



2021 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:



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Revised – February 15, 2022

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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:

<i>Parcel Address</i>	<i>Parcel No.</i>	<i>Section No.</i>	<i>Block No.</i>	<i>Lot No.</i>
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 Site Inspection and one groundwater monitoring event performed in November 2021. 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 1, 2021. The following sections discuss the findings of the 2021 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.

Prior to the November 2021 Site Inspection, LiRo sent an access request letter to the property owner by United States Postal Service certified mail. The property owner responded to the access request on November 22, 2021 and requested that the inspection be performed by appointment. LiRo has left telephone messages at the provided phone number to set an appointment. As of the date of this report, the property owner has not responded to LiRo's phone messages and an appointment has not been set for the inspection. A copy of the access request letter and response are attached as Appendix C.

LiRo will continue to attempt to schedule an appointment with the property owner and will notify NYSDEC if an appointment is successfully scheduled. Following inspection of the SVI system, LiRo will provide a letter summary to NYSDEC.

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 November 2021 groundwater sampling and the Site-wide inspection performed on November 1, 2021. 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 Form 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. Three wells (MW-7, MW-7A, and MW-11) have damaged curb boxes and will require curb box/surface seal replacement.

One monitoring well (MW-21A) could not be accessed due to excessive ponding of water at the time of inspection.

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). Monitoring well MW-21A was not measured due to ponding water at the time of site sampling fieldwork.

4.2.3 Groundwater Sampling

Thirteen 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, August 2020, and November 2021. 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 target compound list (TCL) 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.

One monitoring well, MW-21A was not sampled during the November 2021 groundwater sampling event. As noted in Section 4.2.1 of this report, this well could not be accessed due to ponded water.

4.3 Groundwater Data Evaluation

The groundwater analytical data generated during this reporting period (November 2021) are summarized in the following tables:

- Table 4.2 – VOCs in perimeter wells.
- Table 4.3 – VOCs in overburden plume wells.
- Table 4.4 – VOCs in bedrock plume wells.

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

VOCs in Perimeter Wells: The perimeter monitoring wells were monitored for VOCs only. A review of the data presented in Table 4.2, with the exception of detections of vinyl chloride and cis-1,2-dichloroethene at MW-7A and MW-9, shows that all results for VOCs in November 2021 were either non-detect or below the NYS groundwater cleanup standards. At MW-7A, vinyl chloride was detected at 54 µg/L (the NYS Standard for vinyl chloride is 2 µg/L) and cis-1,2-dichloroethene was detected at 190 µg/L (the NYS Standard for cis-1,2-dichloroethene is 5 µg/L). At MW-9, vinyl chloride was detected at 36 µg/L and cis-1,2-dichloroethene was detected at 120 µg/L. Vinyl chloride and cis-1,2-dichloroethene have previously been detected at concentrations exceeding NYS groundwater cleanup standards at MW-7A. This is the first groundwater monitoring event where VOCs were detected exceeding NYS groundwater cleanup standards at MW-9.

Total VOC concentration versus time plots were generated for each of the perimeter monitoring wells. Trendlines have been added to the plots. The plots are presented in Appendix F of this report.

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.

Total VOC concentration versus time plots were generated for each of the overburden plume monitoring wells. Trendlines have been added to the total VOC concentration versus time plots. In addition, concentration versus time plots were generated for each of the six persistent 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 total VOC concentration versus time plots indicate a decrease in VOC concentrations in these wells. Notable exceptions are observed with individual chemicals as observed on the concentration versus time plots. Between August 2020 and November 2021, the following can be seen on the concentration versus time plots; increases in TCE and PCE in MW-5R, increases in cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride at MW-11, and an increase in PCE in MW-19R.

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. As noted previously, MW-21A was not accessible during the November 2021 sampling event. Table 4.4 presents the VOC results for the bedrock plume monitoring wells.

Total VOC concentration versus time plots were generated for each of the bedrock plume monitoring wells. Trendlines have been added to the total VOC concentration versus time plots. In addition, concentration versus time plots were generated for each of 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 total VOC concentration versus time plots indicate a decrease in overall VOC concentrations in these wells with the exception of MW-20A, which indicates an increase. Notable exceptions are observed with individual chemicals as observed on the concentration versus time plots. Between August 2020 and November 2021, the following can be seen on the concentration versus time plots: increases in concentrations of TCE, 1,1-DCE, cis-1,2-DCE, vinyl chloride, and PCE in MW-5AR, increases in concentration of TCE,

cis-1,2-DCE, trans-1,2-DCE, vinyl chloride, PCE, and methylene chloride in MW-13A, and increases in concentration of cis-1,2-DCE and trans-1,2-DCE in MW-19AR.

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 not detected in any of the 9 plume wells that were sampled.

Overburden plume well pH values ranged from 7.49 to 7.8 standard units (s.u.) and bedrock plume well pH values ranged from 7.45 to 8.0 s.u.. A pH of 10.5 s.u. is needed in order to activate the sodium persulfate if any remains within the treatment area.

4.4 Soil Vapor Intrusion Sampling

A Corrective Measure Work Plan (CMWP) for Partial Site Change of Use was submitted to NYSDEC on March 17, 2021 to convert of a portion of the Site (curling club) from Industrial Use to Commercial Use. The CMWP identified three supporting tasks to be completed in support of the “Change of Use”:

1. A Soil Vapor Intrusion (SVI) investigation;
2. A Summary of Existing RI/Site data; and,
3. An updated human exposure assessment specific to commercial use of the area.

The SVI investigation was performed on March 31, 2021 and consisted of the collection of two sub-slab soil vapor samples each paired with an indoor air sample and one outdoor air sample. The samples were collected from within the portion of the site for which the partial “Change of Use” was requested. LiRo submitted the supporting study results in a report dated July 1, 2021.

All samples were collected using 6 liter Summa canisters equipped with 8-hour regulators. Following collection, samples were shipped under chain-of-custody control to York Analytical Laboratories, Inc. of Richmond Hill, New York for analysis of VOCs using USEPA Method TO-15.

The laboratory reported VOC concentrations were compared to New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH GSV, 2006) including updates provided by NYSDOH on their website.

The results of the SVI investigation indicated No Further Action based on NYSDOH GSV, 2006 decision matrices A, B, and C. The SVI investigation results and existing site data were used to prepare an updated human exposure assessment specific to commercial use of the change of use area. The Supporting Studies Report for Partial Site Change of Use is attached as Appendix I.

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. The property owner has replied to written correspondence and indicated willingness to schedule an appointment for access. LiRo will continue to attempt to schedule an appointment with the property owner and will notify NYSDEC if an appointment is successfully scheduled.
- Groundwater surface elevation contours indicate that the groundwater flow patterns across the Site remain consistent with previous hydraulic monitoring events.
- With the exception of detections of vinyl chloride and cis-1,2-DCE at MW-7A and MW-9, 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-6, and MW-19R). The total VOC concentration of 1,476 µg/L in MW-11 is very near the target concentration of 1,000 µg/L.
- Total VOC concentrations have been reduced to below the target concentration of 1,000 µg/L in four of the six bedrock plume wells (MW-14A, MW-19AR, MW-20A, and MW-21A). The total VOC concentrations of 66,242 µg/L in MW-5AR and 19,484 µg/L in MW-13A have not been reduced to an acceptable level to begin the in-situ enhanced biodegradation program.
- Sodium Persulfate was not detected in any of the plume monitoring wells during the November 2021 sampling event.
- Groundwater pH was below 10.5 s.u. in all monitoring wells.
- No human exposure to contaminants were identified in relation to the partial “Change of Use” of the curling club portion of the Site.
- HPMG’s attorney is working on completing the Environmental Easement for the Change in Use area.

The identified maintenance issues (minor well pad issues) in the 2020 PRR were addressed.

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. HPMG is currently evaluating a pilot study that has been recently initiated at a local site with similar contamination and geology. The treatment being evaluated is utilizing an injection of zero valent iron, soy lactate, and anaerobic bacteria. Data from the study should be available before the end of the next PRR period.

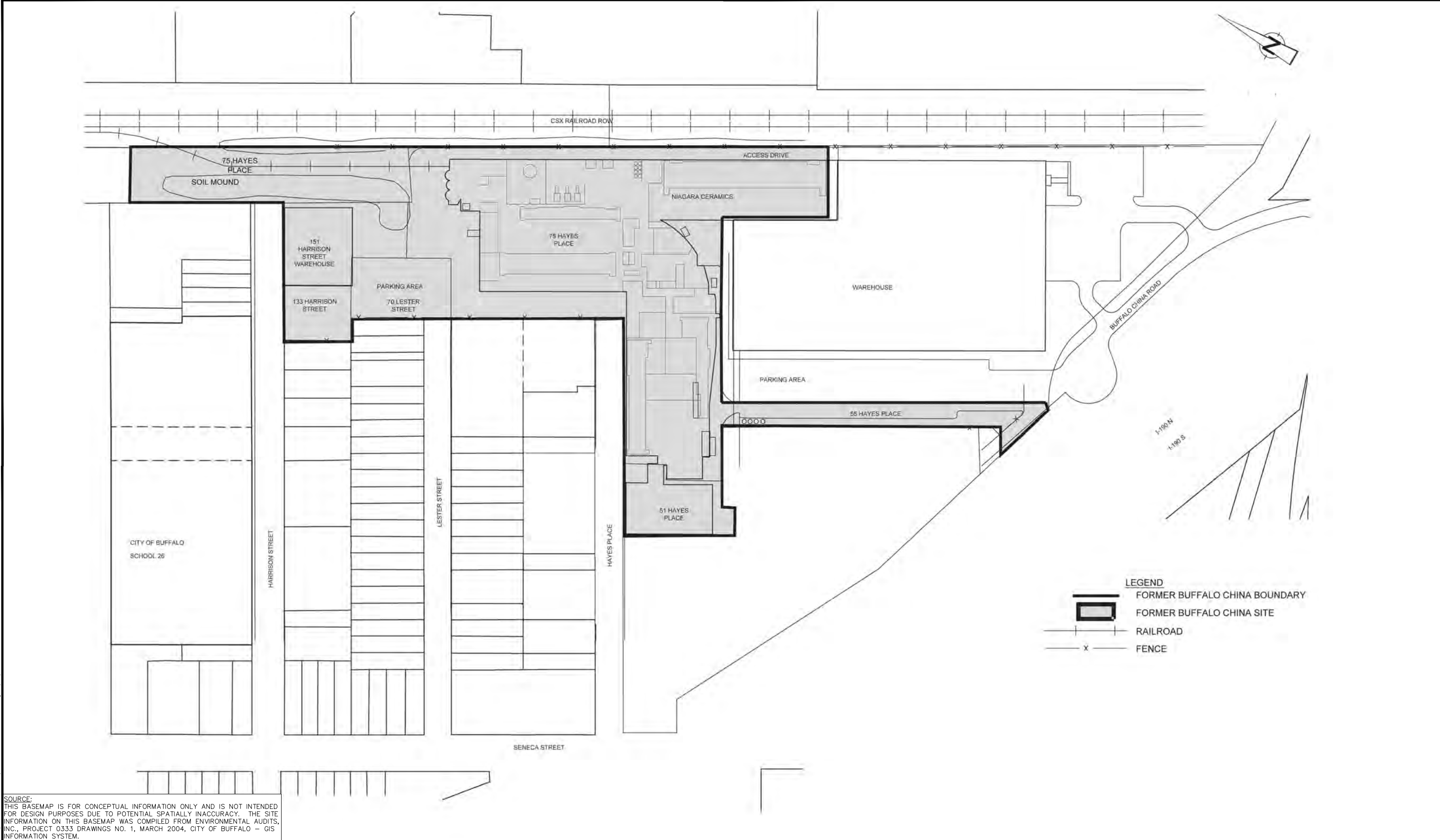
6.0 Certification

The PRR Certification Form is attached as Appendix G. Box 2, question 6 is answered “No” and therefore, the IC Certification is not signed.

7.0 Corrective Measures

A Corrective Measures Work Plan (CMWP) was submitted to NYSDEC on March 17, 2021 to address the partial change in use. The supporting studies have been completed (Appendix I) and the Site owner is currently in the process of updating the Environmental Easement.

Figures



SOURCE:
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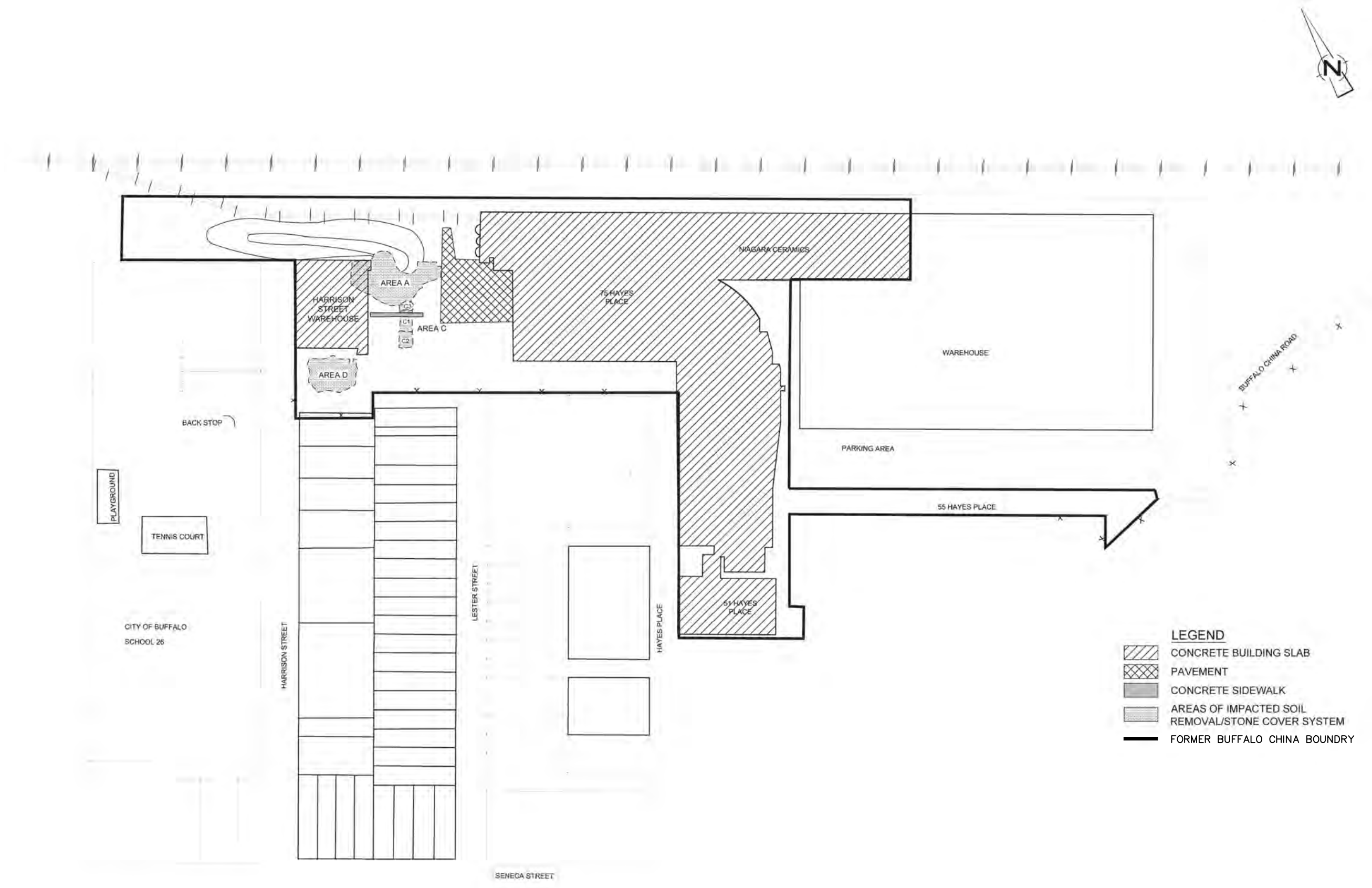
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NO.	DATE	DESCRIPTION
REVISIONS		



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:				
CHECKED BY:				
DRAWN BY: A.M.K.	DATE: DECEMBER 2021	SCALE: NOT TO SCALE	DRAWING TITLE: SITE LAYOUT	SHEET 2 OF 4
				FIGURE NO. 2.1



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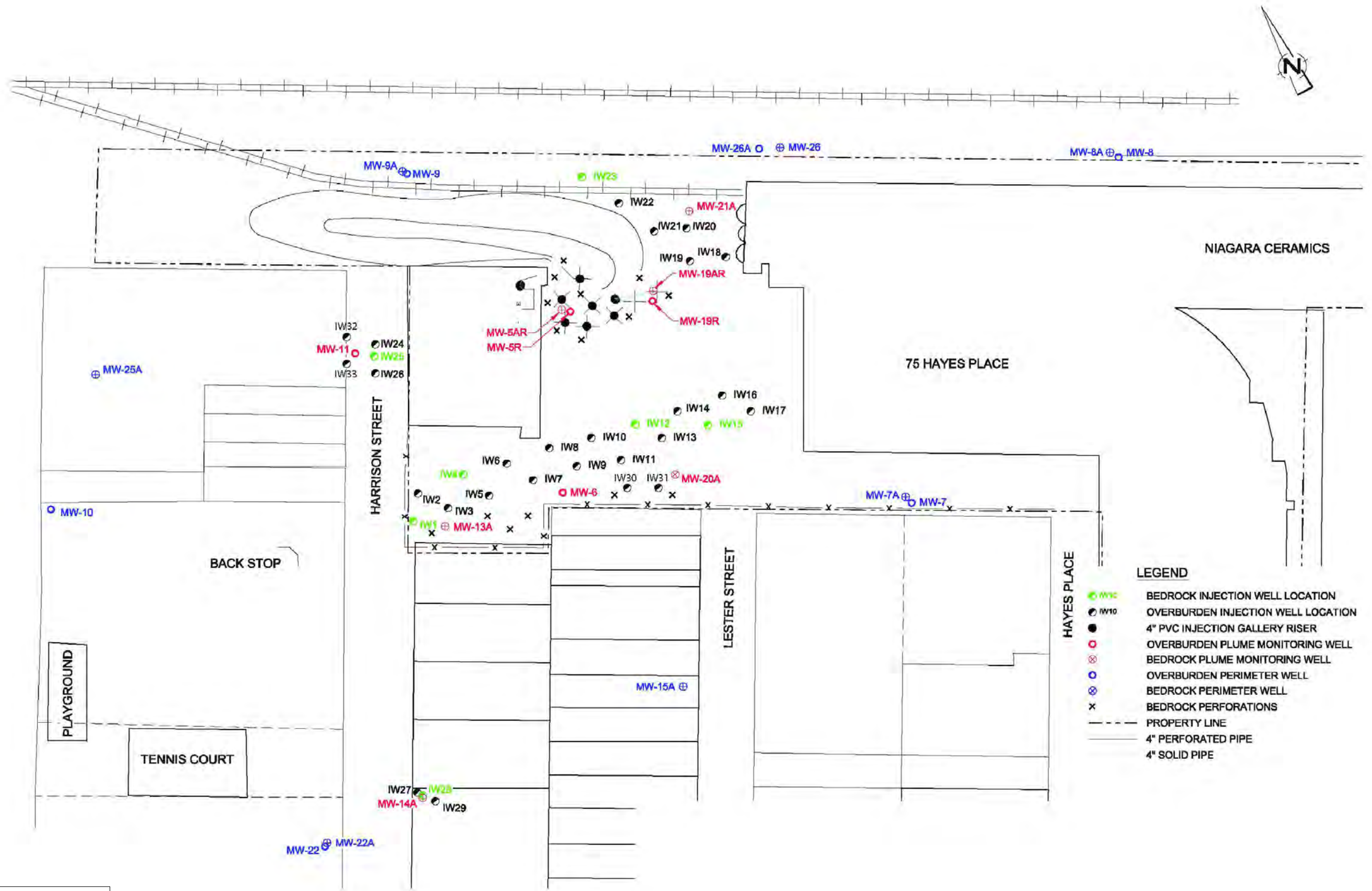
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NO.	DATE	DESCRIPTION
REVISIONS		



LiRo Engineers, Inc.
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Buffalo, New York

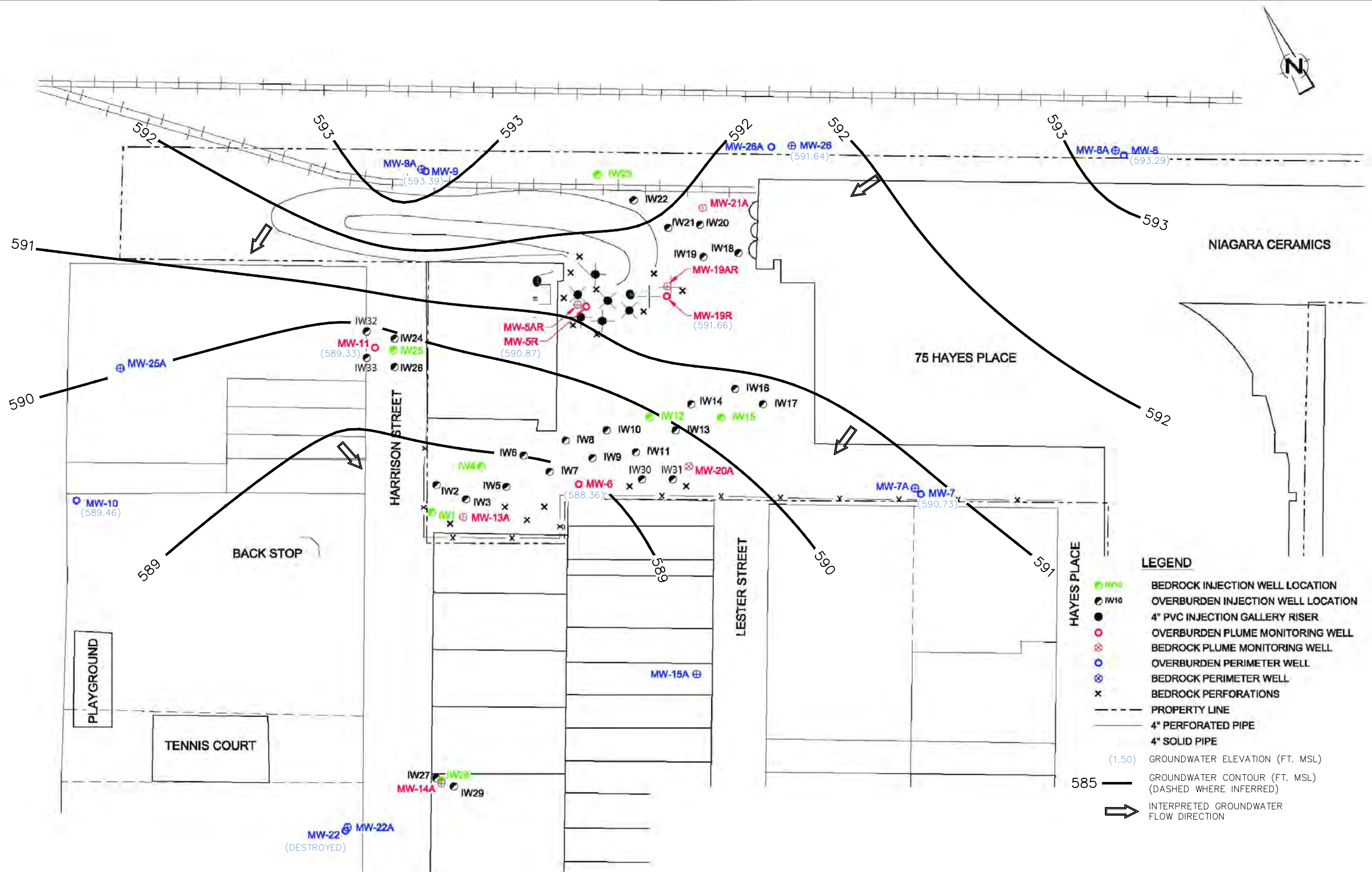
PROJ. ENG.:	CLIENT:	HAYES PLACE MANAGEMENT GROUP, INC.	JOB TITLE AND LOCATION: FORMER BUFFALO CHINA	LIRO JOB NO.: 16-344-1389
DESIGNED BY:				
CHECKED BY:				
DRAWN BY: A.M.K.	DATE: DECEMBER 2021	SCALE: NOT TO SCALE	DRAWING TITLE: EXISTING SITE COVER TO BE MAINTAINED	FIGURE NO. 2.2



- LEGEND**
- IW23 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
 - x BEDROCK PERFORATIONS
 - PROPERTY LINE
 - 4" PERFORATED PIPE
 - - - 4" SOLID PIPE

SOURCE:
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					FORMER BUFFALO CHINA			16-344-1389		
								SHEET 4 OF 4		
						CHECKED BY:			DRAWING TITLE:	FIGURE NO.
	NO.	DATE	DESCRIPTION			DRAWN BY:	DATE:	SCALE:	INJECTION AND MONITORING WELL LOCATIONS	2.3
	REVISIONS					A.M.K.	DECEMBER 2021	NOT TO SCALE		



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NO.	DATE	DESCRIPTION
REVISIONS		



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

PROJ. ENG.:	CLIENT:	JOB TITLE AND LOCATION:		LIRO JOB NO.: 16-344-1389
DESIGNED BY:	HAYES PLACE MANAGEMENT GROUP, INC.		FORMER BUFFALO CHINA	
CHECKED BY:	DRAWING TITLE:		OVERBURDEN GROUNDWATER SURFACE ELEVATION CONTOURS - NOVEMBER 2021	FIGURE NO. 4.1
DRAWN BY: A.M.K.	DATE: DECEMBER 2021	SCALE: NOT TO SCALE		

Tables

**SUMMARY OF HYDRAULIC MONITORING DATA
NOVEMBER 2021
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	11/3/2021	598.10	7.23	590.87
MW-6	11/2/2021	594.15	5.79	588.36
MW-7	11/2/2021	592.03	1.30	590.73
MW-8	11/2/2021	594.00	0.71	593.29
MW-9	11/2/2021	594.81	1.42	593.39
MW-10	11/3/2021	596.45	6.99	589.46
MW-11	11/3/2021	595.04	5.71	589.33
MW-19R	11/3/2021	593.28	1.62	591.66
MW-26	11/2/2021	593.22	1.58	591.64
Bedrock				
MW-5AR	11/3/2021	596.29	9.59	586.70
MW-7A	11/4/2021	592.31	1.90	590.41
MW-8A	11/2/2021	594.10	10.62	583.48
MW-9A	11/2/2021	594.94	10.63	584.31
MW-13A	11/3/2021	594.75	6.95	587.80
MW-14A	11/2/2021	593.37	10.80	582.57
MW-15A	11/3/2021	592.70	10.62	582.08
MW-19AR	11/3/2021	593.40	3.45	589.95
MW-20A	11/4/2021	593.06	4.86	588.20
MW-21A	11/4/2021	590.98	NM	NA
MW-25A	11/3/2021	598.13	7.81	590.32
MW-26A	11/2/2021	593.05	1.79	591.26

Notes:

AMSL - Above Mean Sea Level

NM - Not measured

NA - Not available

TABLE 4.2

ANALYTICAL RESULTS SUMMARY
VOCs in PERIMETER WELLS - NOVEMBER 2021
FORMER BUFFALO CHINA SITE (No. C915209)

				Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter
				Overburden Monitoring Well	Bedrock Monitoring Well	Overburden Monitoring Well	Bedrock Monitoring Well	Overburden Monitoring Well	Bedrock Monitoring Well	Overburden Monitoring Well	Bedrock Monitoring Well
Location ID:				MW-7	MW-7A	MW-8	MW-8A	MW-9	MW-9A	MW-10	MW-15A
Sample ID:				MW-7	MW-7A MS/MSD	MW-8	MW-8A	MW-9	MW-9A	MW-10	MW-15A
Sample Date:				11/2/21 14:30	11/4/21 12:30	11/2/21 9:00	11/2/21 9:30	11/2/21 13:50	11/2/21 13:25	11/4/21 14:00	11/3/21 14:30
New York State Water Quality											
Parameters	Units	Guidance Values	Standards								
Volatile Organic Analytes											
1,1,1-Trichloroethane (TCA)	ug/L	NC	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	ug/L	NC	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	NC	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	NC	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane (1,1-DCA)	ug/L	NC	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene (1,1-DCE)	ug/L	NC	5	0.2 U	0.25 J	0.2 U	0.2 U	1.2 J	0.2 U	0.2 U	0.2 U
1,2,3-Trichlorobenzene	ug/L	NC	5	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,4-Trichlorobenzene	ug/L	NC	5	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	NC	0.04	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
1,2-Dibromoethane	ug/L	NC	0.0006	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene	ug/L	NC	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	NC	0.6	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	ug/L	NC	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	ug/L	NC	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	NC	3	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	1.3 J	0.2 U
1,4-Dioxane	ug/L	NC	NC	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U
2-Butanone (MEK)	ug/L	50	NC	0.84 J	3.2 J	1.5 J	1.7 J	1.0 J	0.78 U	1.1 J	0.78 U
2-Hexanone	ug/L	50	NC	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-Methyl-2-pentanone	ug/L	NC	NC	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Acetone	ug/L	50	NC	5 U	5.9 J	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	ug/L	NC	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromochloromethane	ug/L	NC	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromodichloromethane	ug/L	50	NC	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	50	NC	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Bromomethane	ug/L	NC	5	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	2.1 J	0.7 U
Carbon Disulfide	ug/L	60	60	2.4 J	2.4 J	2 J	0.42 U	0.42 U	2.8 J	0.42 U	1.9 J
Carbon Tetrachloride	ug/L	NC	5	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Chlorobenzene	ug/L	NC	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	NC	5	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroform	ug/L	NC	7	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	ug/L	NC	5	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.78 BJ	0.28 U
Cyclohexane	ug/L	NC	NC	0.26 U	0.97 J	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Dibromochloromethane	ug/L	NC	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (CFC 12)	ug/L	NC	5	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Methylene Chloride (Dichloromethane)	ug/L	NC	5	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Ethylbenzene	ug/L	NC	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Isopropylbenzene (Cumene)	ug/L	NC	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl Acetate	ug/L	NC	NC	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methyl tert-Butyl Ether	ug/L	10	NC	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	NC	NC	0.2 U	0.47 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	ug/L	NC	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene (PCE)	ug/L	NC	5	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.79 J
Toluene	ug/L	NC	5	0.45 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1.7 J	0.2 U

TABLE 4.2

ANALYTICAL RESULTS SUMMARY
VOCs in PERIMETER WELLS - NOVEMBER 2021
FORMER BUFFALO CHINA SITE (No. C915209)

Parameters	Units	New York State Water Quality					
		Guidance Values	Standards	Perimeter	Perimeter	Perimeter	
				Bedrock Monitoring Well	Overburden Monitoring Well	Bedrock Monitoring Well	
				Location ID:	MW-25A	MW-26	MW-26A
				Sample ID:	MW-25A	MW-26	MW-26A
Sample Date:	11/3/21 15:00	11/2/21 11:35	11/2/21 12:00				
Volatile Organic Analytes							
1,1,1-Trichloroethane (TCA)	ug/L	NC	5	0.2 U	0.2 U	0.2 U	
1,1,2,2-Tetrachloroethane	ug/L	NC	5	0.2 U	0.2 U	0.2 U	
1,1,2-Trichloroethane	ug/L	NC	1	0.2 U	0.2 U	0.2 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	NC	5	0.2 U	0.2 U	0.2 U	
1,1-Dichloroethane (1,1-DCA)	ug/L	NC	5	0.2 U	0.2 U	0.2 U	
1,1-Dichloroethene (1,1-DCE)	ug/L	NC	5	0.2 U	0.2 U	0.2 U	
1,2,3-Trichlorobenzene	ug/L	NC	5	0.25 U	0.25 U	0.25 U	
1,2,4-Trichlorobenzene	ug/L	NC	5	0.34 U	0.34 U	0.34 U	
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	NC	0.04	0.45 U	0.45 U	0.45 U	
1,2-Dibromoethane	ug/L	NC	0.0006	0.2 U	0.2 U	0.2 U	
1,2-Dichlorobenzene	ug/L	NC	3	0.2 U	0.2 U	0.2 U	
1,2-Dichloroethane	ug/L	NC	0.6	0.2 U	0.2 U	0.2 U	
1,2-Dichloropropane	ug/L	NC	1	0.2 U	0.2 U	0.2 U	
1,3-Dichlorobenzene	ug/L	NC	3	0.2 U	0.2 U	0.2 U	
1,4-Dichlorobenzene	ug/L	NC	3	0.2 U	0.2 U	0.2 U	
1,4-Dioxane	ug/L	NC	NC	13 U	13 U	13 U	
2-Butanone (MEK)	ug/L	50	NC	0.78 U	0.78 J	0.78 U	
2-Hexanone	ug/L	50	NC	0.2 U	0.2 U	0.2 U	
4-Methyl-2-pentanone	ug/L	NC	NC	0.2 U	0.2 U	0.2 U	
Acetone	ug/L	50	NC	5 U	5 U	5 U	
Benzene	ug/L	NC	1	0.2 U	0.2 U	0.2 U	
Bromochloromethane	ug/L	NC	5	0.2 U	0.2 U	0.2 U	
Bromodichloromethane	ug/L	50	NC	0.2 U	0.2 U	0.2 U	
Bromoform	ug/L	50	NC	0.25 U	0.25 U	0.25 U	
Bromomethane	ug/L	NC	5	0.7 U	0.7 U	0.7 U	
Carbon Disulfide	ug/L	60	60	0.42 U	2.5 J	0.42 U	
Carbon Tetrachloride	ug/L	NC	5	0.34 U	0.34 U	0.34 U	
Chlorobenzene	ug/L	NC	5	0.2 U	0.2 U	0.2 U	
Chloroethane	ug/L	NC	5	0.23 U	0.23 U	0.23 U	
Chloroform	ug/L	NC	7	0.24 U	0.24 U	0.24 U	
Chloromethane	ug/L	NC	5	0.28 U	0.28 U	0.28 U	
Cyclohexane	ug/L	NC	NC	0.26 U	0.26 U	0.26 U	
Dibromochloromethane	ug/L	NC	5	0.2 U	0.2 U	0.2 U	
Dichlorodifluoromethane (CFC 12)	ug/L	NC	5	0.21 U	0.21 U	0.21 U	
Methylene Chloride (Dichloromethane)	ug/L	NC	5	0.65 U	0.65 U	0.65 U	
Ethylbenzene	ug/L	NC	5	0.2 U	0.2 U	0.2 U	
Isopropylbenzene (Cumene)	ug/L	NC	5	0.2 U	0.2 U	0.2 U	
Methyl Acetate	ug/L	NC	NC	0.33 U	0.33 U	0.33 U	
Methyl tert-Butyl Ether	ug/L	10	NC	0.2 U	0.2 U	0.2 U	
Methylcyclohexane	ug/L	NC	NC	0.2 U	0.2 U	0.2 U	
Styrene	ug/L	NC	5	0.2 U	0.2 U	0.2 U	
Tetrachloroethene (PCE)	ug/L	NC	5	0.21 U	0.21 U	0.21 U	
Toluene	ug/L	NC	5	0.2 U	0.2 U	0.2 U	

TABLE 4.2

ANALYTICAL RESULTS SUMMARY
VOCs in PERIMETER WELLS - NOVEMBER 2021
FORMER BUFFALO CHINA SITE (No. C915209)

Parameters	Units	New York State Water Quality			Perimeter	Perimeter	Perimeter
		Guidance Values	Standards	Bedrock Monitoring Well	Overburden Monitoring Well	Bedrock Monitoring Well	
				Location ID:	MW-25A	MW-26	MW-26A
				Sample ID:	MW-25A	MW-26	MW-26A
				Sample Date:	11/3/21 15:00	11/2/21 11:35	11/2/21 12:00
Volatile Organic Analytes							
Trichloroethene (TCE)	ug/L	NC	5	0.35 J	0.2 U	0.2 U	
Trichlorofluoromethane (CFC 11)	ug/L	NC	5	0.24 U	0.24 U	0.24 U	
Vinyl Chloride	ug/L	NC	2	0.2 U	0.2 U	0.2 U	
cis-1,2-Dichloroethene	ug/L	NC	5	0.23 U	0.23 U	0.23 U	
cis-1,3-Dichloropropene	ug/L	NC	NC	0.2 U	0.2 U	0.2 U	
m,p-Xylenes	ug/L	NC	5	0.2 U	0.2 U	0.2 U	
o-Xylene	ug/L	NC	5	0.2 U	0.2 U	0.2 U	
trans-1,2-Dichloroethene	ug/L	NC	5	0.2 U	0.2 U	0.2 U	
trans-1,3-Dichloropropene	ug/L	NC	NC	0.23 U	0.23 U	0.23 U	
Total VOCs	ug/L	NC	NC	0.35	3.3	0	
Field Parameters							
Conductivity, field	mS/cm	NC	NC	1.06	1.82	1.19	
Dissolved oxygen (DO), field	mg/L	NC	NC	4.51	4.75	4.19	
Oxidation reduction potential (ORP), field	millivolts	NC	NC	-81	-69	-130	
pH, field	s.u.	NC	6.5-8.5	7.56	8	7.97	
Temperature, field	Deg. C	NC	NC	16.26	13.88	13.23	
Turbidity, field	NTU	NC	NC	6.6	4.6	25.5	

Notes:

1.0 - Exceeds criteria

U - Not detected

J - Estimated concentration

NC - No criteria

ug/L - Micrograms per liter

mg/L - Milligrams per liter

TABLE 4.3

ANALYTICAL RESULTS SUMMARY

VOCs in OVERBURDEN PLUME WELLS - NOVEMBER 2021

FORMER BUFFALO CHINA SITE (No. C915209)

Parameters	Units	New York State Water Quality		Plume	Plume	Plume	Plume
		Guidance Values	Standards	Overburden Monitoring Well	Overburden Monitoring Well	Overburden Monitoring Well	Overburden Monitoring Well
				Location ID:	Location ID:	Location ID:	Location ID:
				Sample ID:	Sample ID:	Sample ID:	Sample ID:
				Sample Date:	Sample Date:	Sample Date:	Sample Date:
				11/3/21 9:50	11/2/21 15:15	11/4/21 13:30	11/3/21 8:45
Volatile Organic Analytes							
1,1,1-Trichloroethane (TCA)	ug/L	NC	5	1.0 U	0.2 U	2.0 U	0.2 U
1,1,2,2-Tetrachloroethane	ug/L	NC	5	1.0 U	0.2 U	2.0 U	0.2 U
1,1,2-Trichloroethane	ug/L	NC	1	2.0 J	0.2 U	2.0 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	NC	5	1.0 U	0.2 U	2.0 U	0.2 U
1,1-Dichloroethane (1,1-DCA)	ug/L	NC	5	1.0 U	0.2 U	2.0 U	0.2 U
1,1-Dichloroethene (1,1-DCE)	ug/L	NC	5	1.0 U	0.2 U	3.5 J	0.2 U
1,2,3-Trichlorobenzene	ug/L	NC	5	1.3 U	0.25 U	2.5 U	0.25 U
1,2,4-Trichlorobenzene	ug/L	NC	5	1.7 U	0.34 U	3.4 U	0.34 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	NC	0.04	2.3 U	0.45 U	4.5 U	0.45 U
1,2-Dibromoethane	ug/L	NC	0.0006	1.0 U	0.2 U	2.0 U	0.2 U
1,2-Dichlorobenzene	ug/L	NC	3	1.0 U	0.2 U	2.0 U	0.2 U
1,2-Dichloroethane	ug/L	NC	0.6	1.0 U	0.2 U	2.0 U	0.2 U
1,2-Dichloropropane	ug/L	NC	1	1.0 U	0.2 U	2.0 U	0.2 U
1,3-Dichlorobenzene	ug/L	NC	3	1.0 U	0.2 U	2.0 U	0.2 U
1,4-Dichlorobenzene	ug/L	NC	3	1.0 U	0.2 U	2.0 U	0.2 U
1,4-Dioxane	ug/L	NC	NC	65 U	13 U	130 U	13 U
2-Butanone (MEK)	ug/L	50	NC	3.9 U	0.78 U	7.8 U	0.78 U
2-Hexanone	ug/L	50	NC	1.0 U	0.2 U	2.0 U	0.2 U
4-Methyl-2-pentanone	ug/L	NC	NC	1.0 U	0.2 U	2.0 U	0.2 U
Acetone	ug/L	50	NC	25 U	5 U	50 U	5 U
Benzene	ug/L	NC	1	1.0 U	0.2 U	2.0 U	0.2 U
Bromochloromethane	ug/L	NC	5	1.0 U	0.2 U	2.0 U	0.2 U
Bromodichloromethane	ug/L	50	NC	1.0 U	0.2 U	2.0 U	0.2 U
Bromoform	ug/L	50	NC	1.3 U	0.25 U	2.5 U	0.25 U
Bromomethane	ug/L	NC	5	3.5 U	0.7 U	7.0 U	0.7 U
Carbon Disulfide	ug/L	60	60	2.1 U	0.42 U	4.2 U	0.42 U
Carbon Tetrachloride	ug/L	NC	5	1.7 U	0.34 U	3.4 U	0.34 U
Chlorobenzene	ug/L	NC	5	1.0 U	0.2 U	2.0 U	0.2 U
Chloroethane	ug/L	NC	5	1.2 U	0.23 U	2.3 U	0.23 U
Chloroform	ug/L	NC	7	1.2 U	0.24 U	2.4 U	0.24 U
Chloromethane	ug/L	NC	5	1.4 U	0.28 U	2.8 U	0.28 U
Cyclohexane	ug/L	NC	NC	1.3 U	0.26 U	2.6 U	0.26 U
Dibromochloromethane	ug/L	NC	5	1.0 U	0.2 U	2.0 U	0.2 U
Dichlorodifluoromethane (CFC 12)	ug/L	NC	5	1.1 U	0.21 U	2.1 U	0.21 U
Methylene Chloride (Dichloromethane)	ug/L	NC	5	3.3 U	0.65 U	6.5 U	0.65 U
Ethylbenzene	ug/L	NC	5	1.0 U	0.2 U	2.0 U	0.2 U
Isopropylbenzene (Cumene)	ug/L	NC	5	1.0 U	0.2 U	2.0 U	0.2 U
Methyl Acetate	ug/L	NC	NC	1.7 U	0.33 U	3.3 U	0.33 U
Methyl tert-Butyl Ether	ug/L	10	NC	1.0 U	0.2 U	2.0 U	0.2 U
Methylcyclohexane	ug/L	NC	NC	1.0 U	0.2 U	2.0 U	0.2 U
Styrene	ug/L	NC	5	1.0 U	0.2 U	2.0 U	0.2 U
Tetrachloroethene (PCE)	ug/L	NC	5	2.7 J	0.21 U	2.1 U	0.21 U
Toluene	ug/L	NC	5	1.0 U	0.2 U	2.0 U	0.2 U
Trichloroethene (TCE)	ug/L	NC	5	580	0.2 U	60	42
Trichlorofluoromethane (CFC 11)	ug/L	NC	5	1.2 U	0.24 U	2.4 U	0.24 U

TABLE 4.3

ANALYTICAL RESULTS SUMMARY
VOCs in OVERBURDEN PLUME WELLS - NOVEMBER 2021
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:				11/3/21 9:50	11/2/21 15:15	11/4/21 13:30	11/3/21 8:45
New York State Water Quality							
Parameters	Units	Guidance Values	Standards				
Volatile Organic Analytes							
Vinyl Chloride	ug/L	NC	2	1.0 U	0.2 U	7.8 J	0.22 J
cis-1,2-Dichloroethene	ug/L	NC	5	190	0.23 U	1400	11
cis-1,3-Dichloropropene	ug/L	NC	NC	1.0 U	0.2 U	2.0 U	0.2 U
m,p-Xylenes	ug/L	NC	5	1.0 U	0.2 U	2.0 U	0.2 U
o-Xylene	ug/L	NC	5	1.0 U	0.2 U	2.0 U	0.2 U
trans-1,2-Dichloroethene	ug/L	NC	5	17 J	0.2 U	4.3 J	1.5 J
trans-1,3-Dichloropropene	ug/L	NC	NC	1.2 U	0.23 U	2.3 U	0.23 U
Total VOCs	ug/L	NC	NC	791.7	0	1475.6	54.7
Field Parameters							
Conductivity, field	mS/cm	NC	NC	1.07	0.975	1.82	0.821
Dissolved oxygen (DO), field	mg/L	NC	NC	3.82	3.54	4.56	6.85
Oxidation reduction potential (ORP), field	millivolts	NC	NC	107	-217	42	61
pH, field	s.u.	NC	6.5-8.5	7.62	7.8	7.49	7.63
Temperature, field	Deg. C	NC	NC	15.55	15.17	15.81	15.59
Turbidity, field	NTU	NC	NC	0.5	0	50.9	146
Sodium Persulfate	mg/L	NC	NC	U	U	U	U
Notes:							
1.0 - Exceeds criteria							
U - 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 - NOVEMBER 2021
FORMER BUFFALO CHINA SITE (No. C915209)

				Plume	Plume	Plume	Plume	Plume	Plume
				Bedrock Monitoring Well	Bedrock Monitoring Well	Bedrock Monitoring Well	Bedrock Monitoring Well	Bedrock Monitoring Well	Bedrock Monitoring Well
Location ID:				MW-5AR	MW-13A	MW-14A	MW-19AR	MW-20A	MW-20A
Sample ID:				MW-5AR	MW-13A	MW-14A	MW-19AR	MW-20A	MW-DUP
Sample Date:				11/3/21 10:30	11/3/21 11:15	11/2/21 10:25	11/3/21 9:15	11/4/21 11:45	11/4/21 12:00
New York State Water Quality									
Parameters	Units	Guidance Values	Standards						
Volatile Organic Analytes									
1,1,1-Trichloroethane (TCA)	ug/L	NC	5	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	NC	5	130 J	20 U	0.2 U	0.4 U	2.0 U	0.5 U
1,1,2-Trichloroethane	ug/L	NC	1	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	NC	5	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
1,1-Dichloroethane (1,1-DCA)	ug/L	NC	5	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
1,1-Dichloroethene (1,1-DCE)	ug/L	NC	5	52 J	20 U	0.2 U	0.4 U	2.0 U	1.4 J
1,2,3-Trichlorobenzene	ug/L	NC	5	63 U	25 U	0.25 U	0.5 U	2.5 U	0.63 U
1,2,4-Trichlorobenzene	ug/L	NC	5	85 U	34 U	0.34 U	0.68 U	3.4 U	0.85 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	NC	0.04	120 U	45 U	0.45 U	0.9 U	4.5 U	1.2 U
1,2-Dibromoethane	ug/L	NC	0.0006	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
1,2-Dichlorobenzene	ug/L	NC	3	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
1,2-Dichloroethane	ug/L	NC	0.6	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
1,2-Dichloropropane	ug/L	NC	1	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
1,3-Dichlorobenzene	ug/L	NC	3	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
1,4-Dichlorobenzene	ug/L	NC	3	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
1,4-Dioxane	ug/L	NC	NC	3300 U	1300 U	13 U	26 U	130 U	33 U
2-Butanone (MEK)	ug/L	50	NC	200 U	78 U	1.2 J	1.6 U	7.8 U	2.0 U
2-Hexanone	ug/L	50	NC	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
4-Methyl-2-pentanone	ug/L	NC	NC	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
Acetone	ug/L	50	NC	1300 U	500 U	5 U	10 U	50 U	13 U
Benzene	ug/L	NC	1	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
Bromochloromethane	ug/L	NC	5	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
Bromodichloromethane	ug/L	50	NC	50 U	26 J	0.2 U	0.4 U	2.0 U	0.5 U
Bromoform	ug/L	50	NC	63 U	25 U	0.25 U	0.5 U	2.5 U	0.63 U
Bromomethane	ug/L	NC	5	180 U	70 U	0.7 U	1.4 U	7.0 U	1.8 U
Carbon Disulfide	ug/L	60	60	110 U	42 U	0.42 U	0.84 U	4.2 U	1.1 U
Carbon Tetrachloride	ug/L	NC	5	85 U	34 U	0.34 U	0.68 U	3.4 U	0.85 U
Chlorobenzene	ug/L	NC	5	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
Chloroethane	ug/L	NC	5	58 U	23 U	0.23 U	0.46 U	2.3 U	0.58 U
Chloroform	ug/L	NC	7	190 J	74 J	0.24 U	0.48 U	2.4 U	0.60 U
Chloromethane	ug/L	NC	5	70 U	28 U	0.67 J	0.56 U	2.8 U	1.0 BJ
Cyclohexane	ug/L	NC	NC	65 U	26 U	0.26 U	2.0 J	2.6 U	0.65 U
Dibromochloromethane	ug/L	NC	5	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
Dichlorodifluoromethane (CFC 12)	ug/L	NC	5	53 U	21 U	0.21 U	0.42 U	2.1 U	0.53 U
Methylene Chloride (Dichloromethane)	ug/L	NC	5	170 U	360 J	0.65 U	1.3 U	6.5 U	1.7 U
Ethylbenzene	ug/L	NC	5	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
Isopropylbenzene (Cumene)	ug/L	NC	5	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
Methyl Acetate	ug/L	NC	NC	83 U	33 U	0.33 U	0.66 U	3.3 U	0.83 U
Methyl tert-Butyl Ether	ug/L	10	NC	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
Methylcyclohexane	ug/L	NC	NC	50 U	20 U	0.2 U	2.0 J	2.0 U	0.5 U
Styrene	ug/L	NC	5	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
Tetrachloroethene (PCE)	ug/L	NC	5	140 J	34 J	0.21 U	0.42 U	2.1 U	0.53 U
Toluene	ug/L	NC	5	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
Trichloroethene (TCE)	ug/L	NC	5	40000	11000	0.71 J	3.4 J	2.3 J	0.5 U

TABLE 4.4

ANALYTICAL RESULTS SUMMARY
VOCs in BEDROCK PLUME WELLS - NOVEMBER 2021
FORMER BUFFALO CHINA SITE (No. C915209)

				Plume	Plume	Plume	Plume	Plume	Plume
				Bedrock Monitoring Well	Bedrock Monitoring Well	Bedrock Monitoring Well	Bedrock Monitoring Well	Bedrock Monitoring Well	Bedrock Monitoring Well
Location ID:				MW-5AR	MW-13A	MW-14A	MW-19AR	MW-20A	MW-20A
Sample ID:				MW-5AR	MW-13A	MW-14A	MW-19AR	MW-20A	MW-DUP
Sample Date:				11/3/21 10:30	11/3/21 11:15	11/2/21 10:25	11/3/21 9:15	11/4/21 11:45	11/4/21 12:00
New York State Water Quality									
Parameters	Units	Guidance Values	Standards						
Volatile Organic Analytes									
Trichlorofluoromethane (CFC 11)	ug/L	NC	5	60 U	24 U	0.24 U	0.48 U	2.4 U	0.6 U
Vinyl Chloride	ug/L	NC	2	430 J	180 J	2.2 J	37	290	250
cis-1,2-Dichloroethene	ug/L	NC	5	24000	7500	5.5	250	910	580 D
cis-1,3-Dichloropropene	ug/L	NC	NC	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
m,p-Xylenes	ug/L	NC	5	50 U	20 U	0.2 U	0.45 J	2.0 U	0.5 U
o-Xylene	ug/L	NC	5	50 U	20 U	0.2 U	0.4 U	2.0 U	0.5 U
trans-1,2-Dichloroethene	ug/L	NC	5	1300 J	310 J	0.28 J	4.0 J	2.8 J	2.5 J
trans-1,3-Dichloropropene	ug/L	NC	NC	58 U	23 U	0.23 U	0.46 U	2.3 U	0.58 U
Total VOCs	ug/L	NC	NC	66242	19484	10.6	298.9	1205.1	834.9
Field Parameters									
Conductivity, field	mS/cm	NC	NC	9.33	3.14	1.63	1.22	1.21	1.21
Dissolved oxygen (DO), field	mg/L	NC	NC	3.02	1.92	4.31	5.36	6.12	6.12
Oxidation reduction potential (ORP), field	millivolts	NC	NC	67	-6	-30	-229	-52	-52
pH, field	s.u.	NC	6.5-8.5	7.5	7.57	8	7.67	7.45	7.45
Temperature, field	Deg. C	NC	NC	16.2	13.96	13.91	15.44	13.67	13.67
Turbidity, field	NTU	NC	NC	182	338	16.6	181	110	110
Sodium Persulfate	mg/L	NC	NC	U	U	U	U	U	U
Notes:									
1.0 - Exceeds criteria									
U - Not detected									
J - Estimated concentration									
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: 11/1/21INSPECTED BY: J. Williams / R. Cich**Overall Site**Has the Site use changed since the last inspection? Yes _____ No X

If yes, please describe the changes: _____

Have neighboring property uses changed? Yes _____ No X

If yes, please describe the changes: _____

Asphalt/Concrete Cover System**Potential Problems****Concern****Corrective Action**

Potholes and cracks

- Deterioration of asphalt pavement or concrete
- Safety hazard

- Use cold mix or hot mix asphalt and liquid bituminous material to patch, repair, or replace asphalt
- For concrete, select repair method based on type and extent of damage

Ponding water

- Safety hazard

- No action required if ponding is minor
- If ponding is significant, install drainage holes in asphalt/concrete pavement

Obstructions/Debris

- Safety hazard

- Remove obstructions as soon as possible

<i>Inspect For</i>	<i>Inspection Item Identified (circle one)</i>		<i>Action Required (circle one)</i>		<i>Comments</i>
Deterioration	Yes	<u>No</u>	Yes	<u>No</u>	
Obstruction/Debris	Yes	<u>No</u>	Yes	<u>No</u>	
Potholes	Yes	<u>No</u>	Yes	<u>No</u>	
Drainage/Puddles	<u>Yes</u>	No	Yes	<u>No</u>	ponded water near silos
Other	Yes	<u>No</u>	Yes	<u>No</u>	

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

INSPECTION DATE: 11/1/21

INSPECTED BY: J. Williams / R. Cich

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

<i>Inspect For</i>	<i>Inspection Item Identified (circle one)</i>		<i>Action Required (circle one)</i>		<i>Comments</i>
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: 11/1/21INSPECTED BY: J. Williams / R. CichMonitoring WellsPotential ProblemsConcernCorrective 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	Good	Fair	Needs Repair	
MW-5A	Good	Fair	Needs Repair	
MW-6	Good	Fair	Needs Repair	
MW-7	Good	Fair	Needs Repair	missing curb box
MW-7A	Good	Fair	Needs Repair	Damaged curb box
MW-8	Good	Fair	Needs Repair	Flooded 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	missing curb box
MW-13A	Good	Fair	Needs Repair	
MW-14A	Good	Fair	Needs Repair	
MW-15A	Good	Fair	Needs Repair	
MW-19	Good	Fair	Needs Repair	
MW-19A	Good	Fair	Needs Repair	
MW-21A	Good	Fair	Needs Repair	no access - Pond
MW-22	Good	Fair	Needs Repair	

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

INSPECTION DATE: 11/1/21

INSPECTED BY: J. Williams / R. Cich

Monitoring Well	Well Condition (circle one)			Comments
~~MW-22A~~	~~Good~~	~~Fair~~	~~Needs Repair~~	~~Destroyed~~
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	Cracked Concrete
IW-12	Good	Fair	Needs Repair	
IW-13	Good	Fair	Needs Repair	
IW-14	Good	Fair	Needs Repair	Cracked Concrete
IW-15	Good	Fair	Needs Repair	Cracked Concrete
IW-16	Good	Fair	Needs Repair	

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

INSPECTION DATE:

11/1/21

INSPECTED BY:

J. Williams / R. Cich

Injection Well/Gallery	Well Condition (circle one)			Comments
	Good	Fair	Needs Repair	
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 southwest.

Site Photos



Asphalt cover system, view towards southeast

Site Photos



View towards injection gallery and monitoring wells MW-5R and MW-5AR.

Site Photos



Area C stone cover system, view towards southwest.

Site Photos



Area D stone cover system, view towards north.

Site Photos



View of "ponded" water over monitoring well MW-21A.

Site Photos



Flooded curb box at monitoring well MW-8.

Site Photos



Missing curb box and damaged PVC casing at monitoring well MW-7.

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

Site Photos



Damaged curb box at monitoring well MW-7A.

Site Photos



Missing curb box at monitoring well MW-11.

Site Photos



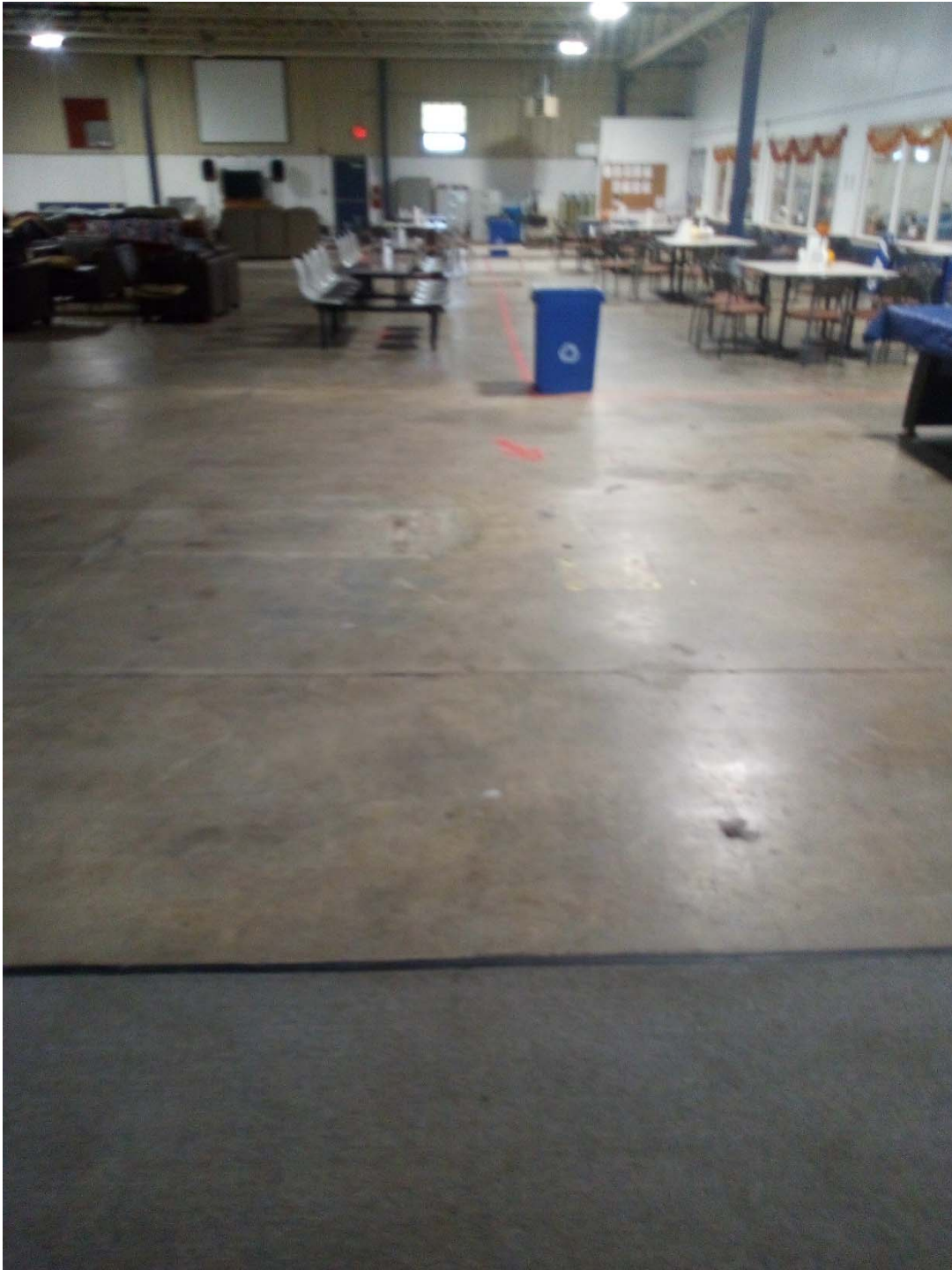
View of floor inside Buffalo Curling Club (ice area – left side).

Site Photos



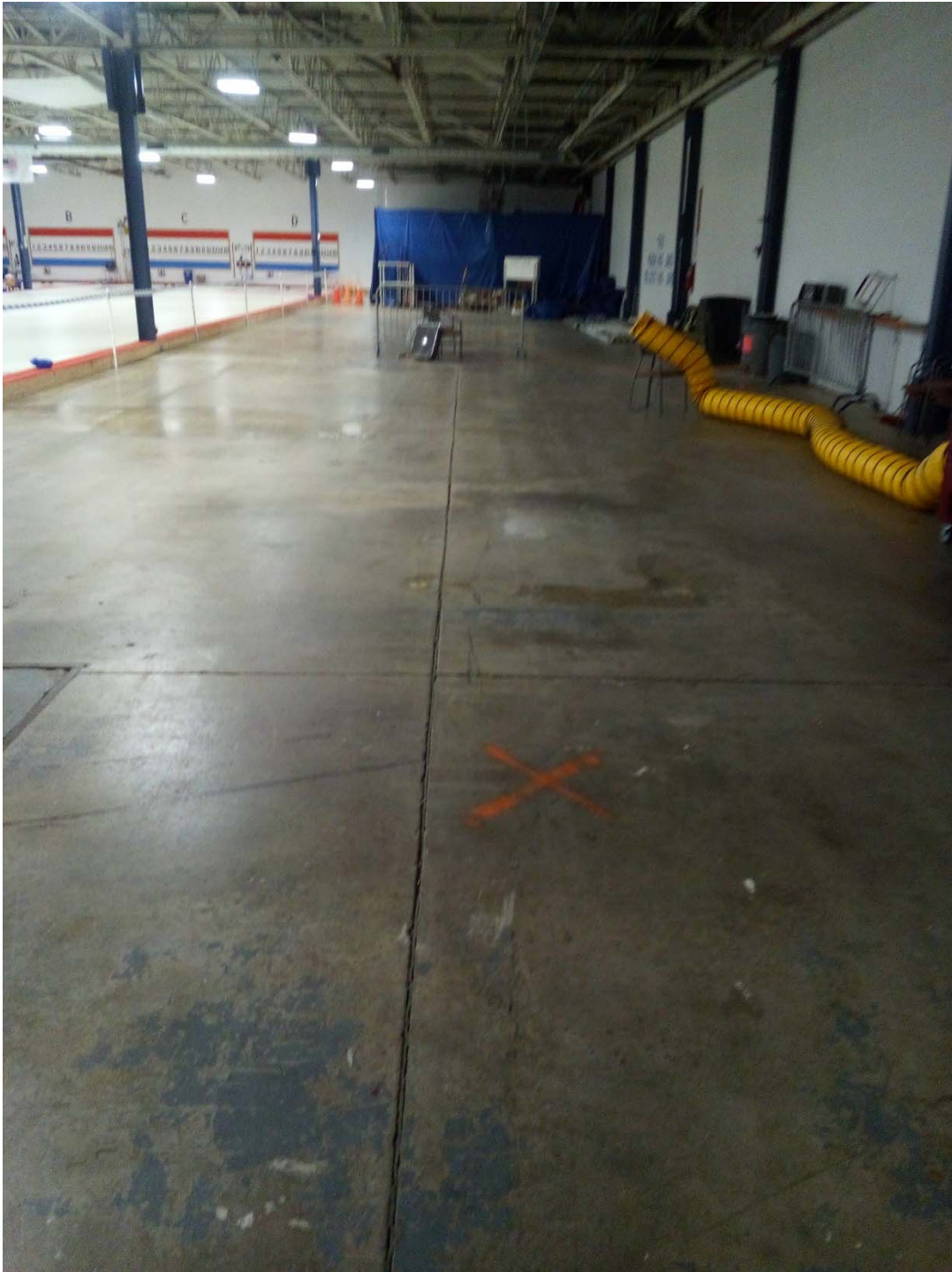
View of floor inside Buffalo Curling Club (lounge area)

Site Photos



View of floor inside Buffalo Curling Club (lounge area)

Site Photos



View of floor inside Buffalo Curling Club (ice area – right side)

Appendix C

Access Request Letter



October 14, 2021

Mr. Richard Runge (or Current Occupant)
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 to schedule the inspection during the week of November 1, 2021.

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 716-882-5476 ext. 423 or by email at franks@liro.com.

Sincerely,

LiRo Engineers, Inc.

A handwritten signature in dark ink that reads "Stephen Frank". The signature is written in a cursive, flowing style.

Stephen Frank
Sr. Associate

Whereas LiRo Engineers, Inc. ("Contractor") is and will be performing certain work for Hayes Place Management Group, Inc. ("HPMG") and is seeking access to the groundwater monitoring wells installed at the 127 Harrison Street property owned by Mr. Richard Runge ("Owner") pursuant to an agreement for conducting in situ groundwater remediation and groundwater monitoring activities, Contractor and Owner hereby agree:

INDEMNIFICATION AGREEMENT

To the fullest extent permitted by law, Contractor agrees to indemnify, defend and hold harmless Owner and/or Managing Agent from any and all claims, suits, damages, liabilities, professional fees, including attorneys' fees, costs, court costs, expenses and disbursements related to death, personal injuries or property damage (including loss of use thereof) arising out of or in connection with the performance of the work of the Contractor, its agents, servants, subcontractors or employees, or the use by Contractor, its agents, servants, subcontractors or employees, of facilities owned by Owner. This agreement to indemnify specifically contemplates full indemnity in the event of liability imposed against the Owner and/or Managing Agent without negligence and solely by reason of statute, operation of law or otherwise, and partial indemnity in the event of any actual negligence on the part of Owner and/or Managing Agent either causing or contributing to the underlying claim. In that event, indemnification will be limited to any liability imposed over and above that percentage attributable to actual fault, whether by statute, by operation of law or otherwise.

INSURANCE PROCUREMENT

Contractor shall obtain and maintain at all times during the term of this agreement, at its sole cost and expense, the following insurance (a) workers compensation insurance with statutory limits and employer's liability coverage of not less than \$500,000; (b) commercial general liability insurance with a minimum limit of \$1,000,000 per occurrence and \$2,000,000 in the aggregate, which insurance shall cover the following: premises and operations liability, products/completed operations, broad form property damage, broad form contractual liability, personal injury and independent contractor's liability; (c) automobile liability insurance covering owned, hired and non-owned vehicles, with a minimum limit of liability of \$1,000,000; and (d) umbrella liability insurance with a limit of \$3,000,000 per occurrence and a general aggregate of \$3,000,000. Contractor shall, by specific endorsements to its primary and umbrella/excess liability policy, cause Owner and Managing Agent to be named as Additional insureds. Contractor shall, by specific endorsement to its primary liability policy, cause the coverage afforded to the additional insureds thereunder to be primary to and not concurrent with other valid and collectible insurance available to Owner and Managing Agent. Contractor shall, by specific endorsement to its umbrella/excess liability policy, cause the coverage afforded to the Owner and Managing Agent thereunder to be first tier umbrella/excess coverage above the primary coverage afforded to Owner and Managing Agent and not concurrent with or excess to other valid and collectible insurance available to Owner and Managing Agent.

Dated: October 14, 2021

Owner

By: _____

Contractor

By: _____

127 Harrison Street Vapor Intrusion Inspection Appointment – November 1 through 5, 2021

Preferred day for inspection:

Preferred time for inspection:

Please provide a contact number if we need to reach you regarding the inspection:

In the event that you are unavailable during regular business hours (8:00 – 5:00) during the week of November 1, 2021, please contact Mr. Stephen Frank of LiRo Engineers, Inc. at 716-882-5476 ext. 423 so that alternate arrangements for the inspection can be made.

127 Harrison Street Vapor Intrusion Inspection Appointment – November 1 through 5, 2021

Preferred day for inspection:

Preferred time for inspection:

AFTER 3:00

Please provide a contact number if we need to reach you regarding the inspection:

716-608-7064

In the event that you are unavailable during regular business hours (8:00 – 5:00) during the week of November 1, 2021, please contact Mr. Stephen Frank of LiRo Engineers, Inc. at 716-882-5476 ext. 423 so that alternate arrangements for the inspection can be made.

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INSURANCE PROCUREMENT

Contractor shall obtain and maintain at all times during the term of this agreement, at its sole cost and expense, the following insurance (a) workers compensation insurance with statutory limits and employer's liability coverage of not less than \$500,000; (b) commercial general liability insurance with a minimum limit of \$1,000,000 per occurrence and \$2,000,000 in the aggregate, which insurance shall cover the following: premises and operations liability, products/completed operations, broad form property damage, broad form contractual liability, personal injury and independent contractor's liability; (c) automobile liability insurance covering owned, hired and non-owned vehicles, with a minimum limit of liability of \$1,000,000; and (d) umbrella liability insurance with a limit of \$3,000,000 per occurrence and a general aggregate of \$3,000,000. Contractor shall, by specific endorsements to its primary and umbrella/excess liability policy, cause Owner and Managing Agent to be named as Additional insureds. Contractor shall, by specific endorsement to its primary liability policy, cause the coverage afforded to the additional insureds thereunder to be primary to and not concurrent with other valid and collectible insurance available to Owner and Managing Agent. Contractor shall, by specific endorsement to its umbrella/excess liability policy, cause the coverage afforded to the Owner and Managing Agent thereunder to be first tier umbrella/excess coverage above the primary coverage afforded to Owner and Managing Agent and not concurrent with or excess to other valid and collectible insurance available to Owner and Managing Agent.

Dated: October 14, 2021

Owner

By: 

Contractor

By: _____

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Richard Runge.
127 Harrison Street
Buffalo, NY 14210



9590 9402 5048 9092 9866 39

2. Article Number (Transfer from service label)

7011 1570 0001 4091 4102

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent

☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Registered Mail
- ☐ Registered Mail Restricted Delivery (over \$500)

- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Return Receipt for Merchandise
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

Domestic Return Receipt

Appendix D
Laboratory Analytical Reports
(Included on Attached CD)



November 22, 2021

Service Request No:R2111745

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 November 05, 2021
For your reference, these analyses have been assigned our service request number **R2111745**.

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

Janice Jaeger for:

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
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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: R2111745
Date Received: 11/05/2021

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:

Twenty two water samples were received for analysis at ALS Environmental on 11/05/2021. 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, 11/12/2021: 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, 11/12/2021: 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, 11/12/2021: 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.

Approved by _____

Date 11/22/2021

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-08	Lab ID: R2111745-001

Analyte	Results	Flag	MDL	MRL	Units	Method
2-Butanone (MEK)	1.5	J	0.78	10	ug/L	8260C
Carbon Disulfide	2.0	J	0.42	10	ug/L	8260C

CLIENT ID: MW-8A	Lab ID: R2111745-002

Analyte	Results	Flag	MDL	MRL	Units	Method
2-Butanone (MEK)	1.7	J	0.78	10	ug/L	8260C

CLIENT ID: MW-14A	Lab ID: R2111745-003

Analyte	Results	Flag	MDL	MRL	Units	Method
2-Butanone (MEK)	1.2	J	0.78	10	ug/L	8260C
Chloromethane	0.67	J	0.28	5.0	ug/L	8260C
Trichloroethene (TCE)	0.71	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	2.2	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	5.5		0.23	5.0	ug/L	8260C
trans-1,2-Dichloroethene	0.28	J	0.20	5.0	ug/L	8260C

CLIENT ID: MW-26	Lab ID: R2111745-004

Analyte	Results	Flag	MDL	MRL	Units	Method
2-Butanone (MEK)	0.78	J	0.78	10	ug/L	8260C
Carbon Disulfide	2.5	J	0.42	10	ug/L	8260C

CLIENT ID: MW-9A	Lab ID: R2111745-006

Analyte	Results	Flag	MDL	MRL	Units	Method
Carbon Disulfide	2.8	J	0.42	10	ug/L	8260C

CLIENT ID: MW-9	Lab ID: R2111745-007

Analyte	Results	Flag	MDL	MRL	Units	Method
1,1-Dichloroethene (1,1-DCE)	1.2	J	0.20	5.0	ug/L	8260C
2-Butanone (MEK)	1.0	J	0.78	10	ug/L	8260C
Trichloroethene (TCE)	0.41	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	36		0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	120		0.23	5.0	ug/L	8260C
trans-1,2-Dichloroethene	0.48	J	0.20	5.0	ug/L	8260C

CLIENT ID: MW-7	Lab ID: R2111745-008

Analyte	Results	Flag	MDL	MRL	Units	Method
2-Butanone (MEK)	0.84	J	0.78	10	ug/L	8260C
Carbon Disulfide	2.4	J	0.42	10	ug/L	8260C
Toluene	0.45	J	0.20	5.0	ug/L	8260C

CLIENT ID: MW-19R	Lab ID: R2111745-010

Analyte	Results	Flag	MDL	MRL	Units	Method
Trichloroethene (TCE)	42		0.20	5.0	ug/L	8260C
Vinyl Chloride	0.22	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	11		0.23	5.0	ug/L	8260C

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-19R	Lab ID: R2111745-010

Analyte	Results	Flag	MDL	MRL	Units	Method
trans-1,2-Dichloroethene	1.5	J	0.20	5.0	ug/L	8260C

CLIENT ID: MW-19AR	Lab ID: R2111745-011

Analyte	Results	Flag	MDL	MRL	Units	Method
Cyclohexane	2.0	J	0.52	20	ug/L	8260C
Methylcyclohexane	2.0	J	0.40	20	ug/L	8260C
Trichloroethene (TCE)	3.4	J	0.40	10	ug/L	8260C
Vinyl Chloride	37		0.40	10	ug/L	8260C
cis-1,2-Dichloroethene	250		0.46	10	ug/L	8260C
m,p-Xylenes	0.45	J	0.40	10	ug/L	8260C
trans-1,2-Dichloroethene	4.0	J	0.40	10	ug/L	8260C

CLIENT ID: MW-5R	Lab ID: R2111745-012

Analyte	Results	Flag	MDL	MRL	Units	Method
1,1,2-Trichloroethane	2.0	J	1.0	25	ug/L	8260C
Tetrachloroethene (PCE)	2.7	J	1.1	25	ug/L	8260C
Trichloroethene (TCE)	580		1.0	25	ug/L	8260C
cis-1,2-Dichloroethene	190		1.2	25	ug/L	8260C
trans-1,2-Dichloroethene	17	J	1.0	25	ug/L	8260C

CLIENT ID: MW-5AR	Lab ID: R2111745-013

Analyte	Results	Flag	MDL	MRL	Units	Method
1,1,2,2-Tetrachloroethane	130	J	50	1300	ug/L	8260C
1,1-Dichloroethene (1,1-DCE)	52	J	50	1300	ug/L	8260C
Chloroform	190	J	60	1300	ug/L	8260C
Tetrachloroethene (PCE)	140	J	53	1300	ug/L	8260C
Trichloroethene (TCE)	40000		50	1300	ug/L	8260C
Vinyl Chloride	430	J	50	1300	ug/L	8260C
cis-1,2-Dichloroethene	24000		58	1300	ug/L	8260C
trans-1,2-Dichloroethene	1300	J	50	1300	ug/L	8260C

CLIENT ID: MW-15A	Lab ID: R2111745-014

Analyte	Results	Flag	MDL	MRL	Units	Method
Carbon Disulfide	1.9	J	0.42	10	ug/L	8260C
Tetrachloroethene (PCE)	0.79	J	0.21	5.0	ug/L	8260C
Trichloroethene (TCE)	0.59	J	0.20	5.0	ug/L	8260C

CLIENT ID: MW-25A	Lab ID: R2111745-015

Analyte	Results	Flag	MDL	MRL	Units	Method
Trichloroethene (TCE)	0.35	J	0.20	5.0	ug/L	8260C

CLIENT ID: MW-20A	Lab ID: R2111745-016

Analyte	Results	Flag	MDL	MRL	Units	Method
Trichloroethene (TCE)	2.3	J	2.0	50	ug/L	8260C

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-20A	Lab ID: R2111745-016

Analyte	Results	Flag	MDL	MRL	Units	Method
Vinyl Chloride	290		2.0	50	ug/L	8260C
cis-1,2-Dichloroethene	910		2.3	50	ug/L	8260C
trans-1,2-Dichloroethene	2.8	J	2.0	50	ug/L	8260C

CLIENT ID: MW-DUP	Lab ID: R2111745-017

Analyte	Results	Flag	MDL	MRL	Units	Method
1,1-Dichloroethene (1,1-DCE)	1.4	J	0.50	13	ug/L	8260C
Chloromethane	1.0	BJ	0.70	13	ug/L	8260C
Vinyl Chloride	250		0.50	13	ug/L	8260C
cis-1,2-Dichloroethene	580	D	2.3	50	ug/L	8260C
trans-1,2-Dichloroethene	2.5	J	0.50	13	ug/L	8260C

CLIENT ID: MW-7A	Lab ID: R2111745-018

Analyte	Results	Flag	MDL	MRL	Units	Method
1,1-Dichloroethene (1,1-DCE)	0.25	J	0.20	5.0	ug/L	8260C
2-Butanone (MEK)	3.2	J	0.78	10	ug/L	8260C
Acetone	5.9	J	5.0	10	ug/L	8260C
Carbon Disulfide	2.4	J	0.42	10	ug/L	8260C
Cyclohexane	0.97	J	0.26	10	ug/L	8260C
Methylcyclohexane	0.47	J	0.20	10	ug/L	8260C
Trichloroethene (TCE)	0.20	J	0.20	5.0	ug/L	8260C
Vinyl Chloride	54		0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	190		0.23	5.0	ug/L	8260C
trans-1,2-Dichloroethene	0.89	J	0.20	5.0	ug/L	8260C

CLIENT ID: MW-11	Lab ID: R2111745-019

Analyte	Results	Flag	MDL	MRL	Units	Method
1,1-Dichloroethene (1,1-DCE)	3.5	J	2.0	50	ug/L	8260C
Trichloroethene (TCE)	60		2.0	50	ug/L	8260C
Vinyl Chloride	7.8	J	2.0	50	ug/L	8260C
cis-1,2-Dichloroethene	1400		2.3	50	ug/L	8260C
trans-1,2-Dichloroethene	4.3	J	2.0	50	ug/L	8260C

CLIENT ID: MW-10	Lab ID: R2111745-020

Analyte	Results	Flag	MDL	MRL	Units	Method
1,4-Dichlorobenzene	1.3	J	0.20	5.0	ug/L	8260C
2-Butanone (MEK)	1.1	J	0.78	10	ug/L	8260C
Bromomethane	2.1	J	0.70	5.0	ug/L	8260C
Chloromethane	0.78	BJ	0.28	5.0	ug/L	8260C
Toluene	1.7	J	0.20	5.0	ug/L	8260C
Trichloroethene (TCE)	0.93	J	0.20	5.0	ug/L	8260C
cis-1,2-Dichloroethene	0.59	J	0.23	5.0	ug/L	8260C

SAMPLE DETECTION SUMMARY

CLIENT ID: Trip Blank			Lab ID: R2111745-021			

Analyte	Results	Flag	MDL	MRL	Units	Method
2-Butanone (MEK)	4.2	J	0.78	10	ug/L	8260C
Acetone	7.5	J	5.0	10	ug/L	8260C

CLIENT ID: MW-13			Lab ID: R2111745-022			

Analyte	Results	Flag	MDL	MRL	Units	Method
Bromodichloromethane	26	J	20	500	ug/L	8260C
Chloroform	74	J	24	500	ug/L	8260C
Dichloromethane	360	J	65	500	ug/L	8260C
Tetrachloroethene (PCE)	34	J	21	500	ug/L	8260C
Trichloroethene (TCE)	11000		20	500	ug/L	8260C
Vinyl Chloride	180	J	20	500	ug/L	8260C
cis-1,2-Dichloroethene	7500		23	500	ug/L	8260C
trans-1,2-Dichloroethene	310	J	20	500	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
Project: Buffalo China/16-344-1389

Service Request:R2111745

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2111745-001	MW-08	11/2/2021	0900
R2111745-002	MW-8A	11/2/2021	0930
R2111745-003	MW-14A	11/2/2021	1025
R2111745-004	MW-26	11/2/2021	1135
R2111745-005	MW-26A	11/2/2021	1200
R2111745-006	MW-9A	11/2/2021	1325
R2111745-007	MW-9	11/2/2021	1350
R2111745-008	MW-7	11/2/2021	1430
R2111745-009	MW-6	11/2/2021	1515
R2111745-010	MW-19R	11/3/2021	0845
R2111745-011	MW-19AR	11/3/2021	0915
R2111745-012	MW-5R	11/3/2021	0950
R2111745-013	MW-5AR	11/3/2021	1030
R2111745-014	MW-15A	11/3/2021	1430
R2111745-015	MW-25A	11/3/2021	1500
R2111745-016	MW-20A	11/4/2021	1145
R2111745-017	MW-DUP	11/4/2021	1200
R2111745-018	MW-7A	11/4/2021	1230
R2111745-019	MW-11	11/4/2021	1330
R2111745-020	MW-10	11/4/2021	1400
R2111745-021	Trip Blank	11/2/2021	
R2111745-022	MW-13	11/3/2021	1115

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R2111745
The LiRo Group
Buffalo China

The LiRo Group
Buffalo, China

Buffalo China

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SR# _____
PAGE 2 OF 3

R2111745 **5**
The LiRo Group
Buffalo China

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SR# _____
PAGE 3 OF 3

Project Name: <u>Buffalo China</u> Project Number: _____ Project Manager: _____ Company: _____ Company/Address: _____ Phone: _____ City, State, Zip: _____ Email: _____ Sampler's Signature: _____					Number of Containers <u>8260 VOCs</u>		Analysis Requested <table border="1" style="width:100%; height: 100px; border-collapse: collapse;"> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Sample I.D.	Date	Time	LAB ID	Matrix	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849



Cooler Receipt and Preservation Check Form

R2111745

5

The LiRo Group
Buffalo China



Project/Client Luo Folder Number _____

Cooler received on 11/5/21 by: e

COURIER: ALS UPS ~~FEDEX~~ VELOCITY CLIENT

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

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

8. Temperature Readings Date: 11/5/21 Time: 1035 ID: IR#7 IR#11 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>8.3</u>						
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: R002 by e on 11/5/21 at 1037
 5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y ☐ N ☐

Cooler Breakdown/Preservation Check**: Date: 11/8/21 Time: 1125 by: e

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 ☐
 13. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N Canisters Pressurized Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved?	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH	Yes No						
≤2		HNO ₃							
≤2		H ₂ SO 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 ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O ₃							
		ZnAcetate	- -						
		HCl	** **	<u>Client</u>					

**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: Client
 Explain all Discrepancies/ Other Comments:

limited ice, samples insulated

Rec'd MW-13A sampled 11/3/21
@ 1115

HPRD	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.
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Internal Chain of Custody Report

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

Service Request: R2111745

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2111745-001.01	8260C				
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
R2111745-001.02					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-001.03					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-002.01	8260C				
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
R2111745-002.02					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-002.03					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-003.01	8260C				
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
R2111745-003.02					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-003.03					
		11/8/2021	1124	SMO / GLAFORCE	

ALS Group USA, Corp.
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Internal Chain of Custody Report

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

Service Request: R2111745

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2111745-004.01	8260C	11/8/2021	1126	R-001 / GLAFORCE	
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
R2111745-004.02		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-004.03		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-005.01	8260C	11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
R2111745-005.02		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-005.03		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-006.01	8260C	11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
R2111745-006.02		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	

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Internal Chain of Custody Report

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

Service Request: R2111745

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2111745-006.03					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-007.01					
	8260C				
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
R2111745-007.02					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-007.03					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-008.01					
	8260C				
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
R2111745-008.02					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-008.03					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-009.01					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-009.02					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	

ALS Group USA, Corp.
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Internal Chain of Custody Report

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

Service Request: R2111745

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2111745-009.03					
	8260C				
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
		11/12/2021	1243	In Lab / KRUEST	
		11/12/2021	1425	R-001-S12 / KRUEST	
R2111745-010.01					
	8260C				
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
		11/12/2021	1243	In Lab / KRUEST	
		11/12/2021	1425	R-001-S12 / KRUEST	
R2111745-010.02					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-010.03					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-011.01					
	8260C				
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
		11/12/2021	1243	In Lab / KRUEST	
		11/12/2021	1425	R-001-S12 / KRUEST	
R2111745-011.02					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-011.03					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-012.01					

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Internal Chain of Custody Report

Client: The LiRo Group
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Service Request: R2111745

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	8260C	11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
		11/12/2021	1243	In Lab / KRUEST	
		11/12/2021	1425	R-001-S12 / KRUEST	
		R2111745-012.02			
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-012.03					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-013.01					
	8260C	11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
		11/12/2021	1243	In Lab / KRUEST	
		11/12/2021	1425	R-001-S12 / KRUEST	
		R2111745-013.02			
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-013.03					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-014.01					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
R2111745-014.02					
	8260C	11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	

ALS Group USA, Corp.
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Internal Chain of Custody Report

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

Service Request: R2111745

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	8260C	11/12/2021	1243	In Lab / KRUEST	
		11/12/2021	1425	R-001-S12 / KRUEST	
R2111745-014.03					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-015.01					
	8260C	11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
		11/12/2021	1243	In Lab / KRUEST	
		11/12/2021	1425	R-001-S12 / KRUEST	
R2111745-015.02					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-015.03					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-016.01					
	8260C	11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
		11/12/2021	1243	In Lab / KRUEST	
		11/12/2021	1426	R-001-S12 / KRUEST	
R2111745-016.02					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-016.03					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-017.01					

ALS Group USA, Corp.
dba ALS Environmental

Internal Chain of Custody Report

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

Service Request: R2111745

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	8260C	11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1645	R-001-S12 / KRUEST	
		11/12/2021	1242	In Lab / KRUEST	
		11/12/2021	1426	R-001-S12 / KRUEST	
		R2111745-017.02			
	8260C	11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		R2111745-017.03			
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		R2111745-018.01			
	8260C	11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
		11/12/2021	1243	In Lab / KRUEST	
		11/12/2021	1426	R-001-S12 / KRUEST	
R2111745-018.02					
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		R2111745-018.03			
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		R2111745-018.04			
		11/8/2021	1125	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		R2111745-018.05			
		11/8/2021	1125	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		R2111745-018.06			
		11/8/2021	1125	SMO / GLAFORCE	

ALS Group USA, Corp.
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Internal Chain of Custody Report

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

Service Request: R2111745

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2111745-018.07		11/8/2021	1126	R-001 / GLAFORCE	
		11/8/2021	1125	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-018.08		11/8/2021	1125	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/8/2021	1125	SMO / GLAFORCE	
R2111745-018.09		11/8/2021	1126	R-001 / GLAFORCE	
		11/8/2021	1125	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-019.01	8260C	11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
		11/12/2021	1243	In Lab / KRUEST	
		11/12/2021	1426	R-001-S12 / KRUEST	
		11/8/2021	1124	SMO / GLAFORCE	
R2111745-019.02		11/8/2021	1126	R-001 / GLAFORCE	
		11/8/2021	1124	SMO / GLAFORCE	
R2111745-019.03		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/8/2021	1124	SMO / GLAFORCE	
R2111745-020.01	8260C	11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
		11/12/2021	1243	In Lab / KRUEST	
		11/12/2021	1426	R-001-S12 / KRUEST	
R2111745-020.02		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1124	SMO / GLAFORCE	

ALS Group USA, Corp.
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Internal Chain of Custody Report

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

Service Request: R2111745

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2111745-020.03		11/8/2021	1126	R-001 / GLAFORCE	
		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-021.01	8260C	11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
		11/11/2021	1632	In Lab / KRUEST	
		11/11/2021	1646	R-001-S12 / KRUEST	
R2111745-021.02		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-021.03		11/8/2021	1124	SMO / GLAFORCE	
		11/8/2021	1126	R-001 / GLAFORCE	
R2111745-022.01	8260C	11/8/2021	1144	SMO / GLAFORCE	
		11/11/2021	1646	R-001-S12 / KRUEST	
		11/12/2021	1243	In Lab / KRUEST	
		11/12/2021	1426	R-001-S12 / KRUEST	
R2111745-022.02		11/8/2021	1144	SMO / GLAFORCE	
R2111745-022.03		11/8/2021	1144	SMO / GLAFORCE	



Miscellaneous Forms

ALS Environmental—Rochester Laboratory

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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.	+	Correlation coefficient for MSA is <0.995.
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/Aroclors).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
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.	P	Concentration >40% difference between the two GC columns.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed ($\geq 100\%$ Difference between two GC columns).
#	Spike was diluted out.	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 Accreditations¹



NELAP States
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Virginia #460167

Non-NELAP States
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island LAO00333

¹ Analyses were performed according to our laboratory's 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.

ALS Group USA, Corp.

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Analyst Summary report

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

Service Request: R2111745

Sample Name: MW-08
Lab Code: R2111745-001
Sample Matrix: Water

Date Collected: 11/2/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: MW-8A
Lab Code: R2111745-002
Sample Matrix: Water

Date Collected: 11/2/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: MW-14A
Lab Code: R2111745-003
Sample Matrix: Water

Date Collected: 11/2/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: MW-26
Lab Code: R2111745-004
Sample Matrix: Water

Date Collected: 11/2/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: MW-26A
Lab Code: R2111745-005
Sample Matrix: Water

Date Collected: 11/2/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

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

Service Request: R2111745

Sample Name: MW-9A
Lab Code: R2111745-006
Sample Matrix: Water

Date Collected: 11/2/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: MW-9
Lab Code: R2111745-007
Sample Matrix: Water

Date Collected: 11/2/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: MW-7
Lab Code: R2111745-008
Sample Matrix: Water

Date Collected: 11/2/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: MW-6
Lab Code: R2111745-009
Sample Matrix: Water

Date Collected: 11/2/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: MW-19R
Lab Code: R2111745-010
Sample Matrix: Water

Date Collected: 11/3/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

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

Service Request: R2111745

Sample Name: MW-19AR
Lab Code: R2111745-011
Sample Matrix: Water

Date Collected: 11/3/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: MW-5R
Lab Code: R2111745-012
Sample Matrix: Water

Date Collected: 11/3/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: MW-5AR
Lab Code: R2111745-013
Sample Matrix: Water

Date Collected: 11/3/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: MW-15A
Lab Code: R2111745-014
Sample Matrix: Water

Date Collected: 11/3/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: MW-25A
Lab Code: R2111745-015
Sample Matrix: Water

Date Collected: 11/3/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

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

Service Request: R2111745

Sample Name: MW-20A
Lab Code: R2111745-016
Sample Matrix: Water

Date Collected: 11/4/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: MW-DUP
Lab Code: R2111745-017
Sample Matrix: Water

Date Collected: 11/4/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: MW-DUP
Lab Code: R2111745-017.R01
Sample Matrix: Water

Date Collected: 11/4/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: MW-7A
Lab Code: R2111745-018
Sample Matrix: Water

Date Collected: 11/4/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: MW-11
Lab Code: R2111745-019
Sample Matrix: Water

Date Collected: 11/4/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

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

Service Request: R2111745

Sample Name: MW-10
Lab Code: R2111745-020
Sample Matrix: Water

Date Collected: 11/4/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: Trip Blank
Lab Code: R2111745-021
Sample Matrix: Water

Date Collected: 11/2/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST

Sample Name: MW-13
Lab Code: R2111745-022
Sample Matrix: Water

Date Collected: 11/3/21
Date Received: 11/5/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
KRUEST



INORGANIC PREPARATION METHODS

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

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ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 09:00
Date Received: 11/05/21 10:20

Sample Name: MW-08
Lab Code: R2111745-001

Units: ug/L
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	11/12/21 01:09	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 01:09	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 01:09	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 01:09	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,4-Dioxane	100 U	100	13	1	11/12/21 01:09	
2-Butanone (MEK)	1.5 J	10	0.78	1	11/12/21 01:09	
2-Hexanone	10 U	10	0.20	1	11/12/21 01:09	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 01:09	
Acetone	10 U	10	5.0	1	11/12/21 01:09	
Benzene	5.0 U	5.0	0.20	1	11/12/21 01:09	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 01:09	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 01:09	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 01:09	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 01:09	
Carbon Disulfide	2.0 J	10	0.42	1	11/12/21 01:09	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 01:09	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:09	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 01:09	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 01:09	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 01:09	
Cyclohexane	10 U	10	0.26	1	11/12/21 01:09	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 01:09	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 01:09	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 01:09	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 01:09	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 01:09	
Methyl Acetate	10 U	10	0.33	1	11/12/21 01:09	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 01:09	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 01:09	
Styrene	5.0 U	5.0	0.20	1	11/12/21 01:09	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 09:00
Date Received: 11/05/21 10:20

Sample Name: MW-08
Lab Code: R2111745-001

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 01:09	
Toluene	5.0 U	5.0	0.20	1	11/12/21 01:09	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 01:09	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 01:09	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 01:09	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 01:09	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 01:09	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 01:09	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 01:09	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 01:09	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 01:09	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	11/12/21 01:09	
Dibromofluoromethane	102	80 - 116	11/12/21 01:09	
Toluene-d8	108	87 - 121	11/12/21 01:09	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 09:30
Date Received: 11/05/21 10:20

Sample Name: MW-8A
Lab Code: R2111745-002

Units: ug/L
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	11/12/21 01:31	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 01:31	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 01:31	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 01:31	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,4-Dioxane	100 U	100	13	1	11/12/21 01:31	
2-Butanone (MEK)	1.7 J	10	0.78	1	11/12/21 01:31	
2-Hexanone	10 U	10	0.20	1	11/12/21 01:31	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 01:31	
Acetone	10 U	10	5.0	1	11/12/21 01:31	
Benzene	5.0 U	5.0	0.20	1	11/12/21 01:31	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 01:31	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 01:31	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 01:31	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 01:31	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 01:31	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 01:31	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:31	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 01:31	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 01:31	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 01:31	
Cyclohexane	10 U	10	0.26	1	11/12/21 01:31	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 01:31	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 01:31	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 01:31	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 01:31	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 01:31	
Methyl Acetate	10 U	10	0.33	1	11/12/21 01:31	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 01:31	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 01:31	
Styrene	5.0 U	5.0	0.20	1	11/12/21 01:31	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 09:30
Date Received: 11/05/21 10:20

Sample Name: MW-8A
Lab Code: R2111745-002

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 01:31	
Toluene	5.0 U	5.0	0.20	1	11/12/21 01:31	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 01:31	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 01:31	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 01:31	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 01:31	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 01:31	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 01:31	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 01:31	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 01:31	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 01:31	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	11/12/21 01:31	
Dibromofluoromethane	98	80 - 116	11/12/21 01:31	
Toluene-d8	106	87 - 121	11/12/21 01:31	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 10:25
Date Received: 11/05/21 10:20

Sample Name: MW-14A
Lab Code: R2111745-003

Units: ug/L
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	11/12/21 01:52	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 01:52	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 01:52	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 01:52	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,4-Dioxane	100 U	100	13	1	11/12/21 01:52	
2-Butanone (MEK)	1.2 J	10	0.78	1	11/12/21 01:52	
2-Hexanone	10 U	10	0.20	1	11/12/21 01:52	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 01:52	
Acetone	10 U	10	5.0	1	11/12/21 01:52	
Benzene	5.0 U	5.0	0.20	1	11/12/21 01:52	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 01:52	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 01:52	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 01:52	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 01:52	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 01:52	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 01:52	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:52	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 01:52	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 01:52	
Chloromethane	0.67 J	5.0	0.28	1	11/12/21 01:52	
Cyclohexane	10 U	10	0.26	1	11/12/21 01:52	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 01:52	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 01:52	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 01:52	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 01:52	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 01:52	
Methyl Acetate	10 U	10	0.33	1	11/12/21 01:52	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 01:52	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 01:52	
Styrene	5.0 U	5.0	0.20	1	11/12/21 01:52	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 10:25
Date Received: 11/05/21 10:20

Sample Name: MW-14A
Lab Code: R2111745-003

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 01:52	
Toluene	5.0 U	5.0	0.20	1	11/12/21 01:52	
Trichloroethene (TCE)	0.71 J	5.0	0.20	1	11/12/21 01:52	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 01:52	
Vinyl Chloride	2.2 J	5.0	0.20	1	11/12/21 01:52	
cis-1,2-Dichloroethene	5.5	5.0	0.23	1	11/12/21 01:52	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 01:52	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 01:52	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 01:52	
trans-1,2-Dichloroethene	0.28 J	5.0	0.20	1	11/12/21 01:52	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 01:52	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	11/12/21 01:52	
Dibromofluoromethane	99	80 - 116	11/12/21 01:52	
Toluene-d8	106	87 - 121	11/12/21 01:52	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 11:35
Date Received: 11/05/21 10:20

Sample Name: MW-26
Lab Code: R2111745-004

Units: ug/L
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	11/12/21 02:14	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 02:14	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 02:14	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 02:14	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,4-Dioxane	100 U	100	13	1	11/12/21 02:14	
2-Butanone (MEK)	0.78 J	10	0.78	1	11/12/21 02:14	
2-Hexanone	10 U	10	0.20	1	11/12/21 02:14	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 02:14	
Acetone	10 U	10	5.0	1	11/12/21 02:14	
Benzene	5.0 U	5.0	0.20	1	11/12/21 02:14	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 02:14	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 02:14	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 02:14	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 02:14	
Carbon Disulfide	2.5 J	10	0.42	1	11/12/21 02:14	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 02:14	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:14	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 02:14	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 02:14	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 02:14	
Cyclohexane	10 U	10	0.26	1	11/12/21 02:14	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 02:14	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 02:14	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 02:14	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 02:14	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 02:14	
Methyl Acetate	10 U	10	0.33	1	11/12/21 02:14	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 02:14	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 02:14	
Styrene	5.0 U	5.0	0.20	1	11/12/21 02:14	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 11:35
Date Received: 11/05/21 10:20

Sample Name: MW-26
Lab Code: R2111745-004

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 02:14	
Toluene	5.0 U	5.0	0.20	1	11/12/21 02:14	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 02:14	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 02:14	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 02:14	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 02:14	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 02:14	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 02:14	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 02:14	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 02:14	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 02:14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	11/12/21 02:14	
Dibromofluoromethane	101	80 - 116	11/12/21 02:14	
Toluene-d8	108	87 - 121	11/12/21 02:14	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 12:00
Date Received: 11/05/21 10:20

Sample Name: MW-26A
Lab Code: R2111745-005

Units: ug/L
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	11/12/21 02:36	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 02:36	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 02:36	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 02:36	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,4-Dioxane	100 U	100	13	1	11/12/21 02:36	
2-Butanone (MEK)	10 U	10	0.78	1	11/12/21 02:36	
2-Hexanone	10 U	10	0.20	1	11/12/21 02:36	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 02:36	
Acetone	10 U	10	5.0	1	11/12/21 02:36	
Benzene	5.0 U	5.0	0.20	1	11/12/21 02:36	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 02:36	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 02:36	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 02:36	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 02:36	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 02:36	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 02:36	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:36	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 02:36	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 02:36	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 02:36	
Cyclohexane	10 U	10	0.26	1	11/12/21 02:36	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 02:36	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 02:36	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 02:36	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 02:36	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 02:36	
Methyl Acetate	10 U	10	0.33	1	11/12/21 02:36	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 02:36	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 02:36	
Styrene	5.0 U	5.0	0.20	1	11/12/21 02:36	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 12:00
Date Received: 11/05/21 10:20

Sample Name: MW-26A
Lab Code: R2111745-005

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 02:36	
Toluene	5.0 U	5.0	0.20	1	11/12/21 02:36	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 02:36	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 02:36	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 02:36	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 02:36	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 02:36	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 02:36	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 02:36	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 02:36	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 02:36	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	11/12/21 02:36	
Dibromofluoromethane	100	80 - 116	11/12/21 02:36	
Toluene-d8	105	87 - 121	11/12/21 02:36	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 13:25
Date Received: 11/05/21 10:20

Sample Name: MW-9A
Lab Code: R2111745-006

Units: ug/L
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	11/12/21 02:58	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 02:58	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 02:58	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 02:58	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,4-Dioxane	100 U	100	13	1	11/12/21 02:58	
2-Butanone (MEK)	10 U	10	0.78	1	11/12/21 02:58	
2-Hexanone	10 U	10	0.20	1	11/12/21 02:58	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 02:58	
Acetone	10 U	10	5.0	1	11/12/21 02:58	
Benzene	5.0 U	5.0	0.20	1	11/12/21 02:58	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 02:58	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 02:58	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 02:58	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 02:58	
Carbon Disulfide	2.8 J	10	0.42	1	11/12/21 02:58	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 02:58	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:58	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 02:58	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 02:58	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 02:58	
Cyclohexane	10 U	10	0.26	1	11/12/21 02:58	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 02:58	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 02:58	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 02:58	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 02:58	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 02:58	
Methyl Acetate	10 U	10	0.33	1	11/12/21 02:58	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 02:58	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 02:58	
Styrene	5.0 U	5.0	0.20	1	11/12/21 02:58	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 13:25
Date Received: 11/05/21 10:20

Sample Name: MW-9A
Lab Code: R2111745-006

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 02:58	
Toluene	5.0 U	5.0	0.20	1	11/12/21 02:58	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 02:58	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 02:58	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 02:58	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 02:58	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 02:58	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 02:58	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 02:58	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 02:58	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 02:58	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	11/12/21 02:58	
Dibromofluoromethane	99	80 - 116	11/12/21 02:58	
Toluene-d8	106	87 - 121	11/12/21 02:58	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 13:50
Date Received: 11/05/21 10:20

Sample Name: MW-9
Lab Code: R2111745-007

Units: ug/L
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	11/12/21 03:19	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,1-Dichloroethene (1,1-DCE)	1.2 J	5.0	0.20	1	11/12/21 03:19	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 03:19	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 03:19	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 03:19	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,4-Dioxane	100 U	100	13	1	11/12/21 03:19	
2-Butanone (MEK)	1.0 J	10	0.78	1	11/12/21 03:19	
2-Hexanone	10 U	10	0.20	1	11/12/21 03:19	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 03:19	
Acetone	10 U	10	5.0	1	11/12/21 03:19	
Benzene	5.0 U	5.0	0.20	1	11/12/21 03:19	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 03:19	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 03:19	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 03:19	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 03:19	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 03:19	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 03:19	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 03:19	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 03:19	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 03:19	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 03:19	
Cyclohexane	10 U	10	0.26	1	11/12/21 03:19	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 03:19	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 03:19	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 03:19	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 03:19	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 03:19	
Methyl Acetate	10 U	10	0.33	1	11/12/21 03:19	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 03:19	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 03:19	
Styrene	5.0 U	5.0	0.20	1	11/12/21 03:19	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 13:50
Date Received: 11/05/21 10:20

Sample Name: MW-9
Lab Code: R2111745-007

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 03:19	
Toluene	5.0 U	5.0	0.20	1	11/12/21 03:19	
Trichloroethene (TCE)	0.41 J	5.0	0.20	1	11/12/21 03:19	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 03:19	
Vinyl Chloride	36	5.0	0.20	1	11/12/21 03:19	
cis-1,2-Dichloroethene	120	5.0	0.23	1	11/12/21 03:19	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 03:19	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 03:19	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 03:19	
trans-1,2-Dichloroethene	0.48 J	5.0	0.20	1	11/12/21 03:19	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 03:19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	11/12/21 03:19	
Dibromofluoromethane	102	80 - 116	11/12/21 03:19	
Toluene-d8	107	87 - 121	11/12/21 03:19	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 14:30
Date Received: 11/05/21 10:20

Sample Name: MW-7
Lab Code: R2111745-008

Units: ug/L
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	11/12/21 03:41	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 03:41	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 03:41	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 03:41	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,4-Dioxane	100 U	100	13	1	11/12/21 03:41	
2-Butanone (MEK)	0.84 J	10	0.78	1	11/12/21 03:41	
2-Hexanone	10 U	10	0.20	1	11/12/21 03:41	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 03:41	
Acetone	10 U	10	5.0	1	11/12/21 03:41	
Benzene	5.0 U	5.0	0.20	1	11/12/21 03:41	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 03:41	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 03:41	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 03:41	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 03:41	
Carbon Disulfide	2.4 J	10	0.42	1	11/12/21 03:41	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 03:41	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 03:41	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 03:41	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 03:41	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 03:41	
Cyclohexane	10 U	10	0.26	1	11/12/21 03:41	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 03:41	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 03:41	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 03:41	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 03:41	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 03:41	
Methyl Acetate	10 U	10	0.33	1	11/12/21 03:41	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 03:41	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 03:41	
Styrene	5.0 U	5.0	0.20	1	11/12/21 03:41	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 14:30
Date Received: 11/05/21 10:20

Sample Name: MW-7
Lab Code: R2111745-008

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 03:41	
Toluene	0.45 J	5.0	0.20	1	11/12/21 03:41	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 03:41	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 03:41	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 03:41	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 03:41	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 03:41	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 03:41	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 03:41	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 03:41	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 03:41	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	11/12/21 03:41	
Dibromofluoromethane	100	80 - 116	11/12/21 03:41	
Toluene-d8	105	87 - 121	11/12/21 03:41	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 15:15
Date Received: 11/05/21 10:20

Sample Name: MW-6
Lab Code: R2111745-009

Units: ug/L
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	11/12/21 20:09	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 20:09	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 20:09	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 20:09	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,4-Dioxane	100 U	100	13	1	11/12/21 20:09	
2-Butanone (MEK)	10 U	10	0.78	1	11/12/21 20:09	
2-Hexanone	10 U	10	0.20	1	11/12/21 20:09	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 20:09	
Acetone	10 U	10	5.0	1	11/12/21 20:09	
Benzene	5.0 U	5.0	0.20	1	11/12/21 20:09	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 20:09	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 20:09	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 20:09	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 20:09	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 20:09	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 20:09	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 20:09	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 20:09	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 20:09	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 20:09	
Cyclohexane	10 U	10	0.26	1	11/12/21 20:09	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 20:09	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 20:09	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 20:09	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 20:09	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 20:09	
Methyl Acetate	10 U	10	0.33	1	11/12/21 20:09	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 20:09	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 20:09	
Styrene	5.0 U	5.0	0.20	1	11/12/21 20:09	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 15:15
Date Received: 11/05/21 10:20

Sample Name: MW-6
Lab Code: R2111745-009

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 20:09	
Toluene	5.0 U	5.0	0.20	1	11/12/21 20:09	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 20:09	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 20:09	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 20:09	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 20:09	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 20:09	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 20:09	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 20:09	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 20:09	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 20:09	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	11/12/21 20:09	
Dibromofluoromethane	100	80 - 116	11/12/21 20:09	
Toluene-d8	104	87 - 121	11/12/21 20:09	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 08:45
Date Received: 11/05/21 10:20

Sample Name: MW-19R
Lab Code: R2111745-010

Units: ug/L
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	11/12/21 15:47	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 15:47	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 15:47	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 15:47	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,4-Dioxane	100 U	100	13	1	11/12/21 15:47	
2-Butanone (MEK)	10 U	10	0.78	1	11/12/21 15:47	
2-Hexanone	10 U	10	0.20	1	11/12/21 15:47	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 15:47	
Acetone	10 U	10	5.0	1	11/12/21 15:47	
Benzene	5.0 U	5.0	0.20	1	11/12/21 15:47	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 15:47	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 15:47	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 15:47	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 15:47	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 15:47	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 15:47	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 15:47	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 15:47	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 15:47	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 15:47	
Cyclohexane	10 U	10	0.26	1	11/12/21 15:47	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 15:47	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 15:47	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 15:47	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 15:47	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 15:47	
Methyl Acetate	10 U	10	0.33	1	11/12/21 15:47	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 15:47	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 15:47	
Styrene	5.0 U	5.0	0.20	1	11/12/21 15:47	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 08:45
Date Received: 11/05/21 10:20

Sample Name: MW-19R
Lab Code: R2111745-010

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 15:47	
Toluene	5.0 U	5.0	0.20	1	11/12/21 15:47	
Trichloroethene (TCE)	42	5.0	0.20	1	11/12/21 15:47	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 15:47	
Vinyl Chloride	0.22 J	5.0	0.20	1	11/12/21 15:47	
cis-1,2-Dichloroethene	11	5.0	0.23	1	11/12/21 15:47	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 15:47	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 15:47	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 15:47	
trans-1,2-Dichloroethene	1.5 J	5.0	0.20	1	11/12/21 15:47	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 15:47	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	11/12/21 15:47	
Dibromofluoromethane	101	80 - 116	11/12/21 15:47	
Toluene-d8	104	87 - 121	11/12/21 15:47	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 09:15
Date Received: 11/05/21 10:20

Sample Name: MW-19AR
Lab Code: R2111745-011

Units: ug/L
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)	10 U	10	0.40	2	11/12/21 16:53	
1,1,2,2-Tetrachloroethane	10 U	10	0.40	2	11/12/21 16:53	
1,1,2-Trichloroethane	10 U	10	0.40	2	11/12/21 16:53	
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	10	0.40	2	11/12/21 16:53	
1,1-Dichloroethane (1,1-DCA)	10 U	10	0.40	2	11/12/21 16:53	
1,1-Dichloroethene (1,1-DCE)	10 U	10	0.40	2	11/12/21 16:53	
1,2,3-Trichlorobenzene	10 U	10	0.50	2	11/12/21 16:53	
1,2,4-Trichlorobenzene	10 U	10	0.68	2	11/12/21 16:53	
1,2-Dibromo-3-chloropropane (DBCP)	10 U	10	0.90	2	11/12/21 16:53	
1,2-Dibromoethane	10 U	10	0.40	2	11/12/21 16:53	
1,2-Dichlorobenzene	10 U	10	0.40	2	11/12/21 16:53	
1,2-Dichloroethane	10 U	10	0.40	2	11/12/21 16:53	
1,2-Dichloropropane	10 U	10	0.40	2	11/12/21 16:53	
1,3-Dichlorobenzene	10 U	10	0.40	2	11/12/21 16:53	
1,4-Dichlorobenzene	10 U	10	0.40	2	11/12/21 16:53	
1,4-Dioxane	200 U	200	26	2	11/12/21 16:53	
2-Butanone (MEK)	20 U	20	1.6	2	11/12/21 16:53	
2-Hexanone	20 U	20	0.40	2	11/12/21 16:53	
4-Methyl-2-pentanone	20 U	20	0.40	2	11/12/21 16:53	
Acetone	20 U	20	10	2	11/12/21 16:53	
Benzene	10 U	10	0.40	2	11/12/21 16:53	
Bromochloromethane	10 U	10	0.40	2	11/12/21 16:53	
Bromodichloromethane	10 U	10	0.40	2	11/12/21 16:53	
Bromoform	10 U	10	0.50	2	11/12/21 16:53	
Bromomethane	10 U	10	1.4	2	11/12/21 16:53	
Carbon Disulfide	20 U	20	0.84	2	11/12/21 16:53	
Carbon Tetrachloride	10 U	10	0.68	2	11/12/21 16:53	
Chlorobenzene	10 U	10	0.40	2	11/12/21 16:53	
Chloroethane	10 U	10	0.46	2	11/12/21 16:53	
Chloroform	10 U	10	0.48	2	11/12/21 16:53	
Chloromethane	10 U	10	0.56	2	11/12/21 16:53	
Cyclohexane	2.0 J	20	0.52	2	11/12/21 16:53	
Dibromochloromethane	10 U	10	0.40	2	11/12/21 16:53	
Dichlorodifluoromethane (CFC 12)	10 U	10	0.42	2	11/12/21 16:53	
Dichloromethane	10 U	10	1.3	2	11/12/21 16:53	
Ethylbenzene	10 U	10	0.40	2	11/12/21 16:53	
Isopropylbenzene (Cumene)	10 U	10	0.40	2	11/12/21 16:53	
Methyl Acetate	20 U	20	0.66	2	11/12/21 16:53	
Methyl tert-Butyl Ether	10 U	10	0.40	2	11/12/21 16:53	
Methylcyclohexane	2.0 J	20	0.40	2	11/12/21 16:53	
Styrene	10 U	10	0.40	2	11/12/21 16:53	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 09:15
Date Received: 11/05/21 10:20

Sample Name: MW-19AR
Lab Code: R2111745-011

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	10 U	10	0.42	2	11/12/21 16:53	
Toluene	10 U	10	0.40	2	11/12/21 16:53	
Trichloroethene (TCE)	3.4 J	10	0.40	2	11/12/21 16:53	
Trichlorofluoromethane (CFC 11)	10 U	10	0.48	2	11/12/21 16:53	
Vinyl Chloride	37	10	0.40	2	11/12/21 16:53	
cis-1,2-Dichloroethene	250	10	0.46	2	11/12/21 16:53	
cis-1,3-Dichloropropene	10 U	10	0.40	2	11/12/21 16:53	
m,p-Xylenes	0.45 J	10	0.40	2	11/12/21 16:53	
o-Xylene	10 U	10	0.40	2	11/12/21 16:53	
trans-1,2-Dichloroethene	4.0 J	10	0.40	2	11/12/21 16:53	
trans-1,3-Dichloropropene	10 U	10	0.46	2	11/12/21 16:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	11/12/21 16:53	
Dibromofluoromethane	100	80 - 116	11/12/21 16:53	
Toluene-d8	103	87 - 121	11/12/21 16:53	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 09:50
Date Received: 11/05/21 10:20

Sample Name: MW-5R
Lab Code: R2111745-012

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	25 U	25	1.0	5	11/12/21 17:37	
1,1,2,2-Tetrachloroethane	25 U	25	1.0	5	11/12/21 17:37	
1,1,2-Trichloroethane	2.0 J	25	1.0	5	11/12/21 17:37	
1,1,2-Trichloro-1,2,2-trifluoroethane	25 U	25	1.0	5	11/12/21 17:37	
1,1-Dichloroethane (1,1-DCA)	25 U	25	1.0	5	11/12/21 17:37	
1,1-Dichloroethene (1,1-DCE)	25 U	25	1.0	5	11/12/21 17:37	
1,2,3-Trichlorobenzene	25 U	25	1.3	5	11/12/21 17:37	
1,2,4-Trichlorobenzene	25 U	25	1.7	5	11/12/21 17:37	
1,2-Dibromo-3-chloropropane (DBCP)	25 U	25	2.3	5	11/12/21 17:37	
1,2-Dibromoethane	25 U	25	1.0	5	11/12/21 17:37	
1,2-Dichlorobenzene	25 U	25	1.0	5	11/12/21 17:37	
1,2-Dichloroethane	25 U	25	1.0	5	11/12/21 17:37	
1,2-Dichloropropane	25 U	25	1.0	5	11/12/21 17:37	
1,3-Dichlorobenzene	25 U	25	1.0	5	11/12/21 17:37	
1,4-Dichlorobenzene	25 U	25	1.0	5	11/12/21 17:37	
1,4-Dioxane	500 U	500	65	5	11/12/21 17:37	
2-Butanone (MEK)	50 U	50	3.9	5	11/12/21 17:37	
2-Hexanone	50 U	50	1.0	5	11/12/21 17:37	
4-Methyl-2-pentanone	50 U	50	1.0	5	11/12/21 17:37	
Acetone	50 U	50	25	5	11/12/21 17:37	
Benzene	25 U	25	1.0	5	11/12/21 17:37	
Bromochloromethane	25 U	25	1.0	5	11/12/21 17:37	
Bromodichloromethane	25 U	25	1.0	5	11/12/21 17:37	
Bromoform	25 U	25	1.3	5	11/12/21 17:37	
Bromomethane	25 U	25	3.5	5	11/12/21 17:37	
Carbon Disulfide	50 U	50	2.1	5	11/12/21 17:37	
Carbon Tetrachloride	25 U	25	1.7	5	11/12/21 17:37	
Chlorobenzene	25 U	25	1.0	5	11/12/21 17:37	
Chloroethane	25 U	25	1.2	5	11/12/21 17:37	
Chloroform	25 U	25	1.2	5	11/12/21 17:37	
Chloromethane	25 U	25	1.4	5	11/12/21 17:37	
Cyclohexane	50 U	50	1.3	5	11/12/21 17:37	
Dibromochloromethane	25 U	25	1.0	5	11/12/21 17:37	
Dichlorodifluoromethane (CFC 12)	25 U	25	1.1	5	11/12/21 17:37	
Dichloromethane	25 U	25	3.3	5	11/12/21 17:37	
Ethylbenzene	25 U	25	1.0	5	11/12/21 17:37	
Isopropylbenzene (Cumene)	25 U	25	1.0	5	11/12/21 17:37	
Methyl Acetate	50 U	50	1.7	5	11/12/21 17:37	
Methyl tert-Butyl Ether	25 U	25	1.0	5	11/12/21 17:37	
Methylcyclohexane	50 U	50	1.0	5	11/12/21 17:37	
Styrene	25 U	25	1.0	5	11/12/21 17:37	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 09:50
Date Received: 11/05/21 10:20

Sample Name: MW-5R
Lab Code: R2111745-012

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	2.7 J	25	1.1	5	11/12/21 17:37	
Toluene	25 U	25	1.0	5	11/12/21 17:37	
Trichloroethene (TCE)	580	25	1.0	5	11/12/21 17:37	
Trichlorofluoromethane (CFC 11)	25 U	25	1.2	5	11/12/21 17:37	
Vinyl Chloride	25 U	25	1.0	5	11/12/21 17:37	
cis-1,2-Dichloroethene	190	25	1.2	5	11/12/21 17:37	
cis-1,3-Dichloropropene	25 U	25	1.0	5	11/12/21 17:37	
m,p-Xylenes	25 U	25	1.0	5	11/12/21 17:37	
o-Xylene	25 U	25	1.0	5	11/12/21 17:37	
trans-1,2-Dichloroethene	17 J	25	1.0	5	11/12/21 17:37	
trans-1,3-Dichloropropene	25 U	25	1.2	5	11/12/21 17:37	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	11/12/21 17:37	
Dibromofluoromethane	102	80 - 116	11/12/21 17:37	
Toluene-d8	105	87 - 121	11/12/21 17:37	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 10:30
Date Received: 11/05/21 10:20

