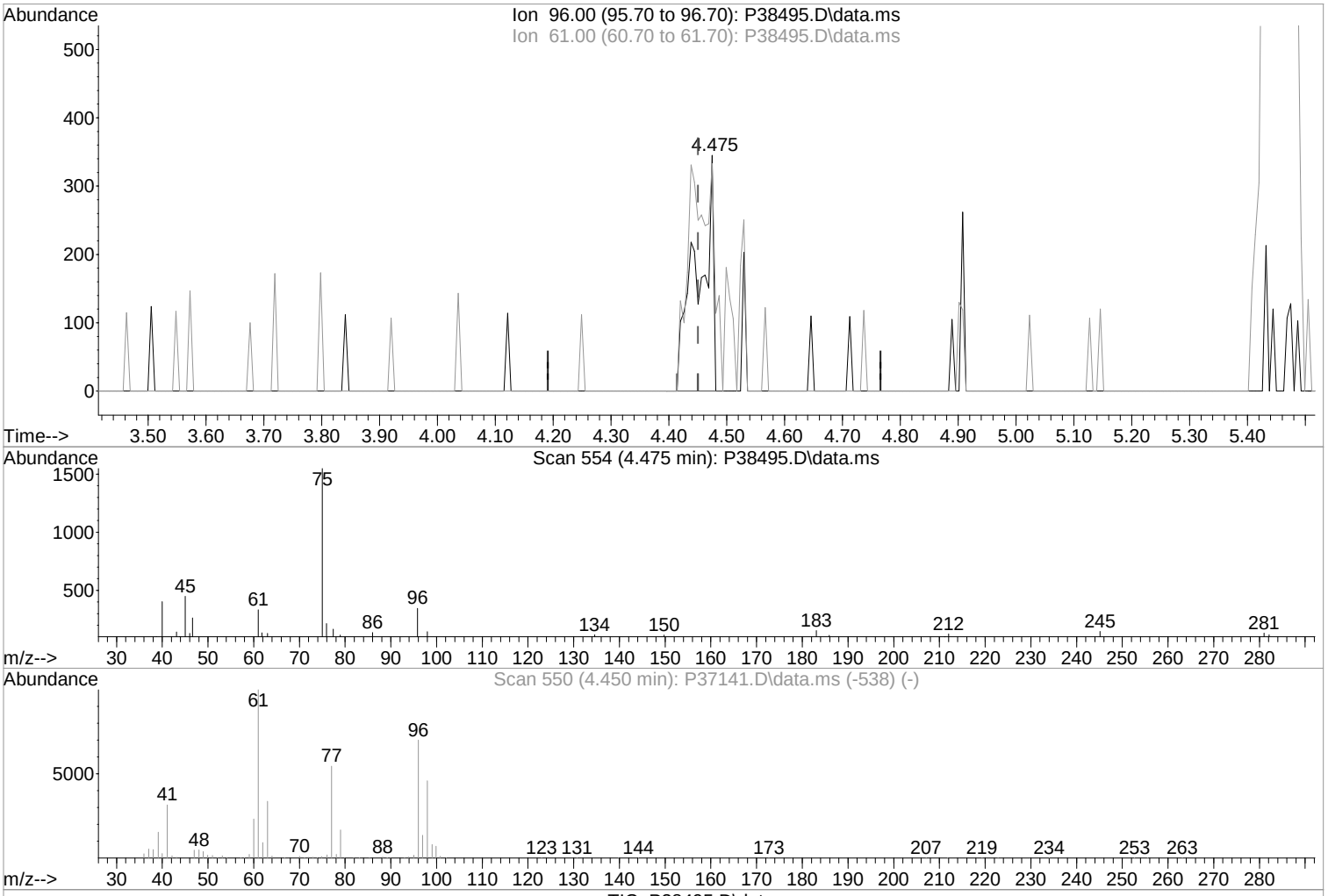


1st 08/17/20
2nd 08/18/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38495.D
Acq On : 14 Aug 2020 4:45 am
Operator : K.Ruest
Sample : R2007055-006|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Aug 14 11:22:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38495.D\data.ms

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

4.475min (+0.025) 0.18 ppb m

response 638

Ion	Exp%	Act%
96.00	100	100
61.00	143.10	96.52#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

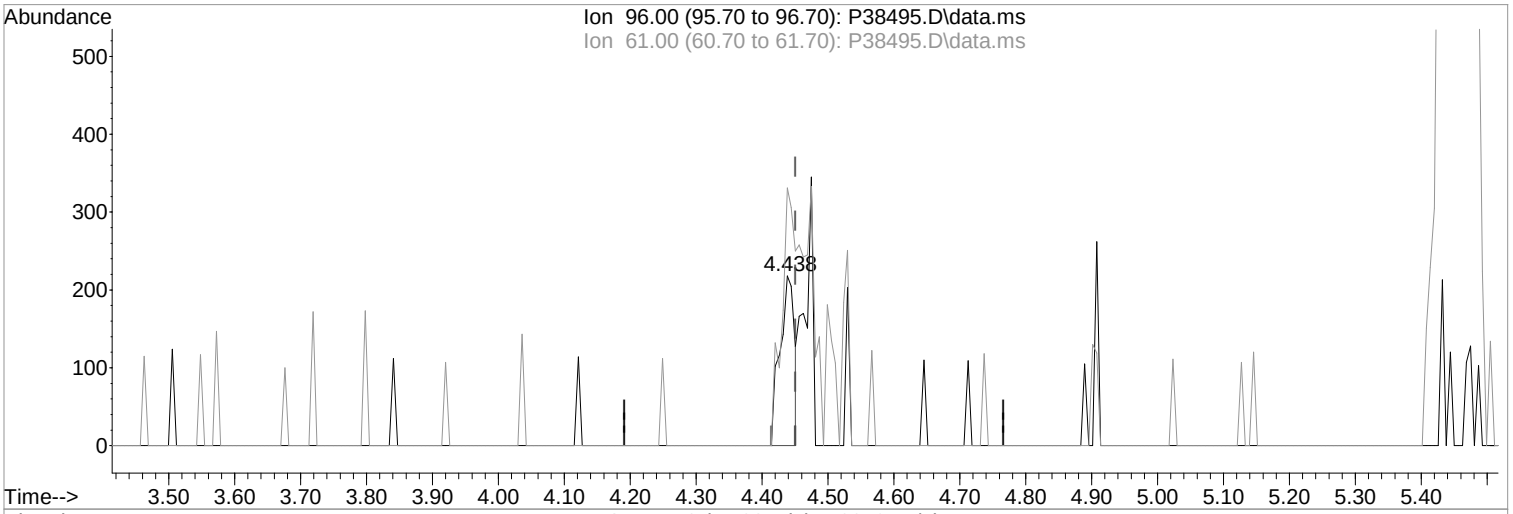
Split Peak

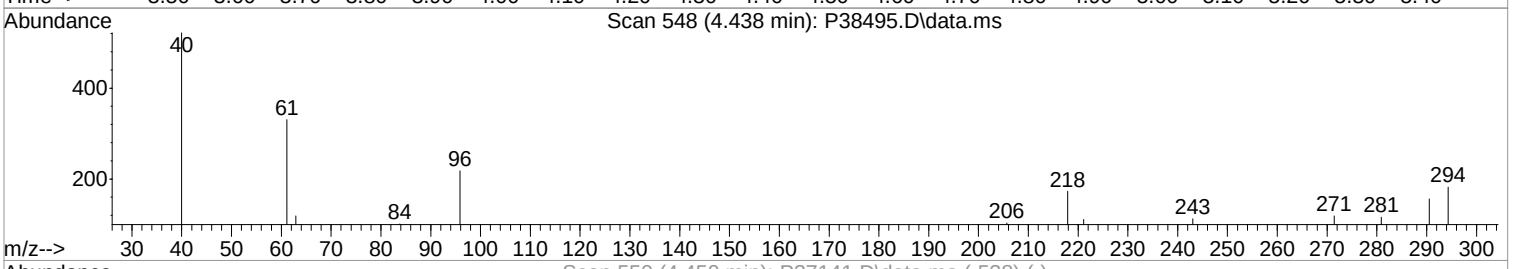
08/17/20

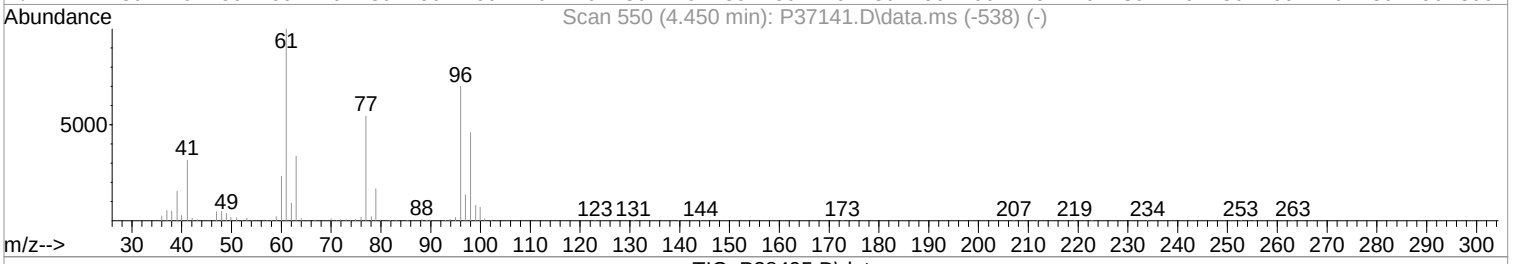
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38495.D
Acq On : 14 Aug 2020 4:45 am
Operator : K.Ruest
Sample : R2007055-006|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Aug 14 11:22:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38495.D\data.ms

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

4.438min (-0.012) 0.10 ppb

response 333

Ion	Exp%	Act%
96.00	100	100
61.00	143.10	151.83
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

08/17/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38495.D
Acq On : 14 Aug 2020 4:45 am
Operator : K.Ruest
Sample : R2007055-006|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Aug 17 16:45:08 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

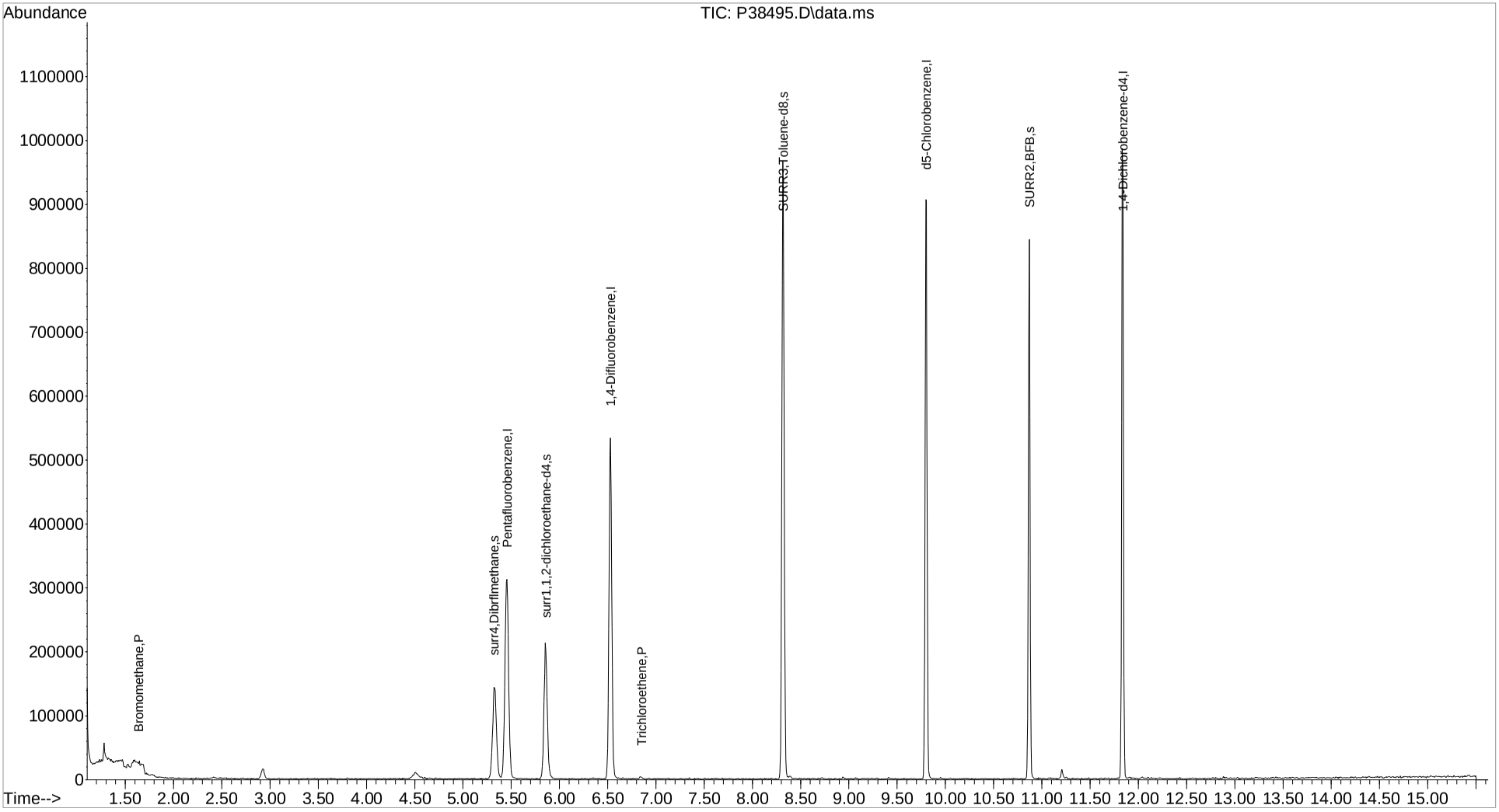
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.456	168	301133	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.529	114	465262	50.00	ppb	0.00
71) d5-Chlorobenzene	9.803	117	417975	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	205469	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.322	113	121941	45.64	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 91.28%			
48) surr1,1,2-dichloroetha...	5.859	65	172788	46.72	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 93.44%			
65) SURR3,Toluene-d8	8.316	98	609332	49.07	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.14%			
70) SURR2,BFB	10.870	95	218099	47.67	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.34%			
Target Compounds						Qvalue
5) Bromomethane	1.640	94	766	0.24	ppb #	64
15) Acetone	2.408	43	2477	Below Cal		84
54) Trichloroethene	6.852	130	952	0.29	ppb #	61

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

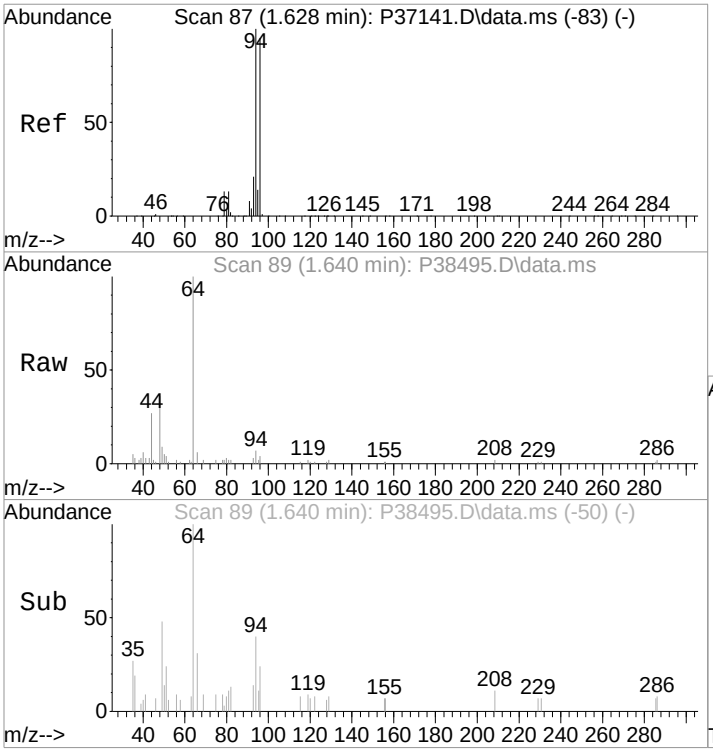
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38495.D
Acq On : 14 Aug 2020 4:45 am
Operator : K.Ruest
Sample : R2007055-006|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Aug 17 16:45:08 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



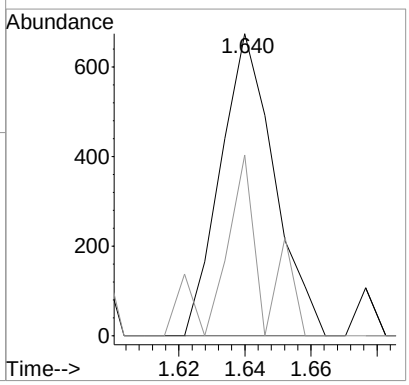
1st 08/17/20
2nd 08/18/20

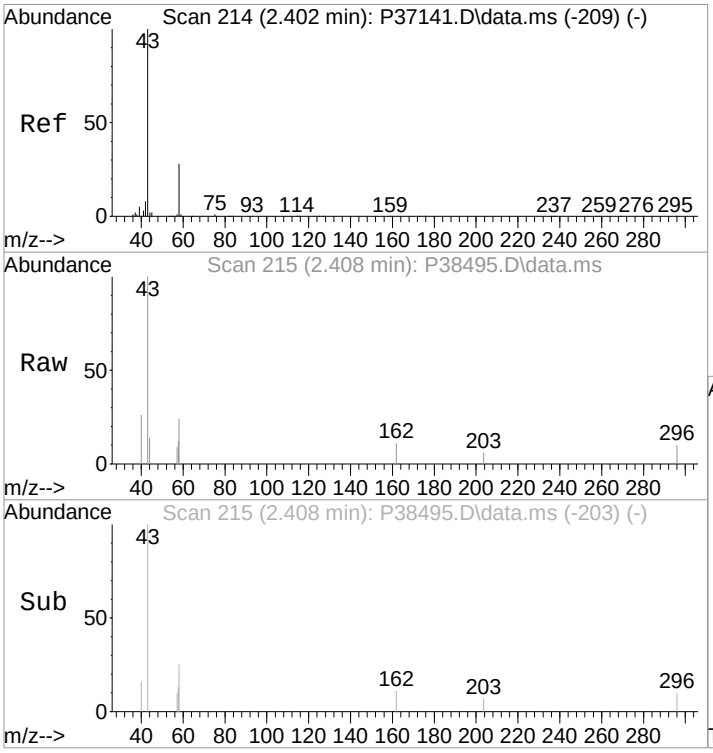


#5
Bromomethane
Concen: 0.24 ppb
RT: 1.640 min Scan# 89
Delta R.T. 0.013 min
Lab File: P38495.D
Acq: 14 Aug 2020 4:45 am

Tgt Ion: 94 Resp: 766

Ion	Ratio	Lower	Upper
94	100		
96	59.9	75.2	115.2#

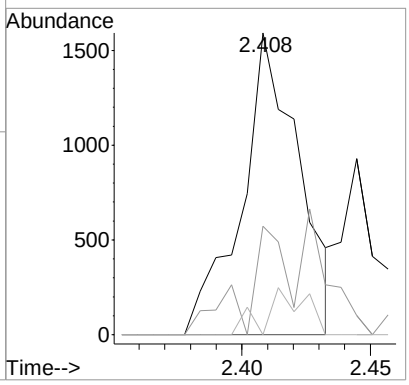


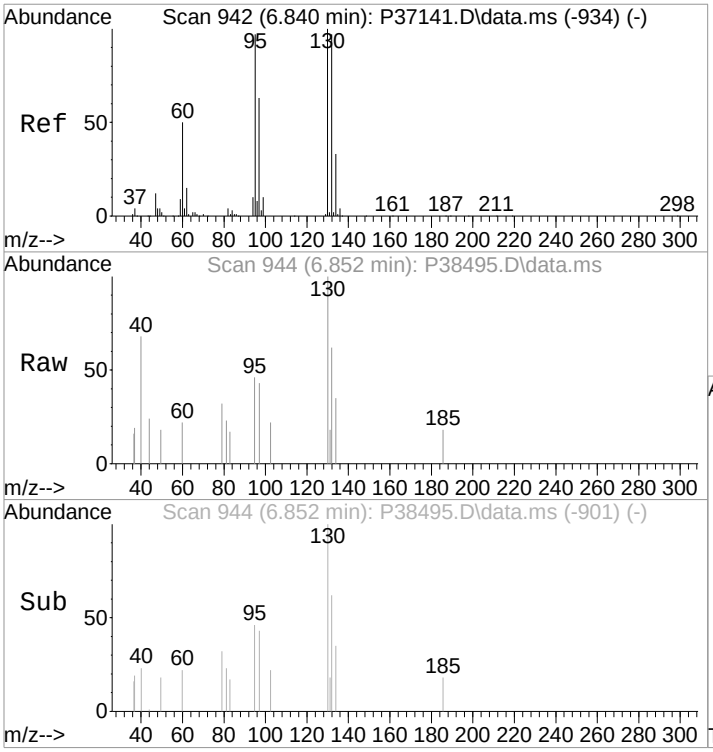


#15
Acetone
Concen: Below Cal
RT: 2.408 min Scan# 215
Delta R.T. 0.001 min
Lab File: P38495.D
Acq: 14 Aug 2020 4:45 am

Tgt Ion: 43 Resp: 2477

Ion	Ratio	Lower	Upper
43	100		
58	35.9	8.2	48.2
42	0.0	0.0	27.7

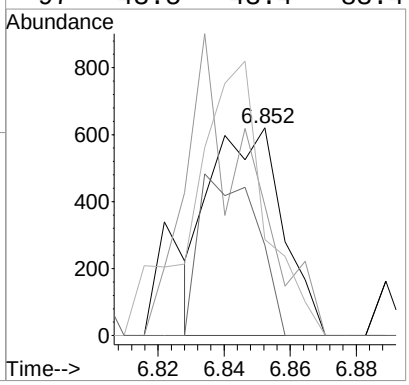




#54
Trichloroethene
Concen: 0.29 ppb
RT: 6.852 min Scan# 944
Delta R.T. 0.012 min
Lab File: P38495.D
Acq: 14 Aug 2020 4:45 am

Tgt Ion:130 Resp: 952

Ion	Ratio	Lower	Upper
130	100		
132	62.5	77.2	117.2#
95	46.2	76.7	116.7#
97	43.5	43.4	83.4



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38488.D
Acq On : 14 Aug 2020 2:12 am
Operator : K.Ruest
Sample : R2007055-007|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 16:30:31 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

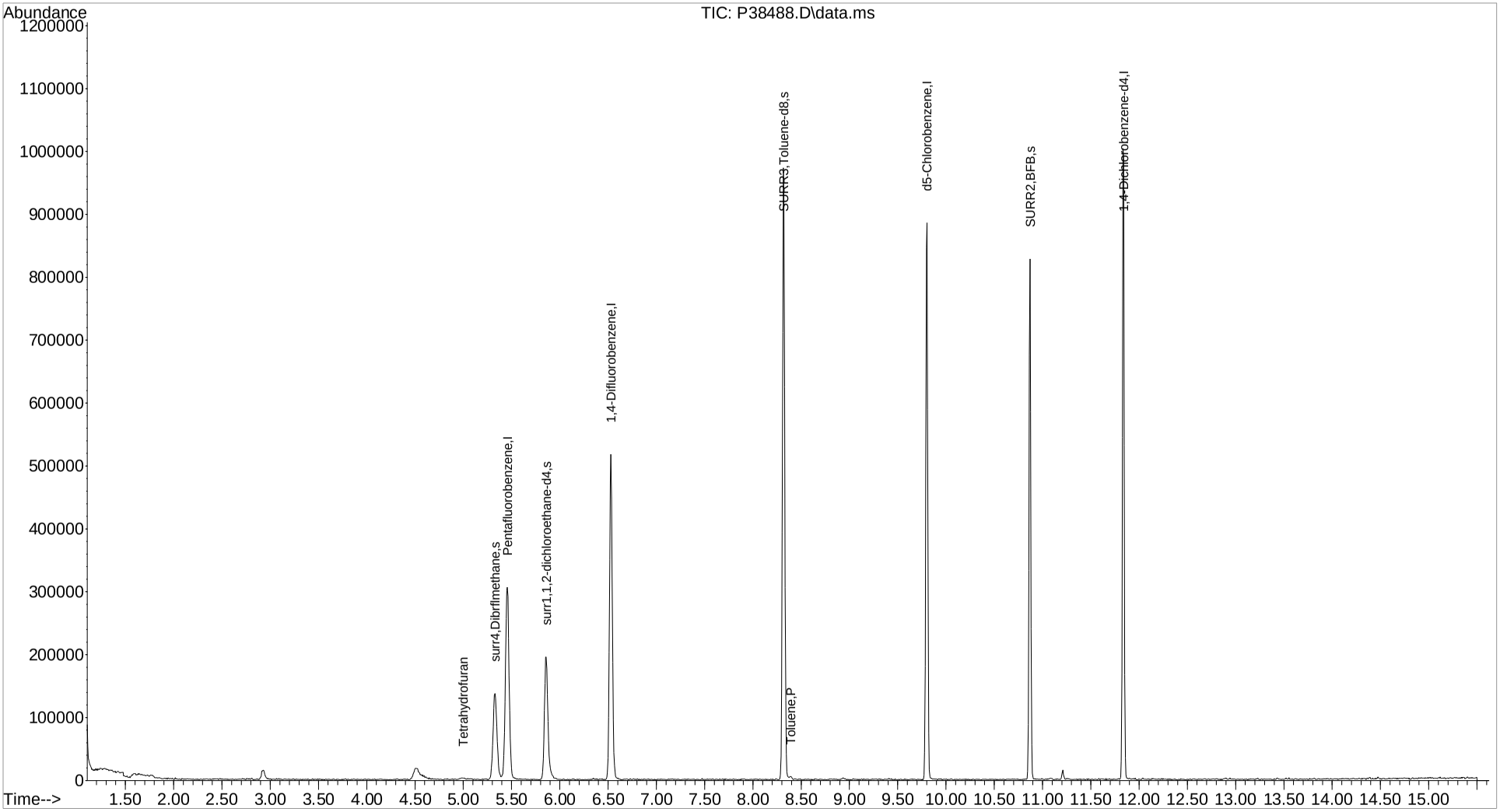
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	294012	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	447768	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	412101	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	206501	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	119866	46.62	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 93.24%				
48) surr1,1,2-dichloroetha...	5.859	65	172899	48.57	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 97.14%				
65) SURR3,Toluene-d8	8.316	98	606737	50.77	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.54%				
70) SURR2,BFB	10.870	95	221904	50.40	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.80%				
Target Compounds							Qvalue
39) Tetrahydrofuran	4.999	42	2291	1.30	ppb		73
66) Toluene	8.389	91	3511	0.26	ppb	#	63

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

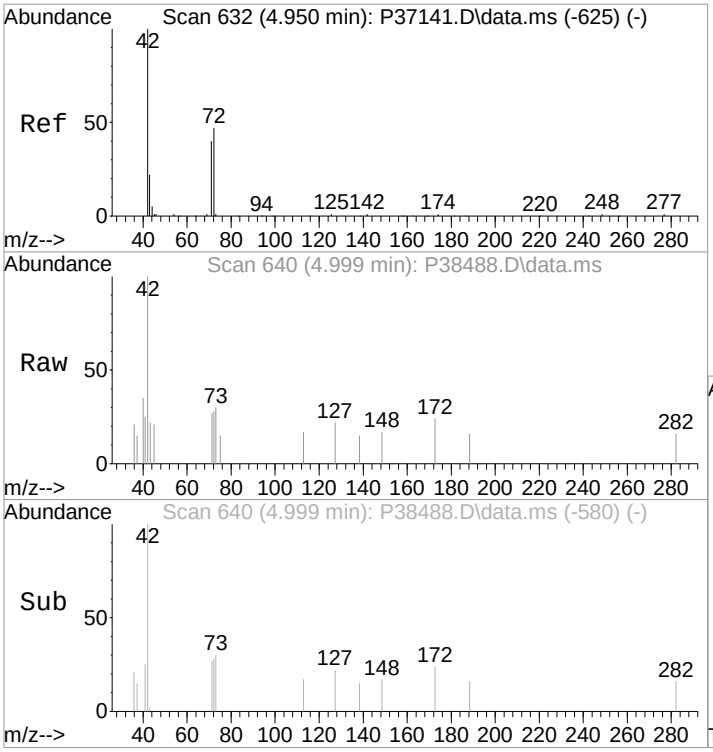
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38488.D
Acq On : 14 Aug 2020 2:12 am
Operator : K.Ruest
Sample : R2007055-007|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 16:30:31 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



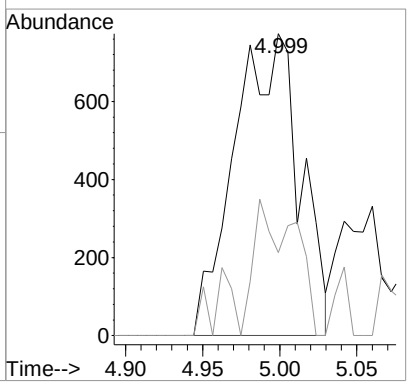
1st 08/17/20
2nd 08/18/20

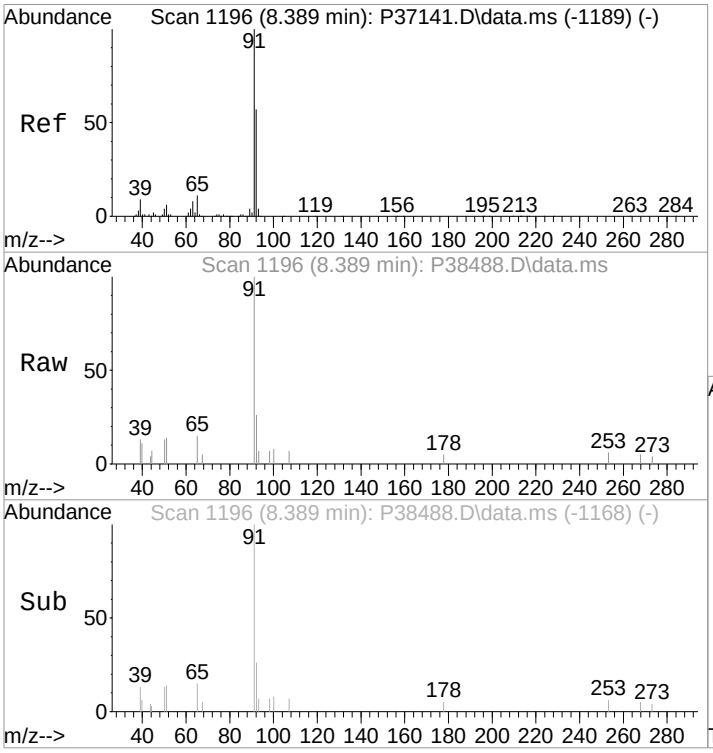


#39
Tetrahydrofuran
Concen: 1.30 ppb
RT: 4.999 min Scan# 640
Delta R.T. 0.049 min
Lab File: P38488.D
Acq: 14 Aug 2020 2:12 am

Tgt Ion: 42 Resp: 2291

Ion	Ratio	Lower	Upper
42	100		
72	27.5	25.2	65.2

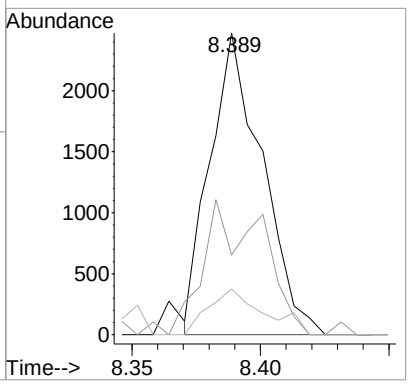




#66
Toluene
Concen: 0.26 ppb
RT: 8.389 min Scan# 1196
Delta R.T. 0.000 min
Lab File: P38488.D
Acq: 14 Aug 2020 2:12 am

Tgt Ion: 91 Resp: 3511

Ion	Ratio	Lower	Upper
91	100		
92	26.5	37.5	77.5#
65	15.2	0.0	31.3

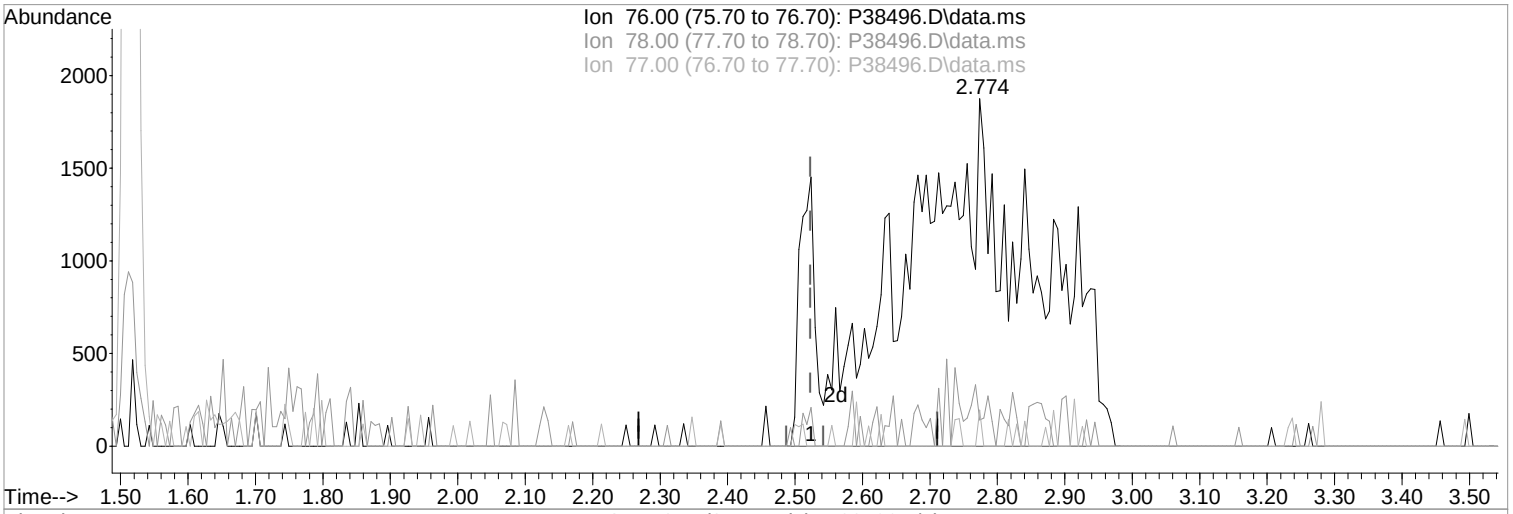


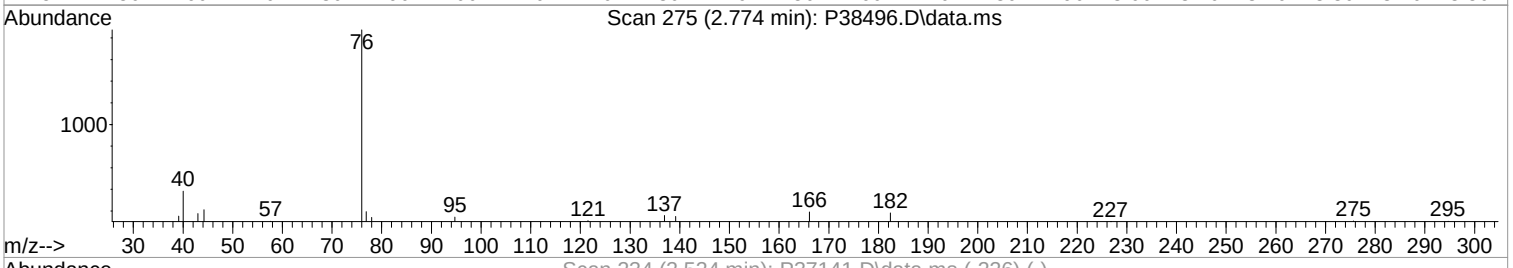
1st 08/17/20
2nd 08/18/20

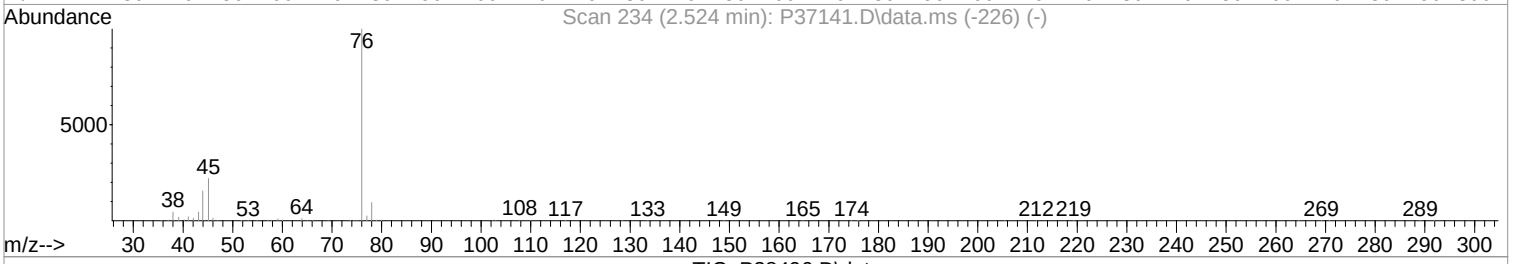
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38496.D
Acq On : 14 Aug 2020 5:07 am
Operator : K.Ruest
Sample : R2007055-008|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Aug 14 11:22:55 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38496.D\data.ms

(18) Carbon Disulfide (P)

2.774min (+0.251) 2.85 ppb m

response 25838

Ion	Exp%	Act%
76.00	100	100
78.00	9.50	7.52
77.00	2.50	10.34
0.00	0.00	0.00

Manual Integration:

After

Other - so2 interference

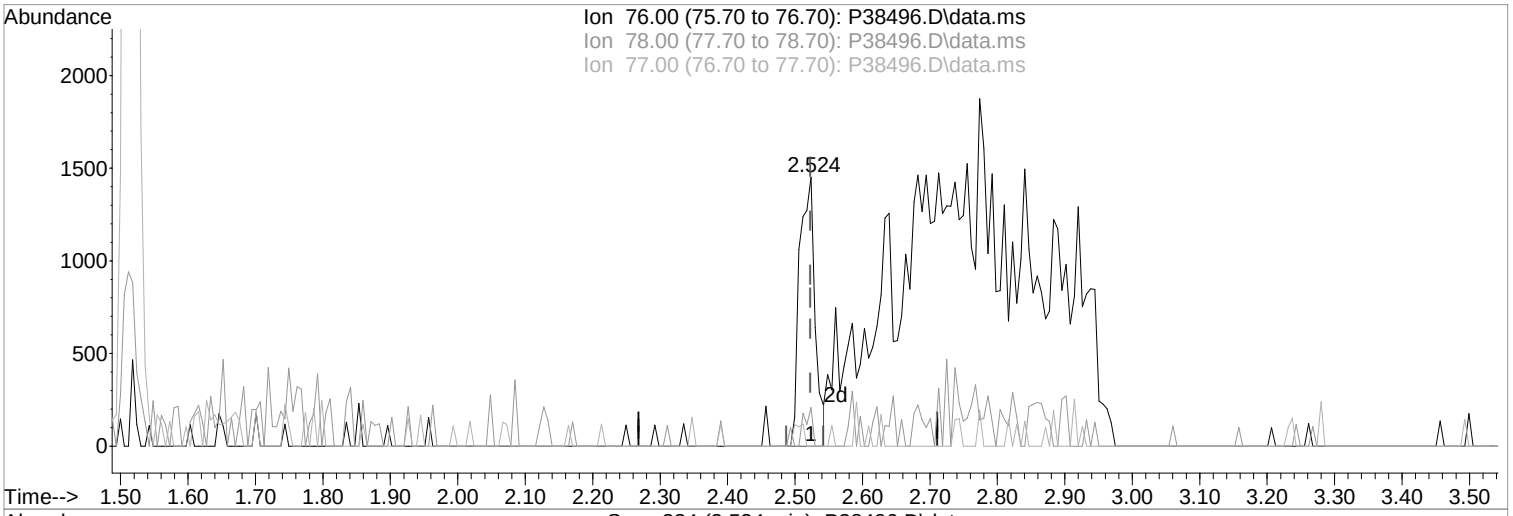
08/17/20

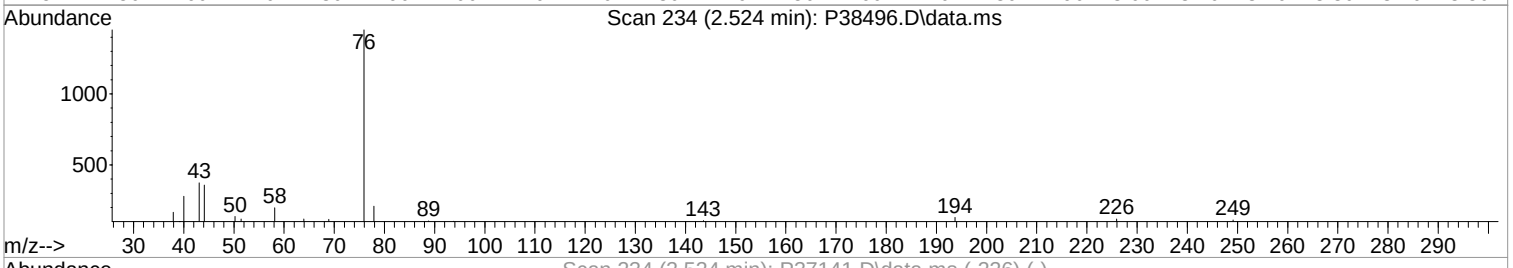
1st 08/17/20
2nd 08/18/20

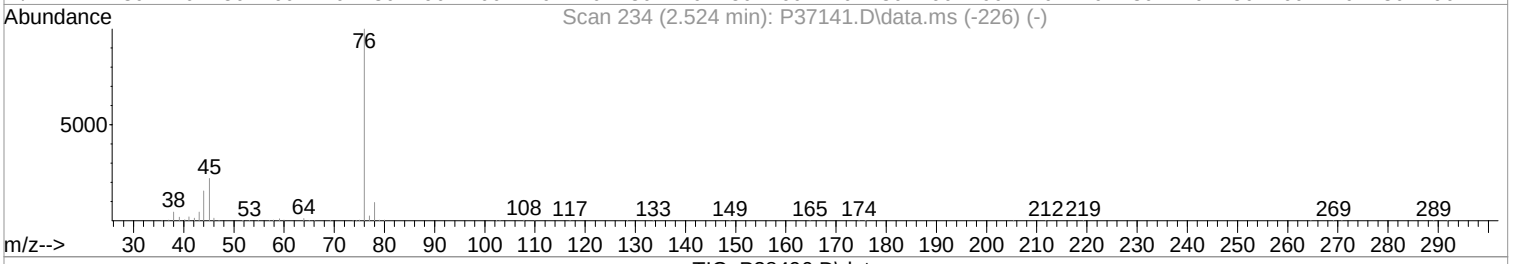
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38496.D
Acq On : 14 Aug 2020 5:07 am
Operator : K.Ruest
Sample : R2007055-008|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Aug 14 11:22:55 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38496.D\data.ms

(18) Carbon Disulfide (P)

2.524min (+0.001) -0.12 ppb

response 2317

Ion	Exp%	Act%
76.00	100	100
78.00	9.50	14.39
77.00	2.50	0.00
0.00	0.00	0.00

Manual Integration:

Before

08/17/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38496.D
Acq On : 14 Aug 2020 5:07 am
Operator : K.Ruest
Sample : R2007055-008|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Aug 17 16:47:13 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

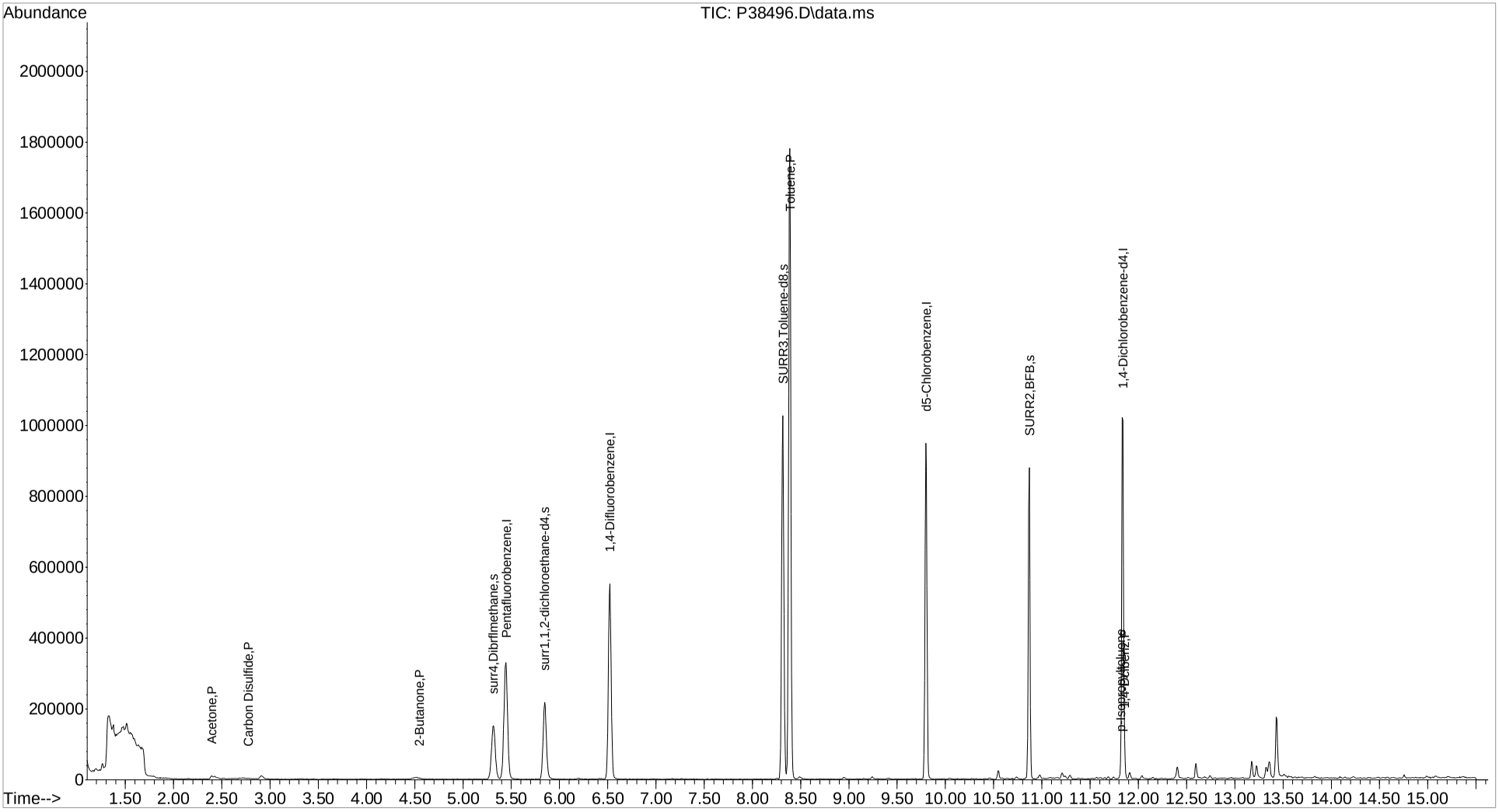
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	315401	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	481571	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	441593	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	218911	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.316	113	127740	46.19	ppb	-0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 92.38%			
48) surr1,1,2-dichloroetha...	5.846	65	180697	47.20	ppb	-0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 94.40%			
65) SURR3,Toluene-d8	8.315	98	643820	50.10	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.20%			
70) SURR2,BFB	10.870	95	234142	49.44	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.88%			
Target Compounds						Qvalue
15) Acetone	2.396	43	20568	8.92	ppb	92
18) Carbon Disulfide	2.774	76	25838m	2.85	ppb	
35) 2-Butanone	4.548	43	4776	1.95	ppb	78
66) Toluene	8.389	91	1216615	82.63	ppb	97
104) p-Isopropyltoluene	11.815	119	5844	0.44	ppb	75
106) 1,4-Dclbenz	11.857	146	23289	2.96	ppb	98

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

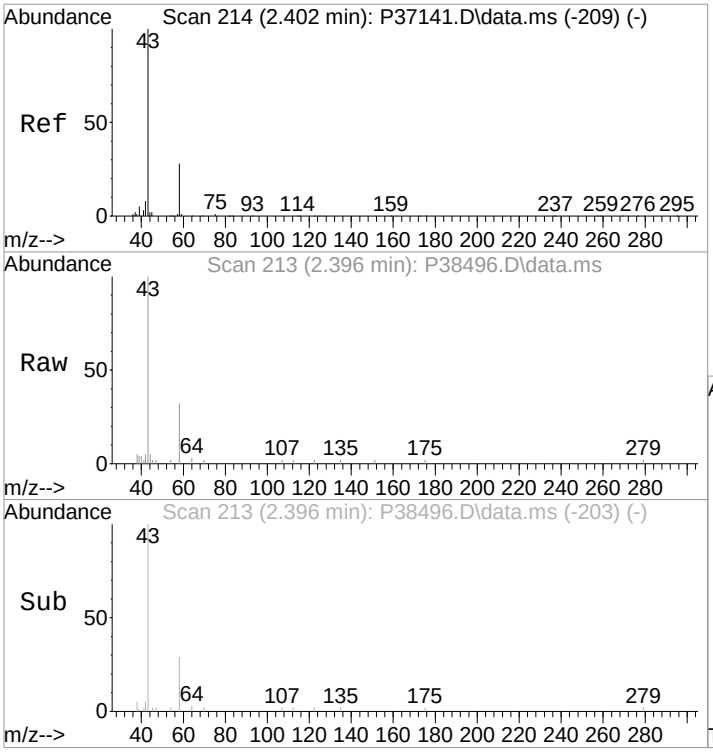
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38496.D
Acq On : 14 Aug 2020 5:07 am
Operator : K.Ruest
Sample : R2007055-008|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Aug 17 16:47:13 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



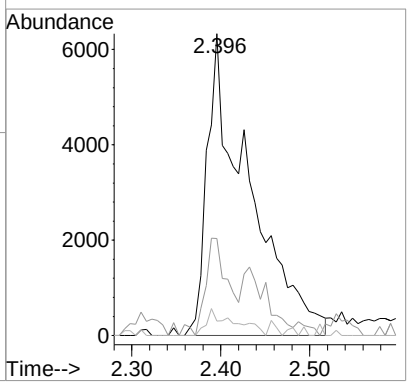
1st 08/17/20
2nd 08/18/20

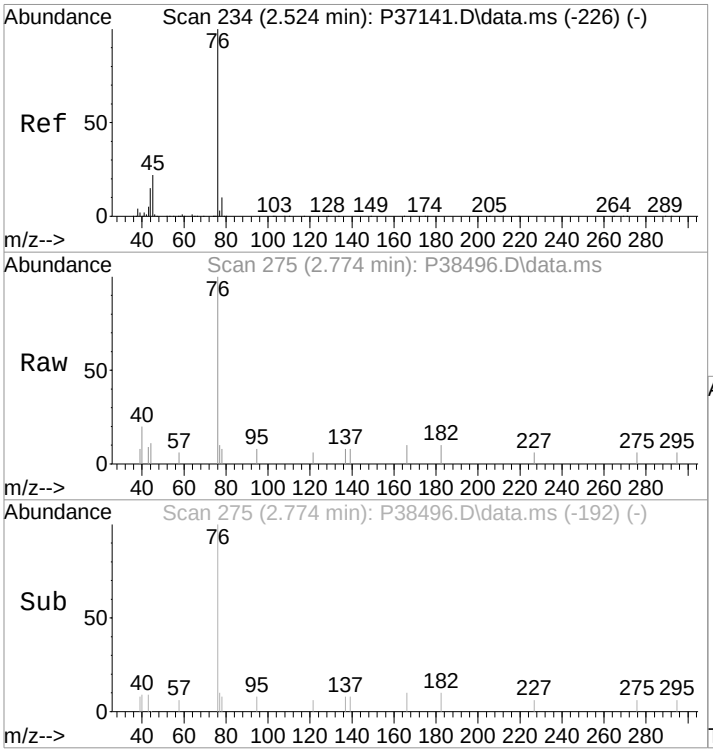


#15
Acetone
Concen: 8.92 ppb
RT: 2.396 min Scan# 213
Delta R.T. -0.011 min
Lab File: P38496.D
Acq: 14 Aug 2020 5:07 am

Tgt Ion: 43 Resp: 20568

Ion	Ratio	Lower	Upper
43	100		
58	32.1	8.2	48.2
42	4.8	0.0	27.7

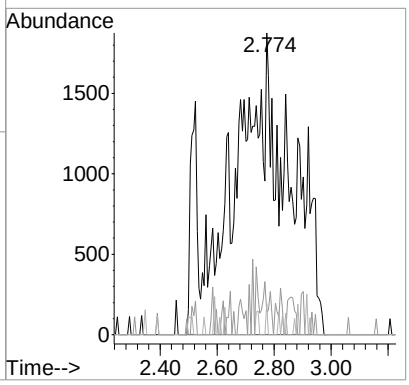


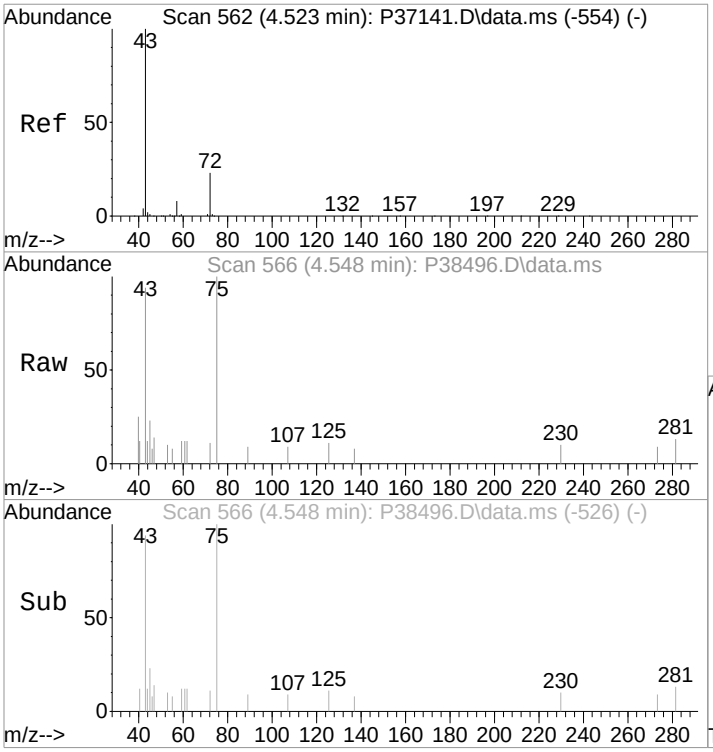


#18
Carbon Disulfide
Concen: 2.85 ppb m
RT: 2.774 min Scan# 275
Delta R.T. 0.251 min
Lab File: P38496.D
Acq: 14 Aug 2020 5:07 am

Tgt Ion: 76 Resp: 25838

Ion	Ratio	Lower	Upper
76	100		
78	7.5	0.0	29.5
77	10.3	0.0	22.5

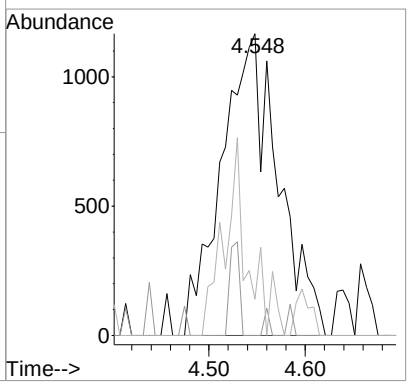


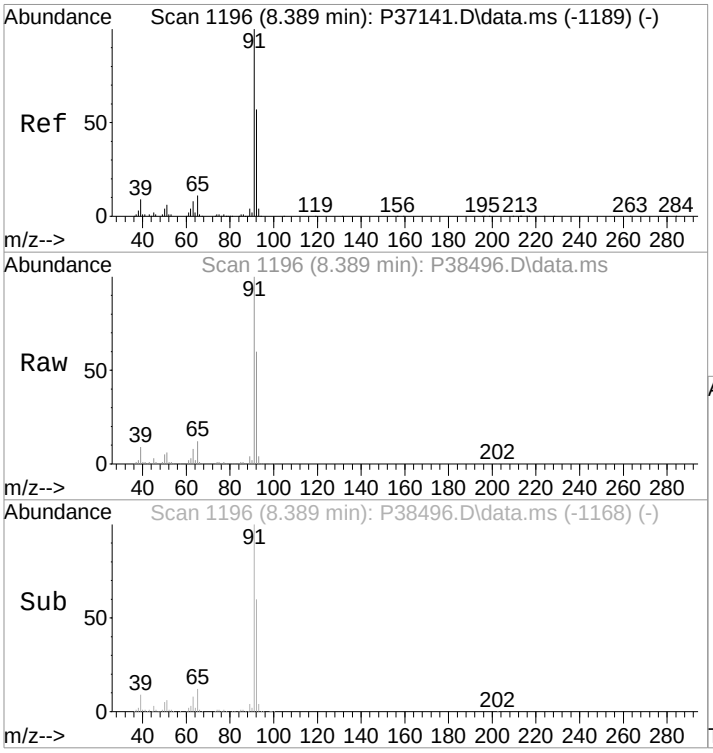


#35
2-Butanone
Concen: 1.95 ppb
RT: 4.548 min Scan# 566
Delta R.T. 0.018 min
Lab File: P38496.D
Acq: 14 Aug 2020 5:07 am

Tgt Ion: 43 Resp: 4776

Ion	Ratio	Lower	Upper
43	100		
57	0.0	0.0	27.5
72	12.0	2.6	42.6

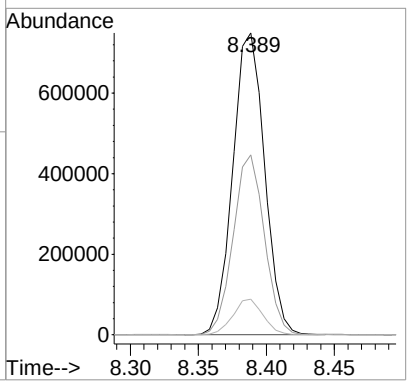


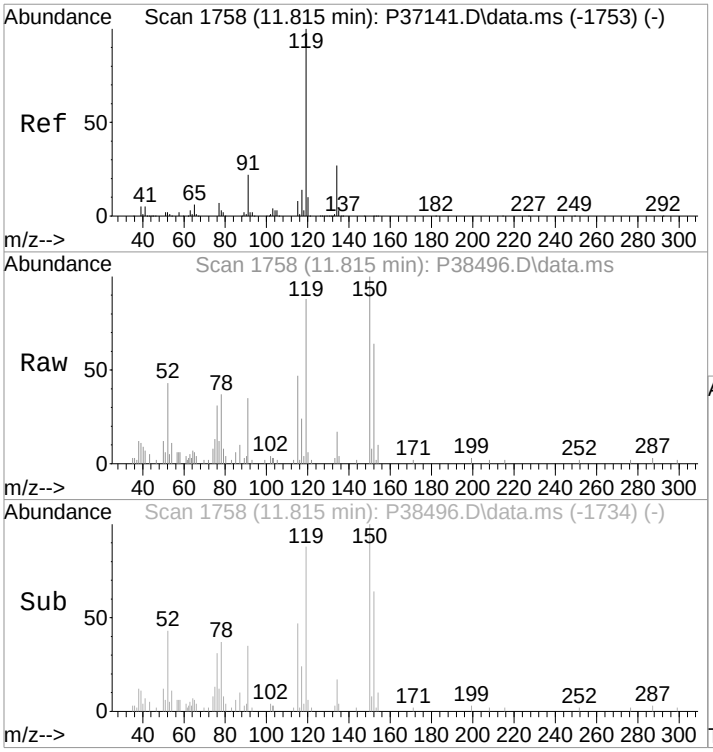


#66
Toluene
Concen: 82.63 ppb
RT: 8.389 min Scan# 1196
Delta R.T. 0.000 min
Lab File: P38496.D
Acq: 14 Aug 2020 5:07 am

Tgt Ion: 91 Resp: 1216615

Ion	Ratio	Lower	Upper
91	100		
92	59.6	37.5	77.5
65	11.8	0.0	31.3

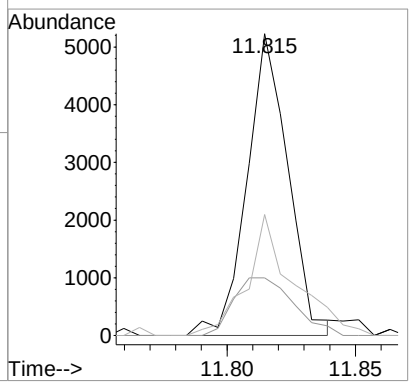


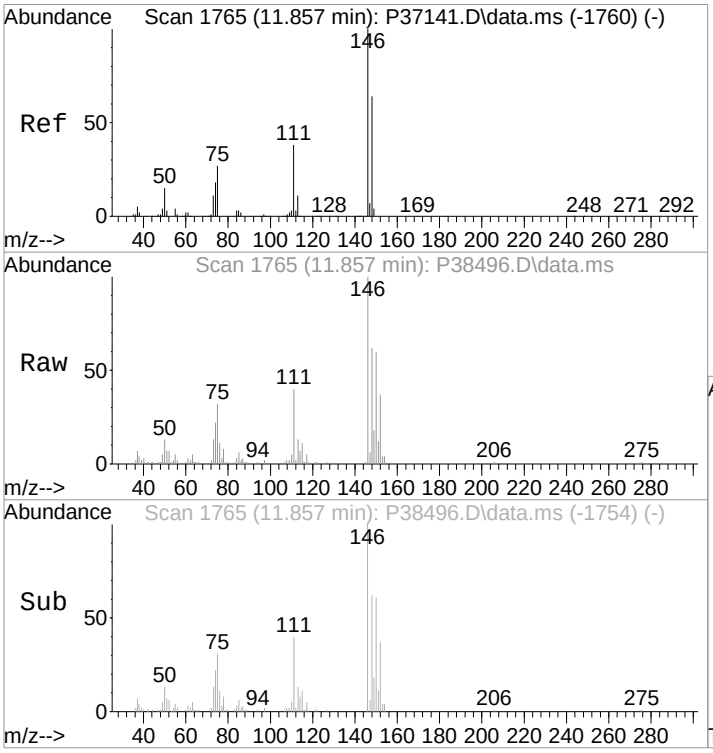


#104
p-Isopropyltoluene
Concen: 0.44 ppb
RT: 11.815 min Scan# 1758
Delta R.T. -0.000 min
Lab File: P38496.D
Acq: 14 Aug 2020 5:07 am

Tgt Ion:119 Resp: 5844

Ion	Ratio	Lower	Upper
119	100		
134	19.1	7.2	47.2
91	40.1	2.5	42.5

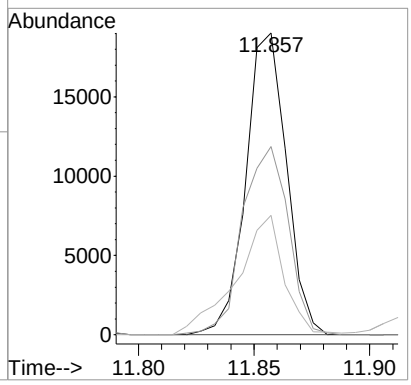




#106
1,4-Dclbenz
Concen: 2.96 ppb
RT: 11.857 min Scan# 1765
Delta R.T. -0.000 min
Lab File: P38496.D
Acq: 14 Aug 2020 5:07 am

Tgt Ion:146 Resp: 23289

Ion	Ratio	Lower	Upper
146	100		
148	62.4	44.1	84.1
111	39.6	18.6	58.6

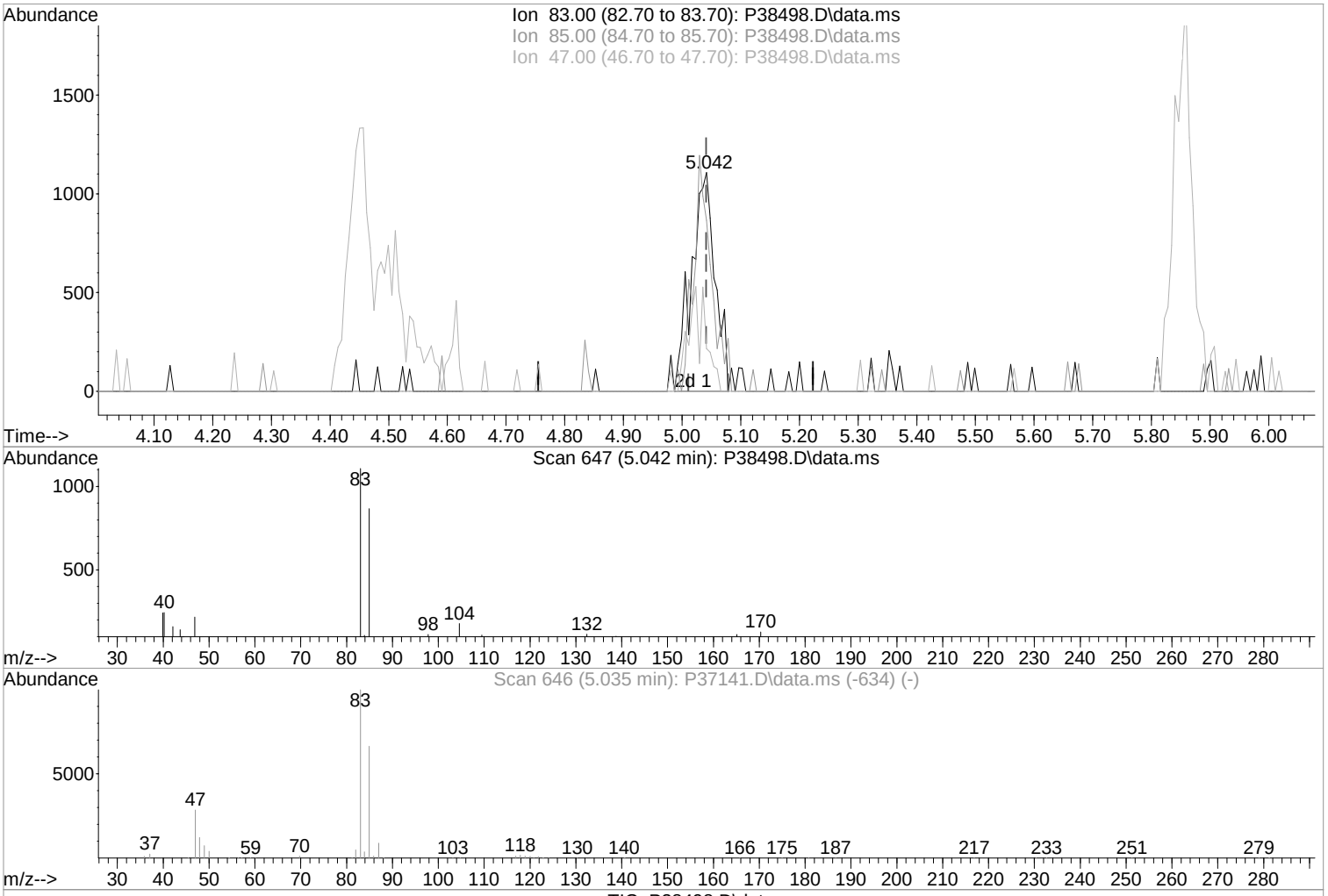


1st 08/17/20
2nd 08/18/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38498.D
Acq On : 14 Aug 2020 5:51 am
Operator : K.Ruest
Sample : R2007055-009|10 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Aug 14 11:23:49 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38498.D\data.ms

(40) Chloroform (P)

5.042min (+0.001) 0.44 ppb m

response 3090

Ion	Exp%	Act%
83.00	100	100
85.00	66.50	78.16
47.00	28.70	19.58
0.00	0.00	0.00

Manual Integration:

After

Split Peak

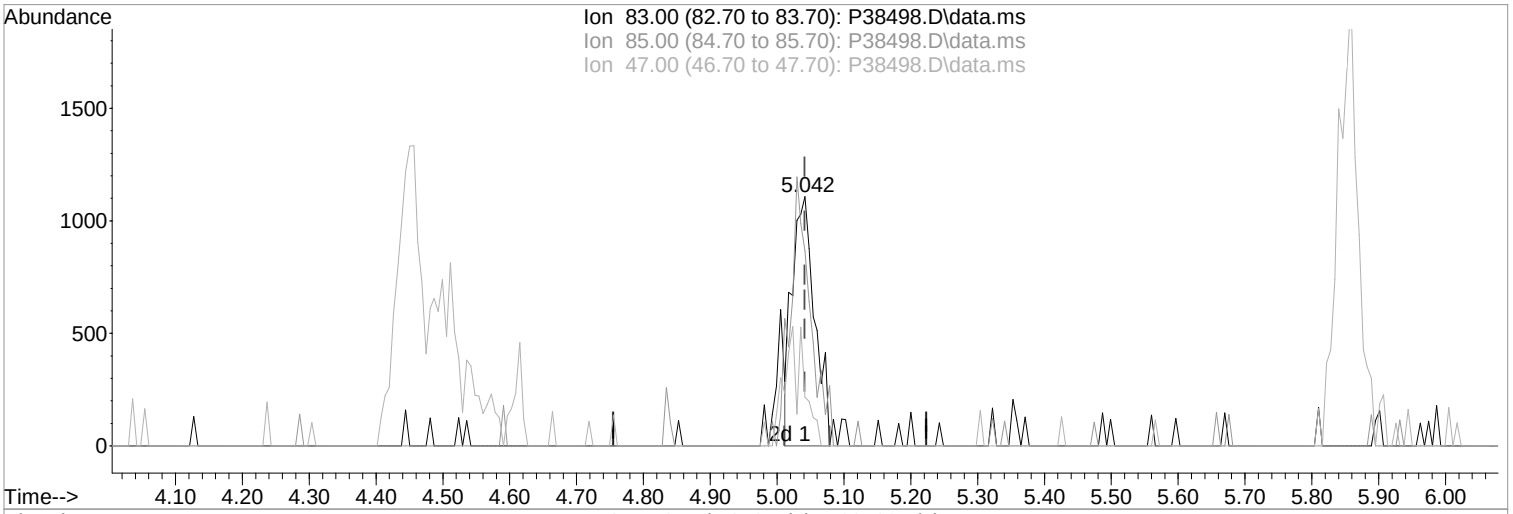
08/17/20

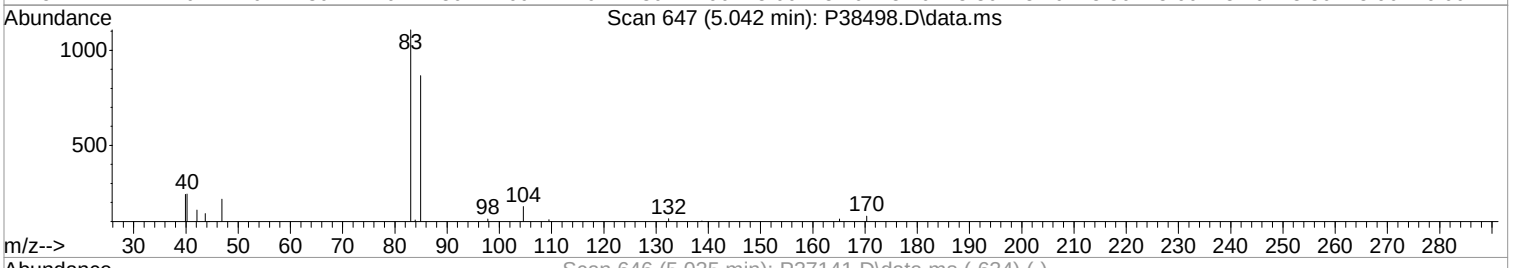
1st 08/17/20
2nd 08/18/20

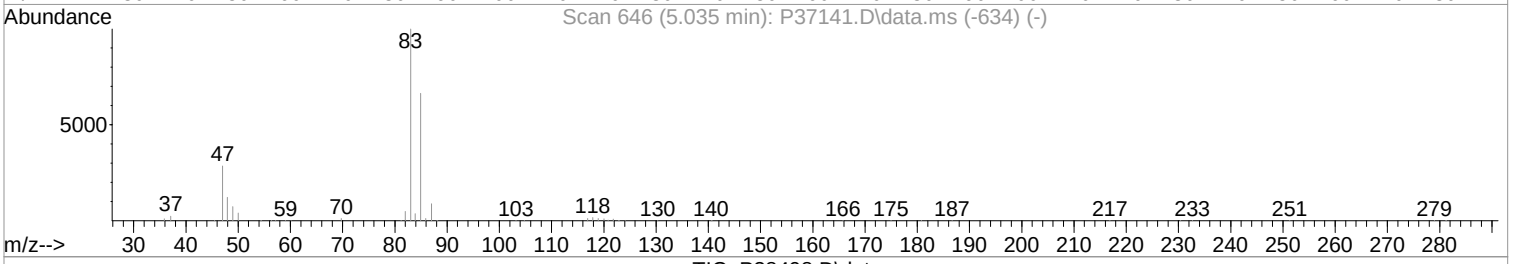
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38498.D
Acq On : 14 Aug 2020 5:51 am
Operator : K.Ruest
Sample : R2007055-009|10 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Aug 14 11:23:49 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38498.D\data.ms

(40) Chloroform (P)

5.042min (+0.001) 0.35 ppb

response 2615

Ion	Exp%	Act%
83.00	100	100
85.00	66.50	78.16
47.00	28.70	19.58
0.00	0.00	0.00

Manual Integration:

Before

08/17/20

1st 08/17/20
2nd 08/18/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38498.D
Acq On : 14 Aug 2020 5:51 am
Operator : K.Ruest
Sample : R2007055-009|10 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Aug 17 16:51:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

foamy sample

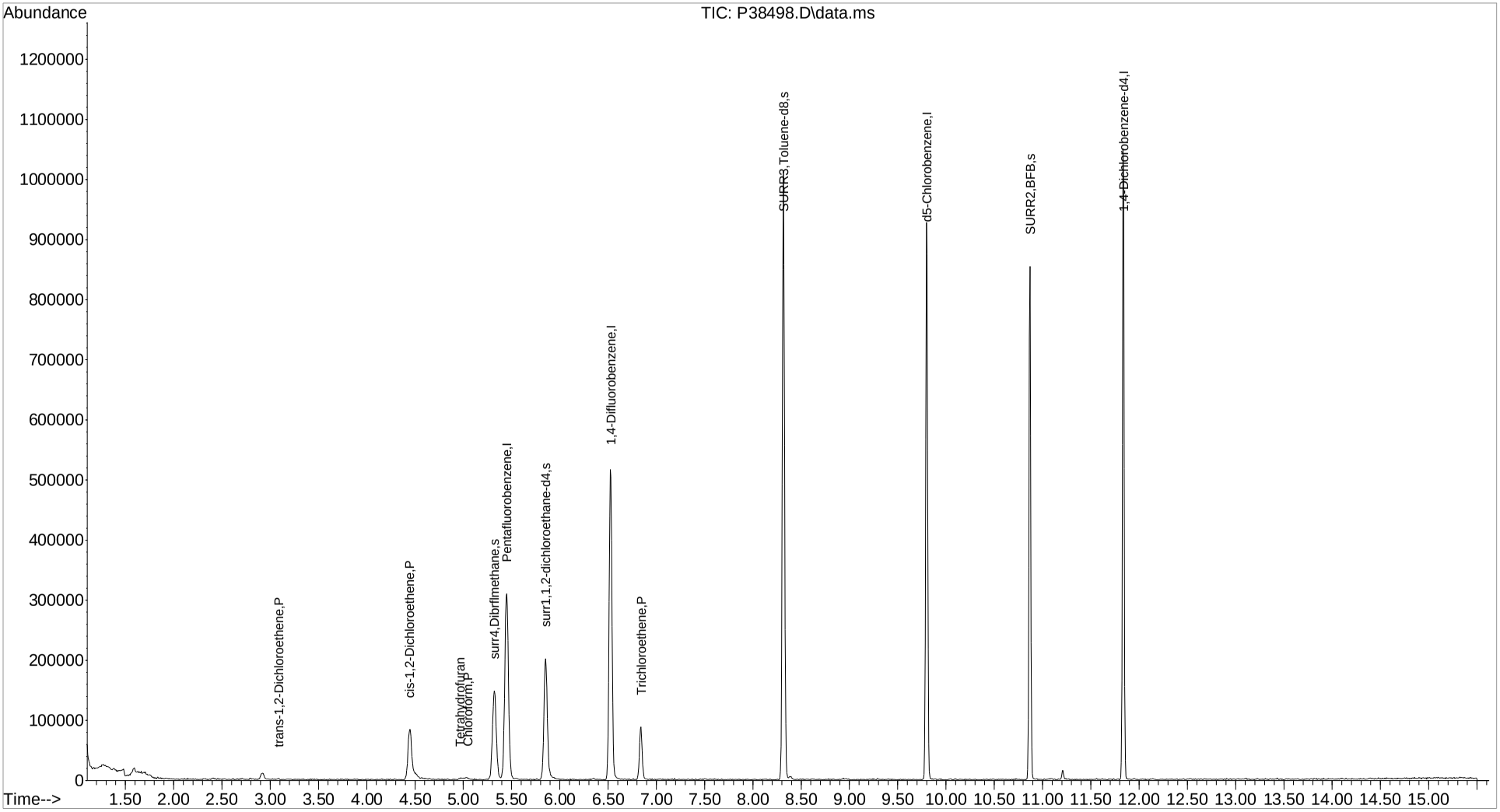
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.450	168	300442	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	473727	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	420909	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	208442	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.322	113	126598	46.54	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 93.08%				
48) surr1,1,2-dichloroetha...	5.853	65	180373	47.90	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 95.80%				
65) SURR3,Toluene-d8	8.316	98	630048	49.84	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.68%				
70) SURR2,BFB	10.870	95	227178	48.77	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.54%				
Target Compounds							Qvalue
15) Acetone	2.402	43	1700	Below Cal			90
26) trans-1,2-Dichloroethene	3.085	96	664	0.25	ppb	#	5
34) cis-1,2-Dichloroethene	4.444	96	52044	15.01	ppb	#	75
39) Tetrahydrofuran	4.969	42	2000	1.11	ppb	#	31
40) Chloroform	5.042	83	3090m	0.44	ppb		
54) Trichloroethene	6.840	130	32346	9.53	ppb		97

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

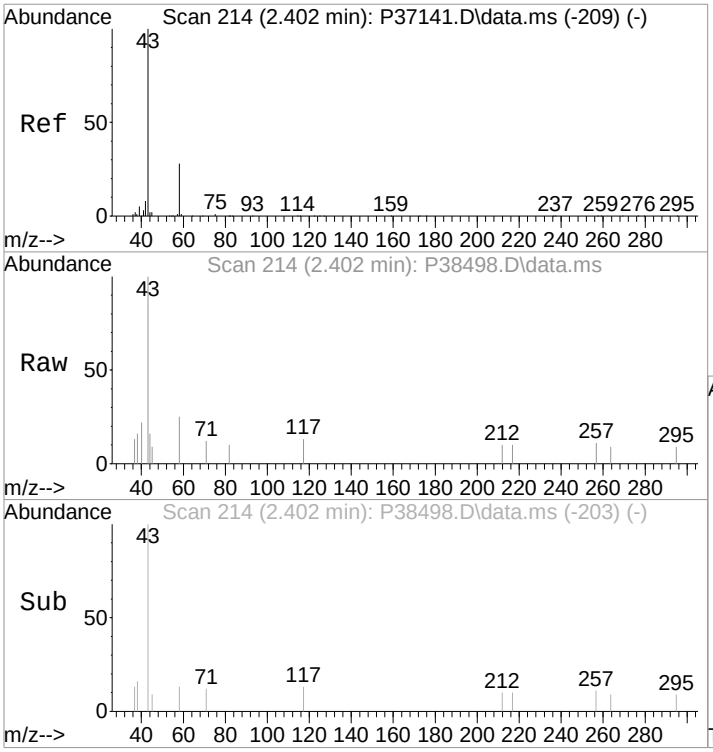
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38498.D
Acq On : 14 Aug 2020 5:51 am
Operator : K.Ruest
Sample : R2007055-009|10 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Aug 17 16:51:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



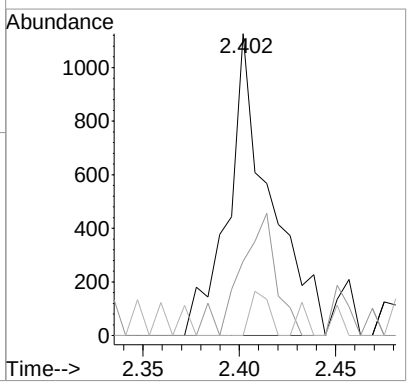
1st 08/17/20
2nd 08/18/20

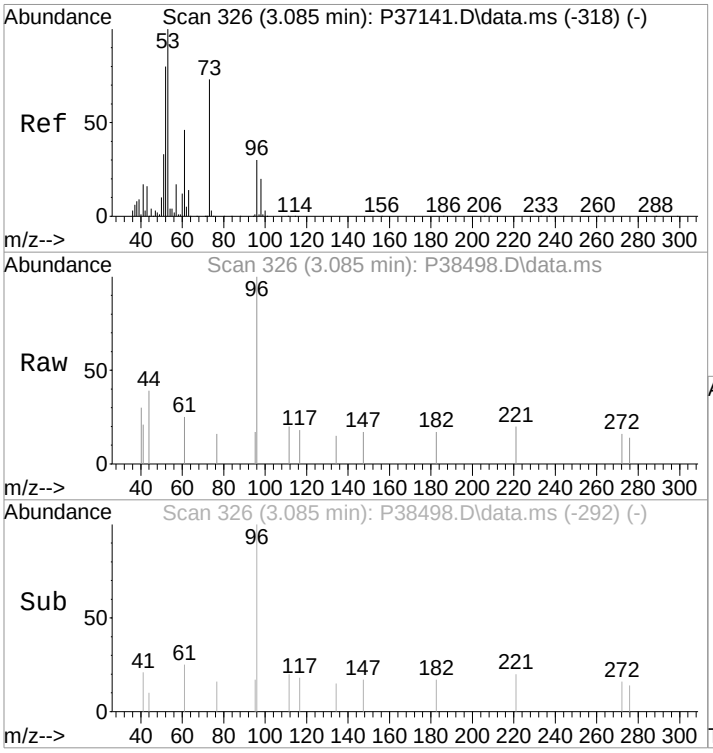


#15
Acetone
Concen: Below Cal
RT: 2.402 min Scan# 214
Delta R.T. -0.005 min
Lab File: P38498.D
Acq: 14 Aug 2020 5:51 am

Tgt Ion: 43 Resp: 1700

Ion	Ratio	Lower	Upper
43	100		
58	24.6	8.2	48.2
42	0.0	0.0	27.7

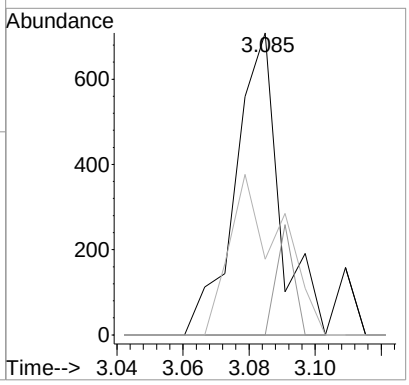


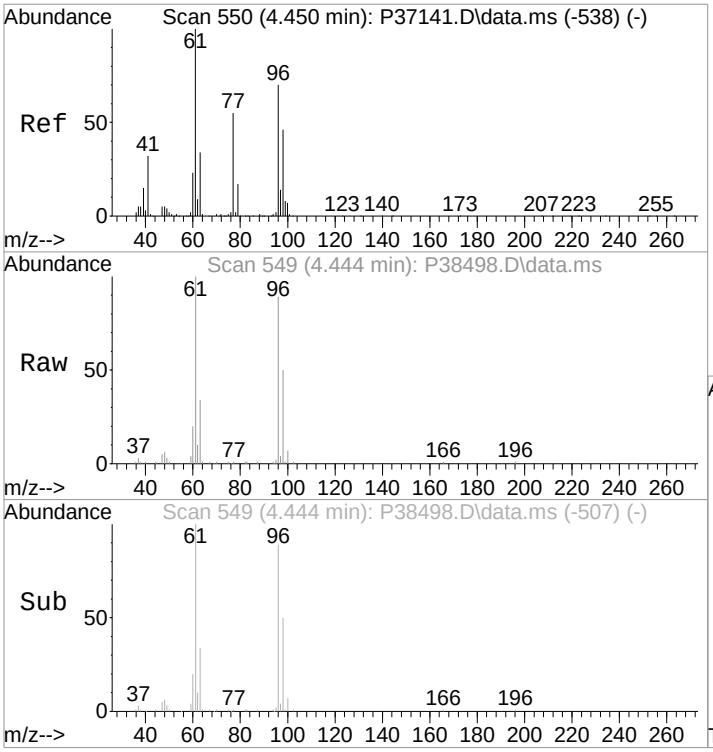


#26
trans-1,2-Dichloroethene
Concen: 0.25 ppb
RT: 3.085 min Scan# 326
Delta R.T. 0.000 min
Lab File: P38498.D
Acq: 14 Aug 2020 5:51 am

Tgt Ion: 96 Resp: 664

Ion	Ratio	Lower	Upper
96	100		
98	0.0	46.8	86.8#
61	25.1	132.8	172.8#

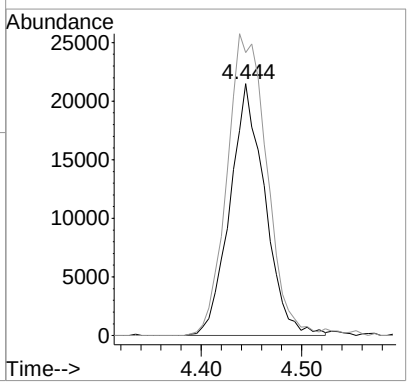


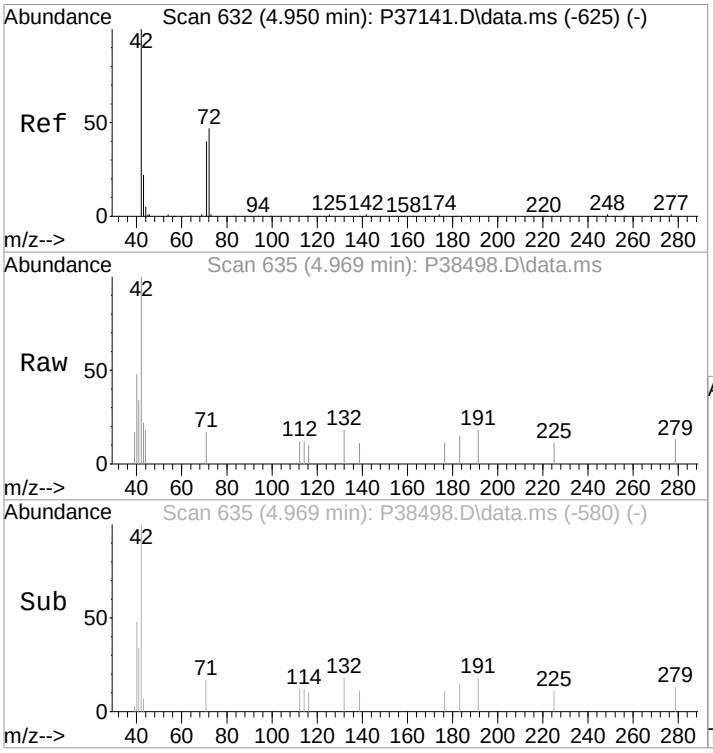


#34
cis-1,2-Dichloroethene
Concen: 15.01 ppb
RT: 4.444 min Scan# 549
Delta R.T. -0.006 min
Lab File: P38498.D
Acq: 14 Aug 2020 5:51 am

Tgt Ion: 96 Resp: 52044

Ion	Ratio	Lower	Upper
96	100		
61	112.3	123.1	163.1#

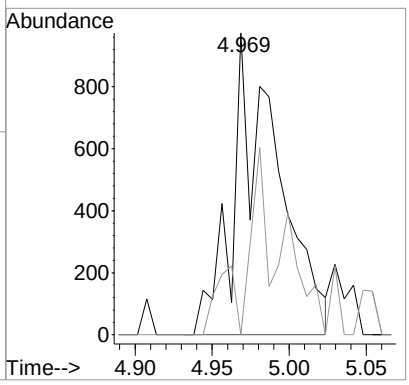


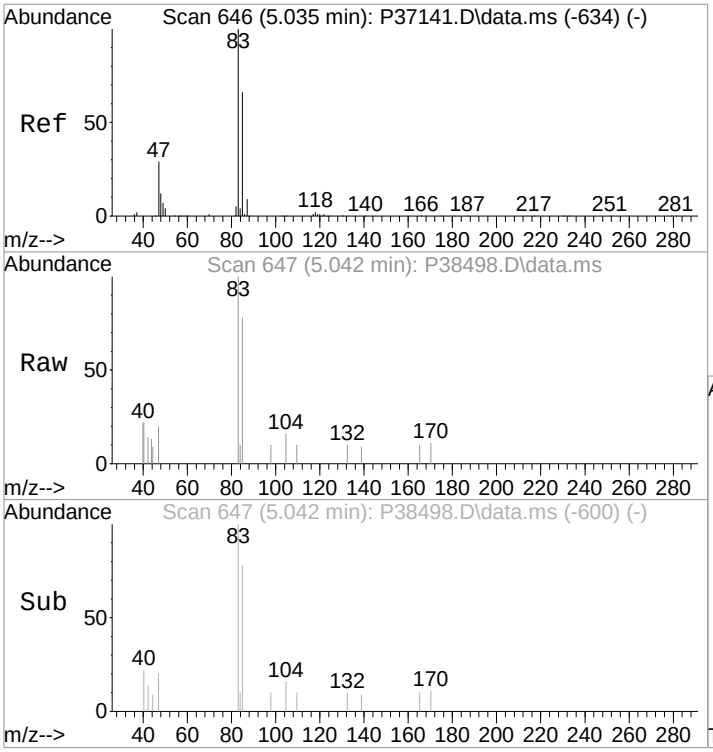


#39
Tetrahydrofuran
Concen: 1.11 ppb
RT: 4.969 min Scan# 635
Delta R.T. 0.018 min
Lab File: P38498.D
Acq: 14 Aug 2020 5:51 am

Tgt Ion: 42 Resp: 2000

Ion	Ratio	Lower	Upper
42	100		
72	0.0	25.2	65.2#

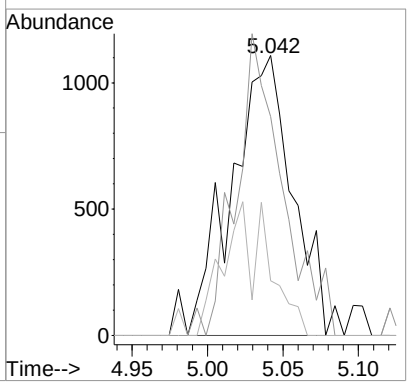


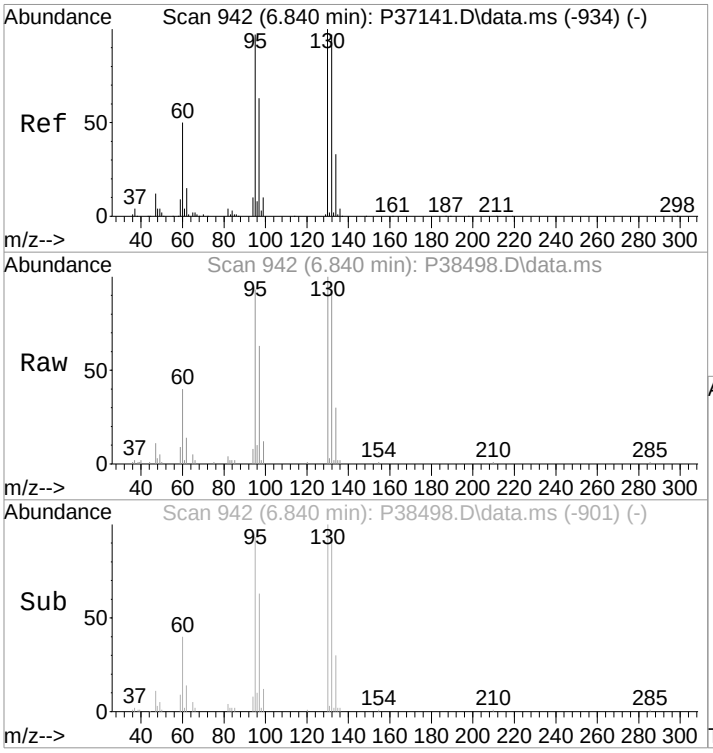


#40
Chloroform
Concen: 0.44 ppb m
RT: 5.042 min Scan# 647
Delta R.T. 0.001 min
Lab File: P38498.D
Acq: 14 Aug 2020 5:51 am

Tgt Ion: 83 Resp: 3090

Ion	Ratio	Lower	Upper
83	100		
85	78.2	46.5	86.5
47	19.6	8.7	48.7

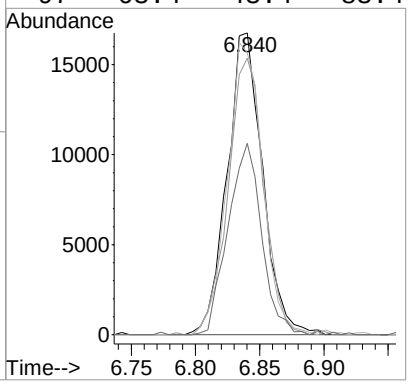




#54
Trichloroethene
Concen: 9.53 ppb
RT: 6.840 min Scan# 942
Delta R.T. 0.000 min
Lab File: P38498.D
Acq: 14 Aug 2020 5:51 am

Tgt Ion:130 Resp: 32346

Ion	Ratio	Lower	Upper
130	100		
132	91.5	77.2	117.2
95	93.4	76.7	116.7
97	63.4	43.4	83.4



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38501.D
Acq On : 14 Aug 2020 6:57 am
Operator : K.Ruest
Sample : R2007055-010|50 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Aug 17 16:57:50 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

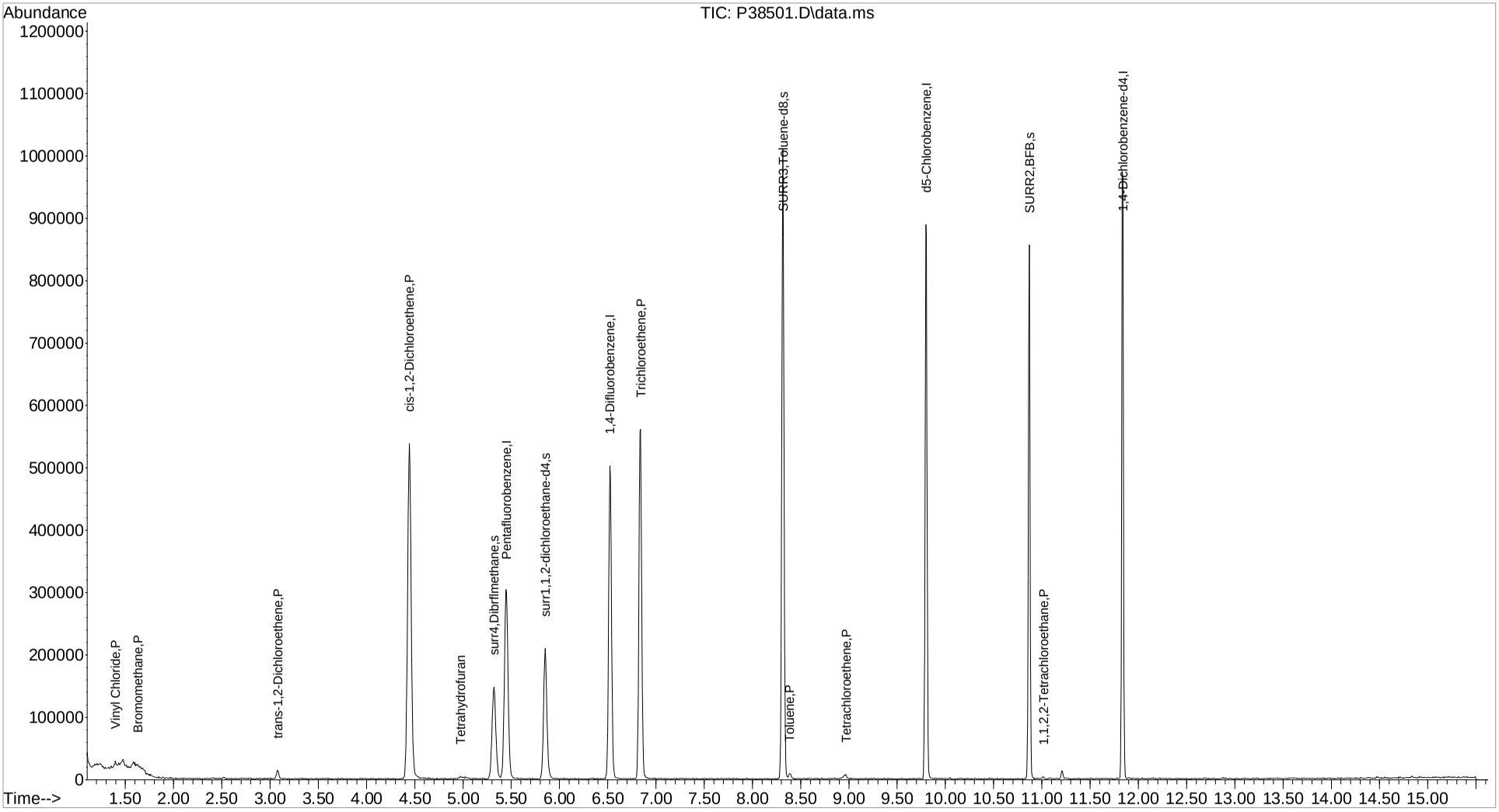
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.450	168	290782	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.523	114	445229	50.00	ppb		0.00
71) d5-Chlorobenzene	9.797	117	412740	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	203518	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.322	113	124448	48.68	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.36%				
48) surr1,1,2-dichloroetha...	5.853	65	176204	49.79	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 99.58%				
65) SURR3,Toluene-d8	8.315	98	622950	52.43	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 104.86%				
70) SURR2,BFB	10.870	95	219001	50.02	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.04%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.396	62	4631	1.22	ppb	#	1
5) Bromomethane	1.628	94	799	0.26	ppb	#	74
15) Acetone	2.402	43	752	Below Cal			86
18) Carbon Disulfide	2.518	76	2413	Below Cal			78
26) trans-1,2-Dichloroethene	3.079	96	5224	1.99	ppb	#	84
34) cis-1,2-Dichloroethene	4.444	96	323948	96.53	ppb		95
39) Tetrahydrofuran	4.975	42	2717	1.56	ppb	#	64
54) Trichloroethene	6.840	130	202802	63.58	ppb		96
66) Toluene	8.383	91	5523	0.41	ppb		97
72) Tetrachloroethene	8.968	164	960	0.38	ppb	#	47
92) 1,1,2,2-Tetrachloroethane	11.016	83	1260	0.28	ppb		86

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

Quantitation Report (QT Reviewed)

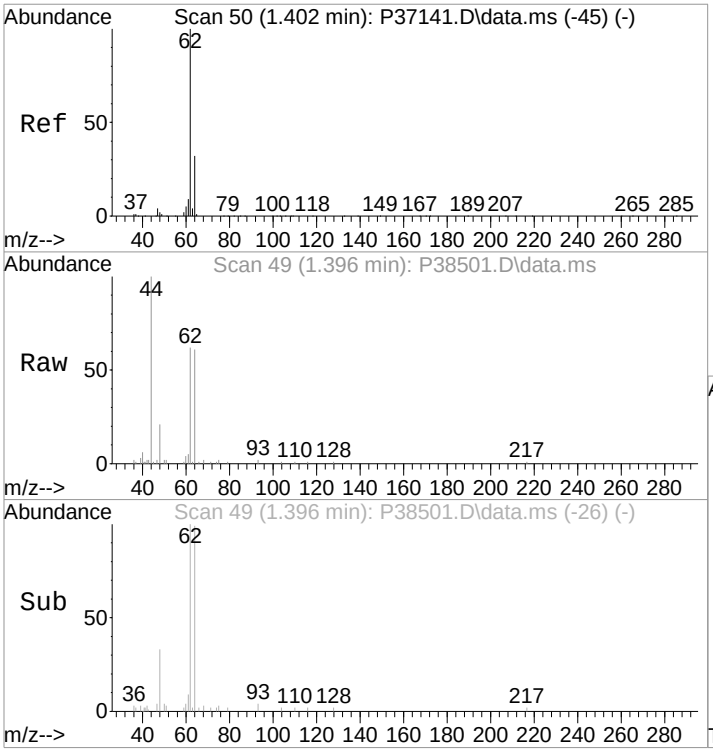
Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38501.D
Acq On : 14 Aug 2020 6:57 am
Operator : K.Ruest
Sample : R2007055-010|50 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Aug 17 16:57:50 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



1st 08/17/20
2nd 08/18/20

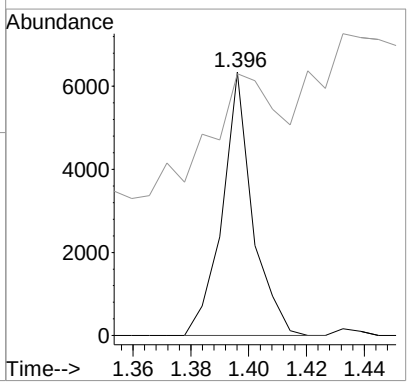
1st 08/17/20
2nd 08/18/20

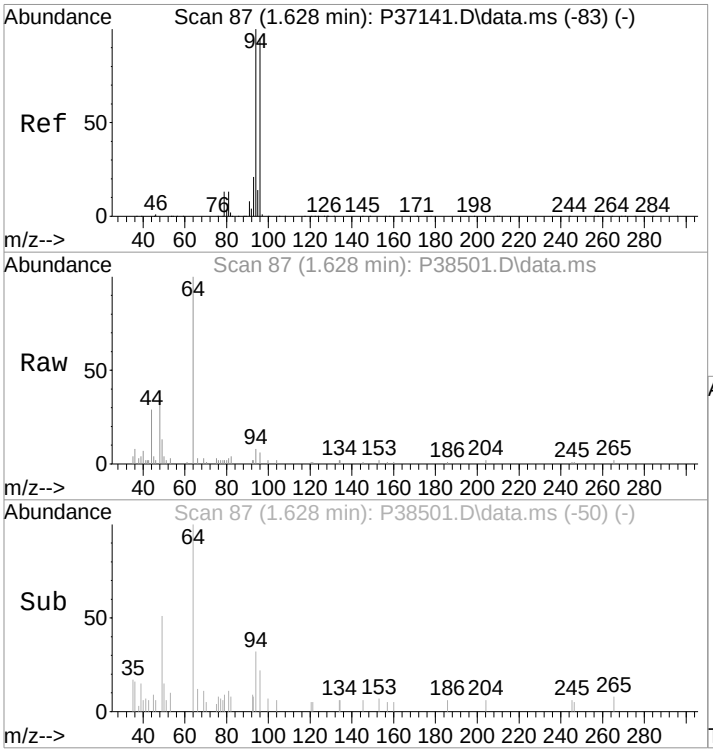


#4
Vinyl Chloride
Concen: 1.22 ppb
RT: 1.396 min Scan# 49
Delta R.T. -0.006 min
Lab File: P38501.D
Acq: 14 Aug 2020 6:57 am

Tgt Ion: 62 Resp: 4631

Ion	Ratio	Lower	Upper
62	100		
64	99.4	11.6	51.6#

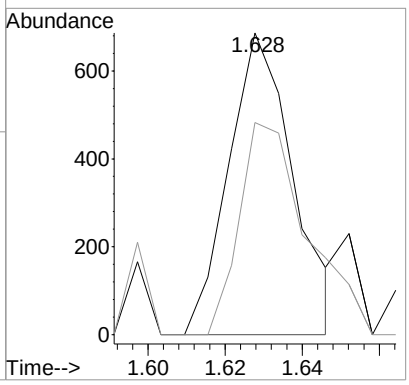


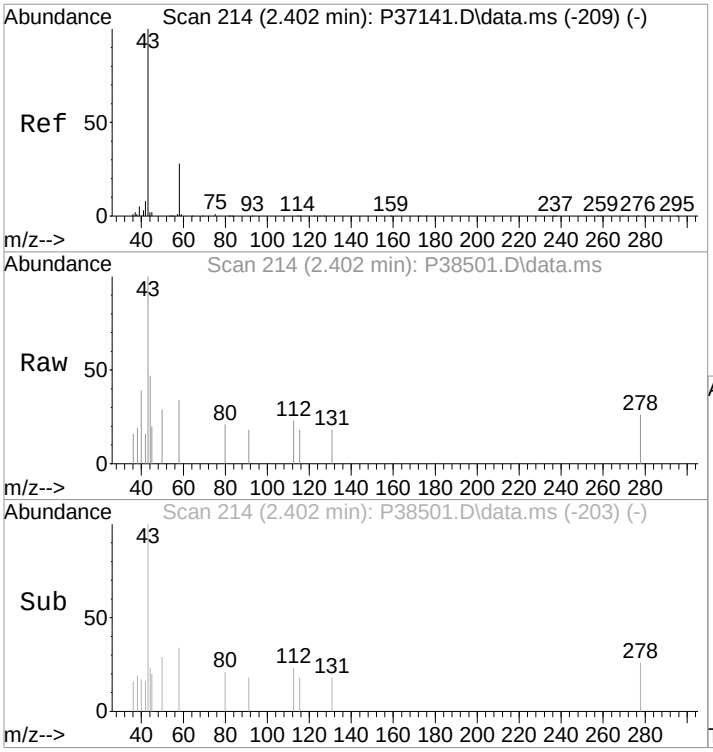


#5
Bromomethane
Concen: 0.26 ppb
RT: 1.628 min Scan# 87
Delta R.T. 0.001 min
Lab File: P38501.D
Acq: 14 Aug 2020 6:57 am

Tgt Ion: 94 Resp: 799

Ion	Ratio	Lower	Upper
94	100		
96	70.3	75.2	115.2#

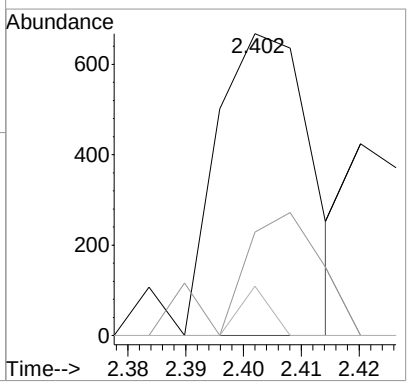


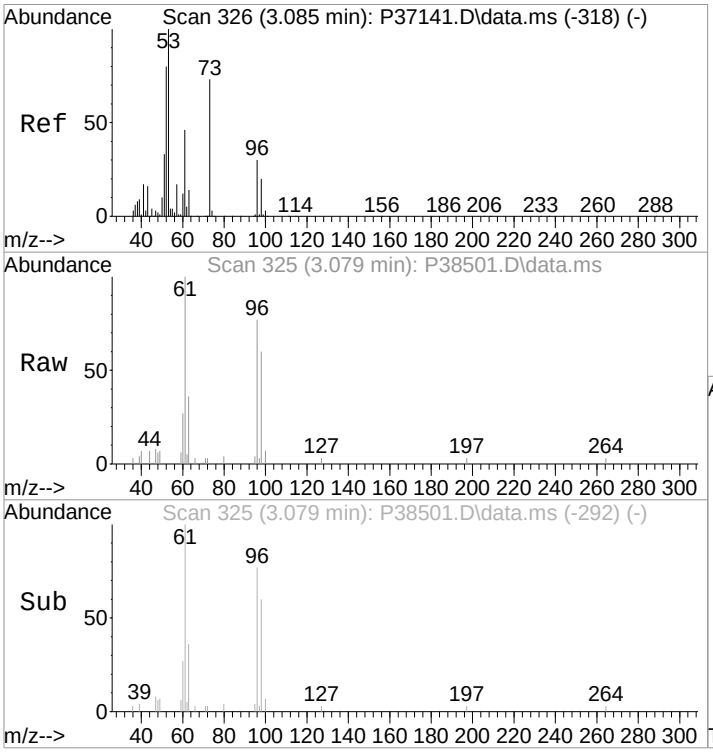


#15
Acetone
Concen: Below Cal
RT: 2.402 min Scan# 214
Delta R.T. -0.005 min
Lab File: P38501.D
Acq: 14 Aug 2020 6:57 am

Tgt Ion: 43 Resp: 752

Ion	Ratio	Lower	Upper
43	100		
58	34.3	8.2	48.2
42	16.3	0.0	27.7

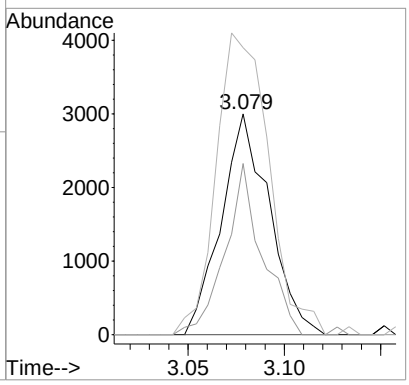


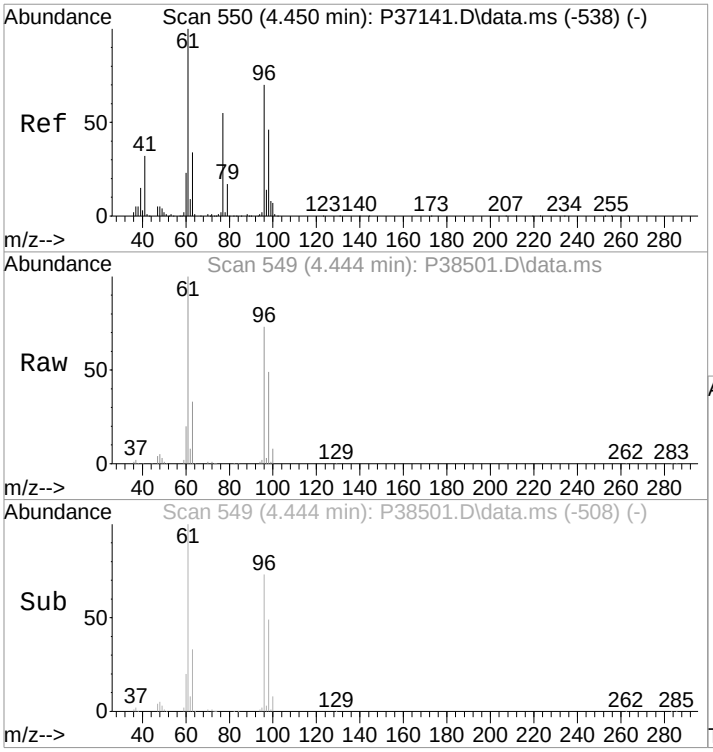


#26
trans-1,2-Dichloroethene
Concen: 1.99 ppb
RT: 3.079 min Scan# 325
Delta R.T. -0.006 min
Lab File: P38501.D
Acq: 14 Aug 2020 6:57 am

Tgt Ion: 96 Resp: 5224

Ion	Ratio	Lower	Upper
96	100		
98	77.5	46.8	86.8
61	129.9	132.8	172.8#

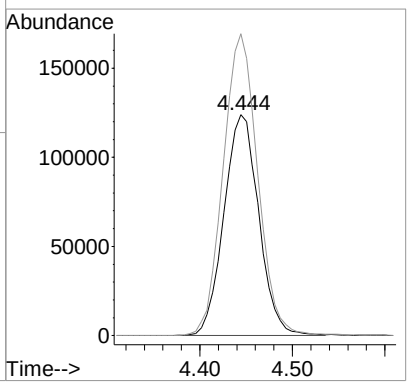


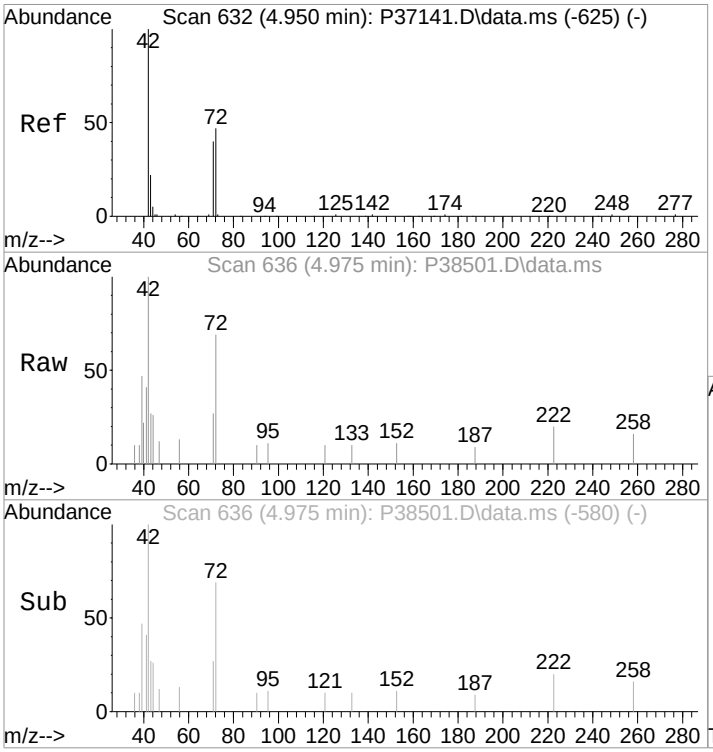


#34
cis-1,2-Dichloroethene
Concen: 96.53 ppb
RT: 4.444 min Scan# 549
Delta R.T. -0.006 min
Lab File: P38501.D
Acq: 14 Aug 2020 6:57 am

Tgt Ion: 96 Resp: 323948

Ion	Ratio	Lower	Upper
96	100		
61	136.7	123.1	163.1

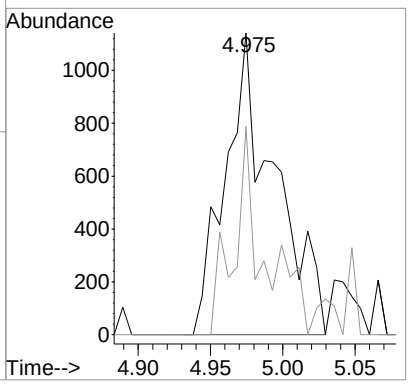


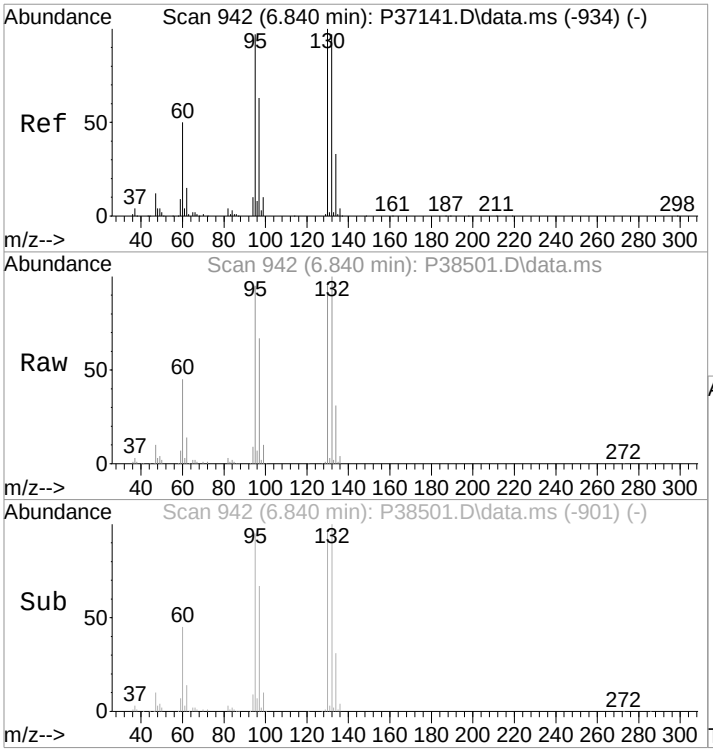


#39
Tetrahydrofuran
Concen: 1.56 ppb
RT: 4.975 min Scan# 636
Delta R.T. 0.024 min
Lab File: P38501.D
Acq: 14 Aug 2020 6:57 am

Tgt Ion: 42 Resp: 2717

Ion	Ratio	Lower	Upper
42	100		
72	69.0	25.2	65.2#

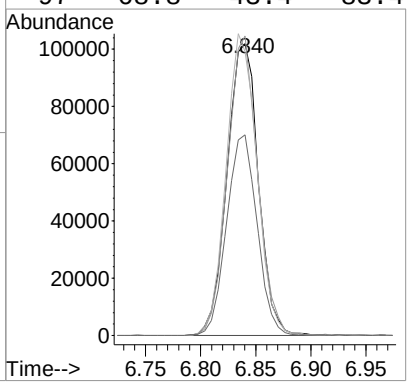


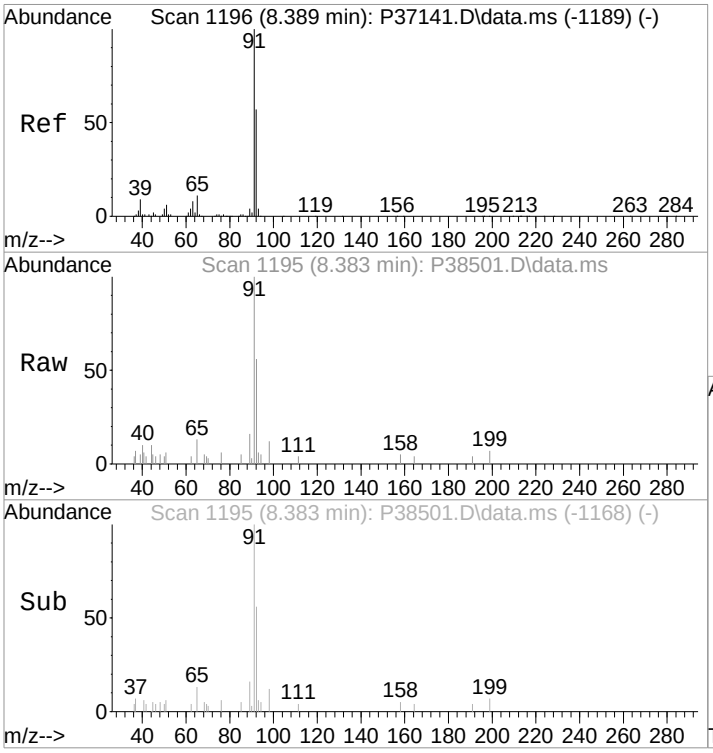


#54
Trichloroethene
Concen: 63.58 ppb
RT: 6.840 min Scan# 942
Delta R.T. 0.000 min
Lab File: P38501.D
Acq: 14 Aug 2020 6:57 am

Tgt Ion:130 Resp: 202802

Ion	Ratio	Lower	Upper
130	100		
132	102.6	77.2	117.2
95	97.3	76.7	116.7
97	68.8	43.4	83.4

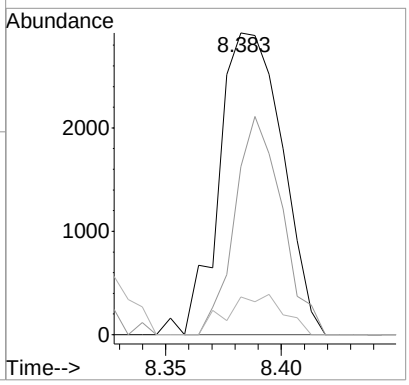


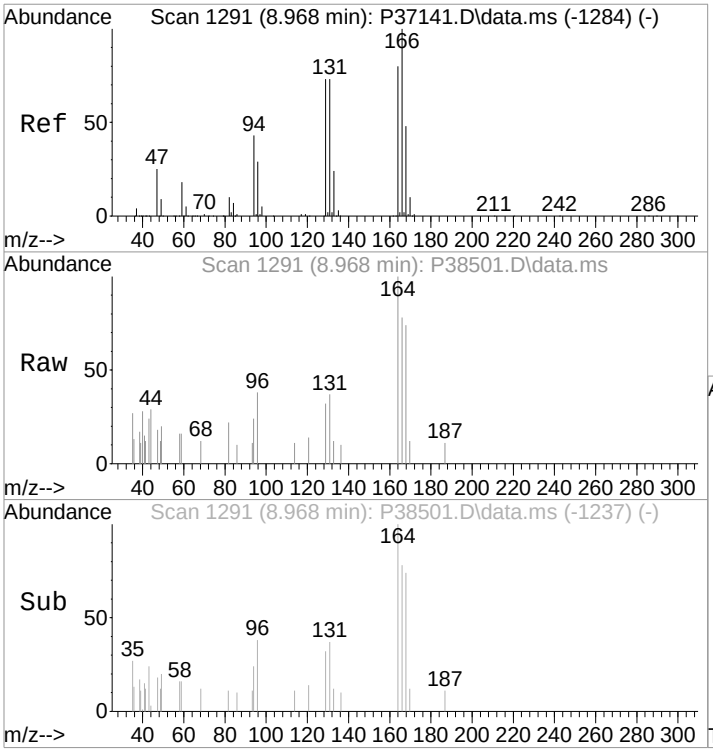


#66
Toluene
Concen: 0.41 ppb
RT: 8.383 min Scan# 1195
Delta R.T. -0.006 min
Lab File: P38501.D
Acq: 14 Aug 2020 6:57 am

Tgt Ion: 91 Resp: 5523

Ion	Ratio	Lower	Upper
91	100		
92	55.7	37.5	77.5
65	12.5	0.0	31.3

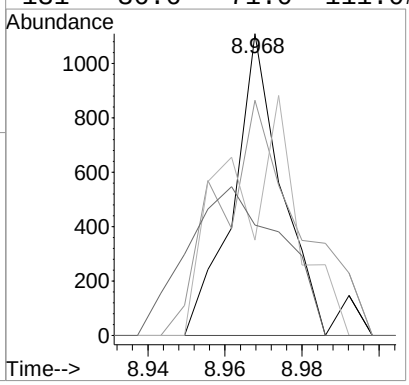


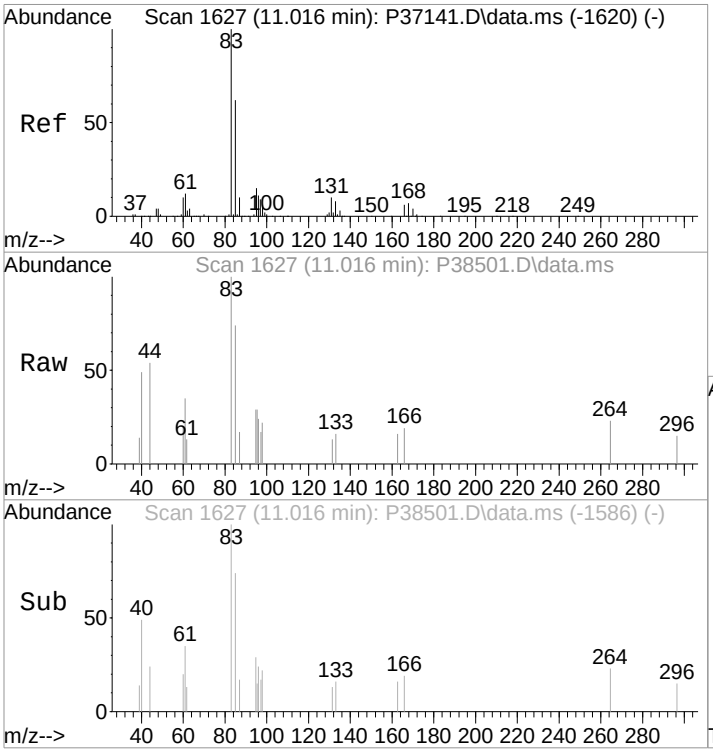


#72
Tetrachloroethene
Concen: 0.38 ppb
RT: 8.968 min Scan# 1291
Delta R.T. 0.000 min
Lab File: P38501.D
Acq: 14 Aug 2020 6:57 am

Tgt Ion:164 Resp: 960

Ion	Ratio	Lower	Upper
164	100		
166	77.9	105.5	145.5#
129	31.6	71.7	111.7#
131	36.6	71.0	111.0#

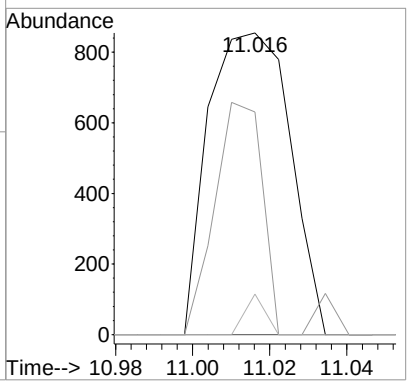




#92
1,1,2,2-Tetrachloroethane
Concen: 0.28 ppb
RT: 11.016 min Scan# 1627
Delta R.T. 0.000 min
Lab File: P38501.D
Acq: 14 Aug 2020 6:57 am

Tgt Ion: 83 Resp: 1260

Ion	Ratio	Lower	Upper
83	100		
85	73.8	42.4	82.4
131	13.5	0.0	30.3



1st 08/17/20
2nd 08/18/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38499.D
Acq On : 14 Aug 2020 6:13 am
Operator : K.Ruest
Sample : R2007055-011|10 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 50 Sample Multiplier: 1

repeat 50

Quant Time: Aug 17 16:53:47 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.450	168	291688	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	446234	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	402546	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	196629	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	123554	48.22	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.44%				
48) surr1,1,2-dichloroetha...	5.852	65	169038	47.65	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 95.30%				
65) SURR3,Toluene-d8	8.315	98	598671	50.27	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.54%				
70) SURR2,BFB	10.870	95	216202	49.27	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.54%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.402	62	216746	57.06	ppb		100
13) 1,1-Diclethene	2.335	96	7228	3.20	ppb	#	79
18) Carbon Disulfide	2.518	76	637	Below Cal			78
26) trans-1,2-Dichloroethene	3.085	96	4860	1.85	ppb		91
34) cis-1,2-Dichloroethene	4.450	96	1637546	486.44	ppb		96
39) Tetrahydrofuran	4.987	42	2836	1.62	ppb		84
49) Benzene	5.920	78	2581	0.20	ppb	#	66
54) Trichloroethene	6.846	130	44124	13.80	ppb		95

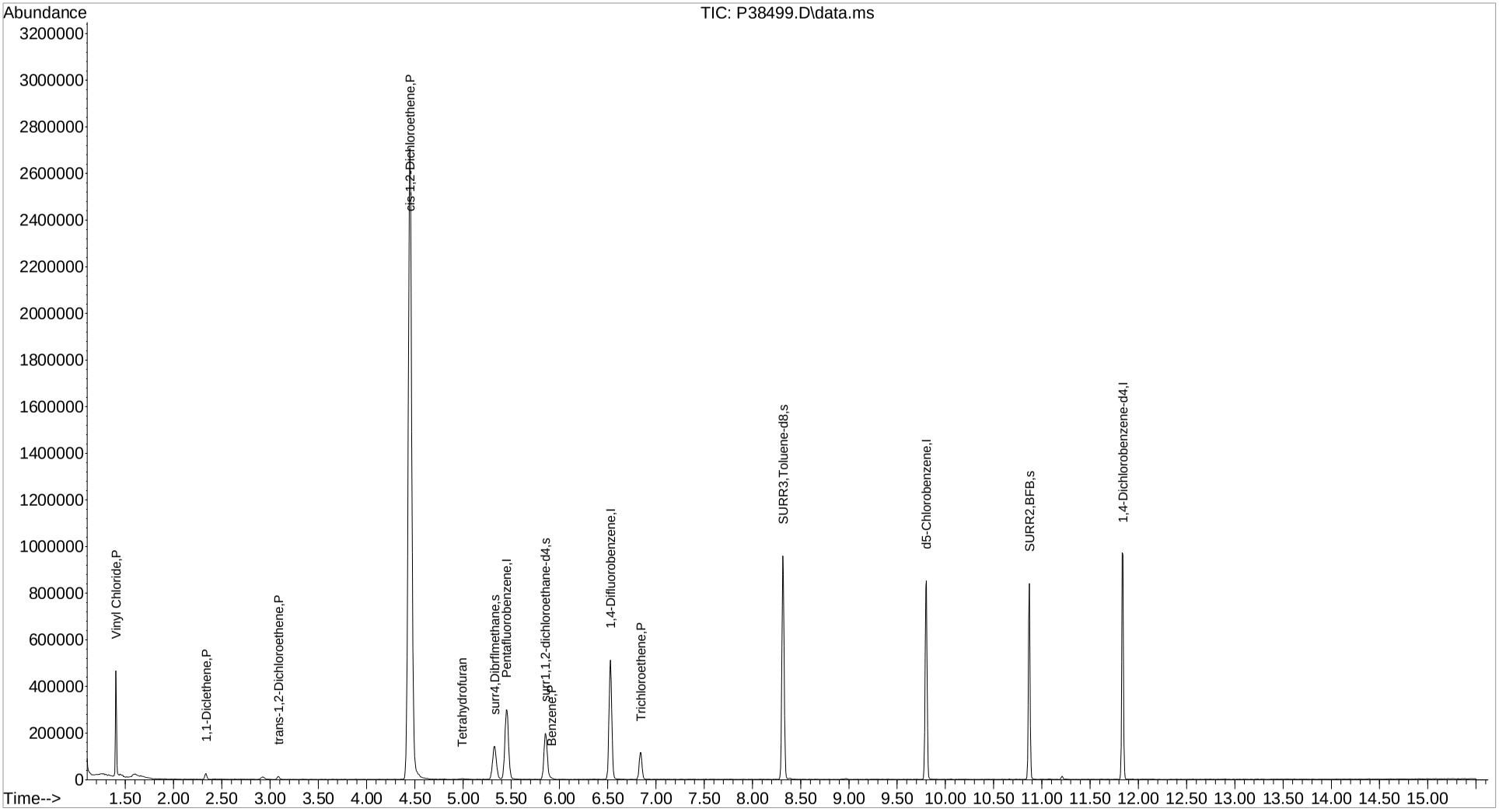
E-Over Calibration

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

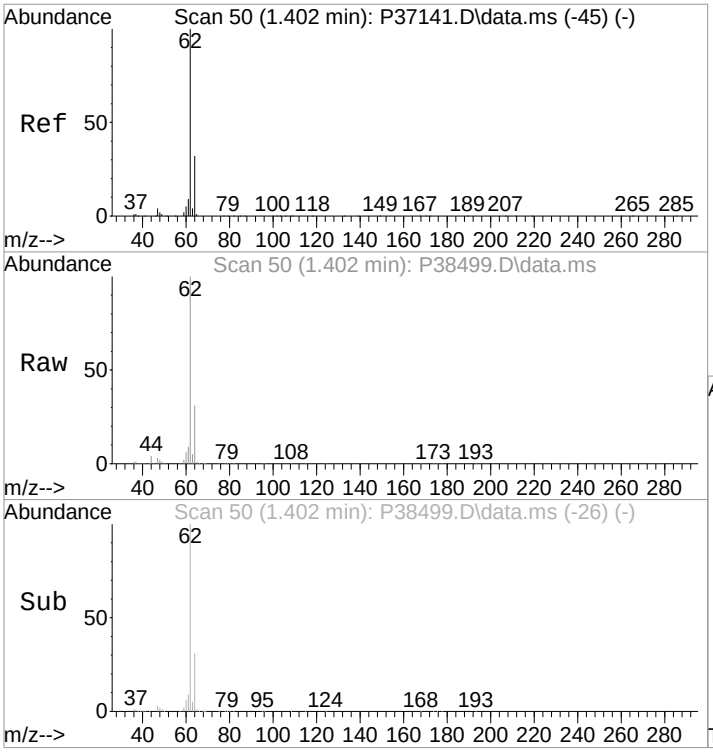
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38499.D
Acq On : 14 Aug 2020 6:13 am
Operator : K.Ruest
Sample : R2007055-011|10 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 50 Sample Multiplier: 1

Quant Time: Aug 17 16:53:47 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



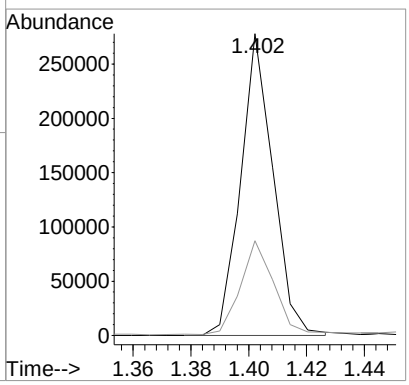
1st 08/17/20
2nd 08/18/20

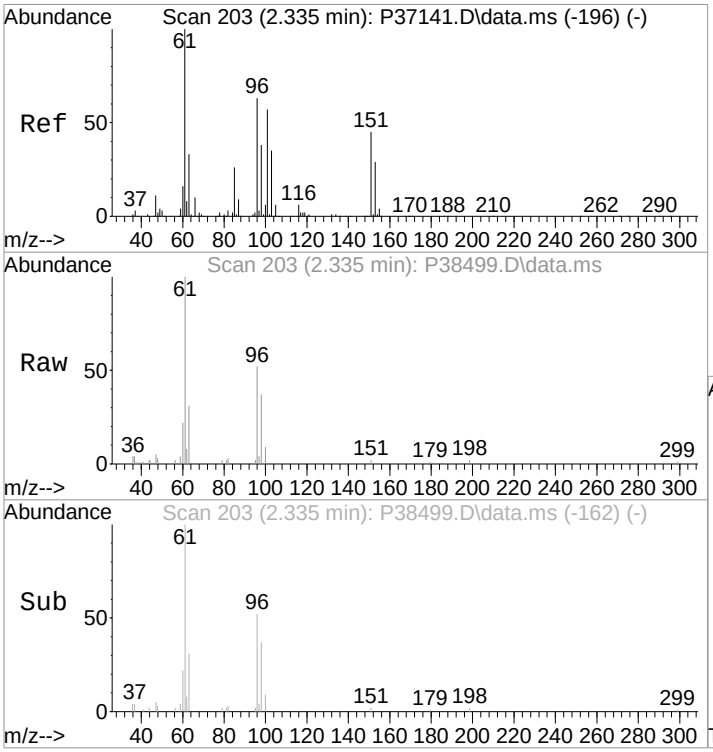


#4
Vinyl Chloride
Concen: 57.06 ppb
RT: 1.402 min Scan# 50
Delta R.T. 0.000 min
Lab File: P38499.D
Acq: 14 Aug 2020 6:13 am

Tgt Ion: 62 Resp: 216746

Ion	Ratio	Lower	Upper
62	100		
64	31.4	11.6	51.6

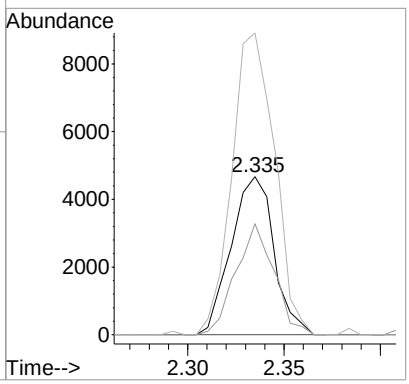


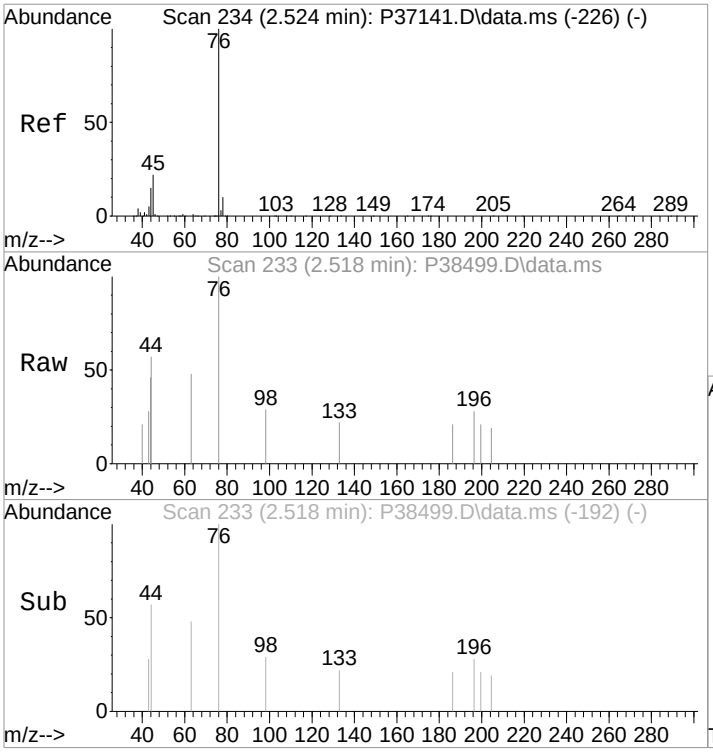


#13
1,1-Diclethene
Concen: 3.20 ppb
RT: 2.335 min Scan# 203
Delta R.T. 0.000 min
Lab File: P38499.D
Acq: 14 Aug 2020 6:13 am

Tgt Ion: 96 Resp: 7228

Ion	Ratio	Lower	Upper
96	100		
98	70.3	40.4	80.4
61	191.0	139.0	179.0#

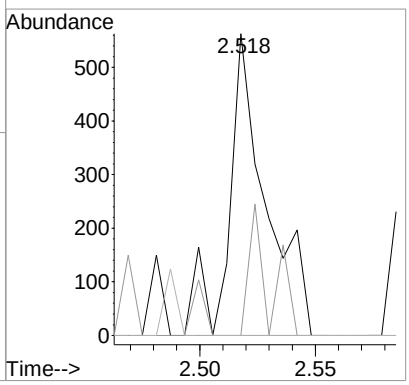


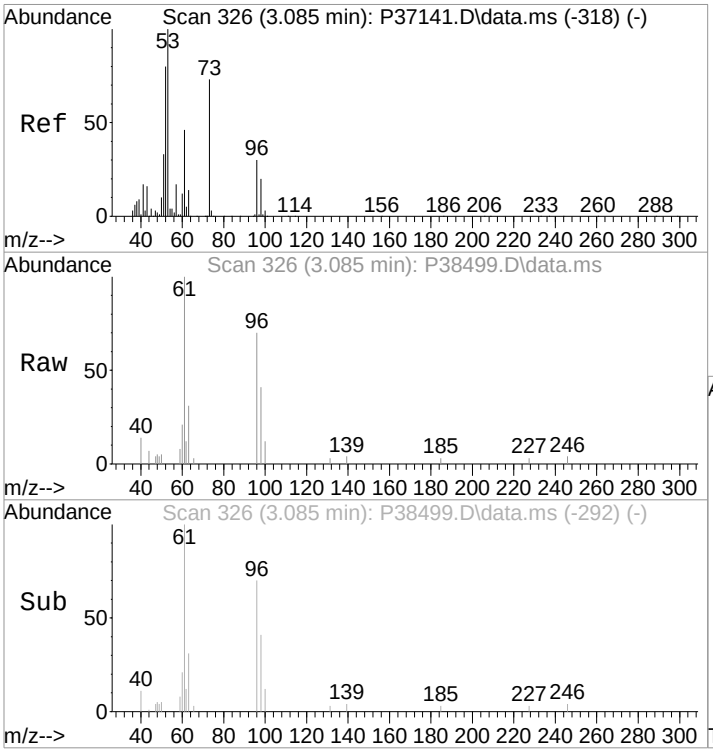


#18
Carbon Disulfide
Concen: Below Cal
RT: 2.518 min Scan# 233
Delta R.T. -0.005 min
Lab File: P38499.D
Acq: 14 Aug 2020 6:13 am

Tgt Ion: 76 Resp: 637

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	29.5
77	0.0	0.0	22.5

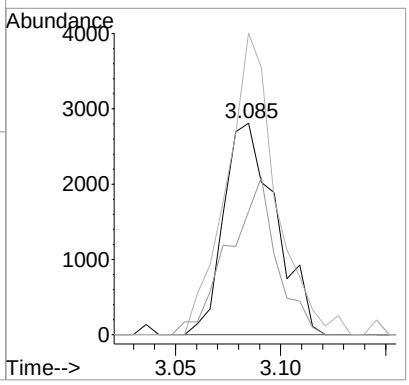


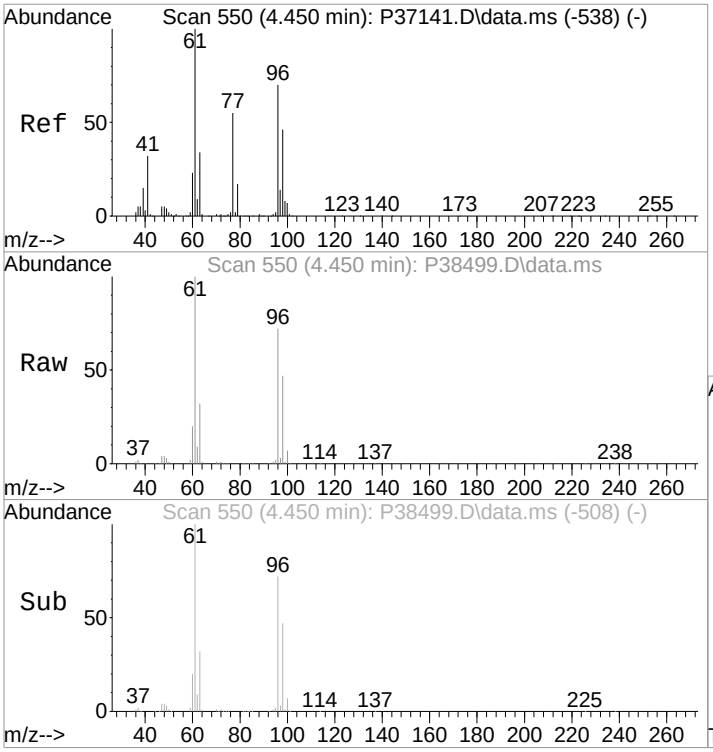


#26
trans-1,2-Dichloroethene
Concen: 1.85 ppb
RT: 3.085 min Scan# 326
Delta R.T. 0.000 min
Lab File: P38499.D
Acq: 14 Aug 2020 6:13 am

Tgt Ion: 96 Resp: 4860

Ion	Ratio	Lower	Upper
96	100		
98	58.2	46.8	86.8
61	142.7	132.8	172.8

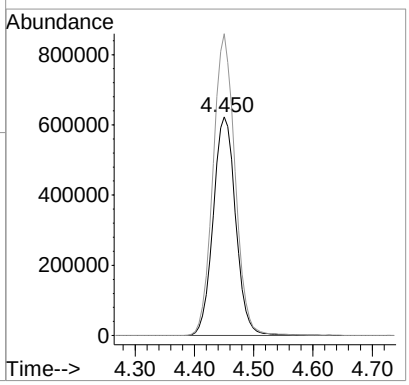


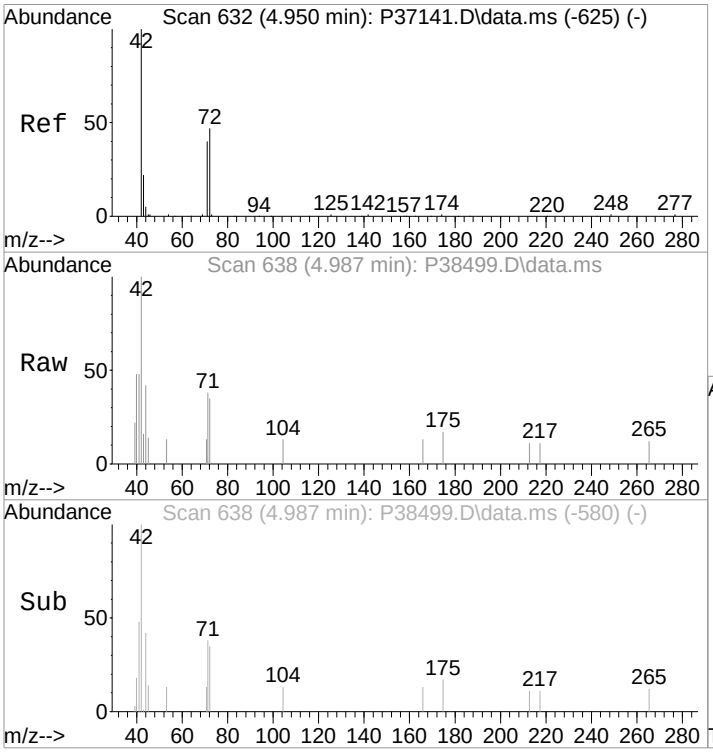


#34
cis-1,2-Dichloroethene
Concen: 486.44 ppb
RT: 4.450 min Scan# 550
Delta R.T. 0.000 min
Lab File: P38499.D
Acq: 14 Aug 2020 6:13 am

Tgt Ion: 96 Resp: 1637546

Ion	Ratio	Lower	Upper
96	100		
61	138.2	123.1	163.1

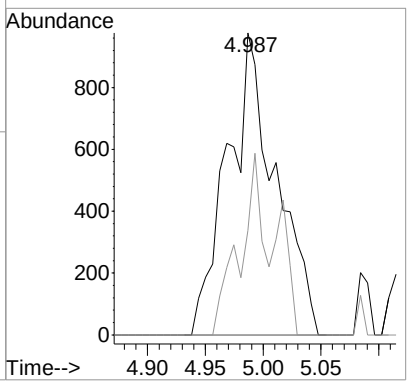


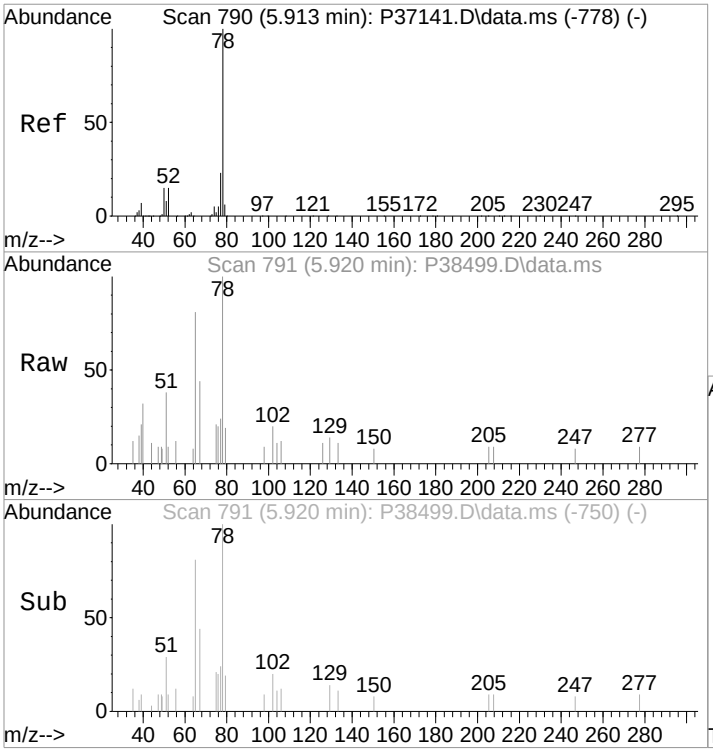


#39
Tetrahydrofuran
Concen: 1.62 ppb
RT: 4.987 min Scan# 638
Delta R.T. 0.037 min
Lab File: P38499.D
Acq: 14 Aug 2020 6:13 am

Tgt Ion: 42 Resp: 2836

Ion	Ratio	Lower	Upper
42	100		
72	34.6	25.2	65.2

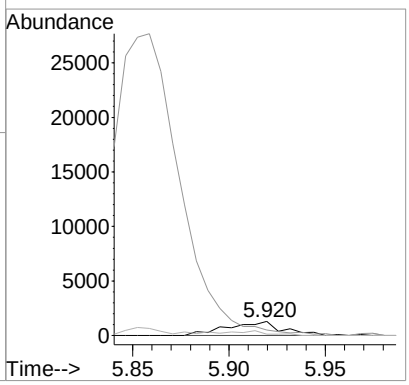


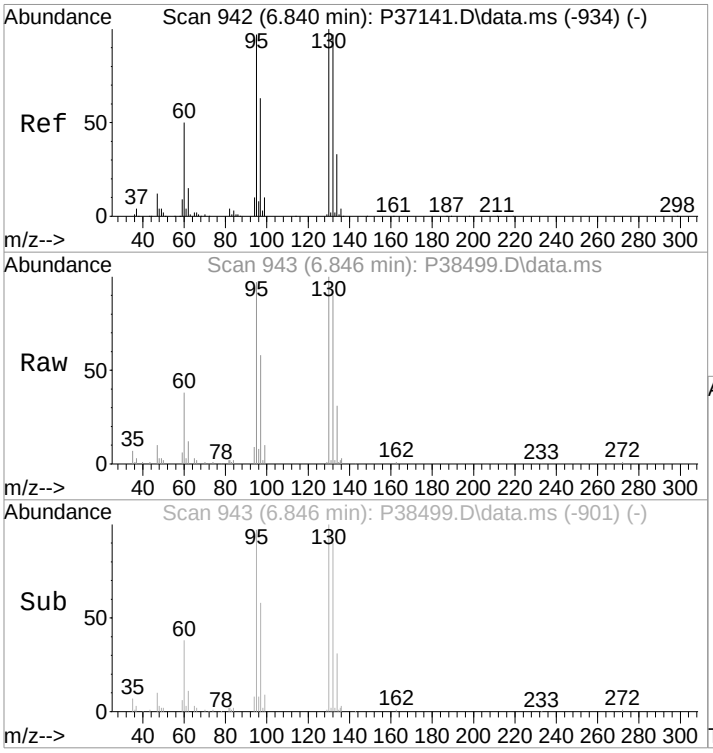


#49
Benzene
Concen: 0.20 ppb
RT: 5.920 min Scan# 791
Delta R.T. 0.006 min
Lab File: P38499.D
Acq: 14 Aug 2020 6:13 am

Tgt Ion: 78 Resp: 2581

Ion	Ratio	Lower	Upper
78	100		
51	37.8	0.0	35.6#
52	9.1	0.0	35.0

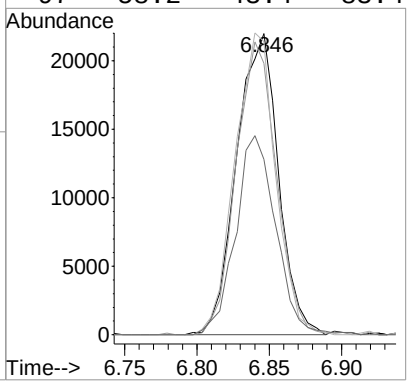




#54
Trichloroethene
Concen: 13.80 ppb
RT: 6.846 min Scan# 943
Delta R.T. 0.006 min
Lab File: P38499.D
Acq: 14 Aug 2020 6:13 am

Tgt Ion:130 Resp: 44124

Ion	Ratio	Lower	Upper
130	100		
132	90.1	77.2	117.2
95	97.3	76.7	116.7
97	58.2	43.4	83.4

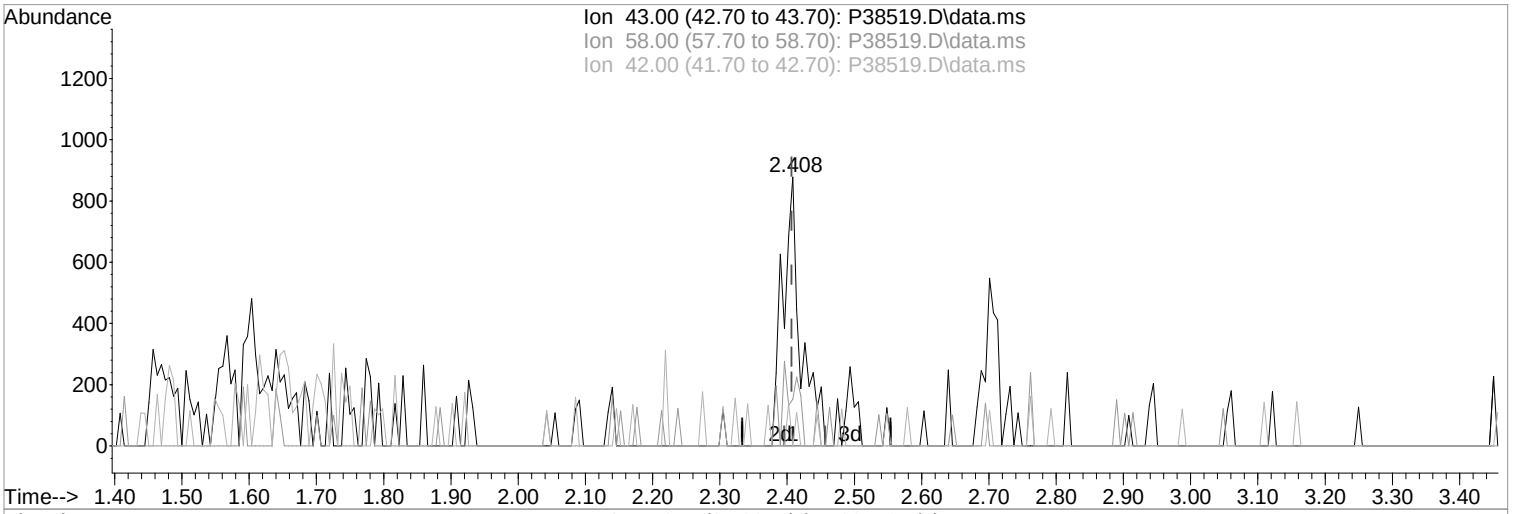


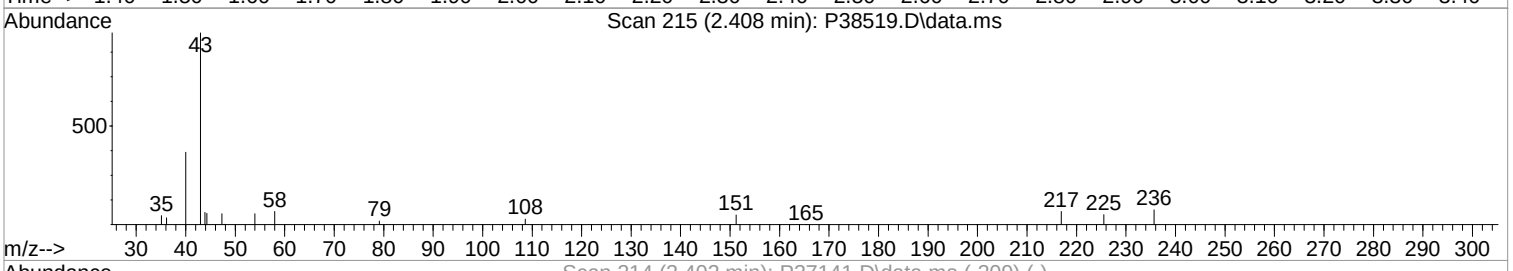
1st 08/20/20
2nd 08/21/20

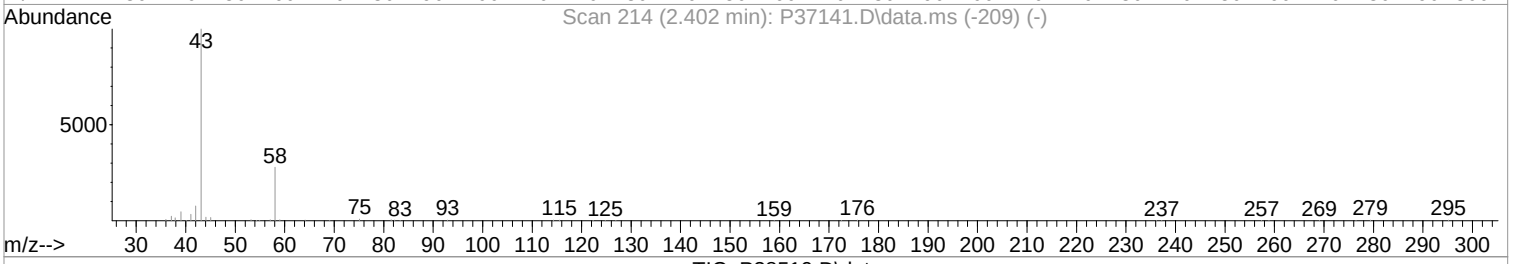
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38519.D
Acq On : 14 Aug 2020 2:47 pm
Operator : K.Ruest
Sample : R2007055-011|50 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 15:18:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38519.D\data.ms

(15) Acetone (P)

2.408min (+0.001) -1.00 ppb m

response 1657

Ion	Exp%	Act%
43.00	100	100
58.00	28.20	17.43
42.00	7.70	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

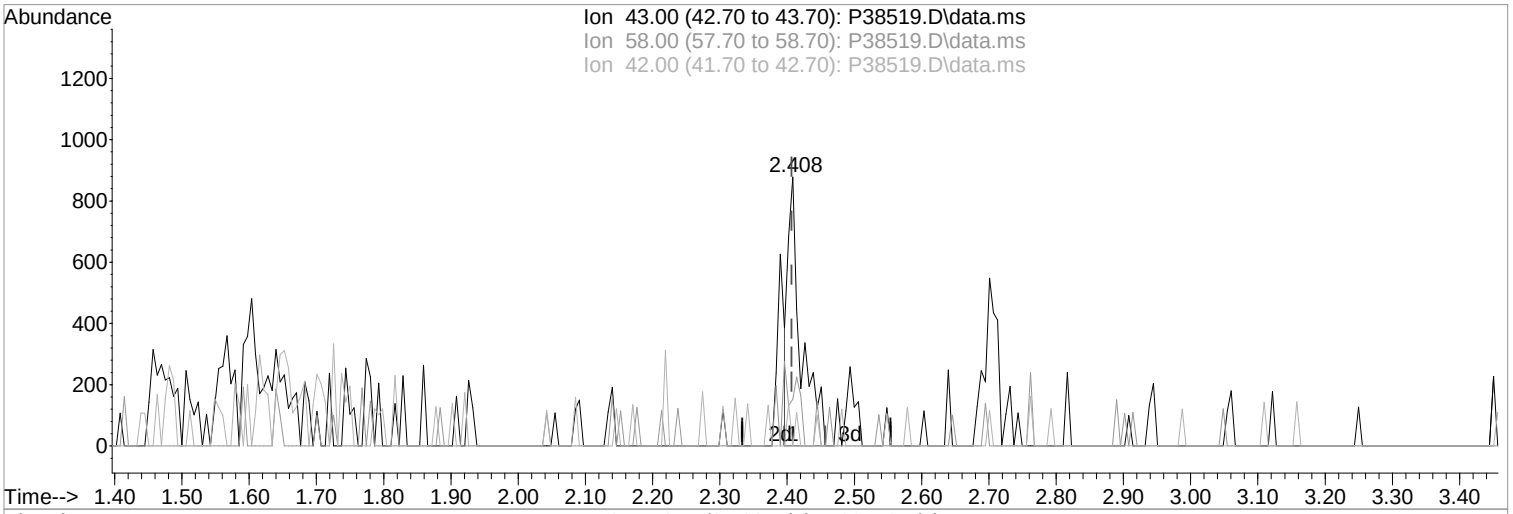
08/20/20

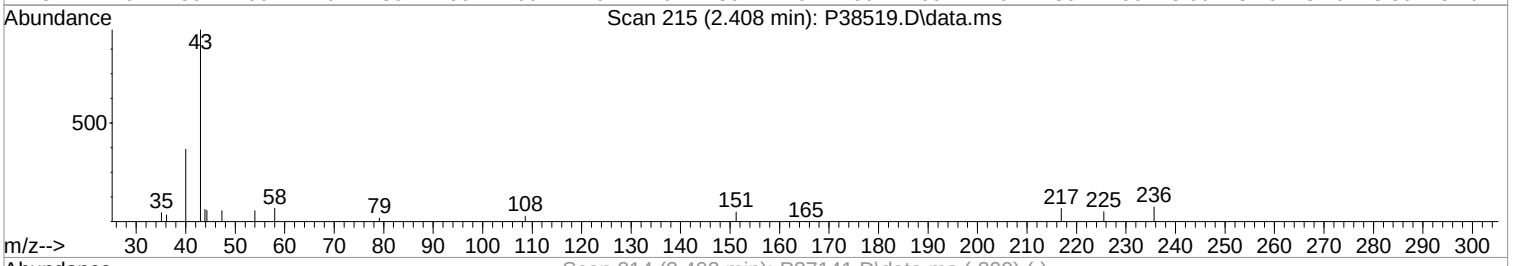
1st 08/20/20
2nd 08/21/20

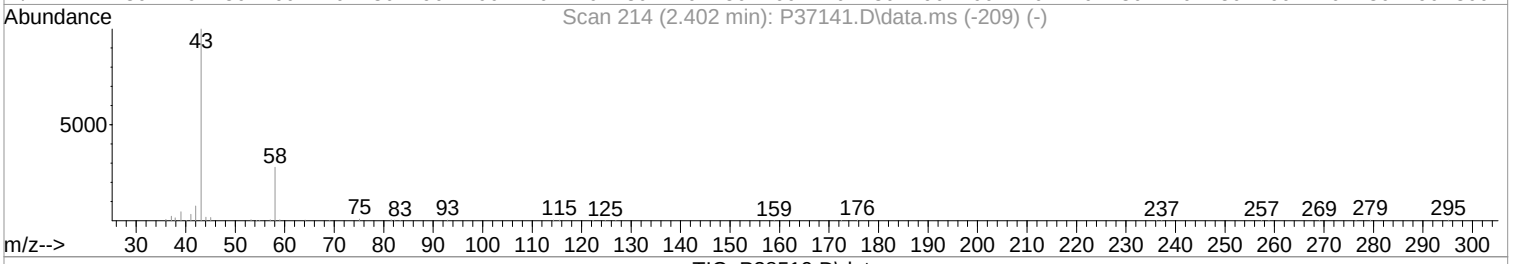
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38519.D
Acq On : 14 Aug 2020 2:47 pm
Operator : K.Ruest
Sample : R2007055-011|50 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 15:18:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38519.D\data.ms

(15) Acetone (P)

2.408min (+0.001) -1.00 ppb

response 1201

Ion	Exp%	Act%
43.00	100	100
58.00	28.20	17.43
42.00	7.70	0.00
0.00	0.00	0.00

Manual Integration:

Before

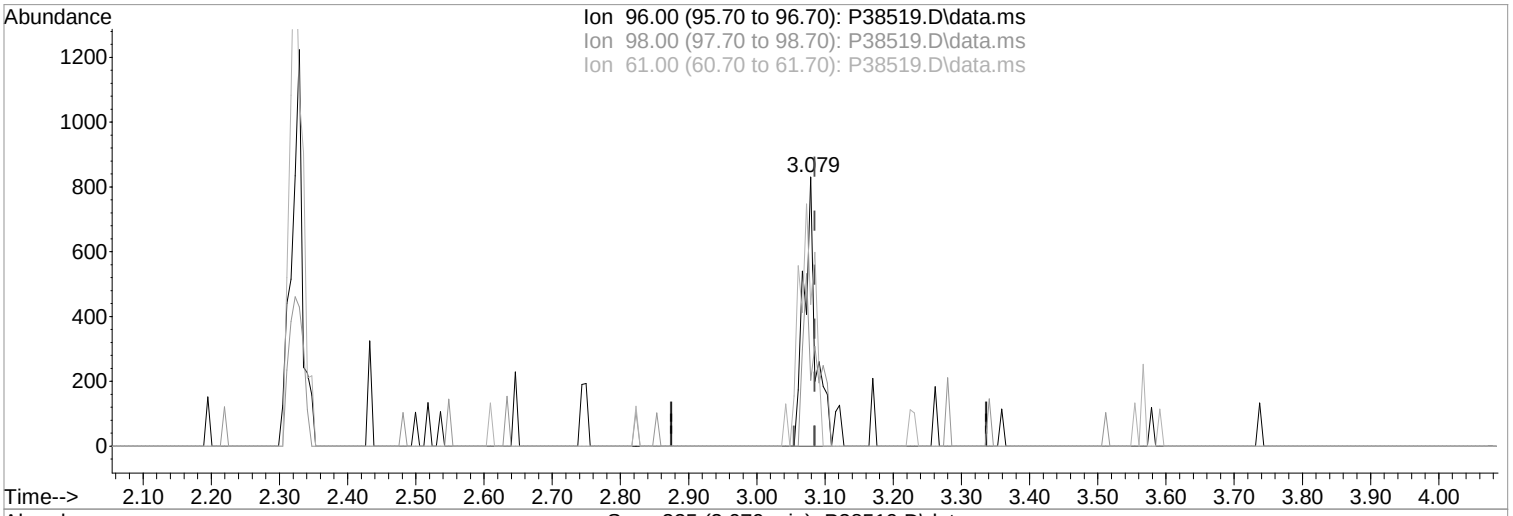
08/20/20

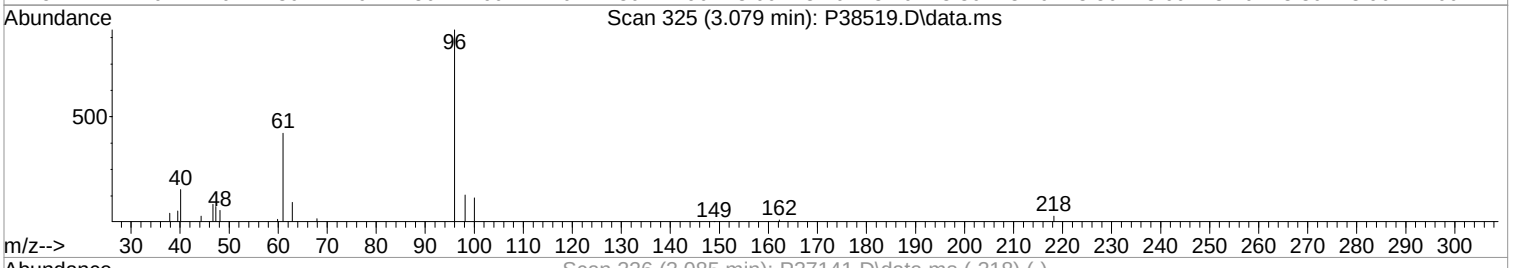
1st 08/20/20
2nd 08/21/20

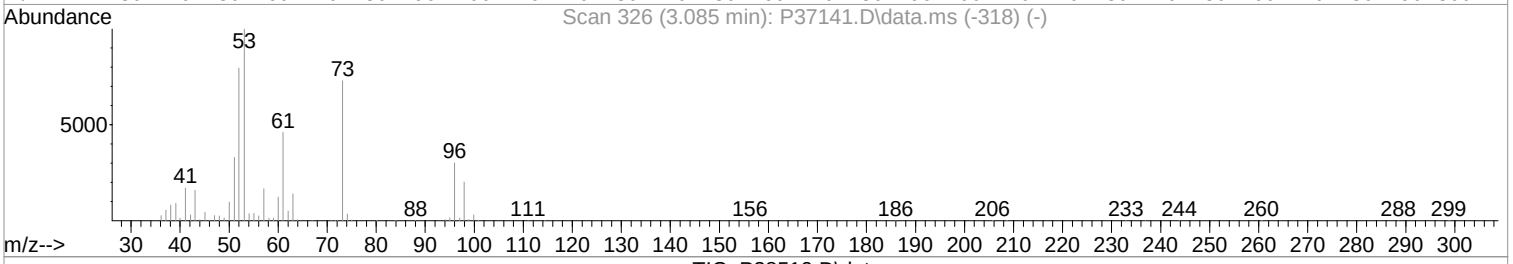
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38519.D
Acq On : 14 Aug 2020 2:47 pm
Operator : K.Ruest
Sample : R2007055-011|50 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 15:18:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38519.D\data.ms

(26) trans-1,2-Dichloroethene (P)

3.079min (-0.006) 0.37 ppb m

response 1007

Ion	Exp%	Act%
96.00	100	100
98.00	66.80	24.46#
61.00	152.80	52.65#
0.00	0.00	0.00

Manual Integration:

After

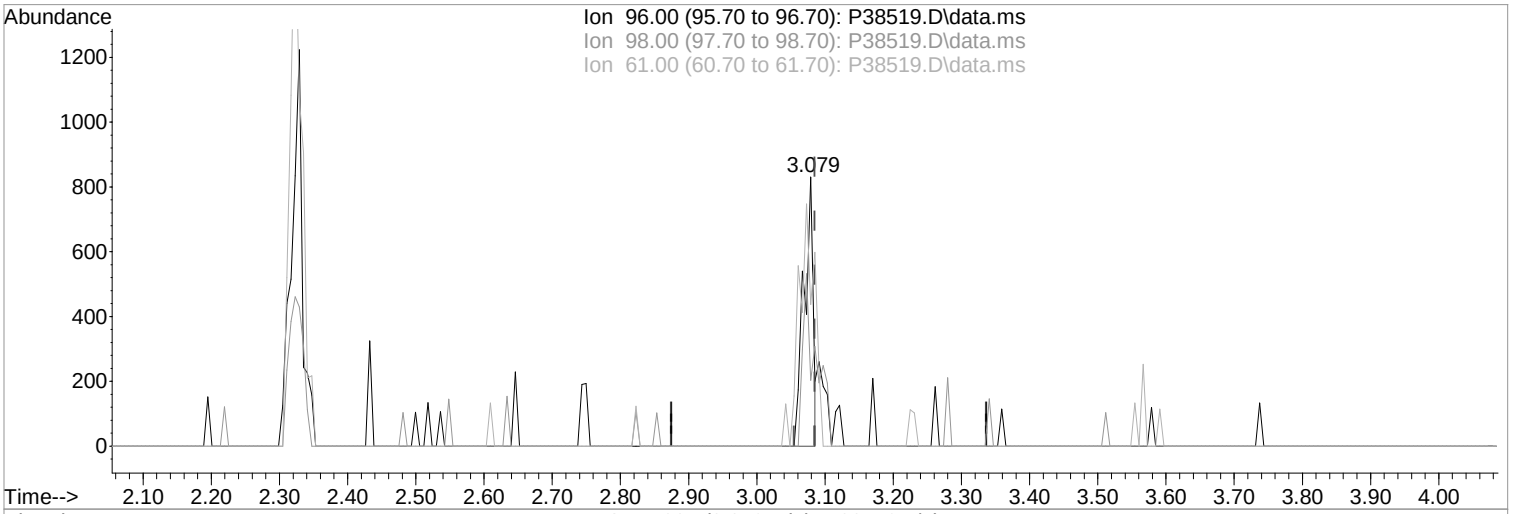
Split Peak

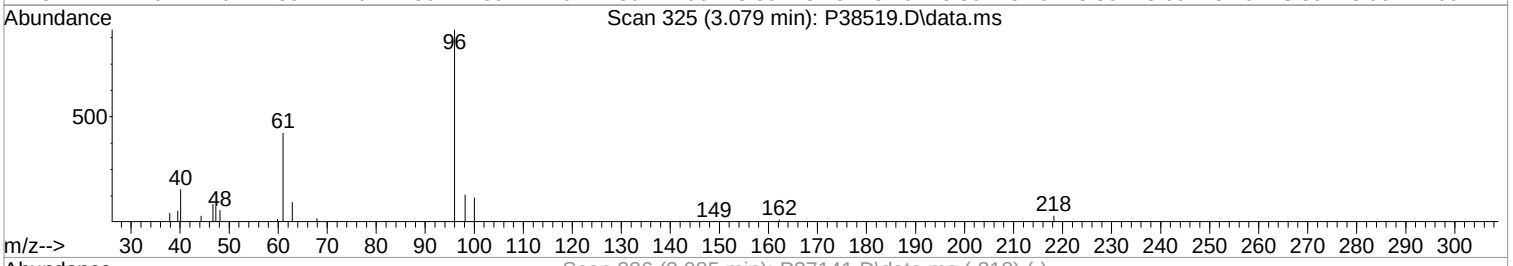
08/20/20

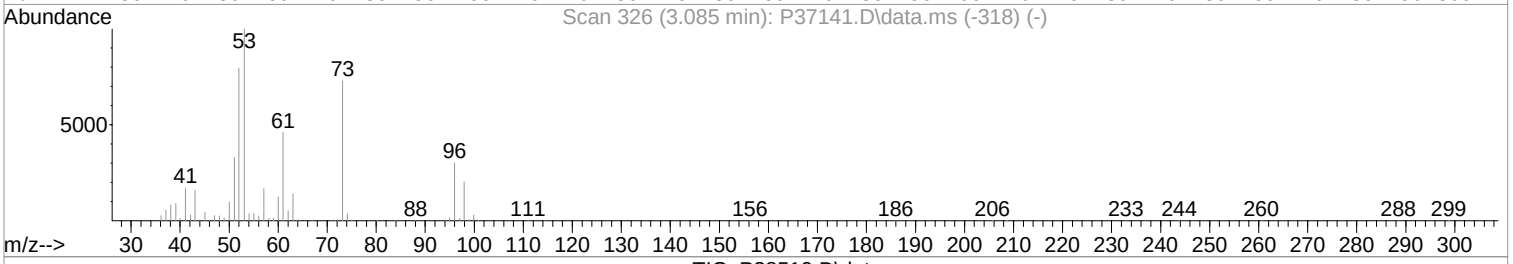
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38519.D
Acq On : 14 Aug 2020 2:47 pm
Operator : K.Ruest
Sample : R2007055-011|50 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 15:18:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38519.D\data.ms

(26) trans-1,2-Dichloroethene (P)

3.079min (-0.006) 0.29 ppb

response 786

Ion	Exp%	Act%
96.00	100	100
98.00	66.80	24.46#
61.00	152.80	52.65#
0.00	0.00	0.00

Manual Integration:

Before

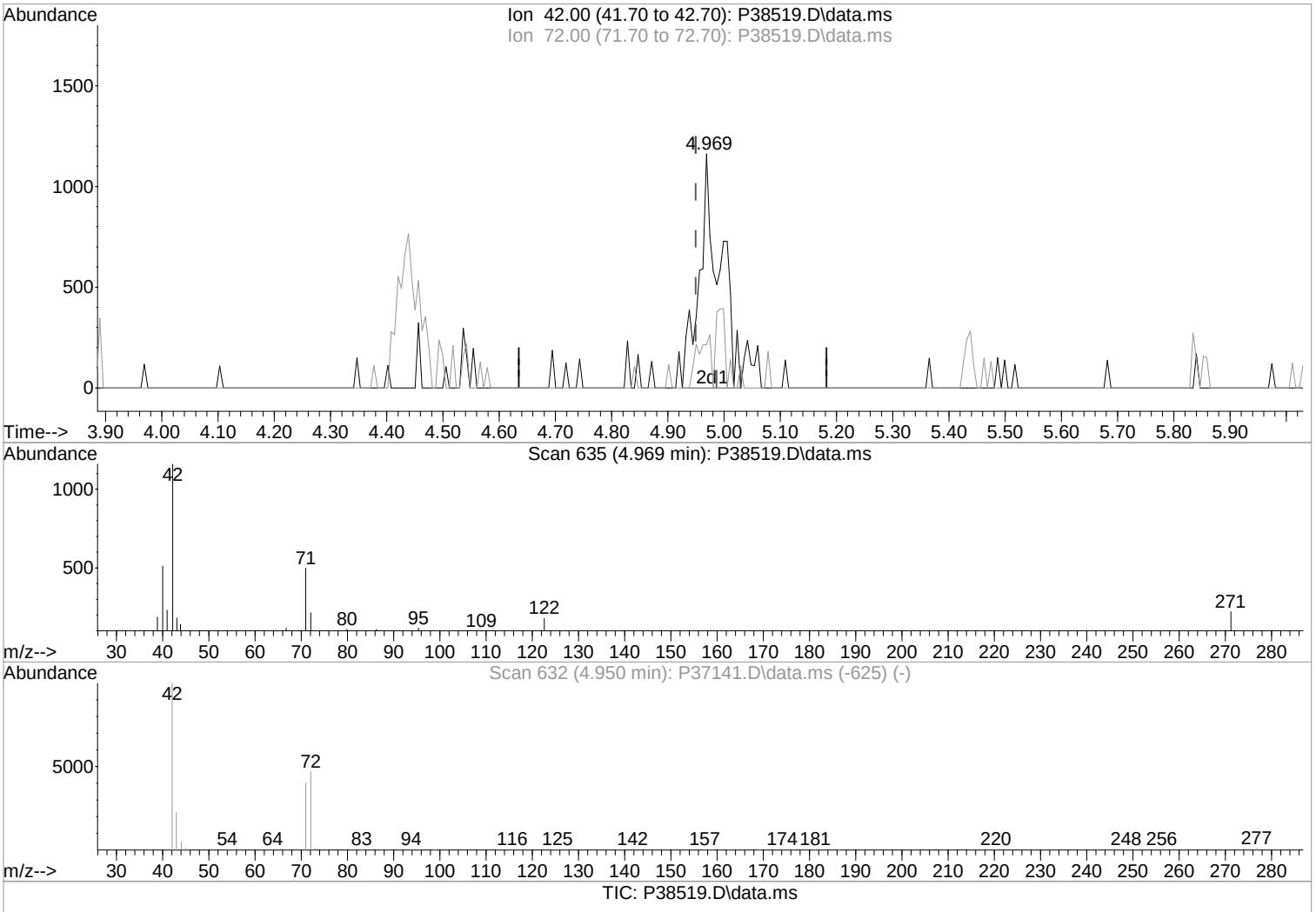
08/20/20

1st 08/20/20
2nd 08/21/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38519.D
Acq On : 14 Aug 2020 2:47 pm
Operator : K.Ruest
Sample : R2007055-011|50 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 15:18:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38519.D\data.ms

(39) Tetrahydrofuran

4.969min (+0.018) 1.67 ppb m

response 2995

Ion	Exp%	Act%
42.00	100	100
72.00	45.20	18.52#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

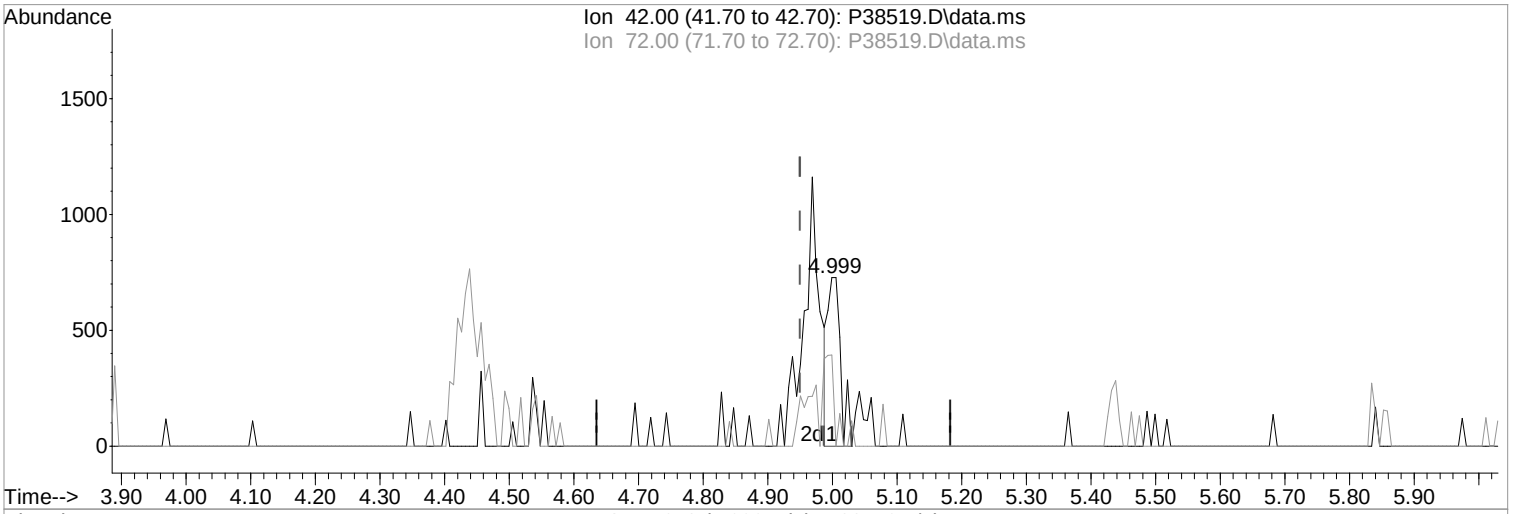
08/20/20

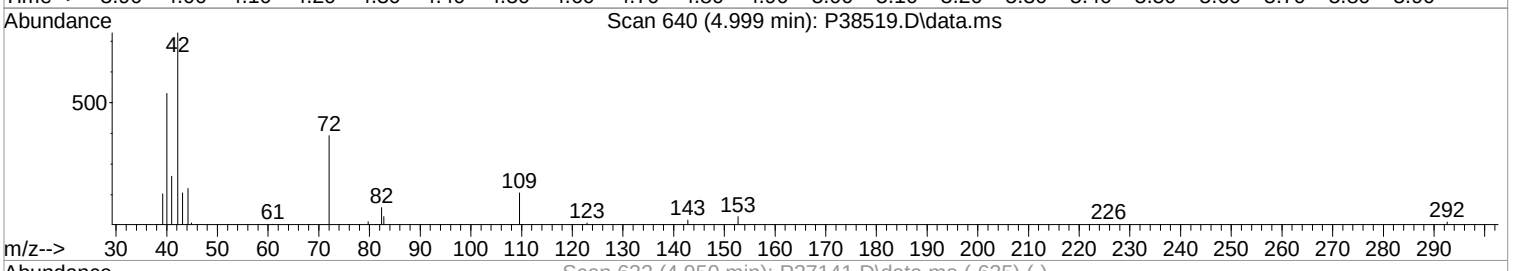
1st 08/20/20
2nd 08/21/20

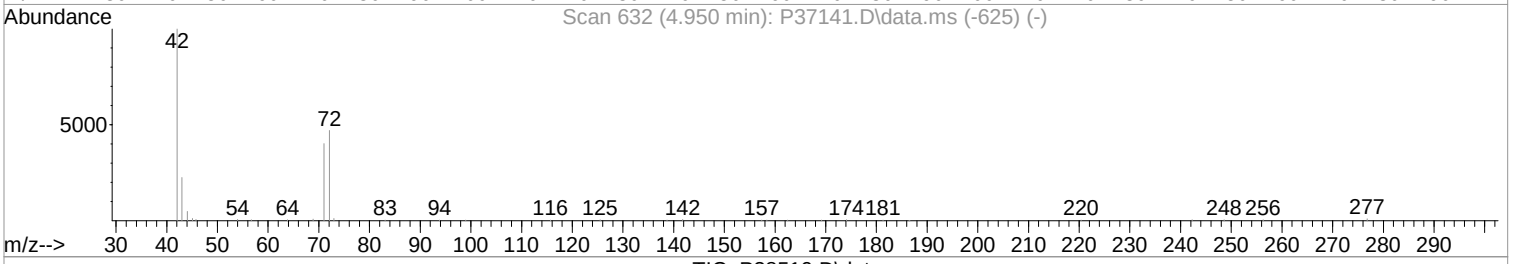
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38519.D
Acq On : 14 Aug 2020 2:47 pm
Operator : K.Ruest
Sample : R2007055-011|50 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 15:18:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38519.D\data.ms

(39) Tetrahydrofuran

4.999min (+0.049) 0.57 ppb

response 1024

Ion	Exp%	Act%
42.00	100	100
72.00	45.20	53.98
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

08/20/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38519.D
Acq On : 14 Aug 2020 2:47 pm
Operator : K.Ruest
Sample : R2007055-011|50 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 7 Sample Multiplier: 1

DL

Quant Time: Aug 20 12:21:01 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

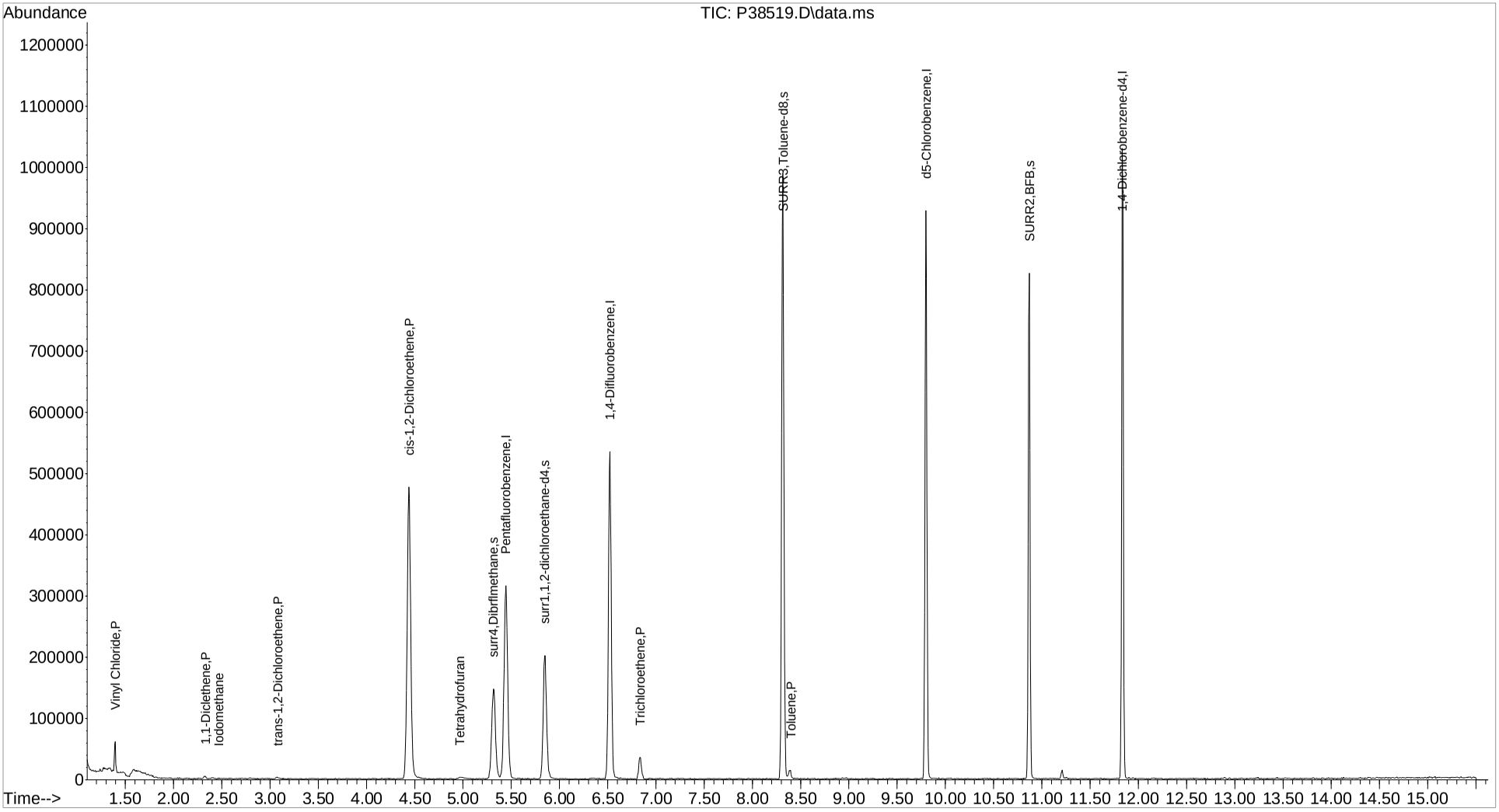
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.444	168	298772	50.00	ppb		-0.01
43) 1,4-Difluorobenzene	6.523	114	471327	50.00	ppb		0.00
71) d5-Chlorobenzene	9.797	117	416867	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	209713	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.316	113	124616	46.04	ppb		-0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 92.08%				
48) surr1,1,2-dichloroetha...	5.846	65	176030	46.98	ppb		-0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 93.96%				
65) SURR3,Toluene-d8	8.316	98	618338	49.16	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.32%				
70) SURR2,BFB	10.870	95	225562	48.67	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.34%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.396	62	28682	7.37	ppb		99
13) 1,1-Diclethene	2.329	96	1376	0.60	ppb	#	51
15) Acetone	2.408	43	1657m	Below Cal			
17) Iodomethane	2.463	142	615	0.24	ppb		83
26) trans-1,2-Dichloroethene	3.079	96	1007m	0.37	ppb		
34) cis-1,2-Dichloroethene	4.438	96	288671	83.72	ppb		89
39) Tetrahydrofuran	4.969	42	2995m	1.67	ppb		
54) Trichloroethene	6.834	130	13190	3.91	ppb		91
66) Toluene	8.395	91	9179	0.64	ppb		87

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

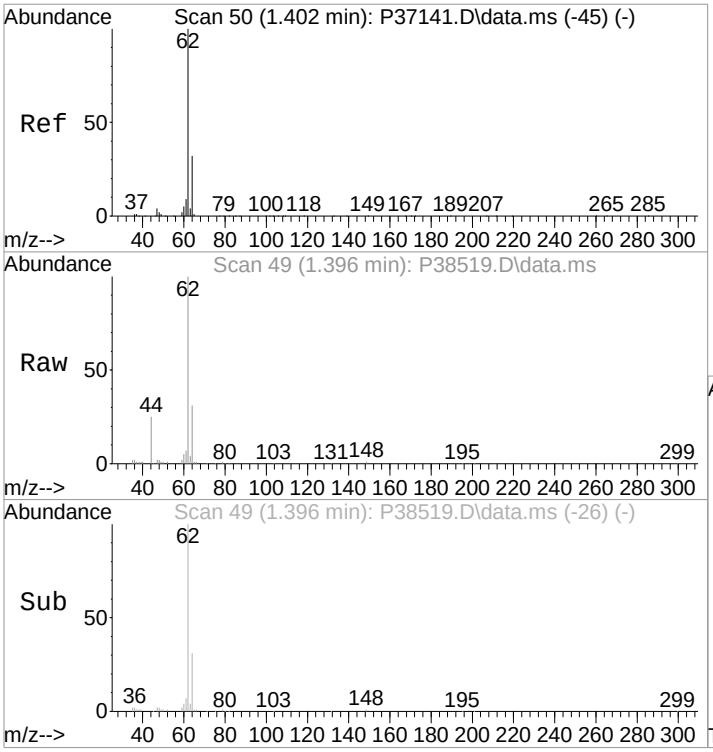
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38519.D
Acq On : 14 Aug 2020 2:47 pm
Operator : K.Ruest
Sample : R2007055-011|50 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 20 12:21:01 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



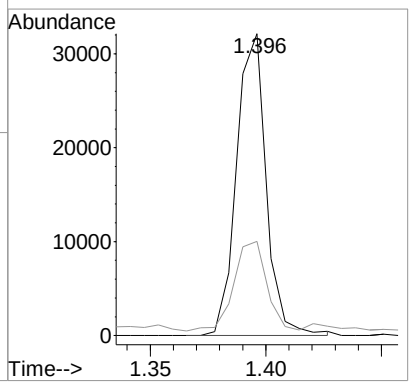
1st 08/20/20
2nd 08/21/20

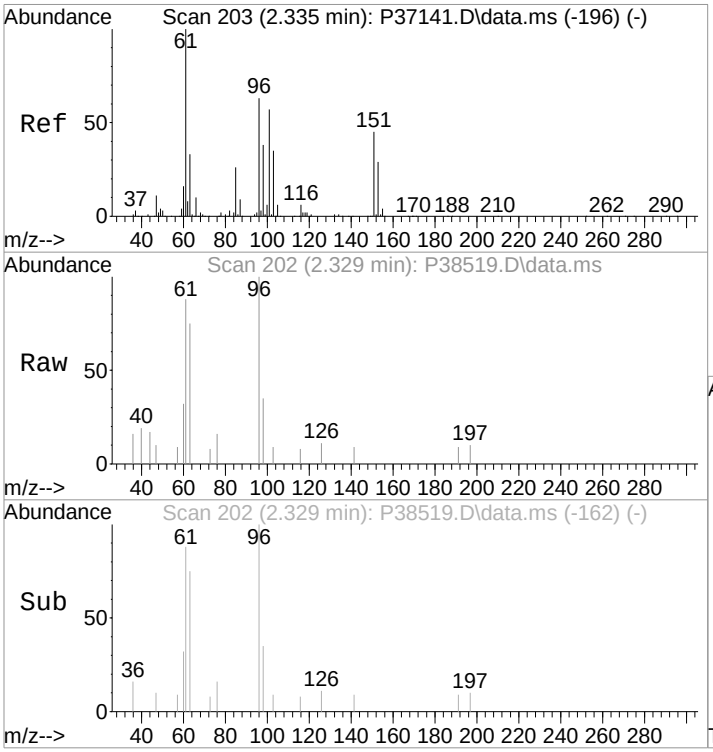


#4
Vinyl Chloride
Concen: 7.37 ppb
RT: 1.396 min Scan# 49
Delta R.T. -0.006 min
Lab File: P38519.D
Acq: 14 Aug 2020 2:47 pm

Tgt Ion: 62 Resp: 28682

Ion	Ratio	Lower	Upper
62	100		
64	31.1	11.6	51.6

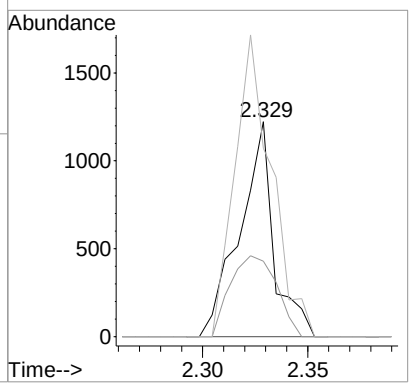


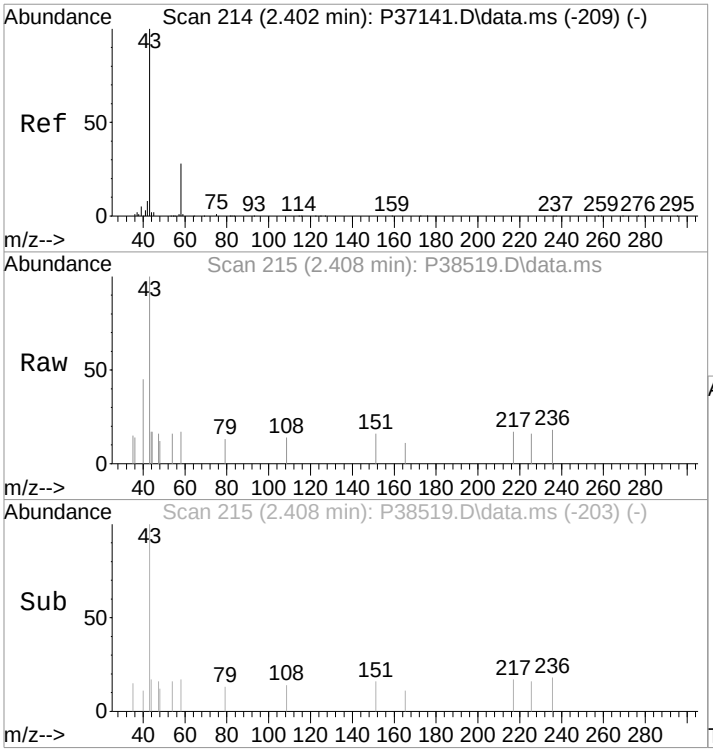


#13
1,1-Diclethene
Concen: 0.60 ppb
RT: 2.329 min Scan# 202
Delta R.T. -0.006 min
Lab File: P38519.D
Acq: 14 Aug 2020 2:47 pm

Tgt Ion: 96 Resp: 1376

Ion	Ratio	Lower	Upper
96	100		
98	35.1	40.4	80.4#
61	87.7	139.0	179.0#

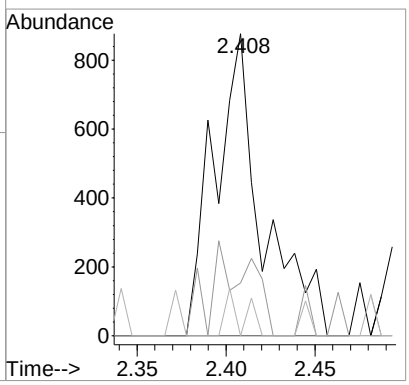


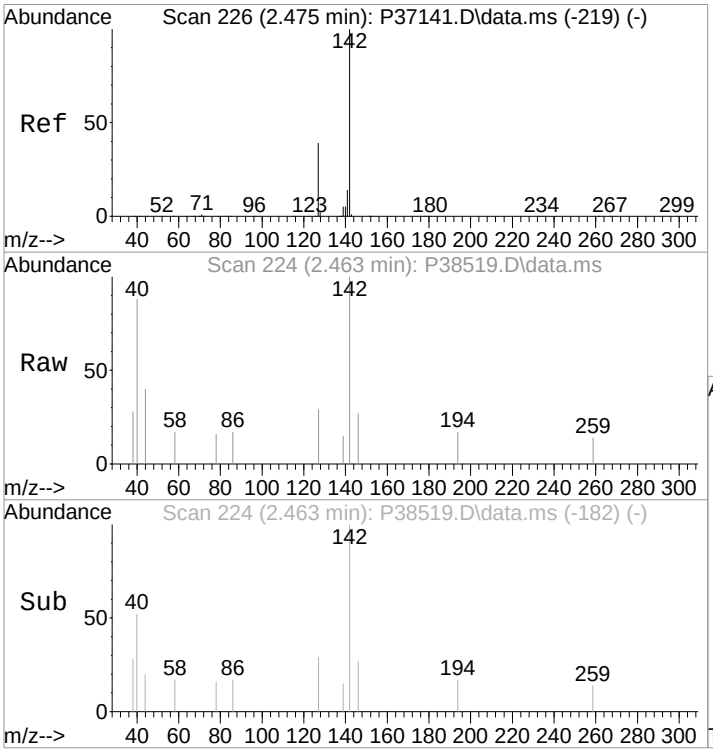


#15
Acetone
Concen: Below Cal m
RT: 2.408 min Scan# 215
Delta R.T. 0.001 min
Lab File: P38519.D
Acq: 14 Aug 2020 2:47 pm

Tgt Ion: 43 Resp: 1657

Ion	Ratio	Lower	Upper
43	100		
58	17.4	8.2	48.2
42	0.0	0.0	27.7

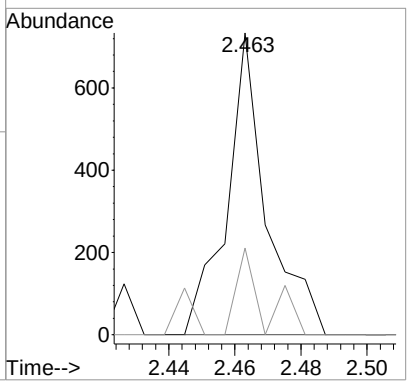


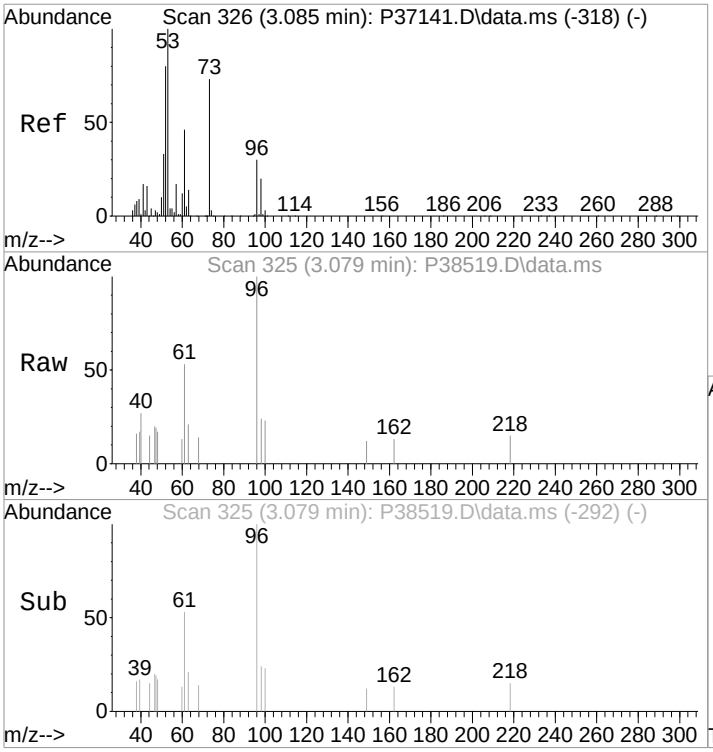


#17
Iodomethane
Concen: 0.24 ppb
RT: 2.463 min Scan# 224
Delta R.T. -0.005 min
Lab File: P38519.D
Acq: 14 Aug 2020 2:47 pm

Tgt Ion:142 Resp: 615

Ion	Ratio	Lower	Upper
142	100		
127	28.7	19.3	59.3

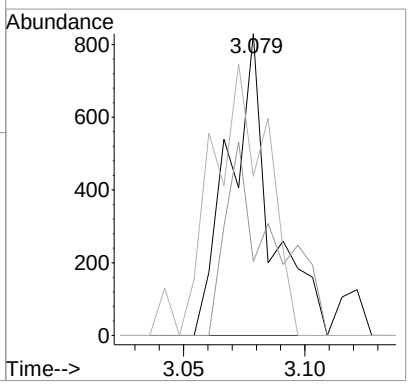


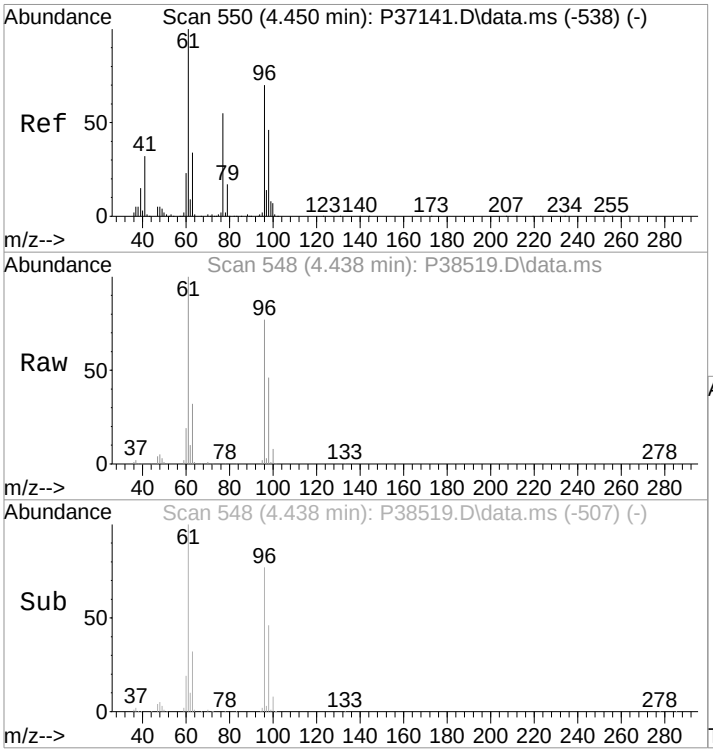


#26
trans-1,2-Dichloroethene
Concen: 0.37 ppb m
RT: 3.079 min Scan# 325
Delta R.T. -0.006 min
Lab File: P38519.D
Acq: 14 Aug 2020 2:47 pm

Tgt Ion: 96 Resp: 1007

Ion	Ratio	Lower	Upper
96	100		
98	24.5	46.8	86.8#
61	52.7	132.8	172.8#

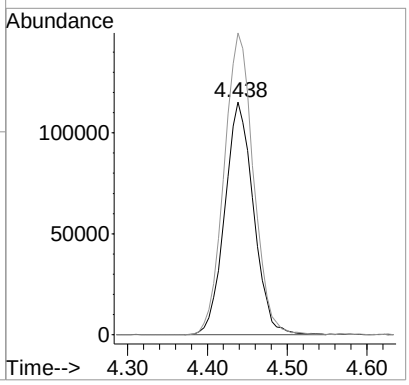


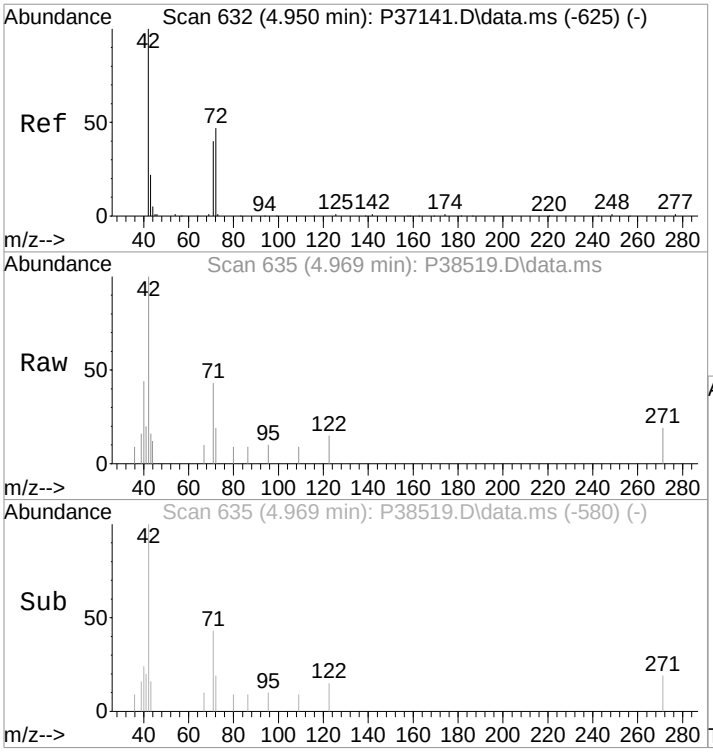


#34
cis-1,2-Dichloroethene
Concen: 83.72 ppb
RT: 4.438 min Scan# 548
Delta R.T. -0.012 min
Lab File: P38519.D
Acq: 14 Aug 2020 2:47 pm

Tgt Ion: 96 Resp: 288671

Ion	Ratio	Lower	Upper
96	100		
61	129.8	123.1	163.1

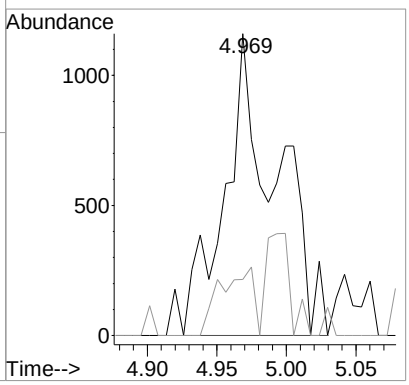


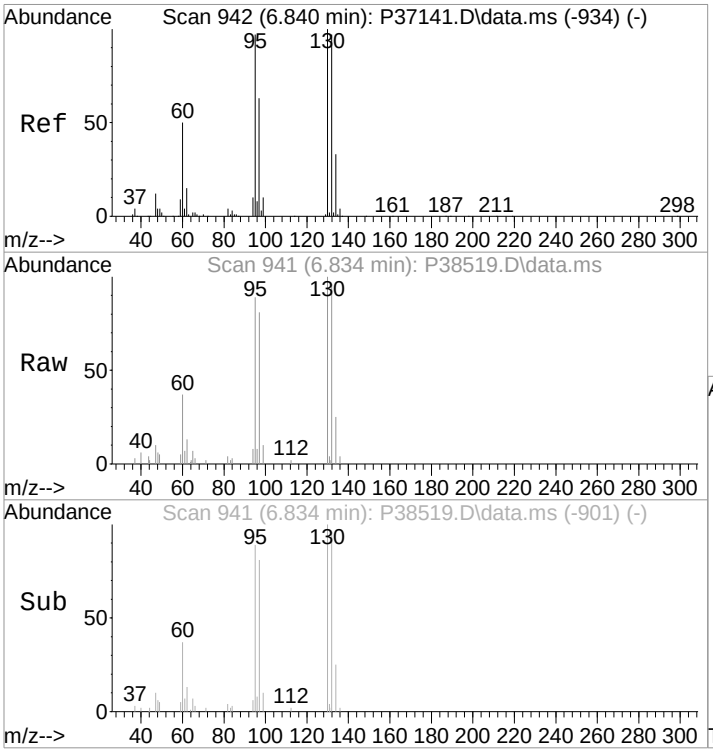


#39
Tetrahydrofuran
Concen: 1.67 ppb m
RT: 4.969 min Scan# 635
Delta R.T. 0.018 min
Lab File: P38519.D
Acq: 14 Aug 2020 2:47 pm

Tgt Ion: 42 Resp: 2995

Ion	Ratio	Lower	Upper
42	100		
72	18.5	25.2	65.2#

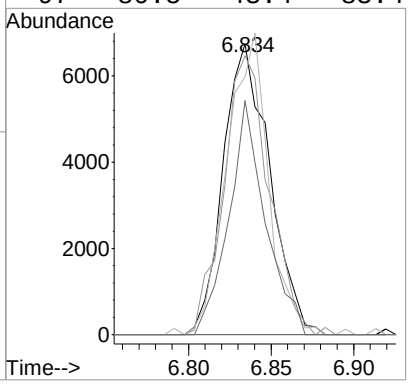


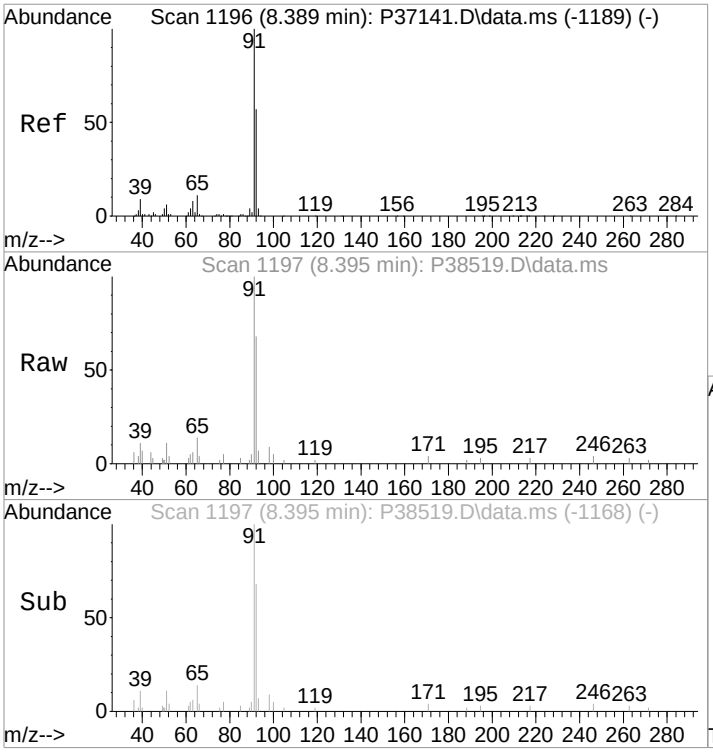


#54
Trichloroethene
Concen: 3.91 ppb
RT: 6.834 min Scan# 941
Delta R.T. -0.006 min
Lab File: P38519.D
Acq: 14 Aug 2020 2:47 pm

Tgt Ion:130 Resp: 13190

Ion	Ratio	Lower	Upper
130	100		
132	96.0	77.2	117.2
95	88.6	76.7	116.7
97	80.5	43.4	83.4

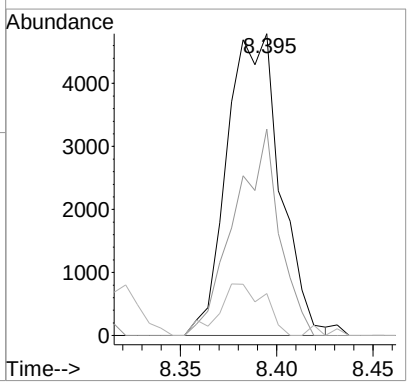




#66
Toluene
Concen: 0.64 ppb
RT: 8.395 min Scan# 1197
Delta R.T. 0.006 min
Lab File: P38519.D
Acq: 14 Aug 2020 2:47 pm

Tgt Ion: 91 Resp: 9179

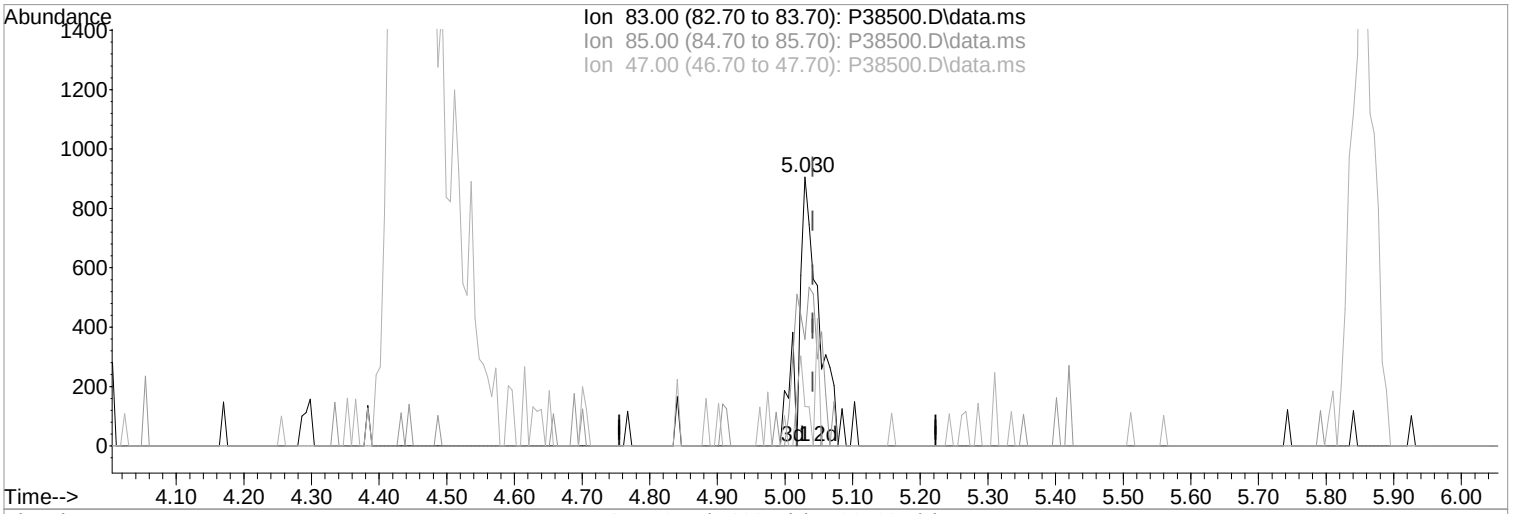
Ion	Ratio	Lower	Upper
91	100		
92	68.3	37.5	77.5
65	13.9	0.0	31.3

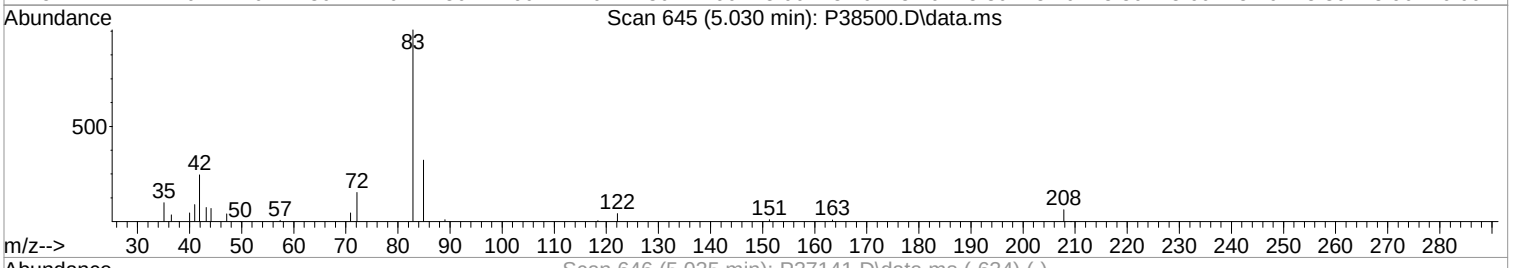


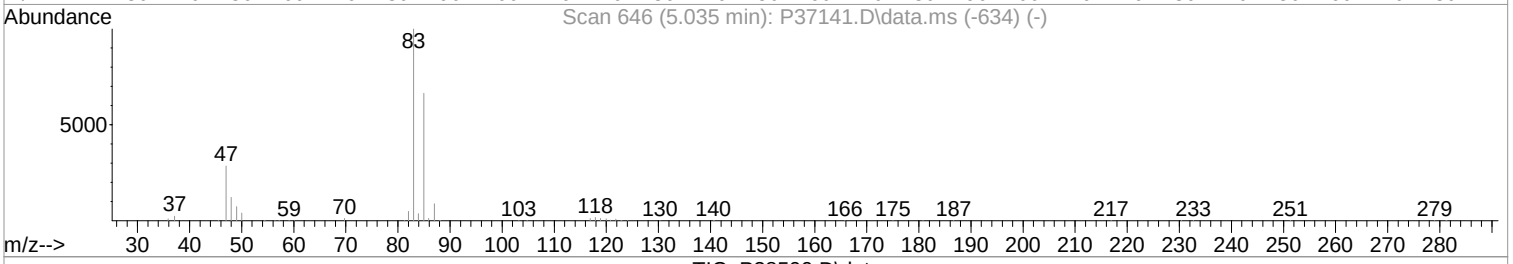
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38500.D
Acq On : 14 Aug 2020 6:35 am
Operator : K.Ruest
Sample : R2007055-012|10 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 51 Sample Multiplier: 1

Quant Time: Aug 14 11:28:23 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38500.D\data.ms

(40) Chloroform (P)

5.030min (-0.011) 0.22 ppb m

response 1864

Ion	Exp%	Act%
83.00	100	100
85.00	66.50	39.62#
47.00	28.70	14.68
0.00	0.00	0.00

Manual Integration:

After

Split Peak

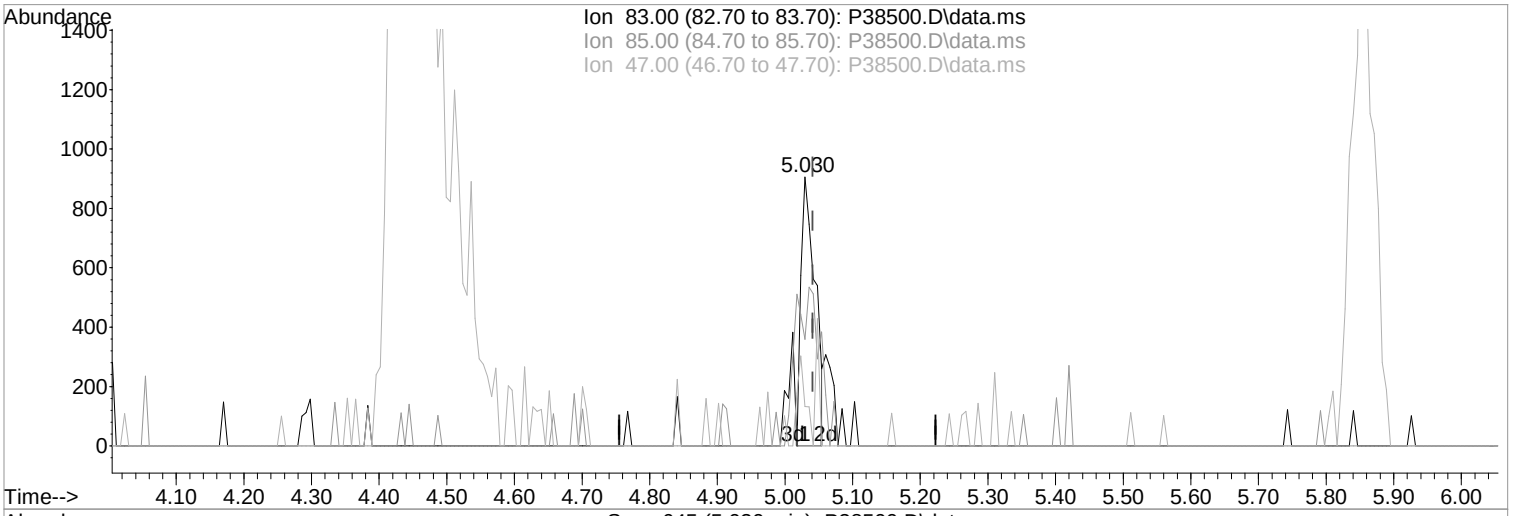
08/17/20

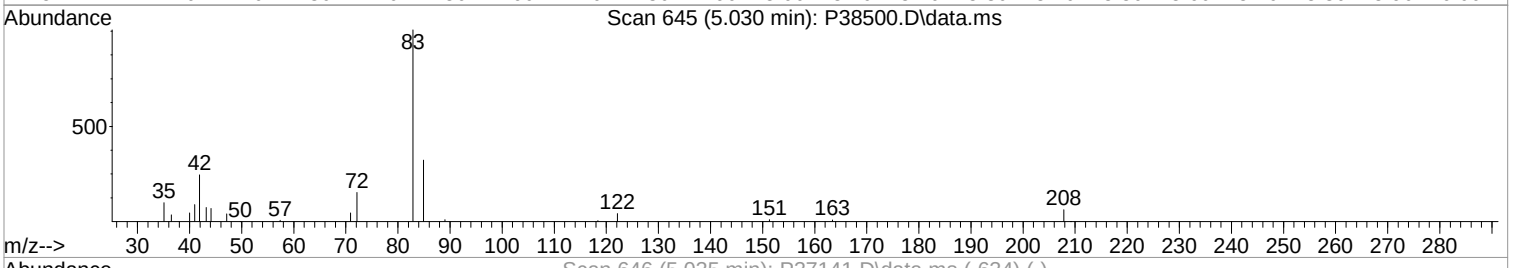
1st 08/17/20
2nd 08/18/20

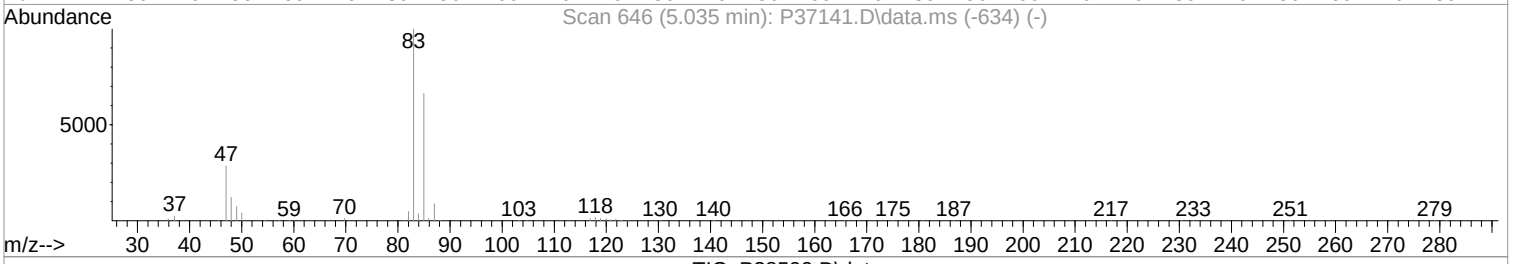
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38500.D
Acq On : 14 Aug 2020 6:35 am
Operator : K.Ruest
Sample : R2007055-012|10 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 51 Sample Multiplier: 1

Quant Time: Aug 14 11:28:23 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38500.D\data.ms

(40) Chloroform (P)

5.030min (-0.011) 0.12 ppb

response 1313

Ion	Exp%	Act%
83.00	100	100
85.00	66.50	39.62#
47.00	28.70	14.68
0.00	0.00	0.00

Manual Integration:

Before

08/17/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38500.D
Acq On : 14 Aug 2020 6:35 am
Operator : K.Ruest
Sample : R2007055-012|10 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 51 Sample Multiplier: 1

Quant Time: Aug 17 16:55:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

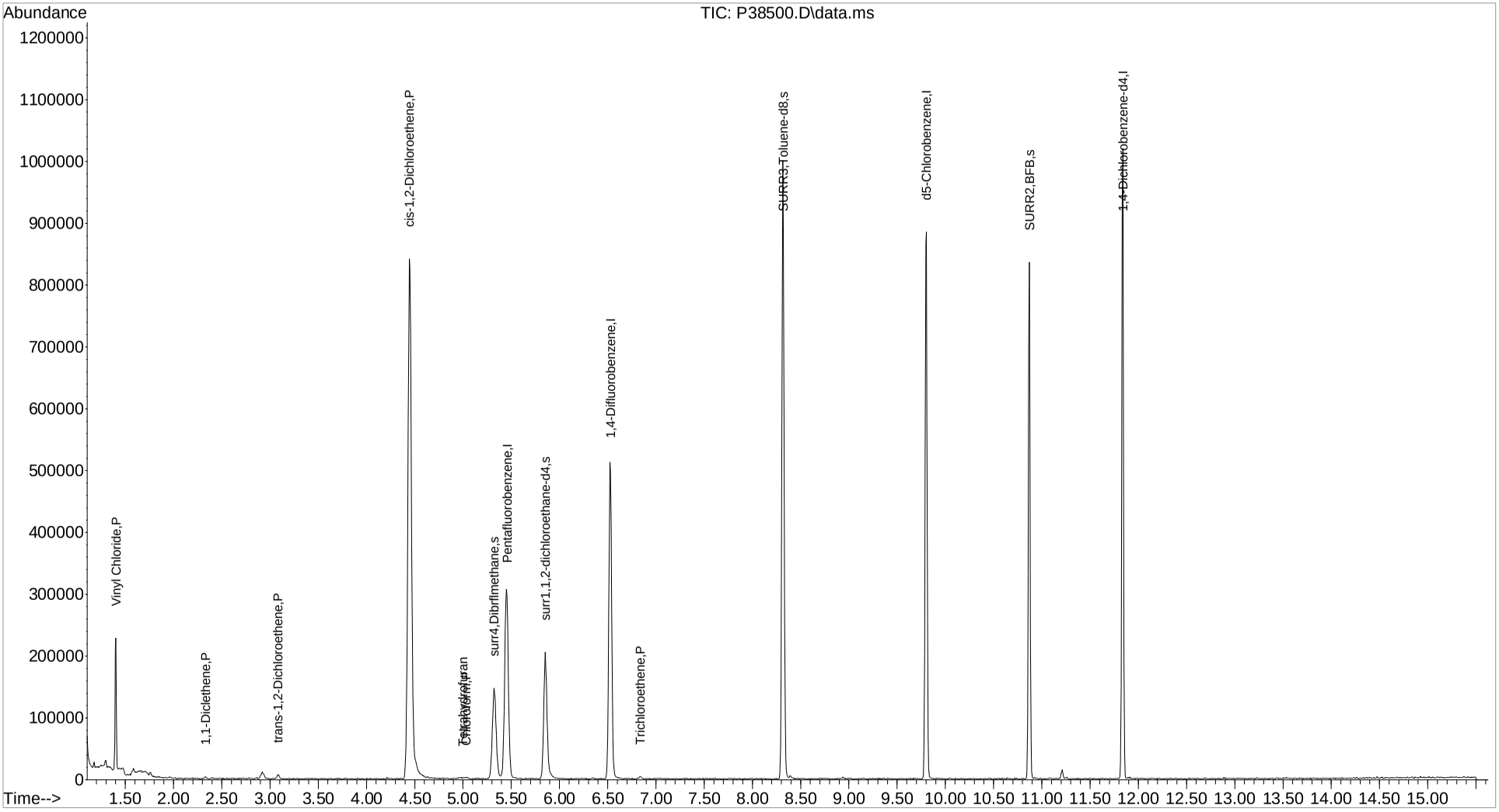
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	296926	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	457215	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	417603	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	208317	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.322	113	121732	46.37	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 92.74%				
48) surr1,1,2-dichloroetha...	5.853	65	165689	45.59	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 91.18%				
65) SURR3,Toluene-d8	8.316	98	620312	50.84	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.68%				
70) SURR2,BFB	10.870	95	224171	49.86	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.72%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.402	62	116766	30.20	ppb		100
13) 1,1-Diclethene	2.329	96	817	0.36	ppb	#	75
26) trans-1,2-Dichloroethene	3.079	96	2174	0.81	ppb	#	81
34) cis-1,2-Dichloroethene	4.444	96	512193	149.46	ppb		92
39) Tetrahydrofuran	4.999	42	2167	1.22	ppb	#	54
40) Chloroform	5.030	83	1864m	0.22	ppb		
54) Trichloroethene	6.834	130	825	0.25	ppb	#	89

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

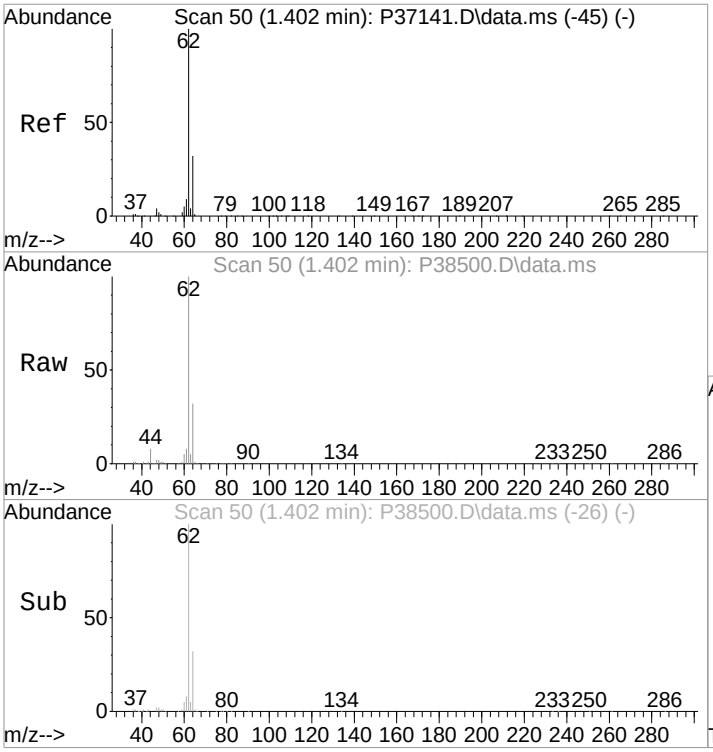
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38500.D
Acq On : 14 Aug 2020 6:35 am
Operator : K.Ruest
Sample : R2007055-012|10 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 51 Sample Multiplier: 1

Quant Time: Aug 17 16:55:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



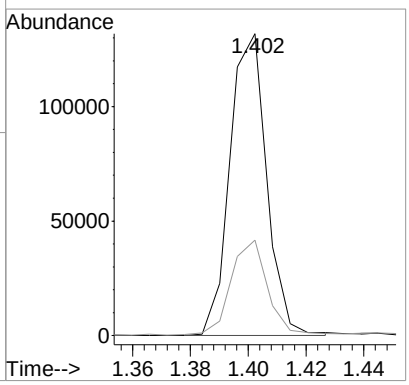
1st 08/17/20
2nd 08/18/20

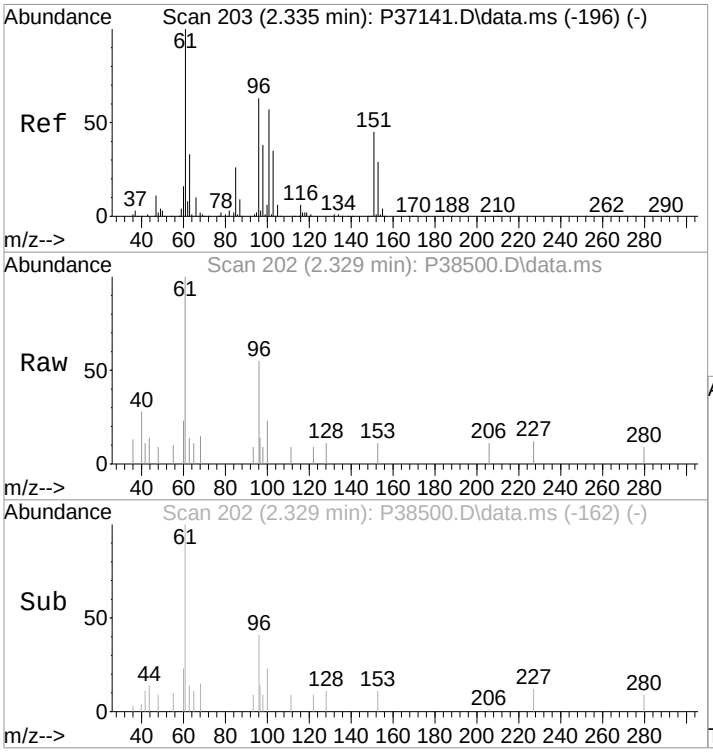


#4
Vinyl Chloride
Concen: 30.20 ppb
RT: 1.402 min Scan# 50
Delta R.T. 0.000 min
Lab File: P38500.D
Acq: 14 Aug 2020 6:35 am

Tgt Ion: 62 Resp: 116766

Ion	Ratio	Lower	Upper
62	100		
64	31.6	11.6	51.6

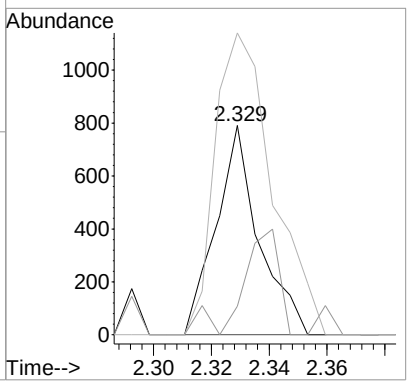


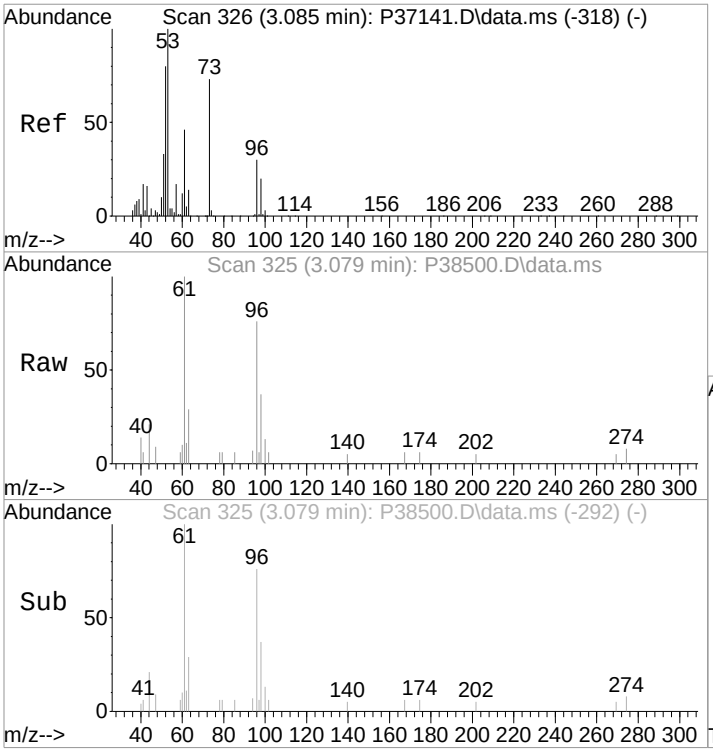


#13
1,1-Diclethene
Concen: 0.36 ppb
RT: 2.329 min Scan# 202
Delta R.T. -0.006 min
Lab File: P38500.D
Acq: 14 Aug 2020 6:35 am

Tgt Ion: 96 Resp: 817

Ion	Ratio	Lower	Upper
96	100		
98	13.7	40.4	80.4#
61	144.2	139.0	179.0

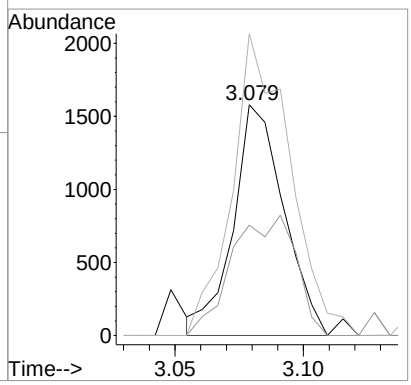


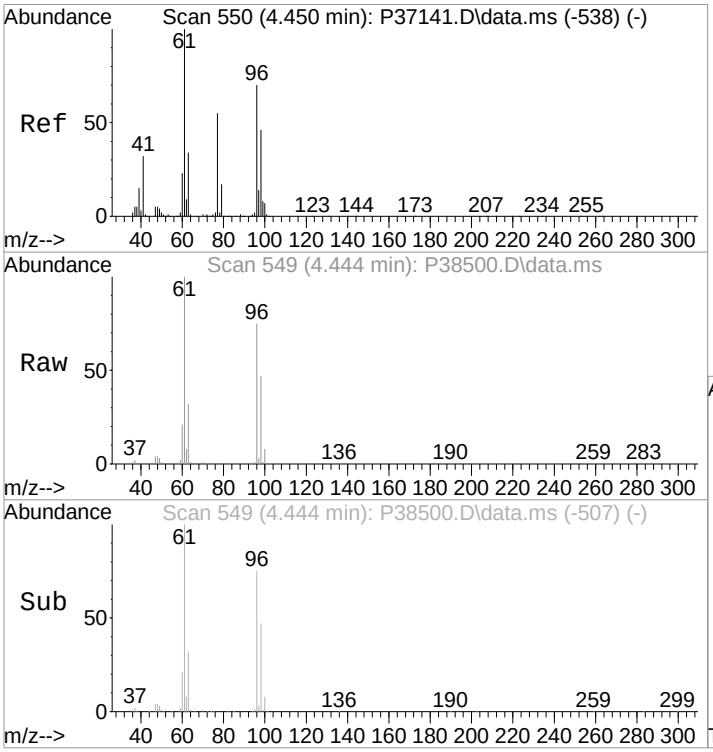


#26
trans-1,2-Dichloroethene
Concen: 0.81 ppb
RT: 3.079 min Scan# 325
Delta R.T. -0.006 min
Lab File: P38500.D
Acq: 14 Aug 2020 6:35 am

Tgt Ion: 96 Resp: 2174

Ion	Ratio	Lower	Upper
96	100		
98	47.9	46.8	86.8
61	130.9	132.8	172.8#

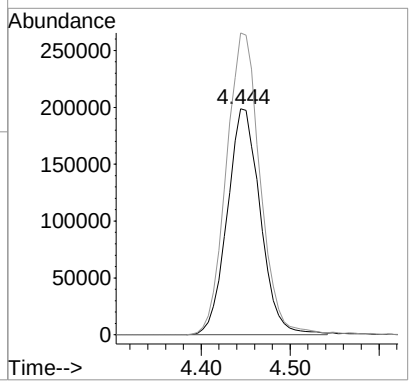


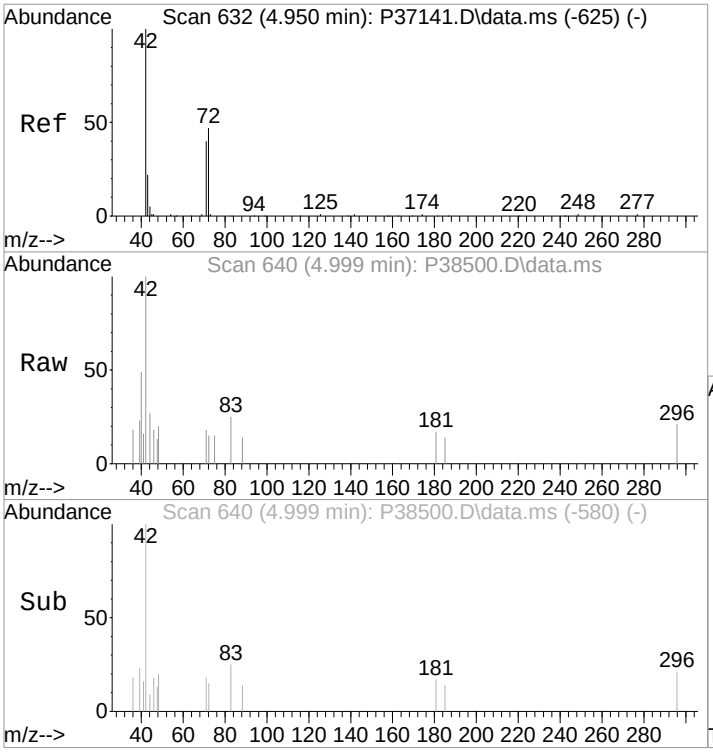


#34
cis-1,2-Dichloroethene
Concen: 149.46 ppb
RT: 4.444 min Scan# 549
Delta R.T. -0.006 min
Lab File: P38500.D
Acq: 14 Aug 2020 6:35 am

Tgt Ion: 96 Resp: 512193

Ion	Ratio	Lower	Upper
96	100		
61	133.6	123.1	163.1

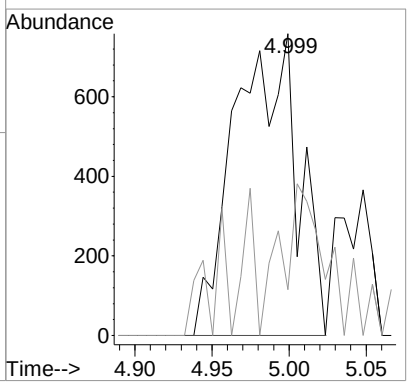


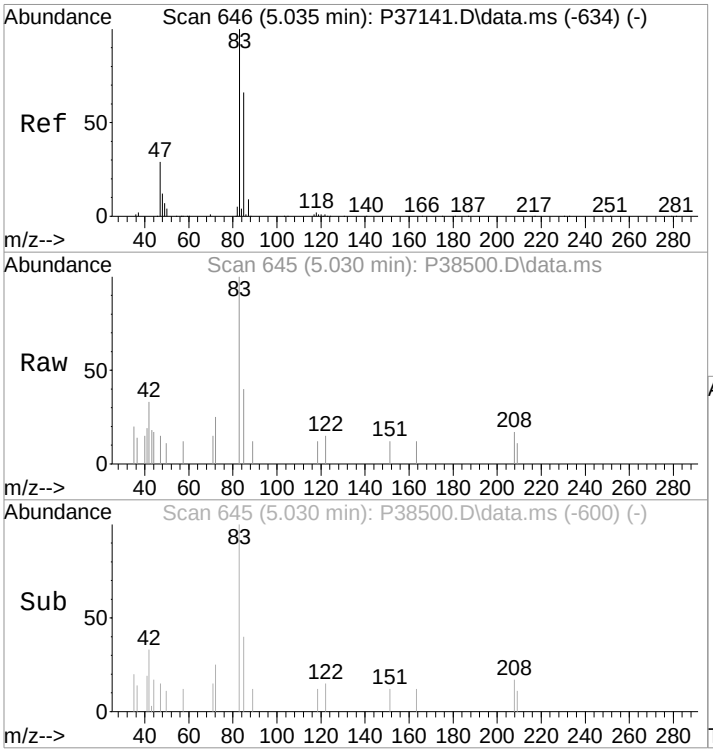


#39
Tetrahydrofuran
Concen: 1.22 ppb
RT: 4.999 min Scan# 640
Delta R.T. 0.049 min
Lab File: P38500.D
Acq: 14 Aug 2020 6:35 am

Tgt Ion: 42 Resp: 2167

Ion	Ratio	Lower	Upper
42	100		
72	15.2	25.2	65.2#

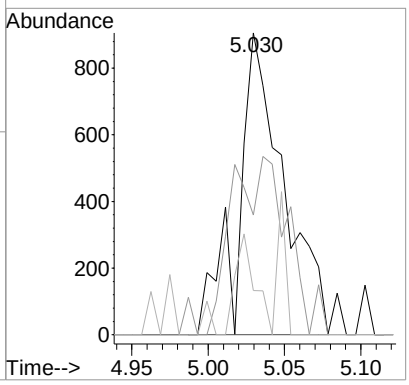


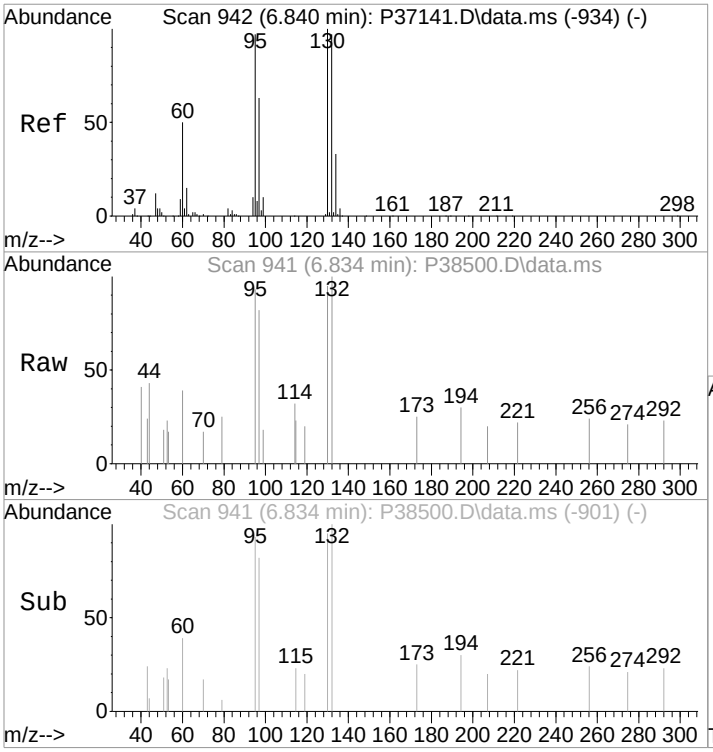


#40
Chloroform
Concen: 0.22 ppb m
RT: 5.030 min Scan# 645
Delta R.T. -0.011 min
Lab File: P38500.D
Acq: 14 Aug 2020 6:35 am

Tgt Ion: 83 Resp: 1864

Ion	Ratio	Lower	Upper
83	100		
85	39.6	46.5	86.5#
47	14.7	8.7	48.7

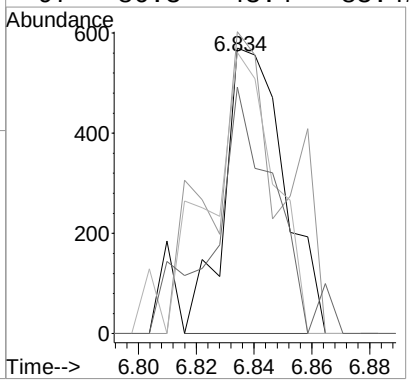




#54
Trichloroethene
Concen: 0.25 ppb
RT: 6.834 min Scan# 941
Delta R.T. -0.006 min
Lab File: P38500.D
Acq: 14 Aug 2020 6:35 am

Tgt Ion:130 Resp: 825

Ion	Ratio	Lower	Upper
130	100		
132	105.8	77.2	117.2
95	98.4	76.7	116.7
97	86.3	43.4	83.4#

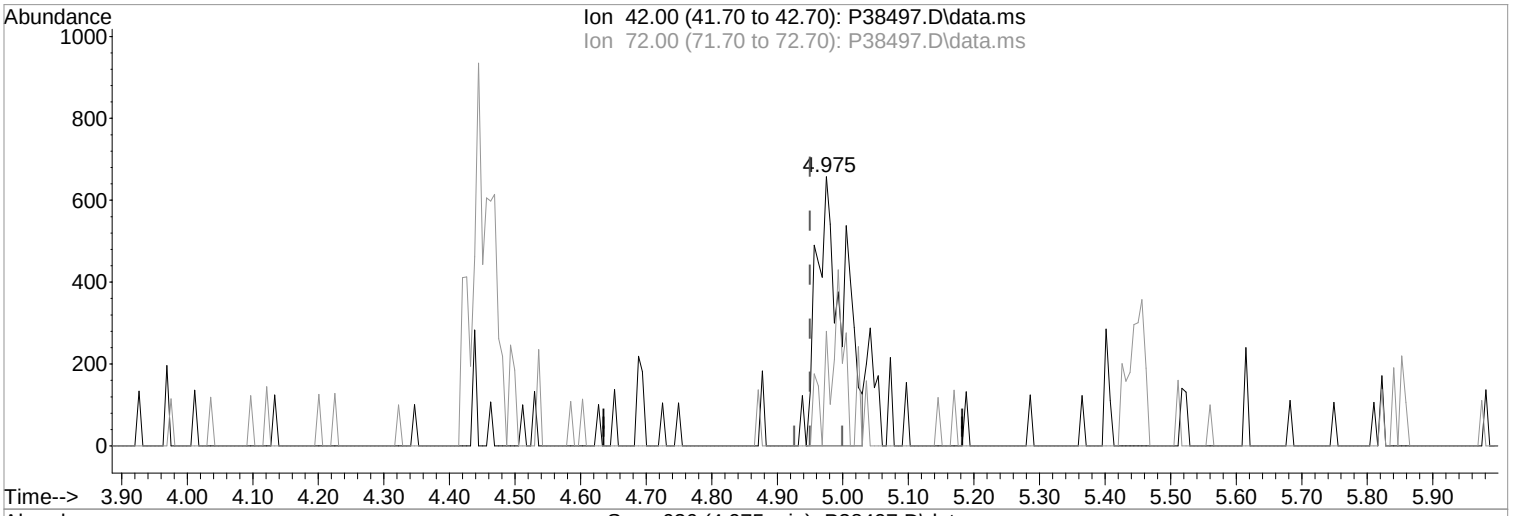


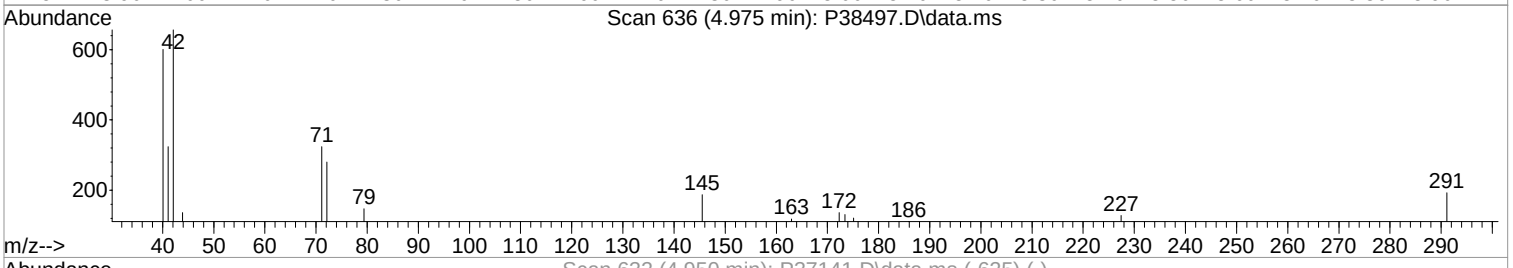
1st 08/17/20
2nd 08/18/20

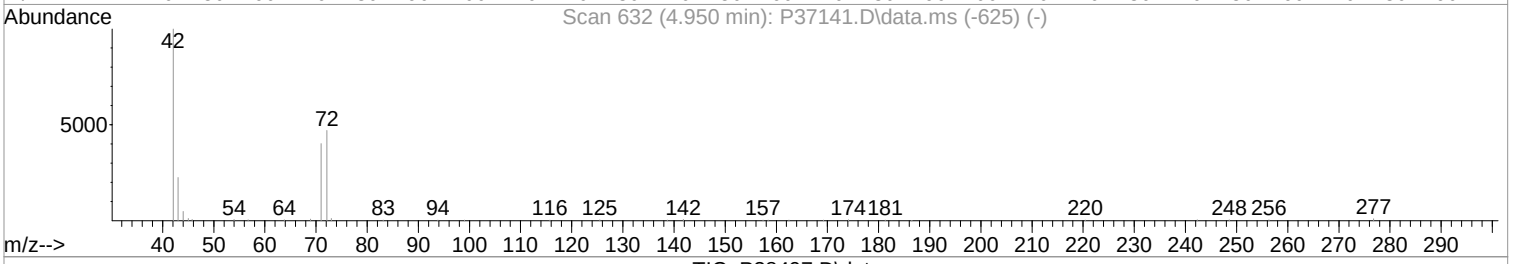
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38497.D
Acq On : 14 Aug 2020 5:29 am
Operator : K.Ruest
Sample : R2007055-013|2.5 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Aug 14 11:23:22 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38497.D\data.ms

(39) Tetrahydrofuran

4.975min (+0.025) 1.06 ppb m

response 1867

Ion	Exp%	Act%
42.00	100	100
72.00	45.20	42.62
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

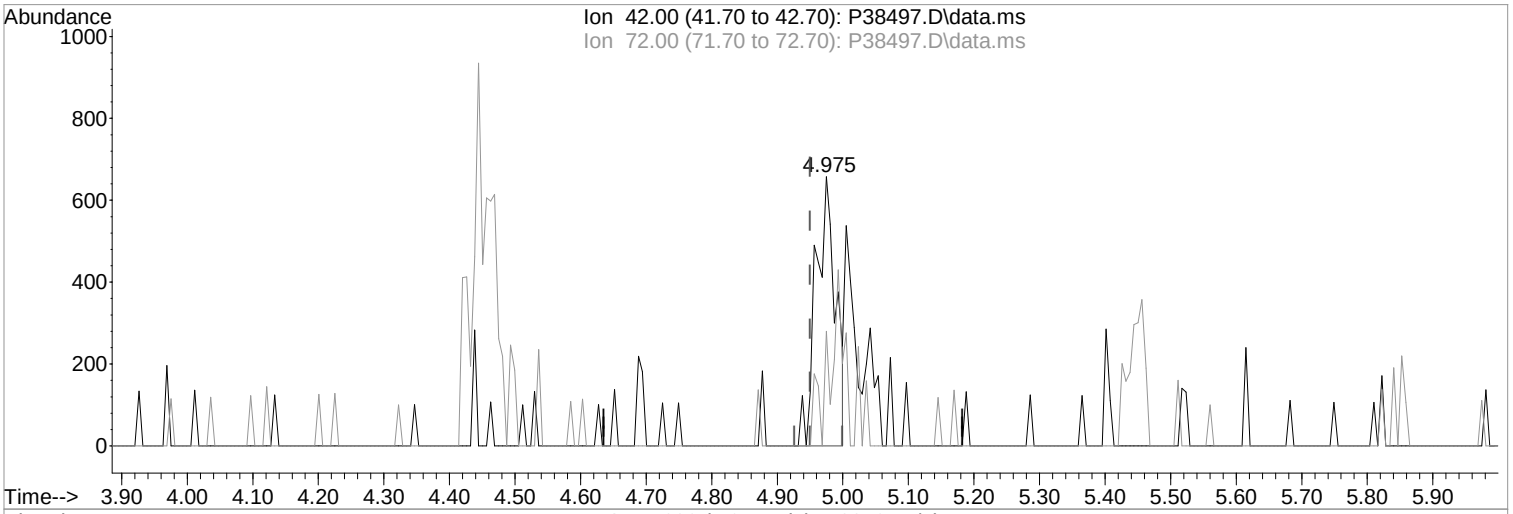
Poor integration.

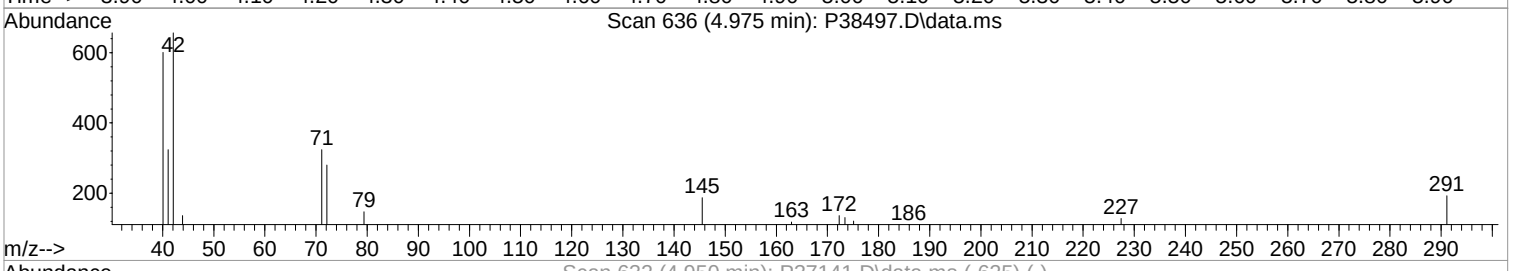
08/17/20

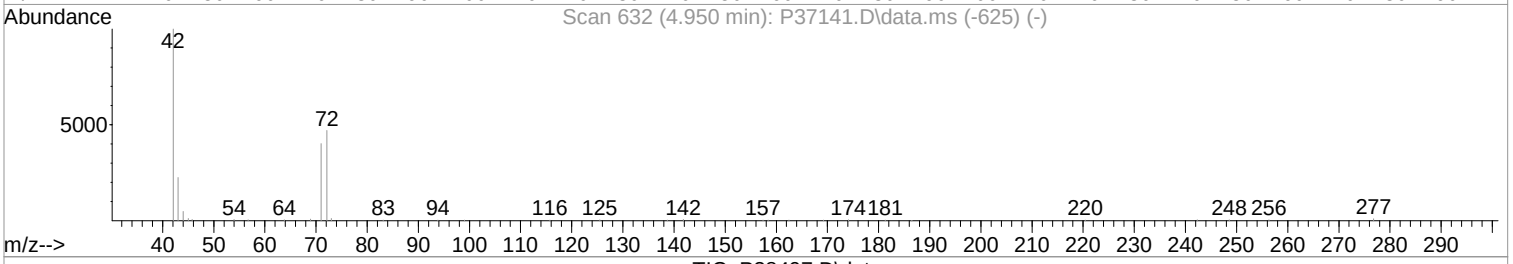
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38497.D
Acq On : 14 Aug 2020 5:29 am
Operator : K.Ruest
Sample : R2007055-013|2.5 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Aug 14 11:23:22 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38497.D\data.ms

(39) Tetrahydrofuran

4.975min (+0.025) 0.77 ppb

response 1363

Ion	Exp%	Act%
42.00	100	100
72.00	45.20	42.62
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

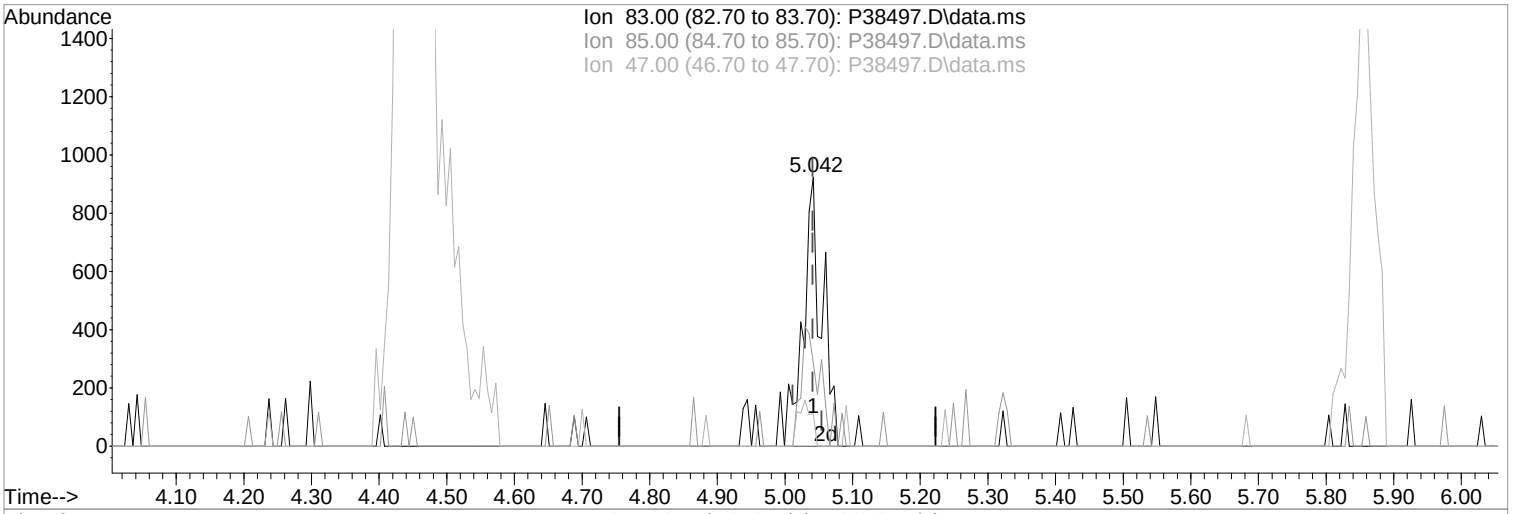
08/17/20

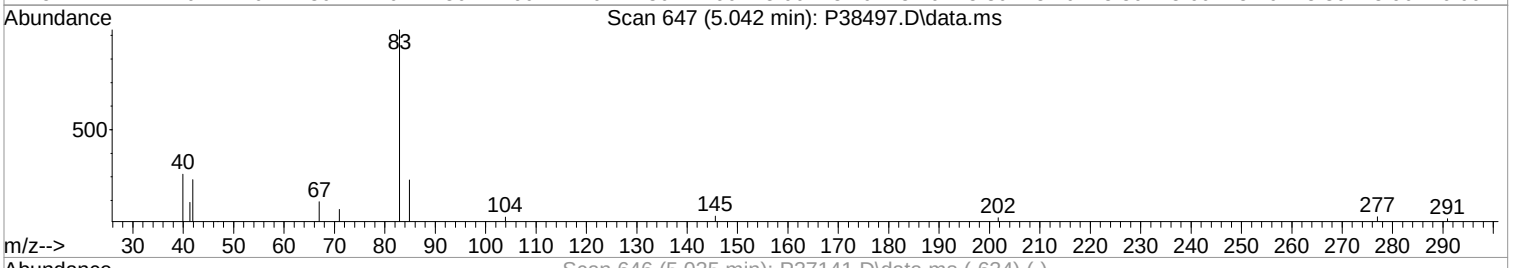
1st 08/17/20
2nd 08/18/20

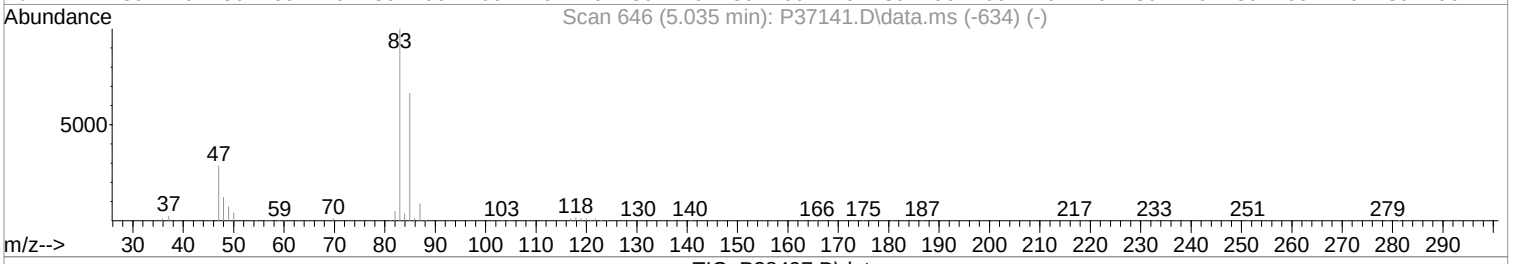
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38497.D
Acq On : 14 Aug 2020 5:29 am
Operator : K.Ruest
Sample : R2007055-013|2.5 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Aug 14 11:23:22 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38497.D\data.ms

(40) Chloroform (P)

5.042min (+0.001) 0.20 ppb m

response 1755

Ion	Exp%	Act%
83.00	100	100
85.00	66.50	31.06#
47.00	28.70	12.01
0.00	0.00	0.00

Manual Integration:

After

Split Peak

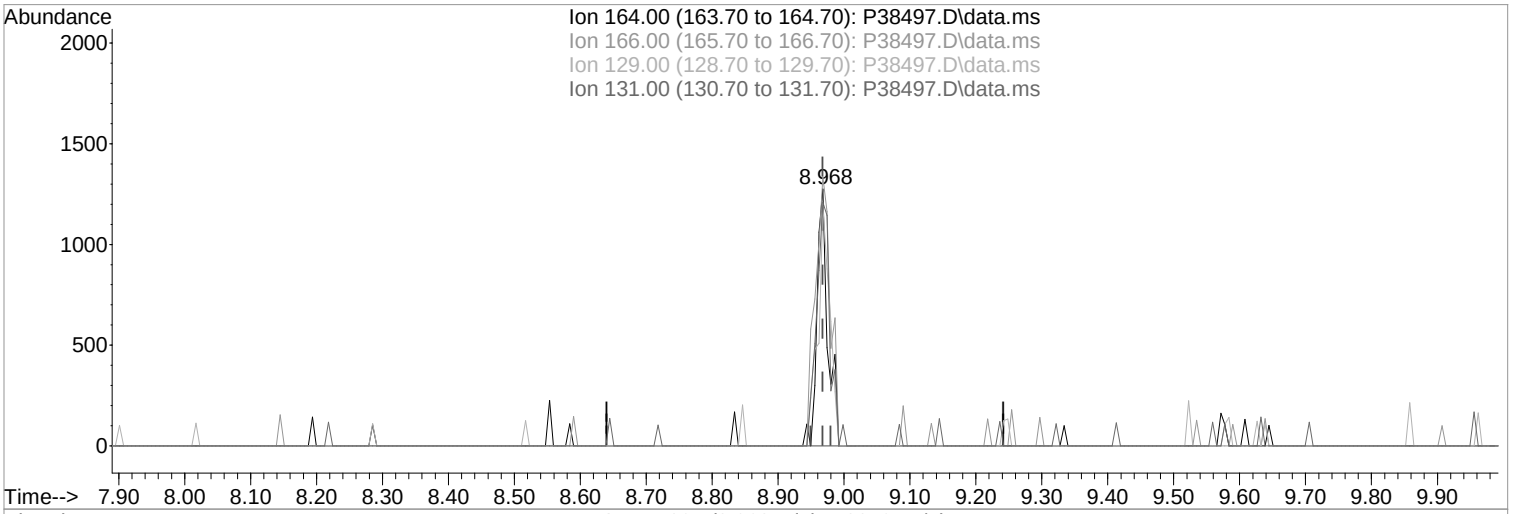
08/17/20

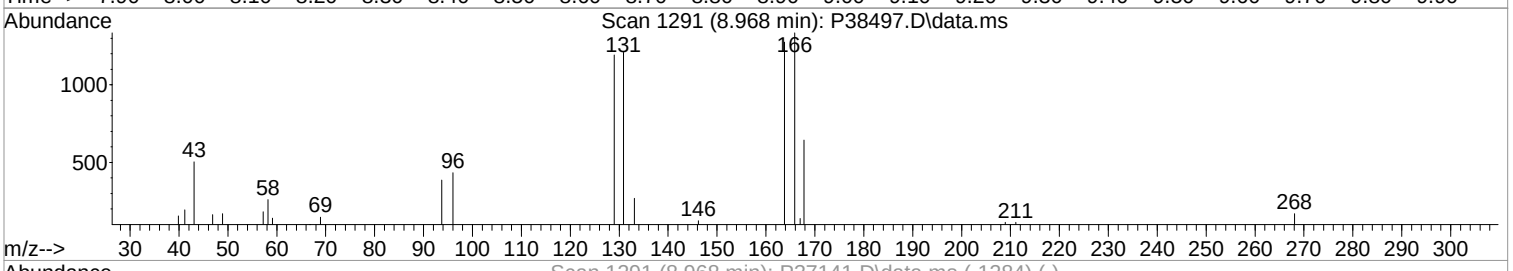
1st 08/17/20
2nd 08/18/20

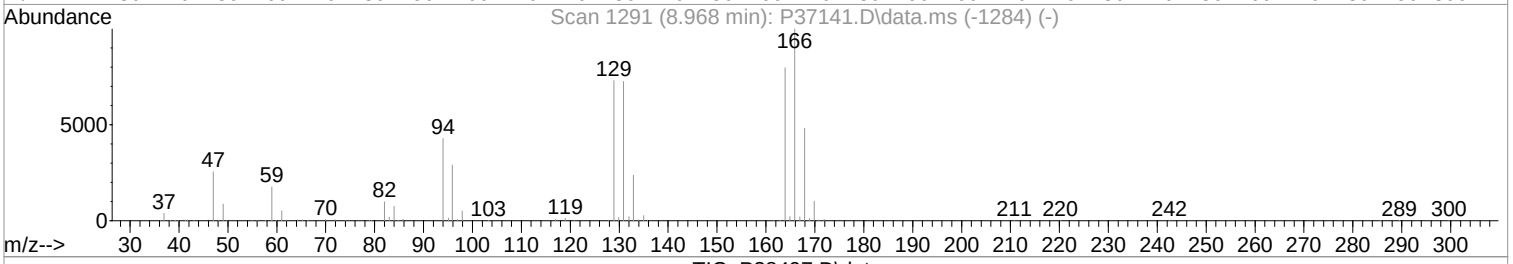
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38497.D
Acq On : 14 Aug 2020 5:29 am
Operator : K.Ruest
Sample : R2007055-013|2.5 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Aug 14 11:23:22 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38497.D\data.ms

(72) Tetrachloroethene (P)

8.968min (+0.000) 0.58 ppb m

response 1461

Ion	Exp%	Act%
164.00	100	100
166.00	125.50	104.71#
129.00	91.70	93.49
131.00	91.00	94.82

Manual Integration:

After

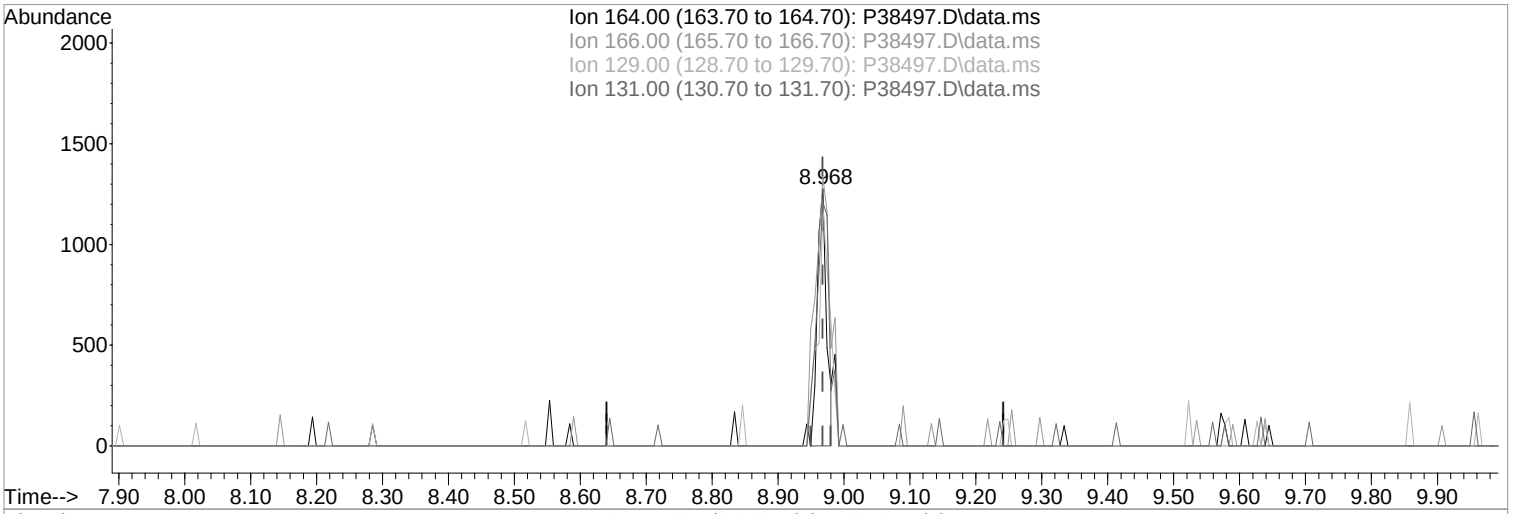
Split Peak

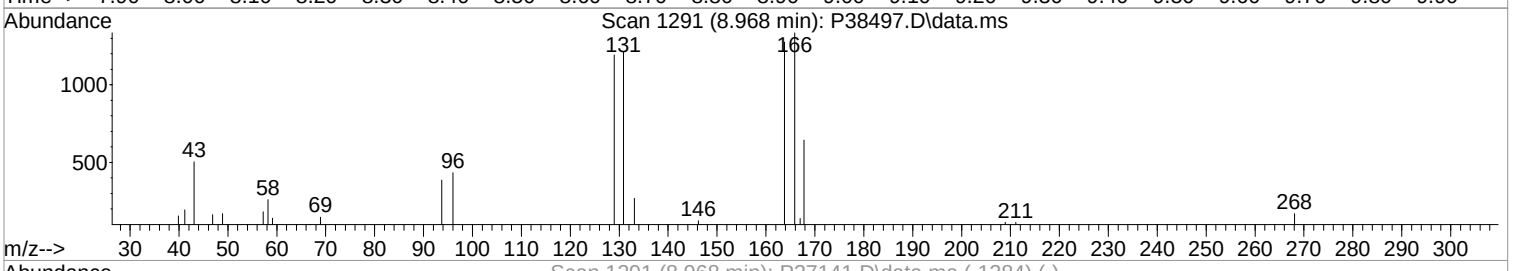
08/17/20

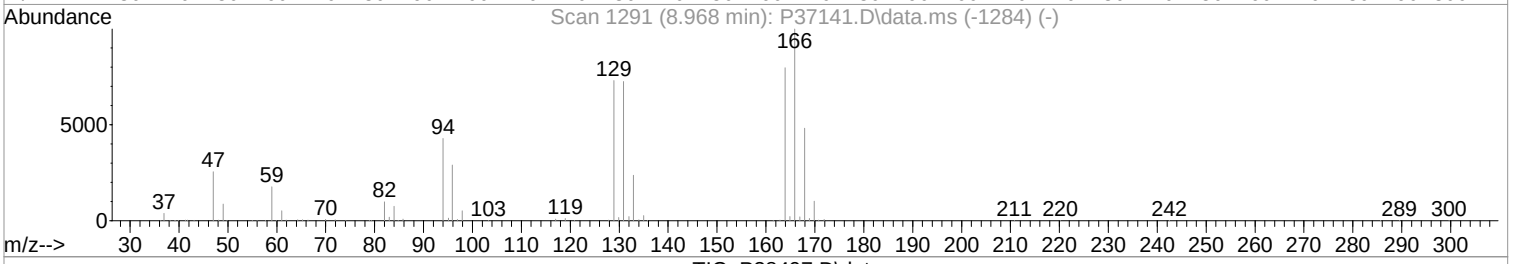
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38497.D
Acq On : 14 Aug 2020 5:29 am
Operator : K.Ruest
Sample : R2007055-013|2.5 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Aug 14 11:23:22 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38497.D\data.ms

(72) Tetrachloroethene (P)

8.968min (+0.000) 0.50 ppb

response 1255

Ion	Exp%	Act%
164.00	100	100
166.00	125.50	104.71#
129.00	91.70	93.49
131.00	91.00	94.82

Manual Integration:

Before

08/17/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38497.D
Acq On : 14 Aug 2020 5:29 am
Operator : K.Ruest
Sample : R2007055-013|2.5 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Aug 17 16:49:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

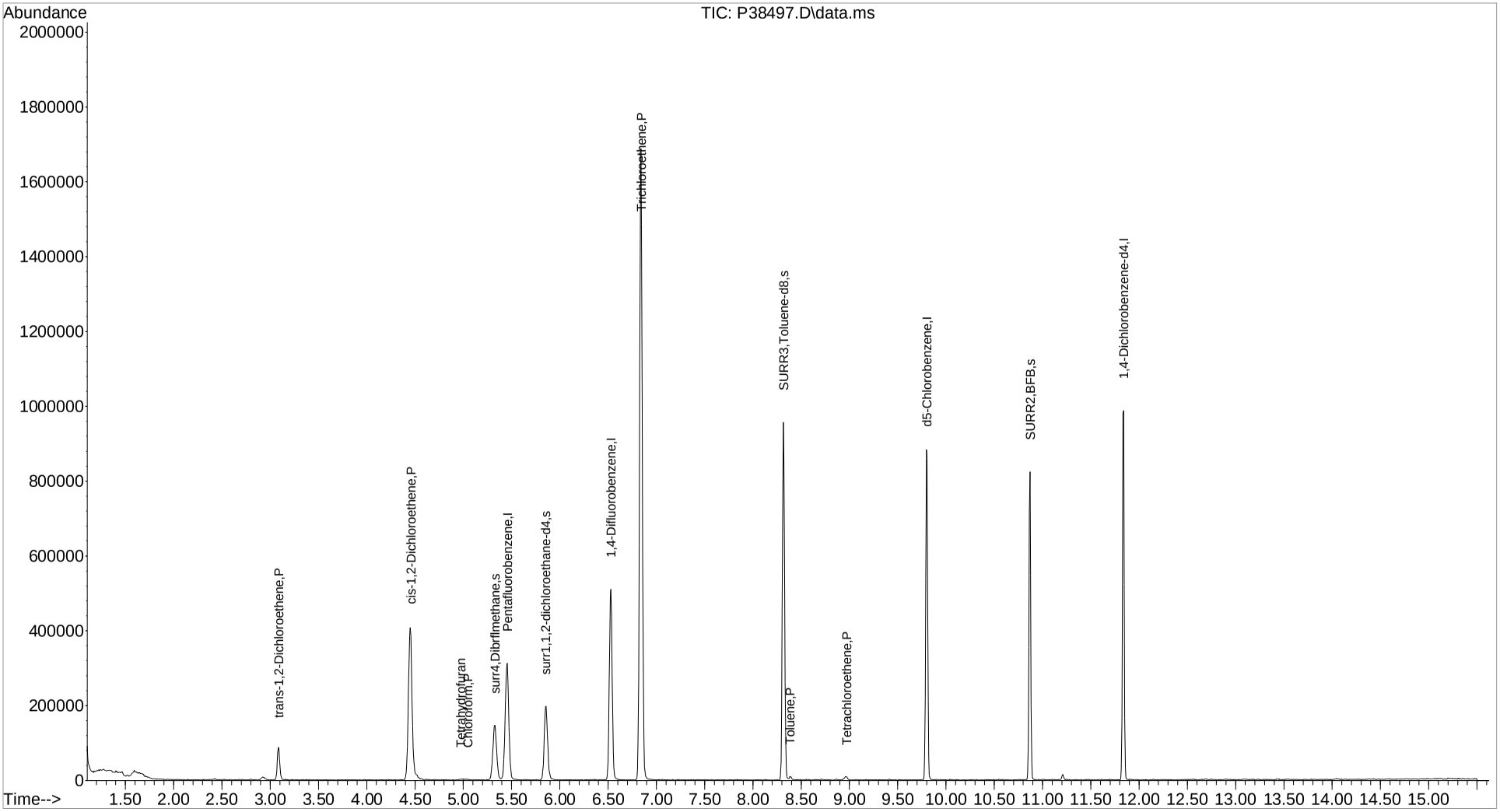
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.456	168	294392	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.529	114	456682	50.00	ppb	0.00
71) d5-Chlorobenzene	9.803	117	409068	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	202994	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.328	113	120763	46.05	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 92.10%			
48) surr1,1,2-dichloroetha...	5.853	65	167831	46.23	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 92.46%			
65) SURR3,Toluene-d8	8.316	98	607898	49.88	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.76%			
70) SURR2,BFB	10.870	95	217869	48.51	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.02%			
Target Compounds						Qvalue
18) Carbon Disulfide	2.530	76	701	Below Cal		61
26) trans-1,2-Dichloroethene	3.091	96	33544	12.65	ppb	98
34) cis-1,2-Dichloroethene	4.457	96	251614	74.06	ppb	87
39) Tetrahydrofuran	4.975	42	1867m	1.06	ppb	
40) Chloroform	5.042	83	1755m	0.20	ppb	
54) Trichloroethene	6.840	130	601947	183.98	ppb	97
66) Toluene	8.383	91	5400	0.39	ppb	81
72) Tetrachloroethene	8.968	164	1461m	0.58	ppb	

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

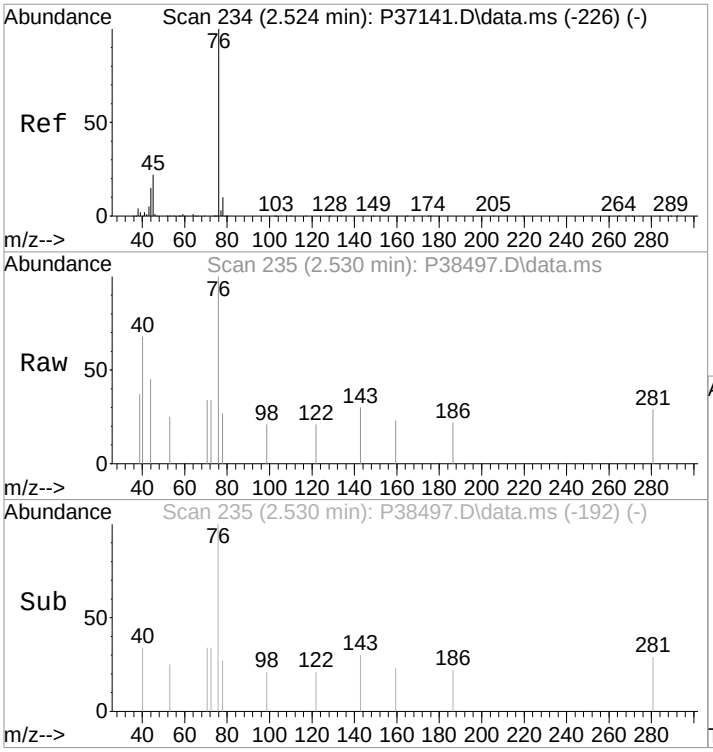
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38497.D
Acq On : 14 Aug 2020 5:29 am
Operator : K.Ruest
Sample : R2007055-013|2.5 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Aug 17 16:49:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



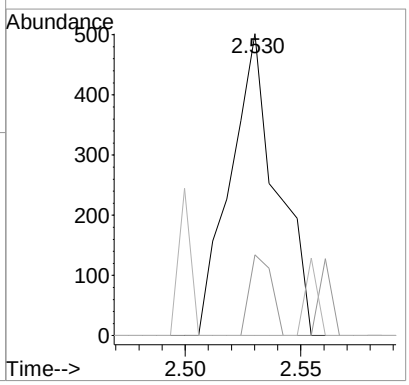
1st 08/17/20
2nd 08/18/20

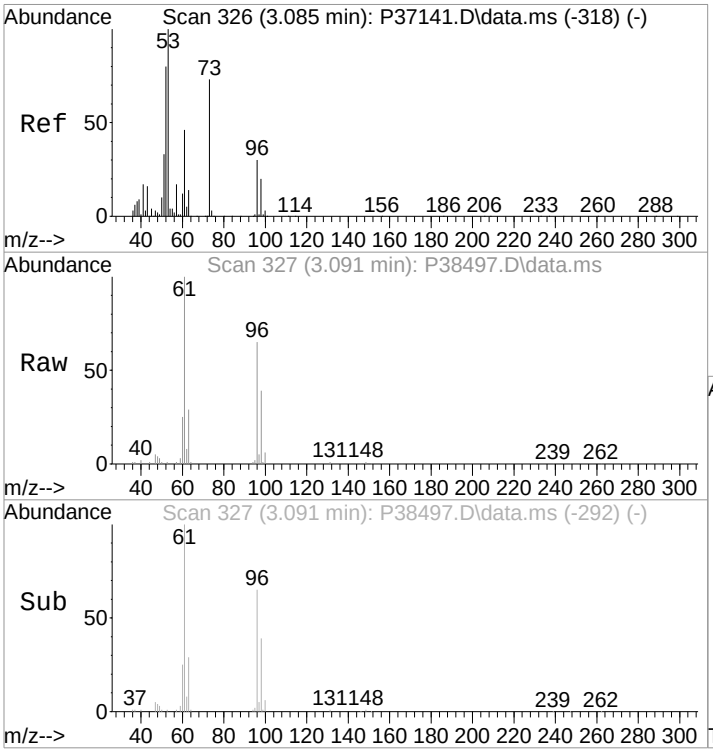


#18
Carbon Disulfide
Concen: Below Cal
RT: 2.530 min Scan# 235
Delta R.T. 0.007 min
Lab File: P38497.D
Acq: 14 Aug 2020 5:29 am

Tgt Ion: 76 Resp: 701

Ion	Ratio	Lower	Upper
76	100		
78	26.7	0.0	29.5
77	0.0	0.0	22.5

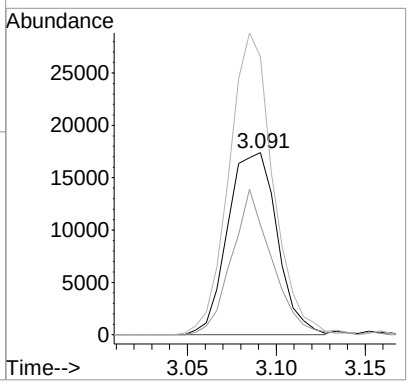


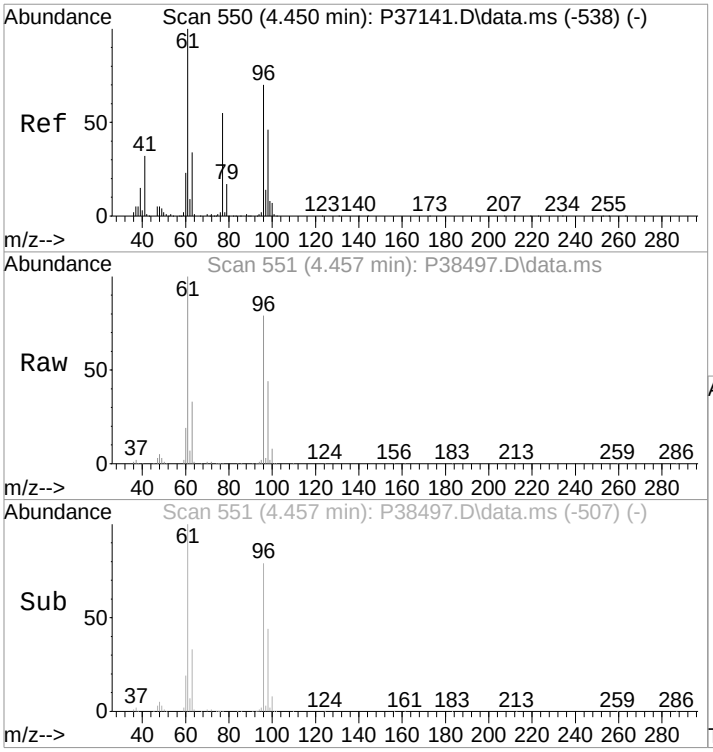


#26
trans-1,2-Dichloroethene
Concen: 12.65 ppb
RT: 3.091 min Scan# 327
Delta R.T. 0.006 min
Lab File: P38497.D
Acq: 14 Aug 2020 5:29 am

Tgt Ion: 96 Resp: 33544

Ion	Ratio	Lower	Upper
96	100		
98	60.3	46.8	86.8
61	152.8	132.8	172.8

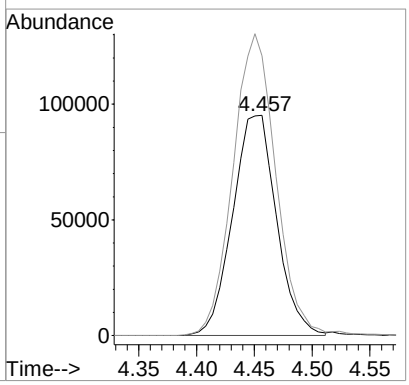


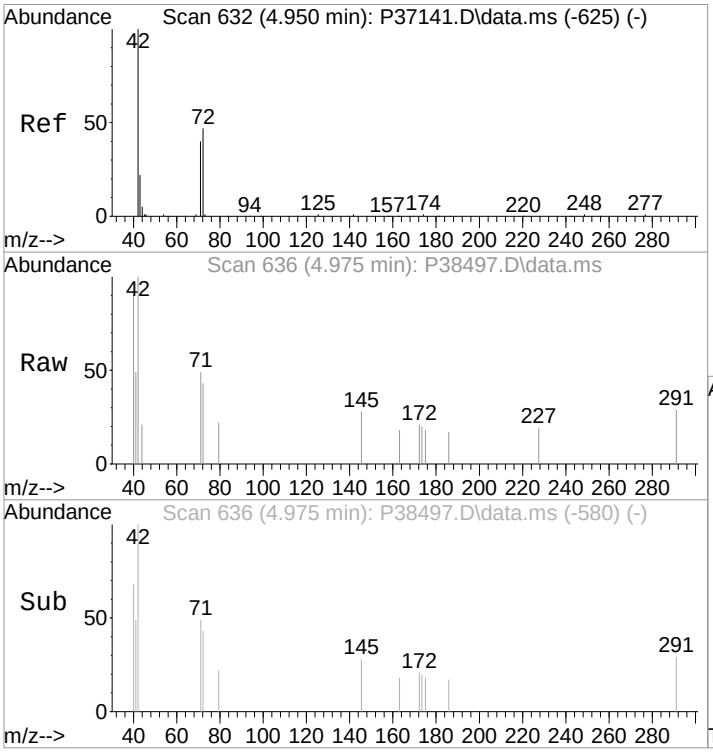


#34
cis-1,2-Dichloroethene
Concen: 74.06 ppb
RT: 4.457 min Scan# 551
Delta R.T. 0.006 min
Lab File: P38497.D
Acq: 14 Aug 2020 5:29 am

Tgt Ion: 96 Resp: 251614

Ion	Ratio	Lower	Upper
96	100		
61	126.9	123.1	163.1

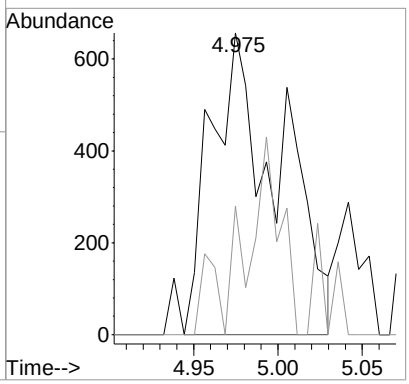


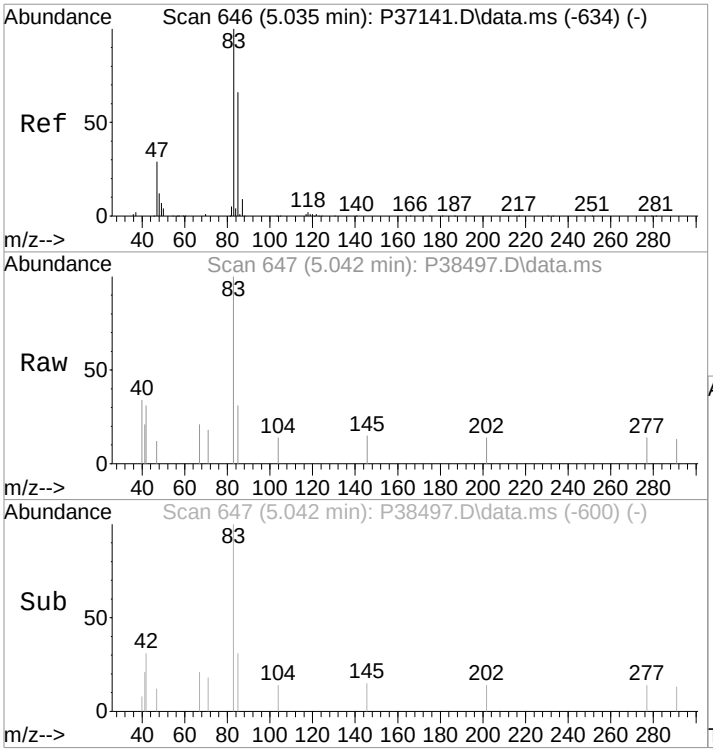


#39
Tetrahydrofuran
Concen: 1.06 ppb m
RT: 4.975 min Scan# 636
Delta R.T. 0.025 min
Lab File: P38497.D
Acq: 14 Aug 2020 5:29 am

Tgt Ion: 42 Resp: 1867

Ion	Ratio	Lower	Upper
42	100		
72	42.6	25.2	65.2

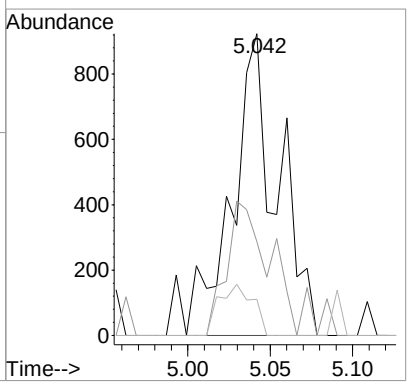


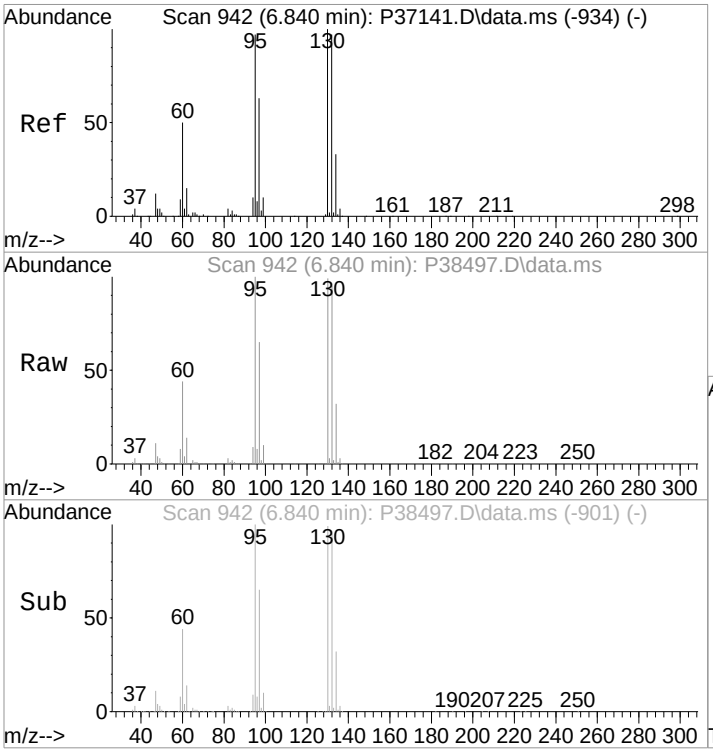


#40
Chloroform
Concen: 0.20 ppb m
RT: 5.042 min Scan# 647
Delta R.T. 0.001 min
Lab File: P38497.D
Acq: 14 Aug 2020 5:29 am

Tgt Ion: 83 Resp: 1755

Ion	Ratio	Lower	Upper
83	100		
85	31.1	46.5	86.5#
47	12.0	8.7	48.7

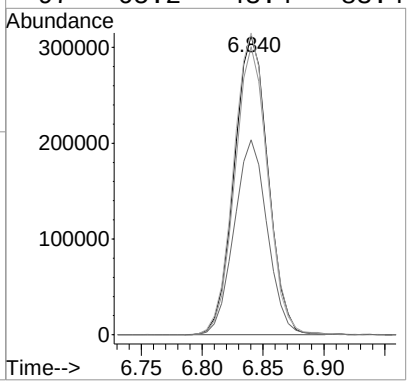


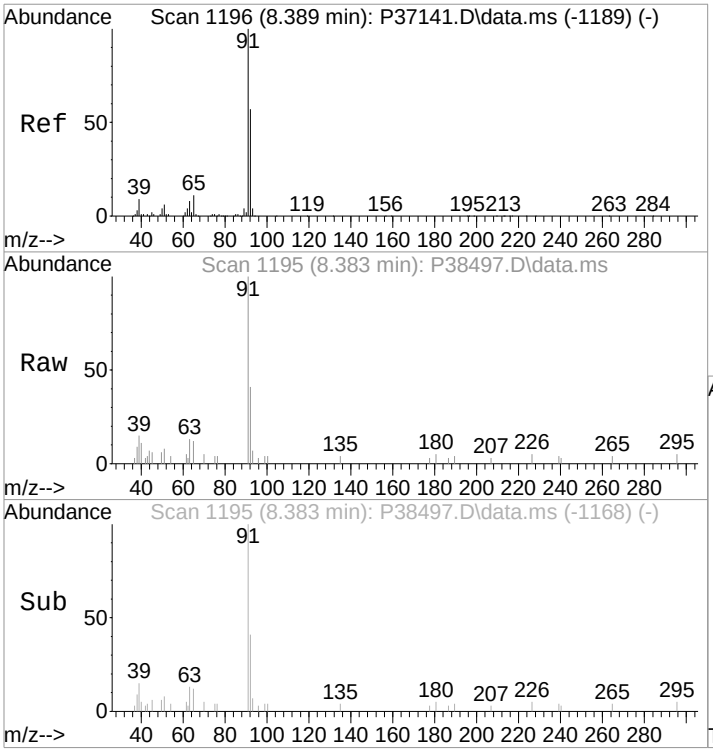


#54
Trichloroethene
Concen: 183.98 ppb
RT: 6.840 min Scan# 942
Delta R.T. 0.000 min
Lab File: P38497.D
Acq: 14 Aug 2020 5:29 am

Tgt Ion:130 Resp: 601947

Ion	Ratio	Lower	Upper
130	100		
132	96.4	77.2	117.2
95	101.0	76.7	116.7
97	65.2	43.4	83.4

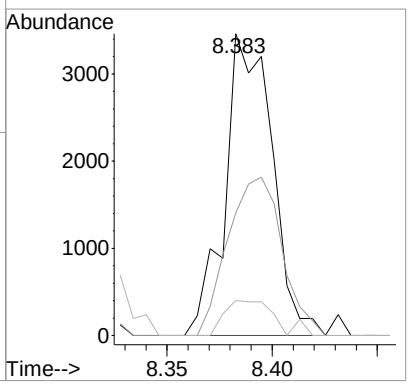


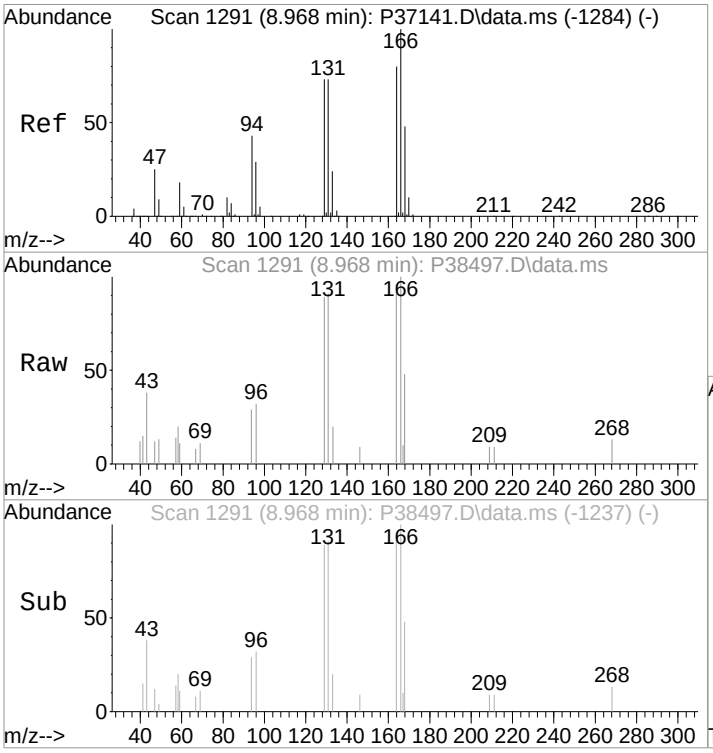


#66
Toluene
Concen: 0.39 ppb
RT: 8.383 min Scan# 1195
Delta R.T. -0.006 min
Lab File: P38497.D
Acq: 14 Aug 2020 5:29 am

Tgt Ion: 91 Resp: 5400

Ion	Ratio	Lower	Upper
91	100		
92	40.6	37.5	77.5
65	11.6	0.0	31.3

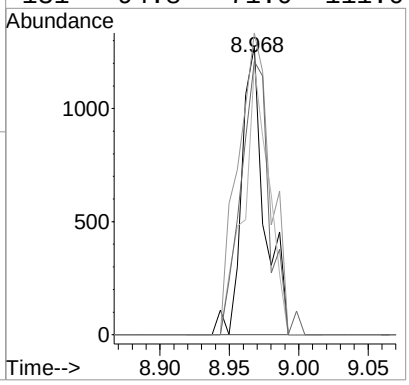




#72
Tetrachloroethene
Concen: 0.58 ppb m
RT: 8.968 min Scan# 1291
Delta R.T. 0.000 min
Lab File: P38497.D
Acq: 14 Aug 2020 5:29 am

Tgt Ion:164 Resp: 1461

Ion	Ratio	Lower	Upper
164	100		
166	104.7	105.5	145.5#
129	93.5	71.7	111.7
131	94.8	71.0	111.0

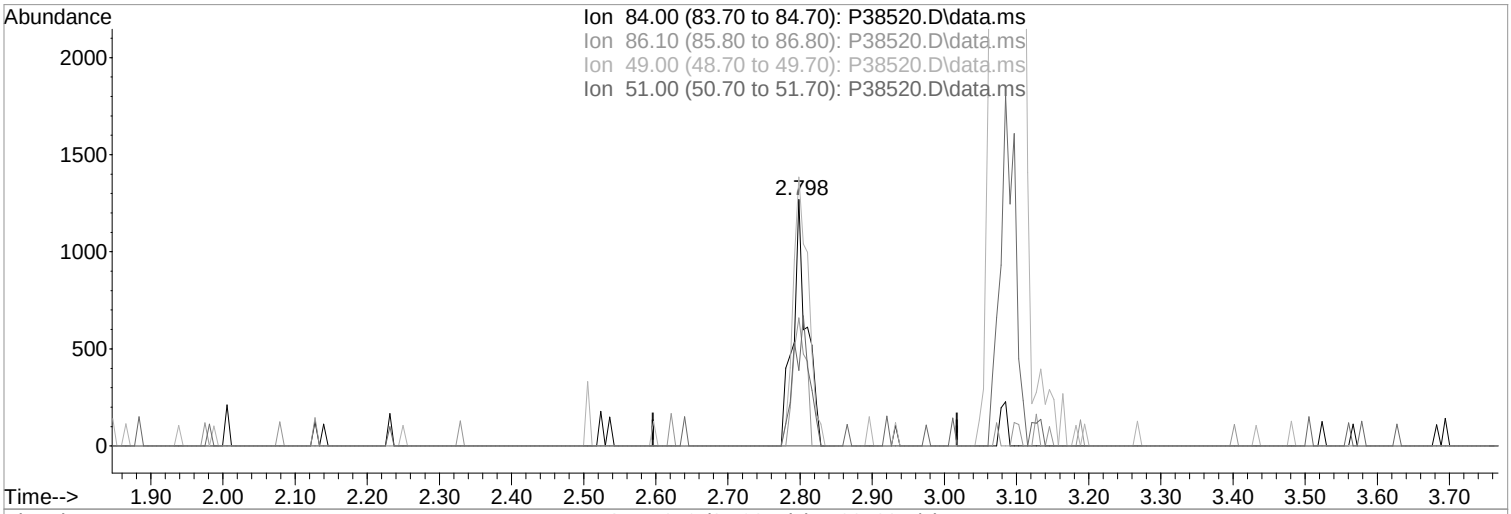


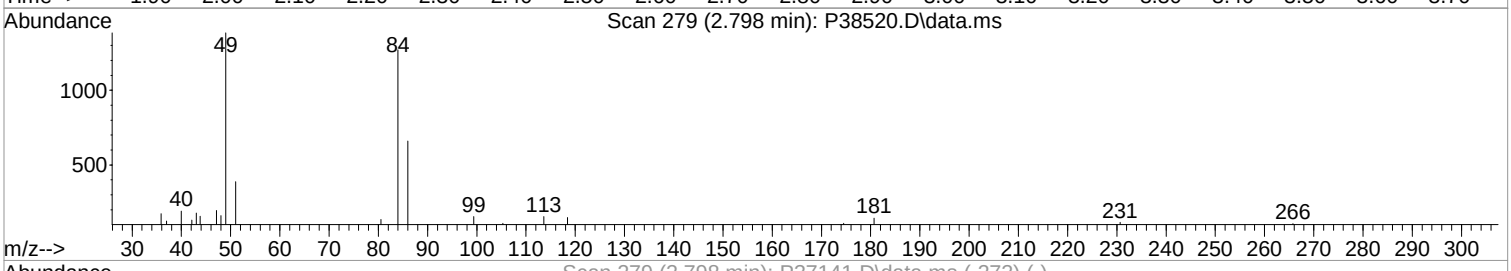
1st 08/20/20
2nd 08/21/20

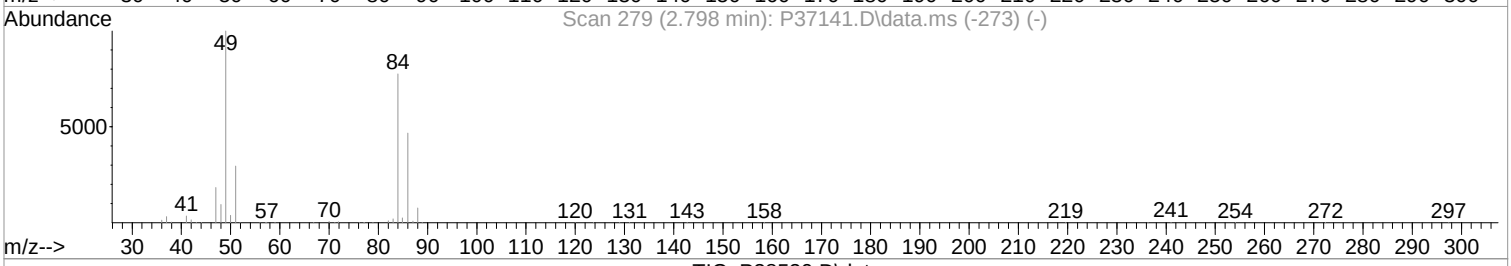
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38520.D
Acq On : 14 Aug 2020 3:09 pm
Operator : K.Ruest
Sample : R2007055-014|10 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 15:25:26 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38520.D\data.ms

(22) Methylene Chloride (P)

2.798min (+0.000) 0.52 ppb m

response 1689

Ion	Exp%	Act%
84.00	100	100
86.10	60.20	51.89
49.00	129.50	109.06#
51.00	38.10	30.63

Manual Integration:

After

Peak not found.

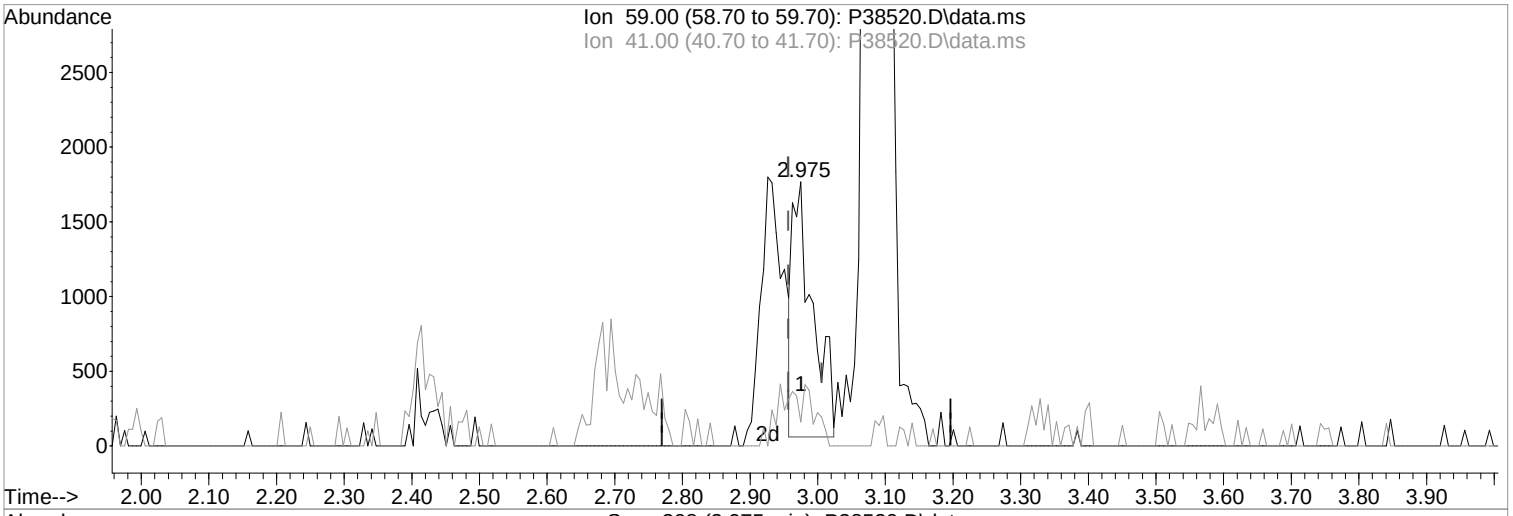
08/20/20

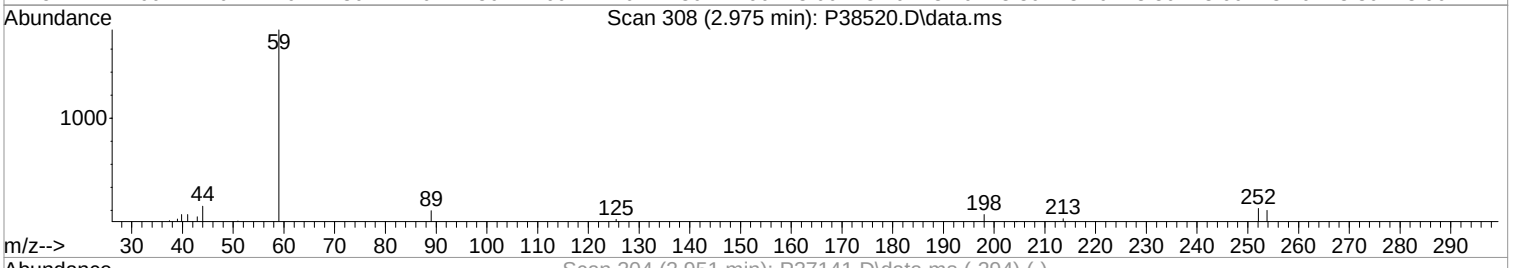
1st 08/20/20
2nd 08/21/20

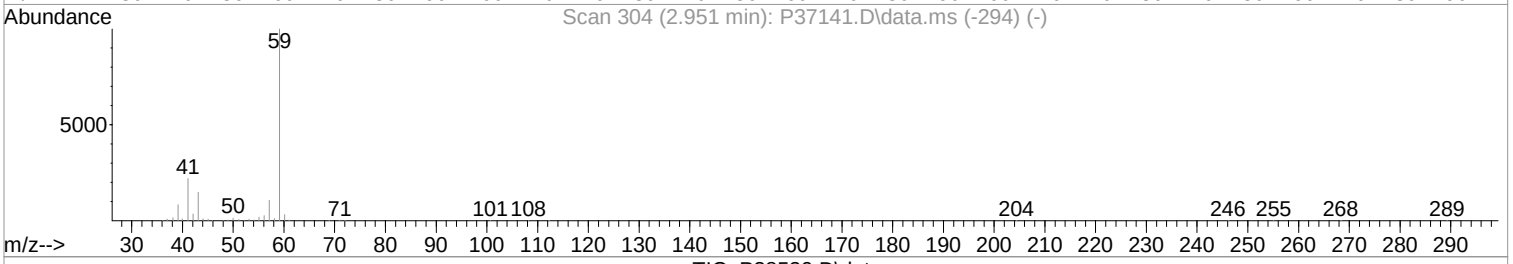
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38520.D
Acq On : 14 Aug 2020 3:09 pm
Operator : K.Ruest
Sample : R2007055-014|10 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 15:25:26 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38520.D\data.ms

(23) TBA

2.975min (+0.018) 5.80 ppb m

response 3597

Ion	Exp%	Act%
59.00	100	100
41.00	22.00	9.16
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

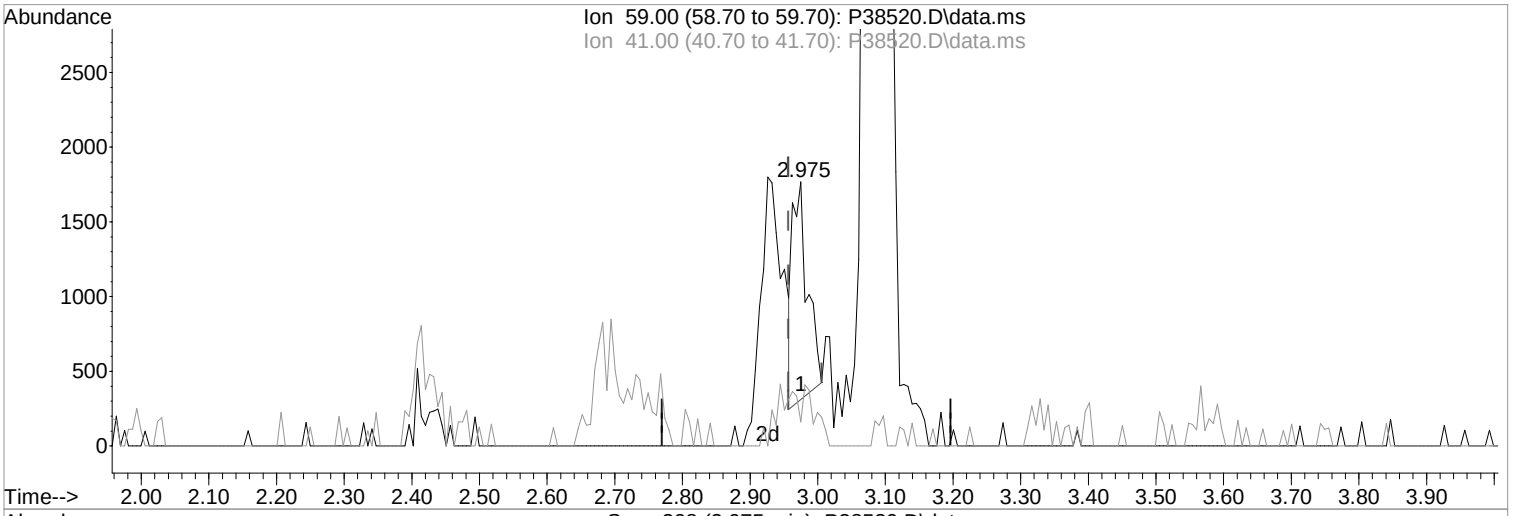
08/20/20

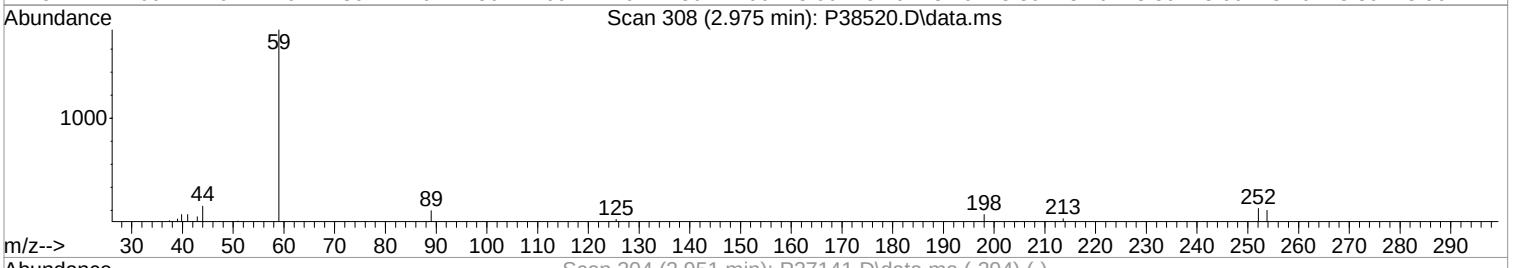
1st 08/20/20
2nd 08/21/20

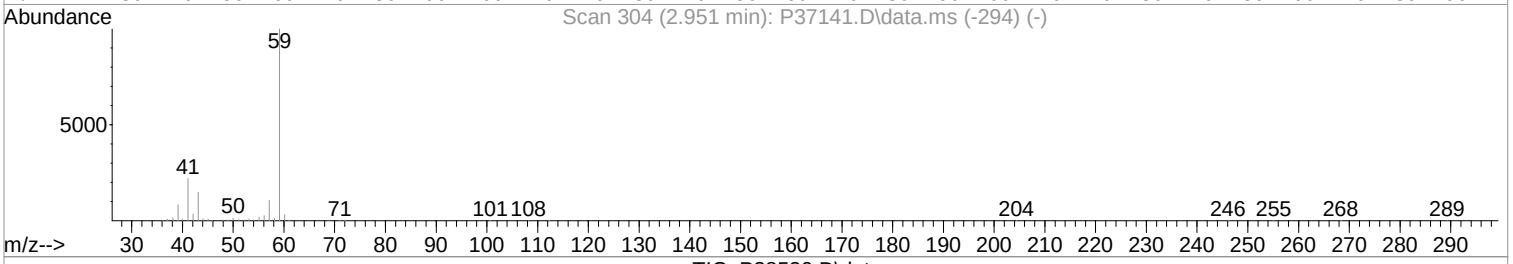
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38520.D
Acq On : 14 Aug 2020 3:09 pm
Operator : K.Ruest
Sample : R2007055-014|10 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 15:25:26 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38520.D\data.ms

(23) TBA

2.975min (+0.018) 3.69 ppb

response 2287

Ion	Exp%	Act%
59.00	100	100
41.00	22.00	9.16
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

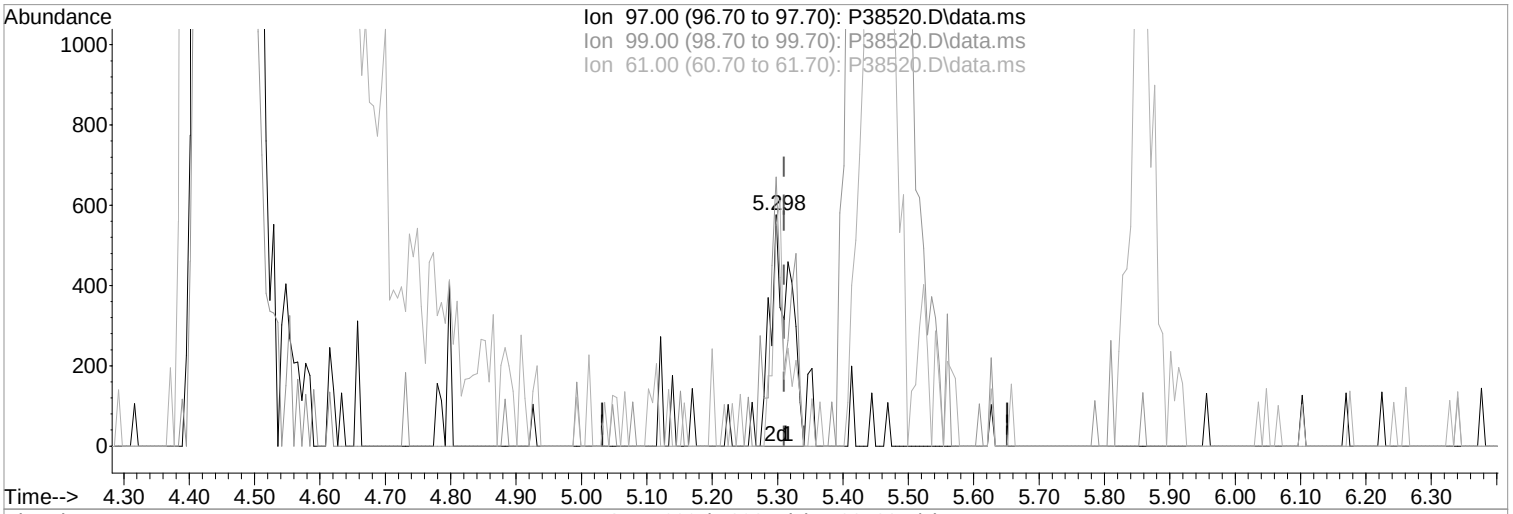
08/20/20

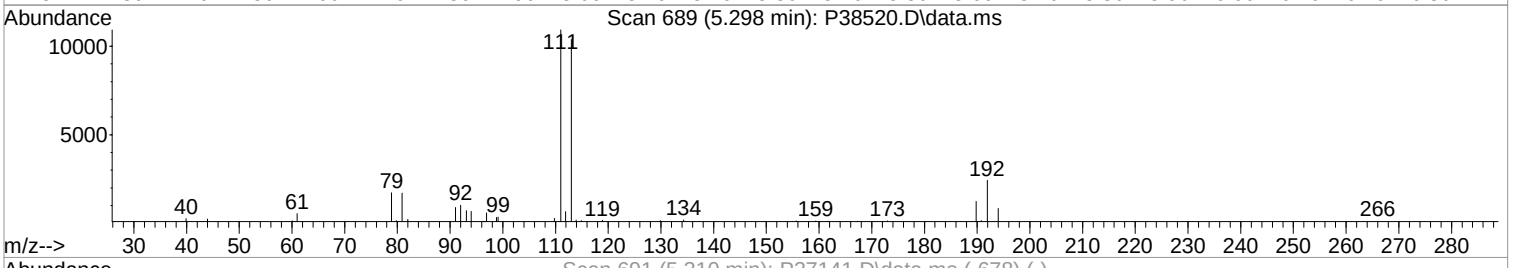
1st 08/20/20
2nd 08/21/20

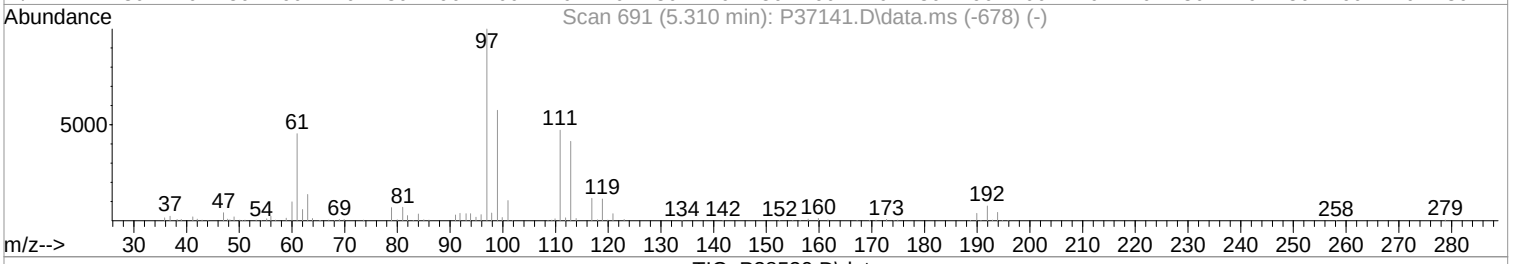
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38520.D
Acq On : 14 Aug 2020 3:09 pm
Operator : K.Ruest
Sample : R2007055-014|10 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 15:25:26 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38520.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.298min (-0.012) 0.28 ppb m

response 1188

Ion	Exp%	Act%
97.00	100	100
99.00	57.60	59.38
61.00	45.60	95.66#
0.00	0.00	0.00

Manual Integration:

After

Split Peak

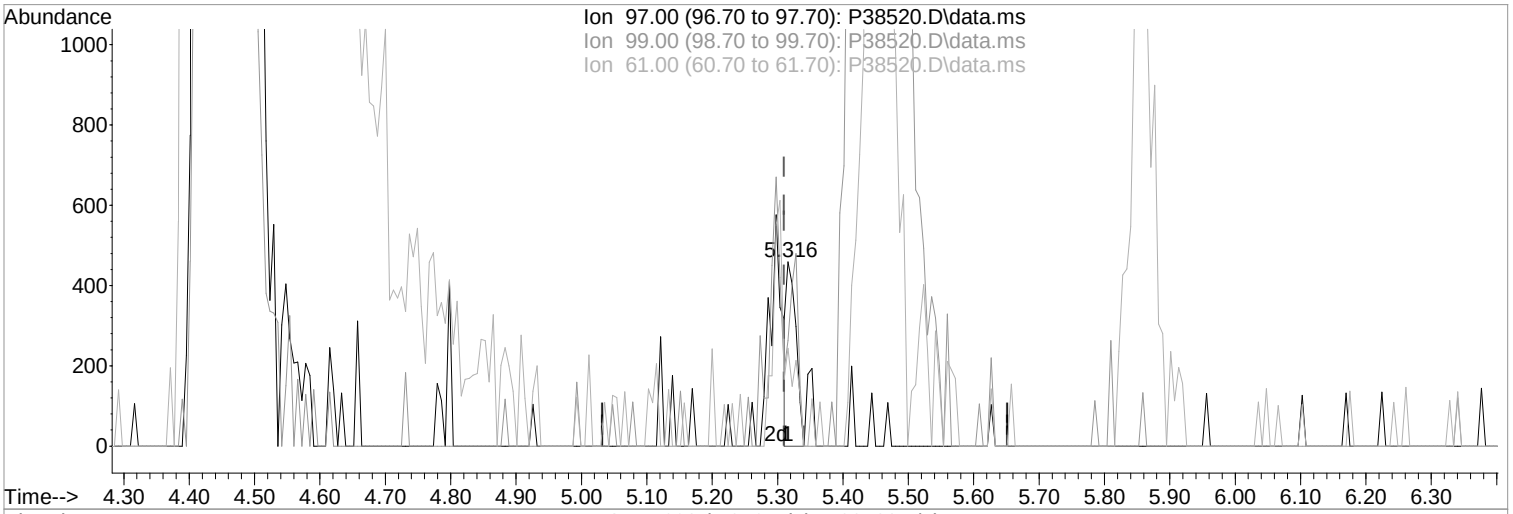
08/20/20

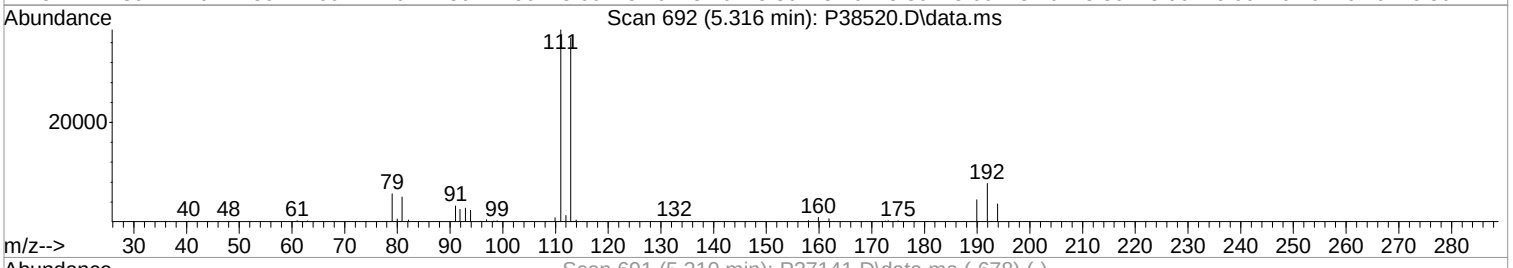
1st 08/20/20
2nd 08/21/20

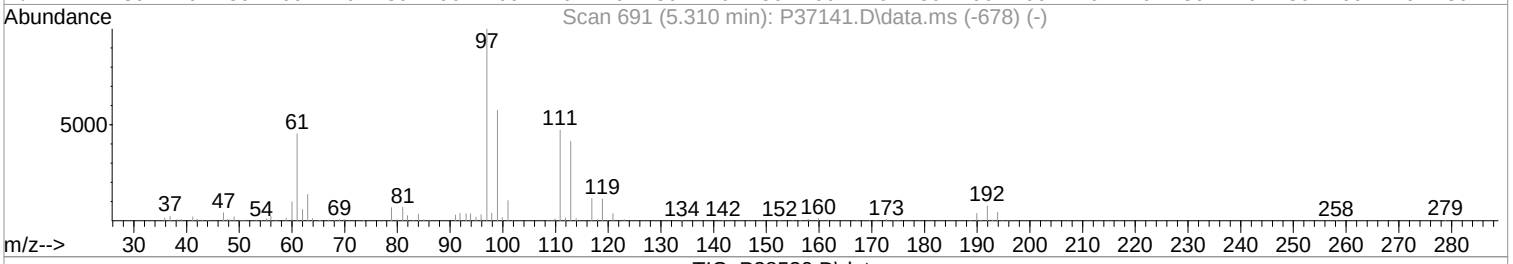
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38520.D
Acq On : 14 Aug 2020 3:09 pm
Operator : K.Ruest
Sample : R2007055-014|10 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 15:25:26 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38520.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.316min (+0.006) 0.11 ppb

response 464

Ion	Exp%	Act%
97.00	100	100
99.00	57.60	57.30
61.00	45.60	53.16
0.00	0.00	0.00

Manual Integration:

Before

08/20/20

1st 08/20/20
2nd 08/21/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38520.D
Acq On : 14 Aug 2020 3:09 pm
Operator : K.Ruest
Sample : R2007055-014|10 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 8 Sample Multiplier: 1

repeat 250

Quant Time: Aug 20 12:29:49 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

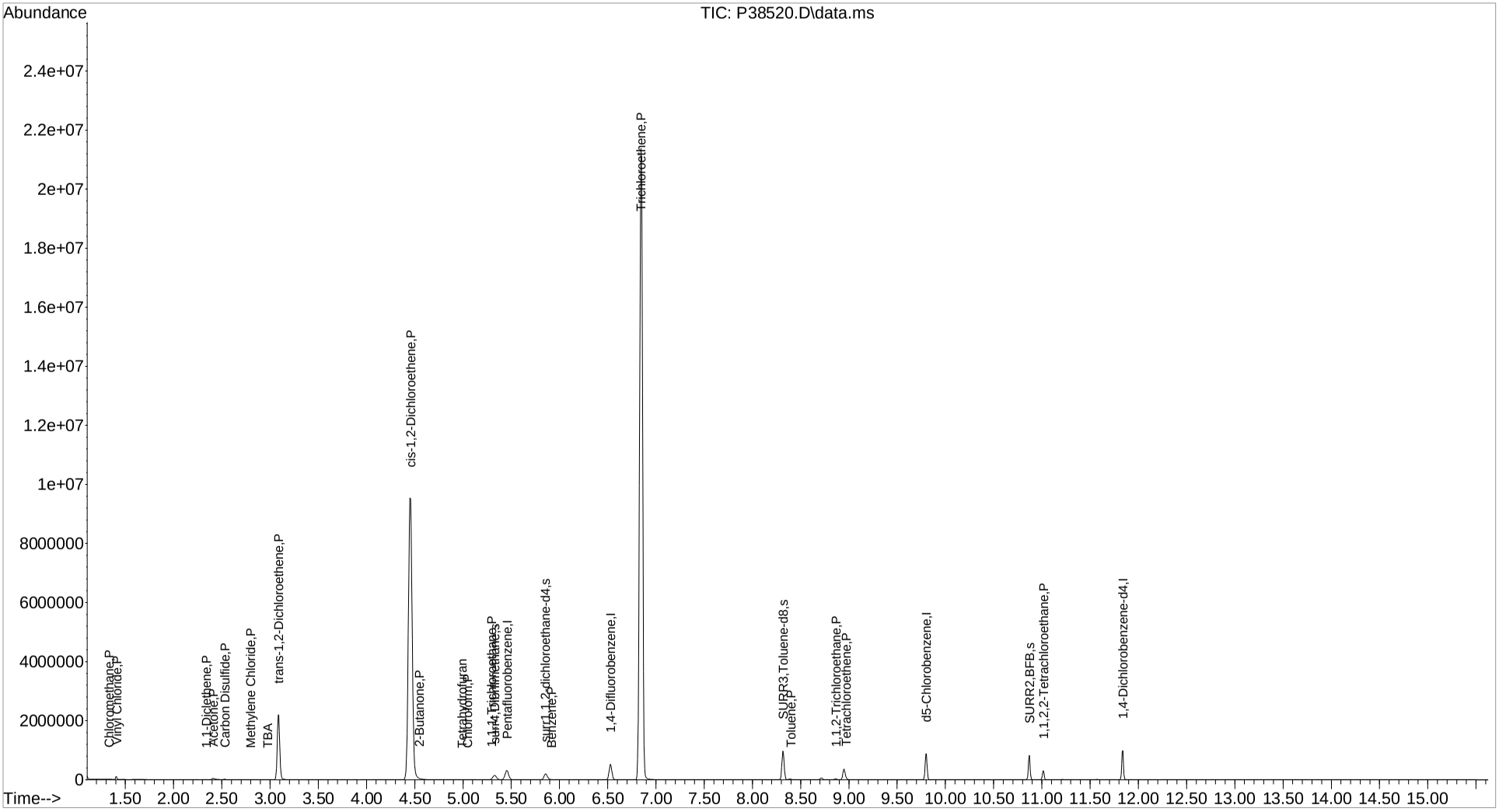
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
Internal Standards								
1) Pentafluorobenzene	5.456	168	297327	50.00	ppb		0.00	
43) 1,4-Difluorobenzene	6.529	114	455513	50.00	ppb		0.00	
71) d5-Chlorobenzene	9.803	117	421271	50.00	ppb		0.00	
86) 1,4-Dichlorobenzene-d4	11.839	152	205339	50.00	ppb		0.00	
System Monitoring Compounds								
45) surr4,Dibrflmethane	5.328	113	123777	47.32	ppb		0.00	
Spiked Amount 50.000	Range 89 - 119		Recovery = 94.64%					
48) surr1,1,2-dichloroetha...	5.852	65	171850	47.46	ppb		0.00	
Spiked Amount 50.000	Range 73 - 125		Recovery = 94.92%					
65) SURR3,Toluene-d8	8.315	98	612703	50.40	ppb		0.00	
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.80%					
70) SURR2,BFB	10.870	95	216576	48.35	ppb		0.00	
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.70%					
Target Compounds							Qvalue	
3) Chloromethane	1.329	50	2665	0.65	ppb		77	
4) Vinyl Chloride	1.408	62	53875	13.91	ppb		99	
13) 1,1-Diclethene	2.341	96	747	0.32	ppb	#	38	
15) Acetone	2.408	43	86355	50.24	ppb		92	
18) Carbon Disulfide	2.530	76	22474	2.60	ppb		95	
22) Methylene Chloride	2.798	84	1689m	0.52	ppb			
23) TBA	2.975	59	3597m	5.80	ppb			
26) trans-1,2-Dichloroethene	3.091	96	861336	321.64	ppb		93	E-Over Calibration
34) cis-1,2-Dichloroethene	4.456	96	6168127	1797.51	ppb	#	81	E-Over Calibration
35) 2-Butanone	4.548	43	14480	6.26	ppb		90	
39) Tetrahydrofuran	4.987	42	2295	1.29	ppb		84	
40) Chloroform	5.042	83	4805	0.75	ppb	#	74	
41) 1,1,1-Trichloroethane	5.298	97	1188m	0.28	ppb			
49) Benzene	5.920	78	4395	0.33	ppb	#	51	
54) Trichloroethene	6.846	130	7624490	2336.39	ppb		93	E-Over Calibration
66) Toluene	8.395	91	20759	1.49	ppb		92	
69) 1,1,2-Trichloroethane	8.864	97	9783	3.15	ppb		94	
72) Tetrachloroethene	8.974	164	9671	3.76	ppb	#	87	
92) 1,1,2,2-Tetrachloroethane	11.016	83	118750	25.91	ppb		97	

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

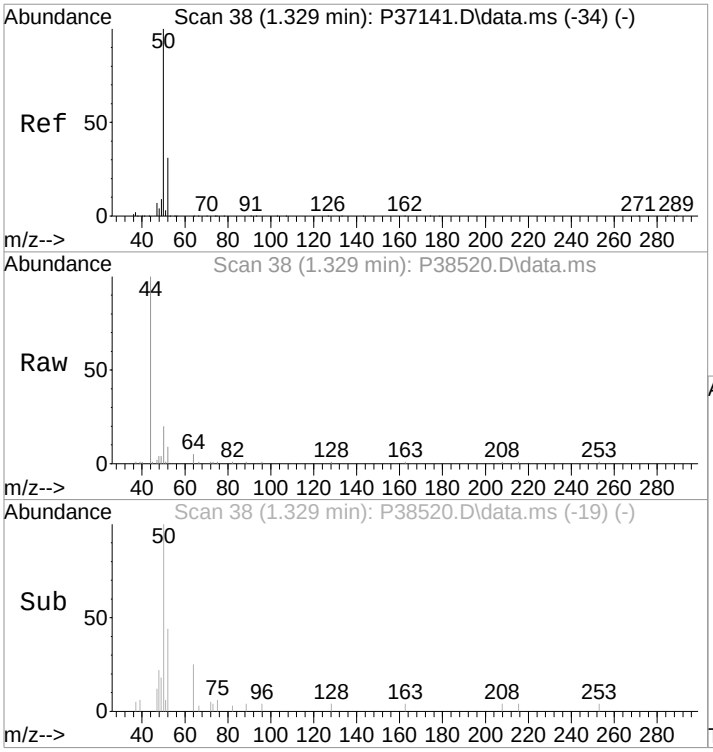
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38520.D
Acq On : 14 Aug 2020 3:09 pm
Operator : K.Ruest
Sample : R2007055-014|10 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 20 12:29:49 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



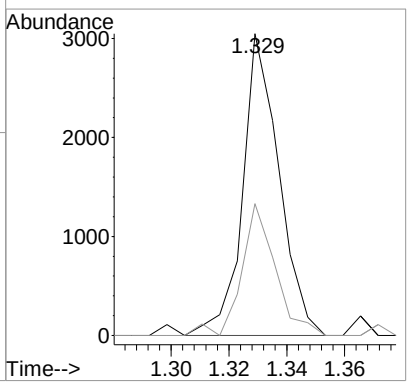
1st 08/20/20
2nd 08/21/20

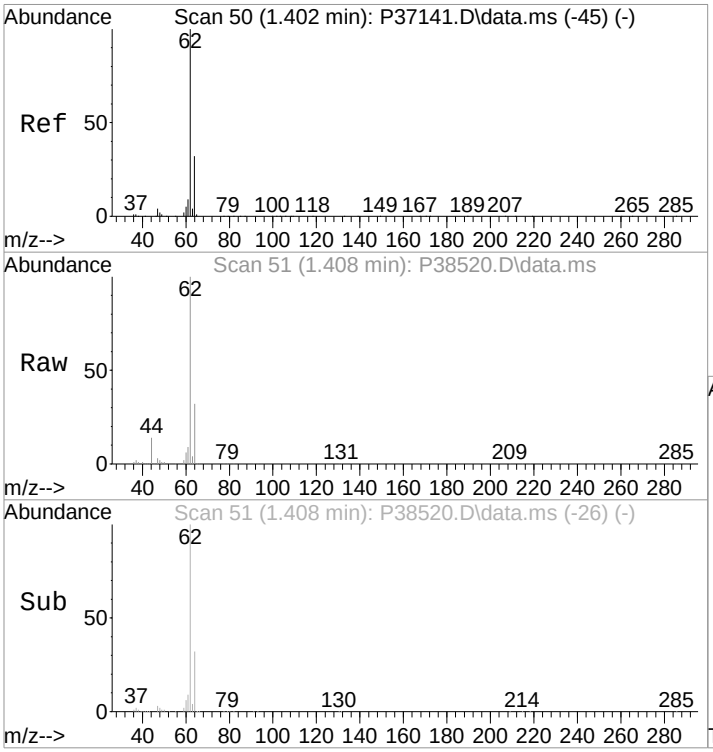


#3
Chloromethane
Concen: 0.65 ppb
RT: 1.329 min Scan# 38
Delta R.T. 0.000 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion: 50 Resp: 2665

Ion	Ratio	Lower	Upper
50	100		
52	43.6	10.8	50.8

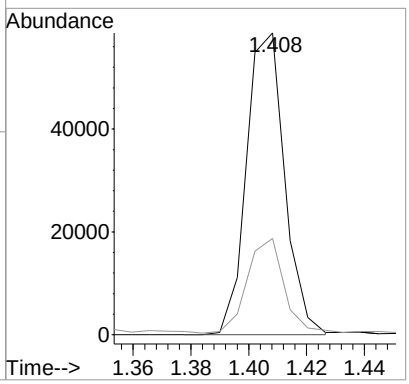


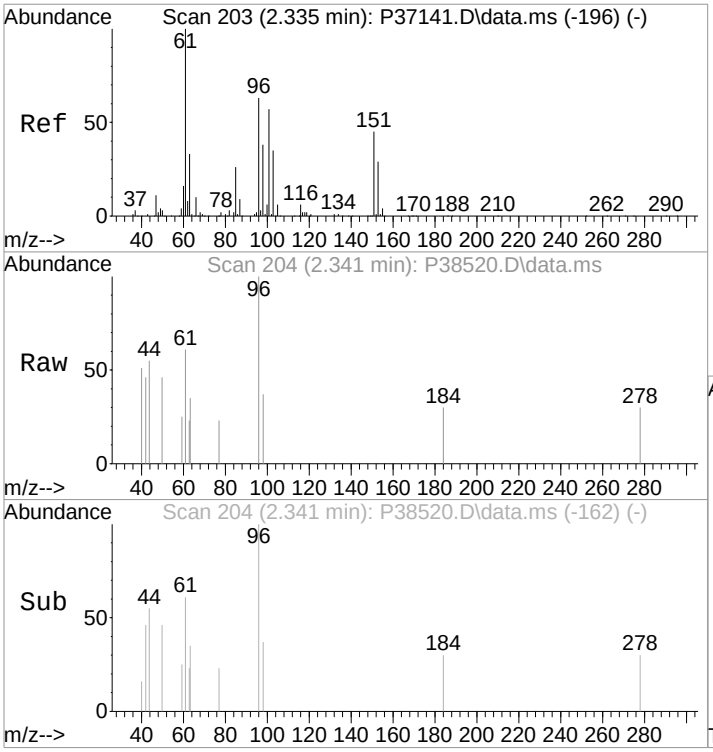


#4
Vinyl Chloride
Concen: 13.91 ppb
RT: 1.408 min Scan# 51
Delta R.T. 0.006 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion: 62 Resp: 53875

Ion	Ratio	Lower	Upper
62	100		
64	31.9	11.6	51.6

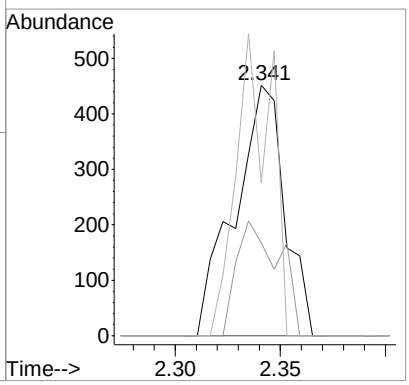


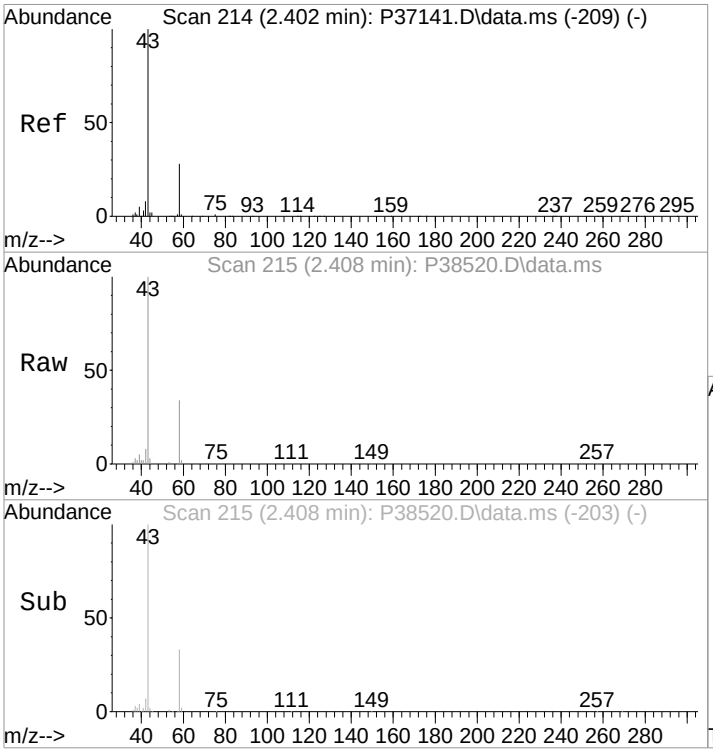


#13
1,1-Diclethene
Concen: 0.32 ppb
RT: 2.341 min Scan# 204
Delta R.T. 0.006 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion: 96 Resp: 747

Ion	Ratio	Lower	Upper
96	100		
98	36.9	40.4	80.4#
61	61.1	139.0	179.0#

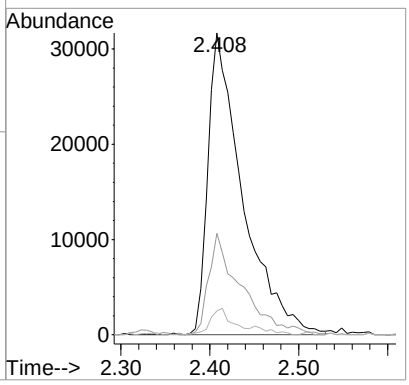


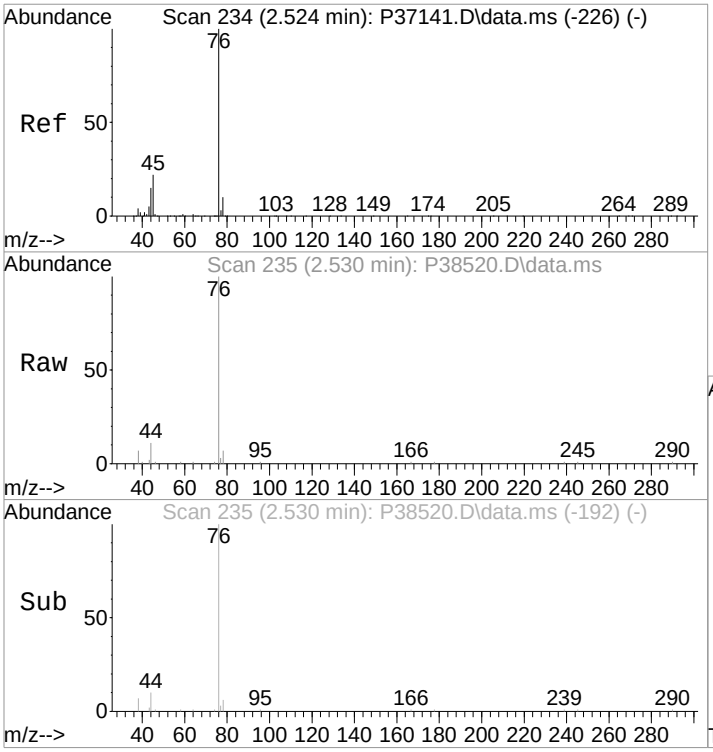


#15
Acetone
Concen: 50.24 ppb
RT: 2.408 min Scan# 215
Delta R.T. 0.001 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion: 43 Resp: 86355

Ion	Ratio	Lower	Upper
43	100		
58	33.6	8.2	48.2
42	7.8	0.0	27.7

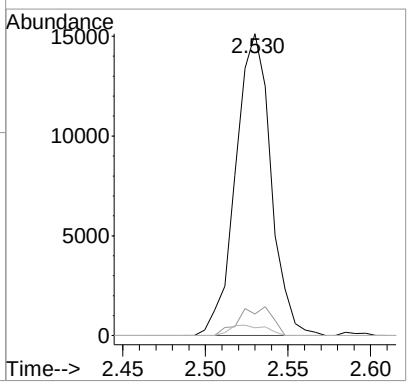


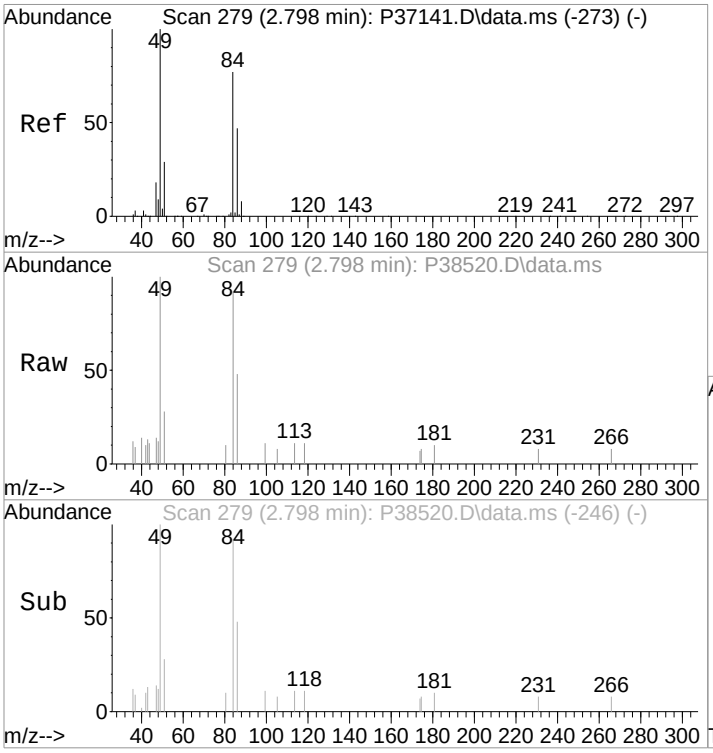


#18
Carbon Disulfide
Concen: 2.60 ppb
RT: 2.530 min Scan# 235
Delta R.T. 0.007 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion: 76 Resp: 22474

Ion	Ratio	Lower	Upper
76	100		
78	7.1	0.0	29.5
77	2.5	0.0	22.5

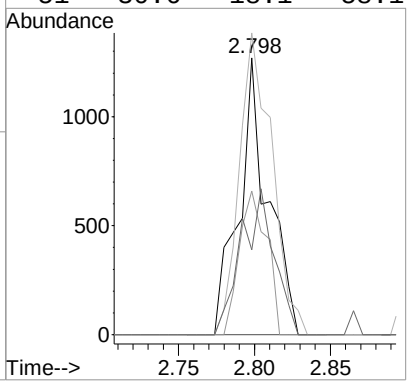


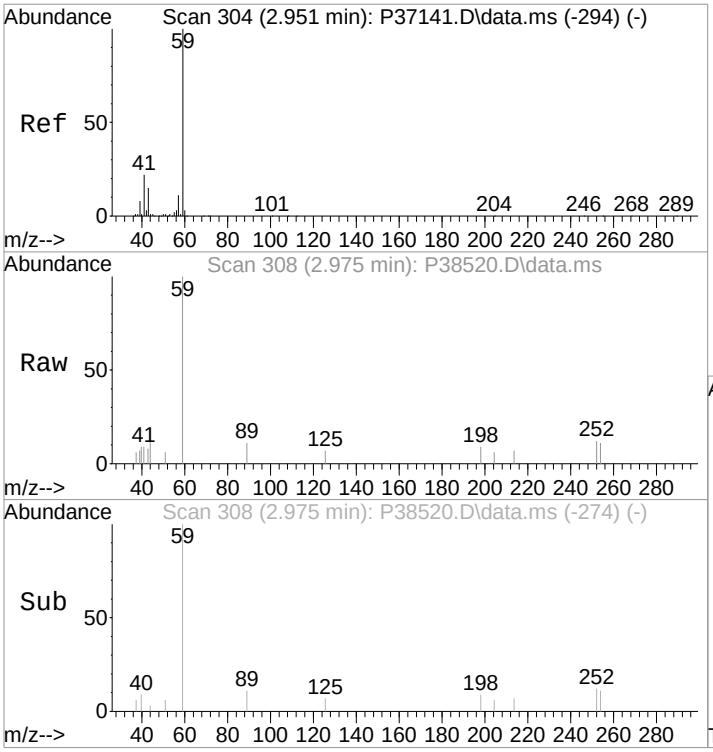


#22
Methylene Chloride
Concen: 0.52 ppb m
RT: 2.798 min Scan# 279
Delta R.T. 0.000 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion: 84 Resp: 1689

Ion	Ratio	Lower	Upper
84	100		
86	51.9	40.2	80.2
49	109.1	109.5	149.5#
51	30.6	18.1	58.1

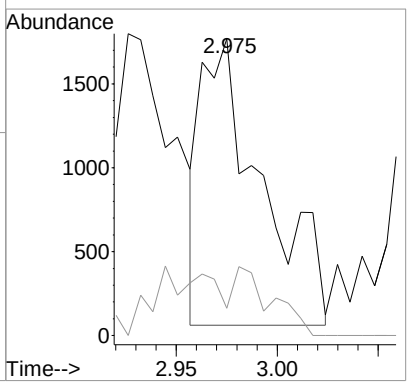


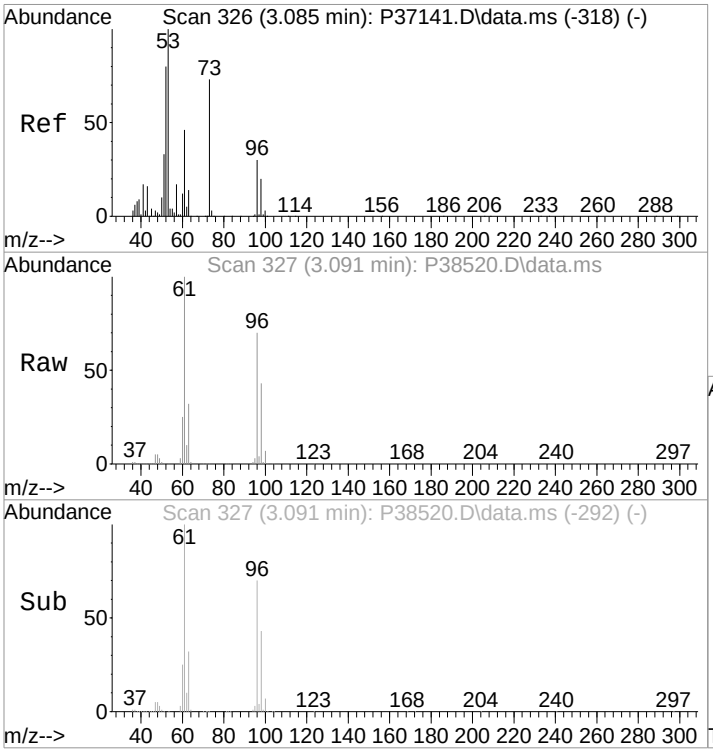


#23
TBA
Concen: 5.80 ppb m
RT: 2.975 min Scan# 308
Delta R.T. 0.018 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion: 59 Resp: 3597

Ion	Ratio	Lower	Upper
59	100		
41	9.2	2.0	42.0

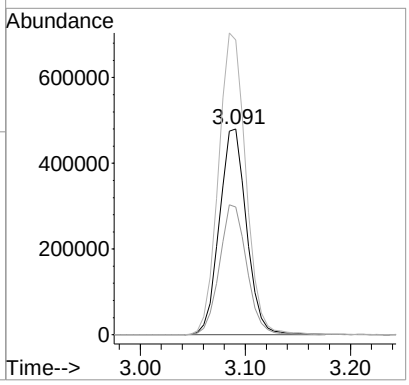


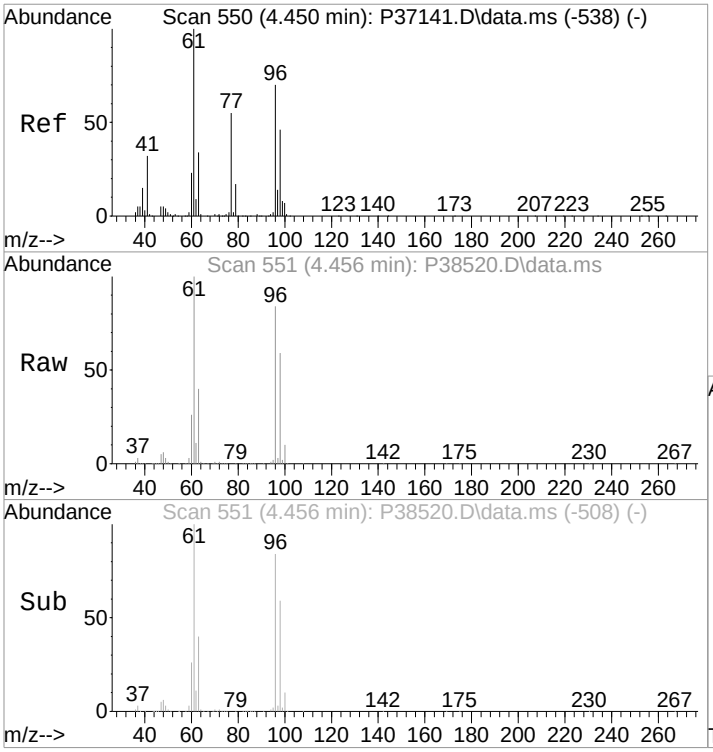


#26
trans-1,2-Dichloroethene
Concen: 321.64 ppb
RT: 3.091 min Scan# 327
Delta R.T. 0.006 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion: 96 Resp: 861336

Ion	Ratio	Lower	Upper
96	100		
98	62.1	46.8	86.8
61	143.4	132.8	172.8

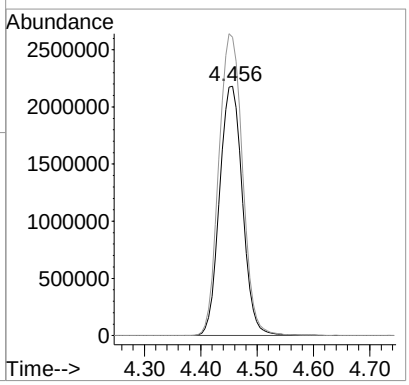


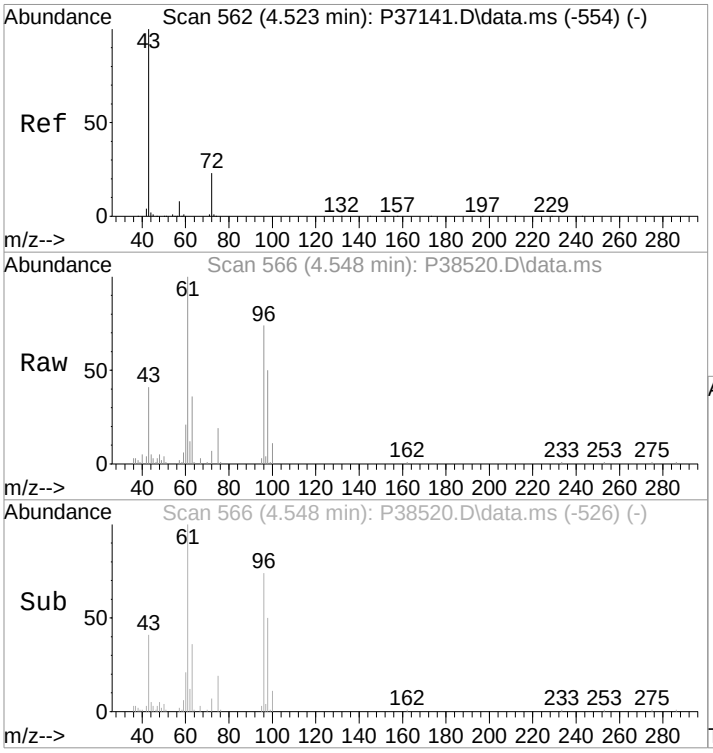


#34
cis-1,2-Dichloroethene
Concen: 1797.51 ppb
RT: 4.456 min Scan# 551
Delta R.T. 0.006 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion: 96 Resp: 6168127

Ion	Ratio	Lower	Upper
96	100		
61	119.6	123.1	163.1#

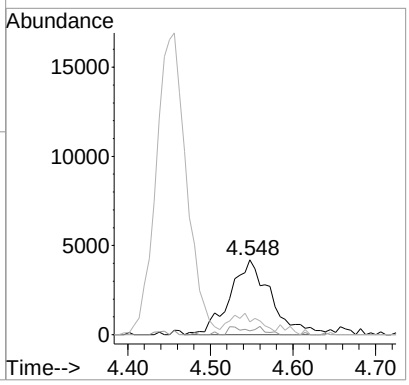


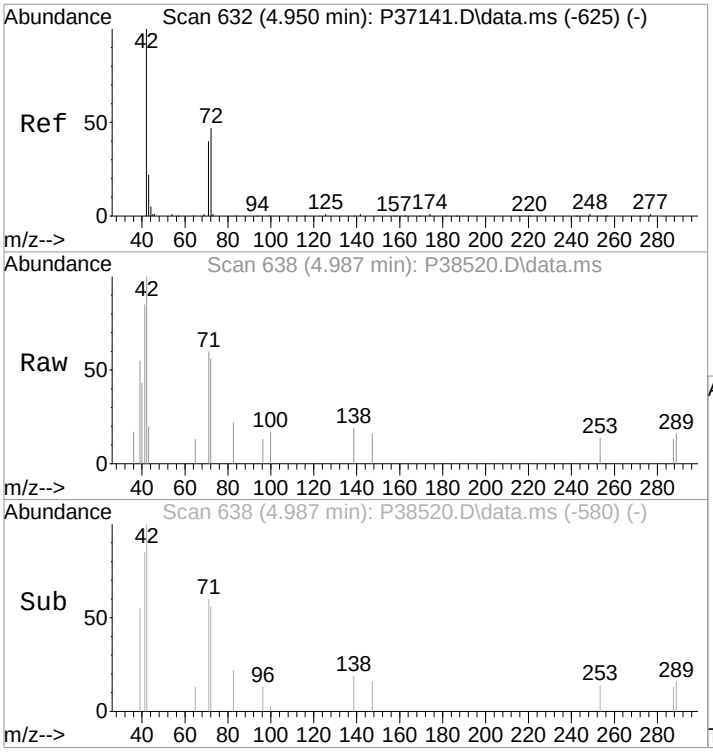


#35
2-Butanone
Concen: 6.26 ppb
RT: 4.548 min Scan# 566
Delta R.T. 0.018 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion: 43 Resp: 14480

Ion	Ratio	Lower	Upper
43	100		
57	5.4	0.0	27.5
72	17.3	2.6	42.6

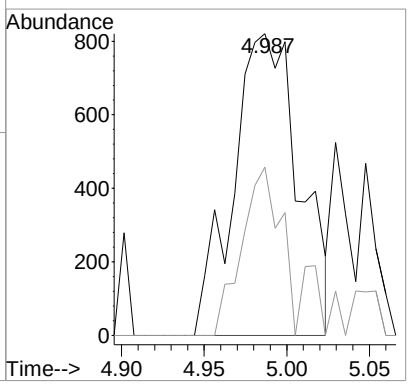


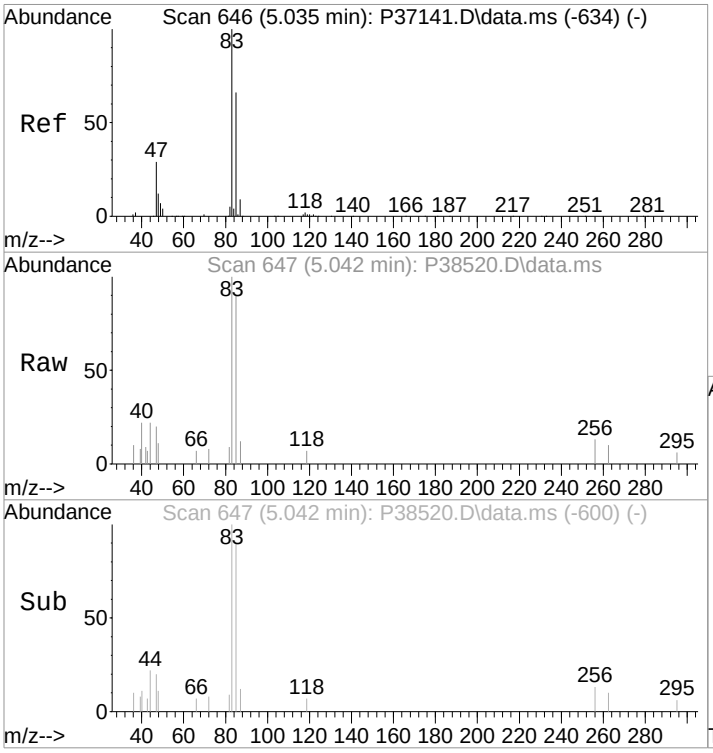


#39
Tetrahydrofuran
Concen: 1.29 ppb
RT: 4.987 min Scan# 638
Delta R.T. 0.037 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion: 42 Resp: 2295

Ion	Ratio	Lower	Upper
42	100		
72	55.8	25.2	65.2

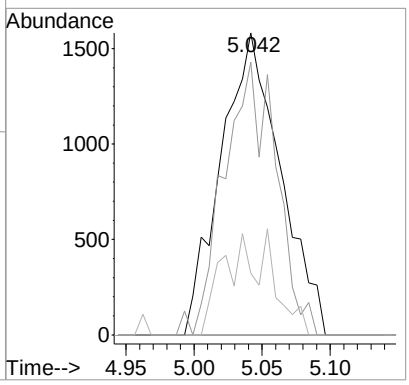


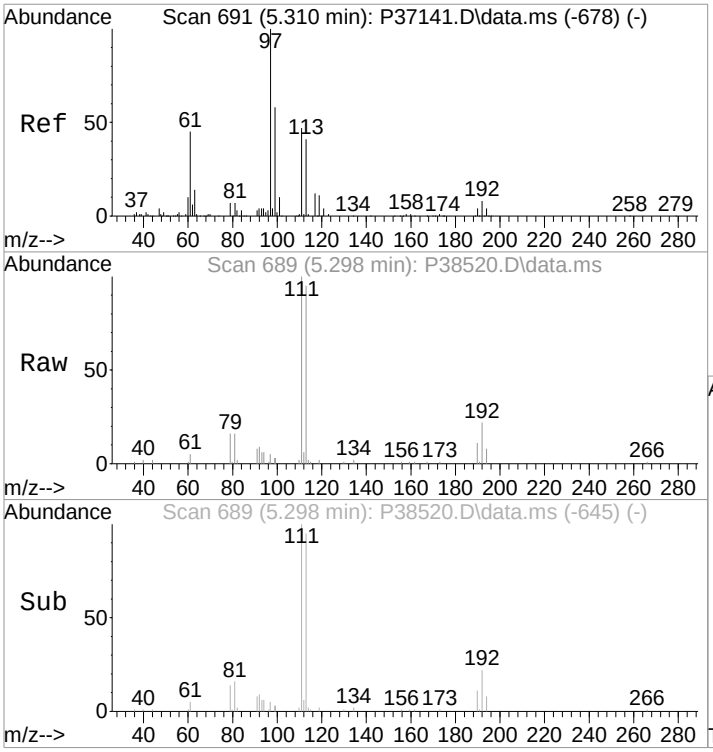


#40
Chloroform
Concen: 0.75 ppb
RT: 5.042 min Scan# 647
Delta R.T. 0.001 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion: 83 Resp: 4805

Ion	Ratio	Lower	Upper
83	100		
85	90.3	46.5	86.5#
47	20.3	8.7	48.7

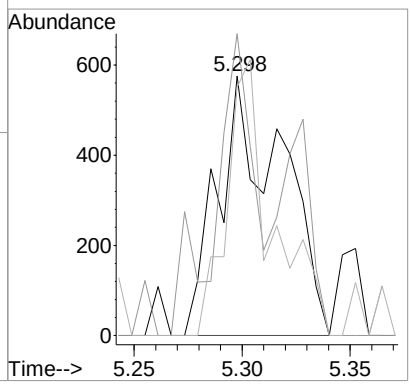


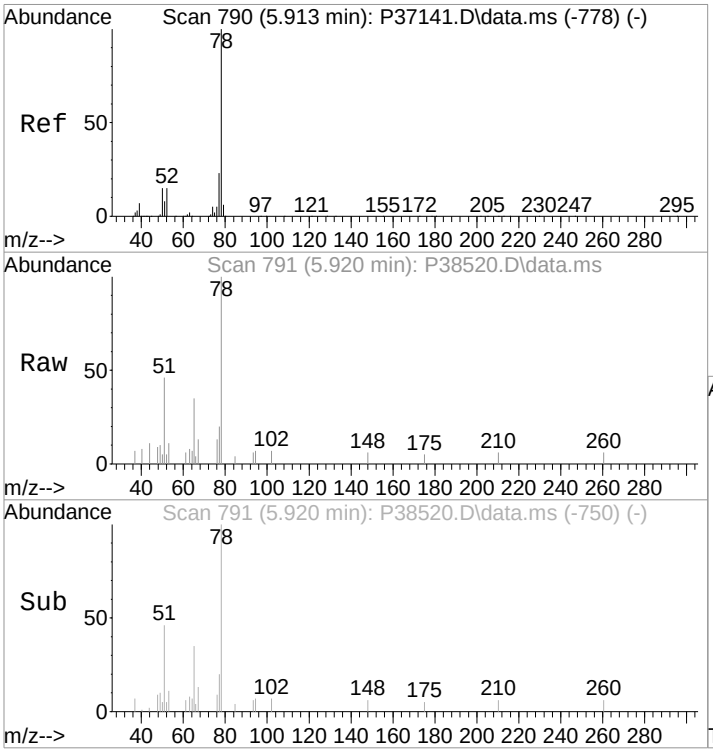


#41
1,1,1-Trichloroethane
Concen: 0.28 ppb m
RT: 5.298 min Scan# 689
Delta R.T. -0.012 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion: 97 Resp: 1188

Ion	Ratio	Lower	Upper
97	100		
99	59.4	37.6	77.6
61	95.7	25.6	65.6#

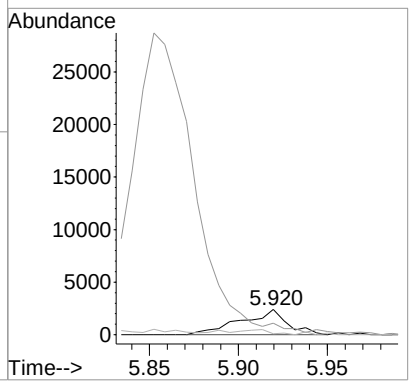


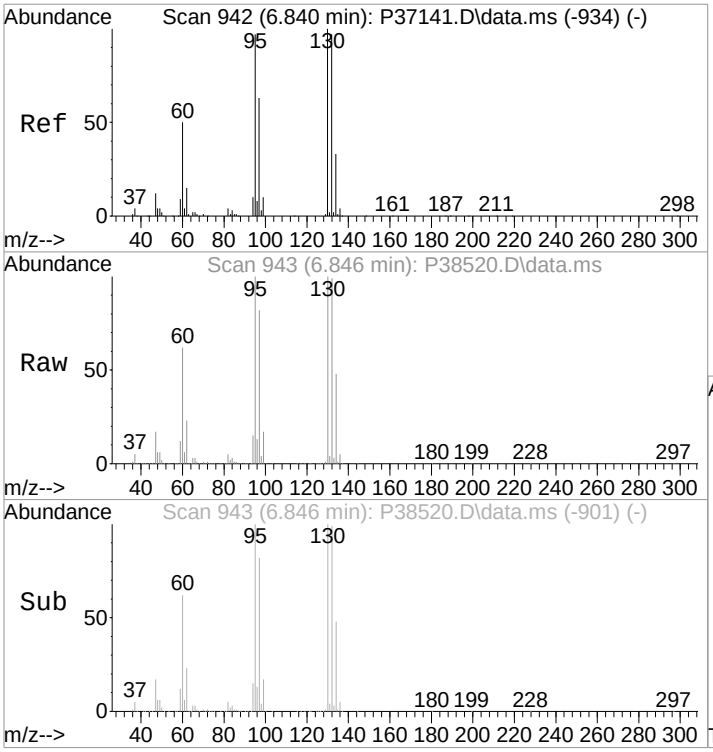


#49
Benzene
Concen: 0.33 ppb
RT: 5.920 min Scan# 791
Delta R.T. 0.006 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion: 78 Resp: 4395

Ion	Ratio	Lower	Upper
78	100		
51	45.8	0.0	35.6#
52	4.5	0.0	35.0

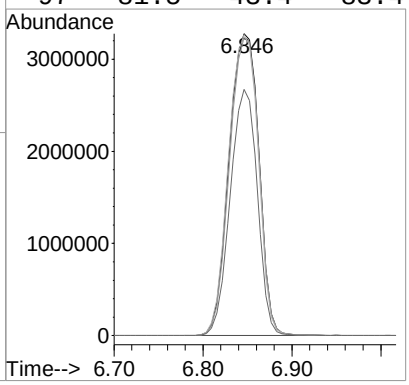


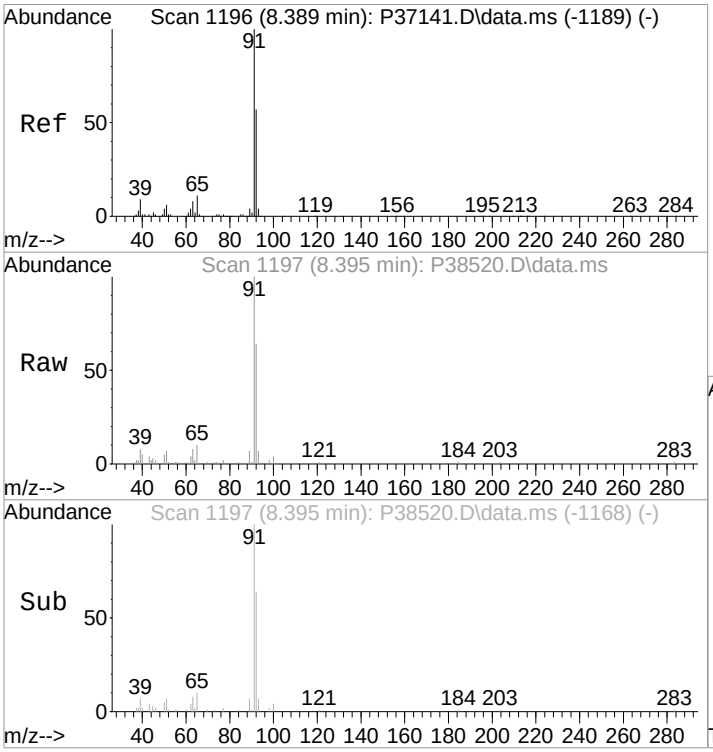


#54
Trichloroethene
Concen: 2336.39 ppb
RT: 6.846 min Scan# 943
Delta R.T. 0.006 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion:130 Resp: 7624490

Ion	Ratio	Lower	Upper
130	100		
132	98.7	77.2	117.2
95	99.6	76.7	116.7
97	81.5	43.4	83.4

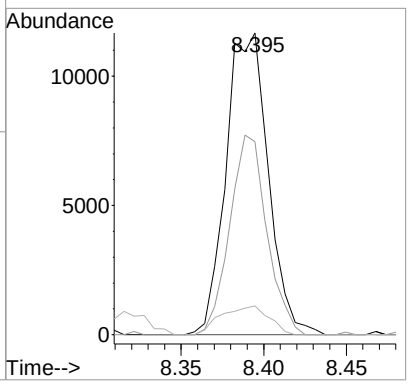


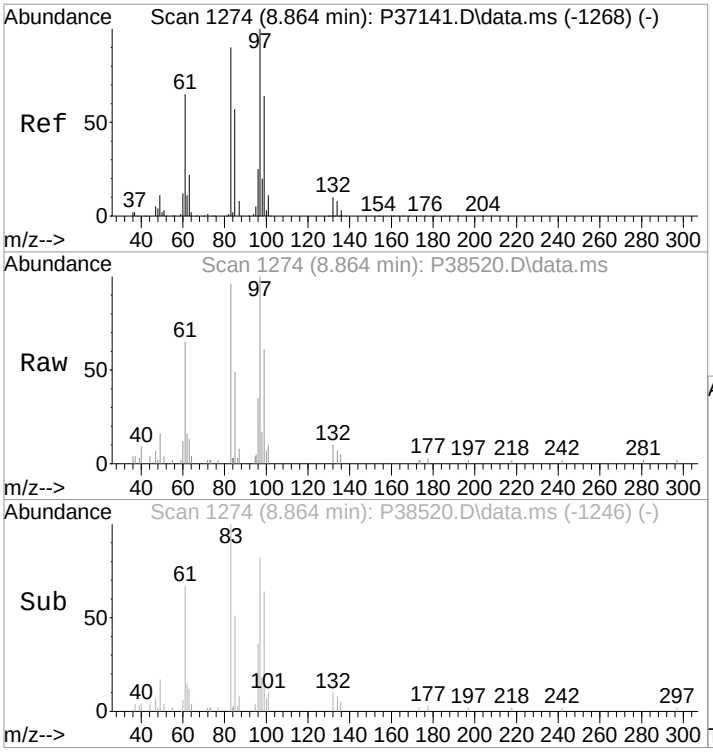


#66
Toluene
Concen: 1.49 ppb
RT: 8.395 min Scan# 1197
Delta R.T. 0.006 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion: 91 Resp: 20759

Ion	Ratio	Lower	Upper
91	100		
92	63.9	37.5	77.5
65	9.6	0.0	31.3

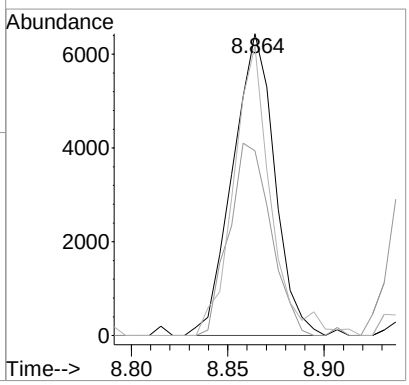


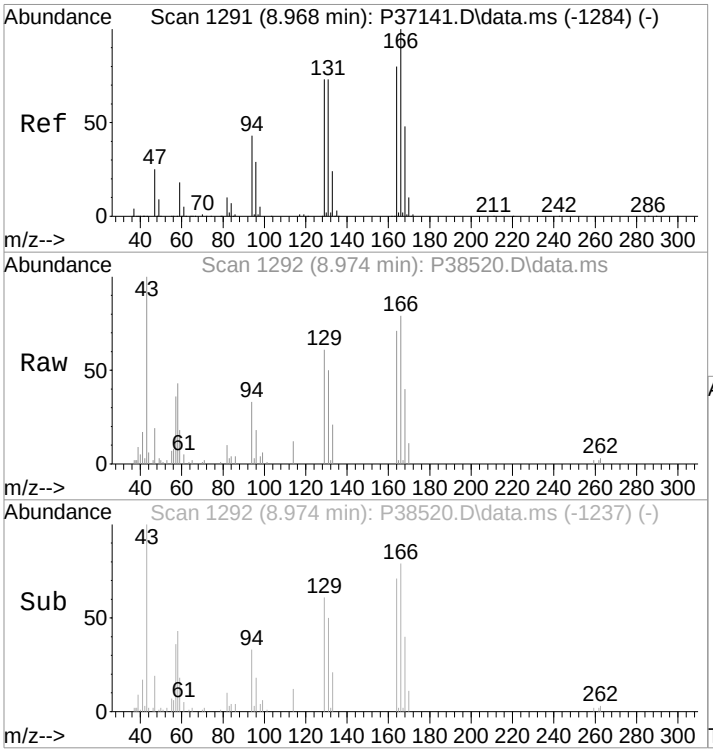


#69
1,1,2-Trichloroethane
Concen: 3.15 ppb
RT: 8.864 min Scan# 1274
Delta R.T. 0.000 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion: 97 Resp: 9783

Ion	Ratio	Lower	Upper
97	100		
99	61.2	45.5	85.5
83	96.0	70.4	110.4

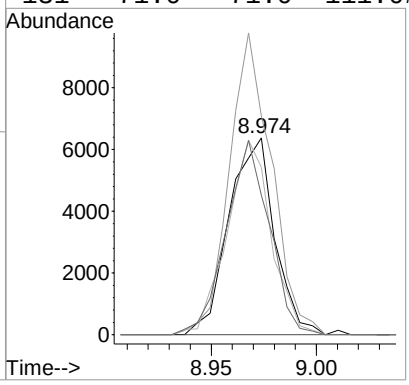


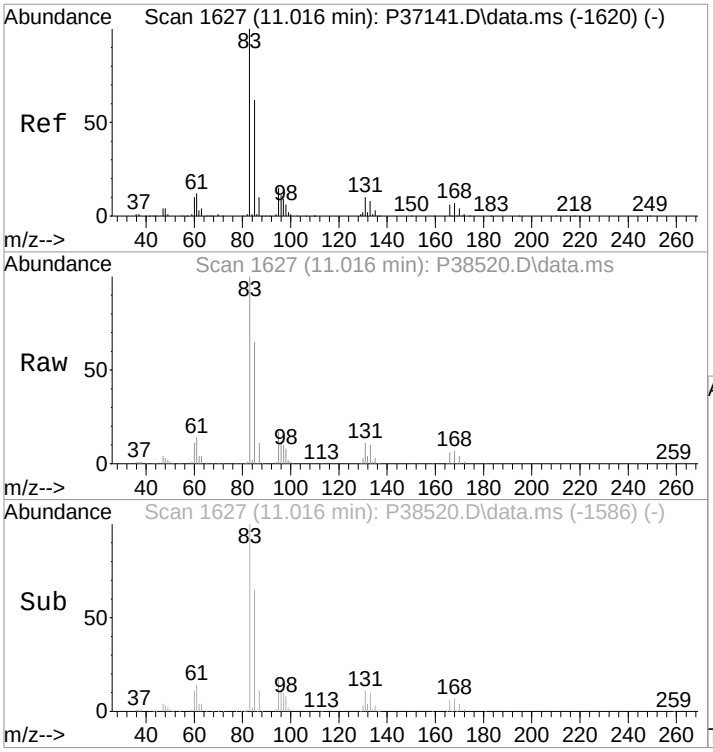


#72
Tetrachloroethene
Concen: 3.76 ppb
RT: 8.974 min Scan# 1292
Delta R.T. 0.006 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion:164 Resp: 9671

Ion	Ratio	Lower	Upper
164	100		
166	111.1	105.5	145.5
129	85.1	71.7	111.7
131	71.0	71.0	111.0#

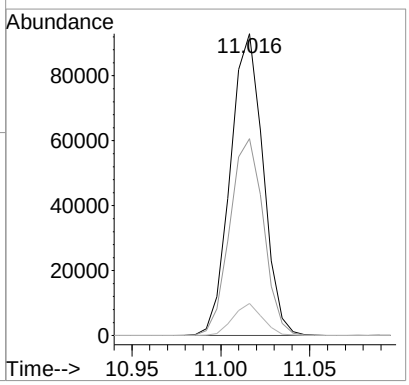




#92
1,1,2,2-Tetrachloroethane
Concen: 25.91 ppb
RT: 11.016 min Scan# 1627
Delta R.T. 0.000 min
Lab File: P38520.D
Acq: 14 Aug 2020 3:09 pm

Tgt Ion: 83 Resp: 118750

Ion	Ratio	Lower	Upper
83	100		
85	65.2	42.4	82.4
131	10.7	0.0	30.3

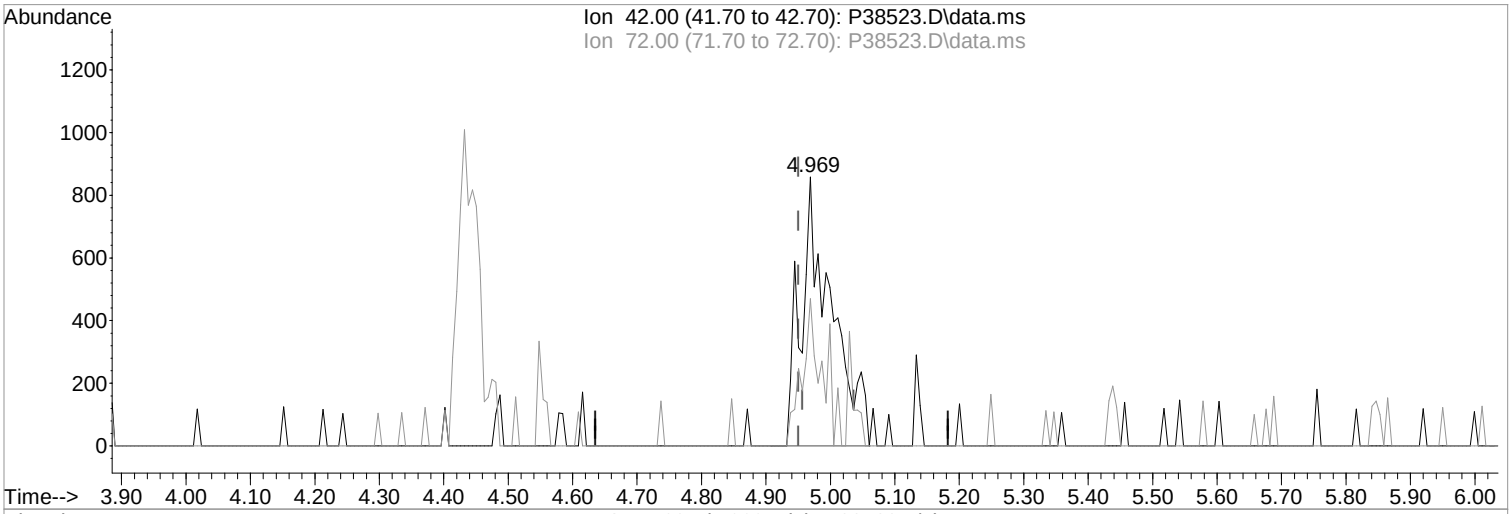


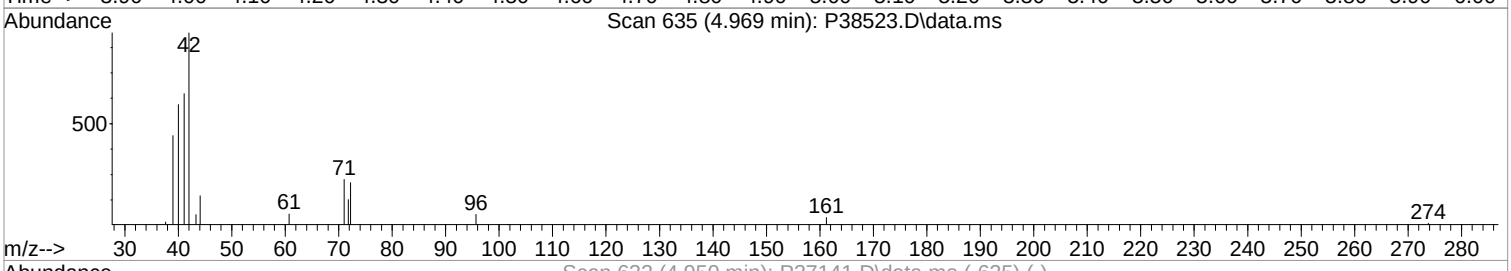
1st 08/20/20
2nd 08/21/20

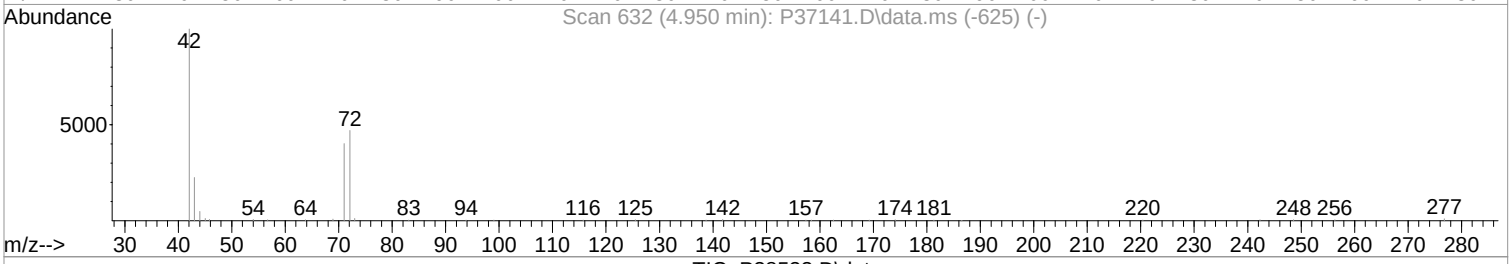
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38523.D
Acq On : 14 Aug 2020 4:15 pm
Operator : K.Ruest
Sample : R2007055-014|250 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 14 16:34:20 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38523.D\data.ms

(39) Tetrahydrofuran

4.969min (+0.019) 1.57 ppb m

response 2823

Ion	Exp%	Act%
42.00	100	100
72.00	45.20	31.24
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

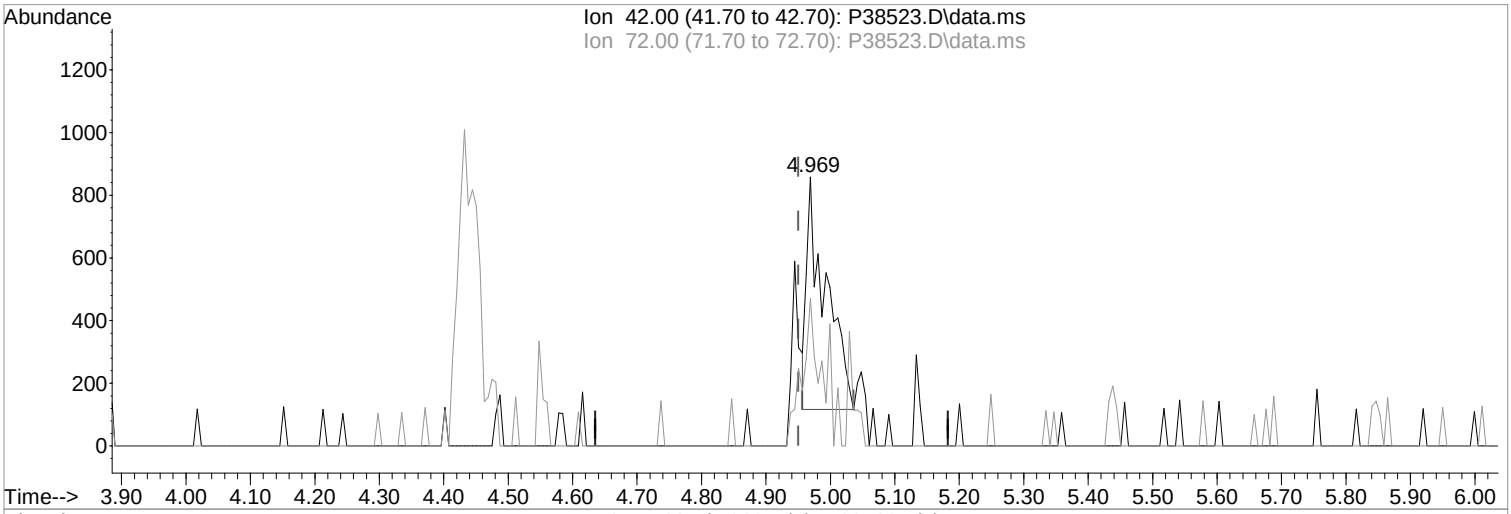
Poor integration.