Sample Name: MW-5AR
Lab Code: R2111745-013

Units: ug/L
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)	1300 U	1300	50	250	11/12/21 19:04	
1,1,2,2-Tetrachloroethane	130 J	1300	50	250	11/12/21 19:04	
1,1,2-Trichloroethane	1300 U	1300	50	250	11/12/21 19:04	
1,1,2-Trichloro-1,2,2-trifluoroethane	1300 U	1300	50	250	11/12/21 19:04	
1,1-Dichloroethane (1,1-DCA)	1300 U	1300	50	250	11/12/21 19:04	
1,1-Dichloroethene (1,1-DCE)	52 J	1300	50	250	11/12/21 19:04	
1,2,3-Trichlorobenzene	1300 U	1300	63	250	11/12/21 19:04	
1,2,4-Trichlorobenzene	1300 U	1300	85	250	11/12/21 19:04	
1,2-Dibromo-3-chloropropane (DBCP)	1300 U	1300	120	250	11/12/21 19:04	
1,2-Dibromoethane	1300 U	1300	50	250	11/12/21 19:04	
1,2-Dichlorobenzene	1300 U	1300	50	250	11/12/21 19:04	
1,2-Dichloroethane	1300 U	1300	50	250	11/12/21 19:04	
1,2-Dichloropropane	1300 U	1300	50	250	11/12/21 19:04	
1,3-Dichlorobenzene	1300 U	1300	50	250	11/12/21 19:04	
1,4-Dichlorobenzene	1300 U	1300	50	250	11/12/21 19:04	
1,4-Dioxane	25000 U	25000	3300	250	11/12/21 19:04	
2-Butanone (MEK)	2500 U	2500	200	250	11/12/21 19:04	
2-Hexanone	2500 U	2500	50	250	11/12/21 19:04	
4-Methyl-2-pentanone	2500 U	2500	50	250	11/12/21 19:04	
Acetone	2500 U	2500	1300	250	11/12/21 19:04	
Benzene	1300 U	1300	50	250	11/12/21 19:04	
Bromochloromethane	1300 U	1300	50	250	11/12/21 19:04	
Bromodichloromethane	1300 U	1300	50	250	11/12/21 19:04	
Bromoform	1300 U	1300	63	250	11/12/21 19:04	
Bromomethane	1300 U	1300	180	250	11/12/21 19:04	
Carbon Disulfide	2500 U	2500	110	250	11/12/21 19:04	
Carbon Tetrachloride	1300 U	1300	85	250	11/12/21 19:04	
Chlorobenzene	1300 U	1300	50	250	11/12/21 19:04	
Chloroethane	1300 U	1300	58	250	11/12/21 19:04	
Chloroform	190 J	1300	60	250	11/12/21 19:04	
Chloromethane	1300 U	1300	70	250	11/12/21 19:04	
Cyclohexane	2500 U	2500	65	250	11/12/21 19:04	
Dibromochloromethane	1300 U	1300	50	250	11/12/21 19:04	
Dichlorodifluoromethane (CFC 12)	1300 U	1300	53	250	11/12/21 19:04	
Dichloromethane	1300 U	1300	170	250	11/12/21 19:04	
Ethylbenzene	1300 U	1300	50	250	11/12/21 19:04	
Isopropylbenzene (Cumene)	1300 U	1300	50	250	11/12/21 19:04	
Methyl Acetate	2500 U	2500	83	250	11/12/21 19:04	
Methyl tert-Butyl Ether	1300 U	1300	50	250	11/12/21 19:04	
Methylcyclohexane	2500 U	2500	50	250	11/12/21 19:04	
Styrene	1300 U	1300	50	250	11/12/21 19:04	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 10:30
Date Received: 11/05/21 10:20

Sample Name: MW-5AR
Lab Code: R2111745-013

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	140 J	1300	53	250	11/12/21 19:04	
Toluene	1300 U	1300	50	250	11/12/21 19:04	
Trichloroethene (TCE)	40000	1300	50	250	11/12/21 19:04	
Trichlorofluoromethane (CFC 11)	1300 U	1300	60	250	11/12/21 19:04	
Vinyl Chloride	430 J	1300	50	250	11/12/21 19:04	
cis-1,2-Dichloroethene	24000	1300	58	250	11/12/21 19:04	
cis-1,3-Dichloropropene	1300 U	1300	50	250	11/12/21 19:04	
m,p-Xylenes	1300 U	1300	50	250	11/12/21 19:04	
o-Xylene	1300 U	1300	50	250	11/12/21 19:04	
trans-1,2-Dichloroethene	1300 J	1300	50	250	11/12/21 19:04	
trans-1,3-Dichloropropene	1300 U	1300	58	250	11/12/21 19:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	11/12/21 19:04	
Dibromofluoromethane	101	80 - 116	11/12/21 19:04	
Toluene-d8	105	87 - 121	11/12/21 19:04	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 14:30
Date Received: 11/05/21 10:20

Sample Name: MW-15A
Lab Code: R2111745-014

Units: ug/L
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	11/12/21 14:42	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 14:42	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 14:42	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 14:42	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,4-Dioxane	100 U	100	13	1	11/12/21 14:42	
2-Butanone (MEK)	10 U	10	0.78	1	11/12/21 14:42	
2-Hexanone	10 U	10	0.20	1	11/12/21 14:42	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 14:42	
Acetone	10 U	10	5.0	1	11/12/21 14:42	
Benzene	5.0 U	5.0	0.20	1	11/12/21 14:42	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 14:42	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 14:42	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 14:42	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 14:42	
Carbon Disulfide	1.9 J	10	0.42	1	11/12/21 14:42	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 14:42	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 14:42	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 14:42	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 14:42	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 14:42	
Cyclohexane	10 U	10	0.26	1	11/12/21 14:42	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 14:42	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 14:42	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 14:42	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 14:42	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 14:42	
Methyl Acetate	10 U	10	0.33	1	11/12/21 14:42	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 14:42	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 14:42	
Styrene	5.0 U	5.0	0.20	1	11/12/21 14:42	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 14:30
Date Received: 11/05/21 10:20

Sample Name: MW-15A
Lab Code: R2111745-014

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	0.79 J	5.0	0.21	1	11/12/21 14:42	
Toluene	5.0 U	5.0	0.20	1	11/12/21 14:42	
Trichloroethene (TCE)	0.59 J	5.0	0.20	1	11/12/21 14:42	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 14:42	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 14:42	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 14:42	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 14:42	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 14:42	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 14:42	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 14:42	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 14:42	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	11/12/21 14:42	
Dibromofluoromethane	102	80 - 116	11/12/21 14:42	
Toluene-d8	104	87 - 121	11/12/21 14:42	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 15:00
Date Received: 11/05/21 10:20

Sample Name: MW-25A
Lab Code: R2111745-015

Units: ug/L
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	11/12/21 15:04	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 15:04	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 15:04	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 15:04	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,4-Dioxane	100 U	100	13	1	11/12/21 15:04	
2-Butanone (MEK)	10 U	10	0.78	1	11/12/21 15:04	
2-Hexanone	10 U	10	0.20	1	11/12/21 15:04	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 15:04	
Acetone	10 U	10	5.0	1	11/12/21 15:04	
Benzene	5.0 U	5.0	0.20	1	11/12/21 15:04	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 15:04	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 15:04	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 15:04	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 15:04	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 15:04	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 15:04	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 15:04	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 15:04	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 15:04	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 15:04	
Cyclohexane	10 U	10	0.26	1	11/12/21 15:04	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 15:04	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 15:04	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 15:04	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 15:04	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 15:04	
Methyl Acetate	10 U	10	0.33	1	11/12/21 15:04	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 15:04	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 15:04	
Styrene	5.0 U	5.0	0.20	1	11/12/21 15:04	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 15:00
Date Received: 11/05/21 10:20

Sample Name: MW-25A
Lab Code: R2111745-015

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 15:04	
Toluene	5.0 U	5.0	0.20	1	11/12/21 15:04	
Trichloroethene (TCE)	0.35 J	5.0	0.20	1	11/12/21 15:04	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 15:04	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 15:04	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 15:04	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 15:04	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 15:04	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 15:04	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 15:04	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 15:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	11/12/21 15:04	
Dibromofluoromethane	101	80 - 116	11/12/21 15:04	
Toluene-d8	106	87 - 121	11/12/21 15:04	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 11:45
Date Received: 11/05/21 10:20

Sample Name: MW-20A
Lab Code: R2111745-016

Units: ug/L
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)	50 U	50	2.0	10	11/12/21 17:58	
1,1,2,2-Tetrachloroethane	50 U	50	2.0	10	11/12/21 17:58	
1,1,2-Trichloroethane	50 U	50	2.0	10	11/12/21 17:58	
1,1,2-Trichloro-1,2,2-trifluoroethane	50 U	50	2.0	10	11/12/21 17:58	
1,1-Dichloroethane (1,1-DCA)	50 U	50	2.0	10	11/12/21 17:58	
1,1-Dichloroethene (1,1-DCE)	50 U	50	2.0	10	11/12/21 17:58	
1,2,3-Trichlorobenzene	50 U	50	2.5	10	11/12/21 17:58	
1,2,4-Trichlorobenzene	50 U	50	3.4	10	11/12/21 17:58	
1,2-Dibromo-3-chloropropane (DBCP)	50 U	50	4.5	10	11/12/21 17:58	
1,2-Dibromoethane	50 U	50	2.0	10	11/12/21 17:58	
1,2-Dichlorobenzene	50 U	50	2.0	10	11/12/21 17:58	
1,2-Dichloroethane	50 U	50	2.0	10	11/12/21 17:58	
1,2-Dichloropropane	50 U	50	2.0	10	11/12/21 17:58	
1,3-Dichlorobenzene	50 U	50	2.0	10	11/12/21 17:58	
1,4-Dichlorobenzene	50 U	50	2.0	10	11/12/21 17:58	
1,4-Dioxane	1000 U	1000	130	10	11/12/21 17:58	
2-Butanone (MEK)	100 U	100	7.8	10	11/12/21 17:58	
2-Hexanone	100 U	100	2.0	10	11/12/21 17:58	
4-Methyl-2-pentanone	100 U	100	2.0	10	11/12/21 17:58	
Acetone	100 U	100	50	10	11/12/21 17:58	
Benzene	50 U	50	2.0	10	11/12/21 17:58	
Bromochloromethane	50 U	50	2.0	10	11/12/21 17:58	
Bromodichloromethane	50 U	50	2.0	10	11/12/21 17:58	
Bromoform	50 U	50	2.5	10	11/12/21 17:58	
Bromomethane	50 U	50	7.0	10	11/12/21 17:58	
Carbon Disulfide	100 U	100	4.2	10	11/12/21 17:58	
Carbon Tetrachloride	50 U	50	3.4	10	11/12/21 17:58	
Chlorobenzene	50 U	50	2.0	10	11/12/21 17:58	
Chloroethane	50 U	50	2.3	10	11/12/21 17:58	
Chloroform	50 U	50	2.4	10	11/12/21 17:58	
Chloromethane	50 U	50	2.8	10	11/12/21 17:58	
Cyclohexane	100 U	100	2.6	10	11/12/21 17:58	
Dibromochloromethane	50 U	50	2.0	10	11/12/21 17:58	
Dichlorodifluoromethane (CFC 12)	50 U	50	2.1	10	11/12/21 17:58	
Dichloromethane	50 U	50	6.5	10	11/12/21 17:58	
Ethylbenzene	50 U	50	2.0	10	11/12/21 17:58	
Isopropylbenzene (Cumene)	50 U	50	2.0	10	11/12/21 17:58	
Methyl Acetate	100 U	100	3.3	10	11/12/21 17:58	
Methyl tert-Butyl Ether	50 U	50	2.0	10	11/12/21 17:58	
Methylcyclohexane	100 U	100	2.0	10	11/12/21 17:58	
Styrene	50 U	50	2.0	10	11/12/21 17:58	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 11:45
Date Received: 11/05/21 10:20

Sample Name: MW-20A
Lab Code: R2111745-016

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	50 U	50	2.1	10	11/12/21 17:58	
Toluene	50 U	50	2.0	10	11/12/21 17:58	
Trichloroethene (TCE)	2.3 J	50	2.0	10	11/12/21 17:58	
Trichlorofluoromethane (CFC 11)	50 U	50	2.4	10	11/12/21 17:58	
Vinyl Chloride	290	50	2.0	10	11/12/21 17:58	
cis-1,2-Dichloroethene	910	50	2.3	10	11/12/21 17:58	
cis-1,3-Dichloropropene	50 U	50	2.0	10	11/12/21 17:58	
m,p-Xylenes	50 U	50	2.0	10	11/12/21 17:58	
o-Xylene	50 U	50	2.0	10	11/12/21 17:58	
trans-1,2-Dichloroethene	2.8 J	50	2.0	10	11/12/21 17:58	
trans-1,3-Dichloropropene	50 U	50	2.3	10	11/12/21 17:58	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	11/12/21 17:58	
Dibromofluoromethane	99	80 - 116	11/12/21 17:58	
Toluene-d8	105	87 - 121	11/12/21 17:58	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 12:00
Date Received: 11/05/21 10:20

Sample Name: MW-DUP
Lab Code: R2111745-017

Units: ug/L
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	11/12/21 17:15	
1,1,2,2-Tetrachloroethane	13 U	13	0.50	2.5	11/12/21 17:15	
1,1,2-Trichloroethane	13 U	13	0.50	2.5	11/12/21 17:15	
1,1,2-Trichloro-1,2,2-trifluoroethane	13 U	13	0.50	2.5	11/12/21 17:15	
1,1-Dichloroethane (1,1-DCA)	13 U	13	0.50	2.5	11/12/21 17:15	
1,1-Dichloroethene (1,1-DCE)	1.4 J	13	0.50	2.5	11/12/21 17:15	
1,2,3-Trichlorobenzene	13 U	13	0.63	2.5	11/12/21 17:15	
1,2,4-Trichlorobenzene	13 U	13	0.85	2.5	11/12/21 17:15	
1,2-Dibromo-3-chloropropane (DBCP)	13 U	13	1.2	2.5	11/12/21 17:15	
1,2-Dibromoethane	13 U	13	0.50	2.5	11/12/21 17:15	
1,2-Dichlorobenzene	13 U	13	0.50	2.5	11/12/21 17:15	
1,2-Dichloroethane	13 U	13	0.50	2.5	11/12/21 17:15	
1,2-Dichloropropane	13 U	13	0.50	2.5	11/12/21 17:15	
1,3-Dichlorobenzene	13 U	13	0.50	2.5	11/12/21 17:15	
1,4-Dichlorobenzene	13 U	13	0.50	2.5	11/12/21 17:15	
1,4-Dioxane	250 U	250	33	2.5	11/12/21 17:15	
2-Butanone (MEK)	25 U	25	2.0	2.5	11/12/21 17:15	
2-Hexanone	25 U	25	0.50	2.5	11/12/21 17:15	
4-Methyl-2-pentanone	25 U	25	0.50	2.5	11/12/21 17:15	
Acetone	25 U	25	13	2.5	11/12/21 17:15	
Benzene	13 U	13	0.50	2.5	11/12/21 17:15	
Bromochloromethane	13 U	13	0.50	2.5	11/12/21 17:15	
Bromodichloromethane	13 U	13	0.50	2.5	11/12/21 17:15	
Bromoform	13 U	13	0.63	2.5	11/12/21 17:15	
Bromomethane	13 U	13	1.8	2.5	11/12/21 17:15	
Carbon Disulfide	25 U	25	1.1	2.5	11/12/21 17:15	
Carbon Tetrachloride	13 U	13	0.85	2.5	11/12/21 17:15	
Chlorobenzene	13 U	13	0.50	2.5	11/12/21 17:15	
Chloroethane	13 U	13	0.58	2.5	11/12/21 17:15	
Chloroform	13 U	13	0.60	2.5	11/12/21 17:15	
Chloromethane	1.0 BJ	13	0.70	2.5	11/12/21 17:15	
Cyclohexane	25 U	25	0.65	2.5	11/12/21 17:15	
Dibromochloromethane	13 U	13	0.50	2.5	11/12/21 17:15	
Dichlorodifluoromethane (CFC 12)	13 U	13	0.53	2.5	11/12/21 17:15	
Dichloromethane	13 U	13	1.7	2.5	11/12/21 17:15	
Ethylbenzene	13 U	13	0.50	2.5	11/12/21 17:15	
Isopropylbenzene (Cumene)	13 U	13	0.50	2.5	11/12/21 17:15	
Methyl Acetate	25 U	25	0.83	2.5	11/12/21 17:15	
Methyl tert-Butyl Ether	13 U	13	0.50	2.5	11/12/21 17:15	
Methylcyclohexane	25 U	25	0.50	2.5	11/12/21 17:15	
Styrene	13 U	13	0.50	2.5	11/12/21 17:15	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 12:00
Date Received: 11/05/21 10:20

Sample Name: MW-DUP
Lab Code: R2111745-017

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	13 U	13	0.53	2.5	11/12/21 17:15	
Toluene	13 U	13	0.50	2.5	11/12/21 17:15	
Trichloroethene (TCE)	13 U	13	0.50	2.5	11/12/21 17:15	
Trichlorofluoromethane (CFC 11)	13 U	13	0.60	2.5	11/12/21 17:15	
Vinyl Chloride	250	13	0.50	2.5	11/12/21 17:15	
cis-1,2-Dichloroethene	580 D	50	2.3	10	11/12/21 20:31	
cis-1,3-Dichloropropene	13 U	13	0.50	2.5	11/12/21 17:15	
m,p-Xylenes	13 U	13	0.50	2.5	11/12/21 17:15	
o-Xylene	13 U	13	0.50	2.5	11/12/21 17:15	
trans-1,2-Dichloroethene	2.5 J	13	0.50	2.5	11/12/21 17:15	
trans-1,3-Dichloropropene	13 U	13	0.58	2.5	11/12/21 17:15	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	11/12/21 17:15	
Dibromofluoromethane	101	80 - 116	11/12/21 17:15	
Toluene-d8	105	87 - 121	11/12/21 17:15	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 12:30
Date Received: 11/05/21 10:20

Sample Name: MW-7A
Lab Code: R2111745-018

Units: ug/L
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	11/12/21 16:09	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,1-Dichloroethene (1,1-DCE)	0.25 J	5.0	0.20	1	11/12/21 16:09	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 16:09	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 16:09	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 16:09	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,4-Dioxane	100 U	100	13	1	11/12/21 16:09	
2-Butanone (MEK)	3.2 J	10	0.78	1	11/12/21 16:09	
2-Hexanone	10 U	10	0.20	1	11/12/21 16:09	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 16:09	
Acetone	5.9 J	10	5.0	1	11/12/21 16:09	
Benzene	5.0 U	5.0	0.20	1	11/12/21 16:09	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 16:09	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 16:09	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 16:09	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 16:09	
Carbon Disulfide	2.4 J	10	0.42	1	11/12/21 16:09	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 16:09	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 16:09	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 16:09	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 16:09	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 16:09	
Cyclohexane	0.97 J	10	0.26	1	11/12/21 16:09	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 16:09	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 16:09	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 16:09	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 16:09	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 16:09	
Methyl Acetate	10 U	10	0.33	1	11/12/21 16:09	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 16:09	
Methylcyclohexane	0.47 J	10	0.20	1	11/12/21 16:09	
Styrene	5.0 U	5.0	0.20	1	11/12/21 16:09	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 12:30
Date Received: 11/05/21 10:20

Sample Name: MW-7A
Lab Code: R2111745-018

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 16:09	
Toluene	5.0 U	5.0	0.20	1	11/12/21 16:09	
Trichloroethene (TCE)	0.20 J	5.0	0.20	1	11/12/21 16:09	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 16:09	
Vinyl Chloride	54	5.0	0.20	1	11/12/21 16:09	
cis-1,2-Dichloroethene	190	5.0	0.23	1	11/12/21 16:09	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 16:09	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 16:09	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 16:09	
trans-1,2-Dichloroethene	0.89 J	5.0	0.20	1	11/12/21 16:09	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 16:09	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	11/12/21 16:09	
Dibromofluoromethane	102	80 - 116	11/12/21 16:09	
Toluene-d8	106	87 - 121	11/12/21 16:09	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 13:30
Date Received: 11/05/21 10:20

Sample Name: MW-11
Lab Code: R2111745-019

Units: ug/L
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)	50 U	50	2.0	10	11/12/21 15:26	
1,1,2,2-Tetrachloroethane	50 U	50	2.0	10	11/12/21 15:26	
1,1,2-Trichloroethane	50 U	50	2.0	10	11/12/21 15:26	
1,1,2-Trichloro-1,2,2-trifluoroethane	50 U	50	2.0	10	11/12/21 15:26	
1,1-Dichloroethane (1,1-DCA)	50 U	50	2.0	10	11/12/21 15:26	
1,1-Dichloroethene (1,1-DCE)	3.5 J	50	2.0	10	11/12/21 15:26	
1,2,3-Trichlorobenzene	50 U	50	2.5	10	11/12/21 15:26	
1,2,4-Trichlorobenzene	50 U	50	3.4	10	11/12/21 15:26	
1,2-Dibromo-3-chloropropane (DBCP)	50 U	50	4.5	10	11/12/21 15:26	
1,2-Dibromoethane	50 U	50	2.0	10	11/12/21 15:26	
1,2-Dichlorobenzene	50 U	50	2.0	10	11/12/21 15:26	
1,2-Dichloroethane	50 U	50	2.0	10	11/12/21 15:26	
1,2-Dichloropropane	50 U	50	2.0	10	11/12/21 15:26	
1,3-Dichlorobenzene	50 U	50	2.0	10	11/12/21 15:26	
1,4-Dichlorobenzene	50 U	50	2.0	10	11/12/21 15:26	
1,4-Dioxane	1000 U	1000	130	10	11/12/21 15:26	
2-Butanone (MEK)	100 U	100	7.8	10	11/12/21 15:26	
2-Hexanone	100 U	100	2.0	10	11/12/21 15:26	
4-Methyl-2-pentanone	100 U	100	2.0	10	11/12/21 15:26	
Acetone	100 U	100	50	10	11/12/21 15:26	
Benzene	50 U	50	2.0	10	11/12/21 15:26	
Bromochloromethane	50 U	50	2.0	10	11/12/21 15:26	
Bromodichloromethane	50 U	50	2.0	10	11/12/21 15:26	
Bromoform	50 U	50	2.5	10	11/12/21 15:26	
Bromomethane	50 U	50	7.0	10	11/12/21 15:26	
Carbon Disulfide	100 U	100	4.2	10	11/12/21 15:26	
Carbon Tetrachloride	50 U	50	3.4	10	11/12/21 15:26	
Chlorobenzene	50 U	50	2.0	10	11/12/21 15:26	
Chloroethane	50 U	50	2.3	10	11/12/21 15:26	
Chloroform	50 U	50	2.4	10	11/12/21 15:26	
Chloromethane	50 U	50	2.8	10	11/12/21 15:26	
Cyclohexane	100 U	100	2.6	10	11/12/21 15:26	
Dibromochloromethane	50 U	50	2.0	10	11/12/21 15:26	
Dichlorodifluoromethane (CFC 12)	50 U	50	2.1	10	11/12/21 15:26	
Dichloromethane	50 U	50	6.5	10	11/12/21 15:26	
Ethylbenzene	50 U	50	2.0	10	11/12/21 15:26	
Isopropylbenzene (Cumene)	50 U	50	2.0	10	11/12/21 15:26	
Methyl Acetate	100 U	100	3.3	10	11/12/21 15:26	
Methyl tert-Butyl Ether	50 U	50	2.0	10	11/12/21 15:26	
Methylcyclohexane	100 U	100	2.0	10	11/12/21 15:26	
Styrene	50 U	50	2.0	10	11/12/21 15:26	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 13:30
Date Received: 11/05/21 10:20

Sample Name: MW-11
Lab Code: R2111745-019

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	50 U	50	2.1	10	11/12/21 15:26	
Toluene	50 U	50	2.0	10	11/12/21 15:26	
Trichloroethene (TCE)	60	50	2.0	10	11/12/21 15:26	
Trichlorofluoromethane (CFC 11)	50 U	50	2.4	10	11/12/21 15:26	
Vinyl Chloride	7.8 J	50	2.0	10	11/12/21 15:26	
cis-1,2-Dichloroethene	1400	50	2.3	10	11/12/21 15:26	
cis-1,3-Dichloropropene	50 U	50	2.0	10	11/12/21 15:26	
m,p-Xylenes	50 U	50	2.0	10	11/12/21 15:26	
o-Xylene	50 U	50	2.0	10	11/12/21 15:26	
trans-1,2-Dichloroethene	4.3 J	50	2.0	10	11/12/21 15:26	
trans-1,3-Dichloropropene	50 U	50	2.3	10	11/12/21 15:26	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	11/12/21 15:26	
Dibromofluoromethane	102	80 - 116	11/12/21 15:26	
Toluene-d8	105	87 - 121	11/12/21 15:26	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 14:00
Date Received: 11/05/21 10:20

Sample Name: MW-10
Lab Code: R2111745-020

Units: ug/L
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	11/12/21 19:48	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 19:48	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 19:48	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 19:48	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,4-Dichlorobenzene	1.3 J	5.0	0.20	1	11/12/21 19:48	
1,4-Dioxane	100 U	100	13	1	11/12/21 19:48	
2-Butanone (MEK)	1.1 J	10	0.78	1	11/12/21 19:48	
2-Hexanone	10 U	10	0.20	1	11/12/21 19:48	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 19:48	
Acetone	10 U	10	5.0	1	11/12/21 19:48	
Benzene	5.0 U	5.0	0.20	1	11/12/21 19:48	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 19:48	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 19:48	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 19:48	
Bromomethane	2.1 J	5.0	0.70	1	11/12/21 19:48	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 19:48	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 19:48	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 19:48	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 19:48	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 19:48	
Chloromethane	0.78 BJ	5.0	0.28	1	11/12/21 19:48	
Cyclohexane	10 U	10	0.26	1	11/12/21 19:48	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 19:48	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 19:48	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 19:48	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 19:48	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 19:48	
Methyl Acetate	10 U	10	0.33	1	11/12/21 19:48	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 19:48	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 19:48	
Styrene	5.0 U	5.0	0.20	1	11/12/21 19:48	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 14:00
Date Received: 11/05/21 10:20

Sample Name: MW-10
Lab Code: R2111745-020

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 19:48	
Toluene	1.7 J	5.0	0.20	1	11/12/21 19:48	
Trichloroethene (TCE)	0.93 J	5.0	0.20	1	11/12/21 19:48	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 19:48	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 19:48	
cis-1,2-Dichloroethene	0.59 J	5.0	0.23	1	11/12/21 19:48	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 19:48	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 19:48	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 19:48	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 19:48	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 19:48	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	11/12/21 19:48	
Dibromofluoromethane	101	80 - 116	11/12/21 19:48	
Toluene-d8	105	87 - 121	11/12/21 19:48	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21
Date Received: 11/05/21 10:20

Sample Name: Trip Blank
Lab Code: R2111745-021

Units: ug/L
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	11/12/21 00:47	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 00:47	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 00:47	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 00:47	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,4-Dioxane	100 U	100	13	1	11/12/21 00:47	
2-Butanone (MEK)	4.2 J	10	0.78	1	11/12/21 00:47	
2-Hexanone	10 U	10	0.20	1	11/12/21 00:47	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 00:47	
Acetone	7.5 J	10	5.0	1	11/12/21 00:47	
Benzene	5.0 U	5.0	0.20	1	11/12/21 00:47	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 00:47	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 00:47	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 00:47	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 00:47	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 00:47	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 00:47	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 00:47	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 00:47	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 00:47	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 00:47	
Cyclohexane	10 U	10	0.26	1	11/12/21 00:47	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 00:47	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 00:47	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 00:47	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 00:47	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 00:47	
Methyl Acetate	10 U	10	0.33	1	11/12/21 00:47	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 00:47	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 00:47	
Styrene	5.0 U	5.0	0.20	1	11/12/21 00:47	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21
Date Received: 11/05/21 10:20

Sample Name: Trip Blank
Lab Code: R2111745-021

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 00:47	
Toluene	5.0 U	5.0	0.20	1	11/12/21 00:47	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 00:47	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 00:47	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 00:47	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 00:47	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 00:47	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 00:47	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 00:47	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 00:47	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 00:47	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	11/12/21 00:47	
Dibromofluoromethane	98	80 - 116	11/12/21 00:47	
Toluene-d8	106	87 - 121	11/12/21 00:47	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 11:15
Date Received: 11/05/21 10:20

Sample Name: MW-13
Lab Code: R2111745-022

Units: ug/L
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)	500 U	500	20	100	11/12/21 18:42	
1,1,2,2-Tetrachloroethane	500 U	500	20	100	11/12/21 18:42	
1,1,2-Trichloroethane	500 U	500	20	100	11/12/21 18:42	
1,1,2-Trichloro-1,2,2-trifluoroethane	500 U	500	20	100	11/12/21 18:42	
1,1-Dichloroethane (1,1-DCA)	500 U	500	20	100	11/12/21 18:42	
1,1-Dichloroethene (1,1-DCE)	500 U	500	20	100	11/12/21 18:42	
1,2,3-Trichlorobenzene	500 U	500	25	100	11/12/21 18:42	
1,2,4-Trichlorobenzene	500 U	500	34	100	11/12/21 18:42	
1,2-Dibromo-3-chloropropane (DBCP)	500 U	500	45	100	11/12/21 18:42	
1,2-Dibromoethane	500 U	500	20	100	11/12/21 18:42	
1,2-Dichlorobenzene	500 U	500	20	100	11/12/21 18:42	
1,2-Dichloroethane	500 U	500	20	100	11/12/21 18:42	
1,2-Dichloropropane	500 U	500	20	100	11/12/21 18:42	
1,3-Dichlorobenzene	500 U	500	20	100	11/12/21 18:42	
1,4-Dichlorobenzene	500 U	500	20	100	11/12/21 18:42	
1,4-Dioxane	10000 U	10000	1300	100	11/12/21 18:42	
2-Butanone (MEK)	1000 U	1000	78	100	11/12/21 18:42	
2-Hexanone	1000 U	1000	20	100	11/12/21 18:42	
4-Methyl-2-pentanone	1000 U	1000	20	100	11/12/21 18:42	
Acetone	1000 U	1000	500	100	11/12/21 18:42	
Benzene	500 U	500	20	100	11/12/21 18:42	
Bromochloromethane	500 U	500	20	100	11/12/21 18:42	
Bromodichloromethane	26 J	500	20	100	11/12/21 18:42	
Bromoform	500 U	500	25	100	11/12/21 18:42	
Bromomethane	500 U	500	70	100	11/12/21 18:42	
Carbon Disulfide	1000 U	1000	42	100	11/12/21 18:42	
Carbon Tetrachloride	500 U	500	34	100	11/12/21 18:42	
Chlorobenzene	500 U	500	20	100	11/12/21 18:42	
Chloroethane	500 U	500	23	100	11/12/21 18:42	
Chloroform	74 J	500	24	100	11/12/21 18:42	
Chloromethane	500 U	500	28	100	11/12/21 18:42	
Cyclohexane	1000 U	1000	26	100	11/12/21 18:42	
Dibromochloromethane	500 U	500	20	100	11/12/21 18:42	
Dichlorodifluoromethane (CFC 12)	500 U	500	21	100	11/12/21 18:42	
Dichloromethane	360 J	500	65	100	11/12/21 18:42	
Ethylbenzene	500 U	500	20	100	11/12/21 18:42	
Isopropylbenzene (Cumene)	500 U	500	20	100	11/12/21 18:42	
Methyl Acetate	1000 U	1000	33	100	11/12/21 18:42	
Methyl tert-Butyl Ether	500 U	500	20	100	11/12/21 18:42	
Methylcyclohexane	1000 U	1000	20	100	11/12/21 18:42	
Styrene	500 U	500	20	100	11/12/21 18:42	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 11:15
Date Received: 11/05/21 10:20

Sample Name: MW-13
Lab Code: R2111745-022

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	34 J	500	21	100	11/12/21 18:42	
Toluene	500 U	500	20	100	11/12/21 18:42	
Trichloroethene (TCE)	11000	500	20	100	11/12/21 18:42	
Trichlorofluoromethane (CFC 11)	500 U	500	24	100	11/12/21 18:42	
Vinyl Chloride	180 J	500	20	100	11/12/21 18:42	
cis-1,2-Dichloroethene	7500	500	23	100	11/12/21 18:42	
cis-1,3-Dichloropropene	500 U	500	20	100	11/12/21 18:42	
m,p-Xylenes	500 U	500	20	100	11/12/21 18:42	
o-Xylene	500 U	500	20	100	11/12/21 18:42	
trans-1,2-Dichloroethene	310 J	500	20	100	11/12/21 18:42	
trans-1,3-Dichloropropene	500 U	500	23	100	11/12/21 18:42	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	11/12/21 18:42	
Dibromofluoromethane	99	80 - 116	11/12/21 18:42	
Toluene-d8	104	87 - 121	11/12/21 18:42	



QC Summary Forms

ALS Environmental—Rochester Laboratory

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Volatile Organic Compounds by GC/MS

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ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

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

Service Request: R2111745

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene	Dibromofluoromethane	Toluene-d8
		85-122	80-116	87-121
MW-08	R2111745-001	100	102	108
MW-8A	R2111745-002	98	98	106
MW-14A	R2111745-003	96	99	106
MW-26	R2111745-004	100	101	108
MW-26A	R2111745-005	97	100	105
MW-9A	R2111745-006	98	99	106
MW-9	R2111745-007	97	102	107
MW-7	R2111745-008	95	100	105
MW-6	R2111745-009	95	100	104
MW-19R	R2111745-010	96	101	104
MW-19AR	R2111745-011	96	100	103
MW-5R	R2111745-012	98	102	105
MW-5AR	R2111745-013	99	101	105
MW-15A	R2111745-014	98	102	104
MW-25A	R2111745-015	101	101	106
MW-20A	R2111745-016	98	99	105
MW-DUP	R2111745-017	98	101	105
MW-7A	R2111745-018	97	102	106
MW-11	R2111745-019	98	102	105
MW-10	R2111745-020	96	101	105
Trip Blank	R2111745-021	97	98	106
MW-13	R2111745-022	97	99	104
Method Blank	RQ2114546-04	97	98	106
Method Blank	RQ2114594-04	95	98	104
Lab Control Sample	RQ2114546-03	99	103	107
Lab Control Sample	RQ2114594-03	98	102	104
MW-7A MS	RQ2114594-05	103	106	108
MW-7A DMS	RQ2114594-06	100	107	107

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QA/QC Report

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

Service Request: R2111745
Date Collected: 11/04/21
Date Received: 11/05/21
Date Analyzed: 11/12/21
Date Extracted: NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: MW-7A
Lab Code: R2111745-018
Analysis Method: 8260C
Prep Method: EPA 5030C

Units: ug/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike RQ2114594-05			Duplicate Matrix Spike RQ2114594-06			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1-Trichloroethane (TCA)	5.0 U	47.7	50.0	95	49.6	50.0	99	74-127	4	30
1,1,2,2-Tetrachloroethane	5.0 U	55.1	50.0	110	57.0	50.0	114	72-122	3	30
1,1,2-Trichloroethane	5.0 U	49.4	50.0	99	50.9	50.0	102	82-121	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	49.6	50.0	99	52.7	50.0	105	50-147	6	30
1,1-Dichloroethane (1,1-DCA)	5.0 U	50.3	50.0	101	51.2	50.0	102	74-132	2	30
1,1-Dichloroethene (1,1-DCE)	0.25 J	51.7	50.0	103	53.4	50.0	106	71-118	3	30
1,2,3-Trichlorobenzene	5.0 U	52.6	50.0	105	53.7	50.0	107	59-129	2	30
1,2,4-Trichlorobenzene	5.0 U	54.4	50.0	109	54.5	50.0	109	69-122	<1	30
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	58.1	50.0	116	59.1	50.0	118	37-150	2	30
1,2-Dibromoethane	5.0 U	50.5	50.0	101	52.4	50.0	105	67-127	4	30
1,2-Dichlorobenzene	5.0 U	51.6	50.0	103	52.6	50.0	105	77-120	2	30
1,2-Dichloroethane	5.0 U	43.7	50.0	87	44.8	50.0	90	68-130	2	30
1,2-Dichloropropane	5.0 U	49.5	50.0	99	51.8	50.0	104	79-124	5	30
1,3-Dichlorobenzene	5.0 U	51.3	50.0	103	53.2	50.0	106	83-121	4	30
1,4-Dichlorobenzene	5.0 U	48.6	50.0	97	49.4	50.0	99	82-120	1	30
1,4-Dioxane	100 U	1000	1000	100	997	1000	100	44-154	<1	30
2-Butanone (MEK)	3.2 J	48.3	50.0	90	50.1	50.0	94	61-137	4	30
2-Hexanone	10 U	51.5	50.0	103	51.8	50.0	104	56-132	<1	30
4-Methyl-2-pentanone	10 U	49.0	50.0	98	50.7	50.0	101	60-141	3	30
Acetone	5.9 J	50.1	50.0	89	52.9	50.0	94	35-183	5	30
Benzene	5.0 U	51.5	50.0	103	52.9	50.0	106	76-129	3	30
Bromochloromethane	5.0 U	50.0	50.0	100	52.0	50.0	104	80-122	4	30
Bromodichloromethane	5.0 U	45.4	50.0	91	47.4	50.0	95	78-133	4	30
Bromoform	5.0 U	50.5	50.0	101	54.1	50.0	108	58-133	7	30
Bromomethane	5.0 U	46.8	50.0	94	44.0	50.0	88	10-184	6	30
Carbon Disulfide	2.4 J	63.3	50.0	122	64.6	50.0	124	59-140	2	30
Carbon Tetrachloride	5.0 U	46.7	50.0	93	48.7	50.0	97	65-135	4	30
Chlorobenzene	5.0 U	51.2	50.0	102	52.9	50.0	106	76-125	3	30
Chloroethane	5.0 U	59.2	50.0	118	55.3	50.0	111	48-146	7	30
Chloroform	5.0 U	46.2	50.0	92	47.9	50.0	96	75-130	3	30
Chloromethane	5.0 U	69.7	50.0	139	70.9	50.0	142	55-160	2	30
Cyclohexane	0.97 J	47.4	50.0	93	48.9	50.0	96	52-145	3	30
Dibromochloromethane	5.0 U	49.0	50.0	98	51.7	50.0	103	72-128	5	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.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

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

Service Request: R2111745
Date Collected: 11/04/21
Date Received: 11/05/21
Date Analyzed: 11/12/21
Date Extracted: NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: MW-7A
Lab Code: R2111745-018
Analysis Method: 8260C
Prep Method: EPA 5030C

Units: ug/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike RQ2114594-05			Duplicate Matrix Spike RQ2114594-06			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Dichlorodifluoromethane (CFC 12)	5.0 U	51.5	50.0	103	52.2	50.0	104	49-154	1	30
Dichloromethane	5.0 U	49.7	50.0	99	50.3	50.0	101	73-122	1	30
Ethylbenzene	5.0 U	52.7	50.0	105	53.9	50.0	108	72-134	2	30
Isopropylbenzene (Cumene)	5.0 U	54.7	50.0	109	56.2	50.0	112	77-128	3	30
Methyl Acetate	10 U	58.3	50.0	117	58.7	50.0	117	26-121	<1	30
Methyl tert-Butyl Ether	5.0 U	48.8	50.0	98	49.5	50.0	99	75-119	1	30
Methylcyclohexane	0.47 J	51.6	50.0	102	52.9	50.0	105	45-146	3	30
Styrene	5.0 U	53.0	50.0	106	54.2	50.0	108	74-136	2	30
Tetrachloroethene (PCE)	5.0 U	51.4	50.0	103	52.6	50.0	105	72-125	2	30
Toluene	5.0 U	53.0	50.0	106	54.4	50.0	109	79-119	3	30
Trichloroethene (TCE)	0.20 J	49.4	50.0	98	51.1	50.0	102	74-122	3	30
Trichlorofluoromethane (CFC 11)	5.0 U	44.9	50.0	90	46.1	50.0	92	71-136	3	30
Vinyl Chloride	54	114	50.0	119	112	50.0	114	74-159	2	30
cis-1,2-Dichloroethene	190	230 E	50.0	79	227 E	50.0	75 *	77-127	<1	30
cis-1,3-Dichloropropene	5.0 U	53.6	50.0	107	55.8	50.0	112	52-134	4	30
m,p-Xylenes	5.0 U	108	100	108	109	100	109	80-126	2	30
o-Xylene	5.0 U	53.0	50.0	106	54.0	50.0	108	79-123	2	30
trans-1,2-Dichloroethene	0.89 J	52.6	50.0	104	53.6	50.0	106	73-118	2	30
trans-1,3-Dichloropropene	5.0 U	52.5	50.0	105	55.3	50.0	111	71-133	5	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.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/12/21 00:26
Date Extracted:

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ2114546-04
Analysis Method: 8260C
Prep Method: EPA 5030C

Instrument ID: R-MS-12
File ID: I:\ACQUDATA\msvoa12\Data\111121\K8884.D\
Analysis Lot: 745816

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2114546-03	I:\ACQUDATA\msvoa12\Data\111121\K8881.D\	11/11/21 23:20
Trip Blank	R2111745-021	I:\ACQUDATA\msvoa12\Data\111121\K8885.D\	11/12/21 00:47
MW-08	R2111745-001	I:\ACQUDATA\msvoa12\Data\111121\K8886.D\	11/12/21 01:09
MW-8A	R2111745-002	I:\ACQUDATA\msvoa12\Data\111121\K8887.D\	11/12/21 01:31
MW-14A	R2111745-003	I:\ACQUDATA\msvoa12\Data\111121\K8888.D\	11/12/21 01:52
MW-26	R2111745-004	I:\ACQUDATA\msvoa12\Data\111121\K8889.D\	11/12/21 02:14
MW-26A	R2111745-005	I:\ACQUDATA\msvoa12\Data\111121\K8890.D\	11/12/21 02:36
MW-9A	R2111745-006	I:\ACQUDATA\msvoa12\Data\111121\K8891.D\	11/12/21 02:58
MW-9	R2111745-007	I:\ACQUDATA\msvoa12\Data\111121\K8892.D\	11/12/21 03:19
MW-7	R2111745-008	I:\ACQUDATA\msvoa12\Data\111121\K8893.D\	11/12/21 03:41

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/12/21 12:47
Date Extracted:

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ2114594-04
Analysis Method: 8260C
Prep Method: EPA 5030C

Instrument ID: R-MS-12
File ID: I:\ACQUDATA\msvoa12\Data\111221\K8902.D\
Analysis Lot: 745908

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ2114594-03	I:\ACQUDATA\msvoa12\Data\111221\K8899.D\	11/12/21 11:27
MW-15A	R2111745-014	I:\ACQUDATA\msvoa12\Data\111221\K8907.D\	11/12/21 14:42
MW-25A	R2111745-015	I:\ACQUDATA\msvoa12\Data\111221\K8908.D\	11/12/21 15:04
MW-11	R2111745-019	I:\ACQUDATA\msvoa12\Data\111221\K8909.D\	11/12/21 15:26
MW-19R	R2111745-010	I:\ACQUDATA\msvoa12\Data\111221\K8910.D\	11/12/21 15:47
MW-7A	R2111745-018	I:\ACQUDATA\msvoa12\Data\111221\K8911.D\	11/12/21 16:09
MW-19AR	R2111745-011	I:\ACQUDATA\msvoa12\Data\111221\K8913.D\	11/12/21 16:53
MW-DUP	R2111745-017	I:\ACQUDATA\msvoa12\Data\111221\K8914.D\	11/12/21 17:15
MW-5R	R2111745-012	I:\ACQUDATA\msvoa12\Data\111221\K8915.D\	11/12/21 17:37
MW-20A	R2111745-016	I:\ACQUDATA\msvoa12\Data\111221\K8916.D\	11/12/21 17:58
MW-13	R2111745-022	I:\ACQUDATA\msvoa12\Data\111221\K8918.D\	11/12/21 18:42
MW-5AR	R2111745-013	I:\ACQUDATA\msvoa12\Data\111221\K8919.D\	11/12/21 19:04
MW-10	R2111745-020	I:\ACQUDATA\msvoa12\Data\111221\K8921.D\	11/12/21 19:48
MW-6	R2111745-009	I:\ACQUDATA\msvoa12\Data\111221\K8922.D\	11/12/21 20:09
MW-DUP	R2111745-017	I:\ACQUDATA\msvoa12\Data\111221\K8923.D\	11/12/21 20:31
MW-7AMS	RQ2114594-05	I:\ACQUDATA\msvoa12\Data\111221\K8924.D\	11/12/21 20:53
MW-7ADMS	RQ2114594-06	I:\ACQUDATA\msvoa12\Data\111221\K8925.D\	11/12/21 21:15

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Analytical Report

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

Service Request: R2111745
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2114546-04

Units: ug/L
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	11/12/21 00:26	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 00:26	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 00:26	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 00:26	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 00:26	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 00:26	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 00:26	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 00:26	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 00:26	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 00:26	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 00:26	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 00:26	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 00:26	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 00:26	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 00:26	
1,4-Dioxane	100 U	100	13	1	11/12/21 00:26	
2-Butanone (MEK)	10 U	10	0.78	1	11/12/21 00:26	
2-Hexanone	10 U	10	0.20	1	11/12/21 00:26	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 00:26	
Acetone	10 U	10	5.0	1	11/12/21 00:26	
Benzene	5.0 U	5.0	0.20	1	11/12/21 00:26	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 00:26	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 00:26	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 00:26	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 00:26	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 00:26	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 00:26	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 00:26	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 00:26	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 00:26	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 00:26	
Cyclohexane	10 U	10	0.26	1	11/12/21 00:26	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 00:26	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 00:26	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 00:26	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 00:26	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 00:26	
Methyl Acetate	10 U	10	0.33	1	11/12/21 00:26	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 00:26	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 00:26	
Styrene	5.0 U	5.0	0.20	1	11/12/21 00:26	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2114546-04

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 00:26	
Toluene	5.0 U	5.0	0.20	1	11/12/21 00:26	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 00:26	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 00:26	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 00:26	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 00:26	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 00:26	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 00:26	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 00:26	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 00:26	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 00:26	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	11/12/21 00:26	
Dibromofluoromethane	98	80 - 116	11/12/21 00:26	
Toluene-d8	106	87 - 121	11/12/21 00:26	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2114594-04

Units: ug/L
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	11/12/21 12:47	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 12:47	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 12:47	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 12:47	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 12:47	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 12:47	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 12:47	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 12:47	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 12:47	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 12:47	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 12:47	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 12:47	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 12:47	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 12:47	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 12:47	
1,4-Dioxane	100 U	100	13	1	11/12/21 12:47	
2-Butanone (MEK)	10 U	10	0.78	1	11/12/21 12:47	
2-Hexanone	10 U	10	0.20	1	11/12/21 12:47	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 12:47	
Acetone	10 U	10	5.0	1	11/12/21 12:47	
Benzene	5.0 U	5.0	0.20	1	11/12/21 12:47	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 12:47	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 12:47	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 12:47	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 12:47	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 12:47	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 12:47	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 12:47	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 12:47	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 12:47	
Chloromethane	0.31 J	5.0	0.28	1	11/12/21 12:47	
Cyclohexane	10 U	10	0.26	1	11/12/21 12:47	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 12:47	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 12:47	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 12:47	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 12:47	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 12:47	
Methyl Acetate	10 U	10	0.33	1	11/12/21 12:47	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 12:47	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 12:47	
Styrene	5.0 U	5.0	0.20	1	11/12/21 12:47	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2114594-04

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 12:47	
Toluene	5.0 U	5.0	0.20	1	11/12/21 12:47	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 12:47	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 12:47	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 12:47	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 12:47	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 12:47	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 12:47	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 12:47	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 12:47	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 12:47	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	11/12/21 12:47	
Dibromofluoromethane	98	80 - 116	11/12/21 12:47	
Toluene-d8	104	87 - 121	11/12/21 12:47	

ALS Group USA, Corp.

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QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/11/21 23:20
Date Extracted:

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name: Lab Control Sample
Lab Code: RQ2114546-03
Analysis Method: 8260C
Prep Method: EPA 5030C

Instrument ID: R-MS-12
File ID: I:\ACQUDATA\msvoa12\Data\111121\K8881.D\
Analysis Lot: 745816

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ2114546-04	I:\ACQUDATA\msvoa12\Data\111121\K8884.D\	11/12/21 00:26
Trip Blank	R2111745-021	I:\ACQUDATA\msvoa12\Data\111121\K8885.D\	11/12/21 00:47
MW-08	R2111745-001	I:\ACQUDATA\msvoa12\Data\111121\K8886.D\	11/12/21 01:09
MW-8A	R2111745-002	I:\ACQUDATA\msvoa12\Data\111121\K8887.D\	11/12/21 01:31
MW-14A	R2111745-003	I:\ACQUDATA\msvoa12\Data\111121\K8888.D\	11/12/21 01:52
MW-26	R2111745-004	I:\ACQUDATA\msvoa12\Data\111121\K8889.D\	11/12/21 02:14
MW-26A	R2111745-005	I:\ACQUDATA\msvoa12\Data\111121\K8890.D\	11/12/21 02:36
MW-9A	R2111745-006	I:\ACQUDATA\msvoa12\Data\111121\K8891.D\	11/12/21 02:58
MW-9	R2111745-007	I:\ACQUDATA\msvoa12\Data\111121\K8892.D\	11/12/21 03:19
MW-7	R2111745-008	I:\ACQUDATA\msvoa12\Data\111121\K8893.D\	11/12/21 03:41

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/12/21 11:27
Date Extracted:

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name: Lab Control Sample
Lab Code: RQ2114594-03
Analysis Method: 8260C
Prep Method: EPA 5030C

Instrument ID: R-MS-12
File ID: I:\ACQUDATA\msvoa12\Data\111221\K8899.D\
Analysis Lot: 745908

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ2114594-04	I:\ACQUDATA\msvoa12\Data\111221\K8902.D\	11/12/21 12:47
MW-15A	R2111745-014	I:\ACQUDATA\msvoa12\Data\111221\K8907.D\	11/12/21 14:42
MW-25A	R2111745-015	I:\ACQUDATA\msvoa12\Data\111221\K8908.D\	11/12/21 15:04
MW-11	R2111745-019	I:\ACQUDATA\msvoa12\Data\111221\K8909.D\	11/12/21 15:26
MW-19R	R2111745-010	I:\ACQUDATA\msvoa12\Data\111221\K8910.D\	11/12/21 15:47
MW-7A	R2111745-018	I:\ACQUDATA\msvoa12\Data\111221\K8911.D\	11/12/21 16:09
MW-19AR	R2111745-011	I:\ACQUDATA\msvoa12\Data\111221\K8913.D\	11/12/21 16:53
MW-DUP	R2111745-017	I:\ACQUDATA\msvoa12\Data\111221\K8914.D\	11/12/21 17:15
MW-5R	R2111745-012	I:\ACQUDATA\msvoa12\Data\111221\K8915.D\	11/12/21 17:37
MW-20A	R2111745-016	I:\ACQUDATA\msvoa12\Data\111221\K8916.D\	11/12/21 17:58
MW-13	R2111745-022	I:\ACQUDATA\msvoa12\Data\111221\K8918.D\	11/12/21 18:42
MW-5AR	R2111745-013	I:\ACQUDATA\msvoa12\Data\111221\K8919.D\	11/12/21 19:04
MW-10	R2111745-020	I:\ACQUDATA\msvoa12\Data\111221\K8921.D\	11/12/21 19:48
MW-6	R2111745-009	I:\ACQUDATA\msvoa12\Data\111221\K8922.D\	11/12/21 20:09
MW-DUP	R2111745-017	I:\ACQUDATA\msvoa12\Data\111221\K8923.D\	11/12/21 20:31
MW-7AMS	RQ2114594-05	I:\ACQUDATA\msvoa12\Data\111221\K8924.D\	11/12/21 20:53
MW-7ADMS	RQ2114594-06	I:\ACQUDATA\msvoa12\Data\111221\K8925.D\	11/12/21 21:15

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/11/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2114546-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	17.5	20.0	88	75-125
1,1,2,2-Tetrachloroethane	8260C	22.1	20.0	111	78-126
1,1,2-Trichloroethane	8260C	20.5	20.0	103	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	17.9	20.0	90	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	20.4	20.0	102	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	20.5	20.0	102	71-118
1,2,3-Trichlorobenzene	8260C	21.6	20.0	108	67-136
1,2,4-Trichlorobenzene	8260C	21.5	20.0	108	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	22.2	20.0	111	55-136
1,2-Dibromoethane	8260C	20.5	20.0	103	82-127
1,2-Dichlorobenzene	8260C	20.7	20.0	103	80-119
1,2-Dichloroethane	8260C	17.9	20.0	89	71-127
1,2-Dichloropropane	8260C	20.0	20.0	100	80-119
1,3-Dichlorobenzene	8260C	20.5	20.0	103	83-121
1,4-Dichlorobenzene	8260C	19.5	20.0	97	79-119
1,4-Dioxane	8260C	412	400	103	44-154
2-Butanone (MEK)	8260C	20.2	20.0	101	61-137
2-Hexanone	8260C	20.8	20.0	104	63-124
4-Methyl-2-pentanone	8260C	21.5	20.0	107	66-124
Acetone	8260C	18.2	20.0	91	40-161
Benzene	8260C	20.3	20.0	101	79-119
Bromochloromethane	8260C	19.9	20.0	99	81-126
Bromodichloromethane	8260C	18.8	20.0	94	81-123
Bromoform	8260C	19.8	20.0	99	65-146
Bromomethane	8260C	19.9	20.0	99	42-166
Carbon Disulfide	8260C	25.7	20.0	129 *	66-128
Carbon Tetrachloride	8260C	16.8	20.0	84	70-127
Chlorobenzene	8260C	20.0	20.0	100	80-121
Chloroethane	8260C	21.3	20.0	106	62-131
Chloroform	8260C	18.4	20.0	92	79-120
Chloromethane	8260C	28.4	20.0	142 *	65-135
Cyclohexane	8260C	20.2	20.0	101	69-120
Dibromochloromethane	8260C	18.1	20.0	91	72-128

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Superset Reference:21-0000610573 rev 00

ALS Group USA, Corp.
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QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/11/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2114546-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	19.5	20.0	98	59-155
Dichloromethane	8260C	19.4	20.0	97	73-122
Ethylbenzene	8260C	19.2	20.0	96	76-120
Isopropylbenzene (Cumene)	8260C	20.5	20.0	103	77-128
Methyl Acetate	8260C	24.1	20.0	120	61-133
Methyl tert-Butyl Ether	8260C	20.4	20.0	102	75-118
Methylcyclohexane	8260C	20.5	20.0	103	51-129
Styrene	8260C	20.4	20.0	102	80-124
Tetrachloroethene (PCE)	8260C	17.9	20.0	90	72-125
Toluene	8260C	20.3	20.0	102	79-119
Trichloroethene (TCE)	8260C	19.4	20.0	97	74-122
Trichlorofluoromethane (CFC 11)	8260C	16.6	20.0	83	71-136
Vinyl Chloride	8260C	21.8	20.0	109	74-159
cis-1,2-Dichloroethene	8260C	20.3	20.0	102	80-121
cis-1,3-Dichloropropene	8260C	21.0	20.0	105	77-122
m,p-Xylenes	8260C	39.5	40.0	99	80-126
o-Xylene	8260C	19.6	20.0	98	79-123
trans-1,2-Dichloroethene	8260C	19.7	20.0	99	73-118
trans-1,3-Dichloropropene	8260C	21.0	20.0	105	71-133

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/12/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2114594-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	18.0	20.0	90	75-125
1,1,2,2-Tetrachloroethane	8260C	21.0	20.0	105	78-126
1,1,2-Trichloroethane	8260C	19.6	20.0	98	82-121
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	19.1	20.0	96	67-124
1,1-Dichloroethane (1,1-DCA)	8260C	18.9	20.0	95	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	19.8	20.0	99	71-118
1,2,3-Trichlorobenzene	8260C	21.4	20.0	107	67-136
1,2,4-Trichlorobenzene	8260C	21.0	20.0	105	75-132
1,2-Dibromo-3-chloropropane (DBCP)	8260C	20.3	20.0	101	55-136
1,2-Dibromoethane	8260C	20.5	20.0	103	82-127
1,2-Dichlorobenzene	8260C	20.6	20.0	103	80-119
1,2-Dichloroethane	8260C	17.4	20.0	87	71-127
1,2-Dichloropropane	8260C	19.9	20.0	99	80-119
1,3-Dichlorobenzene	8260C	20.4	20.0	102	83-121
1,4-Dichlorobenzene	8260C	19.4	20.0	97	79-119
1,4-Dioxane	8260C	339	400	85	44-154
2-Butanone (MEK)	8260C	16.9	20.0	85	61-137
2-Hexanone	8260C	17.8	20.0	89	63-124
4-Methyl-2-pentanone	8260C	17.6	20.0	88	66-124
Acetone	8260C	14.8	20.0	74	40-161
Benzene	8260C	19.2	20.0	96	79-119
Bromochloromethane	8260C	20.6	20.0	103	81-126
Bromodichloromethane	8260C	17.7	20.0	89	81-123
Bromoform	8260C	18.9	20.0	94	65-146
Bromomethane	8260C	17.2	20.0	86	42-166
Carbon Disulfide	8260C	24.6	20.0	123	66-128
Carbon Tetrachloride	8260C	16.6	20.0	83	70-127
Chlorobenzene	8260C	20.4	20.0	102	80-121
Chloroethane	8260C	21.4	20.0	107	62-131
Chloroform	8260C	18.2	20.0	91	79-120
Chloromethane	8260C	26.3	20.0	131	65-135
Cyclohexane	8260C	17.2	20.0	86	69-120
Dibromochloromethane	8260C	19.1	20.0	96	72-128

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Superset Reference:21-0000610573 rev 00

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/12/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2114594-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dichlorodifluoromethane (CFC 12)	8260C	20.1	20.0	100	59-155
Dichloromethane	8260C	19.2	20.0	96	73-122
Ethylbenzene	8260C	19.9	20.0	100	76-120
Isopropylbenzene (Cumene)	8260C	21.1	20.0	105	77-128
Methyl Acetate	8260C	19.8	20.0	99	61-133
Methyl tert-Butyl Ether	8260C	19.1	20.0	96	75-118
Methylcyclohexane	8260C	18.8	20.0	94	51-129
Styrene	8260C	21.0	20.0	105	80-124
Tetrachloroethene (PCE)	8260C	20.0	20.0	100	72-125
Toluene	8260C	20.2	20.0	101	79-119
Trichloroethene (TCE)	8260C	18.8	20.0	94	74-122
Trichlorofluoromethane (CFC 11)	8260C	17.3	20.0	87	71-136
Vinyl Chloride	8260C	21.8	20.0	109	74-159
cis-1,2-Dichloroethene	8260C	19.7	20.0	99	80-121
cis-1,3-Dichloropropene	8260C	20.4	20.0	102	77-122
m,p-Xylenes	8260C	40.7	40.0	102	80-126
o-Xylene	8260C	20.3	20.0	102	79-123
trans-1,2-Dichloroethene	8260C	19.5	20.0	98	73-118
trans-1,3-Dichloropropene	8260C	20.6	20.0	103	71-133

ALS Group USA, Corp.
dba ALS Environmental

QC/QC Report

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

Service Request: R2111745
Date Analyzed: 11/11/21 22:37

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\111121\K8879.D\
Instrument ID: R-MS-12

Analytical Method: 8260C
Analysis Lot: 745816

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	17.84	35024	Pass
75	95	30	60	47.49	93259	Pass
95	95	100	100	100.00	196360	Pass
96	95	5	9	6.71	13166	Pass
173	174	0	2	0.57	894	Pass
174	95	50	120	80.07	157235	Pass
175	174	5	9	7.08	11134	Pass
176	174	95	101	97.03	152571	Pass
177	176	5	9	6.58	10045	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2114546-02	I:\ACQUDATA\msvoa12\Data\111121\K8880.D\	11/11/21 22:58	
Lab Control Sample	RQ2114546-03	I:\ACQUDATA\msvoa12\Data\111121\K8881.D\	11/11/21 23:20	
Method Blank	RQ2114546-04	I:\ACQUDATA\msvoa12\Data\111121\K8884.D\	11/12/21 00:26	
Trip Blank	R2111745-021	I:\ACQUDATA\msvoa12\Data\111121\K8885.D\	11/12/21 00:47	
MW-08	R2111745-001	I:\ACQUDATA\msvoa12\Data\111121\K8886.D\	11/12/21 01:09	
MW-8A	R2111745-002	I:\ACQUDATA\msvoa12\Data\111121\K8887.D\	11/12/21 01:31	
MW-14A	R2111745-003	I:\ACQUDATA\msvoa12\Data\111121\K8888.D\	11/12/21 01:52	
MW-26	R2111745-004	I:\ACQUDATA\msvoa12\Data\111121\K8889.D\	11/12/21 02:14	
MW-26A	R2111745-005	I:\ACQUDATA\msvoa12\Data\111121\K8890.D\	11/12/21 02:36	
MW-9A	R2111745-006	I:\ACQUDATA\msvoa12\Data\111121\K8891.D\	11/12/21 02:58	
MW-9	R2111745-007	I:\ACQUDATA\msvoa12\Data\111121\K8892.D\	11/12/21 03:19	
MW-7	R2111745-008	I:\ACQUDATA\msvoa12\Data\111121\K8893.D\	11/12/21 03:41	

ALS Group USA, Corp.
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QC/QC Report

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

Service Request: R2111745
Date Analyzed: 11/12/21 10:30

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\111221\K8897.D\
Instrument ID: R-MS-12

Analytical Method: 8260C
Analysis Lot: 745908

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	16.57	35568	Pass
75	95	30	60	46.67	100157	Pass
95	95	100	100	100.00	214592	Pass
96	95	5	9	6.53	14011	Pass
173	174	0	2	0.62	958	Pass
174	95	50	120	71.99	154491	Pass
175	174	5	9	7.02	10838	Pass
176	174	95	101	97.56	150723	Pass
177	176	5	9	6.51	9811	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ2114594-02	I:\ACQUDATA\msvoa12\Data\111221\K8898.D\	11/12/21 11:01	
Lab Control Sample	RQ2114594-03	I:\ACQUDATA\msvoa12\Data\111221\K8899.D\	11/12/21 11:27	
Method Blank	RQ2114594-04	I:\ACQUDATA\msvoa12\Data\111221\K8902.D\	11/12/21 12:47	
MW-15A	R2111745-014	I:\ACQUDATA\msvoa12\Data\111221\K8907.D\	11/12/21 14:42	
MW-25A	R2111745-015	I:\ACQUDATA\msvoa12\Data\111221\K8908.D\	11/12/21 15:04	
MW-11	R2111745-019	I:\ACQUDATA\msvoa12\Data\111221\K8909.D\	11/12/21 15:26	
MW-19R	R2111745-010	I:\ACQUDATA\msvoa12\Data\111221\K8910.D\	11/12/21 15:47	
MW-7A	R2111745-018	I:\ACQUDATA\msvoa12\Data\111221\K8911.D\	11/12/21 16:09	
MW-19AR	R2111745-011	I:\ACQUDATA\msvoa12\Data\111221\K8913.D\	11/12/21 16:53	
MW-DUP	R2111745-017	I:\ACQUDATA\msvoa12\Data\111221\K8914.D\	11/12/21 17:15	
MW-5R	R2111745-012	I:\ACQUDATA\msvoa12\Data\111221\K8915.D\	11/12/21 17:37	
MW-20A	R2111745-016	I:\ACQUDATA\msvoa12\Data\111221\K8916.D\	11/12/21 17:58	
MW-13	R2111745-022	I:\ACQUDATA\msvoa12\Data\111221\K8918.D\	11/12/21 18:42	
MW-5AR	R2111745-013	I:\ACQUDATA\msvoa12\Data\111221\K8919.D\	11/12/21 19:04	
MW-10	R2111745-020	I:\ACQUDATA\msvoa12\Data\111221\K8921.D\	11/12/21 19:48	
MW-6	R2111745-009	I:\ACQUDATA\msvoa12\Data\111221\K8922.D\	11/12/21 20:09	
MW-DUP	R2111745-017	I:\ACQUDATA\msvoa12\Data\111221\K8923.D\	11/12/21 20:31	
MW-7A	RQ2114594-05	I:\ACQUDATA\msvoa12\Data\111221\K8924.D\	11/12/21 20:53	
MW-7A	RQ2114594-06	I:\ACQUDATA\msvoa12\Data\111221\K8925.D\	11/12/21 21:15	

ALS Group USA, Corp.
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QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/11/21 22:58

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

File ID: I:\ACQUDATA\msvoa12\Data\111121\K8880.D\
Instrument ID: R-MS-12
Analysis Method: 8260C

Lab Code: RQ2114546-02
Analysis Lot: 745816
Signal ID: 1

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
	Result ==>	288,166	11.83	634,478	6.52	575,282	9.80
	Upper Limit ==>	576,332	12.00	1,268,956	6.69	1,150,564	9.97
	Lower Limit ==>	144,083	11.66	317,239	6.35	287,641	9.63
Associated Analyses							
Lab Control Sample	RQ2114546-03	261076	11.83	596243	6.53	544747	9.80
Method Blank	RQ2114546-04	260310	11.83	624653	6.52	568789	9.80

ALS Group USA, Corp.
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QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/11/21 22:58

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

File ID: I:\ACQUDATA\msvoa12\Data\111121\K8880.D\
Instrument ID: R-MS-12
Analysis Method: 8260C

Lab Code: RQ2114546-02
Analysis Lot: 745816
Signal ID: 1

	Pentafluorobenzene	
	Area	RT
Result ==>	385,196	5.45
Upper Limit ==>	770,392	5.62
Lower Limit ==>	192,598	5.28

Associated Analyses

Lab Control Sample	RQ2114546-03	363762	5.46
Method Blank	RQ2114546-04	381260	5.44

ALS Group USA, Corp.
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QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/11/21 22:58

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

File ID: I:\ACQUDATA\msvoa12\Data\111121\K8880.D\
Instrument ID: R-MS-12
Analysis Method: 8260C

Lab Code: RQ2114546-02
Analysis Lot: 745816
Signal ID:

	1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
Result ==>	288,166	11.83	634,478	6.52	575,282	9.80
Upper Limit ==>	576,332	12.00	1,268,956	6.69	1,150,564	9.97
Lower Limit ==>	144,083	11.66	317,239	6.35	287,641	9.63

Associated Analyses

Trip Blank	R2111745-021	260675	11.83	628532	6.52	560070	9.80
MW-08	R2111745-001	257241	11.83	605906	6.53	538926	9.80
MW-8A	R2111745-002	269683	11.83	617368	6.52	558557	9.80
MW-14A	R2111745-003	266764	11.83	634760	6.52	563722	9.80
MW-26	R2111745-004	264749	11.83	618007	6.52	560577	9.80
MW-26A	R2111745-005	266833	11.83	640130	6.52	569447	9.80
MW-9A	R2111745-006	260040	11.83	616424	6.52	545203	9.80
MW-9	R2111745-007	271020	11.83	627226	6.52	552450	9.80
MW-7	R2111745-008	269802	11.83	632896	6.52	561295	9.80

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/11/21 22:58

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

File ID: I:\ACQUDATA\msvoa12\Data\111121\K8880.D\
Instrument ID: R-MS-12
Analysis Method: 8260C

Lab Code: RQ2114546-02
Analysis Lot: 745816
Signal ID:

	Pentafluorobenzene	
	Area	RT
Result ==>	385,196	5.45
Upper Limit ==>	770,392	5.62
Lower Limit ==>	192,598	5.28

Associated Analyses

Trip Blank	R2111745-021	387765	5.44
MW-08	R2111745-001	363070	5.45
MW-8A	R2111745-002	372900	5.45
MW-14A	R2111745-003	386897	5.44
MW-26	R2111745-004	375802	5.44
MW-26A	R2111745-005	382560	5.44
MW-9A	R2111745-006	373913	5.46
MW-9	R2111745-007	372744	5.45
MW-7	R2111745-008	379792	5.44

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/12/21 11:01

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

File ID: I:\ACQUDATA\msvoa12\Data\111221\K8898.D\
Instrument ID: R-MS-12
Analysis Method: 8260C

Lab Code: RQ2114594-02
Analysis Lot: 745908
Signal ID: 1

	1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
Result ==>	302,385	11.83	675,063	6.52	609,990	9.80
Upper Limit ==>	604,770	12.00	1,350,126	6.69	1,219,980	9.97
Lower Limit ==>	151,193	11.66	337,532	6.35	304,995	9.63

Associated Analyses

Lab Control Sample	RQ2114594-03	292433	11.83	666594	6.52	594275	9.80
Method Blank	RQ2114594-04	277614	11.83	647303	6.52	578732	9.80
MW-15A	R2111745-014	260903	11.83	613163	6.53	549485	9.80
MW-25A	R2111745-015	269595	11.83	622289	6.52	552481	9.80
MW-11	R2111745-019	274314	11.83	647125	6.52	585339	9.80
MW-19R	R2111745-010	267848	11.83	640568	6.52	570939	9.80
MW-7A	R2111745-018	272489	11.83	632181	6.52	571820	9.80
MW-19AR	R2111745-011	280283	11.83	643012	6.52	571813	9.80
MW-DUP	R2111745-017	264138	11.83	618017	6.52	556824	9.80
MW-5R	R2111745-012	268663	11.83	624913	6.52	558608	9.80
MW-20A	R2111745-016	276024	11.83	642624	6.52	576431	9.80
MW-13	R2111745-022	275986	11.83	638838	6.52	569499	9.80
MW-5AR	R2111745-013	264318	11.83	617956	6.52	552008	9.80
MW-10	R2111745-020	274279	11.83	643325	6.52	580400	9.80
MW-6	R2111745-009	274447	11.83	632215	6.52	564776	9.80
MW-DUP	R2111745-017	259432	11.83	610365	6.53	543430	9.80
MW-7AMS	RQ2114594-05	278535	11.83	617422	6.52	561458	9.80
MW-7ADMS	RQ2114594-06	291286	11.83	635658	6.52	582943	9.80

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/12/21 11:01

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

File ID: I:\ACQUDATA\msvoa12\Data\111221\K8898.D\
Instrument ID: R-MS-12
Analysis Method: 8260C

Lab Code: RQ2114594-02
Analysis Lot: 745908
Signal ID: 1

	Pentafluorobenzene	
	Area	RT
Result ==>	410,322	5.44
Upper Limit ==>	820,644	5.61
Lower Limit ==>	205,161	5.27

Associated Analyses

Lab Control Sample	RQ2114594-03	404928	5.44
Method Blank	RQ2114594-04	396659	5.44
MW-15A	R2111745-014	376349	5.46
MW-25A	R2111745-015	381766	5.45
MW-11	R2111745-019	394005	5.44
MW-19R	R2111745-010	388582	5.45
MW-7A	R2111745-018	391157	5.44
MW-19AR	R2111745-011	393150	5.45
MW-DUP	R2111745-017	374248	5.45
MW-5R	R2111745-012	381104	5.45
MW-20A	R2111745-016	397979	5.44
MW-13	R2111745-022	388938	5.44
MW-5AR	R2111745-013	380207	5.46
MW-10	R2111745-020	392400	5.44
MW-6	R2111745-009	390688	5.44
MW-DUP	R2111745-017	373974	5.46
MW-7AMS	RQ2114594-05	379257	5.45
MW-7ADMS	RQ2114594-06	394556	5.45



Raw Data

ALS Environmental—Rochester Laboratory

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Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 09:00
Date Received: 11/05/21 10:20

Sample Name: MW-08
Lab Code: R2111745-001

Units: ug/L
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	11/12/21 01:09	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 01:09	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 01:09	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 01:09	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:09	
1,4-Dioxane	100 U	100	13	1	11/12/21 01:09	
2-Butanone (MEK)	1.5 J	10	0.78	1	11/12/21 01:09	
2-Hexanone	10 U	10	0.20	1	11/12/21 01:09	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 01:09	
Acetone	10 U	10	5.0	1	11/12/21 01:09	
Benzene	5.0 U	5.0	0.20	1	11/12/21 01:09	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 01:09	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 01:09	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 01:09	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 01:09	
Carbon Disulfide	2.0 J	10	0.42	1	11/12/21 01:09	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 01:09	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:09	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 01:09	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 01:09	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 01:09	
Cyclohexane	10 U	10	0.26	1	11/12/21 01:09	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 01:09	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 01:09	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 01:09	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 01:09	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 01:09	
Methyl Acetate	10 U	10	0.33	1	11/12/21 01:09	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 01:09	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 01:09	
Styrene	5.0 U	5.0	0.20	1	11/12/21 01:09	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 09:00
Date Received: 11/05/21 10:20

Sample Name: MW-08
Lab Code: R2111745-001

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 01:09	
Toluene	5.0 U	5.0	0.20	1	11/12/21 01:09	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 01:09	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 01:09	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 01:09	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 01:09	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 01:09	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 01:09	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 01:09	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 01:09	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 01:09	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	11/12/21 01:09	
Dibromofluoromethane	102	80 - 116	11/12/21 01:09	
Toluene-d8	108	87 - 121	11/12/21 01:09	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 09:30
Date Received: 11/05/21 10:20

Sample Name: MW-8A
Lab Code: R2111745-002

Units: ug/L
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	11/12/21 01:31	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 01:31	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 01:31	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 01:31	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:31	
1,4-Dioxane	100 U	100	13	1	11/12/21 01:31	
2-Butanone (MEK)	1.7 J	10	0.78	1	11/12/21 01:31	
2-Hexanone	10 U	10	0.20	1	11/12/21 01:31	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 01:31	
Acetone	10 U	10	5.0	1	11/12/21 01:31	
Benzene	5.0 U	5.0	0.20	1	11/12/21 01:31	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 01:31	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 01:31	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 01:31	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 01:31	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 01:31	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 01:31	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:31	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 01:31	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 01:31	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 01:31	
Cyclohexane	10 U	10	0.26	1	11/12/21 01:31	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 01:31	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 01:31	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 01:31	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 01:31	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 01:31	
Methyl Acetate	10 U	10	0.33	1	11/12/21 01:31	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 01:31	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 01:31	
Styrene	5.0 U	5.0	0.20	1	11/12/21 01:31	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 09:30
Date Received: 11/05/21 10:20

Sample Name: MW-8A
Lab Code: R2111745-002

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 01:31	
Toluene	5.0 U	5.0	0.20	1	11/12/21 01:31	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 01:31	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 01:31	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 01:31	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 01:31	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 01:31	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 01:31	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 01:31	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 01:31	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 01:31	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	11/12/21 01:31	
Dibromofluoromethane	98	80 - 116	11/12/21 01:31	
Toluene-d8	106	87 - 121	11/12/21 01:31	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 10:25
Date Received: 11/05/21 10:20

Sample Name: MW-14A
Lab Code: R2111745-003

Units: ug/L
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	11/12/21 01:52	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 01:52	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 01:52	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 01:52	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:52	
1,4-Dioxane	100 U	100	13	1	11/12/21 01:52	
2-Butanone (MEK)	1.2 J	10	0.78	1	11/12/21 01:52	
2-Hexanone	10 U	10	0.20	1	11/12/21 01:52	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 01:52	
Acetone	10 U	10	5.0	1	11/12/21 01:52	
Benzene	5.0 U	5.0	0.20	1	11/12/21 01:52	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 01:52	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 01:52	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 01:52	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 01:52	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 01:52	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 01:52	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 01:52	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 01:52	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 01:52	
Chloromethane	0.67 J	5.0	0.28	1	11/12/21 01:52	
Cyclohexane	10 U	10	0.26	1	11/12/21 01:52	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 01:52	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 01:52	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 01:52	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 01:52	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 01:52	
Methyl Acetate	10 U	10	0.33	1	11/12/21 01:52	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 01:52	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 01:52	
Styrene	5.0 U	5.0	0.20	1	11/12/21 01:52	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 10:25
Date Received: 11/05/21 10:20

Sample Name: MW-14A
Lab Code: R2111745-003

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 01:52	
Toluene	5.0 U	5.0	0.20	1	11/12/21 01:52	
Trichloroethene (TCE)	0.71 J	5.0	0.20	1	11/12/21 01:52	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 01:52	
Vinyl Chloride	2.2 J	5.0	0.20	1	11/12/21 01:52	
cis-1,2-Dichloroethene	5.5	5.0	0.23	1	11/12/21 01:52	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 01:52	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 01:52	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 01:52	
trans-1,2-Dichloroethene	0.28 J	5.0	0.20	1	11/12/21 01:52	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 01:52	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	11/12/21 01:52	
Dibromofluoromethane	99	80 - 116	11/12/21 01:52	
Toluene-d8	106	87 - 121	11/12/21 01:52	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 11:35
Date Received: 11/05/21 10:20

Sample Name: MW-26
Lab Code: R2111745-004

Units: ug/L
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	11/12/21 02:14	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 02:14	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 02:14	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 02:14	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:14	
1,4-Dioxane	100 U	100	13	1	11/12/21 02:14	
2-Butanone (MEK)	0.78 J	10	0.78	1	11/12/21 02:14	
2-Hexanone	10 U	10	0.20	1	11/12/21 02:14	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 02:14	
Acetone	10 U	10	5.0	1	11/12/21 02:14	
Benzene	5.0 U	5.0	0.20	1	11/12/21 02:14	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 02:14	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 02:14	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 02:14	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 02:14	
Carbon Disulfide	2.5 J	10	0.42	1	11/12/21 02:14	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 02:14	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:14	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 02:14	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 02:14	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 02:14	
Cyclohexane	10 U	10	0.26	1	11/12/21 02:14	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 02:14	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 02:14	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 02:14	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 02:14	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 02:14	
Methyl Acetate	10 U	10	0.33	1	11/12/21 02:14	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 02:14	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 02:14	
Styrene	5.0 U	5.0	0.20	1	11/12/21 02:14	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 11:35
Date Received: 11/05/21 10:20

Sample Name: MW-26
Lab Code: R2111745-004

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 02:14	
Toluene	5.0 U	5.0	0.20	1	11/12/21 02:14	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 02:14	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 02:14	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 02:14	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 02:14	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 02:14	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 02:14	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 02:14	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 02:14	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 02:14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	11/12/21 02:14	
Dibromofluoromethane	101	80 - 116	11/12/21 02:14	
Toluene-d8	108	87 - 121	11/12/21 02:14	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 12:00
Date Received: 11/05/21 10:20

Sample Name: MW-26A
Lab Code: R2111745-005

Units: ug/L
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	11/12/21 02:36	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 02:36	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 02:36	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 02:36	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:36	
1,4-Dioxane	100 U	100	13	1	11/12/21 02:36	
2-Butanone (MEK)	10 U	10	0.78	1	11/12/21 02:36	
2-Hexanone	10 U	10	0.20	1	11/12/21 02:36	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 02:36	
Acetone	10 U	10	5.0	1	11/12/21 02:36	
Benzene	5.0 U	5.0	0.20	1	11/12/21 02:36	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 02:36	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 02:36	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 02:36	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 02:36	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 02:36	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 02:36	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:36	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 02:36	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 02:36	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 02:36	
Cyclohexane	10 U	10	0.26	1	11/12/21 02:36	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 02:36	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 02:36	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 02:36	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 02:36	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 02:36	
Methyl Acetate	10 U	10	0.33	1	11/12/21 02:36	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 02:36	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 02:36	
Styrene	5.0 U	5.0	0.20	1	11/12/21 02:36	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 12:00
Date Received: 11/05/21 10:20

Sample Name: MW-26A
Lab Code: R2111745-005

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 02:36	
Toluene	5.0 U	5.0	0.20	1	11/12/21 02:36	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 02:36	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 02:36	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 02:36	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 02:36	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 02:36	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 02:36	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 02:36	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 02:36	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 02:36	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	11/12/21 02:36	
Dibromofluoromethane	100	80 - 116	11/12/21 02:36	
Toluene-d8	105	87 - 121	11/12/21 02:36	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 13:25
Date Received: 11/05/21 10:20

Sample Name: MW-9A
Lab Code: R2111745-006

Units: ug/L
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	11/12/21 02:58	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 02:58	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 02:58	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 02:58	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:58	
1,4-Dioxane	100 U	100	13	1	11/12/21 02:58	
2-Butanone (MEK)	10 U	10	0.78	1	11/12/21 02:58	
2-Hexanone	10 U	10	0.20	1	11/12/21 02:58	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 02:58	
Acetone	10 U	10	5.0	1	11/12/21 02:58	
Benzene	5.0 U	5.0	0.20	1	11/12/21 02:58	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 02:58	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 02:58	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 02:58	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 02:58	
Carbon Disulfide	2.8 J	10	0.42	1	11/12/21 02:58	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 02:58	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 02:58	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 02:58	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 02:58	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 02:58	
Cyclohexane	10 U	10	0.26	1	11/12/21 02:58	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 02:58	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 02:58	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 02:58	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 02:58	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 02:58	
Methyl Acetate	10 U	10	0.33	1	11/12/21 02:58	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 02:58	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 02:58	
Styrene	5.0 U	5.0	0.20	1	11/12/21 02:58	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 13:25
Date Received: 11/05/21 10:20

Sample Name: MW-9A
Lab Code: R2111745-006

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 02:58	
Toluene	5.0 U	5.0	0.20	1	11/12/21 02:58	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 02:58	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 02:58	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 02:58	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 02:58	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 02:58	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 02:58	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 02:58	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 02:58	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 02:58	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	11/12/21 02:58	
Dibromofluoromethane	99	80 - 116	11/12/21 02:58	
Toluene-d8	106	87 - 121	11/12/21 02:58	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 13:50
Date Received: 11/05/21 10:20

Sample Name: MW-9
Lab Code: R2111745-007

Units: ug/L
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	11/12/21 03:19	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,1-Dichloroethene (1,1-DCE)	1.2 J	5.0	0.20	1	11/12/21 03:19	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 03:19	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 03:19	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 03:19	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 03:19	
1,4-Dioxane	100 U	100	13	1	11/12/21 03:19	
2-Butanone (MEK)	1.0 J	10	0.78	1	11/12/21 03:19	
2-Hexanone	10 U	10	0.20	1	11/12/21 03:19	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 03:19	
Acetone	10 U	10	5.0	1	11/12/21 03:19	
Benzene	5.0 U	5.0	0.20	1	11/12/21 03:19	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 03:19	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 03:19	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 03:19	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 03:19	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 03:19	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 03:19	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 03:19	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 03:19	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 03:19	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 03:19	
Cyclohexane	10 U	10	0.26	1	11/12/21 03:19	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 03:19	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 03:19	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 03:19	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 03:19	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 03:19	
Methyl Acetate	10 U	10	0.33	1	11/12/21 03:19	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 03:19	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 03:19	
Styrene	5.0 U	5.0	0.20	1	11/12/21 03:19	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 13:50
Date Received: 11/05/21 10:20

Sample Name: MW-9
Lab Code: R2111745-007

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 03:19	
Toluene	5.0 U	5.0	0.20	1	11/12/21 03:19	
Trichloroethene (TCE)	0.41 J	5.0	0.20	1	11/12/21 03:19	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 03:19	
Vinyl Chloride	36	5.0	0.20	1	11/12/21 03:19	
cis-1,2-Dichloroethene	120	5.0	0.23	1	11/12/21 03:19	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 03:19	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 03:19	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 03:19	
trans-1,2-Dichloroethene	0.48 J	5.0	0.20	1	11/12/21 03:19	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 03:19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	11/12/21 03:19	
Dibromofluoromethane	102	80 - 116	11/12/21 03:19	
Toluene-d8	107	87 - 121	11/12/21 03:19	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 14:30
Date Received: 11/05/21 10:20

Sample Name: MW-7
Lab Code: R2111745-008

Units: ug/L
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	11/12/21 03:41	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 03:41	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 03:41	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 03:41	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 03:41	
1,4-Dioxane	100 U	100	13	1	11/12/21 03:41	
2-Butanone (MEK)	0.84 J	10	0.78	1	11/12/21 03:41	
2-Hexanone	10 U	10	0.20	1	11/12/21 03:41	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 03:41	
Acetone	10 U	10	5.0	1	11/12/21 03:41	
Benzene	5.0 U	5.0	0.20	1	11/12/21 03:41	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 03:41	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 03:41	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 03:41	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 03:41	
Carbon Disulfide	2.4 J	10	0.42	1	11/12/21 03:41	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 03:41	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 03:41	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 03:41	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 03:41	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 03:41	
Cyclohexane	10 U	10	0.26	1	11/12/21 03:41	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 03:41	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 03:41	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 03:41	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 03:41	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 03:41	
Methyl Acetate	10 U	10	0.33	1	11/12/21 03:41	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 03:41	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 03:41	
Styrene	5.0 U	5.0	0.20	1	11/12/21 03:41	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 14:30
Date Received: 11/05/21 10:20

Sample Name: MW-7
Lab Code: R2111745-008

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 03:41	
Toluene	0.45 J	5.0	0.20	1	11/12/21 03:41	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 03:41	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 03:41	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 03:41	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 03:41	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 03:41	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 03:41	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 03:41	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 03:41	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 03:41	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	11/12/21 03:41	
Dibromofluoromethane	100	80 - 116	11/12/21 03:41	
Toluene-d8	105	87 - 121	11/12/21 03:41	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 15:15
Date Received: 11/05/21 10:20

Sample Name: MW-6
Lab Code: R2111745-009

Units: ug/L
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	11/12/21 20:09	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 20:09	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 20:09	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 20:09	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 20:09	
1,4-Dioxane	100 U	100	13	1	11/12/21 20:09	
2-Butanone (MEK)	10 U	10	0.78	1	11/12/21 20:09	
2-Hexanone	10 U	10	0.20	1	11/12/21 20:09	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 20:09	
Acetone	10 U	10	5.0	1	11/12/21 20:09	
Benzene	5.0 U	5.0	0.20	1	11/12/21 20:09	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 20:09	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 20:09	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 20:09	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 20:09	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 20:09	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 20:09	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 20:09	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 20:09	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 20:09	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 20:09	
Cyclohexane	10 U	10	0.26	1	11/12/21 20:09	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 20:09	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 20:09	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 20:09	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 20:09	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 20:09	
Methyl Acetate	10 U	10	0.33	1	11/12/21 20:09	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 20:09	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 20:09	
Styrene	5.0 U	5.0	0.20	1	11/12/21 20:09	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21 15:15
Date Received: 11/05/21 10:20

Sample Name: MW-6
Lab Code: R2111745-009

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 20:09	
Toluene	5.0 U	5.0	0.20	1	11/12/21 20:09	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 20:09	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 20:09	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 20:09	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 20:09	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 20:09	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 20:09	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 20:09	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 20:09	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 20:09	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	11/12/21 20:09	
Dibromofluoromethane	100	80 - 116	11/12/21 20:09	
Toluene-d8	104	87 - 121	11/12/21 20:09	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 08:45
Date Received: 11/05/21 10:20

Sample Name: MW-19R
Lab Code: R2111745-010

Units: ug/L
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	11/12/21 15:47	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 15:47	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 15:47	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 15:47	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 15:47	
1,4-Dioxane	100 U	100	13	1	11/12/21 15:47	
2-Butanone (MEK)	10 U	10	0.78	1	11/12/21 15:47	
2-Hexanone	10 U	10	0.20	1	11/12/21 15:47	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 15:47	
Acetone	10 U	10	5.0	1	11/12/21 15:47	
Benzene	5.0 U	5.0	0.20	1	11/12/21 15:47	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 15:47	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 15:47	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 15:47	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 15:47	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 15:47	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 15:47	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 15:47	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 15:47	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 15:47	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 15:47	
Cyclohexane	10 U	10	0.26	1	11/12/21 15:47	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 15:47	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 15:47	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 15:47	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 15:47	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 15:47	
Methyl Acetate	10 U	10	0.33	1	11/12/21 15:47	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 15:47	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 15:47	
Styrene	5.0 U	5.0	0.20	1	11/12/21 15:47	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 08:45
Date Received: 11/05/21 10:20

Sample Name: MW-19R
Lab Code: R2111745-010

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 15:47	
Toluene	5.0 U	5.0	0.20	1	11/12/21 15:47	
Trichloroethene (TCE)	42	5.0	0.20	1	11/12/21 15:47	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 15:47	
Vinyl Chloride	0.22 J	5.0	0.20	1	11/12/21 15:47	
cis-1,2-Dichloroethene	11	5.0	0.23	1	11/12/21 15:47	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 15:47	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 15:47	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 15:47	
trans-1,2-Dichloroethene	1.5 J	5.0	0.20	1	11/12/21 15:47	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 15:47	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	11/12/21 15:47	
Dibromofluoromethane	101	80 - 116	11/12/21 15:47	
Toluene-d8	104	87 - 121	11/12/21 15:47	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 09:15
Date Received: 11/05/21 10:20

Sample Name: MW-19AR
Lab Code: R2111745-011

Units: ug/L
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)	10 U	10	0.40	2	11/12/21 16:53	
1,1,2,2-Tetrachloroethane	10 U	10	0.40	2	11/12/21 16:53	
1,1,2-Trichloroethane	10 U	10	0.40	2	11/12/21 16:53	
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	10	0.40	2	11/12/21 16:53	
1,1-Dichloroethane (1,1-DCA)	10 U	10	0.40	2	11/12/21 16:53	
1,1-Dichloroethene (1,1-DCE)	10 U	10	0.40	2	11/12/21 16:53	
1,2,3-Trichlorobenzene	10 U	10	0.50	2	11/12/21 16:53	
1,2,4-Trichlorobenzene	10 U	10	0.68	2	11/12/21 16:53	
1,2-Dibromo-3-chloropropane (DBCP)	10 U	10	0.90	2	11/12/21 16:53	
1,2-Dibromoethane	10 U	10	0.40	2	11/12/21 16:53	
1,2-Dichlorobenzene	10 U	10	0.40	2	11/12/21 16:53	
1,2-Dichloroethane	10 U	10	0.40	2	11/12/21 16:53	
1,2-Dichloropropane	10 U	10	0.40	2	11/12/21 16:53	
1,3-Dichlorobenzene	10 U	10	0.40	2	11/12/21 16:53	
1,4-Dichlorobenzene	10 U	10	0.40	2	11/12/21 16:53	
1,4-Dioxane	200 U	200	26	2	11/12/21 16:53	
2-Butanone (MEK)	20 U	20	1.6	2	11/12/21 16:53	
2-Hexanone	20 U	20	0.40	2	11/12/21 16:53	
4-Methyl-2-pentanone	20 U	20	0.40	2	11/12/21 16:53	
Acetone	20 U	20	10	2	11/12/21 16:53	
Benzene	10 U	10	0.40	2	11/12/21 16:53	
Bromochloromethane	10 U	10	0.40	2	11/12/21 16:53	
Bromodichloromethane	10 U	10	0.40	2	11/12/21 16:53	
Bromoform	10 U	10	0.50	2	11/12/21 16:53	
Bromomethane	10 U	10	1.4	2	11/12/21 16:53	
Carbon Disulfide	20 U	20	0.84	2	11/12/21 16:53	
Carbon Tetrachloride	10 U	10	0.68	2	11/12/21 16:53	
Chlorobenzene	10 U	10	0.40	2	11/12/21 16:53	
Chloroethane	10 U	10	0.46	2	11/12/21 16:53	
Chloroform	10 U	10	0.48	2	11/12/21 16:53	
Chloromethane	10 U	10	0.56	2	11/12/21 16:53	
Cyclohexane	2.0 J	20	0.52	2	11/12/21 16:53	
Dibromochloromethane	10 U	10	0.40	2	11/12/21 16:53	
Dichlorodifluoromethane (CFC 12)	10 U	10	0.42	2	11/12/21 16:53	
Dichloromethane	10 U	10	1.3	2	11/12/21 16:53	
Ethylbenzene	10 U	10	0.40	2	11/12/21 16:53	
Isopropylbenzene (Cumene)	10 U	10	0.40	2	11/12/21 16:53	
Methyl Acetate	20 U	20	0.66	2	11/12/21 16:53	
Methyl tert-Butyl Ether	10 U	10	0.40	2	11/12/21 16:53	
Methylcyclohexane	2.0 J	20	0.40	2	11/12/21 16:53	
Styrene	10 U	10	0.40	2	11/12/21 16:53	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 09:15
Date Received: 11/05/21 10:20

Sample Name: MW-19AR
Lab Code: R2111745-011

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	10 U	10	0.42	2	11/12/21 16:53	
Toluene	10 U	10	0.40	2	11/12/21 16:53	
Trichloroethene (TCE)	3.4 J	10	0.40	2	11/12/21 16:53	
Trichlorofluoromethane (CFC 11)	10 U	10	0.48	2	11/12/21 16:53	
Vinyl Chloride	37	10	0.40	2	11/12/21 16:53	
cis-1,2-Dichloroethene	250	10	0.46	2	11/12/21 16:53	
cis-1,3-Dichloropropene	10 U	10	0.40	2	11/12/21 16:53	
m,p-Xylenes	0.45 J	10	0.40	2	11/12/21 16:53	
o-Xylene	10 U	10	0.40	2	11/12/21 16:53	
trans-1,2-Dichloroethene	4.0 J	10	0.40	2	11/12/21 16:53	
trans-1,3-Dichloropropene	10 U	10	0.46	2	11/12/21 16:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	11/12/21 16:53	
Dibromofluoromethane	100	80 - 116	11/12/21 16:53	
Toluene-d8	103	87 - 121	11/12/21 16:53	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 09:50
Date Received: 11/05/21 10:20

Sample Name: MW-5R
Lab Code: R2111745-012

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	25 U	25	1.0	5	11/12/21 17:37	
1,1,2,2-Tetrachloroethane	25 U	25	1.0	5	11/12/21 17:37	
1,1,2-Trichloroethane	2.0 J	25	1.0	5	11/12/21 17:37	
1,1,2-Trichloro-1,2,2-trifluoroethane	25 U	25	1.0	5	11/12/21 17:37	
1,1-Dichloroethane (1,1-DCA)	25 U	25	1.0	5	11/12/21 17:37	
1,1-Dichloroethene (1,1-DCE)	25 U	25	1.0	5	11/12/21 17:37	
1,2,3-Trichlorobenzene	25 U	25	1.3	5	11/12/21 17:37	
1,2,4-Trichlorobenzene	25 U	25	1.7	5	11/12/21 17:37	
1,2-Dibromo-3-chloropropane (DBCP)	25 U	25	2.3	5	11/12/21 17:37	
1,2-Dibromoethane	25 U	25	1.0	5	11/12/21 17:37	
1,2-Dichlorobenzene	25 U	25	1.0	5	11/12/21 17:37	
1,2-Dichloroethane	25 U	25	1.0	5	11/12/21 17:37	
1,2-Dichloropropane	25 U	25	1.0	5	11/12/21 17:37	
1,3-Dichlorobenzene	25 U	25	1.0	5	11/12/21 17:37	
1,4-Dichlorobenzene	25 U	25	1.0	5	11/12/21 17:37	
1,4-Dioxane	500 U	500	65	5	11/12/21 17:37	
2-Butanone (MEK)	50 U	50	3.9	5	11/12/21 17:37	
2-Hexanone	50 U	50	1.0	5	11/12/21 17:37	
4-Methyl-2-pentanone	50 U	50	1.0	5	11/12/21 17:37	
Acetone	50 U	50	25	5	11/12/21 17:37	
Benzene	25 U	25	1.0	5	11/12/21 17:37	
Bromochloromethane	25 U	25	1.0	5	11/12/21 17:37	
Bromodichloromethane	25 U	25	1.0	5	11/12/21 17:37	
Bromoform	25 U	25	1.3	5	11/12/21 17:37	
Bromomethane	25 U	25	3.5	5	11/12/21 17:37	
Carbon Disulfide	50 U	50	2.1	5	11/12/21 17:37	
Carbon Tetrachloride	25 U	25	1.7	5	11/12/21 17:37	
Chlorobenzene	25 U	25	1.0	5	11/12/21 17:37	
Chloroethane	25 U	25	1.2	5	11/12/21 17:37	
Chloroform	25 U	25	1.2	5	11/12/21 17:37	
Chloromethane	25 U	25	1.4	5	11/12/21 17:37	
Cyclohexane	50 U	50	1.3	5	11/12/21 17:37	
Dibromochloromethane	25 U	25	1.0	5	11/12/21 17:37	
Dichlorodifluoromethane (CFC 12)	25 U	25	1.1	5	11/12/21 17:37	
Dichloromethane	25 U	25	3.3	5	11/12/21 17:37	
Ethylbenzene	25 U	25	1.0	5	11/12/21 17:37	
Isopropylbenzene (Cumene)	25 U	25	1.0	5	11/12/21 17:37	
Methyl Acetate	50 U	50	1.7	5	11/12/21 17:37	
Methyl tert-Butyl Ether	25 U	25	1.0	5	11/12/21 17:37	
Methylcyclohexane	50 U	50	1.0	5	11/12/21 17:37	
Styrene	25 U	25	1.0	5	11/12/21 17:37	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 09:50
Date Received: 11/05/21 10:20

Sample Name: MW-5R
Lab Code: R2111745-012

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	2.7 J	25	1.1	5	11/12/21 17:37	
Toluene	25 U	25	1.0	5	11/12/21 17:37	
Trichloroethene (TCE)	580	25	1.0	5	11/12/21 17:37	
Trichlorofluoromethane (CFC 11)	25 U	25	1.2	5	11/12/21 17:37	
Vinyl Chloride	25 U	25	1.0	5	11/12/21 17:37	
cis-1,2-Dichloroethene	190	25	1.2	5	11/12/21 17:37	
cis-1,3-Dichloropropene	25 U	25	1.0	5	11/12/21 17:37	
m,p-Xylenes	25 U	25	1.0	5	11/12/21 17:37	
o-Xylene	25 U	25	1.0	5	11/12/21 17:37	
trans-1,2-Dichloroethene	17 J	25	1.0	5	11/12/21 17:37	
trans-1,3-Dichloropropene	25 U	25	1.2	5	11/12/21 17:37	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	11/12/21 17:37	
Dibromofluoromethane	102	80 - 116	11/12/21 17:37	
Toluene-d8	105	87 - 121	11/12/21 17:37	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 10:30
Date Received: 11/05/21 10:20

Sample Name: MW-5AR
Lab Code: R2111745-013

Units: ug/L
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)	1300 U	1300	50	250	11/12/21 19:04	
1,1,2,2-Tetrachloroethane	130 J	1300	50	250	11/12/21 19:04	
1,1,2-Trichloroethane	1300 U	1300	50	250	11/12/21 19:04	
1,1,2-Trichloro-1,2,2-trifluoroethane	1300 U	1300	50	250	11/12/21 19:04	
1,1-Dichloroethane (1,1-DCA)	1300 U	1300	50	250	11/12/21 19:04	
1,1-Dichloroethene (1,1-DCE)	52 J	1300	50	250	11/12/21 19:04	
1,2,3-Trichlorobenzene	1300 U	1300	63	250	11/12/21 19:04	
1,2,4-Trichlorobenzene	1300 U	1300	85	250	11/12/21 19:04	
1,2-Dibromo-3-chloropropane (DBCP)	1300 U	1300	120	250	11/12/21 19:04	
1,2-Dibromoethane	1300 U	1300	50	250	11/12/21 19:04	
1,2-Dichlorobenzene	1300 U	1300	50	250	11/12/21 19:04	
1,2-Dichloroethane	1300 U	1300	50	250	11/12/21 19:04	
1,2-Dichloropropane	1300 U	1300	50	250	11/12/21 19:04	
1,3-Dichlorobenzene	1300 U	1300	50	250	11/12/21 19:04	
1,4-Dichlorobenzene	1300 U	1300	50	250	11/12/21 19:04	
1,4-Dioxane	25000 U	25000	3300	250	11/12/21 19:04	
2-Butanone (MEK)	2500 U	2500	200	250	11/12/21 19:04	
2-Hexanone	2500 U	2500	50	250	11/12/21 19:04	
4-Methyl-2-pentanone	2500 U	2500	50	250	11/12/21 19:04	
Acetone	2500 U	2500	1300	250	11/12/21 19:04	
Benzene	1300 U	1300	50	250	11/12/21 19:04	
Bromochloromethane	1300 U	1300	50	250	11/12/21 19:04	
Bromodichloromethane	1300 U	1300	50	250	11/12/21 19:04	
Bromoform	1300 U	1300	63	250	11/12/21 19:04	
Bromomethane	1300 U	1300	180	250	11/12/21 19:04	
Carbon Disulfide	2500 U	2500	110	250	11/12/21 19:04	
Carbon Tetrachloride	1300 U	1300	85	250	11/12/21 19:04	
Chlorobenzene	1300 U	1300	50	250	11/12/21 19:04	
Chloroethane	1300 U	1300	58	250	11/12/21 19:04	
Chloroform	190 J	1300	60	250	11/12/21 19:04	
Chloromethane	1300 U	1300	70	250	11/12/21 19:04	
Cyclohexane	2500 U	2500	65	250	11/12/21 19:04	
Dibromochloromethane	1300 U	1300	50	250	11/12/21 19:04	
Dichlorodifluoromethane (CFC 12)	1300 U	1300	53	250	11/12/21 19:04	
Dichloromethane	1300 U	1300	170	250	11/12/21 19:04	
Ethylbenzene	1300 U	1300	50	250	11/12/21 19:04	
Isopropylbenzene (Cumene)	1300 U	1300	50	250	11/12/21 19:04	
Methyl Acetate	2500 U	2500	83	250	11/12/21 19:04	
Methyl tert-Butyl Ether	1300 U	1300	50	250	11/12/21 19:04	
Methylcyclohexane	2500 U	2500	50	250	11/12/21 19:04	
Styrene	1300 U	1300	50	250	11/12/21 19:04	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 10:30
Date Received: 11/05/21 10:20

Sample Name: MW-5AR
Lab Code: R2111745-013

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	140 J	1300	53	250	11/12/21 19:04	
Toluene	1300 U	1300	50	250	11/12/21 19:04	
Trichloroethene (TCE)	40000	1300	50	250	11/12/21 19:04	
Trichlorofluoromethane (CFC 11)	1300 U	1300	60	250	11/12/21 19:04	
Vinyl Chloride	430 J	1300	50	250	11/12/21 19:04	
cis-1,2-Dichloroethene	24000	1300	58	250	11/12/21 19:04	
cis-1,3-Dichloropropene	1300 U	1300	50	250	11/12/21 19:04	
m,p-Xylenes	1300 U	1300	50	250	11/12/21 19:04	
o-Xylene	1300 U	1300	50	250	11/12/21 19:04	
trans-1,2-Dichloroethene	1300 J	1300	50	250	11/12/21 19:04	
trans-1,3-Dichloropropene	1300 U	1300	58	250	11/12/21 19:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	11/12/21 19:04	
Dibromofluoromethane	101	80 - 116	11/12/21 19:04	
Toluene-d8	105	87 - 121	11/12/21 19:04	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 14:30
Date Received: 11/05/21 10:20

Sample Name: MW-15A
Lab Code: R2111745-014

Units: ug/L
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	11/12/21 14:42	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 14:42	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 14:42	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 14:42	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 14:42	
1,4-Dioxane	100 U	100	13	1	11/12/21 14:42	
2-Butanone (MEK)	10 U	10	0.78	1	11/12/21 14:42	
2-Hexanone	10 U	10	0.20	1	11/12/21 14:42	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 14:42	
Acetone	10 U	10	5.0	1	11/12/21 14:42	
Benzene	5.0 U	5.0	0.20	1	11/12/21 14:42	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 14:42	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 14:42	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 14:42	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 14:42	
Carbon Disulfide	1.9 J	10	0.42	1	11/12/21 14:42	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 14:42	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 14:42	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 14:42	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 14:42	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 14:42	
Cyclohexane	10 U	10	0.26	1	11/12/21 14:42	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 14:42	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 14:42	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 14:42	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 14:42	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 14:42	
Methyl Acetate	10 U	10	0.33	1	11/12/21 14:42	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 14:42	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 14:42	
Styrene	5.0 U	5.0	0.20	1	11/12/21 14:42	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 14:30
Date Received: 11/05/21 10:20

Sample Name: MW-15A
Lab Code: R2111745-014

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	0.79 J	5.0	0.21	1	11/12/21 14:42	
Toluene	5.0 U	5.0	0.20	1	11/12/21 14:42	
Trichloroethene (TCE)	0.59 J	5.0	0.20	1	11/12/21 14:42	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 14:42	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 14:42	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 14:42	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 14:42	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 14:42	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 14:42	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 14:42	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 14:42	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	11/12/21 14:42	
Dibromofluoromethane	102	80 - 116	11/12/21 14:42	
Toluene-d8	104	87 - 121	11/12/21 14:42	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 15:00
Date Received: 11/05/21 10:20

Sample Name: MW-25A
Lab Code: R2111745-015

Units: ug/L
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	11/12/21 15:04	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 15:04	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 15:04	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 15:04	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 15:04	
1,4-Dioxane	100 U	100	13	1	11/12/21 15:04	
2-Butanone (MEK)	10 U	10	0.78	1	11/12/21 15:04	
2-Hexanone	10 U	10	0.20	1	11/12/21 15:04	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 15:04	
Acetone	10 U	10	5.0	1	11/12/21 15:04	
Benzene	5.0 U	5.0	0.20	1	11/12/21 15:04	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 15:04	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 15:04	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 15:04	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 15:04	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 15:04	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 15:04	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 15:04	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 15:04	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 15:04	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 15:04	
Cyclohexane	10 U	10	0.26	1	11/12/21 15:04	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 15:04	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 15:04	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 15:04	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 15:04	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 15:04	
Methyl Acetate	10 U	10	0.33	1	11/12/21 15:04	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 15:04	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 15:04	
Styrene	5.0 U	5.0	0.20	1	11/12/21 15:04	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 15:00
Date Received: 11/05/21 10:20

Sample Name: MW-25A
Lab Code: R2111745-015

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 15:04	
Toluene	5.0 U	5.0	0.20	1	11/12/21 15:04	
Trichloroethene (TCE)	0.35 J	5.0	0.20	1	11/12/21 15:04	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 15:04	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 15:04	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 15:04	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 15:04	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 15:04	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 15:04	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 15:04	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 15:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	11/12/21 15:04	
Dibromofluoromethane	101	80 - 116	11/12/21 15:04	
Toluene-d8	106	87 - 121	11/12/21 15:04	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 11:45
Date Received: 11/05/21 10:20

Sample Name: MW-20A
Lab Code: R2111745-016

Units: ug/L
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)	50 U	50	2.0	10	11/12/21 17:58	
1,1,2,2-Tetrachloroethane	50 U	50	2.0	10	11/12/21 17:58	
1,1,2-Trichloroethane	50 U	50	2.0	10	11/12/21 17:58	
1,1,2-Trichloro-1,2,2-trifluoroethane	50 U	50	2.0	10	11/12/21 17:58	
1,1-Dichloroethane (1,1-DCA)	50 U	50	2.0	10	11/12/21 17:58	
1,1-Dichloroethene (1,1-DCE)	50 U	50	2.0	10	11/12/21 17:58	
1,2,3-Trichlorobenzene	50 U	50	2.5	10	11/12/21 17:58	
1,2,4-Trichlorobenzene	50 U	50	3.4	10	11/12/21 17:58	
1,2-Dibromo-3-chloropropane (DBCP)	50 U	50	4.5	10	11/12/21 17:58	
1,2-Dibromoethane	50 U	50	2.0	10	11/12/21 17:58	
1,2-Dichlorobenzene	50 U	50	2.0	10	11/12/21 17:58	
1,2-Dichloroethane	50 U	50	2.0	10	11/12/21 17:58	
1,2-Dichloropropane	50 U	50	2.0	10	11/12/21 17:58	
1,3-Dichlorobenzene	50 U	50	2.0	10	11/12/21 17:58	
1,4-Dichlorobenzene	50 U	50	2.0	10	11/12/21 17:58	
1,4-Dioxane	1000 U	1000	130	10	11/12/21 17:58	
2-Butanone (MEK)	100 U	100	7.8	10	11/12/21 17:58	
2-Hexanone	100 U	100	2.0	10	11/12/21 17:58	
4-Methyl-2-pentanone	100 U	100	2.0	10	11/12/21 17:58	
Acetone	100 U	100	50	10	11/12/21 17:58	
Benzene	50 U	50	2.0	10	11/12/21 17:58	
Bromochloromethane	50 U	50	2.0	10	11/12/21 17:58	
Bromodichloromethane	50 U	50	2.0	10	11/12/21 17:58	
Bromoform	50 U	50	2.5	10	11/12/21 17:58	
Bromomethane	50 U	50	7.0	10	11/12/21 17:58	
Carbon Disulfide	100 U	100	4.2	10	11/12/21 17:58	
Carbon Tetrachloride	50 U	50	3.4	10	11/12/21 17:58	
Chlorobenzene	50 U	50	2.0	10	11/12/21 17:58	
Chloroethane	50 U	50	2.3	10	11/12/21 17:58	
Chloroform	50 U	50	2.4	10	11/12/21 17:58	
Chloromethane	50 U	50	2.8	10	11/12/21 17:58	
Cyclohexane	100 U	100	2.6	10	11/12/21 17:58	
Dibromochloromethane	50 U	50	2.0	10	11/12/21 17:58	
Dichlorodifluoromethane (CFC 12)	50 U	50	2.1	10	11/12/21 17:58	
Dichloromethane	50 U	50	6.5	10	11/12/21 17:58	
Ethylbenzene	50 U	50	2.0	10	11/12/21 17:58	
Isopropylbenzene (Cumene)	50 U	50	2.0	10	11/12/21 17:58	
Methyl Acetate	100 U	100	3.3	10	11/12/21 17:58	
Methyl tert-Butyl Ether	50 U	50	2.0	10	11/12/21 17:58	
Methylcyclohexane	100 U	100	2.0	10	11/12/21 17:58	
Styrene	50 U	50	2.0	10	11/12/21 17:58	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 11:45
Date Received: 11/05/21 10:20

Sample Name: MW-20A
Lab Code: R2111745-016

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	50 U	50	2.1	10	11/12/21 17:58	
Toluene	50 U	50	2.0	10	11/12/21 17:58	
Trichloroethene (TCE)	2.3 J	50	2.0	10	11/12/21 17:58	
Trichlorofluoromethane (CFC 11)	50 U	50	2.4	10	11/12/21 17:58	
Vinyl Chloride	290	50	2.0	10	11/12/21 17:58	
cis-1,2-Dichloroethene	910	50	2.3	10	11/12/21 17:58	
cis-1,3-Dichloropropene	50 U	50	2.0	10	11/12/21 17:58	
m,p-Xylenes	50 U	50	2.0	10	11/12/21 17:58	
o-Xylene	50 U	50	2.0	10	11/12/21 17:58	
trans-1,2-Dichloroethene	2.8 J	50	2.0	10	11/12/21 17:58	
trans-1,3-Dichloropropene	50 U	50	2.3	10	11/12/21 17:58	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	11/12/21 17:58	
Dibromofluoromethane	99	80 - 116	11/12/21 17:58	
Toluene-d8	105	87 - 121	11/12/21 17:58	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 12:00
Date Received: 11/05/21 10:20

Sample Name: MW-DUP
Lab Code: R2111745-017

Units: ug/L
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	11/12/21 17:15	
1,1,2,2-Tetrachloroethane	13 U	13	0.50	2.5	11/12/21 17:15	
1,1,2-Trichloroethane	13 U	13	0.50	2.5	11/12/21 17:15	
1,1,2-Trichloro-1,2,2-trifluoroethane	13 U	13	0.50	2.5	11/12/21 17:15	
1,1-Dichloroethane (1,1-DCA)	13 U	13	0.50	2.5	11/12/21 17:15	
1,1-Dichloroethene (1,1-DCE)	1.4 J	13	0.50	2.5	11/12/21 17:15	
1,2,3-Trichlorobenzene	13 U	13	0.63	2.5	11/12/21 17:15	
1,2,4-Trichlorobenzene	13 U	13	0.85	2.5	11/12/21 17:15	
1,2-Dibromo-3-chloropropane (DBCP)	13 U	13	1.2	2.5	11/12/21 17:15	
1,2-Dibromoethane	13 U	13	0.50	2.5	11/12/21 17:15	
1,2-Dichlorobenzene	13 U	13	0.50	2.5	11/12/21 17:15	
1,2-Dichloroethane	13 U	13	0.50	2.5	11/12/21 17:15	
1,2-Dichloropropane	13 U	13	0.50	2.5	11/12/21 17:15	
1,3-Dichlorobenzene	13 U	13	0.50	2.5	11/12/21 17:15	
1,4-Dichlorobenzene	13 U	13	0.50	2.5	11/12/21 17:15	
1,4-Dioxane	250 U	250	33	2.5	11/12/21 17:15	
2-Butanone (MEK)	25 U	25	2.0	2.5	11/12/21 17:15	
2-Hexanone	25 U	25	0.50	2.5	11/12/21 17:15	
4-Methyl-2-pentanone	25 U	25	0.50	2.5	11/12/21 17:15	
Acetone	25 U	25	13	2.5	11/12/21 17:15	
Benzene	13 U	13	0.50	2.5	11/12/21 17:15	
Bromochloromethane	13 U	13	0.50	2.5	11/12/21 17:15	
Bromodichloromethane	13 U	13	0.50	2.5	11/12/21 17:15	
Bromoform	13 U	13	0.63	2.5	11/12/21 17:15	
Bromomethane	13 U	13	1.8	2.5	11/12/21 17:15	
Carbon Disulfide	25 U	25	1.1	2.5	11/12/21 17:15	
Carbon Tetrachloride	13 U	13	0.85	2.5	11/12/21 17:15	
Chlorobenzene	13 U	13	0.50	2.5	11/12/21 17:15	
Chloroethane	13 U	13	0.58	2.5	11/12/21 17:15	
Chloroform	13 U	13	0.60	2.5	11/12/21 17:15	
Chloromethane	1.0 BJ	13	0.70	2.5	11/12/21 17:15	
Cyclohexane	25 U	25	0.65	2.5	11/12/21 17:15	
Dibromochloromethane	13 U	13	0.50	2.5	11/12/21 17:15	
Dichlorodifluoromethane (CFC 12)	13 U	13	0.53	2.5	11/12/21 17:15	
Dichloromethane	13 U	13	1.7	2.5	11/12/21 17:15	
Ethylbenzene	13 U	13	0.50	2.5	11/12/21 17:15	
Isopropylbenzene (Cumene)	13 U	13	0.50	2.5	11/12/21 17:15	
Methyl Acetate	25 U	25	0.83	2.5	11/12/21 17:15	
Methyl tert-Butyl Ether	13 U	13	0.50	2.5	11/12/21 17:15	
Methylcyclohexane	25 U	25	0.50	2.5	11/12/21 17:15	
Styrene	13 U	13	0.50	2.5	11/12/21 17:15	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 12:00
Date Received: 11/05/21 10:20

Sample Name: MW-DUP
Lab Code: R2111745-017

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	13 U	13	0.53	2.5	11/12/21 17:15	
Toluene	13 U	13	0.50	2.5	11/12/21 17:15	
Trichloroethene (TCE)	13 U	13	0.50	2.5	11/12/21 17:15	
Trichlorofluoromethane (CFC 11)	13 U	13	0.60	2.5	11/12/21 17:15	
Vinyl Chloride	250	13	0.50	2.5	11/12/21 17:15	
cis-1,2-Dichloroethene	580 D	50	2.3	10	11/12/21 20:31	
cis-1,3-Dichloropropene	13 U	13	0.50	2.5	11/12/21 17:15	
m,p-Xylenes	13 U	13	0.50	2.5	11/12/21 17:15	
o-Xylene	13 U	13	0.50	2.5	11/12/21 17:15	
trans-1,2-Dichloroethene	2.5 J	13	0.50	2.5	11/12/21 17:15	
trans-1,3-Dichloropropene	13 U	13	0.58	2.5	11/12/21 17:15	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	11/12/21 17:15	
Dibromofluoromethane	101	80 - 116	11/12/21 17:15	
Toluene-d8	105	87 - 121	11/12/21 17:15	

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Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 12:30
Date Received: 11/05/21 10:20

Sample Name: MW-7A
Lab Code: R2111745-018

Units: ug/L
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	11/12/21 16:09	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,1-Dichloroethene (1,1-DCE)	0.25 J	5.0	0.20	1	11/12/21 16:09	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 16:09	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 16:09	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 16:09	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 16:09	
1,4-Dioxane	100 U	100	13	1	11/12/21 16:09	
2-Butanone (MEK)	3.2 J	10	0.78	1	11/12/21 16:09	
2-Hexanone	10 U	10	0.20	1	11/12/21 16:09	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 16:09	
Acetone	5.9 J	10	5.0	1	11/12/21 16:09	
Benzene	5.0 U	5.0	0.20	1	11/12/21 16:09	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 16:09	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 16:09	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 16:09	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 16:09	
Carbon Disulfide	2.4 J	10	0.42	1	11/12/21 16:09	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 16:09	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 16:09	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 16:09	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 16:09	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 16:09	
Cyclohexane	0.97 J	10	0.26	1	11/12/21 16:09	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 16:09	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 16:09	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 16:09	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 16:09	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 16:09	
Methyl Acetate	10 U	10	0.33	1	11/12/21 16:09	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 16:09	
Methylcyclohexane	0.47 J	10	0.20	1	11/12/21 16:09	
Styrene	5.0 U	5.0	0.20	1	11/12/21 16:09	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 12:30
Date Received: 11/05/21 10:20

Sample Name: MW-7A
Lab Code: R2111745-018

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 16:09	
Toluene	5.0 U	5.0	0.20	1	11/12/21 16:09	
Trichloroethene (TCE)	0.20 J	5.0	0.20	1	11/12/21 16:09	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 16:09	
Vinyl Chloride	54	5.0	0.20	1	11/12/21 16:09	
cis-1,2-Dichloroethene	190	5.0	0.23	1	11/12/21 16:09	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 16:09	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 16:09	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 16:09	
trans-1,2-Dichloroethene	0.89 J	5.0	0.20	1	11/12/21 16:09	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 16:09	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	11/12/21 16:09	
Dibromofluoromethane	102	80 - 116	11/12/21 16:09	
Toluene-d8	106	87 - 121	11/12/21 16:09	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 13:30
Date Received: 11/05/21 10:20

Sample Name: MW-11
Lab Code: R2111745-019

Units: ug/L
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)	50 U	50	2.0	10	11/12/21 15:26	
1,1,2,2-Tetrachloroethane	50 U	50	2.0	10	11/12/21 15:26	
1,1,2-Trichloroethane	50 U	50	2.0	10	11/12/21 15:26	
1,1,2-Trichloro-1,2,2-trifluoroethane	50 U	50	2.0	10	11/12/21 15:26	
1,1-Dichloroethane (1,1-DCA)	50 U	50	2.0	10	11/12/21 15:26	
1,1-Dichloroethene (1,1-DCE)	3.5 J	50	2.0	10	11/12/21 15:26	
1,2,3-Trichlorobenzene	50 U	50	2.5	10	11/12/21 15:26	
1,2,4-Trichlorobenzene	50 U	50	3.4	10	11/12/21 15:26	
1,2-Dibromo-3-chloropropane (DBCP)	50 U	50	4.5	10	11/12/21 15:26	
1,2-Dibromoethane	50 U	50	2.0	10	11/12/21 15:26	
1,2-Dichlorobenzene	50 U	50	2.0	10	11/12/21 15:26	
1,2-Dichloroethane	50 U	50	2.0	10	11/12/21 15:26	
1,2-Dichloropropane	50 U	50	2.0	10	11/12/21 15:26	
1,3-Dichlorobenzene	50 U	50	2.0	10	11/12/21 15:26	
1,4-Dichlorobenzene	50 U	50	2.0	10	11/12/21 15:26	
1,4-Dioxane	1000 U	1000	130	10	11/12/21 15:26	
2-Butanone (MEK)	100 U	100	7.8	10	11/12/21 15:26	
2-Hexanone	100 U	100	2.0	10	11/12/21 15:26	
4-Methyl-2-pentanone	100 U	100	2.0	10	11/12/21 15:26	
Acetone	100 U	100	50	10	11/12/21 15:26	
Benzene	50 U	50	2.0	10	11/12/21 15:26	
Bromochloromethane	50 U	50	2.0	10	11/12/21 15:26	
Bromodichloromethane	50 U	50	2.0	10	11/12/21 15:26	
Bromoform	50 U	50	2.5	10	11/12/21 15:26	
Bromomethane	50 U	50	7.0	10	11/12/21 15:26	
Carbon Disulfide	100 U	100	4.2	10	11/12/21 15:26	
Carbon Tetrachloride	50 U	50	3.4	10	11/12/21 15:26	
Chlorobenzene	50 U	50	2.0	10	11/12/21 15:26	
Chloroethane	50 U	50	2.3	10	11/12/21 15:26	
Chloroform	50 U	50	2.4	10	11/12/21 15:26	
Chloromethane	50 U	50	2.8	10	11/12/21 15:26	
Cyclohexane	100 U	100	2.6	10	11/12/21 15:26	
Dibromochloromethane	50 U	50	2.0	10	11/12/21 15:26	
Dichlorodifluoromethane (CFC 12)	50 U	50	2.1	10	11/12/21 15:26	
Dichloromethane	50 U	50	6.5	10	11/12/21 15:26	
Ethylbenzene	50 U	50	2.0	10	11/12/21 15:26	
Isopropylbenzene (Cumene)	50 U	50	2.0	10	11/12/21 15:26	
Methyl Acetate	100 U	100	3.3	10	11/12/21 15:26	
Methyl tert-Butyl Ether	50 U	50	2.0	10	11/12/21 15:26	
Methylcyclohexane	100 U	100	2.0	10	11/12/21 15:26	
Styrene	50 U	50	2.0	10	11/12/21 15:26	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 13:30
Date Received: 11/05/21 10:20

Sample Name: MW-11
Lab Code: R2111745-019

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	50 U	50	2.1	10	11/12/21 15:26	
Toluene	50 U	50	2.0	10	11/12/21 15:26	
Trichloroethene (TCE)	60	50	2.0	10	11/12/21 15:26	
Trichlorofluoromethane (CFC 11)	50 U	50	2.4	10	11/12/21 15:26	
Vinyl Chloride	7.8 J	50	2.0	10	11/12/21 15:26	
cis-1,2-Dichloroethene	1400	50	2.3	10	11/12/21 15:26	
cis-1,3-Dichloropropene	50 U	50	2.0	10	11/12/21 15:26	
m,p-Xylenes	50 U	50	2.0	10	11/12/21 15:26	
o-Xylene	50 U	50	2.0	10	11/12/21 15:26	
trans-1,2-Dichloroethene	4.3 J	50	2.0	10	11/12/21 15:26	
trans-1,3-Dichloropropene	50 U	50	2.3	10	11/12/21 15:26	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	11/12/21 15:26	
Dibromofluoromethane	102	80 - 116	11/12/21 15:26	
Toluene-d8	105	87 - 121	11/12/21 15:26	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 14:00
Date Received: 11/05/21 10:20

Sample Name: MW-10
Lab Code: R2111745-020

Units: ug/L
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	11/12/21 19:48	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 19:48	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 19:48	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 19:48	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 19:48	
1,4-Dichlorobenzene	1.3 J	5.0	0.20	1	11/12/21 19:48	
1,4-Dioxane	100 U	100	13	1	11/12/21 19:48	
2-Butanone (MEK)	1.1 J	10	0.78	1	11/12/21 19:48	
2-Hexanone	10 U	10	0.20	1	11/12/21 19:48	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 19:48	
Acetone	10 U	10	5.0	1	11/12/21 19:48	
Benzene	5.0 U	5.0	0.20	1	11/12/21 19:48	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 19:48	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 19:48	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 19:48	
Bromomethane	2.1 J	5.0	0.70	1	11/12/21 19:48	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 19:48	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 19:48	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 19:48	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 19:48	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 19:48	
Chloromethane	0.78 BJ	5.0	0.28	1	11/12/21 19:48	
Cyclohexane	10 U	10	0.26	1	11/12/21 19:48	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 19:48	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 19:48	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 19:48	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 19:48	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 19:48	
Methyl Acetate	10 U	10	0.33	1	11/12/21 19:48	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 19:48	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 19:48	
Styrene	5.0 U	5.0	0.20	1	11/12/21 19:48	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/04/21 14:00
Date Received: 11/05/21 10:20

Sample Name: MW-10
Lab Code: R2111745-020

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 19:48	
Toluene	1.7 J	5.0	0.20	1	11/12/21 19:48	
Trichloroethene (TCE)	0.93 J	5.0	0.20	1	11/12/21 19:48	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 19:48	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 19:48	
cis-1,2-Dichloroethene	0.59 J	5.0	0.23	1	11/12/21 19:48	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 19:48	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 19:48	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 19:48	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 19:48	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 19:48	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	11/12/21 19:48	
Dibromofluoromethane	101	80 - 116	11/12/21 19:48	
Toluene-d8	105	87 - 121	11/12/21 19:48	

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dba ALS Environmental

Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21
Date Received: 11/05/21 10:20

Sample Name: Trip Blank
Lab Code: R2111745-021

Units: ug/L
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	11/12/21 00:47	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,1,2-Trichloroethane	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,1-Dichloroethane (1,1-DCA)	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,1-Dichloroethene (1,1-DCE)	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,2,3-Trichlorobenzene	5.0 U	5.0	0.25	1	11/12/21 00:47	
1,2,4-Trichlorobenzene	5.0 U	5.0	0.34	1	11/12/21 00:47	
1,2-Dibromo-3-chloropropane (DBCP)	5.0 U	5.0	0.45	1	11/12/21 00:47	
1,2-Dibromoethane	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,2-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,2-Dichloroethane	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,2-Dichloropropane	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,3-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,4-Dichlorobenzene	5.0 U	5.0	0.20	1	11/12/21 00:47	
1,4-Dioxane	100 U	100	13	1	11/12/21 00:47	
2-Butanone (MEK)	4.2 J	10	0.78	1	11/12/21 00:47	
2-Hexanone	10 U	10	0.20	1	11/12/21 00:47	
4-Methyl-2-pentanone	10 U	10	0.20	1	11/12/21 00:47	
Acetone	7.5 J	10	5.0	1	11/12/21 00:47	
Benzene	5.0 U	5.0	0.20	1	11/12/21 00:47	
Bromochloromethane	5.0 U	5.0	0.20	1	11/12/21 00:47	
Bromodichloromethane	5.0 U	5.0	0.20	1	11/12/21 00:47	
Bromoform	5.0 U	5.0	0.25	1	11/12/21 00:47	
Bromomethane	5.0 U	5.0	0.70	1	11/12/21 00:47	
Carbon Disulfide	10 U	10	0.42	1	11/12/21 00:47	
Carbon Tetrachloride	5.0 U	5.0	0.34	1	11/12/21 00:47	
Chlorobenzene	5.0 U	5.0	0.20	1	11/12/21 00:47	
Chloroethane	5.0 U	5.0	0.23	1	11/12/21 00:47	
Chloroform	5.0 U	5.0	0.24	1	11/12/21 00:47	
Chloromethane	5.0 U	5.0	0.28	1	11/12/21 00:47	
Cyclohexane	10 U	10	0.26	1	11/12/21 00:47	
Dibromochloromethane	5.0 U	5.0	0.20	1	11/12/21 00:47	
Dichlorodifluoromethane (CFC 12)	5.0 U	5.0	0.21	1	11/12/21 00:47	
Dichloromethane	5.0 U	5.0	0.65	1	11/12/21 00:47	
Ethylbenzene	5.0 U	5.0	0.20	1	11/12/21 00:47	
Isopropylbenzene (Cumene)	5.0 U	5.0	0.20	1	11/12/21 00:47	
Methyl Acetate	10 U	10	0.33	1	11/12/21 00:47	
Methyl tert-Butyl Ether	5.0 U	5.0	0.20	1	11/12/21 00:47	
Methylcyclohexane	10 U	10	0.20	1	11/12/21 00:47	
Styrene	5.0 U	5.0	0.20	1	11/12/21 00:47	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/02/21
Date Received: 11/05/21 10:20

Sample Name: Trip Blank
Lab Code: R2111745-021

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	5.0 U	5.0	0.21	1	11/12/21 00:47	
Toluene	5.0 U	5.0	0.20	1	11/12/21 00:47	
Trichloroethene (TCE)	5.0 U	5.0	0.20	1	11/12/21 00:47	
Trichlorofluoromethane (CFC 11)	5.0 U	5.0	0.24	1	11/12/21 00:47	
Vinyl Chloride	5.0 U	5.0	0.20	1	11/12/21 00:47	
cis-1,2-Dichloroethene	5.0 U	5.0	0.23	1	11/12/21 00:47	
cis-1,3-Dichloropropene	5.0 U	5.0	0.20	1	11/12/21 00:47	
m,p-Xylenes	5.0 U	5.0	0.20	1	11/12/21 00:47	
o-Xylene	5.0 U	5.0	0.20	1	11/12/21 00:47	
trans-1,2-Dichloroethene	5.0 U	5.0	0.20	1	11/12/21 00:47	
trans-1,3-Dichloropropene	5.0 U	5.0	0.23	1	11/12/21 00:47	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	11/12/21 00:47	
Dibromofluoromethane	98	80 - 116	11/12/21 00:47	
Toluene-d8	106	87 - 121	11/12/21 00:47	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 11:15
Date Received: 11/05/21 10:20

Sample Name: MW-13
Lab Code: R2111745-022

Units: ug/L
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)	500 U	500	20	100	11/12/21 18:42	
1,1,2,2-Tetrachloroethane	500 U	500	20	100	11/12/21 18:42	
1,1,2-Trichloroethane	500 U	500	20	100	11/12/21 18:42	
1,1,2-Trichloro-1,2,2-trifluoroethane	500 U	500	20	100	11/12/21 18:42	
1,1-Dichloroethane (1,1-DCA)	500 U	500	20	100	11/12/21 18:42	
1,1-Dichloroethene (1,1-DCE)	500 U	500	20	100	11/12/21 18:42	
1,2,3-Trichlorobenzene	500 U	500	25	100	11/12/21 18:42	
1,2,4-Trichlorobenzene	500 U	500	34	100	11/12/21 18:42	
1,2-Dibromo-3-chloropropane (DBCP)	500 U	500	45	100	11/12/21 18:42	
1,2-Dibromoethane	500 U	500	20	100	11/12/21 18:42	
1,2-Dichlorobenzene	500 U	500	20	100	11/12/21 18:42	
1,2-Dichloroethane	500 U	500	20	100	11/12/21 18:42	
1,2-Dichloropropane	500 U	500	20	100	11/12/21 18:42	
1,3-Dichlorobenzene	500 U	500	20	100	11/12/21 18:42	
1,4-Dichlorobenzene	500 U	500	20	100	11/12/21 18:42	
1,4-Dioxane	10000 U	10000	1300	100	11/12/21 18:42	
2-Butanone (MEK)	1000 U	1000	78	100	11/12/21 18:42	
2-Hexanone	1000 U	1000	20	100	11/12/21 18:42	
4-Methyl-2-pentanone	1000 U	1000	20	100	11/12/21 18:42	
Acetone	1000 U	1000	500	100	11/12/21 18:42	
Benzene	500 U	500	20	100	11/12/21 18:42	
Bromochloromethane	500 U	500	20	100	11/12/21 18:42	
Bromodichloromethane	26 J	500	20	100	11/12/21 18:42	
Bromoform	500 U	500	25	100	11/12/21 18:42	
Bromomethane	500 U	500	70	100	11/12/21 18:42	
Carbon Disulfide	1000 U	1000	42	100	11/12/21 18:42	
Carbon Tetrachloride	500 U	500	34	100	11/12/21 18:42	
Chlorobenzene	500 U	500	20	100	11/12/21 18:42	
Chloroethane	500 U	500	23	100	11/12/21 18:42	
Chloroform	74 J	500	24	100	11/12/21 18:42	
Chloromethane	500 U	500	28	100	11/12/21 18:42	
Cyclohexane	1000 U	1000	26	100	11/12/21 18:42	
Dibromochloromethane	500 U	500	20	100	11/12/21 18:42	
Dichlorodifluoromethane (CFC 12)	500 U	500	21	100	11/12/21 18:42	
Dichloromethane	360 J	500	65	100	11/12/21 18:42	
Ethylbenzene	500 U	500	20	100	11/12/21 18:42	
Isopropylbenzene (Cumene)	500 U	500	20	100	11/12/21 18:42	
Methyl Acetate	1000 U	1000	33	100	11/12/21 18:42	
Methyl tert-Butyl Ether	500 U	500	20	100	11/12/21 18:42	
Methylcyclohexane	1000 U	1000	20	100	11/12/21 18:42	
Styrene	500 U	500	20	100	11/12/21 18:42	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111745
Date Collected: 11/03/21 11:15
Date Received: 11/05/21 10:20

Sample Name: MW-13
Lab Code: R2111745-022

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene (PCE)	34 J	500	21	100	11/12/21 18:42	
Toluene	500 U	500	20	100	11/12/21 18:42	
Trichloroethene (TCE)	11000	500	20	100	11/12/21 18:42	
Trichlorofluoromethane (CFC 11)	500 U	500	24	100	11/12/21 18:42	
Vinyl Chloride	180 J	500	20	100	11/12/21 18:42	
cis-1,2-Dichloroethene	7500	500	23	100	11/12/21 18:42	
cis-1,3-Dichloropropene	500 U	500	20	100	11/12/21 18:42	
m,p-Xylenes	500 U	500	20	100	11/12/21 18:42	
o-Xylene	500 U	500	20	100	11/12/21 18:42	
trans-1,2-Dichloroethene	310 J	500	20	100	11/12/21 18:42	
trans-1,3-Dichloropropene	500 U	500	23	100	11/12/21 18:42	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	11/12/21 18:42	
Dibromofluoromethane	99	80 - 116	11/12/21 18:42	
Toluene-d8	104	87 - 121	11/12/21 18:42	

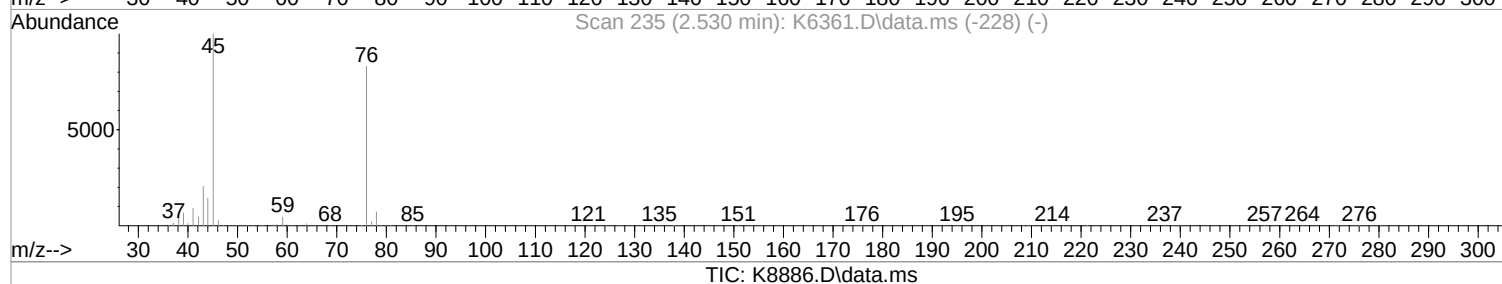
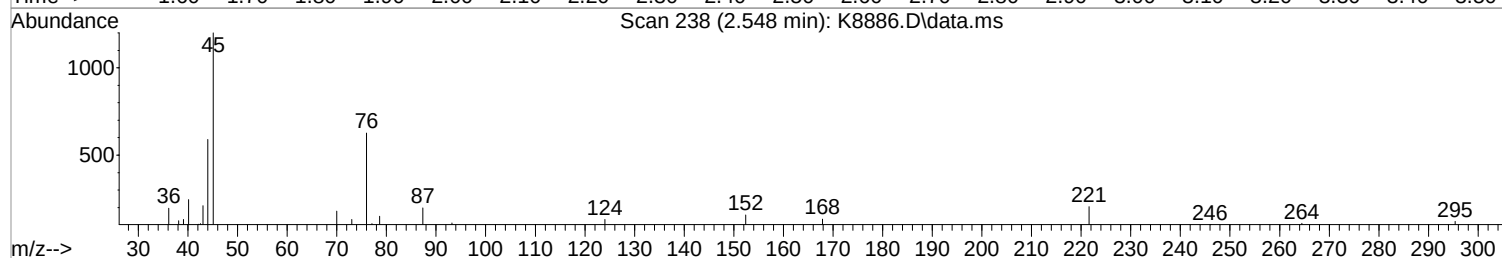
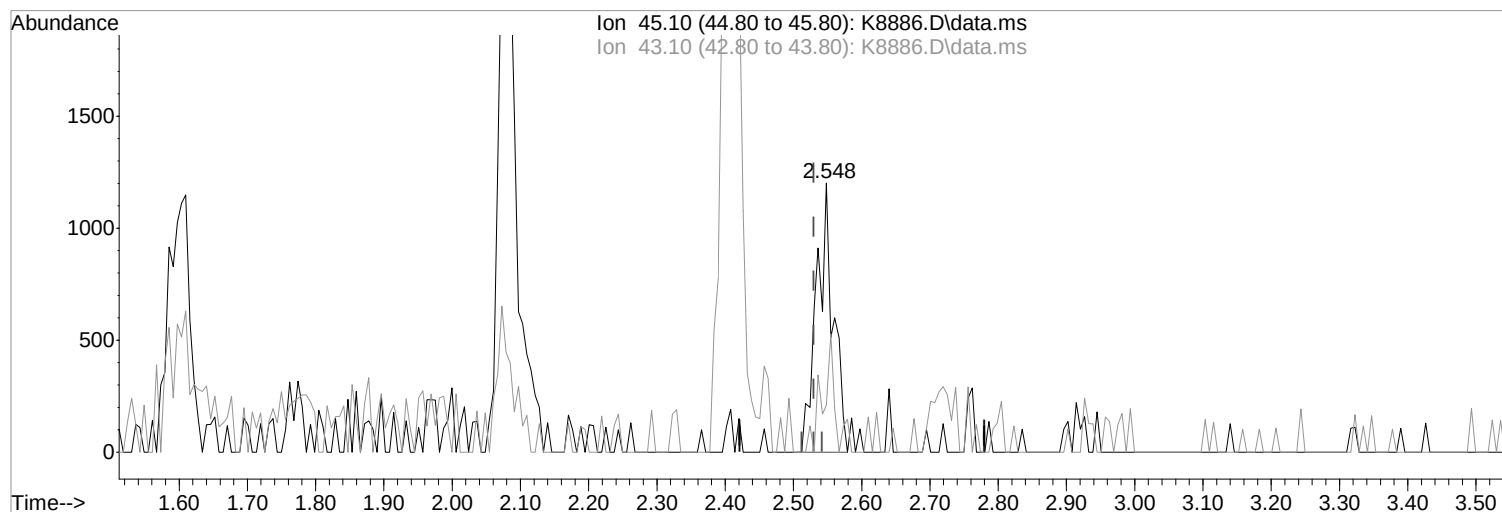
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8886.D
Acq On : 12 Nov 2021 1:09 am
Operator : K.Ruest
Sample : R2111745-001|1.0
Misc : LIRO 8260 T4
ALS Vial : 34 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:03:50 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



(16) 2-Propanol

Manual Integration:

2.548min (+0.018) 4.33 ppb m

After

response 2042

Split Peak

Ion	Exp%	Act%
45.10	100	100
43.10	20.60	17.49
0.00	0.00	0.00
0.00	0.00	0.00

11/18/21

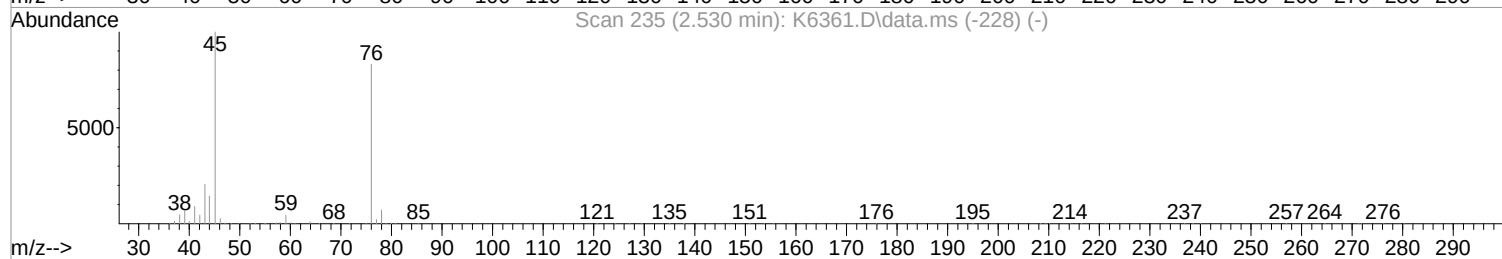
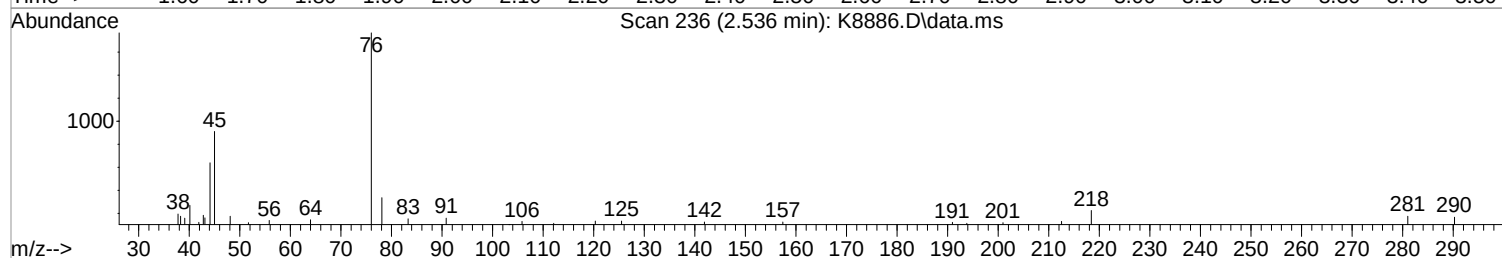
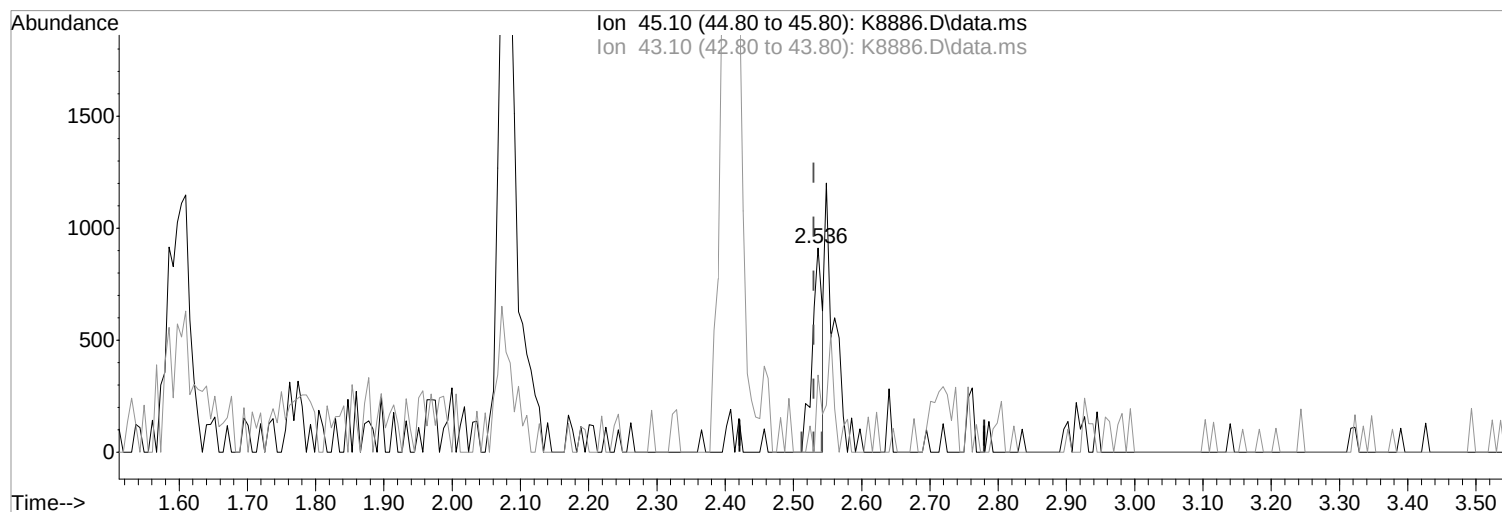
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8886.D
Acq On : 12 Nov 2021 1:09 am
Operator : K.Ruest
Sample : R2111745-001|1.0
Misc : LIRO 8260 T4
ALS Vial : 34 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:03:50 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8886.D\data.ms

(16) 2-Propanol

Manual Integration:

2.536min (+0.006) 2.02 ppb

Before

response 952

Ion	Exp%	Act%
45.10	100	100
43.10	20.60	37.76
0.00	0.00	0.00
0.00	0.00	0.00

11/18/21

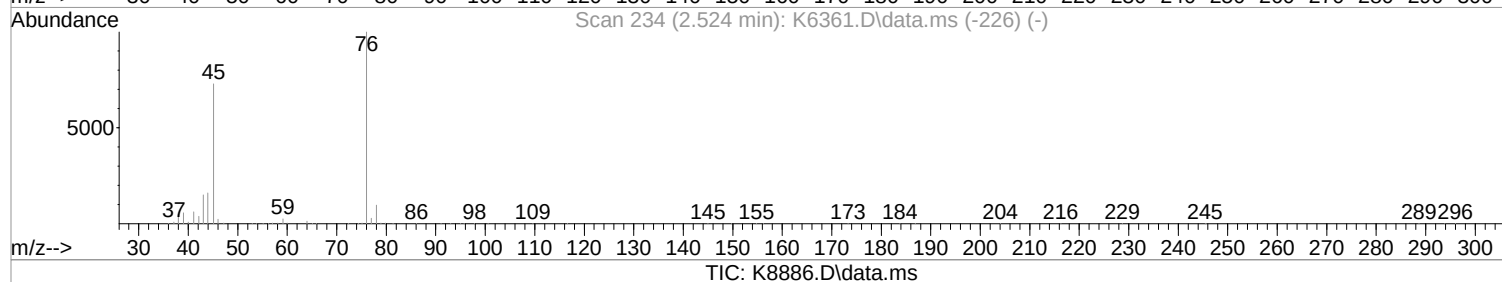
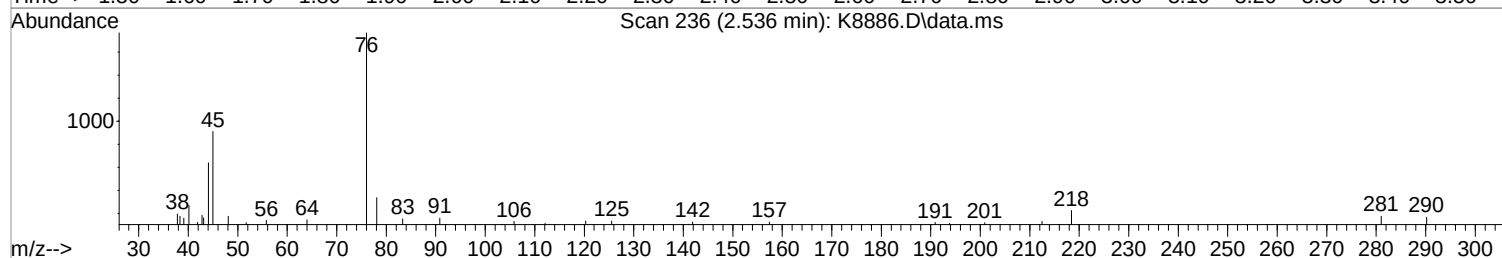
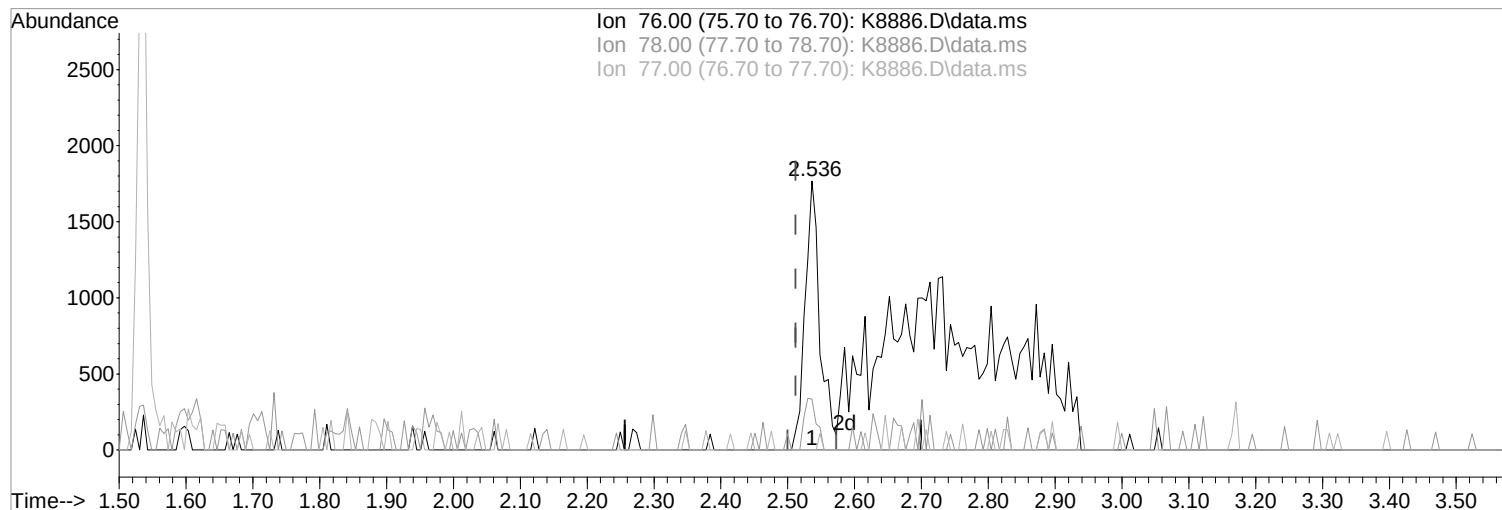
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8886.D
Acq On : 12 Nov 2021 1:09 am
Operator : K.Ruest
Sample : R2111745-001|1.0
Misc : LIRO 8260 T4
ALS Vial : 34 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:03:50 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8886.D\data.ms

(18) Carbon Disulfide (P)

2.536min (+0.025) 1.97 ppb m

response 16789

Ion	Exp%	Act%
76.00	100	100
78.00	9.70	18.95
77.00	2.70	0.00
0.00	0.00	0.00

Manual Integration:

After

Other - so2 interference

11/18/21

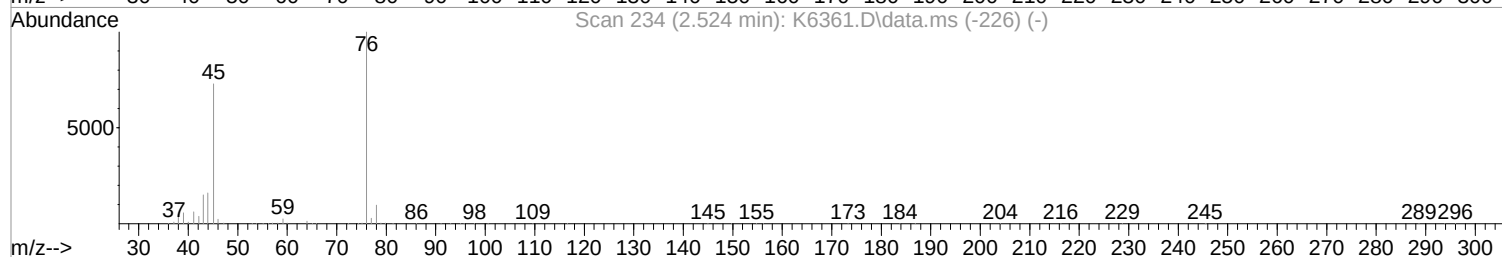
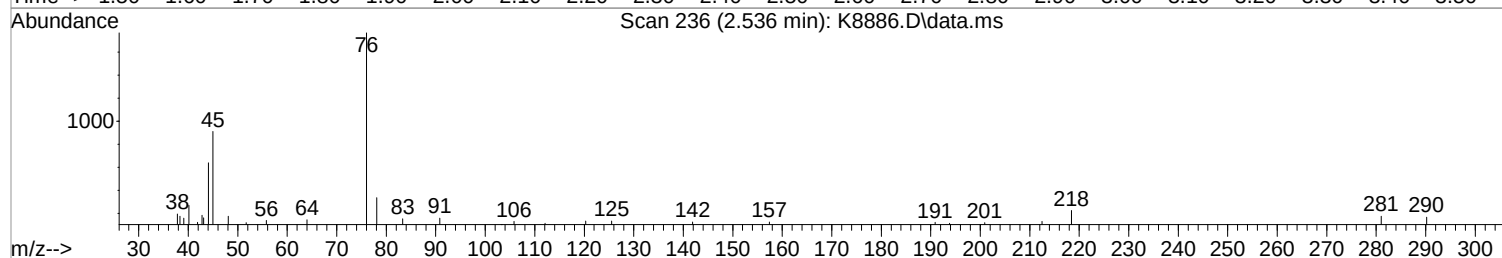
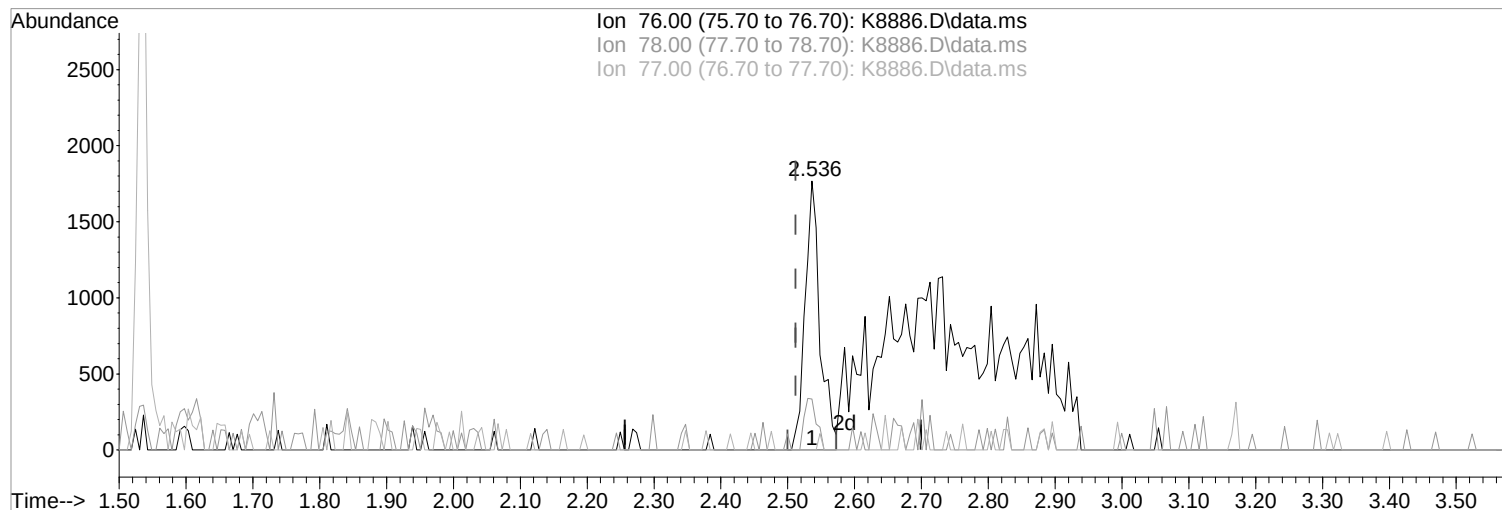
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8886.D
Acq On : 12 Nov 2021 1:09 am
Operator : K.Ruest
Sample : R2111745-001|1.0
Misc : LIRO 8260 T4
ALS Vial : 34 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:03:50 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8886.D\data.ms

(18) Carbon Disulfide (P)

Manual Integration:

2.536min (+0.025) 0.32 ppb

Before

response 2755

Ion	Exp%	Act%
76.00	100	100
78.00	9.70	18.95
77.00	2.70	0.00
0.00	0.00	0.00

11/18/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8886.D
 Acq On : 12 Nov 2021 1:09 am
 Operator : K.Ruest
 Sample : R2111745-001|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 34 Sample Multiplier: 1

Inst : MSVOA-12

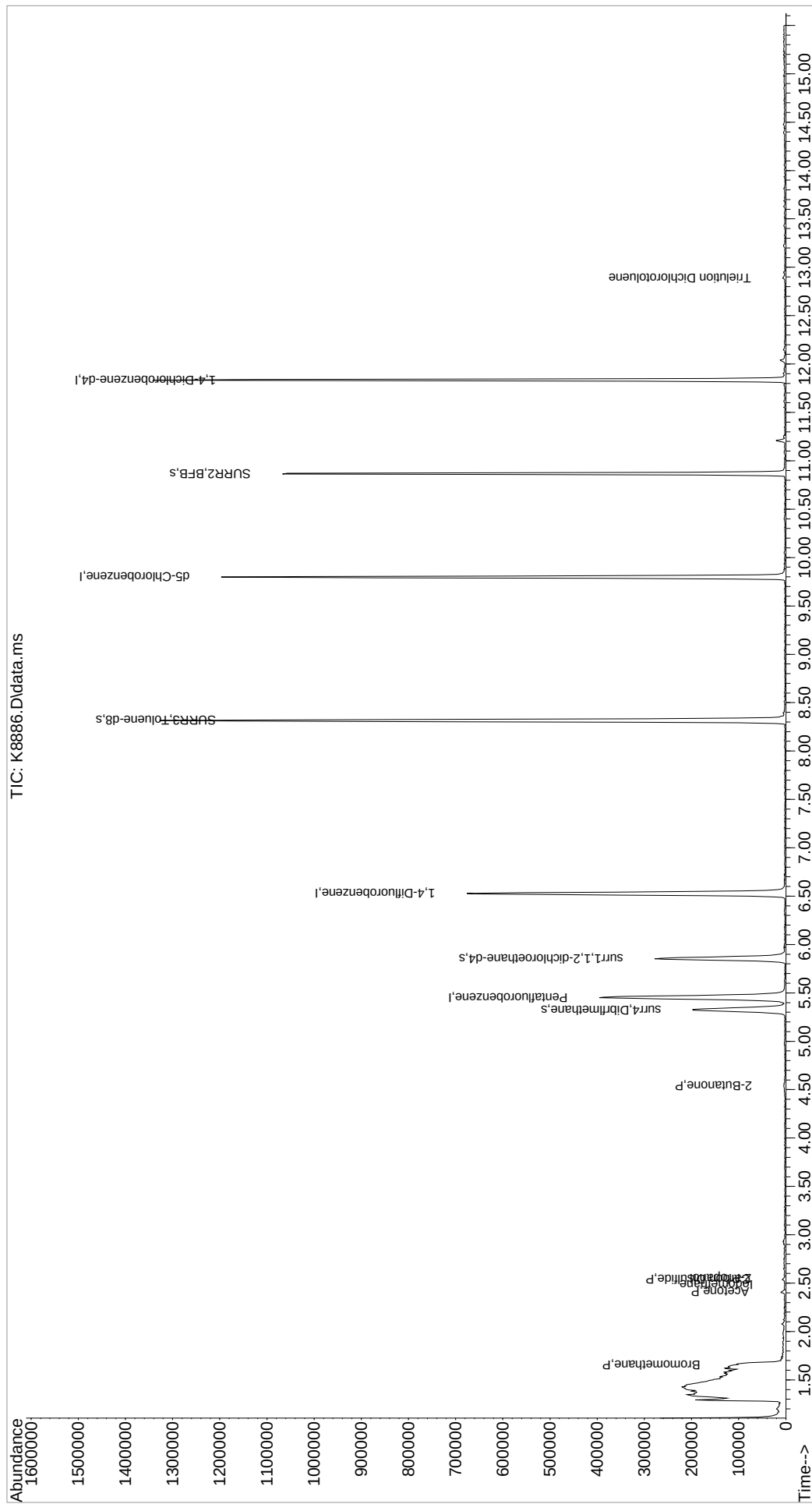
Quant Time: Nov 18 17:55:25 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

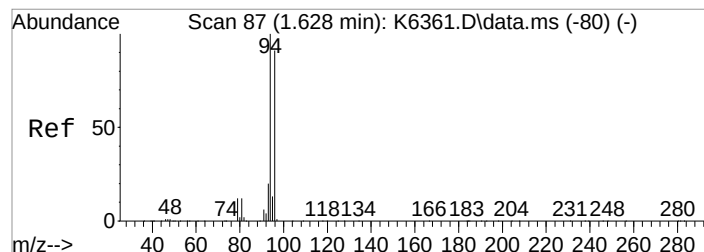
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	363070	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.529	114	605906	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	538926	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	257241	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.322	113	168950	51.22	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	102.44%	
48) surr1,1,2-dichloroetha...	5.853	65	233654	48.72	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	97.44%	
65) SURR3,Toluene-d8	8.316	98	835667	53.90	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	107.80%	
70) SURR2,BFB	10.864	95	308090	50.06	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	100.12%	
Target Compounds						
5) Bromomethane	1.652	94	1458	0.46	ppb	Qvalue # 73
15) Acetone	2.408	43	7359	1.50	ppb	99
16) 2-Propanol	2.548	45	2042m	4.33	ppb	
17) Iodomethane	2.487	142	462	1.47	ppb	81
18) Carbon Disulfide	2.536	76	16789m	1.97	ppb	
35) 2-Butanone	4.536	43	4766	1.52	ppb	81
112) Trielution Dichlorotol...	12.888	125	1806	0.22	ppb	# 88

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

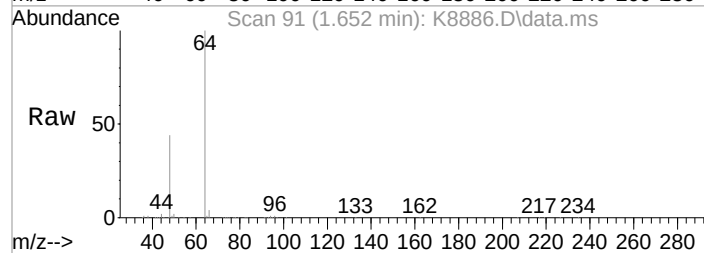
Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8886.D
Acq On : 12 Nov 2021 1:09 am
Operator : K.Ruest
Sample : R2111745-001|1.0
Misc : LIRO 8260 T4
ALS Vial : 34 Sample Multiplier: 1
Inst : MSV0A-12

Quant Time: Nov 18 17:55:25 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration

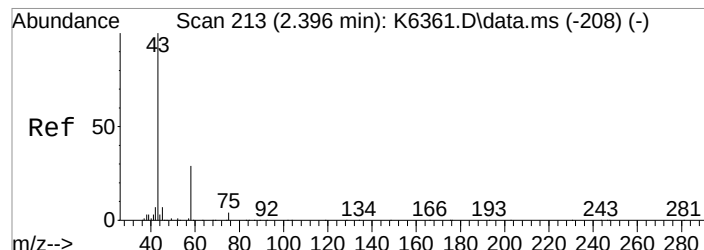
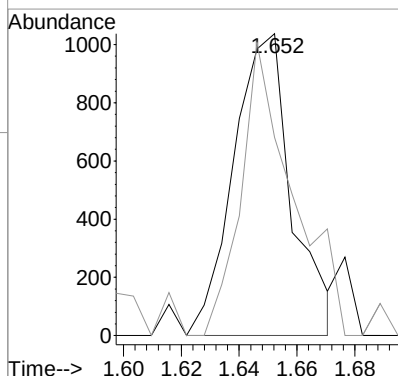
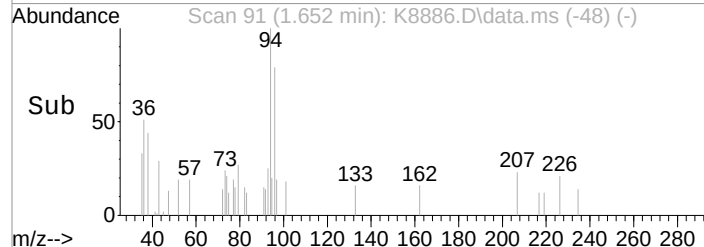




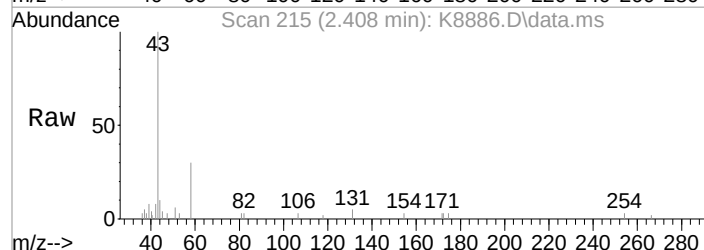
#5
 Bromomethane
 Concen: 0.46 ppb
 RT: 1.652 min Scan# 91
 Delta R.T. 0.037 min
 Lab File: K8886.D
 Acq: 12 Nov 2021 1:09 am



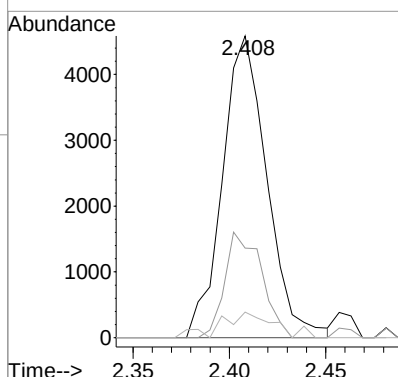
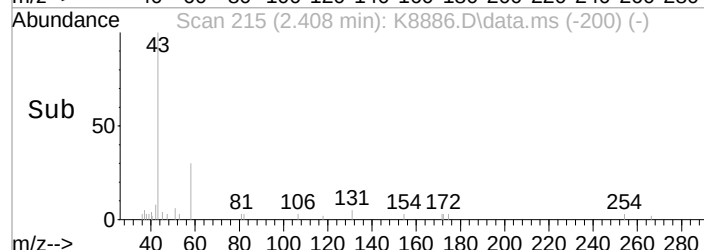
Tgt Ion: 94 Resp: 1458
 Ion Ratio Lower Upper
 94 100
 96 65.6 71.0 111.0#

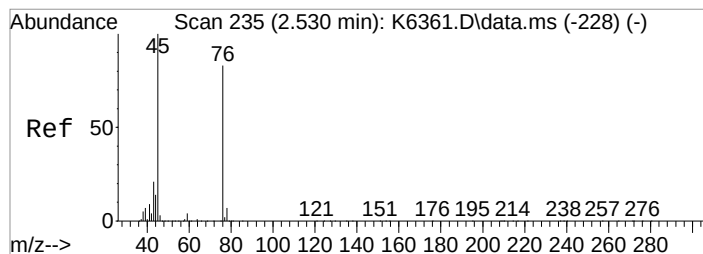


#15
 Acetone
 Concen: 1.50 ppb
 RT: 2.408 min Scan# 215
 Delta R.T. 0.019 min
 Lab File: K8886.D
 Acq: 12 Nov 2021 1:09 am



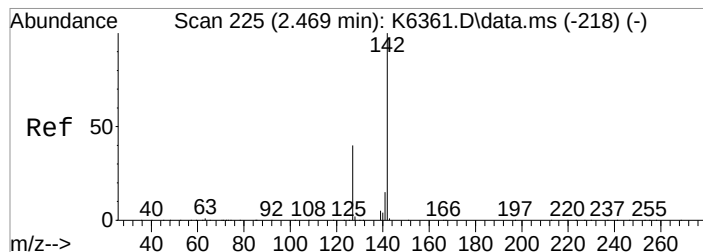
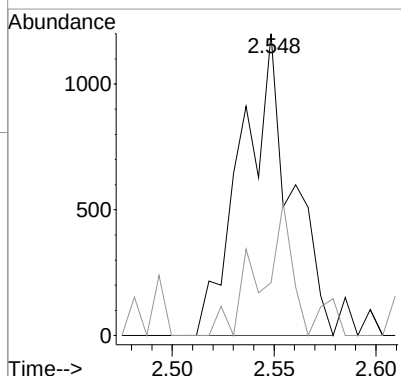
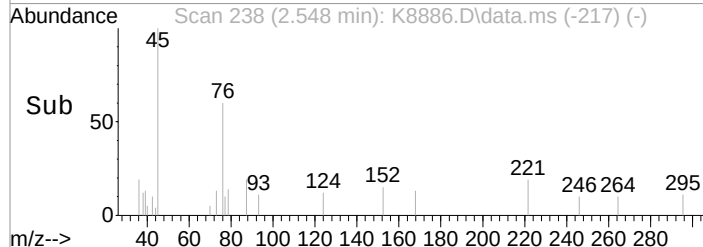
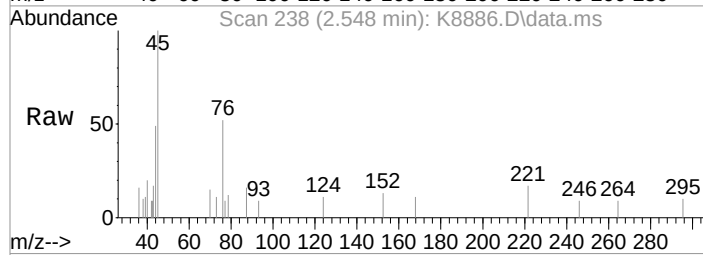
Tgt Ion: 43 Resp: 7359
 Ion Ratio Lower Upper
 43 100
 58 29.7 9.6 49.6
 42 8.5 0.0 27.7





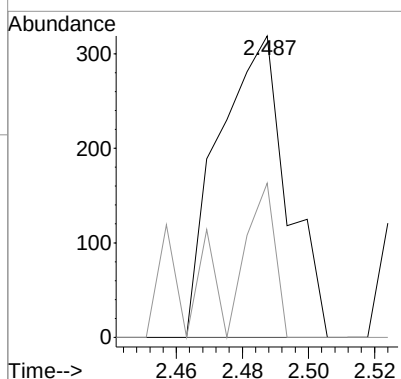
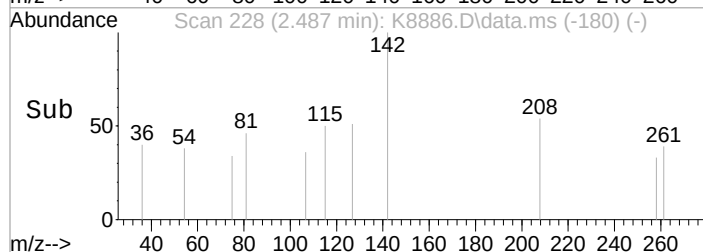
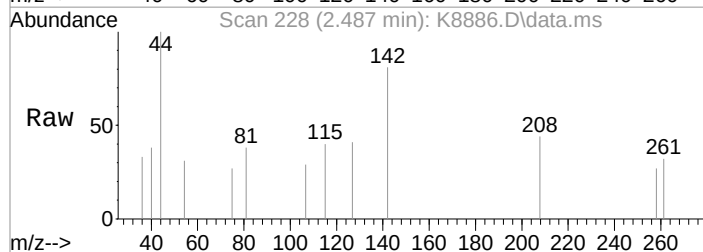
#16
2-Propanol
Concen: 4.33 ppb m
RT: 2.548 min Scan# 238
Delta R.T. 0.018 min
Lab File: K8886.D
Acq: 12 Nov 2021 1:09 am

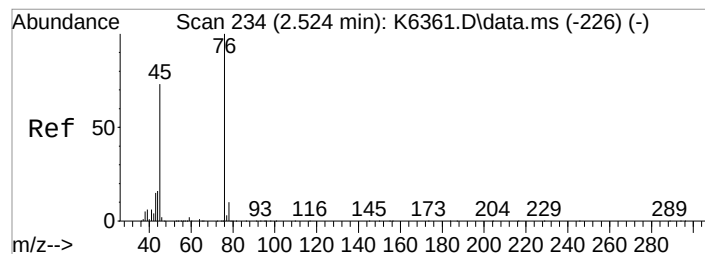
Tgt Ion: 45 Resp: 2042
Ion Ratio Lower Upper
45 100
43 17.5 0.6 40.6



#17
Iodomethane
Concen: 1.47 ppb
RT: 2.487 min Scan# 228
Delta R.T. 0.031 min
Lab File: K8886.D
Acq: 12 Nov 2021 1:09 am

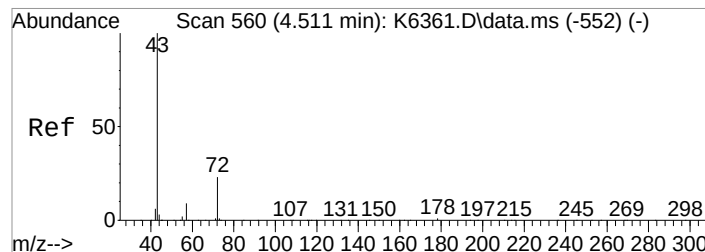
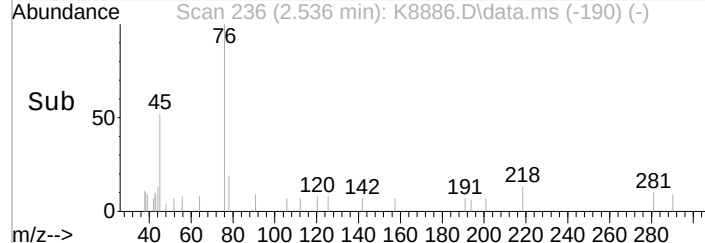
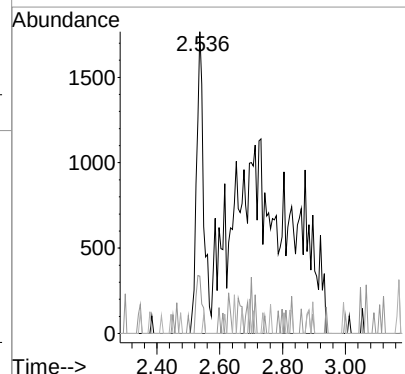
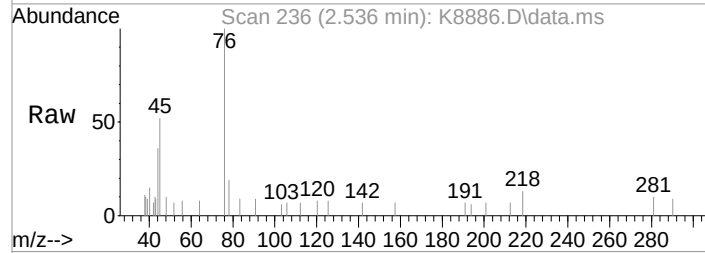
Tgt Ion: 142 Resp: 462
Ion Ratio Lower Upper
142 100
127 51.1 19.6 59.6





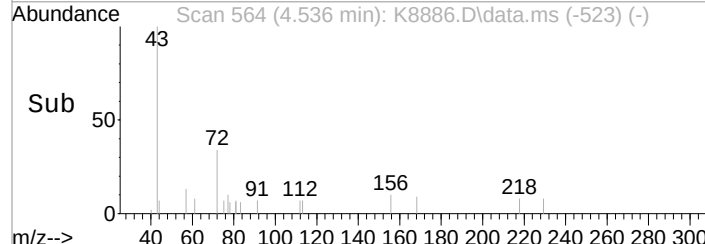
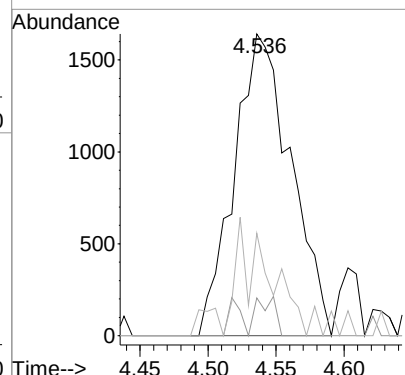
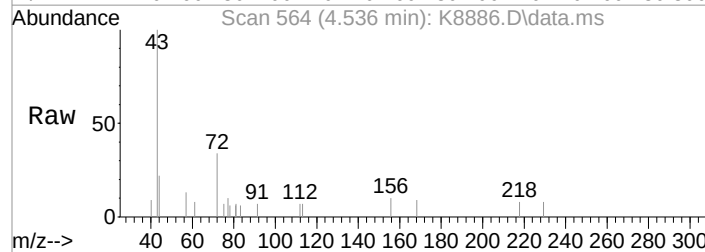
#18
 Carbon Disulfide
 Concen: 1.97 ppb m
 RT: 2.536 min Scan# 236
 Delta R.T. 0.025 min
 Lab File: K8886.D
 Acq: 12 Nov 2021 1:09 am

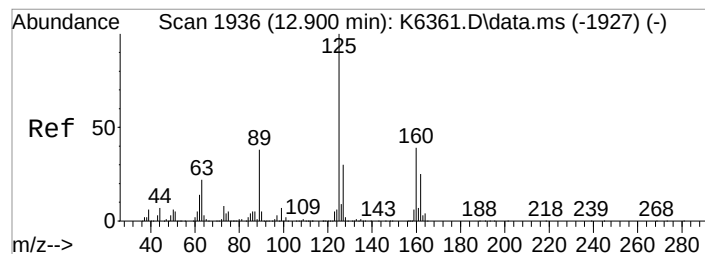
Tgt Ion:	76	Resp:	16789
Ion Ratio		Lower	Upper
76	100		
78	18.9	0.0	29.7
77	0.0	0.0	22.7



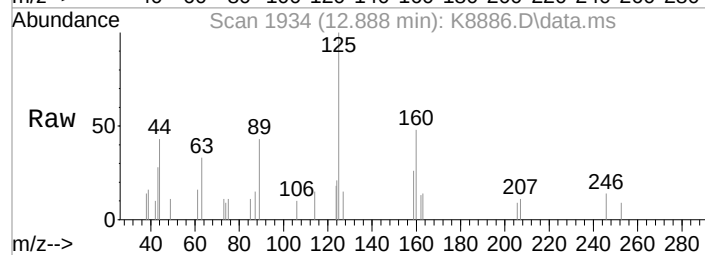
#35
 2-Butanone
 Concen: 1.52 ppb
 RT: 4.536 min Scan# 564
 Delta R.T. 0.025 min
 Lab File: K8886.D
 Acq: 12 Nov 2021 1:09 am

Tgt Ion:	43	Resp:	4766
Ion Ratio		Lower	Upper
43	100		
57	12.5	0.0	28.6
72	33.9	3.4	43.4

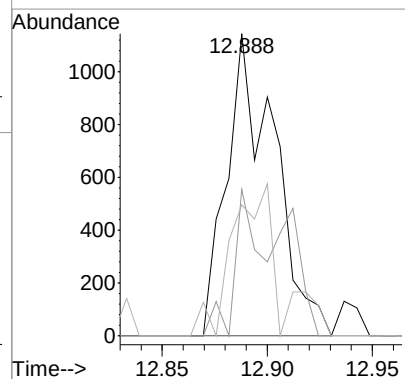
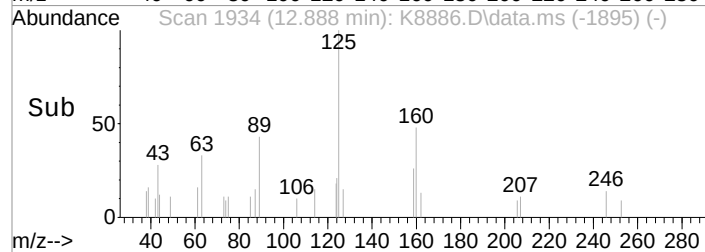




#112
 Trielution Dichlorotoluene
 Concen: 0.22 ppb
 RT: 12.888 min Scan# 1934
 Delta R.T. -0.012 min
 Lab File: K8886.D
 Acq: 12 Nov 2021 1:09 am



Tgt Ion:	125	Resp:	1806
Ion Ratio	Lower	Upper	
125	100		
160	48.4	31.0	46.4#
89	43.3	30.4	45.6



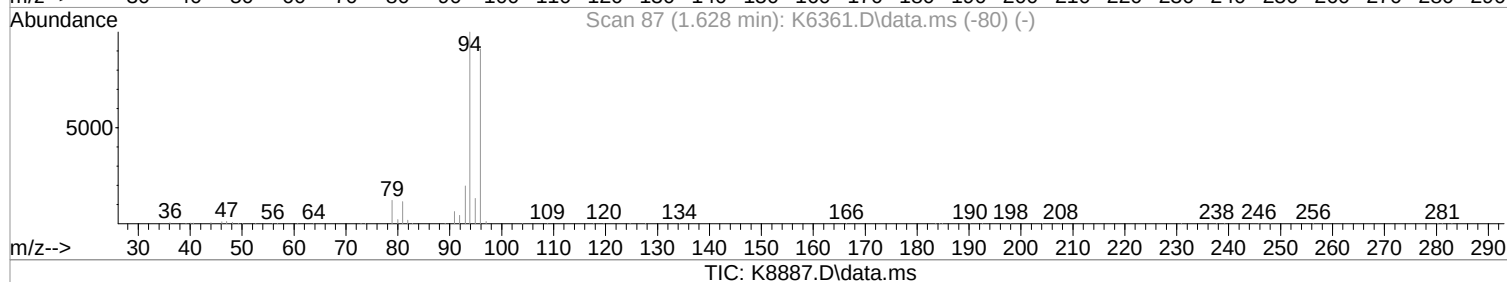
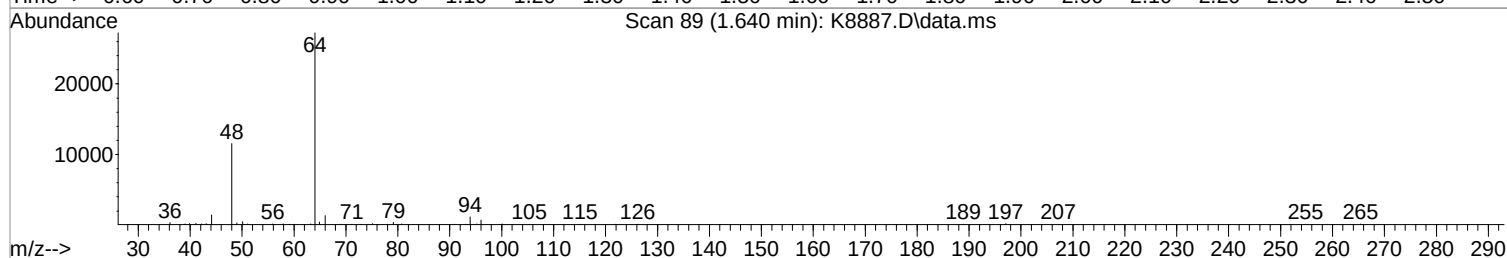
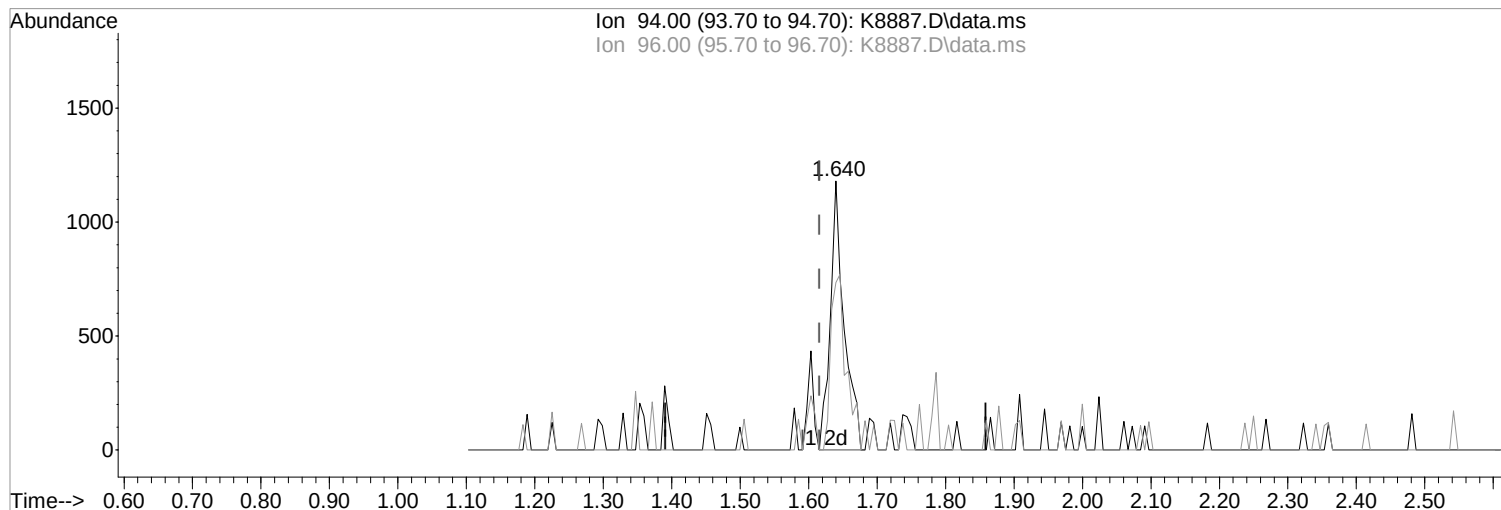
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8887.D
Acq On : 12 Nov 2021 1:31 am
Operator : K.Ruest
Sample : R2111745-002|1.0
Misc : LIRO 8260 T4
ALS Vial : 35 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:04:09 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



(5) Bromomethane (P)

1.640min (+0.024) 0.50 ppb m

response 1662

Ion	Exp%	Act%
94.00	100	100
96.00	91.00	62.29#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Peak not found.

11/18/21

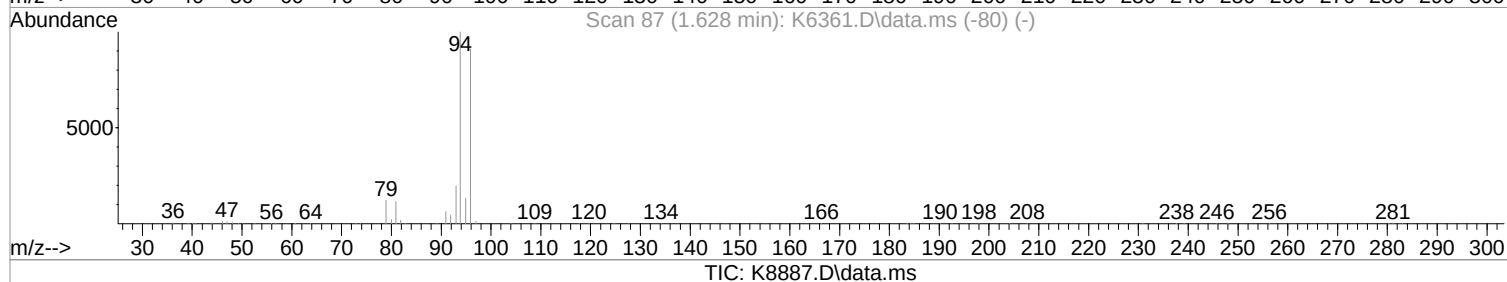
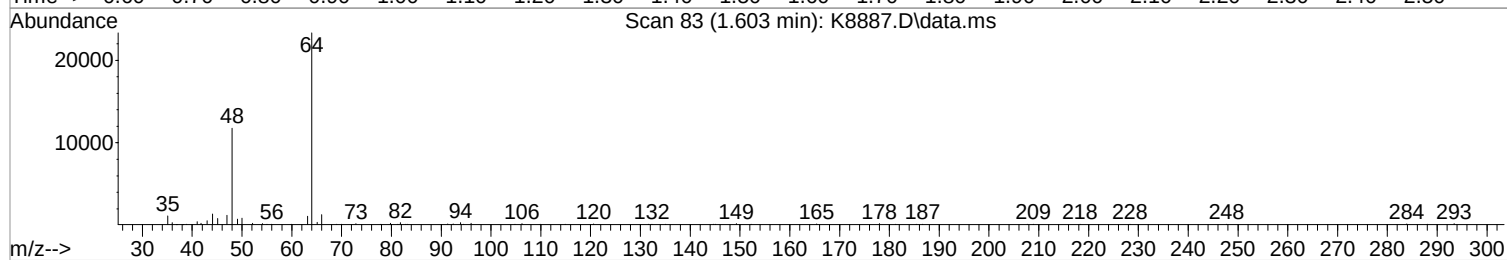
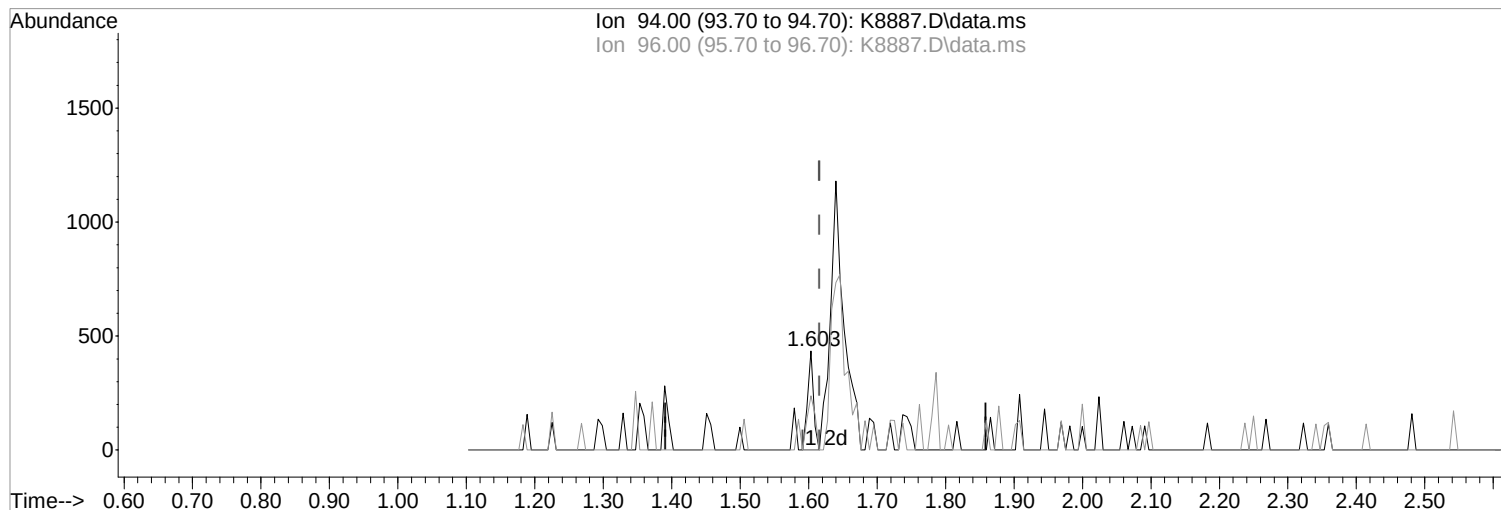
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8887.D
Acq On : 12 Nov 2021 1:31 am
Operator : K.Ruest
Sample : R2111745-002|1.0
Misc : LIRO 8260 T4
ALS Vial : 35 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:04:09 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



(5) Bromomethane (P)

Manual Integration:

1.603min (-0.012) 0.08 ppb

Before

response 264

Ion Exp% Act%

11/18/21

94.00 100 100

96.00 91.00 54.71#

0.00 0.00 0.00

0.00 0.00 0.00

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8887.D
 Acq On : 12 Nov 2021 1:31 am
 Operator : K.Ruest
 Sample : R2111745-002|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 35 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 18 17:58:54 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

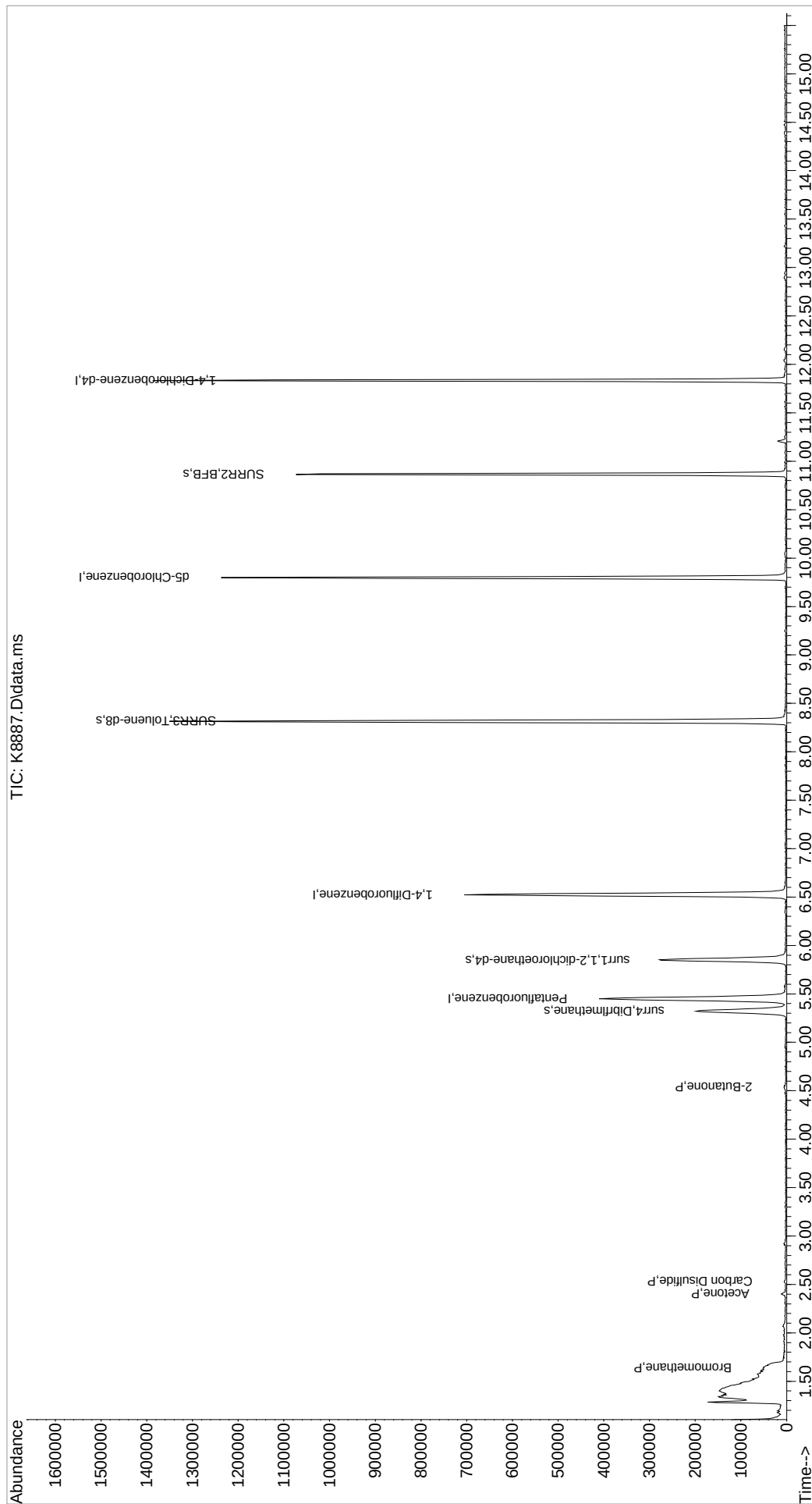
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	372900	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	617368	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	558557	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	269683	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.322	113	164649	48.99	ppb	0.00
Spiked Amount 50.000	Range	80 - 116	Recovery	=	97.98%	
48) surr1,1,2-dichloroetha...	5.846	65	231249	47.32	ppb	0.00
Spiked Amount 50.000	Range	73 - 125	Recovery	=	94.64%	
65) SURR3,Toluene-d8	8.315	98	838423	53.07	ppb	0.00
Spiked Amount 50.000	Range	87 - 121	Recovery	=	106.14%	
70) SURR2,BFB	10.864	95	307887	49.10	ppb	0.00
Spiked Amount 50.000	Range	85 - 122	Recovery	=	98.20%	
Target Compounds						
5) Bromomethane	1.640	94	1662m	0.50	ppb	Qvalue
15) Acetone	2.402	43	8707	2.04	ppb	93
18) Carbon Disulfide	2.530	76	3093	0.35	ppb	54
35) 2-Butanone	4.536	43	5356	1.66	ppb	90

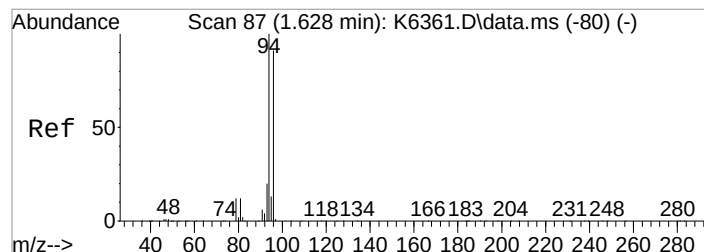
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8887.D
 Acq On : 12 Nov 2021 1:31 am
 Operator : K.Ruest
 Sample : R2111745-002|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 35 Sample Multiplier: 1

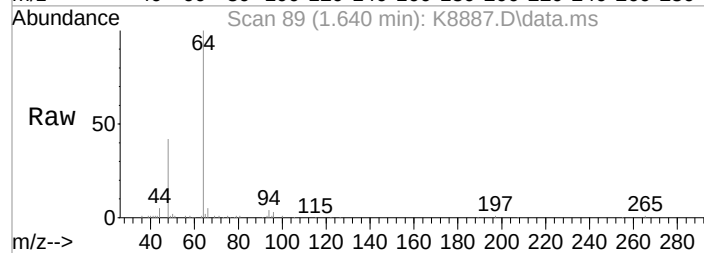
Inst : MSV0A-12

Quant Time: Nov 18 17:58:54 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 Qlast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

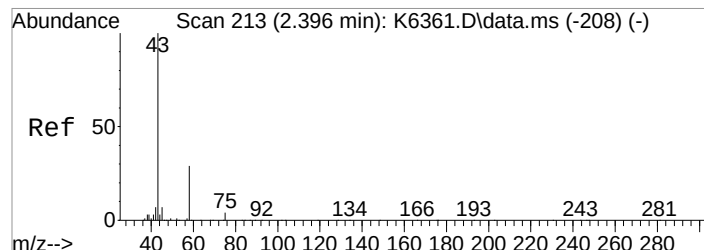
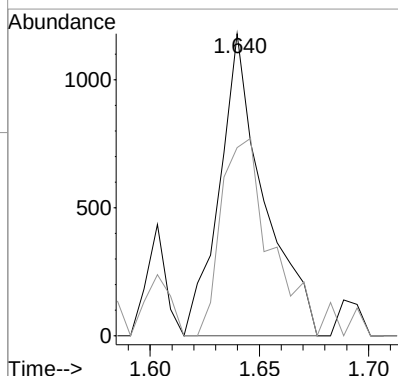
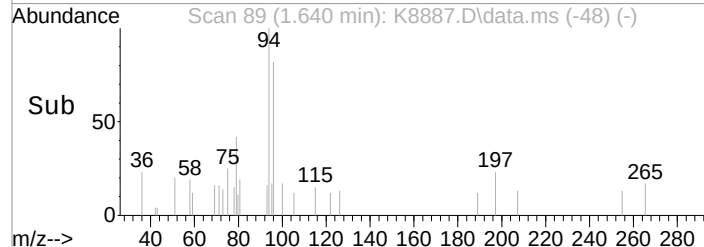




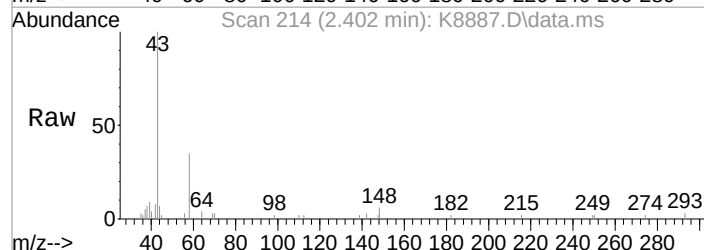
#5
 Bromomethane
 Concen: 0.50 ppb m
 RT: 1.640 min Scan# 89
 Delta R.T. 0.024 min
 Lab File: K8887.D
 Acq: 12 Nov 2021 1:31 am



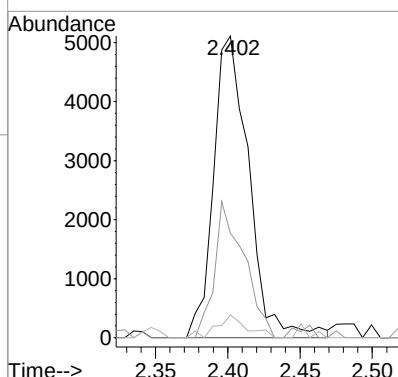
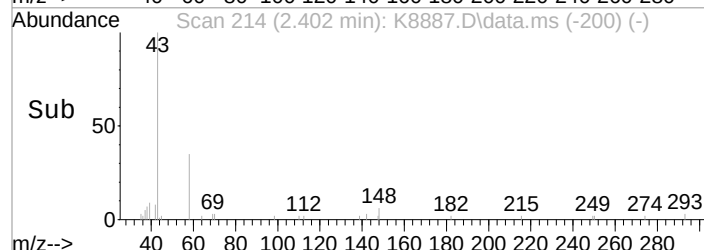
Tgt Ion: 94 Resp: 1662
 Ion Ratio Lower Upper
 94 100
 96 62.3 71.0 111.0#

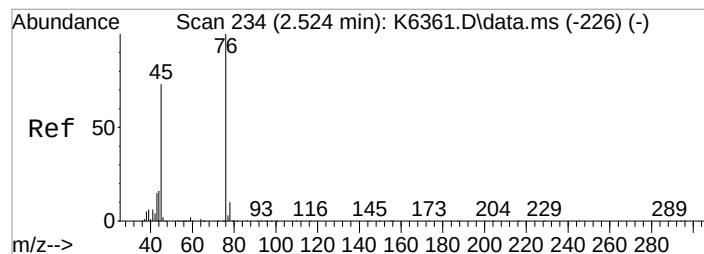


#15
 Acetone
 Concen: 2.04 ppb
 RT: 2.402 min Scan# 214
 Delta R.T. 0.013 min
 Lab File: K8887.D
 Acq: 12 Nov 2021 1:31 am



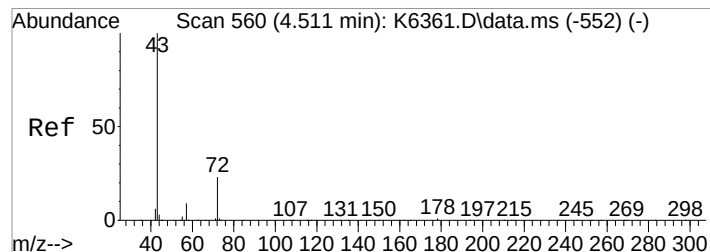
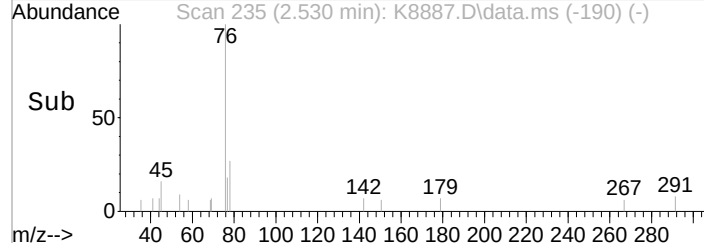
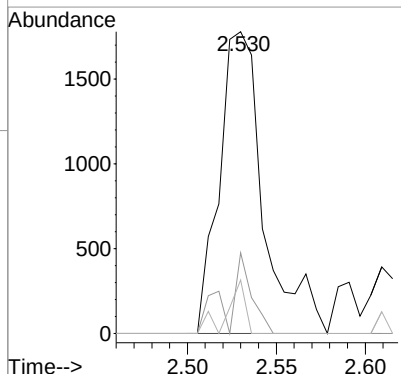
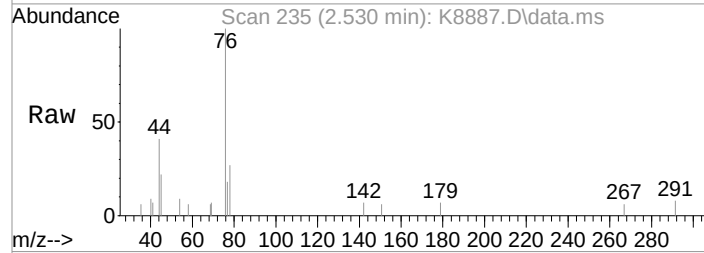
Tgt Ion: 43 Resp: 8707
 Ion Ratio Lower Upper
 43 100
 58 34.5 9.6 49.6
 42 7.5 0.0 27.7





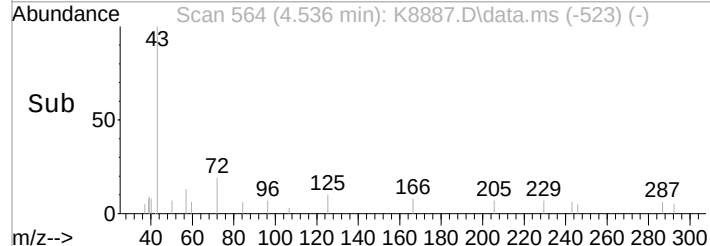
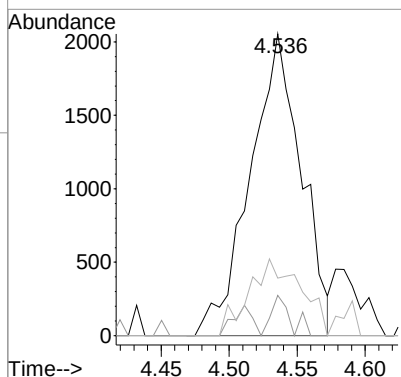
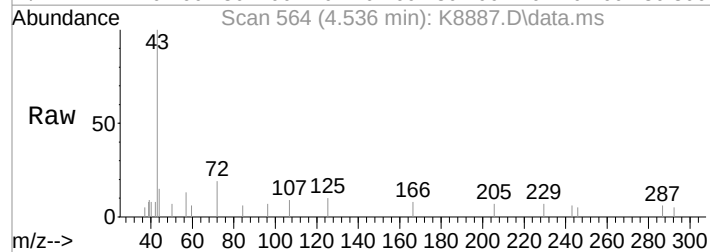
#18
 Carbon Disulfide
 Concen: 0.35 ppb
 RT: 2.530 min Scan# 235
 Delta R.T. 0.018 min
 Lab File: K8887.D
 Acq: 12 Nov 2021 1:31 am

Tgt Ion:	76	Resp:	3093
Ion Ratio		Lower	Upper
76	100		
78	26.8	0.0	29.7
77	17.7	0.0	22.7



#35
 2-Butanone
 Concen: 1.66 ppb
 RT: 4.536 min Scan# 564
 Delta R.T. 0.024 min
 Lab File: K8887.D
 Acq: 12 Nov 2021 1:31 am

Tgt Ion:	43	Resp:	5356
Ion Ratio		Lower	Upper
43	100		
57	13.4	0.0	28.6
72	19.1	3.4	43.4



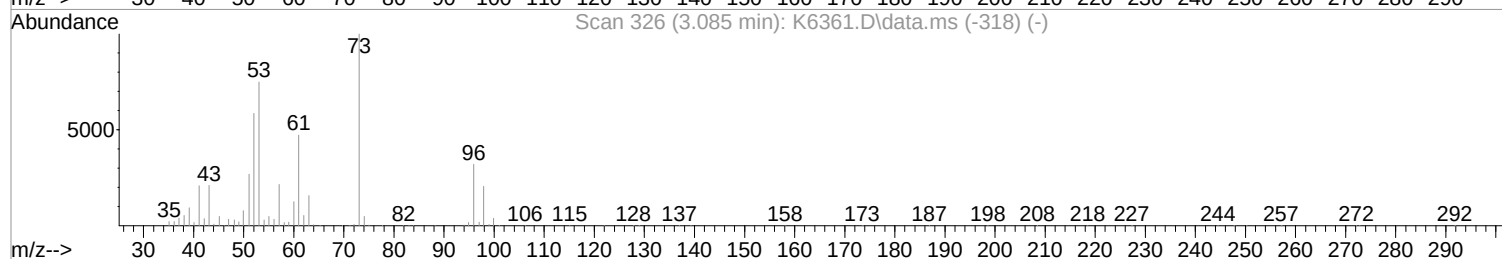
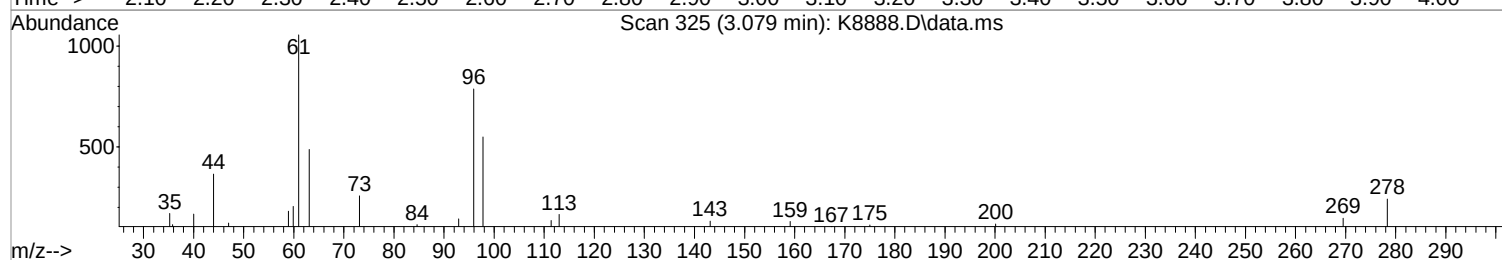
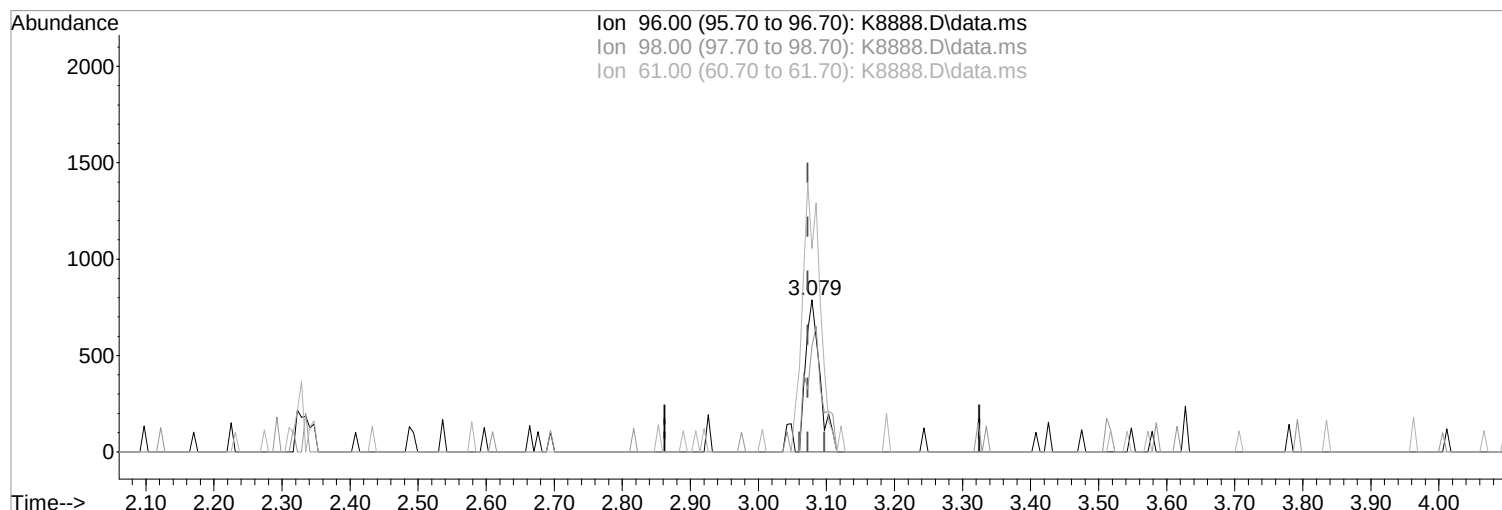
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8888.D
Acq On : 12 Nov 2021 1:52 am
Operator : K.Ruest
Sample : R2111745-003|1.0
Misc : LIRO 8260 T4
ALS Vial : 36 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:04:20 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8888.D\data.ms

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

3.079min (+0.006) 0.28 ppb m

response 1154

Ion	Exp%	Act%
96.00	100	100
98.00	64.10	69.80
61.00	147.90	134.01
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

11/18/21

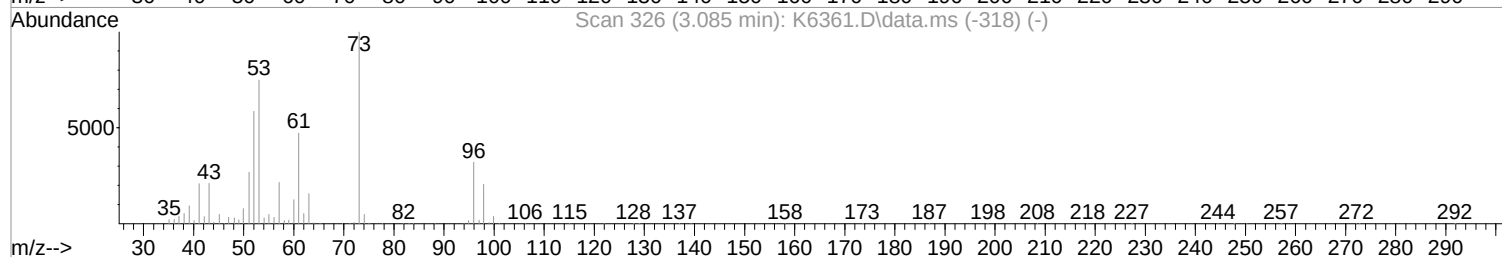
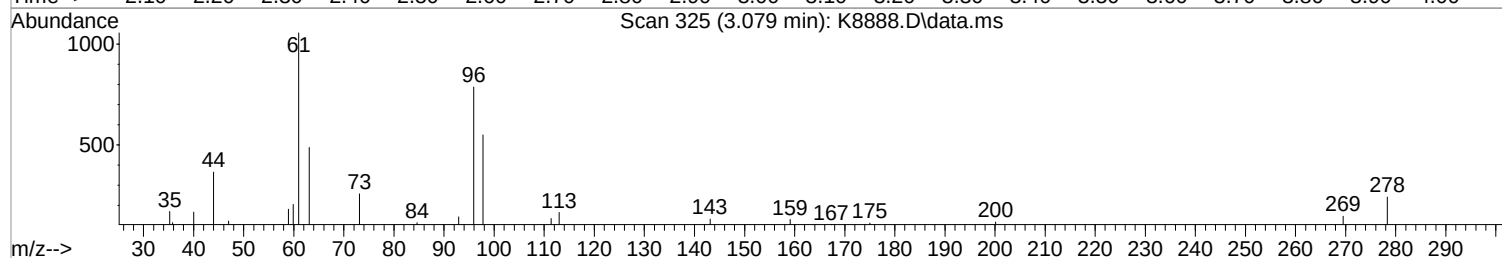
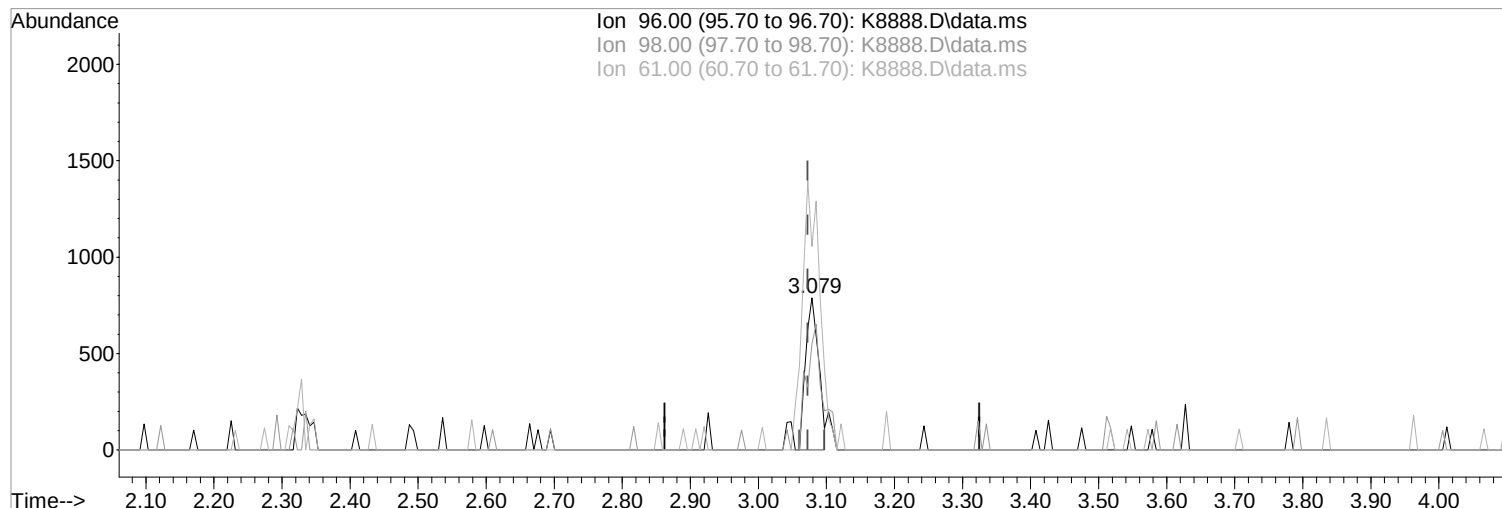
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8888.D
Acq On : 12 Nov 2021 1:52 am
Operator : K.Ruest
Sample : R2111745-003|1.0
Misc : LIRO 8260 T4
ALS Vial : 36 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:04:20 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8888.D\data.ms

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

Manual Integration:

3.079min (+0.006) 0.25 ppb

Before

response 1044

Ion	Exp%	Act%
96.00	100	100
98.00	64.10	69.80
61.00	147.90	134.01
0.00	0.00	0.00

11/18/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8888.D
 Acq On : 12 Nov 2021 1:52 am
 Operator : K.Ruest
 Sample : R2111745-003|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 36 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 18 18:00:34 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

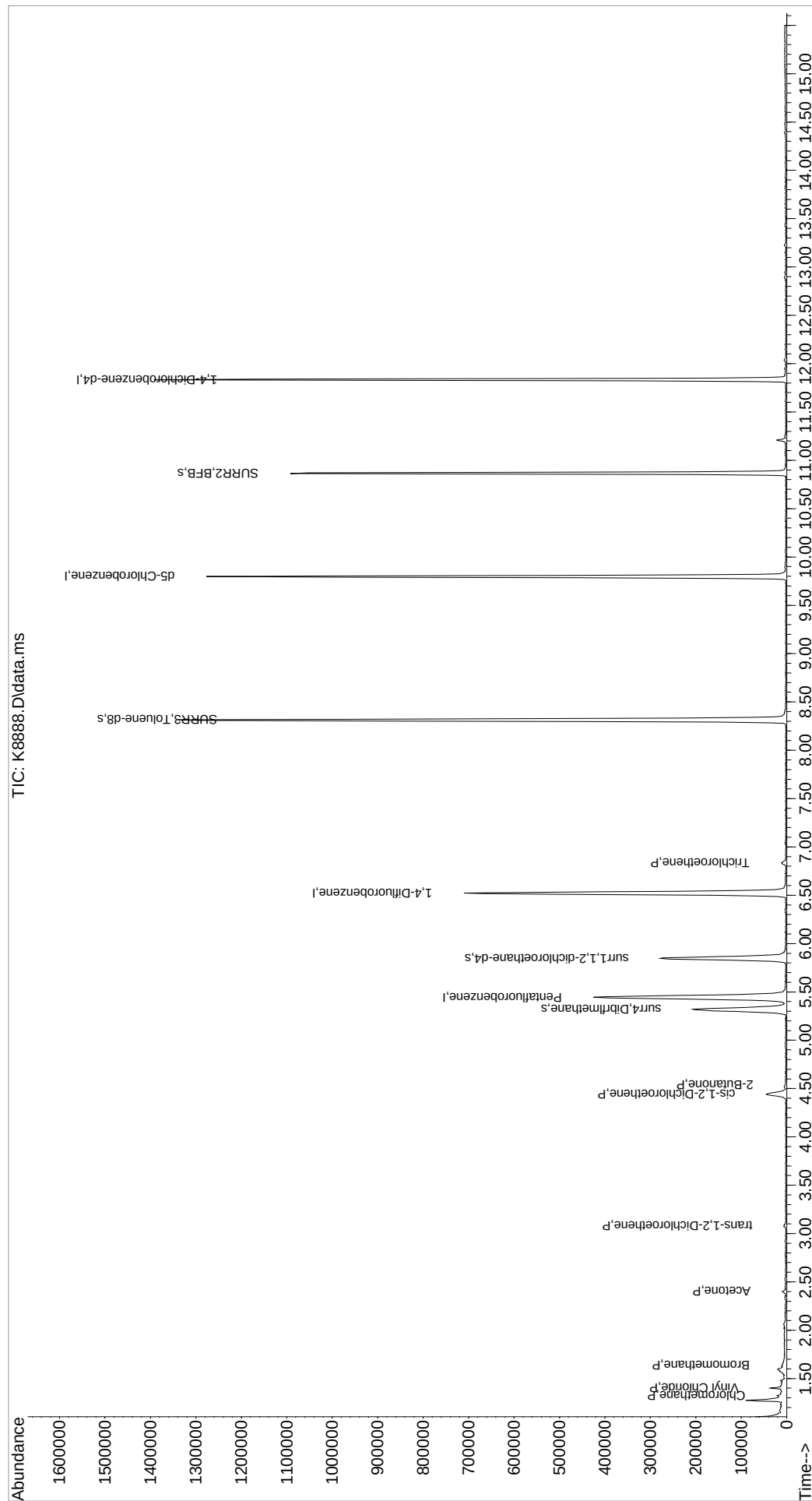
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.444	168	386897	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	634760	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	563722	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	266764	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.322	113	171552	49.65	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	99.30%	
48) surr1,1,2-dichloroetha...	5.846	65	238446	47.45	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	94.90%	
65) SURR3,Toluene-d8	8.315	98	859949	52.94	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	105.88%	
70) SURR2,BFB	10.864	95	309526	48.01	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	96.02%	
Target Compounds						
3) Chloromethane	1.323	50	3031	0.67	ppb	Qvalue 80
4) Vinyl Chloride	1.402	62	11754	2.25	ppb	83
5) Bromomethane	1.634	94	1653	0.48	ppb	# 75
15) Acetone	2.402	43	6785	1.02	ppb	96
26) trans-1,2-Dichloroethene	3.079	96	1154m	0.28	ppb	
34) cis-1,2-Dichloroethene	4.444	96	26176	5.52	ppb	# 79
35) 2-Butanone	4.536	43	3982	1.19	ppb	93
54) Trichloroethene	6.834	130	3156	0.71	ppb	90

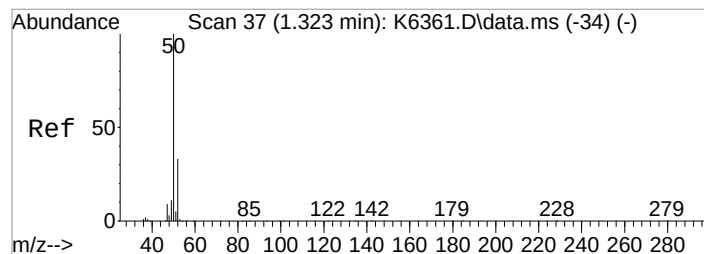
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8888.D
 Acq On : 12 Nov 2021 1:52 am
 Operator : K.Ruest
 Sample : R2111745-003|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 36 Sample Multiplier: 1

Inst : MSV0A-12

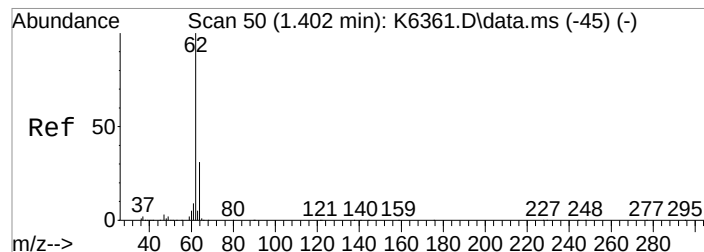
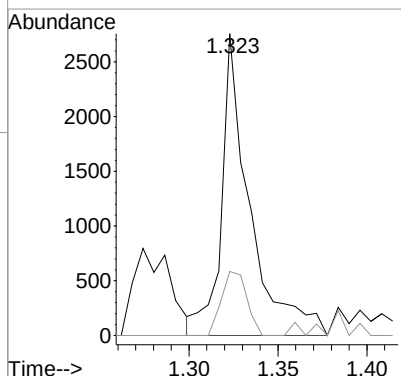
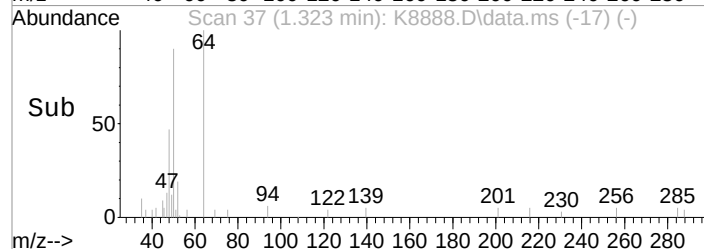
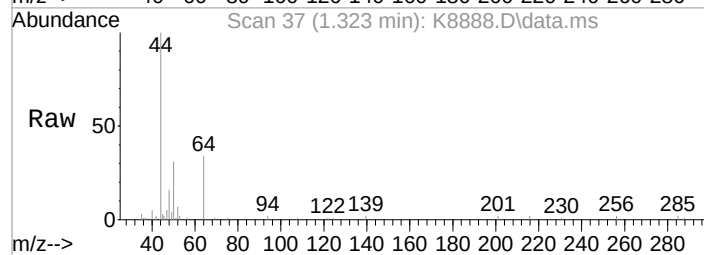
Quant Time: Nov 18 18:00:34 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 Qlast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration





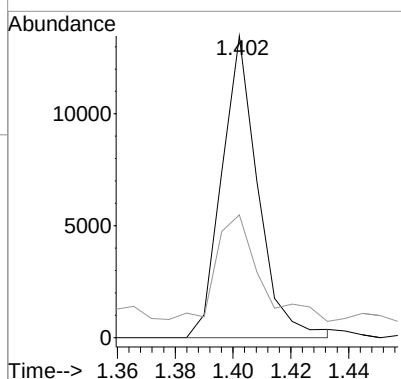
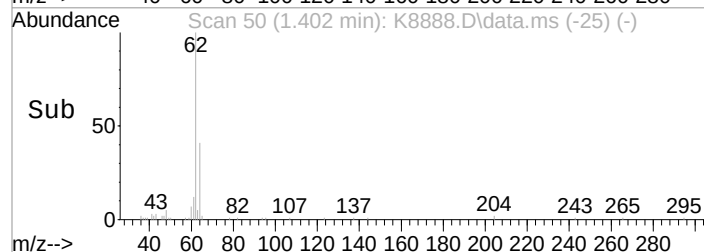
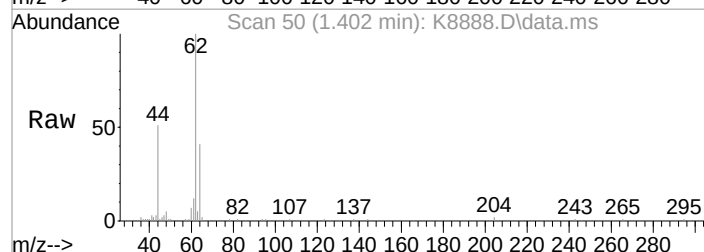
#3
Chloromethane
Concen: 0.67 ppb
RT: 1.323 min Scan# 37
Delta R.T. 0.006 min
Lab File: K8888.D
Acq: 12 Nov 2021 1:52 am

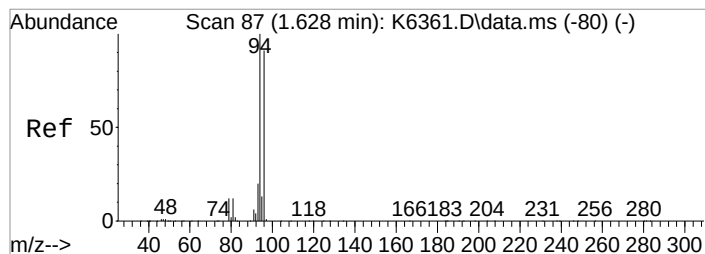
Tgt Ion: 50 Resp: 3031
Ion Ratio Lower Upper
50 100
52 21.2 12.7 52.7



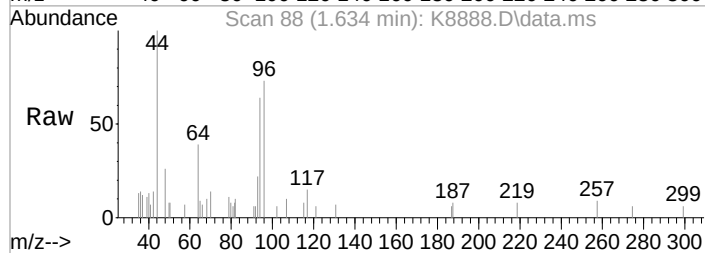
#4
Vinyl Chloride
Concen: 2.25 ppb
RT: 1.402 min Scan# 50
Delta R.T. 0.006 min
Lab File: K8888.D
Acq: 12 Nov 2021 1:52 am

Tgt Ion: 62 Resp: 11754
Ion Ratio Lower Upper
62 100
64 40.7 11.5 51.5

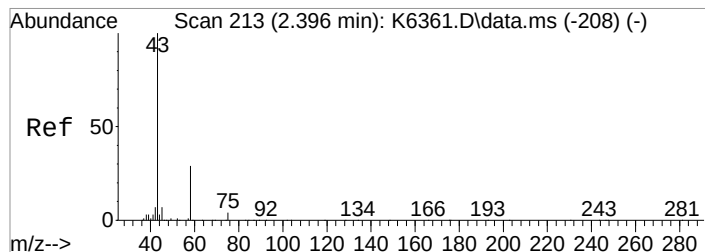
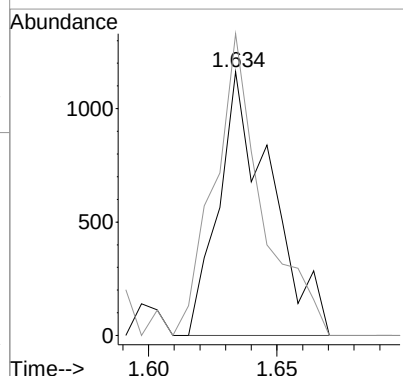
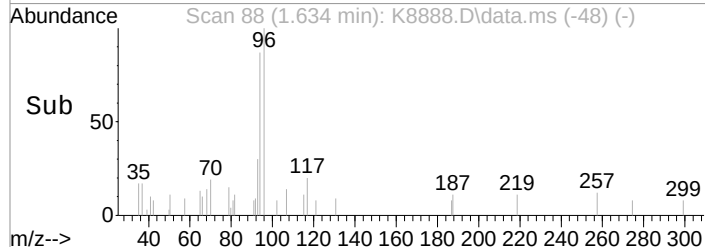




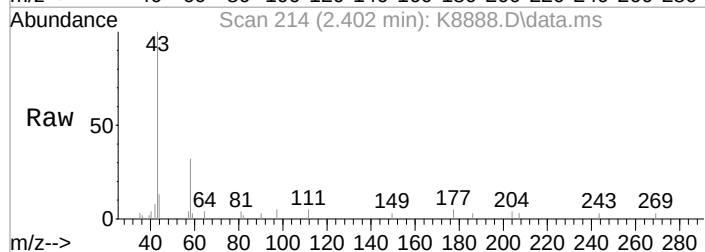
#5
 Bromomethane
 Concen: 0.48 ppb
 RT: 1.634 min Scan# 88
 Delta R.T. 0.018 min
 Lab File: K8888.D
 Acq: 12 Nov 2021 1:52 am



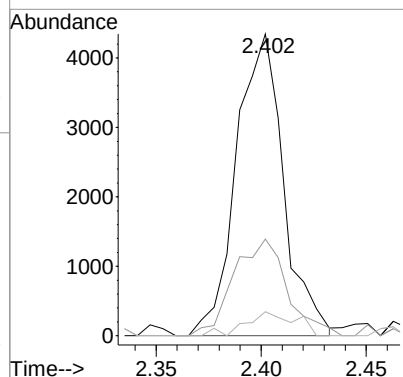
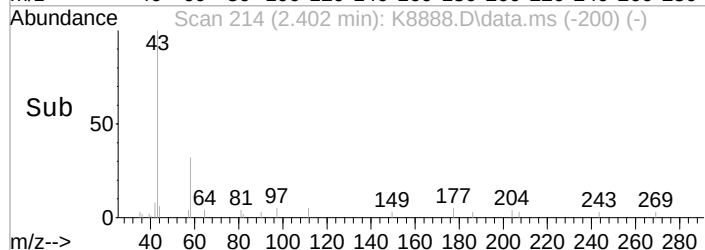
Tgt Ion: 94 Resp: 1653
 Ion Ratio Lower Upper
 94 100
 96 114.5 71.0 111.0#

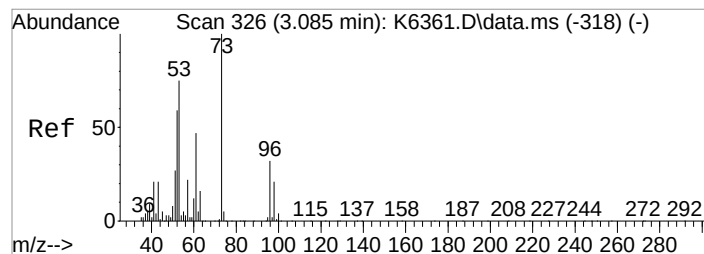


#15
 Acetone
 Concen: 1.02 ppb
 RT: 2.402 min Scan# 214
 Delta R.T. 0.013 min
 Lab File: K8888.D
 Acq: 12 Nov 2021 1:52 am



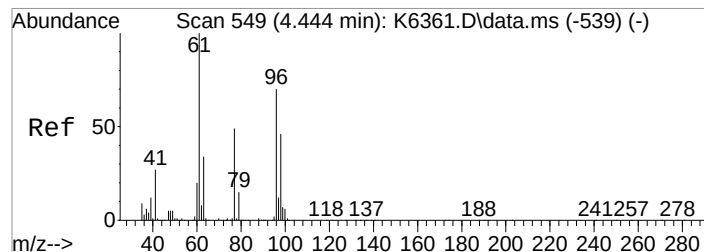
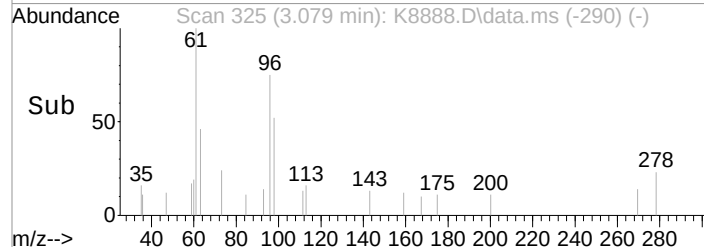
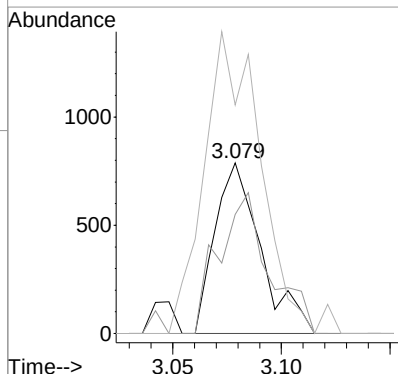
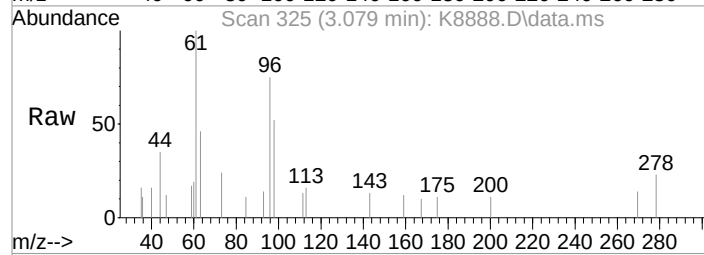
Tgt Ion: 43 Resp: 6785
 Ion Ratio Lower Upper
 43 100
 58 32.0 9.6 49.6
 42 8.0 0.0 27.7