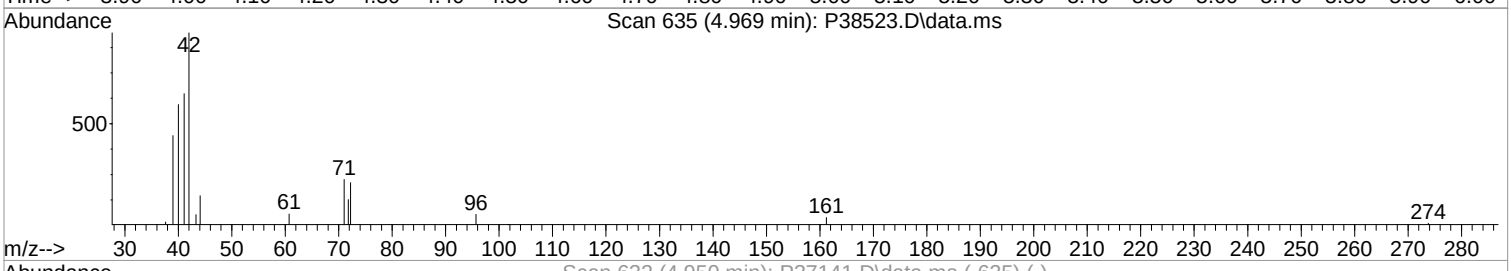
08/20/20

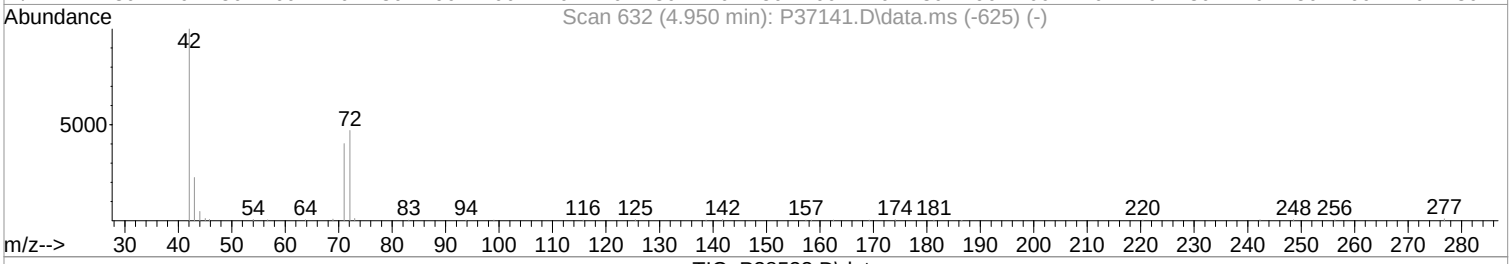
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38523.D
Acq On : 14 Aug 2020 4:15 pm
Operator : K.Ruest
Sample : R2007055-014|250 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 14 16:34:20 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38523.D\data.ms

(39) Tetrahydrofuran

4.969min (+0.019) 0.85 ppb

response 1531

Ion	Exp%	Act%
42.00	100	100
72.00	45.20	54.78
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

08/20/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38523.D
Acq On : 14 Aug 2020 4:15 pm
Operator : K.Ruest
Sample : R2007055-014|250 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 11 Sample Multiplier: 1

DL

Quant Time: Aug 20 12:34:11 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

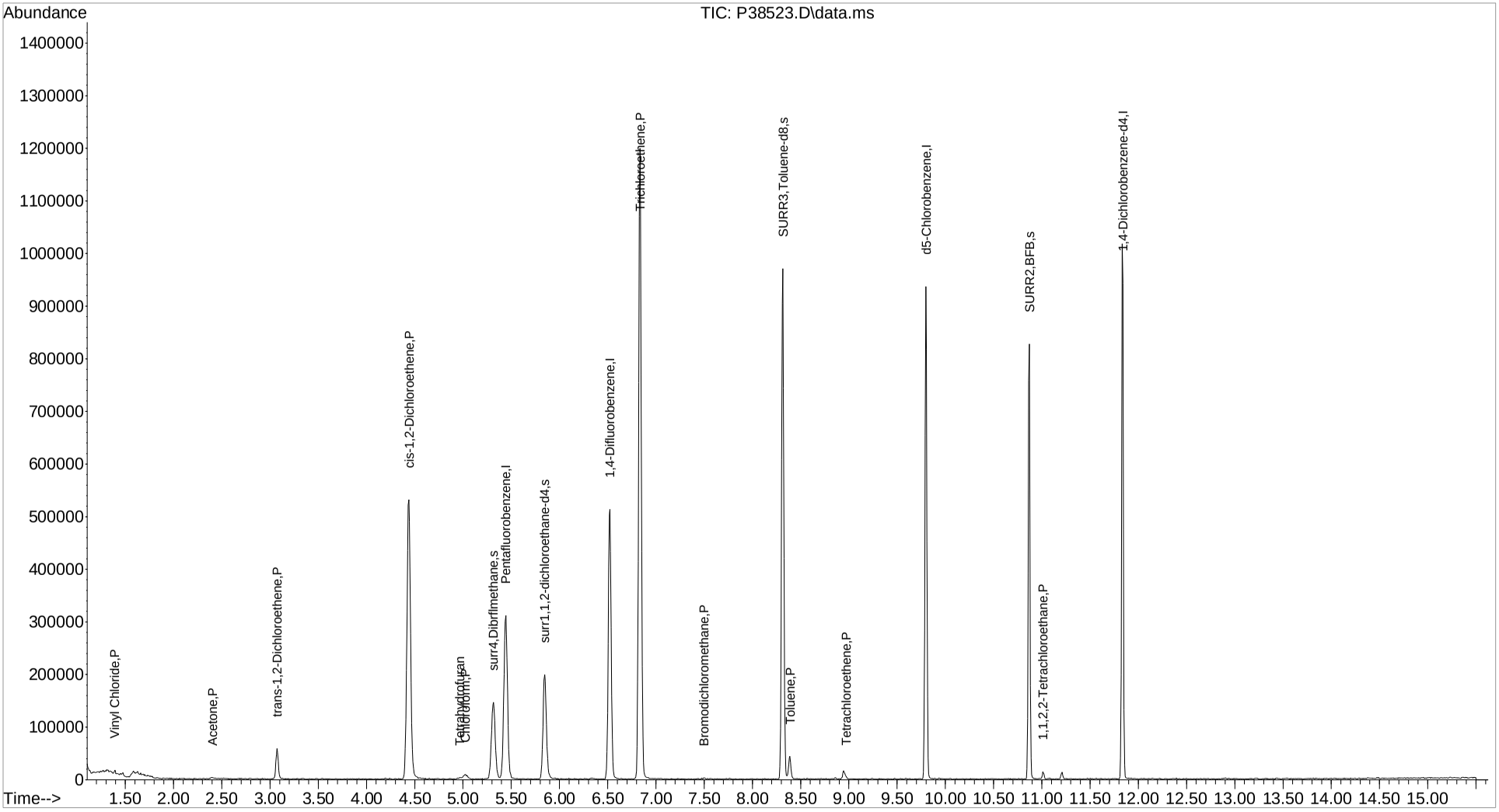
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.444	168	299748	50.00	ppb		-0.01
43) 1,4-Difluorobenzene	6.523	114	459637	50.00	ppb		0.00
71) d5-Chlorobenzene	9.797	117	414953	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	203445	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.316	113	121586	46.07	ppb		-0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 92.14%				
48) surr1,1,2-dichloroetha...	5.847	65	171154	46.84	ppb		-0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 93.68%				
65) SURR3,Toluene-d8	8.316	98	612416	49.93	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.86%				
70) SURR2,BFB	10.870	95	216925	47.99	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.98%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.390	62	3782	0.97	ppb		94
15) Acetone	2.402	43	5174	1.24	ppb		91
26) trans-1,2-Dichloroethene	3.073	96	20385	7.55	ppb		91
34) cis-1,2-Dichloroethene	4.438	96	323846	93.61	ppb		100
39) Tetrahydrofuran	4.969	42	2823m	1.57	ppb		
40) Chloroform	5.024	83	9116	1.52	ppb		90
54) Trichloroethene	6.834	130	426537	129.53	ppb		98
60) Bromodichloromethane	7.499	83	1307	0.35	ppb		74
66) Toluene	8.389	91	26675	1.90	ppb		93
72) Tetrachloroethene	8.974	164	563	0.22	ppb	#	65
92) 1,1,2,2-Tetrachloroethane	11.010	83	4792	1.06	ppb		81

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

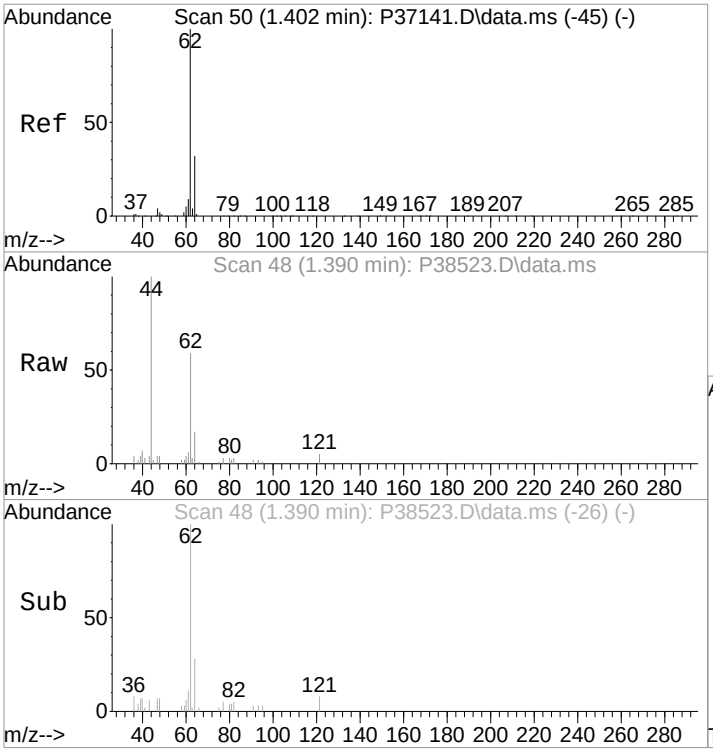
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38523.D
Acq On : 14 Aug 2020 4:15 pm
Operator : K.Ruest
Sample : R2007055-014|250 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 20 12:34:11 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



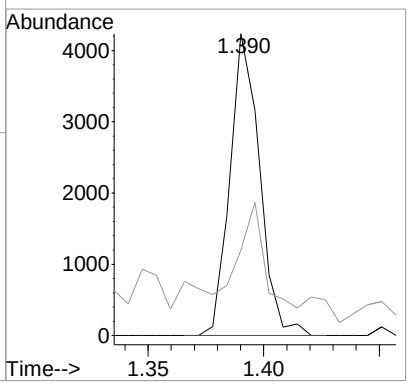
1st 08/20/20
2nd 08/21/20

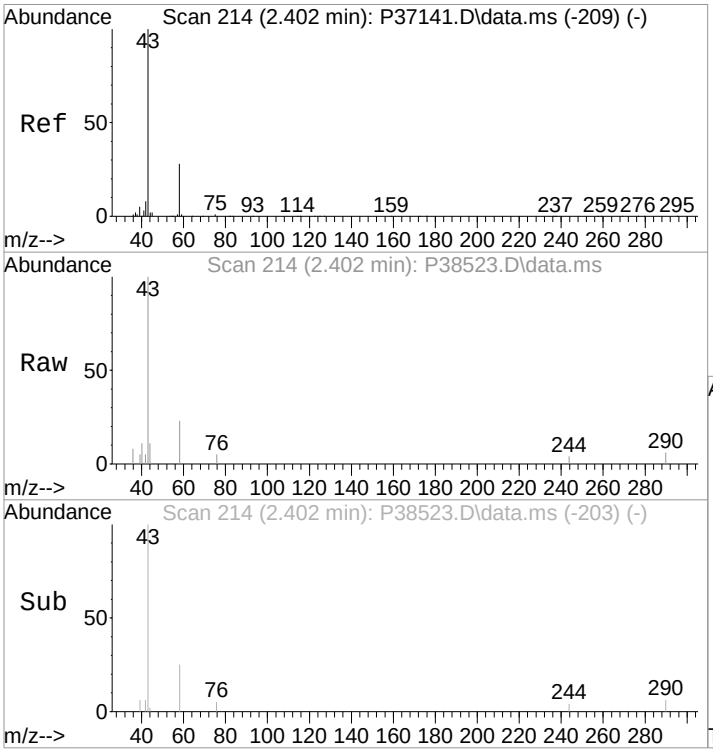


#4
Vinyl Chloride
Concen: 0.97 ppb
RT: 1.390 min Scan# 48
Delta R.T. -0.012 min
Lab File: P38523.D
Acq: 14 Aug 2020 4:15 pm

Tgt Ion: 62 Resp: 3782

Ion	Ratio	Lower	Upper
62	100		
64	28.2	11.6	51.6

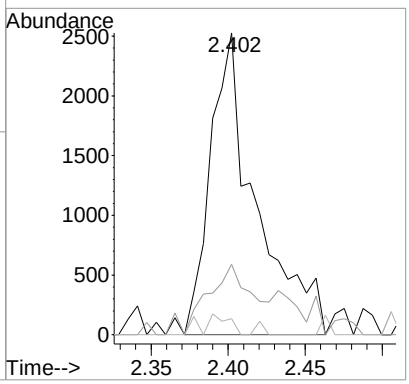


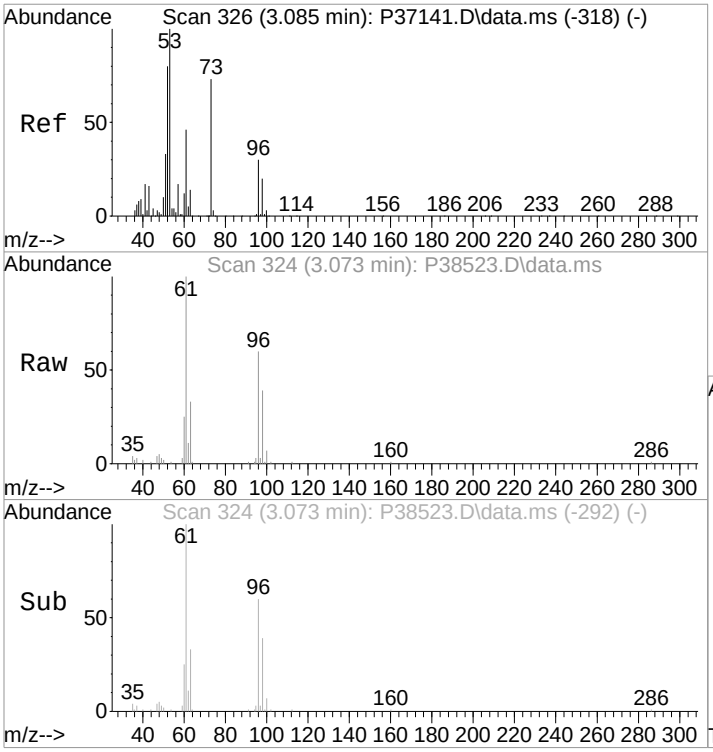


#15
Acetone
Concen: 1.24 ppb
RT: 2.402 min Scan# 214
Delta R.T. -0.005 min
Lab File: P38523.D
Acq: 14 Aug 2020 4:15 pm

Tgt Ion: 43 Resp: 5174

Ion	Ratio	Lower	Upper
43	100		
58	23.3	8.2	48.2
42	5.3	0.0	27.7

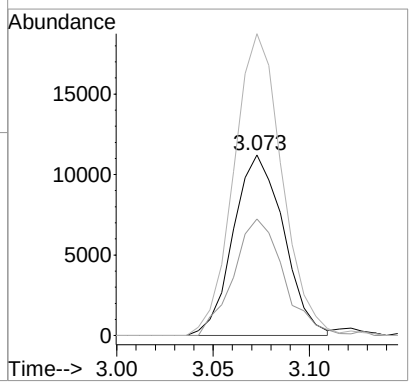


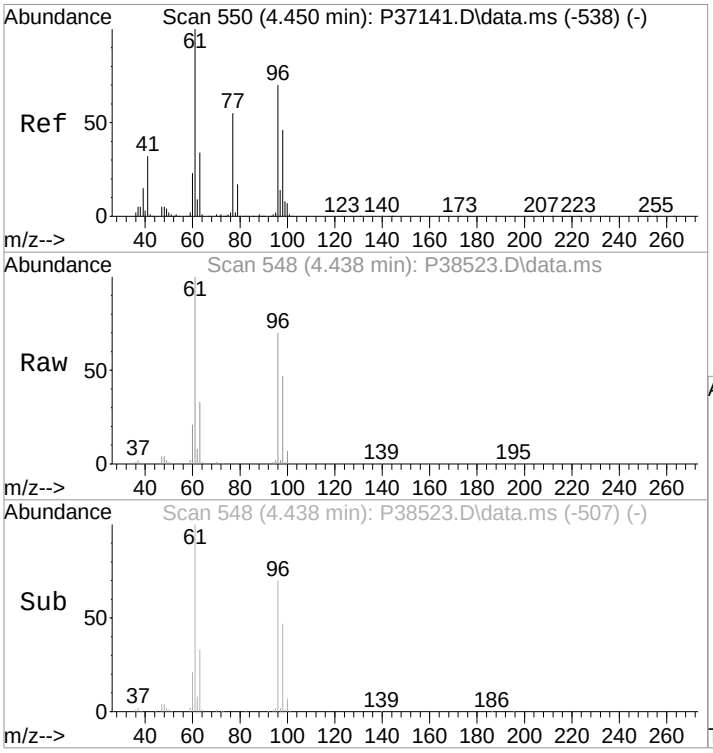


#26
trans-1,2-Dichloroethene
Concen: 7.55 ppb
RT: 3.073 min Scan# 324
Delta R.T. -0.012 min
Lab File: P38523.D
Acq: 14 Aug 2020 4:15 pm

Tgt Ion: 96 Resp: 20385

Ion	Ratio	Lower	Upper
96	100		
98	64.6	46.8	86.8
61	167.4	132.8	172.8

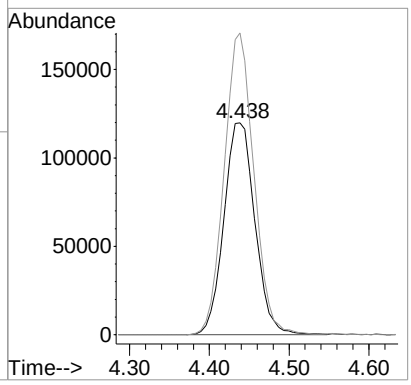


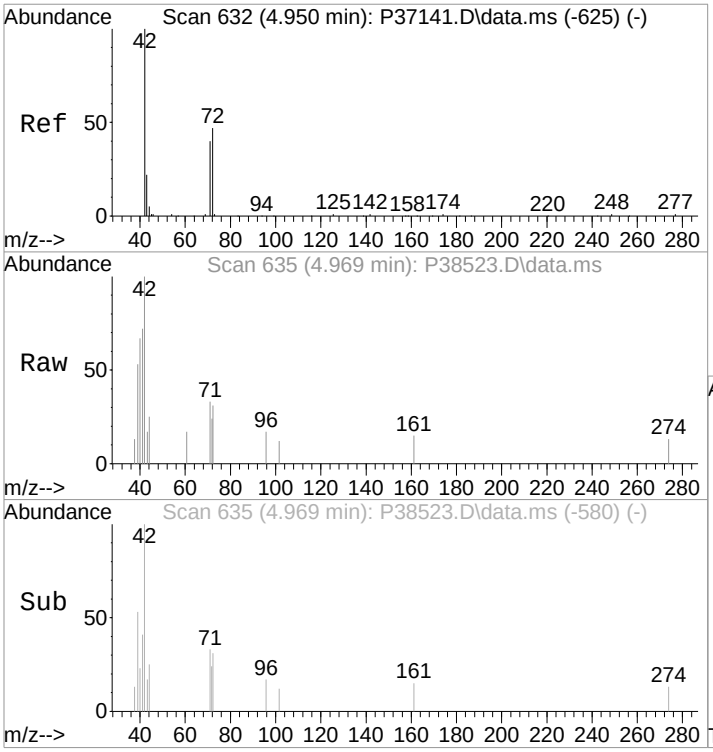


#34
cis-1,2-Dichloroethene
Concen: 93.61 ppb
RT: 4.438 min Scan# 548
Delta R.T. -0.012 min
Lab File: P38523.D
Acq: 14 Aug 2020 4:15 pm

Tgt Ion: 96 Resp: 323846

Ion	Ratio	Lower	Upper
96	100		
61	142.6	123.1	163.1

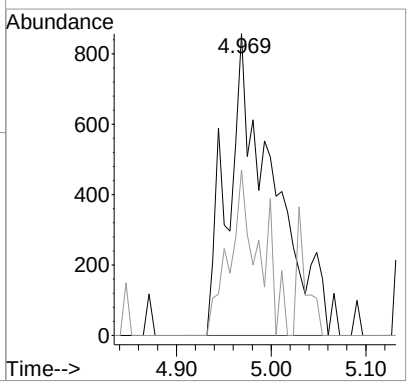


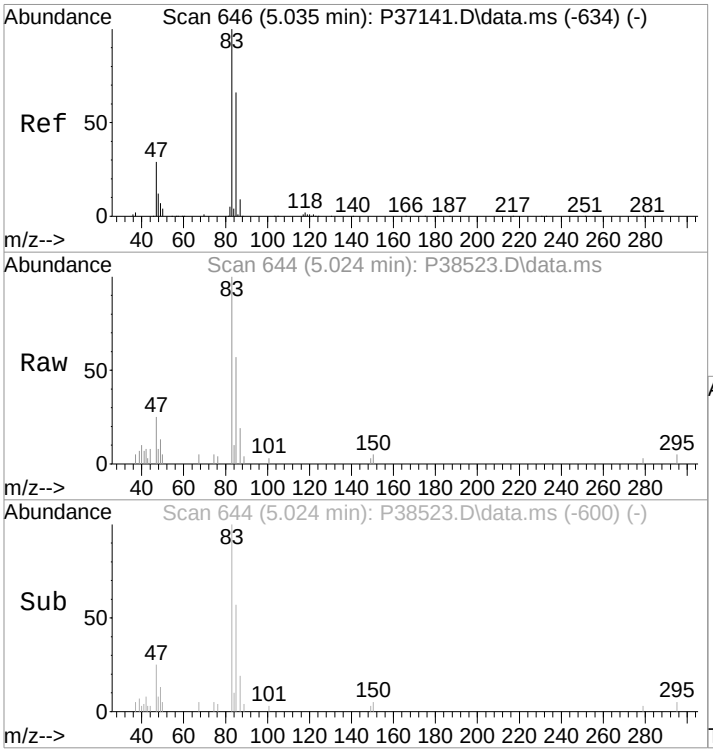


#39
Tetrahydrofuran
Concen: 1.57 ppb m
RT: 4.969 min Scan# 635
Delta R.T. 0.019 min
Lab File: P38523.D
Acq: 14 Aug 2020 4:15 pm

Tgt Ion: 42 Resp: 2823

Ion	Ratio	Lower	Upper
42	100		
72	31.2	25.2	65.2

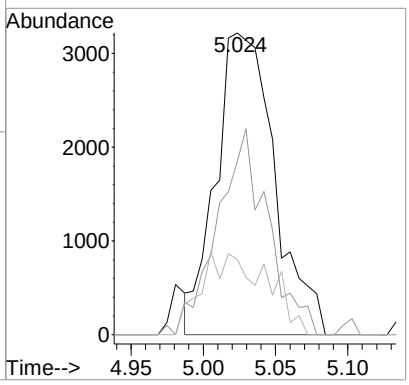


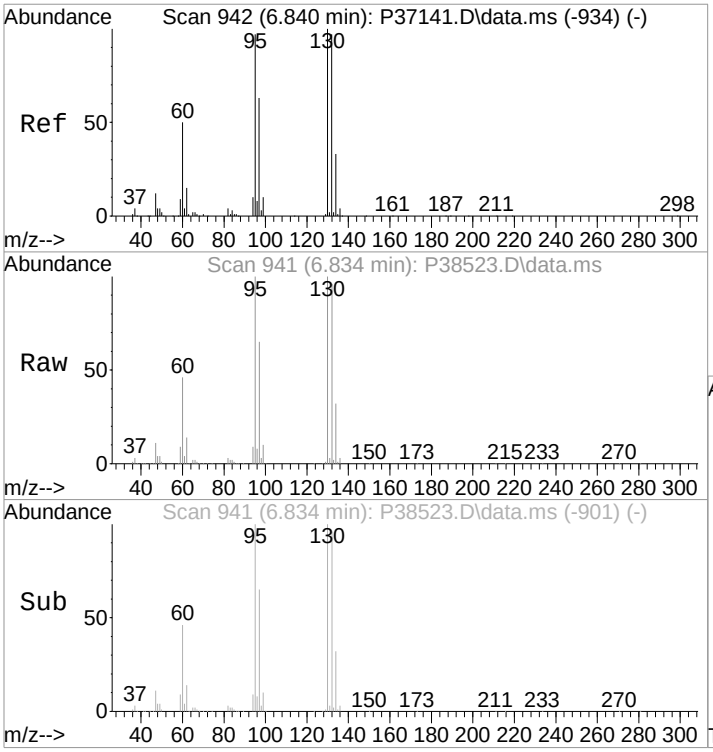


#40
Chloroform
Concen: 1.52 ppb
RT: 5.024 min Scan# 644
Delta R.T. -0.017 min
Lab File: P38523.D
Acq: 14 Aug 2020 4:15 pm

Tgt Ion: 83 Resp: 9116

Ion	Ratio	Lower	Upper
83	100		
85	57.5	46.5	86.5
47	24.9	8.7	48.7

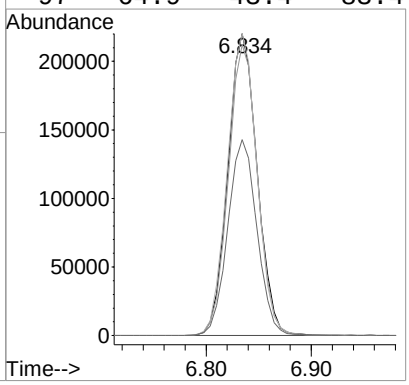


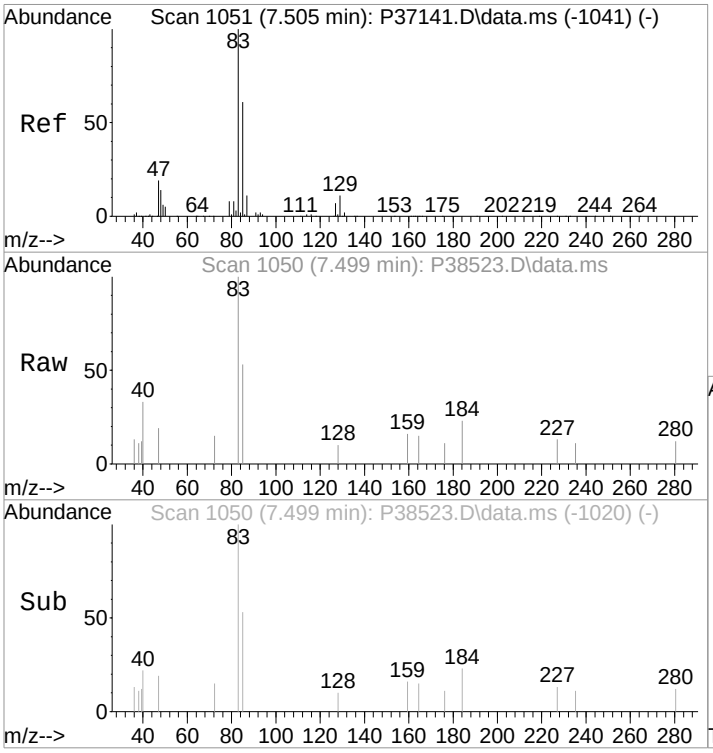


#54
Trichloroethene
Concen: 129.53 ppb
RT: 6.834 min Scan# 941
Delta R.T. -0.006 min
Lab File: P38523.D
Acq: 14 Aug 2020 4:15 pm

Tgt Ion:130 Resp: 426537

Ion	Ratio	Lower	Upper
130	100		
132	96.4	77.2	117.2
95	99.9	76.7	116.7
97	64.9	43.4	83.4

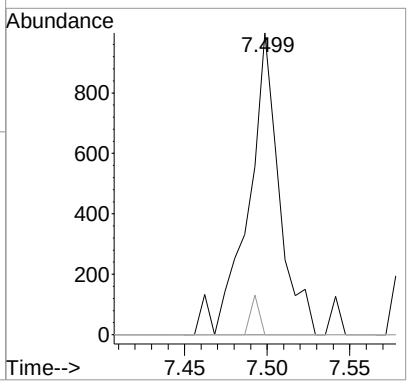


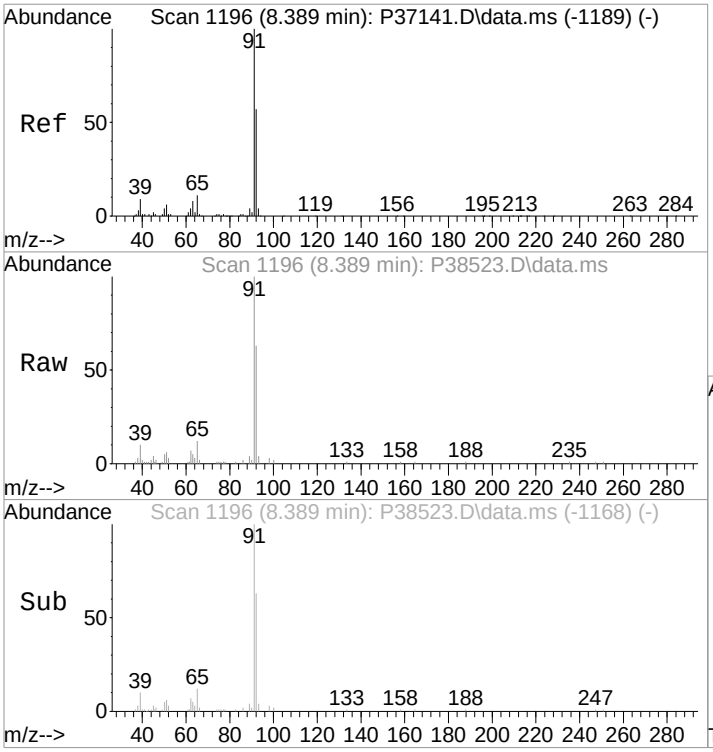


#60
Bromodichloromethane
Concen: 0.35 ppb
RT: 7.499 min Scan# 1050
Delta R.T. -0.006 min
Lab File: P38523.D
Acq: 14 Aug 2020 4:15 pm

Tgt Ion: 83 Resp: 1307

Ion	Ratio	Lower	Upper
83	100		
129	0.0	0.0	31.3
127	0.0	0.0	27.3

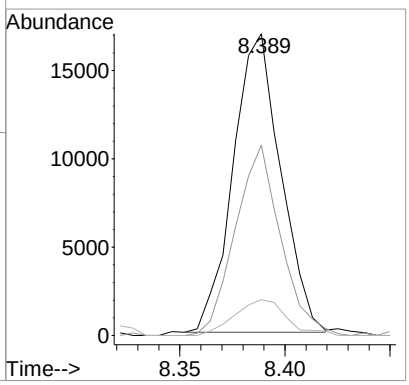


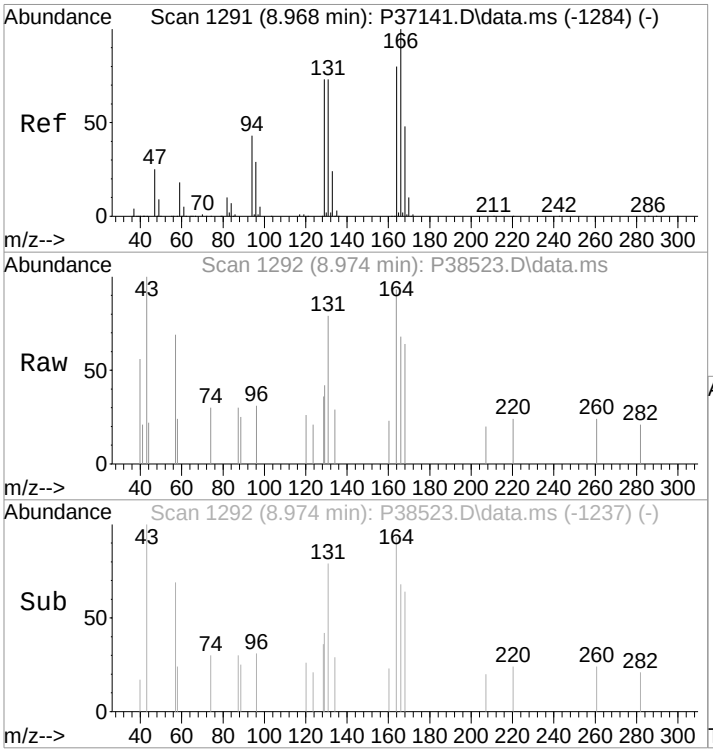


#66
Toluene
Concen: 1.90 ppb
RT: 8.389 min Scan# 1196
Delta R.T. 0.000 min
Lab File: P38523.D
Acq: 14 Aug 2020 4:15 pm

Tgt Ion: 91 Resp: 26675

Ion	Ratio	Lower	Upper
91	100		
92	63.1	37.5	77.5
65	11.9	0.0	31.3

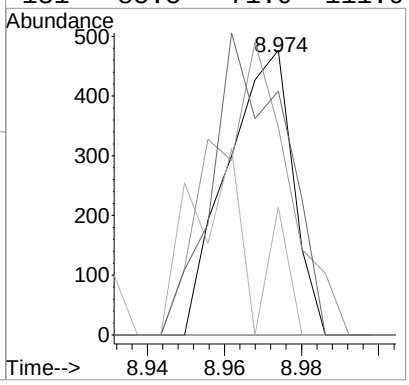


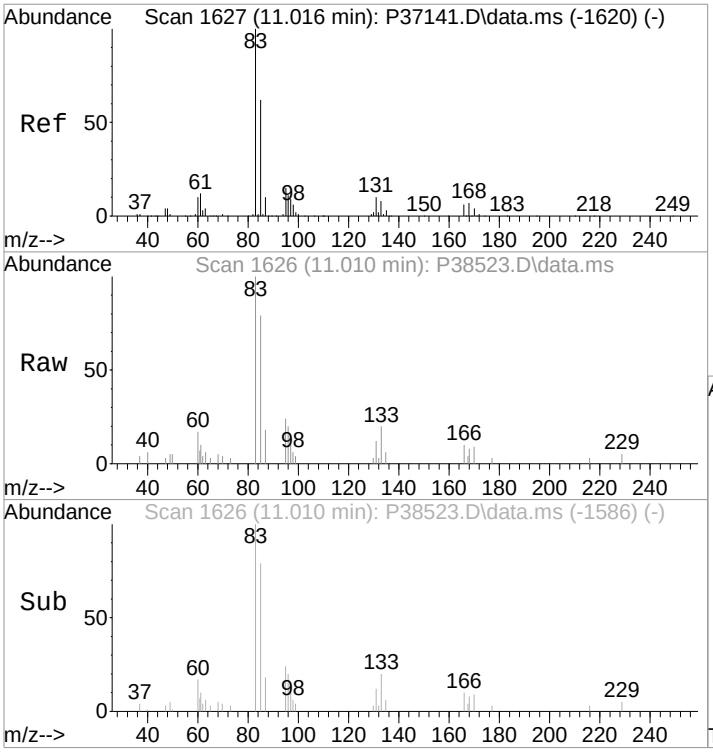


#72
Tetrachloroethene
Concen: 0.22 ppb
RT: 8.974 min Scan# 1292
Delta R.T. 0.006 min
Lab File: P38523.D
Acq: 14 Aug 2020 4:15 pm

Tgt Ion:164 Resp: 563

Ion	Ratio	Lower	Upper
164	100		
166	73.0	105.5	145.5#
129	44.9	71.7	111.7#
131	85.5	71.0	111.0

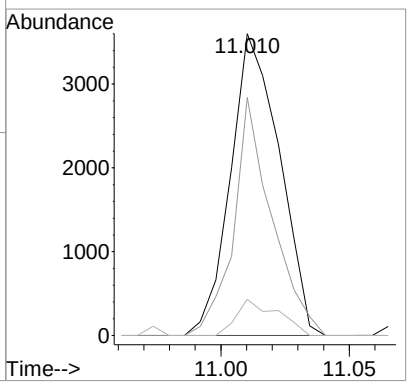




#92
1,1,2,2-Tetrachloroethane
Concen: 1.06 ppb
RT: 11.010 min Scan# 1626
Delta R.T. -0.006 min
Lab File: P38523.D
Acq: 14 Aug 2020 4:15 pm

Tgt Ion: 83 Resp: 4792

Ion	Ratio	Lower	Upper
83	100		
85	78.9	42.4	82.4
131	12.0	0.0	30.3



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38489.D
Acq On : 14 Aug 2020 2:34 am
Operator : K.Ruest
Sample : R2007055-015|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Aug 17 16:32:40 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

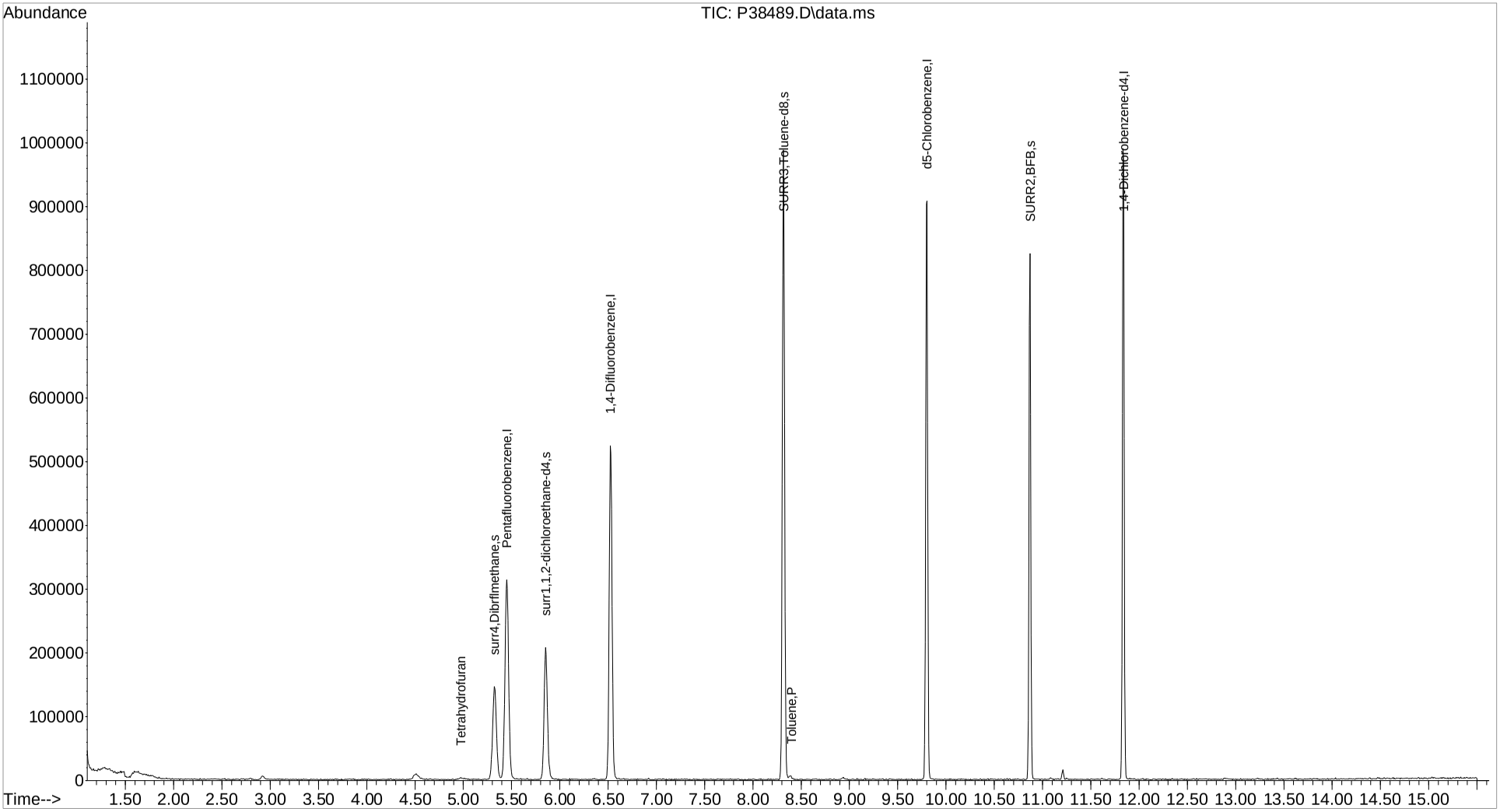
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	301936	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	467753	50.00	ppb	0.00
71) d5-Chlorobenzene	9.803	117	422313	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	207104	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.322	113	122032	45.43	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 90.86%			
48) surr1,1,2-dichloroetha...	5.853	65	173831	46.75	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 93.50%			
65) SURR3,Toluene-d8	8.316	98	623137	49.92	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.84%			
70) SURR2,BFB	10.870	95	222245	48.32	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.64%			
Target Compounds						Qvalue
39) Tetrahydrofuran	4.975	42	2192	1.21	ppb	# 56
66) Toluene	8.395	91	3360	0.23	ppb	83

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

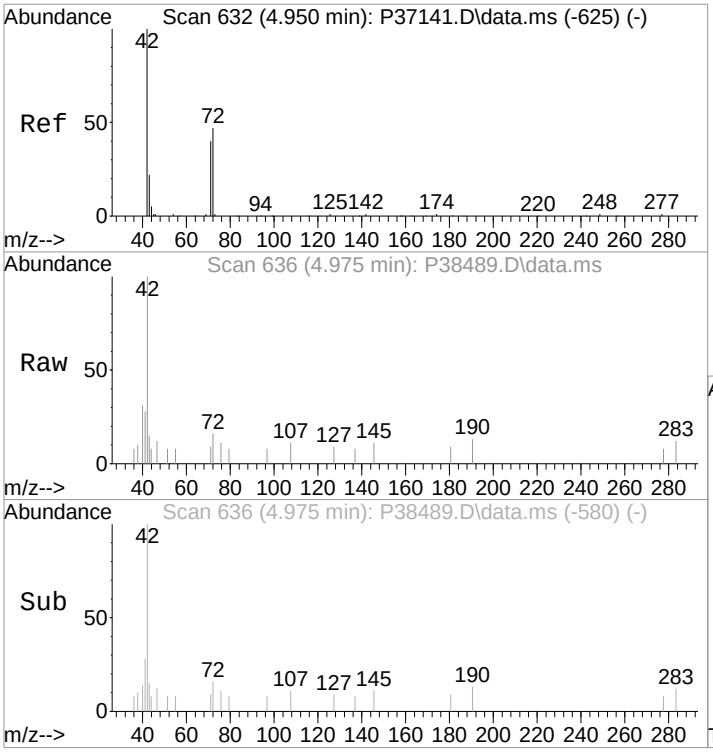
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38489.D
Acq On : 14 Aug 2020 2:34 am
Operator : K.Ruest
Sample : R2007055-015|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Aug 17 16:32:40 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



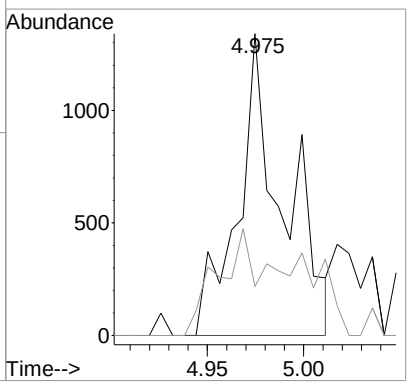
1st 08/17/20
2nd 08/18/20

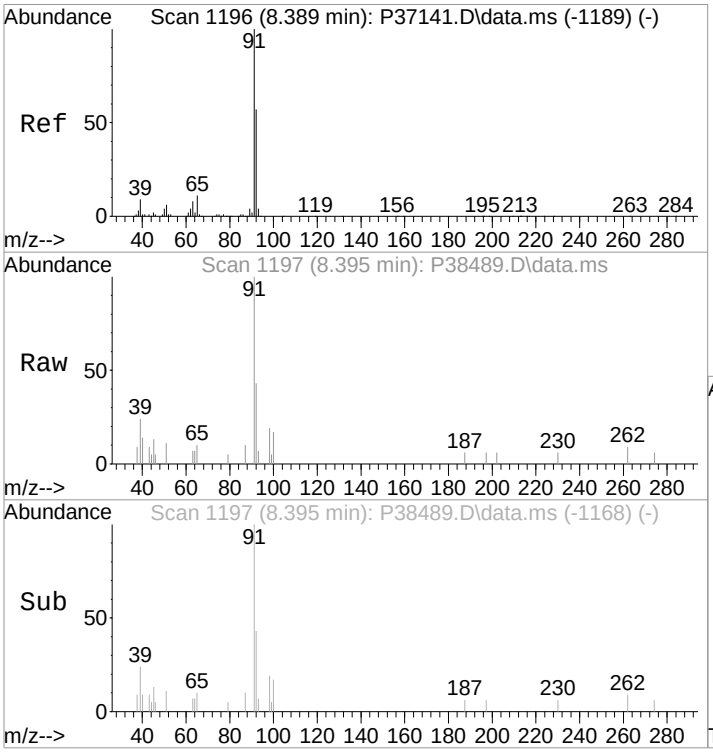


#39
Tetrahydrofuran
Concen: 1.21 ppb
RT: 4.975 min Scan# 636
Delta R.T. 0.025 min
Lab File: P38489.D
Acq: 14 Aug 2020 2:34 am

Tgt Ion: 42 Resp: 2192

Ion	Ratio	Lower	Upper
42	100		
72	16.3	25.2	65.2#

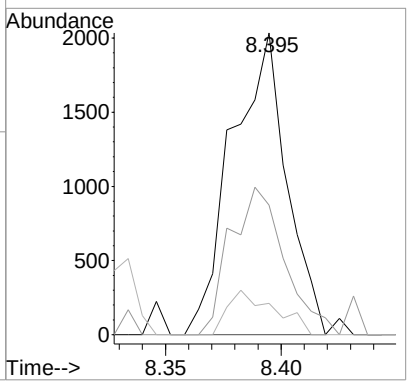




#66
Toluene
Concen: 0.23 ppb
RT: 8.395 min Scan# 1197
Delta R.T. 0.006 min
Lab File: P38489.D
Acq: 14 Aug 2020 2:34 am

Tgt Ion: 91 Resp: 3360

Ion	Ratio	Lower	Upper
91	100		
92	42.9	37.5	77.5
65	10.4	0.0	31.3



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38481.D
Acq On : 13 Aug 2020 11:39 pm
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Aug 14 10:37:29 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

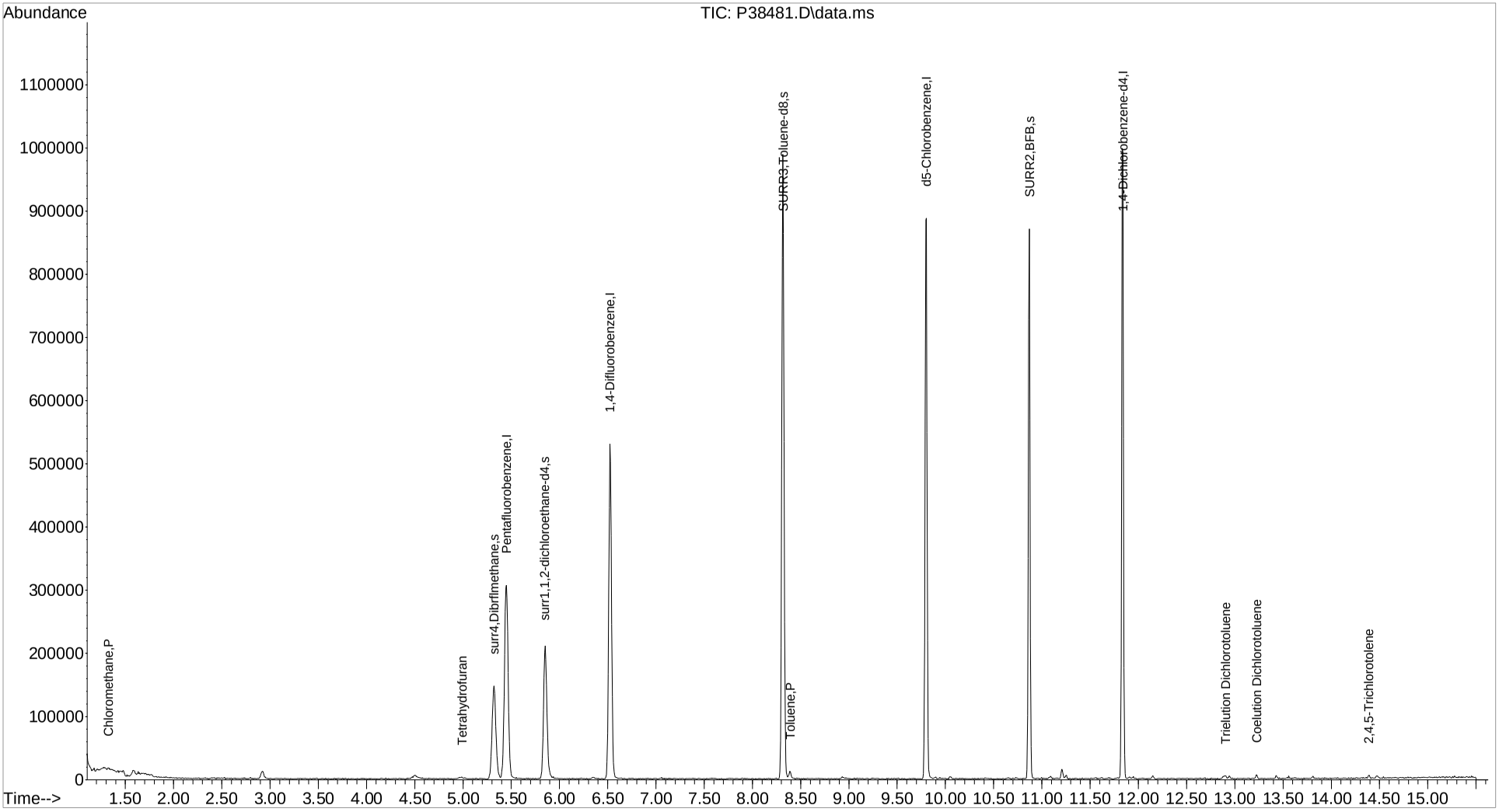
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.450	168	292162	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.523	114	461079	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	419556	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	208911	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.322	113	121802	46.00	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 92.00%				
48) surr1,1,2-dichloroetha...	5.846	65	178030	48.57	ppb		-0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 97.14%				
65) SURR3,Toluene-d8	8.315	98	619679	50.36	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.72%				
70) SURR2,BFB	10.870	95	224066	49.42	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.84%				
Target Compounds							Qvalue
3) Chloromethane	1.323	50	971	0.24	ppb		72
39) Tetrahydrofuran	4.987	42	2763	1.58	ppb	#	10
66) Toluene	8.389	91	6899	0.49	ppb		98
112) Trielution Dichlorotol...	12.900	125	2614	0.44	ppb	#	59
114) Coelution Dichlorotoluene	13.223	125	1749	0.27	ppb	#	80
119) 2,4,5-Trichlorotolene	14.387	159	999	0.29	ppb	#	85

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

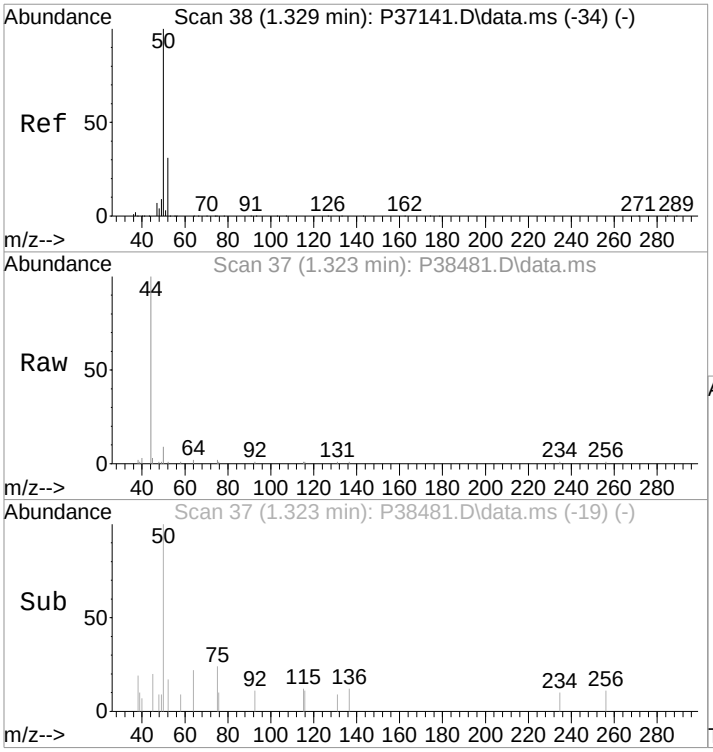
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38481.D
Acq On : 13 Aug 2020 11:39 pm
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Aug 14 10:37:29 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



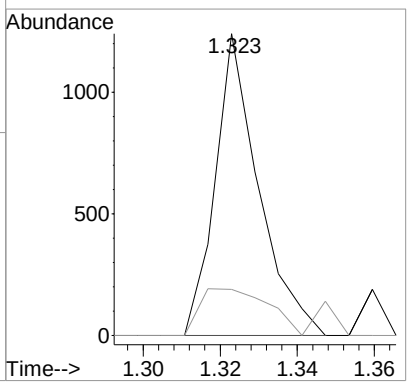
1st 08/14/20
2nd 08/18/20

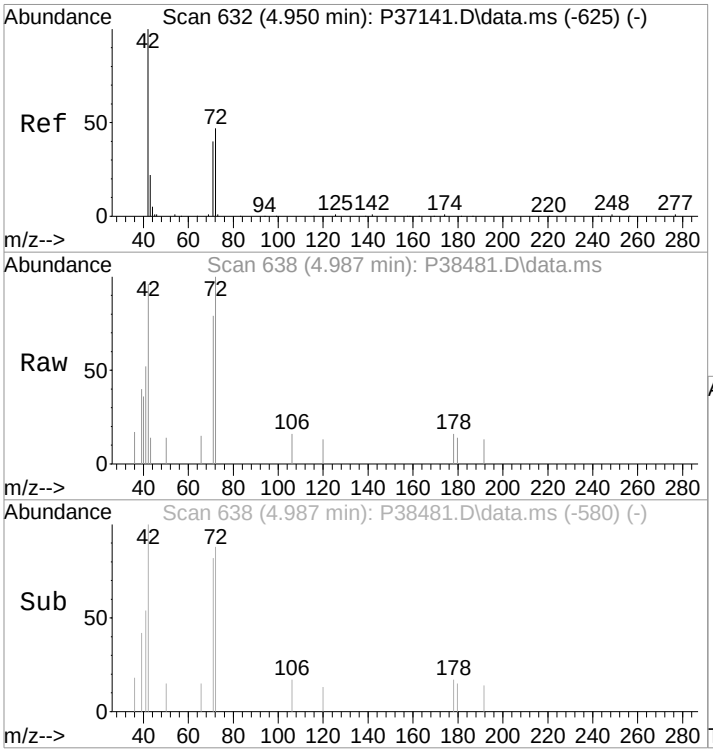


#3
Chloromethane
Concen: 0.24 ppb
RT: 1.323 min Scan# 37
Delta R.T. -0.006 min
Lab File: P38481.D
Acq: 13 Aug 2020 11:39 pm

Tgt Ion: 50 Resp: 971

Ion	Ratio	Lower	Upper
50	100		
52	15.3	10.8	50.8

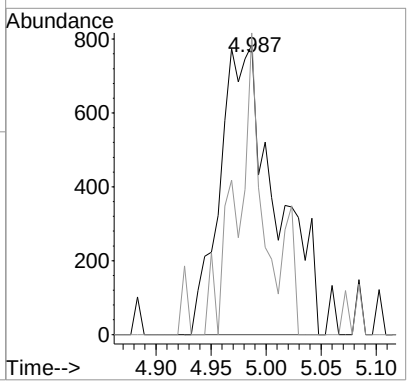


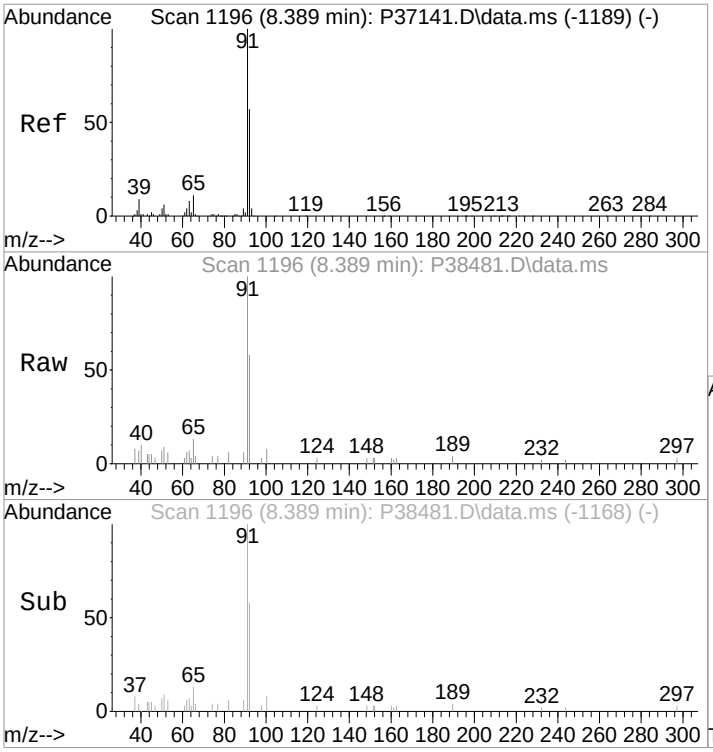


#39
Tetrahydrofuran
Concen: 1.58 ppb
RT: 4.987 min Scan# 638
Delta R.T. 0.037 min
Lab File: P38481.D
Acq: 13 Aug 2020 11:39 pm

Tgt Ion: 42 Resp: 2763

Ion	Ratio	Lower	Upper
42	100		
72	104.2	25.2	65.2#

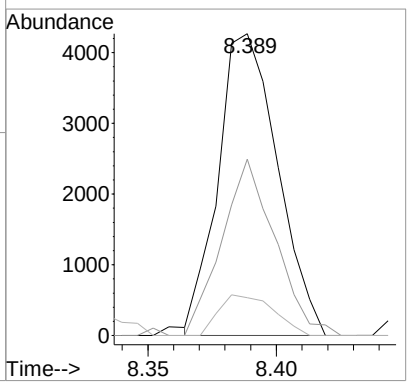


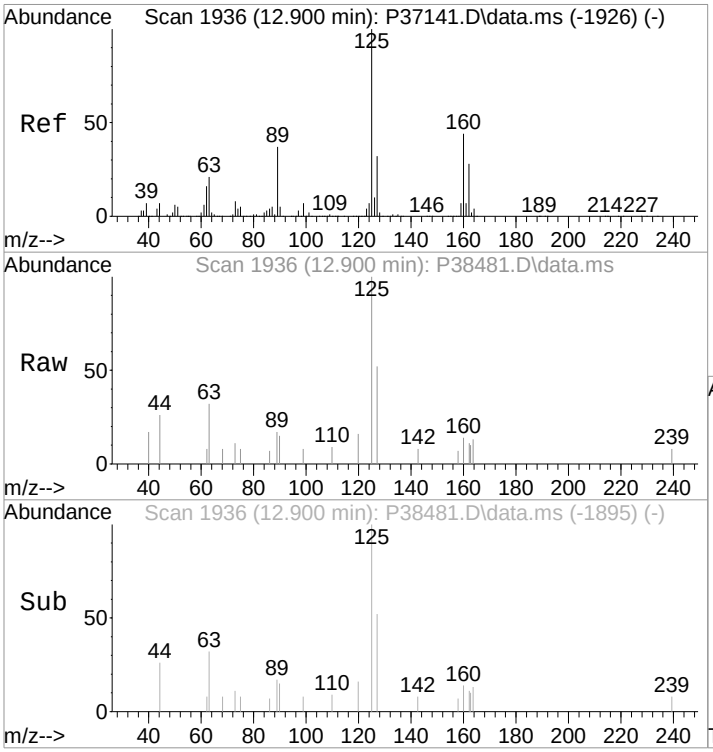


#66
Toluene
Concen: 0.49 ppb
RT: 8.389 min Scan# 1196
Delta R.T. 0.000 min
Lab File: P38481.D
Acq: 13 Aug 2020 11:39 pm

Tgt Ion: 91 Resp: 6899

Ion	Ratio	Lower	Upper
91	100		
92	58.5	37.5	77.5
65	12.6	0.0	31.3

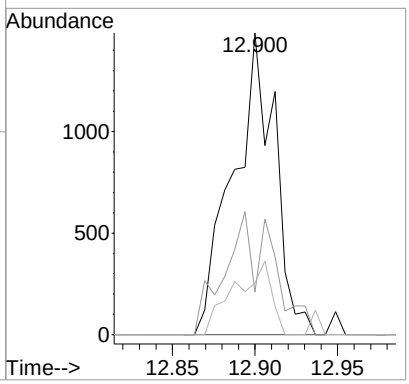


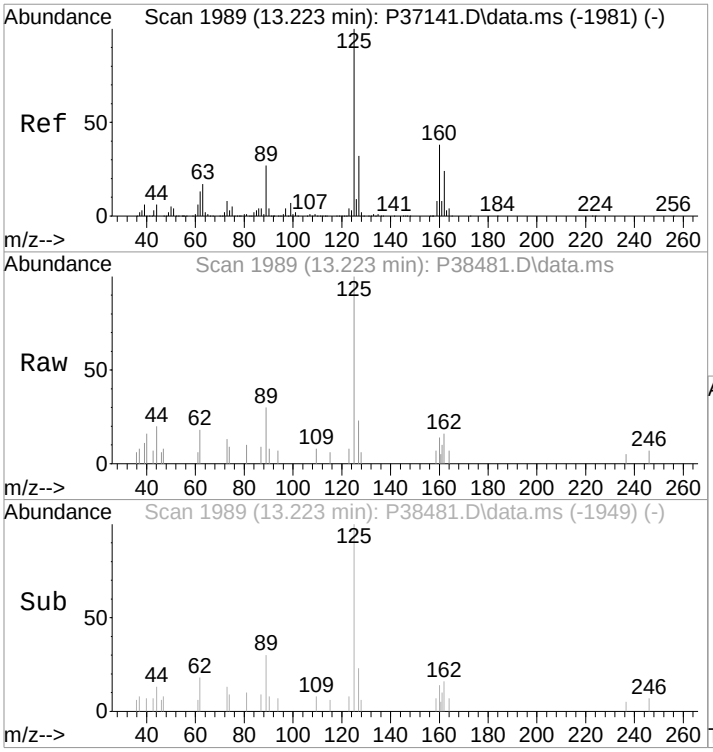


#112
Trielution Dichlorotoluene
Concen: 0.44 ppb
RT: 12.900 min Scan# 1936
Delta R.T. 0.000 min
Lab File: P38481.D
Acq: 13 Aug 2020 11:39 pm

Tgt Ion:125 Resp: 2614

Ion	Ratio	Lower	Upper
125	100		
160	14.1	35.3	52.9#
89	17.1	29.9	44.9#

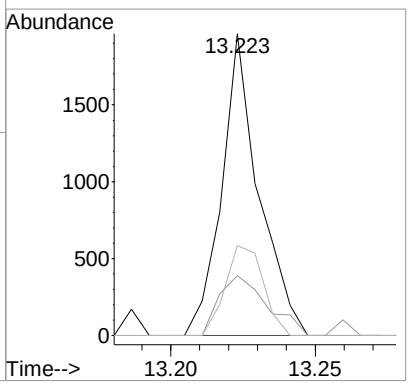


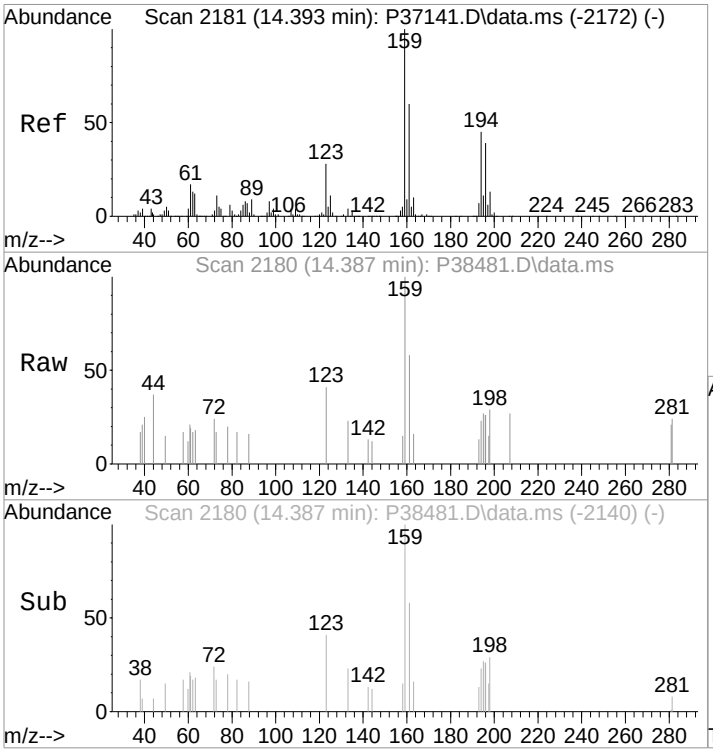


#114
Coelution Dichlorotoluene
Concen: 0.27 ppb
RT: 13.223 min Scan# 1989
Delta R.T. -0.006 min
Lab File: P38481.D
Acq: 13 Aug 2020 11:39 pm

Tgt Ion:125 Resp: 1749

Ion	Ratio	Lower	Upper
125	100		
160	19.8	30.5	45.7#
89	29.8	21.7	32.5

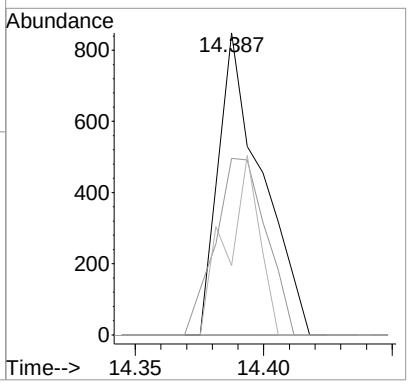




#119
2,4,5-Trichlorotolene
Concen: 0.29 ppb
RT: 14.387 min Scan# 2180
Delta R.T. -0.006 min
Lab File: P38481.D
Acq: 13 Aug 2020 11:39 pm

Tgt Ion:159 Resp: 999

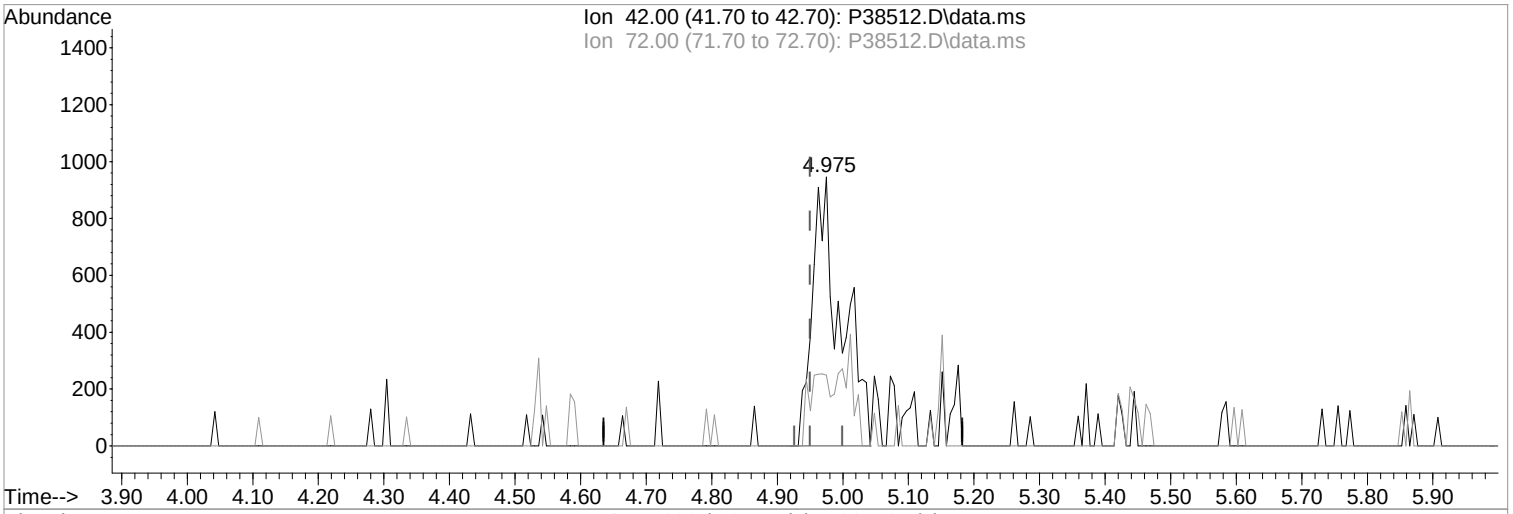
Ion	Ratio	Lower	Upper
159	100		
161	58.4	47.6	71.4
194	23.0	35.8	53.8#

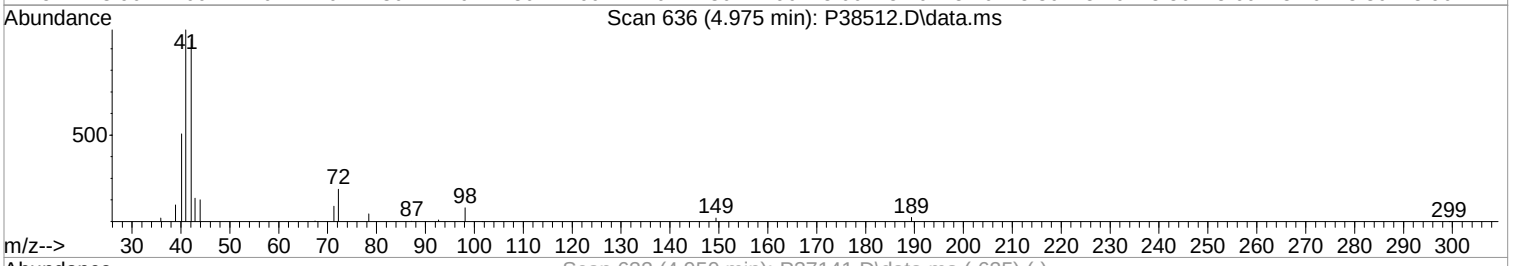


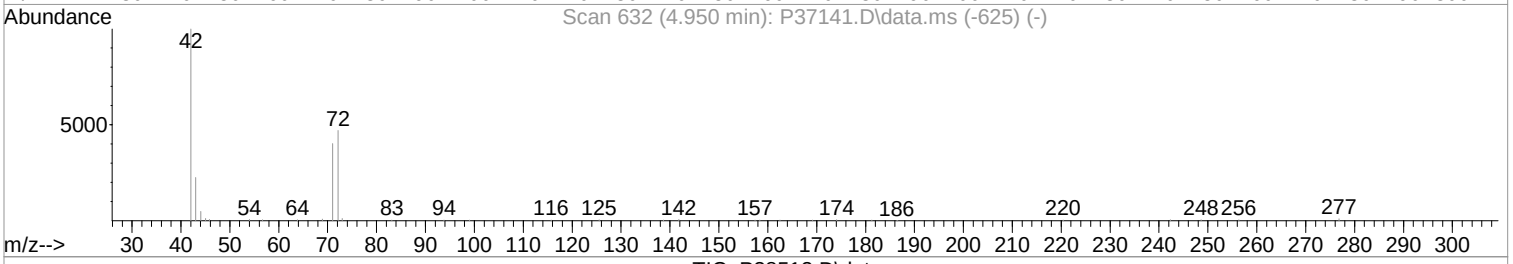
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38512.D
Acq On : 14 Aug 2020 12:05 pm
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 12:49:35 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38512.D\data.ms

(39) Tetrahydrofuran

4.975min (+0.025) 1.63 ppb m

response 2867

Ion	Exp%	Act%
42.00	100	100
72.00	45.20	26.32
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

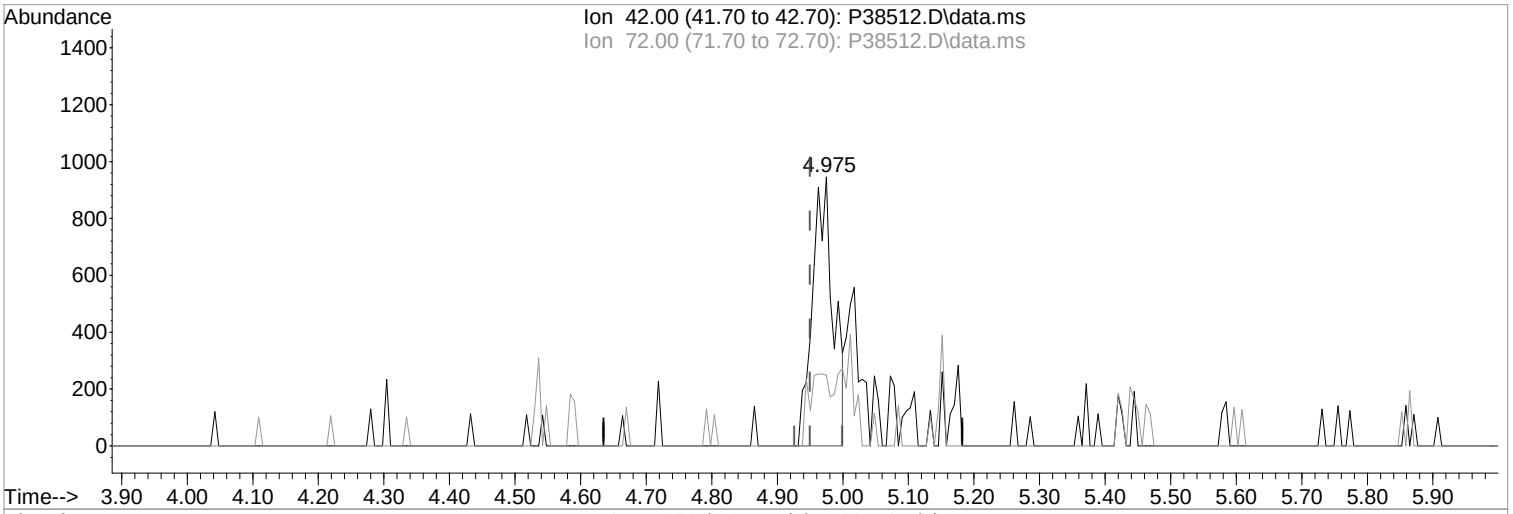
Split Peak

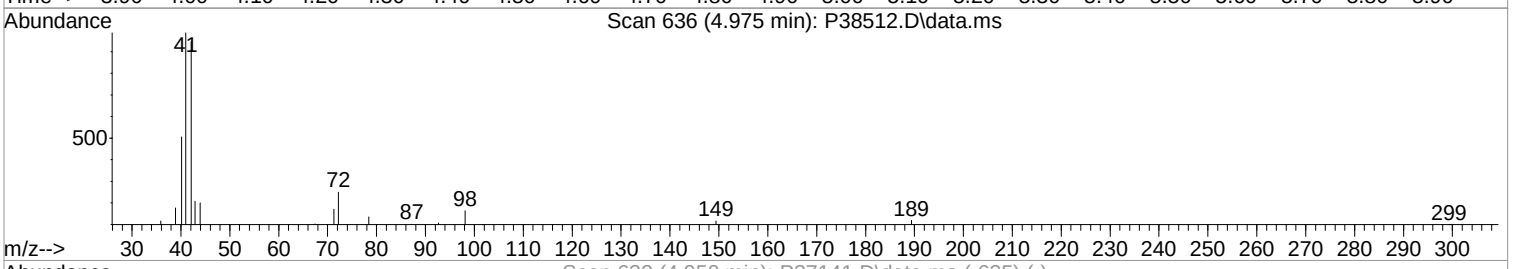
08/14/20

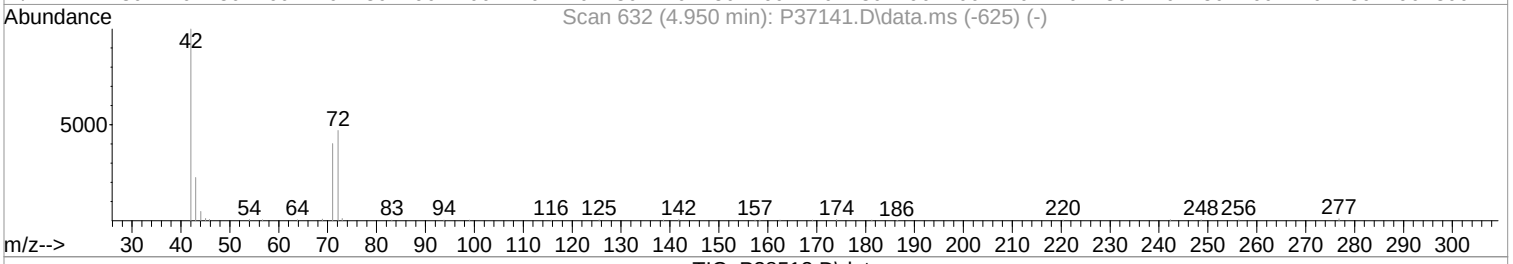
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38512.D
Acq On : 14 Aug 2020 12:05 pm
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 12:49:35 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38512.D\data.ms

(39) Tetrahydrofuran

4.975min (+0.025) 1.19 ppb

response 2092

Ion	Exp%	Act%
42.00	100	100
72.00	45.20	26.32
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

08/14/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38512.D
Acq On : 14 Aug 2020 12:05 pm
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 12:50:33 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

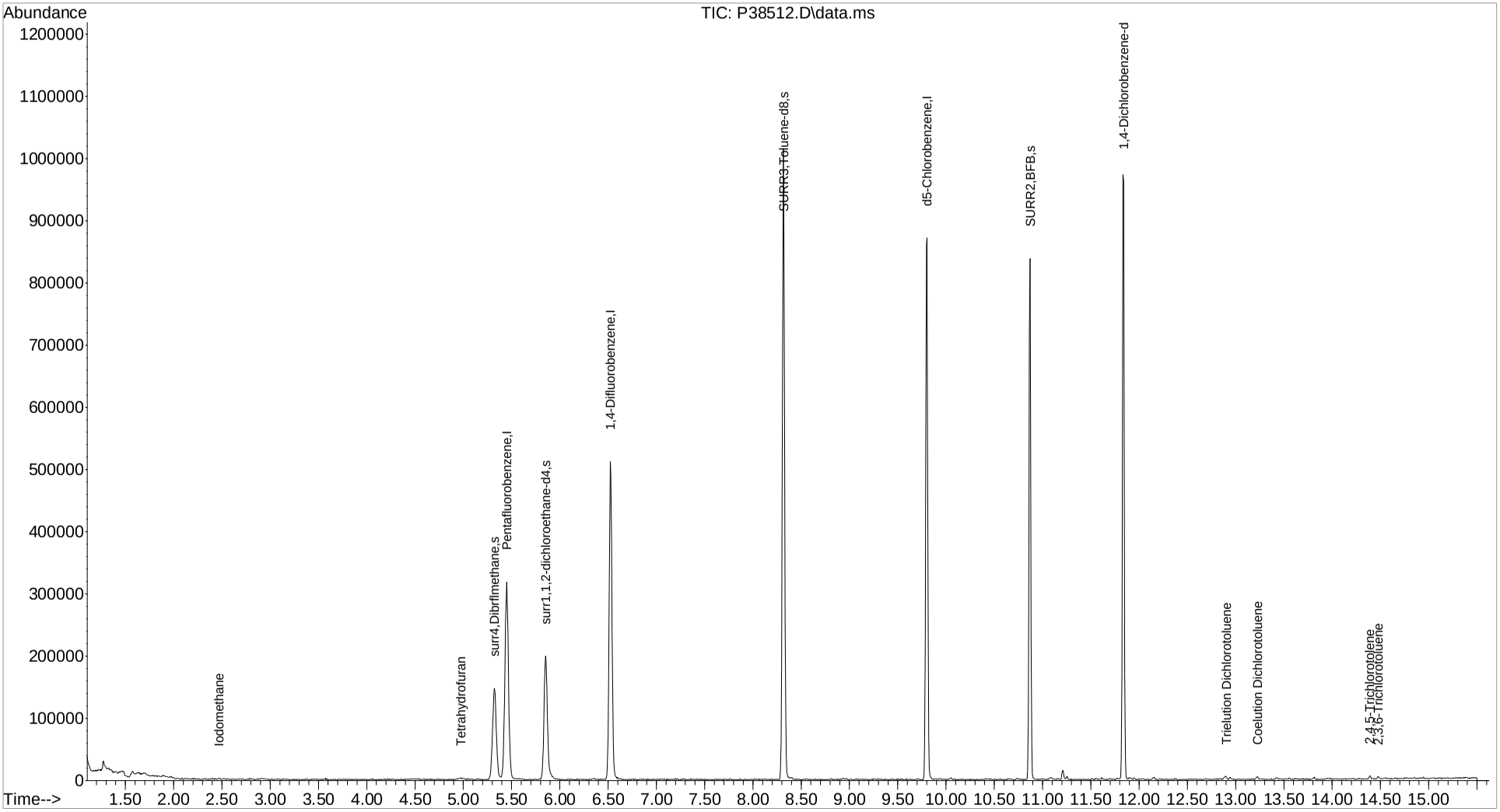
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.450	168	292789	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.523	114	448556	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	408572	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	209167	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.322	113	123305	47.87	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.74%				
48) surr1,1,2-dichloroetha...	5.853	65	170069	47.70	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 95.40%				
65) SURR3,Toluene-d8	8.316	98	621553	51.92	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 103.84%				
70) SURR2,BFB	10.870	95	222542	50.45	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.90%				
Target Compounds							Qvalue
17) Iodomethane	2.469	142	1102	0.43	ppb	#	59
18) Carbon Disulfide	2.524	76	1077	Below Cal			78
39) Tetrahydrofuran	4.975	42	2867m	1.63	ppb		
112) Trielution Dichlorotol...	12.900	125	2198	0.37	ppb		96
114) Coelution Dichlorotoluene	13.223	125	1621	0.25	ppb	#	87
119) 2,4,5-Trichlorotolene	14.388	159	1024	0.30	ppb	#	74
120) 2,3,6-Trichlorotoluene	14.479	159	981	0.32	ppb	#	58

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

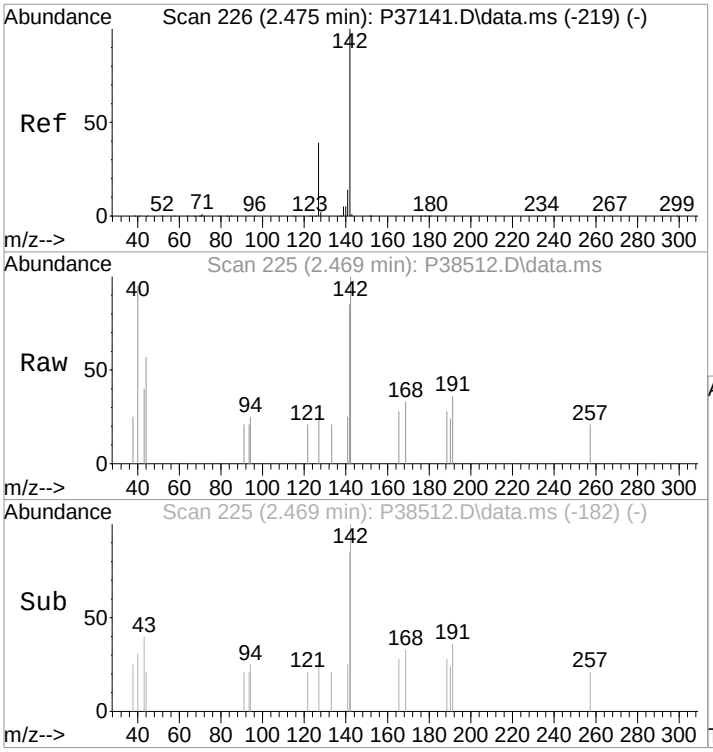
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38512.D
Acq On : 14 Aug 2020 12:05 pm
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 12:50:33 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



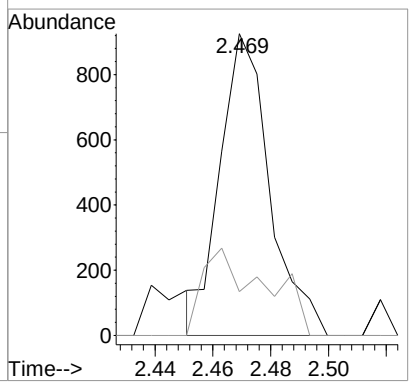
1st 08/14/20
2nd 08/21/20

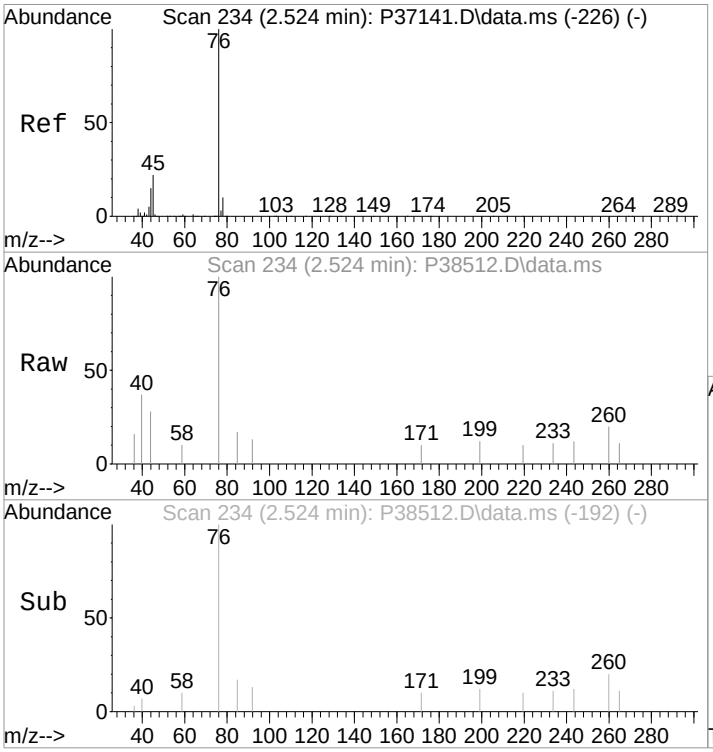


#17
Iodomethane
Concen: 0.43 ppb
RT: 2.469 min Scan# 225
Delta R.T. 0.001 min
Lab File: P38512.D
Acq: 14 Aug 2020 12:05 pm

Tgt Ion:142 Resp: 1102

Ion	Ratio	Lower	Upper
142	100		
127	14.5	19.3	59.3#

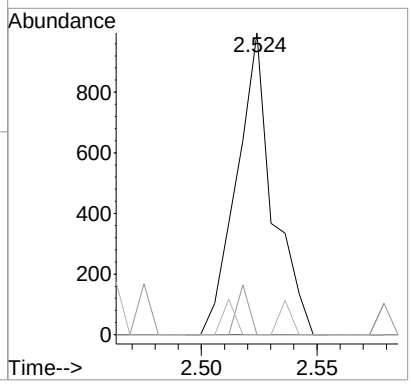


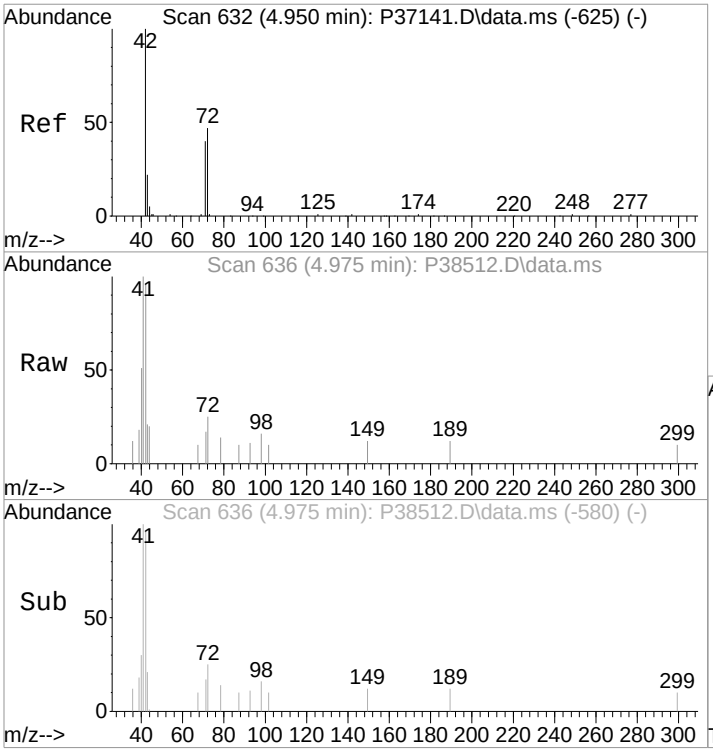


#18
Carbon Disulfide
Concen: Below Cal
RT: 2.524 min Scan# 234
Delta R.T. 0.001 min
Lab File: P38512.D
Acq: 14 Aug 2020 12:05 pm

Tgt Ion: 76 Resp: 1077

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	29.5
77	0.0	0.0	22.5

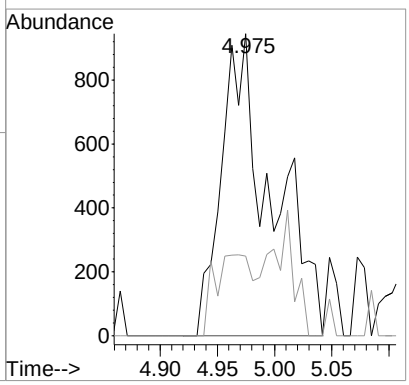


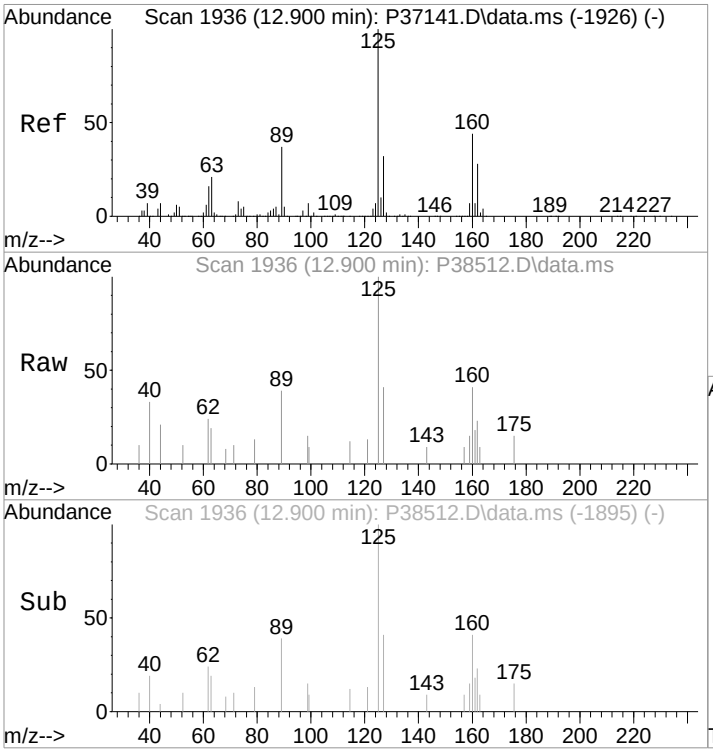


#39
Tetrahydrofuran
Concen: 1.63 ppb m
RT: 4.975 min Scan# 636
Delta R.T. 0.025 min
Lab File: P38512.D
Acq: 14 Aug 2020 12:05 pm

Tgt Ion: 42 Resp: 2867

Ion	Ratio	Lower	Upper
42	100		
72	26.3	25.2	65.2

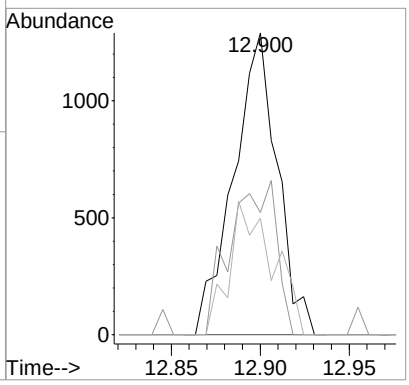


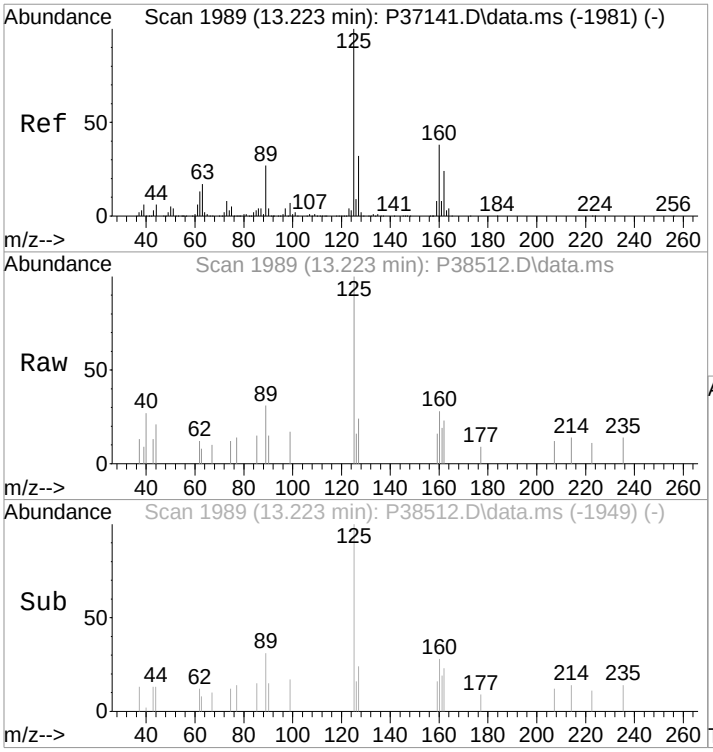


#112
Trielution Dichlorotoluene
Concen: 0.37 ppb
RT: 12.900 min Scan# 1936
Delta R.T. 0.000 min
Lab File: P38512.D
Acq: 14 Aug 2020 12:05 pm

Tgt Ion:125 Resp: 2198

Ion	Ratio	Lower	Upper
125	100		
160	40.5	35.3	52.9
89	38.6	29.9	44.9

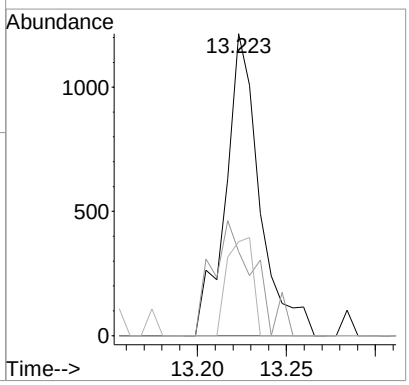


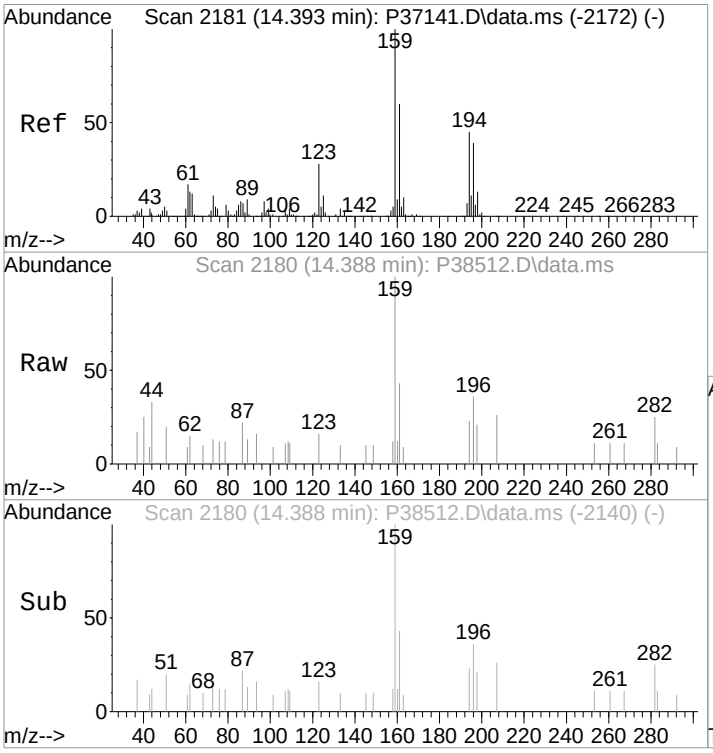


#114
Coelution Dichlorotoluene
Concen: 0.25 ppb
RT: 13.223 min Scan# 1989
Delta R.T. -0.006 min
Lab File: P38512.D
Acq: 14 Aug 2020 12:05 pm

Tgt Ion:125 Resp: 1621

Ion	Ratio	Lower	Upper
125	100		
160	27.8	30.5	45.7#
89	31.1	21.7	32.5

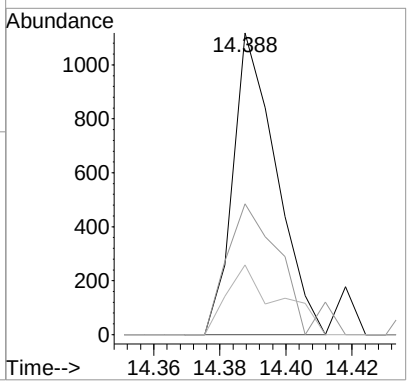


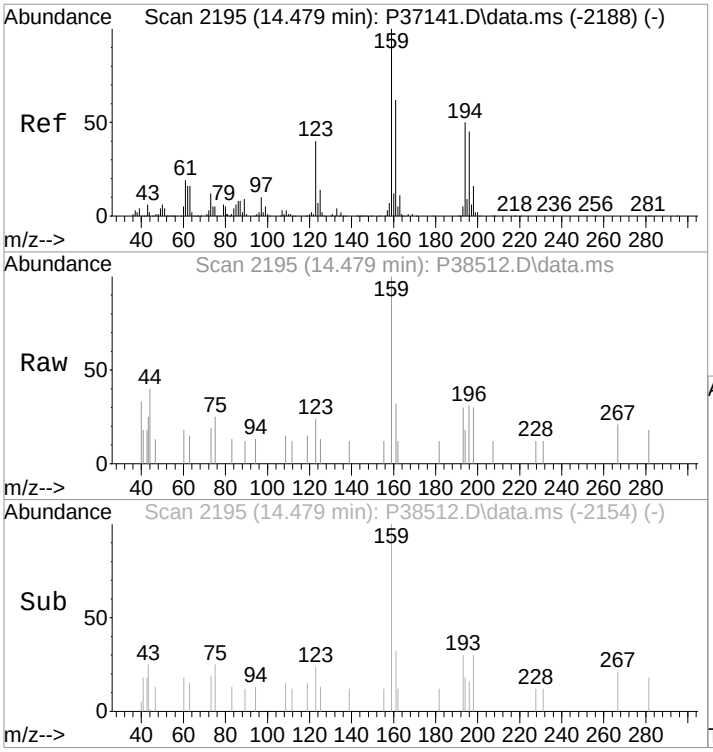


#119
2,4,5-Trichlorotolene
Concen: 0.30 ppb
RT: 14.388 min Scan# 2180
Delta R.T. -0.006 min
Lab File: P38512.D
Acq: 14 Aug 2020 12:05 pm

Tgt Ion:159 Resp: 1024

Ion	Ratio	Lower	Upper
159	100		
161	43.3	47.6	71.4#
194	23.1	35.8	53.8#

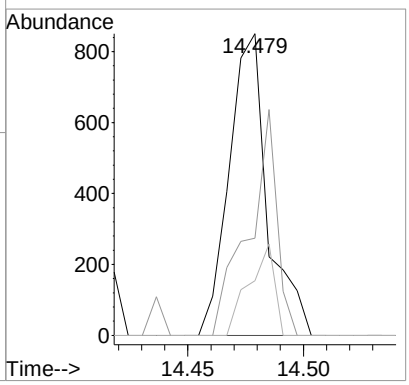




#120
2,3,6-Trichlorotoluene
Concen: 0.32 ppb
RT: 14.479 min Scan# 2195
Delta R.T. 0.000 min
Lab File: P38512.D
Acq: 14 Aug 2020 12:05 pm

Tgt Ion:159 Resp: 981

Ion	Ratio	Lower	Upper
159	100		
161	32.2	49.9	74.9#
194	18.1	40.2	60.2#



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38512.D
Acq On : 14 Aug 2020 12:05 pm
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
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\W071320.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P38512.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.268	26	28	35	rVB2	13080	17528	1.09%	0.220%
2	1.573	72	78	83	rBV6	9455	22597	1.41%	0.283%
3	5.322	683	693	705	rBV2	146768	403291	25.08%	5.052%
4	5.450	705	714	727	rVB	317311	814423	50.64%	10.203%
5	5.853	771	780	797	rBV2	198732	492418	30.62%	6.169%
6	6.523	882	890	901	rBV	511119	1030851	64.10%	12.914%
7	8.316	1177	1184	1194	rBV	1015010	1608286	100.00%	20.148%
8	9.803	1421	1428	1434	rBV	871505	1251891	77.84%	15.683%
9	10.870	1597	1603	1608	rBV	838023	1056106	65.67%	13.230%
10	11.211	1654	1659	1662	rBV3	15543	21003	1.31%	0.263%
11	11.833	1756	1761	1768	rVB	971831	1264110	78.60%	15.836%

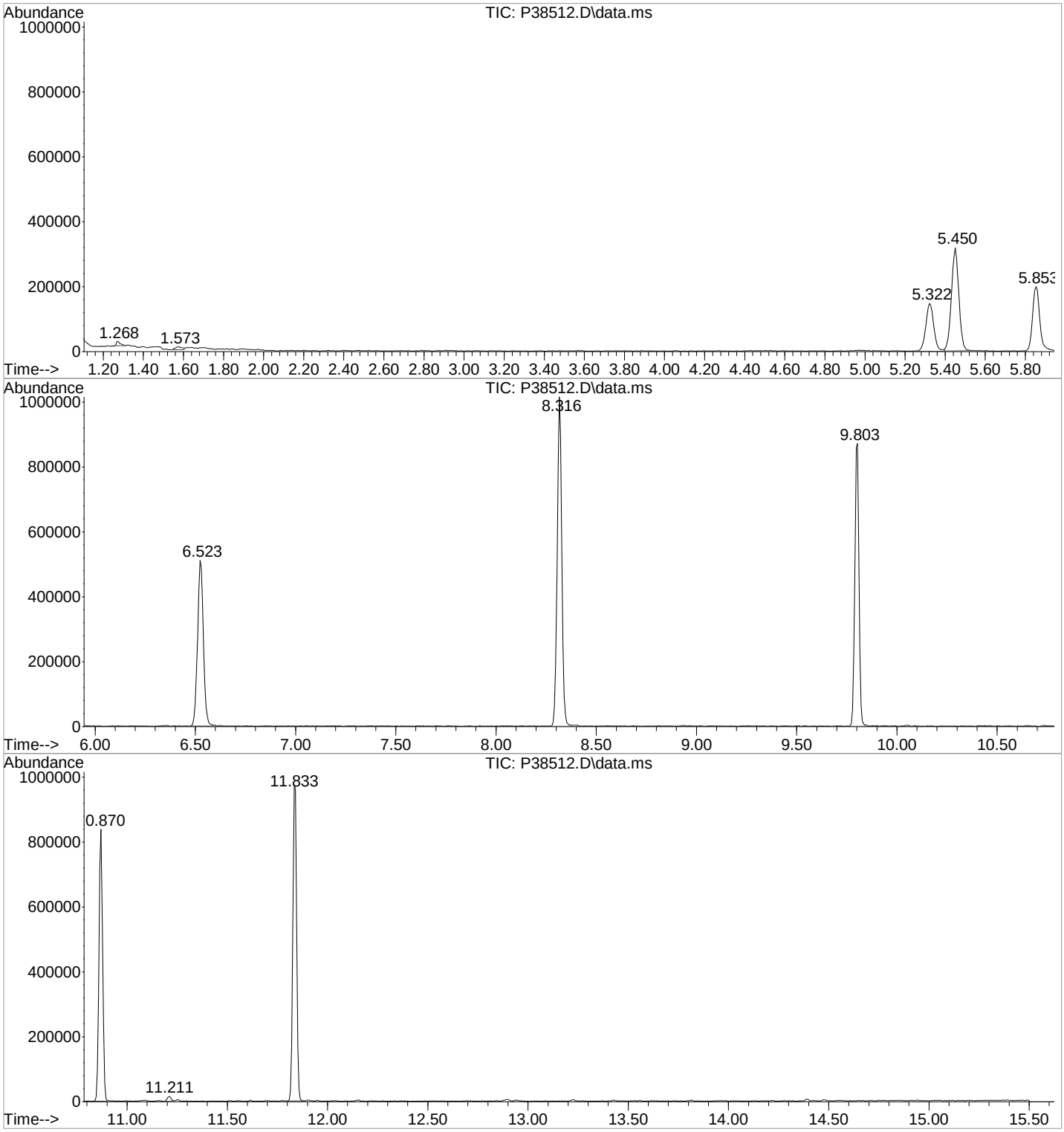
Sum of corrected areas: 7982504

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38512.D
Acq On : 14 Aug 2020 12:05 pm
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

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



1st 08/21/20
2nd 08/21/20

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\081420\\
Data File : P38512.D
Acq On : 14 Aug 2020 12:05 pmm
Operator : K.Ruestt
Sample : MBLK-FP Inst : MSVOA-122
Misc :
ALS Vial : 3 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.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

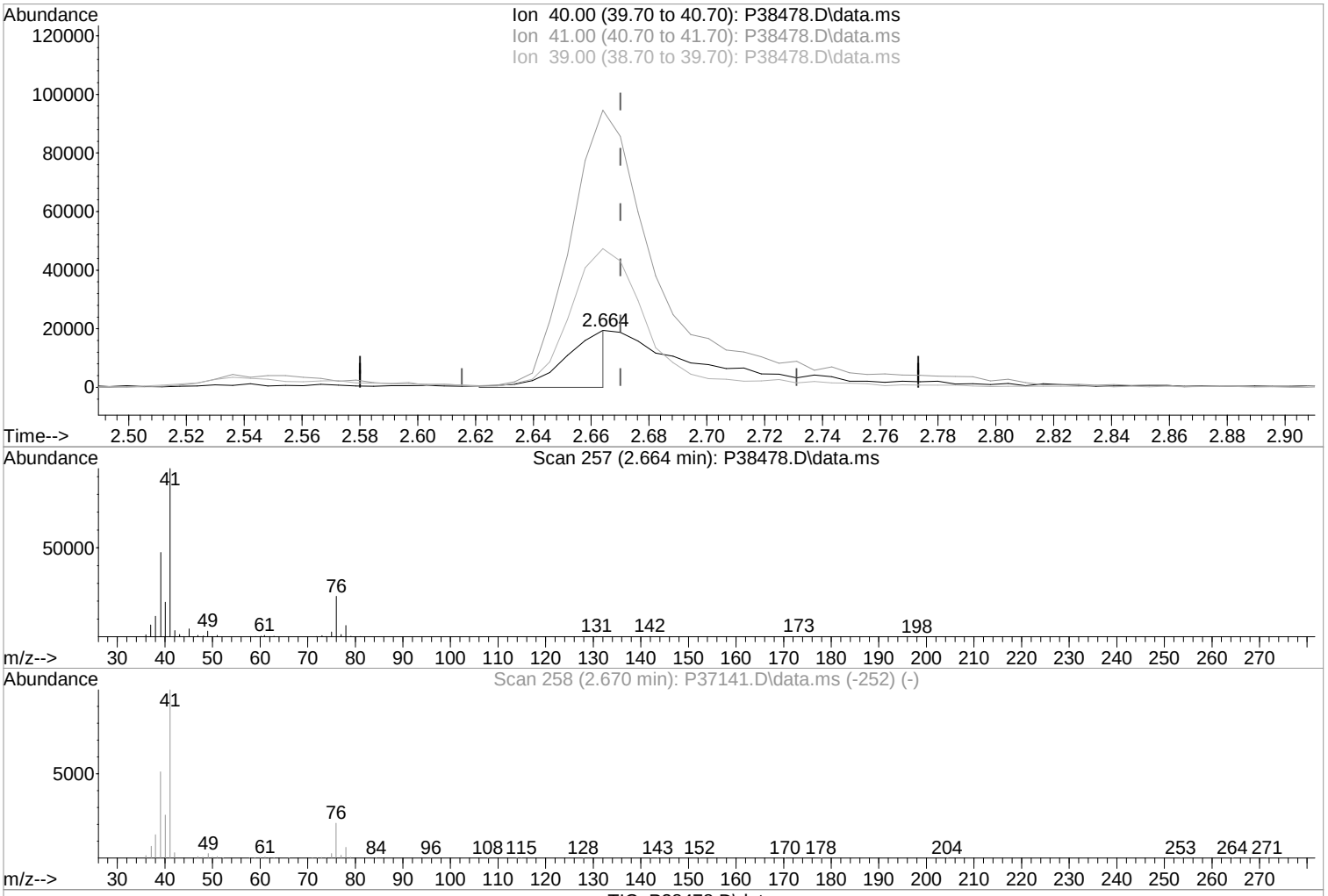
No Library Search Compounds Detected
****

1st 08/14/20
2nd 08/18/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38478.D
Acq On : 13 Aug 2020 10:33 pm
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 14 09:13:05 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38478.D\data.ms

(19) Acetonitrile

2.664min (-0.006) 92.11 ppb m

response 20318

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	485.70#
39.00	200.50	242.93#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

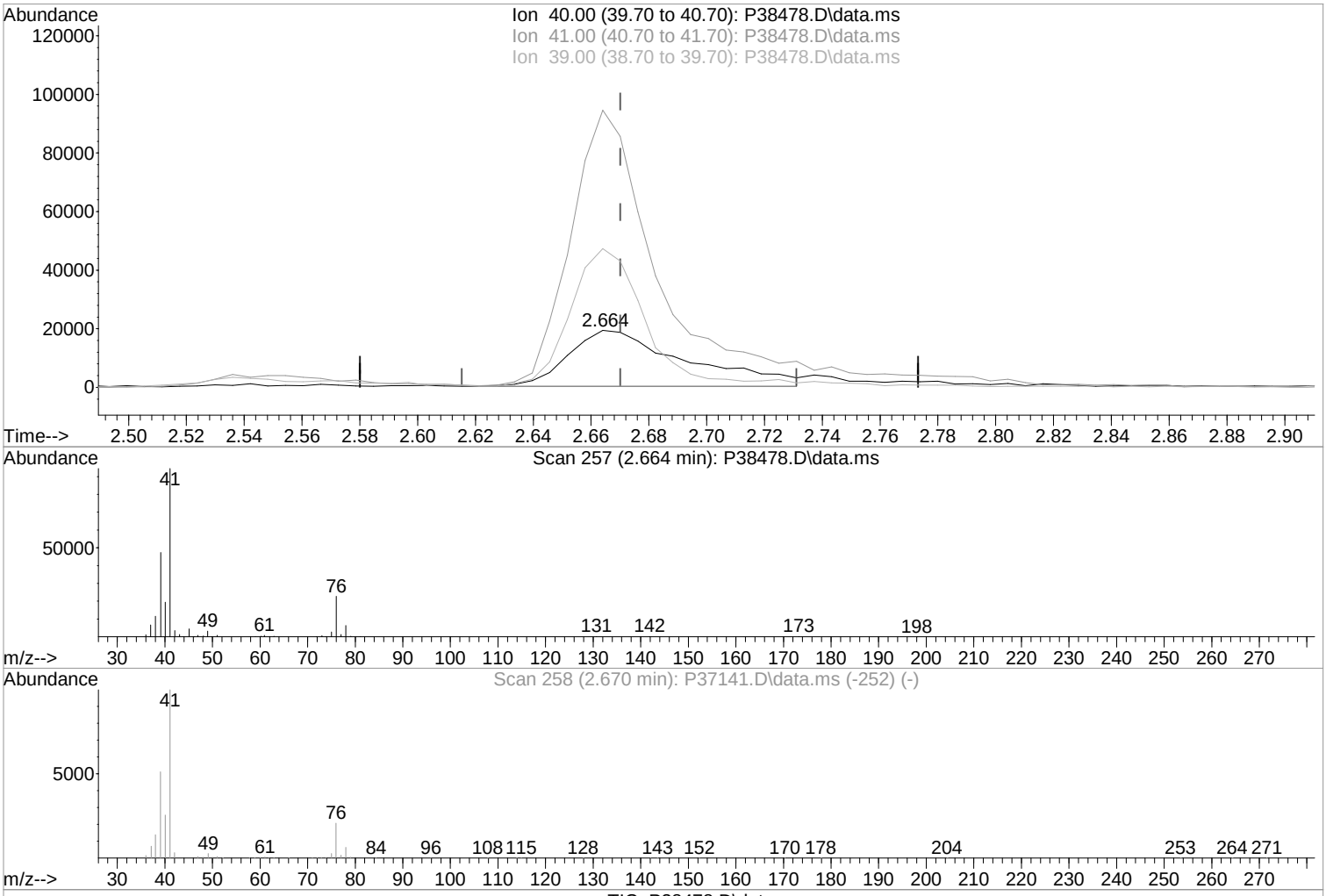
08/14/20

1st 08/14/20
2nd 08/18/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38478.D
Acq On : 13 Aug 2020 10:33 pm
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 14 09:13:05 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38478.D\data.ms

(19) Acetonitrile

2.664min (-0.006) 243.14 ppb

response 53636

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	485.70#
39.00	200.50	242.93#
0.00	0.00	0.00

Manual Integration:

Before

08/14/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38478.D
Acq On : 13 Aug 2020 10:33 pm
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 14 10:34:58 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.444	168	308902	50.00	ppb		-0.01
43) 1,4-Difluorobenzene	6.523	114	486742	50.00	ppb		0.00
71) d5-Chlorobenzene	9.797	117	440072	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	218169	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.316	113	132962	47.57	ppb		-0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.14%				
48) surr1,1,2-dichloroetha...	5.852	65	178393	46.11	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 92.22%				
65) SURR3,Toluene-d8	8.315	98	645737	49.71	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.42%				
70) SURR2,BFB	10.870	95	241983	50.56	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.12%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.195	85	84416	24.56	ppb		95
3) Chloromethane	1.317	50	103664	24.16	ppb		100
4) Vinyl Chloride	1.396	62	102759	25.54	ppb		93
5) Bromomethane	1.628	94	54878	17.10	ppb		94
6) Chloroethane	1.701	64	58786	26.56	ppb		92
7) Freon 21	1.853	67	107786	21.03	ppb		97
8) Trichlorofluoromethane	1.896	101	90854	21.92	ppb		92
9) Diethyl Ether	2.140	59	71820	23.98	ppb		94
10) Freon 123a	2.146	67	57219	16.19	ppb		94
11) Freon 123	2.201	83	68370	16.39	ppb		89
12) Acrolein	2.256	56	36901	45.49	ppb		96
13) 1,1-Diclethene	2.323	96	57806	24.20	ppb		89
14) Freon 113	2.323	101	56632	20.35	ppb		87
15) Acetone	2.396	43	42435	21.12	ppb		91
16) 2-Propanol	2.542	45	199417	501.64	ppb		96
17) Iodomethane	2.463	142	73608	27.54	ppb		98
18) Carbon Disulfide	2.518	76	157003	19.84	ppb		100
19) Acetonitrile	2.664	40	20318m	92.11	ppb		
20) Allyl Chloride	2.664	76	35688	21.08	ppb	#	89
21) Methyl Acetate	2.701	43	71888	15.65	ppb		96
22) Methylene Chloride	2.792	84	69749	20.48	ppb		95
23) TBA	2.951	59	297872	462.68	ppb		99
24) Acrylonitrile	3.079	53	239774	120.74	ppb		95
25) Methyl-t-Butyl Ether	3.091	73	249224	22.54	ppb		98
26) trans-1,2-Dichloroethene	3.079	96	66054	23.74	ppb	#	84
28) 1,1-Diclethane	3.591	63	125496	20.46	ppb		94
29) Vinyl Acetate	3.688	86	14640	28.14	ppb	#	95
30) DIPE	3.694	45	265894	24.81	ppb		88
31) 2-Chloro-1,3-Butadiene	3.706	53	102975	20.86	ppb		99
32) ETBE	4.231	59	224362	22.44	ppb		98
33) 2,2-Dichloropropane	4.420	77	84250	18.67	ppb		96
34) cis-1,2-Dichloroethene	4.438	96	74989	21.03	ppb		92
35) 2-Butanone	4.529	43	61259	25.51	ppb		97
36) Propionitrile	4.639	54	103197	119.83	ppb		97
37) Bromochloromethane	4.859	130	42154	19.99	ppb		91
38) Methacrylonitrile	4.895	67	46783	22.93	ppb	#	69
39) Tetrahydrofuran	4.962	42	43062	23.28	ppb		92
40) Chloroform	5.029	83	117616	20.95	ppb		91
41) 1,1,1-Trichloroethane	5.298	97	94880	21.24	ppb		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38478.D
Acq On : 13 Aug 2020 10:33 pm
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 14 10:34:58 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.127	73	232628	23.36	ppb		96
44) Cyclohexane	5.353	41	67213	21.06	ppb		98
46) Carbontetrachloride	5.566	117	66831	20.91	ppb		99
47) 1,1-Dichloropropene	5.584	75	91537	20.23	ppb		94
49) Benzene	5.901	78	299582	21.32	ppb		98
50) 1,2-Dichloroethane	5.962	62	98082	19.97	ppb		98
51) Iso-Butyl Alcohol	5.968	43	141220	468.47	ppb		95
52) n-Heptane	6.352	43	90990	20.89	ppb		93
53) 1-Butanol	6.913	56	245513	1308.78	ppb		99
54) Trichloroethene	6.834	130	66326	19.02	ppb		98
55) Methylcyclohexane	7.047	55	95785	22.12	ppb		97
56) 1,2-Diclpropane	7.133	63	77319	20.78	ppb		95
57) Dibromomethane	7.279	93	40394	18.82	ppb		98
58) 1,4-Dioxane	7.352	88	36822	478.12	ppb		99
59) Methyl Methacrylate	7.352	69	71233	21.97	ppb		94
60) Bromodichloromethane	7.498	83	72764	18.48	ppb		96
63) cis-1,3-Dichloropropene	8.035	75	102522	19.09	ppb		98
64) 4-Methyl-2-pentanone	8.248	43	113377	22.60	ppb		97
66) Toluene	8.389	91	336769	22.63	ppb		99
67) trans-1,3-Dichloropropene	8.669	75	96512	19.76	ppb		93
68) Ethyl Methacrylate	8.803	69	124935	22.85	ppb		97
69) 1,1,2-Trichloroethane	8.858	97	69641	20.96	ppb		92
72) Tetrachloroethene	8.968	164	51600	19.20	ppb		94
73) 2-Hexanone	9.151	43	88309	22.58	ppb		96
74) 1,3-Dichloropropane	9.029	76	123444	19.95	ppb		98
75) Dibromochloromethane	9.248	129	51289	18.74	ppb		95
76) N-Butyl Acetate	9.291	43	153435	21.14	ppb		97
77) 1,2-Dibromoethane	9.346	107	69829	20.73	ppb		99
78) Chlorobenzene	9.827	112	200346	20.41	ppb		95
79) 3-CBTF	9.839	180	98146	21.60	ppb		92
80) 4-CBTF	9.894	180	84883	20.76	ppb		97
81) 1,1,1,2-Tetrachloroethane	9.913	131	59831	19.81	ppb		97
82) Ethylbenzene	9.937	106	109516	21.26	ppb		94
83) (m+p)Xylene	10.053	106	276703	44.88	ppb		96
84) o-Xylene	10.406	106	133281	22.14	ppb		97
85) Styrene	10.425	104	222798	21.79	ppb		99
87) Bromoform	10.589	173	32958	18.34	ppb		84
88) 2-CBTF	10.656	180	97734	22.08	ppb		96
89) Isopropylbenzene	10.736	105	349209	23.19	ppb		98
90) Cyclohexanone	10.827	55	117202	129.50	ppb		98
91) trans-1,4-Dichloro-2-B...	11.059	53	28608	22.93	ppb		84
92) 1,1,2,2-Tetrachloroethane	11.010	83	110502	22.70	ppb		95
93) Bromobenzene	10.992	156	84279	21.45	ppb		95
94) 1,2,3-Trichloropropane	11.047	110	35061	22.27	ppb	#	89
95) n-Propylbenzene	11.089	91	424189	24.54	ppb		98
96) 2-Chlorotoluene	11.156	91	254595	22.68	ppb		97
97) 3-Chlorotoluene	11.211	91	237565	22.13	ppb		99
98) 4-Chlorotoluene	11.254	91	283951	22.59	ppb		98
99) 1,3,5-Trimethylbenzene	11.242	105	290779	22.60	ppb		98
100) tert-Butylbenzene	11.516	119	251860	23.38	ppb		98
101) 1,2,4-Trimethylbenzene	11.553	105	299270	23.11	ppb		98
102) 3,4-DCBTF	11.620	214	76337	21.52	ppb		97
103) sec-Butylbenzene	11.693	105	373787	24.19	ppb		99
104) p-Isopropyltoluene	11.815	119	316707	23.78	ppb		96
105) 1,3-Dclbenz	11.784	146	163833	21.28	ppb		98
106) 1,4-Dclbenz	11.857	146	171301	21.87	ppb		100

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38478.D
Acq On : 13 Aug 2020 10:33 pm
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 14 10:34:58 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 2,4-DCBTF	11.906	214	70361	21.18	ppb	97
108) 2,5-DCBTF	11.949	214	81532	22.44	ppb	99
109) n-Butylbenzene	12.150	91	290924	23.20	ppb	97
110) 1,2-Dclbenz	12.156	146	166504	21.31	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.790	157	22557	20.69	ppb	92
112) Trielution Dichlorotol...	12.894	125	412750	65.94	ppb	94
113) 1,3,5 Trichlorobenzene	12.942	180	119683	22.27	ppb	97
114) Coelution Dichlorotoluene	13.223	125	314043	45.68	ppb	98
115) 1,2,4-Tcbenzene	13.430	180	131275	23.29	ppb	96
116) Hexachlorobt	13.558	225	53248	23.53	ppb	96
117) Naphthalen	13.625	128	431771	26.21	ppb	99
118) 1,2,3-Tclbenzene	13.808	180	127510	21.87	ppb	92
119) 2,4,5-Trichlorotolene	14.393	159	89914	25.21	ppb	96
120) 2,3,6-Trichlorotoluene	14.473	159	81247	25.08	ppb	98

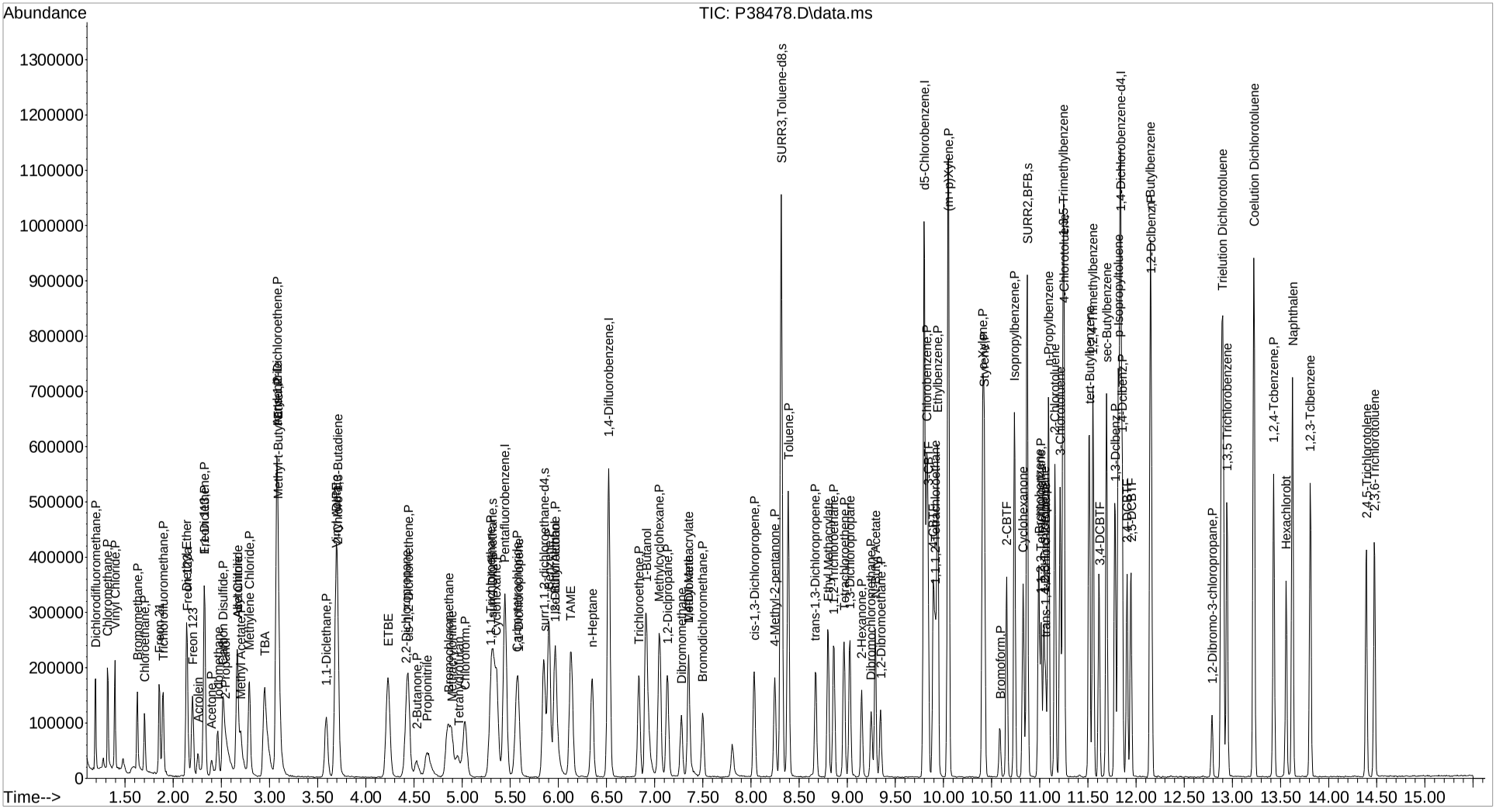
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38478.D
Acq On : 13 Aug 2020 10:33 pm
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 14 10:34:58 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

08/14/20 1st
08/18/20 2nd

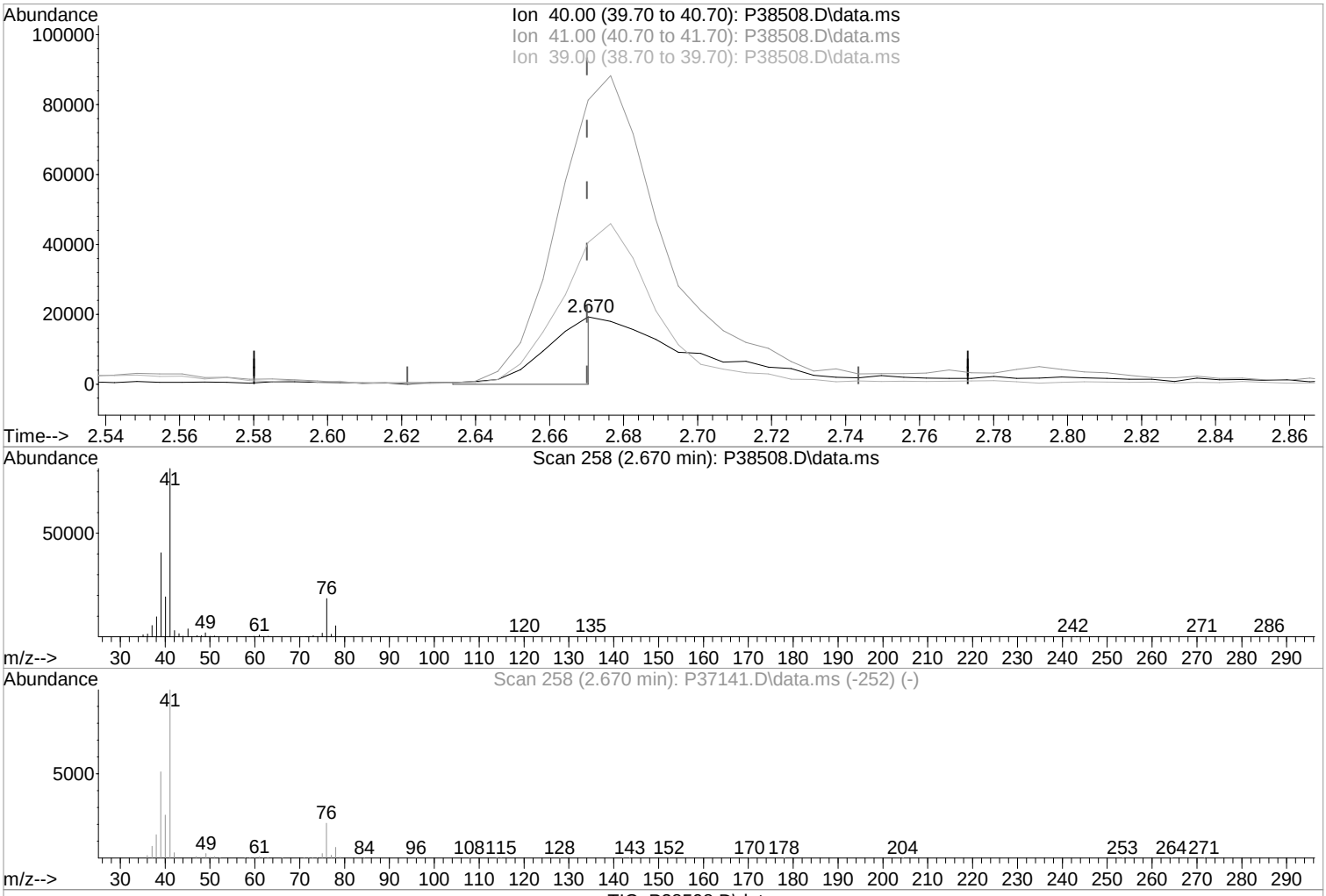


1st 08/14/20
2nd 08/21/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38508.D
Acq On : 14 Aug 2020 10:32 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 10:58:46 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38508.D\data.ms

(19) Acetonitrile

2.670min (+0.000) 85.28 ppb m

response 18363

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	422.09#
39.00	200.50	210.67
0.00	0.00	0.00

Manual Integration:

After

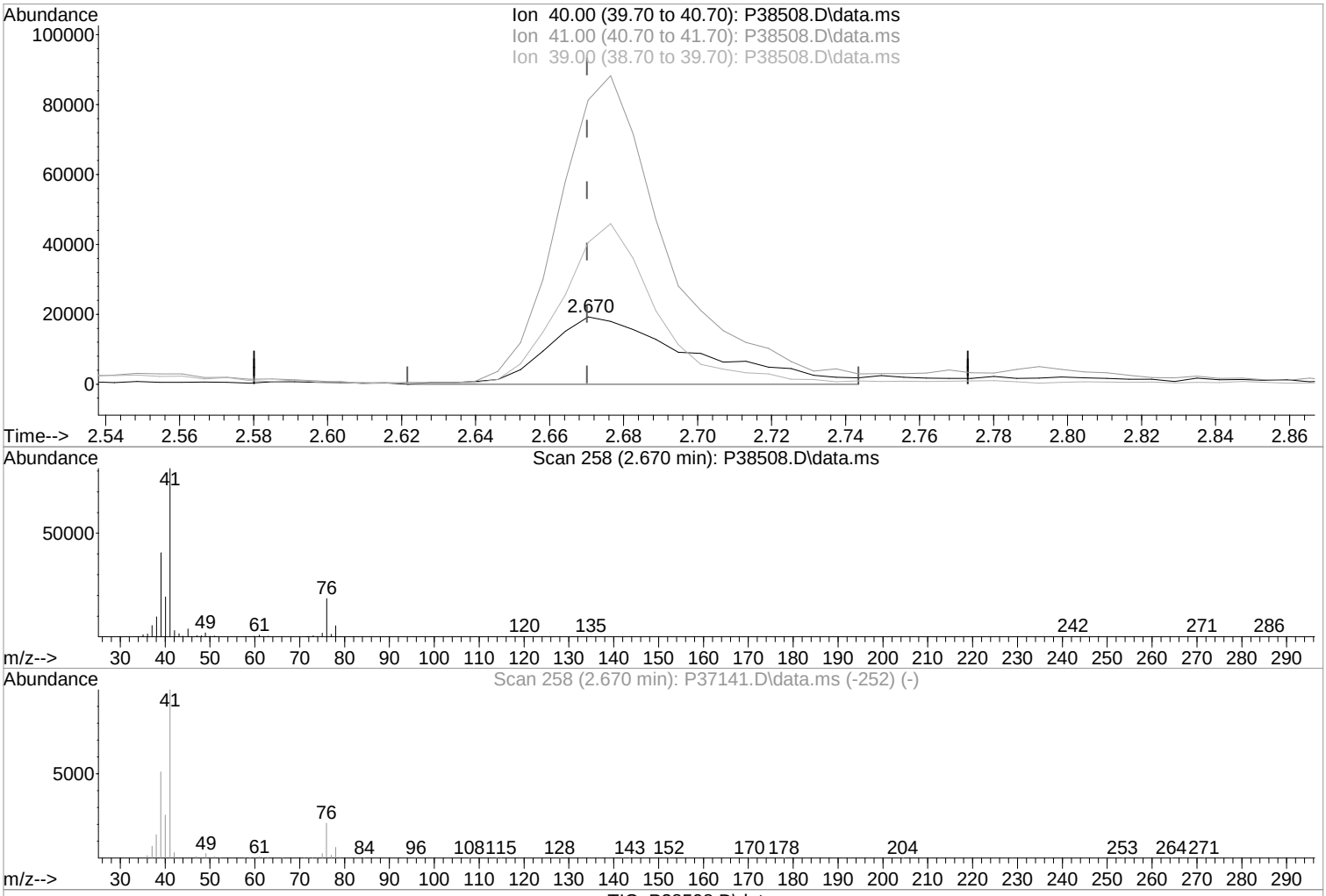
Poor integration.

08/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38508.D
Acq On : 14 Aug 2020 10:32 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 10:58:46 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38508.D\data.ms

(19) Acetonitrile

2.670min (+0.000) 244.97 ppb

response 52749

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	422.09#
39.00	200.50	210.67
0.00	0.00	0.00

Manual Integration:

Before

08/14/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38508.D
Acq On : 14 Aug 2020 10:32 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 10:59:55 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.450	168	301532	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	459244	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	419046	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	212800	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	129586	49.14	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.28%				
48) surr1,1,2-dichloroetha...	5.853	65	172551	47.27	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 94.54%				
65) SURR3,Toluene-d8	8.316	98	624641	50.97	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.94%				
70) SURR2,BFB	10.870	95	229757	50.88	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.76%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.201	85	80618	24.03	ppb		97
3) Chloromethane	1.329	50	90385	21.58	ppb		98
4) Vinyl Chloride	1.408	62	92397	23.53	ppb		98
5) Bromomethane	1.640	94	45449	14.51	ppb		98
6) Chloroethane	1.719	64	55865	25.86	ppb		92
7) Freon 21	1.866	67	102740	20.53	ppb		95
8) Trichlorofluoromethane	1.908	101	89710	22.17	ppb		95
9) Diethyl Ether	2.146	59	66849	22.87	ppb		97
10) Freon 123a	2.152	67	53622	15.54	ppb		94
11) Freon 123	2.207	83	65339	16.05	ppb		98
12) Acrolein	2.268	56	37469	47.32	ppb		92
13) 1,1-Diclethene	2.335	96	54392	23.33	ppb		89
14) Freon 113	2.335	101	56957	20.96	ppb		94
15) Acetone	2.402	43	38121	19.21	ppb		97
16) 2-Propanol	2.542	45	137604	354.61	ppb		98
17) Iodomethane	2.475	142	61777	23.68	ppb		100
18) Carbon Disulfide	2.524	76	157247	20.36	ppb		99
19) Acetonitrile	2.670	40	18363m	85.28	ppb		
20) Allyl Chloride	2.676	76	33626	20.35	ppb		94
21) Methyl Acetate	2.707	43	77574	17.30	ppb		90
22) Methylene Chloride	2.798	84	65661	19.76	ppb		97
23) TBA	2.957	59	259474	412.89	ppb		97
24) Acrylonitrile	3.085	53	220537	113.77	ppb		96
25) Methyl-t-Butyl Ether	3.097	73	233211	21.61	ppb		98
26) trans-1,2-Dichloroethene	3.085	96	60512	22.28	ppb		95
28) 1,1-Diclethane	3.603	63	117538	19.63	ppb		97
29) Vinyl Acetate	3.695	86	18009	35.29	ppb	#	33
30) DIPE	3.701	45	241810	23.12	ppb	#	72
31) 2-Chloro-1,3-Butadiene	3.713	53	100647	20.89	ppb		99
32) ETBE	4.243	59	212610	21.78	ppb		96
33) 2,2-Dichloropropane	4.432	77	86346	19.60	ppb		97
34) cis-1,2-Dichloroethene	4.444	96	72405	20.81	ppb		93
35) 2-Butanone	4.530	43	55676	23.75	ppb		97
36) Propionitrile	4.640	54	95189	113.24	ppb		99
37) Bromochloromethane	4.853	130	40901	19.87	ppb		95
38) Methacrylonitrile	4.896	67	42342	21.26	ppb		98
39) Tetrahydrofuran	4.963	42	38532	21.34	ppb		87
40) Chloroform	5.036	83	106286	19.34	ppb		94
41) 1,1,1-Trichloroethane	5.298	97	87860	20.15	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38508.D
Acq On : 14 Aug 2020 10:32 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 10:59:55 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.139	73	221618	22.80	ppb	97
44) Cyclohexane	5.359	41	62240	20.67	ppb	99
46) Carbontetrachloride	5.572	117	61559	20.41	ppb	98
47) 1,1-Dichloropropene	5.584	75	89147	20.88	ppb	93
49) Benzene	5.908	78	275877	20.81	ppb	99
50) 1,2-Dichloroethane	5.975	62	89663	19.35	ppb	95
51) Iso-Butyl Alcohol	5.975	43	127969	449.93	ppb	89
52) n-Heptane	6.353	43	103145	25.10	ppb	96
53) 1-Butanol	6.907	56	205702	1162.21	ppb	99
54) Trichloroethene	6.840	130	62583	19.02	ppb	94
55) Methylcyclohexane	7.048	55	90713	22.20	ppb	87
56) 1,2-Diclpropane	7.133	63	72547	20.67	ppb	88
57) Dibromomethane	7.279	93	39797	19.65	ppb	92
58) 1,4-Dioxane	7.346	88	31542	434.09	ppb	91
59) Methyl Methacrylate	7.352	69	66399	21.71	ppb	96
60) Bromodichloromethane	7.499	83	70201	18.90	ppb	95
63) cis-1,3-Dichloropropene	8.035	75	99723	19.68	ppb	99
64) 4-Methyl-2-pentanone	8.249	43	115468	24.39	ppb	94
66) Toluene	8.389	91	306868	21.85	ppb	97
67) trans-1,3-Dichloropropene	8.675	75	93982	20.40	ppb	98
68) Ethyl Methacrylate	8.803	69	119235	23.11	ppb	99
69) 1,1,2-Trichloroethane	8.858	97	67555	21.55	ppb	95
72) Tetrachloroethene	8.968	164	52752	20.61	ppb	96
73) 2-Hexanone	9.151	43	87378	23.46	ppb	96
74) 1,3-Dichloropropane	9.029	76	118323	20.08	ppb	95
75) Dibromochloromethane	9.248	129	52523	20.15	ppb	92
76) N-Butyl Acetate	9.291	43	153320	22.19	ppb	99
77) 1,2-Dibromoethane	9.346	107	63731	19.87	ppb	93
78) Chlorobenzene	9.828	112	189426	20.27	ppb	95
79) 3-CBTF	9.840	180	91288	21.09	ppb	96
80) 4-CBTF	9.895	180	82469	21.18	ppb	98
81) 1,1,1,2-Tetrachloroethane	9.919	131	58717	20.42	ppb	94
82) Ethylbenzene	9.937	106	106806	21.78	ppb	96
83) (m+p)Xylene	10.053	106	263124	44.82	ppb	96
84) o-Xylene	10.407	106	132163	23.06	ppb	99
85) Styrene	10.425	104	216861	22.27	ppb	99
87) Bromoform	10.583	173	33173	18.93	ppb	97
88) 2-CBTF	10.657	180	89229	20.67	ppb	98
89) Isopropylbenzene	10.736	105	340783	23.20	ppb	97
90) Cyclohexanone	10.827	55	104925	118.86	ppb	91
91) trans-1,4-Dichloro-2-B...	11.065	53	28355	23.30	ppb	99
92) 1,1,2,2-Tetrachloroethane	11.016	83	107070	22.55	ppb	97
93) Bromobenzene	10.992	156	79475	20.73	ppb	94
94) 1,2,3-Trichloropropane	11.047	110	32785	21.35	ppb	95
95) n-Propylbenzene	11.089	91	411574	24.42	ppb	98
96) 2-Chlorotoluene	11.157	91	244398	22.32	ppb	99
97) 3-Chlorotoluene	11.211	91	227801	21.75	ppb	98
98) 4-Chlorotoluene	11.254	91	277154	22.61	ppb	98
99) 1,3,5-Trimethylbenzene	11.242	105	283852	22.61	ppb	98
100) tert-Butylbenzene	11.516	119	247351	23.54	ppb	98
101) 1,2,4-Trimethylbenzene	11.553	105	289884	22.95	ppb	99
102) 3,4-DCBTF	11.614	214	77961	22.53	ppb	99
103) sec-Butylbenzene	11.693	105	368086	24.42	ppb	97
104) p-Isopropyltoluene	11.815	119	314260	24.19	ppb	96
105) 1,3-Dclbenz	11.784	146	166654	22.19	ppb	95
106) 1,4-Dclbenz	11.858	146	167922	21.98	ppb	100

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38508.D
Acq On : 14 Aug 2020 10:32 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 10:59:55 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

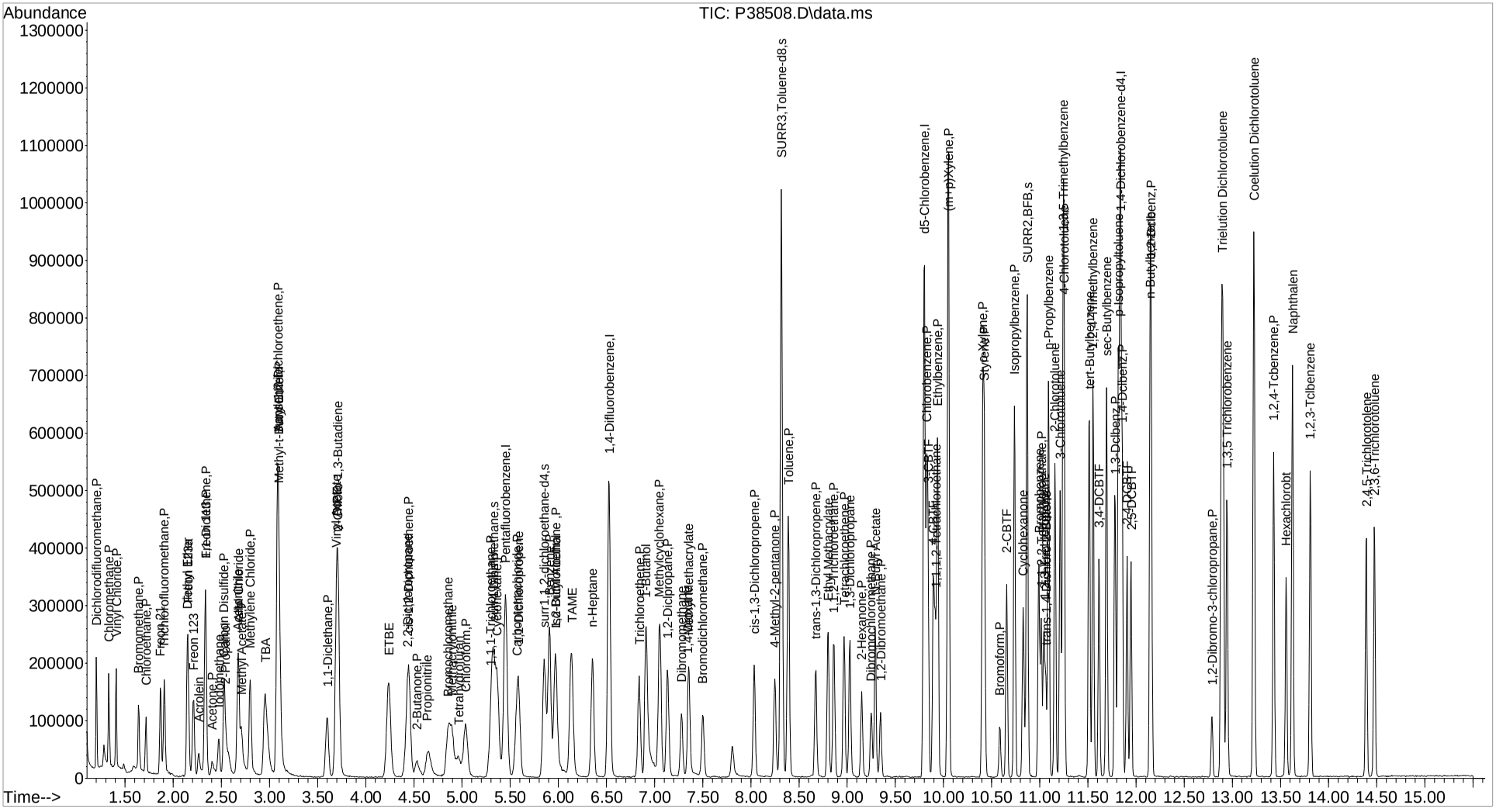
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 2,4-DCBTF	11.906	214	69580	21.47	ppb	97
108) 2,5-DCBTF	11.949	214	83270	23.50	ppb	99
109) n-Butylbenzene	12.144	91	296227	24.22	ppb	97
110) 1,2-Dclbenz	12.156	146	161531	21.19	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.790	157	21528	20.25	ppb	92
112) Trielution Dichlorotol...	12.894	125	421933	69.11	ppb	98
113) 1,3,5 Trichlorobenzene	12.943	180	119880	22.87	ppb	98
114) Coelution Dichlorotoluene	13.223	125	311148	46.40	ppb	96
115) 1,2,4-Tcbenzene	13.430	180	133430	24.27	ppb	97
116) Hexachlorobt	13.559	225	54036	24.48	ppb	91
117) Naphthalen	13.626	128	429501	26.73	ppb	99
118) 1,2,3-Tclbenzene	13.808	180	129925	22.84	ppb	95
119) 2,4,5-Trichlorotolene	14.394	159	89546	25.74	ppb	97
120) 2,3,6-Trichlorotoluene	14.473	159	84615	26.78	ppb	97

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38508.D
Acq On : 14 Aug 2020 10:32 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 10:59:55 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

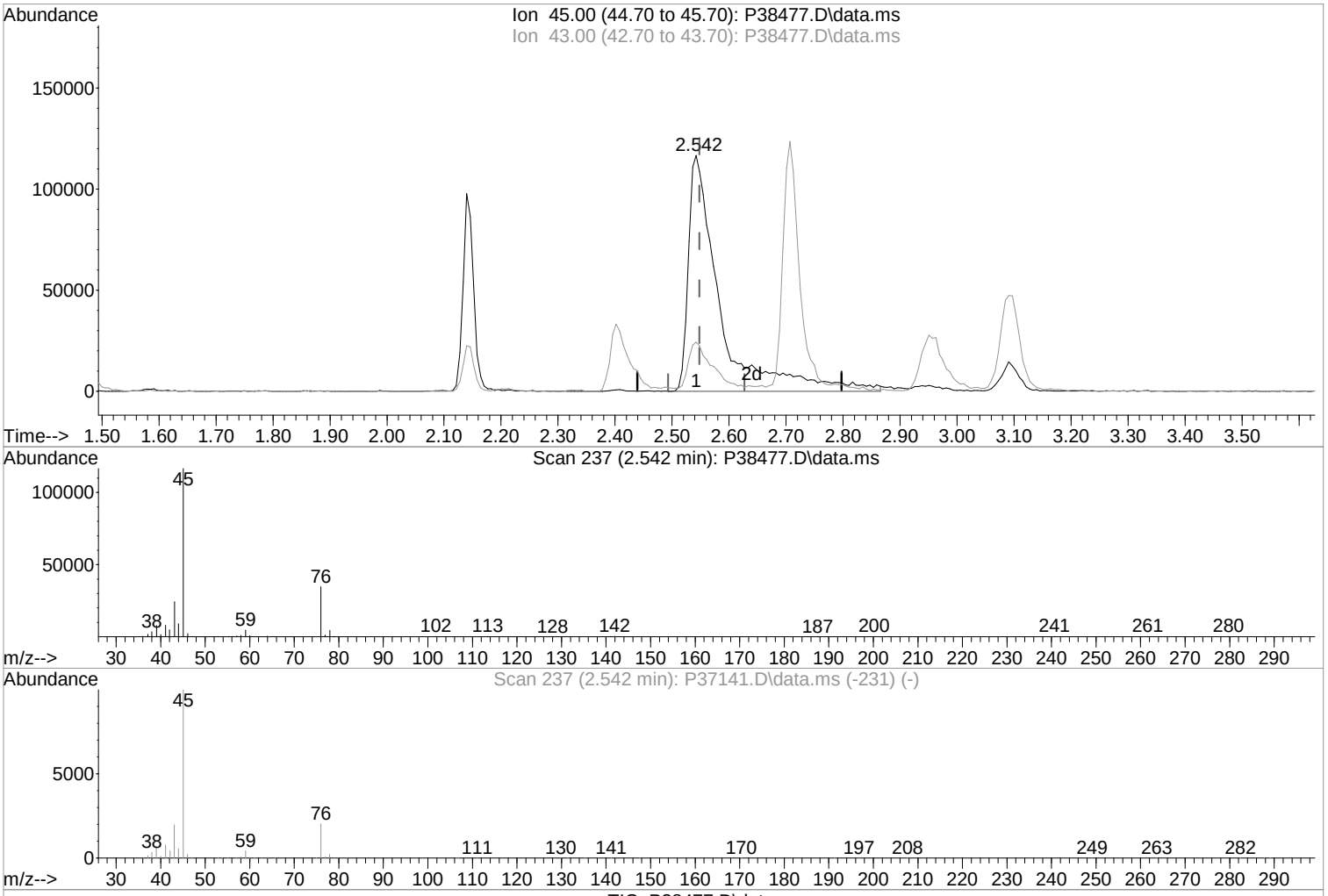


1st 08/14/20
2nd 08/18/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38477.D
Acq On : 13 Aug 2020 10:11 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 14 09:11:14 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38477.D\data.ms

(16) 2-Propanol

2.542min (-0.006) 1144.87 ppb m

response 449309

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	20.83
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

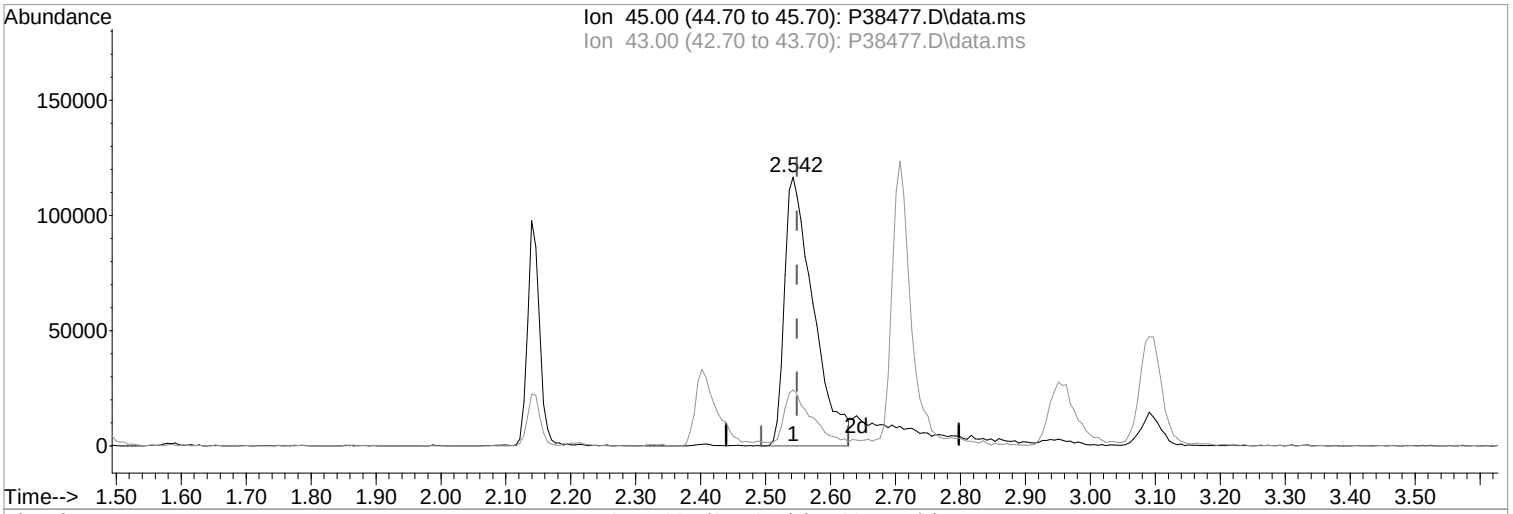
08/14/20

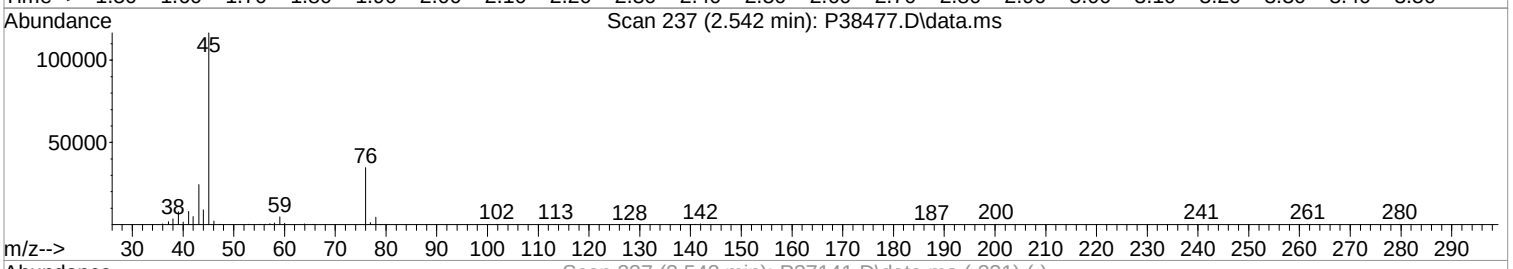
1st 08/14/20
2nd 08/18/20

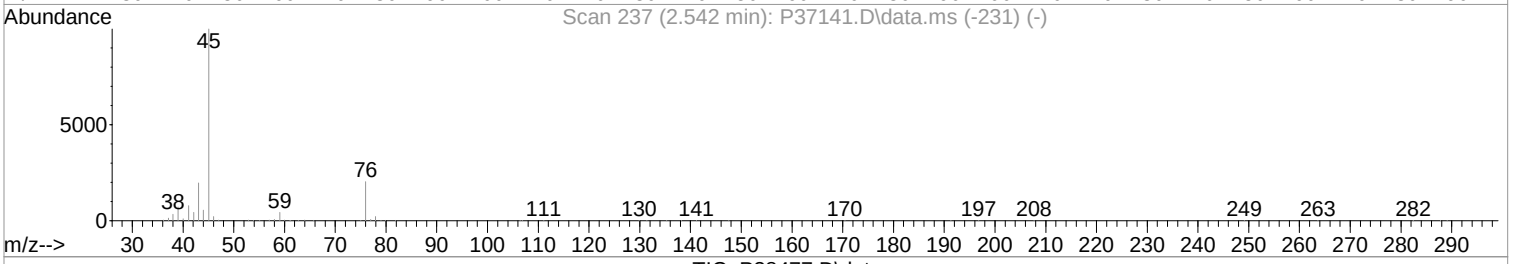
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38477.D
Acq On : 13 Aug 2020 10:11 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 14 09:11:14 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38477.D\data.ms

(16) 2-Propanol

2.542min (-0.006) 918.73 ppb

response 360560

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	20.83
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

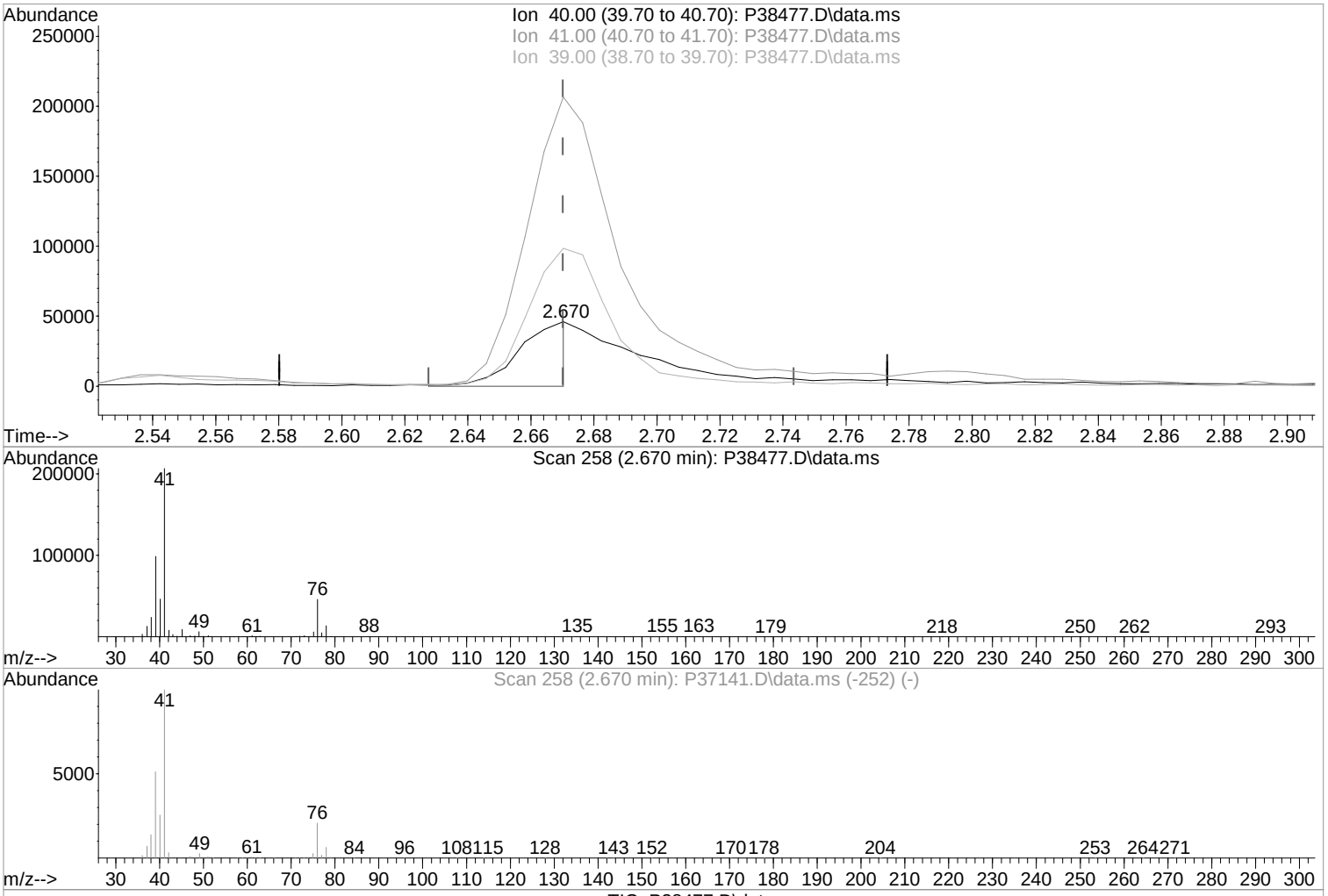
08/14/20

1st 08/14/20
2nd 08/18/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38477.D
Acq On : 13 Aug 2020 10:11 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 14 09:11:14 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38477.D\data.ms

(19) Acetonitrile

2.670min (+0.000) 236.11 ppb m

response 51420

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	449.17#
39.00	200.50	214.08
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

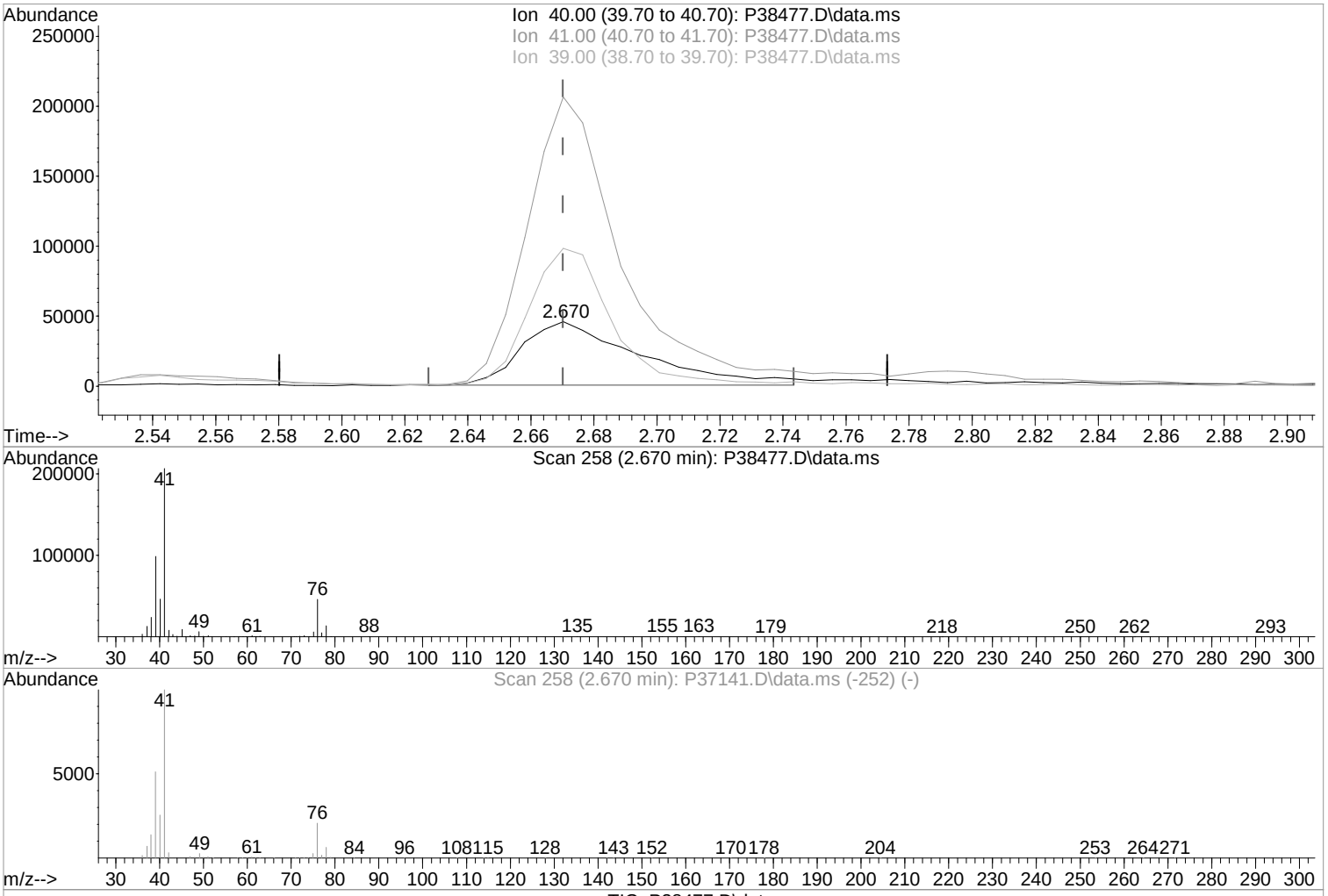
08/14/20

1st 08/14/20
2nd 08/18/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38477.D
Acq On : 13 Aug 2020 10:11 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 14 09:11:14 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38477.D\data.ms

(19) Acetonitrile

2.670min (+0.000) 542.23 ppb

response 118087

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	449.17#
39.00	200.50	214.08
0.00	0.00	0.00

Manual Integration:

Before

08/14/20

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38477.D
Acq On : 13 Aug 2020 10:11 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 14 10:29:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
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	94	0.00
2	P	Dichlorodifluoromethane	50.0000	54.9575	-9.9	91	0.00
3	P	Chloromethane	50.0000	52.8581	-5.7	91	0.00
4	P	Vinyl Chloride	50.0000	55.3661	-10.7	92	0.00
5	P	Bromomethane	50.0000	38.2130	23.6#	82	0.00
6	P	Chloroethane	50.0000	59.2748	-18.5	116	0.01
7		Freon 21	50.0000	55.6925	-11.4	98	0.00
8	P	Trichlorofluoromethane	50.0000	49.6072	0.8	87	0.00
9		Diethyl Ether	50.0000	56.2976	-12.6	93	0.00
10		Freon 123a	50.0000	50.6661	-1.3	91	0.00
11		Freon 123	50.0000	48.9316	2.1	91	0.00
12		Acrolein	250.0000	256.8387	-2.7	92	0.00
13	P	1,1-Diclethene	50.0000	46.0952	7.8	81	0.00
14	P	Freon 113	50.0000	45.8502	8.3	81	0.00
15	P	Acetone	50.0000	44.9100	10.2	88	0.00
16		2-Propanol	1000.0000	1144.8665	-14.5	103	0.00
17		Iodomethane	50.0000	69.6643	-39.3#	89	0.00
18	P	Carbon Disulfide	50.0000	48.2956	3.4	84	0.00
19		Acetonitrile	250.0000	236.1094	5.6	72	0.00
20		Allyl Chloride	50.0000	43.8572	12.3	79	0.00
21	P	Methyl Acetate	50.0000	53.3224	-6.6	97	0.00
22	P	Methylene Chloride	50.0000	49.1074	1.8	90	0.00
23		TBA	1000.0000	1028.2183	-2.8	93	0.00
24		Acrylonitrile	250.0000	284.0622	-13.6	102	0.00
25	P	Methyl-t-Butyl Ether	50.0000	51.9639	-3.9	89	0.00
26	P	trans-1,2-Dichloroethene	50.0000	46.8507	6.3	80	0.00
27		Halothane	-1.0000	0.0000	0.0	0	-4.17#
28	P	1,1-Diclethane	50.0000	46.7891	6.4	83	0.00
29		Vinyl Acetate	50.0000	43.1986	13.6	76	0.00
30		DIPE	50.0000	55.5767	-11.2	95	0.00
31		2-Chloro-1,3-Butadiene	50.0000	51.1303	-2.3	87	0.00
32		ETBE	50.0000	53.9879	-8.0	93	0.00
33		2,2-Dichloropropane	50.0000	42.5354	14.9	72	0.00
34	P	cis-1,2-Dichloroethene	50.0000	47.0439	5.9	83	0.00
35	P	2-Butanone	50.0000	54.4844	-9.0	100	0.00
36		Propionitrile	250.0000	283.4705	-13.4	106	0.00
37		Bromochloromethane	50.0000	48.1917	3.6	88	0.00
38		Methacrylonitrile	50.0000	53.3577	-6.7	96	0.00
39		Tetrahydrofuran	50.0000	53.3982	-6.8	100	0.00
40	P	Chloroform	50.0000	49.4809	1.0	85	0.00
41	P	1,1,1-Trichloroethane	50.0000	46.1950	7.6	79	0.00
42		TAME	50.0000	52.3029	-4.6	91	0.00
43	I	1,4-Difluorobenzene	50.0000	50.0000	0.0	93	0.00
44	P	Cyclohexane	50.0000	49.5520	0.9	89	0.00
45	s	surr4,Dibrflmethane	50.0000	48.6079	2.8	87	0.00
46	P	Carbontetrachloride	50.0000	47.1519	5.7	76	0.00
47		1,1-Dichloropropene	50.0000	45.7059	8.6	81	0.00
48	s	surr1,1,2-dichloroethane-d4	50.0000	45.9442	8.1	84	0.00
49	P	Benzene	50.0000	49.5457	0.9	87	0.00
50	P	1,2-Dichloroethane	50.0000	45.2034	9.6	81	0.00
51		Iso-Butyl Alcohol	1000.0000	1105.2520	-10.5	99	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38477.D
Acq On : 13 Aug 2020 10:11 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 14 10:29:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
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	49.2712	1.5	86	0.00
53		1-Butanol	2500.0000	2856.1465	-14.2	99	0.00
54	P	Trichloroethene	50.0000	44.9441	10.1	84	0.00
55	P	Methylcyclohexane	50.0000	53.2910	-6.6	94	0.00
56	P	1,2-Diclpropane	50.0000	48.7655	2.5	87	0.00
57		Dibromomethane	50.0000	45.7076	8.6	83	0.00
58		1,4-Dioxane	1000.0000	959.5332	4.0	89	0.00
59		Methyl Methacrylate	50.0000	53.2598	-6.5	93	0.00
60	P	Bromodichloromethane	50.0000	48.0775	3.8	79	0.00
61		2-Nitropropane	-1.0000	0.0000	0.0	81	0.00
62		2-Chloroethylvinyl Ether	50.0000	86.0798	-72.2#	158	0.00
63	P	cis-1,3-Dichloropropene	50.0000	48.5281	2.9	82	0.00
64	P	4-Methyl-2-pentanone	50.0000	56.4198	-12.8	100	0.00
65	s	SURR3,Toluene-d8	50.0000	50.1508	-0.3	91	0.00
66	P	Toluene	50.0000	51.3621	-2.7	88	0.00
67	P	trans-1,3-Dichloropropene	50.0000	48.9791	2.0	84	0.00
68		Ethyl Methacrylate	50.0000	56.0147	-12.0	95	0.00
69	P	1,1,2-Trichloroethane	50.0000	50.3019	-0.6	89	0.00
70	s	SURR2,BFB	50.0000	50.1192	-0.2	92	0.00
71	I	d5-Chlorobenzene	50.0000	50.0000	0.0	96	0.00
72	P	Tetrachloroethene	50.0000	44.0816	11.8	83	0.00
73	P	2-Hexanone	50.0000	53.0993	-6.2	100	0.00
74		1,3-Dichloropropane	50.0000	47.8096	4.4	88	0.00
75	P	Dibromochloromethane	50.0000	46.9324	6.1	80	0.00
76		N-Butyl Acetate	50.0000	56.4612	-12.9	100	0.00
77	P	1,2-Dibromoethane	50.0000	47.8791	4.2	87	0.00
78	P	Chlorobenzene	50.0000	46.3255	7.3	87	0.00
79		3-CBTF	50.0000	50.1219	-0.2	90	0.00
80		4-CBTF	50.0000	50.1390	-0.3	90	0.00
81		1,1,1,2-Tetrachloroethane	50.0000	46.5059	7.0	84	0.00
82	P	Ethylbenzene	50.0000	48.3221	3.4	89	0.00
83	P	(m+p)Xylene	100.0000	99.9032	0.1	88	0.00
84	P	o-Xylene	50.0000	50.5609	-1.1	88	0.00
85	P	Styrene	50.0000	52.8783	-5.8	90	0.00
86	I	1,4-Dichlorobenzene-d4	50.0000	50.0000	0.0	95	0.00
87	P	Bromoform	50.0000	43.6522	12.7	80	0.00
88		2-CBTF	50.0000	48.6787	2.6	93	0.00
89	P	Isopropylbenzene	50.0000	49.3355	1.3	90	0.00
90		Cyclohexanone	1000.0000	882.5060	11.7	82	0.00
91		trans-1,4-Dichloro-2-Butene	50.0000	53.3680	-6.7	99	0.00
92	P	1,1,2,2-Tetrachloroethane	50.0000	48.3731	3.3	89	0.00
93		Bromobenzene	50.0000	46.4356	7.1	89	0.00
94		1,2,3-Trichloropropane	50.0000	46.9944	6.0	88	0.00
95		n-Propylbenzene	50.0000	51.9605	-3.9	90	0.00
96		2-Chlorotoluene	50.0000	48.9665	2.1	89	0.00
97		3-Chlorotoluene	50.0000	49.6837	0.6	93	0.00
98		4-Chlorotoluene	50.0000	50.1801	-0.4	90	0.00
99		1,3,5-Trimethylbenzene	50.0000	50.0375	-0.1	89	0.00
100		tert-Butylbenzene	50.0000	49.9705	0.1	91	0.00
101		1,2,4-Trimethylbenzene	50.0000	50.6850	-1.4	89	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38477.D
Acq On : 13 Aug 2020 10:11 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 14 10:29:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
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	47.9837	4.0	90	0.00
103		sec-Butylbenzene	50.0000	51.7313	-3.5	90	0.00
104		p-Isopropyltoluene	50.0000	52.3303	-4.7	92	0.00
105	P	1,3-Dclbenz	50.0000	47.7696	4.5	91	0.00
106	P	1,4-Dclbenz	50.0000	48.1515	3.7	91	0.00
107		2,4-DCBTF	50.0000	47.6634	4.7	89	0.00
108		2,5-DCBTF	50.0000	50.9819	-2.0	97	0.00
109		n-Butylbenzene	50.0000	52.2619	-4.5	90	0.00
110	P	1,2-Dclbenz	50.0000	47.7499	4.5	89	0.00
111	P	1,2-Dibromo-3-chloropropane	50.0000	49.2434	1.5	88	0.00
112		Trielution Dichlorotoluene	150.0000	155.2094	-3.5	93	0.00
113		1,3,5 Trichlorobenzene	50.0000	52.1216	-4.2	95	0.00
114		Coelution Dichlorotoluene	100.0000	106.9676	-7.0	92	0.00
115	P	1,2,4-Tcbenzene	50.0000	52.8867	-5.8	93	0.00
116		Hexachlorobt	50.0000	51.0430	-2.1	92	0.00
117		Naphthalen	50.0000	60.5043	-21.0#	98	0.00
118		1,2,3-Tclbenzene	50.0000	51.5869	-3.2	93	0.00
119		2,4,5-Trichlorotolene	50.0000	57.1583	-14.3	99	0.00
120		2,3,6-Trichlorotoluene	50.0000	57.2719	-14.5	98	0.00

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38477.D
Acq On : 13 Aug 2020 10:11 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 14 10:29:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.450	168	304960	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	480660	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	440960	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	230847	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	134159	48.61	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.22%				
48) surr1,1,2-dichloroetha...	5.853	65	175549	45.94	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 91.88%				
65) SURR3,Toluene-d8	8.316	98	643310	50.15	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.30%				
70) SURR2,BFB	10.870	95	236893	50.12	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.24%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.195	85	186479	54.96	ppb		95
3) Chloromethane	1.323	50	223928	52.86	ppb		97
4) Vinyl Chloride	1.402	62	219897	55.37	ppb		98
5) Bromomethane	1.634	94	121052	38.21	ppb		95
6) Chloroethane	1.713	64	129531	59.27	ppb		94
7) Freon 21	1.866	67	281840	55.69	ppb		98
8) Trichlorofluoromethane	1.902	101	202973	49.61	ppb		99
9) Diethyl Ether	2.140	59	166457	56.30	ppb		90
10) Freon 123a	2.152	67	176777	50.67	ppb		100
11) Freon 123	2.207	83	201464	48.93	ppb		98
12) Acrolein	2.262	56	205666	256.84	ppb		98
13) 1,1-Diclethene	2.329	96	108704	46.10	ppb		91
14) Freon 113	2.329	101	125996	45.85	ppb		98
15) Acetone	2.402	43	80655	44.91	ppb		92
16) 2-Propanol	2.542	45	449309m	1144.87	ppb		
17) Iodomethane	2.469	142	183836	69.66	ppb		95
18) Carbon Disulfide	2.524	76	372794	48.30	ppb		99
19) Acetonitrile	2.670	40	51420m	236.11	ppb		
20) Allyl Chloride	2.670	76	73296	43.86	ppb		95
21) Methyl Acetate	2.707	43	241819	53.32	ppb		97
22) Methylene Chloride	2.798	84	165072	49.11	ppb		98
23) TBA	2.951	59	653518	1028.22	ppb		98
24) Acrylonitrile	3.079	53	556914	284.06	ppb		98
25) Methyl-t-Butyl Ether	3.091	73	567156	51.96	ppb		98
26) trans-1,2-Dichloroethene	3.085	96	128684	46.85	ppb		98
28) 1,1-Diclethane	3.597	63	283277	46.79	ppb		97
29) Vinyl Acetate	3.688	86	22380	43.20	ppb	#	80
30) DIPE	3.701	45	587974	55.58	ppb		89
31) 2-Chloro-1,3-Butadiene	3.713	53	249137	51.13	ppb		97
32) ETBE	4.231	59	532899	53.99	ppb		98
33) 2,2-Dichloropropane	4.432	77	189538	42.54	ppb		94
34) cis-1,2-Dichloroethene	4.450	96	165575	47.04	ppb		96
35) 2-Butanone	4.530	43	129179	54.48	ppb		96
36) Propionitrile	4.639	54	241000	283.47	ppb		95
37) Bromochloromethane	4.853	130	100339	48.19	ppb		95
38) Methacrylonitrile	4.889	67	107458	53.36	ppb		91
39) Tetrahydrofuran	4.950	42	97530	53.40	ppb		88
40) Chloroform	5.036	83	260891	49.48	ppb		92
41) 1,1,1-Trichloroethane	5.304	97	203675	46.19	ppb		94

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38477.D
Acq On : 13 Aug 2020 10:11 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 14 10:29:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.133	73	514264	52.30	ppb	97
44) Cyclohexane	5.365	41	156182	49.55	ppb	97
46) Carbontetrachloride	5.566	117	148819	47.15	ppb	97
47) 1,1-Dichloropropene	5.584	75	204228	45.71	ppb	95
49) Benzene	5.907	78	687585	49.55	ppb	95
50) 1,2-Dichloroethane	5.968	62	219229	45.20	ppb	97
51) Iso-Butyl Alcohol	5.968	43	329013	1105.25	ppb	97
52) n-Heptane	6.352	43	211912	49.27	ppb	97
53) 1-Butanol	6.907	56	529087	2856.15	ppb	97
54) Trichloroethene	6.840	130	154766	44.94	ppb	96
55) Methylcyclohexane	7.054	55	227926	53.29	ppb	96
56) 1,2-Diclpropane	7.133	63	179164	48.77	ppb	97
57) Dibromomethane	7.279	93	96886	45.71	ppb	96
58) 1,4-Dioxane	7.352	88	72974	959.53	ppb	97
59) Methyl Methacrylate	7.352	69	170488	53.26	ppb	100
60) Bromodichloromethane	7.499	83	186890	48.08	ppb	99
62) 2-Chloroethylvinyl Ether	7.901	63	137877	86.08	ppb	96
63) cis-1,3-Dichloropropene	8.035	75	257352	48.53	ppb	99
64) 4-Methyl-2-pentanone	8.248	43	279505	56.42	ppb	98
66) Toluene	8.389	91	754845	51.36	ppb	99
67) trans-1,3-Dichloropropene	8.675	75	236214	48.98	ppb	96
68) Ethyl Methacrylate	8.803	69	302422	56.01	ppb	99
69) 1,1,2-Trichloroethane	8.864	97	165060	50.30	ppb	92
72) Tetrachloroethene	8.968	164	118709	44.08	ppb	93
73) 2-Hexanone	9.151	43	208110	53.10	ppb	99
74) 1,3-Dichloropropane	9.029	76	296481	47.81	ppb	98
75) Dibromochloromethane	9.254	129	128701	46.93	ppb	97
76) N-Butyl Acetate	9.291	43	410551	56.46	ppb	98
77) 1,2-Dibromoethane	9.346	107	161603	47.88	ppb	99
78) Chlorobenzene	9.827	112	455578	46.33	ppb	97
79) 3-CBTF	9.840	180	228245	50.12	ppb	95
80) 4-CBTF	9.894	180	205391	50.14	ppb	96
81) 1,1,1,2-Tetrachloroethane	9.913	131	140722	46.51	ppb	97
82) Ethylbenzene	9.937	106	249364	48.32	ppb	96
83) (m+p)Xylene	10.053	106	617228	99.90	ppb	99
84) o-Xylene	10.407	106	304963	50.56	ppb	97
85) Styrene	10.425	104	541862	52.88	ppb	99
87) Bromoform	10.583	173	82991	43.65	ppb	93
88) 2-CBTF	10.657	180	227972	48.68	ppb	99
89) Isopropylbenzene	10.736	105	786241	49.34	ppb	98
90) Cyclohexanone	10.827	55	845127	882.51	ppb	97
91) trans-1,4-Dichloro-2-B...	11.059	53	70453	53.37	ppb	95
92) 1,1,2,2-Tetrachloroethane	11.016	83	249201	48.37	ppb	99
93) Bromobenzene	10.992	156	193082	46.44	ppb	98
94) 1,2,3-Trichloropropane	11.047	110	78290	46.99	ppb	93
95) n-Propylbenzene	11.089	91	950182	51.96	ppb	99
96) 2-Chlorotoluene	11.156	91	581592	48.97	ppb	99
97) 3-Chlorotoluene	11.211	91	564420	49.68	ppb	99
98) 4-Chlorotoluene	11.254	91	667318	50.18	ppb	97
99) 1,3,5-Trimethylbenzene	11.242	105	681309	50.04	ppb	99
100) tert-Butylbenzene	11.516	119	569542	49.97	ppb	99
101) 1,2,4-Trimethylbenzene	11.553	105	694572	50.69	ppb	99
102) 3,4-DCBTF	11.620	214	180128	47.98	ppb	98
103) sec-Butylbenzene	11.693	105	845736	51.73	ppb	99
104) p-Isopropyltoluene	11.815	119	737583	52.33	ppb	98
105) 1,3-Dclbenz	11.784	146	389143	47.77	ppb	98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38477.D
Acq On : 13 Aug 2020 10:11 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 14 10:29:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.858	146	399135	48.15	ppb	97
107) 2,4-DCBTF	11.906	214	167561	47.66	ppb	98
108) 2,5-DCBTF	11.949	214	196003	50.98	ppb	98
109) n-Butylbenzene	12.150	91	693446	52.26	ppb	98
110) 1,2-Dclbenz	12.156	146	394857	47.75	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.790	157	56801	49.24	ppb	97
112) Trielution Dichlorotol...	12.894	125	1027987	155.21	ppb	98
113) 1,3,5 Trichlorobenzene	12.943	180	296347	52.12	ppb	97
114) Coelution Dichlorotoluene	13.223	125	778160	106.97	ppb	98
115) 1,2,4-Tcbenzene	13.430	180	315457	52.89	ppb	98
116) Hexachlorobt	13.558	225	122202	51.04	ppb	99
117) Naphthalen	13.625	128	1054450	60.50	ppb	99
118) 1,2,3-Tclbenzene	13.808	180	318311	51.59	ppb	96
119) 2,4,5-Trichlorotolene	14.394	159	215736	57.16	ppb	98
120) 2,3,6-Trichlorotoluene	14.473	159	196330	57.27	ppb	95

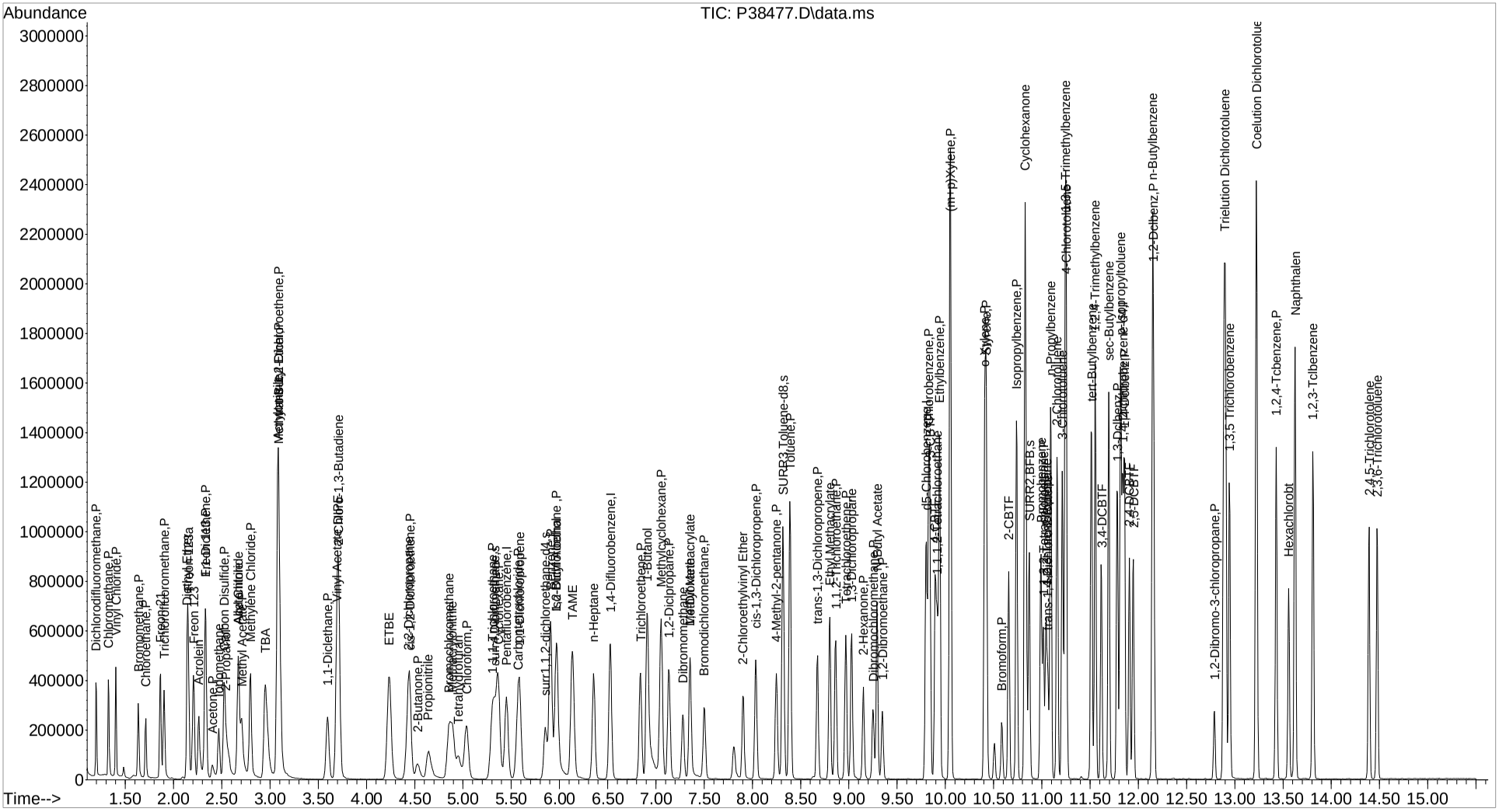
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38477.D
Acq On : 13 Aug 2020 10:11 pm
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 14 10:29:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

1st 08/14/20
2nd 08/18/20

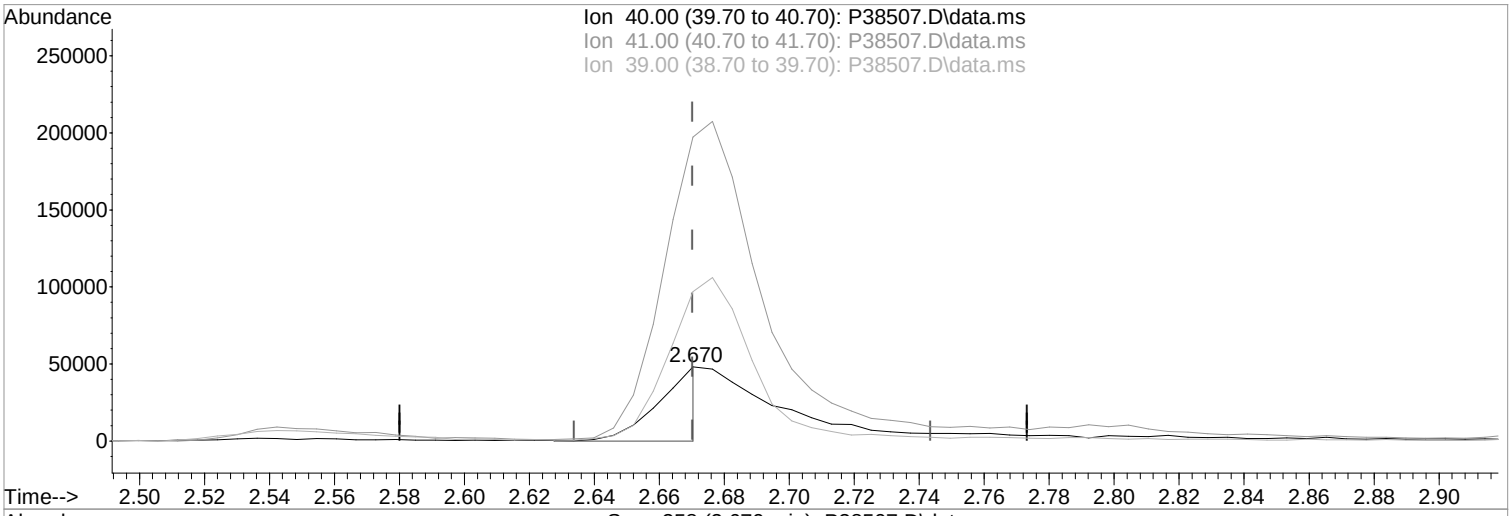


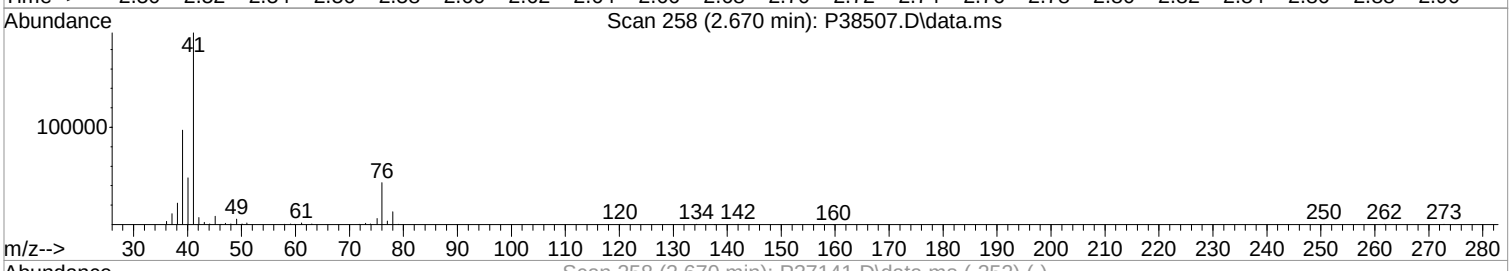
1st 08/14/20
2nd 08/21/20

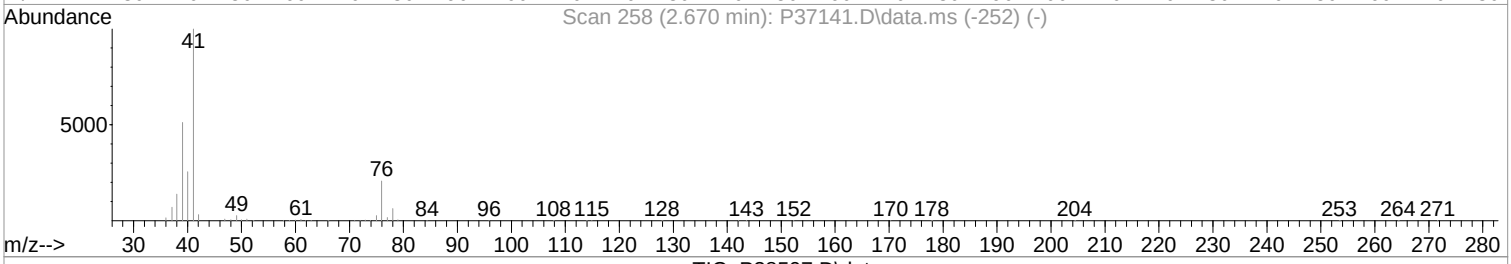
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38507.D
Acq On : 14 Aug 2020 10:02 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 10:17:20 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38507.D\data.ms

(19) Acetonitrile

2.670min (+0.000) 203.34 ppb m

response 43620

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	409.91
39.00	200.50	201.61
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

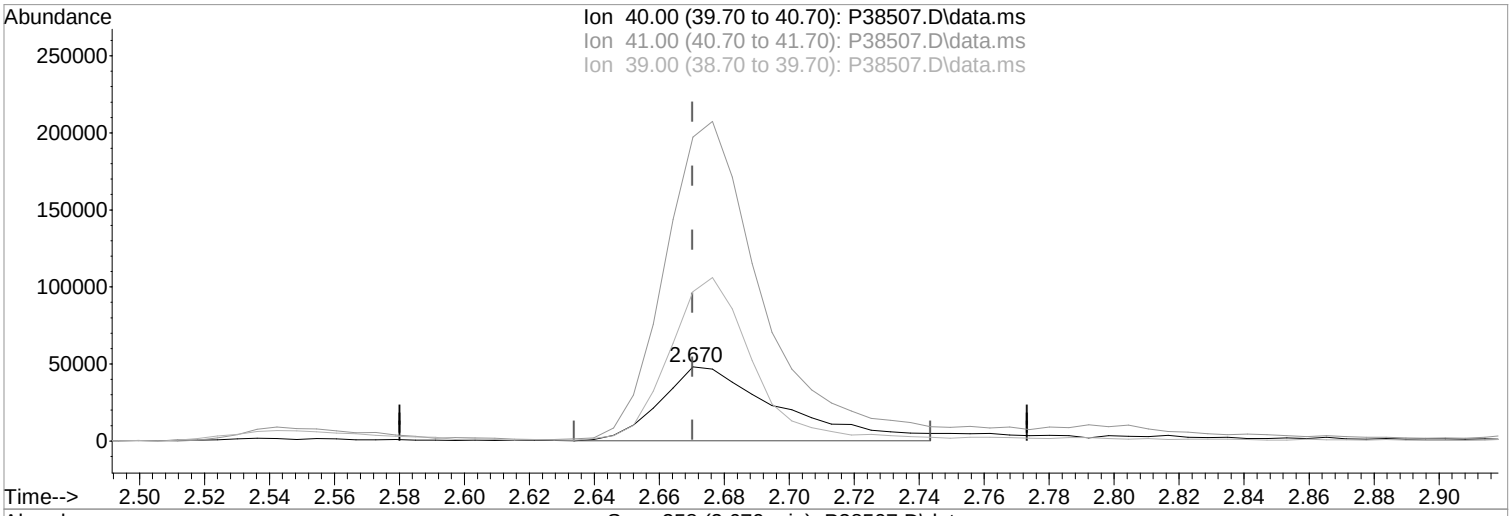
08/14/20

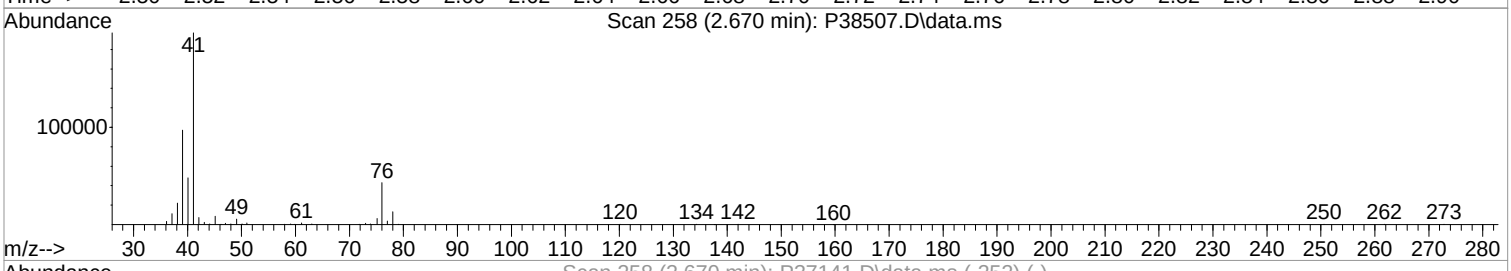
1st 08/14/20
2nd 08/21/20

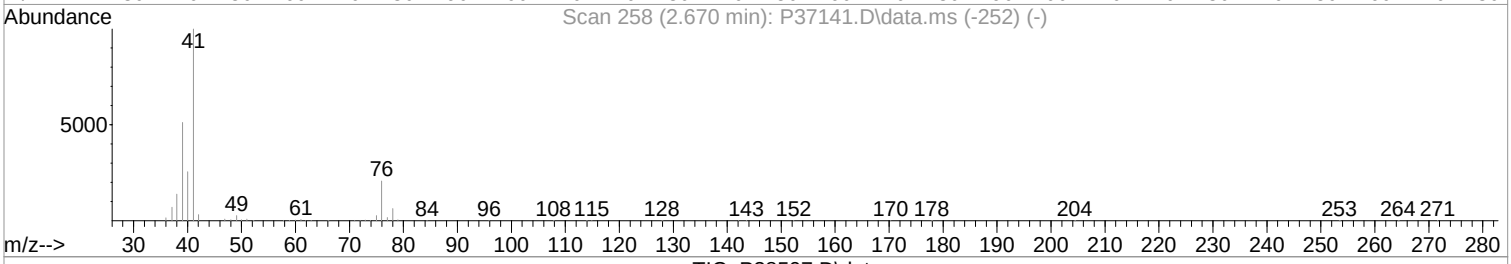
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38507.D
Acq On : 14 Aug 2020 10:02 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 10:17:20 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38507.D\data.ms

(19) Acetonitrile

2.670min (+0.000) 568.67 ppb

response 121988

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	409.91
39.00	200.50	201.61
0.00	0.00	0.00

Manual Integration:

Before

08/14/20

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38507.D
Acq On : 14 Aug 2020 10:02 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 10:18:27 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
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	92	0.00
2	P	Dichlorodifluoromethane	50.0000	58.2156	-16.4	94	0.00
3	P	Chloromethane	50.0000	50.1271	-0.3	85	0.00
4	P	Vinyl Chloride	50.0000	58.3988	-16.8	95	0.00
5	P	Bromomethane	50.0000	34.8063	30.4#	73	0.01
6	P	Chloroethane	50.0000	62.9256	-25.9#	121	0.02
7		Freon 21	50.0000	58.9454	-17.9	102	0.00
8	P	Trichlorofluoromethane	50.0000	53.2270	-6.5	92	0.00
9		Diethyl Ether	50.0000	58.2270	-16.5	95	0.00
10		Freon 123a	50.0000	53.5805	-7.2	94	0.00
11		Freon 123	50.0000	51.5348	-3.1	94	0.00
12		Acrolein	250.0000	286.8774	-14.8	101	0.00
13	P	1,1-Diclethene	50.0000	49.3833	1.2	85	0.00
14	P	Freon 113	50.0000	49.9116	0.2	87	0.00
15	P	Acetone	50.0000	40.8796	18.2	80	0.00
16		2-Propanol	1000.0000	883.2235	11.7	78	0.00
17		Iodomethane	50.0000	67.6952	-35.4#	85	0.00
18	P	Carbon Disulfide	50.0000	49.5721	0.9	85	0.00
19		Acetonitrile	250.0000	203.3427	18.7	61	0.00
20		Allyl Chloride	50.0000	49.3220	1.4	87	0.00
21	P	Methyl Acetate	50.0000	53.6638	-7.3	97	0.00
22	P	Methylene Chloride	50.0000	50.1948	-0.4	91	0.00
23		TBA	1000.0000	975.8468	2.4	87	0.00
24		Acrylonitrile	250.0000	286.7596	-14.7	101	0.00
25	P	Methyl-t-Butyl Ether	50.0000	52.6990	-5.4	89	0.00
26	P	trans-1,2-Dichloroethene	50.0000	48.7426	2.5	82	0.00
27		Halothane	-1.0000	0.0000	0.0	0	-4.17#
28	P	1,1-Diclethane	50.0000	49.6432	0.7	86	0.00
29		Vinyl Acetate	50.0000	53.1967	-6.4	92	0.00
30		DIPE	50.0000	57.9578	-15.9	98	0.00
31		2-Chloro-1,3-Butadiene	50.0000	53.0799	-6.2	89	0.00
32		ETBE	50.0000	54.9976	-10.0	93	0.00
33		2,2-Dichloropropane	50.0000	50.2922	-0.6	84	0.00
34	P	cis-1,2-Dichloroethene	50.0000	48.5158	3.0	85	0.00
35	P	2-Butanone	50.0000	50.9724	-1.9	92	0.00
36		Propionitrile	250.0000	273.1925	-9.3	100	0.00
37		Bromochloromethane	50.0000	50.0692	-0.1	90	0.00
38		Methacrylonitrile	50.0000	53.3302	-6.7	94	0.00
39		Tetrahydrofuran	50.0000	53.5158	-7.0	99	0.00
40	P	Chloroform	50.0000	51.2603	-2.5	86	-0.01
41	P	1,1,1-Trichloroethane	50.0000	48.3991	3.2	82	-0.01
42		TAME	50.0000	55.0033	-10.0	94	0.00
43	I	1,4-Difluorobenzene	50.0000	50.0000	0.0	91	0.00
44	P	Cyclohexane	50.0000	52.0621	-4.1	92	0.00
45	s	surr4,Dibrflmethane	50.0000	48.4831	3.0	86	0.00
46	P	Carbontetrachloride	50.0000	50.1803	-0.4	79	0.00
47		1,1-Dichloropropene	50.0000	50.0103	-0.0	87	0.00
48	s	surr1,1,2-dichloroethane-d4	50.0000	48.3693	3.3	87	0.00
49	P	Benzene	50.0000	51.3404	-2.7	89	0.00
50	P	1,2-Dichloroethane	50.0000	47.2770	5.4	83	0.00
51		Iso-Butyl Alcohol	1000.0000	1095.7449	-9.6	96	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38507.D
Acq On : 14 Aug 2020 10:02 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 10:18:27 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
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	60.7454	-21.5#	104	0.00
53		1-Butanol	2500.0000	2748.8800	-10.0	94	0.00
54	P	Trichloroethene	50.0000	47.0359	5.9	86	0.00
55	P	Methylcyclohexane	50.0000	59.2536	-18.5	102	0.00
56	P	1,2-Diclpropane	50.0000	50.7911	-1.6	88	0.00
57		Dibromomethane	50.0000	49.0411	1.9	87	0.00
58		1,4-Dioxane	1000.0000	962.3537	3.8	88	0.00
59		Methyl Methacrylate	50.0000	55.5226	-11.0	95	0.00
60	P	Bromodichloromethane	50.0000	49.3353	1.3	80	0.00
61		2-Nitropropane	-1.0000	0.0000	0.0	88	0.00
62		2-Chloroethylvinyl Ether	50.0000	85.9593	-71.9#	155	0.00
63	P	cis-1,3-Dichloropropene	50.0000	52.4221	-4.8	87	0.00
64	P	4-Methyl-2-pentanone	50.0000	54.7726	-9.5	96	0.00
65	s	SURR3,Toluene-d8	50.0000	51.4341	-2.9	91	0.00
66	P	Toluene	50.0000	53.3387	-6.7	89	0.00
67	P	trans-1,3-Dichloropropene	50.0000	52.6202	-5.2	88	0.00
68		Ethyl Methacrylate	50.0000	57.2195	-14.4	95	0.00
69	P	1,1,2-Trichloroethane	50.0000	51.3302	-2.7	89	0.00
70	s	SURR2,BFB	50.0000	52.0752	-4.2	94	0.00
71	I	d5-Chlorobenzene	50.0000	50.0000	0.0	94	0.00
72	P	Tetrachloroethene	50.0000	49.4705	1.1	91	0.00
73	P	2-Hexanone	50.0000	52.6673	-5.3	97	0.00
74		1,3-Dichloropropane	50.0000	50.0733	-0.1	90	0.00
75	P	Dibromochloromethane	50.0000	49.9281	0.1	84	0.00
76		N-Butyl Acetate	50.0000	58.1541	-16.3	100	0.00
77	P	1,2-Dibromoethane	50.0000	49.9743	0.1	89	0.00
78	P	Chlorobenzene	50.0000	49.4550	1.1	90	0.00
79		3-CBTF	50.0000	58.8138	-17.6	104	0.00
80		4-CBTF	50.0000	58.4482	-16.9	103	0.00
81		1,1,1,2-Tetrachloroethane	50.0000	48.8939	2.2	86	0.00
82	P	Ethylbenzene	50.0000	52.1144	-4.2	94	0.00
83	P	(m+p)Xylene	100.0000	106.4063	-6.4	91	0.00
84	P	o-Xylene	50.0000	54.2885	-8.6	93	0.00
85	P	Styrene	50.0000	56.7602	-13.5	95	0.00
86	I	1,4-Dichlorobenzene-d4	50.0000	50.0000	0.0	91	0.00
87	P	Bromoform	50.0000	47.1425	5.7	82	0.00
88		2-CBTF	50.0000	57.2721	-14.5	104	0.00
89	P	Isopropylbenzene	50.0000	55.4847	-11.0	96	0.00
90		Cyclohexanone	1000.0000	1081.5402	-8.2	96	0.00
91		trans-1,4-Dichloro-2-Butene	50.0000	58.0961	-16.2	102	0.00
92	P	1,1,2,2-Tetrachloroethane	50.0000	53.1817	-6.4	94	0.00
93		Bromobenzene	50.0000	53.1485	-6.3	97	0.00
94		1,2,3-Trichloropropane	50.0000	52.0842	-4.2	93	0.00
95		n-Propylbenzene	50.0000	59.1822	-18.4	98	0.00
96		2-Chlorotoluene	50.0000	54.9942	-10.0	96	0.00
97		3-Chlorotoluene	50.0000	56.5510	-13.1	101	0.00
98		4-Chlorotoluene	50.0000	55.6009	-11.2	96	0.00
99		1,3,5-Trimethylbenzene	50.0000	56.1077	-12.2	95	0.00
100		tert-Butylbenzene	50.0000	56.1877	-12.4	98	0.00
101		1,2,4-Trimethylbenzene	50.0000	57.5860	-15.2	97	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38507.D
Acq On : 14 Aug 2020 10:02 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 10:18:27 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
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	62.5050	-25.0#	112	0.00
103		sec-Butylbenzene	50.0000	59.8291	-19.7	100	0.00
104		p-Isopropyltoluene	50.0000	60.3706	-20.7#	101	0.00
105	P	1,3-Dclbenz	50.0000	53.6137	-7.2	98	0.00
106	P	1,4-Dclbenz	50.0000	54.7421	-9.5	98	0.00
107		2,4-DCBTF	50.0000	60.0042	-20.0#	107	0.00
108		2,5-DCBTF	50.0000	62.0736	-24.1#	113	0.00
109		n-Butylbenzene	50.0000	61.3867	-22.8#	101	0.00
110	P	1,2-Dclbenz	50.0000	53.9050	-7.8	96	0.00
111	P	1,2-Dibromo-3-chloropropane	50.0000	52.3030	-4.6	89	0.00
112		Trielution Dichlorotoluene	150.0000	180.2749	-20.2#	103	0.00
113		1,3,5 Trichlorobenzene	50.0000	60.5152	-21.0#	106	0.00
114		Coelution Dichlorotoluene	100.0000	123.1904	-23.2#	102	0.00
115	P	1,2,4-Tcbenzene	50.0000	61.8228	-23.6#	104	0.00
116		Hexachlorobt	50.0000	60.8946	-21.8#	105	0.00
117		Naphthalen	50.0000	64.9596	-29.9#	100	0.00
118		1,2,3-Tclbenzene	50.0000	58.1073	-16.2	100	0.00
119		2,4,5-Trichlorotolene	50.0000	68.1776	-36.4#	112	0.00
120		2,3,6-Trichlorotoluene	50.0000	65.3499	-30.7#	107	0.00

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38507.D
Acq On : 14 Aug 2020 10:02 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 10:18:27 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.450	168	300387	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	471042	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	431646	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	220316	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.322	113	131137	48.48	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.96%				
48) surr1,1,2-dichloroetha...	5.853	65	181117	48.37	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 96.74%				
65) SURR3,Toluene-d8	8.316	98	646570	51.43	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.86%				
70) SURR2,BFB	10.870	95	241213	52.08	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 104.16%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.201	85	194572	58.22	ppb		97
3) Chloromethane	1.329	50	209174	50.13	ppb		99
4) Vinyl Chloride	1.408	62	228464	58.40	ppb		99
5) Bromomethane	1.640	94	108607	34.81	ppb		94
6) Chloroethane	1.719	64	135447	62.93	ppb		94
7) Freon 21	1.866	67	293829	58.95	ppb		98
8) Trichlorofluoromethane	1.908	101	214518	53.23	ppb		98
9) Diethyl Ether	2.146	59	169580	58.23	ppb		92
10) Freon 123a	2.158	67	184142	53.58	ppb		95
11) Freon 123	2.213	83	209000	51.53	ppb		100
12) Acrolein	2.262	56	226275	286.88	ppb		93
13) 1,1-Diclethene	2.335	96	114712	49.38	ppb		91
14) Freon 113	2.335	101	135100	49.91	ppb		99
15) Acetone	2.402	43	73362	40.88	ppb		98
16) 2-Propanol	2.542	45	341428	883.22	ppb		99
17) Iodomethane	2.475	142	175961	67.70	ppb		97
18) Carbon Disulfide	2.530	76	376826	49.57	ppb		98
19) Acetonitrile	2.670	40	43620m	203.34	ppb		
20) Allyl Chloride	2.676	76	81193	49.32	ppb	#	84
21) Methyl Acetate	2.713	43	239718	53.66	ppb		94
22) Methylene Chloride	2.798	84	166197	50.19	ppb		96
23) TBA	2.957	59	610931	975.85	ppb		97
24) Acrylonitrile	3.085	53	553772	286.76	ppb		95
25) Methyl-t-Butyl Ether	3.091	73	566554	52.70	ppb		99
26) trans-1,2-Dichloroethene	3.085	96	131873	48.74	ppb		97
28) 1,1-Diclethane	3.597	63	296050	49.64	ppb		95
29) Vinyl Acetate	3.694	86	27230	53.20	ppb	#	93
30) DIPE	3.707	45	603970	57.96	ppb		93
31) 2-Chloro-1,3-Butadiene	3.713	53	254758	53.08	ppb		99
32) ETBE	4.237	59	534725	55.00	ppb		98
33) 2,2-Dichloropropane	4.432	77	220742	50.29	ppb		96
34) cis-1,2-Dichloroethene	4.444	96	168195	48.52	ppb		99
35) 2-Butanone	4.524	43	119040	50.97	ppb		95
36) Propionitrile	4.646	54	228779	273.19	ppb		99
37) Bromochloromethane	4.859	130	102685	50.07	ppb		95
38) Methacrylonitrile	4.902	67	105792	53.33	ppb	#	79
39) Tetrahydrofuran	4.956	42	96279	53.52	ppb		87
40) Chloroform	5.030	83	265404	51.26	ppb		91
41) 1,1,1-Trichloroethane	5.298	97	210193	48.40	ppb		96

1st 08/14/20
2nd 08/21/20

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38507.D
Acq On : 14 Aug 2020 10:02 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 10:18:27 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.133	73	532706	55.00	ppb	98
44) Cyclohexane	5.365	41	160810	52.06	ppb	96
46) Carbontetrachloride	5.566	117	155208	50.18	ppb	94
47) 1,1-Dichloropropene	5.584	75	218990	50.01	ppb	91
49) Benzene	5.907	78	698235	51.34	ppb	95
50) 1,2-Dichloroethane	5.968	62	224698	47.28	ppb	96
51) Iso-Butyl Alcohol	5.968	43	319656	1095.74	ppb	92
52) n-Heptane	6.353	43	256034	60.75	ppb	95
53) 1-Butanol	6.907	56	499027	2748.88	ppb	98
54) Trichloroethene	6.834	130	158728	47.04	ppb	96
55) Methylcyclohexane	7.054	55	248357	59.25	ppb	96
56) 1,2-Diclpropane	7.133	63	182872	50.79	ppb	100
57) Dibromomethane	7.279	93	101872	49.04	ppb	97
58) 1,4-Dioxane	7.346	88	71724	962.35	ppb	95
59) Methyl Methacrylate	7.352	69	174175	55.52	ppb	92
60) Bromodichloromethane	7.499	83	187942	49.34	ppb	97
62) 2-Chloroethylvinyl Ether	7.901	63	134929	85.96	ppb	99
63) cis-1,3-Dichloropropene	8.035	75	272440	52.42	ppb	97
64) 4-Methyl-2-pentanone	8.248	43	265915	54.77	ppb	98
66) Toluene	8.389	91	768209	53.34	ppb	98
67) trans-1,3-Dichloropropene	8.675	75	248696	52.62	ppb	96
68) Ethyl Methacrylate	8.797	69	302745	57.22	ppb	97
69) 1,1,2-Trichloroethane	8.858	97	165064	51.33	ppb	90
72) Tetrachloroethene	8.968	164	130407	49.47	ppb	92
73) 2-Hexanone	9.151	43	202057	52.67	ppb	99
74) 1,3-Dichloropropane	9.029	76	303960	50.07	ppb	98
75) Dibromochloromethane	9.248	129	134024	49.93	ppb	95
76) N-Butyl Acetate	9.291	43	413929	58.15	ppb	98
77) 1,2-Dibromoethane	9.346	107	165112	49.97	ppb	100
78) Chlorobenzene	9.827	112	476082	49.46	ppb	98
79) 3-CBTF	9.840	180	262169	58.81	ppb	97
80) 4-CBTF	9.895	180	234372	58.45	ppb	95
81) 1,1,1,2-Tetrachloroethane	9.913	131	144823	48.89	ppb	98
82) Ethylbenzene	9.937	106	263254	52.11	ppb	93
83) (m+p)Xylene	10.053	106	643520	106.41	ppb	95
84) o-Xylene	10.407	106	320530	54.29	ppb	94
85) Styrene	10.425	104	569356	56.76	ppb	97
87) Bromoform	10.583	173	85538	47.14	ppb	98
88) 2-CBTF	10.657	180	255981	57.27	ppb	98
89) Isopropylbenzene	10.736	105	843900	55.48	ppb	97
90) Cyclohexanone	10.827	55	988482	1081.54	ppb	97
91) trans-1,4-Dichloro-2-B...	11.059	53	73196	58.10	ppb	100
92) 1,1,2,2-Tetrachloroethane	11.016	83	261475	53.18	ppb	99
93) Bromobenzene	10.992	156	210913	53.15	ppb	95
94) 1,2,3-Trichloropropane	11.047	110	82811	52.08	ppb	97
95) n-Propylbenzene	11.089	91	1032872	59.18	ppb	100
96) 2-Chlorotoluene	11.156	91	623388	54.99	ppb	99
97) 3-Chlorotoluene	11.211	91	613127	56.55	ppb	99
98) 4-Chlorotoluene	11.254	91	705676	55.60	ppb	99
99) 1,3,5-Trimethylbenzene	11.242	105	729110	56.11	ppb	99
100) tert-Butylbenzene	11.516	119	611189	56.19	ppb	99
101) 1,2,4-Trimethylbenzene	11.553	105	753141	57.59	ppb	97
102) 3,4-DCBTF	11.614	214	223936	62.50	ppb	95
103) sec-Butylbenzene	11.693	105	933502	59.83	ppb	99
104) p-Isopropyltoluene	11.815	119	812092	60.37	ppb	98
105) 1,3-Dclbenz	11.784	146	416826	53.61	ppb	99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38507.D
Acq On : 14 Aug 2020 10:02 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 10:18:27 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

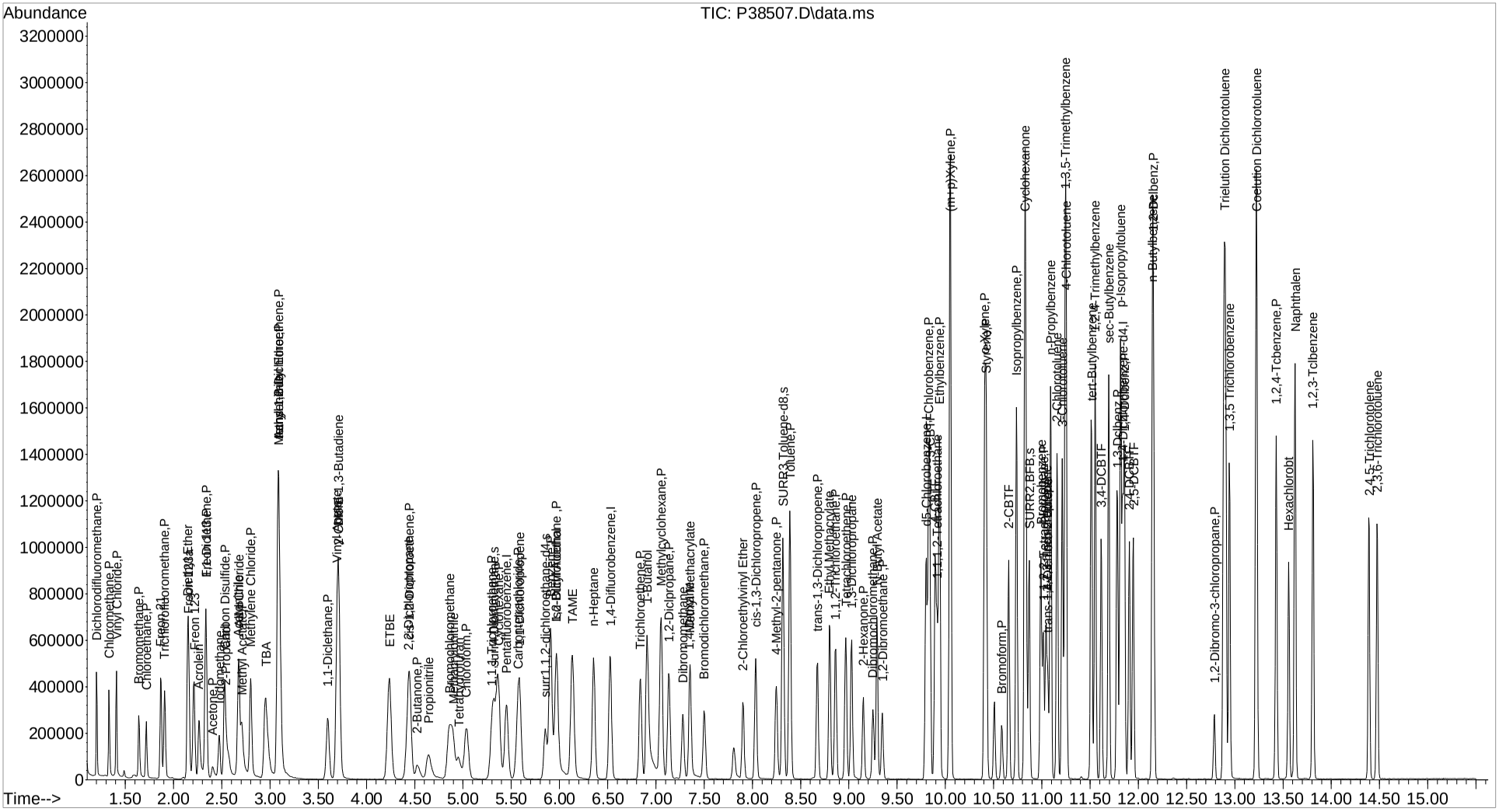
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.858	146	433065	54.74	ppb	96
107) 2,4-DCBTF	11.906	214	201322	60.00	ppb	100
108) 2,5-DCBTF	11.949	214	227759	62.07	ppb	99
109) n-Butylbenzene	12.144	91	777363	61.39	ppb	97
110) 1,2-Dclbenz	12.156	146	425420	53.90	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.790	157	57578	52.30	ppb	93
112) Trielution Dichlorotol...	12.894	125	1139533	180.27	ppb	98
113) 1,3,5 Trichlorobenzene	12.943	180	328374	60.52	ppb	96
114) Coelution Dichlorotoluene	13.223	125	855294	123.19	ppb	99
115) 1,2,4-Tcbenzene	13.430	180	351936	61.82	ppb	98
116) Hexachlorobt	13.558	225	139137	60.89	ppb	97
117) Naphthalen	13.625	128	1080451	64.96	ppb	100
118) 1,2,3-Tclbenzene	13.808	180	342188	58.11	ppb	98
119) 2,4,5-Trichlorotolene	14.394	159	245588	68.18	ppb	98
120) 2,3,6-Trichlorotoluene	14.473	159	213802	65.35	ppb	94

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38507.D
Acq On : 14 Aug 2020 10:02 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 10:18:27 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

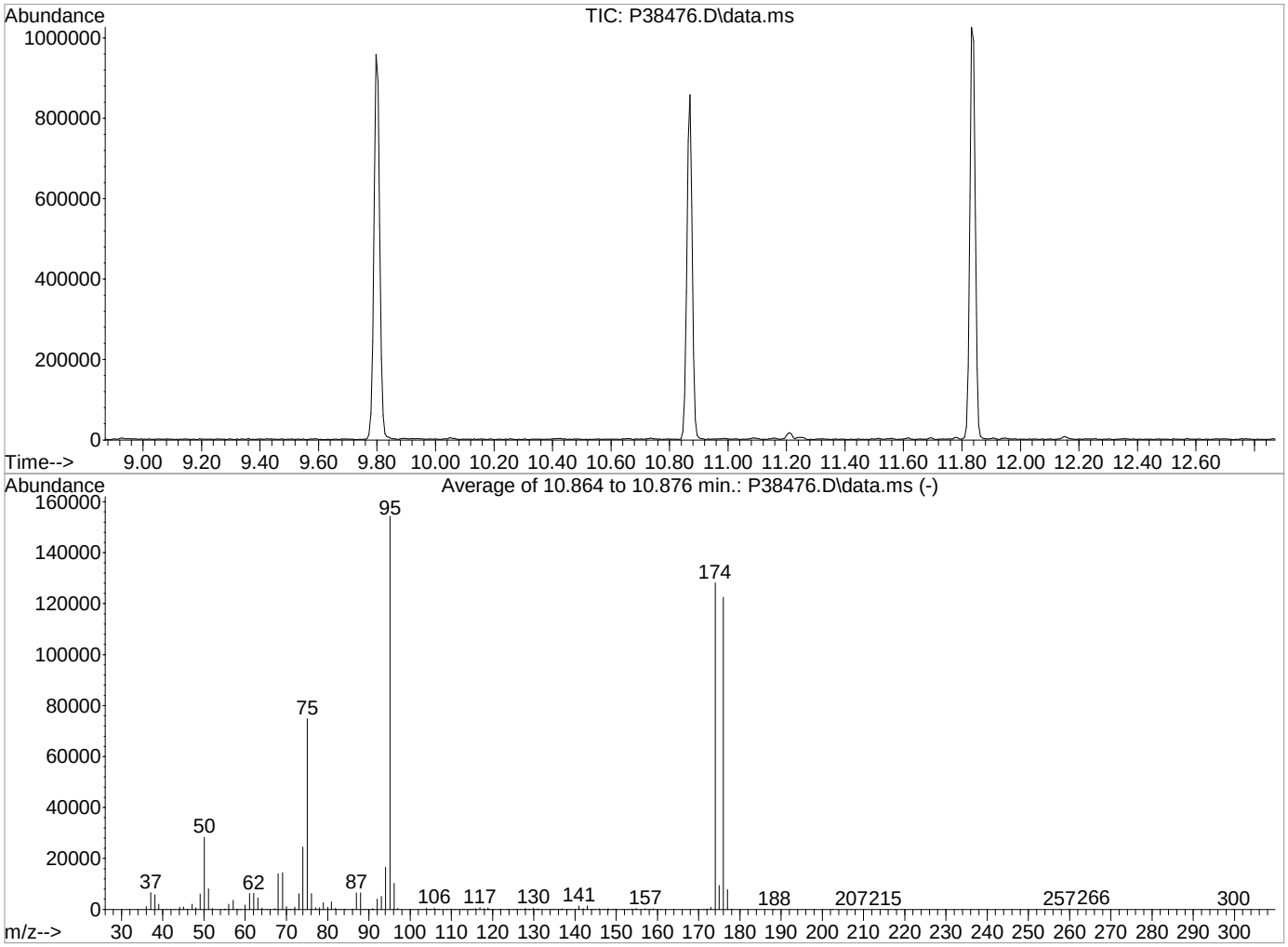


1st 08/14/20
2nd 08/18/20

Data Path : I:\ACQUDATA\msvoa12\Data\081320\
Data File : P38476.D
Acq On : 13 Aug 2020 9:50 pm
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File: INTP90.P

Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Tue Jul 14 10:28:25 2020



AutoFind: Scans 1602, 1603, 1604; Background Corrected with Scan 1595

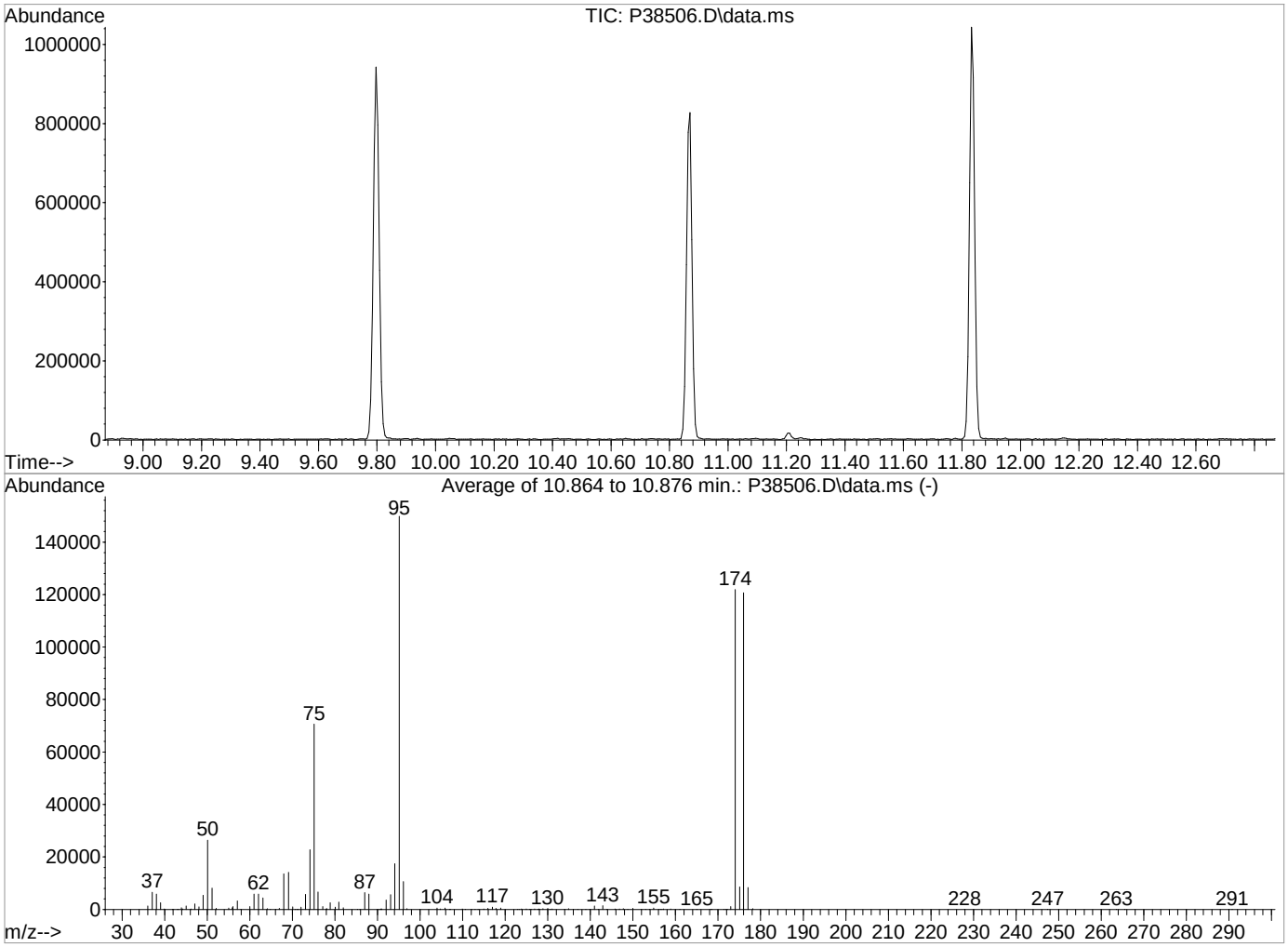
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.4	28323	PASS
75	95	30	60	48.5	74795	PASS
95	95	100	100	100.0	154336	PASS
96	95	5	9	6.7	10281	PASS
173	174	0.00	2	0.7	873	PASS
174	95	50	120	83.1	128245	PASS
175	174	5	9	7.3	9373	PASS
176	174	95	101	95.6	122539	PASS
177	176	5	9	6.4	7821	PASS

1st 08/14/20
2nd 08/21/20

Data Path : I:\ACQUDATA\msvoa12\Data\081420\
Data File : P38506.D
Acq On : 14 Aug 2020 9:33 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\W071320.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Tue Jul 14 10:28:25 2020



AutoFind: Scans 1602, 1603, 1604; Background Corrected with Scan 1592

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	26353	PASS
75	95	30	60	47.2	70664	PASS
95	95	100	100	100.0	149869	PASS
96	95	5	9	7.1	10632	PASS
173	174	0.00	2	0.9	1115	PASS
174	95	50	120	81.3	121861	PASS
175	174	5	9	7.0	8520	PASS
176	174	95	101	99.0	120653	PASS
177	176	5	9	6.9	8300	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 14 10:30:29 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	334568	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	515318	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	459990	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	236872	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	149975	50.68	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.36%				
48) surr1,1,2-dichloroetha...	5.859	65	203903	49.78	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 99.56%				
65) SURR3,Toluene-d8	8.315	98	695379	50.56	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.12%				
70) SURR2,BFB	10.870	95	252353	49.80	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.60%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	187436	50.35	ppb		97
3) Chloromethane	1.329	50	244052	52.51	ppb		100
4) Vinyl Chloride	1.408	62	231300	53.08	ppb		96
5) Bromomethane	1.634	94	171405	49.32	ppb		98
6) Chloroethane	1.713	64	104668	43.66	ppb		94
7) Freon 21	1.872	67	206316	37.16	ppb		99
8) Trichlorofluoromethane	1.908	101	208190	46.38	ppb		94
9) Diethyl Ether	2.152	59	174090	53.67	ppb		94
10) Freon 123a	2.158	67	132478	34.61	ppb		96
11) Freon 123	2.213	83	163604	36.22	ppb		95
12) Acrolein	2.268	56	68538	78.02	ppb		98
13) 1,1-Diclethene	2.341	96	144500	55.85	ppb		89
14) Freon 113	2.341	101	143393	47.56	ppb		98
15) Acetone	2.408	43	103956	54.53	ppb		98
16) 2-Propanol	2.548	45	420199	975.94	ppb		100
17) Iodomethane	2.475	142	131810	45.53	ppb		95
18) Carbon Disulfide	2.530	76	409841	48.40	ppb		99
19) Acetonitrile	2.676	40	74847m	313.27	ppb		
20) Allyl Chloride	2.682	76	93302	50.89	ppb	#	87
21) Methyl Acetate	2.713	43	202010	40.60	ppb		94
22) Methylene Chloride	2.804	84	175954	47.71	ppb		95
23) TBA	2.957	59	720228	1032.90	ppb		96
24) Acrylonitrile	3.085	53	544941	253.36	ppb		97
25) Methyl-t-Butyl Ether	3.103	73	642572	53.66	ppb		100
26) trans-1,2-Dichloroethene	3.091	96	163244	54.17	ppb		97
28) 1,1-Diclethane	3.603	63	321376	48.38	ppb		97
29) Vinyl Acetate	3.700	86	40790	71.31	ppb	#	82
30) DIPE	3.713	45	671647	57.87	ppb		93
31) 2-Chloro-1,3-Butadiene	3.713	53	280748	52.52	ppb		99
32) ETBE	4.243	59	585046	54.03	ppb		99
33) 2,2-Dichloropropane	4.444	77	247426	50.61	ppb		96
34) cis-1,2-Dichloroethene	4.456	96	186726	48.36	ppb		96
35) 2-Butanone	4.530	43	132074	50.78	ppb		97
36) Propionitrile	4.645	54	221603	237.59	ppb		99
37) Bromochloromethane	4.865	130	110747	48.48	ppb		93
38) Methacrylonitrile	4.901	67	113983	51.59	ppb		91
39) Tetrahydrofuran	4.962	42	100268	50.04	ppb		90
40) Chloroform	5.042	83	286737	49.58	ppb		96
41) 1,1,1-Trichloroethane	5.310	97	239607	49.54	ppb		99

1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 14 10:30:29 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.139	73	611809	56.72	ppb		99
44) Cyclohexane	5.371	41	154885	45.84	ppb		93
46) Carbontetrachloride	5.572	117	178746	52.83	ppb		97
47) 1,1-Dichloropropene	5.590	75	238981	49.89	ppb		97
49) Benzene	5.913	78	729728	49.05	ppb		97
50) 1,2-Dichloroethane	5.974	62	245285	47.17	ppb		97
51) Iso-Butyl Alcohol	5.968	43	345496	1082.56	ppb		98
52) n-Heptane	6.358	43	238715	51.77	ppb		98
53) 1-Butanol	6.907	56	570198	2871.06	ppb		99
54) Trichloroethene	6.846	130	169749	45.98	ppb		95
55) Methylcyclohexane	7.053	55	217610	47.46	ppb		95
56) 1,2-Diclpropane	7.139	63	196048	49.77	ppb		99
57) Dibromomethane	7.279	93	108704	47.83	ppb		86
58) 1,4-Dioxane	7.346	88	81445	998.89	ppb		97
59) Methyl Methacrylate	7.358	69	183644	53.51	ppb		96
60) Bromodichloromethane	7.505	83	207175	49.71	ppb		99
62) 2-Chloroethylvinyl Ether	7.907	63	84995	49.50	ppb		96
63) cis-1,3-Dichloropropene	8.035	75	283883	49.93	ppb		98
64) 4-Methyl-2-pentanone	8.248	43	251431	47.34	ppb		99
66) Toluene	8.395	91	795384	50.48	ppb		96
67) trans-1,3-Dichloropropene	8.675	75	259568	50.20	ppb		95
68) Ethyl Methacrylate	8.803	69	308987	53.38	ppb		96
69) 1,1,2-Trichloroethane	8.864	97	174398	49.57	ppb		95
72) Tetrachloroethene	8.968	164	128828	45.86	ppb		94
73) 2-Hexanone	9.151	43	190978	46.71	ppb		94
74) 1,3-Dichloropropane	9.029	76	308828	47.74	ppb		95
75) Dibromochloromethane	9.248	129	154228	53.91	ppb		98
76) N-Butyl Acetate	9.291	43	372558	49.12	ppb		99
77) 1,2-Dibromoethane	9.346	107	174860	49.66	ppb		97
78) Chlorobenzene	9.827	112	502579	48.99	ppb		96
79) 3-CBTF	9.839	180	251302	52.90	ppb		98
80) 4-CBTF	9.894	180	223150	52.22	ppb		96
81) 1,1,1,2-Tetrachloroethane	9.919	131	162847	51.59	ppb		98
82) Ethylbenzene	9.943	106	265618	49.34	ppb		96
83) (m+p)Xylene	10.053	106	660624	102.50	ppb		100
84) o-Xylene	10.413	106	325258	51.69	ppb		93
85) Styrene	10.425	104	544471	50.93	ppb		96
87) Bromoform	10.589	173	96752	49.60	ppb		96
88) 2-CBTF	10.656	180	251989	52.44	ppb		100
89) Isopropylbenzene	10.742	105	822440	50.29	ppb		99
90) Cyclohexanone	10.827	55	1034293	1052.57	ppb		99
91) trans-1,4-Dichloro-2-B...	11.065	53	67669	49.96	ppb		93
92) 1,1,2,2-Tetrachloroethane	11.016	83	277887	52.57	ppb		98
93) Bromobenzene	10.992	156	198259	46.47	ppb		95
94) 1,2,3-Trichloropropane	11.047	110	78326	45.82	ppb	#	85
95) n-Propylbenzene	11.095	91	991309	52.83	ppb		97
96) 2-Chlorotoluene	11.156	91	602352	49.42	ppb		98
97) 3-Chlorotoluene	11.211	91	597806	51.28	ppb		99
98) 4-Chlorotoluene	11.254	91	684154	50.14	ppb		99
99) 1,3,5-Trimethylbenzene	11.242	105	706432	50.56	ppb		99
100) tert-Butylbenzene	11.516	119	592510	50.66	ppb		98
101) 1,2,4-Trimethylbenzene	11.553	105	715551	50.89	ppb		97
102) 3,4-DCBTF	11.620	214	198562	51.55	ppb		98
103) sec-Butylbenzene	11.693	105	881080	52.52	ppb		100
104) p-Isopropyltoluene	11.815	119	739799	51.15	ppb		99
105) 1,3-Dclbenz	11.784	146	395521	47.32	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 14 10:30:29 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

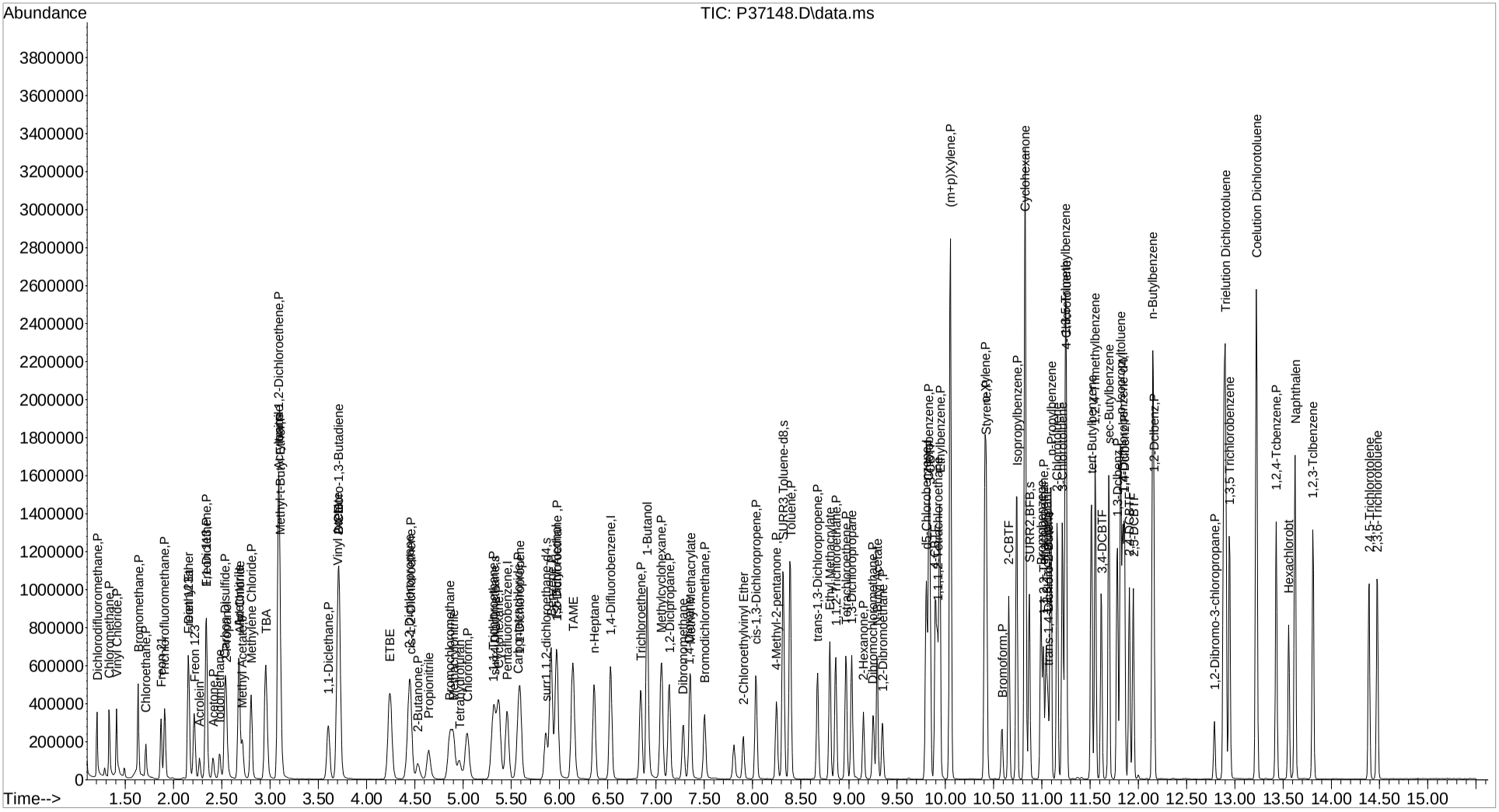
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	396370	46.60	ppb	100
107) 2,4-DCBTF	11.906	214	190538	52.82	ppb	99
108) 2,5-DCBTF	11.949	214	203704	51.64	ppb	97
109) n-Butylbenzene	12.150	91	700129	51.42	ppb	99
110) 1,2-Dclbenz	12.162	146	395795	46.65	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.790	157	60256	50.91	ppb	94
112) Trielution Dichlorotol...	12.900	125	1105573	162.68	ppb	98
113) 1,3,5 Trichlorobenzene	12.943	180	302573	51.86	ppb	99
114) Coelution Dichlorotoluene	13.223	125	837862	112.24	ppb	98
115) 1,2,4-Tcbenzene	13.430	180	311462	50.89	ppb	98
116) Hexachlorobt	13.558	225	116122	47.27	ppb	97
117) Naphthalen	13.625	128	1006622	56.29	ppb	99
118) 1,2,3-Tclbenzene	13.808	180	301180	47.57	ppb	98
119) 2,4,5-Trichlorotolene	14.393	159	220356	56.90	ppb	98
120) 2,3,6-Trichlorotoluene	14.479	159	207550	59.00	ppb	98

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 14 10:30:29 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

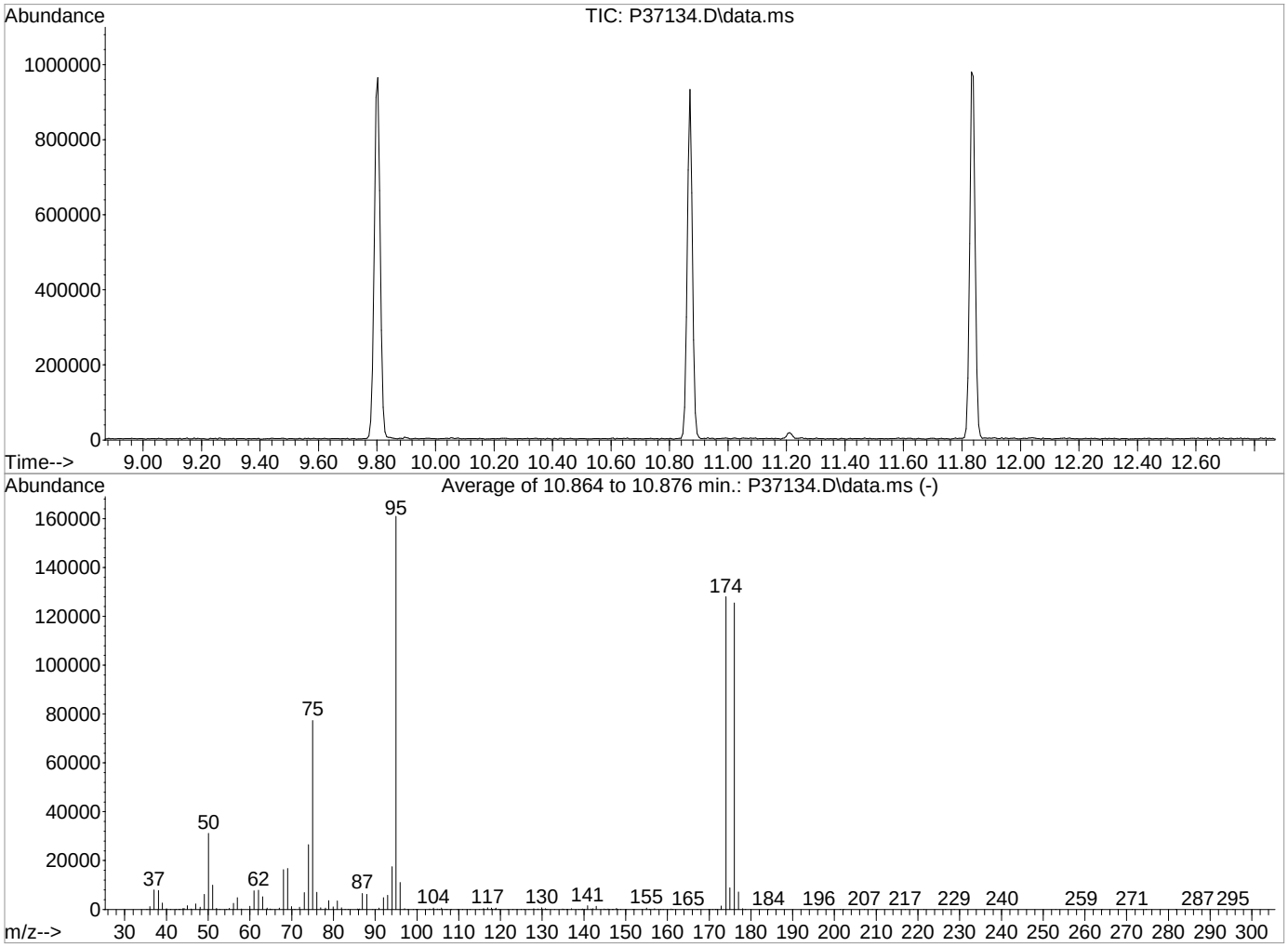


1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37134.D
Acq On : 13 Jul 2020 10:43 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\W071320.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Mon Jul 13 13:05:56 2020



AutoFind: Scans 1602, 1603, 1604; Background Corrected with Scan 1595

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.3	31112	PASS
75	95	30	60	48.1	77408	PASS
95	95	100	100	100.0	161024	PASS
96	95	5	9	6.9	11059	PASS
173	174	0.00	2	1.1	1384	PASS
174	95	50	120	79.5	128075	PASS
175	174	5	9	6.9	8837	PASS
176	174	95	101	98.0	125485	PASS
177	176	5	9	5.6	7080	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37135.D
Acq On : 13 Jul 2020 11:13 am
Operator : K.Ruest
Sample : IBLK Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 14 10:46:04 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

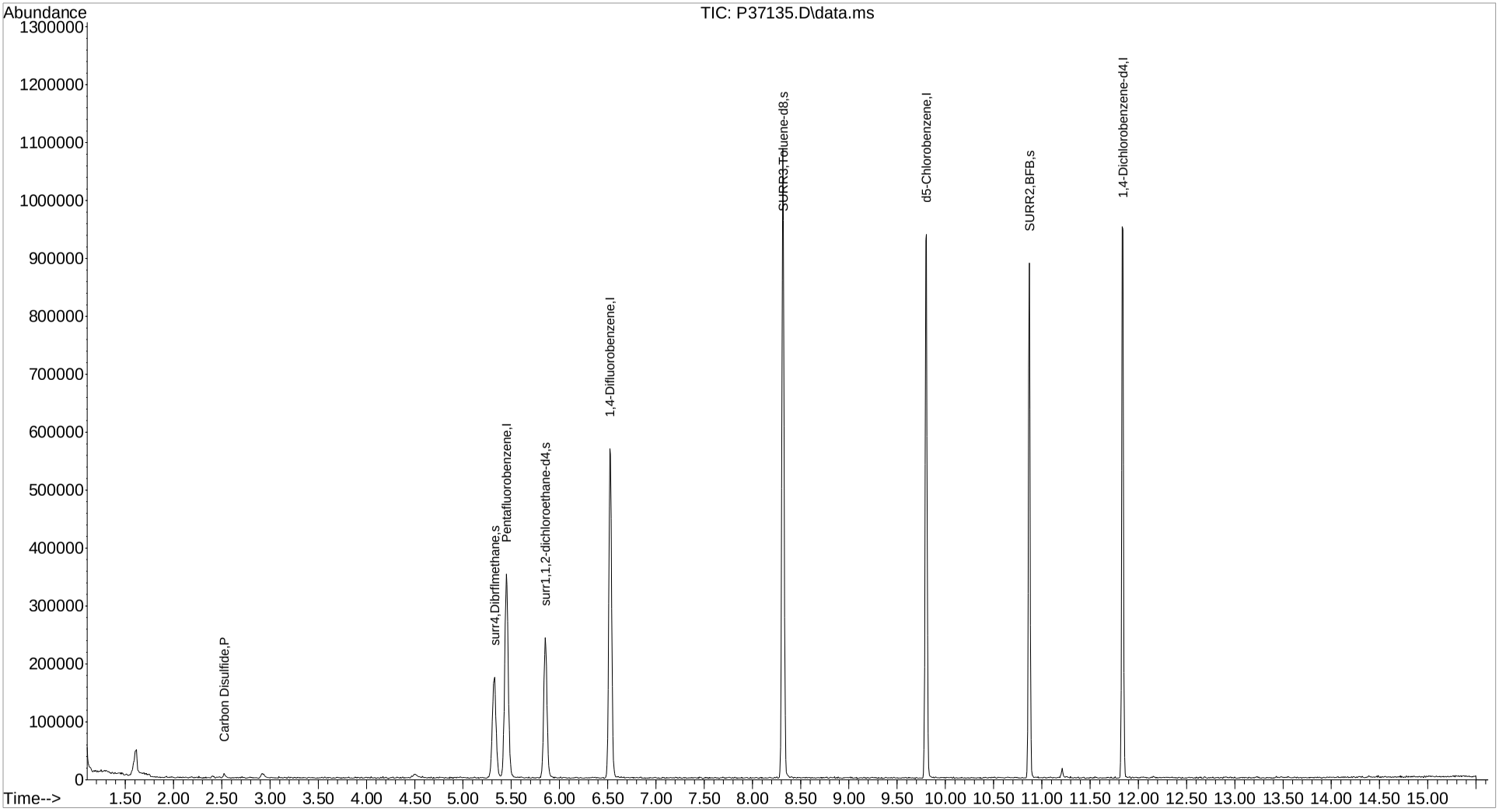
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	323608	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	504388	50.00	ppb	0.00
71) d5-Chlorobenzene	9.803	117	429543	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	193982	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.328	113	146271	50.50	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.00%			
48) surr1,1,2-dichloroetha...	5.853	65	201706	50.31	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 100.62%			
65) SURR3,Toluene-d8	8.316	98	668568	49.67	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.34%			
70) SURR2,BFB	10.870	95	226429	45.65	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 91.30%			
Target Compounds						Qvalue
15) Acetone	2.414	43	2899	Below Cal		83
18) Carbon Disulfide	2.524	76	6828	0.42	ppb	92

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

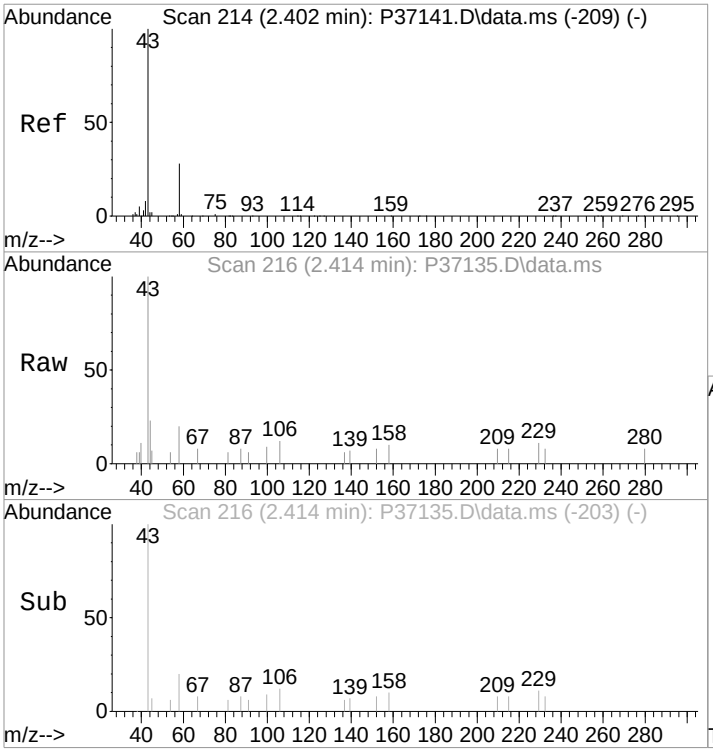
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37135.D
Acq On : 13 Jul 2020 11:13 am
Operator : K.Ruest
Sample : IBLK Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 14 10:46:04 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



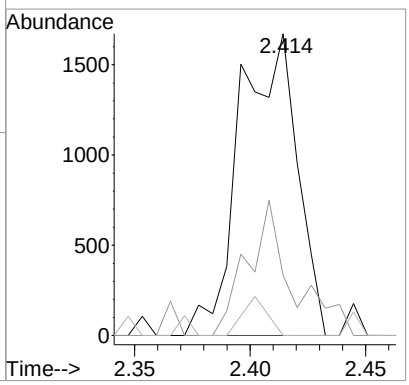
1st 07/14/20
2nd 07/14/20

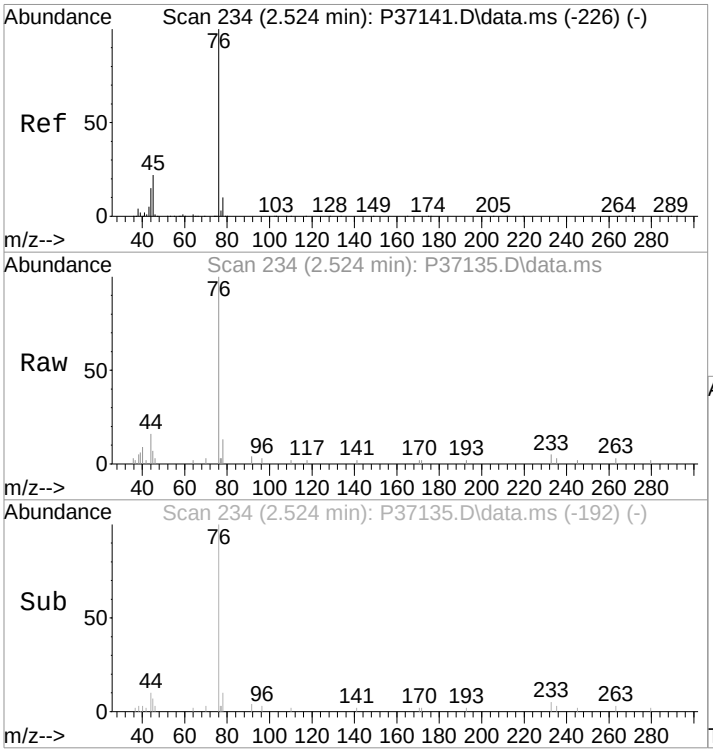


#15
Acetone
Concen: Below Cal
RT: 2.414 min Scan# 216
Delta R.T. 0.007 min
Lab File: P37135.D
Acq: 13 Jul 2020 11:13 am

Tgt Ion: 43 Resp: 2899

Ion	Ratio	Lower	Upper
43	100		
58	19.9	8.2	48.2
42	0.0	0.0	27.7

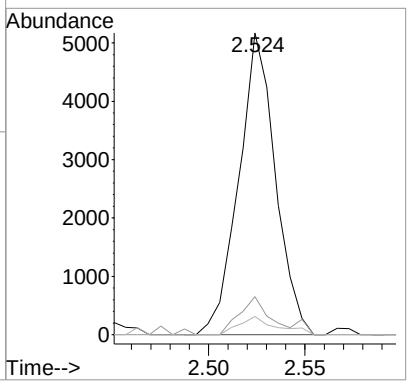




#18
Carbon Disulfide
Concen: 0.42 ppb
RT: 2.524 min Scan# 234
Delta R.T. 0.001 min
Lab File: P37135.D
Acq: 13 Jul 2020 11:13 am

Tgt Ion: 76 Resp: 6828

Ion	Ratio	Lower	Upper
76	100		
78	12.3	0.0	29.5
77	5.9	0.0	22.5

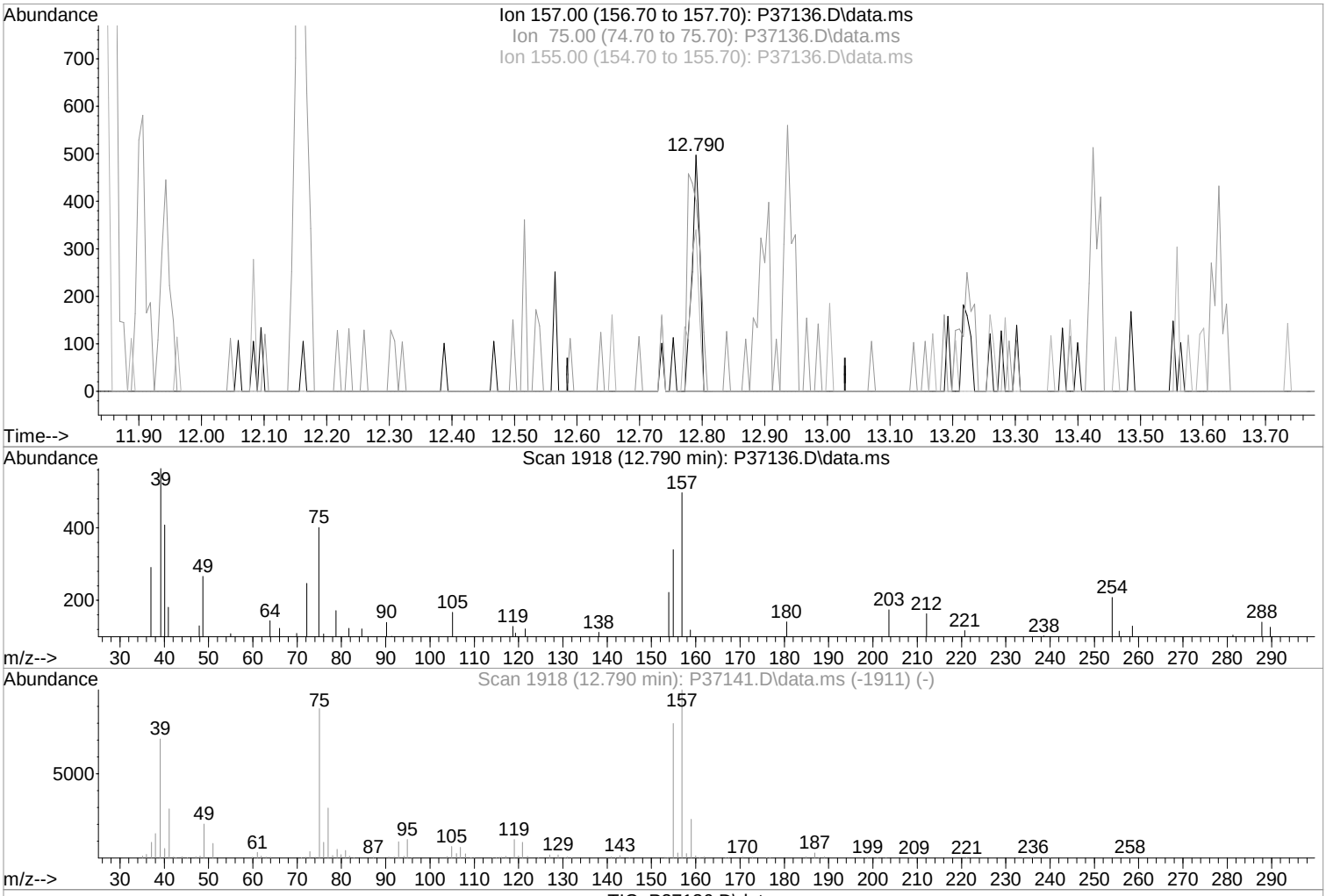


1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(111) 1,2-Dibromo-3-chloropropane (P)

12.790min (+0.000) 0.40 ppb m

response 429

Ion	Exp%	Act%
157.00	100	100
75.00	88.70	80.68
155.00	79.80	68.41
0.00	0.00	0.00

Manual Integration:

After

Peak not found.