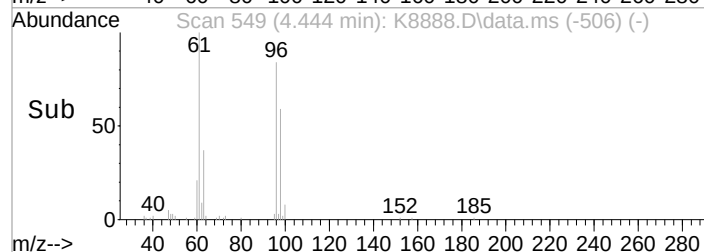
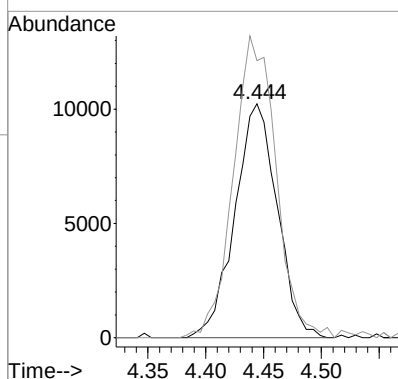
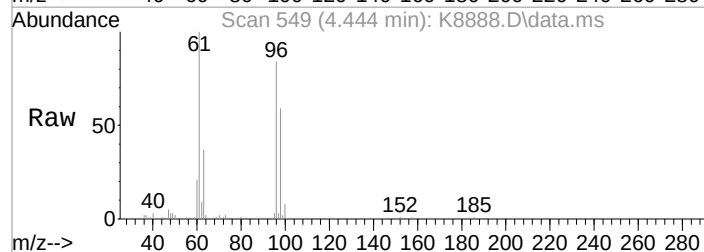
#26
trans-1,2-Dichloroethene
Concen: 0.28 ppb m
RT: 3.079 min Scan# 325
Delta R.T. 0.006 min
Lab File: K8888.D
Acq: 12 Nov 2021 1:52 am

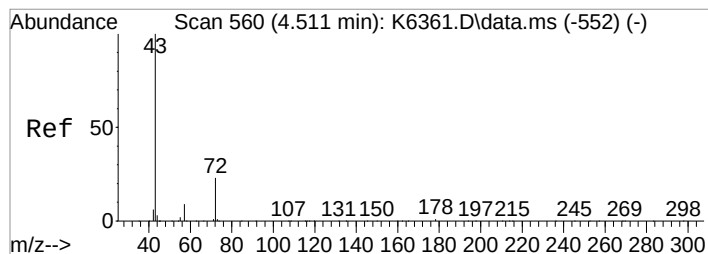
Tgt Ion: 96 Resp: 1154
Ion Ratio Lower Upper
96 100
98 69.8 44.1 84.1
61 134.0 127.9 167.9



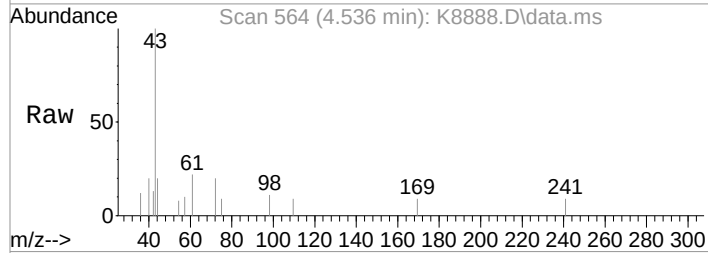
#34
cis-1,2-Dichloroethene
Concen: 5.52 ppb
RT: 4.444 min Scan# 549
Delta R.T. 0.006 min
Lab File: K8888.D
Acq: 12 Nov 2021 1:52 am

Tgt Ion: 96 Resp: 26176
Ion Ratio Lower Upper
96 100
61 118.4 125.2 165.2#

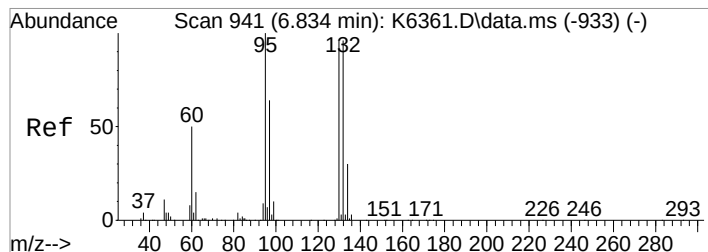
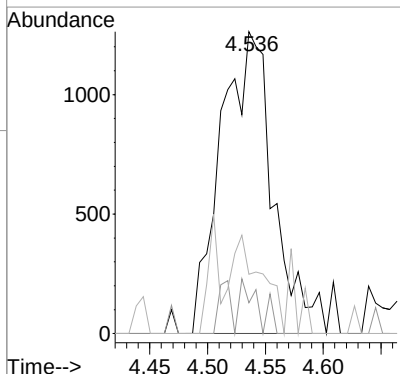
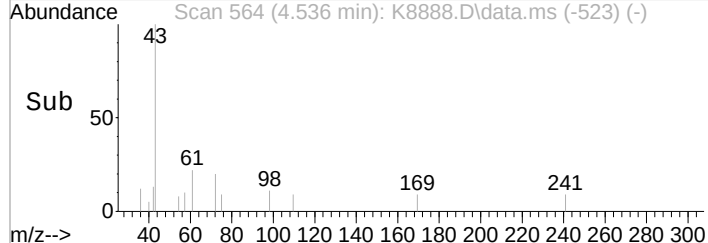




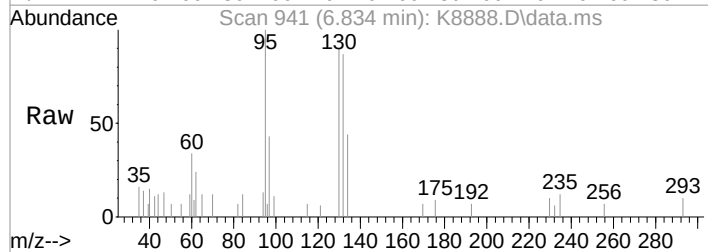
#35
 2-Butanone
 Concen: 1.19 ppb
 RT: 4.536 min Scan# 564
 Delta R.T. 0.024 min
 Lab File: K8888.D
 Acq: 12 Nov 2021 1:52 am



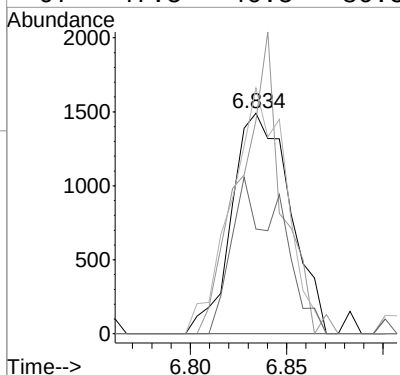
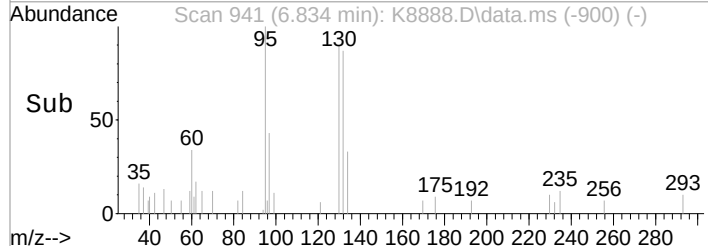
Tgt Ion:	43	Resp:	3982
Ion Ratio		Lower	Upper
43	100		
57	10.2	0.0	28.6
72	19.6	3.4	43.4



#54
 Trichloroethene
 Concen: 0.71 ppb
 RT: 6.834 min Scan# 941
 Delta R.T. 0.000 min
 Lab File: K8888.D
 Acq: 12 Nov 2021 1:52 am



Tgt Ion:	130	Resp:	3156
Ion Ratio		Lower	Upper
130	100		
132	96.6	79.7	119.7
95	111.5	83.8	123.8
97	47.5	46.5	86.5



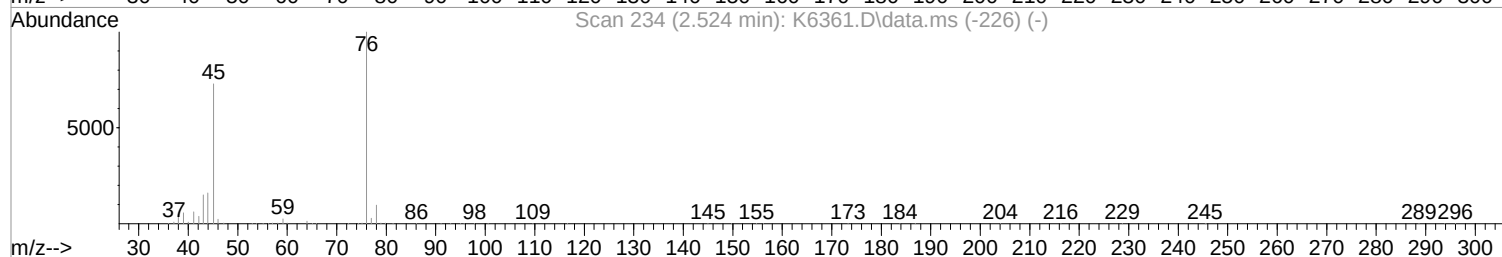
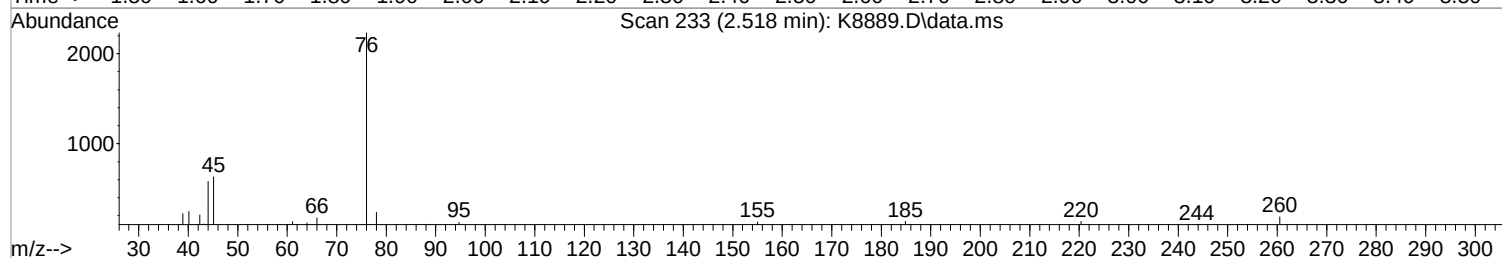
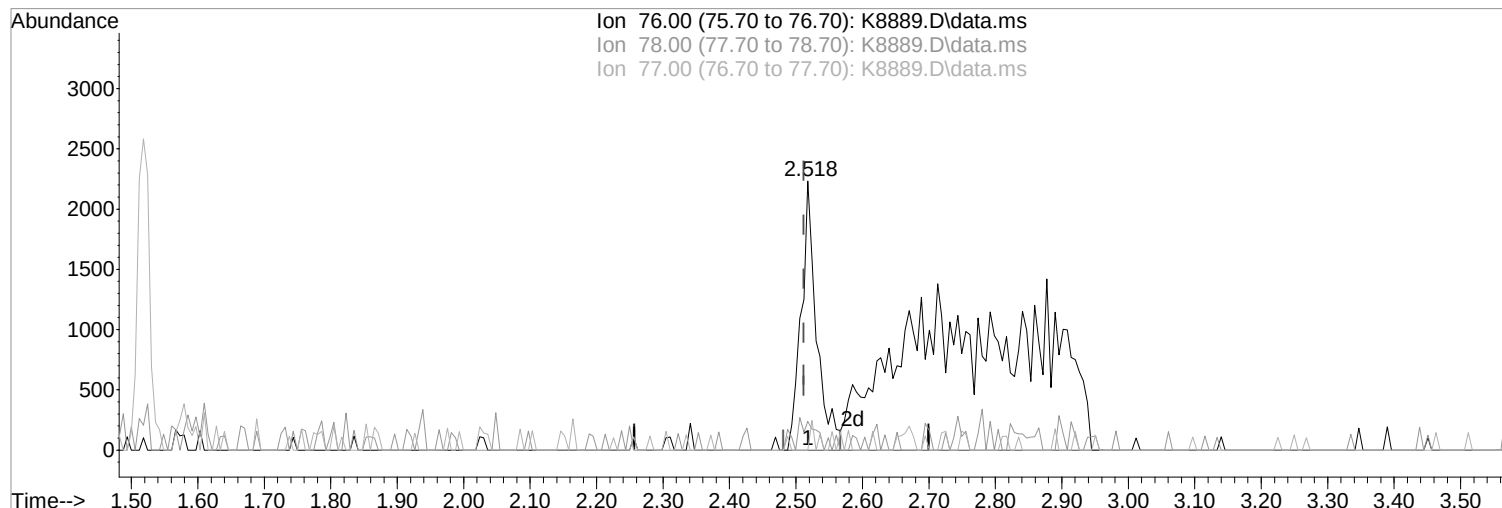
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8889.D
Acq On : 12 Nov 2021 2:14 am
Operator : K.Ruest
Sample : R2111745-004|1.0
Misc : LIRO 8260 T4
ALS Vial : 37 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:04:33 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8889.D\data.ms

(18) Carbon Disulfide (P)

2.518min (+0.006) 2.46 ppb m

response 21727

Ion	Exp%	Act%
76.00	100	100
78.00	9.70	10.61
77.00	2.70	0.00
0.00	0.00	0.00

Manual Integration:

After

Other - so2 interference

11/18/21

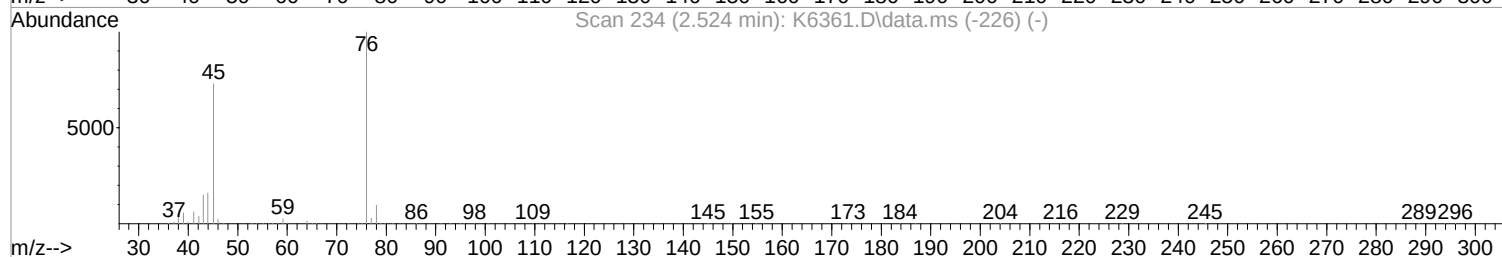
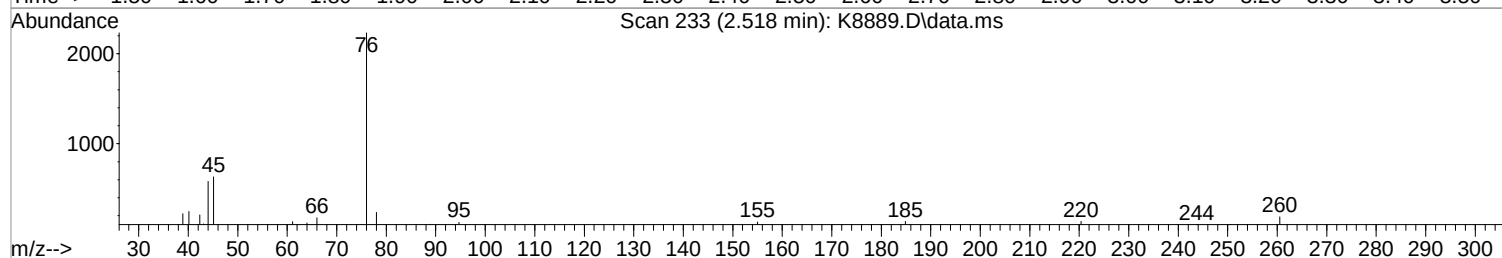
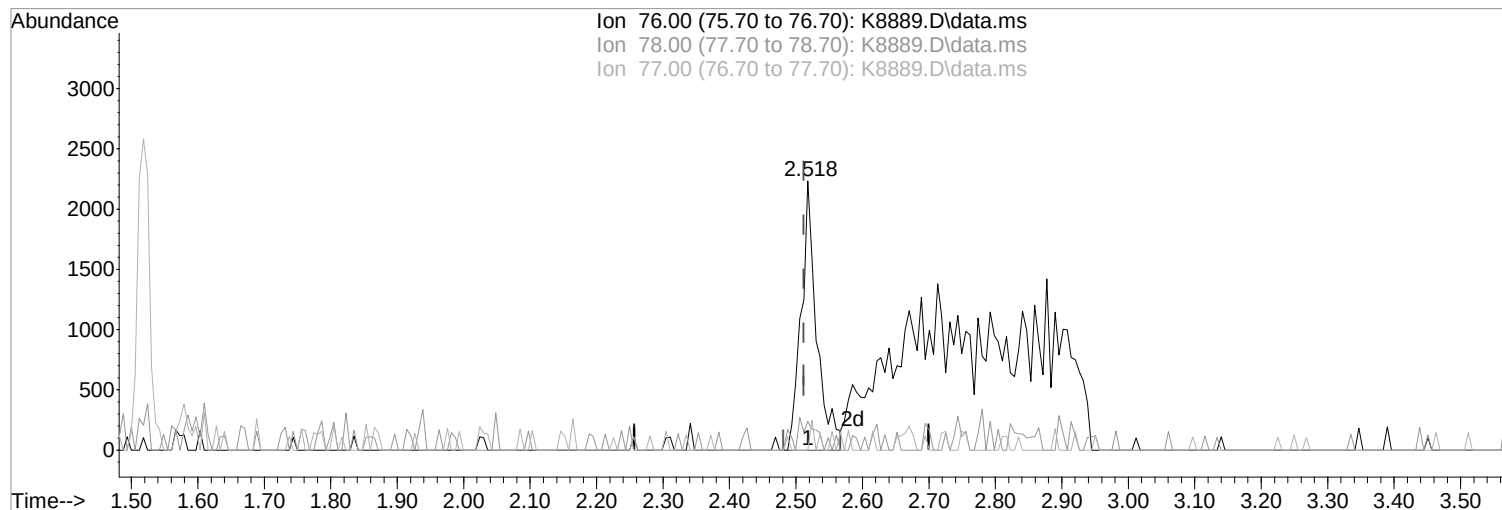
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8889.D
Acq On : 12 Nov 2021 2:14 am
Operator : K.Ruest
Sample : R2111745-004|1.0
Misc : LIRO 8260 T4
ALS Vial : 37 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:04:33 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8889.D\data.ms

(18) Carbon Disulfide (P)

Manual Integration:

2.518min (+0.006) 0.41 ppb

Before

response 3615

Ion	Exp%	Act%
76.00	100	100
78.00	9.70	10.61
77.00	2.70	0.00
0.00	0.00	0.00

11/18/21

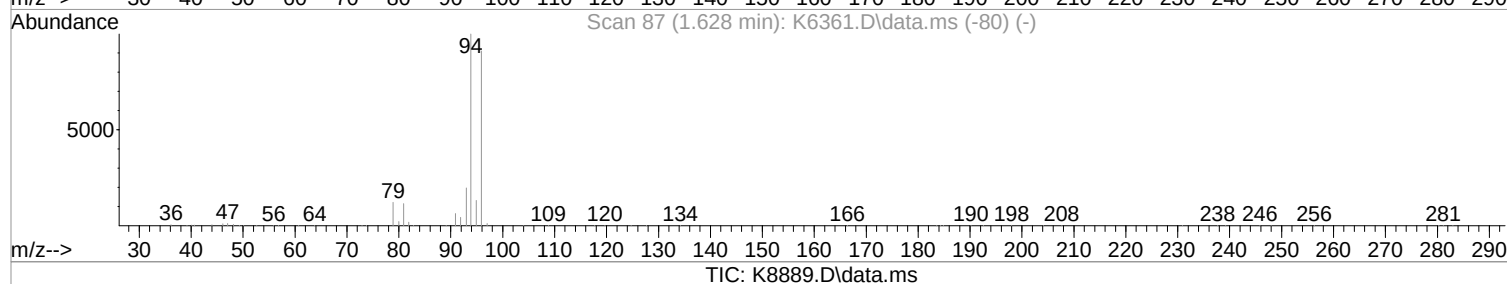
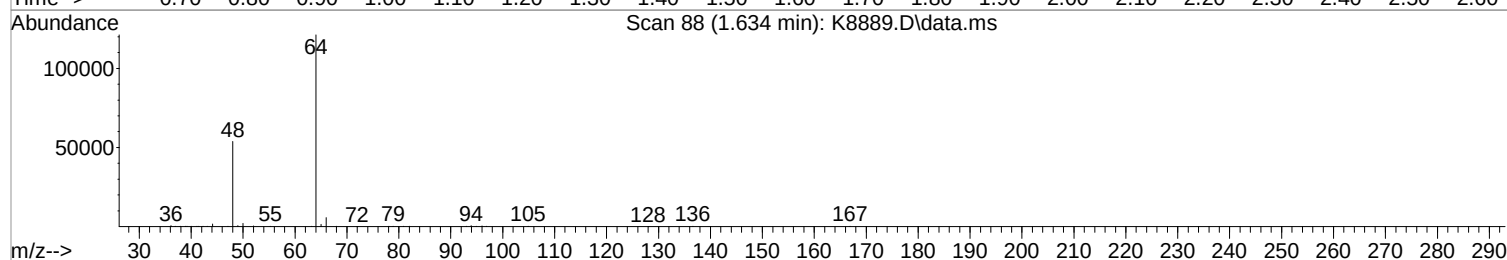
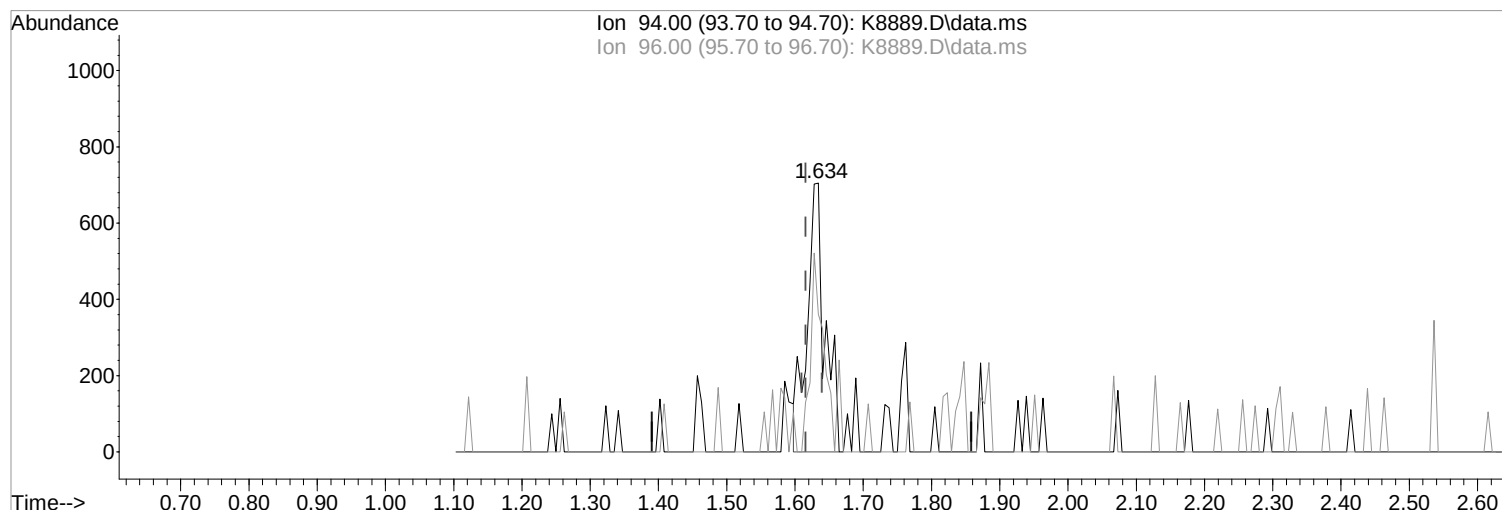
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8889.D
Acq On : 12 Nov 2021 2:14 am
Operator : K.Ruest
Sample : R2111745-004|1.0
Misc : LIRO 8260 T4
ALS Vial : 37 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:04:33 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



(5) Bromomethane (P)

1.634min (+0.018) 0.39 ppb m

response 1281

Ion	Exp%	Act%
94.00	100	100
96.00	91.00	51.21#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

11/18/21

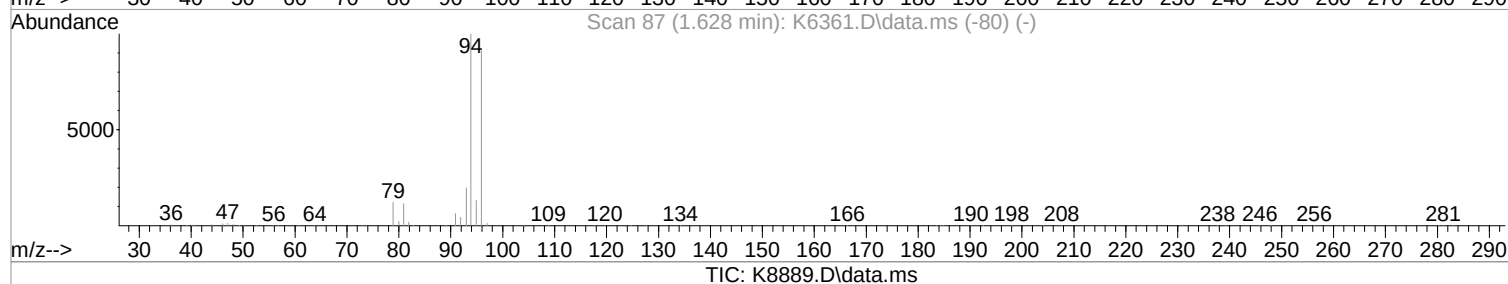
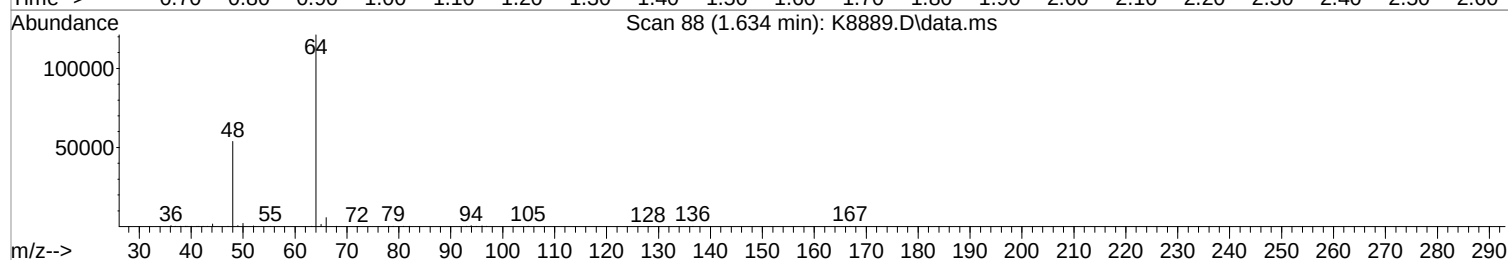
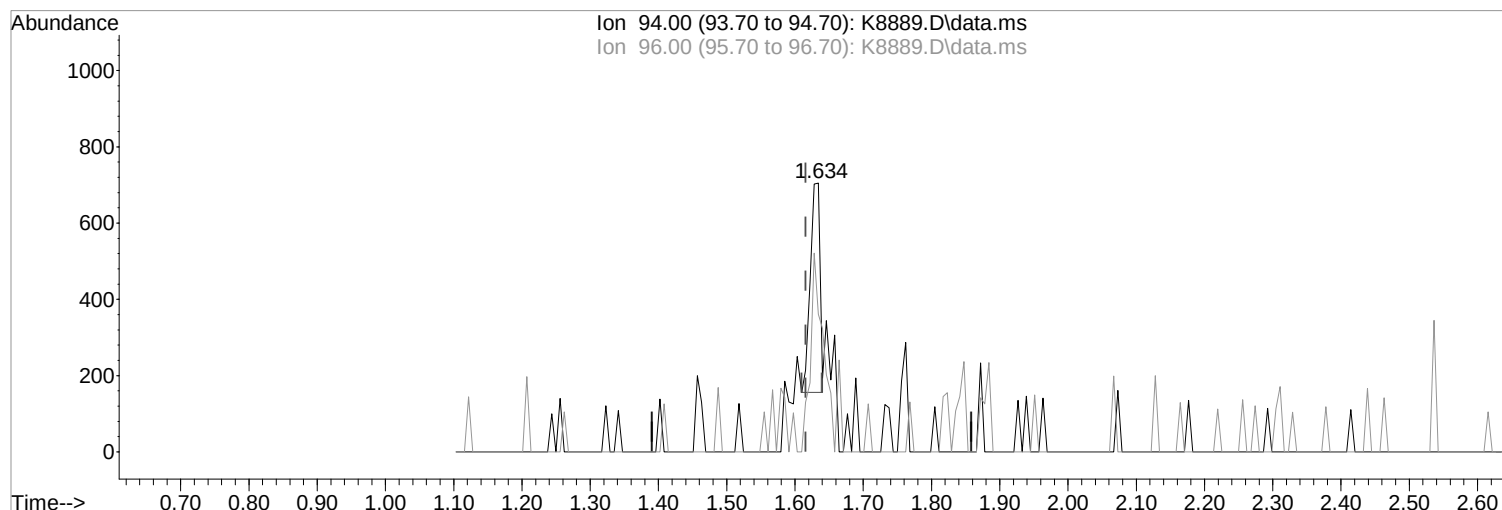
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8889.D
Acq On : 12 Nov 2021 2:14 am
Operator : K.Ruest
Sample : R2111745-004|1.0
Misc : LIRO 8260 T4
ALS Vial : 37 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:04:33 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



(5) Bromomethane (P)

Manual Integration:

1.634min (+0.018) 0.16 ppb

Before

response 541

Ion Exp% Act%

11/18/21

94.00 100 100

96.00 91.00 51.21#

0.00 0.00 0.00

0.00 0.00 0.00

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8889.D
 Acq On : 12 Nov 2021 2:14 am
 Operator : K.Ruest
 Sample : R2111745-004|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 37 Sample Multiplier: 1

Inst : MSVOA-12

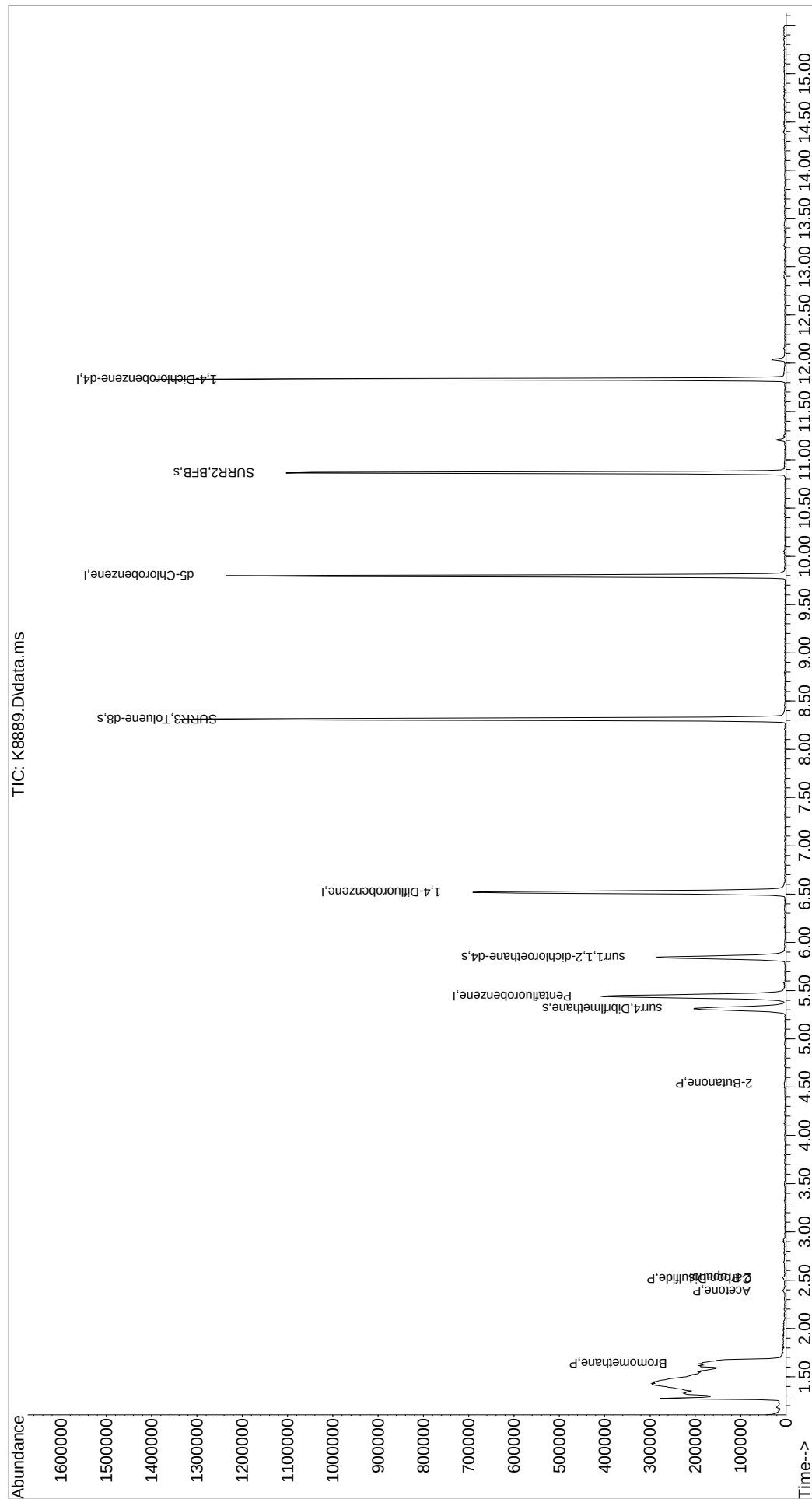
Quant Time: Nov 18 18:03:46 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

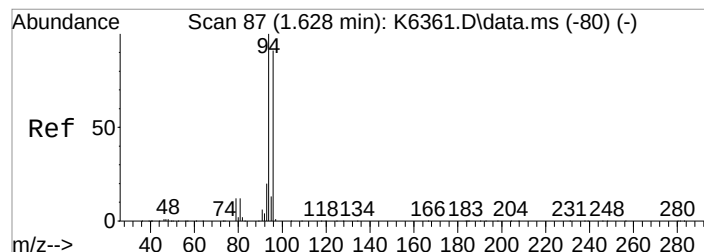
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.438	168	375802	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.517	114	618007	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	560577	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	264749	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.310	113	169460	50.37	ppb	0.00
Spiked Amount 50.000	Range 80 - 116		Recovery =	100.74%		
48) surr1,1,2-dichloroetha...	5.847	65	234321	47.90	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery =	95.80%		
65) SURR3,Toluene-d8	8.309	98	852929	53.94	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	107.88%		
70) SURR2,BFB	10.864	95	313664	49.97	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	99.94%		
Target Compounds						
5) Bromomethane	1.634	94	1281m	0.39	ppb	Qvalue
15) Acetone	2.390	43	5358	0.44	ppb	90
16) 2-Propanol	2.524	45	1900	3.89	ppb	94
18) Carbon Disulfide	2.518	76	21727m	2.46	ppb	
35) 2-Butanone	4.536	43	2535	0.78	ppb	88

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

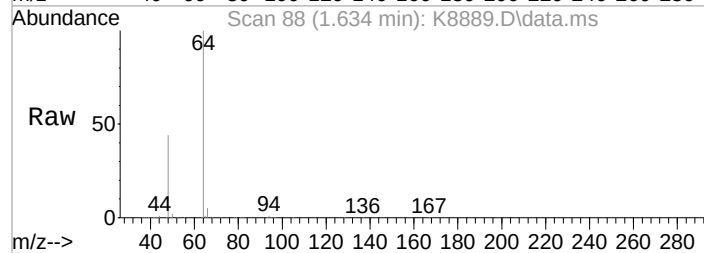
Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8889.D
Acq On : 12 Nov 2021 2:14 am
Operator : K.Ruest
Sample : R2111745-004|1.0
Misc : LIRO 8260 T4
ALS Vial : 37 Sample Multiplier: 1
Inst : MSV0A-12

Quant Time: Nov 18 18:03:46 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration

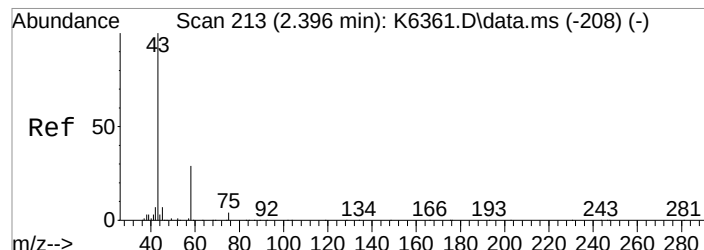
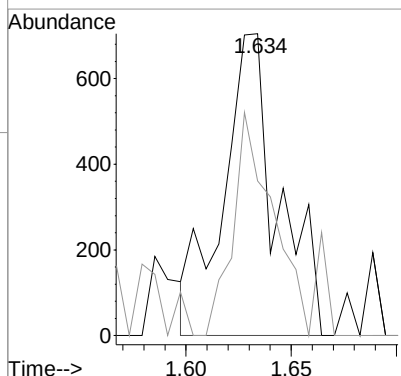
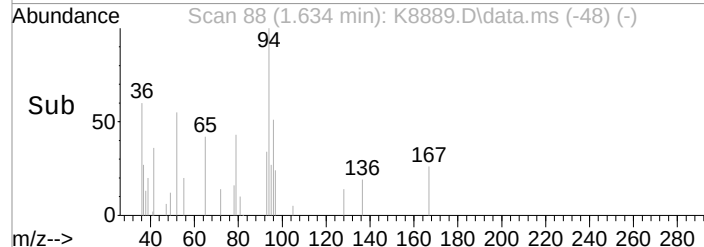




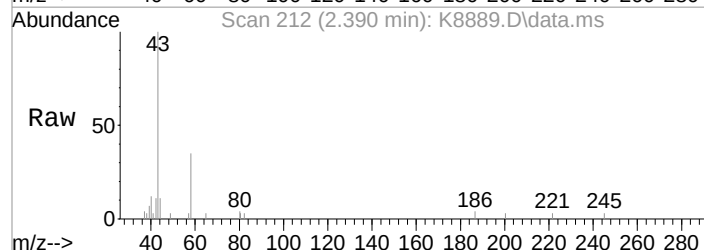
#5
Bromomethane
Concen: 0.39 ppb m
RT: 1.634 min Scan# 88
Delta R.T. 0.018 min
Lab File: K8889.D
Acq: 12 Nov 2021 2:14 am



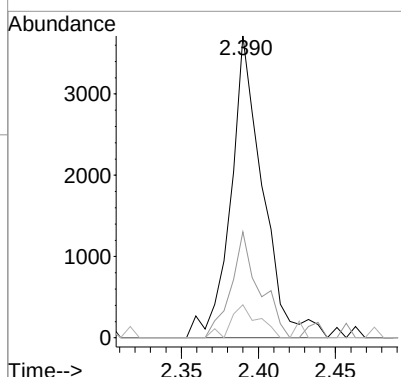
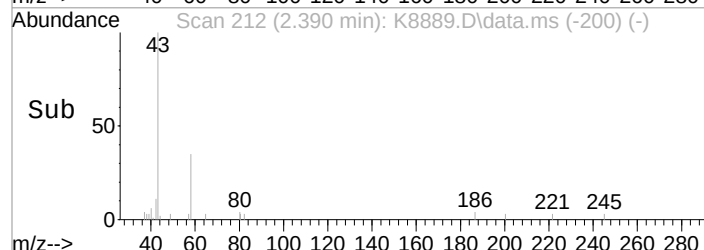
Tgt Ion: 94 Resp: 1281
Ion Ratio Lower Upper
94 100
96 51.2 71.0 111.0#

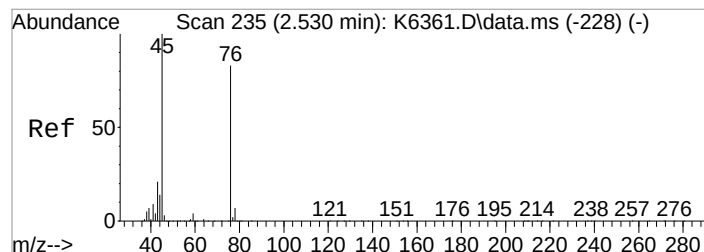


#15
Acetone
Concen: 0.44 ppb
RT: 2.390 min Scan# 212
Delta R.T. 0.001 min
Lab File: K8889.D
Acq: 12 Nov 2021 2:14 am



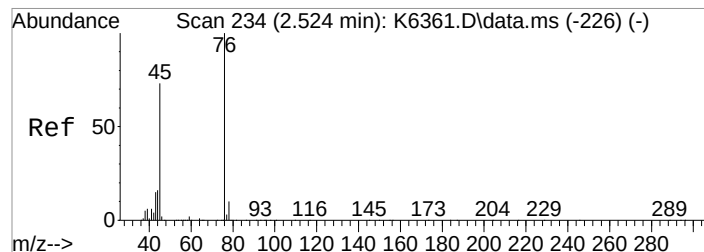
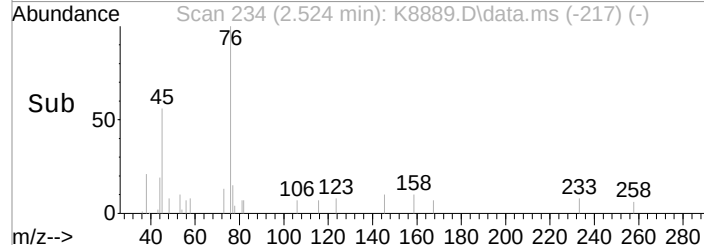
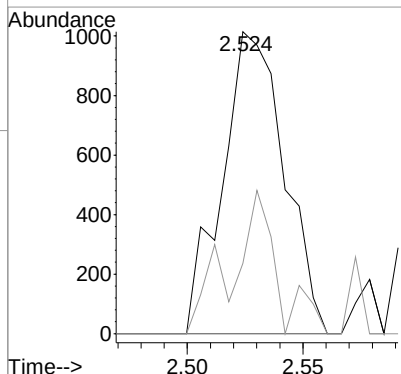
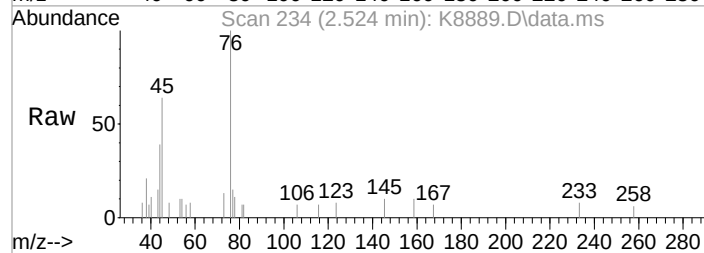
Tgt Ion: 43 Resp: 5358
Ion Ratio Lower Upper
43 100
58 35.1 9.6 49.6
42 11.0 0.0 27.7





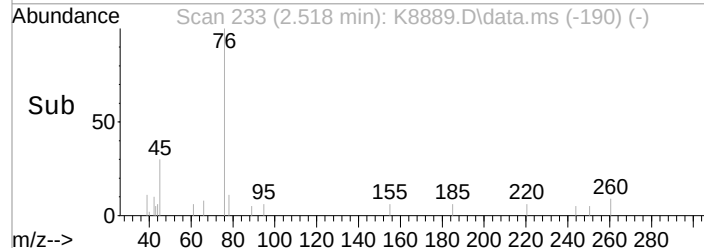
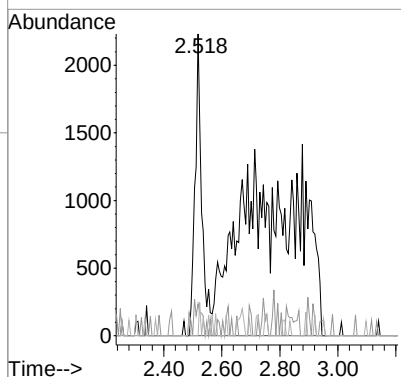
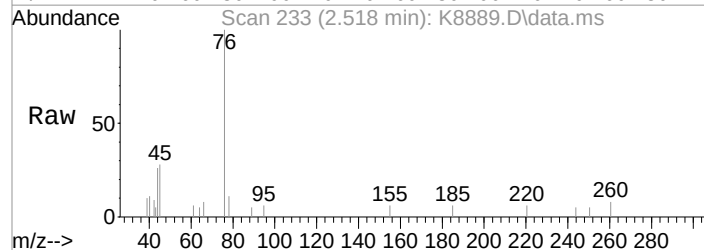
#16
 2-Propanol
 Concen: 3.89 ppb
 RT: 2.524 min Scan# 234
 Delta R.T. -0.006 min
 Lab File: K8889.D
 Acq: 12 Nov 2021 2:14 am

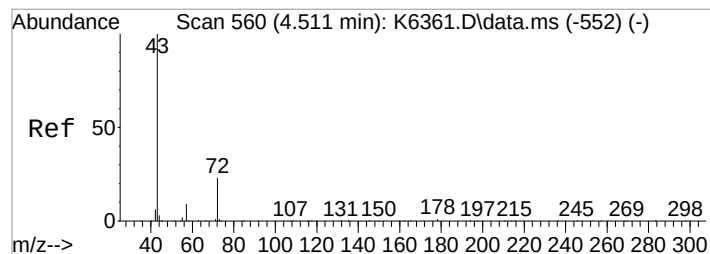
Tgt Ion: 45 Resp: 1900
 Ion Ratio Lower Upper
 45 100
 43 23.3 0.6 40.6



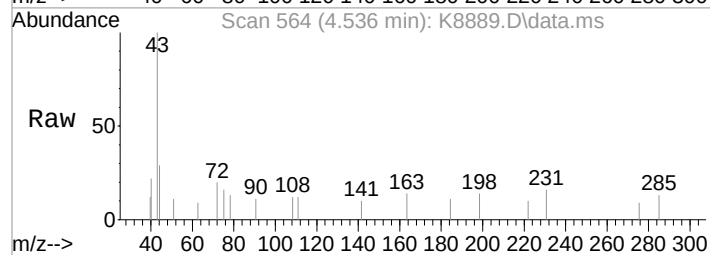
#18
 Carbon Disulfide
 Concen: 2.46 ppb m
 RT: 2.518 min Scan# 233
 Delta R.T. 0.006 min
 Lab File: K8889.D
 Acq: 12 Nov 2021 2:14 am

Tgt Ion: 76 Resp: 21727
 Ion Ratio Lower Upper
 76 100
 78 10.6 0.0 29.7
 77 0.0 0.0 22.7

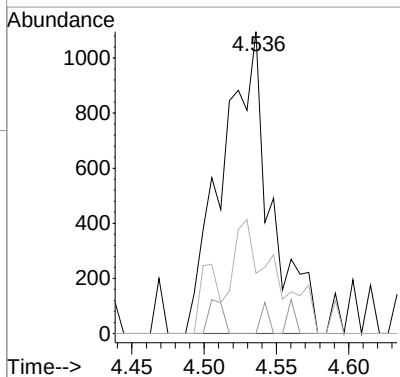
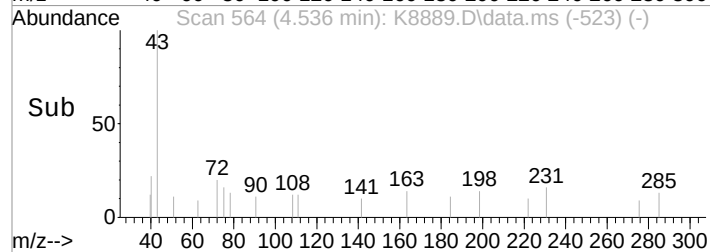




#35
 2-Butanone
 Concen: 0.78 ppb
 RT: 4.536 min Scan# 564
 Delta R.T. 0.025 min
 Lab File: K8889.D
 Acq: 12 Nov 2021 2:14 am



Tgt Ion	Ratio	Lower	Upper
43	100		
57	0.0	0.0	28.6
72	20.0	3.4	43.4



Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8890.D
 Acq On : 12 Nov 2021 2:36 am
 Operator : K.Ruest
 Sample : R2111745-005|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 38 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 18 18:04:47 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

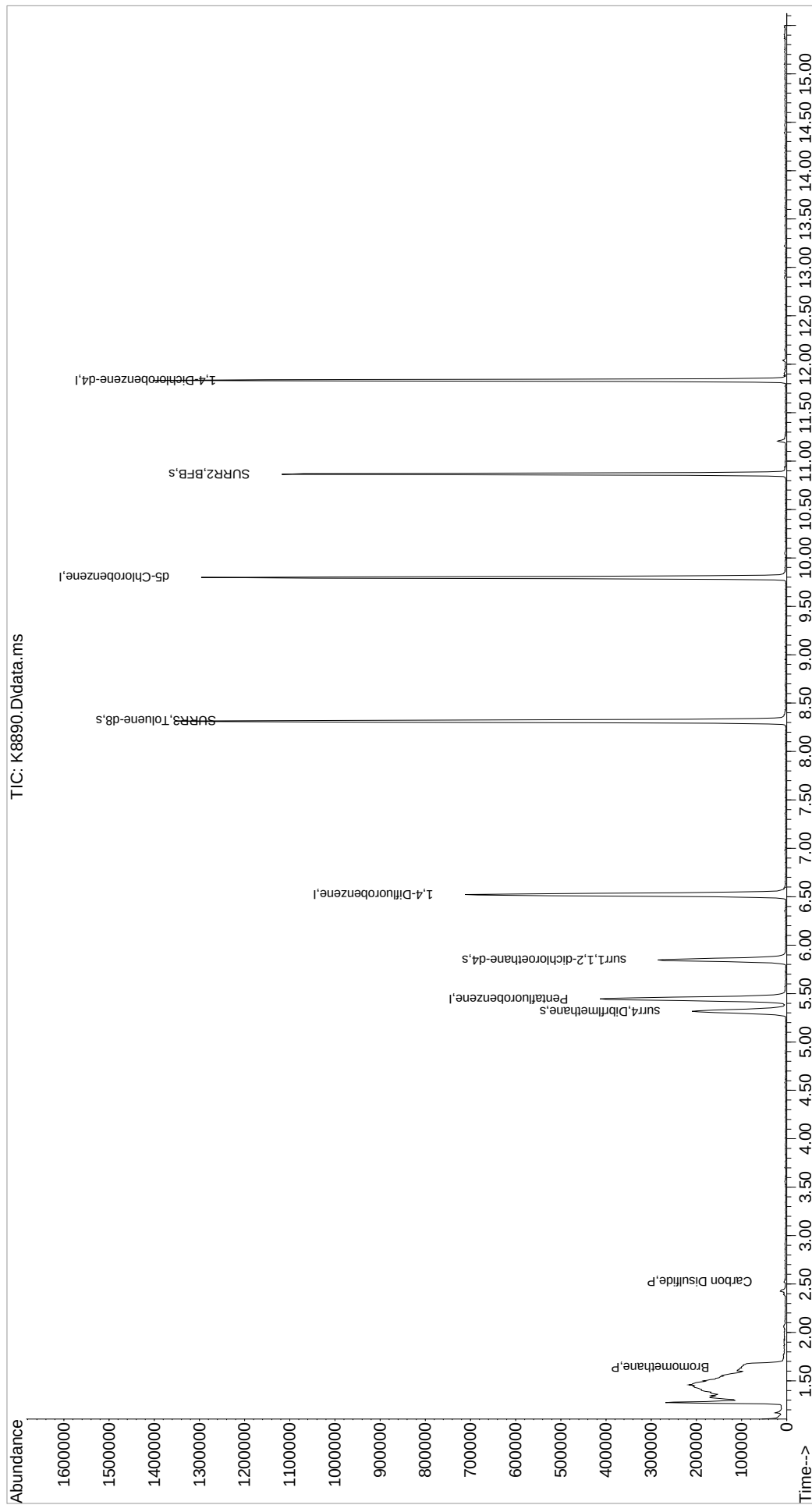
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.444	168	382560	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	640130	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	569447	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	266833	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.316	113	174871	50.18	ppb	0.00
Spiked Amount 50.000	Range 80 - 116		Recovery =	100.36%		
48) surr1,1,2-dichloroetha...	5.847	65	239976	47.36	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery =	94.72%		
65) SURR3,Toluene-d8	8.316	98	863621	52.72	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	105.44%		
70) SURR2,BFB	10.864	95	315333	48.50	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	97.00%		
Target Compounds						
5) Bromomethane	1.640	94	1155	0.34	ppb	Qvalue # 74
15) Acetone	2.390	43	4053	Below	Cal	90
18) Carbon Disulfide	2.524	76	3429	0.38	ppb	93

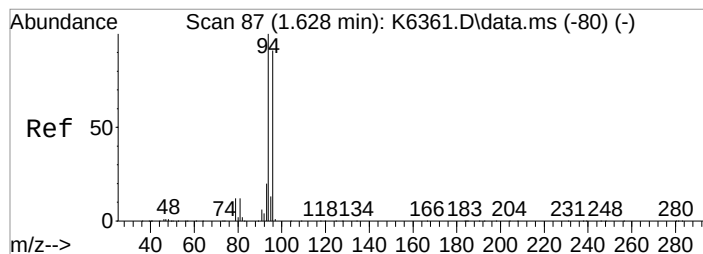
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : I:\ACQDATA\msvoa12\Data\111121\
 Data File : K8890.D
 Acq On : 12 Nov 2021 2:36 am
 Operator : K.Ruest
 Sample : R2111745-005|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 38 Sample Multiplier: 1

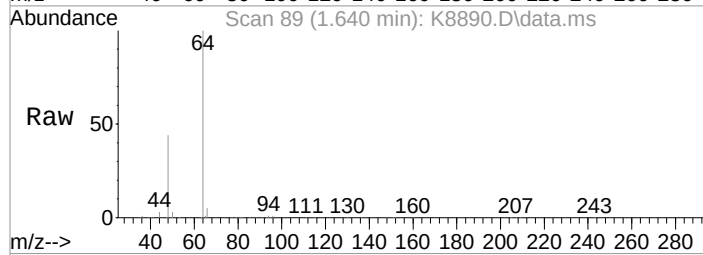
Inst : MSV0A-12

Quant Time: Nov 18 18:04:47 2021
 Quant Method : I:\ACQDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 Qlast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

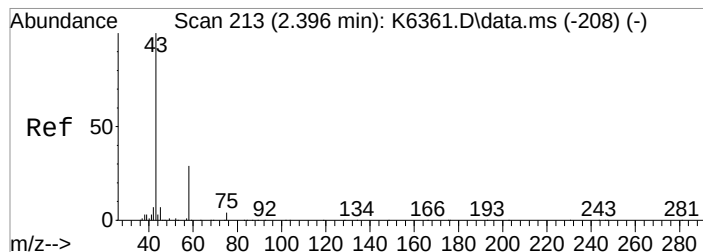
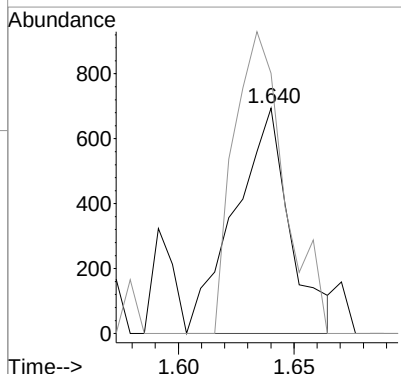
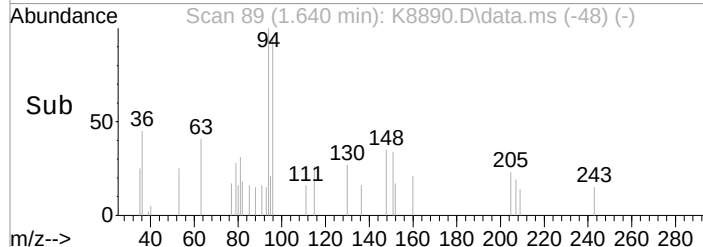




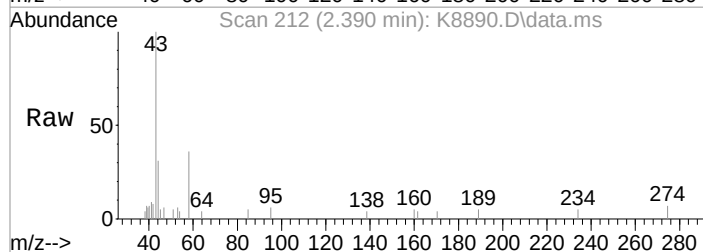
#5
 Bromomethane
 Concen: 0.34 ppb
 RT: 1.640 min Scan# 89
 Delta R.T. 0.025 min
 Lab File: K8890.D
 Acq: 12 Nov 2021 2:36 am



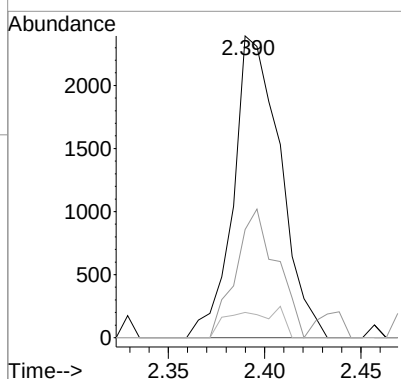
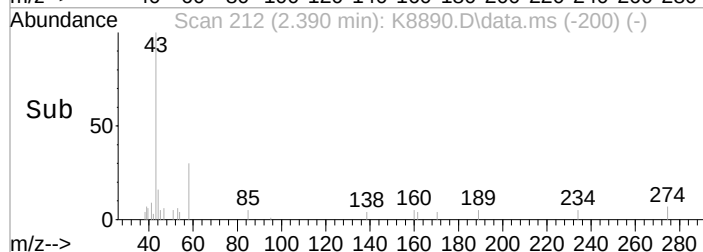
Tgt Ion: 94 Resp: 1155
 Ion Ratio Lower Upper
 94 100
 96 115.4 71.0 111.0#

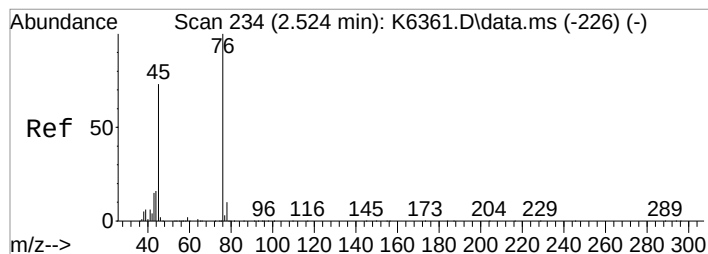


#15
 Acetone
 Concen: Below Cal
 RT: 2.390 min Scan# 212
 Delta R.T. 0.001 min
 Lab File: K8890.D
 Acq: 12 Nov 2021 2:36 am

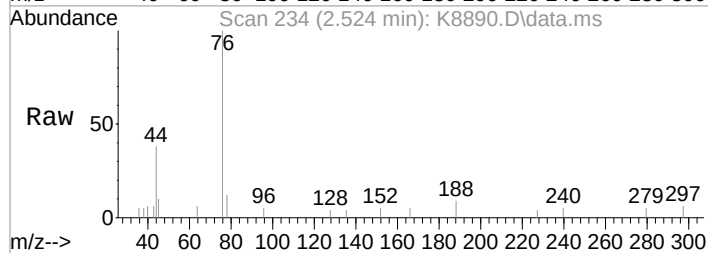


Tgt Ion: 43 Resp: 4053
 Ion Ratio Lower Upper
 43 100
 58 35.8 9.6 49.6
 42 8.4 0.0 27.7

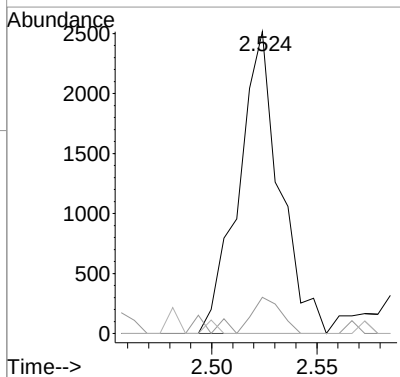
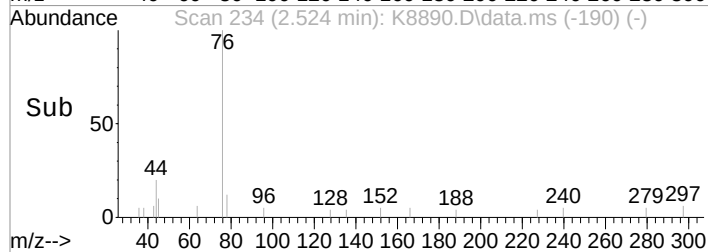




#18
 Carbon Disulfide
 Concen: 0.38 ppb
 RT: 2.524 min Scan# 234
 Delta R.T. 0.012 min
 Lab File: K8890.D
 Acq: 12 Nov 2021 2:36 am



Tgt Ion: 76 Resp: 3429
 Ion Ratio Lower Upper
 76 100
 78 12.0 0.0 29.7
 77 0.0 0.0 22.7



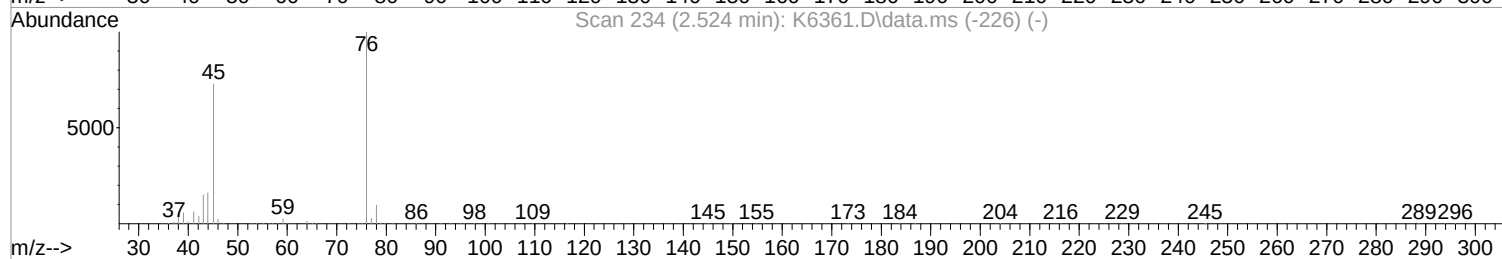
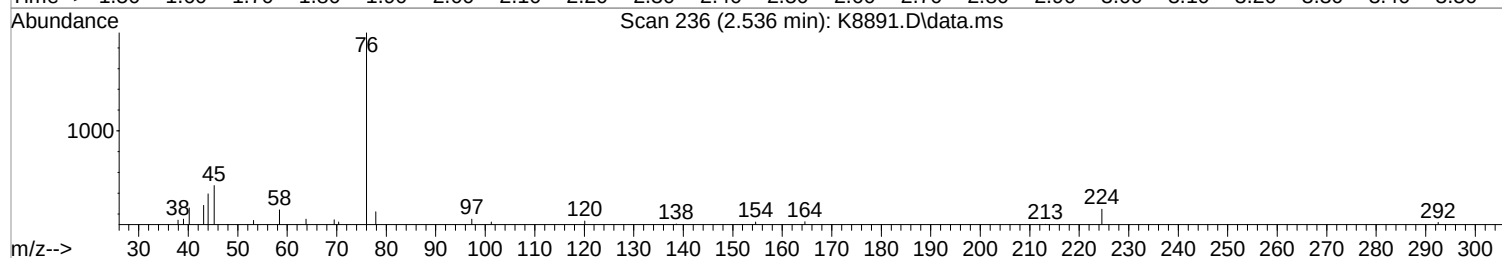
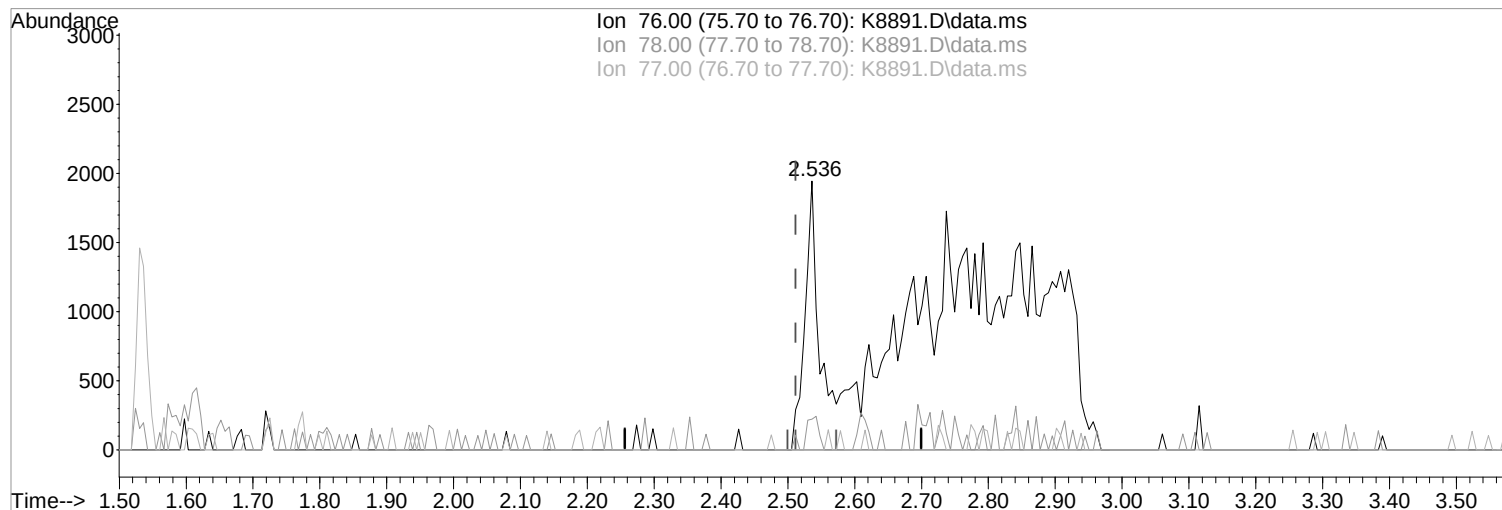
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8891.D
Acq On : 12 Nov 2021 2:58 am
Operator : K.Ruest
Sample : R2111745-006|1.0
Misc : LIRO 8260 T4
ALS Vial : 39 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:05:02 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



(18) Carbon Disulfide (P)

2.536min (+0.024) 2.82 ppb m

response 24840

Ion	Exp%	Act%
76.00	100	100
78.00	9.70	11.41
77.00	2.70	0.00
0.00	0.00	0.00

Manual Integration:

After

Other - so2 interference

11/18/21

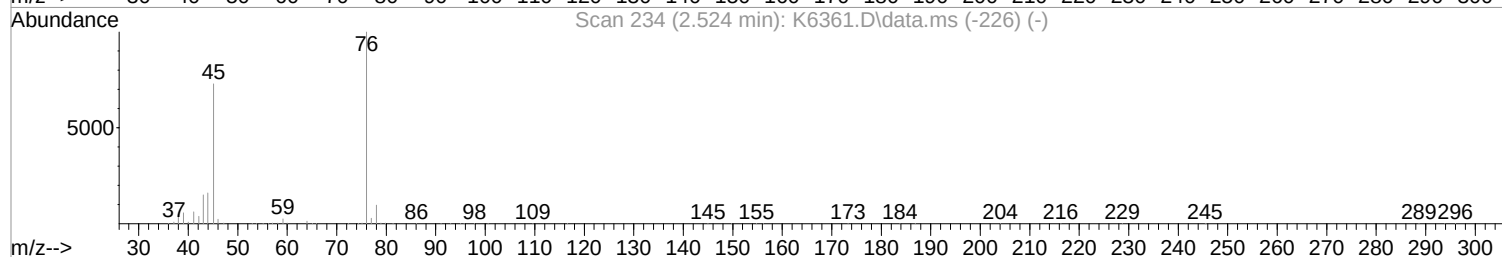
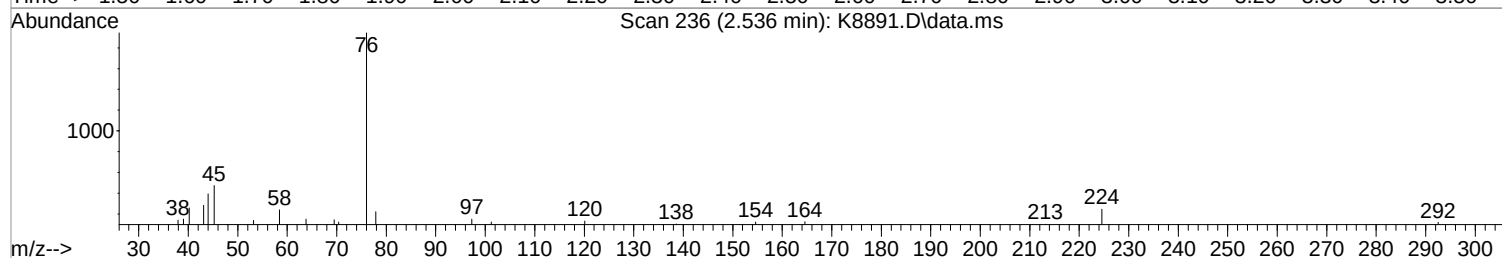
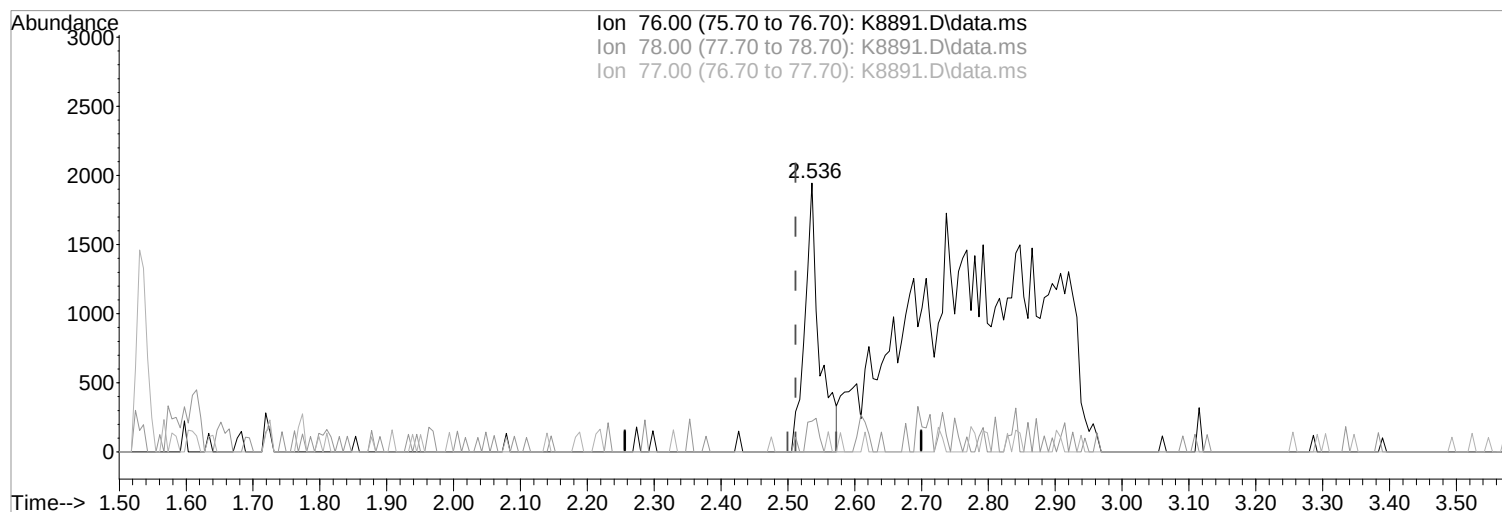
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8891.D
Acq On : 12 Nov 2021 2:58 am
Operator : K.Ruest
Sample : R2111745-006|1.0
Misc : LIRO 8260 T4
ALS Vial : 39 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:05:02 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8891.D\data.ms

(18) Carbon Disulfide (P)

Manual Integration:

2.536min (+0.024) 0.34 ppb

Before

response 2954

Ion	Exp%	Act%
76.00	100	100
78.00	9.70	11.41
77.00	2.70	0.00
0.00	0.00	0.00

11/18/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8891.D
 Acq On : 12 Nov 2021 2:58 am
 Operator : K.Ruest
 Sample : R2111745-006|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 39 Sample Multiplier: 1

Inst : MSVOA-12

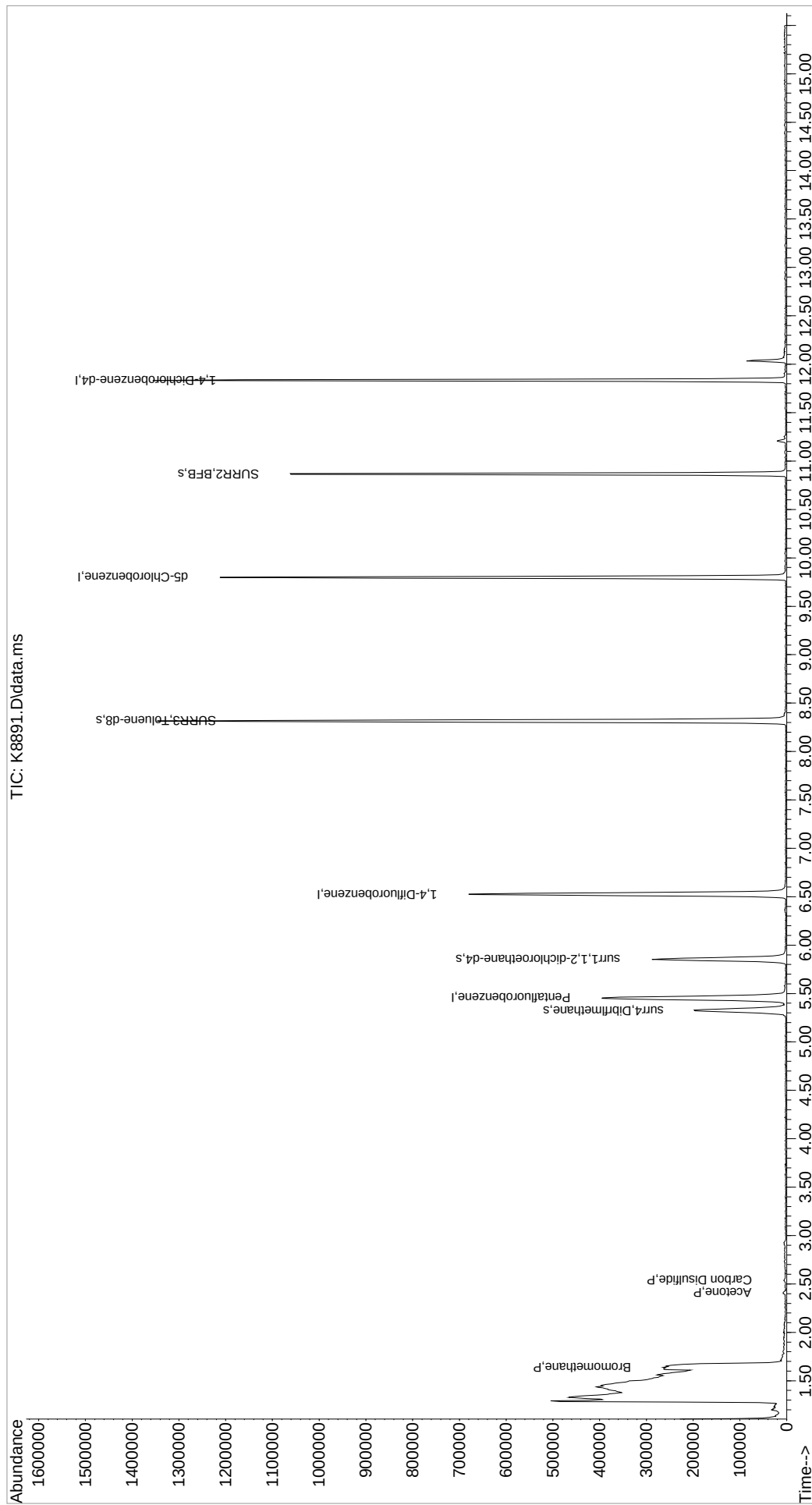
Quant Time: Nov 18 18:06:45 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

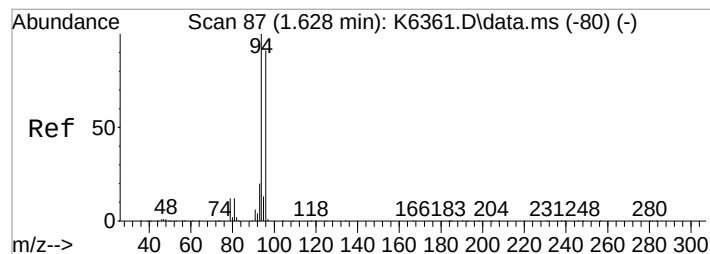
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.456	168	373913	50.00	ppb	0.01
43) 1,4-Difluorobenzene	6.523	114	616424	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	545203	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	260040	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.322	113	166751	49.69	ppb	0.00
Spiked Amount 50.000	Range 80 - 116		Recovery =	99.38%		
48) surr1,1,2-dichloroetha...	5.852	65	230470	47.23	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery =	94.46%		
65) SURR3,Toluene-d8	8.315	98	833010	52.81	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	105.62%		
70) SURR2,BFB	10.864	95	305747	48.83	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	97.66%		
Target Compounds						
5) Bromomethane	1.640	94	996	0.30	ppb	Qvalue # 37
15) Acetone	2.408	43	5554	0.54	ppb	89
18) Carbon Disulfide	2.536	76	24840m	2.82	ppb	

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

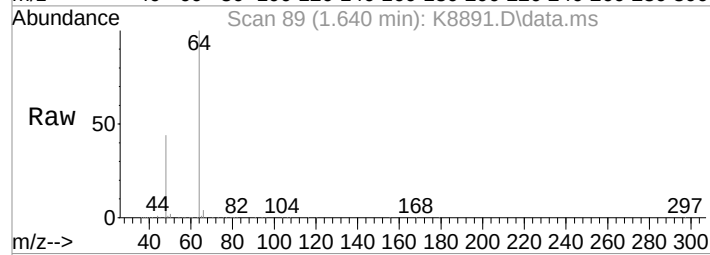
Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8891.D
 Acq On : 12 Nov 2021 2:58 am
 Operator : K.Ruest
 Sample : R2111745-006|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 39 Sample Multiplier: 1
 Inst : MSV0A-12

Quant Time: Nov 18 18:06:45 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 Qlast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

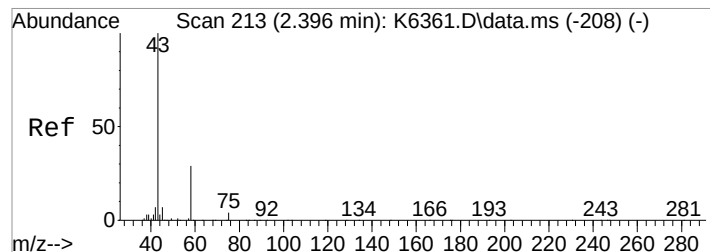
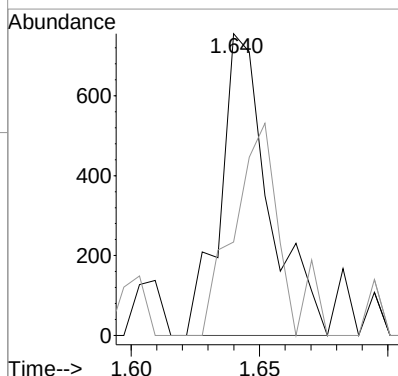
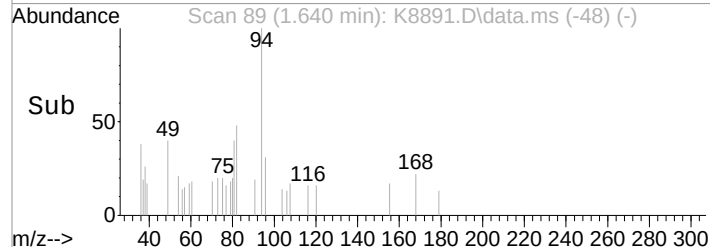




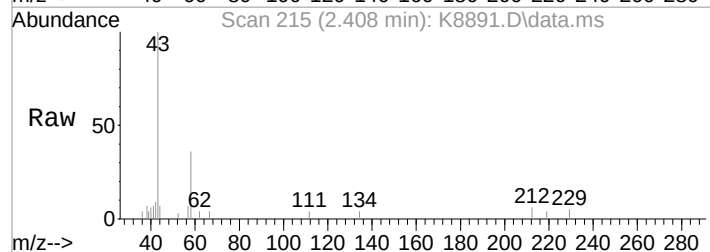
#5
Bromomethane
Concen: 0.30 ppb
RT: 1.640 min Scan# 89
Delta R.T. 0.024 min
Lab File: K8891.D
Acq: 12 Nov 2021 2:58 am



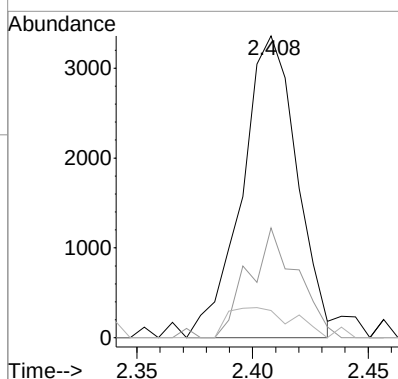
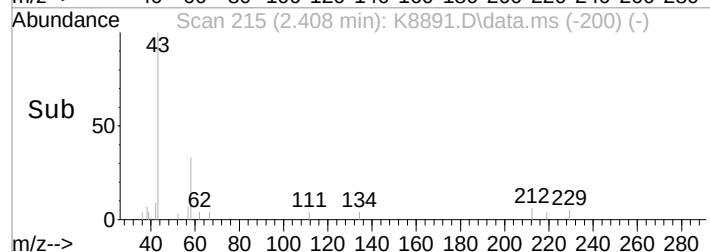
Tgt Ion: 94 Resp: 996
Ion Ratio Lower Upper
94 100
96 31.0 71.0 111.0#

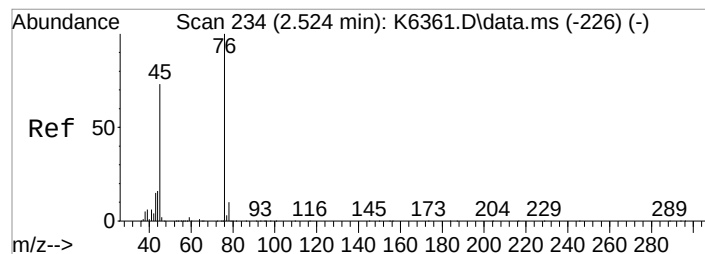


#15
Acetone
Concen: 0.54 ppb
RT: 2.408 min Scan# 215
Delta R.T. 0.019 min
Lab File: K8891.D
Acq: 12 Nov 2021 2:58 am

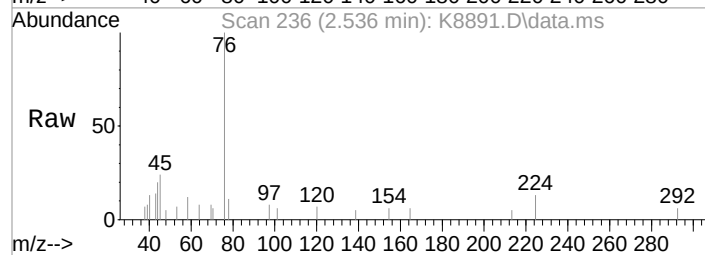


Tgt Ion: 43 Resp: 5554
Ion Ratio Lower Upper
43 100
58 36.4 9.6 49.6
42 9.1 0.0 27.7

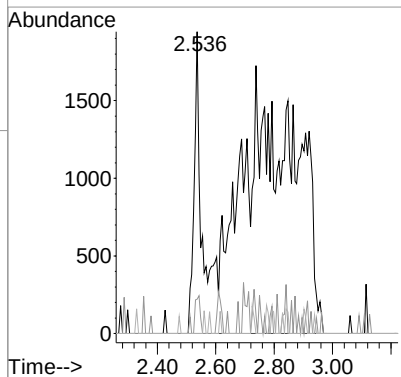
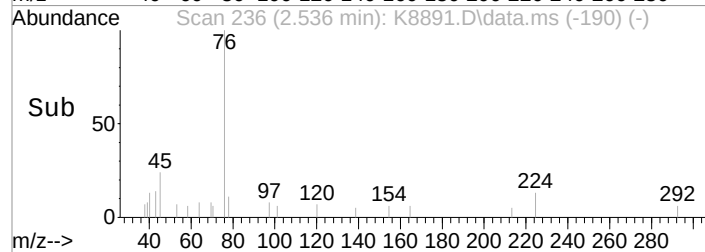




#18
 Carbon Disulfide
 Concen: 2.82 ppb m
 RT: 2.536 min Scan# 236
 Delta R.T. 0.024 min
 Lab File: K8891.D
 Acq: 12 Nov 2021 2:58 am



Tgt Ion: 76 Resp: 24840
 Ion Ratio Lower Upper
 76 100
 78 11.4 0.0 29.7
 77 0.0 0.0 22.7



Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8892.D
 Acq On : 12 Nov 2021 3:19 am
 Operator : K.Ruest
 Sample : R2111745-007|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 40 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 18 18:08:28 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

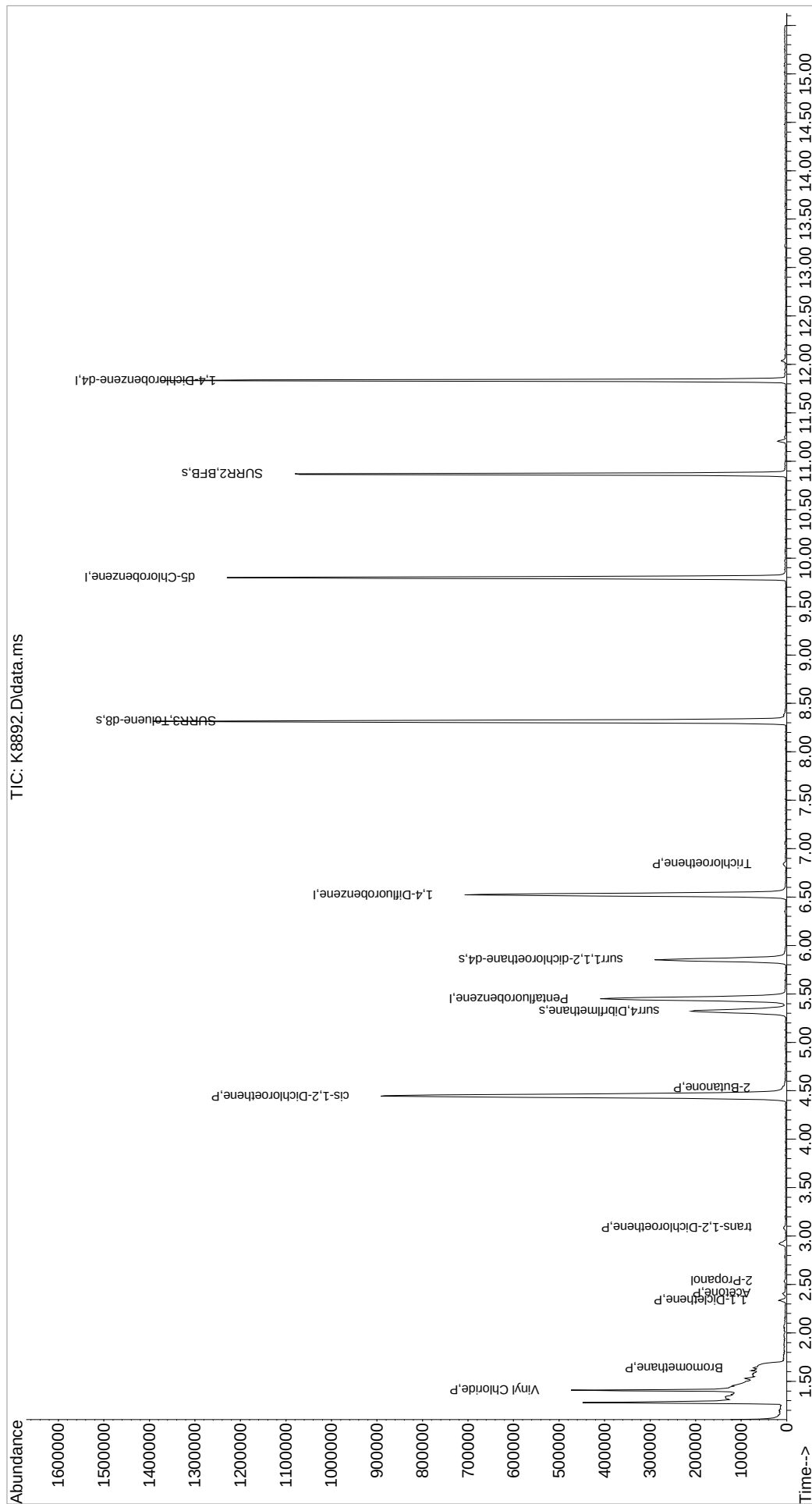
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

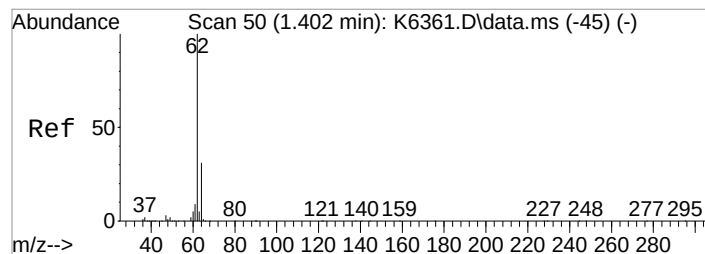
Internal Standards						
1) Pentafluorobenzene	5.450	168	372744	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	627226	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	552450	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	271020	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.322	113	174407	51.08	ppb	0.00
Spiked Amount 50.000	Range 80 - 116		Recovery =	102.16%		
48) surr1,1,2-dichloroetha...	5.853	65	238461	48.03	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery =	96.06%		
65) SURR3,Toluene-d8	8.315	98	855389	53.30	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	106.60%		
70) SURR2,BFB	10.870	95	310161	48.68	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	97.36%		
Target Compounds						Qvalue
4) Vinyl Chloride	1.408	62	182178	36.13	ppb	# 37
5) Bromomethane	1.634	94	1715	0.52	ppb	# 61
13) 1,1-Dicethene	2.335	96	4168	1.15	ppb	91
15) Acetone	2.408	43	6062	0.79	ppb	87
16) 2-Propanol	2.536	45	2092	4.32	ppb	84
26) trans-1,2-Dichloroethene	3.085	96	1912	0.48	ppb	# 72
34) cis-1,2-Dichloroethene	4.444	96	529291	115.86	ppb	91
35) 2-Butanone	4.530	43	3230	1.00	ppb	80
54) Trichloroethene	6.840	130	1799	0.41	ppb	# 81

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

Data Path : I:\ACQDATA\msvoa12\Data\111121\
 Data File : K8892.D
 Acq On : 12 Nov 2021 3:19 am
 Operator : K.Ruest
 Sample : R2111745-007|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 40 Sample Multiplier: 1
 Inst : MSV0A-12

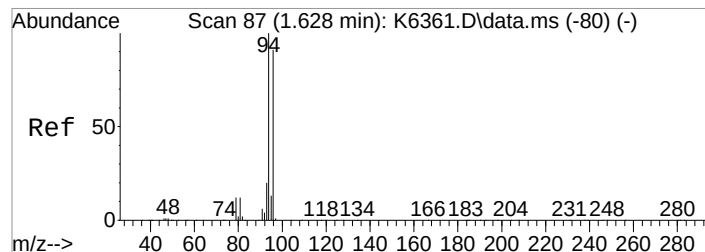
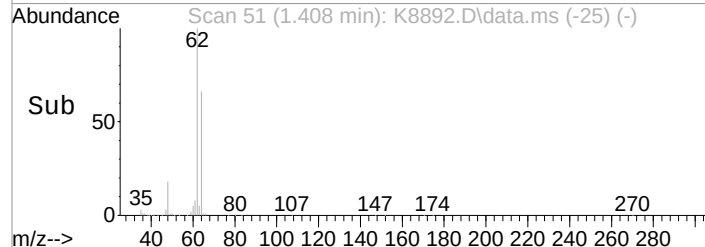
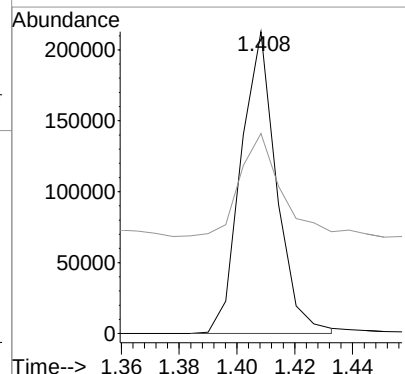
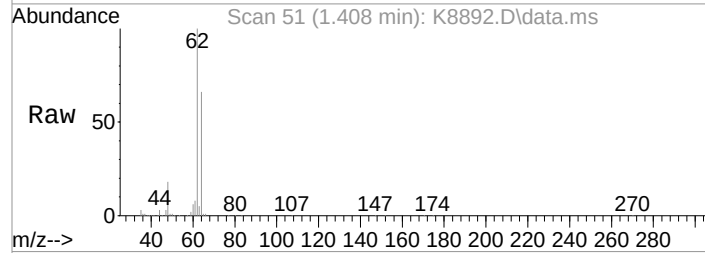
Quant Time: Nov 18 18:08:28 2021
 Quant Method : I:\ACQDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 Qlast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration





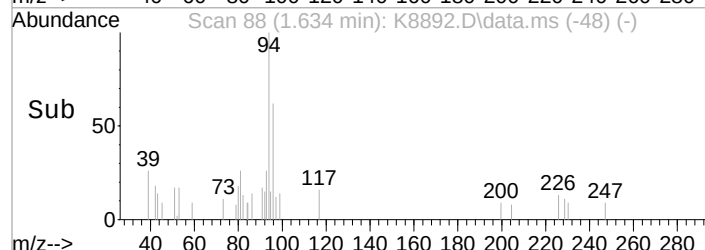
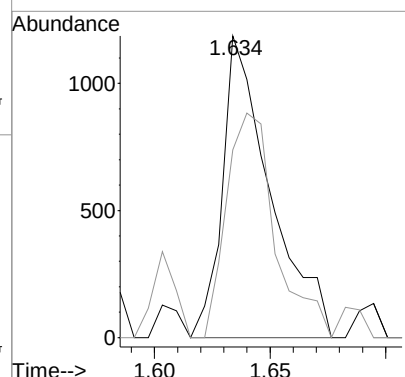
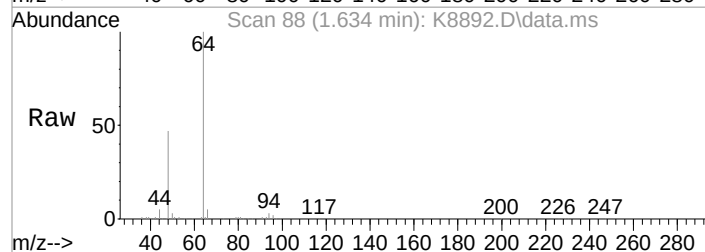
#4
 Vinyl Chloride
 Concen: 36.13 ppb
 RT: 1.408 min Scan# 51
 Delta R.T. 0.012 min
 Lab File: K8892.D
 Acq: 12 Nov 2021 3:19 am

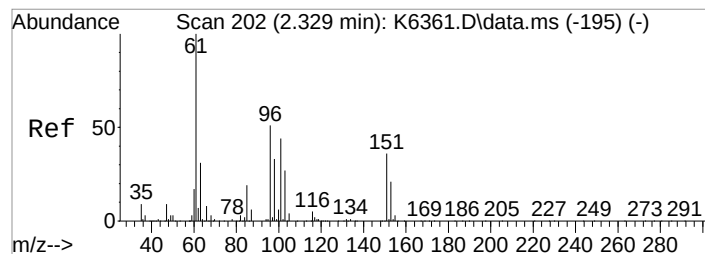
Tgt Ion: 62 Resp: 182178
 Ion Ratio Lower Upper
 62 100
 64 66.2 11.5 51.5#



#5
 Bromomethane
 Concen: 0.52 ppb
 RT: 1.634 min Scan# 88
 Delta R.T. 0.018 min
 Lab File: K8892.D
 Acq: 12 Nov 2021 3:19 am

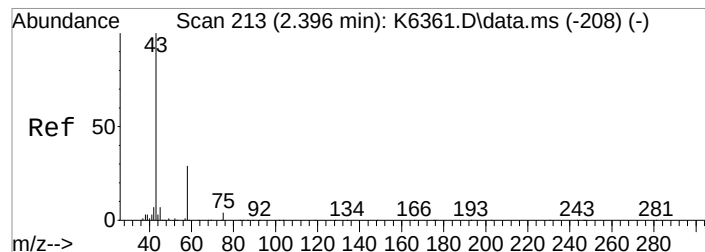
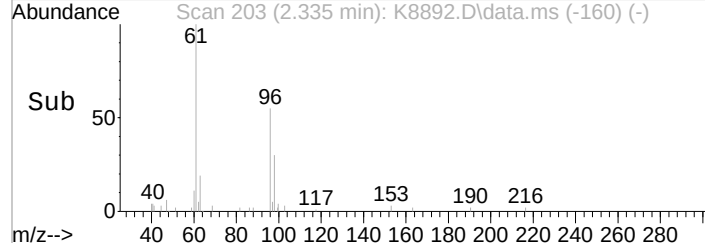
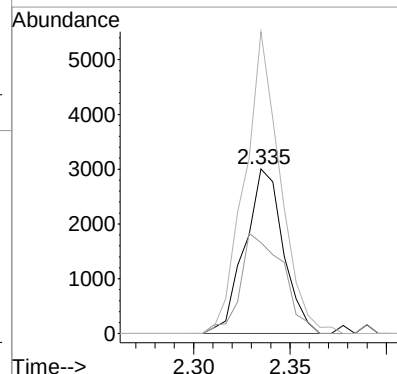
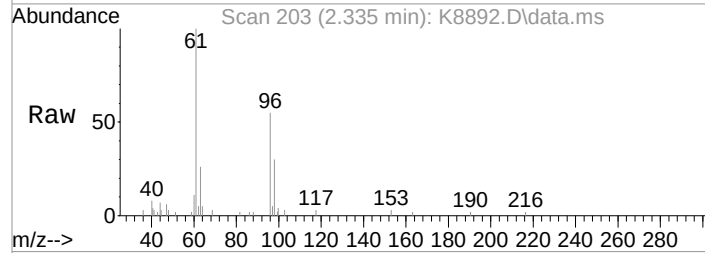
Tgt Ion: 94 Resp: 1715
 Ion Ratio Lower Upper
 94 100
 96 54.1 71.0 111.0#





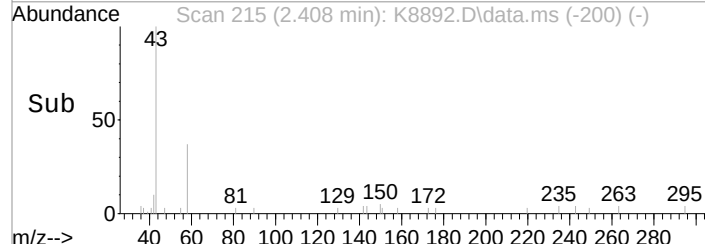
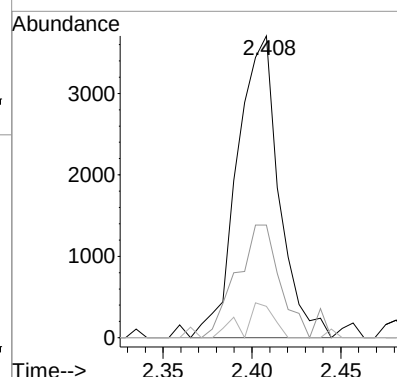
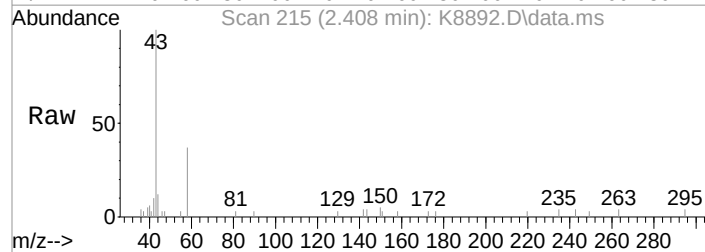
#13
 1,1-Dicethene
 Concen: 1.15 ppb
 RT: 2.335 min Scan# 203
 Delta R.T. 0.012 min
 Lab File: K8892.D
 Acq: 12 Nov 2021 3:19 am

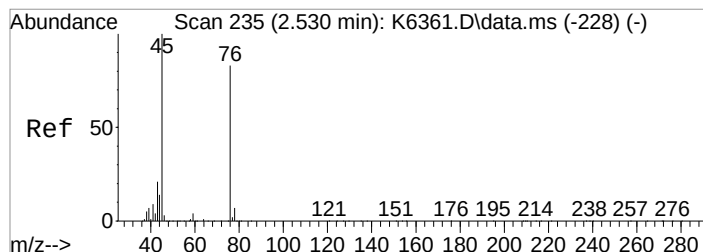
Tgt Ion: 96 Resp: 4168
 Ion Ratio Lower Upper
 96 100
 98 55.3 44.1 84.1
 61 183.3 174.9 214.9



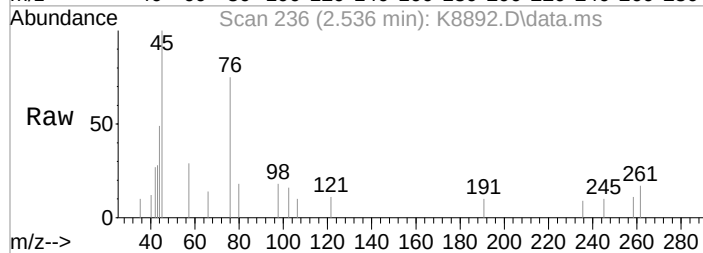
#15
 Acetone
 Concen: 0.79 ppb
 RT: 2.408 min Scan# 215
 Delta R.T. 0.019 min
 Lab File: K8892.D
 Acq: 12 Nov 2021 3:19 am

Tgt Ion: 43 Resp: 6062
 Ion Ratio Lower Upper
 43 100
 58 37.3 9.6 49.6
 42 10.4 0.0 27.7

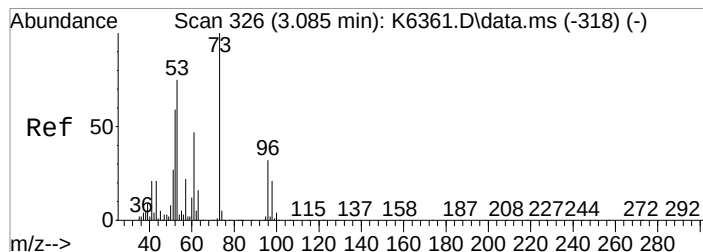
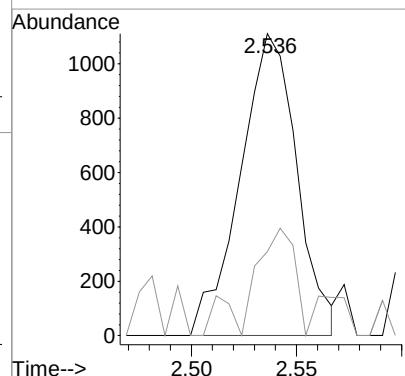
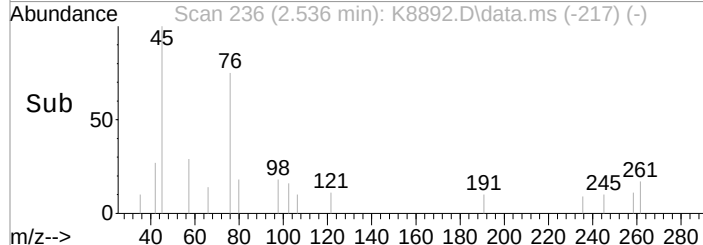




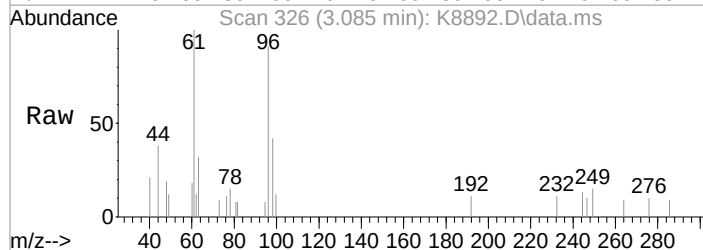
#16
 2-Propanol
 Concen: 4.32 ppb
 RT: 2.536 min Scan# 236
 Delta R.T. 0.006 min
 Lab File: K8892.D
 Acq: 12 Nov 2021 3:19 am



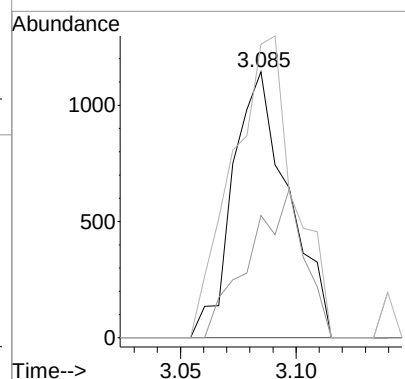
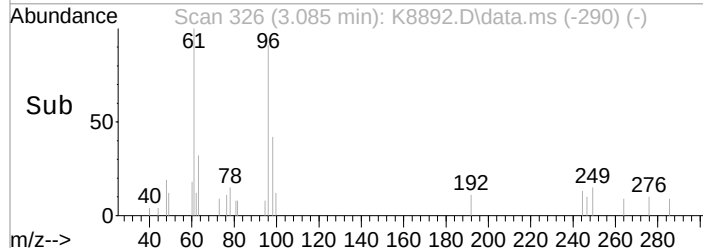
Tgt Ion: 45 Resp: 2092
 Ion Ratio Lower Upper
 45 100
 43 27.8 0.6 40.6

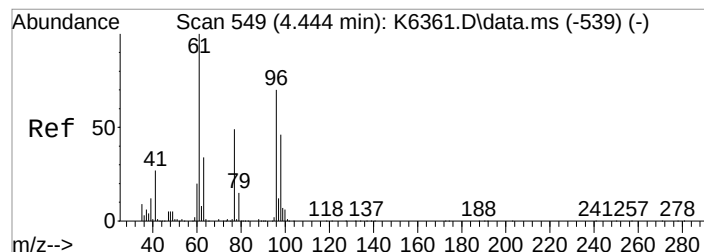


#26
 trans-1,2-Dichloroethene
 Concen: 0.48 ppb
 RT: 3.085 min Scan# 326
 Delta R.T. 0.012 min
 Lab File: K8892.D
 Acq: 12 Nov 2021 3:19 am



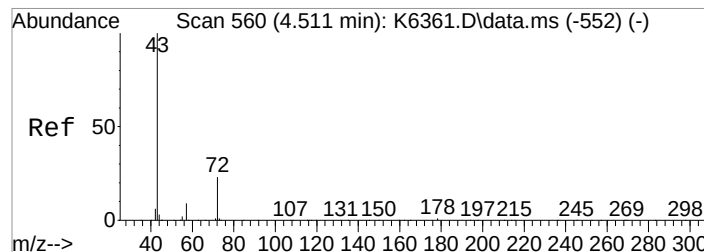
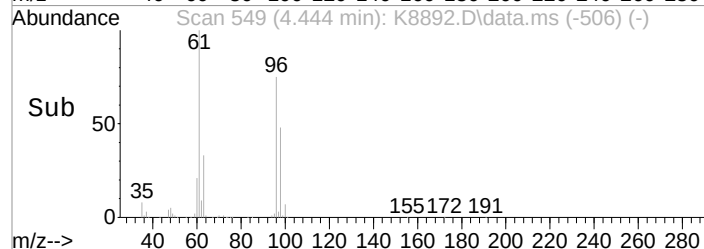
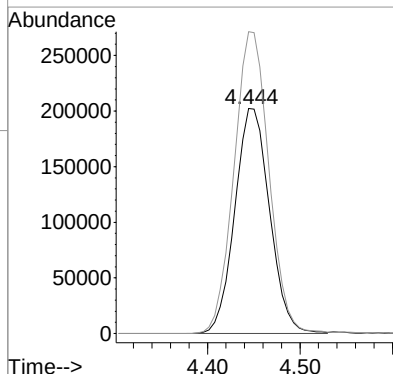
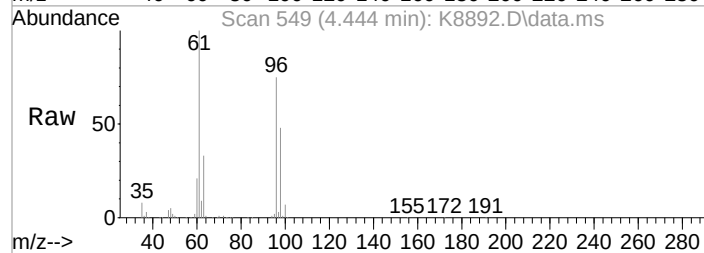
Tgt Ion: 96 Resp: 1912
 Ion Ratio Lower Upper
 96 100
 98 46.0 44.1 84.1
 61 110.4 127.9 167.9#





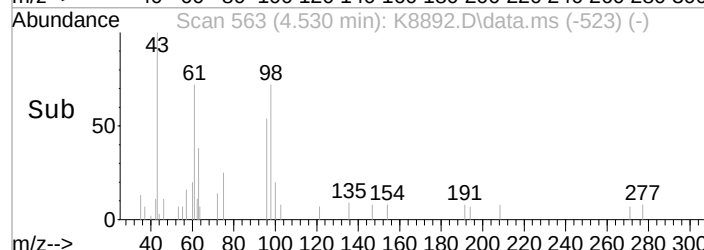
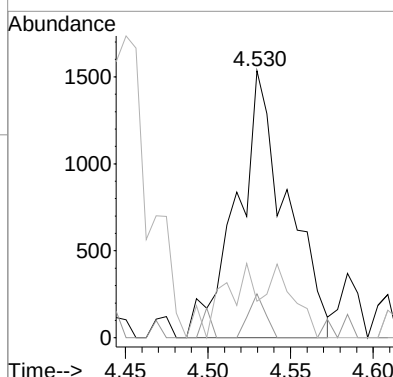
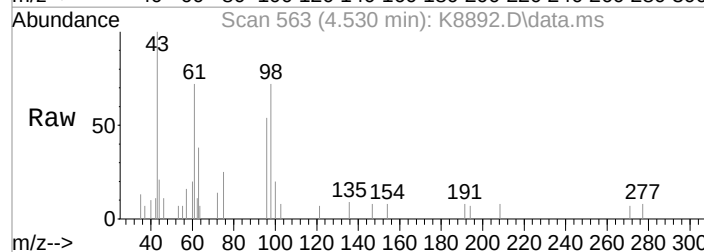
#34
cis-1,2-Dichloroethene
Concen: 115.86 ppb
RT: 4.444 min Scan# 549
Delta R.T. 0.006 min
Lab File: K8892.D
Acq: 12 Nov 2021 3:19 am

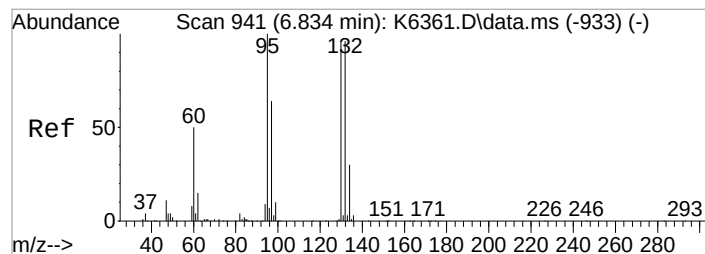
Tgt Ion: 96 Resp: 529291
Ion Ratio Lower Upper
96 100
61 134.1 125.2 165.2



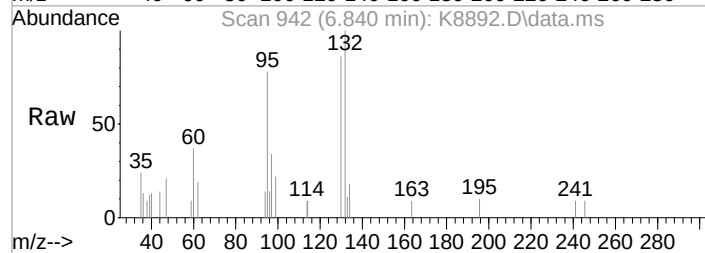
#35
2-Butanone
Concen: 1.00 ppb
RT: 4.530 min Scan# 563
Delta R.T. 0.018 min
Lab File: K8892.D
Acq: 12 Nov 2021 3:19 am

Tgt Ion: 43 Resp: 3230
Ion Ratio Lower Upper
43 100
57 16.5 0.0 28.6
72 13.7 3.4 43.4

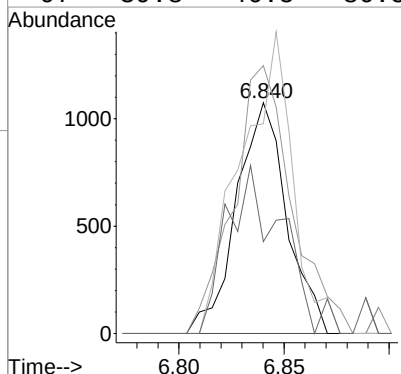
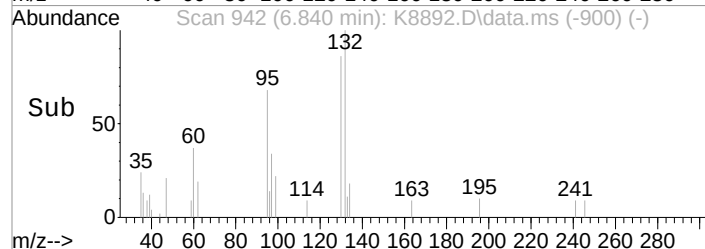




#54
 Trichloroethene
 Concen: 0.41 ppb
 RT: 6.840 min Scan# 942
 Delta R.T. 0.006 min
 Lab File: K8892.D
 Acq: 12 Nov 2021 3:19 am



Tgt Ion:	130	Resp:	1799
Ion Ratio	Lower	Upper	
130	100		
132	116.0	79.7	119.7
95	90.9	83.8	123.8
97	39.8	46.5	86.5#



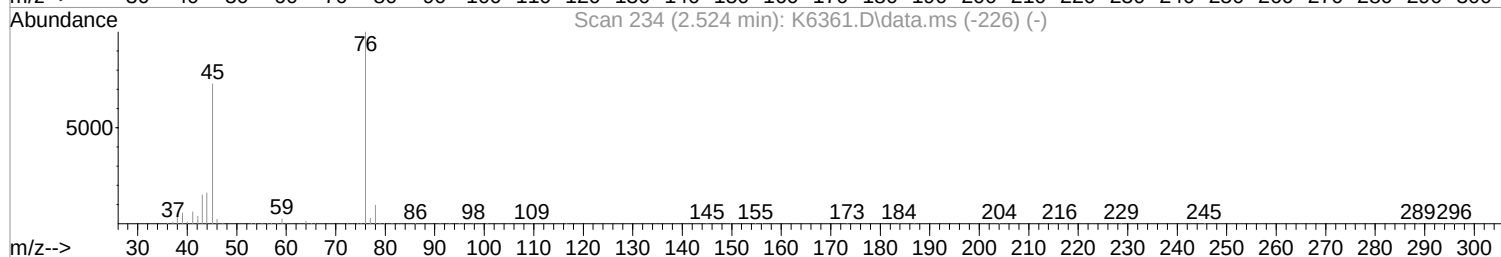
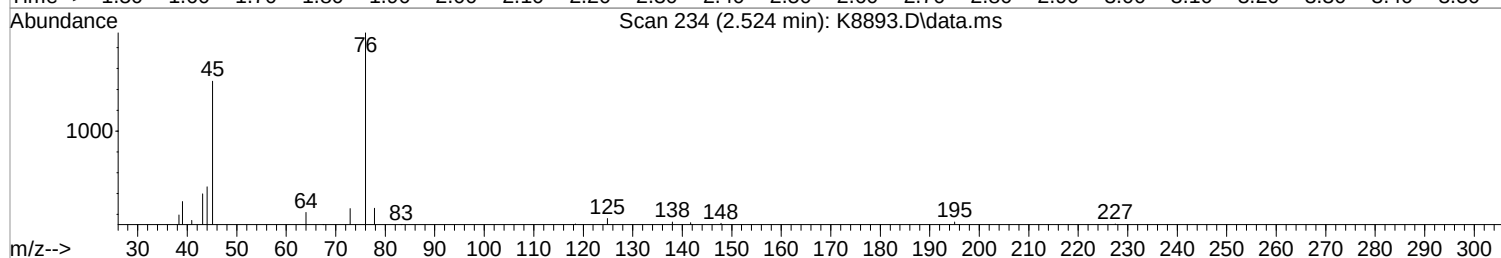
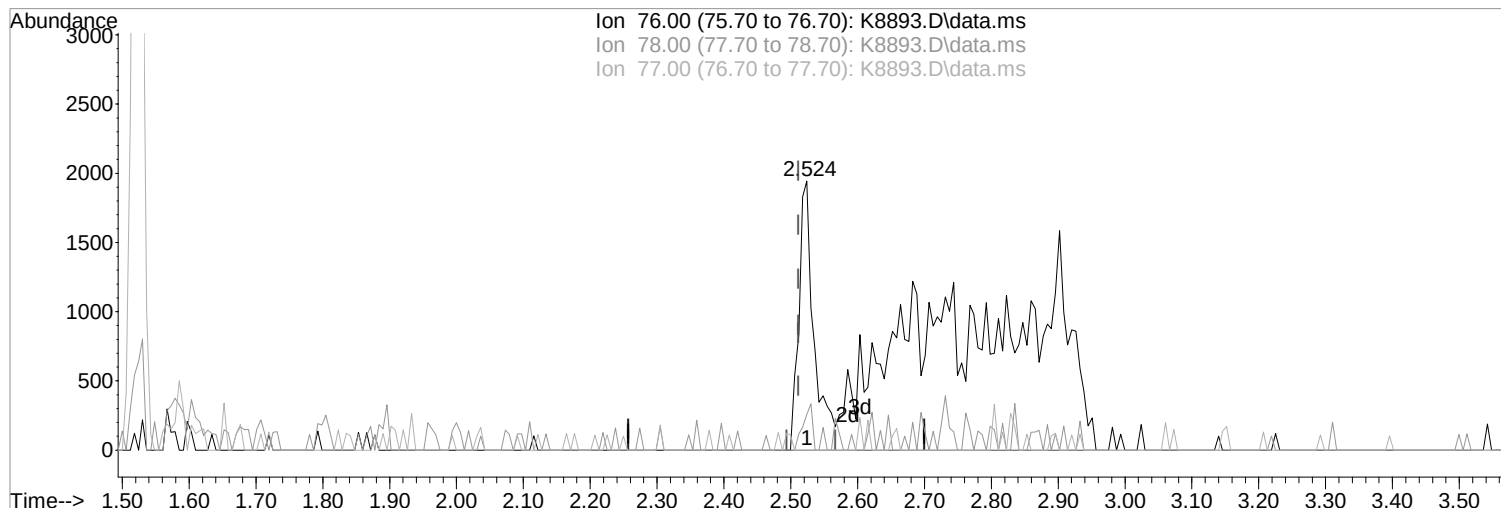
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8893.D
Acq On : 12 Nov 2021 3:41 am
Operator : K.Ruest
Sample : R2111745-008|1.0
Misc : LIRO 8260 T4
ALS Vial : 41 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:05:52 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



(18) Carbon Disulfide (P)

2.524min (+0.012) 2.35 ppb m

response 21026

Ion	Exp%	Act%
76.00	100	100
78.00	9.70	13.27
77.00	2.70	0.00
0.00	0.00	0.00

Manual Integration:

After

Other - so2 interference

11/18/21

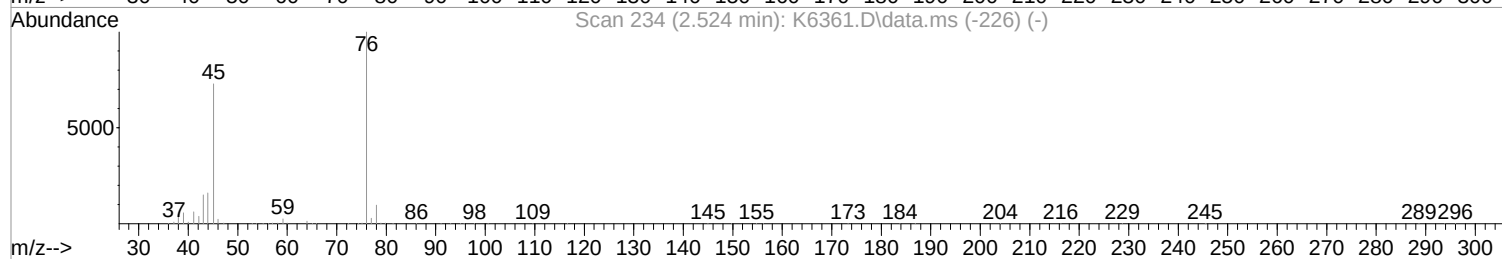
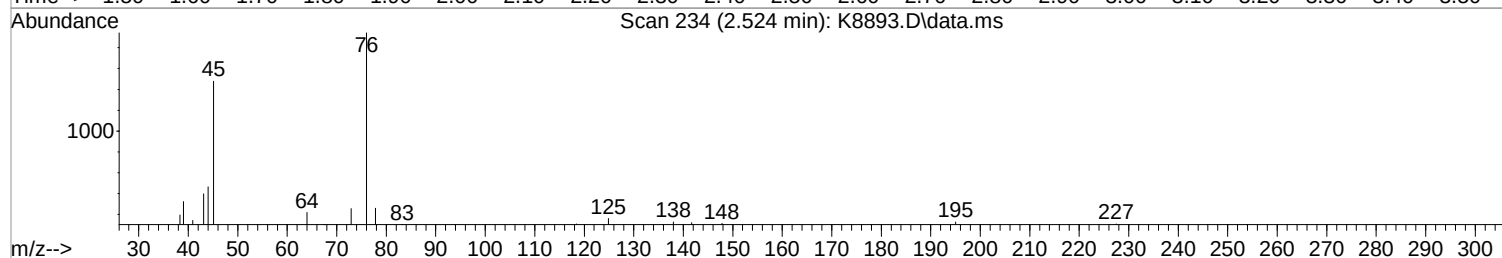
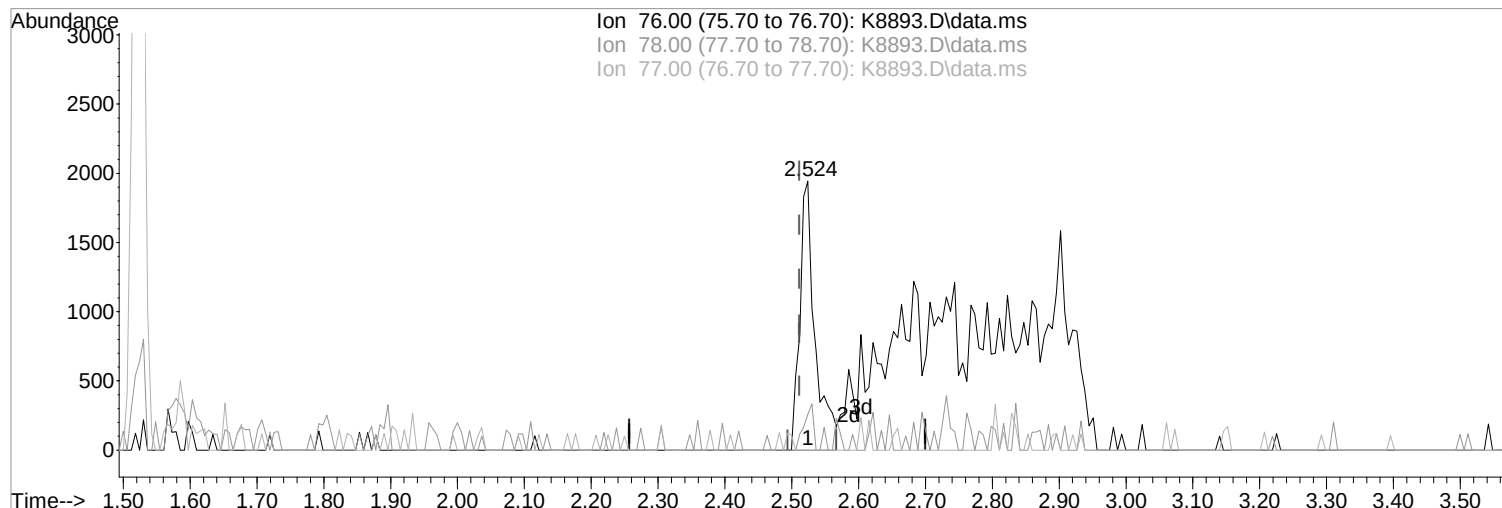
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8893.D
Acq On : 12 Nov 2021 3:41 am
Operator : K.Ruest
Sample : R2111745-008|1.0
Misc : LIRO 8260 T4
ALS Vial : 41 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:05:52 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



(18) Carbon Disulfide (P)

Manual Integration:

2.524min (+0.012) 0.34 ppb

Before

response 3063

Ion	Exp%	Act%
76.00	100	100
78.00	9.70	13.27
77.00	2.70	0.00
0.00	0.00	0.00

11/18/21

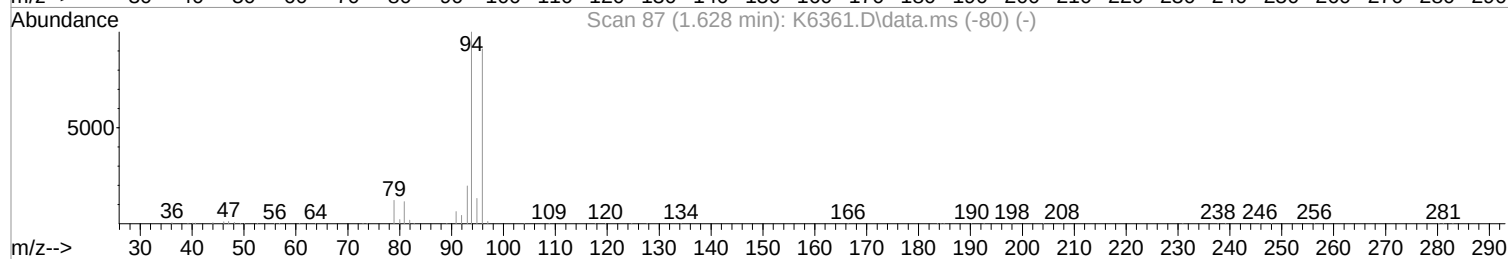
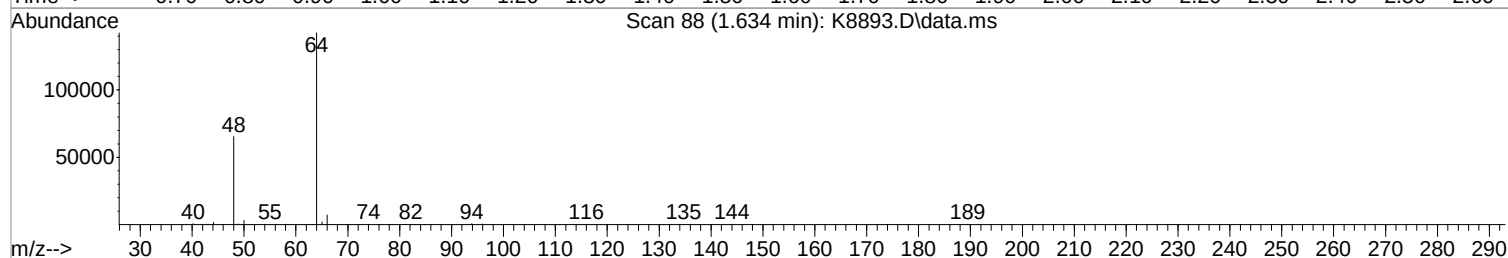
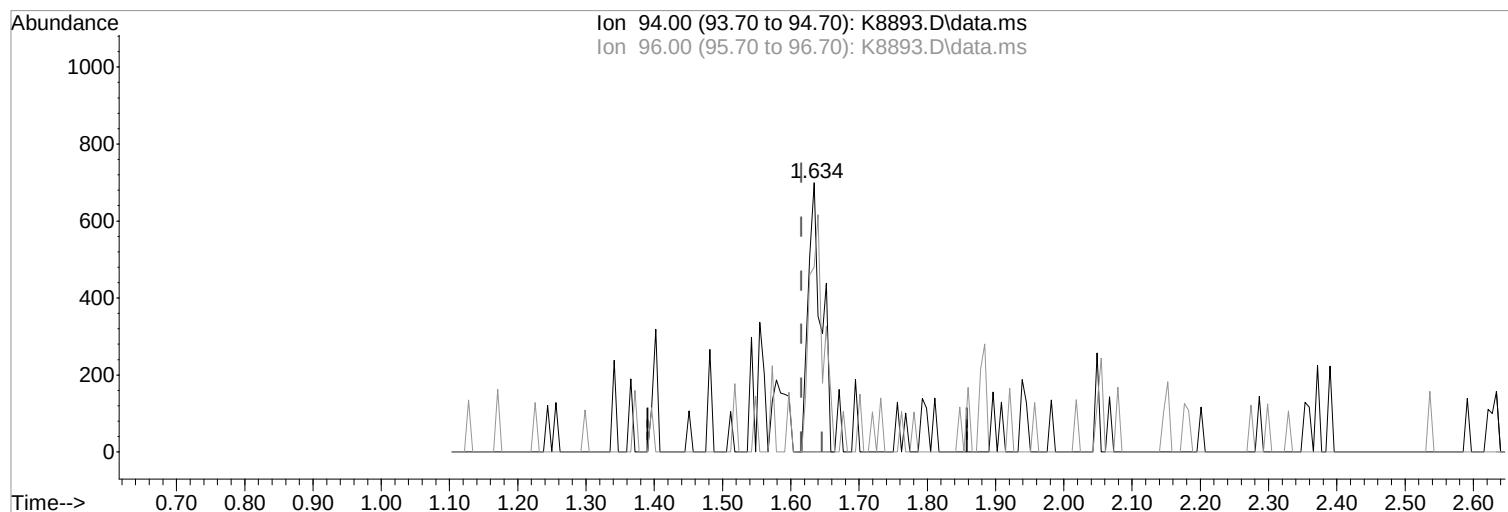
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8893.D
Acq On : 12 Nov 2021 3:41 am
Operator : K.Ruest
Sample : R2111745-008|1.0
Misc : LIRO 8260 T4
ALS Vial : 41 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:05:52 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8893.D\data.ms

(5) Bromomethane (P)

1.634min (+0.018) 0.28 ppb m

response 934

Ion	Exp%	Act%
94.00	100	100
96.00	91.00	68.81#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Split Peak

11/18/21

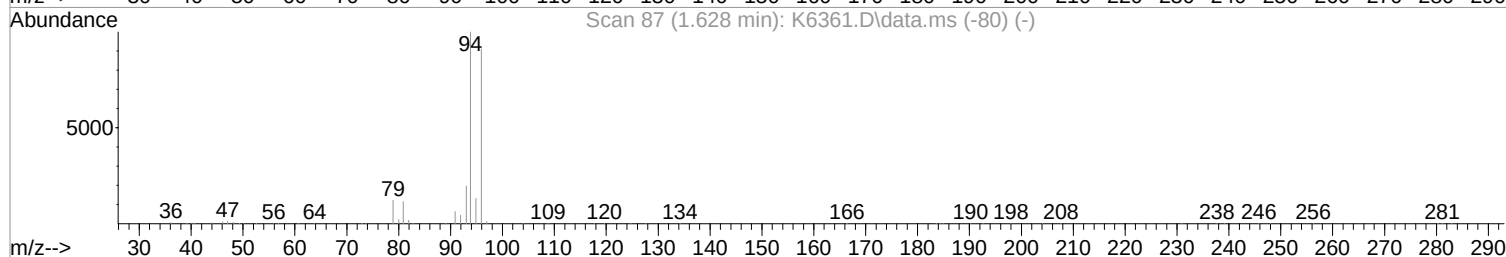
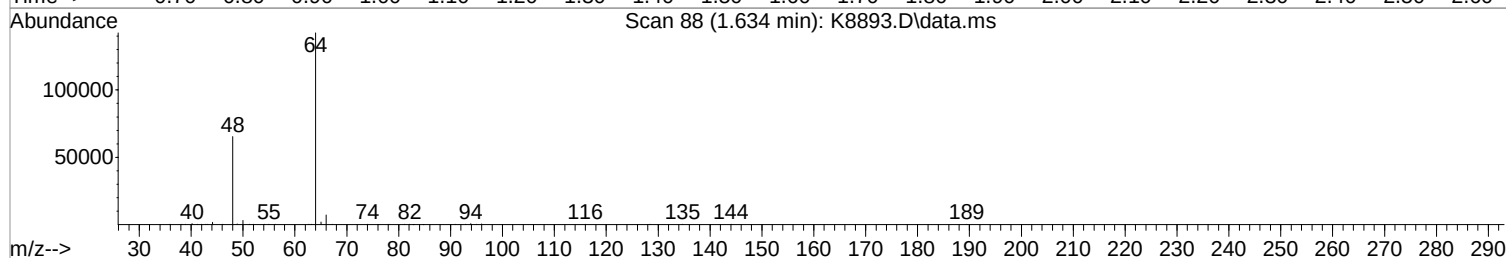
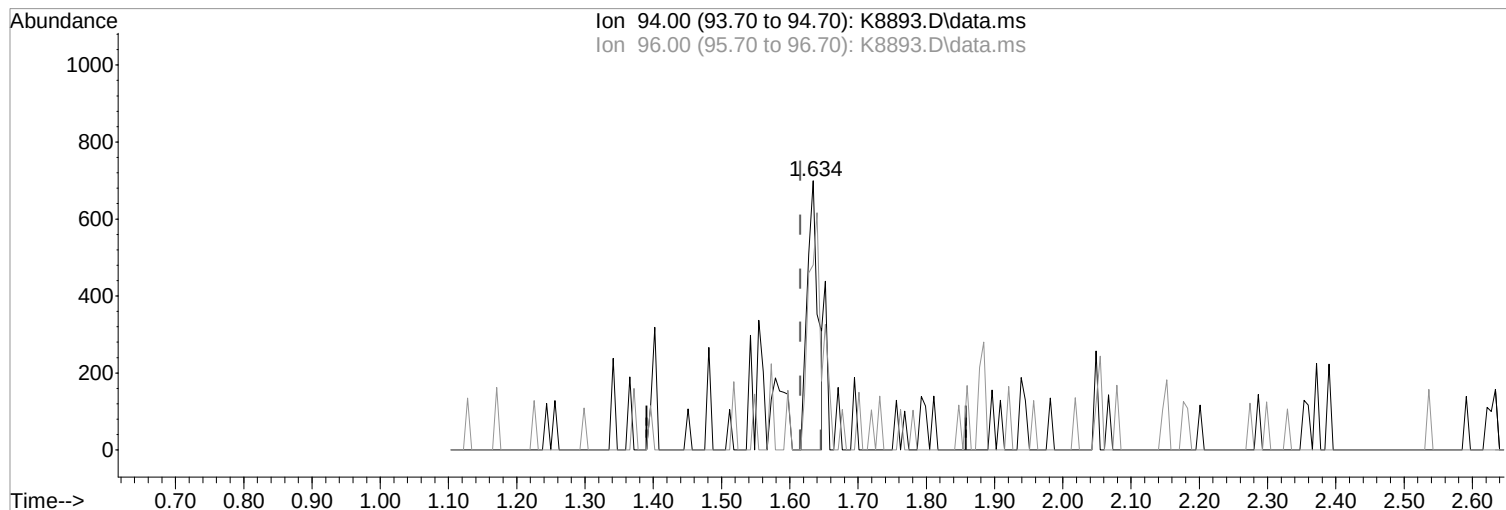
Quantitation Report (Qedit)

1st *FR* 11/18/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8893.D
Acq On : 12 Nov 2021 3:41 am
Operator : K.Ruest
Sample : R2111745-008|1.0
Misc : LIRO 8260 T4
ALS Vial : 41 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:05:52 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8893.D\data.ms

(5) Bromomethane (P)

Manual Integration:

1.634min (+0.018) 0.23 ppb

Before

response 774

Ion	Exp%	Act%
94.00	100	100
96.00	91.00	68.81#
0.00	0.00	0.00
0.00	0.00	0.00

11/18/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8893.D
 Acq On : 12 Nov 2021 3:41 am
 Operator : K.Ruest
 Sample : R2111745-008|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 41 Sample Multiplier: 1

Inst : MSVOA-12

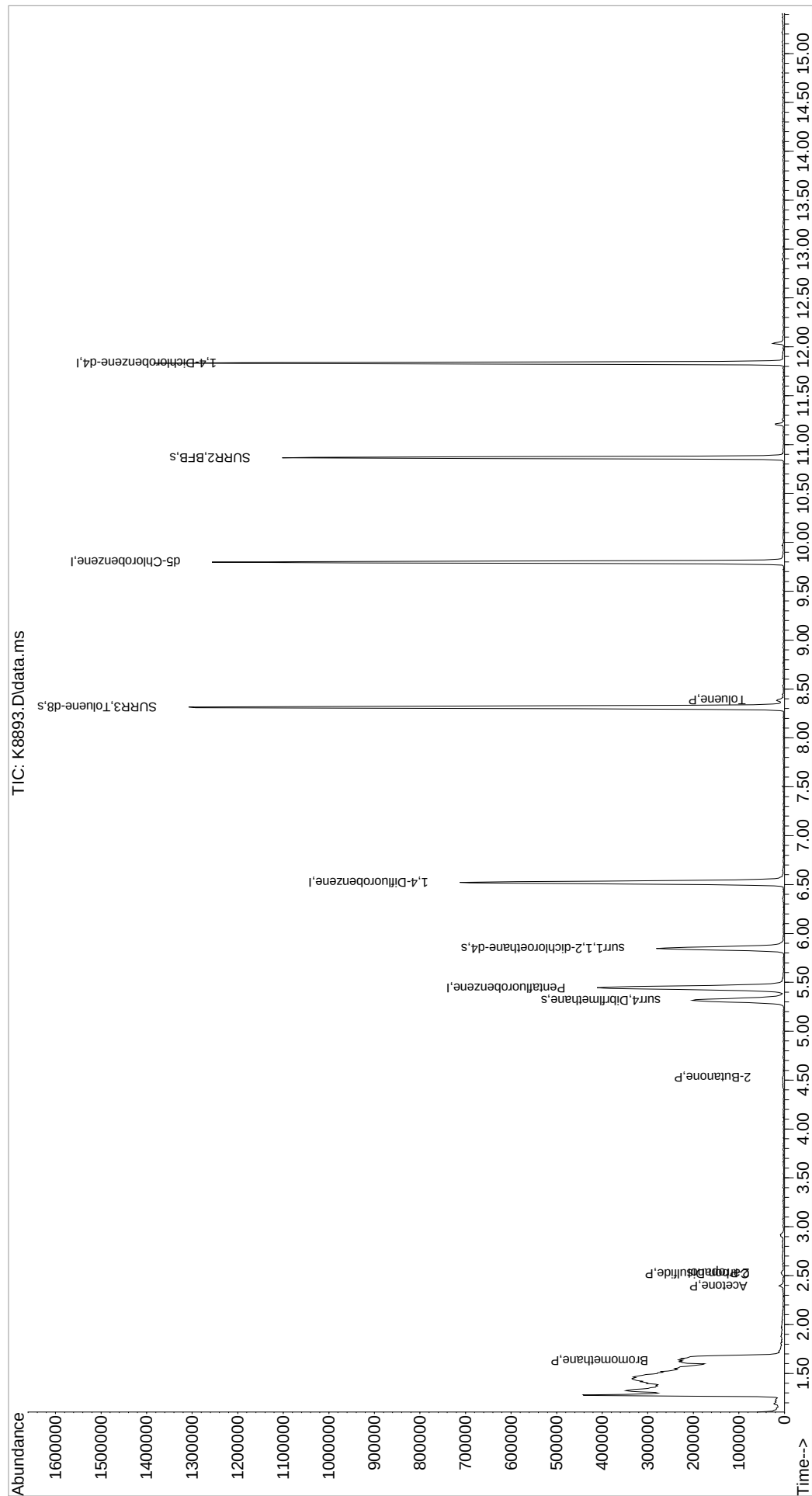
Quant Time: Nov 18 18:11:04 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

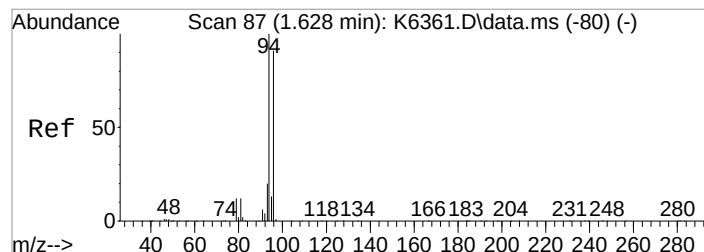
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.444	168	379792	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	632896	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	561295	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	269802	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.316	113	172218	49.98	ppb	0.00
Spiked Amount 50.000	Range 80 - 116		Recovery =	99.96%		
48) surr1,1,2-dichloroetha...	5.847	65	238817	47.67	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery =	95.34%		
65) SURR3,Toluene-d8	8.316	98	851818	52.60	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	105.20%		
70) SURR2,BFB	10.864	95	305845	47.58	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	95.16%		
Target Compounds						
5) Bromomethane	1.634	94	934m	0.28	ppb	Qvalue
15) Acetone	2.396	43	8221	1.74	ppb	87
16) 2-Propanol	2.530	45	3869	7.85	ppb	66
18) Carbon Disulfide	2.524	76	21026m	2.35	ppb	
35) 2-Butanone	4.530	43	2745	0.84	ppb	79
66) Toluene	8.389	91	8619	0.45	ppb	95

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

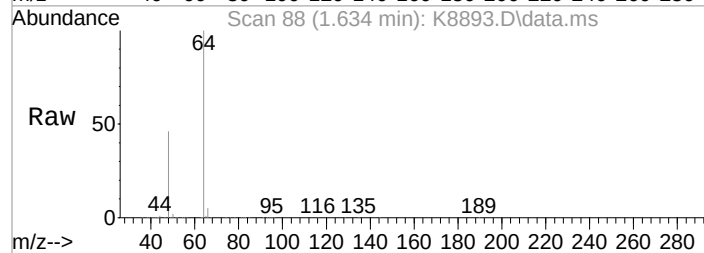
Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8893.D
Acq On : 12 Nov 2021 3:41 am
Operator : K.Ruest
Sample : R2111745-008|1.0
Misc : LIR0 8260 T4
ALS Vial : 41 Sample Multiplier: 1
Inst : MSV0A-12

Quant Time: Nov 18 18:11:04 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Qlast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration

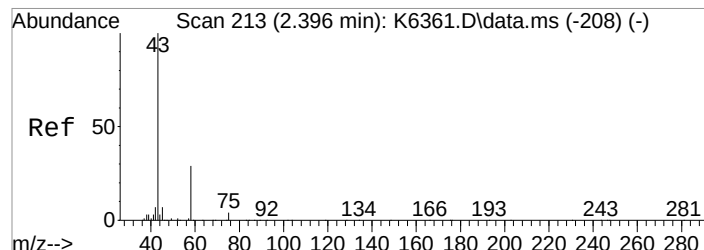
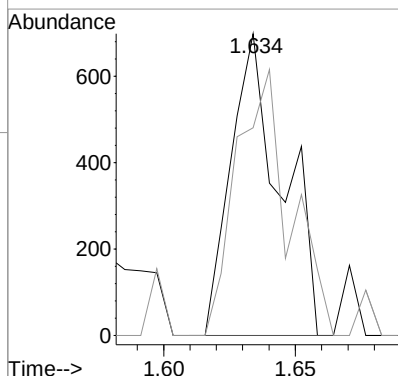
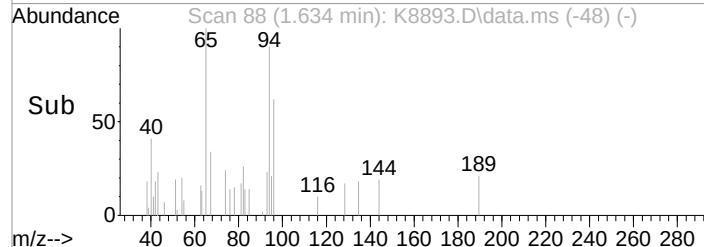




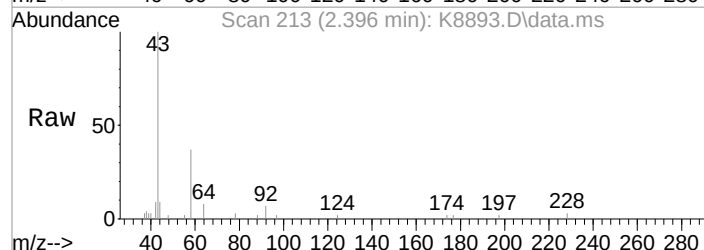
#5
 Bromomethane
 Concen: 0.28 ppb m
 RT: 1.634 min Scan# 88
 Delta R.T. 0.018 min
 Lab File: K8893.D
 Acq: 12 Nov 2021 3:41 am



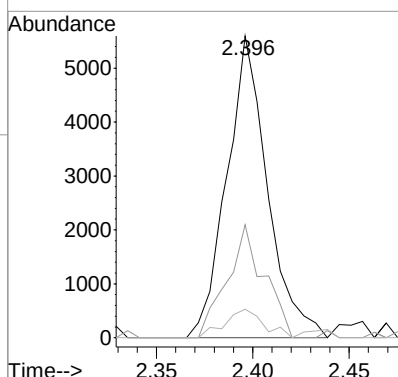
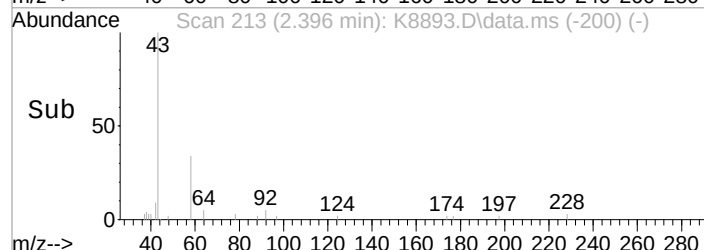
Tgt Ion: 94 Resp: 934
 Ion Ratio Lower Upper
 94 100
 96 68.8 71.0 111.0#

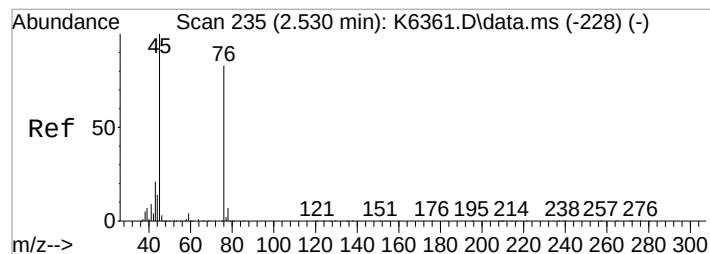


#15
 Acetone
 Concen: 1.74 ppb
 RT: 2.396 min Scan# 213
 Delta R.T. 0.007 min
 Lab File: K8893.D
 Acq: 12 Nov 2021 3:41 am



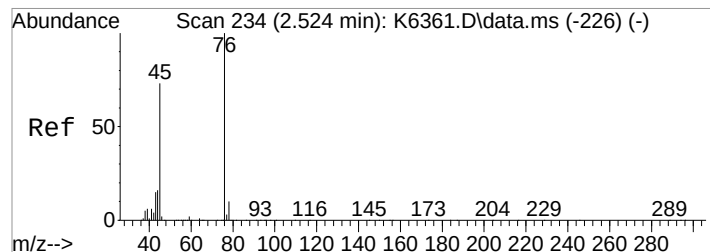
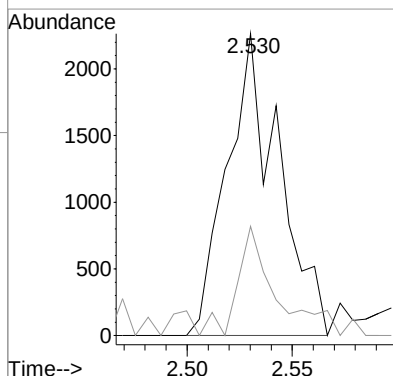
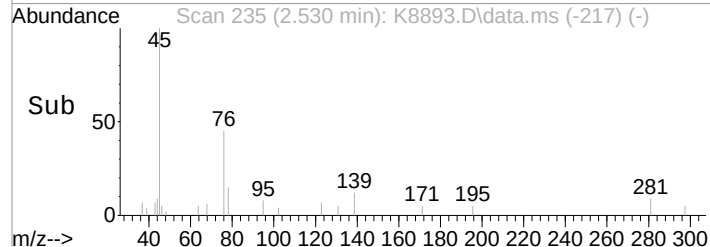
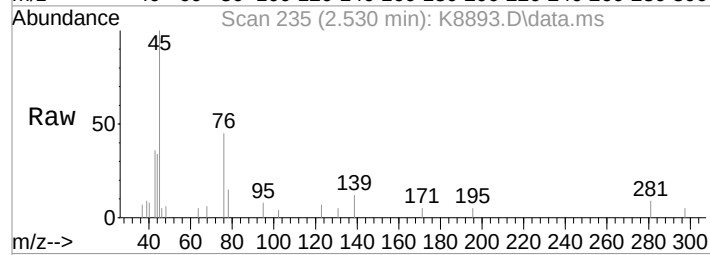
Tgt Ion: 43 Resp: 8221
 Ion Ratio Lower Upper
 43 100
 58 37.4 9.6 49.6
 42 9.5 0.0 27.7





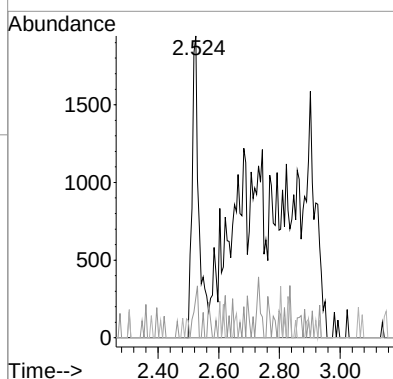
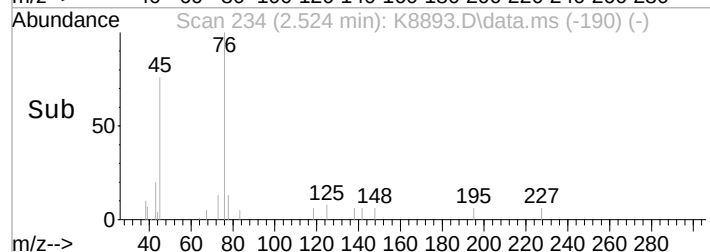
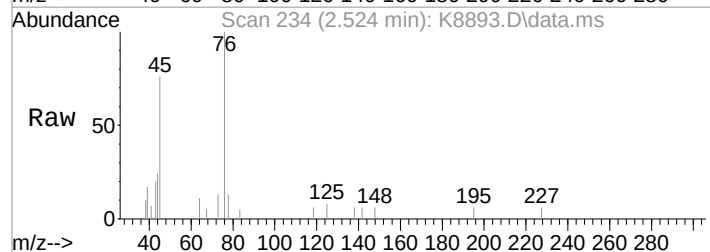
#16
 2-Propanol
 Concen: 7.85 ppb
 RT: 2.530 min Scan# 235
 Delta R.T. 0.000 min
 Lab File: K8893.D
 Acq: 12 Nov 2021 3:41 am

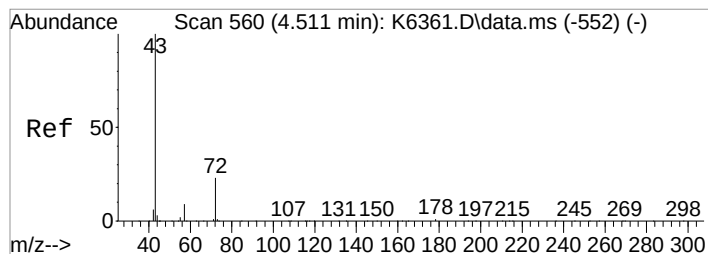
Tgt Ion: 45 Resp: 3869
 Ion Ratio Lower Upper
 45 100
 43 36.2 0.6 40.6



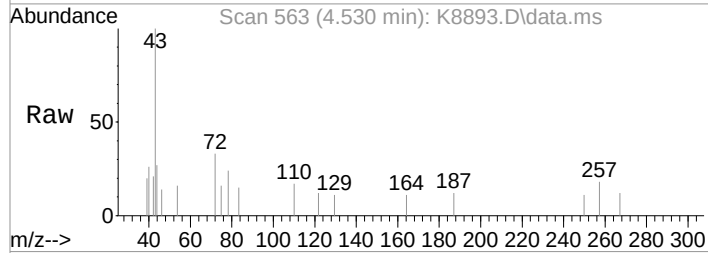
#18
 Carbon Disulfide
 Concen: 2.35 ppb m
 RT: 2.524 min Scan# 234
 Delta R.T. 0.012 min
 Lab File: K8893.D
 Acq: 12 Nov 2021 3:41 am

Tgt Ion: 76 Resp: 21026
 Ion Ratio Lower Upper
 76 100
 78 13.3 0.0 29.7
 77 0.0 0.0 22.7

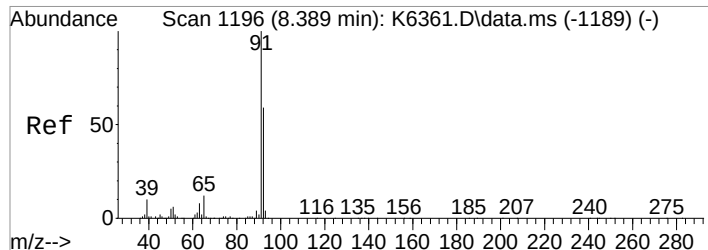
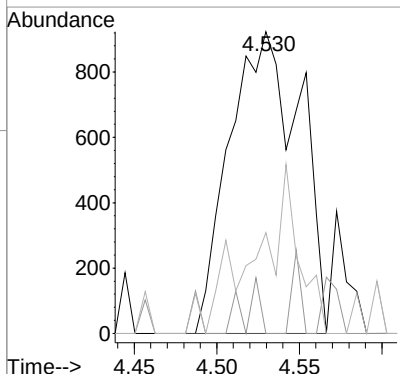
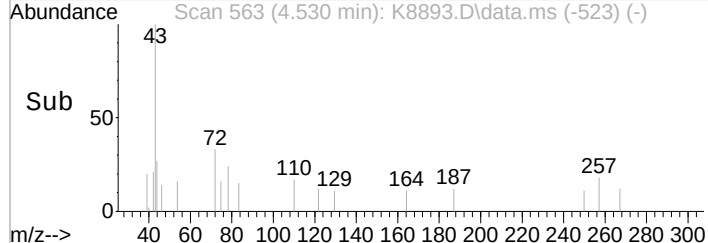




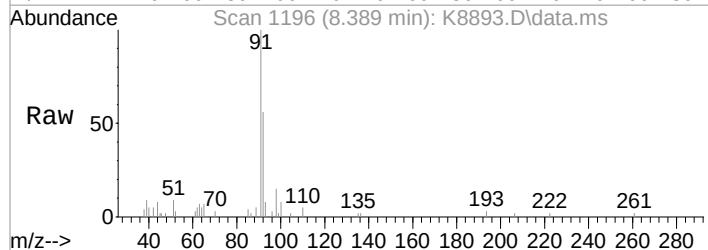
#35
 2-Butanone
 Concen: 0.84 ppb
 RT: 4.530 min Scan# 563
 Delta R.T. 0.019 min
 Lab File: K8893.D
 Acq: 12 Nov 2021 3:41 am



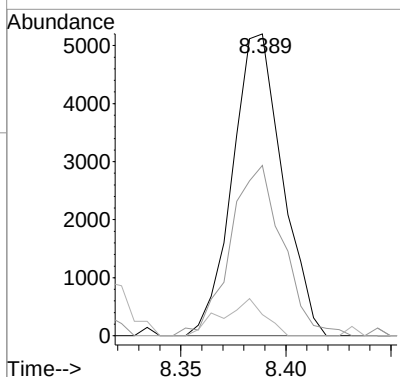
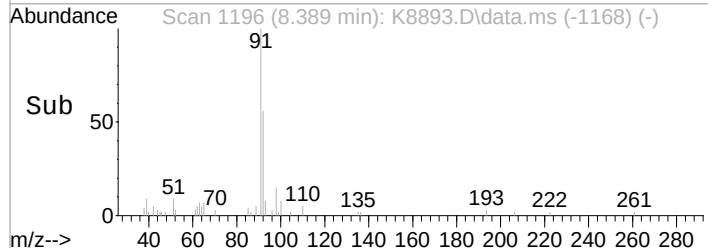
Tgt Ion: 43 Resp: 2745
 Ion Ratio Lower Upper
 43 100
 57 0.0 0.0 28.6
 72 33.3 3.4 43.4



#66
 Toluene
 Concen: 0.45 ppb
 RT: 8.389 min Scan# 1196
 Delta R.T. 0.000 min
 Lab File: K8893.D
 Acq: 12 Nov 2021 3:41 am



Tgt Ion: 91 Resp: 8619
 Ion Ratio Lower Upper
 91 100
 92 56.4 38.7 78.7
 65 7.1 0.0 31.8



Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8922.D
 Acq On : 12 Nov 2021 8:09 pm
 Operator : K.Ruest
 Sample : R2111745-009|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 20 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 15 16:19:52 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

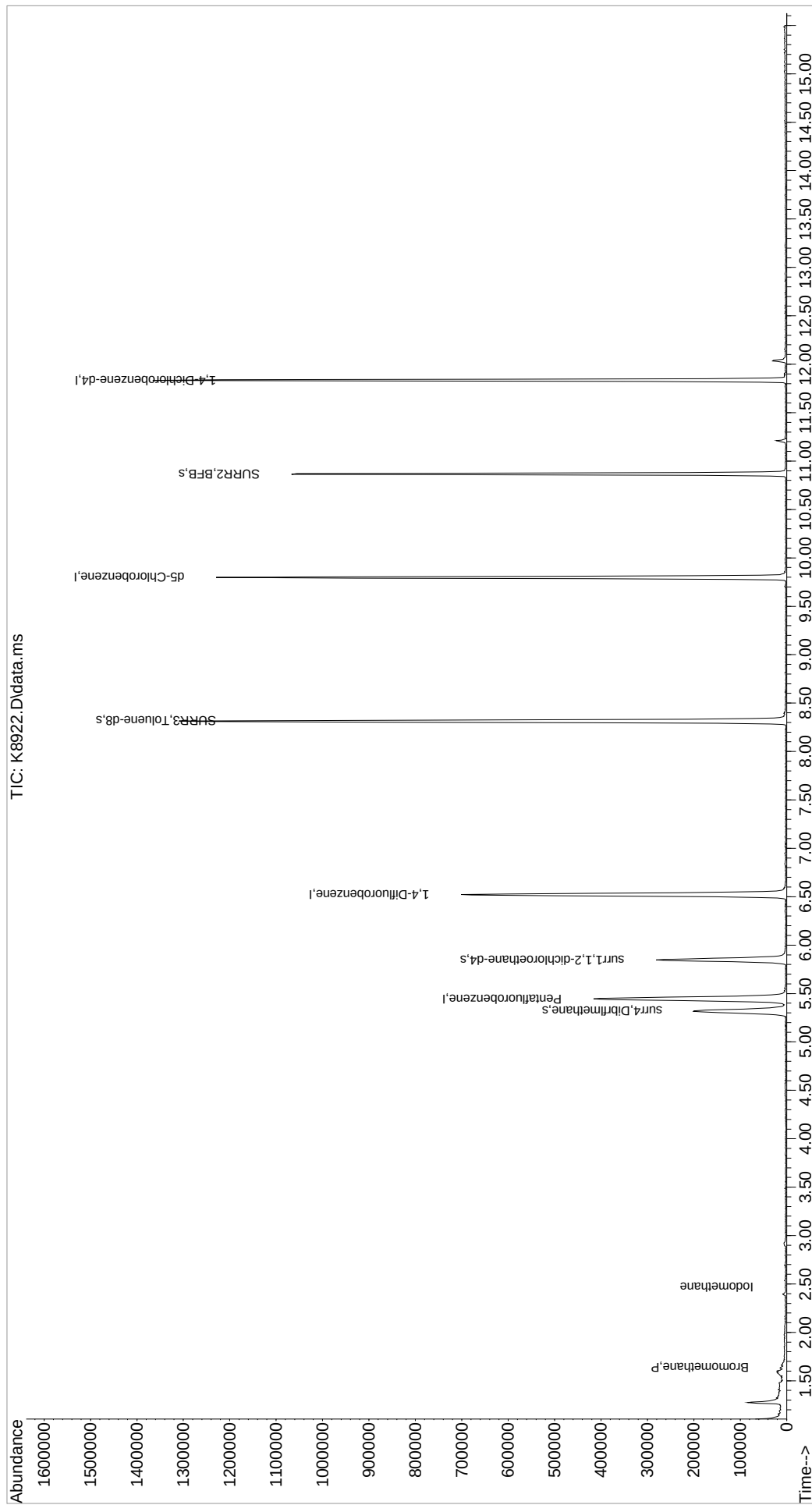
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.444	168	390688	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	632215	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	564776	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	274447	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.322	113	172900	50.24	ppb	0.00
Spiked Amount 50.000	Range 80 - 116		Recovery =	100.48%		
48) surr1,1,2-dichloroetha...	5.846	65	234585	46.87	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery =	93.74%		
65) SURR3,Toluene-d8	8.315	98	839170	51.87	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	103.74%		
70) SURR2,BFB	10.864	95	305451	47.57	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	95.14%		
Target Compounds						
5) Bromomethane	1.640	94	2151	0.62	ppb	92
15) Acetone	2.396	43	4600	Below Cal		73
17) Iodomethane	2.469	142	880	1.56	ppb	73

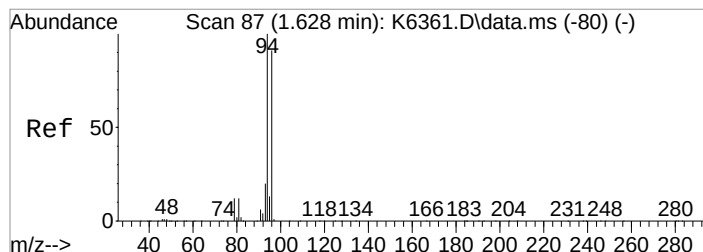
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8922.D
 Acq On : 12 Nov 2021 8:09 pm
 Operator : K.Ruest
 Sample : R2111745-009|1.0
 Misc : LIR0 8260 T4
 ALS Vial : 20 Sample Multiplier: 1

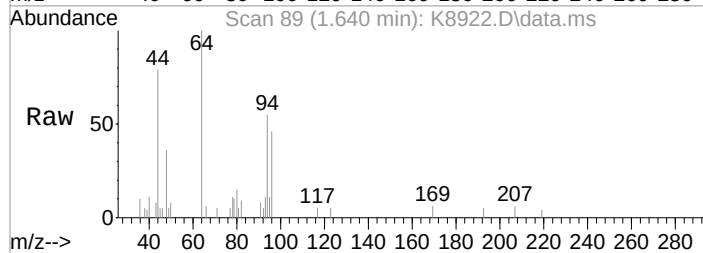
Inst : MSV0A-12

Quant Time: Nov 15 16:19:52 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 Qlast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

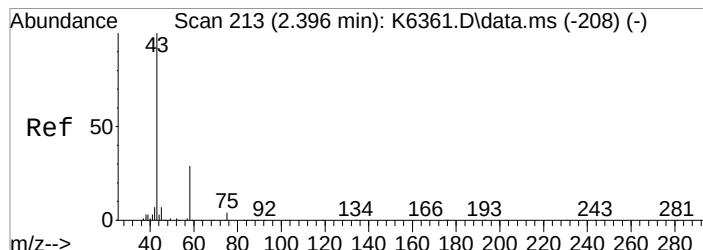
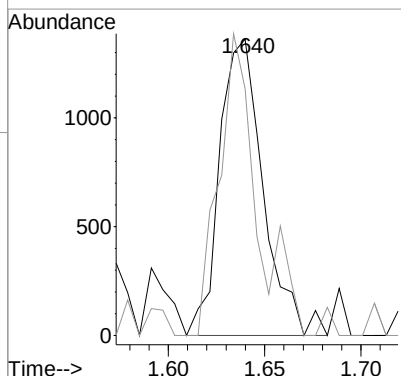
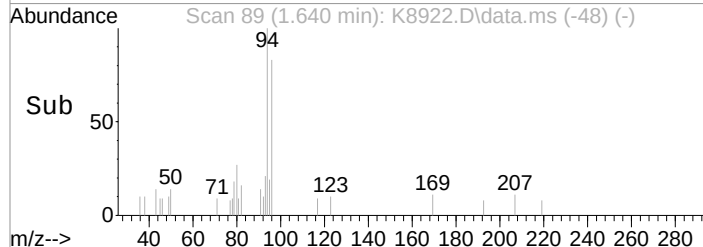




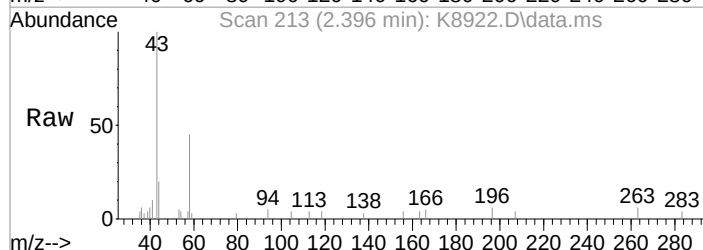
#5
 Bromomethane
 Concen: 0.62 ppb
 RT: 1.640 min Scan# 89
 Delta R.T. 0.024 min
 Lab File: K8922.D
 Acq: 12 Nov 2021 8:09 pm



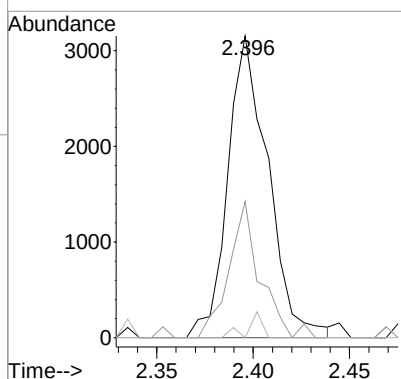
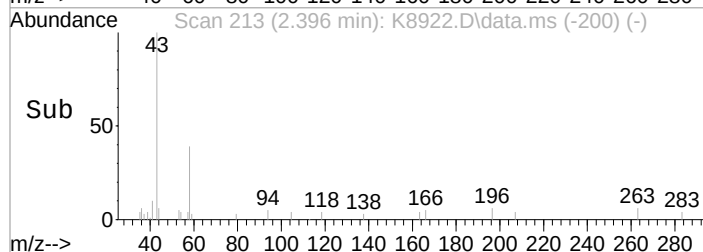
Tgt Ion: 94 Resp: 2151
 Ion Ratio Lower Upper
 94 100
 96 83.2 71.0 111.0

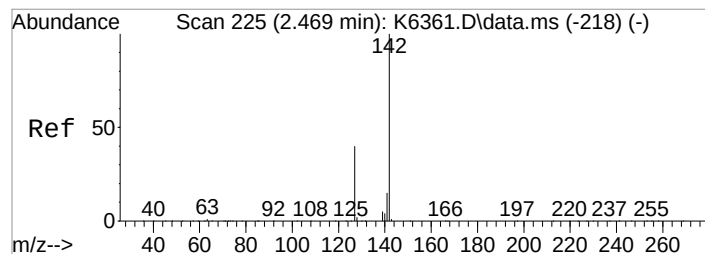


#15
 Acetone
 Concen: Below Cal
 RT: 2.396 min Scan# 213
 Delta R.T. 0.007 min
 Lab File: K8922.D
 Acq: 12 Nov 2021 8:09 pm

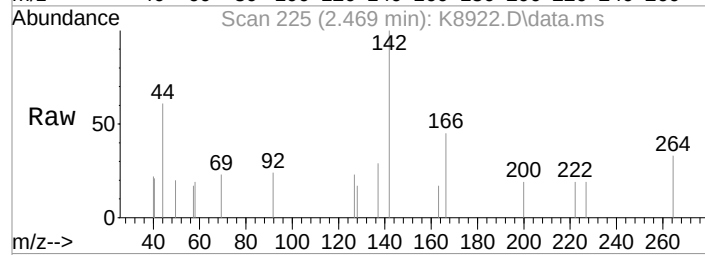


Tgt Ion: 43 Resp: 4600
 Ion Ratio Lower Upper
 43 100
 58 45.1 9.6 49.6
 42 0.0 0.0 27.7

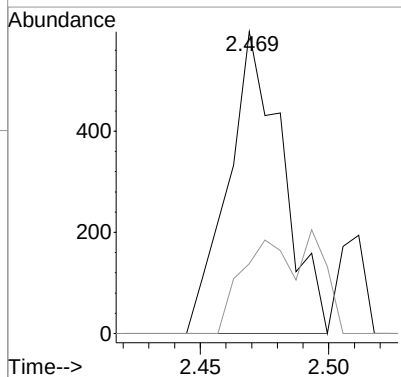
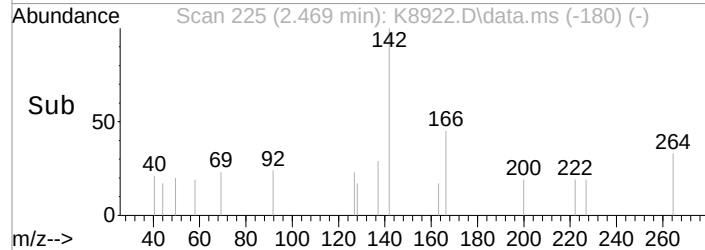




#17
 Iodomethane
 Concen: 1.56 ppb
 RT: 2.469 min Scan# 225
 Delta R.T. 0.013 min
 Lab File: K8922.D
 Acq: 12 Nov 2021 8:09 pm



Tgt Ion:142 Resp: 880
 Ion Ratio Lower Upper
 142 100
 127 23.1 19.6 59.6



Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8910.D
 Acq On : 12 Nov 2021 3:47 pm
 Operator : K.Ruest
 Sample : R2111745-010|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 8 Sample Multiplier: 1

Inst : MSVOA-12

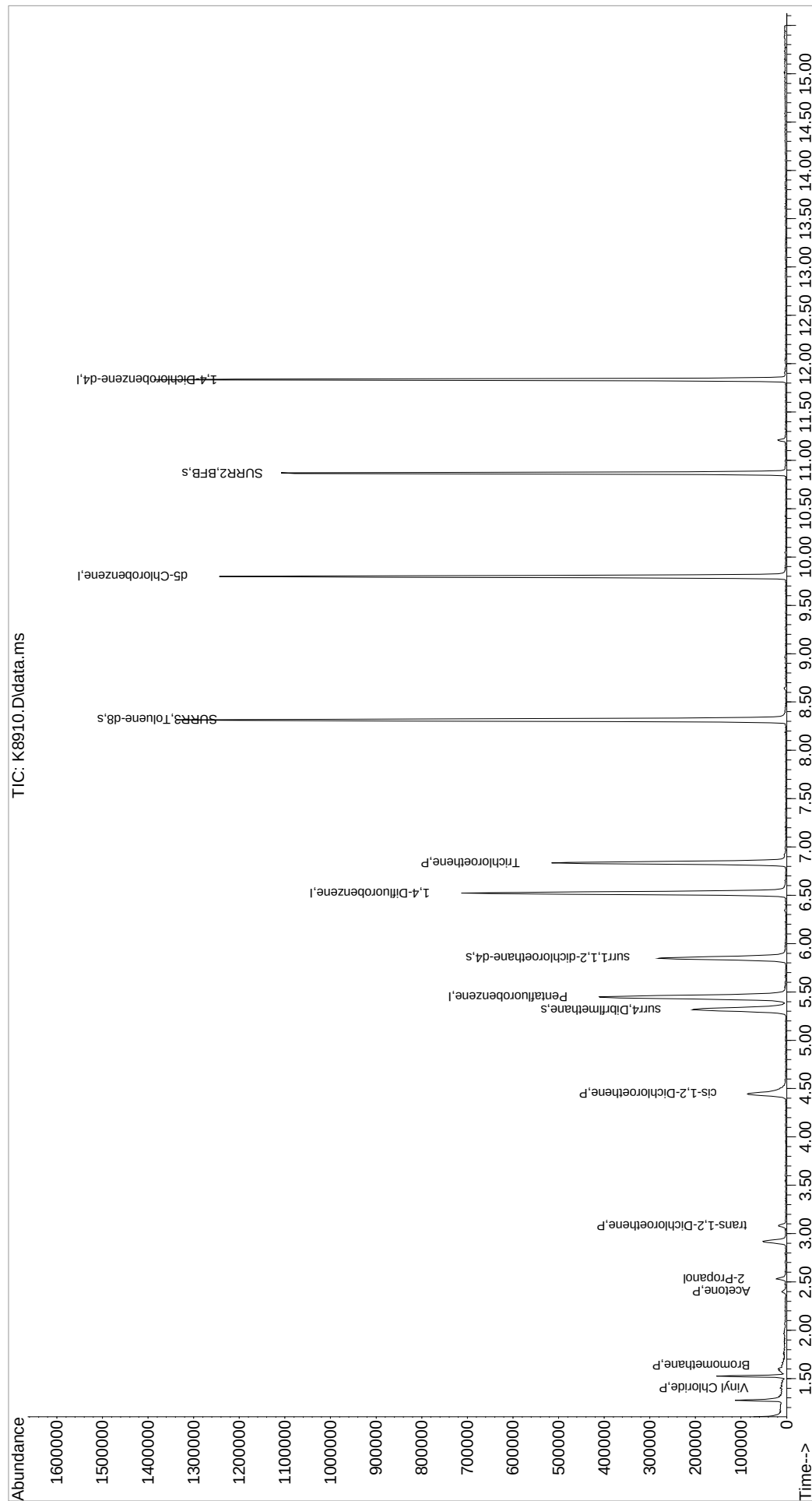
Quant Time: Nov 15 15:58:58 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

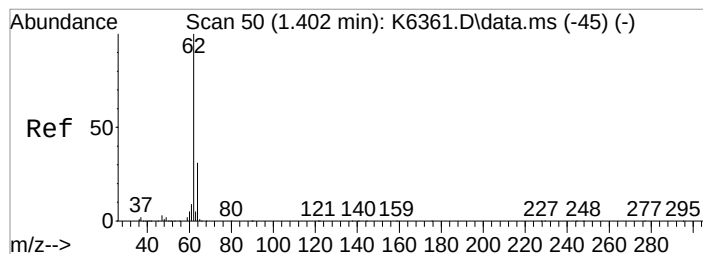
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	388582	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	640568	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	570939	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	267848	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.316	113	176390	50.58	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	101.16%	
48) surr1,1,2-dichloroetha...	5.853	65	235118	46.37	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	92.74%	
65) SURR3,Toluene-d8	8.316	98	848519	51.77	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	103.54%	
70) SURR2,BFB	10.864	95	311173	47.82	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	95.64%	
Target Compounds						
4) Vinyl Chloride	1.402	62	1166	0.22	ppb	Qvalue # 15
5) Bromomethane	1.634	94	1432	0.42	ppb	85
15) Acetone	2.402	43	8032	1.57	ppb	97
16) 2-Propanol	2.530	45	20579	40.80	ppb	96
26) trans-1,2-Dichloroethene	3.079	96	6353	1.54	ppb	# 73
34) cis-1,2-Dichloroethene	4.450	96	50574	10.62	ppb	85
54) Trichloroethene	6.834	130	189111	41.95	ppb	94

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

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8910.D
Acq On : 12 Nov 2021 3:47 pm
Operator : K.Ruest
Sample : R2111745-010|1.0
Misc : LIRO 8260 T4
ALS Vial : 8 Sample Multiplier: 1
Inst : MSV0A-12

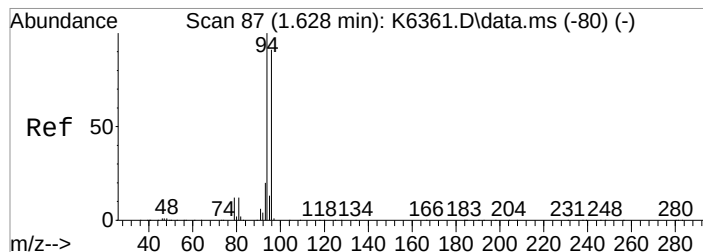
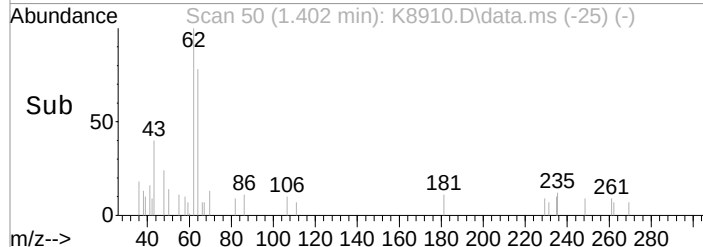
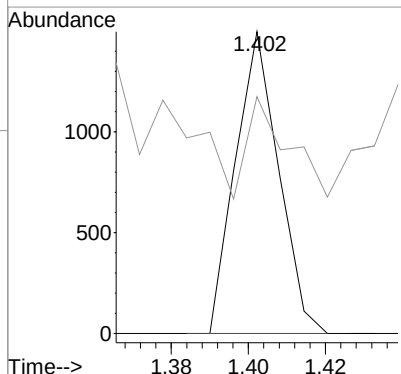
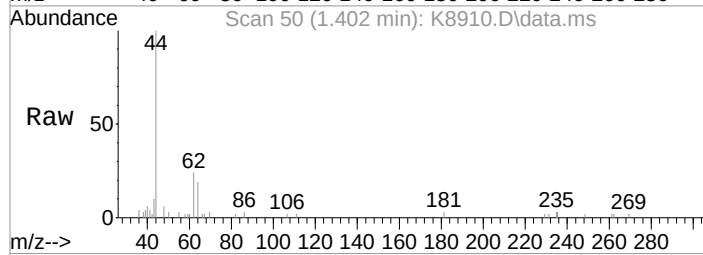
Quant Time: Nov 15 15:58:58 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Qlast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration





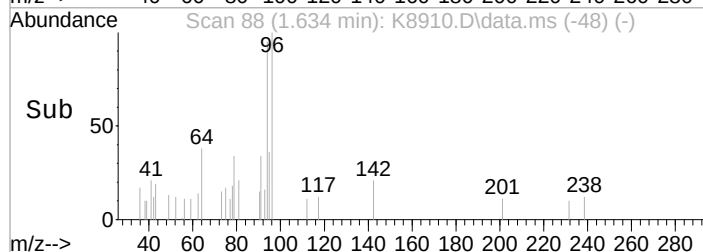
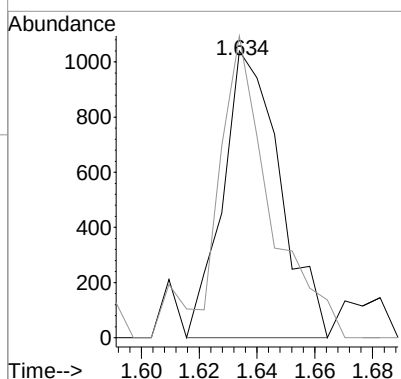
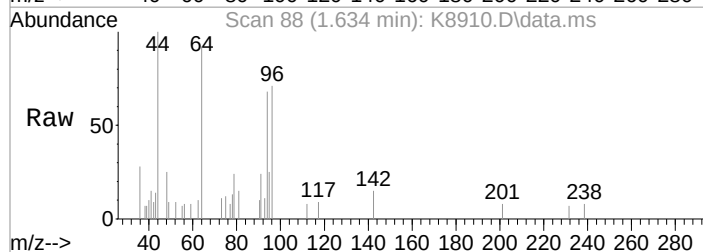
#4
 Vinyl Chloride
 Concen: 0.22 ppb
 RT: 1.402 min Scan# 50
 Delta R.T. 0.006 min
 Lab File: K8910.D
 Acq: 12 Nov 2021 3:47 pm

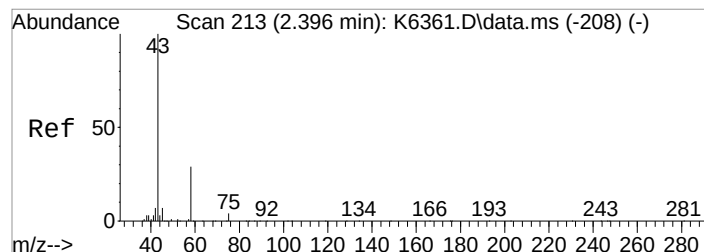
Tgt Ion: 62 Resp: 1166
 Ion Ratio Lower Upper
 62 100
 64 78.4 11.5 51.5#



#5
 Bromomethane
 Concen: 0.42 ppb
 RT: 1.634 min Scan# 88
 Delta R.T. 0.018 min
 Lab File: K8910.D
 Acq: 12 Nov 2021 3:47 pm

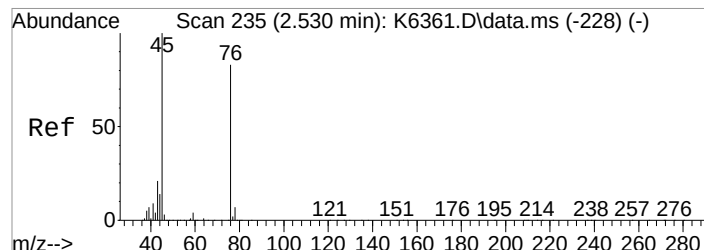
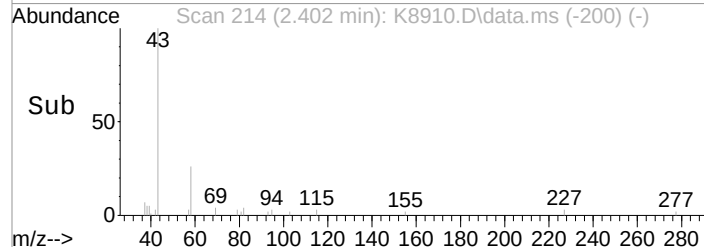
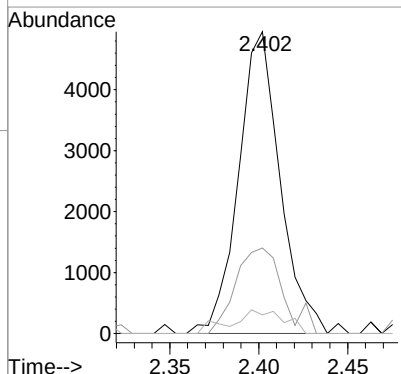
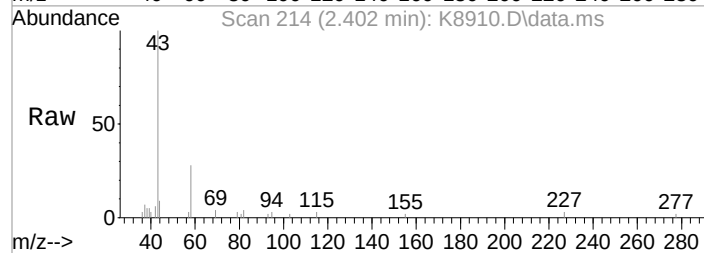
Tgt Ion: 94 Resp: 1432
 Ion Ratio Lower Upper
 94 100
 96 105.3 71.0 111.0





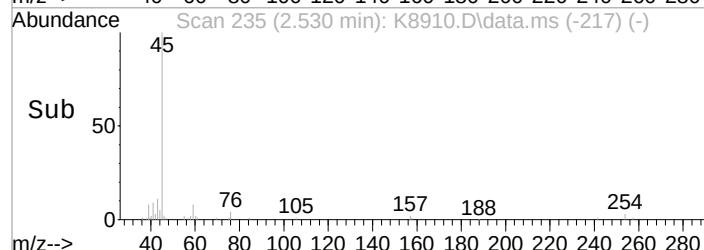
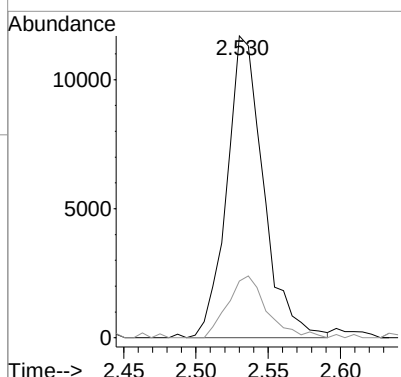
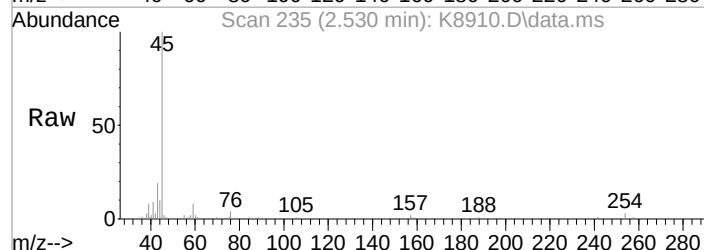
#15
 Acetone
 Concen: 1.57 ppb
 RT: 2.402 min Scan# 214
 Delta R.T. 0.013 min
 Lab File: K8910.D
 Acq: 12 Nov 2021 3:47 pm

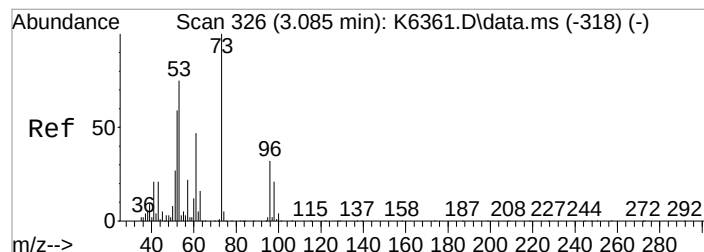
Tgt Ion	Ratio	Lower	Upper
43	100		
58	28.4	9.6	49.6
42	6.2	0.0	27.7



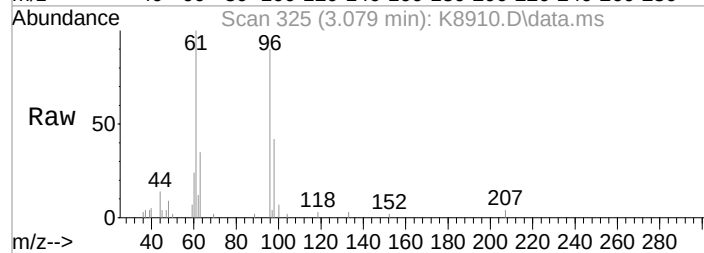
#16
 2-Propanol
 Concen: 40.80 ppb
 RT: 2.530 min Scan# 235
 Delta R.T. 0.000 min
 Lab File: K8910.D
 Acq: 12 Nov 2021 3:47 pm

Tgt Ion	Ratio	Lower	Upper
45	100		
43	18.8	0.6	40.6

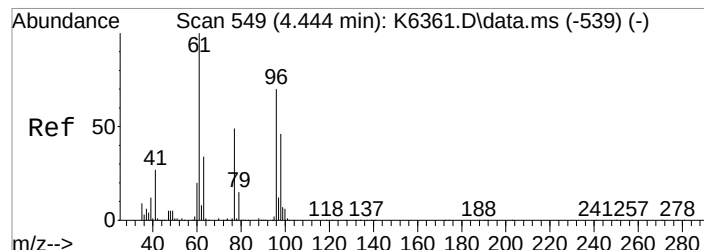
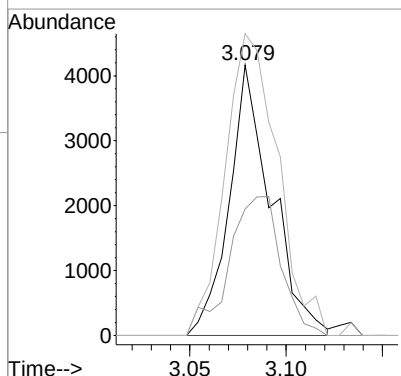
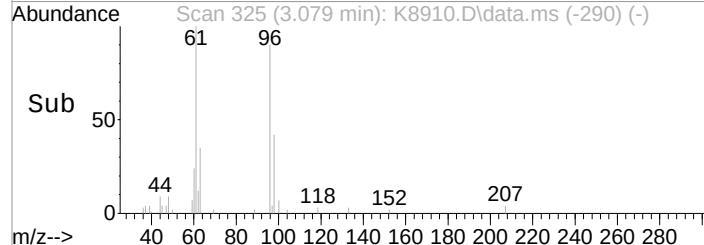




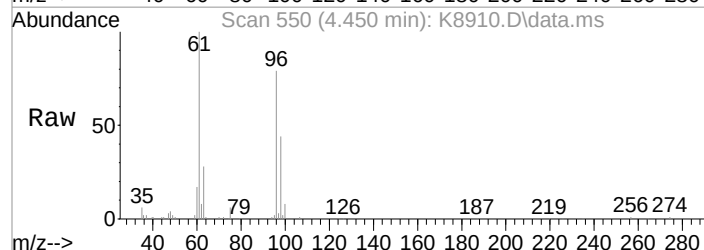
#26
 trans-1,2-Dichloroethene
 Concen: 1.54 ppb
 RT: 3.079 min Scan# 325
 Delta R.T. 0.006 min
 Lab File: K8910.D
 Acq: 12 Nov 2021 3:47 pm



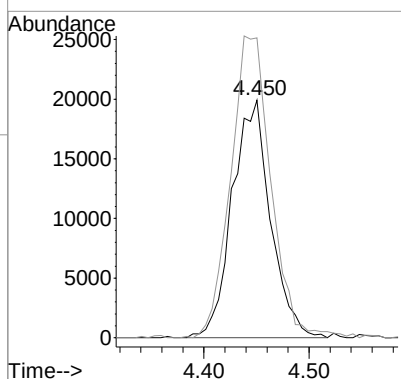
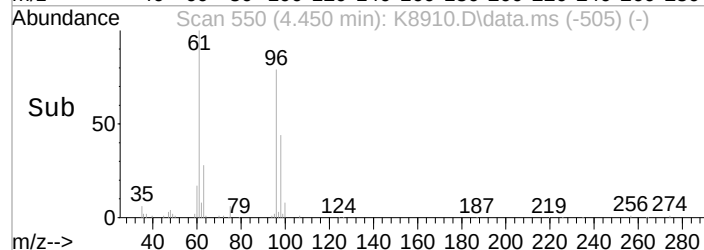
Tgt Ion: 96 Resp: 6353
 Ion Ratio Lower Upper
 96 100
 98 46.8 44.1 84.1
 61 111.7 127.9 167.9#

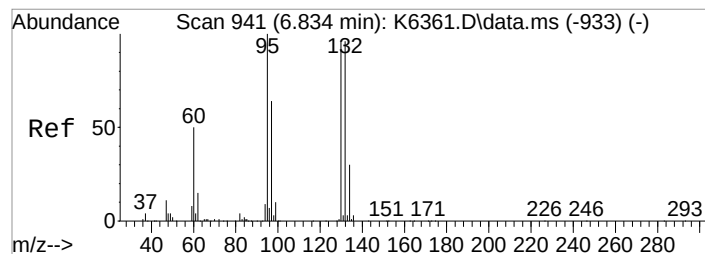


#34
 cis-1,2-Dichloroethene
 Concen: 10.62 ppb
 RT: 4.450 min Scan# 550
 Delta R.T. 0.012 min
 Lab File: K8910.D
 Acq: 12 Nov 2021 3:47 pm

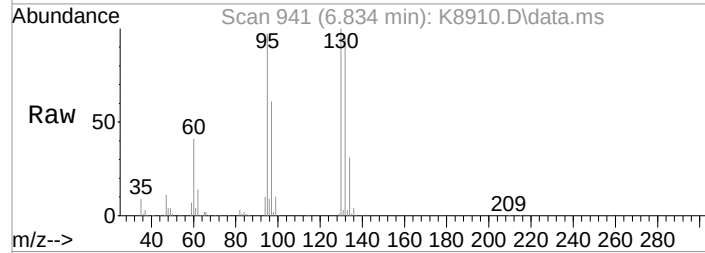


Tgt Ion: 96 Resp: 50574
 Ion Ratio Lower Upper
 96 100
 61 126.4 125.2 165.2

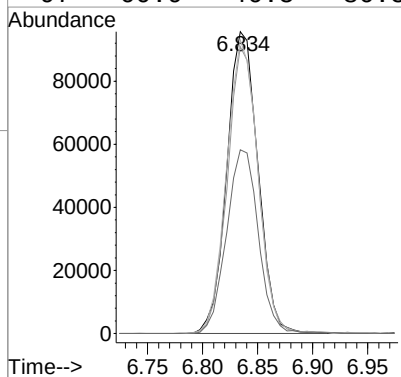
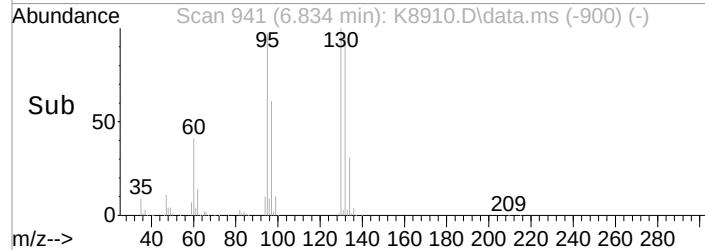




#54
 Trichloroethene
 Concen: 41.95 ppb
 RT: 6.834 min Scan# 941
 Delta R.T. 0.000 min
 Lab File: K8910.D
 Acq: 12 Nov 2021 3:47 pm



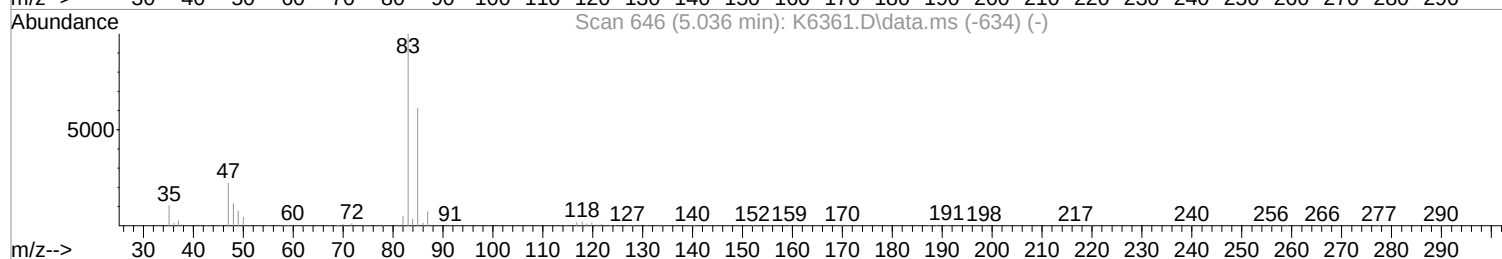
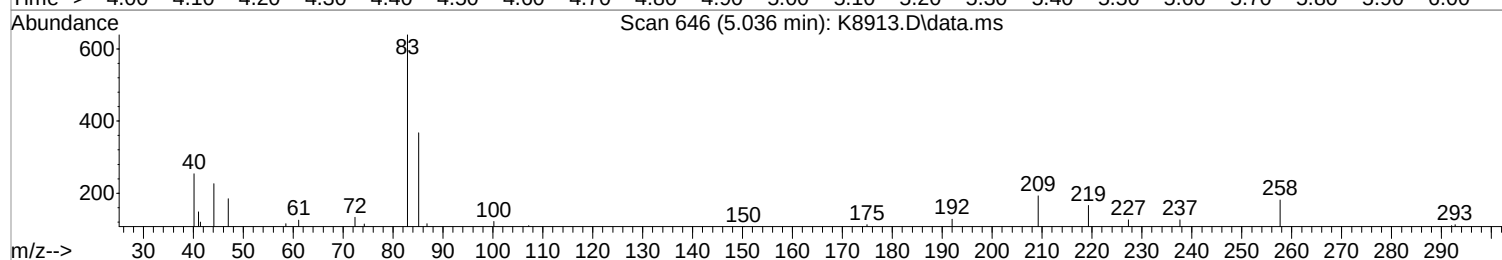
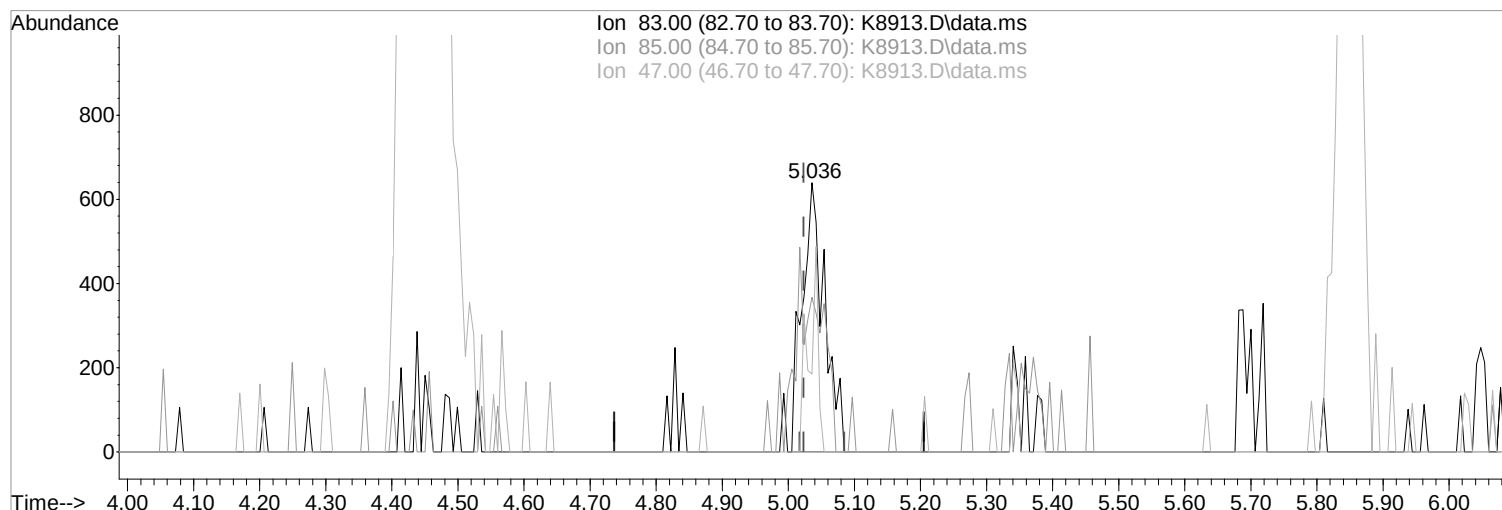
Tgt Ion	Ratio	Resp	Lower	Upper
130	100			
132	95.0	79.7	119.7	
95	97.2	83.8	123.8	
97	60.9	46.5	86.5	



Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8913.D
Acq On : 12 Nov 2021 4:53 pm
Operator : K.Ruest
Sample : R2111745-011|2.0
Misc : LIRO 8260 T4
ALS Vial : 11 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 17:15:45 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8913.D\data.ms

(40) Chloroform (P)

5.036min (+0.013) -0.30 ppb m

response 1509

Ion	Exp%	Act%
83.00	100	100
85.00	61.50	57.43
47.00	22.10	28.95
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

11/15/21

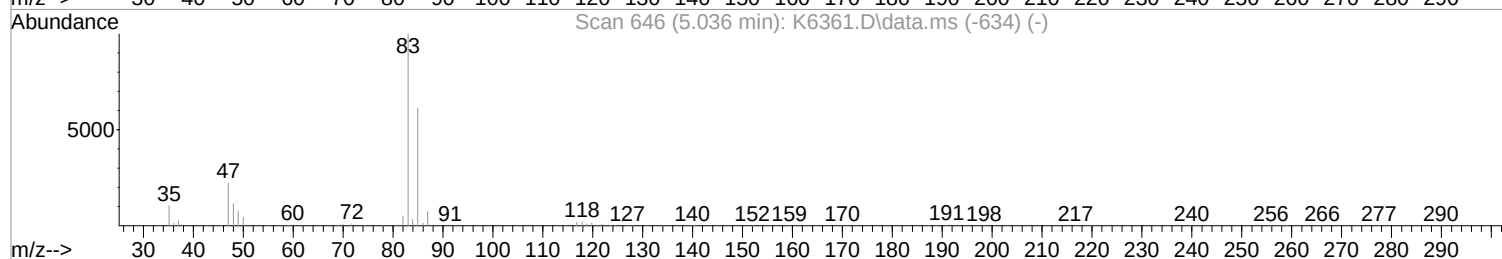
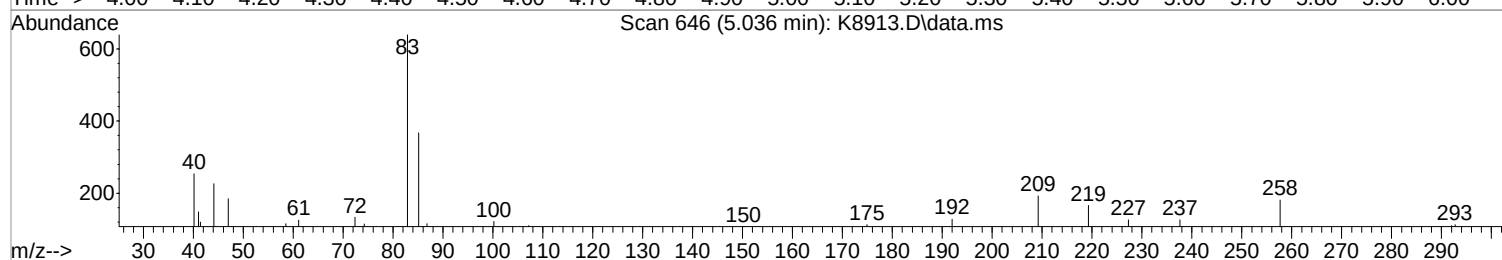
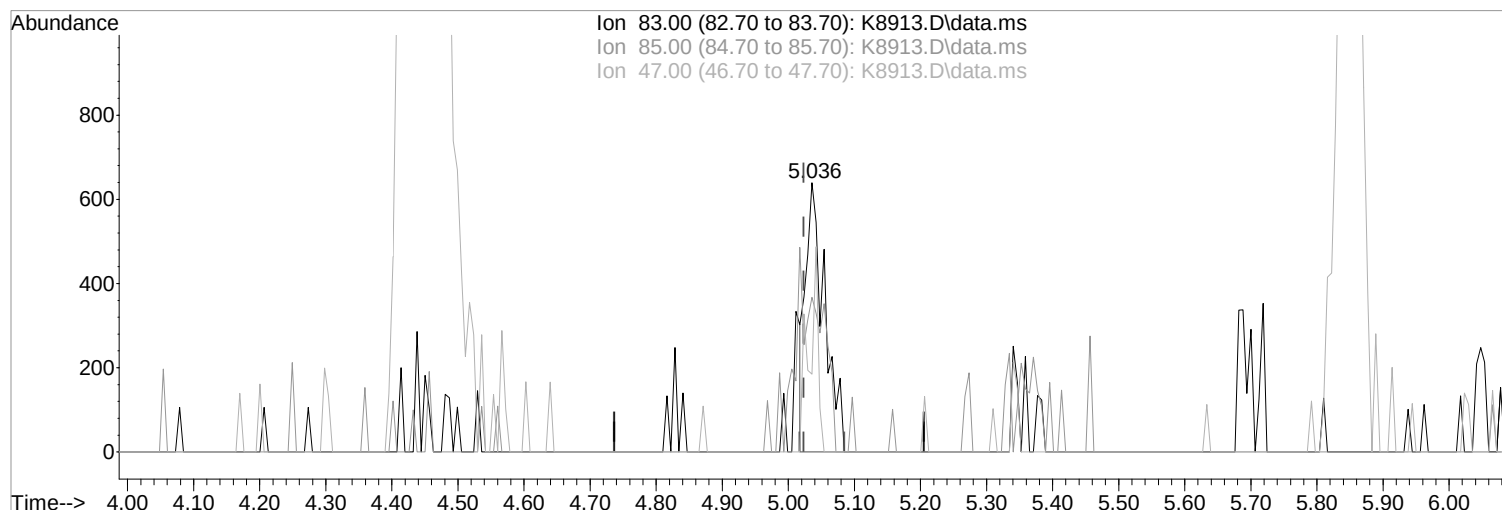
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8913.D
Acq On : 12 Nov 2021 4:53 pm
Operator : K.Ruest
Sample : R2111745-011|2.0
Misc : LIRO 8260 T4
ALS Vial : 11 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 17:15:45 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8913.D\data.ms

(40) Chloroform (P)

Manual Integration:

5.036min (+0.013) -0.33 ppb

Before

response 1276

Ion	Exp%	Act%
83.00	100	100
85.00	61.50	57.43
47.00	22.10	28.95
0.00	0.00	0.00

11/15/21

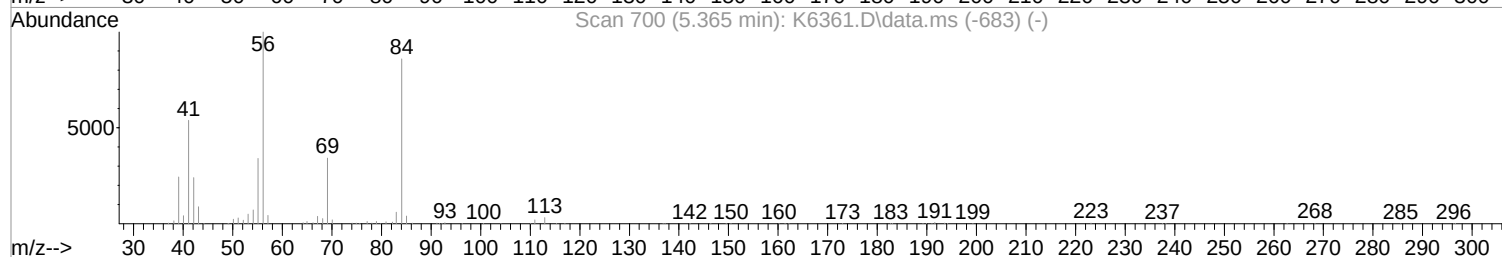
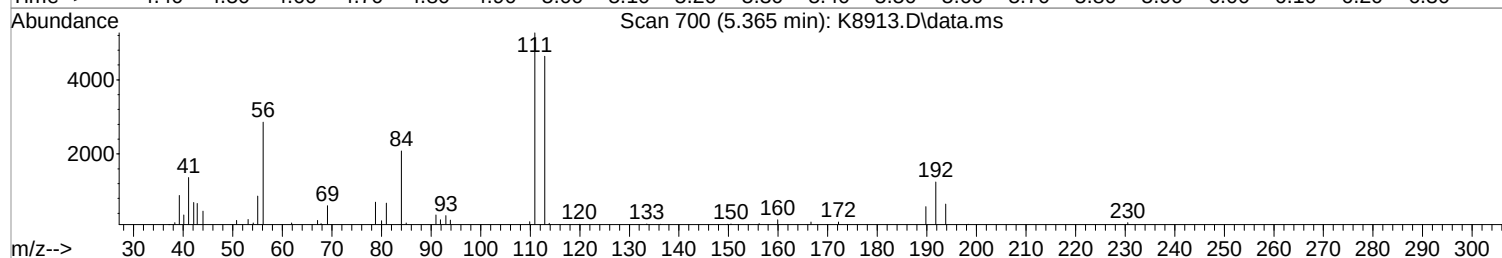
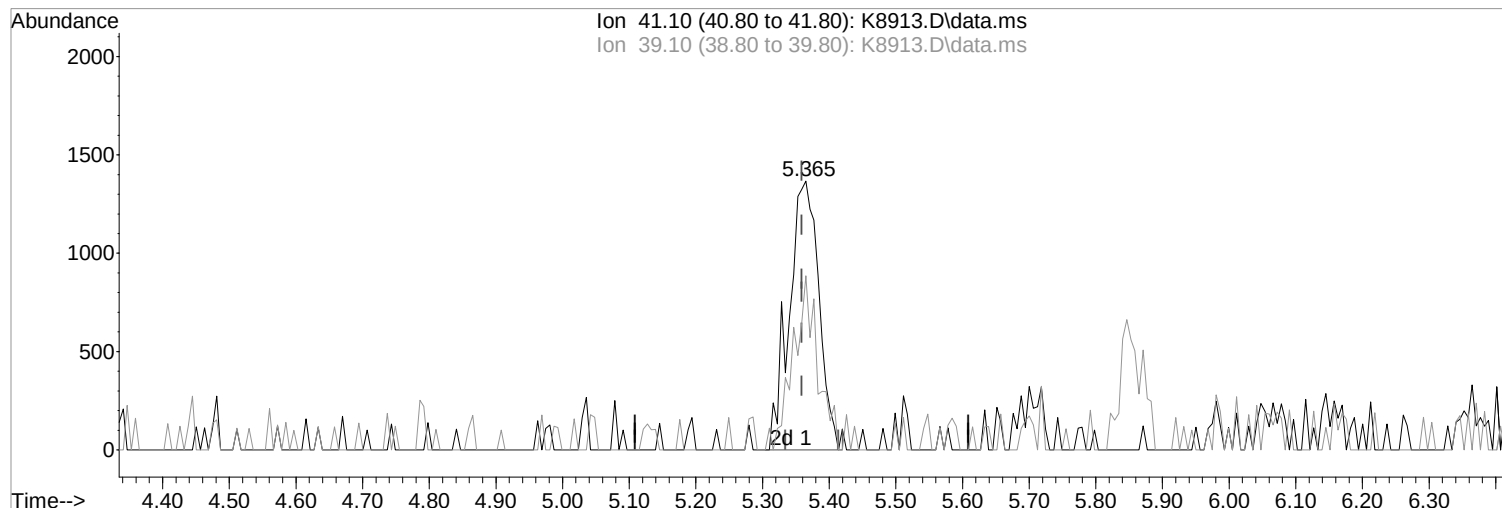
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8913.D
Acq On : 12 Nov 2021 4:53 pm
Operator : K.Ruest
Sample : R2111745-011|2.0
Misc : LIRO 8260 T4
ALS Vial : 11 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 17:15:45 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8913.D\data.ms

(44) Cyclohexane (P)

Manual Integration:

5.365min (+0.006) 1.00 ppb m

After

response 4267

Split Peak

Ion	Exp%	Act%
41.10	100	100
39.10	45.20	64.74
0.00	0.00	0.00
0.00	0.00	0.00

11/15/21

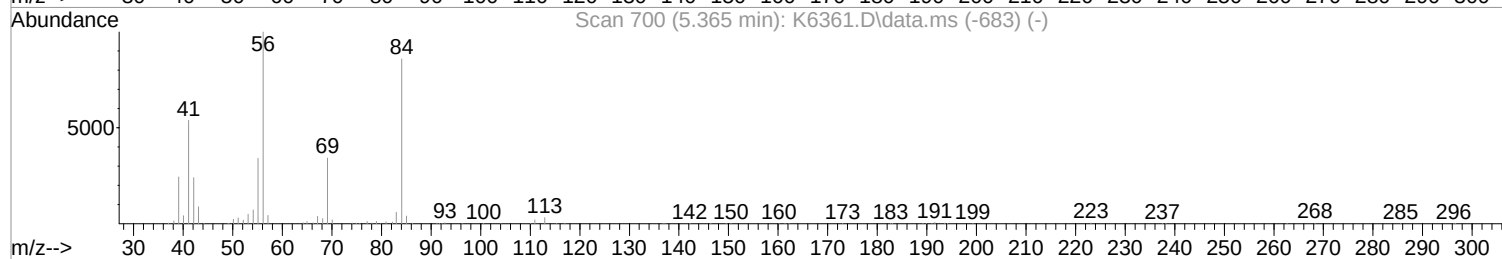
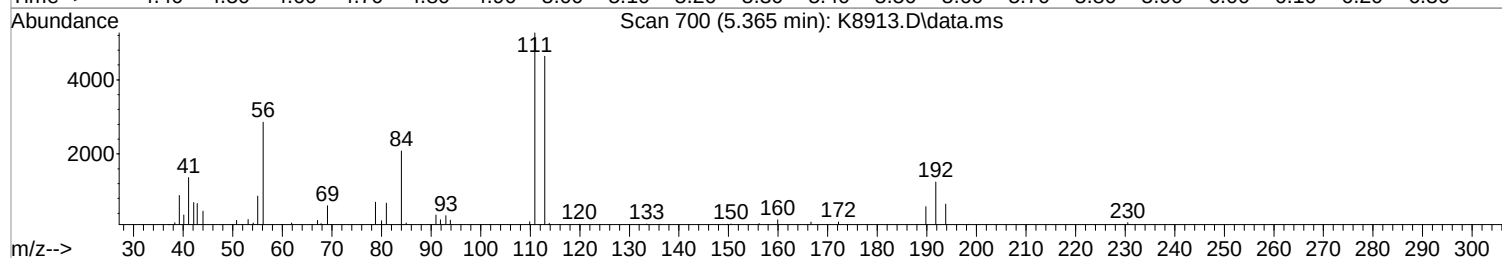
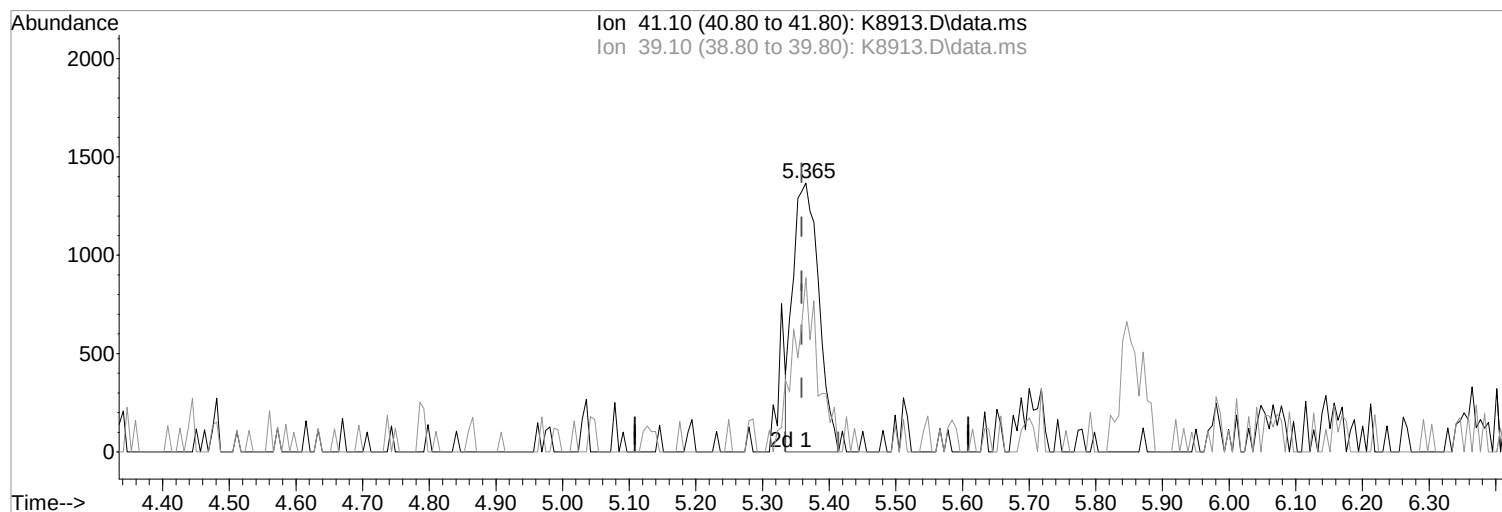
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8913.D
Acq On : 12 Nov 2021 4:53 pm
Operator : K.Ruest
Sample : R2111745-011|2.0
Misc : LIRO 8260 T4
ALS Vial : 11 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 17:15:45 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8913.D\data.ms

(44) Cyclohexane (P)

Manual Integration:

5.365min (+0.006) 0.86 ppb

Before

response 3673

Ion	Exp%	Act%
41.10	100	100
39.10	45.20	64.74
0.00	0.00	0.00
0.00	0.00	0.00

11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8913.D
 Acq On : 12 Nov 2021 4:53 pm
 Operator : K.Ruest
 Sample : R2111745-011|2.0
 Misc : LIRO 8260 T4
 ALS Vial : 11 Sample Multiplier: 1

Inst : MSVOA-12

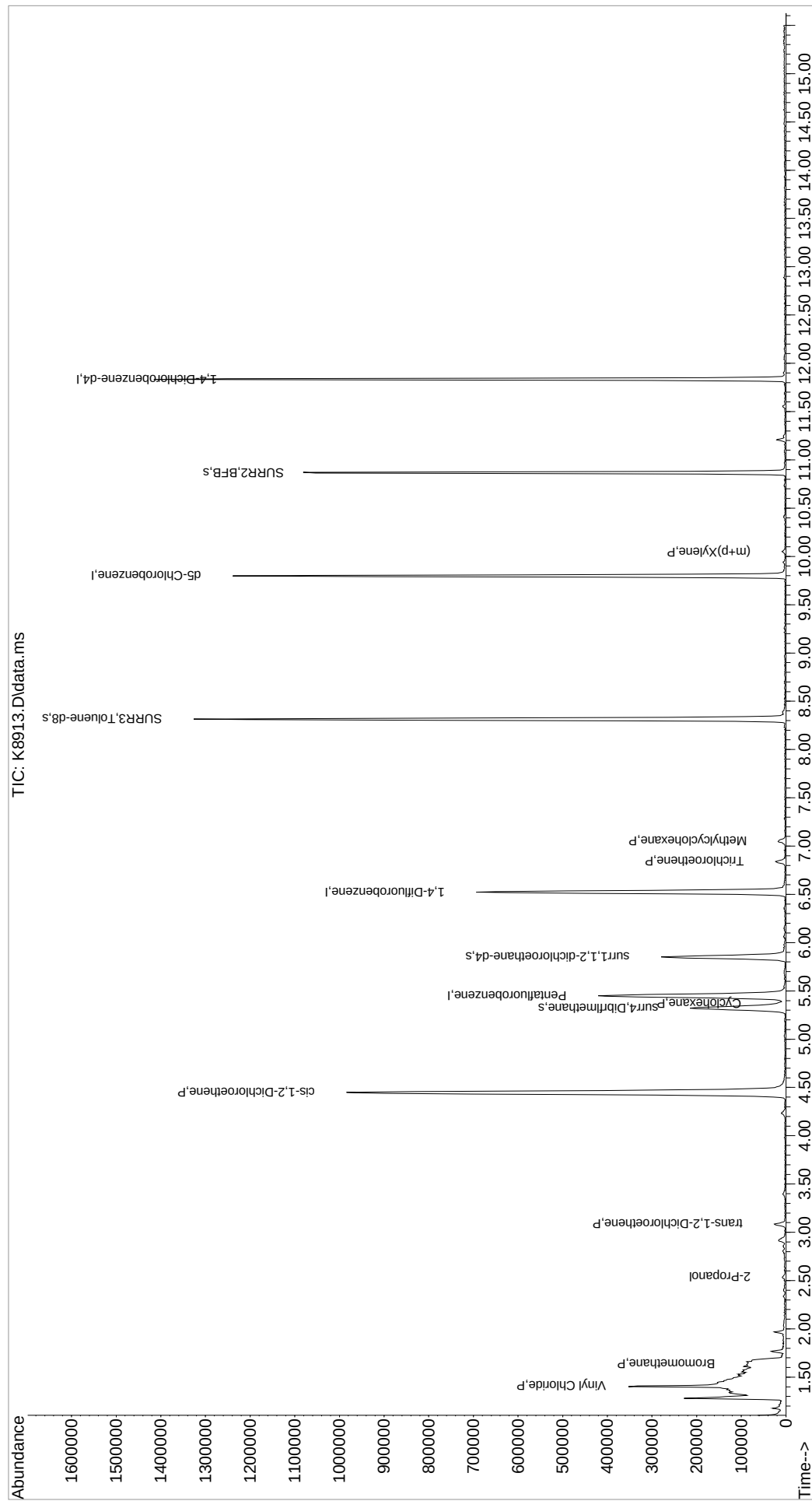
Quant Time: Nov 15 16:04:26 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

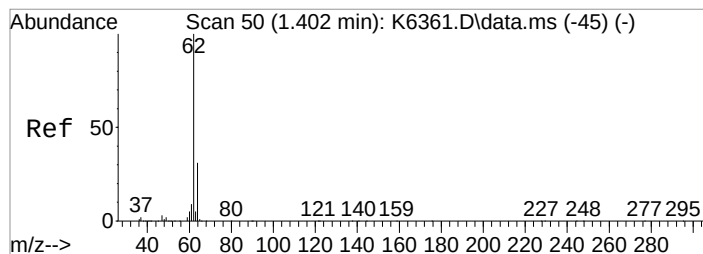
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	393150	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	643012	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	571813	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	280283	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.322	113	174268	49.78	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	99.56%	
48) surr1,1,2-dichloroetha...	5.853	65	227740	44.74	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	89.48%	
65) SURR3,Toluene-d8	8.316	98	845977	51.42	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	102.84%	
70) SURR2,BFB	10.864	95	312611	47.86	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	95.72%	
Target Compounds						
4) Vinyl Chloride	1.408	62	97724	18.38	ppb	Qvalue # 1
5) Bromomethane	1.634	94	1229	0.35	ppb	95
15) Acetone	2.402	43	3142	Below	Cal	93
16) 2-Propanol	2.536	45	5103	10.00	ppb	80
26) trans-1,2-Dichloroethene	3.085	96	8355	2.00	ppb	91
34) cis-1,2-Dichloroethene	4.450	96	599015	124.32	ppb	87
40) Chloroform	5.036	83	1509m	Below	Cal	
44) Cyclohexane	5.365	41	4267m	1.00	ppb	
54) Trichloroethene	6.840	130	7747	1.71	ppb	87
55) Methylcyclohexane	7.054	55	5844	0.98	ppb	86
83) (m+p)Xylene	10.047	106	1831	0.23	ppb	# 73

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

Data Path : I:\ACQDATA\msvoa12\Data\111221\
Data File : K8913.D
Acq On : 12 Nov 2021 4:53 pm
Operator : K.Ruest
Sample : R2111745-011|2.0
Misc : LIR0 8260 T4
ALS Vial : 11 Sample Multiplier: 1
Inst : MSV0A-12

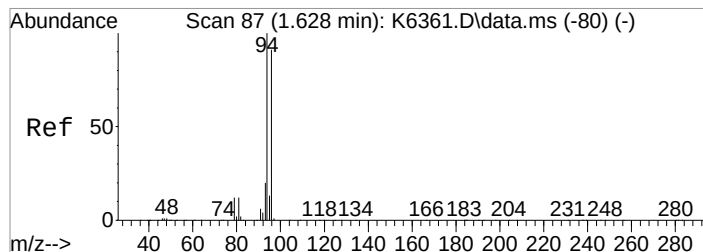
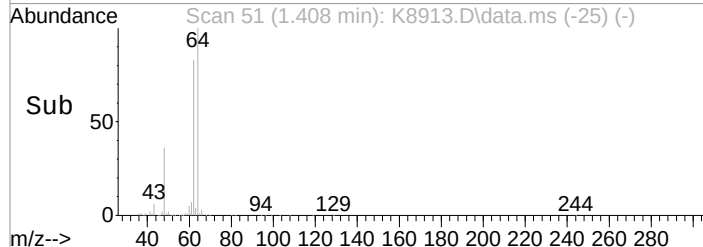
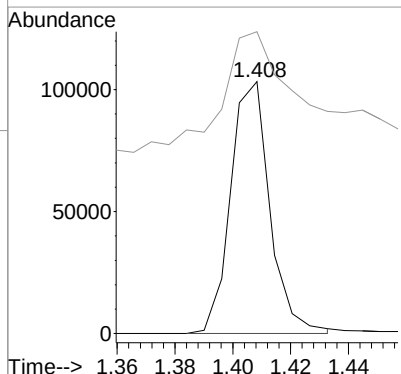
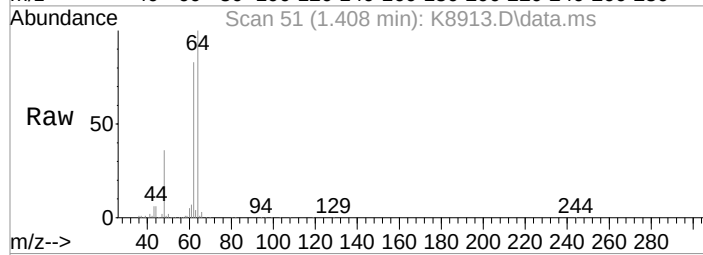
Quant Time: Nov 15 16:04:26 2021
Quant Method : I:\ACQDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Qlast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration





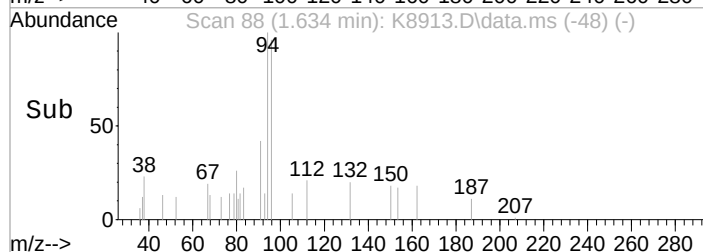
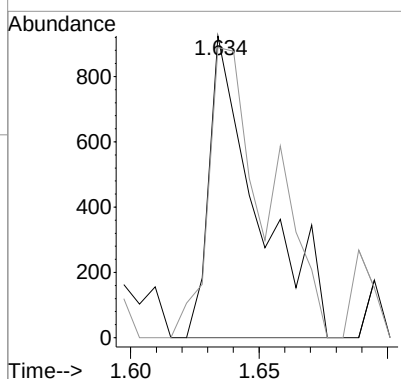
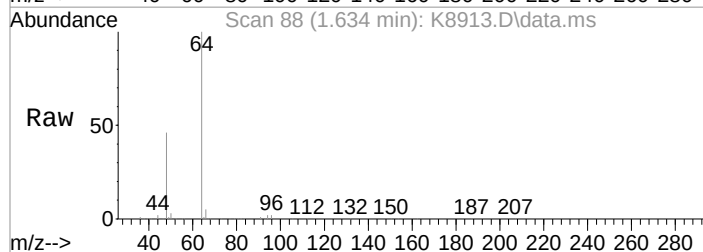
#4
 Vinyl Chloride
 Concen: 18.38 ppb
 RT: 1.408 min Scan# 51
 Delta R.T. 0.012 min
 Lab File: K8913.D
 Acq: 12 Nov 2021 4:53 pm

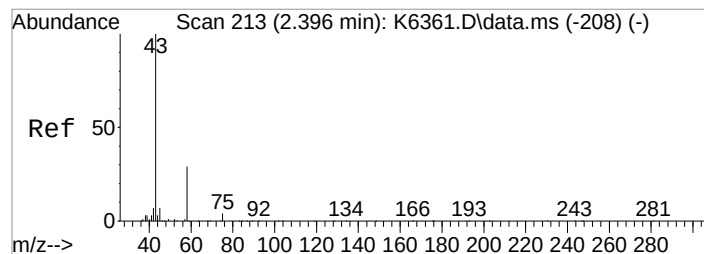
Tgt Ion: 62 Resp: 97724
 Ion Ratio Lower Upper
 62 100
 64 119.9 11.5 51.5#



#5
 Bromomethane
 Concen: 0.35 ppb
 RT: 1.634 min Scan# 88
 Delta R.T. 0.018 min
 Lab File: K8913.D
 Acq: 12 Nov 2021 4:53 pm

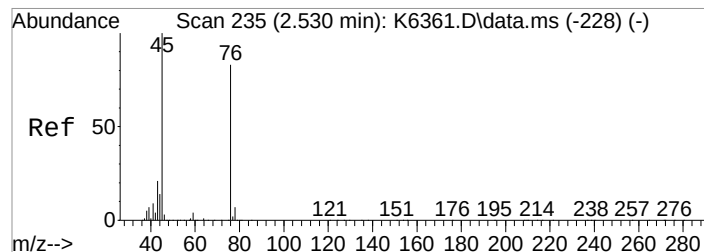
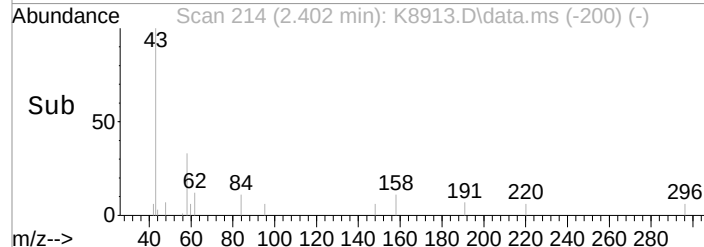
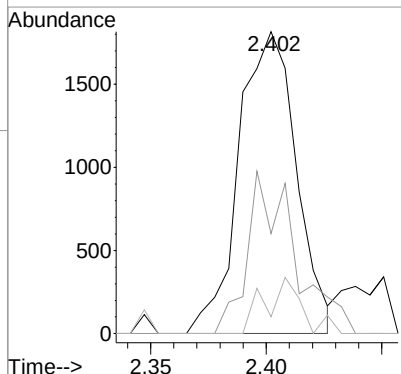
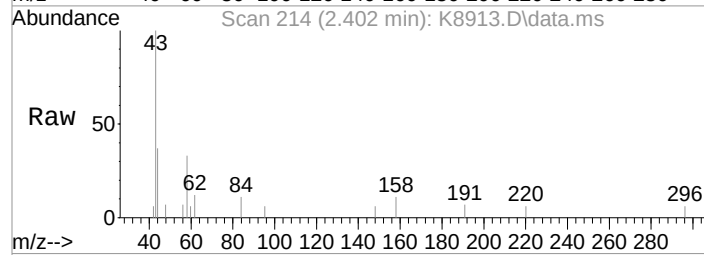
Tgt Ion: 94 Resp: 1229
 Ion Ratio Lower Upper
 94 100
 96 96.1 71.0 111.0





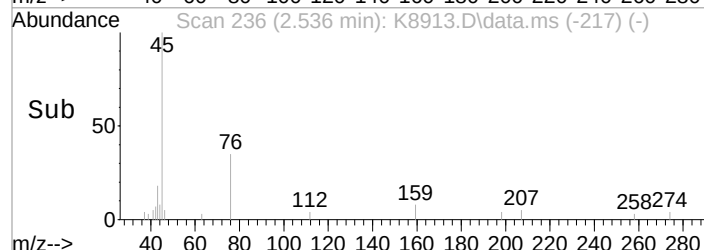
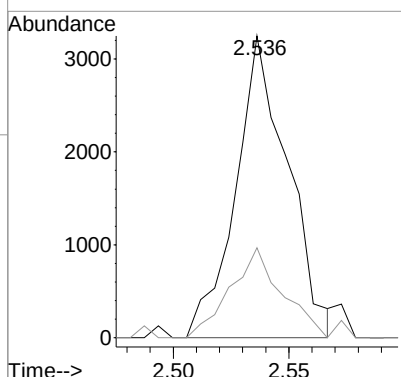
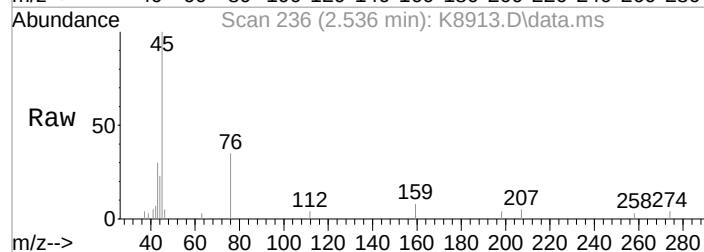
#15
 Acetone
 Concen: Below Cal
 RT: 2.402 min Scan# 214
 Delta R.T. 0.013 min
 Lab File: K8913.D
 Acq: 12 Nov 2021 4:53 pm

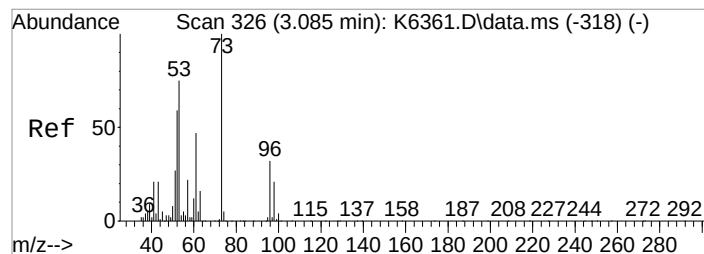
Tgt Ion	Ratio	Resp	Lower	Upper
43	100	3142		
58	33.1	9.6	49.6	
42	5.5	0.0	27.7	



#16
 2-Propanol
 Concen: 10.00 ppb
 RT: 2.536 min Scan# 236
 Delta R.T. 0.006 min
 Lab File: K8913.D
 Acq: 12 Nov 2021 4:53 pm

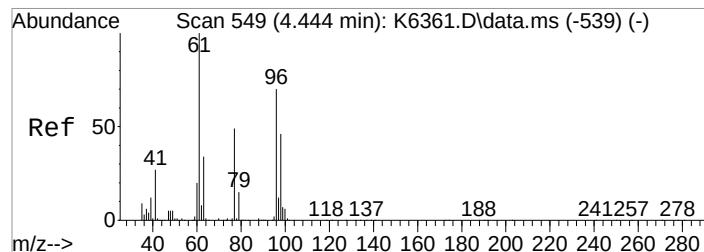
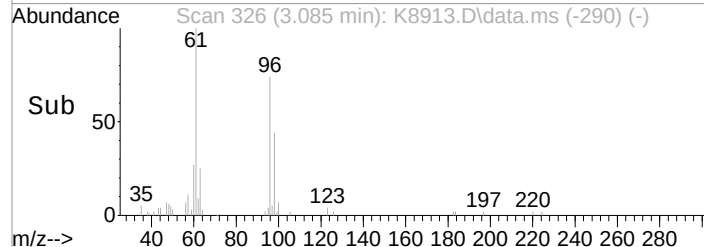
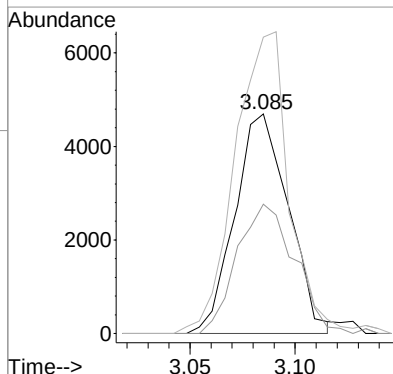
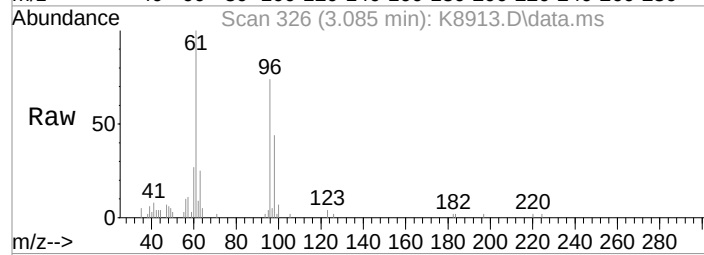
Tgt Ion	Ratio	Resp	Lower	Upper
45	100	5103		
43	29.8	0.6	40.6	