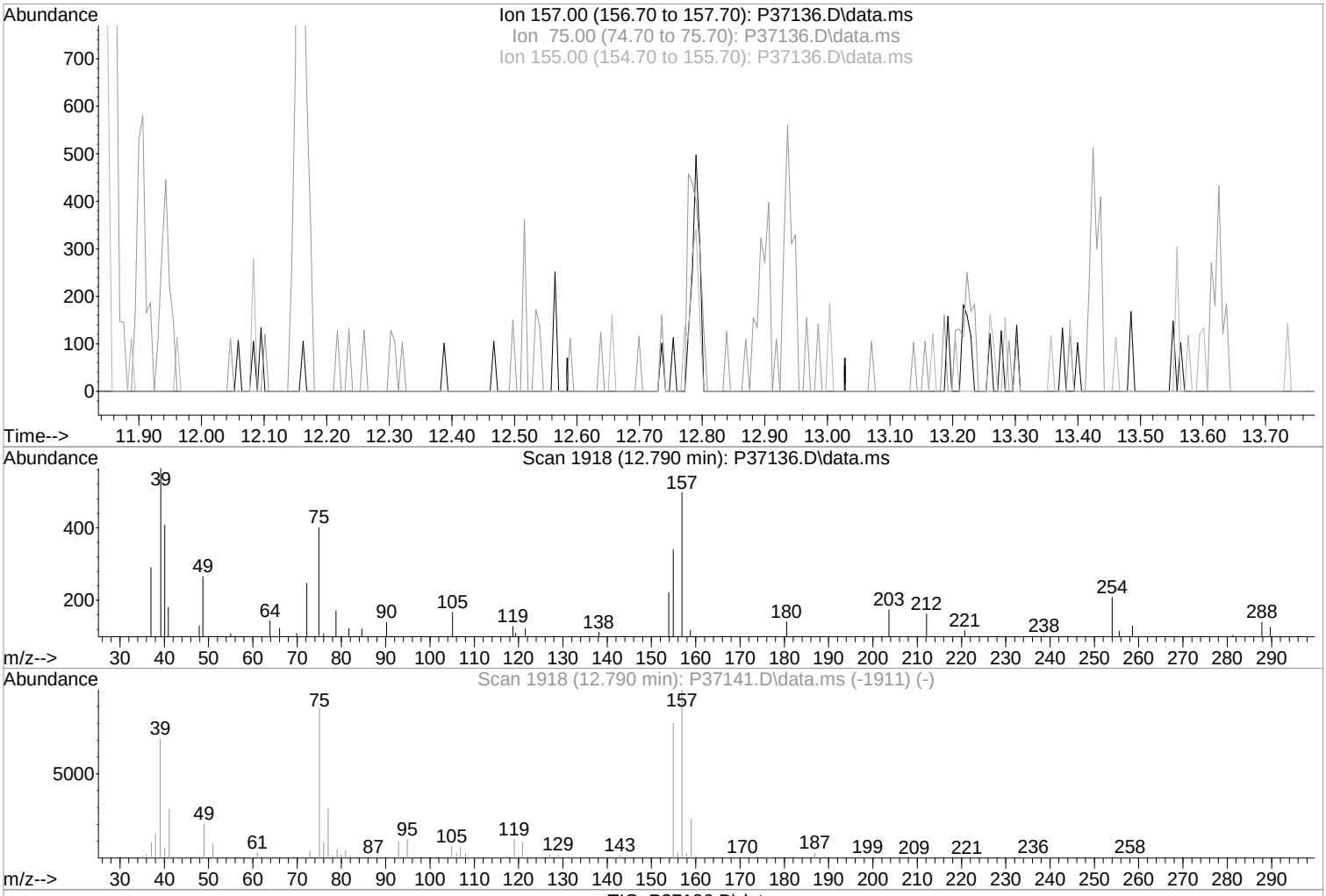
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(111) 1,2-Dibromo-3-chloropropane (P)

12.790min (-12.790) 0.00 ppb

response 0

Ion	Exp%	Act%
157.00	100	0.00
75.00	88.70	0.00#
155.00	79.80	0.00#
0.00	0.00	0.00

Manual Integration:

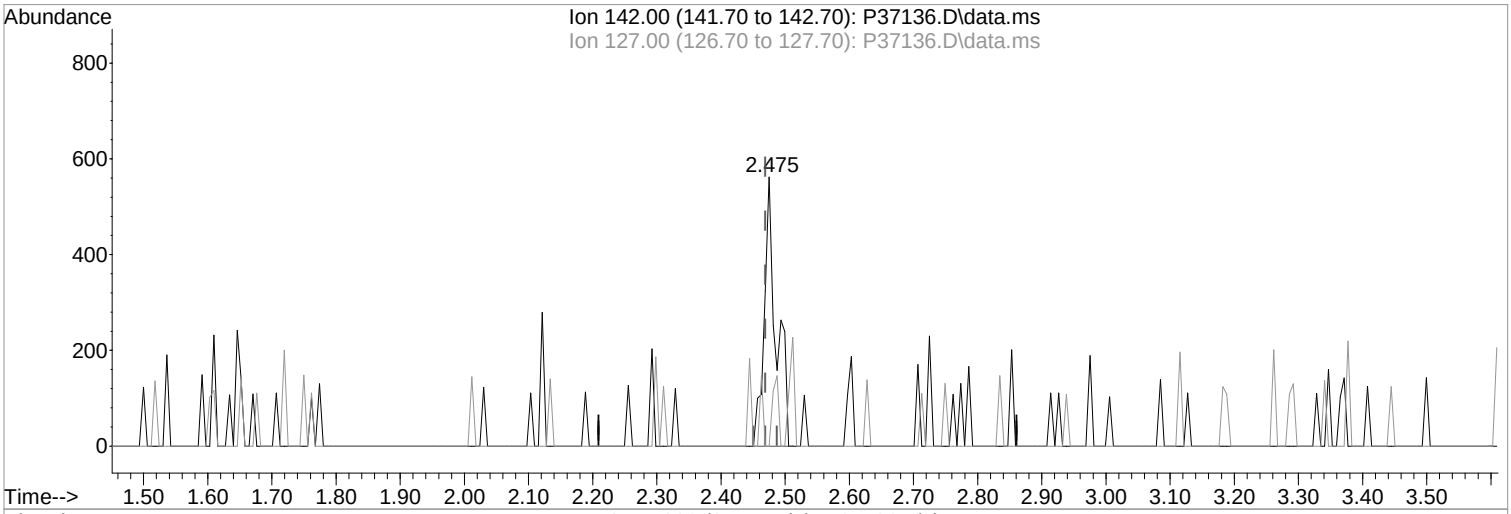
Before

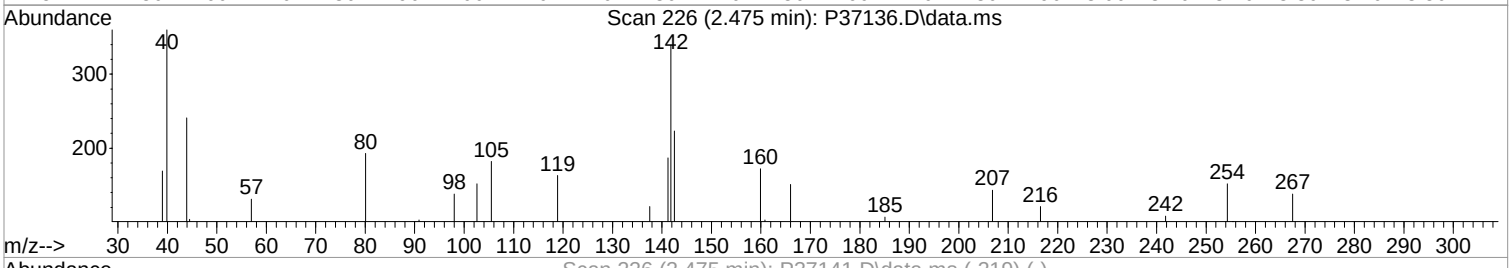
07/13/20

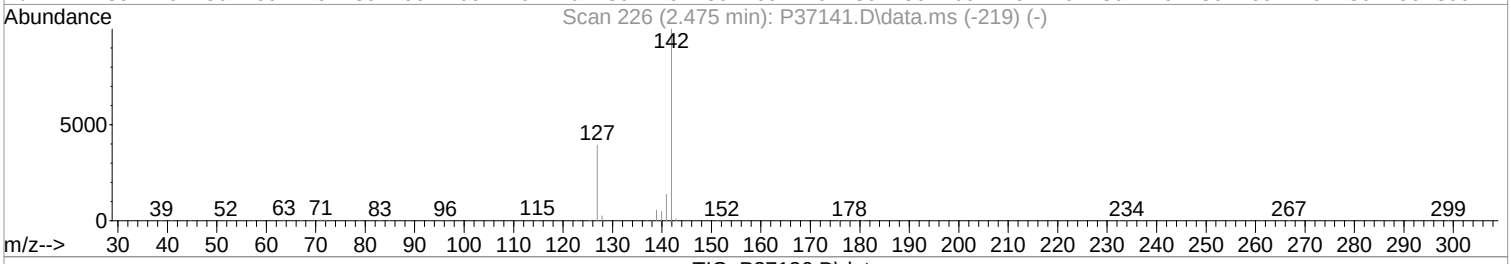
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(17) Iodomethane

2.475min (+0.006) 0.29 ppb m

response 734

Ion	Exp%	Act%
142.00	100	100
127.00	39.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

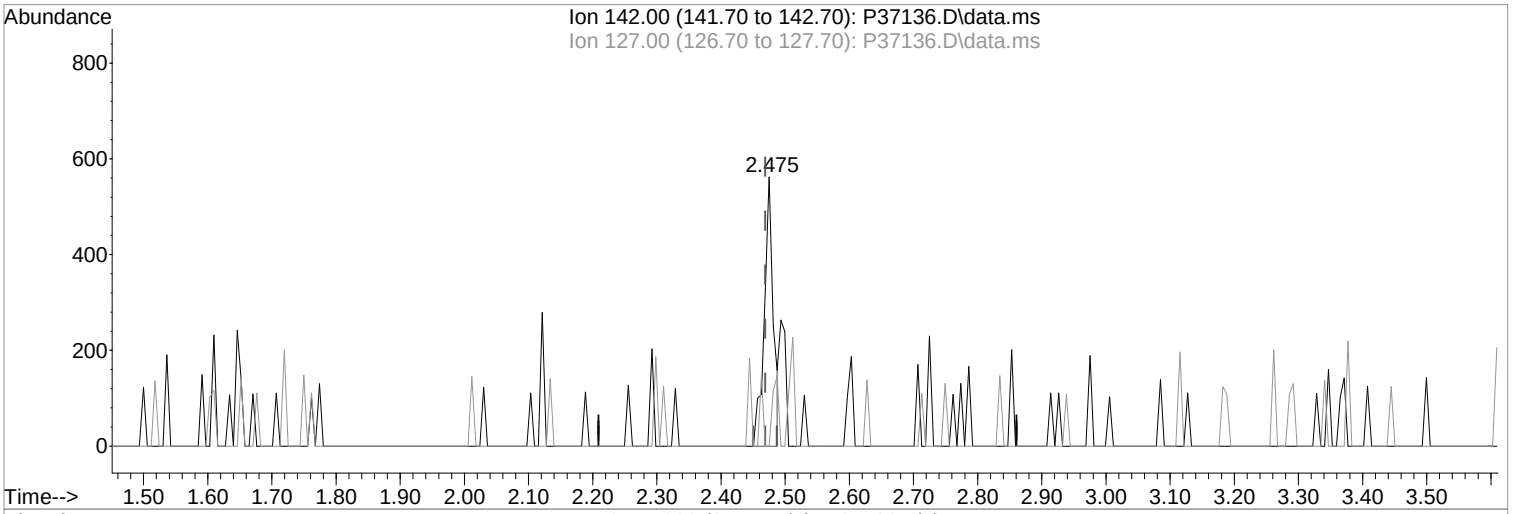
Split Peak

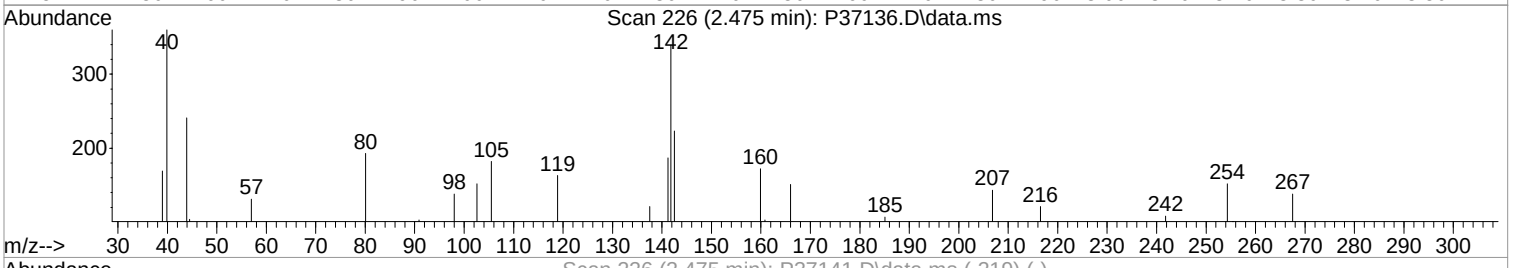
07/13/20

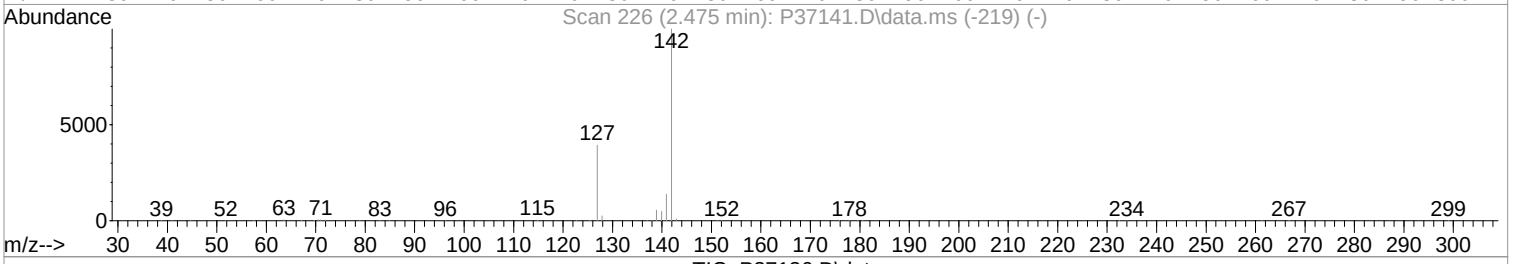
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(17) Iodomethane

2.475min (+0.006) 0.21 ppb

response 550

Ion	Exp%	Act%
142.00	100	100
127.00	39.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

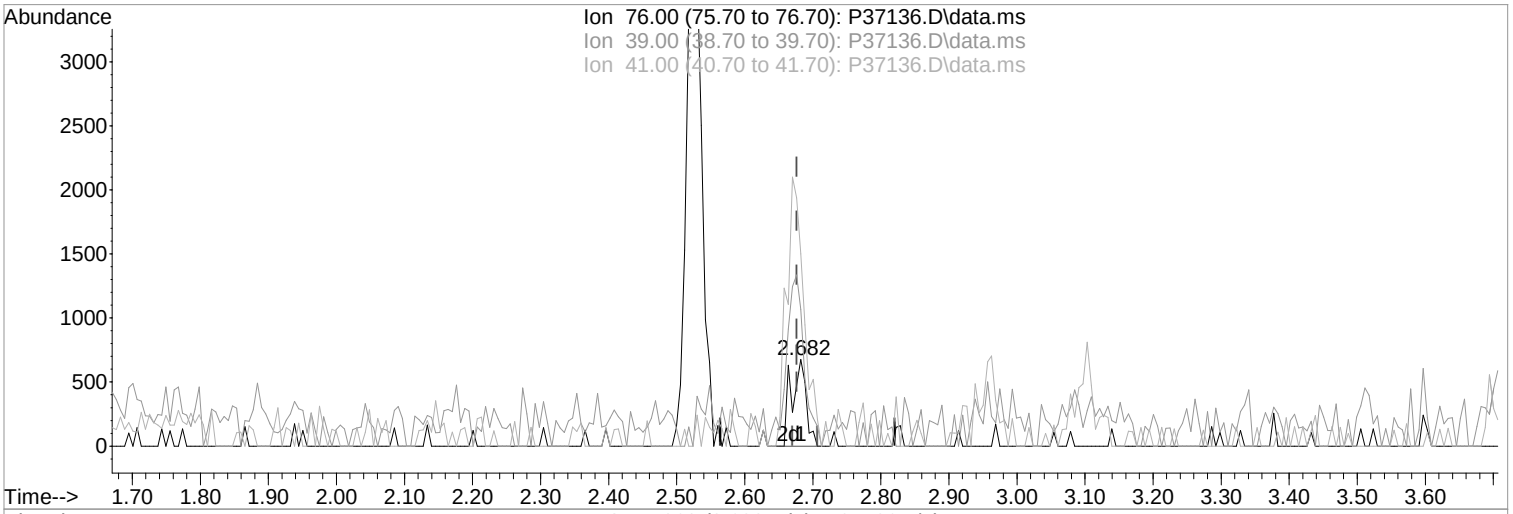
07/13/20

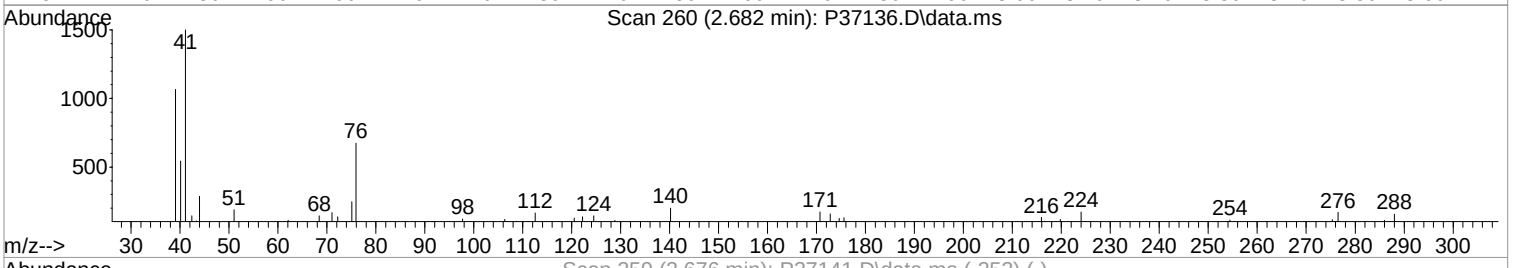
1st 07/14/20
2nd 07/14/20

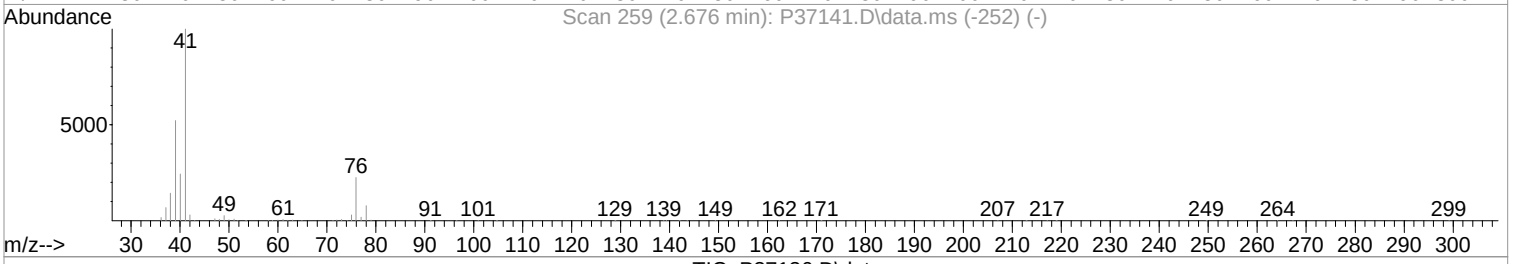
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(20) Allyl Chloride

2.682min (+0.006) 0.62 ppb m

response 1010

Ion	Exp%	Act%
76.00	100	100
39.00	231.00	157.93#
41.00	443.30	222.37#
0.00	0.00	0.00

Manual Integration:

After

Split Peak

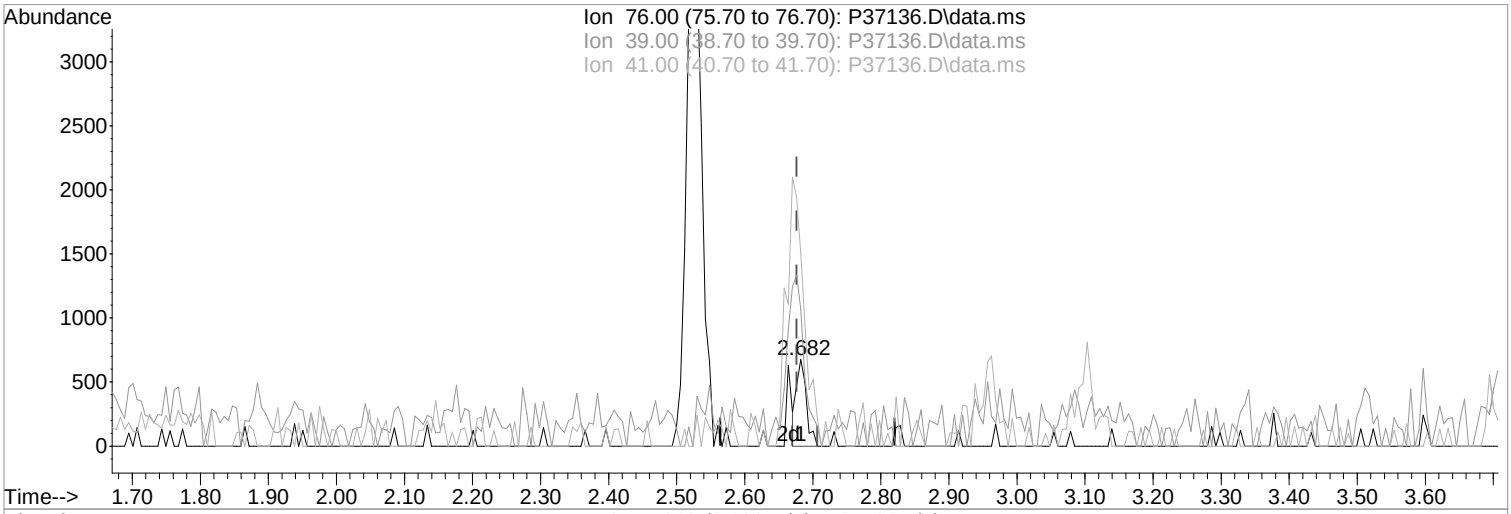
07/13/20

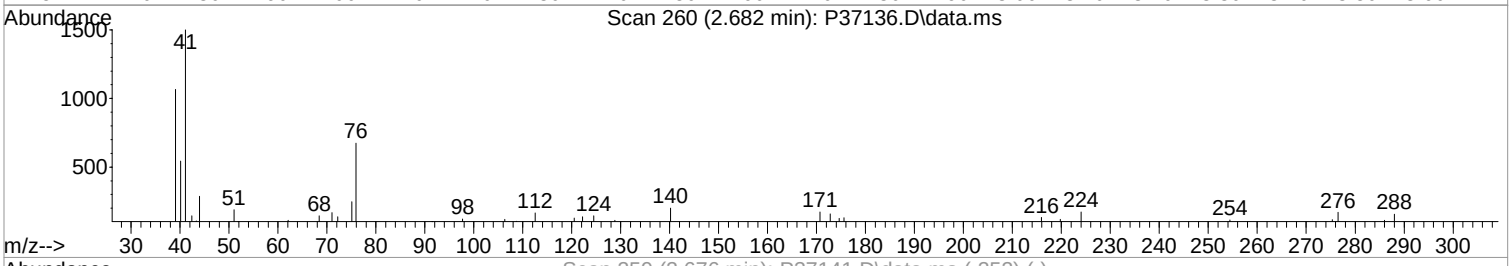
1st 07/14/20
2nd 07/14/20

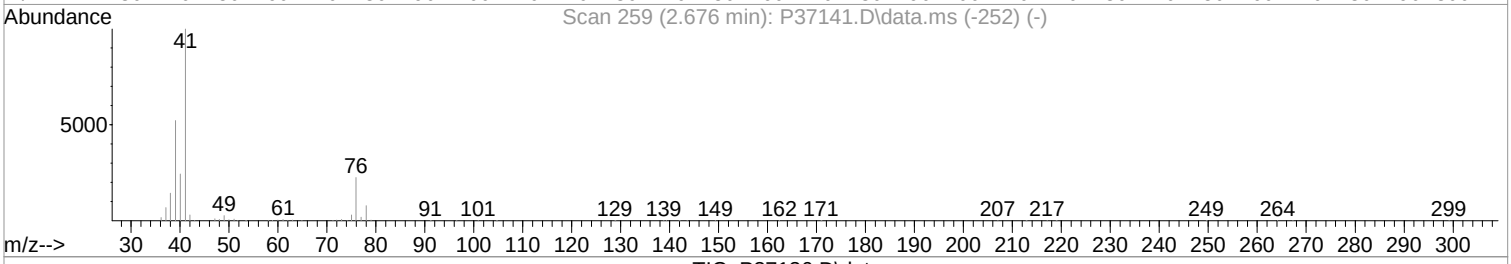
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(20) Allyl Chloride

2.682min (+0.006) 0.42 ppb

response 682

Ion	Exp%	Act%
76.00	100	100
39.00	231.00	157.93#
41.00	443.30	222.37#
0.00	0.00	0.00

Manual Integration:

Before

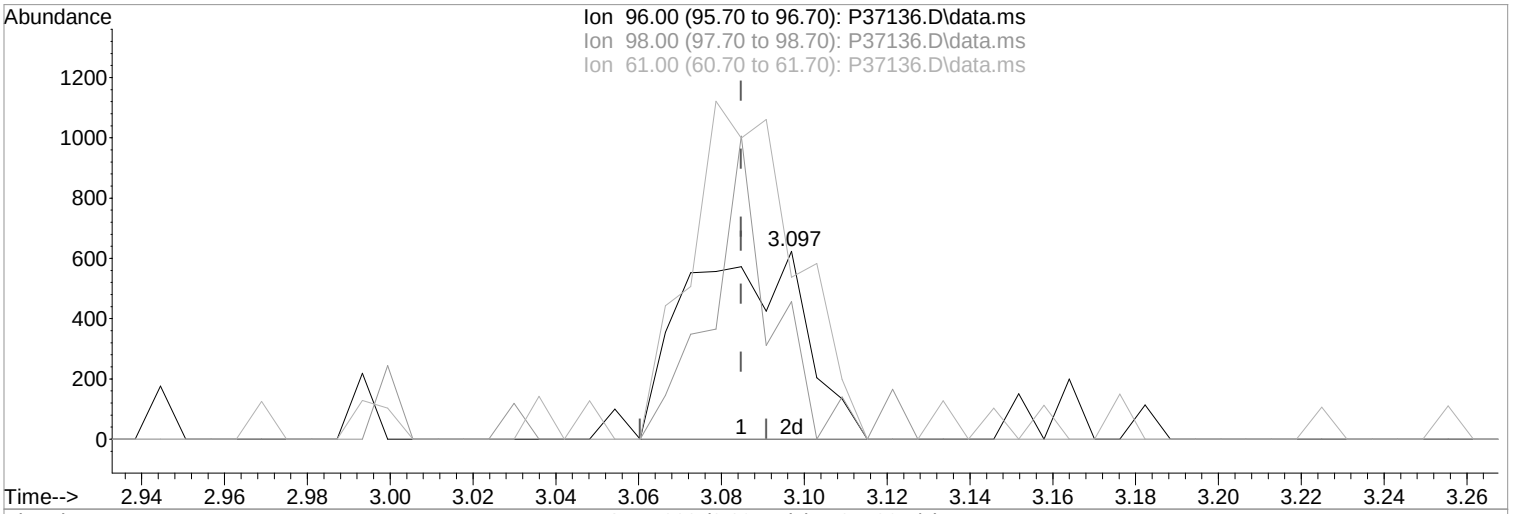
07/13/20

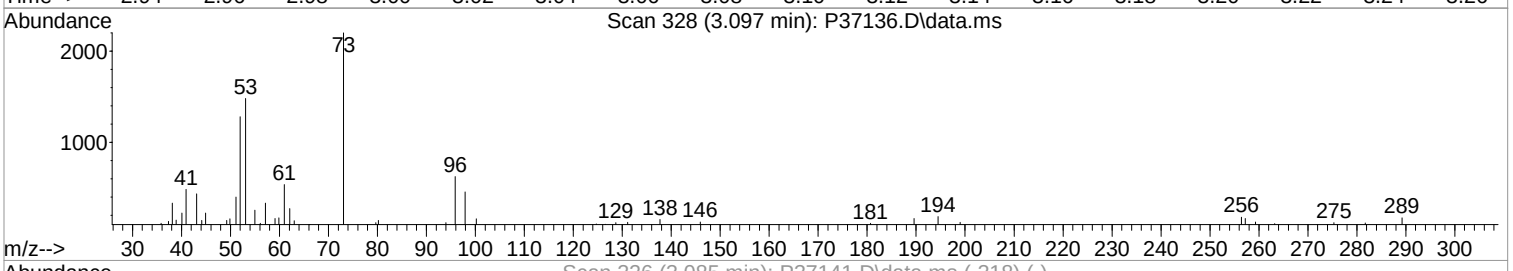
1st 07/14/20
2nd 07/14/20

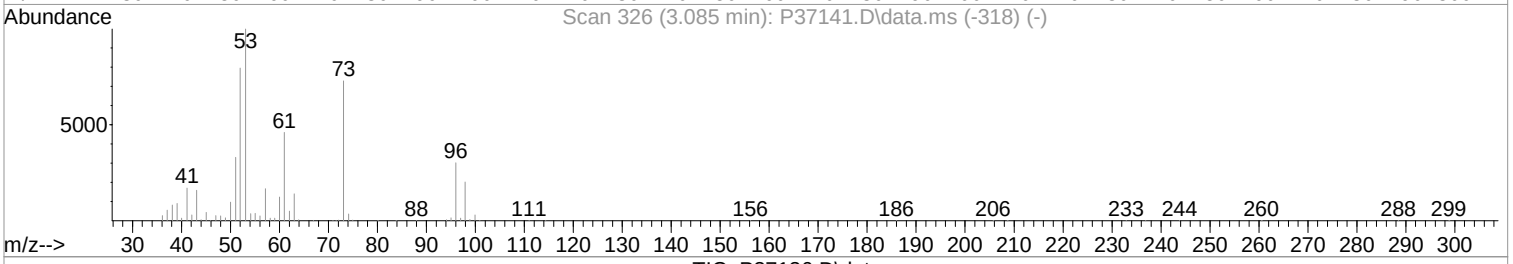
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(26) trans-1,2-Dichloroethene (P)

3.097min (+0.012) 0.47 ppb m

response 1252

Ion	Exp%	Act%
96.00	100	100
98.00	66.80	73.24
61.00	152.80	86.06#
0.00	0.00	0.00

Manual Integration:

After

Split Peak

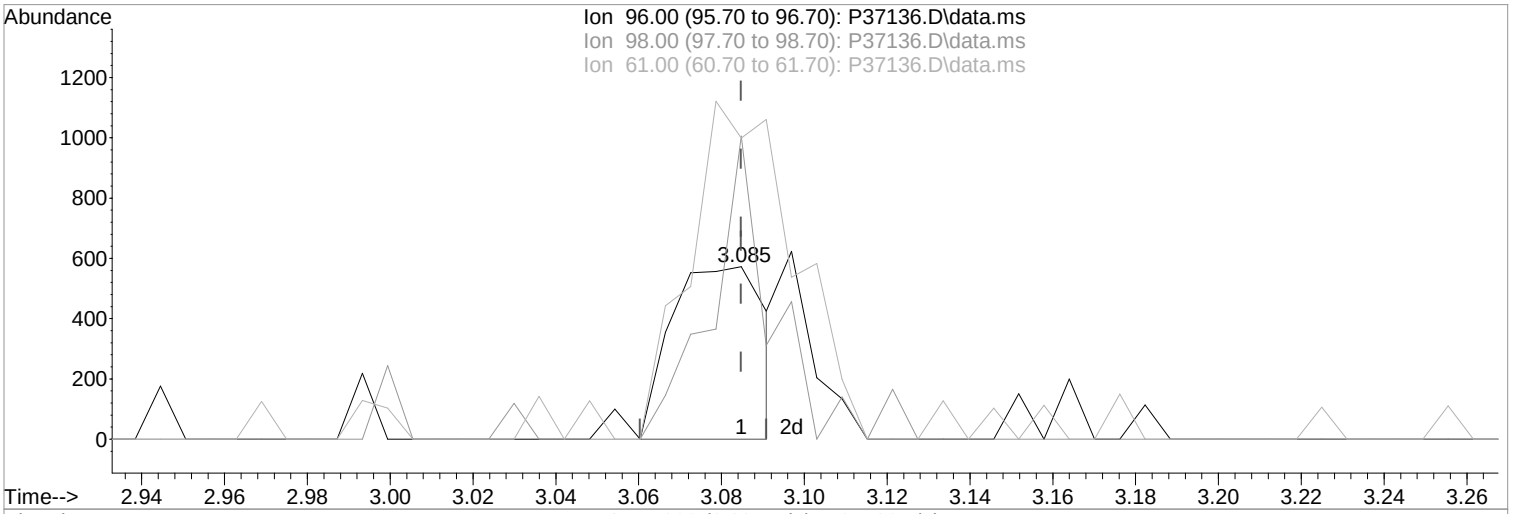
07/13/20

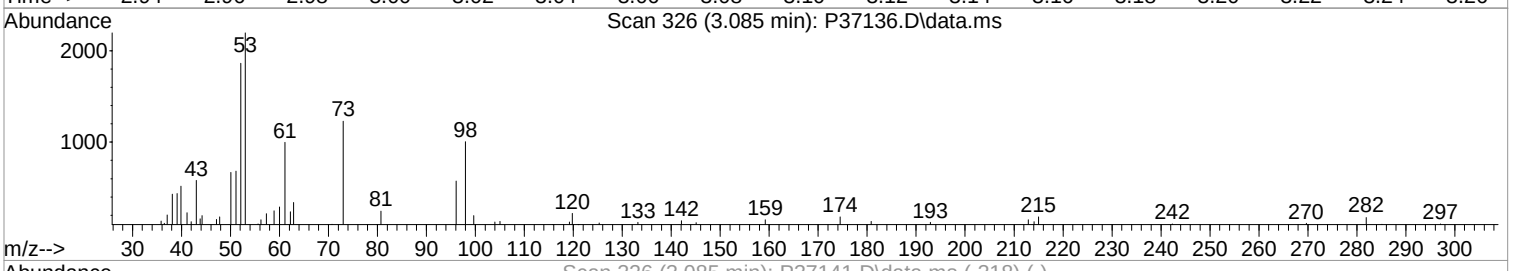
1st 07/14/20
2nd 07/14/20

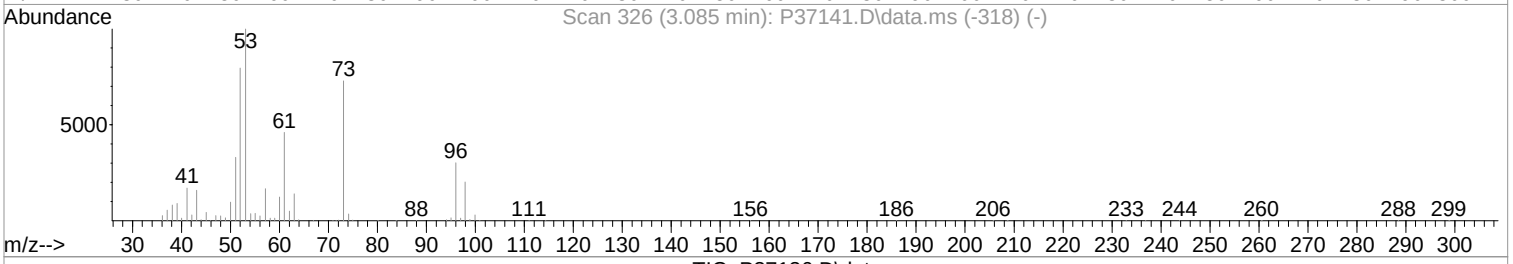
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(26) trans-1,2-Dichloroethene (P)

3.085min (+0.000) 0.34 ppb

response 901

Ion	Exp%	Act%
96.00	100	100
98.00	66.80	175.57#
61.00	152.80	174.35#
0.00	0.00	0.00

Manual Integration:

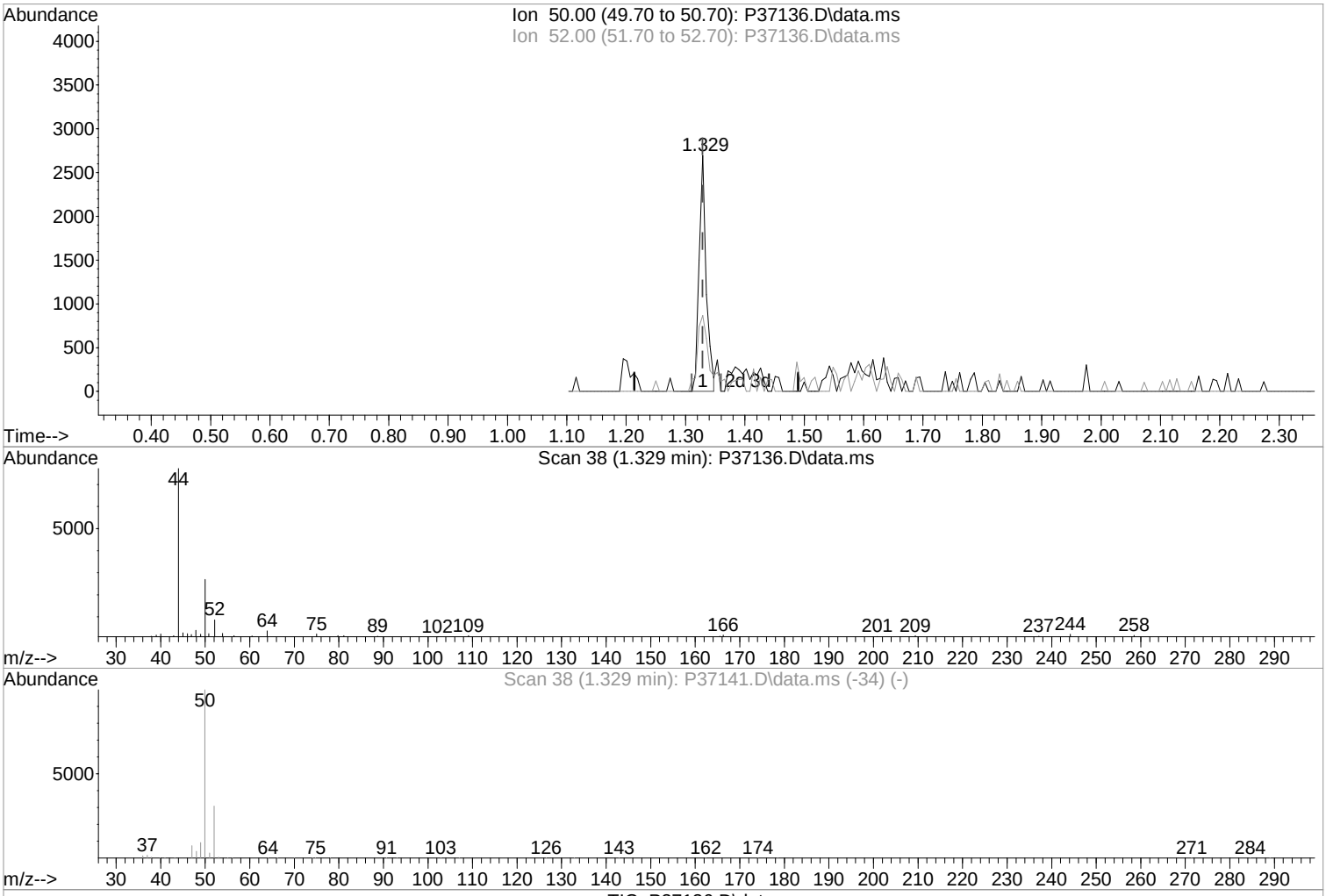
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(3) Chloromethane (P)

1.329min (+0.000) 0.54 ppb m

response 2259

Ion	Exp%	Act%
50.00	100	100
52.00	30.80	32.18
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

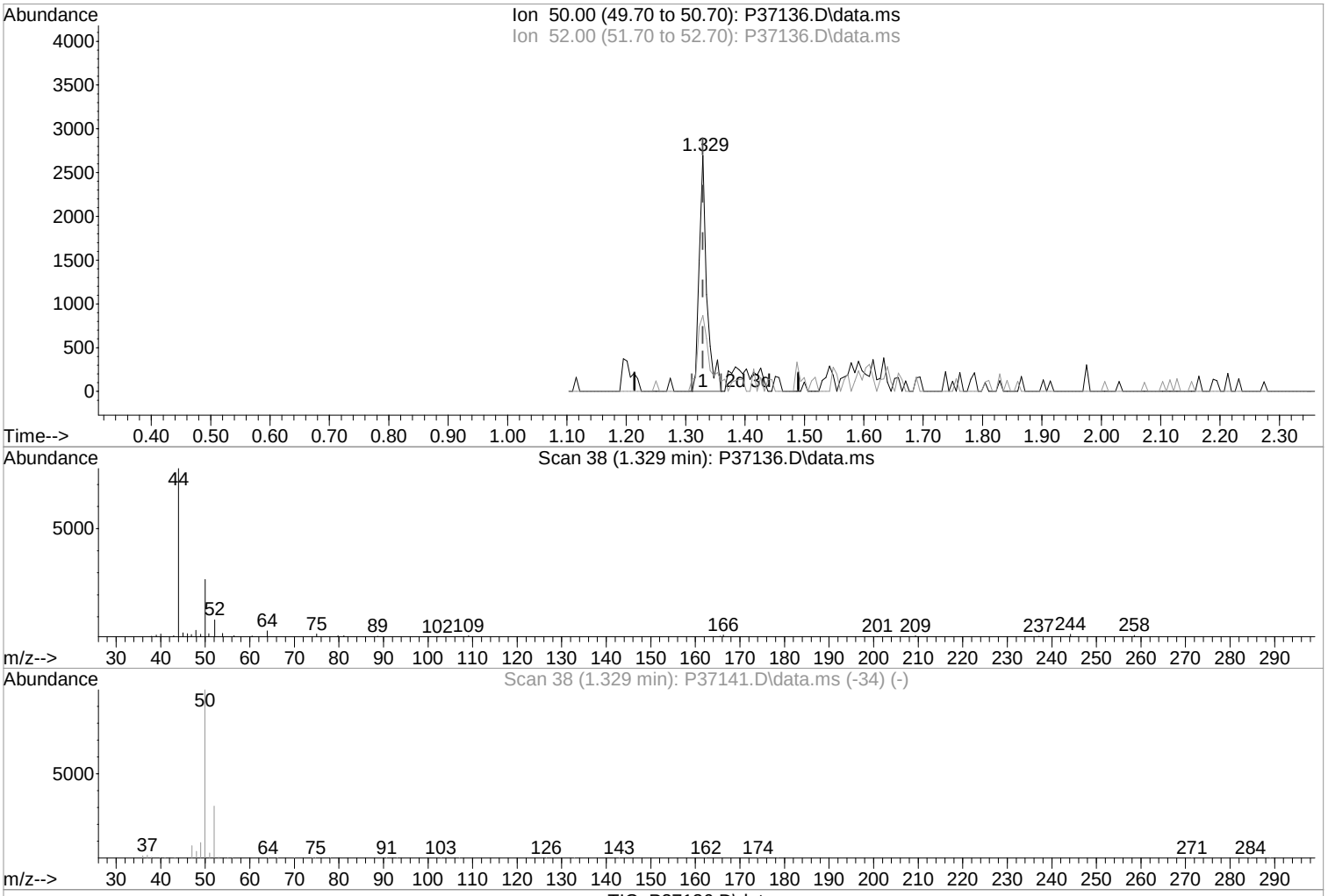
Poor integration.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(3) Chloromethane (P)

1.329min (+0.000) 0.58 ppb

response 2391

Ion	Exp%	Act%
50.00	100	100
52.00	30.80	32.18
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

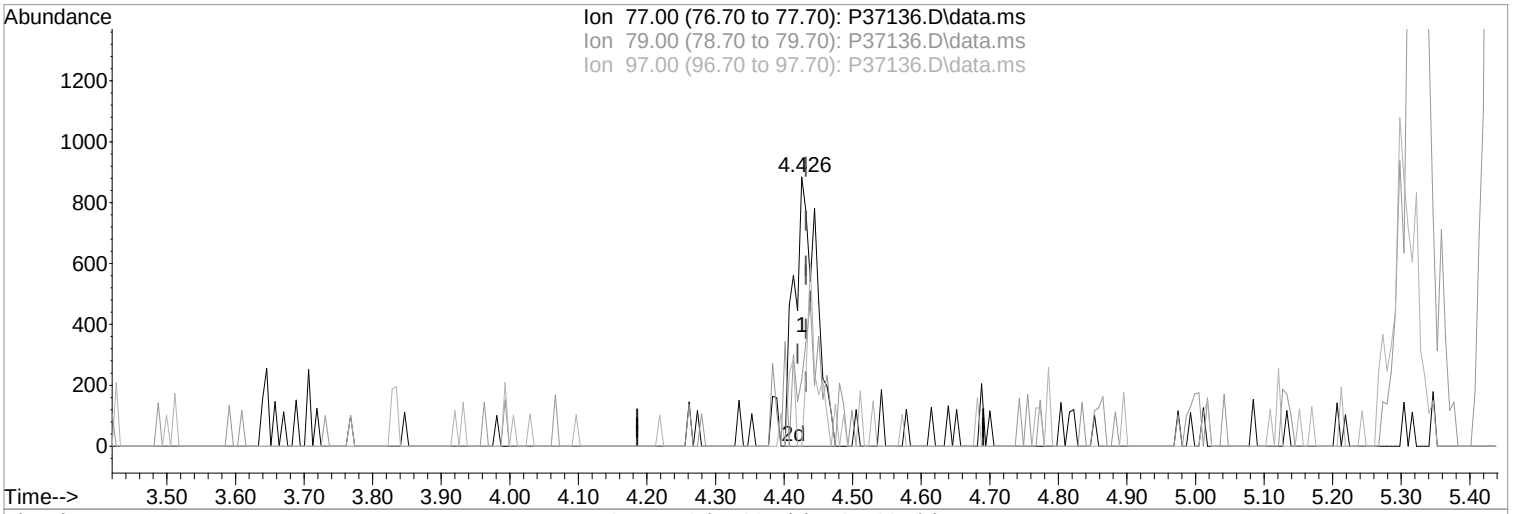
07/13/20

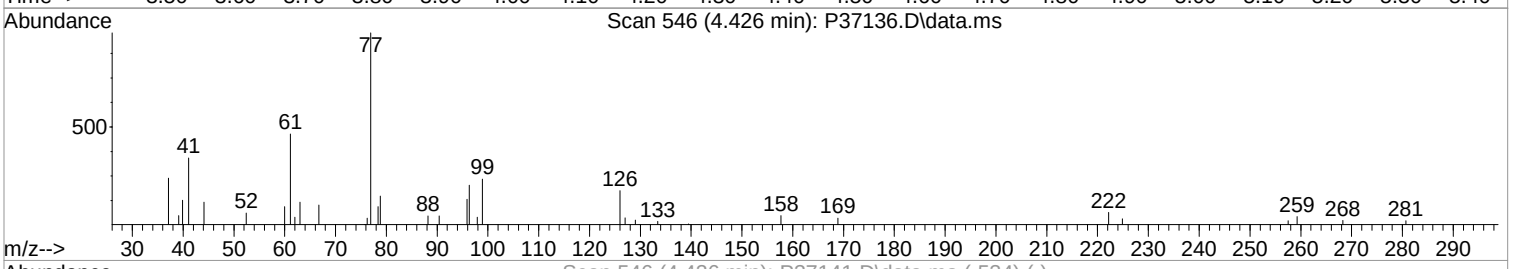
1st 07/14/20
2nd 07/14/20

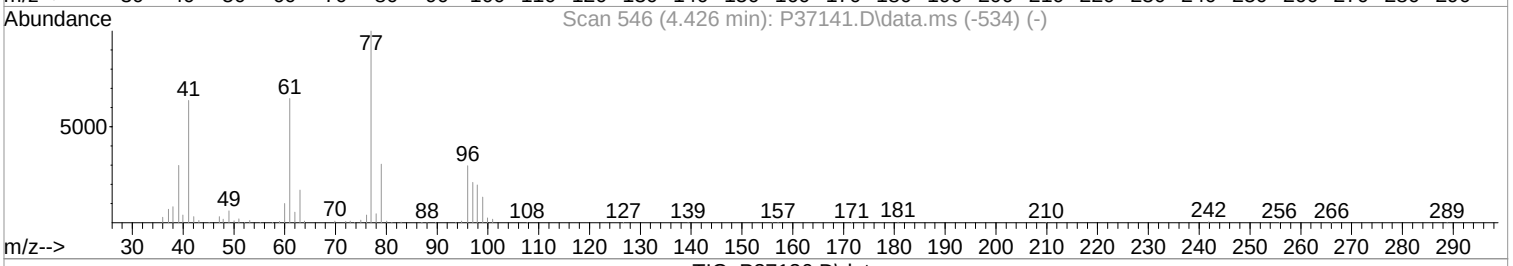
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(33) 2,2-Dichloropropane

4.426min (-0.006) 0.46 ppb m

response 1993

Ion	Exp%	Act%
77.00	100	100
79.00	30.40	24.77
97.00	21.00	0.00#
0.00	0.00	0.00

Manual Integration:

After

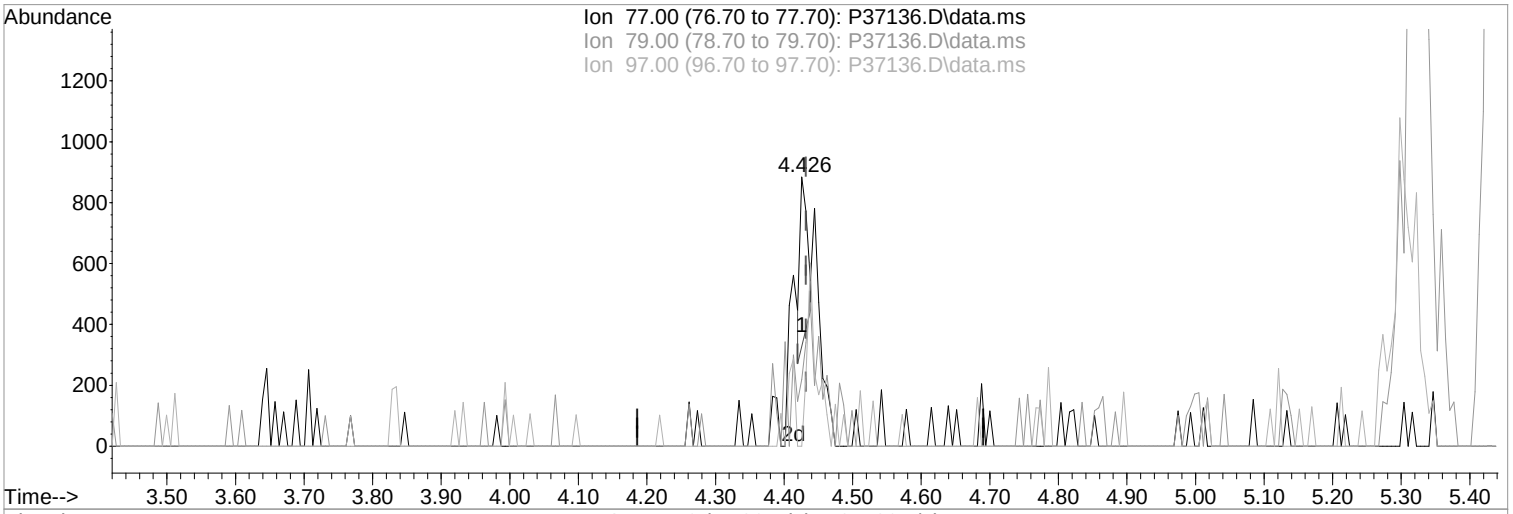
Split Peak

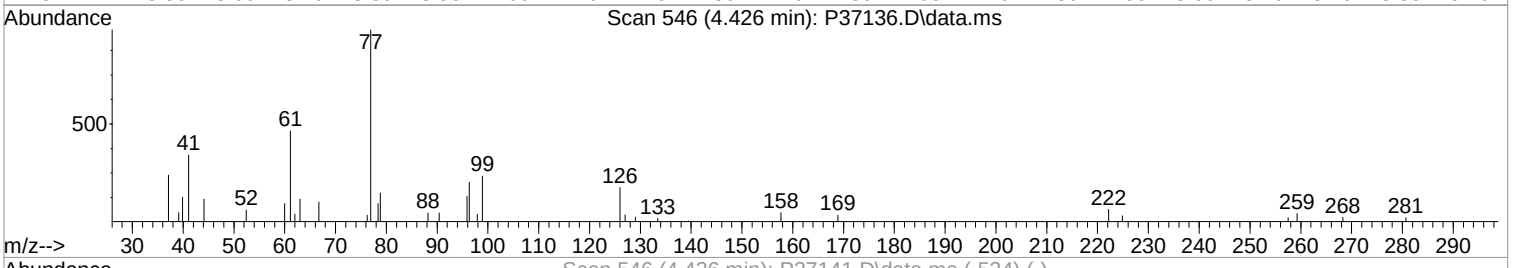
07/13/20

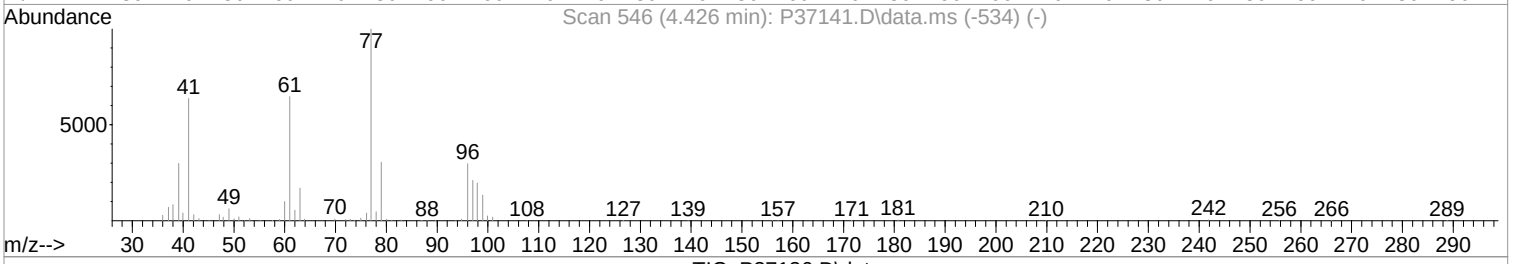
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(33) 2,2-Dichloropropane

4.426min (-0.006) 0.09 ppb

response 410

Ion	Exp%	Act%
77.00	100	100
79.00	30.40	24.77
97.00	21.00	0.00#
0.00	0.00	0.00

Manual Integration:

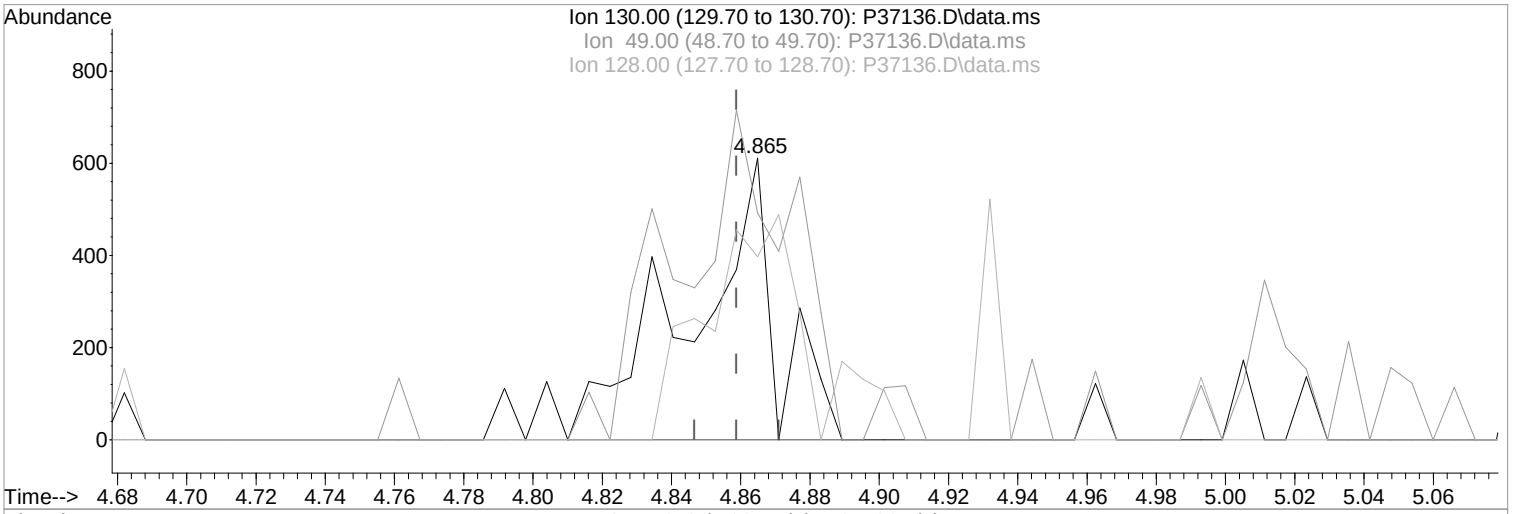
Before

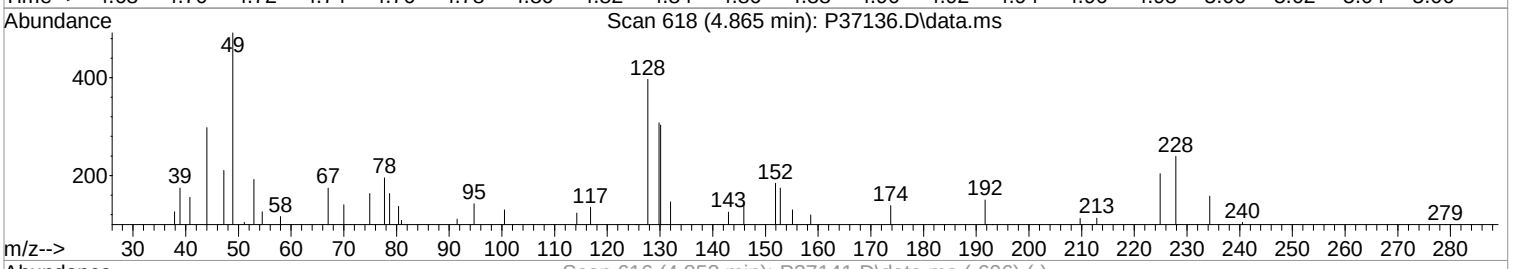
07/13/20

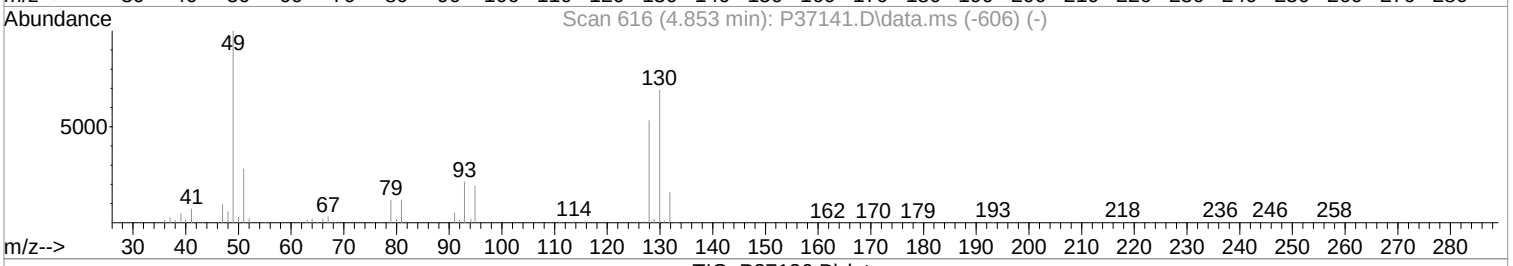
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(37) Bromochloromethane

4.865min (+0.006) 0.52 ppb m

response 1056

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	159.74
128.00	77.00	128.90#
0.00	0.00	0.00

Manual Integration:

After

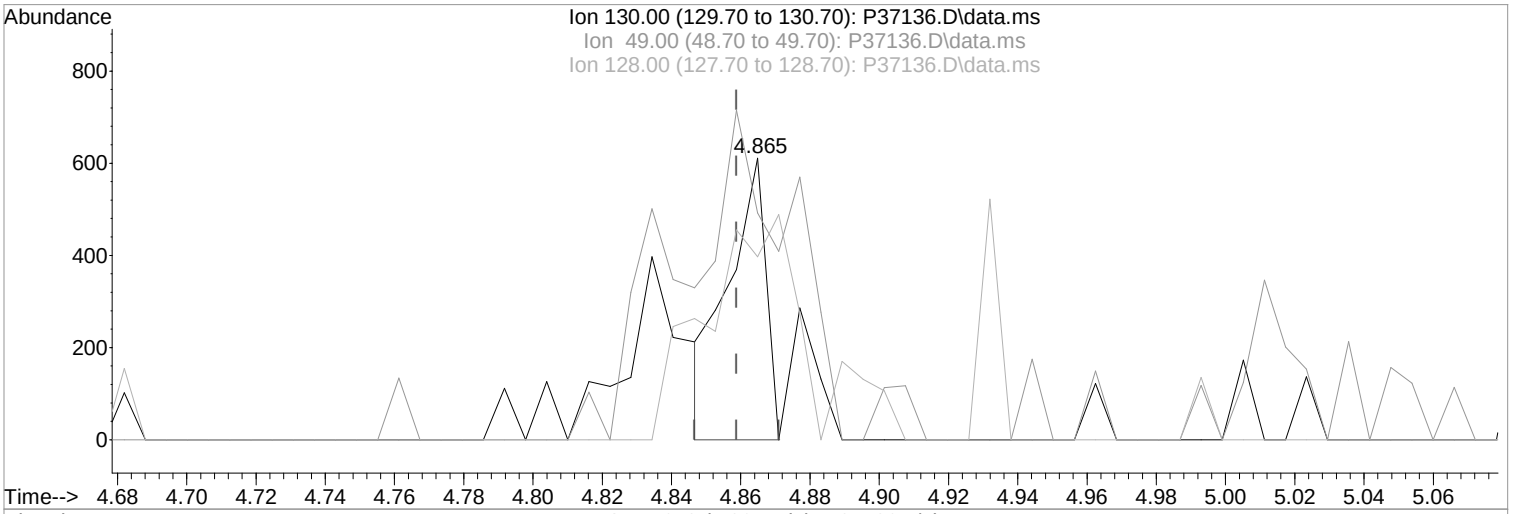
Split Peak

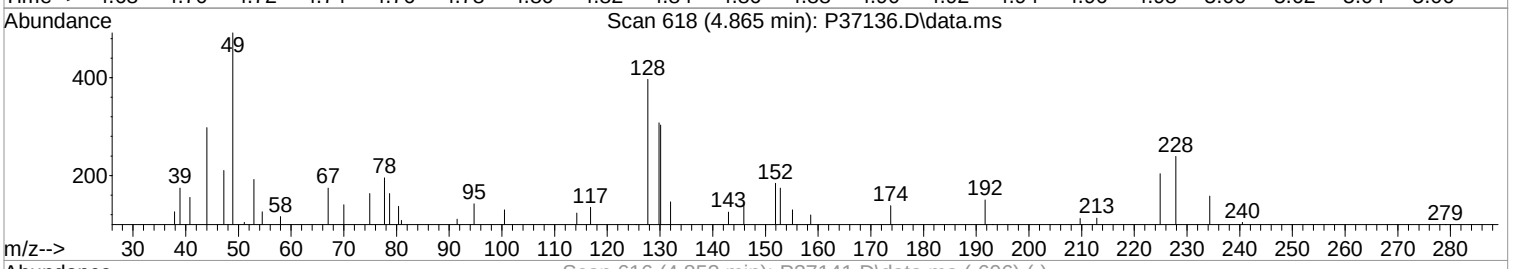
07/13/20

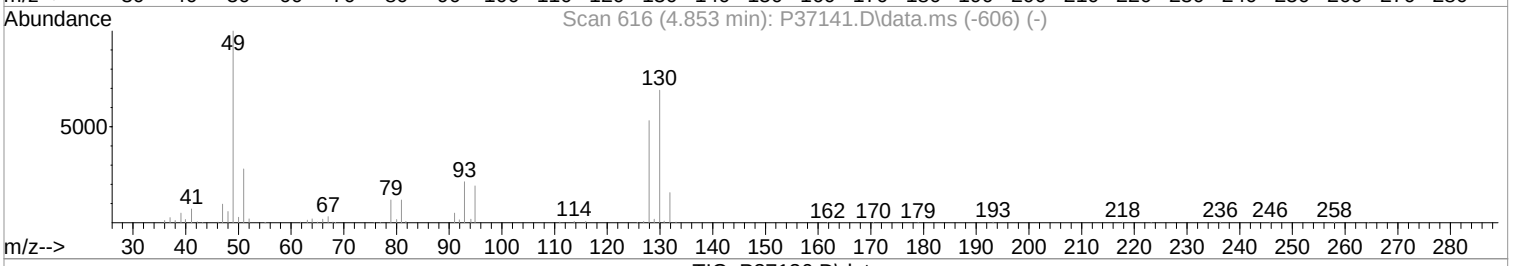
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(37) Bromochloromethane

4.865min (+0.006) 0.23 ppb

response 461

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	80.52#
128.00	77.00	64.98
0.00	0.00	0.00

Manual Integration:

Before

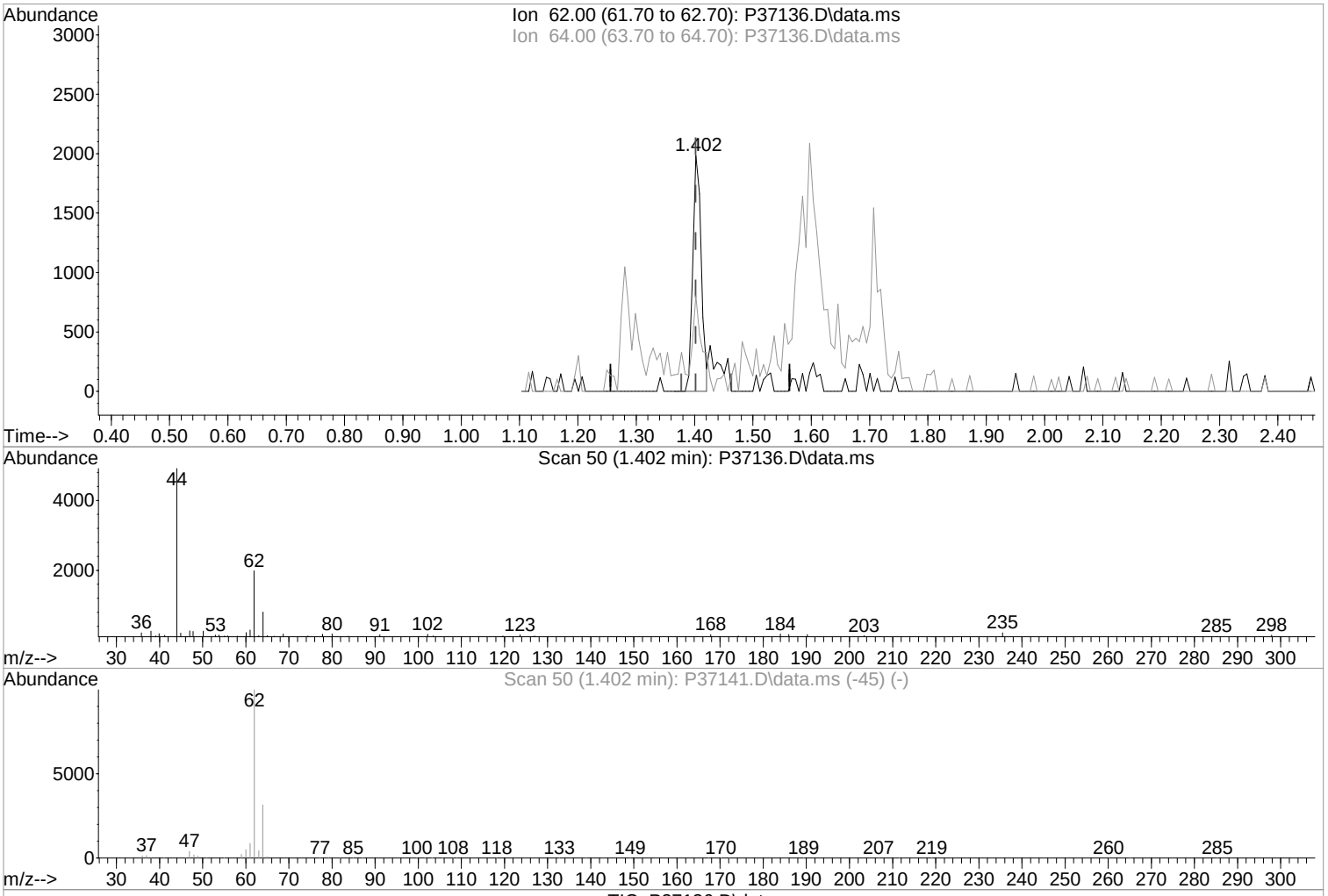
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(4) Vinyl Chloride (P)

1.402min (+0.000) 0.51 ppb m

response 2012

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	40.48
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

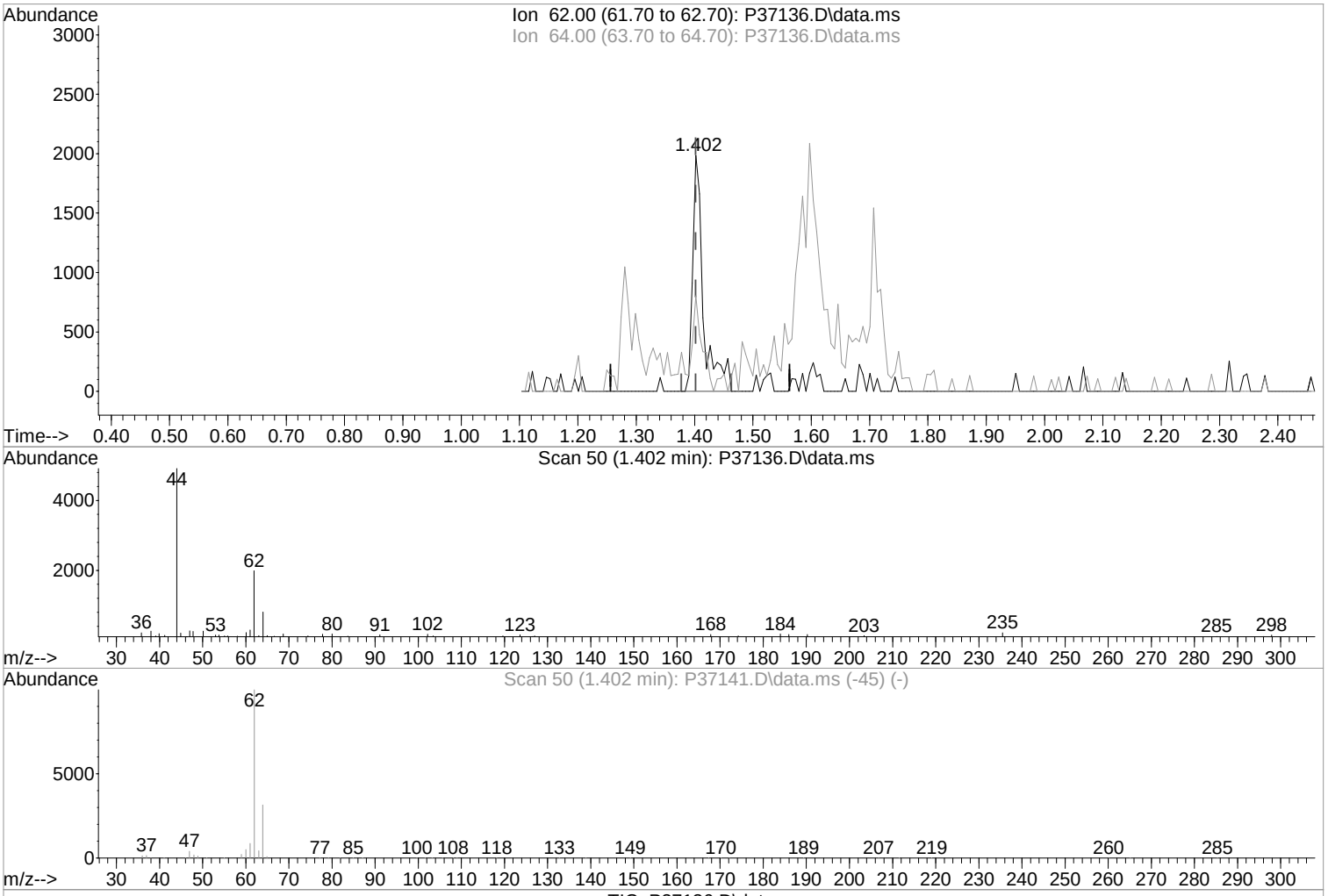
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(4) Vinyl Chloride (P)

1.402min (+0.000) 0.65 ppb

response 2546

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	40.48
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

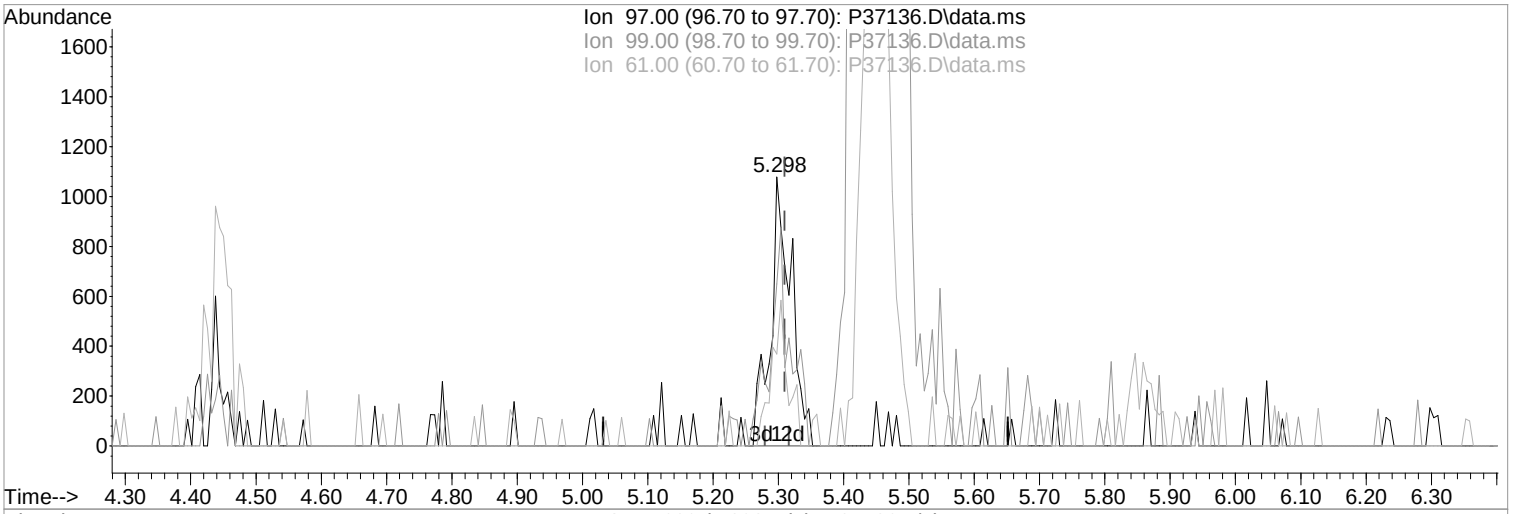
07/13/20

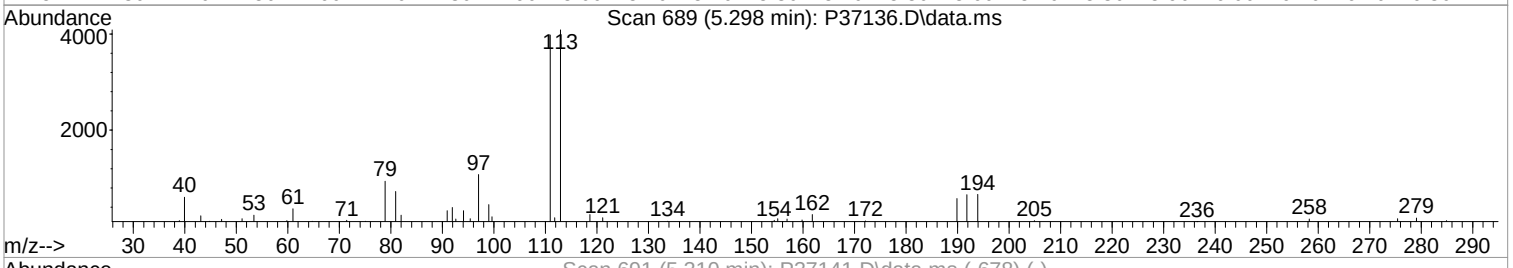
1st 07/14/20
2nd 07/14/20

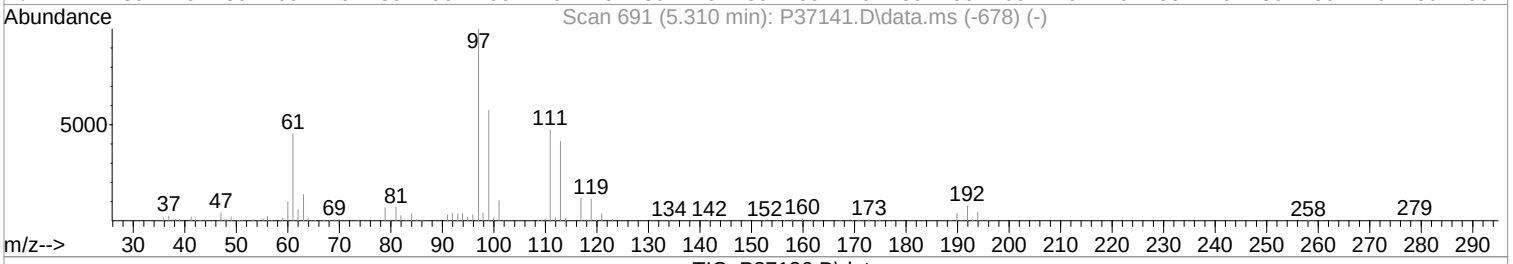
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.298min (-0.012) 0.56 ppb m

response 2394

Ion	Exp%	Act%
97.00	100	100
99.00	57.60	41.93
61.00	45.60	34.23
0.00	0.00	0.00

Manual Integration:

After

Split Peak

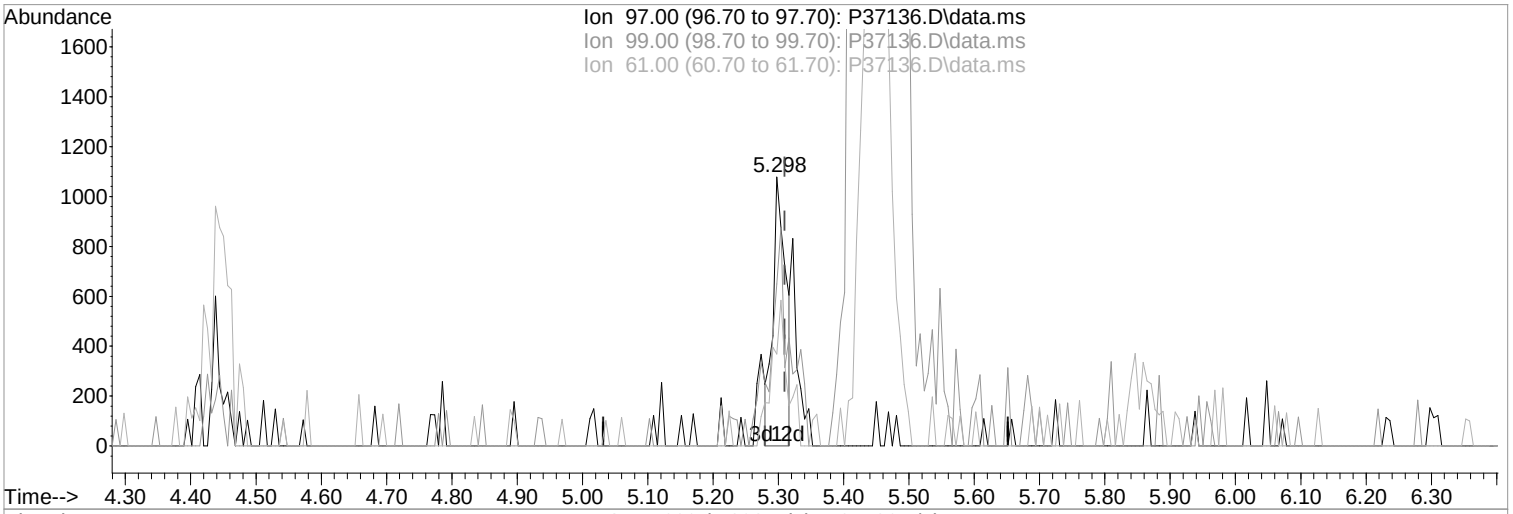
07/13/20

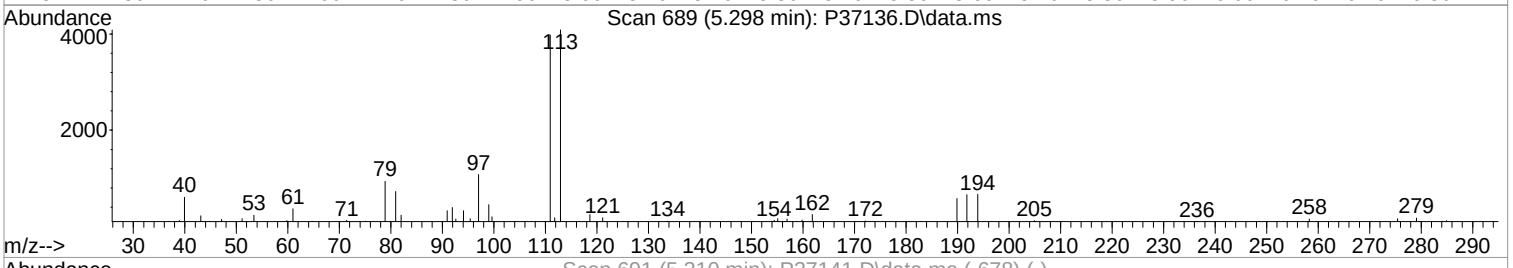
1st 07/14/20
2nd 07/14/20

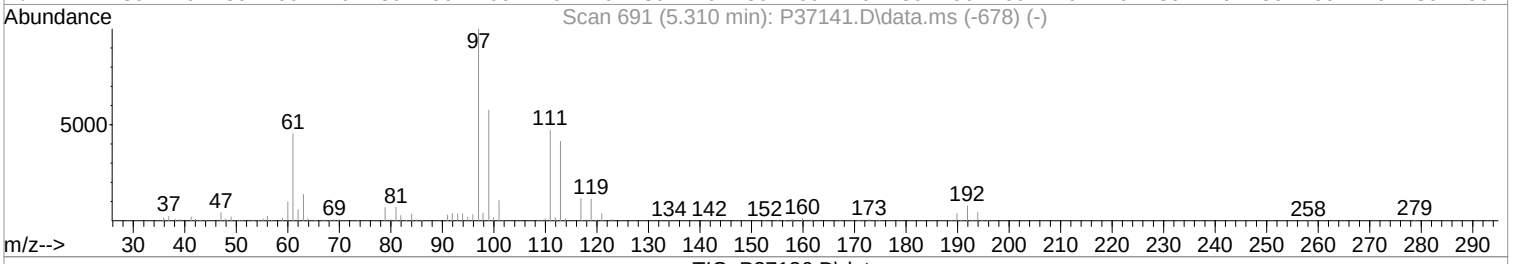
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.298min (-0.012) 0.35 ppb

response 1481

Ion	Exp%	Act%
97.00	100	100
99.00	57.60	60.20
61.00	45.60	34.23
0.00	0.00	0.00

Manual Integration:

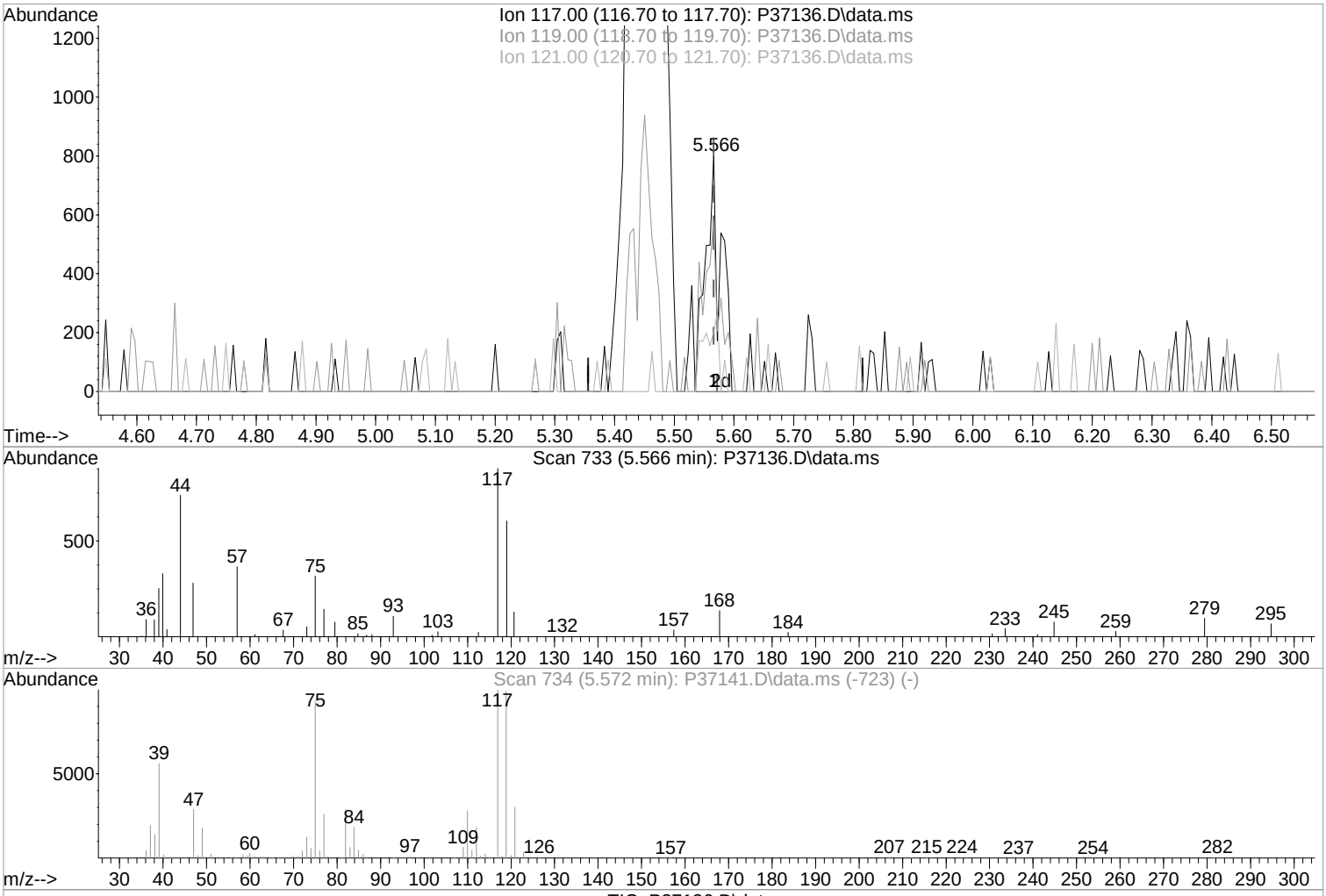
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(46) Carbontetrachloride (P)

5.566min (+0.000) 0.42 ppb m

response 1466

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	72.69#
121.00	29.80	25.44
0.00	0.00	0.00

Manual Integration:

After

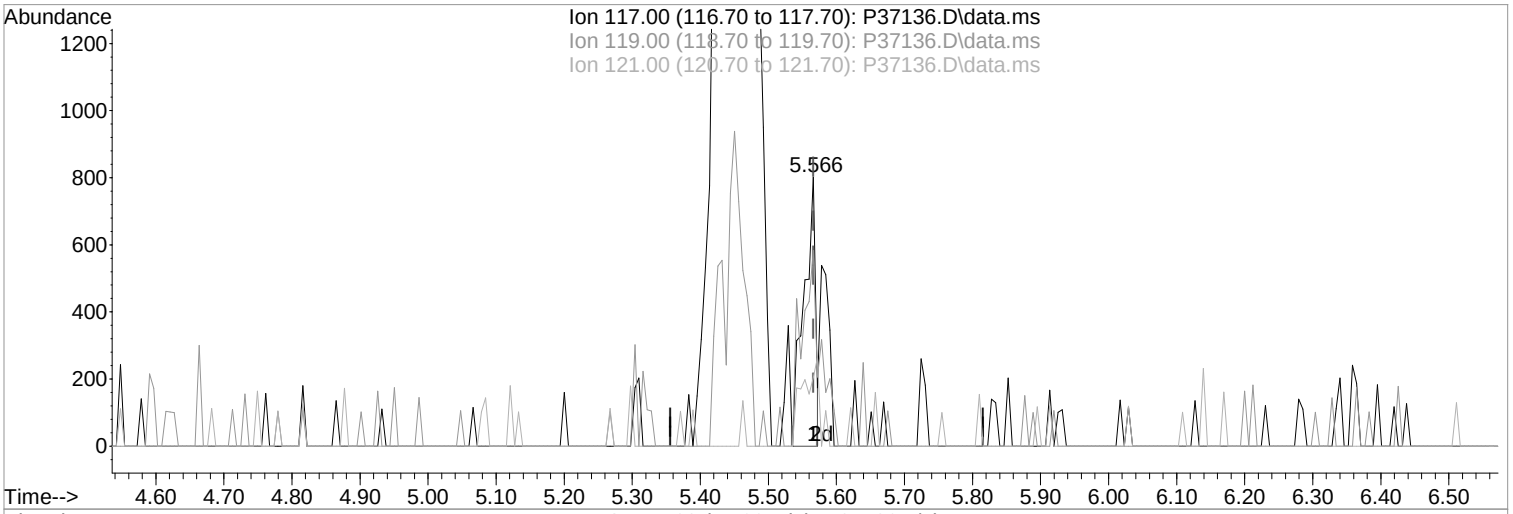
Split Peak

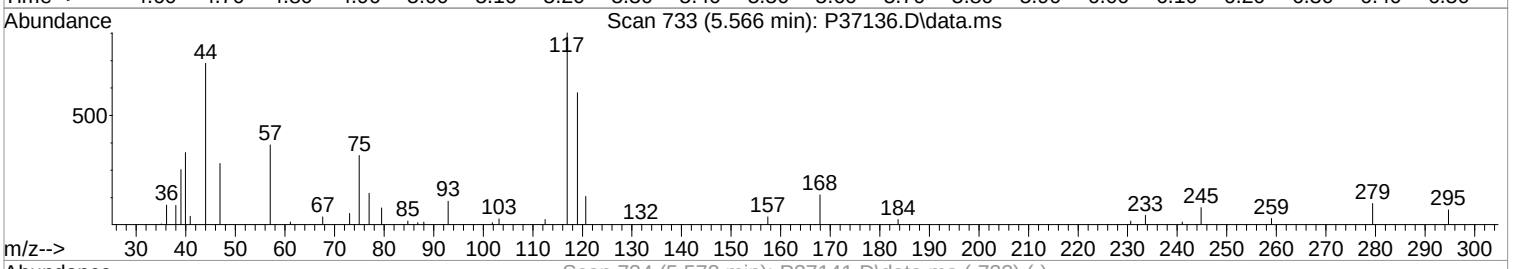
07/13/20

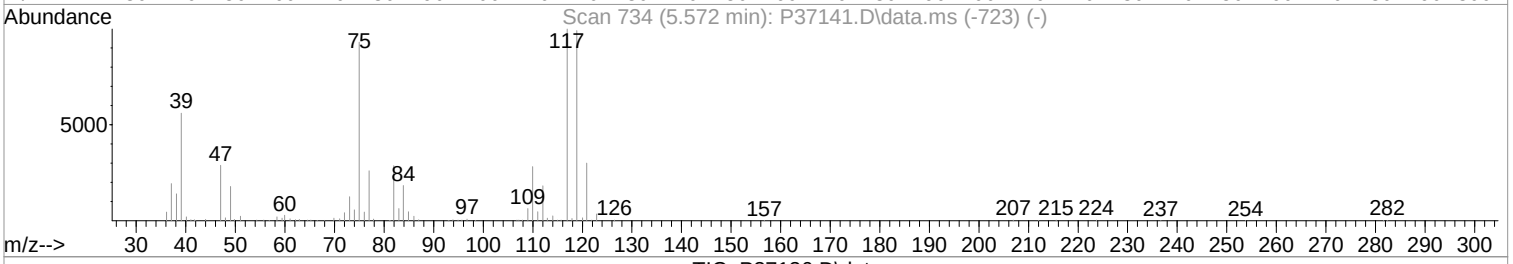
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(46) Carbontetrachloride (P)

5.566min (+0.000) 0.27 ppb

response 955

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	72.69#
121.00	29.80	25.44
0.00	0.00	0.00

Manual Integration:

Before

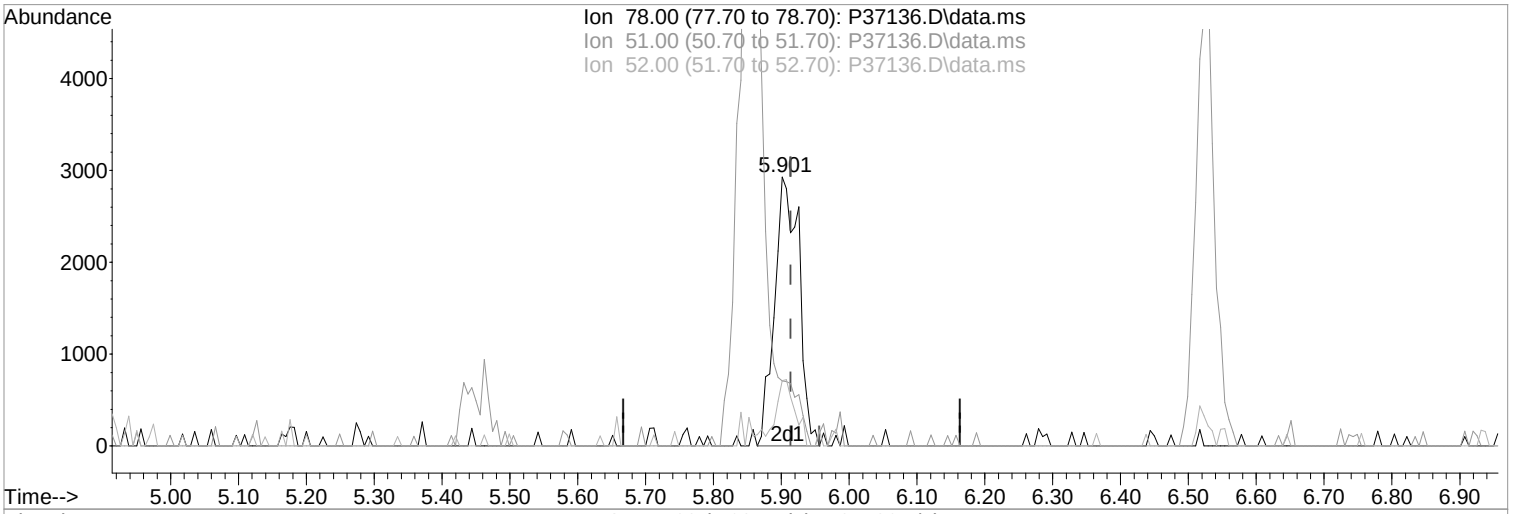
07/13/20

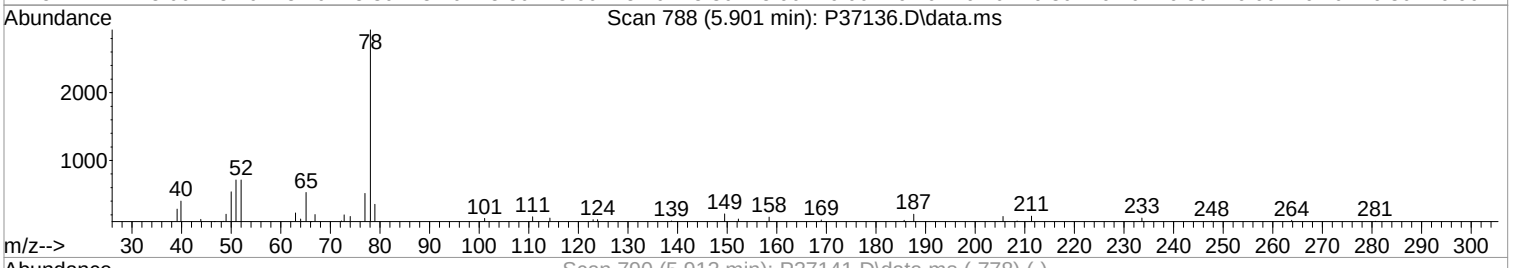
1st 07/14/20
2nd 07/14/20

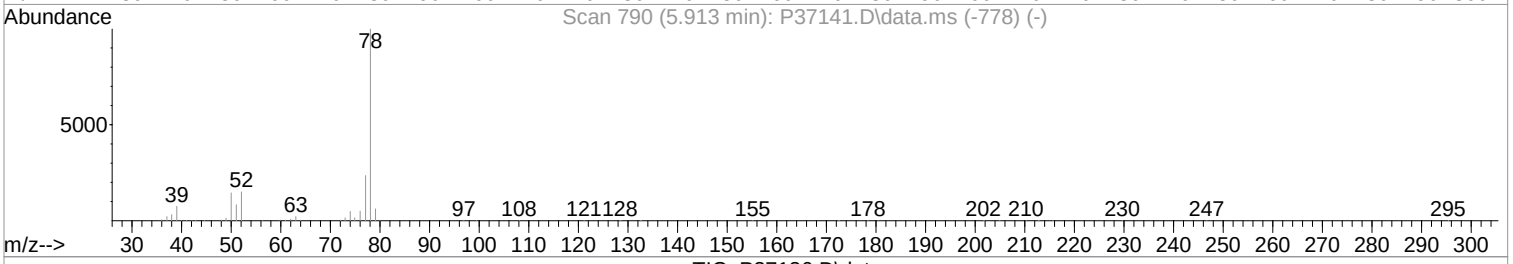
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(49) Benzene (P)

5.901min (-0.012) 0.48 ppb m

response 7301

Ion	Exp%	Act%
78.00	100	100
51.00	15.60	24.25
52.00	15.00	24.32
0.00	0.00	0.00

Manual Integration:

After

Split Peak

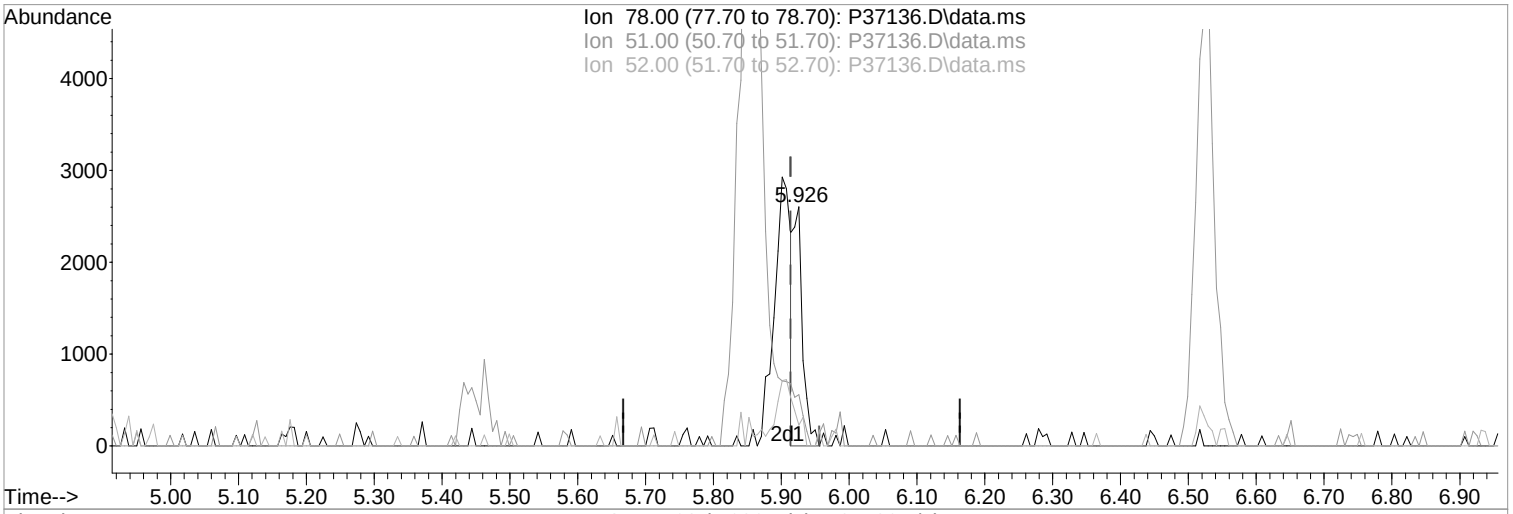
07/13/20

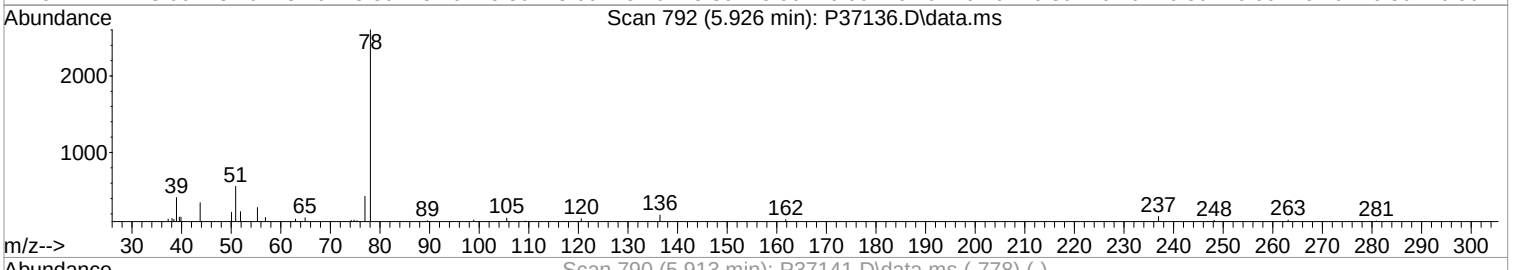
1st 07/14/20
2nd 07/14/20

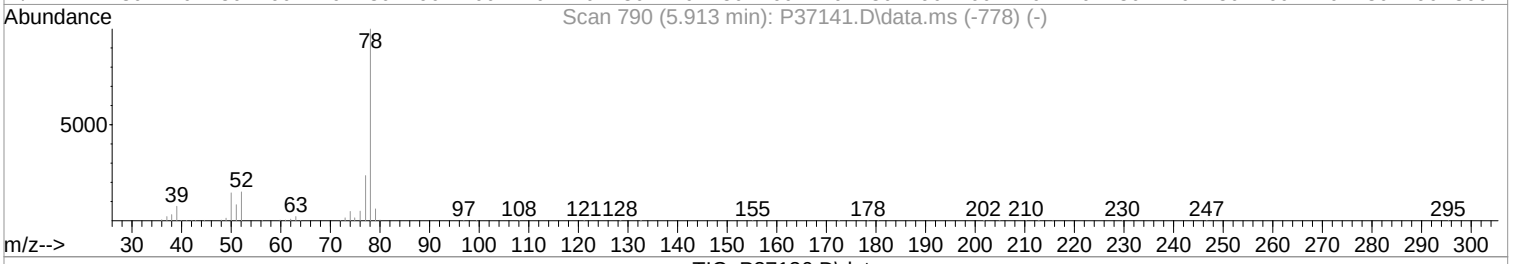
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(49) Benzene (P)

5.926min (+0.012) 0.16 ppb

response 2466

Ion	Exp%	Act%
78.00	100	100
51.00	15.60	21.48
52.00	15.00	8.72
0.00	0.00	0.00

Manual Integration:

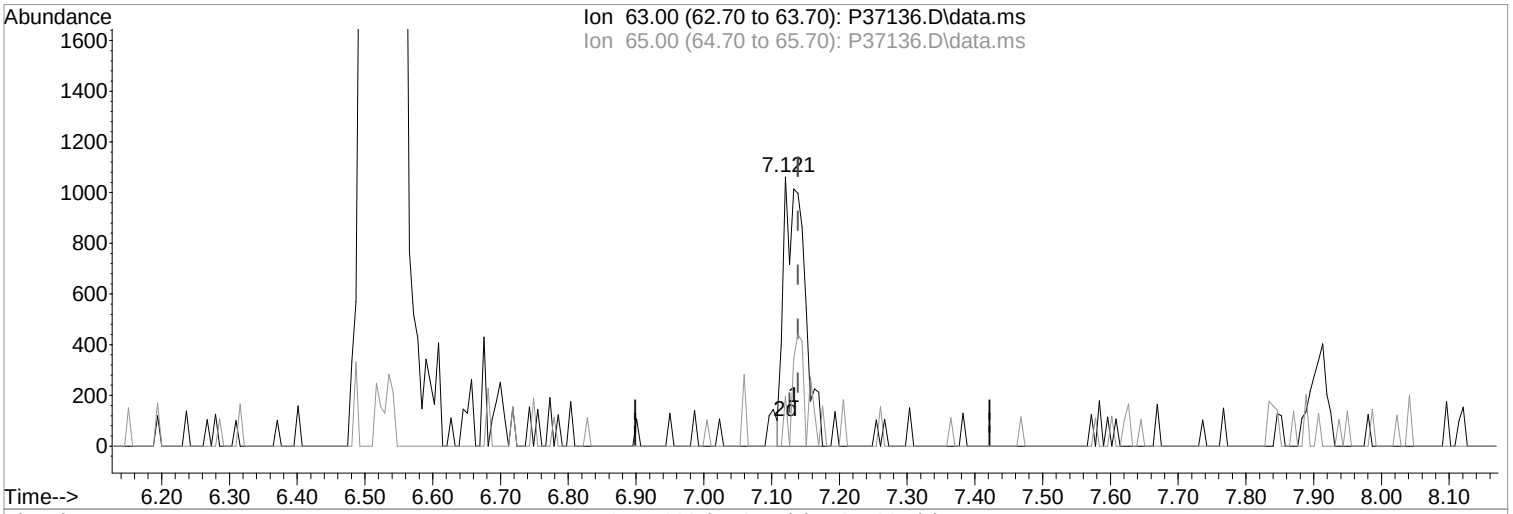
Before

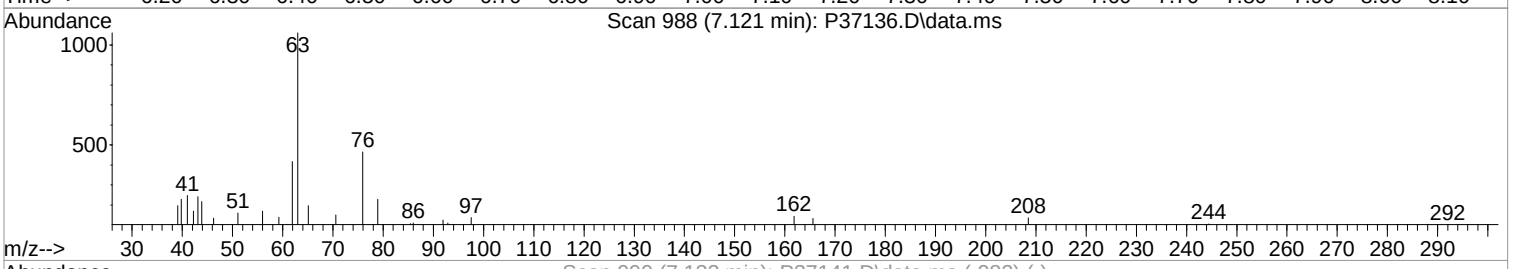
07/13/20

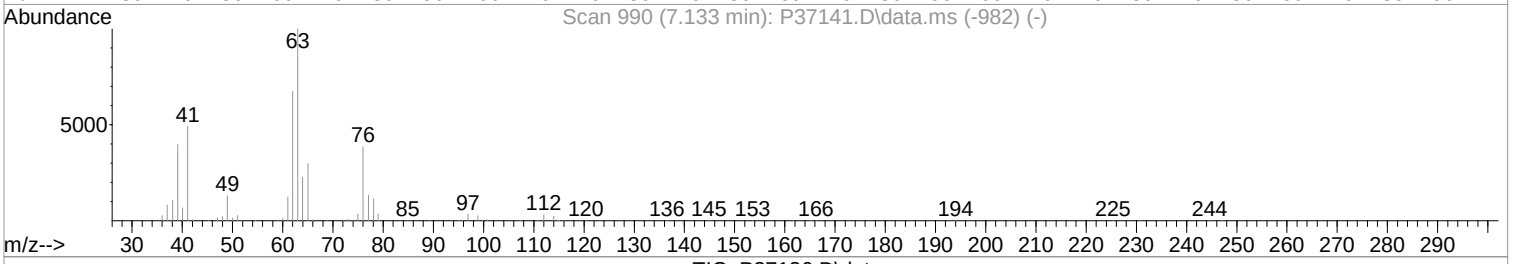
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(56) 1,2-Diclpropane (P)

7.121min (-0.018) 0.56 ppb m

response 2273

Ion	Exp%	Act%
63.00	100	100
65.00	29.90	18.57
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

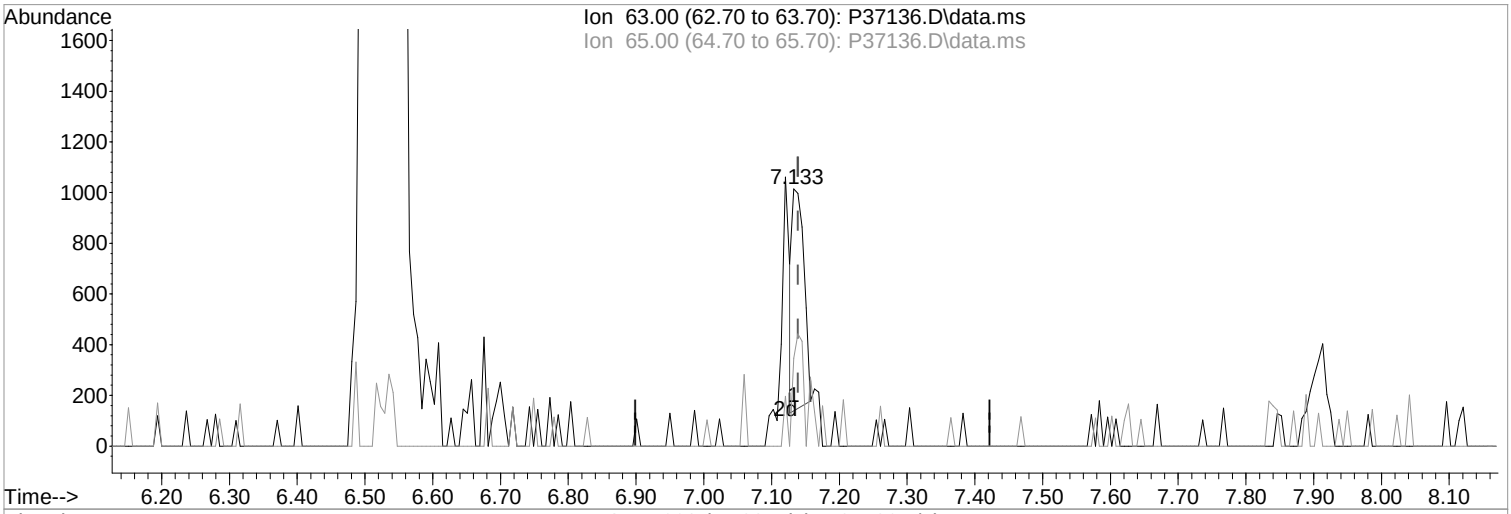
Split Peak

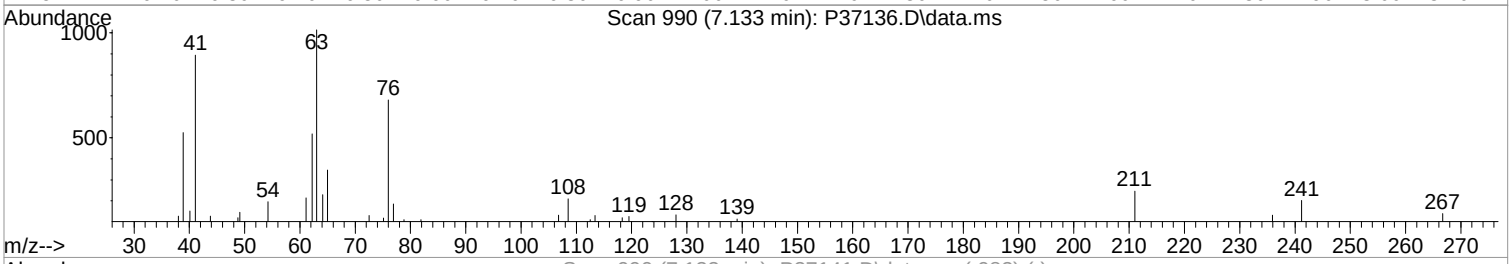
07/13/20

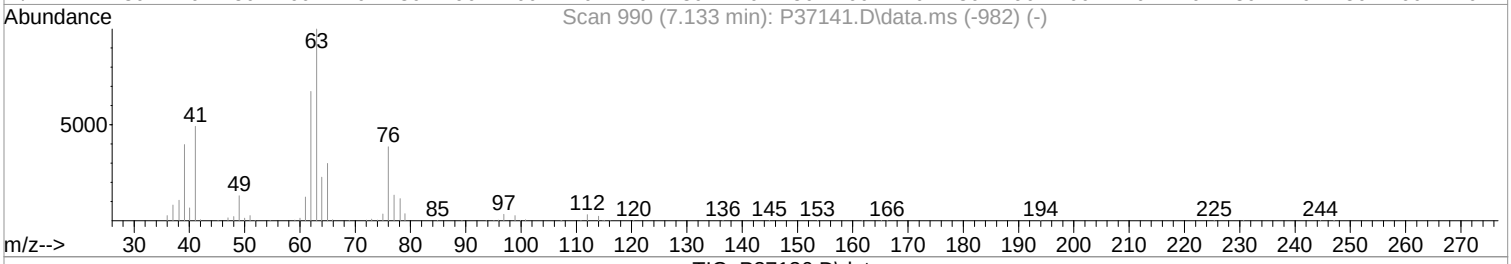
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(56) 1,2-Diclpropane (P)

7.133min (-0.006) 0.26 ppb

response 1036

Ion	Exp%	Act%
63.00	100	100
65.00	29.90	34.19
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

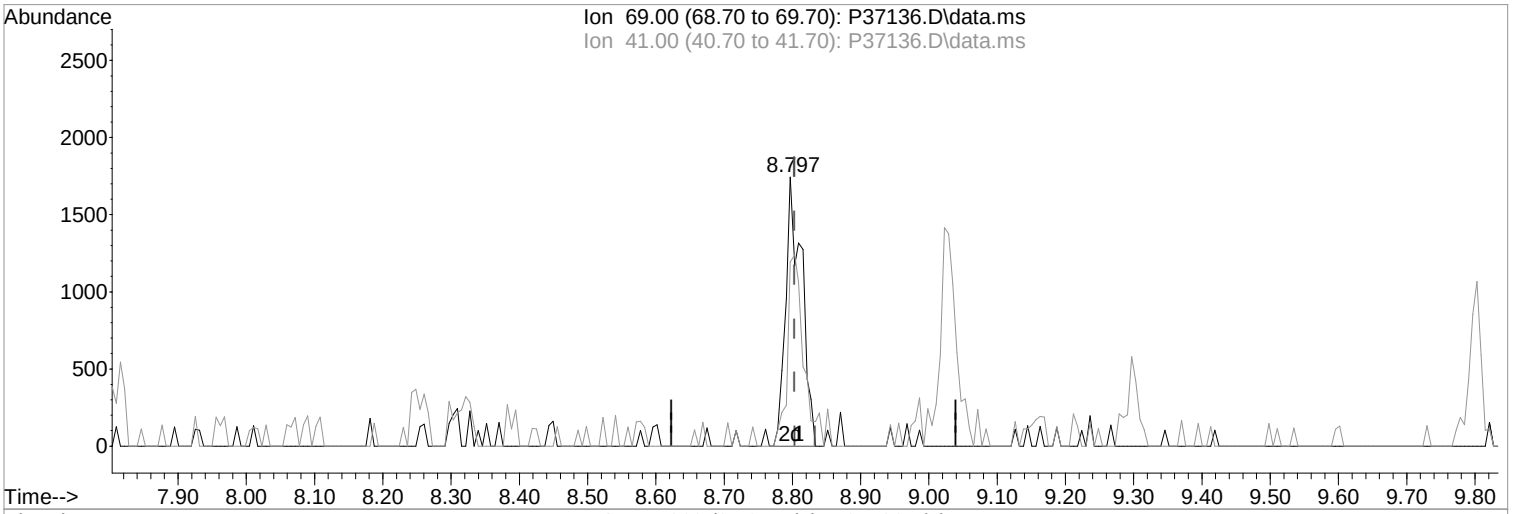
Before

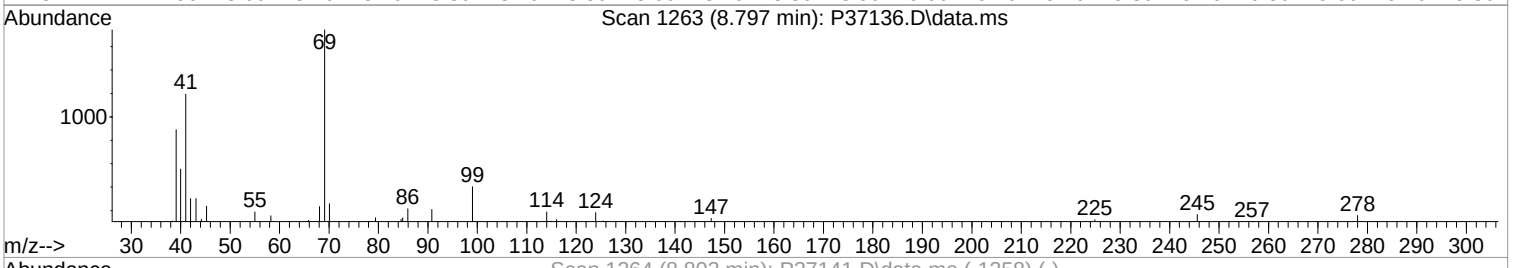
07/13/20

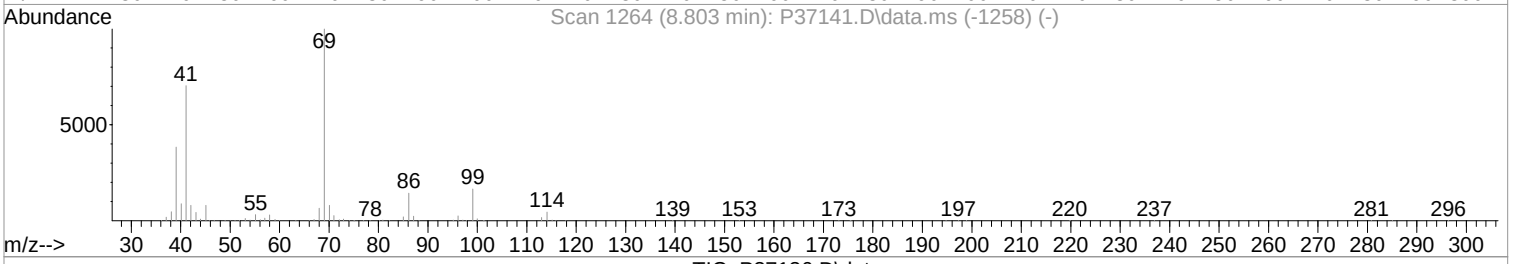
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(68) Ethyl Methacrylate

8.797min (-0.006) 0.48 ppb m

response 2851

Ion	Exp%	Act%
69.00	100	100
41.00	70.50	68.46
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Split Peak

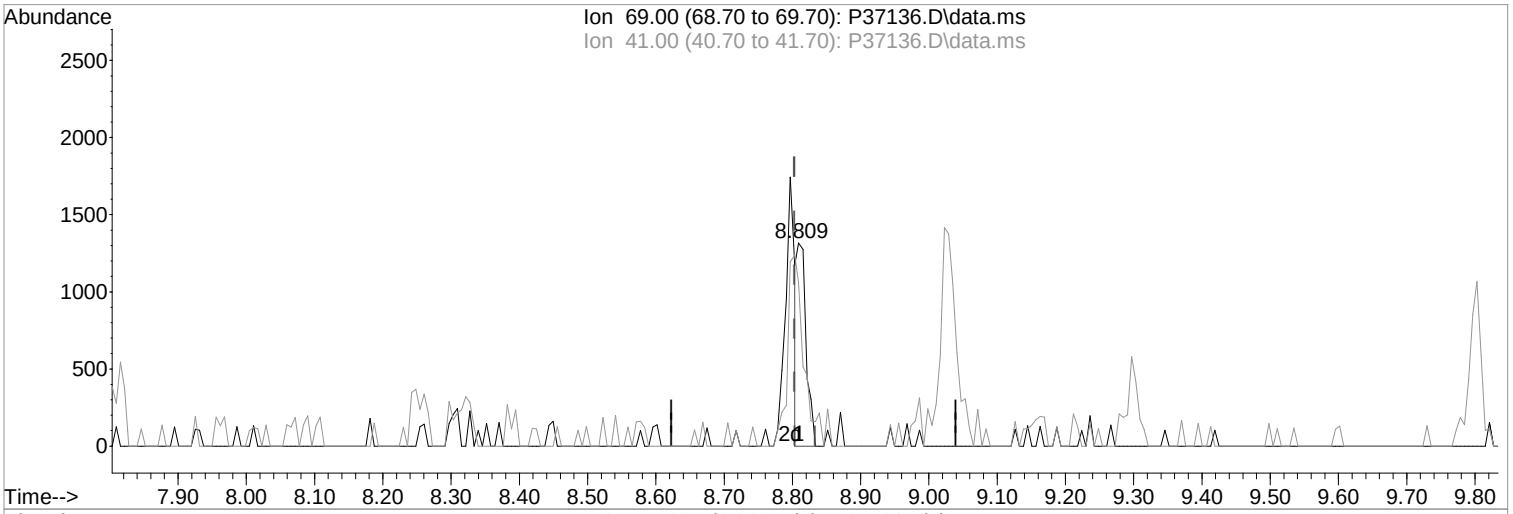
07/13/20

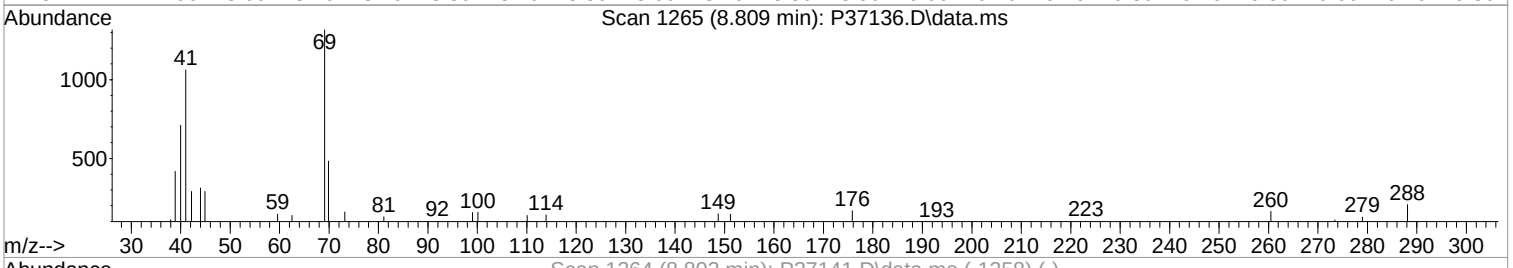
1st 07/14/20
2nd 07/14/20

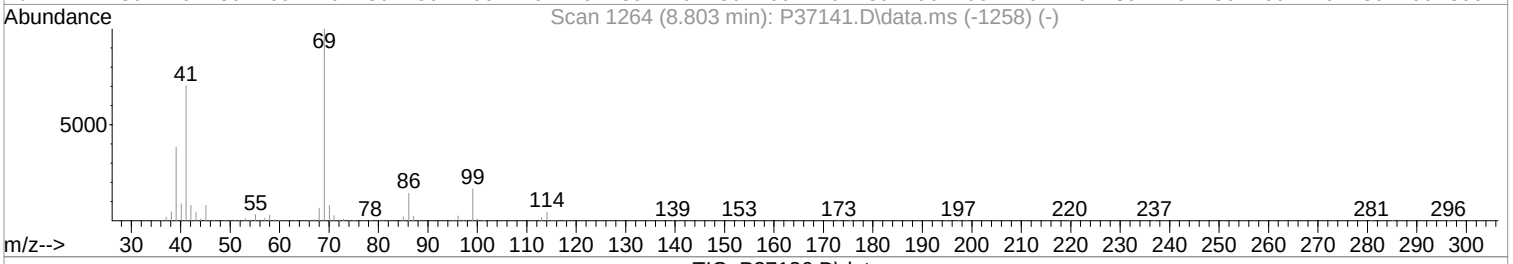
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(68) Ethyl Methacrylate

8.809min (+0.006) 0.21 ppb

response 1217

Ion	Exp%	Act%
69.00	100	100
41.00	70.50	80.64
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

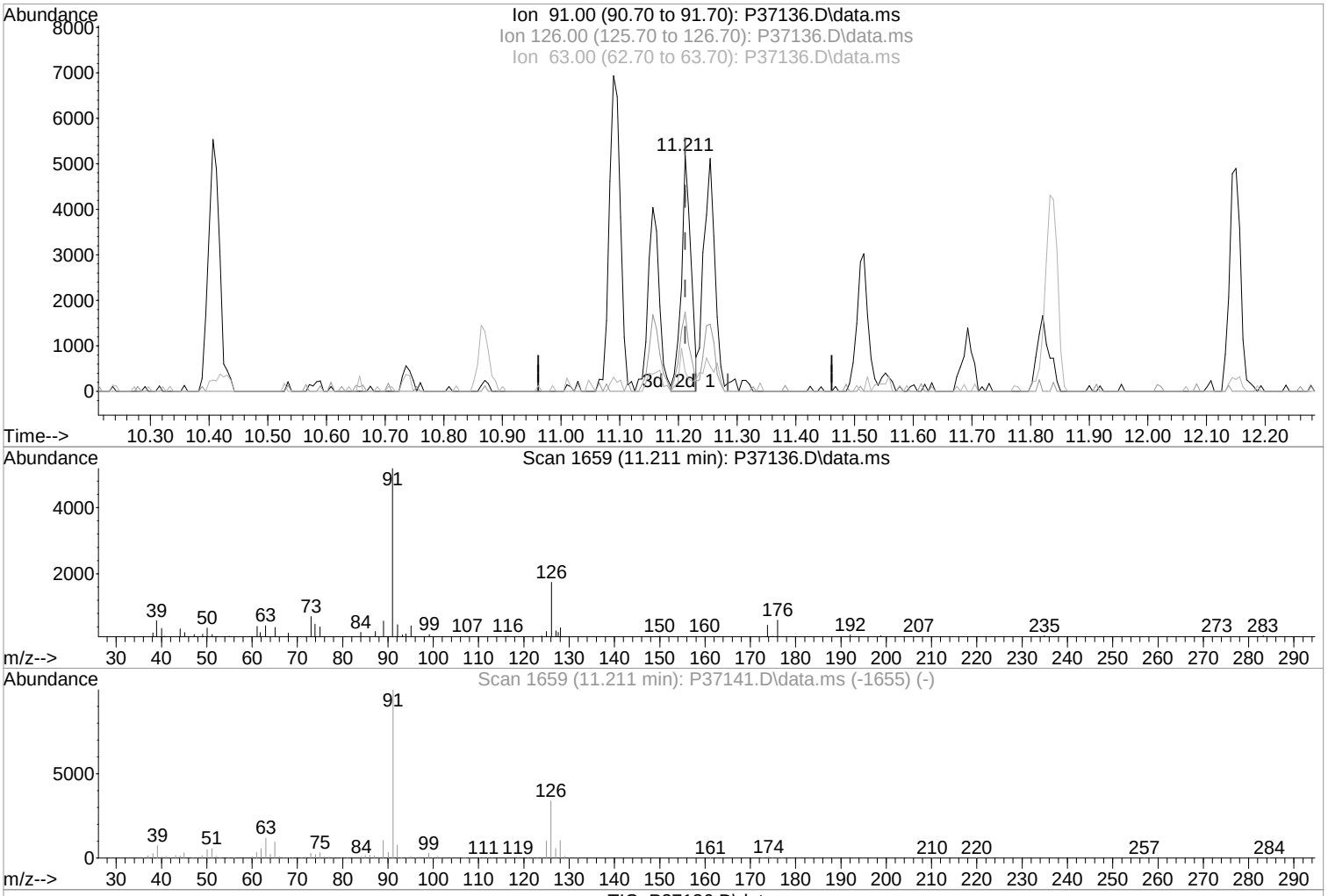
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(97) 3-Chlorotoluene

11.211min (+0.000) 0.56 ppb m

response 5899

Ion	Exp%	Act%
91.00	100	100
126.00	33.90	33.58
63.00	11.90	8.22#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

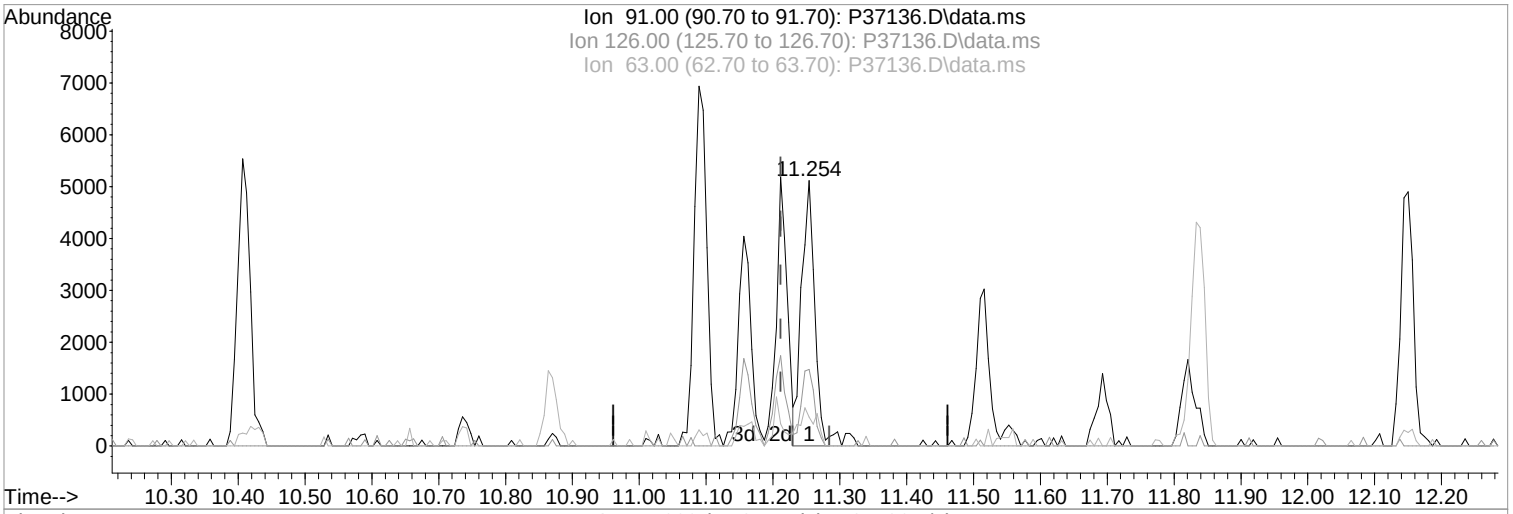
07/13/20

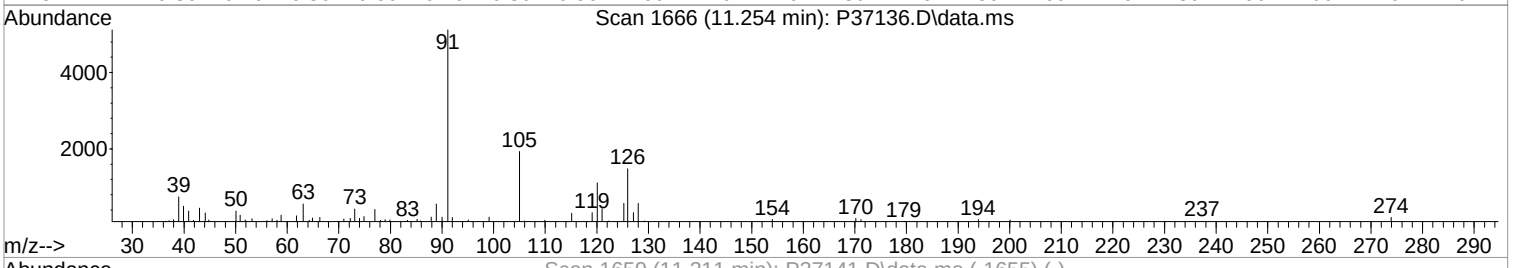
1st 07/14/20
2nd 07/14/20

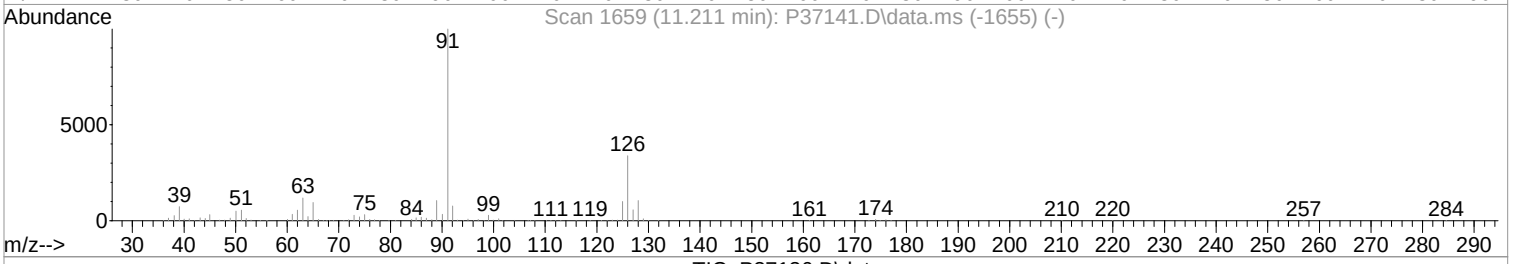
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(97) 3-Chlorotoluene

11.254min (+0.043) 0.66 ppb

response 6910

Ion	Exp%	Act%
91.00	100	100
126.00	33.90	28.87
63.00	11.90	10.92
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:09:05 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.450	168	296624	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	527689	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	457342	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	212791	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	28851	9.52	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 19.04%#				
48) surr1,1,2-dichloroetha...	5.846	65	43566	10.39	ppb		-0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 20.78%#				
65) SURR3,Toluene-d8	8.315	98	153399	10.89	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 21.78%#				
70) SURR2,BFB	10.870	95	51035	9.84	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 19.68%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.201	85	1930	0.58	ppb		85
3) Chloromethane	1.329	50	2259m	0.54	ppb		
4) Vinyl Chloride	1.402	62	2012m	0.51	ppb		
5) Bromomethane	1.634	94	2097	0.65	ppb	#	75
6) Chloroethane	1.707	64	1365	0.64	ppb		77
7) Freon 21	1.865	67	2554	0.52	ppb		77
8) Trichlorofluoromethane	1.902	101	2365	0.59	ppb		84
9) Diethyl Ether	2.146	59	1149	0.40	ppb		86
10) Freon 123a	2.152	67	1726	0.51	ppb		80
11) Freon 123	2.207	83	2477	0.62	ppb		79
12) Acrolein	2.268	56	1516	1.95	ppb		87
13) 1,1-Diclethene	2.335	96	1317	0.57	ppb	#	85
14) Freon 113	2.329	101	1462	0.55	ppb		95
15) Acetone	2.414	43	2664	1.55	ppb		90
16) 2-Propanol	2.548	45	2812	7.36	ppb		74
17) Iodomethane	2.475	142	734m	0.29	ppb		
18) Carbon Disulfide	2.524	76	6697	0.77	ppb		93
20) Allyl Chloride	2.682	76	1010m	0.62	ppb		
21) Methyl Acetate	2.713	43	2265	0.51	ppb		83
22) Methylene Chloride	2.798	84	1814	0.55	ppb		94
23) TBA	2.957	59	5087	8.23	ppb		87
24) Acrylonitrile	3.091	53	4287	2.25	ppb	#	74
25) Methyl-t-Butyl Ether	3.097	73	5093	0.48	ppb		82
26) trans-1,2-Dichloroethene	3.097	96	1252m	0.47	ppb		
28) 1,1-Diclethane	3.603	63	3117	0.53	ppb		77
30) DIPE	3.713	45	4795	0.47	ppb	#	65
31) 2-Chloro-1,3-Butadiene	3.707	53	1929	0.41	ppb		99
32) ETBE	4.237	59	4795	0.50	ppb		83
33) 2,2-Dichloropropane	4.426	77	1993m	0.46	ppb		
34) cis-1,2-Dichloroethene	4.438	96	1724	0.50	ppb	#	83
36) Propionitrile	4.658	54	2243	2.71	ppb		85
37) Bromochloromethane	4.865	130	1056m	0.52	ppb		
40) Chloroform	5.036	83	3440	0.63	ppb		82
41) 1,1,1-Trichloroethane	5.298	97	2394m	0.56	ppb		
42) TAME	6.145	73	4866	0.51	ppb		77
46) Carbontetrachloride	5.566	117	1466m	0.42	ppb		
47) 1,1-Dichloropropene	5.590	75	2440	0.49	ppb		89
49) Benzene	5.901	78	7301m	0.48	ppb		
50) 1,2-Dichloroethane	5.974	62	2974	0.56	ppb		92

1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:09:05 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
51)	Iso-Butyl Alcohol	5.981	43	2288	7.00	ppb		96
52)	n-Heptane	6.346	43	2621	0.56	ppb	#	66
53)	1-Butanol	6.932	56	3607	17.74	ppb		99
54)	Trichloroethene	6.828	130	2041	0.54	ppb	#	72
55)	Methylcyclohexane	7.060	55	2032	0.43	ppb		87
56)	1,2-Diclpropane	7.121	63	2273m	0.56	ppb		
57)	Dibromomethane	7.279	93	1306	0.56	ppb		94
58)	1,4-Dioxane	7.358	88	766	9.19	ppb		80
59)	Methyl Methacrylate	7.346	69	1717	0.49	ppb	#	77
60)	Bromodichloromethane	7.499	83	1873	0.44	ppb		93
62)	2-Chloroethylvinyl Ether	7.913	63	666	0.38	ppb	#	35
63)	cis-1,3-Dichloropropene	8.041	75	3034	0.52	ppb		94
64)	4-Methyl-2-pentanone	8.248	43	2466	0.45	ppb		71
66)	Toluene	8.395	91	8114	0.50	ppb		98
67)	trans-1,3-Dichloropropene	8.675	75	2746	0.52	ppb		89
68)	Ethyl Methacrylate	8.797	69	2851m	0.48	ppb		
69)	1,1,2-Trichloroethane	8.864	97	1842	0.51	ppb	#	70
72)	Tetrachloroethene	8.974	164	1617	0.58	ppb	#	74
73)	2-Hexanone	9.157	43	1861	0.46	ppb		85
74)	1,3-Dichloropropane	9.029	76	3256	0.51	ppb		88
75)	Dibromochloromethane	9.248	129	1047	0.37	ppb		85
76)	N-Butyl Acetate	9.291	43	2869	0.38	ppb		79
77)	1,2-Dibromoethane	9.346	107	1595	0.46	ppb		94
78)	Chlorobenzene	9.827	112	5656	0.55	ppb		96
79)	3-CBTF	9.846	180	2418	0.51	ppb		98
80)	4-CBTF	9.894	180	2143	0.50	ppb		91
81)	1,1,1,2-Tetrachloroethane	9.919	131	1464	0.47	ppb	#	83
82)	Ethylbenzene	9.943	106	2952	0.55	ppb	#	55
83)	(m+p)Xylene	10.053	106	6535	1.02	ppb	#	86
84)	o-Xylene	10.413	106	2618	0.42	ppb	#	74
85)	Styrene	10.425	104	5090	0.48	ppb		86
87)	Bromoform	10.583	173	682	0.39	ppb	#	62
88)	2-CBTF	10.656	180	2421	0.56	ppb	#	73
89)	Isopropylbenzene	10.742	105	8469	0.58	ppb		95
90)	Cyclohexanone	10.827	55	8423	9.54	ppb		91
91)	trans-1,4-Dichloro-2-B...	11.065	53	604	0.49	ppb	#	28
92)	1,1,2,2-Tetrachloroethane	11.016	83	2464	0.52	ppb		83
93)	Bromobenzene	10.992	156	2330	0.61	ppb	#	76
94)	1,2,3-Trichloropropane	11.034	110	553	0.36	ppb	#	64
95)	n-Propylbenzene	11.089	91	9315	0.55	ppb		95
96)	2-Chlorotoluene	11.156	91	5484	0.50	ppb		82
97)	3-Chlorotoluene	11.211	91	5899m	0.56	ppb		
98)	4-Chlorotoluene	11.254	91	6844	0.56	ppb		95
99)	1,3,5-Trimethylbenzene	11.242	105	6363	0.51	ppb		88
100)	tert-Butylbenzene	11.510	119	5221	0.50	ppb		94
101)	1,2,4-Trimethylbenzene	11.553	105	6856	0.54	ppb		95
102)	3,4-DCBTF	11.620	214	2060	0.60	ppb		91
103)	sec-Butylbenzene	11.693	105	7651	0.51	ppb		90
104)	p-Isopropyltoluene	11.815	119	6660	0.51	ppb		99
105)	1,3-Dclbenz	11.784	146	4479	0.60	ppb		91
106)	1,4-Dclbenz	11.857	146	4008	0.52	ppb		87
107)	2,4-DCBTF	11.906	214	2254	0.70	ppb	#	66
108)	2,5-DCBTF	11.949	214	2014	0.58	ppb	#	86
109)	n-Butylbenzene	12.150	91	6520	0.53	ppb		90
110)	1,2-Dclbenz	12.162	146	4387	0.58	ppb		88
111)	1,2-Dibromo-3-chloropr...	12.790	157	429m	0.40	ppb		

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:09:05 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

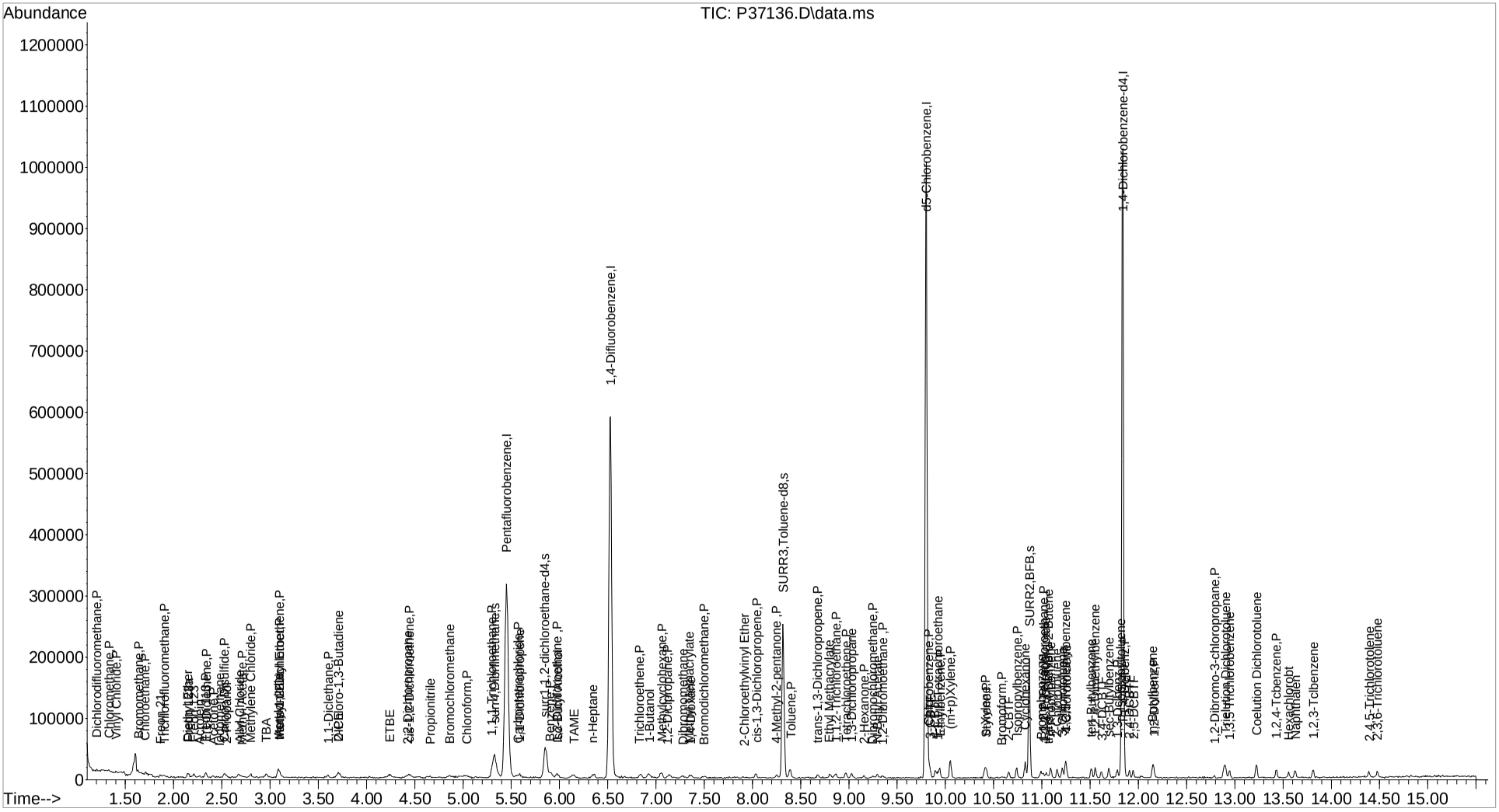
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
112) Trielution Dichlorotol...	12.900	125	9442	1.55	ppb	#	86
113) 1,3,5 Trichlorobenzene	12.943	180	2858	0.55	ppb	#	84
114) Coelution Dichlorotoluene	13.229	125	6250	0.93	ppb	#	85
115) 1,2,4-Tcbenzene	13.430	180	2717	0.49	ppb		92
116) Hexachlorobt	13.558	225	1209	0.55	ppb		87
117) Naphthalen	13.625	128	6752	0.42	ppb		93
118) 1,2,3-Tclbenzene	13.814	180	2990	0.53	ppb		94
119) 2,4,5-Trichlorotolene	14.394	159	1428	0.41	ppb	#	55
120) 2,3,6-Trichlorotoluene	14.479	159	1563	0.49	ppb	#	89

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

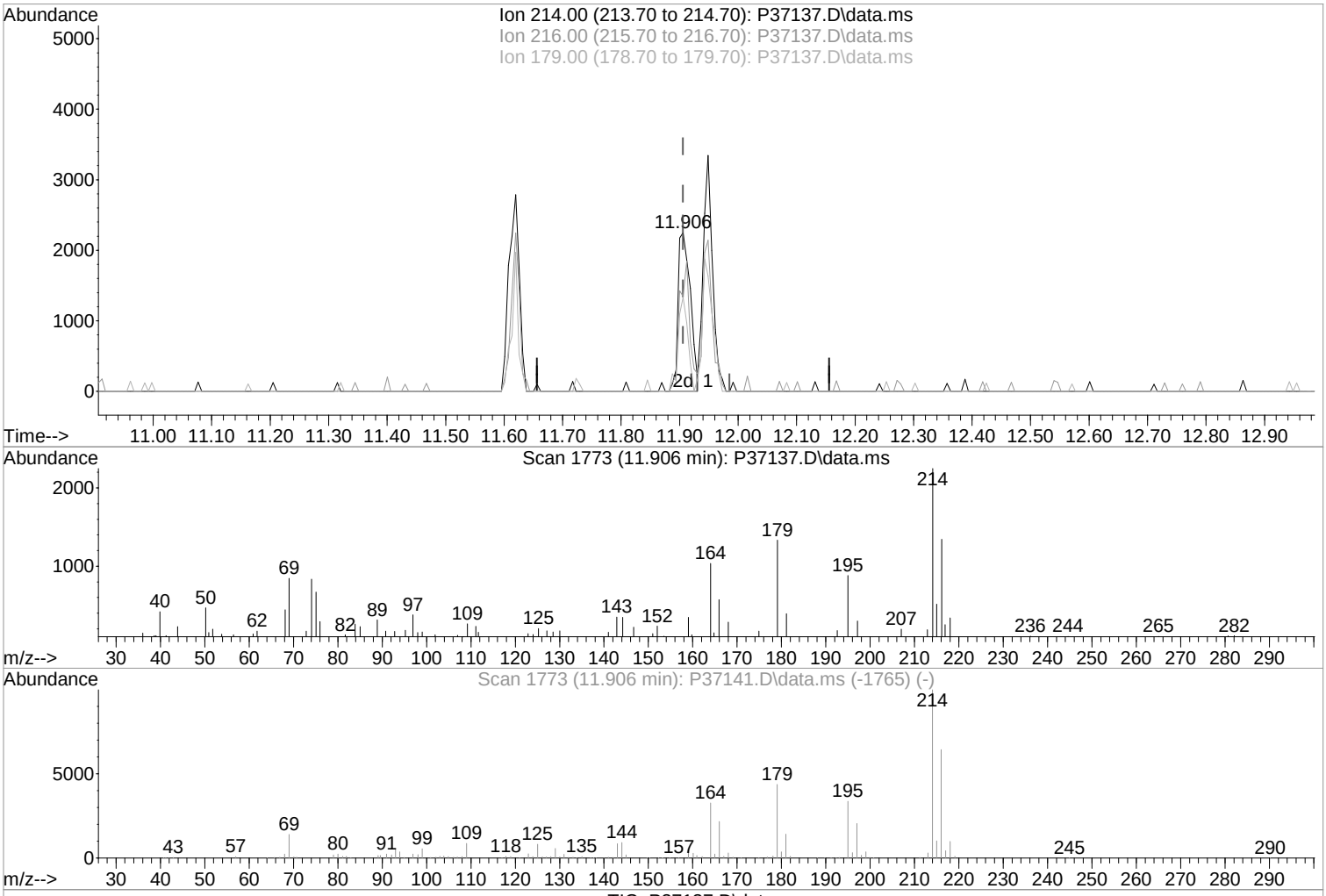
Quant Time: Jul 13 16:09:05 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(107) 2,4-DCBTF

11.906min (+0.000) 1.08 ppb m

response 3306

Ion	Exp%	Act%
214.00	100	100
216.00	64.40	59.80
179.00	43.70	59.27#
0.00	0.00	0.00

Manual Integration:

After

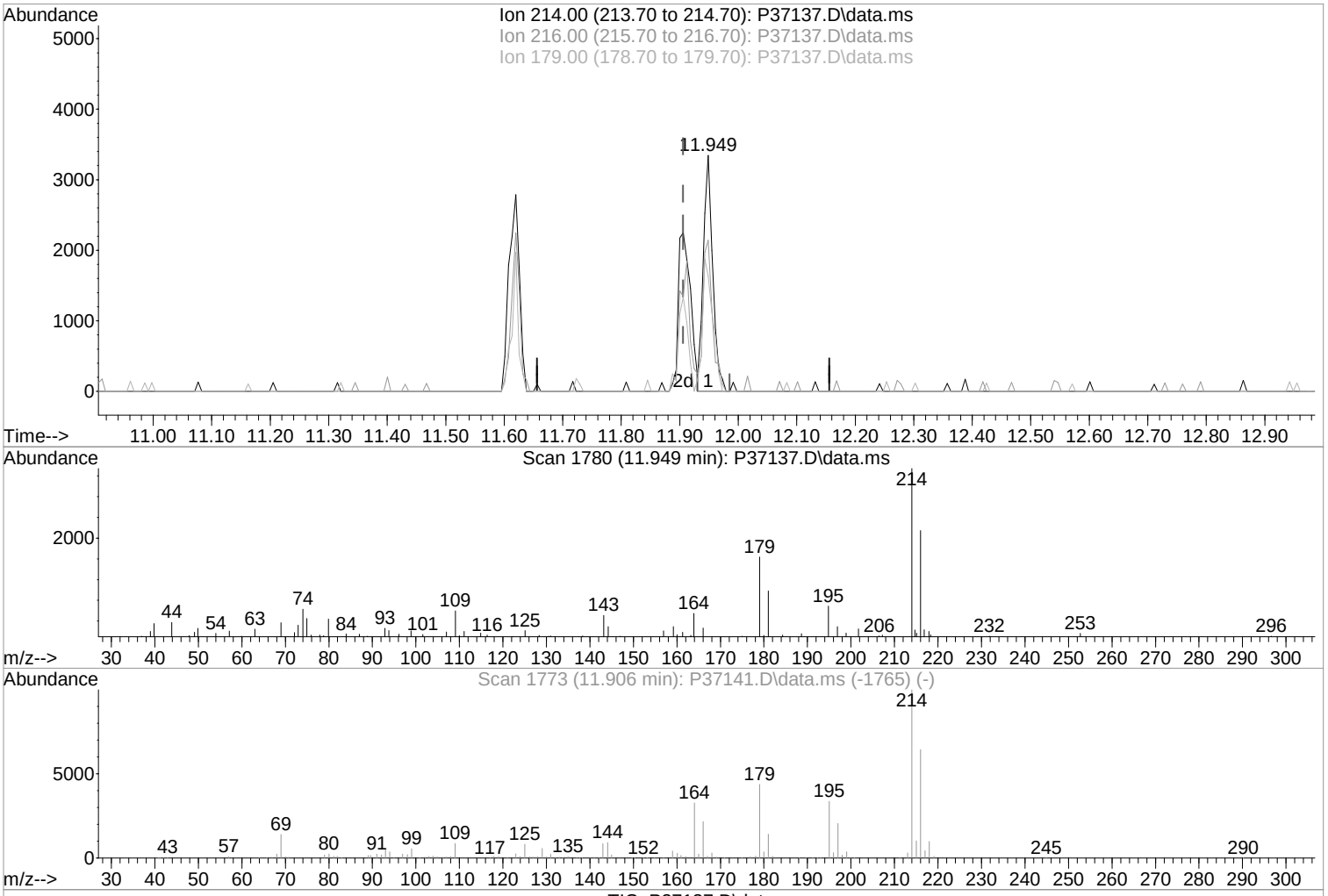
Wrong peak selected.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(107) 2,4-DCBTF

11.949min (+0.043) 1.22 ppb

response 3733

Ion	Exp%	Act%
214.00	100	100
216.00	64.40	59.96
179.00	43.70	45.72
0.00	0.00	0.00

Manual Integration:

Before

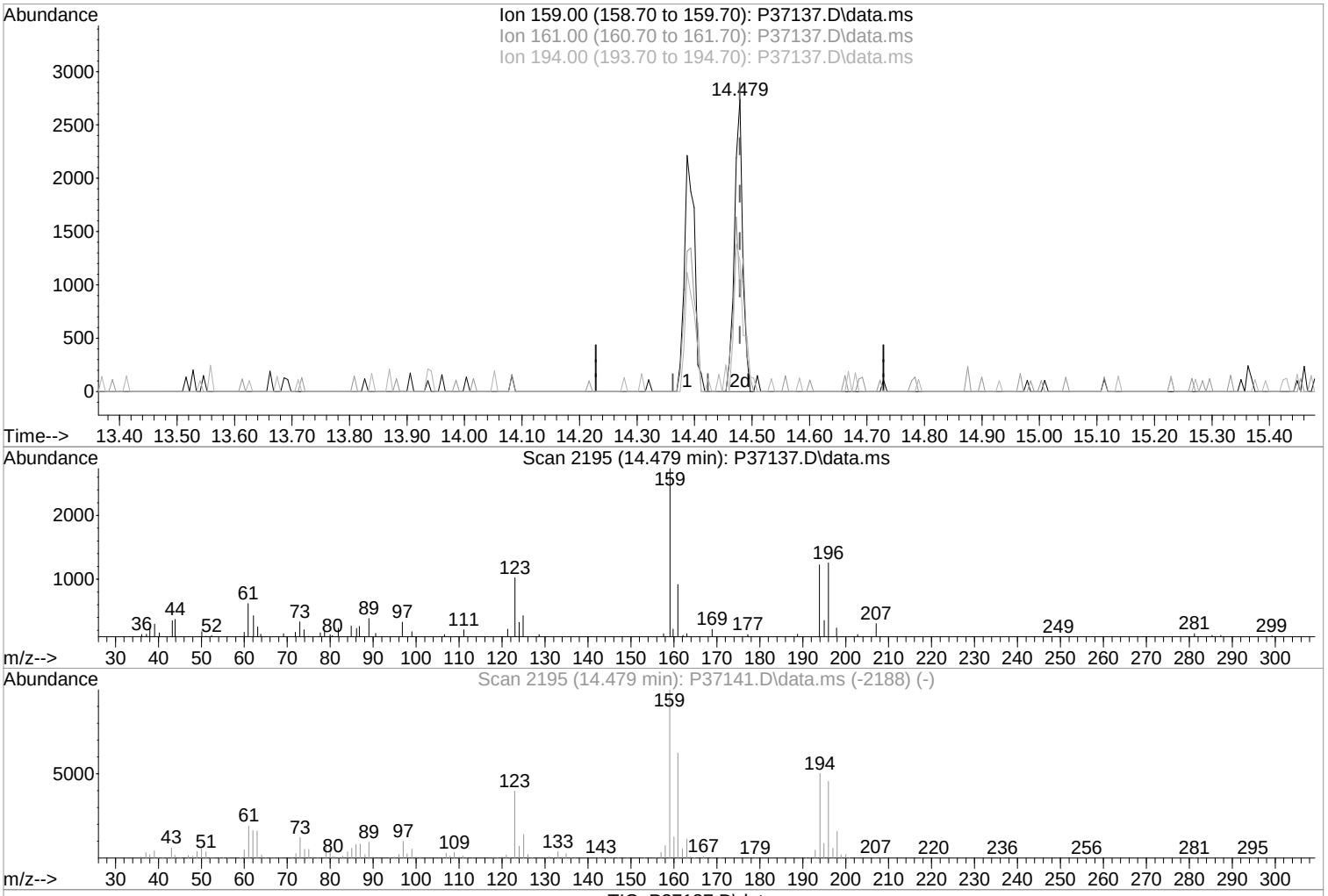
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(120) 2,3,6-Trichlorotoluene

14.479min (+0.000) 0.91 ppb m

response 2715

Ion	Exp%	Act%
159.00	100	100
161.00	62.40	33.47#
194.00	50.20	44.76
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

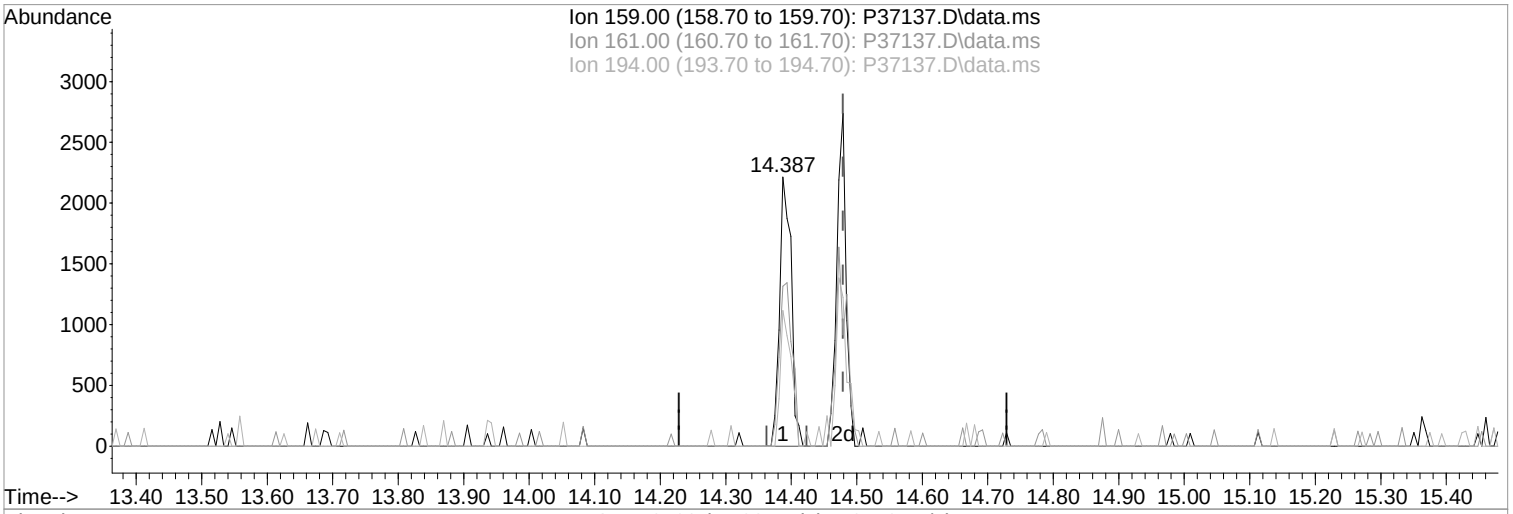
07/13/20

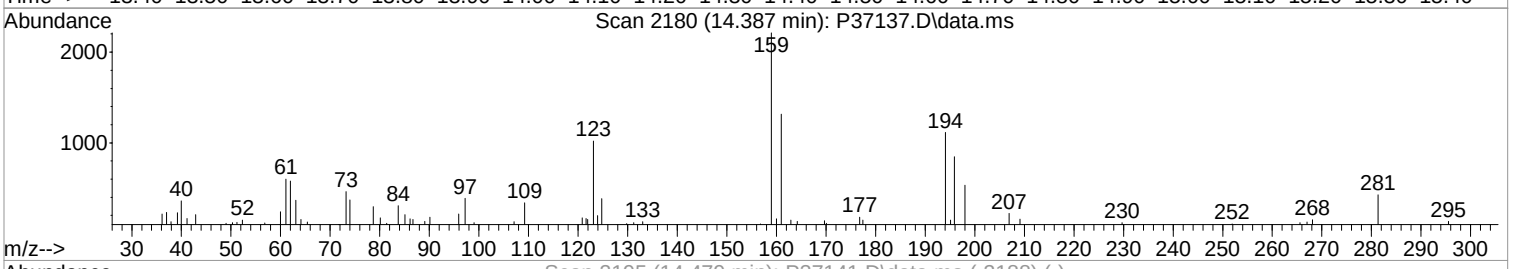
1st 07/14/20
2nd 07/14/20

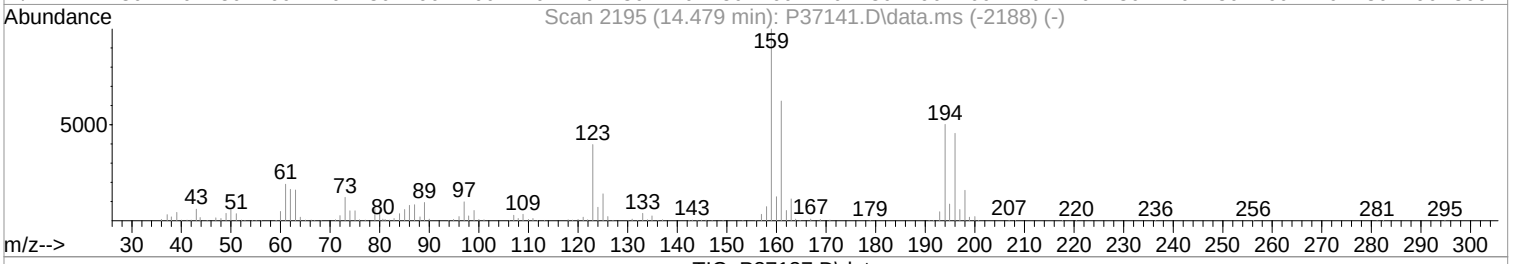
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(120) 2,3,6-Trichlorotoluene

14.387min (-0.091) 0.91 ppb

response 2722

Ion	Exp%	Act%
159.00	100	100
161.00	62.40	59.44
194.00	50.20	50.41
0.00	0.00	0.00

Manual Integration:

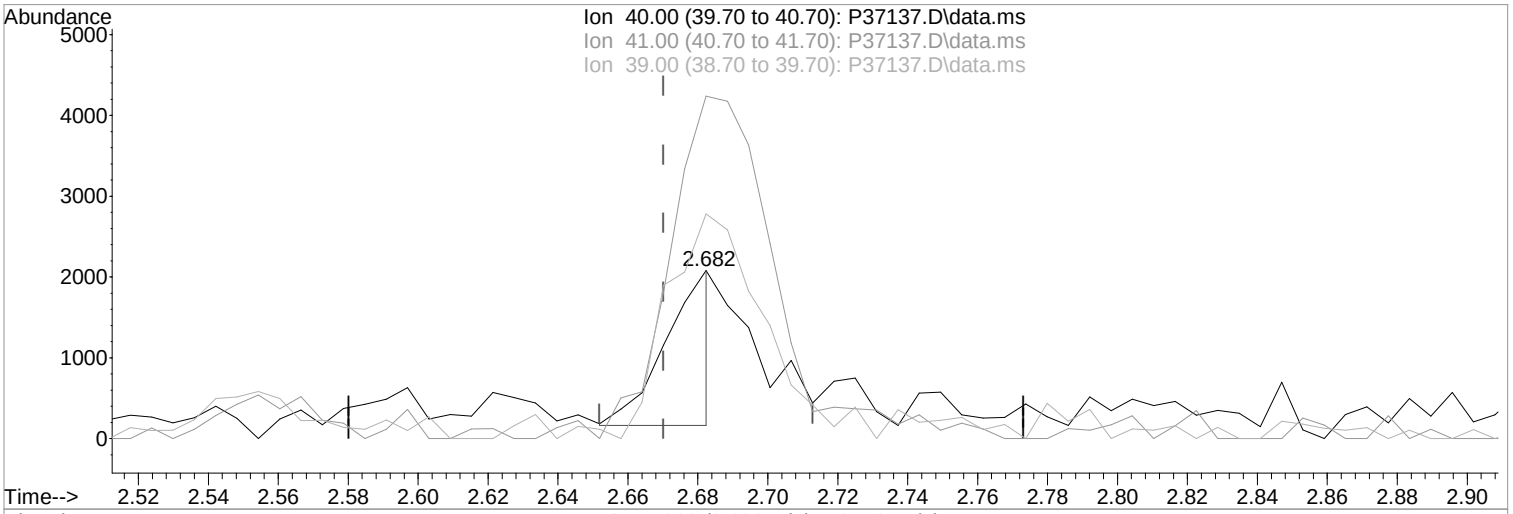
Before

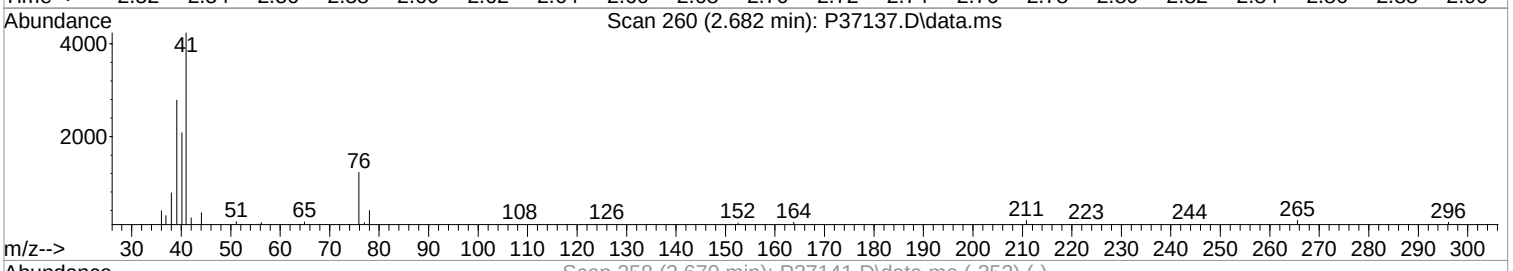
07/13/20

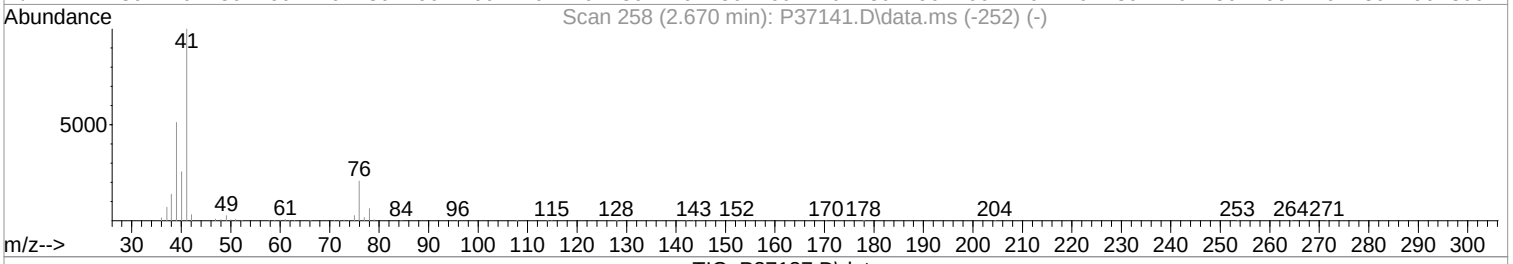
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(19) Acetonitrile

2.682min (+0.012) 8.29 ppb m

response 1843

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	203.51#
39.00	200.50	133.67#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

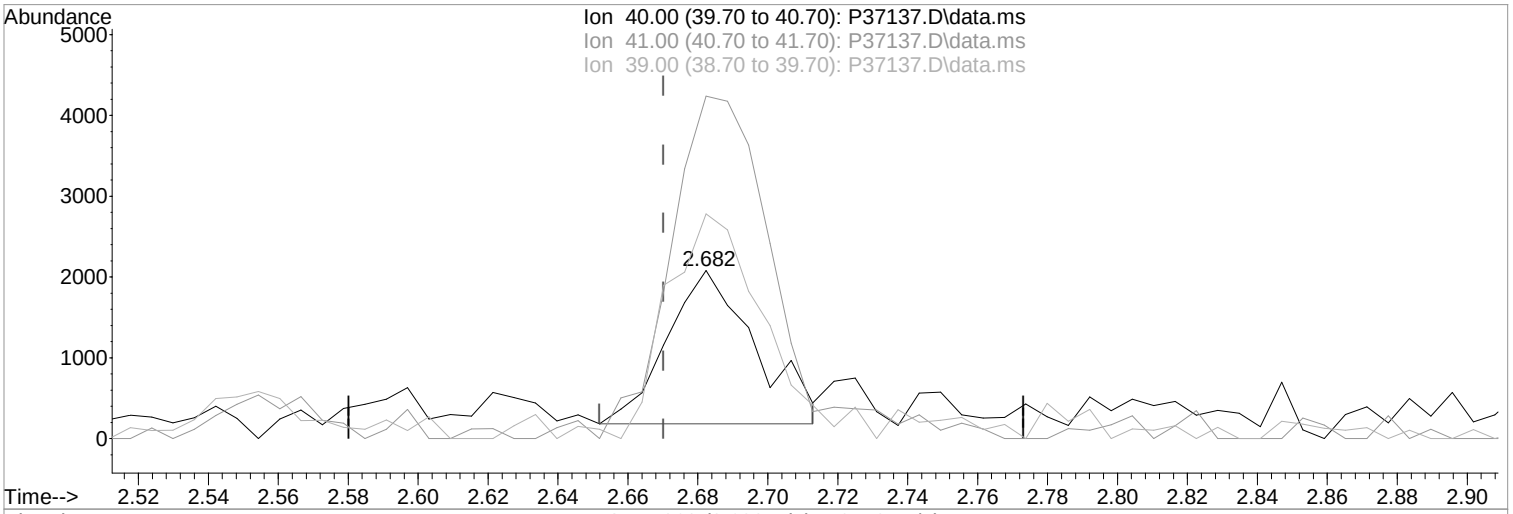
07/13/20

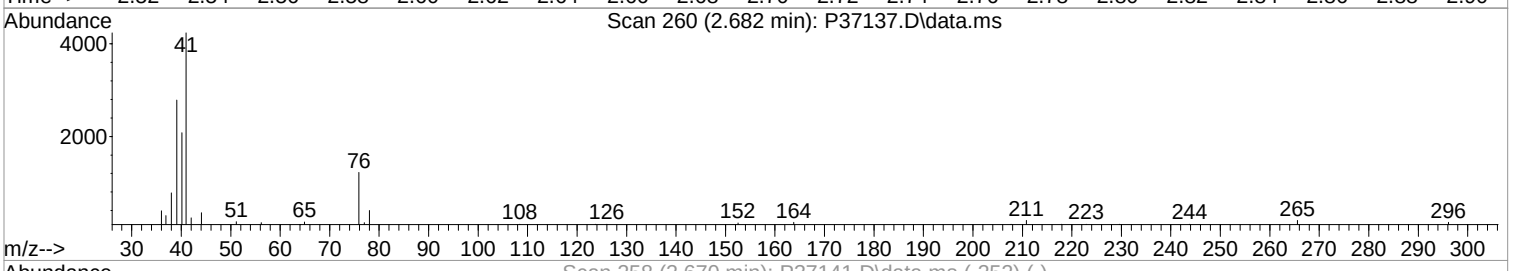
1st 07/14/20
2nd 07/14/20

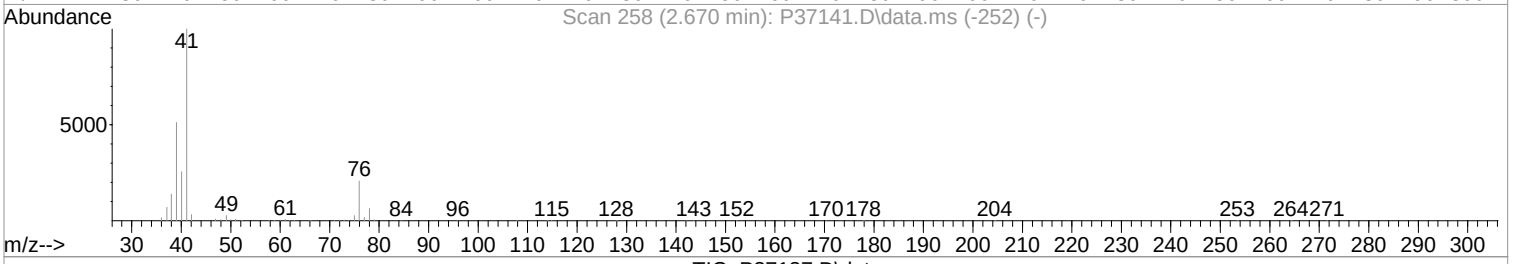
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(19) Acetonitrile

2.682min (+0.012) 14.98 ppb

response 3330

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	203.51#
39.00	200.50	133.67#
0.00	0.00	0.00

Manual Integration:

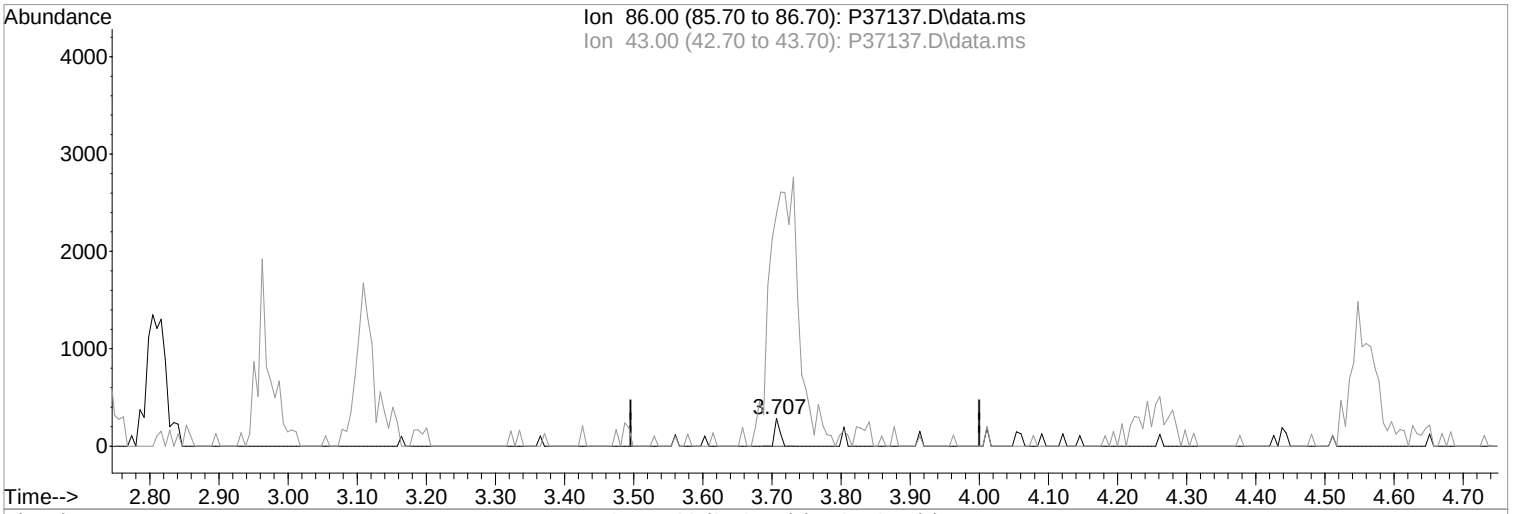
Before

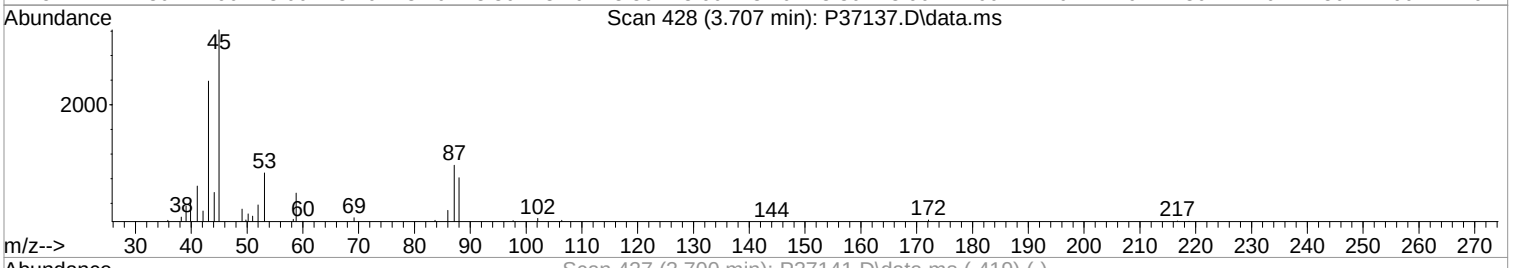
07/13/20

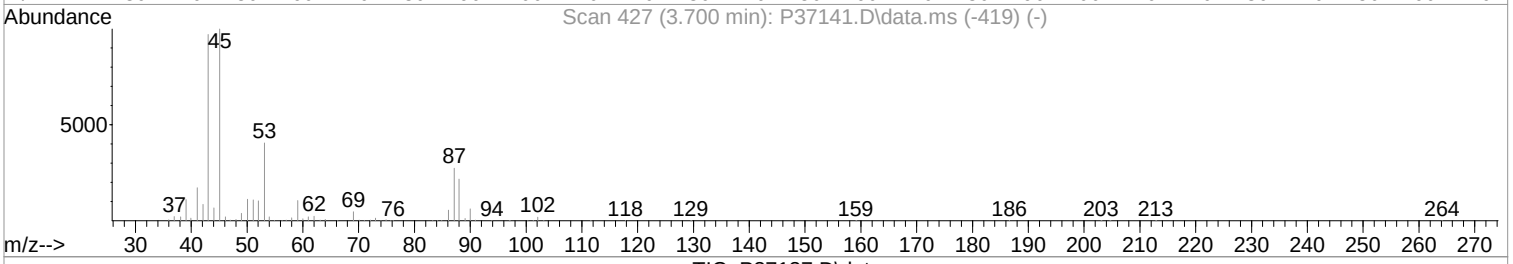
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(29) Vinyl Acetate

3.707min (+0.012) 0.33 ppb m

response 151

Ion	Exp%	Act%
86.00	100	100
43.00	1783.00	837.54#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

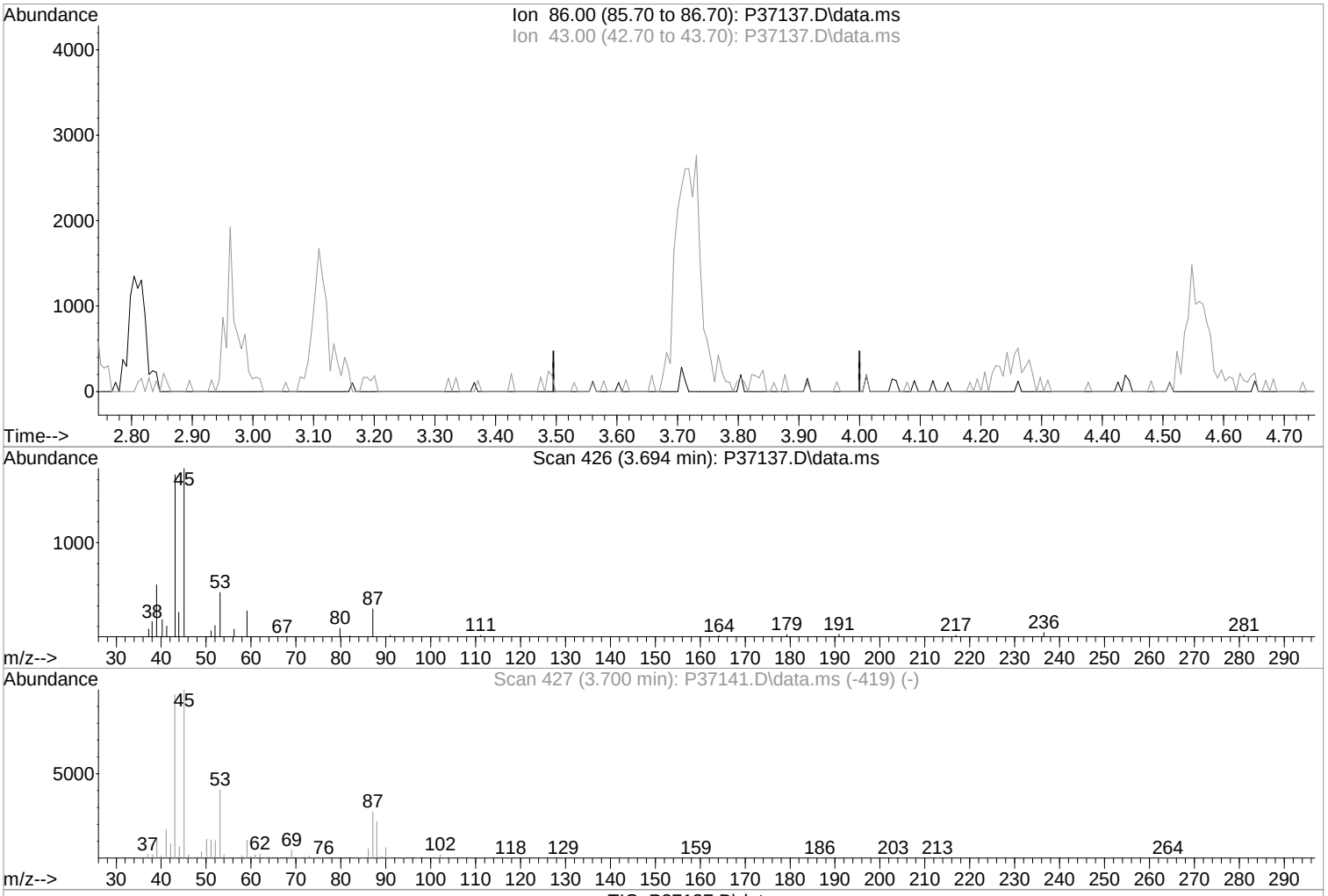
Peak not found.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(29) Vinyl Acetate

3.694min (-3.694) 0.00 ppb

response 0

Ion	Exp%	Act%
86.00	100	0.00
43.00	1783.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

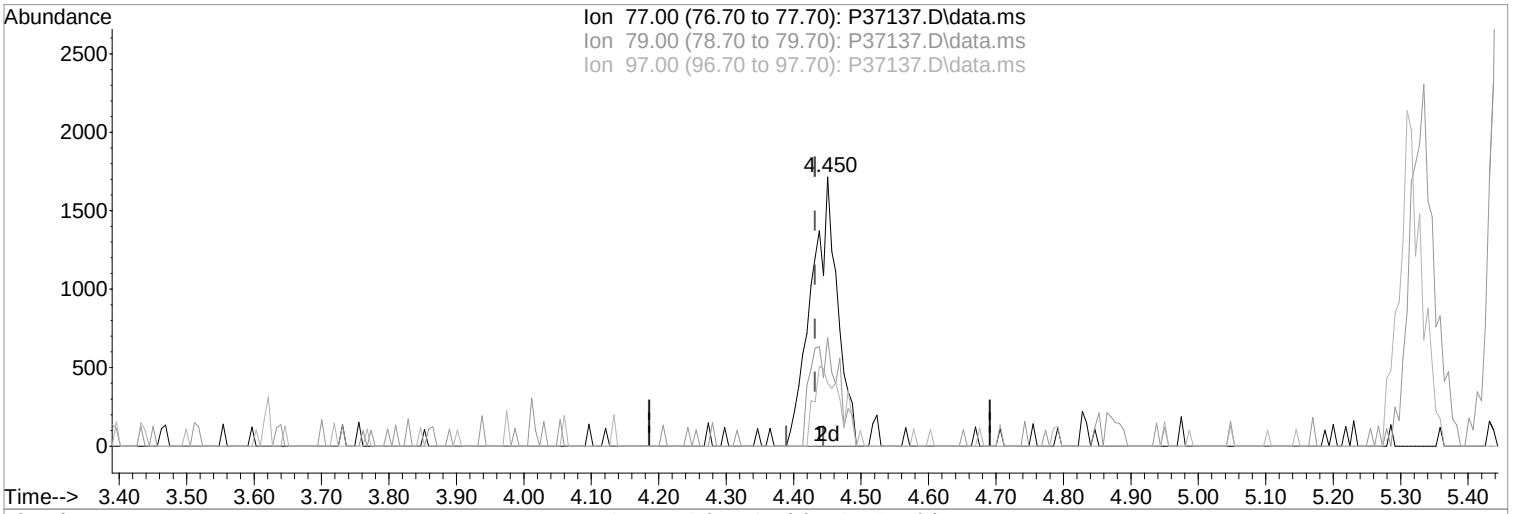
07/13/20

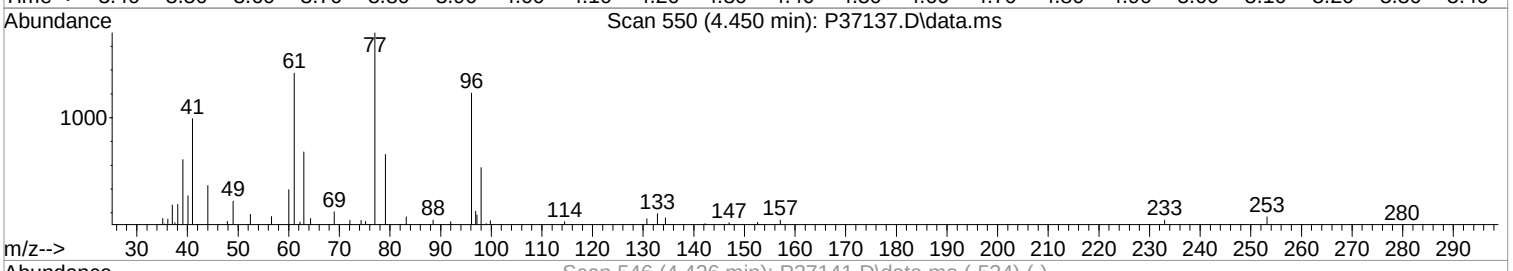
1st 07/14/20
2nd 07/14/20

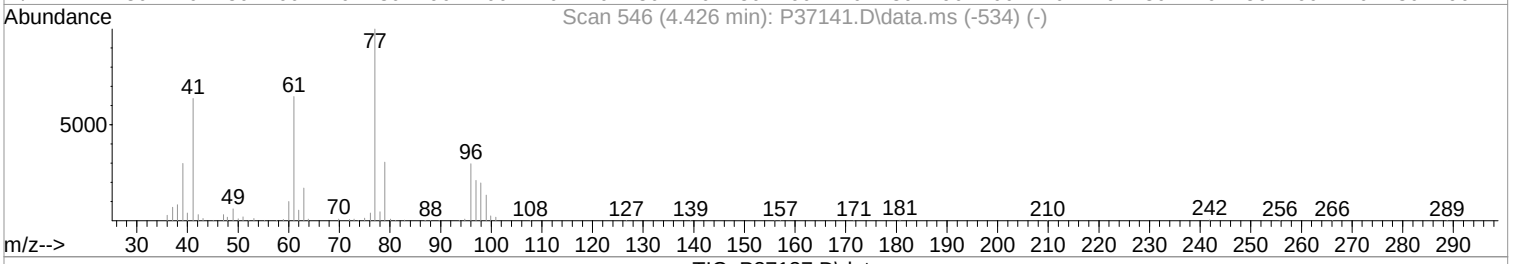
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(33) 2,2-Dichloropropane

4.450min (+0.018) 1.02 ppb m

response 4606

Ion	Exp%	Act%
77.00	100	100
79.00	30.40	40.32
97.00	21.00	12.60
0.00	0.00	0.00

Manual Integration:

After

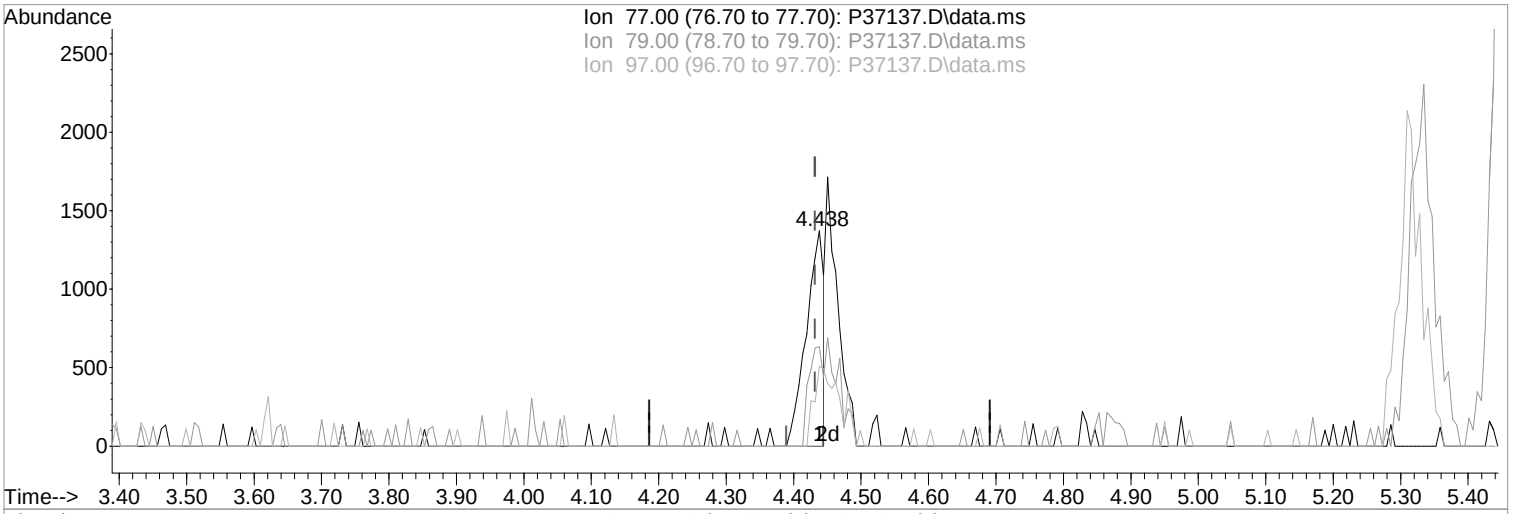
Split Peak

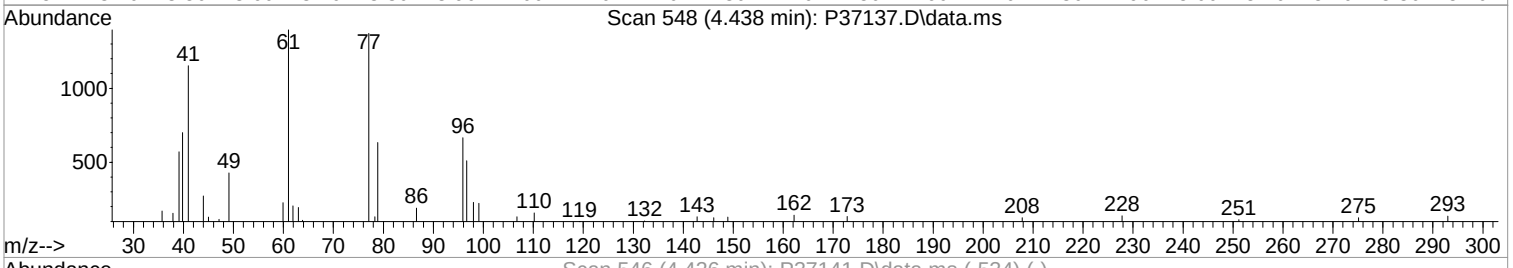
07/13/20

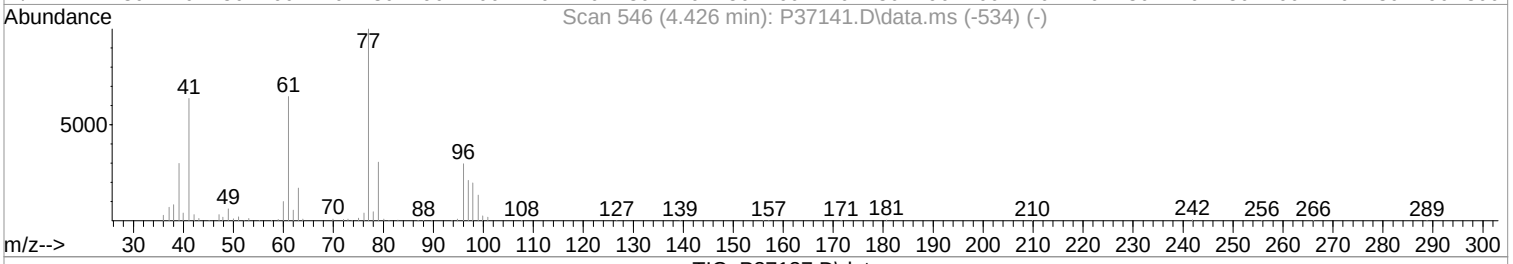
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(33) 2,2-Dichloropropane

4.438min (+0.006) 0.54 ppb

response 2453

Ion	Exp%	Act%
77.00	100	100
79.00	30.40	46.21
97.00	21.00	37.17
0.00	0.00	0.00

Manual Integration:

Before

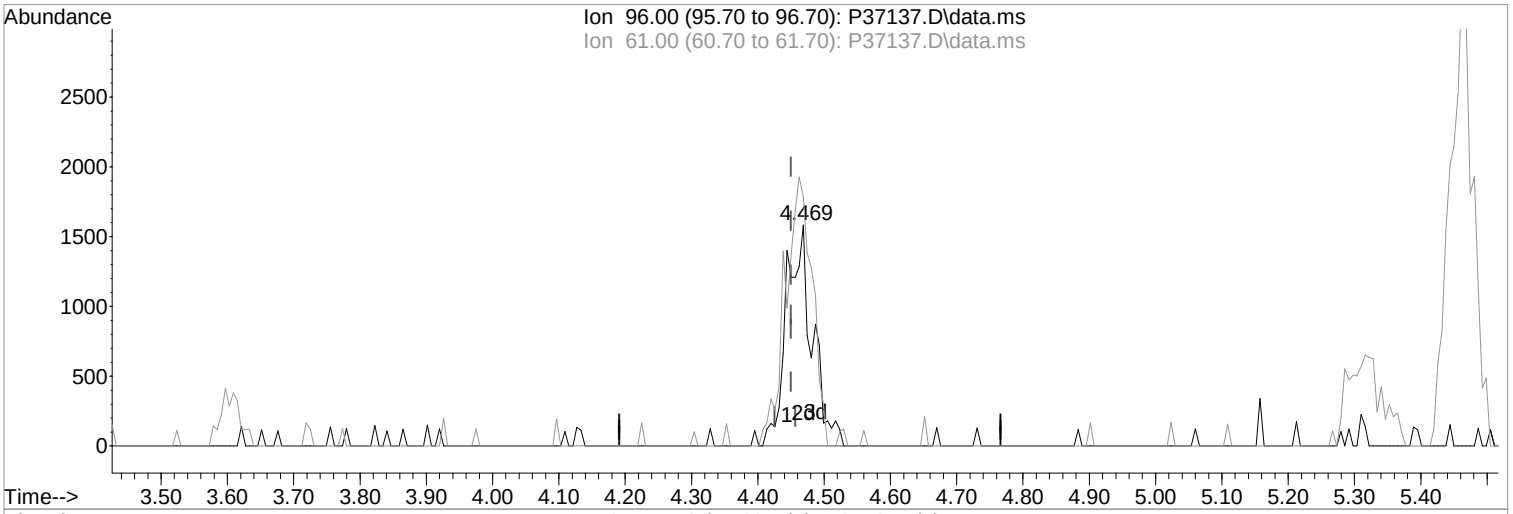
07/13/20

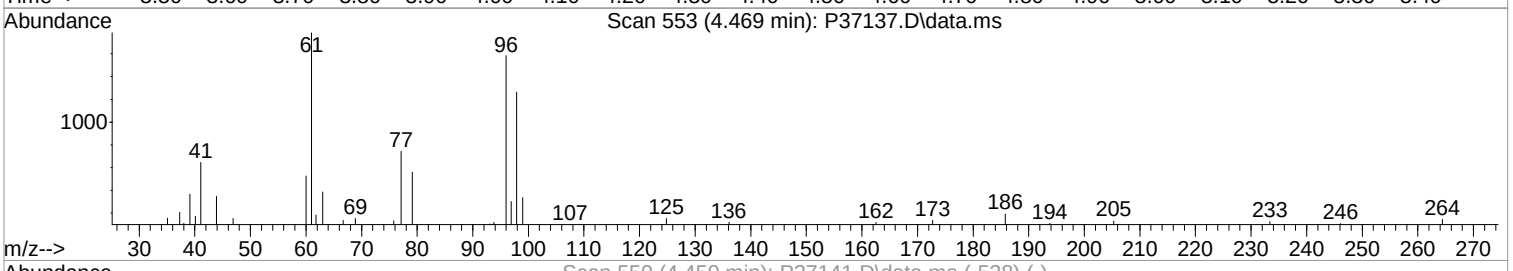
1st 07/14/20
2nd 07/14/20

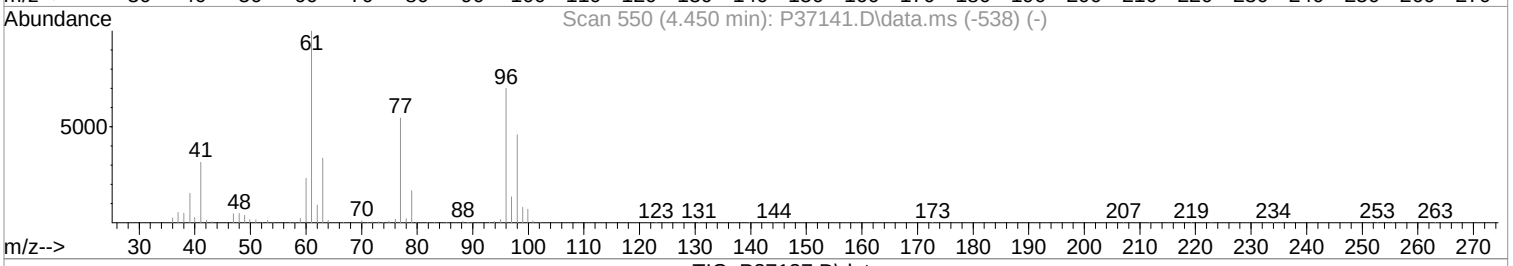
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

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

4.469min (+0.018) 1.20 ppb m

response 4326

Ion	Exp%	Act%
96.00	100	100
61.00	143.10	112.76#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

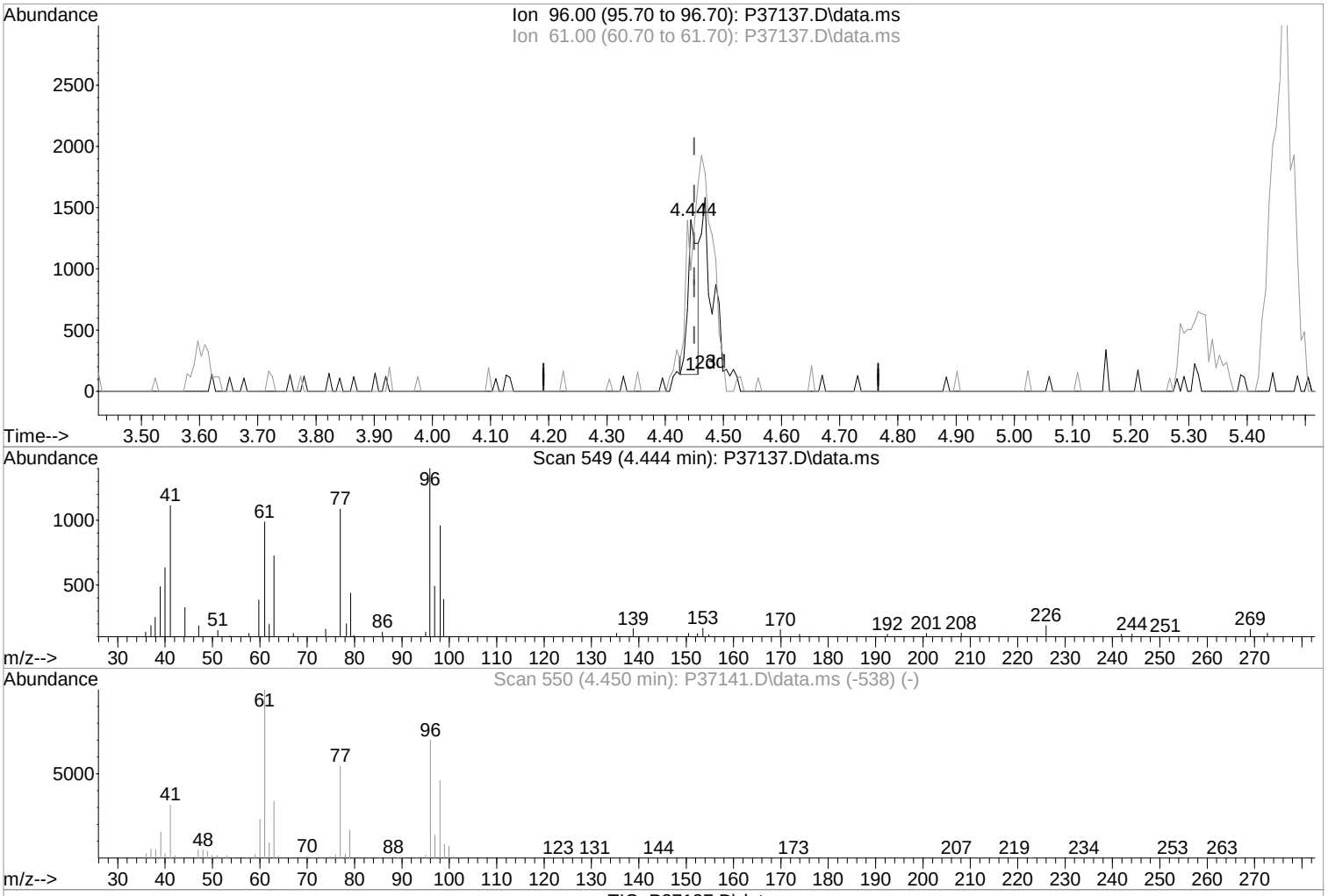
Split Peak

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

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

4.444min (-0.006) 0.41 ppb

response 1486

Ion	Exp%	Act%
96.00	100	100
61.00	143.10	70.47#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

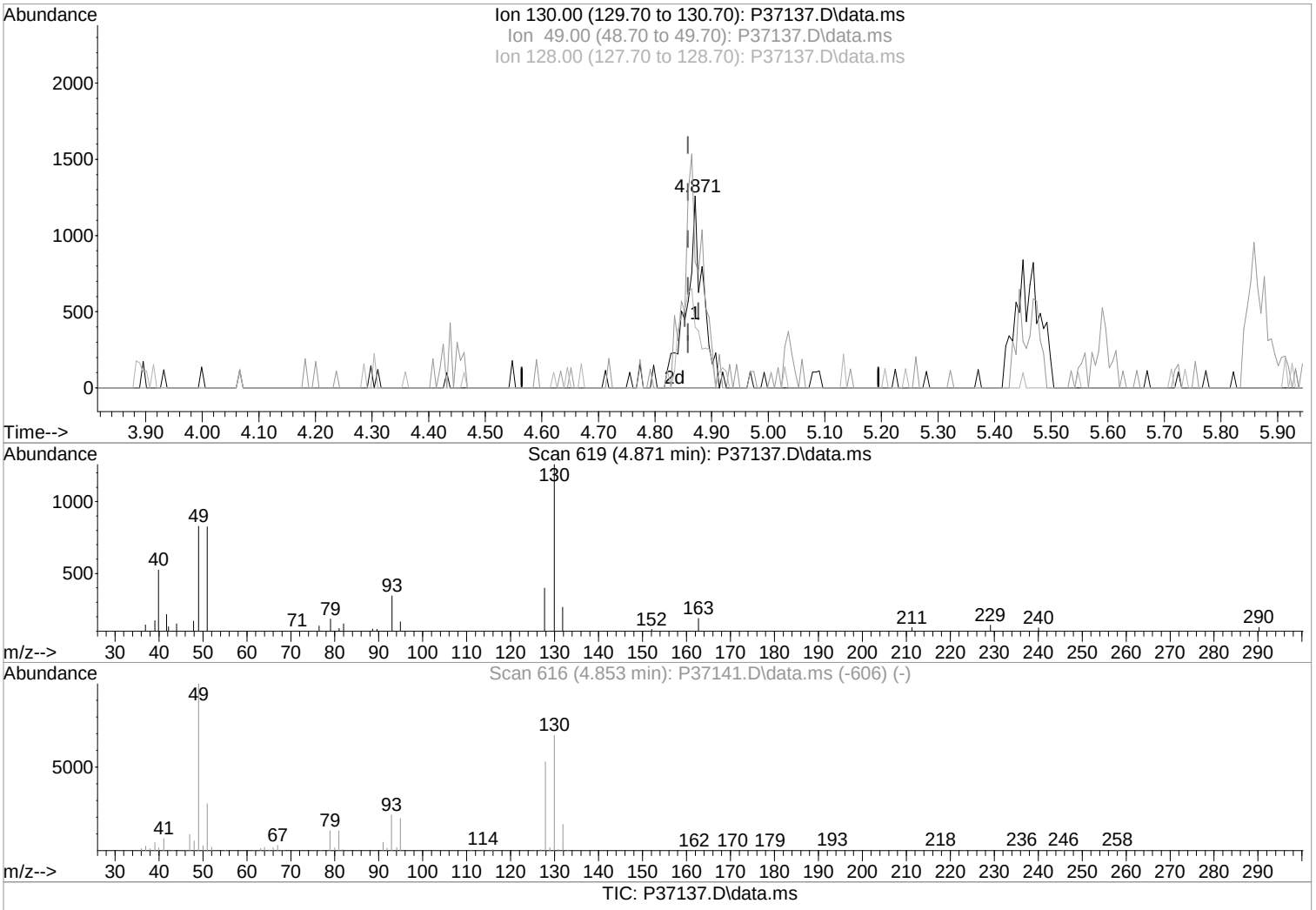
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(37) Bromochloromethane

4.871min (+0.012) 1.21 ppb m

response 2557

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	65.77#
128.00	77.00	31.69#
0.00	0.00	0.00

Manual Integration:

After

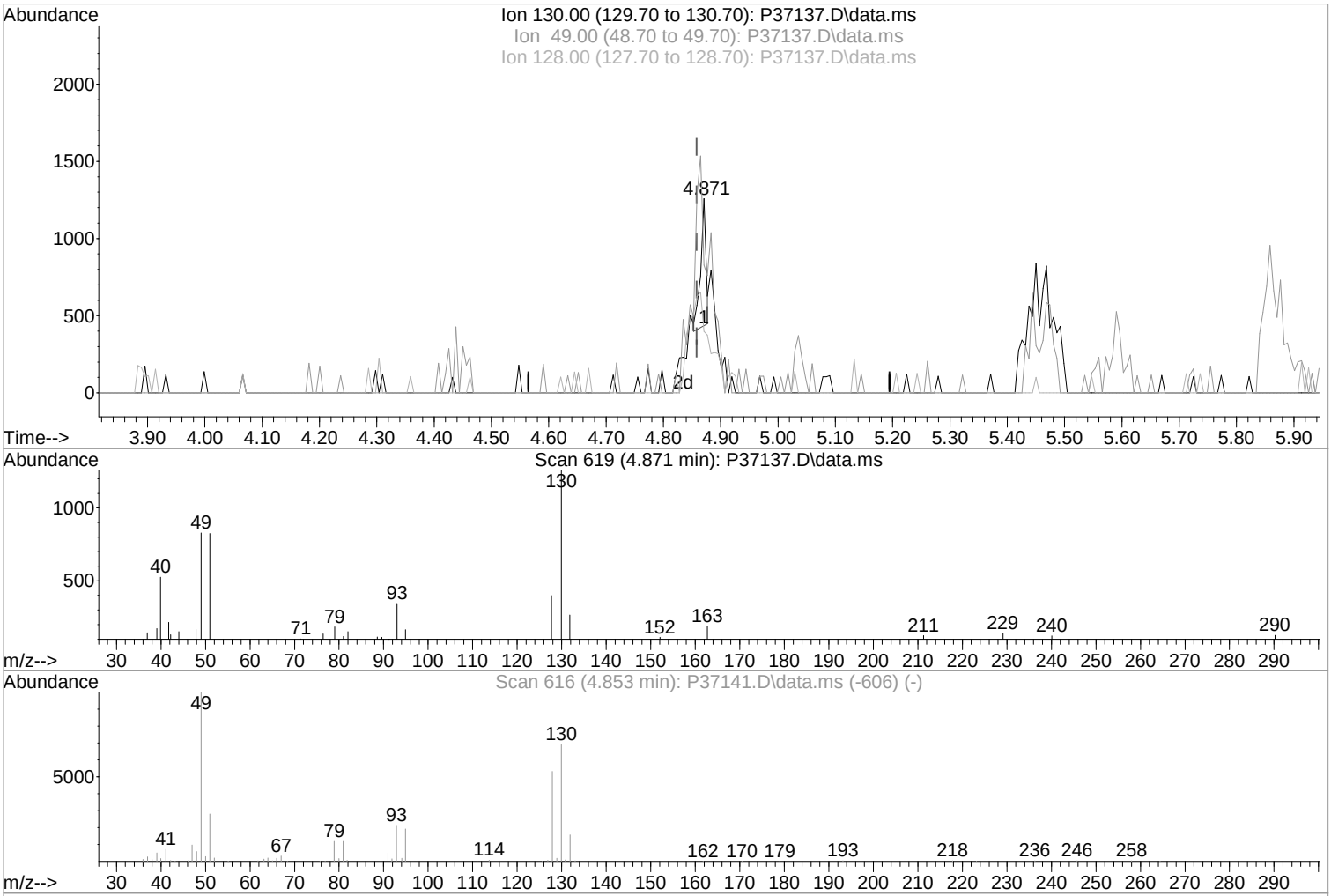
Split Peak

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(37) Bromochloromethane

4.871min (+0.012) 0.26 ppb

response 557

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	65.77#
128.00	77.00	31.69#
0.00	0.00	0.00

Manual Integration:

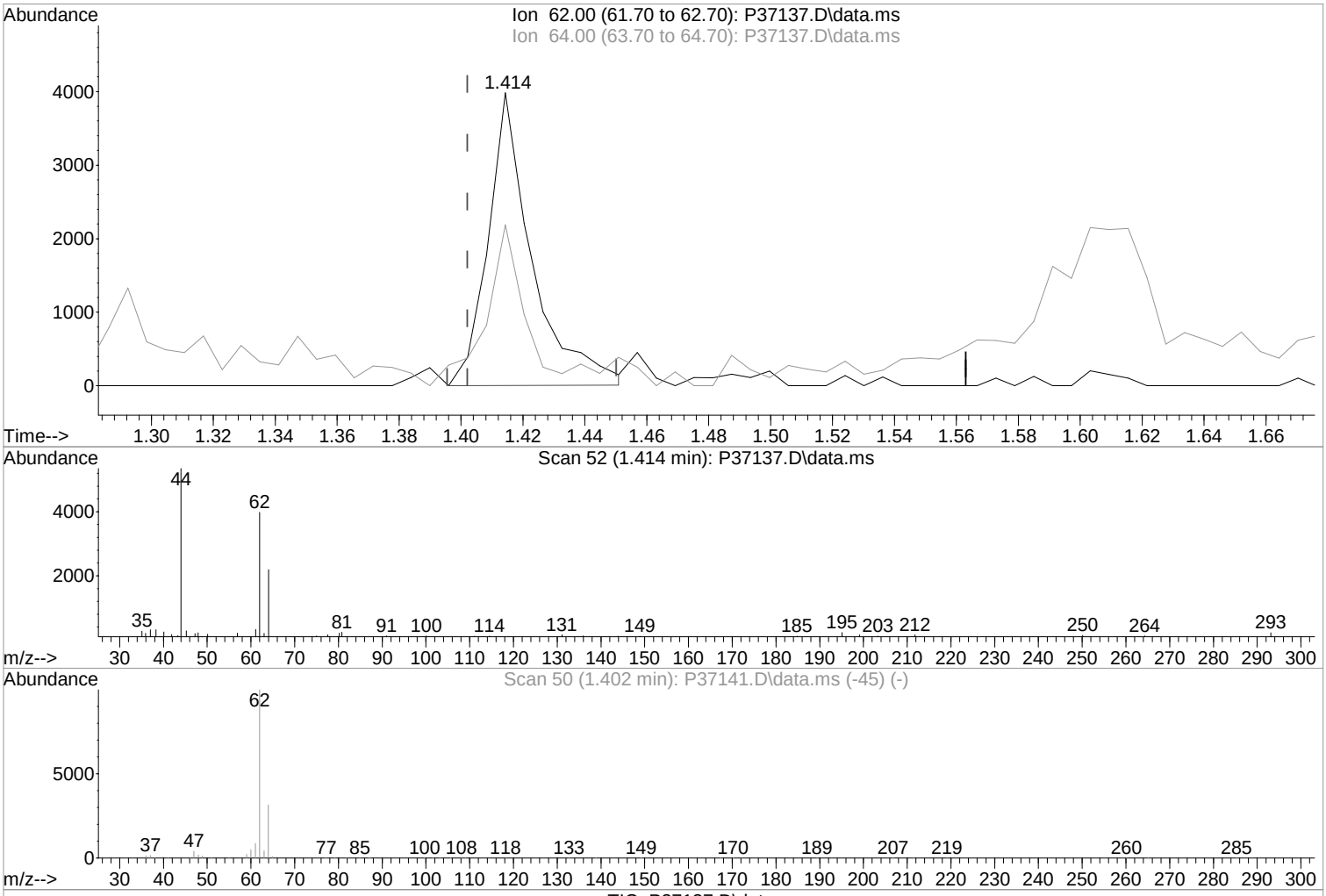
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(4) Vinyl Chloride (P)

1.414min (+0.012) 0.95 ppb m

response 3919

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	55.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

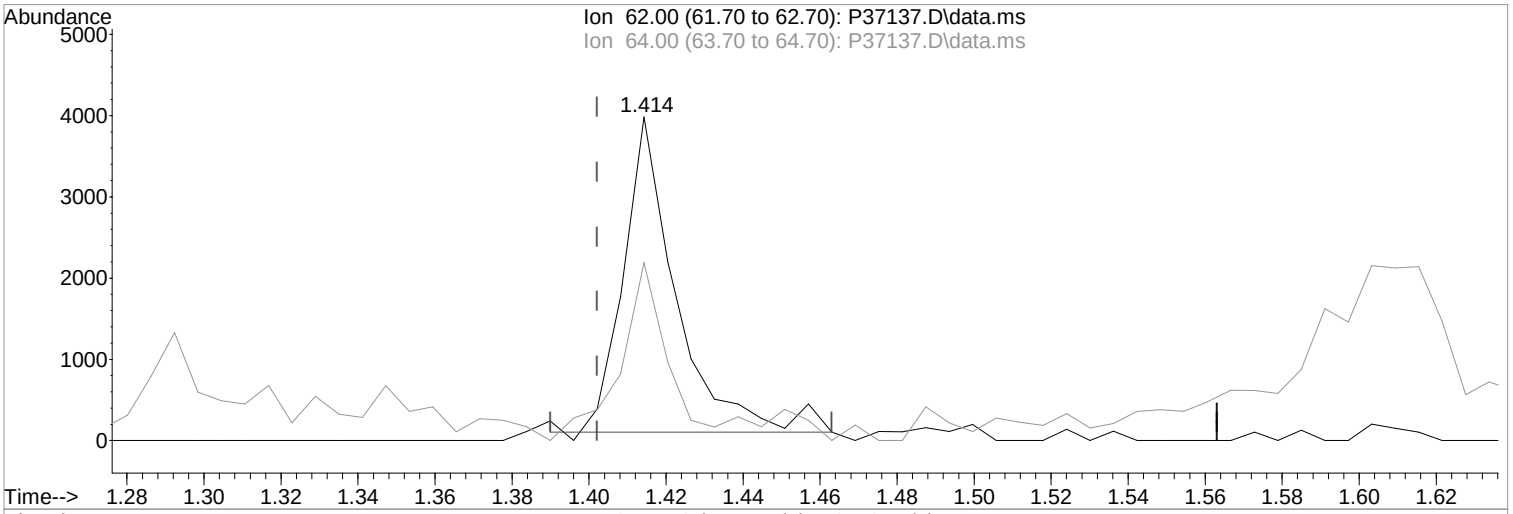
Poor integration.

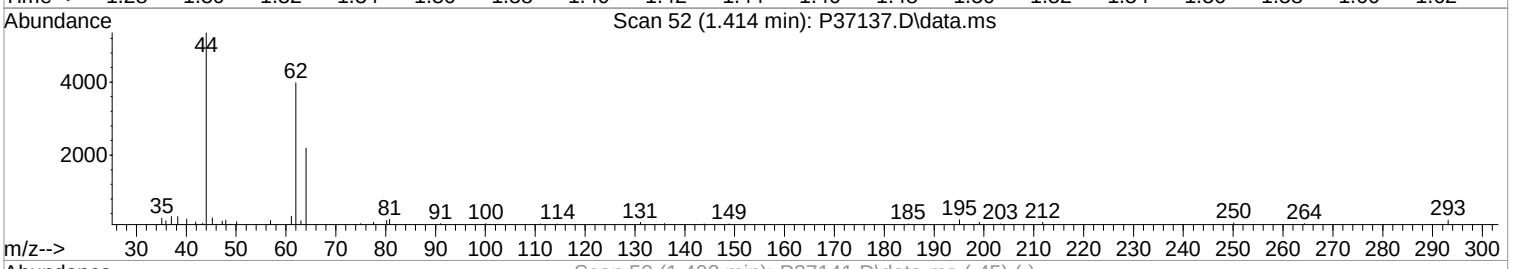
07/13/20

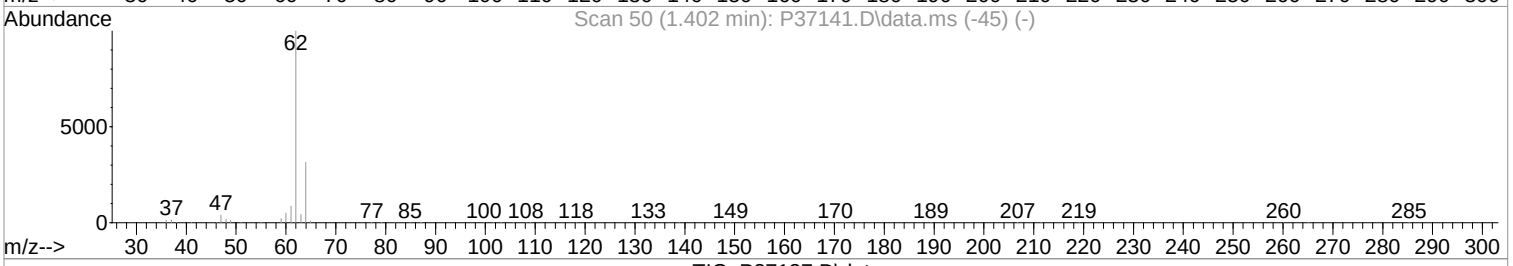
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(4) Vinyl Chloride (P)

1.414min (+0.012) 0.90 ppb

response 3674

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	55.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

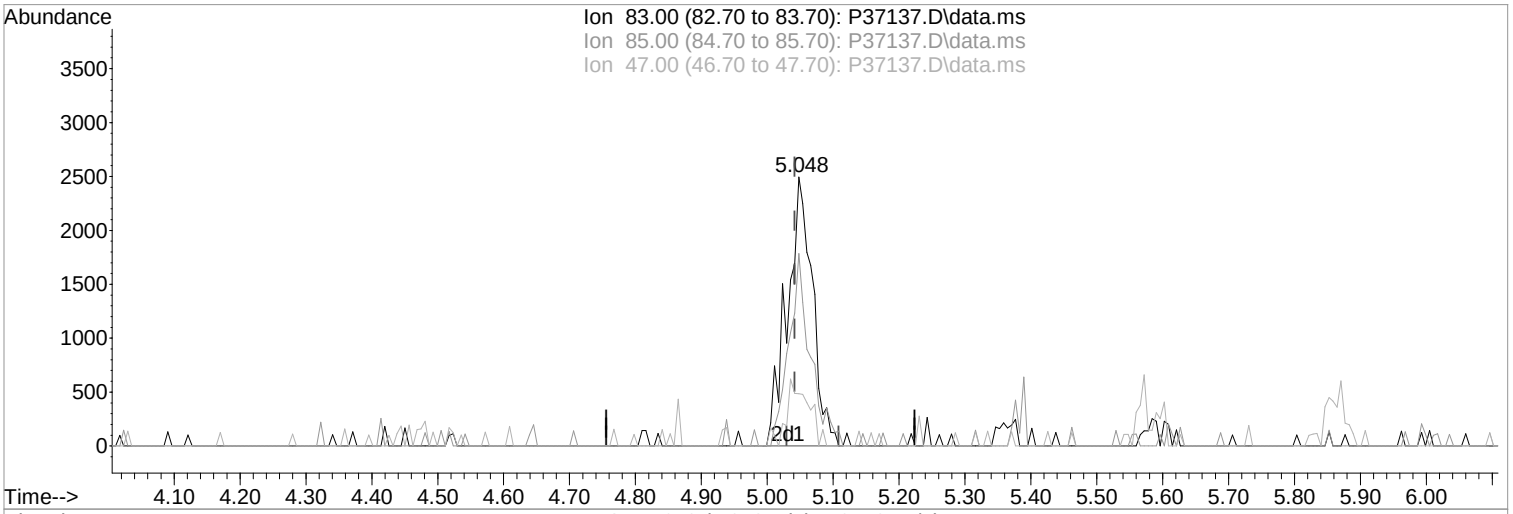
07/13/20

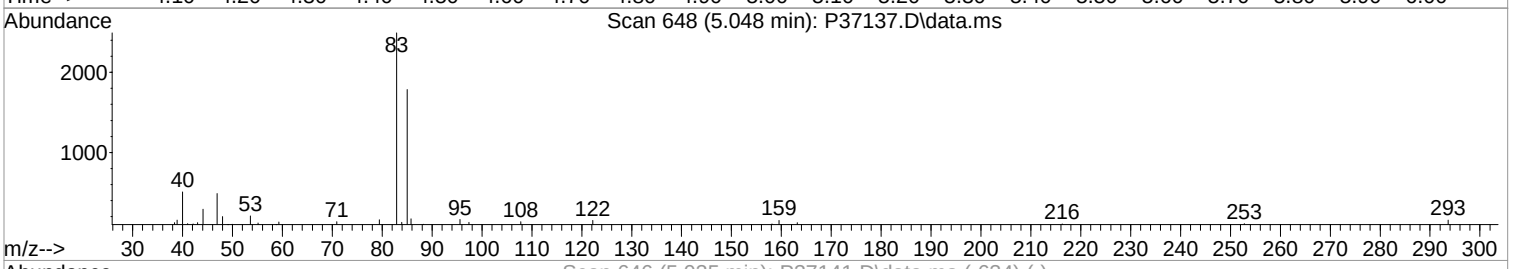
1st 07/14/20
2nd 07/14/20

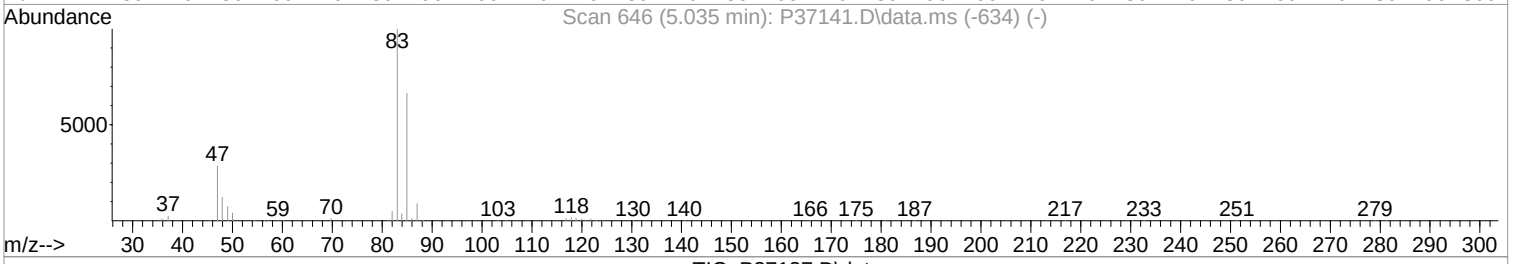
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(40) Chloroform (P)

5.048min (+0.006) 1.17 ppb m

response 6624

Ion	Exp%	Act%
83.00	100	100
85.00	66.50	71.54
47.00	28.70	19.48
0.00	0.00	0.00

Manual Integration:

After

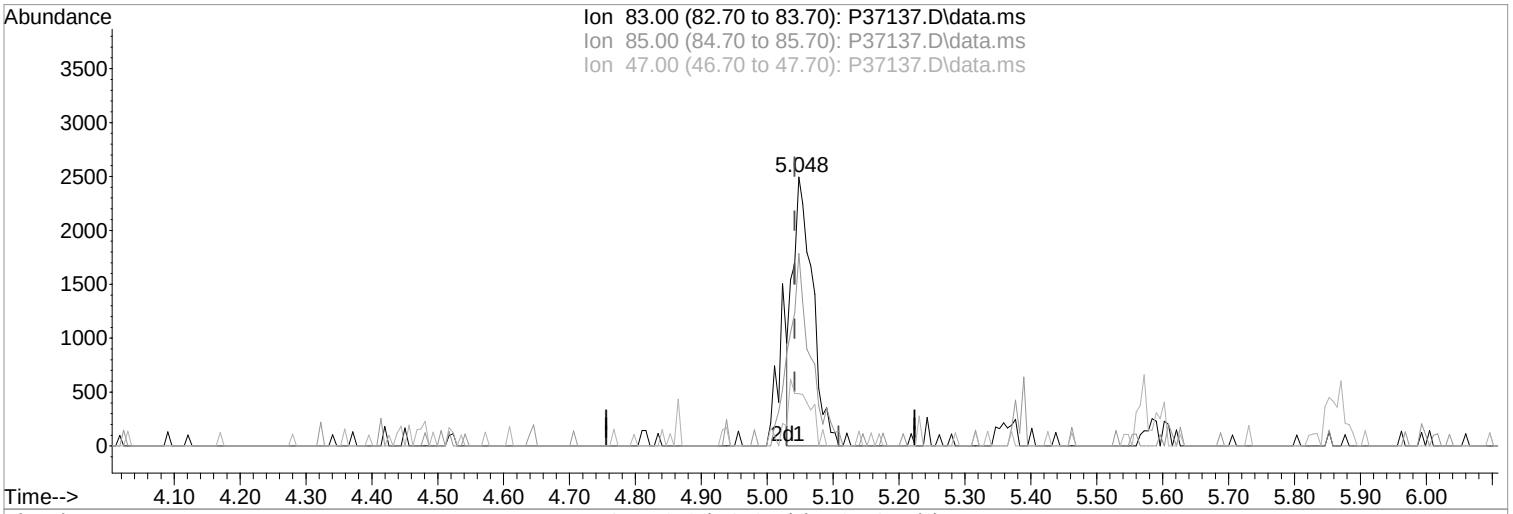
Split Peak

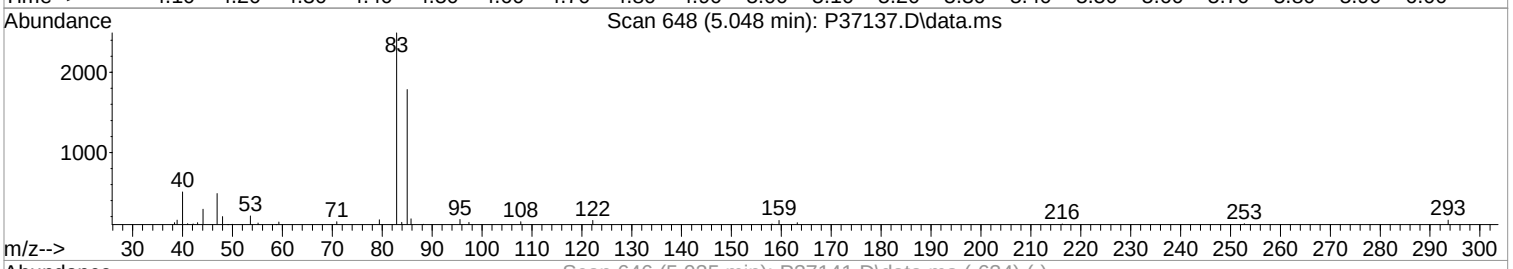
07/13/20

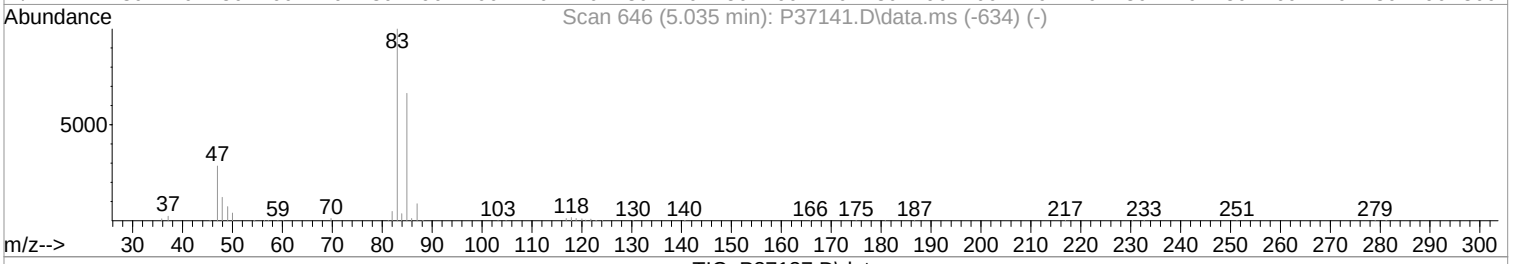
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(40) Chloroform (P)

5.048min (+0.006) 0.92 ppb

response 5225

Ion	Exp%	Act%
83.00	100	100
85.00	66.50	71.54
47.00	28.70	19.48
0.00	0.00	0.00

Manual Integration:

Before

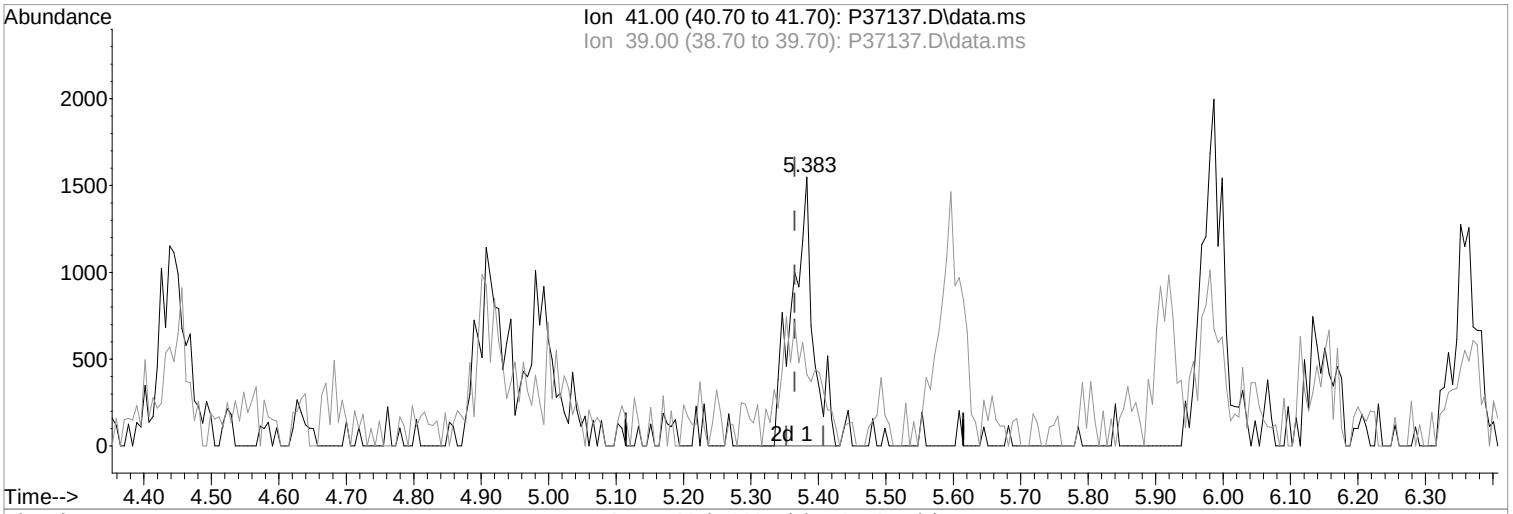
07/13/20

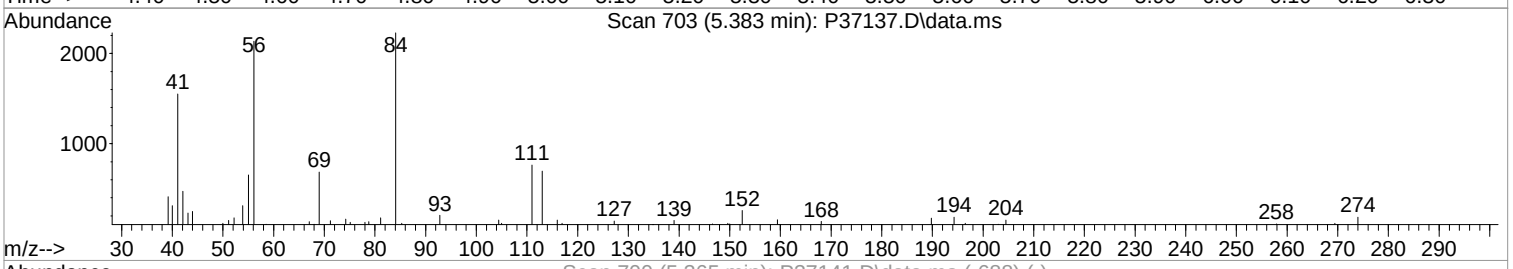
1st 07/14/20
2nd 07/14/20

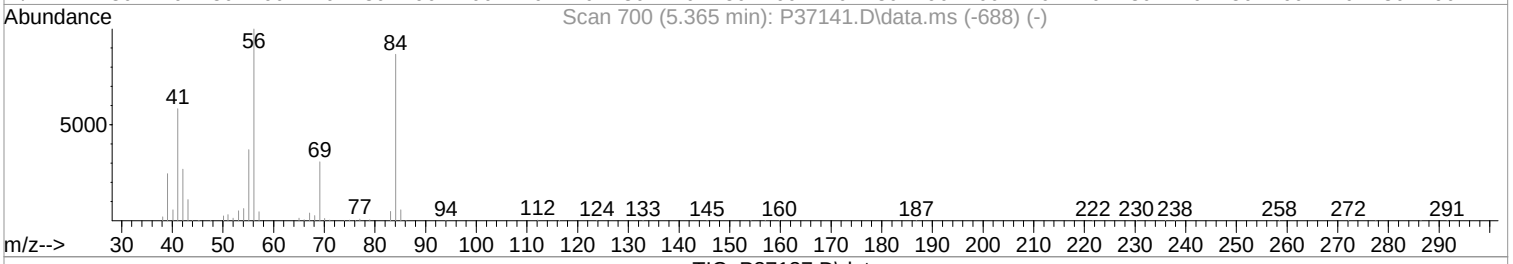
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(44) Cyclohexane (P)

5.383min (+0.018) 1.04 ppb m

response 3421

Ion	Exp%	Act%
41.00	100	100
39.00	42.20	26.53
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Split Peak

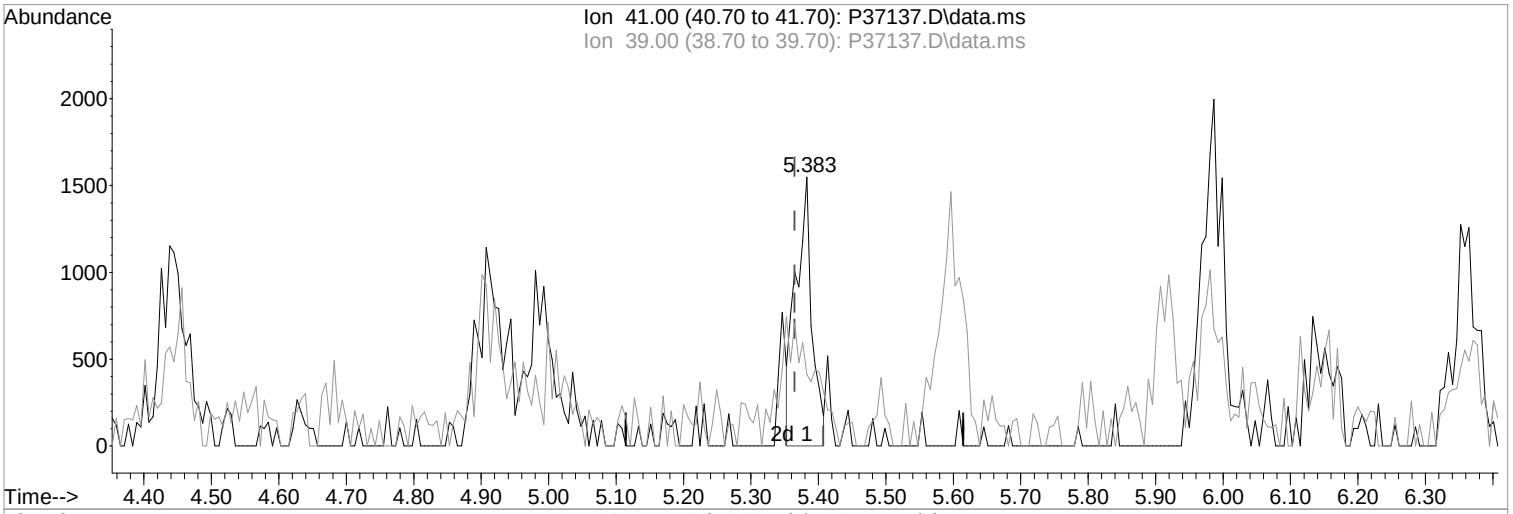
07/13/20

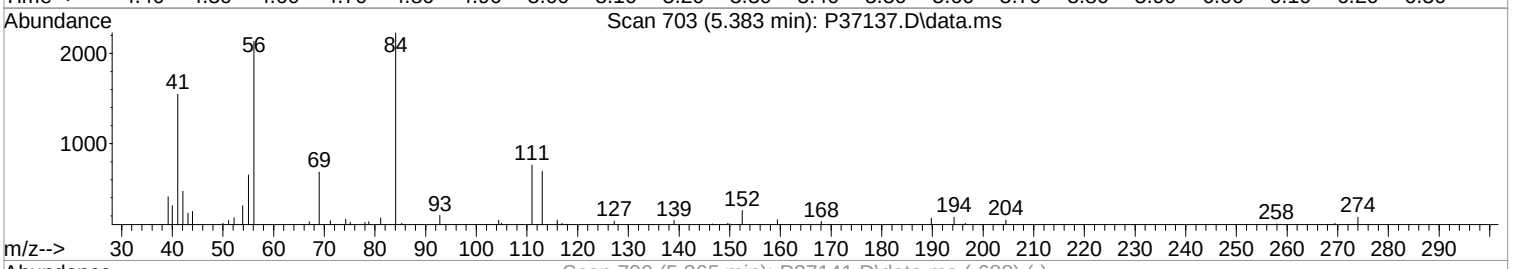
1st 07/14/20
2nd 07/14/20

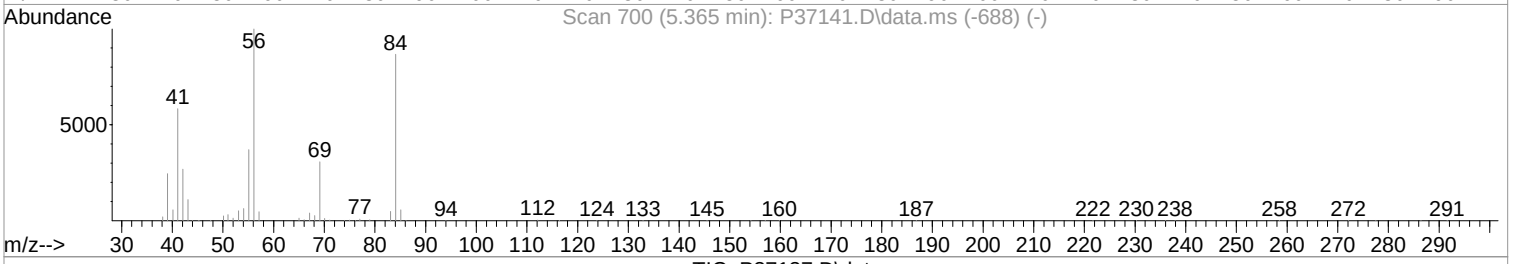
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(44) Cyclohexane (P)

5.383min (+0.018) 0.78 ppb

response 2582

Ion	Exp%	Act%
41.00	100	100
39.00	42.20	26.53
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

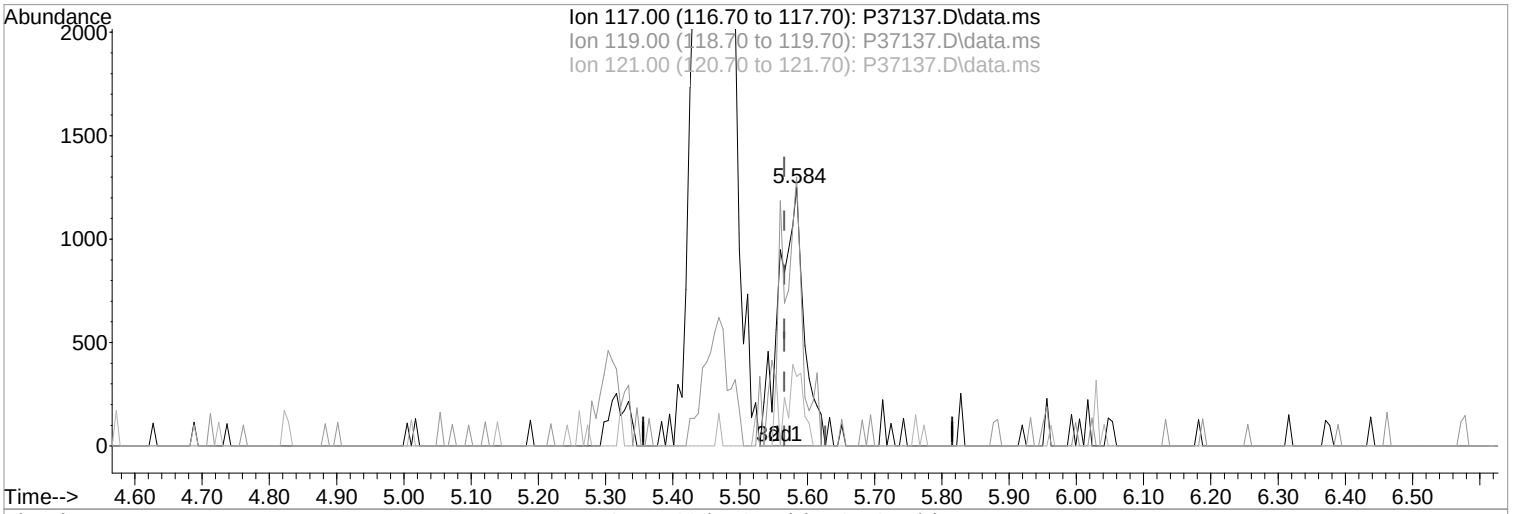
07/13/20

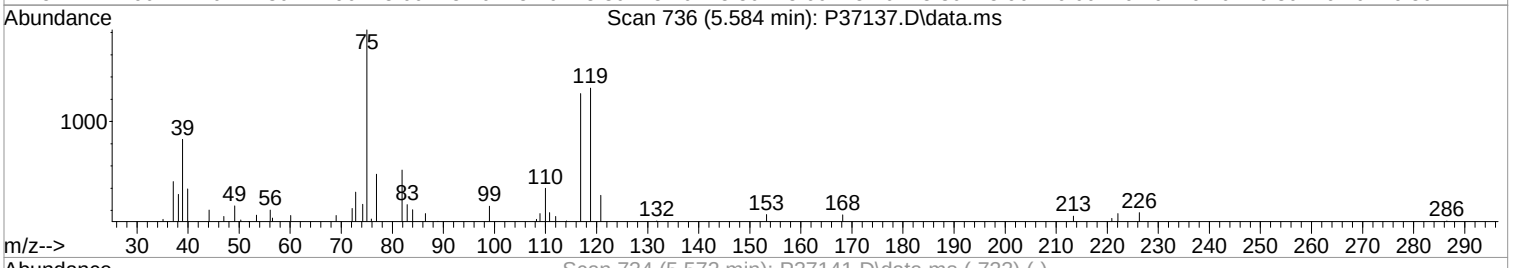
1st 07/14/20
2nd 07/14/20

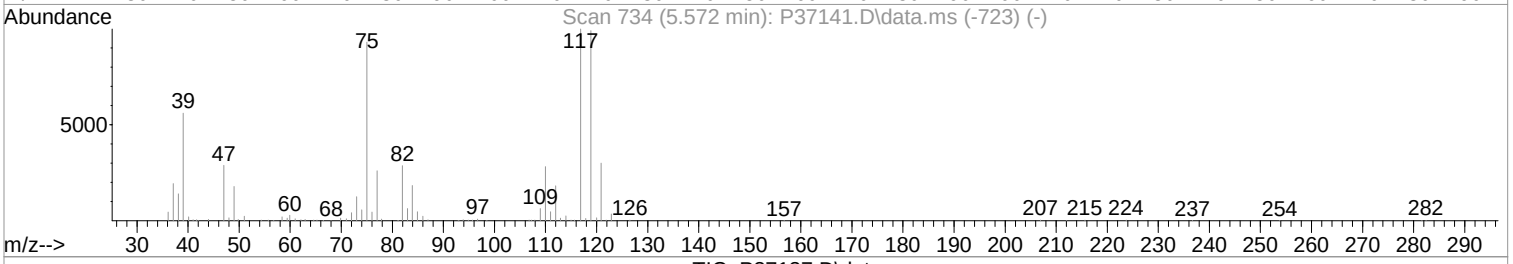
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(46) Carbontetrachloride (P)

5.584min (+0.018) 0.95 ppb m

response 3176

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	103.92
121.00	29.80	26.86
0.00	0.00	0.00

Manual Integration:

After

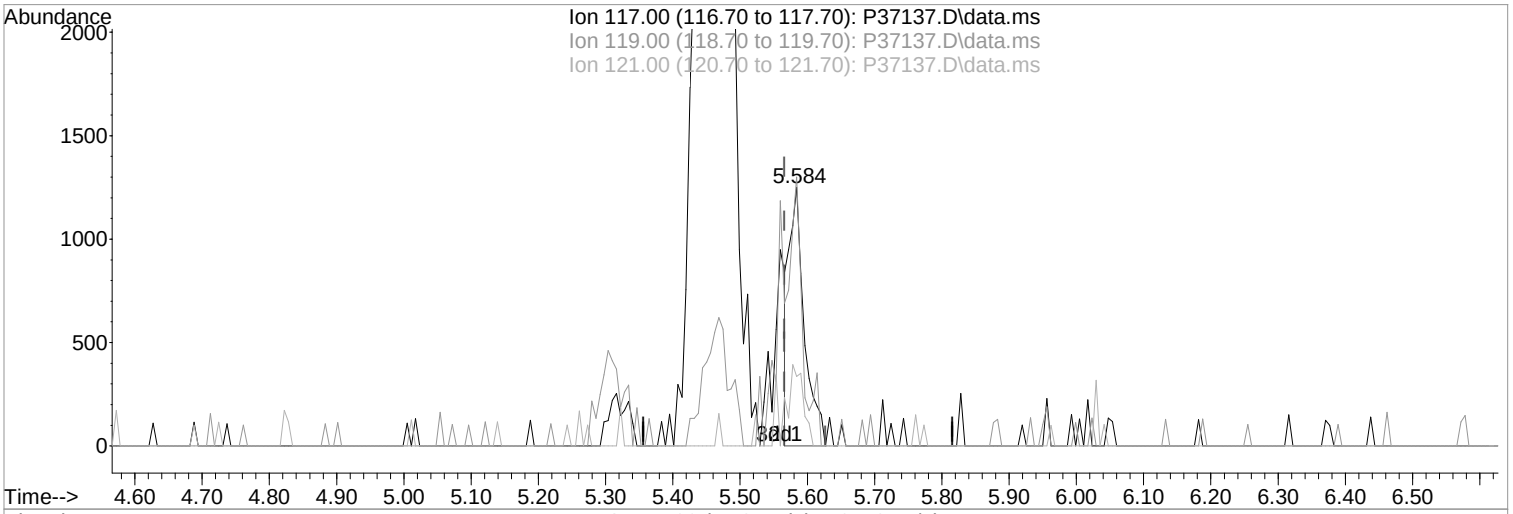
Split Peak

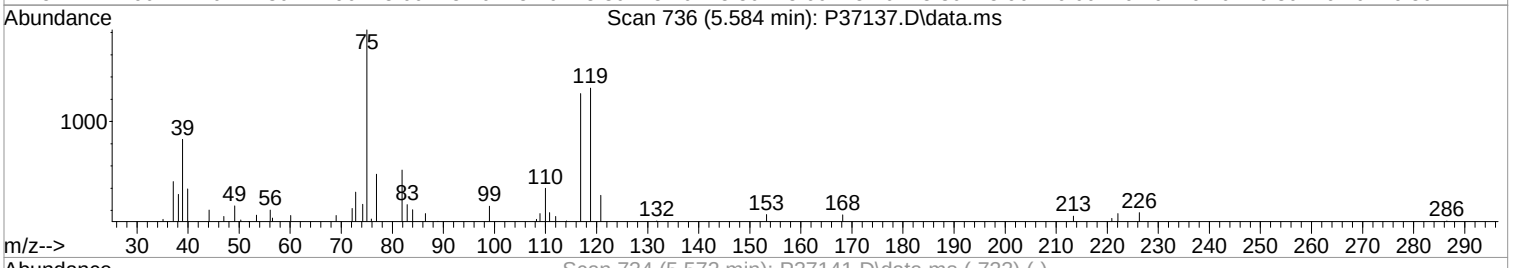
07/13/20

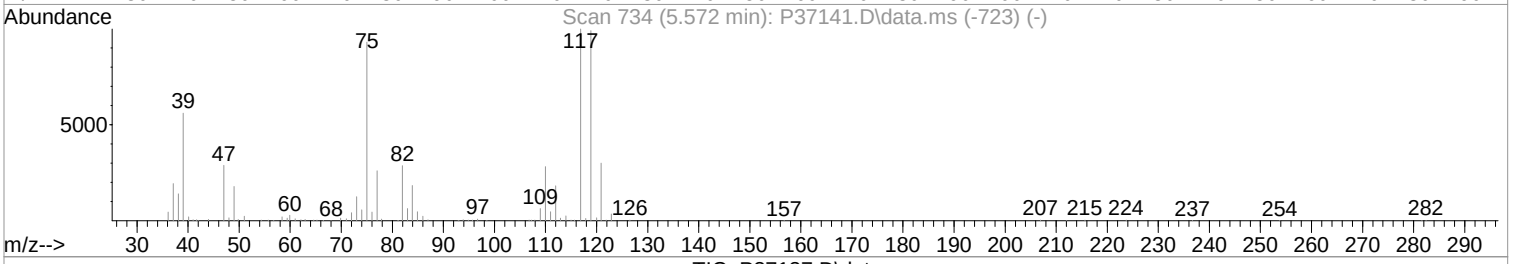
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(46) Carbontetrachloride (P)

5.584min (+0.018) 0.60 ppb

response 2012

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	103.92
121.00	29.80	26.86
0.00	0.00	0.00

Manual Integration:

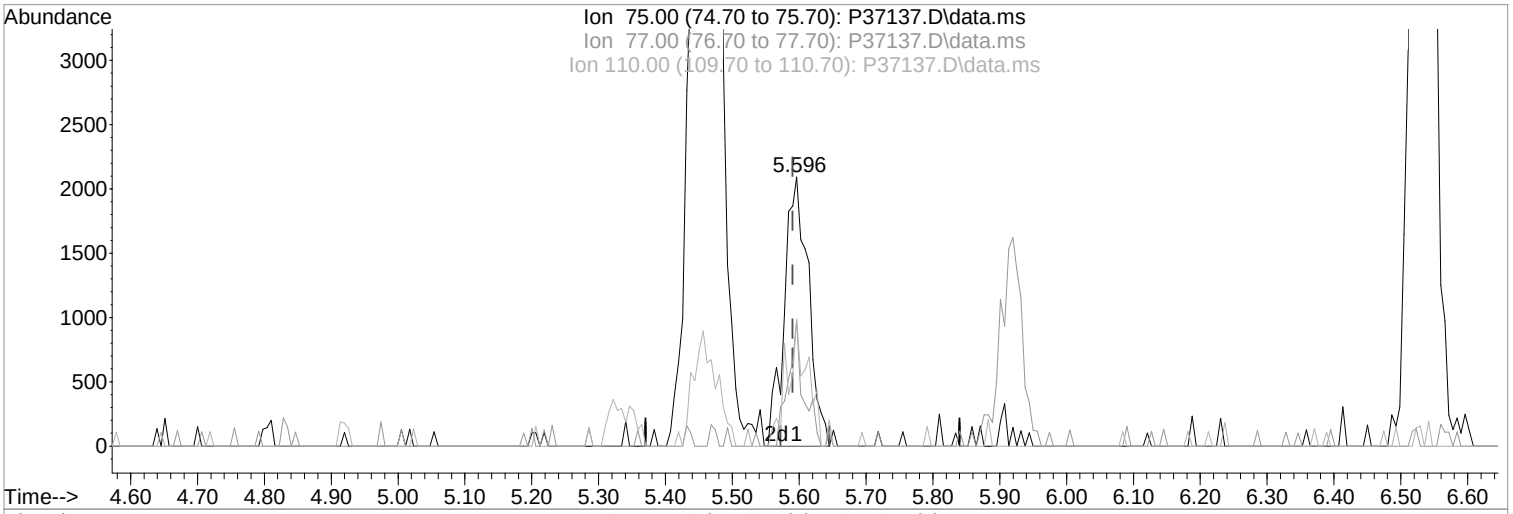
Before

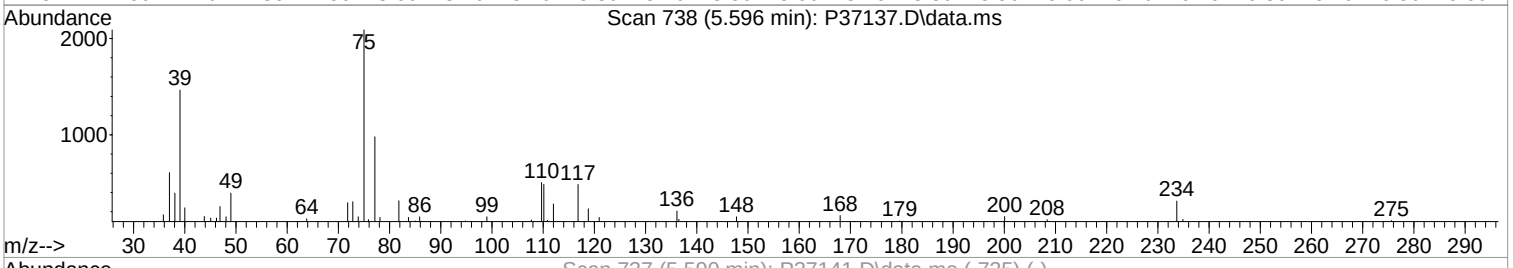
07/13/20

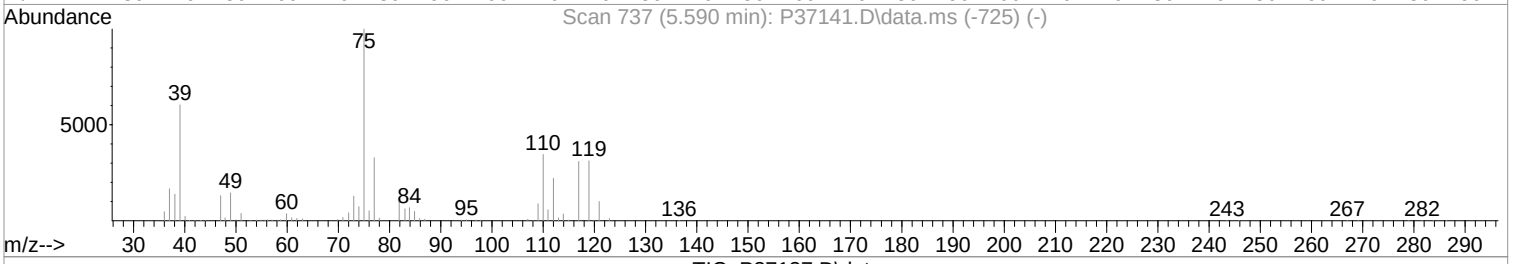
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(47) 1,1-Dichloropropene

5.596min (+0.006) 1.10 ppb m

response 5220

Ion	Exp%	Act%
75.00	100	100
77.00	32.80	46.80
110.00	34.60	24.04
0.00	0.00	0.00

Manual Integration:

After

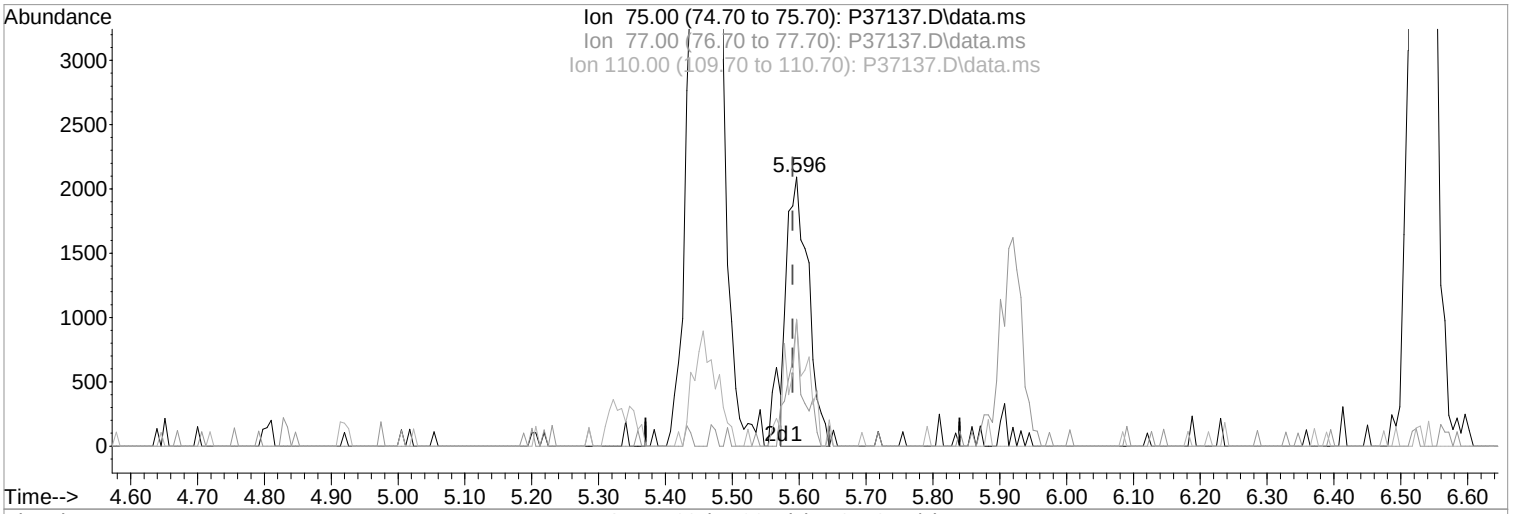
Split Peak

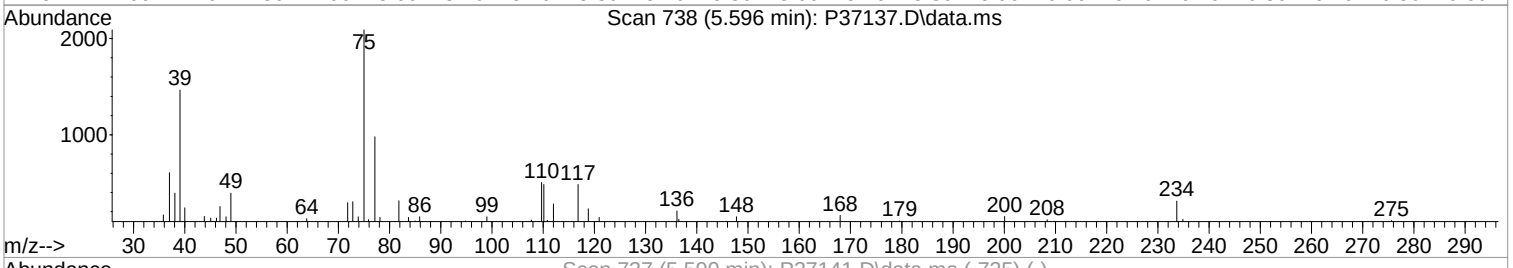
07/13/20

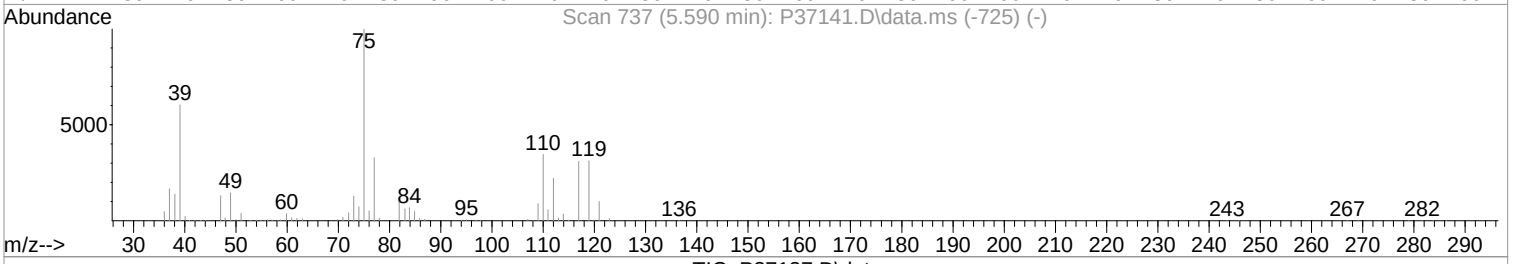
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(47) 1,1-Dichloropropene

5.596min (+0.006) 0.99 ppb

response 4697

Ion	Exp%	Act%
75.00	100	100
77.00	32.80	46.80
110.00	34.60	47.13
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:14:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.462	168	309333	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.535	114	501639	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	433933	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	201205	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	32643	11.33	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 22.66%#				
48) surr1,1,2-dichloroetha...	5.859	65	45754	11.47	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 22.94%#				
65) SURR3,Toluene-d8	8.321	98	150618	11.25	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 22.50%#				
70) SURR2,BFB	10.870	95	52855	10.72	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 21.44%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	3965	1.15	ppb		88
3) Chloromethane	1.335	50	3928	0.91	ppb		70
4) Vinyl Chloride	1.414	62	3919m	0.95	ppb		
5) Bromomethane	1.646	94	3520	1.05	ppb	#	70
6) Chloroethane	1.719	64	2258	1.02	ppb		99
7) Freon 21	1.878	67	5307	1.03	ppb		95
8) Trichlorofluoromethane	1.914	101	4219	1.02	ppb		92
9) Diethyl Ether	2.158	59	3060	1.02	ppb		97
10) Freon 123a	2.164	67	3682	1.04	ppb		90
11) Freon 123	2.225	83	4395	1.05	ppb	#	78
12) Acrolein	2.274	56	4163	5.13	ppb	#	65
13) 1,1-Diclethene	2.341	96	2672	1.12	ppb		99
14) Freon 113	2.347	101	3025	1.09	ppb		84
15) Acetone	2.414	43	3562	1.98	ppb		84
16) 2-Propanol	2.554	45	8496	21.33	ppb		99
17) Iodomethane	2.493	142	891	0.33	ppb		78
18) Carbon Disulfide	2.542	76	11415	1.25	ppb		97
19) Acetonitrile	2.682	40	1843m	8.29	ppb		
20) Allyl Chloride	2.688	76	2002	1.18	ppb	#	37
21) Methyl Acetate	2.719	43	5486	1.19	ppb		80
22) Methylene Chloride	2.816	84	4352	1.28	ppb	#	62
23) TBA	2.969	59	12830	19.90	ppb		98
24) Acrylonitrile	3.097	53	11569	5.82	ppb		98
25) Methyl-t-Butyl Ether	3.103	73	12053	1.09	ppb		86
26) trans-1,2-Dichloroethene	3.097	96	3049	1.09	ppb	#	87
28) 1,1-Diclethane	3.609	63	7193	1.17	ppb		87
29) Vinyl Acetate	3.707	86	151m	0.33	ppb		
30) DIPE	3.719	45	11843	1.10	ppb	#	77
31) 2-Chloro-1,3-Butadiene	3.731	53	5223	1.06	ppb	#	70
32) ETBE	4.267	59	9583	0.96	ppb		85
33) 2,2-Dichloropropane	4.450	77	4606m	1.02	ppb		
34) cis-1,2-Dichloroethene	4.469	96	4326m	1.20	ppb		
35) 2-Butanone	4.548	43	3470	1.44	ppb		92
36) Propionitrile	4.651	54	4656	5.40	ppb		85
37) Bromochloromethane	4.871	130	2557m	1.21	ppb		
38) Methacrylonitrile	4.926	67	2318	1.13	ppb	#	45
39) Tetrahydrofuran	4.975	42	3829	2.03	ppb	#	68
40) Chloroform	5.048	83	6624m	1.17	ppb		
41) 1,1,1-Trichloroethane	5.310	97	4862	1.09	ppb		87

1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:14:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.151	73	10956	1.10	ppb		90
44) Cyclohexane	5.383	41	3421m	1.04	ppb		
46) Carbontetrachloride	5.584	117	3176m	0.95	ppb		
47) 1,1-Dichloropropene	5.596	75	5220m	1.10	ppb		
49) Benzene	5.920	78	16370	1.13	ppb		97
50) 1,2-Dichloroethane	5.974	62	5324	1.05	ppb		90
51) Iso-Butyl Alcohol	5.980	43	6676	21.49	ppb		95
52) n-Heptane	6.365	43	4968	1.11	ppb	#	82
53) 1-Butanol	6.919	56	8293	42.90	ppb		94
54) Trichloroethene	6.846	130	4243	1.18	ppb	#	82
55) Methylcyclohexane	7.047	55	4897	1.10	ppb	#	65
56) 1,2-Diclpropane	7.139	63	4016	1.04	ppb		95
57) Dibromomethane	7.279	93	2228	1.01	ppb		97
58) 1,4-Dioxane	7.352	88	1726	21.78	ppb		89
59) Methyl Methacrylate	7.364	69	3218	0.96	ppb	#	81
60) Bromodichloromethane	7.505	83	3913	0.96	ppb		82
62) 2-Chloroethylvinyl Ether	7.919	63	1714	1.02	ppb		100
63) cis-1,3-Dichloropropene	8.047	75	5085	0.92	ppb		91
64) 4-Methyl-2-pentanone	8.254	43	5097	0.99	ppb		92
66) Toluene	8.389	91	16928	1.10	ppb		98
67) trans-1,3-Dichloropropene	8.675	75	4432	0.88	ppb		74
68) Ethyl Methacrylate	8.809	69	5268	0.93	ppb		99
69) 1,1,2-Trichloroethane	8.858	97	3780	1.10	ppb		94
72) Tetrachloroethene	8.974	164	2777	1.05	ppb		87
73) 2-Hexanone	9.157	43	3759	0.97	ppb	#	63
74) 1,3-Dichloropropane	9.029	76	7241	1.19	ppb		90
75) Dibromochloromethane	9.254	129	2462	0.91	ppb	#	87
76) N-Butyl Acetate	9.297	43	6507	0.91	ppb		86
77) 1,2-Dibromoethane	9.346	107	3845	1.16	ppb		92
78) Chlorobenzene	9.827	112	9976	1.03	ppb		82
79) 3-CBTF	9.833	180	4479	1.00	ppb	#	71
80) 4-CBTF	9.900	180	3893	0.97	ppb		88
81) 1,1,1,2-Tetrachloroethane	9.919	131	2910	0.98	ppb	#	76
82) Ethylbenzene	9.937	106	4920	0.97	ppb	#	72
83) (m+p)Xylene	10.053	106	12839	2.11	ppb		96
84) o-Xylene	10.406	106	6458	1.09	ppb	#	78
85) Styrene	10.425	104	9756	0.97	ppb		91
87) Bromoform	10.589	173	1698	1.02	ppb		82
88) 2-CBTF	10.662	180	4670	1.14	ppb	#	92
89) Isopropylbenzene	10.742	105	15504	1.12	ppb		95
90) Cyclohexanone	10.827	55	18052	21.63	ppb		98
91) trans-1,4-Dichloro-2-B...	11.065	53	1154	0.99	ppb		95
92) 1,1,2,2-Tetrachloroethane	11.016	83	4823	1.07	ppb		88
93) Bromobenzene	10.992	156	3728	1.03	ppb	#	92
94) 1,2,3-Trichloropropane	11.047	110	1795	1.24	ppb	#	75
95) n-Propylbenzene	11.095	91	16934	1.06	ppb		98
96) 2-Chlorotoluene	11.162	91	11875	1.15	ppb		96
97) 3-Chlorotoluene	11.211	91	11250	1.14	ppb		98
98) 4-Chlorotoluene	11.248	91	12460	1.07	ppb		94
99) 1,3,5-Trimethylbenzene	11.242	105	13278	1.12	ppb		90
100) tert-Butylbenzene	11.516	119	10906	1.10	ppb		85
101) 1,2,4-Trimethylbenzene	11.553	105	13195	1.10	ppb		95
102) 3,4-DCBTF	11.620	214	3497	1.07	ppb	#	67
103) sec-Butylbenzene	11.693	105	15581	1.09	ppb		93
104) p-Isopropyltoluene	11.815	119	13296	1.08	ppb		96
105) 1,3-Dclbenz	11.784	146	7697	1.08	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:14:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

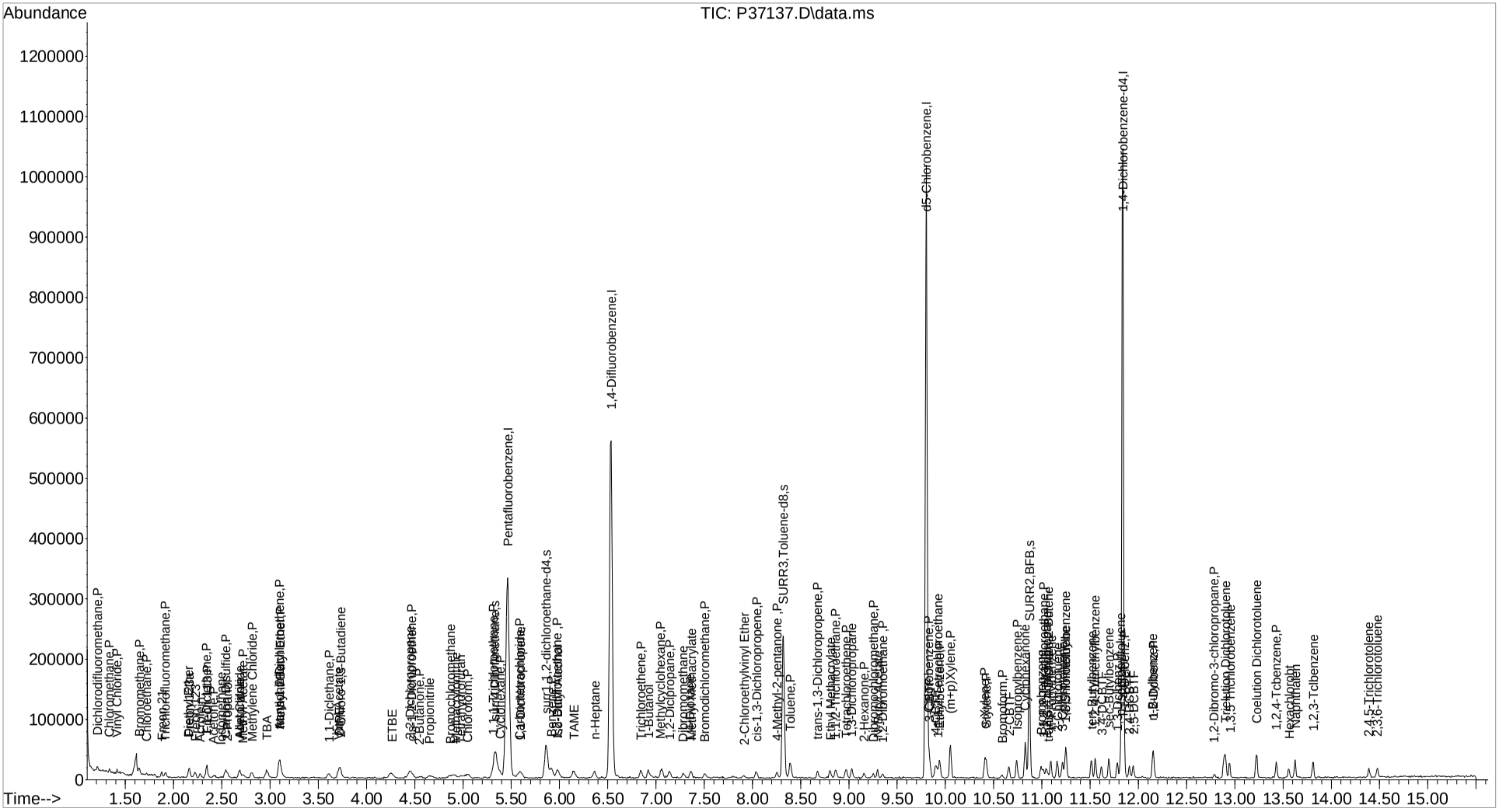
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
106) 1,4-Dclbenz	11.857	146	8673	1.20	ppb		93
107) 2,4-DCBTF	11.906	214	3306m	1.08	ppb		
108) 2,5-DCBTF	11.949	214	3733	1.14	ppb		90
109) n-Butylbenzene	12.150	91	11866	1.03	ppb		97
110) 1,2-Dclbenz	12.156	146	7675	1.06	ppb	#	66
111) 1,2-Dibromo-3-chloropr...	12.784	157	898	0.89	ppb	#	68
112) Trielution Dichlorotol...	12.900	125	17943	3.11	ppb	#	85
113) 1,3,5 Trichlorobenzene	12.949	180	5485	1.11	ppb		97
114) Coelution Dichlorotoluene	13.223	125	12874	2.03	ppb		93
115) 1,2,4-Tcbenzene	13.430	180	5169	0.99	ppb	#	71
116) Hexachlorobt	13.564	225	2392	1.15	ppb	#	70
117) Naphthalen	13.625	128	13920	0.92	ppb		90
118) 1,2,3-Tclbenzene	13.814	180	5697	1.06	ppb		94
119) 2,4,5-Trichlorotolene	14.387	159	2722	0.83	ppb		96
120) 2,3,6-Trichlorotoluene	14.479	159	2715m	0.91	ppb		

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:14:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

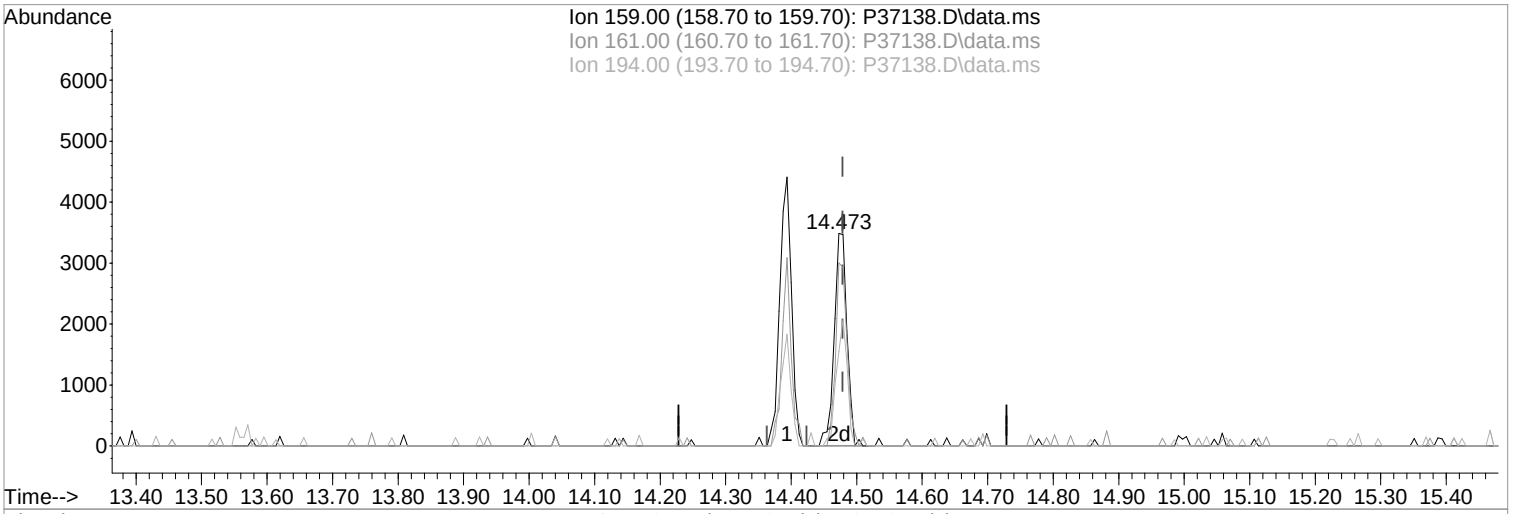


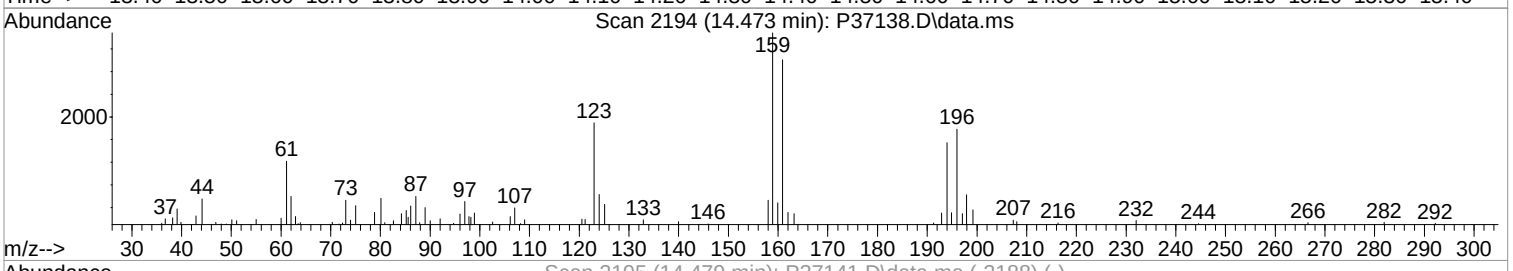
1st 07/14/20
2nd 07/14/20

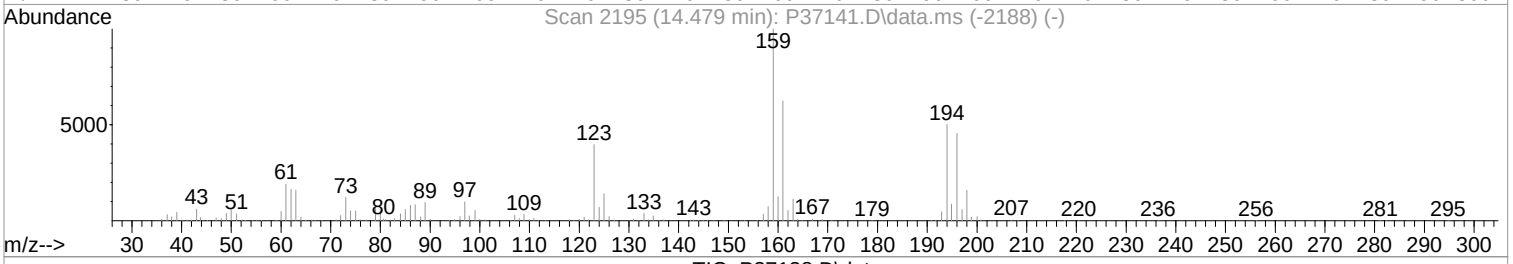
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(120) 2,3,6-Trichlorotoluene

14.473min (-0.006) 1.52 ppb m

response 4721

Ion	Exp%	Act%
159.00	100	100
161.00	62.40	86.26#
194.00	50.20	44.42
0.00	0.00	0.00

Manual Integration:

After

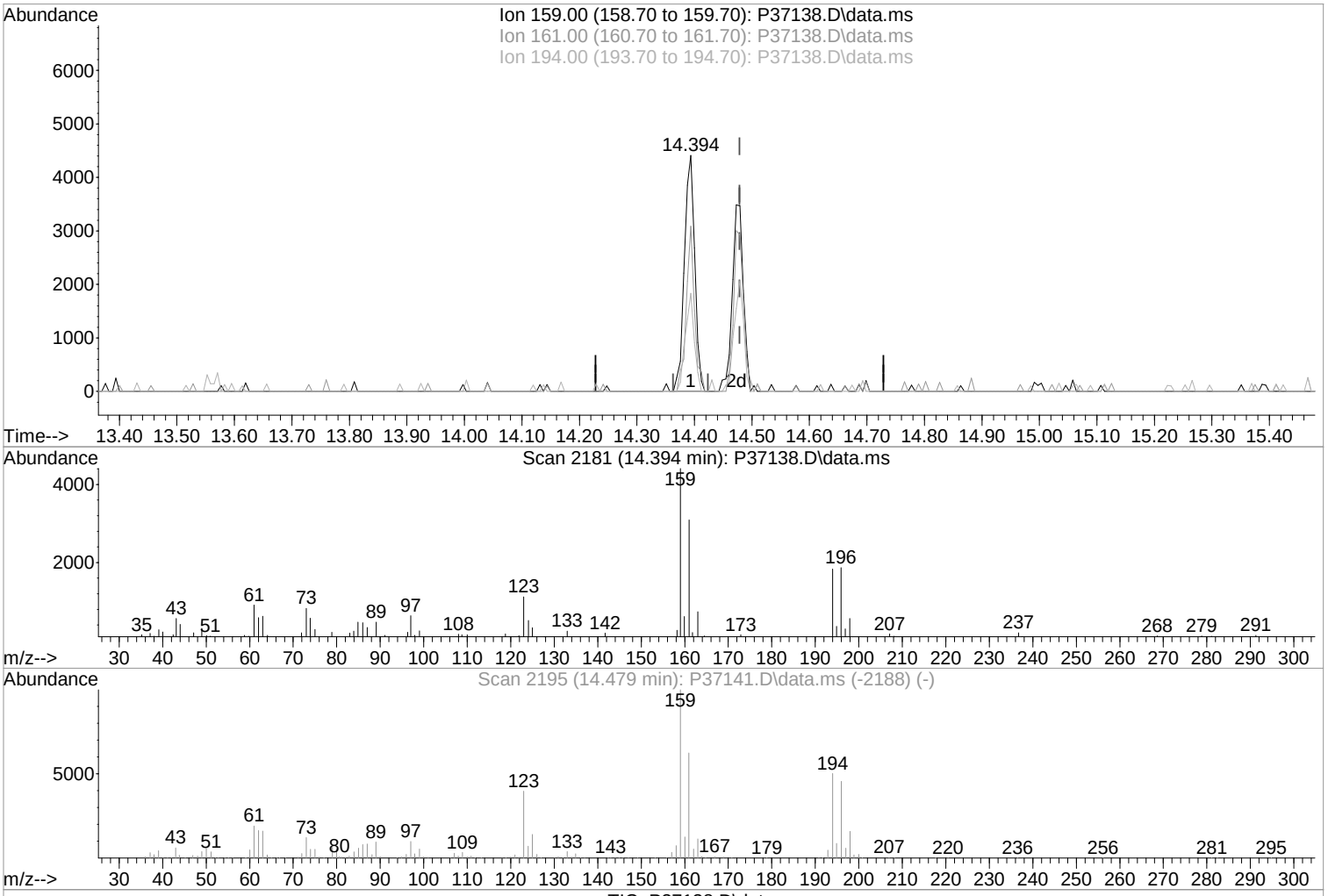
Wrong peak selected.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37138.D\data.ms

(120) 2,3,6-Trichlorotoluene

14.394min (-0.085) 1.78 ppb

response 5518

Ion	Exp%	Act%
159.00	100	100
161.00	62.40	70.03
194.00	50.20	41.58
0.00	0.00	0.00

Manual Integration:

Before

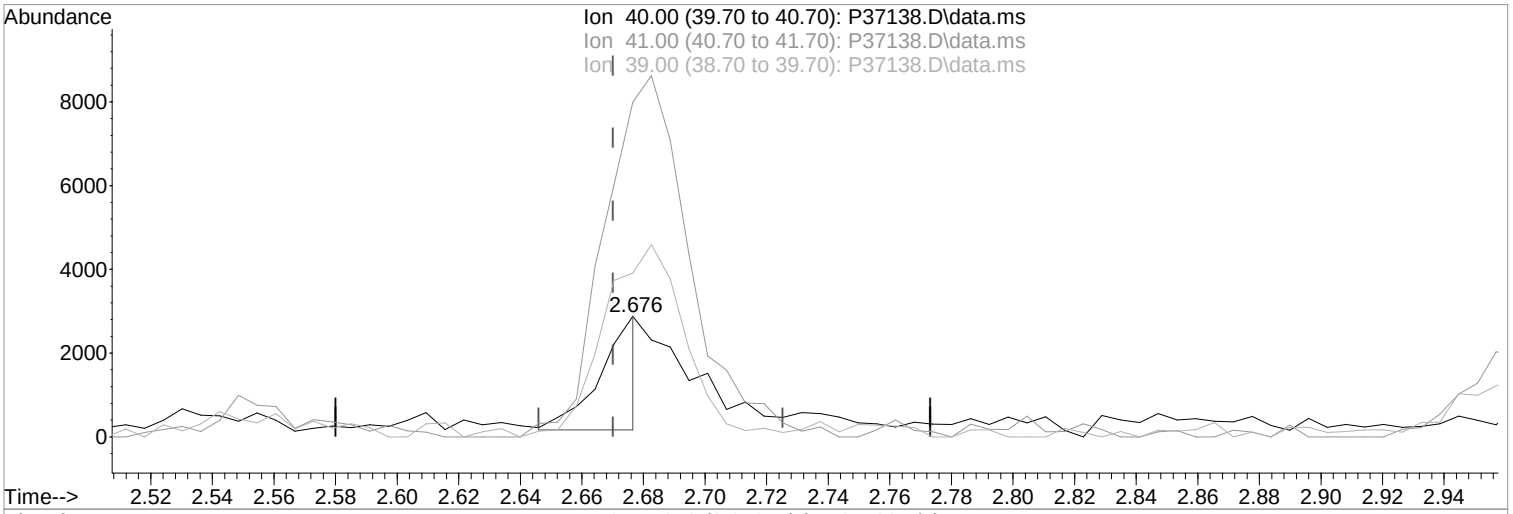
07/13/20

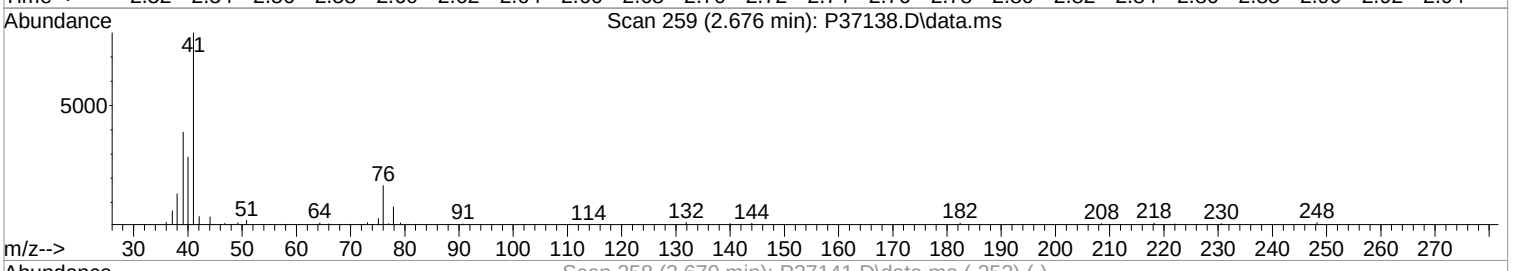
1st 07/14/20
2nd 07/14/20

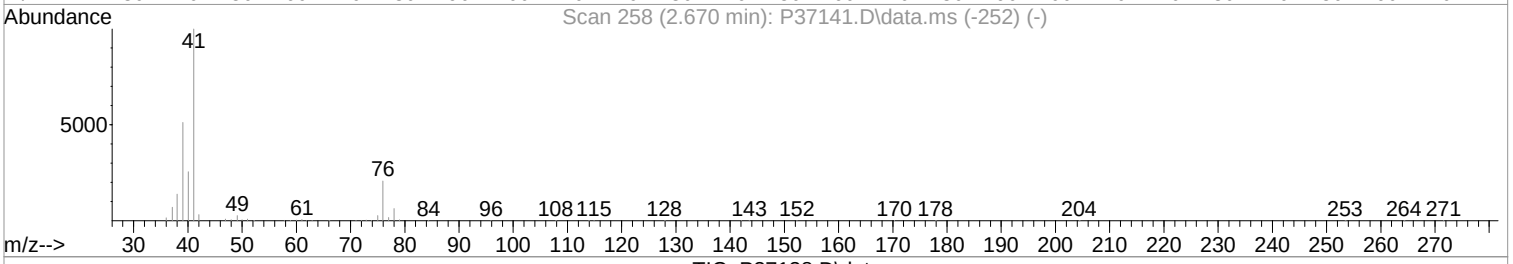
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 10.91 ppb m

response 2415

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	277.40#
39.00	200.50	135.61#
0.00	0.00	0.00

Manual Integration:

After

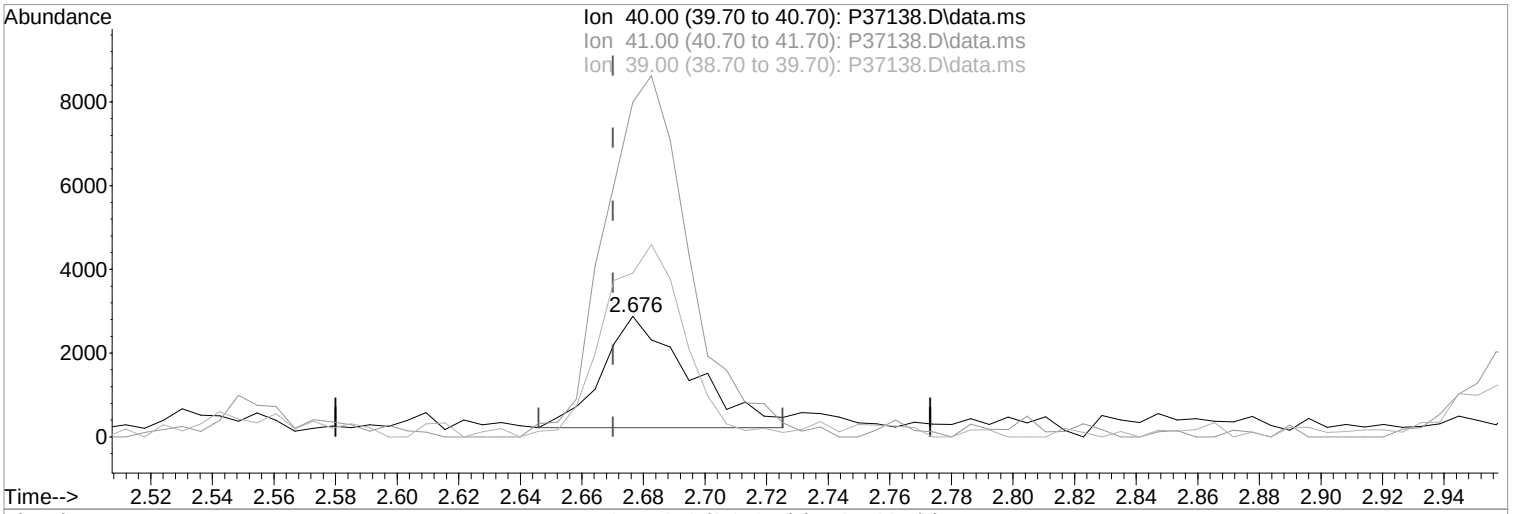
Poor integration.

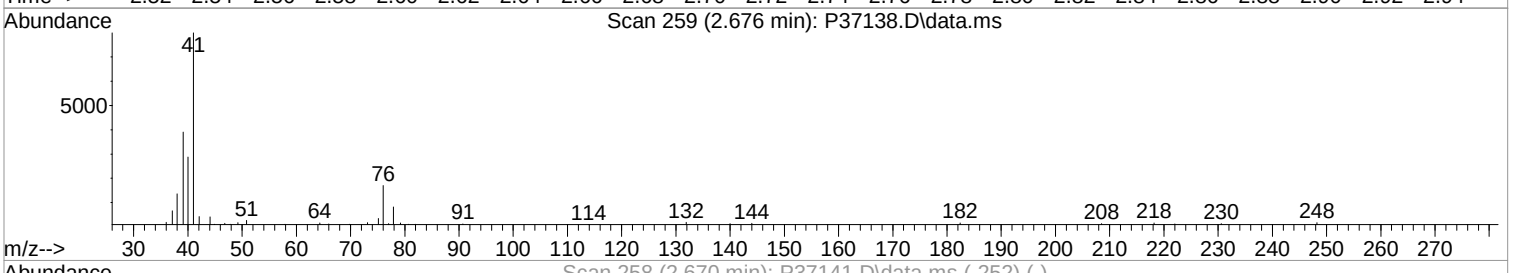
07/13/20

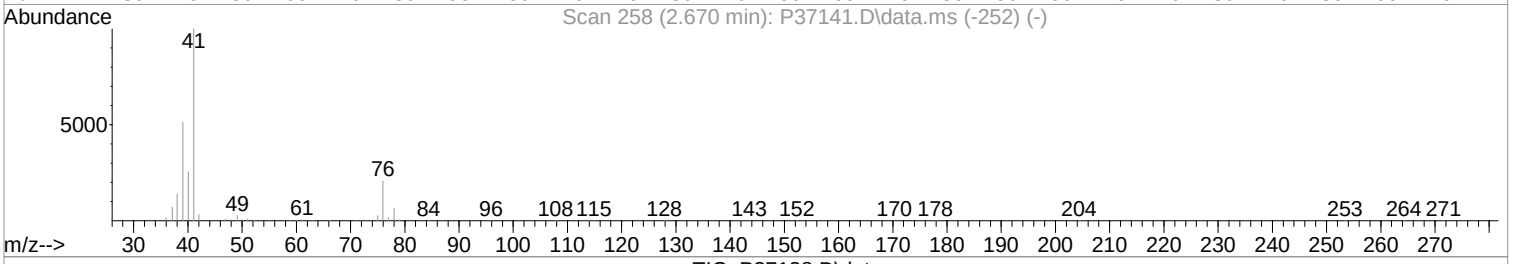
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 23.70 ppb

response 5244

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	277.40#
39.00	200.50	135.61#
0.00	0.00	0.00

Manual Integration:

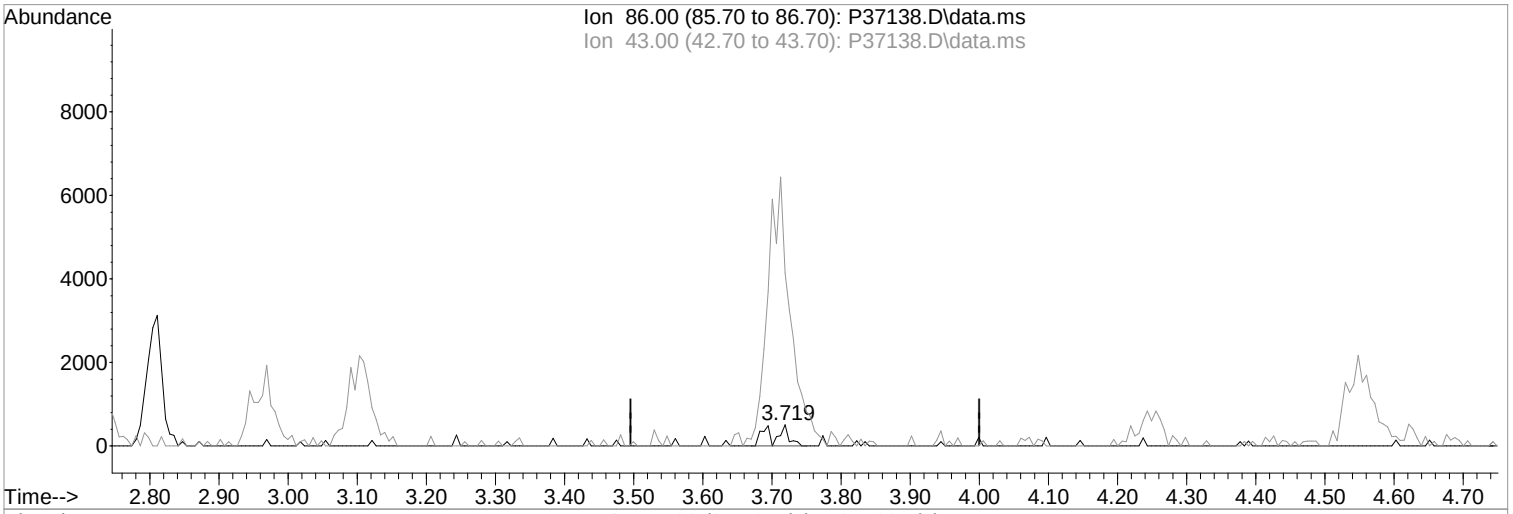
Before

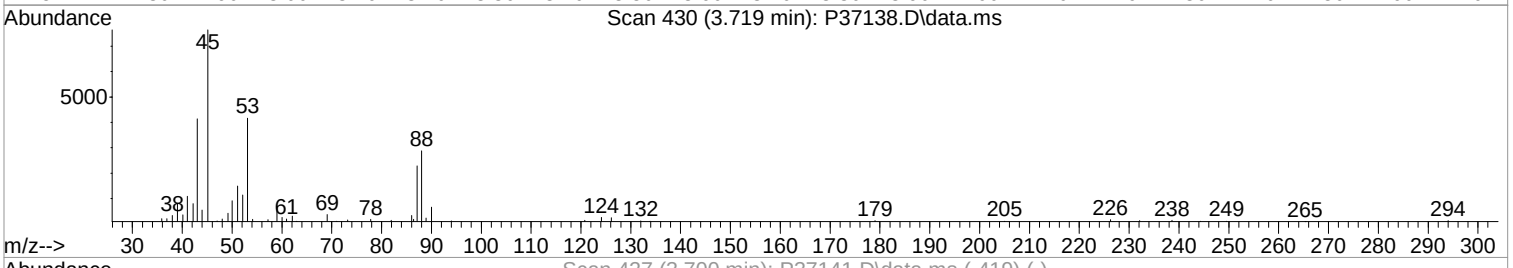
07/13/20

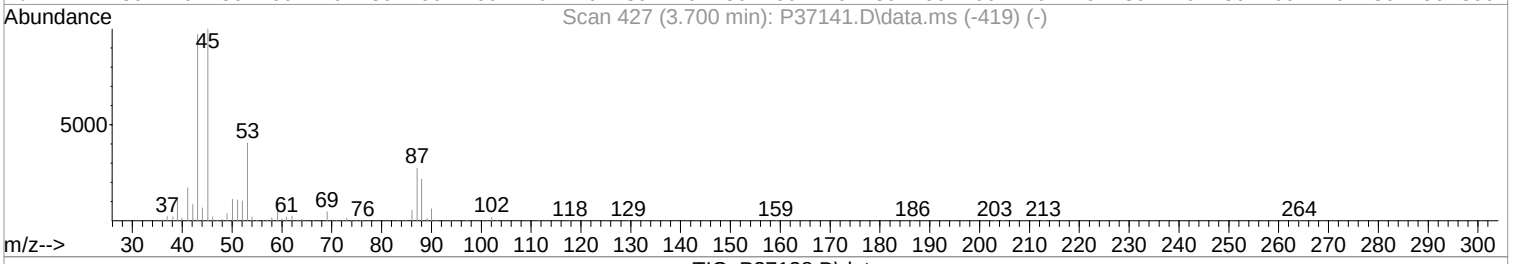
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(29) Vinyl Acetate

3.719min (+0.025) 2.05 ppb m

response 920

Ion	Exp%	Act%
86.00	100	100
43.00	1783.00	1239.22#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

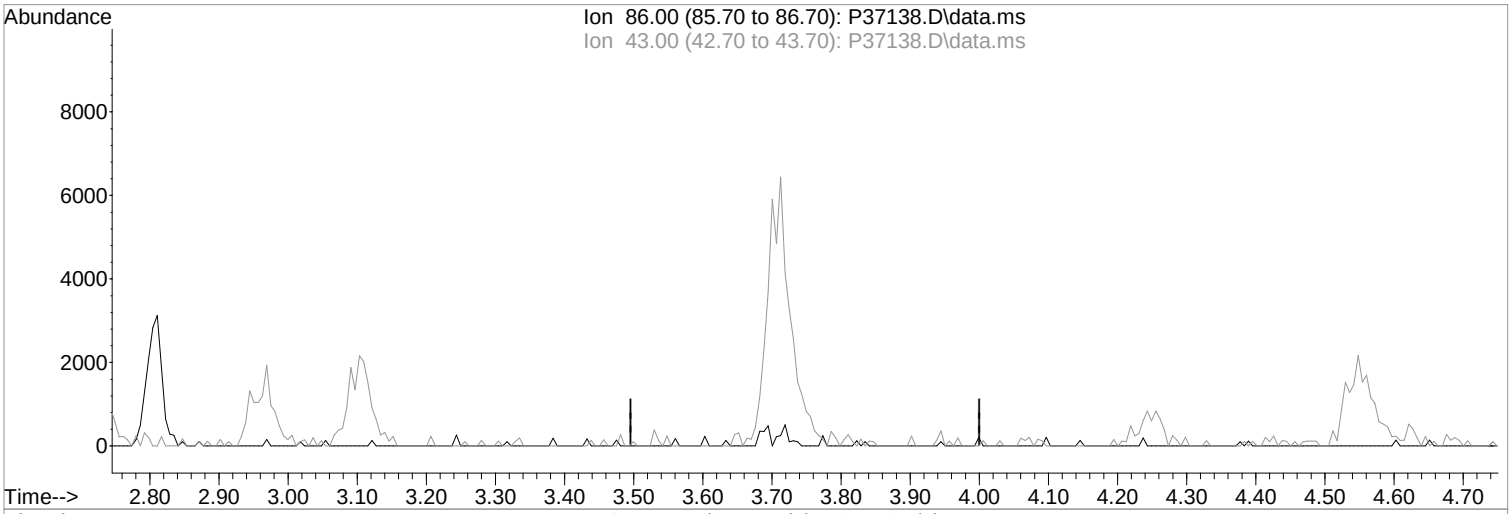
07/13/20

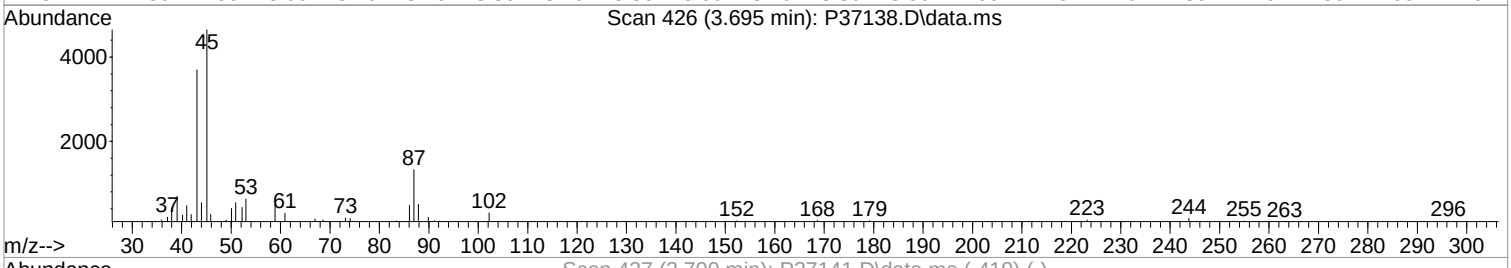
1st 07/14/20
2nd 07/14/20

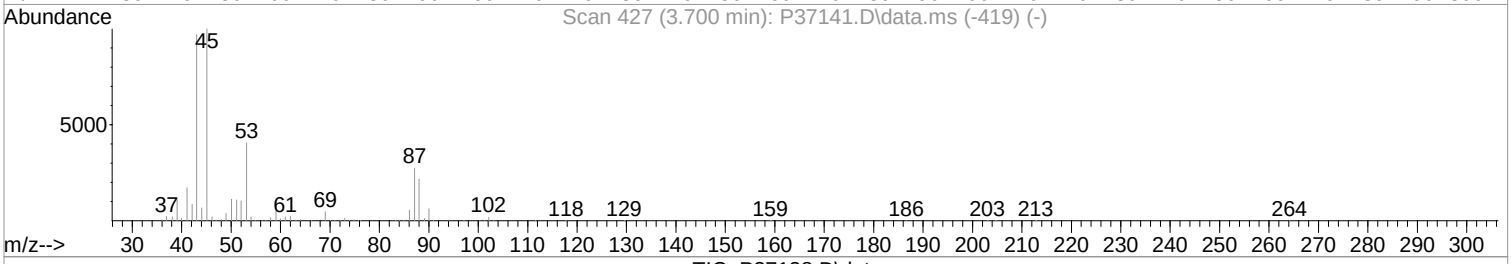
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(29) Vinyl Acetate

3.694min (-3.694) 0.00 ppb

response 0

Ion	Exp%	Act%
86.00	100	0.00
43.00	1783.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

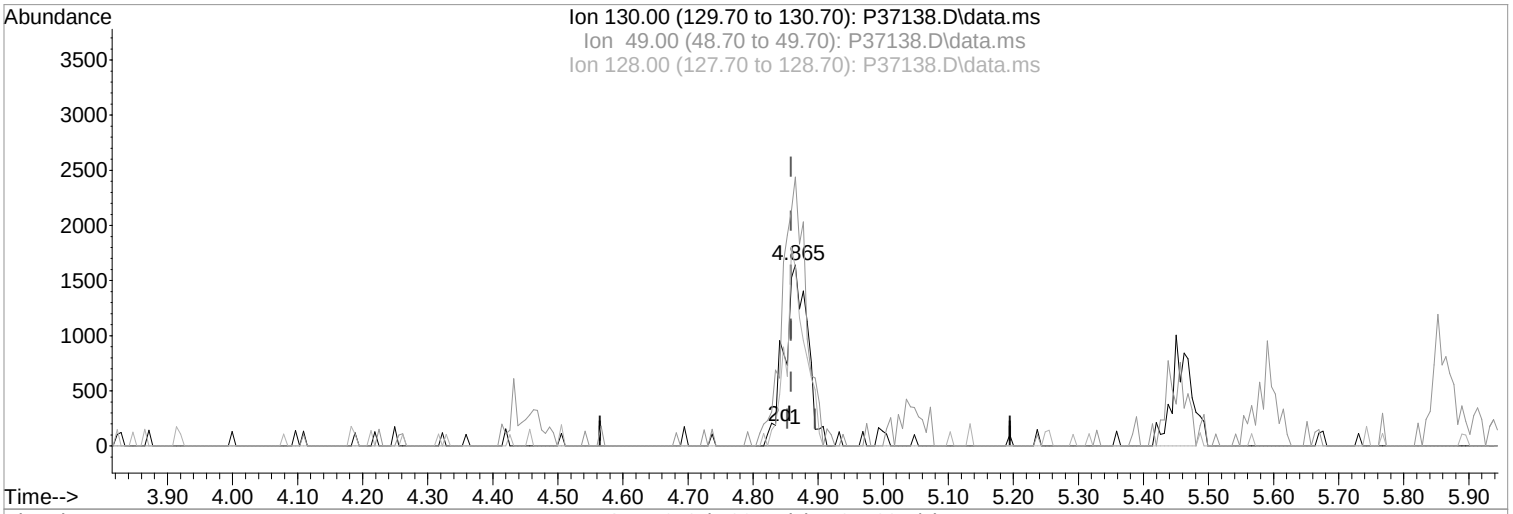
Before

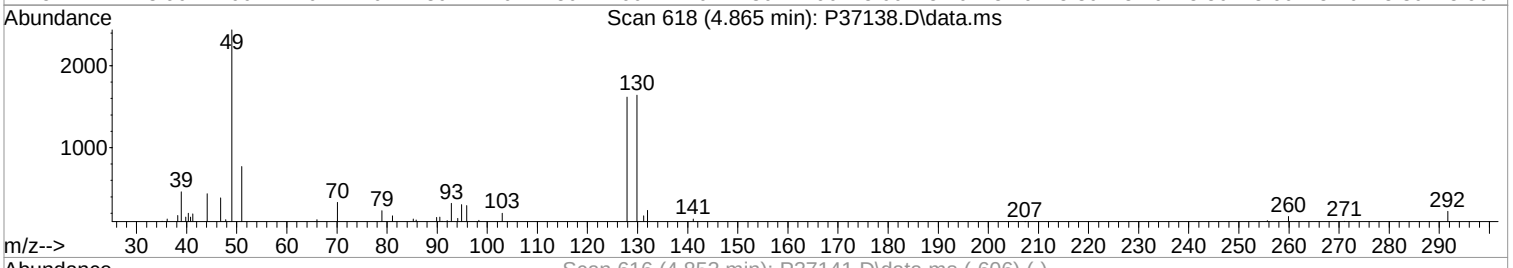
07/13/20

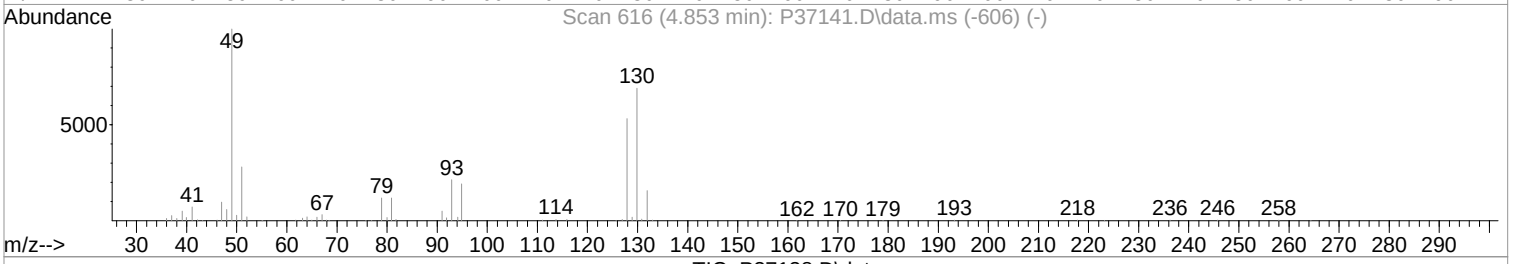
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(37) Bromochloromethane

4.865min (+0.006) 1.95 ppb m

response 4104

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	148.63
128.00	77.00	98.60#
0.00	0.00	0.00

Manual Integration:

After

Split Peak

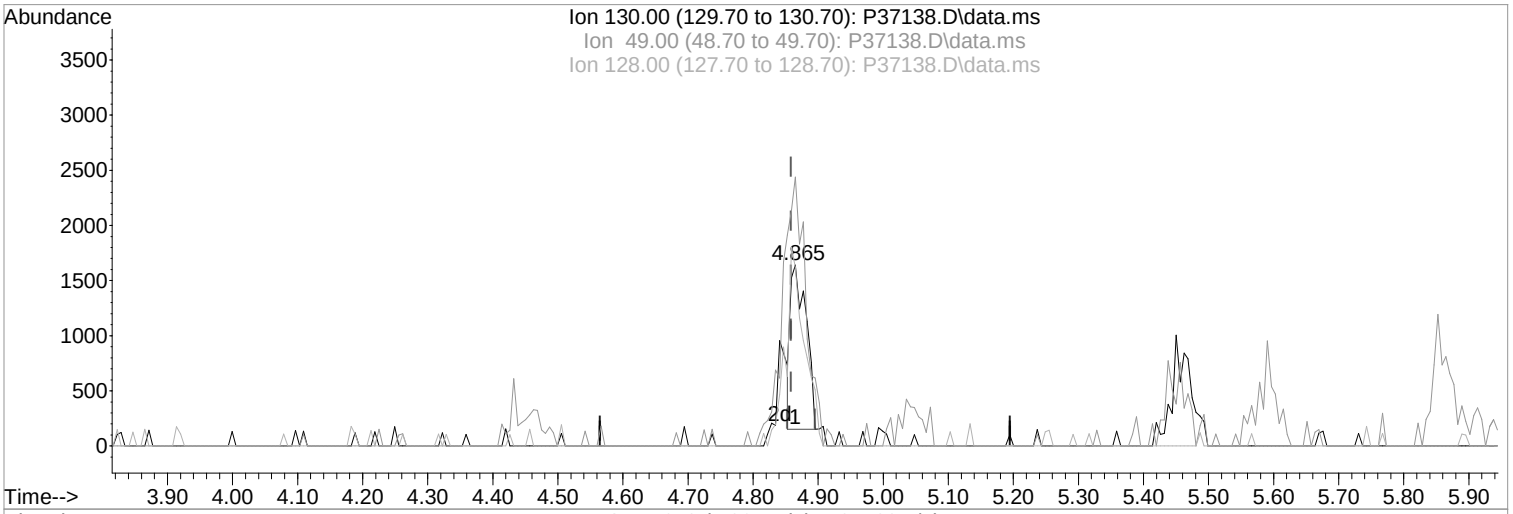
07/13/20

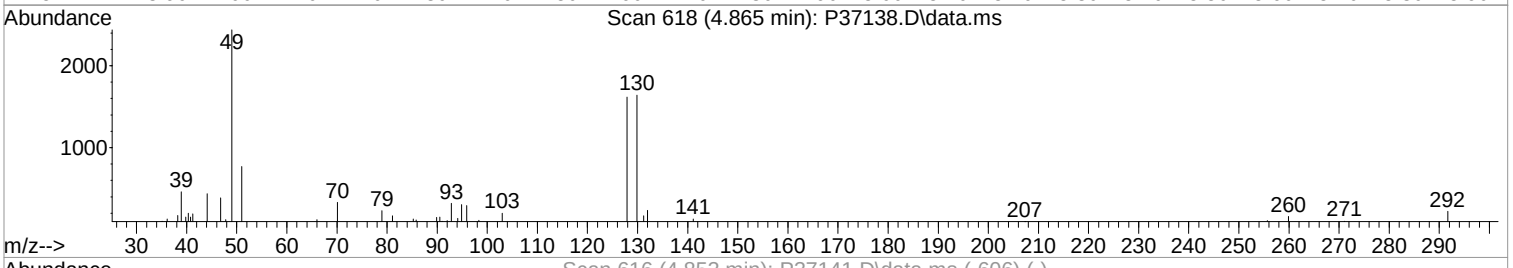
1st 07/14/20
2nd 07/14/20

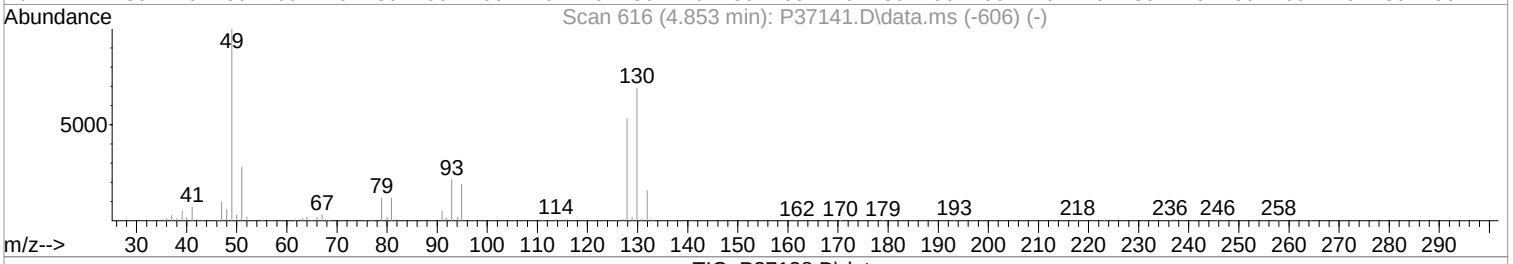
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(37) Bromochloromethane

4.865min (+0.006) 1.18 ppb

response 2485

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	148.63
128.00	77.00	98.60#
0.00	0.00	0.00

Manual Integration:

Before

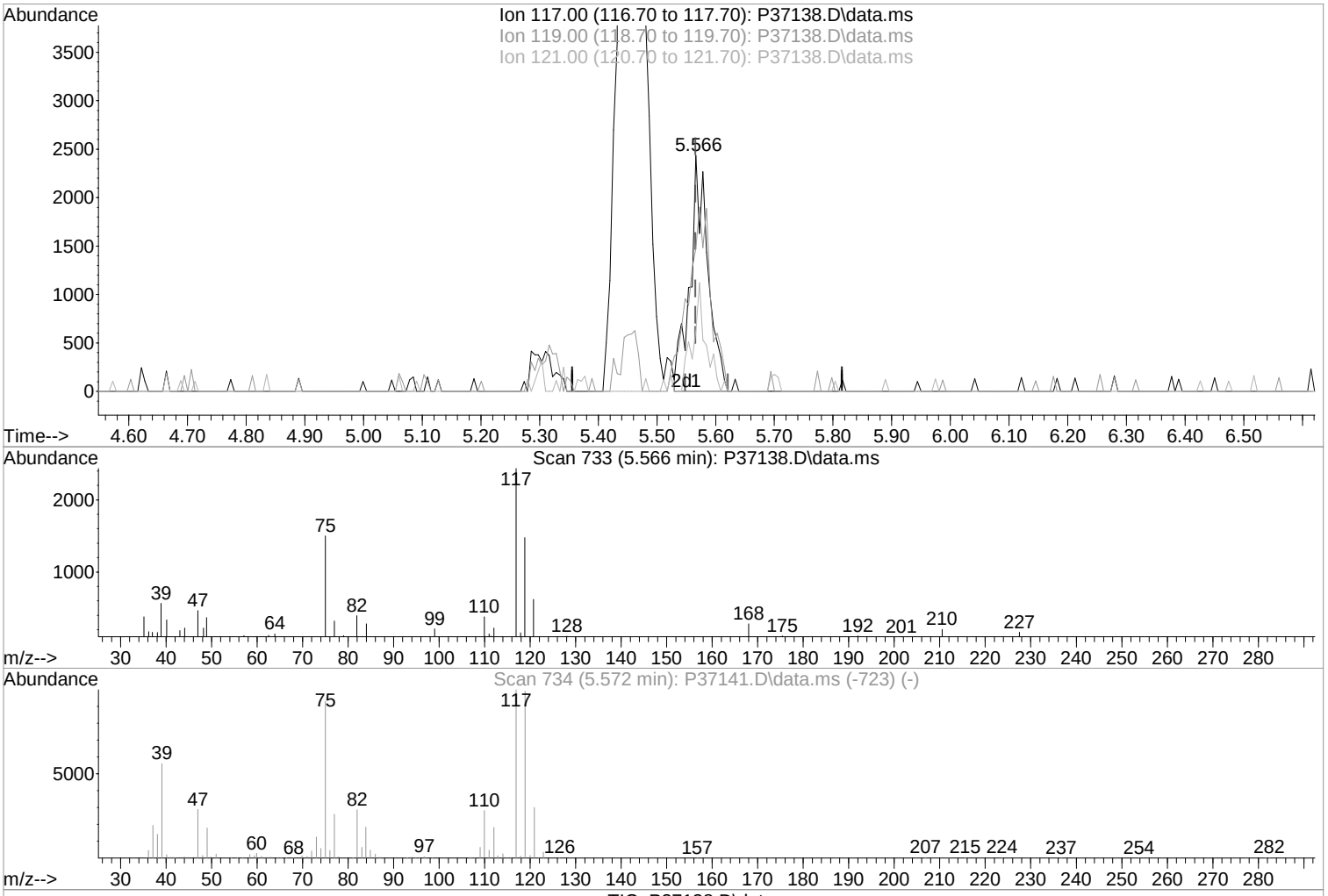
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37138.D\data.ms

(46) Carbontetrachloride (P)

5.566min (+0.000) 1.57 ppb m

response 5194

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	60.59#
121.00	29.80	25.45
0.00	0.00	0.00

Manual Integration:

After

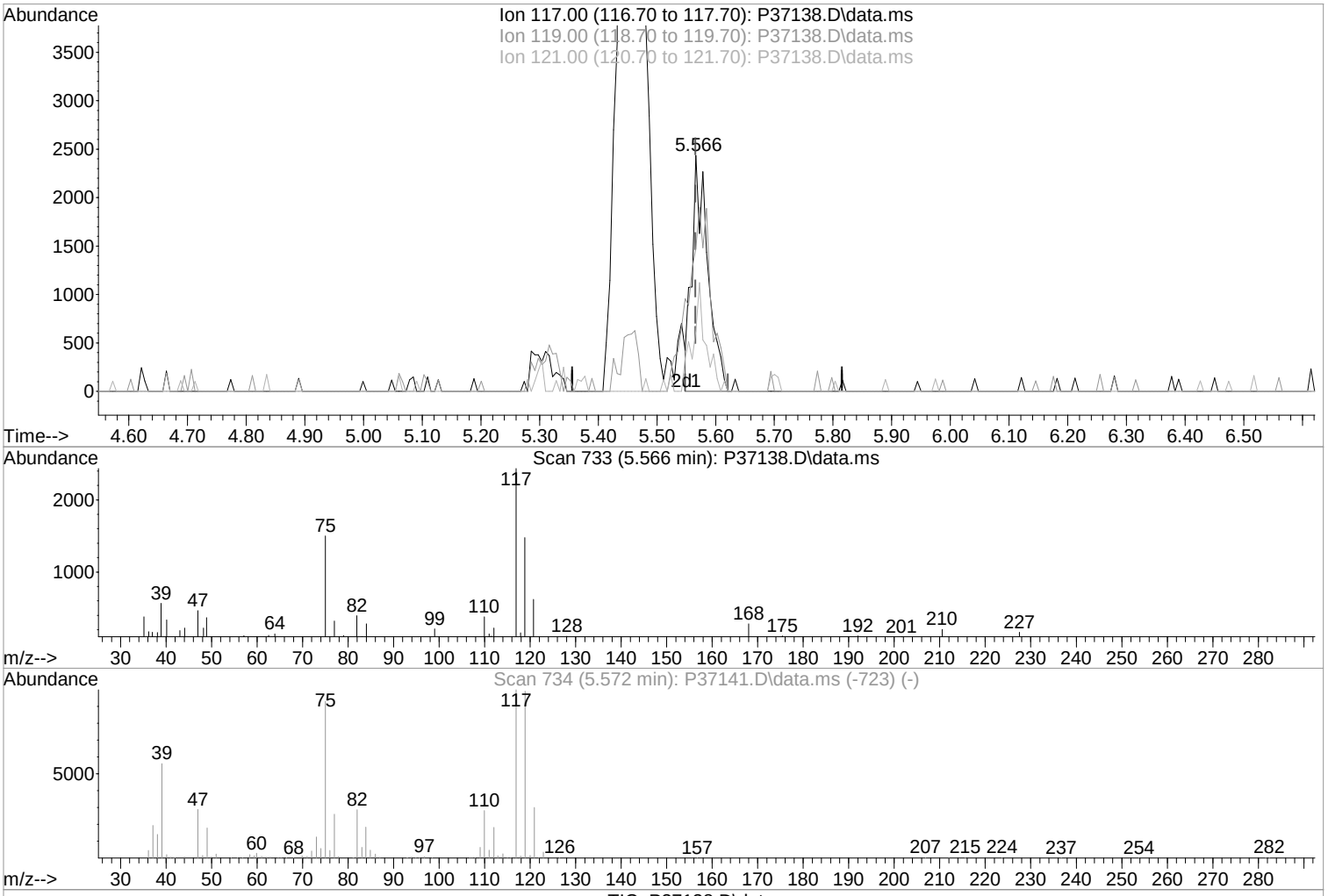
Split Peak

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37138.D\data.ms

(46) Carbontetrachloride (P)

5.566min (+0.000) 1.39 ppb

response 4594

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	60.59#
121.00	29.80	25.45
0.00	0.00	0.00

Manual Integration:

Before

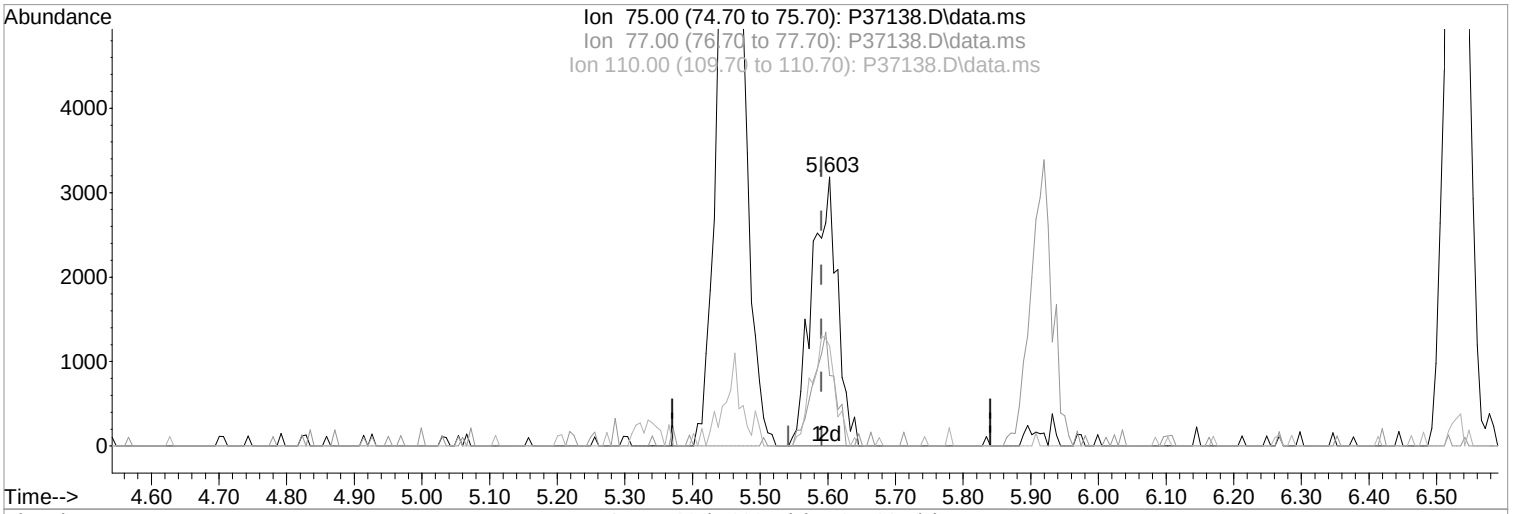
07/13/20

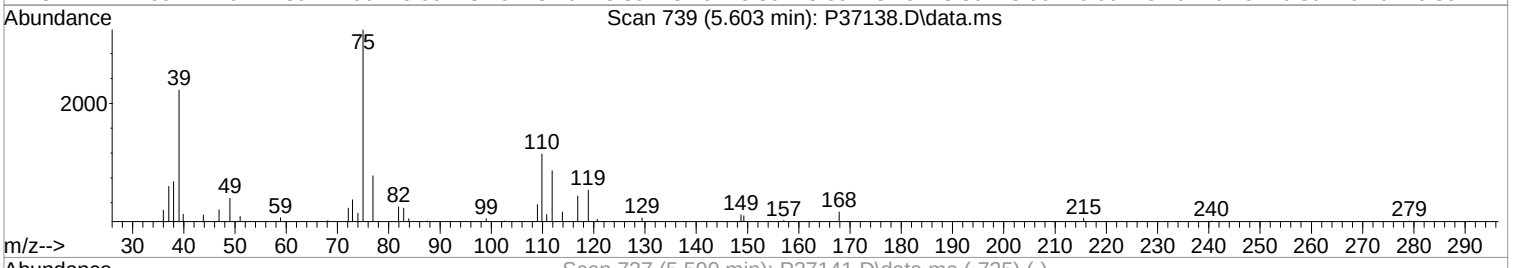
1st 07/14/20
2nd 07/14/20

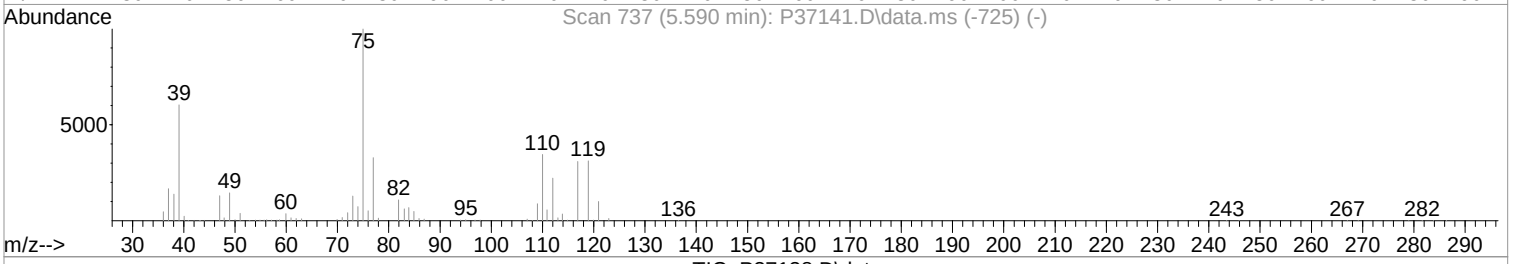
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(47) 1,1-Dichloropropene

5.603min (+0.012) 1.78 ppb m

response 8392

Ion	Exp%	Act%
75.00	100	100
77.00	32.80	26.25
110.00	34.60	37.14
0.00	0.00	0.00

Manual Integration:

After

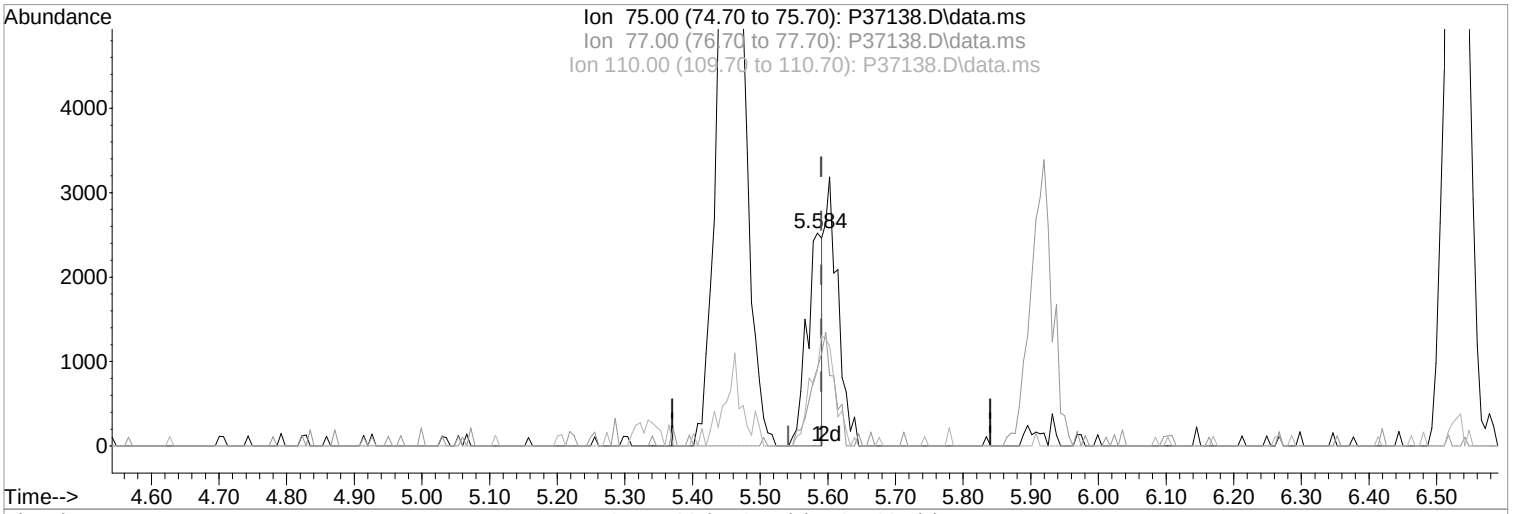
Split Peak

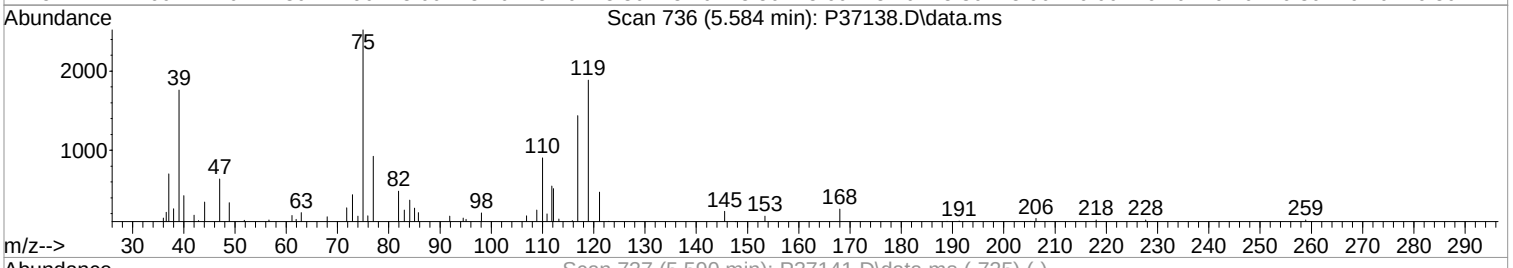
07/13/20

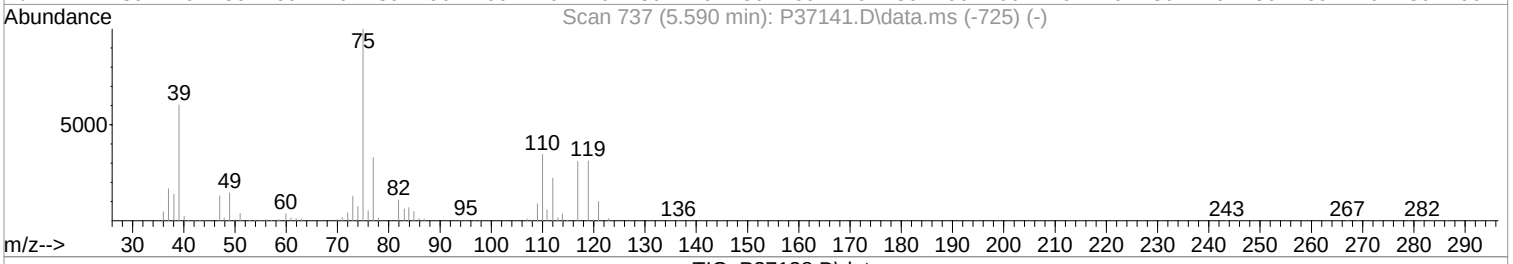
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(47) 1,1-Dichloropropene

5.584min (-0.006) 0.85 ppb

response 4029

Ion	Exp%	Act%
75.00	100	100
77.00	32.80	36.54
110.00	34.60	35.83
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:18:46 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.463	168	307931	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	498048	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	435838	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	208145	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.335	113	31267	10.93	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 21.86%#				
48) surr1,1,2-dichloroetha...	5.859	65	42263	10.67	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 21.34%#				
65) SURR3,Toluene-d8	8.316	98	144841	10.90	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 21.80%#				
70) SURR2,BFB	10.870	95	49350	10.08	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 20.16%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	6142	1.79	ppb		88
3) Chloromethane	1.335	50	8243	1.91	ppb		89
4) Vinyl Chloride	1.408	62	6994	1.71	ppb		91
5) Bromomethane	1.640	94	6779	2.04	ppb		89
6) Chloroethane	1.719	64	4235	1.92	ppb		97
7) Freon 21	1.872	67	10321	2.02	ppb		93
8) Trichlorofluoromethane	1.908	101	7659	1.85	ppb		96
9) Diethyl Ether	2.152	59	5387	1.80	ppb	#	60
10) Freon 123a	2.164	67	7570	2.15	ppb		97
11) Freon 123	2.213	83	8437	2.03	ppb		94
12) Acrolein	2.274	56	7985	9.88	ppb		94
13) 1,1-Diclethene	2.341	96	4767	2.00	ppb		92
14) Freon 113	2.341	101	5786	2.09	ppb		81
15) Acetone	2.414	43	6502	3.64	ppb		87
16) 2-Propanol	2.548	45	13095	33.02	ppb		86
17) Iodomethane	2.475	142	1394	0.52	ppb		85
18) Carbon Disulfide	2.536	76	19144	2.11	ppb		95
19) Acetonitrile	2.676	40	2415m	10.91	ppb		
20) Allyl Chloride	2.683	76	3112	1.84	ppb	#	93
21) Methyl Acetate	2.719	43	9302	2.03	ppb		89
22) Methylene Chloride	2.805	84	6734	1.98	ppb		91
23) TBA	2.957	59	24574	38.29	ppb		92
24) Acrylonitrile	3.091	53	18967	9.58	ppb		97
25) Methyl-t-Butyl Ether	3.103	73	20547	1.86	ppb		94
26) trans-1,2-Dichloroethene	3.091	96	6006	2.17	ppb		99
28) 1,1-Diclethane	3.603	63	12202	2.00	ppb		93
29) Vinyl Acetate	3.719	86	920m	2.05	ppb		
30) DIPE	3.719	45	19472	1.82	ppb	#	72
31) 2-Chloro-1,3-Butadiene	3.713	53	9458	1.92	ppb		89
32) ETBE	4.243	59	18775	1.88	ppb		93
33) 2,2-Dichloropropane	4.432	77	9189	2.04	ppb		87
34) cis-1,2-Dichloroethene	4.463	96	7466	2.08	ppb	#	71
35) 2-Butanone	4.548	43	5608	2.34	ppb		91
36) Propionitrile	4.652	54	9021	10.51	ppb		95
37) Bromochloromethane	4.865	130	4104m	1.95	ppb		
38) Methacrylonitrile	4.914	67	3858	1.90	ppb	#	72
39) Tetrahydrofuran	4.975	42	4444	2.36	ppb		100
40) Chloroform	5.054	83	10793	1.92	ppb		83
41) 1,1,1-Trichloroethane	5.310	97	8204	1.84	ppb		83

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:18:46 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.145	73	16914	1.70	ppb		89
44) Cyclohexane	5.371	41	6706	2.05	ppb		91
46) Carbontetrachloride	5.566	117	5194m	1.57	ppb		
47) 1,1-Dichloropropene	5.603	75	8392m	1.78	ppb		
49) Benzene	5.920	78	29026	2.02	ppb		95
50) 1,2-Dichloroethane	5.975	62	9278	1.85	ppb		88
51) Iso-Butyl Alcohol	5.975	43	9824	31.85	ppb		88
52) n-Heptane	6.365	43	7823	1.76	ppb	#	84
53) 1-Butanol	6.920	56	15075	78.54	ppb		96
54) Trichloroethene	6.840	130	7527	2.11	ppb	#	74
55) Methylcyclohexane	7.054	55	7711	1.74	ppb		89
56) 1,2-Diclpropane	7.139	63	6689	1.75	ppb		90
57) Dibromomethane	7.285	93	4510	2.05	ppb	#	75
58) 1,4-Dioxane	7.352	88	3230	41.05	ppb		93
59) Methyl Methacrylate	7.352	69	6187	1.87	ppb	#	74
60) Bromodichloromethane	7.511	83	7816	1.94	ppb		98
62) 2-Chloroethylvinyl Ether	7.907	63	2747	1.65	ppb		96
63) cis-1,3-Dichloropropene	8.035	75	9781	1.78	ppb		90
64) 4-Methyl-2-pentanone	8.255	43	9118	1.78	ppb		89
66) Toluene	8.389	91	29180	1.92	ppb		97
67) trans-1,3-Dichloropropene	8.675	75	8285	1.66	ppb		94
68) Ethyl Methacrylate	8.803	69	9144	1.63	ppb		80
69) 1,1,2-Trichloroethane	8.864	97	5795	1.70	ppb	#	83
72) Tetrachloroethene	8.968	164	5134	1.93	ppb	#	72
73) 2-Hexanone	9.157	43	6269	1.62	ppb		87
74) 1,3-Dichloropropane	9.029	76	10821	1.77	ppb		91
75) Dibromochloromethane	9.248	129	4659	1.72	ppb		85
76) N-Butyl Acetate	9.297	43	12295	1.71	ppb		95
77) 1,2-Dibromoethane	9.352	107	5979	1.79	ppb		81
78) Chlorobenzene	9.828	112	18918	1.95	ppb		97
79) 3-CBTF	9.846	180	8451	1.88	ppb	#	75
80) 4-CBTF	9.901	180	7782	1.92	ppb		94
81) 1,1,1,2-Tetrachloroethane	9.913	131	5817	1.94	ppb		90
82) Ethylbenzene	9.943	106	9419	1.85	ppb	#	89
83) (m+p)Xylene	10.053	106	21557	3.53	ppb	#	81
84) o-Xylene	10.413	106	10306	1.73	ppb		97
85) Styrene	10.425	104	17218	1.70	ppb		95
87) Bromoform	10.590	173	3117	1.82	ppb	#	71
88) 2-CBTF	10.657	180	8401	1.99	ppb		89
89) Isopropylbenzene	10.742	105	27202	1.89	ppb		93
90) Cyclohexanone	10.827	55	33126	38.36	ppb		86
91) trans-1,4-Dichloro-2-B...	11.065	53	2171	1.80	ppb	#	79
92) 1,1,2,2-Tetrachloroethane	11.016	83	8656	1.86	ppb		93
93) Bromobenzene	10.992	156	7236	1.93	ppb		95
94) 1,2,3-Trichloropropane	11.041	110	3332	2.22	ppb	#	58
95) n-Propylbenzene	11.089	91	30684	1.86	ppb		97
96) 2-Chlorotoluene	11.157	91	21524	2.01	ppb		94
97) 3-Chlorotoluene	11.211	91	18084	1.77	ppb		93
98) 4-Chlorotoluene	11.254	91	22372	1.87	ppb		98
99) 1,3,5-Trimethylbenzene	11.248	105	22970	1.87	ppb		93
100) tert-Butylbenzene	11.510	119	20761	2.02	ppb		95
101) 1,2,4-Trimethylbenzene	11.553	105	22601	1.83	ppb		90
102) 3,4-DCBTF	11.620	214	6581	1.94	ppb	#	82
103) sec-Butylbenzene	11.693	105	28174	1.91	ppb		97
104) p-Isopropyltoluene	11.815	119	23538	1.85	ppb		97
105) 1,3-Dclbenz	11.784	146	14101	1.92	ppb		94

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:18:46 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

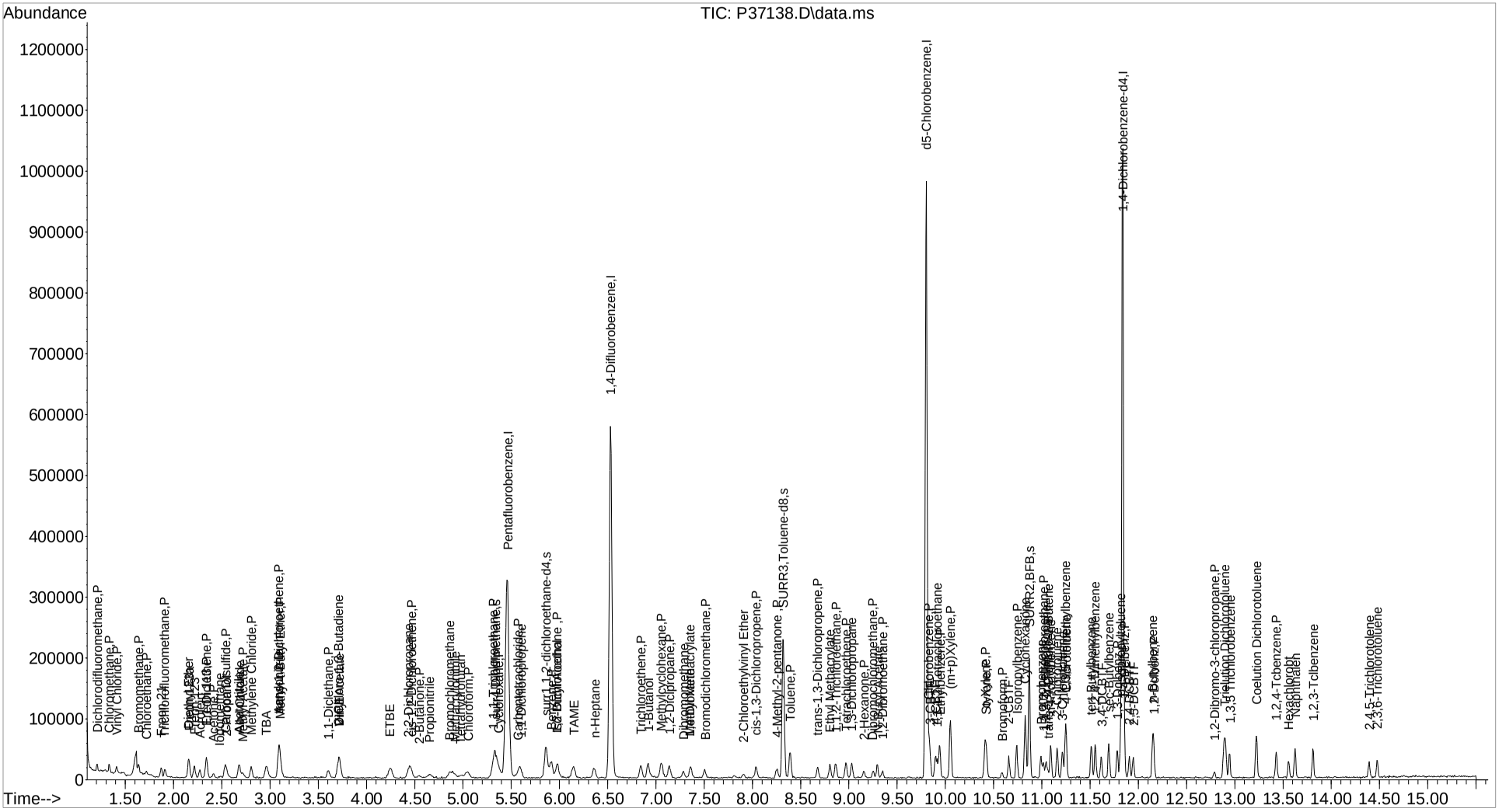
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
106) 1,4-Dclbenz	11.858	146	14046	1.88	ppb		96
107) 2,4-DCBTF	11.906	214	5487	1.73	ppb	#	85
108) 2,5-DCBTF	11.949	214	6611	1.95	ppb		88
109) n-Butylbenzene	12.150	91	21430	1.79	ppb		95
110) 1,2-Dclbenz	12.162	146	14264	1.91	ppb		97
111) 1,2-Dibromo-3-chloropr...	12.790	157	1827	1.76	ppb		91
112) Trielution Dichlorotol...	12.894	125	30328	5.08	ppb		89
113) 1,3,5 Trichlorobenzene	12.949	180	8728	1.70	ppb	#	92
114) Coelution Dichlorotoluene	13.223	125	23322	3.56	ppb		92
115) 1,2,4-Tcbenzene	13.430	180	9461	1.76	ppb		90
116) Hexachlorobt	13.559	225	4067	1.88	ppb		93
117) Naphthalen	13.626	128	27476	1.75	ppb		97
118) 1,2,3-Tclbenzene	13.815	180	9996	1.80	ppb		84
119) 2,4,5-Trichlorotolene	14.394	159	5518	1.62	ppb		90
120) 2,3,6-Trichlorotoluene	14.473	159	4721m	1.52	ppb		

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:18:46 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

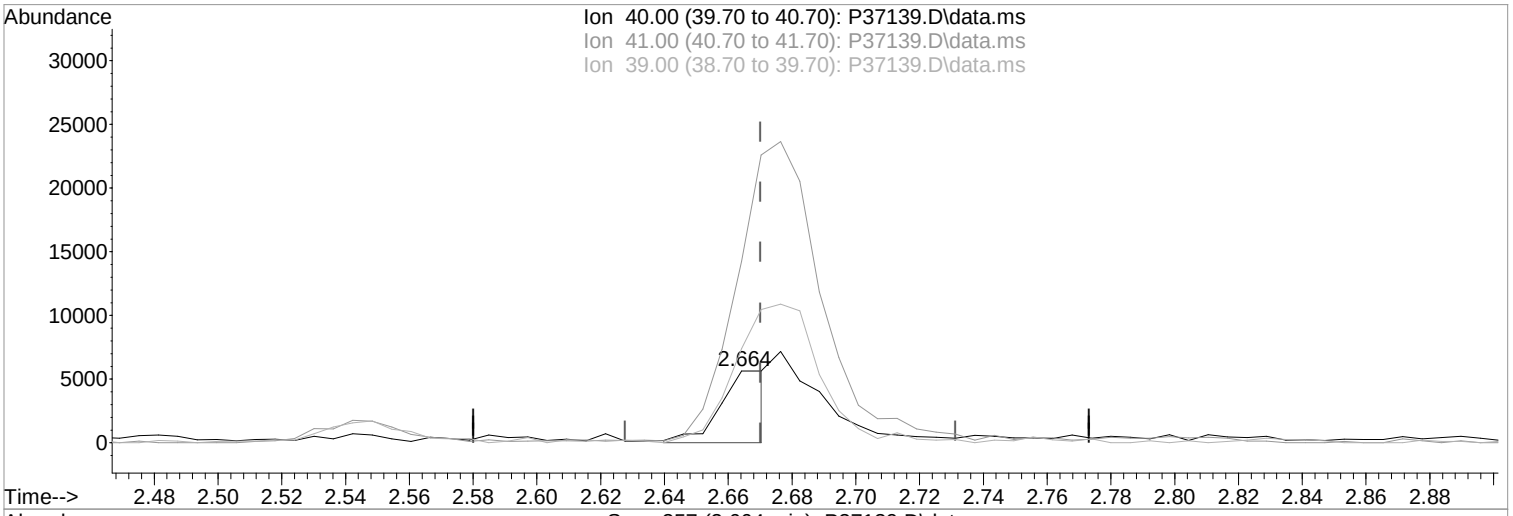


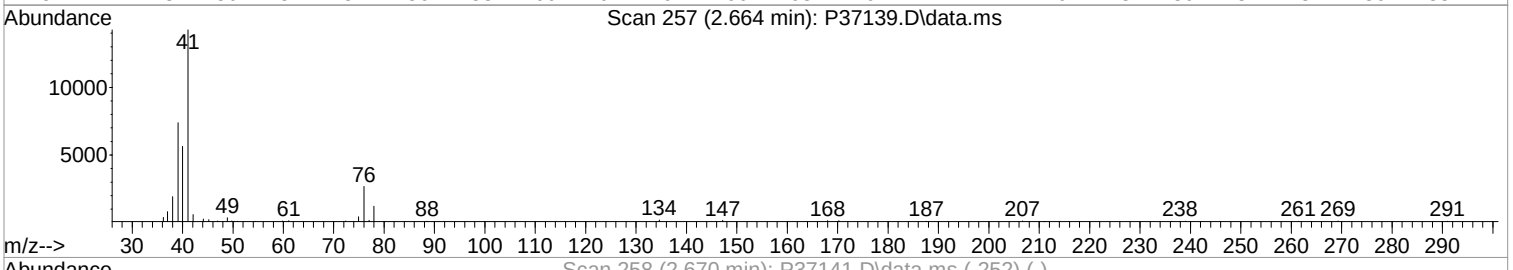
1st 07/14/20
2nd 07/14/20

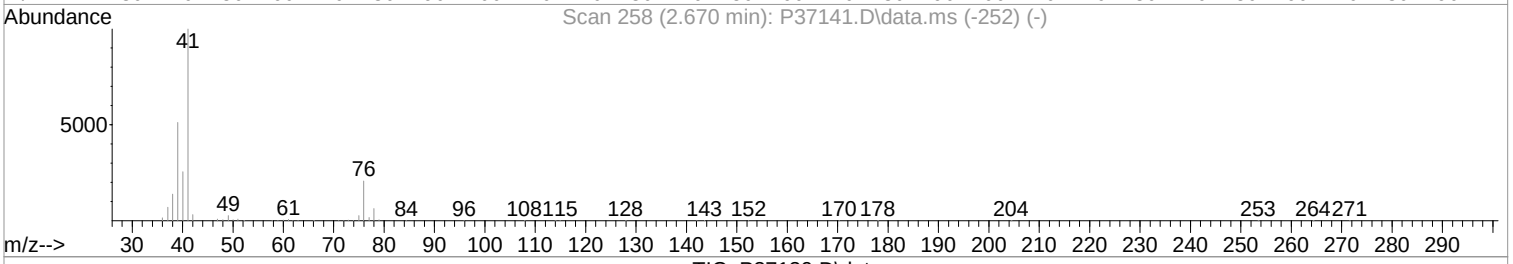
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(19) Acetonitrile

2.664min (-0.006) 25.74 ppb m

response 5783

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	252.38#
39.00	200.50	130.76#
0.00	0.00	0.00

Manual Integration:

After

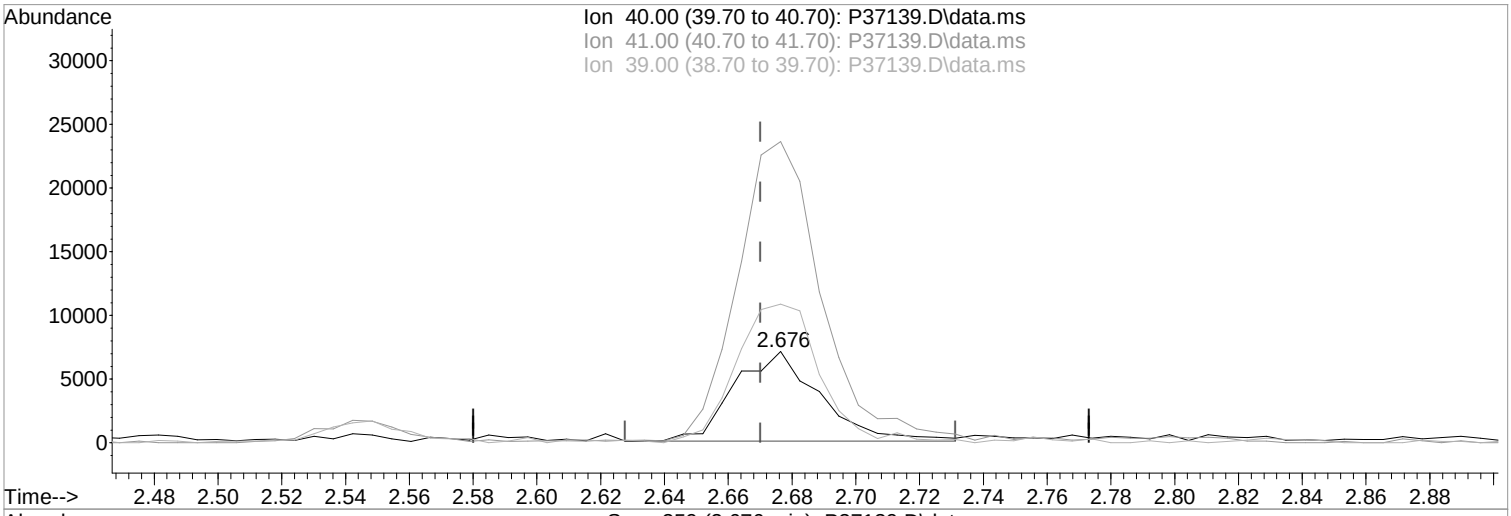
Poor integration.

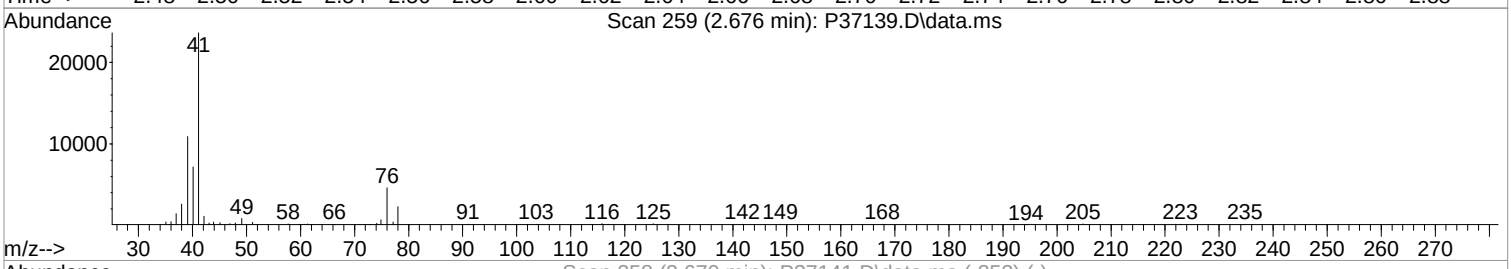
07/13/20

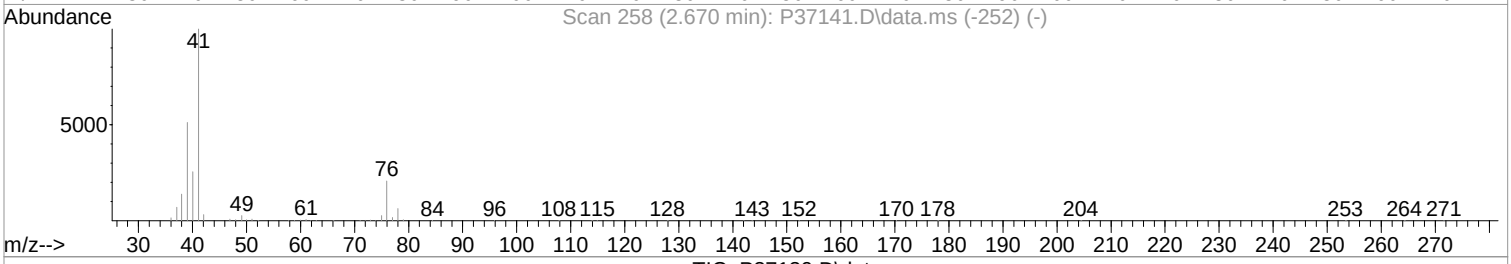
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 58.50 ppb

response 13142

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	329.88#
39.00	200.50	151.97#
0.00	0.00	0.00

Manual Integration:

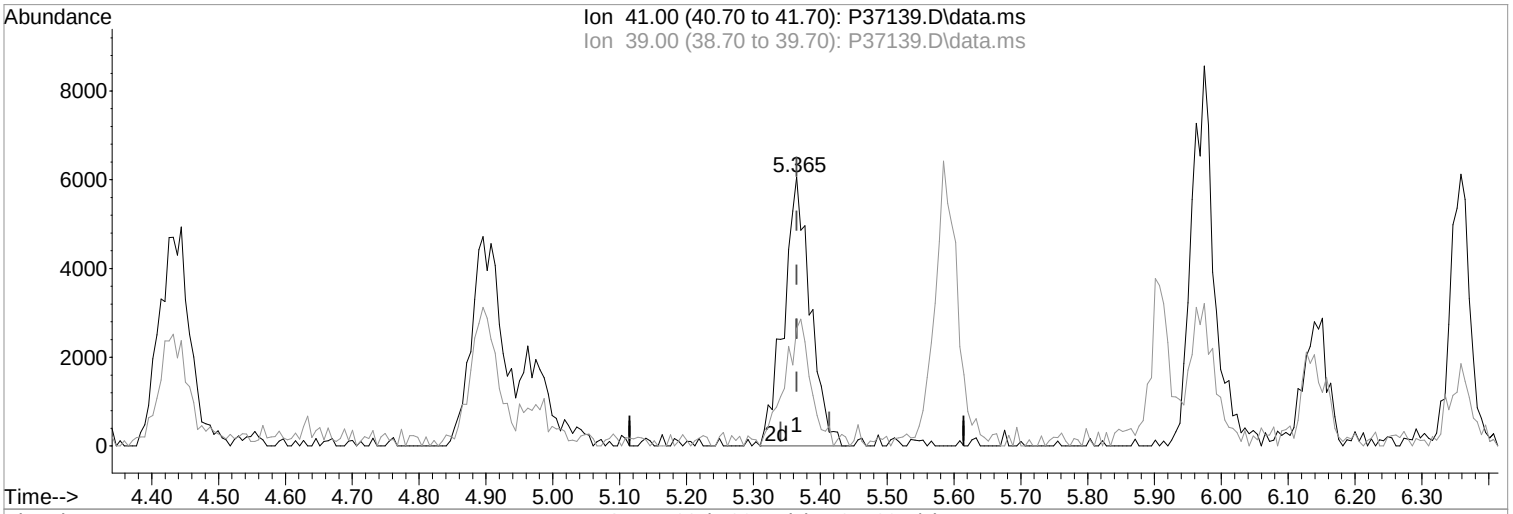
Before

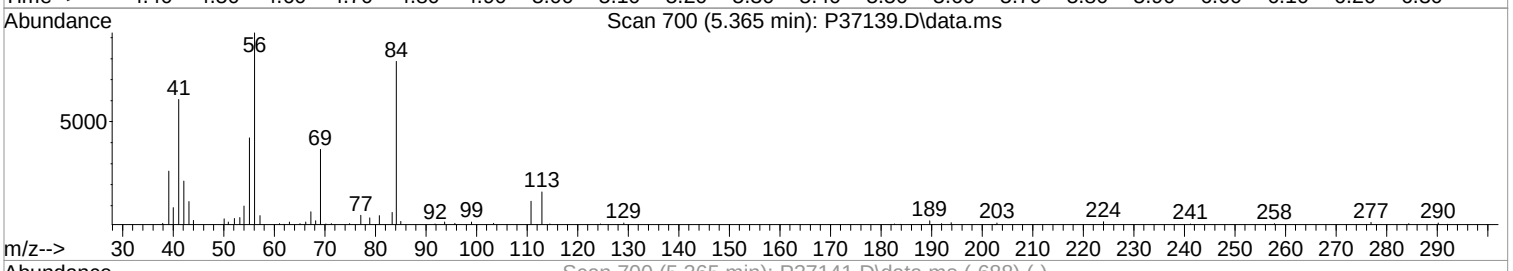
07/13/20

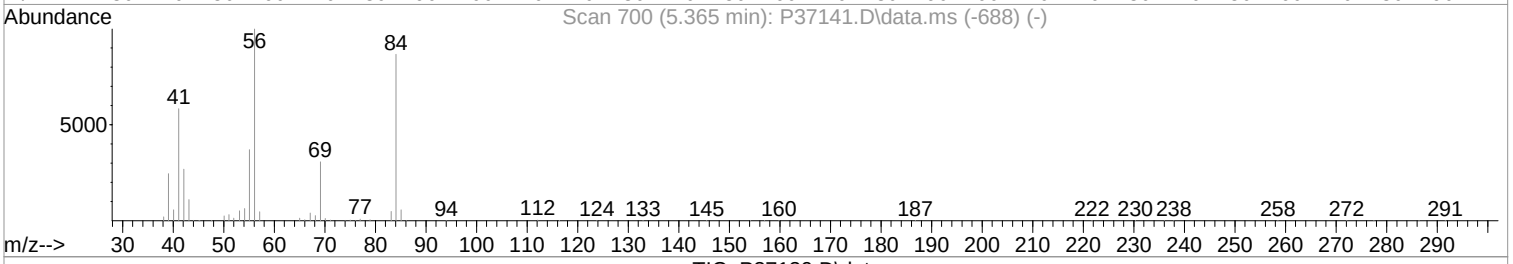
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(44) Cyclohexane (P)

5.365min (+0.000) 4.97 ppb m

response 16745

Ion	Exp%	Act%
41.00	100	100
39.00	42.20	43.71
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

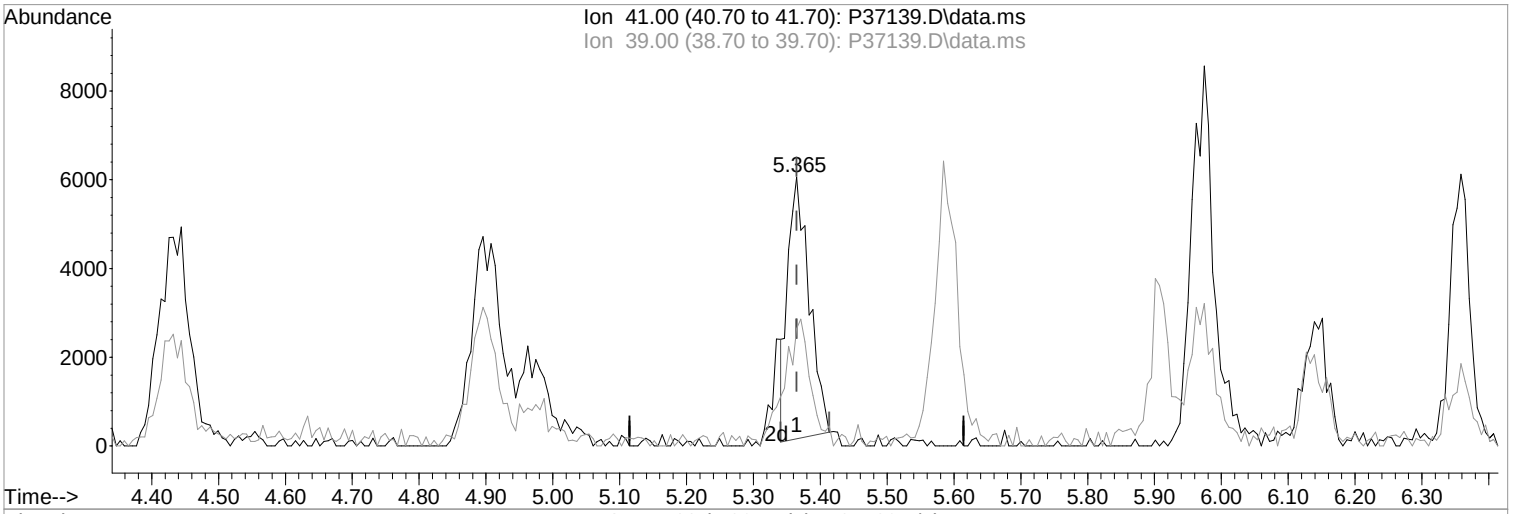
Poor integration.

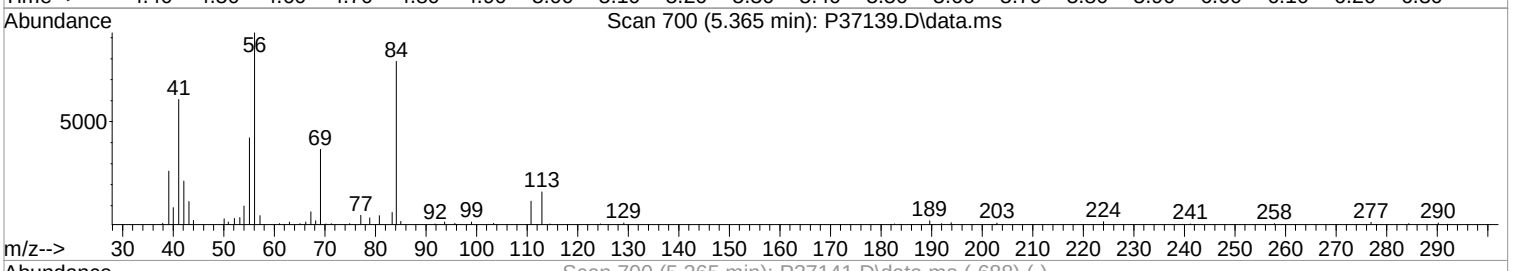
07/13/20

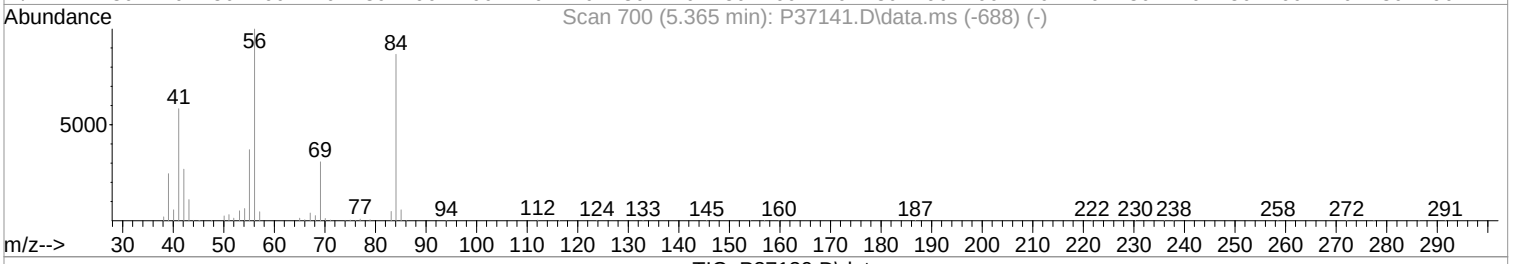
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(44) Cyclohexane (P)

5.365min (+0.000) 3.89 ppb

response 13088

Ion	Exp%	Act%
41.00	100	100
39.00	42.20	43.71
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

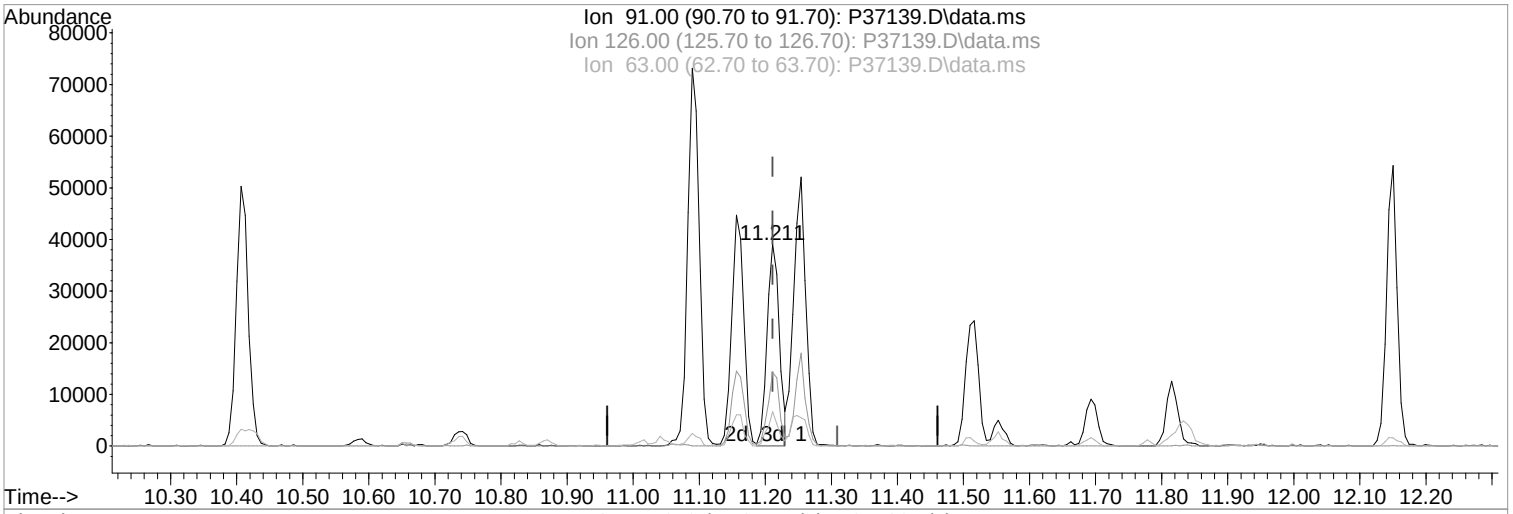
07/13/20

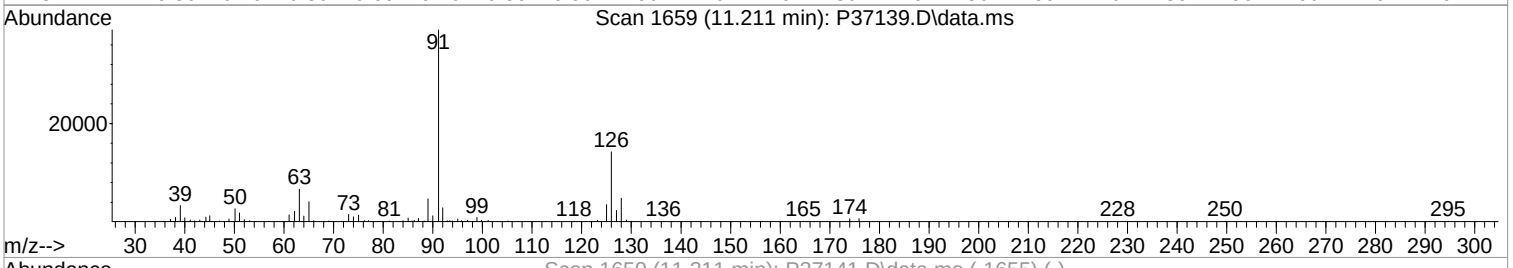
1st 07/14/20
2nd 07/14/20

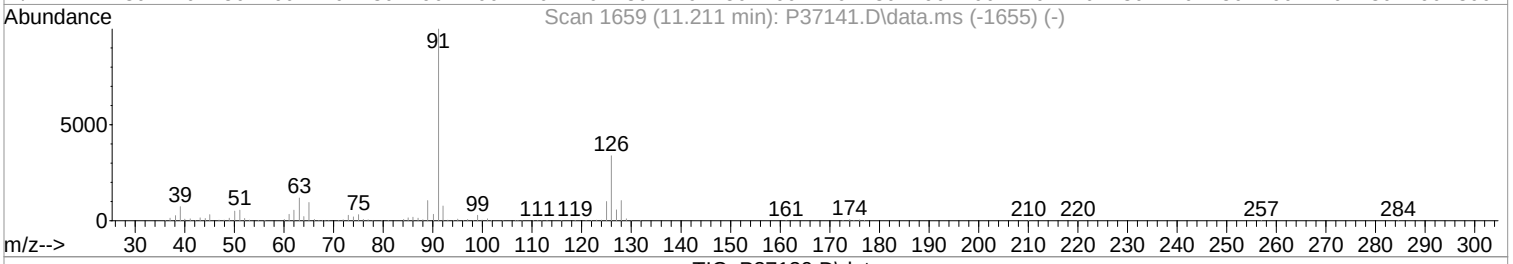
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(97) 3-Chlorotoluene

11.211min (+0.000) 4.77 ppb m

response 50195

Ion	Exp%	Act%
91.00	100	100
126.00	33.90	36.46
63.00	11.90	17.07#
0.00	0.00	0.00

Manual Integration:

After

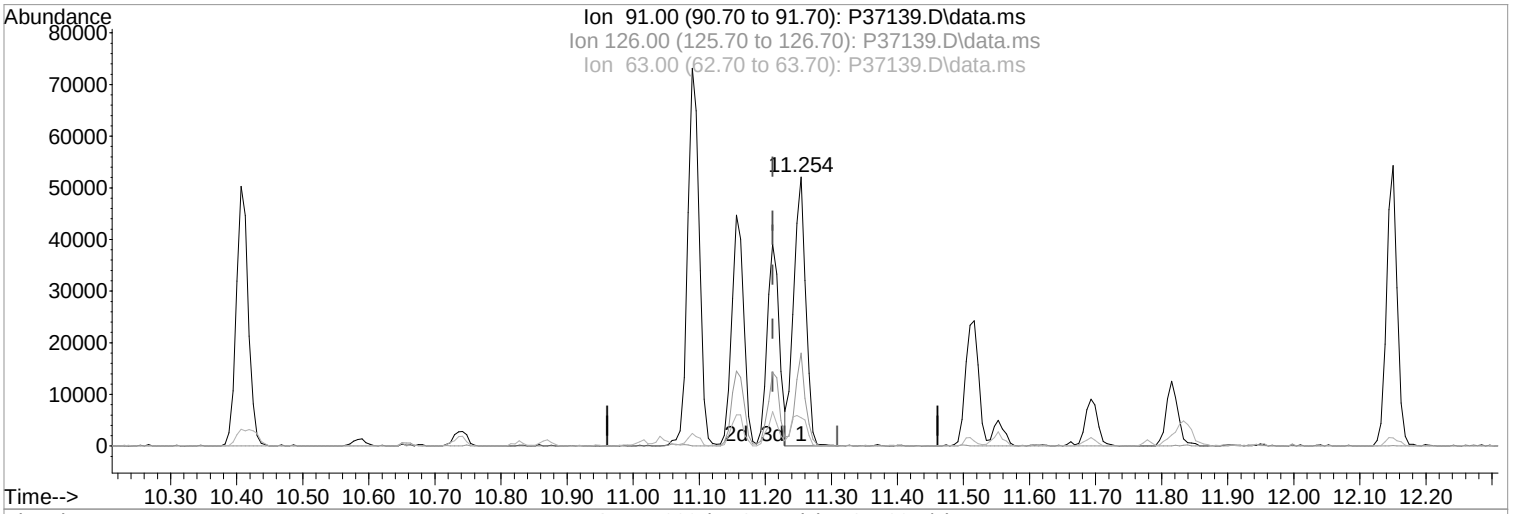
Poor integration.

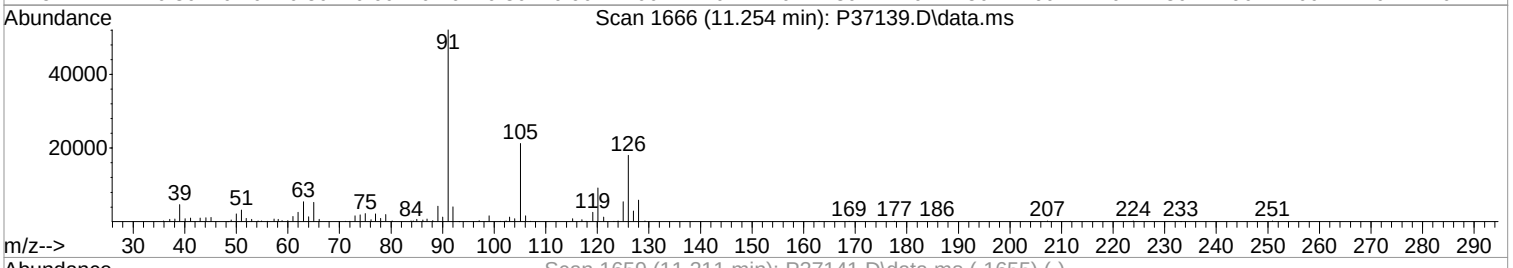
07/13/20

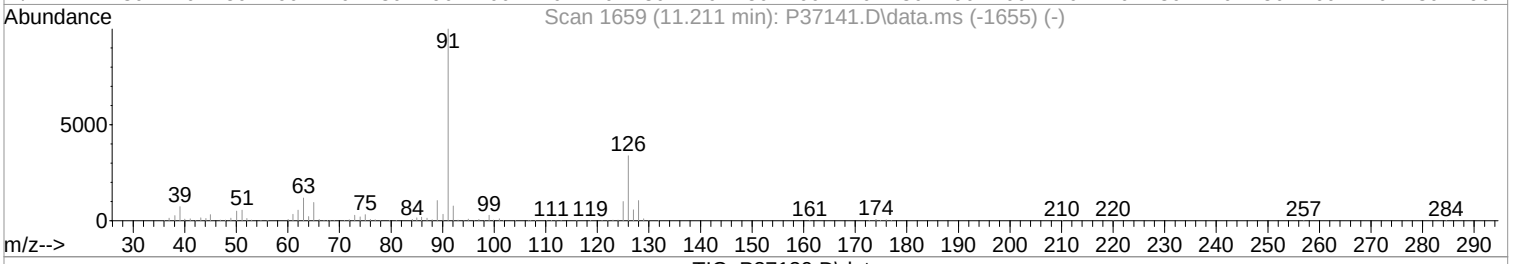
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(97) 3-Chlorotoluene

11.254min (+0.043) 6.31 ppb

response 66366

Ion	Exp%	Act%
91.00	100	100
126.00	33.90	34.57
63.00	11.90	10.50
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:21:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	312583	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	513354	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	442654	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	213927	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.316	113	30384	10.31	ppb		-0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 20.62%#				
48) surr1,1,2-dichloroetha...	5.859	65	45823	11.23	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 22.46%#				
65) SURR3,Toluene-d8	8.316	98	148671	10.85	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 21.70%#				
70) SURR2,BFB	10.870	95	54520	10.80	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 21.60%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.201	85	13614	3.91	ppb		98
3) Chloromethane	1.329	50	21678	4.96	ppb		99
4) Vinyl Chloride	1.402	62	20800	5.01	ppb		95
5) Bromomethane	1.628	94	20221	5.99	ppb		94
6) Chloroethane	1.713	64	10542	4.70	ppb		94
7) Freon 21	1.866	67	22991	4.44	ppb		94
8) Trichlorofluoromethane	1.908	101	20176	4.81	ppb		96
9) Diethyl Ether	2.146	59	16224	5.35	ppb		91
10) Freon 123a	2.152	67	18302	5.12	ppb		97
11) Freon 123	2.207	83	22040	5.22	ppb		97
12) Acrolein	2.268	56	19636	23.92	ppb		98
13) 1,1-Diclethene	2.335	96	11564	4.78	ppb		93
14) Freon 113	2.341	101	15210	5.40	ppb		80
15) Acetone	2.408	43	13486	7.43	ppb		86
16) 2-Propanol	2.542	45	37063	92.07	ppb		98
17) Iodomethane	2.481	142	4243	1.57	ppb		81
18) Carbon Disulfide	2.524	76	40723	4.42	ppb		94
19) Acetonitrile	2.664	40	5783m	25.74	ppb		
20) Allyl Chloride	2.676	76	7812	4.56	ppb	#	80
21) Methyl Acetate	2.713	43	21716	4.67	ppb		98
22) Methylene Chloride	2.798	84	17778	5.16	ppb		92
23) TBA	2.957	59	64781	99.44	ppb		98
24) Acrylonitrile	3.085	53	51656	25.71	ppb		91
25) Methyl-t-Butyl Ether	3.097	73	55706	4.98	ppb		92
26) trans-1,2-Dichloroethene	3.085	96	14647	5.20	ppb		99
28) 1,1-Diclethane	3.603	63	31934	5.15	ppb		92
29) Vinyl Acetate	3.701	86	1394	3.06	ppb	#	87
30) DIPE	3.707	45	51980	4.79	ppb		89
31) 2-Chloro-1,3-Butadiene	3.713	53	25100	5.03	ppb		89
32) ETBE	4.237	59	48608	4.80	ppb		97
33) 2,2-Dichloropropane	4.438	77	23449	5.13	ppb		93
34) cis-1,2-Dichloroethene	4.450	96	18732	5.15	ppb		95
35) 2-Butanone	4.530	43	12900	5.31	ppb		90
36) Propionitrile	4.639	54	21499	24.67	ppb		96
37) Bromochloromethane	4.865	130	11045	5.17	ppb		98
38) Methacrylonitrile	4.889	67	10718	5.19	ppb	#	80
39) Tetrahydrofuran	4.969	42	9768	5.12	ppb		96
40) Chloroform	5.036	83	28677	5.01	ppb		86
41) 1,1,1-Trichloroethane	5.304	97	22134	4.90	ppb		93

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:21:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.139	73	48357	4.80	ppb		85
44) Cyclohexane	5.365	41	16745m	4.97	ppb		
46) Carbontetrachloride	5.560	117	16677	4.89	ppb		85
47) 1,1-Dichloropropene	5.584	75	23805	4.90	ppb		95
49) Benzene	5.907	78	73495	4.95	ppb		95
50) 1,2-Dichloroethane	5.968	62	25754	4.97	ppb		94
51) Iso-Butyl Alcohol	5.975	43	28407	89.35	ppb		85
52) n-Heptane	6.353	43	22072	4.80	ppb		88
53) 1-Butanol	6.913	56	39667	200.50	ppb		97
54) Trichloroethene	6.846	130	18122	4.93	ppb		92
55) Methylcyclohexane	7.054	55	21076	4.61	ppb		89
56) 1,2-Diclpropane	7.133	63	18888	4.80	ppb		92
57) Dibromomethane	7.285	93	10534	4.65	ppb		96
58) 1,4-Dioxane	7.352	88	6963	85.85	ppb		97
59) Methyl Methacrylate	7.358	69	16250	4.75	ppb		96
60) Bromodichloromethane	7.505	83	19052	4.59	ppb		92
62) 2-Chloroethylvinyl Ether	7.907	63	6544	3.82	ppb		100
63) cis-1,3-Dichloropropene	8.035	75	25650	4.53	ppb		94
64) 4-Methyl-2-pentanone	8.248	43	24564	4.64	ppb		97
66) Toluene	8.389	91	78552	5.00	ppb		99
67) trans-1,3-Dichloropropene	8.675	75	23662	4.59	ppb		92
68) Ethyl Methacrylate	8.803	69	26266	4.55	ppb		83
69) 1,1,2-Trichloroethane	8.864	97	17780	5.07	ppb		95
72) Tetrachloroethene	8.968	164	13899	5.14	ppb	#	88
73) 2-Hexanone	9.157	43	19776	5.03	ppb		96
74) 1,3-Dichloropropane	9.029	76	29352	4.72	ppb		87
75) Dibromochloromethane	9.254	129	13152	4.78	ppb		83
76) N-Butyl Acetate	9.291	43	32125	4.40	ppb		96
77) 1,2-Dibromoethane	9.346	107	16673	4.92	ppb		97
78) Chlorobenzene	9.827	112	50311	5.10	ppb		96
79) 3-CBTF	9.840	180	21567	4.72	ppb		98
80) 4-CBTF	9.901	180	19490	4.74	ppb		98
81) 1,1,1,2-Tetrachloroethane	9.919	131	14662	4.83	ppb		91
82) Ethylbenzene	9.937	106	24714	4.77	ppb		97
83) (m+p)Xylene	10.053	106	60287	9.72	ppb		96
84) o-Xylene	10.407	106	32362	5.34	ppb		90
85) Styrene	10.425	104	50370	4.90	ppb		92
87) Bromoform	10.583	173	7636	4.33	ppb		86
88) 2-CBTF	10.657	180	22366	5.15	ppb		97
89) Isopropylbenzene	10.736	105	75652	5.12	ppb		91
90) Cyclohexanone	10.827	55	90806	102.32	ppb		97
91) trans-1,4-Dichloro-2-B...	11.065	53	5988	4.84	ppb		92
92) 1,1,2,2-Tetrachloroethane	11.016	83	23587	4.94	ppb		94
93) Bromobenzene	10.992	156	19215	4.99	ppb		89
94) 1,2,3-Trichloropropane	11.041	110	8208	5.32	ppb		94
95) n-Propylbenzene	11.089	91	90546	5.34	ppb		98
96) 2-Chlorotoluene	11.156	91	55925	5.08	ppb		98
97) 3-Chlorotoluene	11.211	91	50195m	4.77	ppb		
98) 4-Chlorotoluene	11.254	91	65386	5.31	ppb		94
99) 1,3,5-Trimethylbenzene	11.242	105	64125	5.08	ppb		93
100) tert-Butylbenzene	11.516	119	54602	5.17	ppb		94
101) 1,2,4-Trimethylbenzene	11.553	105	65389	5.15	ppb		94
102) 3,4-DCBTF	11.614	214	16100	4.63	ppb		95
103) sec-Butylbenzene	11.693	105	78628	5.19	ppb		99
104) p-Isopropyltoluene	11.815	119	65769	5.04	ppb		99
105) 1,3-Dclbenz	11.784	146	36600	4.85	ppb		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:21:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

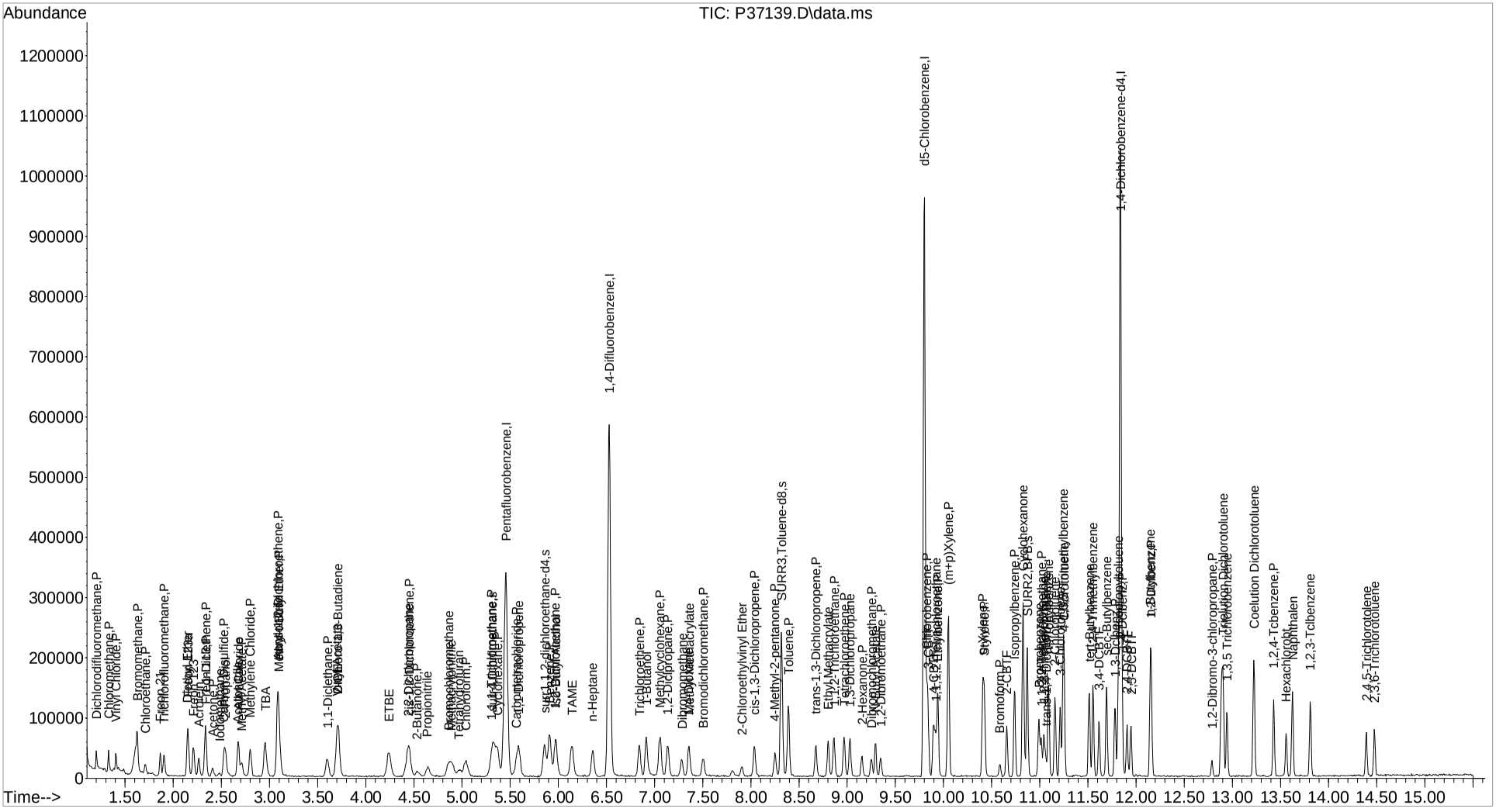
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.858	146	38046	4.95	ppb	90
107) 2,4-DCBTF	11.906	214	16585	5.09	ppb	92
108) 2,5-DCBTF	11.949	214	16450	4.71	ppb	95
109) n-Butylbenzene	12.150	91	61052	4.97	ppb	91
110) 1,2-Dclbenz	12.156	146	38497	5.02	ppb	100
111) 1,2-Dibromo-3-chloropr...	12.790	157	4682	4.38	ppb	91
112) Trielution Dichlorotol...	12.900	125	88998	14.50	ppb	98
113) 1,3,5 Trichlorobenzene	12.943	180	24537	4.66	ppb	96
114) Coelution Dichlorotoluene	13.223	125	65055	9.65	ppb	92
115) 1,2,4-Tcbenzene	13.430	180	26071	4.72	ppb	93
116) Hexachlorobt	13.558	225	9547	4.30	ppb	91
117) Naphthalen	13.625	128	83729	5.18	ppb	99
118) 1,2,3-Tclbenzene	13.808	180	27762	4.86	ppb	97
119) 2,4,5-Trichlorotolene	14.394	159	14781	4.23	ppb	97
120) 2,3,6-Trichlorotoluene	14.479	159	13029	4.09	ppb	90

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:21:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

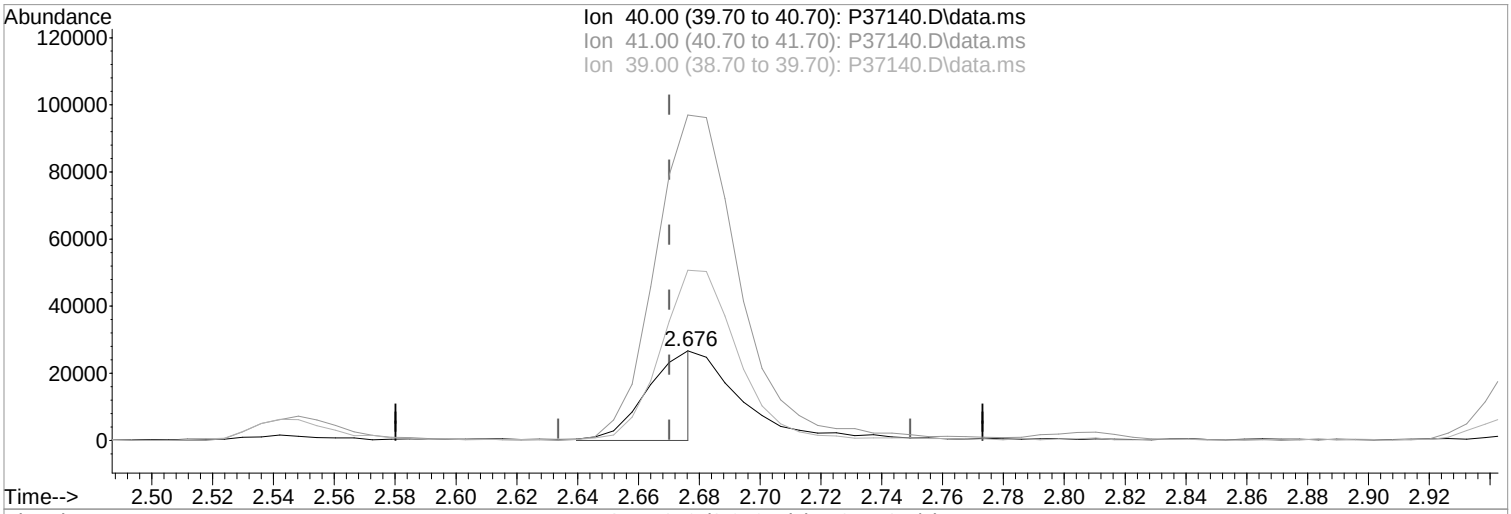


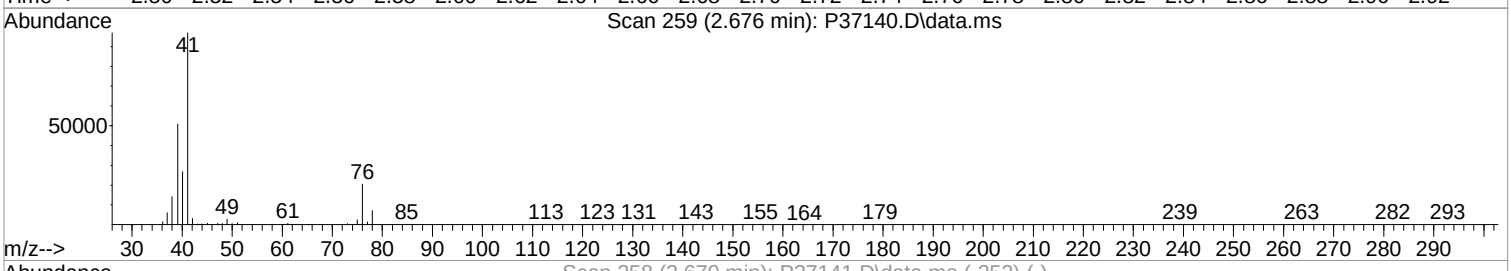
1st 07/14/20
2nd 07/14/20

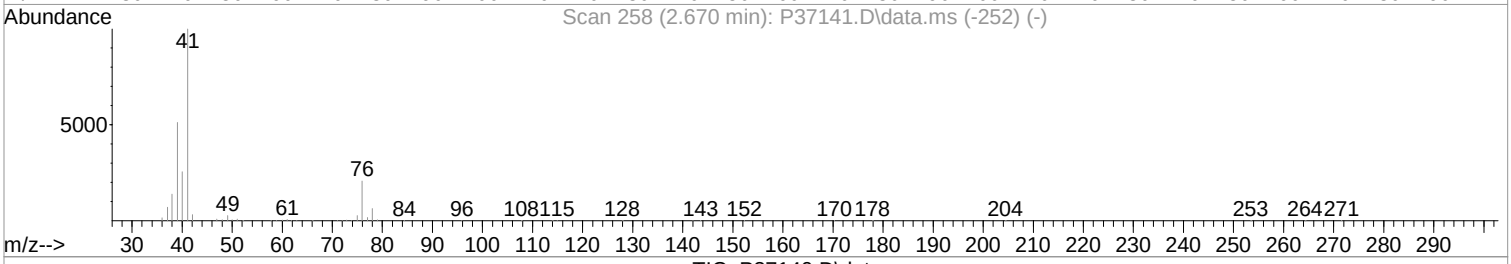
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37140.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 126.91 ppb m

response 28917

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	363.21#
39.00	200.50	190.02
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

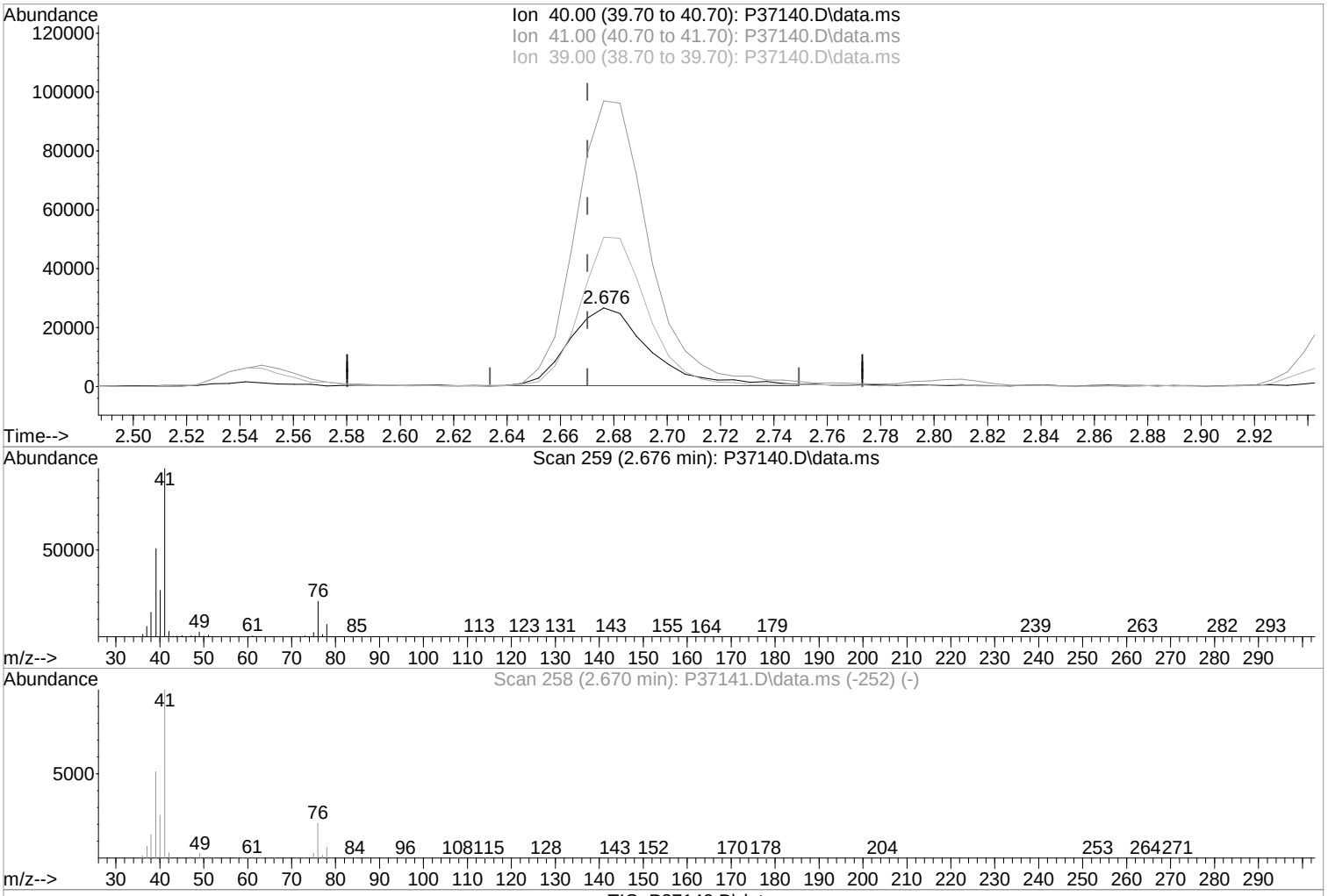
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37140.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 241.84 ppb

response 55105

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	363.21#
39.00	200.50	190.02
0.00	0.00	0.00

Manual Integration:

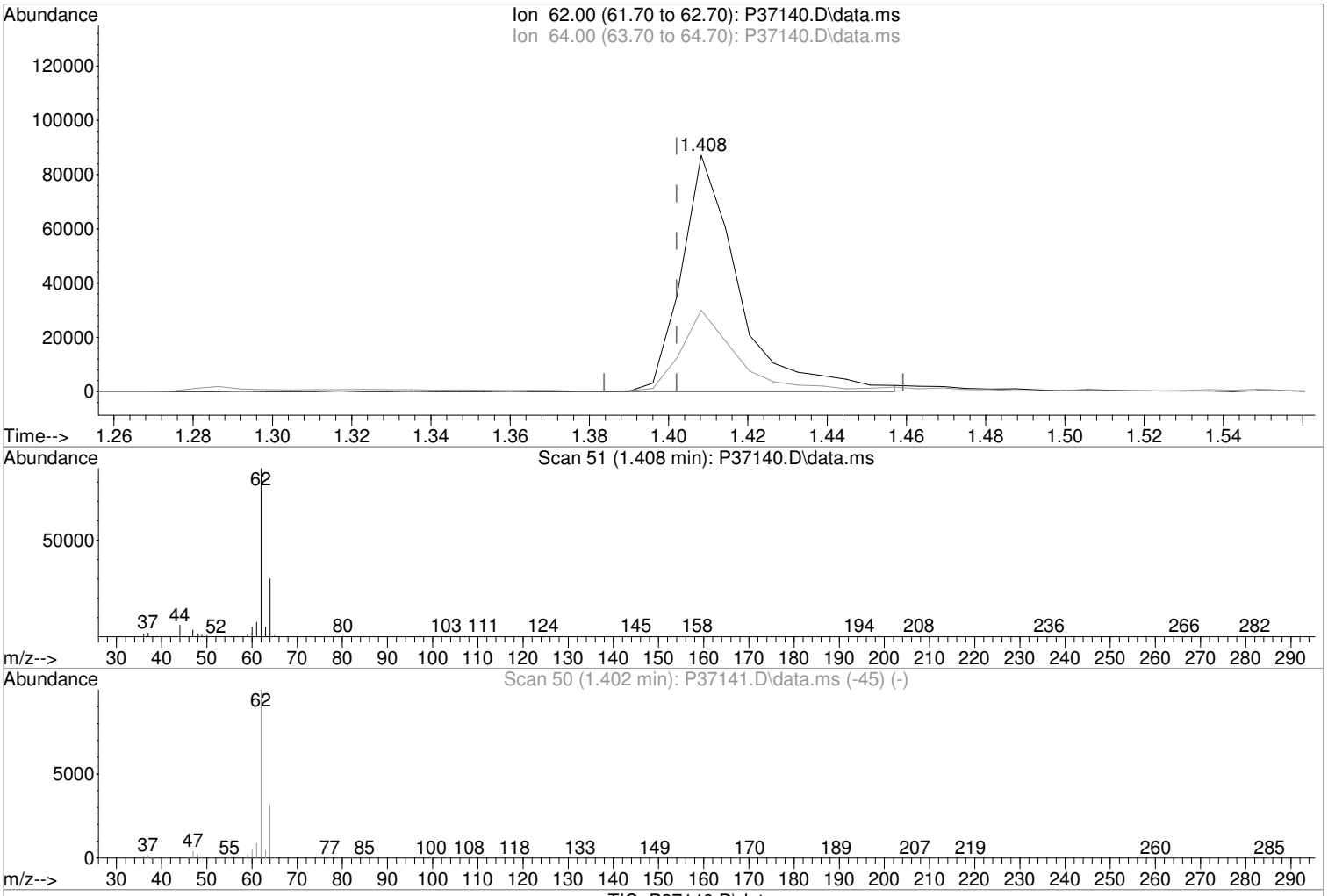
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:38:53 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37140.D\data.ms

(4) Vinyl Chloride (P)

1.408min (+0.006) 20.85 ppb m

response 87713

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	34.49
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

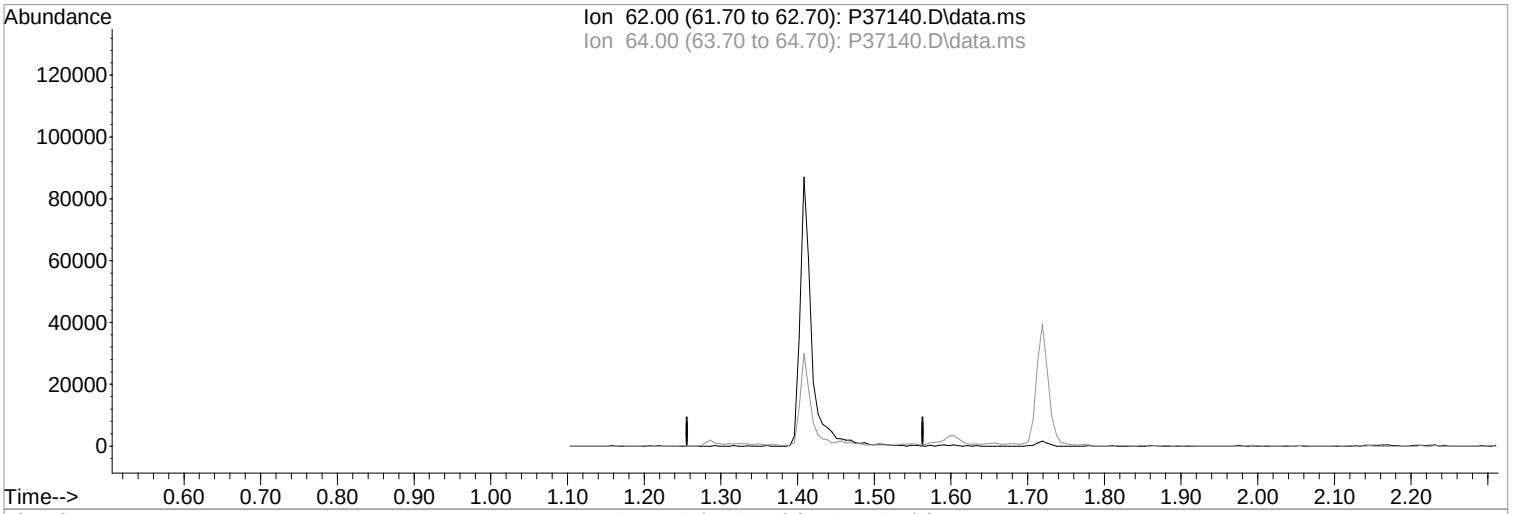
Peak not found.

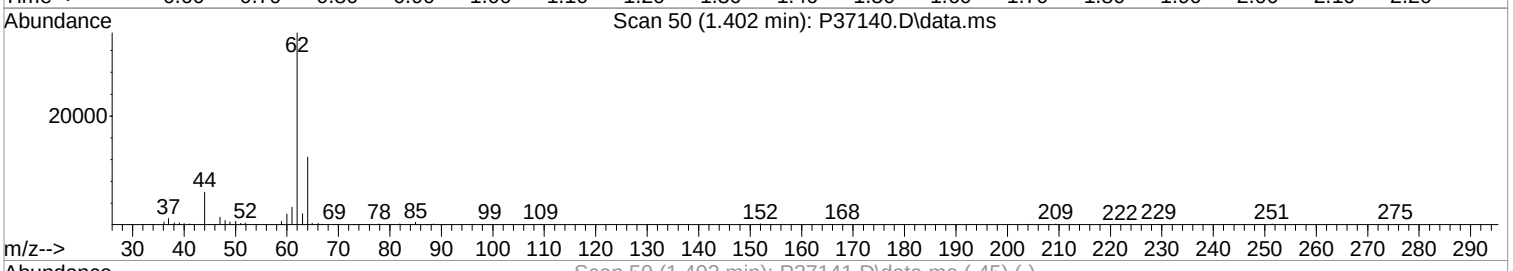
07/14/20

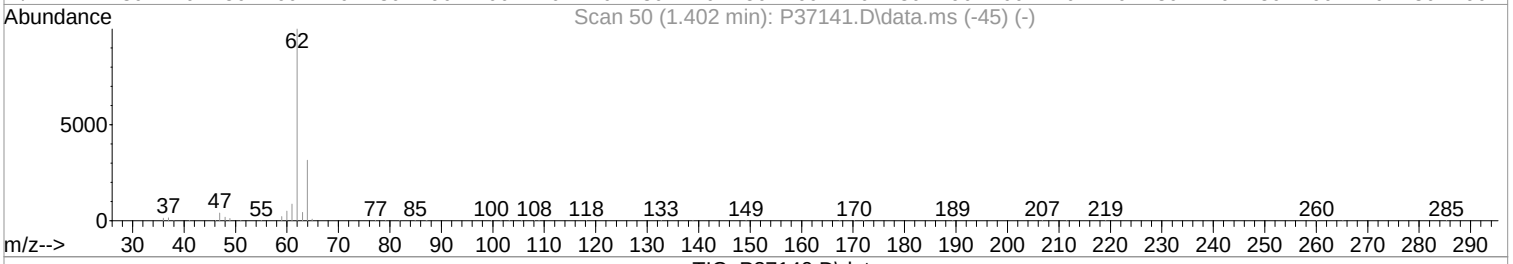
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37140.D\data.ms

(4) Vinyl Chloride (P)

1.402min (-1.402) 0.00 ppb

response 0

Ion	Exp%	Act%
62.00	100	0.00
64.00	31.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

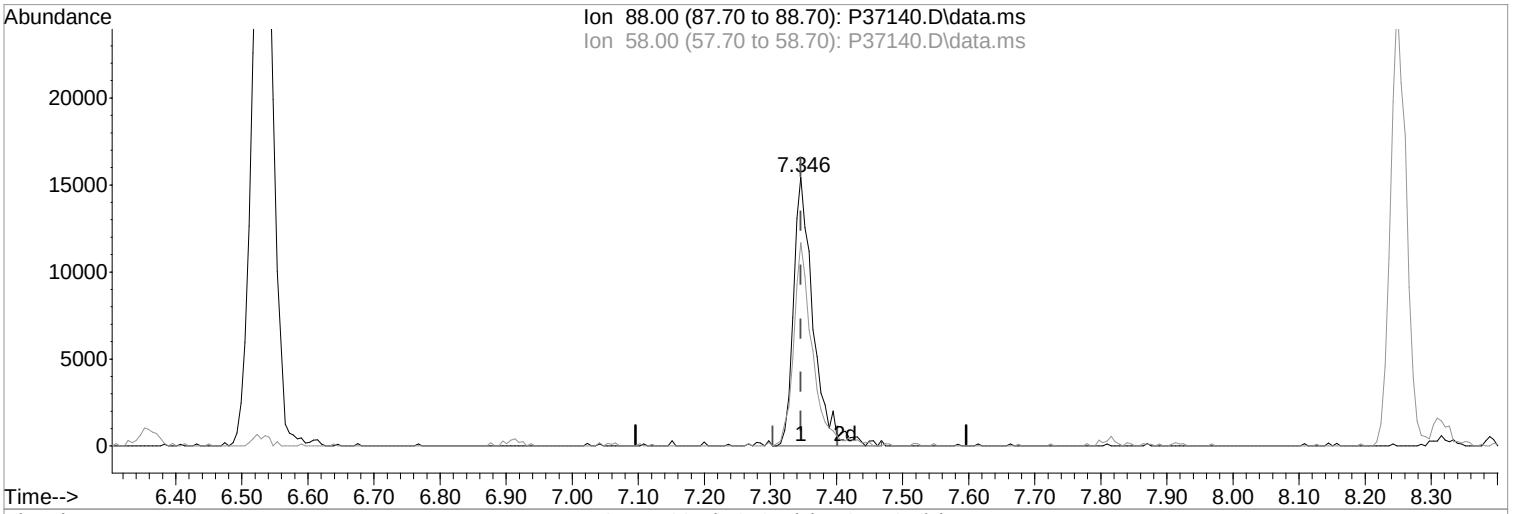
07/13/20

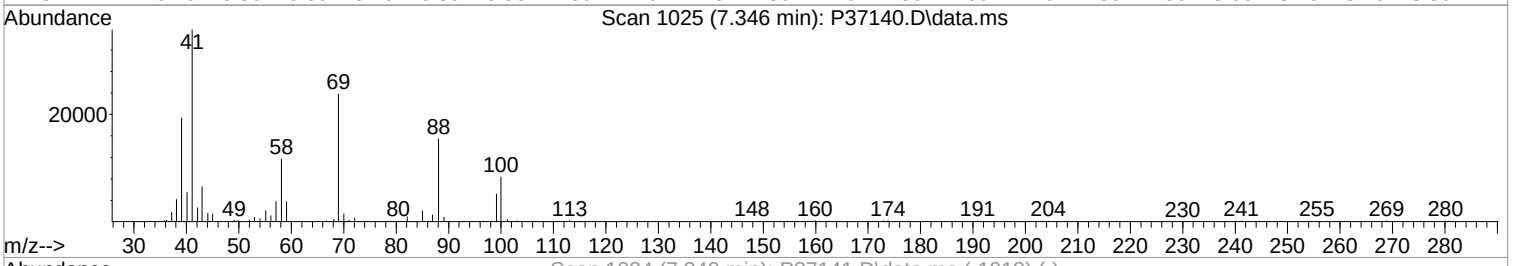
1st 07/14/20
2nd 07/14/20

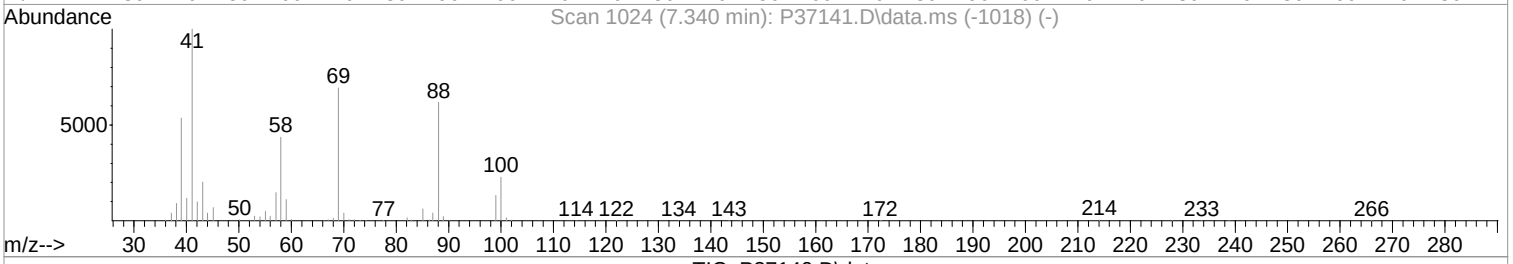
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37140.D\data.ms

(58) 1,4-Dioxane

7.346min (0.000) 401.80 ppb m

response 32420

Ion	Exp%	Act%
88.00	100	100
58.00	70.60	75.59
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

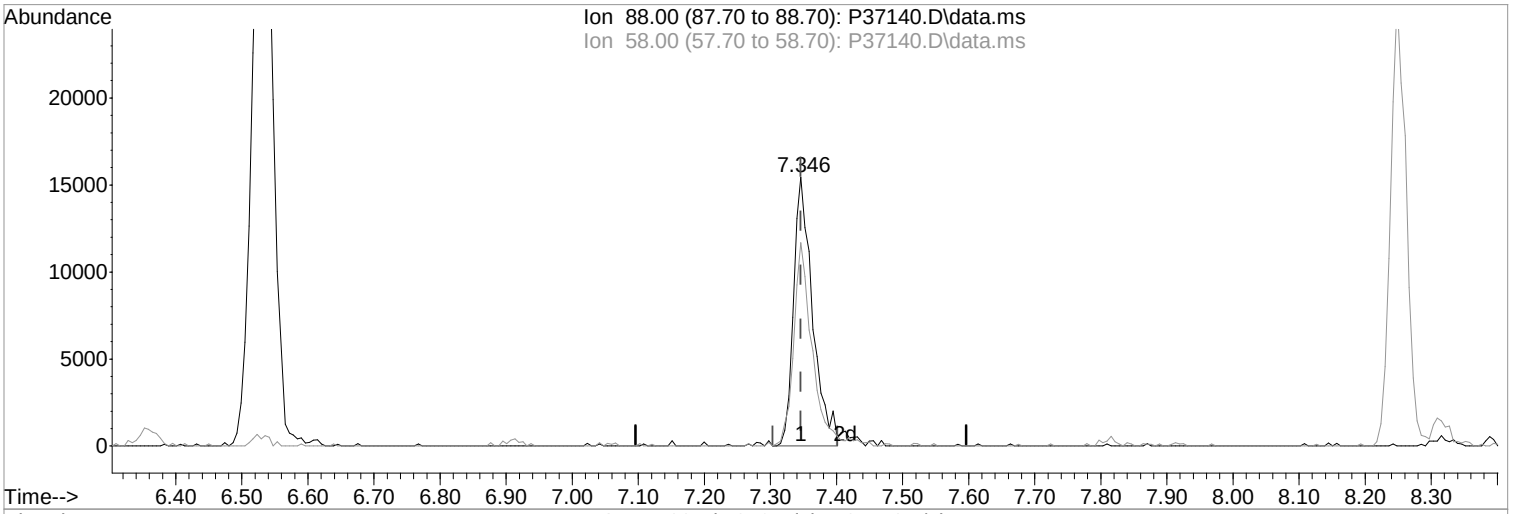
Poor integration.

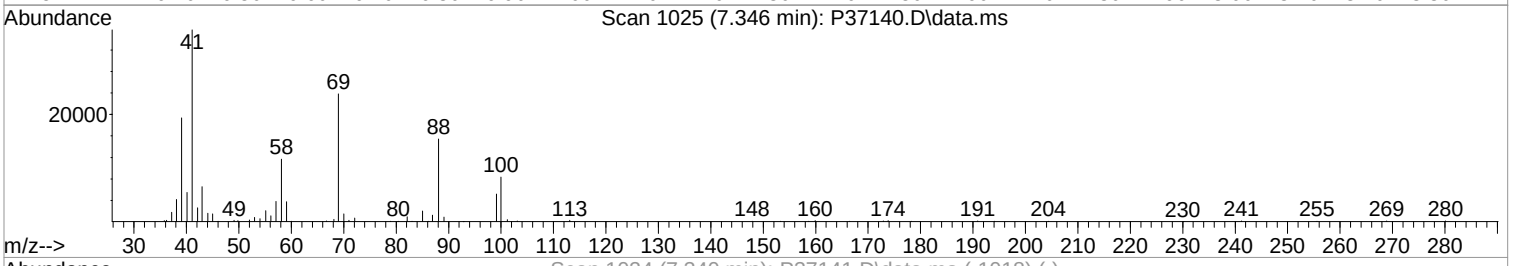
07/13/20

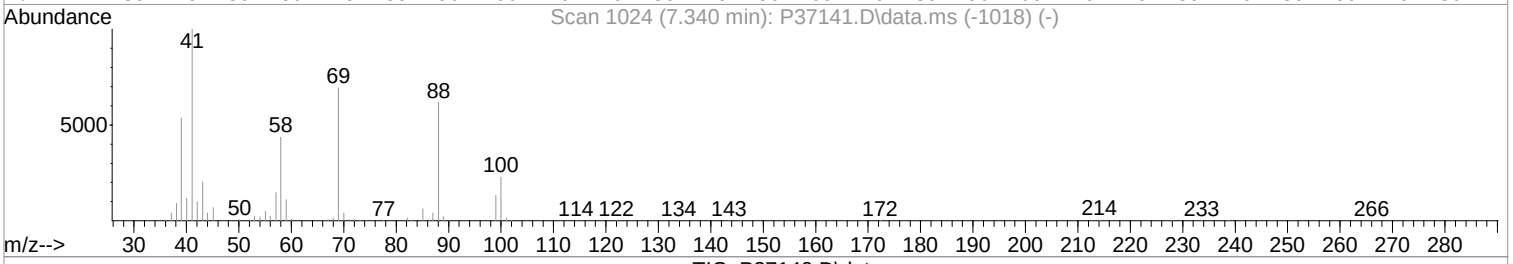
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37140.D\data.ms

(58) 1,4-Dioxane

7.346min (0.000) 382.26 ppb

response 30844

Ion	Exp%	Act%
88.00	100	100
58.00	70.60	75.59
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

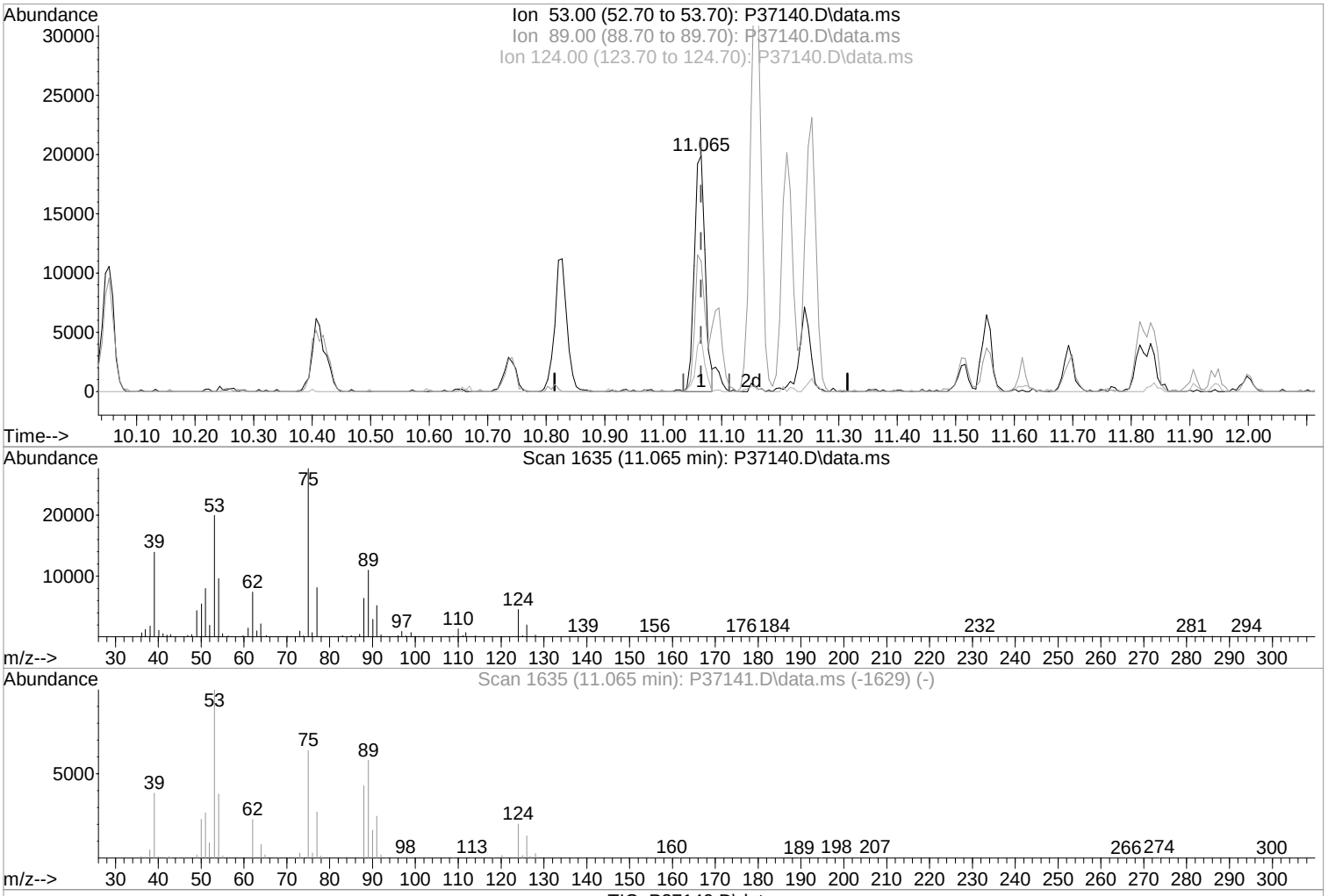
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37140.D\data.ms

(91) trans-1,4-Dichloro-2-Butene

11.065min (+0.000) 19.37 ppb m

response 25688

Ion	Exp%	Act%
53.00	100	100
89.00	58.00	55.11
124.00	20.10	22.80
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

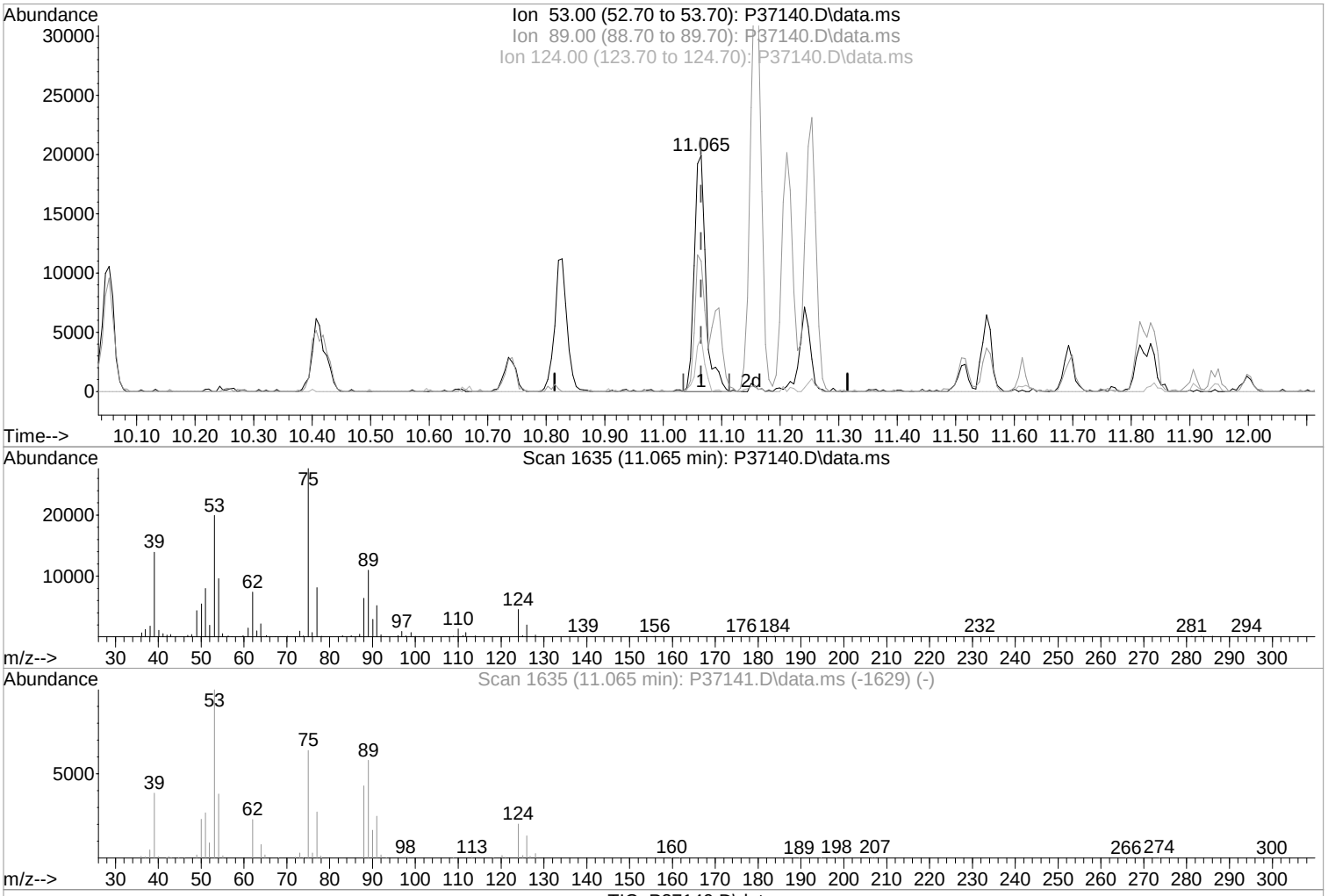
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37140.D\data.ms

(91) trans-1,4-Dichloro-2-Butene

11.065min (+0.000) 20.63 ppb

response 27359

Ion	Exp%	Act%
53.00	100	100
89.00	58.00	55.11
124.00	20.10	22.80
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:38:53 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.462	168	317057	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	510707	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	450883	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	229412	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	55863	19.05	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 38.10%#				
48) surr1,1,2-dichloroetha...	5.859	65	76633	18.88	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 37.76%#				
65) SURR3,Toluene-d8	8.315	98	261795	19.21	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 38.42%#				
70) SURR2,BFB	10.870	95	94435	18.81	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 37.62%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	78333	22.16	ppb		97
3) Chloromethane	1.335	50	93088	20.99	ppb		100
4) Vinyl Chloride	1.408	62	87713m	20.85	ppb		
5) Bromomethane	1.640	94	61209	17.87	ppb		99
6) Chloroethane	1.719	64	43067	18.92	ppb		90
7) Freon 21	1.872	67	113977	21.68	ppb		99
8) Trichlorofluoromethane	1.914	101	95413	22.43	ppb		96
9) Diethyl Ether	2.152	59	70112	22.80	ppb		96
10) Freon 123a	2.164	67	72802	20.06	ppb		99
11) Freon 123	2.219	83	83408	19.48	ppb		96
12) Acrolein	2.268	56	92913	111.60	ppb		99
13) 1,1-Diclethene	2.341	96	52198	21.29	ppb		98
14) Freon 113	2.341	101	60124	21.04	ppb		97
15) Acetone	2.408	43	42768	23.22	ppb		94
16) 2-Propanol	2.548	45	167788	410.91	ppb		96
17) Iodomethane	2.481	142	60009	21.87	ppb		95
18) Carbon Disulfide	2.530	76	179013	19.14	ppb		99
19) Acetonitrile	2.676	40	28917m	126.91	ppb		
20) Allyl Chloride	2.682	76	35407	20.38	ppb	#	90
21) Methyl Acetate	2.713	43	93828	19.90	ppb		94
22) Methylene Chloride	2.804	84	71840	20.56	ppb		96
23) TBA	2.957	59	271502	410.87	ppb		95
24) Acrylonitrile	3.085	53	219059	107.47	ppb		93
25) Methyl-t-Butyl Ether	3.103	73	247784	21.84	ppb		97
26) trans-1,2-Dichloroethene	3.091	96	61262	21.45	ppb		99
28) 1,1-Diclethane	3.609	63	132054	20.98	ppb		94
29) Vinyl Acetate	3.700	86	11401	24.67	ppb	#	37
30) DIPE	3.713	45	233173	21.20	ppb		97
31) 2-Chloro-1,3-Butadiene	3.719	53	113191	22.36	ppb		93
32) ETBE	4.243	59	223639	21.79	ppb		97
33) 2,2-Dichloropropane	4.438	77	100723	21.74	ppb		99
34) cis-1,2-Dichloroethene	4.456	96	76070	20.62	ppb		98
35) 2-Butanone	4.542	43	53315	21.63	ppb		91
36) Propionitrile	4.639	54	91137	103.11	ppb		93
37) Bromochloromethane	4.865	130	46612	21.49	ppb		97
38) Methacrylonitrile	4.901	67	43628	20.84	ppb		97
39) Tetrahydrofuran	4.968	42	39685	20.51	ppb		99
40) Chloroform	5.048	83	119569	20.61	ppb		97
41) 1,1,1-Trichloroethane	5.310	97	97656	21.30	ppb		93

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:38:53 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	TAME	6.139	73	217569	21.28	ppb		99
44)	Cyclohexane	5.365	41	63731	19.03	ppb		84
46)	Carbontetrachloride	5.566	117	70864	20.89	ppb		84
47)	1,1-Dichloropropene	5.590	75	100938	20.87	ppb		94
49)	Benzene	5.913	78	306203	20.75	ppb		97
50)	1,2-Dichloroethane	5.974	62	111601	21.66	ppb		97
51)	Iso-Butyl Alcohol	5.968	43	123183	389.46	ppb		100
52)	n-Heptane	6.358	43	91513	20.03	ppb		91
53)	1-Butanol	6.907	56	193530	983.26	ppb		98
54)	Trichloroethene	6.846	130	72894	19.92	ppb		97
55)	Methylcyclohexane	7.053	55	88144	19.40	ppb		93
56)	1,2-Diclpropane	7.139	63	81304	20.77	ppb		99
57)	Dibromomethane	7.279	93	47589	21.13	ppb		84
58)	1,4-Dioxane	7.346	88	32420m	401.80	ppb		
59)	Methyl Methacrylate	7.358	69	70667	20.78	ppb		93
60)	Bromodichloromethane	7.505	83	87282	21.13	ppb		95
62)	2-Chloroethylvinyl Ether	7.907	63	30632	17.99	ppb		99
63)	cis-1,3-Dichloropropene	8.035	75	114751	20.37	ppb		94
64)	4-Methyl-2-pentanone	8.248	43	109500	20.80	ppb		100
66)	Toluene	8.395	91	330234	21.15	ppb		98
67)	trans-1,3-Dichloropropene	8.675	75	104598	20.41	ppb		98
68)	Ethyl Methacrylate	8.803	69	123867	21.56	ppb		100
69)	1,1,2-Trichloroethane	8.864	97	72937	20.92	ppb		96
72)	Tetrachloroethene	8.968	164	56229	20.42	ppb		93
73)	2-Hexanone	9.151	43	82297	20.53	ppb		97
74)	1,3-Dichloropropane	9.029	76	131977	20.81	ppb		96
75)	Dibromochloromethane	9.248	129	57831	20.62	ppb		91
76)	N-Butyl Acetate	9.291	43	153070	20.59	ppb		99
77)	1,2-Dibromoethane	9.346	107	72944	21.14	ppb		96
78)	Chlorobenzene	9.827	112	209488	20.83	ppb		96
79)	3-CBTF	9.839	180	91740	19.70	ppb		98
80)	4-CBTF	9.894	180	81422	19.44	ppb		97
81)	1,1,1,2-Tetrachloroethane	9.913	131	62545	20.22	ppb		96
82)	Ethylbenzene	9.943	106	111431	21.12	ppb	#	89
83)	(m+p)Xylene	10.053	106	270402	42.80	ppb		98
84)	o-Xylene	10.406	106	127348	20.65	ppb		96
85)	Styrene	10.425	104	222427	21.23	ppb		98
87)	Bromoform	10.589	173	37064	19.62	ppb		96
88)	2-CBTF	10.656	180	90084	19.36	ppb		97
89)	Isopropylbenzene	10.736	105	331307	20.92	ppb		98
90)	Cyclohexanone	10.827	55	370896	389.72	ppb		98
91)	trans-1,4-Dichloro-2-B...	11.065	53	25688m	19.37	ppb		
92)	1,1,2,2-Tetrachloroethane	11.016	83	106588	20.82	ppb		96
93)	Bromobenzene	10.992	156	87053	21.07	ppb		95
94)	1,2,3-Trichloropropane	11.047	110	35229	21.28	ppb		94
95)	n-Propylbenzene	11.089	91	393451	21.65	ppb		99
96)	2-Chlorotoluene	11.156	91	246460	20.88	ppb		98
97)	3-Chlorotoluene	11.211	91	219017	19.43	ppb		98
98)	4-Chlorotoluene	11.254	91	275783	20.87	ppb		98
99)	1,3,5-Trimethylbenzene	11.242	105	280236	20.71	ppb		98
100)	tert-Butylbenzene	11.516	119	227033	20.04	ppb		99
101)	1,2,4-Trimethylbenzene	11.553	105	287540	21.11	ppb		98
102)	3,4-DCBTF	11.620	214	71854	19.26	ppb		95
103)	sec-Butylbenzene	11.693	105	335505	20.65	ppb		98
104)	p-Isopropyltoluene	11.815	119	286013	20.42	ppb		97
105)	1,3-Dclbenz	11.784	146	163378	20.18	ppb		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:38:53 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

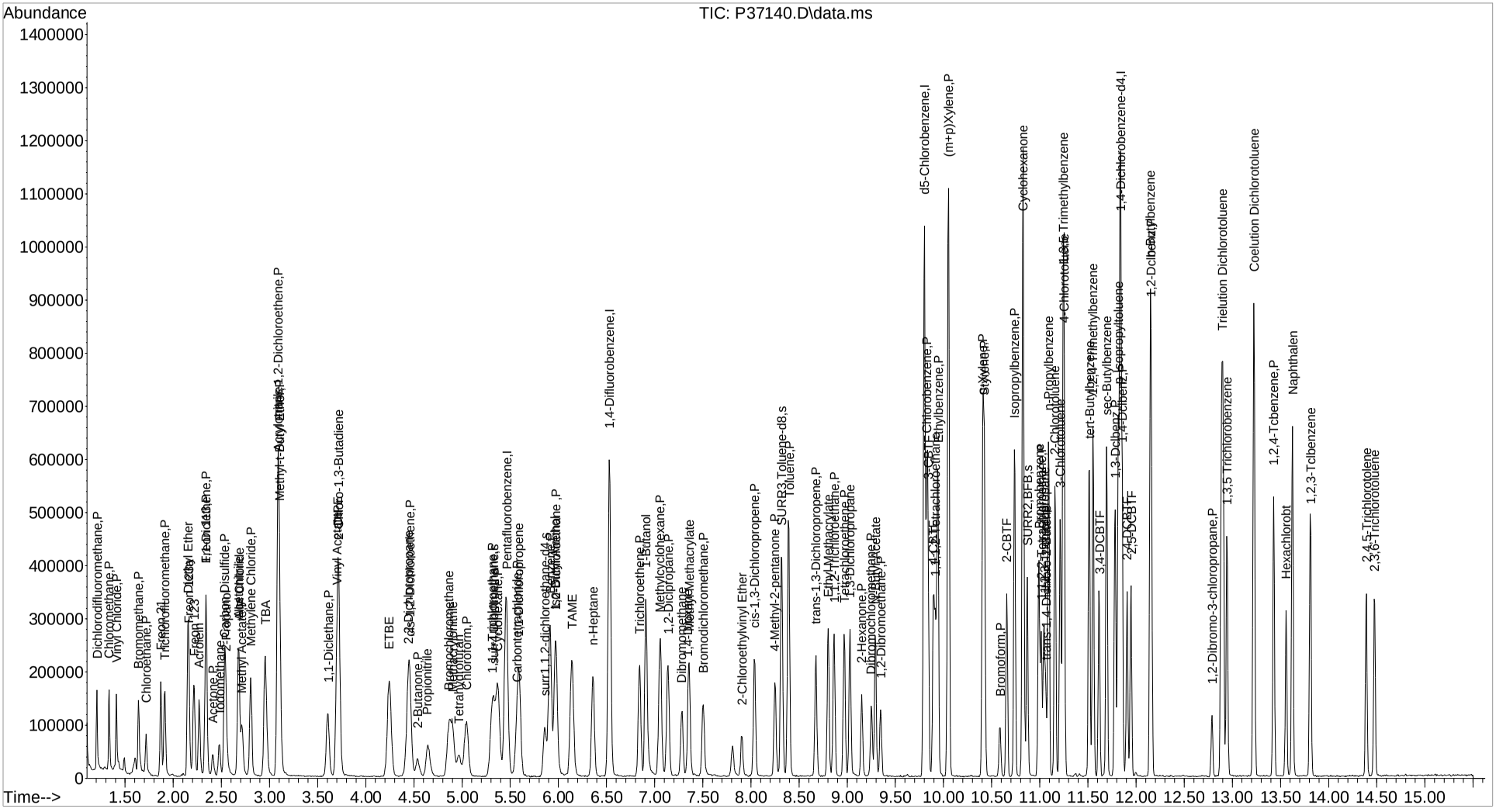
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	165908	20.14	ppb	96
107) 2,4-DCBTF	11.906	214	65163	18.65	ppb	98
108) 2,5-DCBTF	11.949	214	71921	19.21	ppb	96
109) n-Butylbenzene	12.150	91	270835	20.54	ppb	96
110) 1,2-Dclbenz	12.156	146	163610	19.91	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.790	157	21529	18.78	ppb	97
112) Trielution Dichlorotol...	12.894	125	385212	58.52	ppb	94
113) 1,3,5 Trichlorobenzene	12.943	180	107108	18.96	ppb	94
114) Coelution Dichlorotoluene	13.223	125	291536	40.33	ppb	97
115) 1,2,4-Tcbenzene	13.430	180	118721	20.03	ppb	100
116) Hexachlorobt	13.558	225	42982	18.07	ppb	98
117) Naphthalen	13.625	128	384484	22.20	ppb	98
118) 1,2,3-Tclbenzene	13.814	180	120975	19.73	ppb	96
119) 2,4,5-Trichlorotolene	14.393	159	71909	19.17	ppb	98
120) 2,3,6-Trichlorotoluene	14.479	159	65464	19.17	ppb	98

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:38:53 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

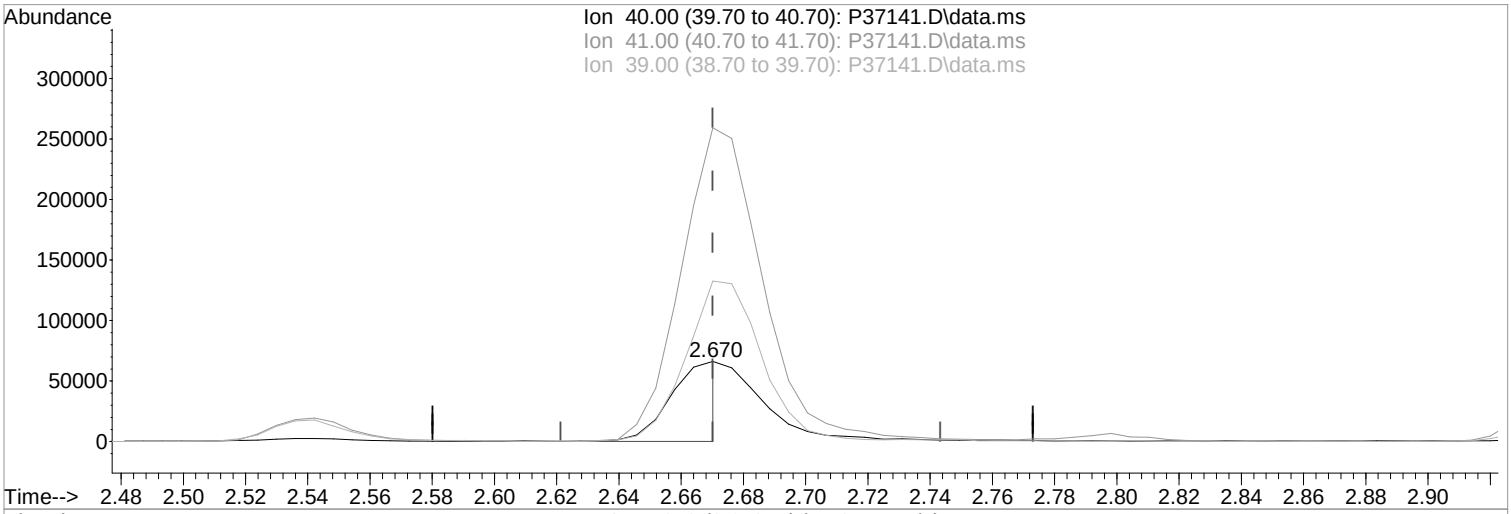


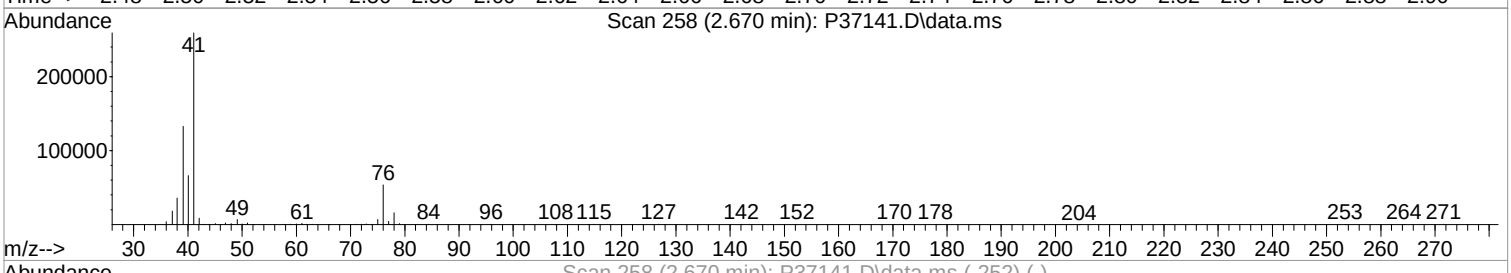
1st 07/14/20
2nd 07/14/20

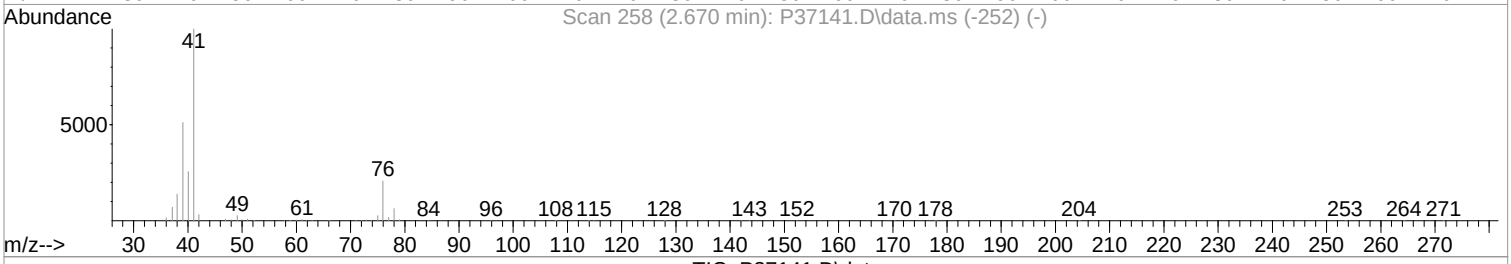
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37141.D\data.ms

(19) Acetonitrile

2.670min (-0.000) 306.00 ppb m

response 71444

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	391.78
39.00	200.50	200.48
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

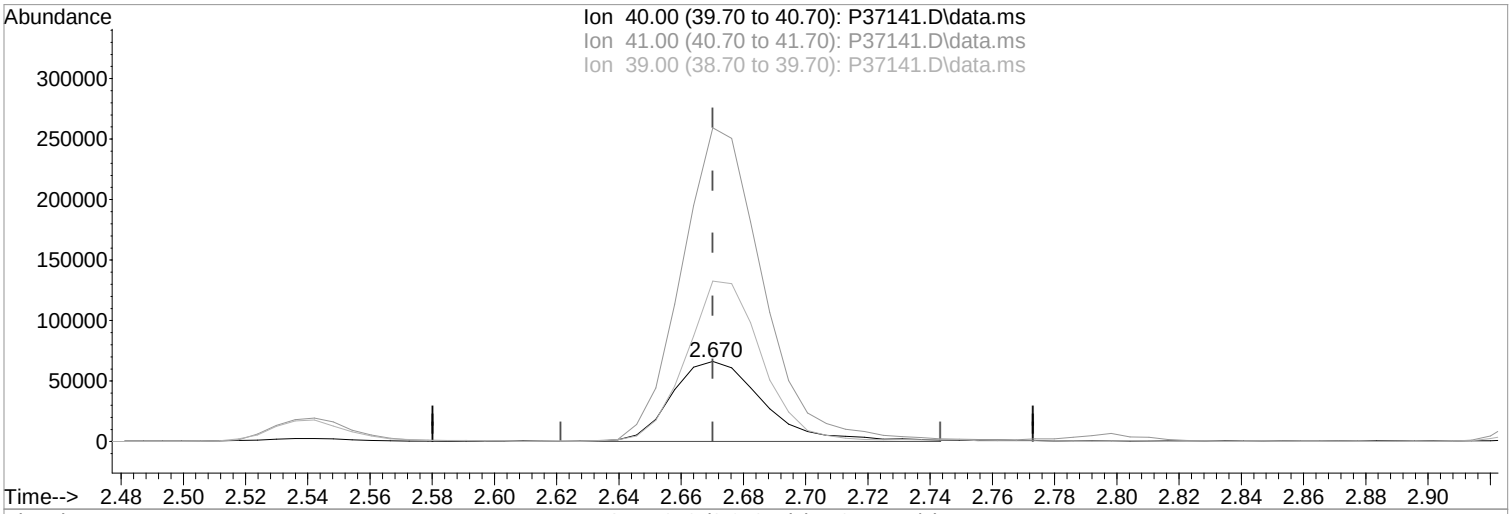
07/13/20

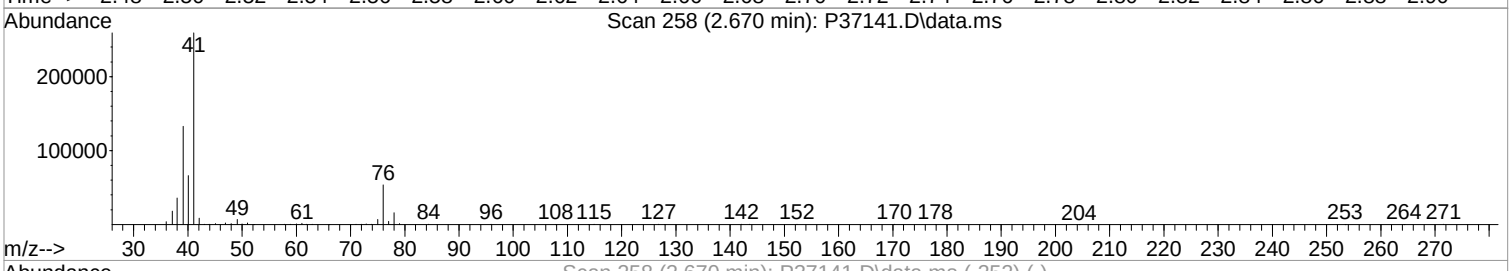
1st 07/14/20
2nd 07/14/20

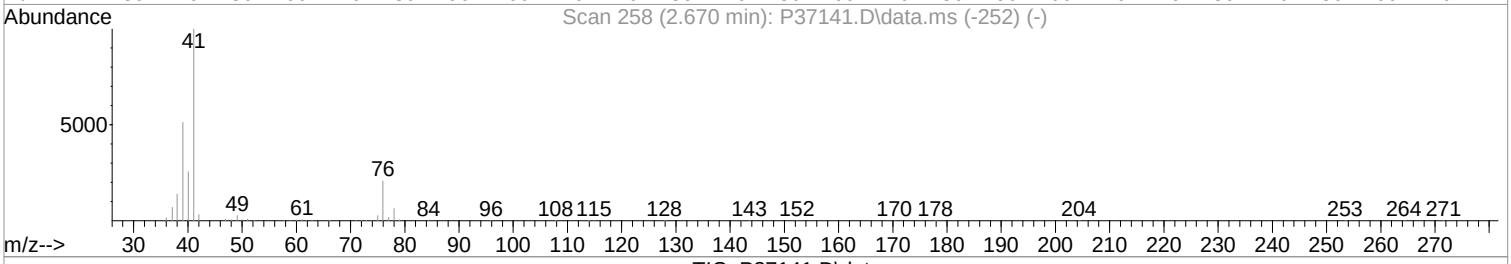
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37141.D\data.ms

(19) Acetonitrile

2.670min (-0.000) 580.40 ppb

response 135509

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	391.78
39.00	200.50	200.48
0.00	0.00	0.00

Manual Integration:

Before

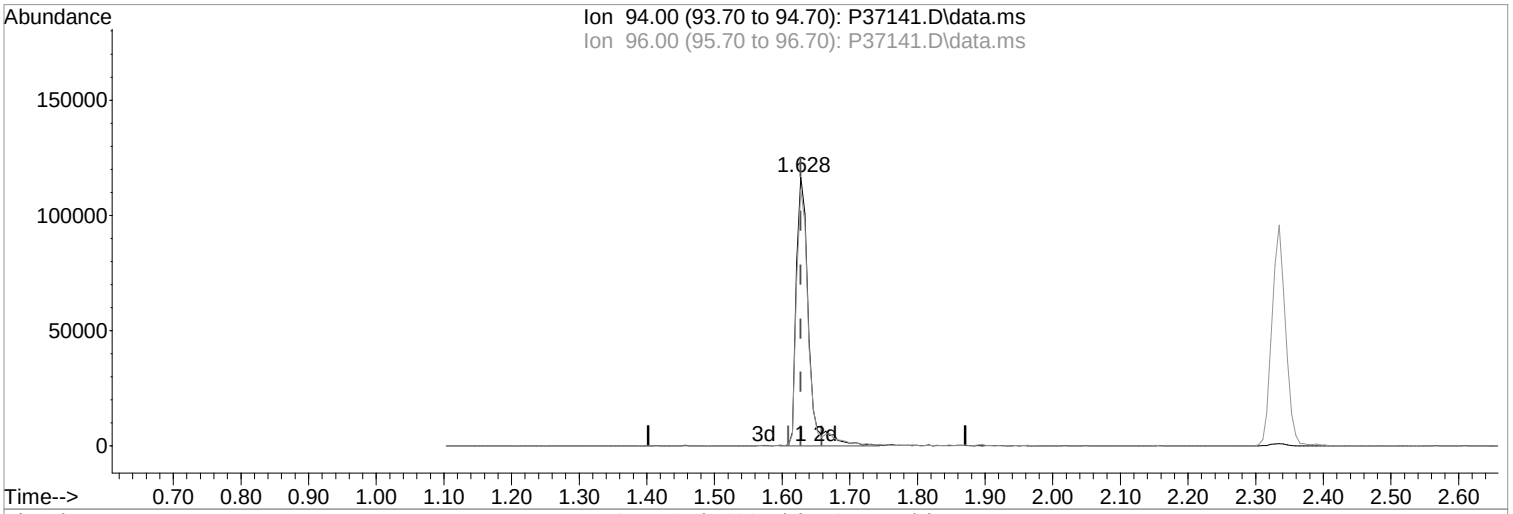
07/13/20

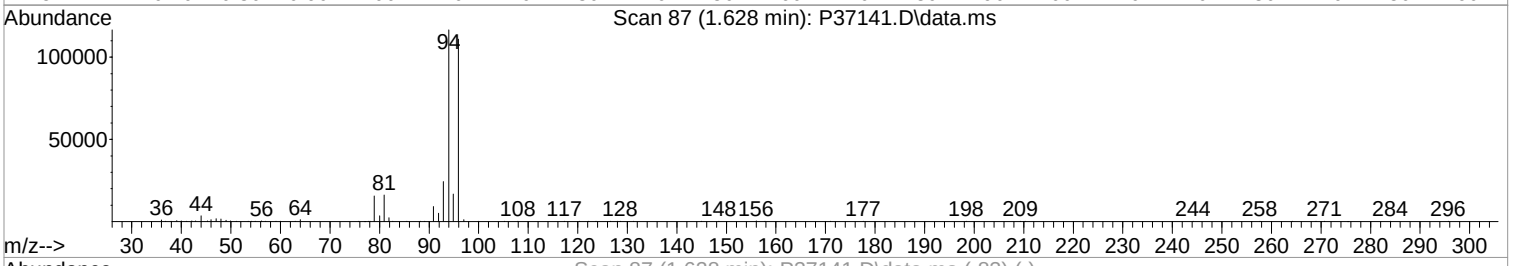
1st 07/14/20
2nd 07/14/20

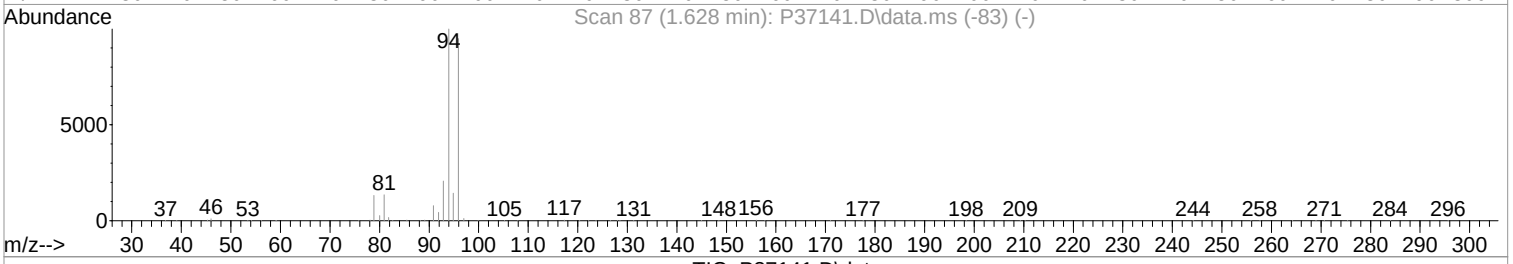
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37141.D\data.ms

(5) Bromomethane (P)

1.628min (-0.000) 42.25 ppb m

response 148315

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	95.17
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

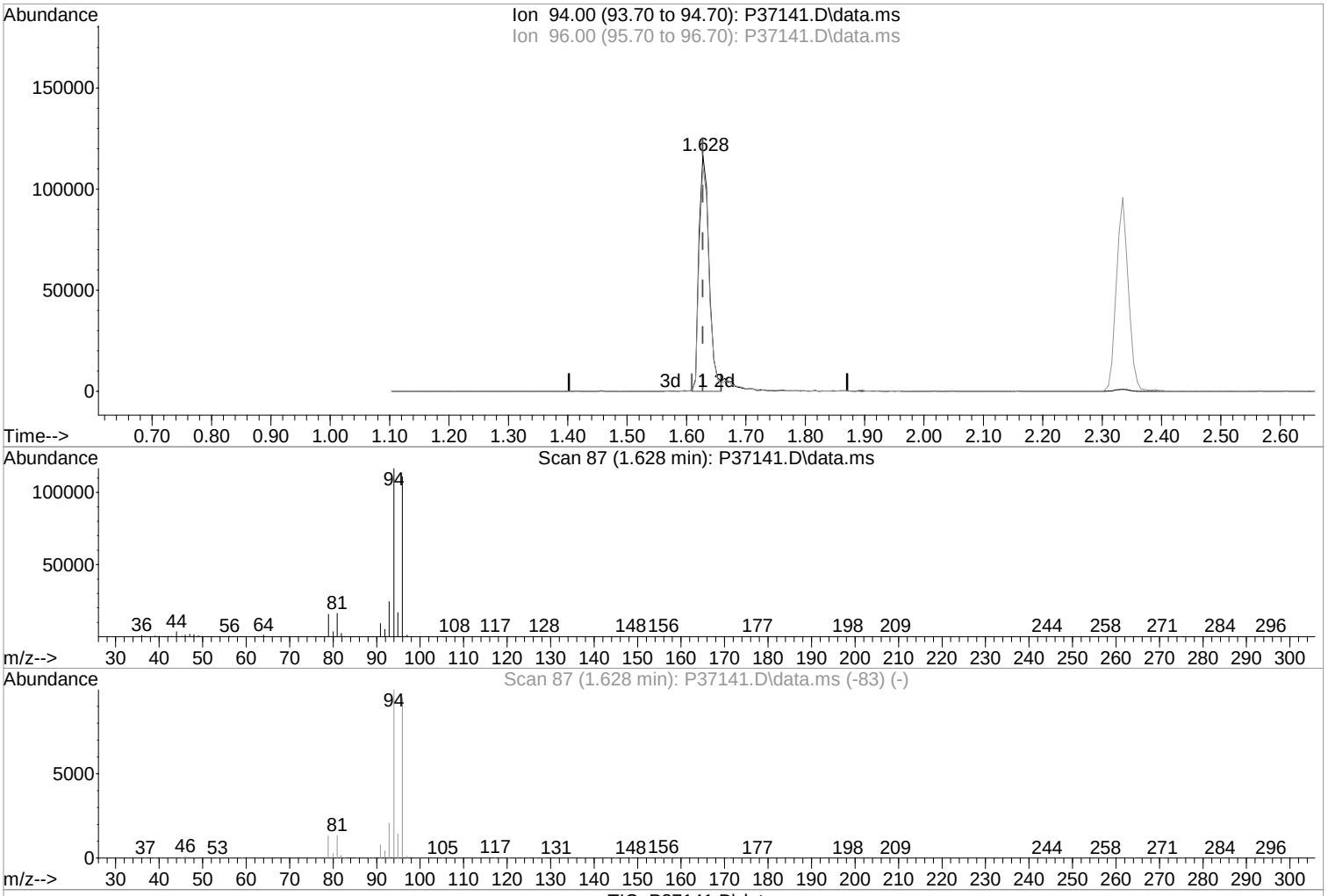
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37141.D\data.ms

(5) Bromomethane (P)

1.628min (-0.000) 39.13 ppb

response 137334

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	95.17
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

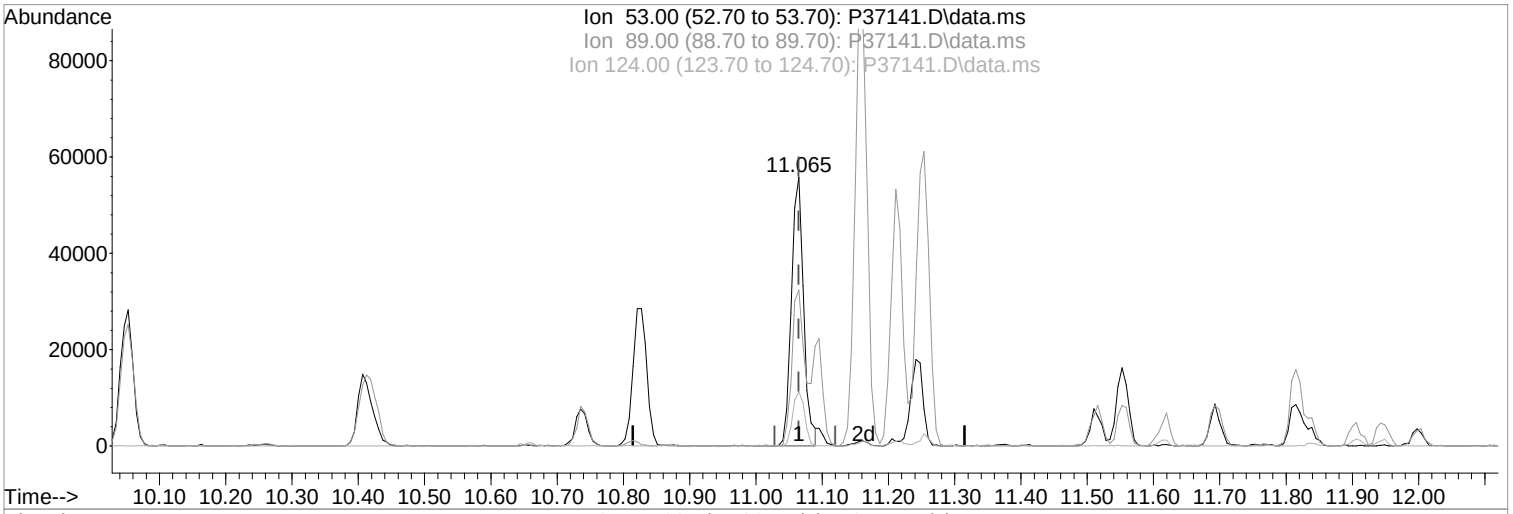
07/13/20

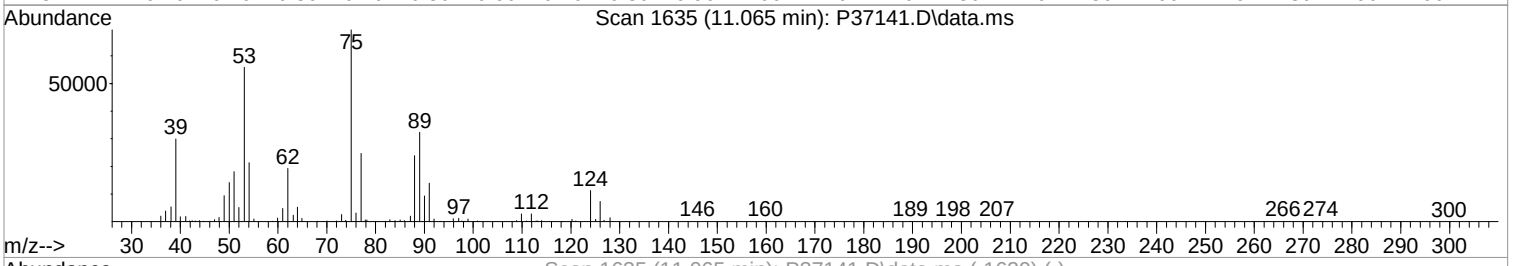
1st 07/14/20
2nd 07/14/20

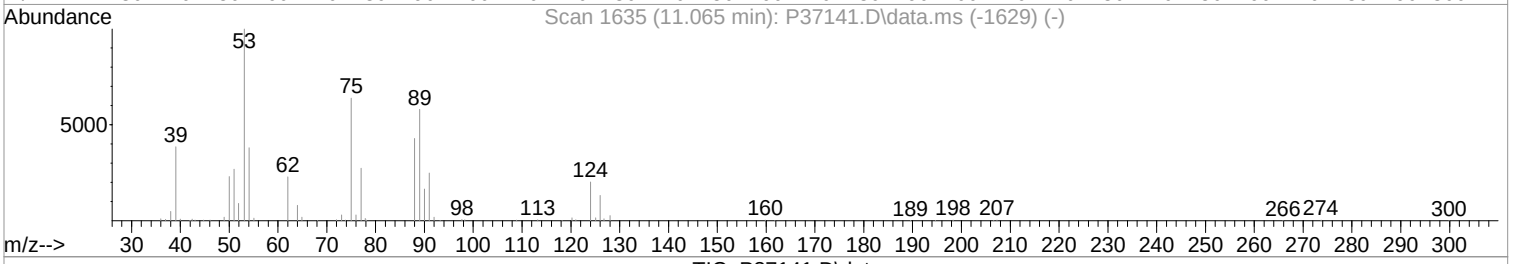
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37141.D\data.ms

(91) trans-1,4-Dichloro-2-Butene

11.065min (-0.000) 50.84 ppb m

response 71470

Ion	Exp%	Act%
53.00	100	100
89.00	58.00	58.02
124.00	20.10	20.14
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

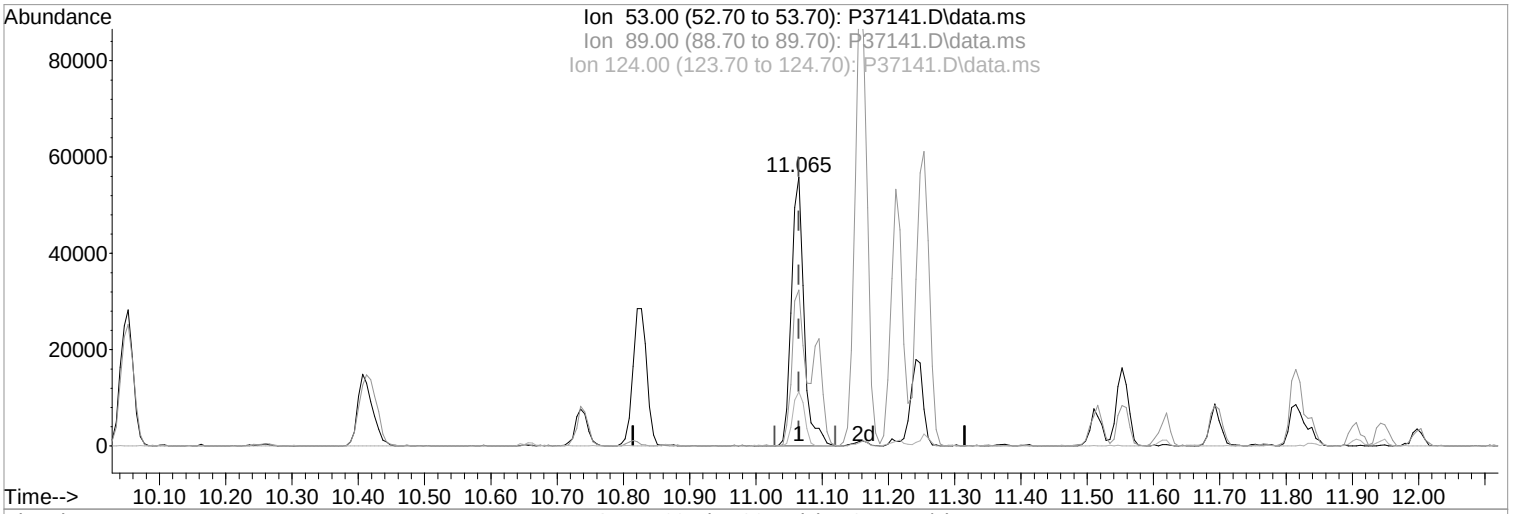
07/13/20

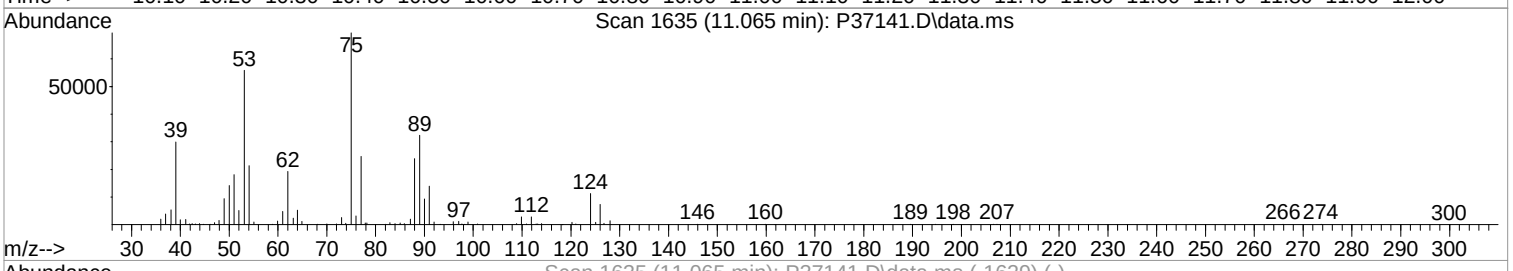
1st 07/14/20
2nd 07/14/20

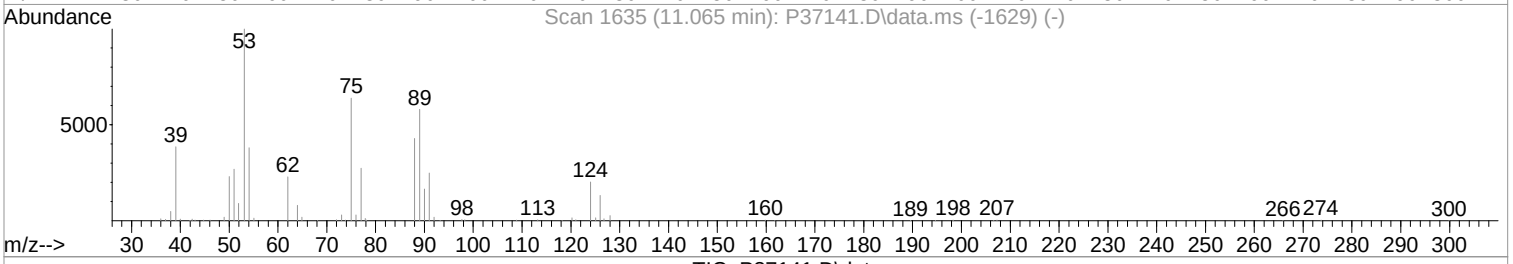
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37141.D\data.ms

(91) trans-1,4-Dichloro-2-Butene

11.065min (-0.000) 52.60 ppb

response 73948

Ion	Exp%	Act%
53.00	100	100
89.00	58.00	58.02
124.00	20.10	20.14
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:42:24 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	324870	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.529	114	516307	50.00	ppb	0.00
71) d5-Chlorobenzene	9.803	117	457341	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	243135	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.328	113	153332	51.72	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.44%			
48) surr1,1,2-dichloroetha...	5.852	65	208598	50.82	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.64%			
65) SURR3,Toluene-d8	8.315	98	710177	51.54	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 103.08%			
70) SURR2,BFB	10.870	95	257669	50.76	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.52%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.201	85	206030	56.88	ppb	100
3) Chloromethane	1.329	50	245764	54.07	ppb	100
4) Vinyl Chloride	1.402	62	239939	55.66	ppb	100
5) Bromomethane	1.628	94	148315m	42.25	ppb	
6) Chloroethane	1.707	64	112078	48.07	ppb	100
7) Freon 21	1.865	67	288303	53.52	ppb	100
8) Trichlorofluoromethane	1.902	101	233066	53.47	ppb	100
9) Diethyl Ether	2.146	59	178048	56.52	ppb	100
10) Freon 123a	2.152	67	195145	52.48	ppb	100
11) Freon 123	2.207	83	221263	50.44	ppb	100
12) Acrolein	2.262	56	224412	263.07	ppb	100
13) 1,1-Diclethene	2.335	96	134541	53.55	ppb	100
14) Freon 113	2.335	101	154967	52.94	ppb	100
15) Acetone	2.402	43	91537	48.51	ppb	100
16) 2-Propanol	2.542	45	435304	1040.42	ppb	100
17) Iodomethane	2.475	142	206293	73.38	ppb	100
18) Carbon Disulfide	2.524	76	443346	46.27	ppb	100
19) Acetonitrile	2.670	40	71444m	306.00	ppb	
20) Allyl Chloride	2.676	76	92871	52.16	ppb	100
21) Methyl Acetate	2.707	43	248103	51.36	ppb	100
22) Methylene Chloride	2.798	84	183199	51.16	ppb	100
23) TBA	2.951	59	699322	1032.85	ppb	100
24) Acrylonitrile	3.085	53	547090	261.95	ppb	100
25) Methyl-t-Butyl Ether	3.097	73	638375	54.90	ppb	100
26) trans-1,2-Dichloroethene	3.085	96	160895	54.99	ppb	100
28) 1,1-Diclethane	3.597	63	342431	53.09	ppb	100
29) Vinyl Acetate	3.700	86	29596	62.51	ppb	100
30) DIPE	3.706	45	617671	54.81	ppb	100
31) 2-Chloro-1,3-Butadiene	3.706	53	287511	55.44	ppb	100
32) ETBE	4.237	59	572104	54.41	ppb	100
33) 2,2-Dichloropropane	4.426	77	262750	55.35	ppb	100
34) cis-1,2-Dichloroethene	4.450	96	198494	52.51	ppb	100
35) 2-Butanone	4.523	43	129099	51.11	ppb	100
36) Propionitrile	4.633	54	228219	251.99	ppb	100
37) Bromochloromethane	4.853	130	114309	51.43	ppb	100
38) Methacrylonitrile	4.895	67	111970	52.19	ppb	100
39) Tetrahydrofuran	4.950	42	97404	49.12	ppb	100
40) Chloroform	5.035	83	306852	51.62	ppb	100
41) 1,1,1-Trichloroethane	5.310	97	256935	54.70	ppb	100

1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:42:24 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42)	TAME	6.133	73	566912	54.12	ppb	100
44)	Cyclohexane	5.365	41	175502	51.84	ppb	100
46)	Carbontetrachloride	5.572	117	196901	57.42	ppb	100
47)	1,1-Dichloropropene	5.590	75	252252	51.60	ppb	100
49)	Benzene	5.913	78	788933	52.88	ppb	100
50)	1,2-Dichloroethane	5.968	62	270234	51.87	ppb	100
51)	Iso-Butyl Alcohol	5.962	43	333418	1042.72	ppb	100
52)	n-Heptane	6.352	43	246312	53.31	ppb	100
53)	1-Butanol	6.907	56	531988	2673.53	ppb	100
54)	Trichloroethene	6.840	130	184776	49.95	ppb	100
55)	Methylcyclohexane	7.053	55	242578	52.80	ppb	100
56)	1,2-Diclpropane	7.133	63	206933	52.29	ppb	100
57)	Dibromomethane	7.285	93	116967	51.37	ppb	100
58)	1,4-Dioxane	7.340	88	81942	1004.53	ppb	100
59)	Methyl Methacrylate	7.352	69	183993	53.51	ppb	100
60)	Bromodichloromethane	7.505	83	235239	56.34	ppb	100
62)	2-Chloroethylvinyl Ether	7.901	63	87195	50.65	ppb	100
63)	cis-1,3-Dichloropropene	8.035	75	313503	55.03	ppb	100
64)	4-Methyl-2-pentanone	8.248	43	278323	52.30	ppb	100
66)	Toluene	8.389	91	858850	54.40	ppb	100
67)	trans-1,3-Dichloropropene	8.675	75	282573	54.55	ppb	100
68)	Ethyl Methacrylate	8.803	69	318717	54.88	ppb	100
69)	1,1,2-Trichloroethane	8.864	97	185338	52.58	ppb	100
72)	Tetrachloroethene	8.968	164	143590	51.41	ppb	100
73)	2-Hexanone	9.151	43	208825	51.37	ppb	100
74)	1,3-Dichloropropane	9.029	76	337855	52.53	ppb	100
75)	Dibromochloromethane	9.248	129	160155	56.31	ppb	100
76)	N-Butyl Acetate	9.291	43	412143	54.66	ppb	100
77)	1,2-Dibromoethane	9.346	107	185062	52.87	ppb	100
78)	Chlorobenzene	9.827	112	526529	51.62	ppb	100
79)	3-CBTF	9.839	180	253283	53.63	ppb	100
80)	4-CBTF	9.894	180	227727	53.60	ppb	100
81)	1,1,1,2-Tetrachloroethane	9.919	131	167482	53.37	ppb	100
82)	Ethylbenzene	9.943	106	281421	52.58	ppb	100
83)	(m+p)Xylene	10.053	106	704326	109.92	ppb	100
84)	o-Xylene	10.406	106	345523	55.23	ppb	100
85)	Styrene	10.425	104	600140	56.47	ppb	100
87)	Bromoform	10.589	173	103722	51.80	ppb	100
88)	2-CBTF	10.656	180	246015	49.88	ppb	100
89)	Isopropylbenzene	10.742	105	876866	52.24	ppb	100
90)	Cyclohexanone	10.827	55	1028641	1019.85	ppb	100
91)	trans-1,4-Dichloro-2-B...	11.065	53	71470m	50.84	ppb	
92)	1,1,2,2-Tetrachloroethane	11.016	83	278938	51.41	ppb	100
93)	Bromobenzene	10.992	156	217809	49.73	ppb	100
94)	1,2,3-Trichloropropane	11.047	110	88646	50.52	ppb	100
95)	n-Propylbenzene	11.089	91	1058051	54.94	ppb	100
96)	2-Chlorotoluene	11.156	91	650515	52.00	ppb	100
97)	3-Chlorotoluene	11.211	91	604579	50.60	ppb	100
98)	4-Chlorotoluene	11.254	91	737752	52.67	ppb	100
99)	1,3,5-Trimethylbenzene	11.242	105	767037	53.49	ppb	100
100)	tert-Butylbenzene	11.516	119	625765	52.13	ppb	100
101)	1,2,4-Trimethylbenzene	11.553	105	779396	54.00	ppb	100
102)	3,4-DCBTF	11.620	214	199698	50.51	ppb	100
103)	sec-Butylbenzene	11.693	105	934901	54.30	ppb	100
104)	p-Isopropyltoluene	11.815	119	802097	54.03	ppb	100
105)	1,3-Dclbenz	11.784	146	426885	49.75	ppb	100

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:42:24 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

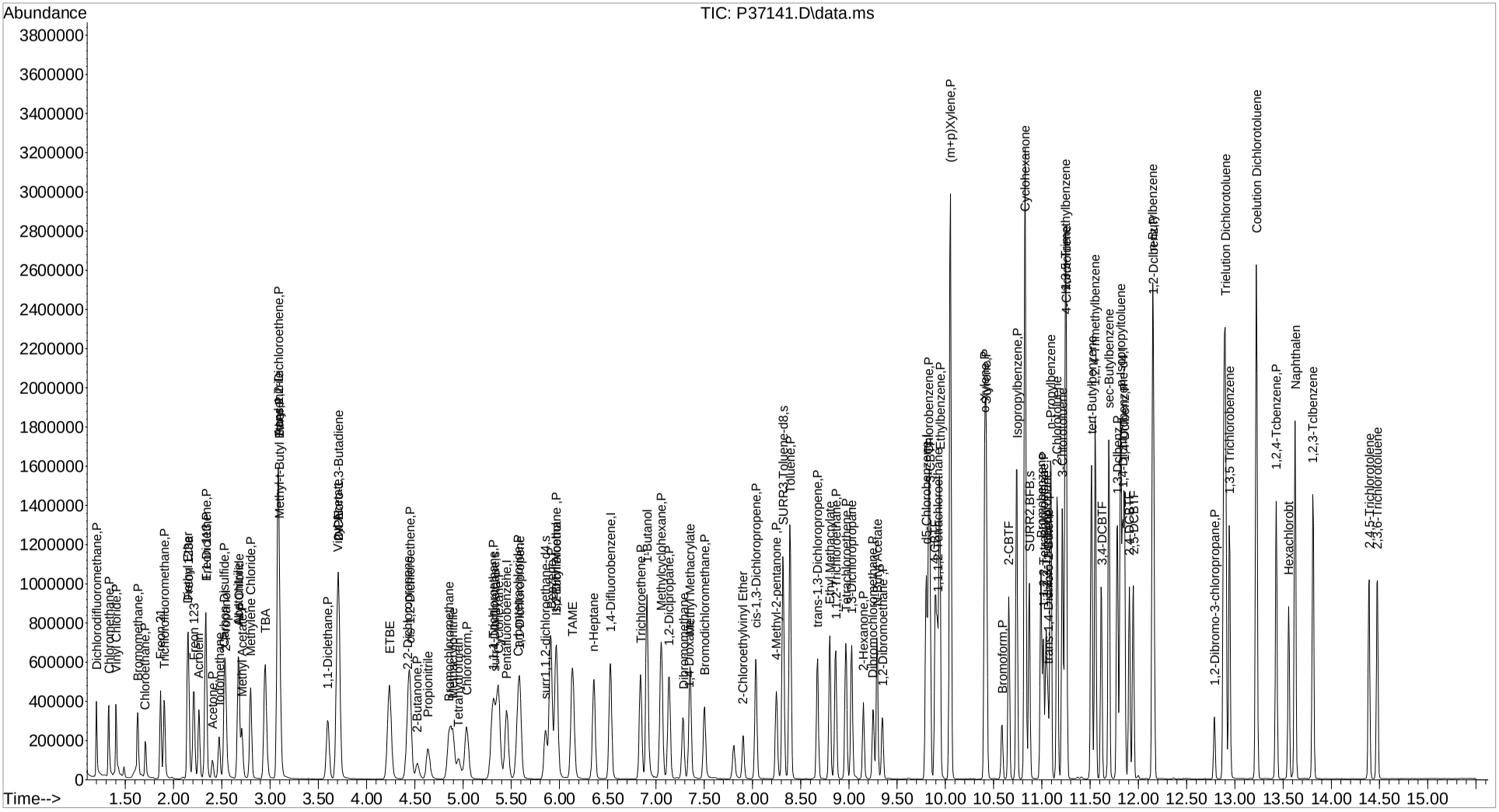
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	440719	50.48	ppb	100
107) 2,4-DCBTF	11.906	214	188645	50.95	ppb	100
108) 2,5-DCBTF	11.949	214	202423	51.02	ppb	100
109) n-Butylbenzene	12.150	91	770003	55.10	ppb	100
110) 1,2-Dclbenz	12.156	146	443002	50.86	ppb	100
111) 1,2-Dibromo-3-chloropr...	12.790	157	64394	53.00	ppb	100
112) Trielution Dichlorotol...	12.900	125	1106135	158.57	ppb	100
113) 1,3,5 Trichlorobenzene	12.943	180	310407	51.84	ppb	100
114) Coelution Dichlorotoluene	13.223	125	842606	109.97	ppb	100
115) 1,2,4-Tcbenzene	13.430	180	338853	53.94	ppb	100
116) Hexachlorobt	13.558	225	132682	52.62	ppb	100
117) Naphthalen	13.625	128	1080161	58.85	ppb	100
118) 1,2,3-Tclbenzene	13.808	180	341564	52.56	ppb	100
119) 2,4,5-Trichlorotolene	14.393	159	218674	55.01	ppb	100
120) 2,3,6-Trichlorotoluene	14.479	159	200190	55.32	ppb	100

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:42:24 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

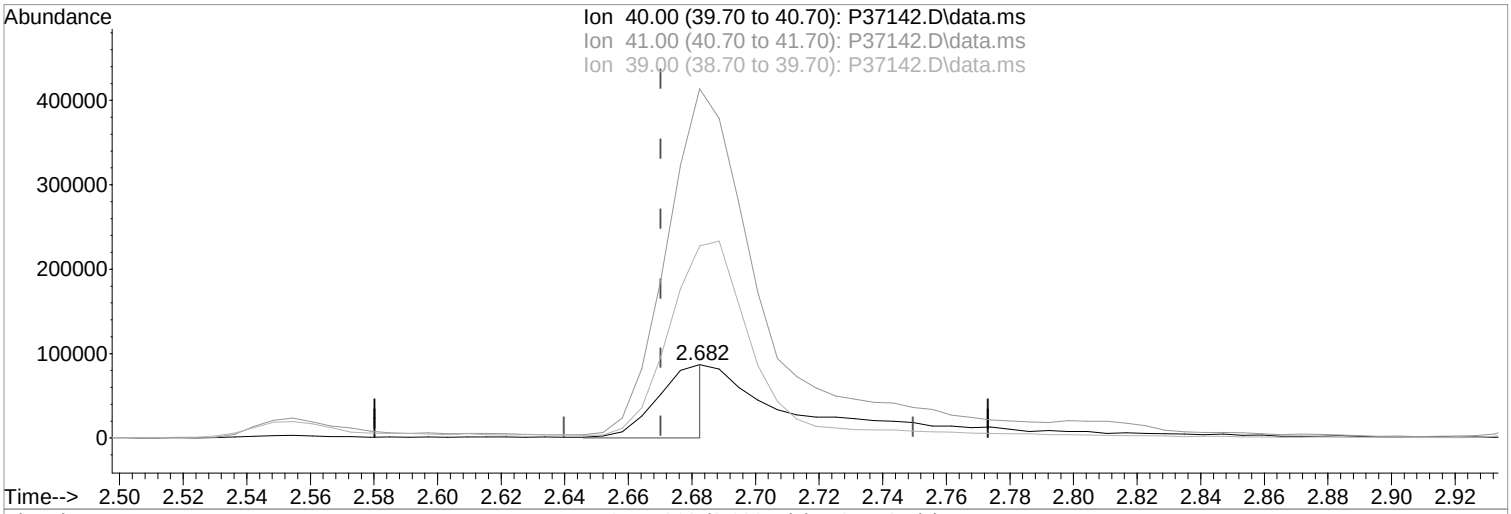


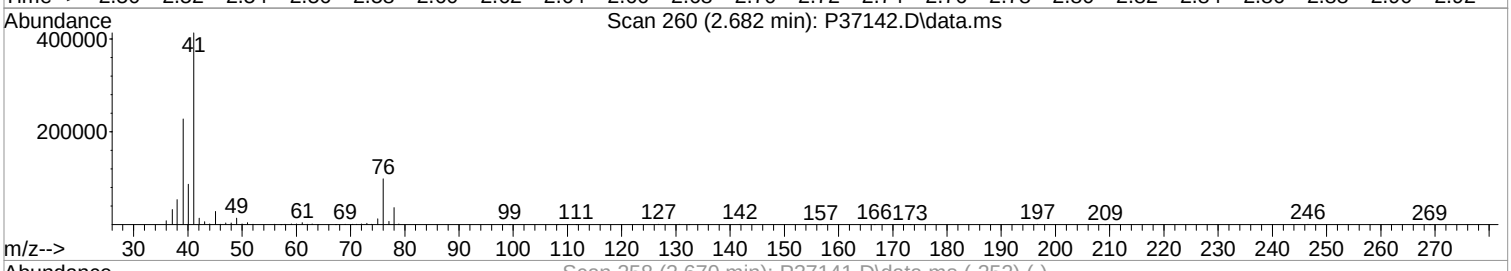
1st 07/14/20
2nd 07/14/20

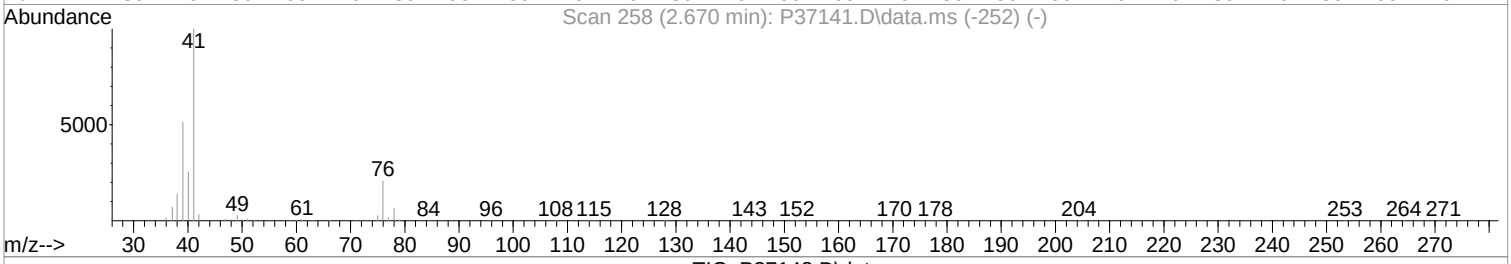
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37142.D\data.ms

(19) Acetonitrile

2.682min (+0.012) 370.39 ppb m

response 93460

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	474.90#
39.00	200.50	261.33#
0.00	0.00	0.00

Manual Integration:

After

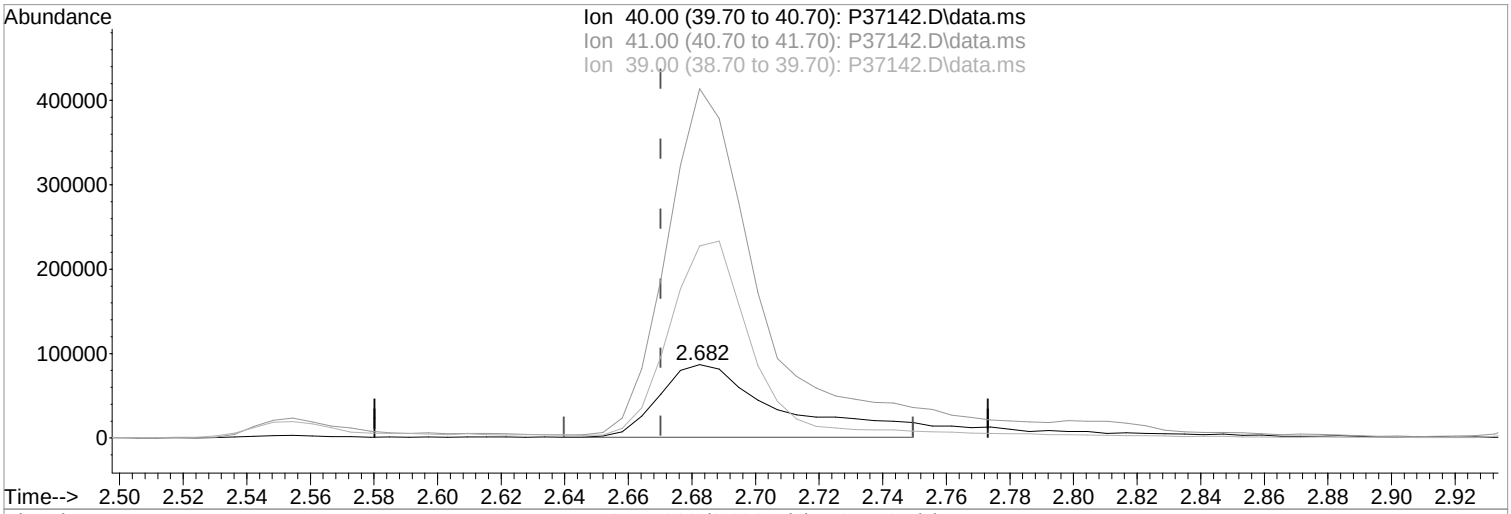
Poor integration.

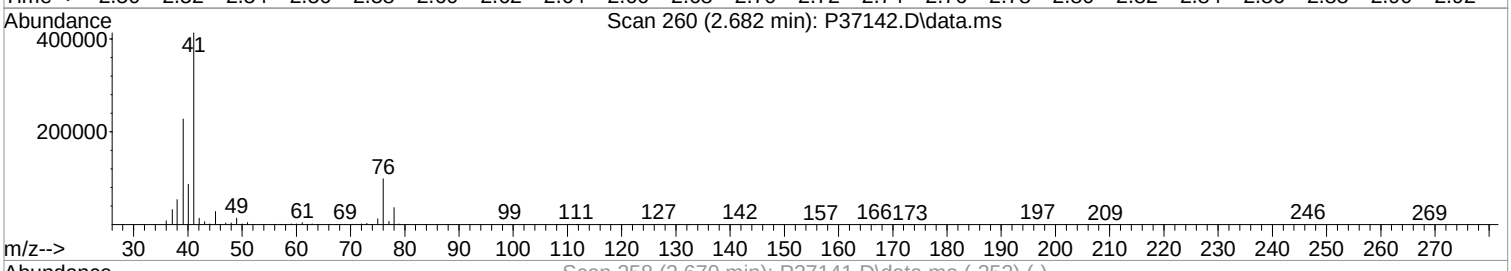
07/13/20

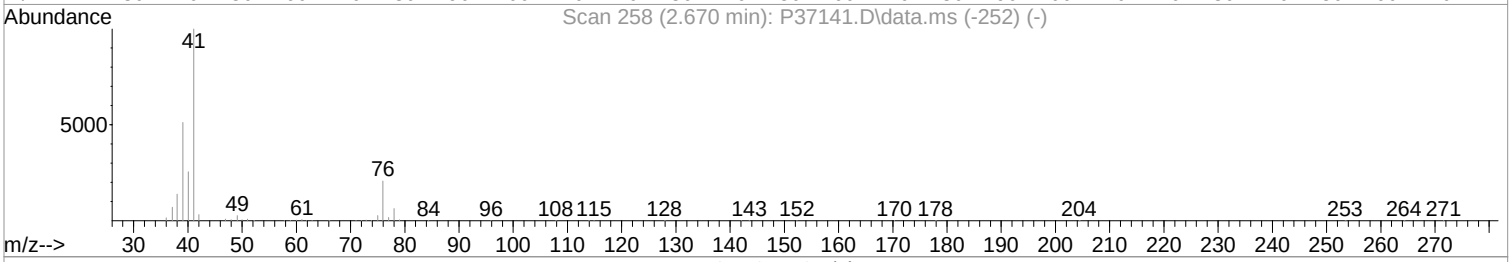
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37142.D\data.ms

(19) Acetonitrile

2.682min (+0.012) 899.83 ppb

response 227054

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	474.90#
39.00	200.50	261.33#
0.00	0.00	0.00

Manual Integration:

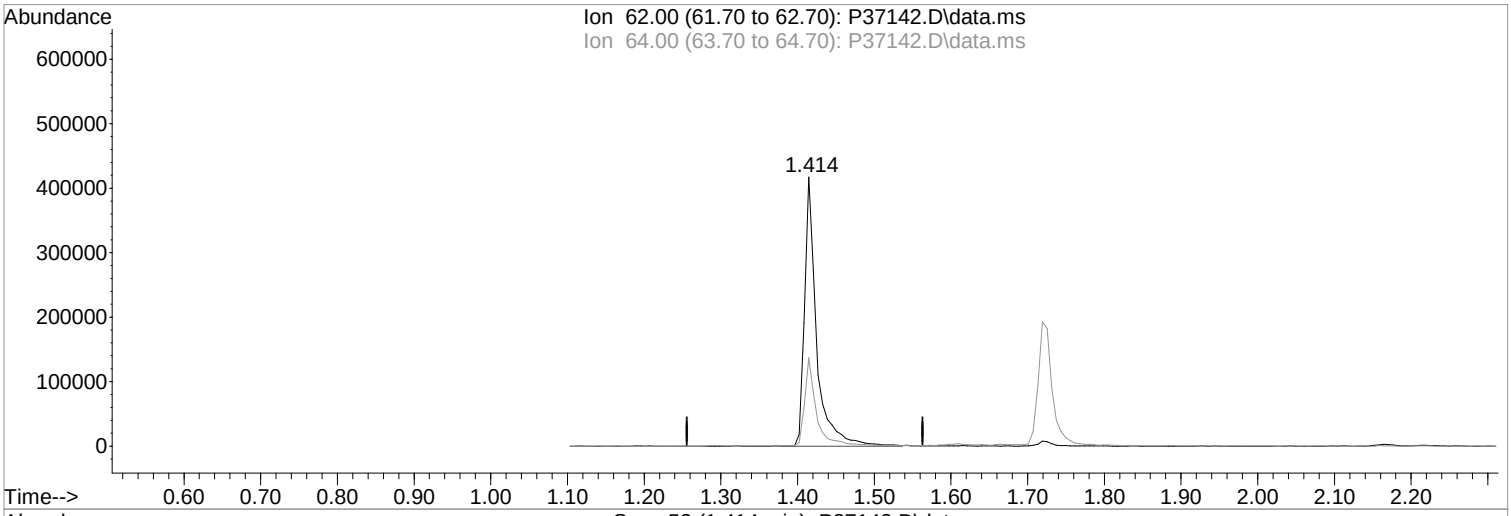
Before

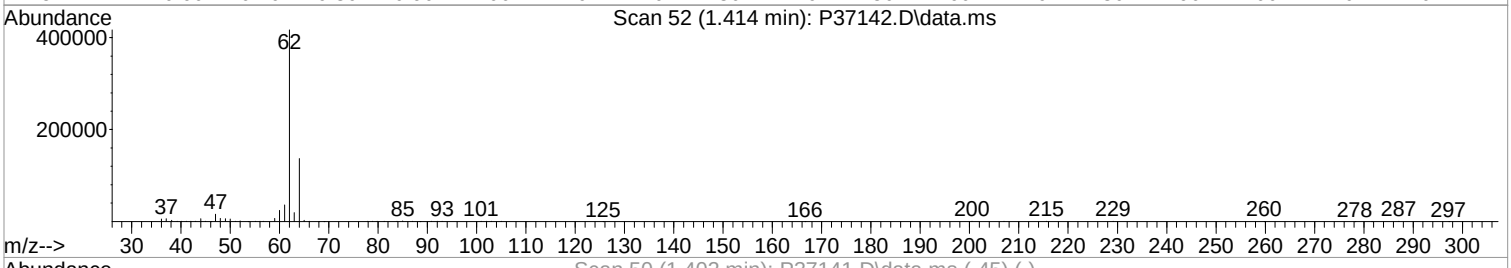
07/13/20

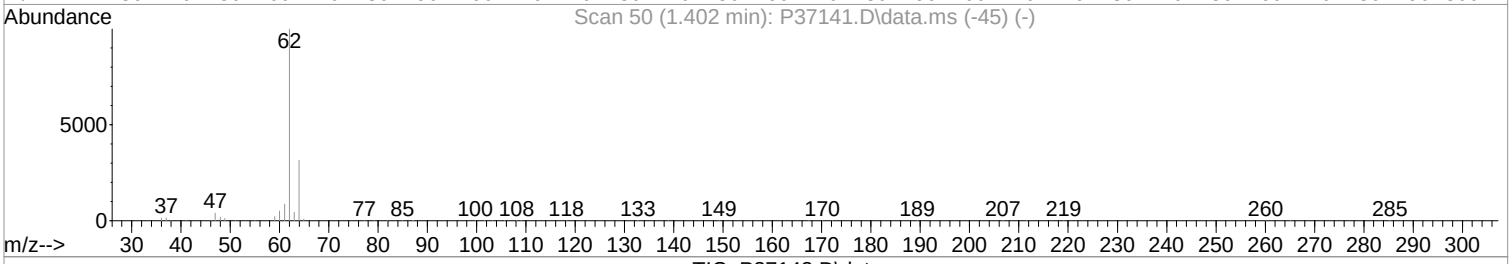
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37142.D\data.ms

(4) Vinyl Chloride (P)

1.414min (+0.012) 98.07 ppb m

response 456885

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	32.80
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

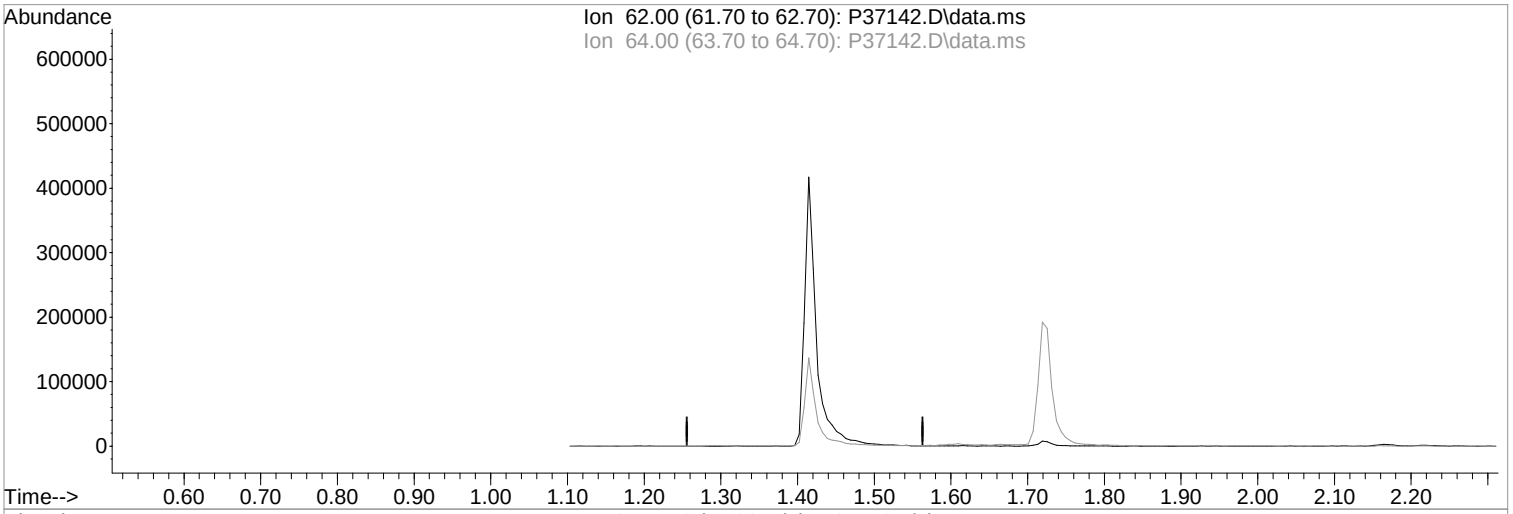
Peak not found.

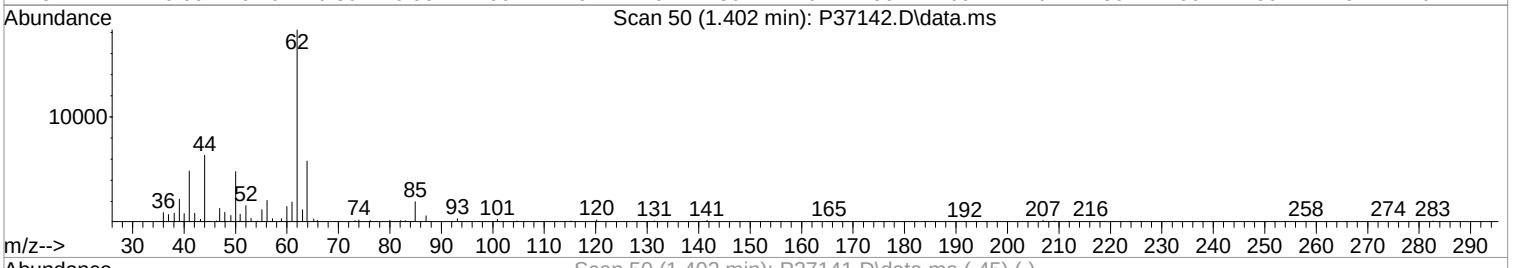
07/13/20

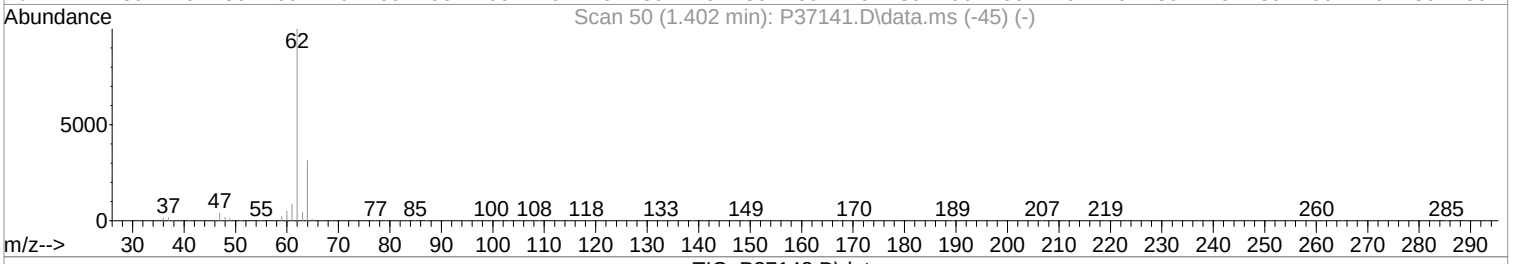
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37142.D\data.ms

(4) Vinyl Chloride (P)

1.402min (-1.402) 0.00 ppb

response 0

Ion	Exp%	Act%
62.00	100	0.00
64.00	31.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

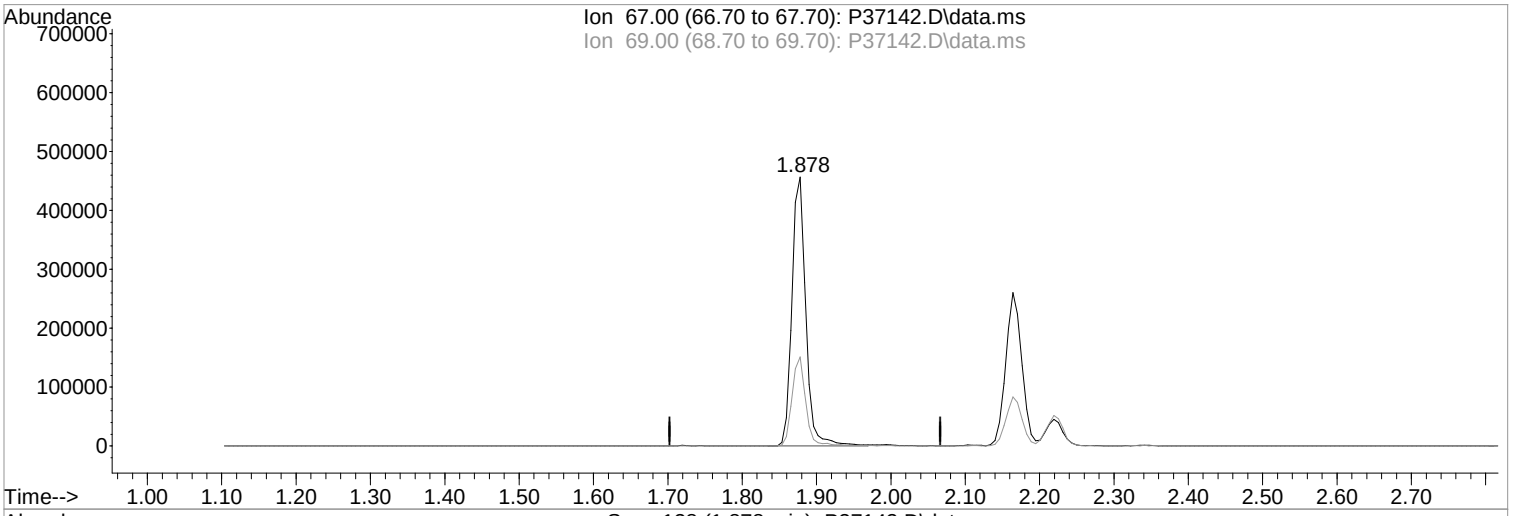
07/13/20

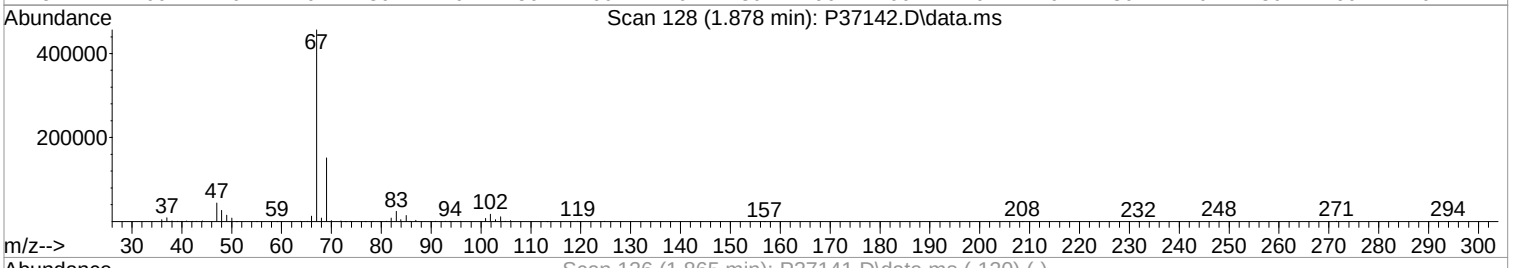
1st 07/14/20
2nd 07/14/20

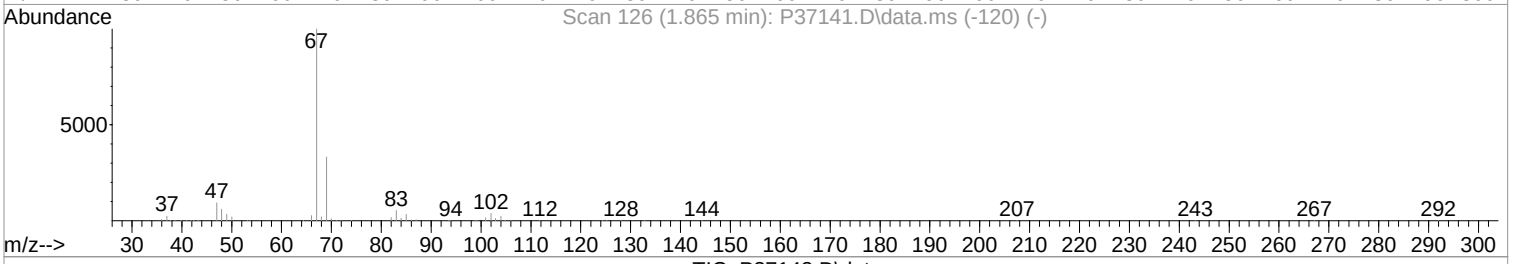
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37142.D\data.ms

(7) Freon 21

1.878min (+0.012) 101.39 ppb m

response 590319

Ion	Exp%	Act%
67.00	100	100
69.00	33.20	33.14
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Peak not found.

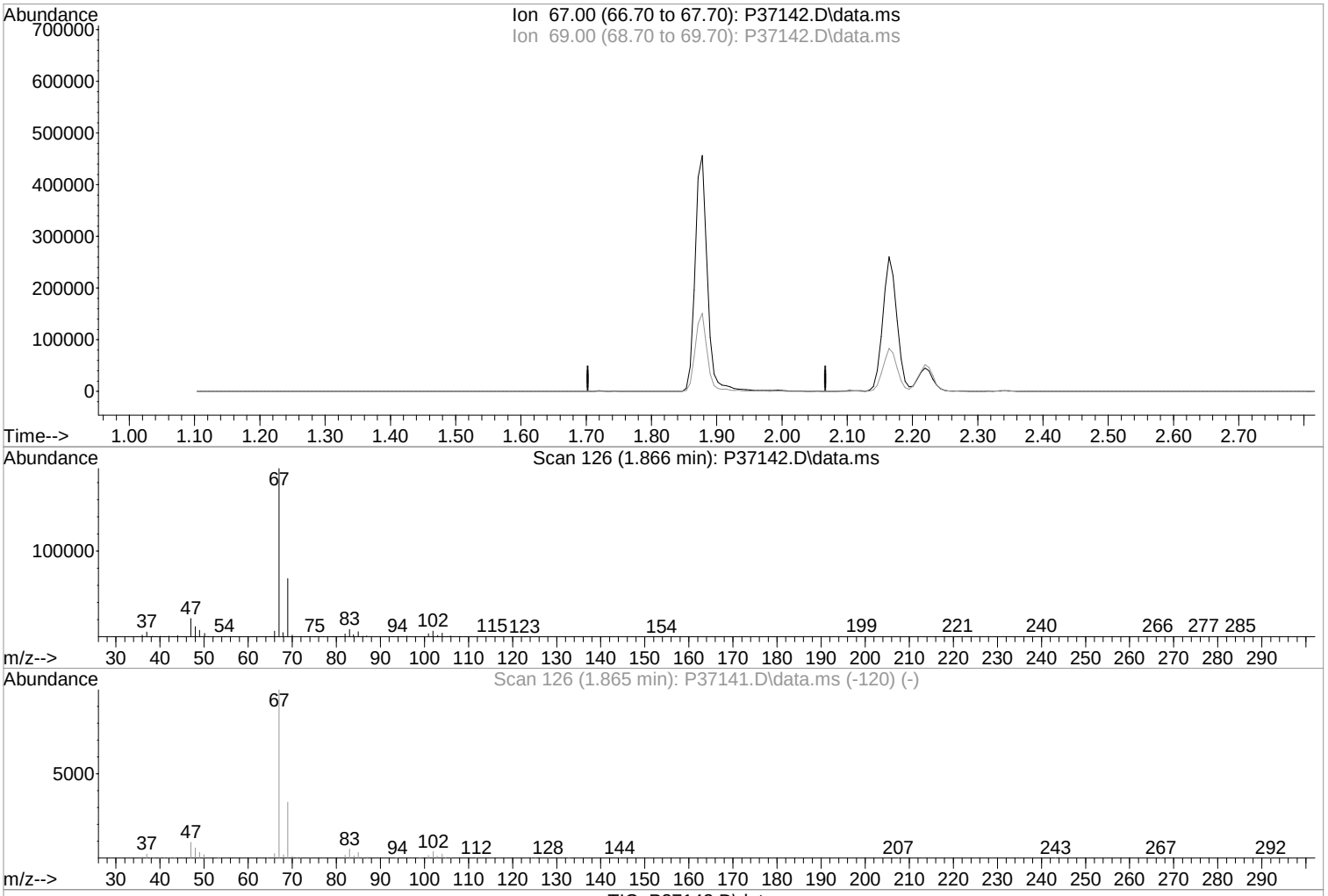
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37142.D\data.ms

(7) Freon 21

1.865min (-1.865) 0.00 ppb

response 0

Ion	Exp%	Act%
67.00	100	0.00
69.00	33.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:43:37 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.462	168	351105	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.535	114	521766	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	467596	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	245111	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.340	113	308936	103.11	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 206.22%#				
48) surr1,1,2-dichloroetha...	5.865	65	410458	98.96	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 197.92%#				
65) SURR3,Toluene-d8	8.322	98	1409409	101.22	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 202.44%#				
70) SURR2,BFB	10.870	95	510509	99.51	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 199.02%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	369920	94.50	ppb		98
3) Chloromethane	1.341	50	474574	96.61	ppb		98
4) Vinyl Chloride	1.414	62	456885m	98.07	ppb		
5) Bromomethane	1.646	94	293988	77.50	ppb		98
6) Chloroethane	1.719	64	246877	97.96	ppb		99
7) Freon 21	1.878	67	590319m	101.39	ppb		
8) Trichlorofluoromethane	1.914	101	440795	93.57	ppb		96
9) Diethyl Ether	2.158	59	343706	100.95	ppb		97
10) Freon 123a	2.164	67	389591	96.95	ppb		98
11) Freon 123	2.219	83	439563	92.72	ppb		96
12) Acrolein	2.274	56	457583	496.33	ppb		96
13) 1,1-Diclethene	2.347	96	249953	92.06	ppb		94
14) Freon 113	2.341	101	286206	90.46	ppb		97
15) Acetone	2.414	43	172272	84.48	ppb		94
16) 2-Propanol	2.554	45	925337	2046.38	ppb		99
17) Iodomethane	2.481	142	411652	135.49	ppb		98
18) Carbon Disulfide	2.536	76	866568	83.68	ppb		99
19) Acetonitrile	2.682	40	93460m	370.39	ppb		
20) Allyl Chloride	2.689	76	172180	89.48	ppb	#	78
21) Methyl Acetate	2.719	43	520147	99.62	ppb		98
22) Methylene Chloride	2.811	84	345242	89.21	ppb		96
23) TBA	2.963	59	1450743	1982.55	ppb		98
24) Acrylonitrile	3.091	53	1095399	485.29	ppb		96
25) Methyl-t-Butyl Ether	3.109	73	1240164	98.69	ppb		98
26) trans-1,2-Dichloroethene	3.097	96	298460	94.38	ppb		96
28) 1,1-Diclethane	3.609	63	638332	91.58	ppb		96
29) Vinyl Acetate	3.701	86	65659	128.32	ppb	#	32
30) DIPE	3.713	45	1245289	102.24	ppb		91
31) 2-Chloro-1,3-Butadiene	3.725	53	572958	102.22	ppb		96
32) ETBE	4.249	59	1164625	102.48	ppb		99
33) 2,2-Dichloropropane	4.444	77	504011	98.24	ppb		96
34) cis-1,2-Dichloroethene	4.463	96	367833	90.04	ppb		97
35) 2-Butanone	4.536	43	265525	97.27	ppb		96
36) Propionitrile	4.652	54	460312	470.27	ppb		100
37) Bromochloromethane	4.865	130	217727	90.65	ppb		99
38) Methacrylonitrile	4.908	67	223255	96.29	ppb		97
39) Tetrahydrofuran	4.969	42	187493	87.48	ppb		86
40) Chloroform	5.054	83	576822	89.79	ppb		92
41) 1,1,1-Trichloroethane	5.316	97	477129	93.99	ppb		92

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:43:37 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	TAME	6.139	73	1148192	101.43	ppb		97
44)	Cyclohexane	5.371	41	356405	104.17	ppb		93
46)	Carbontetrachloride	5.572	117	368148	106.24	ppb		94
47)	1,1-Dichloropropene	5.597	75	480585	97.28	ppb		96
49)	Benzene	5.920	78	1480054	98.17	ppb		97
50)	1,2-Dichloroethane	5.981	62	512779	97.40	ppb		98
51)	Iso-Butyl Alcohol	5.975	43	678358	2099.28	ppb		100
52)	n-Heptane	6.359	43	472430	101.19	ppb		99
53)	1-Butanol	6.913	56	1147709	5707.52	ppb		100
54)	Trichloroethene	6.846	130	347320	92.92	ppb		97
55)	Methylcyclohexane	7.060	55	498663	107.41	ppb		96
56)	1,2-Diclpropane	7.139	63	398857	99.73	ppb		96
57)	Dibromomethane	7.285	93	227471	98.86	ppb		96
58)	1,4-Dioxane	7.352	88	170195	2064.59	ppb		88
59)	Methyl Methacrylate	7.358	69	358890	103.28	ppb		99
60)	Bromodichloromethane	7.505	83	447071	105.95	ppb		99
62)	2-Chloroethylvinyl Ether	7.907	63	192940	110.91	ppb		96
63)	cis-1,3-Dichloropropene	8.041	75	621745	108.00	ppb		99
64)	4-Methyl-2-pentanone	8.248	43	555978	103.39	ppb		99
66)	Toluene	8.395	91	1561995	97.91	ppb		97
67)	trans-1,3-Dichloropropene	8.675	75	577422	110.30	ppb		96
68)	Ethyl Methacrylate	8.803	69	631883	107.66	ppb		97
69)	1,1,2-Trichloroethane	8.864	97	361329	101.44	ppb		96
72)	Tetrachloroethene	8.968	164	264632	92.67	ppb		98
73)	2-Hexanone	9.151	43	425573	102.39	ppb		96
74)	1,3-Dichloropropane	9.029	76	649090	98.71	ppb		94
75)	Dibromochloromethane	9.254	129	323661	111.30	ppb		95
76)	N-Butyl Acetate	9.291	43	821613	106.57	ppb		99
77)	1,2-Dibromoethane	9.352	107	358456	100.15	ppb		97
78)	Chlorobenzene	9.827	112	998702	95.77	ppb		97
79)	3-CBTF	9.846	180	490111	101.50	ppb		95
80)	4-CBTF	9.894	180	447888	103.11	ppb		95
81)	1,1,1,2-Tetrachloroethane	9.919	131	329966	102.84	ppb		97
82)	Ethylbenzene	9.943	106	545521	99.69	ppb	#	90
83)	(m+p)Xylene	10.053	106	1299998	198.43	ppb		93
84)	o-Xylene	10.407	106	646402	101.06	ppb		93
85)	Styrene	10.425	104	1130565	104.04	ppb		99
87)	Bromoform	10.589	173	212335	105.19	ppb		98
88)	2-CBTF	10.657	180	486720	97.88	ppb		99
89)	Isopropylbenzene	10.742	105	1613299	95.34	ppb		100
90)	Cyclohexanone	10.827	55	2183152	2147.04	ppb		96
91)	trans-1,4-Dichloro-2-B...	11.065	53	143652	101.36	ppb		94
92)	1,1,2,2-Tetrachloroethane	11.016	83	543463	99.35	ppb		99
93)	Bromobenzene	10.992	156	416825	94.41	ppb		98
94)	1,2,3-Trichloropropane	11.047	110	167527	94.71	ppb	#	90
95)	n-Propylbenzene	11.095	91	1945764	100.21	ppb		95
96)	2-Chlorotoluene	11.156	91	1217391	96.53	ppb		100
97)	3-Chlorotoluene	11.211	91	1194110	99.13	ppb		98
98)	4-Chlorotoluene	11.254	91	1383544	97.98	ppb		99
99)	1,3,5-Trimethylbenzene	11.242	105	1436445	99.36	ppb		99
100)	tert-Butylbenzene	11.516	119	1175736	97.15	ppb		99
101)	1,2,4-Trimethylbenzene	11.553	105	1452947	99.86	ppb		97
102)	3,4-DCBTF	11.620	214	411213	103.17	ppb		99
103)	sec-Butylbenzene	11.693	105	1736782	100.05	ppb		99
104)	p-Isopropyltoluene	11.815	119	1531436	102.33	ppb		98
105)	1,3-Dclbenz	11.784	146	833947	96.41	ppb		100

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:43:37 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.858	146	852359	96.84	ppb	99
107) 2,4-DCBTF	11.906	214	397366	106.45	ppb	99
108) 2,5-DCBTF	11.949	214	427662	106.93	ppb	99
109) n-Butylbenzene	12.150	91	1471600	104.45	ppb	99
110) 1,2-Dclbenz	12.162	146	855166	97.40	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.790	157	136178	111.19	ppb	94
112) Trielution Dichlorotol...	12.900	125	2330970	331.46	ppb	100
113) 1,3,5 Trichlorobenzene	12.949	180	658915	109.15	ppb	95
114) Coelution Dichlorotoluene	13.223	125	1732170	224.25	ppb	98
115) 1,2,4-Tcbenzene	13.430	180	685916	108.30	ppb	98
116) Hexachlorobt	13.558	225	256879	101.05	ppb	99
117) Naphthalen	13.625	128	2095497	113.24	ppb	97
118) 1,2,3-Tclbenzene	13.808	180	701984	107.15	ppb	97
119) 2,4,5-Trichlorotolene	14.394	159	485386	121.12	ppb	99
120) 2,3,6-Trichlorotoluene	14.479	159	443363	121.53	ppb	99

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

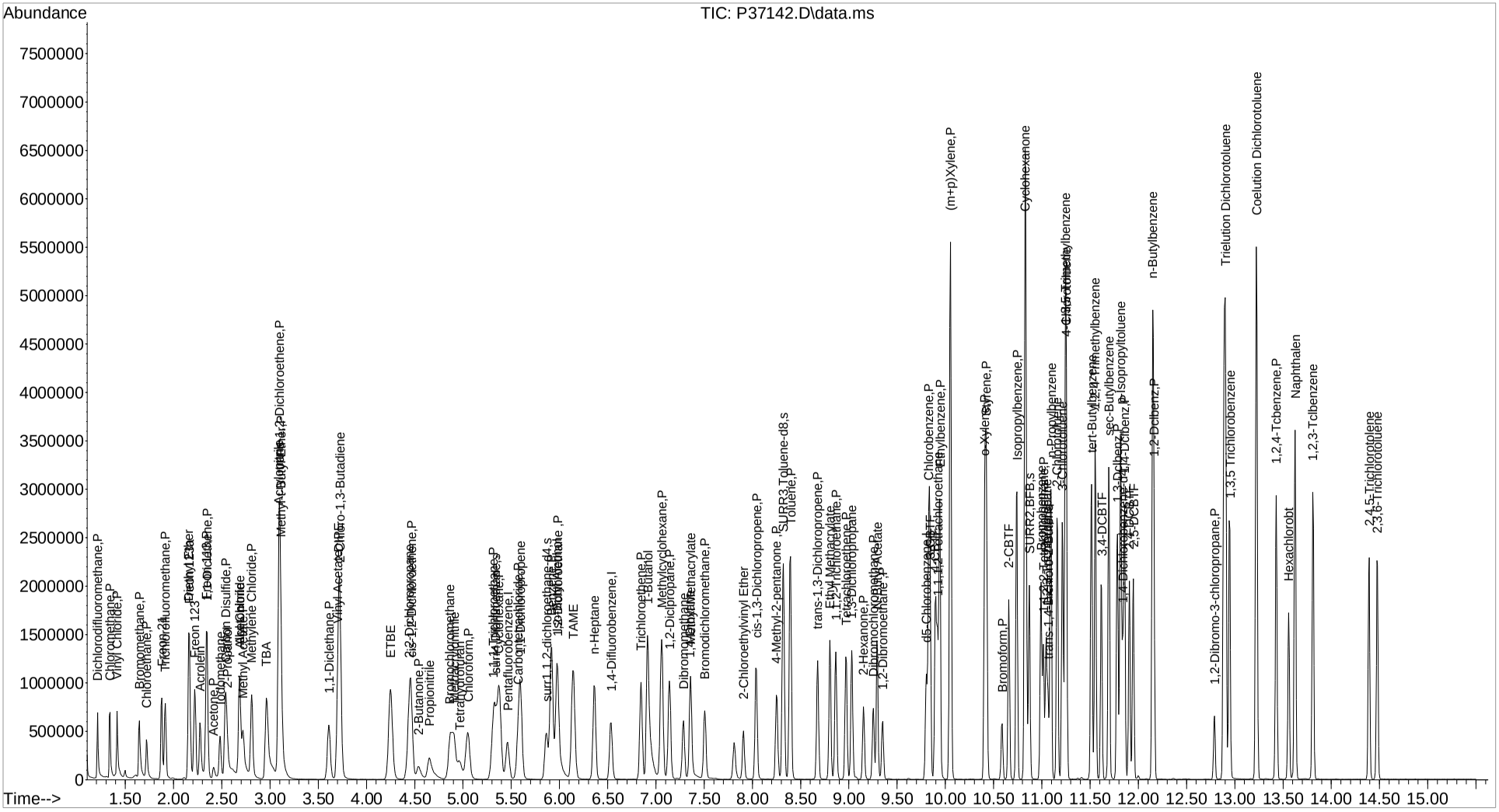
1st 07/14/20

2nd 07/14/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:43:37 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

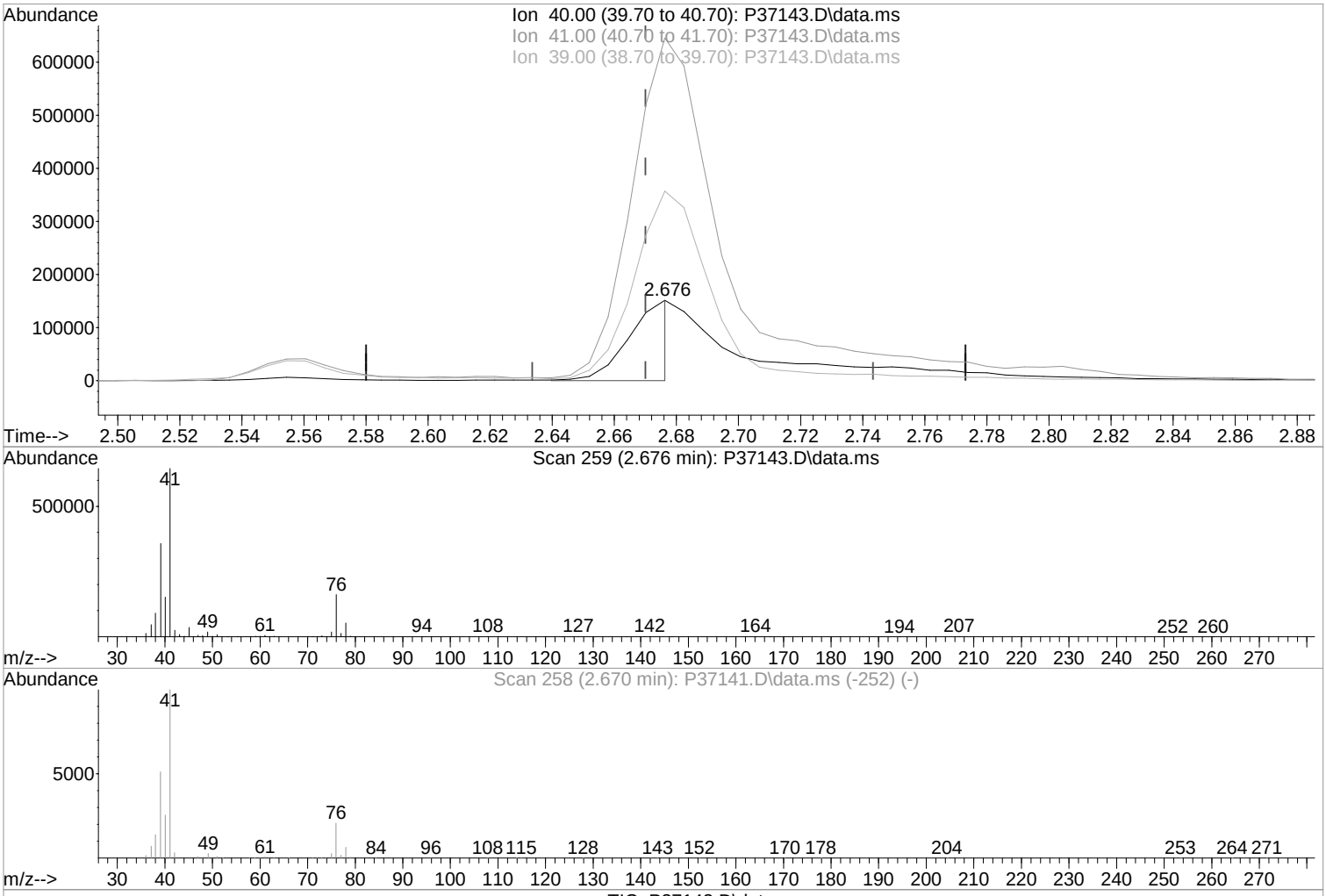


1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:04:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37143.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 502.76 ppb m

response 145190

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	426.65#
39.00	200.50	236.04#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

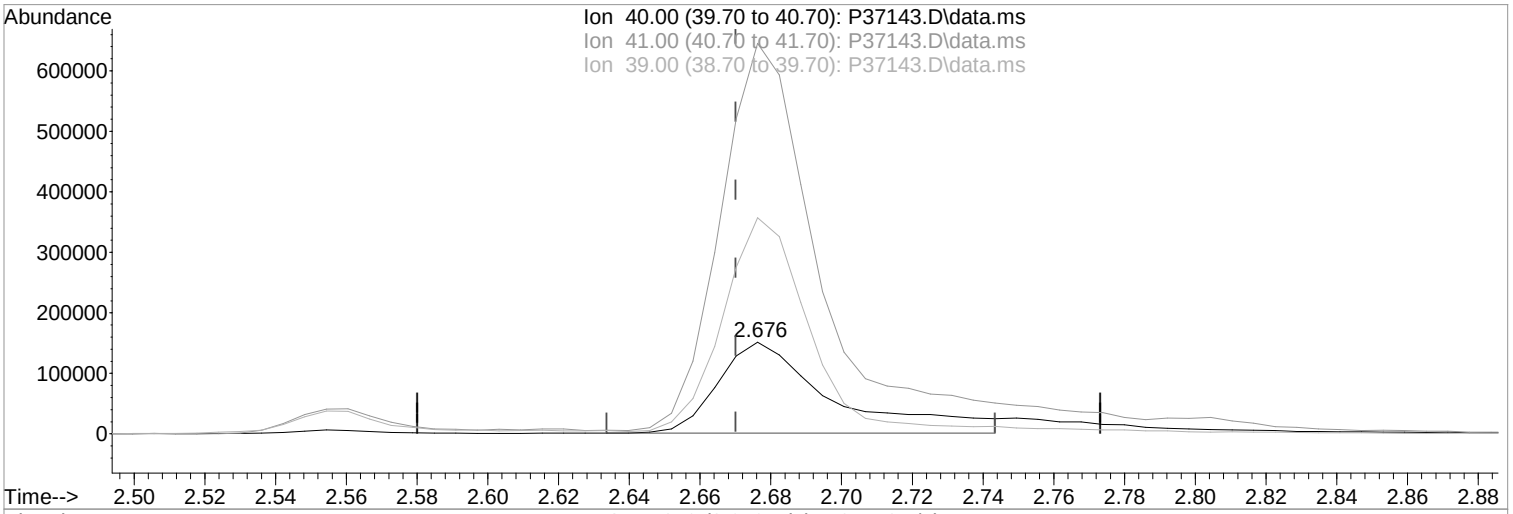
07/13/20

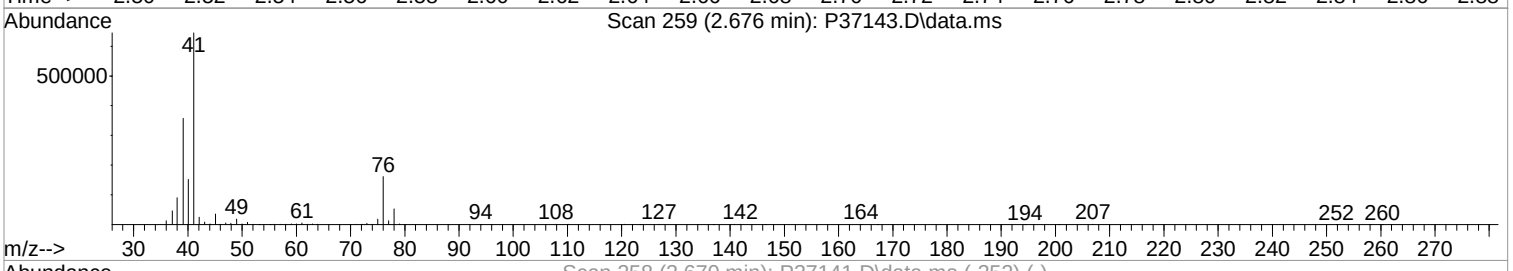
1st 07/14/20
2nd 07/14/20

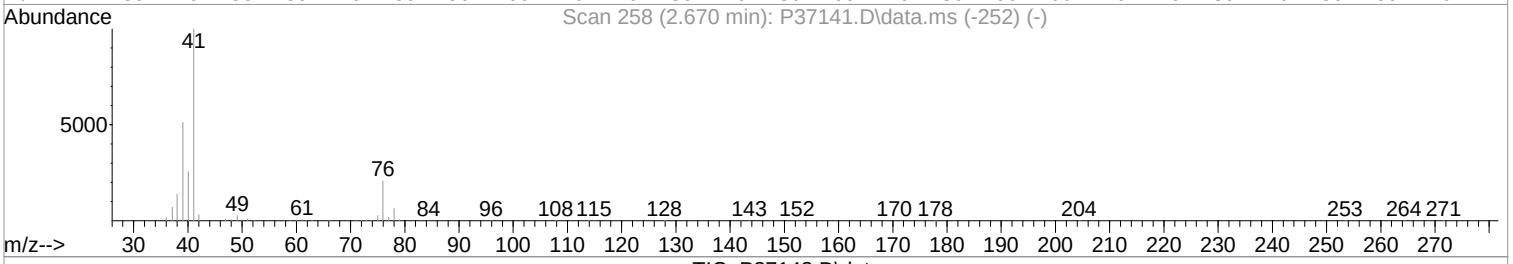
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:04:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37143.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 1172.71 ppb

response 338661

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	426.65#
39.00	200.50	236.04#
0.00	0.00	0.00

Manual Integration:

Before

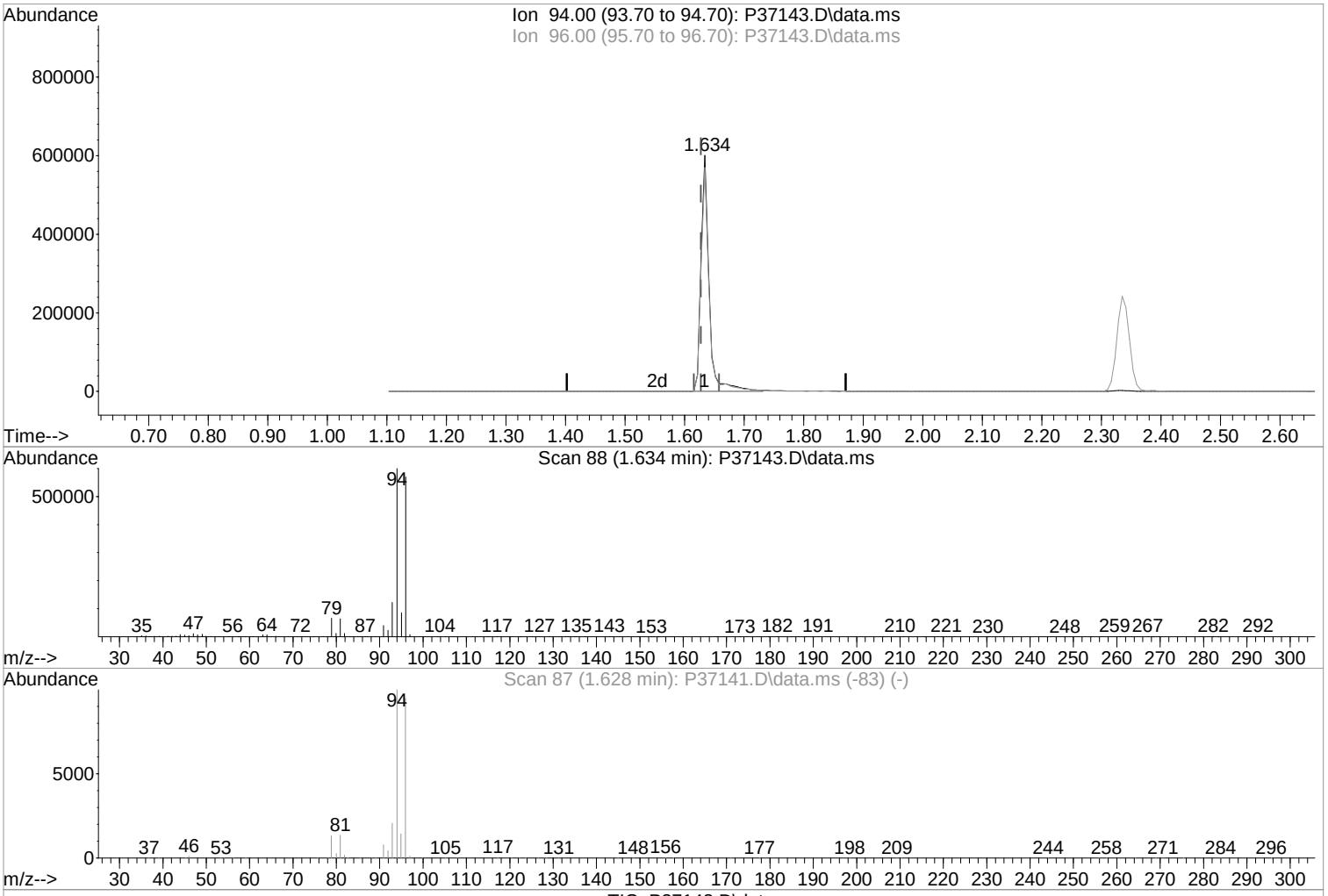
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:04:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37143.D\data.ms

(5) Bromomethane (P)

1.634min (+0.006) 132.03 ppb m

response 573215

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	94.92
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

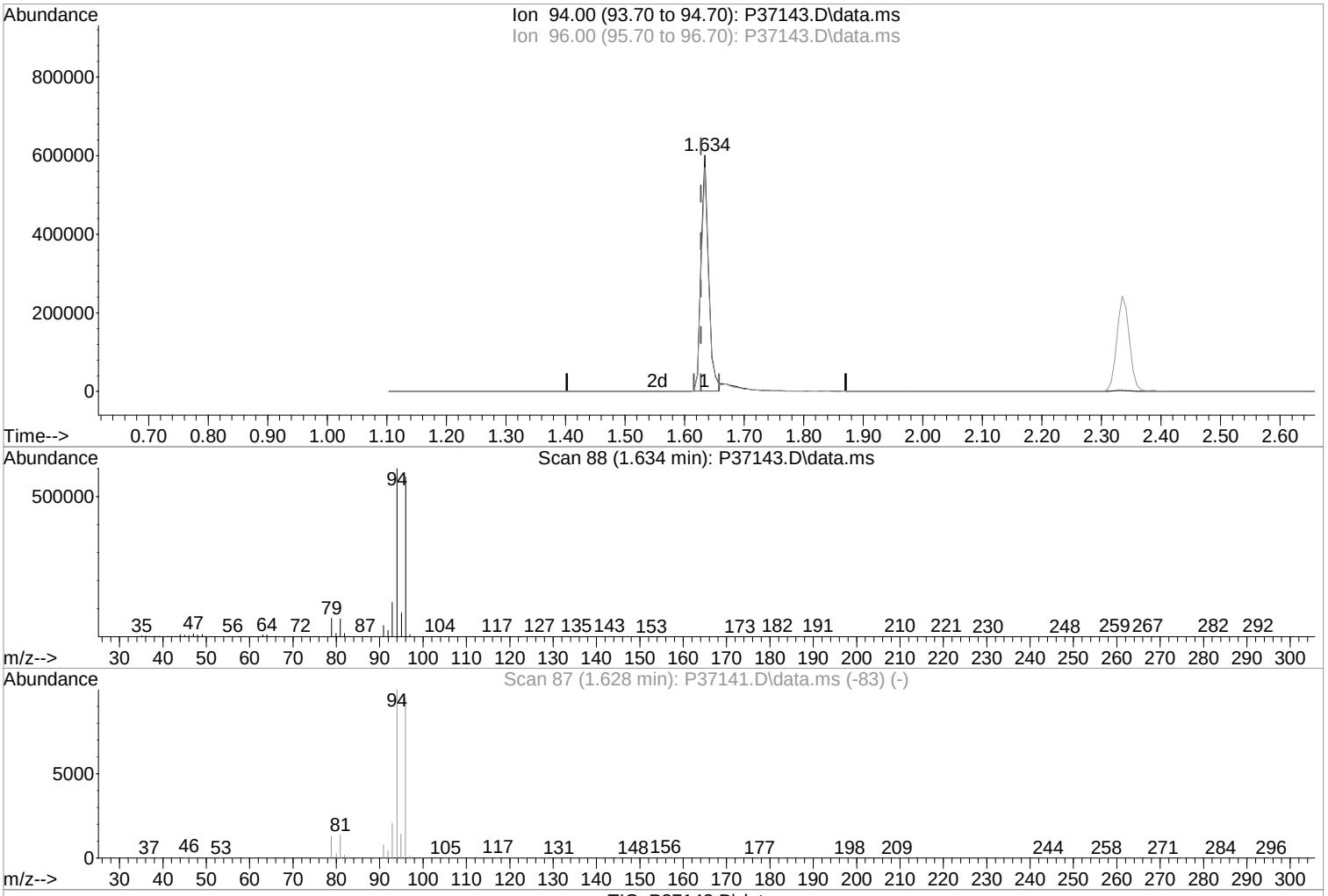
Poor integration.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:04:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37143.D\data.ms

(5) Bromomethane (P)

1.634min (+0.006) 121.45 ppb

response 527272

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	94.92
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:45:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	401830	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	556613	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	495556	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	267058	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	608081	190.25	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 380.50%#				
48) surr1,1,2-dichloroetha...	5.859	65	820523	185.44	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 370.88%#				
65) SURR3,Toluene-d8	8.322	98	2707696	182.28	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 364.56%#				
70) SURR2,BFB	10.870	95	1061612	193.98	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 387.96%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	537989	120.08	ppb		97
3) Chloromethane	1.335	50	691507	123.00	ppb		99
4) Vinyl Chloride	1.408	62	659084	123.61	ppb		99
5) Bromomethane	1.634	94	573215m	132.03	ppb		
6) Chloroethane	1.707	64	422190	146.38	ppb		94
7) Freon 21	1.865	67	817758	122.73	ppb		99
8) Trichlorofluoromethane	1.902	101	647224	120.05	ppb		96
9) Diethyl Ether	2.152	59	503901	129.32	ppb		94
10) Freon 123a	2.158	67	549534	119.49	ppb		100
11) Freon 123	2.213	83	622049	114.65	ppb		97
12) Acrolein	2.268	56	680089	644.56	ppb		96
13) 1,1-Diclethene	2.335	96	357088	114.92	ppb		89
14) Freon 113	2.335	101	407196	112.46	ppb		98
15) Acetone	2.414	43	244946	104.95	ppb		93
16) 2-Propanol	2.554	45	1467334	2835.38	ppb		99
17) Iodomethane	2.475	142	577594	166.11	ppb		100
18) Carbon Disulfide	2.530	76	1256373	106.00	ppb		99
19) Acetonitrile	2.676	40	145190m	502.76	ppb		
20) Allyl Chloride	2.676	76	262742	119.31	ppb	#	87
21) Methyl Acetate	2.713	43	752824	125.98	ppb		97
22) Methylene Chloride	2.804	84	489471	110.51	ppb		97
23) TBA	2.969	59	2308239	2756.19	ppb		97
24) Acrylonitrile	3.091	53	1621560	627.71	ppb		98
25) Methyl-t-Butyl Ether	3.103	73	1782902	123.97	ppb		98
26) trans-1,2-Dichloroethene	3.091	96	416908	115.19	ppb		96
28) 1,1-Diclethane	3.603	63	916054	114.83	ppb		98
29) Vinyl Acetate	3.707	86	95236	162.62	ppb	#	90
30) DIPE	3.713	45	1821612	130.67	ppb		99
31) 2-Chloro-1,3-Butadiene	3.719	53	833479	129.93	ppb		97
32) ETBE	4.243	59	1714823	131.85	ppb		98
33) 2,2-Dichloropropane	4.438	77	720608	122.73	ppb		99
34) cis-1,2-Dichloroethene	4.456	96	523387	111.94	ppb		97
35) 2-Butanone	4.536	43	397784	127.33	ppb		97
36) Propionitrile	4.645	54	691699	617.46	ppb		95
37) Bromochloromethane	4.865	130	317727	115.58	ppb		97
38) Methacrylonitrile	4.901	67	326539	123.05	ppb		100
39) Tetrahydrofuran	4.962	42	296586	120.92	ppb		89
40) Chloroform	5.048	83	804883	109.48	ppb		98
41) 1,1,1-Trichloroethane	5.310	97	691825	119.08	ppb		95

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:45:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.139	73	1680663	129.72	ppb		98
44) Cyclohexane	5.371	41	492794	135.01	ppb		96
46) Carbontetrachloride	5.572	117	544978	147.42	ppb		100
47) 1,1-Dichloropropene	5.590	75	683574	129.70	ppb		98
49) Benzene	5.913	78	2103233	130.78	ppb		95
50) 1,2-Dichloroethane	5.974	62	734056	130.70	ppb		99
51) Iso-Butyl Alcohol	5.974	43	1102860	3199.29	ppb		100
52) n-Heptane	6.359	43	698705	140.28	ppb		96
53) 1-Butanol	6.919	56	1842912	8590.98	ppb		100
54) Trichloroethene	6.846	130	502603	126.04	ppb		98
55) Methylcyclohexane	7.060	55	699460	141.22	ppb		97
56) 1,2-Diclpropane	7.139	63	577889	135.46	ppb		97
57) Dibromomethane	7.285	93	326706	133.10	ppb		97
58) 1,4-Dioxane	7.346	88	257579	2929.01	ppb		99
59) Methyl Methacrylate	7.358	69	537631	145.04	ppb		98
60) Bromodichloromethane	7.505	83	643433	142.94	ppb		98
62) 2-Chloroethylvinyl Ether	7.907	63	315396	169.95	ppb		96
63) cis-1,3-Dichloropropene	8.035	75	895804	145.87	ppb		98
64) 4-Methyl-2-pentanone	8.248	43	862552	150.35	ppb		99
66) Toluene	8.389	91	2226507	130.83	ppb		97
67) trans-1,3-Dichloropropene	8.675	75	845631	151.42	ppb		97
68) Ethyl Methacrylate	8.803	69	944813	150.90	ppb		98
69) 1,1,2-Trichloroethane	8.864	97	517493	136.19	ppb		94
72) Tetrachloroethene	8.968	164	391204	129.27	ppb		97
73) 2-Hexanone	9.151	43	675525	153.36	ppb		96
74) 1,3-Dichloropropane	9.029	76	941398	135.08	ppb		95
75) Dibromochloromethane	9.254	129	496799	161.20	ppb		94
76) N-Butyl Acetate	9.291	43	1268841	155.29	ppb		99
77) 1,2-Dibromoethane	9.346	107	518815	136.78	ppb		100
78) Chlorobenzene	9.827	112	1445654	130.81	ppb		98
79) 3-CBTF	9.846	180	753803	147.30	ppb		93
80) 4-CBTF	9.894	180	677363	147.14	ppb		97
81) 1,1,1,2-Tetrachloroethane	9.919	131	492697	144.89	ppb		97
82) Ethylbenzene	9.943	106	793333	136.80	ppb	#	86
83) (m+p)Xylene	10.053	106	1900617	273.74	ppb	#	82
84) o-Xylene	10.413	106	958131	141.35	ppb	#	87
85) Styrene	10.425	104	1659909	144.14	ppb		97
87) Bromoform	10.589	173	332014	150.96	ppb		100
88) 2-CBTF	10.656	180	749906	138.41	ppb		99
89) Isopropylbenzene	10.742	105	2337827	126.80	ppb		98
90) Cyclohexanone	10.827	55	3137757	2832.26	ppb		93
91) trans-1,4-Dichloro-2-B...	11.065	53	225537	146.07	ppb		91
92) 1,1,2,2-Tetrachloroethane	11.016	83	829098	139.12	ppb		98
93) Bromobenzene	10.992	156	622725	129.46	ppb		98
94) 1,2,3-Trichloropropane	11.047	110	258292	134.02	ppb		94
95) n-Propylbenzene	11.095	91	2777872	131.31	ppb		92
96) 2-Chlorotoluene	11.162	91	1785254	129.93	ppb		95
97) 3-Chlorotoluene	11.211	91	1866608	142.22	ppb		97
98) 4-Chlorotoluene	11.254	91	1953681	126.99	ppb		96
99) 1,3,5-Trimethylbenzene	11.242	105	2079610	132.02	ppb		96
100) tert-Butylbenzene	11.516	119	1754015	133.03	ppb		99
101) 1,2,4-Trimethylbenzene	11.553	105	2105397	132.81	ppb		93
102) 3,4-DCBTF	11.620	214	633179	145.80	ppb		100
103) sec-Butylbenzene	11.693	105	2504183	132.40	ppb		96
104) p-Isopropyltoluene	11.815	119	2216856	135.96	ppb		95
105) 1,3-Dclbenz	11.784	146	1230767	130.60	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:45:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

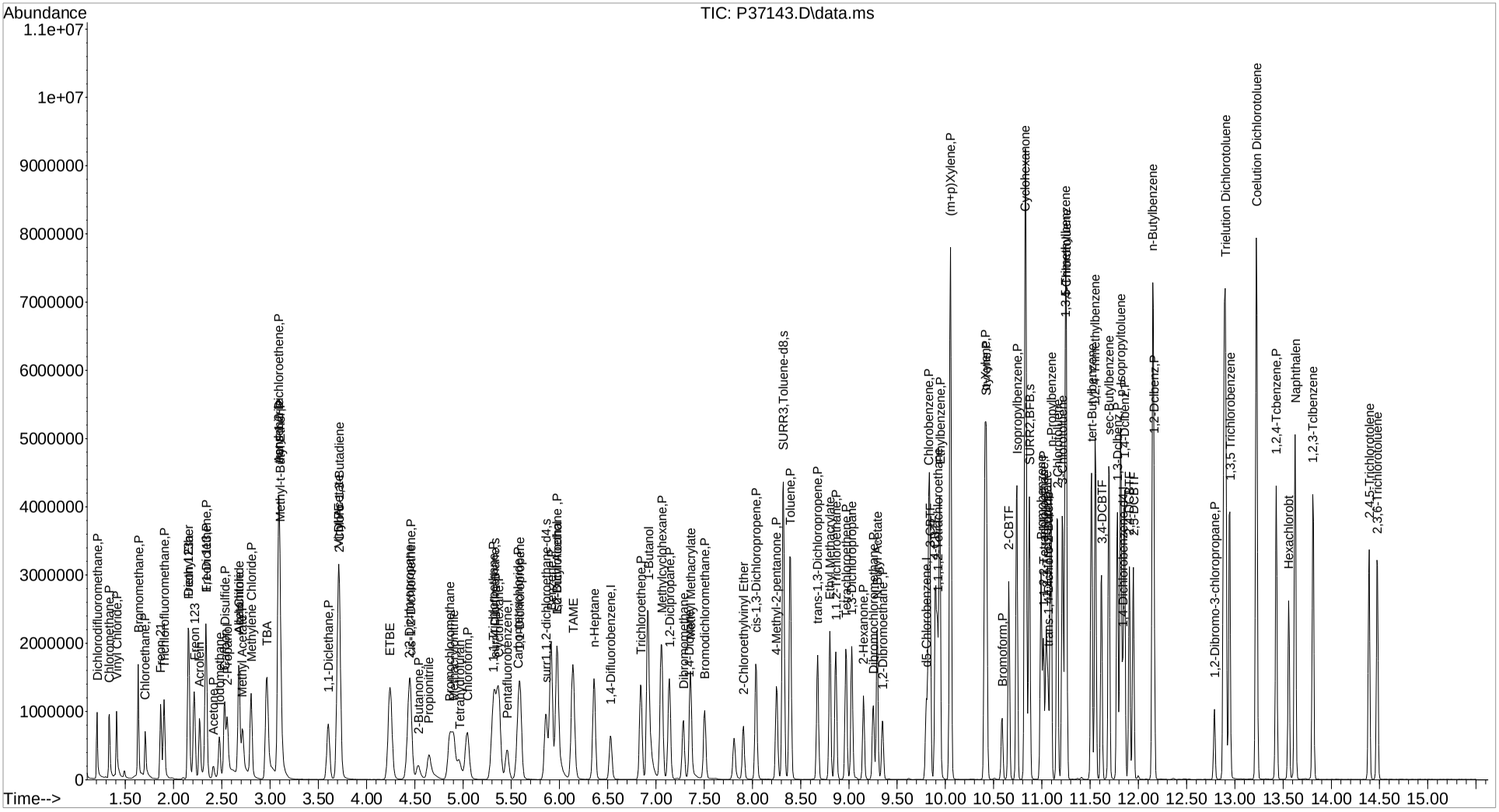
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	1266516	132.08	ppb	100
107) 2,4-DCBTF	11.906	214	589997	145.07	ppb	99
108) 2,5-DCBTF	11.949	214	637893	146.39	ppb	97
109) n-Butylbenzene	12.150	91	2152130	140.20	ppb	95
110) 1,2-Dclbenz	12.162	146	1258220	131.52	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.790	157	212205	159.03	ppb	98
112) Trielution Dichlorotol...	12.900	125	3339121	435.79	ppb	96
113) 1,3,5 Trichlorobenzene	12.949	180	956029	145.35	ppb	96
114) Coelution Dichlorotoluene	13.223	125	2450999	291.24	ppb	94
115) 1,2,4-Tcbenzene	13.430	180	994072	144.06	ppb	98
116) Hexachlorobt	13.558	225	389646	140.68	ppb	98
117) Naphthalen	13.625	128	2864370	142.07	ppb	93
118) 1,2,3-Tclbenzene	13.808	180	989842	138.67	ppb	96
119) 2,4,5-Trichlorotolene	14.394	159	712426	163.16	ppb	97
120) 2,3,6-Trichlorotoluene	14.479	159	635742	159.94	ppb	99

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:45:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

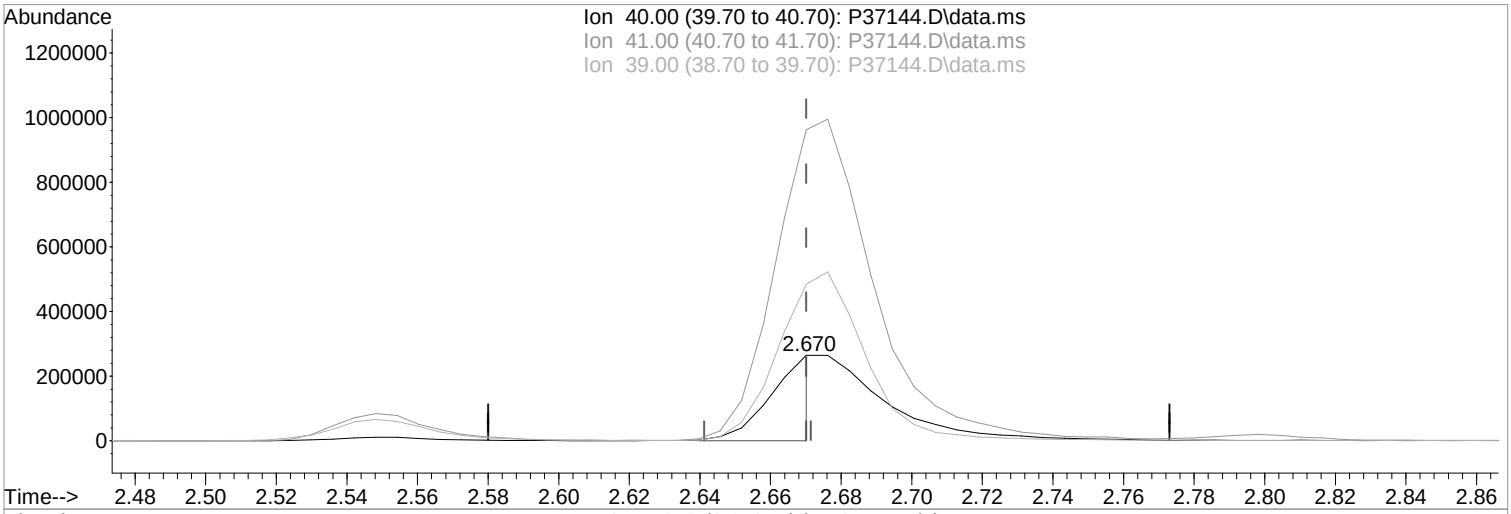


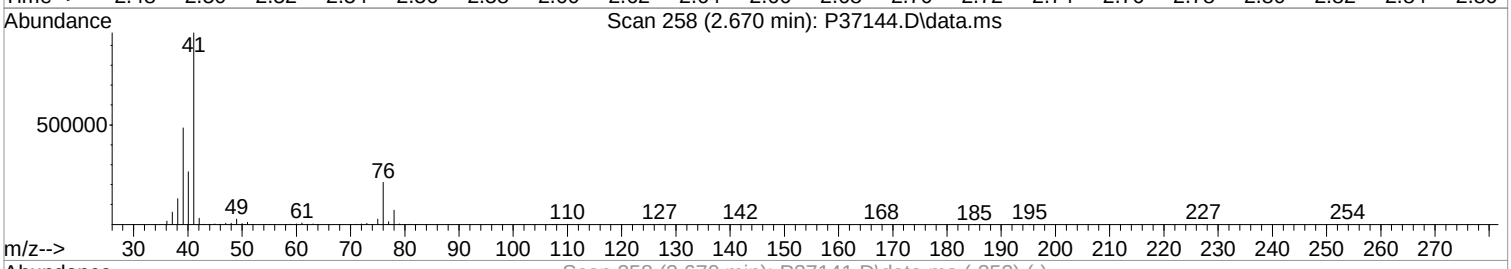
1st 07/14/20
2nd 07/14/20

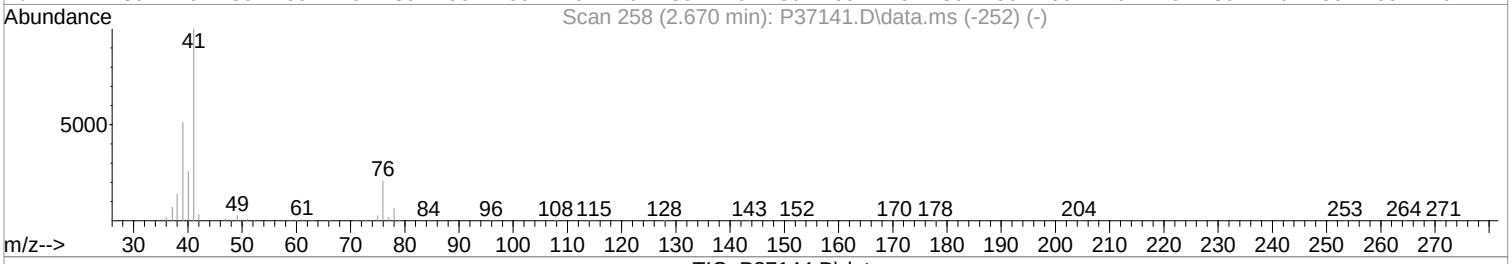
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:04:06 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37144.D\data.ms

(19) Acetonitrile

2.670min (0.000) 930.54 ppb m

response 228407

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	363.68#
39.00	200.50	182.99
0.00	0.00	0.00

Manual Integration:

After

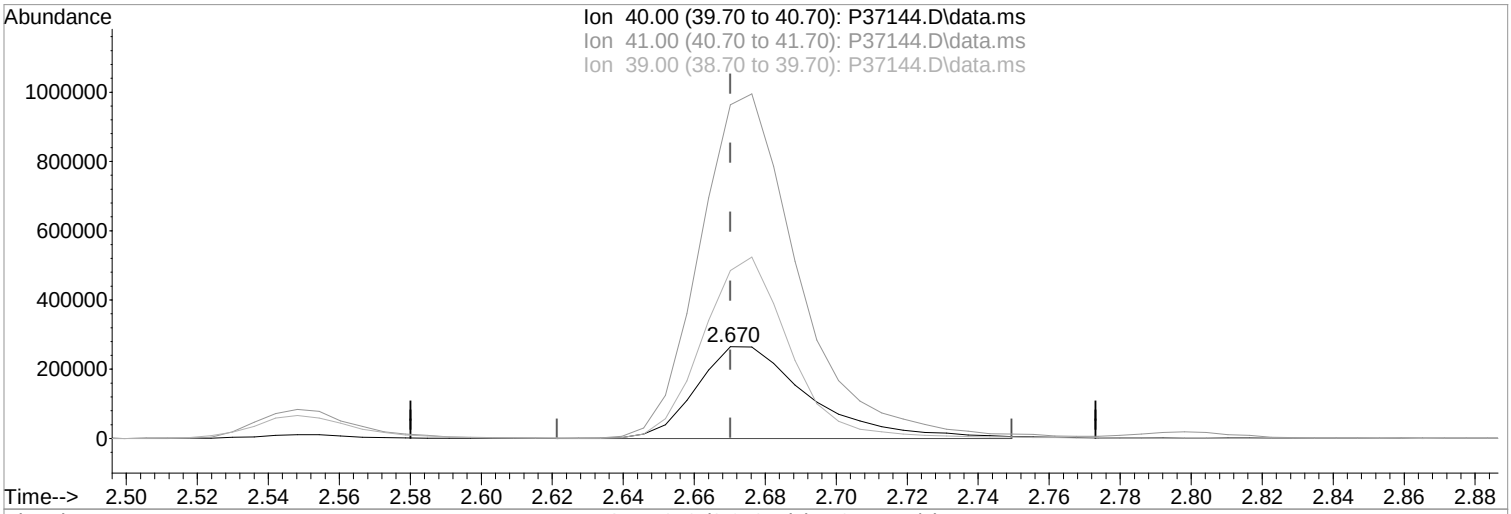
Poor integration.

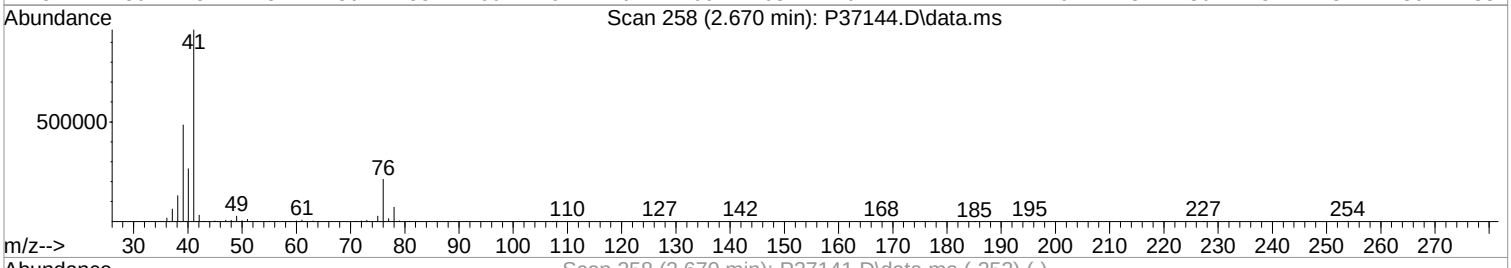
07/13/20

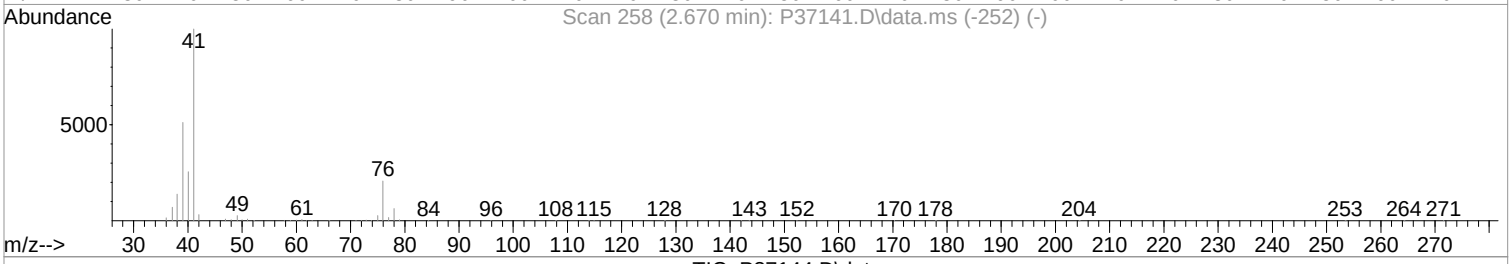
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:04:06 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37144.D\data.ms

(19) Acetonitrile

2.670min (0.000) 2383.10 ppb

response 584947

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	363.68#
39.00	200.50	182.99
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:47:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	341541	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	532005	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	468649	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	263400	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	156873	51.35	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.70%				
48) surr1,1,2-dichloroetha...	5.859	65	211137	49.93	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 99.86%				
65) SURR3,Toluene-d8	8.315	98	718104	50.58	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.16%				
70) SURR2,BFB	10.870	95	274920	52.56	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 105.12%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.201	85	759974	199.58	ppb		97
3) Chloromethane	1.329	50	1027449	215.02	ppb		97
4) Vinyl Chloride	1.402	62	940025	207.42	ppb		97
5) Bromomethane	1.628	94	758907	205.65	ppb		98
6) Chloroethane	1.701	64	453526	185.01	ppb		95
7) Freon 21	1.865	67	1188637	209.88	ppb		98
8) Trichlorofluoromethane	1.902	101	897137	195.78	ppb		95
9) Diethyl Ether	2.146	59	705277	212.96	ppb		95
10) Freon 123a	2.152	67	800491	204.78	ppb		96
11) Freon 123	2.207	83	900525	195.28	ppb		97
12) Acrolein	2.268	56	905792	1010.01	ppb		100
13) 1,1-Diclethene	2.335	96	504242	190.92	ppb		90
14) Freon 113	2.329	101	574224	186.58	ppb		97
15) Acetone	2.408	43	332614	167.67	ppb		95
16) 2-Propanol	2.548	45	2015414	4581.90	ppb		99
17) Iodomethane	2.469	142	828135	280.21	ppb		97
18) Carbon Disulfide	2.524	76	1722126	170.95	ppb		99
19) Acetonitrile	2.670	40	228407m	930.54	ppb		
20) Allyl Chloride	2.676	76	370522	197.96	ppb		94
21) Methyl Acetate	2.713	43	1014975	199.84	ppb		97
22) Methylene Chloride	2.798	84	685334	182.04	ppb		97
23) TBA	2.957	59	3070280	4313.26	ppb		100
24) Acrylonitrile	3.085	53	2241592	1020.90	ppb		94
25) Methyl-t-Butyl Ether	3.097	73	2494635	204.08	ppb		99
26) trans-1,2-Dichloroethene	3.085	96	591177	192.18	ppb		98
28) 1,1-Diclethane	3.597	63	1289413	190.16	ppb		96
29) Vinyl Acetate	3.694	86	117164	235.38	ppb	#	80
30) DIPE	3.707	45	2475774	208.95	ppb		99
31) 2-Chloro-1,3-Butadiene	3.713	53	1147233	210.40	ppb		95
32) ETBE	4.237	59	2342933	211.94	ppb		99
33) 2,2-Dichloropropane	4.432	77	1016698	203.72	ppb		97
34) cis-1,2-Dichloroethene	4.450	96	736157	185.24	ppb		96
35) 2-Butanone	4.530	43	537999	202.61	ppb		95
36) Propionitrile	4.645	54	947107	994.70	ppb		100
37) Bromochloromethane	4.859	130	441887	189.12	ppb		97
38) Methacrylonitrile	4.895	67	455331	201.88	ppb		100
39) Tetrahydrofuran	4.950	42	405964	194.73	ppb		94
40) Chloroform	5.042	83	1137764	182.07	ppb		97
41) 1,1,1-Trichloroethane	5.310	97	989898	200.47	ppb		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:47:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.133	73	2305147	209.33	ppb		98
44) Cyclohexane	5.365	41	703590	201.68	ppb		96
46) Carbontetrachloride	5.566	117	781980	221.31	ppb		99
47) 1,1-Dichloropropene	5.590	75	985391	195.62	ppb		98
49) Benzene	5.913	78	2944922	191.58	ppb		96
50) 1,2-Dichloroethane	5.974	62	1017495	189.55	ppb		98
51) Iso-Butyl Alcohol	5.974	43	1552274	4711.28	ppb		95
52) n-Heptane	6.358	43	989930	207.95	ppb		97
53) 1-Butanol	6.913	56	2491349	12150.95	ppb		99
54) Trichloroethene	6.840	130	712480	186.94	ppb		98
55) Methylcyclohexane	7.053	55	1011892	213.76	ppb		95
56) 1,2-Diclpropane	7.139	63	804012	197.18	ppb		99
57) Dibromomethane	7.279	93	447304	190.66	ppb		94
58) 1,4-Dioxane	7.346	88	372475	4431.44	ppb		97
59) Methyl Methacrylate	7.358	69	756439	213.50	ppb		98
60) Bromodichloromethane	7.505	83	924107	214.78	ppb		97
62) 2-Chloroethylvinyl Ether	7.907	63	434418	244.91	ppb		90
63) cis-1,3-Dichloropropene	8.035	75	1258222	214.36	ppb		99
64) 4-Methyl-2-pentanone	8.248	43	1163474	212.19	ppb		99
66) Toluene	8.389	91	3041109	186.96	ppb		92
67) trans-1,3-Dichloropropene	8.675	75	1185546	222.10	ppb		98
68) Ethyl Methacrylate	8.803	69	1327027	221.75	ppb		99
69) 1,1,2-Trichloroethane	8.864	97	716799	197.36	ppb		94
72) Tetrachloroethene	8.968	164	551633	192.74	ppb		98
73) 2-Hexanone	9.151	43	903712	216.94	ppb		96
74) 1,3-Dichloropropane	9.029	76	1313216	199.25	ppb		96
75) Dibromochloromethane	9.254	129	694358	238.25	ppb		98
76) N-Butyl Acetate	9.291	43	1749509	226.41	ppb		97
77) 1,2-Dibromoethane	9.346	107	734158	204.66	ppb		100
78) Chlorobenzene	9.827	112	2014847	192.78	ppb		98
79) 3-CBTF	9.846	180	1029399	212.70	ppb		95
80) 4-CBTF	9.894	180	931161	213.88	ppb		96
81) 1,1,1,2-Tetrachloroethane	9.919	131	694302	215.90	ppb		99
82) Ethylbenzene	9.943	106	1134380	206.83	ppb	#	74
83) (m+p)Xylene	10.053	106	2615466	398.32	ppb	#	72
84) o-Xylene	10.413	106	1348114	210.30	ppb	#	83
85) Styrene	10.425	104	2294183	210.65	ppb		95
87) Bromoform	10.589	173	487759	224.85	ppb		96
88) 2-CBTF	10.656	180	1029768	192.71	ppb		98
89) Isopropylbenzene	10.742	105	3164807	174.04	ppb		91
90) Cyclohexanone	10.827	55	4040929	3698.16	ppb		87
91) trans-1,4-Dichloro-2-B...	11.065	53	330500	217.02	ppb		88
92) 1,1,2,2-Tetrachloroethane	11.016	83	1149875	195.62	ppb		98
93) Bromobenzene	10.992	156	890035	187.60	ppb		98
94) 1,2,3-Trichloropropane	11.047	110	363530	191.24	ppb		96
95) n-Propylbenzene	11.095	91	3671079	175.94	ppb		83
96) 2-Chlorotoluene	11.162	91	2478611	182.89	ppb		92
97) 3-Chlorotoluene	11.211	91	2549465	196.95	ppb	#	94
98) 4-Chlorotoluene	11.254	91	2704200	178.22	ppb		91
99) 1,3,5-Trimethylbenzene	11.242	105	2909409	187.27	ppb		91
100) tert-Butylbenzene	11.516	119	2483893	191.00	ppb		95
101) 1,2,4-Trimethylbenzene	11.553	105	2912248	186.25	ppb		86
102) 3,4-DCBTF	11.620	214	905129	211.32	ppb		99
103) sec-Butylbenzene	11.693	105	3399894	182.26	ppb		89
104) p-Isopropyltoluene	11.815	119	3066347	190.66	ppb		88
105) 1,3-Dclbenz	11.784	146	1774452	190.90	ppb		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:47:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

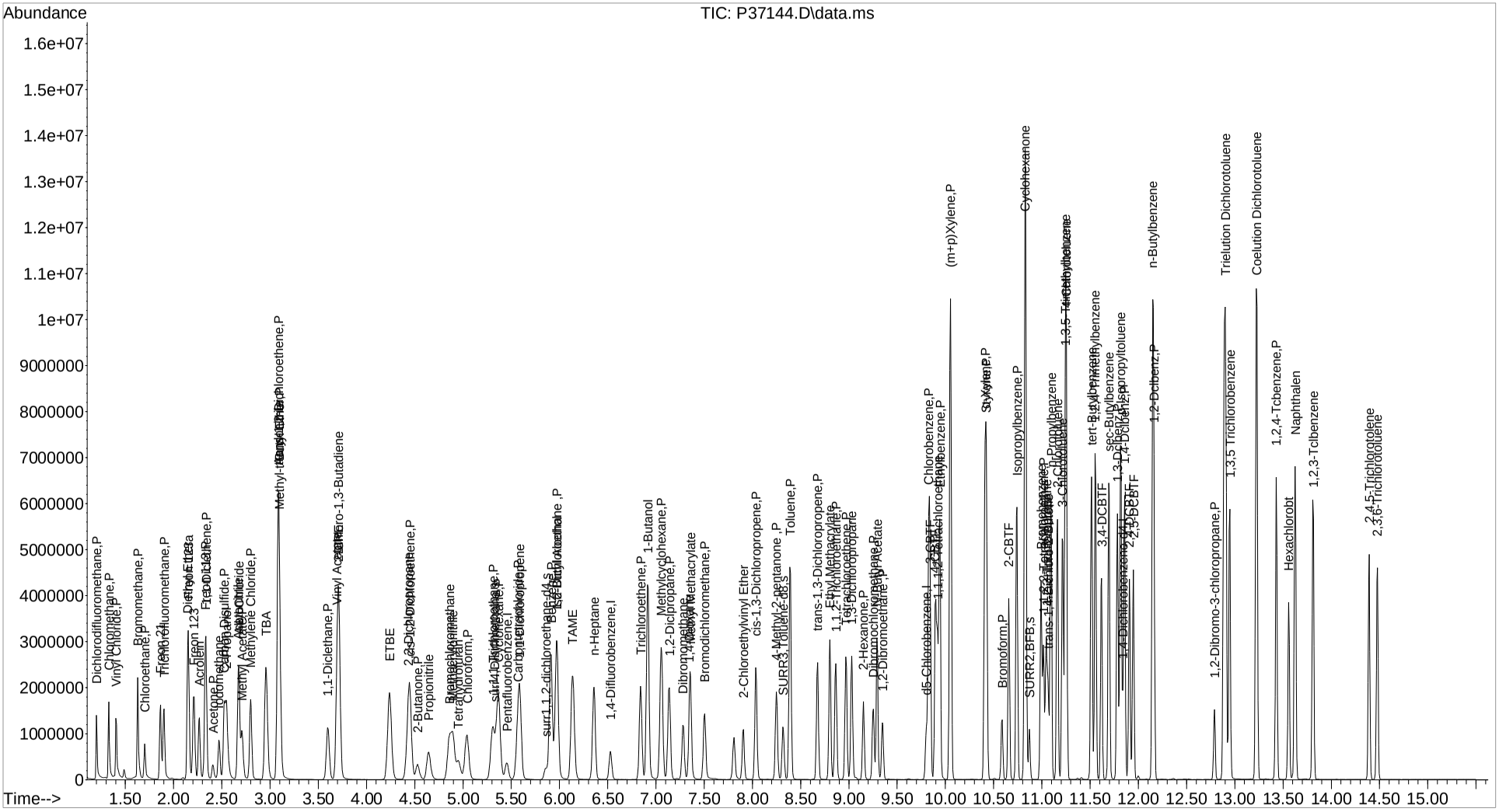
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
106) 1,4-Dclbenz	11.857	146	1805793	190.93	ppb		97
107) 2,4-DCBTF	11.906	214	845666	210.82	ppb		97
108) 2,5-DCBTF	11.949	214	933615	217.23	ppb		97
109) n-Butylbenzene	12.150	91	2958781	195.43	ppb		87
110) 1,2-Dclbenz	12.162	146	1810177	191.85	ppb		95
111) 1,2-Dibromo-3-chloropr...	12.790	157	310931	236.25	ppb		93
112) Trielution Dichlorotol...	12.900	125	4597778	608.40	ppb		89
113) 1,3,5 Trichlorobenzene	12.949	180	1382592	213.12	ppb		98
114) Coelution Dichlorotoluene	13.229	125	3316787	399.59	ppb	#	89
115) 1,2,4-Tcbenzene	13.430	180	1457753	214.19	ppb		98
116) Hexachlorobt	13.558	225	574342	210.25	ppb		97
117) Naphthalen	13.625	128	3839307	193.07	ppb		87
118) 1,2,3-Tclbenzene	13.814	180	1461401	207.57	ppb		97
119) 2,4,5-Trichlorotolene	14.393	159	998310	231.81	ppb		97
120) 2,3,6-Trichlorotoluene	14.479	159	900282	229.64	ppb		97

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:47:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

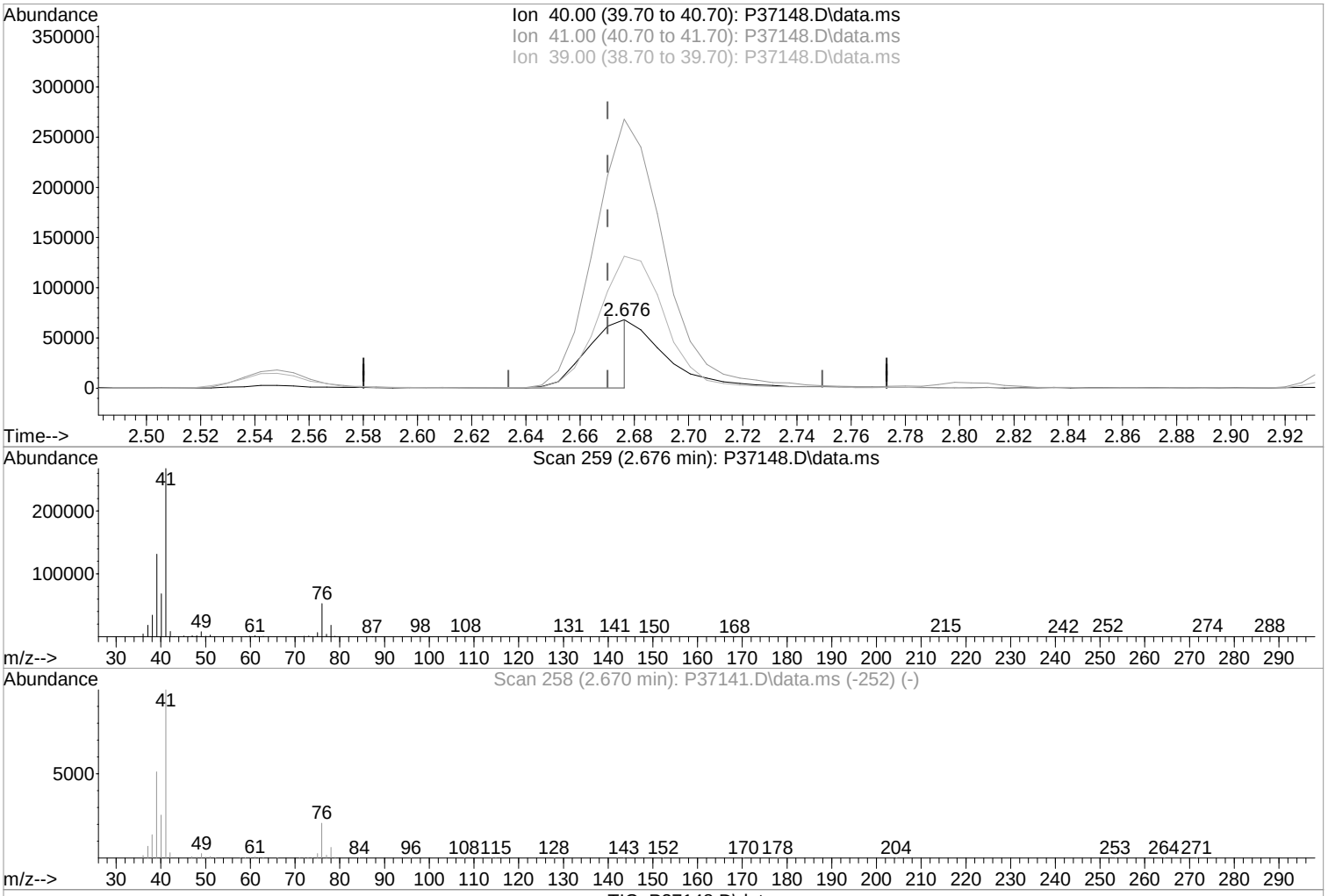


1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 14 10:29:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P37148.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 313.27 ppb m

response 74847

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	393.51
39.00	200.50	192.90
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

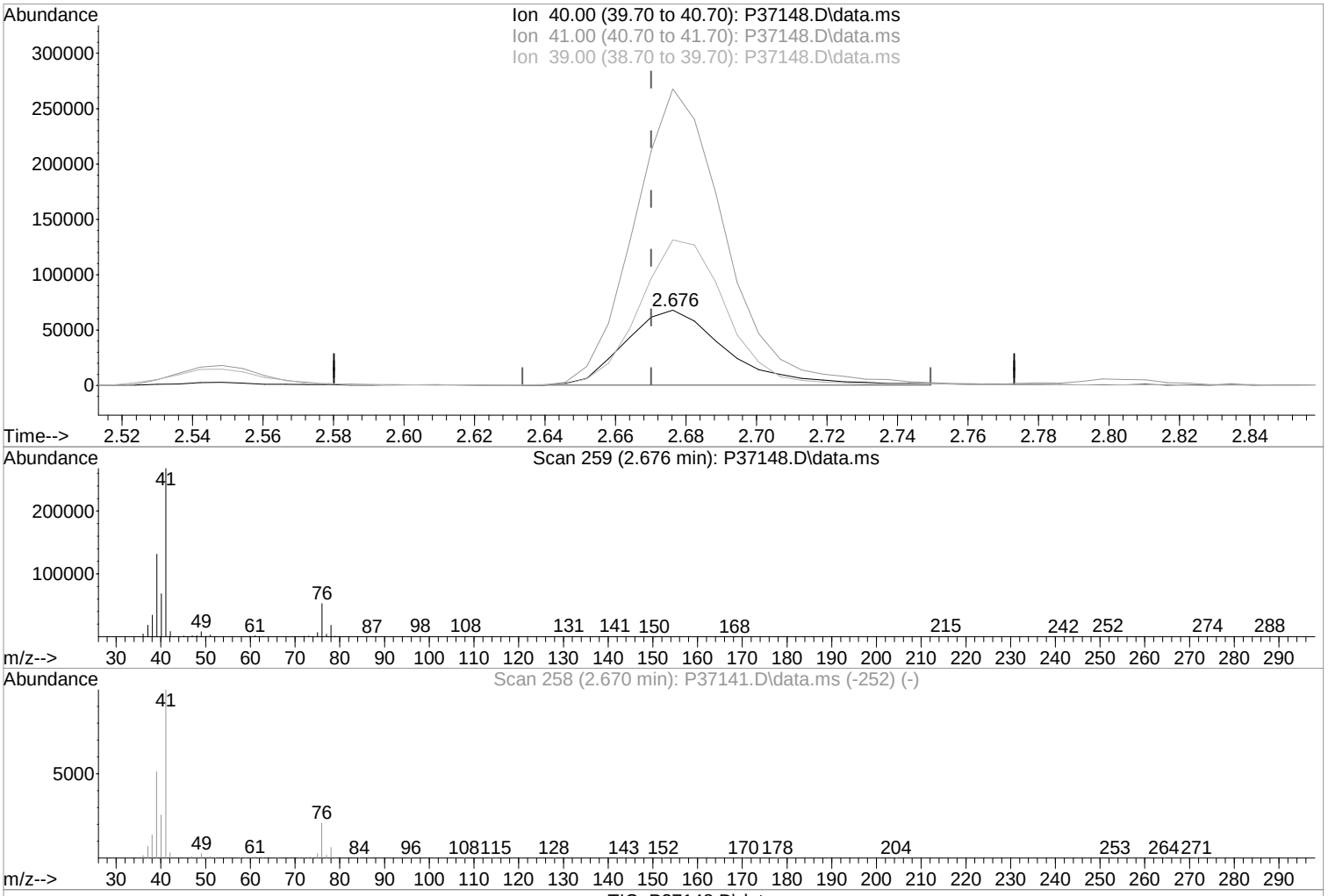
07/14/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 13 17:57:25 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration



TIC: P37148.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 563.28 ppb

response 134581

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	393.51
39.00	200.50	192.90
0.00	0.00	0.00

Manual Integration:

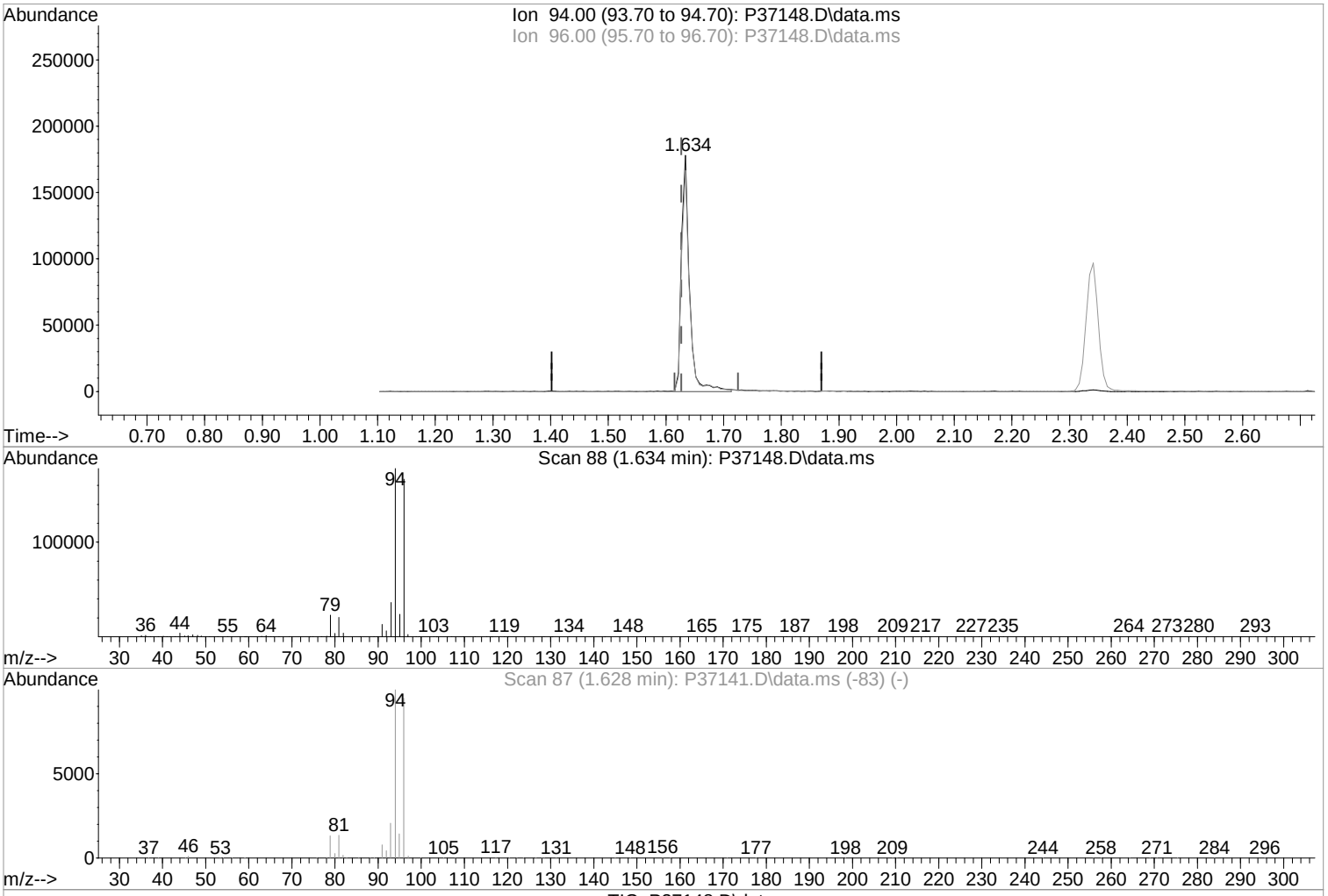
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 13 17:57:25 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration



TIC: P37148.D\data.ms

(5) Bromomethane (P)

1.634min (+0.007) 50.13 ppb m

response 174216

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	93.53
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

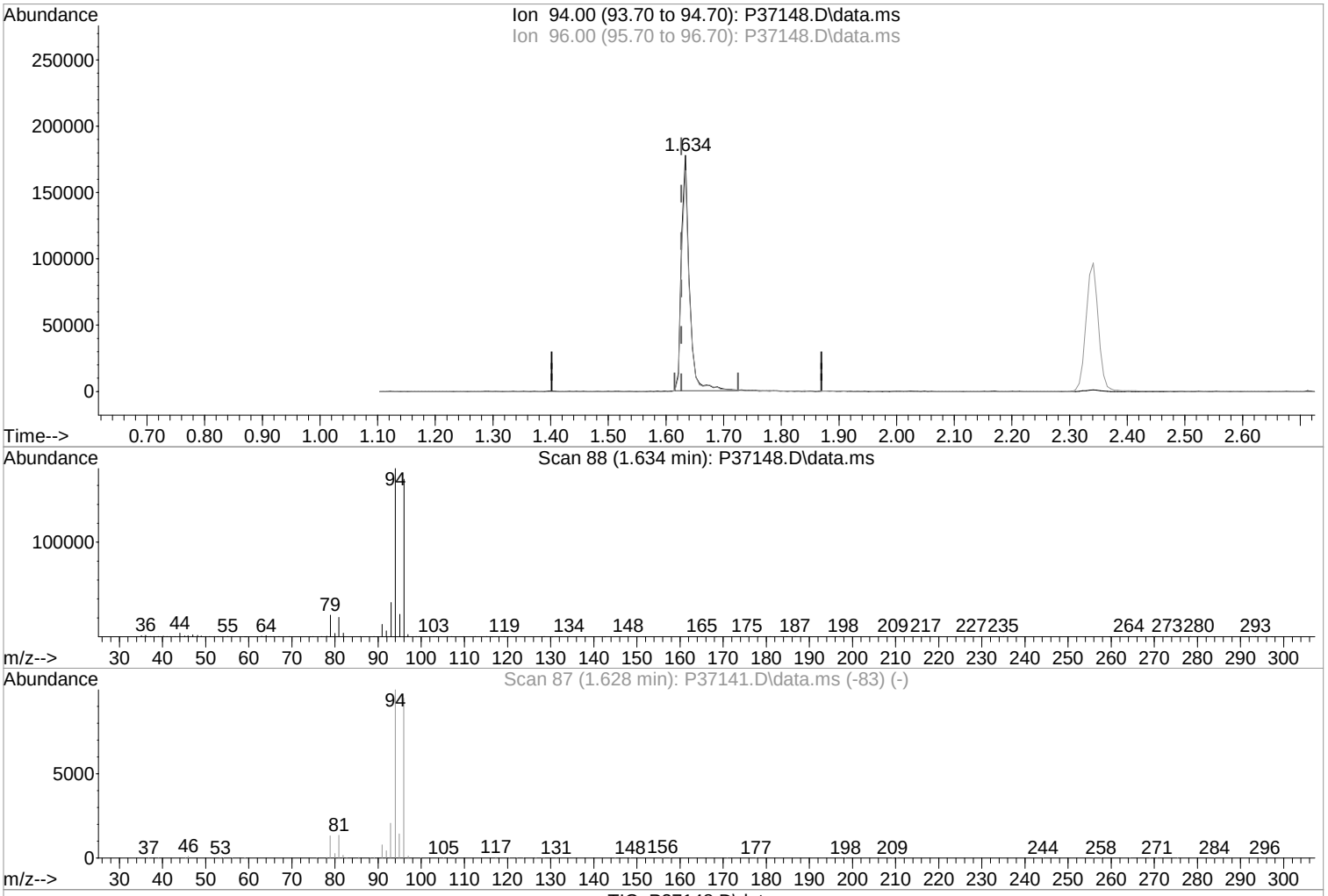
Poor integration.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 13 17:57:25 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration



TIC: P37148.D\data.ms

(5) Bromomethane (P)

1.634min (+0.007) 49.32 ppb

response 171405

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	93.53
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

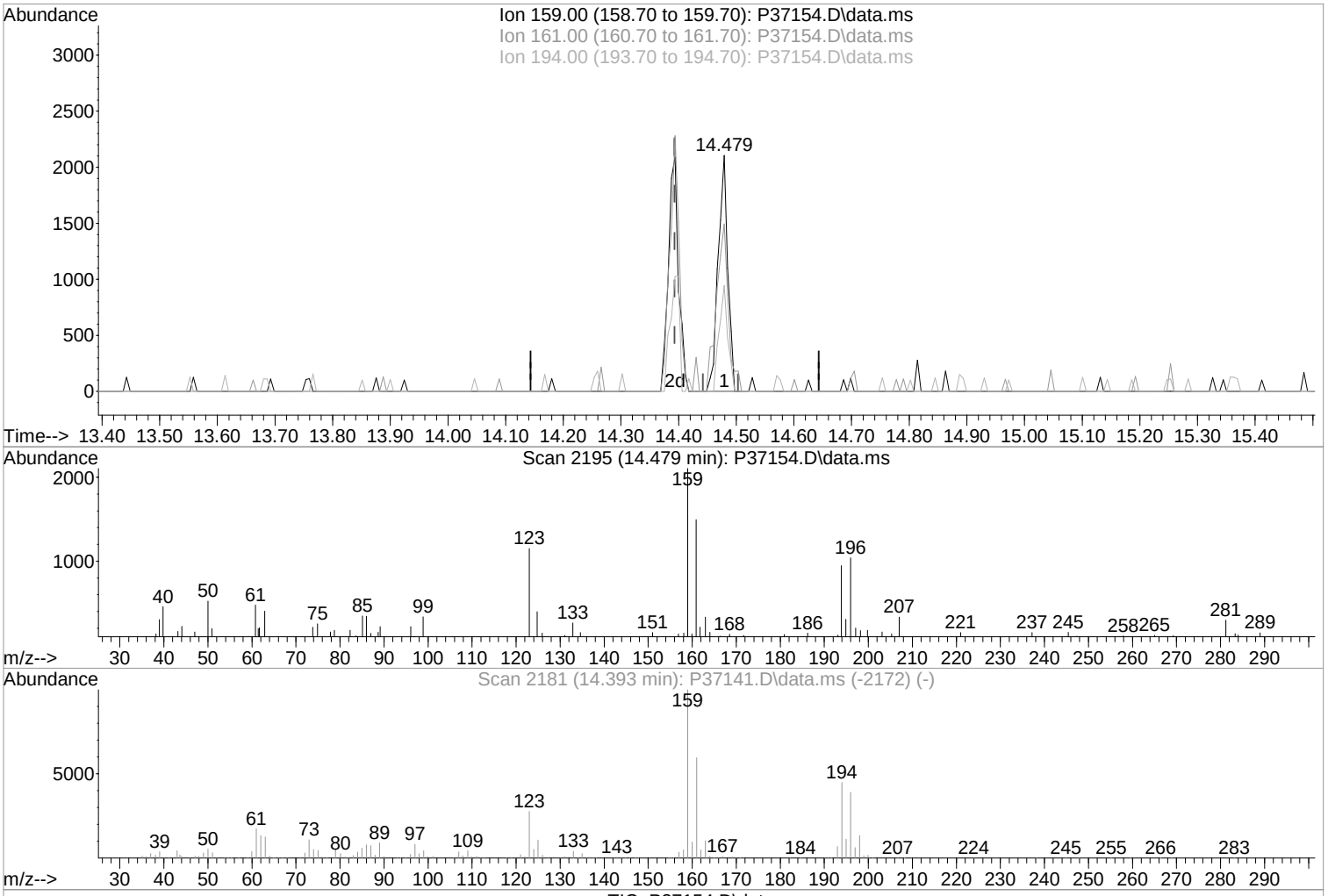
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37154.D
Acq On : 13 Jul 2020 6:18 pm
Operator : K.Ruest
Sample : ICV-50 Inst : MSVOA-12
Misc : FREONS ONLY
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 14 09:25:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration



TIC: P37154.D\data.ms

(119) 2,4,5-Trichlorotolene

14.479min (+0.085) 0.73 ppb

response 2459

Ion	Exp%	Act%
159.00	100	100
161.00	59.50	70.99
194.00	44.80	44.92
0.00	0.00	0.00

Manual Integration:

Before

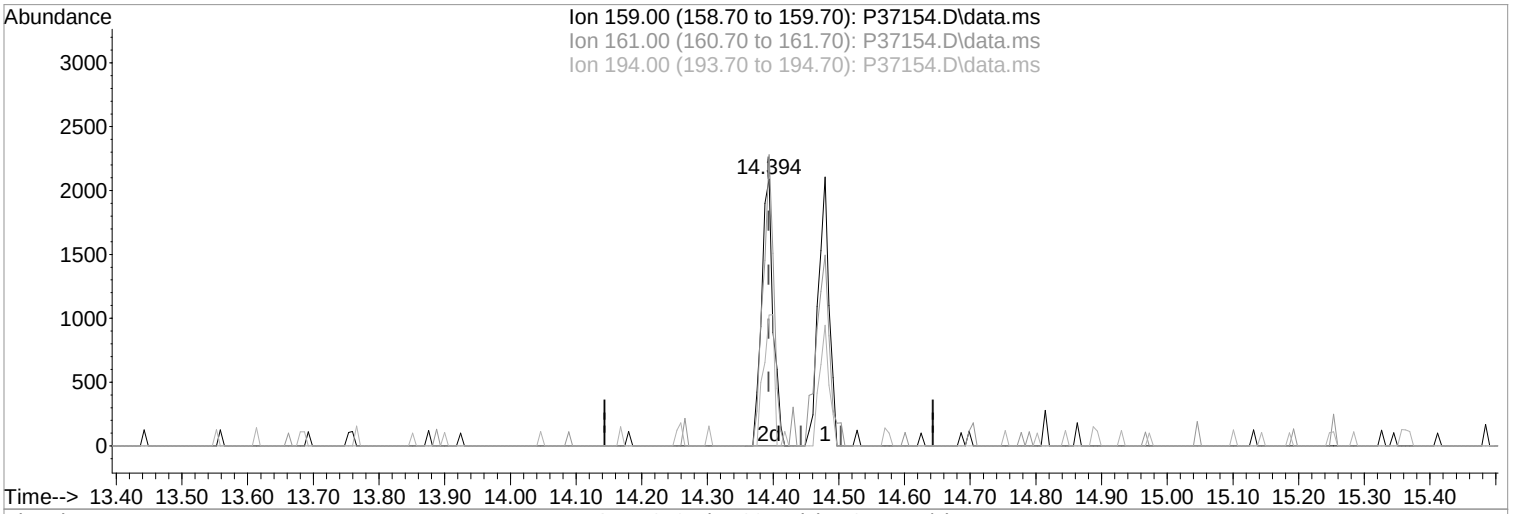
07/14/20

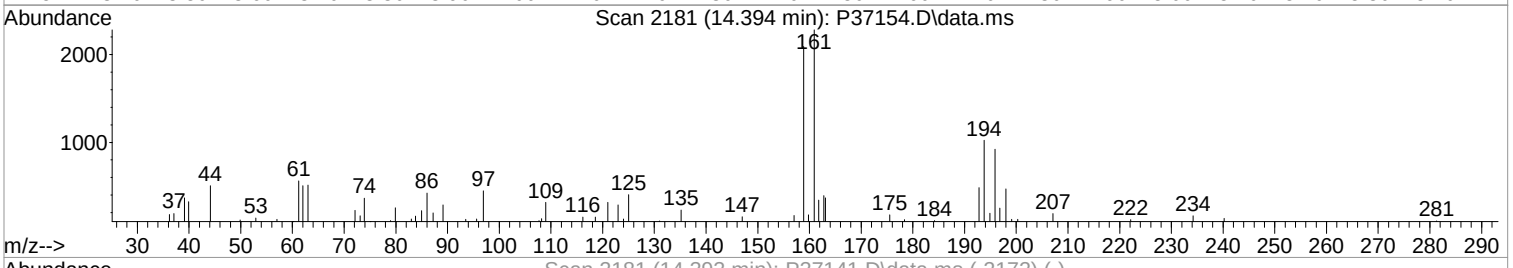
1st 07/14/20
2nd 07/14/20

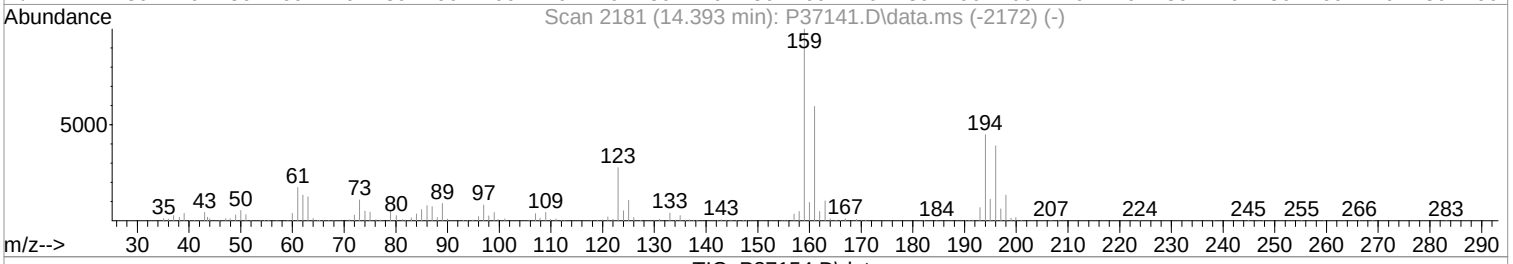
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37154.D
Acq On : 13 Jul 2020 6:18 pm
Operator : K.Ruest
Sample : ICV-50 Inst : MSVOA-12
Misc : FREONS ONLY
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 14 09:25:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration







TIC: P37154.D\data.ms

(119) 2,4,5-Trichlorotolene

14.394min (+0.000) 0.76 ppb m

response 2556

Ion	Exp%	Act%
159.00	100	100
161.00	59.50	109.09#
194.00	44.80	49.02
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

07/14/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37154.D
Acq On : 13 Jul 2020 6:18 pm
Operator : K.Ruest
Sample : ICV-50 Inst : MSVOA-12
Misc : FREONS ONLY
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 14 09:27:36 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration

F123/123a only

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	324637	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	512010	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	446825	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	206697	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.334	113	144916	49.29	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.58%				
48) surr1,1,2-dichloroetha...	5.859	65	205934	50.60	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.20%				
65) SURR3,Toluene-d8	8.322	98	680204	49.78	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.56%				
70) SURR2,BFB	10.870	95	232852	46.25	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 92.50%				
Target Compounds							Qvalue
7) Freon 21	1.872	67	218906	40.63	ppb		100
10) Freon 123a	2.164	67	134282	36.15	ppb		88
11) Freon 123	2.219	83	171809	39.20	ppb		97
13) 1,1-Diclethene	2.341	96	541	0.22	ppb	#	50
14) Freon 113	2.347	101	614	0.21	ppb		82
15) Acetone	2.414	43	4024	0.47	ppb		88
16) 2-Propanol	2.548	45	457693	1095.54	ppb		100
17) Iodomethane	2.487	142	889	0.32	ppb		71
21) Methyl Acetate	2.719	43	203916	42.24	ppb		96
26) trans-1,2-Dichloroethene	3.091	96	688	0.24	ppb	#	72
39) Tetrahydrofuran	4.993	42	2526	1.30	ppb		98
40) Chloroform	5.048	83	362	Below Cal			94
44) Cyclohexane	5.371	41	168285	50.12	ppb		97
52) n-Heptane	6.371	43	1342	0.29	ppb		90
53) 1-Butanol	6.938	56	1835	9.30	ppb	#	67
55) Methylcyclohexane	7.060	55	229862	50.45	ppb		98
72) Tetrachloroethene	8.968	164	947	0.35	ppb	#	59
76) N-Butyl Acetate	9.291	43	380777	51.68	ppb		100
78) Chlorobenzene	9.834	112	2084	0.21	ppb		95
79) 3-CBTF	9.846	180	1334	0.29	ppb		94
80) 4-CBTF	9.894	180	1383	0.33	ppb		84
83) (m+p)Xylene	10.053	106	2339	0.37	ppb	#	77
88) 2-CBTF	10.663	180	1278	0.30	ppb		90
95) n-Propylbenzene	11.089	91	5855	0.36	ppb		96
96) 2-Chlorotoluene	11.156	91	3066	0.29	ppb		85
97) 3-Chlorotoluene	11.211	91	2852	0.28	ppb	#	63
98) 4-Chlorotoluene	11.254	91	3433	0.29	ppb		88
99) 1,3,5-Trimethylbenzene	11.242	105	2827	0.23	ppb		80
100) tert-Butylbenzene	11.516	119	2124	0.21	ppb		89
101) 1,2,4-Trimethylbenzene	11.553	105	3174	0.26	ppb		97
102) 3,4-DCBTF	11.614	214	1494	0.44	ppb	#	76
103) sec-Butylbenzene	11.693	105	3916	0.27	ppb		85
104) p-Isopropyltoluene	11.821	119	3502	0.28	ppb		81
105) 1,3-Dclbenz	11.784	146	2657	0.36	ppb		97
106) 1,4-Dclbenz	11.858	146	2795	0.38	ppb	#	80
107) 2,4-DCBTF	11.912	214	1527	0.49	ppb	#	88
108) 2,5-DCBTF	11.949	214	1458	0.42	ppb	#	60
109) n-Butylbenzene	12.150	91	5090	0.43	ppb		84
110) 1,2-Dclbenz	12.156	146	2076	0.28	ppb		92

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37154.D
Acq On : 13 Jul 2020 6:18 pm
Operator : K.Ruest
Sample : ICV-50 Inst : MSVOA-12
Misc : FREONS ONLY
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 14 09:27:36 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration

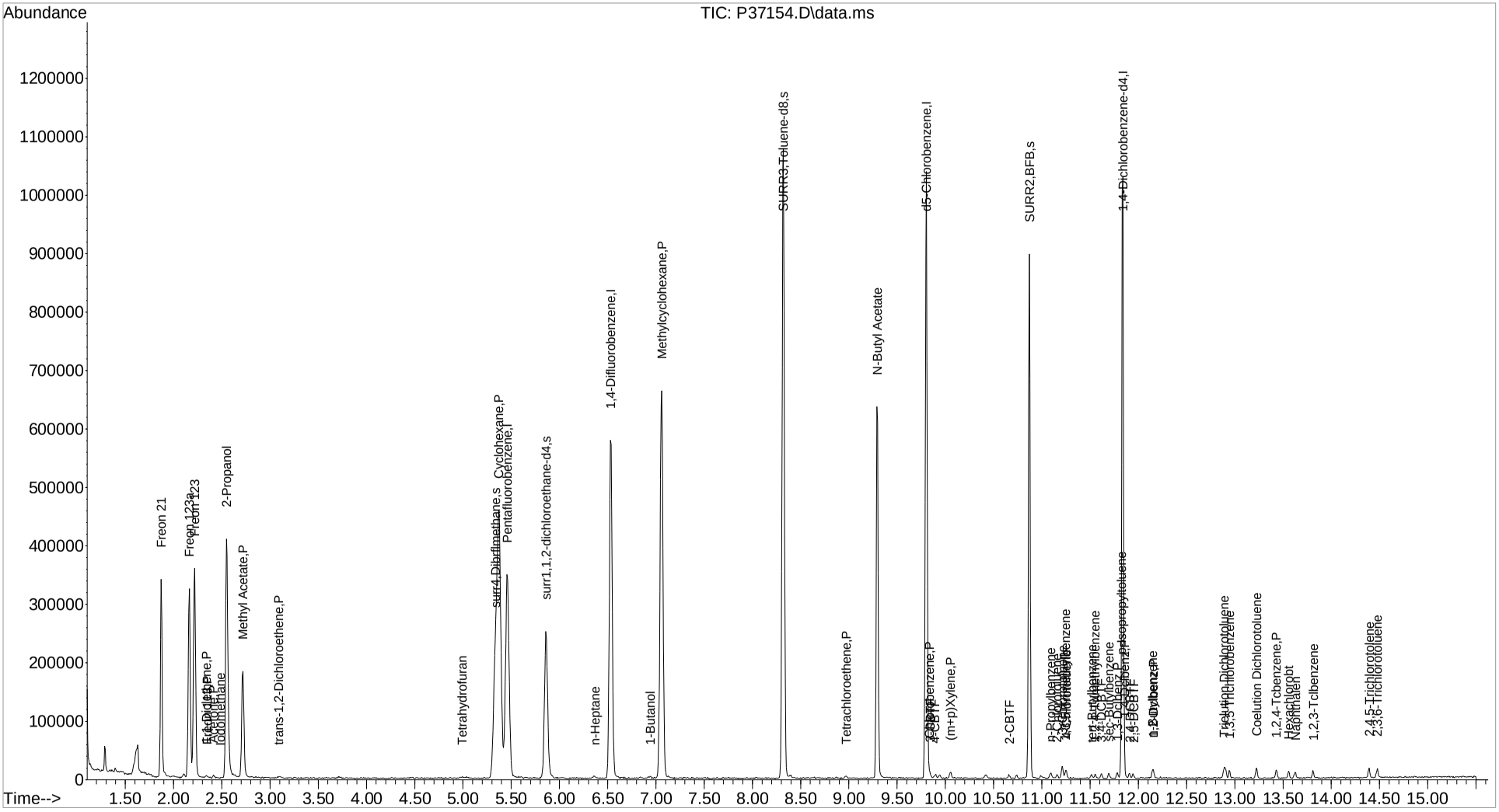
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
112) Trielution Dichlorotol...	12.888	125	8278	1.40	ppb	#	80
113) 1,3,5 Trichlorobenzene	12.943	180	2807	0.55	ppb	#	80
114) Coelution Dichlorotoluene	13.223	125	5564	0.85	ppb		92
115) 1,2,4-Tcbenzene	13.430	180	3288	0.62	ppb		93
116) Hexachlorobt	13.558	225	1792	0.84	ppb		89
117) Naphthalen	13.625	128	5709	0.37	ppb		91
118) 1,2,3-Tclbenzene	13.814	180	2744	0.50	ppb		88
119) 2,4,5-Trichlorotolene	14.394	159	2556m	0.76	ppb		
120) 2,3,6-Trichlorotoluene	14.479	159	2459	0.80	ppb		90

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37154.D
Acq On : 13 Jul 2020 6:18 pm
Operator : K.Ruest
Sample : ICV-50 Inst : MSVOA-12
Misc : FREONS ONLY
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 14 09:27:36 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration



1st 07/14/20
2nd 07/14/20

ALS Group USA, Corp.

DBA ALS Environmetal

QC/QC Report

Date Analyzed: 7/13/20 11:13

ICAL Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\071320\P37135.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	19.3	31112	PASS
75	95	30	60	48.1	77408	PASS
95	95	100	100	100.0	161024	PASS
96	95	5	9	6.9	11059	PASS
173	174	0	2	1.1	1384	PASS
174	95	50	120	79.5	128075	PASS
175	174	5	9	6.9	8837	PASS
176	174	95	101	98.0	125485	PASS
177	176	5	9	5.6	7080	PASS

Sample Name	Lab Code	File ID:	Date Analyzes:	Q
0.5ppb	0.5ppb	I:\ACQUDATA\msvoa12\Data\071320\P37136.D	7/13/20 11:45	
1.0ppb	1.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37137.D	7/13/20 12:07	
2.0ppb	2.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37138.D	7/13/20 12:29	
5.0ppb	5.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37139.D	7/13/20 12:51	
20ppb	20ppb	I:\ACQUDATA\msvoa12\Data\071320\P37140.D	7/13/20 13:12	
50ppb	50ppb	I:\ACQUDATA\msvoa12\Data\071320\P37141.D	7/13/20 13:34	
100ppb	100ppb	I:\ACQUDATA\msvoa12\Data\071320\P37142.D	7/13/20 13:56	
150ppb	150ppb	I:\ACQUDATA\msvoa12\Data\071320\P37143.D	7/13/20 14:18	
200ppb	200ppb	I:\ACQUDATA\msvoa12\Data\071320\P37144.D	7/13/20 14:40	
ICV50	ICV50	I:\ACQUDATA\msvoa12\Data\071320\P37148.D	7/13/20 16:07	

ALS Group USA, Corp.

DBA ALS Environmetal

QC/QC Report

Date Analyzed: 7/13/20 17:34

ICAL Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\071320\P37152.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	19.0	29493	PASS
75	95	30	60	51.0	79178	PASS
95	95	100	100	100.0	155200	PASS
96	95	5	9	6.5	10044	PASS
173	174	0	2	1.0	1237	PASS
174	95	50	120	77.9	120861	PASS
175	174	5	9	7.7	9306	PASS
176	174	95	101	95.6	115547	PASS
177	176	5	9	6.8	7905	PASS

Sample Name	Lab Code	File ID:	Date Analyzes:	Q
LCS-FP	LCS-FP	I:\ACQUDATA\MSVOA12\DATA\071320\P37153.D	7/13/20 17:56	
ICV-50	ICV-50	I:\ACQUDATA\MSVOA12\DATA\071320\P37154.D	7/13/20 18:18	

Analysis: 8260 waters | Analyst: K. Quest | pH strips: 221419 | Tune Method: W071320

Date: 7/13/2020 · Run#2 | Balance ID: N/A | ResCl strips: N/A | Run Method: ↓

Instr. 12 | 50 mL Class A used for dilution FV | Syringes: 205000 | LIMS Run#: 6868867

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Tier	Vial	pH	File#	OK?	Comments
16	~~15~~ TUNE		R2007451 · 01				(12)	~~P37150~~	YT	P37151 17:13 (auto)
	17 CCV		02					P37152	YC	
	18 LCS · FP		03					P37153	YQ	11DCE ↑ + MTBE ↑
	19 ICV · SD (Freons only)		—					P37154	YQ	F123/123A only
	20 MBLK · UNP		—					P37155	YB	
	21 MBLK · FP		04					P37156	YB	
	22 R2005574 · 005	1.0		19760	2	1	12	P37157	Y	
	23 R2005576 · 004	1.0		9443	2	1	12	P37158	Y	
	24 001	1.0				1	12	P37159	Y	
	25 002	1.0				1	12	P37160	Y	
	26 003	1.0				1	12	P37161	Y	
	27 R2005701 · 005	1.0		15626	4	1	12	P37162	Y	
	28 001	1.0				1	12	P37163	(Y)	rpt 25
	29 002	1.0				1	12	P37164	(N)	rpt c/o
	30 003	1.0				1	12	P37165	(N)	
	31 004	1.0				1	12	P37166	(N)	
	32 006	1.0				1	12	P37167	(Y)	rpt SD
	33 R2005635 · 006	1.0				1	12	P37168	(N)	rpt c/o
	34 001	1.0				1	12	P37169		
	35 002	1.0				1	12	P37170		
	36 003	1.0				1	12	P37171		
	37 005	1.0				1	12	P37172		
	38 007	1.0				1	12	P37173		
	39 004	1.0				1	12	P37174		
	40 MS 004	1.0				2	12	~~P37175~~	YQ	P37175 (12)
	41 MSD 004	1.0				3	12	P37176	YQ	2:19 ✓
	42 BLK					—	—	P37177	—	
	1 (7/14/2020)					—	—	P37178	—	↑ baseline - bad gastank?!
	2					—	—	P37179	—	
	3					—	—	P37180	—	
	1 BLK					—	—	P37181	—	
	2 ↓					—	—	P37182	—	

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

Combined IS/Surr :

500 Primary Qc+ : 2096.14

Primary Fr+ : 210841 | 5 mL → 50 mL

Primary T6 : 210630 | = CCV

Primary HSL : 210631

Primary :

200 Secondary Fr+ : 210514 · 5 mL

500 Secondary Qc+ : 210507

Secondary T6 : 210633 | 2 mL | = LCS

Secondary HSL : 210632

Secondary :

- 10.6 uL

4.2 mL

Surrogate SD : 210628

Internal Std SD : 210629

Reagents:

4 7 mL vial = MS/D

Analysis: 8260+624 Water | Analyst: K. Quest | pH strips: N/A | Tune Method: W071320

Date: 7/13/2020 | Balance ID: N/A | ResCl strips: N/A | Run Method: ↓

Instr. 12 | 50 mL Class A used for dilution FV | Syringes: 202106 + 205000 | LIMS Run# : ICAL

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./			RL	Tier	Vial	pH	File#	OK?	Comments
				Atomx								
1	BLK									P37131		
2	↓									P37132		
3										P37133		
4	TUNE									P37134	YT	10:43 (auto)
1	IBLK	(5ppm)	(500ppm)	5mL 5D	FV					P37135	YB	
1	0.5 ppb	5mL	—	—	5Dmb					P37136	Y	
2	1.0	10mL	—	—						P37137	Y	
3	2.0	20mL	—	—						P37138	Y	
4	5.0	50mL	—	1mL						P37139	Y	
5	20	—	2mL	2mL						P37140	Y	
6	50	—	5mL	5mL						P37141	Y	
7	100	—	10mL	10mL						P37142	Y	
8	150	—	15mL	20mL						P37143	Y	
9	200	—	20mL	—						P37144	Y	
10	BLK									P37145	—	
11	↓									P37146	—	
12	↓									P37147	—	
13	ICV · 5D									P37148	YQ	
14	BLK									P37149		
15	ICV · 5D - Freons only									P37150	(N)	wrong shoot (20; instead of 5D)

KQR 7/13/2020

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

500 Primary OCC+ : 209614
↓ Primary Fr+ : 210811 | 10uL → 1.0 mg/l = 5ppm
Primary T6 : 210630
Primary HSL : 210631
Primary : | :

200 Secondary Fr+ : 210514 - 12.5uL
500 Secondary OCC+ : 210507
↓ Secondary T6 : 210633 | 5mL
Secondary HSL : 210632
Secondary : | :

5Dmb = ~~CC~~ (KQ) ICV · 5D

Combined IS/Surr :
Surrogate 5D : 210628
Internal Std 5D : 210629
Reagents:

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China **Calibration Date:** 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094 **Signal ID:** 1
Instrument ID: R-MS-12

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC2000094-01	0.5ppb	I:\ACQUDATA\msvoa12\Data\071320\P37136.D	07/13/2020 11:45
02	RC2000094-02	1.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37137.D	07/13/2020 12:07
03	RC2000094-03	2.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37138.D	07/13/2020 12:29
04	RC2000094-04	5.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37139.D	07/13/2020 12:51
05	RC2000094-05	20ppb	I:\ACQUDATA\msvoa12\Data\071320\P37140.D	07/13/2020 13:12
06	RC2000094-06	50ppb	I:\ACQUDATA\msvoa12\Data\071320\P37141.D	07/13/2020 13:34
07	RC2000094-07	100ppb	I:\ACQUDATA\msvoa12\Data\071320\P37142.D	07/13/2020 13:56
08	RC2000094-08	150ppb	I:\ACQUDATA\msvoa12\Data\071320\P37143.D	07/13/2020 14:18
09	RC2000094-09	200ppb	I:\ACQUDATA\msvoa12\Data\071320\P37144.D	07/13/2020 14:40

Analyte

1,1,1-Trichloroethane (TCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8071	02	1.000	0.7859	03	2.000	0.6661	04	5.000	0.7081
05	20.000	0.77	06	50.000	0.7909	07	100.000	0.6795	08	150.000	0.5739
09	200.000	0.7246									

1,1,2,2-Tetrachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.158	02	1.000	1.199	03	2.000	1.04	04	5.000	1.103
05	20.000	1.162	06	50.000	1.147	07	100.000	1.109	08	150.000	1.035
09	200.000	1.091									

1,1,2-Trichloro-1,2,2-trifluoroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4929	02	1.000	0.489	03	2.000	0.4697	04	5.000	0.4866
05	20.000	0.4741	06	50.000	0.477	07	100.000	0.4076	08	150.000	0.3378
09	200.000	0.4203									

1,1,2-Trichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3491	02	1.000	0.3768	03	2.000	0.2909	04	5.000	0.3463
05	20.000	0.357	06	50.000	0.359	07	100.000	0.3463	08	150.000	0.3099
09	200.000	0.3368									

1,1-Dichloroethane (1,1-DCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.051	02	1.000	1.163	03	2.000	0.9906	04	5.000	1.022
05	20.000	1.041	06	50.000	1.054	07	100.000	0.909	08	150.000	0.7599
09	200.000	0.9438									

1,1-Dichloroethene (1,1-DCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.444	02	1.000	0.4319	03	2.000	0.387	04	5.000	0.3699
05	20.000	0.4116	06	50.000	0.4141	07	100.000	0.356	08	150.000	0.2962
09	200.000	0.3691									

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China **Calibration Date:** 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

1,2,3-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	1.416	03	2.000	1.201	04	5.000	1.298	05	20.000	1.318
06	50.000	1.405	07	100.000	1.432	08	150.000	1.235	09	200.000	1.387

1,2,4-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.277	02	1.000	1.285	03	2.000	1.136	04	5.000	1.219
05	20.000	1.294	06	50.000	1.394	07	100.000	1.399	08	150.000	1.241
09	200.000	1.384									

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.2232	03	2.000	0.2194	04	5.000	0.2189	05	20.000	0.2346
06	50.000	0.2648	07	100.000	0.2778	08	150.000	0.2649	09	200.000	0.2951

1,2-Dibromoethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3488	02	1.000	0.443	03	2.000	0.343	04	5.000	0.3767
05	20.000	0.4045	06	50.000	0.4046	07	100.000	0.3833	08	150.000	0.349
09	200.000	0.3916									

1,2-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.062	02	1.000	1.907	03	2.000	1.713	04	5.000	1.8
05	20.000	1.783	06	50.000	1.822	07	100.000	1.744	08	150.000	1.57
09	200.000	1.718									

1,2-Dichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5636	02	1.000	0.5307	03	2.000	0.4657	04	5.000	0.5017
05	20.000	0.5463	06	50.000	0.5234	07	100.000	0.4914	08	150.000	0.4396
09	200.000	0.4781									

1,2-Dichloropropane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4307	02	1.000	0.4003	03	2.000	0.3358	04	5.000	0.3679
05	20.000	0.398	06	50.000	0.4008	07	100.000	0.3822	08	150.000	0.3461
09	200.000	0.3778									

1,3-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.105	02	1.000	1.913	03	2.000	1.694	04	5.000	1.711
05	20.000	1.78	06	50.000	1.756	07	100.000	1.701	08	150.000	1.536
09	200.000	1.684									

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.884	02	1.000	2.155	03	2.000	1.687	04	5.000	1.778

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China **Calibration Date:** 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	1.808	06	50.000	1.813	07	100.000	1.739	08	150.000	1.581
09	200.000	1.714									

1,4-Dioxane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.008107	04	100.000	0.006782	05	400.000	0.007935	06	1000.000	0.007935
07	2000.000	0.008155	08	3000.000	0.007713	09	4000.000	0.008752			

2-Butanone (MEK)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.4127	05	20.000	0.4204	06	50.000	0.3974	07	100.000	0.3781
08	150.000	0.33	09	200.000	0.3938						

2-Hexanone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.3596	04	5.000	0.4468	05	20.000	0.4563	06	50.000	0.4566
07	100.000	0.4551	08	150.000	0.4544	09	200.000	0.4821			

4-Bromofluorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.531	05	20.000	0.4623	06	50.000	0.4991	07	100.000	0.4892
08	200.000	0.4768									

4-Methyl-2-pentanone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.4577	04	5.000	0.4785	05	20.000	0.536	06	50.000	0.5391
07	100.000	0.5328	08	150.000	0.5165	09	200.000	0.5467			

Acetone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.0	0.5279	04	5.000	0.4314	05	20.000	0.3372	06	50.000	0.2818
07	100.000	0.2453	08	150.000	0.2032						

Benzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.384	02	1.000	1.632	03	2.000	1.457	04	5.000	1.432
05	20.000	1.499	06	50.000	1.528	07	100.000	1.418	08	150.000	1.26
09	200.000	1.384									

Bromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.356	02	1.000	0.4133	03	2.000	0.3332	04	5.000	0.3533
05	20.000	0.3675	06	50.000	0.3519	07	100.000	0.3101	08	150.000	0.2636
09	200.000	0.3235									

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China **Calibration Date:** 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

Bromodichloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3549	02	1.000	0.39	03	2.000	0.3923	04	5.000	0.3711
05	20.000	0.4273	06	50.000	0.4556	07	100.000	0.4284	08	150.000	0.3853
09	200.000	0.4343									

Bromoform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.422	03	2.000	0.3744	04	5.000	0.3569	05	20.000	0.4039
06	50.000	0.4266	07	100.000	0.4331	08	150.000	0.4144	09	200.000	0.4629

Bromomethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.569	03	2.000	0.5504	04	5.000	0.6469	05	20.000	0.4826
06	50.000	0.4565	07	100.000	0.4187	08	150.000	0.4755	09	200.000	0.5555

Carbon Disulfide

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.258	02	1.000	1.845	03	2.000	1.554	04	5.000	1.303
05	20.000	1.412	06	50.000	1.365	07	100.000	1.234	08	150.000	1.042
09	200.000	1.261									

Carbon Tetrachloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2778	02	1.000	0.3166	03	2.000	0.2607	04	5.000	0.3249
05	20.000	0.3469	06	50.000	0.3814	07	100.000	0.3528	08	150.000	0.3264
09	200.000	0.3675									

Chlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.237	02	1.000	1.149	03	2.000	1.085	04	5.000	1.137
05	20.000	1.162	06	50.000	1.151	07	100.000	1.068	08	150.000	0.9724
09	200.000	1.075									

Chloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4602	02	1.000	0.365	03	2.000	0.3438	04	5.000	0.3373
05	20.000	0.3396	06	50.000	0.345	07	100.000	0.3516	08	150.000	0.3502
09	200.000	0.332									

Chloroform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.16	02	1.000	1.071	03	2.000	0.8763	04	5.000	0.9174
05	20.000	0.9428	06	50.000	0.9445	07	100.000	0.8214	08	150.000	0.6677

Chloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7616	02	1.000	0.6349	03	2.000	0.6692	04	5.000	0.6935
05	20.000	0.734	06	50.000	0.7565	07	100.000	0.6758	08	150.000	0.5736

Client: The LiRo Group
Project: Buffalo China

Service Request: R2007055
Calibration Date: 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
Instrument ID: R-MS-12

Signal ID: 1

Analyte

Chloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
09	200.000	0.7521									

Cyclohexane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.341	03	2.000	0.3366	04	5.000	0.3262	05	20.000	0.312
06	50.000	0.3399	07	100.000	0.3415	08	150.000	0.2951	09	200.000	0.3306

Dibromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2289	02	1.000	0.2837	03	2.000	0.2672	04	5.000	0.2971
05	20.000	0.3207	06	50.000	0.3502	07	100.000	0.3461	08	150.000	0.3342
09	200.000	0.3704									

Dibromofluoromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.2959	05	20.000	0.2735	06	50.000	0.297	07	100.000	0.296
08	200.000	0.2731									

Dichlorodifluoromethane (CFC 12)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6507	02	1.000	0.6409	03	2.000	0.4987	04	5.000	0.4355
05	20.000	0.6177	06	50.000	0.6342	07	100.000	0.5268	08	150.000	0.4463
09	200.000	0.5563									

Dichloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6115	02	1.000	0.7034	03	2.000	0.5467	04	5.000	0.5687
05	20.000	0.5665	06	50.000	0.5639	07	100.000	0.4917	08	150.000	0.406
09	200.000	0.5016									

Ethylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6455	02	1.000	0.5669	03	2.000	0.5403	04	5.000	0.5583
05	20.000	0.6178	06	50.000	0.6153	07	100.000	0.5833	08	150.000	0.5336
09	200.000	0.6051									

Isopropylbenzene (Cumene)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.98	02	1.000	3.853	03	2.000	3.267	04	5.000	3.536
05	20.000	3.61	06	50.000	3.606	07	100.000	3.291	08	150.000	2.918
09	200.000	3.004									

Methyl Acetate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.8867	03	2.000	0.7552	04	5.000	0.6947	05	20.000	0.7398
06	50.000	0.7637	07	100.000	0.7407	08	150.000	0.6245	09	200.000	0.7429

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China **Calibration Date:** 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

Methyl tert-Butyl Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.717	02	1.000	1.948	03	2.000	1.668	04	5.000	1.782
05	20.000	1.954	06	50.000	1.965	07	100.000	1.766	08	150.000	1.479
09	200.000	1.826									

Methylcyclohexane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.4881	03	2.000	0.3871	04	5.000	0.4106	05	20.000	0.4315
06	50.000	0.4698	07	100.000	0.4779	08	150.000	0.4189	09	200.000	0.4755

Styrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.113	02	1.000	1.124	03	2.000	0.9876	04	5.000	1.138
05	20.000	1.233	06	50.000	1.312	07	100.000	1.209	08	150.000	1.117
09	200.000	1.224									

Tetrachloroethene (PCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3536	02	1.000	0.32	03	2.000	0.2945	04	5.000	0.314
05	20.000	0.3118	06	50.000	0.314	07	100.000	0.283	08	150.000	0.2631
09	200.000	0.2943									

Toluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.538	02	1.000	1.687	03	2.000	1.465	04	5.000	1.53
05	20.000	1.617	06	50.000	1.663	07	100.000	1.497	08	150.000	1.333
09	200.000	1.429									

Toluene-d8

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	1.448	05	20.000	1.282	06	50.000	1.375	07	100.000	1.351
08	200.000	1.216									

Trichloroethene (TCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3868	02	1.000	0.4229	03	2.000	0.3778	04	5.000	0.353
05	20.000	0.3568	06	50.000	0.3579	07	100.000	0.3328	08	150.000	0.301
09	200.000	0.3348									

Trichlorofluoromethane (CFC 11)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7973	02	1.000	0.682	03	2.000	0.6218	04	5.000	0.6455
05	20.000	0.7523	06	50.000	0.7174	07	100.000	0.6277	08	150.000	0.5369
09	200.000	0.6567									

Vinyl Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6783	02	1.000	0.6335	03	2.000	0.5678	04	5.000	0.6654

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China **Calibration Date:** 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

Vinyl Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	0.6916	06	50.000	0.7386	07	100.000	0.6506	08	150.000	0.5467
09	200.000	0.6881									

cis-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5812	02	1.000	0.6992	03	2.000	0.6061	04	5.000	0.5993
05	20.000	0.5998	06	50.000	0.611	07	100.000	0.5238	08	150.000	0.4342
09	200.000	0.5388									

cis-1,3-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.575	02	1.000	0.5068	03	2.000	0.491	04	5.000	0.4997
05	20.000	0.5617	06	50.000	0.6072	07	100.000	0.5958	08	150.000	0.5365
09	200.000	0.5913									

m,p-Xylenes

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.7145	02	2.000	0.7397	03	4.000	0.6183	04	10.000	0.681
05	40.000	0.7496	06	100.000	0.77	07	200.000	0.695	08	300.000	0.6392
09	400.000	0.6976									

o-Xylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5724	02	1.000	0.7441	03	2.000	0.5912	04	5.000	0.7311
05	20.000	0.7061	06	50.000	0.7555	07	100.000	0.6912	08	150.000	0.6445
09	200.000	0.7191									

trans-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4221	02	1.000	0.4928	03	2.000	0.4876	04	5.000	0.4686
05	20.000	0.4831	06	50.000	0.4953	07	100.000	0.425	08	150.000	0.3458
09	200.000	0.4327									

trans-1,3-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5204	02	1.000	0.4418	03	2.000	0.4159	04	5.000	0.4609
05	20.000	0.512	06	50.000	0.5473	07	100.000	0.5533	08	150.000	0.5064
09	200.000	0.5571									

Client: The LiRo Group
Project: Buffalo China

Service Request: R2007055
Calibration Date: 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
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	10.4	≤20	0.7229	0.100
1,1,2,2-Tetrachloroethane	TRG	Average RF	% RSD	5.0	≤20	1.116	0.300
1,1,2-Trichloro-1,2,2-trifluoroethane	TRG	Average RF	% RSD	11.6	≤20	0.4505	0.100
1,1,2-Trichloroethane	TRG	Average RF	% RSD	7.7	≤20	0.3413	0.100
1,1-Dichloroethane (1,1-DCA)	TRG	Average RF	% RSD	11.4	≤20	0.9926	0.200
1,1-Dichloroethene (1,1-DCE)	TRG	Average RF	% RSD	11.7	≤20	0.3866	0.100
1,2,3-Trichlorobenzene	TRG	Average RF	% RSD	6.5	≤20	1.336	
1,2,4-Trichlorobenzene	TRG	Average RF	% RSD	6.9	≤20	1.292	0.200
1,2-Dibromo-3-chloropropane (DBCP)	TRG	Average RF	% RSD	11.8	≤20	0.2498	0.050
1,2-Dibromoethane	TRG	Average RF	% RSD	8.6	≤20	0.3827	0.100
1,2-Dichlorobenzene	TRG	Average RF	% RSD	7.6	≤20	1.791	0.400
1,2-Dichloroethane	TRG	Average RF	% RSD	8.0	≤20	0.5045	0.100
1,2-Dichloropropane	TRG	Average RF	% RSD	7.7	≤20	0.3822	0.100
1,3-Dichlorobenzene	TRG	Average RF	% RSD	9.2	≤20	1.764	0.600
1,4-Dichlorobenzene	TRG	Average RF	% RSD	8.9	≤20	1.795	0.500
1,4-Dioxane	TRG	Average RF	% RSD	7.5	≤20	0.007911	
2-Butanone (MEK)	TRG	Average RF	% RSD	8.3	≤20	0.3887	0.05
2-Hexanone	TRG	Average RF	% RSD	8.8	≤20	0.4444	0.05
4-Bromofluorobenzene	SURR	Average RF	% RSD	5.3	≤20	0.4917	
4-Methyl-2-pentanone	TRG	Average RF	% RSD	6.6	≤20	0.5153	0.05
Acetone	TRG	Quadratic	COD	0.9997	≥0.99	0.3378	0.05
Benzene	TRG	Average RF	% RSD	7.2	≤20	1.444	0.500
Bromochloromethane	TRG	Average RF	% RSD	12.1	≤20	0.3414	
Bromodichloromethane	TRG	Average RF	% RSD	8.2	≤20	0.4044	0.200
Bromoform	TRG	Average RF	% RSD	8.1	≤20	0.4118	0.100
Bromomethane	TRG	Average RF	% RSD	14.3	≤20	0.5194	0.100
Carbon Disulfide	TRG	Linear	R2	0.9914	≥0.99	1.475	0.100
Carbon Tetrachloride	TRG	Average RF	% RSD	12.1	≤20	0.3283	0.05
Chlorobenzene	TRG	Average RF	% RSD	6.7	≤20	1.115	0.500
Chloroethane	TRG	Average RF	% RSD	11.0	≤20	0.3583	0.100
Chloroform	TRG	Quadratic	COD	0.9914	≥0.99	0.9251	0.200
Chloromethane	TRG	Average RF	% RSD	9.2	≤20	0.6946	0.100
Cyclohexane	TRG	Average RF	% RSD	5.0	≤20	0.3279	0.100
Dibromochloromethane	TRG	Average RF	% RSD	14.6	≤20	0.3109	0.100

Client: The LiRo Group
Project: Buffalo China

Service Request: R2007055
Calibration Date: 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
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	4.4	≤20	0.2871	
Dichlorodifluoromethane (CFC 12)	TRG	Average RF	% RSD	15.1	≤20	0.5563	0.100
Dichloromethane	TRG	Average RF	% RSD	15.0	≤20	0.5511	0.100
Ethylbenzene	TRG	Average RF	% RSD	6.5	≤20	0.5851	0.100
Isopropylbenzene (Cumene)	TRG	Average RF	% RSD	10.5	≤20	3.452	0.100
Methyl Acetate	TRG	Average RF	% RSD	9.9	≤20	0.7435	0.100
Methyl tert-Butyl Ether	TRG	Average RF	% RSD	8.9	≤20	1.789	0.100
Methylcyclohexane	TRG	Average RF	% RSD	8.4	≤20	0.4449	0.100
Styrene	TRG	Average RF	% RSD	8.1	≤20	1.162	0.300
Tetrachloroethene (PCE)	TRG	Average RF	% RSD	8.4	≤20	0.3053	0.200
Toluene	TRG	Average RF	% RSD	7.5	≤20	1.529	0.400
Toluene-d8	SURR	Average RF	% RSD	6.7	≤20	1.334	
Trichloroethene (TCE)	TRG	Average RF	% RSD	9.8	≤20	0.3582	0.200
Trichlorofluoromethane (CFC 11)	TRG	Average RF	% RSD	11.5	≤20	0.6708	0.100
Vinyl Chloride	TRG	Average RF	% RSD	9.4	≤20	0.6512	0.100
cis-1,2-Dichloroethene	TRG	Average RF	% RSD	12.7	≤20	0.5771	0.100
cis-1,3-Dichloropropene	TRG	Average RF	% RSD	8.1	≤20	0.5517	0.200
m,p-Xylenes	TRG	Average RF	% RSD	7.1	≤20	0.7005	0.100
o-Xylene	TRG	Average RF	% RSD	9.7	≤20	0.6839	0.300
trans-1,2-Dichloroethene	TRG	Average RF	% RSD	10.9	≤20	0.4503	0.100
trans-1,3-Dichloropropene	TRG	Average RF	% RSD	10.2	≤20	0.5017	0.100

Client: The LiRo Group **Service Request:** R2007055
Project: Buffalo China **Calibration Date:** 7/13/2020

Initial Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094 **Signal ID:** 1
Instrument ID: R-MS-12

#	Lab Code	Sample Name	File Location	Acquisition Date
10	RC2000094-10	ICV50	I:\ACQUDATA\msvoa12\Data\071320\P37148.D	07/13/2020 16:07
11	RC2000094-11	ICV-50	I:\ACQUDATA\msvoa12\Data\071320\P37154.D	07/13/2020 18:18

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	49.5	7.229E-1	7.162E-1	-0.929	±30	Average RF
1,1,2,2-Tetrachloroethane	50.0	52.6	1.116E0	1.173E0	5.14	±30	Average RF
1,1,2-Trichloroethane	50.0	49.6	3.413E-1	3.384E-1	-0.854	±30	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	47.6	4.505E-1	4.286E-1	-4.874	±30	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	48.4	9.926E-1	9.606E-1	-3.231	±30	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	55.9	3.866E-1	4.319E-1	11.70	±30	Average RF
1,2,3-Trichlorobenzene	50.0	47.6	1.336E0	1.271E0	-4.862	±30	Average RF
1,2,4-Trichlorobenzene	50.0	50.9	1.292E0	1.315E0	1.78	±30	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	50.9	2.498E-1	2.544E-1	1.82	±30	Average RF
1,2-Dibromoethane	50.0	49.7	3.827E-1	3.801E-1	-0.673	±30	Average RF
1,2-Dichlorobenzene	50.0	46.6	1.791E0	1.671E0	-6.708	±30	Average RF
1,2-Dichloroethane	50.0	47.2	5.045E-1	4.76E-1	-5.651	±30	Average RF
1,2-Dichloropropane	50.0	49.8	3.822E-1	3.804E-1	-0.455	±30	Average RF
1,3-Dichlorobenzene	50.0	47.3	1.764E0	1.67E0	-5.365	±30	Average RF
1,4-Dichlorobenzene	50.0	46.6	1.795E0	1.673E0	-6.797	±30	Average RF
1,4-Dioxane	1000	999	7.911E-3	7.902E-3	-0.111	±30	Average RF
2-Butanone (MEK)	50.0	50.8	3.887E-1	3.948E-1	1.55	±30	Average RF
2-Hexanone	50.0	46.7	4.444E-1	4.152E-1	-6.576	±30	Average RF
4-Methyl-2-pentanone	50.0	47.3	5.153E-1	4.879E-1	-5.321	±30	Average RF
Acetone	50.0	54.5	3.378E-1	3.107E-1	9.06	±30	Quadratic
Benzene	50.0	49.0	1.444E0	1.416E0	-1.908	±30	Average RF
Bromochloromethane	50.0	48.5	3.414E-1	3.31E-1	-3.033	±30	Average RF
Bromodichloromethane	50.0	49.7	4.044E-1	4.02E-1	-0.577	±30	Average RF
Bromoform	50.0	49.6	4.118E-1	4.085E-1	-0.808	±30	Average RF
Bromomethane	50.0	50.1	5.194E-1	5.207E-1	0.257	±30	Average RF
Carbon Disulfide	50.0	48.4	1.475E0	1.225E0	-3.206	±30	Linear
Carbon Tetrachloride	50.0	52.8	3.283E-1	3.469E-1	5.65	±30	Average RF
Chlorobenzene	50.0	49.0	1.115E0	1.093E0	-2.019	±30	Average RF
Chloroethane	50.0	43.7	3.583E-1	3.128E-1	-12.683	±30	Average RF
Chloroform	50.0	49.6	9.251E-1	8.57E-1	-0.843	±30	Quadratic
Chloromethane	50.0	52.5	6.946E-1	7.295E-1	5.02	±30	Average RF
Cyclohexane	50.0	45.8	3.279E-1	3.006E-1	-8.329	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: The LiRo Group
Project: Buffalo China

Service Request: R2007055
Calibration Date: 7/13/2020

Initial Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
Instrument ID: R-MS-12

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Dibromochloromethane	50.0	53.9	3.109E-1	3.353E-1	7.83	±30	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	50.4	5.563E-1	5.602E-1	0.702	±30	Average RF
Dichloromethane	50.0	47.7	5.511E-1	5.259E-1	-4.575	±30	Average RF
Ethylbenzene	50.0	49.3	5.851E-1	5.774E-1	-1.315	±30	Average RF
Isopropylbenzene (Cumene)	50.0	50.3	3.452E0	3.472E0	0.589	±30	Average RF
Methyl Acetate	50.0	40.6	7.435E-1	6.038E-1	-18.795	±30	Average RF
Methyl tert-Butyl Ether	50.0	53.7	1.789E0	1.921E0	7.33	±30	Average RF
Methylcyclohexane	50.0	47.5	4.449E-1	4.223E-1	-5.086	±30	Average RF
Styrene	50.0	50.9	1.162E0	1.184E0	1.87	±30	Average RF
Tetrachloroethene (PCE)	50.0	45.9	3.053E-1	2.801E-1	-8.280	±30	Average RF
Toluene	50.0	50.5	1.529E0	1.543E0	0.961	±30	Average RF
Trichloroethene (TCE)	50.0	46.0	3.582E-1	3.294E-1	-8.040	±30	Average RF
Trichlorofluoromethane (CFC 11)	50.0	46.4	6.708E-1	6.223E-1	-7.241	±30	Average RF
Vinyl Chloride	50.0	53.1	6.512E-1	6.913E-1	6.17	±30	Average RF
cis-1,2-Dichloroethene	50.0	48.4	5.771E-1	5.581E-1	-3.283	±30	Average RF
cis-1,3-Dichloropropene	50.0	49.9	5.517E-1	5.509E-1	-0.139	±30	Average RF
m,p-Xylenes	100	103	7.005E-1	7.181E-1	2.50	±30	Average RF
o-Xylene	50.0	51.7	6.839E-1	7.071E-1	3.39	±30	Average RF
trans-1,2-Dichloroethene	50.0	54.2	4.503E-1	4.879E-1	8.35	±30	Average RF
trans-1,3-Dichloropropene	50.0	50.2	5.017E-1	5.037E-1	0.404	±30	Average RF

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	49.8	4.917E-1	4.897E-1	-0.401	±30	Average RF
Dibromofluoromethane	50.0	50.7	2.871E-1	2.91E-1	1.37	±30	Average RF
Toluene-d8	50.0	50.6	1.334E0	1.349E0	1.13	±30	Average RF

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

Service Request: R2007055
Date Analyzed: 08/13/20 22:11

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\081320\P38477.D\
Signal ID: 1

Calibration Date: 7/13/2020
Calibration ID: RC2000094
Analysis Lot: 690913
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	46.2	0.7229	0.6679	-7.6	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	48.4	1.1158	1.0795	-3.3	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	50.3	0.3413	0.3434	0.6	NA	±20	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	45.9	0.4505	0.4132	-8.3	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	46.8	0.9926	0.9289	-6.4	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	46.1	0.3866	0.3565	-7.8	NA	±20	Average RF
1,2,3-Trichlorobenzene	50.0	51.6	1.3365	1.3789	3.2	NA	±20	Average RF
1,2,4-Trichlorobenzene	50.0	52.9	1.2919	1.3665	5.8	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	49.2	0.2498	0.2461	-1.5	NA	±20	Average RF
1,2-Dibromoethane	50.0	47.9	0.3827	0.3665	-4.2	NA	±20	Average RF
1,2-Dichlorobenzene	50.0	47.8	1.7911	1.7105	-4.5	NA	±20	Average RF
1,2-Dichloroethane	50.0	45.2	0.5045	0.4561	-9.6	NA	±20	Average RF
1,2-Dichloropropane	50.0	48.8	0.3822	0.3727	-2.5	NA	±20	Average RF
1,3-Dichlorobenzene	50.0	47.8	1.7644	1.6857	-4.5	NA	±20	Average RF
1,4-Dichlorobenzene	50.0	48.2	1.7954	1.729	-3.7	NA	±20	Average RF
1,4-Dioxane	1000	960	0.0079	0.0076	-4.0	NA	±20	Average RF
2-Butanone (MEK)	50.0	54.5	0.3887	0.4236	9.0	NA	±20	Average RF
2-Hexanone	50.0	53.1	0.4444	0.4719	6.2	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	56.4	0.5153	0.5815	12.8	NA	±20	Average RF
Acetone	50.0	44.9	0.3378	0.2645	NA	-10.2	±20	Quadratic
Benzene	50.0	49.5	1.4436	1.4305	-0.9	NA	±20	Average RF
Bromochloromethane	50.0	48.2	0.3414	0.329	-3.6	NA	±20	Average RF
Bromodichloromethane	50.0	48.1	0.4044	0.3888	-3.8	NA	±20	Average RF
Bromoform	50.0	43.7	0.4118	0.3595	-12.7	NA	±20	Average RF
Bromomethane	50.0	38.2	0.5194	0.3969	-23.6*	NA	±20	Average RF
Carbon Disulfide	50.0	48.3	1.4748	1.2224	NA	-3.4	±20	Linear
Carbon Tetrachloride	50.0	47.2	0.3283	0.3096	-5.7	NA	±20	Average RF
Chlorobenzene	50.0	46.3	1.1151	1.0332	-7.3	NA	±20	Average RF
Chloroethane	50.0	59.3	0.3583	0.4247	18.5	NA	±20	Average RF
Chloroform	50.0	49.5	0.9251	0.8555	NA	-1.0	±20	Quadratic
Chloromethane	50.0	52.9	0.6946	0.7343	5.7	NA	±20	Average RF
Cyclohexane	50.0	49.6	0.3279	0.3249	-0.9	NA	±20	Average RF
Dibromochloromethane	50.0	46.9	0.3109	0.2919	-6.1	NA	±20	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	55.0	0.5563	0.6115	9.9	NA	±20	Average RF
Dichloromethane	50.0	49.1	0.5511	0.5413	-1.8	NA	±20	Average RF
Ethylbenzene	50.0	48.3	0.5851	0.5655	-3.4	NA	±20	Average RF
Isopropylbenzene (Cumene)	50.0	49.3	3.4518	3.4059	-1.3	NA	±20	Average RF
Methyl Acetate	50.0	53.3	0.7435	0.793	6.6	NA	±20	Average RF
Methyl tert-Butyl Ether	50.0	52.0	1.7895	1.8598	3.9	NA	±20	Average RF

Client:	The LiRo Group	**Service Request:**	R2007055
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	08/13/20 22:11

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	**Calibration Date:**	7/13/2020
File ID:	I:\ACQUDATA\msvoa12\Data\081320\P38477.D\	**Calibration ID:**	RC2000094
Signal ID:	1	**Analysis Lot:**	690913
		Units:	ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Methylcyclohexane	50.0	53.3	0.4449	0.4742	6.6	NA	±20	Average RF
Styrene	50.0	52.9	1.1619	1.2288	5.8	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	44.1	0.3053	0.2692	-11.8	NA	±20	Average RF
Toluene	50.0	51.4	1.5288	1.5704	2.7	NA	±20	Average RF
Trichloroethene (TCE)	50.0	44.9	0.3582	0.322	-10.1	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	49.6	0.6708	0.6656	-0.8	NA	±20	Average RF
Vinyl Chloride	50.0	55.4	0.6512	0.7211	10.7	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	47.0	0.5771	0.5429	-5.9	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	48.5	0.5517	0.5354	-2.9	NA	±20	Average RF
m,p-Xylenes	100	99.9	0.7005	0.6999	-0.1	NA	±20	Average RF
o-Xylene	50.0	50.6	0.6839	0.6916	1.1	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	46.9	0.4503	0.422	-6.3	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	49.0	0.5017	0.4914	-2.0	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	50.1	0.4917	0.4928	0.2	NA	±20	Average RF
Dibromofluoromethane	50.0	48.6	0.2871	0.2791	-2.8	NA	±20	Average RF
Toluene-d8	50.0	50.2	1.3344	1.3384	0.3	NA	±20	Average RF

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

Service Request: R2007055
Date Analyzed: 08/14/20 10:02

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\081420\P38507.D\
Signal ID: 1

Calibration Date: 7/13/2020
Calibration ID: RC2000094
Analysis Lot: 691047
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	48.4	0.7229	0.6997	-3.2	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	53.2	1.1158	1.1868	6.4	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	51.3	0.3413	0.3504	2.7	NA	±20	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	49.9	0.4505	0.4498	-0.2	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	49.6	0.9926	0.9856	-0.7	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	49.4	0.3866	0.3819	-1.2	NA	±20	Average RF
1,2,3-Trichlorobenzene	50.0	58.1	1.3365	1.5532	16.2	NA	±20	Average RF
1,2,4-Trichlorobenzene	50.0	61.8	1.2919	1.5974	23.6*	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	52.3	0.2498	0.2613	4.6	NA	±20	Average RF
1,2-Dibromoethane	50.0	50.0	0.3827	0.3825	-0.1	NA	±20	Average RF
1,2-Dichlorobenzene	50.0	53.9	1.7911	1.931	7.8	NA	±20	Average RF
1,2-Dichloroethane	50.0	47.3	0.5045	0.477	-5.4	NA	±20	Average RF
1,2-Dichloropropane	50.0	50.8	0.3822	0.3882	1.6	NA	±20	Average RF
1,3-Dichlorobenzene	50.0	53.6	1.7644	1.8919	7.2	NA	±20	Average RF
1,4-Dichlorobenzene	50.0	54.7	1.7954	1.9657	9.5	NA	±20	Average RF
1,4-Dioxane	1000	962	0.0079	0.0076	-3.8	NA	±20	Average RF
2-Butanone (MEK)	50.0	51.0	0.3887	0.3963	1.9	NA	±20	Average RF
2-Hexanone	50.0	52.7	0.4444	0.4681	5.3	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	54.8	0.5153	0.5645	9.5	NA	±20	Average RF
Acetone	50.0	40.9	0.3378	0.2442	NA	-18.2	±20	Quadratic
Benzene	50.0	51.3	1.4436	1.4823	2.7	NA	±20	Average RF
Bromochloromethane	50.0	50.1	0.3414	0.3418	0.1	NA	±20	Average RF
Bromodichloromethane	50.0	49.3	0.4044	0.399	-1.3	NA	±20	Average RF
Bromoform	50.0	47.1	0.4118	0.3883	-5.7	NA	±20	Average RF
Bromomethane	50.0	34.8	0.5194	0.3616	-30.4*	NA	±20	Average RF
Carbon Disulfide	50.0	49.6	1.4748	1.2545	NA	-0.9	±20	Linear
Carbon Tetrachloride	50.0	50.2	0.3283	0.3295	0.4	NA	±20	Average RF
Chlorobenzene	50.0	49.5	1.1151	1.1029	-1.1	NA	±20	Average RF
Chloroethane	50.0	62.9	0.3583	0.4509	25.9*	NA	±20	Average RF
Chloroform	50.0	51.3	0.9251	0.8835	NA	2.5	±20	Quadratic
Chloromethane	50.0	50.1	0.6946	0.6963	0.3	NA	±20	Average RF
Cyclohexane	50.0	52.1	0.3279	0.3414	4.1	NA	±20	Average RF
Dibromochloromethane	50.0	49.9	0.3109	0.3105	-0.1	NA	±20	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	58.2	0.5563	0.6477	16.4	NA	±20	Average RF
Dichloromethane	50.0	50.2	0.5511	0.5533	0.4	NA	±20	Average RF
Ethylbenzene	50.0	52.1	0.5851	0.6099	4.2	NA	±20	Average RF
Isopropylbenzene (Cumene)	50.0	55.5	3.4518	3.8304	11.0	NA	±20	Average RF
Methyl Acetate	50.0	53.7	0.7435	0.798	7.3	NA	±20	Average RF
Methyl tert-Butyl Ether	50.0	52.7	1.7895	1.8861	5.4	NA	±20	Average RF

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

Service Request: R2007055
Date Analyzed: 08/14/20 10:02

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\081420\P38507.D\
Signal ID: 1

Calibration Date: 7/13/2020
Calibration ID: RC2000094
Analysis Lot: 691047
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Methylcyclohexane	50.0	59.3	0.4449	0.5273	18.5	NA	±20	Average RF
Styrene	50.0	56.8	1.1619	1.319	13.5	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	49.5	0.3053	0.3021	-1.1	NA	±20	Average RF
Toluene	50.0	53.3	1.5288	1.6309	6.7	NA	±20	Average RF
Trichloroethene (TCE)	50.0	47.0	0.3582	0.337	-5.9	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	53.2	0.6708	0.7141	6.5	NA	±20	Average RF
Vinyl Chloride	50.0	58.4	0.6512	0.7606	16.8	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	48.5	0.5771	0.5599	-3.0	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	52.4	0.5517	0.5784	4.8	NA	±20	Average RF
m,p-Xylenes	100	106	0.7005	0.7454	6.4	NA	±20	Average RF
o-Xylene	50.0	54.3	0.6839	0.7426	8.6	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	48.7	0.4503	0.439	-2.5	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	52.6	0.5017	0.528	5.2	NA	±20	Average RF
4-Bromofluorobenzene	50.0	52.1	0.4917	0.5121	4.2	NA	±20	Average RF
Dibromofluoromethane	50.0	48.5	0.2871	0.2784	-3.0	NA	±20	Average RF
Toluene-d8	50.0	51.4	1.3344	1.3726	2.9	NA	±20	Average RF

Client: The LiRo Group **Service Request:**R2007055
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**690913
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\081320\P38476.D\	ZZZZZZZ	ZZZZZZZ	8/13/2020	21:50:00	
I:\ACQUDATA\msvoa12\Data\081320\P38477.D\	Continuing Calibration Verification	RQ2009120-02	8/13/2020	22:11:00	
I:\ACQUDATA\msvoa12\Data\081320\P38478.D\	Lab Control Sample	RQ2009120-03	8/13/2020	22:33:00	
I:\ACQUDATA\msvoa12\Data\081320\P38481.D\	Method Blank	RQ2009120-04	8/13/2020	23:39:00	
I:\ACQUDATA\msvoa12\Data\081320\P38483.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	00:23:00	
I:\ACQUDATA\msvoa12\Data\081320\P38484.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	00:45:00	
I:\ACQUDATA\msvoa12\Data\081320\P38485.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	01:07:00	
I:\ACQUDATA\msvoa12\Data\081320\P38486.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	01:28:00	
I:\ACQUDATA\msvoa12\Data\081320\P38488.D\	Trip Blank 1	R2007055-007	8/14/2020	02:12:00	
I:\ACQUDATA\msvoa12\Data\081320\P38489.D\	Trip Blank 2	R2007055-015	8/14/2020	02:34:00	
I:\ACQUDATA\msvoa12\Data\081320\P38490.D\	MW-8	R2007055-001	8/14/2020	02:56:00	
I:\ACQUDATA\msvoa12\Data\081320\P38491.D\	MW-8A	R2007055-002	8/14/2020	03:18:00	
I:\ACQUDATA\msvoa12\Data\081320\P38492.D\	MW-9	R2007055-003	8/14/2020	03:40:00	
I:\ACQUDATA\msvoa12\Data\081320\P38493.D\	MW-9A	R2007055-004	8/14/2020	04:01:00	
I:\ACQUDATA\msvoa12\Data\081320\P38494.D\	MW-9A Dup	R2007055-005	8/14/2020	04:23:00	
I:\ACQUDATA\msvoa12\Data\081320\P38495.D\	MW-25A	R2007055-006	8/14/2020	04:45:00	
I:\ACQUDATA\msvoa12\Data\081320\P38496.D\	MW-10	R2007055-008	8/14/2020	05:07:00	
I:\ACQUDATA\msvoa12\Data\081320\P38497.D\	MW-5R	R2007055-013	8/14/2020	05:29:00	
I:\ACQUDATA\msvoa12\Data\081320\P38498.D\	MW-11	R2007055-009	8/14/2020	05:51:00	
I:\ACQUDATA\msvoa12\Data\081320\P38499.D\	MW-6	R2007055-011	8/14/2020	06:13:00	
I:\ACQUDATA\msvoa12\Data\081320\P38500.D\	MW-20A	R2007055-012	8/14/2020	06:35:00	
I:\ACQUDATA\msvoa12\Data\081320\P38501.D\	MW-13A	R2007055-010	8/14/2020	06:57:00	
I:\ACQUDATA\msvoa12\Data\081320\P38503.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	07:40:00	

Client: The LiRo Group **Service Request:**R2007055
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**690913
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\081320 \P38504.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	08:02:00	

Client: The LiRo Group **Service Request:**R2007055
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**691047
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\081420\P38506.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	09:33:00	
I:\ACQUDATA\msvoa12\Data\081420\P38507.D\	Continuing Calibration Verification	RQ2009168-02	8/14/2020	10:02:00	
I:\ACQUDATA\msvoa12\Data\081420\P38508.D\	Lab Control Sample	RQ2009168-03	8/14/2020	10:32:00	
I:\ACQUDATA\msvoa12\Data\081420\P38509.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	10:53:00	
I:\ACQUDATA\msvoa12\Data\081420\P38511.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	11:43:00	
I:\ACQUDATA\msvoa12\Data\081420\P38512.D\	Method Blank	RQ2009168-06	8/14/2020	12:05:00	
I:\ACQUDATA\msvoa12\Data\081420\P38513.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	12:36:00	
I:\ACQUDATA\msvoa12\Data\081420\P38516.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	13:42:00	
I:\ACQUDATA\msvoa12\Data\081420\P38517.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	14:04:00	
I:\ACQUDATA\msvoa12\Data\081420\P38519.D\	MW-6	R2007055-011	8/14/2020	14:47:00	
I:\ACQUDATA\msvoa12\Data\081420\P38520.D\	MW-5AR	R2007055-014	8/14/2020	15:09:00	
I:\ACQUDATA\msvoa12\Data\081420\P38523.D\	MW-5AR	R2007055-014	8/14/2020	16:15:00	
I:\ACQUDATA\msvoa12\Data\081420\P38524.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	16:37:00	
I:\ACQUDATA\msvoa12\Data\081420\P38525.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	16:58:00	
I:\ACQUDATA\msvoa12\Data\081420\P38527.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	17:42:00	
I:\ACQUDATA\msvoa12\Data\081420\P38530.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	18:47:00	
I:\ACQUDATA\msvoa12\Data\081420\P38531.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	19:09:00	
I:\ACQUDATA\msvoa12\Data\081420\P38532.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	19:31:00	
I:\ACQUDATA\msvoa12\Data\081420\P38533.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	19:53:00	
I:\ACQUDATA\msvoa12\Data\081420\P38534.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	20:15:00	
I:\ACQUDATA\msvoa12\Data\081420\P38535.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	20:36:00	
I:\ACQUDATA\msvoa12\Data\081420\P38536.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	20:58:00	
I:\ACQUDATA\msvoa12\Data\081420\P38537.D\	ZZZZZZZ	ZZZZZZZ	8/14/2020	21:20:00	

Analysis: 8260D waters | Analyst: K. Duvet | pH strips: 221419 | Tune Method: W071320

Date: 8/13/2020 · Run#2 | Balance ID: N/A | ResCl strips: N/A | Run Method: ↓

Instr. 12 | 50 mL Class A used for dilution FV | Syringes: 205D00 | LIMS Run#: 690913

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Tier	Vial	pH	File#	OK?	Comments
27	DLNE		R2009120 · 01					P58176	YT	21:50 (can to)
28	CCV		02					P58177	YC	
29	LCS·FP		03					P58178	YQ	
30	BLK		—					P58179	(N)	
31	MBLK·UNP							P58180	YB	
32	MBLK·FP		04					P58181	YB	*tbl=5
33	R2007142·001	1.0		8043	4	1	LZ	P58182	(N)	↓sm not
34	002	1.0				1	LZ	P58183	Y	
35	003	1.0				1	LZ	P58184	Y	
36	004	1.0				1	LZ	P58185	Y	
37	006	1.0				1	LZ	P58186	Y	
38	BLK					—	—	P58187	—	
39	R2007055·007	1.0		8043	4	1	LZ	P58188	Y	
40	015	1.0				1	LZ	P58189	Y	
41	001	1.0				1	LZ	P58190	Y	
42	002	1.0				1	LZ	P58191	Y	
43	003	1.0				1	LZ	P58192	Y	
44	004	1.0				1	LZ	P58193	Y	
45	005	1.0				1	LZ	P58194	Y	
46	006	1.0				1	LZ	P58195	Y	
47	008	1.0				1	LZ	P58196	Y	
48	013	2.5	20/50mls			1	LZ	P58197	Y	
49	009	10	5/50mls			1	LZ	P58198	Y	foamy
50	011	10				1	LZ	P58199	(Y)	not 50 cis12DCE
51	012	10				1	LZ	P58200	Y	
52	010	50	1/50mls			1	LZ	P58201	Y	
53	014	200	1/200mls			1	LZ	P58202	(N)	not 10 foamy
54	R2007142·006	1.0	MS	8043	4	2	LZ	P58203	YQ	
55	006	1.0	MSD	↓	↓	3	LZ	P58204	YQ	8:02 ✓
56	BLK					—	—	P58205	—	

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

Combined IS/Surr :

500 Primary Acc+ : 211502
↓ Primary F+ : 211511
Primary T6 : 211636
↓ Primary HSL : 211370
Primary :

200 Secondary F+ : 211161 - 5ul
500 Secondary Acc+ : 211504
↓ Secondary T6 : 211209 2ul
↓ Secondary HSL : 211637
Secondary :

50mls = LCS

-10.6uL
4.2uL
↓
47ml vial = MS/D

Surrogate 50 : 211225
Internal Std 50 : 211226
Reagents:

Analysis: 8260Waters | Analyst: K. Ruest | pH strips: 221419 | Tune Method: W071320

Date: 8/14/2020 | Balance ID: N/A | ResCl strips: N/A | Run Method: ↓

Instr. 12 | 50 mL Class A used for dilution FV | Syringes: 205000 | LIMS Run#: 691047

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Tier	Vial	pH	File#	OK?	Comments
1	TUNE		R220091658.01					P38506	YT	(auto) 9:33
1	CCV		02					P38507	YC	
1	LCS.FP		03					P38508	YD	
2	LCS.ump		04					P38509	YD	
1	BLK		—					P38510	(N)	rpt 1/0
2	MBLK.ump		05					P38511	YB	
3	MBLK.FP		06					P38512	YB	
1	R2007214.007	2.0	25/50mls	22528	4	3	7	P38513	(Y)	(DL) (weak) toluene
2	011	50	1/50mls			3	8	P38514	(N)	rpt 100
3	005	250	1/250mls			2	8	P38515	(N)	rpt 500
4	004	500	1/500mls			3	8	P38516	(Y)	(DL)
5	010	1000	1/100→5/50mls			2	8	P38517	(Y)	(DL)
6	BLK					—	—	P38518	—	
7	R2007055.011	50	1/50mls	80243	4	2	<2	P38519	(Y)	cis12DCE (DL)
8	014	10	5/50mls			2	<2	P38520	(Y)(Y)	Foamy way over'. 1/250
9	BLK					—	—	P38521	—	
10	~~R2006949.003~~	~~1.0~~	BLK	80243	2	2	<2	P38522	—	
11	1/250mls ~~002~~	~~1.0~~	~~BLK~~(XR) R2007055.014(250)			3	<2	P38523	(Y)	(DL) cis/1CE/trans
12	1/100mls ~~004~~	~~1.0~~	R2007214.011 (100)			3	<2	P38524	(Y)	(DL) tol
13	1/500mls ~~005~~	~~1.0~~	↓ 005 (500)			2	<2	P38525	(Y)	(DL) tol
14	BLK					—	—	P38526	—	
15	↓	1.0	R2006949.003	80243	4	2	<2	P38527	Y	
16	↓					—	—	P38528	—	
17	R2006949.002	1.0		80243	4	1	<2	P38529	(N)	TCE c/o?
18	004	1.0				1	<2	P38530	Y	
19	005	1.0				1	<2	P38531	Y	
20	006	1.0				1	<2	P38532	Y	
21	009	1.0				1	<2	P38533	Y	
22	008 ~~007~~	~~2.0~~				1	<2	P38534	Y	
23	007 ~~MS~~ ~~002~~	2.0	25/50mls			1	<2	P38535	Y	
24	↓ ~~MSD~~ 002	1.0				2	<2	P38536	YD	
25	↓ MSD 002	1.0		↓	↓	3	<2	P38537	YD	21:20

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

Combined IS/Surr

500 Primary CCC+ : 211502

Primary FF+ : 211571 — 5uL → 50mls = CCV

Primary T6 : 211636

Primary HSL : 211320

Primary

200 Secondary FF+ : 211161 — 5uL

500 Secondary CCC+ : 211504

Secondary T6 : 211229 — 2uL

Secondary HSL : 211637

Secondary

50mls = LCS — 10.6uL / 4.2uL

47ml vial = MS/D

Surrogate 50 : 211225

Internal Std 50 : 211226

Reagents:

26 → 30 BLKS P38538 → P38542

August 27, 2020 Service Request No:R2007215

Mr. Stephen Frank
The LiRo Group
690 Delaware Ave.
Buffalo, NY 14209

Laboratory Results for: Buffalo China

Dear Mr.Frank,

Enclosed are the results of the sample(s) submitted to our laboratory August 12, 2020
For your reference, these analyses have been assigned our service request number **R2007215.**

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, 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), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

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 Group USA, Corp.
dba ALS Environmental

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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: R2007215
Date Received: 08/12/2020

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Three water samples were received for analysis at ALS Environmental on 08/12/2020. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Volatiles by GC/MS:

Method 8260C, 08/20/2020: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) above the MRL in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Method 8260C, 08/20/2020: 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) above the MRL 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, R2007215-001: The control limits were exceeded for one or more surrogates due to matrix interferences. A re-extraction and reanalysis was performed, but produced similar results. No further corrective action was required.

Method 8260C, 08/21/2020: 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) above the MRL 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, 08/21/2020: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) above the MRL in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Method 8260C, R2007215-001: The control limits were exceeded for one or more surrogates due to matrix interferences. A re-extraction and reanalysis was performed, but produced similar results. No further corrective action was required.

Approved by Meghan Pedro Date 08/27/2020

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-19R			Lab ID: R2007215-001			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Tetrachloroethene (PCE)	0.31	J	0.21	5.0	ug/L	8260C
Trichloroethene (TCE)	82		0.20	5.0	ug/L	8260C
Vinyl Chloride	1.4	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	63		0.23	5.0	ug/L	8260C
trans-1,2-Dichloroethene	5.2		0.20	5.0	ug/L	8260C

CLIENT ID: MW-19AR			Lab ID: R2007215-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Cyclohexane	2.1	J	0.65	25	ug/L	8260C
Methylcyclohexane	1.9	J	0.50	25	ug/L	8260C
Trichloroethene (TCE)	18		0.50	13	ug/L	8260C
Vinyl Chloride	37		0.50	13	ug/L	8260C
cis-1,2-Dichloroethene	240		0.58	13	ug/L	8260C
trans-1,2-Dichloroethene	2.4	J	0.50	13	ug/L	8260C

CLIENT ID: MW-21			Lab ID: R2007215-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
1,1-Dichloroethene (1,1-DCE)	0.69	J	0.20	5.0	ug/L	8260C
1,2-Dichlorobenzene	0.28	J	0.20	5.0	ug/L	8260C
Benzene	0.27	J	0.20	5.0	ug/L	8260C
Trichloroethene (TCE)	0.72	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	74		0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	170		0.23	5.0	ug/L	8260C
trans-1,2-Dichloroethene	5.7		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:**R2007215
Project: Buffalo China/16-344-1389

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2007215-001	MW-19R	8/11/2020	1030
R2007215-002	MW-19AR	8/11/2020	1055
R2007215-003	MW-21	8/11/2020	1245

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

003316

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: Steve Frank	Report CC: Andrew Koon
Company/Address: LiRo Engineers 690 Delaware Ave Buffalo, NY	
Phone #: 716.882.5476	Email: frank@liro.com + koon@liro.com
Sampler's Signature: Andrew Koon	Sampler's Printed Name: Andrew Koon

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-19R		8/11/20	1030	W,O	9	X							MS/MSD
MW-19AR		8/11/20	1055		3	X							
MW-21		8/11/20	1245		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: NY

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

Edata X Yes ____ No

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

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Andrew Koon	Signature:	Signature:	Signature:	Signature:	
Printed Name: Andrew Koon	Printed Name: Gladys D Esmerian	Printed Name:	Printed Name:	Printed Name:	
Firm: LiRo	Firm: ALS	Firm:	Firm:	Firm:	
Date/Time: 8/11/20	Date/Time: 8/12/2020 09:50	Date/Time:	Date/Time:	Date/Time:	

R2007215 5
The LIRo Group
Buffalo Chins

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

© 2012 by ALS Group

R2007215 5
The LiRo Group
Buffalo China

Cooler Receipt and Preservation Check Form

Project/Client LiRO Engineers Folder Number .

Cooler received on 8-12-2020 by: HE

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: 8-12-2020 Time: 10:10 ID: IR#7 (IR#10) From: Temp Blank (Sample Bottle)

Observed Temp (°C)	4.6						
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 8-12-20 at 10:15
5035 samples placed in storage location: by on at within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 8/12/2020 Time: 1337 by: HE

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	**	**						

Bottle lot numbers: 255-4
Explain all Discrepancies/ Other Comments:

{MW-21 - COC
MW-21A - bottles}

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: @
PC Secondary Review:

*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:** R2007215
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2007215-001.01					
	8260C				
		8/12/2020	1337	SMO / GLAFORCE	
		8/12/2020	1347	R-001 / GLAFORCE	
		8/20/2020	1150	In Lab / KRUEST	
		8/20/2020	1218	R-001-S12 / KRUEST	
R2007215-001.02					
		8/12/2020	1337	SMO / GLAFORCE	
		8/12/2020	1347	R-001 / GLAFORCE	
R2007215-001.03					
		8/12/2020	1337	SMO / GLAFORCE	
		8/12/2020	1347	R-001 / GLAFORCE	
		8/21/2020	1108	In Lab / KRUEST	
R2007215-001.04					
	8260C				
		8/12/2020	1347	R-001 / GLAFORCE	
		8/12/2020	1347	SMO / GLAFORCE	
		8/21/2020	1607	R-001-S12 / KRUEST	
R2007215-001.05					
		8/12/2020	1347	R-001 / GLAFORCE	
		8/12/2020	1347	SMO / GLAFORCE	
R2007215-001.06					
		8/12/2020	1347	R-001 / GLAFORCE	
		8/12/2020	1347	SMO / GLAFORCE	
R2007215-001.07					
		8/12/2020	1347	R-001 / GLAFORCE	
		8/12/2020	1347	SMO / GLAFORCE	
R2007215-001.08					
		8/12/2020	1347	R-001 / GLAFORCE	
		8/12/2020	1347	SMO / GLAFORCE	
R2007215-001.09					
		8/12/2020	1347	R-001 / GLAFORCE	
		8/12/2020	1347	SMO / GLAFORCE	

ALS Group USA, Corp.
dba ALS Environmental

Internal Chain of Custody Report

Client: The LiRo Group **Service Request:** R2007215
Project: Buffalo China/16-344-1389

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2007215-002.01					
		8/12/2020	1337	SMO / GLAFORCE	
		8/12/2020	1347	R-001 / GLAFORCE	
		8/20/2020	1150	In Lab / KRUEST	
		8/20/2020	1218	R-001-S12 / KRUEST	
R2007215-002.02					
	8260C				
		8/12/2020	1337	SMO / GLAFORCE	
		8/12/2020	1347	R-001 / GLAFORCE	
		8/21/2020	1108	In Lab / KRUEST	
		8/21/2020	1607	R-001-S12 / KRUEST	
R2007215-002.03					
		8/12/2020	1337	SMO / GLAFORCE	
		8/12/2020	1347	R-001 / GLAFORCE	
R2007215-003.01					
		8/12/2020	1337	SMO / GLAFORCE	
		8/12/2020	1347	R-001 / GLAFORCE	
R2007215-003.02					
	8260C				
		8/12/2020	1337	SMO / GLAFORCE	
		8/12/2020	1347	R-001 / GLAFORCE	
		8/20/2020	1150	In Lab / KRUEST	
		8/20/2020	1218	R-001-S12 / KRUEST	
R2007215-003.03					
		8/12/2020	1337	SMO / GLAFORCE	
		8/12/2020	1347	R-001 / GLAFORCE	

Miscellaneous Forms

ALS Environmental—Rochester Laboratory
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Phone (585) 288-5380 Fax (585) 288-8475
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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
Project: Buffalo China/16-344-1389
Service Request: R2007215

Sample Name: MW-19R
Lab Code: R2007215-001
Sample Matrix: Water
Date Collected: 08/11/20
Date Received: 08/12/20

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-19R
Lab Code: R2007215-001.R01
Sample Matrix: Water
Date Collected: 08/11/20
Date Received: 08/12/20

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-19AR
Lab Code: R2007215-002
Sample Matrix: Water
Date Collected: 08/11/20
Date Received: 08/12/20

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-21
Lab Code: R2007215-003
Sample Matrix: Water
Date Collected: 08/11/20
Date Received: 08/12/20

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
9034 Sulfide Acid Soluble	9030B
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
7199	3060A
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:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/11/20 10:30
Sample Matrix:	Water	**Date Received:**	08/12/20 09:50
Sample Name:	MW-19R	**Units:**	ug/L
Lab Code:	R2007215-001	**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	0.20	1	08/20/20 18:59	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/20/20 18:59	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/20/20 18:59	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/20/20 18:59	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,4-Dioxane	100 U	100	13	1	08/20/20 18:59	
2-Butanone (MEK)	10 U	10	0.78	1	08/20/20 18:59	
2-Hexanone	10 U	10	0.20	1	08/20/20 18:59	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/20/20 18:59	
Acetone	10 U	10	5.0	1	08/20/20 18:59	
Benzene	5.0 U	5.0	0.20	1	08/20/20 18:59	
Bromochloromethane	5.0 U	5.0	0.20	1	08/20/20 18:59	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/20/20 18:59	
Bromoform	5.0 U	5.0	0.25	1	08/20/20 18:59	
Bromomethane	5.0 U	5.0	0.70	1	08/20/20 18:59	
Carbon Disulfide	10 U	10	0.42	1	08/20/20 18:59	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/20/20 18:59	
Chlorobenzene	5.0 U	5.0	0.20	1	08/20/20 18:59	
Chloroethane	5.0 U	5.0	0.23	1	08/20/20 18:59	
Chloroform	5.0 U	5.0	0.24	1	08/20/20 18:59	
Chloromethane	5.0 U	5.0	0.28	1	08/20/20 18:59	
Cyclohexane	10 U	10	0.26	1	08/20/20 18:59	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/20/20 18:59	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/20/20 18:59	
Dichloromethane	5.0 U	5.0	0.65	1	08/20/20 18:59	
Ethylbenzene	5.0 U	5.0	0.20	1	08/20/20 18:59	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/20/20 18:59	
Methyl Acetate	10 U	10	0.33	1	08/20/20 18:59	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/20/20 18:59	
Methylcyclohexane	10 U	10	0.20	1	08/20/20 18:59	
Styrene	5.0 U	5.0	0.20	1	08/20/20 18:59	
Tetrachloroethene (PCE)	**0.31 J**	5.0	0.21	1	08/20/20 18:59	
Toluene	5.0 U	5.0	0.20	1	08/20/20 18:59	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/11/20 10:30
Sample Matrix:	Water	**Date Received:**	08/12/20 09:50
Sample Name:	MW-19R	**Units:**	ug/L
Lab Code:	R2007215-001	**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)	**82**	5.0	0.20	1	08/20/20 18:59	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/20/20 18:59	
Vinyl Chloride	**1.4 J**	5.0	0.20	1	08/20/20 18:59	
cis-1,2-Dichloroethene	**63**	5.0	0.23	1	08/20/20 18:59	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/20/20 18:59	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/20/20 18:59	
o-Xylene	5.0 U	5.0	0.20	1	08/20/20 18:59	
trans-1,2-Dichloroethene	**5.2**	5.0	0.20	1	08/20/20 18:59	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/20/20 18:59	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	08/20/20 18:59	
Dibromofluoromethane	88 *	89 - 119	08/20/20 18:59	*
Toluene-d8	96	87 - 121	08/20/20 18:59	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/11/20 10:55
Sample Matrix:	Water	**Date Received:**	08/12/20 09:50
Sample Name:	MW-19AR	**Units:**	ug/L
Lab Code:	R2007215-002	**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)	13 U	13	0.50	2.5	08/21/20 15:47	
1,1,2,2-Tetrachloroethane	13 U	13	0.50	2.5	08/21/20 15:47	
1,1,2-Trichloroethane	13 U	13	0.50	2.5	08/21/20 15:47	
1,1,2-Trichloro-1,2,2-trifluoroethane	13 U	13	0.50	2.5	08/21/20 15:47	
1,1-Dichloroethane (1,1-DCA)	13 U	13	0.50	2.5	08/21/20 15:47	
1,1-Dichloroethene (1,1-DCE)	13 U	13	0.50	2.5	08/21/20 15:47	
1,2,3-Trichlorobenzene	13 U	13	0.63	2.5	08/21/20 15:47	
1,2,4-Trichlorobenzene	13 U	13	0.85	2.5	08/21/20 15:47	
1,2-Dibromo-3-chloropropane (DBCP)	13 U	13	1.2	2.5	08/21/20 15:47	
1,2-Dibromoethane	13 U	13	0.50	2.5	08/21/20 15:47	
1,2-Dichlorobenzene	13 U	13	0.50	2.5	08/21/20 15:47	
1,2-Dichloroethane	13 U	13	0.50	2.5	08/21/20 15:47	
1,2-Dichloropropane	13 U	13	0.50	2.5	08/21/20 15:47	
1,3-Dichlorobenzene	13 U	13	0.50	2.5	08/21/20 15:47	
1,4-Dichlorobenzene	13 U	13	0.50	2.5	08/21/20 15:47	
1,4-Dioxane	250 U	250	33	2.5	08/21/20 15:47	
2-Butanone (MEK)	25 U	25	2.0	2.5	08/21/20 15:47	
2-Hexanone	25 U	25	0.50	2.5	08/21/20 15:47	
4-Methyl-2-pentanone	25 U	25	0.50	2.5	08/21/20 15:47	
Acetone	25 U	25	13	2.5	08/21/20 15:47	
Benzene	13 U	13	0.50	2.5	08/21/20 15:47	
Bromochloromethane	13 U	13	0.50	2.5	08/21/20 15:47	
Bromodichloromethane	13 U	13	0.50	2.5	08/21/20 15:47	
Bromoform	13 U	13	0.63	2.5	08/21/20 15:47	
Bromomethane	13 U	13	1.8	2.5	08/21/20 15:47	
Carbon Disulfide	25 U	25	1.1	2.5	08/21/20 15:47	
Carbon Tetrachloride	13 U	13	0.85	2.5	08/21/20 15:47	
Chlorobenzene	13 U	13	0.50	2.5	08/21/20 15:47	
Chloroethane	13 U	13	0.58	2.5	08/21/20 15:47	
Chloroform	13 U	13	0.60	2.5	08/21/20 15:47	
Chloromethane	13 U	13	0.70	2.5	08/21/20 15:47	
Cyclohexane	**2.1 J**	25	0.65	2.5	08/21/20 15:47	
Dibromochloromethane	13 U	13	0.50	2.5	08/21/20 15:47	
Dichlorodifluoromethane (CFC 12)	13 U	13	0.53	2.5	08/21/20 15:47	
Dichloromethane	13 U	13	1.7	2.5	08/21/20 15:47	
Ethylbenzene	13 U	13	0.50	2.5	08/21/20 15:47	
Isopropylbenzene (Cumene)	13 U	13	0.50	2.5	08/21/20 15:47	
Methyl Acetate	25 U	25	0.83	2.5	08/21/20 15:47	
Methyl tert-Butyl Ether	13 U	13	0.50	2.5	08/21/20 15:47	
Methylcyclohexane	**1.9 J**	25	0.50	2.5	08/21/20 15:47	
Styrene	13 U	13	0.50	2.5	08/21/20 15:47	
Tetrachloroethene (PCE)	13 U	13	0.53	2.5	08/21/20 15:47	
Toluene	13 U	13	0.50	2.5	08/21/20 15:47	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/11/20 10:55
Sample Matrix:	Water	**Date Received:**	08/12/20 09:50
Sample Name:	MW-19AR	**Units:**	ug/L
Lab Code:	R2007215-002	**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)	**18**		13	0.50	2.5	08/21/20 15:47	
Trichlorofluoromethane (CFC 11)	13	U	13	0.60	2.5	08/21/20 15:47	
Vinyl Chloride	**37**		13	0.50	2.5	08/21/20 15:47	
cis-1,2-Dichloroethene	**240**		13	0.58	2.5	08/21/20 15:47	
cis-1,3-Dichloropropene	13	U	13	0.50	2.5	08/21/20 15:47	
m,p-Xylenes	13	U	13	0.50	2.5	08/21/20 15:47	
o-Xylene	13	U	13	0.50	2.5	08/21/20 15:47	
trans-1,2-Dichloroethene	**2.4**	**J**	13	0.50	2.5	08/21/20 15:47	
trans-1,3-Dichloropropene	13	U	13	0.58	2.5	08/21/20 15:47	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	08/21/20 15:47	
Dibromofluoromethane	92	89 - 119	08/21/20 15:47	
Toluene-d8	96	87 - 121	08/21/20 15:47	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/11/20 12:45
Sample Matrix:	Water	**Date Received:**	08/12/20 09:50
Sample Name:	MW-21	**Units:**	ug/L
Lab Code:	R2007215-003	**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)	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,1-Dichloroethene (1,1-DCE)	**0.69 J**	5.0	0.20	1	08/20/20 18:37	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/20/20 18:37	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/20/20 18:37	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/20/20 18:37	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,2-Dichlorobenzene	**0.28 J**	5.0	0.20	1	08/20/20 18:37	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,4-Dioxane	100 U	100	13	1	08/20/20 18:37	
2-Butanone (MEK)	10 U	10	0.78	1	08/20/20 18:37	
2-Hexanone	10 U	10	0.20	1	08/20/20 18:37	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/20/20 18:37	
Acetone	10 U	10	5.0	1	08/20/20 18:37	
Benzene	**0.27 J**	5.0	0.20	1	08/20/20 18:37	
Bromochloromethane	5.0 U	5.0	0.20	1	08/20/20 18:37	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/20/20 18:37	
Bromoform	5.0 U	5.0	0.25	1	08/20/20 18:37	
Bromomethane	5.0 U	5.0	0.70	1	08/20/20 18:37	
Carbon Disulfide	10 U	10	0.42	1	08/20/20 18:37	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/20/20 18:37	
Chlorobenzene	5.0 U	5.0	0.20	1	08/20/20 18:37	
Chloroethane	5.0 U	5.0	0.23	1	08/20/20 18:37	
Chloroform	5.0 U	5.0	0.24	1	08/20/20 18:37	
Chloromethane	5.0 U	5.0	0.28	1	08/20/20 18:37	
Cyclohexane	10 U	10	0.26	1	08/20/20 18:37	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/20/20 18:37	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/20/20 18:37	
Dichloromethane	5.0 U	5.0	0.65	1	08/20/20 18:37	
Ethylbenzene	5.0 U	5.0	0.20	1	08/20/20 18:37	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/20/20 18:37	
Methyl Acetate	10 U	10	0.33	1	08/20/20 18:37	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/20/20 18:37	
Methylcyclohexane	10 U	10	0.20	1	08/20/20 18:37	
Styrene	5.0 U	5.0	0.20	1	08/20/20 18:37	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/20/20 18:37	
Toluene	5.0 U	5.0	0.20	1	08/20/20 18:37	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/11/20 12:45
Sample Matrix:	Water	**Date Received:**	08/12/20 09:50
Sample Name:	MW-21	**Units:**	ug/L
Lab Code:	R2007215-003	**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)	**0.72**	**J**	5.0	0.20	1	08/20/20 18:37	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	08/20/20 18:37	
Vinyl Chloride	**74**		5.0	0.20	1	08/20/20 18:37	
cis-1,2-Dichloroethene	**170**		5.0	0.23	1	08/20/20 18:37	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	08/20/20 18:37	
m,p-Xylenes	5.0	U	5.0	0.20	1	08/20/20 18:37	
o-Xylene	5.0	U	5.0	0.20	1	08/20/20 18:37	
trans-1,2-Dichloroethene	**5.7**		5.0	0.20	1	08/20/20 18:37	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	08/20/20 18:37	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	08/20/20 18:37	
Dibromofluoromethane	92	89 - 119	08/20/20 18:37	
Toluene-d8	97	87 - 121	08/20/20 18:37	

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:** R2007215
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-19R	R2007215-001	95	88*	96
MW-19AR	R2007215-002	94	92	96
MW-21	R2007215-003	96	92	97
Method Blank	RQ2009440-04	100	96	102
Method Blank	RQ2009520-04	97	92	101
Lab Control Sample	RQ2009440-03	93	91	95
Lab Control Sample	RQ2009520-03	99	95	100
MW-19R MS	RQ2009440-05	100	93	100
MW-19R DMS	RQ2009440-06	99	96	101

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/11/20
Sample Matrix:	Water	**Date Received:**	08/12/20
		Date Analyzed:	08/20/20
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	MW-19R	**Units:**	ug/L
Lab Code:	R2007215-001	**Basis:**	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

		Matrix Spike RQ2009440-05			Duplicate Matrix Spike RQ2009440-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1-Trichloroethane (TCA)	5.0 U	46.8	50.0	94	48.5	50.0	97	74-127	4	30
1,1,2,2-Tetrachloroethane	5.0 U	47.8	50.0	96	50.3	50.0	101	72-122	5	30
1,1,2-Trichloroethane	5.0 U	47.7	50.0	95	50.0	50.0	100	82-121	5	30
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	47.1	50.0	94	47.5	50.0	95	50-147	<1	30
1,1-Dichloroethane (1,1-DCA)	5.0 U	47.4	50.0	95	47.3	50.0	95	74-132	<1	30
1,1-Dichloroethene (1,1-DCE)	5.0 U	56.1	50.0	112	56.3	50.0	113	71-118	<1	30
1,2,3-Trichlorobenzene	5.0 U	46.9	50.0	94	48.5	50.0	97	59-129	3	30
1,2,4-Trichlorobenzene	5.0 U	49.7	50.0	99	51.7	50.0	103	69-122	4	30
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	41.1	50.0	82	44.8	50.0	90	37-150	9	30
1,2-Dibromoethane	5.0 U	45.8	50.0	92	48.5	50.0	97	67-127	6	30
1,2-Dichlorobenzene	5.0 U	46.5	50.0	93	47.9	50.0	96	77-120	3	30
1,2-Dichloroethane	5.0 U	43.3	50.0	87	44.5	50.0	89	68-130	3	30
1,2-Dichloropropane	5.0 U	47.0	50.0	94	49.9	50.0	100	79-124	6	30
1,3-Dichlorobenzene	5.0 U	46.0	50.0	92	48.7	50.0	97	83-121	6	30
1,4-Dichlorobenzene	5.0 U	46.5	50.0	93	49.7	50.0	99	82-120	7	30
1,4-Dioxane	100 U	767	1000	77	845	1000	85	44-154	10	30
2-Butanone (MEK)	10 U	57.0	50.0	114	56.2	50.0	112	61-137	1	30
2-Hexanone	10 U	48.2	50.0	96	51.7	50.0	103	56-132	7	30
4-Methyl-2-pentanone	10 U	51.6	50.0	103	54.6	50.0	109	60-141	6	30
Acetone	10 U	26.2	50.0	52	31.4	50.0	63	35-183	18	30
Benzene	5.0 U	48.0	50.0	96	50.8	50.0	102	76-129	6	30
Bromochloromethane	5.0 U	44.8	50.0	90	47.0	50.0	94	80-122	5	30
Bromodichloromethane	5.0 U	42.4	50.0	85	46.0	50.0	92	78-133	8	30
Bromoform	5.0 U	39.6	50.0	79	42.1	50.0	84	58-133	6	30
Bromomethane	5.0 U	33.8	50.0	68	35.7	50.0	71	10-184	6	30
Carbon Disulfide	10 U	48.0	50.0	96	49.2	50.0	98	59-140	2	30
Carbon Tetrachloride	5.0 U	47.6	50.0	95	50.8	50.0	102	65-135	7	30
Chlorobenzene	5.0 U	47.0	50.0	94	49.2	50.0	98	76-125	5	30
Chloroethane	5.0 U	60.4	50.0	121	58.7	50.0	117	48-146	3	30
Chloroform	5.0 U	48.4	50.0	97	48.8	50.0	98	75-130	<1	30
Chloromethane	5.0 U	53.6	50.0	107	53.6	50.0	107	55-160	<1	30
Cyclohexane	10 U	49.0	50.0	98	50.6	50.0	101	52-145	3	30
Dibromochloromethane	5.0 U	43.4	50.0	87	49.2	50.0	98	72-128	13	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.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/11/20
Sample Matrix:	Water	**Date Received:**	08/12/20
		Date Analyzed:	08/20/20
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	MW-19R	**Units:**	ug/L
Lab Code:	R2007215-001	**Basis:**	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

		Matrix Spike RQ2009440-05			Duplicate Matrix Spike RQ2009440-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Dichlorodifluoromethane (CFC 12)	5.0 U	55.2	50.0	110	55.7	50.0	111	49-154	1	30
Dichloromethane	5.0 U	47.2	50.0	94	46.1	50.0	92	73-122	2	30
Ethylbenzene	5.0 U	48.7	50.0	97	52.1	50.0	104	72-134	7	30
Isopropylbenzene (Cumene)	5.0 U	51.3	50.0	103	52.9	50.0	106	77-128	3	30
Methyl Acetate	10 U	34.0	50.0	68	33.5	50.0	67	26-121	1	30
Methyl tert-Butyl Ether	5.0 U	49.0	50.0	98	49.2	50.0	98	75-119	<1	30
Methylcyclohexane	10 U	55.1	50.0	110	55.9	50.0	112	45-146	1	30
Styrene	5.0 U	50.5	50.0	101	53.6	50.0	107	74-136	6	30
Tetrachloroethene (PCE)	0.31 J	45.8	50.0	91	47.2	50.0	94	72-125	3	30
Toluene	5.0 U	50.5	50.0	101	52.8	50.0	106	79-119	4	30
Trichloroethene (TCE)	82	116	50.0	68 *	131	50.0	98	74-122	12	30
Trichlorofluoromethane (CFC 11)	5.0 U	51.8	50.0	104	53.1	50.0	106	71-136	2	30
Vinyl Chloride	1.4 J	57.0	50.0	111	58.4	50.0	114	74-159	2	30
cis-1,2-Dichloroethene	63	112	50.0	98	117	50.0	108	77-127	4	30
cis-1,3-Dichloropropene	5.0 U	44.5	50.0	89	47.5	50.0	95	52-134	6	30
m,p-Xylenes	5.0 U	103	100	103	108	100	108	80-126	5	30
o-Xylene	5.0 U	52.1	50.0	104	53.6	50.0	107	79-123	3	30
trans-1,2-Dichloroethene	5.2	57.6	50.0	105	59.7	50.0	109	73-118	4	30
trans-1,3-Dichloropropene	5.0 U	44.4	50.0	89	47.9	50.0	96	71-133	8	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.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	08/20/20 11:34
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:	RQ2009440-04	**File ID:**	I:\ACQUDATA\msvoa12\Data\082020\P38709.D\
Analysis Method:	8260C	**Analysis Lot:**	691826
Prep Method:	EPA 5030C		

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2009440-03	I:\ACQUDATA\msvoa12\Data\082020\P38706.D\	08/20/20 10:13
MW-21	R2007215-003	I:\ACQUDATA\msvoa12\Data\082020\P38728.D\	08/20/20 18:37
MW-19R	R2007215-001	I:\ACQUDATA\msvoa12\Data\082020\P38729.D\	08/20/20 18:59
MW-19RMS	RQ2009440-05	I:\ACQUDATA\msvoa12\Data\082020\P38731.D\	08/20/20 19:43
MW-19RDMS	RQ2009440-06	I:\ACQUDATA\msvoa12\Data\082020\P38732.D\	08/20/20 20:05

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	08/21/20 12:00
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:	RQ2009520-04	**File ID:**	I:\ACQUDATA\msvoa12\Data\082120\P38768.D\
Analysis Method:	8260C	**Analysis Lot:**	692022
Prep Method:	EPA 5030C		

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2009520-03	I:\ACQUDATA\msvoa12\Data\082120\P38765.D\	08/21/20 10:31
MW-19AR	R2007215-002	I:\ACQUDATA\msvoa12\Data\082120\P38778.D\	08/21/20 15:47

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2009440-04	**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	0.20	1	08/20/20 11:34	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/20/20 11:34	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/20/20 11:34	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/20/20 11:34	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/20/20 11:34	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/20/20 11:34	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/20/20 11:34	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/20/20 11:34	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/20/20 11:34	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/20/20 11:34	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/20/20 11:34	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/20/20 11:34	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/20/20 11:34	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/20/20 11:34	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/20/20 11:34	
1,4-Dioxane	100 U	100	13	1	08/20/20 11:34	
2-Butanone (MEK)	10 U	10	0.78	1	08/20/20 11:34	
2-Hexanone	10 U	10	0.20	1	08/20/20 11:34	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/20/20 11:34	
Acetone	10 U	10	5.0	1	08/20/20 11:34	
Benzene	5.0 U	5.0	0.20	1	08/20/20 11:34	
Bromochloromethane	5.0 U	5.0	0.20	1	08/20/20 11:34	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/20/20 11:34	
Bromoform	5.0 U	5.0	0.25	1	08/20/20 11:34	
Bromomethane	5.0 U	5.0	0.70	1	08/20/20 11:34	
Carbon Disulfide	10 U	10	0.42	1	08/20/20 11:34	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/20/20 11:34	
Chlorobenzene	5.0 U	5.0	0.20	1	08/20/20 11:34	
Chloroethane	5.0 U	5.0	0.23	1	08/20/20 11:34	
Chloroform	5.0 U	5.0	0.24	1	08/20/20 11:34	
Chloromethane	**0.73 J**	5.0	0.28	1	08/20/20 11:34	
Cyclohexane	10 U	10	0.26	1	08/20/20 11:34	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/20/20 11:34	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/20/20 11:34	
Dichloromethane	5.0 U	5.0	0.65	1	08/20/20 11:34	
Ethylbenzene	5.0 U	5.0	0.20	1	08/20/20 11:34	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/20/20 11:34	
Methyl Acetate	10 U	10	0.33	1	08/20/20 11:34	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/20/20 11:34	
Methylcyclohexane	10 U	10	0.20	1	08/20/20 11:34	
Styrene	5.0 U	5.0	0.20	1	08/20/20 11:34	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/20/20 11:34	
Toluene	5.0 U	5.0	0.20	1	08/20/20 11:34	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2009440-04	**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	08/20/20 11:34	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/20/20 11:34	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/20/20 11:34	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/20/20 11:34	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/20/20 11:34	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/20/20 11:34	
o-Xylene	5.0 U	5.0	0.20	1	08/20/20 11:34	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/20/20 11:34	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/20/20 11:34	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	08/20/20 11:34	
Dibromofluoromethane	96	89 - 119	08/20/20 11:34	
Toluene-d8	102	87 - 121	08/20/20 11:34	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2009520-04	**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	0.20	1	08/21/20 12:00	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/21/20 12:00	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/21/20 12:00	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/21/20 12:00	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/21/20 12:00	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/21/20 12:00	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/21/20 12:00	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/21/20 12:00	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/21/20 12:00	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/21/20 12:00	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/21/20 12:00	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/21/20 12:00	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/21/20 12:00	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/21/20 12:00	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/21/20 12:00	
1,4-Dioxane	100 U	100	13	1	08/21/20 12:00	
2-Butanone (MEK)	10 U	10	0.78	1	08/21/20 12:00	
2-Hexanone	10 U	10	0.20	1	08/21/20 12:00	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/21/20 12:00	
Acetone	10 U	10	5.0	1	08/21/20 12:00	
Benzene	5.0 U	5.0	0.20	1	08/21/20 12:00	
Bromochloromethane	5.0 U	5.0	0.20	1	08/21/20 12:00	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/21/20 12:00	
Bromoform	5.0 U	5.0	0.25	1	08/21/20 12:00	
Bromomethane	5.0 U	5.0	0.70	1	08/21/20 12:00	
Carbon Disulfide	10 U	10	0.42	1	08/21/20 12:00	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/21/20 12:00	
Chlorobenzene	5.0 U	5.0	0.20	1	08/21/20 12:00	
Chloroethane	5.0 U	5.0	0.23	1	08/21/20 12:00	
Chloroform	5.0 U	5.0	0.24	1	08/21/20 12:00	
Chloromethane	5.0 U	5.0	0.28	1	08/21/20 12:00	
Cyclohexane	10 U	10	0.26	1	08/21/20 12:00	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/21/20 12:00	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/21/20 12:00	
Dichloromethane	5.0 U	5.0	0.65	1	08/21/20 12:00	
Ethylbenzene	5.0 U	5.0	0.20	1	08/21/20 12:00	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/21/20 12:00	
Methyl Acetate	10 U	10	0.33	1	08/21/20 12:00	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/21/20 12:00	
Methylcyclohexane	10 U	10	0.20	1	08/21/20 12:00	
Styrene	5.0 U	5.0	0.20	1	08/21/20 12:00	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/21/20 12:00	
Toluene	5.0 U	5.0	0.20	1	08/21/20 12:00	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ2009520-04	**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	08/21/20 12:00	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/21/20 12:00	
Vinyl Chloride	5.0 U	5.0	0.20	1	08/21/20 12:00	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	08/21/20 12:00	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/21/20 12:00	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/21/20 12:00	
o-Xylene	5.0 U	5.0	0.20	1	08/21/20 12:00	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	08/21/20 12:00	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/21/20 12:00	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	08/21/20 12:00	
Dibromofluoromethane	92	89 - 119	08/21/20 12:00	
Toluene-d8	101	87 - 121	08/21/20 12:00	

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	08/20/20 10:13
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:	RQ2009440-03	**File ID:**	I:\ACQUDATA\msvoa12\Data\082020\P38706.D\
Analysis Method:	8260C	**Analysis Lot:**	691826
Prep Method:	EPA 5030C		

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ2009440-04	I:\ACQUDATA\msvoa12\Data\082020\P38709.D\	08/20/20 11:34
MW-21	R2007215-003	I:\ACQUDATA\msvoa12\Data\082020\P38728.D\	08/20/20 18:37
MW-19R	R2007215-001	I:\ACQUDATA\msvoa12\Data\082020\P38729.D\	08/20/20 18:59
MW-19RMS	RQ2009440-05	I:\ACQUDATA\msvoa12\Data\082020\P38731.D\	08/20/20 19:43
MW-19RDMS	RQ2009440-06	I:\ACQUDATA\msvoa12\Data\082020\P38732.D\	08/20/20 20:05

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Analyzed:**	08/21/20 10:31
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:	RQ2009520-03	**File ID:**	I:\ACQUDATA\msvoa12\Data\082120\P38765.D\
Analysis Method:	8260C	**Analysis Lot:**	692022
Prep Method:	EPA 5030C		

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ2009520-04	I:\ACQUDATA\msvoa12\Data\082120\P38768.D\	08/21/20 12:00
MW-19AR	R2007215-002	I:\ACQUDATA\msvoa12\Data\082120\P38778.D\	08/21/20 15:47

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

Service Request: R2007215
Date Analyzed: 08/20/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2009440-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	20.3	20.0	102	75-125
1,1,2,2-Tetrachloroethane	8260C	21.0	20.0	105	78-126
1,1,2-Trichloroethane	8260C	20.7	20.0	103	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	20.4	20.0	102	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	19.5	20.0	98	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	25.2	20.0	126 *	71-118
1,2,3-Trichlorobenzene	8260C	22.0	20.0	110	67-136
1,2,4-Trichlorobenzene	8260C	22.6	20.0	113	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	17.7	20.0	89	55-136
1,2-Dibromoethane	8260C	20.3	20.0	102	82-127
1,2-Dichlorobenzene	8260C	20.7	20.0	104	80-119
1,2-Dichloroethane	8260C	17.9	20.0	89	71-127
1,2-Dichloropropane	8260C	20.3	20.0	101	80-119
1,3-Dichlorobenzene	8260C	21.5	20.0	108	83-121
1,4-Dichlorobenzene	8260C	21.1	20.0	105	79-119
1,4-Dioxane	8260C	327	400	82	44-154
2-Butanone (MEK)	8260C	18.0	20.0	90	61-137
2-Hexanone	8260C	19.9	20.0	99	63-124
4-Methyl-2-pentanone	8260C	20.6	20.0	103	66-124
Acetone	8260C	14.0	20.0	70	40-161
Benzene	8260C	20.6	20.0	103	79-119
Bromochloromethane	8260C	19.6	20.0	98	81-126
Bromodichloromethane	8260C	18.9	20.0	94	81-123
Bromoform	8260C	17.2	20.0	86	65-146
Bromomethane	8260C	17.8	20.0	89	42-166
Carbon Disulfide	8260C	18.9	20.0	94	66-128
Carbon Tetrachloride	8260C	20.4	20.0	102	70-127
Chlorobenzene	8260C	19.8	20.0	99	80-121
Chloroethane	8260C	25.2	20.0	126	62-131
Chloroform	8260C	19.5	20.0	98	79-120
Chloromethane	8260C	23.0	20.0	115	65-135
Cyclohexane	8260C	19.8	20.0	99	69-120
Dibromochloromethane	8260C	18.7	20.0	94	72-128

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

Service Request: R2007215
Date Analyzed: 08/20/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2009440-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	24.1	20.0	120	59-155
Dichloromethane	8260C	19.8	20.0	99	73-122
Ethylbenzene	8260C	21.1	20.0	105	76-120
Isopropylbenzene (Cumene)	8260C	23.0	20.0	115	77-128
Methyl Acetate	8260C	13.4	20.0	67	61-133
Methyl tert-Butyl Ether	8260C	21.0	20.0	105	75-118
Methylcyclohexane	8260C	21.8	20.0	109	51-129
Styrene	8260C	21.7	20.0	108	80-124
Tetrachloroethene (PCE)	8260C	20.4	20.0	102	72-125
Toluene	8260C	22.1	20.0	110	79-119
Trichloroethene (TCE)	8260C	18.6	20.0	93	74-122
Trichlorofluoromethane (CFC 11)	8260C	22.6	20.0	113	71-136
Vinyl Chloride	8260C	23.3	20.0	116	74-159
cis-1,2-Dichloroethene	8260C	19.8	20.0	99	80-121
cis-1,3-Dichloropropene	8260C	19.0	20.0	95	77-122
m,p-Xylenes	8260C	43.7	40.0	109	80-126
o-Xylene	8260C	21.8	20.0	109	79-123
trans-1,2-Dichloroethene	8260C	22.8	20.0	114	73-118
trans-1,3-Dichloropropene	8260C	19.7	20.0	99	71-133

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

Service Request: R2007215
Date Analyzed: 08/21/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2009520-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	18.5	20.0	92	75-125
1,1,2,2-Tetrachloroethane	8260C	19.3	20.0	96	78-126
1,1,2-Trichloroethane	8260C	20.4	20.0	102	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	19.8	20.0	99	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	18.4	20.0	92	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	24.1	20.0	120 *	71-118
1,2,3-Trichlorobenzene	8260C	21.0	20.0	105	67-136
1,2,4-Trichlorobenzene	8260C	22.3	20.0	112	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	16.8	20.0	84	55-136
1,2-Dibromoethane	8260C	19.6	20.0	98	82-127
1,2-Dichlorobenzene	8260C	19.9	20.0	100	80-119
1,2-Dichloroethane	8260C	17.8	20.0	89	71-127
1,2-Dichloropropane	8260C	19.8	20.0	99	80-119
1,3-Dichlorobenzene	8260C	20.2	20.0	101	83-121
1,4-Dichlorobenzene	8260C	20.1	20.0	100	79-119
1,4-Dioxane	8260C	328	400	82	44-154
2-Butanone (MEK)	8260C	17.0	20.0	85	61-137
2-Hexanone	8260C	20.2	20.0	101	63-124
4-Methyl-2-pentanone	8260C	21.2	20.0	106	66-124
Acetone	8260C	11.2	20.0	56	40-161
Benzene	8260C	20.3	20.0	101	79-119
Bromochloromethane	8260C	18.9	20.0	95	81-126
Bromodichloromethane	8260C	18.2	20.0	91	81-123
Bromoform	8260C	16.8	20.0	84	65-146
Bromomethane	8260C	16.6	20.0	83	42-166
Carbon Disulfide	8260C	19.4	20.0	97	66-128
Carbon Tetrachloride	8260C	20.2	20.0	101	70-127
Chlorobenzene	8260C	20.0	20.0	100	80-121
Chloroethane	8260C	24.0	20.0	120	62-131
Chloroform	8260C	19.4	20.0	97	79-120
Chloromethane	8260C	22.2	20.0	111	65-135
Cyclohexane	8260C	20.4	20.0	102	69-120
Dibromochloromethane	8260C	18.4	20.0	92	72-128

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

Service Request: R2007215
Date Analyzed: 08/21/20

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2009520-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	23.7	20.0	119	59-155
Dichloromethane	8260C	19.0	20.0	95	73-122
Ethylbenzene	8260C	20.5	20.0	102	76-120
Isopropylbenzene (Cumene)	8260C	21.9	20.0	109	77-128
Methyl Acetate	8260C	14.0	20.0	70	61-133
Methyl tert-Butyl Ether	8260C	19.8	20.0	99	75-118
Methylcyclohexane	8260C	23.2	20.0	116	51-129
Styrene	8260C	21.2	20.0	106	80-124
Tetrachloroethene (PCE)	8260C	20.0	20.0	100	72-125
Toluene	8260C	21.2	20.0	106	79-119
Trichloroethene (TCE)	8260C	19.6	20.0	98	74-122
Trichlorofluoromethane (CFC 11)	8260C	20.3	20.0	101	71-136
Vinyl Chloride	8260C	22.7	20.0	113	74-159
cis-1,2-Dichloroethene	8260C	20.0	20.0	100	80-121
cis-1,3-Dichloropropene	8260C	19.1	20.0	96	77-122
m,p-Xylenes	8260C	44.0	40.0	110	80-126
o-Xylene	8260C	21.8	20.0	109	79-123
trans-1,2-Dichloroethene	8260C	21.4	20.0	107	73-118
trans-1,3-Dichloropropene	8260C	18.3	20.0	91	71-133

Client: The LiRo Group **Service Request:**R2007215
Project: Buffalo China/16-344-1389 **Date Analyzed:**08/20/20 09:12

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\082020\P38704.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 691826

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	17.98	27741	Pass
75	95	30	60	49.41	76237	Pass
95	95	100	100	100.00	154280	Pass
96	95	5	9	7.27	11221	Pass
173	174	0	2	0.68	891	Pass
174	95	50	120	85.54	131968	Pass
175	174	5	9	7.82	10318	Pass
176	174	95	101	96.62	127509	Pass
177	176	5	9	6.52	8310	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2009440-02	I:\ACQUDATA\msvoa12\Data\082020\P38705.D\	08/20/20 09:45	
Lab Control Sample	RQ2009440-03	I:\ACQUDATA\msvoa12\Data\082020\P38706.D\	08/20/20 10:13	
Method Blank	RQ2009440-04	I:\ACQUDATA\msvoa12\Data\082020\P38709.D\	08/20/20 11:34	
MW-21	R2007215-003	I:\ACQUDATA\msvoa12\Data\082020\P38728.D\	08/20/20 18:37	
MW-19R	R2007215-001	I:\ACQUDATA\msvoa12\Data\082020\P38729.D\	08/20/20 18:59	
MW-19R	RQ2009440-05	I:\ACQUDATA\msvoa12\Data\082020\P38731.D\	08/20/20 19:43	
MW-19R	RQ2009440-06	I:\ACQUDATA\msvoa12\Data\082020\P38732.D\	08/20/20 20:05	

Client: The LiRo Group **Service Request:**R2007215
Project: Buffalo China/16-344-1389 **Date Analyzed:**08/21/20 09:24

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\082120\P38763.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 692022

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	17.41	27739	Pass
75	95	30	60	45.48	72448	Pass
95	95	100	100	100.00	159301	Pass
96	95	5	9	6.69	10659	Pass
173	174	0	2	0.41	541	Pass
174	95	50	120	82.69	131728	Pass
175	174	5	9	6.74	8874	Pass
176	174	95	101	97.45	128367	Pass
177	176	5	9	5.78	7416	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2009520-02	I:\ACQUDATA\msvoa12\Data\082120\P38764.D\	08/21/20 09:55	
Lab Control Sample	RQ2009520-03	I:\ACQUDATA\msvoa12\Data\082120\P38765.D\	08/21/20 10:31	
Method Blank	RQ2009520-04	I:\ACQUDATA\msvoa12\Data\082120\P38768.D\	08/21/20 12:00	
MW-19AR	R2007215-002	I:\ACQUDATA\msvoa12\Data\082120\P38778.D\	08/21/20 15:47	

Client: The LiRo Group **Service Request:** R2007215
Project: Buffalo China/16-344-1389 **Date Analyzed:** 08/20/20 09:45

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

File ID: I:\ACQUDATA\msvoa12\Data\082020\P38705.D\ **Lab Code:** RQ2009440-02
Instrument ID: R-MS-12 **Analysis Lot:** 691826
Analysis Method: 8260C **Signal ID:** 1

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	241,579	11.84	509,487	6.52	464,662	9.80
	Upper Limit ==>	483,158	12.01	1,018,974	6.69	929,324	9.97
	Lower Limit ==>	120,790	11.67	254,744	6.35	232,331	9.63
Associated Analyses							
Lab Control Sample	RQ2009440-03	243914	11.84	537193	6.52	486363	9.80
Method Blank	RQ2009440-04	230519	11.84	502605	6.52	459639	9.80
MW-21	R2007215-003	226596	11.84	498877	6.52	460758	9.80
MW-19R	R2007215-001	224692	11.84	501985	6.53	449158	9.80
MW-19RMS	RQ2009440-05	244009	11.83	509700	6.52	464608	9.80
MW-19RDMS	RQ2009440-06	246632	11.84	516369	6.52	467198	9.80

Client: The LiRo Group **Service Request:** R2007215
Project: Buffalo China/16-344-1389 **Date Analyzed:** 08/20/20 09:45

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

File ID: I:\ACQUDATA\msvoa12\Data\082020\P38705.D\ **Lab Code:** RQ2009440-02
Instrument ID: R-MS-12 **Analysis Lot:** 691826
Analysis Method: 8260C **Signal ID:** 1

		Pentafluorobenzene	
		Area	**RT**
	Result ==>	332,870	5.44
	Upper Limit ==>	665,740	5.61
	Lower Limit ==>	166,435	5.27
Associated Analyses			
Lab Control Sample	RQ2009440-03	342722	5.45
Method Blank	RQ2009440-04	325631	5.45
MW-21	R2007215-003	329376	5.45
MW-19R	R2007215-001	323112	5.46
MW-19RMS	RQ2009440-05	323050	5.46
MW-19RDMS	RQ2009440-06	336920	5.44

Client: The LiRo Group **Service Request:** R2007215
Project: Buffalo China/16-344-1389 **Date Analyzed:** 08/21/20 09:55

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

File ID: I:\ACQUDATA\msvoa12\Data\082120\P38764.D\ **Lab Code:** RQ2009520-02
Instrument ID: R-MS-12 **Analysis Lot:** 692022
Analysis Method: 8260C **Signal ID:** 1

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Result ==>	227,173	11.84	493,027	6.52	450,406	9.80
	Upper Limit ==>	454,346	12.01	986,054	6.69	900,812	9.97
	Lower Limit ==>	113,587	11.67	246,514	6.35	225,203	9.63
Associated Analyses							
Lab Control Sample	RQ2009520-03	226913	11.84	487469	6.52	440584	9.80
Method Blank	RQ2009520-04	215831	11.84	474769	6.52	437173	9.80
MW-19AR	R2007215-002	225515	11.83	500182	6.52	447783	9.80

Client: The LiRo Group **Service Request:** R2007215
Project: Buffalo China/16-344-1389 **Date Analyzed:** 08/21/20 09:55

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

File ID: I:\ACQUDATA\msvoa12\Data\082120\P38764.D\ **Lab Code:** RQ2009520-02
Instrument ID: R-MS-12 **Analysis Lot:** 692022
Analysis Method: 8260C **Signal ID:** 1

		Pentafluorobenzene	
		Area	**RT**
	Result ==>	320,474	5.44
	Upper Limit ==>	640,948	5.61
	Lower Limit ==>	160,237	5.27
Associated Analyses			
Lab Control Sample	RQ2009520-03	319714	5.45
Method Blank	RQ2009520-04	308917	5.45
MW-19AR	R2007215-002	323482	5.44

Raw Data

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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Volatile Organic Compounds by GC/MS

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Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/11/20 10:30
Sample Matrix:	Water	**Date Received:**	08/12/20 09:50
Sample Name:	MW-19R	**Units:**	ug/L
Lab Code:	R2007215-001	**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	0.20	1	08/20/20 18:59	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/20/20 18:59	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/20/20 18:59	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/20/20 18:59	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/20/20 18:59	
1,4-Dioxane	100 U	100	13	1	08/20/20 18:59	
2-Butanone (MEK)	10 U	10	0.78	1	08/20/20 18:59	
2-Hexanone	10 U	10	0.20	1	08/20/20 18:59	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/20/20 18:59	
Acetone	10 U	10	5.0	1	08/20/20 18:59	
Benzene	5.0 U	5.0	0.20	1	08/20/20 18:59	
Bromochloromethane	5.0 U	5.0	0.20	1	08/20/20 18:59	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/20/20 18:59	
Bromoform	5.0 U	5.0	0.25	1	08/20/20 18:59	
Bromomethane	5.0 U	5.0	0.70	1	08/20/20 18:59	
Carbon Disulfide	10 U	10	0.42	1	08/20/20 18:59	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/20/20 18:59	
Chlorobenzene	5.0 U	5.0	0.20	1	08/20/20 18:59	
Chloroethane	5.0 U	5.0	0.23	1	08/20/20 18:59	
Chloroform	5.0 U	5.0	0.24	1	08/20/20 18:59	
Chloromethane	5.0 U	5.0	0.28	1	08/20/20 18:59	
Cyclohexane	10 U	10	0.26	1	08/20/20 18:59	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/20/20 18:59	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/20/20 18:59	
Dichloromethane	5.0 U	5.0	0.65	1	08/20/20 18:59	
Ethylbenzene	5.0 U	5.0	0.20	1	08/20/20 18:59	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/20/20 18:59	
Methyl Acetate	10 U	10	0.33	1	08/20/20 18:59	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/20/20 18:59	
Methylcyclohexane	10 U	10	0.20	1	08/20/20 18:59	
Styrene	5.0 U	5.0	0.20	1	08/20/20 18:59	
Tetrachloroethene (PCE)	**0.31 J**	5.0	0.21	1	08/20/20 18:59	
Toluene	5.0 U	5.0	0.20	1	08/20/20 18:59	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/11/20 10:30
Sample Matrix:	Water	**Date Received:**	08/12/20 09:50
Sample Name:	MW-19R	**Units:**	ug/L
Lab Code:	R2007215-001	**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)	**82**	5.0	0.20	1	08/20/20 18:59	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	08/20/20 18:59	
Vinyl Chloride	**1.4 J**	5.0	0.20	1	08/20/20 18:59	
cis-1,2-Dichloroethene	**63**	5.0	0.23	1	08/20/20 18:59	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	08/20/20 18:59	
m,p-Xylenes	5.0 U	5.0	0.20	1	08/20/20 18:59	
o-Xylene	5.0 U	5.0	0.20	1	08/20/20 18:59	
trans-1,2-Dichloroethene	**5.2**	5.0	0.20	1	08/20/20 18:59	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	08/20/20 18:59	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	08/20/20 18:59	
Dibromofluoromethane	88 *	89 - 119	08/20/20 18:59	*
Toluene-d8	96	87 - 121	08/20/20 18:59	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/11/20 10:55
Sample Matrix:	Water	**Date Received:**	08/12/20 09:50
Sample Name:	MW-19AR	**Units:**	ug/L
Lab Code:	R2007215-002	**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)	13 U	13	0.50	2.5	08/21/20 15:47	
1,1,2,2-Tetrachloroethane	13 U	13	0.50	2.5	08/21/20 15:47	
1,1,2-Trichloroethane	13 U	13	0.50	2.5	08/21/20 15:47	
1,1,2-Trichloro-1,2,2-trifluoroethane	13 U	13	0.50	2.5	08/21/20 15:47	
1,1-Dichloroethane (1,1-DCA)	13 U	13	0.50	2.5	08/21/20 15:47	
1,1-Dichloroethene (1,1-DCE)	13 U	13	0.50	2.5	08/21/20 15:47	
1,2,3-Trichlorobenzene	13 U	13	0.63	2.5	08/21/20 15:47	
1,2,4-Trichlorobenzene	13 U	13	0.85	2.5	08/21/20 15:47	
1,2-Dibromo-3-chloropropane (DBCP)	13 U	13	1.2	2.5	08/21/20 15:47	
1,2-Dibromoethane	13 U	13	0.50	2.5	08/21/20 15:47	
1,2-Dichlorobenzene	13 U	13	0.50	2.5	08/21/20 15:47	
1,2-Dichloroethane	13 U	13	0.50	2.5	08/21/20 15:47	
1,2-Dichloropropane	13 U	13	0.50	2.5	08/21/20 15:47	
1,3-Dichlorobenzene	13 U	13	0.50	2.5	08/21/20 15:47	
1,4-Dichlorobenzene	13 U	13	0.50	2.5	08/21/20 15:47	
1,4-Dioxane	250 U	250	33	2.5	08/21/20 15:47	
2-Butanone (MEK)	25 U	25	2.0	2.5	08/21/20 15:47	
2-Hexanone	25 U	25	0.50	2.5	08/21/20 15:47	
4-Methyl-2-pentanone	25 U	25	0.50	2.5	08/21/20 15:47	
Acetone	25 U	25	13	2.5	08/21/20 15:47	
Benzene	13 U	13	0.50	2.5	08/21/20 15:47	
Bromochloromethane	13 U	13	0.50	2.5	08/21/20 15:47	
Bromodichloromethane	13 U	13	0.50	2.5	08/21/20 15:47	
Bromoform	13 U	13	0.63	2.5	08/21/20 15:47	
Bromomethane	13 U	13	1.8	2.5	08/21/20 15:47	
Carbon Disulfide	25 U	25	1.1	2.5	08/21/20 15:47	
Carbon Tetrachloride	13 U	13	0.85	2.5	08/21/20 15:47	
Chlorobenzene	13 U	13	0.50	2.5	08/21/20 15:47	
Chloroethane	13 U	13	0.58	2.5	08/21/20 15:47	
Chloroform	13 U	13	0.60	2.5	08/21/20 15:47	
Chloromethane	13 U	13	0.70	2.5	08/21/20 15:47	
Cyclohexane	**2.1 J**	25	0.65	2.5	08/21/20 15:47	
Dibromochloromethane	13 U	13	0.50	2.5	08/21/20 15:47	
Dichlorodifluoromethane (CFC 12)	13 U	13	0.53	2.5	08/21/20 15:47	
Dichloromethane	13 U	13	1.7	2.5	08/21/20 15:47	
Ethylbenzene	13 U	13	0.50	2.5	08/21/20 15:47	
Isopropylbenzene (Cumene)	13 U	13	0.50	2.5	08/21/20 15:47	
Methyl Acetate	25 U	25	0.83	2.5	08/21/20 15:47	
Methyl tert-Butyl Ether	13 U	13	0.50	2.5	08/21/20 15:47	
Methylcyclohexane	**1.9 J**	25	0.50	2.5	08/21/20 15:47	
Styrene	13 U	13	0.50	2.5	08/21/20 15:47	
Tetrachloroethene (PCE)	13 U	13	0.53	2.5	08/21/20 15:47	
Toluene	13 U	13	0.50	2.5	08/21/20 15:47	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/11/20 10:55
Sample Matrix:	Water	**Date Received:**	08/12/20 09:50
Sample Name:	MW-19AR	**Units:**	ug/L
Lab Code:	R2007215-002	**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)	**18**		13	0.50	2.5	08/21/20 15:47	
Trichlorofluoromethane (CFC 11)	13	U	13	0.60	2.5	08/21/20 15:47	
Vinyl Chloride	**37**		13	0.50	2.5	08/21/20 15:47	
cis-1,2-Dichloroethene	**240**		13	0.58	2.5	08/21/20 15:47	
cis-1,3-Dichloropropene	13	U	13	0.50	2.5	08/21/20 15:47	
m,p-Xylenes	13	U	13	0.50	2.5	08/21/20 15:47	
o-Xylene	13	U	13	0.50	2.5	08/21/20 15:47	
trans-1,2-Dichloroethene	**2.4**	**J**	13	0.50	2.5	08/21/20 15:47	
trans-1,3-Dichloropropene	13	U	13	0.58	2.5	08/21/20 15:47	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	08/21/20 15:47	
Dibromofluoromethane	92	89 - 119	08/21/20 15:47	
Toluene-d8	96	87 - 121	08/21/20 15:47	

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/11/20 12:45
Sample Matrix:	Water	**Date Received:**	08/12/20 09:50
Sample Name:	MW-21	**Units:**	ug/L
Lab Code:	R2007215-003	**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)	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,1-Dichloroethene (1,1-DCE)	**0.69 J**	5.0	0.20	1	08/20/20 18:37	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	08/20/20 18:37	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	08/20/20 18:37	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	08/20/20 18:37	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,2-Dichlorobenzene	**0.28 J**	5.0	0.20	1	08/20/20 18:37	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	08/20/20 18:37	
1,4-Dioxane	100 U	100	13	1	08/20/20 18:37	
2-Butanone (MEK)	10 U	10	0.78	1	08/20/20 18:37	
2-Hexanone	10 U	10	0.20	1	08/20/20 18:37	
4-Methyl-2-pentanone	10 U	10	0.20	1	08/20/20 18:37	
Acetone	10 U	10	5.0	1	08/20/20 18:37	
Benzene	**0.27 J**	5.0	0.20	1	08/20/20 18:37	
Bromochloromethane	5.0 U	5.0	0.20	1	08/20/20 18:37	
Bromodichloromethane	5.0 U	5.0	0.20	1	08/20/20 18:37	
Bromoform	5.0 U	5.0	0.25	1	08/20/20 18:37	
Bromomethane	5.0 U	5.0	0.70	1	08/20/20 18:37	
Carbon Disulfide	10 U	10	0.42	1	08/20/20 18:37	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	08/20/20 18:37	
Chlorobenzene	5.0 U	5.0	0.20	1	08/20/20 18:37	
Chloroethane	5.0 U	5.0	0.23	1	08/20/20 18:37	
Chloroform	5.0 U	5.0	0.24	1	08/20/20 18:37	
Chloromethane	5.0 U	5.0	0.28	1	08/20/20 18:37	
Cyclohexane	10 U	10	0.26	1	08/20/20 18:37	
Dibromochloromethane	5.0 U	5.0	0.20	1	08/20/20 18:37	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	08/20/20 18:37	
Dichloromethane	5.0 U	5.0	0.65	1	08/20/20 18:37	
Ethylbenzene	5.0 U	5.0	0.20	1	08/20/20 18:37	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	08/20/20 18:37	
Methyl Acetate	10 U	10	0.33	1	08/20/20 18:37	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	08/20/20 18:37	
Methylcyclohexane	10 U	10	0.20	1	08/20/20 18:37	
Styrene	5.0 U	5.0	0.20	1	08/20/20 18:37	
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	08/20/20 18:37	
Toluene	5.0 U	5.0	0.20	1	08/20/20 18:37	

Analytical Report

Client:	The LiRo Group	**Service Request:**	R2007215
Project:	Buffalo China/16-344-1389	**Date Collected:**	08/11/20 12:45
Sample Matrix:	Water	**Date Received:**	08/12/20 09:50
Sample Name:	MW-21	**Units:**	ug/L
Lab Code:	R2007215-003	**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)	**0.72**	**J**	5.0	0.20	1	08/20/20 18:37	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.24	1	08/20/20 18:37	
Vinyl Chloride	**74**		5.0	0.20	1	08/20/20 18:37	
cis-1,2-Dichloroethene	**170**		5.0	0.23	1	08/20/20 18:37	
cis-1,3-Dichloropropene	5.0	U	5.0	0.20	1	08/20/20 18:37	
m,p-Xylenes	5.0	U	5.0	0.20	1	08/20/20 18:37	
o-Xylene	5.0	U	5.0	0.20	1	08/20/20 18:37	
trans-1,2-Dichloroethene	**5.7**		5.0	0.20	1	08/20/20 18:37	
trans-1,3-Dichloropropene	5.0	U	5.0	0.23	1	08/20/20 18:37	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	08/20/20 18:37	
Dibromofluoromethane	92	89 - 119	08/20/20 18:37	
Toluene-d8	97	87 - 121	08/20/20 18:37	

1st FW 08/25/20
2nd BA 08/25/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38729.D
Acq On : 20 Aug 2020 6:59 pm
Operator : K.Ruest
Sample : R2007215-001|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 25 13:29:12 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

SURR low, rpt to confirm

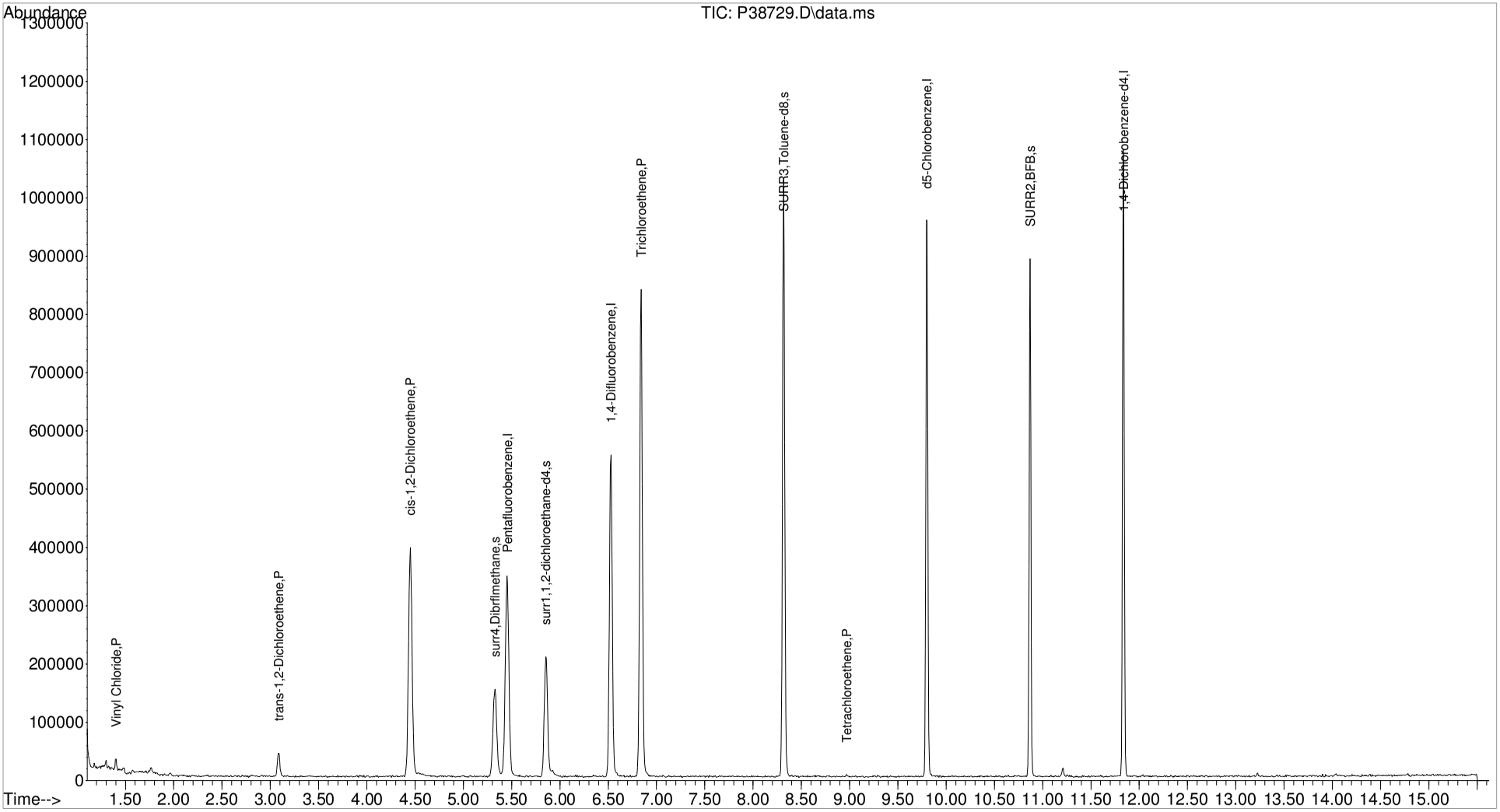
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	323112	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	501985	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	449158	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	224692	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	127160	44.11	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 88.22%#				
48) surr1,1,2-dichloroetha...	5.853	65	177702	44.53	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 89.06%				
65) SURR3,Toluene-d8	8.316	98	642949	47.99	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.98%				
70) SURR2,BFB	10.870	95	235698	47.75	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.50%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.402	62	5882	1.40	ppb		100
15) Acetone	2.414	43	1233m	Below Cal			
18) Carbon Disulfide	2.524	76	475	Below Cal			78
26) trans-1,2-Dichloroethene	3.085	96	15147	5.20	ppb	#	86
34) cis-1,2-Dichloroethene	4.450	96	235511	63.16	ppb		86
54) Trichloroethene	6.840	130	295918	82.28	ppb		97
72) Tetrachloroethene	8.968	164	854	0.31	ppb	#	41

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

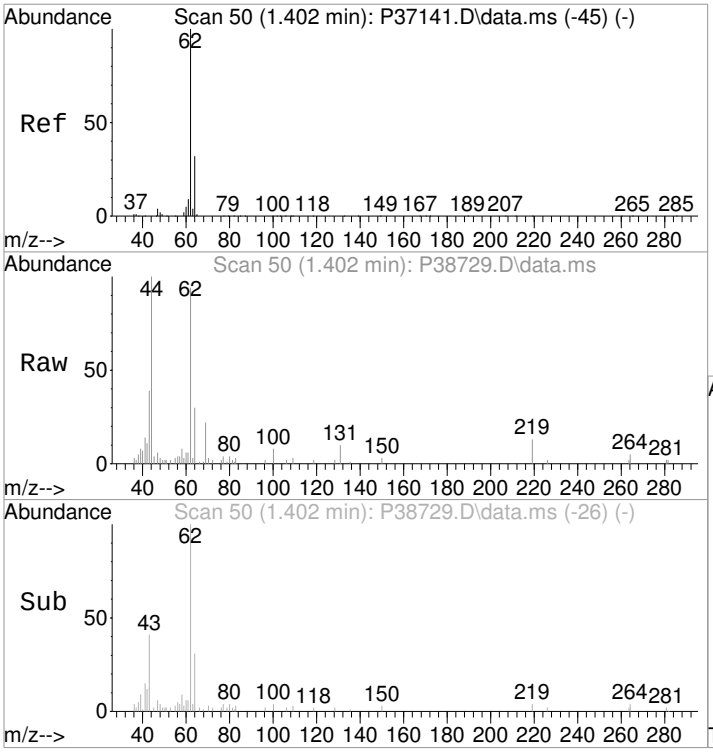
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38729.D
Acq On : 20 Aug 2020 6:59 pm
Operator : K.Ruest
Sample : R2007215-001|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 25 13:29:12 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



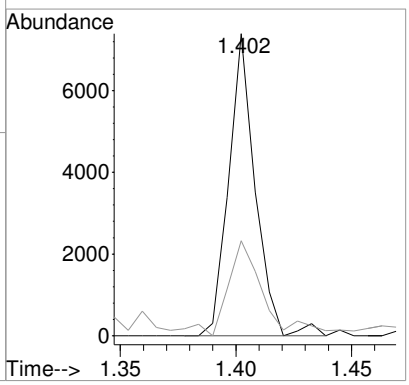
1st FJ 08/25/20
2nd BA 08/25/20

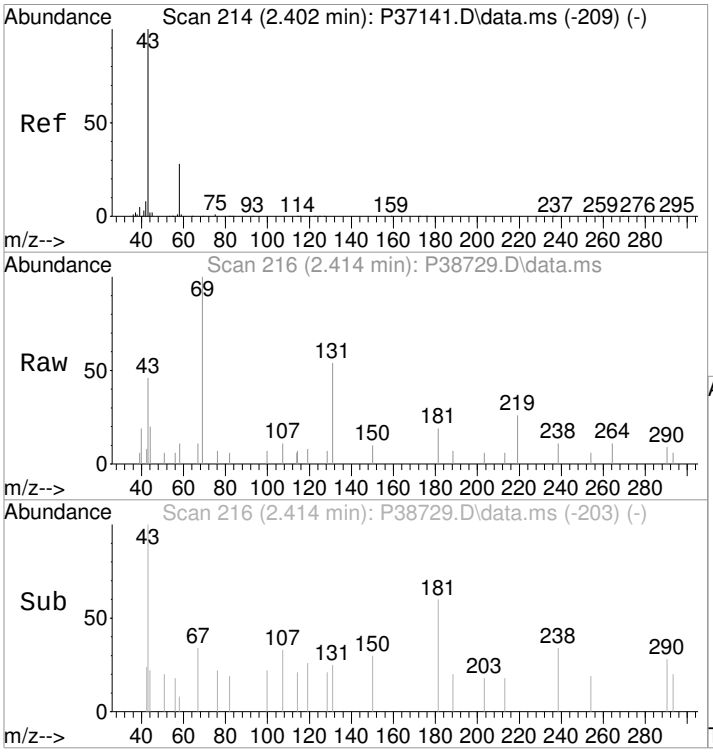


#4
Vinyl Chloride
Concen: 1.40 ppb
RT: 1.402 min Scan# 50
Delta R.T. 0.000 min
Lab File: P38729.D
Acq: 20 Aug 2020 6:59 pm

Tgt Ion: 62 Resp: 5882

Ion	Ratio	Lower	Upper
62	100		
64	31.5	11.6	51.6

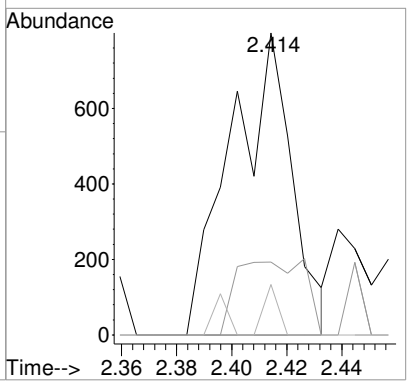


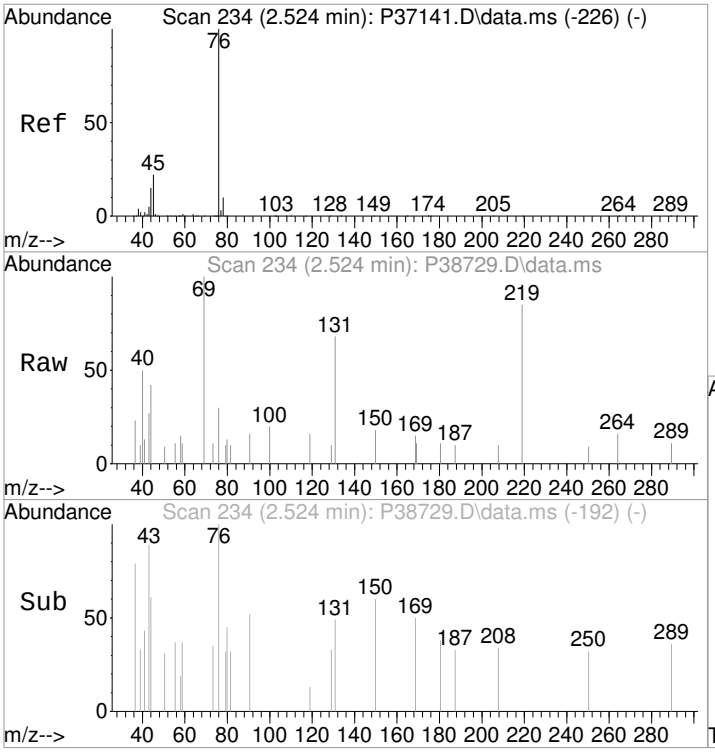


#15
Acetone
Concen: Below Cal m
RT: 2.414 min Scan# 216
Delta R.T. 0.007 min
Lab File: P38729.D
Acq: 20 Aug 2020 6:59 pm

Tgt Ion: 43 Resp: 1233

Ion	Ratio	Lower	Upper
43	100		
58	24.1	8.2	48.2
42	16.8	0.0	27.7

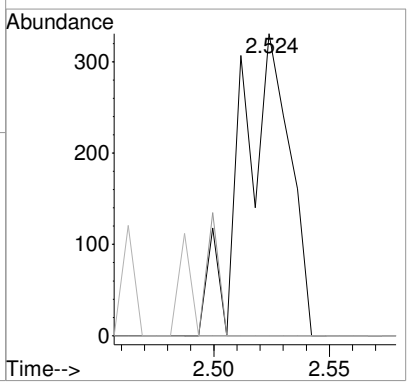


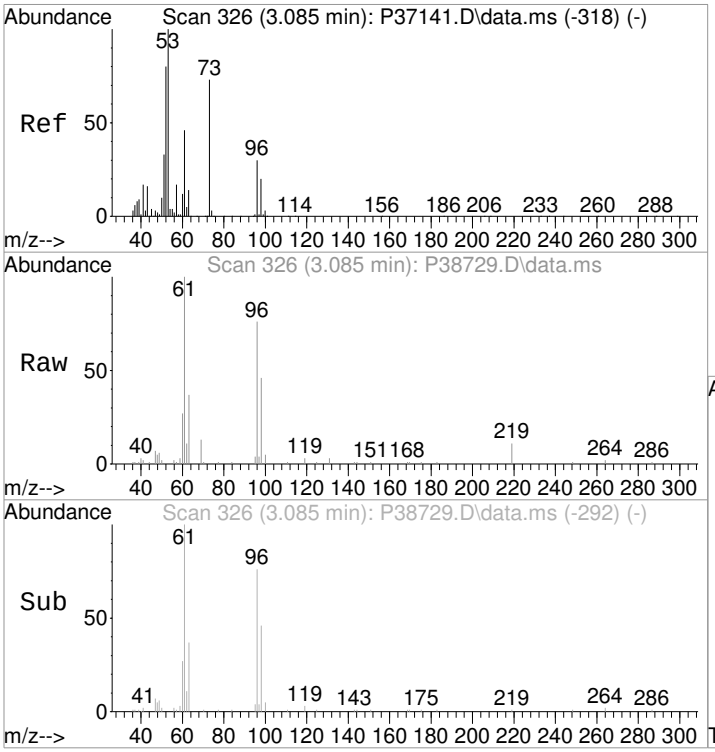


#18
Carbon Disulfide
Concen: Below Cal
RT: 2.524 min Scan# 234
Delta R.T. 0.001 min
Lab File: P38729.D
Acq: 20 Aug 2020 6:59 pm

Tgt Ion: 76 Resp: 475

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	29.5
77	0.0	0.0	22.5

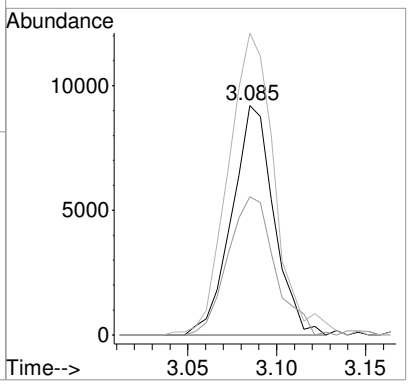


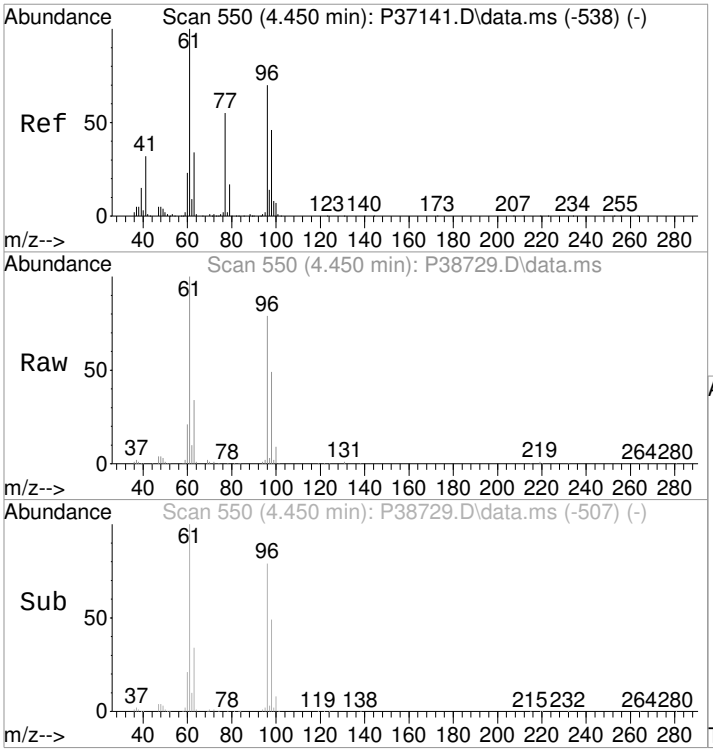


#26
trans-1,2-Dichloroethene
Concen: 5.20 ppb
RT: 3.085 min Scan# 326
Delta R.T. 0.000 min
Lab File: P38729.D
Acq: 20 Aug 2020 6:59 pm

Tgt Ion: 96 Resp: 15147

Ion	Ratio	Lower	Upper
96	100		
98	60.2	46.8	86.8
61	131.6	132.8	172.8#

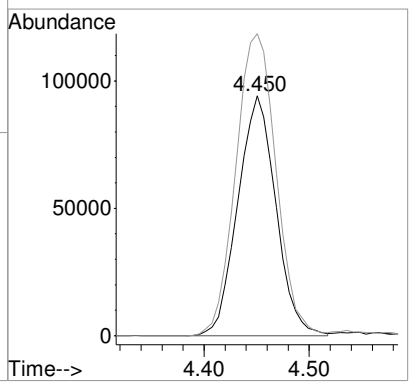


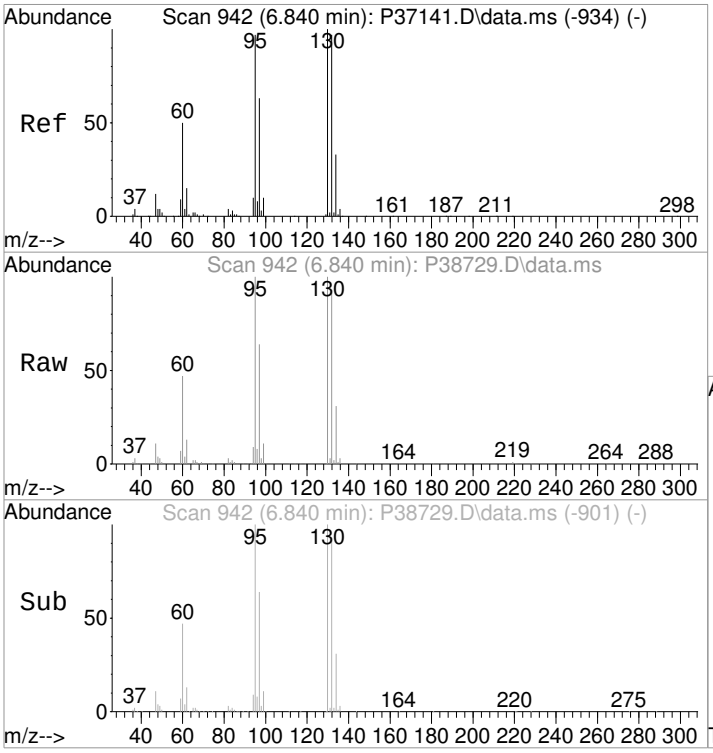


#34
cis-1,2-Dichloroethene
Concen: 63.16 ppb
RT: 4.450 min Scan# 550
Delta R.T. 0.000 min
Lab File: P38729.D
Acq: 20 Aug 2020 6:59 pm

Tgt Ion: 96 Resp: 235511

Ion	Ratio	Lower	Upper
96	100		
61	125.9	123.1	163.1

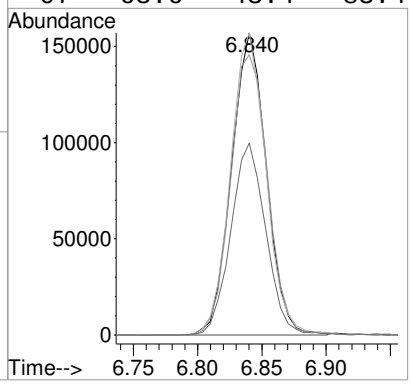


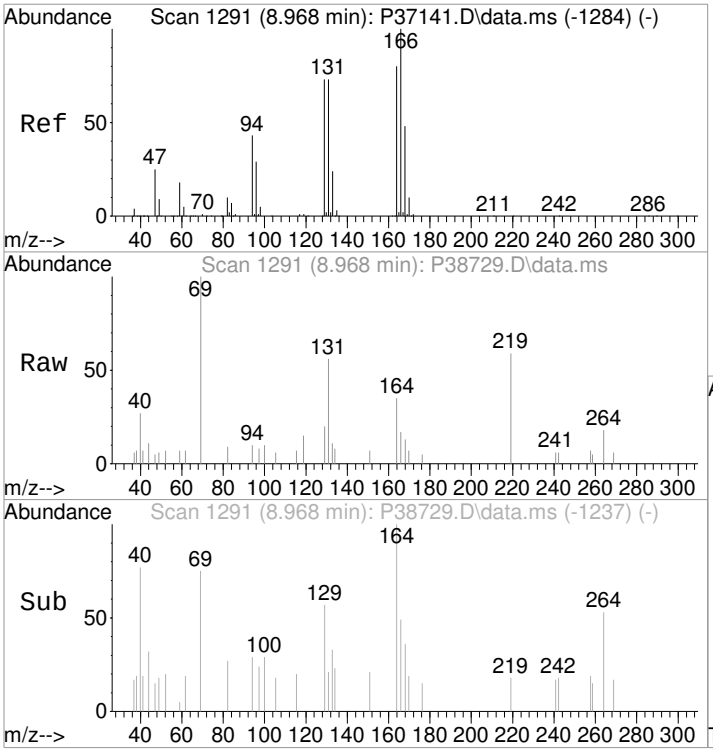


#54
Trichloroethene
Concen: 82.28 ppb
RT: 6.840 min Scan# 942
Delta R.T. 0.000 min
Lab File: P38729.D
Acq: 20 Aug 2020 6:59 pm

Tgt Ion:130 Resp: 295918

Ion	Ratio	Lower	Upper
130	100		
132	92.8	77.2	117.2
95	100.0	76.7	116.7
97	63.6	43.4	83.4

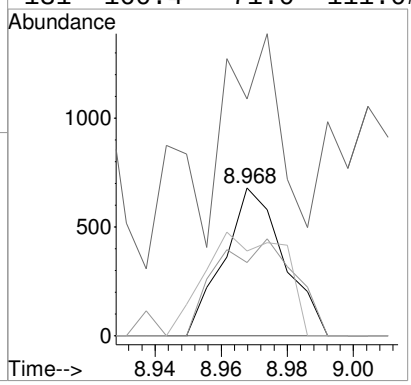




#72
Tetrachloroethene
Concen: 0.31 ppb
RT: 8.968 min Scan# 1291
Delta R.T. 0.000 min
Lab File: P38729.D
Acq: 20 Aug 2020 6:59 pm

Tgt Ion:164 Resp: 854

Ion	Ratio	Lower	Upper
164	100		
166	49.5	105.5	145.5#
129	57.3	71.7	111.7#
131	160.4	71.0	111.0#

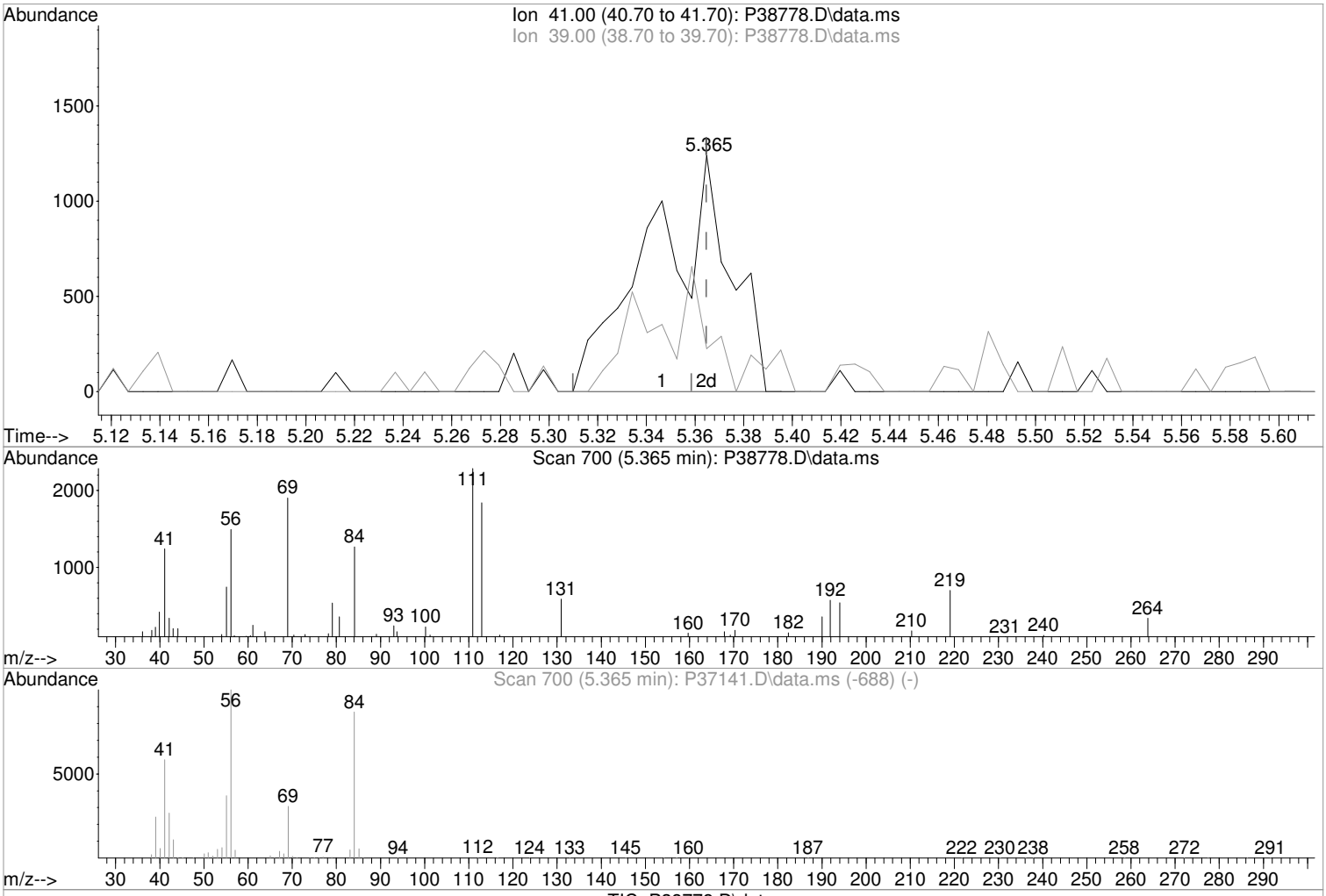


1st FN 08/26/20
2nd BA 08/27/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38778.D
Acq On : 21 Aug 2020 3:47 pm
Operator : K.Ruest
Sample : R2007215-002|2.5 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 21 16:06:11 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38778.D\data.ms

(44) Cyclohexane (P)

5.365min (0.000) 0.86 ppb m

response 2809

Ion	Exp%	Act%
41.00	100	100
39.00	42.20	18.15#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

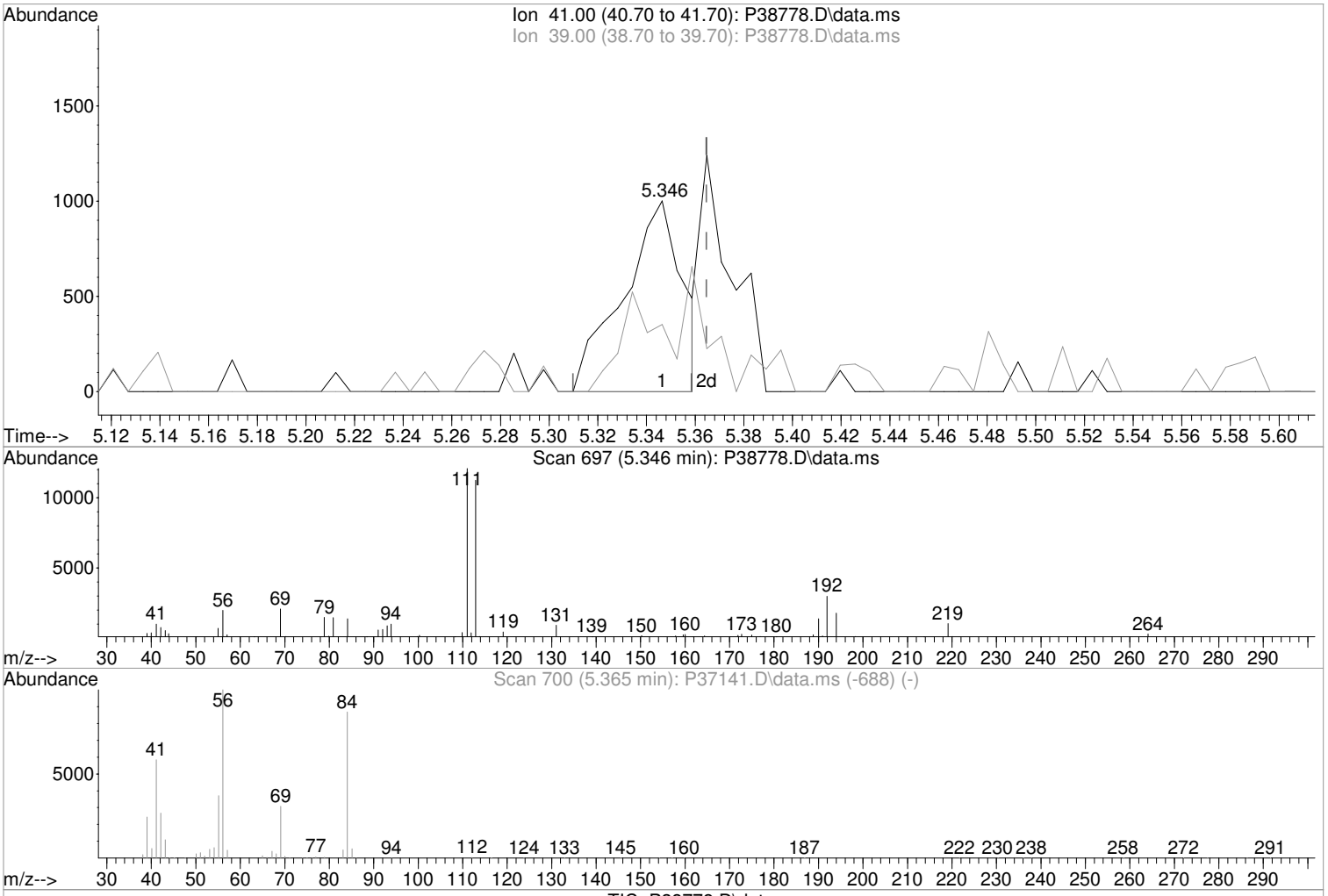
Poor integration.