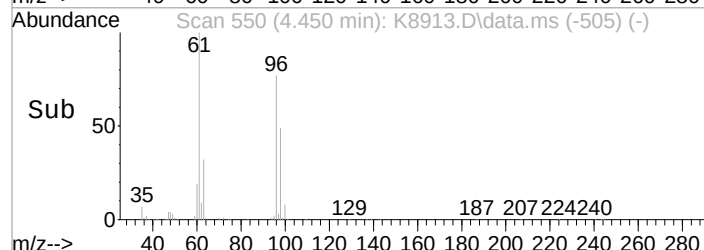
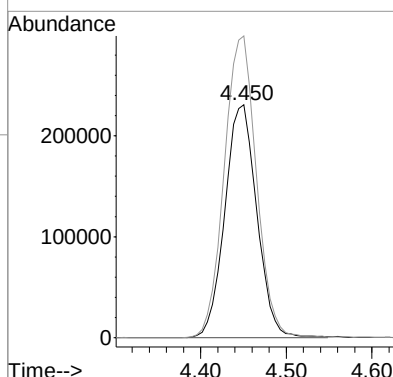
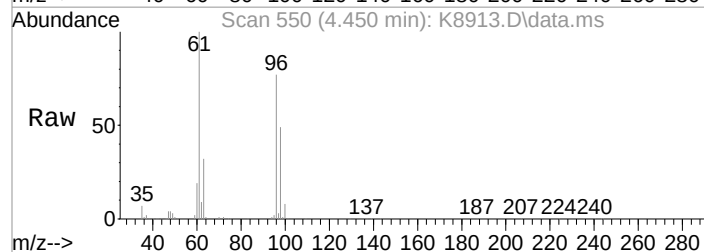
#26
trans-1,2-Dichloroethene
Concen: 2.00 ppb
RT: 3.085 min Scan# 326
Delta R.T. 0.012 min
Lab File: K8913.D
Acq: 12 Nov 2021 4:53 pm

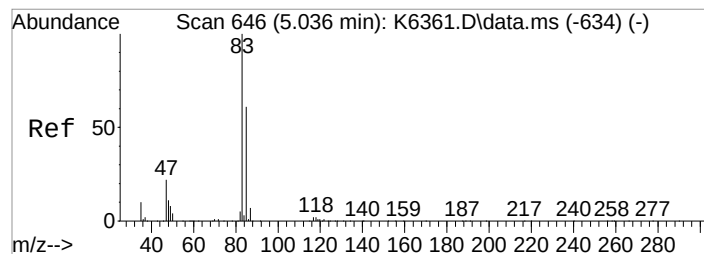
Tgt Ion: 96 Resp: 8355
Ion Ratio Lower Upper
96 100
98 58.9 44.1 84.1
61 135.1 127.9 167.9



#34
cis-1,2-Dichloroethene
Concen: 124.32 ppb
RT: 4.450 min Scan# 550
Delta R.T. 0.012 min
Lab File: K8913.D
Acq: 12 Nov 2021 4:53 pm

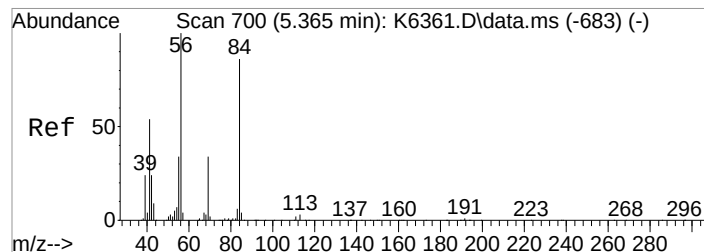
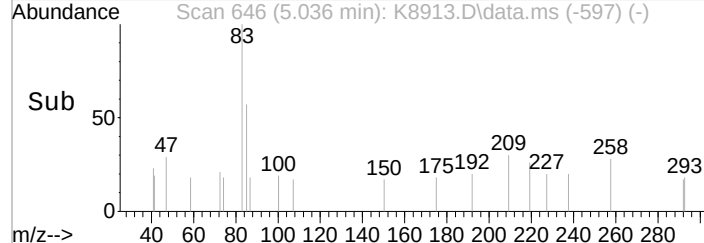
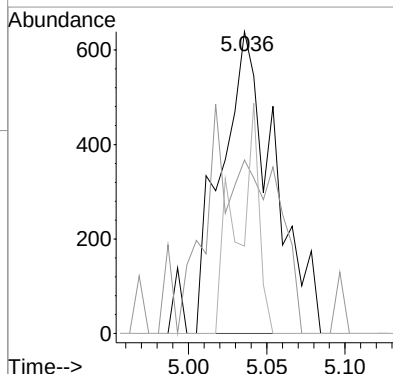
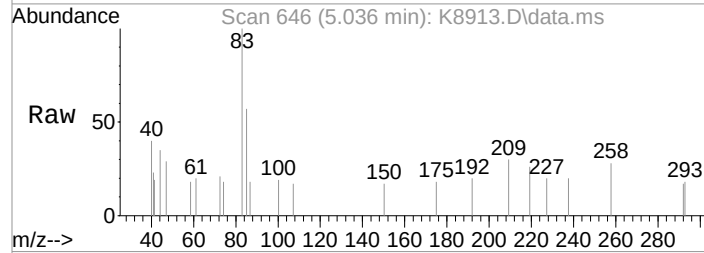
Tgt Ion: 96 Resp: 599015
Ion Ratio Lower Upper
96 100
61 129.5 125.2 165.2





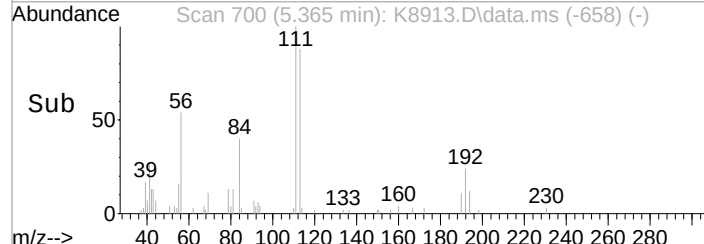
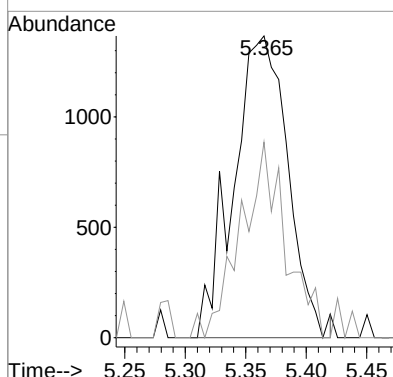
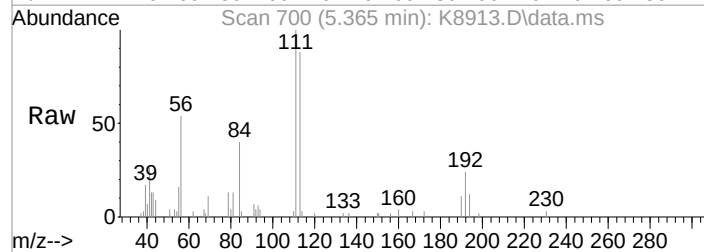
#40
 Chloroform
 Concen: Below Cal m
 RT: 5.036 min Scan# 646
 Delta R.T. 0.013 min
 Lab File: K8913.D
 Acq: 12 Nov 2021 4:53 pm

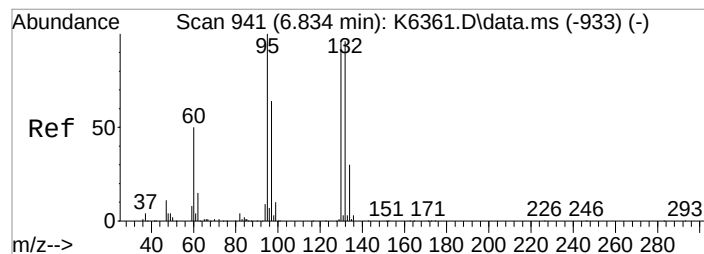
Tgt Ion	Ratio	Resp	Lower	Upper
83	100			
85	57.4	41.5	81.5	
47	29.0	2.1	42.1	



#44
 Cyclohexane
 Concen: 1.00 ppb m
 RT: 5.365 min Scan# 700
 Delta R.T. 0.006 min
 Lab File: K8913.D
 Acq: 12 Nov 2021 4:53 pm

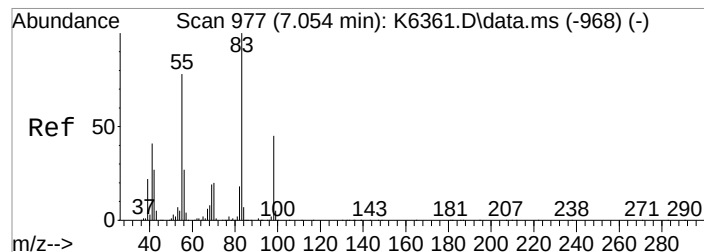
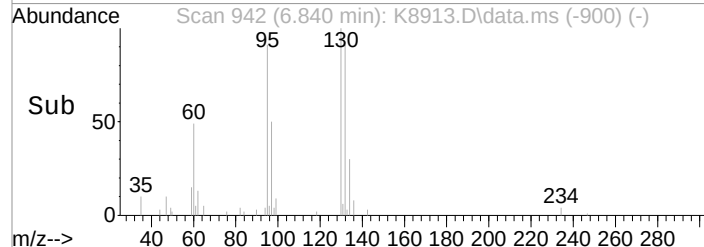
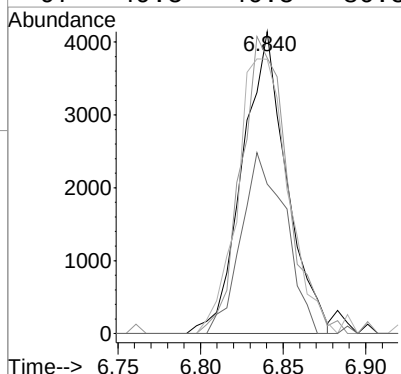
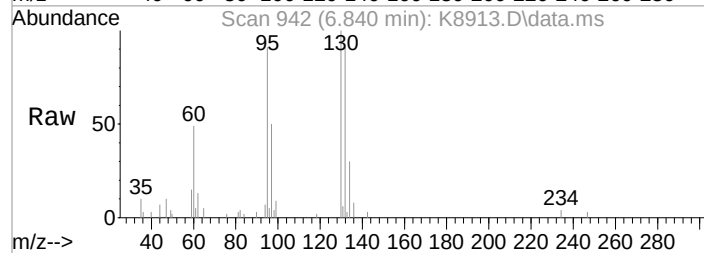
Tgt Ion	Ratio	Resp	Lower	Upper
41	100			
39	64.7	25.2	65.2	





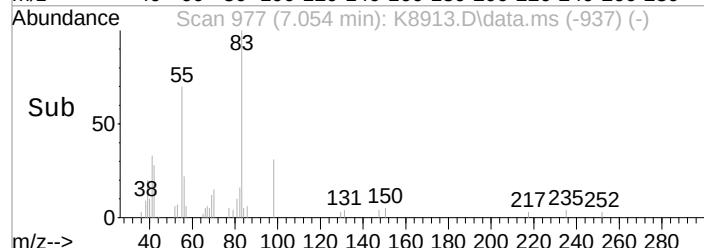
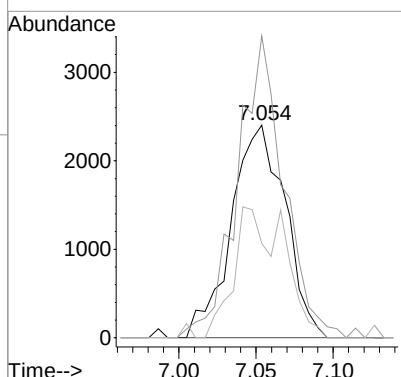
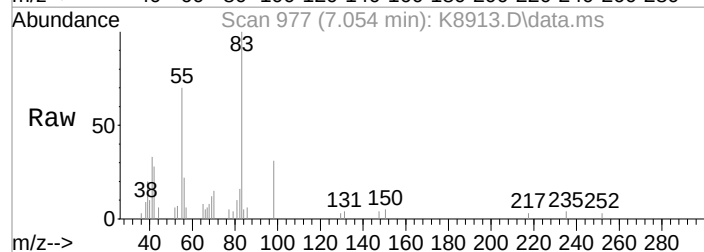
#54
Trichloroethene
Concen: 1.71 ppb
RT: 6.840 min Scan# 942
Delta R.T. 0.006 min
Lab File: K8913.D
Acq: 12 Nov 2021 4:53 pm

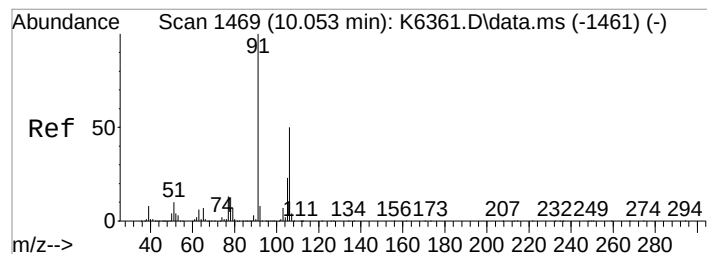
Tgt Ion	Ratio	Resp	Lower	Upper
130	100			
132	91.2	7747	79.7	119.7
95	90.9		83.8	123.8
97	49.5		46.5	86.5



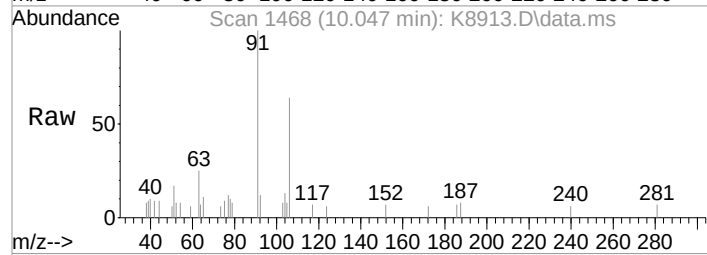
#55
Methylcyclohexane
Concen: 0.98 ppb
RT: 7.054 min Scan# 977
Delta R.T. 0.006 min
Lab File: K8913.D
Acq: 12 Nov 2021 4:53 pm

Tgt Ion	Ratio	Resp	Lower	Upper
55	100	5844		
83	142.1		108.1	148.1
98	44.5		37.0	77.0

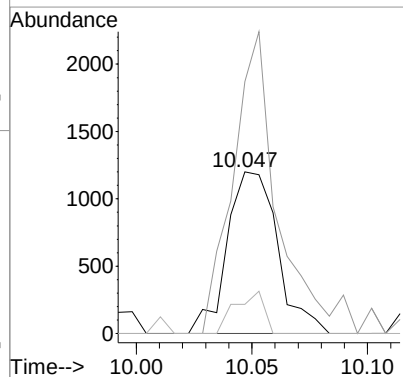
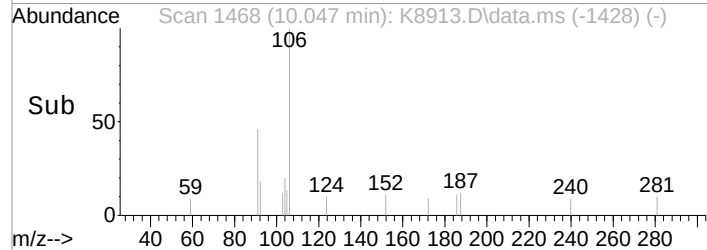




#83
(m+p)Xylene
Concen: 0.23 ppb
RT: 10.047 min Scan# 1468
Delta R.T. -0.006 min
Lab File: K8913.D
Acq: 12 Nov 2021 4:53 pm



Tgt Ion	Ratio	Resp	Lower	Upper
106	100			
91	155.8	1831	178.8	218.8
77	18.2		5.9	45.9



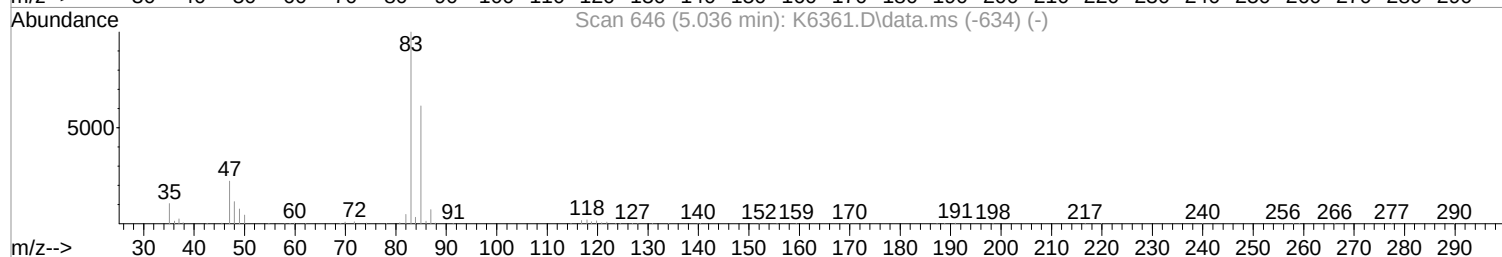
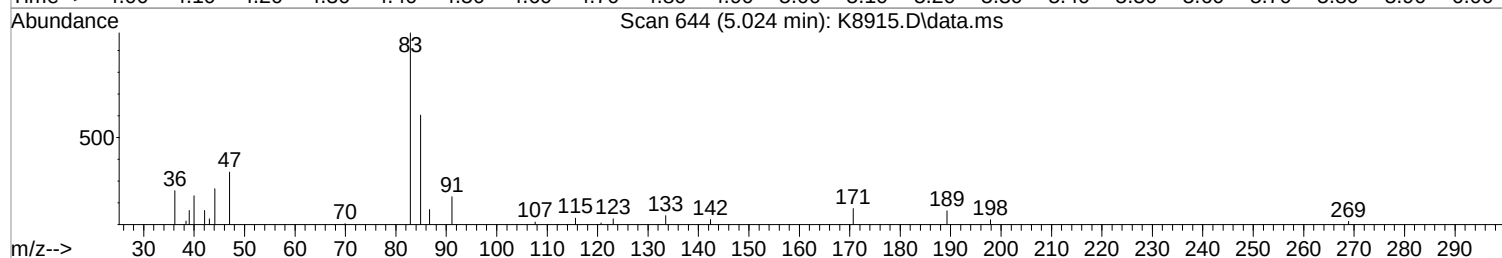
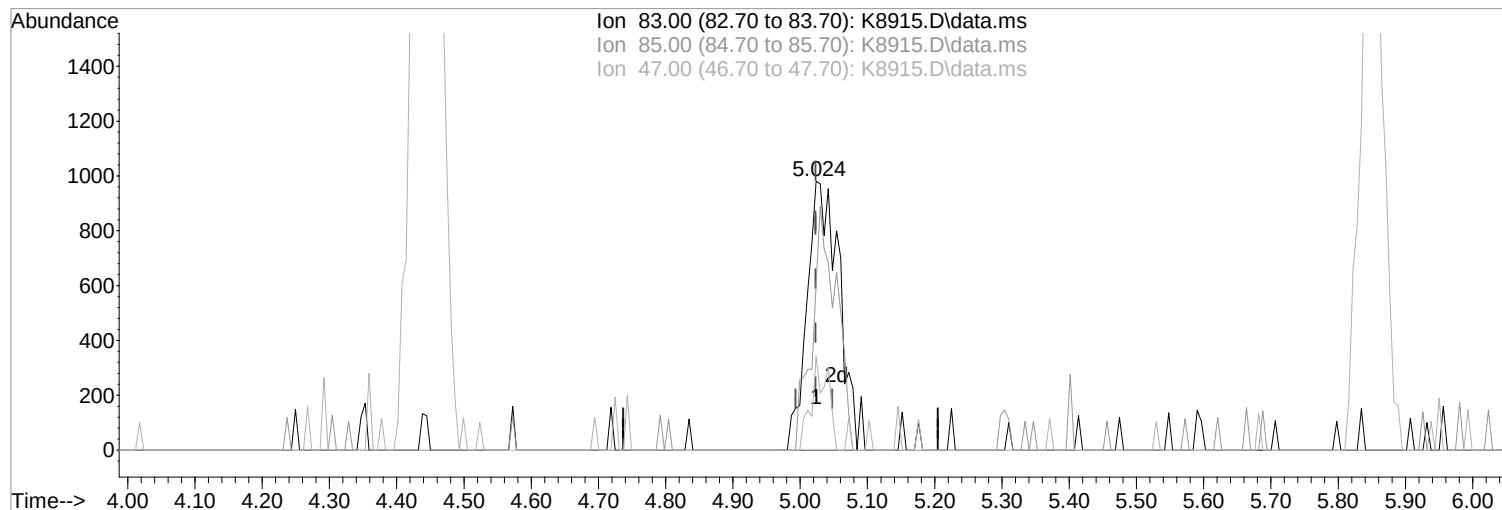
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8915.D
Acq On : 12 Nov 2021 5:37 pm
Operator : K.Ruest
Sample : R2111745-012|5.0
Misc : LIRO 8260 T4
ALS Vial : 13 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 17:54:14 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8915.D\data.ms

(40) Chloroform (P)

5.024min (+0.001) -0.07 ppb m

response 3206

Ion	Exp%	Act%
83.00	100	100
85.00	61.50	61.47
47.00	22.10	34.66
0.00	0.00	0.00

Manual Integration:

After

Split Peak

11/15/21

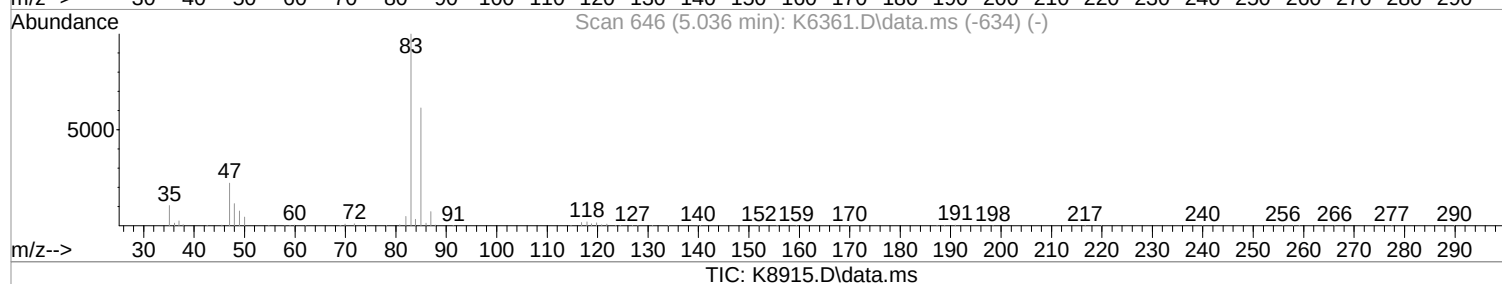
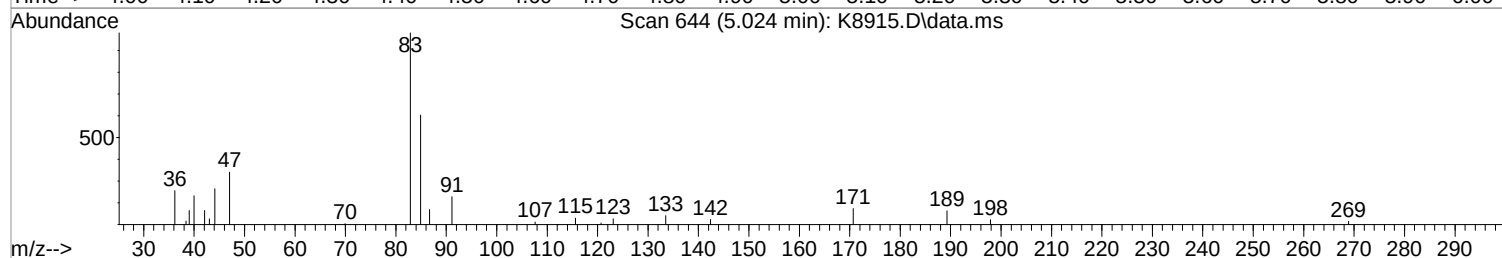
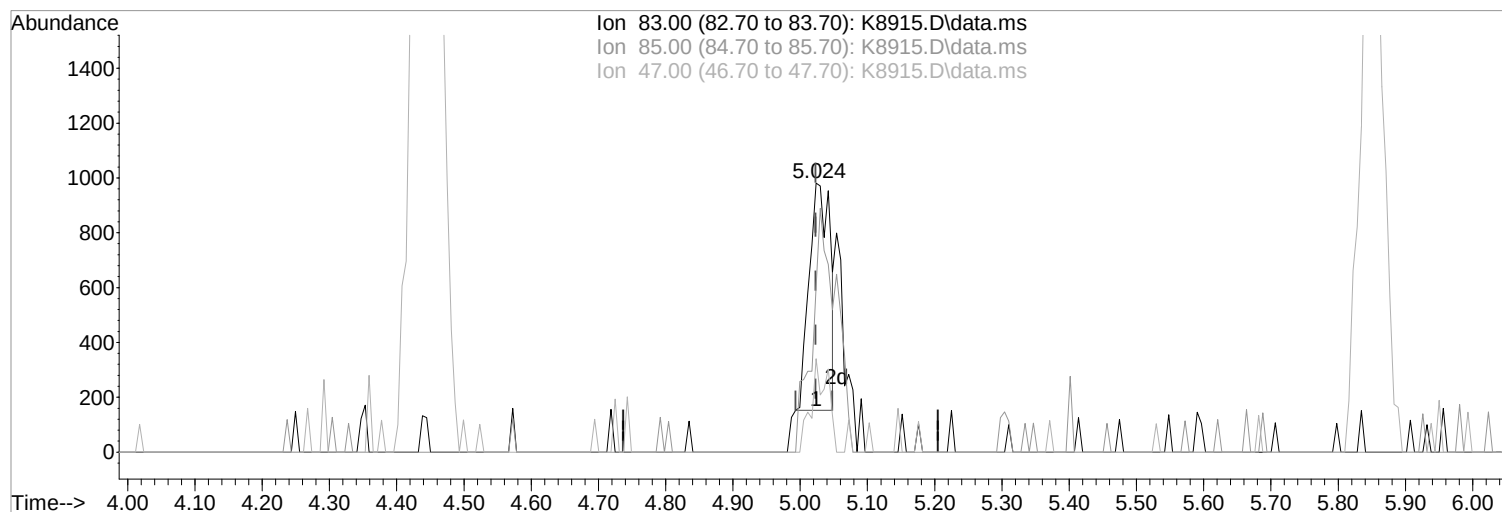
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8915.D
Acq On : 12 Nov 2021 5:37 pm
Operator : K.Ruest
Sample : R2111745-012|5.0
Misc : LIRO 8260 T4
ALS Vial : 13 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 17:54:14 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



(40) Chloroform (P)

Manual Integration:

5.024min (+0.001) -0.26 ppb

Before

response 1780

Ion	Exp%	Act%
83.00	100	100
85.00	61.50	61.47
47.00	22.10	34.66
0.00	0.00	0.00

11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8915.D
 Acq On : 12 Nov 2021 5:37 pm
 Operator : K.Ruest
 Sample : R2111745-012|5.0
 Misc : LIRO 8260 T4
 ALS Vial : 13 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 15 16:09:18 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

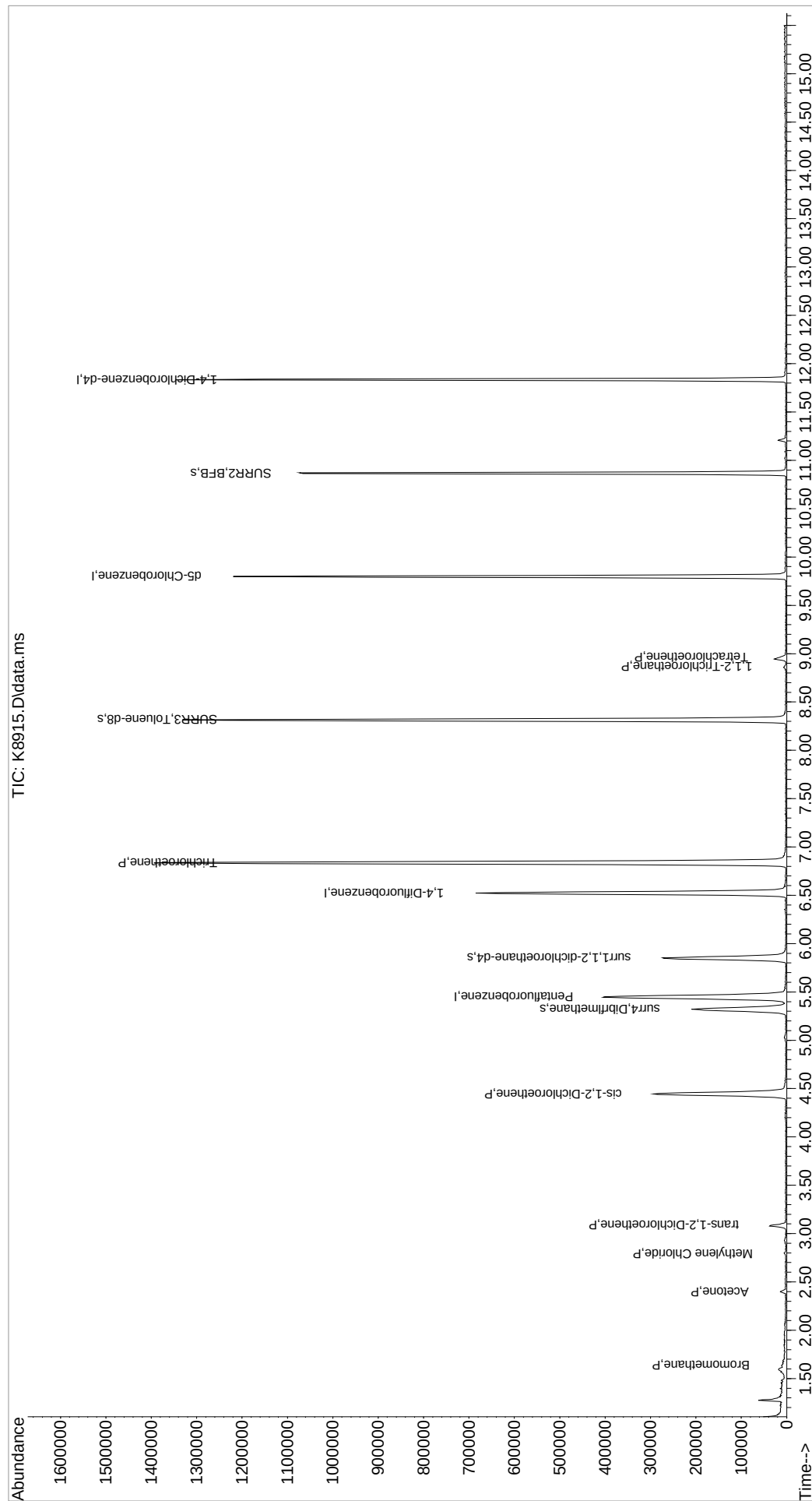
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	381104	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	624913	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	558608	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	268663	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.322	113	172801	50.79	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	101.58%	
48) surr1,1,2-dichloroetha...	5.853	65	229432	46.38	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	92.76%	
65) SURR3,Toluene-d8	8.316	98	841022	52.59	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	105.18%	
70) SURR2,BFB	10.864	95	310007	48.84	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	97.68%	
Target Compounds						
5) Bromomethane	1.634	94	1538	0.46	ppb	Qvalue # 76
15) Acetone	2.396	43	11871	3.43	ppb	95
22) Methylene Chloride	2.792	84	987	0.22	ppb	# 47
26) trans-1,2-Dichloroethene	3.085	96	13606	3.36	ppb	90
34) cis-1,2-Dichloroethene	4.444	96	176668	37.82	ppb	88
40) Chloroform	5.024	83	3206m	Below	Cal	
54) Trichloroethene	6.834	130	506168	115.09	ppb	96
69) 1,1,2-Trichloroethane	8.864	97	1709	0.40	ppb	# 58
72) Tetrachloroethene	8.962	164	1730	0.54	ppb	# 54

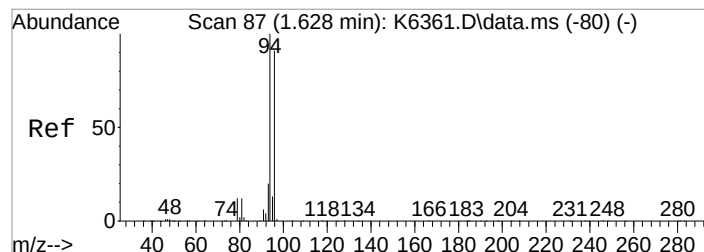
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : I:\ACQDATA\msvoa12\Data\111221\
 Data File : K8915.D
 Acq On : 12 Nov 2021 5:37 pm
 Operator : K.Ruest
 Sample : R2111745-012|5.0
 Misc : LIRO 8260 T4
 ALS Vial : 13 Sample Multiplier: 1

Inst : MSV0A-12

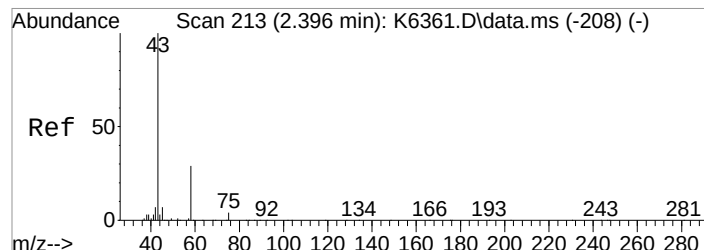
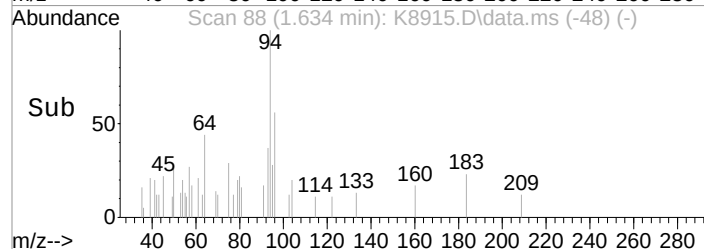
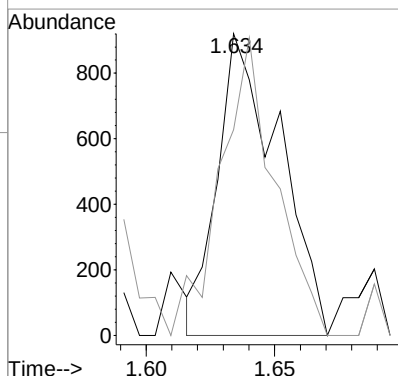
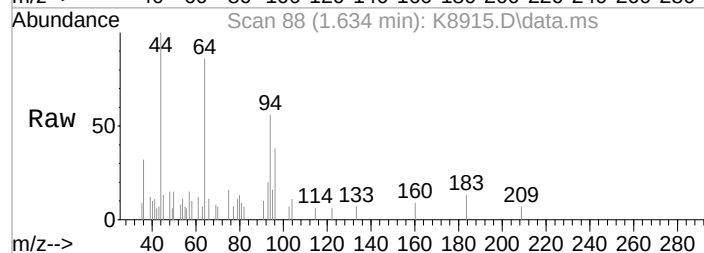
Quant Time: Nov 15 16:09:18 2021
 Quant Method : I:\ACQDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration





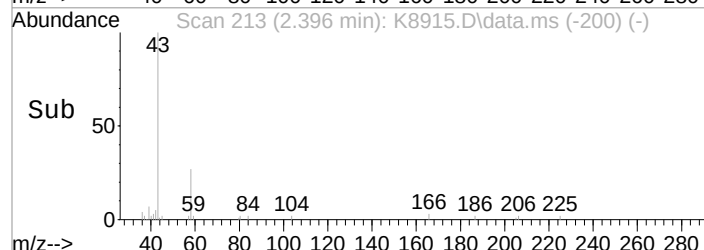
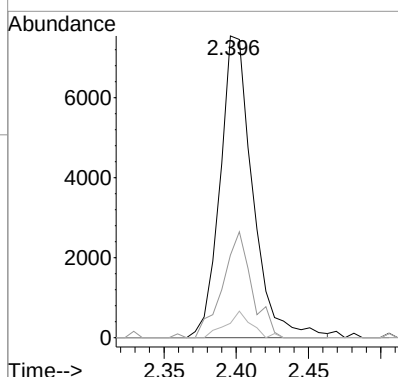
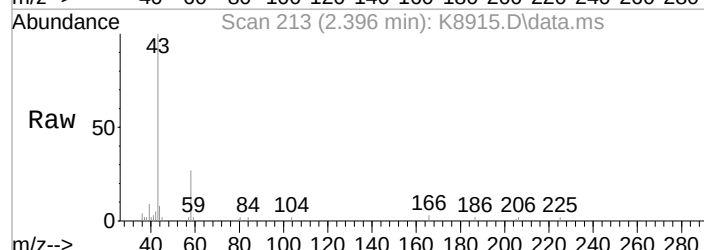
#5
 Bromomethane
 Concen: 0.46 ppb
 RT: 1.634 min Scan# 88
 Delta R.T. 0.018 min
 Lab File: K8915.D
 Acq: 12 Nov 2021 5:37 pm

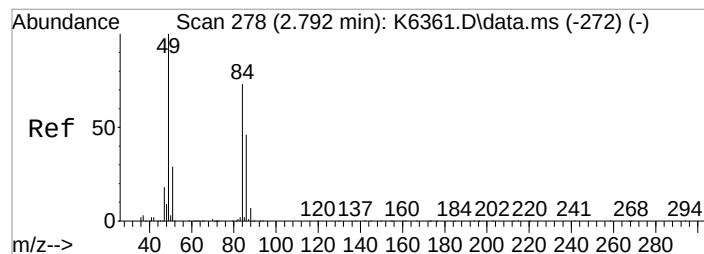
Tgt Ion: 94 Resp: 1538
 Ion Ratio Lower Upper
 94 100
 96 68.2 71.0 111.0#



#15
 Acetone
 Concen: 3.43 ppb
 RT: 2.396 min Scan# 213
 Delta R.T. 0.007 min
 Lab File: K8915.D
 Acq: 12 Nov 2021 5:37 pm

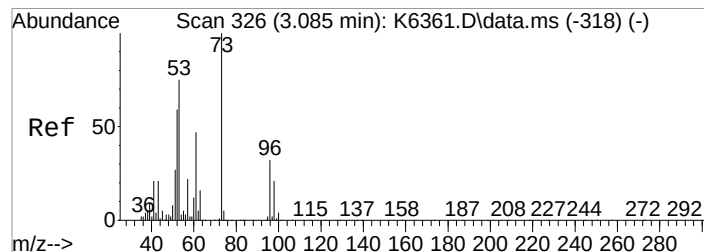
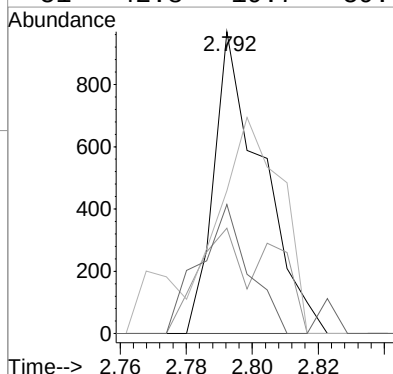
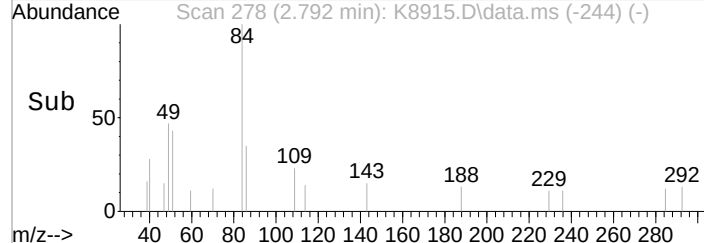
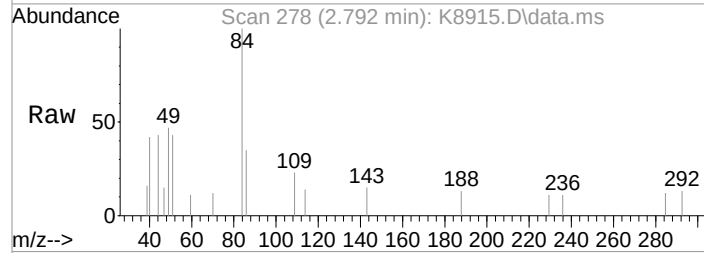
Tgt Ion: 43 Resp: 11871
 Ion Ratio Lower Upper
 43 100
 58 27.4 9.6 49.6
 42 4.8 0.0 27.7





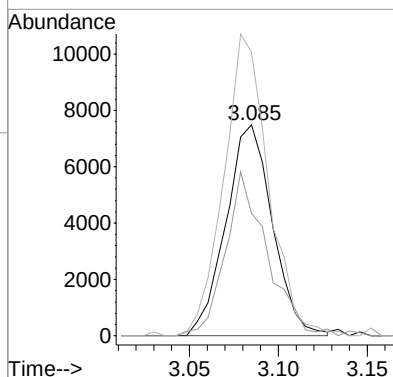
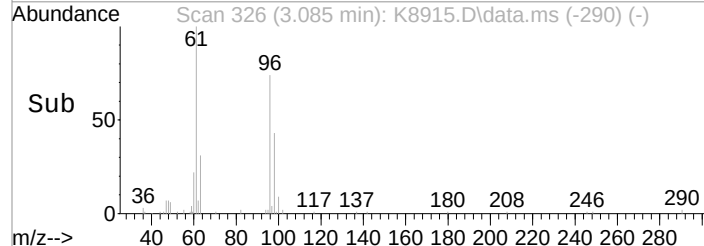
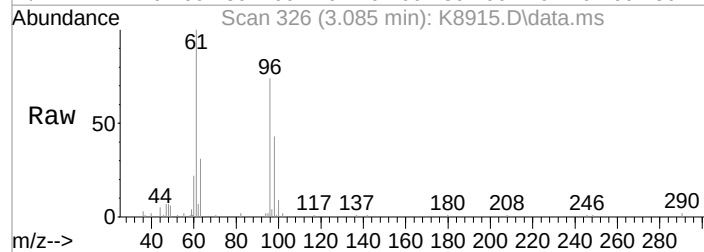
#22
 Methylene Chloride
 Concen: 0.22 ppb
 RT: 2.792 min Scan# 278
 Delta R.T. 0.006 min
 Lab File: K8915.D
 Acq: 12 Nov 2021 5:37 pm

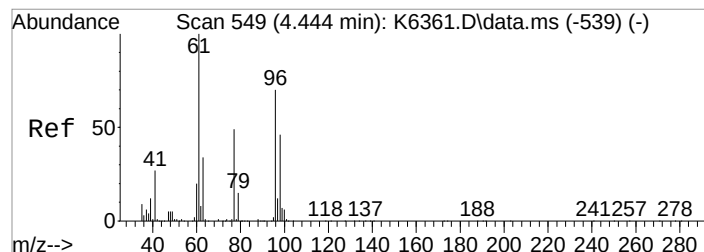
Tgt Ion:	84	Resp:	987
Ion Ratio		Lower	Upper
84	100		
86	34.8	42.7	82.7#
49	47.3	116.5	156.5#
51	42.8	19.7	59.7



#26
 trans-1,2-Dichloroethene
 Concen: 3.36 ppb
 RT: 3.085 min Scan# 326
 Delta R.T. 0.012 min
 Lab File: K8915.D
 Acq: 12 Nov 2021 5:37 pm

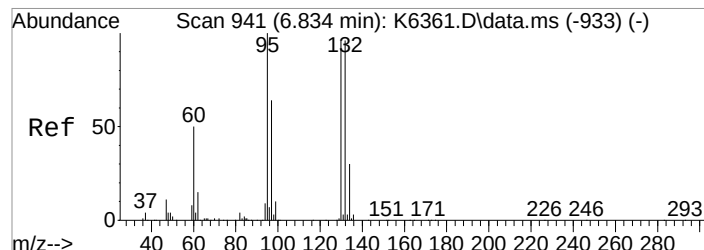
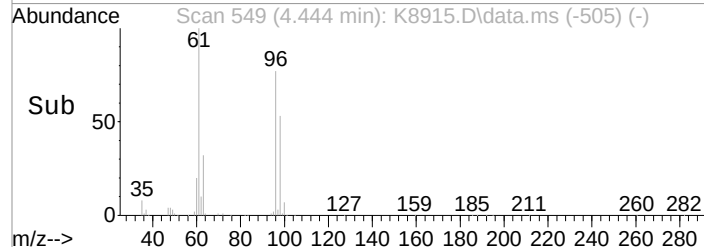
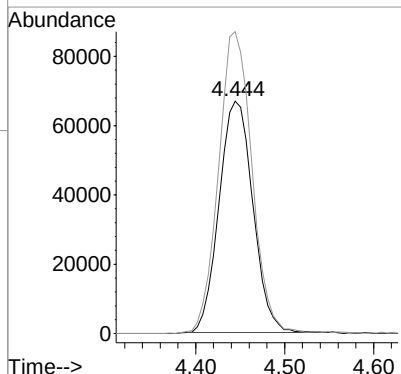
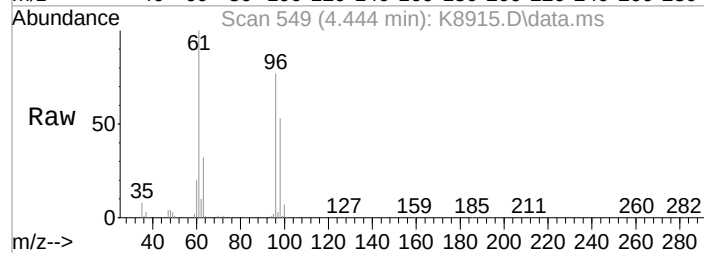
Tgt Ion:	96	Resp:	13606
Ion Ratio		Lower	Upper
96	100		
98	58.0	44.1	84.1
61	134.5	127.9	167.9





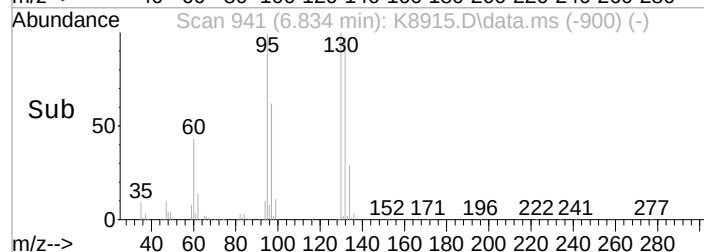
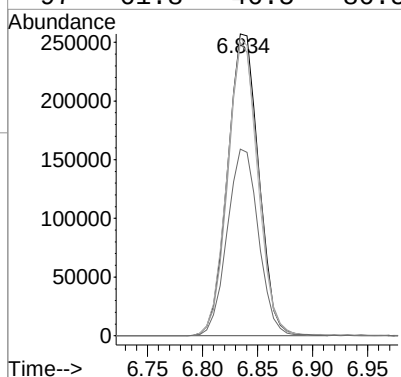
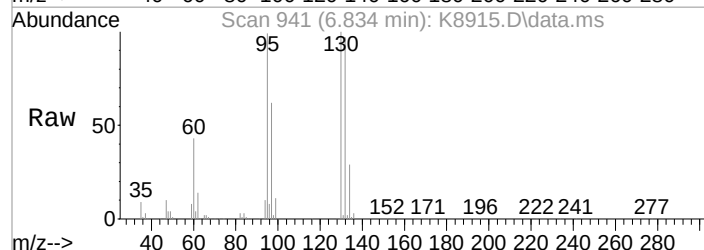
#34
 cis-1,2-Dichloroethene
 Concen: 37.82 ppb
 RT: 4.444 min Scan# 549
 Delta R.T. 0.006 min
 Lab File: K8915.D
 Acq: 12 Nov 2021 5:37 pm

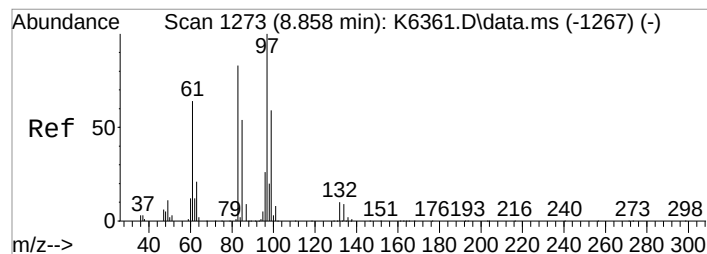
Tgt Ion	Ratio	Resp	Lower	Upper
96	100	176668		
61	130.0	125.2	165.2	



#54
 Trichloroethene
 Concen: 115.09 ppb
 RT: 6.834 min Scan# 941
 Delta R.T. 0.000 min
 Lab File: K8915.D
 Acq: 12 Nov 2021 5:37 pm

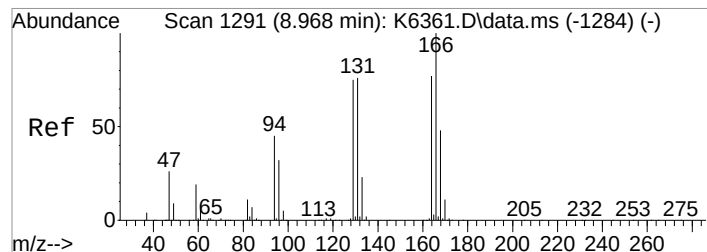
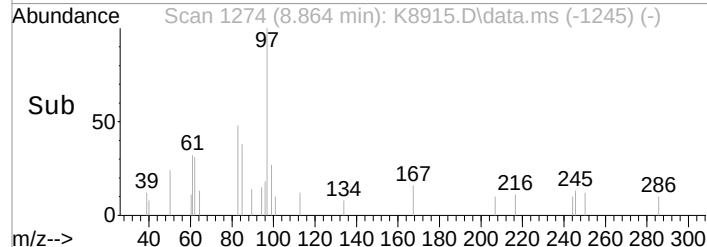
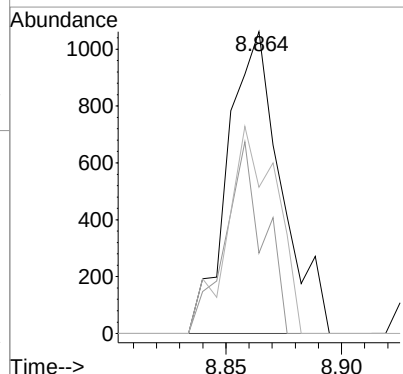
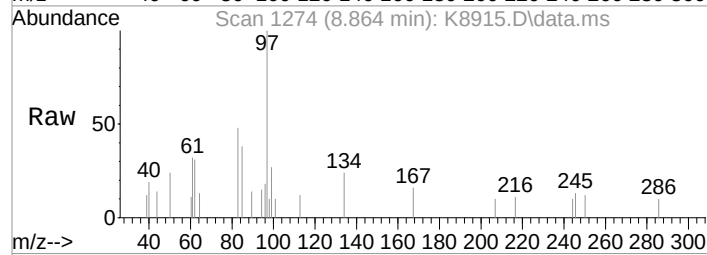
Tgt Ion	Ratio	Resp	Lower	Upper
130	100	506168		
132	97.1	79.7	119.7	
95	98.7	83.8	123.8	
97	61.8	46.5	86.5	





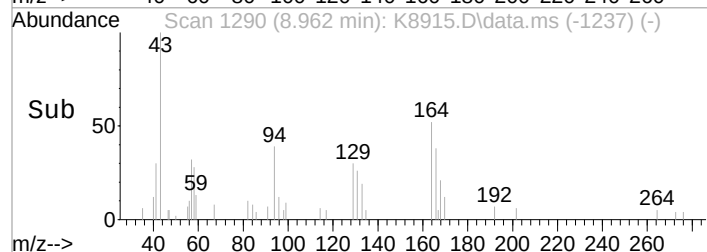
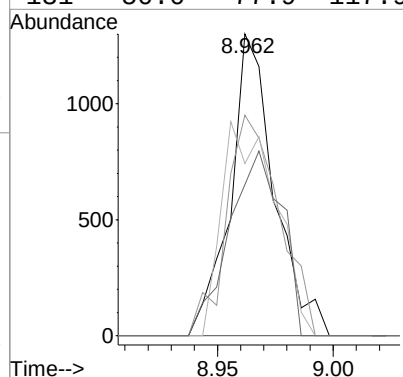
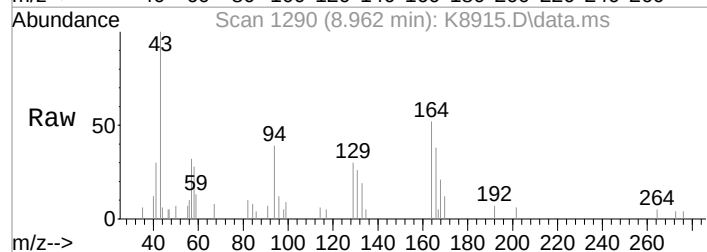
#69
 1,1,2-Trichloroethane
 Concen: 0.40 ppb
 RT: 8.864 min Scan# 1274
 Delta R.T. 0.006 min
 Lab File: K8915.D
 Acq: 12 Nov 2021 5:37 pm

Tgt Ion: 97 Resp: 1709
 Ion Ratio Lower Upper
 97 100
 99 26.6 41.4 81.4#
 83 48.5 63.6 103.6#



#72
 Tetrachloroethene
 Concen: 0.54 ppb
 RT: 8.962 min Scan# 1290
 Delta R.T. -0.006 min
 Lab File: K8915.D
 Acq: 12 Nov 2021 5:37 pm

Tgt Ion: 164 Resp: 1730
 Ion Ratio Lower Upper
 164 100
 166 73.0 109.5 149.5#
 129 57.0 77.6 117.6#
 131 50.0 77.9 117.9#



Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8915.D
Acq On : 12 Nov 2021 5:37 pm
Operator : K.Ruest
Sample : R2111745-012|5.0 Inst : MSVOA-12
Misc : LIRO 8260 T4
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: INTP90.P

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

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

Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: K8915.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.274	26	29	37	rBV	51268	66559	2.44%	0.468%
2	3.079	317	325	331	rBV	35811	63794	2.34%	0.449%
3	4.444	537	549	564	rBV2	291514	763303	27.99%	5.371%
4	5.322	682	693	703	rBV2	207466	553148	20.29%	3.892%
5	5.444	703	713	725	rVV	400114	1061381	38.93%	7.468%
6	5.853	770	780	798	rBV	271386	657736	24.12%	4.628%
7	6.523	881	890	901	rBV	683534	1398345	51.28%	9.839%
8	6.834	931	941	955	rBV	1391884	2726677	100.00%	19.185%
9	8.316	1177	1184	1194	rBV	1328967	2142015	78.56%	15.071%
10	8.944	1281	1287	1296	rBV2	25632	49981	1.83%	0.352%
11	9.797	1421	1427	1436	rBV	1216596	1662319	60.97%	11.696%
12	10.870	1597	1603	1610	rBV	1071473	1415798	51.92%	9.962%
13	11.833	1756	1761	1771	rBV	1343531	1651324	60.56%	11.619%

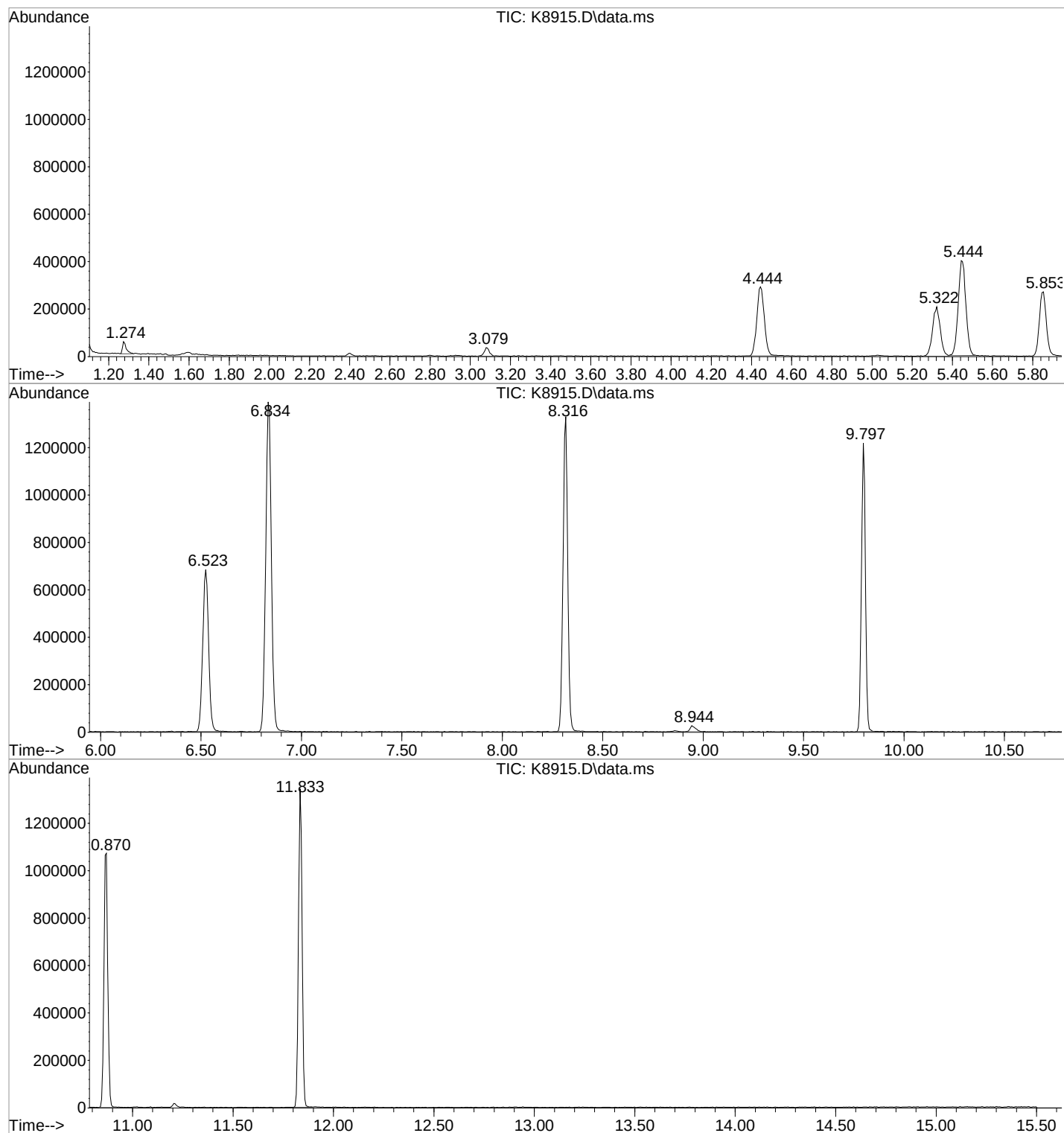
Sum of corrected areas: 14212380

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8915.D
Acq On : 12 Nov 2021 5:37 pm
Operator : K.Ruest
Sample : R2111745-012|5.0
Misc : LIRO 8260 T4
ALS Vial : 13 Sample Multiplier: 1

Inst : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.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

1st *102* 11/15/21
2nd *FN* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8915.D
Acq On : 12 Nov 2021 5:37 pmm
Operator : K.Ruestt
Sample : R2111745-012|5.0 Inst : MSVOA-122
Misc : LIRO 8260 T44
ALS Vial : 13 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

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

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

No Library Search Compounds Detected

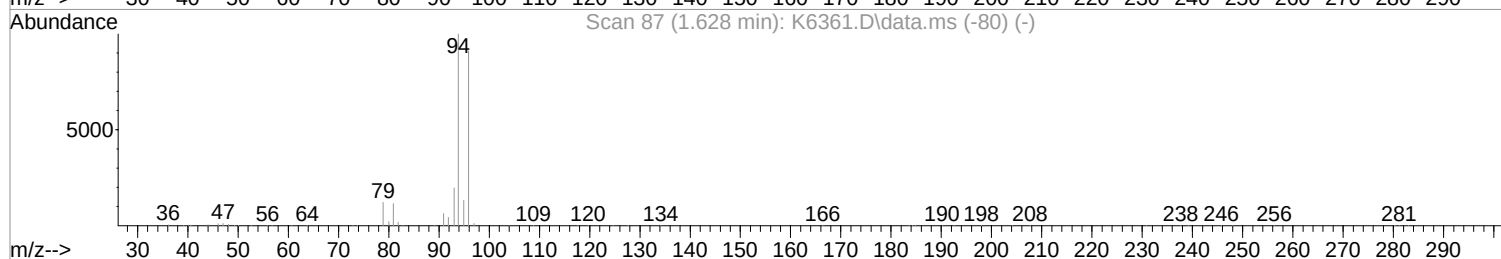
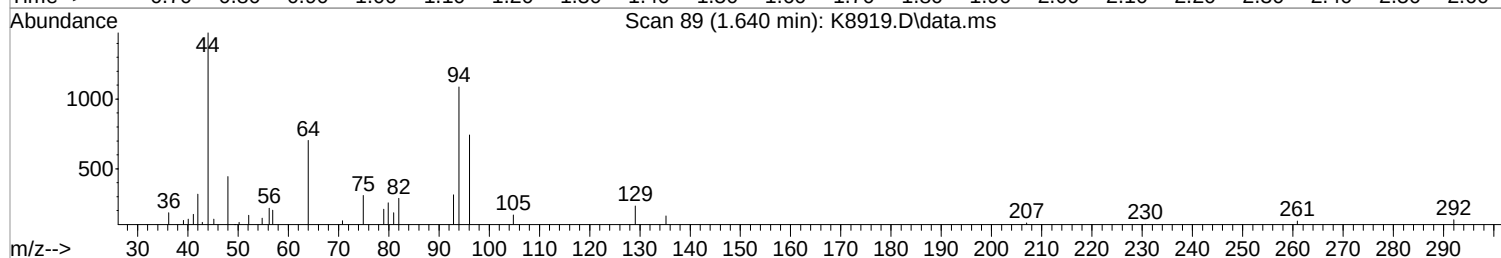
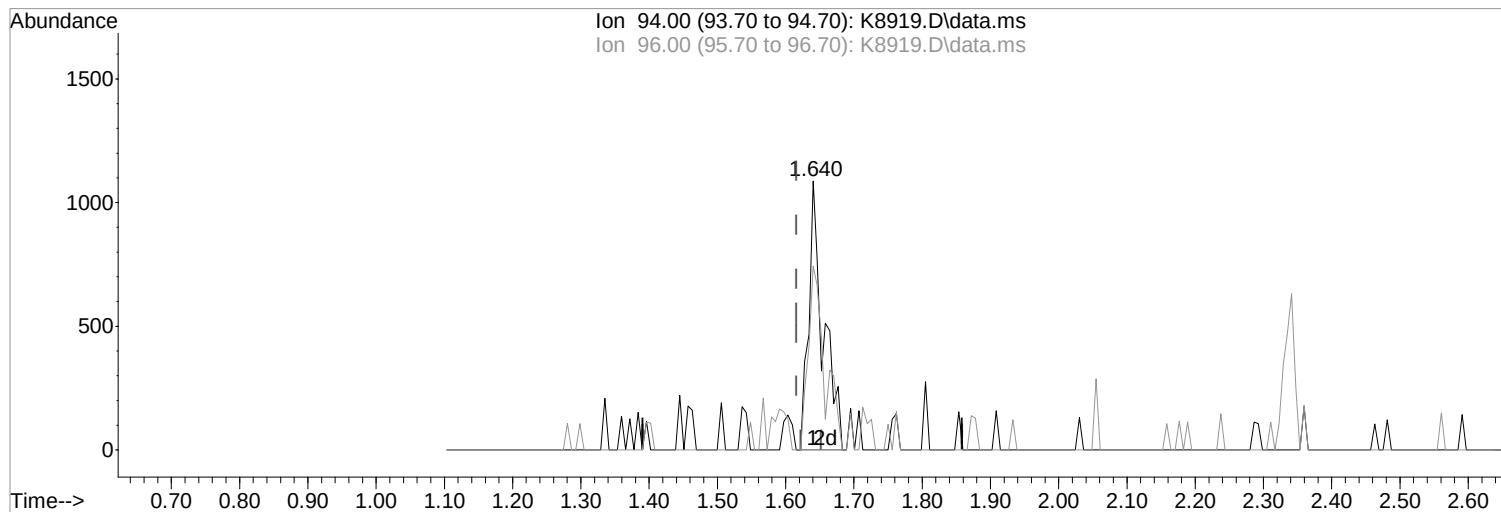
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8919.D
Acq On : 12 Nov 2021 7:04 pm
Operator : K.Ruest
Sample : R2111745-013|250
Misc : LIRO 8260 T4
ALS Vial : 17 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 19:33:37 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8919.D\data.ms

(5) Bromomethane (P)

1.640min (+0.025) 0.48 ppb m

response 1627

Ion Exp% Act%

94.00 100 100

96.00 91.00 68.35#

0.00 0.00 0.00

0.00 0.00 0.00

Manual Integration:

After

Split Peak

11/15/21

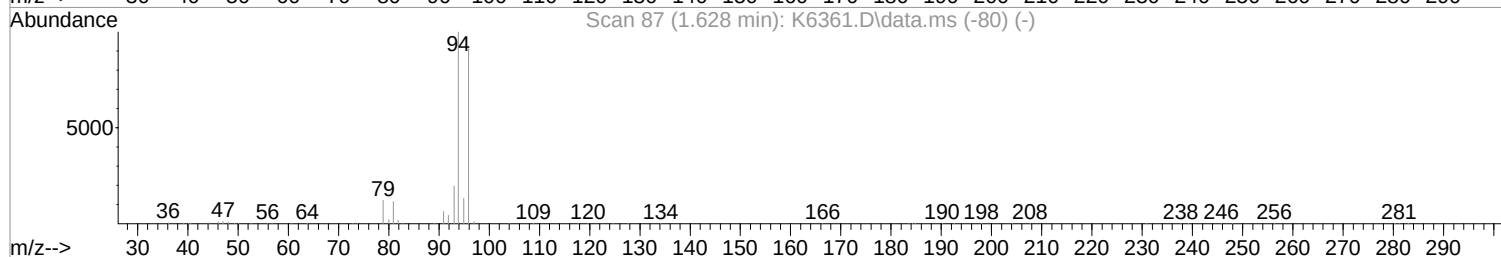
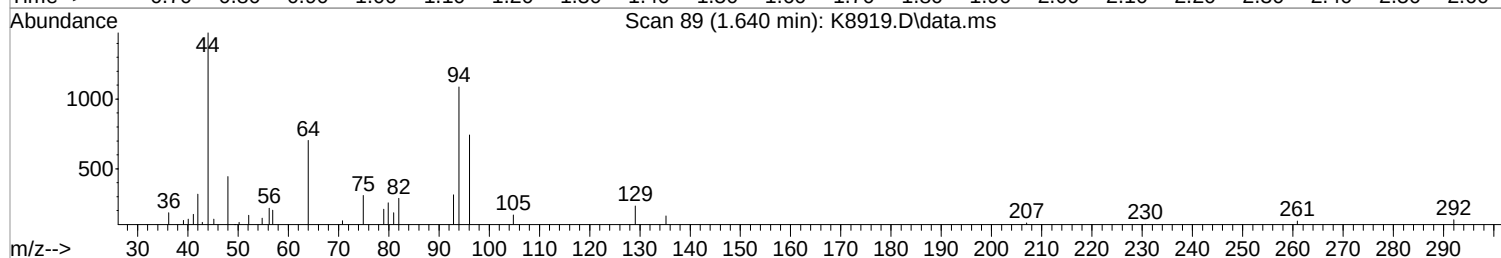
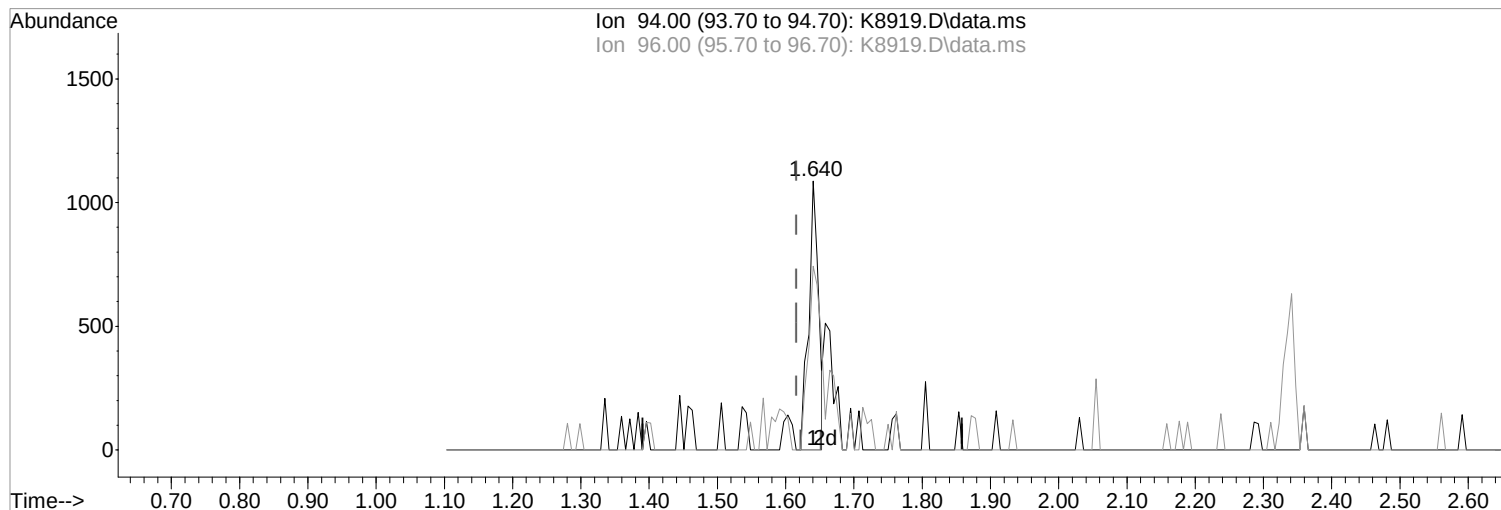
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8919.D
Acq On : 12 Nov 2021 7:04 pm
Operator : K.Ruest
Sample : R2111745-013|250
Misc : LIRO 8260 T4
ALS Vial : 17 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 19:33:37 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8919.D\data.ms

(5) Bromomethane (P)

Manual Integration:

1.640min (+0.025) 0.33 ppb

Before

response 1101

Ion Exp% Act%

11/15/21

94.00 100 100

96.00 91.00 68.35#

0.00 0.00 0.00

0.00 0.00 0.00

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8919.D
 Acq On : 12 Nov 2021 7:04 pm
 Operator : K.Ruest
 Sample : R2111745-013|250
 Misc : LIRO 8260 T4
 ALS Vial : 17 Sample Multiplier: 1

Inst : MSVOA-12

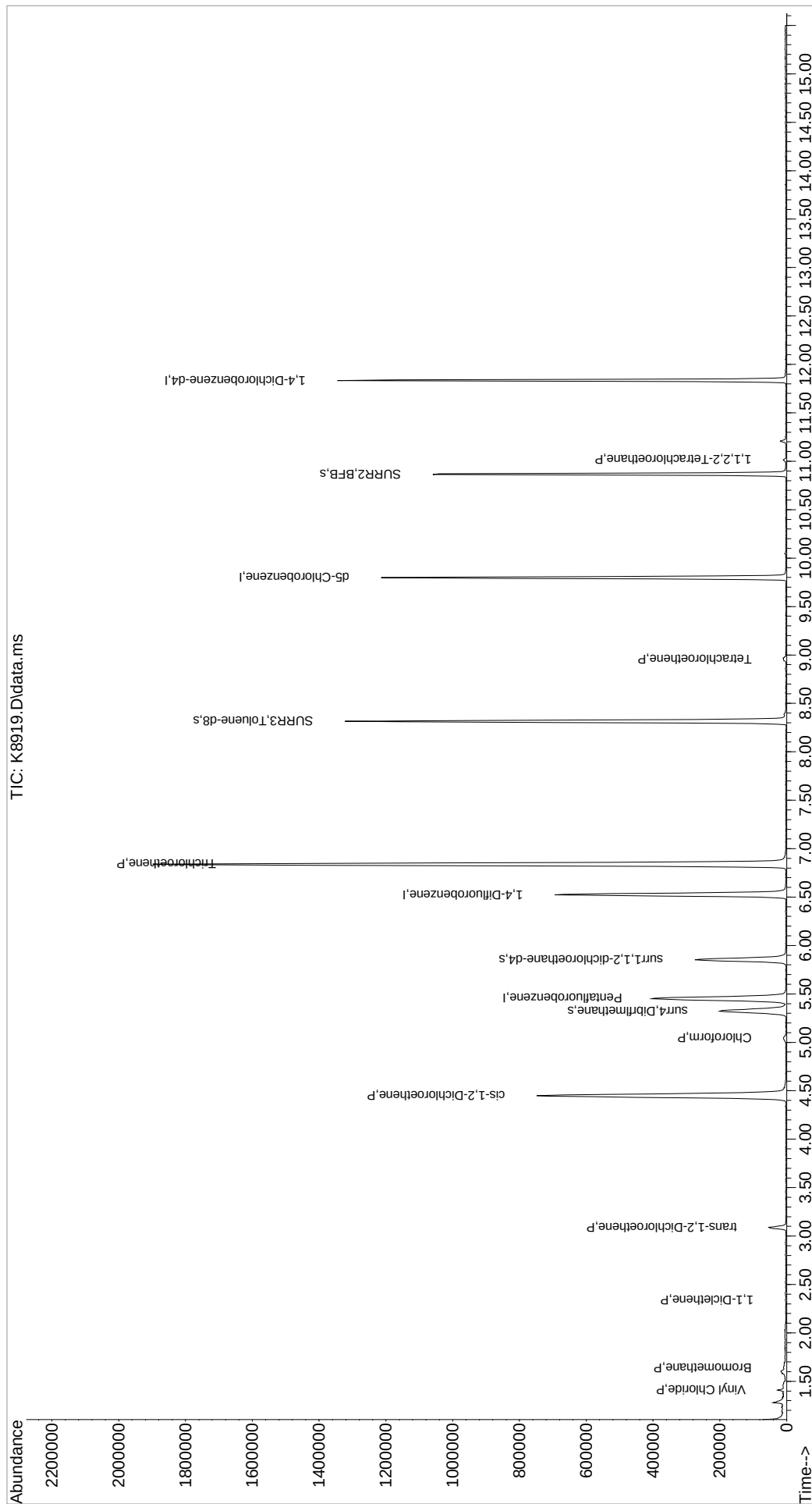
Quant Time: Nov 15 16:16:13 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

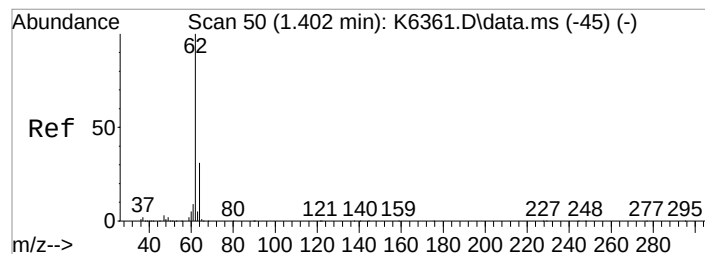
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.456	168	380207	50.00	ppb	0.01
43) 1,4-Difluorobenzene	6.523	114	617956	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	552008	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	264318	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.322	113	169811	50.48	ppb	0.00
Spiked Amount 50.000	Range 80 - 116		Recovery =	100.96%		
48) surr1,1,2-dichloroetha...	5.853	65	227094	46.42	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery =	92.84%		
65) SURR3,Toluene-d8	8.316	98	830434	52.52	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	105.04%		
70) SURR2,BFB	10.864	95	309776	49.35	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	98.70%		
Target Compounds						
4) Vinyl Chloride	1.408	62	8778	1.71	ppb	Qvalue 83
5) Bromomethane	1.640	94	1627m	0.48	ppb	
13) 1,1-Dicethene	2.341	96	771	0.21	ppb	# 46
15) Acetone	2.408	43	2118	Below	Cal	85
26) trans-1,2-Dichloroethene	3.091	96	20324	5.02	ppb	# 82
34) cis-1,2-Dichloroethene	4.450	96	446899	95.90	ppb	84
40) Chloroform	5.048	83	9329	0.77	ppb	85
54) Trichloroethene	6.840	130	688788	158.38	ppb	92
72) Tetrachloroethene	8.956	164	1719	0.54	ppb	# 54
92) 1,1,2,2-Tetrachloroethane	11.016	83	2830	0.51	ppb	# 72

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

Data Path : I:\ACQDATA\msvoa12\Data\111221\
Data File : K8919.D
Acq On : 12 Nov 2021 7:04 pm
Operator : K.Ruest
Sample : R2111745-013|250
Misc : LIRO 8260 T4
ALS Vial : 17 Sample Multiplier: 1
Inst : MSV0A-12

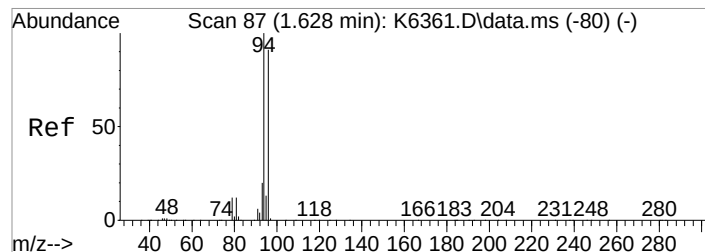
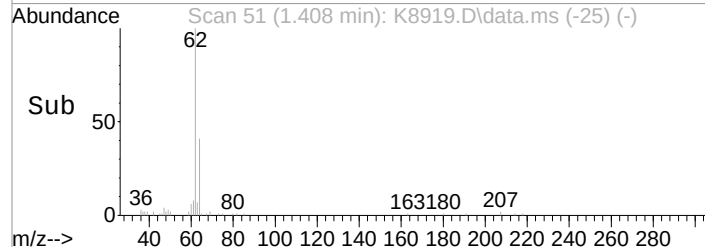
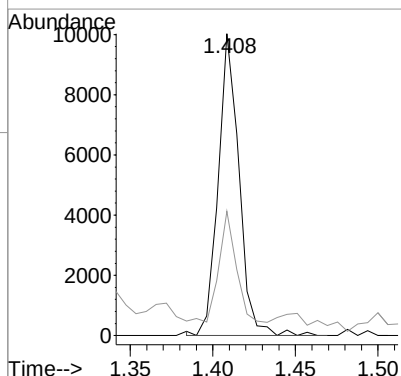
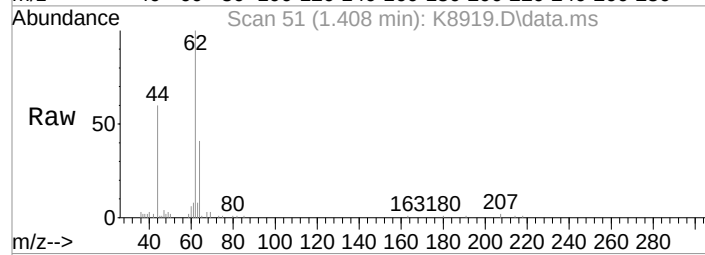
Quant Time: Nov 15 16:16:13 2021
Quant Method : I:\ACQDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration





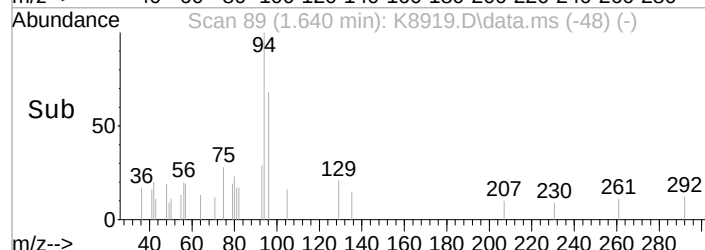
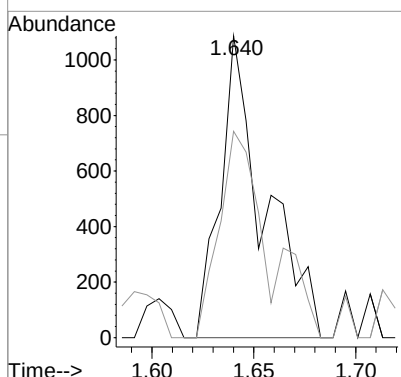
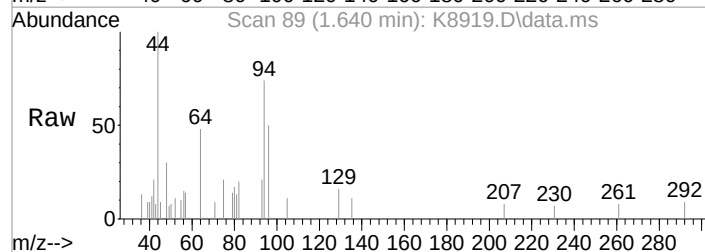
#4
Vinyl Chloride
Concen: 1.71 ppb
RT: 1.408 min Scan# 51
Delta R.T. 0.012 min
Lab File: K8919.D
Acq: 12 Nov 2021 7:04 pm

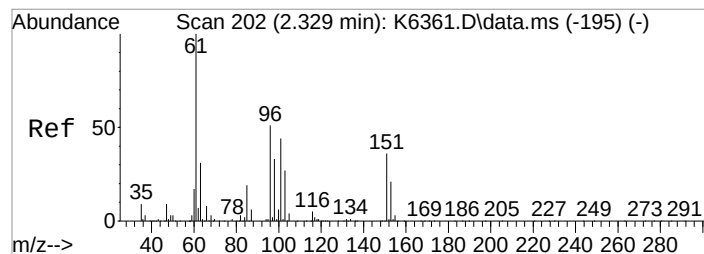
Tgt Ion: 62 Resp: 8778
Ion Ratio Lower Upper
62 100
64 41.2 11.5 51.5



#5
Bromomethane
Concen: 0.48 ppb m
RT: 1.640 min Scan# 89
Delta R.T. 0.025 min
Lab File: K8919.D
Acq: 12 Nov 2021 7:04 pm

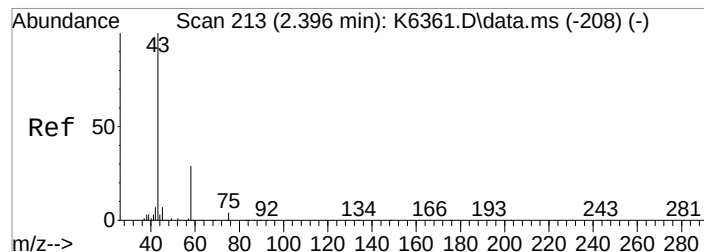
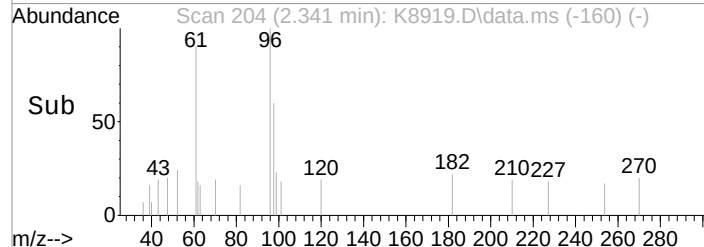
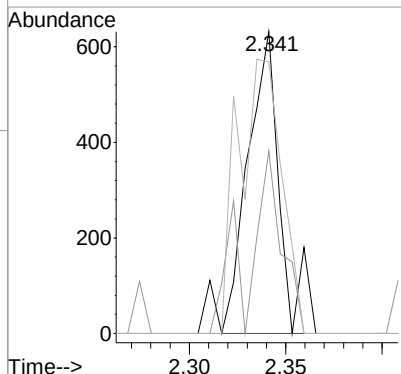
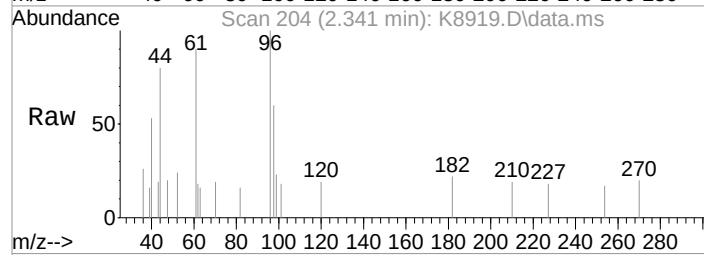
Tgt Ion: 94 Resp: 1627
Ion Ratio Lower Upper
94 100
96 68.4 71.0 111.0#





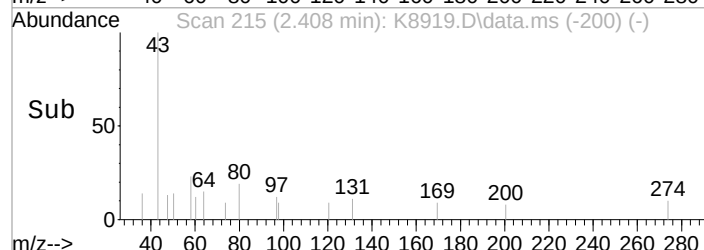
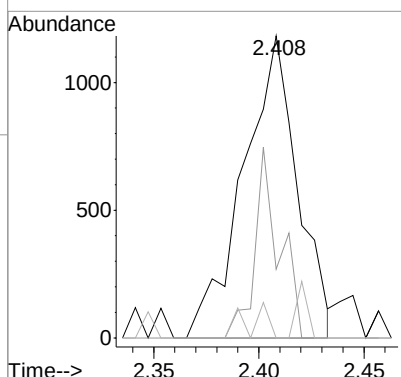
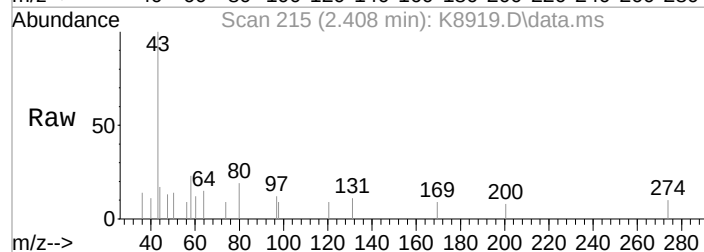
#13
1,1-Dicloroethene
Concen: 0.21 ppb
RT: 2.341 min Scan# 204
Delta R.T. 0.018 min
Lab File: K8919.D
Acq: 12 Nov 2021 7:04 pm

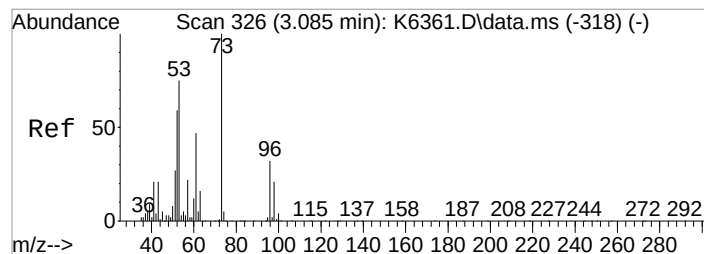
Tgt Ion: 96 Resp: 771
Ion Ratio Lower Upper
96 100
98 60.4 44.1 84.1
61 90.0 174.9 214.9#



#15
Acetone
Concen: Below Cal
RT: 2.408 min Scan# 215
Delta R.T. 0.019 min
Lab File: K8919.D
Acq: 12 Nov 2021 7:04 pm

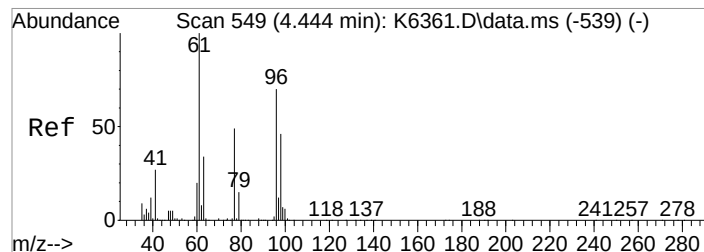
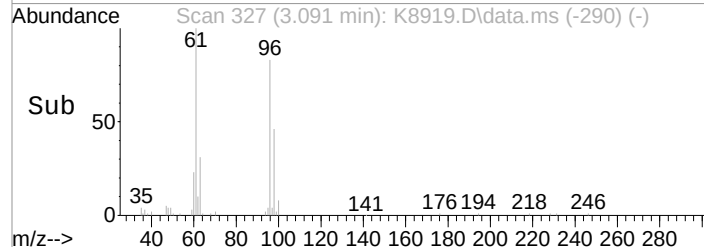
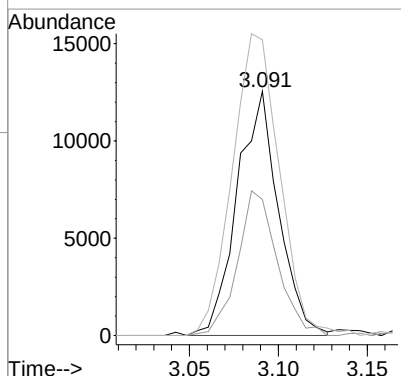
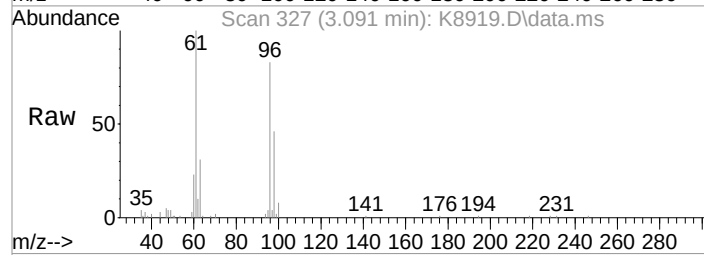
Tgt Ion: 43 Resp: 2118
Ion Ratio Lower Upper
43 100
58 22.7 9.6 49.6
42 0.0 0.0 27.7





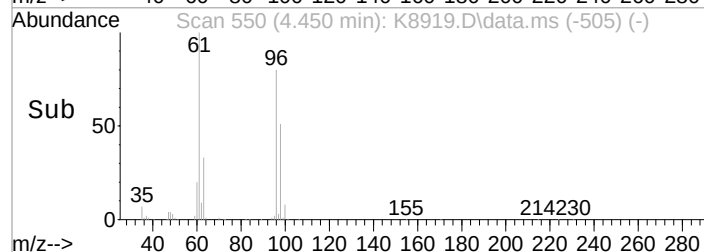
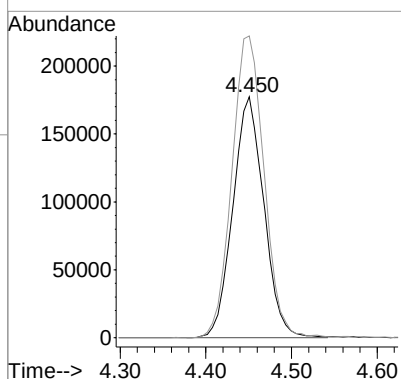
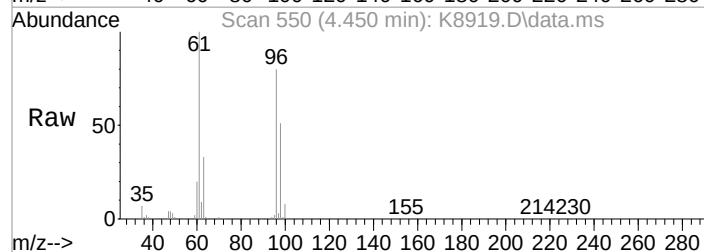
#26
trans-1,2-Dichloroethene
Concen: 5.02 ppb
RT: 3.091 min Scan# 327
Delta R.T. 0.018 min
Lab File: K8919.D
Acq: 12 Nov 2021 7:04 pm

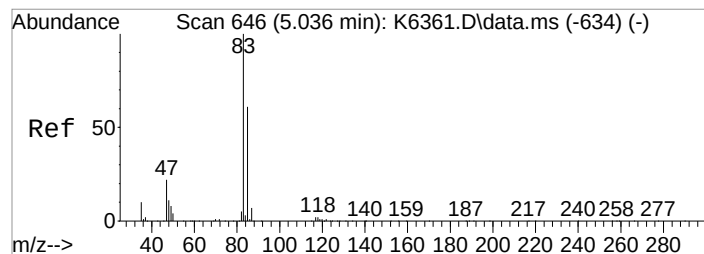
Tgt Ion	96	Resp	20324
Ion Ratio	Lower	Upper	
96	100		
98	55.8	44.1	84.1
61	121.2	127.9	167.9#



#34
cis-1,2-Dichloroethene
Concen: 95.90 ppb
RT: 4.450 min Scan# 550
Delta R.T. 0.012 min
Lab File: K8919.D
Acq: 12 Nov 2021 7:04 pm

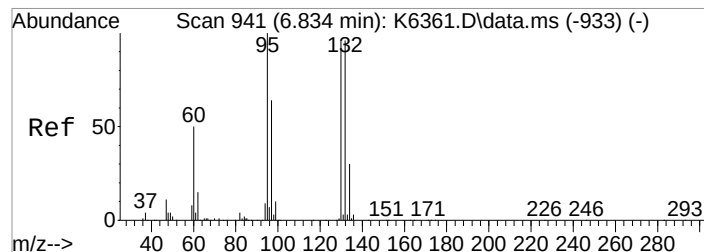
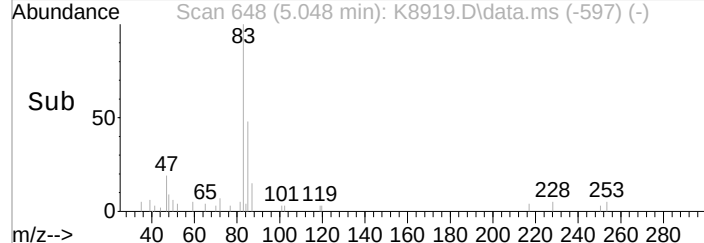
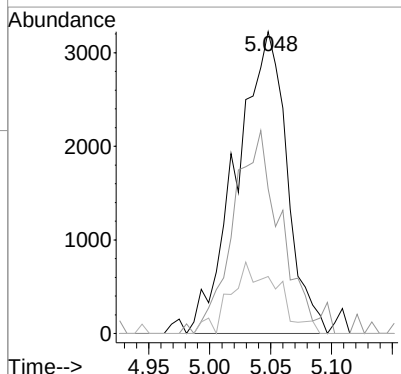
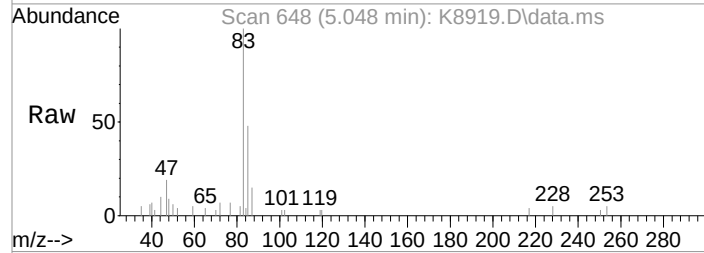
Tgt Ion	96	Resp	446899
Ion Ratio	Lower	Upper	
96	100		
61	125.3	125.2	165.2





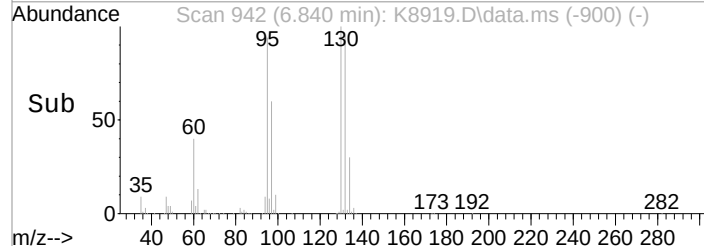
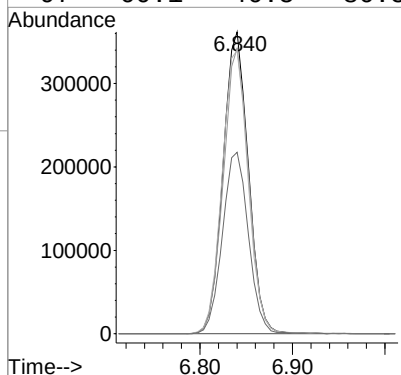
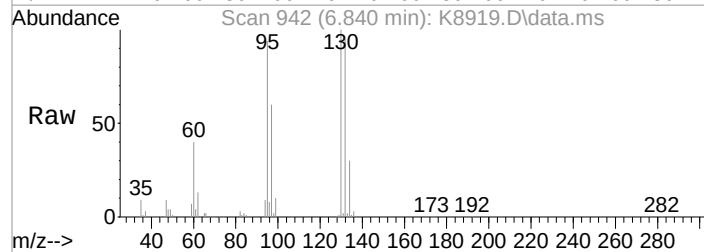
#40
 Chloroform
 Concen: 0.77 ppb
 RT: 5.048 min Scan# 648
 Delta R.T. 0.025 min
 Lab File: K8919.D
 Acq: 12 Nov 2021 7:04 pm

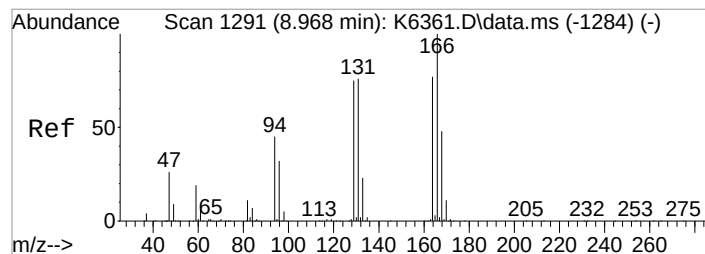
Tgt Ion:	83	Resp:	9329
Ion Ratio		Lower	Upper
83	100		
85	47.9	41.5	81.5
47	18.9	2.1	42.1



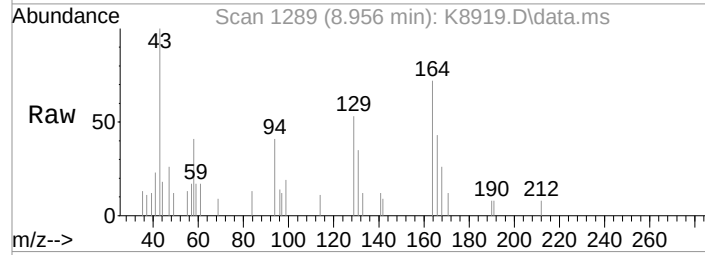
#54
 Trichloroethene
 Concen: 158.38 ppb
 RT: 6.840 min Scan# 942
 Delta R.T. 0.006 min
 Lab File: K8919.D
 Acq: 12 Nov 2021 7:04 pm

Tgt Ion:	130	Resp:	688788
Ion Ratio		Lower	Upper
130	100		
132	94.5	79.7	119.7
95	93.8	83.8	123.8
97	60.1	46.5	86.5

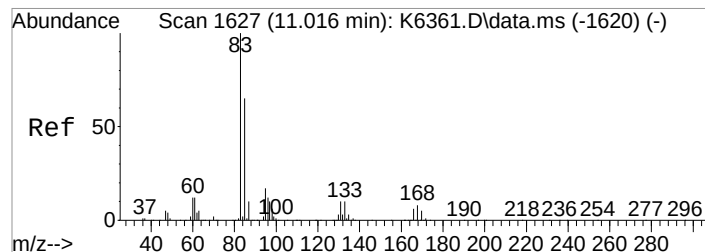
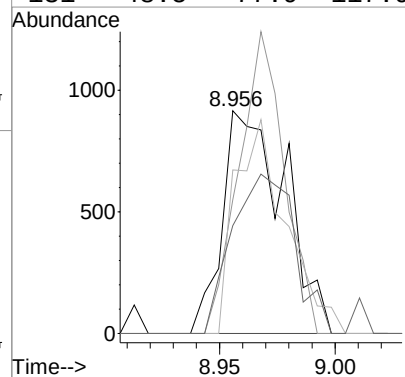
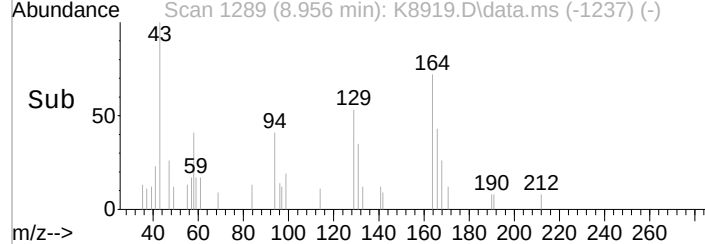




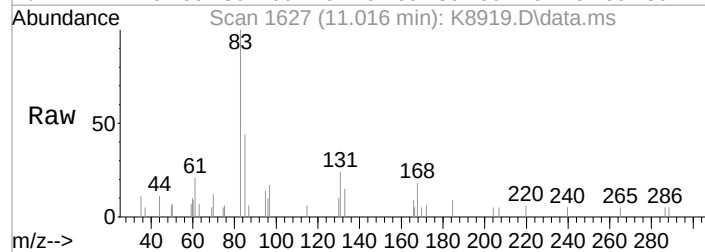
#72
 Tetrachloroethene
 Concen: 0.54 ppb
 RT: 8.956 min Scan# 1289
 Delta R.T. -0.012 min
 Lab File: K8919.D
 Acq: 12 Nov 2021 7:04 pm



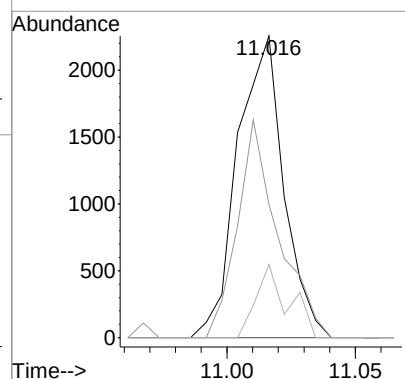
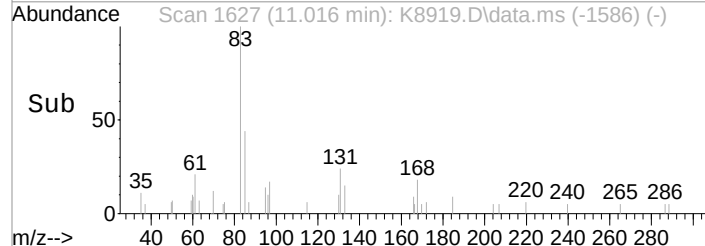
Tgt Ion	164	Resp	1719
Ion Ratio	Lower	Upper	
164	100		
166	60.1	109.5	149.5#
129	73.4	77.6	117.6#
131	48.5	77.9	117.9#



#92
 1,1,2,2-Tetrachloroethane
 Concen: 0.51 ppb
 RT: 11.016 min Scan# 1627
 Delta R.T. 0.000 min
 Lab File: K8919.D
 Acq: 12 Nov 2021 7:04 pm



Tgt Ion	83	Resp	2830
Ion Ratio	Lower	Upper	
83	100		
85	44.1	44.6	84.6#
131	24.2	0.0	30.0



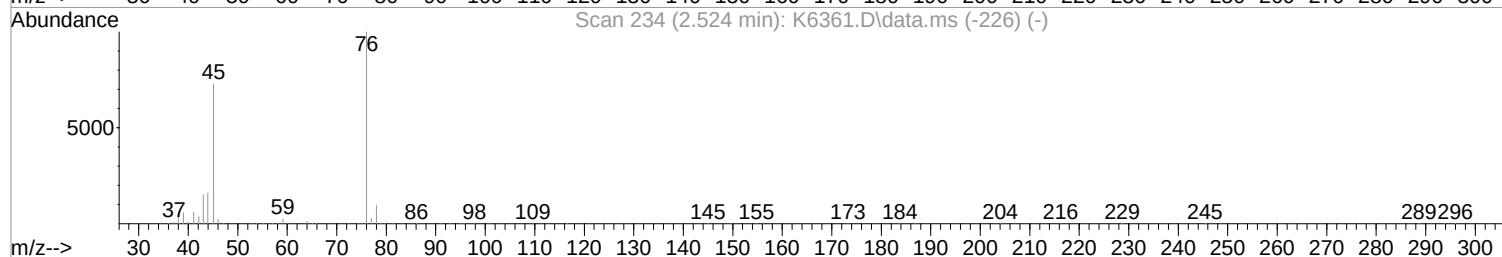
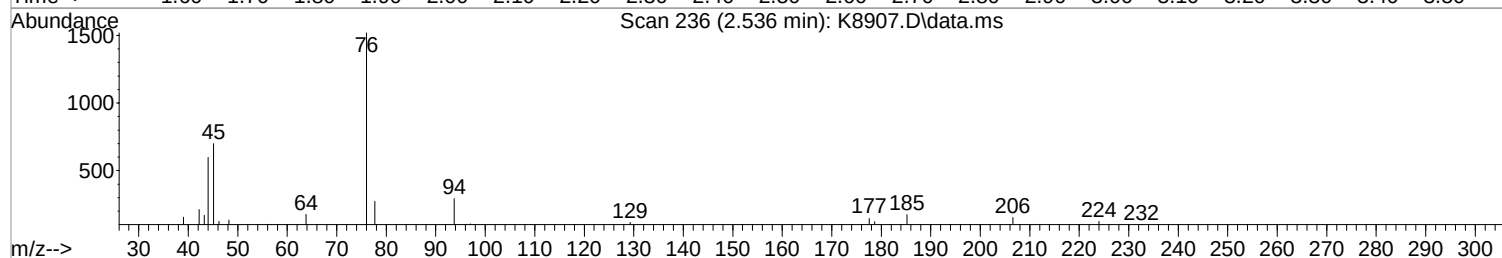
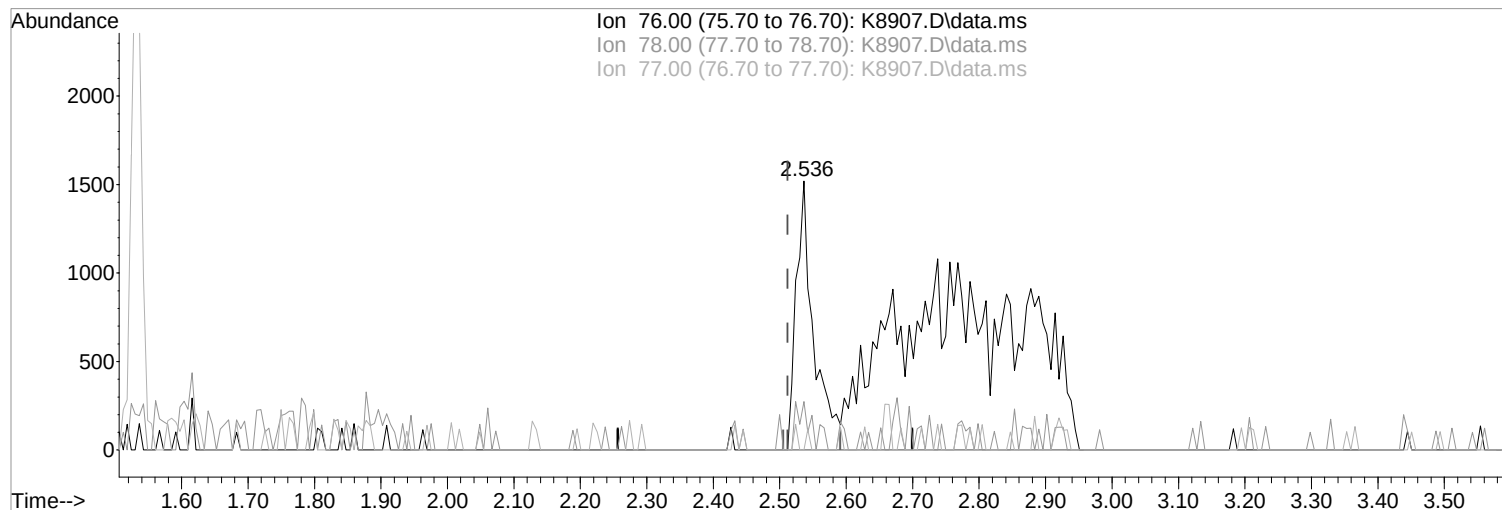
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8907.D
Acq On : 12 Nov 2021 2:42 pm
Operator : K.Ruest
Sample : R2111745-014|1.0
Misc : LIRO 8260 T4
ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 15:13:15 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



(18) Carbon Disulfide (P)

2.536min (+0.025) 1.87 ppb m

response 16565

Ion	Exp%	Act%
76.00	100	100
78.00	9.70	17.96
77.00	2.70	17.96
0.00	0.00	0.00

Manual Integration:

After

Other - so2 interference

11/15/21

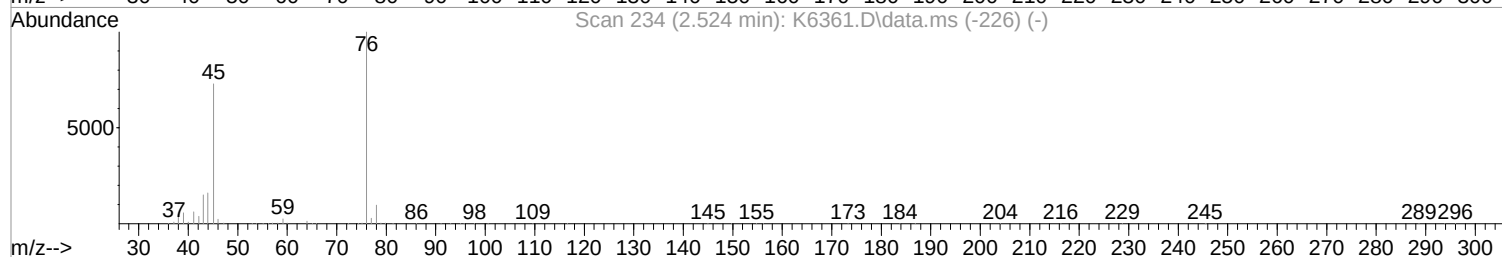
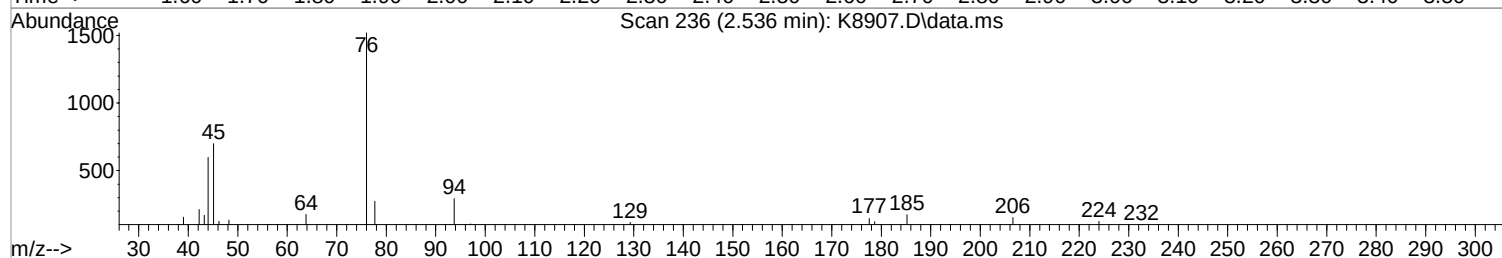
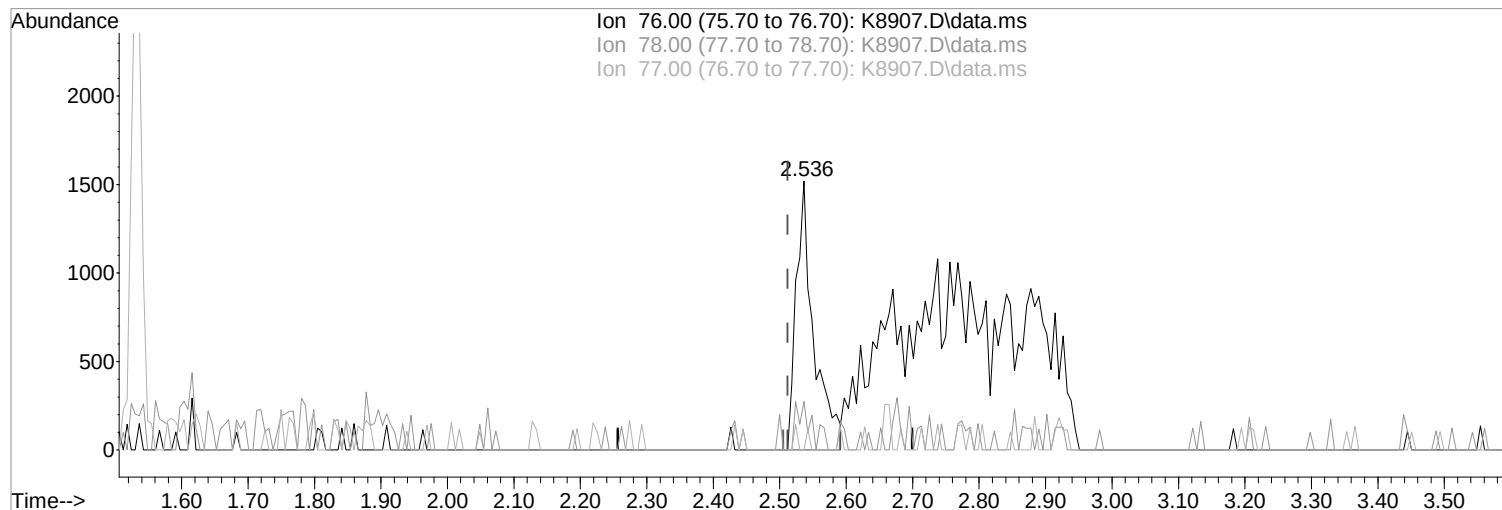
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8907.D
Acq On : 12 Nov 2021 2:42 pm
Operator : K.Ruest
Sample : R2111745-014|1.0
Misc : LIRO 8260 T4
ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 15:13:15 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8907.D\data.ms

(18) Carbon Disulfide (P)

Manual Integration:

2.536min (+0.025) 0.31 ppb

Before

response 2786

Ion	Exp%	Act%
76.00	100	100
78.00	9.70	17.96
77.00	2.70	17.96
0.00	0.00	0.00

11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8907.D
 Acq On : 12 Nov 2021 2:42 pm
 Operator : K.Ruest
 Sample : R2111745-014|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA-12

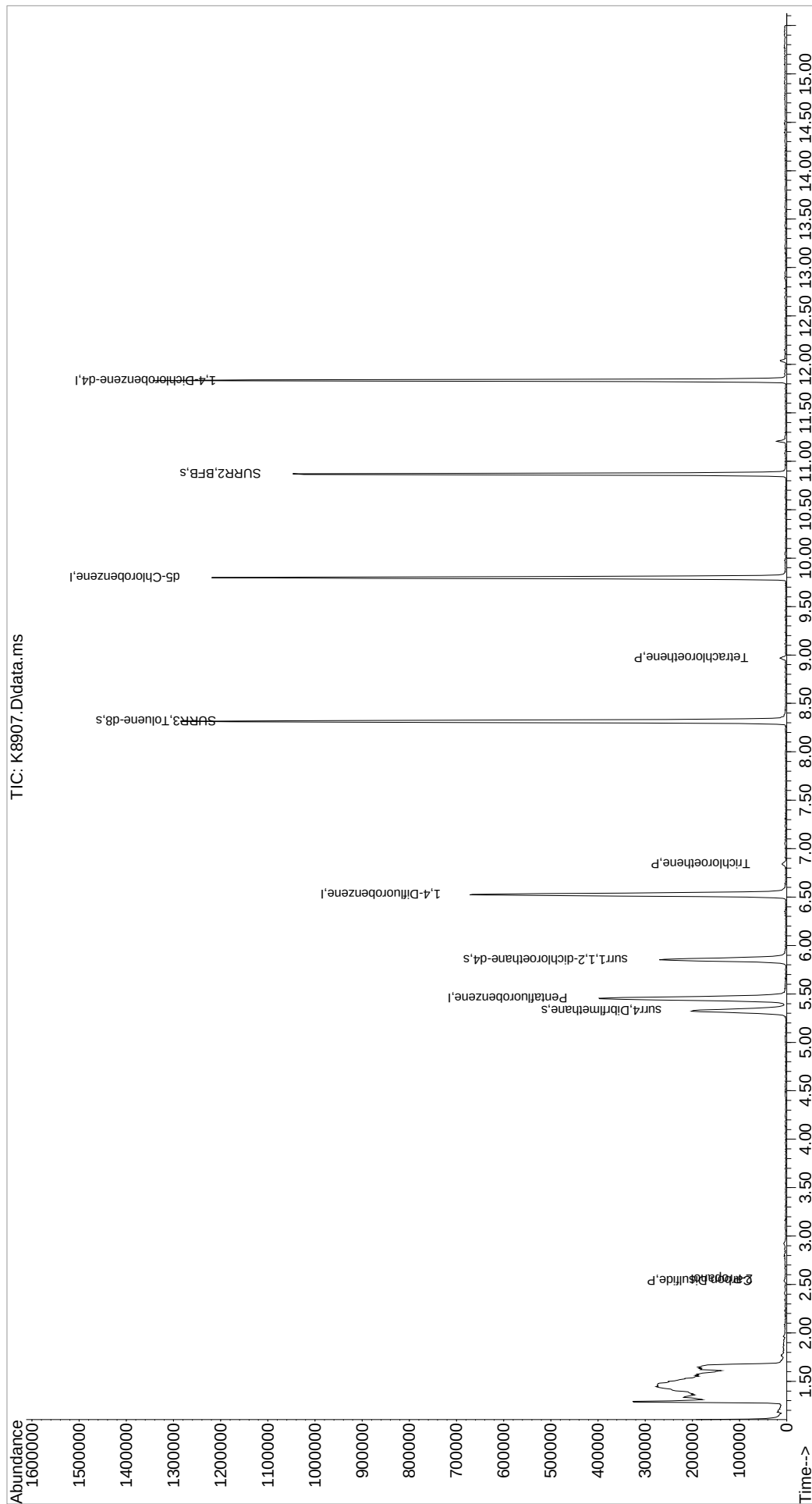
Quant Time: Nov 15 15:53:08 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