08/26/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38778.D
Acq On : 21 Aug 2020 3:47 pm
Operator : K.Ruest
Sample : R2007215-002|2.5 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 21 16:06:11 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38778.D\data.ms

(44) Cyclohexane (P)

5.346min (-0.018) 0.51 ppb

response 1685

Ion	Exp%	Act%
41.00	100	100
39.00	42.20	35.26
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

08/26/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38778.D
Acq On : 21 Aug 2020 3:47 pm
Operator : K.Ruest
Sample : R2007215-002|2.5 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 15:16:46 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

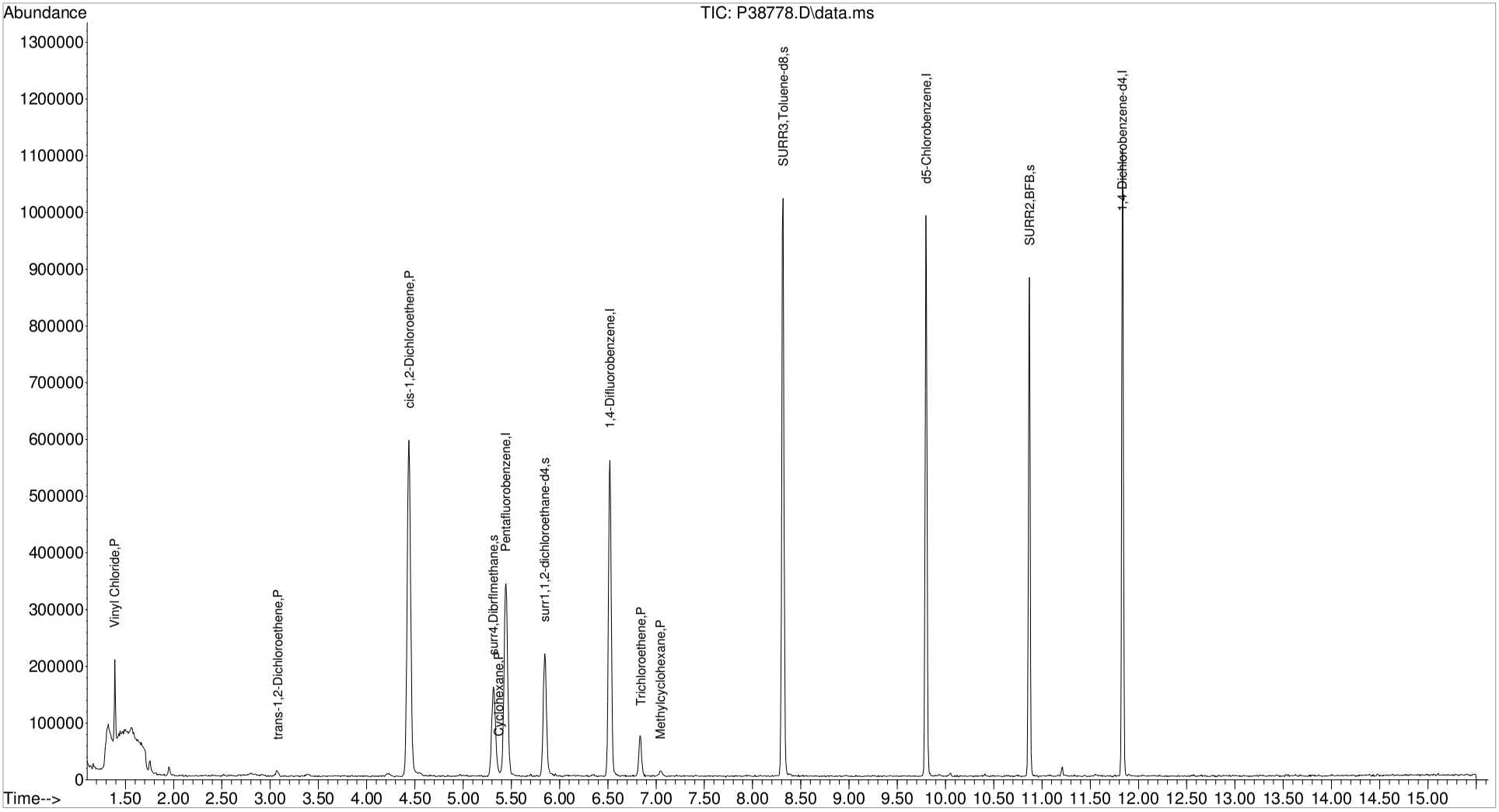
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.444	168	323482	50.00	ppb	-0.01
43) 1,4-Difluorobenzene	6.523	114	500182	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	447783	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	225515	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.316	113	131546	45.80	ppb	-0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 91.60%			
48) surr1,1,2-dichloroetha...	5.846	65	179795	45.22	ppb	-0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 90.44%			
65) SURR3,Toluene-d8	8.315	98	643515	48.21	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.42%			
70) SURR2,BFB	10.870	95	230514	46.87	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 93.74%			
Target Compounds						Qvalue
4) Vinyl Chloride	1.390	62	62310	14.79	ppb	# 29
15) Acetone	2.396	43	1052	Below Cal		# 53
18) Carbon Disulfide	2.518	76	2295	Below Cal		74
26) trans-1,2-Dichloroethene	3.079	96	2837	0.97	ppb	# 64
34) cis-1,2-Dichloroethene	4.438	96	351483	94.15	ppb	94
44) Cyclohexane	5.365	41	2809m	0.86	ppb	
54) Trichloroethene	6.840	130	26339	7.35	ppb	92
55) Methylcyclohexane	7.047	55	3374	0.76	ppb	# 83

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

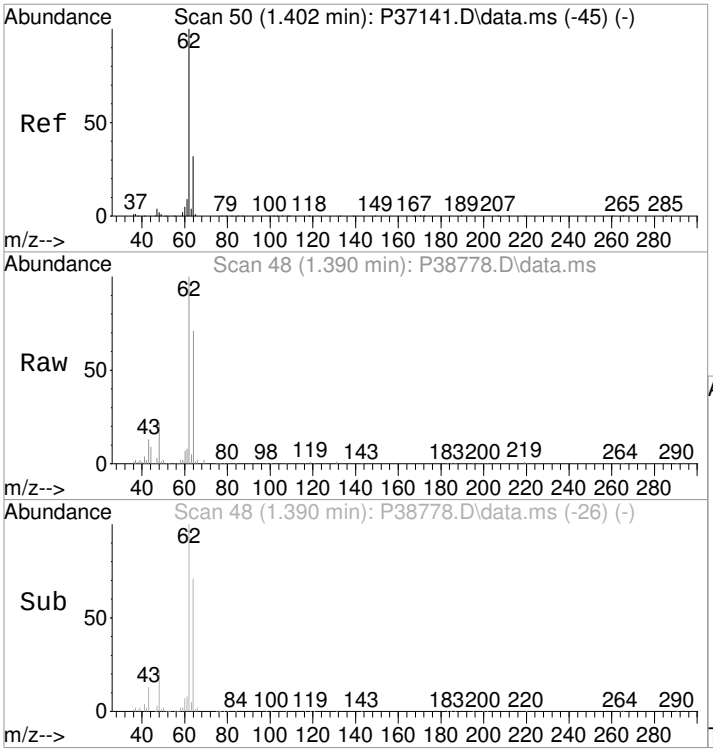
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38778.D
Acq On : 21 Aug 2020 3:47 pm
Operator : K.Ruest
Sample : R2007215-002|2.5 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 26 15:16:46 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



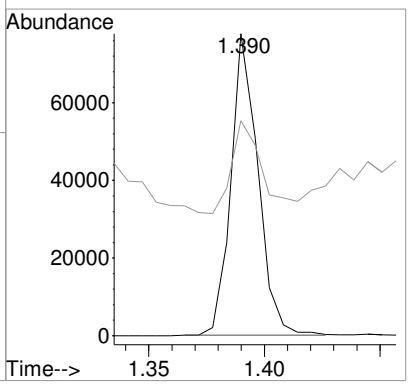
1st FJ 08/26/20
2nd BA 08/27/20

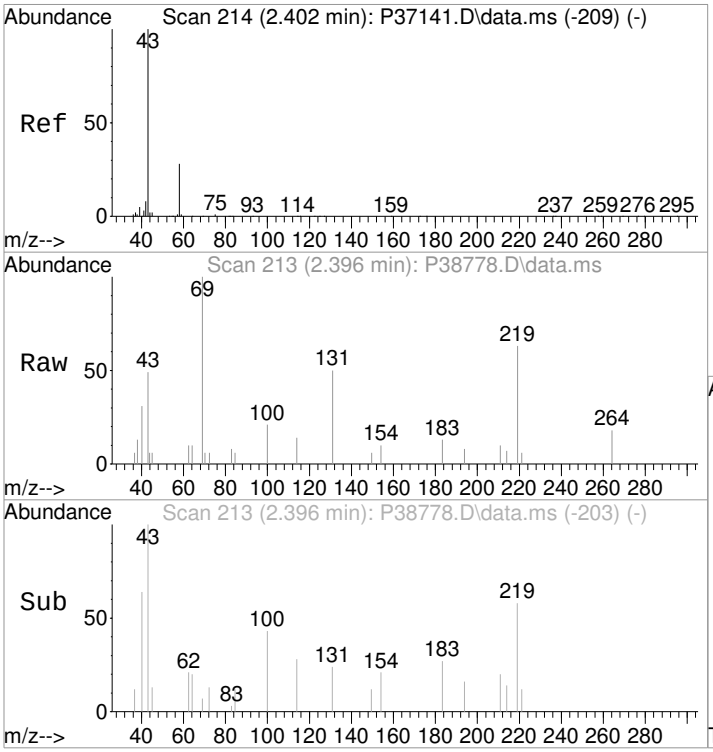


#4
Vinyl Chloride
Concen: 14.79 ppb
RT: 1.390 min Scan# 48
Delta R.T. -0.012 min
Lab File: P38778.D
Acq: 21 Aug 2020 3:47 pm

Tgt Ion: 62 Resp: 62310

Ion	Ratio	Lower	Upper
62	100		
64	71.1	11.6	51.6#

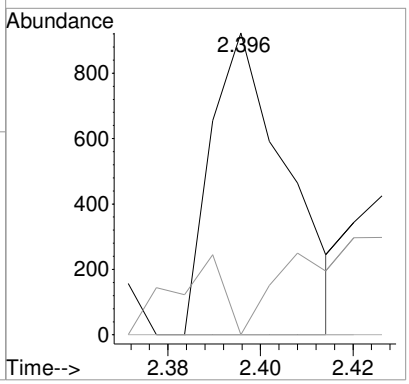


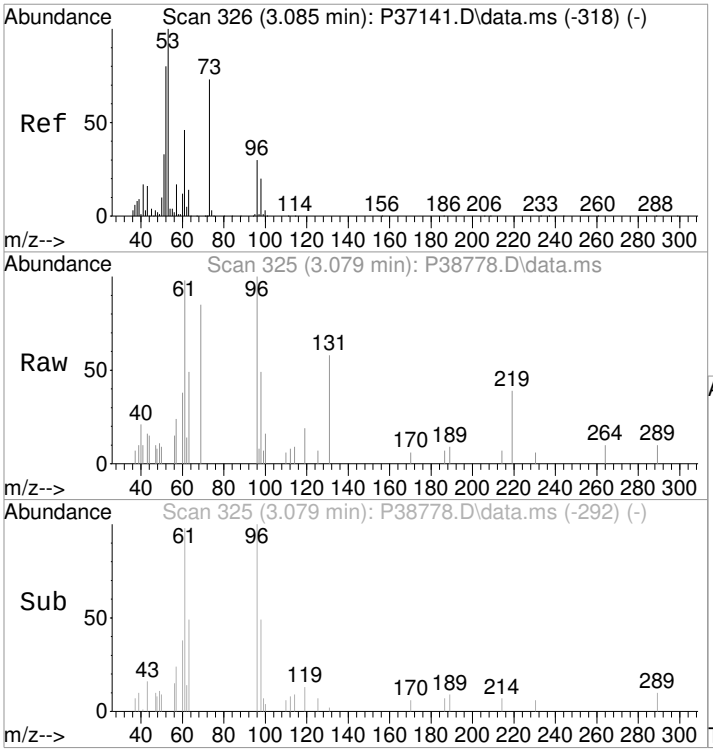


#15
Acetone
Concen: Below Cal
RT: 2.396 min Scan# 213
Delta R.T. -0.011 min
Lab File: P38778.D
Acq: 21 Aug 2020 3:47 pm

Tgt Ion: 43 Resp: 1052

Ion	Ratio	Lower	Upper
43	100		
58	0.0	8.2	48.2#
42	0.0	0.0	27.7

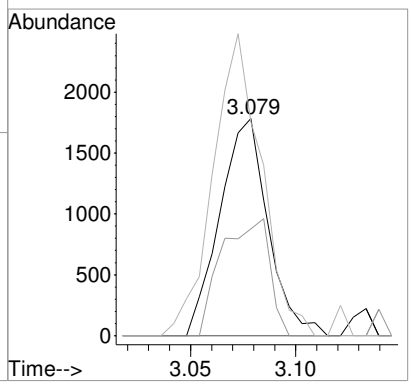


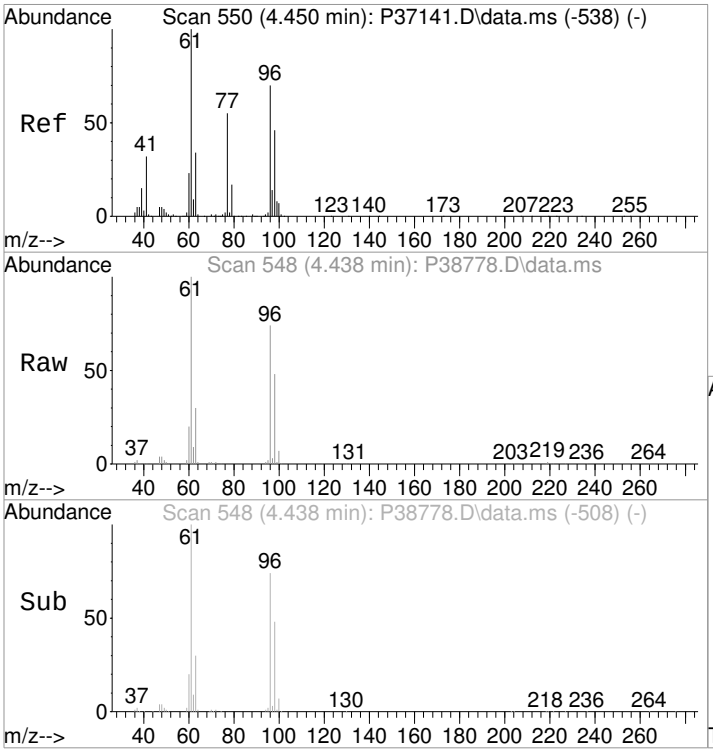


#26
trans-1,2-Dichloroethene
Concen: 0.97 ppb
RT: 3.079 min Scan# 325
Delta R.T. -0.006 min
Lab File: P38778.D
Acq: 21 Aug 2020 3:47 pm

Tgt Ion: 96 Resp: 2837

Ion	Ratio	Lower	Upper
96	100		
98	49.1	46.8	86.8
61	98.4	132.8	172.8#

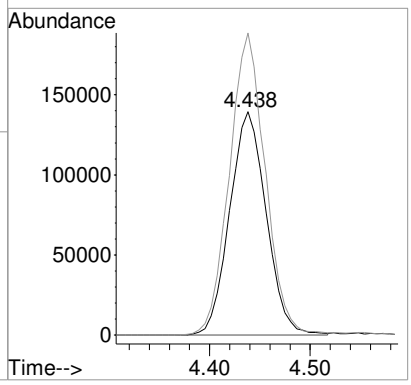


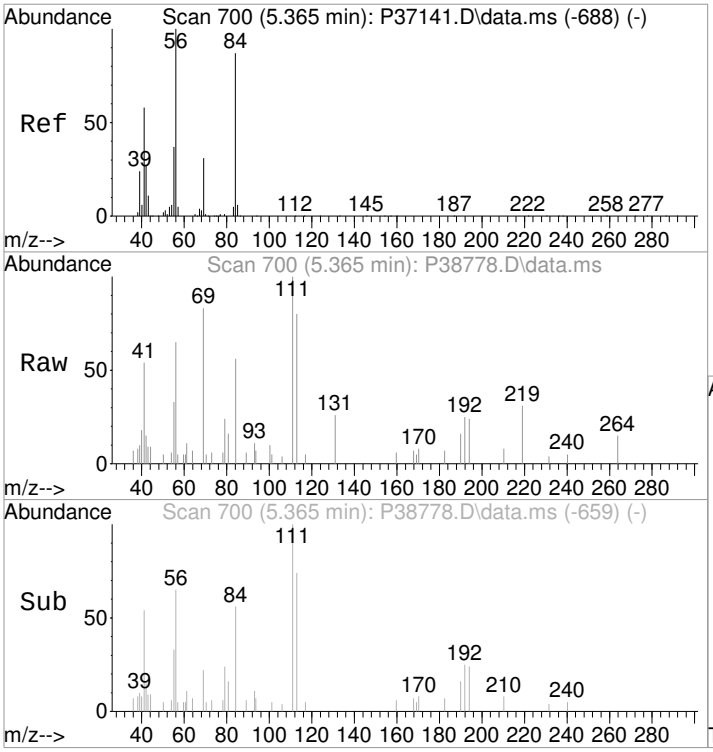


#34
cis-1,2-Dichloroethene
Concen: 94.15 ppb
RT: 4.438 min Scan# 548
Delta R.T. -0.012 min
Lab File: P38778.D
Acq: 21 Aug 2020 3:47 pm

Tgt Ion: 96 Resp: 351483

Ion	Ratio	Lower	Upper
96	100		
61	135.2	123.1	163.1

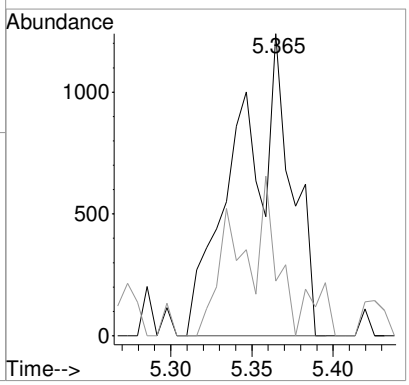


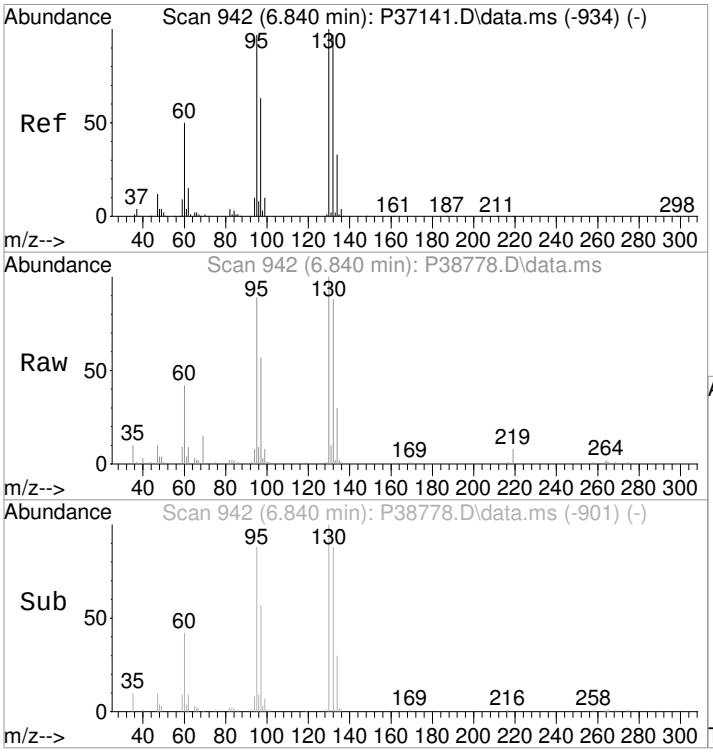


#44
Cyclohexane
Concen: 0.86 ppb m
RT: 5.365 min Scan# 700
Delta R.T. 0.000 min
Lab File: P38778.D
Acq: 21 Aug 2020 3:47 pm

Tgt Ion: 41 Resp: 2809

Ion	Ratio	Lower	Upper
41	100		
39	18.1	22.2	62.2#

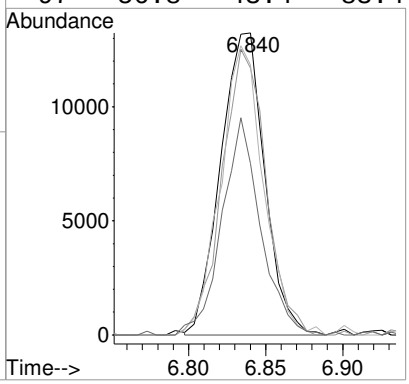


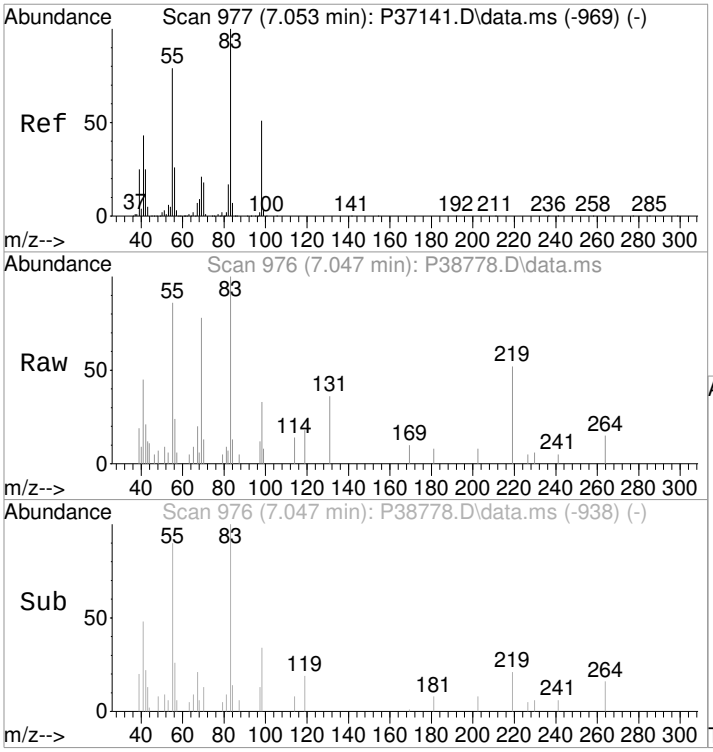


#54
Trichloroethene
Concen: 7.35 ppb
RT: 6.840 min Scan# 942
Delta R.T. -0.000 min
Lab File: P38778.D
Acq: 21 Aug 2020 3:47 pm

Tgt Ion:130 Resp: 26339

Ion	Ratio	Lower	Upper
130	100		
132	88.4	77.2	117.2
95	89.5	76.7	116.7
97	56.8	43.4	83.4

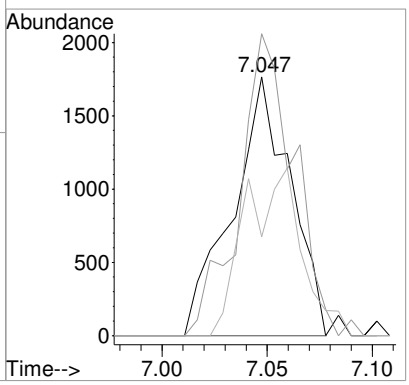




#55
Methylcyclohexane
Concen: 0.76 ppb
RT: 7.047 min Scan# 976
Delta R.T. -0.006 min
Lab File: P38778.D
Acq: 21 Aug 2020 3:47 pm

Tgt Ion: 55 Resp: 3374

Ion	Ratio	Lower	Upper
55	100		
83	116.6	106.2	146.2
98	38.2	44.7	84.7#



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38728.D
Acq On : 20 Aug 2020 6:37 pm
Operator : K.Ruest
Sample : R2007215-003|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 25 13:15:49 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

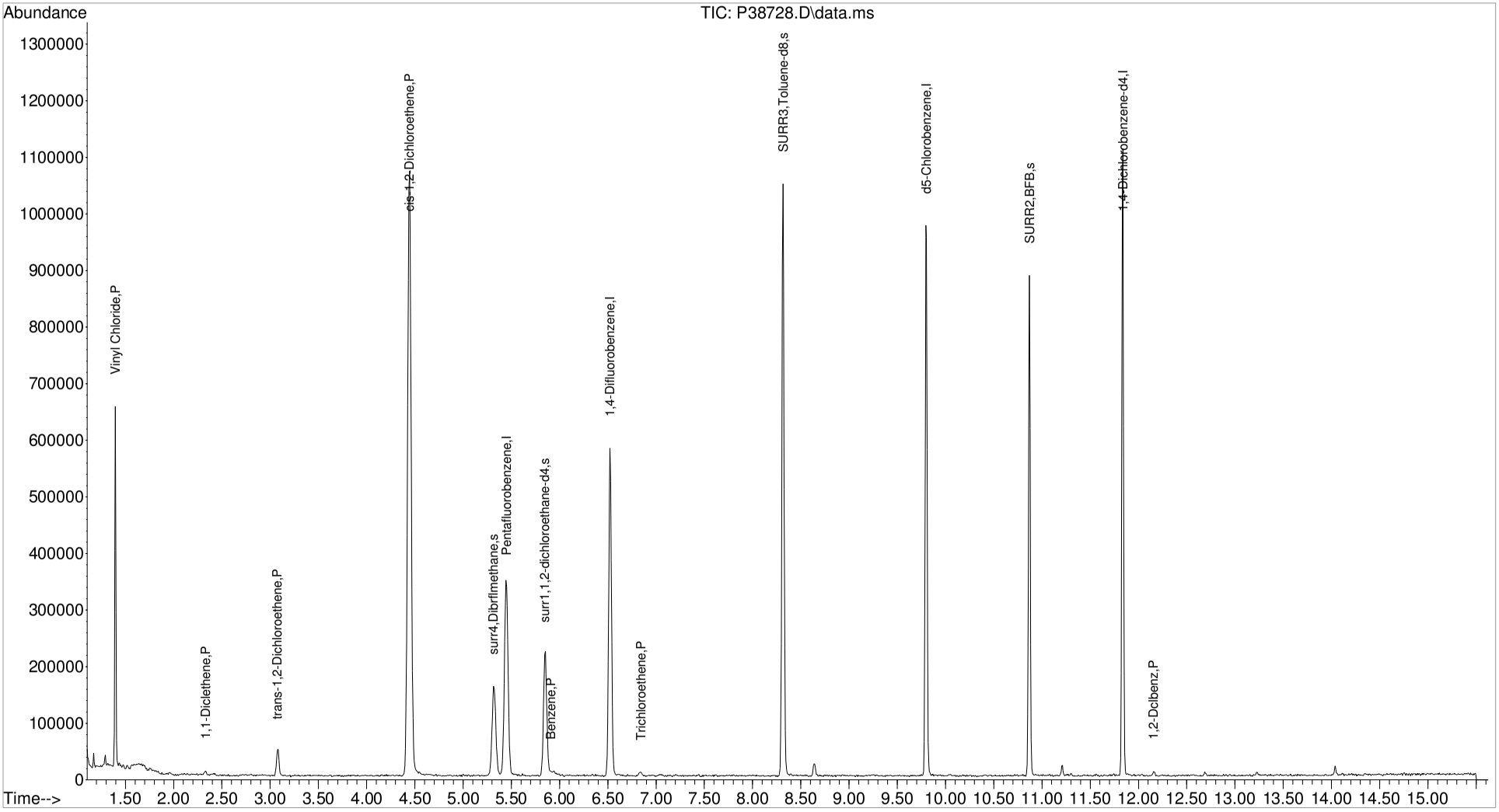
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.450	168	329376	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.523	114	498877	50.00	ppb		0.00
71) d5-Chlorobenzene	9.797	117	460758	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	226596	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.316	113	131279	45.83	ppb		-0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 91.66%				
48) surr1,1,2-dichloroetha...	5.846	65	183873	46.37	ppb		-0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 92.74%				
65) SURR3,Toluene-d8	8.315	98	647668	48.65	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.30%				
70) SURR2,BFB	10.870	95	234747	47.85	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.70%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.396	62	317563	74.03	ppb		100
13) 1,1-Diclethene	2.329	96	1760	0.69	ppb	#	70
15) Acetone	2.402	43	1462	Below Cal			70
18) Carbon Disulfide	2.518	76	903	Below Cal		#	50
26) trans-1,2-Dichloroethene	3.072	96	16906	5.70	ppb	#	74
34) cis-1,2-Dichloroethene	4.444	96	644109	169.44	ppb		93
49) Benzene	5.907	78	3846	0.27	ppb	#	72
54) Trichloroethene	6.840	130	2560	0.72	ppb		86
110) 1,2-Dclbenz	12.156	146	2229	0.27	ppb		88

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

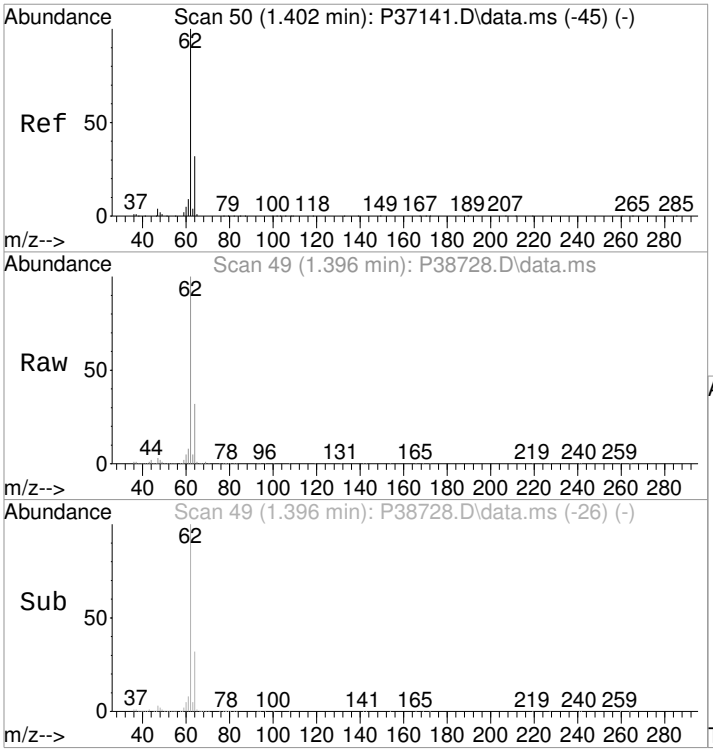
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38728.D
Acq On : 20 Aug 2020 6:37 pm
Operator : K.Ruest
Sample : R2007215-003|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 25 13:15:49 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



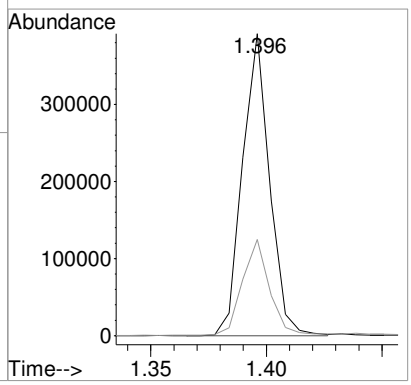
1st FJ 08/25/20
2nd BA 08/25/20

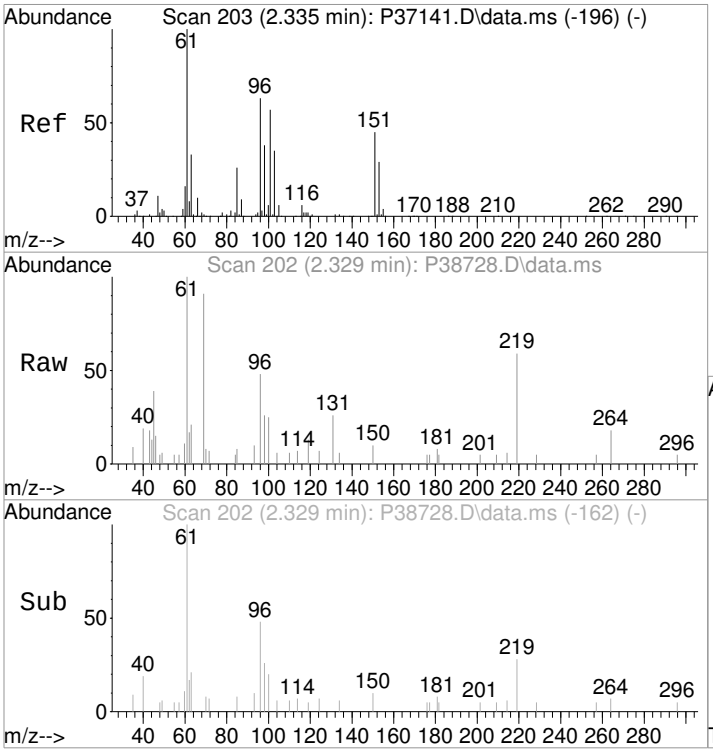


#4
Vinyl Chloride
Concen: 74.03 ppb
RT: 1.396 min Scan# 49
Delta R.T. -0.006 min
Lab File: P38728.D
Acq: 20 Aug 2020 6:37 pm

Tgt Ion: 62 Resp: 317563

Ion	Ratio	Lower	Upper
62	100		
64	31.8	11.6	51.6

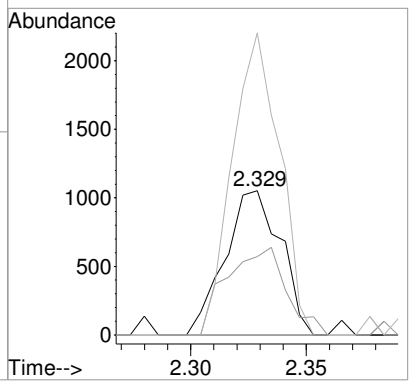


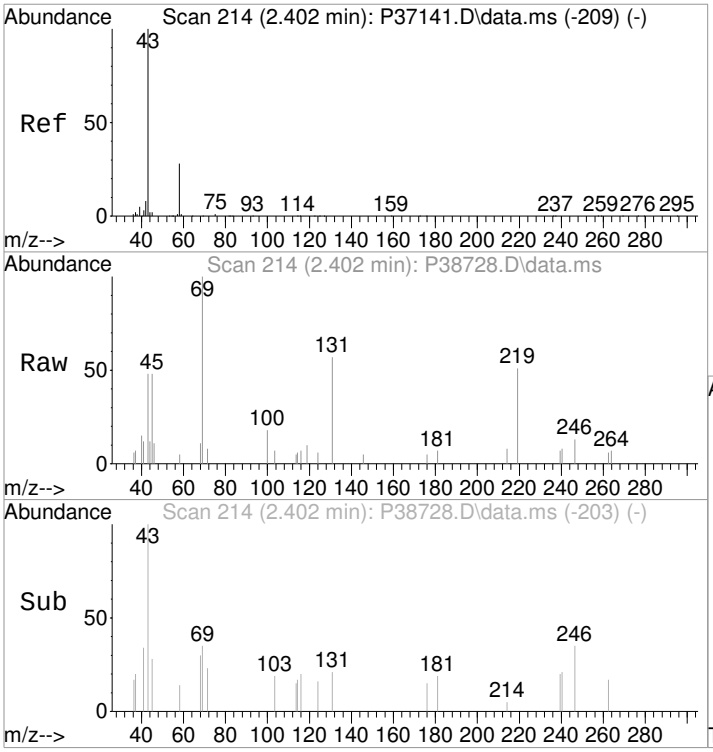


#13
1,1-Diclethene
Concen: 0.69 ppb
RT: 2.329 min Scan# 202
Delta R.T. -0.006 min
Lab File: P38728.D
Acq: 20 Aug 2020 6:37 pm

Tgt Ion: 96 Resp: 1760

Ion	Ratio	Lower	Upper
96	100		
98	54.3	40.4	80.4
61	209.2	139.0	179.0#

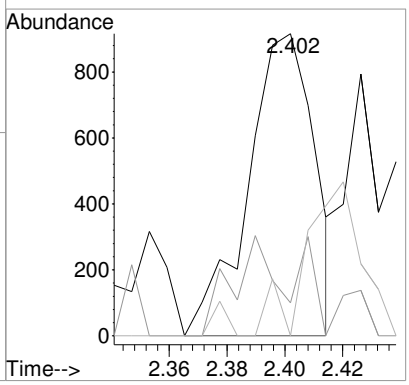


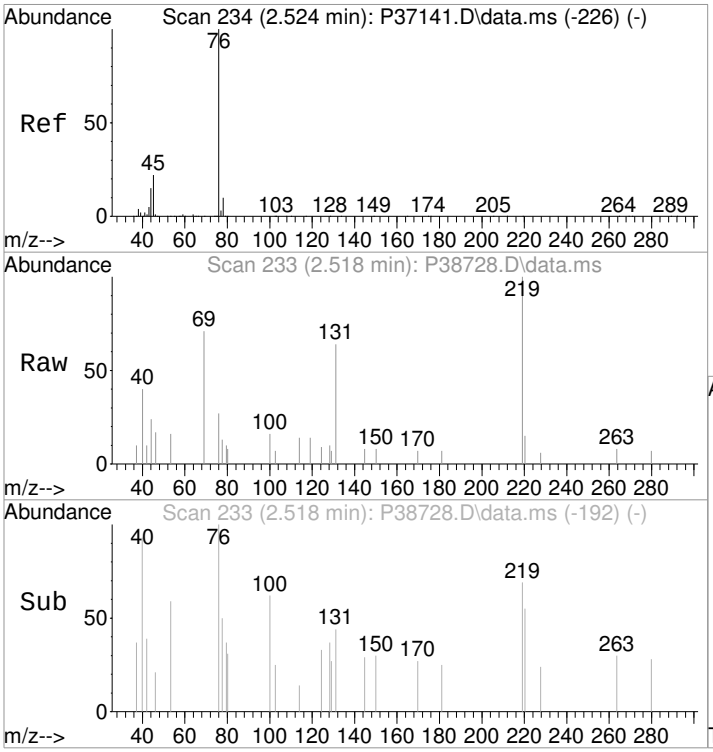


#15
Acetone
Concen: Below Cal
RT: 2.402 min Scan# 214
Delta R.T. -0.005 min
Lab File: P38728.D
Acq: 20 Aug 2020 6:37 pm

Tgt Ion: 43 Resp: 1462

Ion	Ratio	Lower	Upper
43	100		
58	10.9	8.2	48.2
42	0.0	0.0	27.7

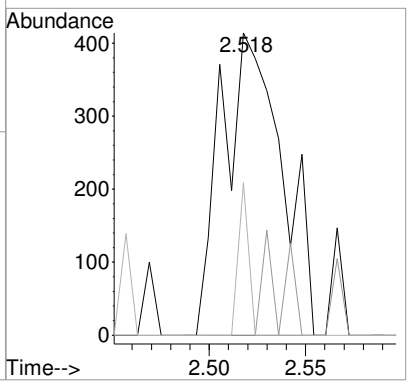


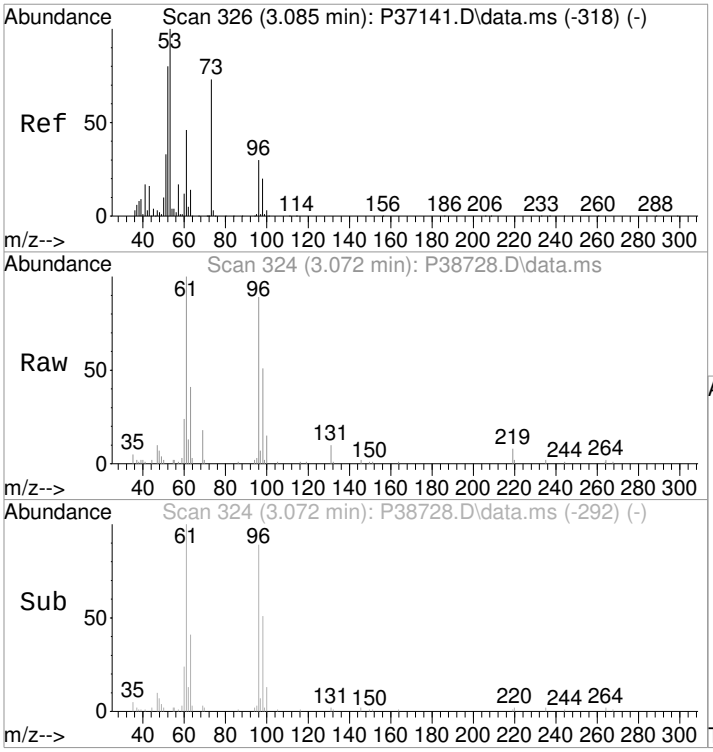


#18
Carbon Disulfide
Concen: Below Cal
RT: 2.518 min Scan# 233
Delta R.T. -0.005 min
Lab File: P38728.D
Acq: 20 Aug 2020 6:37 pm

Tgt Ion: 76 Resp: 903

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	29.5
77	50.5	0.0	22.5#

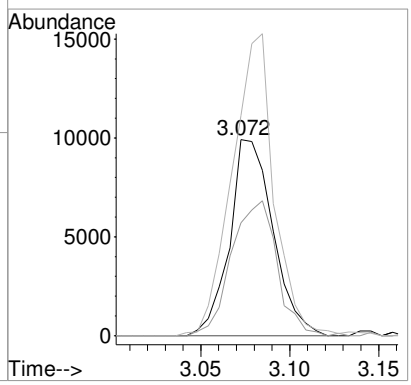


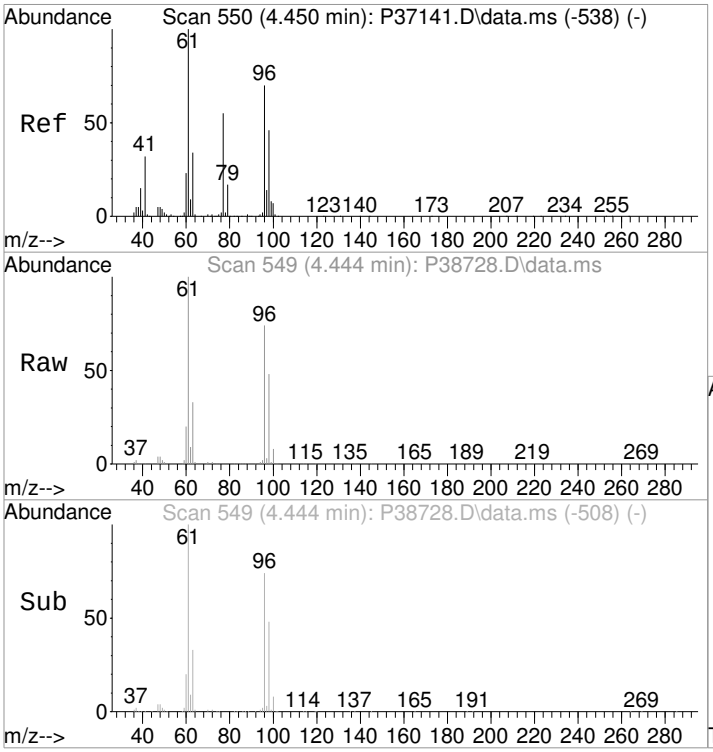


#26
trans-1,2-Dichloroethene
Concen: 5.70 ppb
RT: 3.072 min Scan# 324
Delta R.T. -0.012 min
Lab File: P38728.D
Acq: 20 Aug 2020 6:37 pm

Tgt Ion: 96 Resp: 16906

Ion	Ratio	Lower	Upper
96	100		
98	57.6	46.8	86.8
61	112.1	132.8	172.8#

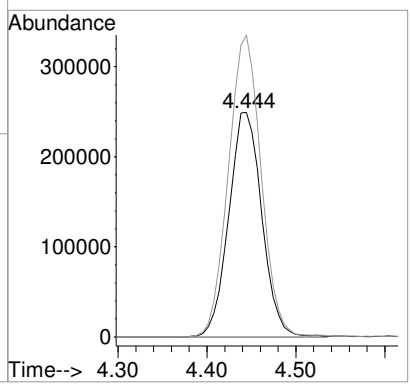


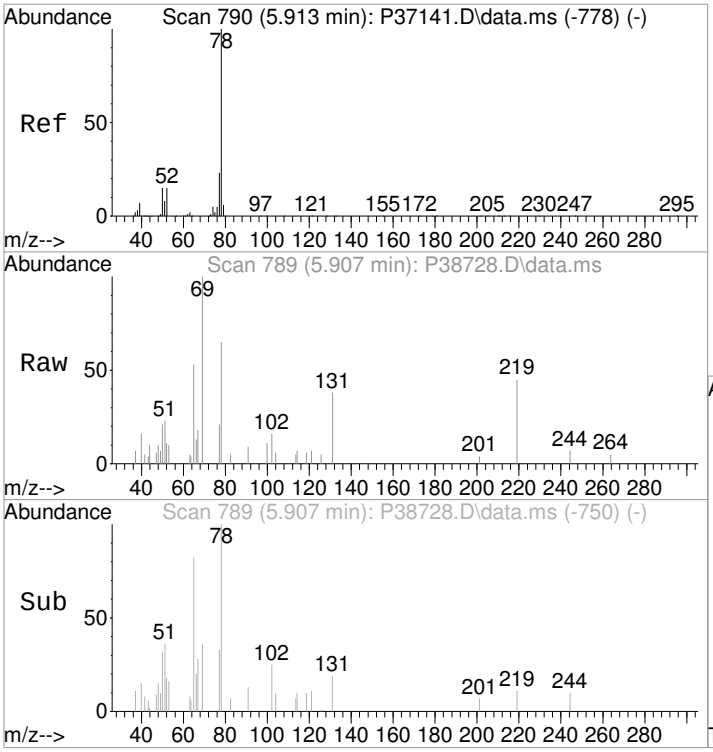


#34
cis-1,2-Dichloroethene
Concen: 169.44 ppb
RT: 4.444 min Scan# 549
Delta R.T. -0.006 min
Lab File: P38728.D
Acq: 20 Aug 2020 6:37 pm

Tgt Ion: 96 Resp: 644109

Ion	Ratio	Lower	Upper
96	100		
61	134.6	123.1	163.1

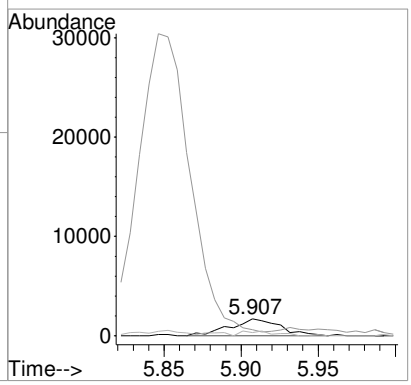


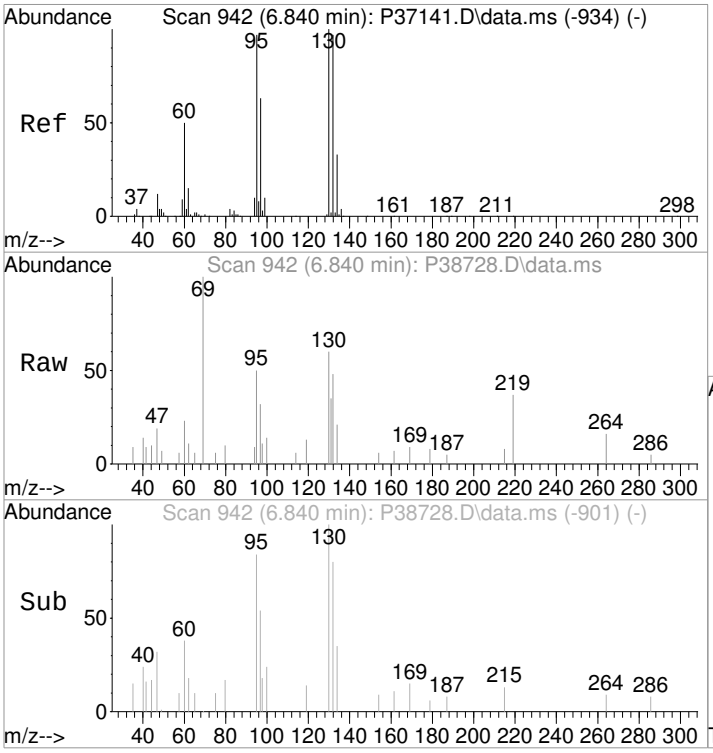


#49
Benzene
Concen: 0.27 ppb
RT: 5.907 min Scan# 789
Delta R.T. -0.006 min
Lab File: P38728.D
Acq: 20 Aug 2020 6:37 pm

Tgt Ion: 78 Resp: 3846

Ion	Ratio	Lower	Upper
78	100		
51	35.8	0.0	35.6#
52	17.7	0.0	35.0

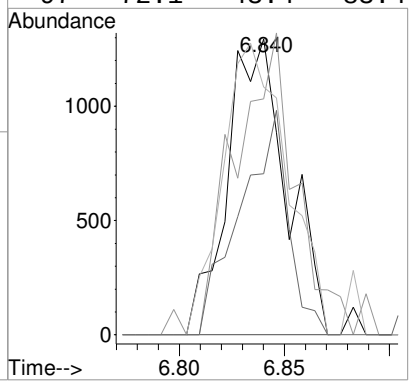


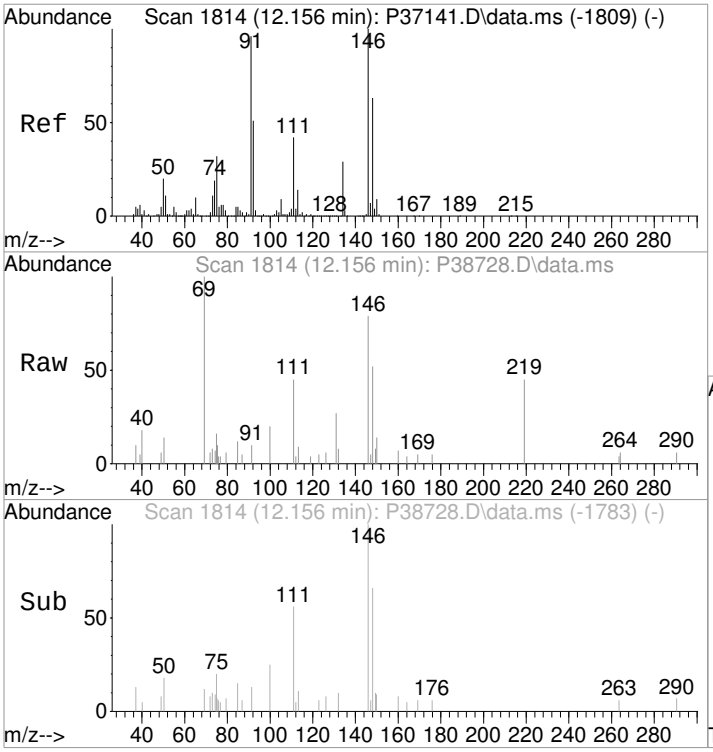


#54
Trichloroethene
Concen: 0.72 ppb
RT: 6.840 min Scan# 942
Delta R.T. -0.000 min
Lab File: P38728.D
Acq: 20 Aug 2020 6:37 pm

Tgt Ion:130 Resp: 2560

Ion	Ratio	Lower	Upper
130	100		
132	79.8	77.2	117.2
95	83.8	76.7	116.7
97	72.1	43.4	83.4

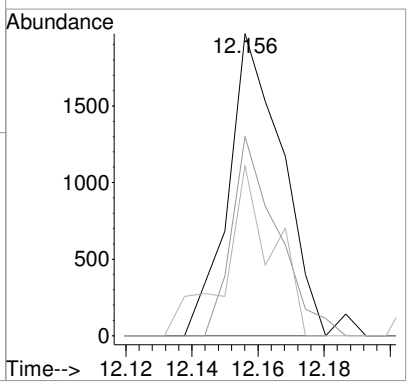




#110
1,2-Dclbenz
Concen: 0.27 ppb
RT: 12.156 min Scan# 1814
Delta R.T. -0.006 min
Lab File: P38728.D
Acq: 20 Aug 2020 6:37 pm

Tgt Ion:146 Resp: 2229

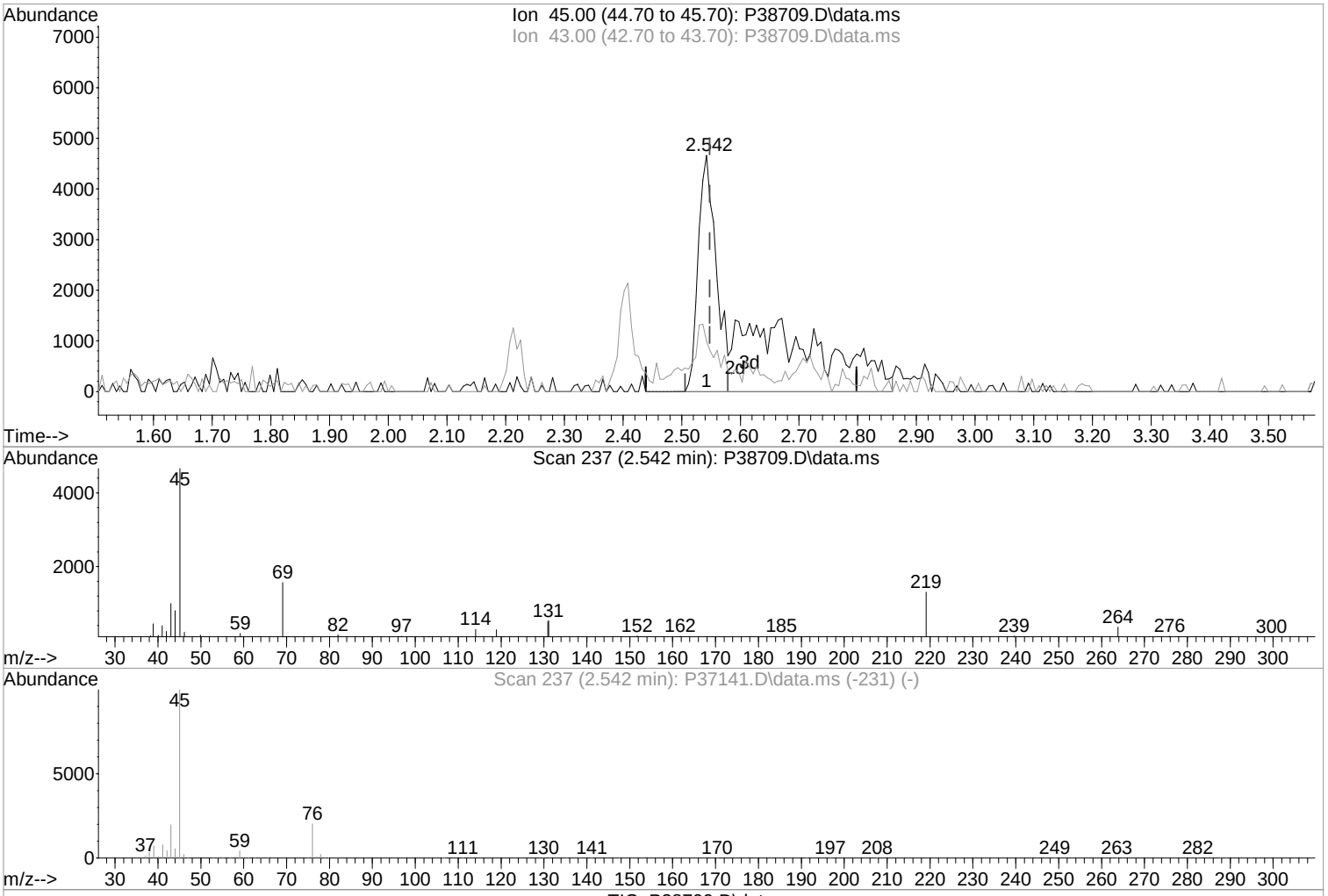
Ion	Ratio	Lower	Upper
146	100		
148	66.0	42.7	82.7
111	56.4	21.6	61.6



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38709.D
Acq On : 20 Aug 2020 11:34 am
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 20 13:00:19 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38709.D\data.ms

(16) 2-Propanol

2.542min (-0.006) 57.81 ppb m

response 24225

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	21.36
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

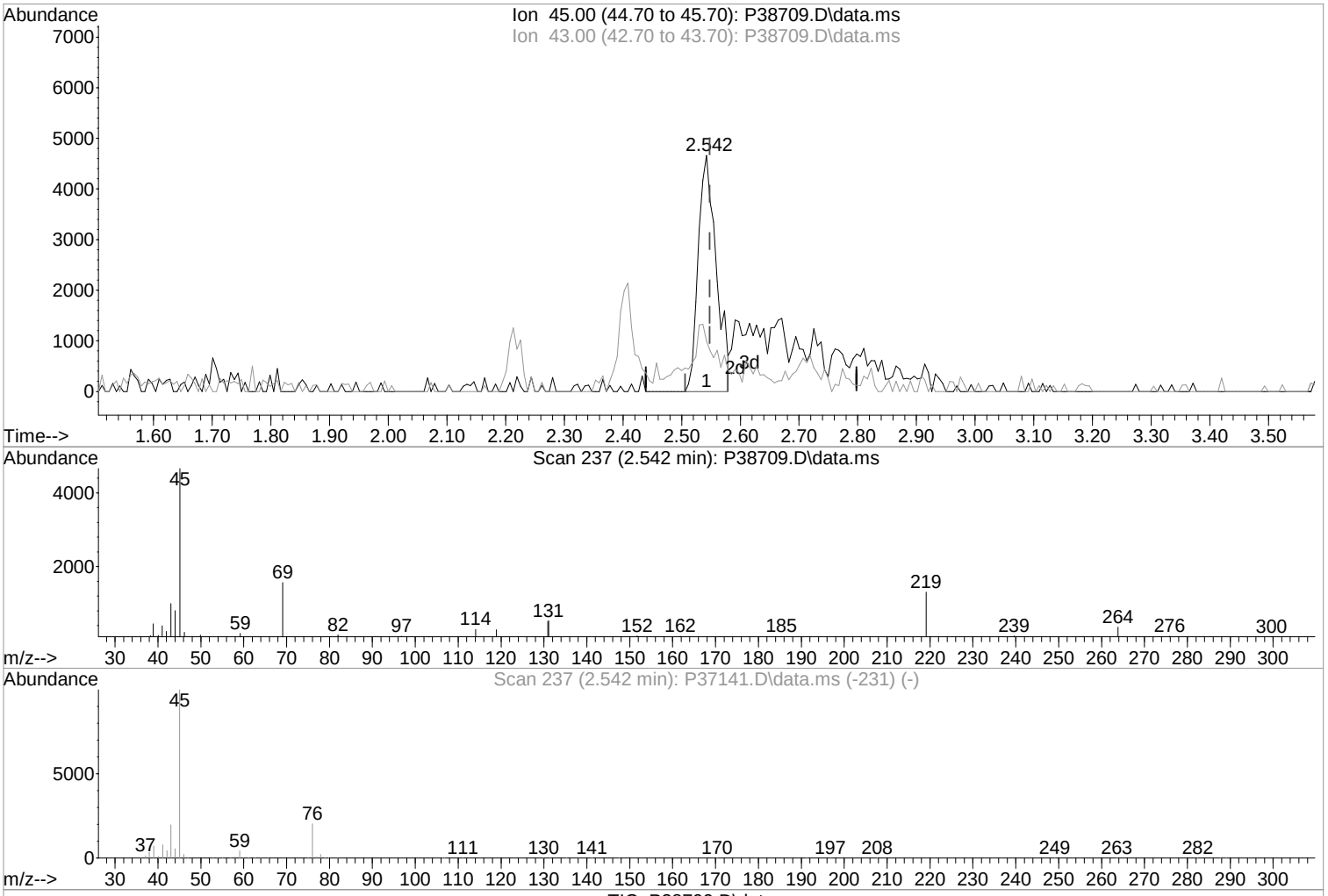
08/20/20

1st 08/20/20
2nd 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38709.D
Acq On : 20 Aug 2020 11:34 am
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 20 13:00:19 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38709.D\data.ms

(16) 2-Propanol

2.542min (-0.006) 23.81 ppb

response 9978

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	21.36
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

08/20/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38709.D
Acq On : 20 Aug 2020 11:34 am
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 20 13:01:16 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

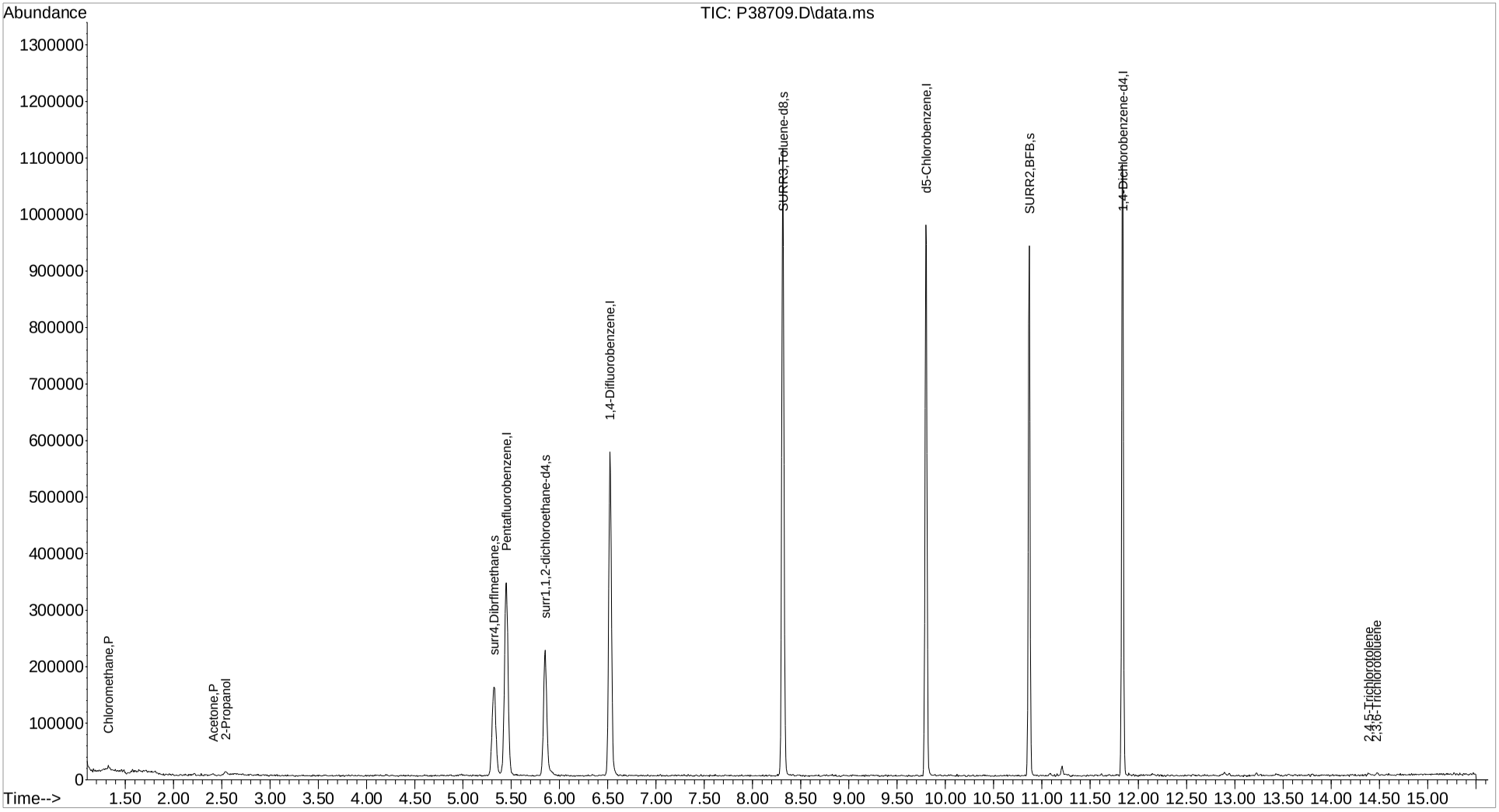
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.450	168	325631	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.523	114	502605	50.00	ppb		0.00
71) d5-Chlorobenzene	9.797	117	459639	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	230519	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.322	113	138641	48.04	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.08%				
48) surr1,1,2-dichloroetha...	5.853	65	191005	47.81	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 95.62%				
65) SURR3,Toluene-d8	8.316	98	685717	51.12	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.24%				
70) SURR2,BFB	10.870	95	247221	50.02	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.04%				
Target Compounds							Qvalue
3) Chloromethane	1.323	50	3294	0.73	ppb		76
15) Acetone	2.408	43	3982	0.45	ppb		95
16) 2-Propanol	2.542	45	24225m	57.81	ppb		
119) 2,4,5-Trichlorotolene	14.388	159	892	0.24	ppb	#	53
120) 2,3,6-Trichlorotoluene	14.467	159	805	0.24	ppb	#	61

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

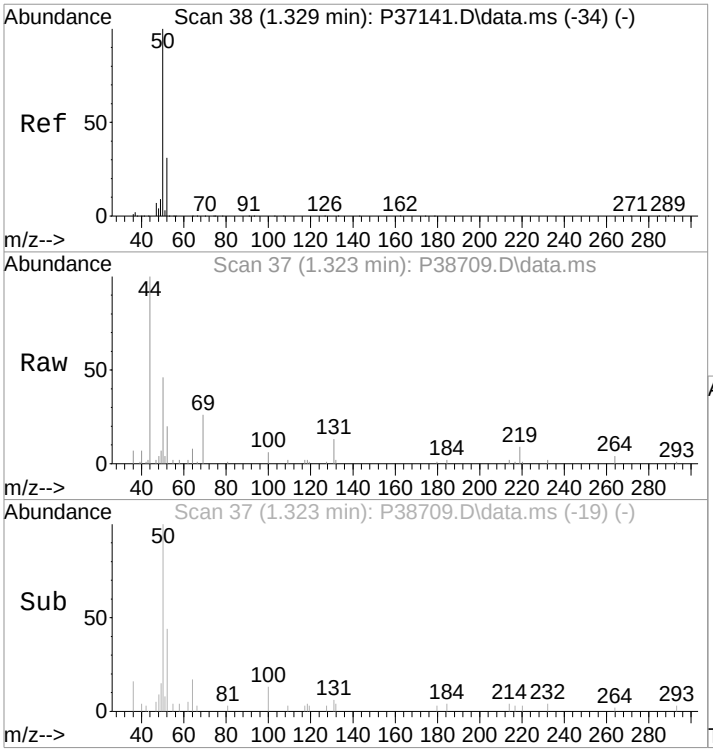
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38709.D
Acq On : 20 Aug 2020 11:34 am
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 20 13:01:16 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



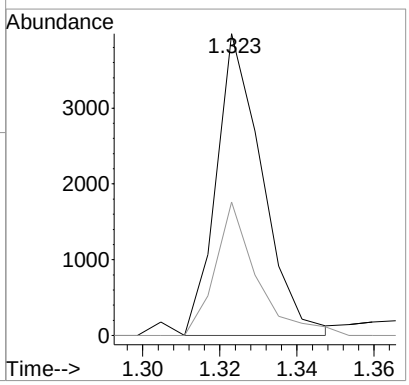
1st KR 08/20/20
2nd BA 08/25/20

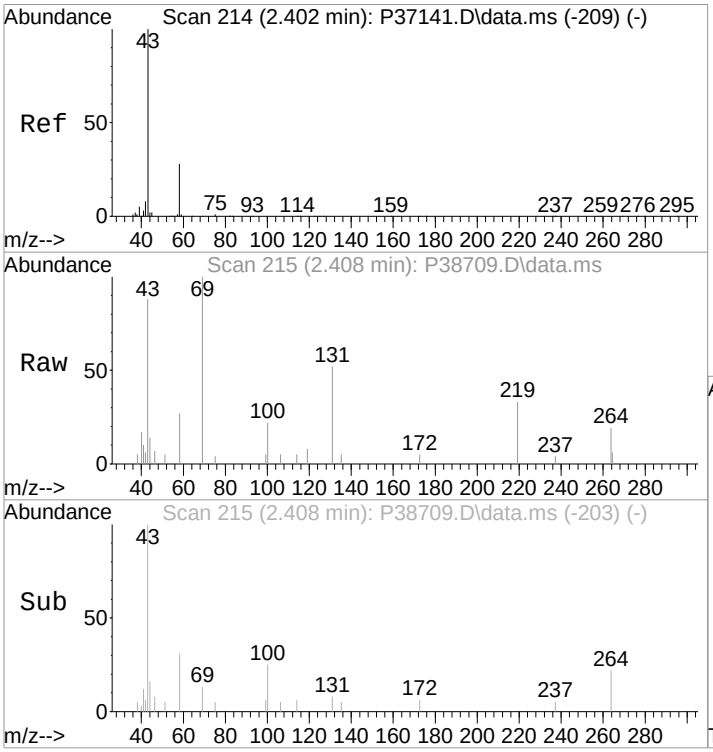


#3
Chloromethane
Concen: 0.73 ppb
RT: 1.323 min Scan# 37
Delta R.T. -0.006 min
Lab File: P38709.D
Acq: 20 Aug 2020 11:34 am

Tgt Ion: 50 Resp: 3294

Ion	Ratio	Lower	Upper
50	100		
52	44.2	10.8	50.8

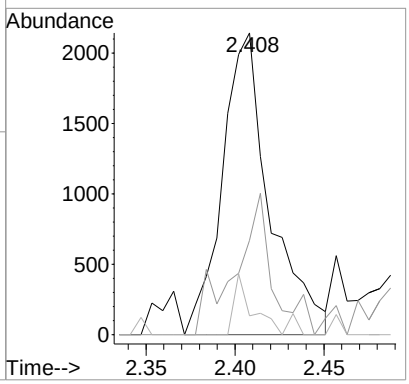


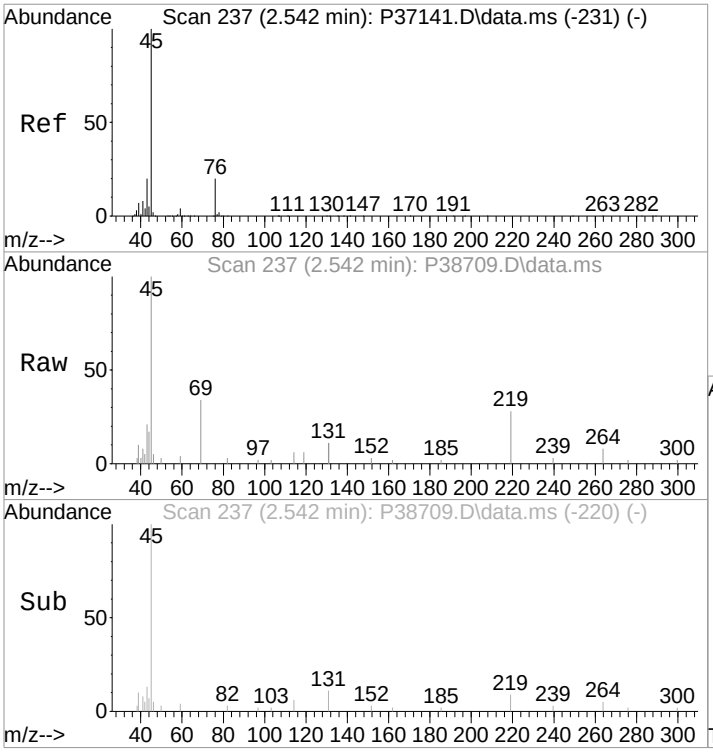


#15
Acetone
Concen: 0.45 ppb
RT: 2.408 min Scan# 215
Delta R.T. 0.001 min
Lab File: P38709.D
Acq: 20 Aug 2020 11:34 am

Tgt Ion: 43 Resp: 3982

Ion	Ratio	Lower	Upper
43	100		
58	31.3	8.2	48.2
42	6.3	0.0	27.7

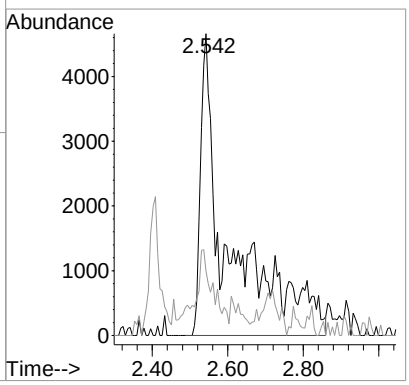


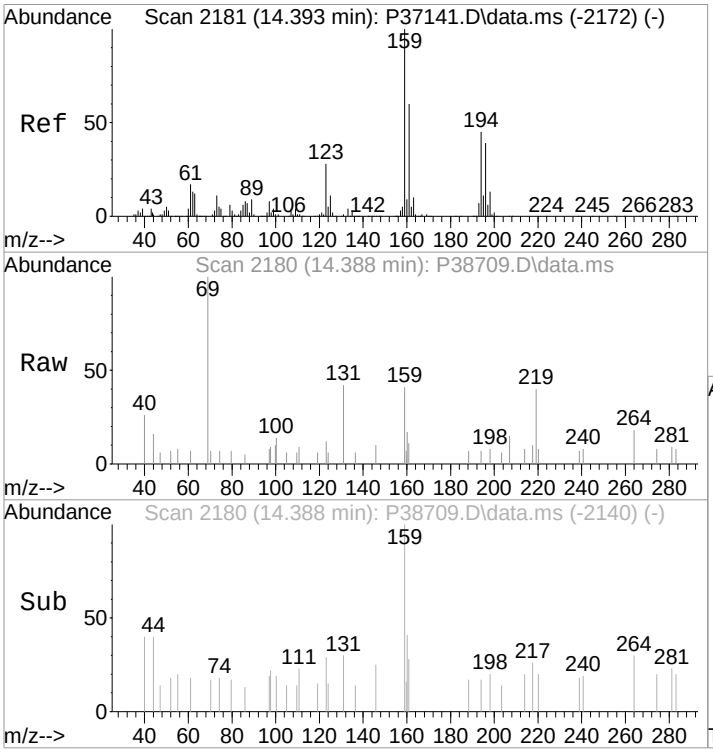


#16
2-Propanol
Concen: 57.81 ppb m
RT: 2.542 min Scan# 237
Delta R.T. -0.006 min
Lab File: P38709.D
Acq: 20 Aug 2020 11:34 am

Tgt Ion: 45 Resp: 24225

Ion	Ratio	Lower	Upper
45	100		
43	21.4	0.0	39.7

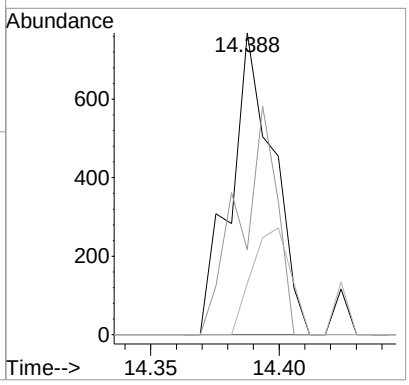


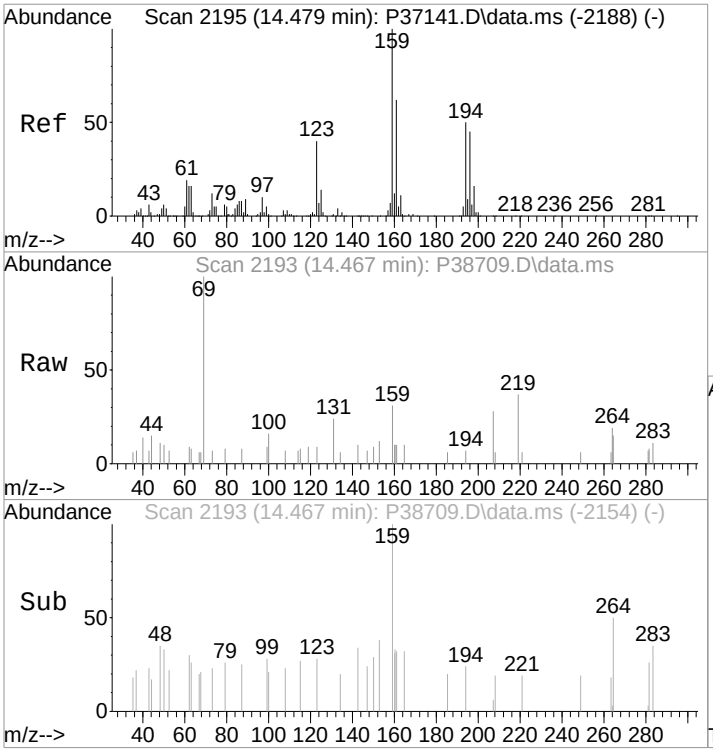


#119
2,4,5-Trichlorotolene
Concen: 0.24 ppb
RT: 14.388 min Scan# 2180
Delta R.T. -0.006 min
Lab File: P38709.D
Acq: 20 Aug 2020 11:34 am

Tgt Ion:159 Resp: 892

Ion	Ratio	Lower	Upper
159	100		
161	24.2	47.6	71.4#
194	14.7	35.8	53.8#

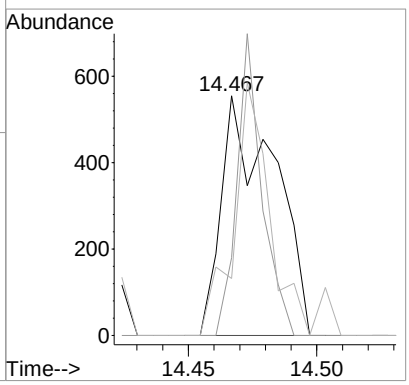




#120
2,3,6-Trichlorotoluene
Concen: 0.24 ppb
RT: 14.467 min Scan# 2193
Delta R.T. -0.012 min
Lab File: P38709.D
Acq: 20 Aug 2020 11:34 am

Tgt Ion:159 Resp: 805

Ion	Ratio	Lower	Upper
159	100		
161	32.4	49.9	74.9#
194	23.8	40.2	60.2#



1st KR 08/20/20
2nd BA 08/25/20

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38709.D
Acq On : 20 Aug 2020 11:34 am
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
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\W071320.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P38709.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.322	683	693	703	rBV3	156116	437050	24.77%	4.957%
2	5.450	703	714	724	rVV	337859	883277	50.06%	10.018%
3	5.853	771	780	802	rVB	223296	553455	31.37%	6.277%
4	6.523	881	890	904	rVB	573159	1153853	65.39%	13.087%
5	8.316	1176	1184	1195	rBV	1110092	1764442	100.00%	20.012%
6	9.797	1422	1427	1439	rBV	975030	1396203	79.13%	15.835%
7	10.870	1597	1603	1611	rBV	938706	1180441	66.90%	13.388%
8	11.211	1652	1659	1662	rBV4	17927	25453	1.44%	0.289%
9	11.833	1756	1761	1771	rBV	1083162	1422843	80.64%	16.137%

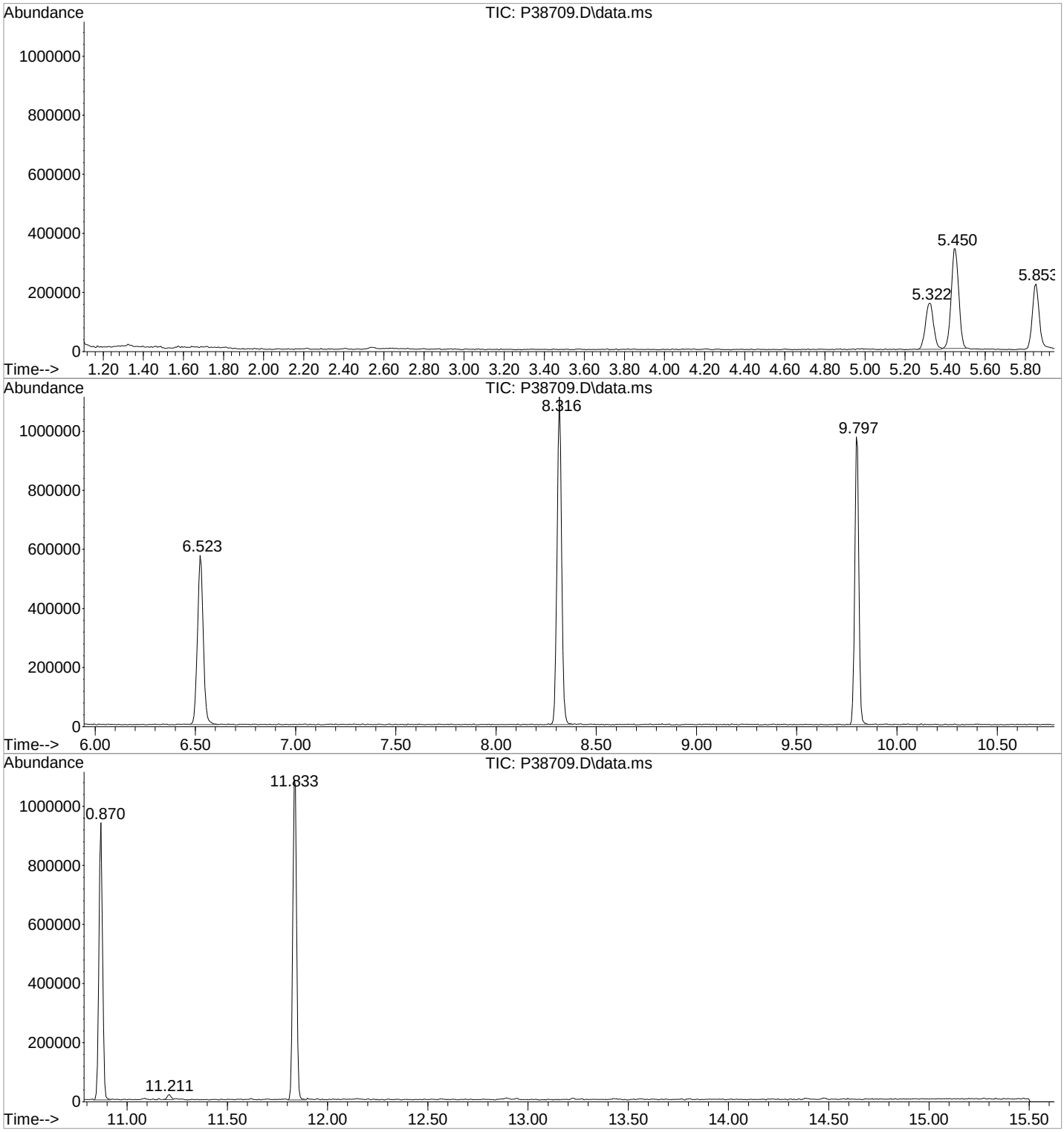
Sum of corrected areas: 8817017

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38709.D
Acq On : 20 Aug 2020 11:34 am
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.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\082020\\
Data File : P38709.D
Acq On : 20 Aug 2020 11:34 amm
Operator : K.Ruestt
Sample : MBLK-FP Inst : MSVOA-122
Misc :
ALS Vial : 3 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.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\082120\
Data File : P38768.D
Acq On : 21 Aug 2020 12:00 pm
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 16:58:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

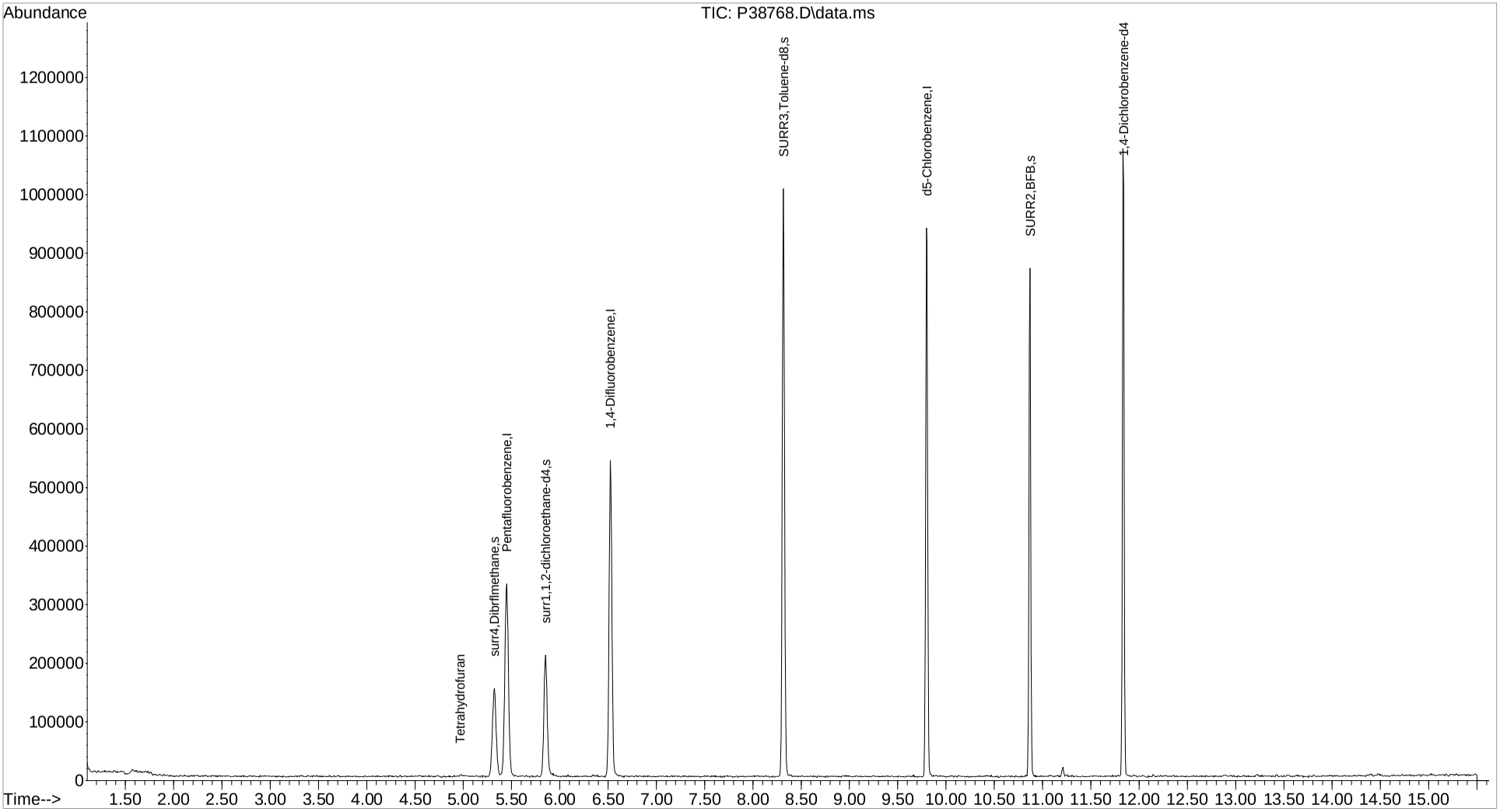
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	308917	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	474769	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	437173	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	215831	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.322	113	125032	45.86	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 91.72%			
48) surr1,1,2-dichloroetha...	5.853	65	178130	47.20	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 94.40%			
65) SURR3,Toluene-d8	8.316	98	636937	50.27	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.54%			
70) SURR2,BFB	10.870	95	227401	48.71	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.42%			
Target Compounds						Qvalue
18) Carbon Disulfide	2.524	76	773	Below Cal		68
39) Tetrahydrofuran	4.963	42	1674	0.90	ppb	71

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

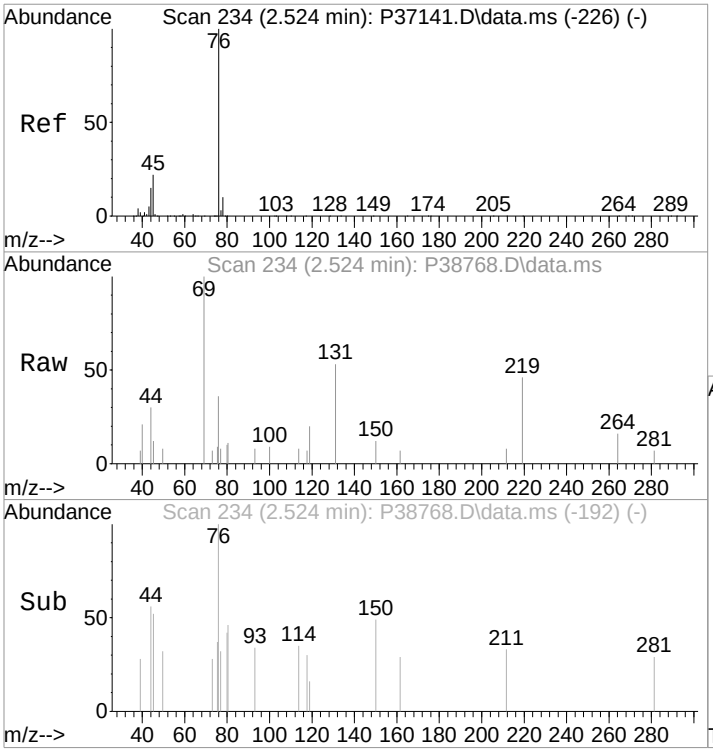
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38768.D
Acq On : 21 Aug 2020 12:00 pm
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 21 16:58:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



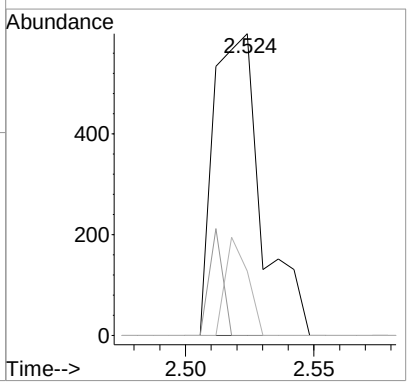
1st KR 08/21/20
2nd BA 08/27/20

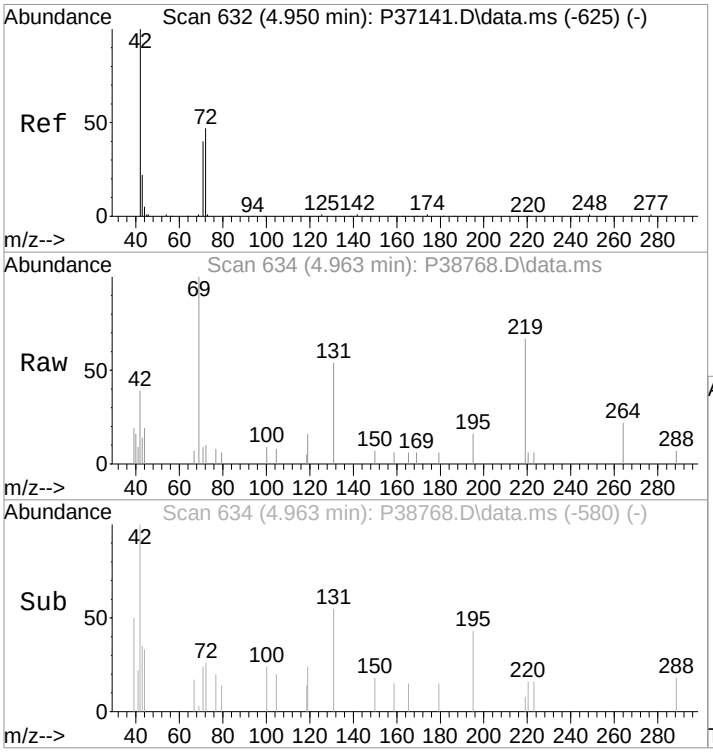


#18
Carbon Disulfide
Concen: Below Cal
RT: 2.524 min Scan# 234
Delta R.T. 0.001 min
Lab File: P38768.D
Acq: 21 Aug 2020 12:00 pm

Tgt Ion: 76 Resp: 773

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	29.5
77	21.4	0.0	22.5

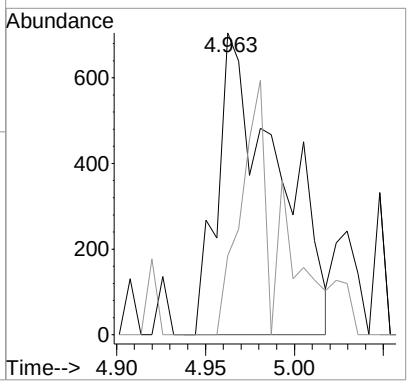




#39
Tetrahydrofuran
Concen: 0.90 ppb
RT: 4.963 min Scan# 634
Delta R.T. 0.012 min
Lab File: P38768.D
Acq: 21 Aug 2020 12:00 pm

Tgt Ion: 42 Resp: 1674

Ion	Ratio	Lower	Upper
42	100		
72	26.2	25.2	65.2



1st KR 08/21/20
2nd BA 08/27/20

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38768.D
Acq On : 21 Aug 2020 12:00 pm
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
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\W071320.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: P38768.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.322	683	693	702	rBV	150309	402600	24.84%	4.878%
2	5.450	702	714	727	rVB	328371	869698	53.66%	10.537%
3	5.853	771	780	789	rBV2	208174	498652	30.77%	6.042%
4	6.523	881	890	899	rBV	541040	1096642	67.66%	13.287%
5	8.316	1177	1184	1194	rVB	1002563	1620816	100.00%	19.638%
6	9.797	1421	1427	1434	rBV	936694	1313368	81.03%	15.913%
7	10.870	1598	1603	1610	rVB	867320	1080356	66.66%	13.090%
8	11.211	1654	1659	1662	rBV4	17443	23789	1.47%	0.288%
9	11.833	1756	1761	1767	rBV	1070969	1328202	81.95%	16.092%
10	15.479	2357	2359	2363	rVB4	11513	19439	1.20%	0.236%

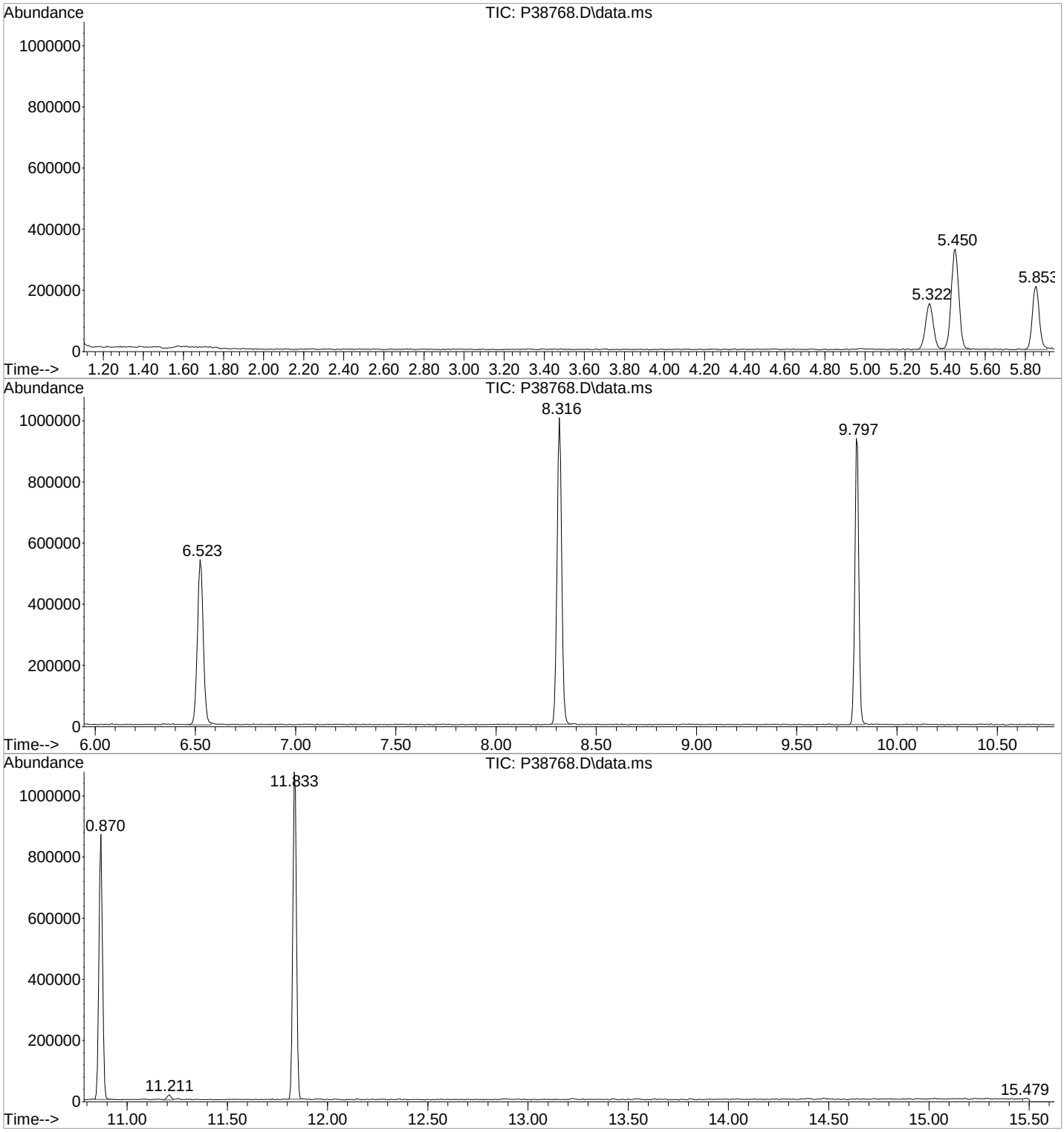
Sum of corrected areas: 8253562

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38768.D
Acq On : 21 Aug 2020 12:00 pm
Operator : K.Ruest
Sample : MBLK-FP Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.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\082120\\
Data File : P38768.D
Acq On : 21 Aug 2020 12:00 pmm
Operator : K.Ruestt
Sample : MBLK-FP Inst : MSVOA-122
Misc :
ALS Vial : 3 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

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

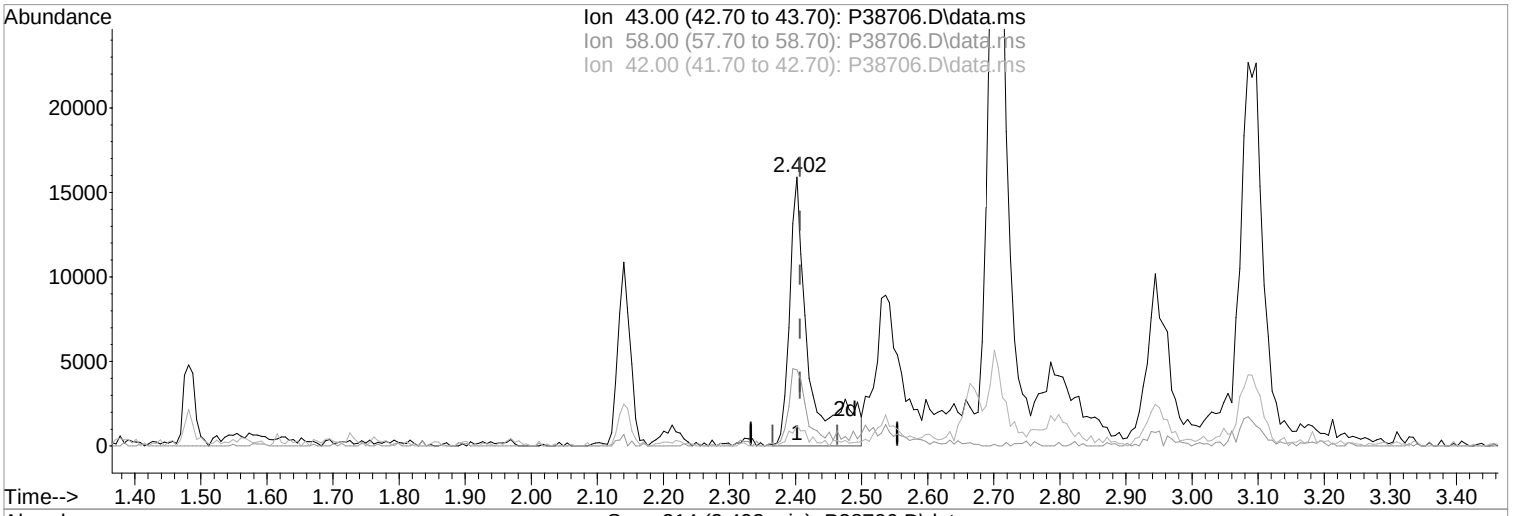
					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

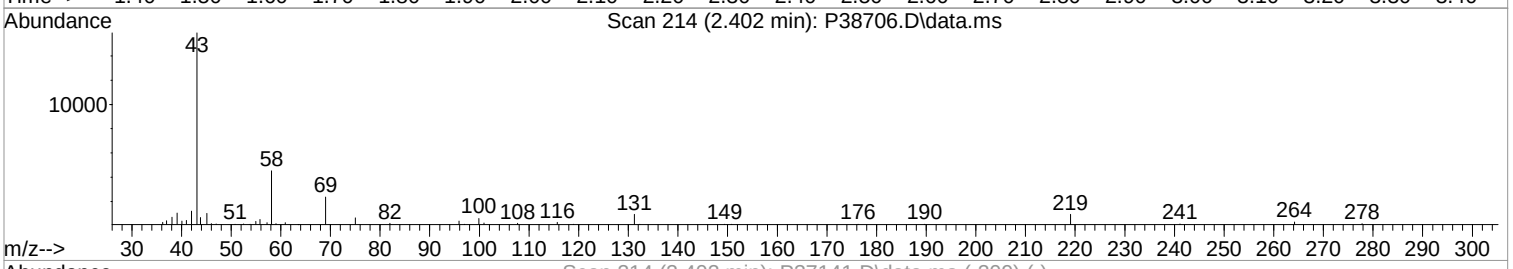
No Library Search Compounds Detected
****

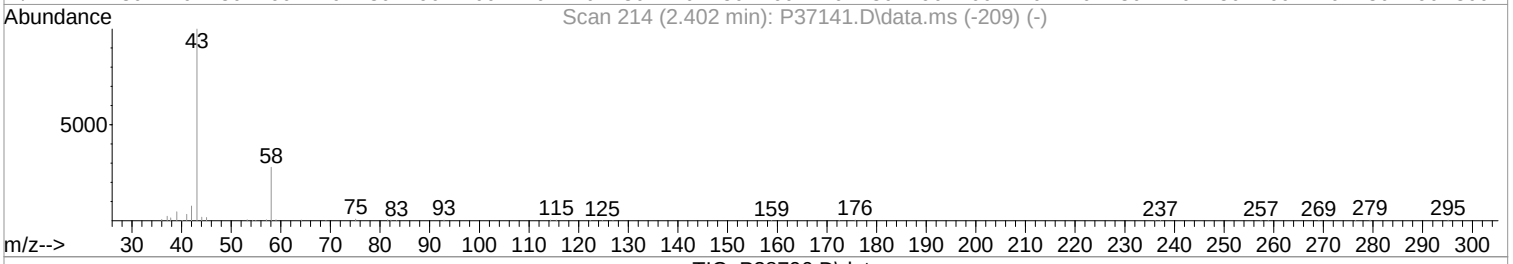
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:30:13 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38706.D\data.ms

(15) Acetone (P)

2.402min (-0.005) 13.99 ppb m

response 32828

Ion	Exp%	Act%
43.00	100	100
58.00	28.20	28.37
42.00	7.70	7.55
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

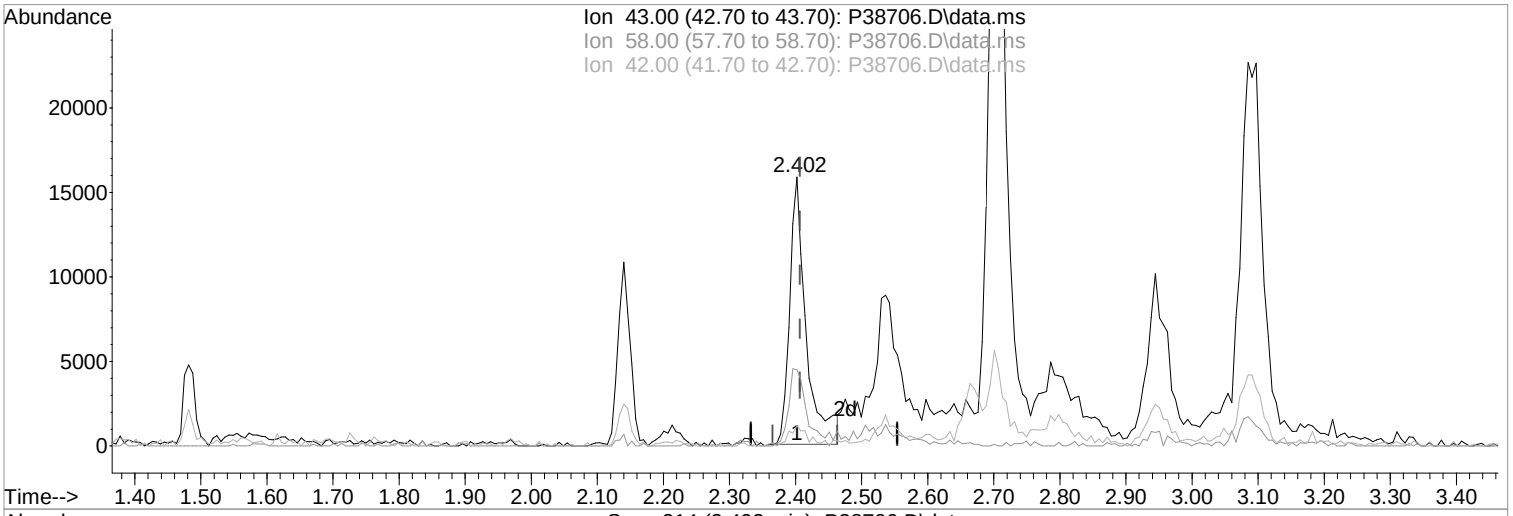
08/20/20

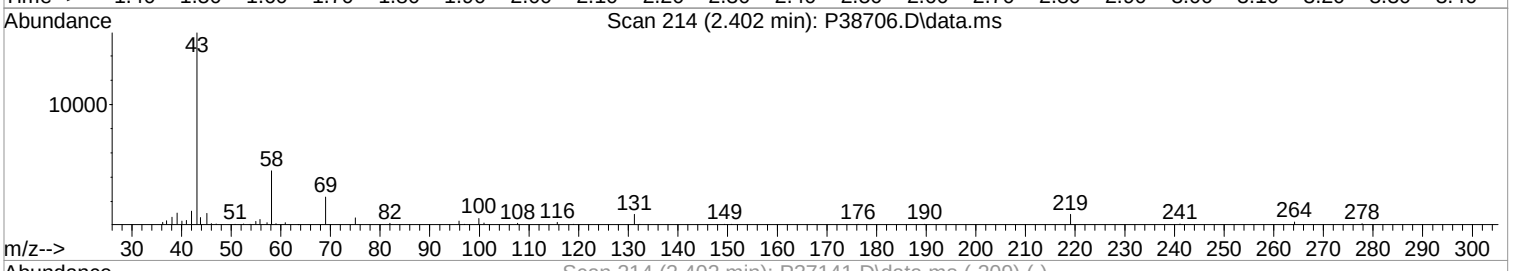
1st 08/20/20
2nd 08/25/20

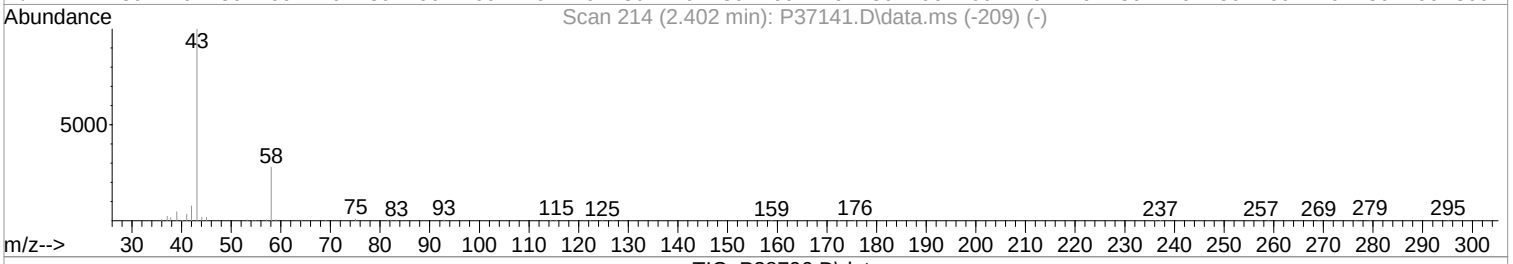
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:30:13 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38706.D\data.ms

(15) Acetone (P)

2.402min (-0.005) 11.34 ppb

response 27373

Ion	Exp%	Act%
43.00	100	100
58.00	28.20	28.37
42.00	7.70	7.55
0.00	0.00	0.00

Manual Integration:

Before

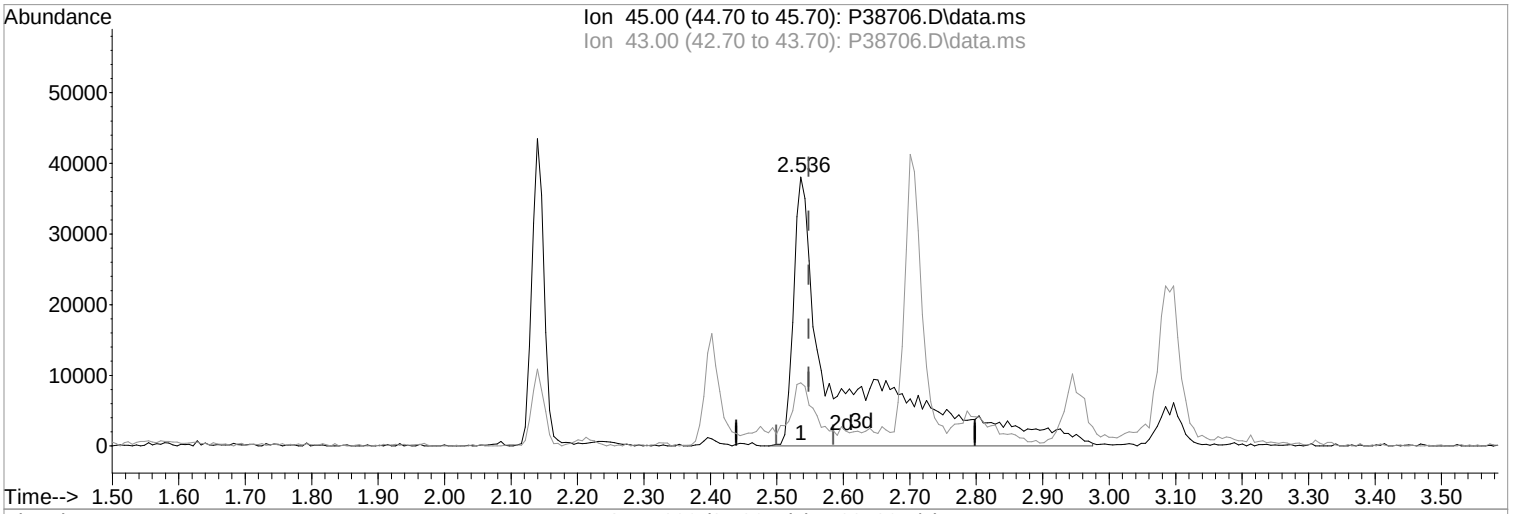
08/20/20

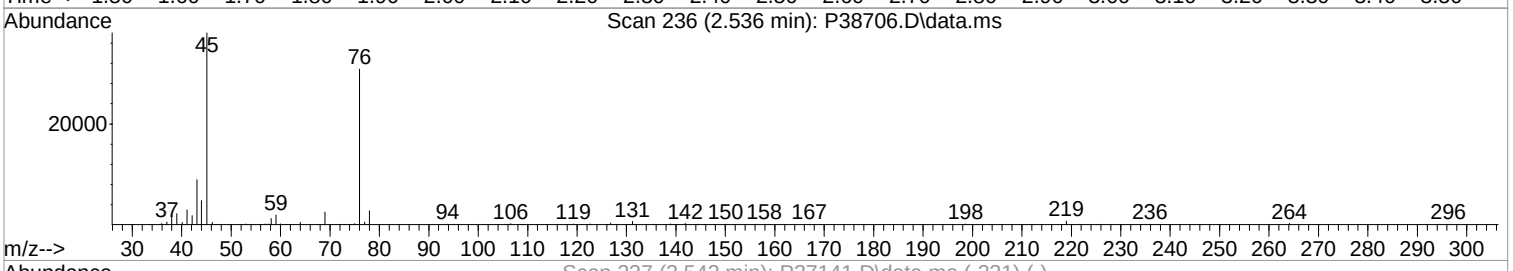
1st 08/20/20
2nd 08/25/20

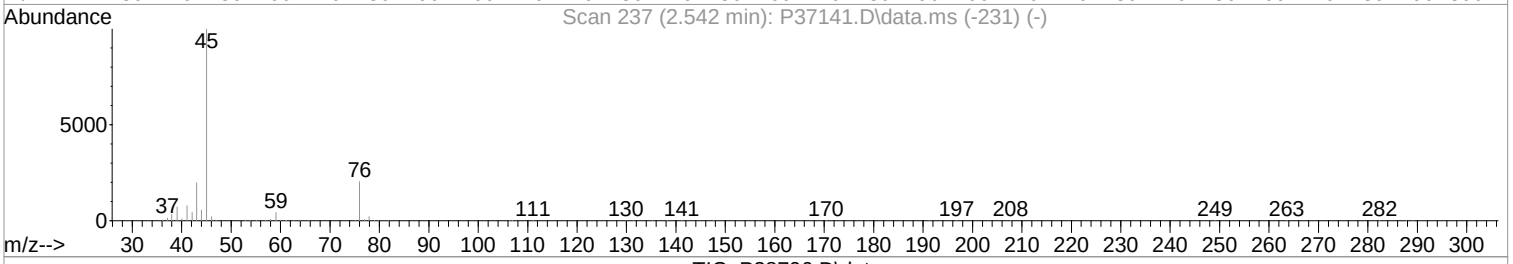
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:30:13 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38706.D\data.ms

(16) 2-Propanol

2.536min (-0.012) 427.88 ppb m

response 188719

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	23.46
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

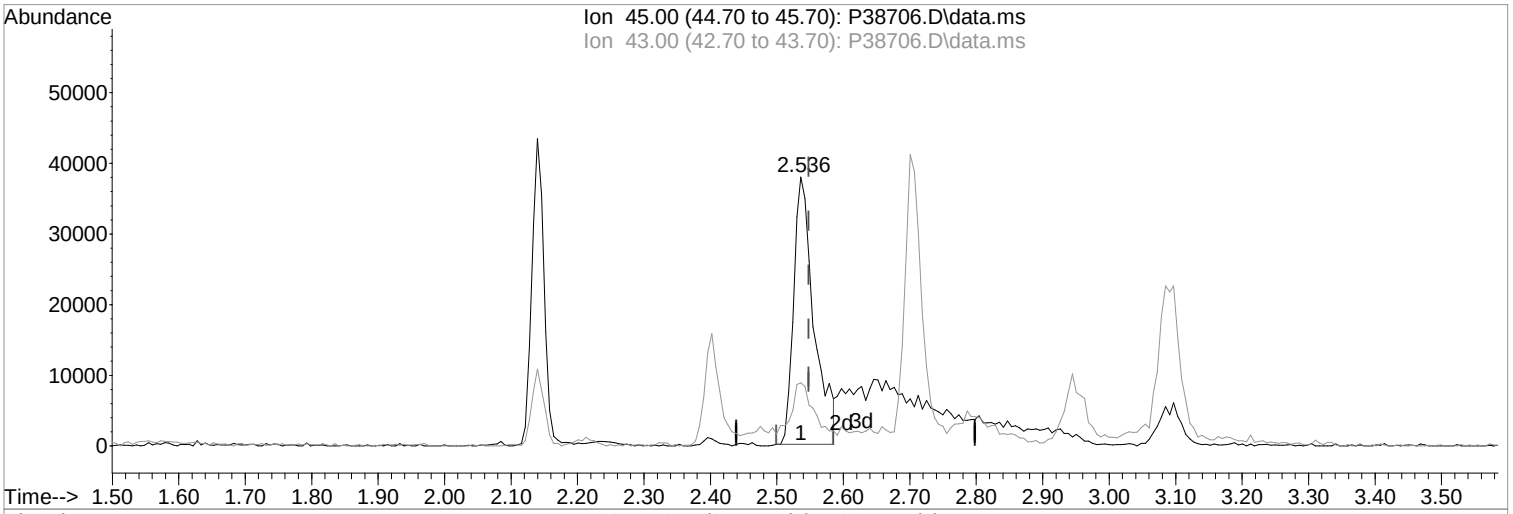
08/20/20

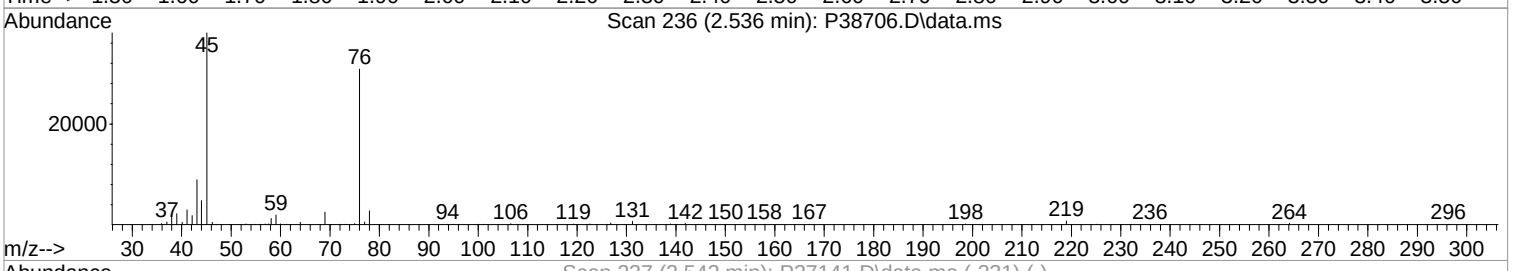
1st 08/20/20
2nd 08/25/20

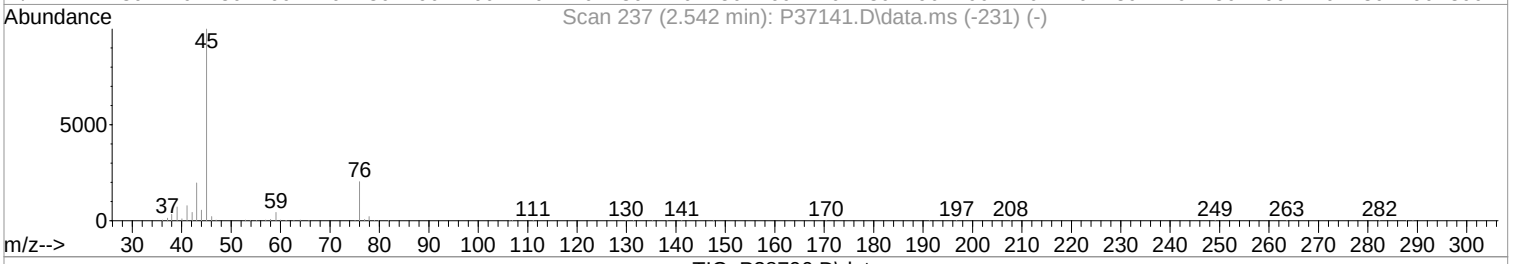
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:30:13 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38706.D\data.ms

(16) 2-Propanol

2.536min (-0.012) 181.80 ppb

response 80182

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	23.46
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

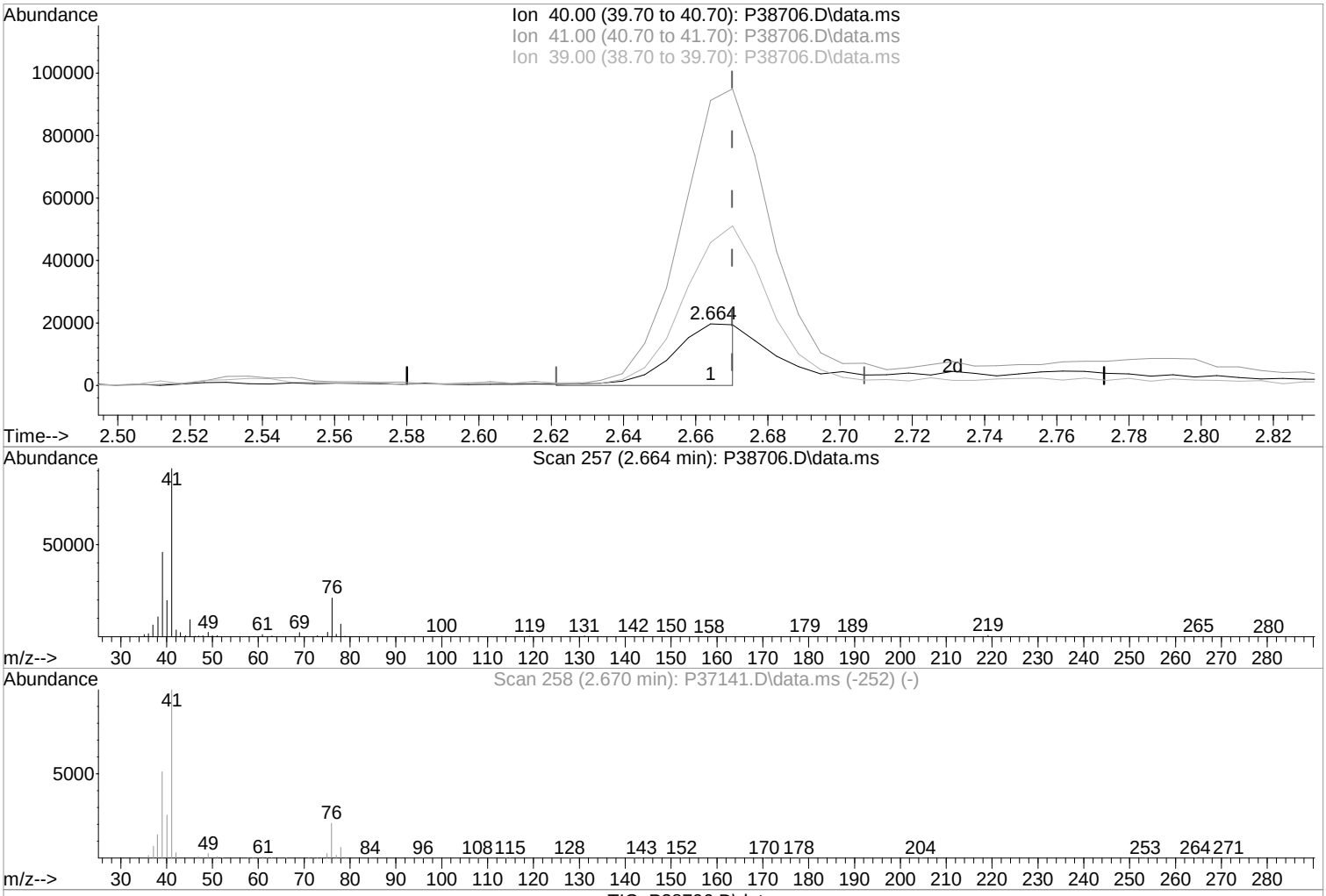
08/20/20

1st 08/20/20
2nd 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:30:13 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38706.D\data.ms

(19) Acetonitrile

2.664min (-0.006) 101.95 ppb m

response 24952

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	464.45#
39.00	200.50	233.02#
0.00	0.00	0.00

Manual Integration:

After

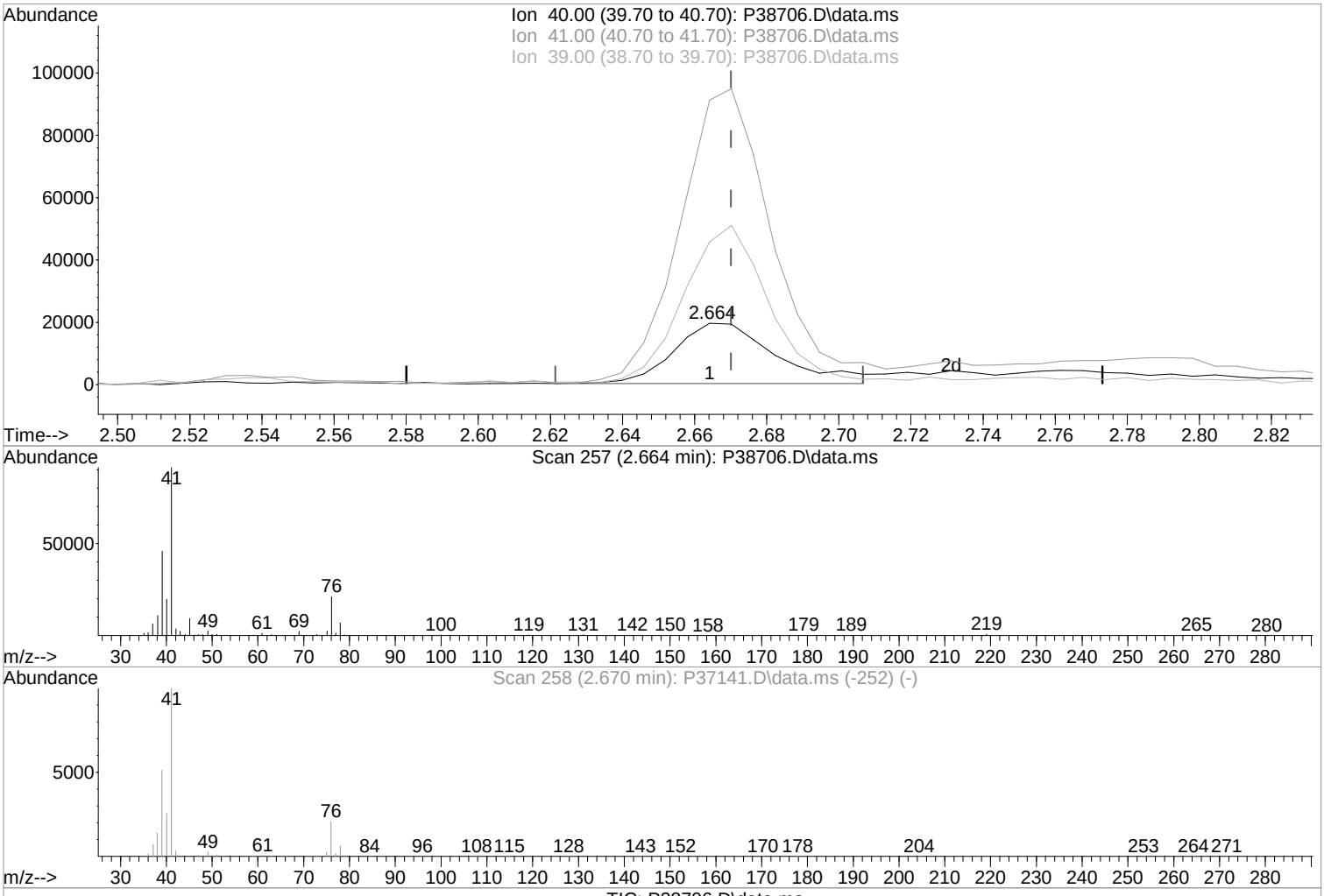
Poor integration.

08/20/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:30:13 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38706.D\data.ms

(19) Acetonitrile

2.664min (-0.006) 156.31 ppb

response 38256

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	464.45#
39.00	200.50	233.02#
0.00	0.00	0.00

Manual Integration:

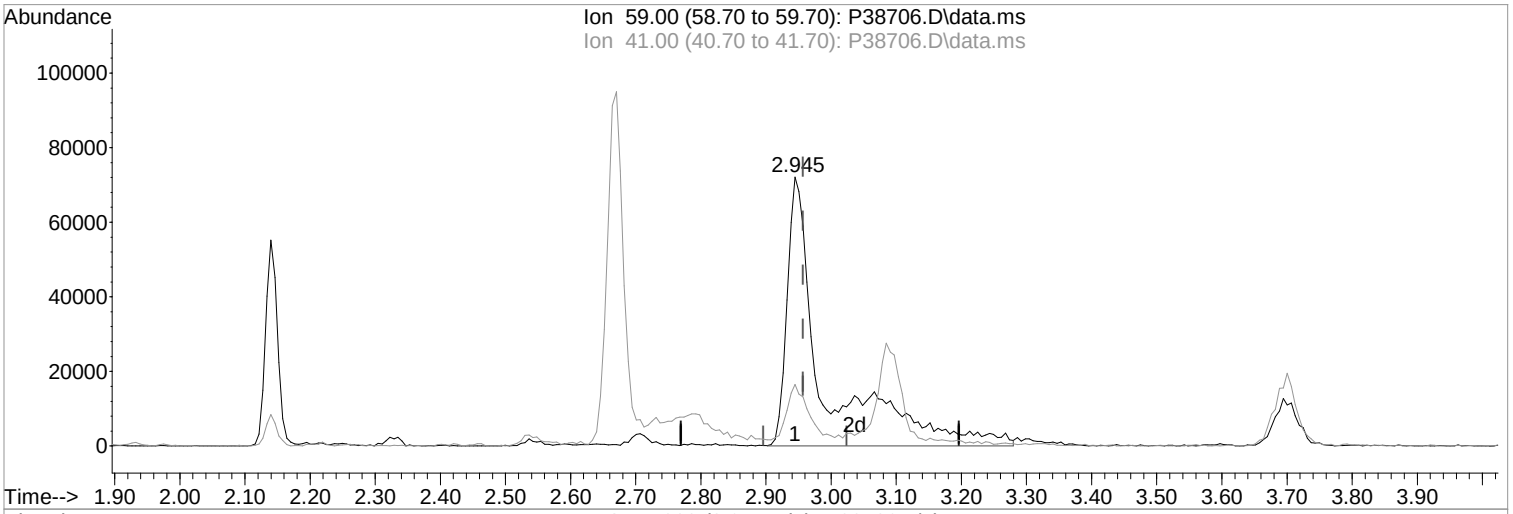
Before

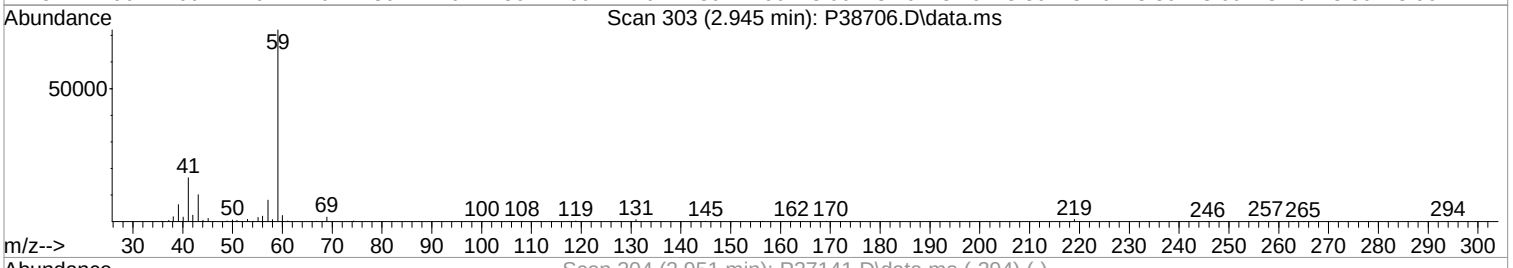
08/20/20

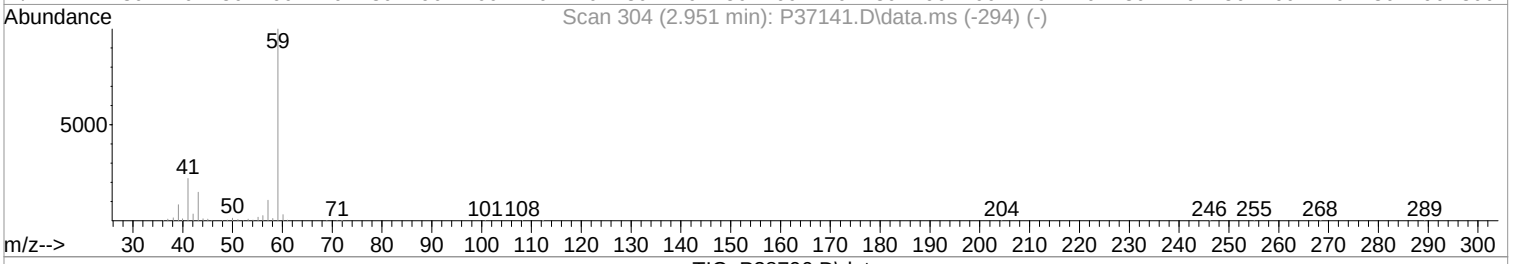
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:30:13 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38706.D\data.ms

(23) TBA

2.945min (-0.012) 399.91 ppb m

response 285647

Ion	Exp%	Act%
59.00	100	100
41.00	22.00	22.93
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

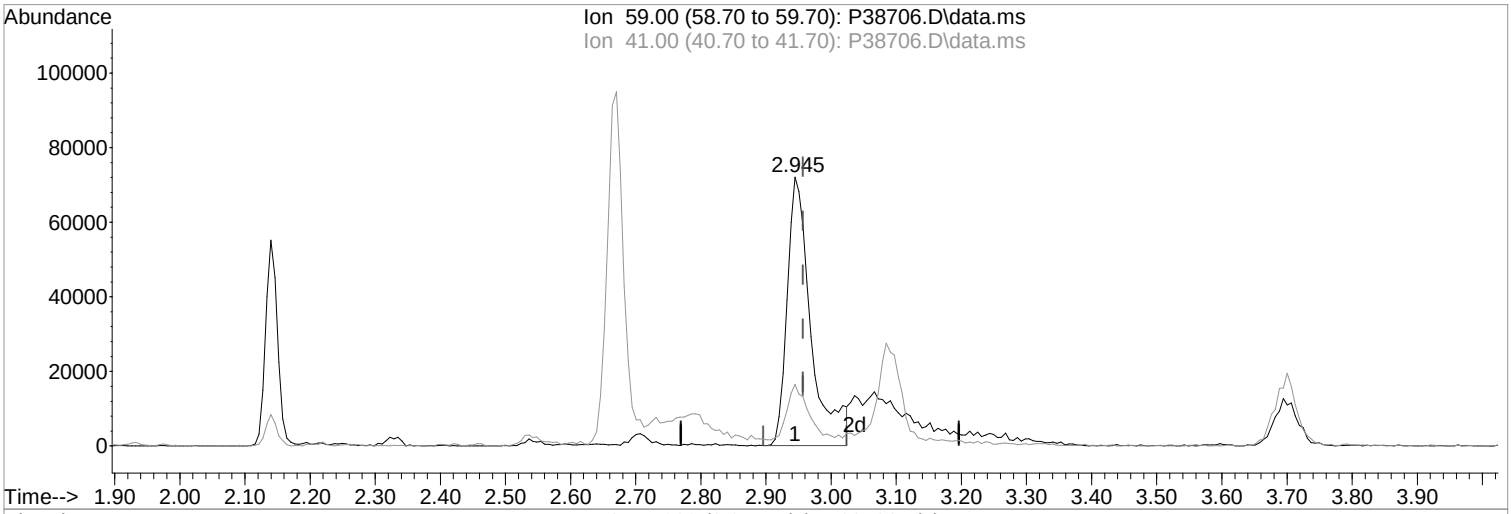
Poor integration.

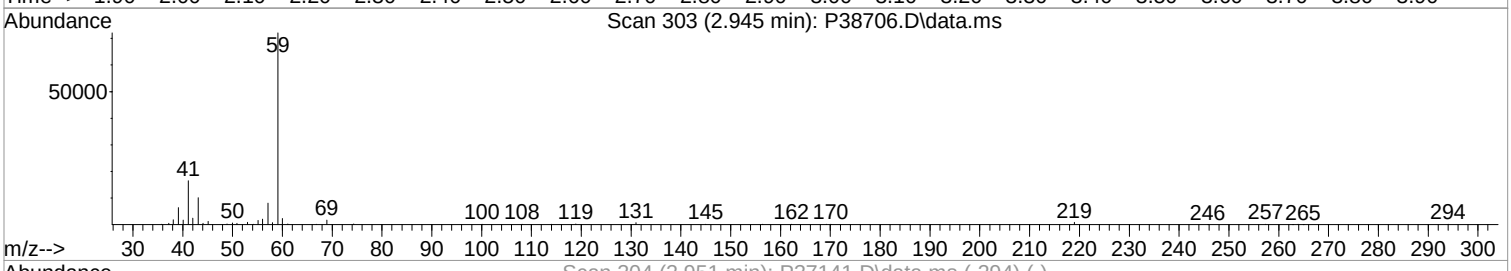
08/20/20

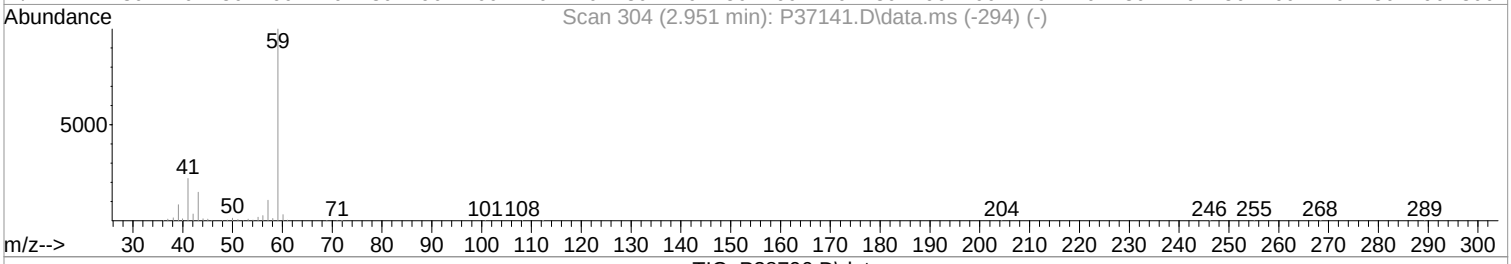
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:30:13 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38706.D\data.ms

(23) TBA

2.945min (-0.012) 256.33 ppb

response 183091

Ion	Exp%	Act%
59.00	100	100
41.00	22.00	22.93
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

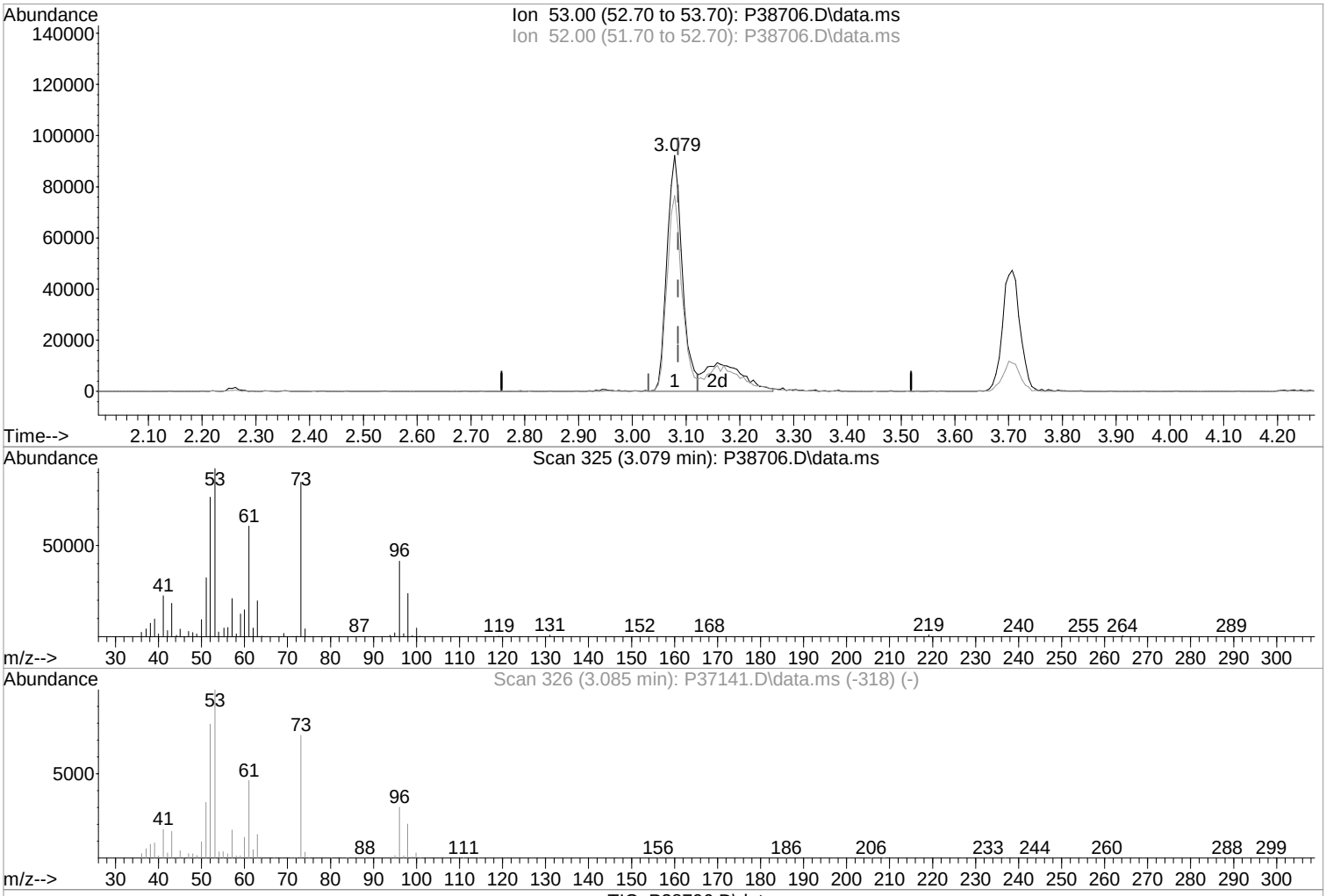
08/20/20

1st 08/20/20
2nd 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:30:13 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38706.D\data.ms

(24) Acrylonitrile

3.079min (-0.006) 108.33 ppb m

response 238693

Ion	Exp%	Act%
53.00	100	100
52.00	79.50	82.99
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

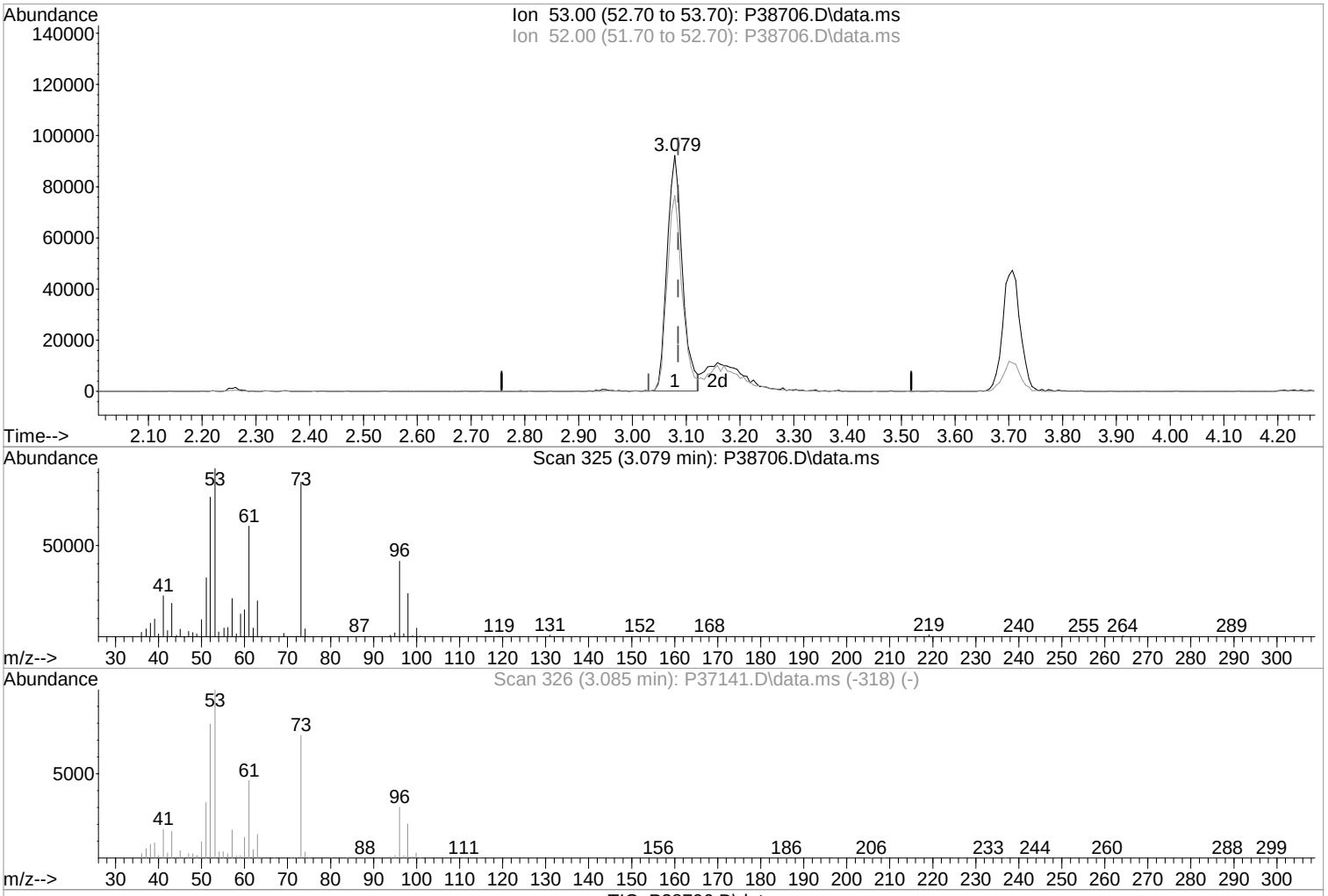
08/20/20

1st 08/20/20
2nd 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:30:13 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38706.D\data.ms

(24) Acrylonitrile

3.079min (-0.006) 83.04 ppb

response 182963

Ion	Exp%	Act%
53.00	100	100
52.00	79.50	82.99
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

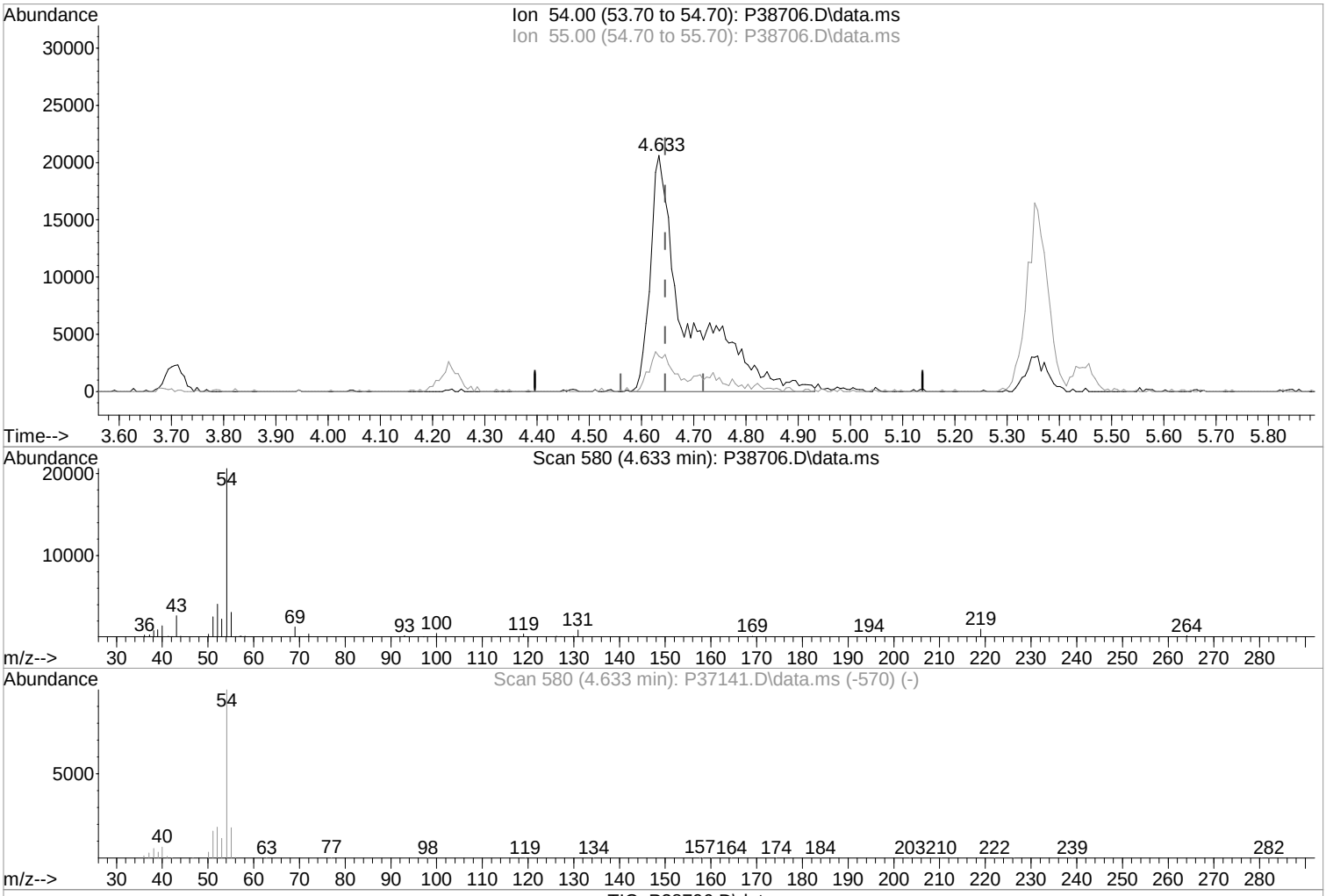
08/20/20

1st 08/20/20
2nd 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:30:13 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38706.D\data.ms

(36) Propionitrile

4.633min (-0.012) 105.85 ppb m

response 101136

Ion	Exp%	Act%
54.00	100	100
55.00	17.90	14.94
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

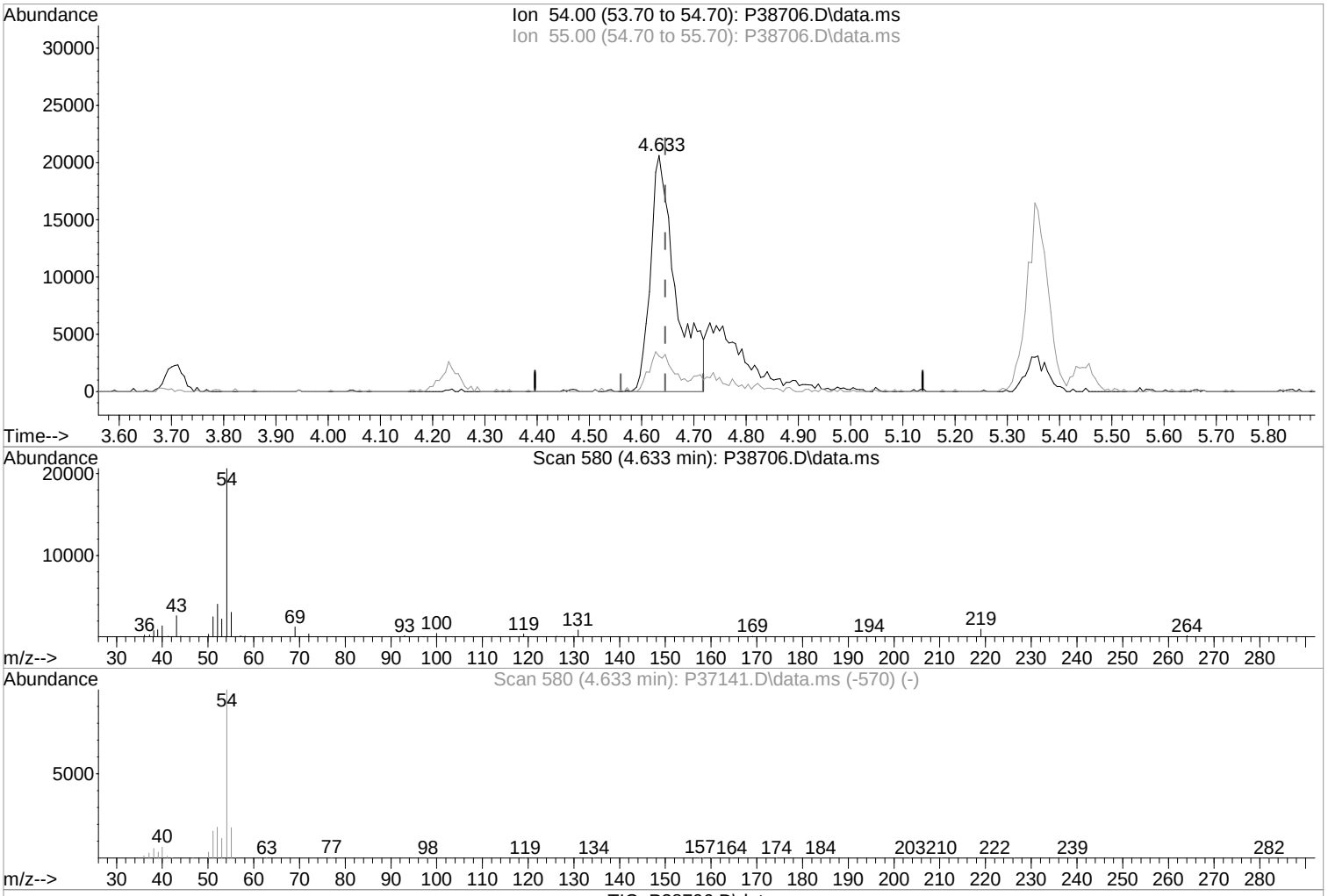
08/20/20

1st 08/20/20
2nd 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:30:13 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38706.D\data.ms

(36) Propionitrile

4.633min (-0.012) 73.73 ppb

response 70450

Ion	Exp%	Act%
54.00	100	100
55.00	17.90	14.94
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

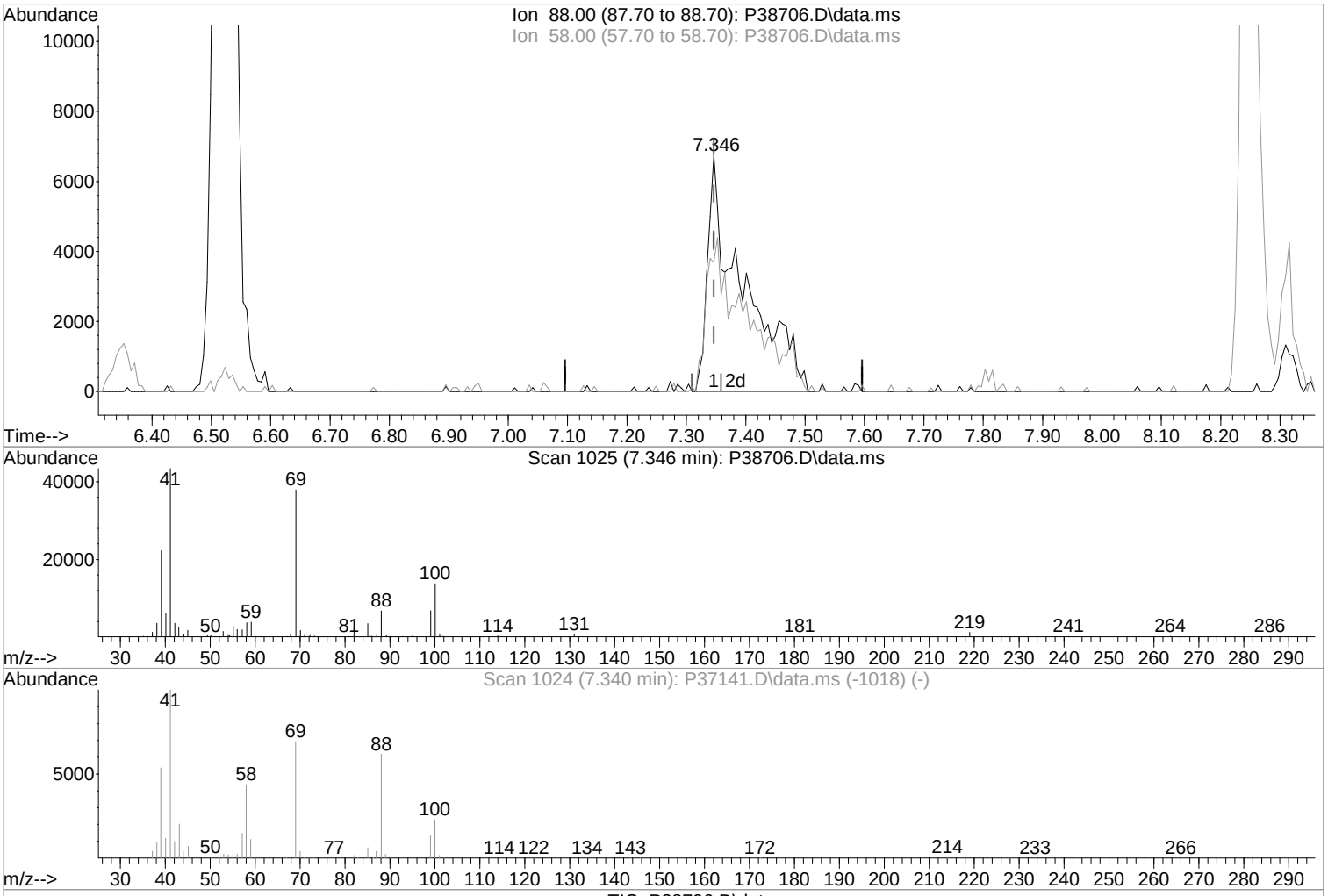
08/20/20

1st 08/20/20
2nd 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:30:13 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38706.D\data.ms

(58) 1,4-Dioxane

7.346min (+0.000) 326.76 ppb m

response 27773

Ion	Exp%	Act%
88.00	100	100
58.00	70.60	54.65
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Split Peak

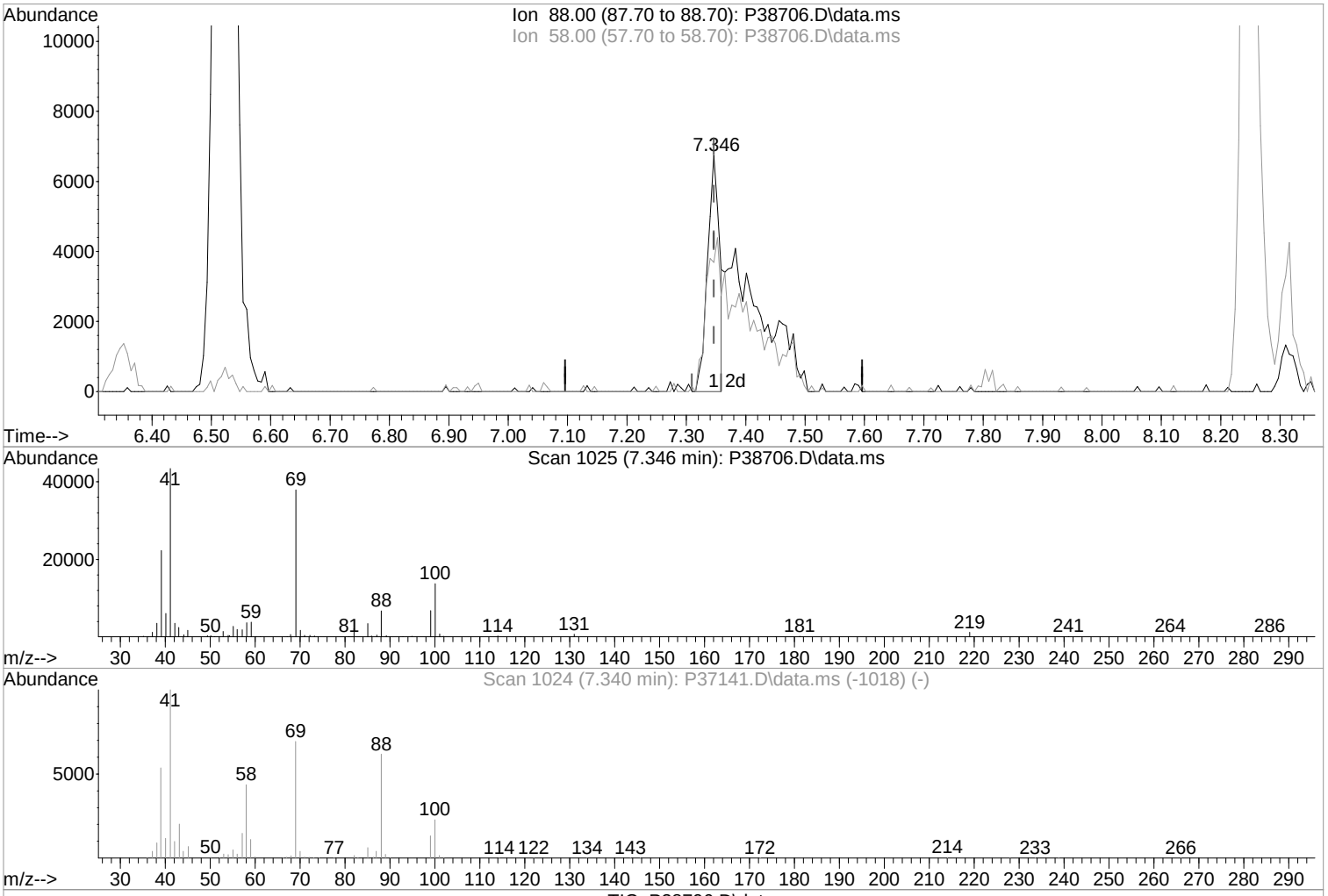
08/20/20

1st 08/20/20
2nd 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:30:13 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38706.D\data.ms

(58) 1,4-Dioxane

7.346min (+0.000) 109.72 ppb

response 9326

Ion	Exp%	Act%
88.00	100	100
58.00	70.60	54.65
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

08/20/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:42:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.450	168	342722	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.523	114	537193	50.00	ppb		0.00
71) d5-Chlorobenzene	9.797	117	486363	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	243914	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.316	113	140910	45.68	ppb		-0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 91.36%				
48) surr1,1,2-dichloroetha...	5.853	65	191706	44.89	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 89.78%				
65) SURR3,Toluene-d8	8.315	98	683112	47.65	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.30%				
70) SURR2,BFB	10.870	95	245820	46.53	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 93.06%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.195	85	91889	24.10	ppb		97
3) Chloromethane	1.323	50	109424	22.98	ppb		97
4) Vinyl Chloride	1.396	62	103898	23.28	ppb		97
5) Bromomethane	1.634	94	63489	17.83	ppb		97
6) Chloroethane	1.707	64	61887	25.20	ppb		98
7) Freon 21	1.859	67	111978	19.69	ppb		97
8) Trichlorofluoromethane	1.902	101	104002	22.62	ppb		96
9) Diethyl Ether	2.140	59	70770	21.30	ppb		94
10) Freon 123a	2.152	67	62639	15.97	ppb		98
11) Freon 123	2.207	83	76814	16.60	ppb		98
12) Acrolein	2.262	56	33169	36.86	ppb		94
13) 1,1-Diclethene	2.329	96	66692	25.16	ppb		92
14) Freon 113	2.329	101	63030	20.41	ppb		95
15) Acetone	2.402	43	32828m	13.99	ppb		
16) 2-Propanol	2.536	45	188719m	427.88	ppb		
17) Iodomethane	2.469	142	66300	22.36	ppb		98
18) Carbon Disulfide	2.518	76	166100	18.90	ppb		100
19) Acetonitrile	2.664	40	24952m	101.95	ppb		
20) Allyl Chloride	2.670	76	39194	20.87	ppb	#	70
21) Methyl Acetate	2.701	43	68164	13.37	ppb		96
22) Methylene Chloride	2.792	84	74930	19.83	ppb		95
23) TBA	2.945	59	285647m	399.91	ppb		
24) Acrylonitrile	3.079	53	238693m	108.33	ppb		
25) Methyl-t-Butyl Ether	3.091	73	258152	21.05	ppb		97
26) trans-1,2-Dichloroethene	3.079	96	70251	22.76	ppb		93
28) 1,1-Diclethane	3.591	63	132844	19.52	ppb		97
29) Vinyl Acetate	3.688	86	19652	33.91	ppb	#	40
30) DIPE	3.700	45	281410	23.67	ppb		93
31) 2-Chloro-1,3-Butadiene	3.707	53	107630	19.66	ppb		88
32) ETBE	4.231	59	240795	21.71	ppb		96
33) 2,2-Dichloropropane	4.426	77	103104	20.59	ppb		97
34) cis-1,2-Dichloroethene	4.444	96	78465	19.84	ppb		99
35) 2-Butanone	4.530	43	47991	18.01	ppb		98
36) Propionitrile	4.633	54	101136m	105.85	ppb		
37) Bromochloromethane	4.847	130	45913	19.62	ppb		96
38) Methacrylonitrile	4.883	67	40775	18.02	ppb		86
39) Tetrahydrofuran	4.950	42	31412	15.30	ppb		93
40) Chloroform	5.036	83	121917	19.52	ppb		90
41) 1,1,1-Trichloroethane	5.292	97	100677	20.32	ppb		96

1st KR 08/20/20
2nd BA 08/25/20

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:42:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.127	73	245994	22.26	ppb		93
44) Cyclohexane	5.359	41	69640	19.77	ppb		99
46) Carbontetrachloride	5.566	117	71912	20.39	ppb		96
47) 1,1-Dichloropropene	5.584	75	101494	20.32	ppb		92
49) Benzene	5.901	78	320230	20.65	ppb		98
50) 1,2-Dichloroethane	5.968	62	97000	17.90	ppb		98
51) Iso-Butyl Alcohol	5.962	43	119876	360.32	ppb		98
52) n-Heptane	6.352	43	115694	24.07	ppb		97
53) 1-Butanol	6.907	56	187506	905.68	ppb		98
54) Trichloroethene	6.834	130	71477	18.57	ppb		95
55) Methylcyclohexane	7.053	55	104238	21.81	ppb		94
56) 1,2-Diclpropane	7.133	63	83200	20.26	ppb		97
57) Dibromomethane	7.279	93	44569	18.81	ppb		95
58) 1,4-Dioxane	7.346	88	27773m	326.76	ppb		
59) Methyl Methacrylate	7.352	69	77697	21.72	ppb		97
60) Bromodichloromethane	7.499	83	82040	18.88	ppb		96
63) cis-1,3-Dichloropropene	8.029	75	112773	19.03	ppb		96
64) 4-Methyl-2-pentanone	8.242	43	113957	20.58	ppb		95
66) Toluene	8.389	91	362741	22.08	ppb		99
67) trans-1,3-Dichloropropene	8.669	75	106344	19.73	ppb		93
68) Ethyl Methacrylate	8.797	69	134186	22.24	ppb		95
69) 1,1,2-Trichloroethane	8.864	97	75759	20.66	ppb		91
72) Tetrachloroethene	8.968	164	60604	20.40	ppb		95
73) 2-Hexanone	9.151	43	85903	19.87	ppb		99
74) 1,3-Dichloropropane	9.029	76	134971	19.73	ppb		97
75) Dibromochloromethane	9.248	129	56604	18.71	ppb		97
76) N-Butyl Acetate	9.291	43	163573	20.40	ppb		99
77) 1,2-Dibromoethane	9.346	107	75674	20.33	ppb		99
78) Chlorobenzene	9.827	112	214792	19.80	ppb		95
79) 3-CBTF	9.840	180	120660	24.02	ppb		92
80) 4-CBTF	9.894	180	108603	24.04	ppb		97
81) 1,1,1,2-Tetrachloroethane	9.913	131	65716	19.69	ppb		97
82) Ethylbenzene	9.937	106	119865	21.06	ppb		100
83) (m+p)Xylene	10.053	106	297668	43.68	ppb		98
84) o-Xylene	10.406	106	144940	21.79	ppb		99
85) Styrene	10.425	104	245243	21.70	ppb		97
87) Bromoform	10.583	173	34596	17.22	ppb		93
88) 2-CBTF	10.656	180	115106	23.26	ppb		94
89) Isopropylbenzene	10.736	105	387968	23.04	ppb		98
90) Cyclohexanone	10.833	55	98938	97.78	ppb		90
91) trans-1,4-Dichloro-2-B...	11.065	53	30448	21.83	ppb		96
92) 1,1,2,2-Tetrachloroethane	11.016	83	114092	20.96	ppb		98
93) Bromobenzene	10.992	156	91146	20.75	ppb		94
94) 1,2,3-Trichloropropane	11.047	110	33740	19.17	ppb	#	88
95) n-Propylbenzene	11.089	91	469953	24.32	ppb		96
96) 2-Chlorotoluene	11.156	91	276323	22.02	ppb		98
97) 3-Chlorotoluene	11.211	91	270301	22.52	ppb		99
98) 4-Chlorotoluene	11.254	91	308356	21.95	ppb		98
99) 1,3,5-Trimethylbenzene	11.242	105	332162	23.09	ppb		98
100) tert-Butylbenzene	11.516	119	277350	23.03	ppb		100
101) 1,2,4-Trimethylbenzene	11.553	105	328400	22.68	ppb		99
102) 3,4-DCBTF	11.620	214	101317	25.54	ppb		91
103) sec-Butylbenzene	11.693	105	424520	24.58	ppb		98
104) p-Isopropyltoluene	11.815	119	353494	23.74	ppb		97
105) 1,3-Dclbenz	11.784	146	185363	21.54	ppb		99
106) 1,4-Dclbenz	11.857	146	184691	21.09	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:42:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 2,4-DCBTF	11.906	214	88286	23.77	ppb	98
108) 2,5-DCBTF	11.949	214	99205	24.42	ppb	98
109) n-Butylbenzene	12.150	91	334625	23.87	ppb	99
110) 1,2-Dclbenz	12.156	146	181143	20.73	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.790	157	21625	17.74	ppb	93
112) Trielution Dichlorotol...	12.900	125	483486	69.09	ppb	99
113) 1,3,5 Trichlorobenzene	12.943	180	137597	22.90	ppb	98
114) Coelution Dichlorotoluene	13.223	125	355316	46.23	ppb	99
115) 1,2,4-Tcbenzene	13.430	180	142591	22.62	ppb	95
116) Hexachlorobt	13.558	225	58209	23.01	ppb	99
117) Naphthalen	13.625	128	435444	23.65	ppb	99
118) 1,2,3-Tclbenzene	13.808	180	143236	21.97	ppb	94
119) 2,4,5-Trichlorotolene	14.394	159	101279	25.40	ppb	96
120) 2,3,6-Trichlorotoluene	14.473	159	94641	26.13	ppb	97

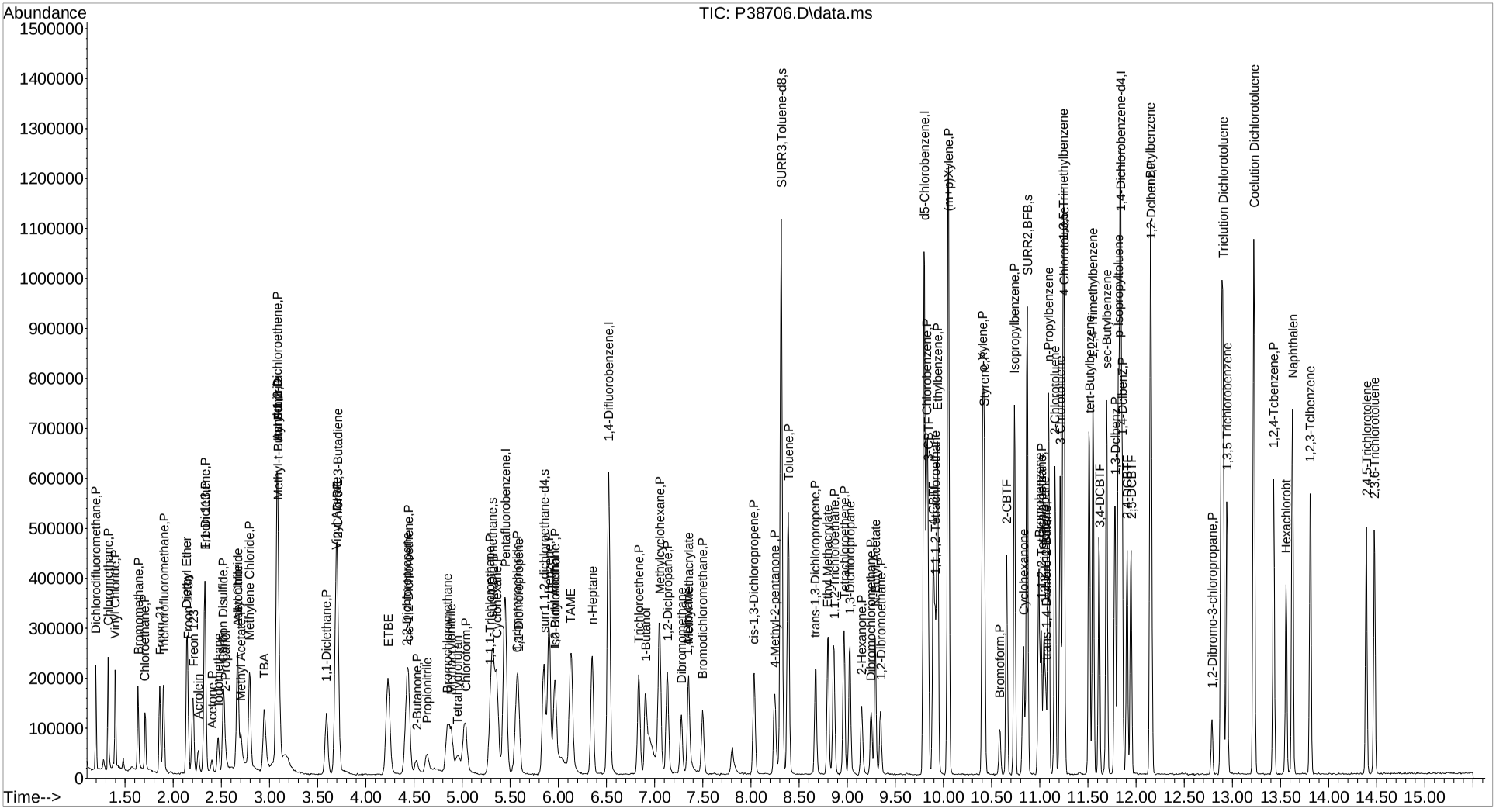
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38706.D
Acq On : 20 Aug 2020 10:13 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

1st 08/20/20
2nd 08/25/20

Quant Time: Aug 20 10:42:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

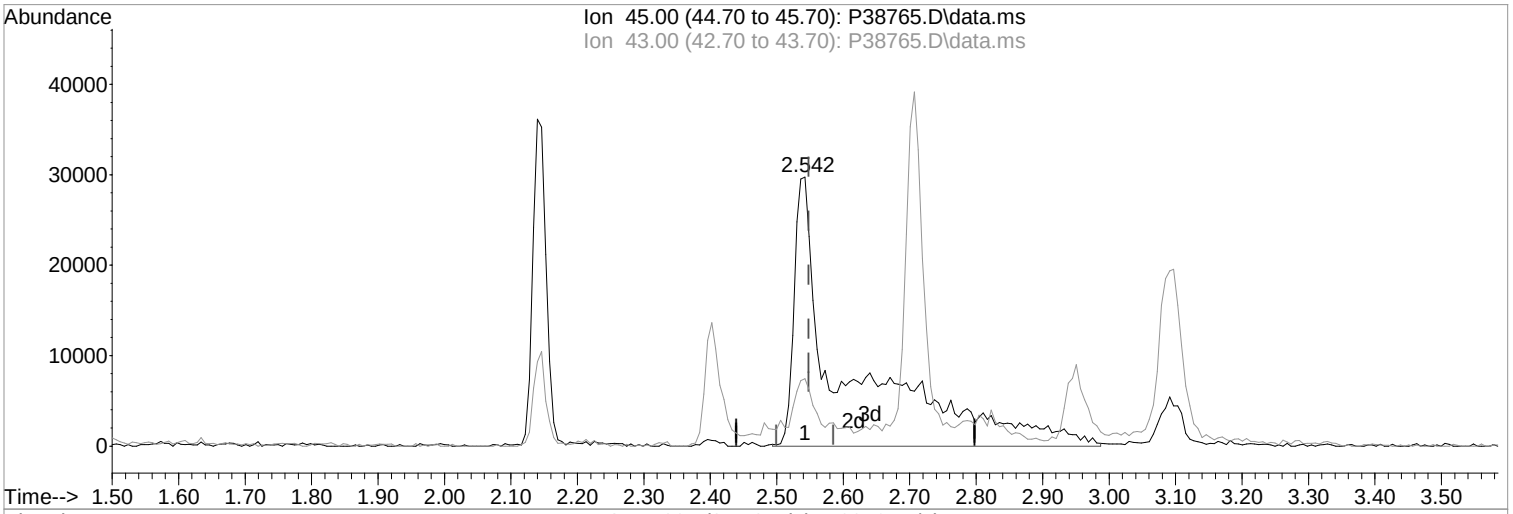


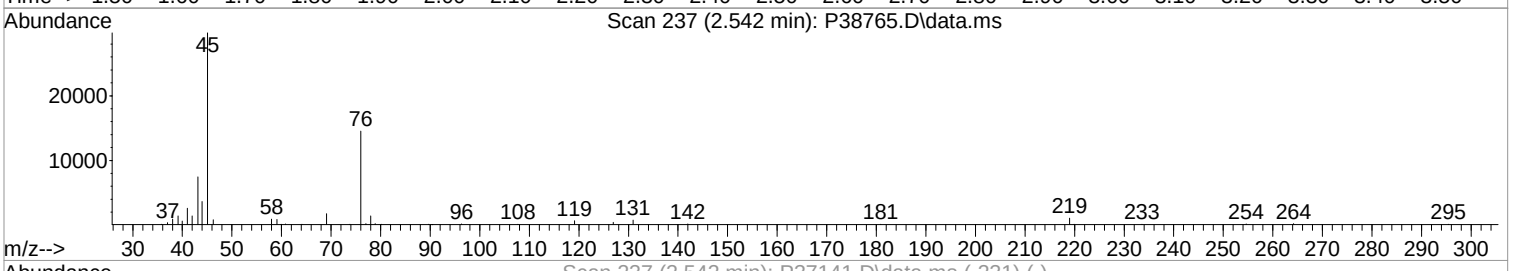
1st KR 08/21/20
2nd BA 08/27/20

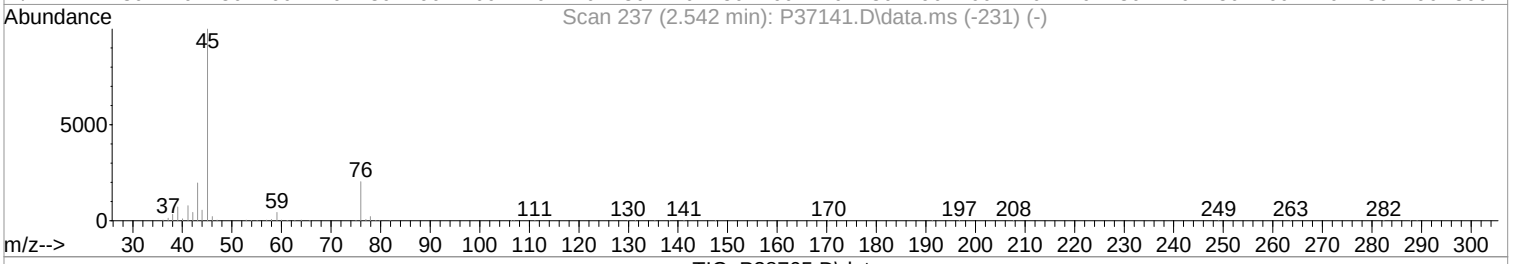
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38765.D
Acq On : 21 Aug 2020 10:31 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:50:11 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38765.D\data.ms

(16) 2-Propanol

2.542min (-0.006) 396.01 ppb m

response 162937

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	25.02
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

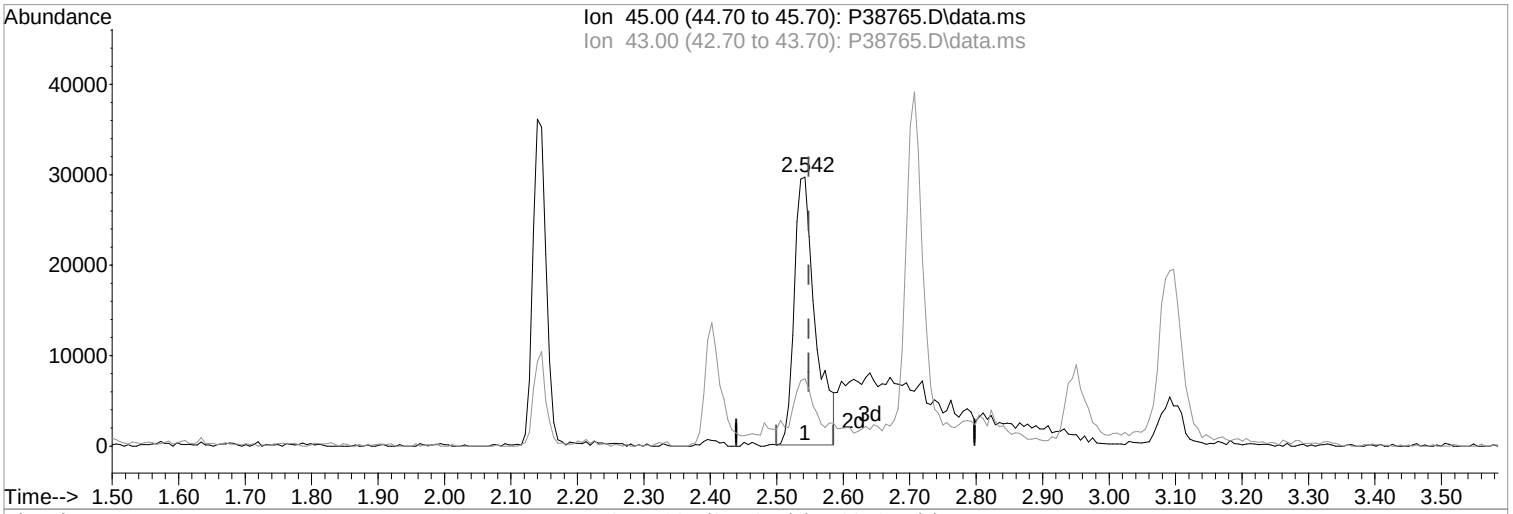
Poor integration.

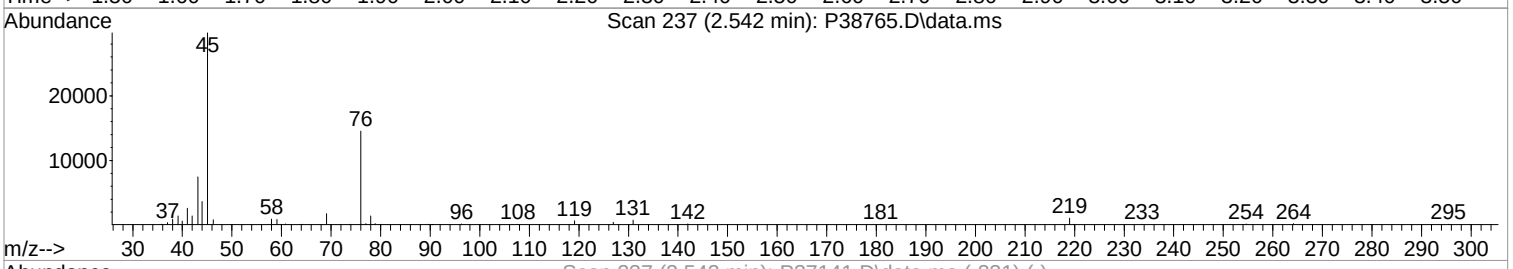
08/21/20

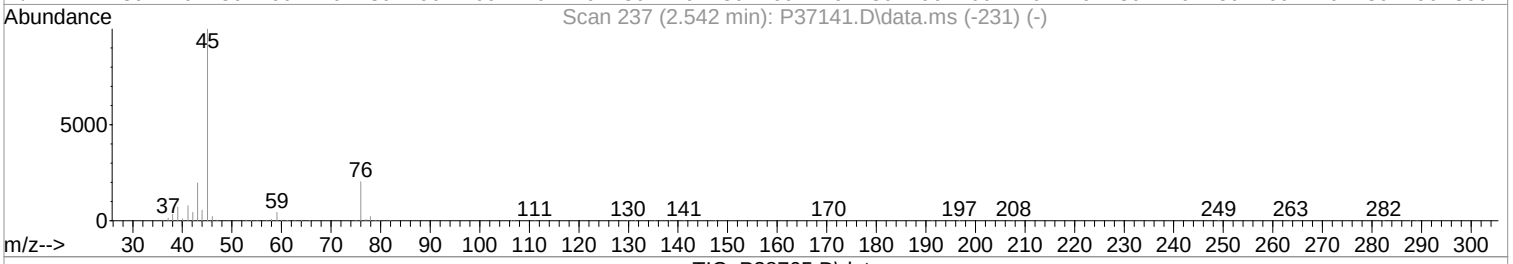
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38765.D
Acq On : 21 Aug 2020 10:31 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:50:11 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38765.D\data.ms

(16) 2-Propanol

2.542min (-0.006) 158.68 ppb

response 65289

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	25.02
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

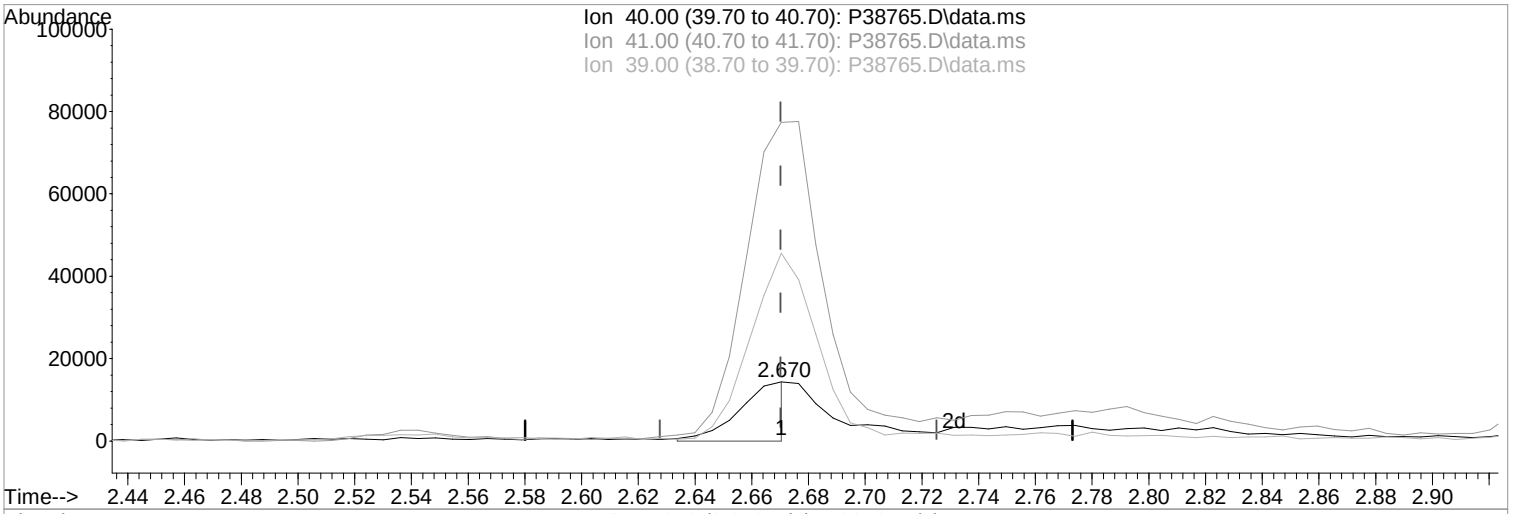
08/21/20

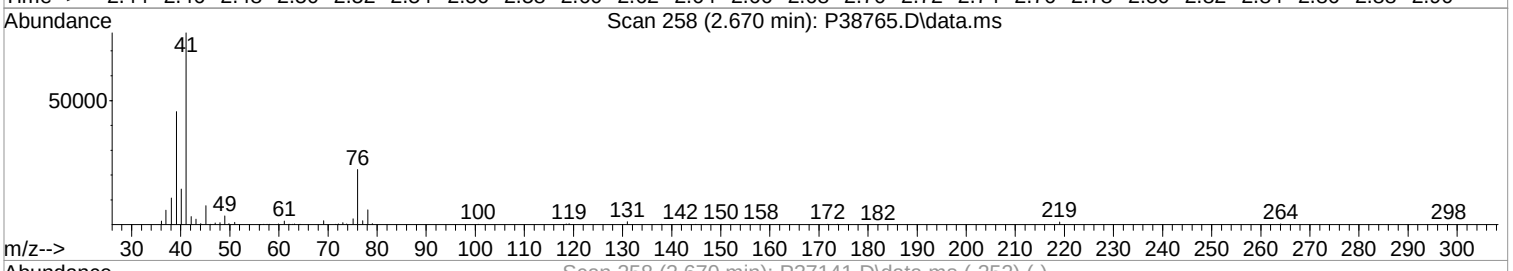
1st KR 08/21/20
2nd BA 08/27/20

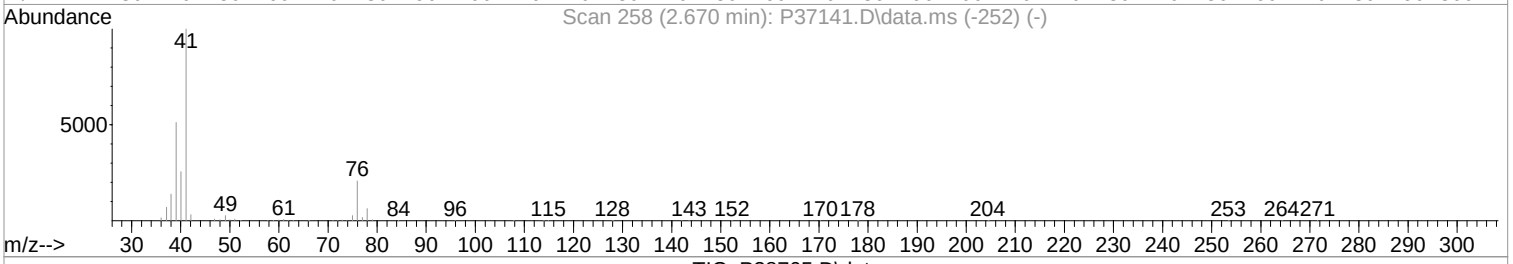
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38765.D
Acq On : 21 Aug 2020 10:31 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:50:11 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38765.D\data.ms

(19) Acetonitrile

2.670min (+0.000) 73.48 ppb m

response 16777

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	538.01#
39.00	200.50	317.32#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

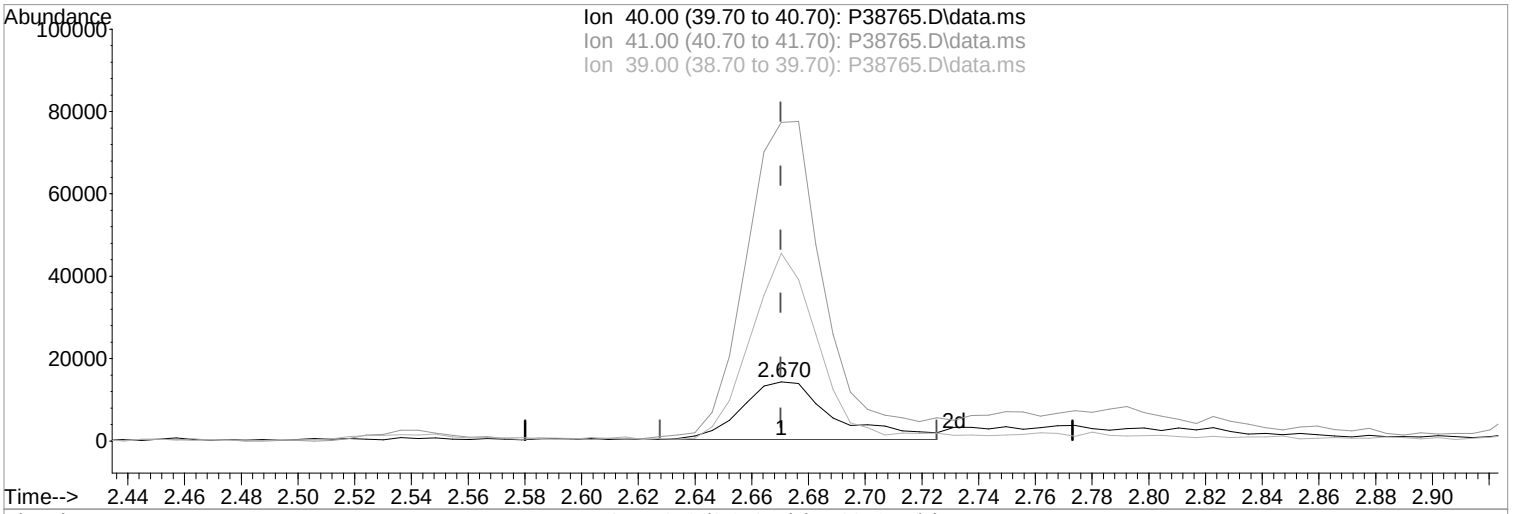
08/21/20

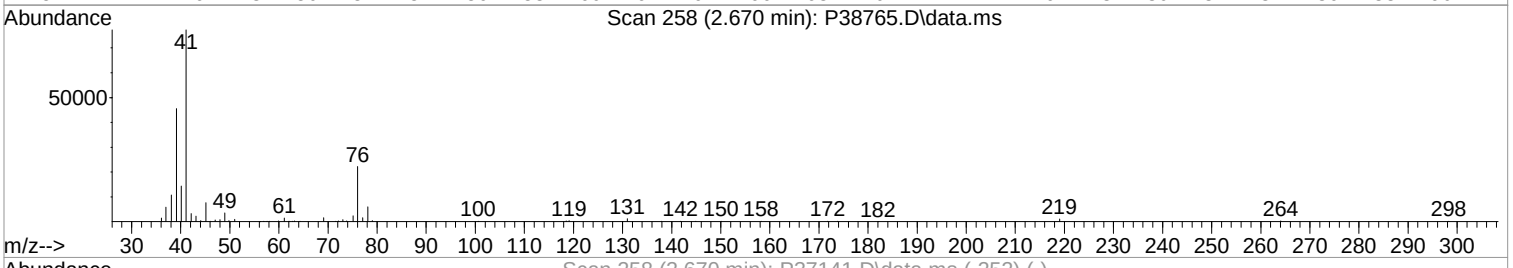
1st KR 08/21/20
2nd BA 08/27/20

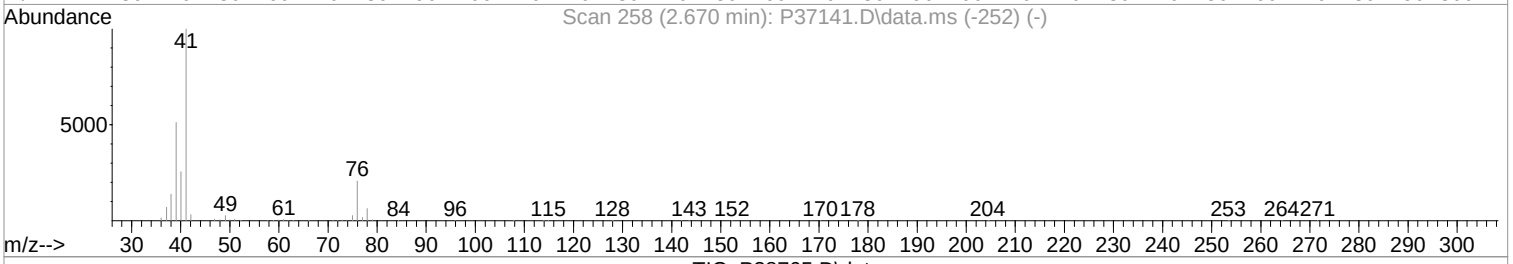
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38765.D
Acq On : 21 Aug 2020 10:31 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:50:11 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38765.D\data.ms

(19) Acetonitrile

2.670min (+0.000) 139.85 ppb

response 31930

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	538.01#
39.00	200.50	317.32#
0.00	0.00	0.00

Manual Integration:

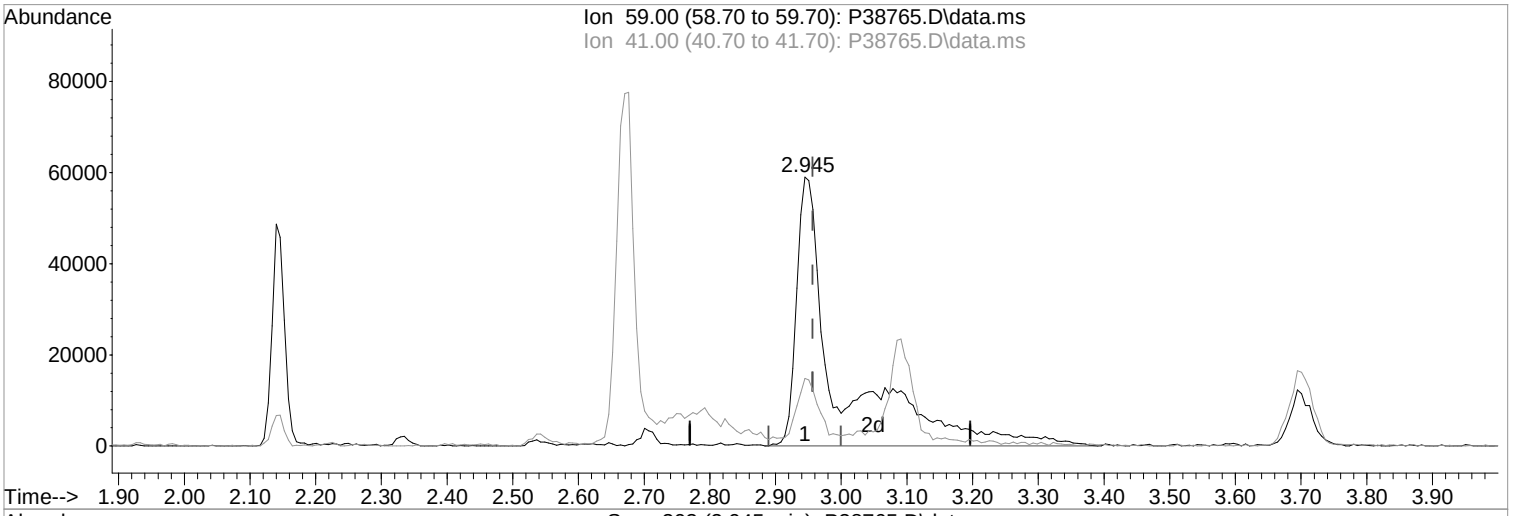
Before

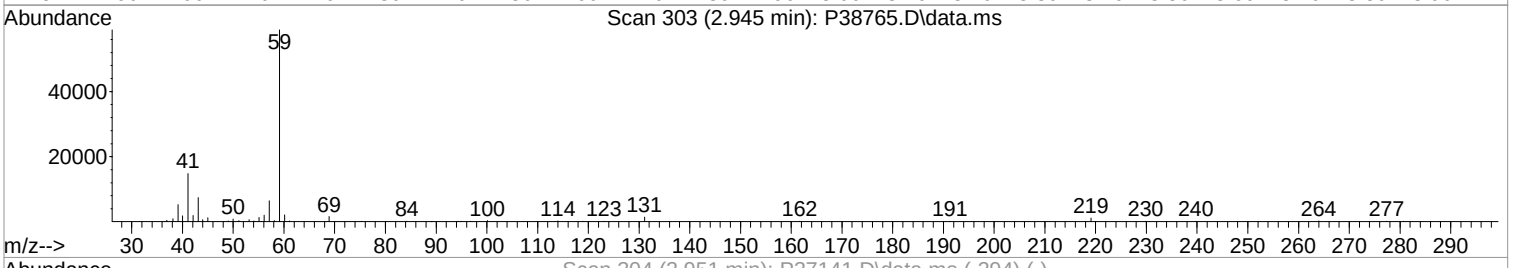
08/21/20

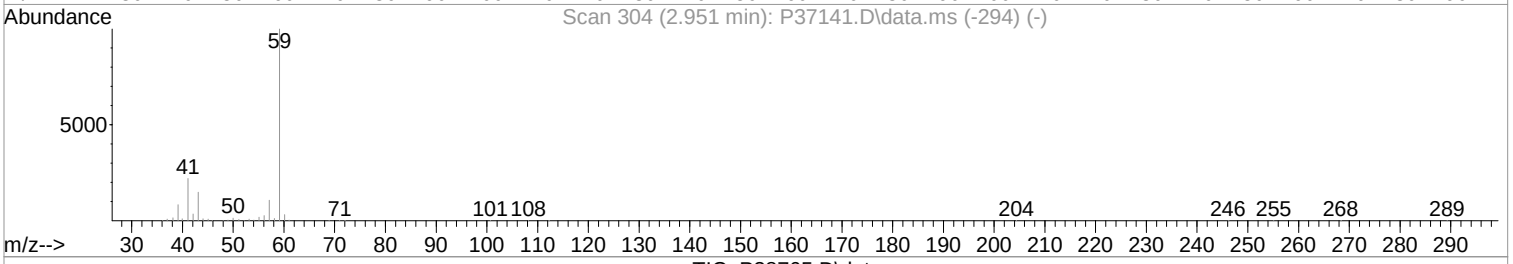
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38765.D
Acq On : 21 Aug 2020 10:31 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:50:11 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38765.D\data.ms

(23) TBA

2.945min (-0.012) 395.79 ppb m

response 263729

Ion	Exp%	Act%
59.00	100	100
41.00	22.00	25.17
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

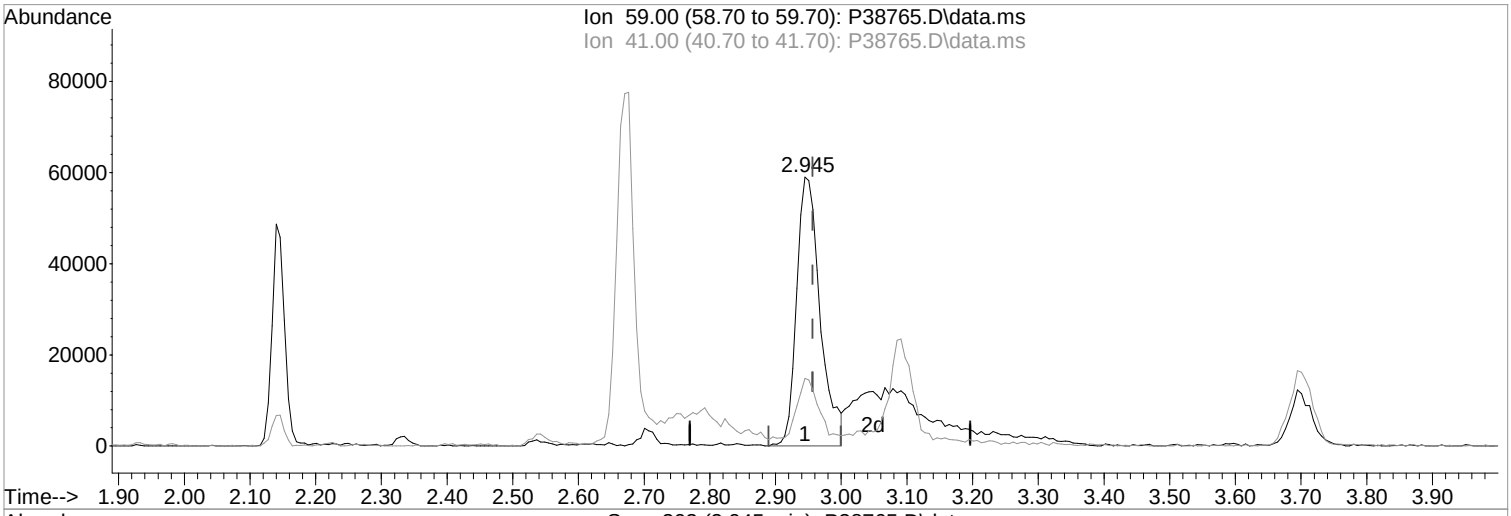
08/21/20

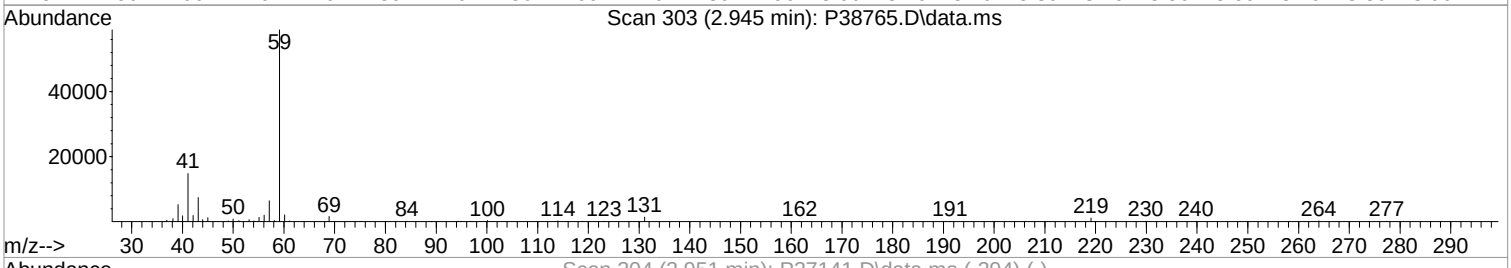
1st 08/21/20
2nd 08/27/20

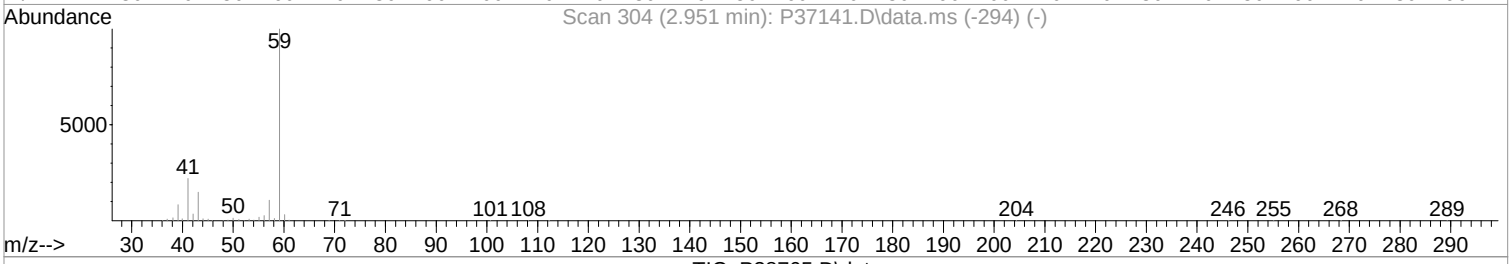
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38765.D
Acq On : 21 Aug 2020 10:31 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:50:11 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38765.D\data.ms

(23) TBA

2.945min (-0.012) 219.44 ppb

response 146223

Ion	Exp%	Act%
59.00	100	100
41.00	22.00	25.17
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

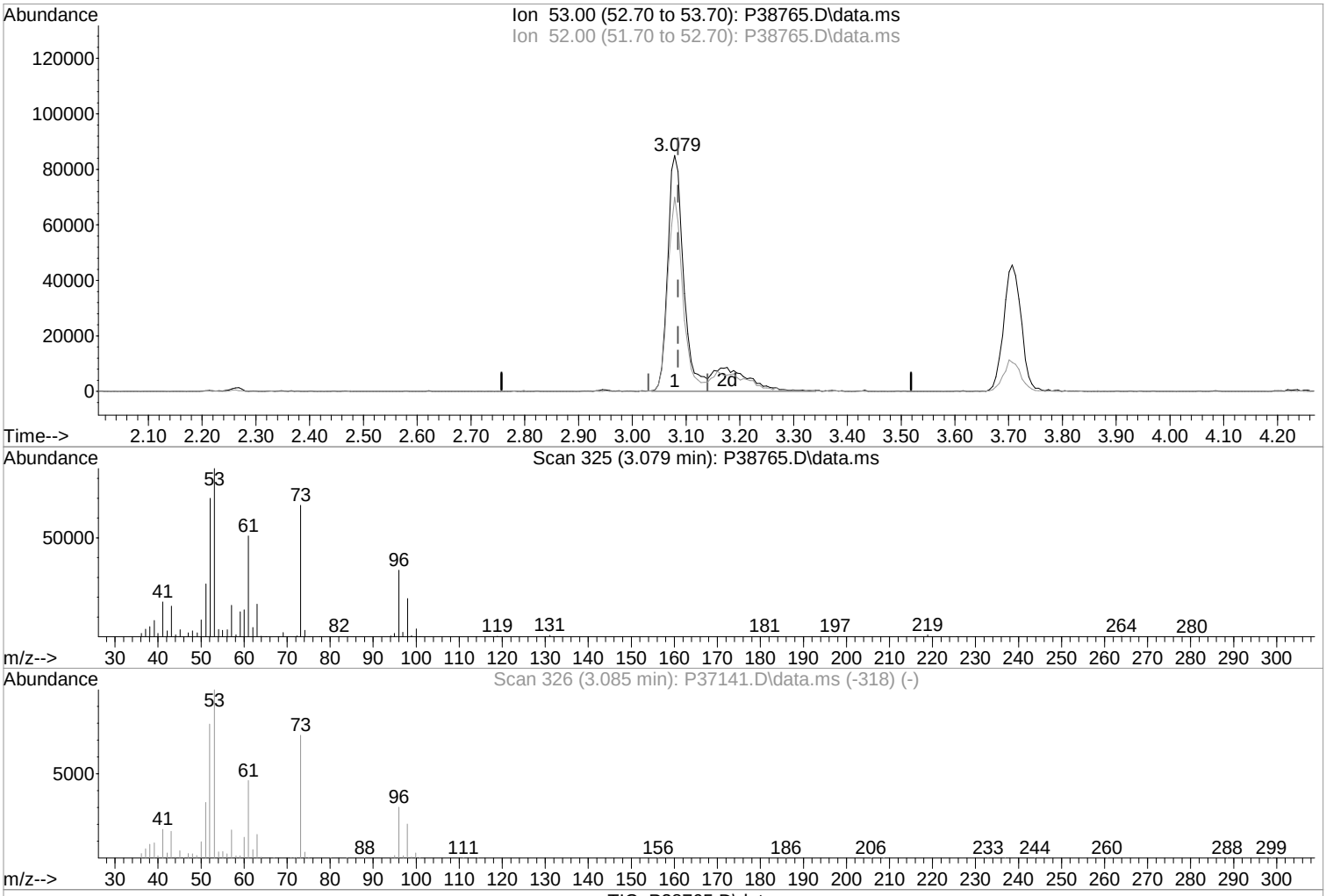
08/21/20

1st KR 08/21/20
2nd BA 08/27/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38765.D
Acq On : 21 Aug 2020 10:31 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:50:11 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38765.D\data.ms

(24) Acrylonitrile

3.079min (-0.006) 105.09 ppb m

response 216007

Ion	Exp%	Act%
53.00	100	100
52.00	79.50	82.21
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

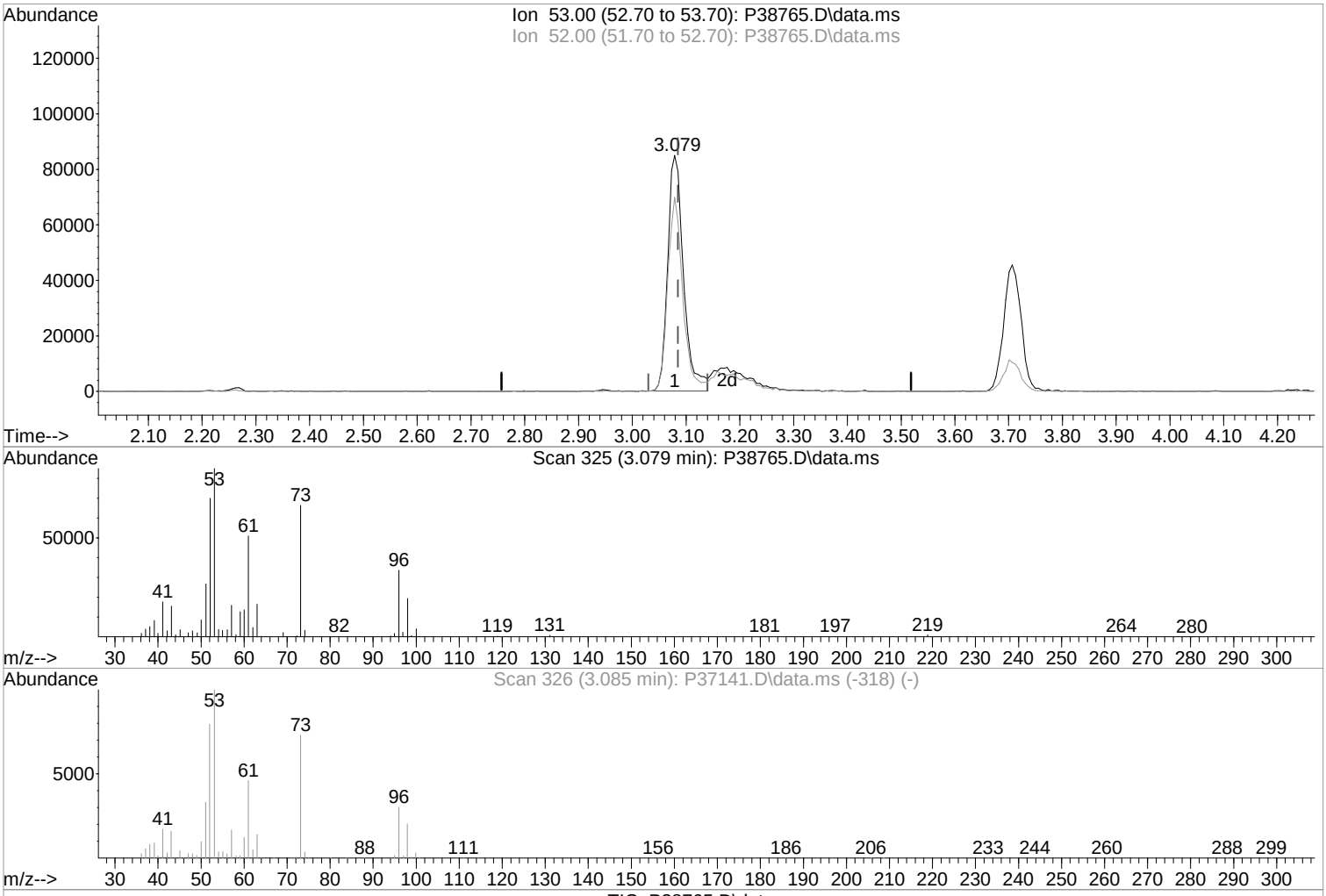
Poor integration.

08/21/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38765.D
Acq On : 21 Aug 2020 10:31 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:50:11 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38765.D\data.ms

(24) Acrylonitrile

3.079min (-0.006) 84.76 ppb

response 174219

Ion	Exp%	Act%
53.00	100	100
52.00	79.50	82.21
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

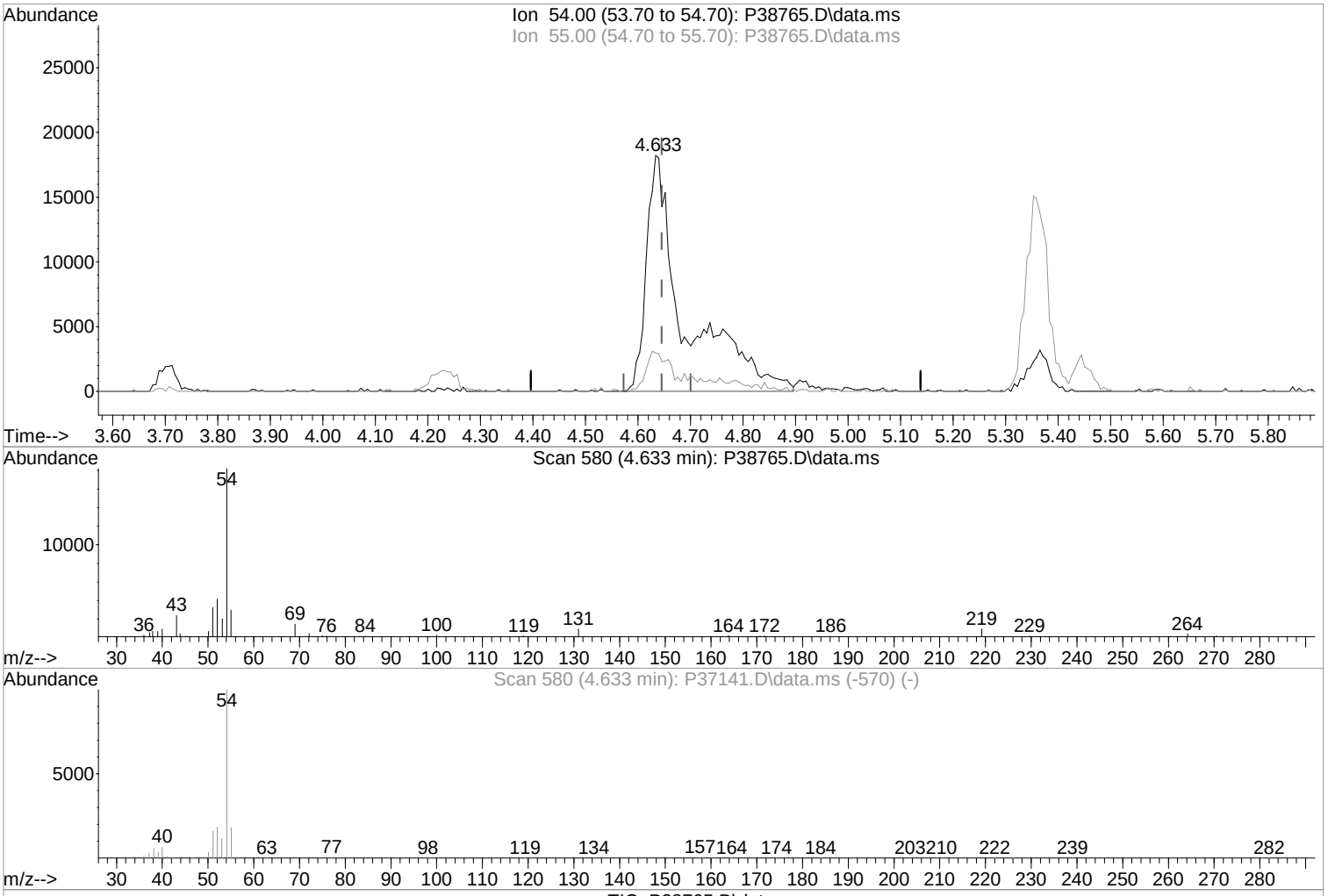
08/21/20

1st 08/21/20
2nd 08/27/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38765.D
Acq On : 21 Aug 2020 10:31 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:50:11 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38765.D\data.ms

(36) Propionitrile

4.633min (-0.012) 103.17 ppb m

response 91958

Ion	Exp%	Act%
54.00	100	100
55.00	17.90	16.28
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

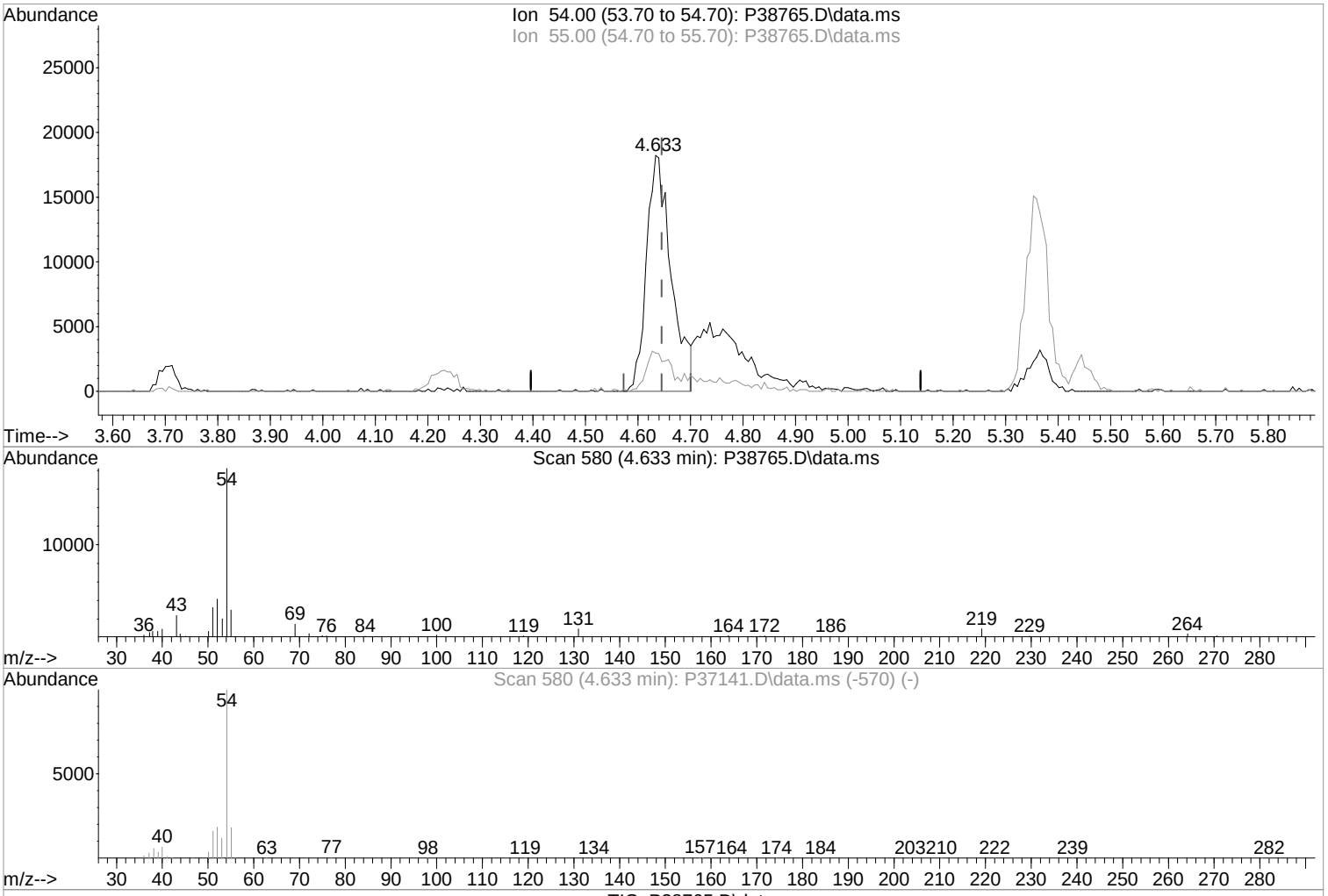
08/21/20

1st 08/21/20
2nd 08/27/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38765.D
Acq On : 21 Aug 2020 10:31 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:50:11 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38765.D\data.ms

(36) Propionitrile

4.633min (-0.012) 66.96 ppb

response 59678

Ion	Exp%	Act%
54.00	100	100
55.00	17.90	16.28
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

08/21/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38765.D
Acq On : 21 Aug 2020 10:31 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 11:18:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.450	168	319714	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.523	114	487469	50.00	ppb		0.00
71) d5-Chlorobenzene	9.797	117	440584	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	226913	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.322	113	132348	47.28	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 94.56%				
48) surr1,1,2-dichloroetha...	5.847	65	177656	45.85	ppb		-0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 91.70%				
65) SURR3,Toluene-d8	8.316	98	649378	49.92	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.84%				
70) SURR2,BFB	10.870	95	237654	49.58	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.16%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.201	85	84421	23.73	ppb		93
3) Chloromethane	1.323	50	98770	22.24	ppb		93
4) Vinyl Chloride	1.402	62	94400	22.67	ppb		96
5) Bromomethane	1.640	94	55231	16.63	ppb		99
6) Chloroethane	1.713	64	55006	24.01	ppb		91
7) Freon 21	1.866	67	106227	20.02	ppb		94
8) Trichlorofluoromethane	1.902	101	86927	20.26	ppb		96
9) Diethyl Ether	2.140	59	63998	20.65	ppb		93
10) Freon 123a	2.152	67	57395	15.69	ppb		99
11) Freon 123	2.207	83	68535	15.88	ppb		94
12) Acrolein	2.262	56	30142	35.90	ppb		88
13) 1,1-Diclethene	2.329	96	59578	24.10	ppb		92
14) Freon 113	2.329	101	56983	19.78	ppb		86
15) Acetone	2.402	43	25361	11.25	ppb		85
16) 2-Propanol	2.542	45	162937m	396.01	ppb		
17) Iodomethane	2.469	142	64724	23.40	ppb		99
18) Carbon Disulfide	2.524	76	159290	19.44	ppb		96
19) Acetonitrile	2.670	40	16777m	73.48	ppb		
20) Allyl Chloride	2.670	76	36433	20.79	ppb	#	70
21) Methyl Acetate	2.707	43	66480	13.98	ppb		95
22) Methylene Chloride	2.798	84	66819	18.96	ppb		93
23) TBA	2.945	59	263729m	395.79	ppb		
24) Acrylonitrile	3.079	53	216007m	105.09	ppb		
25) Methyl-t-Butyl Ether	3.091	73	226179	19.77	ppb		95
26) trans-1,2-Dichloroethene	3.079	96	61558	21.38	ppb		96
28) 1,1-Diclethane	3.591	63	117096	18.45	ppb		98
29) Vinyl Acetate	3.688	86	16446	30.49	ppb	#	76
30) DIPE	3.695	45	257086	23.18	ppb	#	71
31) 2-Chloro-1,3-Butadiene	3.707	53	103877	20.33	ppb		88
32) ETBE	4.237	59	220849	21.34	ppb		96
33) 2,2-Dichloropropane	4.426	77	89253	19.11	ppb		95
34) cis-1,2-Dichloroethene	4.444	96	73953	20.04	ppb		95
35) 2-Butanone	4.524	43	42133	16.95	ppb		99
36) Propionitrile	4.633	54	91958m	103.17	ppb		
37) Bromochloromethane	4.853	130	41279	18.91	ppb		97
38) Methacrylonitrile	4.889	67	37827	17.92	ppb		90
39) Tetrahydrofuran	4.963	42	27414	14.32	ppb		81
40) Chloroform	5.036	83	113053	19.40	ppb		88
41) 1,1,1-Trichloroethane	5.298	97	85464	18.49	ppb		90

1st KR 08/21/20
2nd BA 08/27/20

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38765.D
Acq On : 21 Aug 2020 10:31 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 11:18:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.127	73	226837	22.01	ppb		97
44) Cyclohexane	5.359	41	65362	20.45	ppb		83
46) Carbontetrachloride	5.560	117	64594	20.18	ppb		88
47) 1,1-Dichloropropene	5.584	75	89604	19.77	ppb		96
49) Benzene	5.908	78	285269	20.27	ppb		96
50) 1,2-Dichloroethane	5.962	62	87383	17.77	ppb		99
51) Iso-Butyl Alcohol	5.962	43	102933	340.95	ppb		96
52) n-Heptane	6.353	43	97349	22.32	ppb		98
53) 1-Butanol	6.901	56	170870	909.52	ppb		95
54) Trichloroethene	6.834	130	68485	19.61	ppb		98
55) Methylcyclohexane	7.054	55	100561	23.18	ppb		87
56) 1,2-Diclpropane	7.133	63	73701	19.78	ppb		99
57) Dibromomethane	7.273	93	39559	18.40	ppb		91
58) 1,4-Dioxane	7.340	88	25316	328.23	ppb		85
59) Methyl Methacrylate	7.352	69	67022	20.64	ppb		93
60) Bromodichloromethane	7.499	83	71877	18.23	ppb		97
63) cis-1,3-Dichloropropene	8.029	75	102769	19.11	ppb		95
64) 4-Methyl-2-pentanone	8.249	43	106694	21.24	ppb		98
66) Toluene	8.389	91	315555	21.17	ppb		98
67) trans-1,3-Dichloropropene	8.669	75	89437	18.29	ppb		94
68) Ethyl Methacrylate	8.803	69	116355	21.25	ppb		96
69) 1,1,2-Trichloroethane	8.858	97	68019	20.44	ppb		95
72) Tetrachloroethene	8.968	164	53683	19.95	ppb		95
73) 2-Hexanone	9.151	43	79102	20.20	ppb		88
74) 1,3-Dichloropropane	9.029	76	118262	19.09	ppb		97
75) Dibromochloromethane	9.248	129	50477	18.42	ppb		97
76) N-Butyl Acetate	9.291	43	146082	20.11	ppb		98
77) 1,2-Dibromoethane	9.346	107	66212	19.63	ppb		97
78) Chlorobenzene	9.828	112	196674	20.02	ppb		96
79) 3-CBTF	9.840	180	109176	24.00	ppb		98
80) 4-CBTF	9.895	180	100409	24.53	ppb		98
81) 1,1,1,2-Tetrachloroethane	9.913	131	58937	19.49	ppb		97
82) Ethylbenzene	9.937	106	105651	20.49	ppb	#	87
83) (m+p)Xylene	10.047	106	271495	43.98	ppb		99
84) o-Xylene	10.407	106	131084	21.75	ppb		99
85) Styrene	10.425	104	217538	21.25	ppb		99
87) Bromoform	10.583	173	31442	16.82	ppb		94
88) 2-CBTF	10.657	180	108070	23.48	ppb		96
89) Isopropylbenzene	10.736	105	342575	21.87	ppb		98
90) Cyclohexanone	10.827	55	89035	94.58	ppb		86
91) trans-1,4-Dichloro-2-B...	11.059	53	22943	17.68	ppb		97
92) 1,1,2,2-Tetrachloroethane	11.016	83	97729	19.30	ppb		99
93) Bromobenzene	10.992	156	79977	19.57	ppb		94
94) 1,2,3-Trichloropropane	11.041	110	30717	18.76	ppb		91
95) n-Propylbenzene	11.089	91	422784	23.52	ppb		99
96) 2-Chlorotoluene	11.157	91	245448	21.02	ppb		96
97) 3-Chlorotoluene	11.211	91	250574	22.44	ppb		97
98) 4-Chlorotoluene	11.254	91	276414	21.15	ppb		98
99) 1,3,5-Trimethylbenzene	11.242	105	291756	21.80	ppb		98
100) tert-Butylbenzene	11.516	119	248462	22.18	ppb		97
101) 1,2,4-Trimethylbenzene	11.553	105	297823	22.11	ppb		100
102) 3,4-DCBTF	11.614	214	90162	24.43	ppb		97
103) sec-Butylbenzene	11.693	105	380266	23.66	ppb		99
104) p-Isopropyltoluene	11.815	119	310148	22.39	ppb		100
105) 1,3-Dclbenz	11.784	146	162085	20.24	ppb		98
106) 1,4-Dclbenz	11.858	146	163406	20.06	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38765.D
Acq On : 21 Aug 2020 10:31 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 11:18:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 2,4-DCBTF	11.906	214	82215	23.79	ppb	94
108) 2,5-DCBTF	11.949	214	93135	24.65	ppb	94
109) n-Butylbenzene	12.144	91	297103	22.78	ppb	96
110) 1,2-Dclbenz	12.156	146	162012	19.93	ppb	94
111) 1,2-Dibromo-3-chloropr...	12.790	157	19078	16.83	ppb	87
112) Trielution Dichlorotol...	12.894	125	458740	70.46	ppb	95
113) 1,3,5 Trichlorobenzene	12.943	180	133187	23.83	ppb	98
114) Coelution Dichlorotoluene	13.223	125	336336	47.04	ppb	97
115) 1,2,4-Tcbenzene	13.430	180	130780	22.31	ppb	97
116) Hexachlorobt	13.558	225	51639	21.94	ppb	98
117) Naphthalen	13.626	128	393635	22.98	ppb	100
118) 1,2,3-Tclbenzene	13.808	180	127650	21.05	ppb	94
119) 2,4,5-Trichlorotolene	14.394	159	92648	24.97	ppb	93
120) 2,3,6-Trichlorotoluene	14.473	159	85747	25.45	ppb	96

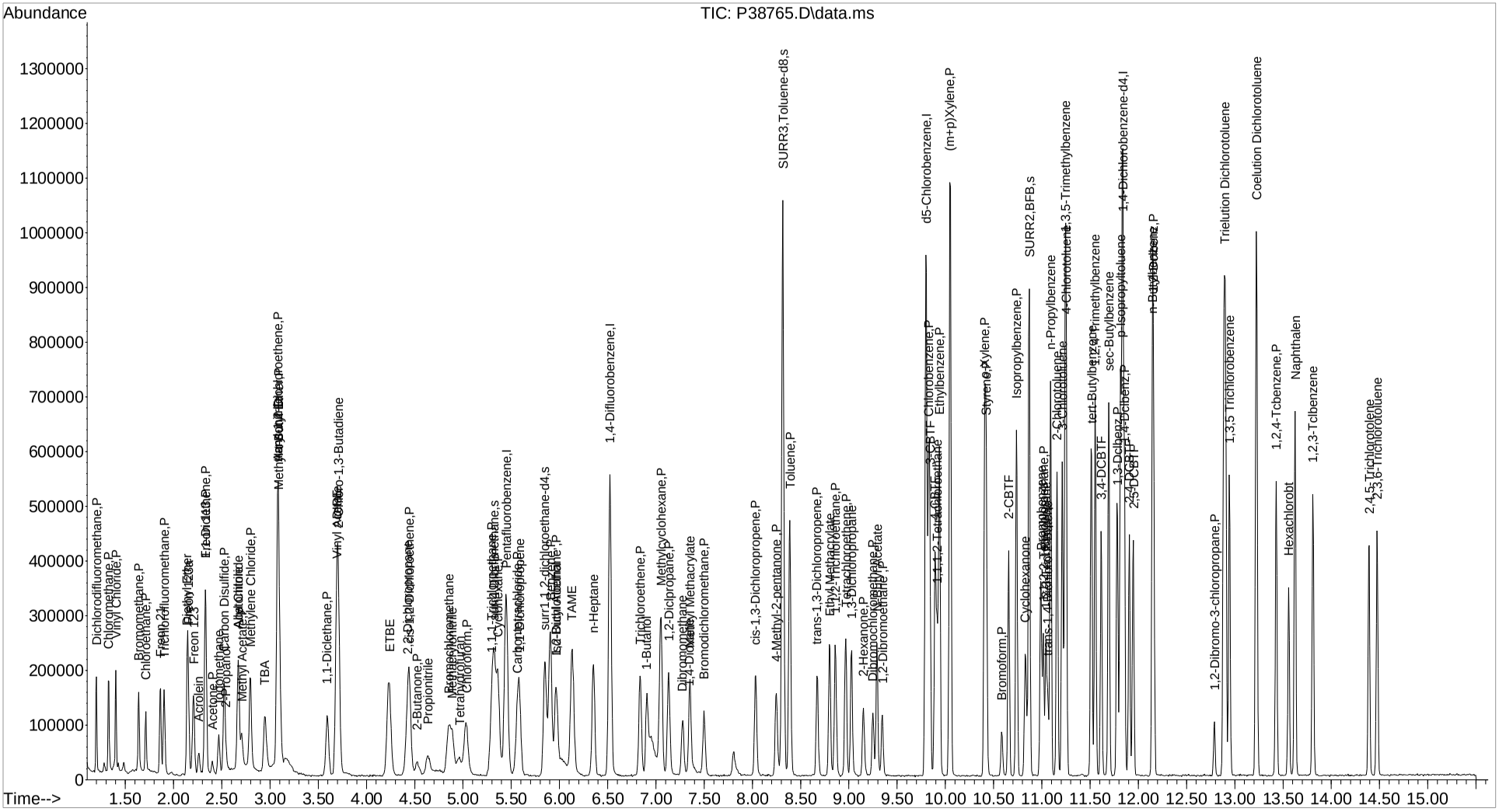
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38765.D
Acq On : 21 Aug 2020 10:31 am
Operator : K.Ruest
Sample : LCS-FP Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

1st 08/21/20 2nd 08/27/20

Quant Time: Aug 21 11:18:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

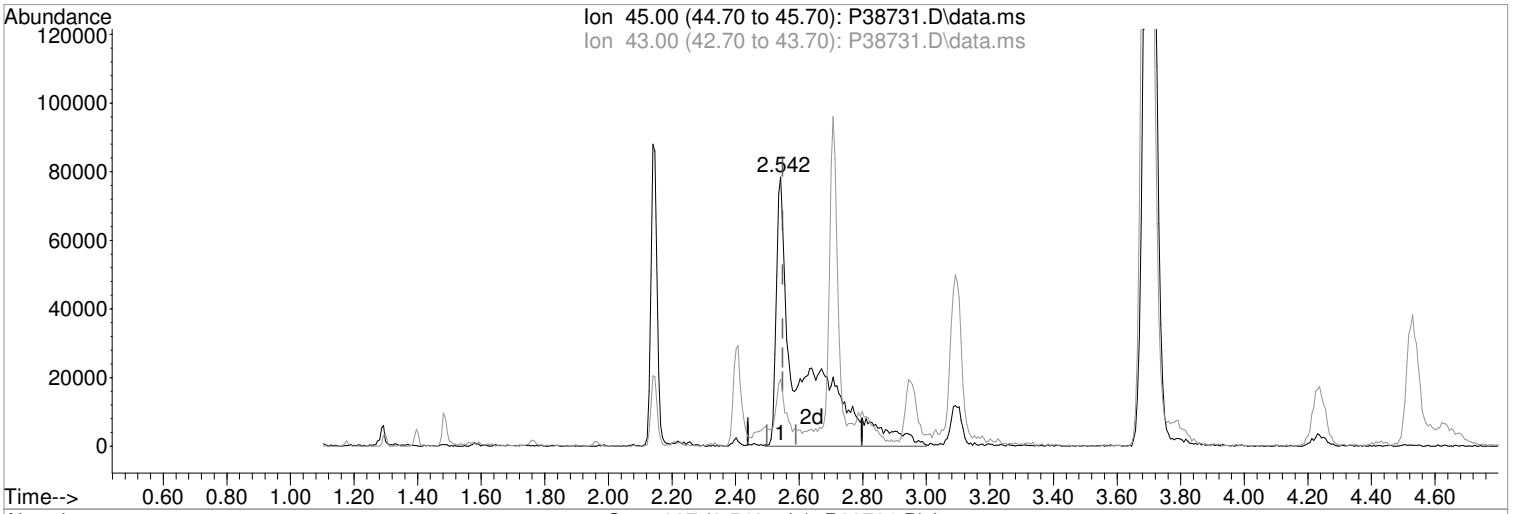


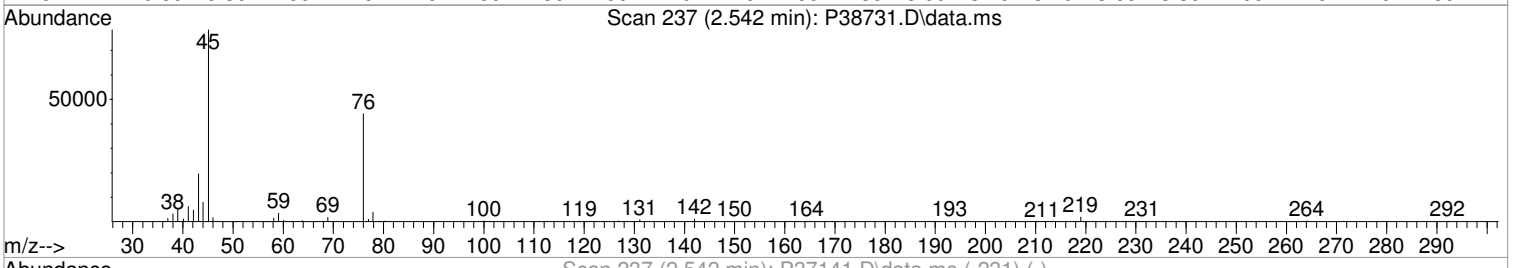
1st FW 08/25/20
2nd BA 08/25/20

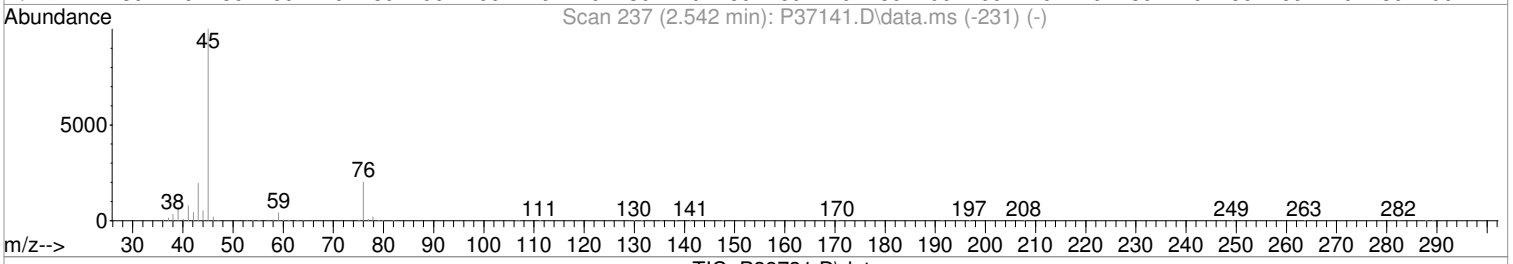
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38731.D
Acq On : 20 Aug 2020 7:43 pm
Operator : K.Ruest
Sample : R2007215-001MS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 21 08:26:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38731.D\data.ms

(16) 2-Propanol

2.542min (-0.006) 1024.46 ppb m

response 425906

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	24.97
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

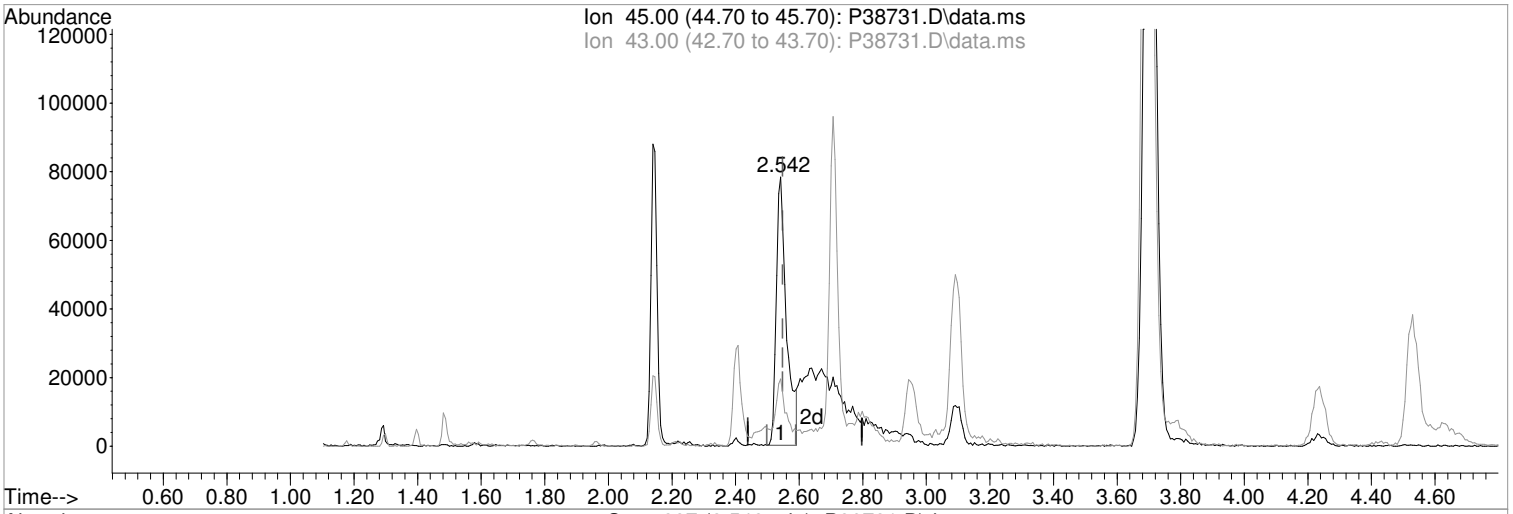
Poor integration.

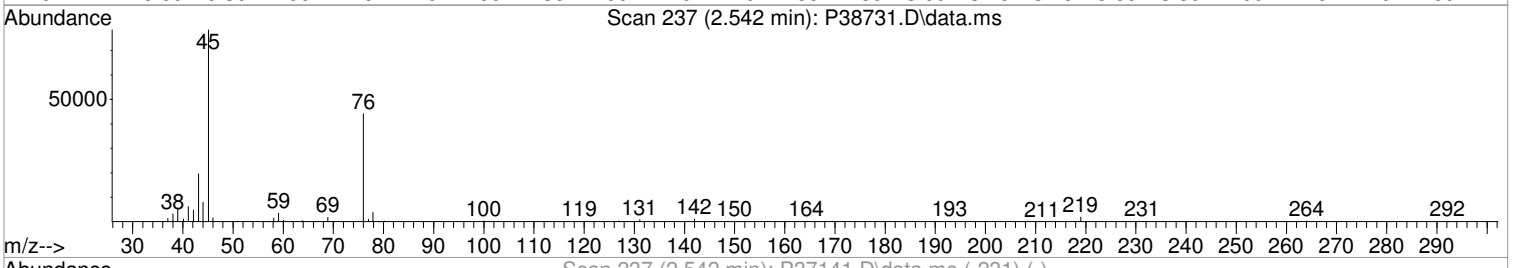
08/25/20

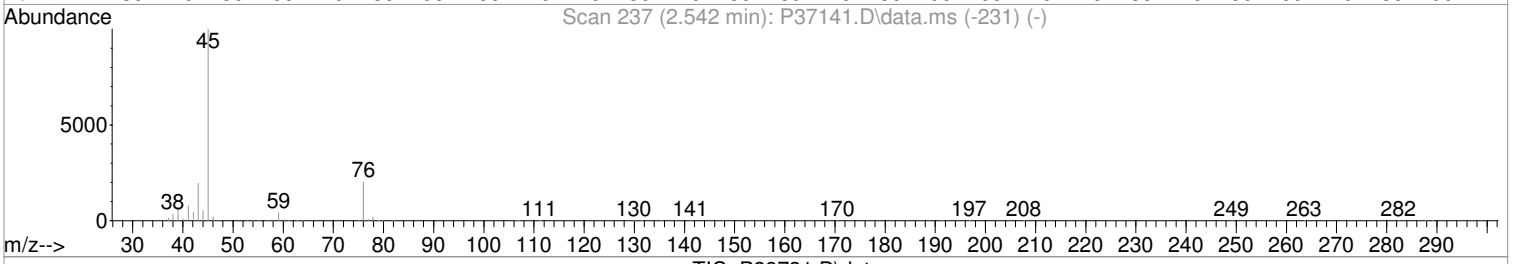
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38731.D
Acq On : 20 Aug 2020 7:43 pm
Operator : K.Ruest
Sample : R2007215-001MS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 21 08:26:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38731.D\data.ms

(16) 2-Propanol

2.542min (-0.006) 414.90 ppb

response 172488

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	24.97
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

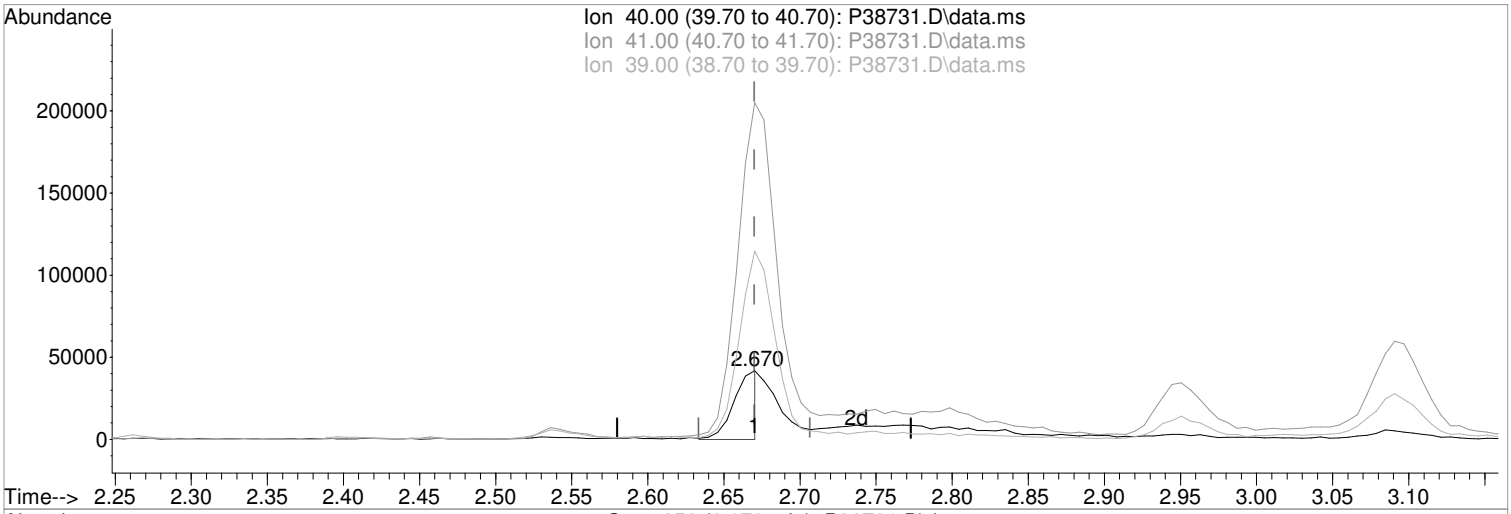
Before

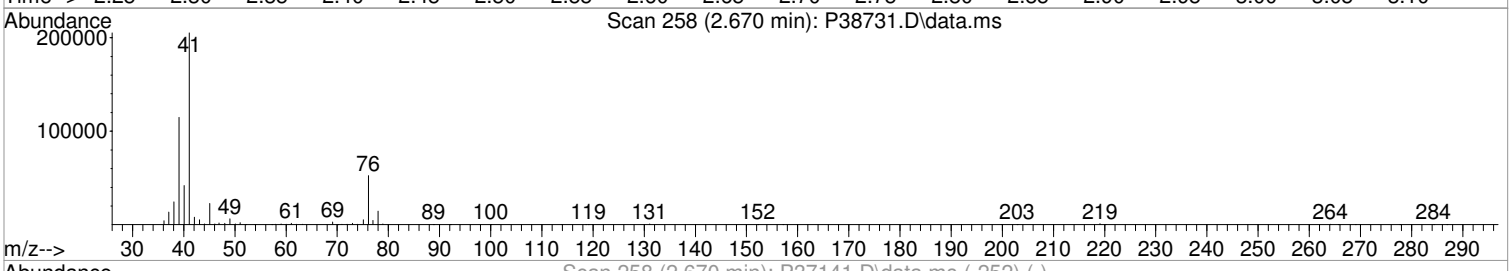
08/25/20

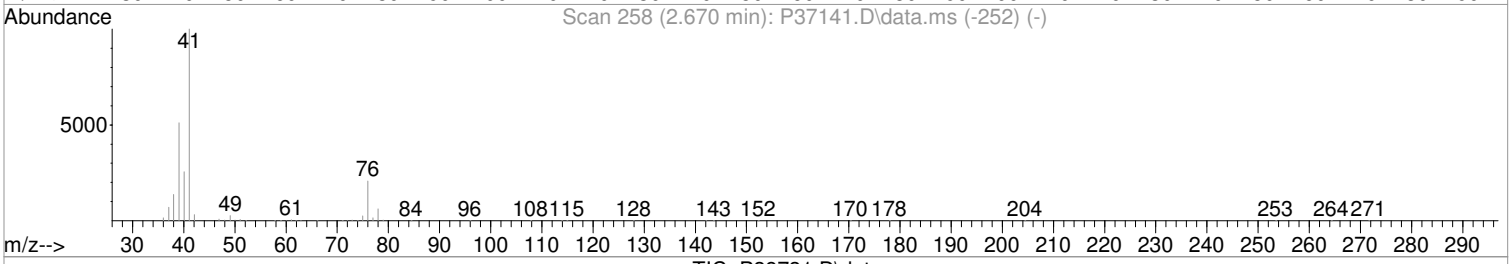
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38731.D
Acq On : 20 Aug 2020 7:43 pm
Operator : K.Ruest
Sample : R2007215-001MS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 21 08:26:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38731.D\data.ms

(19) Acetonitrile

2.670min (+0.000) 196.76 ppb m

response 45393

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	491.25#
39.00	200.50	274.58#
0.00	0.00	0.00

Manual Integration:

After

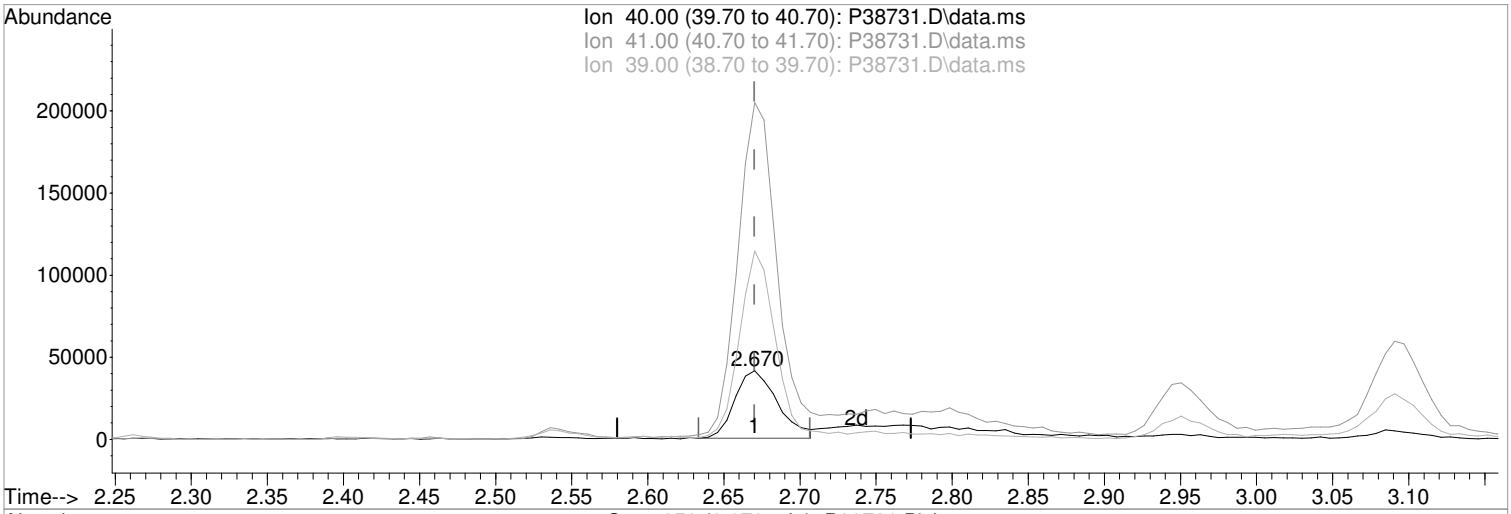
Poor integration.

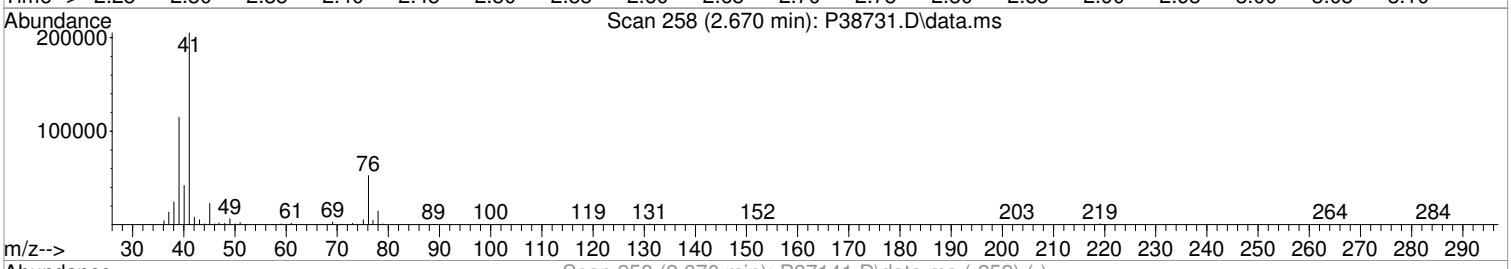
08/25/20

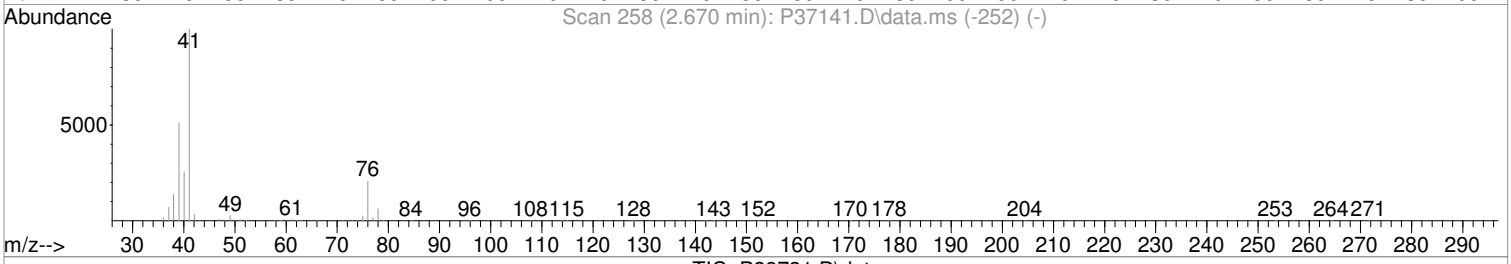
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38731.D
Acq On : 20 Aug 2020 7:43 pm
Operator : K.Ruest
Sample : R2007215-001MS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 21 08:26:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38731.D\data.ms

(19) Acetonitrile

2.670min (+0.000) 347.20 ppb

response 80099

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	491.25#
39.00	200.50	274.58#
0.00	0.00	0.00

Manual Integration:

Before

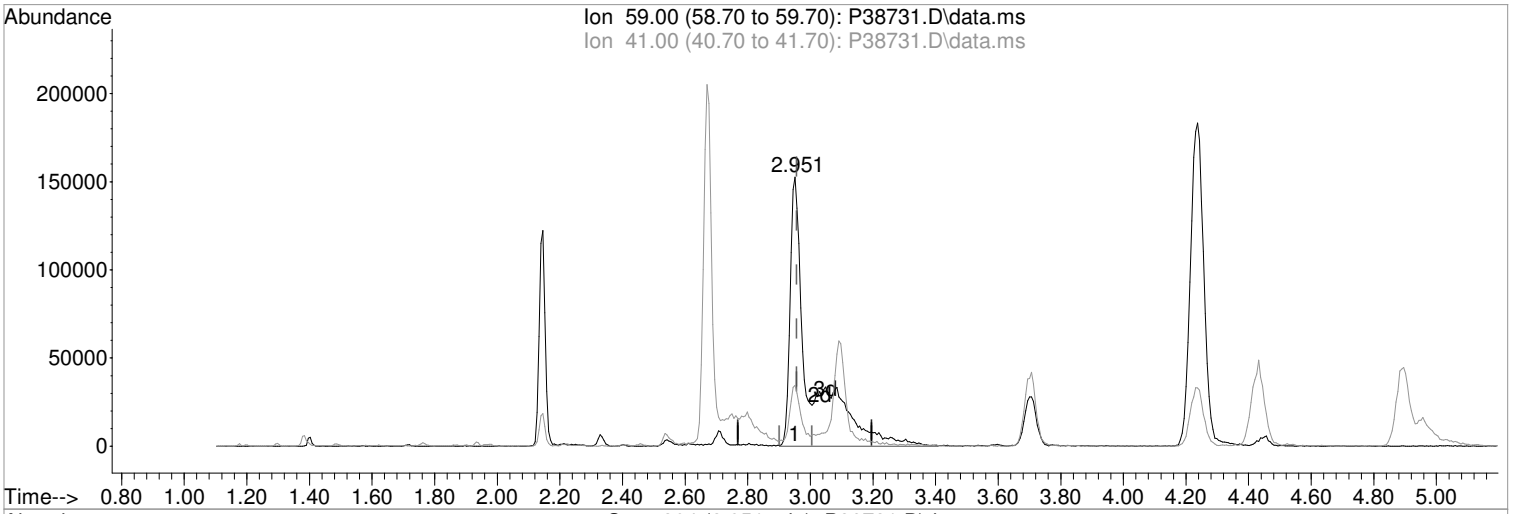
08/25/20

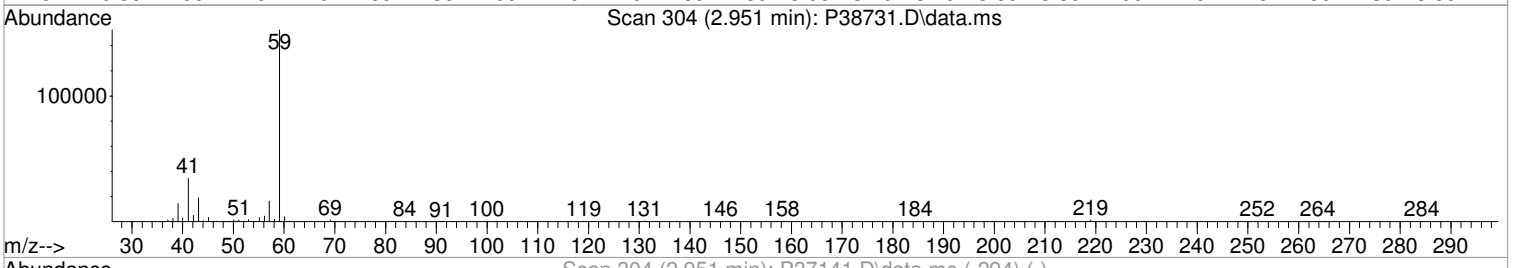
1st FN 08/25/20
2nd BA 08/25/20

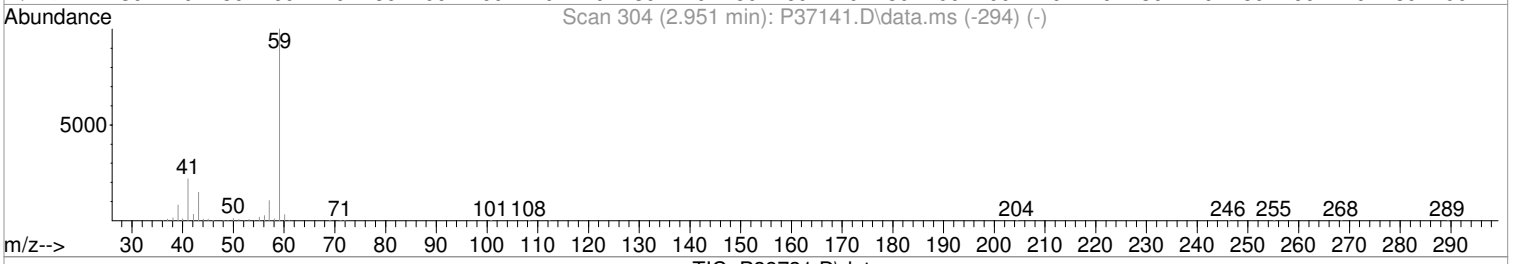
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38731.D
Acq On : 20 Aug 2020 7:43 pm
Operator : K.Ruest
Sample : R2007215-001MS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 21 08:26:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38731.D\data.ms

(23) TBA

2.951min (-0.006) 983.70 ppb m

response 662309

Ion	Exp%	Act%
59.00	100	100
41.00	22.00	22.64
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

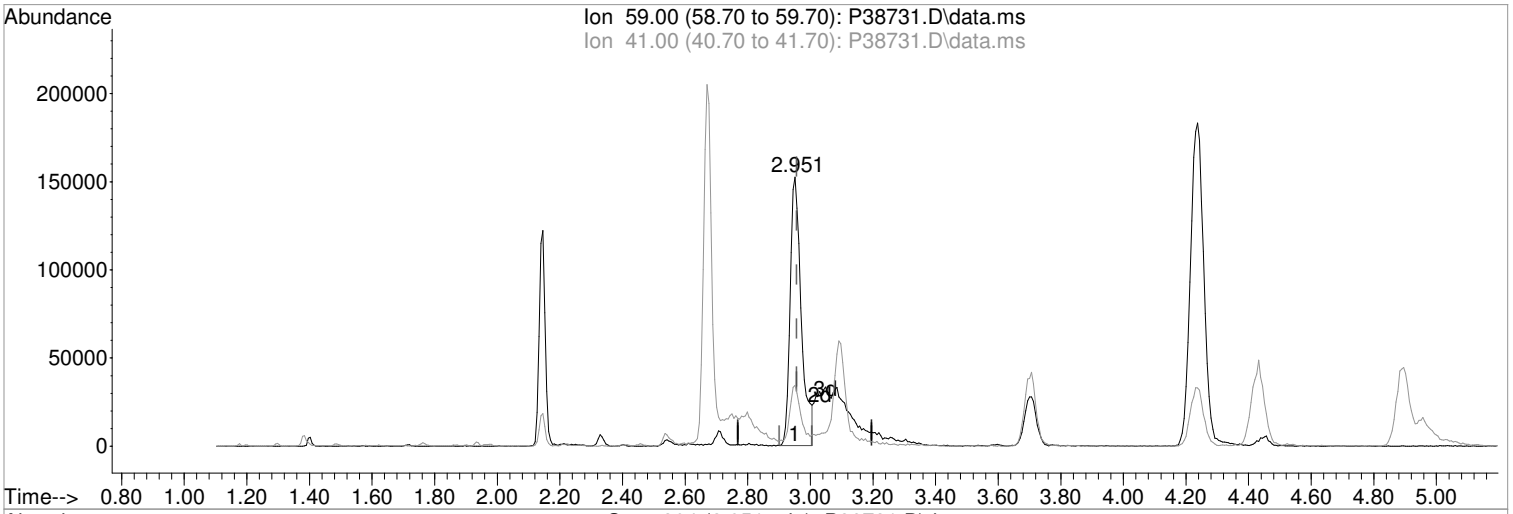
Poor integration.

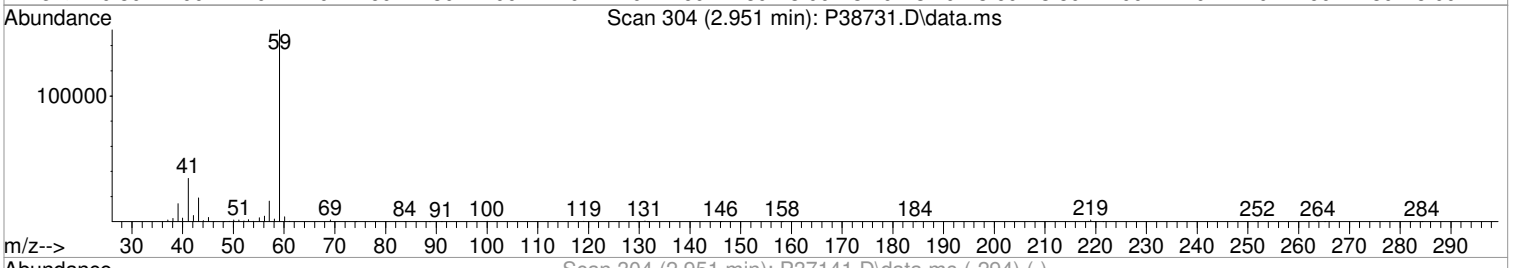
08/25/20

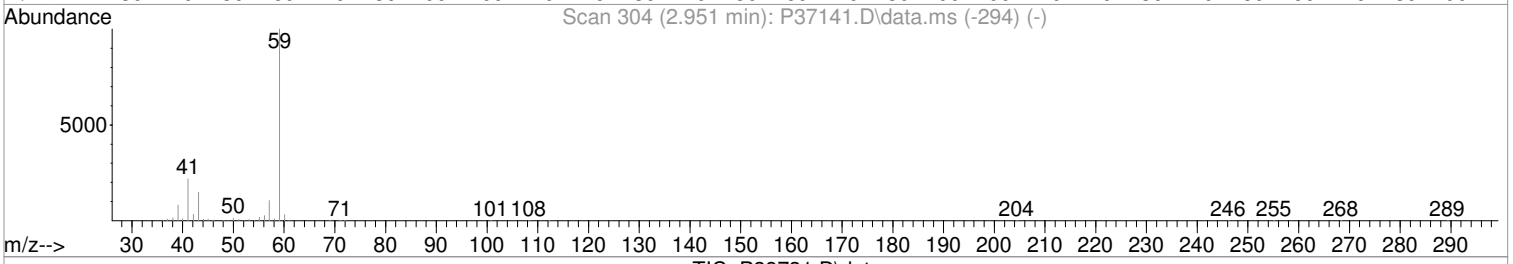
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38731.D
Acq On : 20 Aug 2020 7:43 pm
Operator : K.Ruest
Sample : R2007215-001MS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 21 08:26:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38731.D\data.ms

(23) TBA

2.951min (-0.006) 559.74 ppb

response 376862

Ion	Exp%	Act%
59.00	100	100
41.00	22.00	22.64
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

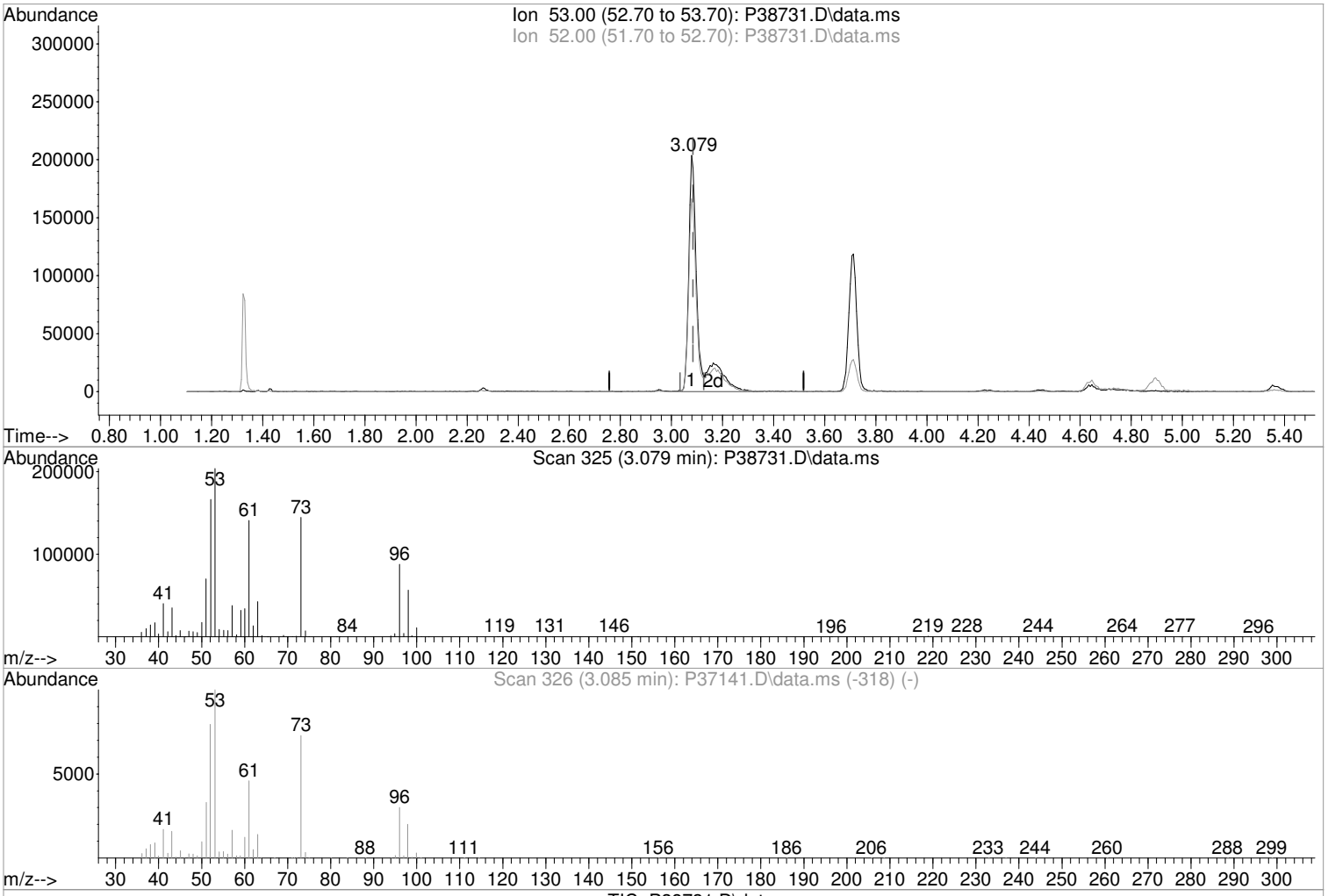
08/25/20

1st FN 08/25/20
2nd BA 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38731.D
Acq On : 20 Aug 2020 7:43 pm
Operator : K.Ruest
Sample : R2007215-001MS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 21 08:26:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38731.D\data.ms

(24) Acrylonitrile

3.079min (-0.006) 255.85 ppb m

response 531355

Ion	Exp%	Act%
53.00	100	100
52.00	79.50	81.58
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

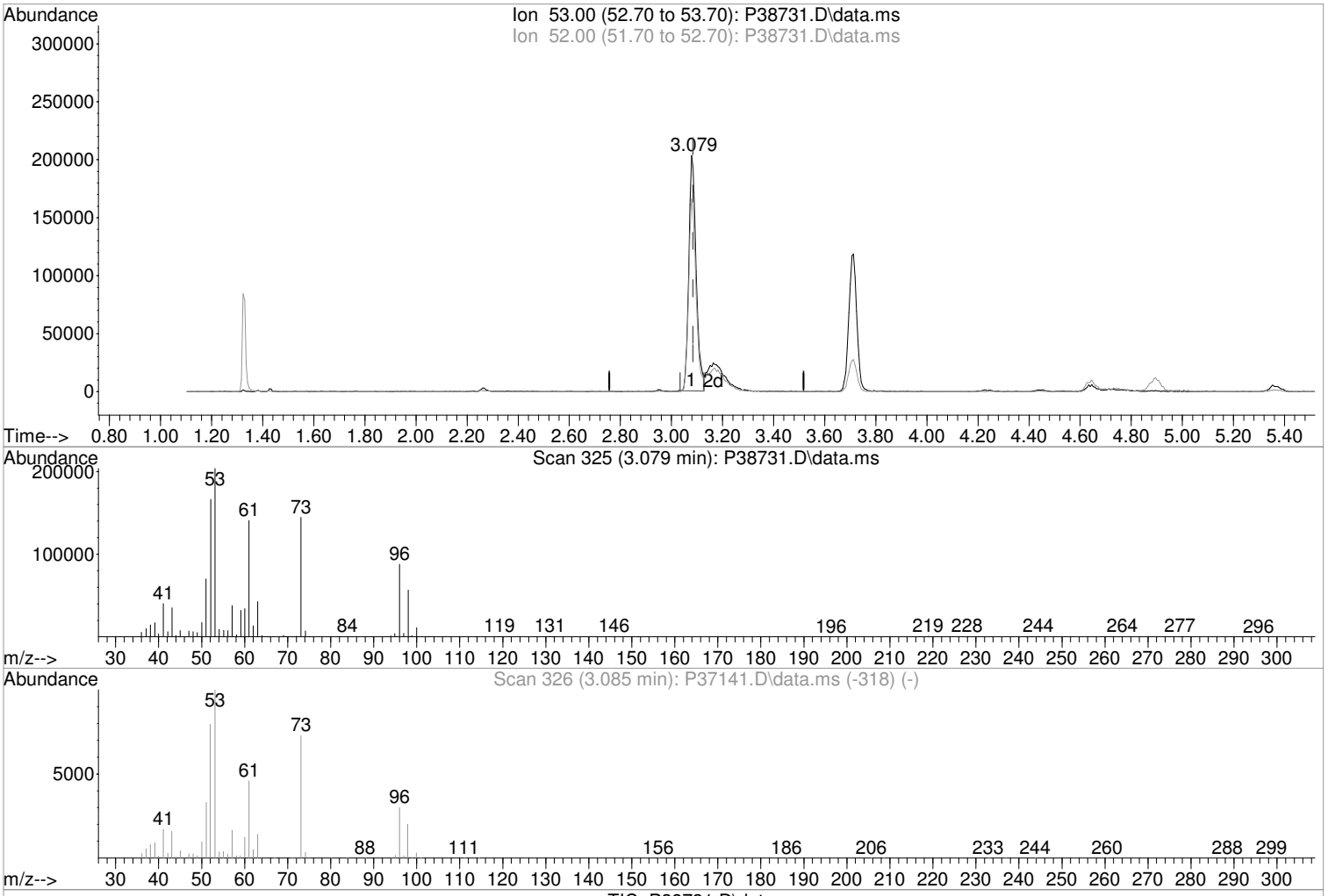
Poor integration.

08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38731.D
Acq On : 20 Aug 2020 7:43 pm
Operator : K.Ruest
Sample : R2007215-001MS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 21 08:26:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38731.D\data.ms

(24) Acrylonitrile

3.079min (-0.006) 196.06 ppb

response 407192

Ion	Exp%	Act%
53.00	100	100
52.00	79.50	81.58
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

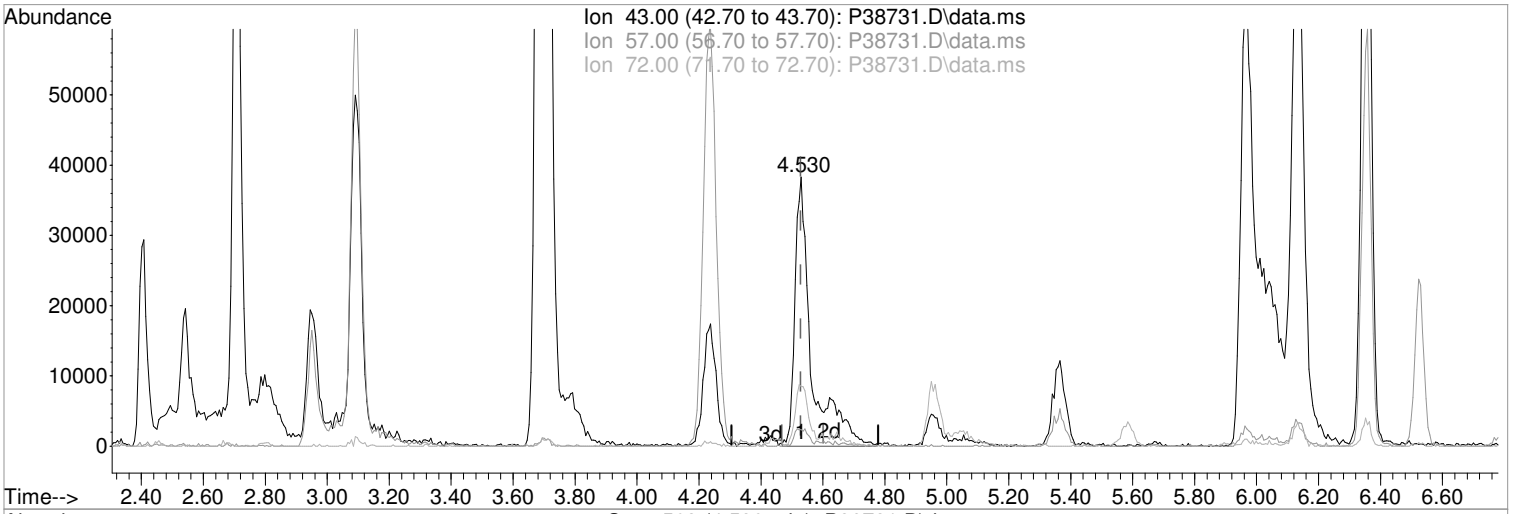
Before

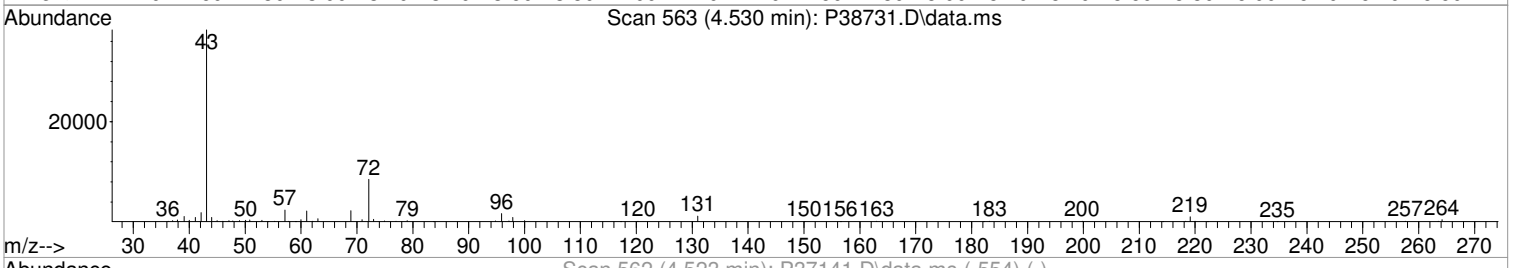
08/25/20

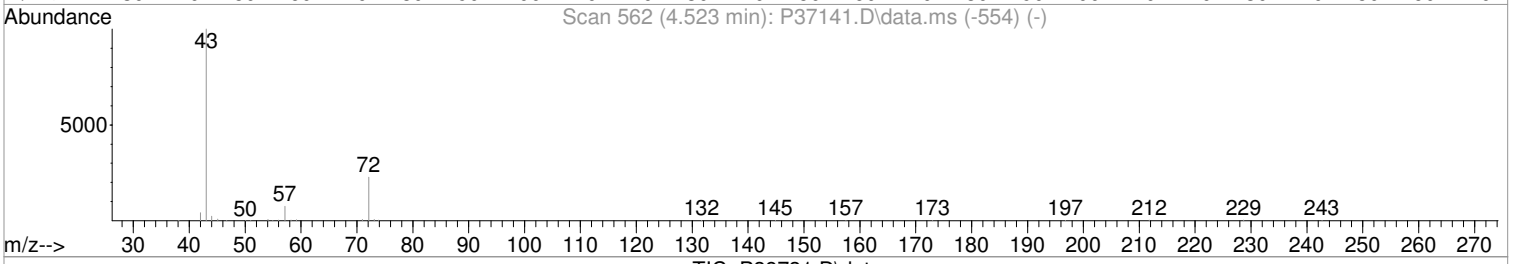
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38731.D
Acq On : 20 Aug 2020 7:43 pm
Operator : K.Ruest
Sample : R2007215-001MS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 21 08:26:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38731.D\data.ms

(35) 2-Butanone (P)

4.530min (+0.000) 56.97 ppb m

response 143074

Ion	Exp%	Act%
43.00	100	100
57.00	7.50	6.24
72.00	22.60	22.24
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

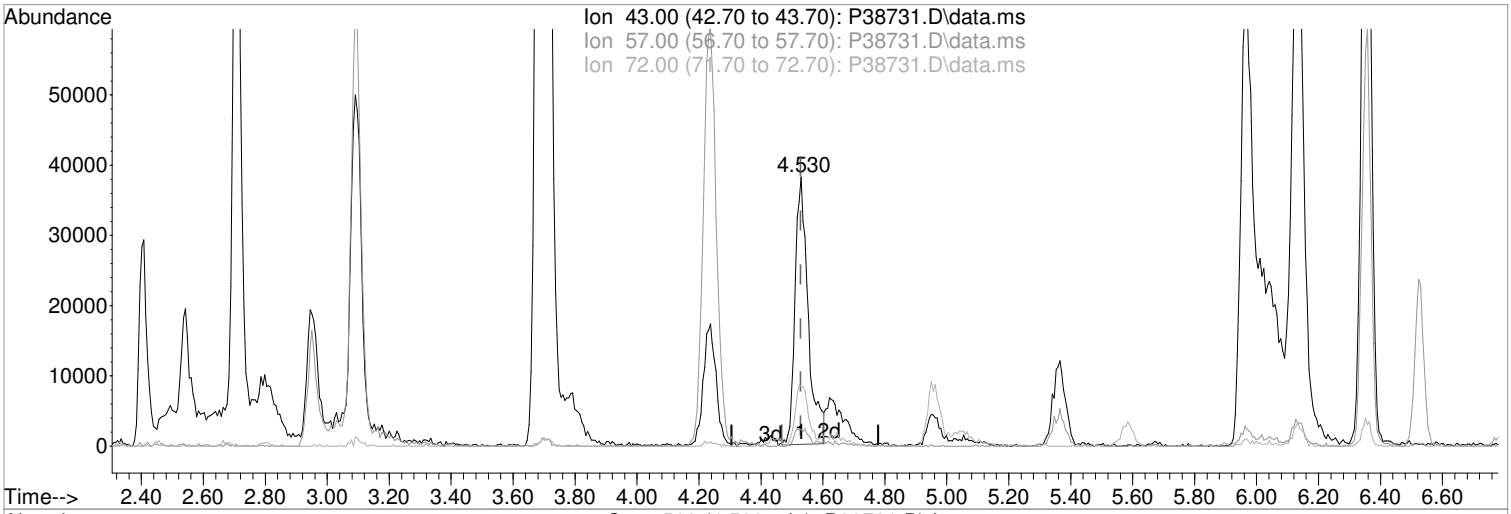
08/25/20

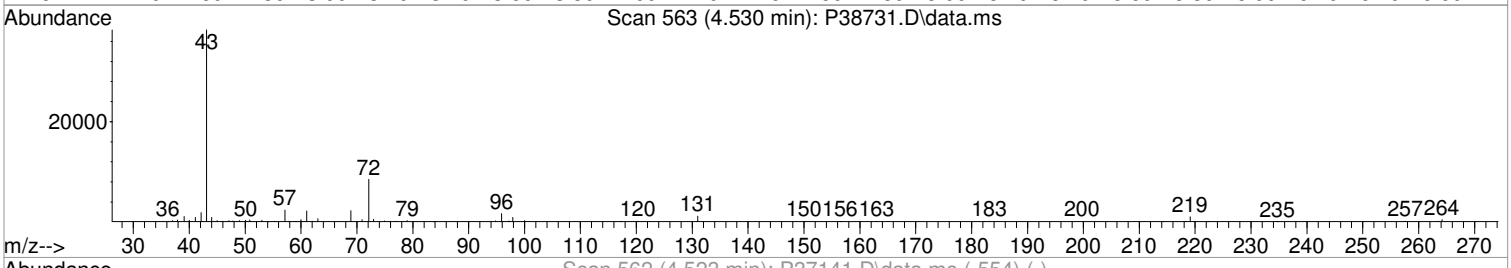
1st FW 08/25/20
2nd BA 08/25/20

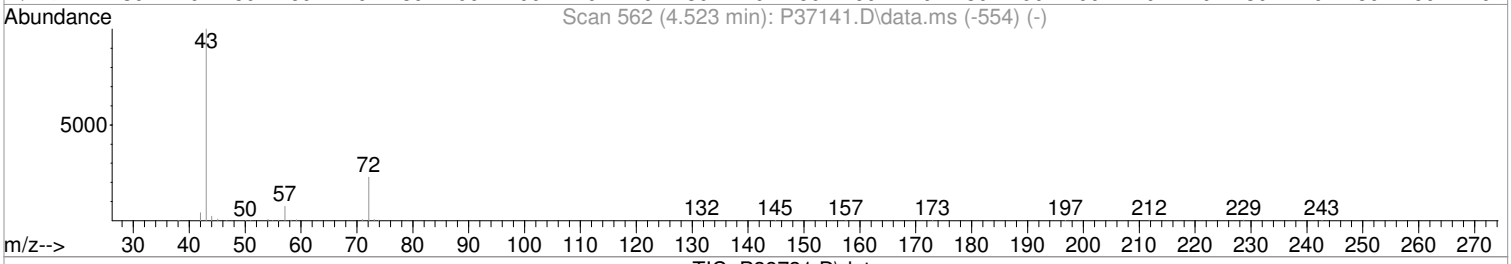
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38731.D
Acq On : 20 Aug 2020 7:43 pm
Operator : K.Ruest
Sample : R2007215-001MS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 21 08:26:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38731.D\data.ms

(35) 2-Butanone (P)

4.530min (+0.000) 44.36 ppb

response 111404

Ion	Exp%	Act%
43.00	100	100
57.00	7.50	6.24
72.00	22.60	22.24
0.00	0.00	0.00

Manual Integration:

Before

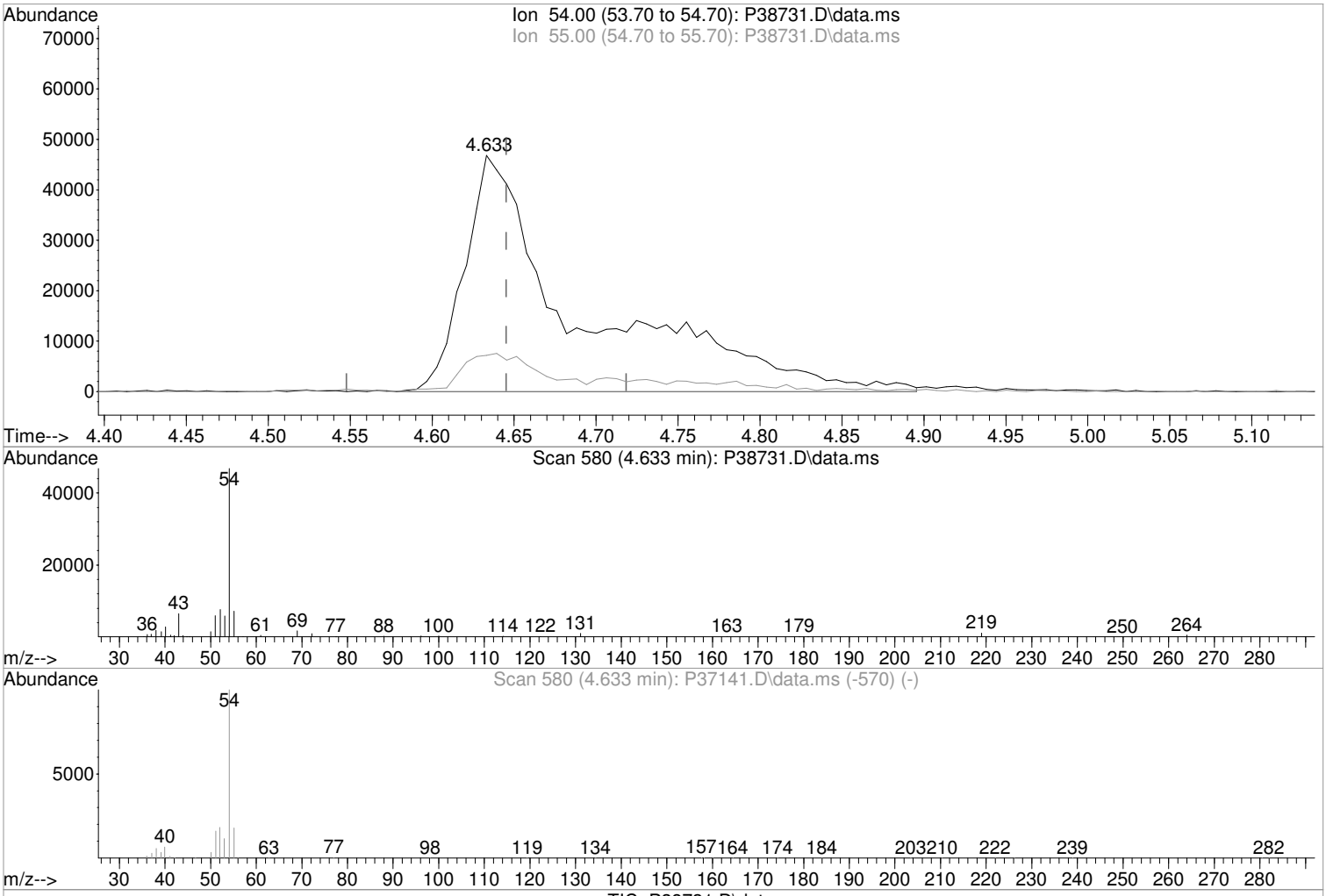
08/25/20

1st FW 08/25/20
2nd BA 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38731.D
Acq On : 20 Aug 2020 7:43 pm
Operator : K.Ruest
Sample : R2007215-001MS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 21 08:26:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38731.D\data.ms

(36) Propionitrile

4.633min (-0.012) 251.56 ppb m

response 226553

Ion	Exp%	Act%
54.00	100	100
55.00	17.90	15.33
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

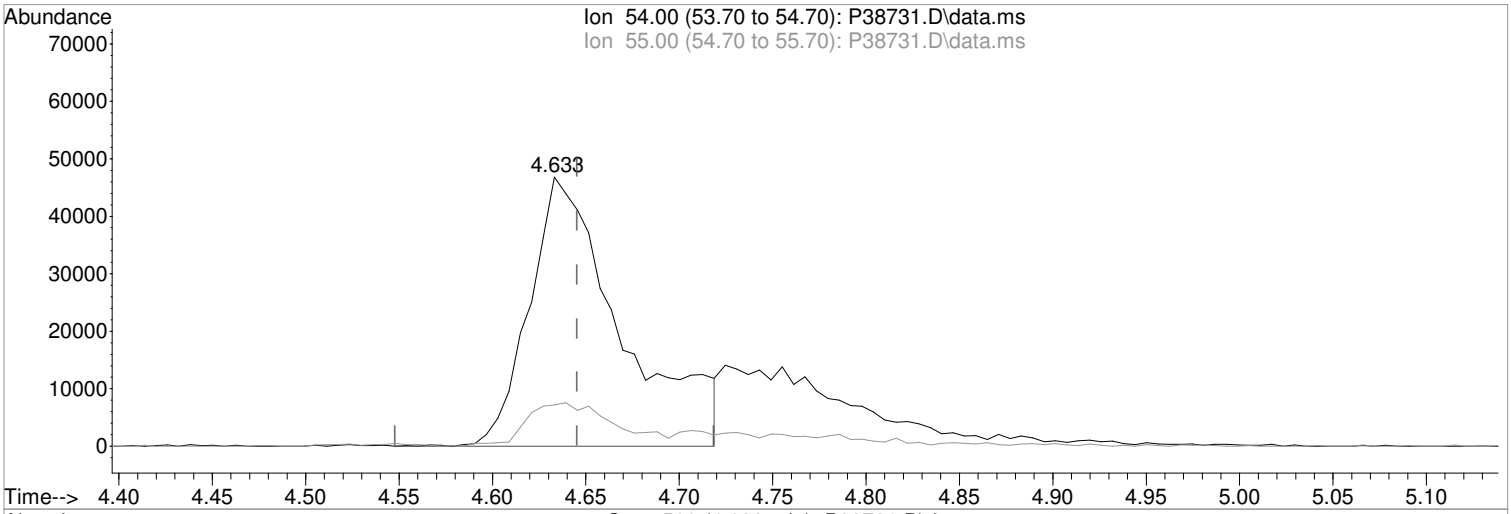
Poor integration.

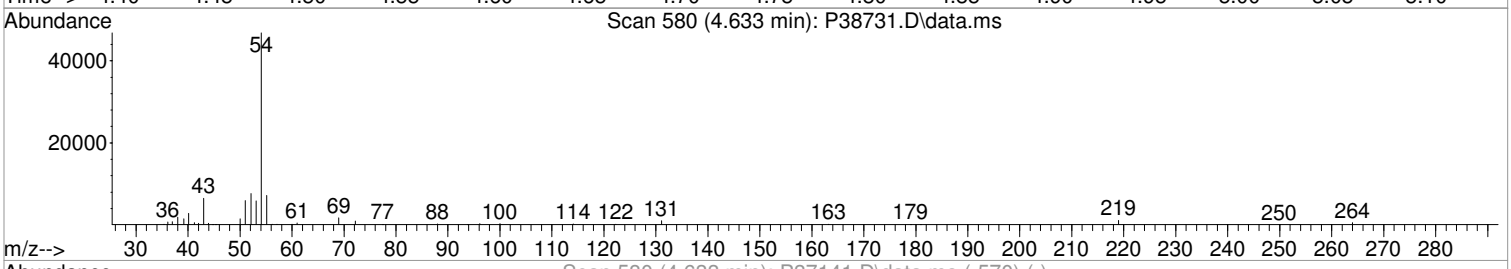
08/25/20

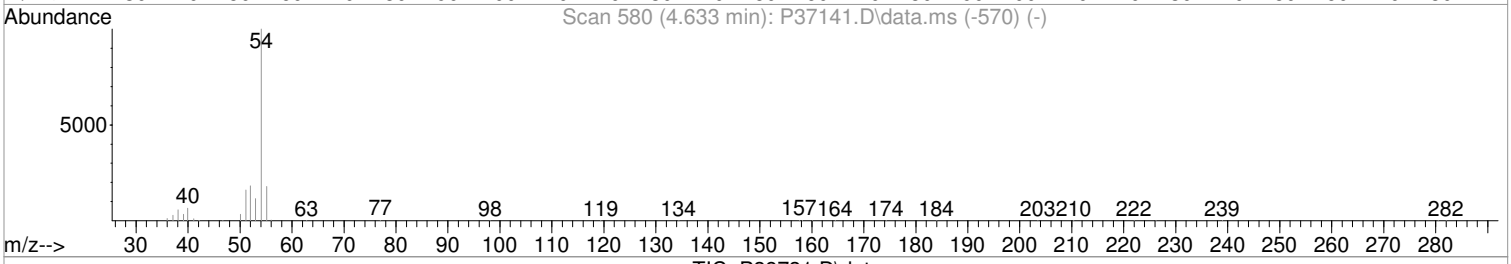
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38731.D
Acq On : 20 Aug 2020 7:43 pm
Operator : K.Ruest
Sample : R2007215-001MS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 21 08:26:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38731.D\data.ms

(36) Propionitrile

4.633min (-0.012) 176.97 ppb

response 159378

Ion	Exp%	Act%
54.00	100	100
55.00	17.90	15.33
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

08/25/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38731.D
Acq On : 20 Aug 2020 7:43 pm
Operator : K.Ruest
Sample : R2007215-001MS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 25 13:17:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	323050	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.523	114	509700	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	464608	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	244009	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	136641	46.69	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 93.38%				
48) surr1,1,2-dichloroetha...	5.852	65	187859	46.36	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 92.72%				
65) SURR3,Toluene-d8	8.315	98	683497	50.25	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.50%				
70) SURR2,BFB	10.870	95	250289	49.94	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.88%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.201	85	198257	55.16	ppb		96
3) Chloromethane	1.323	50	240413	53.57	ppb		93
4) Vinyl Chloride	1.402	62	239874	57.01	ppb		99
5) Bromomethane	1.640	94	113290	33.76	ppb		97
6) Chloroethane	1.713	64	139770	60.38	ppb		90
7) Freon 21	1.865	67	267147	49.83	ppb		98
8) Trichlorofluoromethane	1.902	101	224602	51.82	ppb		96
9) Diethyl Ether	2.146	59	160752	51.32	ppb		95
10) Freon 123a	2.152	67	143547	38.84	ppb		96
11) Freon 123	2.207	83	179813	41.23	ppb		98
12) Acrolein	2.262	56	68848	81.16	ppb		94
13) 1,1-Diclethene	2.335	96	140126	56.09	ppb		96
14) Freon 113	2.329	101	137041	47.08	ppb		99
15) Acetone	2.408	43	53675	26.22	ppb		96
16) 2-Propanol	2.542	45	425906m	1024.46	ppb		
17) Iodomethane	2.469	142	186566	66.74	ppb		94
18) Carbon Disulfide	2.524	76	392884	48.05	ppb		100
19) Acetonitrile	2.670	40	45393m	196.76	ppb		
20) Allyl Chloride	2.676	76	85286	48.17	ppb	#	72
21) Methyl Acetate	2.707	43	163125	33.96	ppb		97
22) Methylene Chloride	2.798	84	167927	47.16	ppb		98
23) TBA	2.951	59	662309m	983.70	ppb		
24) Acrylonitrile	3.079	53	531355m	255.85	ppb		
25) Methyl-t-Butyl Ether	3.091	73	566911	49.03	ppb		98
26) trans-1,2-Dichloroethene	3.085	96	167690	57.63	ppb		99
28) 1,1-Diclethane	3.597	63	304011	47.40	ppb		100
29) Vinyl Acetate	3.694	86	40634	73.54	ppb	#	64
30) DIPE	3.700	45	649709	57.97	ppb	#	81
31) 2-Chloro-1,3-Butadiene	3.713	53	258666	50.11	ppb		98
32) ETBE	4.237	59	547310	52.34	ppb		95
33) 2,2-Dichloropropane	4.426	77	224214	47.50	ppb		99
34) cis-1,2-Dichloroethene	4.444	96	418889	112.35	ppb		94
35) 2-Butanone	4.530	43	143074m	56.97	ppb		
36) Propionitrile	4.633	54	226553m	251.56	ppb		
37) Bromochloromethane	4.853	130	98747	44.77	ppb		95
38) Methacrylonitrile	4.895	67	102334	47.97	ppb		99
39) Tetrahydrofuran	4.956	42	81693	42.22	ppb		81
40) Chloroform	5.029	83	270890	48.41	ppb		89
41) 1,1,1-Trichloroethane	5.304	97	218521	46.79	ppb		92

1st FW 08/25/20
2nd BA 08/25/20

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38731.D
Acq On : 20 Aug 2020 7:43 pm
Operator : K.Ruest
Sample : R2007215-001MS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 25 13:17:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.133	73	561756	53.93	ppb		97
44) Cyclohexane	5.365	41	163777	49.00	ppb		97
46) Carbontetrachloride	5.566	117	159245	47.58	ppb		89
47) 1,1-Dichloropropene	5.584	75	224785	47.44	ppb		97
49) Benzene	5.907	78	705938	47.97	ppb		94
50) 1,2-Dichloroethane	5.974	62	222786	43.32	ppb		97
51) Iso-Butyl Alcohol	5.968	43	283321	897.53	ppb		95
52) n-Heptane	6.358	43	232996	51.09	ppb		94
53) 1-Butanol	6.907	56	472226	2403.96	ppb		96
54) Trichloroethene	6.840	130	425013	116.39	ppb		97
55) Methylcyclohexane	7.053	55	250038	55.13	ppb		90
56) 1,2-Diclpropane	7.139	63	183213	47.03	ppb		100
57) Dibromomethane	7.279	93	101245	45.04	ppb		93
58) 1,4-Dioxane	7.352	88	61839	766.79	ppb		90
59) Methyl Methacrylate	7.352	69	166557	49.07	ppb		99
60) Bromodichloromethane	7.498	83	174919	42.43	ppb		97
62) 2-Chloroethylvinyl Ether	7.852	63	507	0.30	ppb	#	51
63) cis-1,3-Dichloropropene	8.035	75	250360	44.52	ppb		98
64) 4-Methyl-2-pentanone	8.248	43	270929	51.57	ppb		99
66) Toluene	8.389	91	787595	50.54	ppb		98
67) trans-1,3-Dichloropropene	8.675	75	227143	44.41	ppb		99
68) Ethyl Methacrylate	8.803	69	296206	51.74	ppb		100
69) 1,1,2-Trichloroethane	8.864	97	166023	47.71	ppb		95
72) Tetrachloroethene	8.968	164	130060	45.84	ppb		96
73) 2-Hexanone	9.151	43	199167	48.23	ppb		96
74) 1,3-Dichloropropane	9.029	76	290391	44.44	ppb		97
75) Dibromochloromethane	9.248	129	125426	43.41	ppb		100
76) N-Butyl Acetate	9.291	43	381996	49.86	ppb		97
77) 1,2-Dibromoethane	9.346	107	162763	45.77	ppb		98
78) Chlorobenzene	9.827	112	487108	47.01	ppb		98
79) 3-CBTF	9.839	180	271942	56.68	ppb		96
80) 4-CBTF	9.894	180	241217	55.89	ppb		94
81) 1,1,1,2-Tetrachloroethane	9.913	131	143861	45.12	ppb		97
82) Ethylbenzene	9.937	106	264596	48.66	ppb		98
83) (m+p)Xylene	10.053	106	671925	103.22	ppb		98
84) o-Xylene	10.406	106	331408	52.15	ppb		95
85) Styrene	10.425	104	544877	50.47	ppb		97
87) Bromoform	10.583	173	79504	39.56	ppb		94
88) 2-CBTF	10.656	180	263913	53.31	ppb		98
89) Isopropylbenzene	10.736	105	864747	51.33	ppb		97
90) Cyclohexanone	10.827	55	232052	229.24	ppb		95
91) trans-1,4-Dichloro-2-B...	11.065	53	64408	46.16	ppb		93
92) 1,1,2,2-Tetrachloroethane	11.016	83	260311	47.80	ppb		98
93) Bromobenzene	10.992	156	193049	43.92	ppb		98
94) 1,2,3-Trichloropropane	11.047	110	74020	42.03	ppb	#	88
95) n-Propylbenzene	11.089	91	1035037	53.55	ppb		99
96) 2-Chlorotoluene	11.156	91	612338	48.77	ppb		98
97) 3-Chlorotoluene	11.211	91	626702	52.19	ppb		99
98) 4-Chlorotoluene	11.254	91	680233	48.39	ppb		98
99) 1,3,5-Trimethylbenzene	11.242	105	718750	49.94	ppb		99
100) tert-Butylbenzene	11.516	119	608245	50.49	ppb		99
101) 1,2,4-Trimethylbenzene	11.553	105	737986	50.95	ppb		99
102) 3,4-DCBTF	11.620	214	220077	55.46	ppb		98
103) sec-Butylbenzene	11.693	105	922536	53.39	ppb		99
104) p-Isopropyltoluene	11.815	119	774775	52.00	ppb		99
105) 1,3-Dclbenz	11.784	146	396165	46.01	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38731.D
Acq On : 20 Aug 2020 7:43 pm
Operator : K.Ruest
Sample : R2007215-001MS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 25 13:17:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	407278	46.48	ppb	99
107) 2,4-DCBTF	11.906	214	202740	54.56	ppb	97
108) 2,5-DCBTF	11.949	214	220738	54.32	ppb	98
109) n-Butylbenzene	12.150	91	729379	52.00	ppb	98
110) 1,2-Dclbenz	12.156	146	406064	46.46	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.790	157	50097	41.09	ppb	94
112) Trielution Dichlorotol...	12.900	125	1135557	162.20	ppb	99
113) 1,3,5 Trichlorobenzene	12.943	180	326174	54.27	ppb	97
114) Coelution Dichlorotoluene	13.223	125	837181	108.87	ppb	99
115) 1,2,4-Tcbenzene	13.430	180	313394	49.71	ppb	99
116) Hexachlorobt	13.558	225	121014	47.82	ppb	93
117) Naphthalen	13.625	128	984765	53.46	ppb	100
118) 1,2,3-Tclbenzene	13.808	180	305956	46.91	ppb	93
119) 2,4,5-Trichlorotolene	14.394	159	228911	57.38	ppb	98
120) 2,3,6-Trichlorotoluene	14.473	159	211942	58.49	ppb	97

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
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Acq On : 20 Aug 2020 7:43 pm
Operator : K.Ruest
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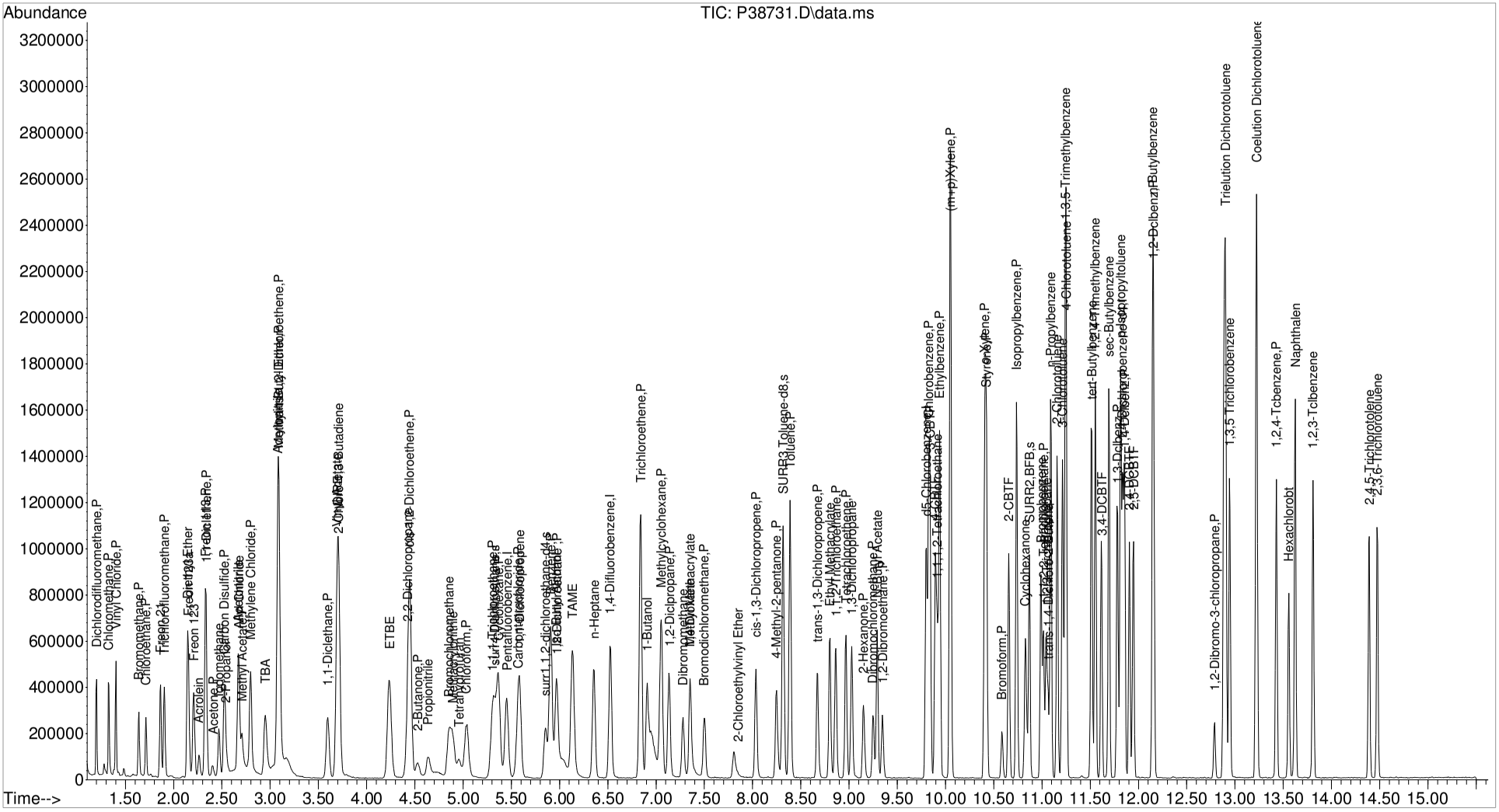
Misc : LiRo 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 25 13:17:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



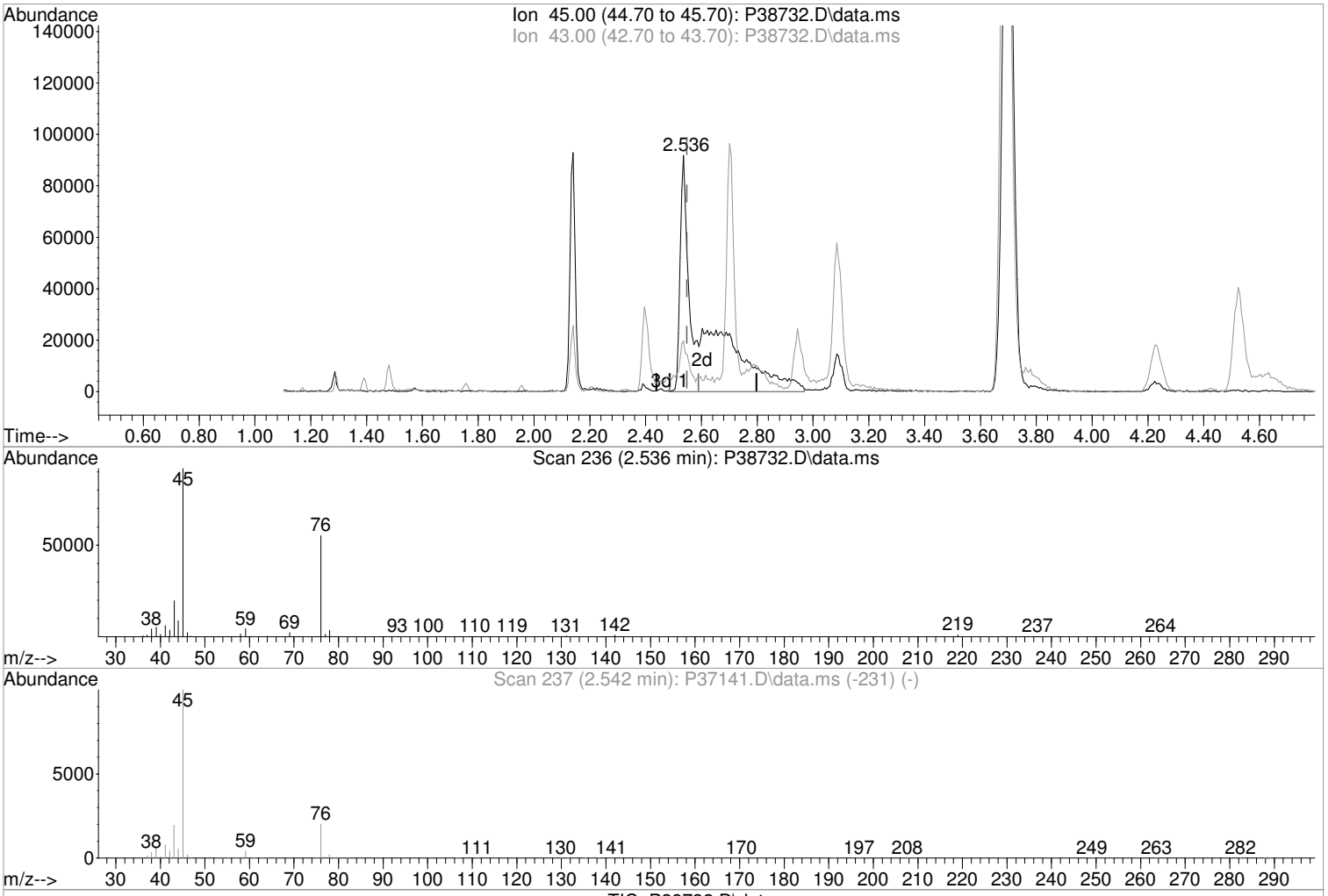
1st FJ 08/25/20
2nd BA 08/25/20

1st FN 08/25/20
2nd BA 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 21 08:27:02 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38732.D\data.ms

(16) 2-Propanol

2.536min (-0.012) 1097.84 ppb m

response 476009

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	21.49
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

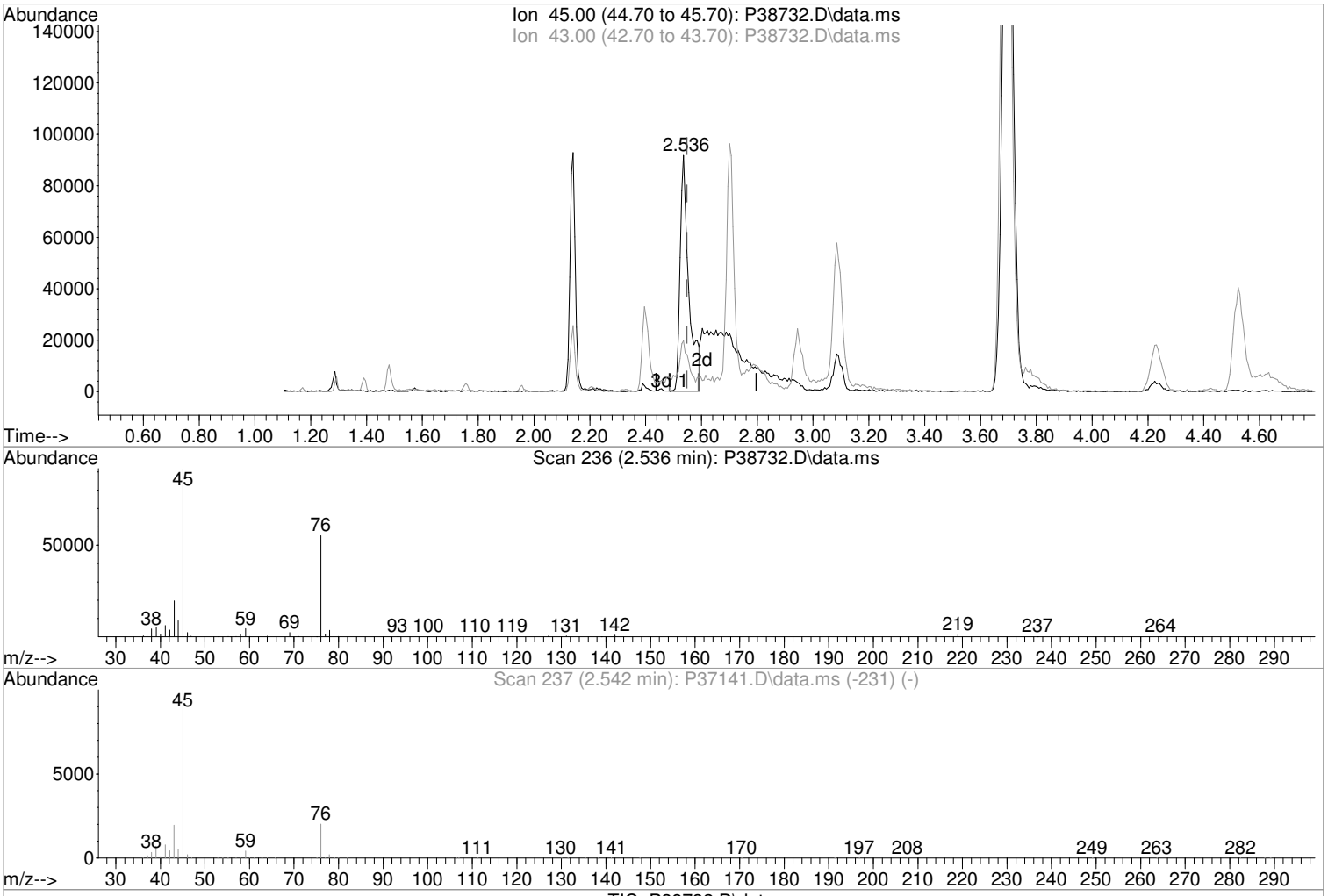
Poor integration.

08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 21 08:27:02 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38732.D\data.ms

(16) 2-Propanol

2.536min (-0.012) 453.49 ppb

response 196627

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	21.49
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

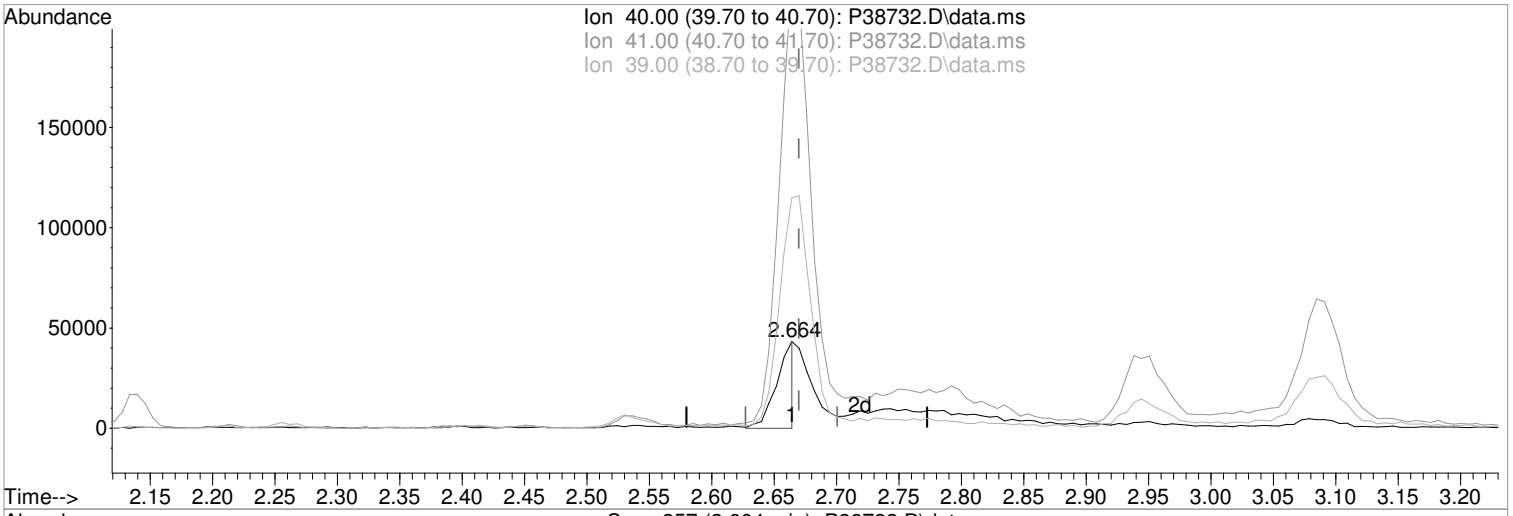
Before

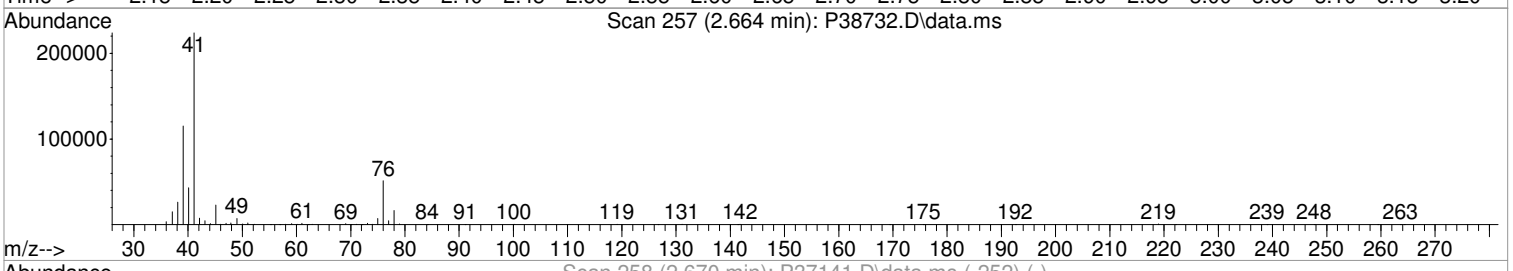
08/25/20

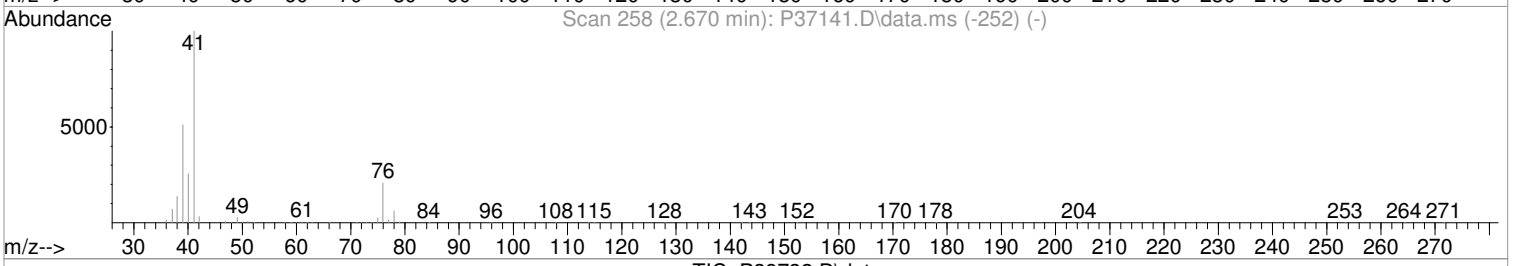
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 21 08:27:02 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38732.D\data.ms

(19) Acetonitrile

2.664min (-0.006) 178.60 ppb m

response 42973

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	518.22#
39.00	200.50	266.46#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

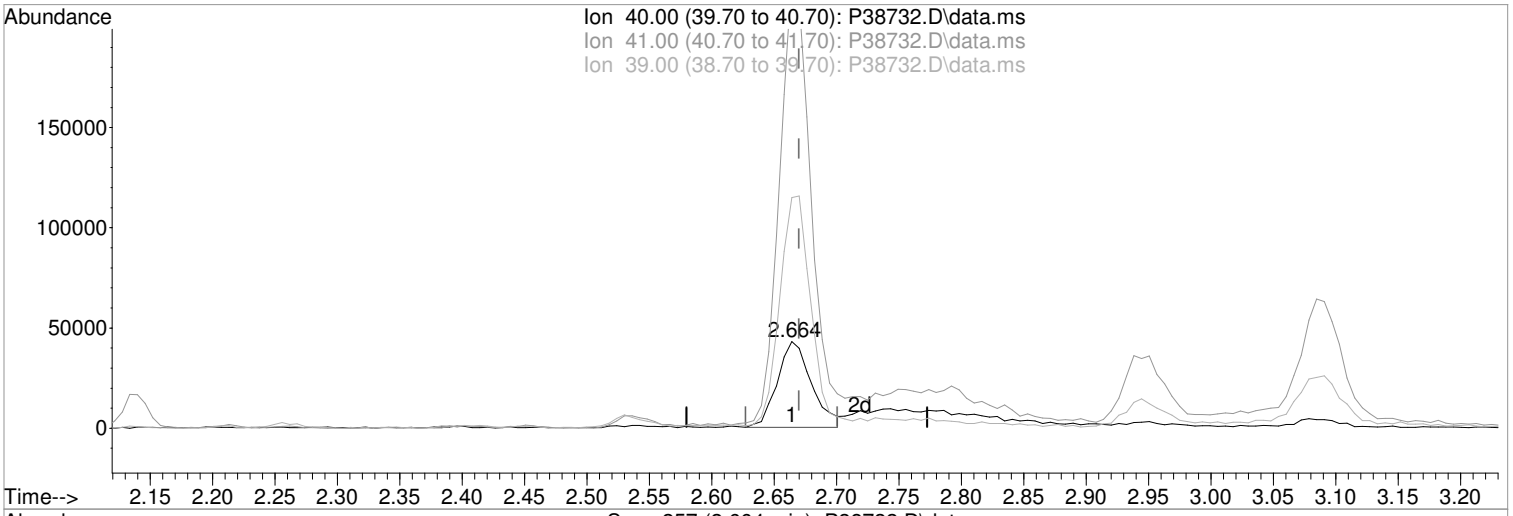
08/25/20

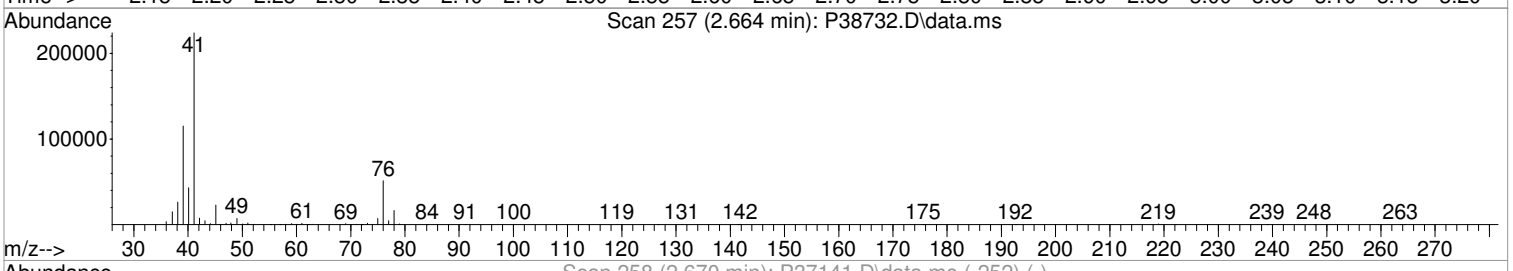
1st FW 08/25/20
2nd BA 08/25/20

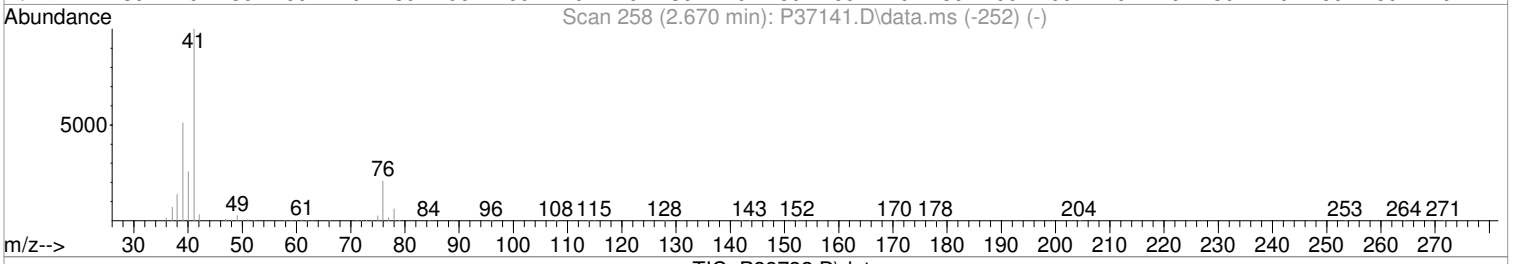
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 21 08:27:02 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38732.D\data.ms

(19) Acetonitrile

2.664min (-0.006) 338.79 ppb

response 81513

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	518.22#
39.00	200.50	266.46#
0.00	0.00	0.00

Manual Integration:

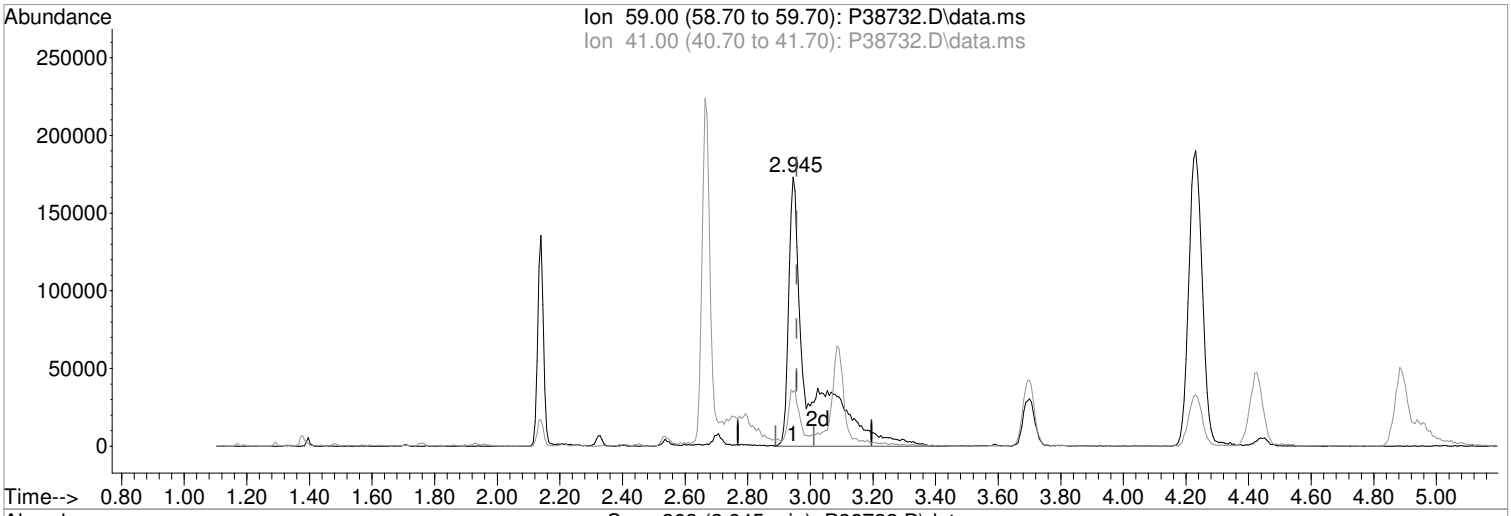
Before

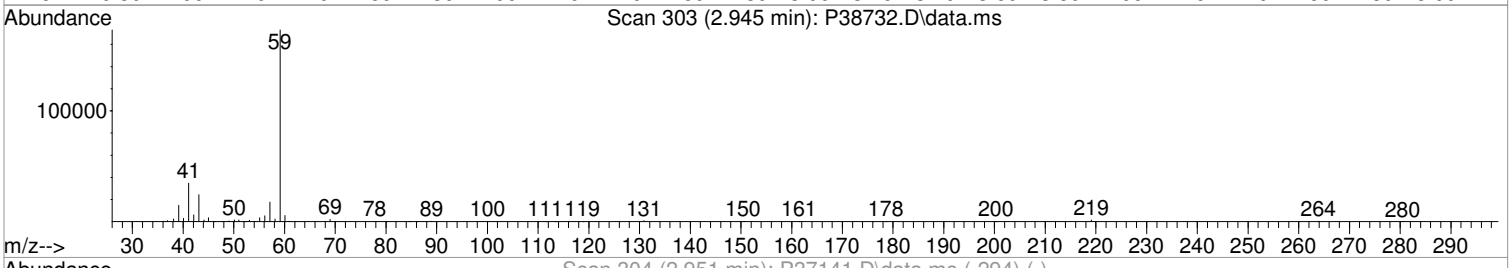
08/25/20

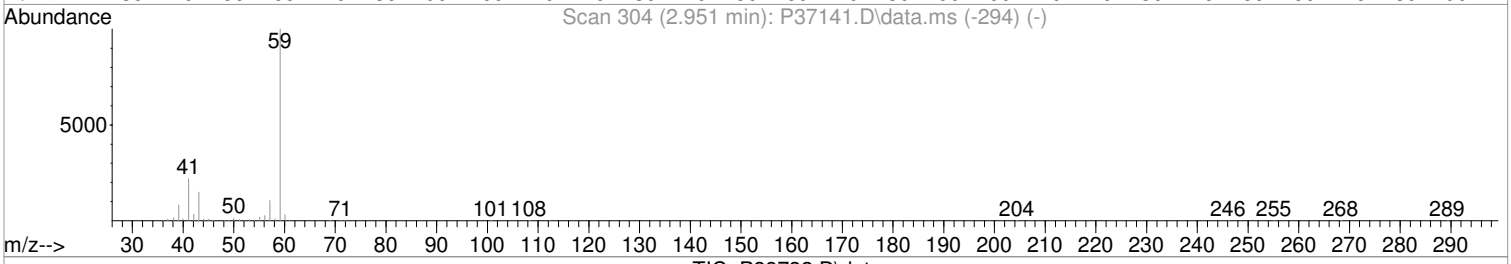
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 21 08:27:02 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38732.D\data.ms

(23) TBA

2.945min (-0.012) 1069.02 ppb m

response 750659

Ion	Exp%	Act%
59.00	100	100
41.00	22.00	20.11
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

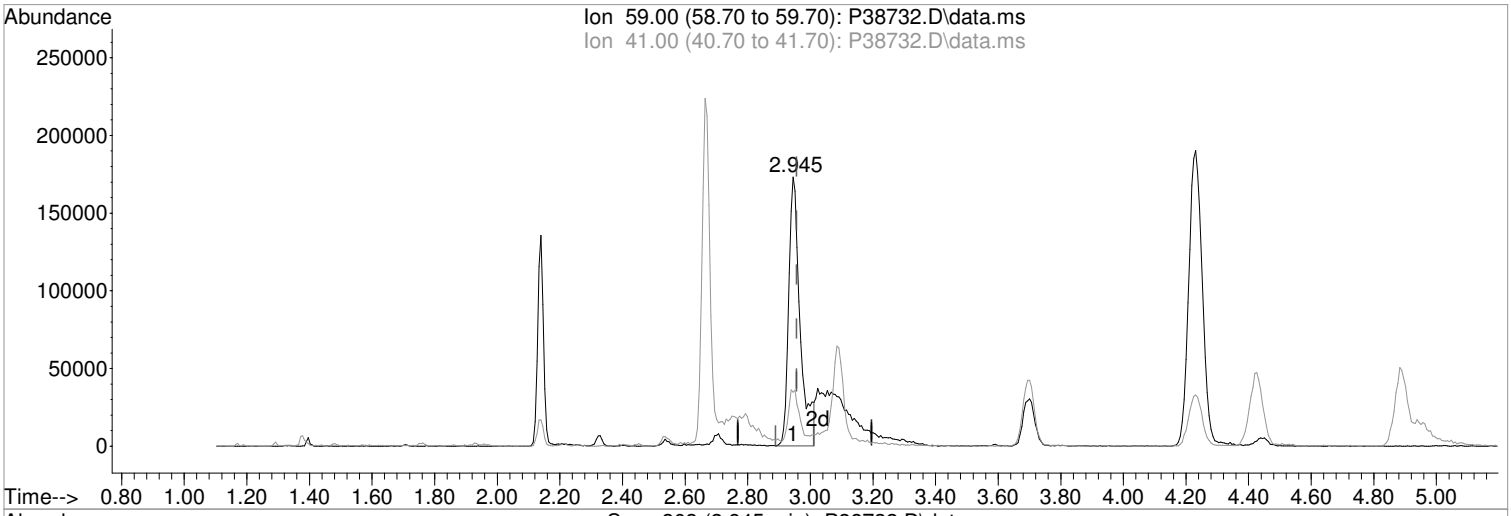
08/25/20

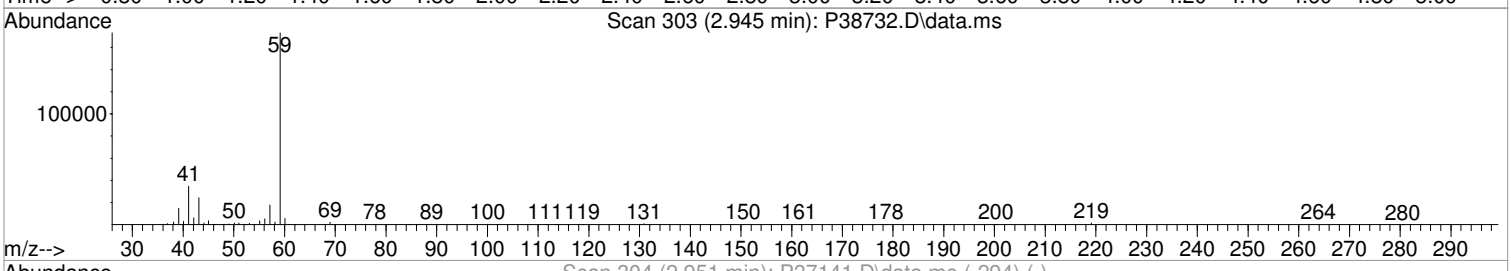
1st FN 08/25/20
2nd BA 08/25/20

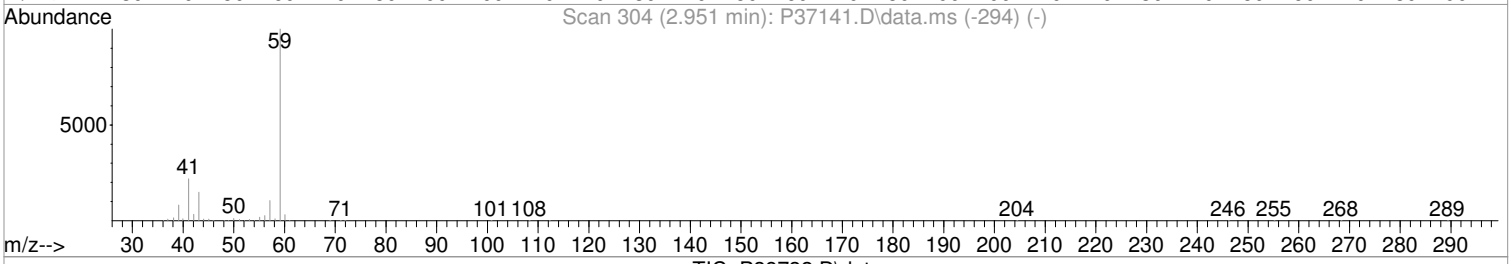
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 21 08:27:02 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38732.D\data.ms

(23) TBA

2.945min (-0.012) 628.93 ppb

response 441628

Ion	Exp%	Act%
59.00	100	100
41.00	22.00	20.11
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

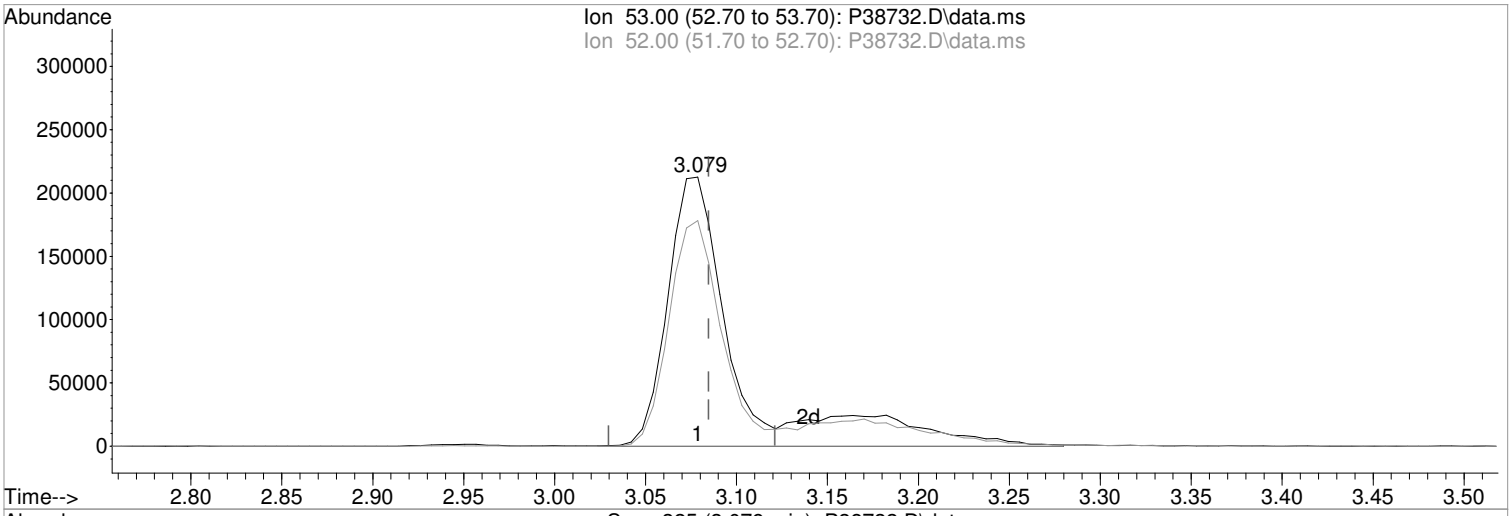
Before

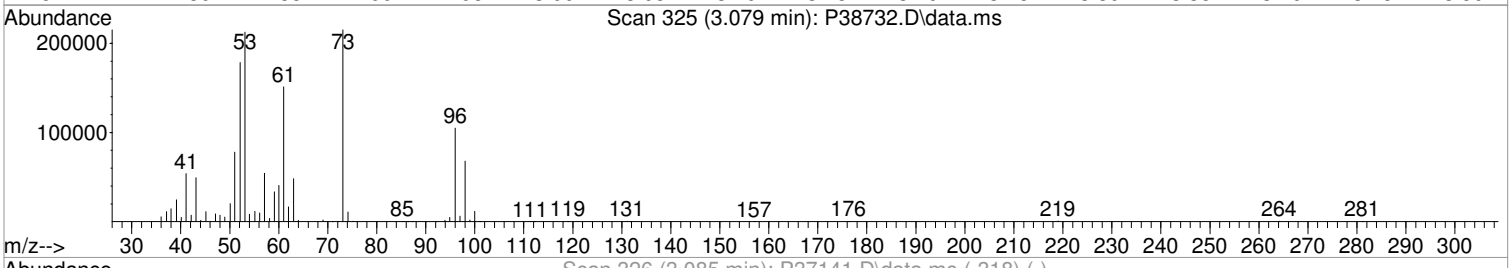
08/25/20

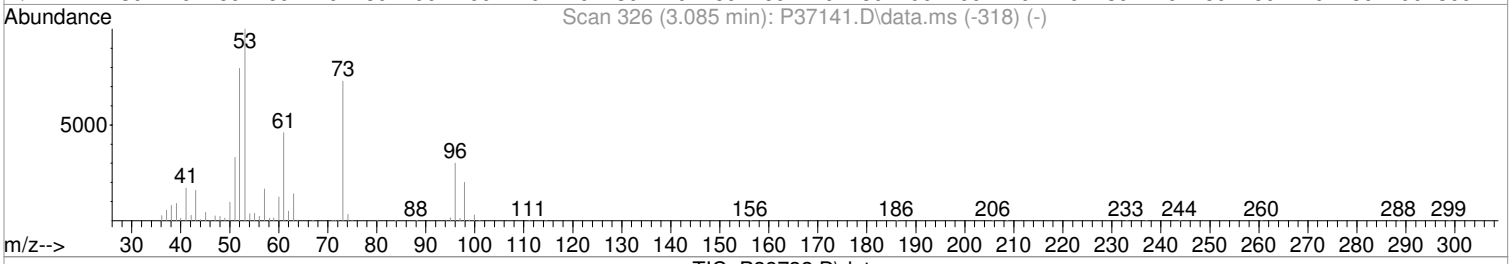
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 21 08:27:02 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38732.D\data.ms

(24) Acrylonitrile

3.079min (-0.006) 262.56 ppb m

response 568711

Ion	Exp%	Act%
53.00	100	100
52.00	79.50	83.92
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

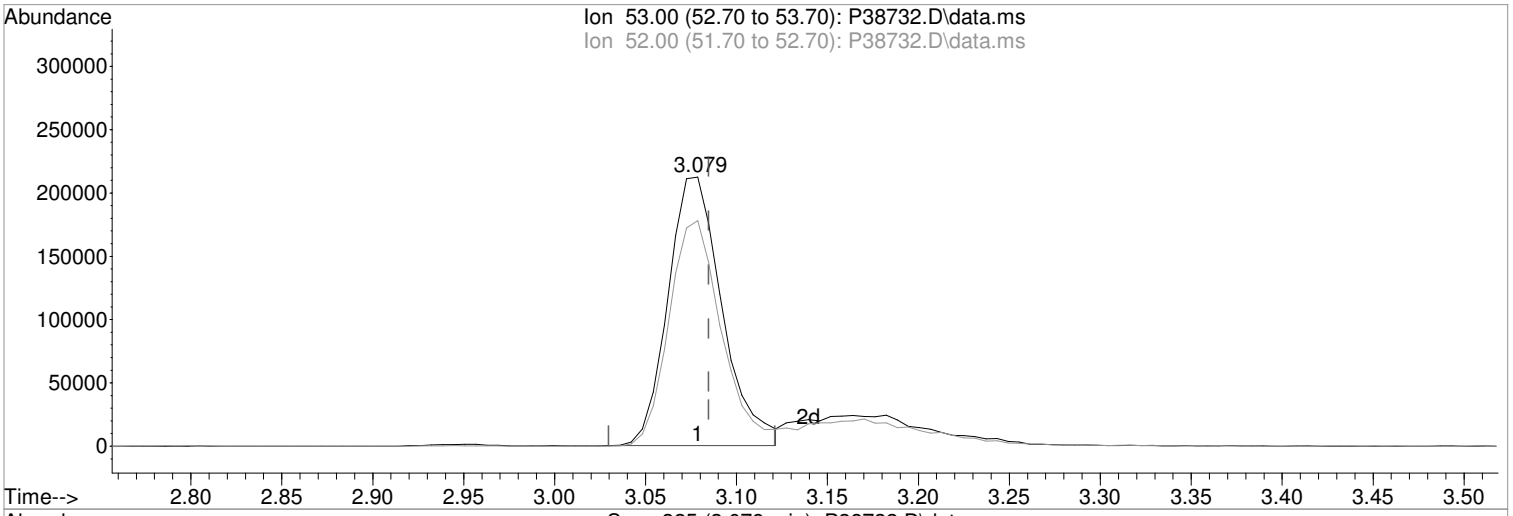
08/25/20

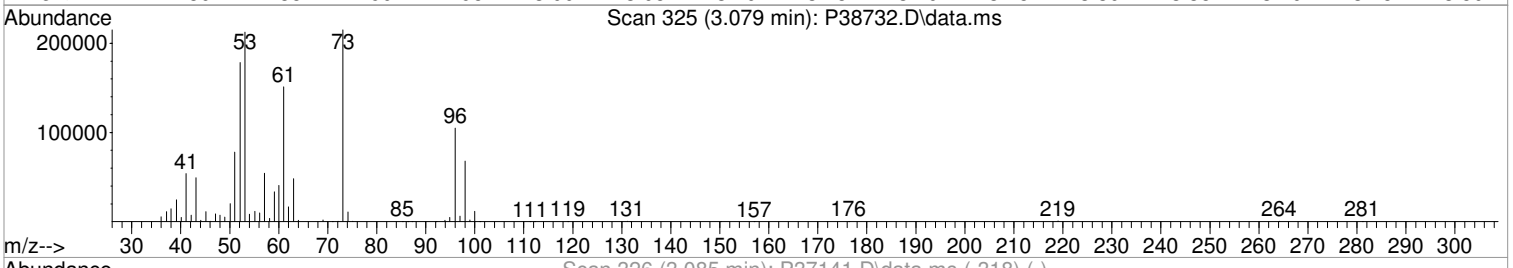
1st FN 08/25/20
2nd BA 08/25/20

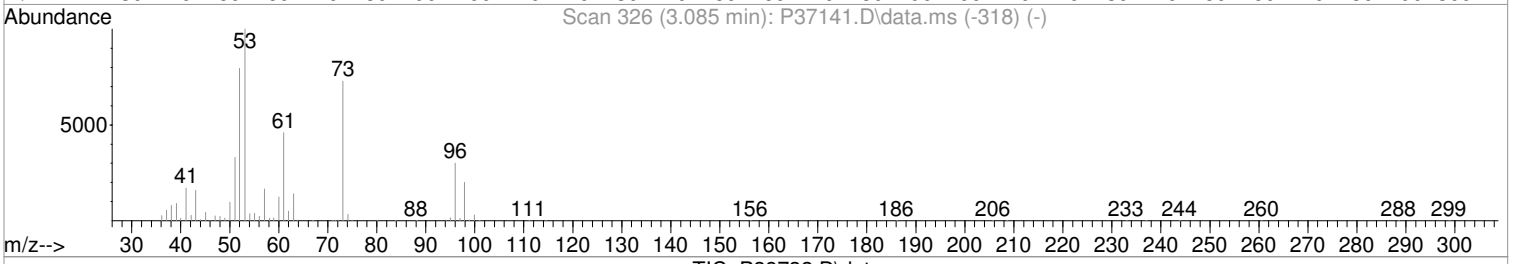
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 21 08:27:02 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38732.D\data.ms

(24) Acrylonitrile

3.079min (-0.006) 202.92 ppb

response 439517

Ion	Exp%	Act%
53.00	100	100
52.00	79.50	83.92
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

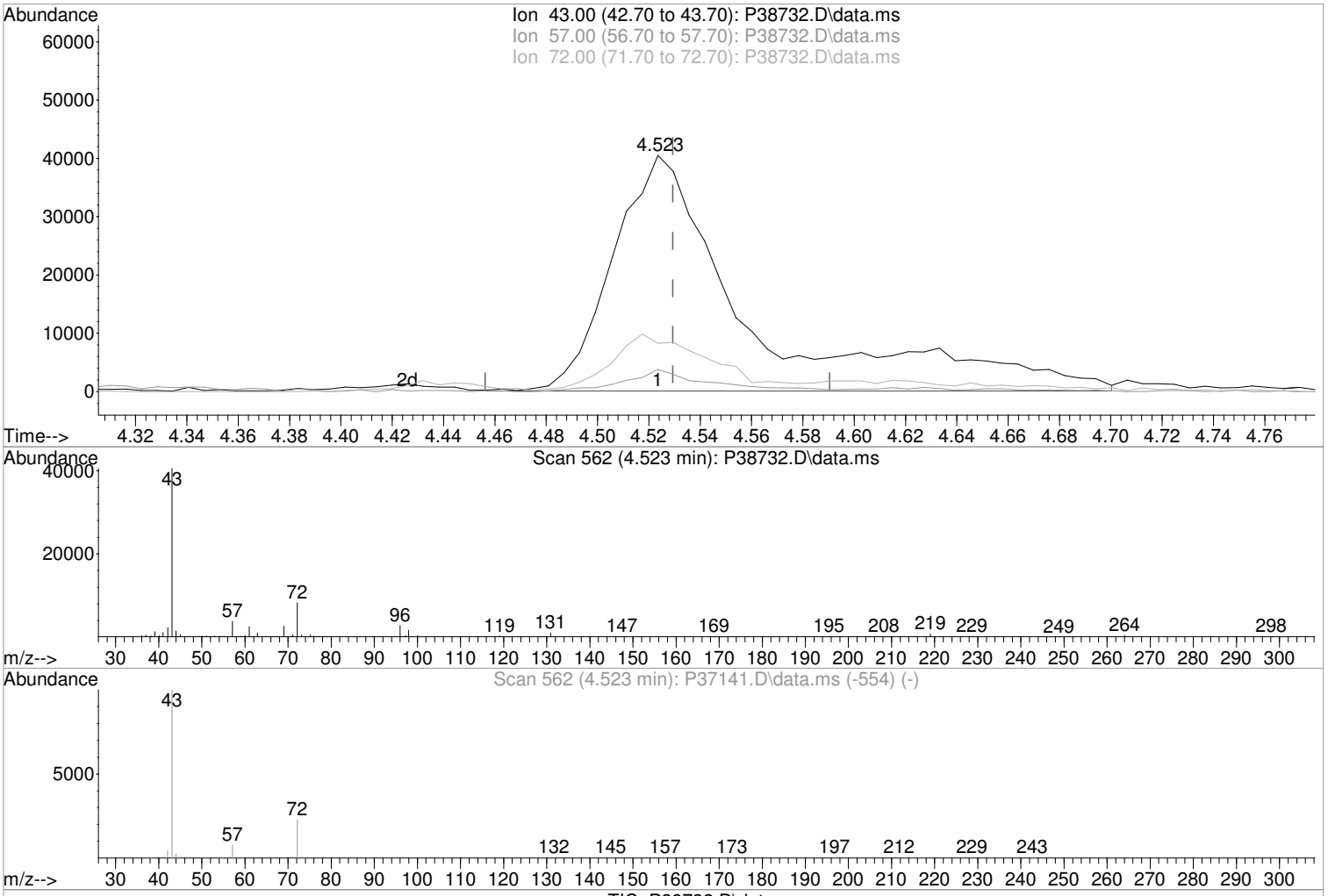
08/25/20

1st FN 08/25/20
2nd BA 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 21 08:27:02 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38732.D\data.ms

(35) 2-Butanone (P)

4.523min (-0.006) 56.19 ppb m

response 147177

Ion	Exp%	Act%
43.00	100	100
57.00	7.50	9.43
72.00	22.60	20.43
0.00	0.00	0.00

Manual Integration:

After

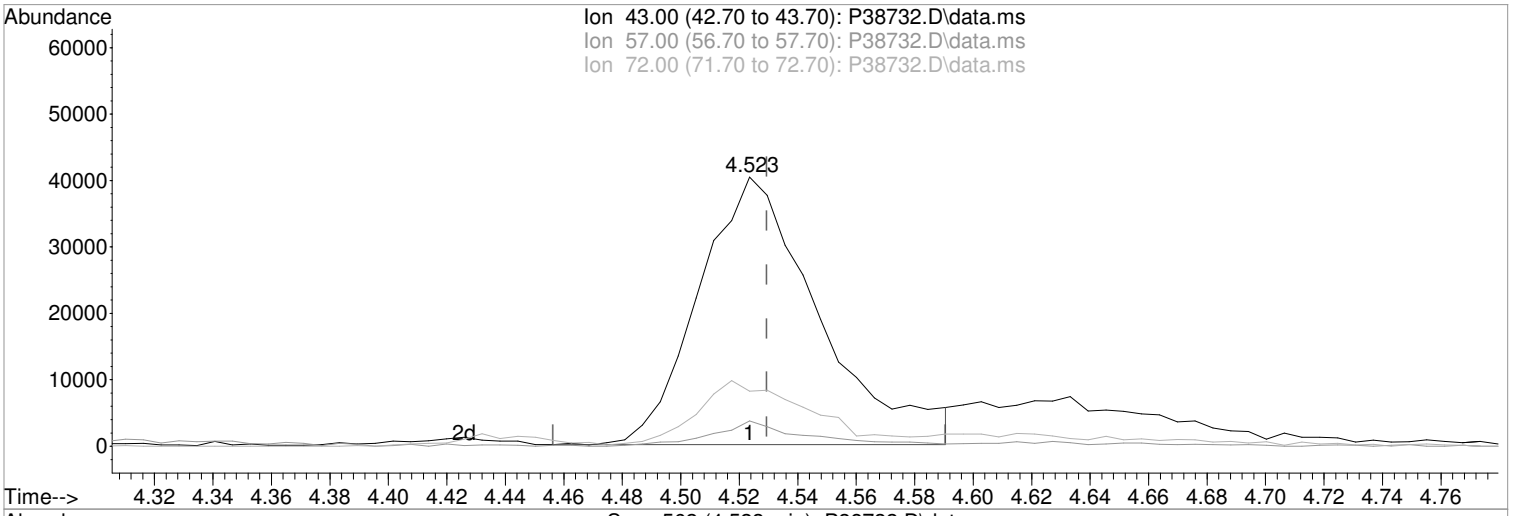
Poor integration.

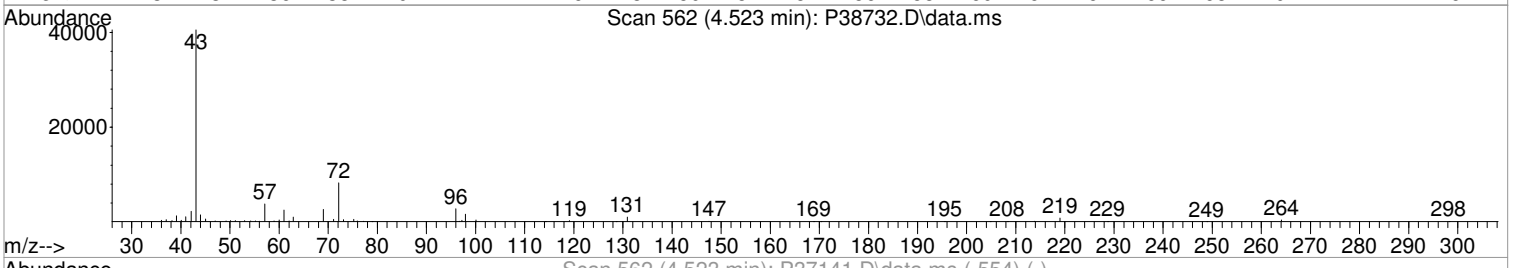
08/25/20

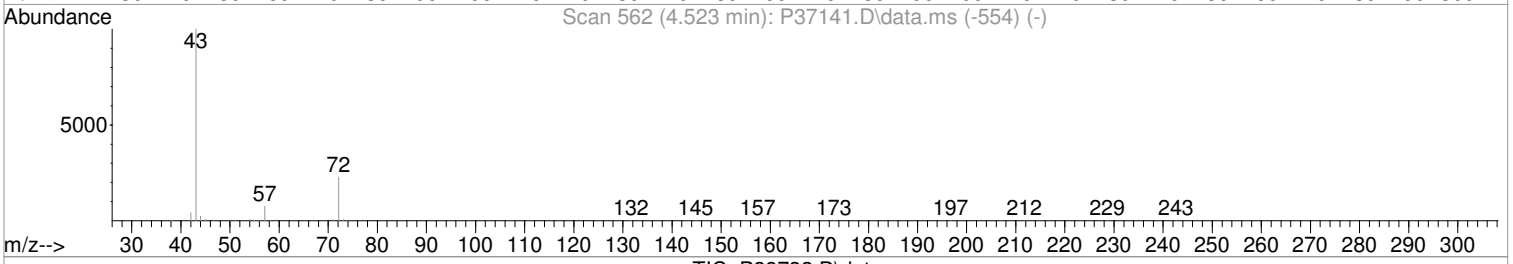
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 21 08:27:02 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38732.D\data.ms

(35) 2-Butanone (P)

4.523min (-0.006) 43.84 ppb

response 114848

Ion	Exp%	Act%
43.00	100	100
57.00	7.50	9.43
72.00	22.60	20.43
0.00	0.00	0.00

Manual Integration:

Before

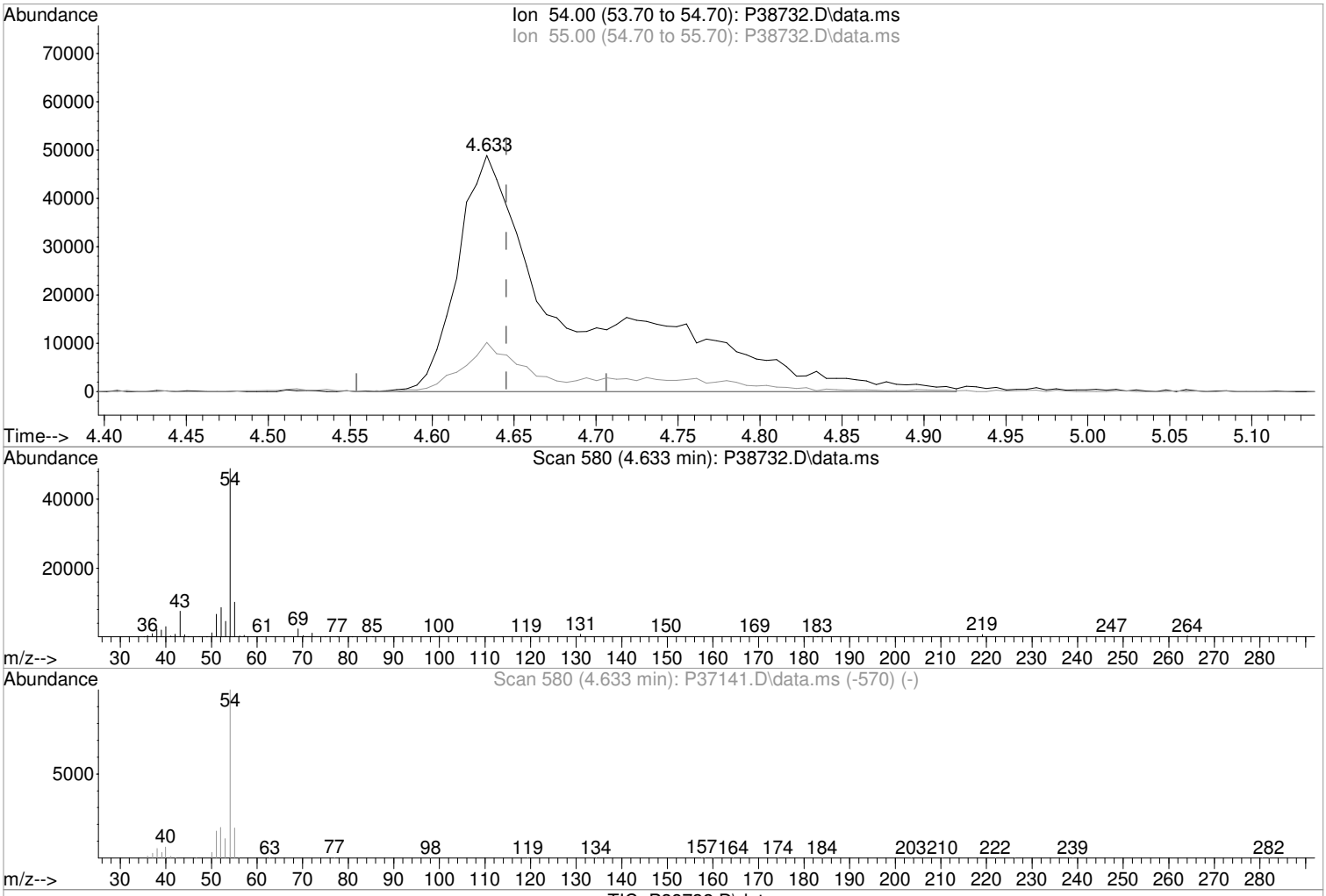
08/25/20

1st FW 08/25/20
2nd BA 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 21 08:27:02 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38732.D\data.ms

(36) Propionitrile

4.633min (-0.012) 261.32 ppb m

response 245456

Ion	Exp%	Act%
54.00	100	100
55.00	17.90	20.77
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

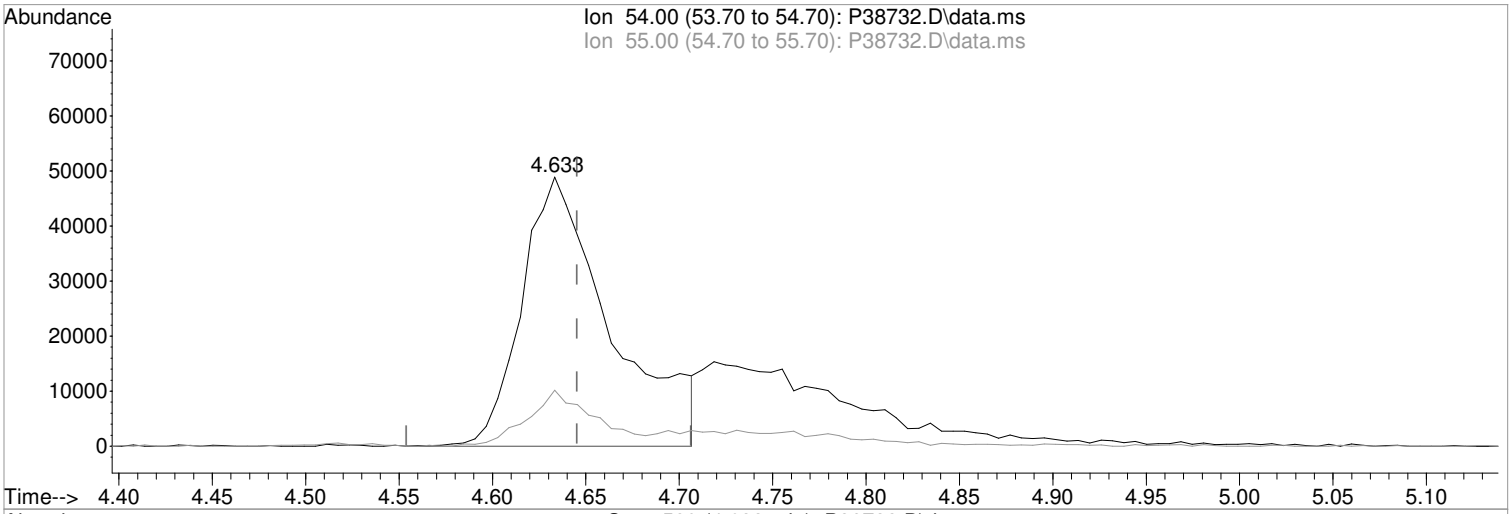
Poor integration.

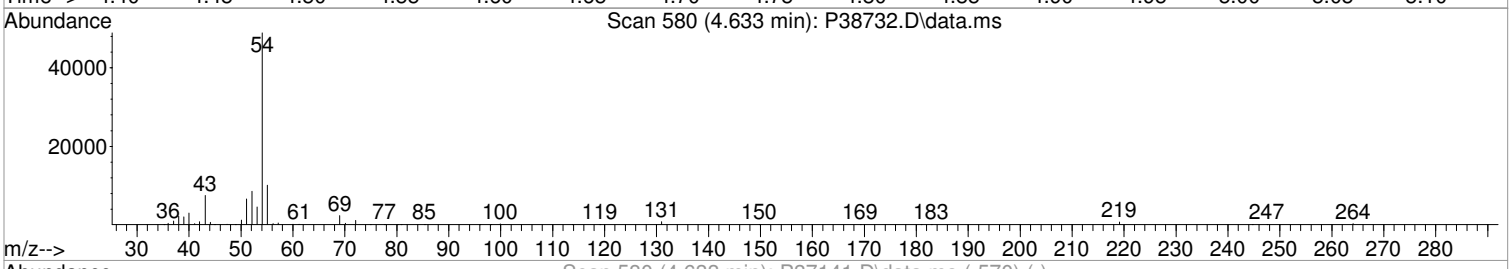
08/25/20

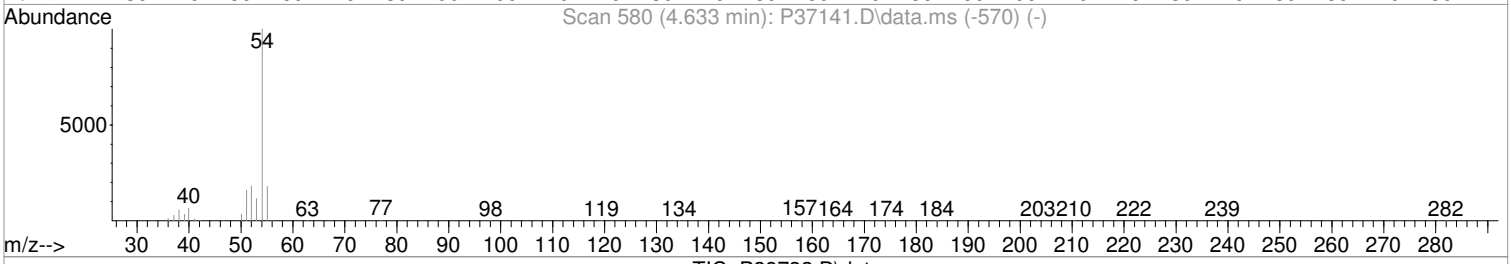
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 21 08:27:02 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38732.D\data.ms

(36) Propionitrile

4.633min (-0.012) 171.42 ppb

response 161010

Ion	Exp%	Act%
54.00	100	100
55.00	17.90	20.77
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

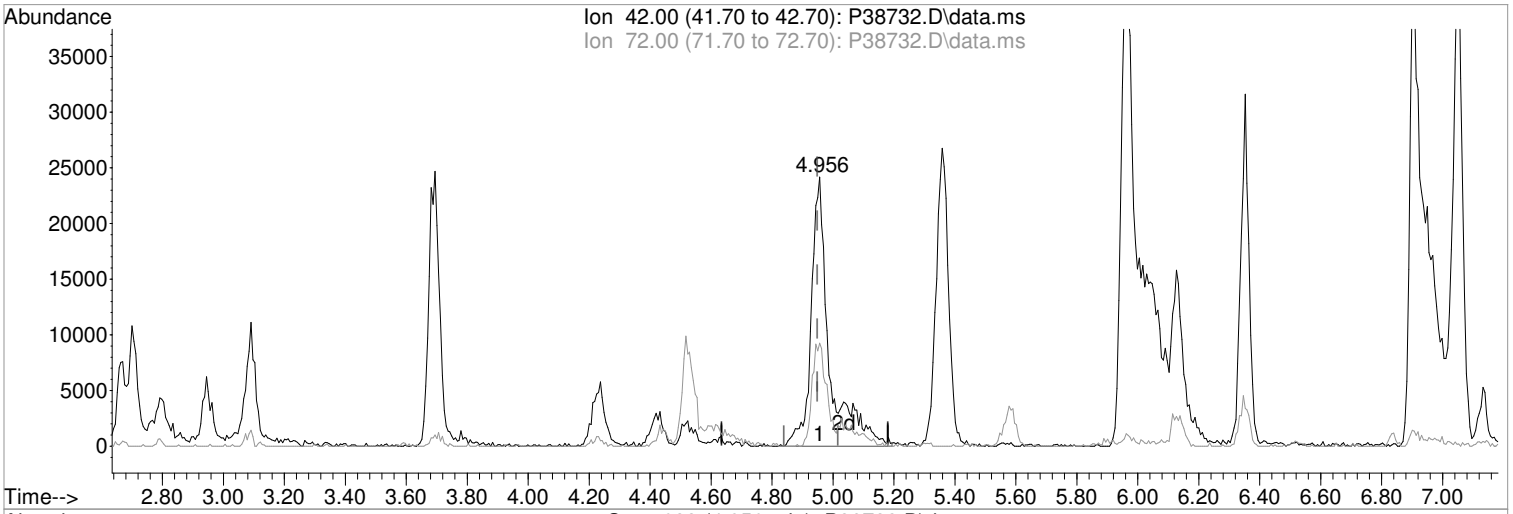
Before

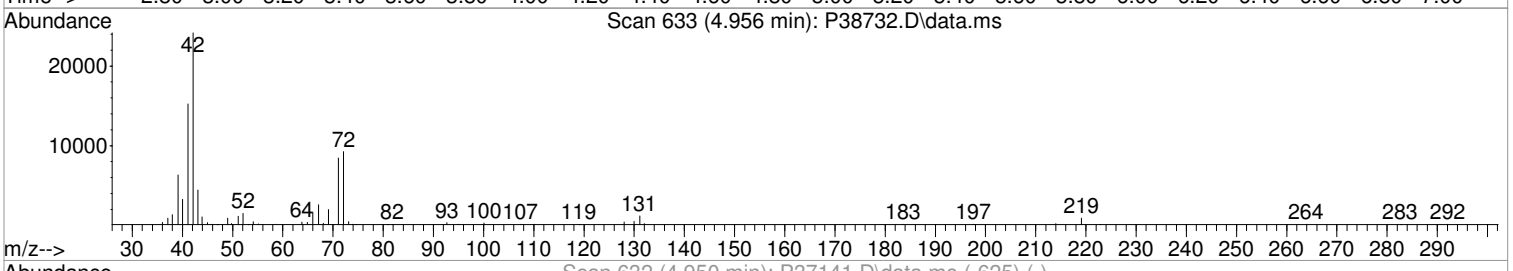
08/25/20

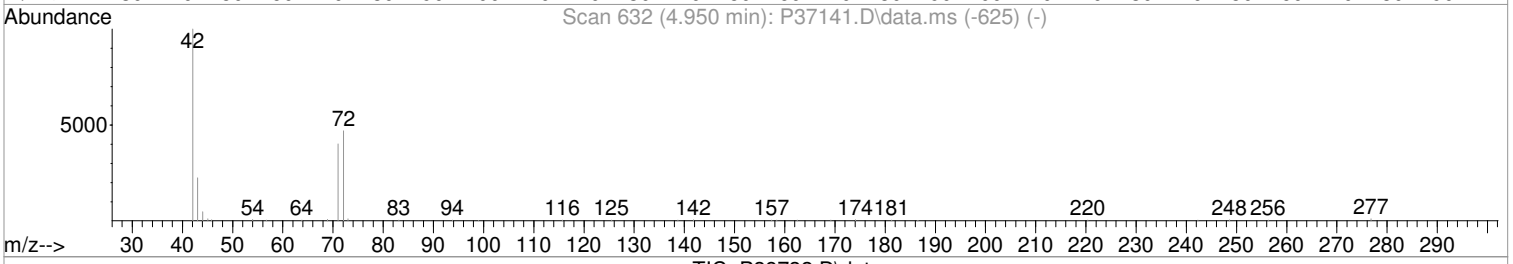
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 21 08:27:02 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38732.D\data.ms

(39) Tetrahydrofuran

4.956min (+0.006) 50.15 ppb m

response 101203

Ion	Exp%	Act%
42.00	100	100
72.00	45.20	38.29
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

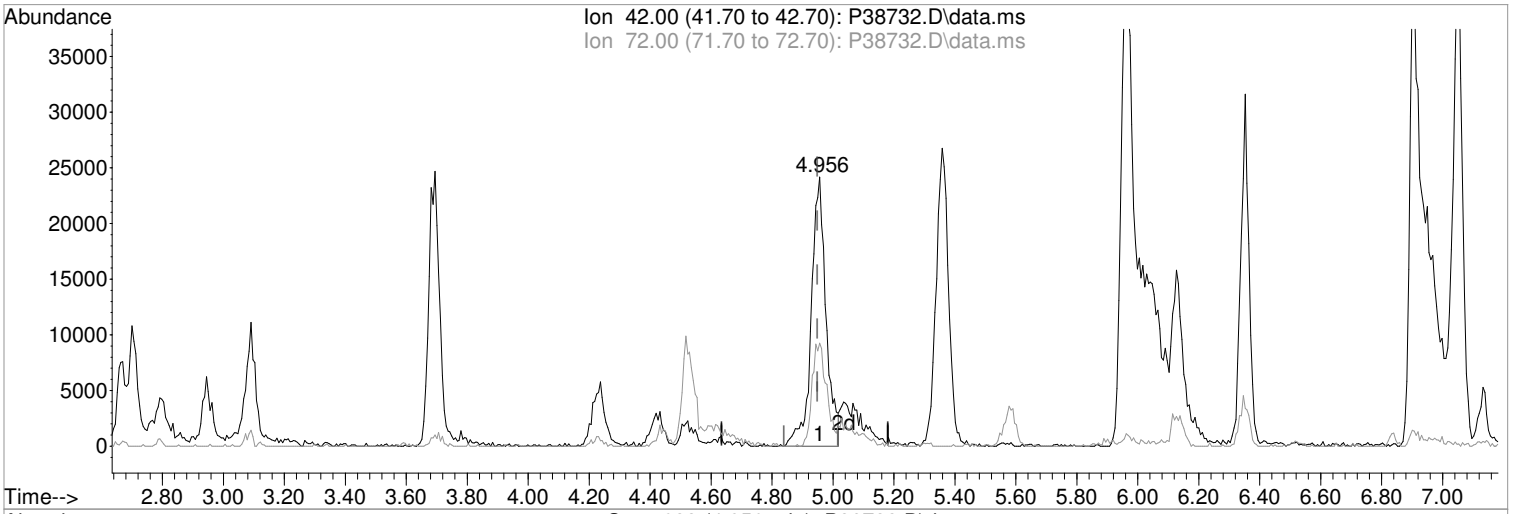
Poor integration.

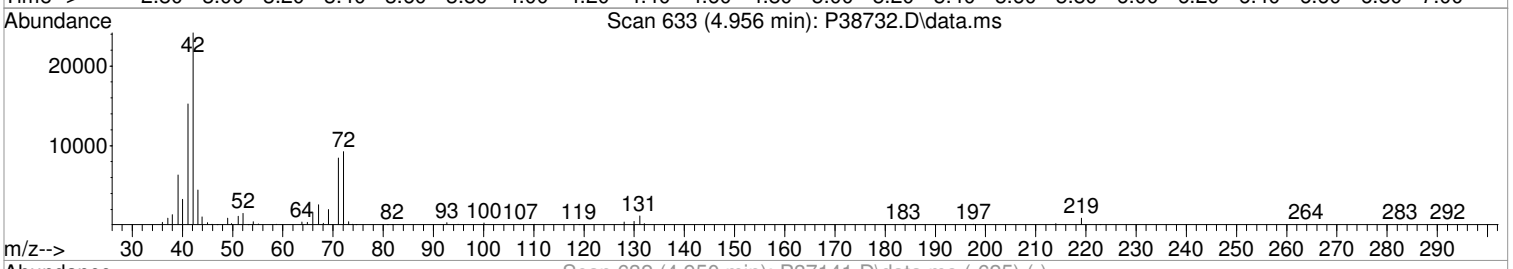
08/25/20

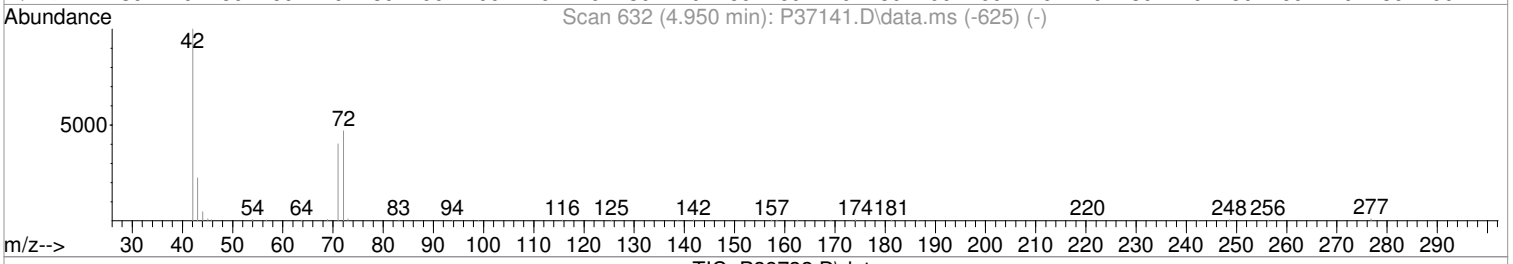
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 21 08:27:02 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38732.D\data.ms

(39) Tetrahydrofuran

4.956min (+0.006) 40.12 ppb

response 80967

Ion	Exp%	Act%
42.00	100	100
72.00	45.20	38.29
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

08/25/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 25 13:20:34 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.444	168	336920	50.00	ppb		-0.01
43) 1,4-Difluorobenzene	6.523	114	516369	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	467198	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	246632	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.316	113	142599	48.09	ppb		-0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.18%				
48) surr1,1,2-dichloroetha...	5.846	65	189806	46.24	ppb		-0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 92.48%				
65) SURR3,Toluene-d8	8.315	98	695358	50.46	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.92%				
70) SURR2,BFB	10.870	95	251857	49.60	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.20%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.195	85	208881	55.72	ppb		95
3) Chloromethane	1.323	50	250776	53.58	ppb		98
4) Vinyl Chloride	1.396	62	256388	58.43	ppb		99
5) Bromomethane	1.634	94	124984	35.71	ppb		96
6) Chloroethane	1.707	64	141621	58.66	ppb		94
7) Freon 21	1.859	67	276498	49.45	ppb		98
8) Trichlorofluoromethane	1.896	101	239988	53.09	ppb		99
9) Diethyl Ether	2.140	59	172233	52.73	ppb		94
10) Freon 123a	2.146	67	154964	40.20	ppb		94
11) Freon 123	2.201	83	187519	41.22	ppb		97
12) Acrolein	2.256	56	76456	86.42	ppb		95
13) 1,1-Diclethene	2.329	96	146802	56.35	ppb		89
14) Freon 113	2.323	101	144126	47.47	ppb		96
15) Acetone	2.396	43	65605	31.43	ppb		99
16) 2-Propanol	2.536	45	476009m	1097.84	ppb		
17) Iodomethane	2.463	142	209192	71.75	ppb		98
18) Carbon Disulfide	2.518	76	419441	49.19	ppb		99
19) Acetonitrile	2.664	40	42973m	178.60	ppb		
20) Allyl Chloride	2.670	76	90684	49.11	ppb	#	78
21) Methyl Acetate	2.701	43	168066	33.54	ppb		94
22) Methylene Chloride	2.792	84	171293	46.12	ppb		97
23) TBA	2.945	59	750659m	1069.02	ppb		
24) Acrylonitrile	3.079	53	568711m	262.56	ppb		
25) Methyl-t-Butyl Ether	3.091	73	593755	49.24	ppb		99
26) trans-1,2-Dichloroethene	3.079	96	181192	59.71	ppb		95
28) 1,1-Diclethane	3.591	63	316448	47.31	ppb		98
29) Vinyl Acetate	3.688	86	45623	79.12	ppb	#	55
30) DIPE	3.700	45	677543	57.97	ppb		94
31) 2-Chloro-1,3-Butadiene	3.700	53	279302	51.88	ppb		100
32) ETBE	4.231	59	571061	52.37	ppb		99
33) 2,2-Dichloropropane	4.426	77	235872	47.91	ppb		96
34) cis-1,2-Dichloroethene	4.444	96	454874	116.98	ppb		92
35) 2-Butanone	4.523	43	147177m	56.19	ppb		
36) Propionitrile	4.633	54	245456m	261.32	ppb		
37) Bromochloromethane	4.853	130	108161	47.02	ppb		89
38) Methacrylonitrile	4.889	67	102231	45.95	ppb		98
39) Tetrahydrofuran	4.956	42	101203m	50.15	ppb		
40) Chloroform	5.036	83	284791	48.84	ppb		94
41) 1,1,1-Trichloroethane	5.298	97	236414	48.53	ppb		96

1st FW 08/25/20
2nd BA 08/25/20

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 25 13:20:34 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.127	73	600017	55.24	ppb		96
44) Cyclohexane	5.365	41	171235	50.57	ppb		95
46) Carbontetrachloride	5.560	117	172337	50.83	ppb		98
47) 1,1-Dichloropropene	5.584	75	235637	49.09	ppb		97
49) Benzene	5.901	78	758099	50.85	ppb		95
50) 1,2-Dichloroethane	5.968	62	231940	44.52	ppb		98
51) Iso-Butyl Alcohol	5.962	43	307441	961.36	ppb		98
52) n-Heptane	6.352	43	248743	53.84	ppb		93
53) 1-Butanol	6.901	56	530764	2667.06	ppb		96
54) Trichloroethene	6.834	130	485349	131.20	ppb		97
55) Methylcyclohexane	7.053	55	256696	55.87	ppb		95
56) 1,2-Diclpropane	7.133	63	196925	49.89	ppb		96
57) Dibromomethane	7.279	93	105344	46.26	ppb		95
58) 1,4-Dioxane	7.352	88	69044	845.08	ppb		96
59) Methyl Methacrylate	7.352	69	183904	53.48	ppb		93
60) Bromodichloromethane	7.499	83	192022	45.98	ppb		94
62) 2-Chloroethylvinyl Ether	7.852	63	852	0.50	ppb	#	51
63) cis-1,3-Dichloropropene	8.035	75	270562	47.49	ppb		97
64) 4-Methyl-2-pentanone	8.248	43	290715	54.62	ppb		98
66) Toluene	8.389	91	834115	52.83	ppb		99
67) trans-1,3-Dichloropropene	8.675	75	248093	47.88	ppb		96
68) Ethyl Methacrylate	8.797	69	318880	54.98	ppb		99
69) 1,1,2-Trichloroethane	8.864	97	176154	49.97	ppb		98
72) Tetrachloroethene	8.968	164	134767	47.23	ppb		97
73) 2-Hexanone	9.151	43	214867	51.74	ppb		96
74) 1,3-Dichloropropane	9.029	76	311656	47.43	ppb		98
75) Dibromochloromethane	9.248	129	143011	49.22	ppb		92
76) N-Butyl Acetate	9.291	43	410093	53.23	ppb		98
77) 1,2-Dibromoethane	9.346	107	173297	48.46	ppb		99
78) Chlorobenzene	9.827	112	512431	49.18	ppb		96
79) 3-CBTF	9.840	180	282079	58.46	ppb		95
80) 4-CBTF	9.894	180	259284	59.74	ppb		97
81) 1,1,1,2-Tetrachloroethane	9.913	131	158039	49.30	ppb		97
82) Ethylbenzene	9.937	106	284761	52.08	ppb		95
83) (m+p)Xylene	10.053	106	708930	108.30	ppb		96
84) o-Xylene	10.406	106	342788	53.64	ppb		98
85) Styrene	10.425	104	581404	53.55	ppb		99
87) Bromoform	10.583	173	85593	42.14	ppb		99
88) 2-CBTF	10.656	180	271498	54.26	ppb		98
89) Isopropylbenzene	10.736	105	901070	52.92	ppb		99
90) Cyclohexanone	10.827	55	253130	247.41	ppb		97
91) trans-1,4-Dichloro-2-B...	11.065	53	70605	50.06	ppb		94
92) 1,1,2,2-Tetrachloroethane	11.016	83	276798	50.29	ppb		99
93) Bromobenzene	10.992	156	208242	46.88	ppb		97
94) 1,2,3-Trichloropropane	11.047	110	81099	45.56	ppb		96
95) n-Propylbenzene	11.089	91	1100812	56.34	ppb		99
96) 2-Chlorotoluene	11.156	91	642020	50.59	ppb		98
97) 3-Chlorotoluene	11.211	91	667128	54.97	ppb		99
98) 4-Chlorotoluene	11.254	91	717817	50.52	ppb		98
99) 1,3,5-Trimethylbenzene	11.242	105	764882	52.58	ppb		97
100) tert-Butylbenzene	11.516	119	655340	53.82	ppb		96
101) 1,2,4-Trimethylbenzene	11.553	105	777399	53.10	ppb		96
102) 3,4-DCBTF	11.620	214	224167	55.89	ppb		100
103) sec-Butylbenzene	11.693	105	968767	55.46	ppb		99
104) p-Isopropyltoluene	11.815	119	822434	54.62	ppb		99
105) 1,3-Dclbenz	11.784	146	424142	48.73	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 25 13:20:34 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

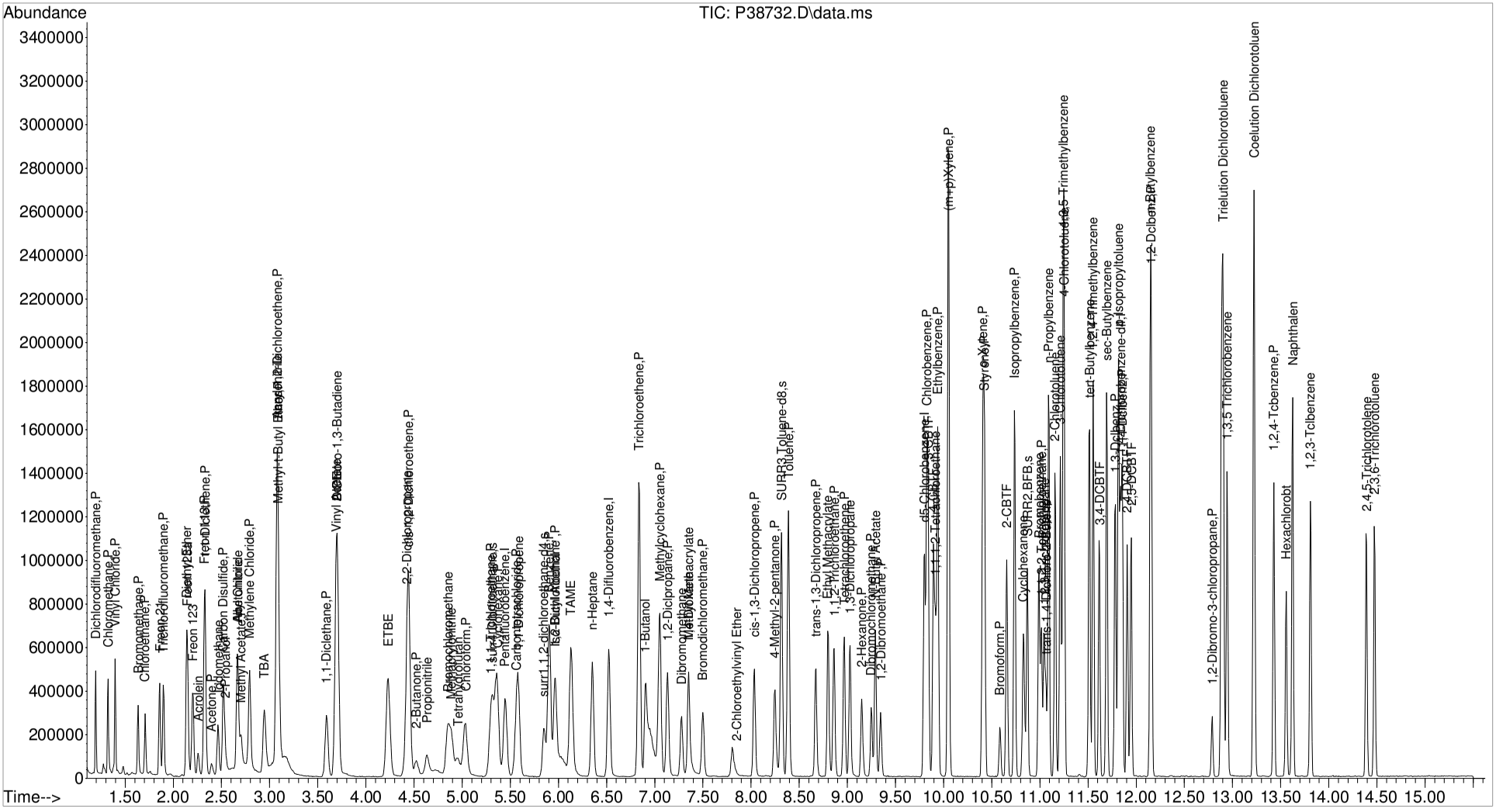
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	440093	49.69	ppb	97
107) 2,4-DCBTF	11.906	214	210835	56.13	ppb	98
108) 2,5-DCBTF	11.949	214	229043	55.76	ppb	97
109) n-Butylbenzene	12.150	91	767226	54.12	ppb	99
110) 1,2-Dclbenz	12.156	146	423203	47.90	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.790	157	55212	44.80	ppb	95
112) Trielution Dichlorotol...	12.900	125	1184729	167.43	ppb	99
113) 1,3,5 Trichlorobenzene	12.943	180	334877	55.13	ppb	97
114) Coelution Dichlorotoluene	13.223	125	865867	111.41	ppb	99
115) 1,2,4-Tcbenzene	13.430	180	329660	51.73	ppb	98
116) Hexachlorobt	13.558	225	134404	52.55	ppb	99
117) Naphthalen	13.625	128	1045663	56.16	ppb	99
118) 1,2,3-Tclbenzene	13.808	180	320044	48.55	ppb	95
119) 2,4,5-Trichlorotolene	14.394	159	241323	59.85	ppb	99
120) 2,3,6-Trichlorotoluene	14.473	159	219801	60.01	ppb	98

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38732.D
Acq On : 20 Aug 2020 8:05 pm
Operator : K.Ruest
Sample : R2007215-001DMS|1.0 Inst : MSVOA-12
Misc : LiRo 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 25 13:20:34 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



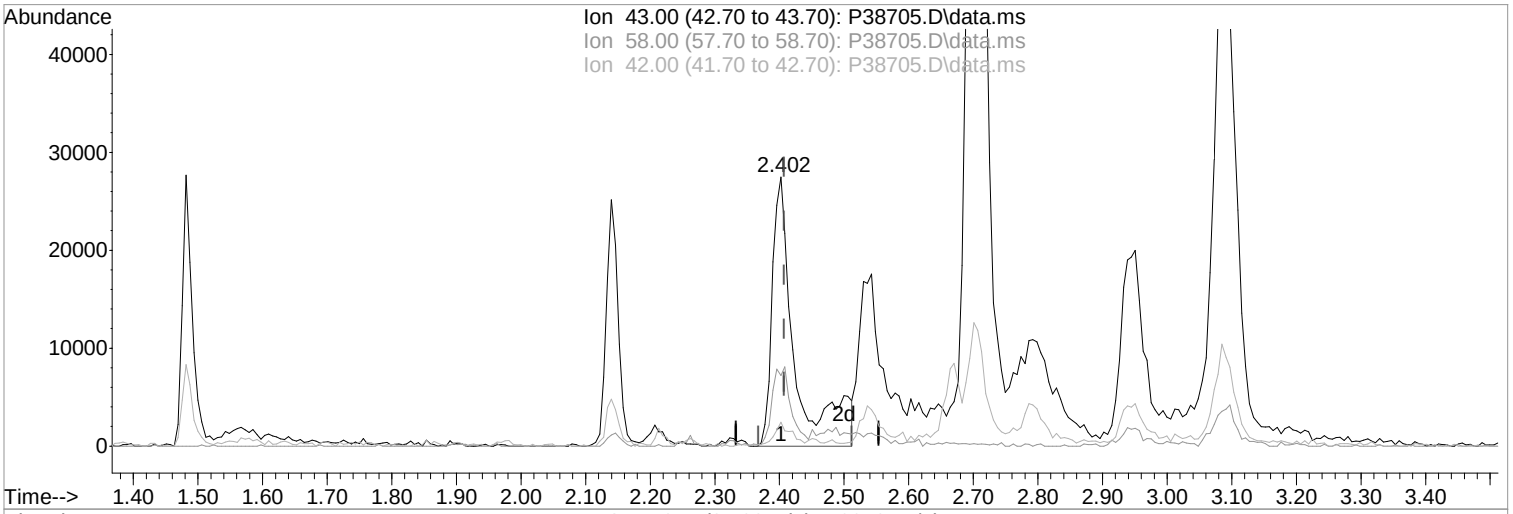
1st FJ 08/25/20
2nd BA 08/25/20

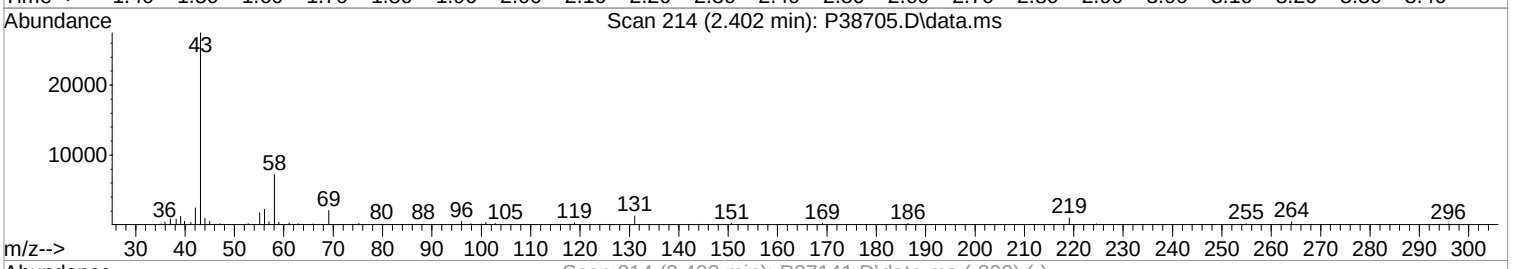
1st 08/20/20
2nd 08/25/20

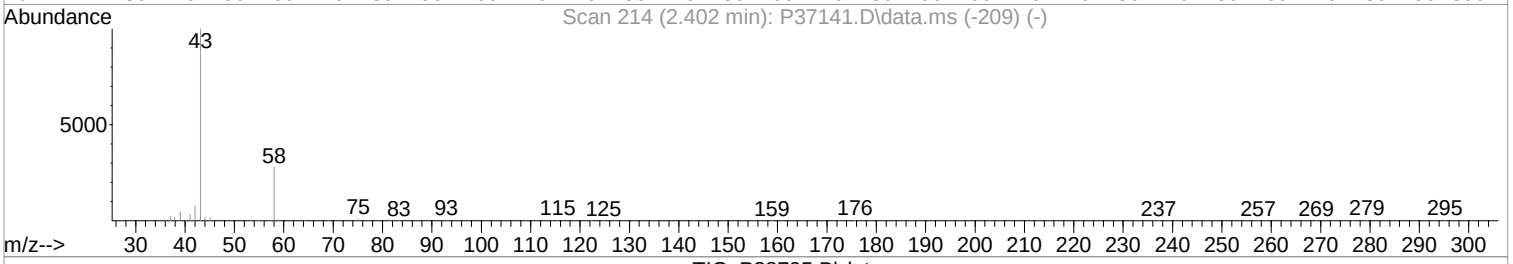
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:00:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38705.D\data.ms

(15) Acetone (P)

2.402min (-0.005) 33.02 ppb m

response 67655

Ion	Exp%	Act%
43.00	100	100
58.00	28.20	26.17
42.00	7.70	8.87
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

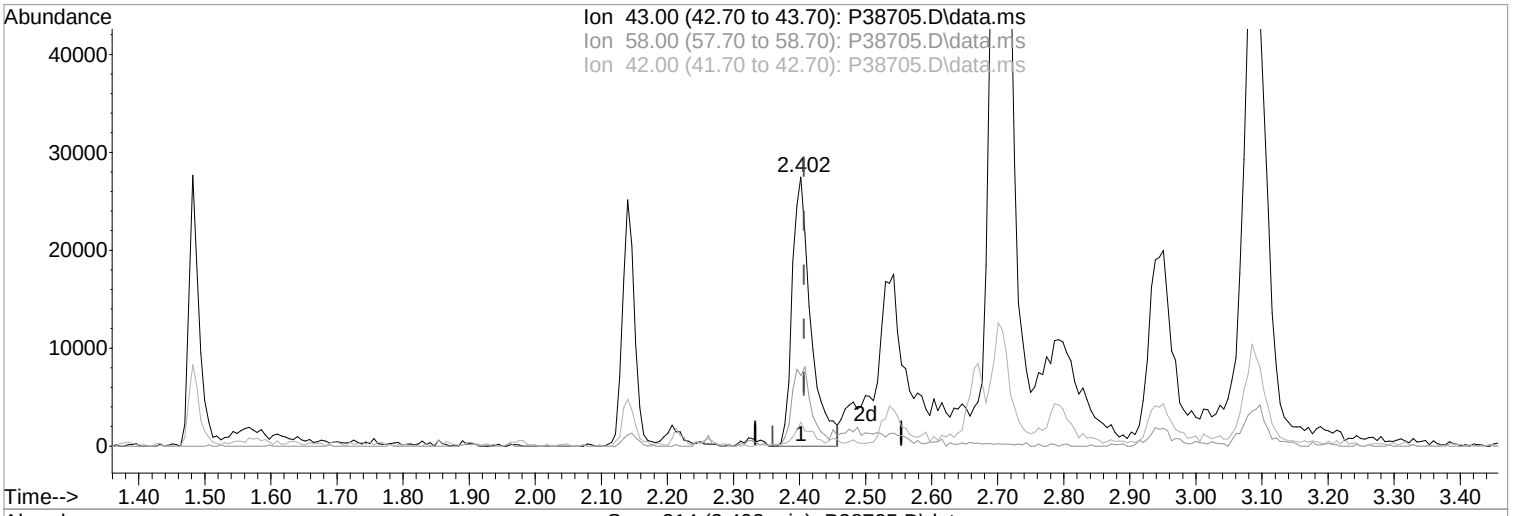
08/20/20

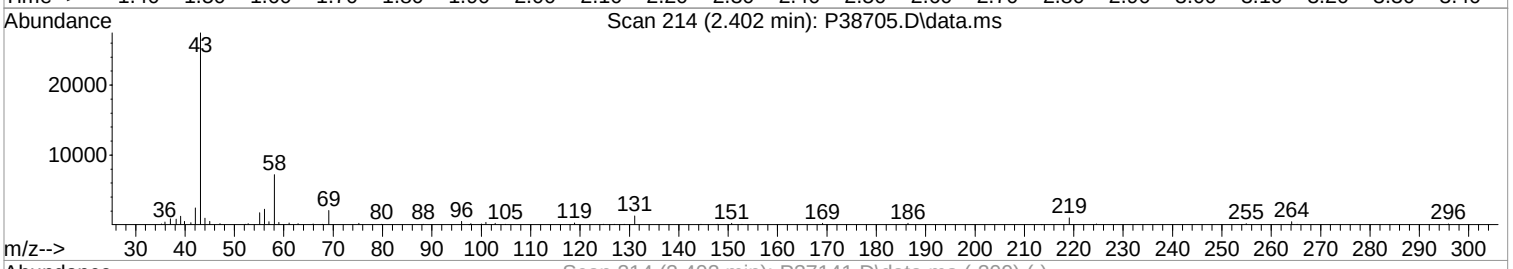
1st 08/20/20
2nd 08/25/20

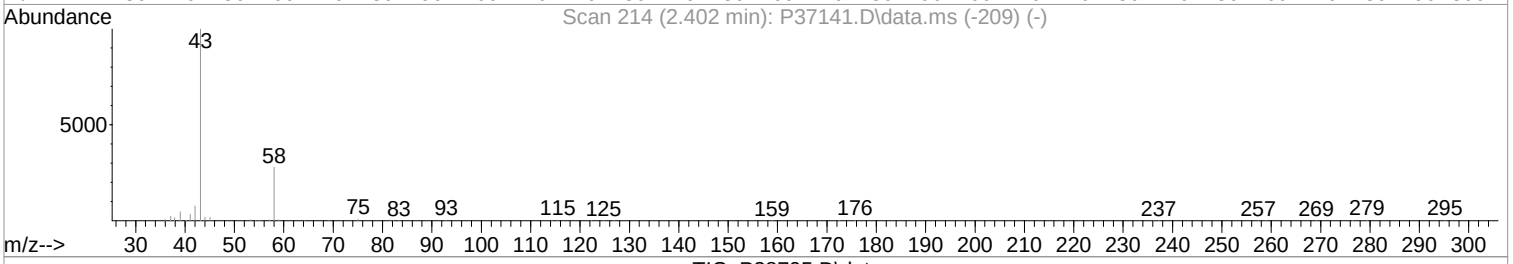
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:00:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38705.D\data.ms

(15) Acetone (P)

2.402min (-0.005) 25.40 ppb

response 53797

Ion	Exp%	Act%
43.00	100	100
58.00	28.20	26.17
42.00	7.70	8.87
0.00	0.00	0.00

Manual Integration:

Before

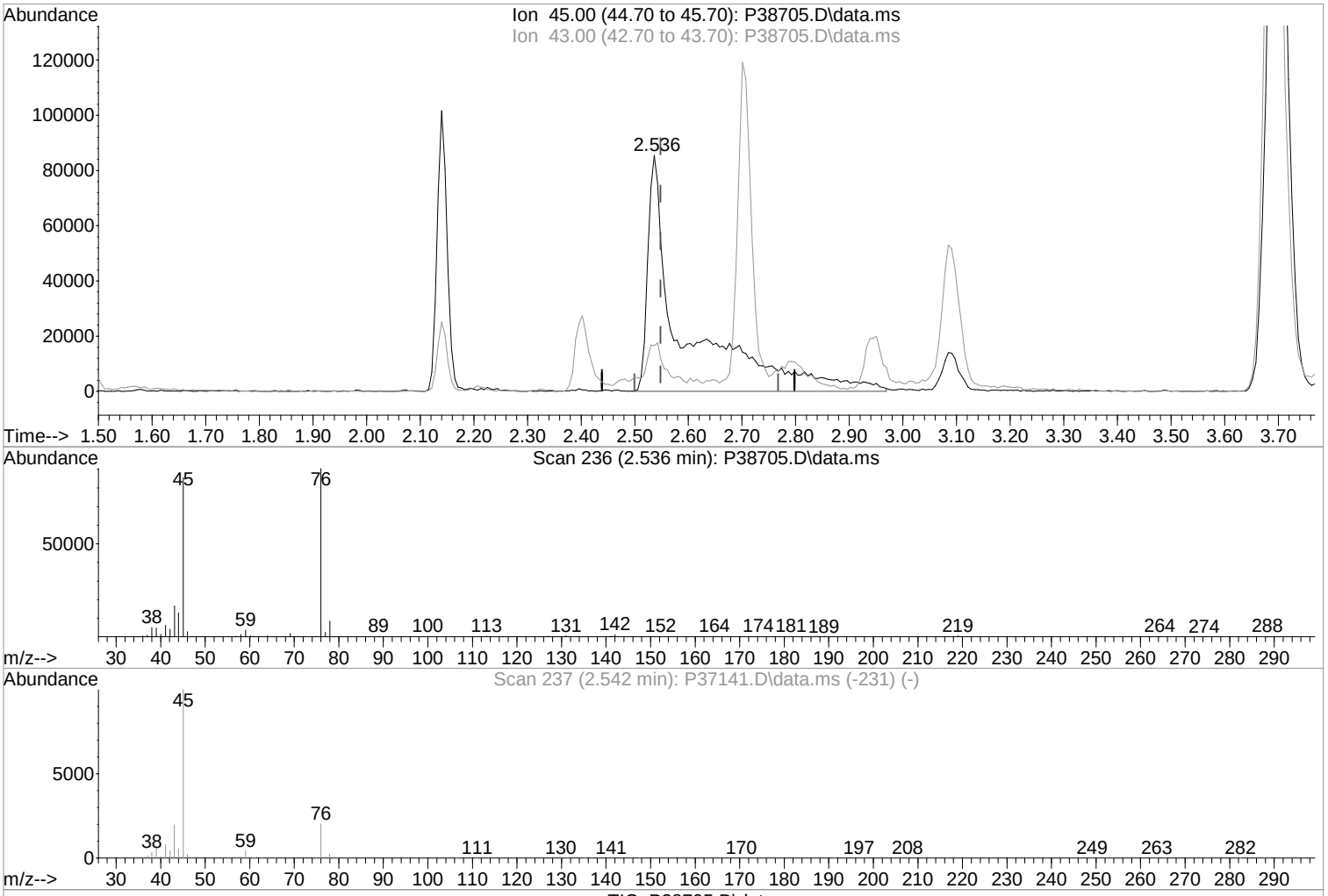
08/20/20

1st KR 08/20/20
2nd BA 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:00:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38705.D\data.ms

(16) 2-Propanol

2.536min (-0.012) 918.87 ppb m

response 393620

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	19.43
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

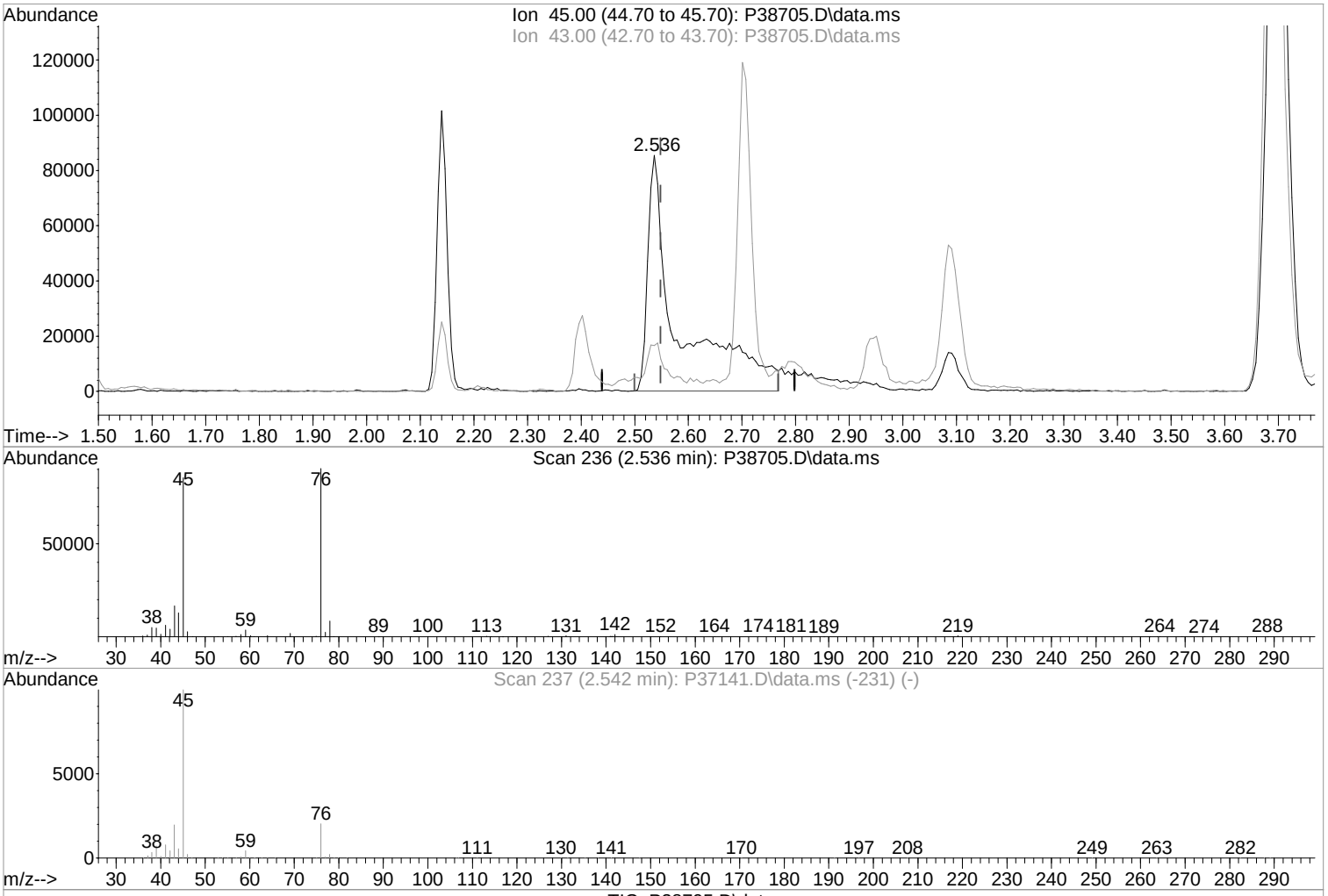
08/20/20

1st 08/20/20
2nd 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:00:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38705.D\data.ms

(16) 2-Propanol

2.536min (-0.012) 789.16 ppb

response 338055

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	19.43
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

08/20/20

1st 08/20/20
2nd 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
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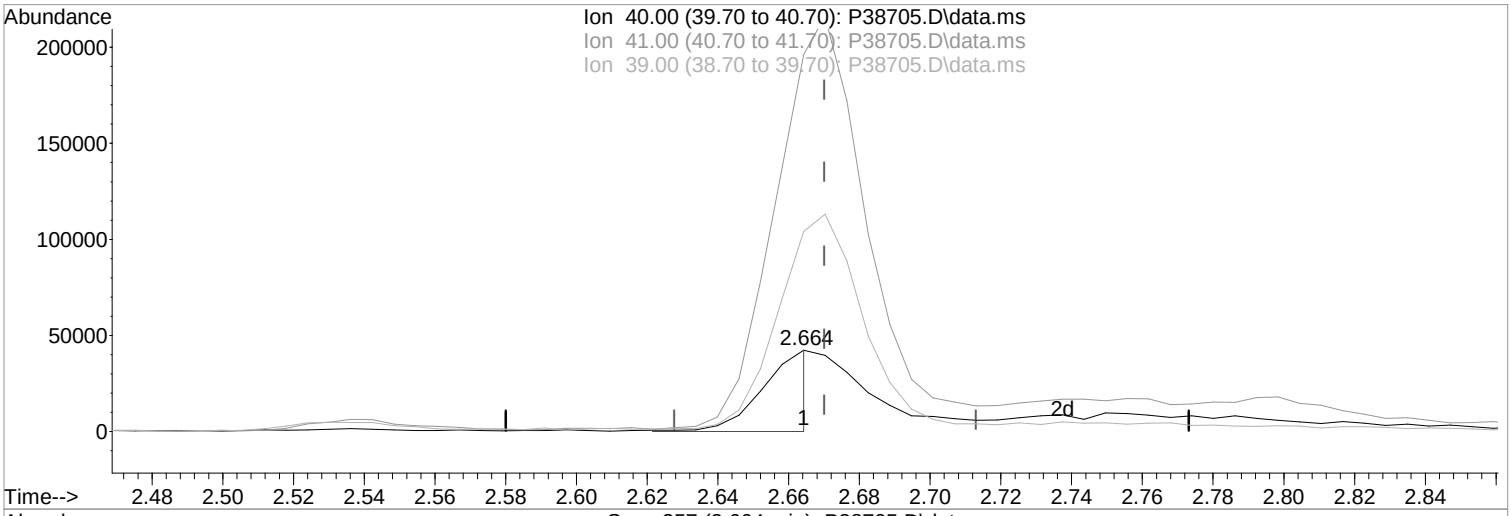
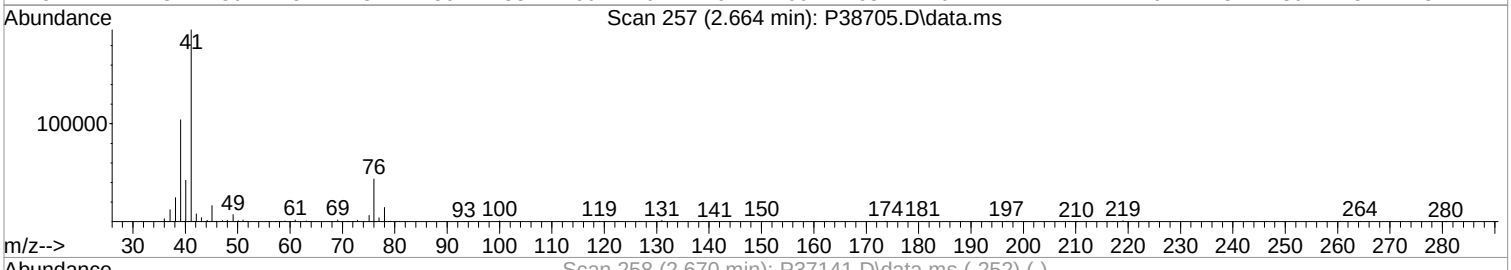
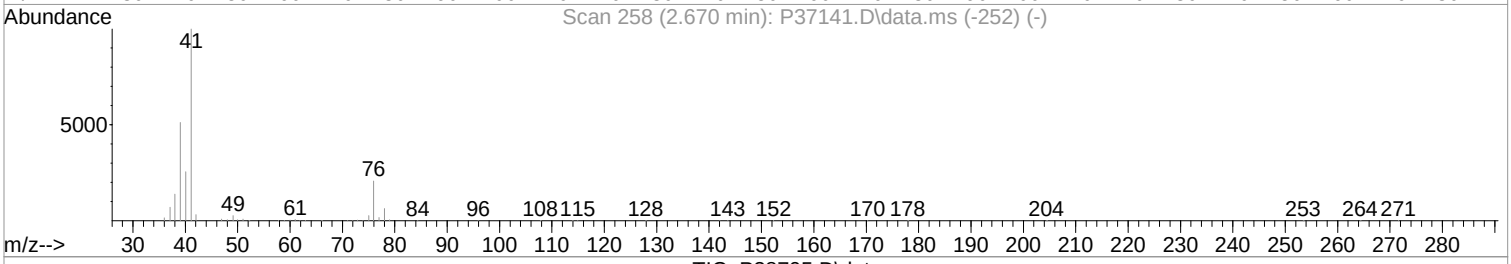
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38705.D\data.ms

(19) Acetonitrile

2.664min (-0.006) 170.51 ppb m

response 40532

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	463.93#
39.00	200.50	246.26#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

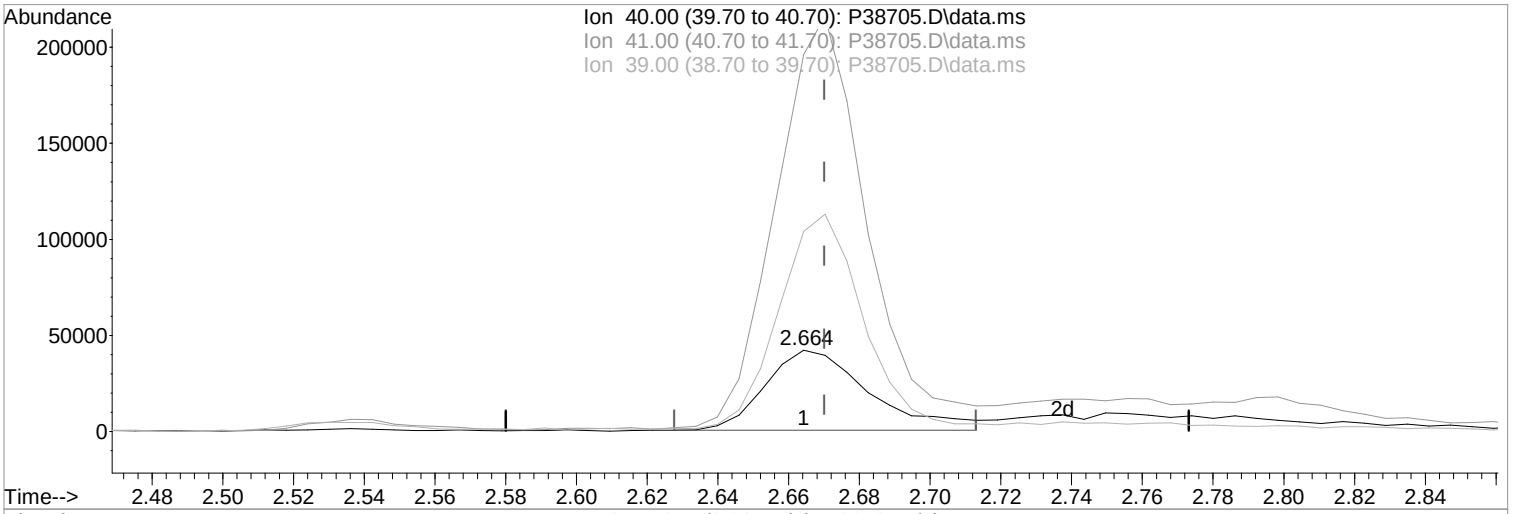
08/20/20

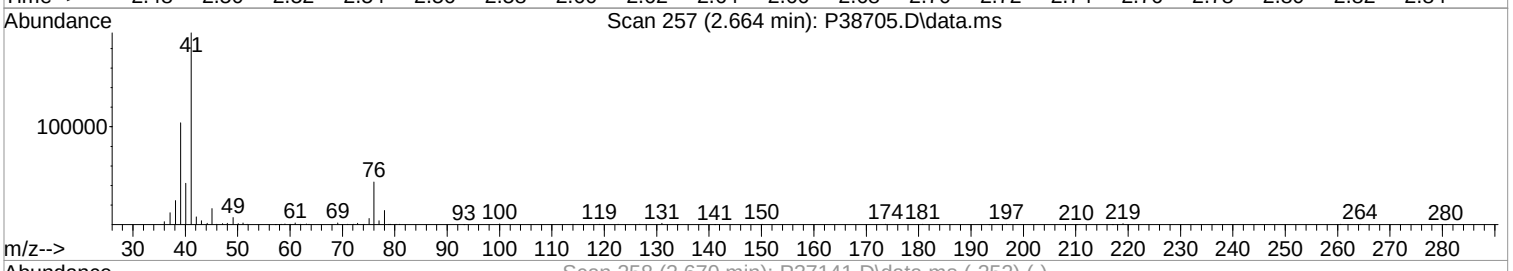
1st KR 08/20/20
2nd BA 08/25/20

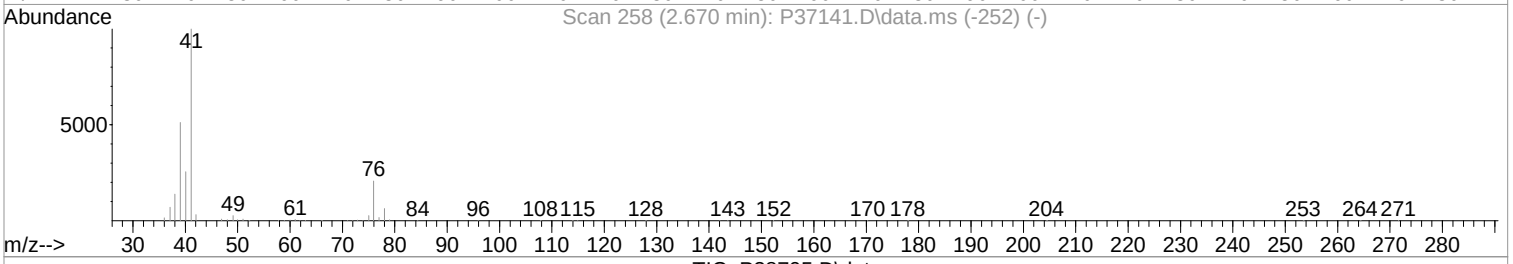
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:00:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38705.D\data.ms

(19) Acetonitrile

2.664min (-0.006) 360.72 ppb

response 85748

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	463.93#
39.00	200.50	246.26#
0.00	0.00	0.00

Manual Integration:

Before

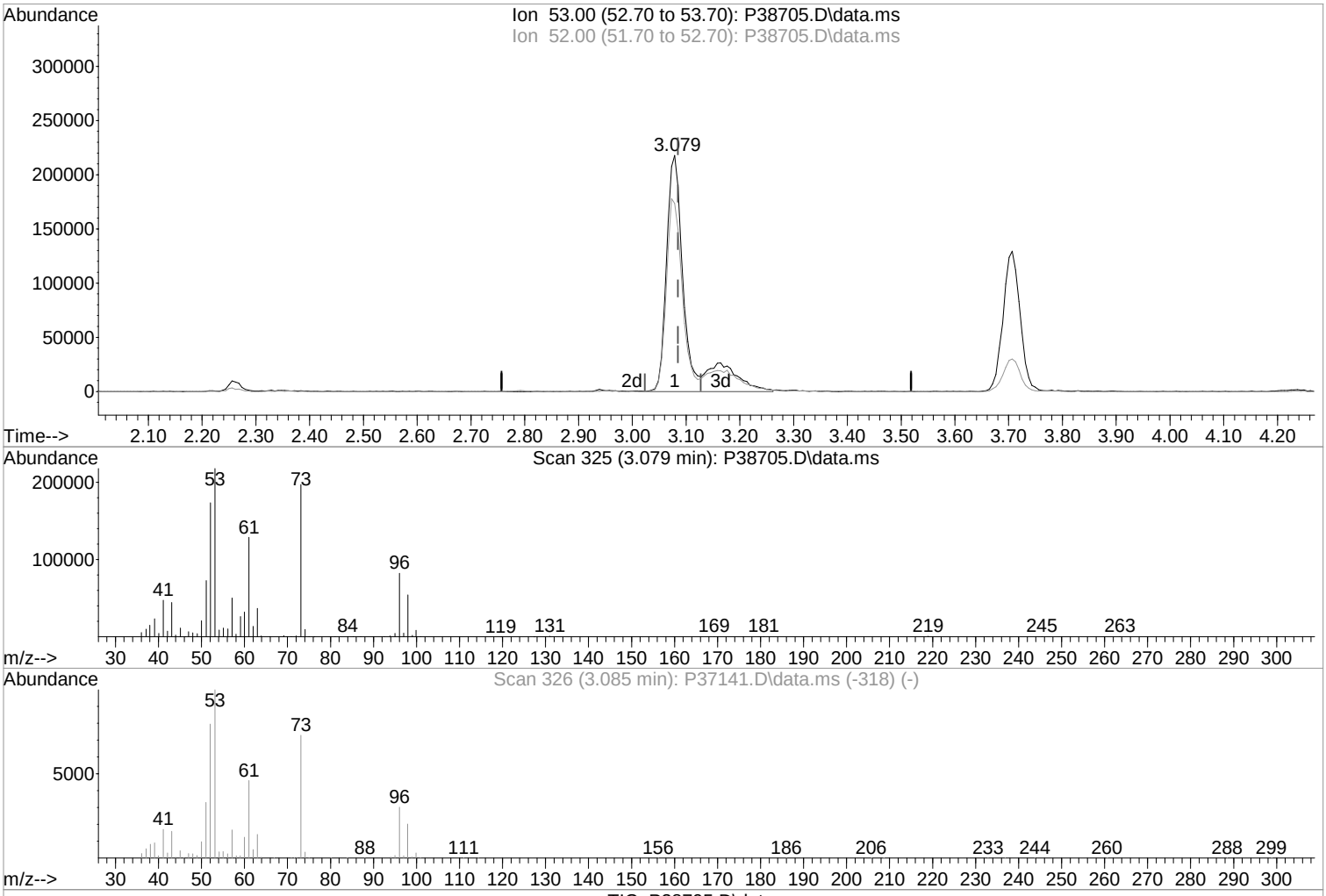
08/20/20

1st KR 08/20/20
2nd BA 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:00:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38705.D\data.ms

(24) Acrylonitrile

3.079min (-0.006) 257.87 ppb m

response 551834

Ion	Exp%	Act%
53.00	100	100
52.00	79.50	79.61
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

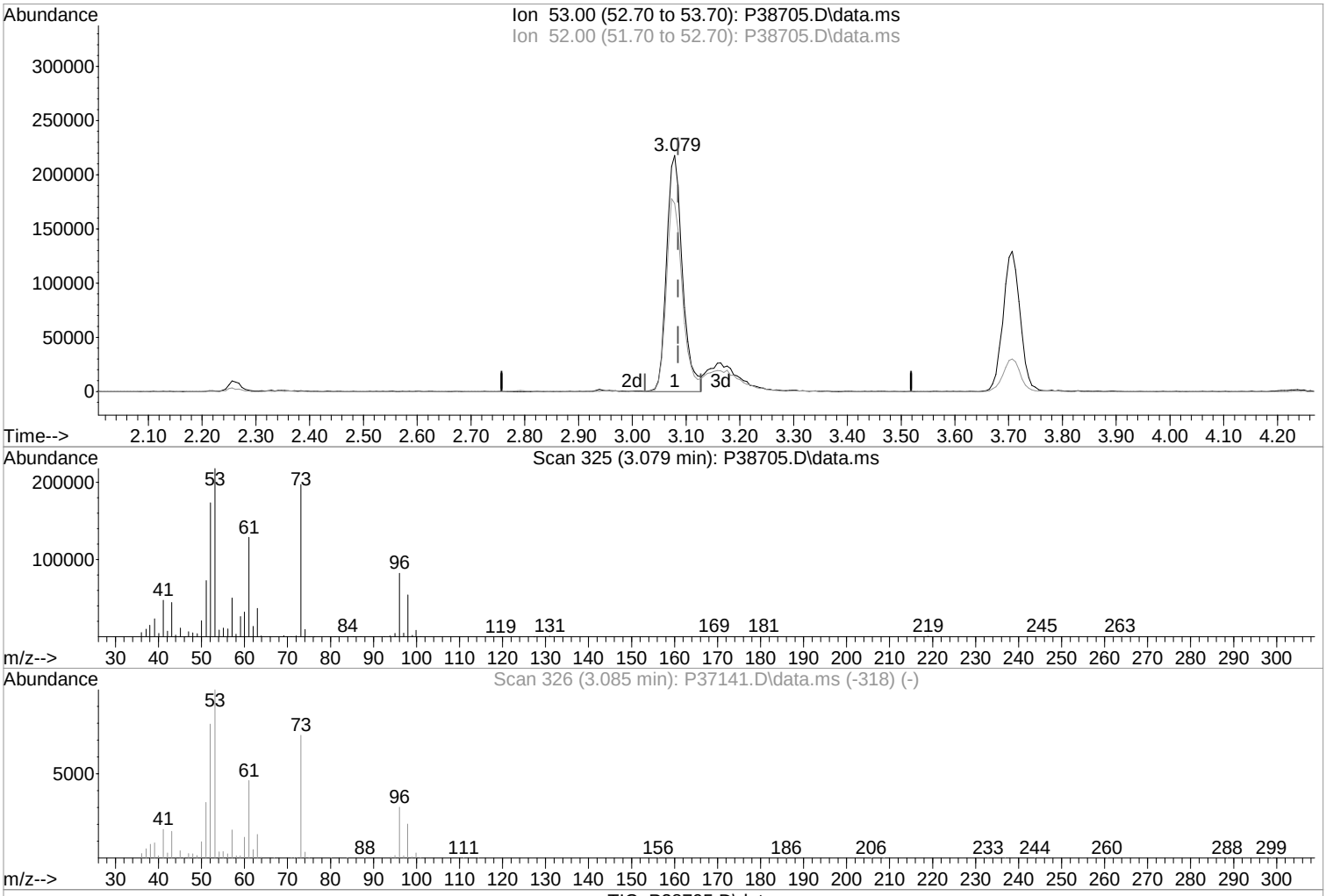
08/20/20

1st KR 08/20/20
2nd BA 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:00:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38705.D\data.ms

(24) Acrylonitrile

3.079min (-0.006) 208.87 ppb

response 446977

Ion	Exp%	Act%
53.00	100	100
52.00	79.50	79.61
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

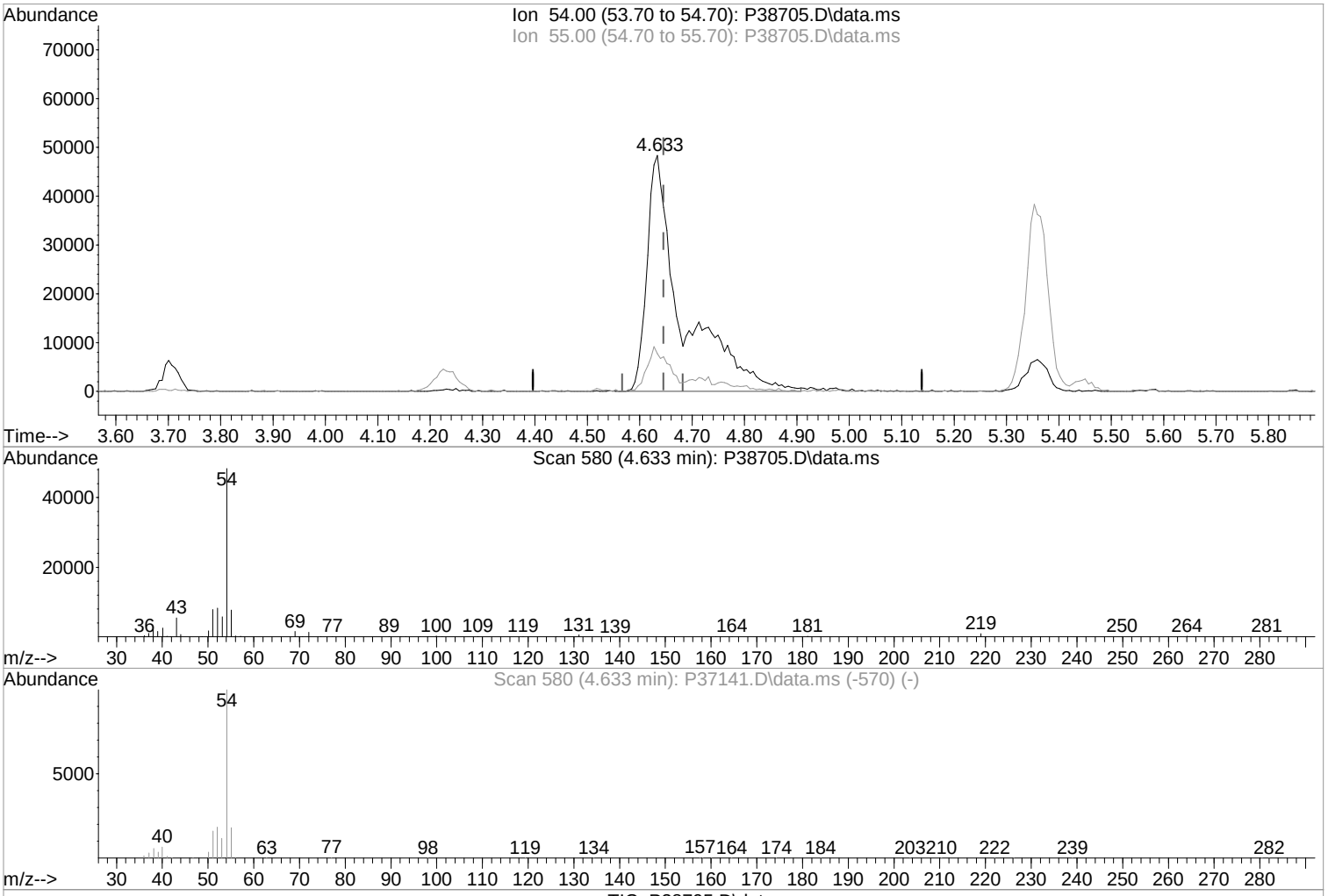
08/20/20

1st 08/20/20
2nd 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:00:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38705.D\data.ms

(36) Propionitrile

4.633min (-0.012) 244.40 ppb m

response 226797

Ion	Exp%	Act%
54.00	100	100
55.00	17.90	15.99
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

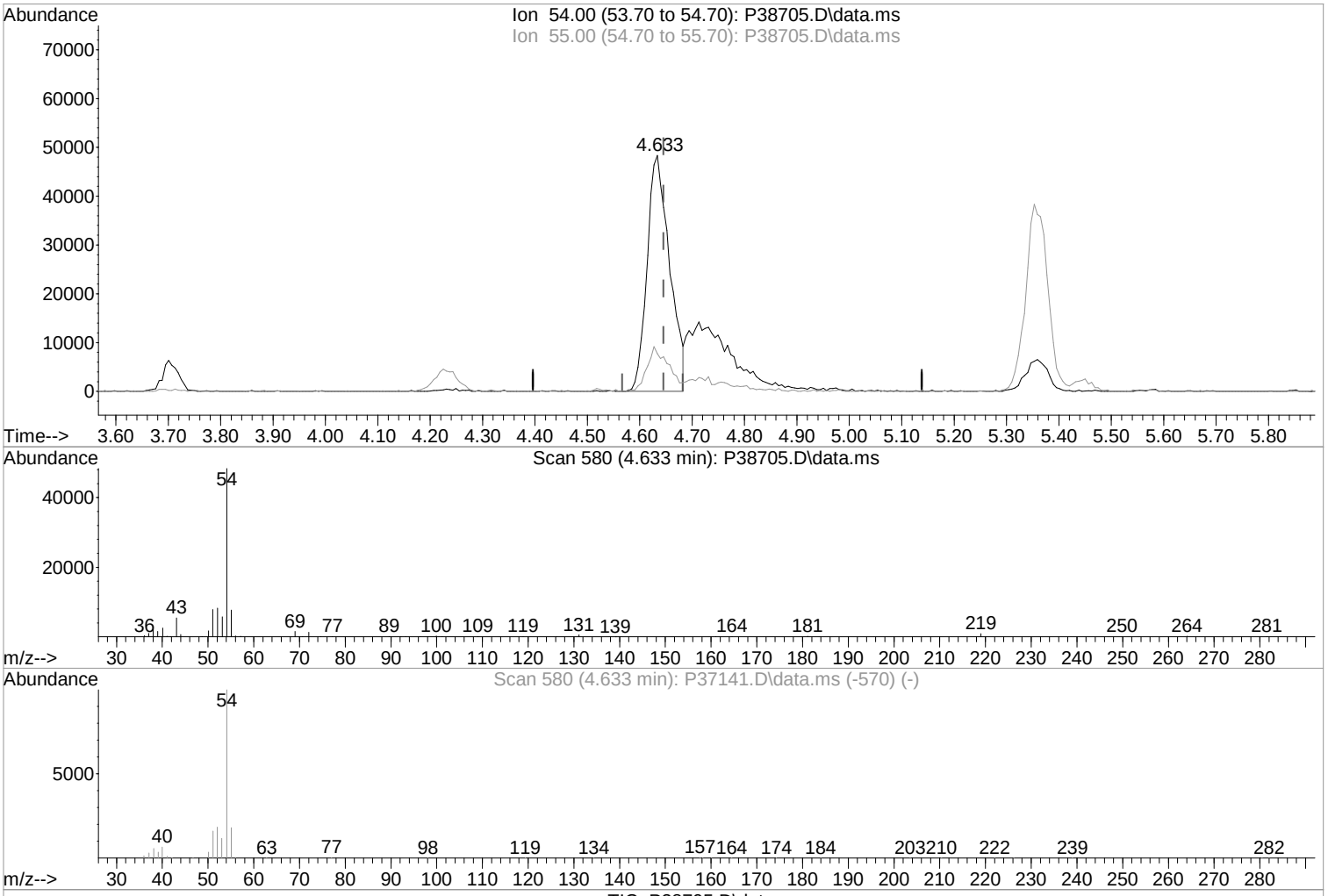
08/20/20

1st 08/20/20
2nd 08/25/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:00:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38705.D\data.ms

(36) Propionitrile

4.633min (-0.012) 155.35 ppb

response 144164

Ion	Exp%	Act%
54.00	100	100
55.00	17.90	15.99
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

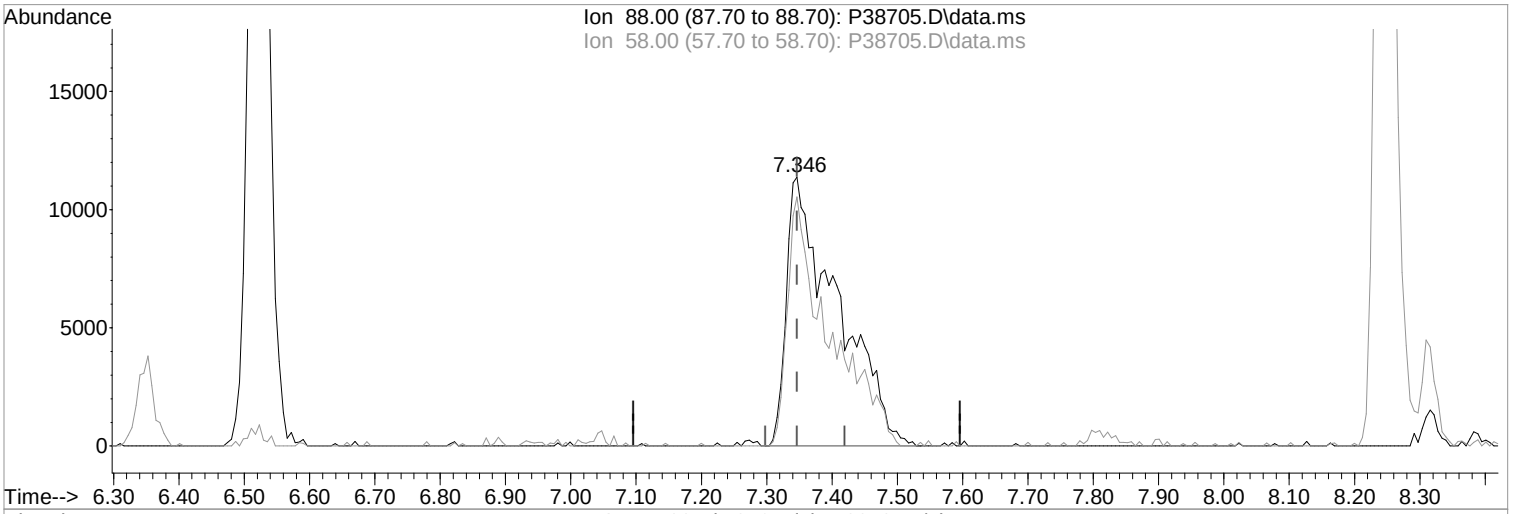
08/20/20

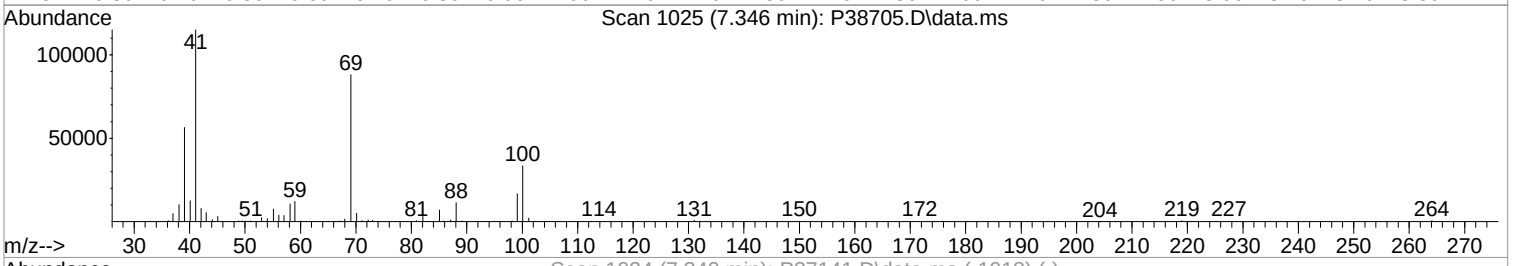
1st 08/20/20
2nd 08/25/20

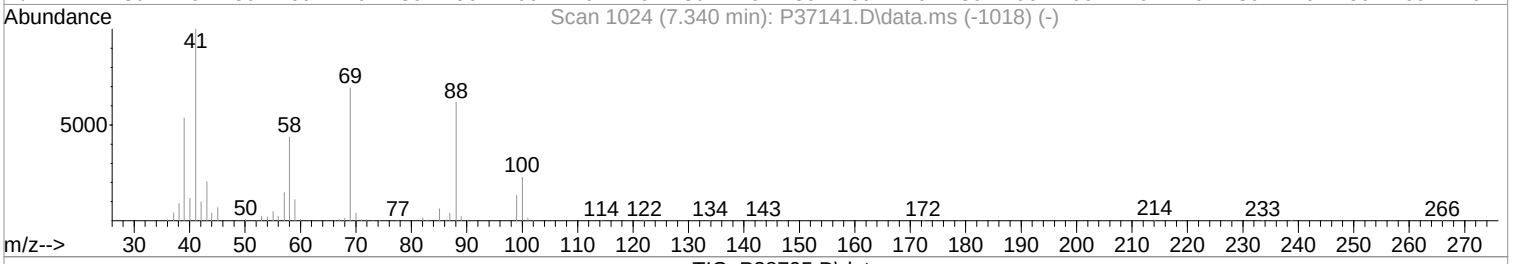
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:00:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38705.D\data.ms

(58) 1,4-Dioxane

7.346min (+0.000) 762.80 ppb m

response 61491

Ion	Exp%	Act%
88.00	100	100
58.00	70.60	92.64#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

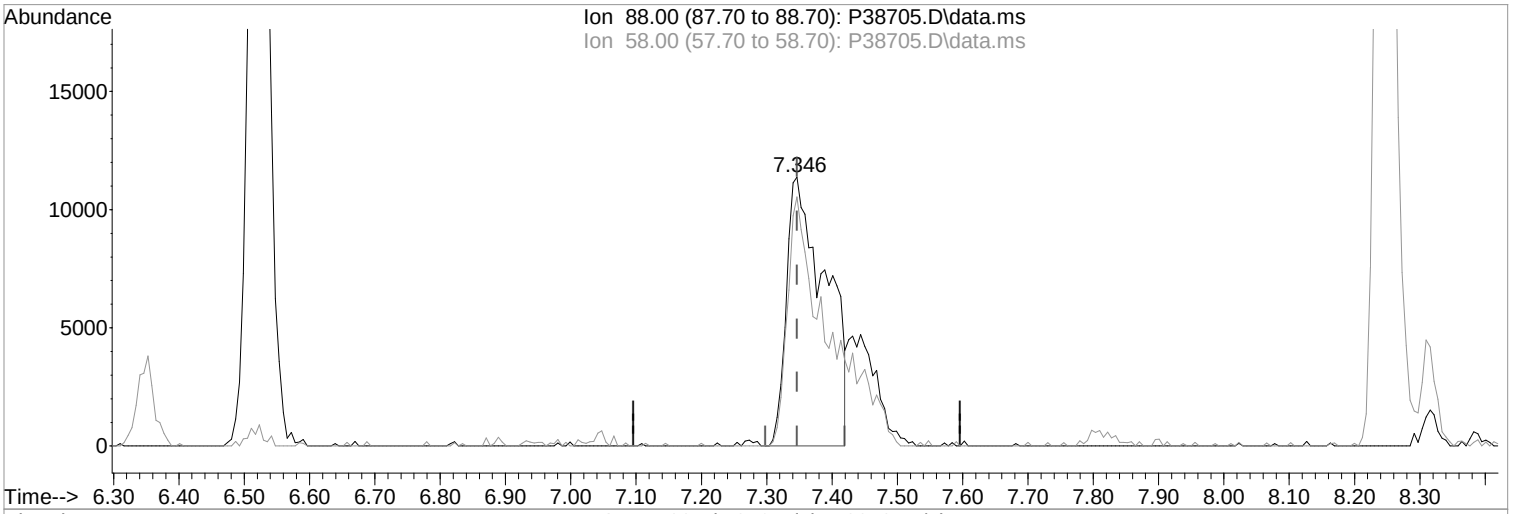
Poor integration.

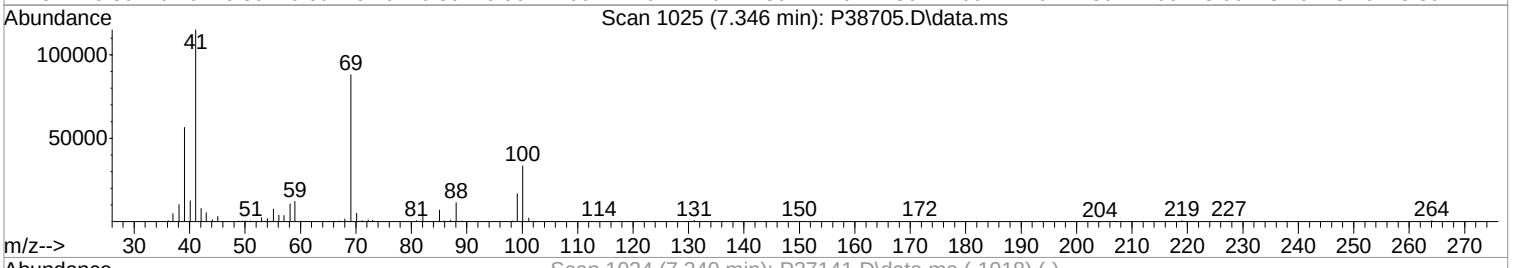
08/20/20

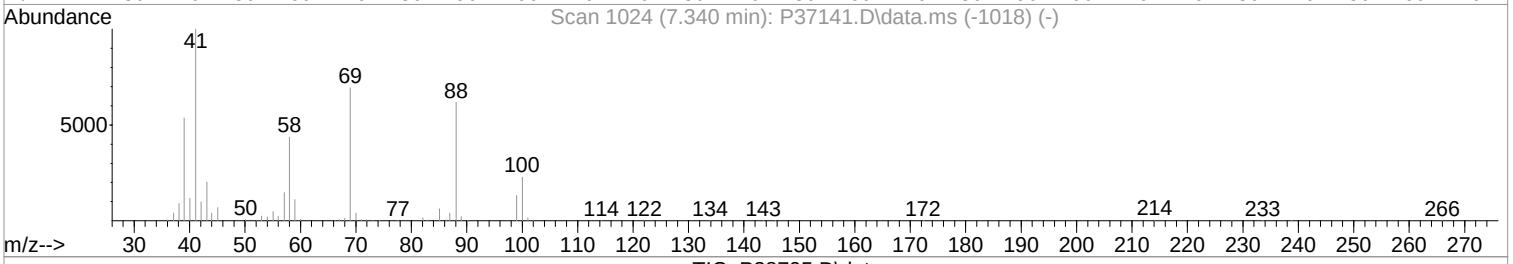
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:00:38 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38705.D\data.ms

(58) 1,4-Dioxane

7.346min (+0.000) 586.48 ppb

response 47278

Ion	Exp%	Act%
88.00	100	100
58.00	70.60	92.64#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

08/20/20

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:03:16 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
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	102	-0.01
2	P	Dichlorodifluoromethane	50.0000	55.6912	-11.4	100	0.00
3	P	Chloromethane	50.0000	52.9277	-5.9	100	0.00
4	P	Vinyl Chloride	50.0000	58.4259	-16.9	106	0.00
5	P	Bromomethane	50.0000	39.0165	22.0#	91	0.00
6	P	Chloroethane	50.0000	59.1999	-18.4	126	0.00
7		Freon 21	50.0000	53.8397	-7.7	103	0.00
8	P	Trichlorofluoromethane	50.0000	51.2662	-2.5	98	0.00
9		Diethyl Ether	50.0000	54.2872	-8.6	98	0.00
10		Freon 123a	50.0000	49.9880	0.0	98	0.00
11		Freon 123	50.0000	47.1909	5.6	96	0.00
12		Acrolein	250.0000	264.3525	-5.7	103	0.00
13	P	1,1-Diclethene	50.0000	49.1690	1.7	94	0.00
14	P	Freon 113	50.0000	50.0515	-0.1	97	0.00
15	P	Acetone	50.0000	33.0226	34.0#	74	0.00
16		2-Propanol	1000.0000	918.8722	8.1	90	-0.01
17		Iodomethane	50.0000	73.1577	-46.3#	102	0.00
18	P	Carbon Disulfide	50.0000	51.6198	-3.2	98	0.00
19		Acetonitrile	250.0000	170.5091	31.8#	57	0.00
20		Allyl Chloride	50.0000	47.2296	5.5	93	0.00
21	P	Methyl Acetate	50.0000	42.1746	15.7	84	-0.01
22	P	Methylene Chloride	50.0000	47.1035	5.8	94	0.00
23		TBA	1000.0000	844.5659	15.5	84	-0.01
24		Acrylonitrile	250.0000	257.8707	-3.1	101	0.00
25	P	Methyl-t-Butyl Ether	50.0000	48.8369	2.3	91	0.00
26	P	trans-1,2-Dichloroethene	50.0000	50.5377	-1.1	94	0.00
27		Halothane	-1.0000	0.0000	0.0	0	-4.17#
28	P	1,1-Diclethane	50.0000	46.7103	6.6	90	0.00
29		Vinyl Acetate	50.0000	59.6994	-19.4	115	0.00
30		DIPE	50.0000	56.5027	-13.0	106	0.00
31		2-Chloro-1,3-Butadiene	50.0000	53.8309	-7.7	100	0.00
32		ETBE	50.0000	54.7766	-9.6	103	0.00
33		2,2-Dichloropropane	50.0000	48.5708	2.9	90	0.00
34	P	cis-1,2-Dichloroethene	50.0000	45.8555	8.3	89	0.00
35	P	2-Butanone	50.0000	39.5549	20.9#	79	-0.01
36		Propionitrile	250.0000	244.3973	2.2	99	-0.01
37		Bromochloromethane	50.0000	47.7151	4.6	95	0.00
38		Methacrylonitrile	50.0000	43.7720	12.5	86	0.00
39		Tetrahydrofuran	50.0000	38.2254	23.5#	78	0.00
40	P	Chloroform	50.0000	49.9385	0.1	94	-0.01
41	P	1,1,1-Trichloroethane	50.0000	47.7421	4.5	89	-0.01
42		TAME	50.0000	52.5447	-5.1	99	0.00
43	I	1,4-Difluorobenzene	50.0000	50.0000	0.0	99	0.00
44	P	Cyclohexane	50.0000	48.8083	2.4	93	0.00
45	s	surr4,Dibrflmethane	50.0000	48.3929	3.2	92	-0.01
46	P	Carbontetrachloride	50.0000	50.9911	-2.0	87	0.00
47		1,1-Dichloropropene	50.0000	50.1566	-0.3	94	-0.01
48	s	surr1,1,2-dichloroethane-d4	50.0000	47.6754	4.6	93	-0.01
49	P	Benzene	50.0000	51.0863	-2.2	95	-0.01
50	P	1,2-Dichloroethane	50.0000	47.1117	5.8	90	0.00
51		Iso-Butyl Alcohol	1000.0000	856.1947	14.4	81	-0.02

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:03:16 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
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	60.4688	-20.9#	112	0.00
53		1-Butanol	2500.0000	2227.5228	10.9	82	-0.01
54	P	Trichloroethene	50.0000	46.1910	7.6	91	0.00
55	P	Methylcyclohexane	50.0000	56.6130	-13.2	106	0.00
56	P	1,2-Diclpropane	50.0000	50.2998	-0.6	95	0.00
57		Dibromomethane	50.0000	48.2162	3.6	93	0.00
58		1,4-Dioxane	1000.0000	762.7958	23.7#	75	0.00
59		Methyl Methacrylate	50.0000	51.0022	-2.0	94	0.00
60	P	Bromodichloromethane	50.0000	48.0851	3.8	84	0.00
61		2-Nitropropane	-1.0000	0.0000	0.0	81	0.00
62		2-Chloroethylvinyl Ether	50.0000	8.9139	82.2#	17	0.00
63	P	cis-1,3-Dichloropropene	50.0000	50.8400	-1.7	91	0.00
64	P	4-Methyl-2-pentanone	50.0000	51.5792	-3.2	97	0.00
65	s	SURR3,Toluene-d8	50.0000	49.9890	0.0	96	0.00
66	P	Toluene	50.0000	53.7292	-7.5	97	0.00
67	P	trans-1,3-Dichloropropene	50.0000	50.7260	-1.5	92	0.00
68		Ethyl Methacrylate	50.0000	53.7607	-7.5	97	0.00
69	P	1,1,2-Trichloroethane	50.0000	50.0396	-0.1	94	0.00
70	s	SURR2,BFB	50.0000	50.1662	-0.3	98	0.00
71	I	d5-Chlorobenzene	50.0000	50.0000	0.0	102	0.00
72	P	Tetrachloroethene	50.0000	48.6752	2.6	96	0.00
73	P	2-Hexanone	50.0000	49.8006	0.4	98	0.00
74		1,3-Dichloropropane	50.0000	48.1799	3.6	93	0.00
75	P	Dibromochloromethane	50.0000	47.2294	5.5	85	0.00
76		N-Butyl Acetate	50.0000	51.6364	-3.3	96	0.00
77	P	1,2-Dibromoethane	50.0000	48.0362	3.9	92	0.00
78	P	Chlorobenzene	50.0000	49.2984	1.4	97	0.00
79		3-CBTF	50.0000	60.1432	-20.3#	114	0.00
80		4-CBTF	50.0000	59.3772	-18.8	113	0.00
81		1,1,1,2-Tetrachloroethane	50.0000	49.6399	0.7	95	0.00
82	P	Ethylbenzene	50.0000	51.8451	-3.7	100	0.00
83	P	(m+p)Xylene	100.0000	107.5686	-7.6	99	0.00
84	P	o-Xylene	50.0000	52.8969	-5.8	97	0.00
85	P	Styrene	50.0000	55.8018	-11.6	100	0.00
86	I	1,4-Dichlorobenzene-d4	50.0000	50.0000	0.0	99	0.00
87	P	Bromoform	50.0000	43.5189	13.0	83	0.00
88		2-CBTF	50.0000	56.2992	-12.6	112	0.00
89	P	Isopropylbenzene	50.0000	53.5598	-7.1	102	0.00
90		Cyclohexanone	1000.0000	723.2811	27.7#	70	0.00
91		trans-1,4-Dichloro-2-Butene	50.0000	50.8111	-1.6	98	0.00
92	P	1,1,2,2-Tetrachloroethane	50.0000	48.6689	2.7	94	0.00
93		Bromobenzene	50.0000	50.0038	-0.0	100	0.00
94		1,2,3-Trichloropropane	50.0000	45.7356	8.5	90	0.00
95		n-Propylbenzene	50.0000	57.7683	-15.5	104	0.00
96		2-Chlorotoluene	50.0000	53.2559	-6.5	102	0.00
97		3-Chlorotoluene	50.0000	56.7057	-13.4	112	0.00
98		4-Chlorotoluene	50.0000	53.1410	-6.3	100	0.00
99		1,3,5-Trimethylbenzene	50.0000	54.7893	-9.6	102	0.00
100		tert-Butylbenzene	50.0000	54.3714	-8.7	104	0.00
101		1,2,4-Trimethylbenzene	50.0000	55.2760	-10.6	102	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:03:16 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
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	60.8053	-21.6#	120	0.00
103		sec-Butylbenzene	50.0000	57.4719	-14.9	105	0.00
104		p-Isopropyltoluene	50.0000	58.2456	-16.5	107	0.00
105	P	1,3-Dclbenz	50.0000	51.3587	-2.7	103	0.00
106	P	1,4-Dclbenz	50.0000	51.7718	-3.5	102	0.00
107		2,4-DCBTF	50.0000	58.2494	-16.5	114	0.00
108		2,5-DCBTF	50.0000	60.7117	-21.4#	121	0.00
109		n-Butylbenzene	50.0000	58.4659	-16.9	105	0.00
110	P	1,2-Dclbenz	50.0000	50.7230	-1.4	99	0.00
111	P	1,2-Dibromo-3-chloropropane	50.0000	44.7180	10.6	84	0.00
112		Trielution Dichlorotoluene	150.0000	173.8599	-15.9	109	0.00
113		1,3,5 Trichlorobenzene	50.0000	59.3738	-18.7	114	0.00
114		Coelution Dichlorotoluene	100.0000	118.8584	-18.9	107	0.00
115	P	1,2,4-Tcbenzene	50.0000	56.0156	-12.0	103	0.00
116		Hexachlorobt	50.0000	54.9689	-9.9	104	0.00
117		Naphthalen	50.0000	57.3738	-14.7	97	0.00
118		1,2,3-Tclbenzene	50.0000	54.8755	-9.8	104	0.00
119		2,4,5-Trichlorotolene	50.0000	64.2329	-28.5#	116	0.00
120		2,3,6-Trichlorotoluene	50.0000	63.6748	-27.3#	114	0.00

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:03:16 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.444	168	332870	50.00	ppb		-0.01
43) 1,4-Difluorobenzene	6.523	114	509487	50.00	ppb		0.00
71) d5-Chlorobenzene	9.797	117	464662	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	241579	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.316	113	141576	48.39	ppb		-0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.78%				
48) surr1,1,2-dichloroetha...	5.847	65	193089	47.68	ppb		-0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 95.36%				
65) SURR3,Toluene-d8	8.316	98	679692	49.99	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.98%				
70) SURR2,BFB	10.870	95	251336	50.17	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.34%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.195	85	206263	55.69	ppb		96
3) Chloromethane	1.323	50	244744	52.93	ppb		96
4) Vinyl Chloride	1.396	62	253287	58.43	ppb		99
5) Bromomethane	1.634	94	134909	39.02	ppb		92
6) Chloroethane	1.707	64	141207	59.20	ppb		91
7) Freon 21	1.860	67	297400	53.84	ppb		99
8) Trichlorofluoromethane	1.902	101	228958	51.27	ppb		93
9) Diethyl Ether	2.140	59	175203	54.29	ppb		94
10) Freon 123a	2.146	67	190373	49.99	ppb		97
11) Freon 123	2.207	83	212079	47.19	ppb		99
12) Acrolein	2.262	56	231056	264.35	ppb		98
13) 1,1-Diclethene	2.329	96	126565	49.17	ppb		98
14) Freon 113	2.329	101	150129	50.05	ppb		94
15) Acetone	2.402	43	67655m	33.02	ppb		
16) 2-Propanol	2.536	45	393620m	918.87	ppb		
17) Iodomethane	2.469	142	210723	73.16	ppb		96
18) Carbon Disulfide	2.524	76	434681	51.62	ppb		99
19) Acetonitrile	2.664	40	40532m	170.51	ppb		
20) Allyl Chloride	2.670	76	86156	47.23	ppb	#	76
21) Methyl Acetate	2.701	43	208768	42.17	ppb		96
22) Methylene Chloride	2.792	84	172827	47.10	ppb		95
23) TBA	2.945	59	585919	844.57	ppb		100
24) Acrylonitrile	3.079	53	551834m	257.87	ppb		
25) Methyl-t-Butyl Ether	3.091	73	581809	48.84	ppb		97
26) trans-1,2-Dichloroethene	3.079	96	151515	50.54	ppb		98
28) 1,1-Diclethane	3.591	63	308682	46.71	ppb		96
29) Vinyl Acetate	3.688	86	33912	59.70	ppb	#	67
30) DIPE	3.701	45	652479	56.50	ppb		94
31) 2-Chloro-1,3-Butadiene	3.707	53	286301	53.83	ppb		96
32) ETBE	4.231	59	590167	54.78	ppb		96
33) 2,2-Dichloropropane	4.426	77	236240	48.57	ppb		97
34) cis-1,2-Dichloroethene	4.444	96	176163	45.86	ppb		95
35) 2-Butanone	4.518	43	102365	39.55	ppb		96
36) Propionitrile	4.633	54	226797m	244.40	ppb		
37) Bromochloromethane	4.853	130	108439	47.72	ppb		95
38) Methacrylonitrile	4.889	67	96221	43.77	ppb		93
39) Tetrahydrofuran	4.944	42	76207	38.23	ppb		89
40) Chloroform	5.030	83	287175	49.94	ppb		93
41) 1,1,1-Trichloroethane	5.298	97	229761	47.74	ppb		97

1st KR 08/20/20
2nd BA 08/25/20

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:03:16 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.127	73	563925	52.54	ppb		98
44) Cyclohexane	5.365	41	163064	48.81	ppb		92
46) Carbontetrachloride	5.560	117	170588	50.99	ppb		98
47) 1,1-Dichloropropene	5.578	75	237556	50.16	ppb		97
49) Benzene	5.901	78	751484	51.09	ppb		97
50) 1,2-Dichloroethane	5.968	62	242187	47.11	ppb		98
51) Iso-Butyl Alcohol	5.956	43	270159	856.19	ppb		89
52) n-Heptane	6.353	43	275670	60.47	ppb		99
53) 1-Butanol	6.901	56	437385	2227.52	ppb		96
54) Trichloroethene	6.834	130	168599	46.19	ppb		98
55) Methylcyclohexane	7.048	55	256656	56.61	ppb		95
56) 1,2-Diclpropane	7.133	63	195884	50.30	ppb		98
57) Dibromomethane	7.273	93	108333	48.22	ppb		97
58) 1,4-Dioxane	7.346	88	61491m	762.80	ppb		
59) Methyl Methacrylate	7.352	69	173053	51.00	ppb		97
60) Bromodichloromethane	7.499	83	198130	48.09	ppb		97
62) 2-Chloroethylvinyl Ether	7.907	63	15134	8.91	ppb		77
63) cis-1,3-Dichloropropene	8.029	75	285782	50.84	ppb		99
64) 4-Methyl-2-pentanone	8.249	43	270849	51.58	ppb		99
66) Toluene	8.389	91	836990	53.73	ppb		98
67) trans-1,3-Dichloropropene	8.669	75	259311	50.73	ppb		96
68) Ethyl Methacrylate	8.797	69	307660	53.76	ppb		98
69) 1,1,2-Trichloroethane	8.858	97	174047	50.04	ppb		95
72) Tetrachloroethene	8.968	164	138125	48.68	ppb		98
73) 2-Hexanone	9.151	43	205673	49.80	ppb		98
74) 1,3-Dichloropropane	9.029	76	314837	48.18	ppb		98
75) Dibromochloromethane	9.248	129	136477	47.23	ppb		96
76) N-Butyl Acetate	9.291	43	395650	51.64	ppb		98
77) 1,2-Dibromoethane	9.346	107	170848	48.04	ppb		93
78) Chlorobenzene	9.827	112	510874	49.30	ppb		96
79) 3-CBTF	9.840	180	288601	60.14	ppb		93
80) 4-CBTF	9.895	180	256309	59.38	ppb		96
81) 1,1,1,2-Tetrachloroethane	9.913	131	158279	49.64	ppb		99
82) Ethylbenzene	9.937	106	281925	51.85	ppb		96
83) (m+p)Xylene	10.053	106	700309	107.57	ppb		99
84) o-Xylene	10.407	106	336202	52.90	ppb		98
85) Styrene	10.425	104	602556	55.80	ppb		99
87) Bromoform	10.583	173	86584	43.52	ppb		96
88) 2-CBTF	10.657	180	275918	56.30	ppb		99
89) Isopropylbenzene	10.736	105	893244	53.56	ppb		97
90) Cyclohexanone	10.827	55	724847	723.28	ppb		96
91) trans-1,4-Dichloro-2-B...	11.065	53	70196	50.81	ppb		93
92) 1,1,2,2-Tetrachloroethane	11.016	83	262381	48.67	ppb		97
93) Bromobenzene	10.992	156	217585	50.00	ppb		98
94) 1,2,3-Trichloropropane	11.041	110	79735	45.74	ppb	#	87
95) n-Propylbenzene	11.089	91	1105498	57.77	ppb		99
96) 2-Chlorotoluene	11.156	91	661946	53.26	ppb		98
97) 3-Chlorotoluene	11.211	91	674140	56.71	ppb		99
98) 4-Chlorotoluene	11.254	91	739547	53.14	ppb		97
99) 1,3,5-Trimethylbenzene	11.242	105	780692	54.79	ppb		99
100) tert-Butylbenzene	11.510	119	648512	54.37	ppb		96
101) 1,2,4-Trimethylbenzene	11.553	105	792701	55.28	ppb		99
102) 3,4-DCBTF	11.614	214	238871	60.81	ppb		95
103) sec-Butylbenzene	11.693	105	983267	57.47	ppb		99
104) p-Isopropyltoluene	11.815	119	859123	58.25	ppb		98
105) 1,3-Dclbenz	11.784	146	437831	51.36	ppb		97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:03:16 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.858	146	449095	51.77	ppb	99
107) 2,4-DCBTF	11.906	214	214296	58.25	ppb	97
108) 2,5-DCBTF	11.949	214	244261	60.71	ppb	97
109) n-Butylbenzene	12.150	91	811831	58.47	ppb	98
110) 1,2-Dclbenz	12.156	146	438942	50.72	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.790	157	53979	44.72	ppb	97
112) Trielution Dichlorotol...	12.900	125	1205047	173.86	ppb	99
113) 1,3,5 Trichlorobenzene	12.943	180	353275	59.37	ppb	99
114) Coelution Dichlorotoluene	13.223	125	904860	118.86	ppb	99
115) 1,2,4-Tcbenzene	13.430	180	349653	56.02	ppb	99
116) Hexachlorobt	13.558	225	137719	54.97	ppb	96
117) Naphthalen	13.626	128	1046378	57.37	ppb	100
118) 1,2,3-Tclbenzene	13.808	180	354344	54.88	ppb	95
119) 2,4,5-Trichlorotolene	14.394	159	253709	64.23	ppb	97
120) 2,3,6-Trichlorotoluene	14.479	159	228427	63.67	ppb	99

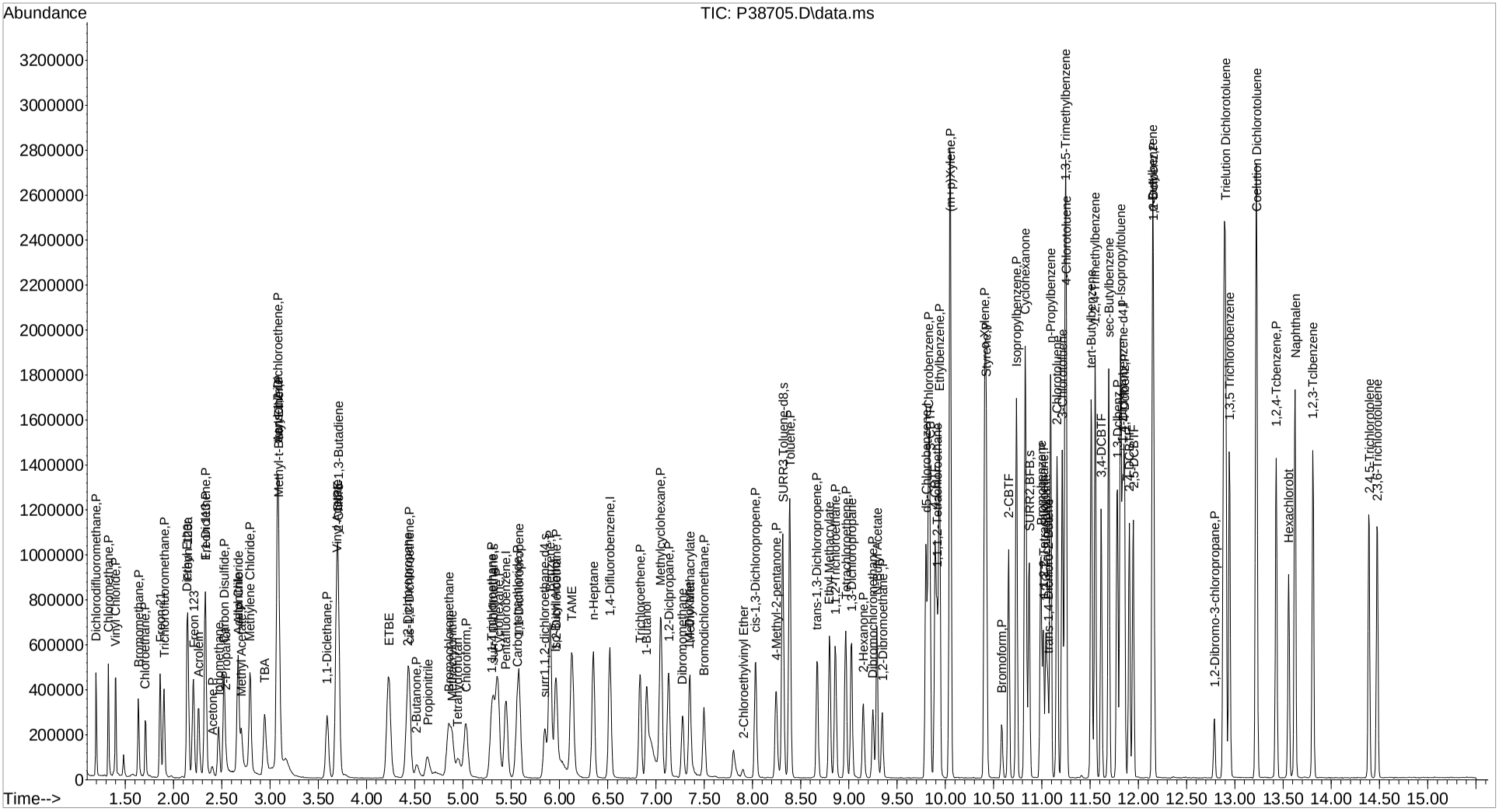
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38705.D
Acq On : 20 Aug 2020 9:45 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 20 10:03:16 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

1st 08/20/20
2nd 08/25/20

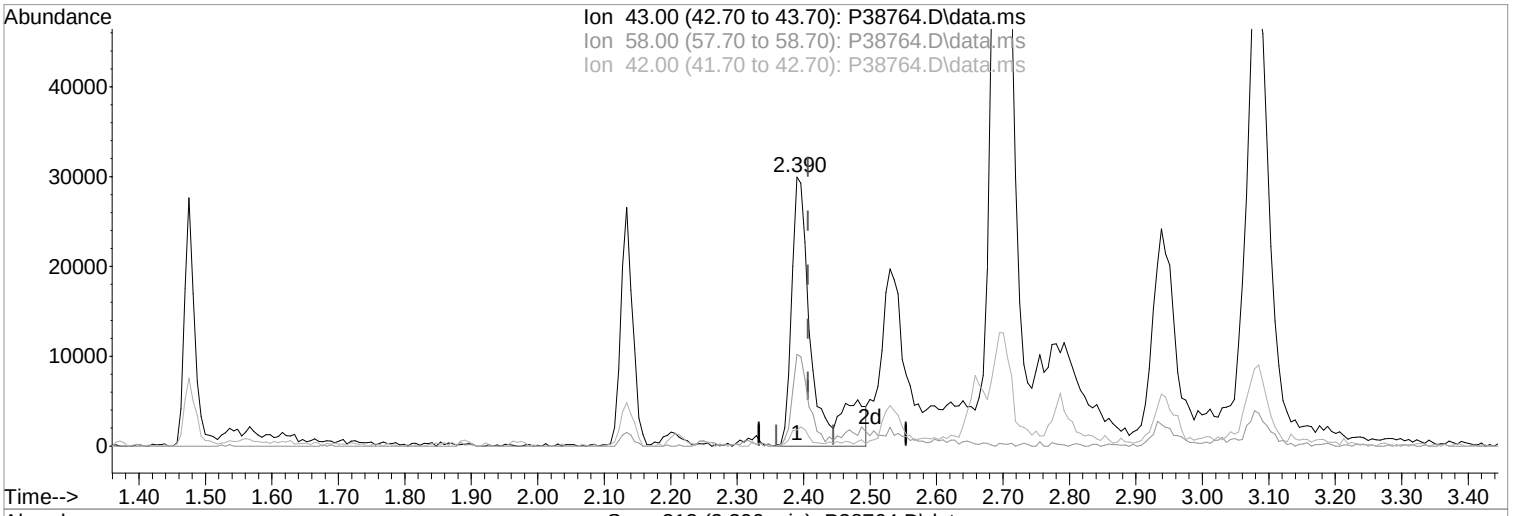


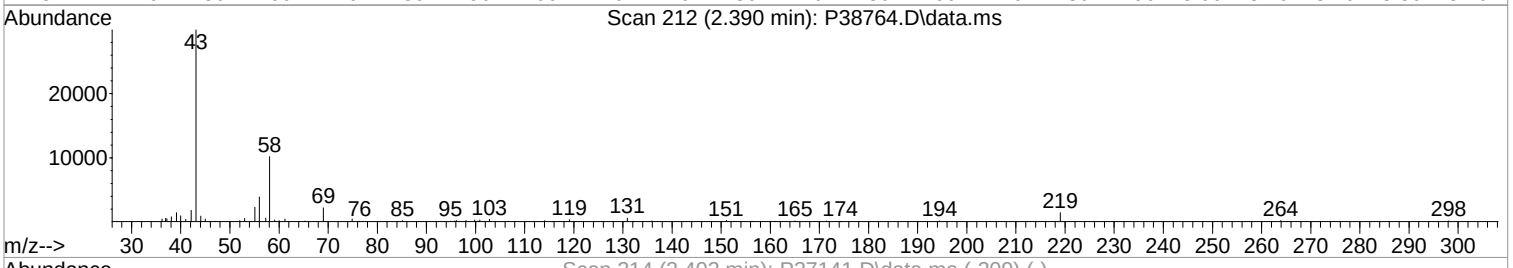
1st KR 08/21/20
2nd BA 08/27/20

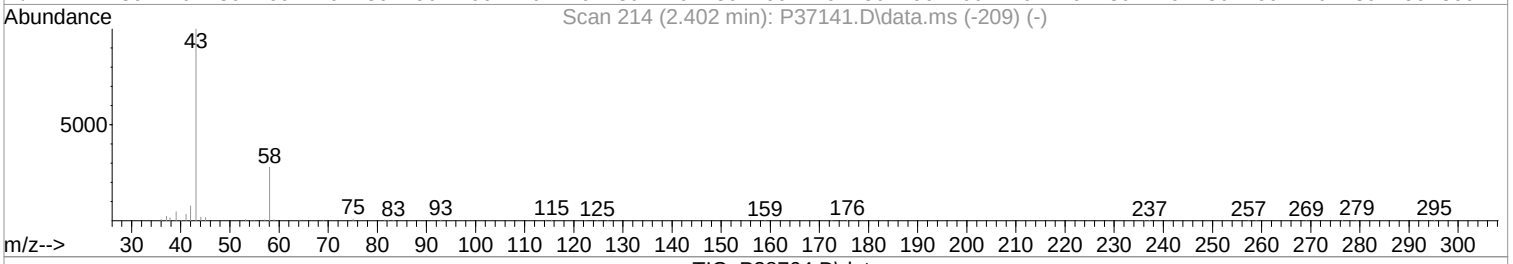
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:13:22 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38764.D\data.ms

(15) Acetone (P)

2.390min (-0.017) 34.32 ppb m

response 67341

Ion	Exp%	Act%
43.00	100	100
58.00	28.20	34.06
42.00	7.70	6.06
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

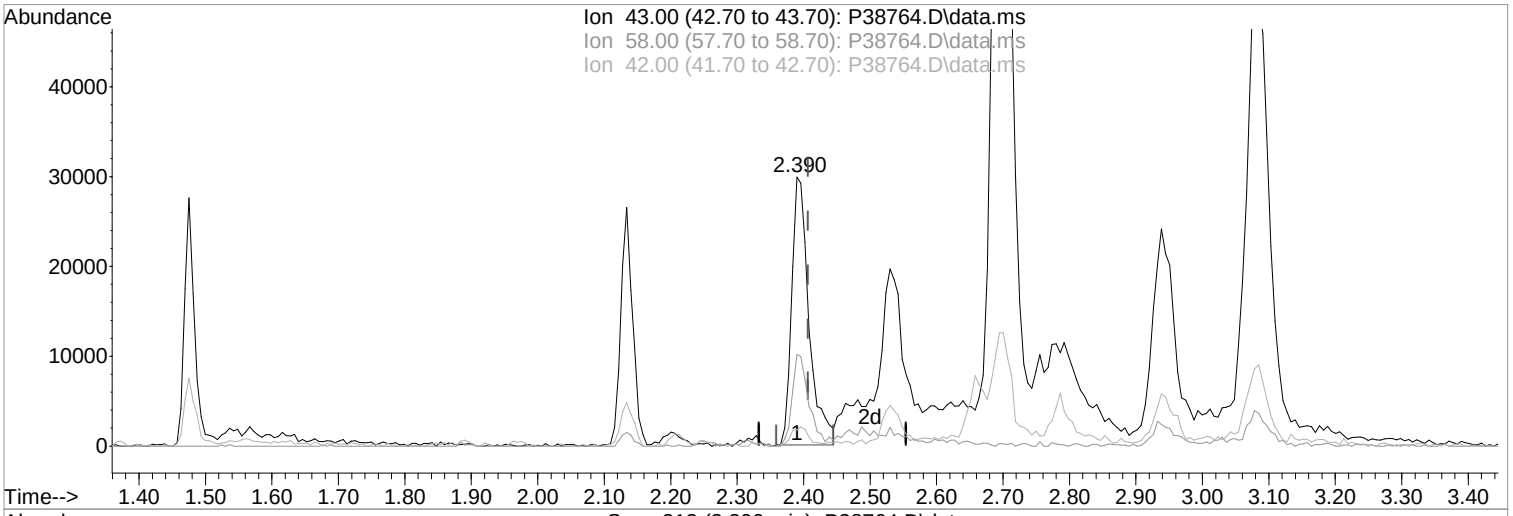
08/21/20

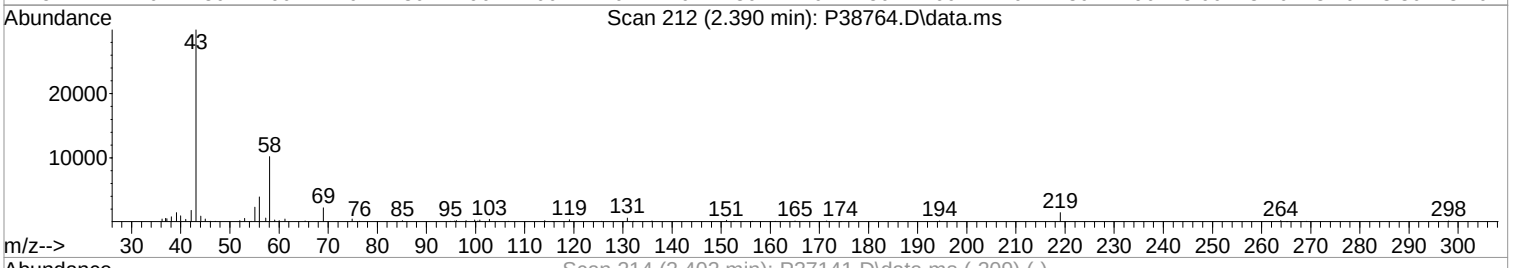
1st 08/21/20
2nd 08/27/20

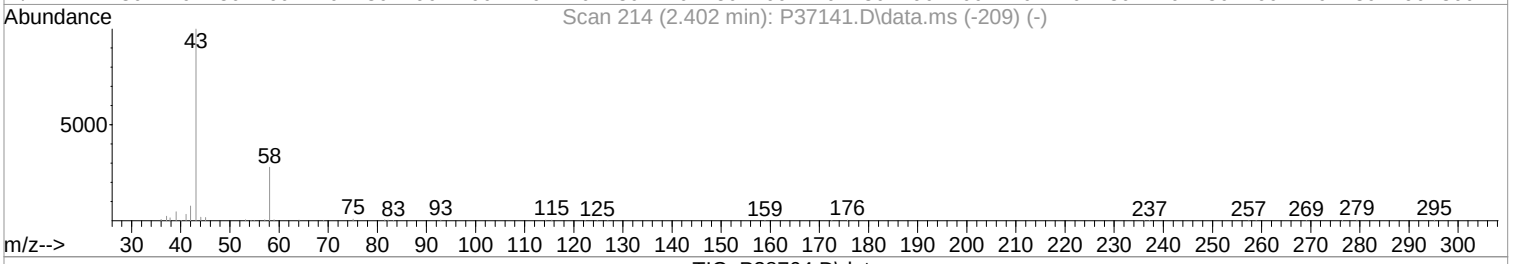
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:13:22 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38764.D\data.ms

(15) Acetone (P)

2.390min (-0.017) 26.66 ppb

response 54031

Ion	Exp%	Act%
43.00	100	100
58.00	28.20	34.06
42.00	7.70	6.06
0.00	0.00	0.00

Manual Integration:

Before

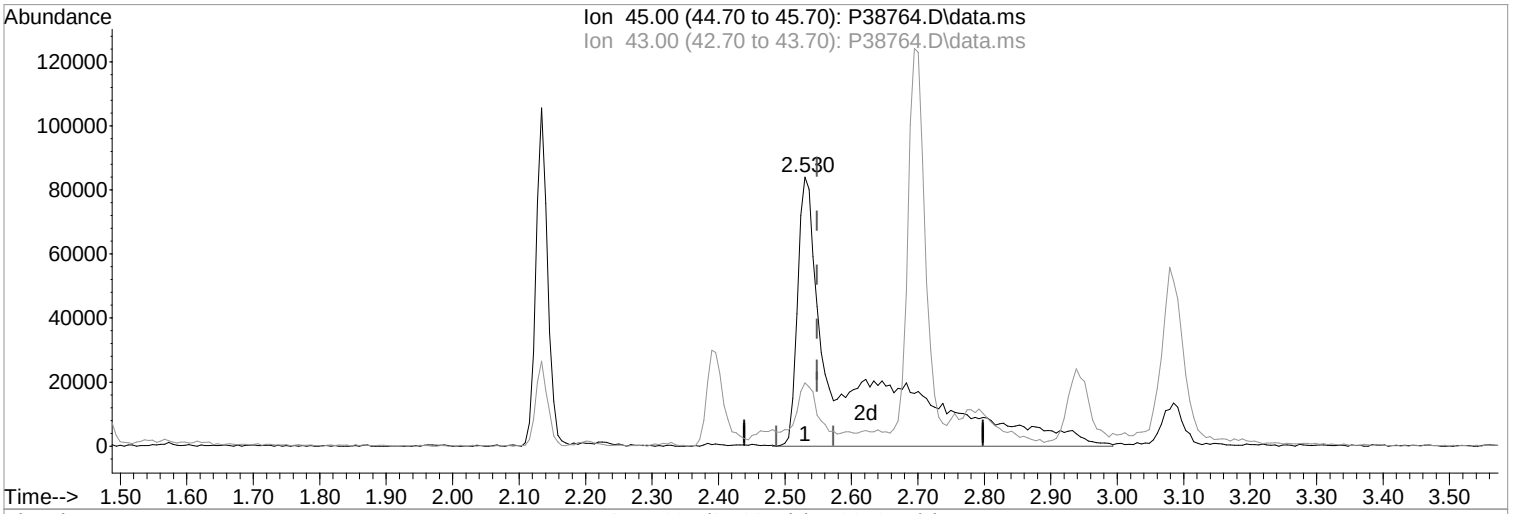
08/21/20

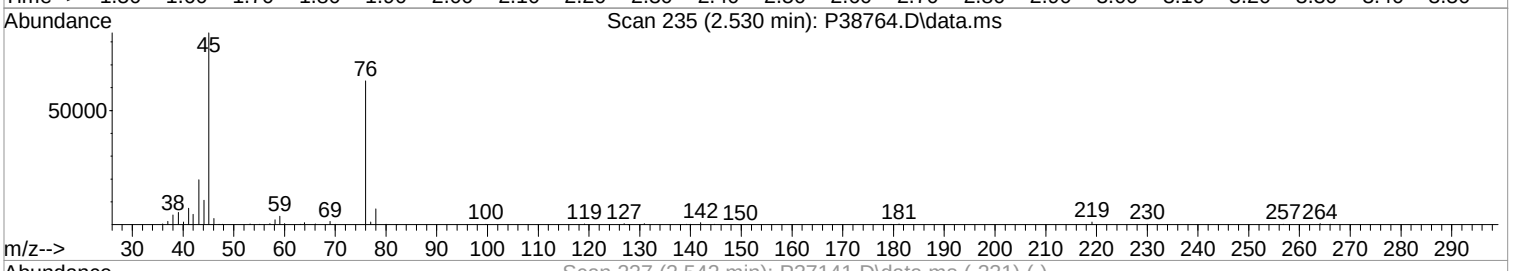
1st 08/21/20
2nd 08/27/20

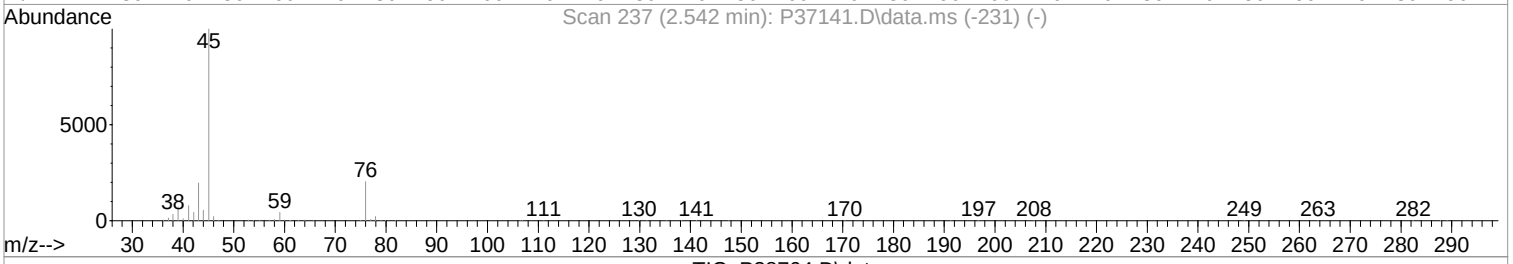
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:13:22 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38764.D\data.ms

(16) 2-Propanol

2.530min (-0.018) 1048.55 ppb m

response 432444

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	23.45
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

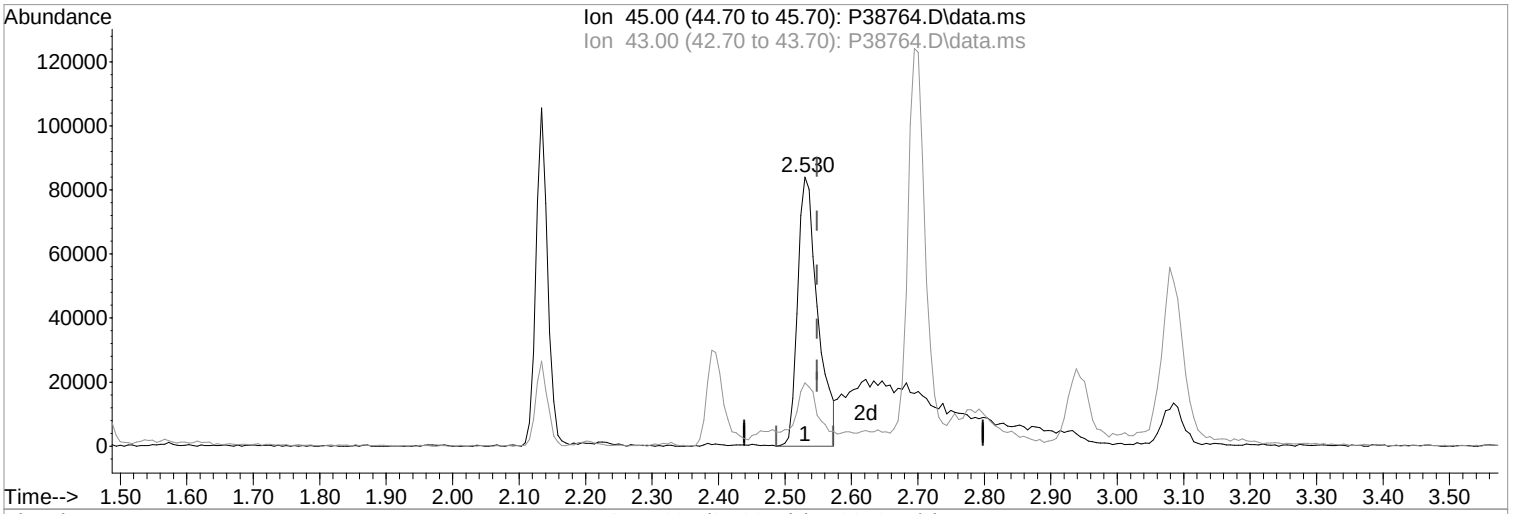
08/21/20

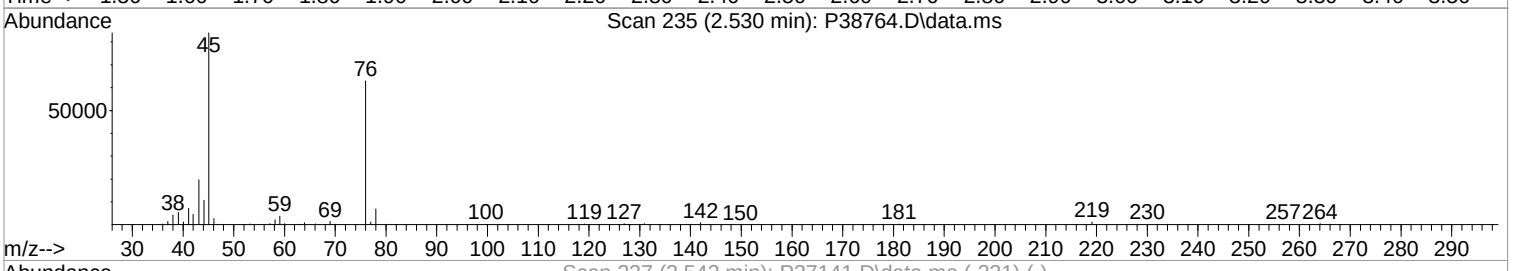
1st 08/21/20
2nd 08/27/20

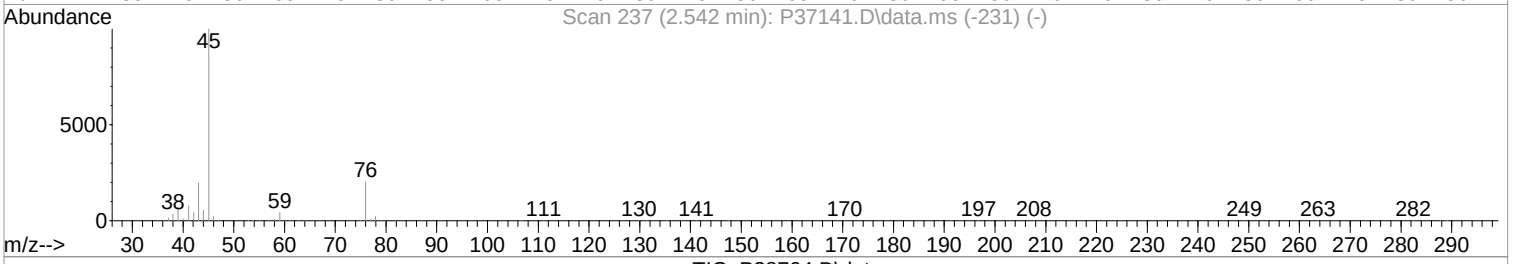
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:13:22 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38764.D\data.ms

(16) 2-Propanol

2.530min (-0.018) 428.27 ppb

response 176629

Ion	Exp%	Act%
45.00	100	100
43.00	19.70	23.45
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

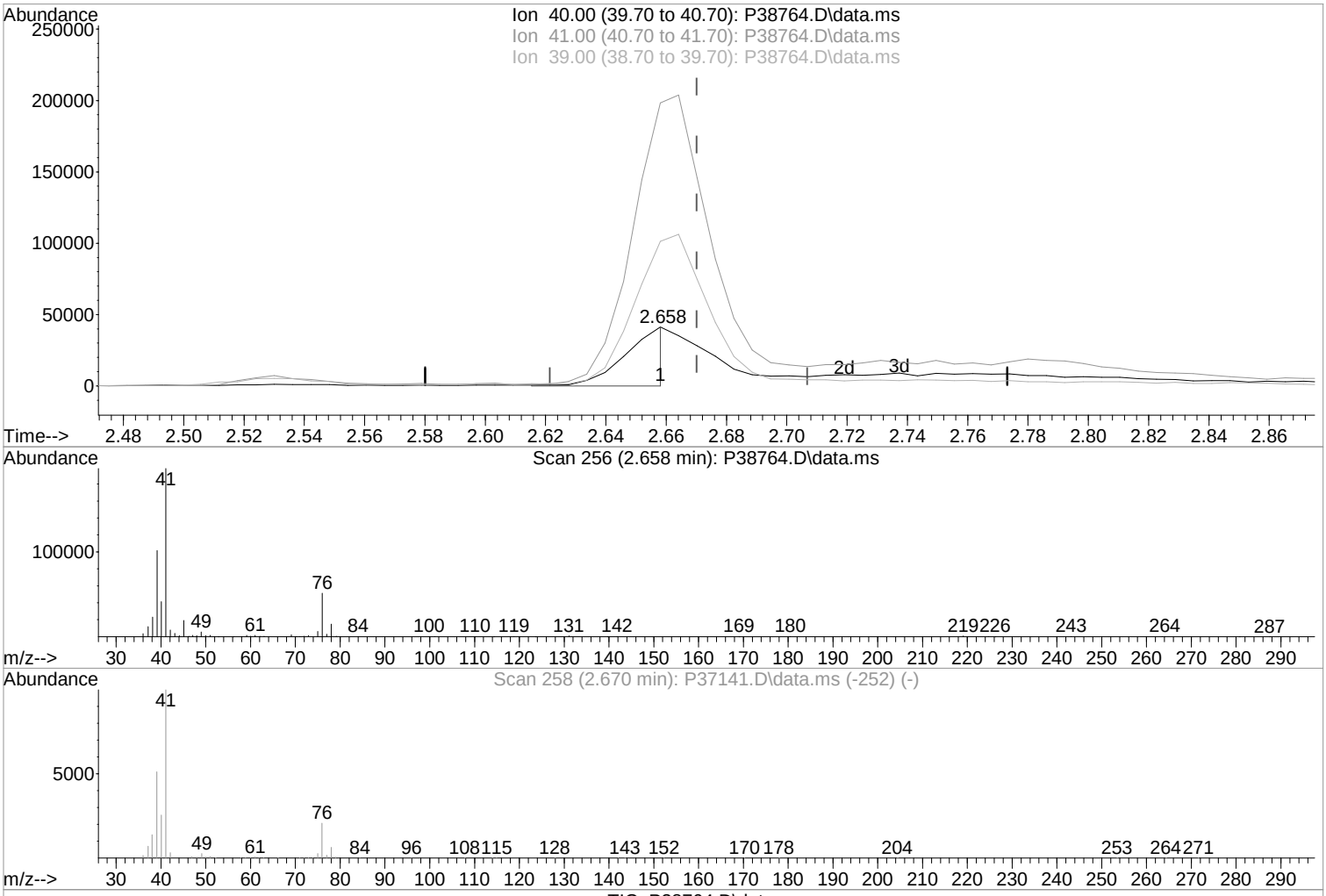
Before

08/21/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:13:22 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38764.D\data.ms

(19) Acetonitrile

2.658min (-0.012) 174.68 ppb m

response 39978

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	480.34#
39.00	200.50	245.57#
0.00	0.00	0.00

Manual Integration:

After

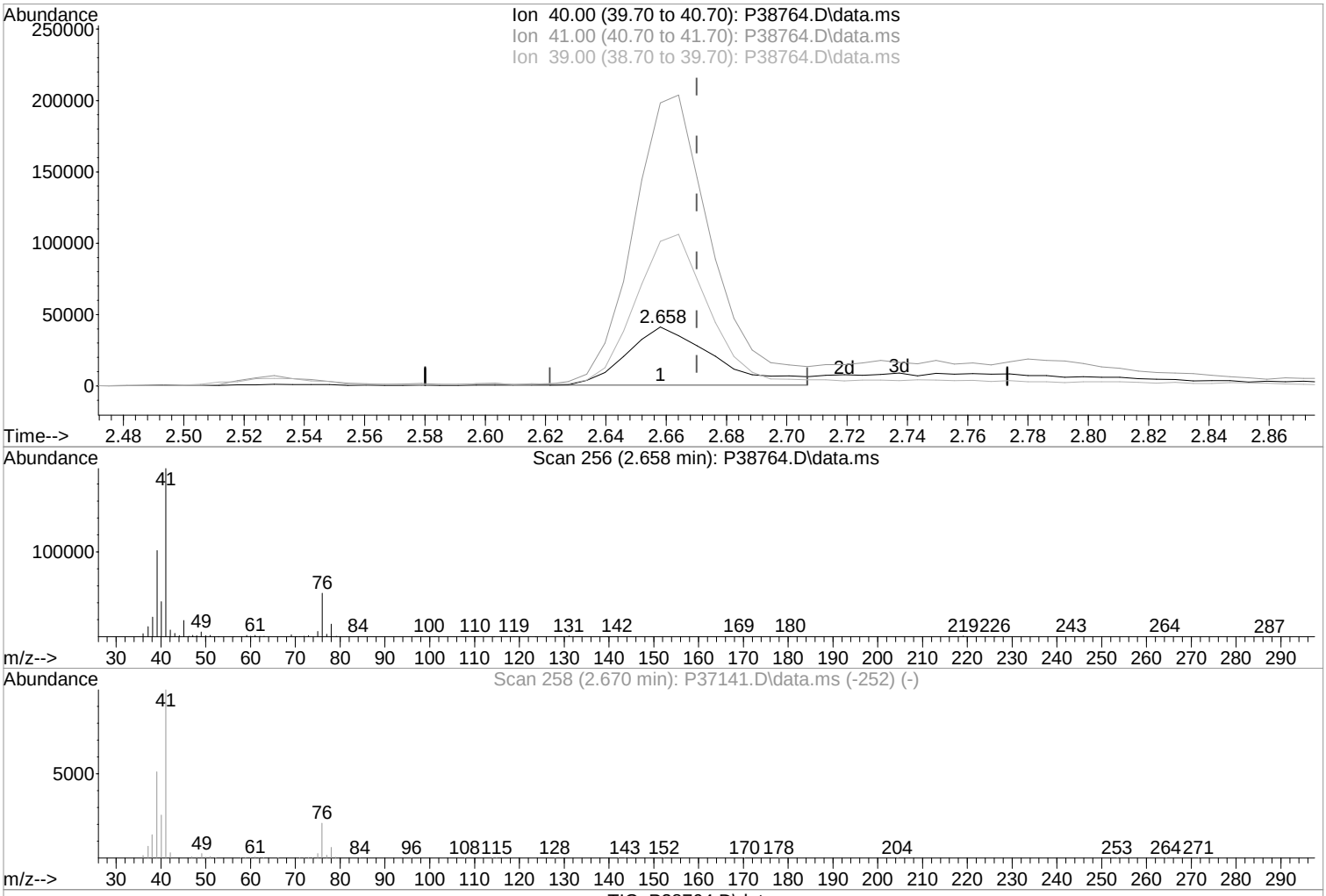
Poor integration.

08/21/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:13:22 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38764.D\data.ms

(19) Acetonitrile

2.658min (-0.012) 360.98 ppb

response 82613

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	480.34#
39.00	200.50	245.57#
0.00	0.00	0.00

Manual Integration:

Before

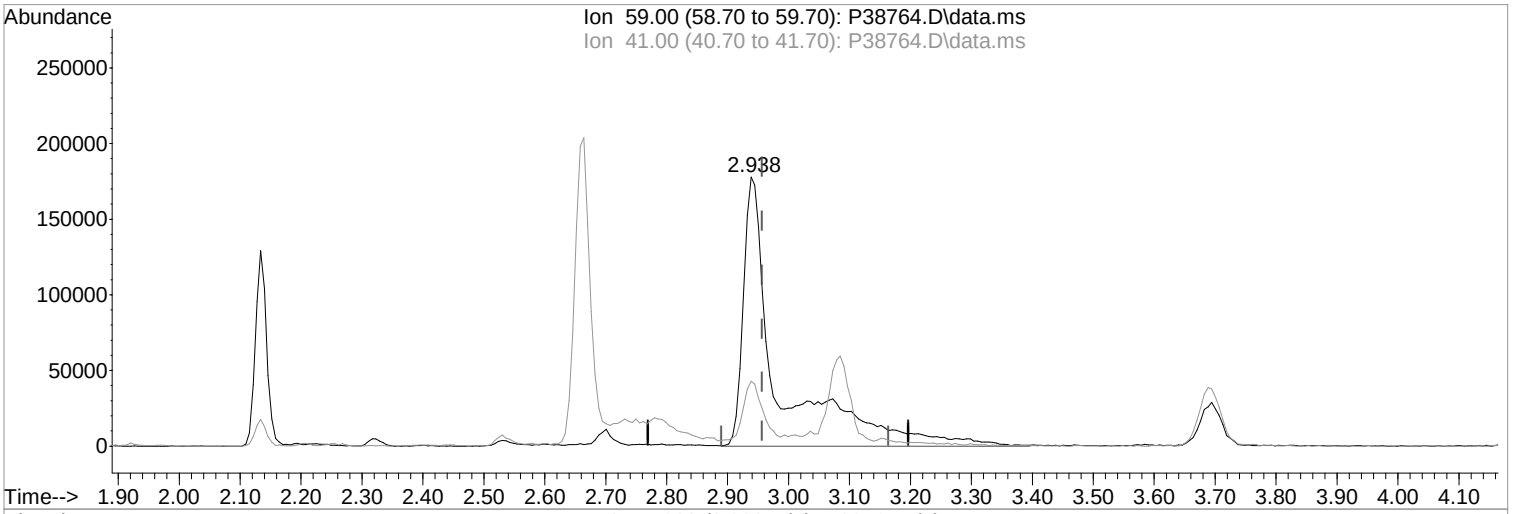
08/21/20

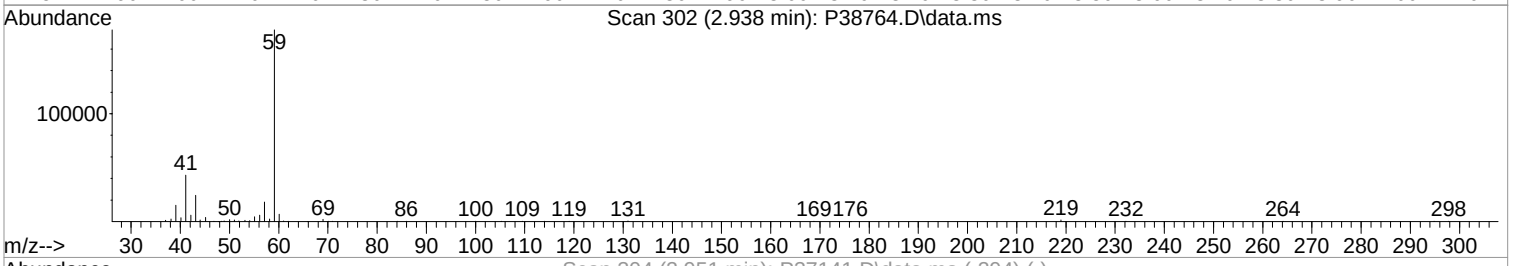
1st 08/21/20
2nd 08/27/20

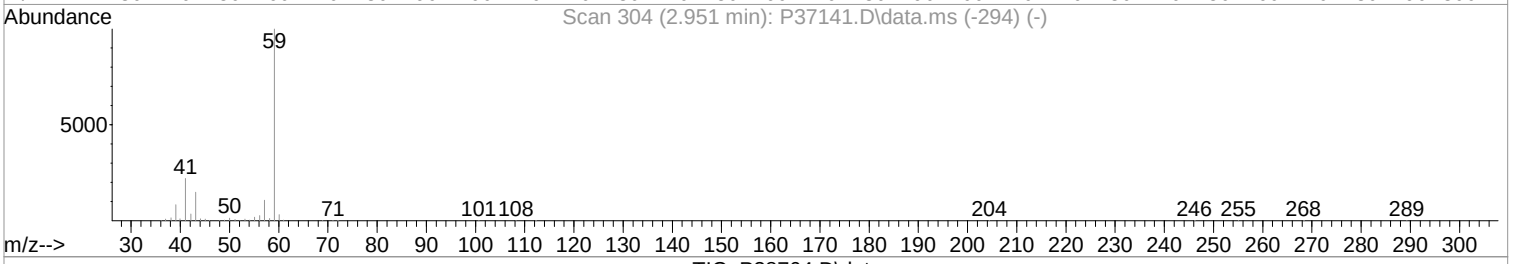
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:13:22 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38764.D\data.ms

(23) TBA

2.938min (-0.018) 1075.27 ppb m

response 718190

Ion	Exp%	Act%
59.00	100	100
41.00	22.00	24.11
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

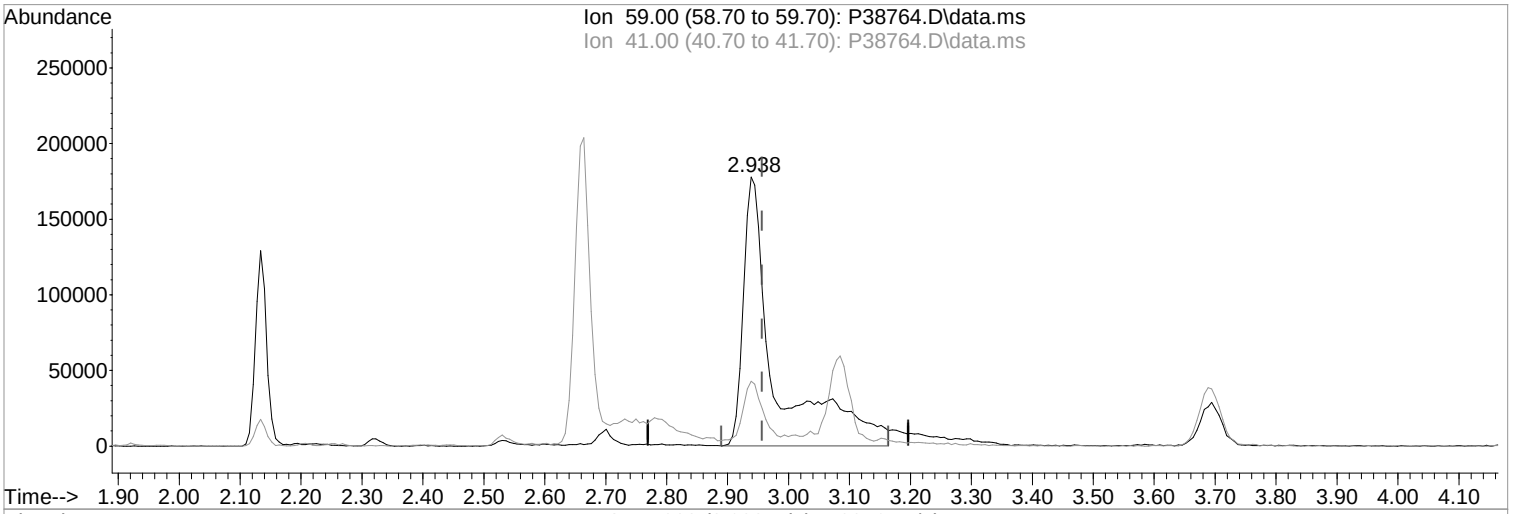
08/21/20

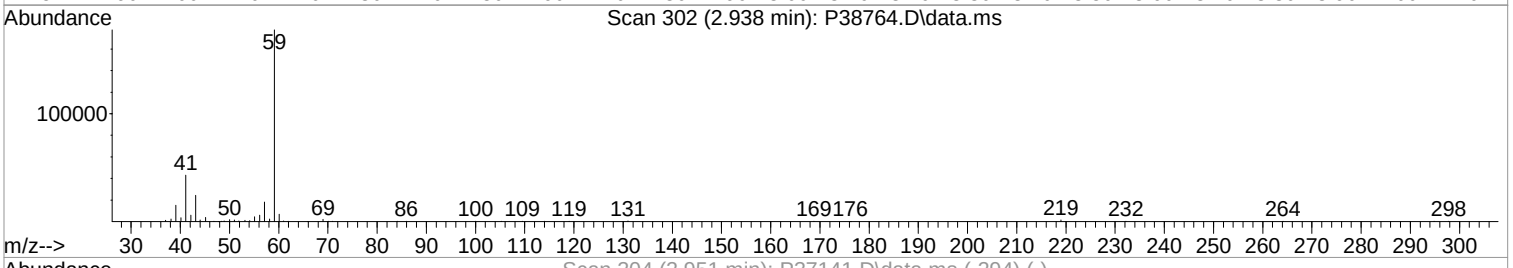
1st 08/21/20
2nd 08/27/20

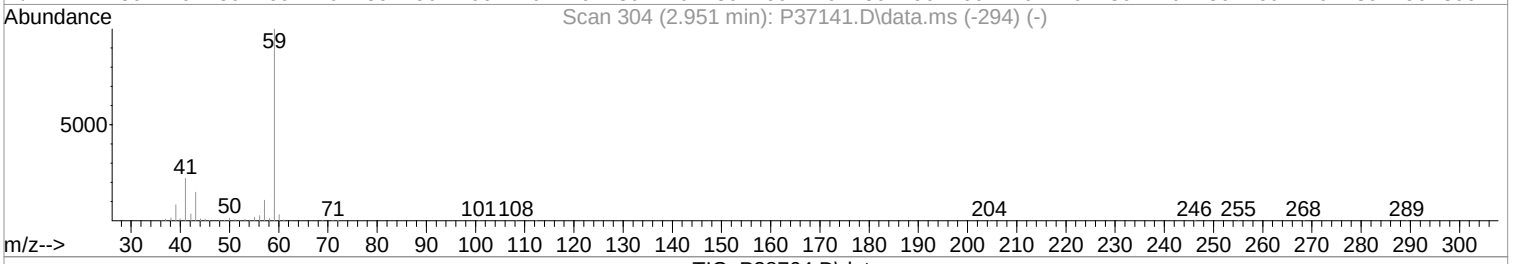
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:13:22 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38764.D\data.ms

(23) TBA

2.938min (-0.018) 975.34 ppb

response 651444

Ion	Exp%	Act%
59.00	100	100
41.00	22.00	24.11
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

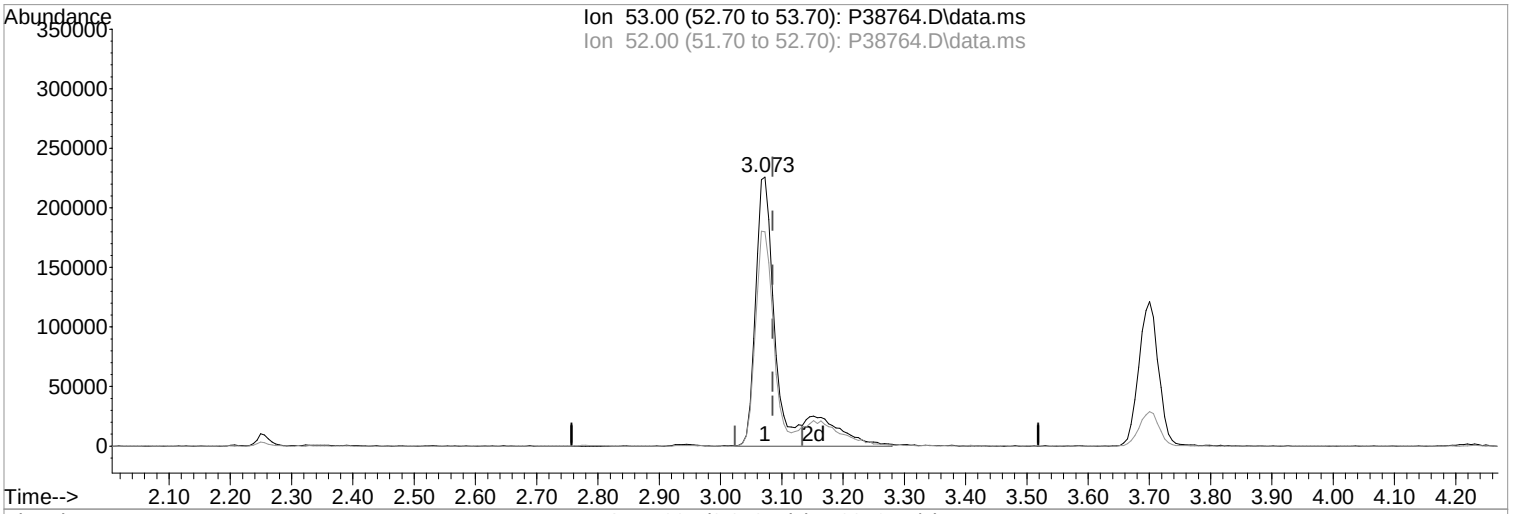
08/21/20

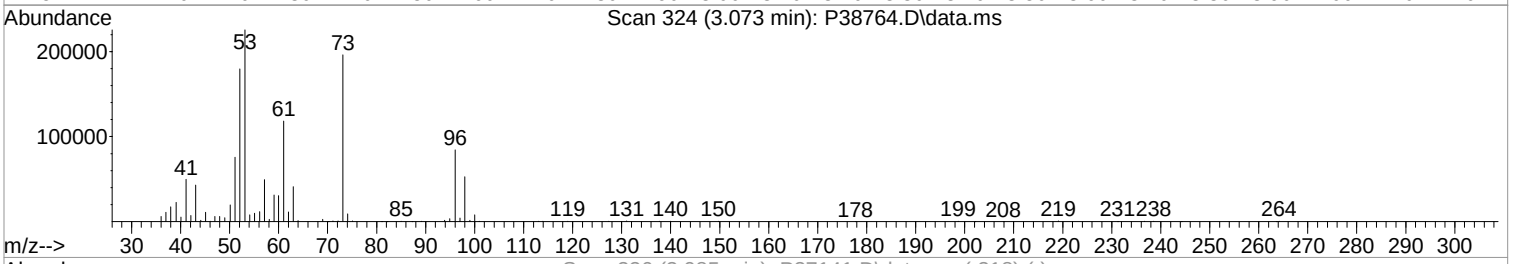
1st 08/21/20
2nd 08/27/20

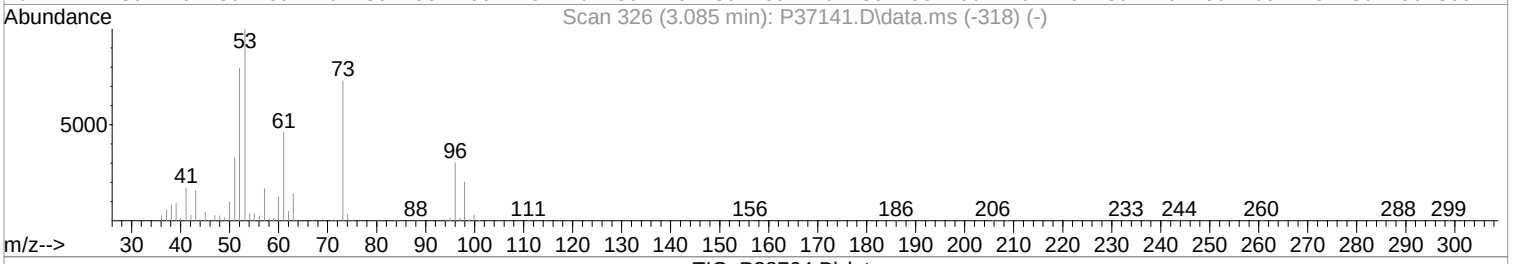
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:13:22 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration







TIC: P38764.D\data.ms

(24) Acrylonitrile

3.073min (-0.012) 278.97 ppb m

response 574748

Ion	Exp%	Act%
53.00	100	100
52.00	79.50	79.60
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

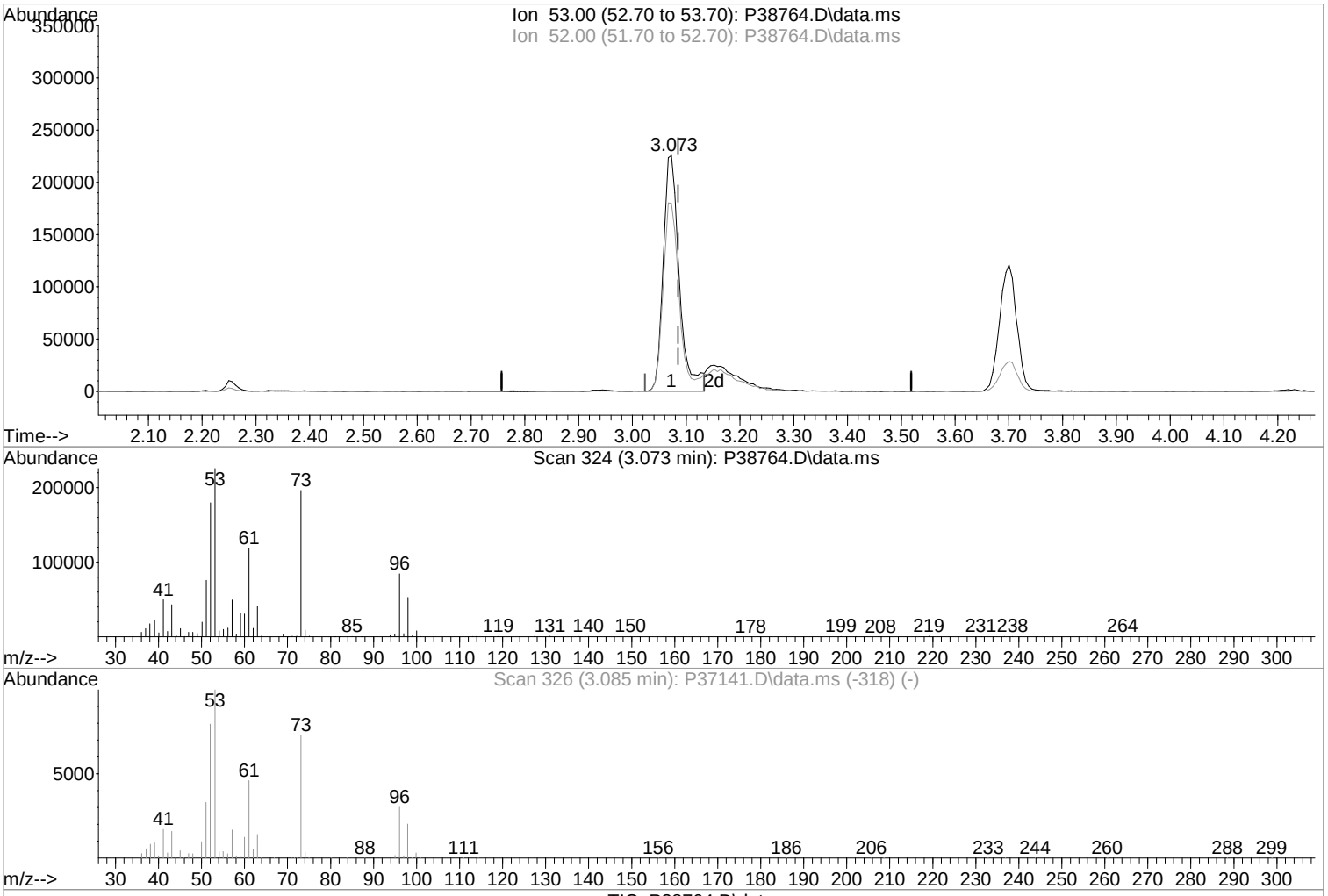
08/21/20

1st 08/21/20
2nd 08/27/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:13:22 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38764.D\data.ms

(24) Acrylonitrile

3.073min (-0.012) 228.95 ppb

response 471695

Ion	Exp%	Act%
53.00	100	100
52.00	79.50	79.60
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

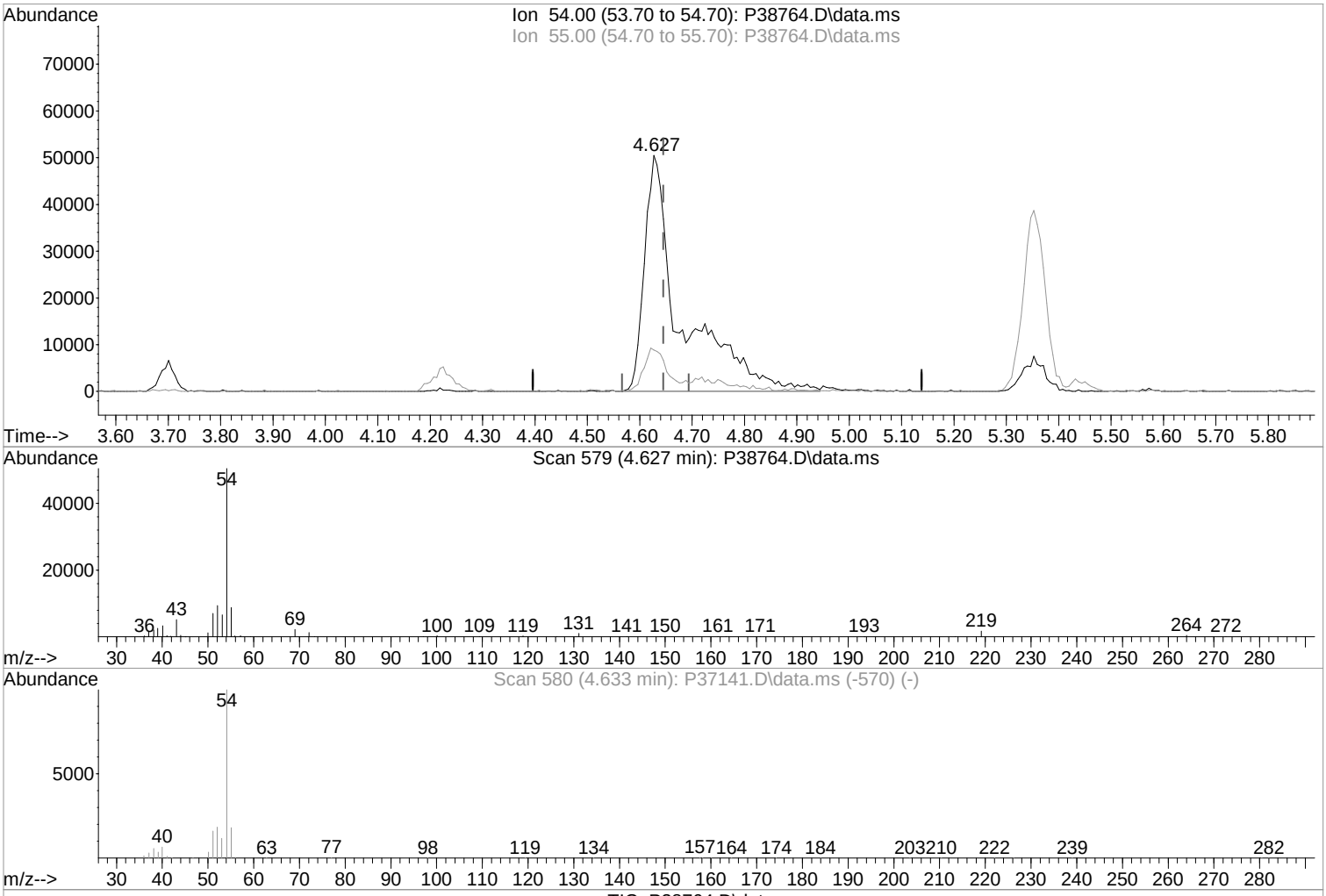
08/21/20

1st 08/21/20
2nd 08/27/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:13:22 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38764.D\data.ms

(36) Propionitrile

4.627min (-0.018) 276.08 ppb m

response 246654

Ion	Exp%	Act%
54.00	100	100
55.00	17.90	17.51
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

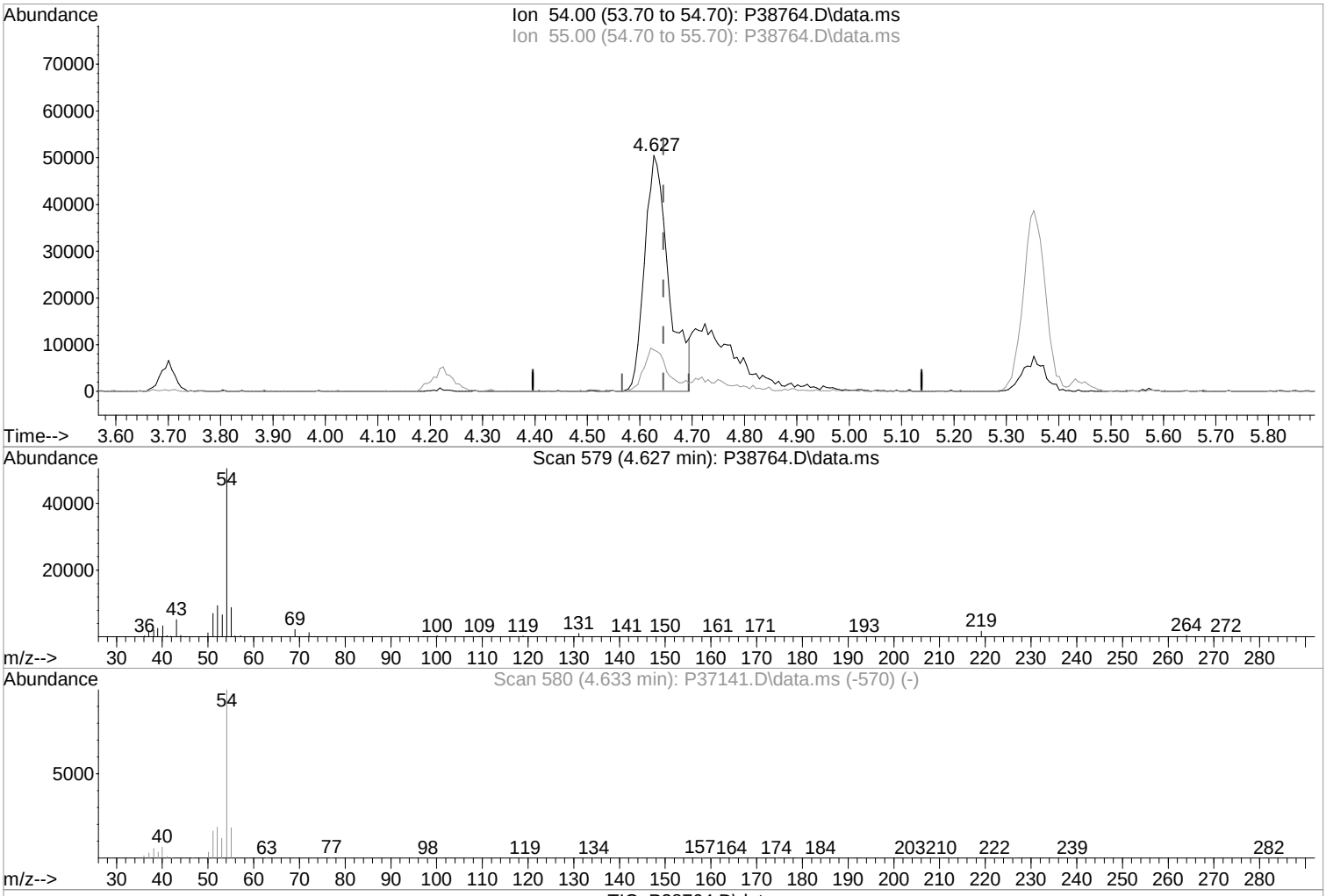
08/21/20

1st 08/21/20
2nd 08/27/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:13:22 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P38764.D\data.ms

(36) Propionitrile

4.627min (-0.018) 181.97 ppb

response 162579

Ion	Exp%	Act%
54.00	100	100
55.00	17.90	17.51
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

08/21/20

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:18:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
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	99	-0.01
2	P	Dichlorodifluoromethane	50.0000	55.3830	-10.8	96	-0.01
3	P	Chloromethane	50.0000	52.4143	-4.8	95	-0.01
4	P	Vinyl Chloride	50.0000	56.6525	-13.3	99	-0.01
5	P	Bromomethane	50.0000	40.6208	18.8	91	0.00
6	P	Chloroethane	50.0000	59.8616	-19.7	123	0.00
7		Freon 21	50.0000	57.4653	-14.9	106	-0.01
8	P	Trichlorofluoromethane	50.0000	52.1902	-4.4	96	0.00
9		Diethyl Ether	50.0000	53.5356	-7.1	93	-0.01
10		Freon 123a	50.0000	52.5763	-5.2	99	-0.01
11		Freon 123	50.0000	50.0251	-0.1	98	-0.01
12		Acrolein	250.0000	265.5747	-6.2	100	-0.02
13	P	1,1-Diclethene	50.0000	49.4637	1.1	91	-0.01
14	P	Freon 113	50.0000	49.3481	1.3	92	0.00
15	P	Acetone	50.0000	34.3160	31.4#	74	-0.02
16		2-Propanol	1000.0000	1048.5513	-4.9	99	-0.02
17		Iodomethane	50.0000	68.6358	-37.3#	92	-0.01
18	P	Carbon Disulfide	50.0000	50.0793	-0.2	92	-0.01
19		Acetonitrile	250.0000	174.6837	30.1#	56	-0.01
20		Allyl Chloride	50.0000	48.1648	3.7	91	-0.01
21	P	Methyl Acetate	50.0000	44.7934	10.4	86	-0.02
22	P	Methylene Chloride	50.0000	47.7679	4.5	92	-0.01
23		TBA	1000.0000	1075.2691	-7.5	103	-0.02
24		Acrylonitrile	250.0000	278.9670	-11.6	105	-0.01
25	P	Methyl-t-Butyl Ether	50.0000	50.0343	-0.1	90	-0.01
26	P	trans-1,2-Dichloroethene	50.0000	49.1672	1.7	88	-0.01
27		Halothane	-1.0000	0.0000	0.0	0	-4.17#
28	P	1,1-Diclethane	50.0000	47.3862	5.2	88	-0.01
29		Vinyl Acetate	50.0000	51.2090	-2.4	94	0.00
30		DIPE	50.0000	55.9328	-11.9	101	-0.02
31		2-Chloro-1,3-Butadiene	50.0000	53.0092	-6.0	94	-0.01
32		ETBE	50.0000	53.1299	-6.3	96	-0.01
33		2,2-Dichloropropane	50.0000	48.3089	3.4	86	-0.02
34	P	cis-1,2-Dichloroethene	50.0000	47.7190	4.6	89	-0.01
35	P	2-Butanone	50.0000	45.6539	8.7	88	-0.01
36		Propionitrile	250.0000	276.0763	-10.4	108	-0.02
37		Bromochloromethane	50.0000	48.5000	3.0	93	-0.01
38		Methacrylonitrile	50.0000	46.8940	6.2	89	-0.02
39		Tetrahydrofuran	50.0000	48.1358	3.7	95	0.00
40	P	Chloroform	50.0000	49.7805	0.4	90	-0.02
41	P	1,1,1-Trichloroethane	50.0000	47.5605	4.9	86	-0.01
42		TAME	50.0000	52.4899	-5.0	96	0.00
43	I	1,4-Difluorobenzene	50.0000	50.0000	0.0	95	0.00
44	P	Cyclohexane	50.0000	52.5887	-5.2	97	-0.01
45	s	surr4,Dibrflmethane	50.0000	48.4370	3.1	89	-0.01
46	P	Carbontetrachloride	50.0000	50.0345	-0.1	82	0.00
47		1,1-Dichloropropene	50.0000	50.2907	-0.6	91	-0.01
48	s	surr1,1,2-dichloroethane-d4	50.0000	47.6492	4.7	90	-0.01
49	P	Benzene	50.0000	51.1517	-2.3	92	-0.01
50	P	1,2-Dichloroethane	50.0000	46.1744	7.7	85	-0.01
51		Iso-Butyl Alcohol	1000.0000	983.4724	1.7	90	-0.02

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:18:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
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	57.4785	-15.0	103	-0.01
53		1-Butanol	2500.0000	2515.5562	-0.6	90	-0.01
54	P	Trichloroethene	50.0000	47.2121	5.6	90	0.00
55	P	Methylcyclohexane	50.0000	58.5430	-17.1	106	0.00
56	P	1,2-Diclpropane	50.0000	51.0668	-2.1	93	0.00
57		Dibromomethane	50.0000	47.5175	5.0	88	0.00
58		1,4-Dioxane	1000.0000	854.8064	14.5	81	0.00
59		Methyl Methacrylate	50.0000	53.7588	-7.5	96	0.00
60	P	Bromodichloromethane	50.0000	47.4441	5.1	80	0.00
61		2-Nitropropane	-1.0000	0.0000	0.0	78	0.00
62		2-Chloroethylvinyl Ether	50.0000	10.9596	78.1#	21	0.00
63	P	cis-1,3-Dichloropropene	50.0000	50.2561	-0.5	87	0.00
64	P	4-Methyl-2-pentanone	50.0000	54.7716	-9.5	100	0.00
65	s	SURR3,Toluene-d8	50.0000	51.1603	-2.3	95	0.00
66	P	Toluene	50.0000	53.4459	-6.9	94	0.00
67	P	trans-1,3-Dichloropropene	50.0000	49.4461	1.1	87	0.00
68		Ethyl Methacrylate	50.0000	54.8785	-9.8	95	0.00
69	P	1,1,2-Trichloroethane	50.0000	50.4092	-0.8	92	0.00
70	s	SURR2,BFB	50.0000	50.3224	-0.6	95	0.00
71	I	d5-Chlorobenzene	50.0000	50.0000	0.0	98	0.00
72	P	Tetrachloroethene	50.0000	48.2694	3.5	92	0.00
73	P	2-Hexanone	50.0000	54.8556	-9.7	105	0.00
74		1,3-Dichloropropane	50.0000	48.9165	2.2	92	0.00
75	P	Dibromochloromethane	50.0000	47.7132	4.6	83	0.00
76		N-Butyl Acetate	50.0000	53.9777	-8.0	97	0.00
77	P	1,2-Dibromoethane	50.0000	49.8629	0.3	93	0.00
78	P	Chlorobenzene	50.0000	48.9175	2.2	93	0.00
79		3-CBTF	50.0000	60.5085	-21.0#	111	0.00
80		4-CBTF	50.0000	60.6687	-21.3#	111	0.00
81		1,1,1,2-Tetrachloroethane	50.0000	47.3166	5.4	87	0.00
82	P	Ethylbenzene	50.0000	52.4430	-4.9	98	0.00
83	P	(m+p)Xylene	100.0000	108.0674	-8.1	97	0.00
84	P	o-Xylene	50.0000	53.5713	-7.1	96	0.00
85	P	Styrene	50.0000	55.0969	-10.2	96	0.00
86	I	1,4-Dichlorobenzene-d4	50.0000	50.0000	0.0	93	0.00
87	P	Bromoform	50.0000	45.3123	9.4	82	0.00
88		2-CBTF	50.0000	58.4401	-16.9	109	0.00
89	P	Isopropylbenzene	50.0000	55.9188	-11.8	100	0.00
90		Cyclohexanone	1000.0000	521.3331	47.9#	48	0.00
91		trans-1,4-Dichloro-2-Butene	50.0000	53.8578	-7.7	98	0.00
92	P	1,1,2,2-Tetrachloroethane	50.0000	51.0738	-2.1	93	0.00
93		Bromobenzene	50.0000	51.4526	-2.9	97	0.00
94		1,2,3-Trichloropropane	50.0000	50.0797	-0.2	93	0.00
95		n-Propylbenzene	50.0000	58.5155	-17.0	100	0.00
96		2-Chlorotoluene	50.0000	54.3957	-8.8	98	0.00
97		3-Chlorotoluene	50.0000	57.7530	-15.5	107	0.00
98		4-Chlorotoluene	50.0000	54.7074	-9.4	97	0.00
99		1,3,5-Trimethylbenzene	50.0000	56.7598	-13.5	99	0.00
100		tert-Butylbenzene	50.0000	56.2175	-12.4	101	0.00
101		1,2,4-Trimethylbenzene	50.0000	56.4158	-12.8	98	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:18:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
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	62.0671	-24.1#	115	0.00
103		sec-Butylbenzene	50.0000	59.4995	-19.0	102	0.00
104		p-Isopropyltoluene	50.0000	58.6929	-17.4	101	0.00
105	P	1,3-Dclbenz	50.0000	52.6802	-5.4	99	0.00
106	P	1,4-Dclbenz	50.0000	53.6133	-7.2	99	0.00
107		2,4-DCBTF	50.0000	63.6377	-27.3#	117	0.00
108		2,5-DCBTF	50.0000	61.3275	-22.7#	115	0.00
109		n-Butylbenzene	50.0000	58.6195	-17.2	99	0.00
110	P	1,2-Dclbenz	50.0000	52.4812	-5.0	96	0.00
111	P	1,2-Dibromo-3-chloropropane	50.0000	47.9043	4.2	84	0.00
112		Trielution Dichlorotoluene	150.0000	177.2632	-18.2	104	0.00
113		1,3,5 Trichlorobenzene	50.0000	60.3484	-20.7#	109	0.00
114		Coelution Dichlorotoluene	100.0000	119.8477	-19.8	102	0.00
115	P	1,2,4-Tcbenzene	50.0000	57.6301	-15.3	100	0.00
116		Hexachlorobt	50.0000	55.5651	-11.1	99	0.00
117		Naphthalen	50.0000	60.2673	-20.5#	96	0.00
118		1,2,3-Tclbenzene	50.0000	54.5435	-9.1	97	0.00
119		2,4,5-Trichlorotolene	50.0000	63.2947	-26.6#	108	0.00
120		2,3,6-Trichlorotoluene	50.0000	64.7089	-29.4#	109	0.00

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:18:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.444	168	320474	50.00	ppb		-0.01
43) 1,4-Difluorobenzene	6.523	114	493027	50.00	ppb		0.00
71) d5-Chlorobenzene	9.797	117	450406	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	227173	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.316	113	137127	48.44	ppb		-0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.88%				
48) surr1,1,2-dichloroetha...	5.846	65	186748	47.65	ppb		-0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 95.30%				
65) SURR3,Toluene-d8	8.315	98	673144	51.16	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.32%				
70) SURR2,BFB	10.870	95	243973	50.32	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.64%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.189	85	197483	55.38	ppb		95
3) Chloromethane	1.317	50	233344	52.41	ppb		97
4) Vinyl Chloride	1.390	62	236453	56.65	ppb		99
5) Bromomethane	1.628	94	135226	40.62	ppb		100
6) Chloroethane	1.701	64	137468	59.86	ppb		97
7) Freon 21	1.853	67	305606	57.47	ppb		100
8) Trichlorofluoromethane	1.896	101	224405	52.19	ppb		96
9) Diethyl Ether	2.134	59	166343	53.54	ppb		90
10) Freon 123a	2.140	67	192774	52.58	ppb		93
11) Freon 123	2.195	83	216444	50.03	ppb		99
12) Acrolein	2.250	56	223480	265.57	ppb		97
13) 1,1-Diclethene	2.323	96	122582	49.46	ppb		90
14) Freon 113	2.323	101	142507	49.35	ppb		100
15) Acetone	2.390	43	67341m	34.32	ppb		
16) 2-Propanol	2.530	45	432444m	1048.55	ppb		
17) Iodomethane	2.457	142	190336	68.64	ppb		94
18) Carbon Disulfide	2.512	76	406104	50.08	ppb		99
19) Acetonitrile	2.658	40	39978m	174.68	ppb		
20) Allyl Chloride	2.664	76	84590	48.16	ppb	#	82
21) Methyl Acetate	2.695	43	213474	44.79	ppb		97
22) Methylene Chloride	2.786	84	168738	47.77	ppb		96
23) TBA	2.938	59	718190m	1075.27	ppb		
24) Acrylonitrile	3.073	53	574748m	278.97	ppb		
25) Methyl-t-Butyl Ether	3.085	73	573877	50.03	ppb		99
26) trans-1,2-Dichloroethene	3.073	96	141917	49.17	ppb		92
28) 1,1-Diclethane	3.585	63	301487	47.39	ppb		96
29) Vinyl Acetate	3.688	86	27951	51.21	ppb	#	95
30) DIPE	3.688	45	621844	55.93	ppb		92
31) 2-Chloro-1,3-Butadiene	3.701	53	271432	53.01	ppb		91
32) ETBE	4.225	59	551109	53.13	ppb		97
33) 2,2-Dichloropropane	4.414	77	226216	48.31	ppb		98
34) cis-1,2-Dichloroethene	4.438	96	176495	47.72	ppb		93
35) 2-Butanone	4.517	43	113749	45.65	ppb		96
36) Propionitrile	4.627	54	246654m	276.08	ppb		
37) Bromochloromethane	4.847	130	106118	48.50	ppb		94
38) Methacrylonitrile	4.877	67	99245	46.89	ppb		95
39) Tetrahydrofuran	4.950	42	92391	48.14	ppb		91
40) Chloroform	5.023	83	275681	49.78	ppb		95
41) 1,1,1-Trichloroethane	5.298	97	220363	47.56	ppb		92

1st KR 08/21/20
2nd BA 08/27/20

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:18:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.127	73	542358	52.49	ppb	95
44) Cyclohexane	5.353	41	170018	52.59	ppb	93
46) Carbontetrachloride	5.566	117	161980	50.03	ppb	91
47) 1,1-Dichloropropene	5.578	75	230496	50.29	ppb	97
49) Benzene	5.901	78	728137	51.15	ppb	98
50) 1,2-Dichloroethane	5.962	62	229700	46.17	ppb	95
51) Iso-Butyl Alcohol	5.956	43	300294	983.47	ppb	96
52) n-Heptane	6.346	43	253572	57.48	ppb	93
53) 1-Butanol	6.901	56	477984	2515.56	ppb	96
54) Trichloroethene	6.834	130	166759	47.21	ppb	95
55) Methylcyclohexane	7.047	55	256831	58.54	ppb	95
56) 1,2-Diclpropane	7.133	63	192446	51.07	ppb	100
57) Dibromomethane	7.273	93	103314	47.52	ppb	99
58) 1,4-Dioxane	7.340	88	66682	854.81	ppb	95
59) Methyl Methacrylate	7.352	69	176513	53.76	ppb	98
60) Bromodichloromethane	7.499	83	189173	47.44	ppb	96
62) 2-Chloroethylvinyl Ether	7.901	63	18006	10.96	ppb	95
63) cis-1,3-Dichloropropene	8.035	75	273373	50.26	ppb	97
64) 4-Methyl-2-pentanone	8.242	43	278321	54.77	ppb	98
66) Toluene	8.389	91	805679	53.45	ppb	100
67) trans-1,3-Dichloropropene	8.669	75	244602	49.45	ppb	97
68) Ethyl Methacrylate	8.797	69	303911	54.88	ppb	98
69) 1,1,2-Trichloroethane	8.858	97	169668	50.41	ppb	95
72) Tetrachloroethene	8.968	164	132771	48.27	ppb	99
73) 2-Hexanone	9.151	43	219599	54.86	ppb	92
74) 1,3-Dichloropropane	9.029	76	309843	48.92	ppb	98
75) Dibromochloromethane	9.248	129	133645	47.71	ppb	94
76) N-Butyl Acetate	9.291	43	400900	53.98	ppb	98
77) 1,2-Dibromoethane	9.346	107	171904	49.86	ppb	96
78) Chlorobenzene	9.827	112	491374	48.92	ppb	98
79) 3-CBTF	9.840	180	281446	60.51	ppb	98
80) 4-CBTF	9.894	180	253849	60.67	ppb	97
81) 1,1,1,2-Tetrachloroethane	9.913	131	146242	47.32	ppb	100
82) Ethylbenzene	9.937	106	276427	52.44	ppb	97
83) (m+p)Xylene	10.047	106	681971	108.07	ppb	99
84) o-Xylene	10.407	106	330042	53.57	ppb	98
85) Styrene	10.425	104	576692	55.10	ppb	98
87) Bromoform	10.583	173	84776	45.31	ppb	97
88) 2-CBTF	10.656	180	269331	58.44	ppb	98
89) Isopropylbenzene	10.736	105	876974	55.92	ppb	97
90) Cyclohexanone	10.827	55	491306	521.33	ppb	95
91) trans-1,4-Dichloro-2-B...	11.065	53	69968	53.86	ppb	96
92) 1,1,2,2-Tetrachloroethane	11.016	83	258927	51.07	ppb	96
93) Bromobenzene	10.992	156	210538	51.45	ppb	93
94) 1,2,3-Trichloropropane	11.041	110	82102	50.08	ppb	98
95) n-Propylbenzene	11.089	91	1053022	58.52	ppb	100
96) 2-Chlorotoluene	11.156	91	635795	54.40	ppb	97
97) 3-Chlorotoluene	11.211	91	645647	57.75	ppb	99
98) 4-Chlorotoluene	11.254	91	715945	54.71	ppb	99
99) 1,3,5-Trimethylbenzene	11.242	105	760540	56.76	ppb	97
100) tert-Butylbenzene	11.510	119	630545	56.22	ppb	96
101) 1,2,4-Trimethylbenzene	11.553	105	760801	56.42	ppb	98
102) 3,4-DCBTF	11.620	214	229288	62.07	ppb	97
103) sec-Butylbenzene	11.693	105	957253	59.50	ppb	99
104) p-Isopropyltoluene	11.815	119	814096	58.69	ppb	97
105) 1,3-Dclbenz	11.784	146	422316	52.68	ppb	98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:18:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	437336	53.61	ppb	99
107) 2,4-DCBTF	11.906	214	220158	63.64	ppb	99
108) 2,5-DCBTF	11.949	214	232025	61.33	ppb	98
109) n-Butylbenzene	12.150	91	765425	58.62	ppb	98
110) 1,2-Dclbenz	12.156	146	427074	52.48	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.790	157	54377	47.90	ppb	99
112) Trielution Dichlorotol...	12.894	125	1155369	177.26	ppb	97
113) 1,3,5 Trichlorobenzene	12.943	180	337661	60.35	ppb	100
114) Coelution Dichlorotoluene	13.223	125	857983	119.85	ppb	98
115) 1,2,4-Tcbenzene	13.430	180	338279	57.63	ppb	96
116) Hexachlorobt	13.558	225	130911	55.57	ppb	99
117) Naphthalen	13.625	128	1033603	60.27	ppb	100
118) 1,2,3-Tclbenzene	13.808	180	331198	54.54	ppb	94
119) 2,4,5-Trichlorotolene	14.394	159	235095	63.29	ppb	95
120) 2,3,6-Trichlorotoluene	14.479	159	218294	64.71	ppb	98

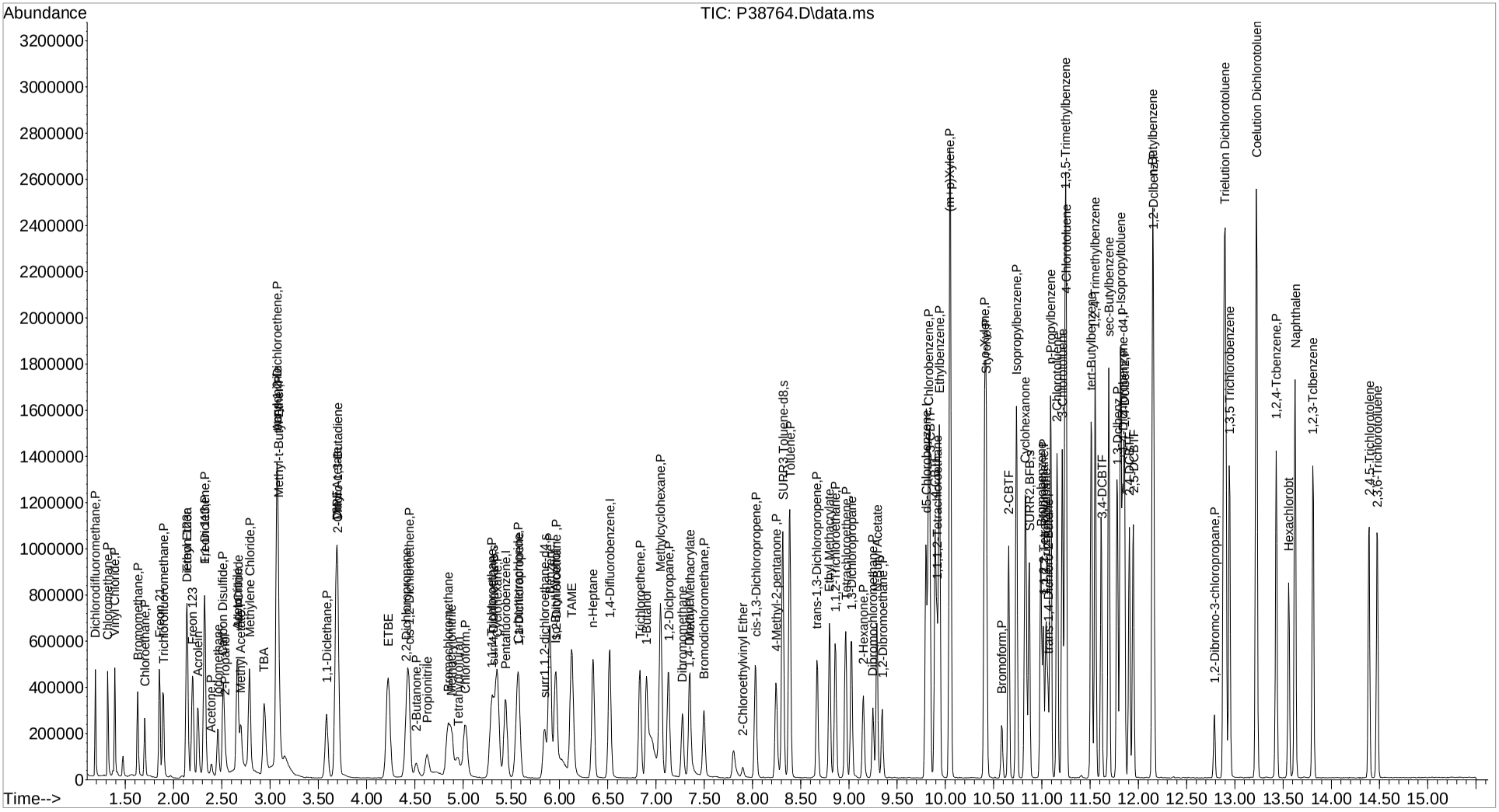
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38764.D
Acq On : 21 Aug 2020 9:55 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 21 10:18:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

1st 08/21/20 2nd 08/27/20

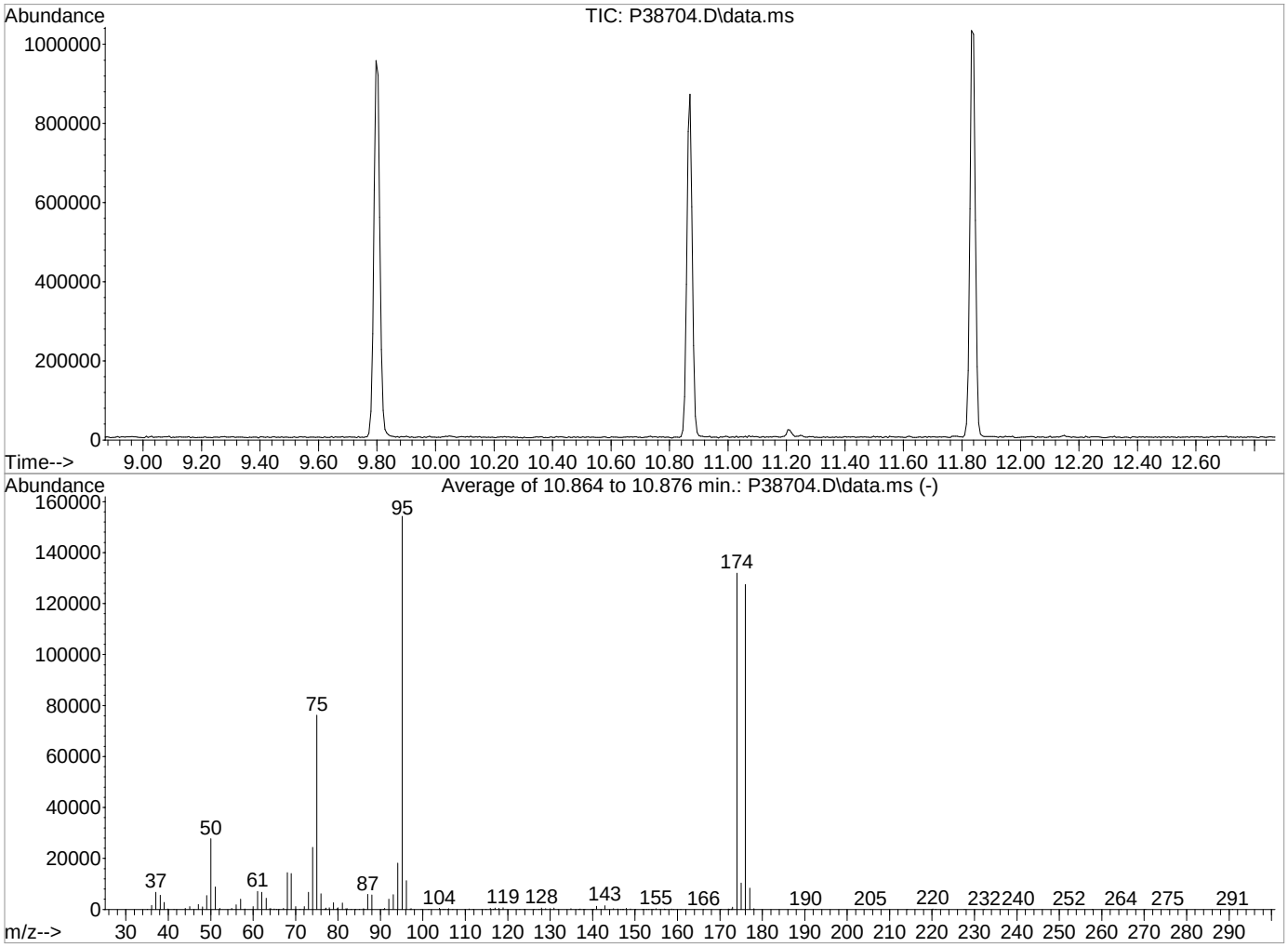


1st 08/20/20
2nd 08/25/20

Data Path : I:\ACQUDATA\msvoa12\Data\082020\
Data File : P38704.D
Acq On : 20 Aug 2020 9:12 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\W071320.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Tue Jul 14 10:28:25 2020



AutoFind: Scans 1602, 1603, 1604; Background Corrected with Scan 1595

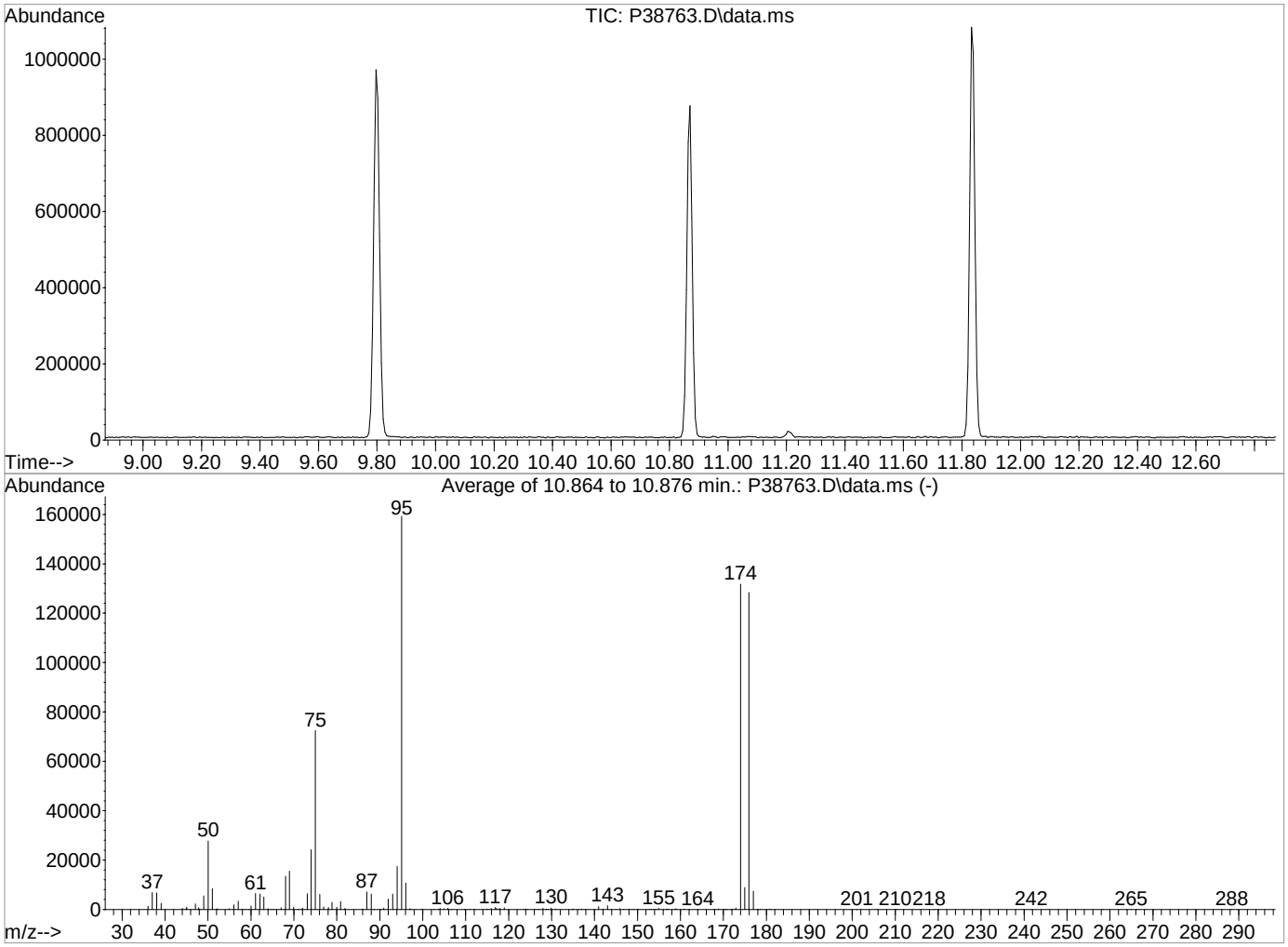
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.0	27741	PASS
75	95	30	60	49.4	76237	PASS
95	95	100	100	100.0	154280	PASS
96	95	5	9	7.3	11221	PASS
173	174	0.00	2	0.7	891	PASS
174	95	50	120	85.5	131968	PASS
175	174	5	9	7.8	10318	PASS
176	174	95	101	96.6	127509	PASS
177	176	5	9	6.5	8310	PASS

1st 08/21/20
2nd 08/27/20

Data Path : I:\ACQUDATA\msvoa12\Data\082120\
Data File : P38763.D
Acq On : 21 Aug 2020 9:24 am
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: INTP90.P

Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Tue Jul 14 10:28:25 2020



AutoFind: Scans 1602, 1603, 1604; Background Corrected with Scan 1595

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.4	27739	PASS
75	95	30	60	45.5	72448	PASS
95	95	100	100	100.0	159301	PASS
96	95	5	9	6.7	10659	PASS
173	174	0.00	2	0.4	541	PASS
174	95	50	120	82.7	131728	PASS
175	174	5	9	6.7	8874	PASS
176	174	95	101	97.4	128367	PASS
177	176	5	9	5.8	7416	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 14 10:30:29 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	334568	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	515318	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	459990	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	236872	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	149975	50.68	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.36%				
48) surr1,1,2-dichloroetha...	5.859	65	203903	49.78	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 99.56%				
65) SURR3,Toluene-d8	8.315	98	695379	50.56	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.12%				
70) SURR2,BFB	10.870	95	252353	49.80	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.60%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	187436	50.35	ppb		97
3) Chloromethane	1.329	50	244052	52.51	ppb		100
4) Vinyl Chloride	1.408	62	231300	53.08	ppb		96
5) Bromomethane	1.634	94	171405	49.32	ppb		98
6) Chloroethane	1.713	64	104668	43.66	ppb		94
7) Freon 21	1.872	67	206316	37.16	ppb		99
8) Trichlorofluoromethane	1.908	101	208190	46.38	ppb		94
9) Diethyl Ether	2.152	59	174090	53.67	ppb		94
10) Freon 123a	2.158	67	132478	34.61	ppb		96
11) Freon 123	2.213	83	163604	36.22	ppb		95
12) Acrolein	2.268	56	68538	78.02	ppb		98
13) 1,1-Diclethene	2.341	96	144500	55.85	ppb		89
14) Freon 113	2.341	101	143393	47.56	ppb		98
15) Acetone	2.408	43	103956	54.53	ppb		98
16) 2-Propanol	2.548	45	420199	975.94	ppb		100
17) Iodomethane	2.475	142	131810	45.53	ppb		95
18) Carbon Disulfide	2.530	76	409841	48.40	ppb		99
19) Acetonitrile	2.676	40	74847m	313.27	ppb		
20) Allyl Chloride	2.682	76	93302	50.89	ppb	#	87
21) Methyl Acetate	2.713	43	202010	40.60	ppb		94
22) Methylene Chloride	2.804	84	175954	47.71	ppb		95
23) TBA	2.957	59	720228	1032.90	ppb		96
24) Acrylonitrile	3.085	53	544941	253.36	ppb		97
25) Methyl-t-Butyl Ether	3.103	73	642572	53.66	ppb		100
26) trans-1,2-Dichloroethene	3.091	96	163244	54.17	ppb		97
28) 1,1-Diclethane	3.603	63	321376	48.38	ppb		97
29) Vinyl Acetate	3.700	86	40790	71.31	ppb	#	82
30) DIPE	3.713	45	671647	57.87	ppb		93
31) 2-Chloro-1,3-Butadiene	3.713	53	280748	52.52	ppb		99
32) ETBE	4.243	59	585046	54.03	ppb		99
33) 2,2-Dichloropropane	4.444	77	247426	50.61	ppb		96
34) cis-1,2-Dichloroethene	4.456	96	186726	48.36	ppb		96
35) 2-Butanone	4.530	43	132074	50.78	ppb		97
36) Propionitrile	4.645	54	221603	237.59	ppb		99
37) Bromochloromethane	4.865	130	110747	48.48	ppb		93
38) Methacrylonitrile	4.901	67	113983	51.59	ppb		91
39) Tetrahydrofuran	4.962	42	100268	50.04	ppb		90
40) Chloroform	5.042	83	286737	49.58	ppb		96
41) 1,1,1-Trichloroethane	5.310	97	239607	49.54	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 14 10:30:29 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.139	73	611809	56.72	ppb		99
44) Cyclohexane	5.371	41	154885	45.84	ppb		93
46) Carbontetrachloride	5.572	117	178746	52.83	ppb		97
47) 1,1-Dichloropropene	5.590	75	238981	49.89	ppb		97
49) Benzene	5.913	78	729728	49.05	ppb		97
50) 1,2-Dichloroethane	5.974	62	245285	47.17	ppb		97
51) Iso-Butyl Alcohol	5.968	43	345496	1082.56	ppb		98
52) n-Heptane	6.358	43	238715	51.77	ppb		98
53) 1-Butanol	6.907	56	570198	2871.06	ppb		99
54) Trichloroethene	6.846	130	169749	45.98	ppb		95
55) Methylcyclohexane	7.053	55	217610	47.46	ppb		95
56) 1,2-Diclpropane	7.139	63	196048	49.77	ppb		99
57) Dibromomethane	7.279	93	108704	47.83	ppb		86
58) 1,4-Dioxane	7.346	88	81445	998.89	ppb		97
59) Methyl Methacrylate	7.358	69	183644	53.51	ppb		96
60) Bromodichloromethane	7.505	83	207175	49.71	ppb		99
62) 2-Chloroethylvinyl Ether	7.907	63	84995	49.50	ppb		96
63) cis-1,3-Dichloropropene	8.035	75	283883	49.93	ppb		98
64) 4-Methyl-2-pentanone	8.248	43	251431	47.34	ppb		99
66) Toluene	8.395	91	795384	50.48	ppb		96
67) trans-1,3-Dichloropropene	8.675	75	259568	50.20	ppb		95
68) Ethyl Methacrylate	8.803	69	308987	53.38	ppb		96
69) 1,1,2-Trichloroethane	8.864	97	174398	49.57	ppb		95
72) Tetrachloroethene	8.968	164	128828	45.86	ppb		94
73) 2-Hexanone	9.151	43	190978	46.71	ppb		94
74) 1,3-Dichloropropane	9.029	76	308828	47.74	ppb		95
75) Dibromochloromethane	9.248	129	154228	53.91	ppb		98
76) N-Butyl Acetate	9.291	43	372558	49.12	ppb		99
77) 1,2-Dibromoethane	9.346	107	174860	49.66	ppb		97
78) Chlorobenzene	9.827	112	502579	48.99	ppb		96
79) 3-CBTF	9.839	180	251302	52.90	ppb		98
80) 4-CBTF	9.894	180	223150	52.22	ppb		96
81) 1,1,1,2-Tetrachloroethane	9.919	131	162847	51.59	ppb		98
82) Ethylbenzene	9.943	106	265618	49.34	ppb		96
83) (m+p)Xylene	10.053	106	660624	102.50	ppb		100
84) o-Xylene	10.413	106	325258	51.69	ppb		93
85) Styrene	10.425	104	544471	50.93	ppb		96
87) Bromoform	10.589	173	96752	49.60	ppb		96
88) 2-CBTF	10.656	180	251989	52.44	ppb		100
89) Isopropylbenzene	10.742	105	822440	50.29	ppb		99
90) Cyclohexanone	10.827	55	1034293	1052.57	ppb		99
91) trans-1,4-Dichloro-2-B...	11.065	53	67669	49.96	ppb		93
92) 1,1,2,2-Tetrachloroethane	11.016	83	277887	52.57	ppb		98
93) Bromobenzene	10.992	156	198259	46.47	ppb		95
94) 1,2,3-Trichloropropane	11.047	110	78326	45.82	ppb	#	85
95) n-Propylbenzene	11.095	91	991309	52.83	ppb		97
96) 2-Chlorotoluene	11.156	91	602352	49.42	ppb		98
97) 3-Chlorotoluene	11.211	91	597806	51.28	ppb		99
98) 4-Chlorotoluene	11.254	91	684154	50.14	ppb		99
99) 1,3,5-Trimethylbenzene	11.242	105	706432	50.56	ppb		99
100) tert-Butylbenzene	11.516	119	592510	50.66	ppb		98
101) 1,2,4-Trimethylbenzene	11.553	105	715551	50.89	ppb		97
102) 3,4-DCBTF	11.620	214	198562	51.55	ppb		98
103) sec-Butylbenzene	11.693	105	881080	52.52	ppb		100
104) p-Isopropyltoluene	11.815	119	739799	51.15	ppb		99
105) 1,3-Dclbenz	11.784	146	395521	47.32	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 14 10:30:29 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

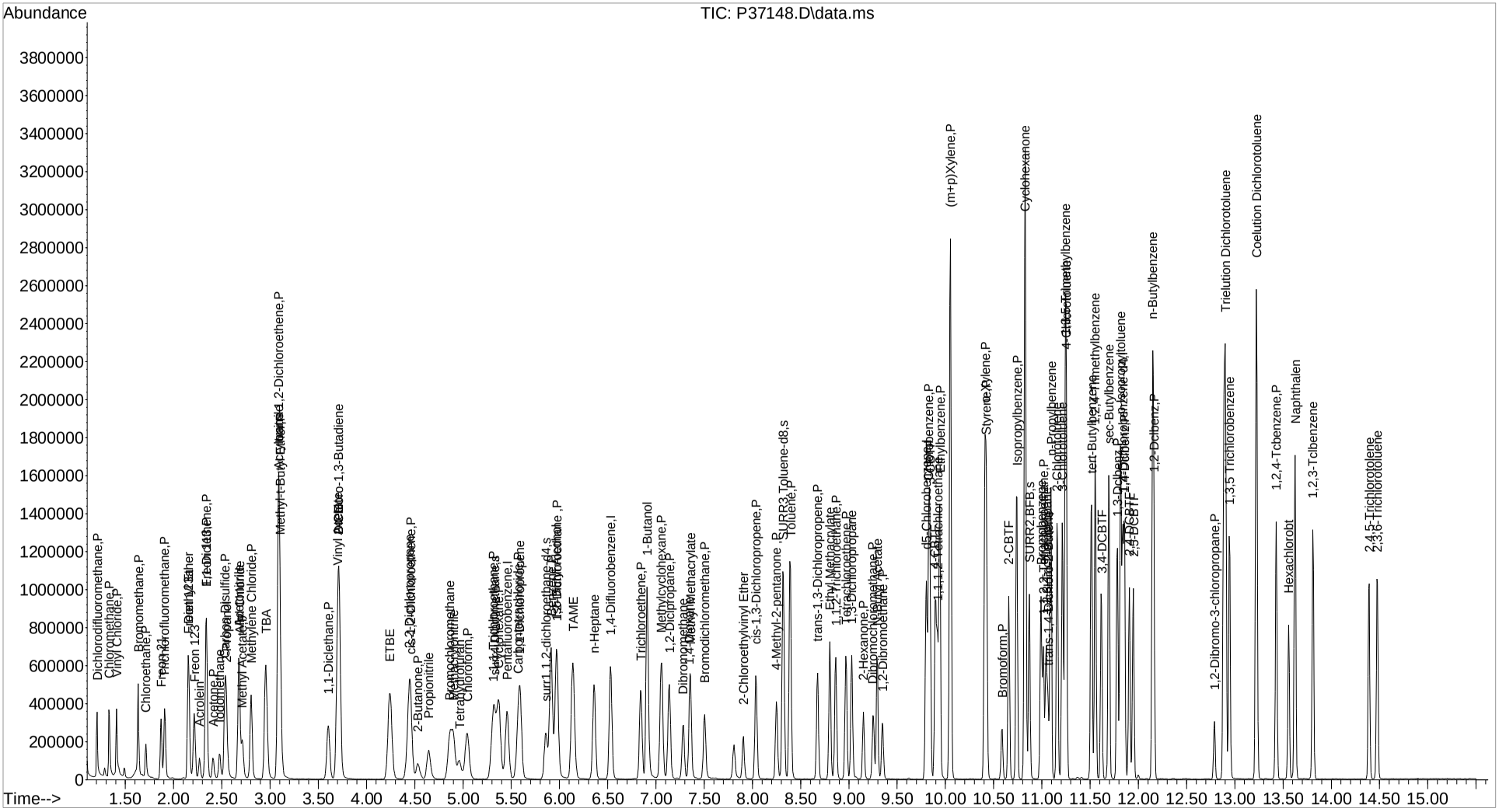
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	396370	46.60	ppb	100
107) 2,4-DCBTF	11.906	214	190538	52.82	ppb	99
108) 2,5-DCBTF	11.949	214	203704	51.64	ppb	97
109) n-Butylbenzene	12.150	91	700129	51.42	ppb	99
110) 1,2-Dclbenz	12.162	146	395795	46.65	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.790	157	60256	50.91	ppb	94
112) Trielution Dichlorotol...	12.900	125	1105573	162.68	ppb	98
113) 1,3,5 Trichlorobenzene	12.943	180	302573	51.86	ppb	99
114) Coelution Dichlorotoluene	13.223	125	837862	112.24	ppb	98
115) 1,2,4-Tcbenzene	13.430	180	311462	50.89	ppb	98
116) Hexachlorobt	13.558	225	116122	47.27	ppb	97
117) Naphthalen	13.625	128	1006622	56.29	ppb	99
118) 1,2,3-Tclbenzene	13.808	180	301180	47.57	ppb	98
119) 2,4,5-Trichlorotolene	14.393	159	220356	56.90	ppb	98
120) 2,3,6-Trichlorotoluene	14.479	159	207550	59.00	ppb	98

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 14 10:30:29 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

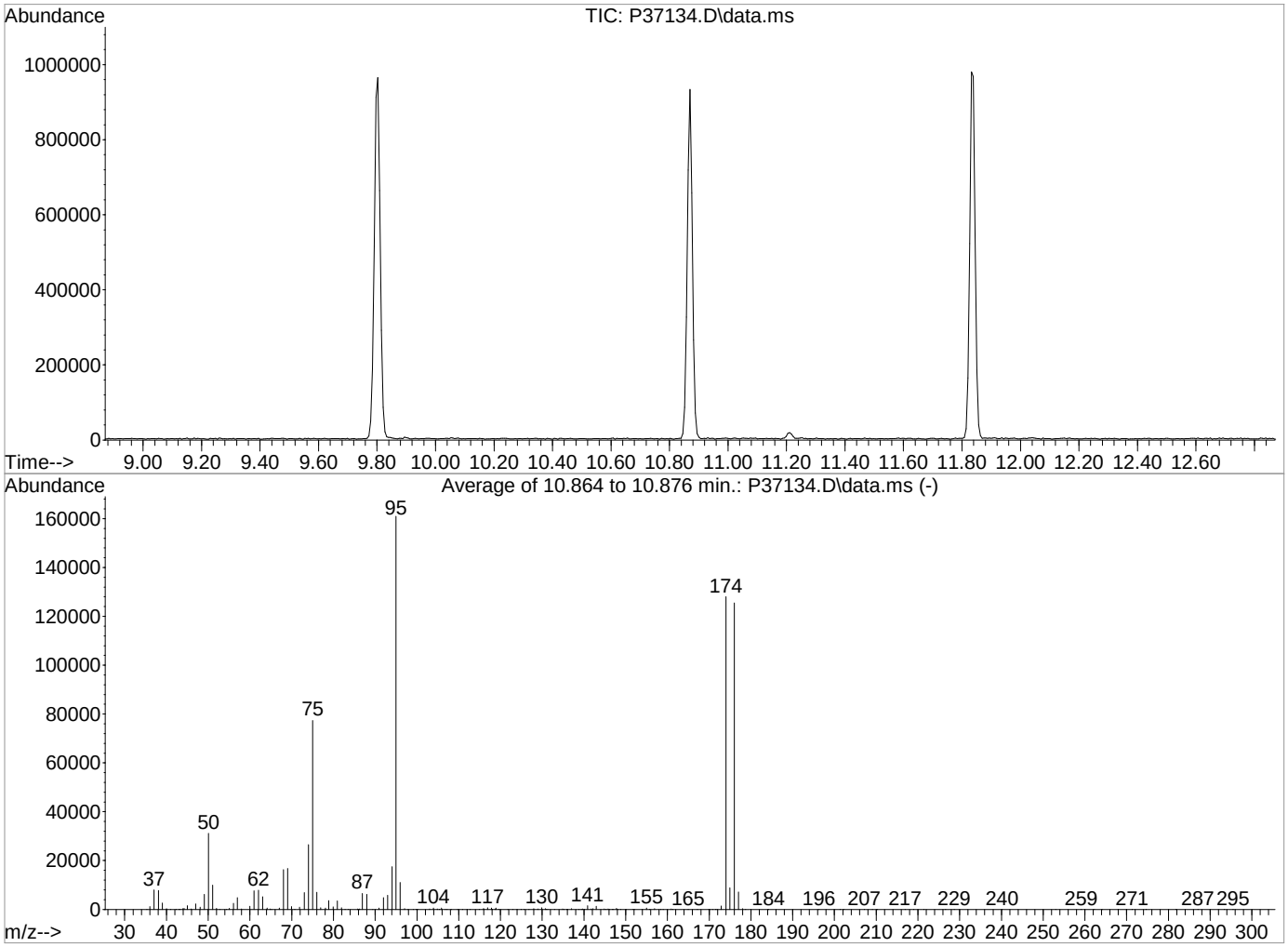


1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37134.D
Acq On : 13 Jul 2020 10:43 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\W071320.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Mon Jul 13 13:05:56 2020



AutoFind: Scans 1602, 1603, 1604; Background Corrected with Scan 1595

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.3	31112	PASS
75	95	30	60	48.1	77408	PASS
95	95	100	100	100.0	161024	PASS
96	95	5	9	6.9	11059	PASS
173	174	0.00	2	1.1	1384	PASS
174	95	50	120	79.5	128075	PASS
175	174	5	9	6.9	8837	PASS
176	174	95	101	98.0	125485	PASS
177	176	5	9	5.6	7080	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37135.D
Acq On : 13 Jul 2020 11:13 am
Operator : K.Ruest
Sample : IBLK Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 14 10:46:04 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration

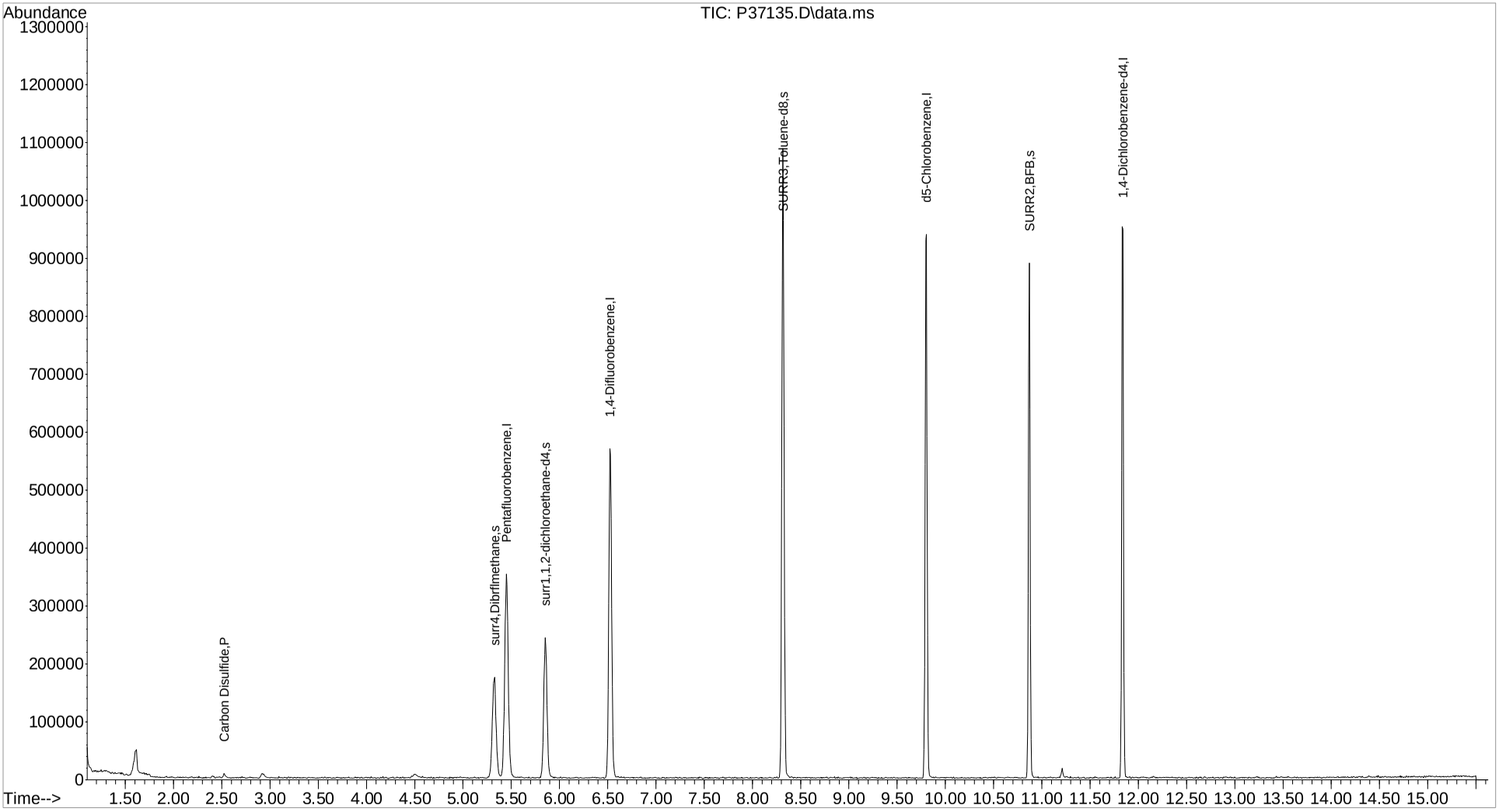
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	323608	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	504388	50.00	ppb	0.00
71) d5-Chlorobenzene	9.803	117	429543	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	193982	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.328	113	146271	50.50	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.00%			
48) surr1,1,2-dichloroetha...	5.853	65	201706	50.31	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 100.62%			
65) SURR3,Toluene-d8	8.316	98	668568	49.67	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.34%			
70) SURR2,BFB	10.870	95	226429	45.65	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 91.30%			
Target Compounds						Qvalue
15) Acetone	2.414	43	2899	Below Cal		83
18) Carbon Disulfide	2.524	76	6828	0.42	ppb	92

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

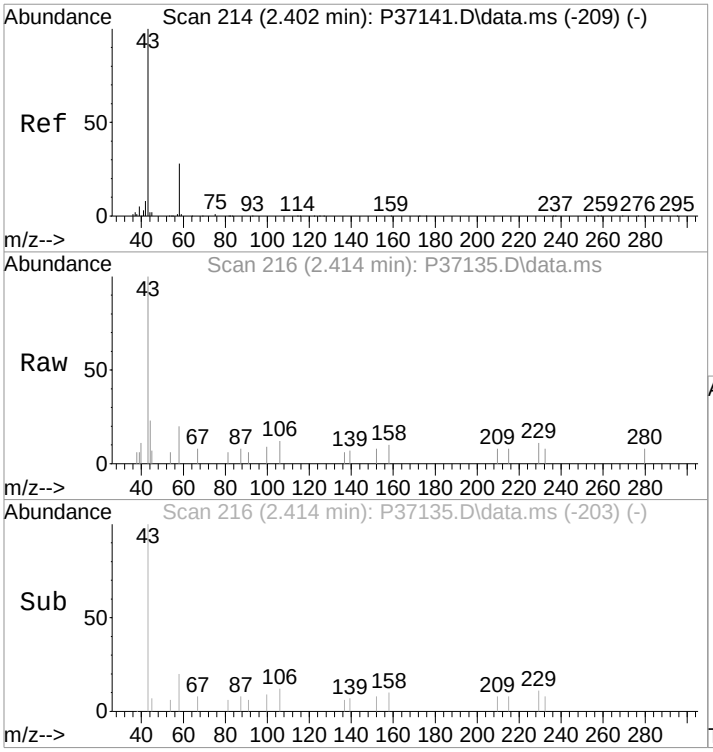
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37135.D
Acq On : 13 Jul 2020 11:13 am
Operator : K.Ruest
Sample : IBLK Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 14 10:46:04 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



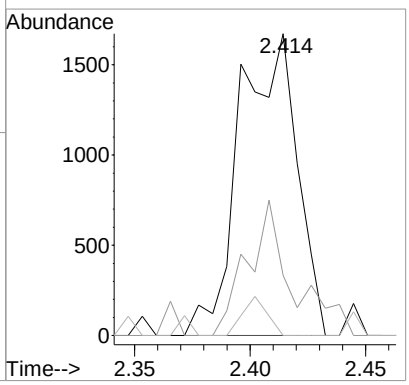
1st 07/14/20
2nd 07/14/20

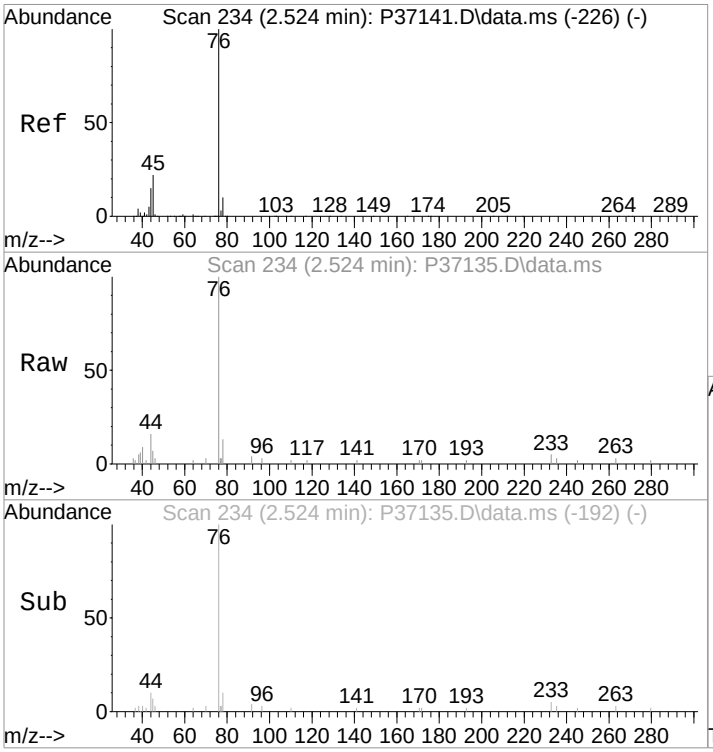


#15
Acetone
Concen: Below Cal
RT: 2.414 min Scan# 216
Delta R.T. 0.007 min
Lab File: P37135.D
Acq: 13 Jul 2020 11:13 am

Tgt Ion: 43 Resp: 2899

Ion	Ratio	Lower	Upper
43	100		
58	19.9	8.2	48.2
42	0.0	0.0	27.7

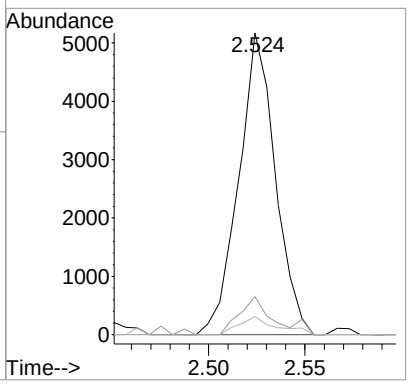




#18
Carbon Disulfide
Concen: 0.42 ppb
RT: 2.524 min Scan# 234
Delta R.T. 0.001 min
Lab File: P37135.D
Acq: 13 Jul 2020 11:13 am

Tgt Ion: 76 Resp: 6828

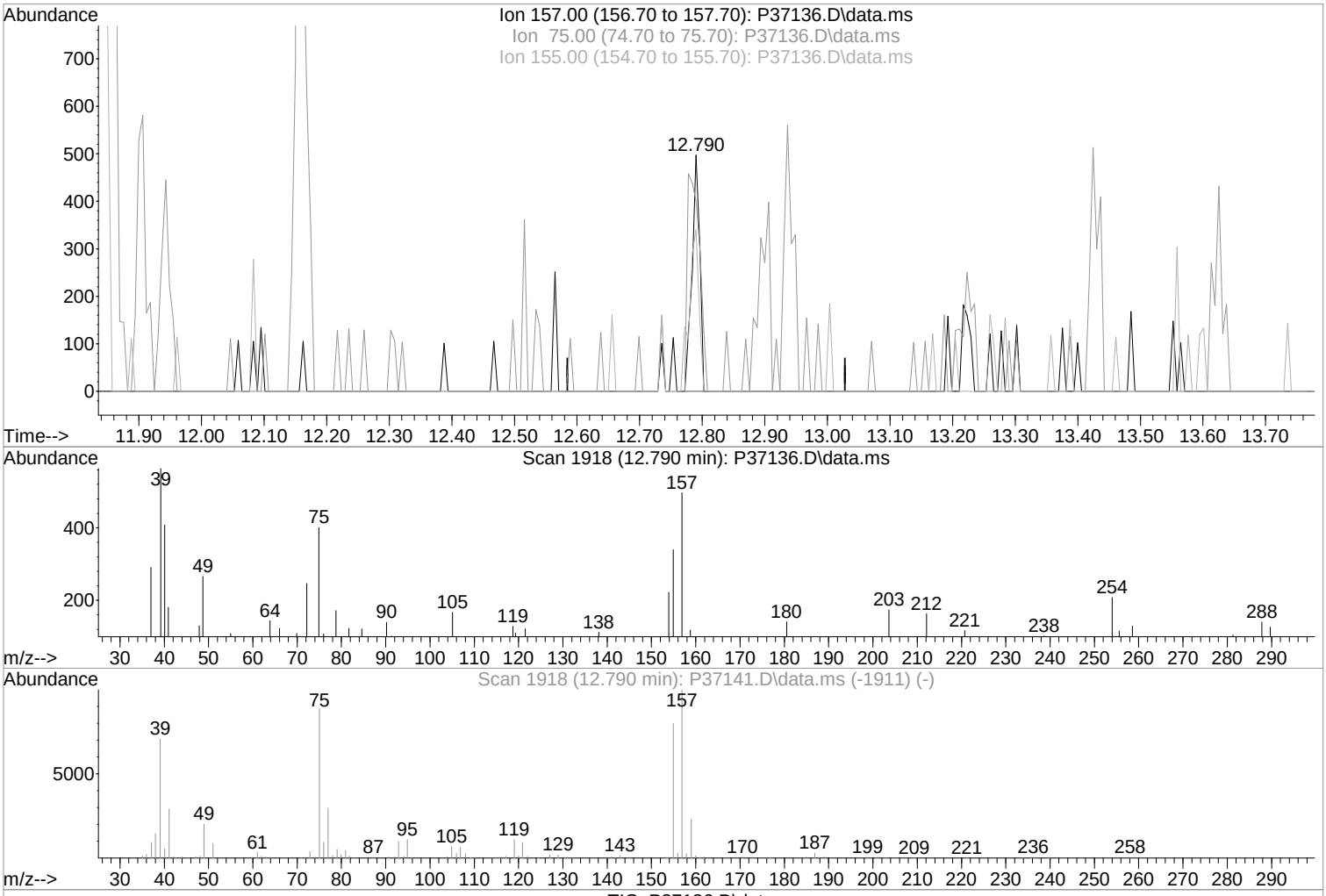
Ion	Ratio	Lower	Upper
76	100		
78	12.3	0.0	29.5
77	5.9	0.0	22.5



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(111) 1,2-Dibromo-3-chloropropane (P)

12.790min (+0.000) 0.40 ppb m

response 429

Ion	Exp%	Act%
157.00	100	100
75.00	88.70	80.68
155.00	79.80	68.41
0.00	0.00	0.00

Manual Integration:

After

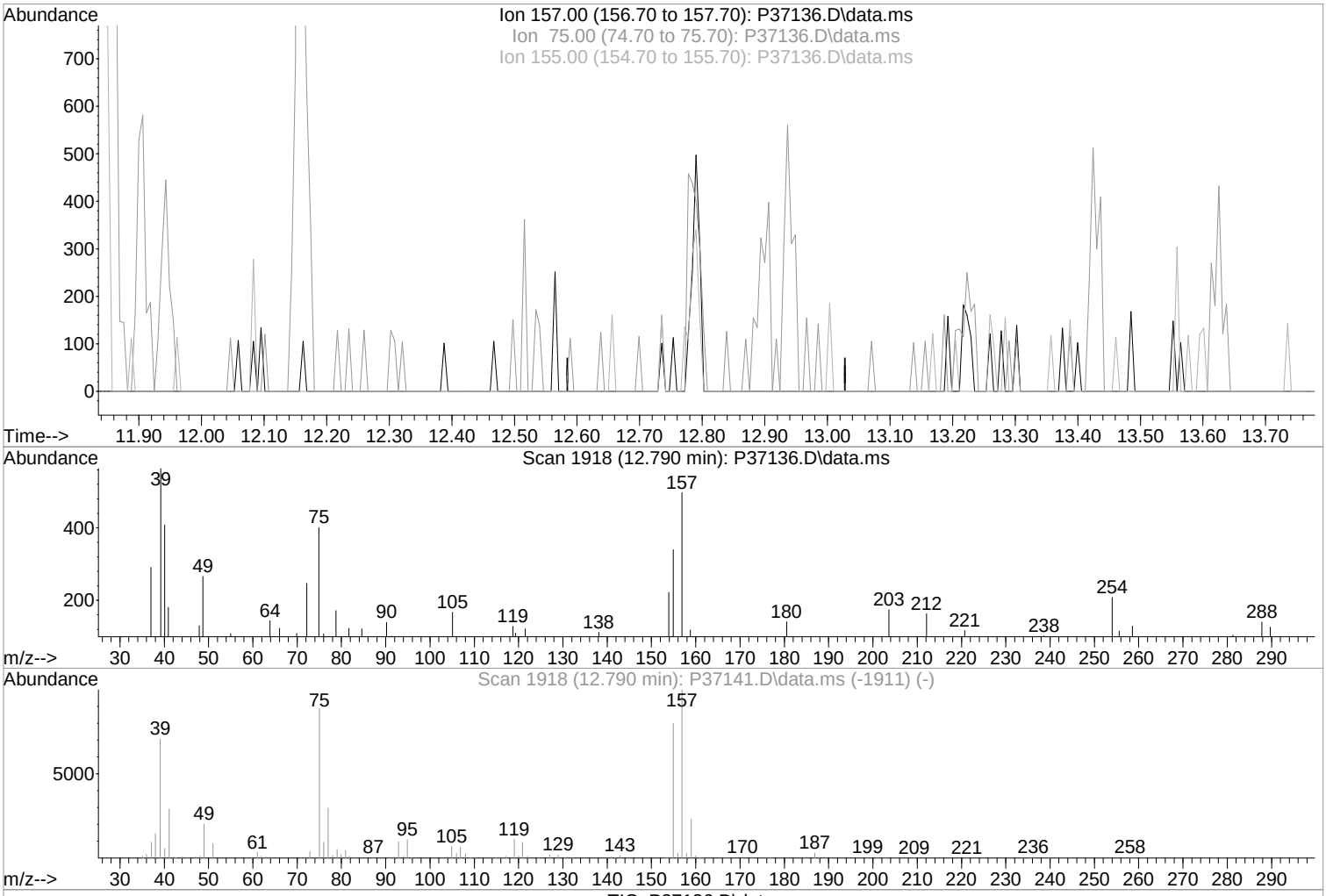
Peak not found.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(111) 1,2-Dibromo-3-chloropropane (P)

12.790min (-12.790) 0.00 ppb

response 0

Ion	Exp%	Act%
157.00	100	0.00
75.00	88.70	0.00#
155.00	79.80	0.00#
0.00	0.00	0.00

Manual Integration:

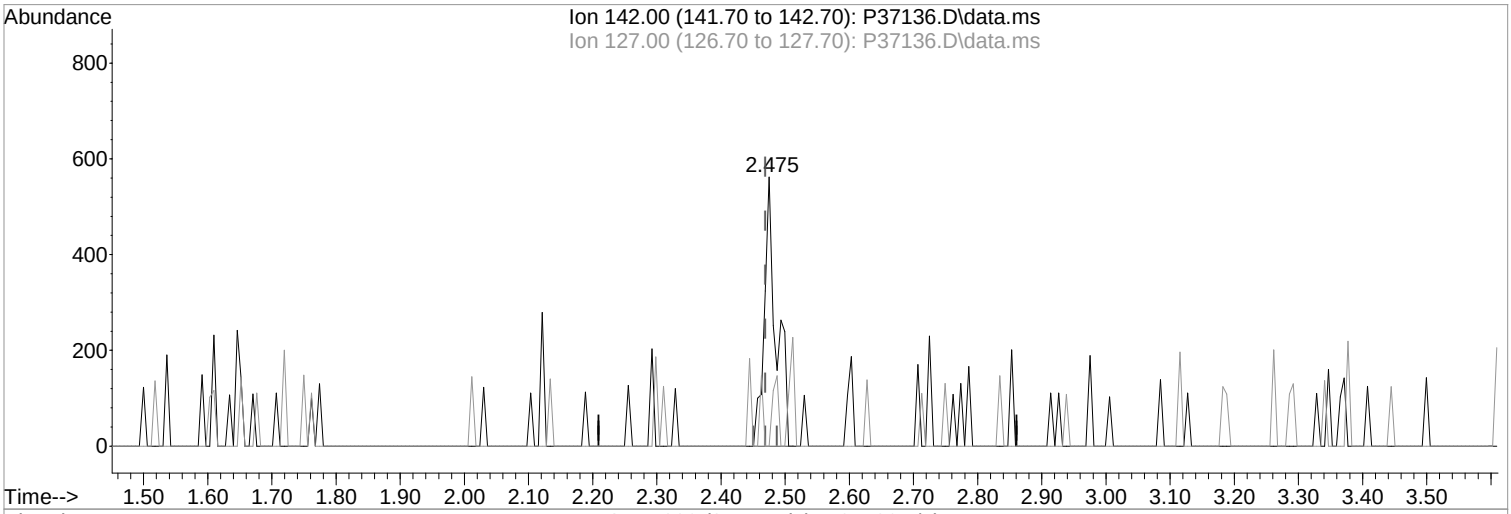
Before

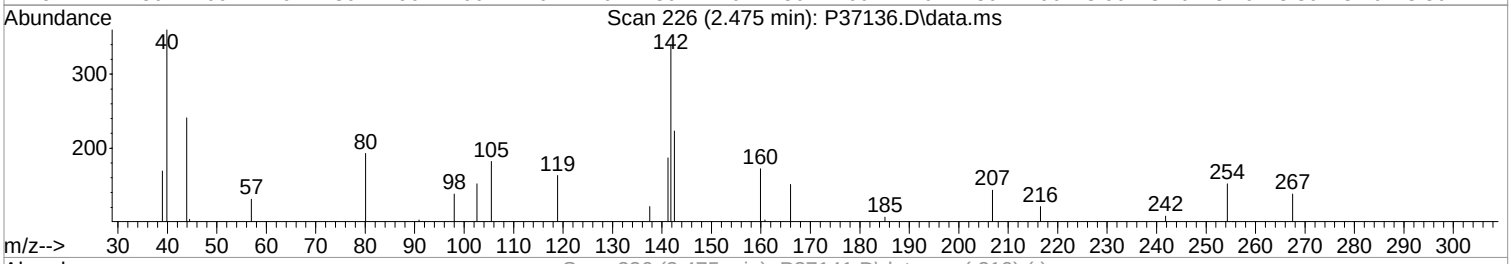
07/13/20

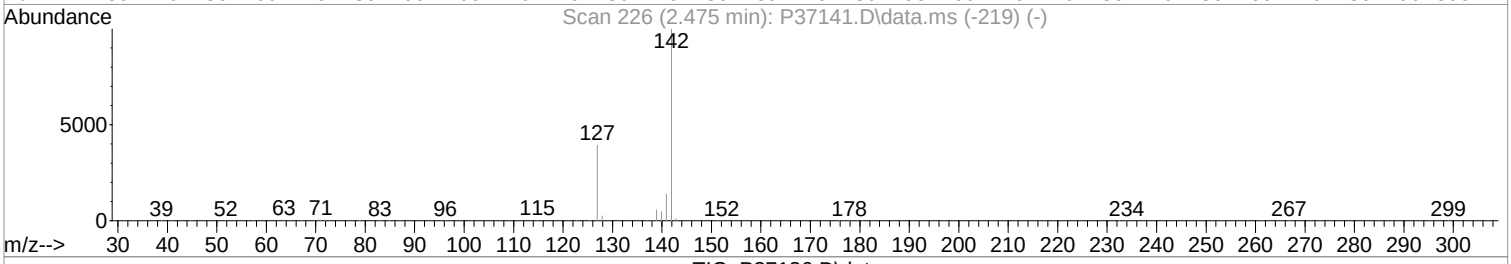
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(17) Iodomethane

2.475min (+0.006) 0.29 ppb m

response 734

Ion	Exp%	Act%
142.00	100	100
127.00	39.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

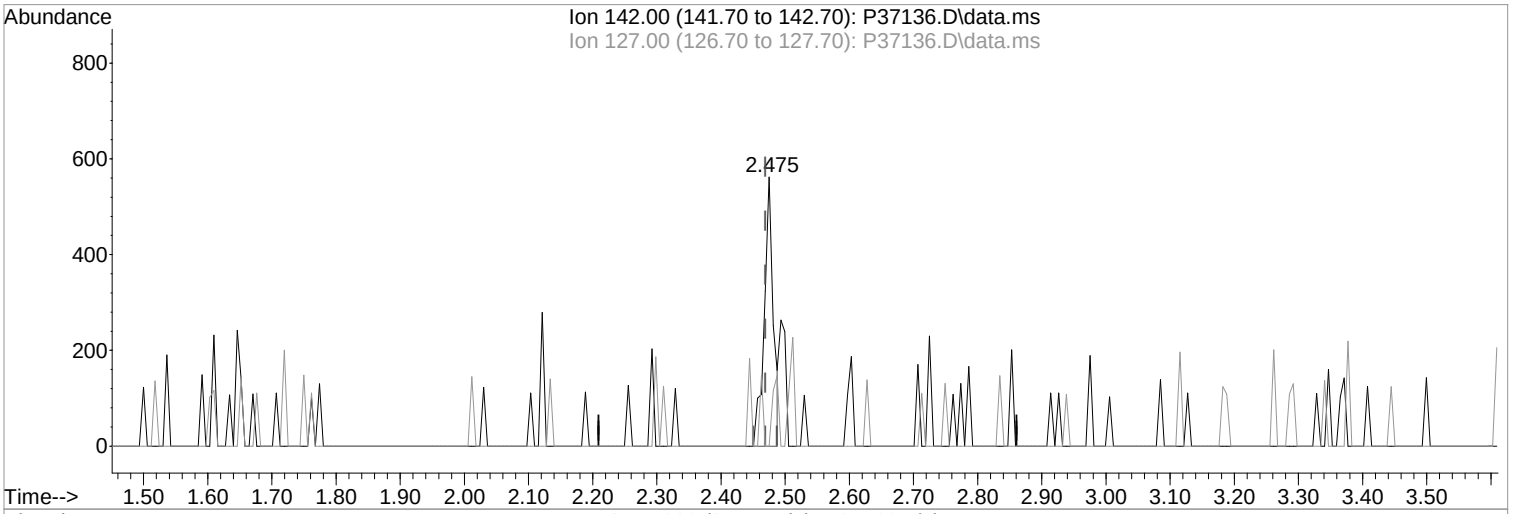
Split Peak

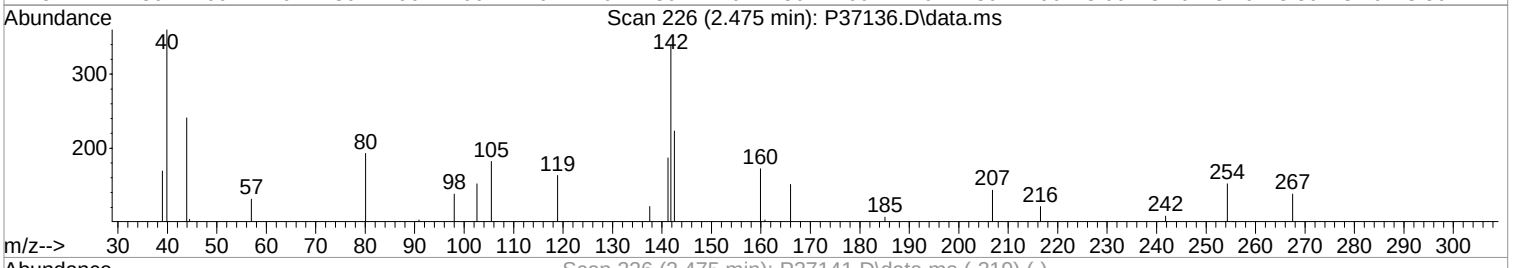
07/13/20

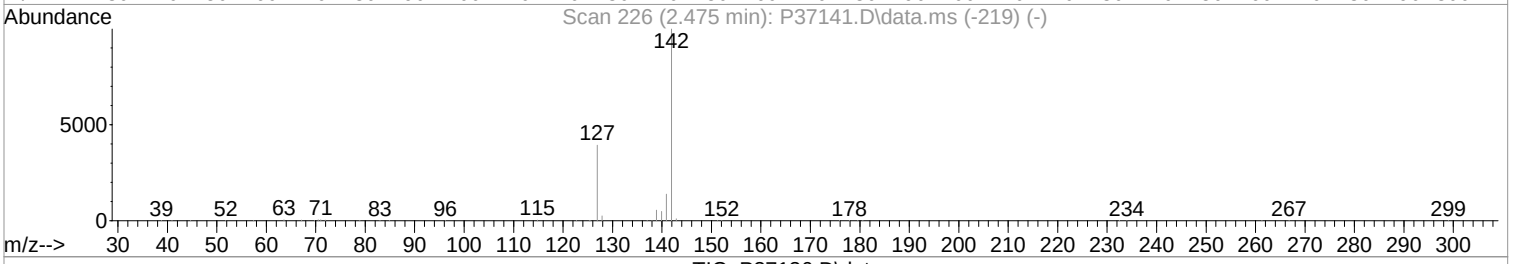
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(17) Iodomethane

2.475min (+0.006) 0.21 ppb

response 550

Ion	Exp%	Act%
142.00	100	100
127.00	39.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

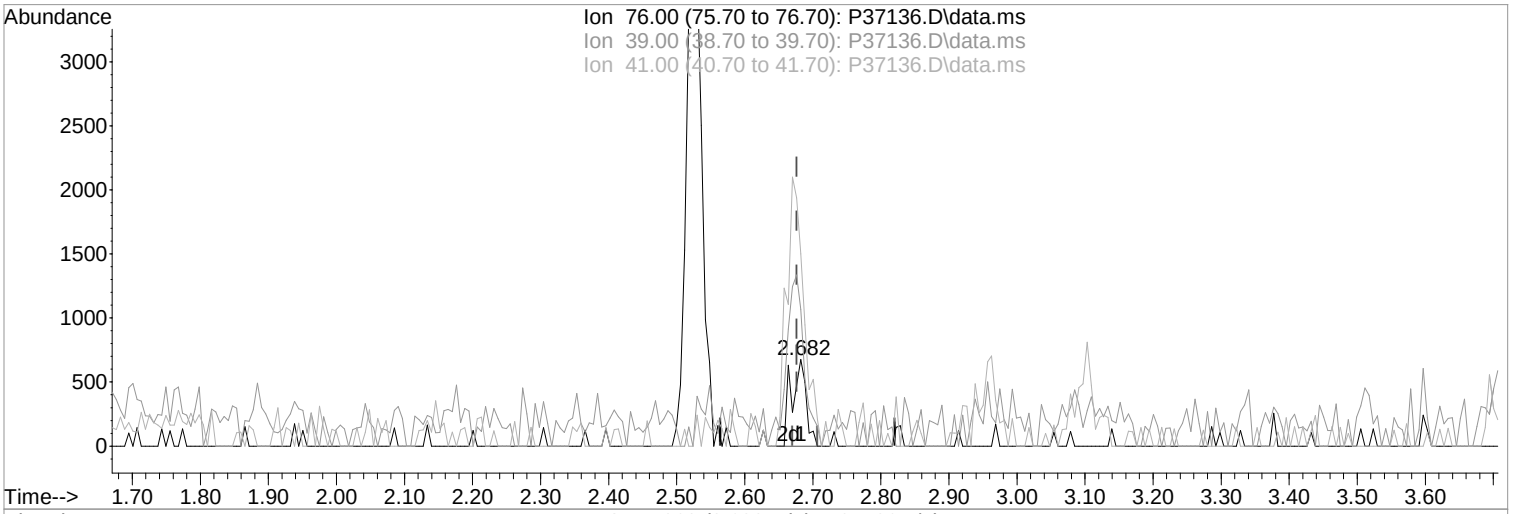
07/13/20

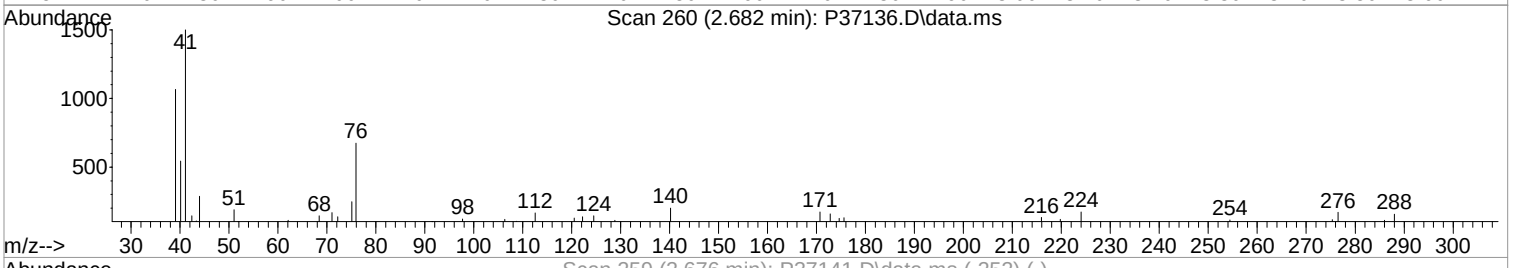
1st 07/14/20
2nd 07/14/20

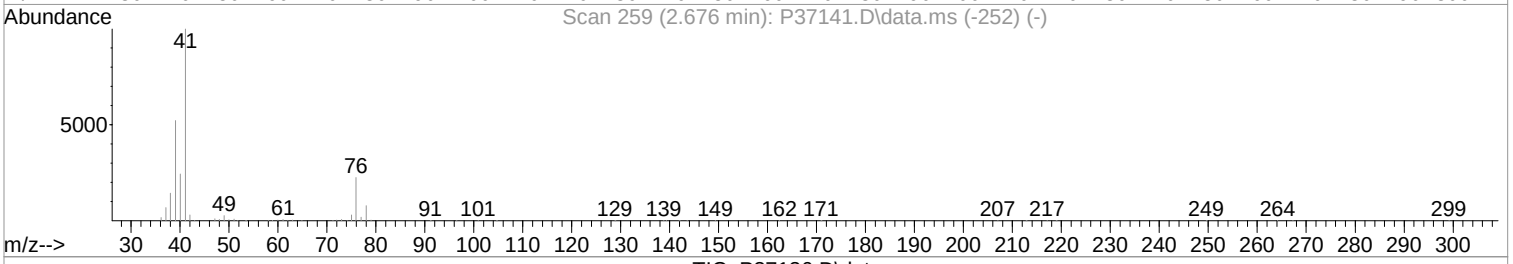
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(20) Allyl Chloride

2.682min (+0.006) 0.62 ppb m

response 1010

Ion	Exp%	Act%
76.00	100	100
39.00	231.00	157.93#
41.00	443.30	222.37#
0.00	0.00	0.00

Manual Integration:

After

Split Peak

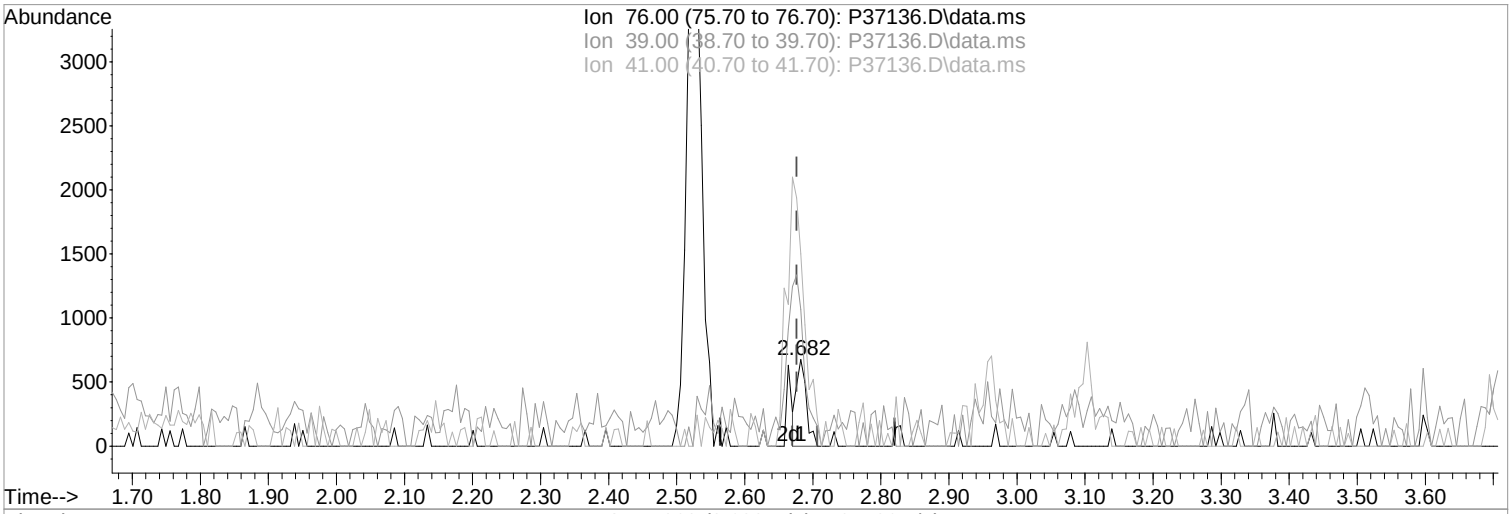
07/13/20

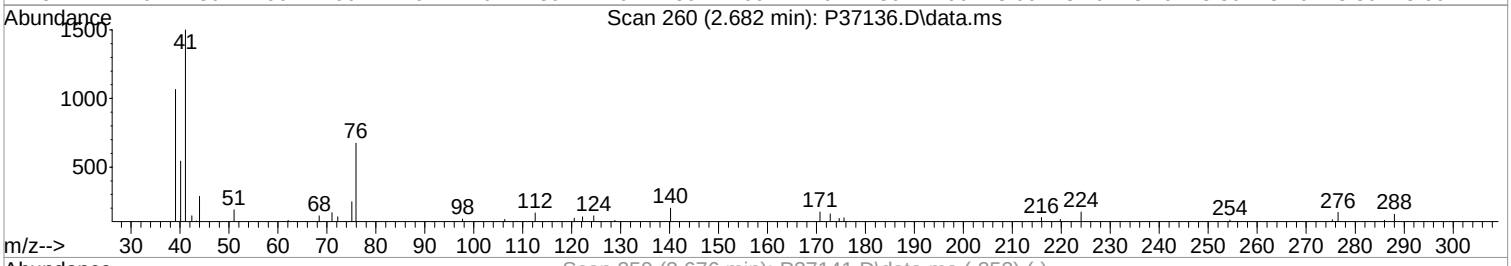
1st 07/14/20
2nd 07/14/20

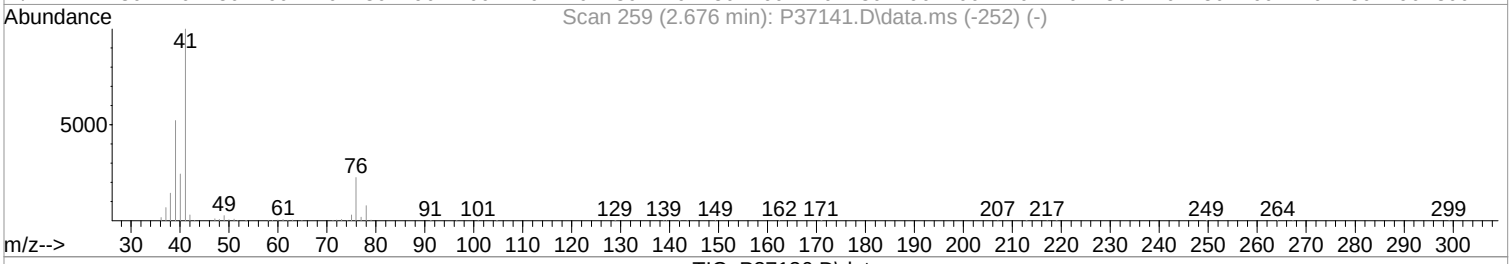
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(20) Allyl Chloride

2.682min (+0.006) 0.42 ppb

response 682

Ion	Exp%	Act%
76.00	100	100
39.00	231.00	157.93#
41.00	443.30	222.37#
0.00	0.00	0.00

Manual Integration:

Before

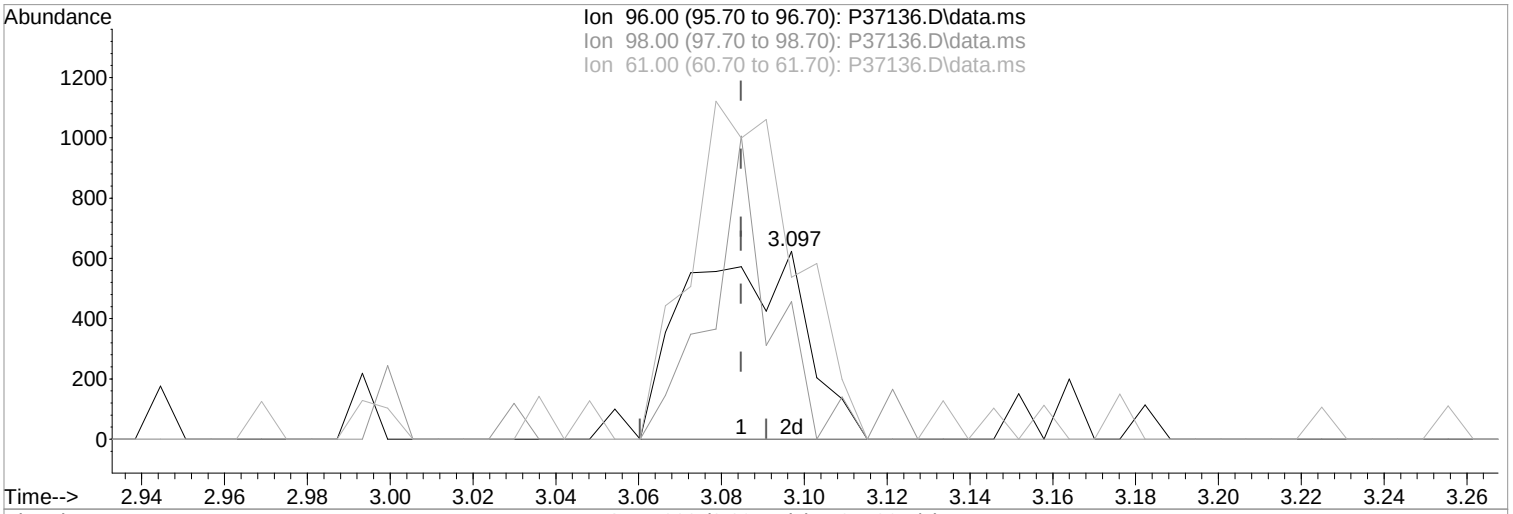
07/13/20

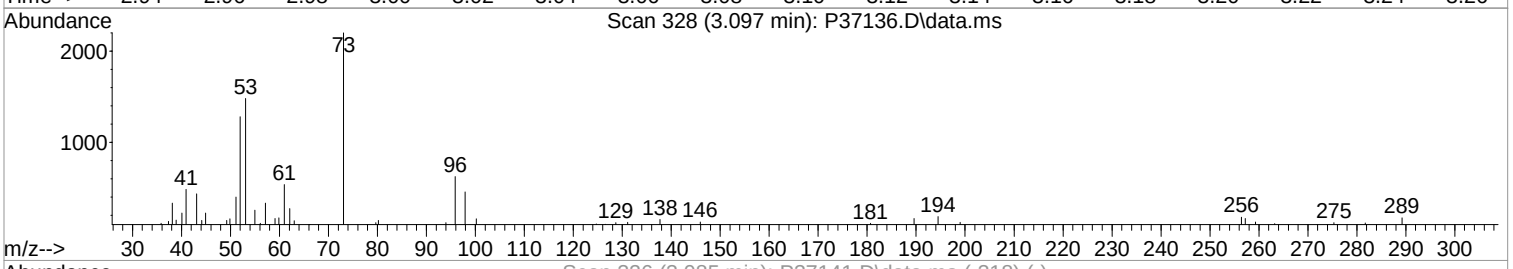
1st 07/14/20
2nd 07/14/20

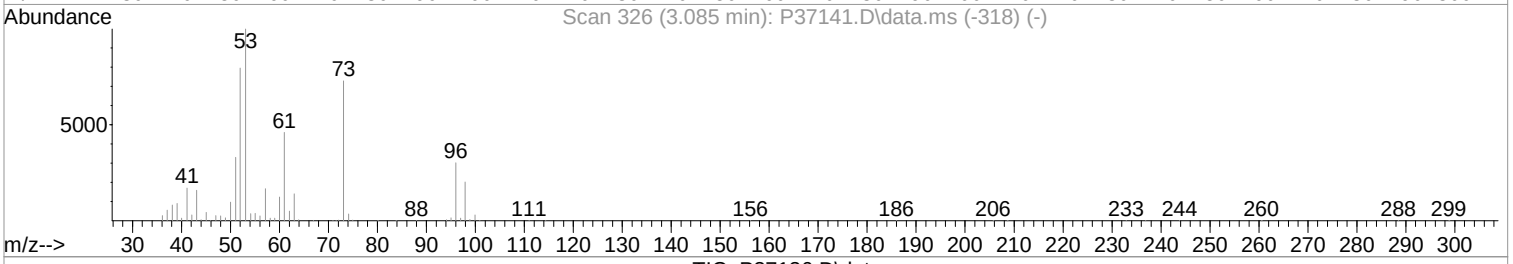
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(26) trans-1,2-Dichloroethene (P)

3.097min (+0.012) 0.47 ppb m

response 1252

Ion	Exp%	Act%
96.00	100	100
98.00	66.80	73.24
61.00	152.80	86.06#
0.00	0.00	0.00

Manual Integration:

After

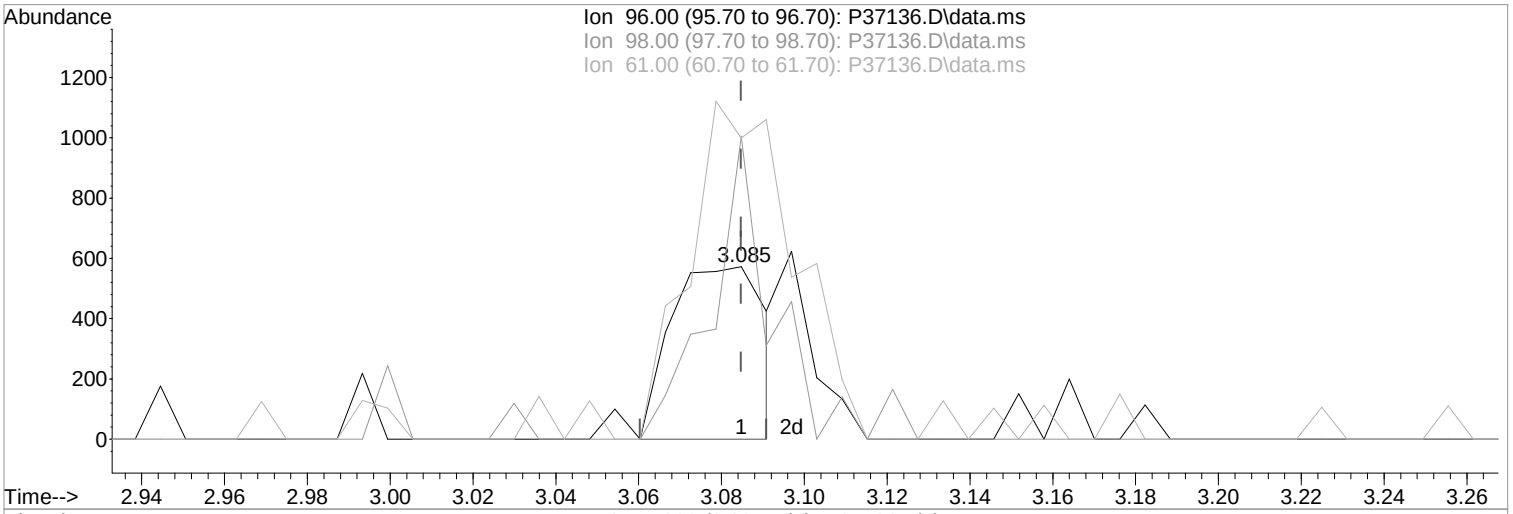
Split Peak

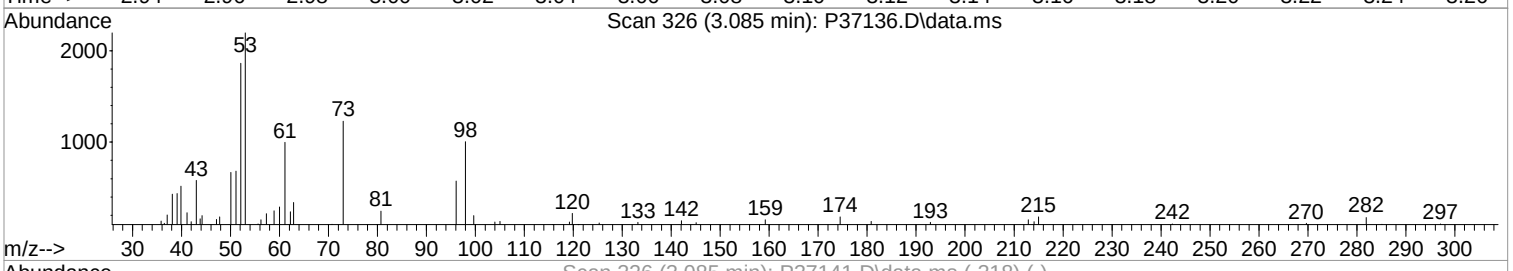
07/13/20

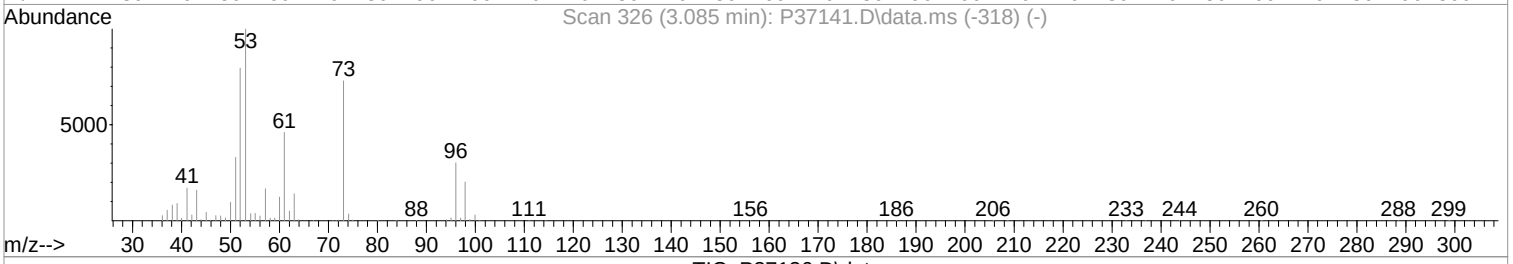
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(26) trans-1,2-Dichloroethene (P)

3.085min (+0.000) 0.34 ppb

response 901

Ion	Exp%	Act%
96.00	100	100
98.00	66.80	175.57#
61.00	152.80	174.35#
0.00	0.00	0.00

Manual Integration:

Before

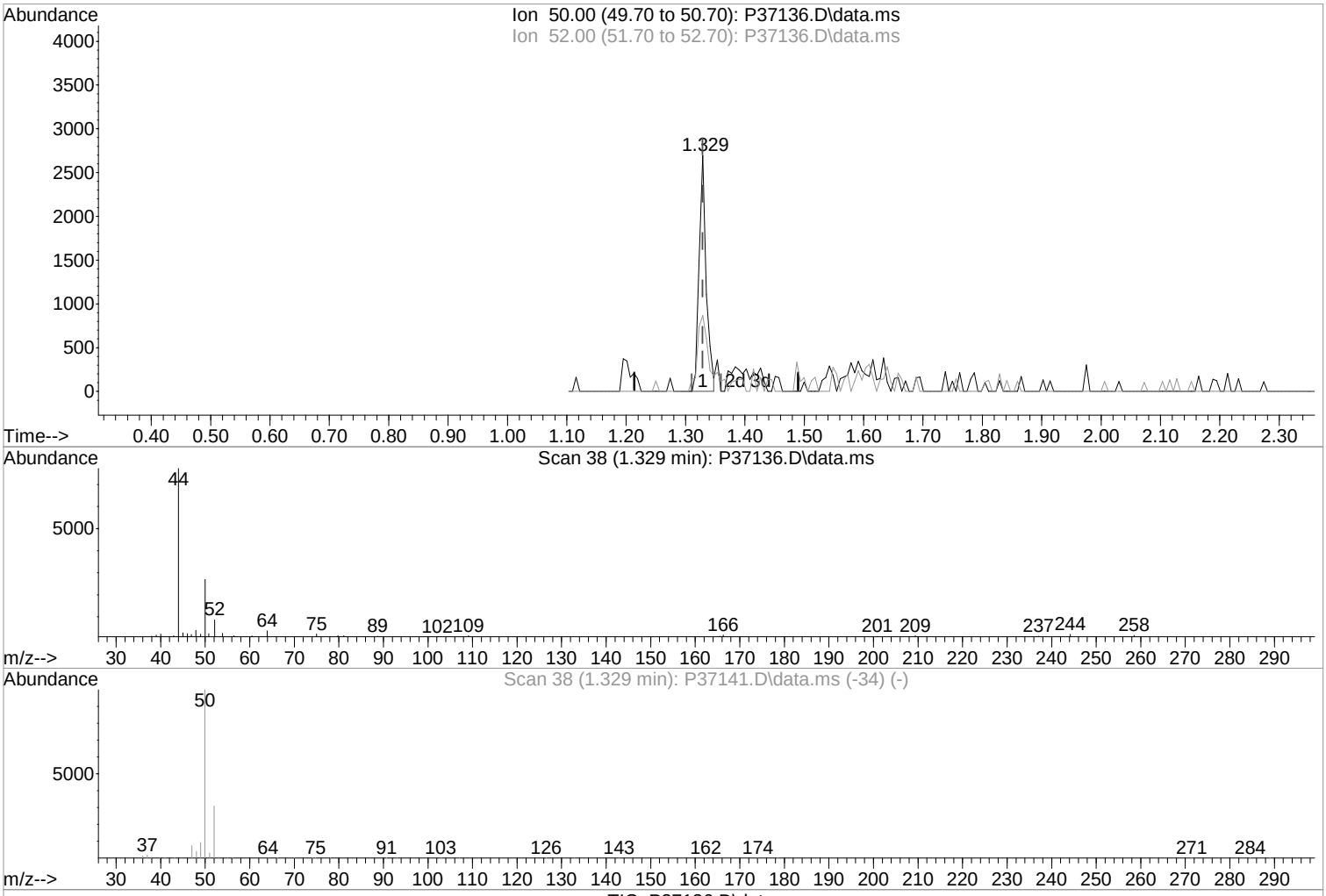
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(3) Chloromethane (P)

1.329min (+0.000) 0.54 ppb m

response 2259

Ion	Exp%	Act%
50.00	100	100
52.00	30.80	32.18
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

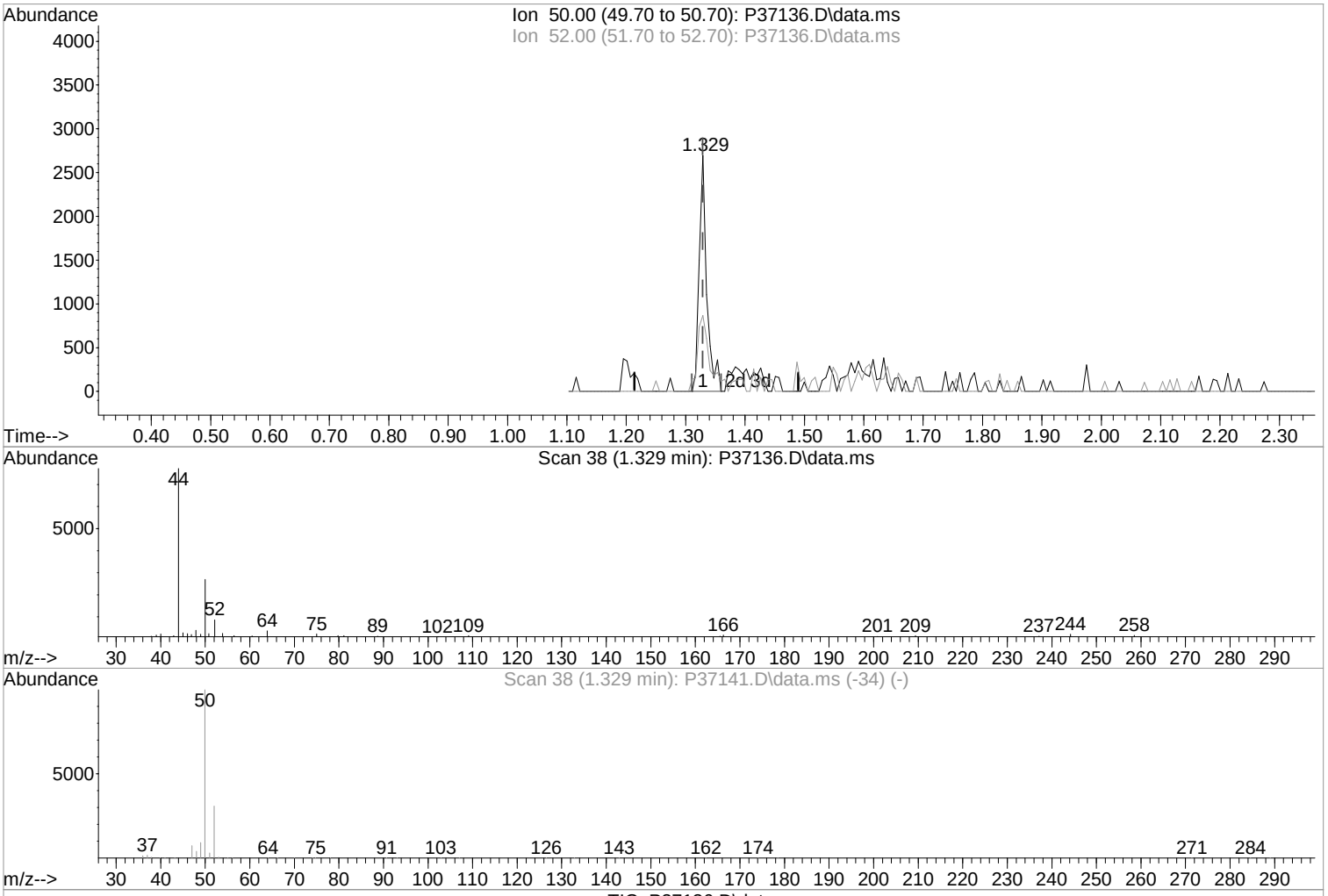
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(3) Chloromethane (P)

1.329min (+0.000) 0.58 ppb

response 2391

Ion	Exp%	Act%
50.00	100	100
52.00	30.80	32.18
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

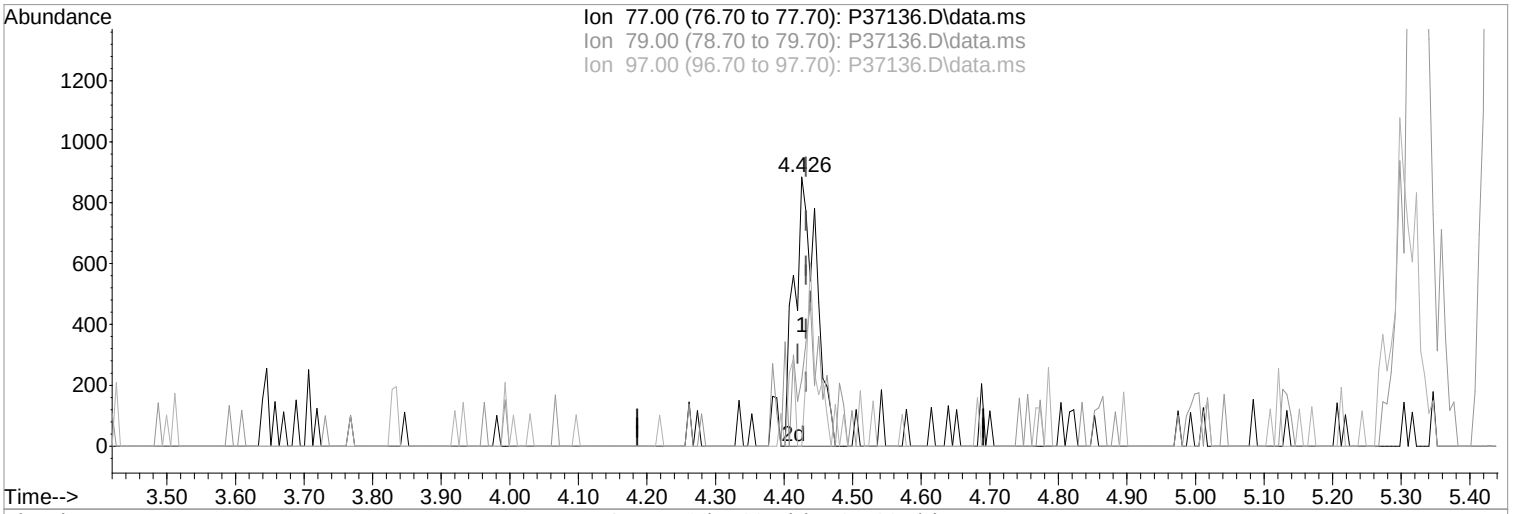
Before

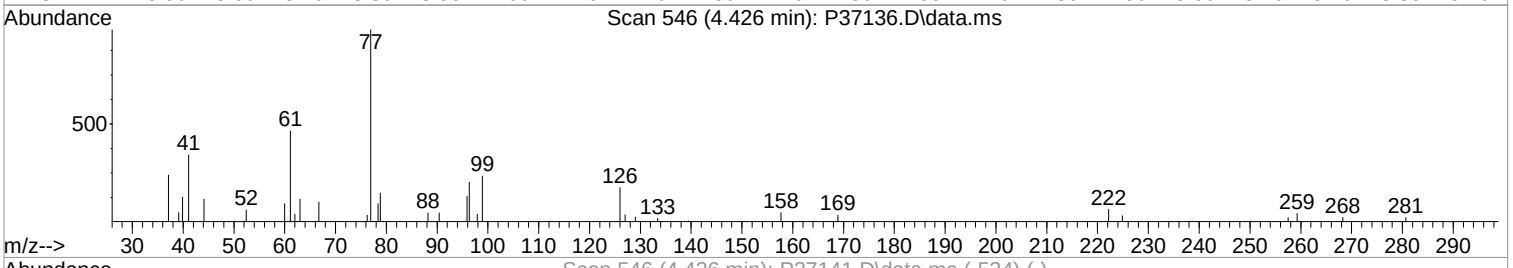
07/13/20

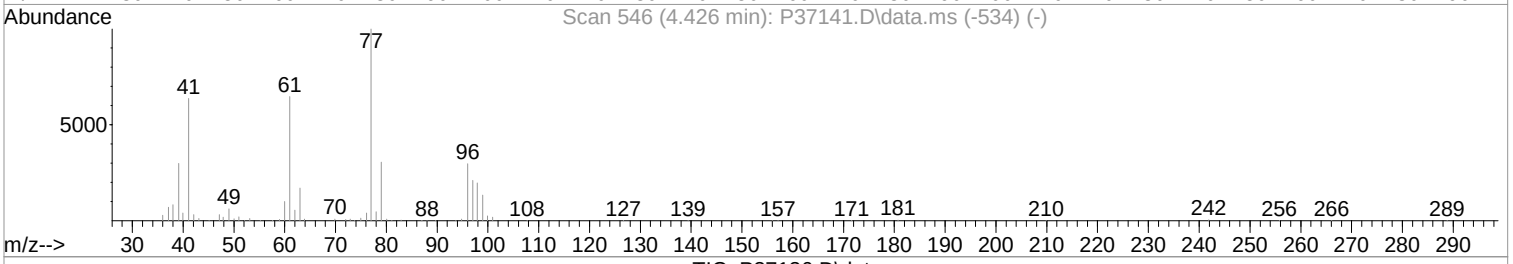
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(33) 2,2-Dichloropropane

4.426min (-0.006) 0.46 ppb m

response 1993

Ion	Exp%	Act%
77.00	100	100
79.00	30.40	24.77
97.00	21.00	0.00#
0.00	0.00	0.00

Manual Integration:

After

Split Peak

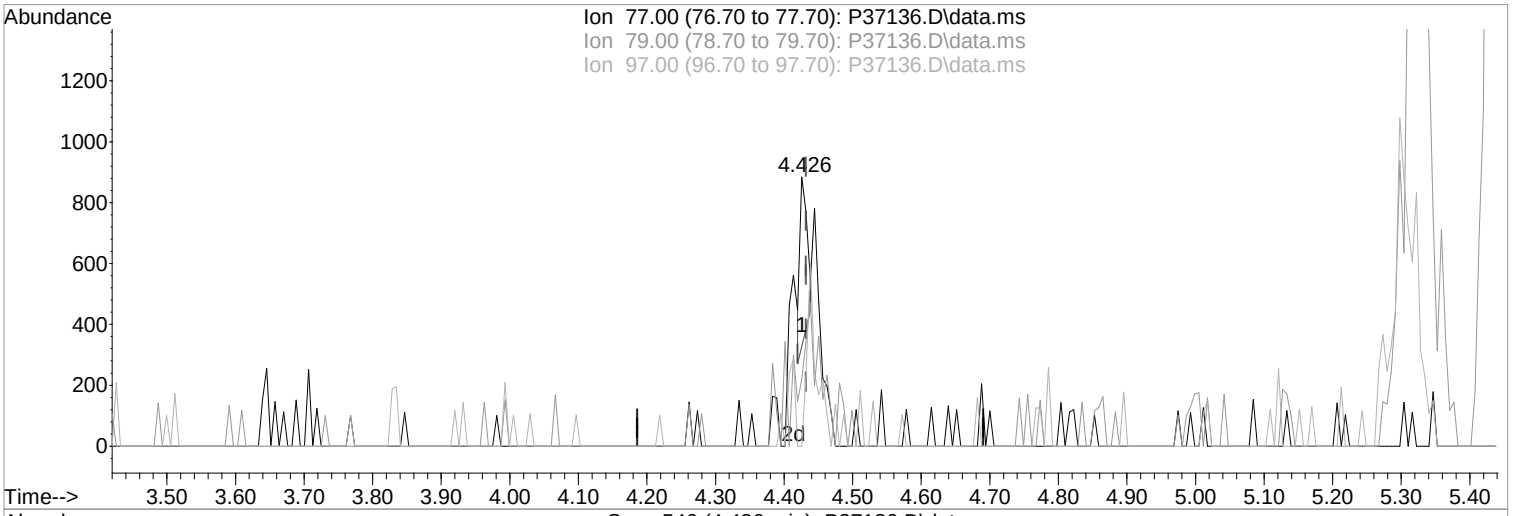
07/13/20

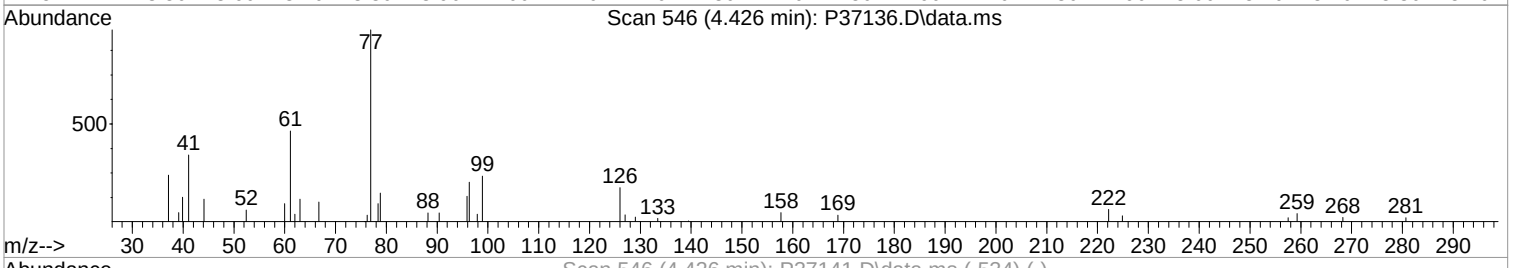
1st 07/14/20
2nd 07/14/20

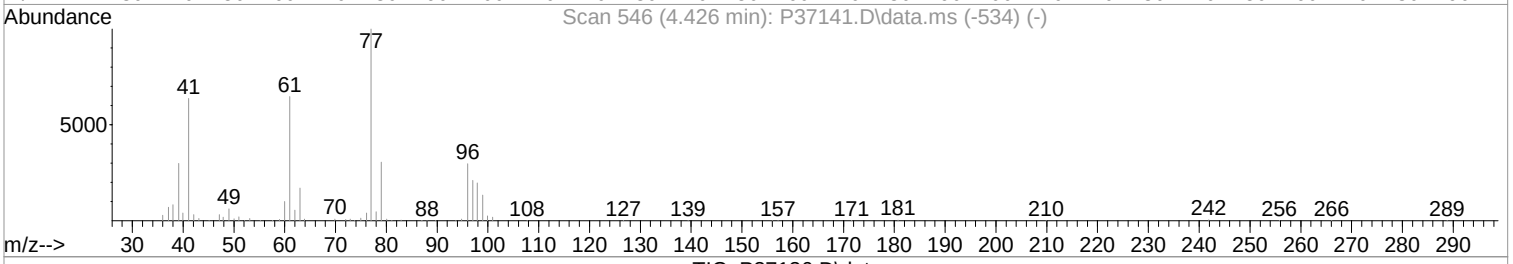
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(33) 2,2-Dichloropropane

4.426min (-0.006) 0.09 ppb

response 410

Ion	Exp%	Act%
77.00	100	100
79.00	30.40	24.77
97.00	21.00	0.00#
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

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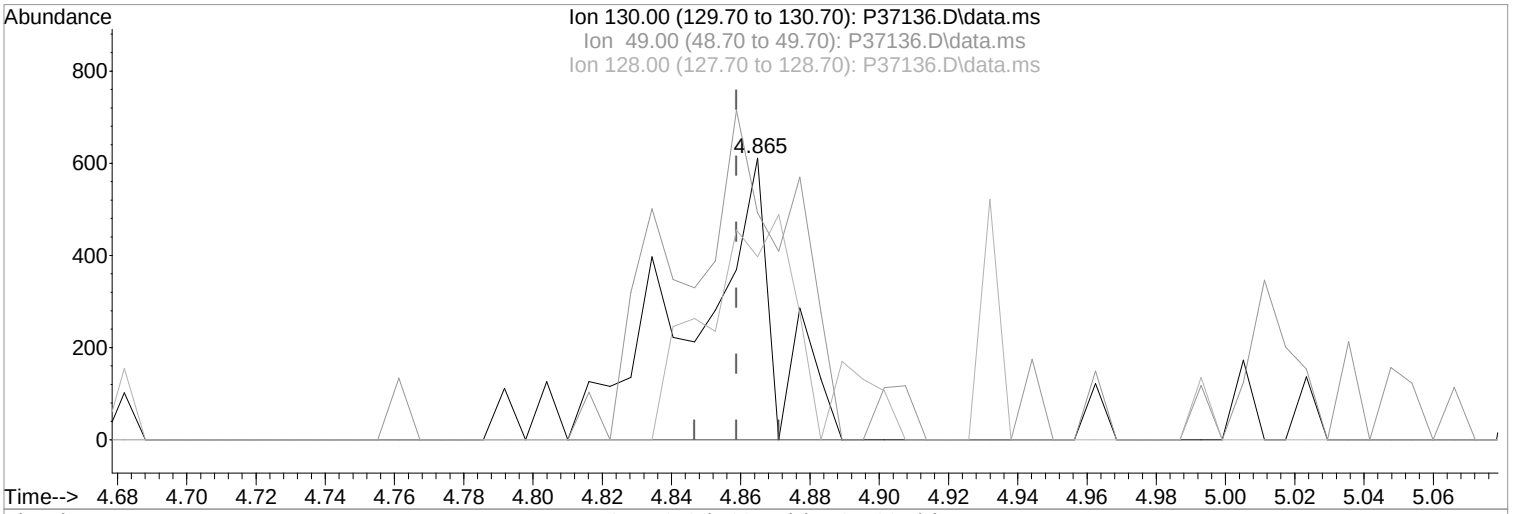
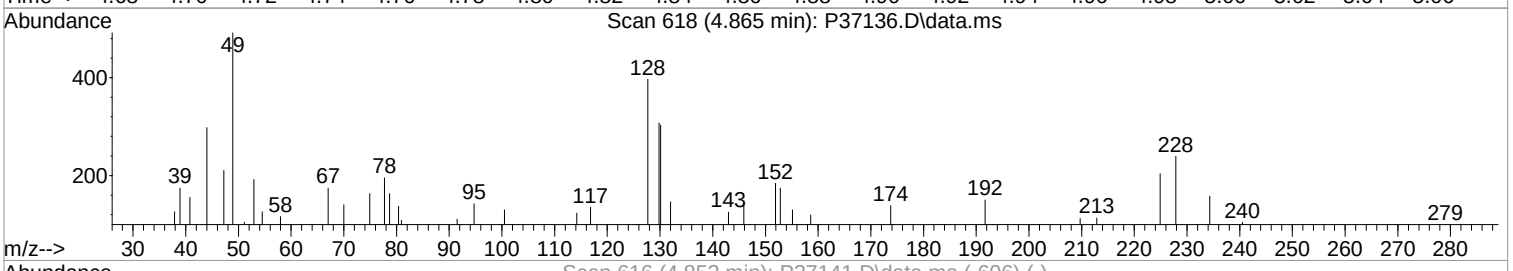
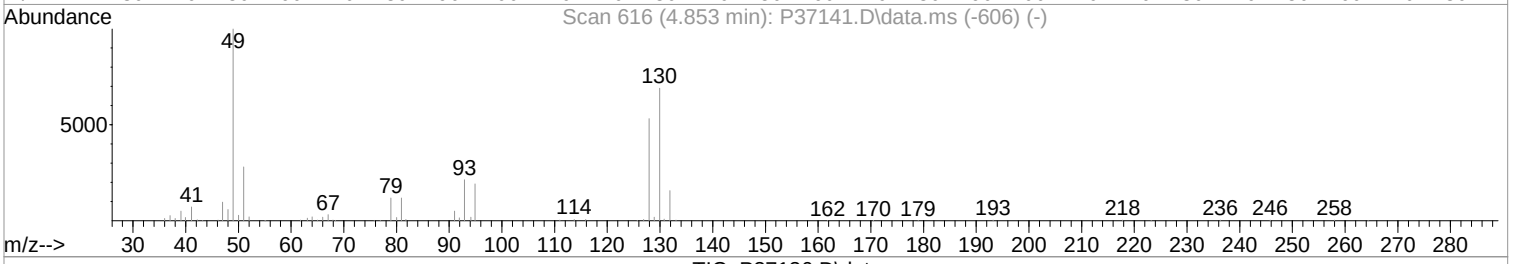
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(37) Bromochloromethane

4.865min (+0.006) 0.52 ppb m

response 1056

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	159.74
128.00	77.00	128.90#
0.00	0.00	0.00

Manual Integration:

After

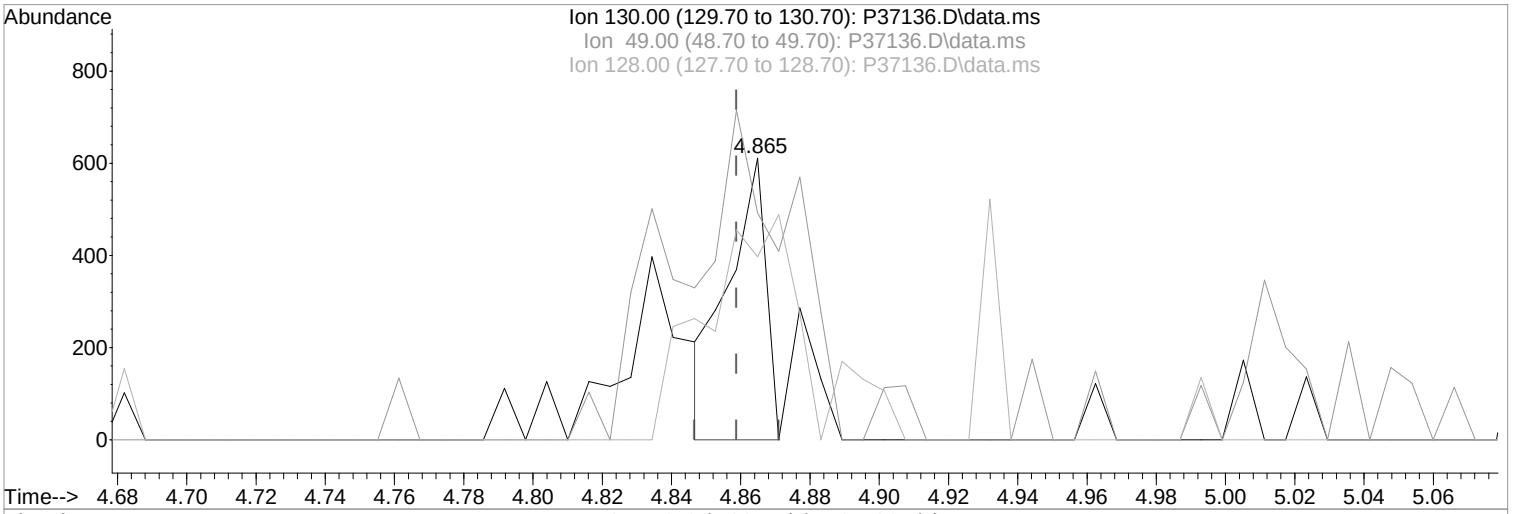
Split Peak

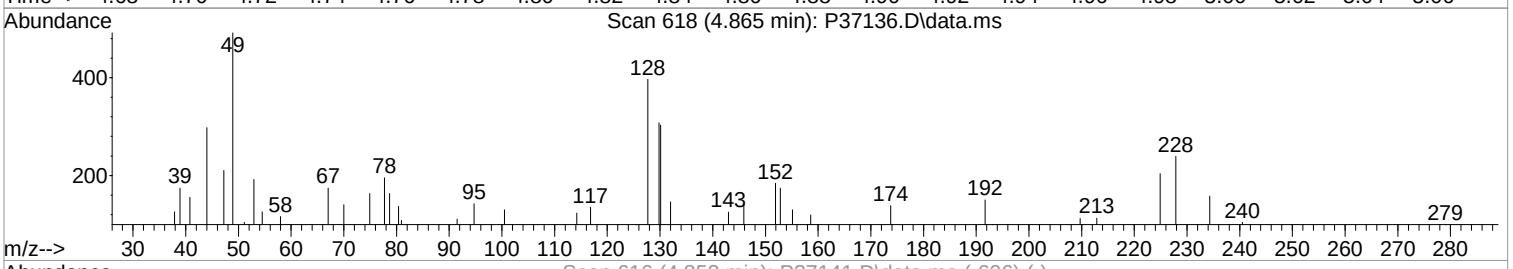
07/13/20

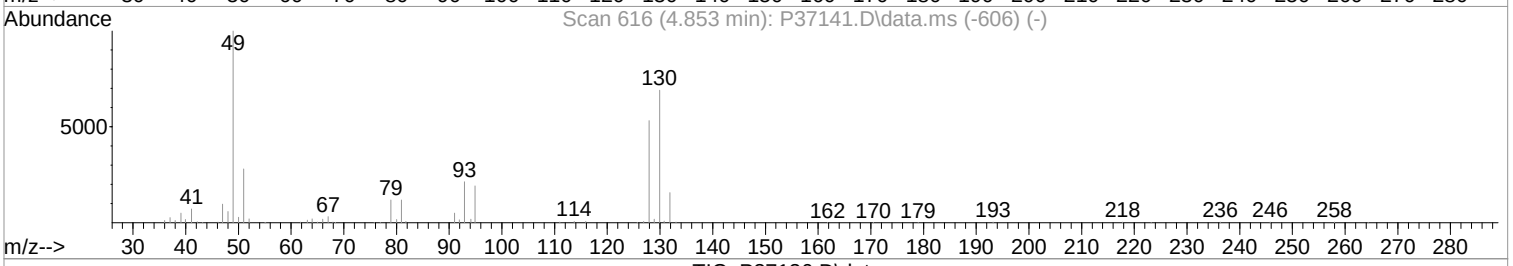
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(37) Bromochloromethane

4.865min (+0.006) 0.23 ppb

response 461

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	80.52#
128.00	77.00	64.98
0.00	0.00	0.00

Manual Integration:

Before

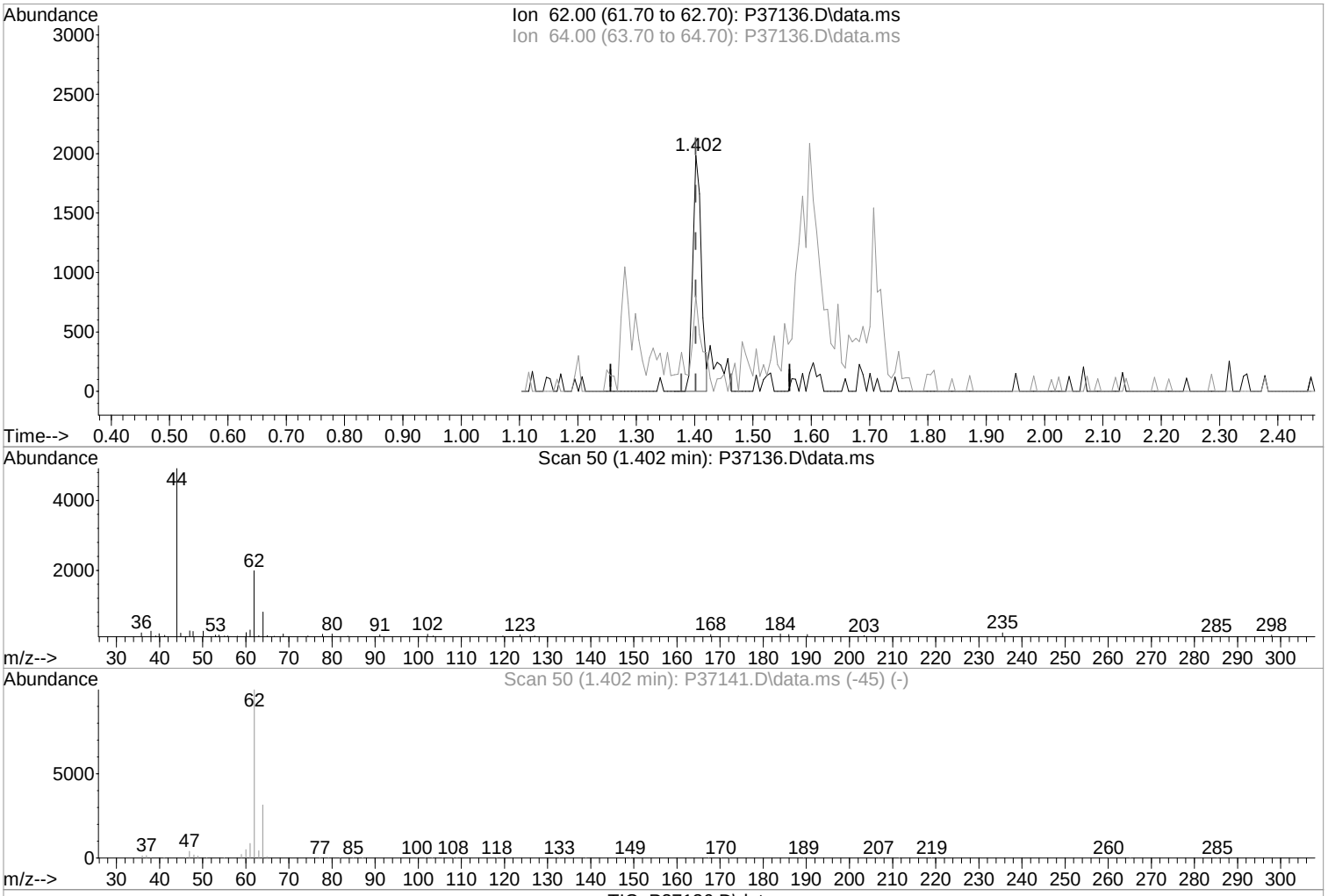
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(4) Vinyl Chloride (P)

1.402min (+0.000) 0.51 ppb m

response 2012

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	40.48
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

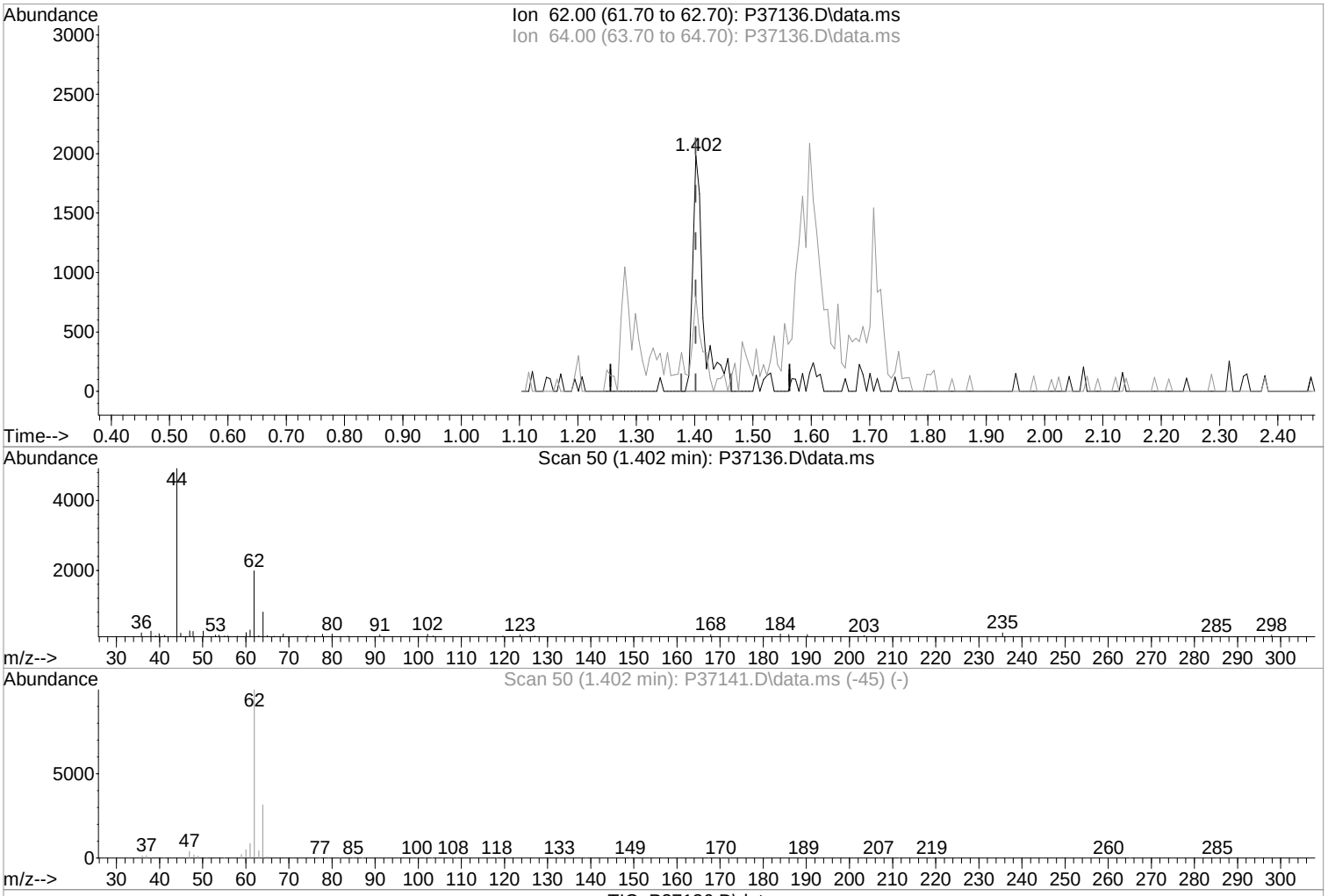
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(4) Vinyl Chloride (P)

1.402min (+0.000) 0.65 ppb

response 2546

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	40.48
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

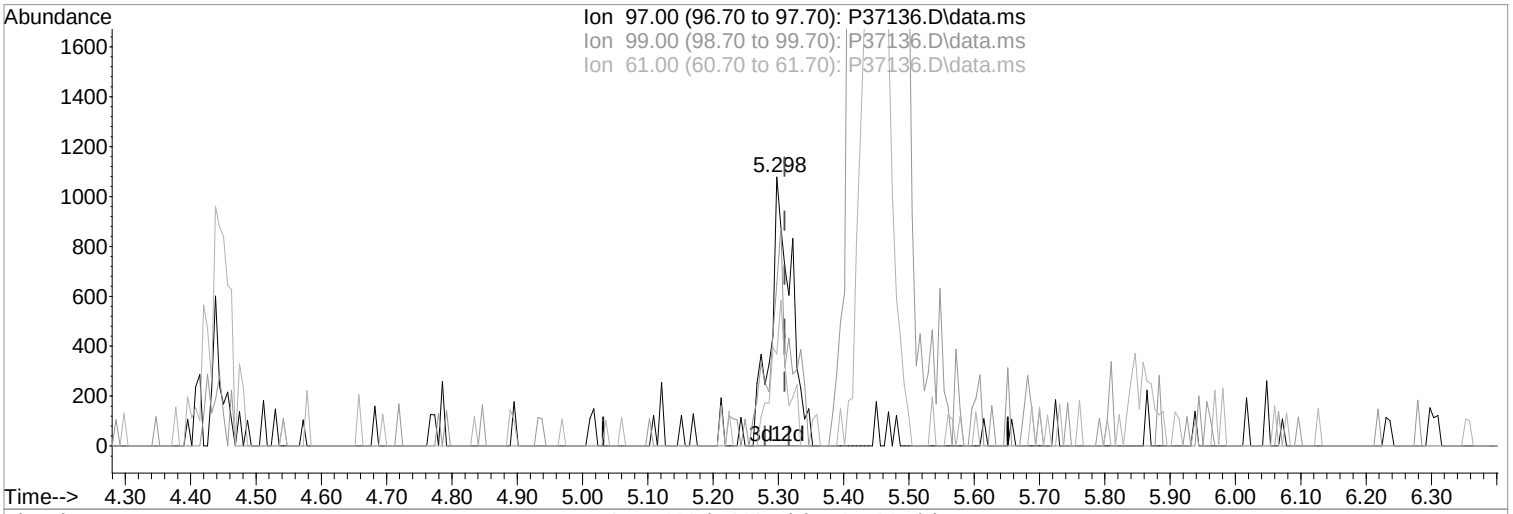
Before

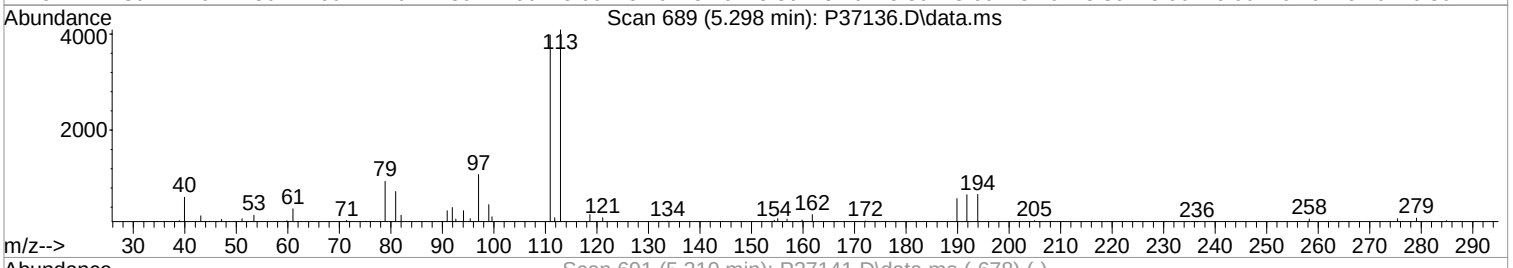
07/13/20

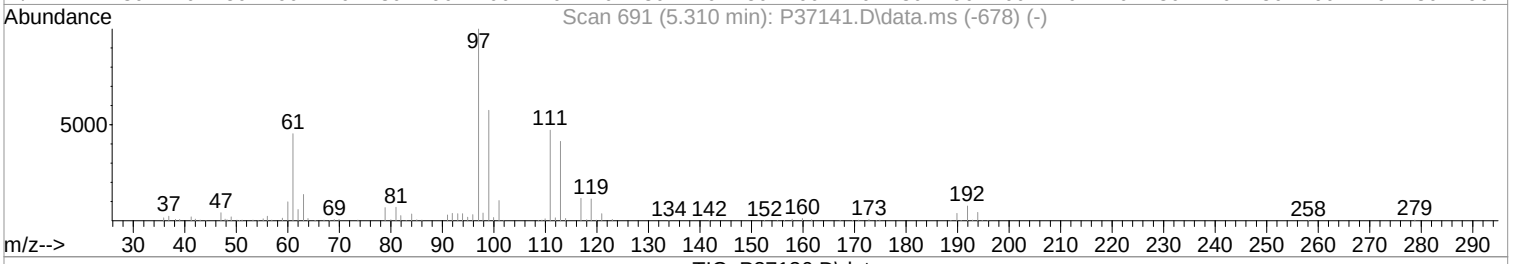
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.298min (-0.012) 0.56 ppb m

response 2394

Ion	Exp%	Act%
97.00	100	100
99.00	57.60	41.93
61.00	45.60	34.23
0.00	0.00	0.00

Manual Integration:

After

Split Peak

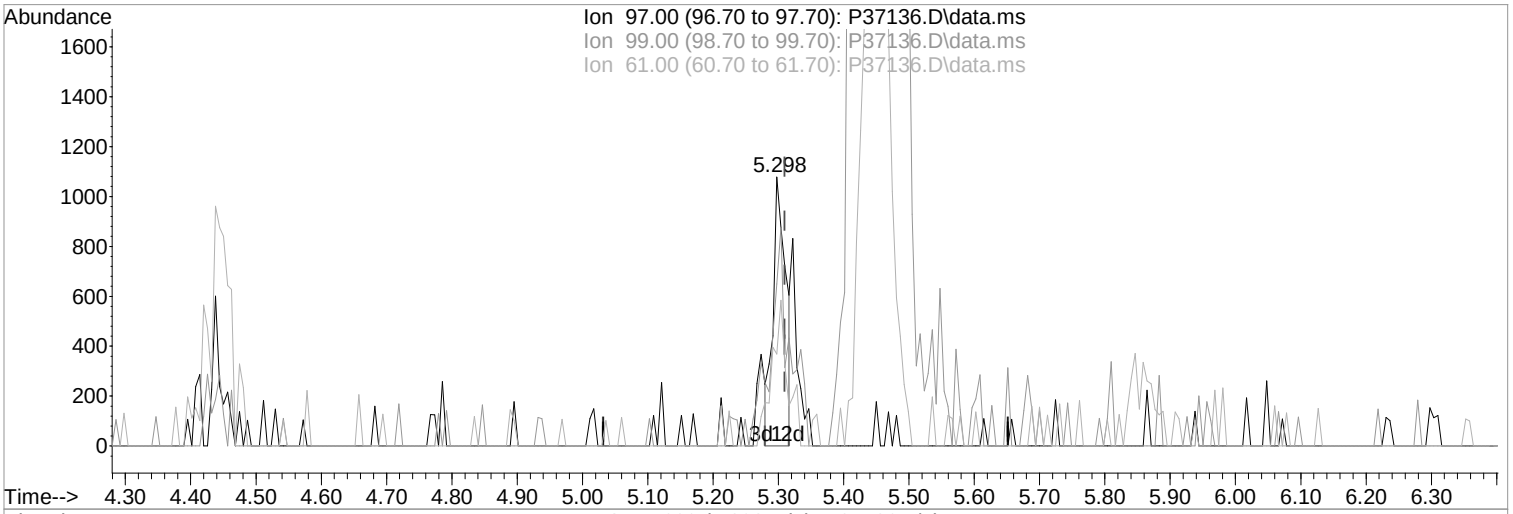
07/13/20

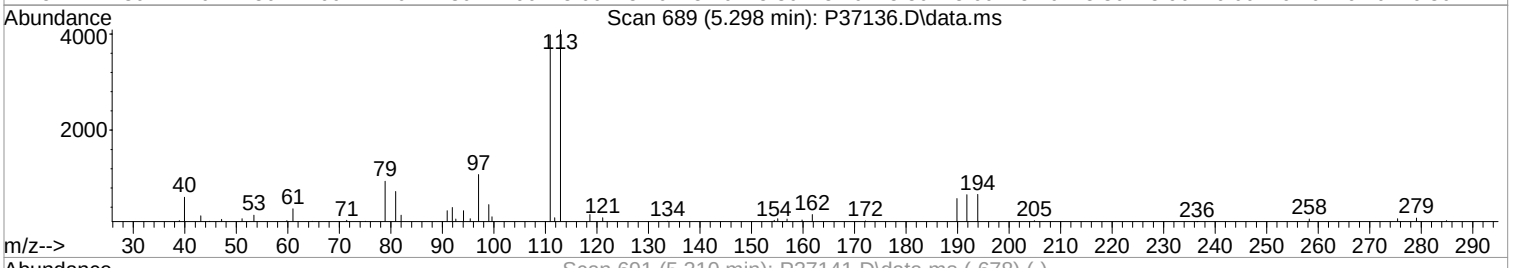
1st 07/14/20
2nd 07/14/20

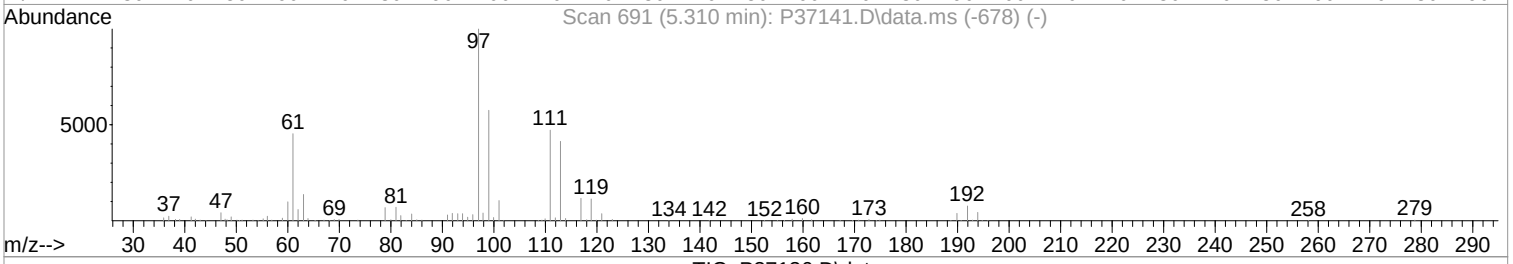
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.298min (-0.012) 0.35 ppb

response 1481

Ion	Exp%	Act%
97.00	100	100
99.00	57.60	60.20
61.00	45.60	34.23
0.00	0.00	0.00

Manual Integration:

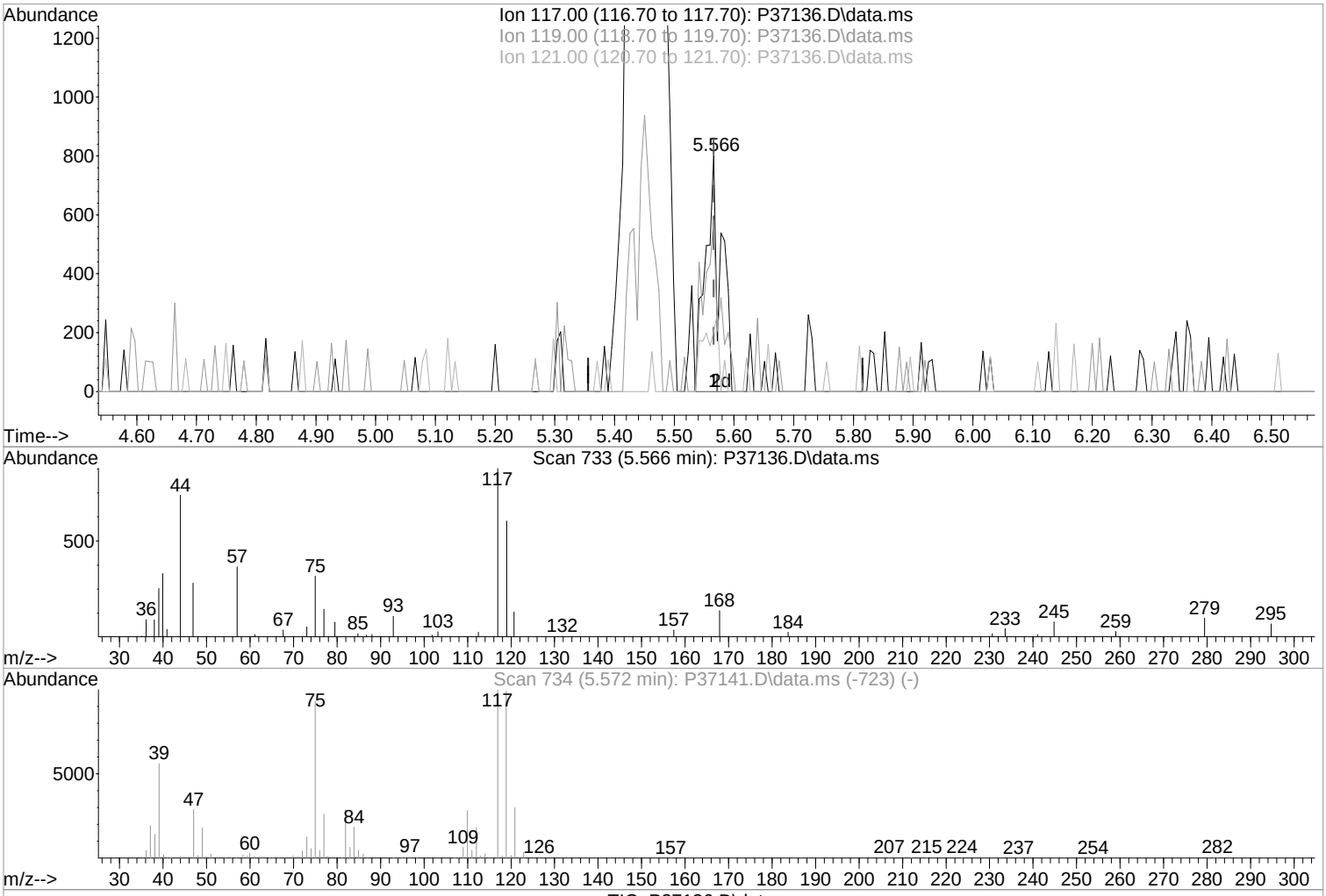
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(46) Carbontetrachloride (P)

5.566min (+0.000) 0.42 ppb m

response 1466

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	72.69#
121.00	29.80	25.44
0.00	0.00	0.00

Manual Integration:

After

Split Peak

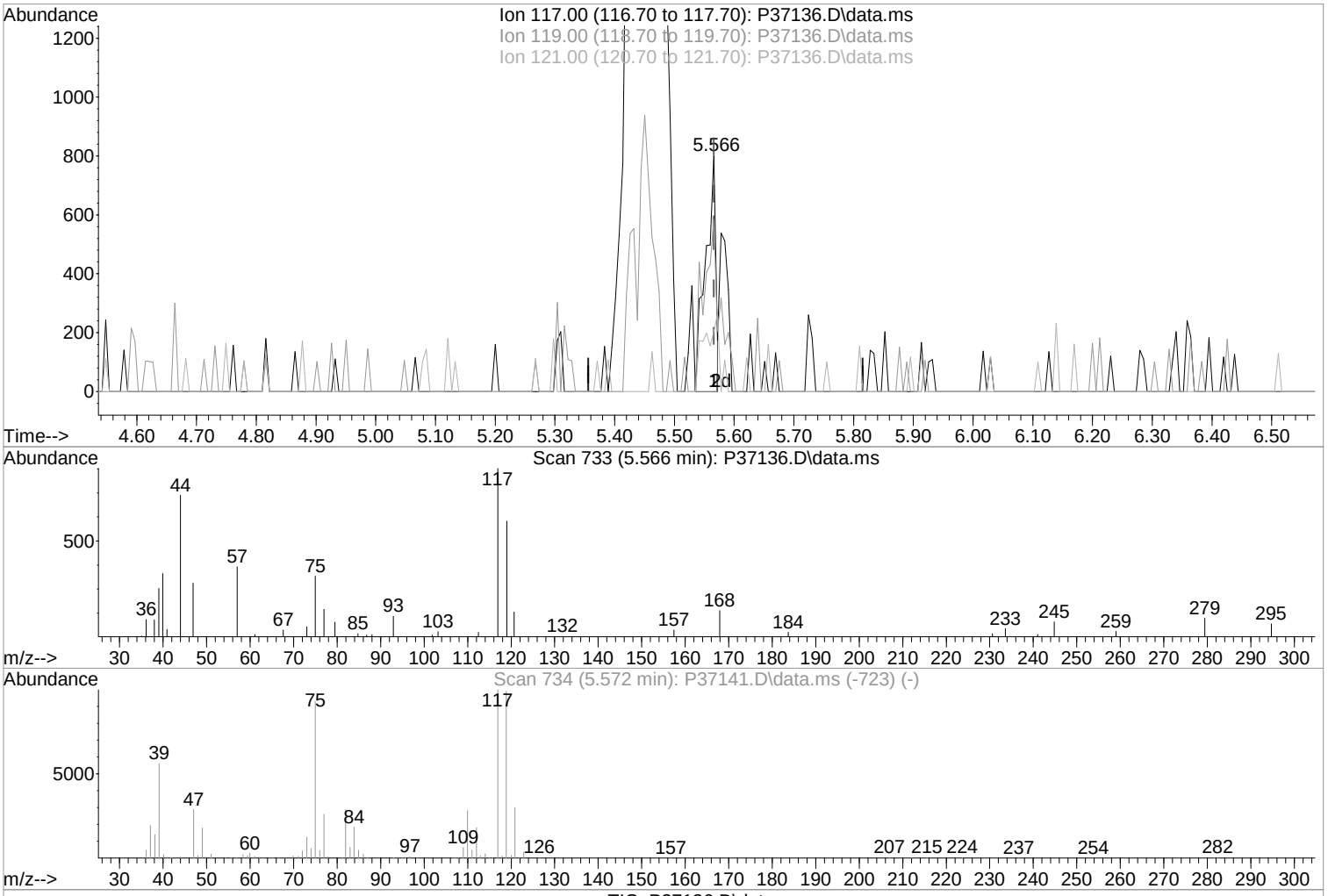
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(46) Carbontetrachloride (P)

5.566min (+0.000) 0.27 ppb

response 955

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	72.69#
121.00	29.80	25.44
0.00	0.00	0.00

Manual Integration:

Before

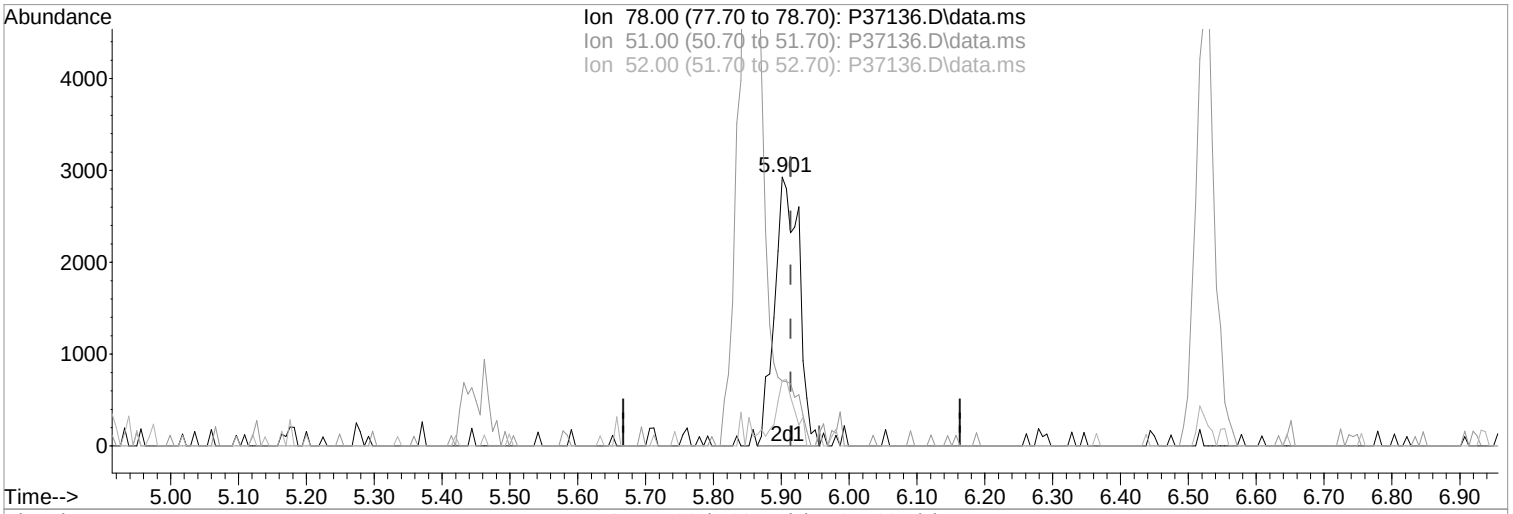
07/13/20

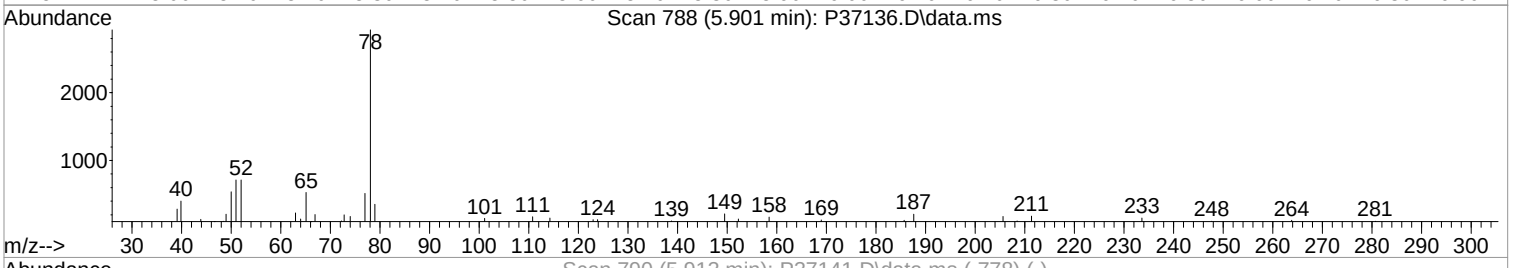
1st 07/14/20
2nd 07/14/20

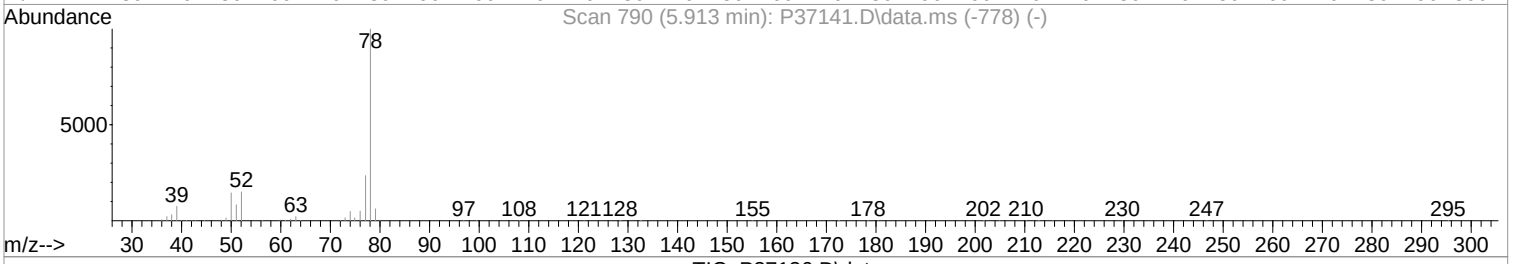
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(49) Benzene (P)

5.901min (-0.012) 0.48 ppb m

response 7301

Ion	Exp%	Act%
78.00	100	100
51.00	15.60	24.25
52.00	15.00	24.32
0.00	0.00	0.00

Manual Integration:

After

Split Peak

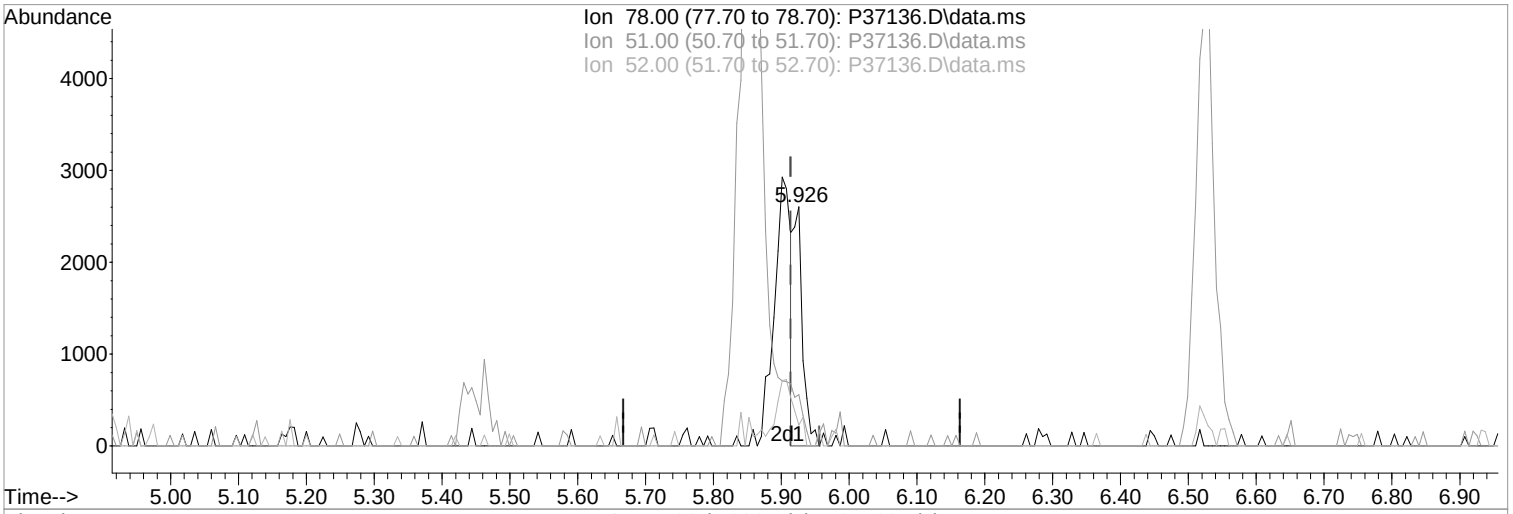
07/13/20

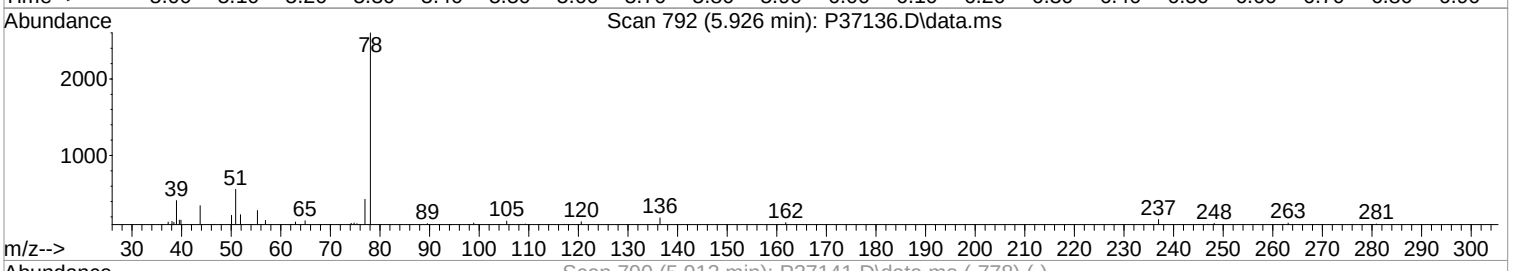
1st 07/14/20
2nd 07/14/20

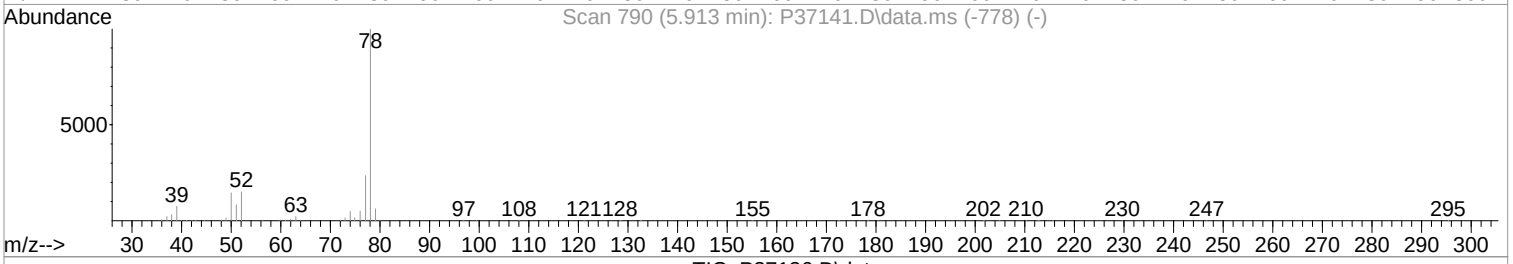
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(49) Benzene (P)

5.926min (+0.012) 0.16 ppb

response 2466

Ion	Exp%	Act%
78.00	100	100
51.00	15.60	21.48
52.00	15.00	8.72
0.00	0.00	0.00

Manual Integration:

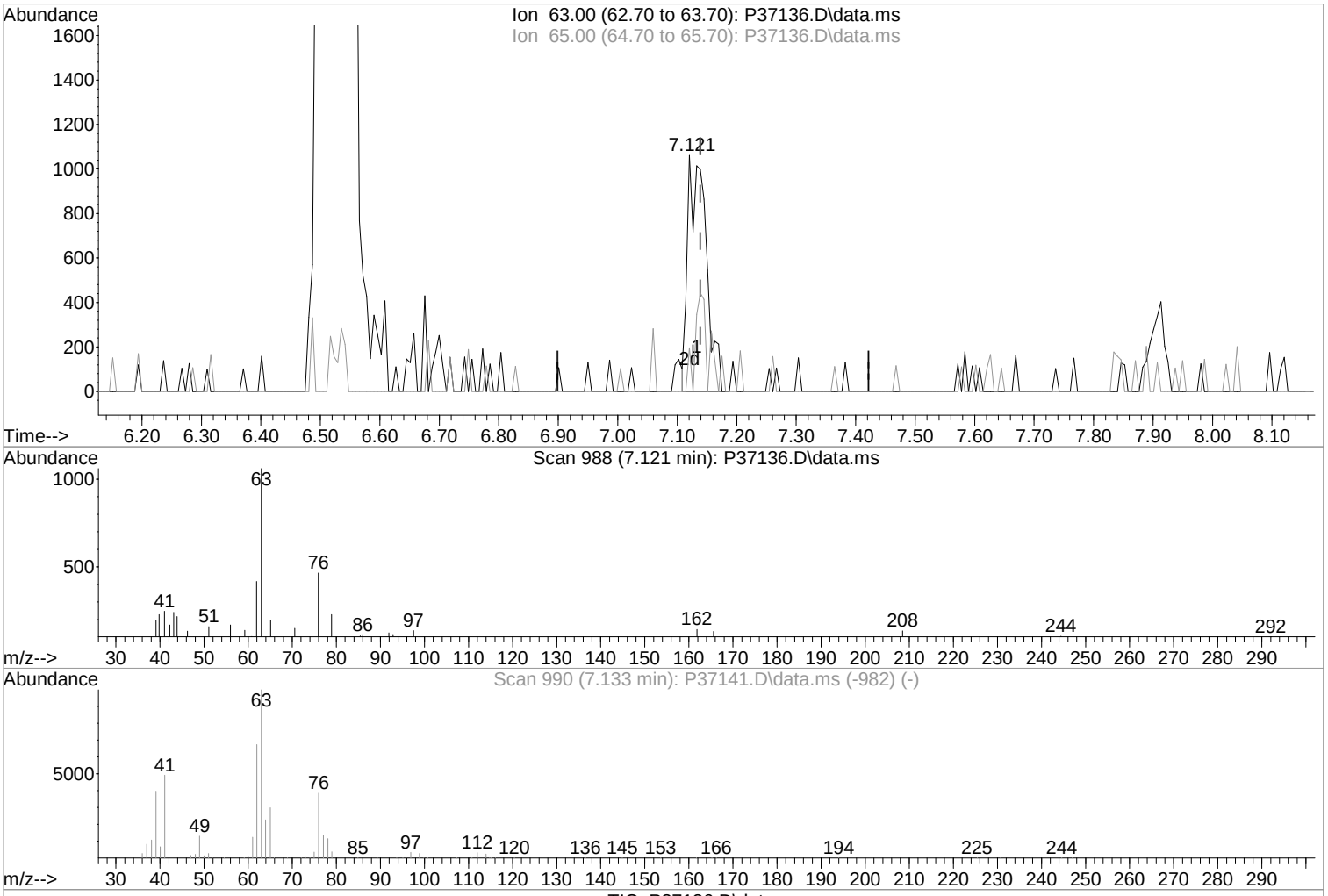
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(56) 1,2-Diclpropane (P)

7.121min (-0.018) 0.56 ppb m

response 2273

Ion	Exp%	Act%
63.00	100	100
65.00	29.90	18.57
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

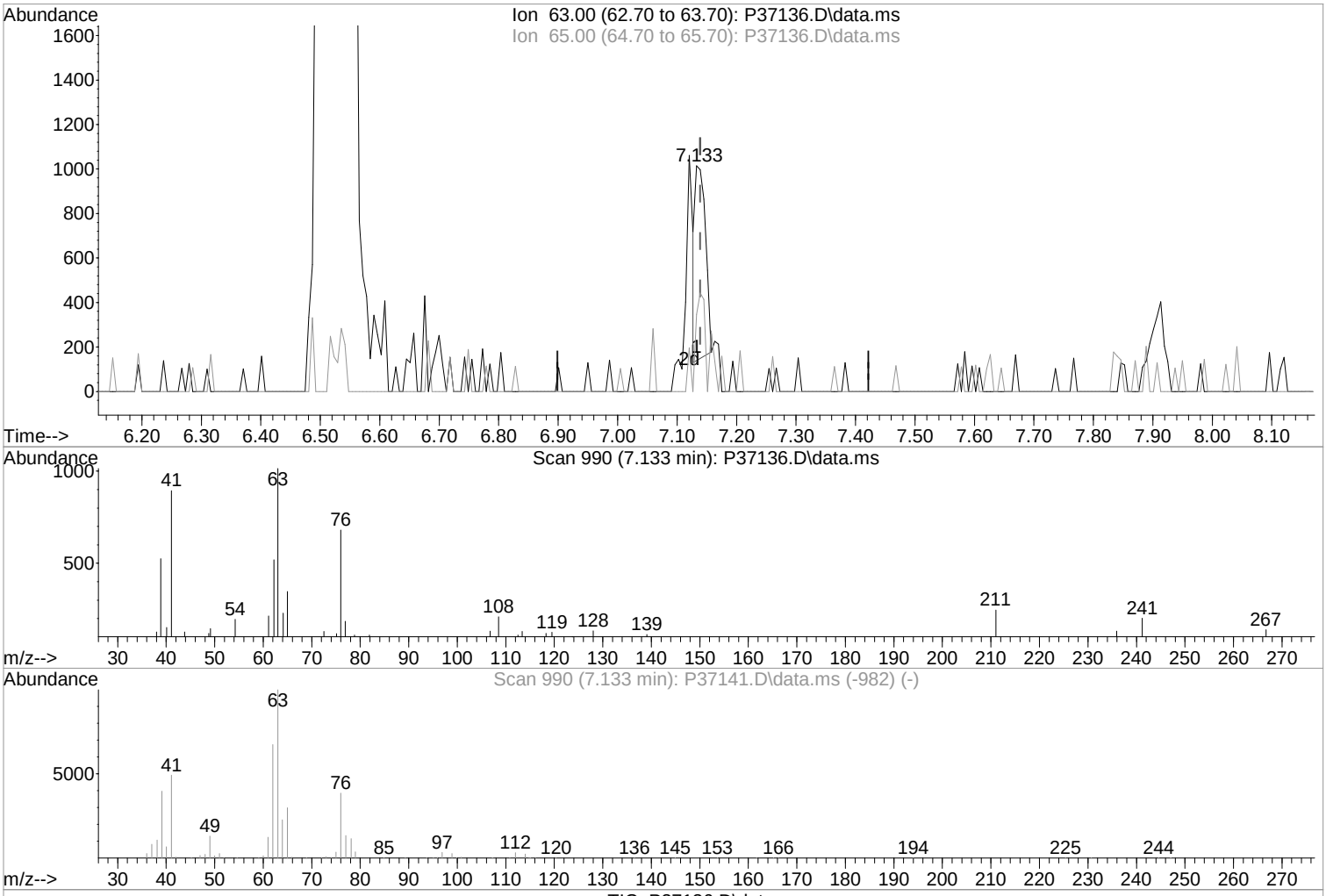
Split Peak

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(56) 1,2-Diclpropane (P)

7.133min (-0.006) 0.26 ppb

response 1036

Ion	Exp%	Act%
63.00	100	100
65.00	29.90	34.19
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

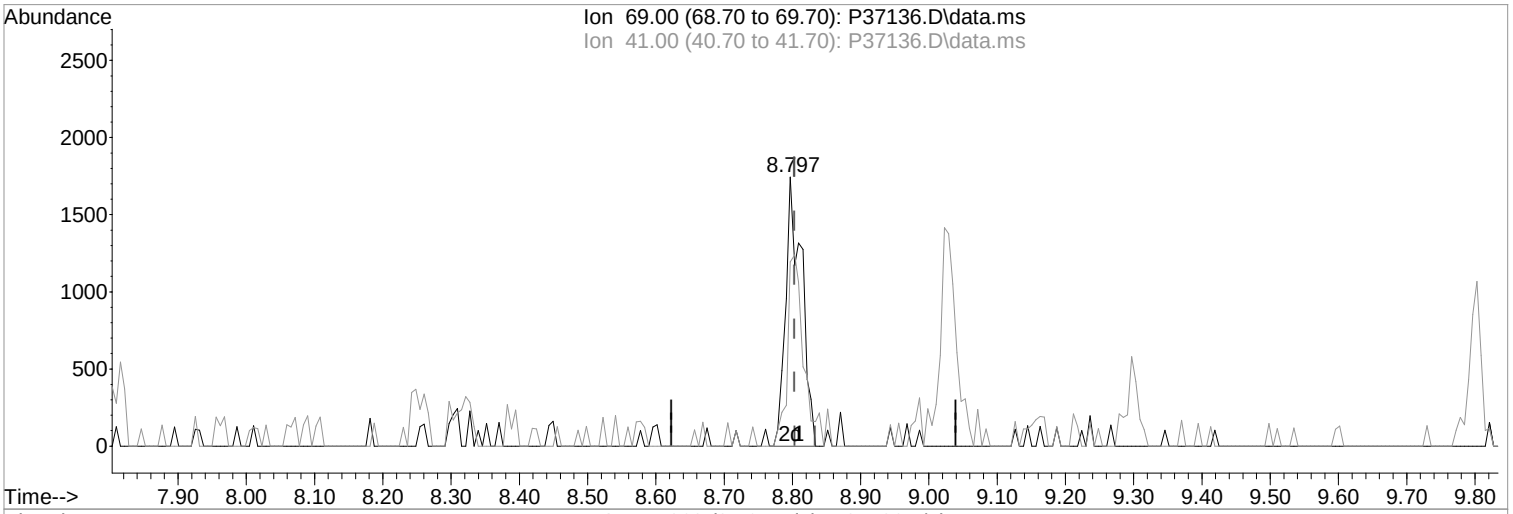
07/13/20

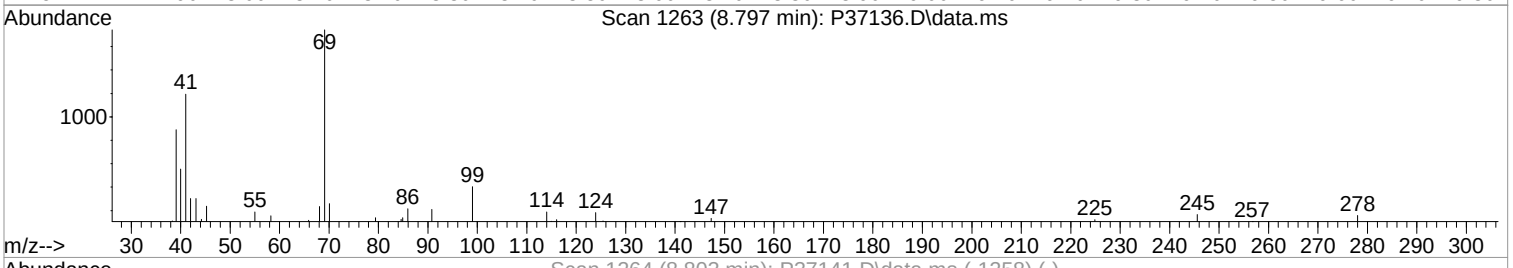
1st 07/14/20
2nd 07/14/20

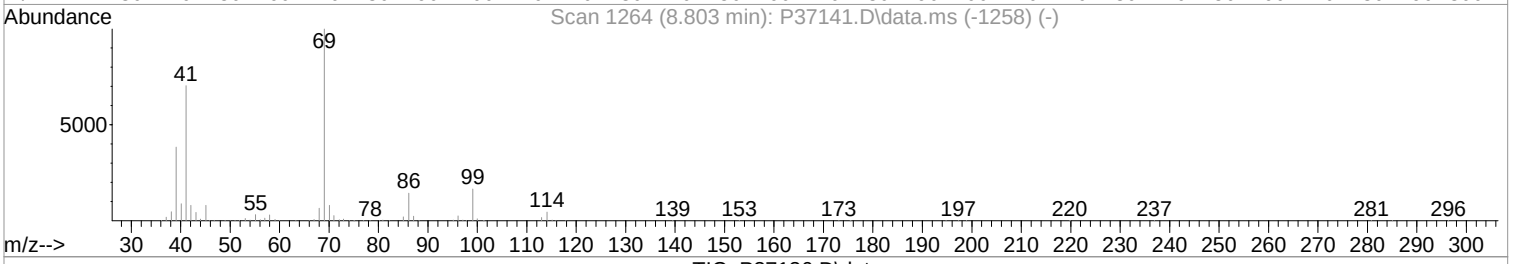
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(68) Ethyl Methacrylate

8.797min (-0.006) 0.48 ppb m

response 2851

Ion	Exp%	Act%
69.00	100	100
41.00	70.50	68.46
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

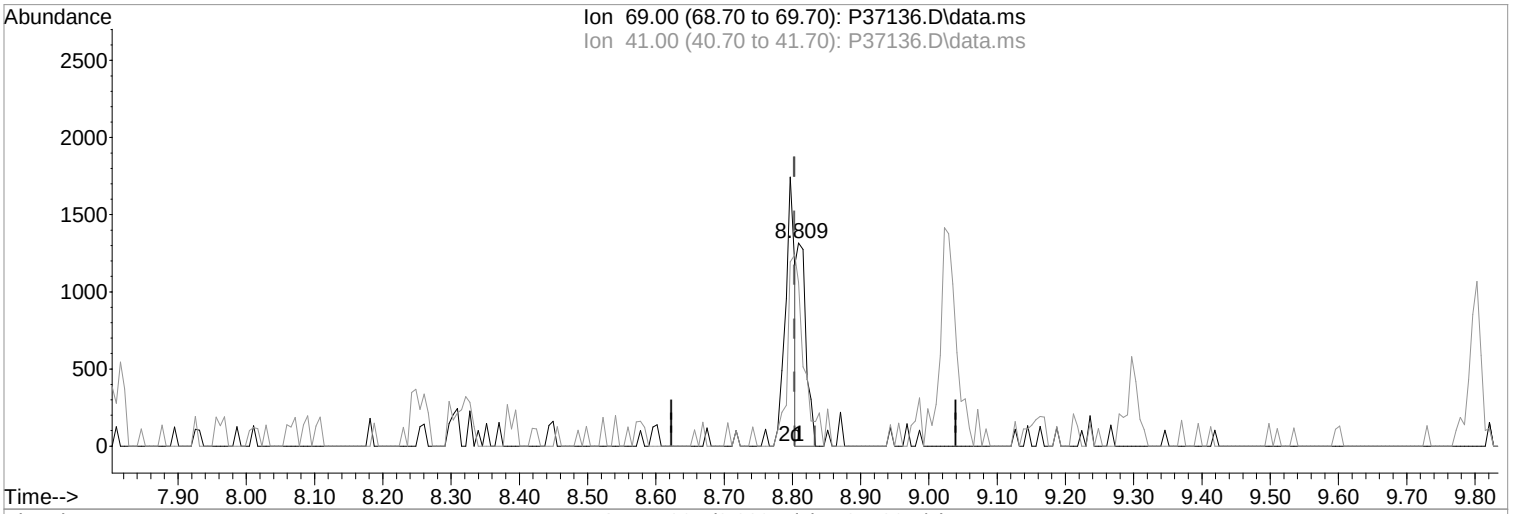
Split Peak

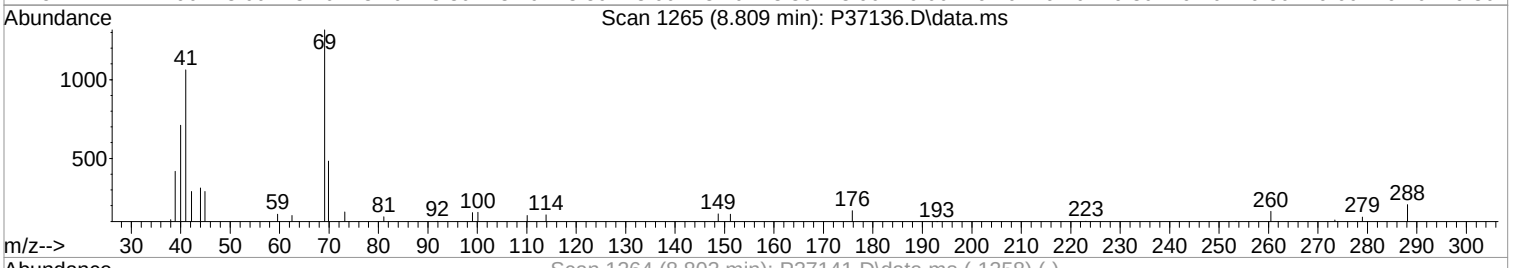
07/13/20

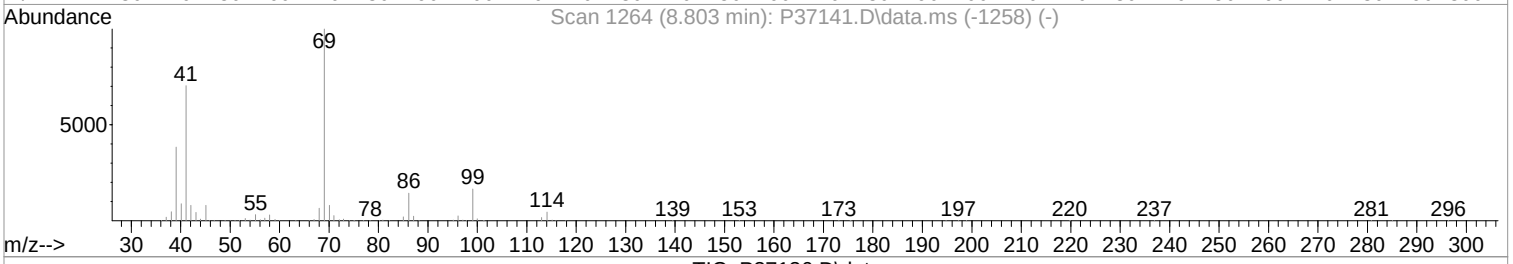
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(68) Ethyl Methacrylate

8.809min (+0.006) 0.21 ppb

response 1217

Ion	Exp%	Act%
69.00	100	100
41.00	70.50	80.64
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

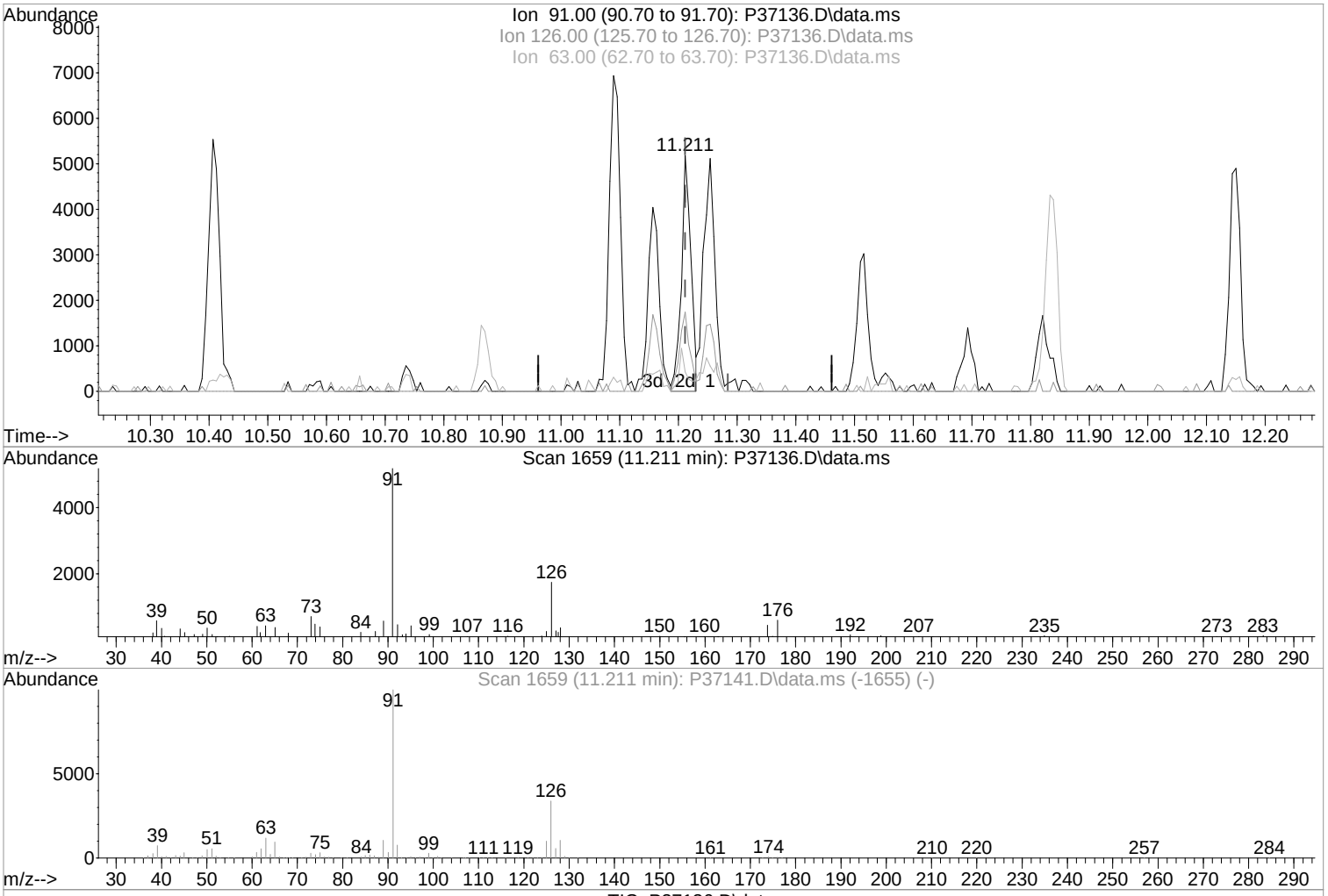
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37136.D\data.ms

(97) 3-Chlorotoluene

11.211min (+0.000) 0.56 ppb m

response 5899

Ion	Exp%	Act%
91.00	100	100
126.00	33.90	33.58
63.00	11.90	8.22#
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

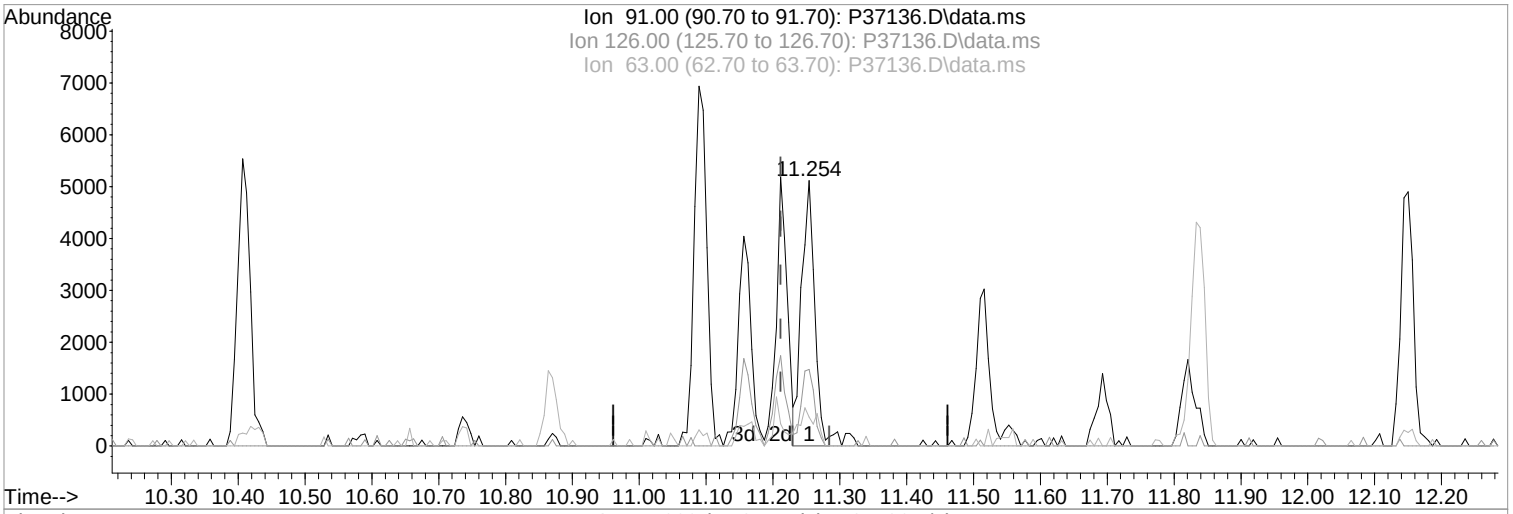
07/13/20

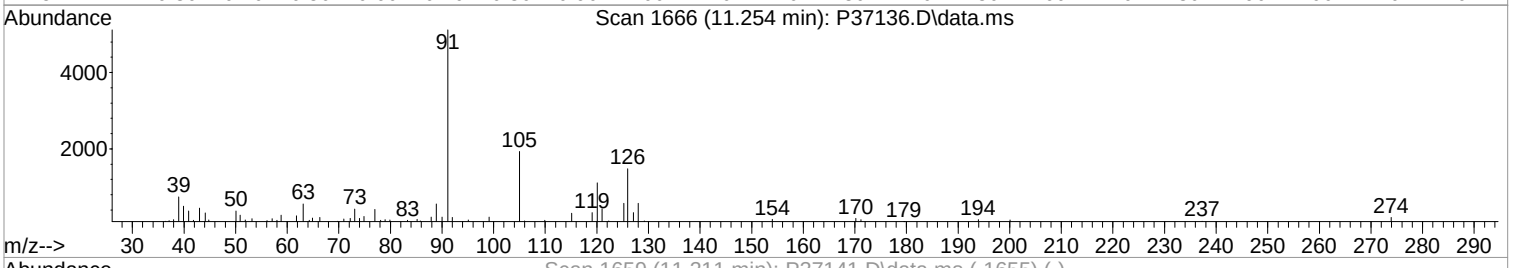
1st 07/14/20
2nd 07/14/20

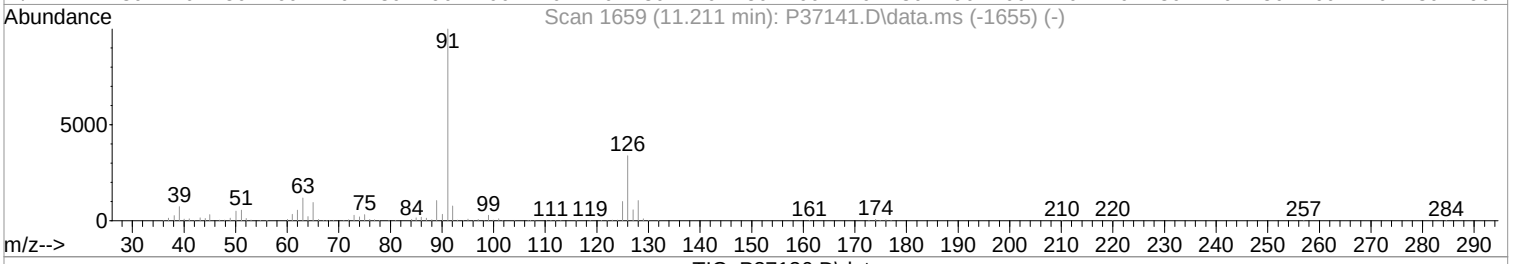
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:03:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37136.D\data.ms

(97) 3-Chlorotoluene

11.254min (+0.043) 0.66 ppb

response 6910

Ion	Exp%	Act%
91.00	100	100
126.00	33.90	28.87
63.00	11.90	10.92
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:09:05 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.450	168	296624	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	527689	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	457342	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	212791	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	28851	9.52	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 19.04%#				
48) surr1,1,2-dichloroetha...	5.846	65	43566	10.39	ppb		-0.01
Spiked Amount 50.000	Range 73 - 125		Recovery = 20.78%#				
65) SURR3,Toluene-d8	8.315	98	153399	10.89	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 21.78%#				
70) SURR2,BFB	10.870	95	51035	9.84	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 19.68%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.201	85	1930	0.58	ppb		85
3) Chloromethane	1.329	50	2259m	0.54	ppb		
4) Vinyl Chloride	1.402	62	2012m	0.51	ppb		
5) Bromomethane	1.634	94	2097	0.65	ppb	#	75
6) Chloroethane	1.707	64	1365	0.64	ppb		77
7) Freon 21	1.865	67	2554	0.52	ppb		77
8) Trichlorofluoromethane	1.902	101	2365	0.59	ppb		84
9) Diethyl Ether	2.146	59	1149	0.40	ppb		86
10) Freon 123a	2.152	67	1726	0.51	ppb		80
11) Freon 123	2.207	83	2477	0.62	ppb		79
12) Acrolein	2.268	56	1516	1.95	ppb		87
13) 1,1-Diclethene	2.335	96	1317	0.57	ppb	#	85
14) Freon 113	2.329	101	1462	0.55	ppb		95
15) Acetone	2.414	43	2664	1.55	ppb		90
16) 2-Propanol	2.548	45	2812	7.36	ppb		74
17) Iodomethane	2.475	142	734m	0.29	ppb		
18) Carbon Disulfide	2.524	76	6697	0.77	ppb		93
20) Allyl Chloride	2.682	76	1010m	0.62	ppb		
21) Methyl Acetate	2.713	43	2265	0.51	ppb		83
22) Methylene Chloride	2.798	84	1814	0.55	ppb		94
23) TBA	2.957	59	5087	8.23	ppb		87
24) Acrylonitrile	3.091	53	4287	2.25	ppb	#	74
25) Methyl-t-Butyl Ether	3.097	73	5093	0.48	ppb		82
26) trans-1,2-Dichloroethene	3.097	96	1252m	0.47	ppb		
28) 1,1-Diclethane	3.603	63	3117	0.53	ppb		77
30) DIPE	3.713	45	4795	0.47	ppb	#	65
31) 2-Chloro-1,3-Butadiene	3.707	53	1929	0.41	ppb		99
32) ETBE	4.237	59	4795	0.50	ppb		83
33) 2,2-Dichloropropane	4.426	77	1993m	0.46	ppb		
34) cis-1,2-Dichloroethene	4.438	96	1724	0.50	ppb	#	83
36) Propionitrile	4.658	54	2243	2.71	ppb		85
37) Bromochloromethane	4.865	130	1056m	0.52	ppb		
40) Chloroform	5.036	83	3440	0.63	ppb		82
41) 1,1,1-Trichloroethane	5.298	97	2394m	0.56	ppb		
42) TAME	6.145	73	4866	0.51	ppb		77
46) Carbontetrachloride	5.566	117	1466m	0.42	ppb		
47) 1,1-Dichloropropene	5.590	75	2440	0.49	ppb		89
49) Benzene	5.901	78	7301m	0.48	ppb		
50) 1,2-Dichloroethane	5.974	62	2974	0.56	ppb		92

1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:09:05 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
51)	Iso-Butyl Alcohol	5.981	43	2288	7.00	ppb		96
52)	n-Heptane	6.346	43	2621	0.56	ppb	#	66
53)	1-Butanol	6.932	56	3607	17.74	ppb		99
54)	Trichloroethene	6.828	130	2041	0.54	ppb	#	72
55)	Methylcyclohexane	7.060	55	2032	0.43	ppb		87
56)	1,2-Diclpropane	7.121	63	2273m	0.56	ppb		
57)	Dibromomethane	7.279	93	1306	0.56	ppb		94
58)	1,4-Dioxane	7.358	88	766	9.19	ppb		80
59)	Methyl Methacrylate	7.346	69	1717	0.49	ppb	#	77
60)	Bromodichloromethane	7.499	83	1873	0.44	ppb		93
62)	2-Chloroethylvinyl Ether	7.913	63	666	0.38	ppb	#	35
63)	cis-1,3-Dichloropropene	8.041	75	3034	0.52	ppb		94
64)	4-Methyl-2-pentanone	8.248	43	2466	0.45	ppb		71
66)	Toluene	8.395	91	8114	0.50	ppb		98
67)	trans-1,3-Dichloropropene	8.675	75	2746	0.52	ppb		89
68)	Ethyl Methacrylate	8.797	69	2851m	0.48	ppb		
69)	1,1,2-Trichloroethane	8.864	97	1842	0.51	ppb	#	70
72)	Tetrachloroethene	8.974	164	1617	0.58	ppb	#	74
73)	2-Hexanone	9.157	43	1861	0.46	ppb		85
74)	1,3-Dichloropropane	9.029	76	3256	0.51	ppb		88
75)	Dibromochloromethane	9.248	129	1047	0.37	ppb		85
76)	N-Butyl Acetate	9.291	43	2869	0.38	ppb		79
77)	1,2-Dibromoethane	9.346	107	1595	0.46	ppb		94
78)	Chlorobenzene	9.827	112	5656	0.55	ppb		96
79)	3-CBTF	9.846	180	2418	0.51	ppb		98
80)	4-CBTF	9.894	180	2143	0.50	ppb		91
81)	1,1,1,2-Tetrachloroethane	9.919	131	1464	0.47	ppb	#	83
82)	Ethylbenzene	9.943	106	2952	0.55	ppb	#	55
83)	(m+p)Xylene	10.053	106	6535	1.02	ppb	#	86
84)	o-Xylene	10.413	106	2618	0.42	ppb	#	74
85)	Styrene	10.425	104	5090	0.48	ppb		86
87)	Bromoform	10.583	173	682	0.39	ppb	#	62
88)	2-CBTF	10.656	180	2421	0.56	ppb	#	73
89)	Isopropylbenzene	10.742	105	8469	0.58	ppb		95
90)	Cyclohexanone	10.827	55	8423	9.54	ppb		91
91)	trans-1,4-Dichloro-2-B...	11.065	53	604	0.49	ppb	#	28
92)	1,1,2,2-Tetrachloroethane	11.016	83	2464	0.52	ppb		83
93)	Bromobenzene	10.992	156	2330	0.61	ppb	#	76
94)	1,2,3-Trichloropropane	11.034	110	553	0.36	ppb	#	64
95)	n-Propylbenzene	11.089	91	9315	0.55	ppb		95
96)	2-Chlorotoluene	11.156	91	5484	0.50	ppb		82
97)	3-Chlorotoluene	11.211	91	5899m	0.56	ppb		
98)	4-Chlorotoluene	11.254	91	6844	0.56	ppb		95
99)	1,3,5-Trimethylbenzene	11.242	105	6363	0.51	ppb		88
100)	tert-Butylbenzene	11.510	119	5221	0.50	ppb		94
101)	1,2,4-Trimethylbenzene	11.553	105	6856	0.54	ppb		95
102)	3,4-DCBTF	11.620	214	2060	0.60	ppb		91
103)	sec-Butylbenzene	11.693	105	7651	0.51	ppb		90
104)	p-Isopropyltoluene	11.815	119	6660	0.51	ppb		99
105)	1,3-Dclbenz	11.784	146	4479	0.60	ppb		91
106)	1,4-Dclbenz	11.857	146	4008	0.52	ppb		87
107)	2,4-DCBTF	11.906	214	2254	0.70	ppb	#	66
108)	2,5-DCBTF	11.949	214	2014	0.58	ppb	#	86
109)	n-Butylbenzene	12.150	91	6520	0.53	ppb		90
110)	1,2-Dclbenz	12.162	146	4387	0.58	ppb		88
111)	1,2-Dibromo-3-chloropr...	12.790	157	429m	0.40	ppb		

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 13 16:09:05 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
112) Trielution Dichlorotol...	12.900	125	9442	1.55	ppb	#	86
113) 1,3,5 Trichlorobenzene	12.943	180	2858	0.55	ppb	#	84
114) Coelution Dichlorotoluene	13.229	125	6250	0.93	ppb	#	85
115) 1,2,4-Tcbenzene	13.430	180	2717	0.49	ppb		92
116) Hexachlorobt	13.558	225	1209	0.55	ppb		87
117) Naphthalen	13.625	128	6752	0.42	ppb		93
118) 1,2,3-Tclbenzene	13.814	180	2990	0.53	ppb		94
119) 2,4,5-Trichlorotolene	14.394	159	1428	0.41	ppb	#	55
120) 2,3,6-Trichlorotoluene	14.479	159	1563	0.49	ppb	#	89

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37136.D
Acq On : 13 Jul 2020 11:45 am
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Misc : WATER ICAL
ALS Vial : 1 Sample Multiplier: 1

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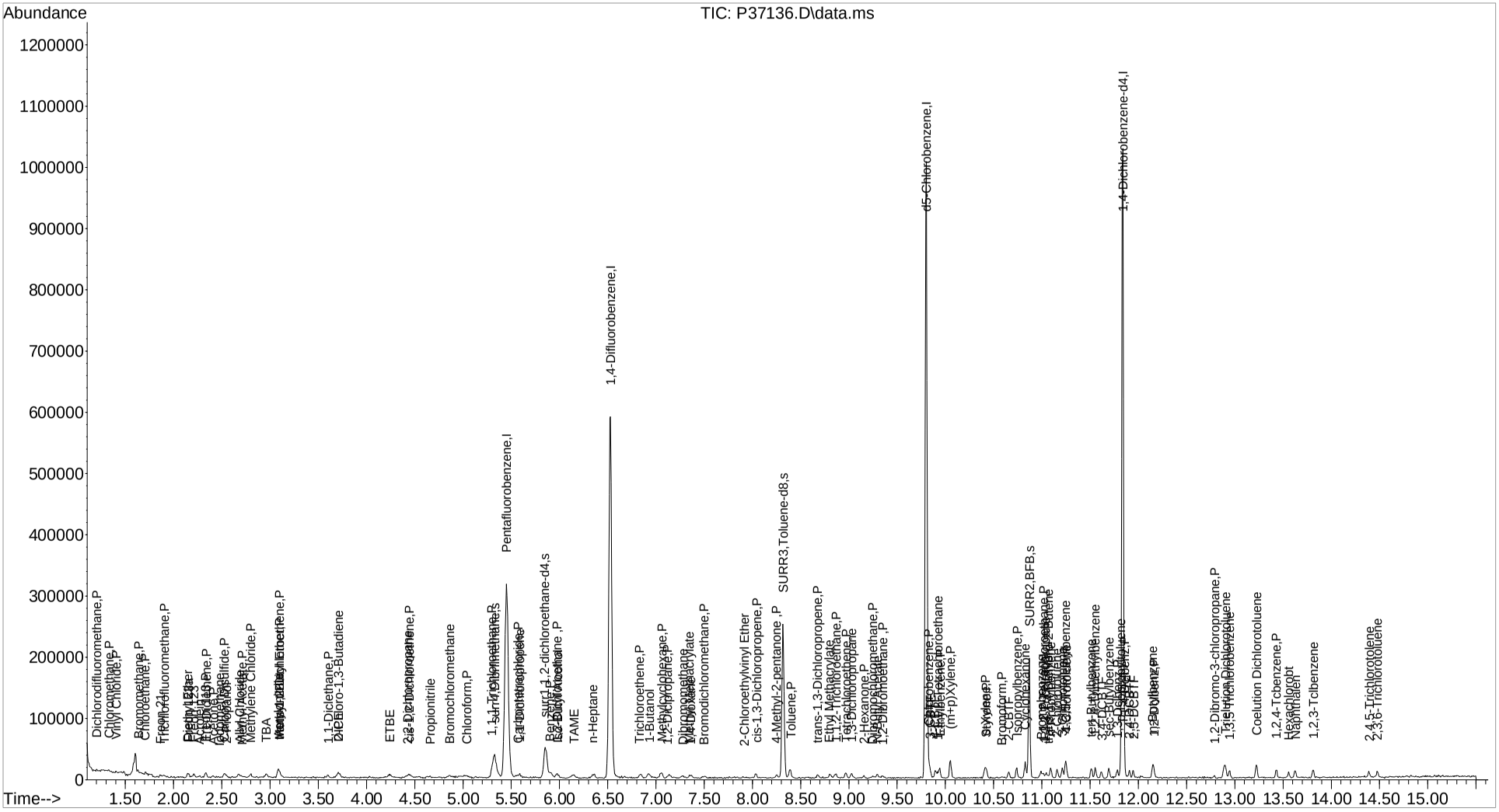
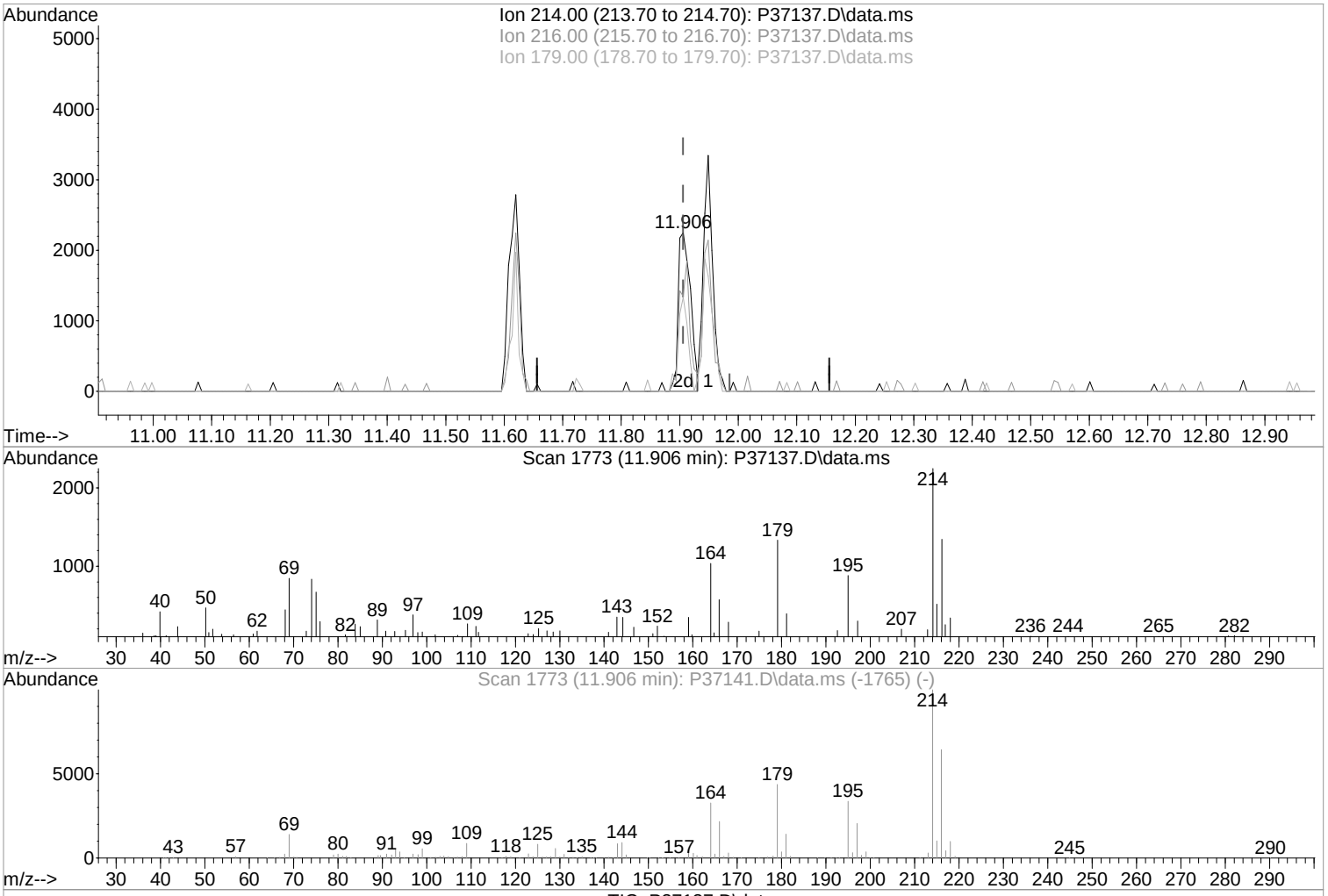
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(107) 2,4-DCBTF

11.906min (+0.000) 1.08 ppb m

response 3306

Ion	Exp%	Act%
214.00	100	100
216.00	64.40	59.80
179.00	43.70	59.27#
0.00	0.00	0.00

Manual Integration:

After

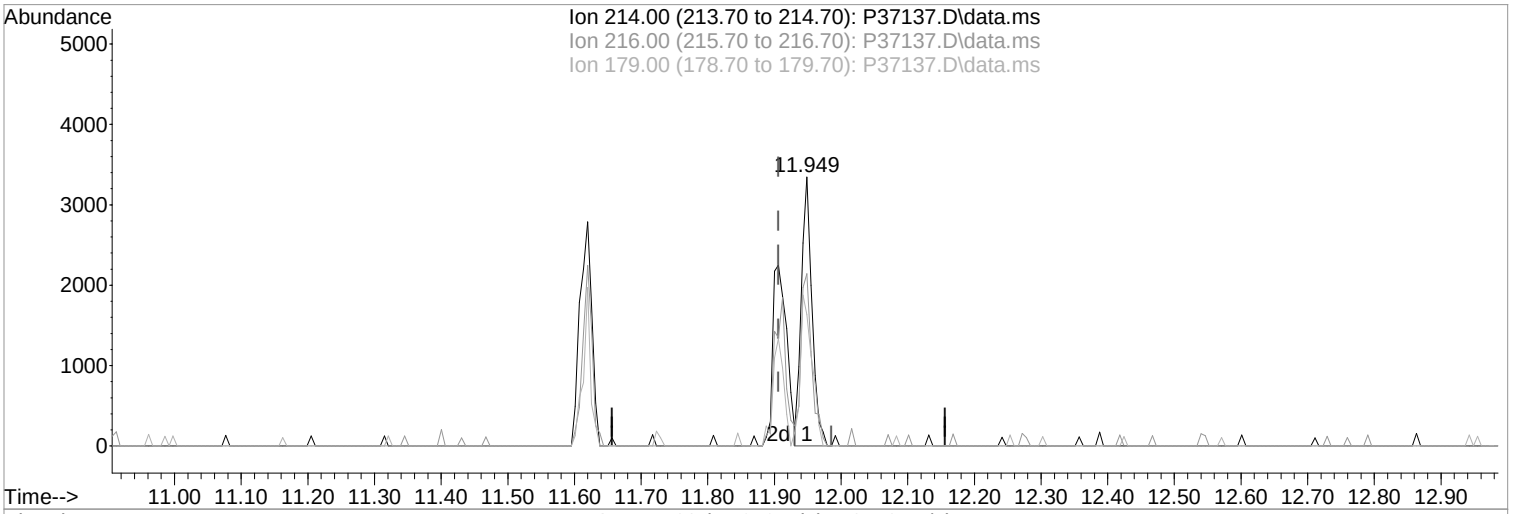
Wrong peak selected.