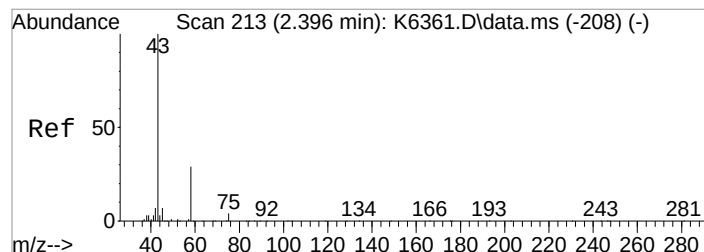
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.456	168	376349	50.00	ppb	0.01
43) 1,4-Difluorobenzene	6.529	114	613163	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	549485	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	260903	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.328	113	170504	51.08	ppb	0.01
Spiked Amount	50.000	Range 80 - 116	Recovery	=	102.16%	
48) surr1,1,2-dichloroetha...	5.853	65	221880	45.71	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	91.42%	
65) SURR3,Toluene-d8	8.316	98	812777	51.80	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	103.60%	
70) SURR2,BFB	10.870	95	304072	48.82	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	97.64%	
Target Compounds						
15) Acetone	2.414	43	2586	Below Cal		77
16) 2-Propanol	2.555	45	1828	3.74 ppb	#	56
18) Carbon Disulfide	2.536	76	16565m	1.87 ppb		
54) Trichloroethene	6.840	130	2565	0.59 ppb		87
72) Tetrachloroethene	8.968	164	2496	0.79 ppb	#	81

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

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8907.D
 Acq On : 12 Nov 2021 2:42 pm
 Operator : K.Ruest
 Sample : R2111745-014|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 5 Sample Multiplier: 1
 Inst : MSV0A-12

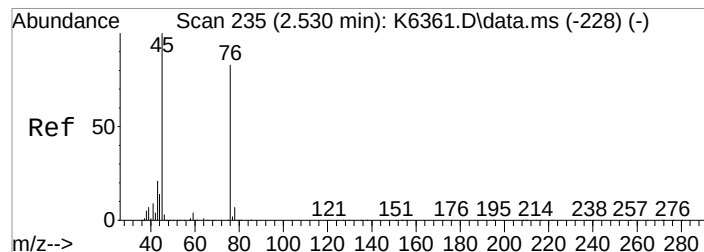
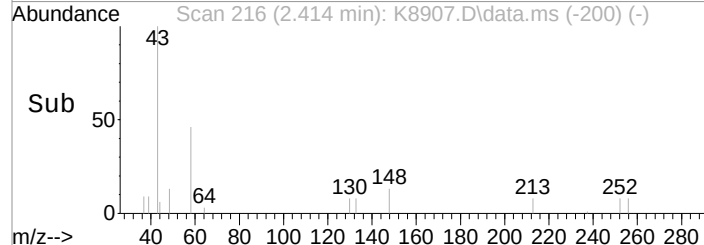
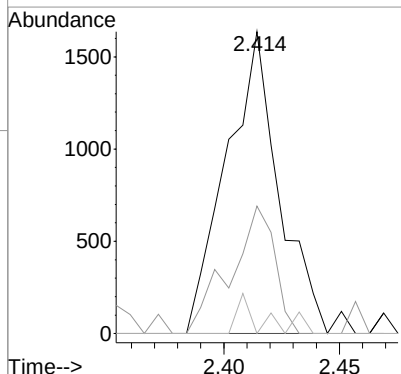
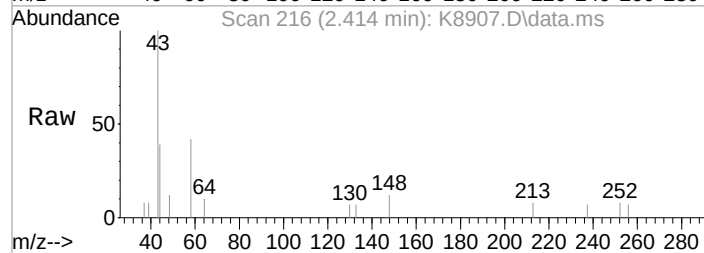
Quant Time: Nov 15 15:53:08 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 Qlast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration





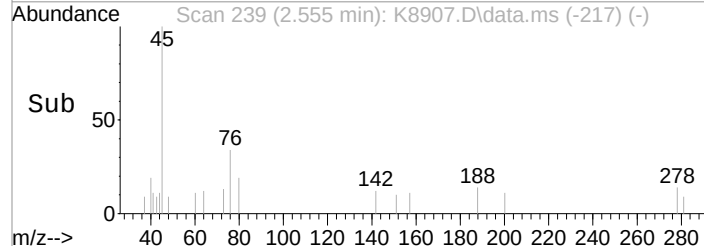
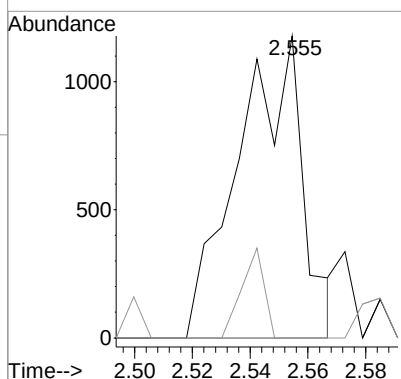
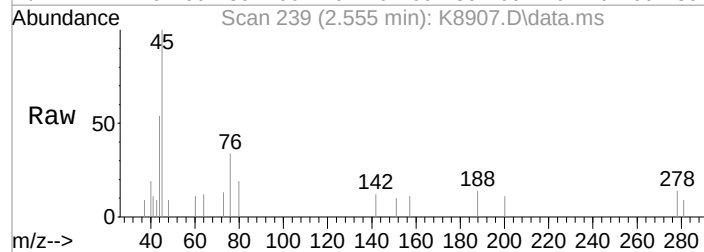
#15
Acetone
Concen: Below Cal
RT: 2.414 min Scan# 216
Delta R.T. 0.025 min
Lab File: K8907.D
Acq: 12 Nov 2021 2:42 pm

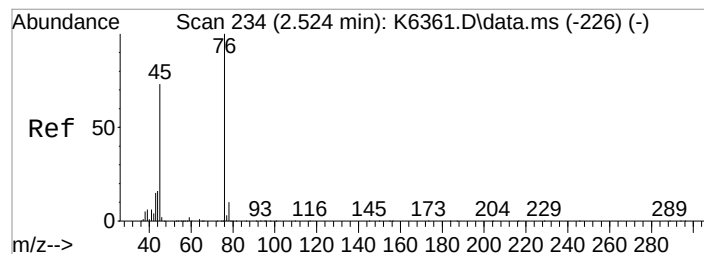
Tgt Ion: 43 Resp: 2586
Ion Ratio Lower Upper
43 100
58 42.2 9.6 49.6
42 0.0 0.0 27.7



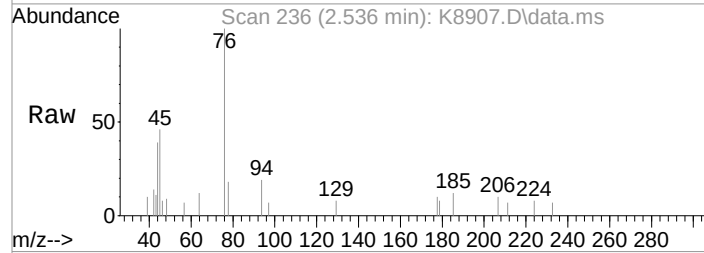
#16
2-Propanol
Concen: 3.74 ppb
RT: 2.555 min Scan# 239
Delta R.T. 0.025 min
Lab File: K8907.D
Acq: 12 Nov 2021 2:42 pm

Tgt Ion: 45 Resp: 1828
Ion Ratio Lower Upper
45 100
43 0.0 0.6 40.6#

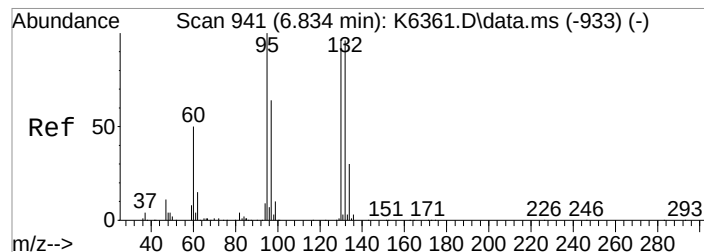
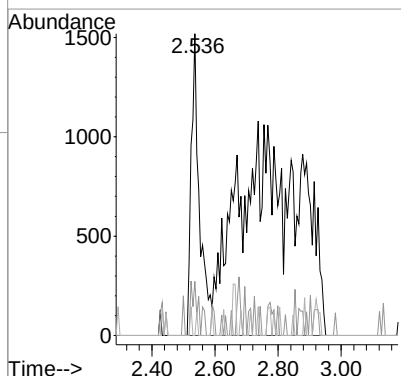
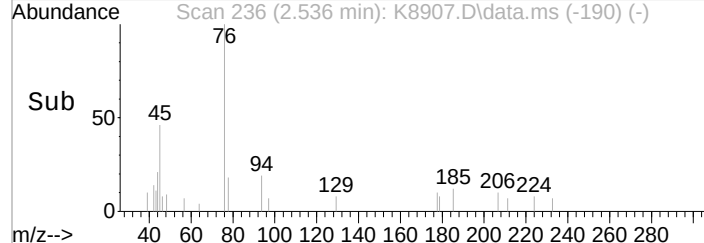




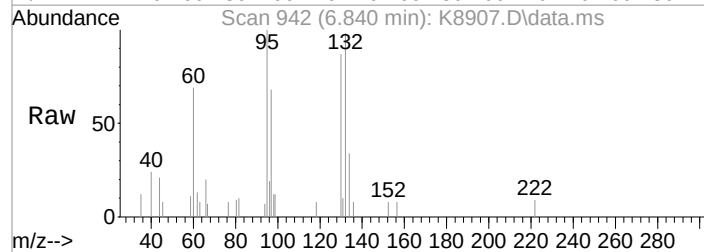
#18
 Carbon Disulfide
 Concen: 1.87 ppb m
 RT: 2.536 min Scan# 236
 Delta R.T. 0.025 min
 Lab File: K8907.D
 Acq: 12 Nov 2021 2:42 pm



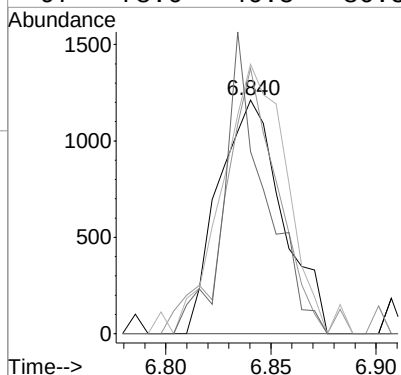
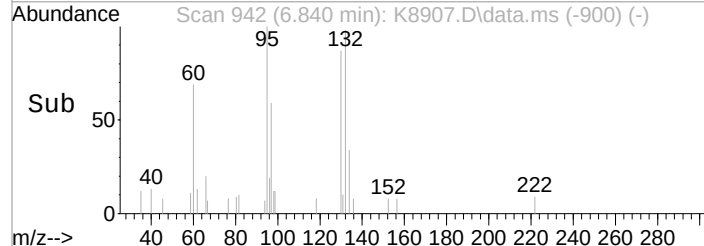
Tgt Ion: 76 Resp: 16565
 Ion Ratio Lower Upper
 76 100
 78 18.0 0.0 29.7
 77 18.0 0.0 22.7

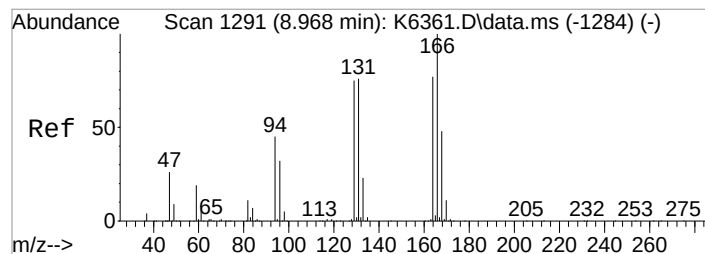


#54
 Trichloroethene
 Concen: 0.59 ppb
 RT: 6.840 min Scan# 942
 Delta R.T. 0.006 min
 Lab File: K8907.D
 Acq: 12 Nov 2021 2:42 pm

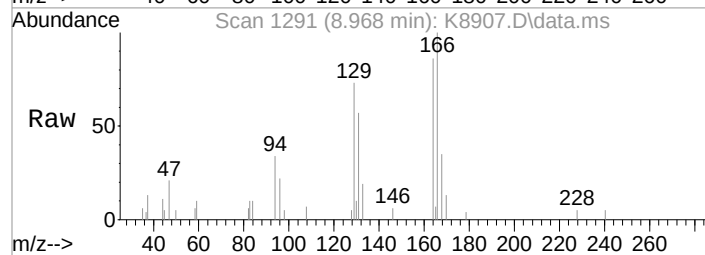


Tgt Ion: 130 Resp: 2565
 Ion Ratio Lower Upper
 130 100
 132 113.6 79.7 119.7
 95 115.4 83.8 123.8
 97 78.0 46.5 86.5

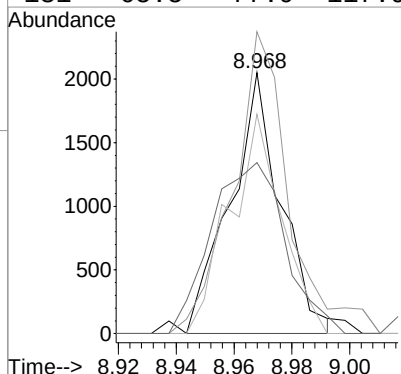
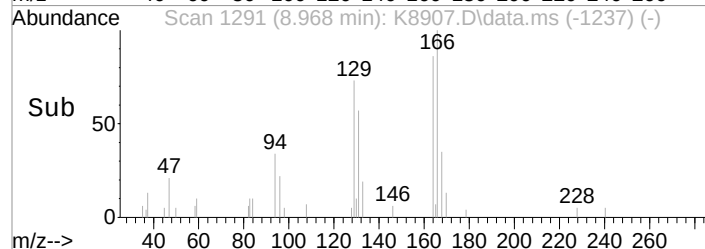




#72
 Tetrachloroethene
 Concen: 0.79 ppb
 RT: 8.968 min Scan# 1291
 Delta R.T. 0.000 min
 Lab File: K8907.D
 Acq: 12 Nov 2021 2:42 pm



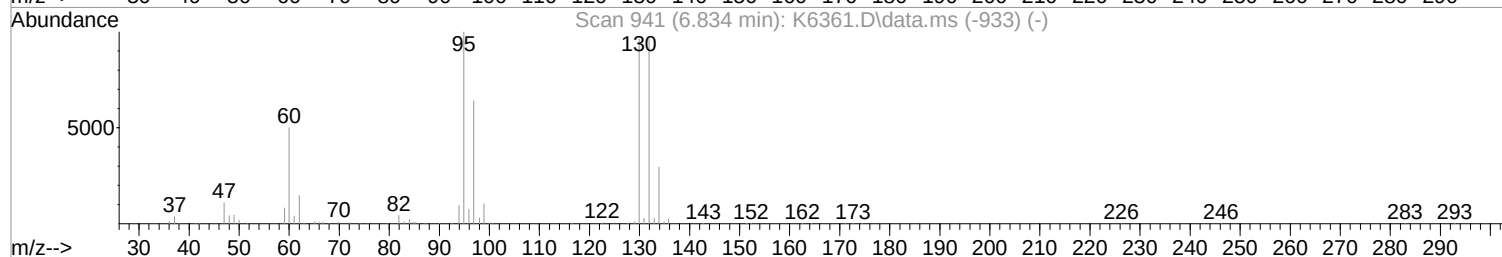
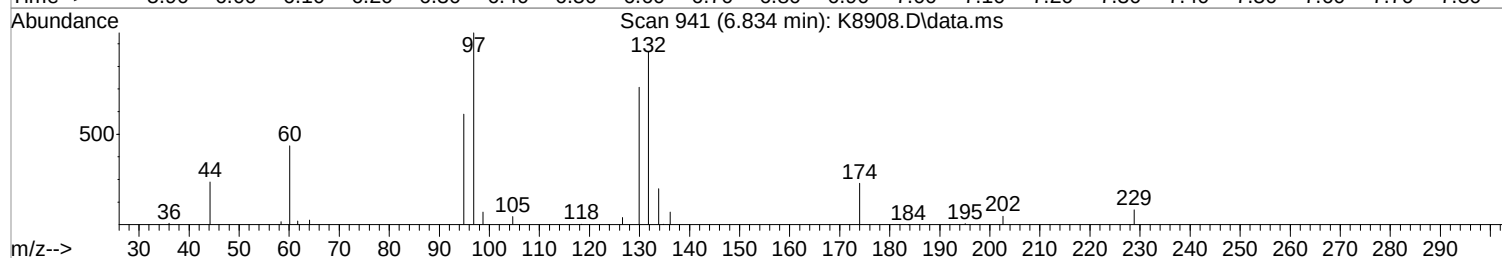
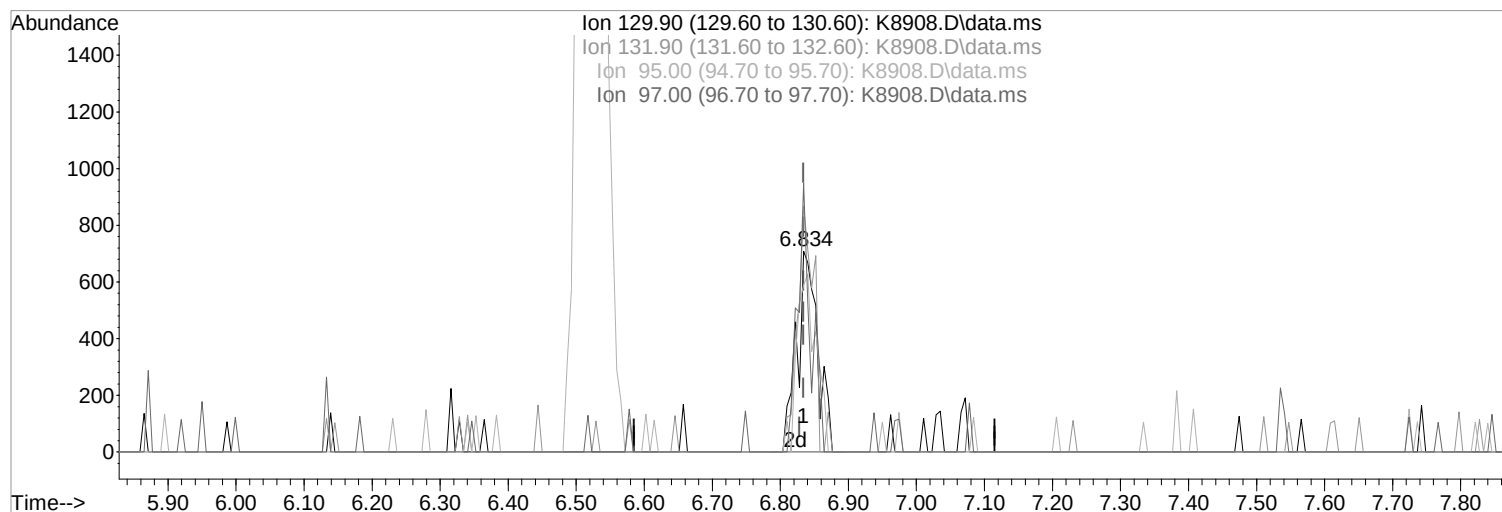
Tgt Ion:	164	Resp:	2496
Ion Ratio		Lower	Upper
164	100		
166	115.8	109.5	149.5
129	84.0	77.6	117.6
131	65.5	77.9	117.9#



Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8908.D
Acq On : 12 Nov 2021 3:04 pm
Operator : K.Ruest
Sample : R2111745-015|1.0
Misc : LIRO 8260 T4
ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 15:36:45 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8908.D\data.ms

(54) Trichloroethene (P)

Manual Integration:

6.834min (+0.000) 0.35 ppb m

After

response 1512

Split Peak

Ion Exp% Act%

11/15/21

129.90 100 100

131.90 99.70 122.32#

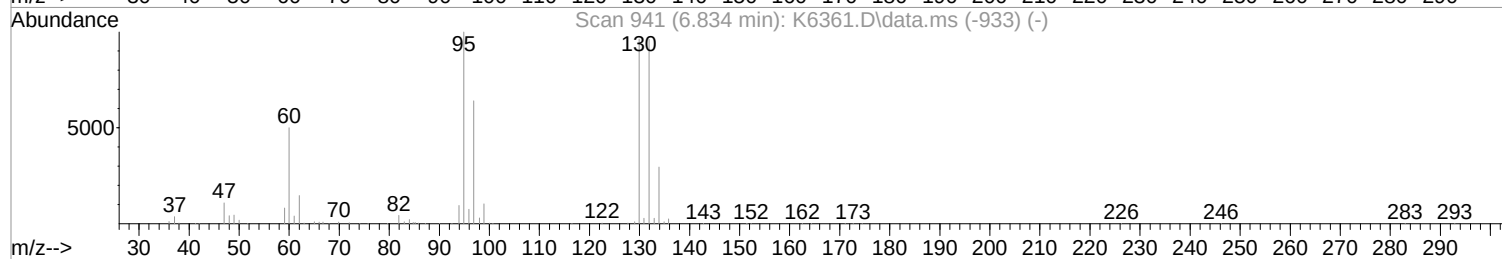
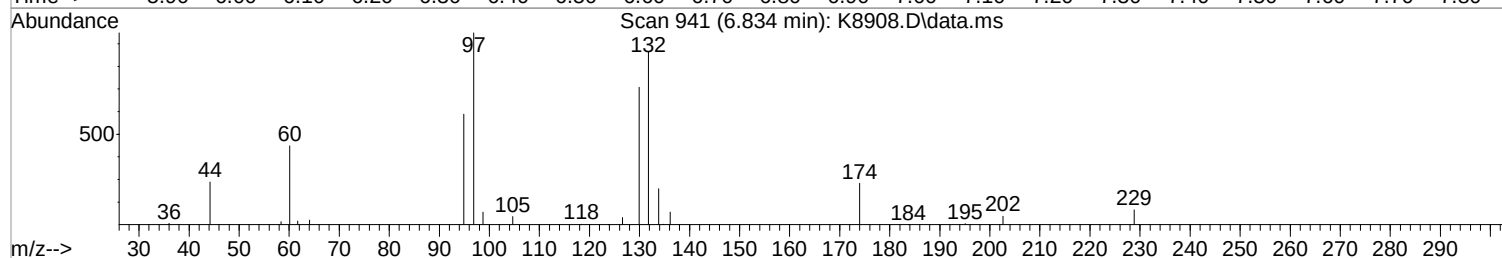
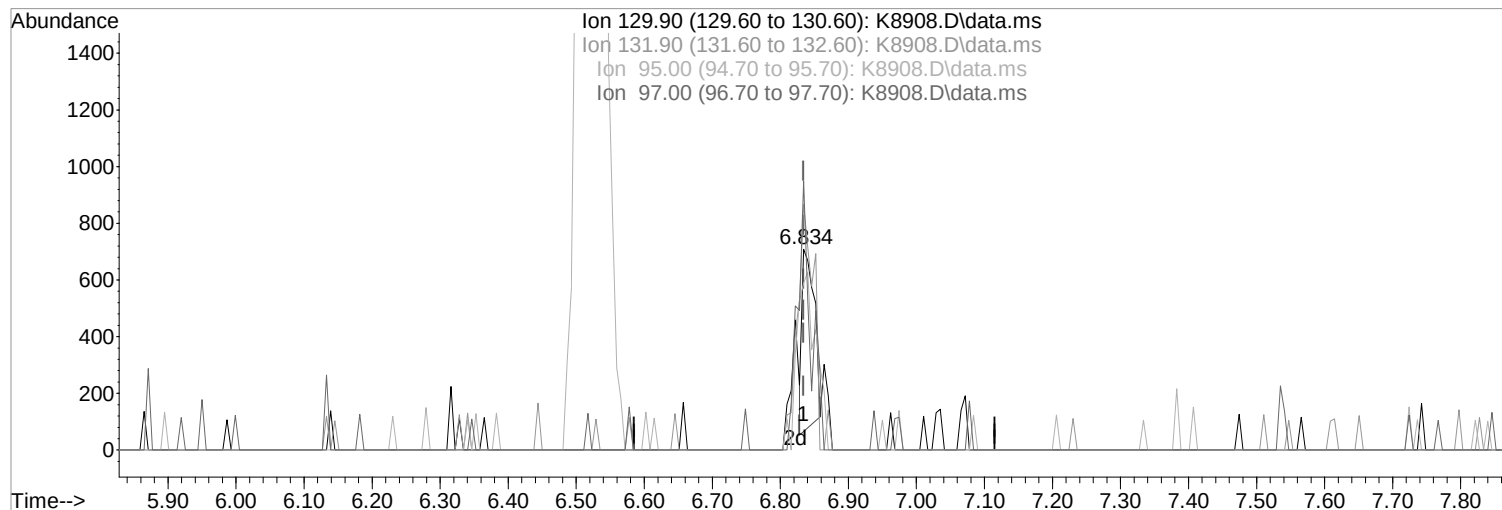
95.00 103.80 83.19#

97.00 66.50 134.04#

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8908.D
Acq On : 12 Nov 2021 3:04 pm
Operator : K.Ruest
Sample : R2111745-015|1.0
Misc : LIRO 8260 T4
ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 15:36:45 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8908.D\data.ms

(54) Trichloroethene (P)

Manual Integration:

6.834min (+0.000) 0.18 ppb

Before

response 791

Ion	Exp%	Act%
129.90	100	100
131.90	99.70	122.32#
95.00	103.80	83.19#
97.00	66.50	134.04#

11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8908.D
 Acq On : 12 Nov 2021 3:04 pm
 Operator : K.Ruest
 Sample : R2111745-015|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 15 15:55:14 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

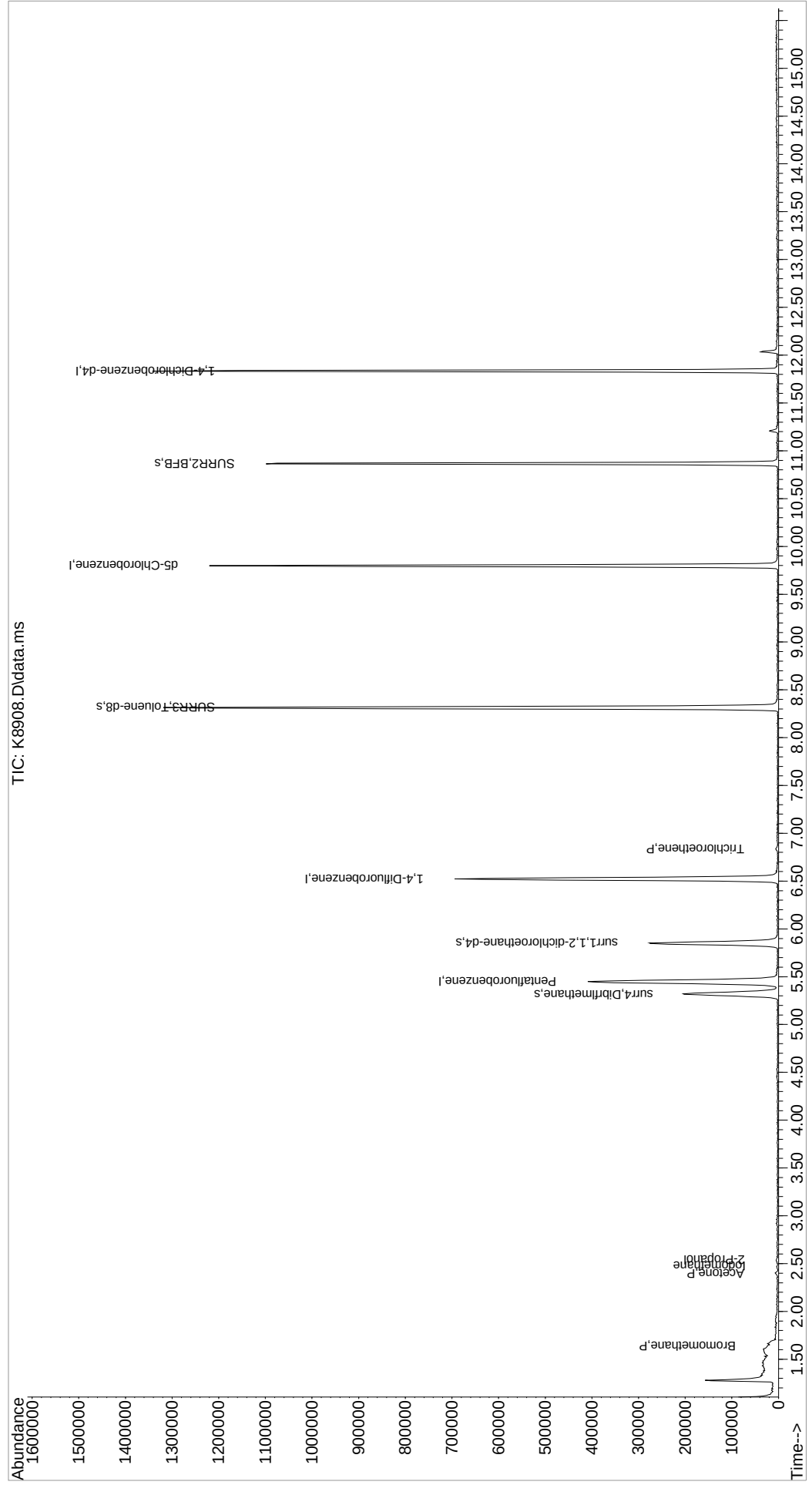
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

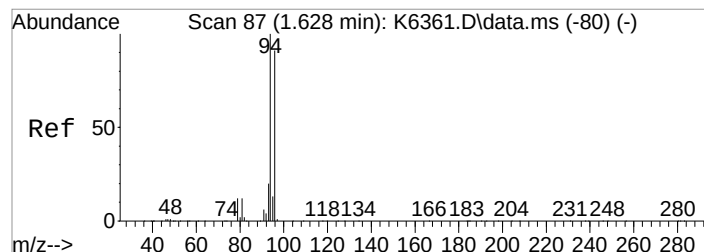
Internal Standards						
1) Pentafluorobenzene	5.450	168	381766	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	622289	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	552481	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	269595	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.316	113	171213	50.54	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	101.08%	
48) surr1,1,2-dichloroetha...	5.853	65	232593	47.22	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	94.44%	
65) SURR3,Toluene-d8	8.315	98	847667	53.23	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	106.46%	
70) SURR2,BFB	10.864	95	318016	50.31	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	100.62%	
Target Compounds						
5) Bromomethane	1.634	94	1475	0.44	ppb	Qvalue # 69
15) Acetone	2.396	43	5076	0.27	ppb	95
16) 2-Propanol	2.536	45	2152	4.34	ppb	61
17) Iodomethane	2.475	142	597	1.50	ppb	82
54) Trichloroethene	6.834	130	1512m	0.35	ppb	

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

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8908.D
 Acq On : 12 Nov 2021 3:04 pm
 Operator : K.Ruest
 Sample : R2111745-015|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 6 Sample Multiplier: 1
 Inst : MSV0A-12

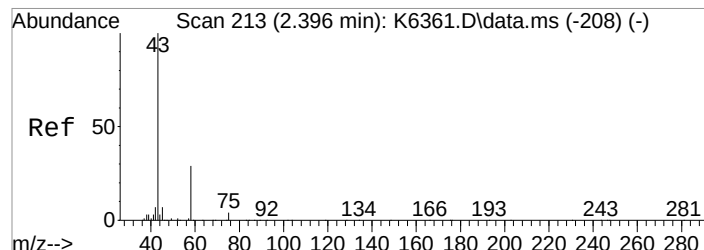
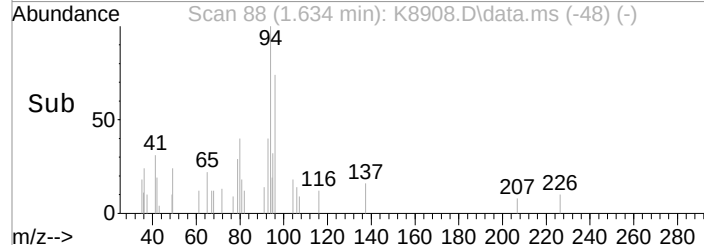
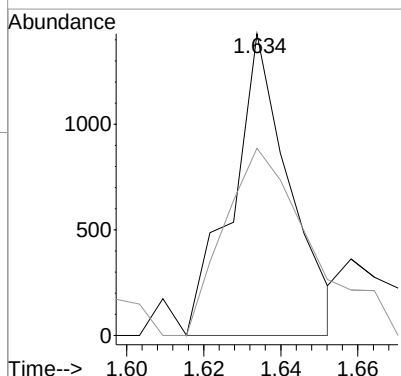
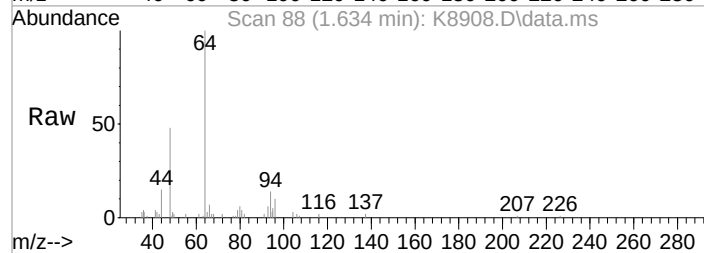
Quant Time: Nov 15 15:55:14 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration





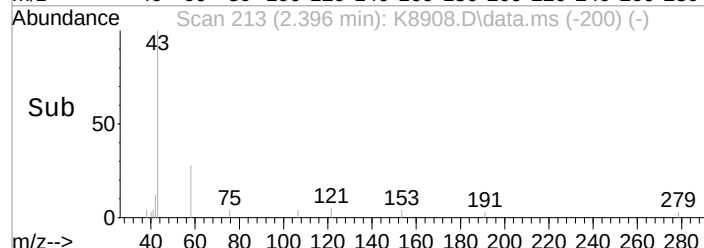
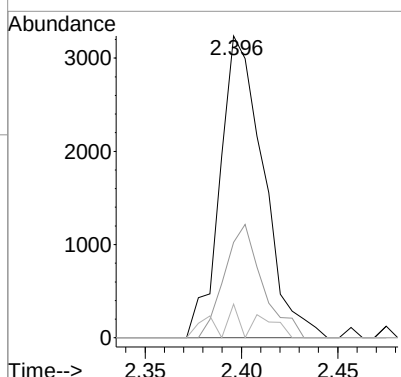
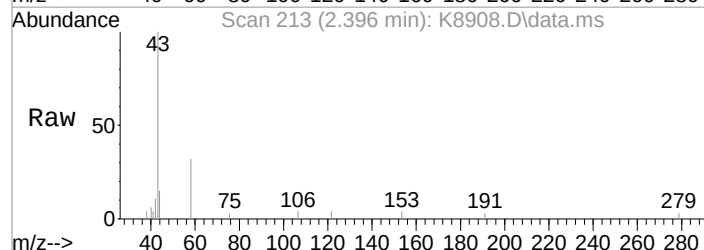
#5
Bromomethane
Concen: 0.44 ppb
RT: 1.634 min Scan# 88
Delta R.T. 0.018 min
Lab File: K8908.D
Acq: 12 Nov 2021 3:04 pm

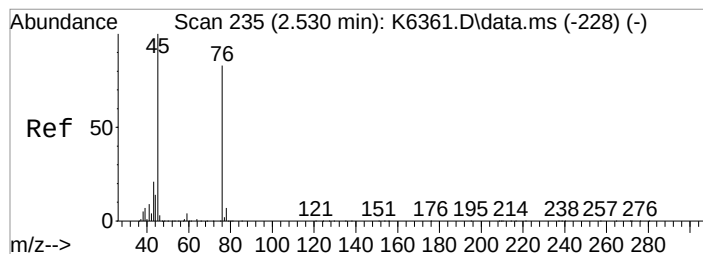
Tgt Ion: 94 Resp: 1475
Ion Ratio Lower Upper
94 100
96 62.0 71.0 111.0#



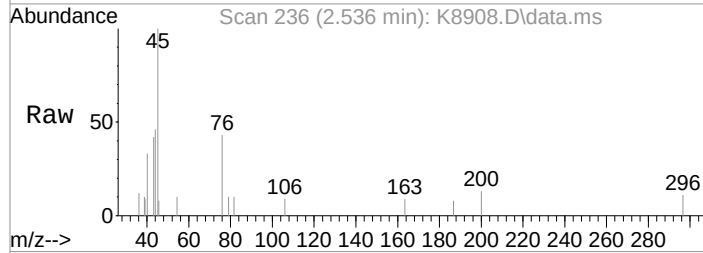
#15
Acetone
Concen: 0.27 ppb
RT: 2.396 min Scan# 213
Delta R.T. 0.007 min
Lab File: K8908.D
Acq: 12 Nov 2021 3:04 pm

Tgt Ion: 43 Resp: 5076
Ion Ratio Lower Upper
43 100
58 31.6 9.6 49.6
42 11.1 0.0 27.7

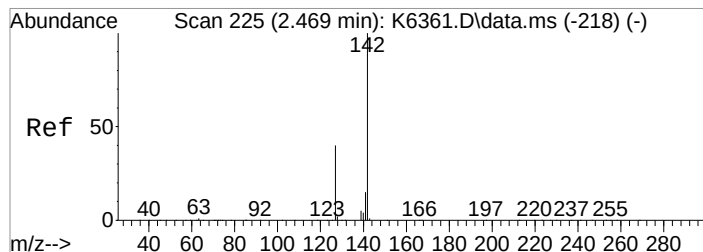
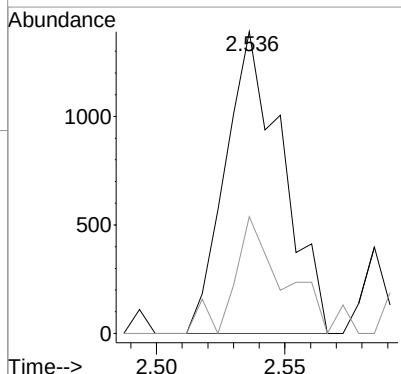
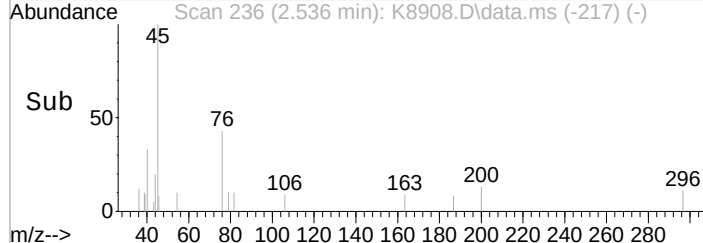




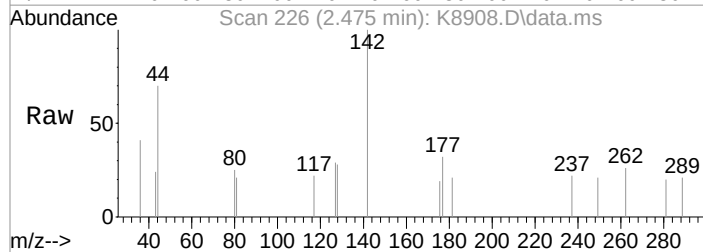
#16
2-Propanol
Concen: 4.34 ppb
RT: 2.536 min Scan# 236
Delta R.T. 0.006 min
Lab File: K8908.D
Acq: 12 Nov 2021 3:04 pm



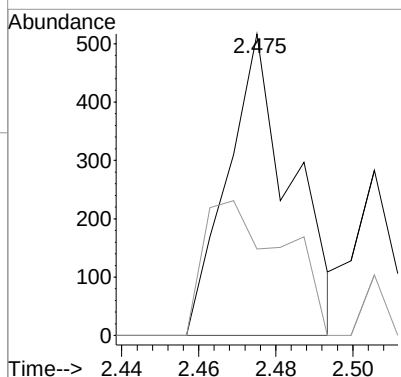
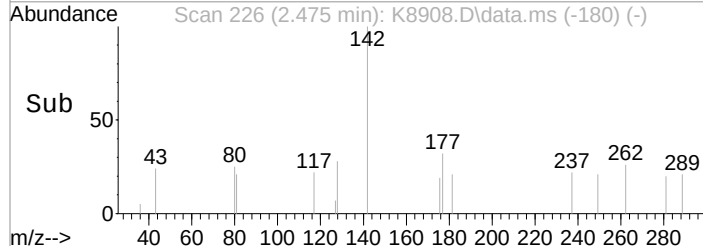
Tgt Ion: 45 Resp: 2152
Ion Ratio Lower Upper
45 100
43 38.7 0.6 40.6

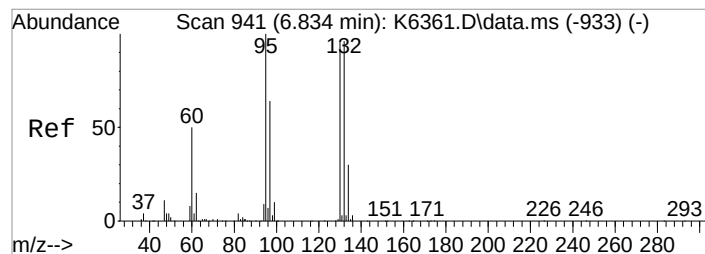


#17
Iodomethane
Concen: 1.50 ppb
RT: 2.475 min Scan# 226
Delta R.T. 0.019 min
Lab File: K8908.D
Acq: 12 Nov 2021 3:04 pm

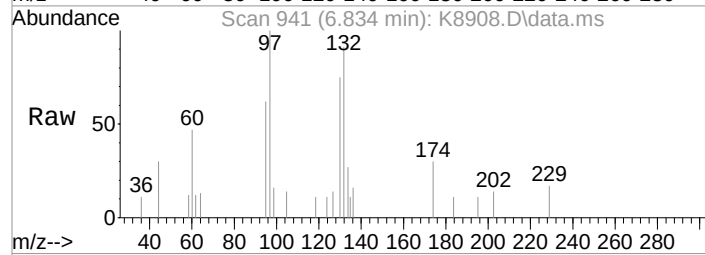


Tgt Ion: 142 Resp: 597
Ion Ratio Lower Upper
142 100
127 28.6 19.6 59.6

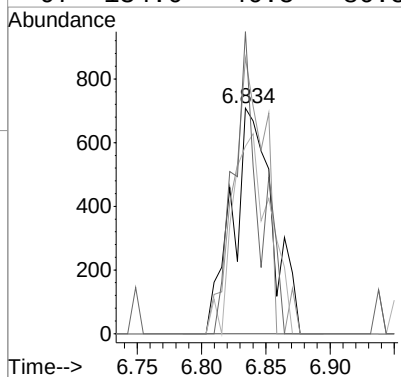
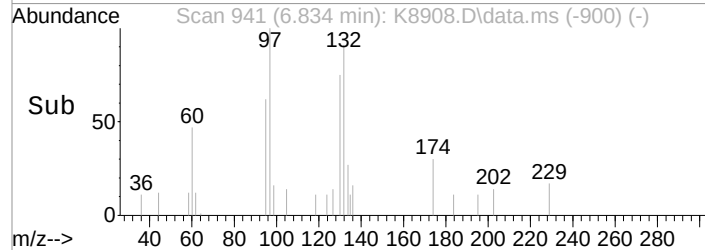




#54
Trichloroethene
Concen: 0.35 ppb m
RT: 6.834 min Scan# 941
Delta R.T. 0.000 min
Lab File: K8908.D
Acq: 12 Nov 2021 3:04 pm



Tgt Ion	Ratio	Resp	Lower	Upper
130	100			
132	122.3	79.7	119.7#	
95	83.2	83.8	123.8#	
97	134.0	46.5	86.5#	



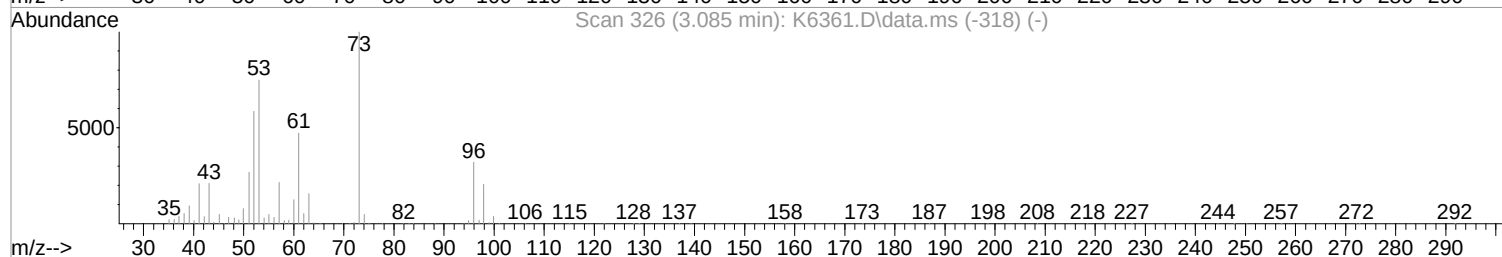
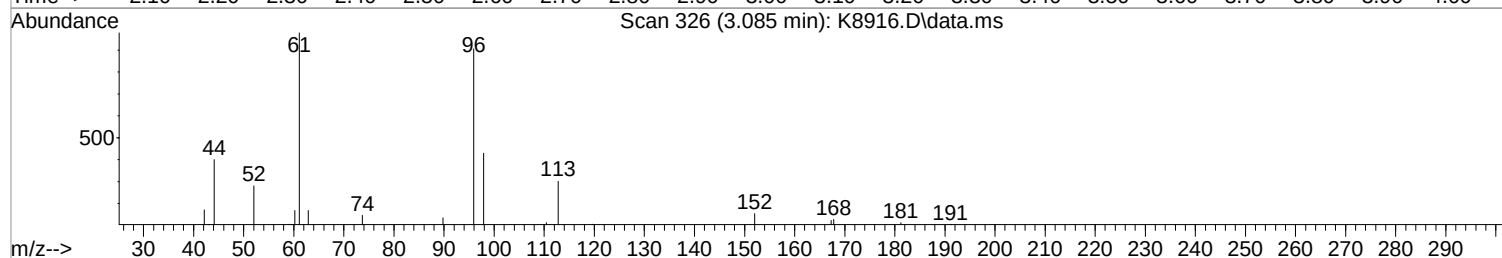
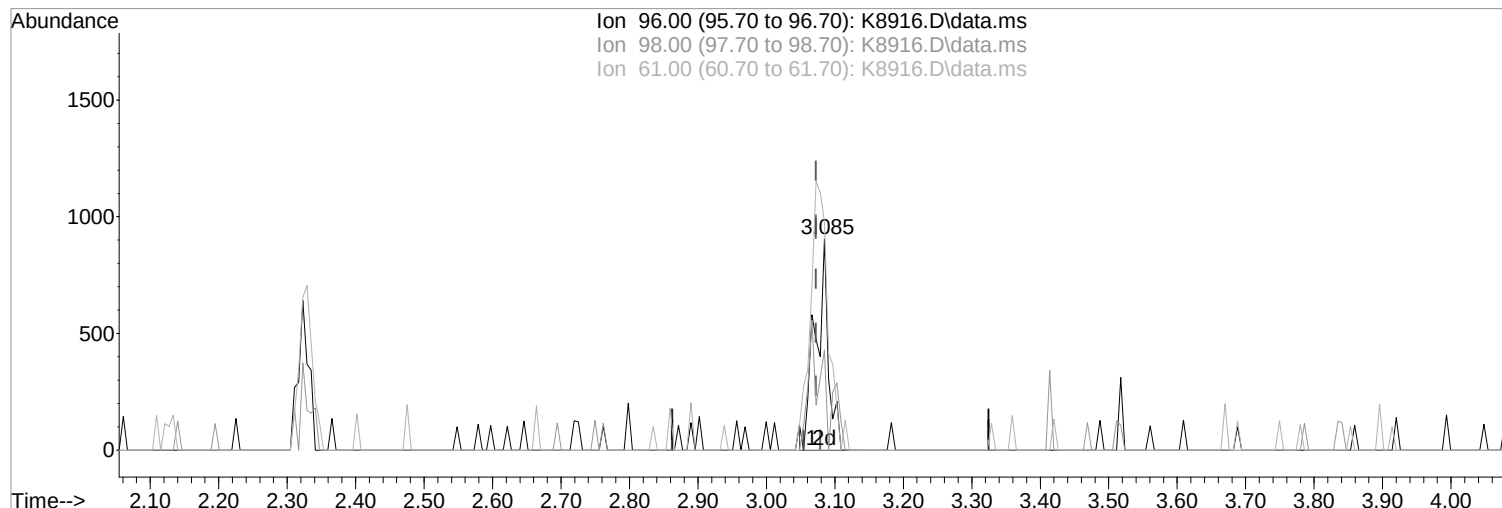
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8916.D
Acq On : 12 Nov 2021 5:58 pm
Operator : K.Ruest
Sample : R2111745-016|10
Misc : LIRO 8260 T4
ALS Vial : 14 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 18:24:24 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8916.D\data.ms

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

Manual Integration:

3.085min (+0.012) 0.28 ppb m

After

response 1179

Split Peak

Ion	Exp%	Act%
96.00	100	100
98.00	64.10	47.40
61.00	147.90	108.18#
0.00	0.00	0.00

11/15/21

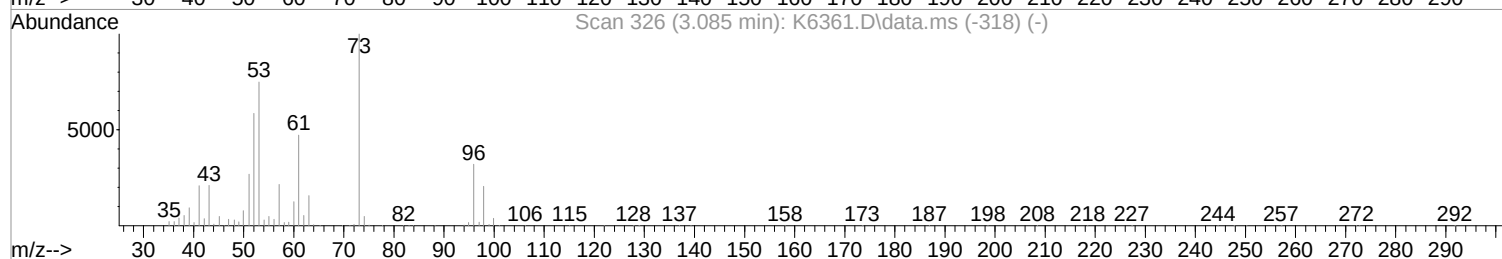
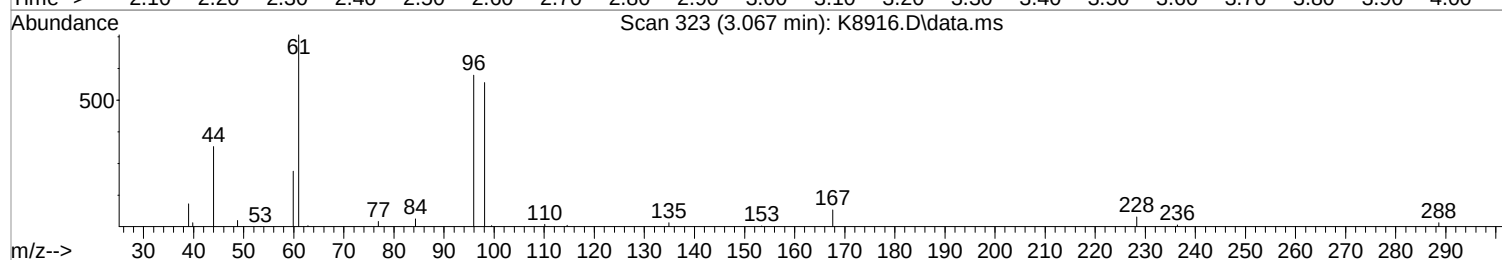
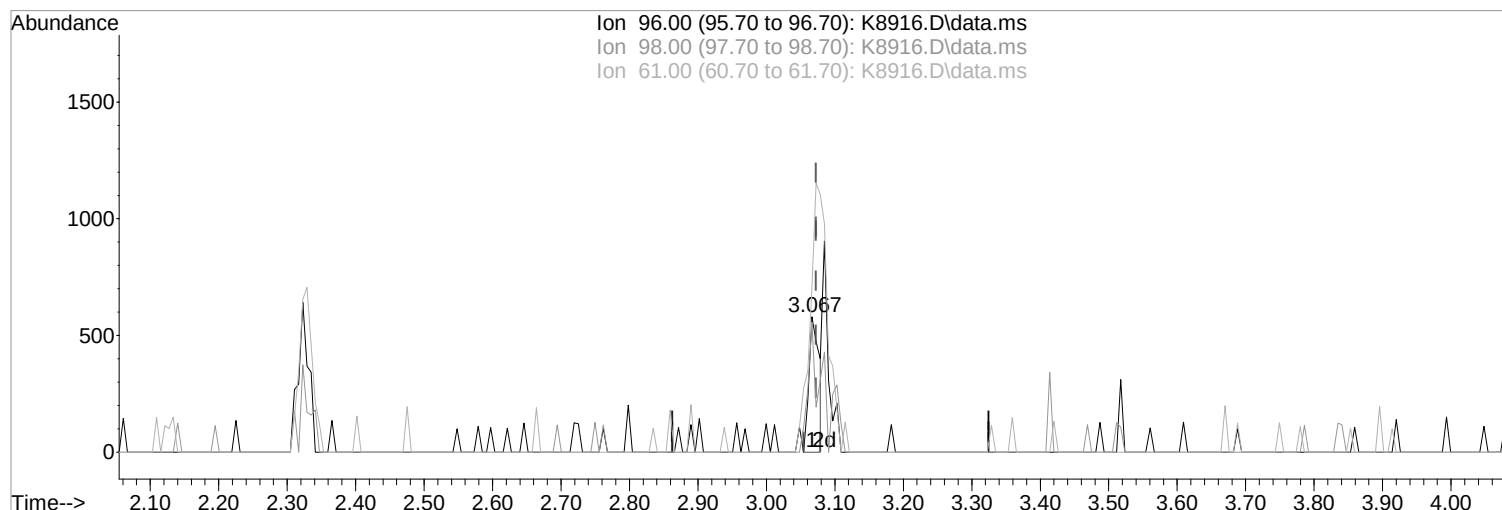
Quantitation Report (Qedit)

1st *12* 11/15/21
2nd *FJ* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8916.D
Acq On : 12 Nov 2021 5:58 pm
Operator : K.Ruest
Sample : R2111745-016|10
Misc : LIRO 8260 T4
ALS Vial : 14 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 18:24:24 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8916.D\data.ms

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

Manual Integration:

3.067min (-0.006) 0.14 ppb

Before

response 612

Ion	Exp%	Act%
96.00	100	100
98.00	64.10	96.03#
61.00	147.90	122.11#
0.00	0.00	0.00

11/15/21

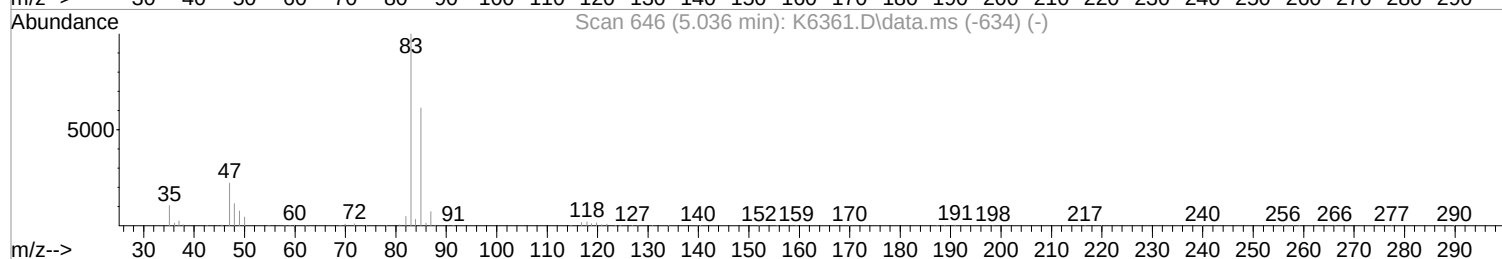
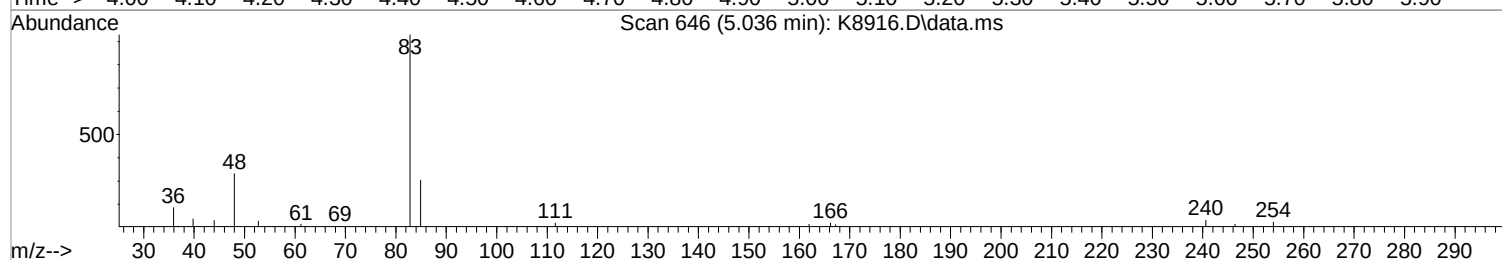
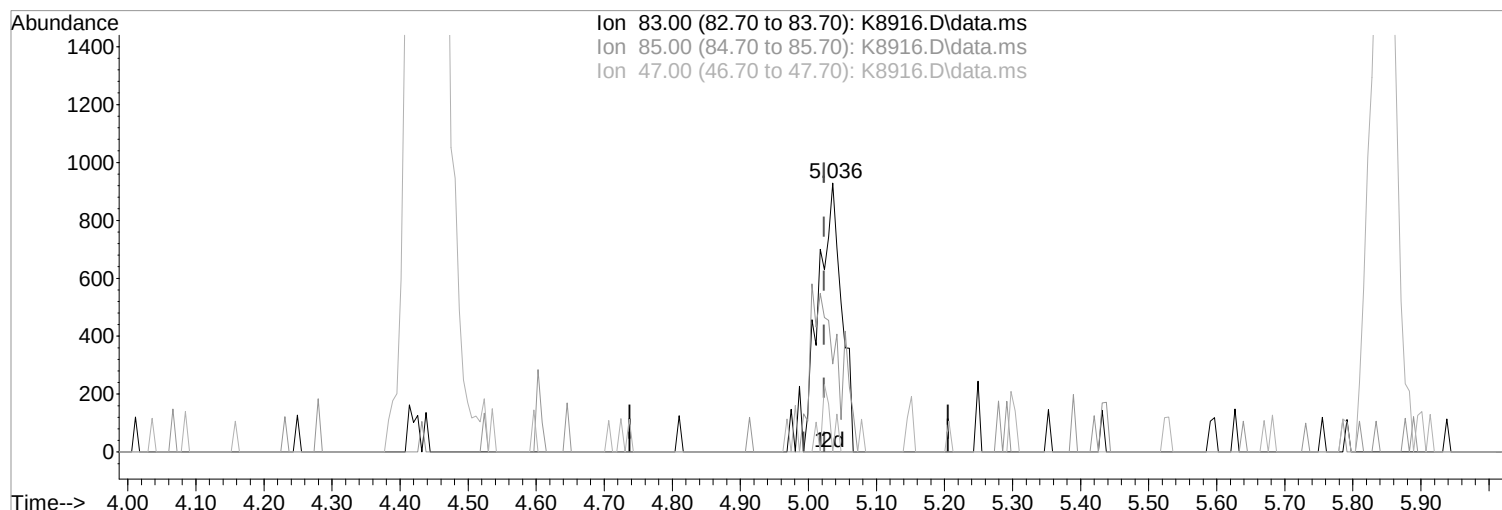
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8916.D
Acq On : 12 Nov 2021 5:58 pm
Operator : K.Ruest
Sample : R2111745-016|10
Misc : LIRO 8260 T4
ALS Vial : 14 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 18:24:24 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8916.D\data.ms

(40) Chloroform (P)

5.036min (+0.013) -0.22 ppb m

response 2157

Ion	Exp%	Act%
83.00	100	100
85.00	61.50	32.72#
47.00	22.10	0.00#
0.00	0.00	0.00

Manual Integration:

After

Split Peak

11/15/21

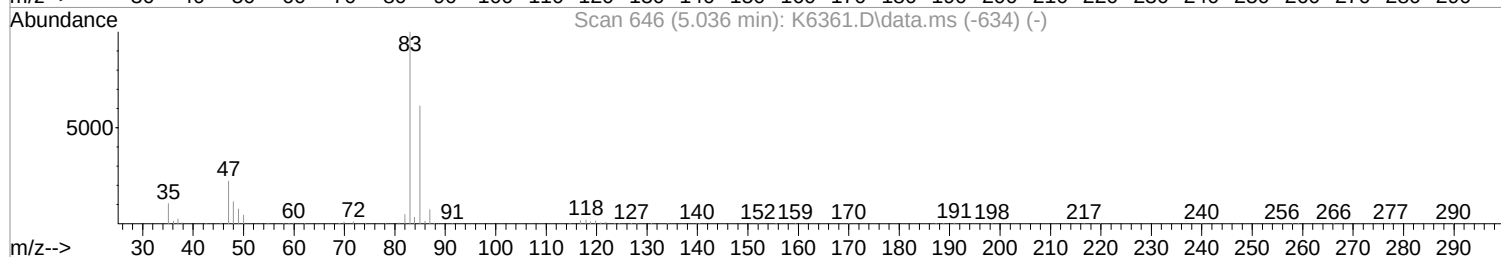
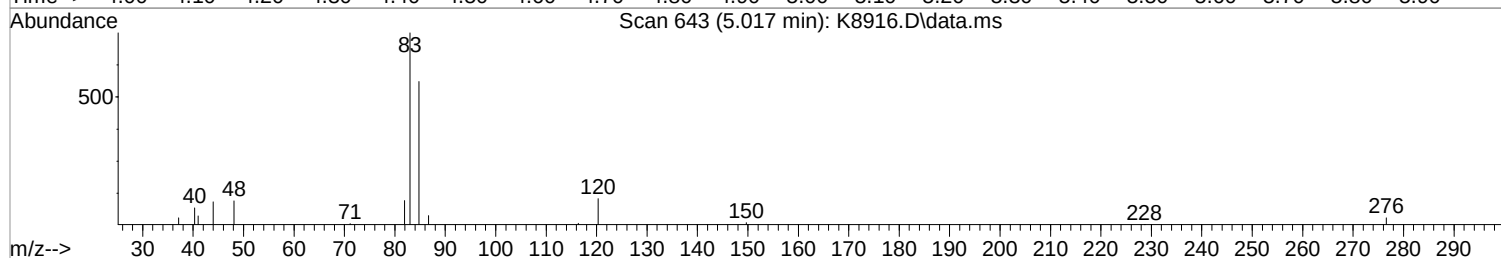
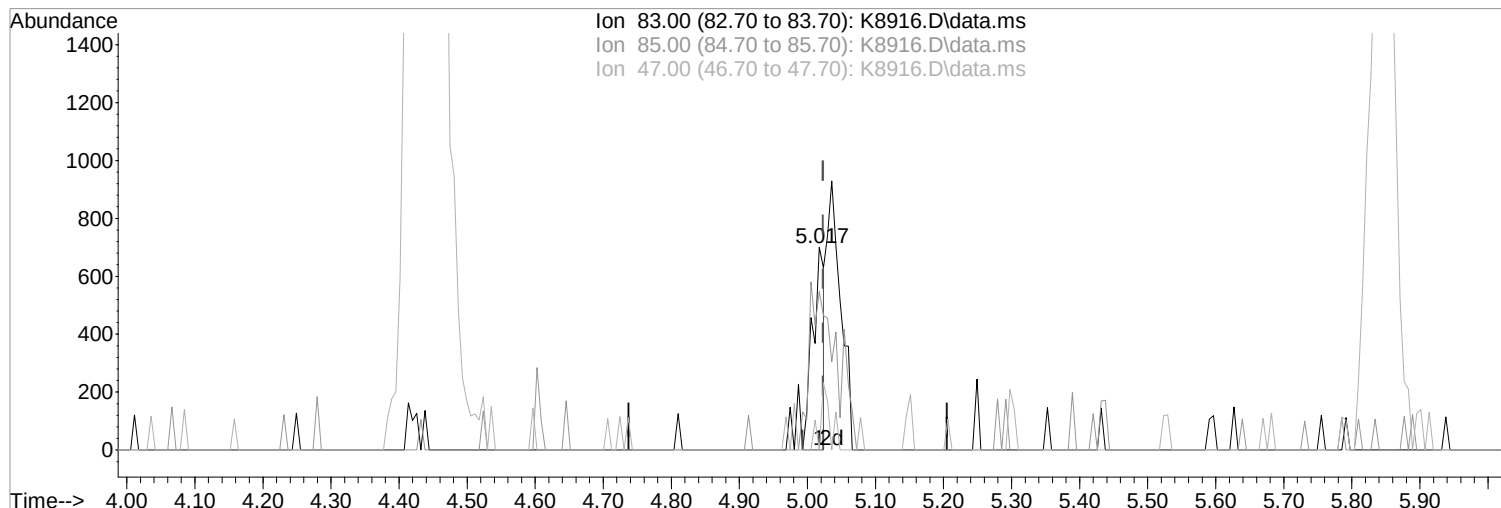
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8916.D
Acq On : 12 Nov 2021 5:58 pm
Operator : K.Ruest
Sample : R2111745-016|10
Misc : LIRO 8260 T4
ALS Vial : 14 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 18:24:24 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8916.D\data.ms

(40) Chloroform (P)

Manual Integration:

5.017min (-0.006) -0.39 ppb

Before

response 836

Ion	Exp%	Act%
83.00	100	100
85.00	61.50	78.29
47.00	22.10	0.00#
0.00	0.00	0.00

11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8916.D
 Acq On : 12 Nov 2021 5:58 pm
 Operator : K.Ruest
 Sample : R2111745-016|10
 Misc : LIRO 8260 T4
 ALS Vial : 14 Sample Multiplier: 1

Inst : MSVOA-12

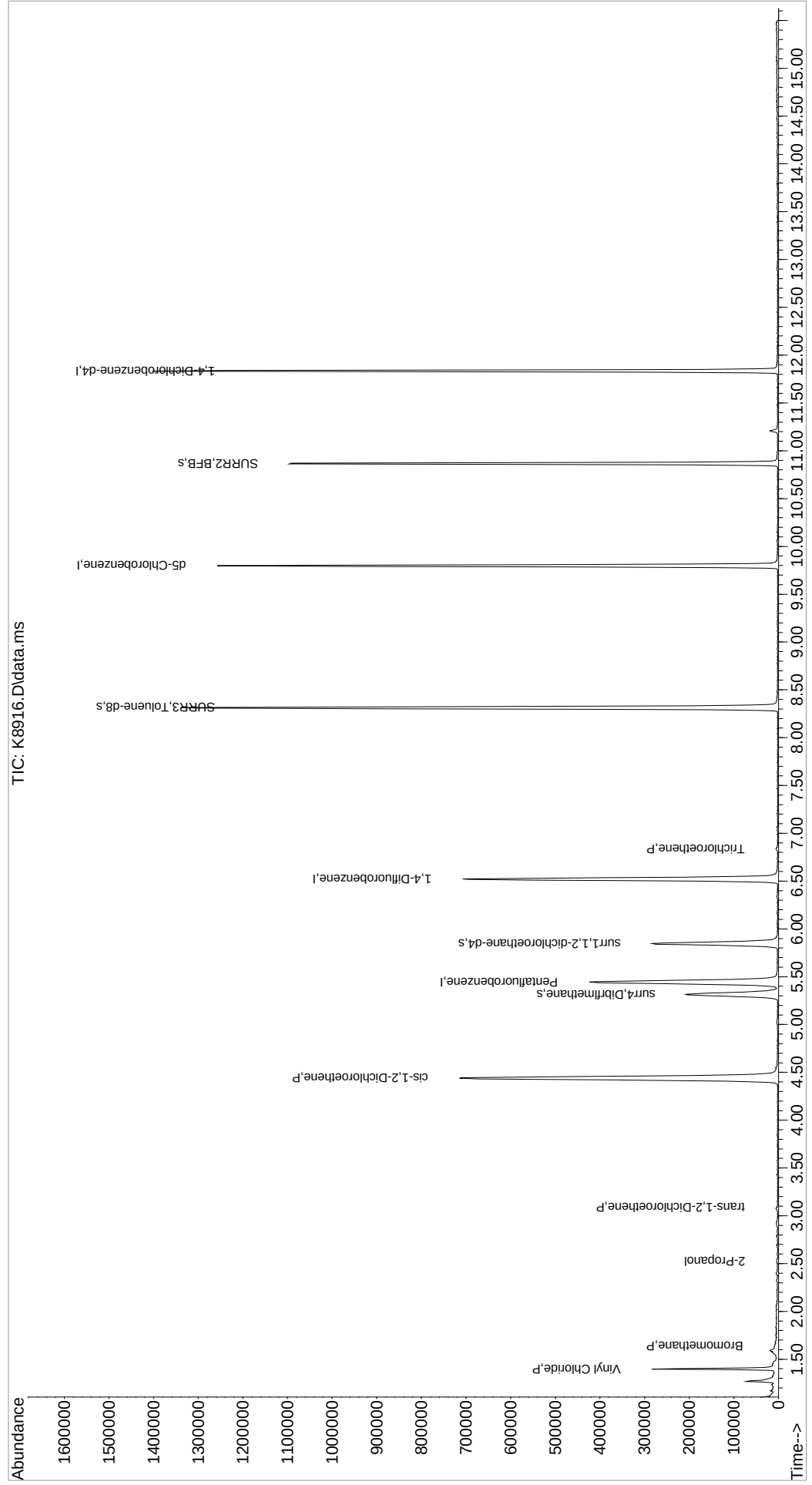
Quant Time: Nov 15 16:11:48 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

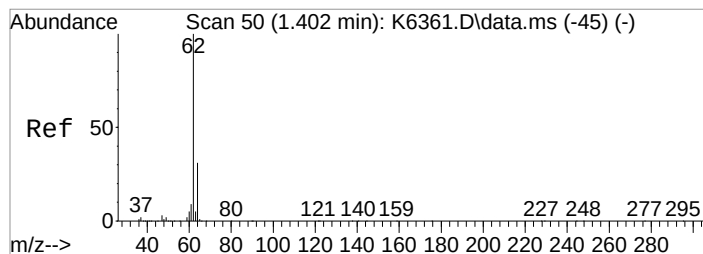
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.444	168	397979	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	642624	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	576431	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	276024	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.310	113	173517	49.60	ppb	0.00
Spiked Amount 50.000	Range 80 - 116		Recovery =	99.20%		
48) surr1,1,2-dichloroetha...	5.846	65	234406	46.08	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery =	92.16%		
65) SURR3,Toluene-d8	8.315	98	860201	52.31	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	104.62%		
70) SURR2,BFB	10.864	95	320061	49.03	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	98.06%		
Target Compounds						
4) Vinyl Chloride	1.396	62	154385	28.68	ppb	Qvalue 99
5) Bromomethane	1.640	94	1498	0.43	ppb	# 37
15) Acetone	2.390	43	2410	Below	Cal	83
16) 2-Propanol	2.524	45	2141	4.14	ppb	67
26) trans-1,2-Dichloroethene	3.085	96	1179m	0.28	ppb	
34) cis-1,2-Dichloroethene	4.438	96	444442	91.12	ppb	86
40) Chloroform	5.036	83	2157m	Below	Cal	
54) Trichloroethene	6.834	130	1029	0.23	ppb	# 75

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

Data Path : I:\ACQDATA\msvoa12\Data\111221\
 Data File : K8916.D
 Acq On : 12 Nov 2021 5:58 pm
 Operator : K.Ruest
 Sample : R2111745-016|10
 Misc : LIR0 8260 T4
 ALS Vial : 14 Sample Multiplier: 1
 Inst : MSV0A-12

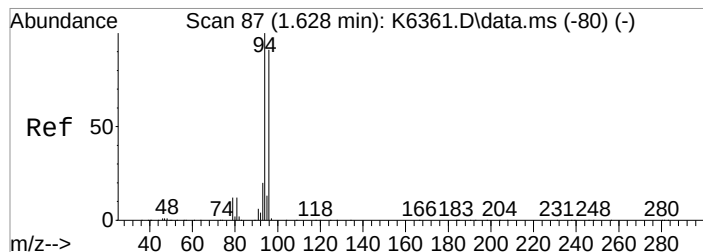
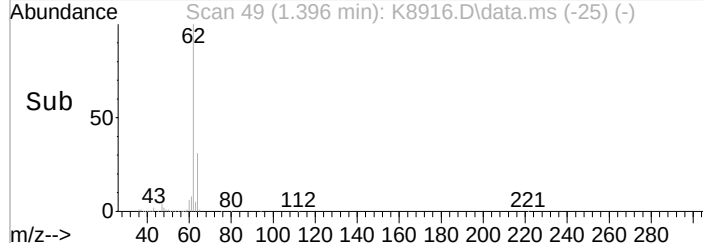
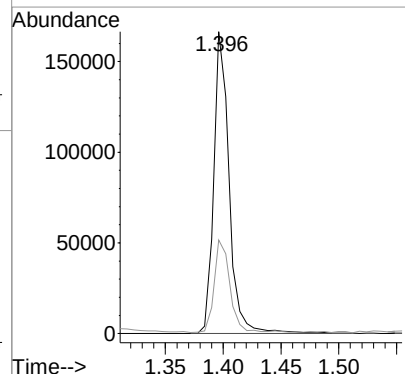
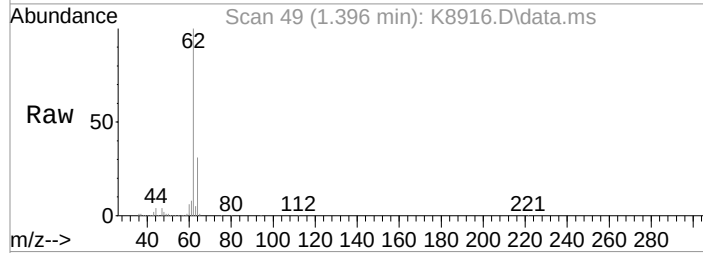
Quant Time: Nov 15 16:11:48 2021
 Quant Method : I:\ACQDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 Qlast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration





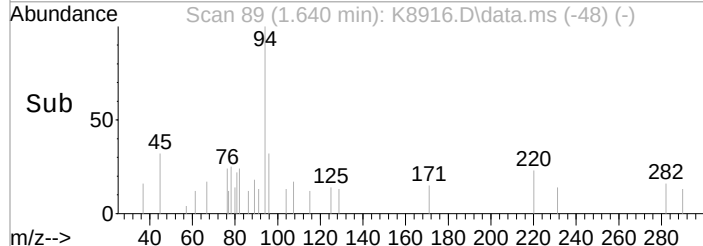
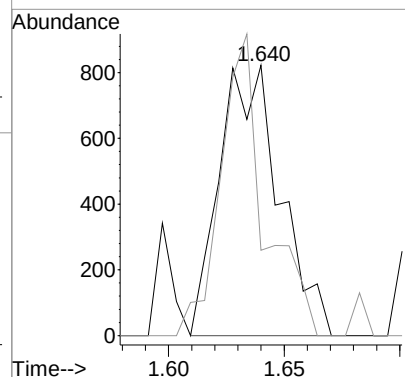
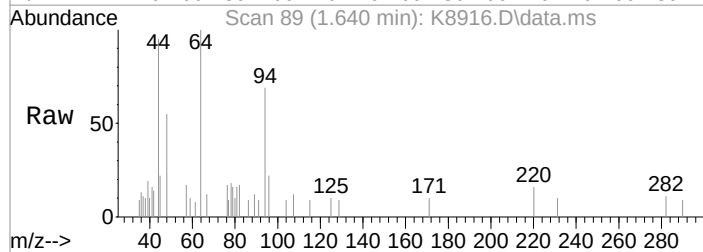
#4
 Vinyl Chloride
 Concen: 28.68 ppb
 RT: 1.396 min Scan# 49
 Delta R.T. 0.000 min
 Lab File: K8916.D
 Acq: 12 Nov 2021 5:58 pm

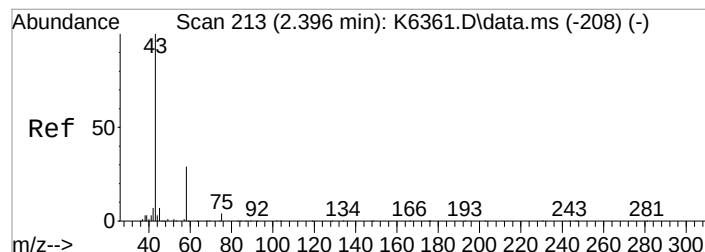
Tgt Ion: 62 Resp: 154385
 Ion Ratio Lower Upper
 62 100
 64 31.0 11.5 51.5



#5
 Bromomethane
 Concen: 0.43 ppb
 RT: 1.640 min Scan# 89
 Delta R.T. 0.024 min
 Lab File: K8916.D
 Acq: 12 Nov 2021 5:58 pm

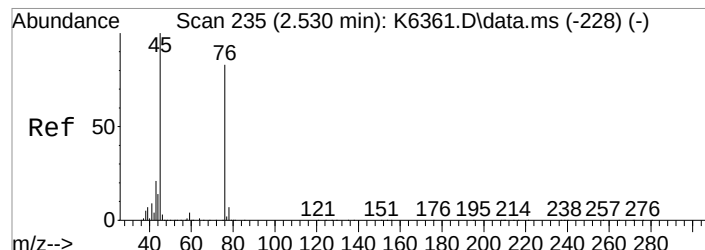
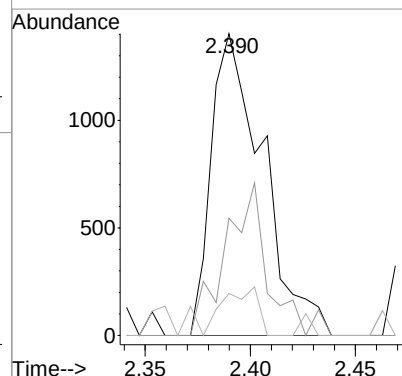
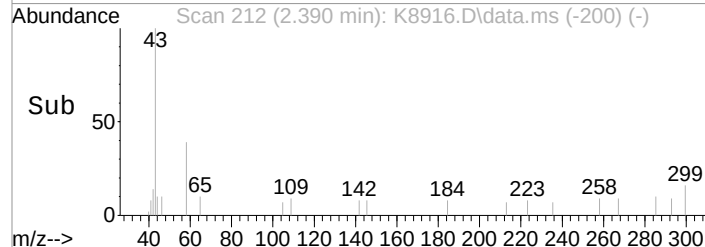
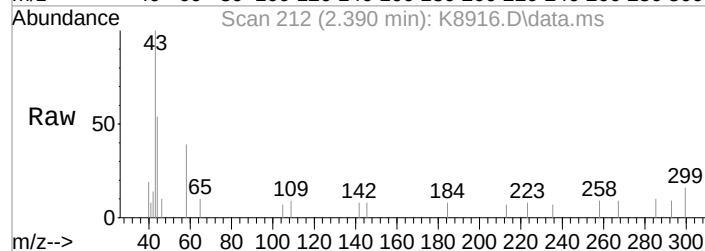
Tgt Ion: 94 Resp: 1498
 Ion Ratio Lower Upper
 94 100
 96 31.6 71.0 111.0#





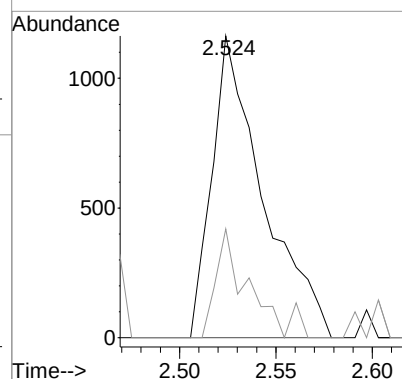
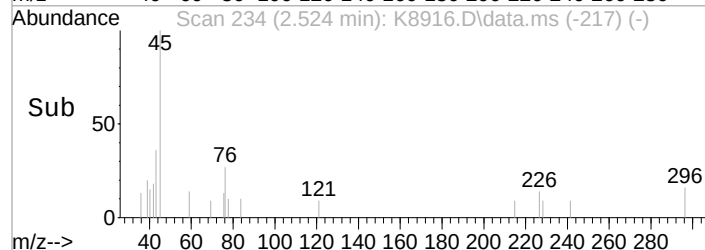
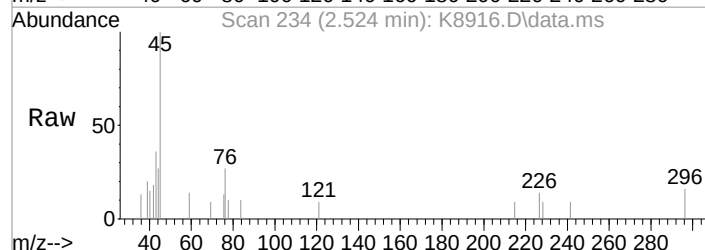
#15
 Acetone
 Concen: Below Cal
 RT: 2.390 min Scan# 212
 Delta R.T. 0.001 min
 Lab File: K8916.D
 Acq: 12 Nov 2021 5:58 pm

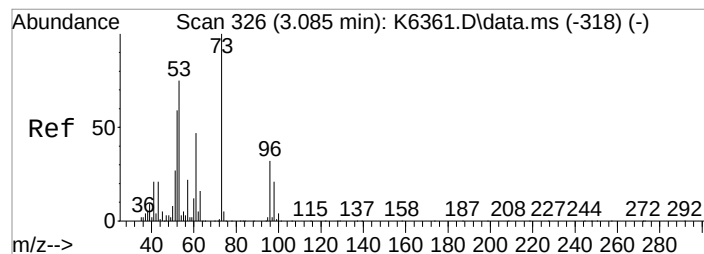
Tgt Ion:	43	Resp:	2410
Ion Ratio		Lower	Upper
43	100		
58	38.8	9.6	49.6
42	13.9	0.0	27.7



#16
 2-Propanol
 Concen: 4.14 ppb
 RT: 2.524 min Scan# 234
 Delta R.T. -0.006 min
 Lab File: K8916.D
 Acq: 12 Nov 2021 5:58 pm

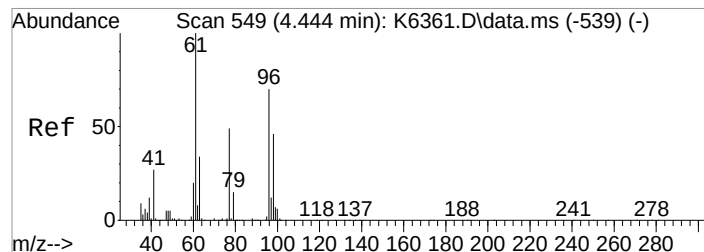
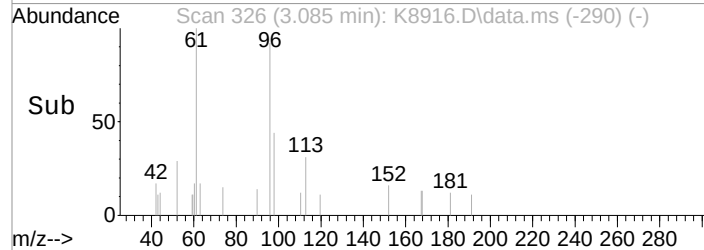
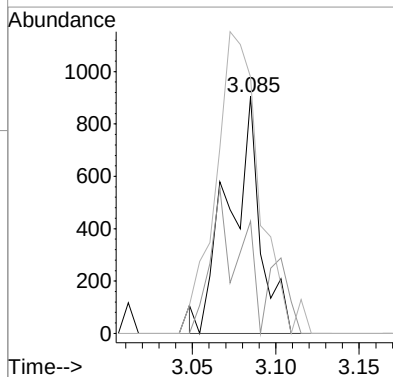
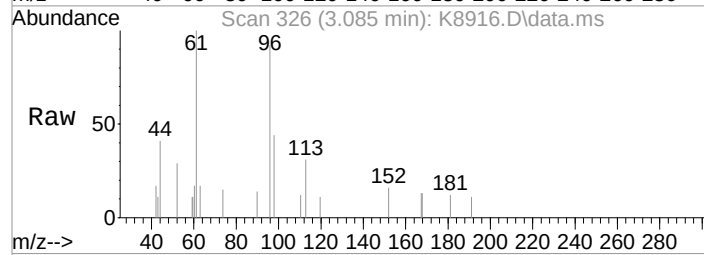
Tgt Ion:	45	Resp:	2141
Ion Ratio		Lower	Upper
45	100		
43	36.1	0.6	40.6





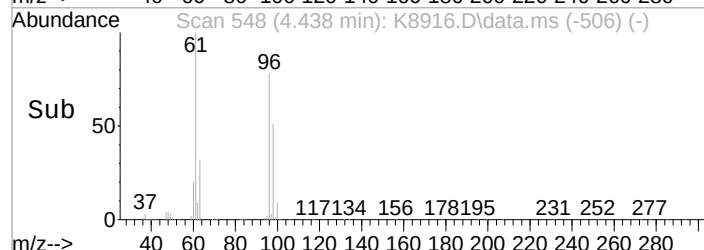
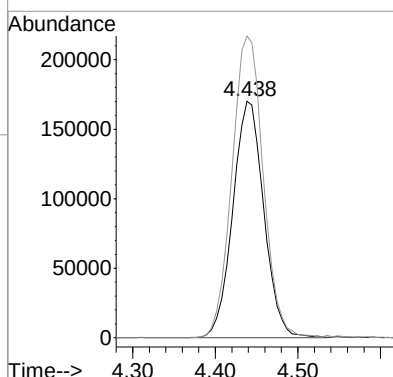
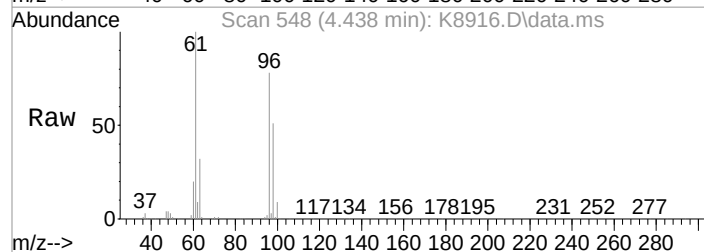
#26
 trans-1,2-Dichloroethene
 Concen: 0.28 ppb m
 RT: 3.085 min Scan# 326
 Delta R.T. 0.012 min
 Lab File: K8916.D
 Acq: 12 Nov 2021 5:58 pm

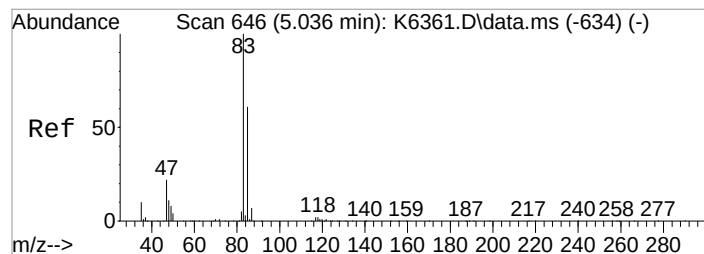
Tgt Ion	96	Resp	1179
Ion Ratio	Lower	Upper	
96	100		
98	47.4	44.1	84.1
61	108.2	127.9	167.9#



#34
 cis-1,2-Dichloroethene
 Concen: 91.12 ppb
 RT: 4.438 min Scan# 548
 Delta R.T. 0.000 min
 Lab File: K8916.D
 Acq: 12 Nov 2021 5:58 pm

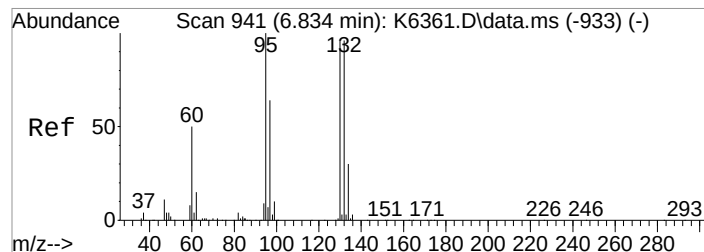
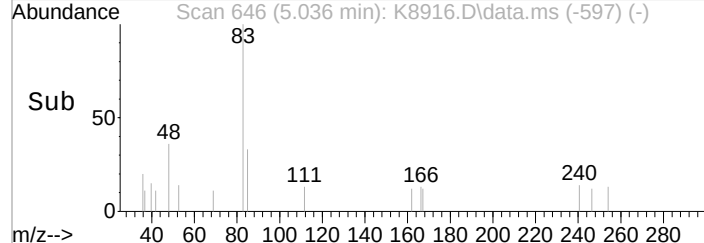
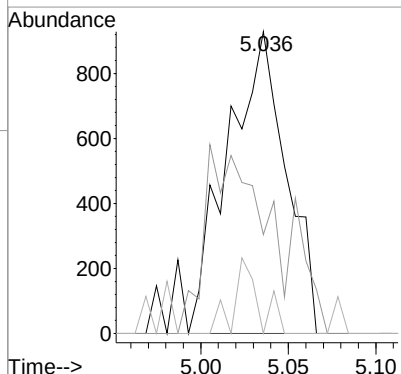
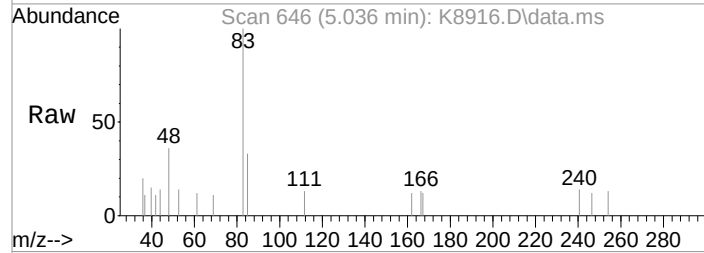
Tgt Ion	96	Resp	444442
Ion Ratio	Lower	Upper	
96	100		
61	127.7	125.2	165.2





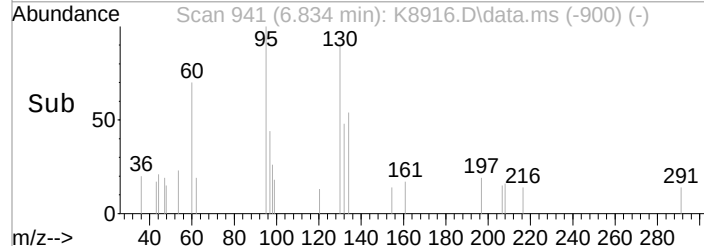
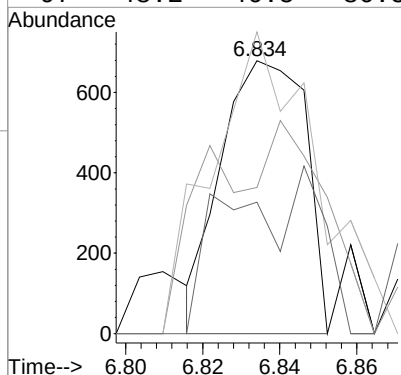
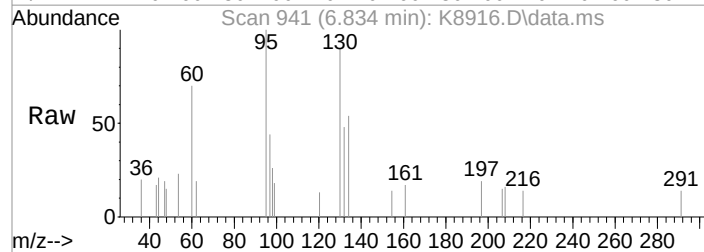
#40
Chloroform
Concen: Below Cal m
RT: 5.036 min Scan# 646
Delta R.T. 0.013 min
Lab File: K8916.D
Acq: 12 Nov 2021 5:58 pm

Tgt Ion:	83	Resp:	2157
Ion Ratio		Lower	Upper
83	100		
85	32.7	41.5	81.5#
47	0.0	2.1	42.1#



#54
Trichloroethene
Concen: 0.23 ppb
RT: 6.834 min Scan# 941
Delta R.T. 0.000 min
Lab File: K8916.D
Acq: 12 Nov 2021 5:58 pm

Tgt Ion:	130	Resp:	1029
Ion Ratio		Lower	Upper
130	100		
132	53.6	79.7	119.7#
95	110.6	83.8	123.8
97	48.2	46.5	86.5



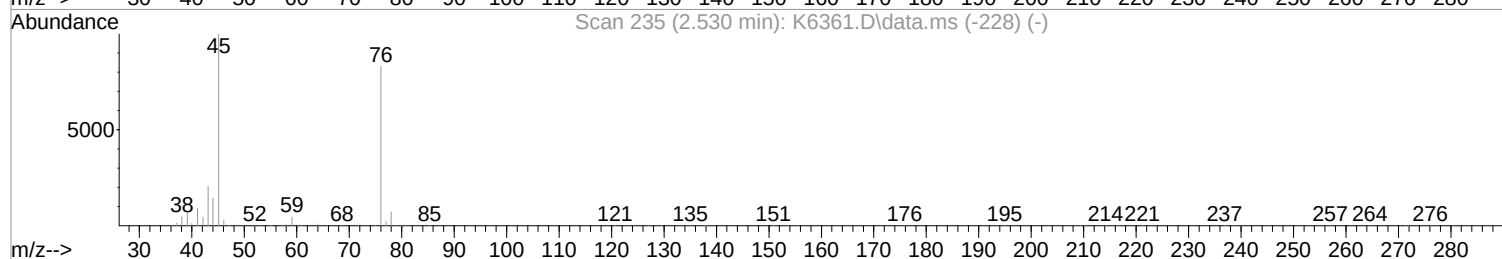
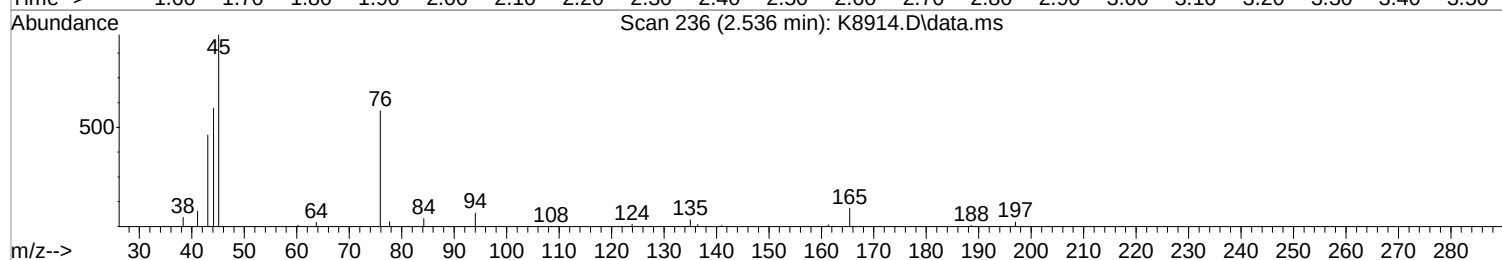
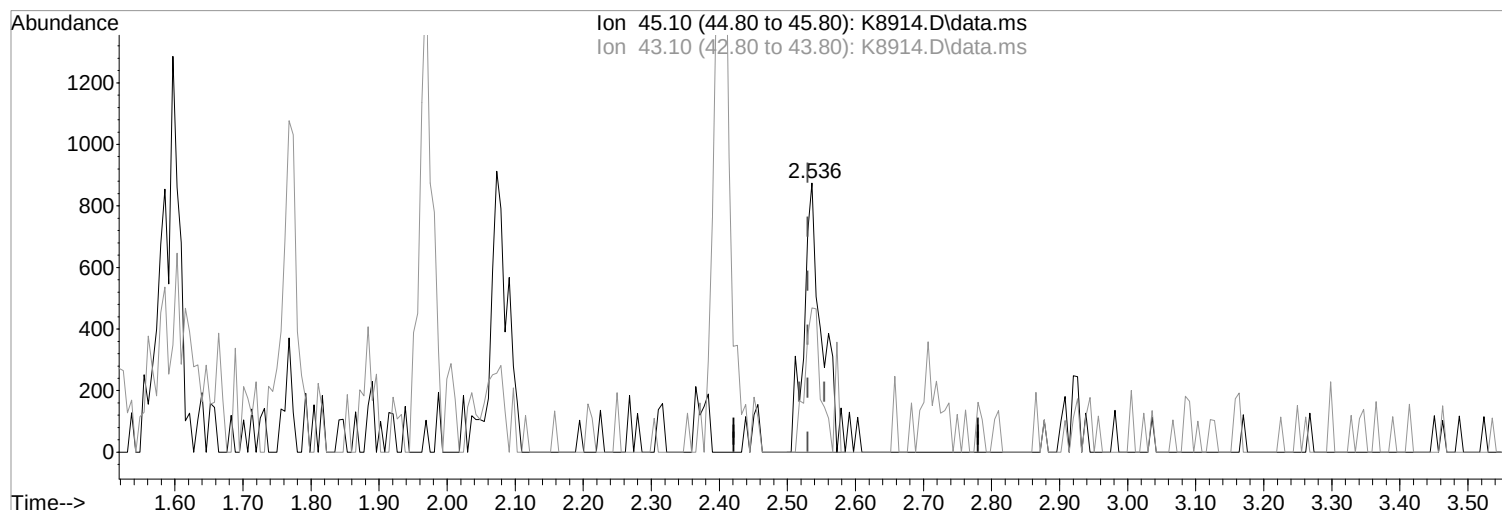
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8914.D
Acq On : 12 Nov 2021 5:15 pm
Operator : K.Ruest
Sample : R2111745-017|2.5
Misc : LIRO 8260 T4
ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 17:31:29 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8914.D\data.ms

(16) 2-Propanol

Manual Integration:

2.536min (+0.006) 3.31 ppb m

After

response 1608

Poor integration.

Ion	Exp%	Act%
45.10	100	100
43.10	20.60	53.66#
0.00	0.00	0.00
0.00	0.00	0.00

11/15/21

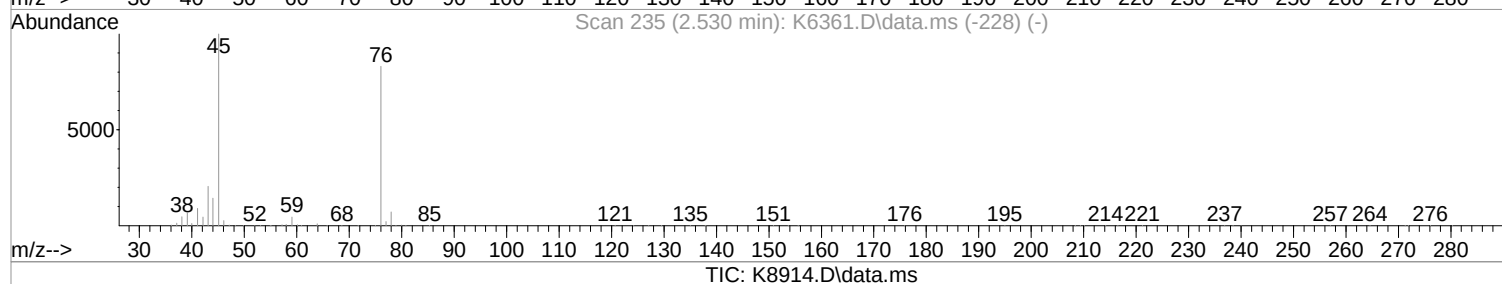
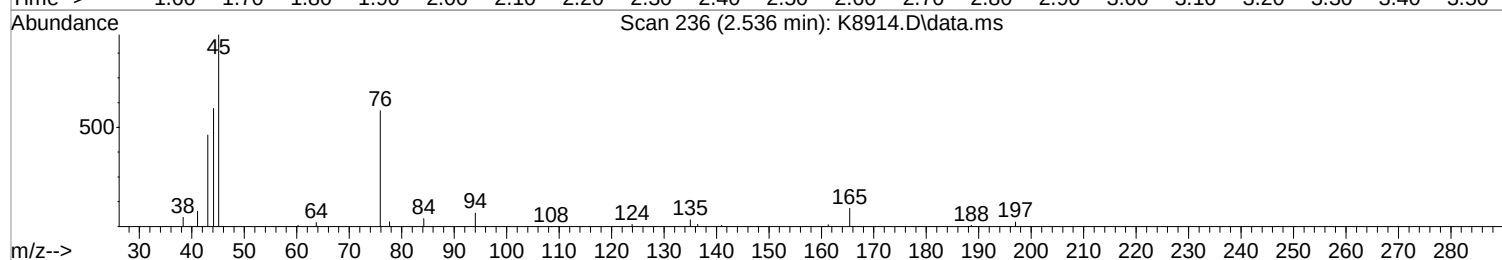
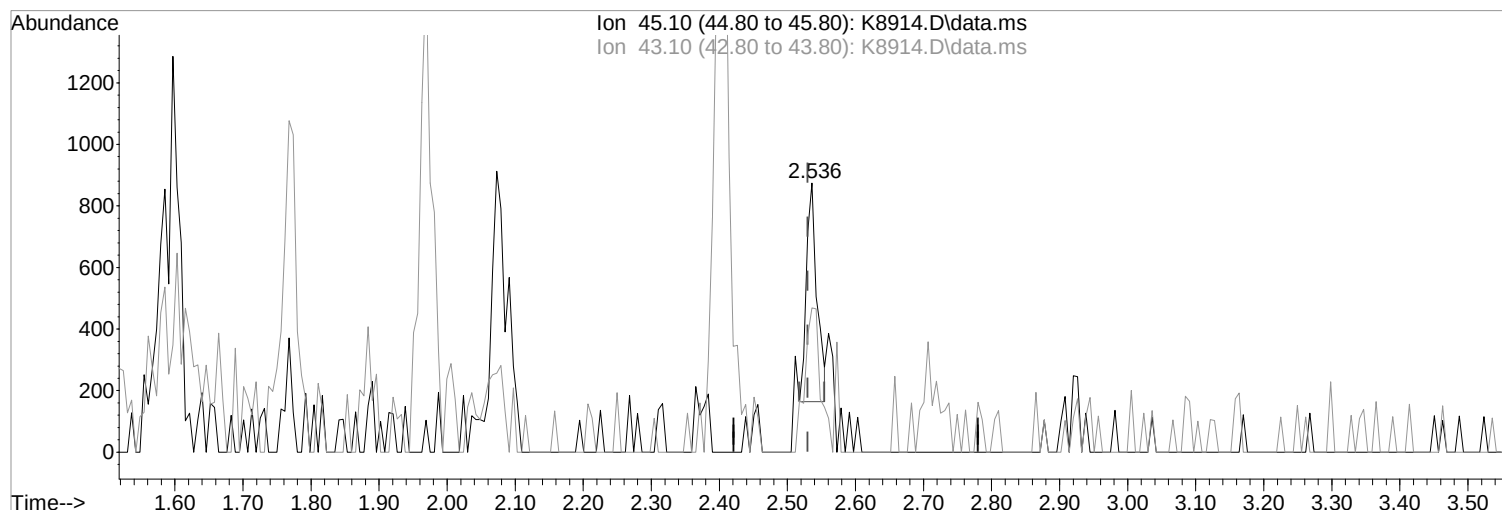
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8914.D
Acq On : 12 Nov 2021 5:15 pm
Operator : K.Ruest
Sample : R2111745-017|2.5
Misc : LIRO 8260 T4
ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 17:31:29 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



(16) 2-Propanol

Manual Integration:

2.536min (+0.006) 1.58 ppb

Before

response 767

Ion Exp% Act%

11/15/21

45.10 100 100

43.10 20.60 53.66#

0.00 0.00 0.00

0.00 0.00 0.00

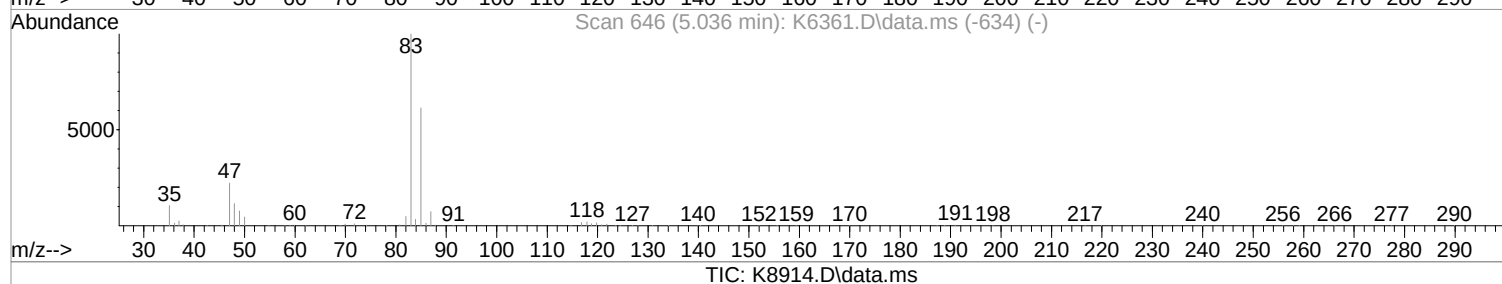
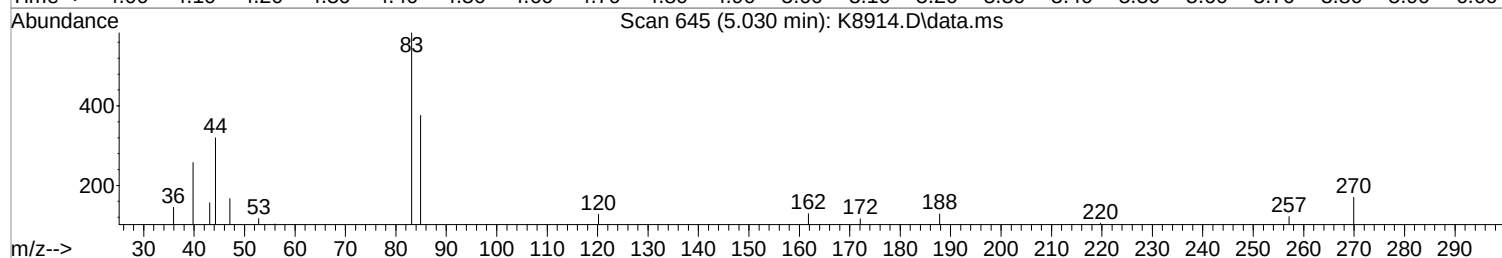
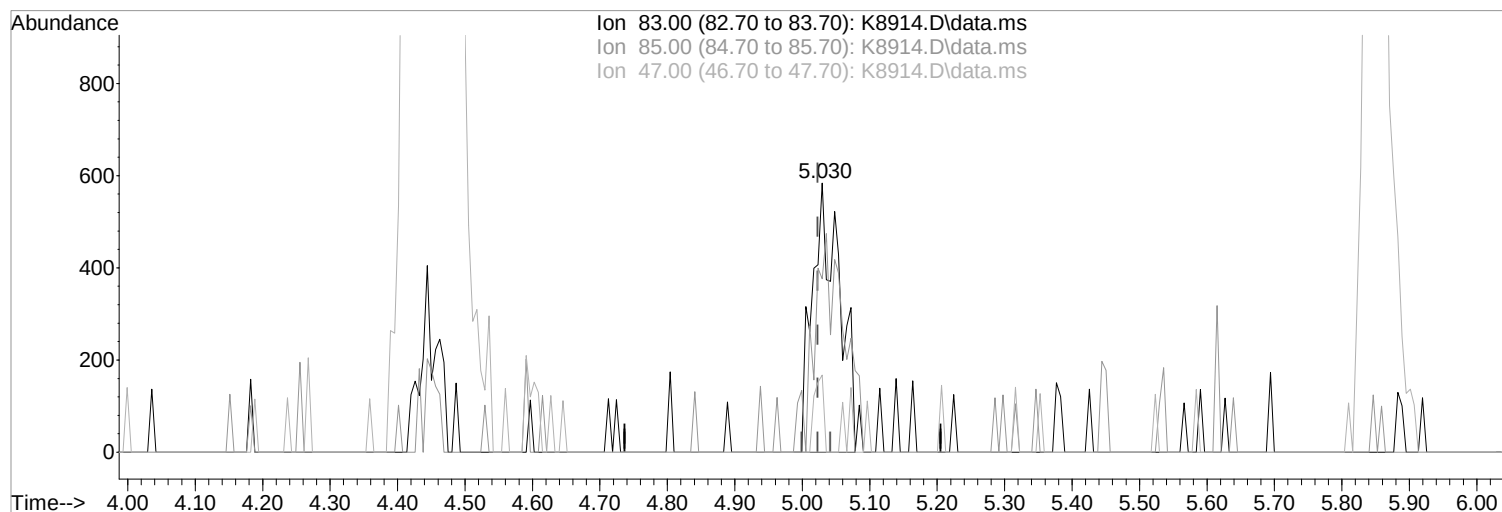
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8914.D
Acq On : 12 Nov 2021 5:15 pm
Operator : K.Ruest
Sample : R2111745-017|2.5
Misc : LIRO 8260 T4
ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 17:31:29 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



(40) Chloroform (P)

Manual Integration:

5.030min (+0.007) -0.28 ppb m

After

response 1628

Split Peak

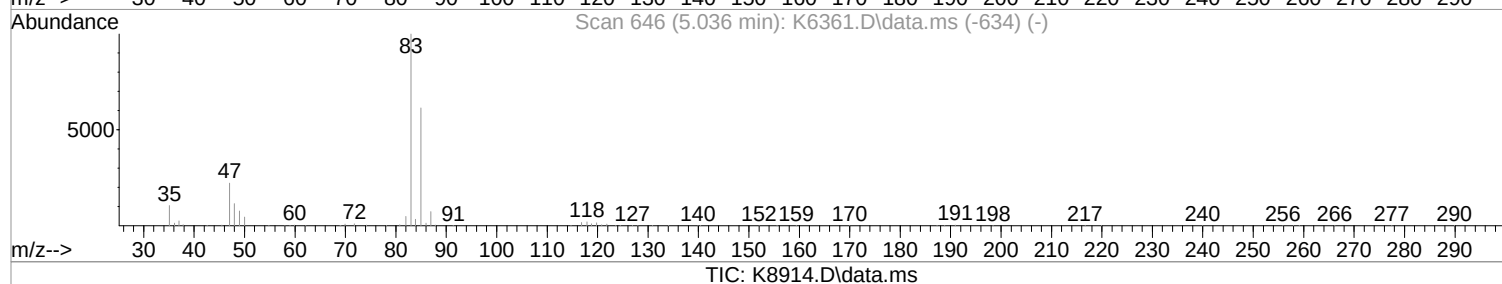
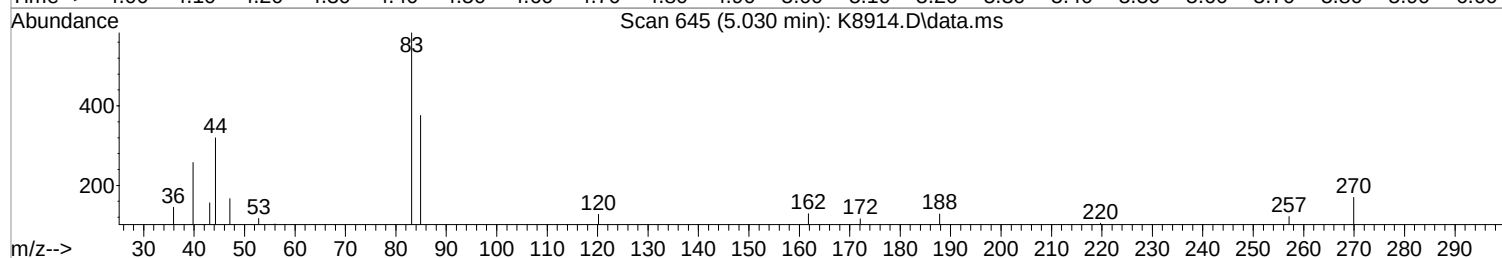
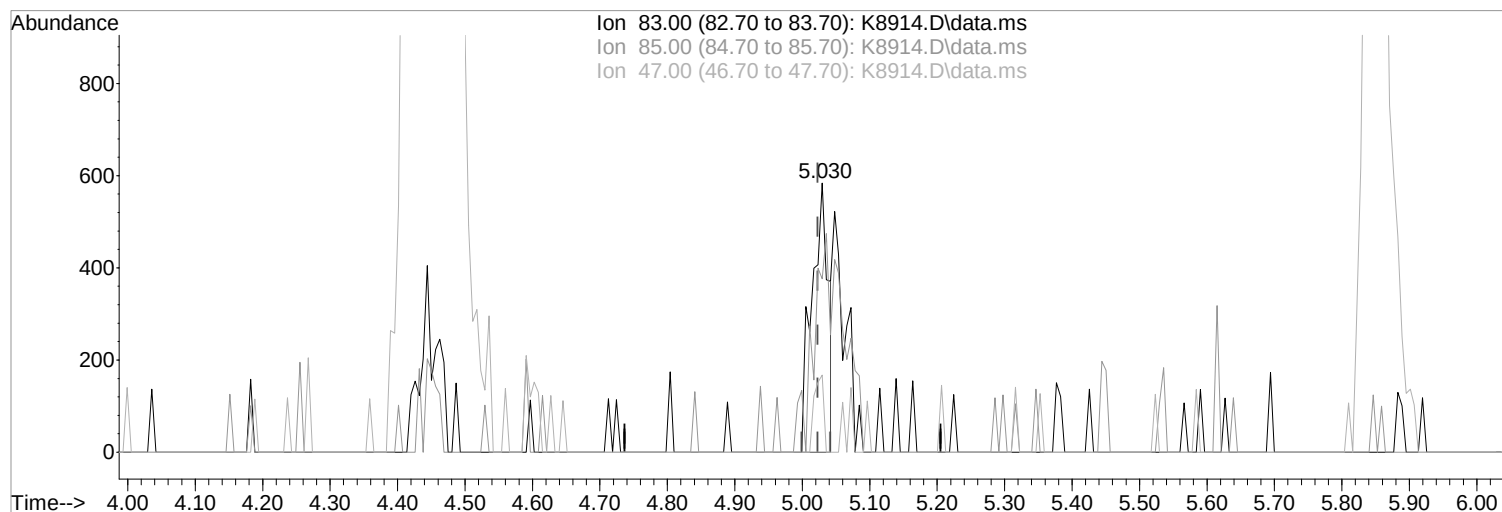
Ion	Exp%	Act%
83.00	100	100
85.00	61.50	64.38
47.00	22.10	28.60
0.00	0.00	0.00

11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8914.D
Acq On : 12 Nov 2021 5:15 pm
Operator : K.Ruest
Sample : R2111745-017|2.5
Misc : LIRO 8260 T4
ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 17:31:29 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



(40) Chloroform (P)

Manual Integration:

5.030min (+0.007) -0.37 ppb

Before

response 992

Ion	Exp%	Act%
83.00	100	100
85.00	61.50	64.38
47.00	22.10	28.60
0.00	0.00	0.00

11/15/21

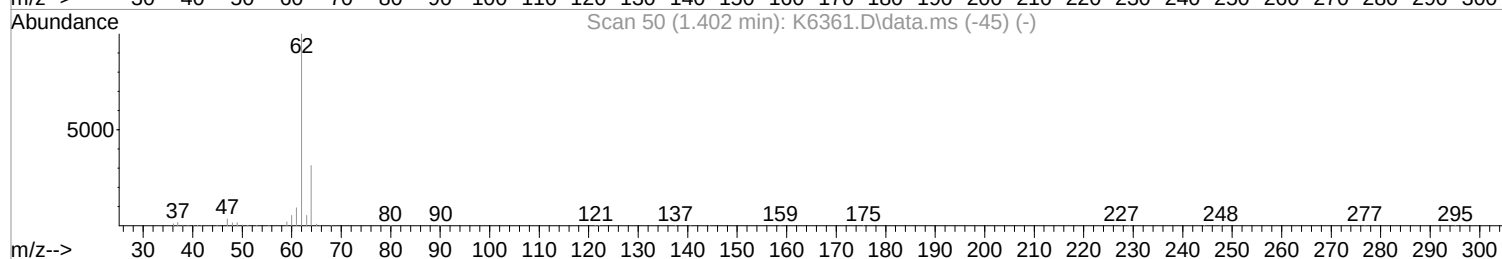
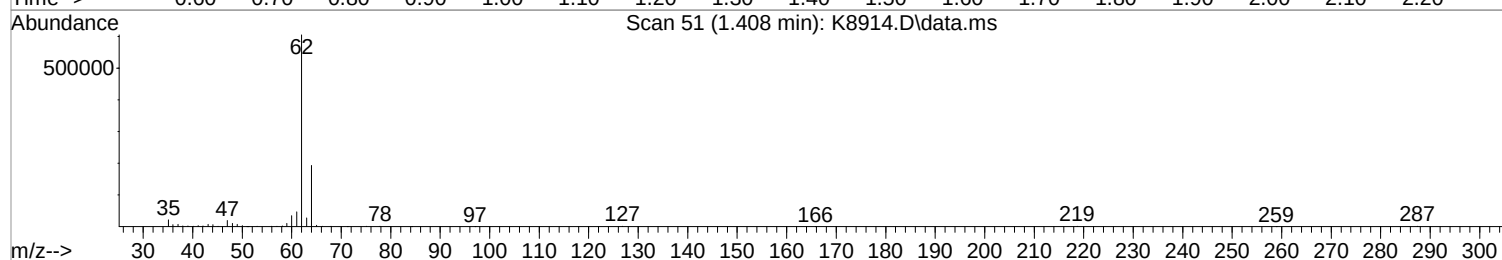
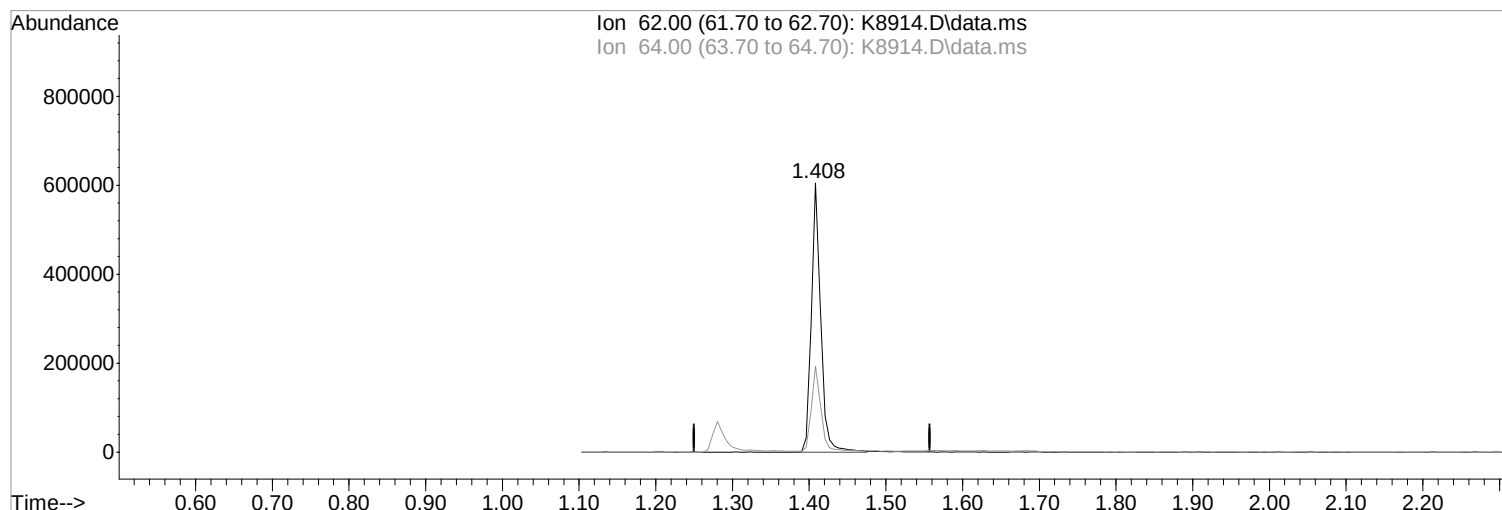
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8914.D
Acq On : 12 Nov 2021 5:15 pm
Operator : K.Ruest
Sample : R2111745-017|2.5
Misc : LIRO 8260 T4
ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 17:31:29 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8914.D\data.ms

(4) Vinyl Chloride (P)

1.408min (+0.012) 101.58 ppb m

response 514243

Ion	Exp%	Act%
62.00	100	100
64.00	31.50	31.90
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Peak not found.