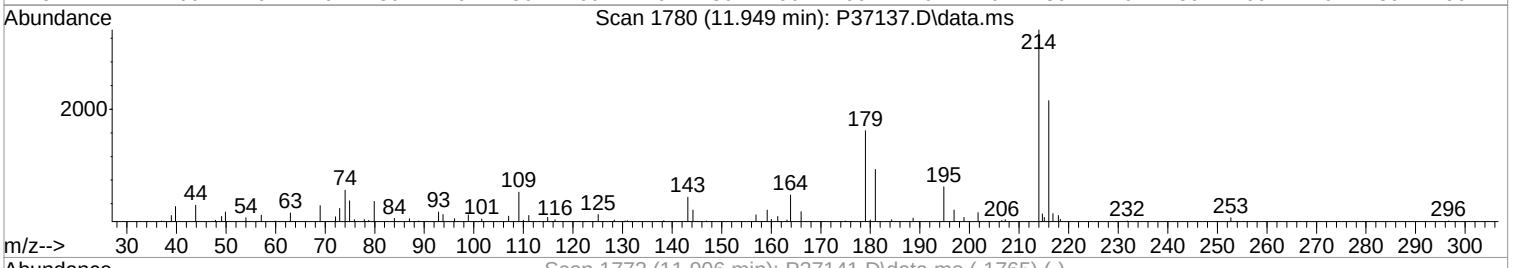
07/13/20

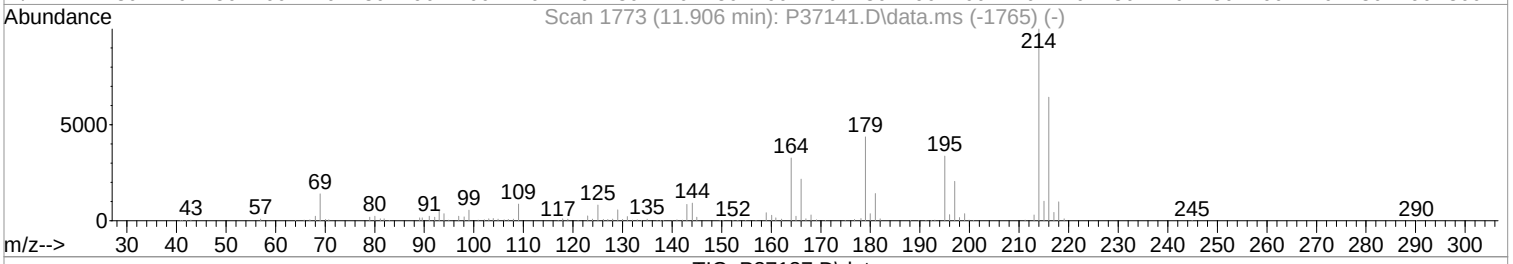
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(107) 2,4-DCBTF

11.949min (+0.043) 1.22 ppb

response 3733

Ion	Exp%	Act%
214.00	100	100
216.00	64.40	59.96
179.00	43.70	45.72
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
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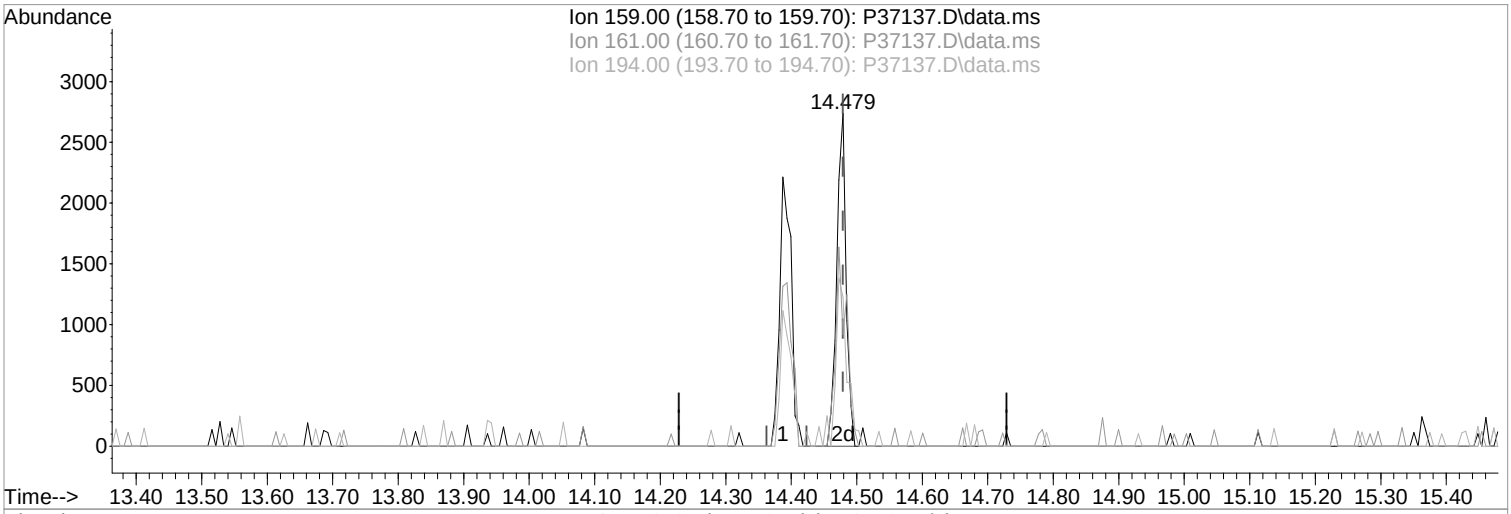
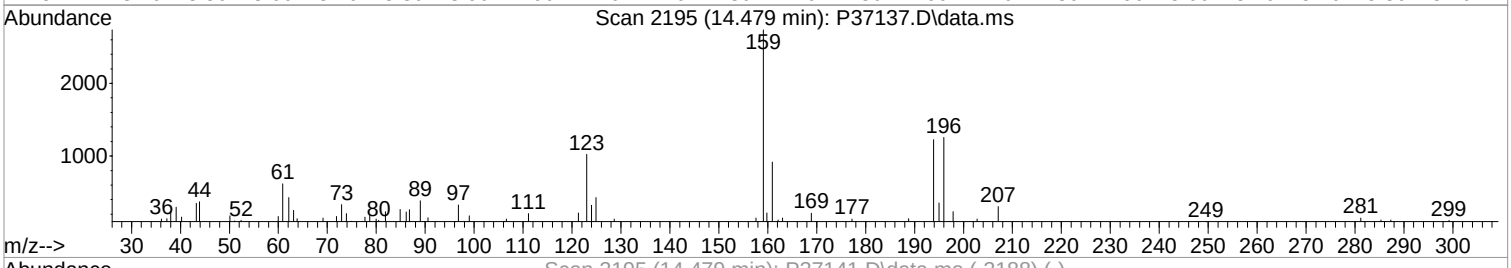
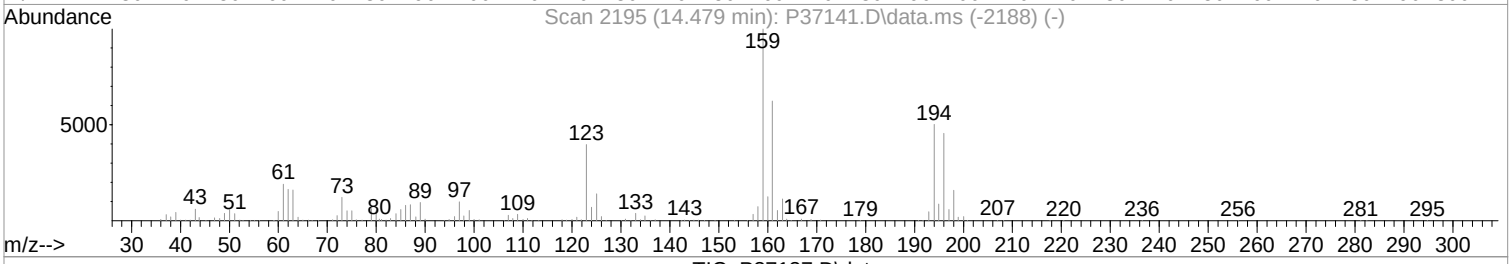






TIC: P37137.D\data.ms

(120) 2,3,6-Trichlorotoluene

14.479min (+0.000) 0.91 ppb m

response 2715

Ion	Exp%	Act%
159.00	100	100
161.00	62.40	33.47#
194.00	50.20	44.76
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

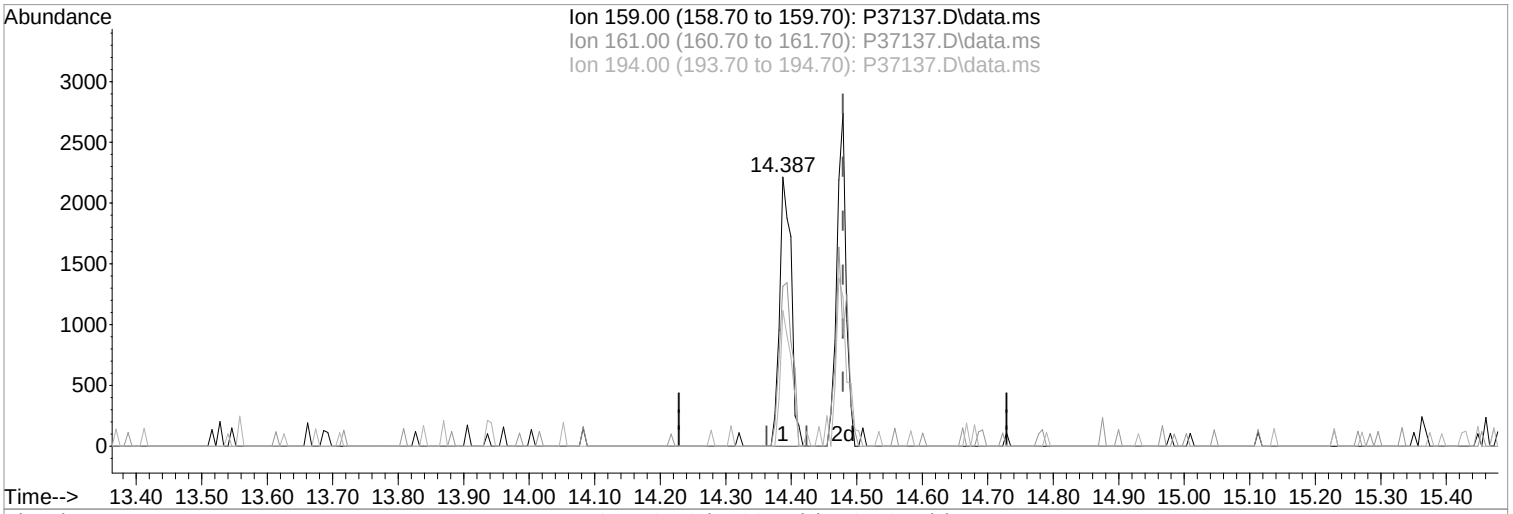
07/13/20

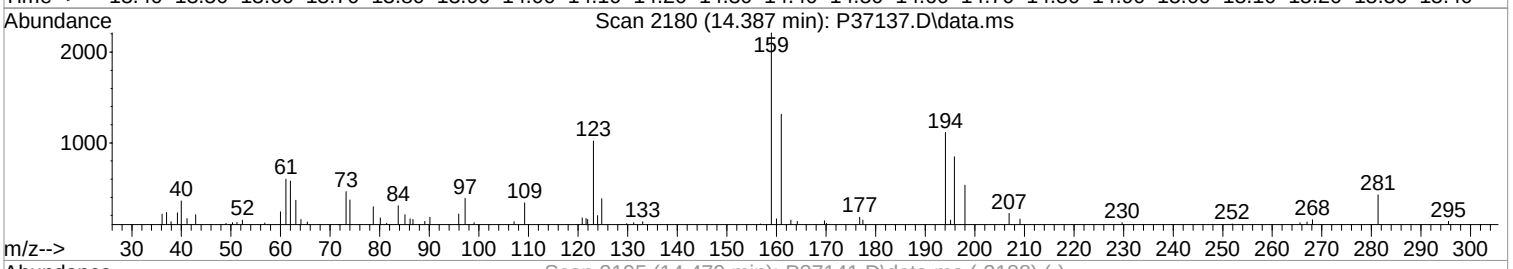
1st 07/14/20
2nd 07/14/20

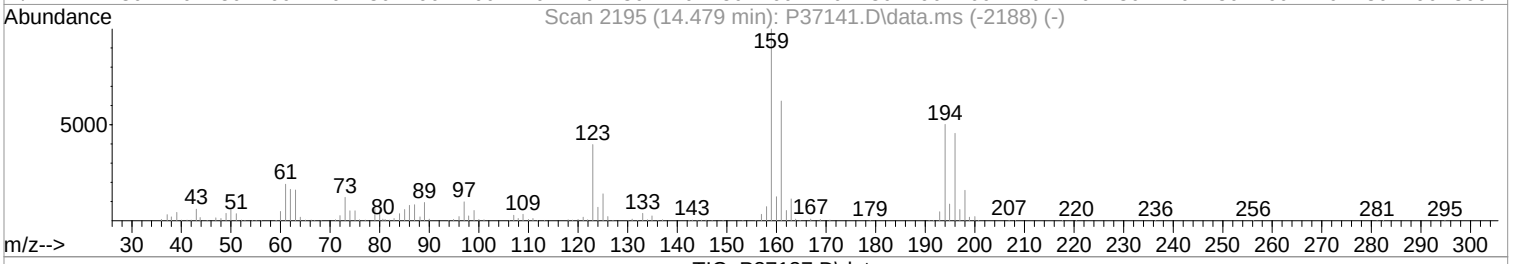
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(120) 2,3,6-Trichlorotoluene

14.387min (-0.091) 0.91 ppb

response 2722

Ion	Exp%	Act%
159.00	100	100
161.00	62.40	59.44
194.00	50.20	50.41
0.00	0.00	0.00

Manual Integration:

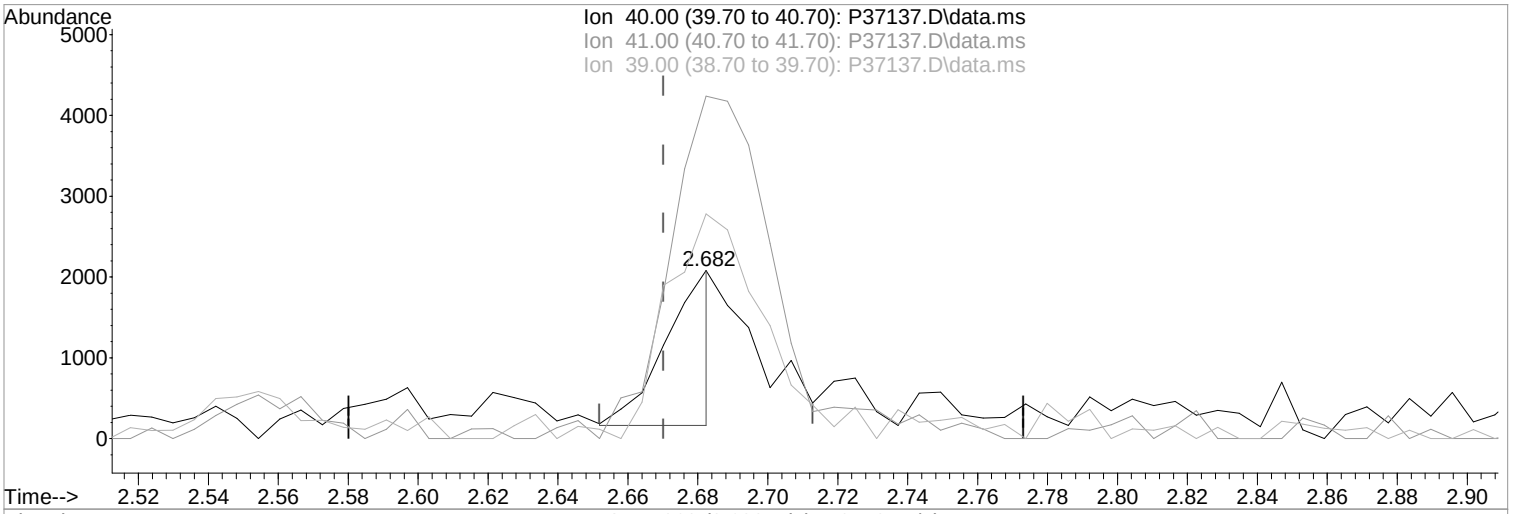
Before

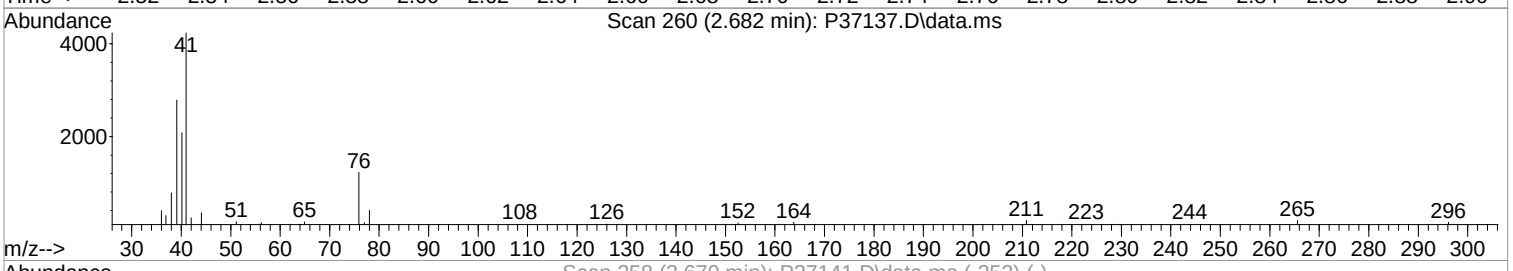
07/13/20

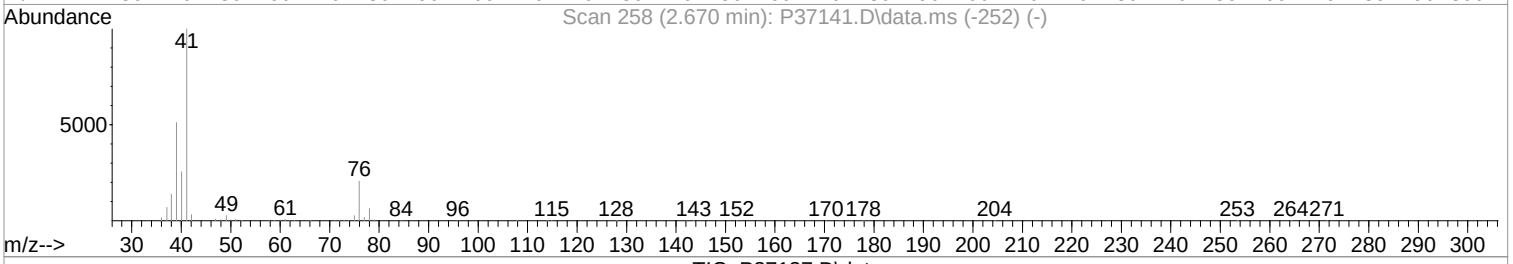
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(19) Acetonitrile

2.682min (+0.012) 8.29 ppb m

response 1843

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	203.51#
39.00	200.50	133.67#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

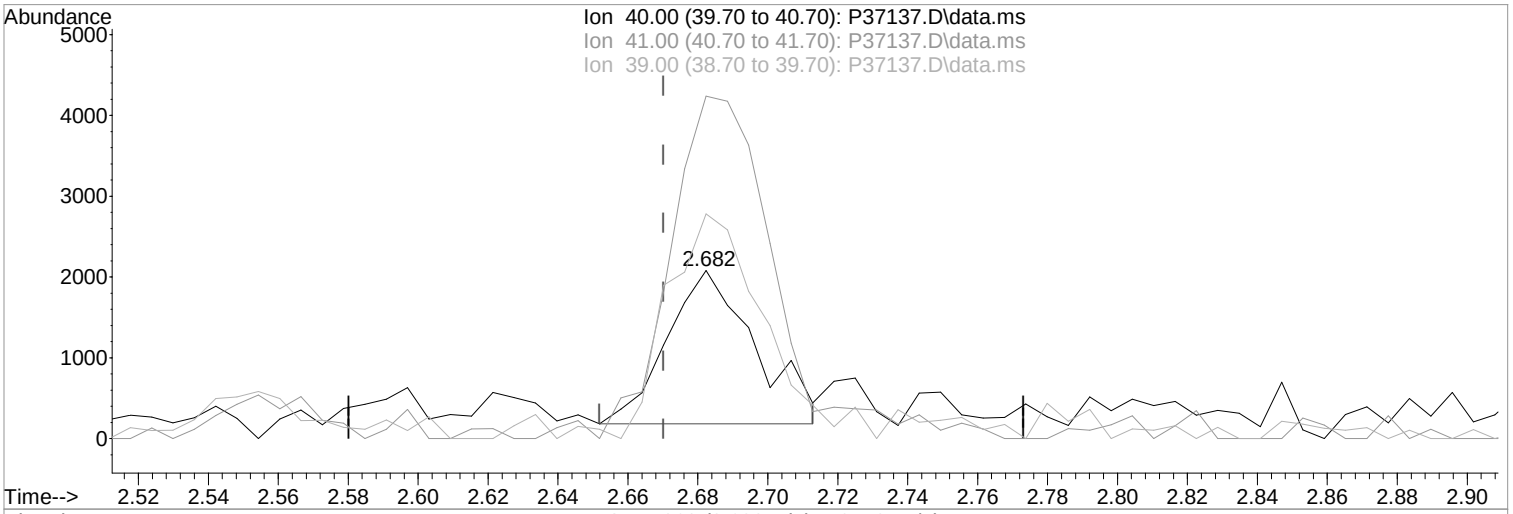
07/13/20

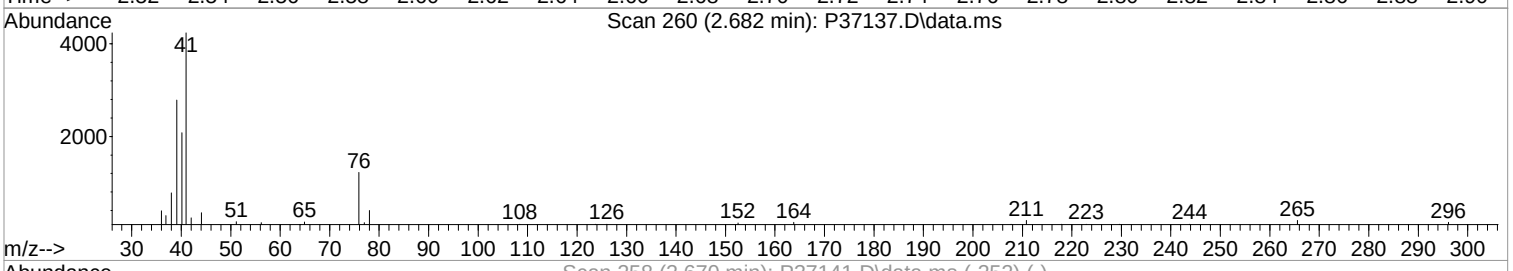
1st 07/14/20
2nd 07/14/20

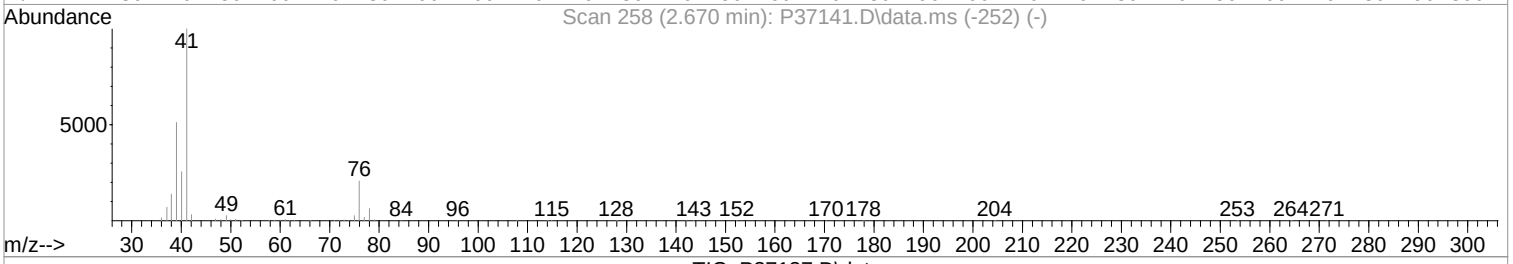
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(19) Acetonitrile

2.682min (+0.012) 14.98 ppb

response 3330

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	203.51#
39.00	200.50	133.67#
0.00	0.00	0.00

Manual Integration:

Before

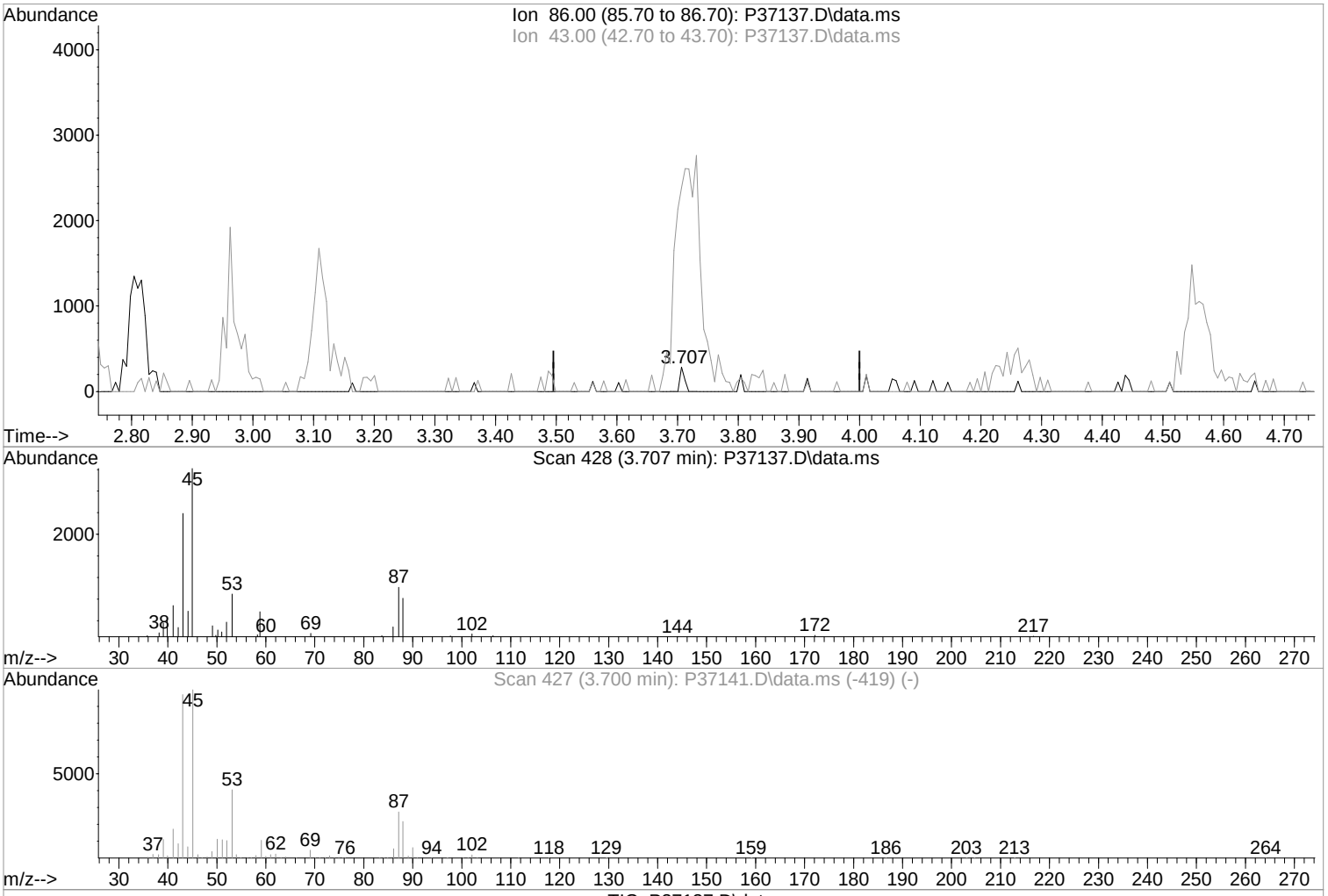
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(29) Vinyl Acetate

3.707min (+0.012) 0.33 ppb m

response 151

Ion	Exp%	Act%
86.00	100	100
43.00	1783.00	837.54#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

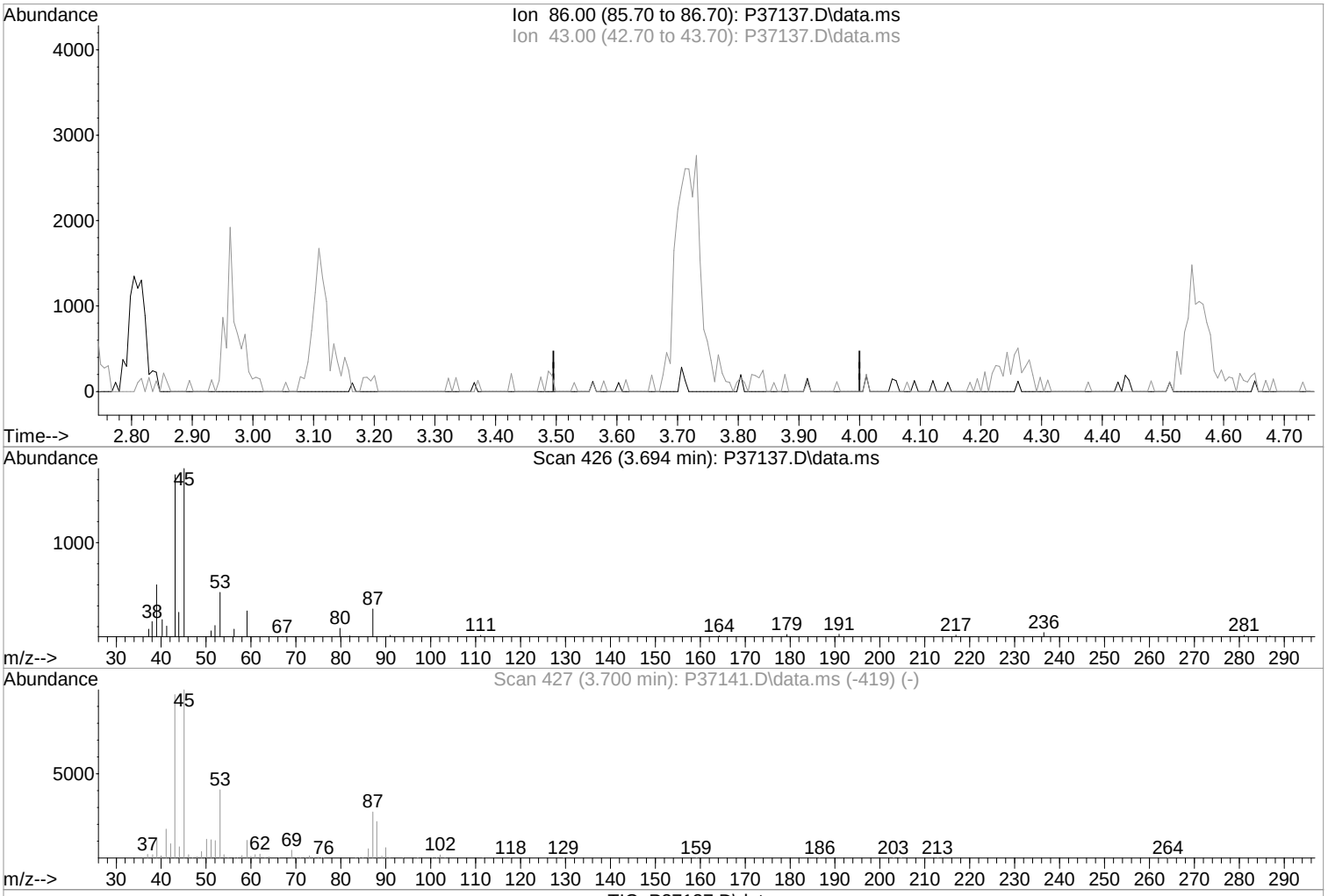
Peak not found.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(29) Vinyl Acetate

3.694min (-3.694) 0.00 ppb

response 0

Ion	Exp%	Act%
86.00	100	0.00
43.00	1783.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

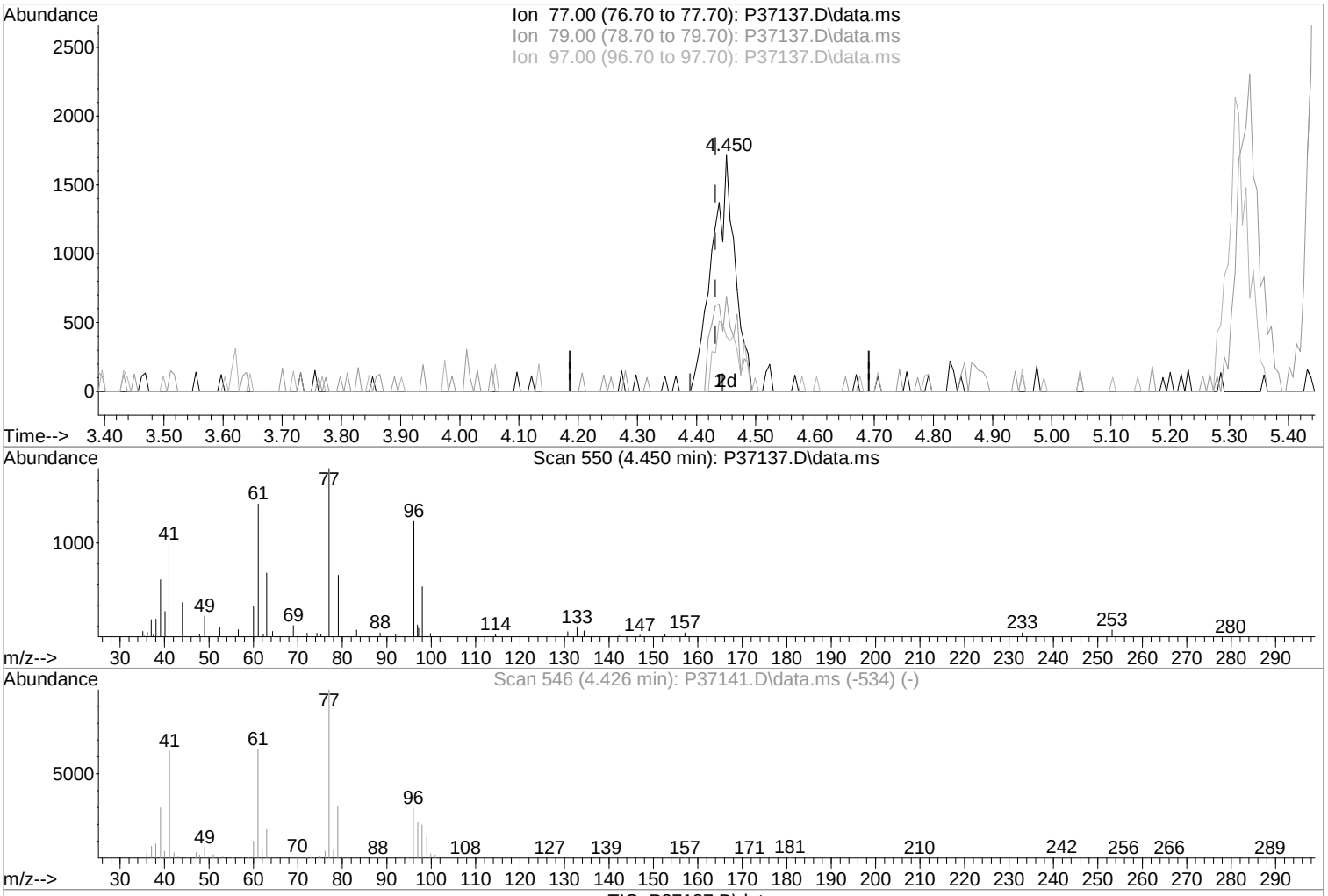
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(33) 2,2-Dichloropropane

4.450min (+0.018) 1.02 ppb m

response 4606

Ion	Exp%	Act%
77.00	100	100
79.00	30.40	40.32
97.00	21.00	12.60
0.00	0.00	0.00

Manual Integration:

After

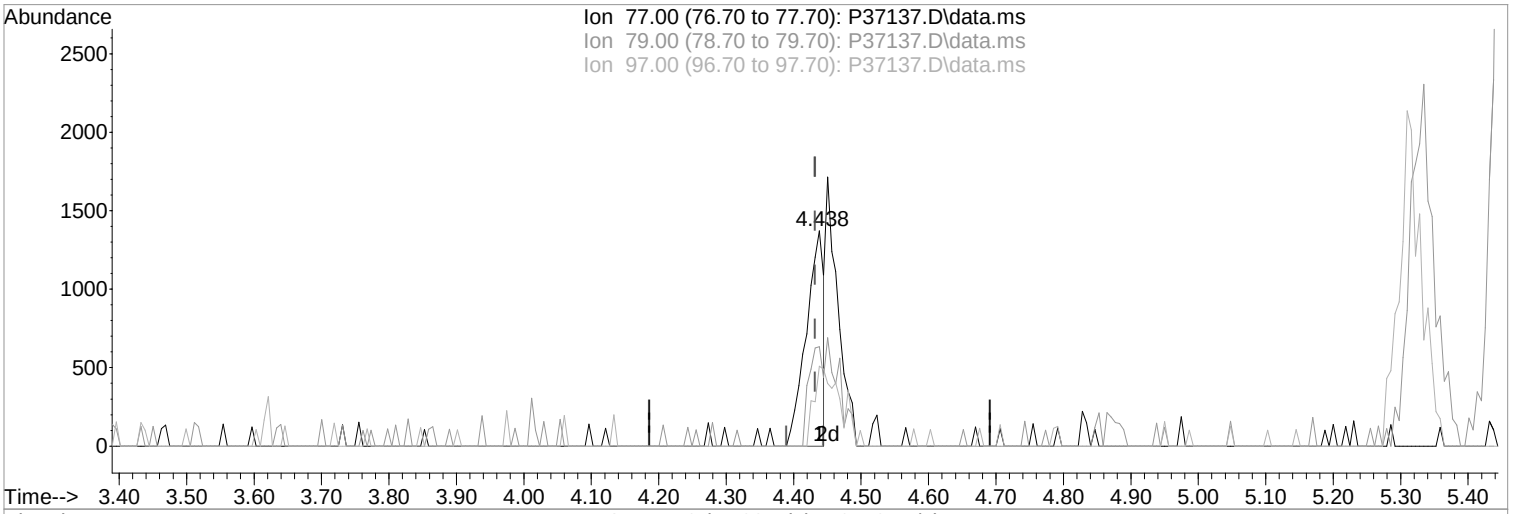
Split Peak

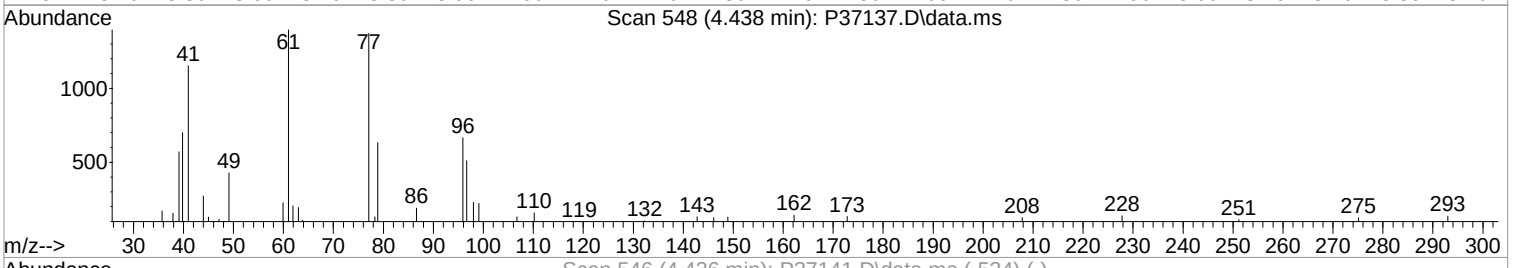
07/13/20

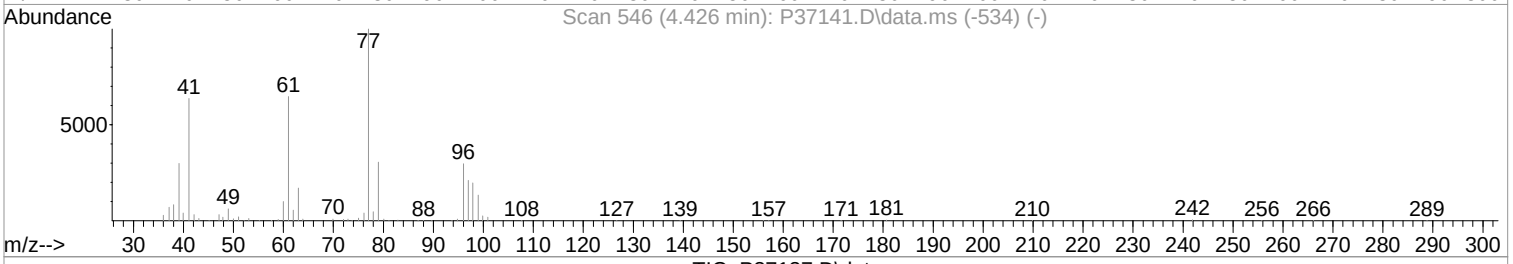
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(33) 2,2-Dichloropropane

4.438min (+0.006) 0.54 ppb

response 2453

Ion	Exp%	Act%
77.00	100	100
79.00	30.40	46.21
97.00	21.00	37.17
0.00	0.00	0.00

Manual Integration:

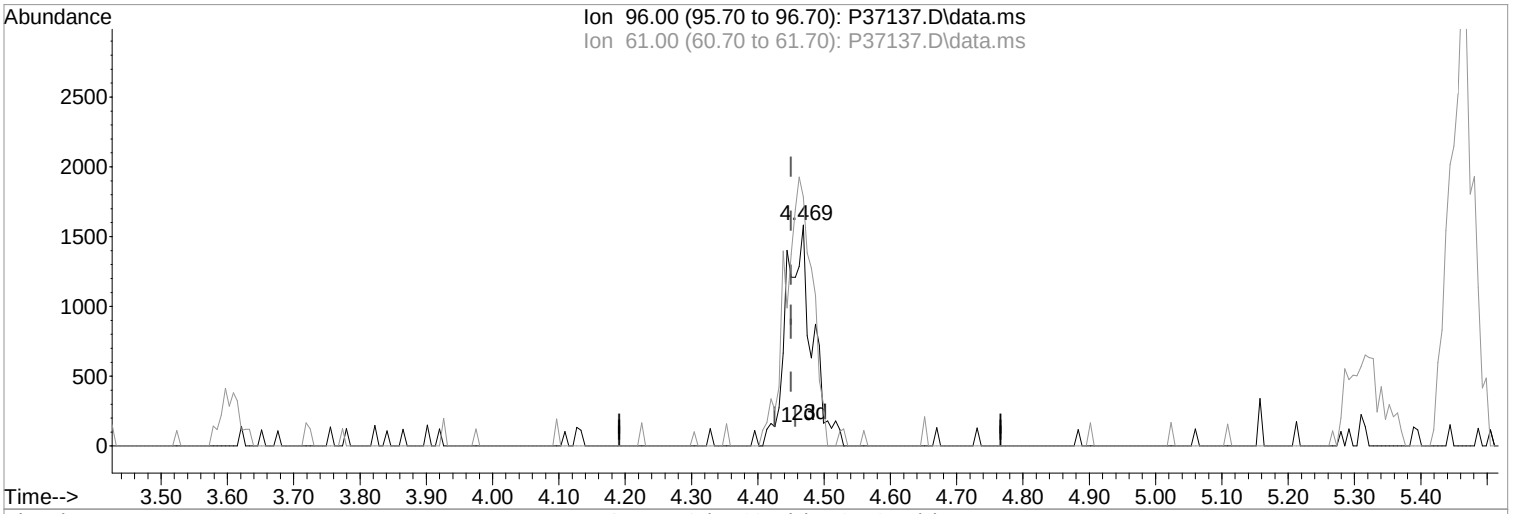
Before

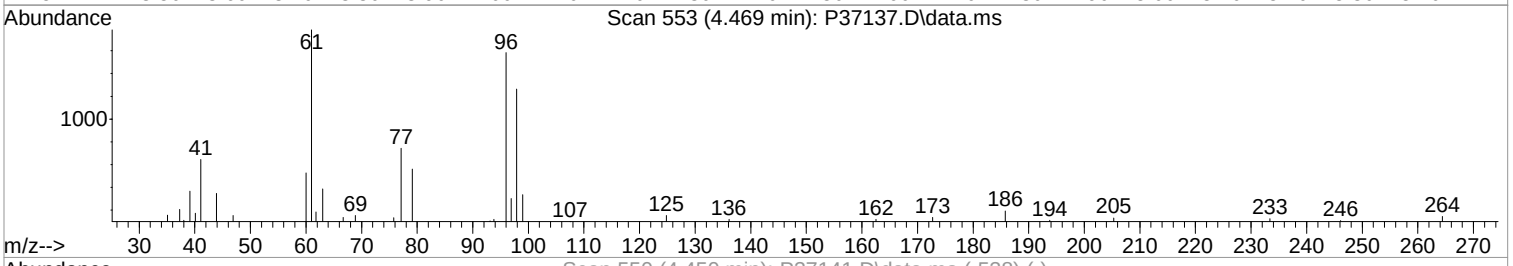
07/13/20

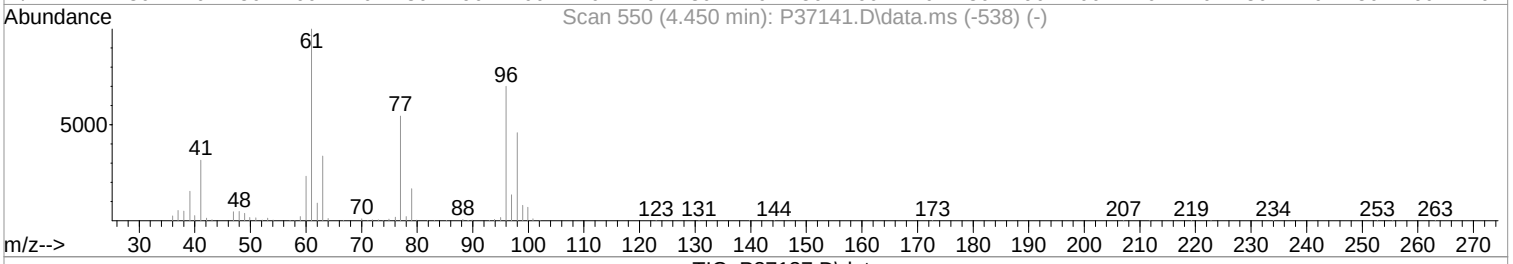
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

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

4.469min (+0.018) 1.20 ppb m

response 4326

Ion	Exp%	Act%
96.00	100	100
61.00	143.10	112.76#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

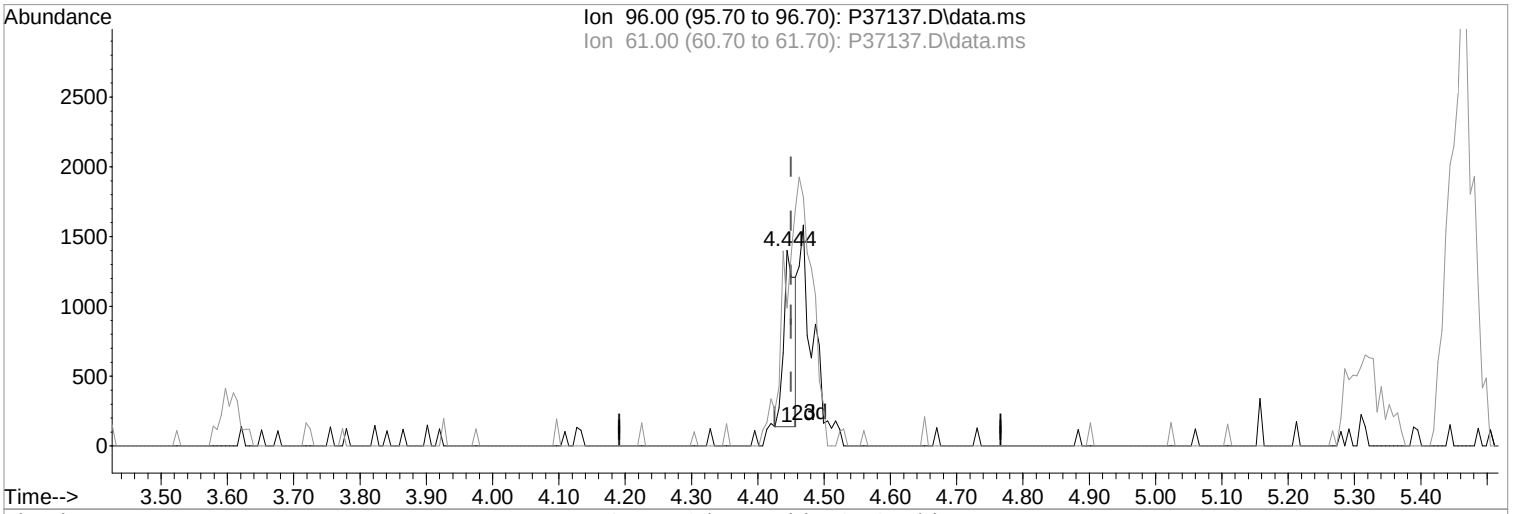
Split Peak

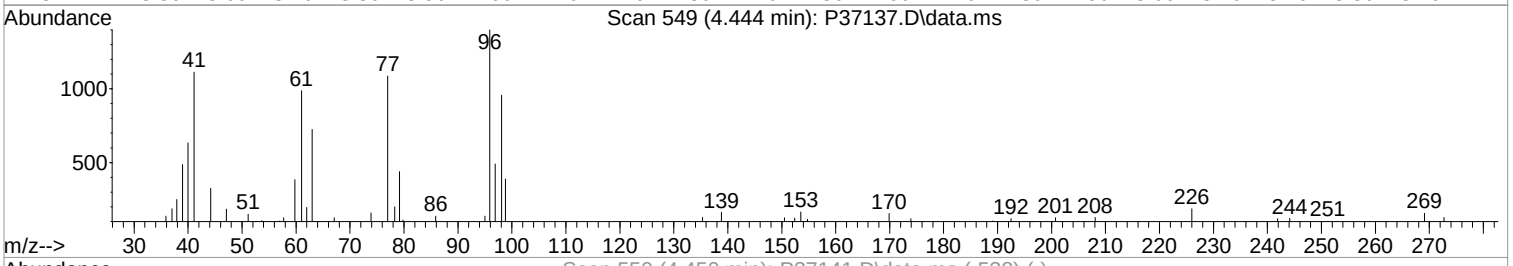
07/13/20

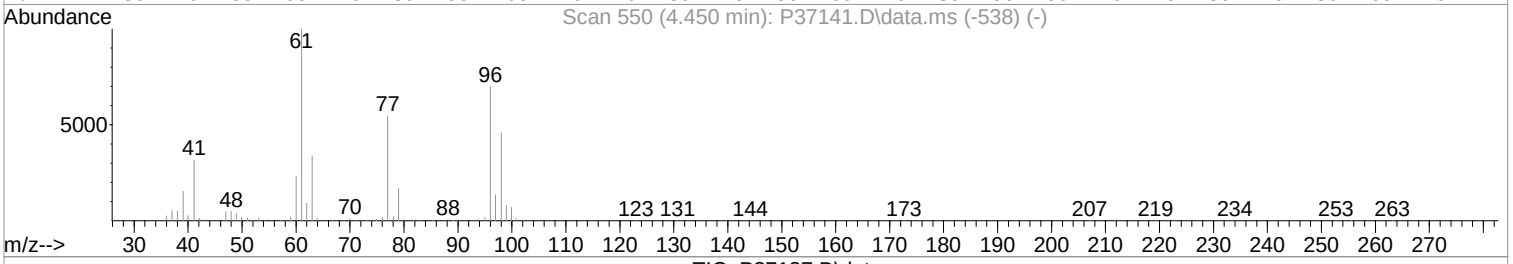
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

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

4.444min (-0.006) 0.41 ppb

response 1486

Ion	Exp%	Act%
96.00	100	100
61.00	143.10	70.47#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

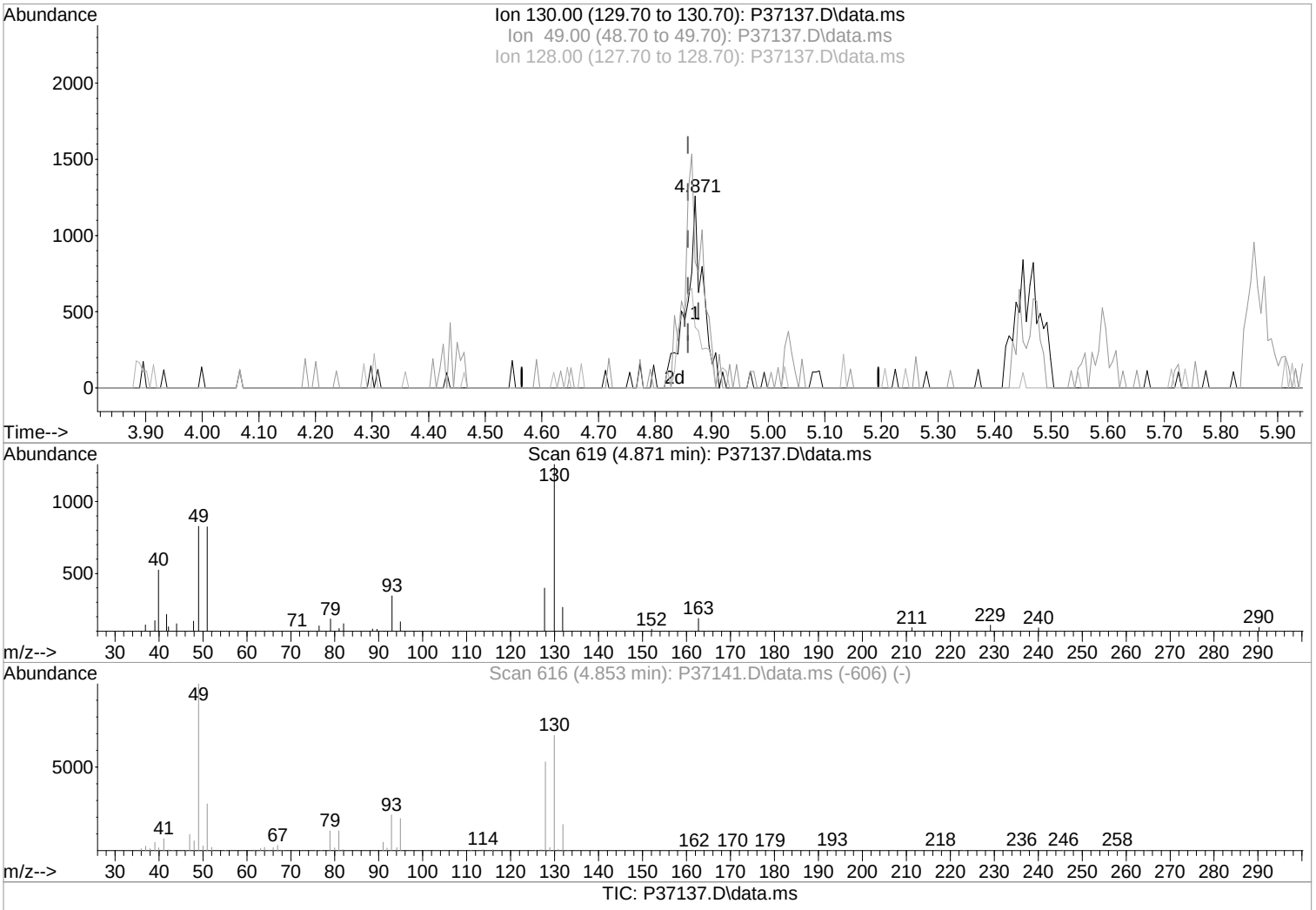
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(37) Bromochloromethane

4.871min (+0.012) 1.21 ppb m

response 2557

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	65.77#
128.00	77.00	31.69#
0.00	0.00	0.00

Manual Integration:

After

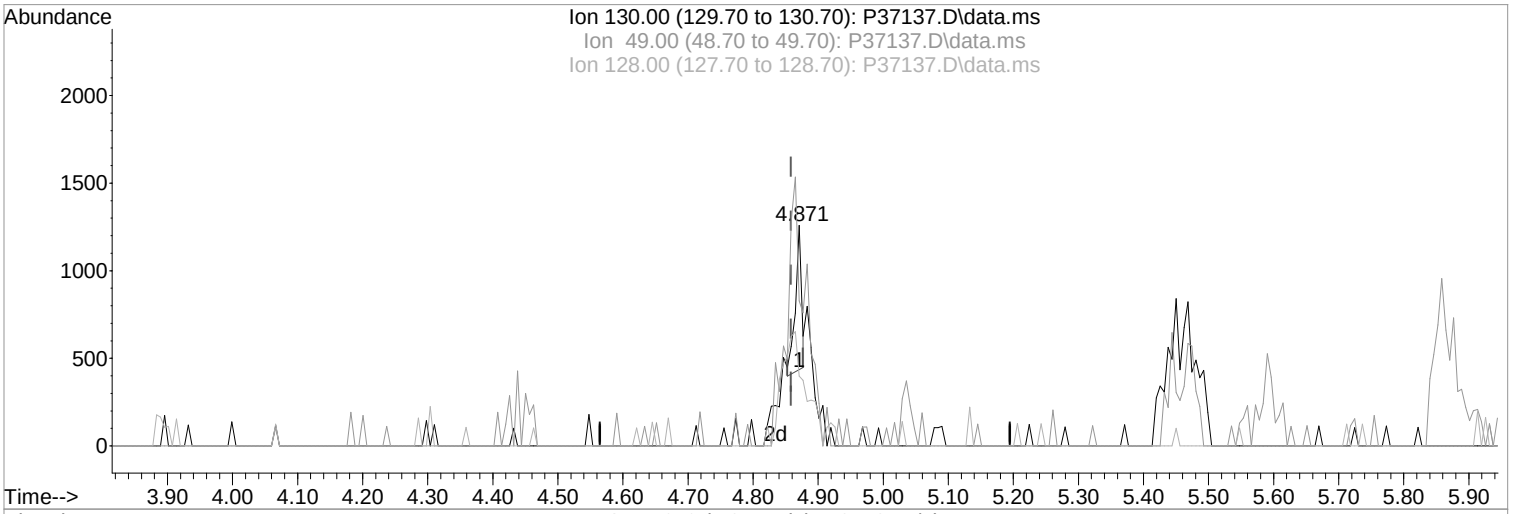
Split Peak

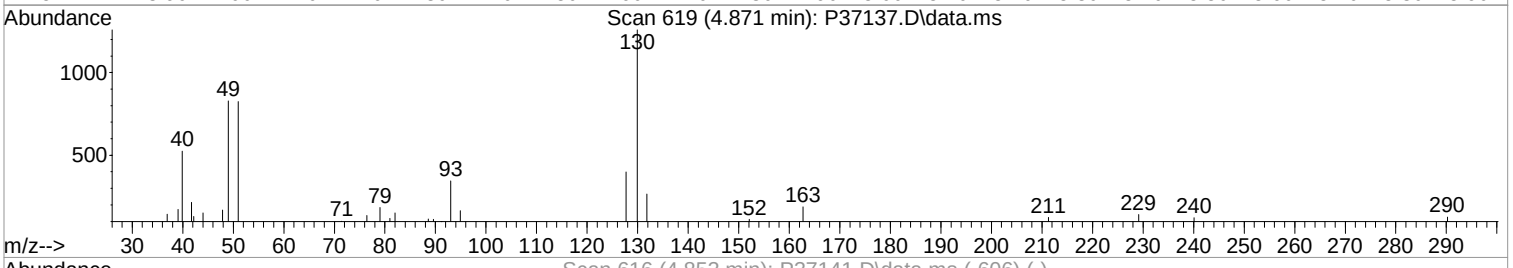
07/13/20

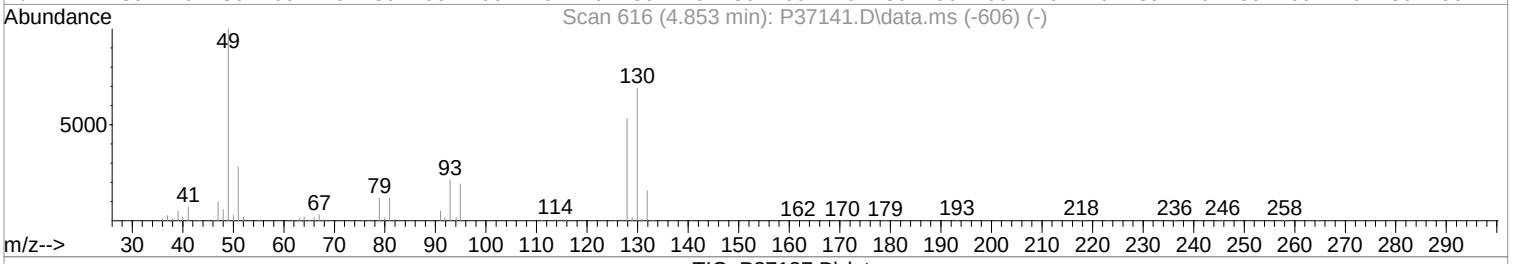
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(37) Bromochloromethane

4.871min (+0.012) 0.26 ppb

response 557

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	65.77#
128.00	77.00	31.69#
0.00	0.00	0.00

Manual Integration:

Before

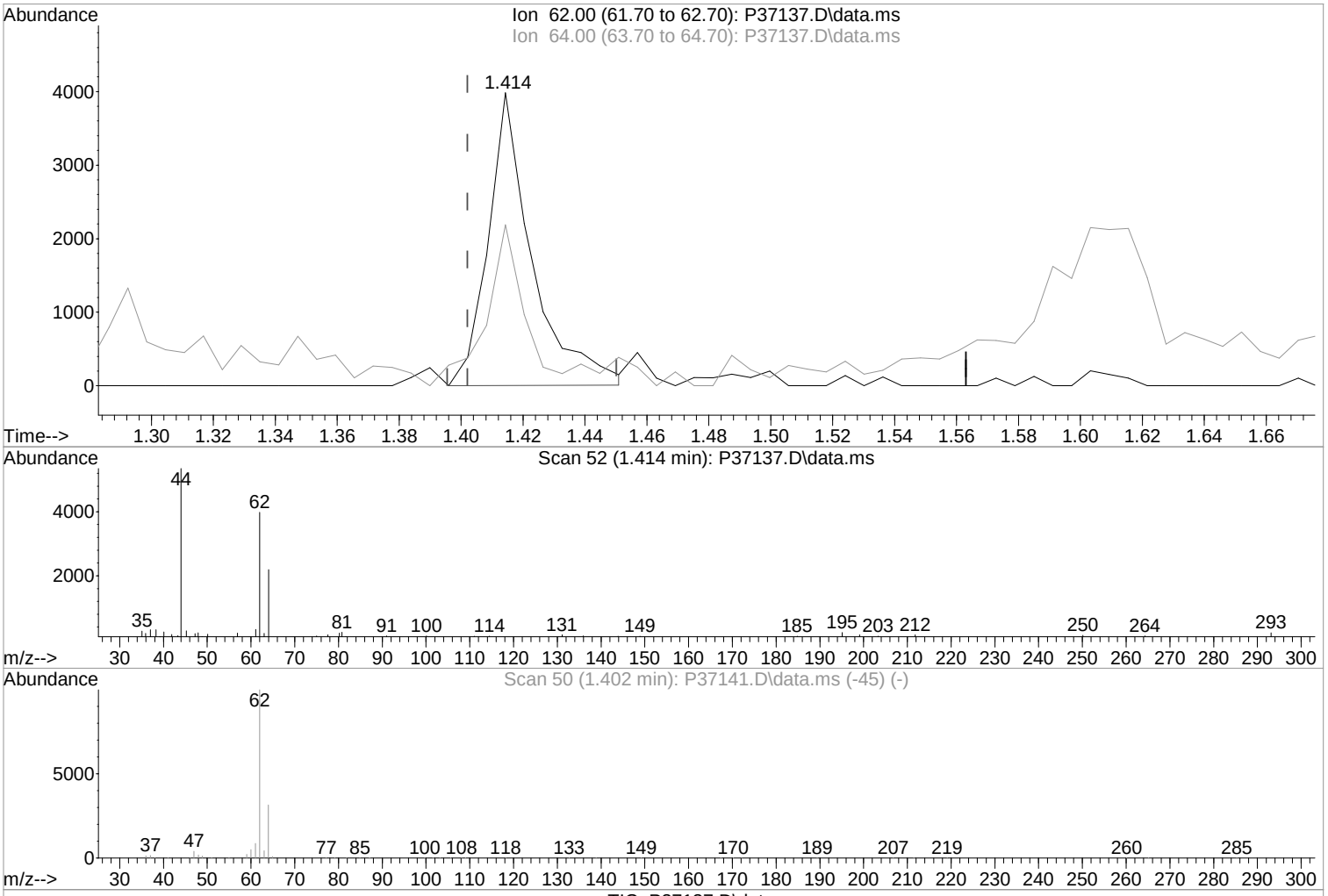
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(4) Vinyl Chloride (P)

1.414min (+0.012) 0.95 ppb m

response 3919

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	55.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

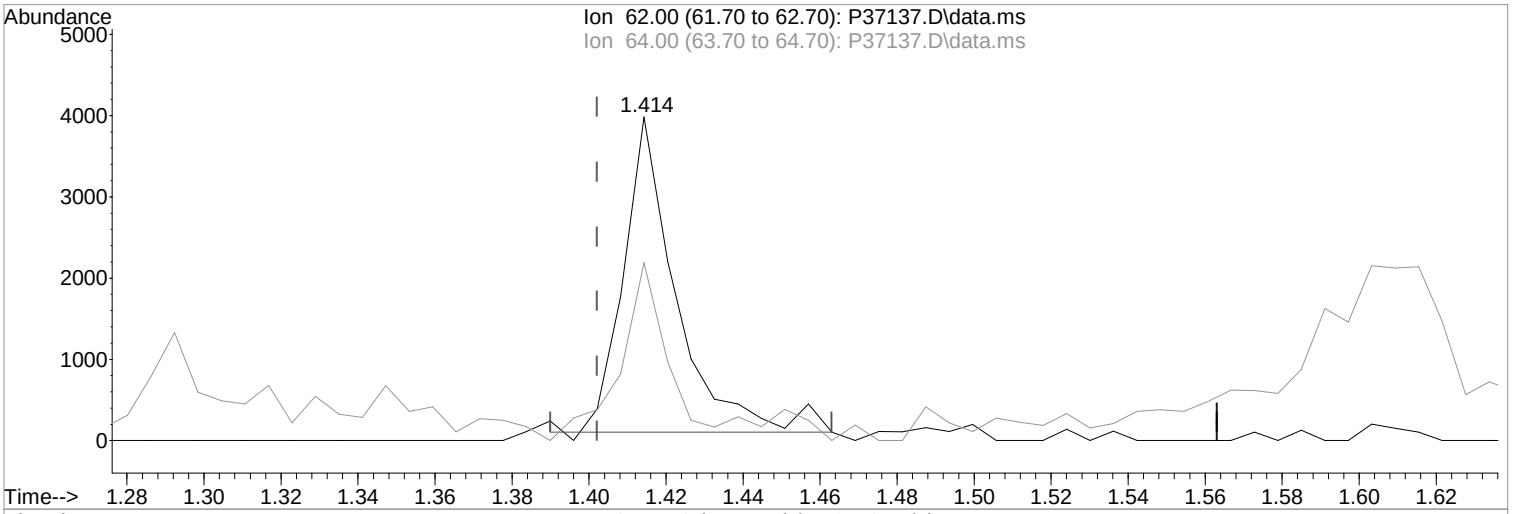
Poor integration.

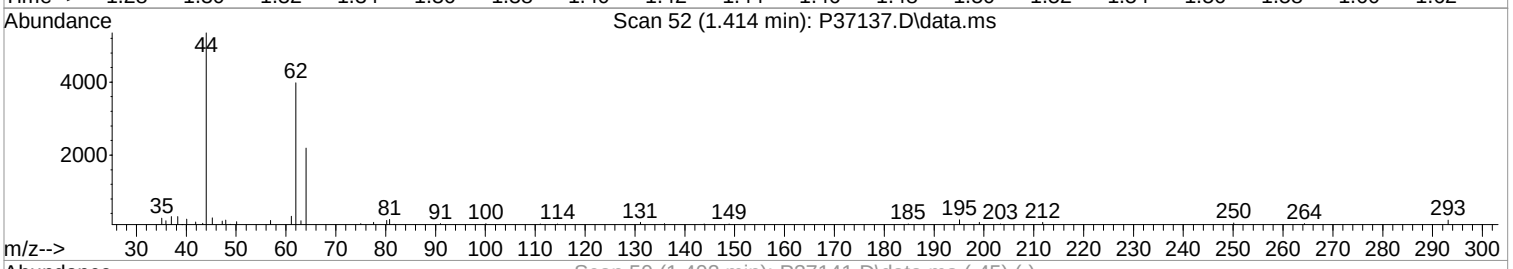
07/13/20

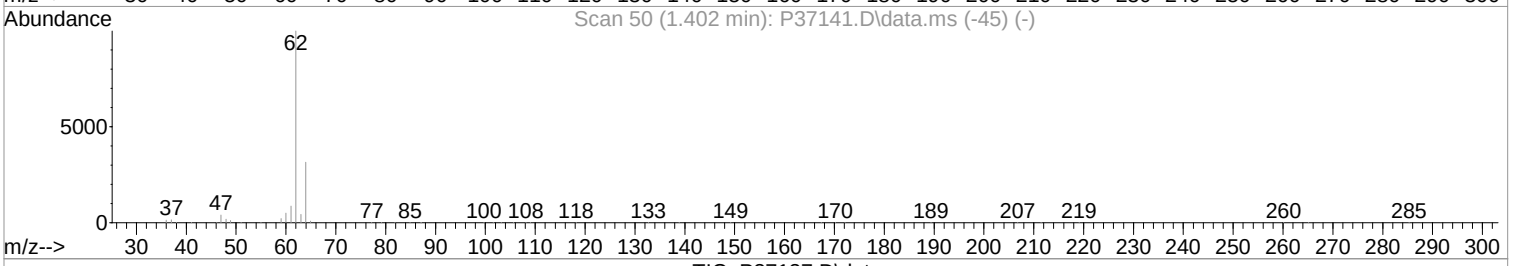
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(4) Vinyl Chloride (P)

1.414min (+0.012) 0.90 ppb

response 3674

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	55.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

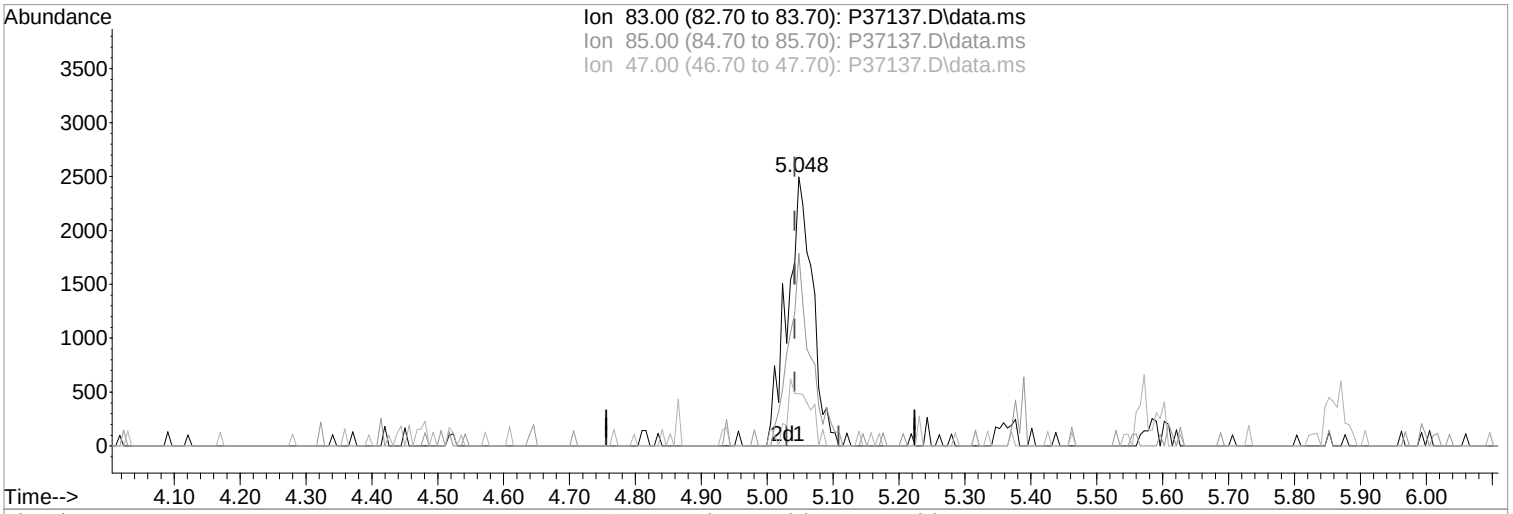
Before

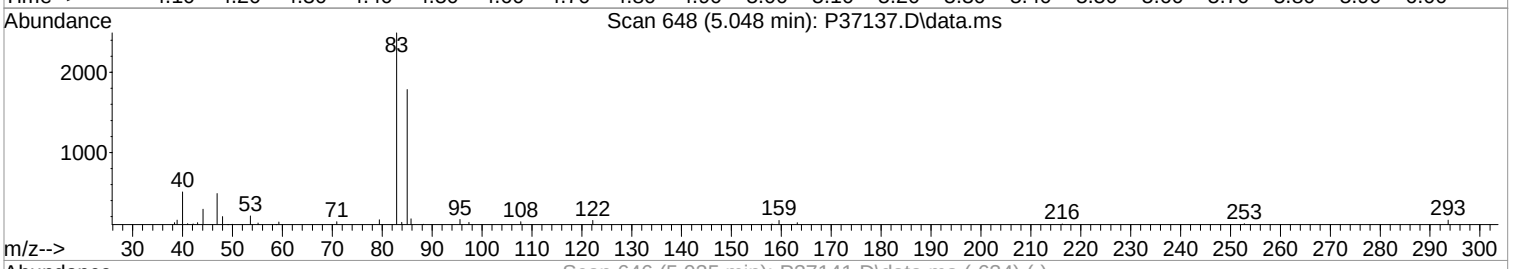
07/13/20

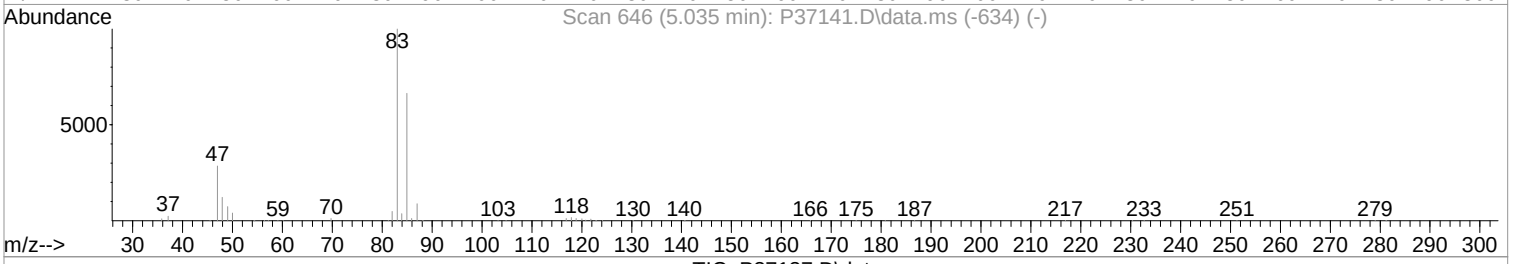
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(40) Chloroform (P)

5.048min (+0.006) 1.17 ppb m

response 6624

Ion	Exp%	Act%
83.00	100	100
85.00	66.50	71.54
47.00	28.70	19.48
0.00	0.00	0.00

Manual Integration:

After

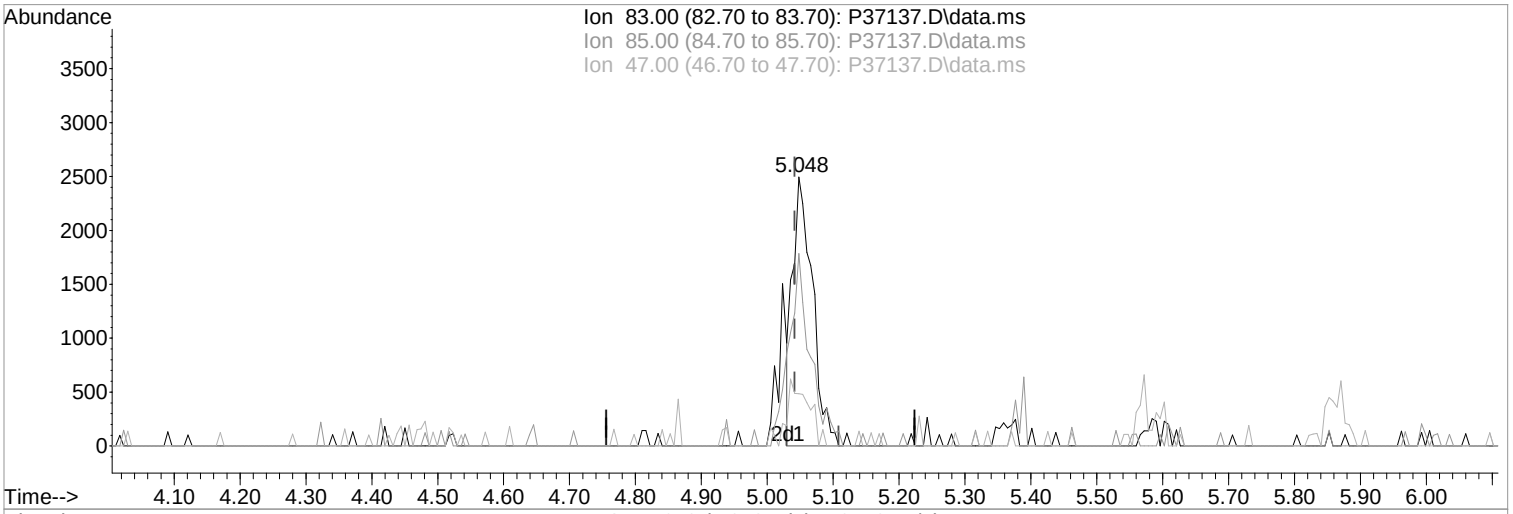
Split Peak

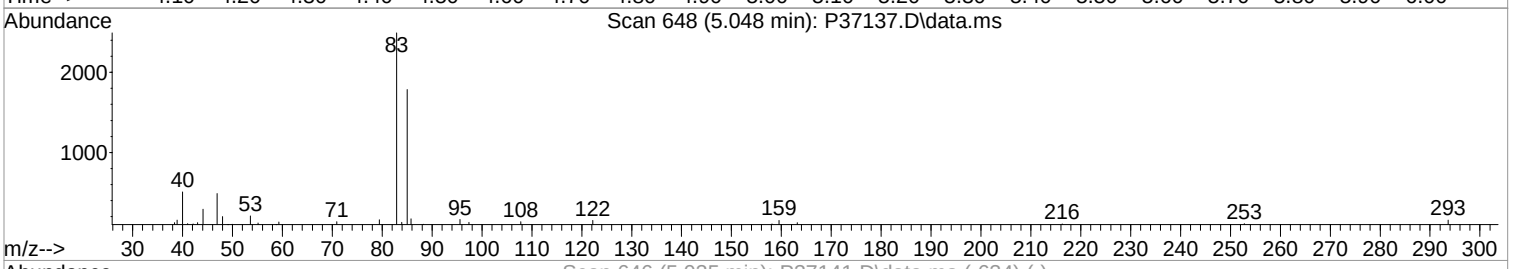
07/13/20

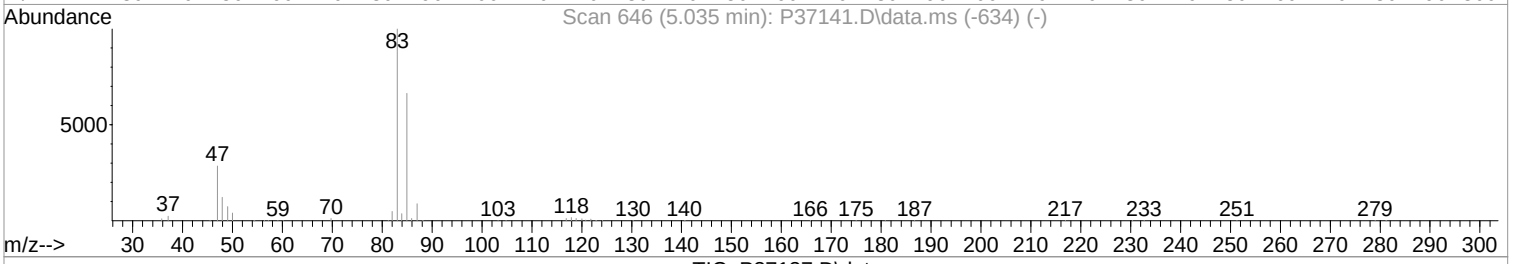
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(40) Chloroform (P)

5.048min (+0.006) 0.92 ppb

response 5225

Ion	Exp%	Act%
83.00	100	100
85.00	66.50	71.54
47.00	28.70	19.48
0.00	0.00	0.00

Manual Integration:

Before

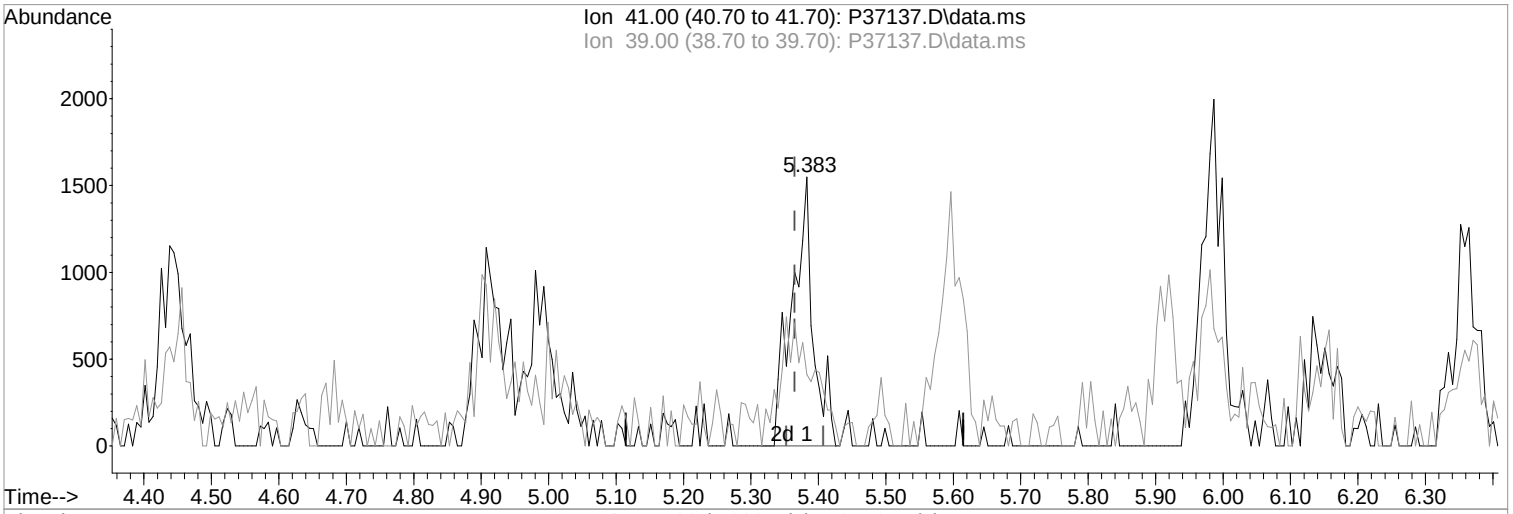
07/13/20

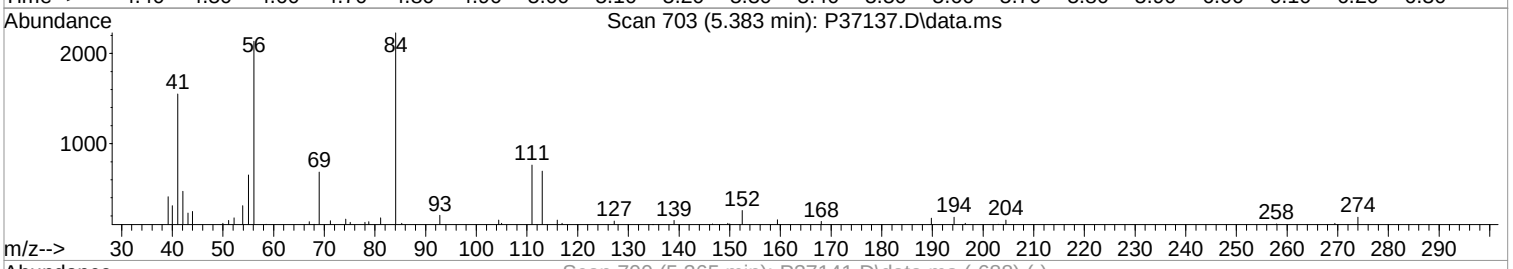
1st 07/14/20
2nd 07/14/20

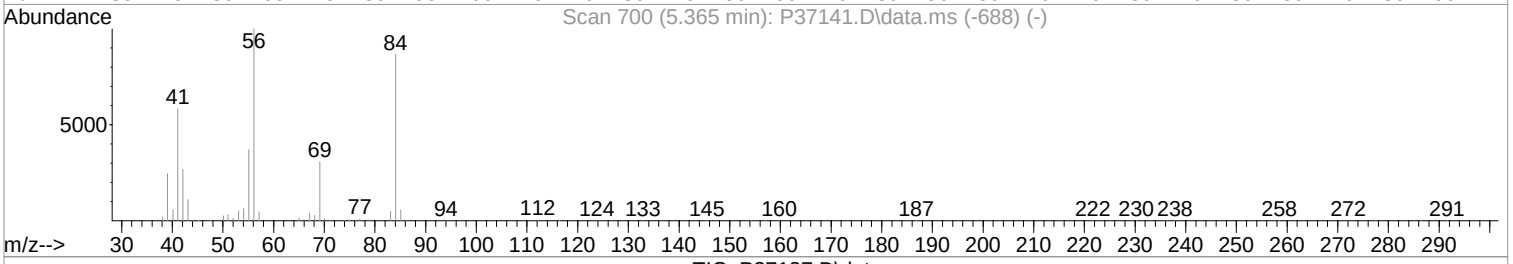
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(44) Cyclohexane (P)

5.383min (+0.018) 1.04 ppb m

response 3421

Ion	Exp%	Act%
41.00	100	100
39.00	42.20	26.53
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Split Peak

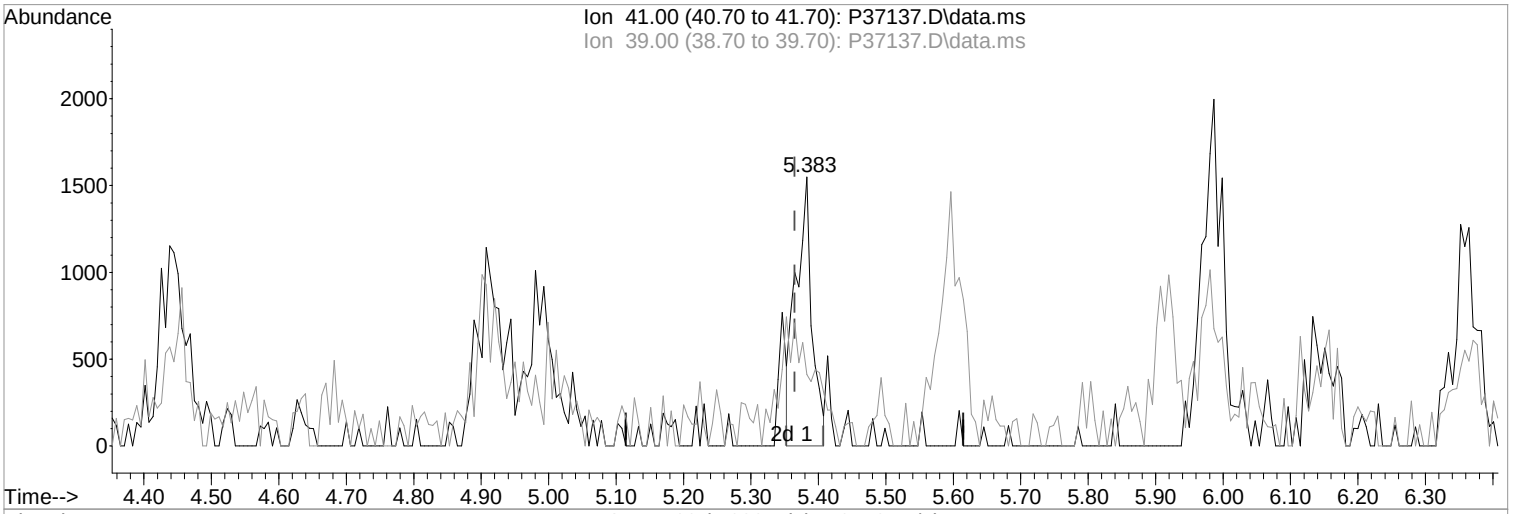
07/13/20

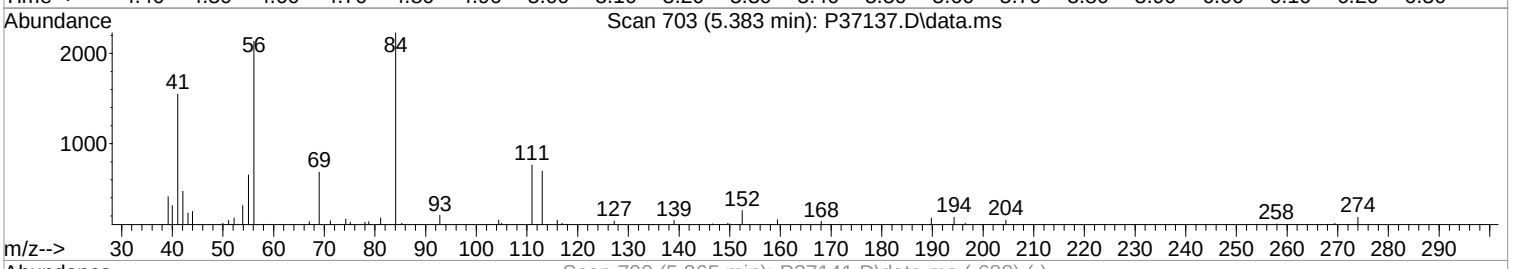
1st 07/14/20
2nd 07/14/20

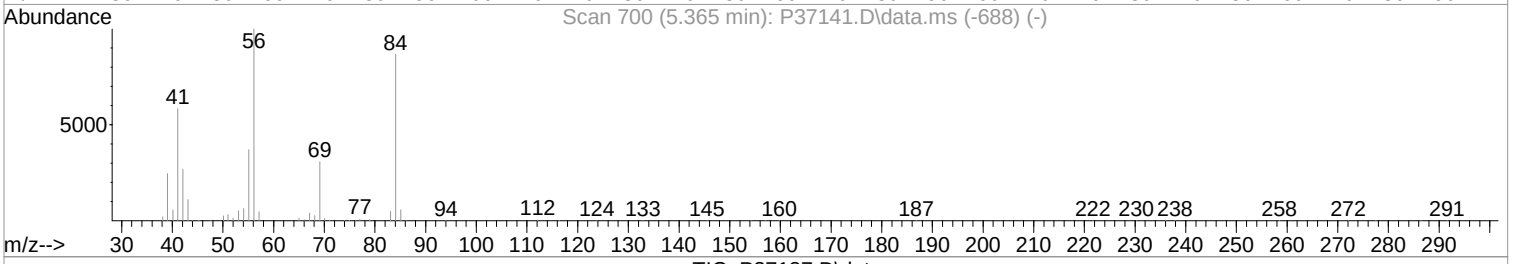
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(44) Cyclohexane (P)

5.383min (+0.018) 0.78 ppb

response 2582

Ion	Exp%	Act%
41.00	100	100
39.00	42.20	26.53
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

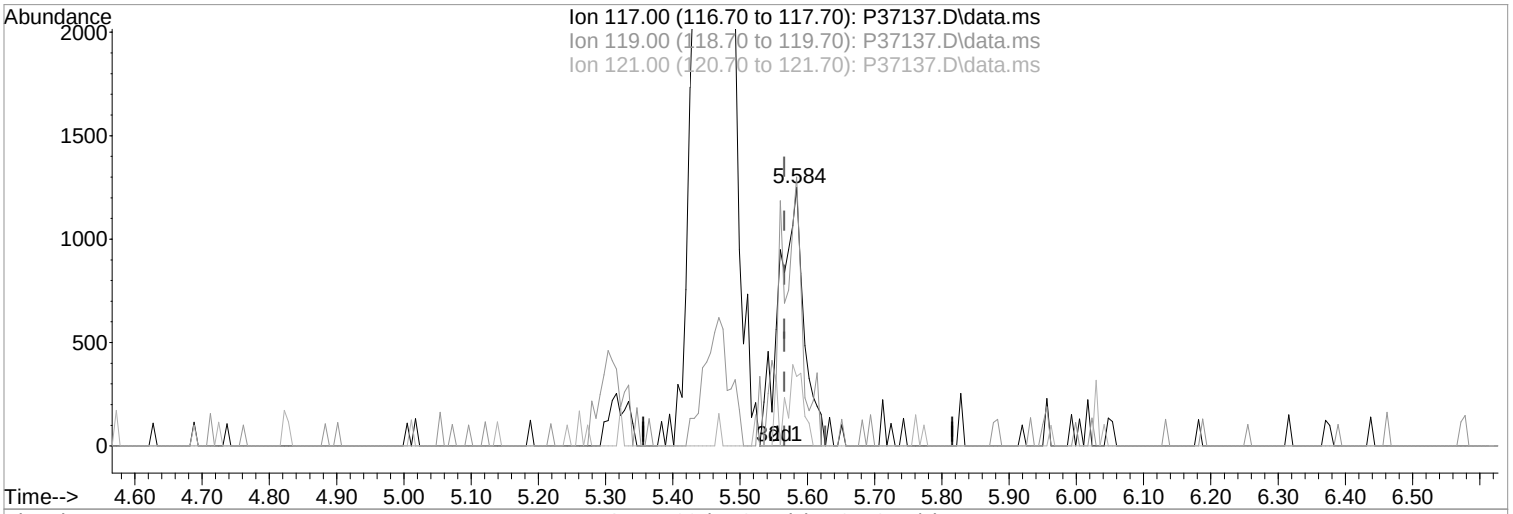
Before

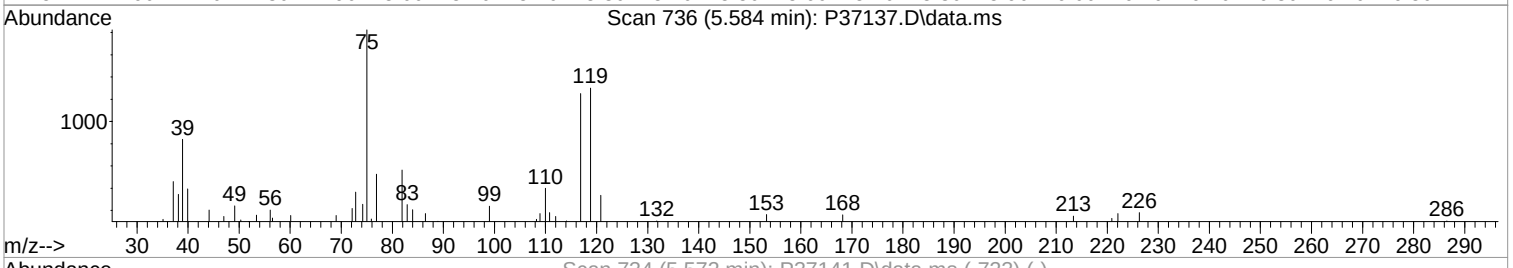
07/13/20

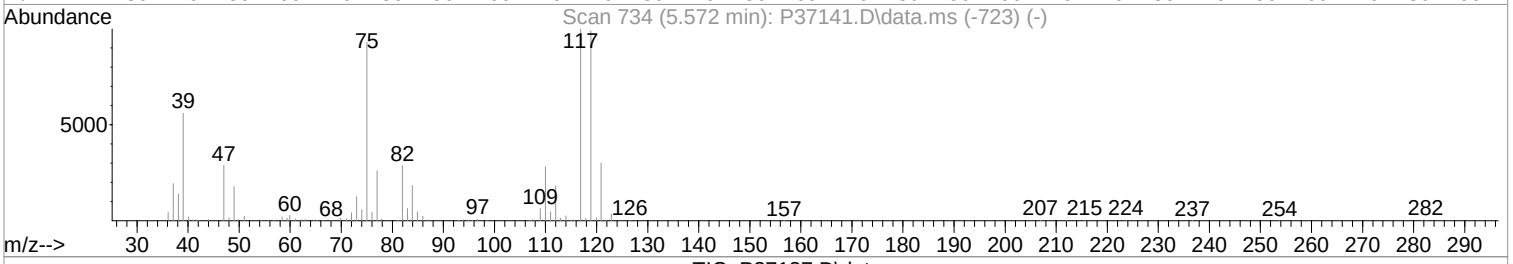
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(46) Carbontetrachloride (P)

5.584min (+0.018) 0.95 ppb m

response 3176

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	103.92
121.00	29.80	26.86
0.00	0.00	0.00

Manual Integration:

After

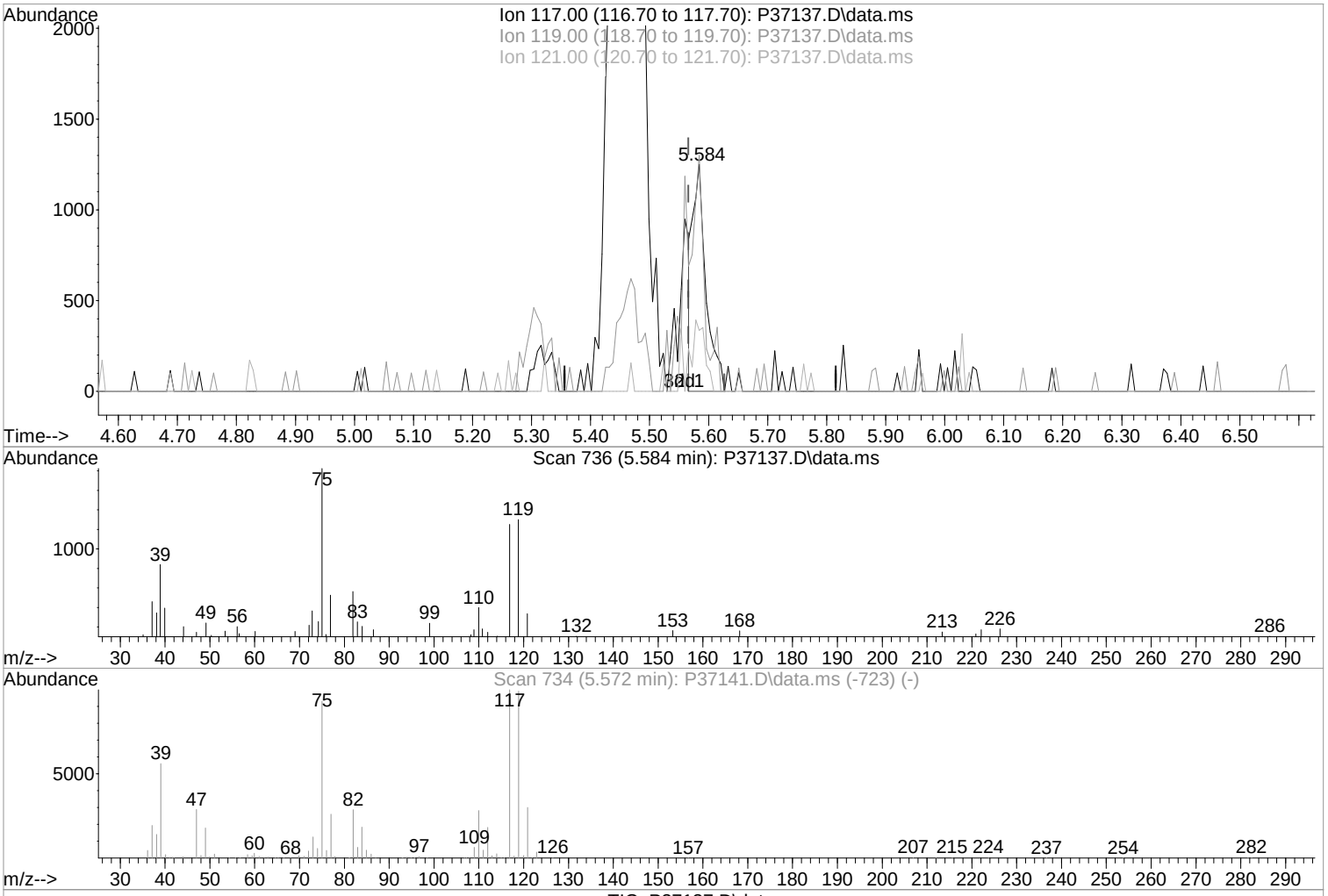
Split Peak

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37137.D\data.ms

(46) Carbontetrachloride (P)

5.584min (+0.018) 0.60 ppb

response 2012

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	103.92
121.00	29.80	26.86
0.00	0.00	0.00

Manual Integration:

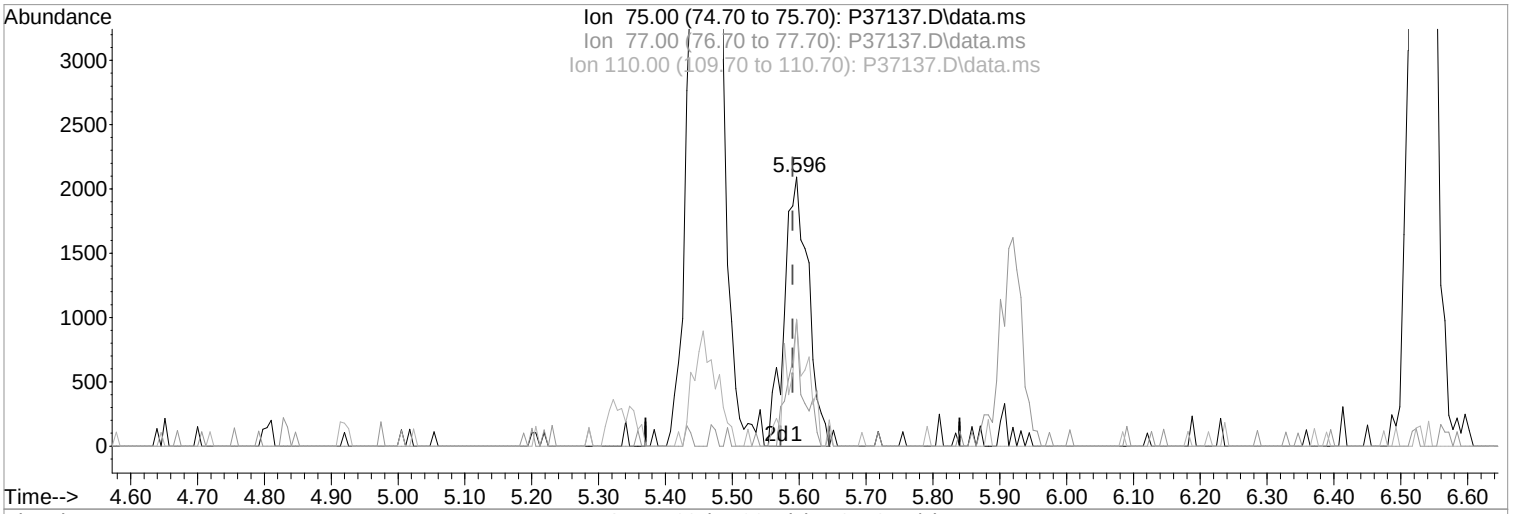
Before

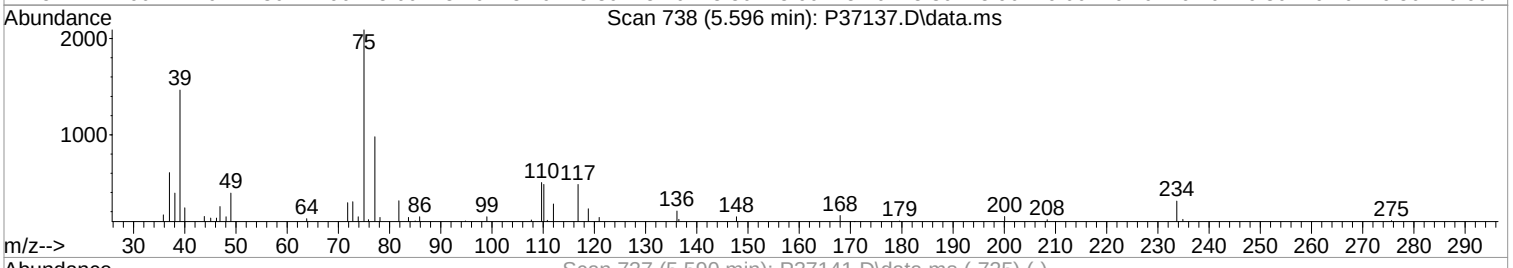
07/13/20

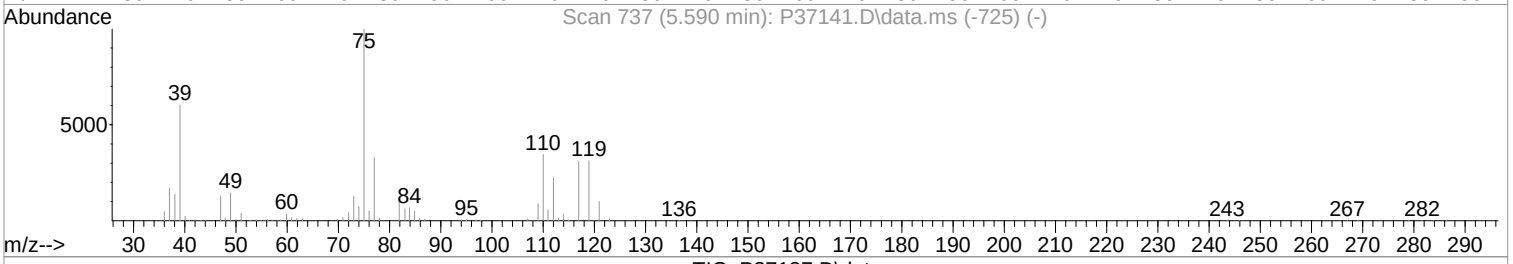
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(47) 1,1-Dichloropropene

5.596min (+0.006) 1.10 ppb m

response 5220

Ion	Exp%	Act%
75.00	100	100
77.00	32.80	46.80
110.00	34.60	24.04
0.00	0.00	0.00

Manual Integration:

After

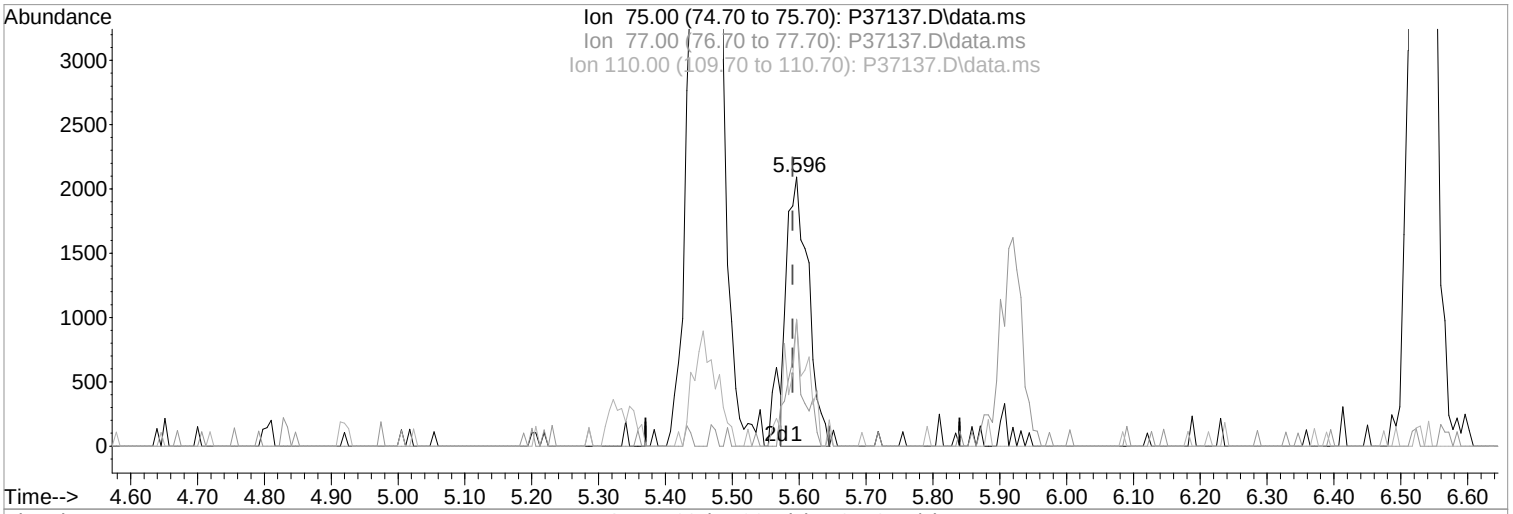
Split Peak

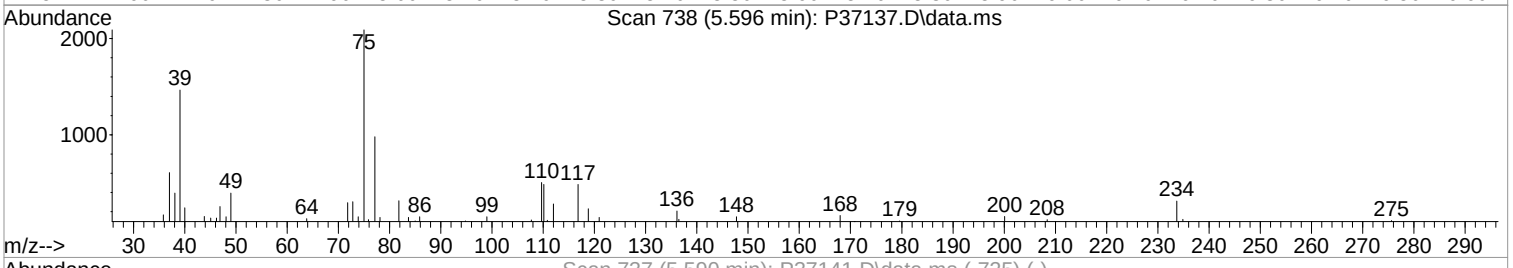
07/13/20

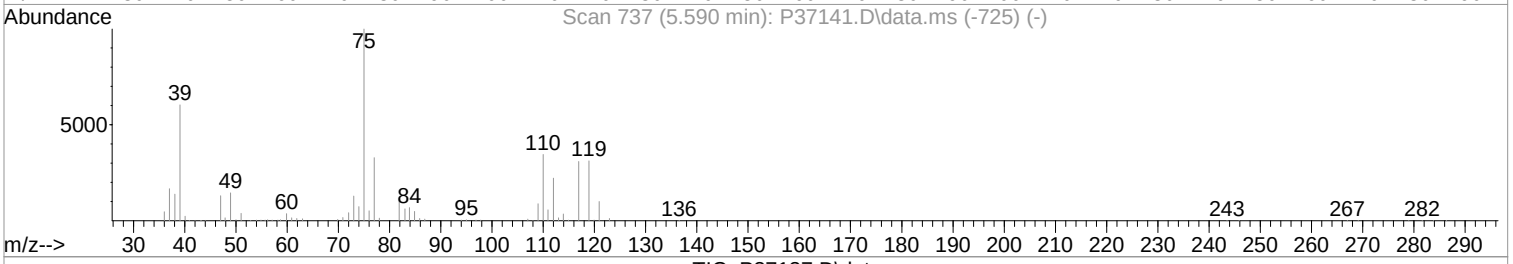
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:03:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37137.D\data.ms

(47) 1,1-Dichloropropene

5.596min (+0.006) 0.99 ppb

response 4697

Ion	Exp%	Act%
75.00	100	100
77.00	32.80	46.80
110.00	34.60	47.13
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:14:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.462	168	309333	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.535	114	501639	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	433933	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	201205	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	32643	11.33	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 22.66%#				
48) surr1,1,2-dichloroetha...	5.859	65	45754	11.47	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 22.94%#				
65) SURR3,Toluene-d8	8.321	98	150618	11.25	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 22.50%#				
70) SURR2,BFB	10.870	95	52855	10.72	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 21.44%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	3965	1.15	ppb		88
3) Chloromethane	1.335	50	3928	0.91	ppb		70
4) Vinyl Chloride	1.414	62	3919m	0.95	ppb		
5) Bromomethane	1.646	94	3520	1.05	ppb	#	70
6) Chloroethane	1.719	64	2258	1.02	ppb		99
7) Freon 21	1.878	67	5307	1.03	ppb		95
8) Trichlorofluoromethane	1.914	101	4219	1.02	ppb		92
9) Diethyl Ether	2.158	59	3060	1.02	ppb		97
10) Freon 123a	2.164	67	3682	1.04	ppb		90
11) Freon 123	2.225	83	4395	1.05	ppb	#	78
12) Acrolein	2.274	56	4163	5.13	ppb	#	65
13) 1,1-Diclethene	2.341	96	2672	1.12	ppb		99
14) Freon 113	2.347	101	3025	1.09	ppb		84
15) Acetone	2.414	43	3562	1.98	ppb		84
16) 2-Propanol	2.554	45	8496	21.33	ppb		99
17) Iodomethane	2.493	142	891	0.33	ppb		78
18) Carbon Disulfide	2.542	76	11415	1.25	ppb		97
19) Acetonitrile	2.682	40	1843m	8.29	ppb		
20) Allyl Chloride	2.688	76	2002	1.18	ppb	#	37
21) Methyl Acetate	2.719	43	5486	1.19	ppb		80
22) Methylene Chloride	2.816	84	4352	1.28	ppb	#	62
23) TBA	2.969	59	12830	19.90	ppb		98
24) Acrylonitrile	3.097	53	11569	5.82	ppb		98
25) Methyl-t-Butyl Ether	3.103	73	12053	1.09	ppb		86
26) trans-1,2-Dichloroethene	3.097	96	3049	1.09	ppb	#	87
28) 1,1-Diclethane	3.609	63	7193	1.17	ppb		87
29) Vinyl Acetate	3.707	86	151m	0.33	ppb		
30) DIPE	3.719	45	11843	1.10	ppb	#	77
31) 2-Chloro-1,3-Butadiene	3.731	53	5223	1.06	ppb	#	70
32) ETBE	4.267	59	9583	0.96	ppb		85
33) 2,2-Dichloropropane	4.450	77	4606m	1.02	ppb		
34) cis-1,2-Dichloroethene	4.469	96	4326m	1.20	ppb		
35) 2-Butanone	4.548	43	3470	1.44	ppb		92
36) Propionitrile	4.651	54	4656	5.40	ppb		85
37) Bromochloromethane	4.871	130	2557m	1.21	ppb		
38) Methacrylonitrile	4.926	67	2318	1.13	ppb	#	45
39) Tetrahydrofuran	4.975	42	3829	2.03	ppb	#	68
40) Chloroform	5.048	83	6624m	1.17	ppb		
41) 1,1,1-Trichloroethane	5.310	97	4862	1.09	ppb		87

1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:14:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.151	73	10956	1.10	ppb		90
44) Cyclohexane	5.383	41	3421m	1.04	ppb		
46) Carbontetrachloride	5.584	117	3176m	0.95	ppb		
47) 1,1-Dichloropropene	5.596	75	5220m	1.10	ppb		
49) Benzene	5.920	78	16370	1.13	ppb		97
50) 1,2-Dichloroethane	5.974	62	5324	1.05	ppb		90
51) Iso-Butyl Alcohol	5.980	43	6676	21.49	ppb		95
52) n-Heptane	6.365	43	4968	1.11	ppb	#	82
53) 1-Butanol	6.919	56	8293	42.90	ppb		94
54) Trichloroethene	6.846	130	4243	1.18	ppb	#	82
55) Methylcyclohexane	7.047	55	4897	1.10	ppb	#	65
56) 1,2-Diclpropane	7.139	63	4016	1.04	ppb		95
57) Dibromomethane	7.279	93	2228	1.01	ppb		97
58) 1,4-Dioxane	7.352	88	1726	21.78	ppb		89
59) Methyl Methacrylate	7.364	69	3218	0.96	ppb	#	81
60) Bromodichloromethane	7.505	83	3913	0.96	ppb		82
62) 2-Chloroethylvinyl Ether	7.919	63	1714	1.02	ppb		100
63) cis-1,3-Dichloropropene	8.047	75	5085	0.92	ppb		91
64) 4-Methyl-2-pentanone	8.254	43	5097	0.99	ppb		92
66) Toluene	8.389	91	16928	1.10	ppb		98
67) trans-1,3-Dichloropropene	8.675	75	4432	0.88	ppb		74
68) Ethyl Methacrylate	8.809	69	5268	0.93	ppb		99
69) 1,1,2-Trichloroethane	8.858	97	3780	1.10	ppb		94
72) Tetrachloroethene	8.974	164	2777	1.05	ppb		87
73) 2-Hexanone	9.157	43	3759	0.97	ppb	#	63
74) 1,3-Dichloropropane	9.029	76	7241	1.19	ppb		90
75) Dibromochloromethane	9.254	129	2462	0.91	ppb	#	87
76) N-Butyl Acetate	9.297	43	6507	0.91	ppb		86
77) 1,2-Dibromoethane	9.346	107	3845	1.16	ppb		92
78) Chlorobenzene	9.827	112	9976	1.03	ppb		82
79) 3-CBTF	9.833	180	4479	1.00	ppb	#	71
80) 4-CBTF	9.900	180	3893	0.97	ppb		88
81) 1,1,1,2-Tetrachloroethane	9.919	131	2910	0.98	ppb	#	76
82) Ethylbenzene	9.937	106	4920	0.97	ppb	#	72
83) (m+p)Xylene	10.053	106	12839	2.11	ppb		96
84) o-Xylene	10.406	106	6458	1.09	ppb	#	78
85) Styrene	10.425	104	9756	0.97	ppb		91
87) Bromoform	10.589	173	1698	1.02	ppb		82
88) 2-CBTF	10.662	180	4670	1.14	ppb	#	92
89) Isopropylbenzene	10.742	105	15504	1.12	ppb		95
90) Cyclohexanone	10.827	55	18052	21.63	ppb		98
91) trans-1,4-Dichloro-2-B...	11.065	53	1154	0.99	ppb		95
92) 1,1,2,2-Tetrachloroethane	11.016	83	4823	1.07	ppb		88
93) Bromobenzene	10.992	156	3728	1.03	ppb	#	92
94) 1,2,3-Trichloropropane	11.047	110	1795	1.24	ppb	#	75
95) n-Propylbenzene	11.095	91	16934	1.06	ppb		98
96) 2-Chlorotoluene	11.162	91	11875	1.15	ppb		96
97) 3-Chlorotoluene	11.211	91	11250	1.14	ppb		98
98) 4-Chlorotoluene	11.248	91	12460	1.07	ppb		94
99) 1,3,5-Trimethylbenzene	11.242	105	13278	1.12	ppb		90
100) tert-Butylbenzene	11.516	119	10906	1.10	ppb		85
101) 1,2,4-Trimethylbenzene	11.553	105	13195	1.10	ppb		95
102) 3,4-DCBTF	11.620	214	3497	1.07	ppb	#	67
103) sec-Butylbenzene	11.693	105	15581	1.09	ppb		93
104) p-Isopropyltoluene	11.815	119	13296	1.08	ppb		96
105) 1,3-Dclbenz	11.784	146	7697	1.08	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 13 16:14:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

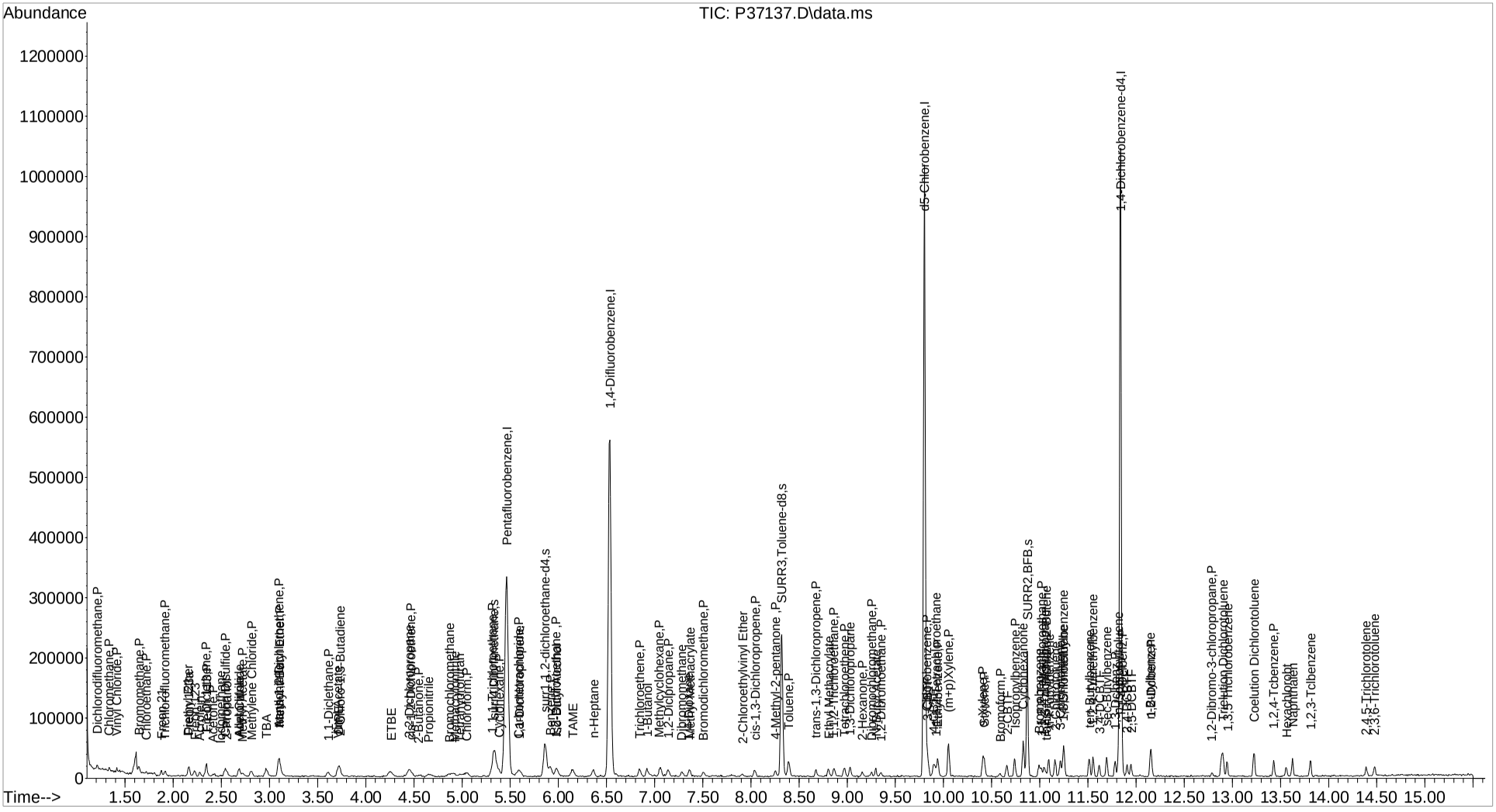
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
106) 1,4-Dclbenz	11.857	146	8673	1.20	ppb		93
107) 2,4-DCBTF	11.906	214	3306m	1.08	ppb		
108) 2,5-DCBTF	11.949	214	3733	1.14	ppb		90
109) n-Butylbenzene	12.150	91	11866	1.03	ppb		97
110) 1,2-Dclbenz	12.156	146	7675	1.06	ppb	#	66
111) 1,2-Dibromo-3-chloropr...	12.784	157	898	0.89	ppb	#	68
112) Trielution Dichlorotol...	12.900	125	17943	3.11	ppb	#	85
113) 1,3,5 Trichlorobenzene	12.949	180	5485	1.11	ppb		97
114) Coelution Dichlorotoluene	13.223	125	12874	2.03	ppb		93
115) 1,2,4-Tcbenzene	13.430	180	5169	0.99	ppb	#	71
116) Hexachlorobt	13.564	225	2392	1.15	ppb	#	70
117) Naphthalen	13.625	128	13920	0.92	ppb		90
118) 1,2,3-Tclbenzene	13.814	180	5697	1.06	ppb		94
119) 2,4,5-Trichlorotolene	14.387	159	2722	0.83	ppb		96
120) 2,3,6-Trichlorotoluene	14.479	159	2715m	0.91	ppb		

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37137.D
Acq On : 13 Jul 2020 12:07 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 2 Sample Multiplier: 1

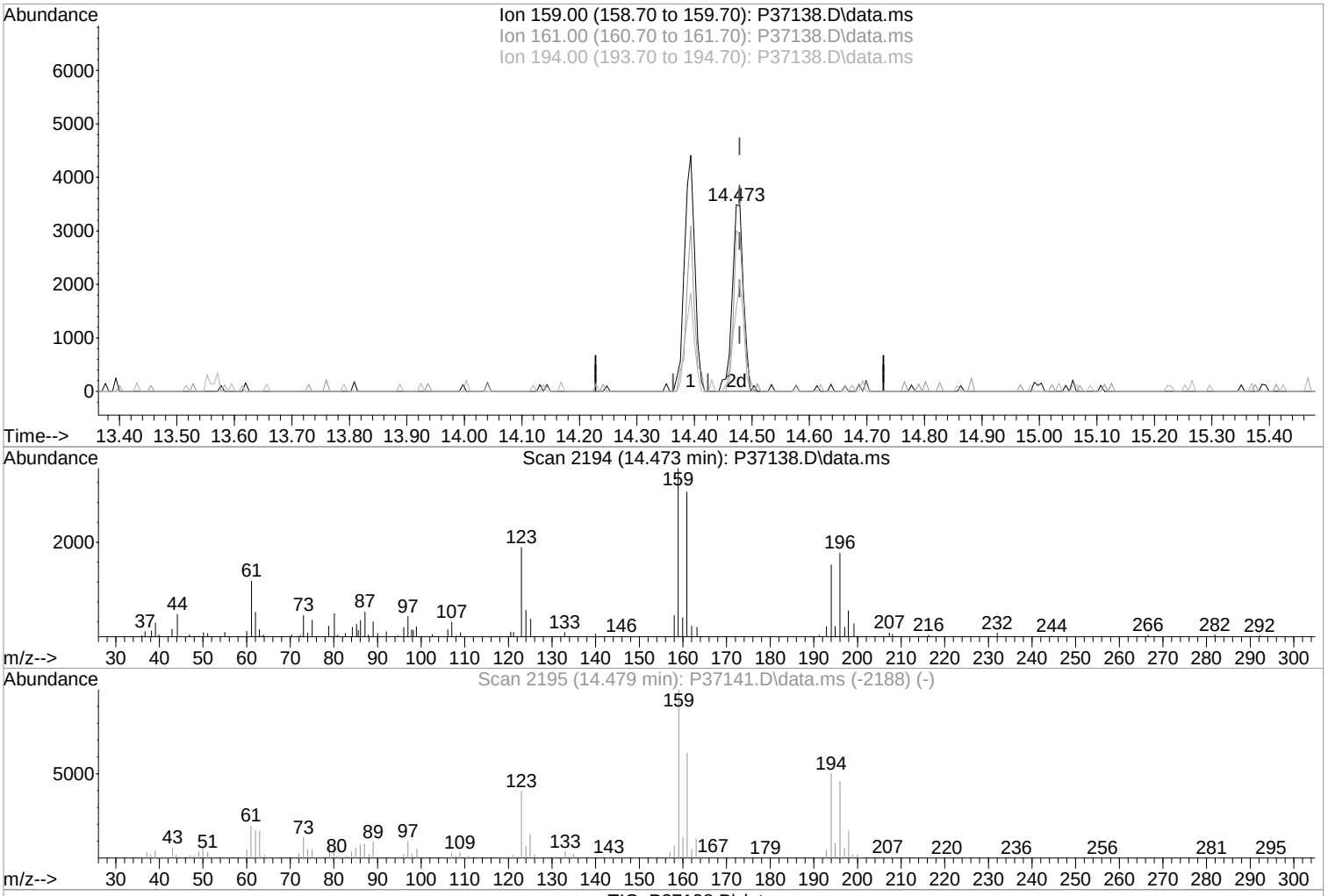
Quant Time: Jul 13 16:14:43 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37138.D\data.ms

(120) 2,3,6-Trichlorotoluene

14.473min (-0.006) 1.52 ppb m

response 4721

Ion	Exp%	Act%
159.00	100	100
161.00	62.40	86.26#
194.00	50.20	44.42
0.00	0.00	0.00

Manual Integration:

After

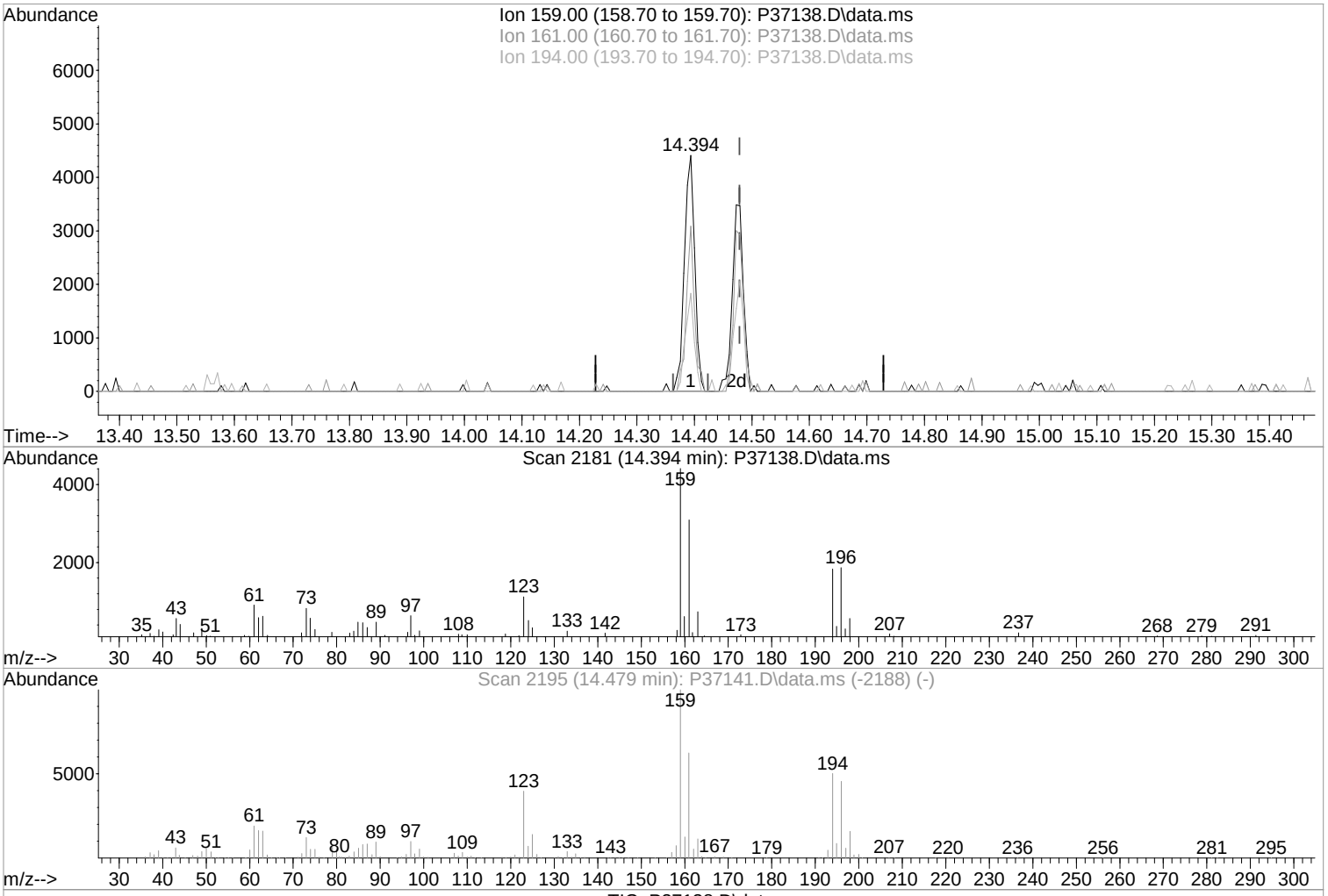
Wrong peak selected.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37138.D\data.ms

(120) 2,3,6-Trichlorotoluene

14.394min (-0.085) 1.78 ppb

response 5518

Ion	Exp%	Act%
159.00	100	100
161.00	62.40	70.03
194.00	50.20	41.58
0.00	0.00	0.00

Manual Integration:

Before

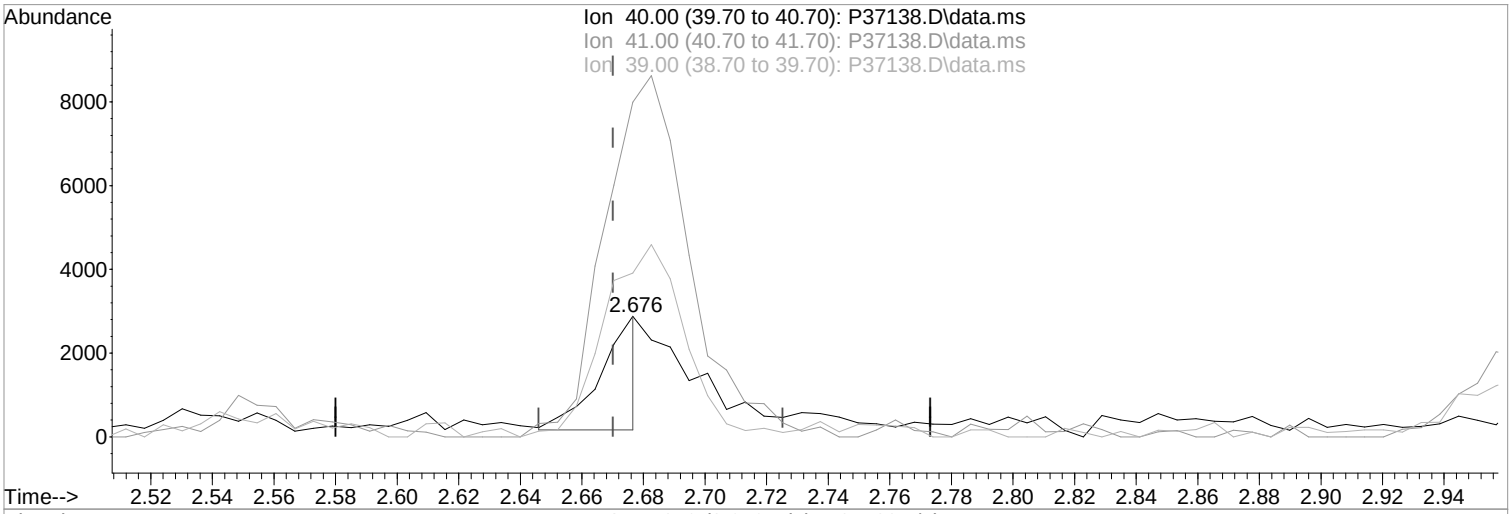
07/13/20

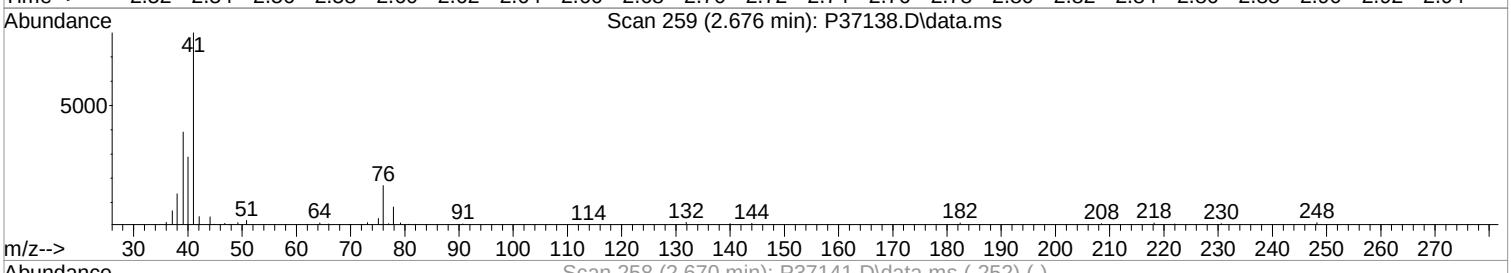
1st 07/14/20
2nd 07/14/20

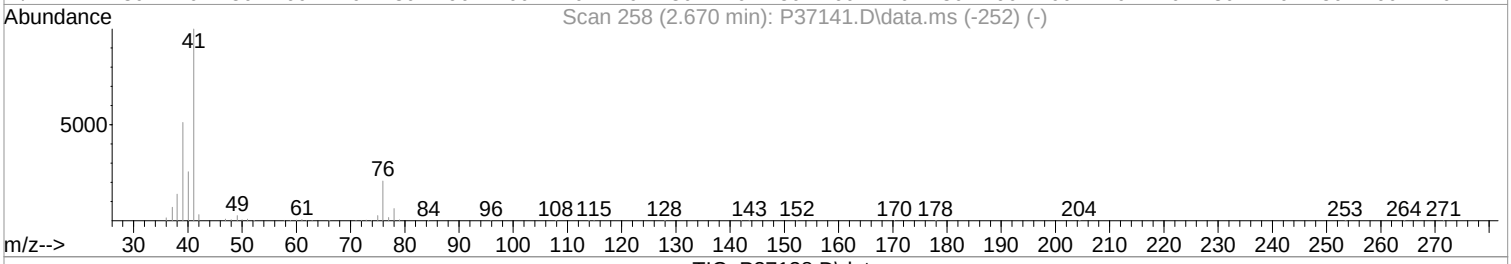
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 10.91 ppb m

response 2415

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	277.40#
39.00	200.50	135.61#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

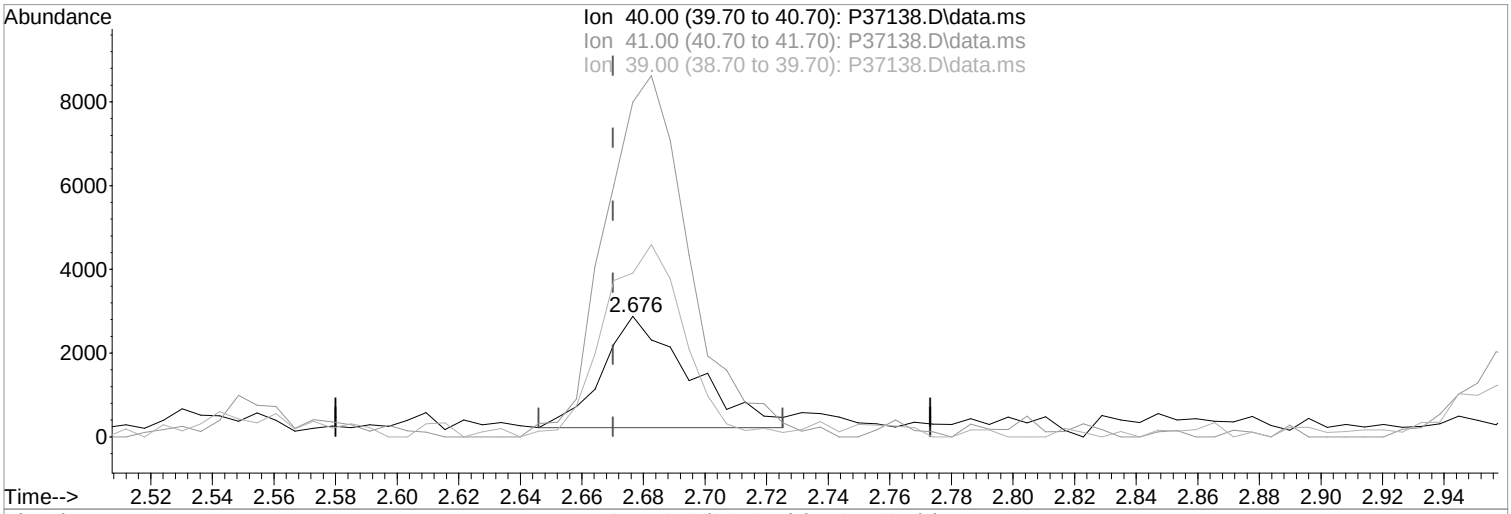
07/13/20

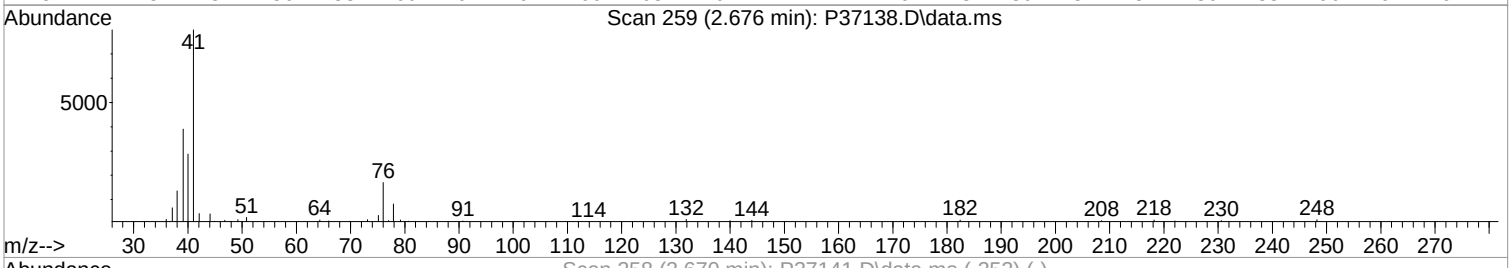
1st 07/14/20
2nd 07/14/20

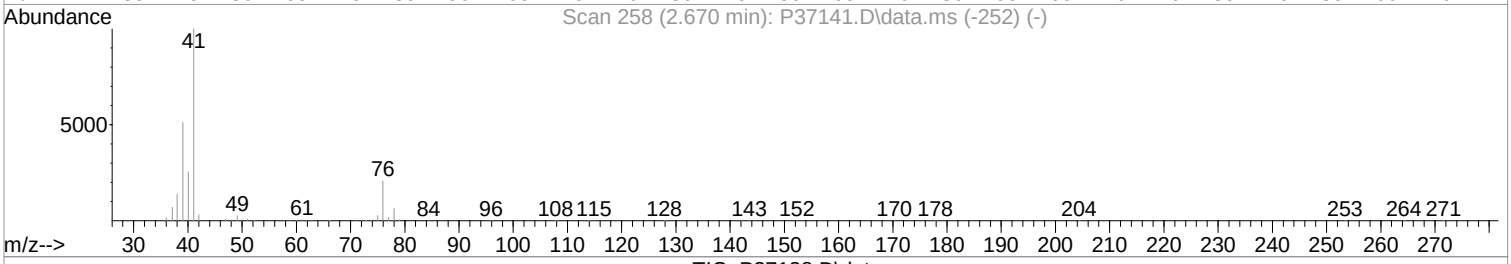
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 23.70 ppb

response 5244

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	277.40#
39.00	200.50	135.61#
0.00	0.00	0.00

Manual Integration:

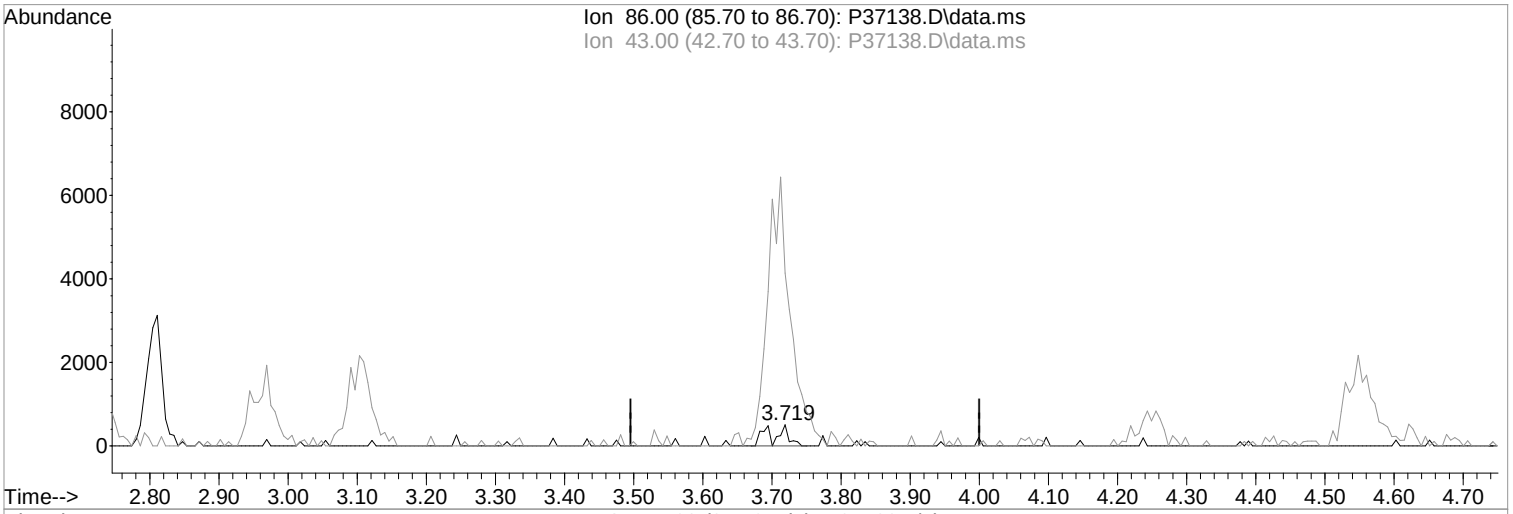
Before

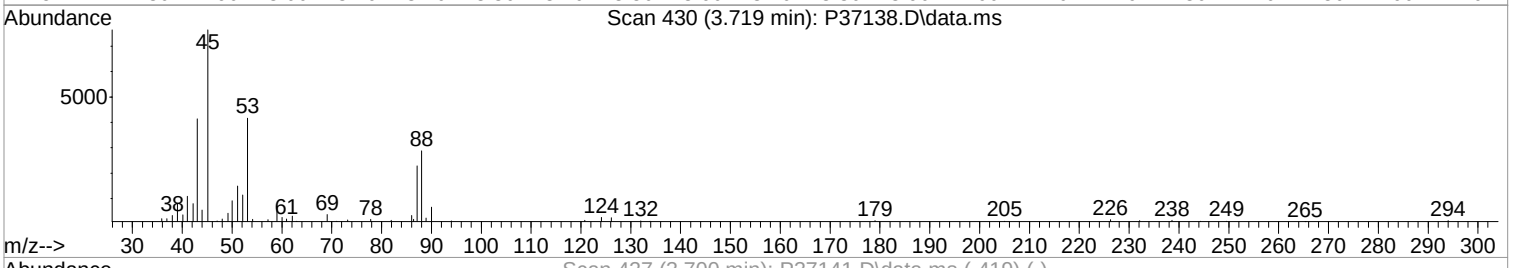
07/13/20

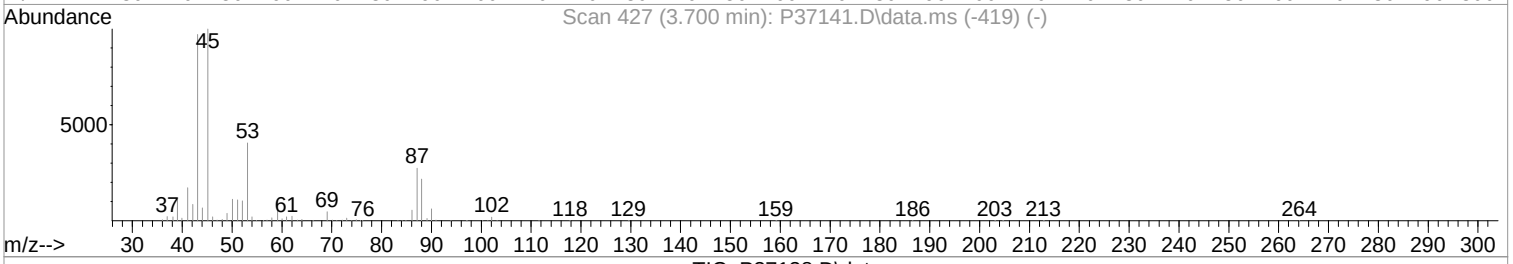
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(29) Vinyl Acetate

3.719min (+0.025) 2.05 ppb m

response 920

Ion	Exp%	Act%
86.00	100	100
43.00	1783.00	1239.22#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

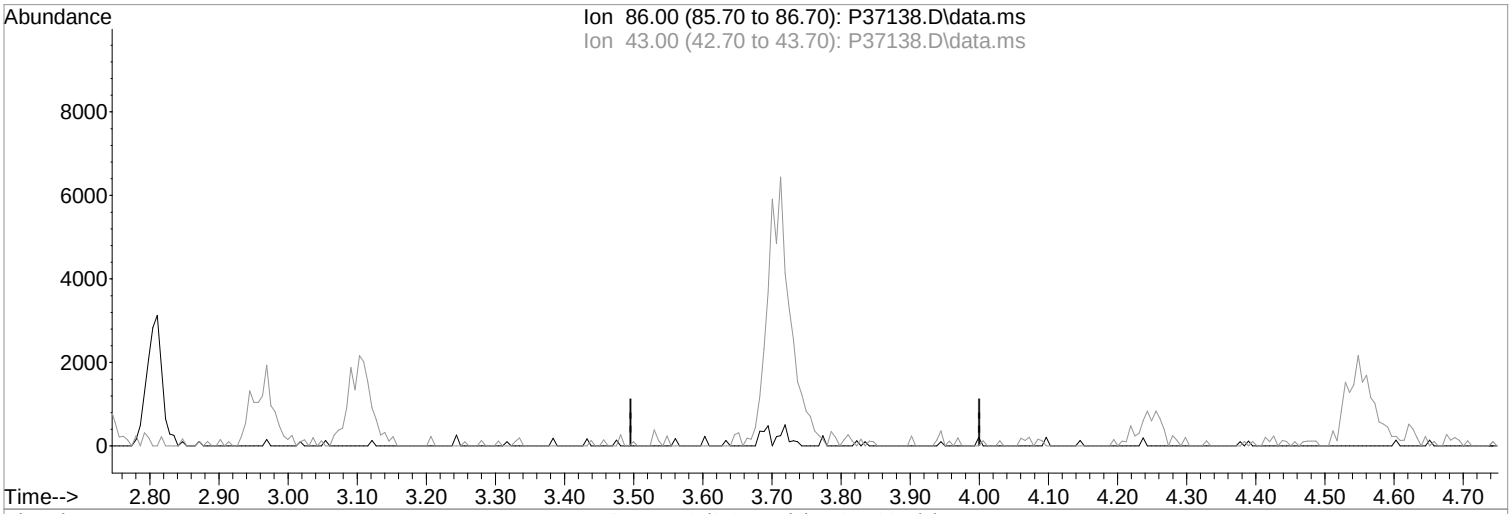
07/13/20

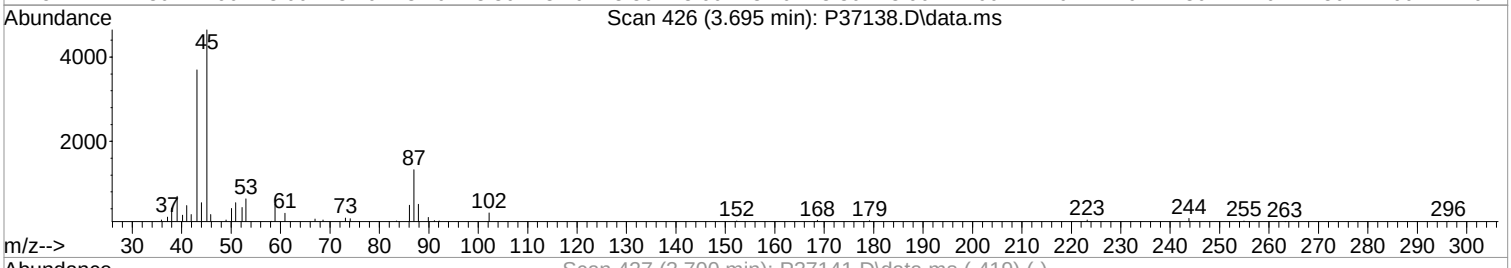
1st 07/14/20
2nd 07/14/20

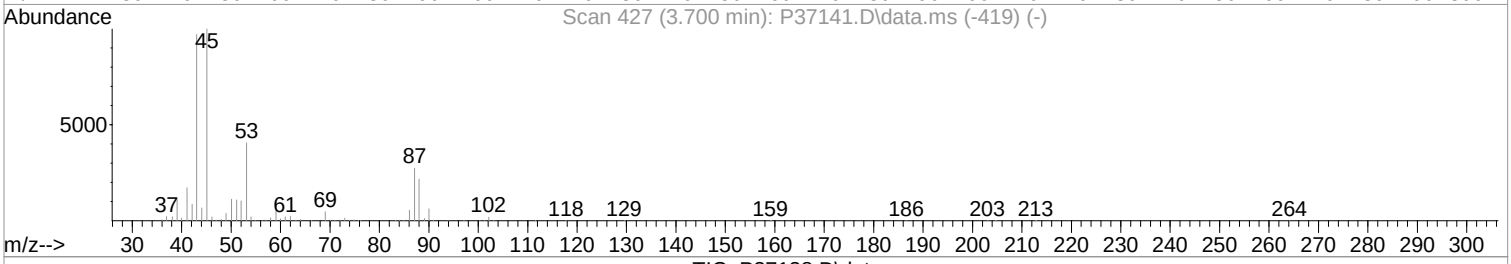
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(29) Vinyl Acetate

3.694min (-3.694) 0.00 ppb

response 0

Ion	Exp%	Act%
86.00	100	0.00
43.00	1783.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

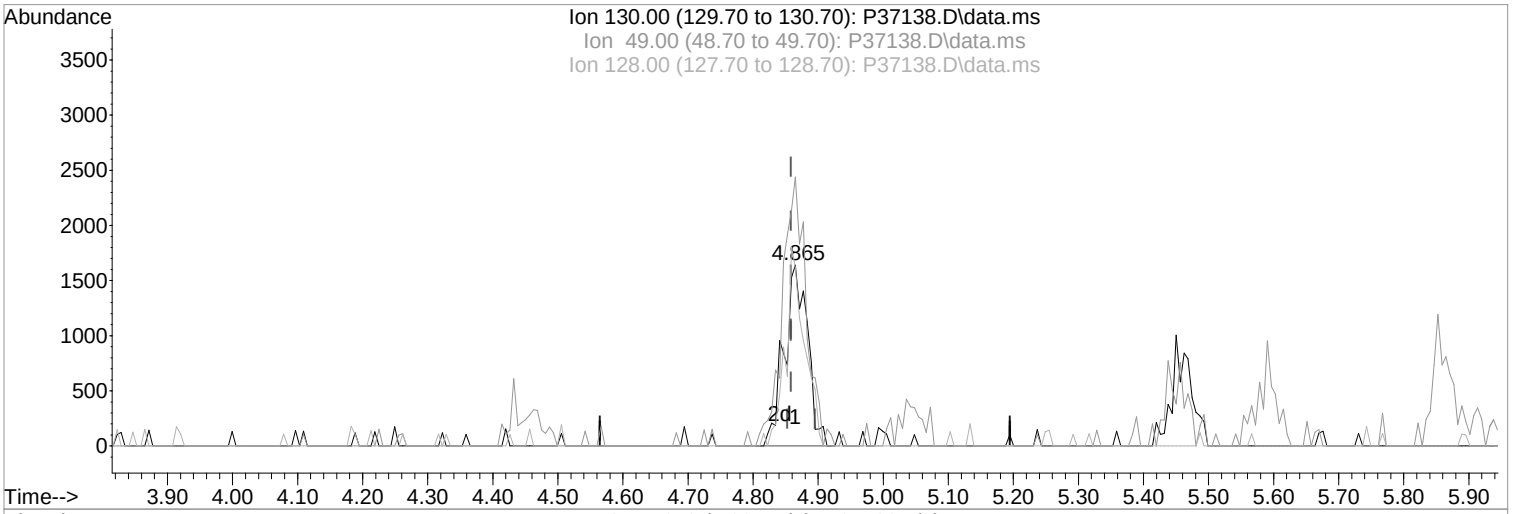
07/13/20

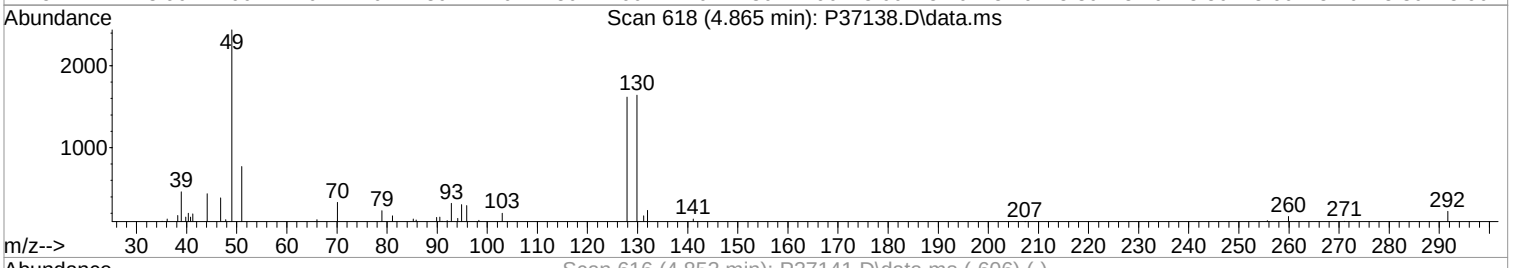
1st 07/14/20
2nd 07/14/20

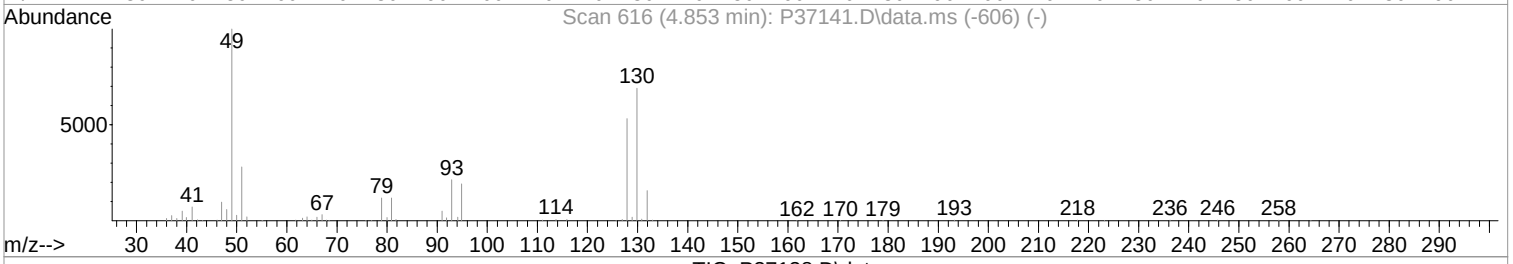
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(37) Bromochloromethane

4.865min (+0.006) 1.95 ppb m

response 4104

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	148.63
128.00	77.00	98.60#
0.00	0.00	0.00

Manual Integration:

After

Split Peak

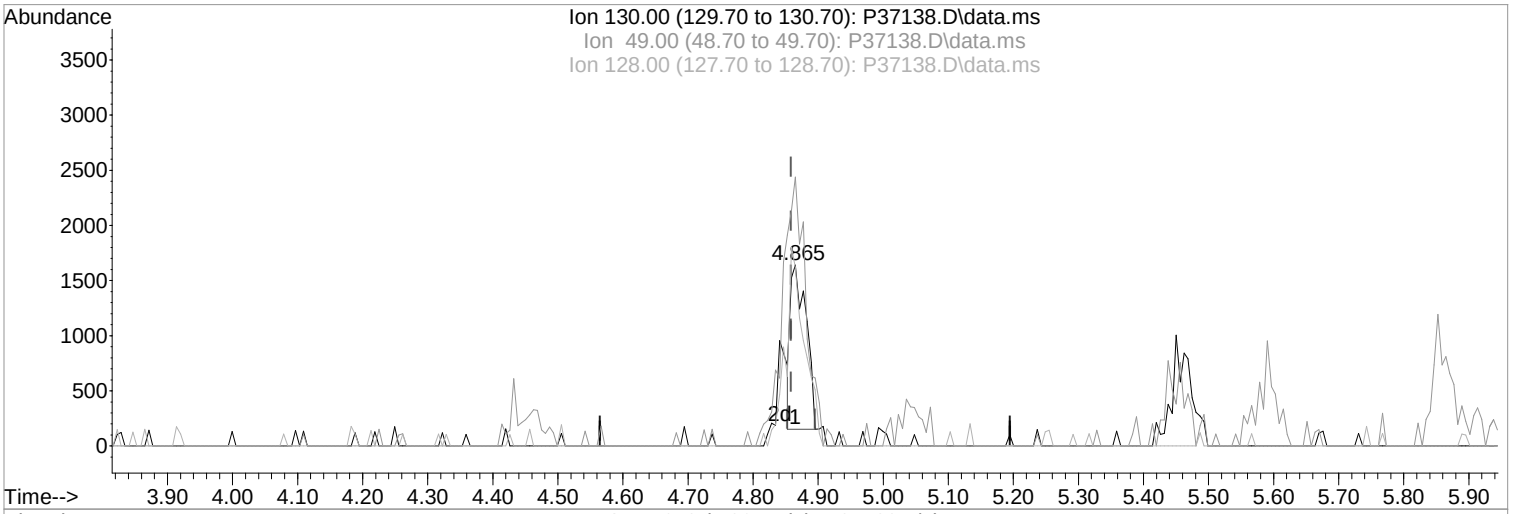
07/13/20

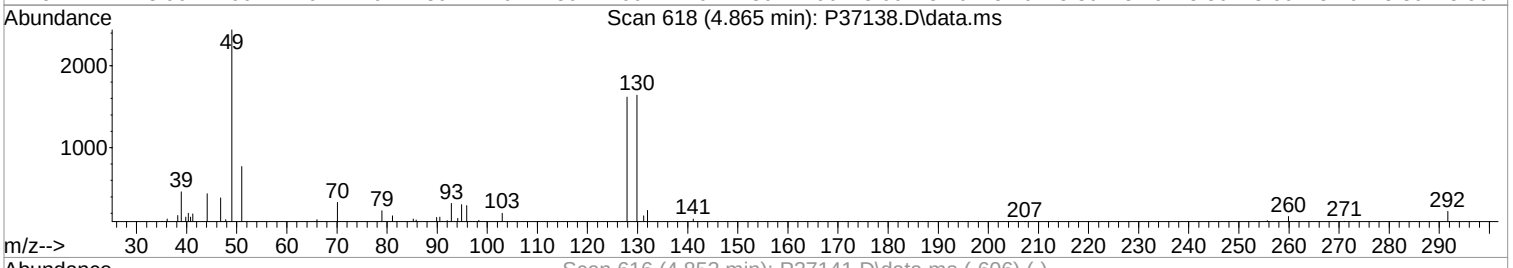
1st 07/14/20
2nd 07/14/20

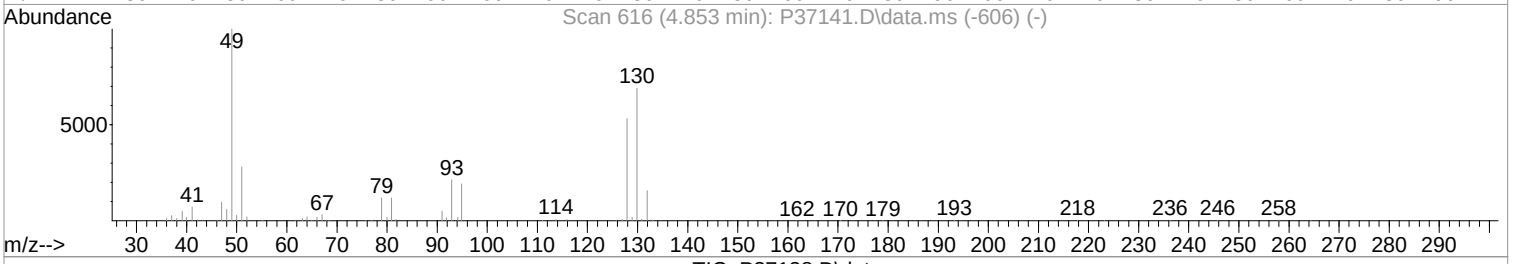
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(37) Bromochloromethane

4.865min (+0.006) 1.18 ppb

response 2485

Ion	Exp%	Act%
130.00	100	100
49.00	145.50	148.63
128.00	77.00	98.60#
0.00	0.00	0.00

Manual Integration:

Before

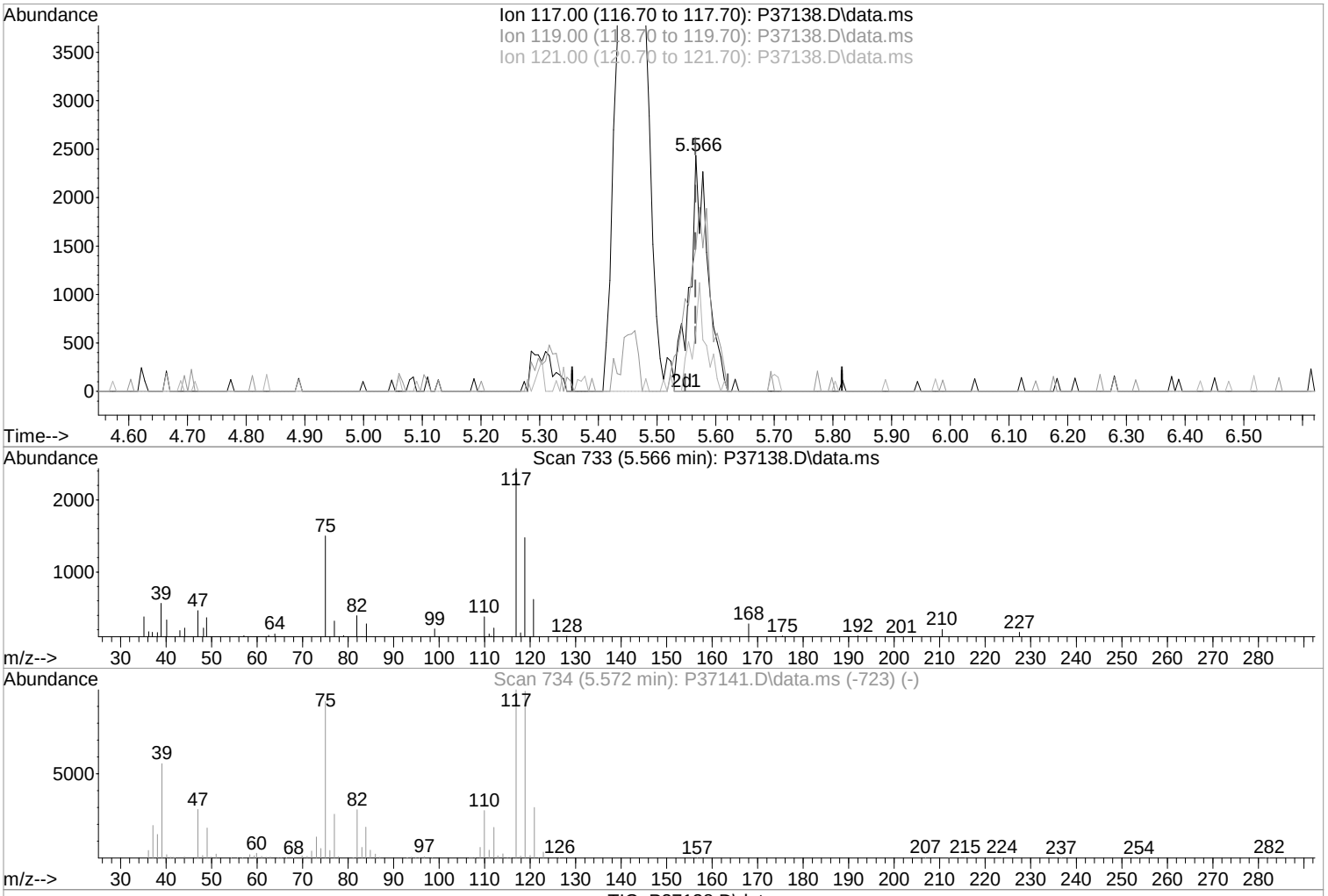
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37138.D\data.ms

(46) Carbontetrachloride (P)

5.566min (+0.000) 1.57 ppb m

response 5194

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	60.59#
121.00	29.80	25.45
0.00	0.00	0.00

Manual Integration:

After

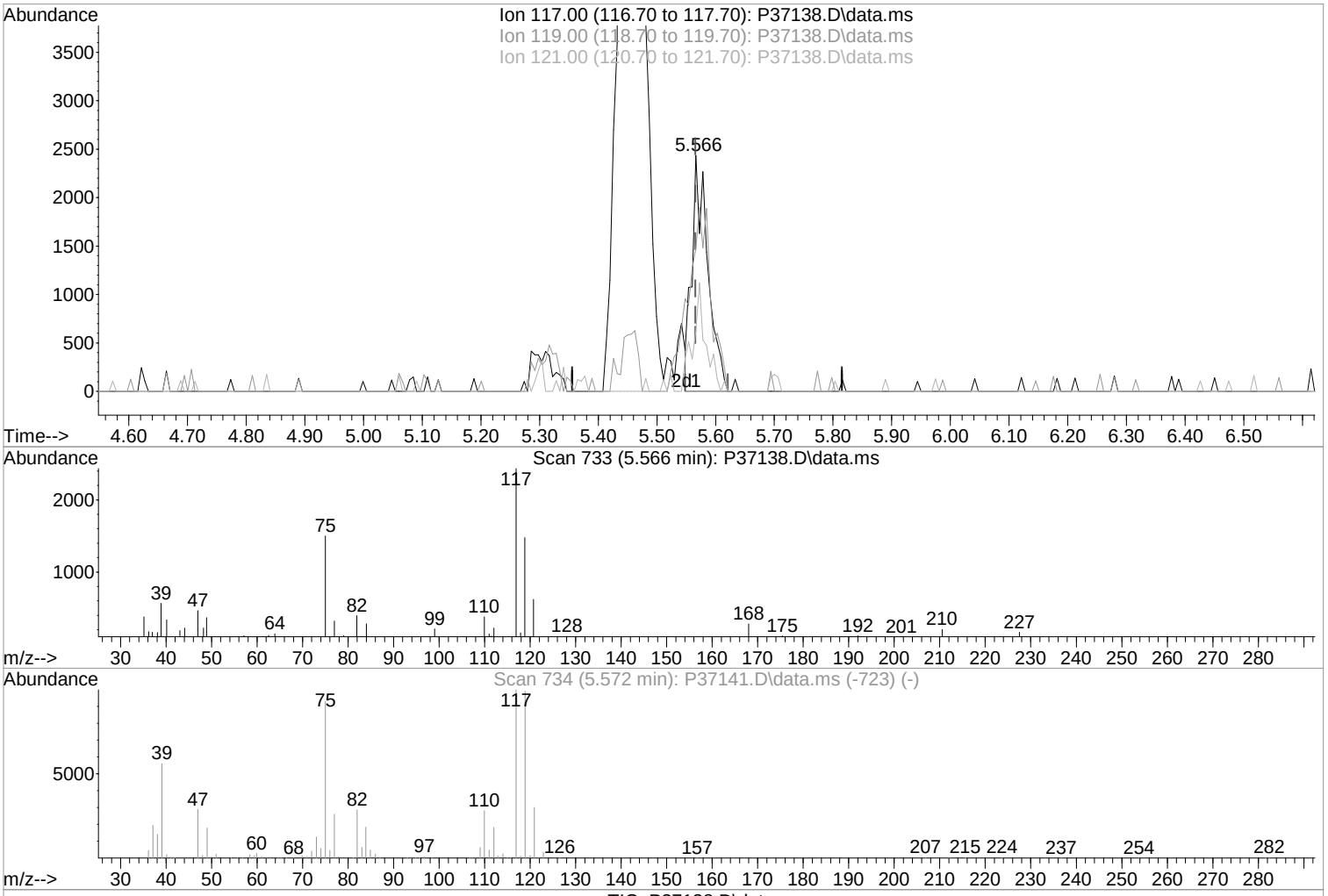
Split Peak

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37138.D\data.ms

(46) Carbontetrachloride (P)

5.566min (+0.000) 1.39 ppb

response 4594

Ion	Exp%	Act%
117.00	100	100
119.00	98.30	60.59#
121.00	29.80	25.45
0.00	0.00	0.00

Manual Integration:

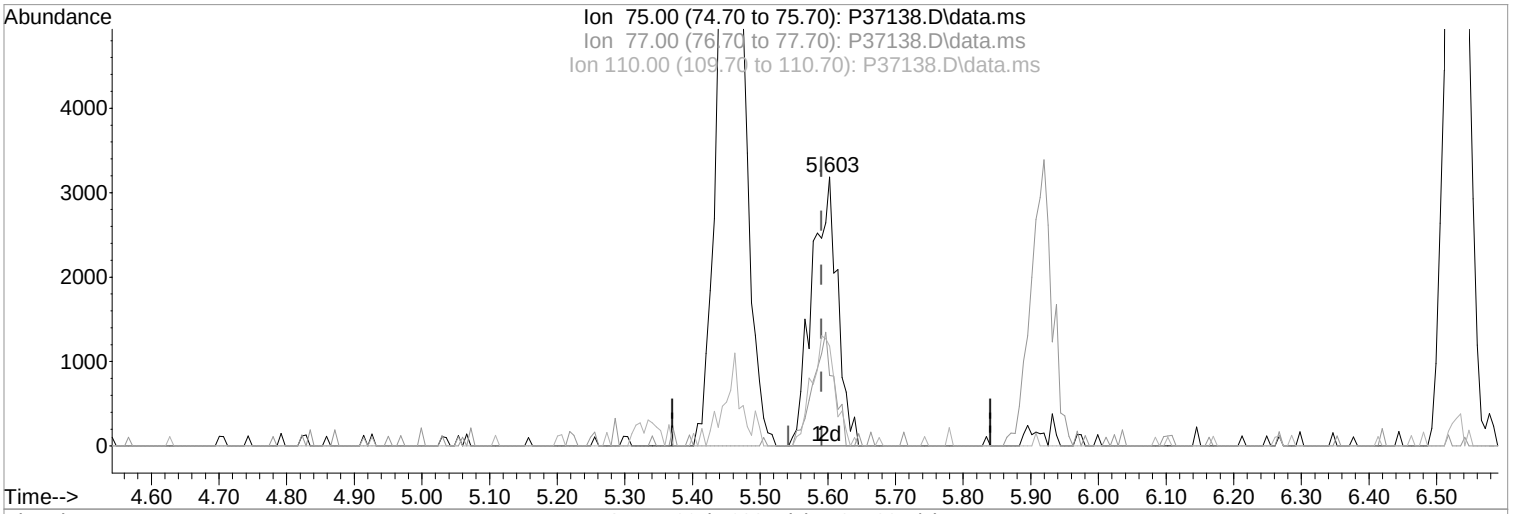
Before

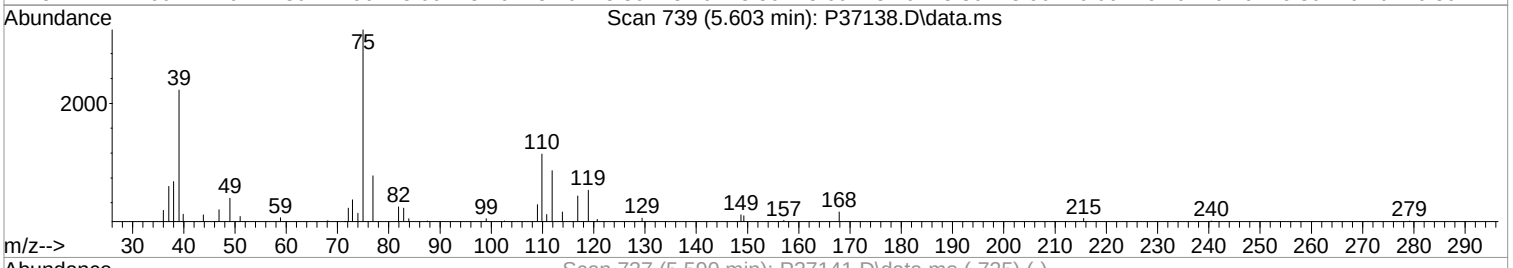
07/13/20

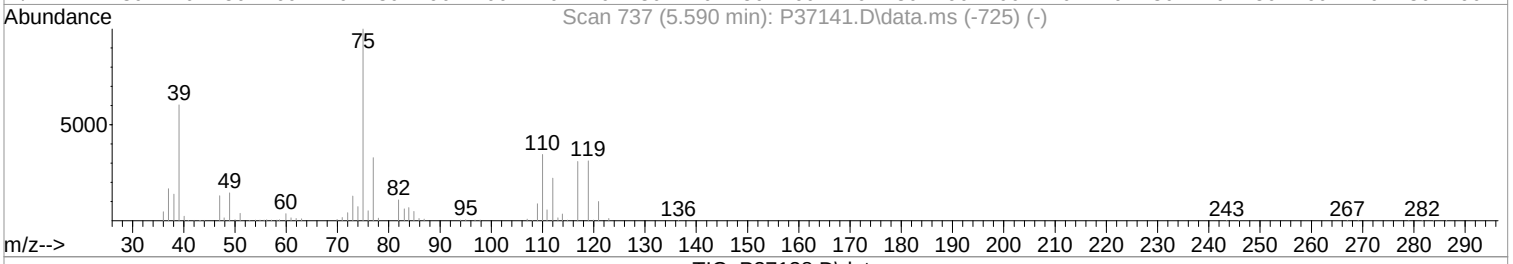
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(47) 1,1-Dichloropropene

5.603min (+0.012) 1.78 ppb m

response 8392

Ion	Exp%	Act%
75.00	100	100
77.00	32.80	26.25
110.00	34.60	37.14
0.00	0.00	0.00

Manual Integration:

After

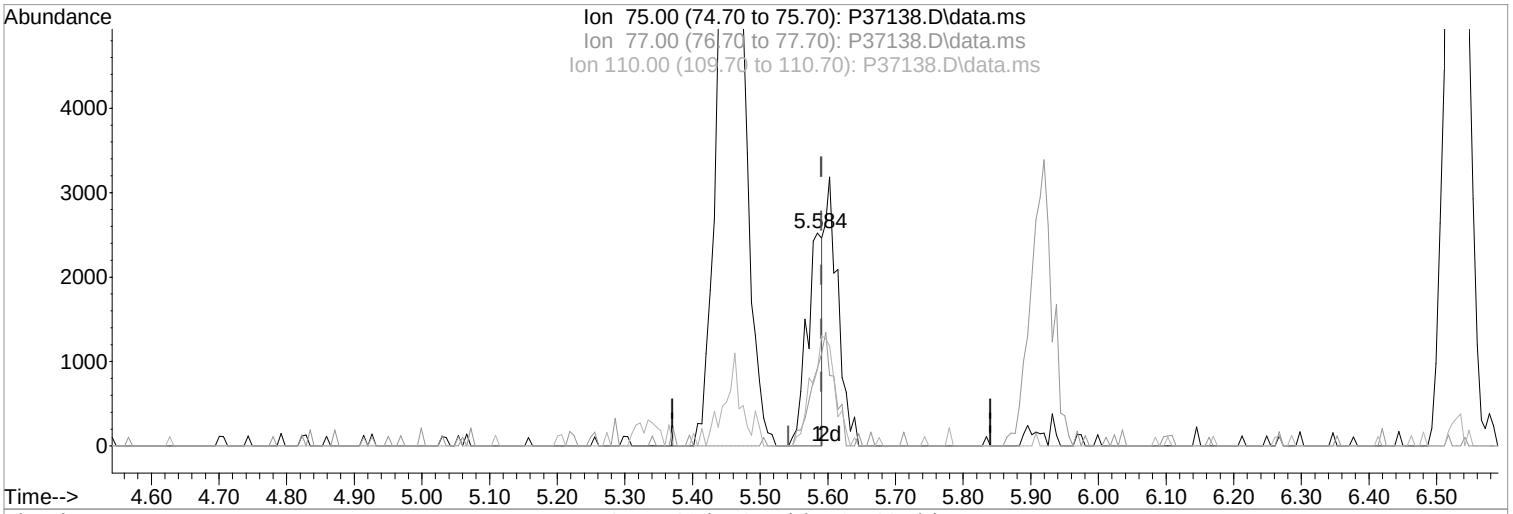
Split Peak

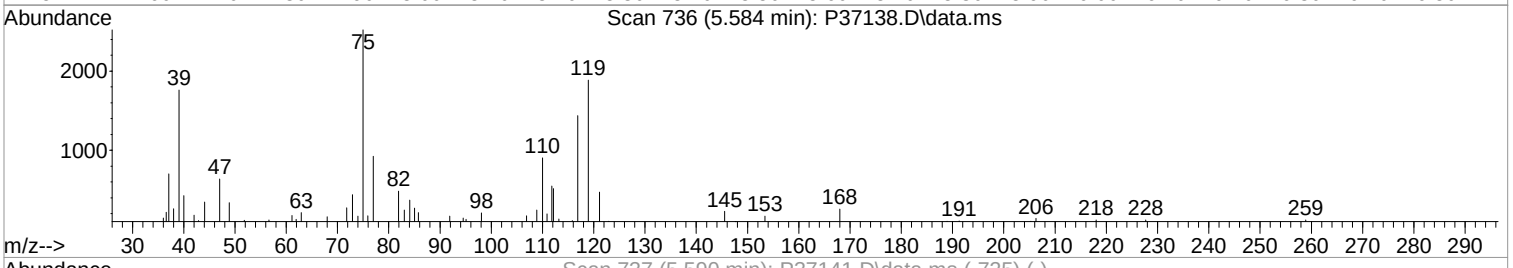
07/13/20

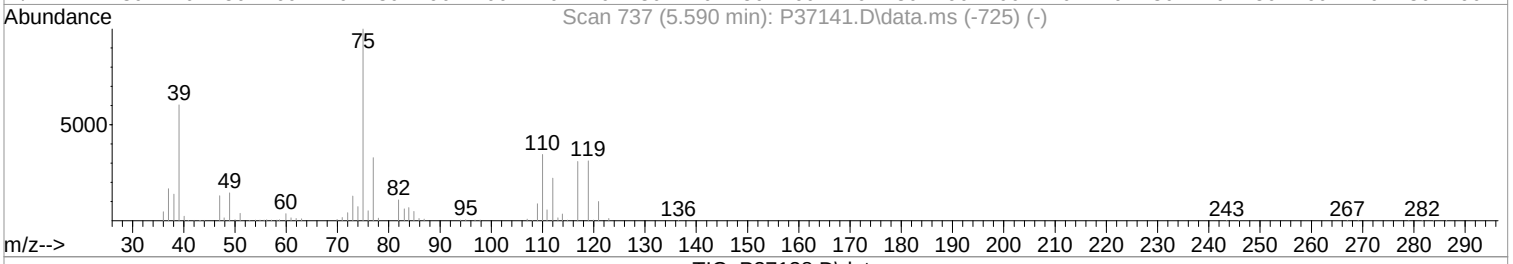
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:03:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37138.D\data.ms

(47) 1,1-Dichloropropene

5.584min (-0.006) 0.85 ppb

response 4029

Ion	Exp%	Act%
75.00	100	100
77.00	32.80	36.54
110.00	34.60	35.83
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:18:46 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.463	168	307931	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	498048	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	435838	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	208145	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.335	113	31267	10.93	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 21.86%#				
48) surr1,1,2-dichloroetha...	5.859	65	42263	10.67	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 21.34%#				
65) SURR3,Toluene-d8	8.316	98	144841	10.90	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 21.80%#				
70) SURR2,BFB	10.870	95	49350	10.08	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 20.16%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	6142	1.79	ppb		88
3) Chloromethane	1.335	50	8243	1.91	ppb		89
4) Vinyl Chloride	1.408	62	6994	1.71	ppb		91
5) Bromomethane	1.640	94	6779	2.04	ppb		89
6) Chloroethane	1.719	64	4235	1.92	ppb		97
7) Freon 21	1.872	67	10321	2.02	ppb		93
8) Trichlorofluoromethane	1.908	101	7659	1.85	ppb		96
9) Diethyl Ether	2.152	59	5387	1.80	ppb	#	60
10) Freon 123a	2.164	67	7570	2.15	ppb		97
11) Freon 123	2.213	83	8437	2.03	ppb		94
12) Acrolein	2.274	56	7985	9.88	ppb		94
13) 1,1-Diclethene	2.341	96	4767	2.00	ppb		92
14) Freon 113	2.341	101	5786	2.09	ppb		81
15) Acetone	2.414	43	6502	3.64	ppb		87
16) 2-Propanol	2.548	45	13095	33.02	ppb		86
17) Iodomethane	2.475	142	1394	0.52	ppb		85
18) Carbon Disulfide	2.536	76	19144	2.11	ppb		95
19) Acetonitrile	2.676	40	2415m	10.91	ppb		
20) Allyl Chloride	2.683	76	3112	1.84	ppb	#	93
21) Methyl Acetate	2.719	43	9302	2.03	ppb		89
22) Methylene Chloride	2.805	84	6734	1.98	ppb		91
23) TBA	2.957	59	24574	38.29	ppb		92
24) Acrylonitrile	3.091	53	18967	9.58	ppb		97
25) Methyl-t-Butyl Ether	3.103	73	20547	1.86	ppb		94
26) trans-1,2-Dichloroethene	3.091	96	6006	2.17	ppb		99
28) 1,1-Diclethane	3.603	63	12202	2.00	ppb		93
29) Vinyl Acetate	3.719	86	920m	2.05	ppb		
30) DIPE	3.719	45	19472	1.82	ppb	#	72
31) 2-Chloro-1,3-Butadiene	3.713	53	9458	1.92	ppb		89
32) ETBE	4.243	59	18775	1.88	ppb		93
33) 2,2-Dichloropropane	4.432	77	9189	2.04	ppb		87
34) cis-1,2-Dichloroethene	4.463	96	7466	2.08	ppb	#	71
35) 2-Butanone	4.548	43	5608	2.34	ppb		91
36) Propionitrile	4.652	54	9021	10.51	ppb		95
37) Bromochloromethane	4.865	130	4104m	1.95	ppb		
38) Methacrylonitrile	4.914	67	3858	1.90	ppb	#	72
39) Tetrahydrofuran	4.975	42	4444	2.36	ppb		100
40) Chloroform	5.054	83	10793	1.92	ppb		83
41) 1,1,1-Trichloroethane	5.310	97	8204	1.84	ppb		83

1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:18:46 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	TAME	6.145	73	16914	1.70	ppb		89
44)	Cyclohexane	5.371	41	6706	2.05	ppb		91
46)	Carbontetrachloride	5.566	117	5194m	1.57	ppb		
47)	1,1-Dichloropropene	5.603	75	8392m	1.78	ppb		
49)	Benzene	5.920	78	29026	2.02	ppb		95
50)	1,2-Dichloroethane	5.975	62	9278	1.85	ppb		88
51)	Iso-Butyl Alcohol	5.975	43	9824	31.85	ppb		88
52)	n-Heptane	6.365	43	7823	1.76	ppb	#	84
53)	1-Butanol	6.920	56	15075	78.54	ppb		96
54)	Trichloroethene	6.840	130	7527	2.11	ppb	#	74
55)	Methylcyclohexane	7.054	55	7711	1.74	ppb		89
56)	1,2-Diclpropane	7.139	63	6689	1.75	ppb		90
57)	Dibromomethane	7.285	93	4510	2.05	ppb	#	75
58)	1,4-Dioxane	7.352	88	3230	41.05	ppb		93
59)	Methyl Methacrylate	7.352	69	6187	1.87	ppb	#	74
60)	Bromodichloromethane	7.511	83	7816	1.94	ppb		98
62)	2-Chloroethylvinyl Ether	7.907	63	2747	1.65	ppb		96
63)	cis-1,3-Dichloropropene	8.035	75	9781	1.78	ppb		90
64)	4-Methyl-2-pentanone	8.255	43	9118	1.78	ppb		89
66)	Toluene	8.389	91	29180	1.92	ppb		97
67)	trans-1,3-Dichloropropene	8.675	75	8285	1.66	ppb		94
68)	Ethyl Methacrylate	8.803	69	9144	1.63	ppb		80
69)	1,1,2-Trichloroethane	8.864	97	5795	1.70	ppb	#	83
72)	Tetrachloroethene	8.968	164	5134	1.93	ppb	#	72
73)	2-Hexanone	9.157	43	6269	1.62	ppb		87
74)	1,3-Dichloropropane	9.029	76	10821	1.77	ppb		91
75)	Dibromochloromethane	9.248	129	4659	1.72	ppb		85
76)	N-Butyl Acetate	9.297	43	12295	1.71	ppb		95
77)	1,2-Dibromoethane	9.352	107	5979	1.79	ppb		81
78)	Chlorobenzene	9.828	112	18918	1.95	ppb		97
79)	3-CBTF	9.846	180	8451	1.88	ppb	#	75
80)	4-CBTF	9.901	180	7782	1.92	ppb		94
81)	1,1,1,2-Tetrachloroethane	9.913	131	5817	1.94	ppb		90
82)	Ethylbenzene	9.943	106	9419	1.85	ppb	#	89
83)	(m+p)Xylene	10.053	106	21557	3.53	ppb	#	81
84)	o-Xylene	10.413	106	10306	1.73	ppb		97
85)	Styrene	10.425	104	17218	1.70	ppb		95
87)	Bromoform	10.590	173	3117	1.82	ppb	#	71
88)	2-CBTF	10.657	180	8401	1.99	ppb		89
89)	Isopropylbenzene	10.742	105	27202	1.89	ppb		93
90)	Cyclohexanone	10.827	55	33126	38.36	ppb		86
91)	trans-1,4-Dichloro-2-B...	11.065	53	2171	1.80	ppb	#	79
92)	1,1,2,2-Tetrachloroethane	11.016	83	8656	1.86	ppb		93
93)	Bromobenzene	10.992	156	7236	1.93	ppb		95
94)	1,2,3-Trichloropropane	11.041	110	3332	2.22	ppb	#	58
95)	n-Propylbenzene	11.089	91	30684	1.86	ppb		97
96)	2-Chlorotoluene	11.157	91	21524	2.01	ppb		94
97)	3-Chlorotoluene	11.211	91	18084	1.77	ppb		93
98)	4-Chlorotoluene	11.254	91	22372	1.87	ppb		98
99)	1,3,5-Trimethylbenzene	11.248	105	22970	1.87	ppb		93
100)	tert-Butylbenzene	11.510	119	20761	2.02	ppb		95
101)	1,2,4-Trimethylbenzene	11.553	105	22601	1.83	ppb		90
102)	3,4-DCBTF	11.620	214	6581	1.94	ppb	#	82
103)	sec-Butylbenzene	11.693	105	28174	1.91	ppb		97
104)	p-Isopropyltoluene	11.815	119	23538	1.85	ppb		97
105)	1,3-Dclbenz	11.784	146	14101	1.92	ppb		94

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:18:46 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
106) 1,4-Dclbenz	11.858	146	14046	1.88	ppb		96
107) 2,4-DCBTF	11.906	214	5487	1.73	ppb	#	85
108) 2,5-DCBTF	11.949	214	6611	1.95	ppb		88
109) n-Butylbenzene	12.150	91	21430	1.79	ppb		95
110) 1,2-Dclbenz	12.162	146	14264	1.91	ppb		97
111) 1,2-Dibromo-3-chloropr...	12.790	157	1827	1.76	ppb		91
112) Trielution Dichlorotol...	12.894	125	30328	5.08	ppb		89
113) 1,3,5 Trichlorobenzene	12.949	180	8728	1.70	ppb	#	92
114) Coelution Dichlorotoluene	13.223	125	23322	3.56	ppb		92
115) 1,2,4-Tcbenzene	13.430	180	9461	1.76	ppb		90
116) Hexachlorobt	13.559	225	4067	1.88	ppb		93
117) Naphthalen	13.626	128	27476	1.75	ppb		97
118) 1,2,3-Tclbenzene	13.815	180	9996	1.80	ppb		84
119) 2,4,5-Trichlorotolene	14.394	159	5518	1.62	ppb		90
120) 2,3,6-Trichlorotoluene	14.473	159	4721m	1.52	ppb		

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37138.D
Acq On : 13 Jul 2020 12:29 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 13 16:18:46 2020
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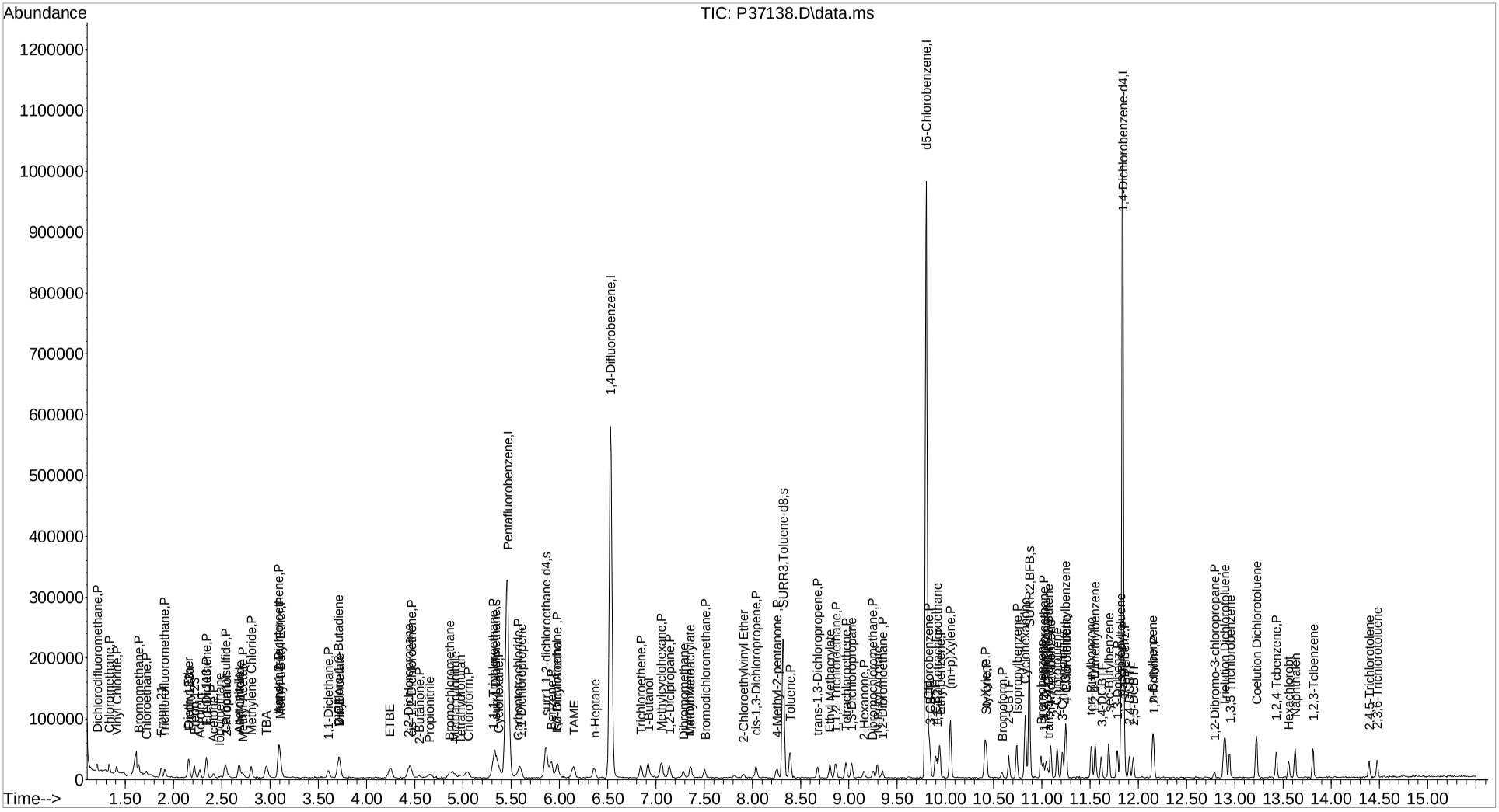
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

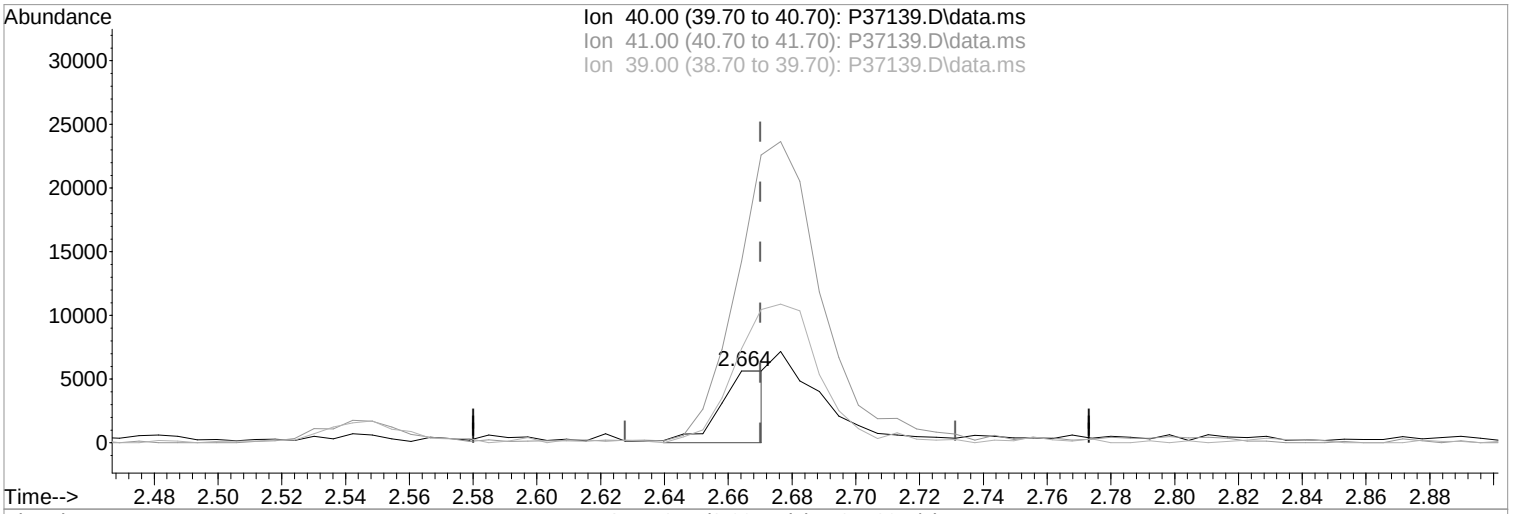


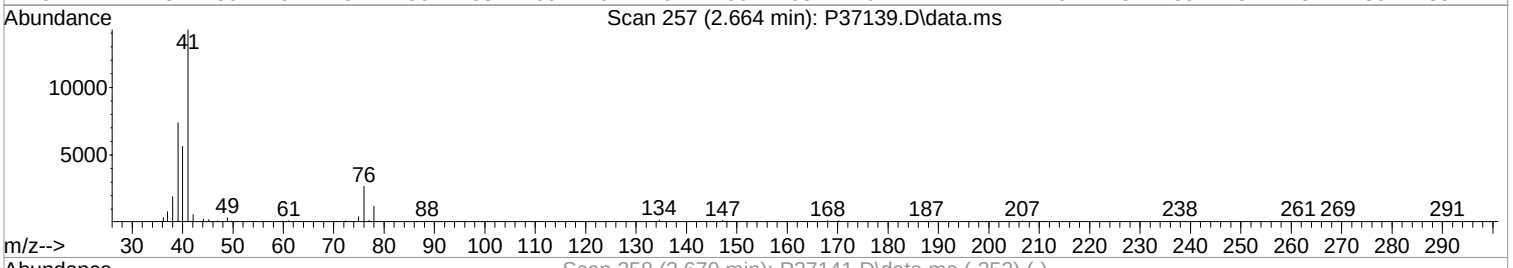
1st 07/14/20
2nd 07/14/20

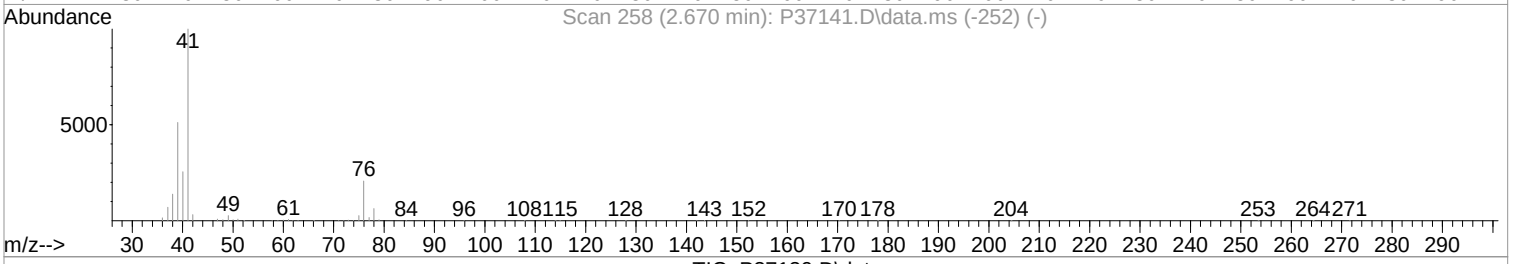
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(19) Acetonitrile

2.664min (-0.006) 25.74 ppb m

response 5783

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	252.38#
39.00	200.50	130.76#
0.00	0.00	0.00

Manual Integration:

After

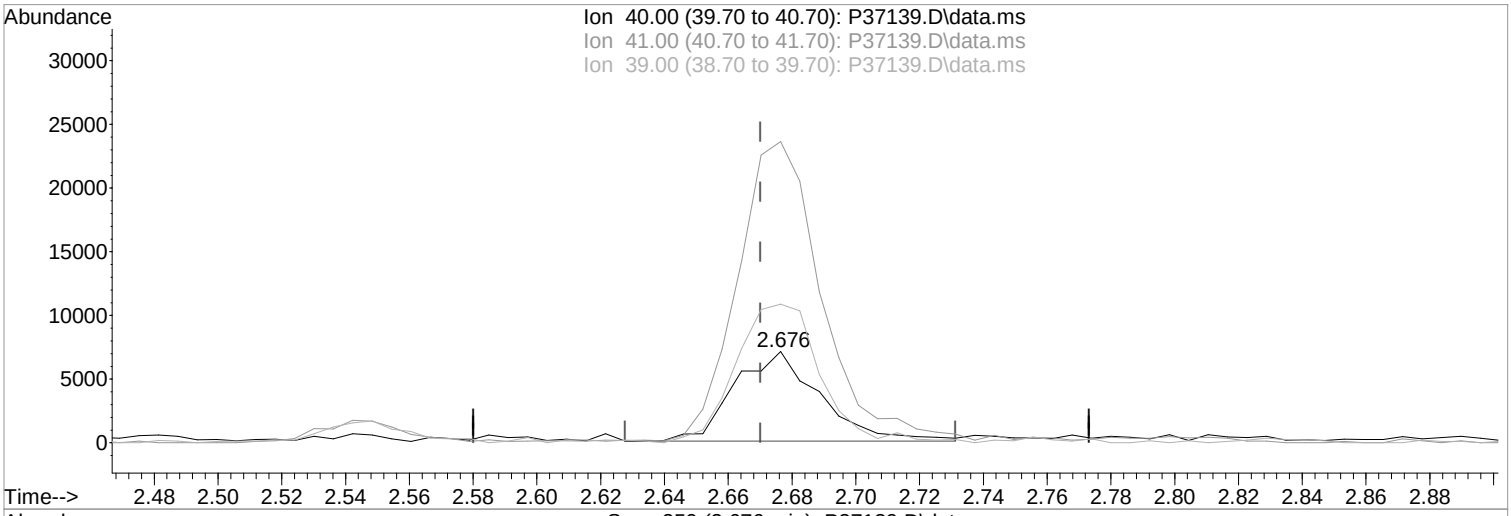
Poor integration.

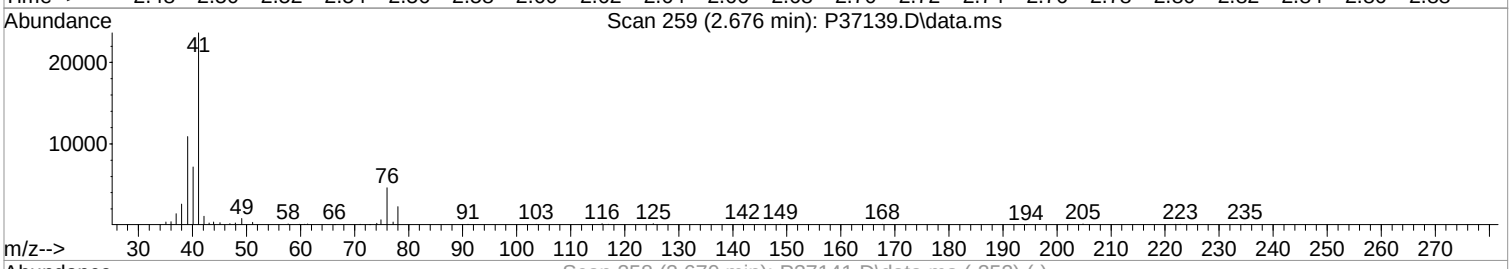
07/13/20

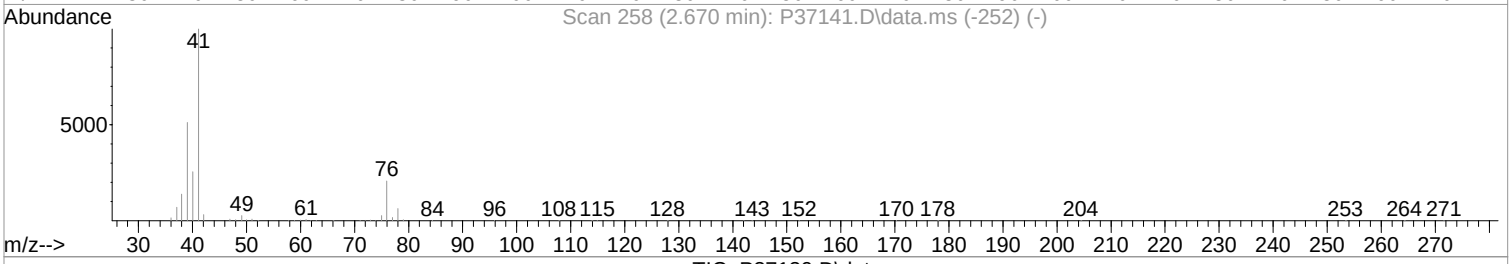
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 58.50 ppb

response 13142

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	329.88#
39.00	200.50	151.97#
0.00	0.00	0.00

Manual Integration:

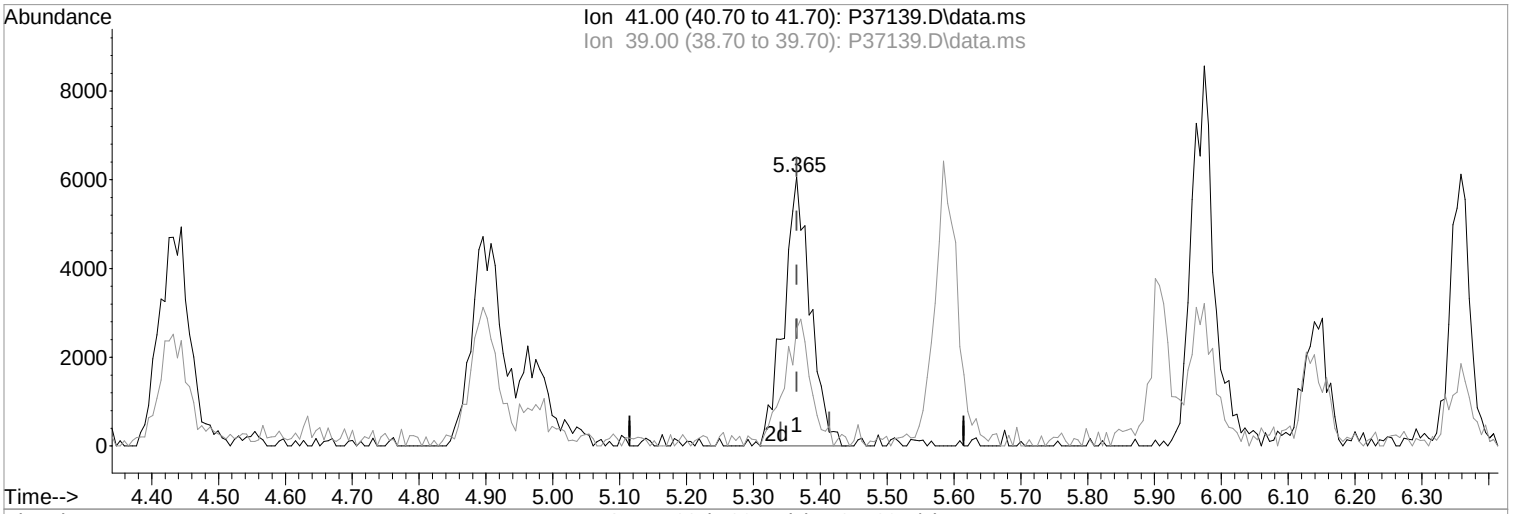
Before

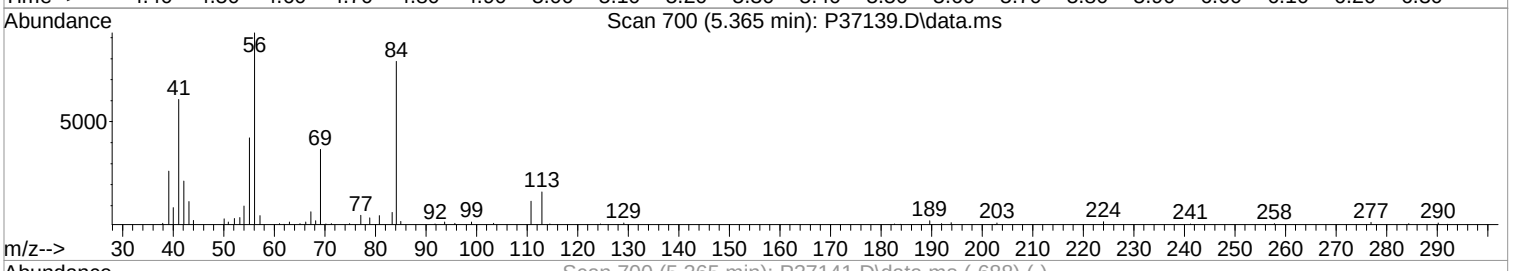
07/13/20

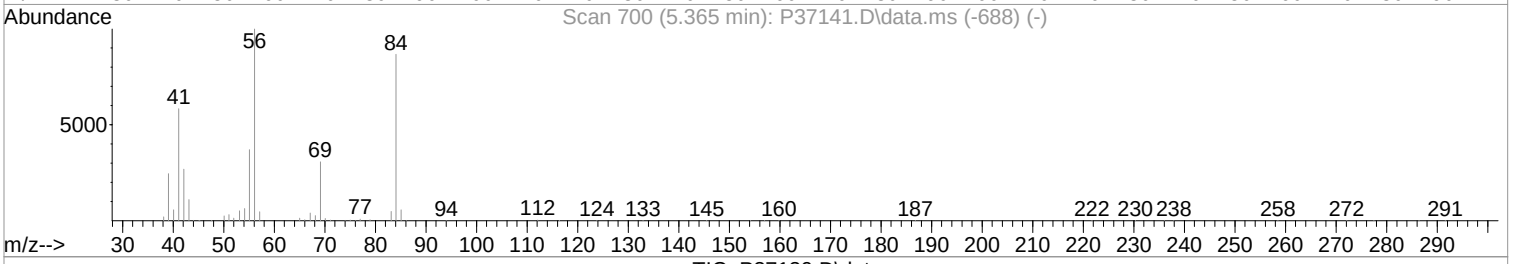
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(44) Cyclohexane (P)

5.365min (+0.000) 4.97 ppb m

response 16745

Ion	Exp%	Act%
41.00	100	100
39.00	42.20	43.71
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

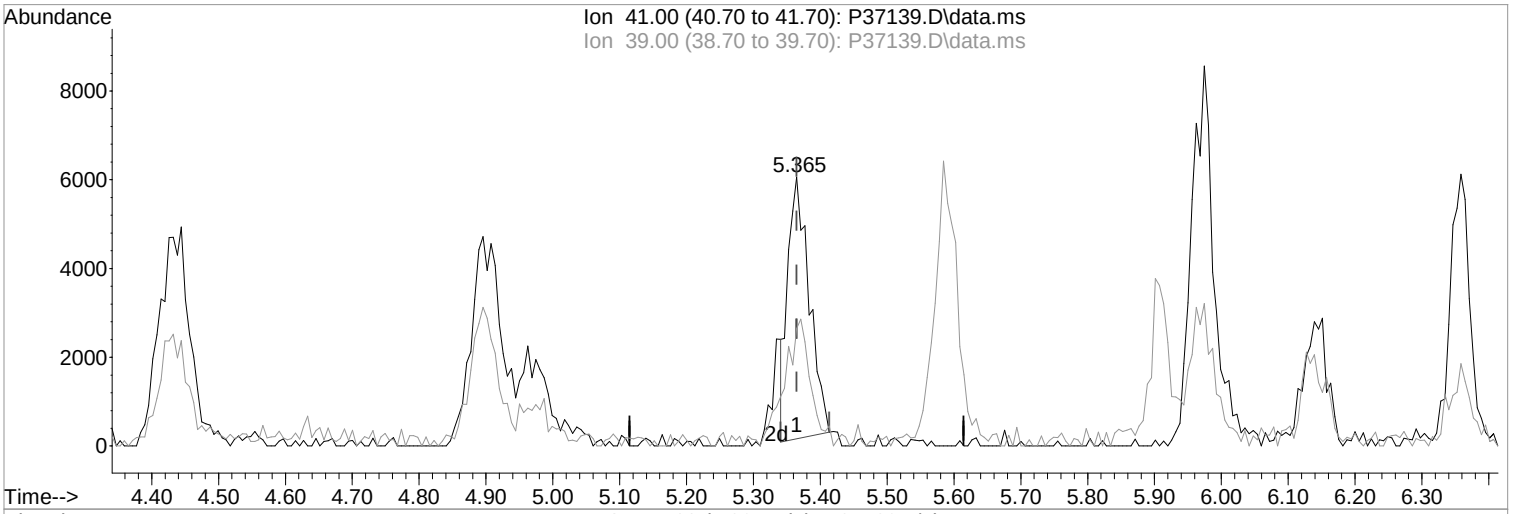
07/13/20

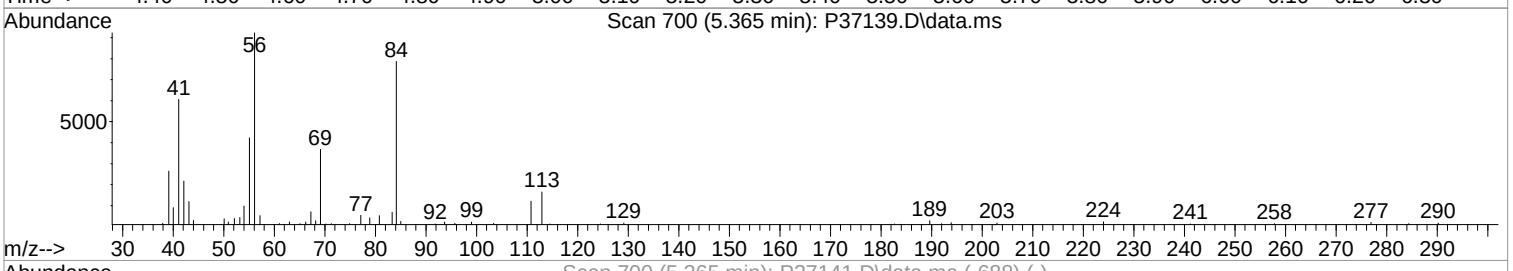
1st 07/14/20
2nd 07/14/20

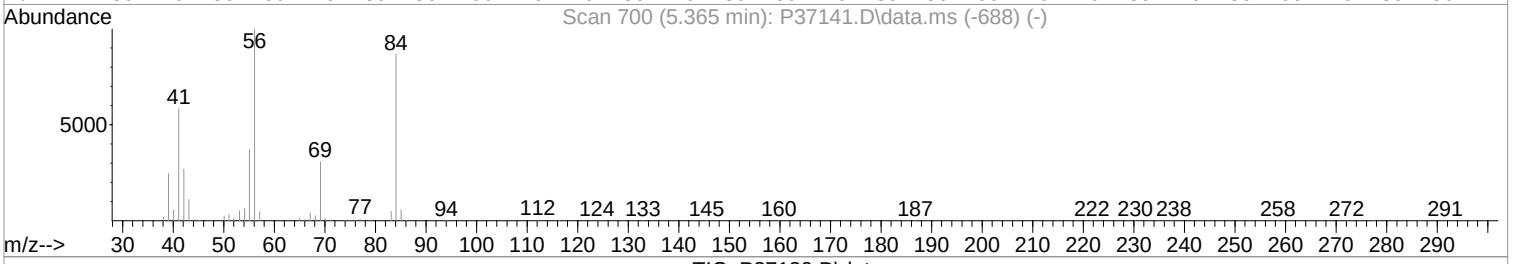
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(44) Cyclohexane (P)

5.365min (+0.000) 3.89 ppb

response 13088

Ion	Exp%	Act%
41.00	100	100
39.00	42.20	43.71
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

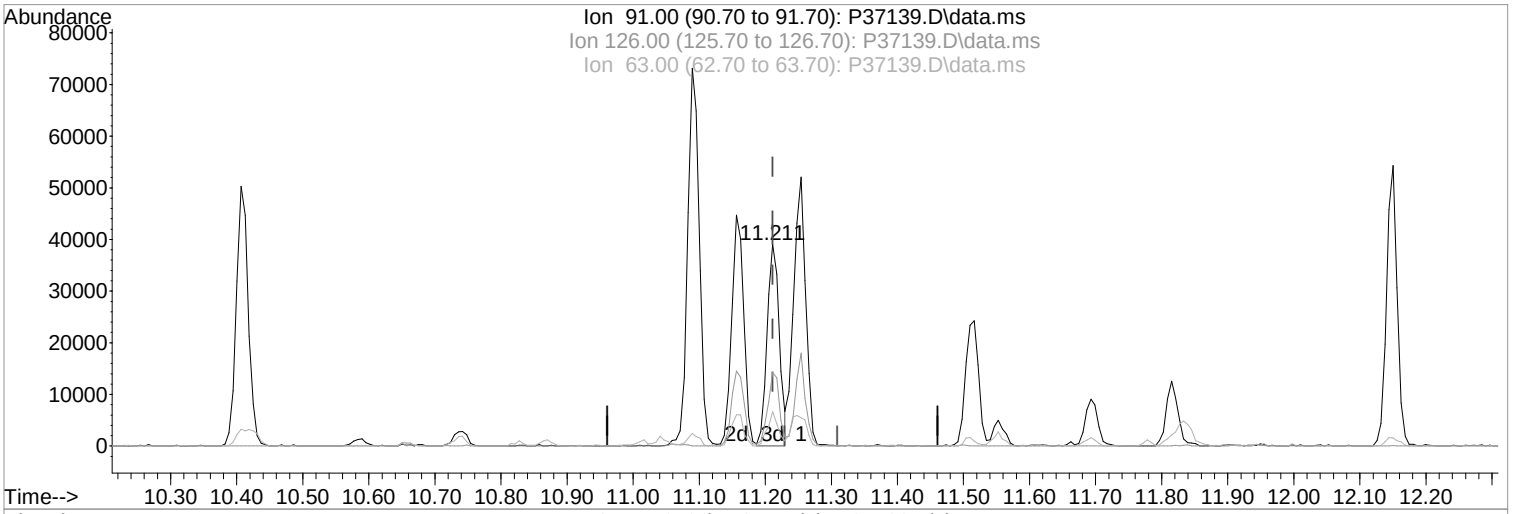
07/13/20

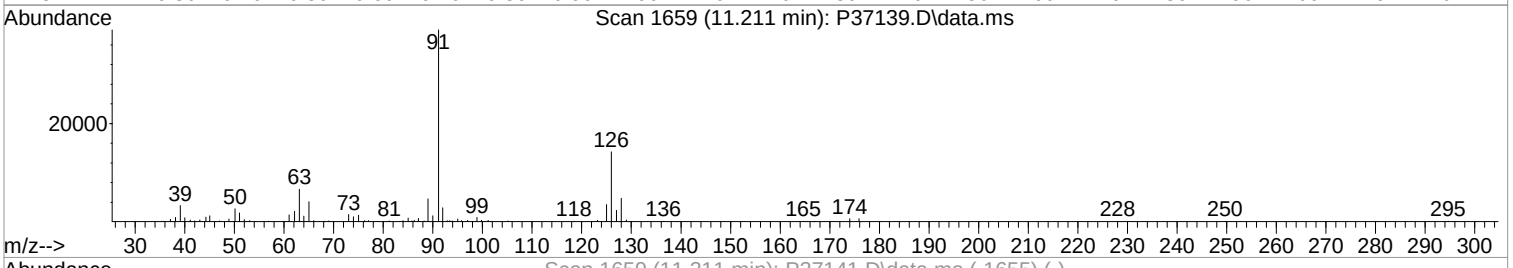
1st 07/14/20
2nd 07/14/20

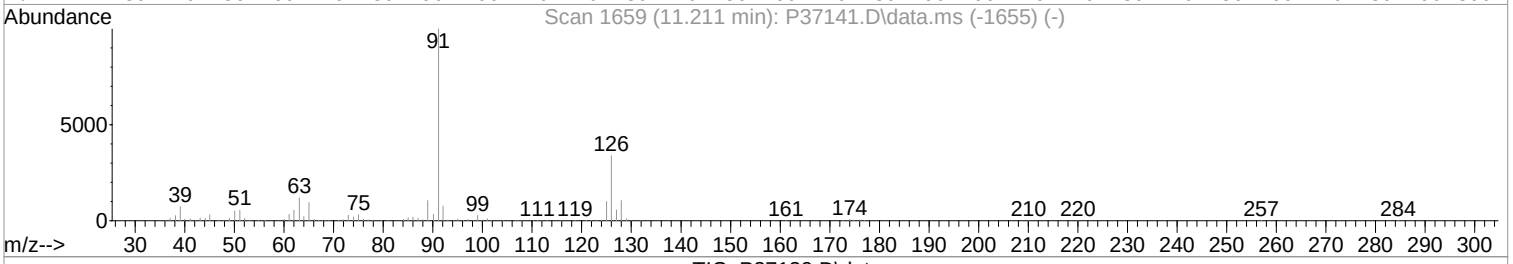
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(97) 3-Chlorotoluene

11.211min (+0.000) 4.77 ppb m

response 50195

Ion	Exp%	Act%
91.00	100	100
126.00	33.90	36.46
63.00	11.90	17.07#
0.00	0.00	0.00

Manual Integration:

After

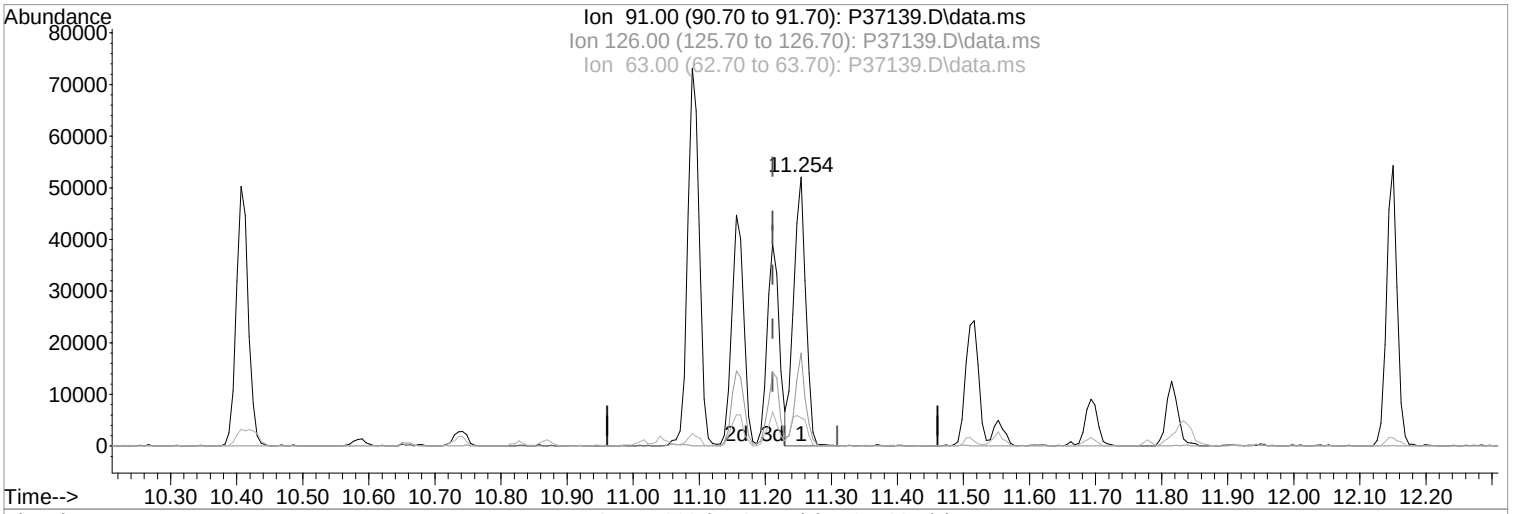
Poor integration.

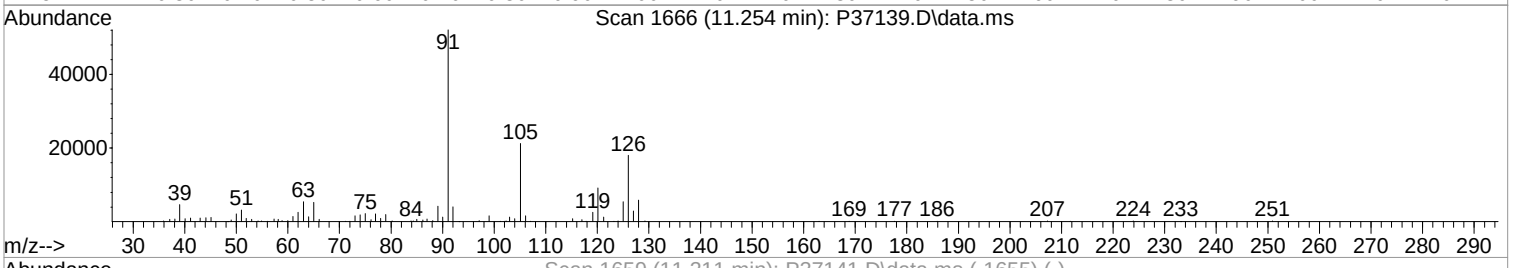
07/13/20

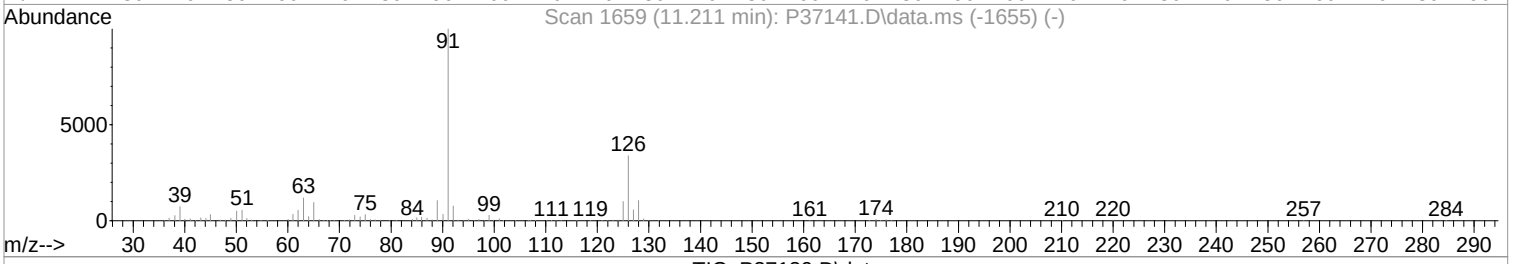
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:03:51 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37139.D\data.ms

(97) 3-Chlorotoluene

11.254min (+0.043) 6.31 ppb

response 66366

Ion	Exp%	Act%
91.00	100	100
126.00	33.90	34.57
63.00	11.90	10.50
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:21:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	312583	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	513354	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	442654	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	213927	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.316	113	30384	10.31	ppb		-0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 20.62%#				
48) surr1,1,2-dichloroetha...	5.859	65	45823	11.23	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 22.46%#				
65) SURR3,Toluene-d8	8.316	98	148671	10.85	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 21.70%#				
70) SURR2,BFB	10.870	95	54520	10.80	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 21.60%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.201	85	13614	3.91	ppb		98
3) Chloromethane	1.329	50	21678	4.96	ppb		99
4) Vinyl Chloride	1.402	62	20800	5.01	ppb		95
5) Bromomethane	1.628	94	20221	5.99	ppb		94
6) Chloroethane	1.713	64	10542	4.70	ppb		94
7) Freon 21	1.866	67	22991	4.44	ppb		94
8) Trichlorofluoromethane	1.908	101	20176	4.81	ppb		96
9) Diethyl Ether	2.146	59	16224	5.35	ppb		91
10) Freon 123a	2.152	67	18302	5.12	ppb		97
11) Freon 123	2.207	83	22040	5.22	ppb		97
12) Acrolein	2.268	56	19636	23.92	ppb		98
13) 1,1-Diclethene	2.335	96	11564	4.78	ppb		93
14) Freon 113	2.341	101	15210	5.40	ppb		80
15) Acetone	2.408	43	13486	7.43	ppb		86
16) 2-Propanol	2.542	45	37063	92.07	ppb		98
17) Iodomethane	2.481	142	4243	1.57	ppb		81
18) Carbon Disulfide	2.524	76	40723	4.42	ppb		94
19) Acetonitrile	2.664	40	5783m	25.74	ppb		
20) Allyl Chloride	2.676	76	7812	4.56	ppb	#	80
21) Methyl Acetate	2.713	43	21716	4.67	ppb		98
22) Methylene Chloride	2.798	84	17778	5.16	ppb		92
23) TBA	2.957	59	64781	99.44	ppb		98
24) Acrylonitrile	3.085	53	51656	25.71	ppb		91
25) Methyl-t-Butyl Ether	3.097	73	55706	4.98	ppb		92
26) trans-1,2-Dichloroethene	3.085	96	14647	5.20	ppb		99
28) 1,1-Diclethane	3.603	63	31934	5.15	ppb		92
29) Vinyl Acetate	3.701	86	1394	3.06	ppb	#	87
30) DIPE	3.707	45	51980	4.79	ppb		89
31) 2-Chloro-1,3-Butadiene	3.713	53	25100	5.03	ppb		89
32) ETBE	4.237	59	48608	4.80	ppb		97
33) 2,2-Dichloropropane	4.438	77	23449	5.13	ppb		93
34) cis-1,2-Dichloroethene	4.450	96	18732	5.15	ppb		95
35) 2-Butanone	4.530	43	12900	5.31	ppb		90
36) Propionitrile	4.639	54	21499	24.67	ppb		96
37) Bromochloromethane	4.865	130	11045	5.17	ppb		98
38) Methacrylonitrile	4.889	67	10718	5.19	ppb	#	80
39) Tetrahydrofuran	4.969	42	9768	5.12	ppb		96
40) Chloroform	5.036	83	28677	5.01	ppb		86
41) 1,1,1-Trichloroethane	5.304	97	22134	4.90	ppb		93

1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:21:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	TAME	6.139	73	48357	4.80	ppb		85
44)	Cyclohexane	5.365	41	16745m	4.97	ppb		
46)	Carbontetrachloride	5.560	117	16677	4.89	ppb		85
47)	1,1-Dichloropropene	5.584	75	23805	4.90	ppb		95
49)	Benzene	5.907	78	73495	4.95	ppb		95
50)	1,2-Dichloroethane	5.968	62	25754	4.97	ppb		94
51)	Iso-Butyl Alcohol	5.975	43	28407	89.35	ppb		85
52)	n-Heptane	6.353	43	22072	4.80	ppb		88
53)	1-Butanol	6.913	56	39667	200.50	ppb		97
54)	Trichloroethene	6.846	130	18122	4.93	ppb		92
55)	Methylcyclohexane	7.054	55	21076	4.61	ppb		89
56)	1,2-Diclpropane	7.133	63	18888	4.80	ppb		92
57)	Dibromomethane	7.285	93	10534	4.65	ppb		96
58)	1,4-Dioxane	7.352	88	6963	85.85	ppb		97
59)	Methyl Methacrylate	7.358	69	16250	4.75	ppb		96
60)	Bromodichloromethane	7.505	83	19052	4.59	ppb		92
62)	2-Chloroethylvinyl Ether	7.907	63	6544	3.82	ppb		100
63)	cis-1,3-Dichloropropene	8.035	75	25650	4.53	ppb		94
64)	4-Methyl-2-pentanone	8.248	43	24564	4.64	ppb		97
66)	Toluene	8.389	91	78552	5.00	ppb		99
67)	trans-1,3-Dichloropropene	8.675	75	23662	4.59	ppb		92
68)	Ethyl Methacrylate	8.803	69	26266	4.55	ppb		83
69)	1,1,2-Trichloroethane	8.864	97	17780	5.07	ppb		95
72)	Tetrachloroethene	8.968	164	13899	5.14	ppb	#	88
73)	2-Hexanone	9.157	43	19776	5.03	ppb		96
74)	1,3-Dichloropropane	9.029	76	29352	4.72	ppb		87
75)	Dibromochloromethane	9.254	129	13152	4.78	ppb		83
76)	N-Butyl Acetate	9.291	43	32125	4.40	ppb		96
77)	1,2-Dibromoethane	9.346	107	16673	4.92	ppb		97
78)	Chlorobenzene	9.827	112	50311	5.10	ppb		96
79)	3-CBTF	9.840	180	21567	4.72	ppb		98
80)	4-CBTF	9.901	180	19490	4.74	ppb		98
81)	1,1,1,2-Tetrachloroethane	9.919	131	14662	4.83	ppb		91
82)	Ethylbenzene	9.937	106	24714	4.77	ppb		97
83)	(m+p)Xylene	10.053	106	60287	9.72	ppb		96
84)	o-Xylene	10.407	106	32362	5.34	ppb		90
85)	Styrene	10.425	104	50370	4.90	ppb		92
87)	Bromoform	10.583	173	7636	4.33	ppb		86
88)	2-CBTF	10.657	180	22366	5.15	ppb		97
89)	Isopropylbenzene	10.736	105	75652	5.12	ppb		91
90)	Cyclohexanone	10.827	55	90806	102.32	ppb		97
91)	trans-1,4-Dichloro-2-B...	11.065	53	5988	4.84	ppb		92
92)	1,1,2,2-Tetrachloroethane	11.016	83	23587	4.94	ppb		94
93)	Bromobenzene	10.992	156	19215	4.99	ppb		89
94)	1,2,3-Trichloropropane	11.041	110	8208	5.32	ppb		94
95)	n-Propylbenzene	11.089	91	90546	5.34	ppb		98
96)	2-Chlorotoluene	11.156	91	55925	5.08	ppb		98
97)	3-Chlorotoluene	11.211	91	50195m	4.77	ppb		
98)	4-Chlorotoluene	11.254	91	65386	5.31	ppb		94
99)	1,3,5-Trimethylbenzene	11.242	105	64125	5.08	ppb		93
100)	tert-Butylbenzene	11.516	119	54602	5.17	ppb		94
101)	1,2,4-Trimethylbenzene	11.553	105	65389	5.15	ppb		94
102)	3,4-DCBTF	11.614	214	16100	4.63	ppb		95
103)	sec-Butylbenzene	11.693	105	78628	5.19	ppb		99
104)	p-Isopropyltoluene	11.815	119	65769	5.04	ppb		99
105)	1,3-Dclbenz	11.784	146	36600	4.85	ppb		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:21:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

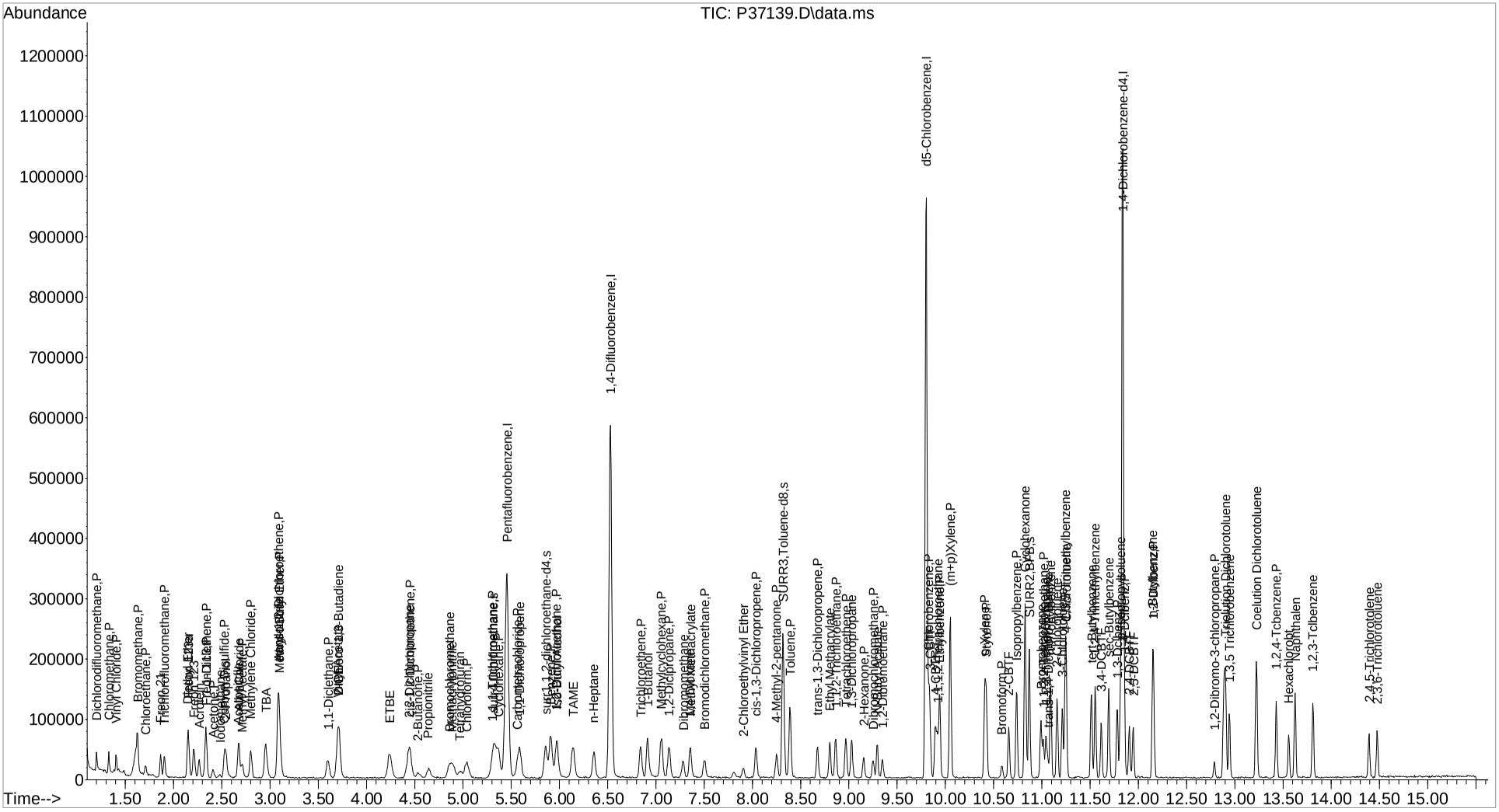
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.858	146	38046	4.95	ppb	90
107) 2,4-DCBTF	11.906	214	16585	5.09	ppb	92
108) 2,5-DCBTF	11.949	214	16450	4.71	ppb	95
109) n-Butylbenzene	12.150	91	61052	4.97	ppb	91
110) 1,2-Dclbenz	12.156	146	38497	5.02	ppb	100
111) 1,2-Dibromo-3-chloropr...	12.790	157	4682	4.38	ppb	91
112) Trielution Dichlorotol...	12.900	125	88998	14.50	ppb	98
113) 1,3,5 Trichlorobenzene	12.943	180	24537	4.66	ppb	96
114) Coelution Dichlorotoluene	13.223	125	65055	9.65	ppb	92
115) 1,2,4-Tcbenzene	13.430	180	26071	4.72	ppb	93
116) Hexachlorobt	13.558	225	9547	4.30	ppb	91
117) Naphthalen	13.625	128	83729	5.18	ppb	99
118) 1,2,3-Tclbenzene	13.808	180	27762	4.86	ppb	97
119) 2,4,5-Trichlorotolene	14.394	159	14781	4.23	ppb	97
120) 2,3,6-Trichlorotoluene	14.479	159	13029	4.09	ppb	90

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37139.D
Acq On : 13 Jul 2020 12:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 13 16:21:42 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

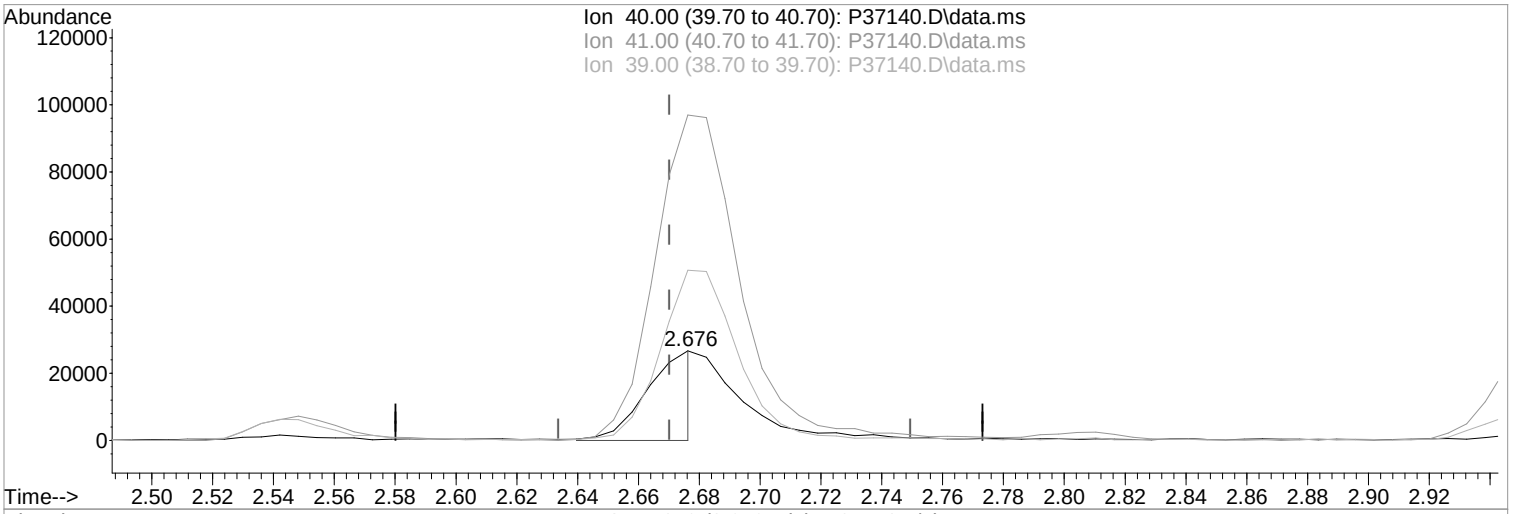


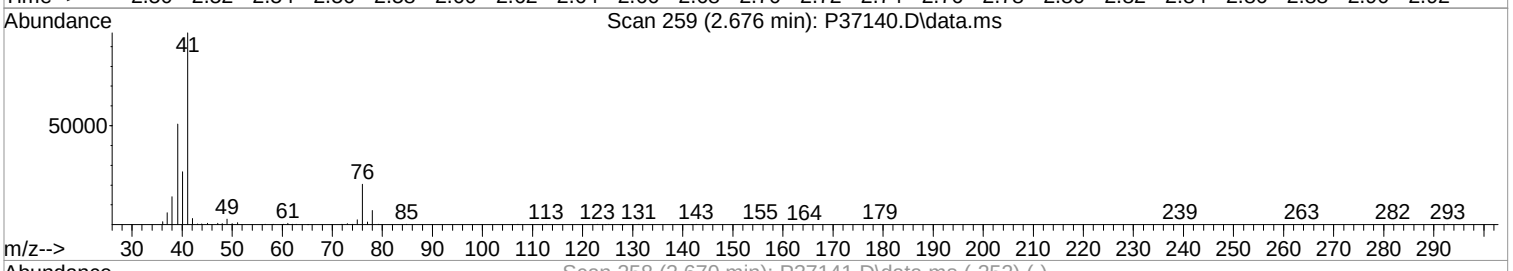
1st 07/14/20
2nd 07/14/20

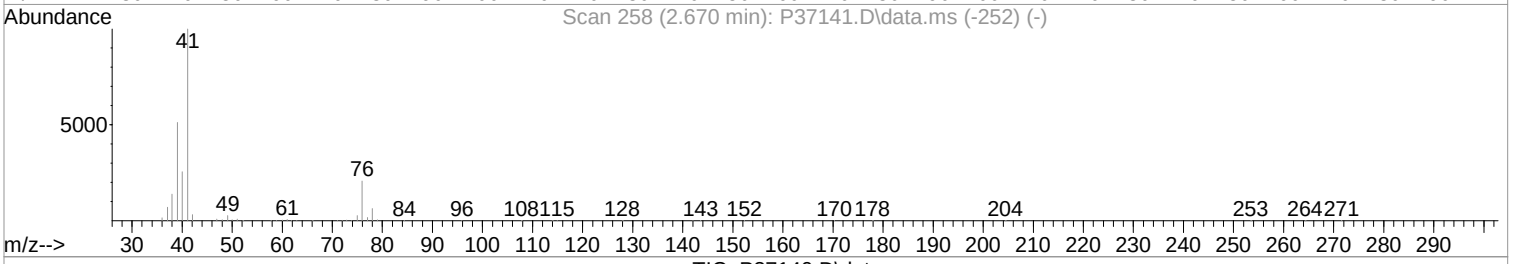
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37140.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 126.91 ppb m

response 28917

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	363.21#
39.00	200.50	190.02
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

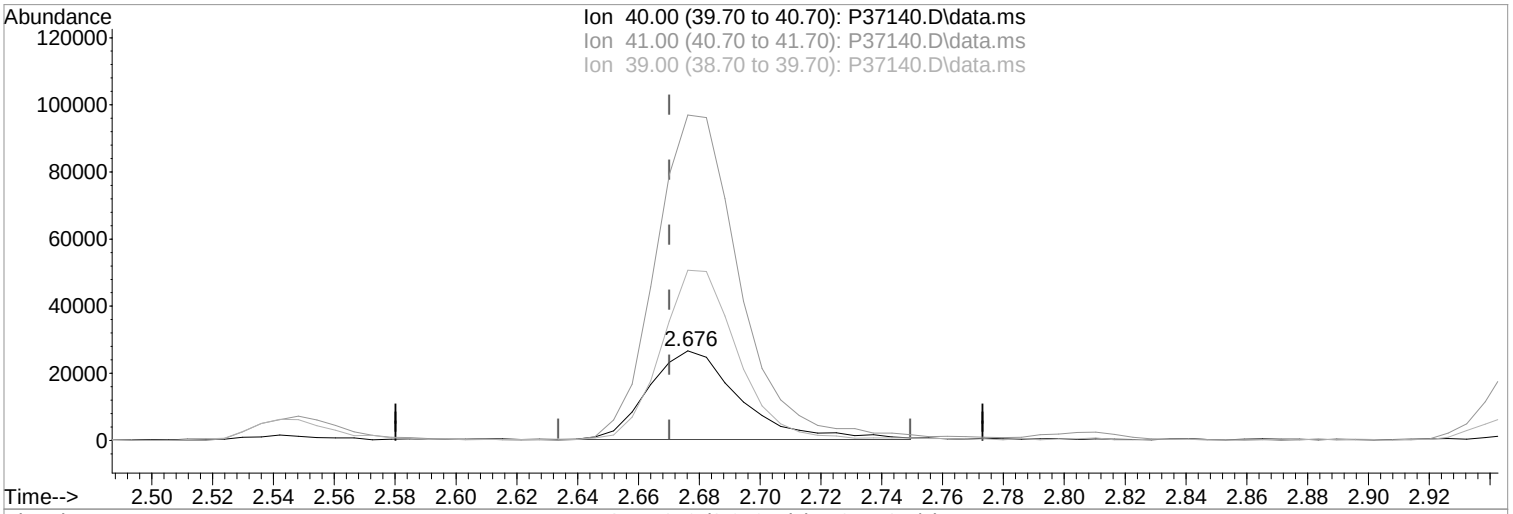
07/13/20

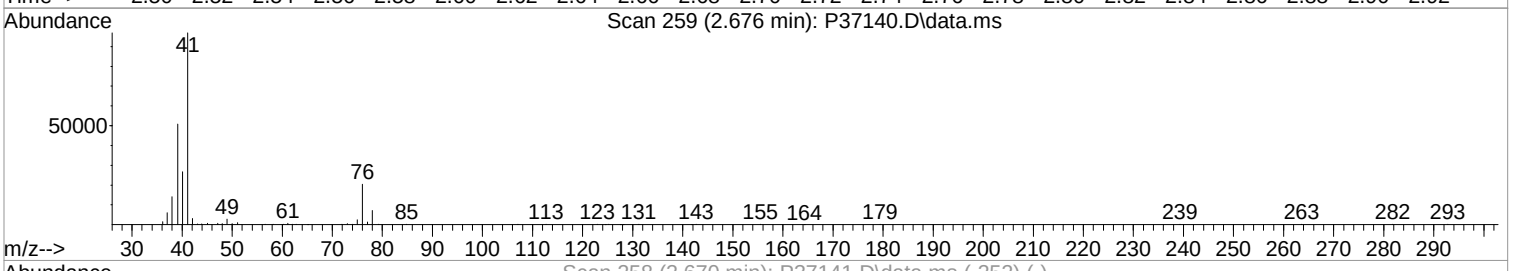
1st 07/14/20
2nd 07/14/20

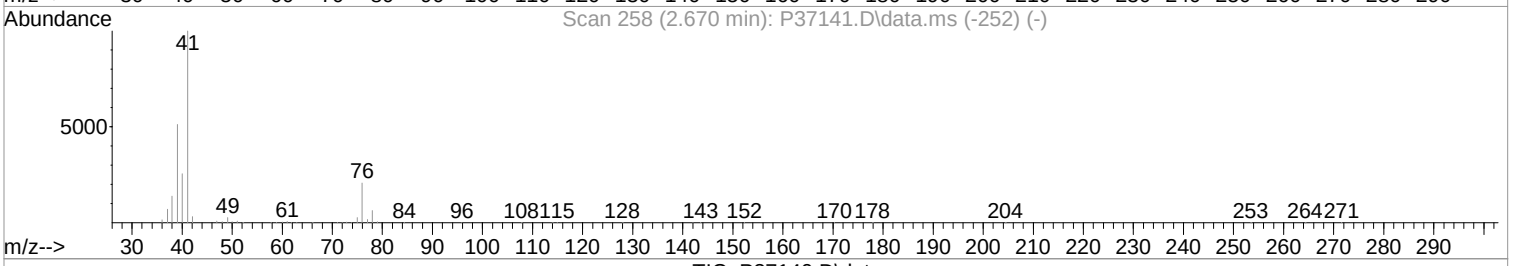
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37140.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 241.84 ppb

response 55105

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	363.21#
39.00	200.50	190.02
0.00	0.00	0.00

Manual Integration:

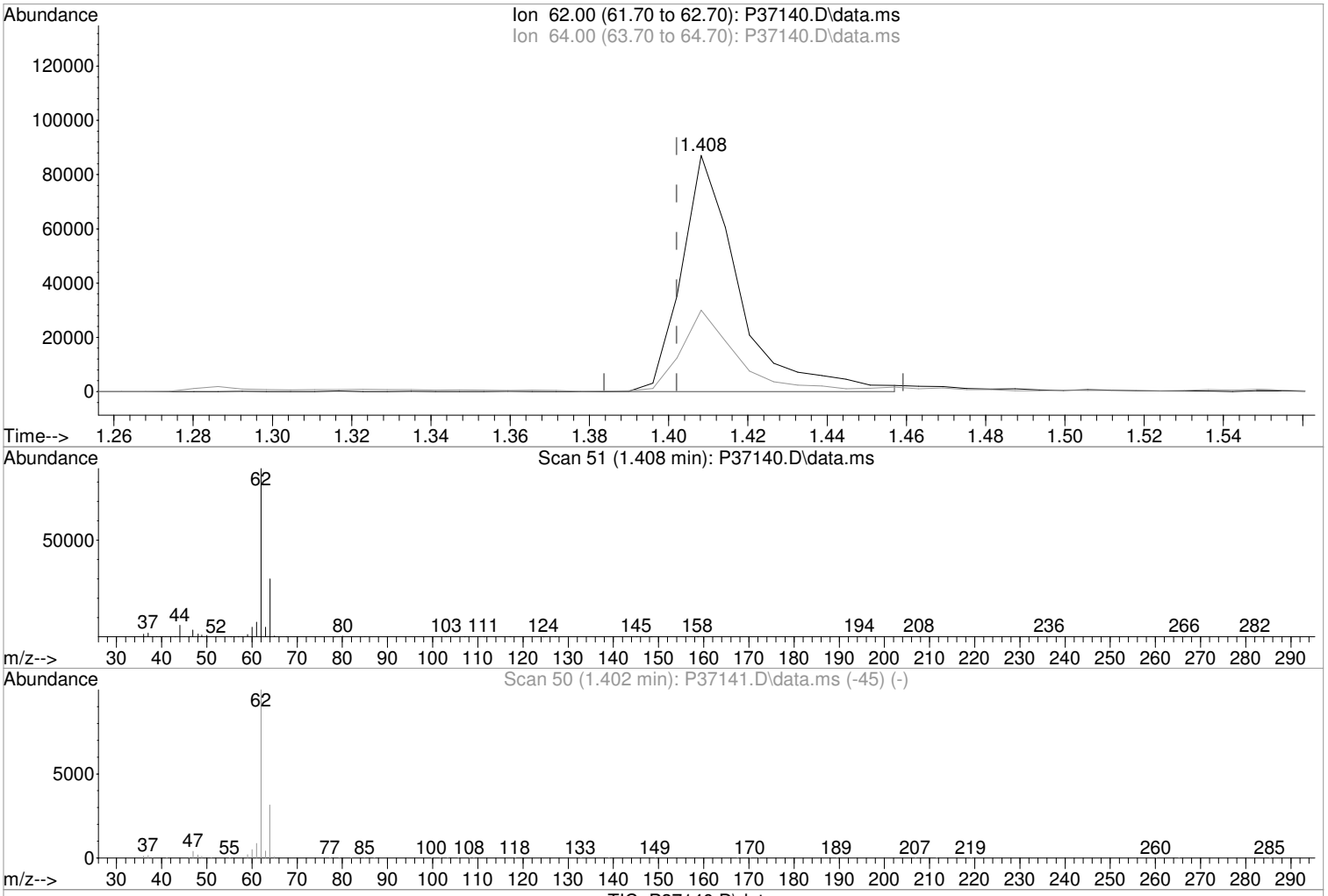
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:38:53 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37140.D\data.ms

(4) Vinyl Chloride (P)

1.408min (+0.006) 20.85 ppb m

response 87713

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	34.49
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

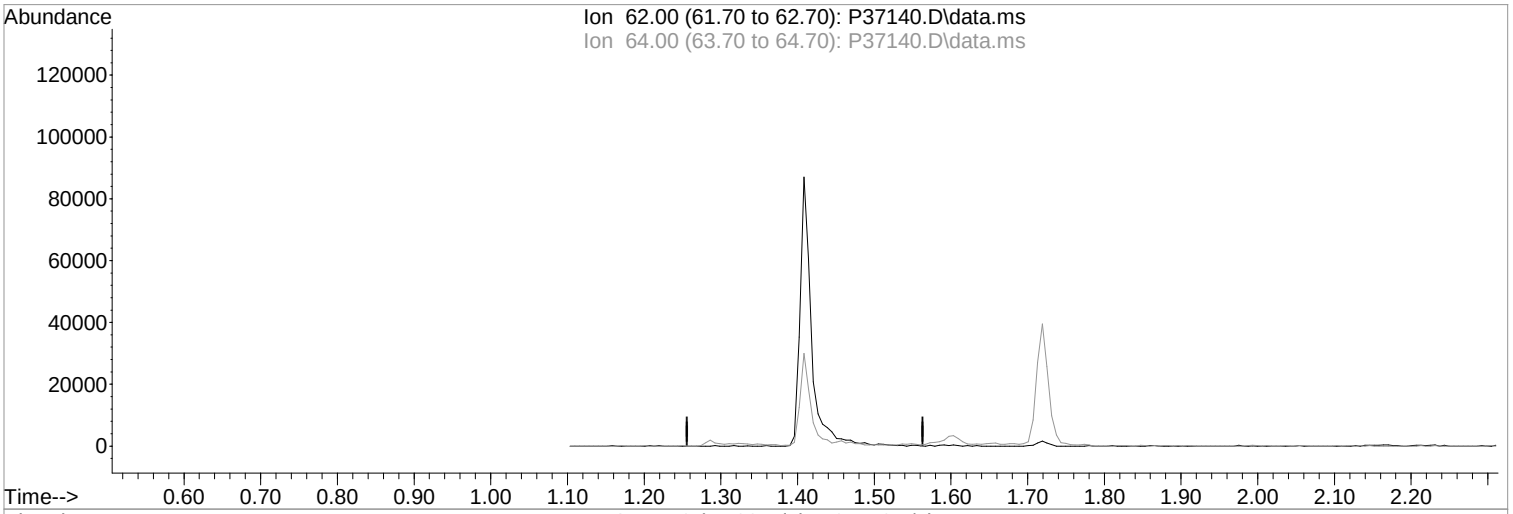
Peak not found.

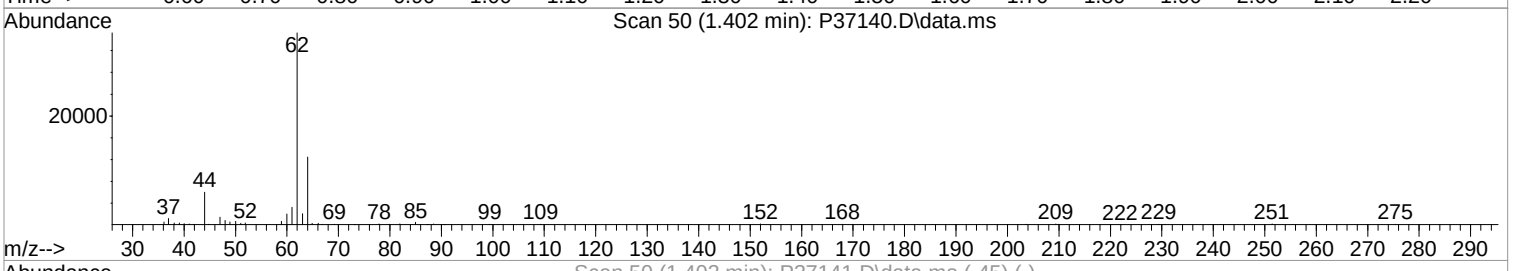
07/14/20

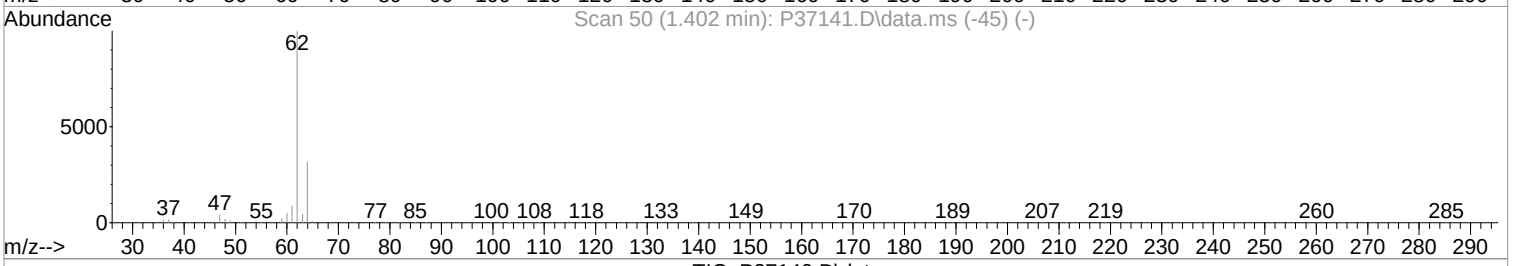
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37140.D\data.ms

(4) Vinyl Chloride (P)

1.402min (-1.402) 0.00 ppb

response 0

Ion	Exp%	Act%
62.00	100	0.00
64.00	31.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

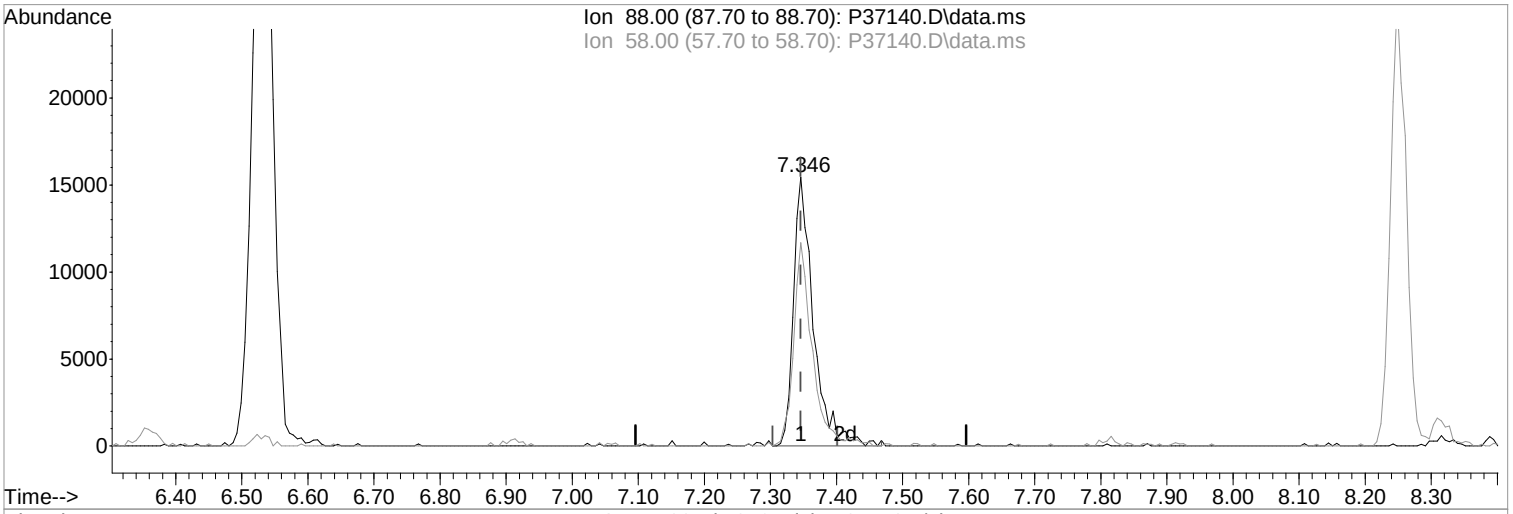
07/13/20

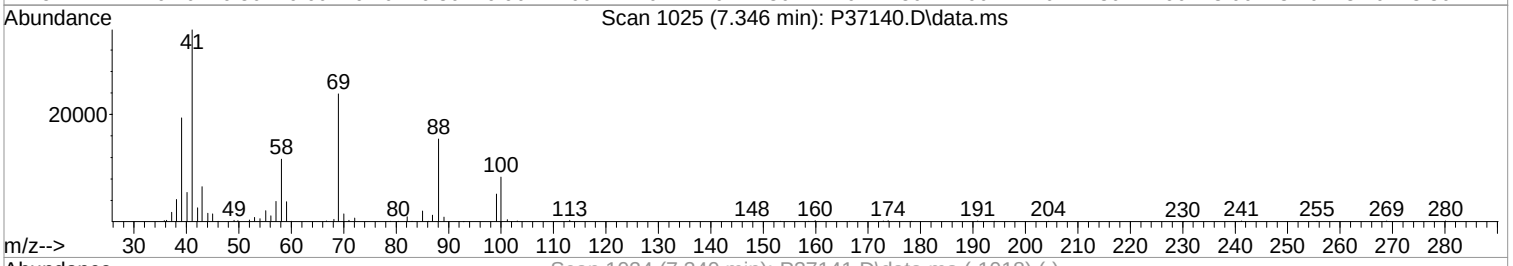
1st 07/14/20
2nd 07/14/20

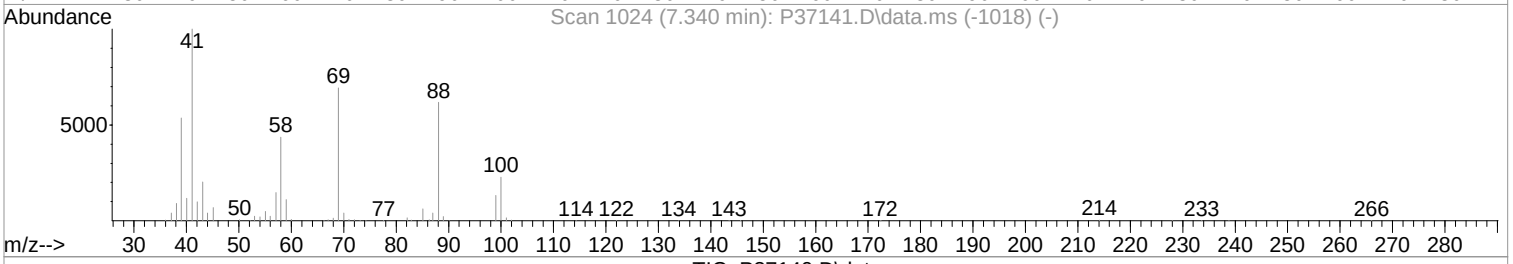
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37140.D\data.ms

(58) 1,4-Dioxane

7.346min (0.000) 401.80 ppb m

response 32420

Ion	Exp%	Act%
88.00	100	100
58.00	70.60	75.59
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

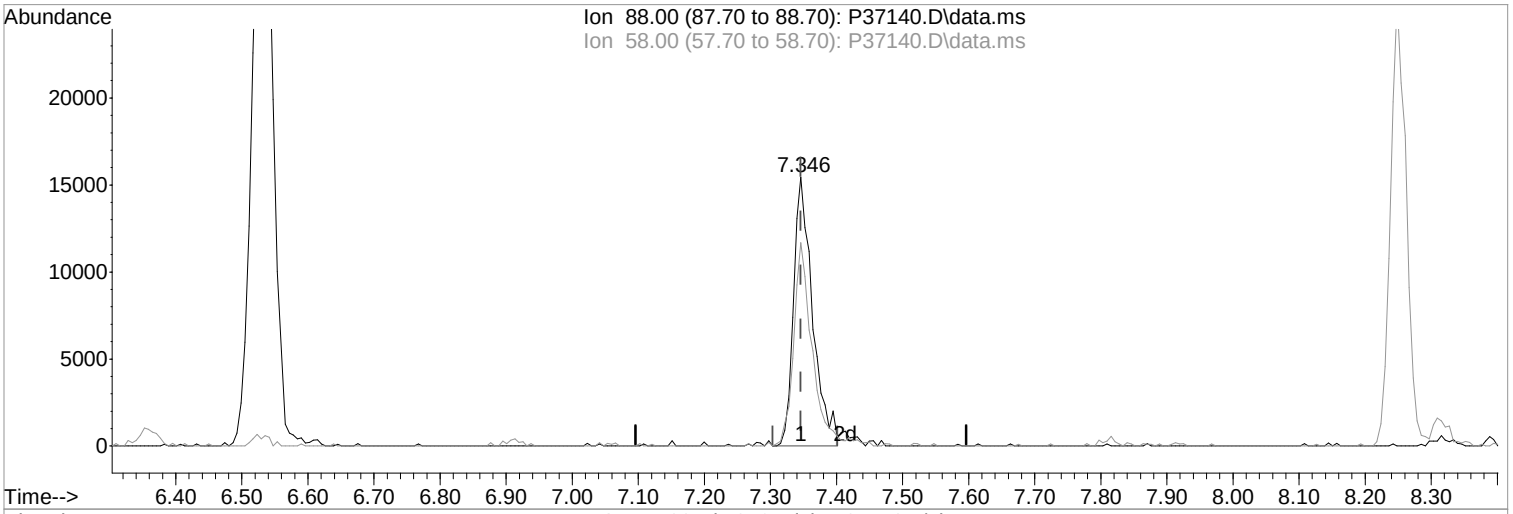
07/13/20

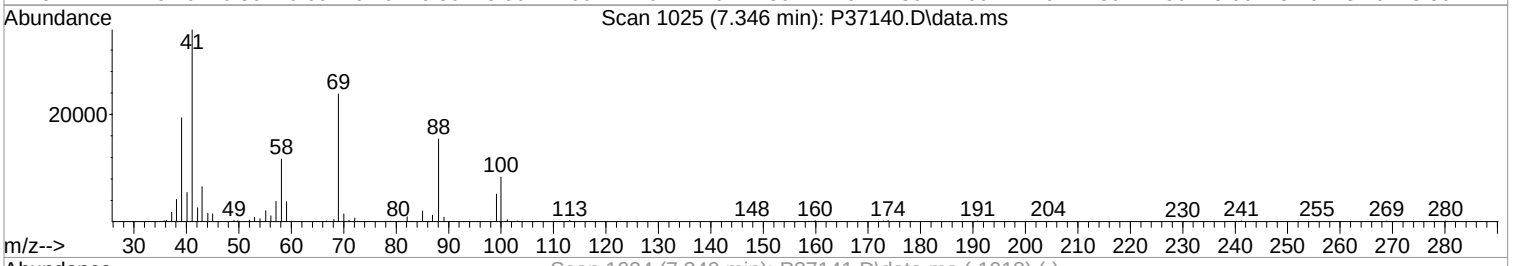
1st 07/14/20
2nd 07/14/20

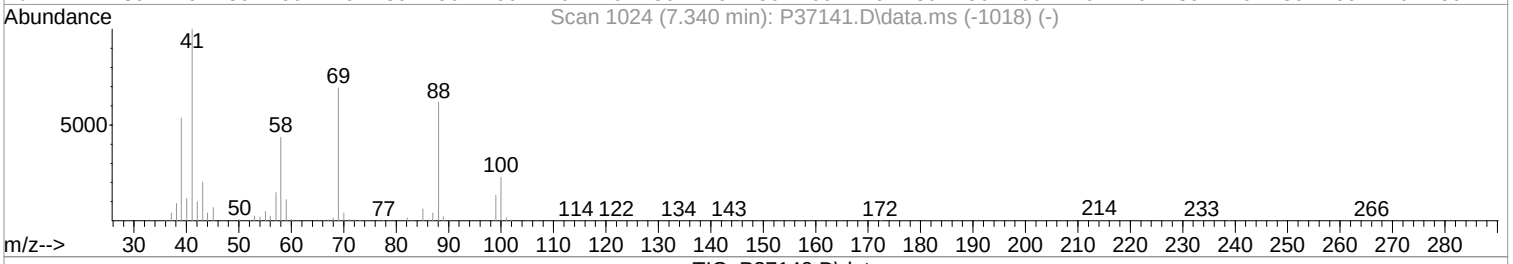
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37140.D\data.ms

(58) 1,4-Dioxane

7.346min (0.000) 382.26 ppb

response 30844

Ion	Exp%	Act%
88.00	100	100
58.00	70.60	75.59
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

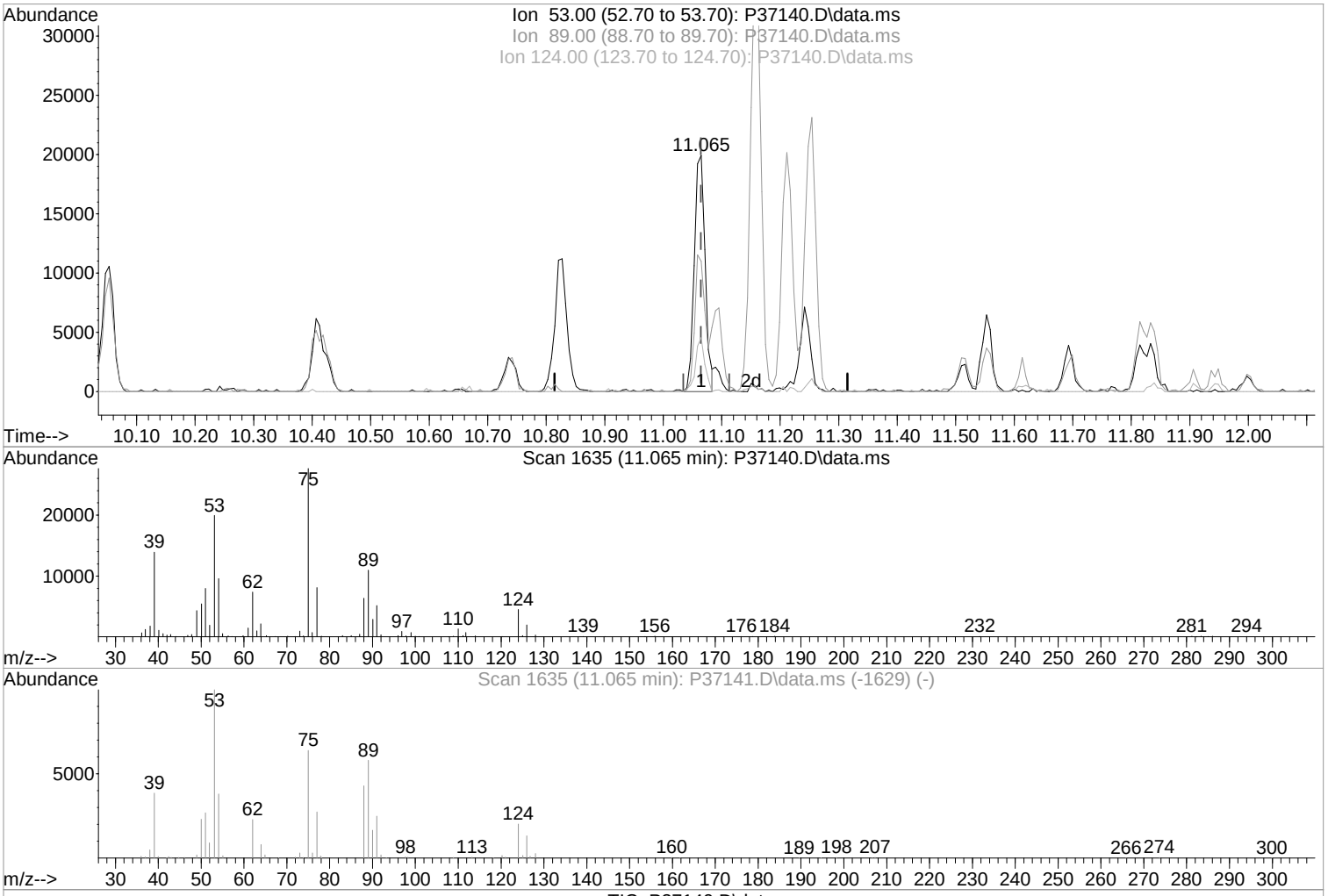
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37140.D\data.ms

(91) trans-1,4-Dichloro-2-Butene

11.065min (+0.000) 19.37 ppb m

response 25688

Ion	Exp%	Act%
53.00	100	100
89.00	58.00	55.11
124.00	20.10	22.80
0.00	0.00	0.00

Manual Integration:

After

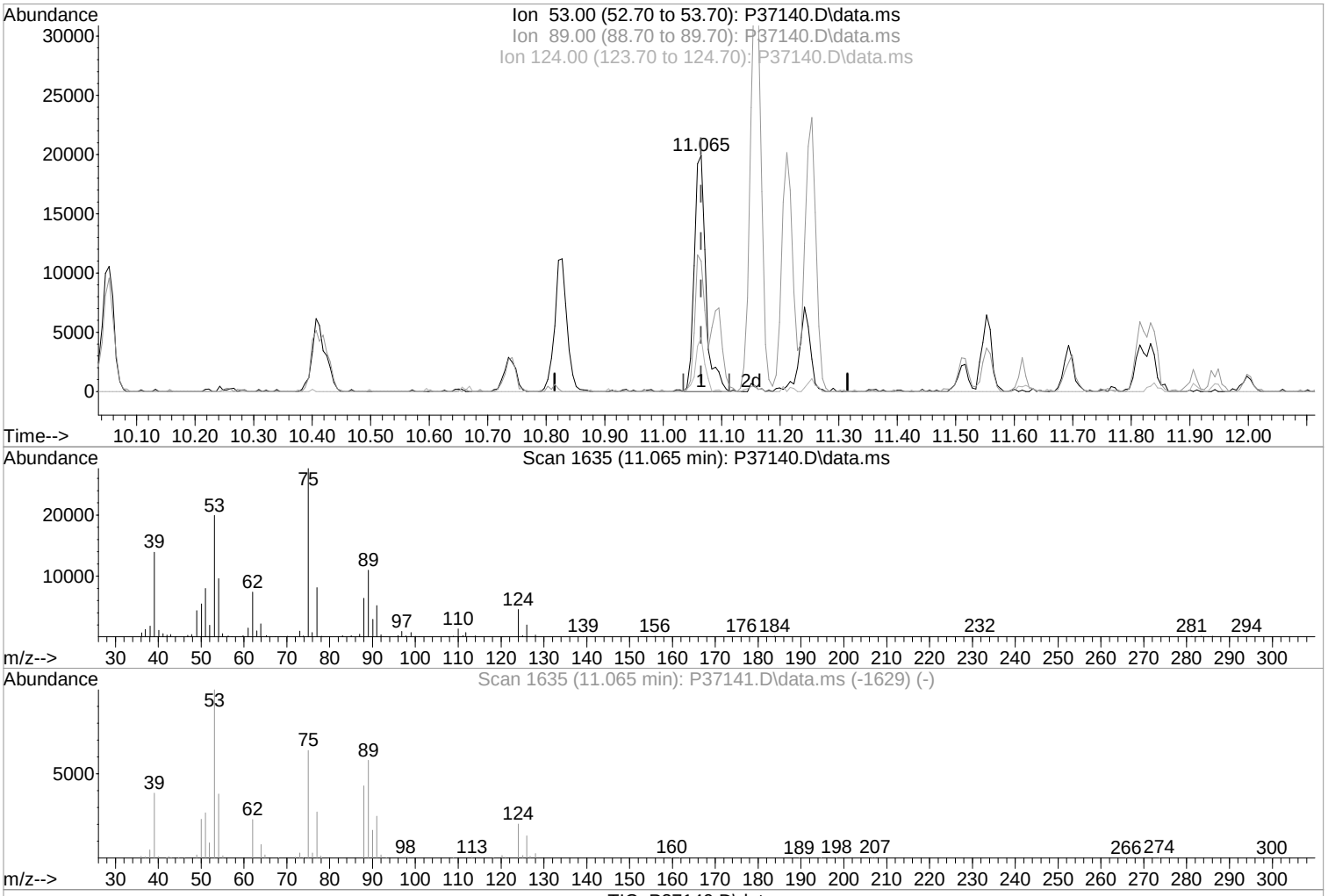
Poor integration.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:03:54 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37140.D\data.ms

(91) trans-1,4-Dichloro-2-Butene

11.065min (+0.000) 20.63 ppb

response 27359

Ion	Exp%	Act%
53.00	100	100
89.00	58.00	55.11
124.00	20.10	22.80
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
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Quant Time: Jul 13 16:38:53 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.462	168	317057	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	510707	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	450883	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	229412	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	55863	19.05	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 38.10%#				
48) surr1,1,2-dichloroetha...	5.859	65	76633	18.88	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 37.76%#				
65) SURR3,Toluene-d8	8.315	98	261795	19.21	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 38.42%#				
70) SURR2,BFB	10.870	95	94435	18.81	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 37.62%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	78333	22.16	ppb		97
3) Chloromethane	1.335	50	93088	20.99	ppb		100
4) Vinyl Chloride	1.408	62	87713m	20.85	ppb		
5) Bromomethane	1.640	94	61209	17.87	ppb		99
6) Chloroethane	1.719	64	43067	18.92	ppb		90
7) Freon 21	1.872	67	113977	21.68	ppb		99
8) Trichlorofluoromethane	1.914	101	95413	22.43	ppb		96
9) Diethyl Ether	2.152	59	70112	22.80	ppb		96
10) Freon 123a	2.164	67	72802	20.06	ppb		99
11) Freon 123	2.219	83	83408	19.48	ppb		96
12) Acrolein	2.268	56	92913	111.60	ppb		99
13) 1,1-Diclethene	2.341	96	52198	21.29	ppb		98
14) Freon 113	2.341	101	60124	21.04	ppb		97
15) Acetone	2.408	43	42768	23.22	ppb		94
16) 2-Propanol	2.548	45	167788	410.91	ppb		96
17) Iodomethane	2.481	142	60009	21.87	ppb		95
18) Carbon Disulfide	2.530	76	179013	19.14	ppb		99
19) Acetonitrile	2.676	40	28917m	126.91	ppb		
20) Allyl Chloride	2.682	76	35407	20.38	ppb	#	90
21) Methyl Acetate	2.713	43	93828	19.90	ppb		94
22) Methylene Chloride	2.804	84	71840	20.56	ppb		96
23) TBA	2.957	59	271502	410.87	ppb		95
24) Acrylonitrile	3.085	53	219059	107.47	ppb		93
25) Methyl-t-Butyl Ether	3.103	73	247784	21.84	ppb		97
26) trans-1,2-Dichloroethene	3.091	96	61262	21.45	ppb		99
28) 1,1-Diclethane	3.609	63	132054	20.98	ppb		94
29) Vinyl Acetate	3.700	86	11401	24.67	ppb	#	37
30) DIPE	3.713	45	233173	21.20	ppb		97
31) 2-Chloro-1,3-Butadiene	3.719	53	113191	22.36	ppb		93
32) ETBE	4.243	59	223639	21.79	ppb		97
33) 2,2-Dichloropropane	4.438	77	100723	21.74	ppb		99
34) cis-1,2-Dichloroethene	4.456	96	76070	20.62	ppb		98
35) 2-Butanone	4.542	43	53315	21.63	ppb		91
36) Propionitrile	4.639	54	91137	103.11	ppb		93
37) Bromochloromethane	4.865	130	46612	21.49	ppb		97
38) Methacrylonitrile	4.901	67	43628	20.84	ppb		97
39) Tetrahydrofuran	4.968	42	39685	20.51	ppb		99
40) Chloroform	5.048	83	119569	20.61	ppb		97
41) 1,1,1-Trichloroethane	5.310	97	97656	21.30	ppb		93

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:38:53 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.139	73	217569	21.28	ppb		99
44) Cyclohexane	5.365	41	63731	19.03	ppb		84
46) Carbontetrachloride	5.566	117	70864	20.89	ppb		84
47) 1,1-Dichloropropene	5.590	75	100938	20.87	ppb		94
49) Benzene	5.913	78	306203	20.75	ppb		97
50) 1,2-Dichloroethane	5.974	62	111601	21.66	ppb		97
51) Iso-Butyl Alcohol	5.968	43	123183	389.46	ppb		100
52) n-Heptane	6.358	43	91513	20.03	ppb		91
53) 1-Butanol	6.907	56	193530	983.26	ppb		98
54) Trichloroethene	6.846	130	72894	19.92	ppb		97
55) Methylcyclohexane	7.053	55	88144	19.40	ppb		93
56) 1,2-Diclpropane	7.139	63	81304	20.77	ppb		99
57) Dibromomethane	7.279	93	47589	21.13	ppb		84
58) 1,4-Dioxane	7.346	88	32420m	401.80	ppb		
59) Methyl Methacrylate	7.358	69	70667	20.78	ppb		93
60) Bromodichloromethane	7.505	83	87282	21.13	ppb		95
62) 2-Chloroethylvinyl Ether	7.907	63	30632	17.99	ppb		99
63) cis-1,3-Dichloropropene	8.035	75	114751	20.37	ppb		94
64) 4-Methyl-2-pentanone	8.248	43	109500	20.80	ppb		100
66) Toluene	8.395	91	330234	21.15	ppb		98
67) trans-1,3-Dichloropropene	8.675	75	104598	20.41	ppb		98
68) Ethyl Methacrylate	8.803	69	123867	21.56	ppb		100
69) 1,1,2-Trichloroethane	8.864	97	72937	20.92	ppb		96
72) Tetrachloroethene	8.968	164	56229	20.42	ppb		93
73) 2-Hexanone	9.151	43	82297	20.53	ppb		97
74) 1,3-Dichloropropane	9.029	76	131977	20.81	ppb		96
75) Dibromochloromethane	9.248	129	57831	20.62	ppb		91
76) N-Butyl Acetate	9.291	43	153070	20.59	ppb		99
77) 1,2-Dibromoethane	9.346	107	72944	21.14	ppb		96
78) Chlorobenzene	9.827	112	209488	20.83	ppb		96
79) 3-CBTF	9.839	180	91740	19.70	ppb		98
80) 4-CBTF	9.894	180	81422	19.44	ppb		97
81) 1,1,1,2-Tetrachloroethane	9.913	131	62545	20.22	ppb		96
82) Ethylbenzene	9.943	106	111431	21.12	ppb	#	89
83) (m+p)Xylene	10.053	106	270402	42.80	ppb		98
84) o-Xylene	10.406	106	127348	20.65	ppb		96
85) Styrene	10.425	104	222427	21.23	ppb		98
87) Bromoform	10.589	173	37064	19.62	ppb		96
88) 2-CBTF	10.656	180	90084	19.36	ppb		97
89) Isopropylbenzene	10.736	105	331307	20.92	ppb		98
90) Cyclohexanone	10.827	55	370896	389.72	ppb		98
91) trans-1,4-Dichloro-2-B...	11.065	53	25688m	19.37	ppb		
92) 1,1,2,2-Tetrachloroethane	11.016	83	106588	20.82	ppb		96
93) Bromobenzene	10.992	156	87053	21.07	ppb		95
94) 1,2,3-Trichloropropane	11.047	110	35229	21.28	ppb		94
95) n-Propylbenzene	11.089	91	393451	21.65	ppb		99
96) 2-Chlorotoluene	11.156	91	246460	20.88	ppb		98
97) 3-Chlorotoluene	11.211	91	219017	19.43	ppb		98
98) 4-Chlorotoluene	11.254	91	275783	20.87	ppb		98
99) 1,3,5-Trimethylbenzene	11.242	105	280236	20.71	ppb		98
100) tert-Butylbenzene	11.516	119	227033	20.04	ppb		99
101) 1,2,4-Trimethylbenzene	11.553	105	287540	21.11	ppb		98
102) 3,4-DCBTF	11.620	214	71854	19.26	ppb		95
103) sec-Butylbenzene	11.693	105	335505	20.65	ppb		98
104) p-Isopropyltoluene	11.815	119	286013	20.42	ppb		97
105) 1,3-Dclbenz	11.784	146	163378	20.18	ppb		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:38:53 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	165908	20.14	ppb	96
107) 2,4-DCBTF	11.906	214	65163	18.65	ppb	98
108) 2,5-DCBTF	11.949	214	71921	19.21	ppb	96
109) n-Butylbenzene	12.150	91	270835	20.54	ppb	96
110) 1,2-Dclbenz	12.156	146	163610	19.91	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.790	157	21529	18.78	ppb	97
112) Trielution Dichlorotol...	12.894	125	385212	58.52	ppb	94
113) 1,3,5 Trichlorobenzene	12.943	180	107108	18.96	ppb	94
114) Coelution Dichlorotoluene	13.223	125	291536	40.33	ppb	97
115) 1,2,4-Tcbenzene	13.430	180	118721	20.03	ppb	100
116) Hexachlorobt	13.558	225	42982	18.07	ppb	98
117) Naphthalen	13.625	128	384484	22.20	ppb	98
118) 1,2,3-Tclbenzene	13.814	180	120975	19.73	ppb	96
119) 2,4,5-Trichlorotolene	14.393	159	71909	19.17	ppb	98
120) 2,3,6-Trichlorotoluene	14.479	159	65464	19.17	ppb	98

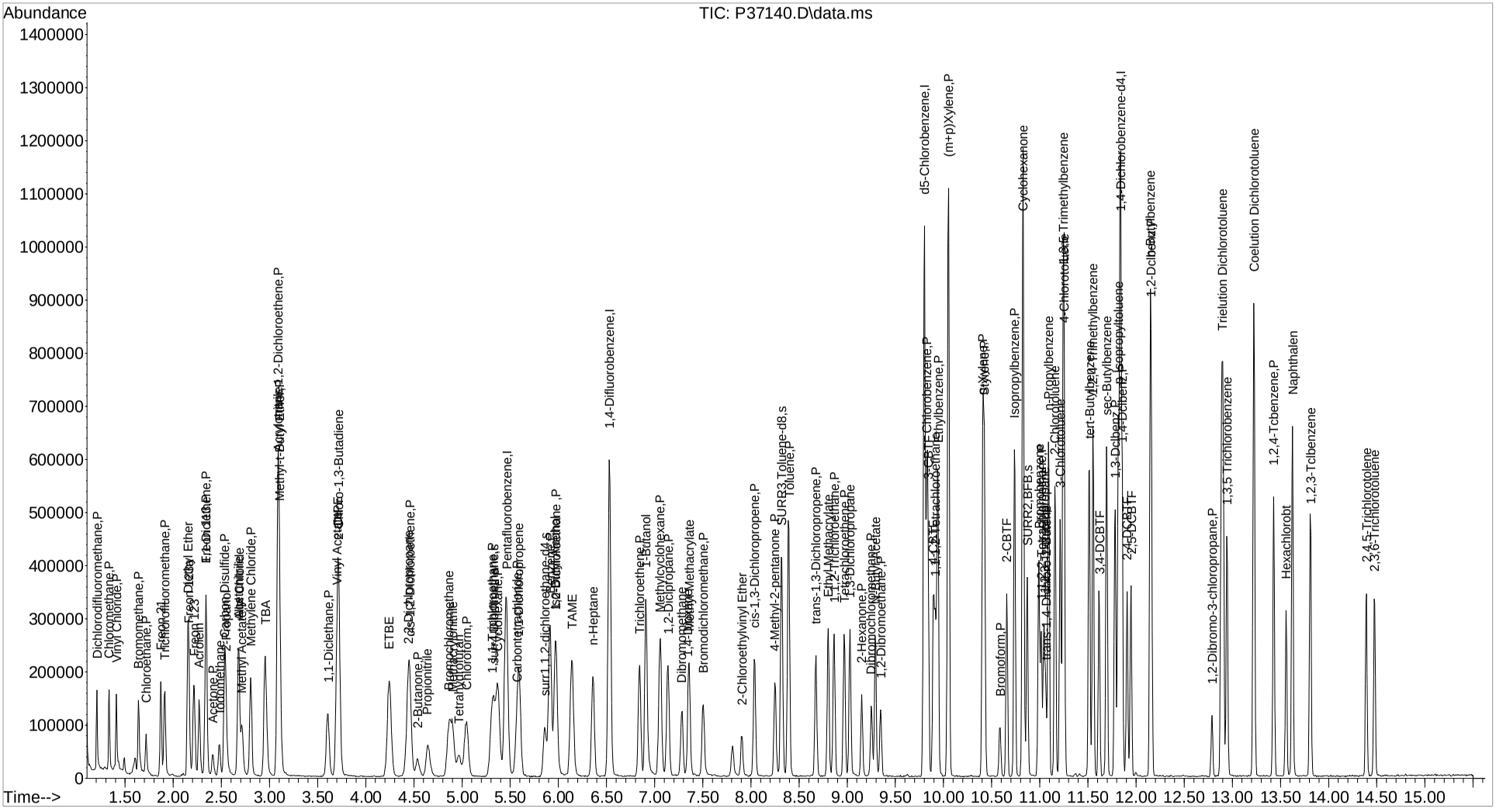
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37140.D
Acq On : 13 Jul 2020 1:12 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 13 16:38:53 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

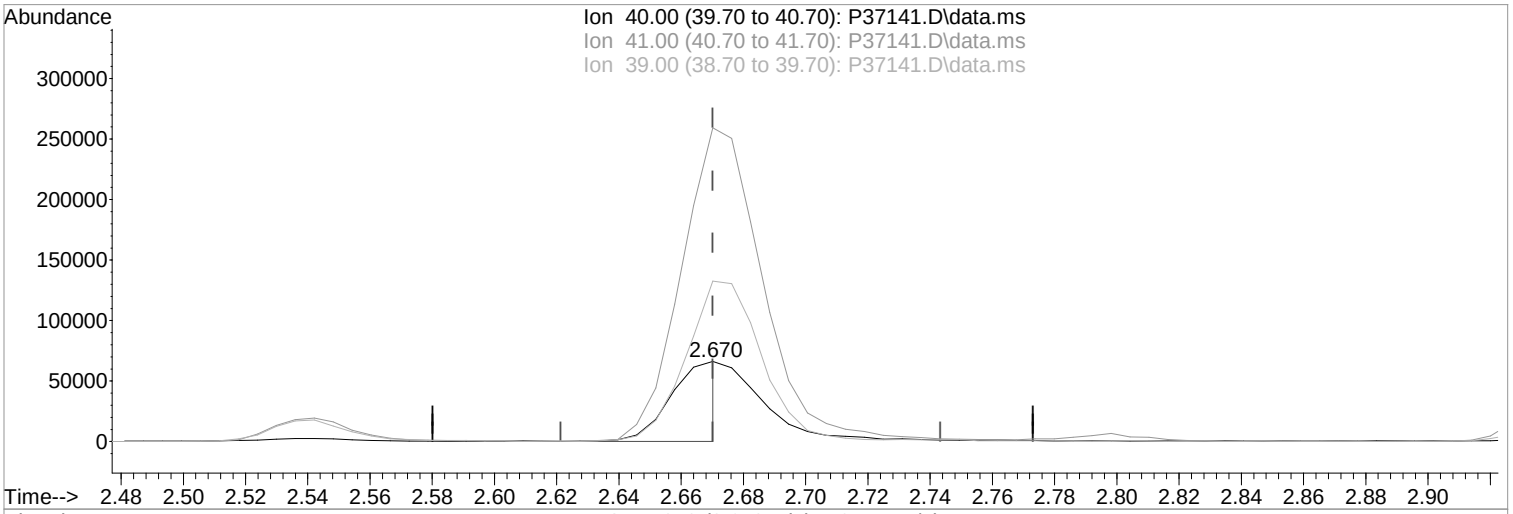
1st 07/14/20
2nd 07/14/20

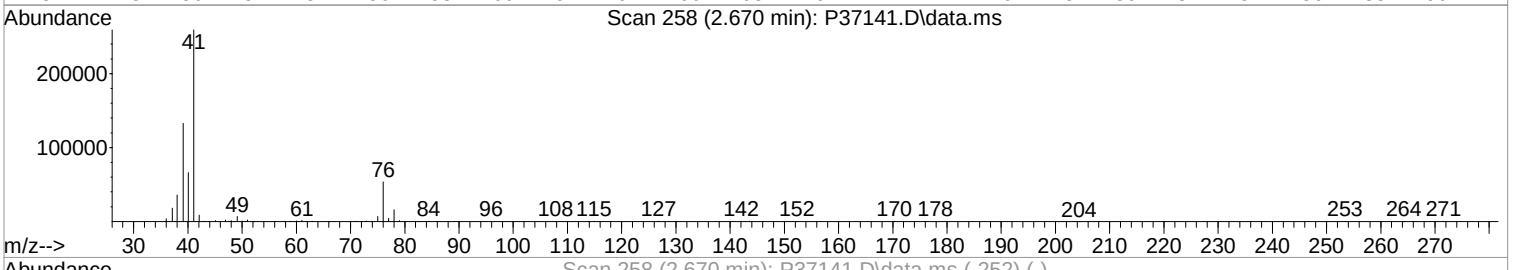


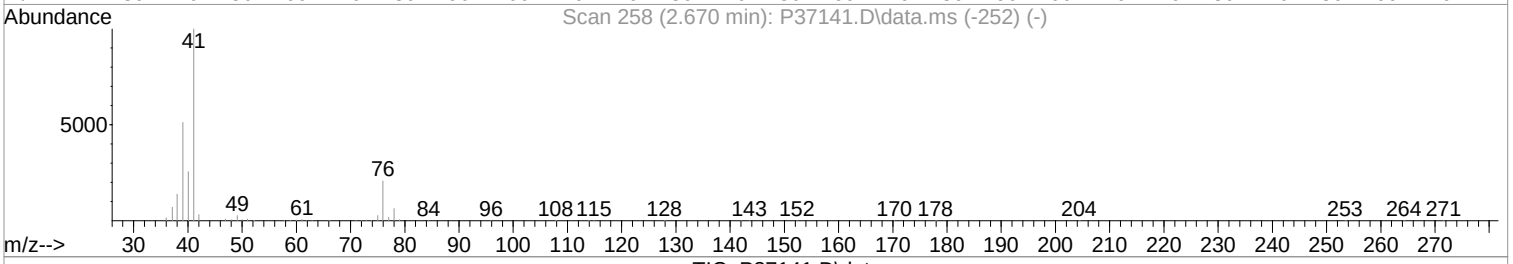
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37141.D\data.ms

(19) Acetonitrile

2.670min (-0.000) 306.00 ppb m

response 71444

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	391.78
39.00	200.50	200.48
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

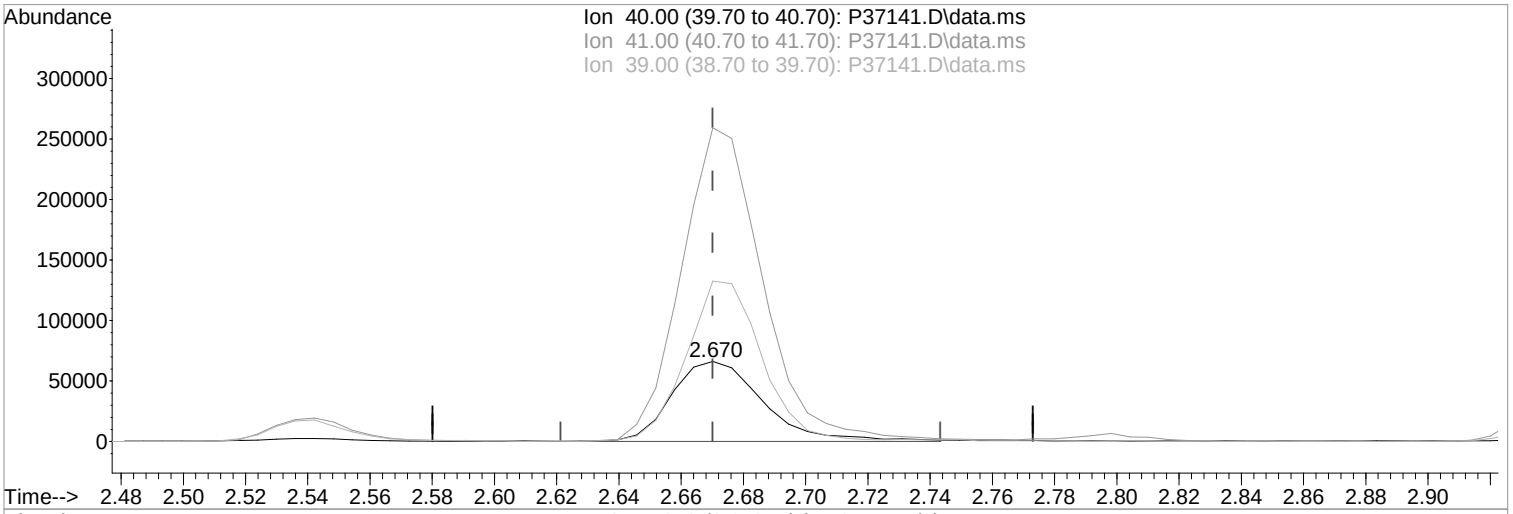
07/13/20

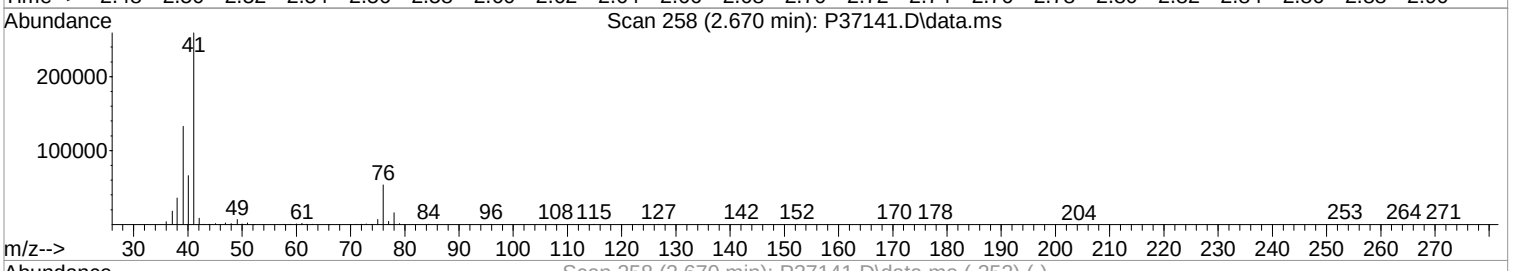
1st 07/14/20
2nd 07/14/20

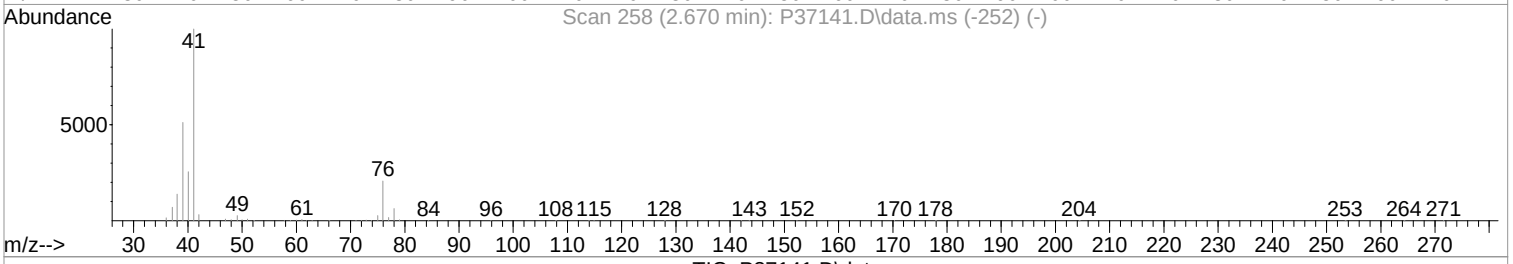
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37141.D\data.ms

(19) Acetonitrile

2.670min (-0.000) 580.40 ppb

response 135509

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	391.78
39.00	200.50	200.48
0.00	0.00	0.00

Manual Integration:

Before

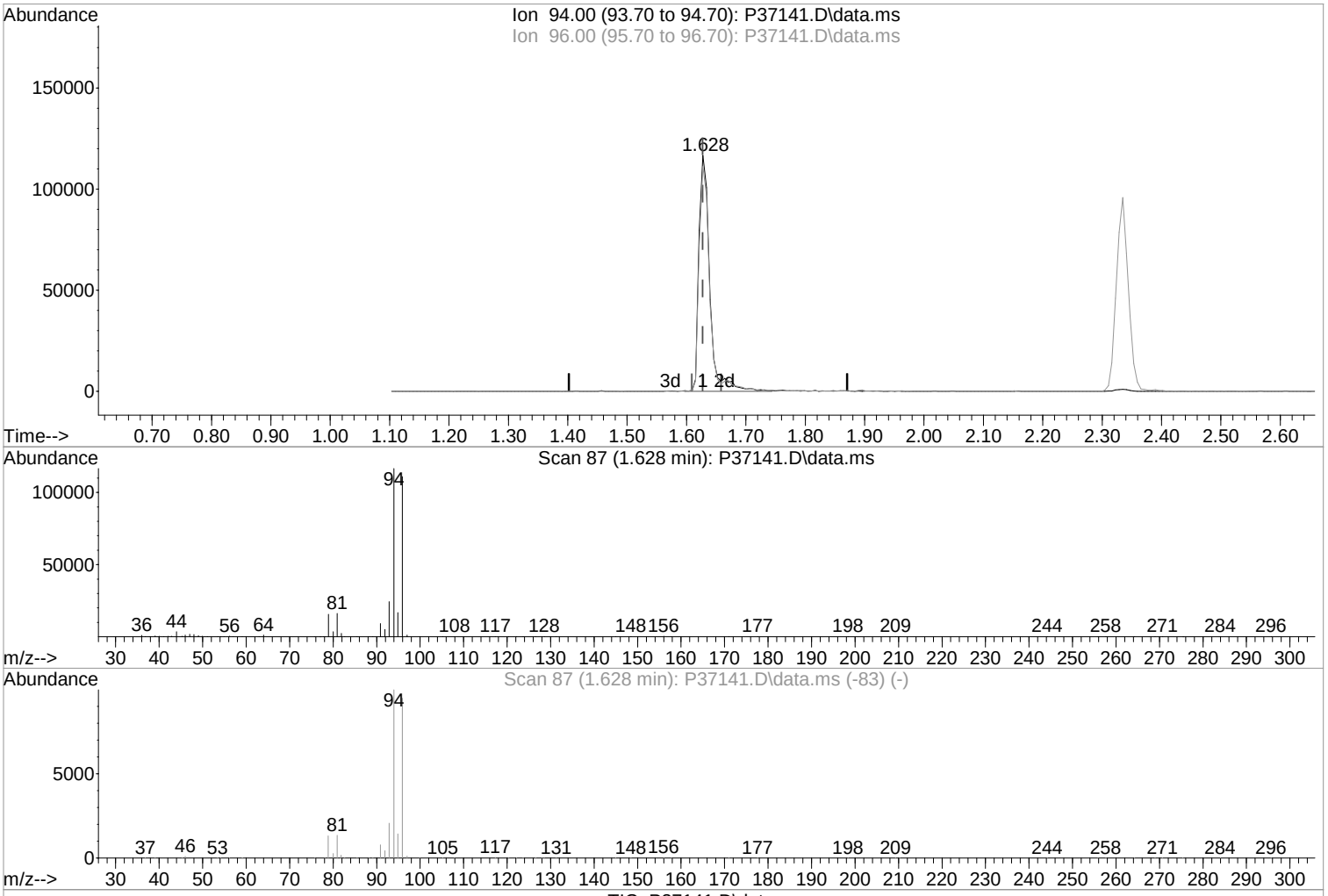
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37141.D\data.ms

(5) Bromomethane (P)

1.628min (-0.000) 42.25 ppb m

response 148315

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	95.17
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

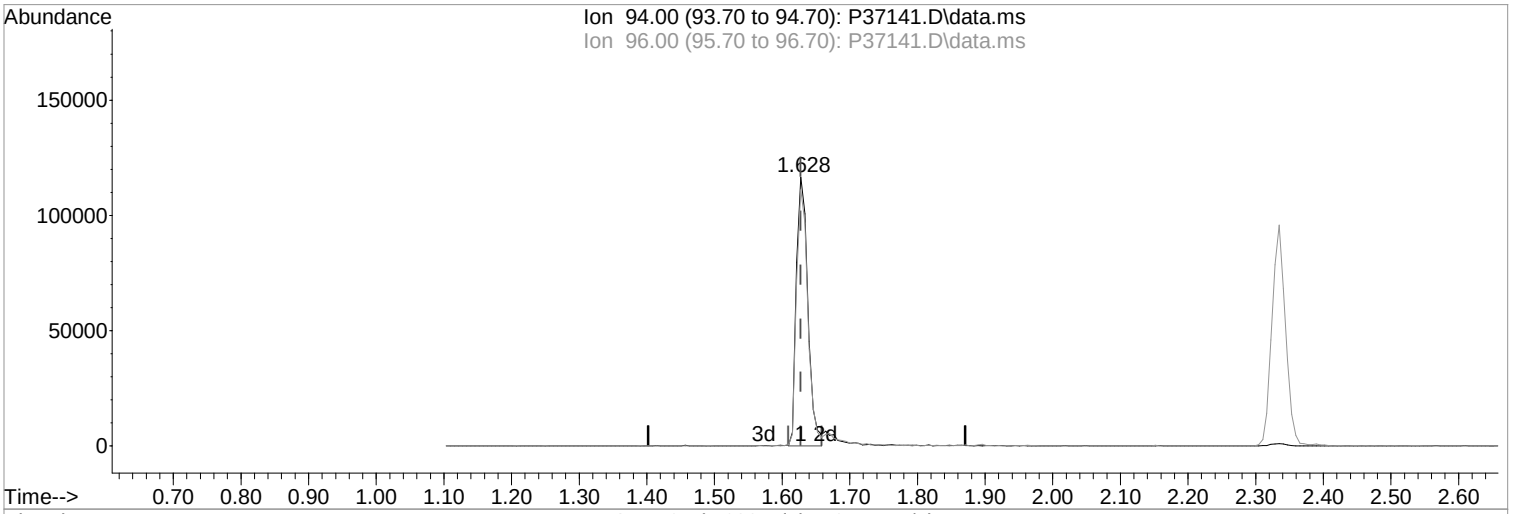
Poor integration.

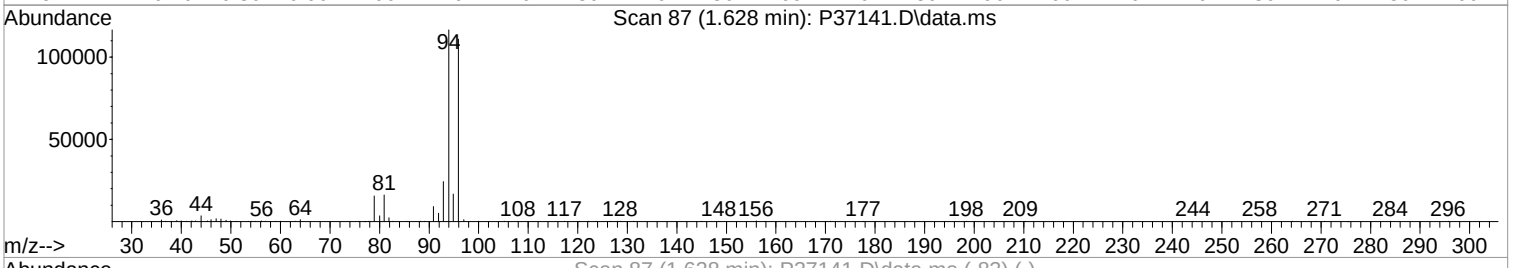
07/13/20

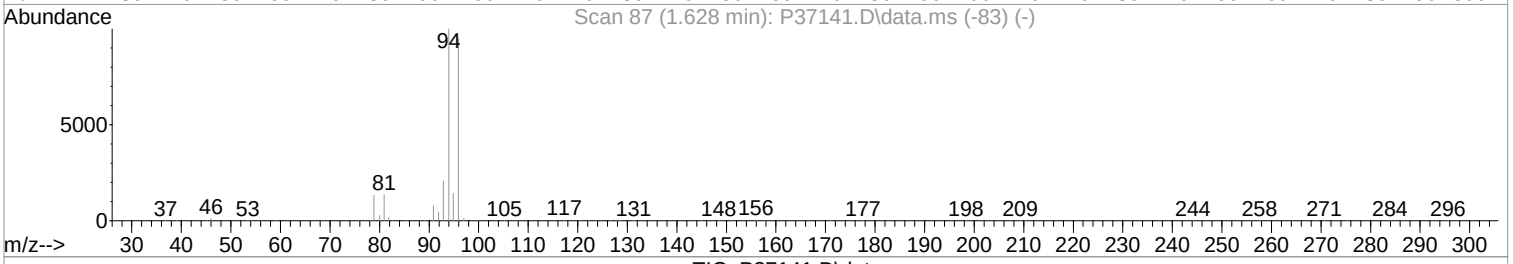
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37141.D\data.ms

(5) Bromomethane (P)

1.628min (-0.000) 39.13 ppb

response 137334

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	95.17
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

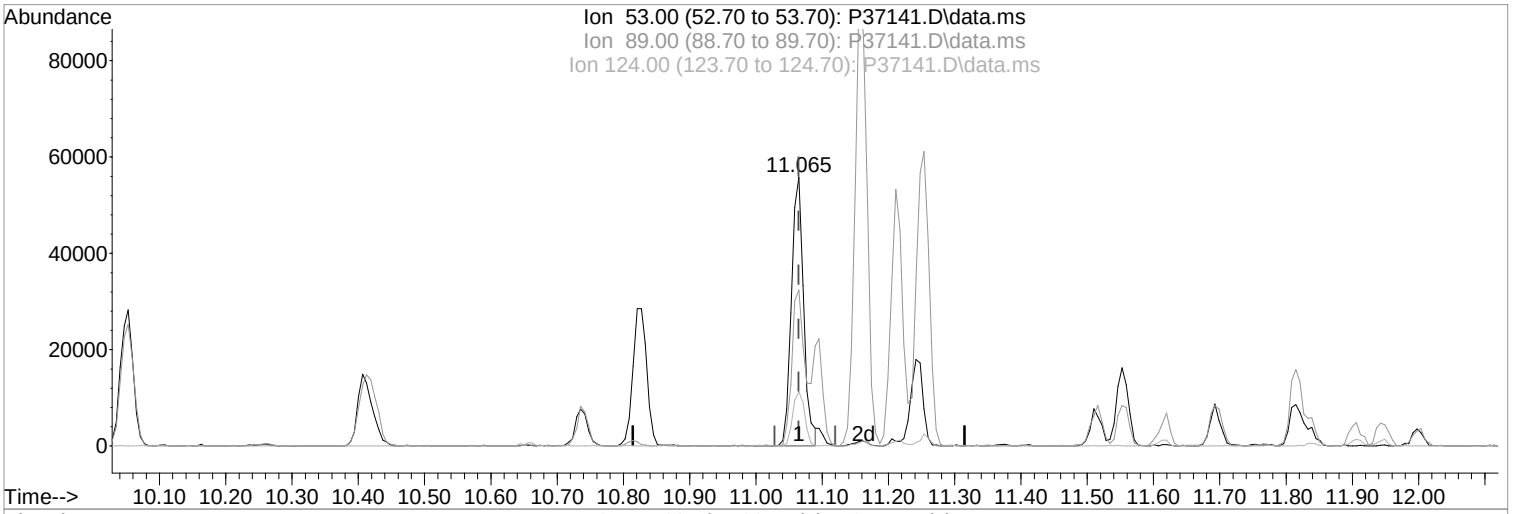
07/13/20

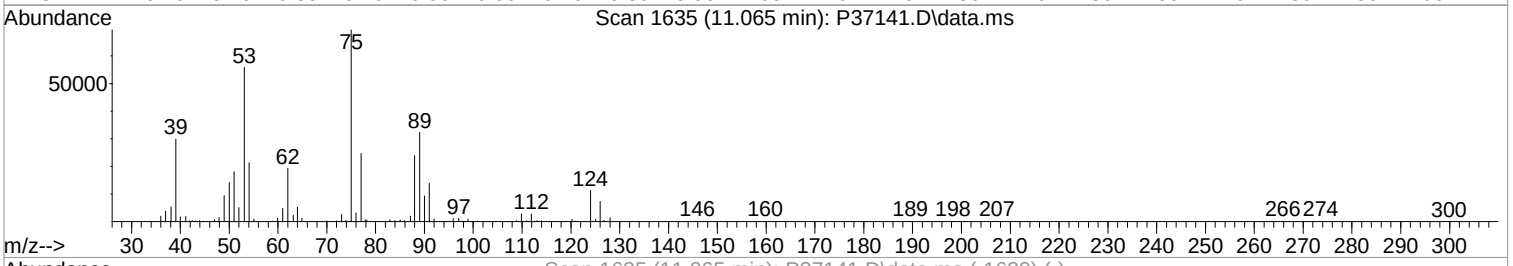
1st 07/14/20
2nd 07/14/20

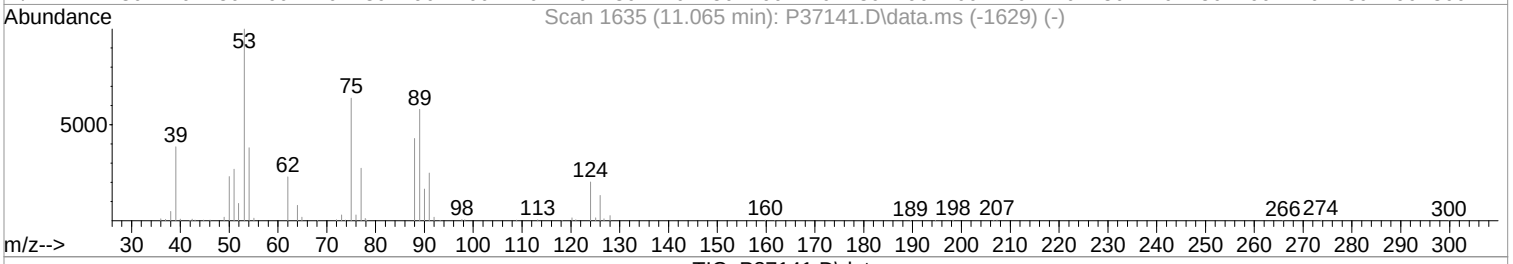
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37141.D\data.ms

(91) trans-1,4-Dichloro-2-Butene

11.065min (-0.000) 50.84 ppb m

response 71470

Ion	Exp%	Act%
53.00	100	100
89.00	58.00	58.02
124.00	20.10	20.14
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

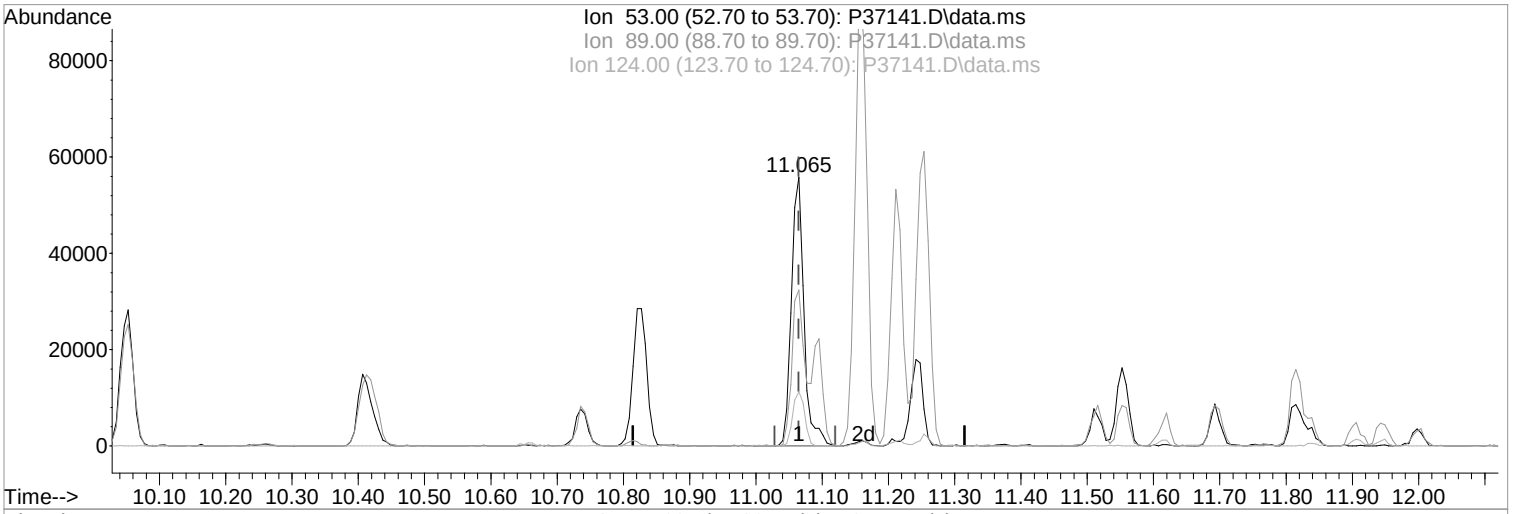
07/13/20

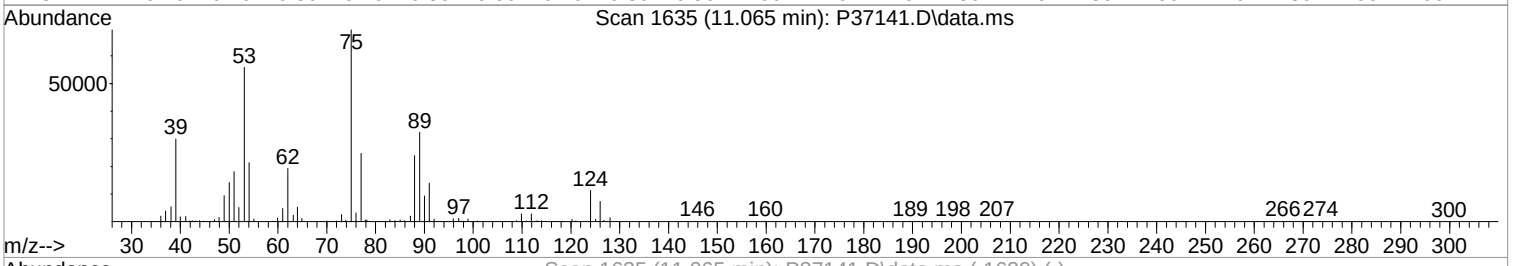
1st 07/14/20
2nd 07/14/20

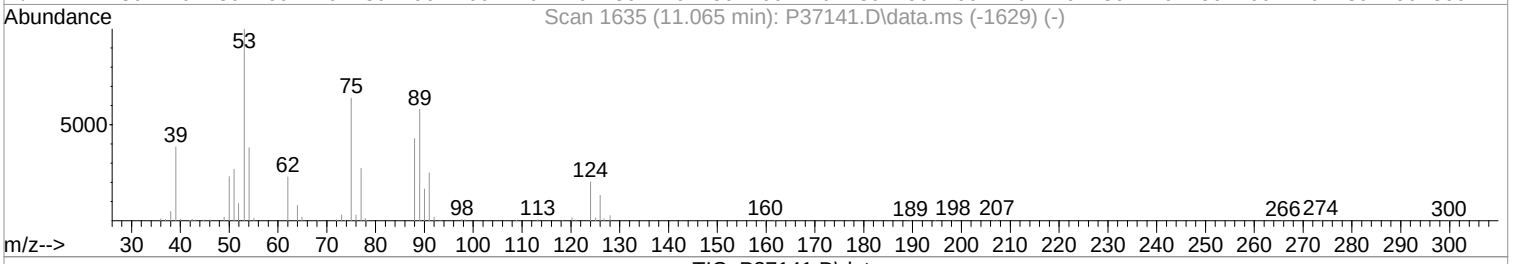
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:03:57 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37141.D\data.ms

(91) trans-1,4-Dichloro-2-Butene

11.065min (-0.000) 52.60 ppb

response 73948

Ion	Exp%	Act%
53.00	100	100
89.00	58.00	58.02
124.00	20.10	20.14
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:42:24 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	324870	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.529	114	516307	50.00	ppb	0.00
71) d5-Chlorobenzene	9.803	117	457341	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	243135	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.328	113	153332	51.72	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.44%			
48) surr1,1,2-dichloroetha...	5.852	65	208598	50.82	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.64%			
65) SURR3,Toluene-d8	8.315	98	710177	51.54	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 103.08%			
70) SURR2,BFB	10.870	95	257669	50.76	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.52%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.201	85	206030	56.88	ppb	100
3) Chloromethane	1.329	50	245764	54.07	ppb	100
4) Vinyl Chloride	1.402	62	239939	55.66	ppb	100
5) Bromomethane	1.628	94	148315m	42.25	ppb	
6) Chloroethane	1.707	64	112078	48.07	ppb	100
7) Freon 21	1.865	67	288303	53.52	ppb	100
8) Trichlorofluoromethane	1.902	101	233066	53.47	ppb	100
9) Diethyl Ether	2.146	59	178048	56.52	ppb	100
10) Freon 123a	2.152	67	195145	52.48	ppb	100
11) Freon 123	2.207	83	221263	50.44	ppb	100
12) Acrolein	2.262	56	224412	263.07	ppb	100
13) 1,1-Diclethene	2.335	96	134541	53.55	ppb	100
14) Freon 113	2.335	101	154967	52.94	ppb	100
15) Acetone	2.402	43	91537	48.51	ppb	100
16) 2-Propanol	2.542	45	435304	1040.42	ppb	100
17) Iodomethane	2.475	142	206293	73.38	ppb	100
18) Carbon Disulfide	2.524	76	443346	46.27	ppb	100
19) Acetonitrile	2.670	40	71444m	306.00	ppb	
20) Allyl Chloride	2.676	76	92871	52.16	ppb	100
21) Methyl Acetate	2.707	43	248103	51.36	ppb	100
22) Methylene Chloride	2.798	84	183199	51.16	ppb	100
23) TBA	2.951	59	699322	1032.85	ppb	100
24) Acrylonitrile	3.085	53	547090	261.95	ppb	100
25) Methyl-t-Butyl Ether	3.097	73	638375	54.90	ppb	100
26) trans-1,2-Dichloroethene	3.085	96	160895	54.99	ppb	100
28) 1,1-Diclethane	3.597	63	342431	53.09	ppb	100
29) Vinyl Acetate	3.700	86	29596	62.51	ppb	100
30) DIPE	3.706	45	617671	54.81	ppb	100
31) 2-Chloro-1,3-Butadiene	3.706	53	287511	55.44	ppb	100
32) ETBE	4.237	59	572104	54.41	ppb	100
33) 2,2-Dichloropropane	4.426	77	262750	55.35	ppb	100
34) cis-1,2-Dichloroethene	4.450	96	198494	52.51	ppb	100
35) 2-Butanone	4.523	43	129099	51.11	ppb	100
36) Propionitrile	4.633	54	228219	251.99	ppb	100
37) Bromochloromethane	4.853	130	114309	51.43	ppb	100
38) Methacrylonitrile	4.895	67	111970	52.19	ppb	100
39) Tetrahydrofuran	4.950	42	97404	49.12	ppb	100
40) Chloroform	5.035	83	306852	51.62	ppb	100
41) 1,1,1-Trichloroethane	5.310	97	256935	54.70	ppb	100

1st 07/14/20
2nd 07/14/20

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:42:24 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.133	73	566912	54.12	ppb	100
44) Cyclohexane	5.365	41	175502	51.84	ppb	100
46) Carbontetrachloride	5.572	117	196901	57.42	ppb	100
47) 1,1-Dichloropropene	5.590	75	252252	51.60	ppb	100
49) Benzene	5.913	78	788933	52.88	ppb	100
50) 1,2-Dichloroethane	5.968	62	270234	51.87	ppb	100
51) Iso-Butyl Alcohol	5.962	43	333418	1042.72	ppb	100
52) n-Heptane	6.352	43	246312	53.31	ppb	100
53) 1-Butanol	6.907	56	531988	2673.53	ppb	100
54) Trichloroethene	6.840	130	184776	49.95	ppb	100
55) Methylcyclohexane	7.053	55	242578	52.80	ppb	100
56) 1,2-Diclpropane	7.133	63	206933	52.29	ppb	100
57) Dibromomethane	7.285	93	116967	51.37	ppb	100
58) 1,4-Dioxane	7.340	88	81942	1004.53	ppb	100
59) Methyl Methacrylate	7.352	69	183993	53.51	ppb	100
60) Bromodichloromethane	7.505	83	235239	56.34	ppb	100
62) 2-Chloroethylvinyl Ether	7.901	63	87195	50.65	ppb	100
63) cis-1,3-Dichloropropene	8.035	75	313503	55.03	ppb	100
64) 4-Methyl-2-pentanone	8.248	43	278323	52.30	ppb	100
66) Toluene	8.389	91	858850	54.40	ppb	100
67) trans-1,3-Dichloropropene	8.675	75	282573	54.55	ppb	100
68) Ethyl Methacrylate	8.803	69	318717	54.88	ppb	100
69) 1,1,2-Trichloroethane	8.864	97	185338	52.58	ppb	100
72) Tetrachloroethene	8.968	164	143590	51.41	ppb	100
73) 2-Hexanone	9.151	43	208825	51.37	ppb	100
74) 1,3-Dichloropropane	9.029	76	337855	52.53	ppb	100
75) Dibromochloromethane	9.248	129	160155	56.31	ppb	100
76) N-Butyl Acetate	9.291	43	412143	54.66	ppb	100
77) 1,2-Dibromoethane	9.346	107	185062	52.87	ppb	100
78) Chlorobenzene	9.827	112	526529	51.62	ppb	100
79) 3-CBTF	9.839	180	253283	53.63	ppb	100
80) 4-CBTF	9.894	180	227727	53.60	ppb	100
81) 1,1,1,2-Tetrachloroethane	9.919	131	167482	53.37	ppb	100
82) Ethylbenzene	9.943	106	281421	52.58	ppb	100
83) (m+p)Xylene	10.053	106	704326	109.92	ppb	100
84) o-Xylene	10.406	106	345523	55.23	ppb	100
85) Styrene	10.425	104	600140	56.47	ppb	100
87) Bromoform	10.589	173	103722	51.80	ppb	100
88) 2-CBTF	10.656	180	246015	49.88	ppb	100
89) Isopropylbenzene	10.742	105	876866	52.24	ppb	100
90) Cyclohexanone	10.827	55	1028641	1019.85	ppb	100
91) trans-1,4-Dichloro-2-B...	11.065	53	71470m	50.84	ppb	
92) 1,1,2,2-Tetrachloroethane	11.016	83	278938	51.41	ppb	100
93) Bromobenzene	10.992	156	217809	49.73	ppb	100
94) 1,2,3-Trichloropropane	11.047	110	88646	50.52	ppb	100
95) n-Propylbenzene	11.089	91	1058051	54.94	ppb	100
96) 2-Chlorotoluene	11.156	91	650515	52.00	ppb	100
97) 3-Chlorotoluene	11.211	91	604579	50.60	ppb	100
98) 4-Chlorotoluene	11.254	91	737752	52.67	ppb	100
99) 1,3,5-Trimethylbenzene	11.242	105	767037	53.49	ppb	100
100) tert-Butylbenzene	11.516	119	625765	52.13	ppb	100
101) 1,2,4-Trimethylbenzene	11.553	105	779396	54.00	ppb	100
102) 3,4-DCBTF	11.620	214	199698	50.51	ppb	100
103) sec-Butylbenzene	11.693	105	934901	54.30	ppb	100
104) p-Isopropyltoluene	11.815	119	802097	54.03	ppb	100
105) 1,3-Dclbenz	11.784	146	426885	49.75	ppb	100

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:42:24 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

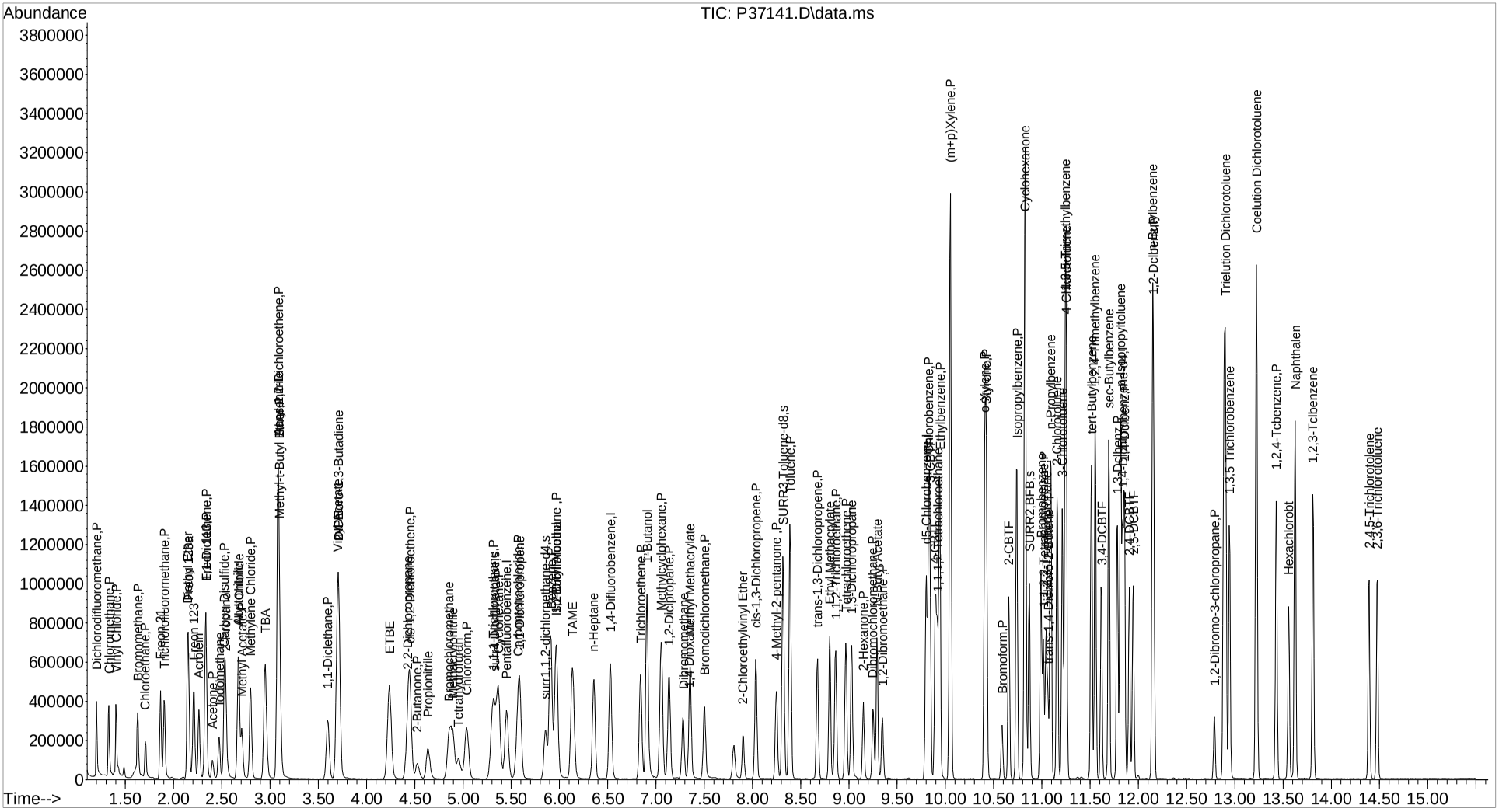
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	440719	50.48	ppb	100
107) 2,4-DCBTF	11.906	214	188645	50.95	ppb	100
108) 2,5-DCBTF	11.949	214	202423	51.02	ppb	100
109) n-Butylbenzene	12.150	91	770003	55.10	ppb	100
110) 1,2-Dclbenz	12.156	146	443002	50.86	ppb	100
111) 1,2-Dibromo-3-chloropr...	12.790	157	64394	53.00	ppb	100
112) Trielution Dichlorotol...	12.900	125	1106135	158.57	ppb	100
113) 1,3,5 Trichlorobenzene	12.943	180	310407	51.84	ppb	100
114) Coelution Dichlorotoluene	13.223	125	842606	109.97	ppb	100
115) 1,2,4-Tcbenzene	13.430	180	338853	53.94	ppb	100
116) Hexachlorobt	13.558	225	132682	52.62	ppb	100
117) Naphthalen	13.625	128	1080161	58.85	ppb	100
118) 1,2,3-Tclbenzene	13.808	180	341564	52.56	ppb	100
119) 2,4,5-Trichlorotolene	14.393	159	218674	55.01	ppb	100
120) 2,3,6-Trichlorotoluene	14.479	159	200190	55.32	ppb	100

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37141.D
Acq On : 13 Jul 2020 1:34 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 13 16:42:24 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

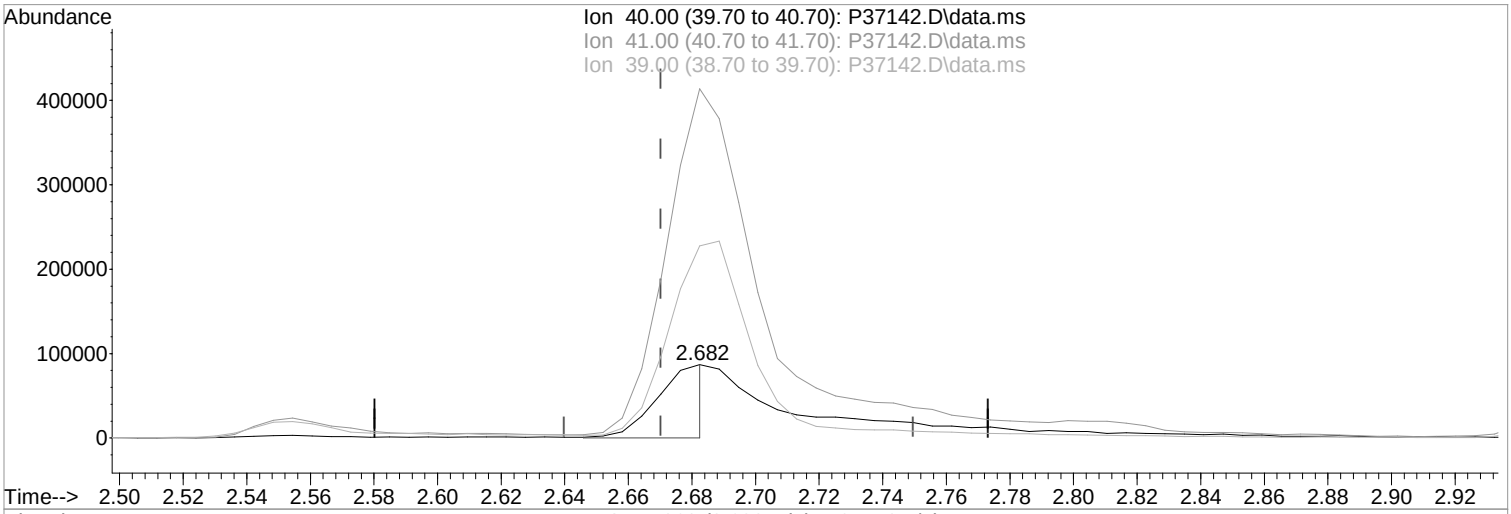


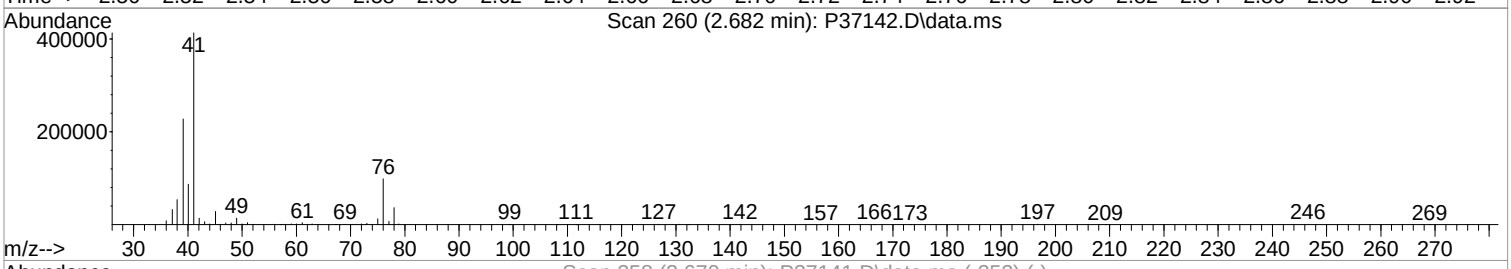
1st 07/14/20
2nd 07/14/20

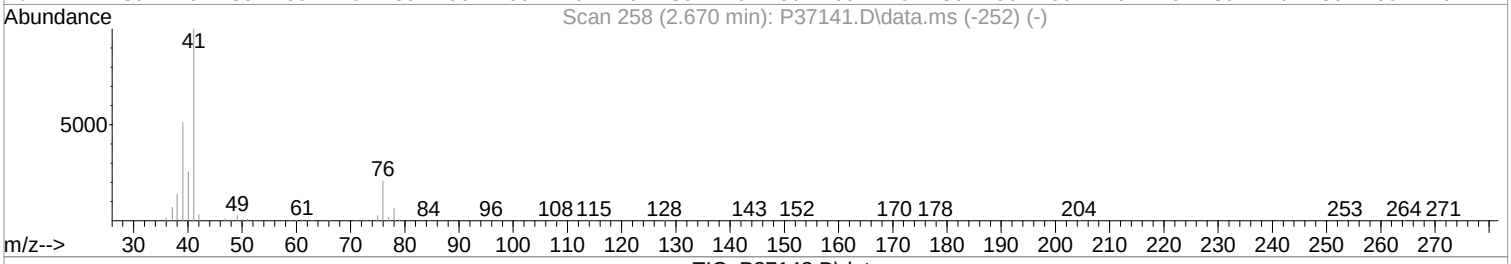
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37142.D\data.ms

(19) Acetonitrile

2.682min (+0.012) 370.39 ppb m

response 93460

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	474.90#
39.00	200.50	261.33#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

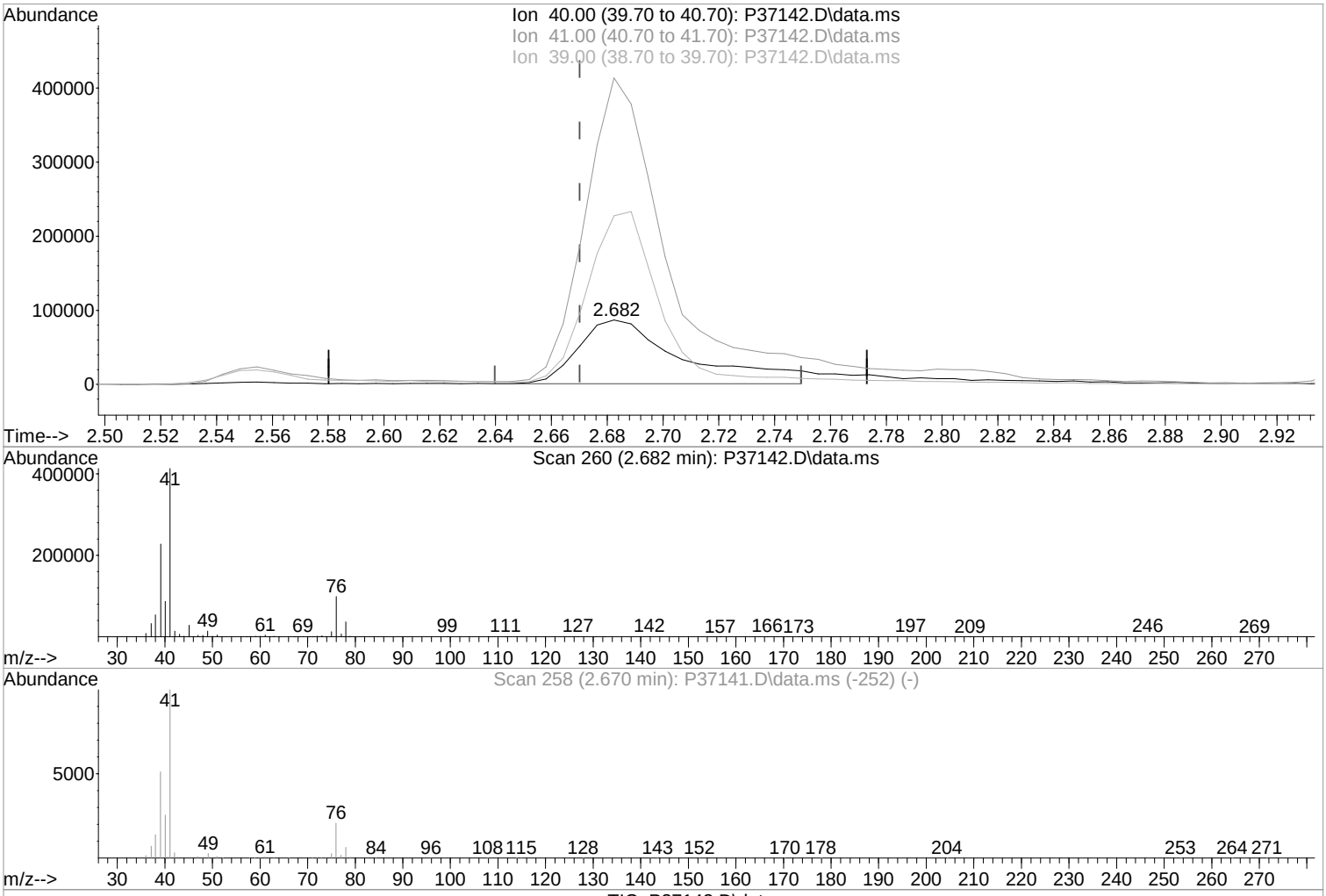
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37142.D\data.ms

(19) Acetonitrile

2.682min (+0.012) 899.83 ppb

response 227054

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	474.90#
39.00	200.50	261.33#
0.00	0.00	0.00

Manual Integration:

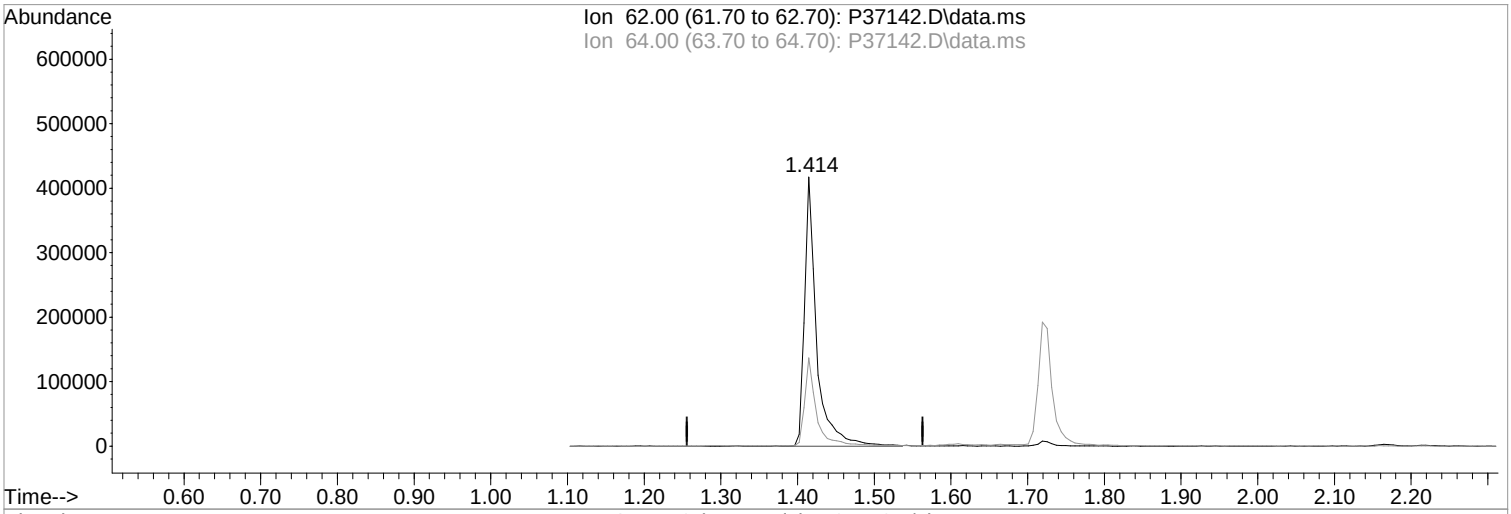
Before

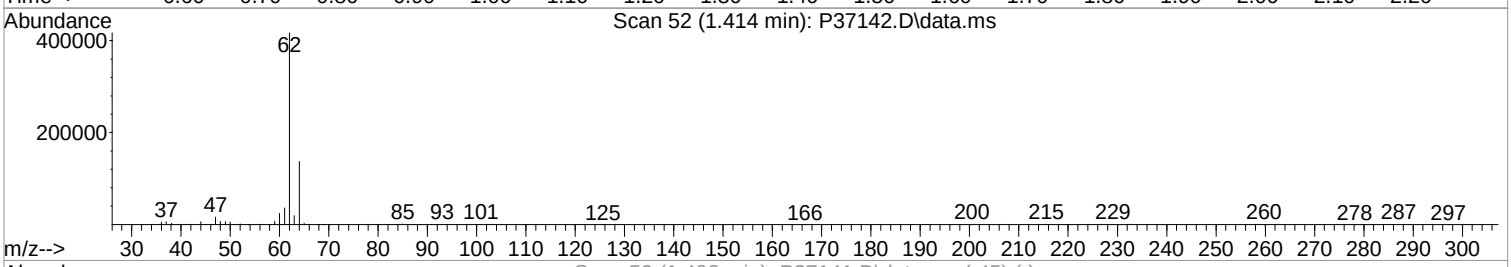
07/13/20

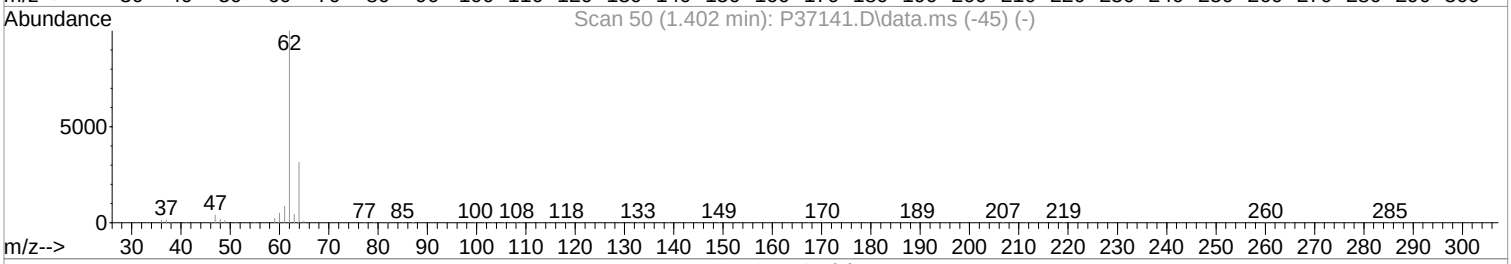
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37142.D\data.ms

(4) Vinyl Chloride (P)

1.414min (+0.012) 98.07 ppb m

response 456885

Ion	Exp%	Act%
62.00	100	100
64.00	31.60	32.80
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

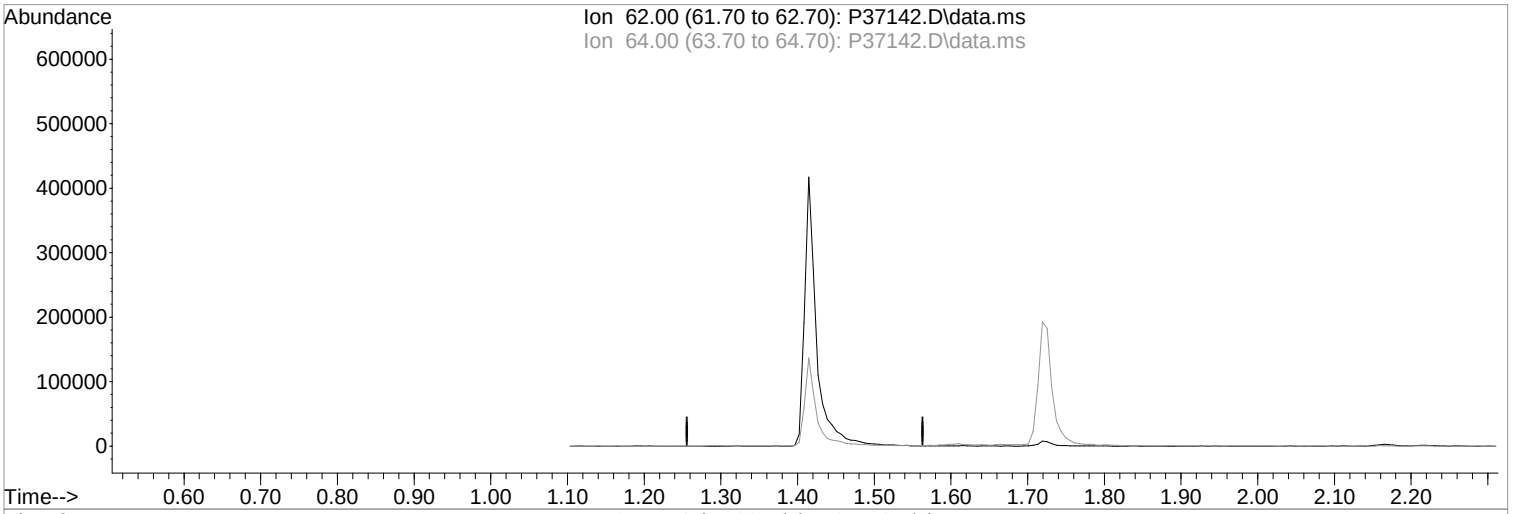
Peak not found.

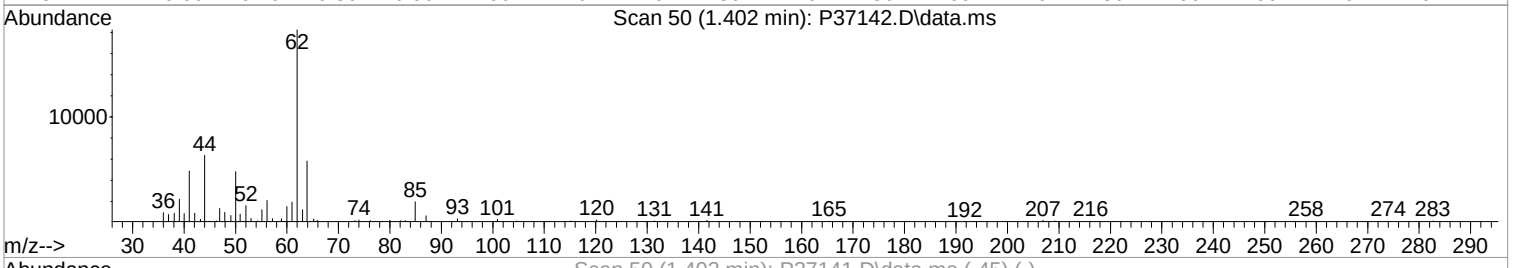
07/13/20

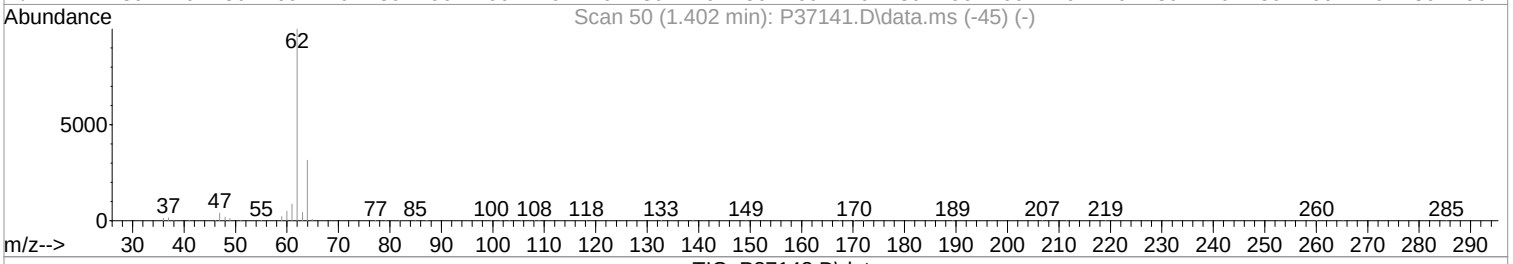
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37142.D\data.ms

(4) Vinyl Chloride (P)

1.402min (-1.402) 0.00 ppb

response 0

Ion	Exp%	Act%
62.00	100	0.00
64.00	31.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

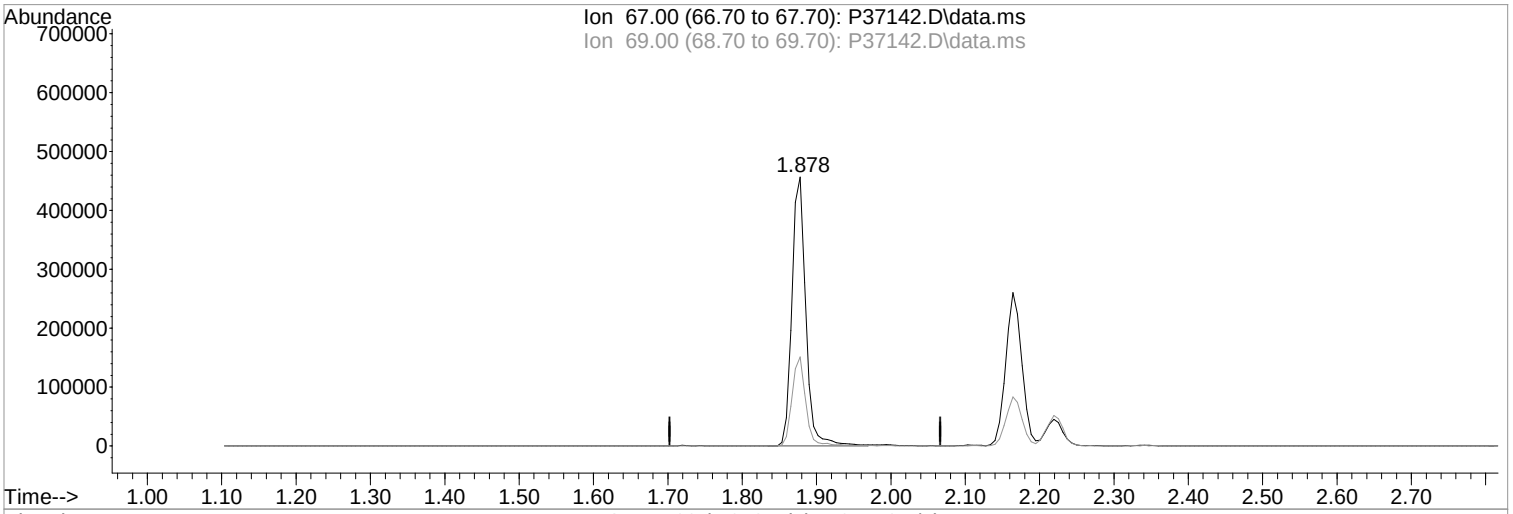
07/13/20

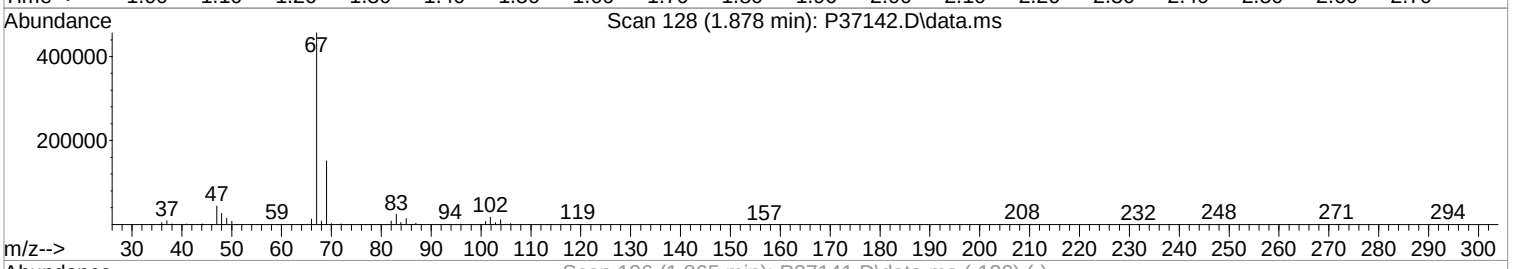
1st 07/14/20
2nd 07/14/20

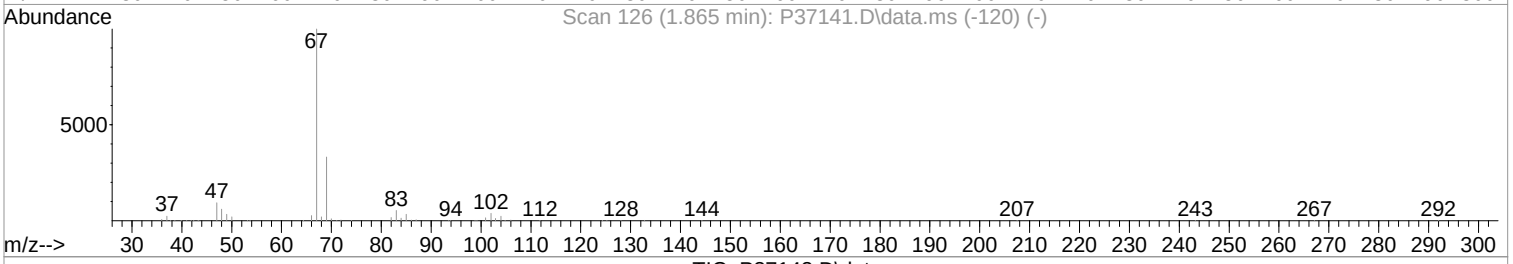
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37142.D\data.ms

(7) Freon 21

1.878min (+0.012) 101.39 ppb m

response 590319

Ion	Exp%	Act%
67.00	100	100
69.00	33.20	33.14
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Peak not found.

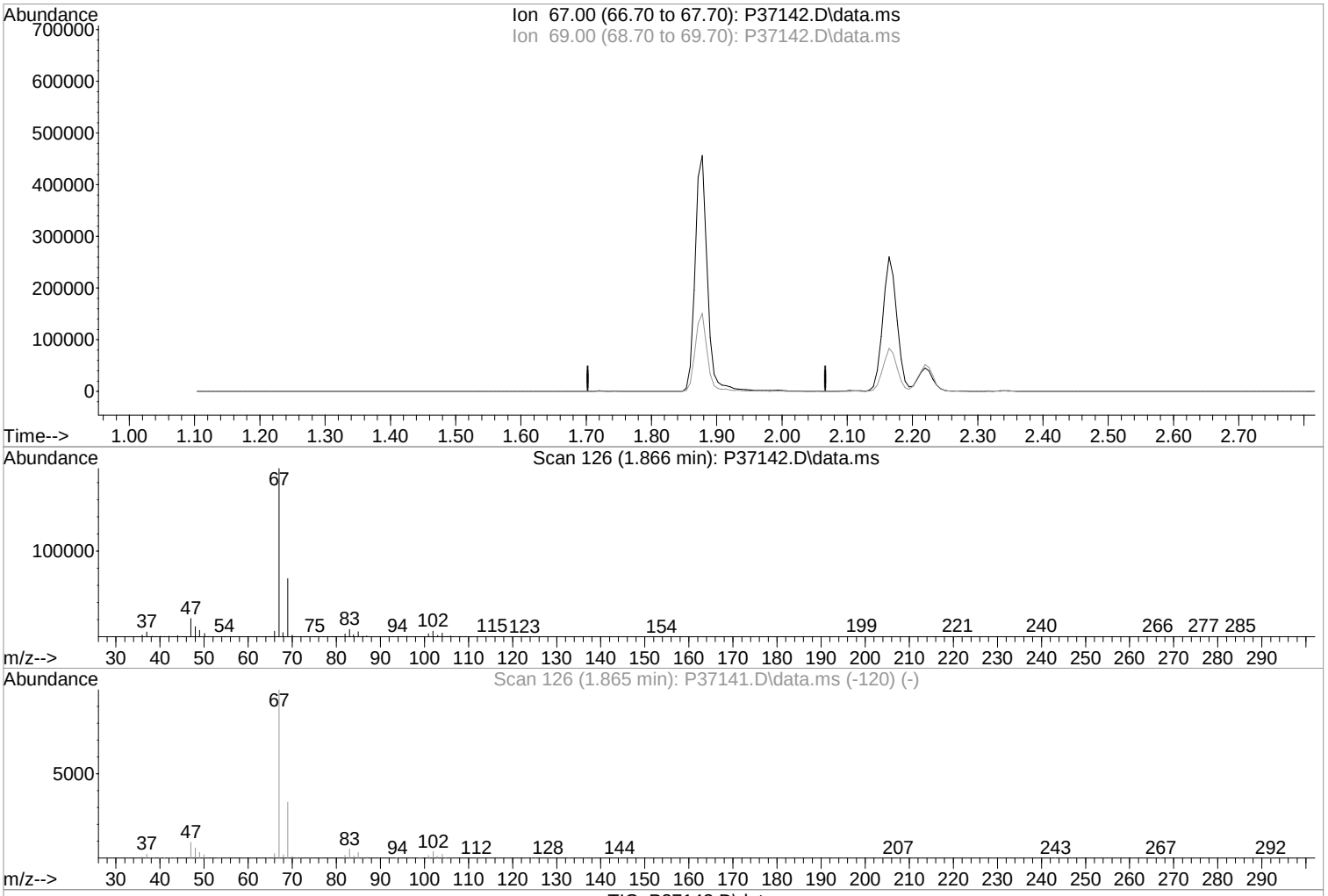
07/13/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:04:00 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37142.D\data.ms

(7) Freon 21

1.865min (-1.865) 0.00 ppb

response 0

Ion	Exp%	Act%
67.00	100	0.00
69.00	33.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:43:37 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.462	168	351105	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.535	114	521766	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	467596	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	245111	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.340	113	308936	103.11	ppb		0.01
Spiked Amount 50.000	Range 89 - 119		Recovery = 206.22%#				
48) surr1,1,2-dichloroetha...	5.865	65	410458	98.96	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 197.92%#				
65) SURR3,Toluene-d8	8.322	98	1409409	101.22	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 202.44%#				
70) SURR2,BFB	10.870	95	510509	99.51	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 199.02%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	369920	94.50	ppb		98
3) Chloromethane	1.341	50	474574	96.61	ppb		98
4) Vinyl Chloride	1.414	62	456885m	98.07	ppb		
5) Bromomethane	1.646	94	293988	77.50	ppb		98
6) Chloroethane	1.719	64	246877	97.96	ppb		99
7) Freon 21	1.878	67	590319m	101.39	ppb		
8) Trichlorofluoromethane	1.914	101	440795	93.57	ppb		96
9) Diethyl Ether	2.158	59	343706	100.95	ppb		97
10) Freon 123a	2.164	67	389591	96.95	ppb		98
11) Freon 123	2.219	83	439563	92.72	ppb		96
12) Acrolein	2.274	56	457583	496.33	ppb		96
13) 1,1-Diclethene	2.347	96	249953	92.06	ppb		94
14) Freon 113	2.341	101	286206	90.46	ppb		97
15) Acetone	2.414	43	172272	84.48	ppb		94
16) 2-Propanol	2.554	45	925337	2046.38	ppb		99
17) Iodomethane	2.481	142	411652	135.49	ppb		98
18) Carbon Disulfide	2.536	76	866568	83.68	ppb		99
19) Acetonitrile	2.682	40	93460m	370.39	ppb		
20) Allyl Chloride	2.689	76	172180	89.48	ppb	#	78
21) Methyl Acetate	2.719	43	520147	99.62	ppb		98
22) Methylene Chloride	2.811	84	345242	89.21	ppb		96
23) TBA	2.963	59	1450743	1982.55	ppb		98
24) Acrylonitrile	3.091	53	1095399	485.29	ppb		96
25) Methyl-t-Butyl Ether	3.109	73	1240164	98.69	ppb		98
26) trans-1,2-Dichloroethene	3.097	96	298460	94.38	ppb		96
28) 1,1-Diclethane	3.609	63	638332	91.58	ppb		96
29) Vinyl Acetate	3.701	86	65659	128.32	ppb	#	32
30) DIPE	3.713	45	1245289	102.24	ppb		91
31) 2-Chloro-1,3-Butadiene	3.725	53	572958	102.22	ppb		96
32) ETBE	4.249	59	1164625	102.48	ppb		99
33) 2,2-Dichloropropane	4.444	77	504011	98.24	ppb		96
34) cis-1,2-Dichloroethene	4.463	96	367833	90.04	ppb		97
35) 2-Butanone	4.536	43	265525	97.27	ppb		96
36) Propionitrile	4.652	54	460312	470.27	ppb		100
37) Bromochloromethane	4.865	130	217727	90.65	ppb		99
38) Methacrylonitrile	4.908	67	223255	96.29	ppb		97
39) Tetrahydrofuran	4.969	42	187493	87.48	ppb		86
40) Chloroform	5.054	83	576822	89.79	ppb		92
41) 1,1,1-Trichloroethane	5.316	97	477129	93.99	ppb		92

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:43:37 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.139	73	1148192	101.43	ppb		97
44) Cyclohexane	5.371	41	356405	104.17	ppb		93
46) Carbontetrachloride	5.572	117	368148	106.24	ppb		94
47) 1,1-Dichloropropene	5.597	75	480585	97.28	ppb		96
49) Benzene	5.920	78	1480054	98.17	ppb		97
50) 1,2-Dichloroethane	5.981	62	512779	97.40	ppb		98
51) Iso-Butyl Alcohol	5.975	43	678358	2099.28	ppb		100
52) n-Heptane	6.359	43	472430	101.19	ppb		99
53) 1-Butanol	6.913	56	1147709	5707.52	ppb		100
54) Trichloroethene	6.846	130	347320	92.92	ppb		97
55) Methylcyclohexane	7.060	55	498663	107.41	ppb		96
56) 1,2-Diclpropane	7.139	63	398857	99.73	ppb		96
57) Dibromomethane	7.285	93	227471	98.86	ppb		96
58) 1,4-Dioxane	7.352	88	170195	2064.59	ppb		88
59) Methyl Methacrylate	7.358	69	358890	103.28	ppb		99
60) Bromodichloromethane	7.505	83	447071	105.95	ppb		99
62) 2-Chloroethylvinyl Ether	7.907	63	192940	110.91	ppb		96
63) cis-1,3-Dichloropropene	8.041	75	621745	108.00	ppb		99
64) 4-Methyl-2-pentanone	8.248	43	555978	103.39	ppb		99
66) Toluene	8.395	91	1561995	97.91	ppb		97
67) trans-1,3-Dichloropropene	8.675	75	577422	110.30	ppb		96
68) Ethyl Methacrylate	8.803	69	631883	107.66	ppb		97
69) 1,1,2-Trichloroethane	8.864	97	361329	101.44	ppb		96
72) Tetrachloroethene	8.968	164	264632	92.67	ppb		98
73) 2-Hexanone	9.151	43	425573	102.39	ppb		96
74) 1,3-Dichloropropane	9.029	76	649090	98.71	ppb		94
75) Dibromochloromethane	9.254	129	323661	111.30	ppb		95
76) N-Butyl Acetate	9.291	43	821613	106.57	ppb		99
77) 1,2-Dibromoethane	9.352	107	358456	100.15	ppb		97
78) Chlorobenzene	9.827	112	998702	95.77	ppb		97
79) 3-CBTF	9.846	180	490111	101.50	ppb		95
80) 4-CBTF	9.894	180	447888	103.11	ppb		95
81) 1,1,1,2-Tetrachloroethane	9.919	131	329966	102.84	ppb		97
82) Ethylbenzene	9.943	106	545521	99.69	ppb	#	90
83) (m+p)Xylene	10.053	106	1299998	198.43	ppb		93
84) o-Xylene	10.407	106	646402	101.06	ppb		93
85) Styrene	10.425	104	1130565	104.04	ppb		99
87) Bromoform	10.589	173	212335	105.19	ppb		98
88) 2-CBTF	10.657	180	486720	97.88	ppb		99
89) Isopropylbenzene	10.742	105	1613299	95.34	ppb		100
90) Cyclohexanone	10.827	55	2183152	2147.04	ppb		96
91) trans-1,4-Dichloro-2-B...	11.065	53	143652	101.36	ppb		94
92) 1,1,2,2-Tetrachloroethane	11.016	83	543463	99.35	ppb		99
93) Bromobenzene	10.992	156	416825	94.41	ppb		98
94) 1,2,3-Trichloropropane	11.047	110	167527	94.71	ppb	#	90
95) n-Propylbenzene	11.095	91	1945764	100.21	ppb		95
96) 2-Chlorotoluene	11.156	91	1217391	96.53	ppb		100
97) 3-Chlorotoluene	11.211	91	1194110	99.13	ppb		98
98) 4-Chlorotoluene	11.254	91	1383544	97.98	ppb		99
99) 1,3,5-Trimethylbenzene	11.242	105	1436445	99.36	ppb		99
100) tert-Butylbenzene	11.516	119	1175736	97.15	ppb		99
101) 1,2,4-Trimethylbenzene	11.553	105	1452947	99.86	ppb		97
102) 3,4-DCBTF	11.620	214	411213	103.17	ppb		99
103) sec-Butylbenzene	11.693	105	1736782	100.05	ppb		99
104) p-Isopropyltoluene	11.815	119	1531436	102.33	ppb		98
105) 1,3-Dclbenz	11.784	146	833947	96.41	ppb		100

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:43:37 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

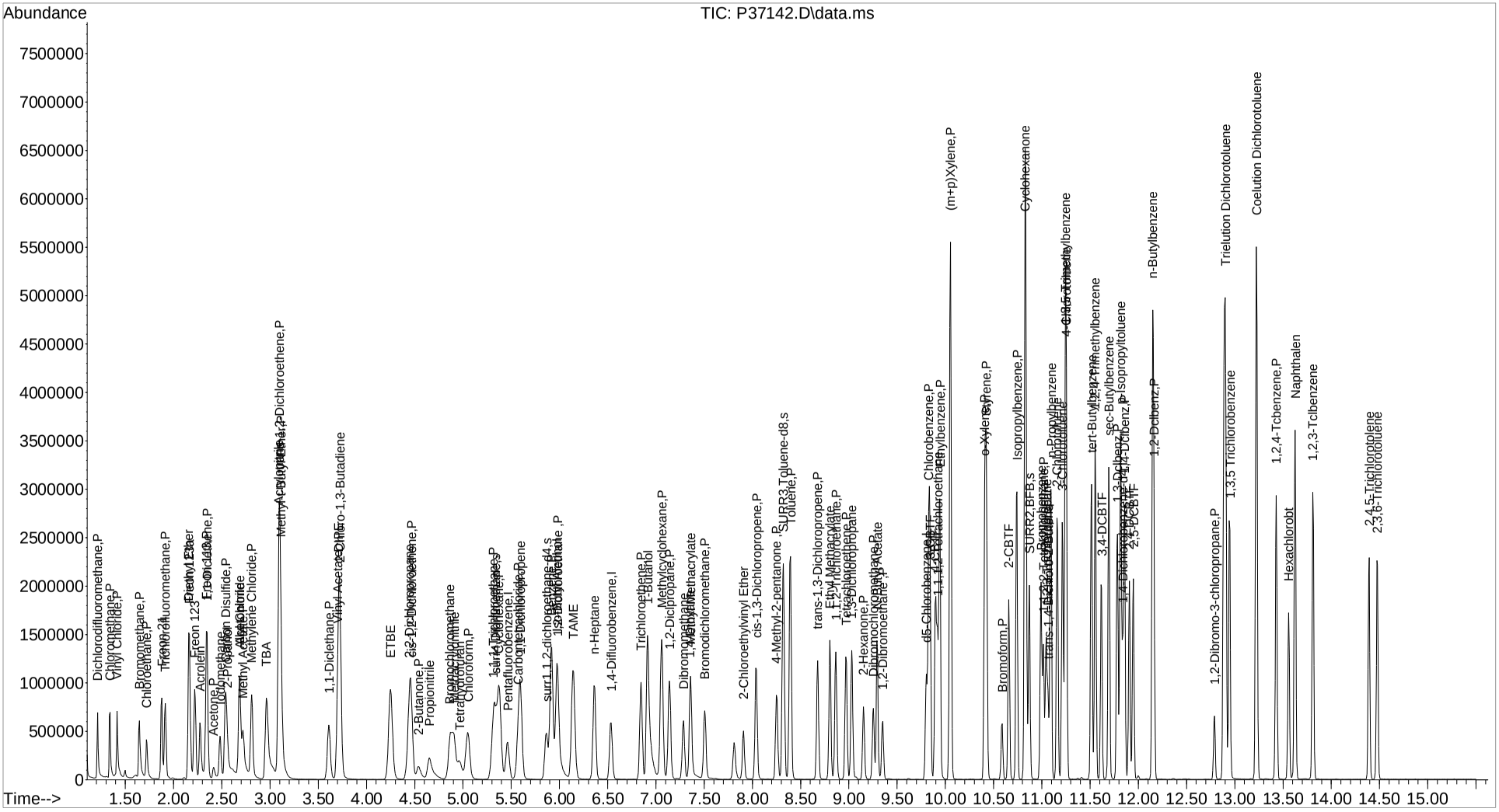
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.858	146	852359	96.84	ppb	99
107) 2,4-DCBTF	11.906	214	397366	106.45	ppb	99
108) 2,5-DCBTF	11.949	214	427662	106.93	ppb	99
109) n-Butylbenzene	12.150	91	1471600	104.45	ppb	99
110) 1,2-Dclbenz	12.162	146	855166	97.40	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.790	157	136178	111.19	ppb	94
112) Trielution Dichlorotol...	12.900	125	2330970	331.46	ppb	100
113) 1,3,5 Trichlorobenzene	12.949	180	658915	109.15	ppb	95
114) Coelution Dichlorotoluene	13.223	125	1732170	224.25	ppb	98
115) 1,2,4-Tcbenzene	13.430	180	685916	108.30	ppb	98
116) Hexachlorobt	13.558	225	256879	101.05	ppb	99
117) Naphthalen	13.625	128	2095497	113.24	ppb	97
118) 1,2,3-Tclbenzene	13.808	180	701984	107.15	ppb	97
119) 2,4,5-Trichlorotolene	14.394	159	485386	121.12	ppb	99
120) 2,3,6-Trichlorotoluene	14.479	159	443363	121.53	ppb	99

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37142.D
Acq On : 13 Jul 2020 1:56 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 16:43:37 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

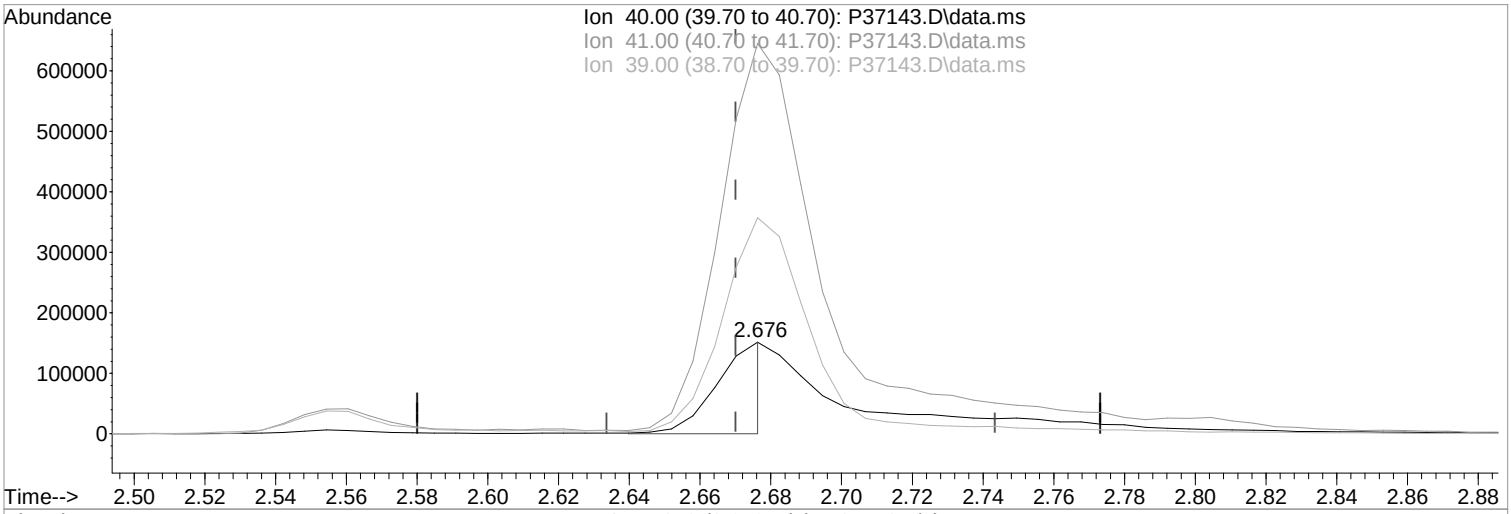


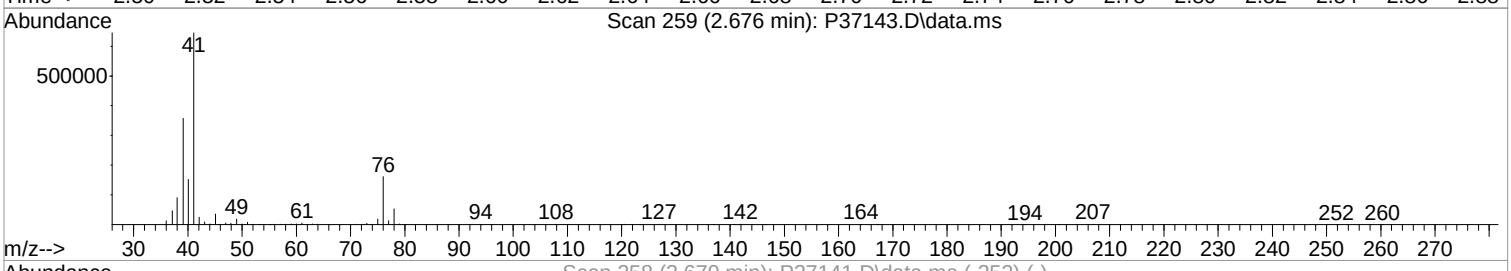
1st 07/14/20
2nd 07/14/20

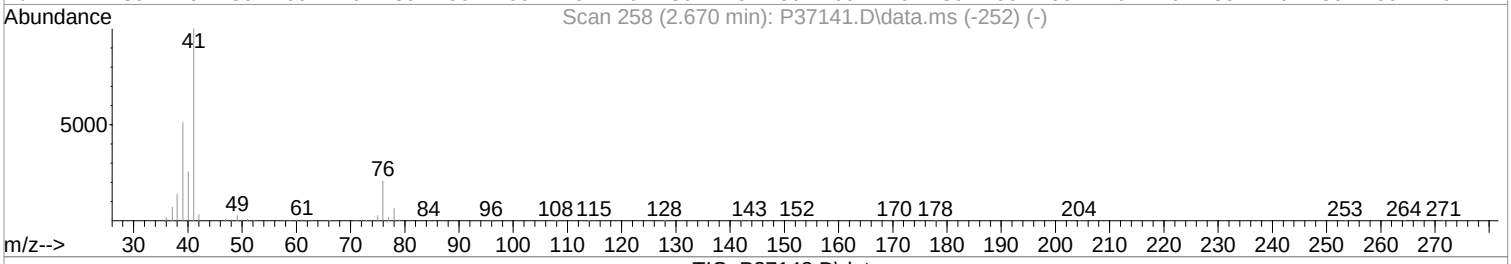
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:04:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37143.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 502.76 ppb m

response 145190

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	426.65#
39.00	200.50	236.04#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

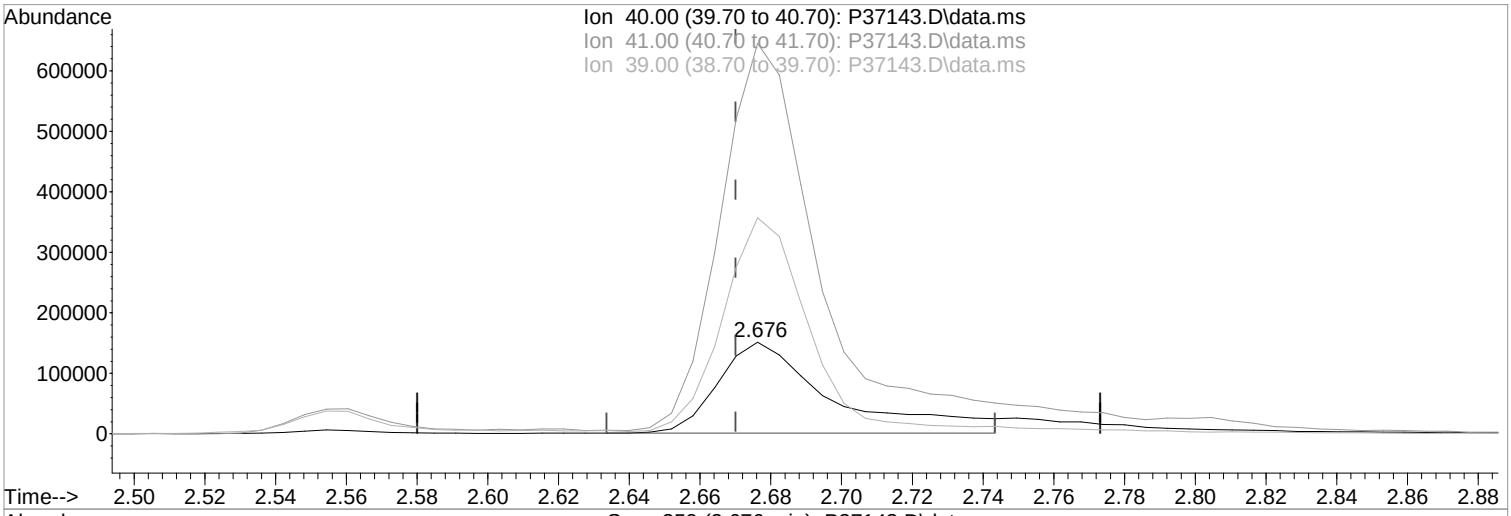
07/13/20

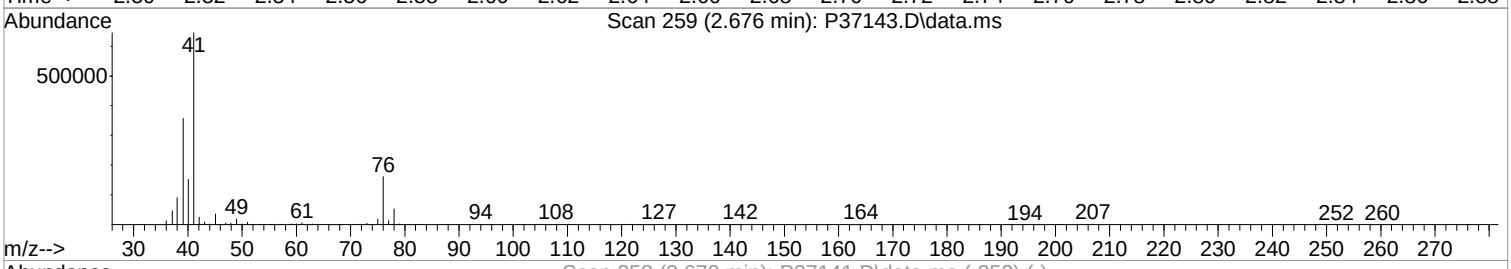
1st 07/14/20
2nd 07/14/20

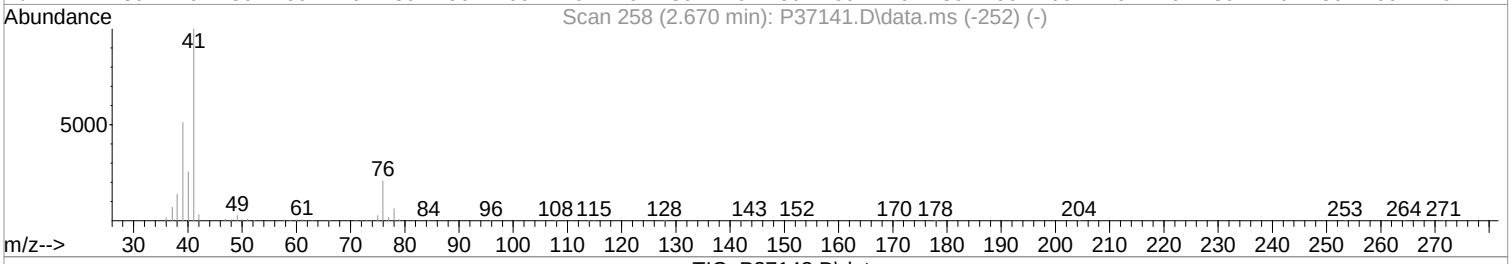
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:04:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37143.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 1172.71 ppb

response 338661

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	426.65#
39.00	200.50	236.04#
0.00	0.00	0.00

Manual Integration:

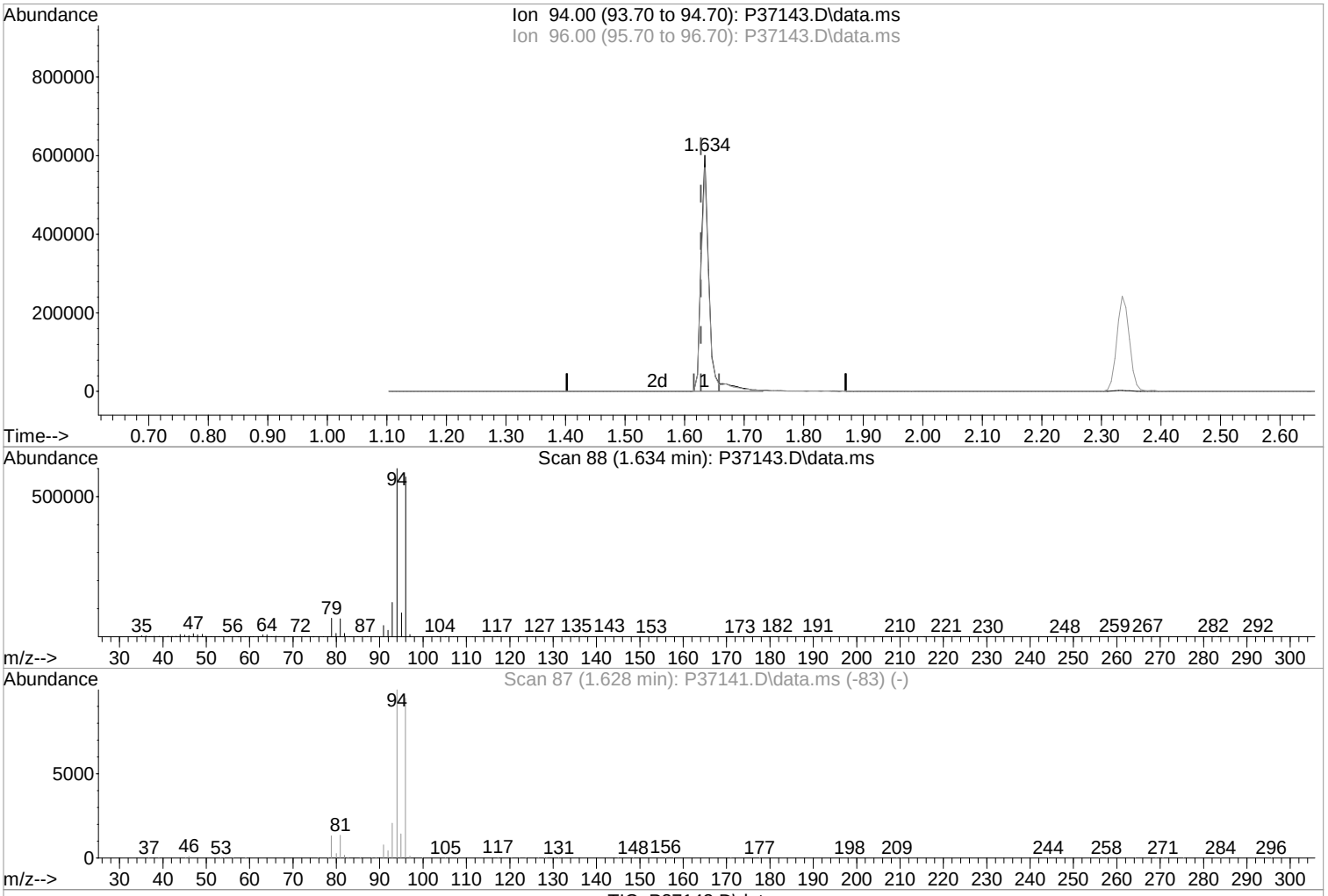
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:04:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37143.D\data.ms

(5) Bromomethane (P)

1.634min (+0.006) 132.03 ppb m

response 573215

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	94.92
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

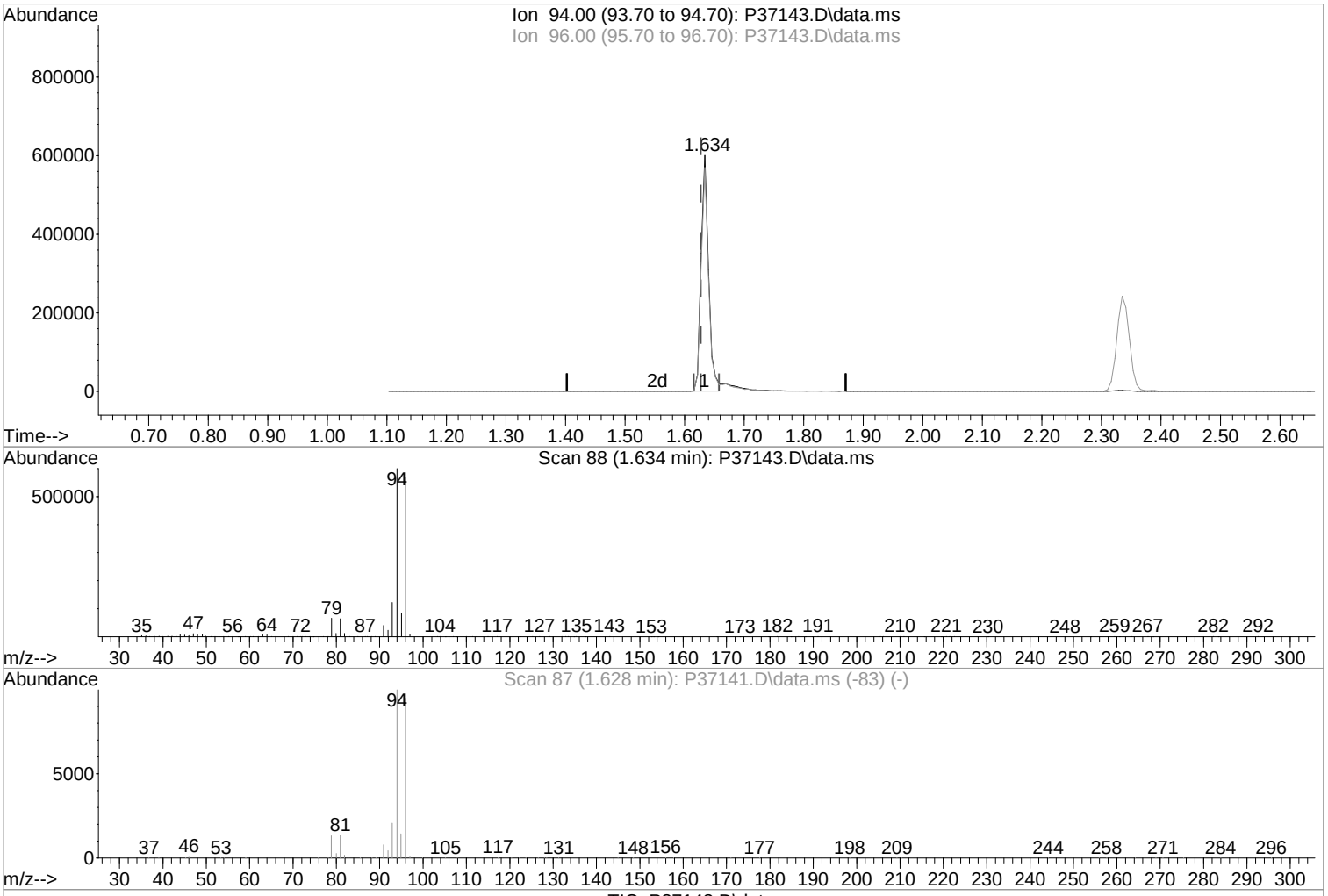
Poor integration.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:04:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration



TIC: P37143.D\data.ms

(5) Bromomethane (P)

1.634min (+0.006) 121.45 ppb

response 527272

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	94.92
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:45:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	401830	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	556613	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	495556	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	267058	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	608081	190.25	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 380.50%#				
48) surr1,1,2-dichloroetha...	5.859	65	820523	185.44	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 370.88%#				
65) SURR3,Toluene-d8	8.322	98	2707696	182.28	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 364.56%#				
70) SURR2,BFB	10.870	95	1061612	193.98	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 387.96%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.207	85	537989	120.08	ppb		97
3) Chloromethane	1.335	50	691507	123.00	ppb		99
4) Vinyl Chloride	1.408	62	659084	123.61	ppb		99
5) Bromomethane	1.634	94	573215m	132.03	ppb		
6) Chloroethane	1.707	64	422190	146.38	ppb		94
7) Freon 21	1.865	67	817758	122.73	ppb		99
8) Trichlorofluoromethane	1.902	101	647224	120.05	ppb		96
9) Diethyl Ether	2.152	59	503901	129.32	ppb		94
10) Freon 123a	2.158	67	549534	119.49	ppb		100
11) Freon 123	2.213	83	622049	114.65	ppb		97
12) Acrolein	2.268	56	680089	644.56	ppb		96
13) 1,1-Diclethene	2.335	96	357088	114.92	ppb		89
14) Freon 113	2.335	101	407196	112.46	ppb		98
15) Acetone	2.414	43	244946	104.95	ppb		93
16) 2-Propanol	2.554	45	1467334	2835.38	ppb		99
17) Iodomethane	2.475	142	577594	166.11	ppb		100
18) Carbon Disulfide	2.530	76	1256373	106.00	ppb		99
19) Acetonitrile	2.676	40	145190m	502.76	ppb		
20) Allyl Chloride	2.676	76	262742	119.31	ppb	#	87
21) Methyl Acetate	2.713	43	752824	125.98	ppb		97
22) Methylene Chloride	2.804	84	489471	110.51	ppb		97
23) TBA	2.969	59	2308239	2756.19	ppb		97
24) Acrylonitrile	3.091	53	1621560	627.71	ppb		98
25) Methyl-t-Butyl Ether	3.103	73	1782902	123.97	ppb		98
26) trans-1,2-Dichloroethene	3.091	96	416908	115.19	ppb		96
28) 1,1-Diclethane	3.603	63	916054	114.83	ppb		98
29) Vinyl Acetate	3.707	86	95236	162.62	ppb	#	90
30) DIPE	3.713	45	1821612	130.67	ppb		99
31) 2-Chloro-1,3-Butadiene	3.719	53	833479	129.93	ppb		97
32) ETBE	4.243	59	1714823	131.85	ppb		98
33) 2,2-Dichloropropane	4.438	77	720608	122.73	ppb		99
34) cis-1,2-Dichloroethene	4.456	96	523387	111.94	ppb		97
35) 2-Butanone	4.536	43	397784	127.33	ppb		97
36) Propionitrile	4.645	54	691699	617.46	ppb		95
37) Bromochloromethane	4.865	130	317727	115.58	ppb		97
38) Methacrylonitrile	4.901	67	326539	123.05	ppb		100
39) Tetrahydrofuran	4.962	42	296586	120.92	ppb		89
40) Chloroform	5.048	83	804883	109.48	ppb		98
41) 1,1,1-Trichloroethane	5.310	97	691825	119.08	ppb		95

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:45:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.139	73	1680663	129.72	ppb		98
44) Cyclohexane	5.371	41	492794	135.01	ppb		96
46) Carbontetrachloride	5.572	117	544978	147.42	ppb		100
47) 1,1-Dichloropropene	5.590	75	683574	129.70	ppb		98
49) Benzene	5.913	78	2103233	130.78	ppb		95
50) 1,2-Dichloroethane	5.974	62	734056	130.70	ppb		99
51) Iso-Butyl Alcohol	5.974	43	1102860	3199.29	ppb		100
52) n-Heptane	6.359	43	698705	140.28	ppb		96
53) 1-Butanol	6.919	56	1842912	8590.98	ppb		100
54) Trichloroethene	6.846	130	502603	126.04	ppb		98
55) Methylcyclohexane	7.060	55	699460	141.22	ppb		97
56) 1,2-Diclpropane	7.139	63	577889	135.46	ppb		97
57) Dibromomethane	7.285	93	326706	133.10	ppb		97
58) 1,4-Dioxane	7.346	88	257579	2929.01	ppb		99
59) Methyl Methacrylate	7.358	69	537631	145.04	ppb		98
60) Bromodichloromethane	7.505	83	643433	142.94	ppb		98
62) 2-Chloroethylvinyl Ether	7.907	63	315396	169.95	ppb		96
63) cis-1,3-Dichloropropene	8.035	75	895804	145.87	ppb		98
64) 4-Methyl-2-pentanone	8.248	43	862552	150.35	ppb		99
66) Toluene	8.389	91	2226507	130.83	ppb		97
67) trans-1,3-Dichloropropene	8.675	75	845631	151.42	ppb		97
68) Ethyl Methacrylate	8.803	69	944813	150.90	ppb		98
69) 1,1,2-Trichloroethane	8.864	97	517493	136.19	ppb		94
72) Tetrachloroethene	8.968	164	391204	129.27	ppb		97
73) 2-Hexanone	9.151	43	675525	153.36	ppb		96
74) 1,3-Dichloropropane	9.029	76	941398	135.08	ppb		95
75) Dibromochloromethane	9.254	129	496799	161.20	ppb		94
76) N-Butyl Acetate	9.291	43	1268841	155.29	ppb		99
77) 1,2-Dibromoethane	9.346	107	518815	136.78	ppb		100
78) Chlorobenzene	9.827	112	1445654	130.81	ppb		98
79) 3-CBTF	9.846	180	753803	147.30	ppb		93
80) 4-CBTF	9.894	180	677363	147.14	ppb		97
81) 1,1,1,2-Tetrachloroethane	9.919	131	492697	144.89	ppb		97
82) Ethylbenzene	9.943	106	793333	136.80	ppb	#	86
83) (m+p)Xylene	10.053	106	1900617	273.74	ppb	#	82
84) o-Xylene	10.413	106	958131	141.35	ppb	#	87
85) Styrene	10.425	104	1659909	144.14	ppb		97
87) Bromoform	10.589	173	332014	150.96	ppb		100
88) 2-CBTF	10.656	180	749906	138.41	ppb		99
89) Isopropylbenzene	10.742	105	2337827	126.80	ppb		98
90) Cyclohexanone	10.827	55	3137757	2832.26	ppb		93
91) trans-1,4-Dichloro-2-B...	11.065	53	225537	146.07	ppb		91
92) 1,1,2,2-Tetrachloroethane	11.016	83	829098	139.12	ppb		98
93) Bromobenzene	10.992	156	622725	129.46	ppb		98
94) 1,2,3-Trichloropropane	11.047	110	258292	134.02	ppb		94
95) n-Propylbenzene	11.095	91	2777872	131.31	ppb		92
96) 2-Chlorotoluene	11.162	91	1785254	129.93	ppb		95
97) 3-Chlorotoluene	11.211	91	1866608	142.22	ppb		97
98) 4-Chlorotoluene	11.254	91	1953681	126.99	ppb		96
99) 1,3,5-Trimethylbenzene	11.242	105	2079610	132.02	ppb		96
100) tert-Butylbenzene	11.516	119	1754015	133.03	ppb		99
101) 1,2,4-Trimethylbenzene	11.553	105	2105397	132.81	ppb		93
102) 3,4-DCBTF	11.620	214	633179	145.80	ppb		100
103) sec-Butylbenzene	11.693	105	2504183	132.40	ppb		96
104) p-Isopropyltoluene	11.815	119	2216856	135.96	ppb		95
105) 1,3-Dclbenz	11.784	146	1230767	130.60	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:45:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

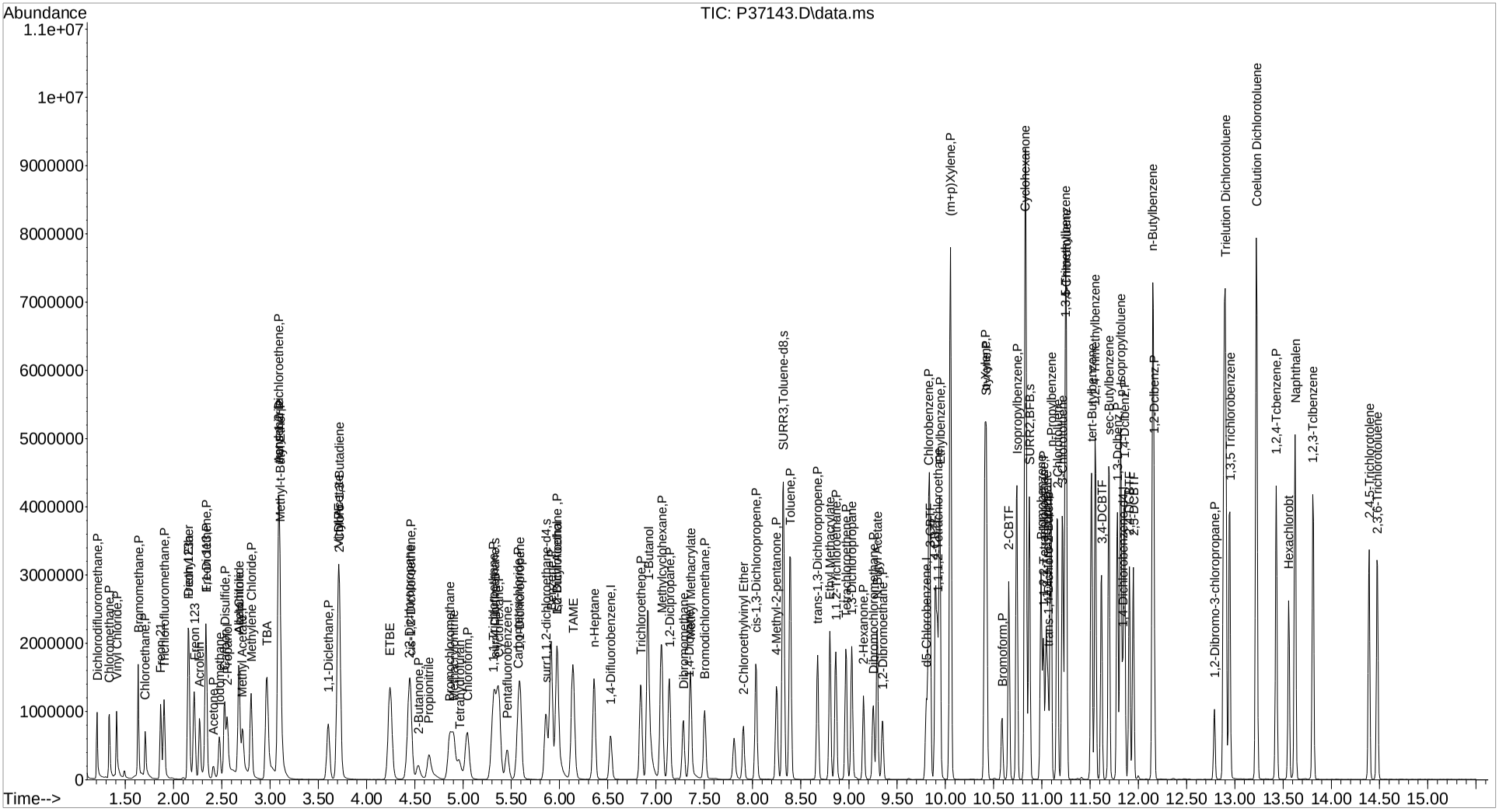
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	1266516	132.08	ppb	100
107) 2,4-DCBTF	11.906	214	589997	145.07	ppb	99
108) 2,5-DCBTF	11.949	214	637893	146.39	ppb	97
109) n-Butylbenzene	12.150	91	2152130	140.20	ppb	95
110) 1,2-Dclbenz	12.162	146	1258220	131.52	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.790	157	212205	159.03	ppb	98
112) Trielution Dichlorotol...	12.900	125	3339121	435.79	ppb	96
113) 1,3,5 Trichlorobenzene	12.949	180	956029	145.35	ppb	96
114) Coelution Dichlorotoluene	13.223	125	2450999	291.24	ppb	94
115) 1,2,4-Tcbenzene	13.430	180	994072	144.06	ppb	98
116) Hexachlorobt	13.558	225	389646	140.68	ppb	98
117) Naphthalen	13.625	128	2864370	142.07	ppb	93
118) 1,2,3-Tclbenzene	13.808	180	989842	138.67	ppb	96
119) 2,4,5-Trichlorotolene	14.394	159	712426	163.16	ppb	97
120) 2,3,6-Trichlorotoluene	14.479	159	635742	159.94	ppb	99

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37143.D
Acq On : 13 Jul 2020 2:18 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 8 Sample Multiplier: 1

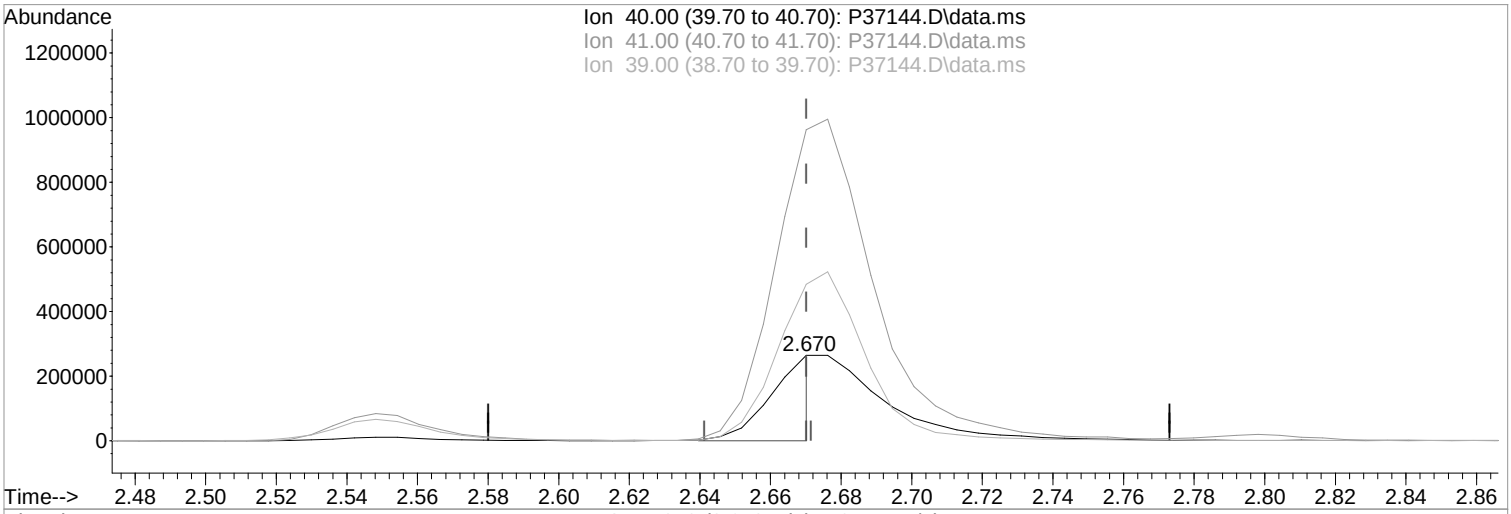
Quant Time: Jul 13 16:45:41 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

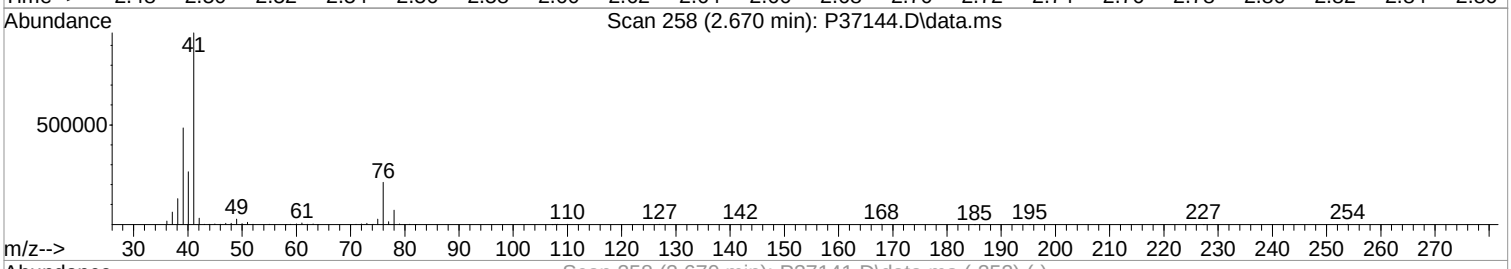


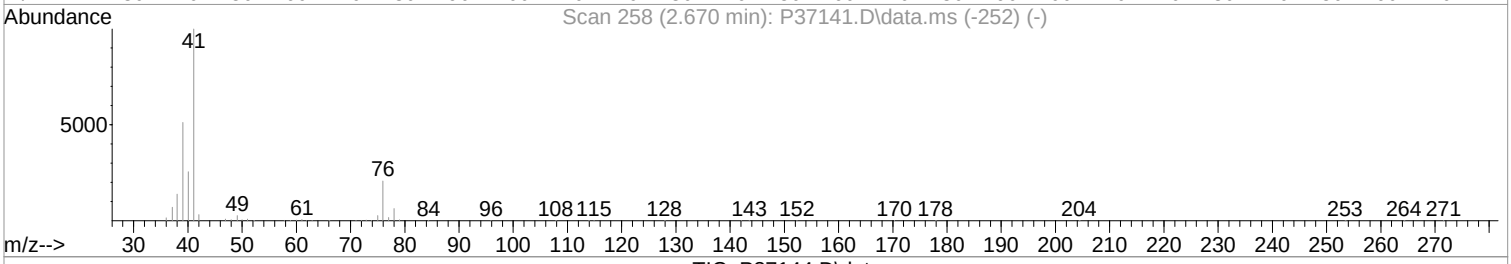
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:04:06 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37144.D\data.ms

(19) Acetonitrile

2.670min (0.000) 930.54 ppb m

response 228407

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	363.68#
39.00	200.50	182.99
0.00	0.00	0.00

Manual Integration:

After

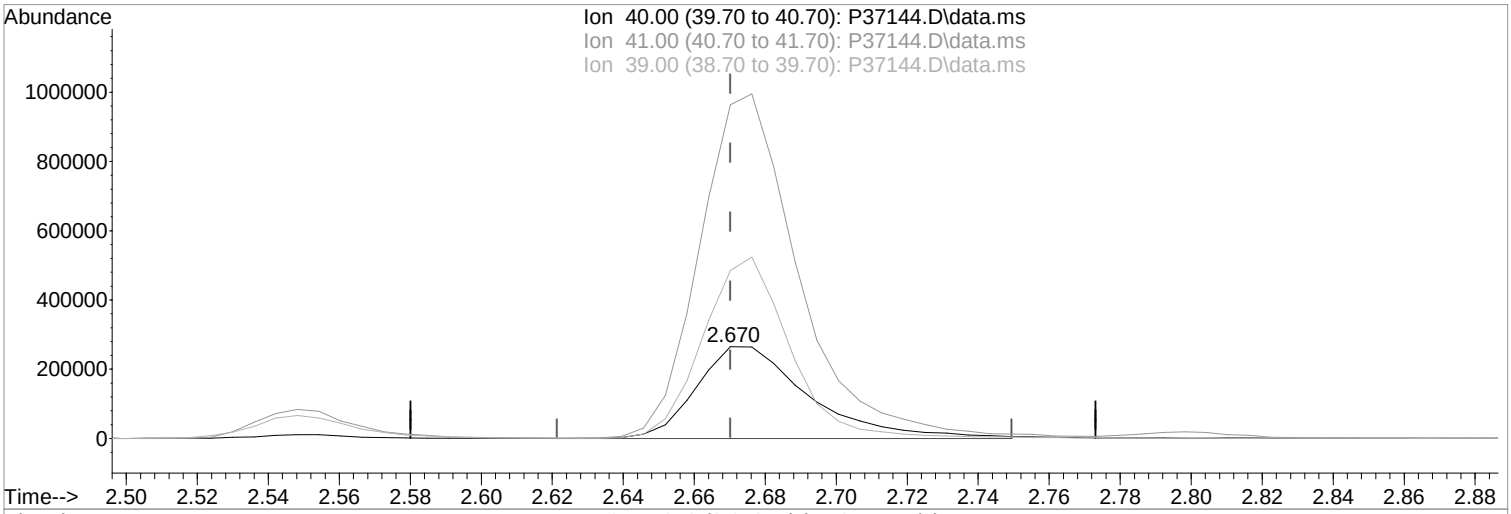
Poor integration.

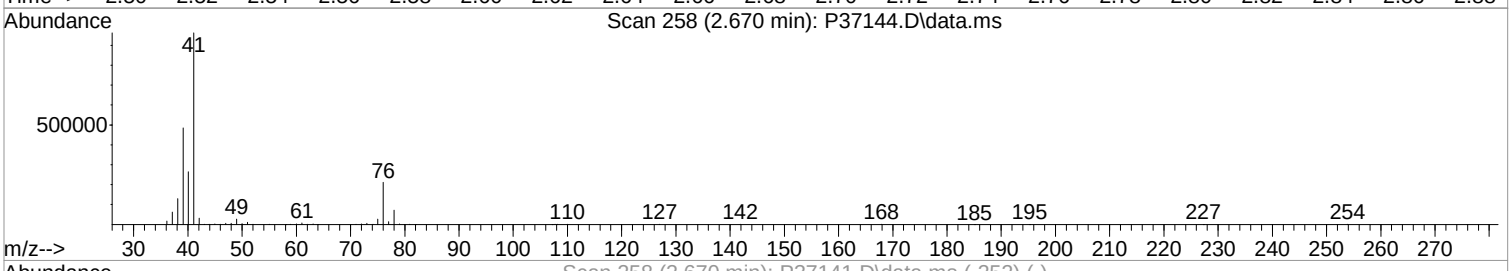
07/13/20

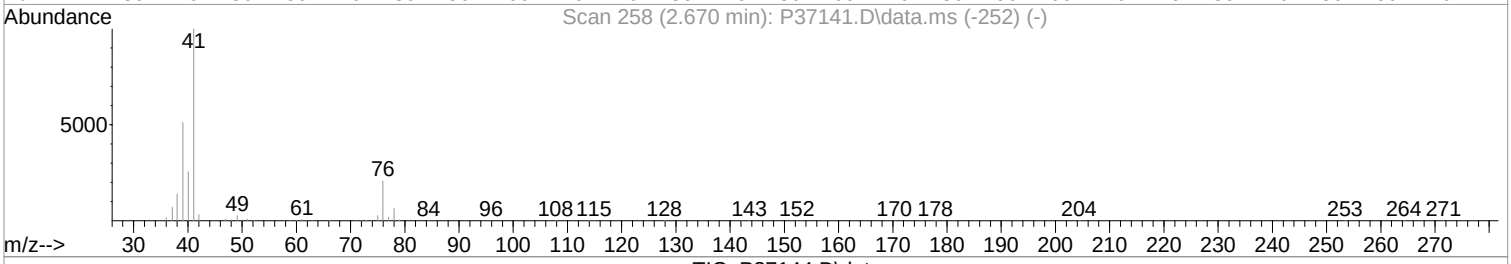
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:04:06 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration







TIC: P37144.D\data.ms

(19) Acetonitrile

2.670min (0.000) 2383.10 ppb

response 584947

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	363.68#
39.00	200.50	182.99
0.00	0.00	0.00

Manual Integration:

Before

07/13/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:47:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	341541	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	532005	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	468649	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	263400	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.328	113	156873	51.35	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.70%				
48) surr1,1,2-dichloroetha...	5.859	65	211137	49.93	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 99.86%				
65) SURR3,Toluene-d8	8.315	98	718104	50.58	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.16%				
70) SURR2,BFB	10.870	95	274920	52.56	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 105.12%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.201	85	759974	199.58	ppb		97
3) Chloromethane	1.329	50	1027449	215.02	ppb		97
4) Vinyl Chloride	1.402	62	940025	207.42	ppb		97
5) Bromomethane	1.628	94	758907	205.65	ppb		98
6) Chloroethane	1.701	64	453526	185.01	ppb		95
7) Freon 21	1.865	67	1188637	209.88	ppb		98
8) Trichlorofluoromethane	1.902	101	897137	195.78	ppb		95
9) Diethyl Ether	2.146	59	705277	212.96	ppb		95
10) Freon 123a	2.152	67	800491	204.78	ppb		96
11) Freon 123	2.207	83	900525	195.28	ppb		97
12) Acrolein	2.268	56	905792	1010.01	ppb		100
13) 1,1-Diclethene	2.335	96	504242	190.92	ppb		90
14) Freon 113	2.329	101	574224	186.58	ppb		97
15) Acetone	2.408	43	332614	167.67	ppb		95
16) 2-Propanol	2.548	45	2015414	4581.90	ppb		99
17) Iodomethane	2.469	142	828135	280.21	ppb		97
18) Carbon Disulfide	2.524	76	1722126	170.95	ppb		99
19) Acetonitrile	2.670	40	228407m	930.54	ppb		
20) Allyl Chloride	2.676	76	370522	197.96	ppb		94
21) Methyl Acetate	2.713	43	1014975	199.84	ppb		97
22) Methylene Chloride	2.798	84	685334	182.04	ppb		97
23) TBA	2.957	59	3070280	4313.26	ppb		100
24) Acrylonitrile	3.085	53	2241592	1020.90	ppb		94
25) Methyl-t-Butyl Ether	3.097	73	2494635	204.08	ppb		99
26) trans-1,2-Dichloroethene	3.085	96	591177	192.18	ppb		98
28) 1,1-Diclethane	3.597	63	1289413	190.16	ppb		96
29) Vinyl Acetate	3.694	86	117164	235.38	ppb	#	80
30) DIPE	3.707	45	2475774	208.95	ppb		99
31) 2-Chloro-1,3-Butadiene	3.713	53	1147233	210.40	ppb		95
32) ETBE	4.237	59	2342933	211.94	ppb		99
33) 2,2-Dichloropropane	4.432	77	1016698	203.72	ppb		97
34) cis-1,2-Dichloroethene	4.450	96	736157	185.24	ppb		96
35) 2-Butanone	4.530	43	537999	202.61	ppb		95
36) Propionitrile	4.645	54	947107	994.70	ppb		100
37) Bromochloromethane	4.859	130	441887	189.12	ppb		97
38) Methacrylonitrile	4.895	67	455331	201.88	ppb		100
39) Tetrahydrofuran	4.950	42	405964	194.73	ppb		94
40) Chloroform	5.042	83	1137764	182.07	ppb		97
41) 1,1,1-Trichloroethane	5.310	97	989898	200.47	ppb		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:47:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.133	73	2305147	209.33	ppb		98
44) Cyclohexane	5.365	41	703590	201.68	ppb		96
46) Carbontetrachloride	5.566	117	781980	221.31	ppb		99
47) 1,1-Dichloropropene	5.590	75	985391	195.62	ppb		98
49) Benzene	5.913	78	2944922	191.58	ppb		96
50) 1,2-Dichloroethane	5.974	62	1017495	189.55	ppb		98
51) Iso-Butyl Alcohol	5.974	43	1552274	4711.28	ppb		95
52) n-Heptane	6.358	43	989930	207.95	ppb		97
53) 1-Butanol	6.913	56	2491349	12150.95	ppb		99
54) Trichloroethene	6.840	130	712480	186.94	ppb		98
55) Methylcyclohexane	7.053	55	1011892	213.76	ppb		95
56) 1,2-Diclpropane	7.139	63	804012	197.18	ppb		99
57) Dibromomethane	7.279	93	447304	190.66	ppb		94
58) 1,4-Dioxane	7.346	88	372475	4431.44	ppb		97
59) Methyl Methacrylate	7.358	69	756439	213.50	ppb		98
60) Bromodichloromethane	7.505	83	924107	214.78	ppb		97
62) 2-Chloroethylvinyl Ether	7.907	63	434418	244.91	ppb		90
63) cis-1,3-Dichloropropene	8.035	75	1258222	214.36	ppb		99
64) 4-Methyl-2-pentanone	8.248	43	1163474	212.19	ppb		99
66) Toluene	8.389	91	3041109	186.96	ppb		92
67) trans-1,3-Dichloropropene	8.675	75	1185546	222.10	ppb		98
68) Ethyl Methacrylate	8.803	69	1327027	221.75	ppb		99
69) 1,1,2-Trichloroethane	8.864	97	716799	197.36	ppb		94
72) Tetrachloroethene	8.968	164	551633	192.74	ppb		98
73) 2-Hexanone	9.151	43	903712	216.94	ppb		96
74) 1,3-Dichloropropane	9.029	76	1313216	199.25	ppb		96
75) Dibromochloromethane	9.254	129	694358	238.25	ppb		98
76) N-Butyl Acetate	9.291	43	1749509	226.41	ppb		97
77) 1,2-Dibromoethane	9.346	107	734158	204.66	ppb		100
78) Chlorobenzene	9.827	112	2014847	192.78	ppb		98
79) 3-CBTF	9.846	180	1029399	212.70	ppb		95
80) 4-CBTF	9.894	180	931161	213.88	ppb		96
81) 1,1,1,2-Tetrachloroethane	9.919	131	694302	215.90	ppb		99
82) Ethylbenzene	9.943	106	1134380	206.83	ppb	#	74
83) (m+p)Xylene	10.053	106	2615466	398.32	ppb	#	72
84) o-Xylene	10.413	106	1348114	210.30	ppb	#	83
85) Styrene	10.425	104	2294183	210.65	ppb		95
87) Bromoform	10.589	173	487759	224.85	ppb		96
88) 2-CBTF	10.656	180	1029768	192.71	ppb		98
89) Isopropylbenzene	10.742	105	3164807	174.04	ppb		91
90) Cyclohexanone	10.827	55	4040929	3698.16	ppb		87
91) trans-1,4-Dichloro-2-B...	11.065	53	330500	217.02	ppb		88
92) 1,1,2,2-Tetrachloroethane	11.016	83	1149875	195.62	ppb		98
93) Bromobenzene	10.992	156	890035	187.60	ppb		98
94) 1,2,3-Trichloropropane	11.047	110	363530	191.24	ppb		96
95) n-Propylbenzene	11.095	91	3671079	175.94	ppb		83
96) 2-Chlorotoluene	11.162	91	2478611	182.89	ppb		92
97) 3-Chlorotoluene	11.211	91	2549465	196.95	ppb	#	94
98) 4-Chlorotoluene	11.254	91	2704200	178.22	ppb		91
99) 1,3,5-Trimethylbenzene	11.242	105	2909409	187.27	ppb		91
100) tert-Butylbenzene	11.516	119	2483893	191.00	ppb		95
101) 1,2,4-Trimethylbenzene	11.553	105	2912248	186.25	ppb		86
102) 3,4-DCBTF	11.620	214	905129	211.32	ppb		99
103) sec-Butylbenzene	11.693	105	3399894	182.26	ppb		89
104) p-Isopropyltoluene	11.815	119	3066347	190.66	ppb		88
105) 1,3-Dclbenz	11.784	146	1774452	190.90	ppb		96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:47:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

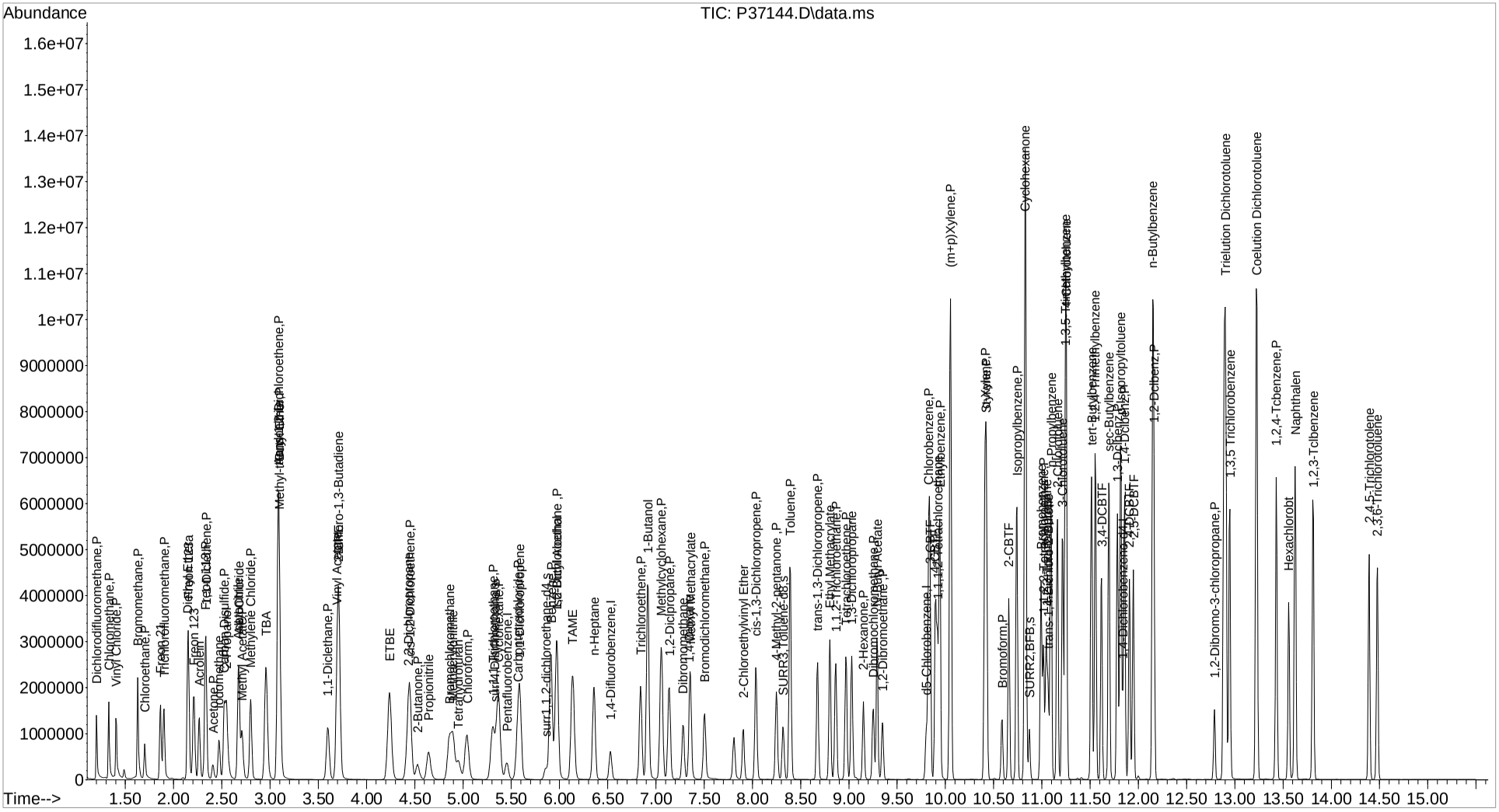
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
106) 1,4-Dclbenz	11.857	146	1805793	190.93	ppb		97
107) 2,4-DCBTF	11.906	214	845666	210.82	ppb		97
108) 2,5-DCBTF	11.949	214	933615	217.23	ppb		97
109) n-Butylbenzene	12.150	91	2958781	195.43	ppb		87
110) 1,2-Dclbenz	12.162	146	1810177	191.85	ppb		95
111) 1,2-Dibromo-3-chloropr...	12.790	157	310931	236.25	ppb		93
112) Trielution Dichlorotol...	12.900	125	4597778	608.40	ppb		89
113) 1,3,5 Trichlorobenzene	12.949	180	1382592	213.12	ppb		98
114) Coelution Dichlorotoluene	13.229	125	3316787	399.59	ppb	#	89
115) 1,2,4-Tcbenzene	13.430	180	1457753	214.19	ppb		98
116) Hexachlorobt	13.558	225	574342	210.25	ppb		97
117) Naphthalen	13.625	128	3839307	193.07	ppb		87
118) 1,2,3-Tclbenzene	13.814	180	1461401	207.57	ppb		97
119) 2,4,5-Trichlorotolene	14.393	159	998310	231.81	ppb		97
120) 2,3,6-Trichlorotoluene	14.479	159	900282	229.64	ppb		97

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37144.D
Acq On : 13 Jul 2020 2:40 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : WATER ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 13 16:47:45 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 15:02:36 2020
Response via : Initial Calibration

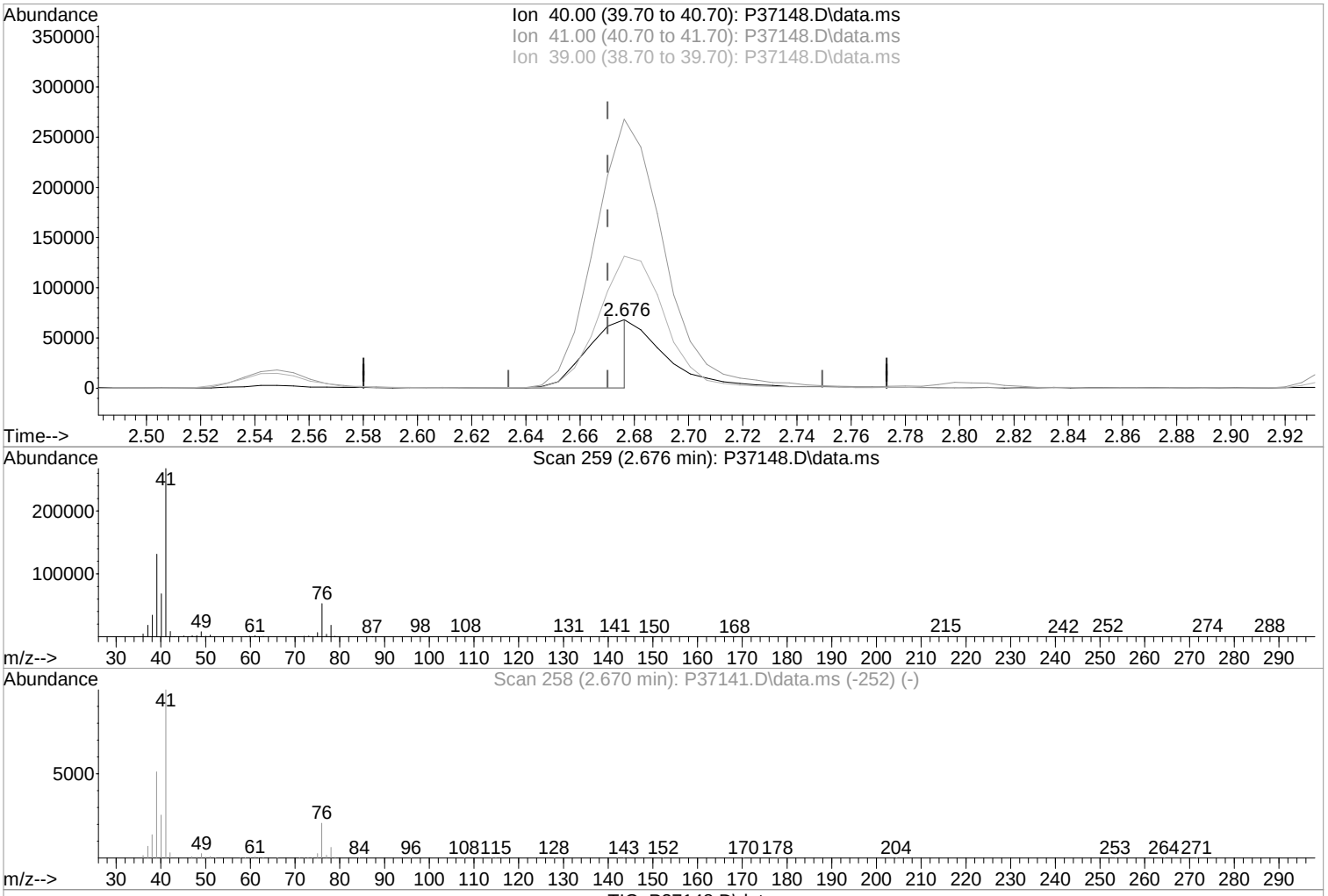


1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 14 10:29:48 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 14 10:28:25 2020
Response via : Initial Calibration



TIC: P37148.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 313.27 ppb m

response 74847

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	393.51
39.00	200.50	192.90
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

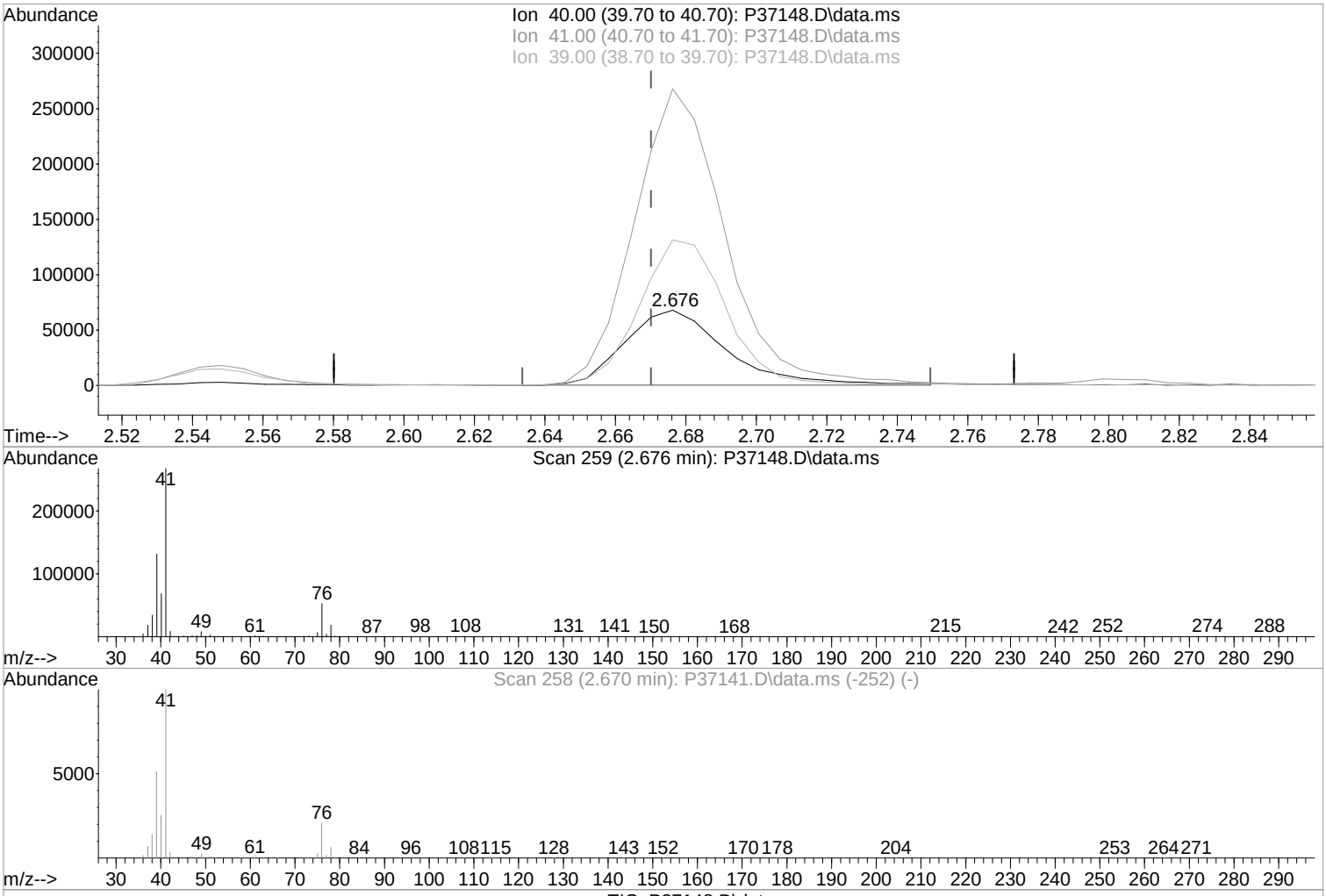
07/14/20

1st 07/14/20
2nd 07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 13 17:57:25 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration



TIC: P37148.D\data.ms

(19) Acetonitrile

2.676min (+0.006) 563.28 ppb

response 134581

Ion	Exp%	Act%
40.00	100	100
41.00	391.80	393.51
39.00	200.50	192.90
0.00	0.00	0.00

Manual Integration:

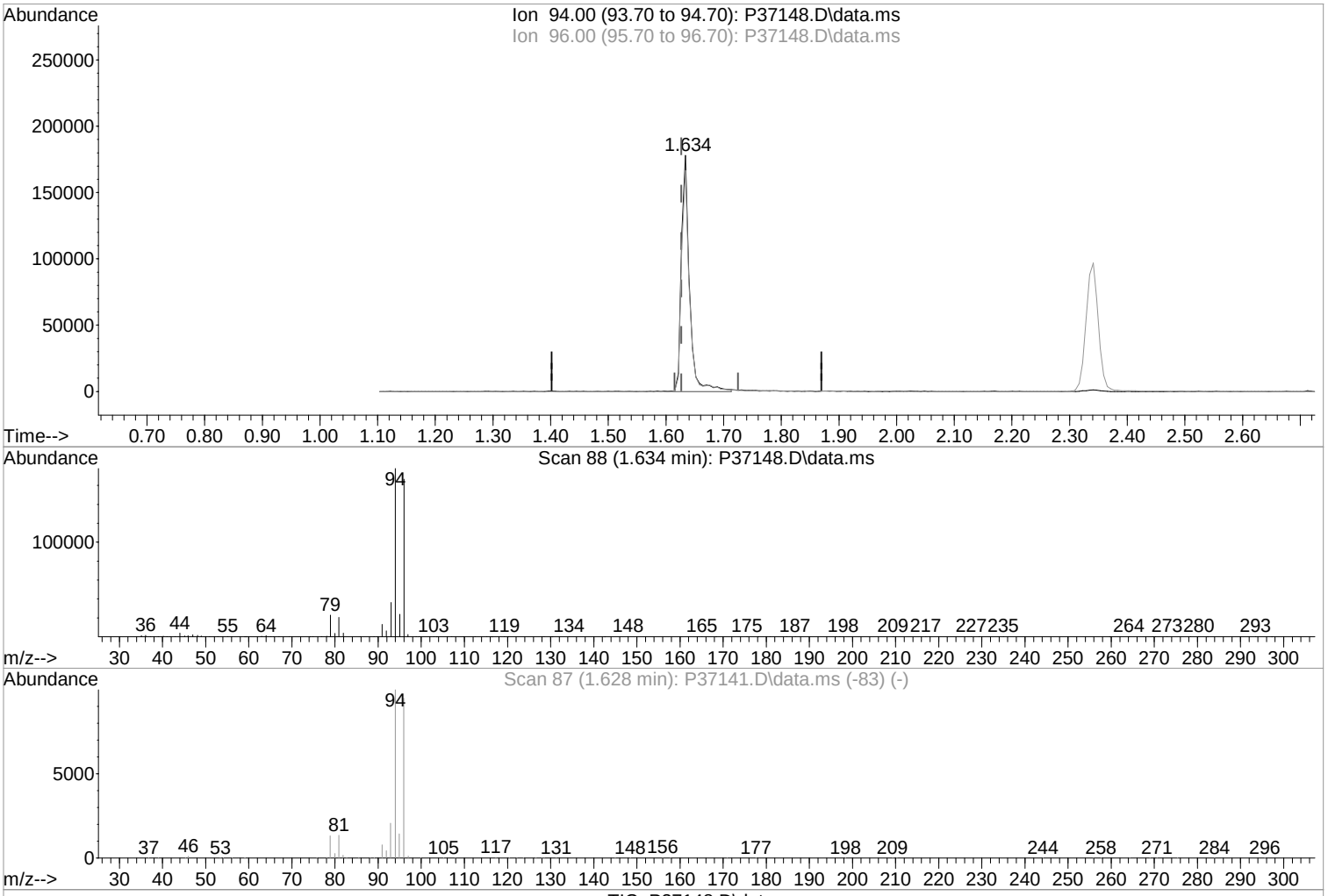
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 13 17:57:25 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration



TIC: P37148.D\data.ms

(5) Bromomethane (P)

1.634min (+0.007) 50.13 ppb m

response 174216

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	93.53
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

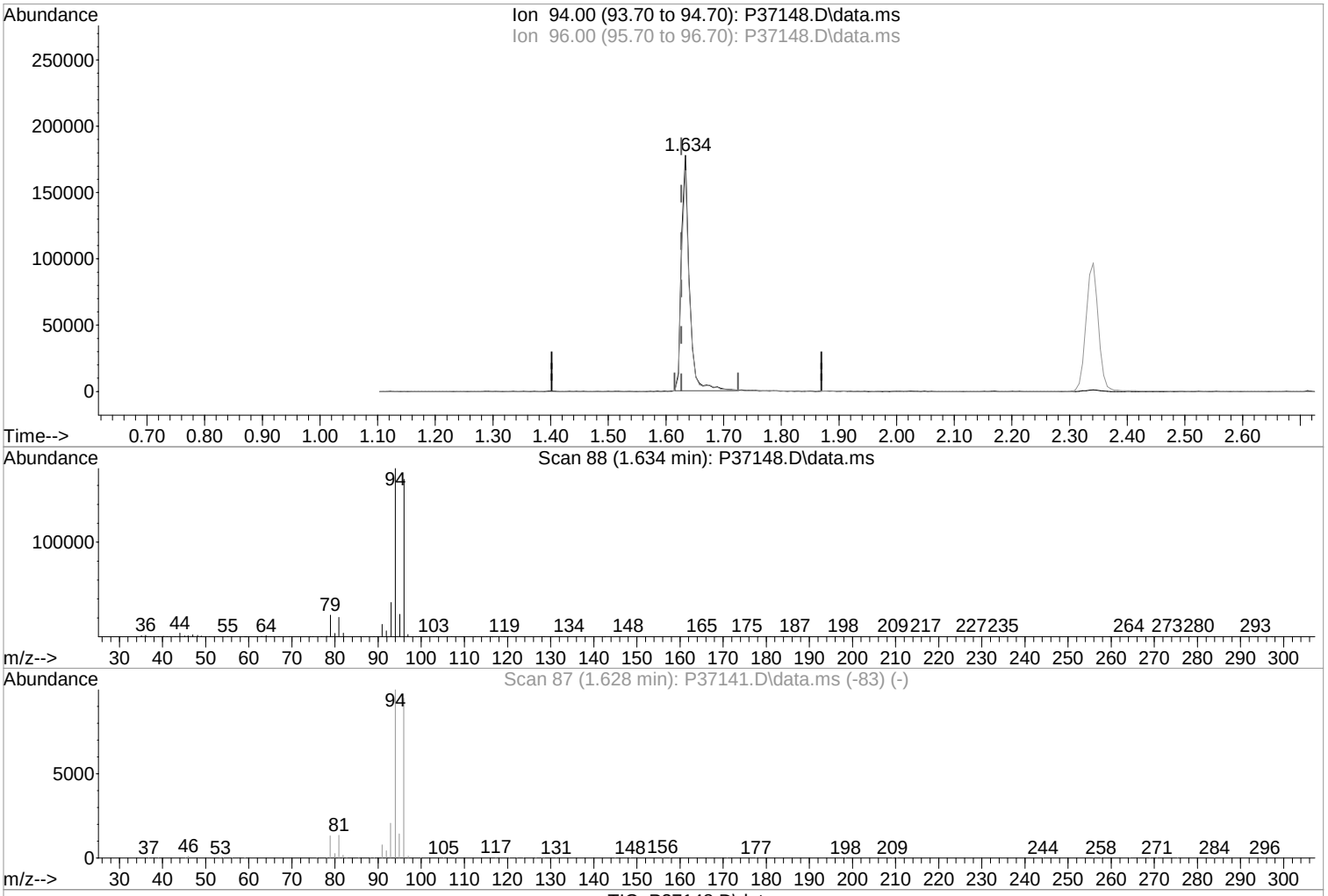
Poor integration.

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37148.D
Acq On : 13 Jul 2020 4:07 pm
Operator : K.Ruest
Sample : ICV50 Inst : MSVOA-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 13 17:57:25 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration



TIC: P37148.D\data.ms

(5) Bromomethane (P)

1.634min (+0.007) 49.32 ppb

response 171405

Ion	Exp%	Act%
94.00	100	100
96.00	95.20	93.53
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

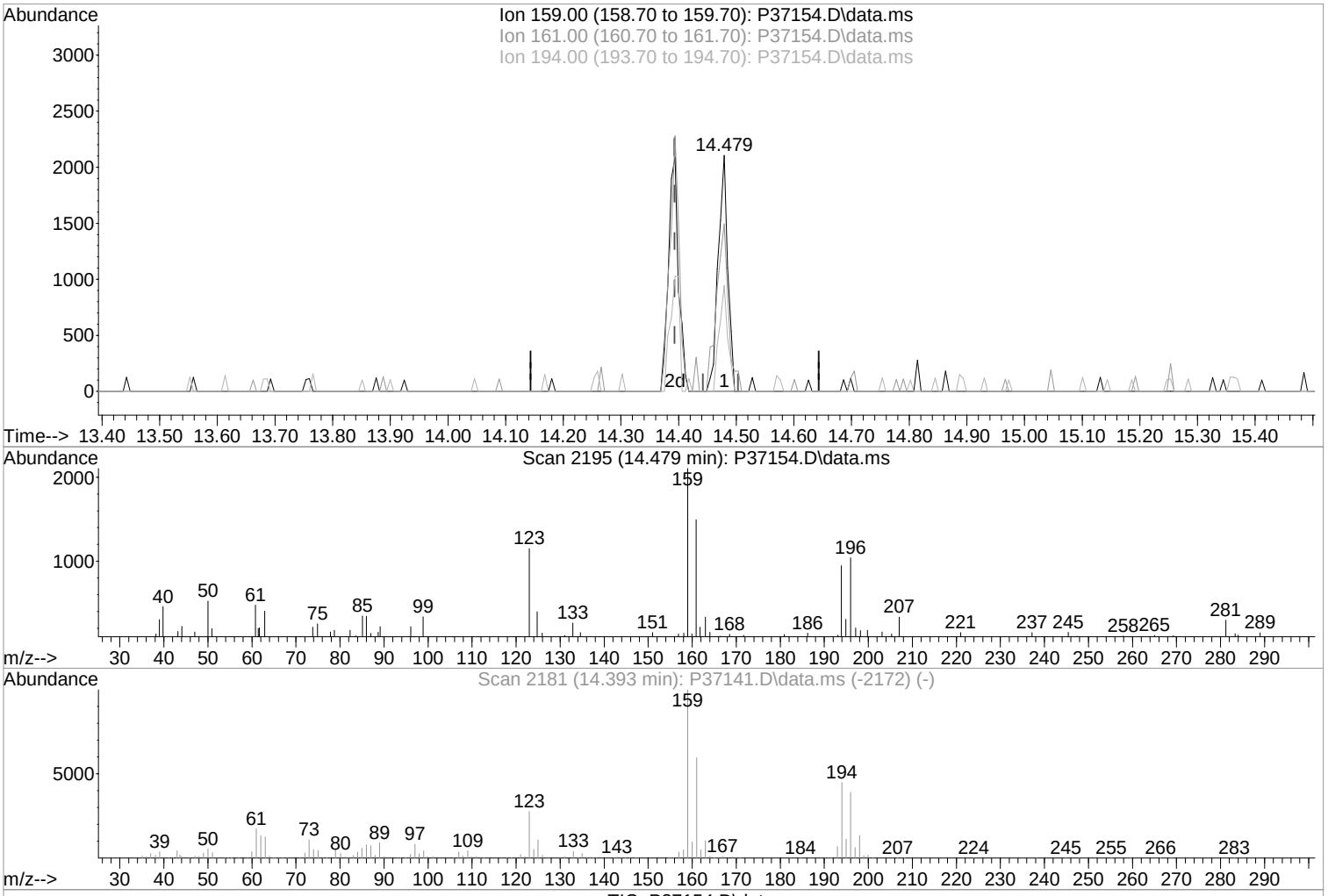
Before

07/13/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37154.D
Acq On : 13 Jul 2020 6:18 pm
Operator : K.Ruest
Sample : ICV-50 Inst : MSVOA-12
Misc : FREONS ONLY
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 14 09:25:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration



TIC: P37154.D\data.ms

(119) 2,4,5-Trichlorotolene

14.479min (+0.085) 0.73 ppb

response 2459

Ion	Exp%	Act%
159.00	100	100
161.00	59.50	70.99
194.00	44.80	44.92
0.00	0.00	0.00

Manual Integration:

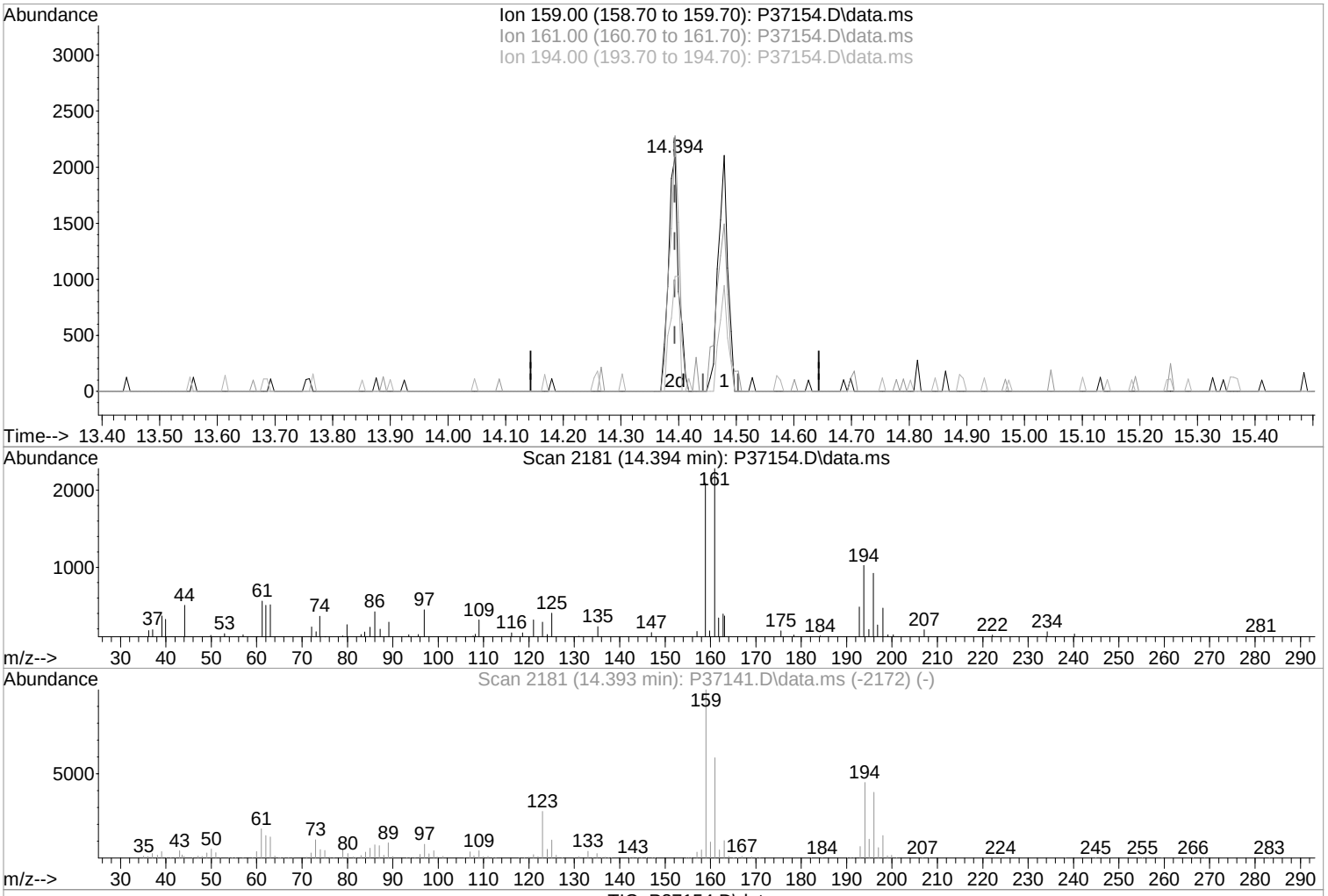
Before

07/14/20

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37154.D
Acq On : 13 Jul 2020 6:18 pm
Operator : K.Ruest
Sample : ICV-50 Inst : MSVOA-12
Misc : FREONS ONLY
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 14 09:25:03 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration



TIC: P37154.D\data.ms

(119) 2,4,5-Trichlorotolene

14.394min (+0.000) 0.76 ppb m

response 2556

Ion	Exp%	Act%
159.00	100	100
161.00	59.50	109.09#
194.00	44.80	49.02
0.00	0.00	0.00

Manual Integration:

After

Wrong peak selected.

07/14/20

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37154.D
Acq On : 13 Jul 2020 6:18 pm
Operator : K.Ruest
Sample : ICV-50 Inst : MSVOA-12
Misc : FREONS ONLY
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 14 09:27:36 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration

F123/123a only

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.456	168	324637	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.529	114	512010	50.00	ppb		0.00
71) d5-Chlorobenzene	9.803	117	446825	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	11.839	152	206697	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.334	113	144916	49.29	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.58%				
48) surr1,1,2-dichloroetha...	5.859	65	205934	50.60	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.20%				
65) SURR3,Toluene-d8	8.322	98	680204	49.78	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.56%				
70) SURR2,BFB	10.870	95	232852	46.25	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 92.50%				
Target Compounds							Qvalue
7) Freon 21	1.872	67	218906	40.63	ppb		100
10) Freon 123a	2.164	67	134282	36.15	ppb		88
11) Freon 123	2.219	83	171809	39.20	ppb		97
13) 1,1-Diclethene	2.341	96	541	0.22	ppb	#	50
14) Freon 113	2.347	101	614	0.21	ppb		82
15) Acetone	2.414	43	4024	0.47	ppb		88
16) 2-Propanol	2.548	45	457693	1095.54	ppb		100
17) Iodomethane	2.487	142	889	0.32	ppb		71
21) Methyl Acetate	2.719	43	203916	42.24	ppb		96
26) trans-1,2-Dichloroethene	3.091	96	688	0.24	ppb	#	72
39) Tetrahydrofuran	4.993	42	2526	1.30	ppb		98
40) Chloroform	5.048	83	362	Below Cal			94
44) Cyclohexane	5.371	41	168285	50.12	ppb		97
52) n-Heptane	6.371	43	1342	0.29	ppb		90
53) 1-Butanol	6.938	56	1835	9.30	ppb	#	67
55) Methylcyclohexane	7.060	55	229862	50.45	ppb		98
72) Tetrachloroethene	8.968	164	947	0.35	ppb	#	59
76) N-Butyl Acetate	9.291	43	380777	51.68	ppb		100
78) Chlorobenzene	9.834	112	2084	0.21	ppb		95
79) 3-CBTF	9.846	180	1334	0.29	ppb		94
80) 4-CBTF	9.894	180	1383	0.33	ppb		84
83) (m+p)Xylene	10.053	106	2339	0.37	ppb	#	77
88) 2-CBTF	10.663	180	1278	0.30	ppb		90
95) n-Propylbenzene	11.089	91	5855	0.36	ppb		96
96) 2-Chlorotoluene	11.156	91	3066	0.29	ppb		85
97) 3-Chlorotoluene	11.211	91	2852	0.28	ppb	#	63
98) 4-Chlorotoluene	11.254	91	3433	0.29	ppb		88
99) 1,3,5-Trimethylbenzene	11.242	105	2827	0.23	ppb		80
100) tert-Butylbenzene	11.516	119	2124	0.21	ppb		89
101) 1,2,4-Trimethylbenzene	11.553	105	3174	0.26	ppb		97
102) 3,4-DCBTF	11.614	214	1494	0.44	ppb	#	76
103) sec-Butylbenzene	11.693	105	3916	0.27	ppb		85
104) p-Isopropyltoluene	11.821	119	3502	0.28	ppb		81
105) 1,3-Dclbenz	11.784	146	2657	0.36	ppb		97
106) 1,4-Dclbenz	11.858	146	2795	0.38	ppb	#	80
107) 2,4-DCBTF	11.912	214	1527	0.49	ppb	#	88
108) 2,5-DCBTF	11.949	214	1458	0.42	ppb	#	60
109) n-Butylbenzene	12.150	91	5090	0.43	ppb		84
110) 1,2-Dclbenz	12.156	146	2076	0.28	ppb		92

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37154.D
Acq On : 13 Jul 2020 6:18 pm
Operator : K.Ruest
Sample : ICV-50 Inst : MSVOA-12
Misc : FREONS ONLY
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 14 09:27:36 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration

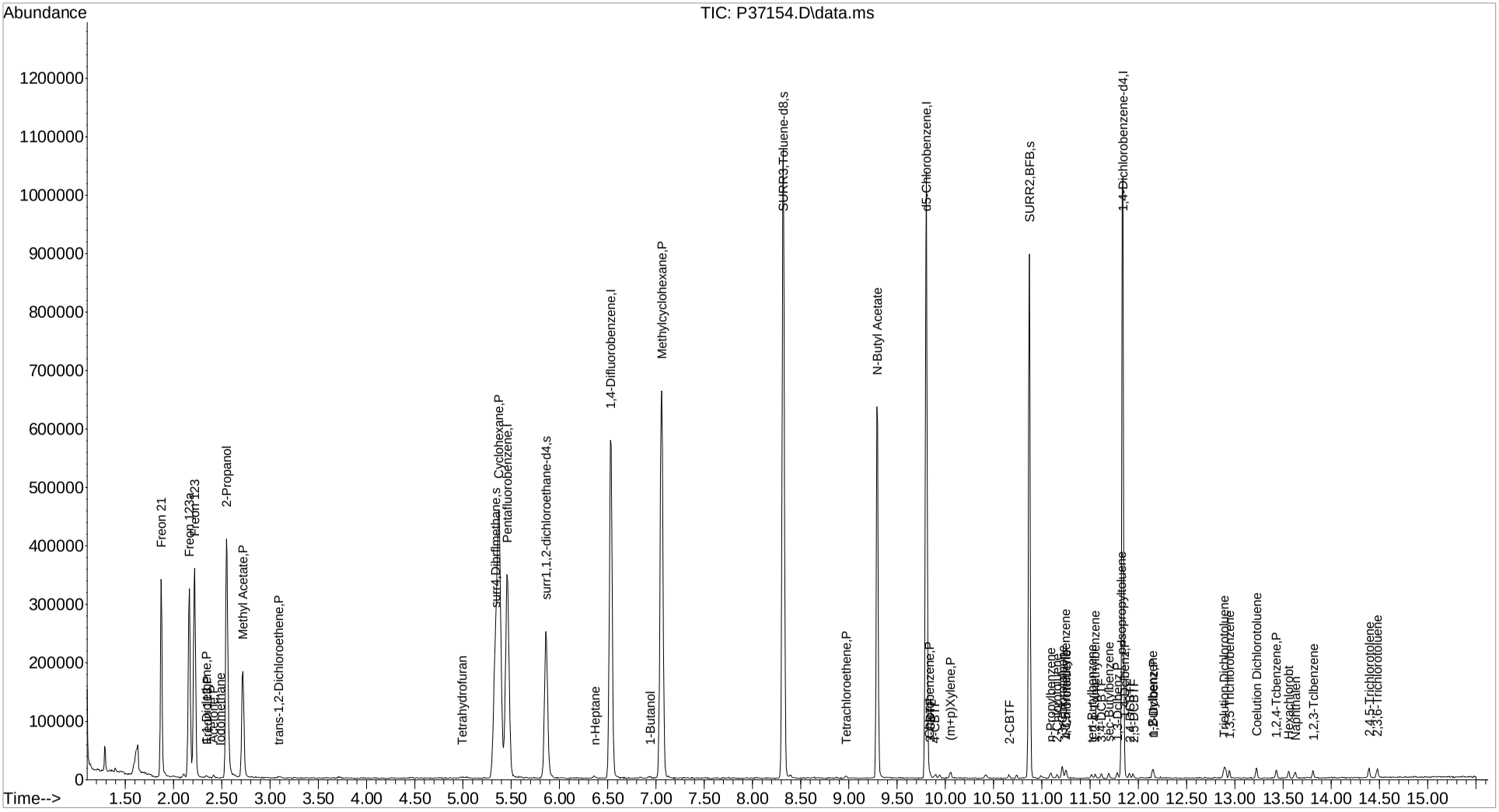
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
112) Trielution Dichlorotol...	12.888	125	8278	1.40	ppb	#	80
113) 1,3,5 Trichlorobenzene	12.943	180	2807	0.55	ppb	#	80
114) Coelution Dichlorotoluene	13.223	125	5564	0.85	ppb		92
115) 1,2,4-Tcbenzene	13.430	180	3288	0.62	ppb		93
116) Hexachlorobt	13.558	225	1792	0.84	ppb		89
117) Naphthalen	13.625	128	5709	0.37	ppb		91
118) 1,2,3-Tclbenzene	13.814	180	2744	0.50	ppb		88
119) 2,4,5-Trichlorotolene	14.394	159	2556m	0.76	ppb		
120) 2,3,6-Trichlorotoluene	14.479	159	2459	0.80	ppb		90

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\071320\
Data File : P37154.D
Acq On : 13 Jul 2020 6:18 pm
Operator : K.Ruest
Sample : ICV-50 Inst : MSVOA-12
Misc : FREONS ONLY
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 14 09:27:36 2020
Quant Method : I:\ACQUDATA\msvoa12\Methods\W071320.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 13 17:46:25 2020
Response via : Initial Calibration



1st 07/14/20
2nd 07/14/20

ALS Group USA, Corp.

DBA ALS Environmetal

QC/QC Report

Date Analyzed: 7/13/20 11:13

ICAL Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\071320\P37135.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	19.3	31112	PASS
75	95	30	60	48.1	77408	PASS
95	95	100	100	100.0	161024	PASS
96	95	5	9	6.9	11059	PASS
173	174	0	2	1.1	1384	PASS
174	95	50	120	79.5	128075	PASS
175	174	5	9	6.9	8837	PASS
176	174	95	101	98.0	125485	PASS
177	176	5	9	5.6	7080	PASS

Sample Name	Lab Code	File ID:	Date Analyzes:	Q
0.5ppb	0.5ppb	I:\ACQUDATA\msvoa12\Data\071320\P37136.D	7/13/20 11:45	
1.0ppb	1.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37137.D	7/13/20 12:07	
2.0ppb	2.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37138.D	7/13/20 12:29	
5.0ppb	5.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37139.D	7/13/20 12:51	
20ppb	20ppb	I:\ACQUDATA\msvoa12\Data\071320\P37140.D	7/13/20 13:12	
50ppb	50ppb	I:\ACQUDATA\msvoa12\Data\071320\P37141.D	7/13/20 13:34	
100ppb	100ppb	I:\ACQUDATA\msvoa12\Data\071320\P37142.D	7/13/20 13:56	
150ppb	150ppb	I:\ACQUDATA\msvoa12\Data\071320\P37143.D	7/13/20 14:18	
200ppb	200ppb	I:\ACQUDATA\msvoa12\Data\071320\P37144.D	7/13/20 14:40	
ICV50	ICV50	I:\ACQUDATA\msvoa12\Data\071320\P37148.D	7/13/20 16:07	

ALS Group USA, Corp.

DBA ALS Environmetal

QC/QC Report

Date Analyzed: 7/13/20 17:34

ICAL Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\071320\P37152.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	19.0	29493	PASS
75	95	30	60	51.0	79178	PASS
95	95	100	100	100.0	155200	PASS
96	95	5	9	6.5	10044	PASS
173	174	0	2	1.0	1237	PASS
174	95	50	120	77.9	120861	PASS
175	174	5	9	7.7	9306	PASS
176	174	95	101	95.6	115547	PASS
177	176	5	9	6.8	7905	PASS

Sample Name	Lab Code	File ID:	Date Analyzes:	Q
LCS-FP	LCS-FP	I:\ACQUDATA\MSVOA12\DATA\071320\P37153.D	7/13/20 17:56	
ICV-50	ICV-50	I:\ACQUDATA\MSVOA12\DATA\071320\P37154.D	7/13/20 18:18	

Analysis: 8260 waters | Analyst: K. Quast | pH strips: 221419 | Tune Method: W071320

Date: 7/13/2020 · Run#2 | Balance ID: N/A | ResCl strips: N/A | Run Method: ↓

Instr. 12 | 50 mL Class A used for dilution FV | Syringes: 205000 | LIMS Run#: 6868867

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Tier	Vial	pH	File#	OK?	Comments
16	~~15~~ TUNE		R2007451 · 01				(12)	~~P37150~~	YT	P37151 17:13 (auto)
	17 CCV		02					P37152	YC	
	18 LCS · FP		03					P37153	YQ	11DCE ↑ + MTBE ↑
	19 ICV · SD (Freons only)		—					P37154	YQ	F123/123A only
	20 MBLK · UNP		—					P37155	YB	
	21 MBLK · FP		04					P37156	YB	
	22 R2005574 · 005	1.0		19760	2	1	12	P37157	Y	
	23 R2005576 · 004	1.0		9443	2	1	12	P37158	Y	
	24 001	1.0				1	12	P37159	Y	
	25 002	1.0				1	12	P37160	Y	
	26 003	1.0				1	12	P37161	Y	
	27 R2005701 · 005	1.0		15626	4	1	12	P37162	Y	
	28 001	1.0				1	12	P37163	(Y)	rpt 25
	29 002	1.0				1	12	P37164	(N)	rpt c/o
	30 003	1.0				1	12	P37165	(N)	
	31 004	1.0				1	12	P37166	(N)	
	32 006	1.0				1	12	P37167	(Y)	rpt SD
	33 R2005635 · 006	1.0				1	12	P37168	(N)	rpt c/o
	34 001	1.0				1	12	P37169		
	35 002	1.0				1	12	P37170		
	36 003	1.0				1	12	P37171		
	37 005	1.0				1	12	P37172		
	38 007	1.0				1	12	P37173		
	39 004	1.0				1	12	P37174		
	40 MS 004	1.0				2	12	~~P37175~~	YQ	P37175 (12)
	41 MSD 004	1.0				3	12	P37176	YQ	2:19 ✓
	42 BLK					—	—	P37177	—	
	1 (7/14/2020)					—	—	P37178	—	↑ baseline - bad gastank?!
	2					—	—	P37179	—	
	3					—	—	P37180	—	
	1 BLK					—	—	P37181	—	
	2 ↓					—	—	P37182	—	

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

Combined IS/Surr :

500 Primary Qc+ : 2096.14

Primary Fr+ : 210841 | 5 mL → 50 mL

Primary T6 : 210630 | = CCV

Primary HSL : 210631

Primary :

200 Secondary Fr+ : 210514 · 5 mL

500 Secondary Qc+ : 210507

Secondary T6 : 210633 | 2 mL | = LCS

Secondary HSL : 210632

Secondary :

- 10.6 uL

4.2 mL

Surrogate SD : 210628

Internal Std SD : 210629

Reagents:

4 7 mL vial = MS/D

Analysis: 8260+624 Water | Analyst: K. Quest | pH strips: N/A | Tune Method: W071320

Date: 7/13/2020 | Balance ID: N/A | ResCl strips: N/A | Run Method: ↓

Instr. 12 | 50 mL Class A used for dilution FV | Syringes: 202106+205000 | LIMS Run#: ICAL

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./			RL	Tier	Vial	pH	File#	OK?	Comments
				Atomx								
1	BLK									P37131		
2	↓									P37132		
3										P37133		
4	TUNE									P37134	YT	10:43 (auto)
1	IBLK	(5ppm)	(500ppm)	5mL	5D	FV				P37135	YB	
1	0.5 ppb	5mL	—	—		5Dmb				P37136	Y	
2	1.0	10mL	—	—		↓				P37137	Y	
3	2.0	20mL	—	—						P37138	Y	
4	5.0	50mL	—	1mL						P37139	Y	
5	20	—	2mL	2mL						P37140	Y	
6	50	—	5mL	5mL						P37141	Y	
7	100	—	10mL	10mL						P37142	Y	
8	150	—	15mL	20mL						P37143	Y	
9	200	—	20mL	—						P37144	Y	
10	BLK									P37145	—	
11	↓									P37146	—	
12										P37147	—	
13	ICV · 5D									P37148	YQ	
14	BLK									P37149		
15	ICV · 5D - Freons only									P37150	(N)	wrong shoot (20; instead of 5D)

KQR 7/13/2020

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

500 Primary OCC+ : 209614
↓ Primary FC+ : 210811 | 10uL → 1.0 mg/l
Primary TG : 210630 | = 5ppm
Primary HSL : 210631 |
Primary : |

200 Secondary FC+ : 210514 - 12.5uL
500 Secondary OCC+ : 210507 |
↓ Secondary TG : 210633 | 5mL
Secondary HSL : 210632 |
Secondary : |

5Dmb = ~~CC~~ (KQ) ICV · 5D

Combined IS/Surr :
Surrogate 5D : 210628
Internal Std 5D : 210629
Reagents:

Client: The LiRo Group
Project: Buffalo China

Service Request: R2007215
Calibration Date: 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
Instrument ID: R-MS-12

Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC2000094-01	0.5ppb	I:\ACQUDATA\msvoa12\Data\071320\P37136.D	07/13/2020 11:45
02	RC2000094-02	1.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37137.D	07/13/2020 12:07
03	RC2000094-03	2.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37138.D	07/13/2020 12:29
04	RC2000094-04	5.0ppb	I:\ACQUDATA\msvoa12\Data\071320\P37139.D	07/13/2020 12:51
05	RC2000094-05	20ppb	I:\ACQUDATA\msvoa12\Data\071320\P37140.D	07/13/2020 13:12
06	RC2000094-06	50ppb	I:\ACQUDATA\msvoa12\Data\071320\P37141.D	07/13/2020 13:34
07	RC2000094-07	100ppb	I:\ACQUDATA\msvoa12\Data\071320\P37142.D	07/13/2020 13:56
08	RC2000094-08	150ppb	I:\ACQUDATA\msvoa12\Data\071320\P37143.D	07/13/2020 14:18
09	RC2000094-09	200ppb	I:\ACQUDATA\msvoa12\Data\071320\P37144.D	07/13/2020 14:40

Analyte

1,1,1-Trichloroethane (TCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8071	02	1.000	0.7859	03	2.000	0.6661	04	5.000	0.7081
05	20.000	0.77	06	50.000	0.7909	07	100.000	0.6795	08	150.000	0.5739
09	200.000	0.7246									

1,1,2,2-Tetrachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.158	02	1.000	1.199	03	2.000	1.04	04	5.000	1.103
05	20.000	1.162	06	50.000	1.147	07	100.000	1.109	08	150.000	1.035
09	200.000	1.091									

1,1,2-Trichloro-1,2,2-trifluoroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4929	02	1.000	0.489	03	2.000	0.4697	04	5.000	0.4866
05	20.000	0.4741	06	50.000	0.477	07	100.000	0.4076	08	150.000	0.3378
09	200.000	0.4203									

1,1,2-Trichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3491	02	1.000	0.3768	03	2.000	0.2909	04	5.000	0.3463
05	20.000	0.357	06	50.000	0.359	07	100.000	0.3463	08	150.000	0.3099
09	200.000	0.3368									

1,1-Dichloroethane (1,1-DCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.051	02	1.000	1.163	03	2.000	0.9906	04	5.000	1.022
05	20.000	1.041	06	50.000	1.054	07	100.000	0.909	08	150.000	0.7599
09	200.000	0.9438									

1,1-Dichloroethene (1,1-DCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.444	02	1.000	0.4319	03	2.000	0.387	04	5.000	0.3699
05	20.000	0.4116	06	50.000	0.4141	07	100.000	0.356	08	150.000	0.2962
09	200.000	0.3691									

Client: The LiRo Group **Service Request:** R2007215
Project: Buffalo China **Calibration Date:** 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

1,2,3-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	1.416	03	2.000	1.201	04	5.000	1.298	05	20.000	1.318
06	50.000	1.405	07	100.000	1.432	08	150.000	1.235	09	200.000	1.387

1,2,4-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.277	02	1.000	1.285	03	2.000	1.136	04	5.000	1.219
05	20.000	1.294	06	50.000	1.394	07	100.000	1.399	08	150.000	1.241
09	200.000	1.384									

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.2232	03	2.000	0.2194	04	5.000	0.2189	05	20.000	0.2346
06	50.000	0.2648	07	100.000	0.2778	08	150.000	0.2649	09	200.000	0.2951

1,2-Dibromoethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3488	02	1.000	0.443	03	2.000	0.343	04	5.000	0.3767
05	20.000	0.4045	06	50.000	0.4046	07	100.000	0.3833	08	150.000	0.349
09	200.000	0.3916									

1,2-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.062	02	1.000	1.907	03	2.000	1.713	04	5.000	1.8
05	20.000	1.783	06	50.000	1.822	07	100.000	1.744	08	150.000	1.57
09	200.000	1.718									

1,2-Dichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5636	02	1.000	0.5307	03	2.000	0.4657	04	5.000	0.5017
05	20.000	0.5463	06	50.000	0.5234	07	100.000	0.4914	08	150.000	0.4396
09	200.000	0.4781									

1,2-Dichloropropane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4307	02	1.000	0.4003	03	2.000	0.3358	04	5.000	0.3679
05	20.000	0.398	06	50.000	0.4008	07	100.000	0.3822	08	150.000	0.3461
09	200.000	0.3778									

1,3-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.105	02	1.000	1.913	03	2.000	1.694	04	5.000	1.711
05	20.000	1.78	06	50.000	1.756	07	100.000	1.701	08	150.000	1.536
09	200.000	1.684									

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.884	02	1.000	2.155	03	2.000	1.687	04	5.000	1.778

Client: The LiRo Group **Service Request:** R2007215
Project: Buffalo China **Calibration Date:** 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	1.808	06	50.000	1.813	07	100.000	1.739	08	150.000	1.581
09	200.000	1.714									

1,4-Dioxane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.008107	04	100.000	0.006782	05	400.000	0.007935	06	1000.000	0.007935
07	2000.000	0.008155	08	3000.000	0.007713	09	4000.000	0.008752			

2-Butanone (MEK)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.4127	05	20.000	0.4204	06	50.000	0.3974	07	100.000	0.3781
08	150.000	0.33	09	200.000	0.3938						

2-Hexanone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.3596	04	5.000	0.4468	05	20.000	0.4563	06	50.000	0.4566
07	100.000	0.4551	08	150.000	0.4544	09	200.000	0.4821			

4-Bromofluorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.531	05	20.000	0.4623	06	50.000	0.4991	07	100.000	0.4892
08	200.000	0.4768									

4-Methyl-2-pentanone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.4577	04	5.000	0.4785	05	20.000	0.536	06	50.000	0.5391
07	100.000	0.5328	08	150.000	0.5165	09	200.000	0.5467			

Acetone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.0	0.5279	04	5.000	0.4314	05	20.000	0.3372	06	50.000	0.2818
07	100.000	0.2453	08	150.000	0.2032						

Benzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.384	02	1.000	1.632	03	2.000	1.457	04	5.000	1.432
05	20.000	1.499	06	50.000	1.528	07	100.000	1.418	08	150.000	1.26
09	200.000	1.384									

Bromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.356	02	1.000	0.4133	03	2.000	0.3332	04	5.000	0.3533
05	20.000	0.3675	06	50.000	0.3519	07	100.000	0.3101	08	150.000	0.2636
09	200.000	0.3235									

Client: The LiRo Group **Service Request:** R2007215
Project: Buffalo China **Calibration Date:** 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

Bromodichloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3549	02	1.000	0.39	03	2.000	0.3923	04	5.000	0.3711
05	20.000	0.4273	06	50.000	0.4556	07	100.000	0.4284	08	150.000	0.3853
09	200.000	0.4343									

Bromoform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.422	03	2.000	0.3744	04	5.000	0.3569	05	20.000	0.4039
06	50.000	0.4266	07	100.000	0.4331	08	150.000	0.4144	09	200.000	0.4629

Bromomethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.569	03	2.000	0.5504	04	5.000	0.6469	05	20.000	0.4826
06	50.000	0.4565	07	100.000	0.4187	08	150.000	0.4755	09	200.000	0.5555

Carbon Disulfide

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.258	02	1.000	1.845	03	2.000	1.554	04	5.000	1.303
05	20.000	1.412	06	50.000	1.365	07	100.000	1.234	08	150.000	1.042
09	200.000	1.261									

Carbon Tetrachloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2778	02	1.000	0.3166	03	2.000	0.2607	04	5.000	0.3249
05	20.000	0.3469	06	50.000	0.3814	07	100.000	0.3528	08	150.000	0.3264
09	200.000	0.3675									

Chlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.237	02	1.000	1.149	03	2.000	1.085	04	5.000	1.137
05	20.000	1.162	06	50.000	1.151	07	100.000	1.068	08	150.000	0.9724
09	200.000	1.075									

Chloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4602	02	1.000	0.365	03	2.000	0.3438	04	5.000	0.3373
05	20.000	0.3396	06	50.000	0.345	07	100.000	0.3516	08	150.000	0.3502
09	200.000	0.332									

Chloroform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.16	02	1.000	1.071	03	2.000	0.8763	04	5.000	0.9174
05	20.000	0.9428	06	50.000	0.9445	07	100.000	0.8214	08	150.000	0.6677

Chloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7616	02	1.000	0.6349	03	2.000	0.6692	04	5.000	0.6935
05	20.000	0.734	06	50.000	0.7565	07	100.000	0.6758	08	150.000	0.5736

Client: The LiRo Group **Service Request:** R2007215
Project: Buffalo China **Calibration Date:** 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

Chloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
09	200.000	0.7521									

Cyclohexane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.341	03	2.000	0.3366	04	5.000	0.3262	05	20.000	0.312
06	50.000	0.3399	07	100.000	0.3415	08	150.000	0.2951	09	200.000	0.3306

Dibromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2289	02	1.000	0.2837	03	2.000	0.2672	04	5.000	0.2971
05	20.000	0.3207	06	50.000	0.3502	07	100.000	0.3461	08	150.000	0.3342
09	200.000	0.3704									

Dibromofluoromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.2959	05	20.000	0.2735	06	50.000	0.297	07	100.000	0.296
08	200.000	0.2731									

Dichlorodifluoromethane (CFC 12)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6507	02	1.000	0.6409	03	2.000	0.4987	04	5.000	0.4355
05	20.000	0.6177	06	50.000	0.6342	07	100.000	0.5268	08	150.000	0.4463
09	200.000	0.5563									

Dichloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6115	02	1.000	0.7034	03	2.000	0.5467	04	5.000	0.5687
05	20.000	0.5665	06	50.000	0.5639	07	100.000	0.4917	08	150.000	0.406
09	200.000	0.5016									

Ethylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6455	02	1.000	0.5669	03	2.000	0.5403	04	5.000	0.5583
05	20.000	0.6178	06	50.000	0.6153	07	100.000	0.5833	08	150.000	0.5336
09	200.000	0.6051									

Isopropylbenzene (Cumene)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.98	02	1.000	3.853	03	2.000	3.267	04	5.000	3.536
05	20.000	3.61	06	50.000	3.606	07	100.000	3.291	08	150.000	2.918
09	200.000	3.004									

Methyl Acetate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.8867	03	2.000	0.7552	04	5.000	0.6947	05	20.000	0.7398
06	50.000	0.7637	07	100.000	0.7407	08	150.000	0.6245	09	200.000	0.7429

Client: The LiRo Group
Project: Buffalo China

Service Request: R2007215
Calibration Date: 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
Instrument ID: R-MS-12

Signal ID: 1

Analyte

Methyl tert-Butyl Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.717	02	1.000	1.948	03	2.000	1.668	04	5.000	1.782
05	20.000	1.954	06	50.000	1.965	07	100.000	1.766	08	150.000	1.479
09	200.000	1.826									

Methylcyclohexane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.4881	03	2.000	0.3871	04	5.000	0.4106	05	20.000	0.4315
06	50.000	0.4698	07	100.000	0.4779	08	150.000	0.4189	09	200.000	0.4755

Styrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.113	02	1.000	1.124	03	2.000	0.9876	04	5.000	1.138
05	20.000	1.233	06	50.000	1.312	07	100.000	1.209	08	150.000	1.117
09	200.000	1.224									

Tetrachloroethene (PCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3536	02	1.000	0.32	03	2.000	0.2945	04	5.000	0.314
05	20.000	0.3118	06	50.000	0.314	07	100.000	0.283	08	150.000	0.2631
09	200.000	0.2943									

Toluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.538	02	1.000	1.687	03	2.000	1.465	04	5.000	1.53
05	20.000	1.617	06	50.000	1.663	07	100.000	1.497	08	150.000	1.333
09	200.000	1.429									

Toluene-d8

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	1.448	05	20.000	1.282	06	50.000	1.375	07	100.000	1.351
08	200.000	1.216									

Trichloroethene (TCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3868	02	1.000	0.4229	03	2.000	0.3778	04	5.000	0.353
05	20.000	0.3568	06	50.000	0.3579	07	100.000	0.3328	08	150.000	0.301
09	200.000	0.3348									

Trichlorofluoromethane (CFC 11)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7973	02	1.000	0.682	03	2.000	0.6218	04	5.000	0.6455
05	20.000	0.7523	06	50.000	0.7174	07	100.000	0.6277	08	150.000	0.5369
09	200.000	0.6567									

Vinyl Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6783	02	1.000	0.6335	03	2.000	0.5678	04	5.000	0.6654

Client: The LiRo Group
Project: Buffalo China

Service Request: R2007215
Calibration Date: 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
Instrument ID: R-MS-12

Signal ID: 1

Analyte

Vinyl Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	0.6916	06	50.000	0.7386	07	100.000	0.6506	08	150.000	0.5467
09	200.000	0.6881									

cis-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5812	02	1.000	0.6992	03	2.000	0.6061	04	5.000	0.5993
05	20.000	0.5998	06	50.000	0.611	07	100.000	0.5238	08	150.000	0.4342
09	200.000	0.5388									

cis-1,3-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.575	02	1.000	0.5068	03	2.000	0.491	04	5.000	0.4997
05	20.000	0.5617	06	50.000	0.6072	07	100.000	0.5958	08	150.000	0.5365
09	200.000	0.5913									

m,p-Xylenes

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.7145	02	2.000	0.7397	03	4.000	0.6183	04	10.000	0.681
05	40.000	0.7496	06	100.000	0.77	07	200.000	0.695	08	300.000	0.6392
09	400.000	0.6976									

o-Xylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5724	02	1.000	0.7441	03	2.000	0.5912	04	5.000	0.7311
05	20.000	0.7061	06	50.000	0.7555	07	100.000	0.6912	08	150.000	0.6445
09	200.000	0.7191									

trans-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4221	02	1.000	0.4928	03	2.000	0.4876	04	5.000	0.4686
05	20.000	0.4831	06	50.000	0.4953	07	100.000	0.425	08	150.000	0.3458
09	200.000	0.4327									

trans-1,3-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5204	02	1.000	0.4418	03	2.000	0.4159	04	5.000	0.4609
05	20.000	0.512	06	50.000	0.5473	07	100.000	0.5533	08	150.000	0.5064
09	200.000	0.5571									

ALS Group USA, Corp.
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QA/QC Report

Client: The LiRo Group
Project: Buffalo China

Service Request: R2007215
Calibration Date: 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
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	10.4	≤20	0.7229	0.100
1,1,2,2-Tetrachloroethane	TRG	Average RF	% RSD	5.0	≤20	1.116	0.300
1,1,2-Trichloro-1,2,2-trifluoroethane	TRG	Average RF	% RSD	11.6	≤20	0.4505	0.100
1,1,2-Trichloroethane	TRG	Average RF	% RSD	7.7	≤20	0.3413	0.100
1,1-Dichloroethane (1,1-DCA)	TRG	Average RF	% RSD	11.4	≤20	0.9926	0.200
1,1-Dichloroethene (1,1-DCE)	TRG	Average RF	% RSD	11.7	≤20	0.3866	0.100
1,2,3-Trichlorobenzene	TRG	Average RF	% RSD	6.5	≤20	1.336	
1,2,4-Trichlorobenzene	TRG	Average RF	% RSD	6.9	≤20	1.292	0.200
1,2-Dibromo-3-chloropropane (DBCP)	TRG	Average RF	% RSD	11.8	≤20	0.2498	0.050
1,2-Dibromoethane	TRG	Average RF	% RSD	8.6	≤20	0.3827	0.100
1,2-Dichlorobenzene	TRG	Average RF	% RSD	7.6	≤20	1.791	0.400
1,2-Dichloroethane	TRG	Average RF	% RSD	8.0	≤20	0.5045	0.100
1,2-Dichloropropane	TRG	Average RF	% RSD	7.7	≤20	0.3822	0.100
1,3-Dichlorobenzene	TRG	Average RF	% RSD	9.2	≤20	1.764	0.600
1,4-Dichlorobenzene	TRG	Average RF	% RSD	8.9	≤20	1.795	0.500
1,4-Dioxane	TRG	Average RF	% RSD	7.5	≤20	0.007911	
2-Butanone (MEK)	TRG	Average RF	% RSD	8.3	≤20	0.3887	0.05
2-Hexanone	TRG	Average RF	% RSD	8.8	≤20	0.4444	0.05
4-Bromofluorobenzene	SURR	Average RF	% RSD	5.3	≤20	0.4917	
4-Methyl-2-pentanone	TRG	Average RF	% RSD	6.6	≤20	0.5153	0.05
Acetone	TRG	Quadratic	COD	0.9997	≥0.99	0.3378	0.05
Benzene	TRG	Average RF	% RSD	7.2	≤20	1.444	0.500
Bromochloromethane	TRG	Average RF	% RSD	12.1	≤20	0.3414	
Bromodichloromethane	TRG	Average RF	% RSD	8.2	≤20	0.4044	0.200
Bromoform	TRG	Average RF	% RSD	8.1	≤20	0.4118	0.100
Bromomethane	TRG	Average RF	% RSD	14.3	≤20	0.5194	0.100
Carbon Disulfide	TRG	Linear	R2	0.9914	≥0.99	1.475	0.100
Carbon Tetrachloride	TRG	Average RF	% RSD	12.1	≤20	0.3283	0.05
Chlorobenzene	TRG	Average RF	% RSD	6.7	≤20	1.115	0.500
Chloroethane	TRG	Average RF	% RSD	11.0	≤20	0.3583	0.100
Chloroform	TRG	Quadratic	COD	0.9914	≥0.99	0.9251	0.200
Chloromethane	TRG	Average RF	% RSD	9.2	≤20	0.6946	0.100
Cyclohexane	TRG	Average RF	% RSD	5.0	≤20	0.3279	0.100
Dibromochloromethane	TRG	Average RF	% RSD	14.6	≤20	0.3109	0.100

Client: The LiRo Group
Project: Buffalo China

Service Request: R2007215
Calibration Date: 7/13/2020

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
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	4.4	≤20	0.2871	
Dichlorodifluoromethane (CFC 12)	TRG	Average RF	% RSD	15.1	≤20	0.5563	0.100
Dichloromethane	TRG	Average RF	% RSD	15.0	≤20	0.5511	0.100
Ethylbenzene	TRG	Average RF	% RSD	6.5	≤20	0.5851	0.100
Isopropylbenzene (Cumene)	TRG	Average RF	% RSD	10.5	≤20	3.452	0.100
Methyl Acetate	TRG	Average RF	% RSD	9.9	≤20	0.7435	0.100
Methyl tert-Butyl Ether	TRG	Average RF	% RSD	8.9	≤20	1.789	0.100
Methylcyclohexane	TRG	Average RF	% RSD	8.4	≤20	0.4449	0.100
Styrene	TRG	Average RF	% RSD	8.1	≤20	1.162	0.300
Tetrachloroethene (PCE)	TRG	Average RF	% RSD	8.4	≤20	0.3053	0.200
Toluene	TRG	Average RF	% RSD	7.5	≤20	1.529	0.400
Toluene-d8	SURR	Average RF	% RSD	6.7	≤20	1.334	
Trichloroethene (TCE)	TRG	Average RF	% RSD	9.8	≤20	0.3582	0.200
Trichlorofluoromethane (CFC 11)	TRG	Average RF	% RSD	11.5	≤20	0.6708	0.100
Vinyl Chloride	TRG	Average RF	% RSD	9.4	≤20	0.6512	0.100
cis-1,2-Dichloroethene	TRG	Average RF	% RSD	12.7	≤20	0.5771	0.100
cis-1,3-Dichloropropene	TRG	Average RF	% RSD	8.1	≤20	0.5517	0.200
m,p-Xylenes	TRG	Average RF	% RSD	7.1	≤20	0.7005	0.100
o-Xylene	TRG	Average RF	% RSD	9.7	≤20	0.6839	0.300
trans-1,2-Dichloroethene	TRG	Average RF	% RSD	10.9	≤20	0.4503	0.100
trans-1,3-Dichloropropene	TRG	Average RF	% RSD	10.2	≤20	0.5017	0.100

ALS Group USA, Corp.
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QA/QC Report

Client: The LiRo Group **Service Request:** R2007215
Project: Buffalo China **Calibration Date:** 7/13/2020

Initial Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094 **Signal ID:** 1
Instrument ID: R-MS-12

#	Lab Code	Sample Name	File Location	Acquisition Date
10	RC2000094-10	ICV50	I:\ACQUDATA\msvoa12\Data\071320\P37148.D	07/13/2020 16:07
11	RC2000094-11	ICV-50	I:\ACQUDATA\msvoa12\Data\071320\P37154.D	07/13/2020 18:18

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	49.5	7.229E-1	7.162E-1	-0.929	±30	Average RF
1,1,2,2-Tetrachloroethane	50.0	52.6	1.116E0	1.173E0	5.14	±30	Average RF
1,1,2-Trichloroethane	50.0	49.6	3.413E-1	3.384E-1	-0.854	±30	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	47.6	4.505E-1	4.286E-1	-4.874	±30	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	48.4	9.926E-1	9.606E-1	-3.231	±30	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	55.9	3.866E-1	4.319E-1	11.70	±30	Average RF
1,2,3-Trichlorobenzene	50.0	47.6	1.336E0	1.271E0	-4.862	±30	Average RF
1,2,4-Trichlorobenzene	50.0	50.9	1.292E0	1.315E0	1.78	±30	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	50.9	2.498E-1	2.544E-1	1.82	±30	Average RF
1,2-Dibromoethane	50.0	49.7	3.827E-1	3.801E-1	-0.673	±30	Average RF
1,2-Dichlorobenzene	50.0	46.6	1.791E0	1.671E0	-6.708	±30	Average RF
1,2-Dichloroethane	50.0	47.2	5.045E-1	4.76E-1	-5.651	±30	Average RF
1,2-Dichloropropane	50.0	49.8	3.822E-1	3.804E-1	-0.455	±30	Average RF
1,3-Dichlorobenzene	50.0	47.3	1.764E0	1.67E0	-5.365	±30	Average RF
1,4-Dichlorobenzene	50.0	46.6	1.795E0	1.673E0	-6.797	±30	Average RF
1,4-Dioxane	1000	999	7.911E-3	7.902E-3	-0.111	±30	Average RF
2-Butanone (MEK)	50.0	50.8	3.887E-1	3.948E-1	1.55	±30	Average RF
2-Hexanone	50.0	46.7	4.444E-1	4.152E-1	-6.576	±30	Average RF
4-Methyl-2-pentanone	50.0	47.3	5.153E-1	4.879E-1	-5.321	±30	Average RF
Acetone	50.0	54.5	3.378E-1	3.107E-1	9.06	±30	Quadratic
Benzene	50.0	49.0	1.444E0	1.416E0	-1.908	±30	Average RF
Bromochloromethane	50.0	48.5	3.414E-1	3.31E-1	-3.033	±30	Average RF
Bromodichloromethane	50.0	49.7	4.044E-1	4.02E-1	-0.577	±30	Average RF
Bromoform	50.0	49.6	4.118E-1	4.085E-1	-0.808	±30	Average RF
Bromomethane	50.0	50.1	5.194E-1	5.207E-1	0.257	±30	Average RF
Carbon Disulfide	50.0	48.4	1.475E0	1.225E0	-3.206	±30	Linear
Carbon Tetrachloride	50.0	52.8	3.283E-1	3.469E-1	5.65	±30	Average RF
Chlorobenzene	50.0	49.0	1.115E0	1.093E0	-2.019	±30	Average RF
Chloroethane	50.0	43.7	3.583E-1	3.128E-1	-12.683	±30	Average RF
Chloroform	50.0	49.6	9.251E-1	8.57E-1	-0.843	±30	Quadratic
Chloromethane	50.0	52.5	6.946E-1	7.295E-1	5.02	±30	Average RF
Cyclohexane	50.0	45.8	3.279E-1	3.006E-1	-8.329	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: The LiRo Group
Project: Buffalo China

Service Request: R2007215
Calibration Date: 7/13/2020

Initial Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2000094
Instrument ID: R-MS-12

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Dibromochloromethane	50.0	53.9	3.109E-1	3.353E-1	7.83	±30	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	50.4	5.563E-1	5.602E-1	0.702	±30	Average RF
Dichloromethane	50.0	47.7	5.511E-1	5.259E-1	-4.575	±30	Average RF
Ethylbenzene	50.0	49.3	5.851E-1	5.774E-1	-1.315	±30	Average RF
Isopropylbenzene (Cumene)	50.0	50.3	3.452E0	3.472E0	0.589	±30	Average RF
Methyl Acetate	50.0	40.6	7.435E-1	6.038E-1	-18.795	±30	Average RF
Methyl tert-Butyl Ether	50.0	53.7	1.789E0	1.921E0	7.33	±30	Average RF
Methylcyclohexane	50.0	47.5	4.449E-1	4.223E-1	-5.086	±30	Average RF
Styrene	50.0	50.9	1.162E0	1.184E0	1.87	±30	Average RF
Tetrachloroethene (PCE)	50.0	45.9	3.053E-1	2.801E-1	-8.280	±30	Average RF
Toluene	50.0	50.5	1.529E0	1.543E0	0.961	±30	Average RF
Trichloroethene (TCE)	50.0	46.0	3.582E-1	3.294E-1	-8.040	±30	Average RF
Trichlorofluoromethane (CFC 11)	50.0	46.4	6.708E-1	6.223E-1	-7.241	±30	Average RF
Vinyl Chloride	50.0	53.1	6.512E-1	6.913E-1	6.17	±30	Average RF
cis-1,2-Dichloroethene	50.0	48.4	5.771E-1	5.581E-1	-3.283	±30	Average RF
cis-1,3-Dichloropropene	50.0	49.9	5.517E-1	5.509E-1	-0.139	±30	Average RF
m,p-Xylenes	100	103	7.005E-1	7.181E-1	2.50	±30	Average RF
o-Xylene	50.0	51.7	6.839E-1	7.071E-1	3.39	±30	Average RF
trans-1,2-Dichloroethene	50.0	54.2	4.503E-1	4.879E-1	8.35	±30	Average RF
trans-1,3-Dichloropropene	50.0	50.2	5.017E-1	5.037E-1	0.404	±30	Average RF

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	49.8	4.917E-1	4.897E-1	-0.401	±30	Average RF
Dibromofluoromethane	50.0	50.7	2.871E-1	2.91E-1	1.37	±30	Average RF
Toluene-d8	50.0	50.6	1.334E0	1.349E0	1.13	±30	Average RF

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

Service Request: R2007215
Date Analyzed: 08/20/20 09:45

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\082020\P38705.D\
Signal ID: 1

Calibration Date: 7/13/2020
Calibration ID: RC2000094
Analysis Lot: 691826
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	47.7	0.7229	0.6902	-4.5	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	48.7	1.1158	1.0861	-2.7	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	50.0	0.3413	0.3416	0.1	NA	±20	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.1	0.4505	0.451	0.1	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	46.7	0.9926	0.9273	-6.6	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	49.2	0.3866	0.3802	-1.7	NA	±20	Average RF
1,2,3-Trichlorobenzene	50.0	54.9	1.3365	1.4668	9.8	NA	±20	Average RF
1,2,4-Trichlorobenzene	50.0	56.0	1.2919	1.4474	12.0	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	44.7	0.2498	0.2234	-10.6	NA	±20	Average RF
1,2-Dibromoethane	50.0	48.0	0.3827	0.3677	-3.9	NA	±20	Average RF
1,2-Dichlorobenzene	50.0	50.7	1.7911	1.817	1.4	NA	±20	Average RF
1,2-Dichloroethane	50.0	47.1	0.5045	0.4754	-5.8	NA	±20	Average RF
1,2-Dichloropropane	50.0	50.3	0.3822	0.3845	0.6	NA	±20	Average RF
1,3-Dichlorobenzene	50.0	51.4	1.7644	1.8124	2.7	NA	±20	Average RF
1,4-Dichlorobenzene	50.0	51.8	1.7954	1.859	3.5	NA	±20	Average RF
1,4-Dioxane	1000	763	0.0079	0.006	-23.7*	NA	±20	Average RF
2-Butanone (MEK)	50.0	39.6	0.3887	0.3075	-20.9*	NA	±20	Average RF
2-Hexanone	50.0	49.8	0.4444	0.4426	-0.4	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	51.6	0.5153	0.5316	3.2	NA	±20	Average RF
Acetone	50.0	33.0	0.3378	0.2032	NA	-34.0*	±20	Quadratic
Benzene	50.0	51.1	1.4436	1.475	2.2	NA	±20	Average RF
Bromochloromethane	50.0	47.7	0.3414	0.3258	-4.6	NA	±20	Average RF
Bromodichloromethane	50.0	48.1	0.4044	0.3889	-3.8	NA	±20	Average RF
Bromoform	50.0	43.5	0.4118	0.3584	-13.0	NA	±20	Average RF
Bromomethane	50.0	39.0	0.5194	0.4053	-22.0*	NA	±20	Average RF
Carbon Disulfide	50.0	51.6	1.4748	1.3059	NA	3.2	±20	Linear
Carbon Tetrachloride	50.0	51.0	0.3283	0.3348	2.0	NA	±20	Average RF
Chlorobenzene	50.0	49.3	1.1151	1.0995	-1.4	NA	±20	Average RF
Chloroethane	50.0	59.2	0.3583	0.4242	18.4	NA	±20	Average RF
Chloroform	50.0	49.9	0.9251	0.8627	NA	-0.1	±20	Quadratic
Chloromethane	50.0	52.9	0.6946	0.7353	5.9	NA	±20	Average RF
Cyclohexane	50.0	48.8	0.3279	0.3201	-2.4	NA	±20	Average RF
Dibromochloromethane	50.0	47.2	0.3109	0.2937	-5.5	NA	±20	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	55.7	0.5563	0.6197	11.4	NA	±20	Average RF
Dichloromethane	50.0	47.1	0.5511	0.5192	-5.8	NA	±20	Average RF
Ethylbenzene	50.0	51.8	0.5851	0.6067	3.7	NA	±20	Average RF
Isopropylbenzene (Cumene)	50.0	53.6	3.4518	3.6975	7.1	NA	±20	Average RF
Methyl Acetate	50.0	42.2	0.7435	0.6272	-15.7	NA	±20	Average RF
Methyl tert-Butyl Ether	50.0	48.8	1.7895	1.7479	-2.3	NA	±20	Average RF

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

Service Request: R2007215
Date Analyzed: 08/20/20 09:45

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\082020\P38705.D\
Signal ID: 1

Calibration Date: 7/13/2020
Calibration ID: RC2000094
Analysis Lot: 691826
Units: ppb

Methylcyclohexane	50.0	56.6	0.4449	0.5038	13.2	NA	±20	Average RF
Styrene	50.0	55.8	1.1619	1.2968	11.6	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	48.7	0.3053	0.2973	-2.6	NA	±20	Average RF
Toluene	50.0	53.7	1.5288	1.6428	7.5	NA	±20	Average RF
Trichloroethene (TCE)	50.0	46.2	0.3582	0.3309	-7.6	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	51.3	0.6708	0.6878	2.5	NA	±20	Average RF
Vinyl Chloride	50.0	58.4	0.6512	0.7609	16.9	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	45.9	0.5771	0.5292	-8.3	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	50.8	0.5517	0.5609	1.7	NA	±20	Average RF
m,p-Xylenes	100	108	0.7005	0.7536	7.6	NA	±20	Average RF
o-Xylene	50.0	52.9	0.6839	0.7235	5.8	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	50.5	0.4503	0.4552	1.1	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	50.7	0.5017	0.509	1.5	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	50.2	0.4917	0.4933	0.3	NA	±20	Average RF
Dibromofluoromethane	50.0	48.4	0.2871	0.2779	-3.2	NA	±20	Average RF
Toluene-d8	50.0	50.0	1.3344	1.3341	0.0	NA	±20	Average RF

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

Service Request: R2007215
Date Analyzed: 08/21/20 09:55

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\082120\P38764.D\
Signal ID: 1

Calibration Date: 7/13/2020
Calibration ID: RC2000094
Analysis Lot: 692022
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	47.6	0.7229	0.6876	-4.9	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	51.1	1.1158	1.1398	2.1	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	50.4	0.3413	0.3441	0.8	NA	±20	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	49.3	0.4505	0.4447	-1.3	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	47.4	0.9926	0.9408	-5.2	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	49.5	0.3866	0.3825	-1.1	NA	±20	Average RF
1,2,3-Trichlorobenzene	50.0	54.5	1.3365	1.4579	9.1	NA	±20	Average RF
1,2,4-Trichlorobenzene	50.0	57.6	1.2919	1.4891	15.3	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	47.9	0.2498	0.2394	-4.2	NA	±20	Average RF
1,2-Dibromoethane	50.0	49.9	0.3827	0.3817	-0.3	NA	±20	Average RF
1,2-Dichlorobenzene	50.0	52.5	1.7911	1.88	5.0	NA	±20	Average RF
1,2-Dichloroethane	50.0	46.2	0.5045	0.4659	-7.7	NA	±20	Average RF
1,2-Dichloropropane	50.0	51.1	0.3822	0.3903	2.1	NA	±20	Average RF
1,3-Dichlorobenzene	50.0	52.7	1.7644	1.859	5.4	NA	±20	Average RF
1,4-Dichlorobenzene	50.0	53.6	1.7954	1.9251	7.2	NA	±20	Average RF
1,4-Dioxane	1000	855	0.0079	0.0068	-14.5	NA	±20	Average RF
2-Butanone (MEK)	50.0	45.7	0.3887	0.3549	-8.7	NA	±20	Average RF
2-Hexanone	50.0	54.9	0.4444	0.4876	9.7	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	54.8	0.5153	0.5645	9.5	NA	±20	Average RF
Acetone	50.0	34.3	0.3378	0.2101	NA	-31.4*	±20	Quadratic
Benzene	50.0	51.2	1.4436	1.4769	2.3	NA	±20	Average RF
Bromochloromethane	50.0	48.5	0.3414	0.3311	-3.0	NA	±20	Average RF
Bromodichloromethane	50.0	47.4	0.4044	0.3837	-5.1	NA	±20	Average RF
Bromoform	50.0	45.3	0.4118	0.3732	-9.4	NA	±20	Average RF
Bromomethane	50.0	40.6	0.5194	0.422	-18.8	NA	±20	Average RF
Carbon Disulfide	50.0	50.1	1.4748	1.2672	NA	0.2	±20	Linear
Carbon Tetrachloride	50.0	50.0	0.3283	0.3285	0.1	NA	±20	Average RF
Chlorobenzene	50.0	48.9	1.1151	1.091	-2.2	NA	±20	Average RF
Chloroethane	50.0	59.9	0.3583	0.429	19.7	NA	±20	Average RF
Chloroform	50.0	49.8	0.9251	0.8602	NA	-0.4	±20	Quadratic
Chloromethane	50.0	52.4	0.6946	0.7281	4.8	NA	±20	Average RF
Cyclohexane	50.0	52.6	0.3279	0.3448	5.2	NA	±20	Average RF
Dibromochloromethane	50.0	47.7	0.3109	0.2967	-4.6	NA	±20	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	55.4	0.5563	0.6162	10.8	NA	±20	Average RF
Dichloromethane	50.0	47.8	0.5511	0.5265	-4.5	NA	±20	Average RF
Ethylbenzene	50.0	52.4	0.5851	0.6137	4.9	NA	±20	Average RF
Isopropylbenzene (Cumene)	50.0	55.9	3.4518	3.8604	11.8	NA	±20	Average RF
Methyl Acetate	50.0	44.8	0.7435	0.6661	-10.4	NA	±20	Average RF
Methyl tert-Butyl Ether	50.0	50.0	1.7895	1.7907	0.1	NA	±20	Average RF

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

Service Request: R2007215
Date Analyzed: 08/21/20 09:55

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\082120\P38764.D\
Signal ID: 1

Calibration Date: 7/13/2020
Calibration ID: RC2000094
Analysis Lot: 692022
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Methylcyclohexane	50.0	58.5	0.4449	0.5209	17.1	NA	±20	Average RF
Styrene	50.0	55.1	1.1619	1.2804	10.2	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	48.3	0.3053	0.2948	-3.5	NA	±20	Average RF
Toluene	50.0	53.4	1.5288	1.6341	6.9	NA	±20	Average RF
Trichloroethene (TCE)	50.0	47.2	0.3582	0.3382	-5.6	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	52.2	0.6708	0.7002	4.4	NA	±20	Average RF
Vinyl Chloride	50.0	56.7	0.6512	0.7378	13.3	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	47.7	0.5771	0.5507	-4.6	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	50.3	0.5517	0.5545	0.5	NA	±20	Average RF
m,p-Xylenes	100	108	0.7005	0.7571	8.1	NA	±20	Average RF
o-Xylene	50.0	53.6	0.6839	0.7328	7.1	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	49.2	0.4503	0.4428	-1.7	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	49.4	0.5017	0.4961	-1.1	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	50.3	0.4917	0.4948	0.6	NA	±20	Average RF
Dibromofluoromethane	50.0	48.4	0.2871	0.2781	-3.1	NA	±20	Average RF
Toluene-d8	50.0	51.2	1.3344	1.3653	2.3	NA	±20	Average RF

Client: The LiRo Group **Service Request:**R2007215
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**691826
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\082020\P38704.D\	ZZZZZZZ	ZZZZZZZ	8/20/2020	09:12:00	
I:\ACQUDATA\msvoa12\Data\082020\P38705.D\	Continuing Calibration Verification	RQ2009440-02	8/20/2020	09:45:00	
I:\ACQUDATA\msvoa12\Data\082020\P38706.D\	Lab Control Sample	RQ2009440-03	8/20/2020	10:13:00	
I:\ACQUDATA\msvoa12\Data\082020\P38709.D\	Method Blank	RQ2009440-04	8/20/2020	11:34:00	
I:\ACQUDATA\msvoa12\Data\082020\P38710.D\	ZZZZZZZ	ZZZZZZZ	8/20/2020	12:03:00	
I:\ACQUDATA\msvoa12\Data\082020\P38711.D\	ZZZZZZZ	ZZZZZZZ	8/20/2020	12:25:00	
I:\ACQUDATA\msvoa12\Data\082020\P38712.D\	ZZZZZZZ	ZZZZZZZ	8/20/2020	12:47:00	
I:\ACQUDATA\msvoa12\Data\082020\P38713.D\	ZZZZZZZ	ZZZZZZZ	8/20/2020	13:09:00	
I:\ACQUDATA\msvoa12\Data\082020\P38714.D\	ZZZZZZZ	ZZZZZZZ	8/20/2020	13:30:00	
I:\ACQUDATA\msvoa12\Data\082020\P38715.D\	ZZZZZZZ	ZZZZZZZ	8/20/2020	13:52:00	
I:\ACQUDATA\msvoa12\Data\082020\P38717.D\	ZZZZZZZ	ZZZZZZZ	8/20/2020	14:36:00	
I:\ACQUDATA\msvoa12\Data\082020\P38720.D\	ZZZZZZZ	ZZZZZZZ	8/20/2020	15:42:00	
I:\ACQUDATA\msvoa12\Data\082020\P38721.D\	ZZZZZZZ	ZZZZZZZ	8/20/2020	16:04:00	
I:\ACQUDATA\msvoa12\Data\082020\P38721.D\	ZZZZZZZ	ZZZZZZZ	8/20/2020	16:04:00	
I:\ACQUDATA\msvoa12\Data\082020\P38722.D\	ZZZZZZZ	ZZZZZZZ	8/20/2020	16:26:00	
I:\ACQUDATA\msvoa12\Data\082020\P38723.D\	ZZZZZZZ	ZZZZZZZ	8/20/2020	16:47:00	
I:\ACQUDATA\msvoa12\Data\082020\P38724.D\	ZZZZZZZ	ZZZZZZZ	8/20/2020	17:09:00	
I:\ACQUDATA\msvoa12\Data\082020\P38725.D\	ZZZZZZZ	ZZZZZZZ	8/20/2020	17:31:00	
I:\ACQUDATA\msvoa12\Data\082020\P38726.D\	ZZZZZZZ	ZZZZZZZ	8/20/2020	17:53:00	
I:\ACQUDATA\msvoa12\Data\082020\P38727.D\	ZZZZZZZ	ZZZZZZZ	8/20/2020	18:15:00	
I:\ACQUDATA\msvoa12\Data\082020\P38728.D\	MW-21	R2007215-003	8/20/2020	18:37:00	
I:\ACQUDATA\msvoa12\Data\082020\P38729.D\	MW-19R	R2007215-001	8/20/2020	18:59:00	
I:\ACQUDATA\msvoa12\Data\082020\P38731.D\	MW-19R MS	RQ2009440-05	8/20/2020	19:43:00	

Client: The LiRo Group **Service Request:**R2007215
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**691826
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\082020 \P38732.D\	MW-19R DMS	RQ2009440-06	8/20/2020	20:05:00	

Client: The LiRo Group **Service Request:**R2007215
Project: Buffalo China/16-344-1389

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: **Analysis Lot:**692022
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\082120\P38763.D\	ZZZZZZZ	ZZZZZZZ	8/21/2020	09:24:00	
I:\ACQUDATA\msvoa12\Data\082120\P38764.D\	Continuing Calibration Verification	RQ2009520-02	8/21/2020	09:55:00	
I:\ACQUDATA\msvoa12\Data\082120\P38765.D\	Lab Control Sample	RQ2009520-03	8/21/2020	10:31:00	
I:\ACQUDATA\msvoa12\Data\082120\P38768.D\	Method Blank	RQ2009520-04	8/21/2020	12:00:00	
I:\ACQUDATA\msvoa12\Data\082120\P38769.D\	ZZZZZZZ	ZZZZZZZ	8/21/2020	12:31:00	
I:\ACQUDATA\msvoa12\Data\082120\P38770.D\	ZZZZZZZ	ZZZZZZZ	8/21/2020	12:53:00	
I:\ACQUDATA\msvoa12\Data\082120\P38771.D\	ZZZZZZZ	ZZZZZZZ	8/21/2020	13:15:00	
I:\ACQUDATA\msvoa12\Data\082120\P38772.D\	ZZZZZZZ	ZZZZZZZ	8/21/2020	13:36:00	
I:\ACQUDATA\msvoa12\Data\082120\P38774.D\	ZZZZZZZ	ZZZZZZZ	8/21/2020	14:20:00	
I:\ACQUDATA\msvoa12\Data\082120\P38775.D\	ZZZZZZZ	ZZZZZZZ	8/21/2020	14:42:00	
I:\ACQUDATA\msvoa12\Data\082120\P38778.D\	MW-19AR	R2007215-002	8/21/2020	15:47:00	
I:\ACQUDATA\msvoa12\Data\082120\P38782.D\	ZZZZZZZ	ZZZZZZZ	8/21/2020	17:14:00	
I:\ACQUDATA\msvoa12\Data\082120\P38785.D\	ZZZZZZZ	ZZZZZZZ	8/21/2020	18:20:00	
I:\ACQUDATA\msvoa12\Data\082120\P38786.D\	ZZZZZZZ	ZZZZZZZ	8/21/2020	18:42:00	
I:\ACQUDATA\msvoa12\Data\082120\P38787.D\	ZZZZZZZ	ZZZZZZZ	8/21/2020	19:03:00	
I:\ACQUDATA\msvoa12\Data\082120\P38790.D\	ZZZZZZZ	ZZZZZZZ	8/21/2020	20:09:00	
I:\ACQUDATA\msvoa12\Data\082120\P38791.D\	ZZZZZZZ	ZZZZZZZ	8/21/2020	20:30:00	
I:\ACQUDATA\msvoa12\Data\082120\P38792.D\	ZZZZZZZ	ZZZZZZZ	8/21/2020	20:52:00	

Analysis: 8260Waters | Analyst: K. Ruest | pH strips: 221419 | Tune Method: LJ071320

Date: 8/20/2020 | Balance ID: N/A | ResCl strips: N/A | Run Method: ↓

Instr. 12 | 50 mL Class A used for dilution FV | Syringes: 205000 | LIMS Run#: 1691826

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Tier	Vial	pH	File#	OK?	Comments
1	~~BLK~~ TUNE (KR)		LQ2009440.01					P35704	Y	(amt) 9:12
1	CCV		02					P35705	Y	
1	LCS-FP		03					P35706	Y	↑DCE
1	BLK		—					P35707	(N)	not c/o
2	mBLK.ump		—					P35708	Y	
3	MBLK-FP		04					P35709	Y	
1	R2007315.007	1.0	+TICs	66576	4	2	22	P35710	Y	
2	008	1.0				2	22	P35711	(Y)	not 2.5 TCFm
3	008	2.5	20/50mls			3	22	P35712	(Y)	(DL)
4	009	2.5	↓			2	22	P35713	(Y)	(DL) F113
5	001	5.0	10/50mls			2	22	P35714	(Y)	(DL) F113
6	005	5.0	↓	↓	↓	2	22	P35715	(Y)	(DL) TCFm
7	BLK					—	—	P35716	—	
8	R2007302.007	10	5/50mls	16636	2	2	22	P35717	Y	
9	BLK					—	—	P35718	—	
10	↓					—	—	P35719	—	
11	R2007371.001	1.0		19396	2	1	22	P35720	Y	
12	002	1.0	R2007372.002			1	22	P35721	Y	
13	R2007322.001	1.0				1	22	P35722	Y	
14	R2007381.004	1.0		19760	2	1	22	P35723	Y	
15	R2007385.005	1.0				1	22	P35724	Y	
16	006	1.0				1	22	P35725	Y	
17	R2007479.001	5.0	10/50mls	9443	2	1	22	P35726	(N)	Fcomy ↓SU - not 25 ↑NT
18	002	10	5/50mls			1	22	P35727	Y	↓ (↑NT)
19	R2007215.003	1.0		8243	4	1	22	P35728	Y	
20	001	1.0				1	22	P35729	(N)	not ↓SU (Y)W/RA
21	002	5.0	10/50mls			1	22	P35730	(N)	not 2.5
22	MS 001	1.0				2	22	P35731	Y	
23	MSD 001	1.0				3	22	P35732	Y	20:05 ✓
24	BLK					—	—	P35733	—	

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

500 Primary Acct: 211502
Primary Frt: 211511 — 5ul → 50mls
Primary TG: 211636 = CCV
Primary HSL: 211601
Primary

200 Secondary Frt: 211161 - 5ul
500 Secondary Acct: 211504
Secondary TG: 211229 — 2ul
Secondary HSL: 211637 — 50mls = LCS
Secondary

-10.6uL
4.2uL
42ml vial = MS/D

Combined IS/Surr
Surrogate SD: 211225
Internal Std SD: 211226
Reagents:

Analysis: 8260Waters | Analyst: K. Quest | pH strips: 221419 | Tune Method: W071320

Date: 5/21/2020 | Balance ID: N/A | ResCl strips: N/A | Run Method: ↓

Instr. 12 | 50 mL Class A used for dilution FV | Syringes: 205000 | LIMS Run#: 692022

Data Path: j:\acqudata\msvoa(InstID)\(Date)

Pos.	Sample	Diln.	Diln. Prep./	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK							P35762		
2	DUVE		R2009570.01					P35763	YT	(auto) 9:24
1	CCV		02					P35764	YC	
1	LCS.FP		03					P35765	YD	
1	BLK		—					P35766	(N)	wpt c/o
2	MBLK.WMP		—					P35767	YB	
3	MBLK.FP		04					P35768	YB	
1	R2007427.003	1.0	TIC's	66576	4	2	L2	P35769	Y	
2	006	1.0				1	L2	P35770	Y	
3	008	1.0				1	L2	P35771	Y	
4	010	1.0				1	L2	P35772	Y	
5	007	1.0				1	L2	P35773	(N)	pos c/o
6	009	1.0				1	L2	P35774	Y	
7	011	1.0				1	L2	P35775	Y	
8	BLK					—	-	P35776	—	
9	R2007215.001	1.0		9443	2	2	L2	P35777	(Y)	as RA - ↓su confirms
10	002	2.5	20/50mls			2	L2	P35778	Y	
11	BLK					—	—	P35779	—	
12	R2007479.001	25	2/50mls	9443	2	2	L2	P35780	(Y)	Foamy, ↑NT's as RA
13	BLK					—	—	P35781	—	
14	R2007472.007	1.0	7487(LR) TIC's	66576	4	2	L2	P35782	Y	
15	R2007476.001	1.0		9443	2	1	L2	P35783	(N)	wpt ↓su
16	R2007478.004	1.0				1	L2	P35784	(D)	↓
17	001	1.0				1	L2	P35785	Y	
18	002	1.0				1	L2	P35786	Y	
19	003	1.0				1	L2	P35787	Y	
20	R2007476.007	1.0		9443	2	2	L2	P35788	(N)	↓ su
21	R2007476.004	1.0		↓	↓	2	L2	P35789	(N)	↓
22	R2007371.001	50	1/50mls	63608	2	1	(4)	P35790	Y	Foamy
23	R2007478.001	1.0	ms	9443	2	2	L2	P35791	Y	RunQL
24	↓ 001	1.0	msd	↓	↓	3	L2	P35792	Y	↓ 8:52
26+ 25	BLK					—	—	P35793	—	P35794

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged

Combined IS/Surr

500 Primary Acct : 211502
Primary TG : 211636 — 5ul→50mls = CCV
Primary Frt : 211571
Primary HSL : 211861
Primary

200 Secondary Frt : 211161 -5ul
500 Secondary Acct : 211584
Secondary TG : 211209 — 2ul
Secondary HSL : 211637
Secondary

50mls = LCS — 10.6uL — 4.2mL — 42ml vial = ms/D

Surrogate 50 : 211225
Internal Std 50 : 211226
Reagents:

Appendix E
Data Usability Summary Reports

Data Usability Summary Report

Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

Buffalo China 16-344-1389
ALS Environmental SDG#R2006930
September 9, 2020
Sampling date: 8/4/2020

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 for The LiRo Group, project located at Buffalo China 16-344-1389, ALS Environmental #R2006930 submitted to Vali-Data of WNY, LLC on August 28, 2020. This DUSR has been prepared in general compliance with USEPA National Functional Guidelines(NFG) and NYSDEC Analytical Services Protocols. 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 Initial Calibration and Continuing Calibration.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met except the temperature of the samples was outside QC limits. The samples were analyzed within 7 days, so no further action is required.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All criteria were met.

METHOD BLANK
All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met.
Several target analytes were outside laboratory QC limits but within NFG QC limits, so no further action is required.

MS/MSD
No MS/MSD was performed.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met except the RRF of 1,4-Dioxane was outside QC limits in the initial calibration. This target analyte should be qualified as estimated in the associated samples, blanks and spikes.
Alternate forms of regression were performed on all target analytes whose %RSD >20%, with acceptable results.

CONTINUING CALIBRATION
All criteria were met except the RRF of 1,4-Dioxane was outside QC limits in the continuing calibration. This target analyte should be qualified as estimated in the associated samples, blanks and spikes.

GC/MS PERFORMANCE CHECK
All criteria were met.

Data Usability Summary Report

Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

Buffalo China 16-344-1389
ALS Environmental SDG#R2007055
September 9, 2020
Sampling date: 8/5, 6/2020

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 for The LiRo Group, project located at Buffalo China 16-344-1389, ALS Environmental #R2007055 submitted to Vali-Data of WNY, LLC on August 28, 2020. This DUSR has been prepared in general compliance with USEPA National Functional Guidelines(NFG) and NYSDEC Analytical Services Protocols. 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 Holding Times, Method Blank, Laboratory Control Samples, Initial Calibration and Continuing Calibration.

DATA COMPLETENESS

All criteria were met.

NARRATIVE AND DATA REPORTING FORMS

All criteria were met except the %Rec of the surrogates in samples MW-6DL and MW-5ARDL were not recorded on the 'Surrogate Recovery Summary'. The %Rec was recorded on the raw data and is within QC limits, so no further action is required.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met except the temperature of the samples was outside QC limits. Some of the samples were analyzed within 7 days, so no further action is required for those samples. Samples: MW-8, MW-8A, MW-9, MW-9A, MW-9A DUP, MW-25A, TRIP BLANK 1, MW-6DL, MW-5AR and MW-5ARDL were analyzed outside 7 days. All target analytes in these samples should be qualified as estimated.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All criteria were met.

METHOD BLANK
All criteria were met except Toluene was detected above the MDL, below the reporting limit and is qualified as estimated in RQ209120-04. This target analyte should be qualified as undetected at the reporting limit in associated samples in which it was detected below the reporting limit. This target analyte should be qualified as estimated high in the associated samples in which it was detected above the reporting limit.

FIELD DUPLICATE SAMPLE PRECISION
All criteria were met except Carbon disulfide was detected in MW-9A but was not detected in MW-9A DUP.

LABORATORY CONTROL SAMPLES
All criteria were met except the %Rec of 1,1-Dichlorethene, Chloroethane and trans-1,2-Dichloroethene was outside QC limits high in R2009120-03 and should be qualified as estimated. These target analytes should be qualified as estimated high in the associated samples in which they were detected.
Several target analytes were outside laboratory QC limits but within NFG QC limits, so no further action is required.

MS/MSD
No MS/MSD was performed.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met except the RRF of 1,4-Dioxane was outside QC limits in the initial calibration. This target analyte should be qualified as estimated in the associated samples,

blanks and spikes.
Alternate forms of regression were performed on all target analytes whose %RSD >20%, with acceptable results.

CONTINUING CALIBRATION
All criteria were met except the RRF of 1,4-Dioxane was outside QC limits in the continuing calibration. The %D of Bromomethane and Chloroethane was outside QC limits in file#P38507. These target analytes should be qualified as estimated in the associated samples, blanks and spikes.

GC/MS PERFORMANCE CHECK
All criteria were met.

Data Usability Summary Report

Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

Buffalo China 16-344-1389
ALS Environmental SDG#R2007215
September 9, 2020
Sampling date: 8/5, 6/2020

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 for The LiRo Group, project located at Buffalo China 16-344-1389, ALS Environmental #R2007215 submitted to Vali-Data of WNY, LLC on August 28, 2020. This DUSR has been prepared in general compliance with USEPA National Functional Guidelines(NFG) and NYSDEC Analytical Services Protocols. 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 Surrogate Spike Recoveries, Method Blank, Laboratory Control Samples, Initial Calibration and Continuing Calibration.

DATA COMPLETENESS

All criteria were met.

NARRATIVE AND DATA REPORTING FORMS

All criteria were met.

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 except the %Rec of Dibromofluoromethane was outside QC limits, low in MW-19R. Associated target analytes should be qualified as estimated in this sample.

METHOD BLANK
All criteria were met except Chloromethane was detected above the MDL, below the reporting limit and is qualified as estimated in RQ209440-04. This target analyte should be qualified as undetected at the reporting limit in associated samples in which it was detected below the reporting limit. This target analyte should be qualified as estimated high in the associated samples in which it was detected above the reporting limit.

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met except the %Rec of 1,1-Dichlorethene was outside QC limits high in R2009440-03 and R2009520-03 and should be qualified as estimated. This target analyte should be qualified as estimated high in the associated samples in which it was detected. Several target analytes were outside laboratory QC limits but within NFG QC limits, so no further action is required.

MS/MSD
All criteria were met except the %Rec of Trichloroethene was outside QC limits in MW-19RMS but within limits in MW-19RMSD, so no further action is required.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met except the RRF of 1,4-Dioxane was outside QC limits in the initial calibration. This target analyte should be qualified as estimated in the associated samples, blanks and spikes.
Alternate forms of regression were performed on all target analytes whose %RSD >20%, with acceptable results.

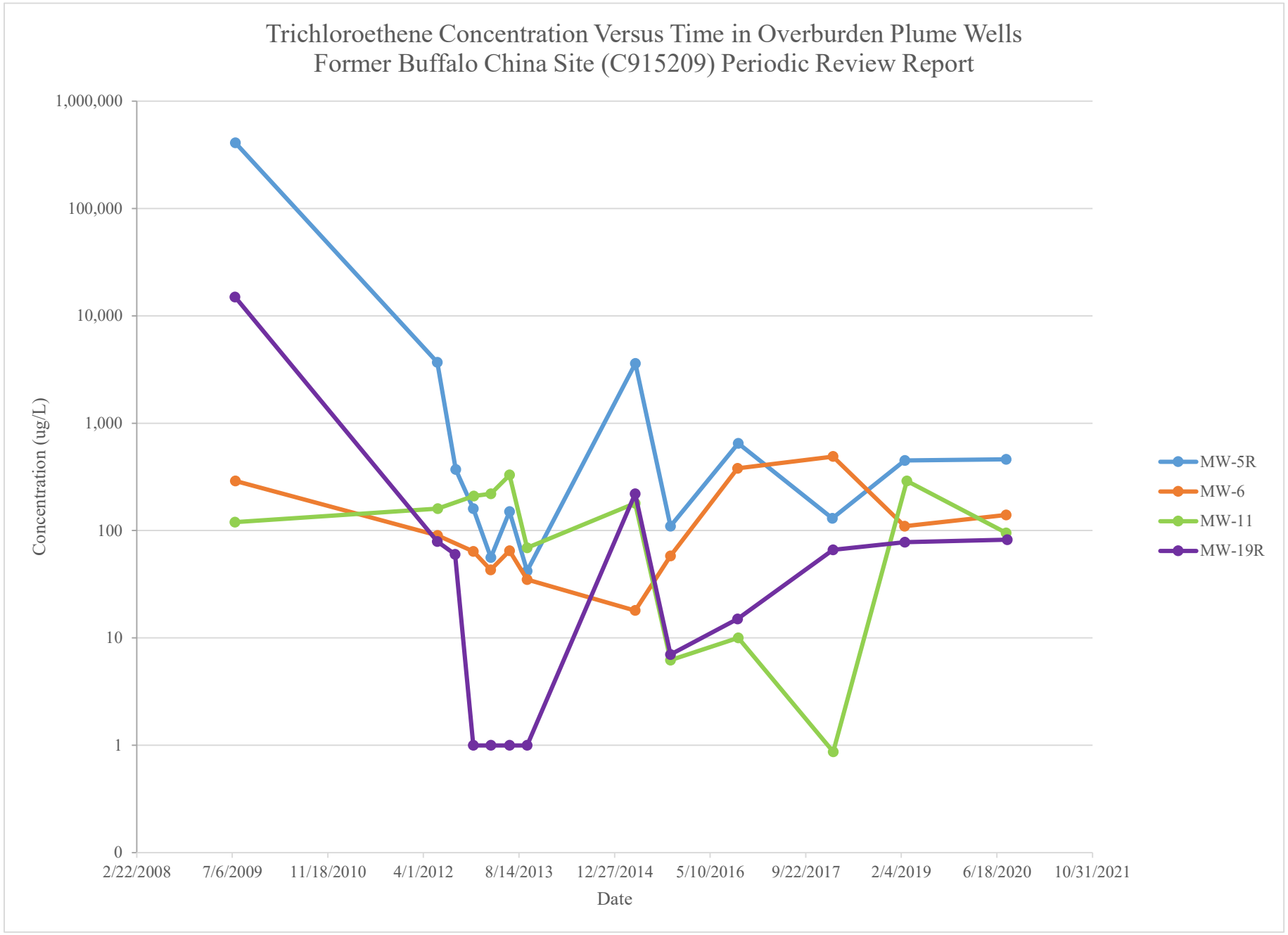
CONTINUING CALIBRATION

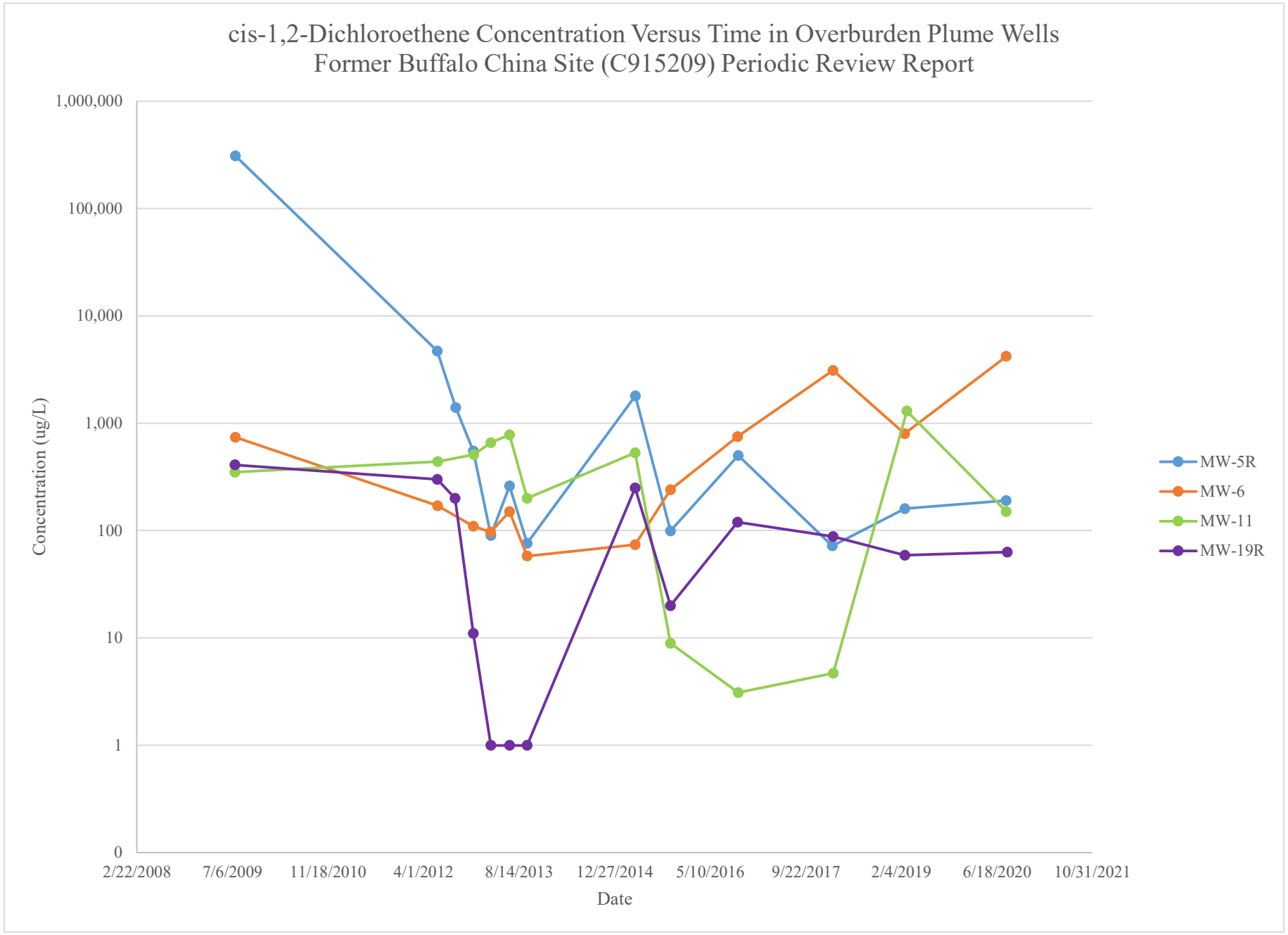
All criteria were met except the RRF of 1,4-Dioxane was outside QC limits in the continuing calibration. This target analyte should be qualified as estimated in the associated samples, blanks and spikes.

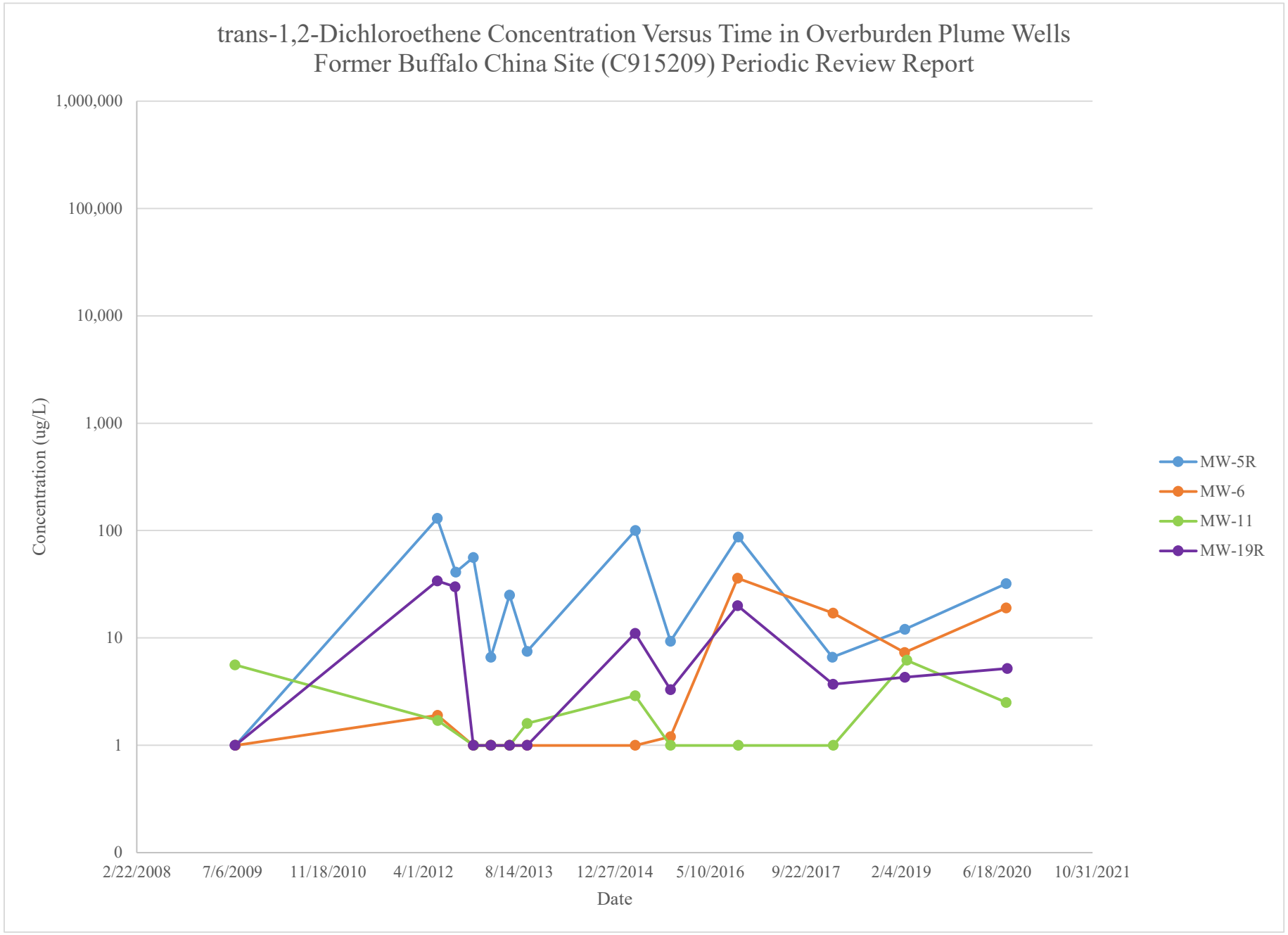
GC/MS PERFORMANCE CHECK

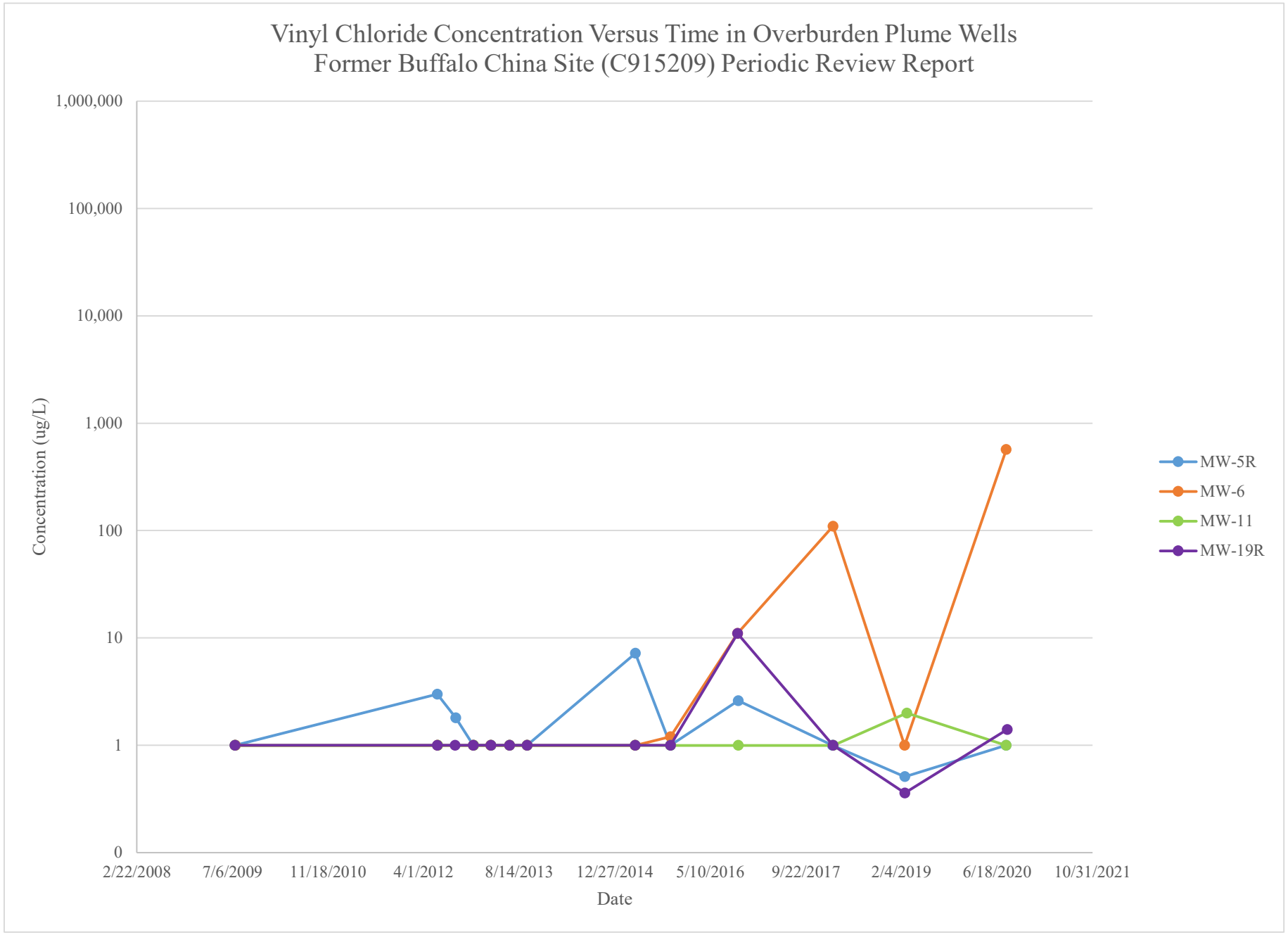
All criteria were met.

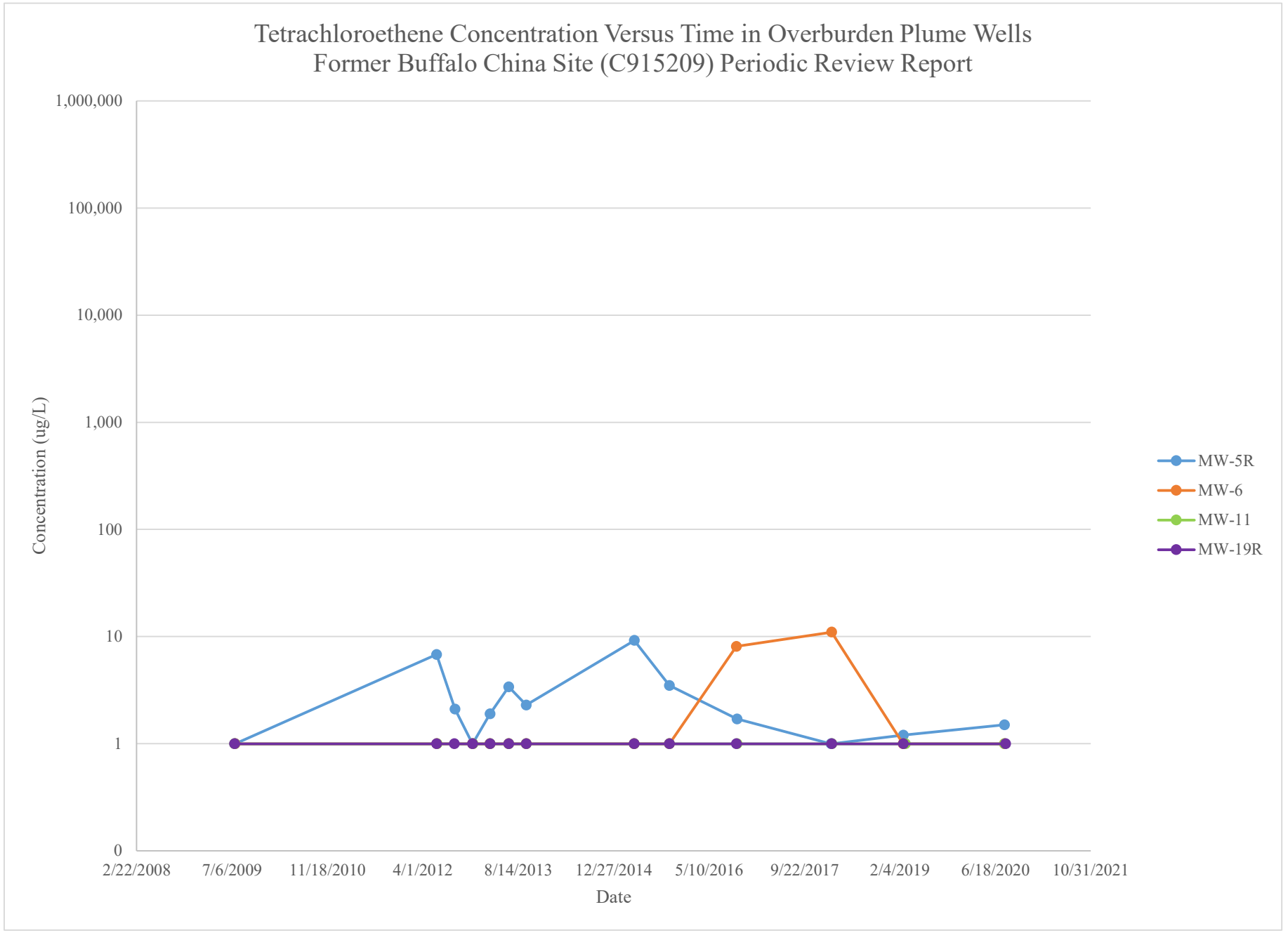
Appendix F
Concentration versus Time Plots for Contaminants of Concern

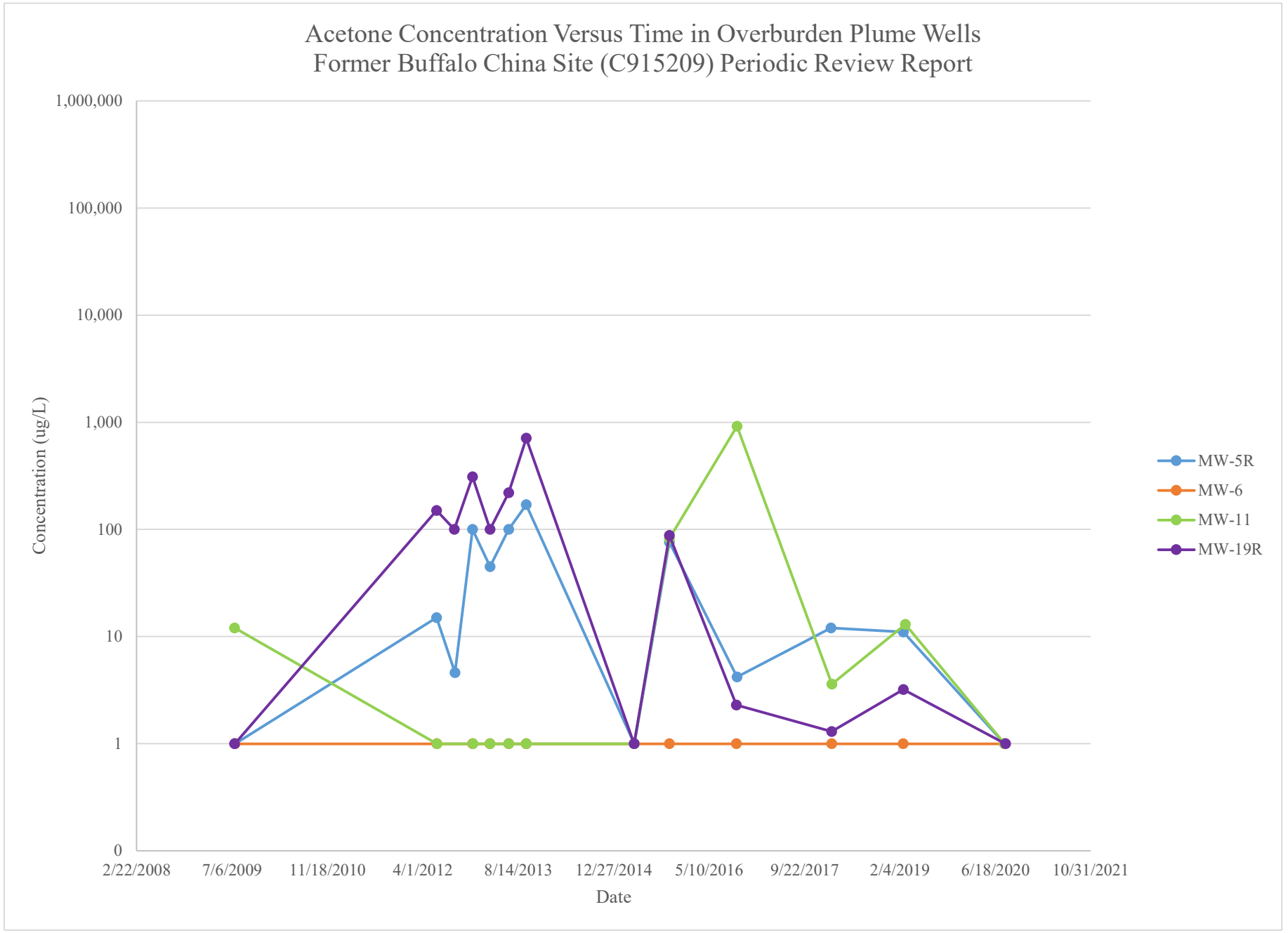

Trichloroethene Concentration Versus Time in Overburden Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
Concentration (ug/L)
1,000,000
100,000
10,000
1,000
100
10
1
0
2/22/2008
7/6/2009
11/18/2010
4/1/2012
8/14/2013
12/27/2014
5/10/2016
9/22/2017
2/4/2019
6/18/2020
10/31/2021
Date
MW-5R
MW-6
MW-11
MW-19R

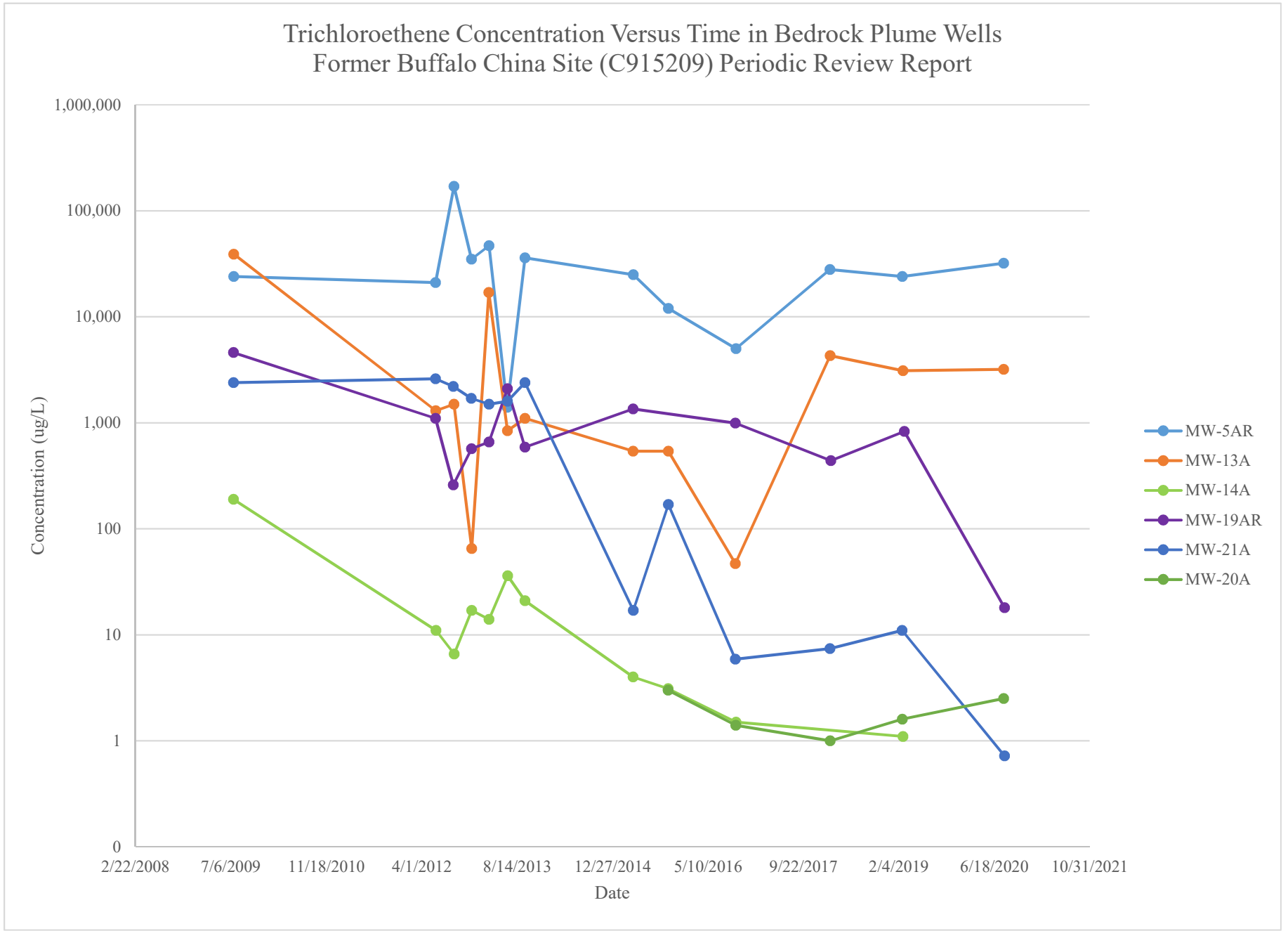

cis-1,2-Dichloroethene Concentration Versus Time in Overburden Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
Concentration (ug/L)
1,000,000
100,000
10,000
1,000
100
10
1
0
2/22/2008
7/6/2009
11/18/2010
4/1/2012
8/14/2013
12/27/2014
5/10/2016
9/22/2017
2/4/2019
6/18/2020
10/31/2021
Date
MW-5R
MW-6
MW-11
MW-19R

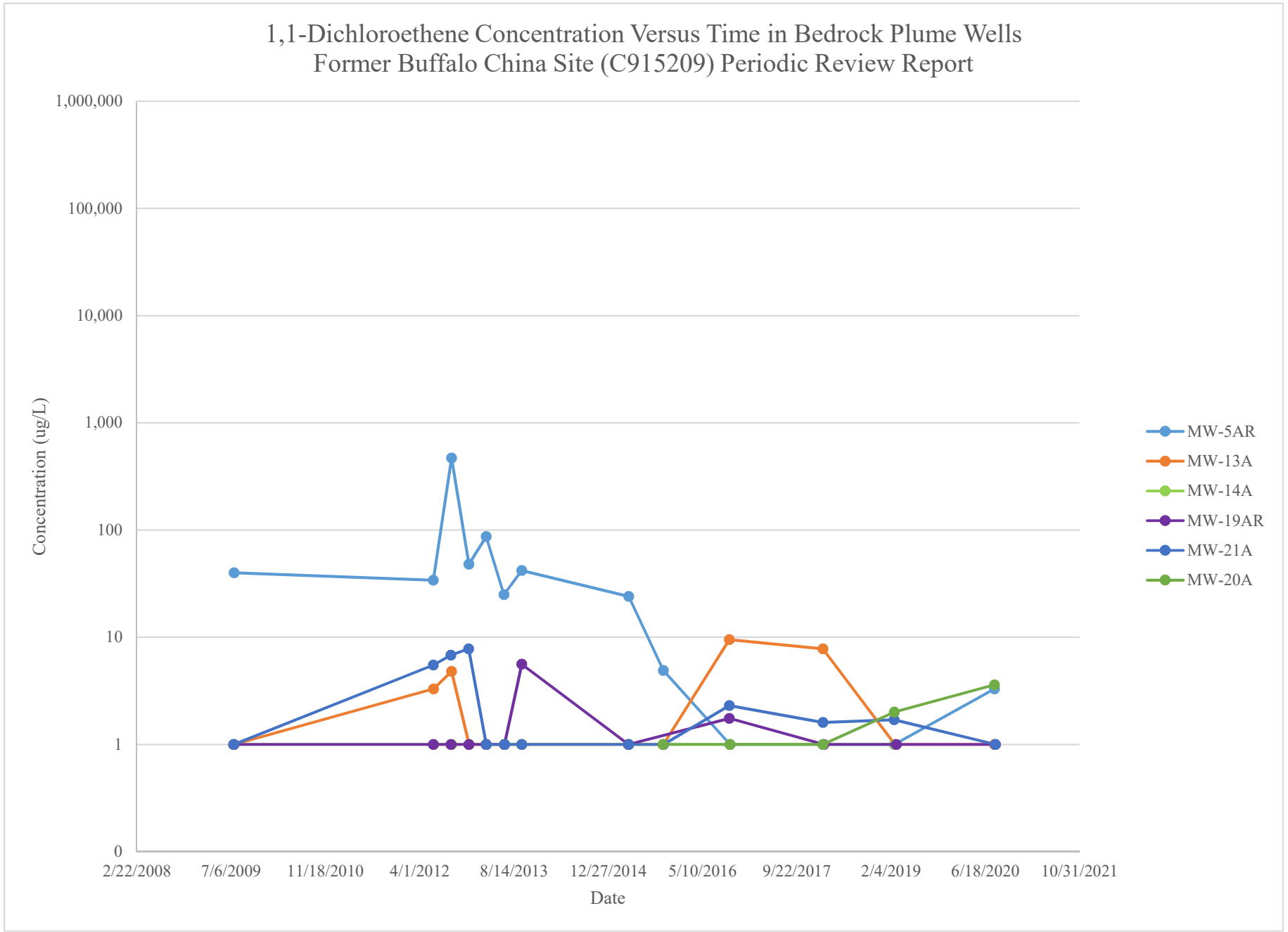

trans-1,2-Dichloroethene Concentration Versus Time in Overburden Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
Concentration (ug/L)
1,000,000
100,000
10,000
1,000
100
10
1
0
2/22/2008
7/6/2009
11/18/2010
4/1/2012
8/14/2013
12/27/2014
5/10/2016
9/22/2017
2/4/2019
6/18/2020
10/31/2021
Date
MW-5R
MW-6
MW-11
MW-19R

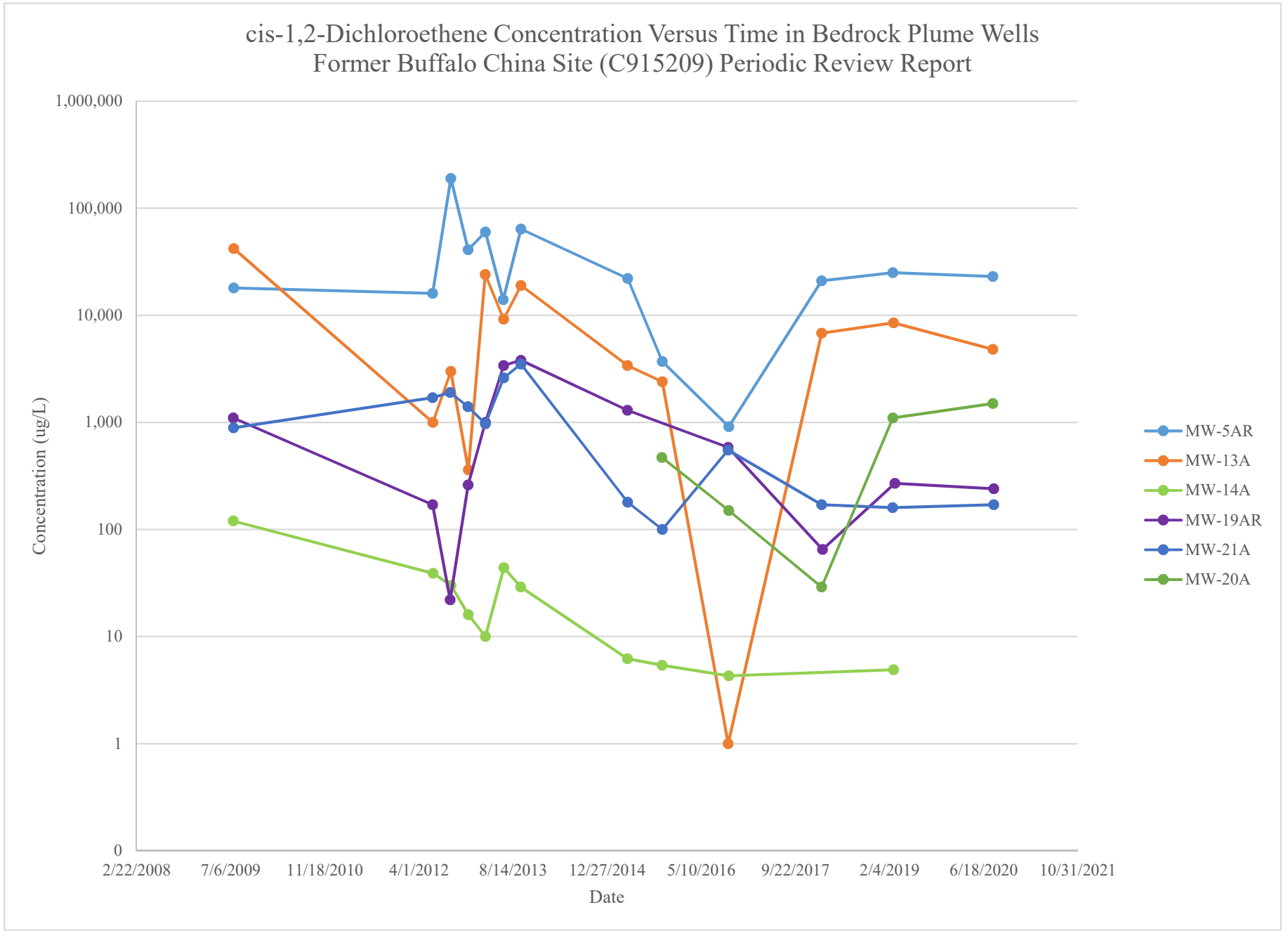

Vinyl Chloride Concentration Versus Time in Overburden Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
1,000,000
100,000
10,000
1,000
100
10
1
0
Concentration (ug/L)
2/22/2008
7/6/2009
11/18/2010
4/1/2012
8/14/2013
12/27/2014
5/10/2016
9/22/2017
2/4/2019
6/18/2020
10/31/2021
Date
MW-5R
MW-6
MW-11
MW-19R


Tetrachloroethene Concentration Versus Time in Overburden Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
1,000,000
100,000
10,000
1,000
100
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
9/22/2017
2/4/2019
6/18/2020
10/31/2021
Date
MW-5R
MW-6
MW-11
MW-19R


Acetone Concentration Versus Time in Overburden Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
1,000,000
100,000
10,000
1,000
100
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
9/22/2017
2/4/2019
6/18/2020
10/31/2021
Date
MW-5R
MW-6
MW-11
MW-19R


Trichloroethene Concentration Versus Time in Bedrock Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
1,000,000
100,000
10,000
1,000
100
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
9/22/2017
2/4/2019
6/18/2020
10/31/2021
Date
MW-5AR
MW-13A
MW-14A
MW-19AR
MW-21A
MW-20A


1,1-Dichloroethene Concentration Versus Time in Bedrock Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
1,000,000
100,000
10,000
1,000
100
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
9/22/2017
2/4/2019
6/18/2020
10/31/2021
Date
MW-5AR
MW-13A
MW-14A
MW-19AR
MW-21A
MW-20A


cis-1,2-Dichloroethene Concentration Versus Time in Bedrock Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
Concentration (ug/L)
1,000,000
100,000
10,000
1,000
100
10
1
0
2/22/2008
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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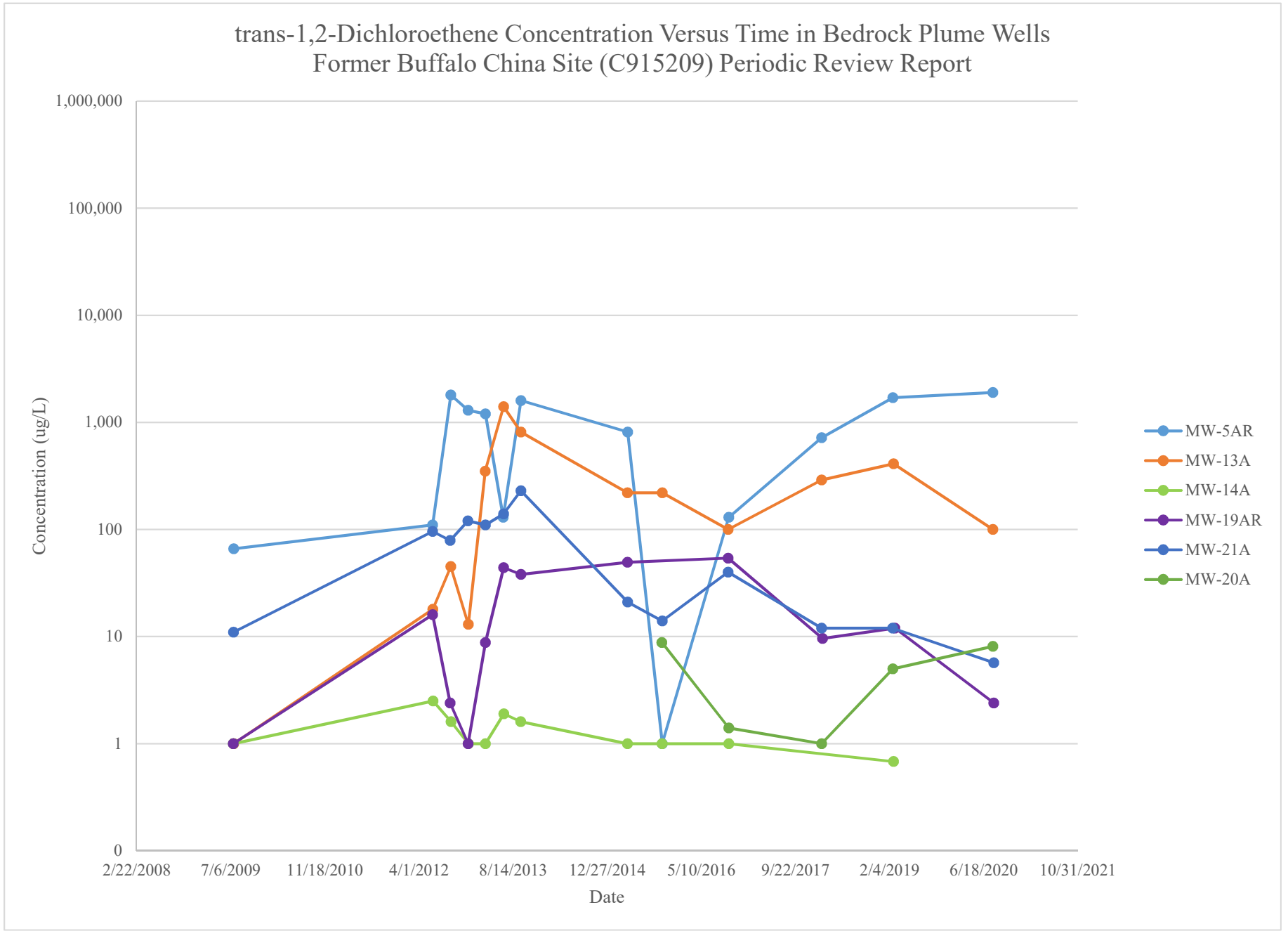
MW-13A
MW-14A
MW-19AR
MW-21A
MW-20A


trans-1,2-Dichloroethene Concentration Versus Time in Bedrock Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
Concentration (ug/L)
1,000,000
100,000
10,000
1,000
100
10
1
0
2/22/2008
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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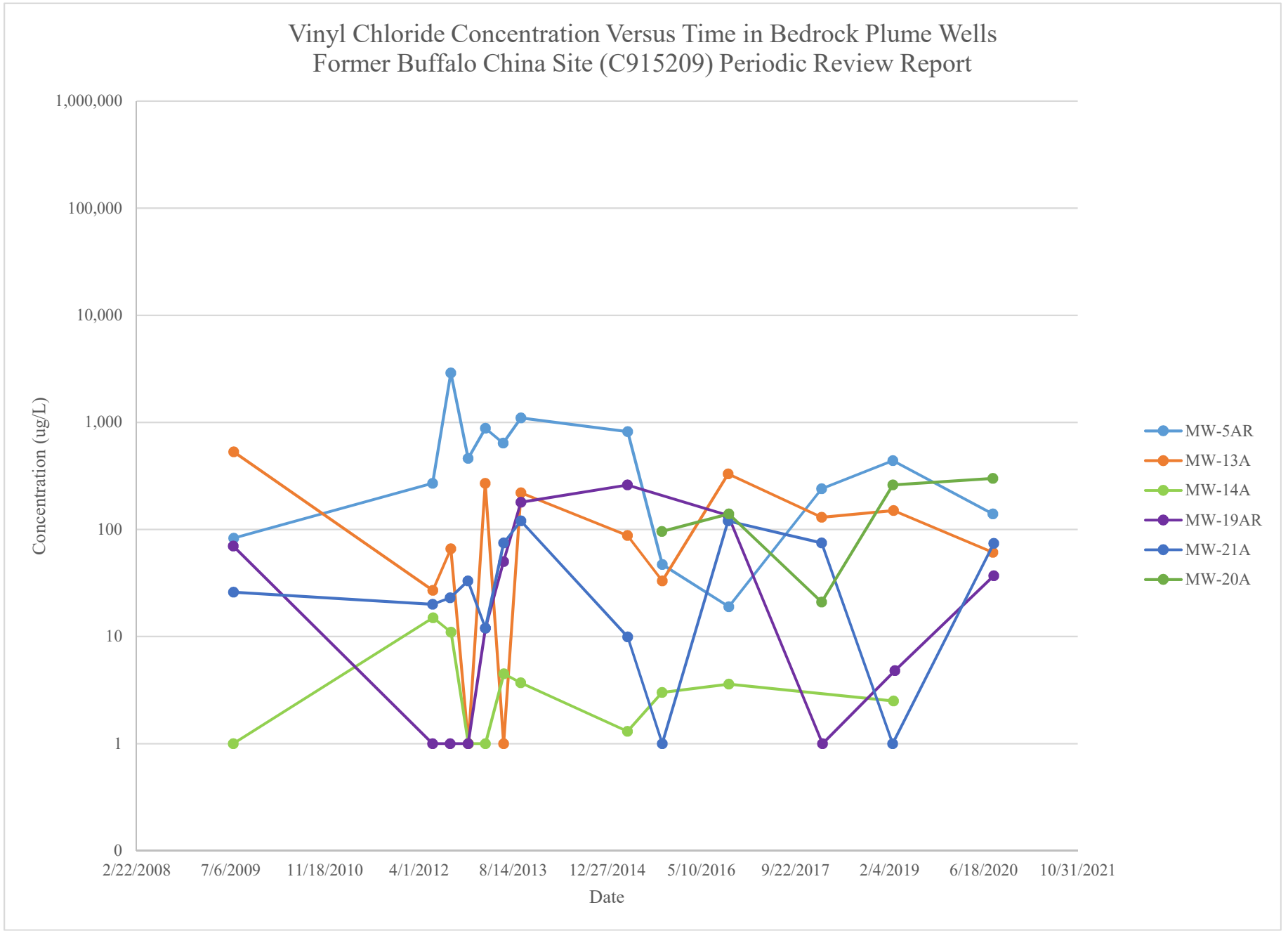
MW-13A
MW-14A
MW-19AR
MW-21A
MW-20A


Vinyl Chloride Concentration Versus Time in Bedrock Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
1,000,000
100,000
10,000
1,000
100
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
9/22/2017
2/4/2019
6/18/2020
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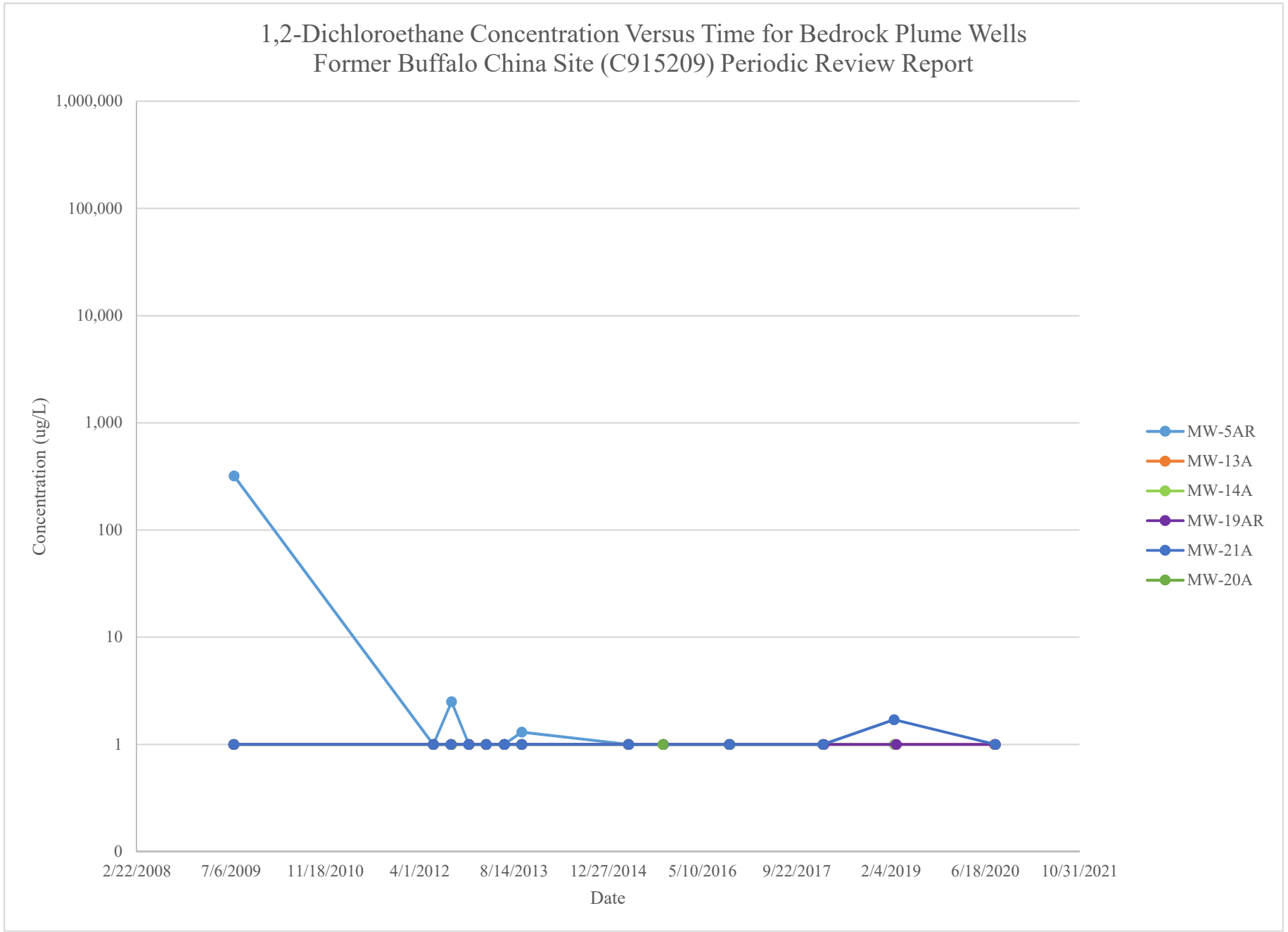
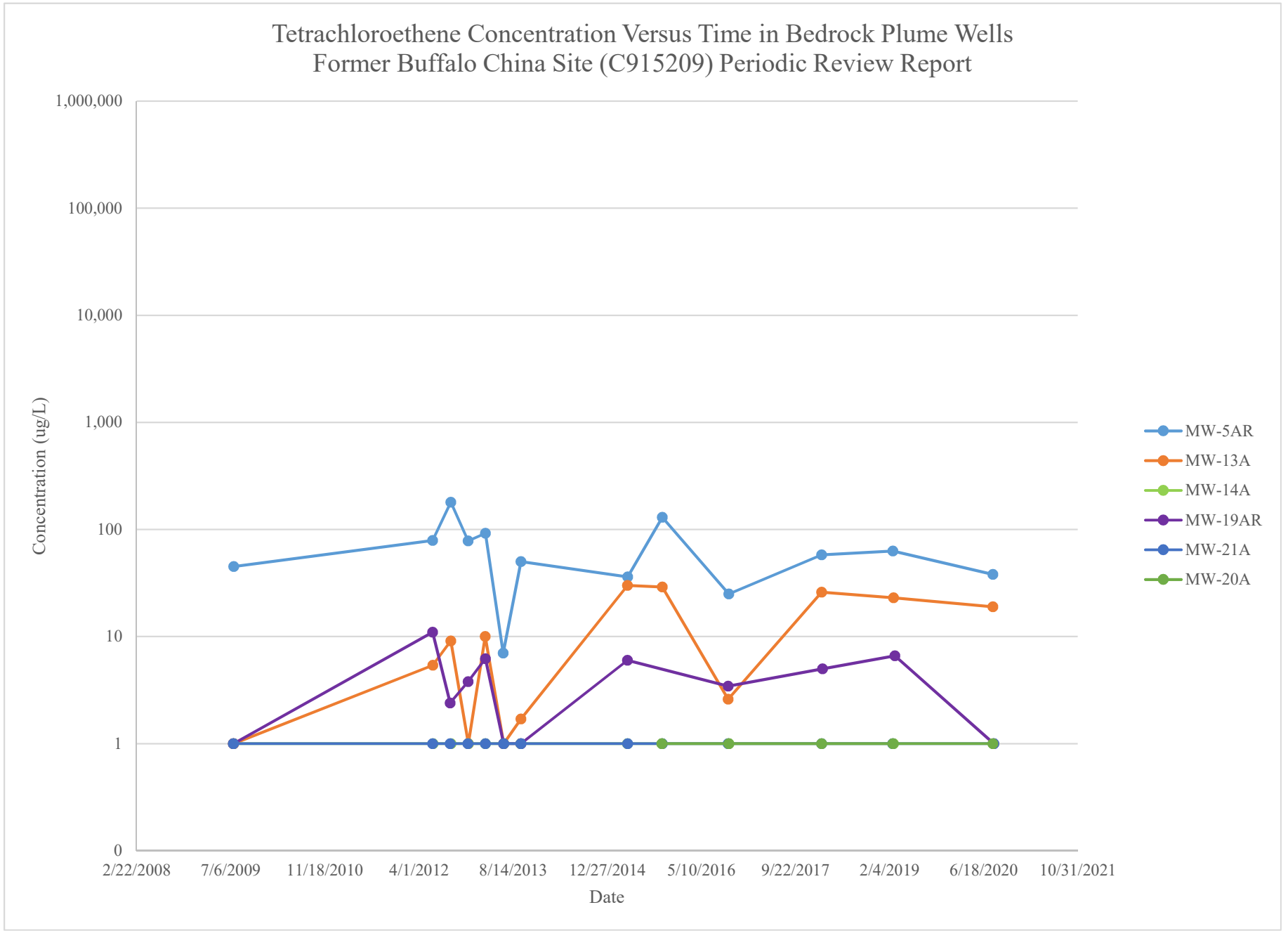
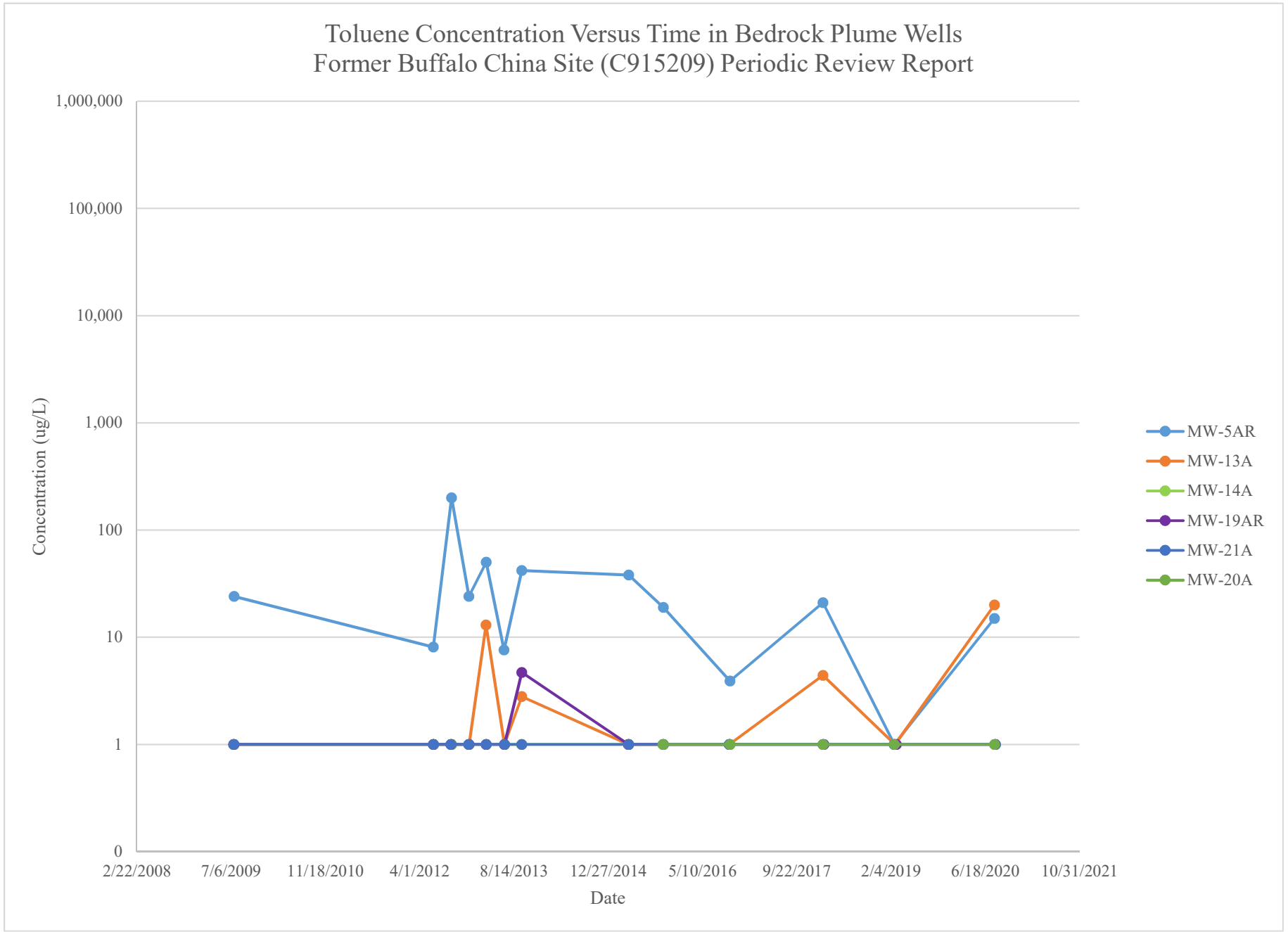
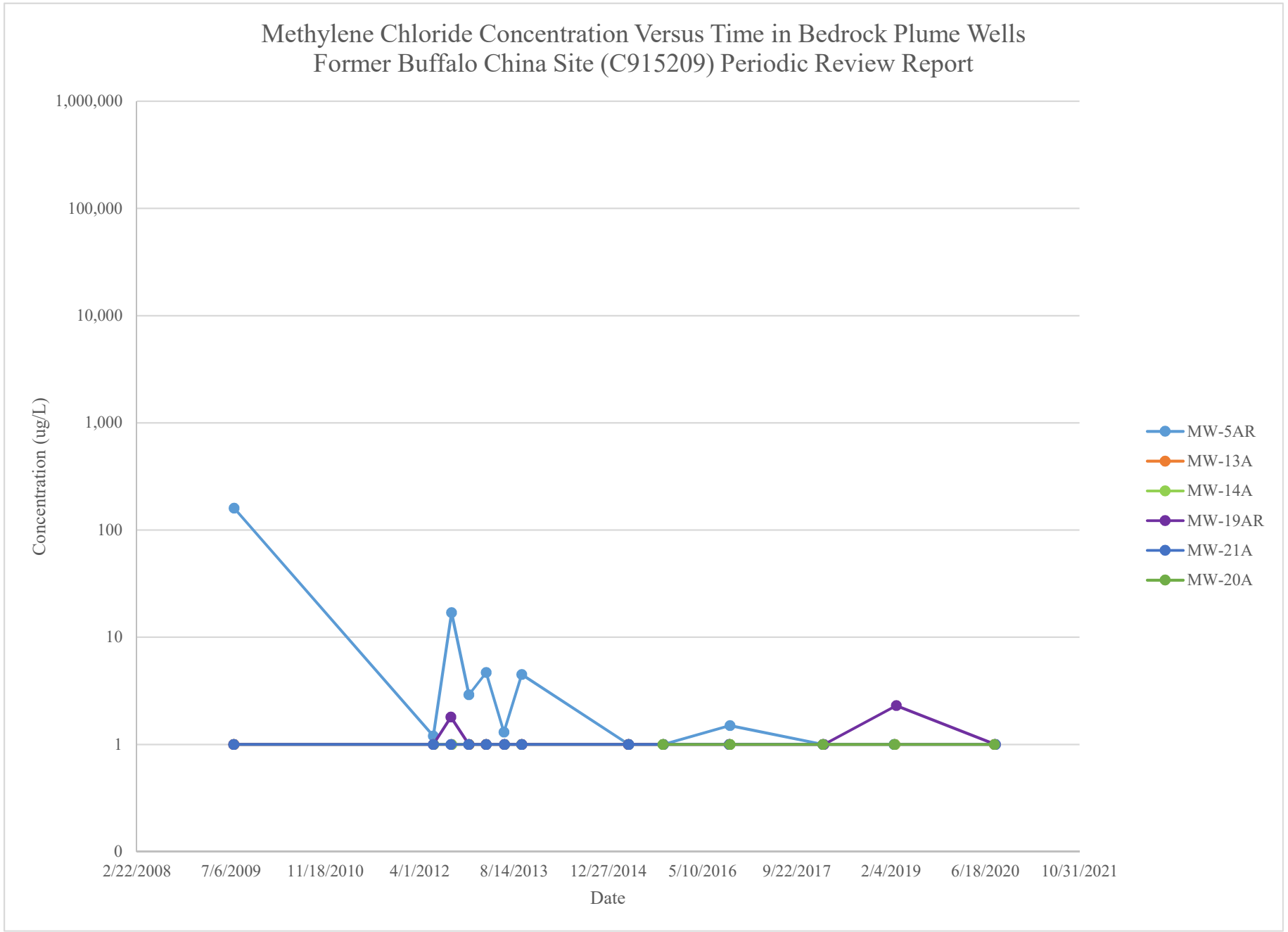
MW-13A
MW-14A
MW-19AR
MW-21A
MW-20A


1,2-Dichloroethane Concentration Versus Time for Bedrock Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
1,000,000
100,000
10,000
1,000
100
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
9/22/2017
2/4/2019
6/18/2020
10/31/2021
Date
MW-5AR
MW-13A
MW-14A
MW-19AR
MW-21A
MW-20A


Tetrachloroethene Concentration Versus Time in Bedrock Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
1,000,000
100,000
10,000
1,000
100
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
9/22/2017
2/4/2019
6/18/2020
10/31/2021
Date
MW-5AR
MW-13A
MW-14A
MW-19AR
MW-21A
MW-20A


Toluene Concentration Versus Time in Bedrock Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
1,000,000
100,000
10,000
1,000
100
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
9/22/2017
2/4/2019
6/18/2020
10/31/2021
Date
MW-5AR
MW-13A
MW-14A
MW-19AR
MW-21A
MW-20A


Methylene Chloride Concentration Versus Time in Bedrock Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report
1,000,000
100,000
10,000
1,000
100
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
9/22/2017
2/4/2019
6/18/2020
10/31/2021
Date
MW-5AR
MW-13A
MW-14A
MW-19AR
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, 2019 to November 6, 2020

	YES	NO
1. Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☒	☐
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☒	☐
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Industrial	☐	☒
7. Are all ICs/ECs in place and functioning as designed?	☐	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Stephen Frank — 02/23/2019

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
☐	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☐	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____

Signature of Owner, Remedial Party or Designated Representative | Date

IC CERTIFICATIONS
SITE NO. 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 _____ at _____,
print name print business address

am certifying as _____(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

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 _____ at _____,
print name print business address

am certifying as a Professional Engineer for the _____
(Owner or Remedial Party)

_____	_____	_____
Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification	Stamp (Required for PE)	Date

Private commercial

CITY OF BUFFALO

DEPARTMENT OF ECONOMIC DEVELOPMENT, PERMIT & INSPECTION SERVICES

105D -

Date 7/20/20 **Permit#: 9470135**

TO: NORTHSTAR DEMO & REMED.
120 ELMGROVE PK
ROCHESTER, NY 14624

The permit was for demolition of the former warehouse at 151 Harrison Street. The superstructure only was demolished so there was no impact to the cover system. All materials from the demolition were disposed of off-site

Property Address :151 HARRISON

The Demolition performed by your company pursuant to the contract

Was inspected on: 7/14/20

The undersigned certifies that the said work performed by your firm at the location citied above is :

Accepted ** **Rejected****

In accepting, it is certified that, to the best of our knowledge, Only a basement and final grade Inspection was observed with photo , outlined in the City of Buffalos' demolition specifications.

All demo Work Complete. Flatwork is ok to stay as per commissioner of permits and inspections. All high grass must be cut and maintained trimmed.

In rejecting, it is certified that the following conditions have not been met:
Accordingly, payment will not be made pursuant to this contract until said demolition work is properly completed, outlined in the City of Buffalo Demolition Spec's

Failure to do so may result in your firm being disqualified from doing business with the City of Buffalo

**** Acceptance is conditional as described in the bid proposal for one year from final inspection date re-grade necessary**
Sean Myers
Building Inspector: Sean Myers983-4934/851-4904
smyers@city-buffalo.com

Date Mailed or Faxed to contractor or owner 7/20/20 **Fax 851-4889**

WASTE SHIPMENT RECORD / ASBESTOS MANIFEST 28250

For Disposal Site Use Only
Elevation 216 1570
North _____ East _____

Generator

1-A. Special Waste Profile Number: 120143 NY
NESHAP Notified: _____ YES _____ NO
WSR Number: № 001974

1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code)
Hayes Place Mgmt Grp.
75 Hayes Place, Buffalo, NY 14210

1-C. Generator's Phone Number
716-984-7562

1-D. Work Site Address
151 Hamson St.
Buffalo, NY 14210

1-E. 24 Hour Emergency Response Telephone Number
716 984 7562

2. Operator's Name and Complete Mailing Address
Empire Building Diagnostics Inc.
786 Terrace Blvd, Suite 1, Depew, NY 14043

Operator's Phone Number
716-685-4588

3. Waste Disposal Site (WDS) Name and Complete Mailing Address
Waste Management
10556 Olean Rd, Chaffee, NY 14030

WDS Phone Number
716-496-5900

4. Name and Address of Responsible Agency
NYSDOL Asbestos Division
State Office, Bldg 12, Albany, NY 12240

5. Description of Materials		6. Containers No.	6. Containers Type	7. Total Quantity yd3
friable asbestos	RQ, NA2212, Asbestos, 9, PGIII			
non-friable asbestos X	Cat I ____ Cat II ____	100	D/M	30 yds

8. Special Handling Instructions and Additional Information
24 HOUR NOTICE GIVEN PRIOR TO DISPOSAL, MUST BE BURIED

9. GENERATOR/OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations. I hereby certify that the asbestos is not contaminated with hazardous, PCB, and/or any special waste.

Printed/Typed Name and Title	Signature	Date
Mike Young / VP		1/10/19

Transporter

10. Transporter 1 Company Name
Empire Building Diagnostics Inc.

Complete Mailing Address
785 Terrace Blvd, Suite 2
Depew, NY 14043

Telephone Number (including area code)
716-685-4588

Driver Signature

Printed Name and Title
JOE GARLOCK

Date 1/11/19

11. Transporter 2 Company Name

Complete Mailing Address

Telephone Number (including area code)

Driver Signature

Printed Name and Title

Date

Disposal Site

12. Discrepancy Indication Space

13. Waste Disposal Site Owner or Operator

Certification of receipt of asbestos materials covered by this manifest except as noted in Item 12. S82264

Printed/Typed Name and Title	Signature	Date
		1-11-19

3052

WASTE SHIPMENT RECORD / ASBESTOS MANIFEST 29.142

For Disposal Site Use Only

Elevation_____

North_____ East_____

Generator

1-A. Special Waste Profile Number	NESHAP Notified	WSR Number
120143NY	_____YES _____NO	No 001679

1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code)
Hayes Place Mgmt Grp.
75 Hayes Pl Buffalo, NY 14210

1-C. Generator's Phone Number
716-984-7562

1-D. Work Site Address
151 Hamson St
Buffalo, NY 14210

1-E. 24 Hour Emergency Response Telephone Number

2. Operator's Name and Complete Mailing Address
Empire Building Diagnostics Inc.
756 Terrace Blvd, Suite 1, Depew, NY 14043

Operator's Phone Number
716-683-4588

3. Waste Disposal Site (WDS) Name and Complete Mailing Address
Waste Management
10080 Olean Rd, Chaffee, NY 14030

WDS Phone Number
716-496-5000

4. Name and Address of Responsible Agency
NYSDOL Asbestos Division
State Office, Bldg 12, Albany, NY 12240

5. Description of Materials		6. Containers No.	Type	7. Total Quantity yd3
friable asbestos	RQ, NA2212, Asbestos, 9, PGIII			
non-friable asbestos X	Cat I ____ Cat II ____	29	0	14

8. Special Handling Instructions and Additional Information
24 HOUR NOTICE GIVEN PRIOR TO DISPOSAL, MUST BE BURIED

9. GENERATOR/OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations. I hereby certify that the asbestos is not contaminated with hazardous, PCB, and/or any special waste.

Printed/Typed Name and Title	Signature	Date
Mike Young / VP		8/22/19

Transporter

10. Transporter 1 Company Name
Empire Building Diagnostics Inc.

Complete Mailing Address
756 Terrace Blvd, Suite 1
Depew, NY 14043

Telephone Number (including area code)
716-683-4588

Driver Signature

Printed Name and Title
Jeff Bray

Date
8/23/19

11. Transporter 2 Company Name

Complete Mailing Address

Telephone Number (including area code)

Driver Signature

Printed Name and Title

Date

Disposal Site

12. Discrepancy Indication Space

13. Waste Disposal Site Owner or Operator

Certification of receipt of asbestos materials covered by this manifest except as noted in Item 12. 606195 tons/cubic ft

Printed/Typed Name and Title	Signature	Date
M. Baker	M. Baker	8/23/19

WHITE - Disposal Site CANARY - Generator (To be mailed by Disposal Site) PINK - Transporter

Waste Management Chaffee LF
10860 Olean Rd
Chaffee, NY, 14030 Ph: (716) 496-5000

Original
Ticket# 631994

WASTE MANAGEMENT

Customer Name TIDDSROLLOFFBUFFALO TIDD
Ticket Date 03/13/2020
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
Manifest 3
Profile ()
Generator
PO#

Carrier GD GEITER DONE OF WNY
Vehicle# GDD1-T6
Container
Driver
Check#
Billing# 0004735
Grid OL2I6-1560

	Time	Scale	Operator	Inbound	Gross	97480 lb
In	03/13/2020 12:42:24	INBOUND	JChapma7		Tare	36020 lb
Out	03/13/2020 13:39:47	OUTBOUND	JChapma7		Net	61460 lb
					Tons	30.73

Comments

	Product	LD%	Qty	UOM	Rate	Tax/Fee	Amount	Origin
1	CDTM-C&D TONS-COVER MAT	100	30.73	Tons				ERI
2	EVF-P10-Environmental F	100		%				ERI
3	RCR-P-Regulatory Cost R	100		%				ERI
4	LFS4-LANDFILL FIXED DIS	100		%				ERI

Total Tax/Fees
Total Ticket

Driver's Signature GDD1

TIDD'S Roll-Off Service

P.O. Box 381, Yorkshire, NY 14173
Cell: (716) 498-3717 | Fax: (716) 496-5672
E-Mail: tiddstowing@yahoo.com
www.tiddstowing.com

DATE 3/13/20

PICK UP (SHIPPER)		DELIVERY (CONSIGNEE)	
NAME	Former Buffalo China	NAME	WM
STREET	75 Hayes Place	STREET	
CITY / STATE / ZIP CODE	Buffalo / NY / 14210	CITY / STATE / ZIP CODE	Chaffee / NY /
CONTACT NAME		CONTACT NAME	
SCHEDULED TIME		SCHEDULED TIME	

ADDITIONAL INFORMATION

☐ Residential ☐ Two Week Rental
☐ Contractor ☐ Four Week Rental

CUSTOMER P.O. NO.	WORK ORDER NUMBER	MANIFEST NUMBER	BILLING REFERENCE
LOAD NUMBER	**TRACTOR NUMBER**	**TRAILER NUMBER/CAN NUMBER**	**DRIVER'S NAME**

NUMBER & TYPES	WEIGHT OR VOLUME	DESCRIPTION	CUSTOMER CODE #
		Dupre	
	TR	GDD1 Time in 1120	
	TRL	GDT6 out 1155	
		C+D Material	
		Bill Tidd's Rolloff	
		Buffalo Acct	

PICK UP	DELIVERY
ARRIVAL DATE _____	DRIVER _____ DATE _____
ARRIVAL TIME _____ AM PM RELEASE TIME _____ AM PM	ARRIVAL TIME _____ AM PM RELEASE TIME _____ AM PM
TRAILER EMPTY UPON ARRIVAL (If not, explain below) ☐ YES ☐ NO	TRAILER EMPTY UPON ARRIVAL (If not, explain below) ☐ YES ☐ NO
COMMENTS: (EXPLAIN ALL DELAYS)	COMMENTS: (EXPLAIN ALL DELAYS)

SHIPPERS CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition transport by highway according to applicable international and national goverment refulations.

X _____ TITLE
SHIPPER'S SIGNATURE

I, THE UNDERSIGNED, CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND COMPLETE.
X _____ 631944 3-13-20
CONSIGNEE'S SIGNATURE

☐ CREDIT CARD # _____
EXP: _____ CVV: _____ ZIP: _____

*I _____
*GIVE PERMISSION FOR TIDD'S ROLL-OFF TO AUTOMATICALLY RUN MY CREDIT CARD FOR ADDITIONAL OVER TON FEES OR ADDITIONAL RENTAL WEEKS**

☐ CHECK # _____
☐ CASH PAYMENT ☐ BILLING CUSTOMER
☐ CUSTOMER ADDRESS _____

* IF PAYMENT IS NOT RECEIVED BY DUE DATE THERE WILL BE A 1.5% MONTHLY FEE ADDED TO THE BILL UNTIL PAYMENT IS RECEIVED*

Waste Management Chaffee LF
10860 Olean Rd
Chaffee, NY, 14030

Original
Ticket# 631929

Ph: (716) 496-5000

WASTE MANAGEMENT

Customer Name	TIDDSROLLOFFBUFFALO TIDD	Carrier	GD GEITER DONE OF WNY
Ticket Date	03/13/2020	Vehicle#	GDD1-T6
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	
Route		Check#	
Hauling Ticket#		Billing#	0004735
Destination		Grid	OL2I6-1560
Manifest	1		
Profile	()		
Generator			
PO#			

	Time	Scale	Operator	Inbound		
In	03/13/2020 09:23:47	INBOUND	JChapma7		Gross	92440 lb
Out	03/13/2020 10:22:15	OUTBOUND	JChapma7		Tare	35700 lb
					Net	56740 lb
					Tons	28.37

Comments

	Product	LD%	Qty	UOM	Rate	Tax/Fee	Amount	Origin
1	CDTM-C&D TONS-COVER MAT	100	28.37	Tons				ERI
2	EVF-P10-Environmental F	100		%				ERI
3	RCR-P-Regulatory Cost R	100		%				ERI
4	LFS4-LANDFILL FIXED DIS	100		%				ERI

Total Tax/Fees
Total Ticket

Driver`s Signature

TIDD'S Roll-Off Service

P.O. Box 381, Yorkshire, NY 14173
Cell: (716) 498-3717 | Fax: (716) 496-5672
E-Mail: tiddstowing@yahoo.com
www.tiddstowing.com

DATE 3/13/20

PICK UP (SHIPPER)				DELIVERY (CONSIGNEE)			
NAME	Former Buffalo Clinic			NAME	WM		
STREET	75 Hayes Place			STREET			
CITY	Buffalo	STATE NY	ZIP CODE 14210	CITY	Chaffee	STATE NY	ZIP CODE
CONTACT NAME				CONTACT NAME			
SCHEDULED TIME				SCHEDULED TIME			

ADDITIONAL INFORMATION

☐ Residential ☐ Two Week Rental
☐ Contractor ☐ Four Week Rental

CUSTOMER P.O. NO.	WORK ORDER NUMBER	MANIFEST NUMBER	BILLING REFERENCE
LOAD NUMBER	**TRACTOR NUMBER**	**TRAILER NUMBER/CAN NUMBER**	**DRIVER'S NAME**

NUMBER & TYPES	WEIGHT OR VOLUME	DESCRIPTION	CUSTOMER CODE #
		Dupre	
	TR	GDD 1 Time in 745 AM	
	TRL	GDT 6 at 820 AM	
		C + D Material	
		Bill Tidds Roll off Buffalo Acct	

PICK UP

ARRIVAL DATE _____

ARRIVAL TIME _____ AM PM RELEASE TIME _____ AM PM

TRAILER EMPTY UPON ARRIVAL ☐ YES ☐ NO
(If not, explain below)

COMMENTS: (EXPLAIN ALL DELAYS) _____

SHIPPERS CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition transport by highway according to applicable international and national goverment refulations.

X _____ TITLE
SHIPPERS'S SIGNATURE

DELIVERY

DRIVER _____ DATE _____

ARRIVAL TIME _____ AM PM RELEASE TIME _____ AM PM

TRAILER EMPTY UPON ARRIVAL ☐ YES ☐ NO
(If not, explain below)

COMMENTS: (EXPLAIN ALL DELAYS) _____

631929

I, THE UNDERSIGNED, CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND COMPLETE.

X _____ 3-13-20
CONSIGNEE'S SIGNATURE

☐ CREDIT CARD # _____

EXP: _____ CVV: _____ ZIP: _____

*I _____

*GIVE PERMISSION FOR TIDD'S ROLL-OFF TO AUTOMATICALLY RUN MY CREDIT CARD FOR ADDITIONAL OVER TON FEES OR ADDITIONAL RENTAL WEEKS**

☐ CHECK # _____

☐ CASH PAYMENT ☐ BILLING CUSTOMER

☐ CUSTOMER ADDRESS _____

* IF PAYMENT IS NOT RECEIVED BY DUE DATE THERE WILL BE A 1.5% MONTHLY FEE ADDED TO THE BILL UNTIL PAYMENT IS RECEIVED*

Waste Management Chaffee LF
10860 Olean Rd
Chaffee, NY, 14030

Original
Ticket# 632004

Ph: (716) 496-5000

WASTE MANAGEMENT

Customer Name TIDDSROLLOFFBUFFALO TIDD
Ticket Date 03/13/2020
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
Manifest 4
Profile ()
Generator
PO#

Carrier GD GEITER DONE OF WNY
Vehicle# GDD4-T2
Container
Driver
Check#
Billing# 0004735
Grid OL2I6-1560

	Time	Scale	Operator	Inbound		
In	03/13/2020 13:09:54	Inbound1	JChapma7		Gross	96960 lb
Out	03/13/2020 14:30:20	OUTBOUND	mbaker13		Tare	38080 lb
					Net	58880 lb
					Tons	29.44

Comments

	Product	LD%	Qty	UOM	Rate	Tax/Fee	Amount	Origin
1	CDTM-C&D TONS-COVER MAT	100	29.44	Tons				ERI
2	EVF-P10-Environmental F	100		%				ERI
3	RCR-P-Regulatory Cost R	100		%				ERI
4	LFS4-LANDFILL FIXED DIS	100		%				ERI

Total Tax/Fees
Total Ticket

Driver's Signature GDD4

TIDD'S Roll-Off Service

P.O. Box 381, Yorkshire, NY 14173
Cell: (716) 498-3717 | Fax: (716) 496-5672
E-Mail: tiddstowing@yahoo.com
www.tiddstowing.com

DATE 3/13/20

PICK UP

SHIPPER

NAME Former Buffalo China
STREET 75 Hayes Place
CITY Buffalo STATE NY ZIP CODE 14210
CONTACT NAME
SCHEDULED TIME

DELIVERY

CONSIGNEE

NAME WM 4
STREET
CITY Chaffee STATE NY ZIP CODE
CONTACT NAME
SCHEDULED TIME

ADDITIONAL INFORMATION

☐ Residential ☐ Two Week Rental
☐ Contractor ☐ Four Week Rental

CUSTOMER P.O. NO.	WORK ORDER NUMBER	MANIFEST NUMBER	BILLING REFERENCE
LOAD NUMBER	TRACTOR NUMBER	TRAILER NUMBER/CAN NUMBER	DRIVER'S NAME

NUMBER & TYPES	WEIGHT OR VOLUME	DESCRIPTION	CUSTOMER CODE #
		Bean	
	Trl: GDN4	Time In: 11:35	
	Trl: J2	Out: 12:25	
		C + D Material	
		Bill Tidd's Rolloff	

PICK UP

ARRIVAL DATE _____
ARRIVAL TIME _____ AM PM RELEASE TIME _____ AM PM
TRAILER EMPTY UPON ARRIVAL ☐ YES ☐ NO
(If not, explain below)
COMMENTS: (EXPLAIN ALL DELAYS) _____

SHIPPERS CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition transport by highway according to applicable international and national goverment refulations.

X _____ TITLE _____
SHIPPERS'S SIGNATURE

DELIVERY

DRIVER _____ DATE _____
ARRIVAL TIME _____ AM PM RELEASE TIME _____ AM PM
TRAILER EMPTY UPON ARRIVAL ☐ YES ☐ NO
(If not, explain below)
COMMENTS: (EXPLAIN ALL DELAYS) WM Chaffee LF
M Balla 3/13/20
632004

I, THE UNDERSIGNED, CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND COMPLETE.
X _____
CONSIGNEE'S SIGNATURE

☐ CREDIT CARD # _____
EXP: _____ CVV: _____ ZIP: _____
*I _____
*GIVE PERMISSION FOR TIDD'S ROLL-OFF TO AUTOMATICALLY RUN MY CREDIT CARD FOR ADDITIONAL OVER TON FEES OR ADDITIONAL RENTAL WEEKS**

☐ CHECK # _____
☐ CASH PAYMENT ☐ BILLING CUSTOMER
☐ CUSTOMER ADDRESS _____

* IF PAYMENT IS NOT RECEIVED BY DUE DATE THERE WILL BE A 1.5% MONTHLY FEE ADDED TO THE BILL UNTIL PAYMENT IS RECEIVED*

Waste Management Chaffee LF
10860 Olean Rd
Chaffee, NY, 14030

Ph: (716) 496-5000

Original
Ticket# 631936

WASTE MANAGEMENT

Customer Name TIDDSROLLOFFBUFFALO TIDD
Ticket Date 03/13/2020
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
Manifest 2
Profile ()
Generator
PO#

Carrier GD GEITER DONE OF WNY
Vehicle# GDD4-T2
Container
Driver
Check#
Billing# 0004735
Grid OL2I6-1560

	Time	Scale	Operator	Inbound		
In	03/13/2020 10:09:55	INBOUND	JChapma7		Gross	88000 lb
Out	03/13/2020 10:52:44	OUTBOUND	JChapma7		Tare	39000 lb
					Net	49000 lb
					Tons	24.50

Comments

	Product	LD%	Qty	UOM	Rate	Tax/Fee	Amount	Origin
1	CDTM-C&D TONS-COVER MAT	100	24.50	Tons				ERI
2	EVF-P10-Environmental F	100		%				ERI
3	RCR-P-Regulatory Cost R	100		%				ERI
4	LFS4-LANDFILL FIXED DIS	100		%				ERI

Total Tax/Fees
Total Ticket

Driver`s Signature

TIDD'S Roll-Off Service

P.O. Box 381, Yorkshire, NY 14173
Cell: (716) 498-3717 | Fax: (716) 496-5672
E-Mail: tiddstowing@yahoo.com
www.tiddstowing.com

#2

DATE 3/13/20

PICK UP (SHIPPER)		DELIVERY (CONSIGNEE)	
NAME	Former Buffalo Civic	NAME	WM
STREET	75 Hayes Plaza	STREET	
CITY / STATE / ZIP CODE	Buffalo / NY / 14210	CITY / STATE / ZIP CODE	Chaffee / NY /
CONTACT NAME		CONTACT NAME	
SCHEDULED TIME		SCHEDULED TIME	

ADDITIONAL INFORMATION

☐ Residential ☐ Two Week Rental
☐ Contractor ☐ Four Week Rental

CUSTOMER P.O. NO.	WORK ORDER NUMBER	MANIFEST NUMBER	BILLING REFERENCE
LOAD NUMBER	**TRACTOR NUMBER**	**TRAILER NUMBER/CAN NUMBER**	**DRIVER'S NAME**

NUMBER & TYPES	WEIGHT OR VOLUME	DESCRIPTION	CUSTOMER CODE #
		Lean	
	Th-GDDH	Time IN: 8:30 AM	
	Th-T2	Out: 9:20 AM	
		Ct D Material	
		Bill Tiddi Rollorff	
		Buffalo Acct	

PICK UP

ARRIVAL DATE _____
ARRIVAL TIME _____ AM PM RELEASE TIME _____ AM PM
TRAILER EMPTY UPON ARRIVAL ☐ YES ☐ NO
(If not, explain below)
COMMENTS: (EXPLAIN ALL DELAYS) _____

SHIPPERS CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition transport by highway according to applicable international and national goverment refulations.

X _____ TITLE _____
SHIPPERS'S SIGNATURE

DELIVERY

DRIVER _____ DATE _____
ARRIVAL TIME _____ AM PM RELEASE TIME _____ AM PM
TRAILER EMPTY UPON ARRIVAL ☐ YES ☐ NO
(If not, explain below)
COMMENTS: (EXPLAIN ALL DELAYS) _____

I, THE UNDERSIGNED, CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND COMPLETE.
X _____ 3-13-20 631936
CONSIGNEE'S SIGNATURE

☐ CREDIT CARD # _____
EXP: _____ CVV: _____ ZIP: _____
*I _____
*GIVE PERMISSION FOR TIDD'S ROLL-OFF TO AUTOMATICALLY RUN MY CREDIT CARD FOR ADDITIONAL OVER TON FEES OR ADDITIONAL RENTAL WEEKS**

☐ CHECK # _____
☐ CASH PAYMENT ☐ BILLING CUSTOMER
☐ CUSTOMER ADDRESS _____

* IF PAYMENT IS NOT RECEIVED BY DUE DATE THERE WILL BE A 1.5% MONTHLY FEE ADDED TO THE BILL UNTIL PAYMENT IS RECEIVED*

Waste Management Chaffee LF
10860 Olean Rd
Chaffee, NY, 14030

Ph: (716) 496-5000

Original
Ticket# 632107

WASTE MANAGEMENT

Customer Name TIDDSROLLOFFBUFFALO TIDD
Ticket Date 03/16/2020
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
Manifest 2
Profile ()
Generator
PO#

Carrier GD GEITER DONE OF WNY
Vehicle# GDD4-T3
Container
Driver
Check#
Billing# 0004735
Grid OL2I6-1560

	Time	Scale	Operator	Inbound		
In	03/16/2020 09:10:32	INBOUND	JChapma7		Gross	84600 lb
Out	03/16/2020 10:29:55	OUTBOUND	JChapma7		Tare	39240 lb
					Net	45360 lb
					Tons	22.68

Comments

	Product	LD%	Qty	UOM	Rate	Tax/Fee	Amount	Origin
1	CDTM-C&D TONS-COVER MAT	100	22.68	Tons				ERI
2	EVF-P10-Environmental F	100		%				ERI
3	RCR-P-Regulatory Cost R	100		%				ERI
4	LFS4-LANDFILL FIXED DIS	100		%				ERI

Total Tax/Fees
Total Ticket

Driver's Signature C-004

TIDD'S Roll-Off Service

P.O. Box 381, Yorkshire, NY 14173
Cell: (716) 498-3717 | Fax: (716) 496-5672
E-Mail: tiddstowing@yahoo.com
www.tiddstowing.com

#2

DATE 3/13/20

PICK UP (SHIPPER)		DELIVERY (CONSIGNEE)	
NAME	Former Buffalo China	NAME	WM
STREET	75 Hayes Place	STREET	
CITY / STATE / ZIP CODE	Buffalo / NY / 14210	CITY / STATE / ZIP CODE	Chaffee / NY /
CONTACT NAME		CONTACT NAME	
SCHEDULED TIME		SCHEDULED TIME	

ADDITIONAL INFORMATION

☐ Residential ☐ Two Week Rental
☐ Contractor ☐ Four Week Rental

CUSTOMER P.O. NO.	WORK ORDER NUMBER	MANIFEST NUMBER	BILLING REFERENCE
LOAD NUMBER	**TRACTOR NUMBER**	**TRAILER NUMBER/CAN NUMBER**	**DRIVER'S NAME**

NUMBER & TYPES	WEIGHT OR VOLUME	DESCRIPTION	CUSTOMER CODE #
		bean	
	TK GSD4	Time In: 7:30	
	Trl T3	Out: 8:25	
		C+D Material	
		Bill Tidds Rolloff	
		Buffalo Acct	

PICK UP	DELIVERY
ARRIVAL DATE _____	DRIVER _____ DATE _____
ARRIVAL TIME _____ AM PM RELEASE TIME _____ AM PM	ARRIVAL TIME _____ AM PM RELEASE TIME _____ AM PM
TRAILER EMPTY UPON ARRIVAL (If not, explain below) ☐ YES ☐ NO	TRAILER EMPTY UPON ARRIVAL (If not, explain below) ☐ YES ☐ NO
COMMENTS: (EXPLAIN ALL DELAYS)	COMMENTS: (EXPLAIN ALL DELAYS)

SHIPPERS CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition transport by highway according to applicable international and national goverment refulations.

X _____ TITLE _____
SHIPPER'S SIGNATURE

3-16-20

I, THE UNDERSIGNED, CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND COMPLETE.

X _____ 632107
CONSIGNEE'S SIGNATURE

☐ CREDIT CARD # _____

EXP: _____ CVV: _____ ZIP: _____

*I _____

*GIVE PERMISSION FOR TIDD'S ROLL-OFF TO AUTOMATICALLY RUN MY CREDIT CARD FOR ADDITIONAL OVER TON FEES OR ADDITIONAL RENTAL WEEKS**

☐ CHECK # _____

☐ CASH PAYMENT ☐ BILLING CUSTOMER

☐ CUSTOMER ADDRESS _____

* IF PAYMENT IS NOT RECEIVED BY DUE DATE THERE WILL BE A 1.5% MONTHLY FEE ADDED TO THE BILL UNTIL PAYMENT IS RECEIVED*

Waste Management Chaffee LF
10860 Olean Rd
Chaffee, NY, 14030

Original
Ticket# 632081

Ph: (716) 496-5000

WASTE MANAGEMENT

Customer Name TIDDSROLLOFFBUFFALO TIDD
Ticket Date 03/16/2020
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
Manifest 1
Profile ()
Generator
PO#

Carrier GD GEITER DONE OF WNY
Vehicle# GDD1-T6
Container
Driver
Check#
Billing# 0004735
Grid OL2I6-1560

	Time	Scale	Operator	Inbound		
In	03/16/2020 07:23:14	INBOUND	JChapma7		Gross	84360 lb
Out	03/16/2020 08:13:48	OUTBOUND	JChapma7		Tare	36040 lb
					Net	48320 lb
					Tons	24.16

Comments

	Product	LD%	Qty	UOM	Rate	Tax/Fee	Amount	Origin
1	CDTM-C&D TONS-COVER MAT	100	24.16	Tons				ERI
2	EVF-P10-Environmental F	100		%				ERI
3	RCR-P-Regulatory Cost R	100		%				ERI
4	LFS4-LANDFILL FIXED DIS	100		%				ERI

Total Tax/Fees
Total Ticket

Driver's Signature GDD1

TIDD'S Roll-Off Service

P.O. Box 381, Yorkshire, NY 14173
Cell: (716) 498-3717 | Fax: (716) 496-5672
E-Mail: tiddstowing@yahoo.com
www.tiddstowing.com

#1

DATE 3/13/20

PICK UP (SHIPPER)		DELIVERY (CONSIGNEE)	
NAME	Former Buffalo China	NAME	WM
STREET	75 Hayes Place	STREET	
CITY / STATE / ZIP CODE	Buffalo / NY / 14210	CITY / STATE / ZIP CODE	Chaffee / NY /
CONTACT NAME		CONTACT NAME	
SCHEDULED TIME		SCHEDULED TIME	

ADDITIONAL INFORMATION

☐ Residential ☐ Two Week Rental
☐ Contractor ☐ Four Week Rental

CUSTOMER P.O. NO.	WORK ORDER NUMBER	MANIFEST NUMBER	BILLING REFERENCE
LOAD NUMBER	**TRACTOR NUMBER**	**TRAILER NUMBER/CAN NUMBER**	**DRIVER'S NAME**

NUMBER & TYPES	WEIGHT OR VOLUME	DESCRIPTION	CUSTOMER CODE #
	TR	GDD1 Dupre Time: 2:30 Out: 3:19	
	TRL	GDT6 Ct D Material	
		Bill Tidds Roll-off Buffalo Acct	

PICK UP

ARRIVAL DATE _____
ARRIVAL TIME _____ AM PM RELEASE TIME _____ AM PM
TRAILER EMPTY UPON ARRIVAL ☐ YES ☐ NO
(If not, explain below)
COMMENTS: (EXPLAIN ALL DELAYS) _____

SHIPPERS CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition transport by highway according to applicable international and national goverment refulations.

X _____ TITLE _____
SHIPPERS'S SIGNATURE

DELIVERY

DRIVER _____ DATE _____
ARRIVAL TIME _____ AM PM RELEASE TIME _____ AM PM
TRAILER EMPTY UPON ARRIVAL ☐ YES ☐ NO
(If not, explain below)
COMMENTS: (EXPLAIN ALL DELAYS) _____

3-16-20

I, THE UNDERSIGNED, CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND COMPLETE.
X _____
CONSIGNEE'S SIGNATURE

632081

☐ CREDIT CARD # _____
EXP: _____ CVV: _____ ZIP: _____
*I _____
*GIVE PERMISSION FOR TIDD'S ROLL-OFF TO AUTOMATICALLY RUN MY CREDIT CARD FOR ADDITIONAL OVER TON FEES OR ADDITIONAL RENTAL WEEKS**

☐ CHECK # _____
☐ CASH PAYMENT ☐ BILLING CUSTOMER
☐ CUSTOMER ADDRESS _____

* IF PAYMENT IS NOT RECEIVED BY DUE DATE THERE WILL BE A 1.5% MONTHLY FEE ADDED TO THE BILL UNTIL PAYMENT IS RECEIVED*

Buffalo Chinca

Waste Management Chaffee LF
10860 Olean Rd
Chaffee, NY, 14030

Ph: (716) 496-5000

Original
Ticket# 632122

WASTE MANAGEMENT

Customer Name TIDDSROLLOFFBUFFALO TIDD
Ticket Date 03/16/2020
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
Manifest 3
Profile ()
Generator
PO#

Carrier TIDDS TIDDS ROLLOFF
Vehicle# 97
Container
Driver
Check#
Billing# 0004735
Grid OL2I6-1560

	Time	Scale	Operator	Inbound		
In	03/16/2020 10:06:37	INBOUND	JChapma7		Gross	65640 lb
Out	03/16/2020 10:42:39	OUTBOUND	JChapma7		Tare	45160 lb
					Net	20480 lb
					Tons	10.24

Comments

	Product	LD%	Qty	UOM	Rate	Tax/Fee	Amount	Origin
1	CDTM-C&D TONS-COVER MAT	100	10.24	Tons				ERI
2	EVF-P10-Environmental F	100		%				ERI
3	RCR-P-Regulatory Cost R	100		%				ERI
4	LFS4-LANDFILL FIXED DIS	100		%				ERI

Total Tax/Fees
Total Ticket

Driver`s Signature Ken

TIDD'S Roll-Off Service

P.O. Box 381, Yorkshire, NY 14173
Cell: (716) 498-3717 | Fax: (716) 496-5672
E-Mail: tiddstowing@yahoo.com
www.tiddstowing.com

#3

DATE 03/16/20

PICK UP (SHIPPER)		DELIVERY (CONSIGNEE)	
NAME	Former Buffalo China	NAME	Wm
STREET	75 hayes Pl. (Hayes)	STREET	
CITY / STATE / ZIP CODE	Buffalo NY	CITY / STATE / ZIP CODE	Chaffee NY
CONTACT NAME	8:15 am	CONTACT NAME	
SCHEDULED TIME	Sean 870-3552	SCHEDULED TIME	

ADDITIONAL INFORMATION

☐ Residential ☐ Two Week Rental
☐ Contractor ☐ Four Week Rental

CUSTOMER P.O. NO.	WORK ORDER NUMBER	MANIFEST NUMBER	BILLING REFERENCE
LOAD NUMBER	**TRACTOR NUMBER**	**TRAILER NUMBER/CAN NUMBER**	**DRIVER'S NAME**
		4002	Ken Tidd

NUMBER & TYPES	WEIGHT OR VOLUME	DESCRIPTION	CUSTOMER CODE #
		C+D Material	
		live load 40 yard Roll off	
		Bill to Tidd's Rolloff	

PICK UP	DELIVERY
ARRIVAL DATE _____	DRIVER Ken Tidd DATE 03-16-20
ARRIVAL TIME _____ AM PM RELEASE TIME _____ AM PM	ARRIVAL TIME _____ AM PM RELEASE TIME _____ AM PM
TRAILER EMPTY UPON ARRIVAL ☐ YES ☐ NO (If not, explain below)	TRAILER EMPTY UPON ARRIVAL ☒ YES ☐ NO (If not, explain below)
COMMENTS: (EXPLAIN ALL DELAYS)	COMMENTS: (EXPLAIN ALL DELAYS)

SHIPPERS CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition transport by highway according to applicable international and national goverment refulations.

X _____ TITLE _____
SHIPPERS'S SIGNATURE

I, THE UNDERSIGNED, CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND COMPLETE. 3-16-20
X _____ 632122
CONSIGNEE'S SIGNATURE

☐ CREDIT CARD # _____
EXP: _____ CVV: _____ ZIP: _____

*I _____
*GIVE PERMISSION FOR TIDD'S ROLL-OFF TO AUTOMATICALLY RUN MY CREDIT CARD FOR ADDITIONAL OVER TON FEES OR ADDITIONAL RENTAL WEEKS**

☐ CHECK # _____
☐ CASH PAYMENT ☐ BILLING CUSTOMER
☐ CUSTOMER ADDRESS _____

* IF PAYMENT IS NOT RECEIVED BY DUE DATE THERE WILL BE A 1.5% MONTHLY FEE ADDED TO THE BILL UNTIL PAYMENT IS RECEIVED*

Buffalo Chimney

Waste Management Chaffee LF
10860 Olean Rd
Chaffee, NY, 14030

Ph: (716) 496-5000

Original
Ticket# 632187

WASTE MANAGEMENT

Customer Name TIDDSROLLOFFBUFFALO TIDD
Ticket Date 03/16/2020
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
Manifest 4
Profile ()
Generator
PO#

Carrier TIDDS TIDDS ROLLOFF
Vehicle# 97
Container
Driver
Check#
Billing# 0004735
Grid OL2I6-1560

	Time	Scale	Operator	Inbound		
In	03/16/2020 13:25:45	INBOUND	JChapma7		Gross	70180 lb
Out	03/16/2020 14:10:30	OUTBOUND	mbaker13		Tare	45080 lb
					Net	25100 lb
					Tons	12.55

Comments

	Product	LD%	Qty	UOM	Rate	Tax/Fee	Amount	Origin
1	CDTM-C&D TONS-COVER MAT	100	12.55	Tons				ERI
2	EVF-P10-Environmental F	100		%				ERI
3	RCR-P-Regulatory Cost R	100		%				ERI
4	LFS4-LANDFILL FIXED DIS	100		%				ERI

Total Tax/Fees
Total Ticket

Driver`s Signature Len

TIDD'S Roll-Off Service

P.O. Box 381, Yorkshire, NY 14173
Cell: (716) 498-3717 | Fax: (716) 496-5672
E-Mail: tiddstowing@yahoo.com
www.tiddstowing.com

#4

DATE 03/16/20

PICK UP (SHIPPER)		DELIVERY (CONSIGNEE)	
NAME	Former Buffalo China	NAME	WM
STREET	75 Hayes Pl.	STREET	
CITY / STATE / ZIP CODE	Buffalo NY	CITY / STATE / ZIP CODE	Chaffee NY
CONTACT NAME		CONTACT NAME	
SCHEDULED TIME	Sean 870-3552	SCHEDULED TIME	

ADDITIONAL INFORMATION

☐ Residential ☐ Two Week Rental
☐ Contractor ☐ Four Week Rental

CUSTOMER P.O. NO.	WORK ORDER NUMBER	MANIFEST NUMBER	BILLING REFERENCE
LOAD NUMBER	TRACTOR NUMBER: 97	TRAILER NUMBER/CAN NUMBER: 4002	DRIVER'S NAME: Ken Tidd

NUMBER & TYPES	WEIGHT OR VOLUME	DESCRIPTION	CUSTOMER CODE #
		C&D material	
		Bill to Tidd's Roll-off	

PICK UP

ARRIVAL DATE _____
ARRIVAL TIME _____ AM PM RELEASE TIME _____ AM PM
TRAILER EMPTY UPON ARRIVAL ☐ YES ☐ NO
(If not, explain below)
COMMENTS: (EXPLAIN ALL DELAYS) _____

SHIPPERS CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition transport by highway according to applicable international and national goverment refulations.

X _____ TITLE _____
SHIPPERS'S SIGNATURE

DELIVERY

DRIVER _____ DATE _____
ARRIVAL TIME _____ AM PM RELEASE TIME _____ AM PM
TRAILER EMPTY UPON ARRIVAL ☐ YES ☐ NO
(If not, explain below)
COMMENTS: (EXPLAIN ALL DELAYS) _____

I, THE UNDERSIGNED, CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND COMPLETE.
X _____ 63287 3-16-20
CONSIGNEE'S SIGNATURE

☐ CREDIT CARD # _____
EXP: _____ CVV: _____ ZIP: _____
* I _____
*GIVE PERMISSION FOR TIDD'S ROLL-OFF TO AUTOMATICALLY RUN MY CREDIT CARD FOR ADDITIONAL OVER TON FEES OR ADDITIONAL RENTAL WEEKS**

☐ CHECK # _____
☐ CASH PAYMENT ☐ BILLING CUSTOMER
☐ CUSTOMER ADDRESS _____

* IF PAYMENT IS NOT RECEIVED BY DUE DATE THERE WILL BE A 1.5% MONTHLY FEE ADDED TO THE BILL UNTIL PAYMENT IS RECEIVED*

Appendix H
Purge Logs

WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-05R**

Site Name: Buffalo China

Date: 8/6/2020

Staff: AK, AK

Time: 13:45 (sample collected)

A). Total casing and screen length in feet: 12.02

B). Water level below top of casing in feet: 7.37

C). Number of feet standing water [A-B]: 4.65

D). Volume of water/foot of casing (gal.): 0.17

E). Volume of water in casing (gal. [CxD]: 0.79

F). Volume of water to remove (gal.) [Ex3]: 2.37

G). Volume of water actually removed (gal.): 2.30

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
13:17	20.64	9.48	-6	15.50	>1000	0.00	0.0	very turbid
13:20	20.56	9.14	-7	6.28	>1000	0.00	0.0	very turbid
13:25	21.09	8,63	-3	3.15	987	0.00	0.0	very turbid
13:30	21.22	8.29	15	1.41	353	0.00	0.0	turbid
13:35	21.26	8.06	19	1.01	762	0.00	0.0	very turbid
13:40	**21.26**	**8.02**	**20**	**0.797**	**434**	**0.00**	**0.0**	**turbid**

Comments: Water had a solvent-like odor.

Bold readings are parameters recorded immediately before sample collection.

Low flow pump used to purge, well sampled after parameters stablized.

Sampling ID: MW-05R

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

_____

WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-05AR**

Site Name: Buffalo China

Date: 8/6/2020

Staff: AK, AK

Time: 11:50 (sample collected)

A). Total casing and screen length in feet: 20.03

B). Water level below top of casing in feet: 10.05

C). Number of feet standing water [A-B]: 9.98

D). Volume of water/foot of casing (gal.): 0.66

E). Volume of water in casing (gal. [CxD]: 6.59

F). Volume of water to remove (gal.) [Ex3]: 19.76

G). Volume of water actually removed (gal.): 2.20

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average) Sampling Flow/Extraction Rate: 0.1 gpm (Average)

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
13:48	19.35	7.58	-140	6.27	327	0.00	0.0	slightly turbid
13:53	17.50	7.55	-169	6.62	345	0.00	0.0	slightly turbid
13:58	17.00	7.18	-143	9.51	931	0.00	0.0	very turbid
14:05	16.45	6.89	4	39.3	>1000	0.00	0.0	very turbid
14:10	**16.28**	**6.90**	**29**	**40.4**	**998**	**0.00**	**0.0**	**very turbid**

Comments: Water had a solvent-like odor.

Bold readings are parameters recorded immediately before sample collection.

Low flow pump used to purge, well sampled after parameters stablized.

Sampling ID: MW-05AR

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

_____

WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-06**

Site Name: Buffalo China

Date: 8/6/2020

Staff: AK, AK

Time: 11:25 (sample collected)

A). Total casing and screen length in feet: 9.24

B). Water level below top of casing in feet: 7.02

C). Number of feet standing water [A-B]: 2.22

D). Volume of water/foot of casing (gal.): 0.17

E). Volume of water in casing (gal. [CxD]: 0.38

F). Volume of water to remove (gal.) [Ex3]: 1.13

G). Volume of water actually removed (gal.): 1.00

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
11:10	16.02	7.75	-149	1.20	209	0.00	0.0	slightly turbid
11:15	15.40	7.68	-236	1.03	33.5	0.00	0.0	clear
11:20	**13.83**	**7.67**	**-204**	**1.68**	**33.1**	**0.00**	**0.0**	**clear**

Comments:

Bold readings are parameters recorded immediately before sample collection.

Low flow pump used to purge, well sampled after parameters stablized.

Sampling ID: MW-06

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

_____

WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-07**

Site Name: Buffalo China

Date: 8/4/2020

Staff: AK, DH

Time: 13:10 (sample collected)

A). Total casing and screen length in feet: 14.50

B). Water level below top of casing in feet: 2.71

C). Number of feet standing water [A-B]: 11.79

D). Volume of water/foot of casing (gal.): 0.17

E). Volume of water in casing (gal. [CxD]: 2.00

F). Volume of water to remove (gal.) [Ex3]: 6.01

G). Volume of water actually removed (gal.): 2.90

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
12:44	17.75	7.93	-64	0.489	314	10.58	10.58	slightly turbid
12:48	17.36	7.78	-71	0.814	94.3	9.05	9.05	clear
12:54	17.74	7.68	-82	0.646	92.7	9.10	9.16	clear
13:00	17.77	7.70	-89	0.743	91.8	9.59	9.59	clear
13:15	**18.08**	**7.73**	**-90**	**0.593**	**222**	**9.73**	**9.73**	**slightly turbid**

Comments:

Bold readings are parameters recorded immediately before sample collection.

Low flow pump used to purge, well sampled after parameters stablized.

Sampling ID: MW-07

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

_____

WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-07A**

Site Name: Buffalo China

Date: 8/4/2020

Staff: AK, DH

Time: 12:30 (sample collected)

A). Total casing and screen length in feet: 14.51

B). Water level below top of casing in feet: 3.04

C). Number of feet standing water [A-B]: 11.47

D). Volume of water/foot of casing (gal.): 0.66

E). Volume of water in casing (gal. [CxD]: 7.57

F). Volume of water to remove (gal.) [Ex3]: 22.71

G). Volume of water actually removed (gal.): 4.40

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
11:44	20.32	8.68	116	1.53	108	24.32	268.4	clear
11:51	20.09	8.20	-28	0.966	229	12.71	139.3	slightly turbid
11:56	17.87	7.90	-85	1.51	132	5.31	55.9	clear
12:01	17.06	7.66	-85	2.05	68.2	0.00	0.0	clear
12:09	17.72	7.95	-54	1.67	107	5.15	54.2	clear
12:16	16.84	7.93	-54	2.29	52.6	8.32	81.6	clear
12:23	16.85	7.80	-68	1.85	94.2	9.55	99.0	clear
12:28	**16.75**	**7.80**	**-65**	**1.64**	**117**	**9.96**	**103.0**	**clear**

Comments:

Bold readings are parameters recorded immediately before sample collection.

Low flow pump used to purge, well sampled after parameters stablized.

Sampling ID: MW-07A

Sampling Parameters: (check one)

☑ TCL VOCS

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-08**

Site Name: Buffalo China

Date: 8/5/2020

Staff: AK, AK

Time: 11:20 (sample collected)

A). Total casing and screen length in feet: 8.01

B). Water level below top of casing in feet: 1.59

C). Number of feet standing water [A-B]: 6.42

D). Volume of water/foot of casing (gal.): 0.17

E). Volume of water in casing (gal. [CxD]: 1.09

F). Volume of water to remove (gal.) [Ex3]: 3.27

G). Volume of water actually removed (gal.): 1.50

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
11:05	18.95	7.63	9	0.592	85.0	0.00	0.00	clear
11:10	19.33	7.16	-64	0.563	37.6	0.00	0.00	clear
11:15	18.70	6.98	-50	0.749	30.8	0.00	0.00	clear
11:20	**18.16**	**6.94**	**-47**	**0.829**	**23.9**	**0.00**	**0.00**	**clear**

Comments:

Bold readings are parameters recorded immediately before sample collection.

Low flow pump used to purge, well sampled after parameters stablized.

Sampling ID: MW-08

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

_____

WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-08A**

Site Name: Buffalo China

Date: 8/5/2020

Staff: AK, AK

Time: 11:50 (sample collected)

A). Total casing and screen length in feet: 27.18

B). Water level below top of casing in feet: 10.68

C). Number of feet standing water [A-B]: 16.5

D). Volume of water/foot of casing (gal.): 0.66

E). Volume of water in casing (gal. [CxD]: 10.89

F). Volume of water to remove (gal.) [Ex3]: 32.67

G). Volume of water actually removed (gal.): 1.50

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
10:31	18.47	7.76	-59	0.556	971	0.00	0.00	very turbid
10:36	15.71	7.94	-117	0.543	455	0.00	0.00	turbid
10:41	14.36	8.03	-141	0.632	166	0.00	0.00	clear
10:46	**14.30**	**8.03**	**-156**	**0.699**	**109**	**0.00**	**0.00**	**clear**

Comments:

Bold readings are parameters recorded immediately before sample collection.

Low flow pump used to purge, well sampled after parameters stablized.

Sampling ID: MW-08A

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

_____

WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-09**

Site Name: Buffalo China

Date: 8/5/2020

Staff: AK, AK

Time: 13:55 (sample collected)

A). Total casing and screen length in feet: 6.61

B). Water level below top of casing in feet: 2.87

C). Number of feet standing water [A-B]: 3.74

D). Volume of water/foot of casing (gal.): 0.17

E). Volume of water in casing (gal. [CxD]: 0.64

F). Volume of water to remove (gal.) [Ex3]: 1.91

G). Volume of water actually removed (gal.): 2.00

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
13:32	22.47	7.55	94	0.824	53.9	9.04	104.6	clear
13:37	20.52	7.12	116	0.833	40.0	0.00	0.0	clear
13:42	19.35	6.90	138	1.37	30.4	0.00	0.0	clear
13:47	18.60	6.84	141	1.40	30.1	0.00	0.0	clear
13:52	**17.39**	**6.99**	**123**	**1.54**	**27.5**	**0.00**	**0.0**	**clear**

Comments:

Bold readings are parameters recorded immediately before sample collection.

Low flow pump used to purge, well sampled after parameters stablized.

Sampling ID: MW-09

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

_____

WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-09A**

Site Name: Buffalo China

Date: 8/5/2020

Staff: AK, AK

Time: 14:30 (sample collected)

A). Total casing and screen length in feet: 26.00

B). Water level below top of casing in feet: 9.16

C). Number of feet standing water [A-B]: 16.84

D). Volume of water/foot of casing (gal.): 0.66

E). Volume of water in casing (gal. [CxD]: 11.11

F). Volume of water to remove (gal.) [Ex3]: 33.34

G). Volume of water actually removed (gal.): 2.00

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
14:03	18.04	7.54	-104	1.45	55.1	0.00	0.0	clear
14:08	13.88	7.45	-152	1.45	46.4	0.00	0.0	clear
14:13	13.33	7.34	-175	1.46	75.8	0.00	0.0	clear
14:18	13.07	7.31	-199	1.47	76.1	0.00	0.0	clear
14:23	**12.92**	**7.35**	**-222**	**1.48**	**111**	**0.00**	**0.0**	**clear**

Comments: Duplicate sample taken at this location.
Bold readings are parameters recorded immediately before sample collection.
Low flow pump used to purge, well sampled after parameters stablized.

Sampling ID: MW-09A

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-10**

Site Name: Buffalo China

Date: 8/5/2020-8/6/2020

Staff: AK, AK

Time: 8:50 (sample collected)

A). Total casing and screen length in feet: 8.60

B). Water level below top of casing in feet: 7.33

C). Number of feet standing water [A-B]: 1.27

D). Volume of water/foot of casing (gal.): 0.17

E). Volume of water in casing (gal. [CxD]: 0.22

F). Volume of water to remove (gal.) [Ex3]: 0.65

G). Volume of water actually removed (gal.): 0.50

H). Explaination/Reason if F ≠ G: Well going dry

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
8/5/2020								
15:05	21.75	7.28	-100	2,14	>1000	2.19	25.1	very turbid
8/6/2020								
8:39	19.32	7.28	-76	1.87	578	0.00	0.0	turbid
8:44	**18.79**	**7.10**	**-104**	**1.74**	**482**	**0.00**	**0.0**	**turbid**

Comments: Well purged dry on 8/5 and sampled on 8/6.
Bold readings are parameters recorded immediately before sample collection.
Bailer was used to purge and sample well.

Sampling ID: MW-10

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

_____

WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-11**

Site Name: Buffalo China

Date: 8/6/2020

Staff: AK, AK

Time: 9:45 (sample collected)

A). Total casing and screen length in feet: 8.55

B). Water level below top of casing in feet: 4.11

C). Number of feet standing water [A-B]: 4.44

D). Volume of water/foot of casing (gal.): 0.17

E). Volume of water in casing (gal. [CxD]: 0.75

F). Volume of water to remove (gal.) [Ex3]: 2.26

G). Volume of water actually removed (gal.): 1.50

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
9:25	18.86	8.27	-23	0.525	1000	5.16	55.6	very turbid
9:30	19.81	7.83	19	0.495	351	0.00	0.0	turbid
9:35	20.18	7.65	39	0.518	104	0.00	0.0	clear
9:40	**20.51**	**7.62**	**47**	**0.515**	**52.3**	**0.00**	**0.0**	**clear**

Comments:

Bold readings are parameters recorded immediately before sample collection.

Bailer was used to purge and sample well.

Sampling ID: MW-11

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

_____

WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-13A**

Site Name: Buffalo China

Date: 8/6/2020

Staff: AK, AK

Time: 10:55 (sample collected)

A). Total casing and screen length in feet: 14.34

B). Water level below top of casing in feet: 7.12

C). Number of feet standing water [A-B]: 7.22

D). Volume of water/foot of casing (gal.): 0.66

E). Volume of water in casing (gal. [CxD]: 4.77

F). Volume of water to remove (gal.) [Ex3]: 14.30

G). Volume of water actually removed (gal.): 2.00

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
10:32	16.19	8.11	-145	0.943	477	0.00	0.0	turbid
10:37	14.74	8.03	-163	0.975	448	0.00	0.0	turbid
10:42	14.41	7.84	-142	0.992	527	0.00	0.0	turbid
10:47	13.95	7.65	-111	1.60	657	0.00	0.0	turbid
10:52	**13.79**	**7.56**	**-81**	**1.72**	**436**	**0.00**	**0.0**	**turbid**

Comments:

Bold readings are parameters recorded immediately before sample collection.

Low flow pump used to purge, well sampled after parameters stablized.

Sampling ID: MW-13A

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

_____

WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-19R**

Site Name: Buffalo China

Date: 8/11/2020

Staff: AK

Time: 10:30 (sample collected)

A). Total casing and screen length in feet: 6.38

B). Water level below top of casing in feet: 1.88

C). Number of feet standing water [A-B]: 4.5

D). Volume of water/foot of casing (gal.): 0.17

E). Volume of water in casing (gal. [CxD]: 0.77

F). Volume of water to remove (gal.) [Ex3]: 2.30

G). Volume of water actually removed (gal.): 1.50

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
10:14	25.23	7.86	107	0.904	326	5.61	65.9	slightly turbid
10:19	22.52	7.83	127	0.836	223	0.21	2.4	slightly turbid
10:24	21.15	7.58	151	0.781	79.0	0.00	0.0	clear
10:29	**21.20**	**7.57**	**161**	**0.780**	**75.6**	**0.00**	**0.0**	**clear**

Comments: MS/MSD sample taken at this location.
Bold readings are parameters recorded immediately before sample collection.
Low flow pump used to purge, well sampled after parameters stablized.

Sampling ID: MW-19R

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-19AR**

Site Name: Buffalo China

Date: 8/11/2020

Staff: AK

Time: 10:55 (sample collected)

A). Total casing and screen length in feet: 17.10

B). Water level below top of casing in feet: 4.48

C). Number of feet standing water [A-B]: 12.62

D). Volume of water/foot of casing (gal.): 0.66

E). Volume of water in casing (gal. [CxD]: 8.33

F). Volume of water to remove (gal.) [Ex3]: 24.99

G). Volume of water actually removed (gal.): 1.50

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
10:43	21.10	7.83	-142	1.99	734	0.00	0.0	turbid
10:48	19.33	7.67	-167	2.15	810	0.00	0.0	turbid
10:53	**19.26**	**7.71**	**-178**	**2.14**	**803**	**0.00**	**0.0**	**turbid**

Comments:

Bold readings are parameters recorded immediately before sample collection.

Low flow pump used to purge, well sampled after parameters stablized.

Sampling ID: MW-19AR

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-20A**

Site Name: Buffalo China

Date: 8/6/2020

Staff: AK, AK

Time: 10:55 (sample collected)

A). Total casing and screen length in feet: 18.80

B). Water level below top of casing in feet: 5.18

C). Number of feet standing water [A-B]: 13.62

D). Volume of water/foot of casing (gal.): 0.66

E). Volume of water in casing (gal. [CxD]: 8.99

F). Volume of water to remove (gal.) [Ex3]: 26.97

G). Volume of water actually removed (gal.): 1.50

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
11:41	15.34	8.04	-148	9.00	831	0.00	0.0	very turbid
11:46	13.69	7.84	-153	7.25	692	0.00	0.0	very turbid
11:51	13.54	7.57	-110	2.57	208	0.00	0.0	slightly turbid
11:56	**13.57**	**7.51**	**-98**	**2.30**	**142**	**0.00**	**0.0**	**clear**

Comments:

Bold readings are parameters recorded immediately before sample collection.

Low flow pump used to purge, well sampled after parameters stablized.

Sampling ID: MW-20A

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

_____

WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-21A**

Site Name: Buffalo China

Date: 8/11/2020

Staff: AK

Time: 12:45 (sample collected)

A). Total casing and screen length in feet: 21.00

B). Water level below top of casing in feet: 7.21

C). Number of feet standing water [A-B]: 13.79

D). Volume of water/foot of casing (gal.): 0.66

E). Volume of water in casing (gal. [CxD]: 9.10

F). Volume of water to remove (gal.) [Ex3]: 27.30

G). Volume of water actually removed (gal.): 2.00

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
12:22	21.18	7.67	111	2.73	672	0.00	0.0	turbid
12:27	17.60	7.40	83	2.80	370	0.00	0.0	slightly turbid
12:32	16.93	7.35	62	2.77	390	0.00	0.0	slightly turbid
12:37	17.05	7.40	29	2.77	162	0.00	0.0	slightly turbid
12:42	**16.75**	**7.55**	**11**	**2.73**	**136**	**0.00**	**0.0**	**slightly turbid**

Comments:

Bold readings are parameters recorded immediately before sample collection.

Low flow pump used to purge, well sampled after parameters stablized.

Sampling ID: MW-21A

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

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WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-25A**

Site Name: Buffalo China

Date: 8/5/2020

Staff: AK, DH

Time: 15:45 (sample collected)

A). Total casing and screen length in feet: 13.19

B). Water level below top of casing in feet: 7.93

C). Number of feet standing water [A-B]: 5.26

D). Volume of water/foot of casing (gal.): 0.66

E). Volume of water in casing (gal. [CxD]: 3.47

F). Volume of water to remove (gal.) [Ex3]: 10.41

G). Volume of water actually removed (gal.): 2.00

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
15:21	20.84	7.64	-66	0.651	255	0.00	0.0	slightly turbid
15:26	18.87	7.26	-73	0.606	86.0	0.00	0.0	clear
15:31	18.20	7.02	-56	0.596	45.2	0.00	0.0	clear
15:36	18.19	6.93	-47	0.584	43.1	0.00	0.0	clear
15:41	**18.22**	**6.92**	**-42**	**0.583**	**33.7**	**0.00**	**0.0**	**clear**

Comments:

Bold readings are parameters recorded immediately before sample collection.

Low flow pump used to purge, well sampled after parameters stablized.

Sampling ID: MW-25A

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

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WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-26**

Site Name: Buffalo China

Date: 8/4/2020

Staff: AK, DH

Time: 11:20 (sample collected)

A). Total casing and screen length in feet: 16.20

B). Water level below top of casing in feet: 3.07

C). Number of feet standing water [A-B]: 13.13

D). Volume of water/foot of casing (gal.): 0.17

E). Volume of water in casing (gal. [CxD]: 2.23

F). Volume of water to remove (gal.) [Ex3]: 6.70

G). Volume of water actually removed (gal.): 1.40

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
13:46	18.11	7.78	-14	1.46	156	10.87	108.4	clear
13:58	17.93	7.90	-21	2.42	47.5	6.15	65.4	clear
14:06	18.19	7.84	-33	2.46	138	4.75	45.5	clear
14:15	**18.35**	**7.93**	**-41**	**2.49**	**175**	**6.26**	**67.1**	**clear**

Comments:

Bold readings are parameters recorded immediately before sample collection.

Low flow pump used to purge, well sampled after parameters stablized.

Sampling ID: MW-26

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

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WELL PURGE LOG

LiRo Engineers, Inc.

Project Title: Buffalo China

Well Number: **MW-26A**

Site Name: Buffalo China

Date: 8/4/2020

Staff: AK, DH

Time: 15:15 (sample collected)

A). Total casing and screen length in feet: 16.20

B). Water level below top of casing in feet: 4.79

C). Number of feet standing water [A-B]: 11.41

D). Volume of water/foot of casing (gal.): 0.66

E). Volume of water in casing (gal. [CxD]: 7.53

F). Volume of water to remove (gal.) [Ex3]: 22.59

G). Volume of water actually removed (gal.): 2.40

H). Explaination/Reason if F ≠ G: Parameters stablized

I). Pumping/Exraction Method: ☐ Bailer ☑ Peristaltic ☐ Whale ☐ Grundfos ☐ Other _____

J). Purge/Sampling Flow/Extraction Rates: 0.1 gpm (Average)

Sampling Flow/Extraction Rate: 0.1 gpm (Average)

Well ID	Volume (gal/ft)
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PURGE DATA

Time	Temperature (˚C)	pH	ORP (mV)	Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen %	Appearance
14:45	18.55	8.14	38	1.17	99.0	0.00	0.00	clear
14:53	18.73	8.09	39	0.968	76.9	0.00	0.00	clear
15:00	18.71	8.17	45	0.903	37.7	4.70	0.43	clear
15:09	**19.58**	**8.16**	**38**	**1.00**	**35.5**	**0.00**	**0.00**	**clear**

Comments:

Bold readings are parameters recorded immediately before sample collection.

Low flow pump used to purge, well sampled after parameters stablized.

Sampling ID: MW-26A

Sampling Parameters: (check one)

☑ TCL VOCs

☐ PFAs & 1,4-Dioxane

☐ TCL VOCs, SVOCs, Pesticides, Herbicides, PCBs, TAL Metals, Cyanide, PFAs & 1,4-Dioxane

☐ Other (list parameters below)

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