11/15/21

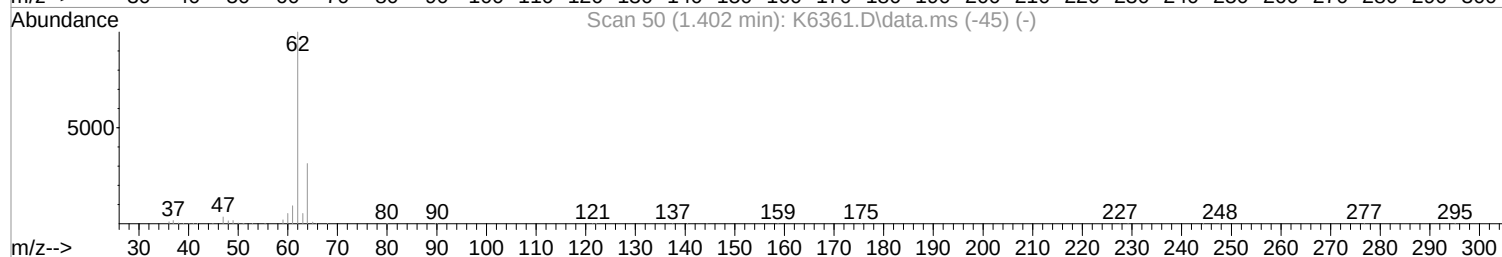
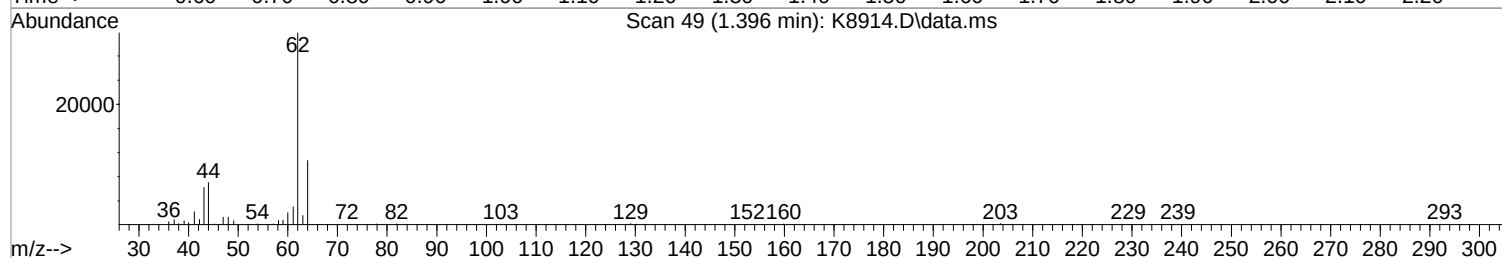
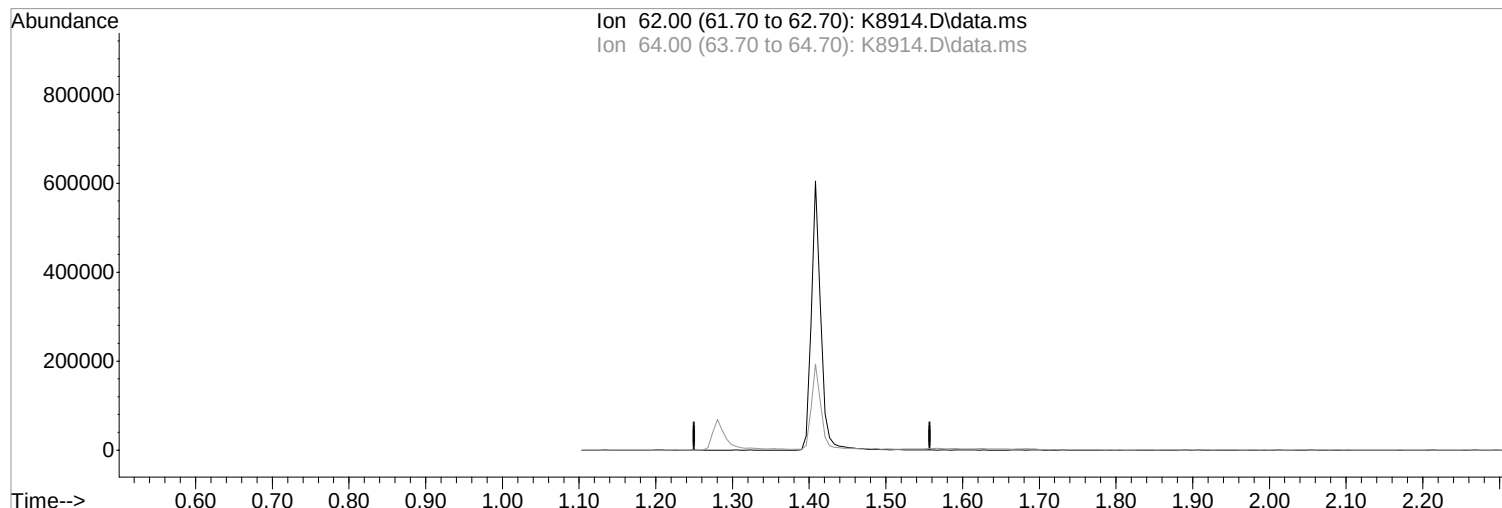
Quantitation Report (Qedit)

1st *12* 11/15/21
2nd *FJ* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8914.D
Acq On : 12 Nov 2021 5:15 pm
Operator : K.Ruest
Sample : R2111745-017|2.5
Misc : LIRO 8260 T4
ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 17:31:29 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8914.D\data.ms

(4) Vinyl Chloride (P)

Manual Integration:

1.396min (-1.396) 0.00 ppb

Before

response 0

Ion	Exp%	Act%
62.00	100	0.00
64.00	31.50	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

11/15/21

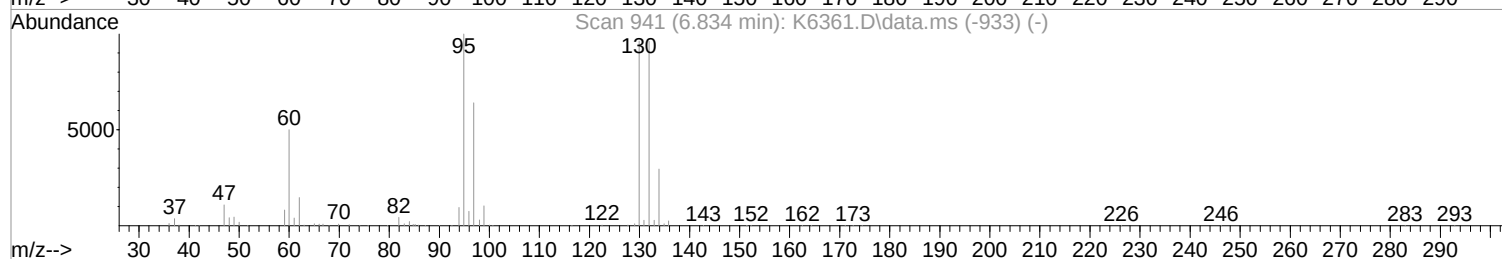
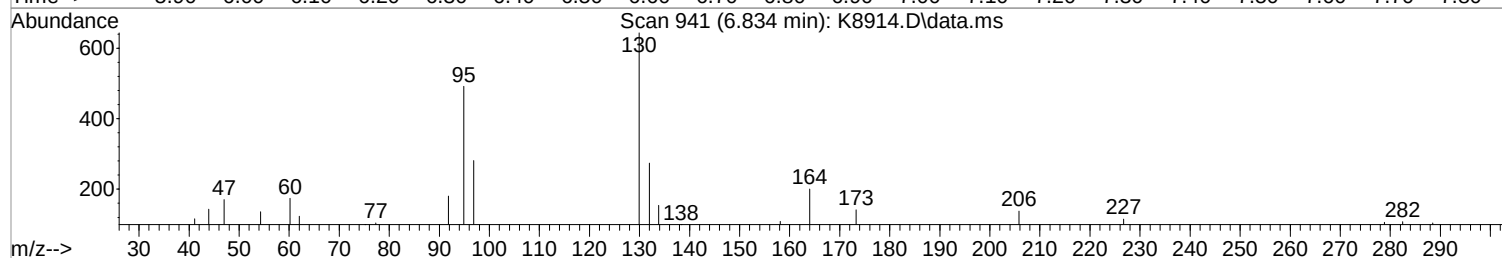
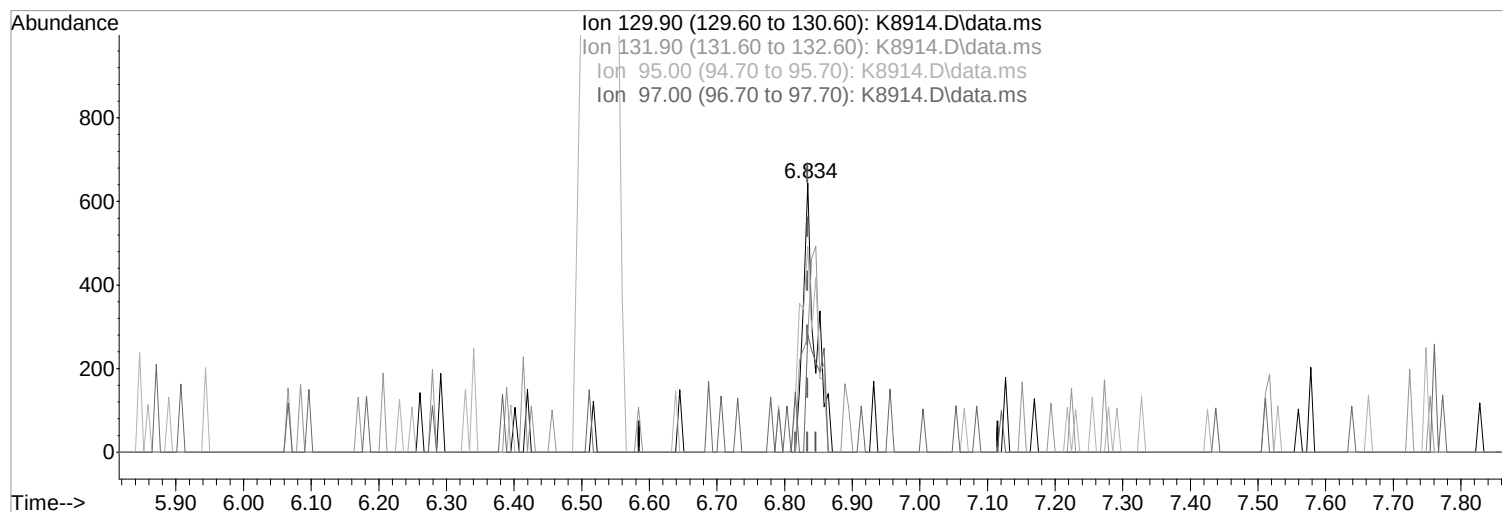
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8914.D
Acq On : 12 Nov 2021 5:15 pm
Operator : K.Ruest
Sample : R2111745-017|2.5
Misc : LIRO 8260 T4
ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 17:31:29 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8914.D\data.ms

(54) Trichloroethene (P)

Manual Integration:

6.834min (+0.000) 0.19 ppb m

After

response 820

Split Peak

Ion Exp% Act%

11/15/21

129.90 100 100

131.90 99.70 42.55#

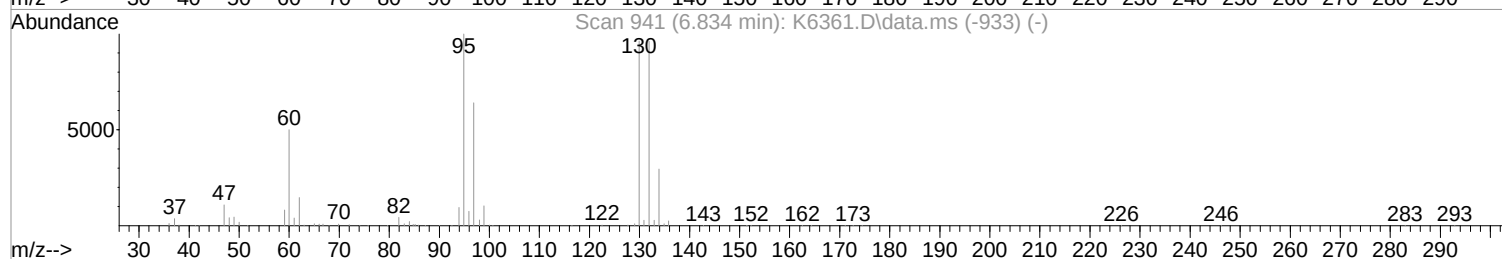
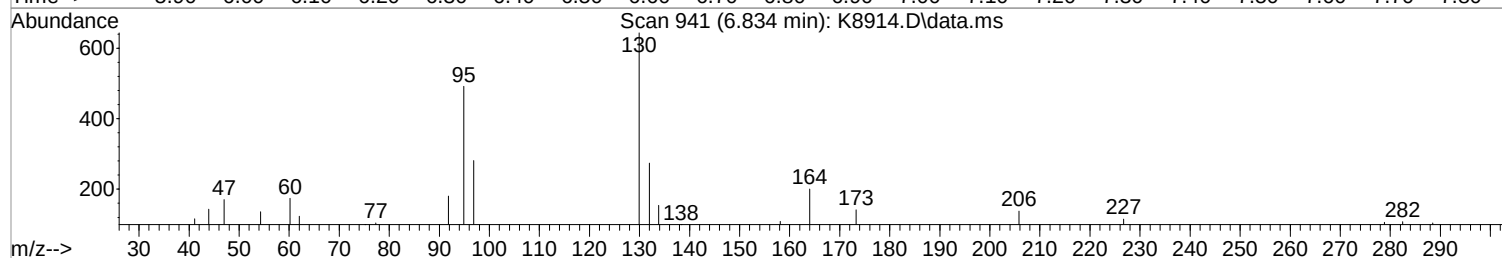
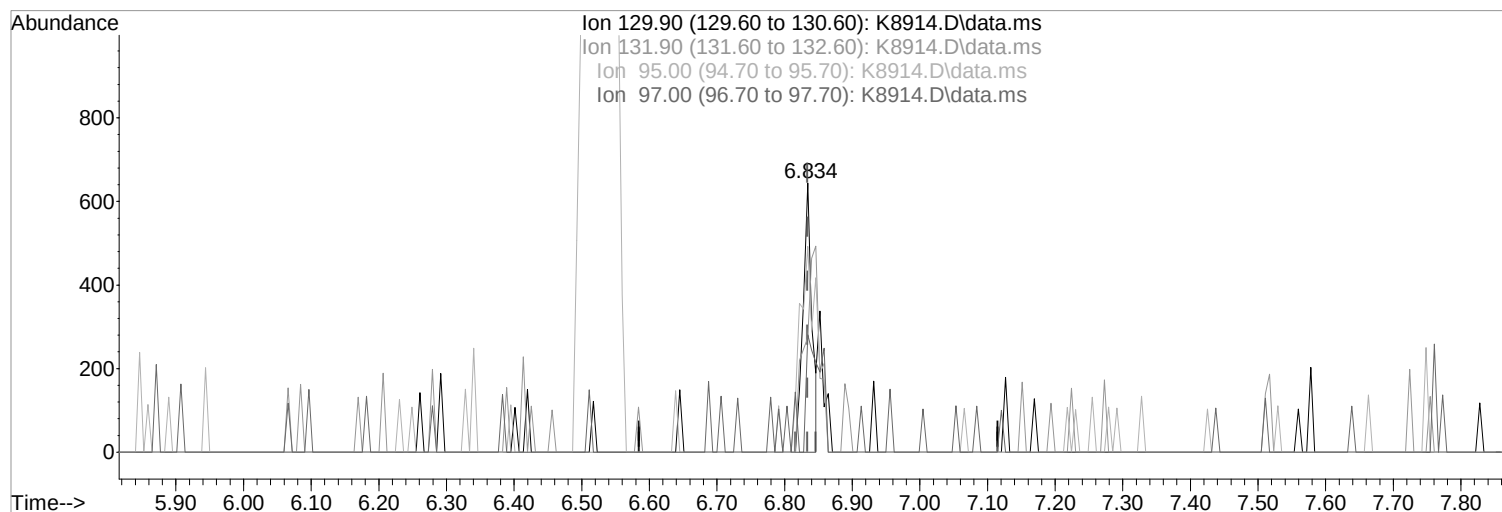
95.00 103.80 76.40#

97.00 66.50 43.63#

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8914.D
Acq On : 12 Nov 2021 5:15 pm
Operator : K.Ruest
Sample : R2111745-017|2.5
Misc : LIRO 8260 T4
ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 17:31:29 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8914.D\data.ms

(54) Trichloroethene (P)

Manual Integration:

6.834min (+0.000) 0.14 ppb

Before

response 605

Ion	Exp%	Act%

11/15/21

129.90	100	100

131.90	99.70	42.55#

95.00	103.80	76.40#

97.00	66.50	43.63#

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8914.D
 Acq On : 12 Nov 2021 5:15 pm
 Operator : K.Ruest
 Sample : R2111745-017|2.5
 Misc : LIRO 8260 T4
 ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA-12

repeat 10

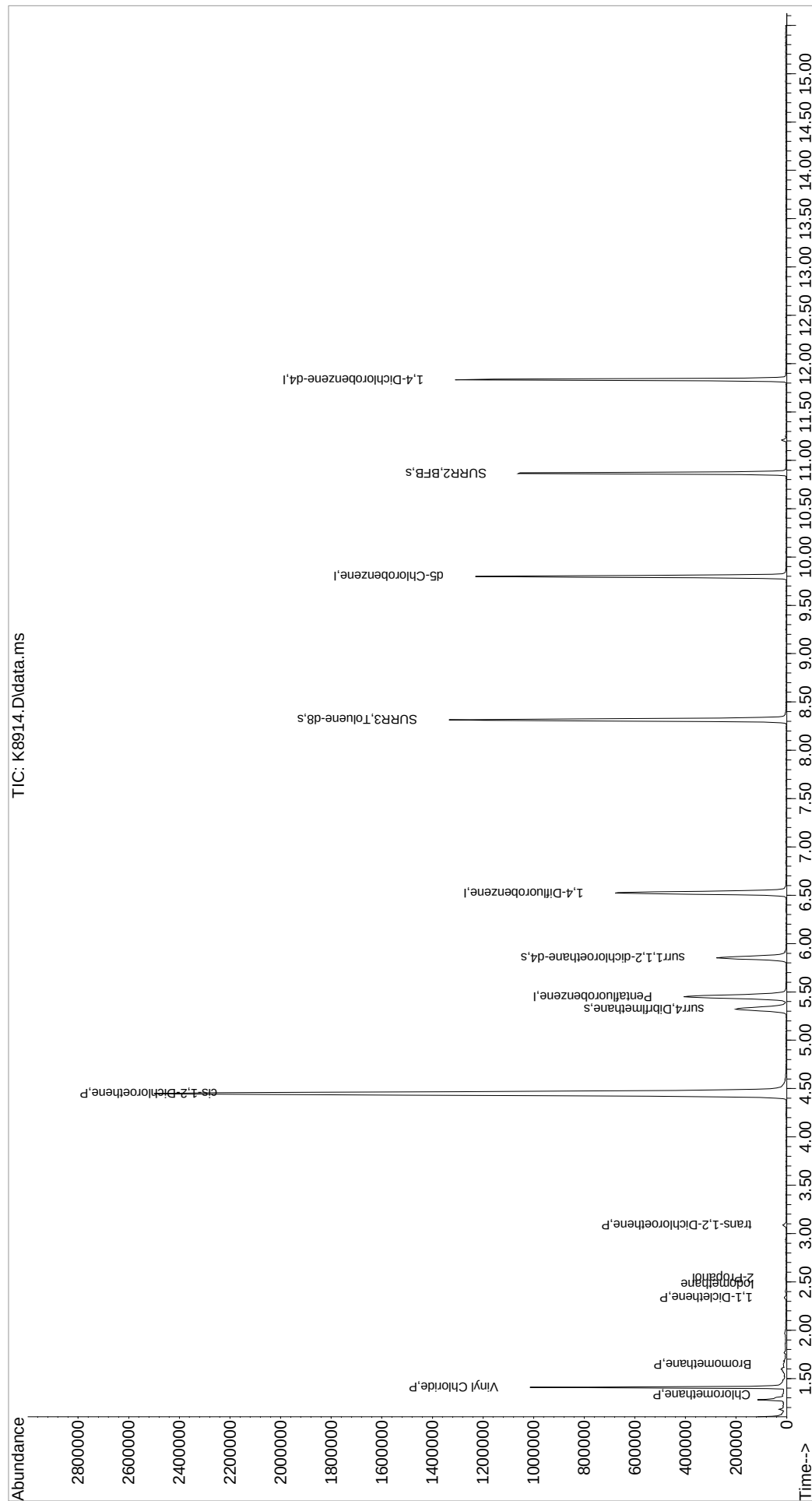
Quant Time: Nov 15 16:07:38 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

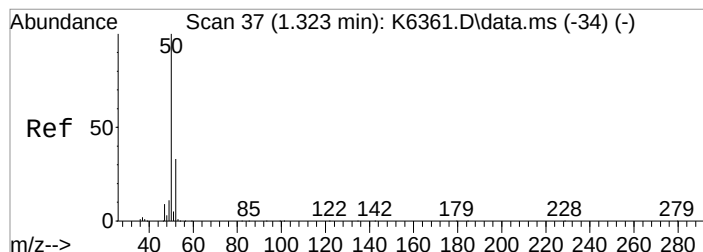
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	374248	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	618017	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	556824	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	264138	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.322	113	170293	50.62	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	101.24%	
48) surr1,1,2-dichloroetha...	5.853	65	227487	46.50	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	93.00%	
65) SURR3,Toluene-d8	8.315	98	829073	52.43	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	104.86%	
70) SURR2,BFB	10.864	95	307297	48.95	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	97.90%	
Target Compounds						
3) Chloromethane	1.329	50	1808	0.42	ppb	Qvalue 90
4) Vinyl Chloride	1.408	62	514243m	101.58	ppb	
5) Bromomethane	1.646	94	1910	0.58	ppb	# 72
13) 1,1-Diclethene	2.341	96	2087	0.57	ppb	# 78
15) Acetone	2.408	43	3005	Below	Cal	94
16) 2-Propanol	2.536	45	1608m	3.31	ppb	
17) Iodomethane	2.475	142	483	1.47	ppb	77
26) trans-1,2-Dichloroethene	3.085	96	4001	1.00	ppb	97
34) cis-1,2-Dichloroethene	4.450	96	1495893	326.13	ppb	87 E-Over Calibration
40) Chloroform	5.030	83	1628m	Below	Cal	

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

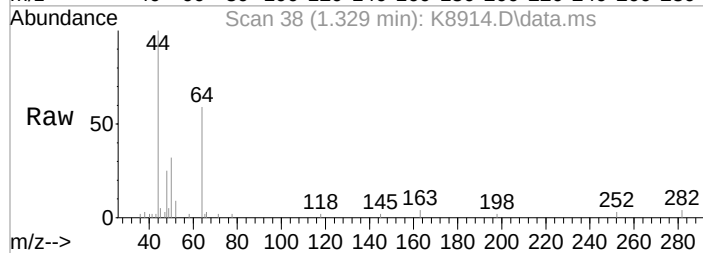
Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8914.D
Acq On : 12 Nov 2021 5:15 pm
Operator : K.Ruest
Sample : R2111745-017|2.5
Misc : LIRO 8260 T4
ALS Vial : 12 Sample Multiplier: 1
Inst : MSV0A-12

Quant Time: Nov 15 16:07:38 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration

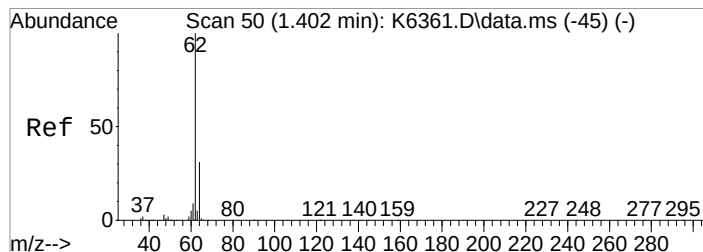
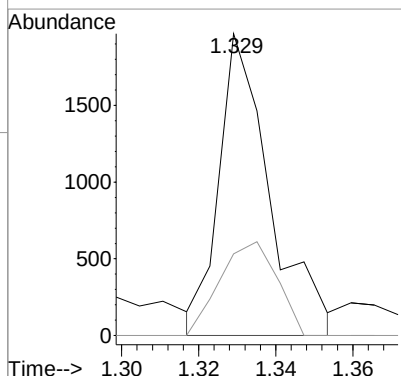
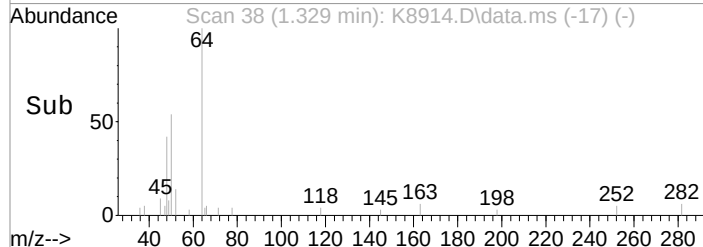




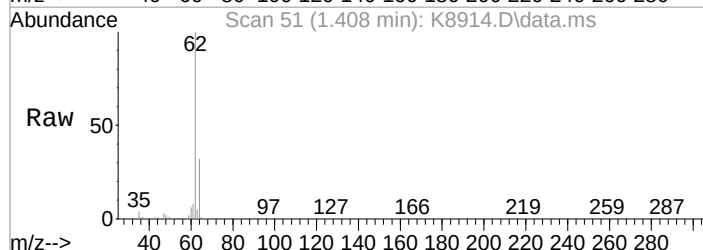
#3
 Chloromethane
 Concen: 0.42 ppb
 RT: 1.329 min Scan# 38
 Delta R.T. 0.012 min
 Lab File: K8914.D
 Acq: 12 Nov 2021 5:15 pm



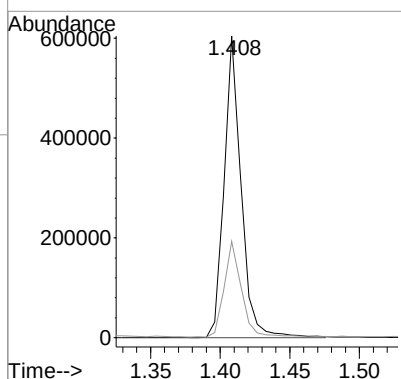
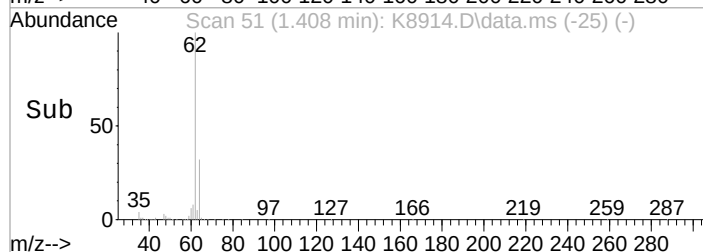
Tgt Ion: 50 Resp: 1808
 Ion Ratio Lower Upper
 50 100
 52 27.0 12.7 52.7

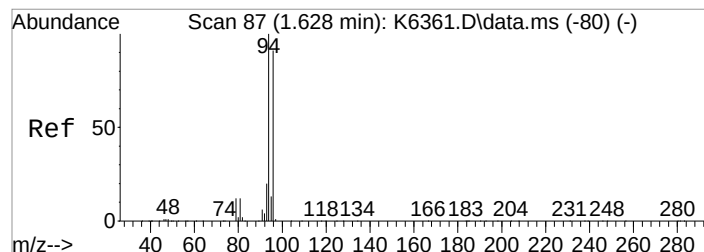


#4
 Vinyl Chloride
 Concen: 101.58 ppb m
 RT: 1.408 min Scan# 51
 Delta R.T. 0.012 min
 Lab File: K8914.D
 Acq: 12 Nov 2021 5:15 pm



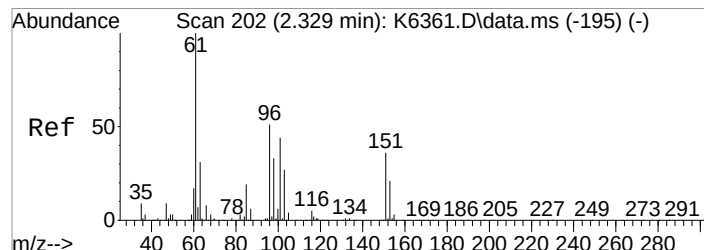
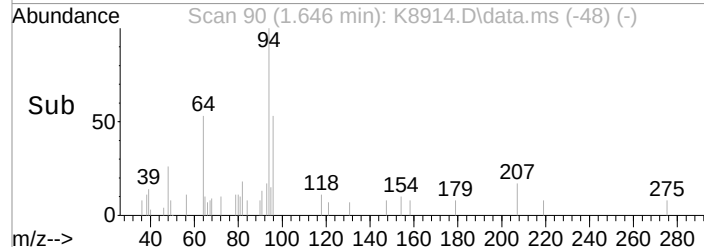
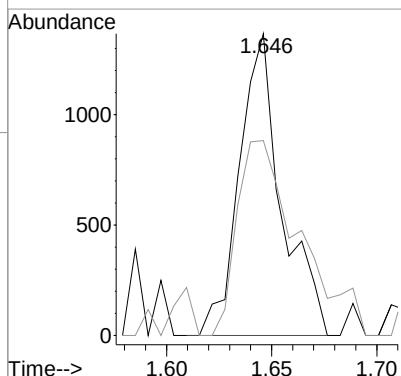
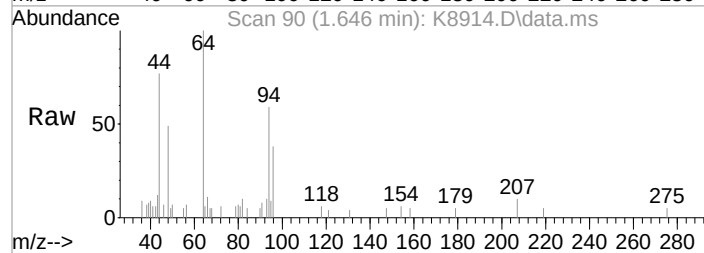
Tgt Ion: 62 Resp: 514243
 Ion Ratio Lower Upper
 62 100
 64 31.9 11.5 51.5





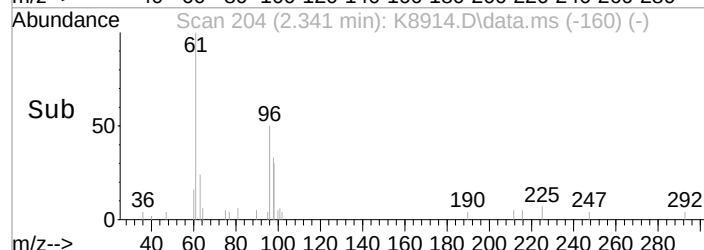
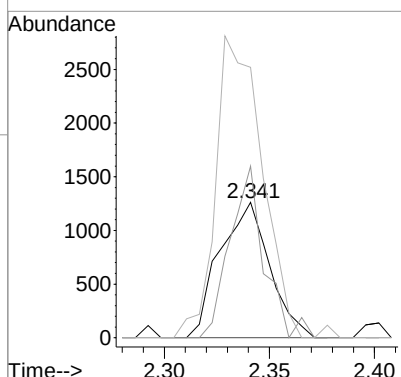
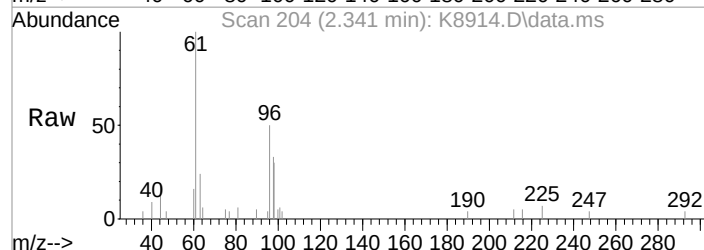
#5
 Bromomethane
 Concen: 0.58 ppb
 RT: 1.646 min Scan# 90
 Delta R.T. 0.031 min
 Lab File: K8914.D
 Acq: 12 Nov 2021 5:15 pm

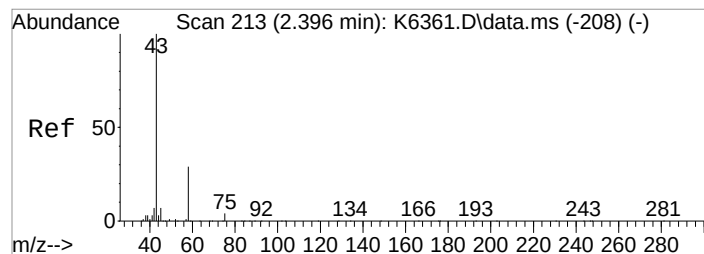
Tgt Ion: 94 Resp: 1910
 Ion Ratio Lower Upper
 94 100
 96 64.6 71.0 111.0#



#13
 1,1-Dicloroethene
 Concen: 0.57 ppb
 RT: 2.341 min Scan# 204
 Delta R.T. 0.018 min
 Lab File: K8914.D
 Acq: 12 Nov 2021 5:15 pm

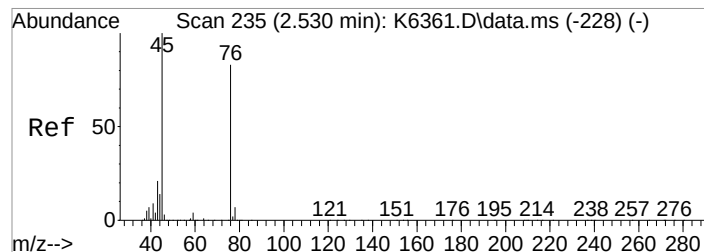
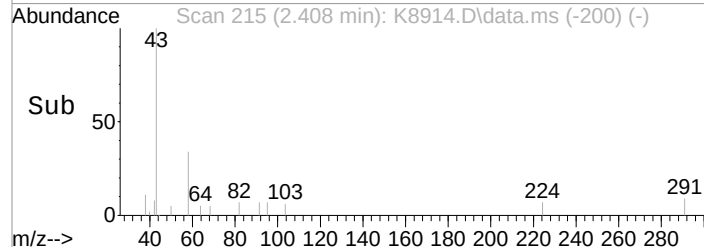
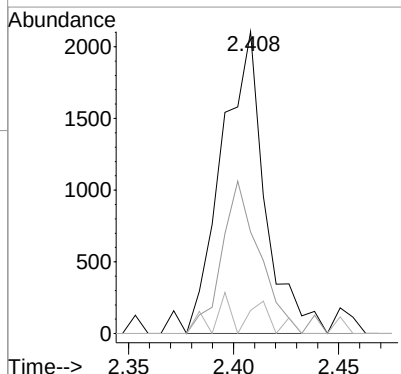
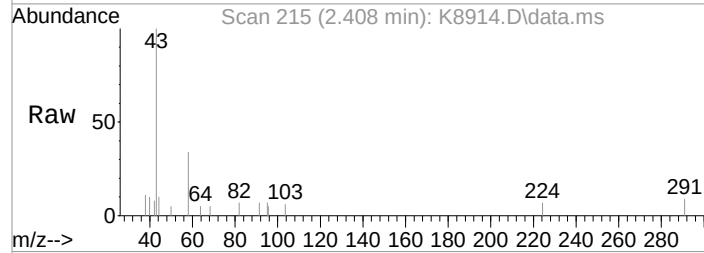
Tgt Ion: 96 Resp: 2087
 Ion Ratio Lower Upper
 96 100
 98 126.5 44.1 84.1#
 61 199.6 174.9 214.9





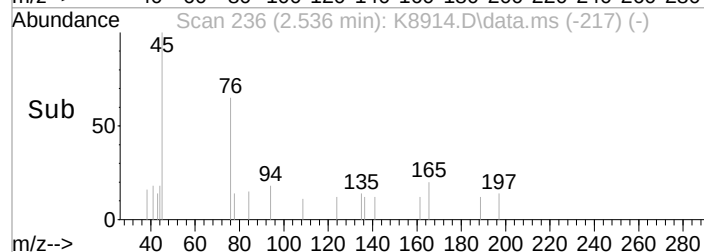
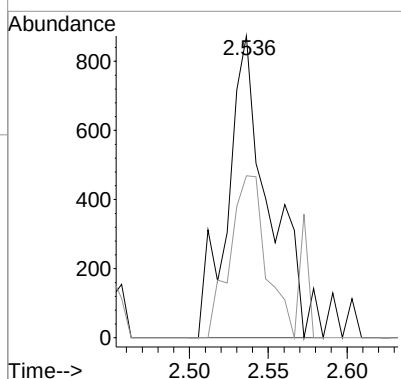
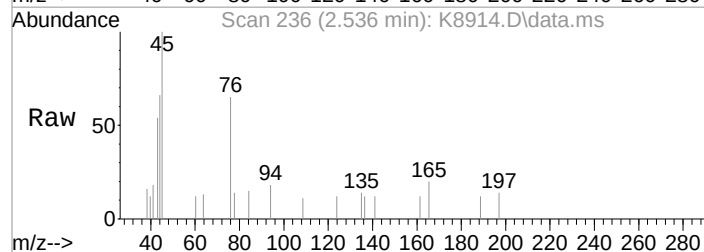
#15
 Acetone
 Concen: Below Cal
 RT: 2.408 min Scan# 215
 Delta R.T. 0.019 min
 Lab File: K8914.D
 Acq: 12 Nov 2021 5:15 pm

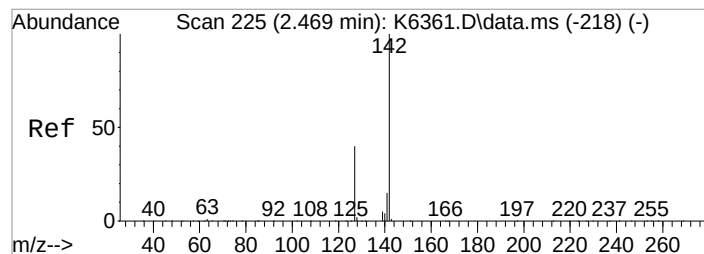
Tgt Ion: 43	Resp: 3005
Ion Ratio	Lower Upper
43 100	
58 33.6	9.6 49.6
42 7.6	0.0 27.7



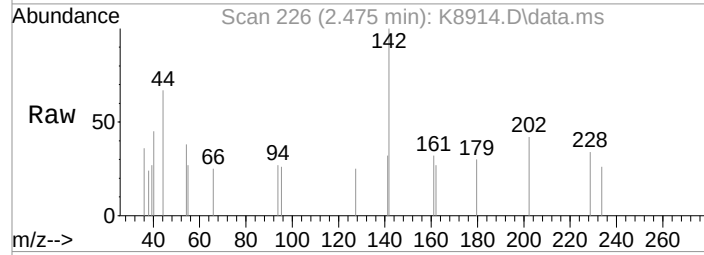
#16
 2-Propanol
 Concen: 3.31 ppb m
 RT: 2.536 min Scan# 236
 Delta R.T. 0.006 min
 Lab File: K8914.D
 Acq: 12 Nov 2021 5:15 pm

Tgt Ion: 45	Resp: 1608
Ion Ratio	Lower Upper
45 100	
43 53.7	0.6 40.6#

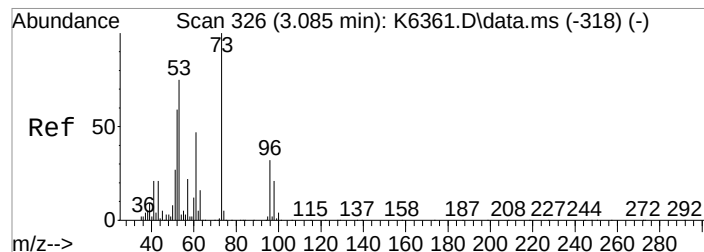
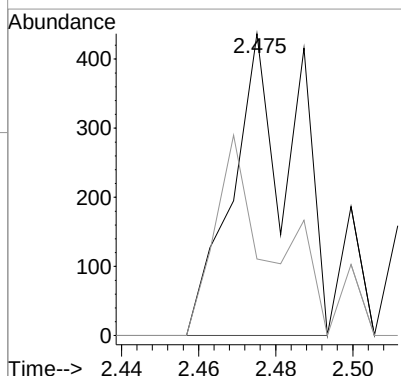
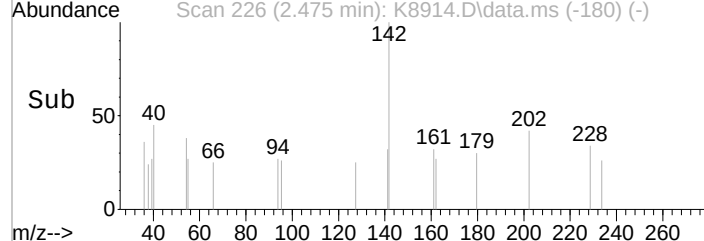




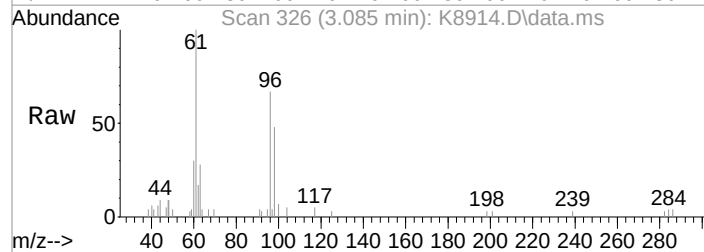
#17
 Iodomethane
 Concen: 1.47 ppb
 RT: 2.475 min Scan# 226
 Delta R.T. 0.019 min
 Lab File: K8914.D
 Acq: 12 Nov 2021 5:15 pm



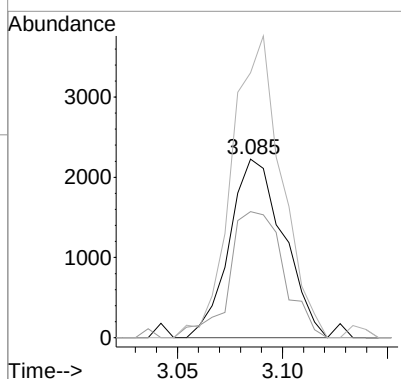
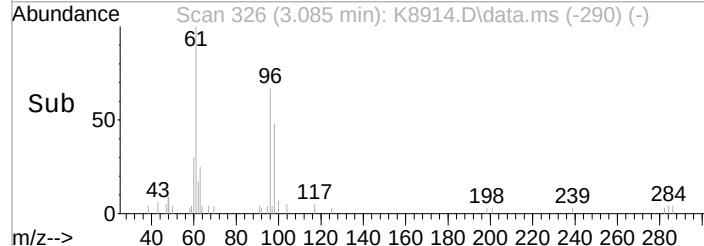
Tgt Ion: 142 Resp: 483
 Ion Ratio Lower Upper
 142 100
 127 25.4 19.6 59.6

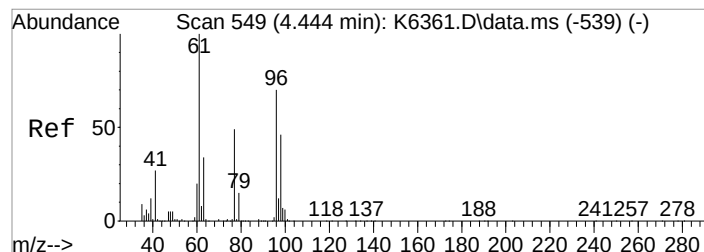


#26
 trans-1,2-Dichloroethene
 Concen: 1.00 ppb
 RT: 3.085 min Scan# 326
 Delta R.T. 0.012 min
 Lab File: K8914.D
 Acq: 12 Nov 2021 5:15 pm



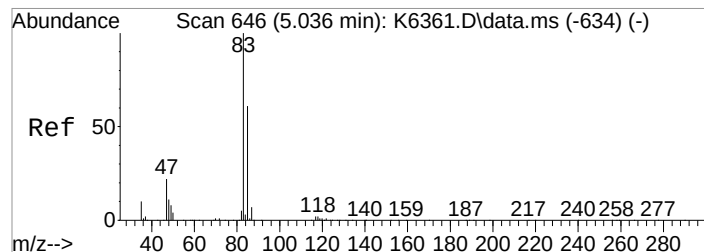
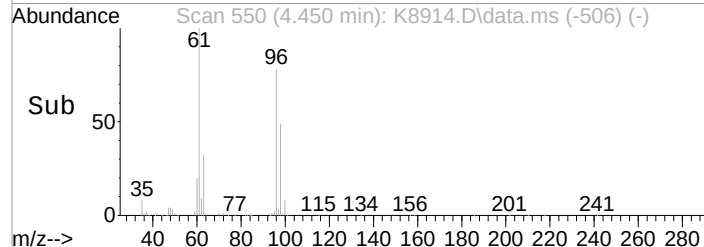
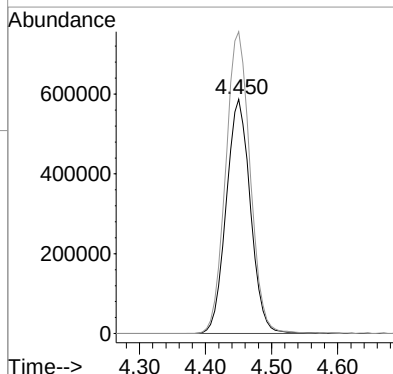
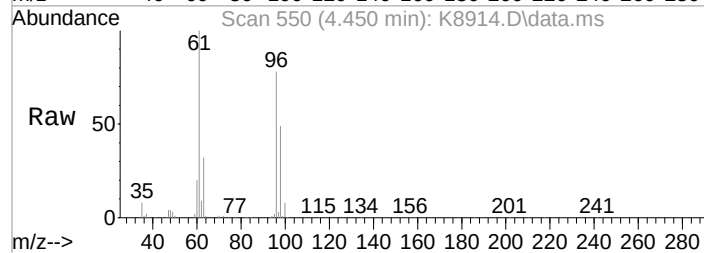
Tgt Ion: 96 Resp: 4001
 Ion Ratio Lower Upper
 96 100
 98 70.7 44.1 84.1
 61 148.5 127.9 167.9





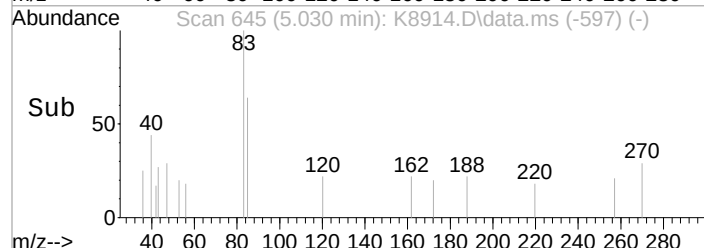
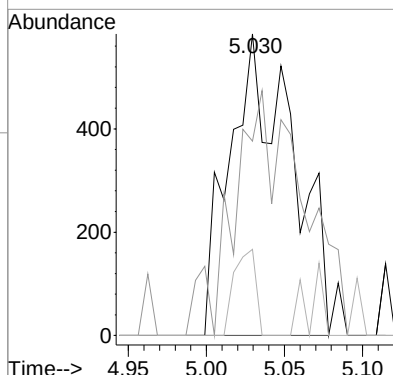
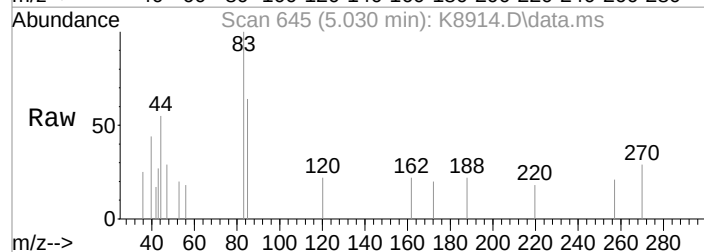
#34
cis-1,2-Dichloroethene
Concen: 326.13 ppb
RT: 4.450 min Scan# 550
Delta R.T. 0.012 min
Lab File: K8914.D
Acq: 12 Nov 2021 5:15 pm

Tgt Ion: 96 Resp: 1495893
Ion Ratio Lower Upper
96 100
61 128.9 125.2 165.2



#40
Chloroform
Concen: Below Cal m
RT: 5.030 min Scan# 645
Delta R.T. 0.007 min
Lab File: K8914.D
Acq: 12 Nov 2021 5:15 pm

Tgt Ion: 83 Resp: 1628
Ion Ratio Lower Upper
83 100
85 64.4 41.5 81.5
47 28.6 2.1 42.1



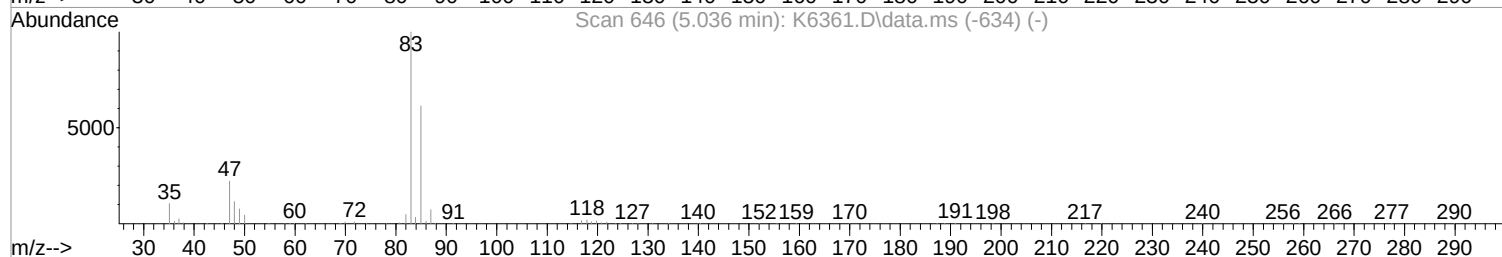
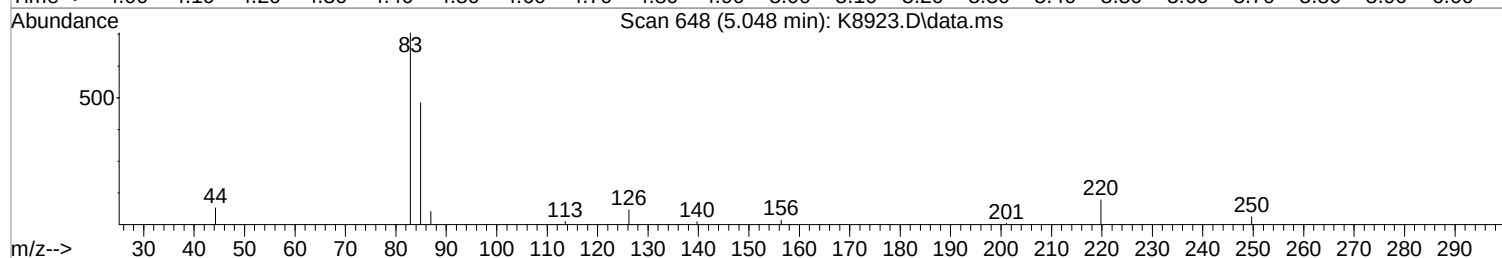
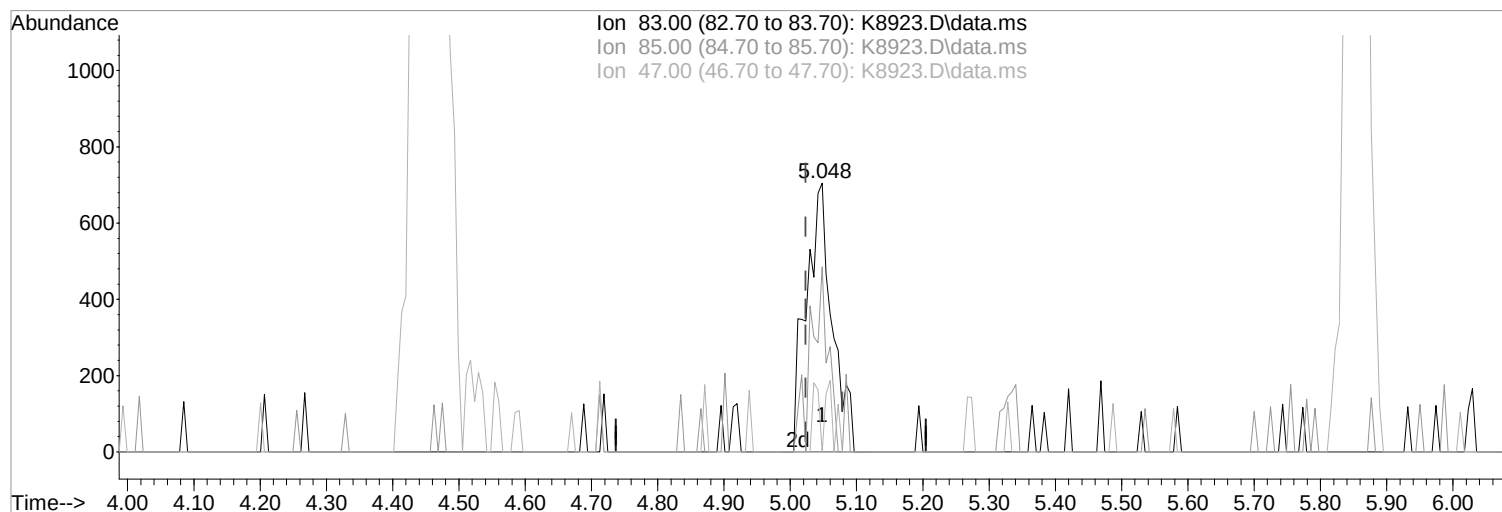
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8923.D
Acq On : 12 Nov 2021 8:31 pm
Operator : K.Ruest
Sample : R2111745-017|10
Misc : LIRO 8260 T4
ALS Vial : 21 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 13 10:25:41 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8923.D\data.ms

(40) Chloroform (P)

5.048min (+0.025) -0.24 ppb m

response 1916

Ion	Exp%	Act%
83.00	100	100
85.00	61.50	68.79
47.00	22.10	0.00#
0.00	0.00	0.00

Manual Integration:

After

Split Peak

11/15/21

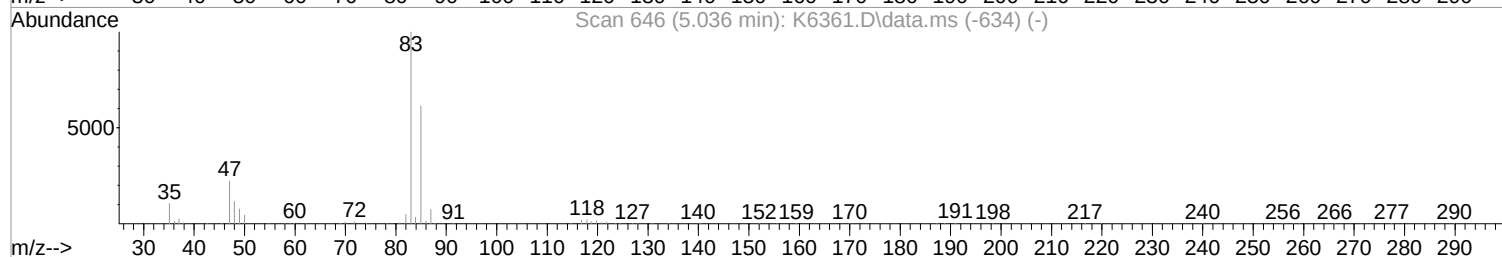
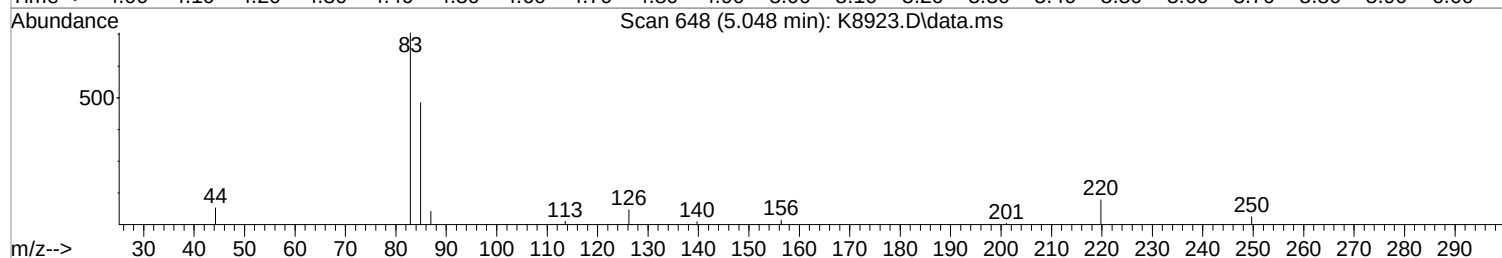
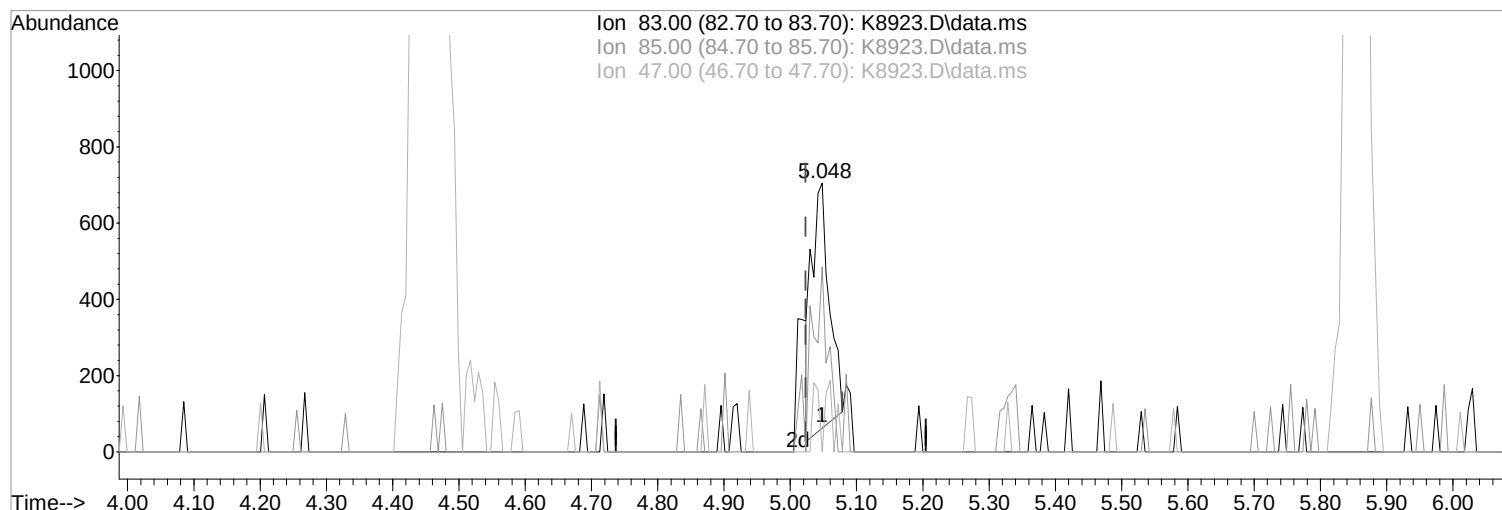
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8923.D
Acq On : 12 Nov 2021 8:31 pm
Operator : K.Ruest
Sample : R2111745-017|10
Misc : LIRO 8260 T4
ALS Vial : 21 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 13 10:25:41 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8923.D\data.ms

(40) Chloroform (P)

Manual Integration:

5.048min (+0.025) -0.34 ppb

Before

response 1196

Ion Exp% Act%

11/15/21

83.00 100 100

85.00 61.50 68.79

47.00 22.10 0.00#

0.00 0.00 0.00

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8923.D
 Acq On : 12 Nov 2021 8:31 pm
 Operator : K.Ruest
 Sample : R2111745-017|10
 Misc : LIRO 8260 T4
 ALS Vial : 21 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 15 16:21:30 2021

DL

Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M

Quant Title : MS#12 - 8260B WATERS 10mL Purge

QLast Update : Fri Sep 03 10:14:47 2021

Response via : Initial Calibration

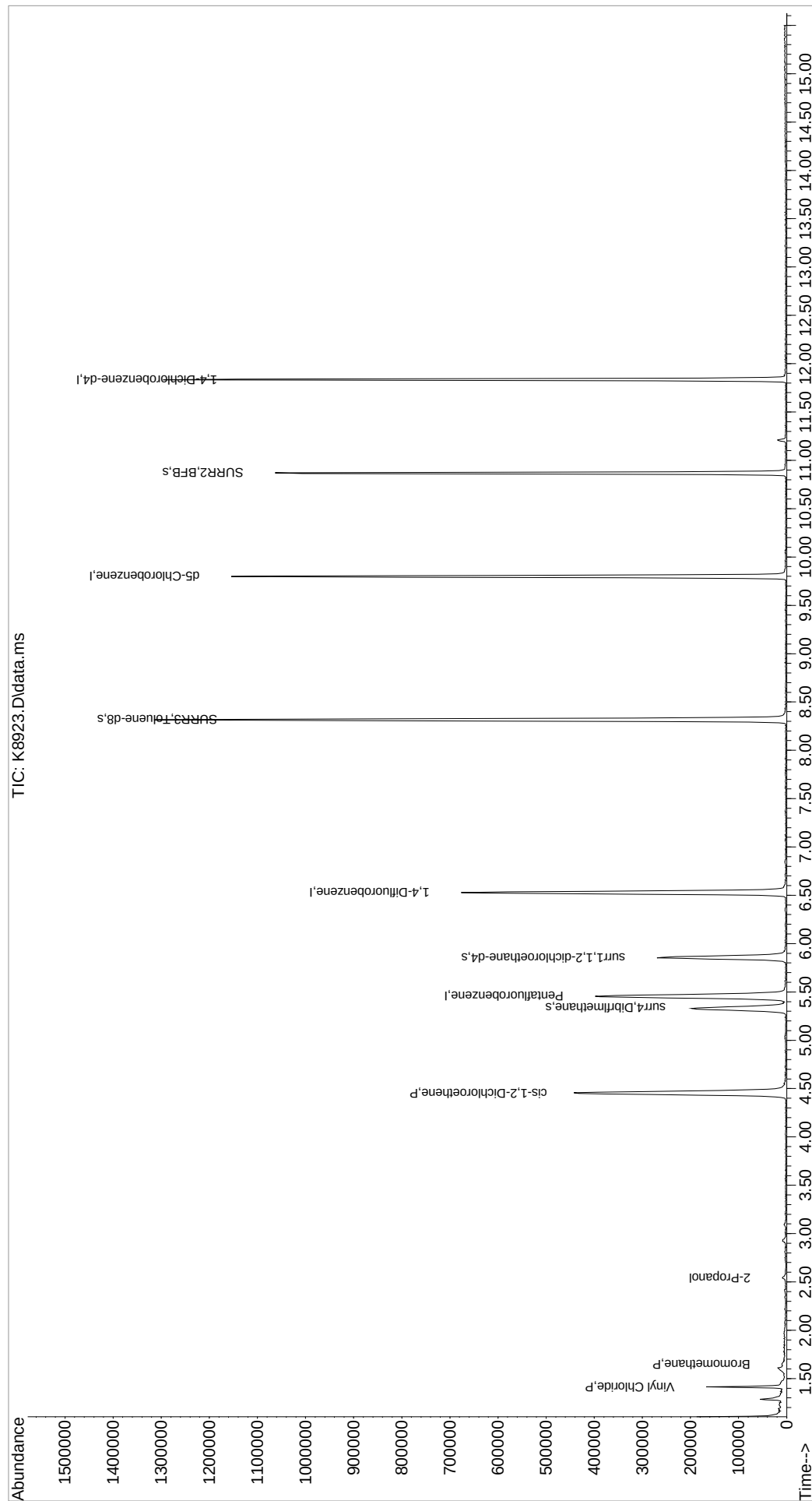
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

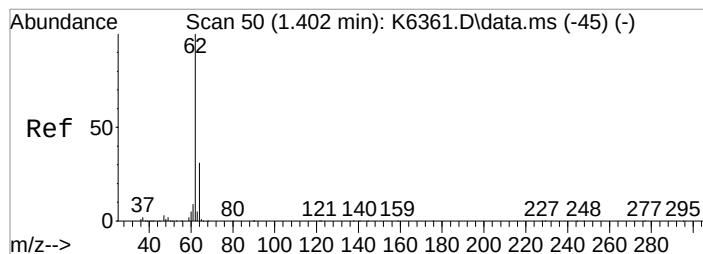
Internal Standards						
1) Pentafluorobenzene	5.456	168	373974	50.00	ppb	0.01
43) 1,4-Difluorobenzene	6.529	114	610365	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	543430	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	259432	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.334	113	163840	49.31	ppb	0.02
Spiked Amount 50.000	Range 80 - 116		Recovery =	98.62%		
48) surr1,1,2-dichloroetha...	5.853	65	222552	46.06	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery =	92.12%		
65) SURR3,Toluene-d8	8.316	98	820046	52.51	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	105.02%		
70) SURR2,BFB	10.870	95	297951	48.06	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	96.12%		
Target Compounds						
4) Vinyl Chloride	1.414	62	81323	16.08	ppb	Qvalue 100
5) Bromomethane	1.646	94	1741	0.53	ppb	# 70
15) Acetone	2.408	43	2379	Below	Cal	82
16) 2-Propanol	2.542	45	7423	15.29	ppb	89
34) cis-1,2-Dichloroethene	4.450	96	266082	58.05	ppb	86
40) Chloroform	5.048	83	1916m	Below	Cal	

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

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8923.D
Acq On : 12 Nov 2021 8:31 pm
Operator : K.Ruest
Sample : R2111745-017|10
Misc : LIRO 8260 T4
ALS Vial : 21 Sample Multiplier: 1
Inst : MSV0A-12

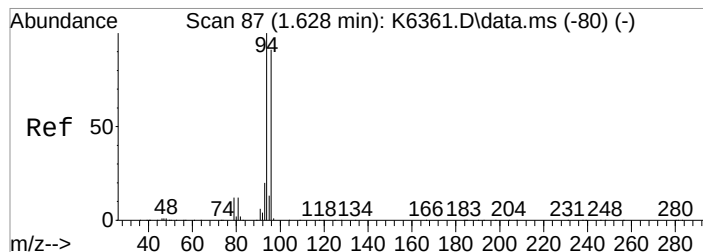
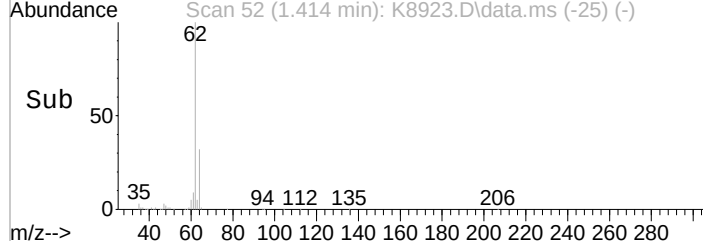
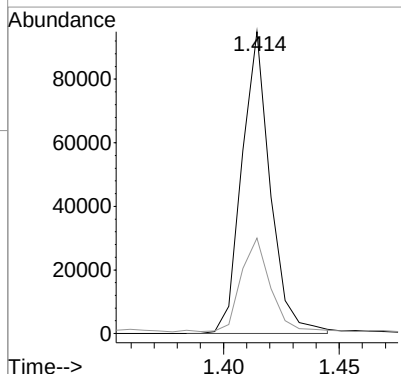
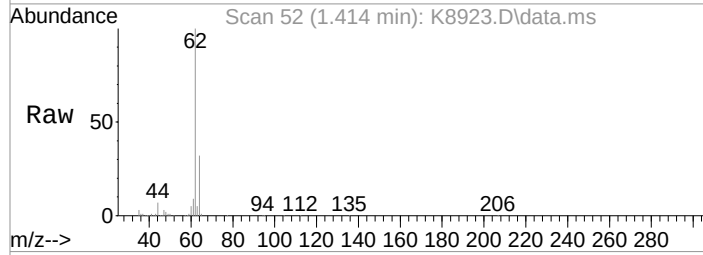
Quant Time: Nov 15 16:21:30 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration





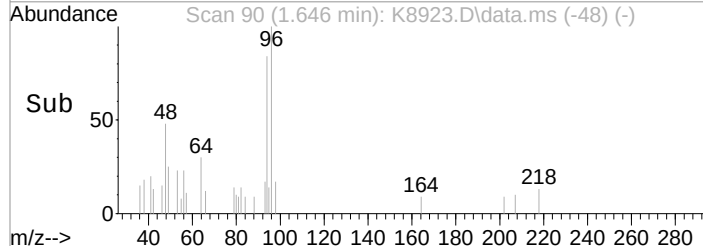
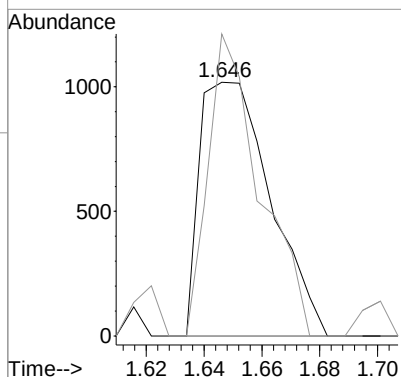
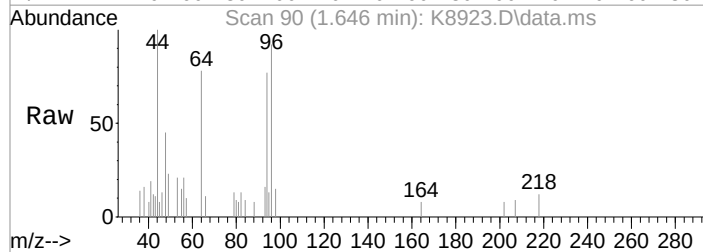
#4
Vinyl Chloride
Concen: 16.08 ppb
RT: 1.414 min Scan# 52
Delta R.T. 0.018 min
Lab File: K8923.D
Acq: 12 Nov 2021 8:31 pm

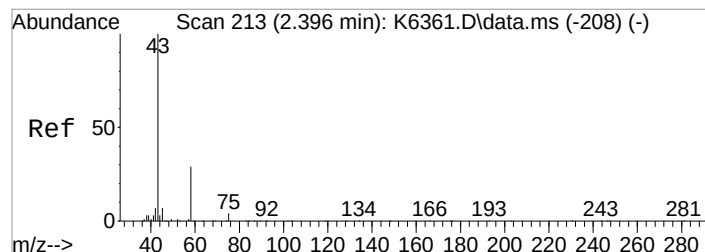
Tgt Ion: 62 Resp: 81323
Ion Ratio Lower Upper
62 100
64 31.6 11.5 51.5



#5
Bromomethane
Concen: 0.53 ppb
RT: 1.646 min Scan# 90
Delta R.T. 0.031 min
Lab File: K8923.D
Acq: 12 Nov 2021 8:31 pm

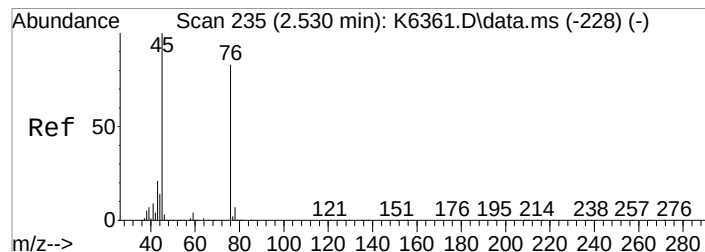
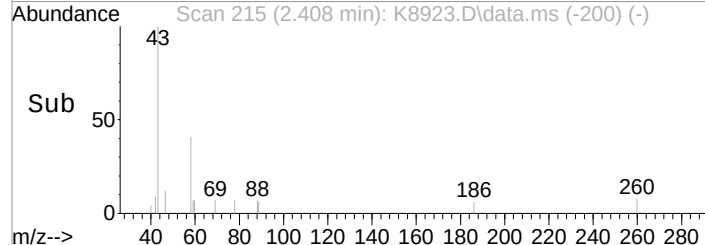
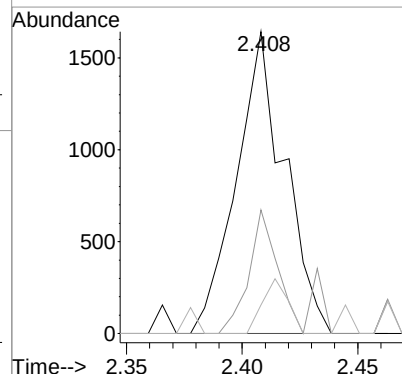
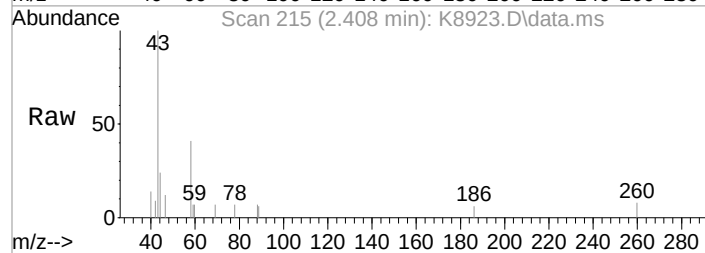
Tgt Ion: 94 Resp: 1741
Ion Ratio Lower Upper
94 100
96 119.2 71.0 111.0#





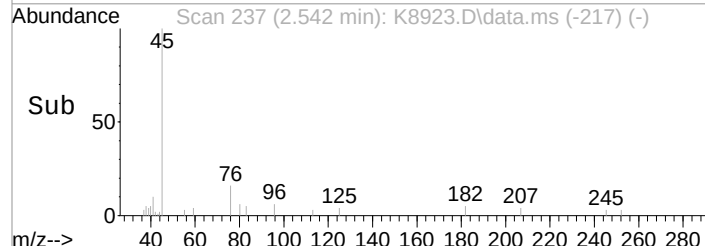
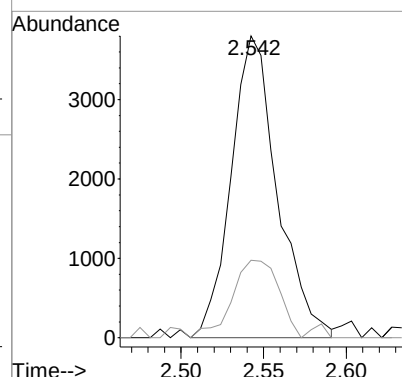
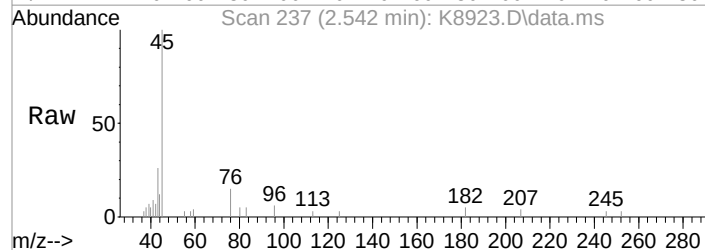
#15
 Acetone
 Concen: Below Cal
 RT: 2.408 min Scan# 215
 Delta R.T. 0.019 min
 Lab File: K8923.D
 Acq: 12 Nov 2021 8:31 pm

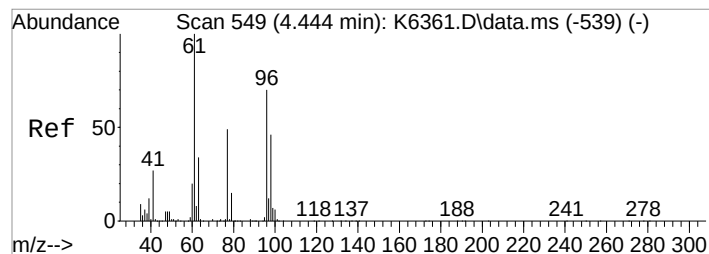
Tgt Ion: 43 Resp: 2379
 Ion Ratio Lower Upper
 43 100
 58 41.0 9.6 49.6
 42 9.4 0.0 27.7



#16
 2-Propanol
 Concen: 15.29 ppb
 RT: 2.542 min Scan# 237
 Delta R.T. 0.012 min
 Lab File: K8923.D
 Acq: 12 Nov 2021 8:31 pm

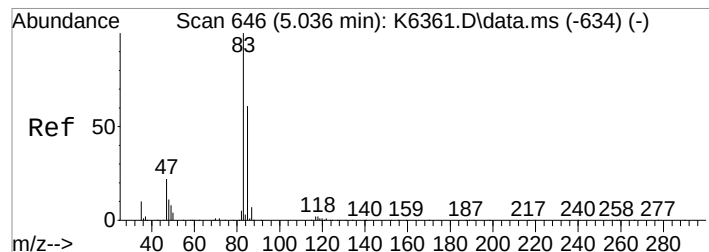
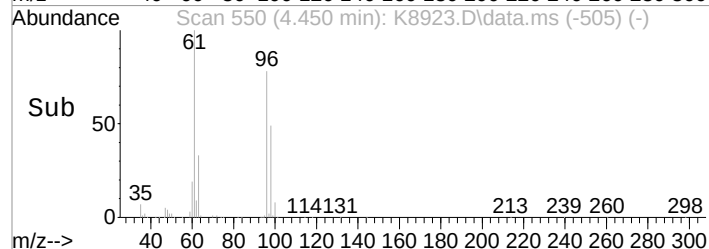
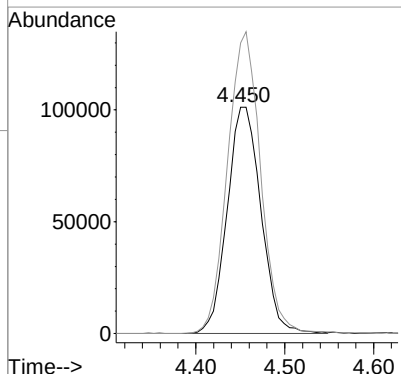
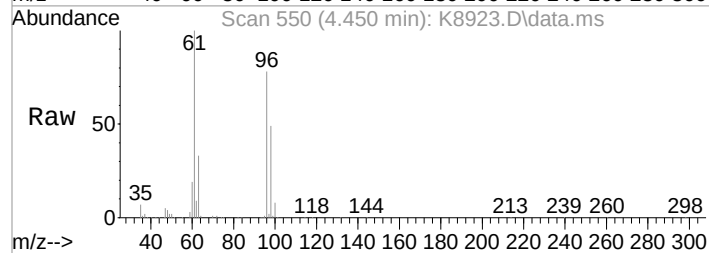
Tgt Ion: 45 Resp: 7423
 Ion Ratio Lower Upper
 45 100
 43 25.6 0.6 40.6





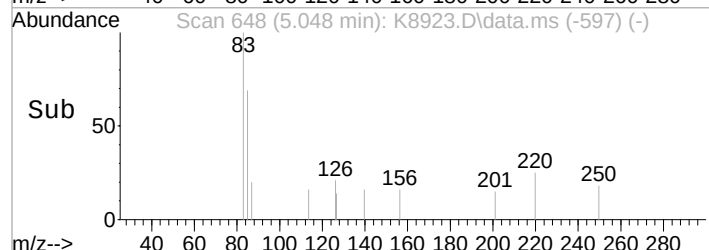
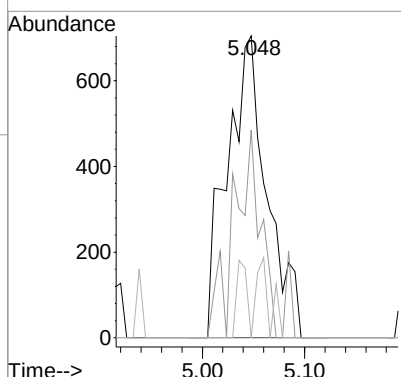
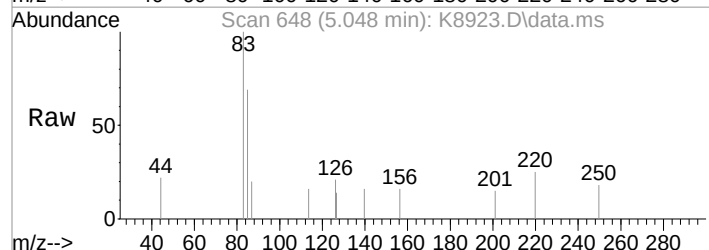
#34
cis-1,2-Dichloroethene
Concen: 58.05 ppb
RT: 4.450 min Scan# 550
Delta R.T. 0.012 min
Lab File: K8923.D
Acq: 12 Nov 2021 8:31 pm

Tgt Ion: 96 Resp: 266082
Ion Ratio Lower Upper
96 100
61 128.3 125.2 165.2



#40
Chloroform
Concen: Below Cal m
RT: 5.048 min Scan# 648
Delta R.T. 0.025 min
Lab File: K8923.D
Acq: 12 Nov 2021 8:31 pm

Tgt Ion: 83 Resp: 1916
Ion Ratio Lower Upper
83 100
85 68.8 41.5 81.5
47 0.0 2.1 42.1#



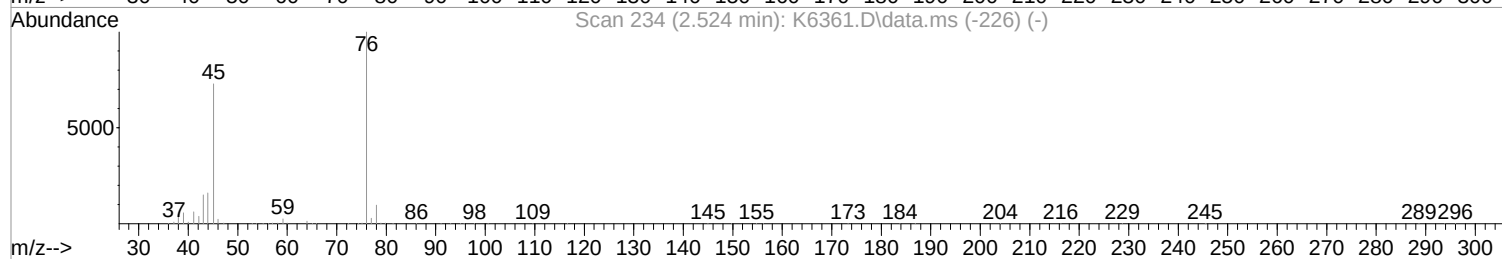
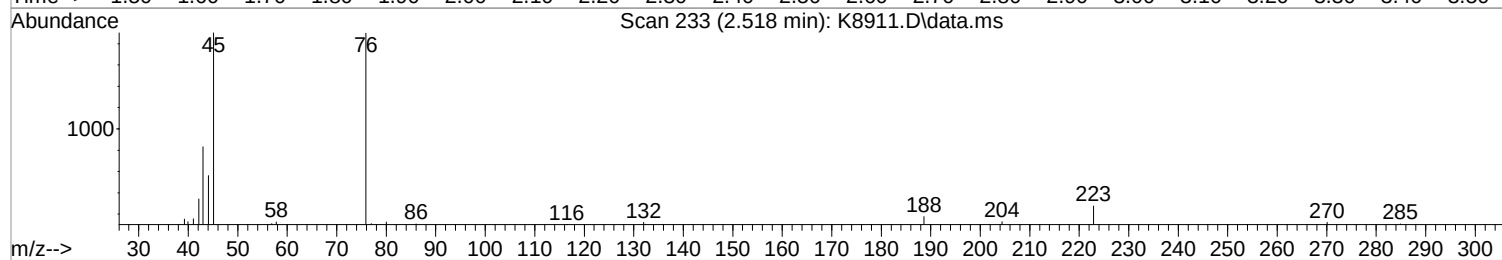
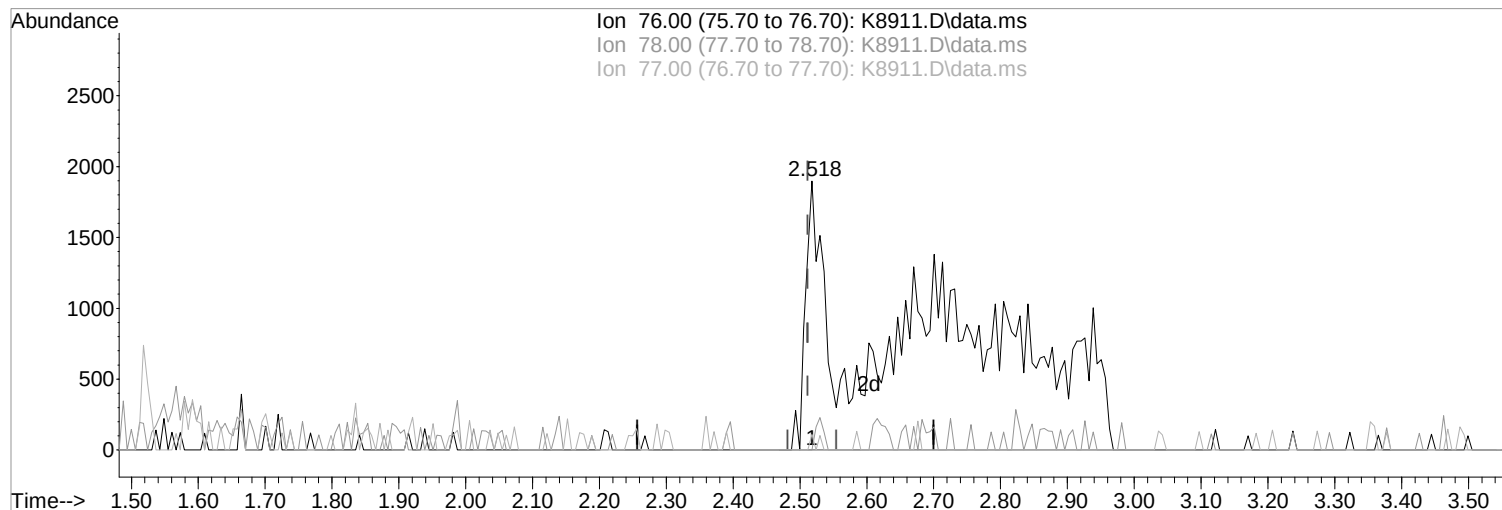
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8911.D
Acq On : 12 Nov 2021 4:09 pm
Operator : K.Ruest
Sample : R2111745-018|1.0
Misc : LIRO 8260 T4
ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 16:30:21 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8911.D\data.ms

(18) Carbon Disulfide (P)

2.518min (+0.006) 2.35 ppb m

response 21640

Ion	Exp%	Act%
76.00	100	100
78.00	9.70	0.00
77.00	2.70	5.80
0.00	0.00	0.00

Manual Integration:

After

Other - so2 interference

11/15/21

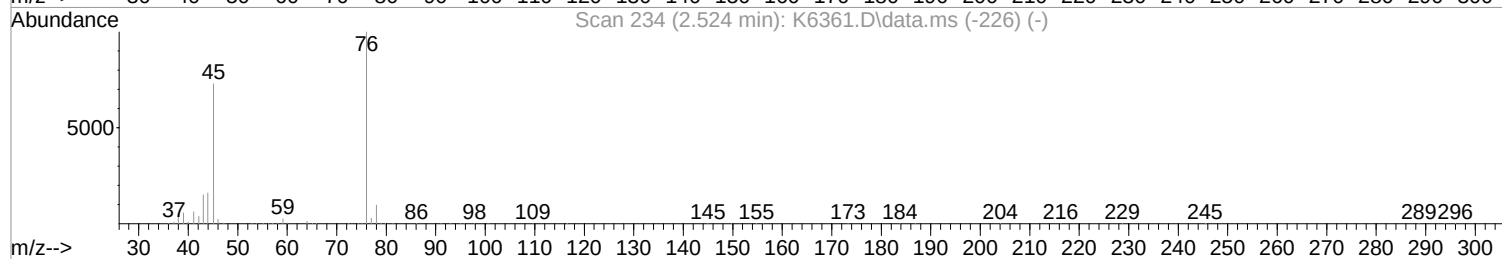
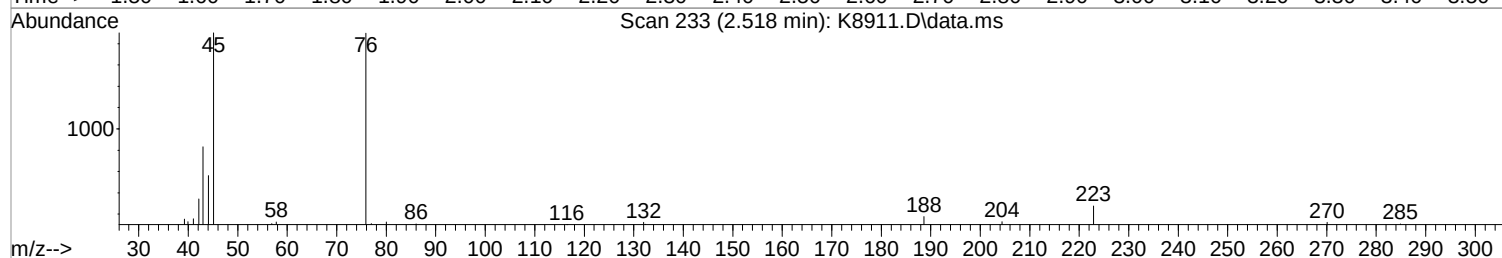
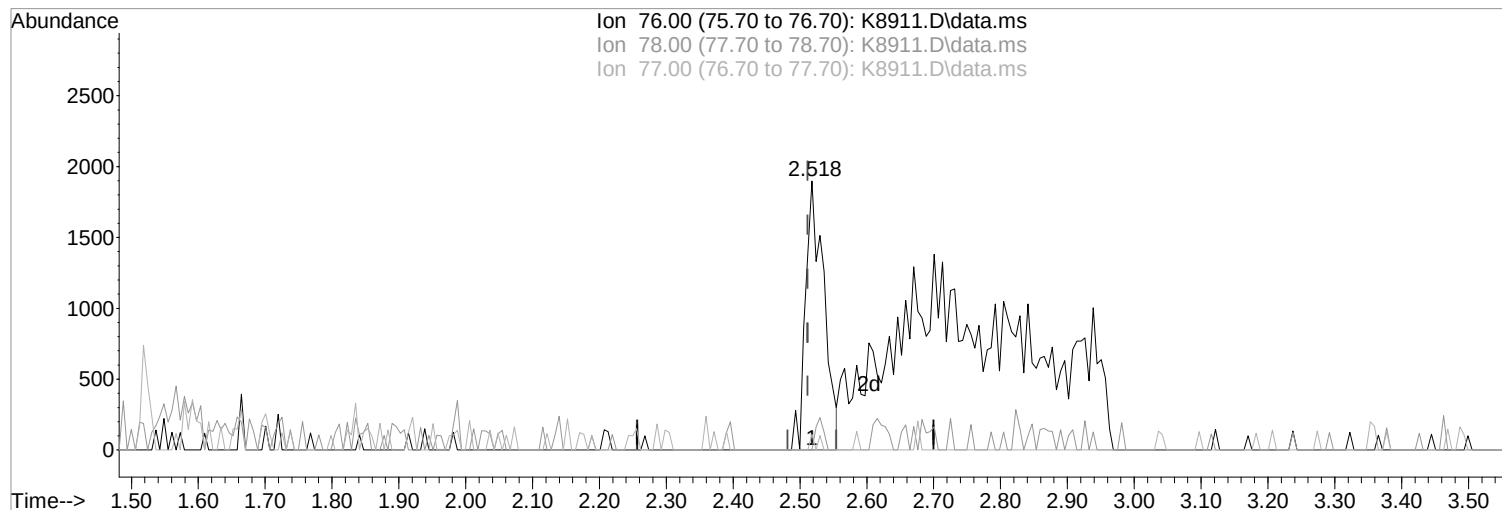
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8911.D
Acq On : 12 Nov 2021 4:09 pm
Operator : K.Ruest
Sample : R2111745-018|1.0
Misc : LIRO 8260 T4
ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 16:30:21 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8911.D\data.ms

(18) Carbon Disulfide (P)

Manual Integration:

2.518min (+0.006) 0.39 ppb

Before

response 3617

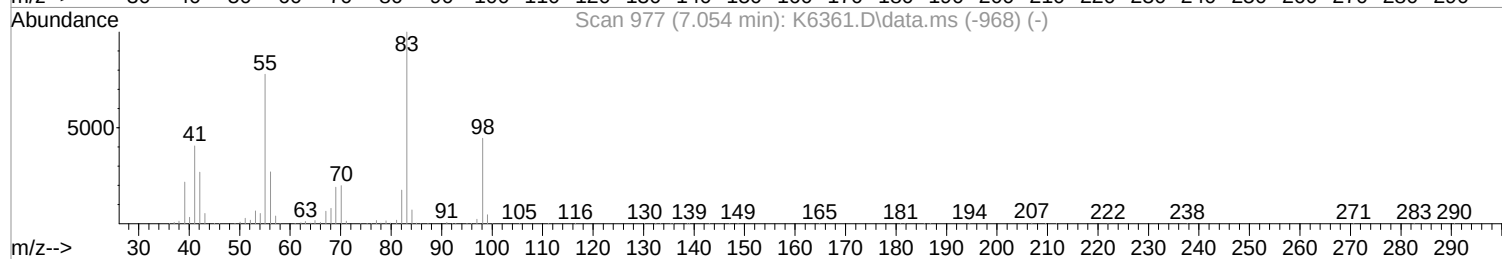
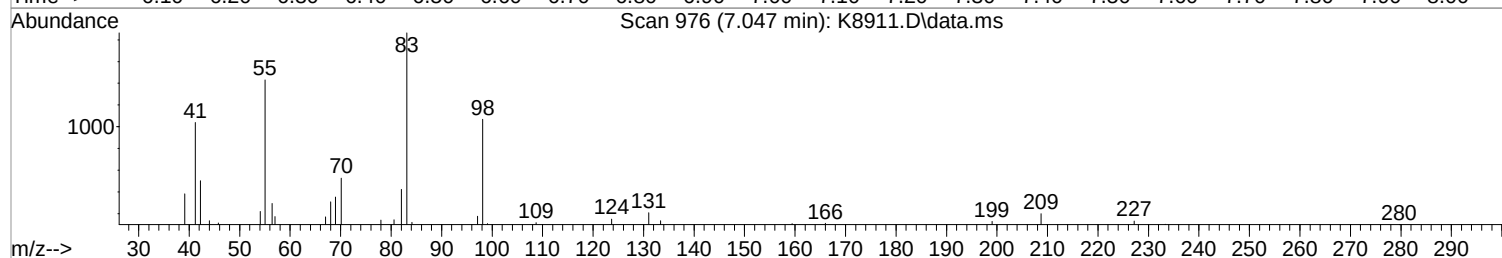
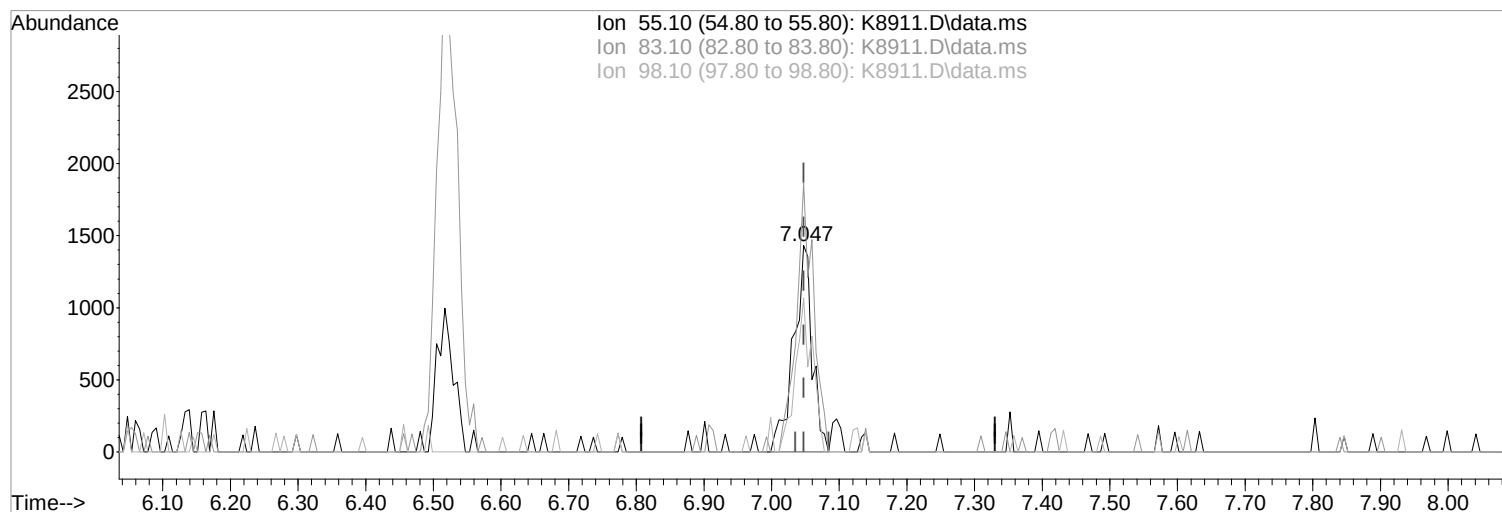
Ion	Exp%	Act%
76.00	100	100
78.00	9.70	0.00
77.00	2.70	5.80
0.00	0.00	0.00

11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8911.D
Acq On : 12 Nov 2021 4:09 pm
Operator : K.Ruest
Sample : R2111745-018|1.0
Misc : LIRO 8260 T4
ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 16:30:21 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8911.D\data.ms

(55) Methylcyclohexane (P)

7.047min (+0.000) 0.47 ppb m

response 2738

Ion	Exp%	Act%
55.10	100	100
83.10	128.10	130.24
98.10	57.00	74.65
0.00	0.00	0.00

Manual Integration:

After

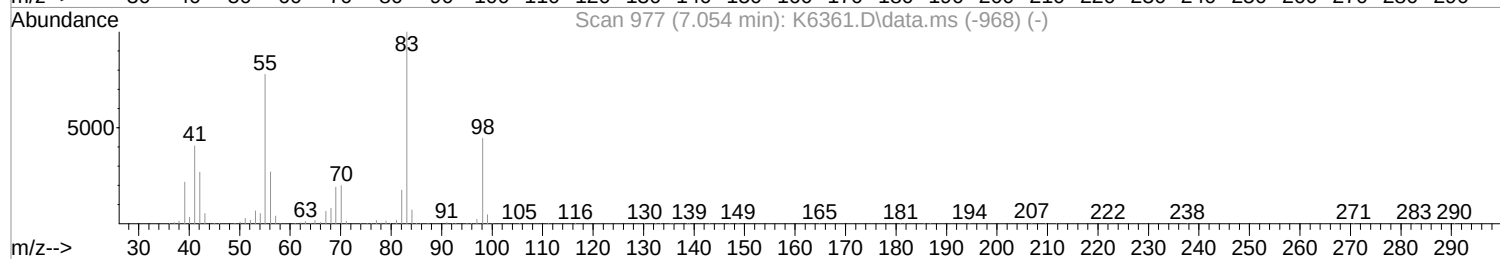
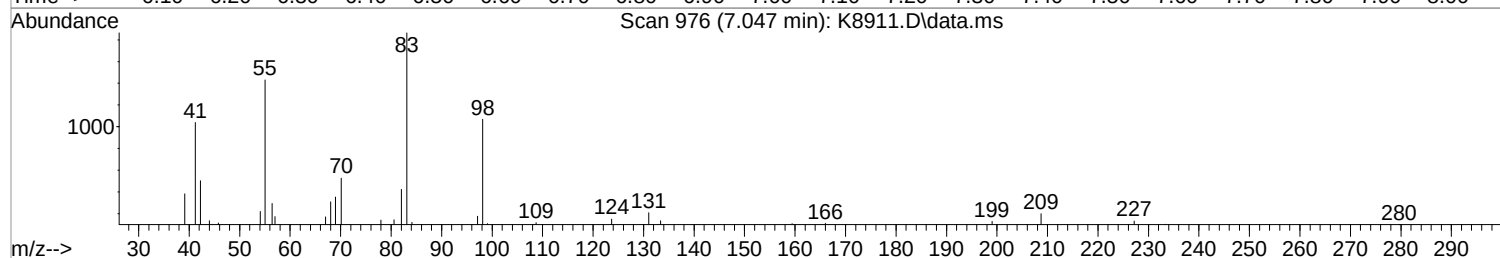
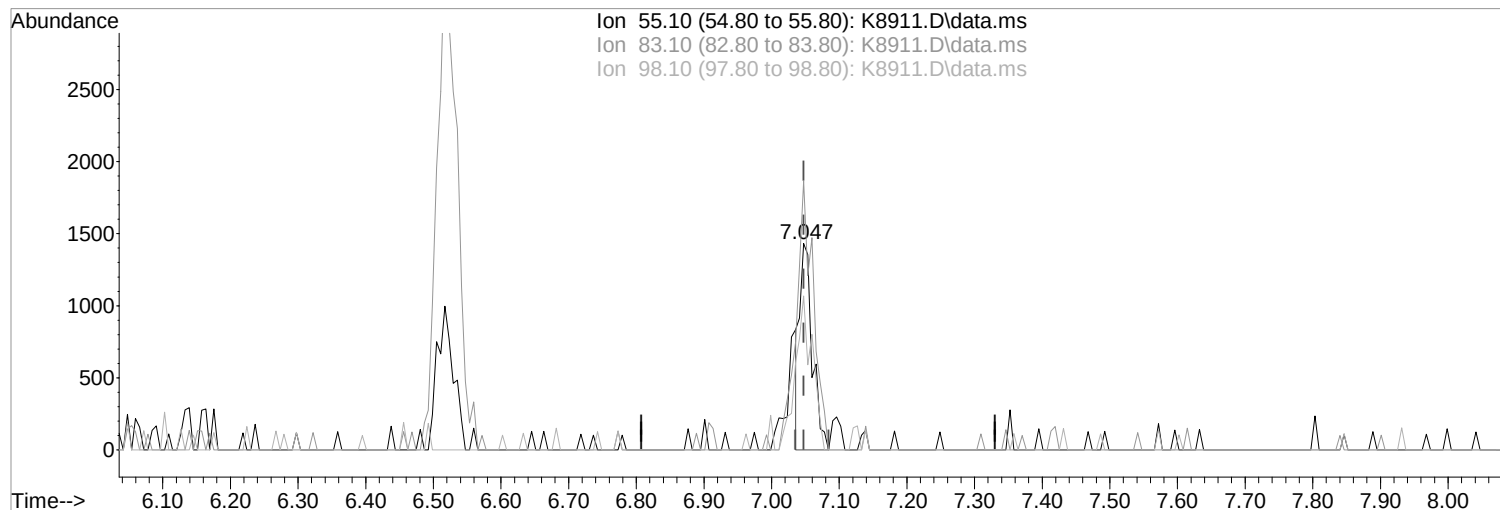
Split Peak

11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8911.D
Acq On : 12 Nov 2021 4:09 pm
Operator : K.Ruest
Sample : R2111745-018|1.0
Misc : LIRO 8260 T4
ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 16:30:21 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8911.D\data.ms

(55) Methylcyclohexane (P)

Manual Integration:

7.047min (+0.000) 0.32 ppb

Before

response 1855

Ion	Exp%	Act%
55.10	100	100
83.10	128.10	130.24
98.10	57.00	74.65
0.00	0.00	0.00

11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8911.D
 Acq On : 12 Nov 2021 4:09 pm
 Operator : K.Ruest
 Sample : R2111745-018|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 15 16:02:08 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

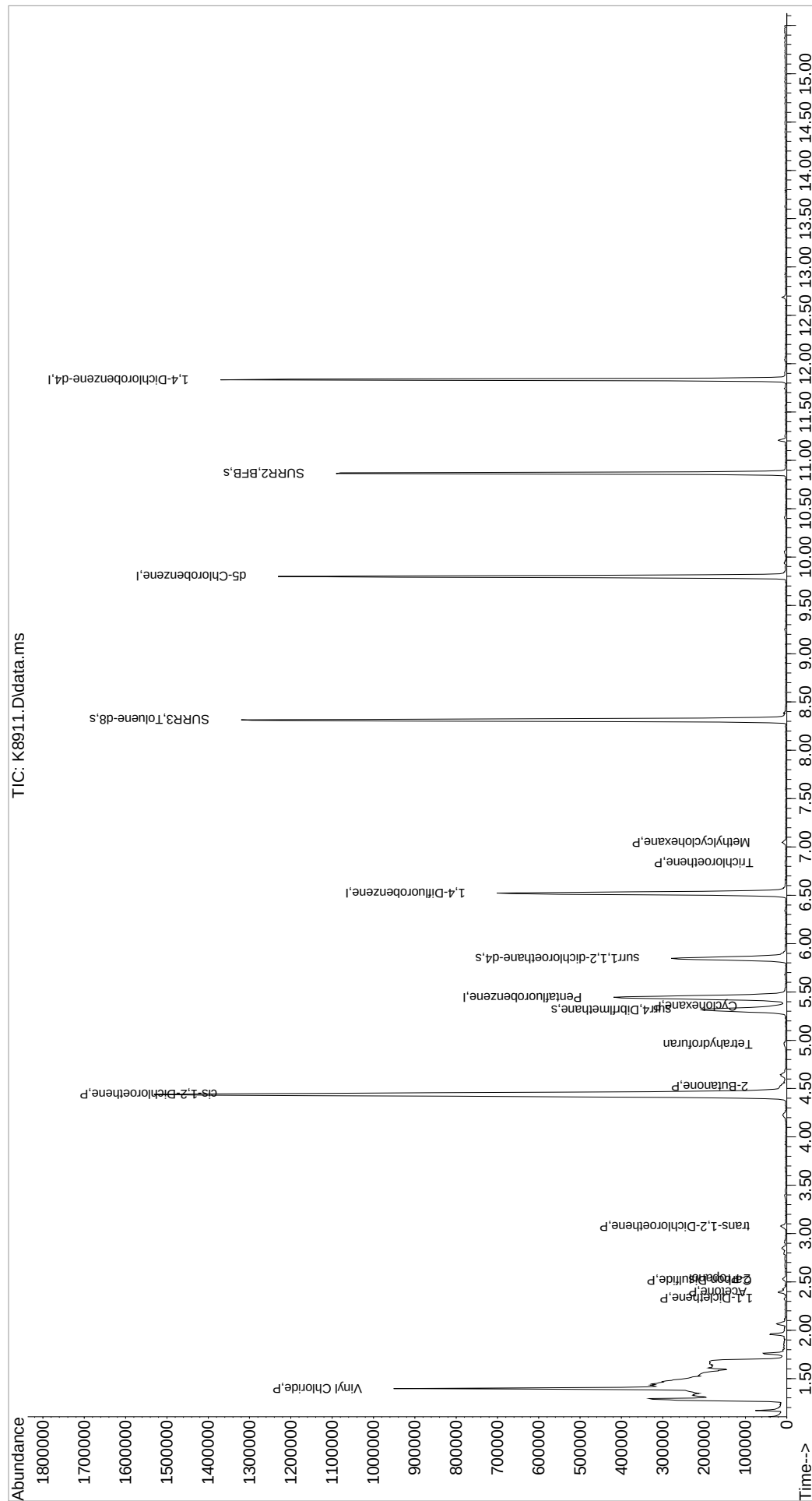
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.444	168	391157	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	632181	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	571820	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	272489	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.310	113	175198	50.91	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	101.82%	
48) surr1,1,2-dichloroetha...	5.846	65	233868	46.73	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	93.46%	
65) SURR3,Toluene-d8	8.316	98	854963	52.85	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	105.70%	
70) SURR2,BFB	10.864	95	311338	48.48	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	96.96%	
Target Compounds						
4) Vinyl Chloride	1.396	62	288096	54.45	ppb	Qvalue # 1
13) 1,1-Dicethene	2.329	96	955	0.25	ppb	91
15) Acetone	2.396	43	17540	5.86	ppb	91
16) 2-Propanol	2.530	45	6847	13.48	ppb	84
18) Carbon Disulfide	2.518	76	21640m	2.35	ppb	
26) trans-1,2-Dichloroethene	3.073	96	3692	0.89	ppb	83
34) cis-1,2-Dichloroethene	4.438	96	911002	190.03	ppb	89
35) 2-Butanone	4.524	43	10894	3.22	ppb	# 66
39) Tetrahydrofuran	4.956	42	3728	1.65	ppb	88
44) Cyclohexane	5.353	41	4066	0.97	ppb	97
54) Trichloroethene	6.834	130	890	0.20	ppb	# 66
55) Methylcyclohexane	7.047	55	2738m	0.47	ppb	

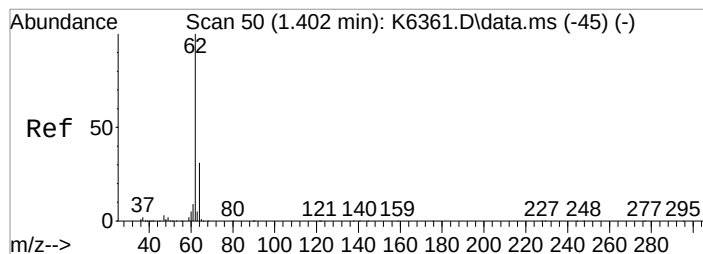
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8911.D
Acq On : 12 Nov 2021 4:09 pm
Operator : K.Ruest
Sample : R2111745-018|1.0
Misc : LIRO 8260 T4
ALS Vial : 9 Sample Multiplier: 1

Inst : MSV0A-12

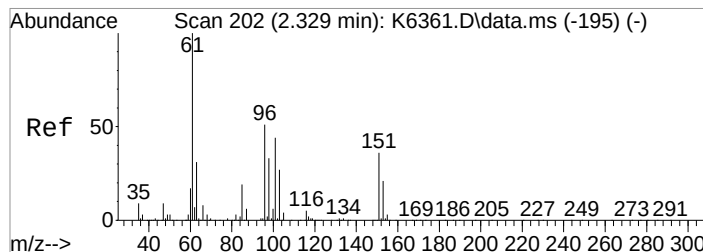
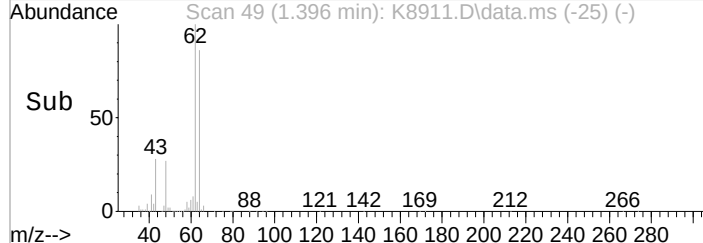
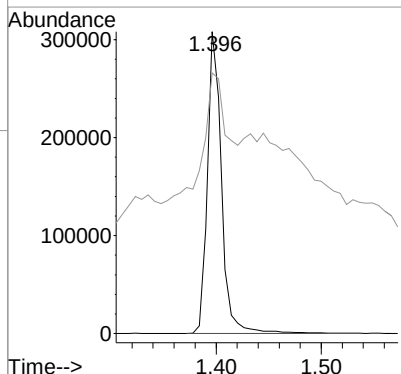
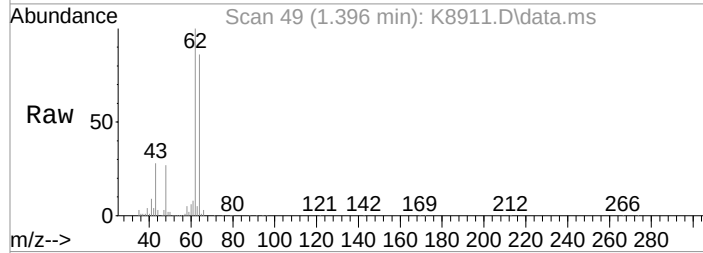
Quant Time: Nov 15 16:02:08 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration





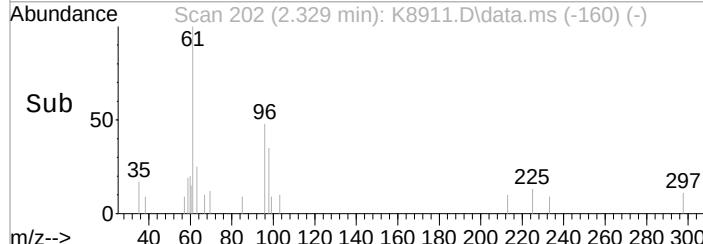
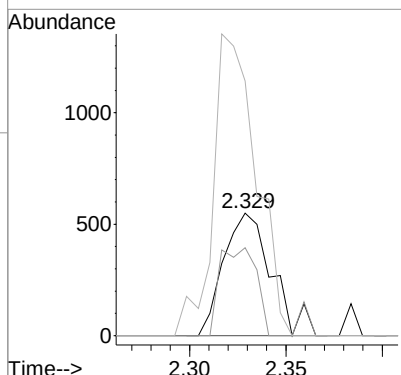
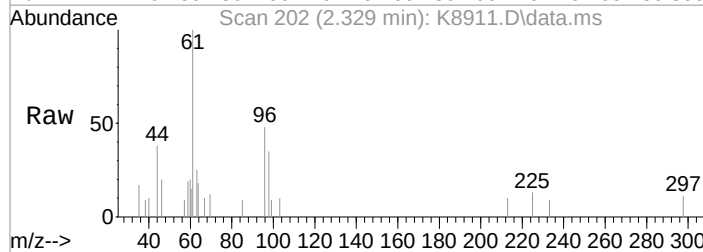
#4
 Vinyl Chloride
 Concen: 54.45 ppb
 RT: 1.396 min Scan# 49
 Delta R.T. 0.000 min
 Lab File: K8911.D
 Acq: 12 Nov 2021 4:09 pm

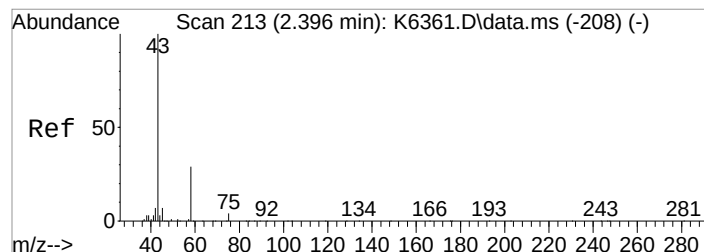
Tgt Ion: 62 Resp: 288096
 Ion Ratio Lower Upper
 62 100
 64 86.3 11.5 51.5#



#13
 1,1-Dicloroethene
 Concen: 0.25 ppb
 RT: 2.329 min Scan# 202
 Delta R.T. 0.006 min
 Lab File: K8911.D
 Acq: 12 Nov 2021 4:09 pm

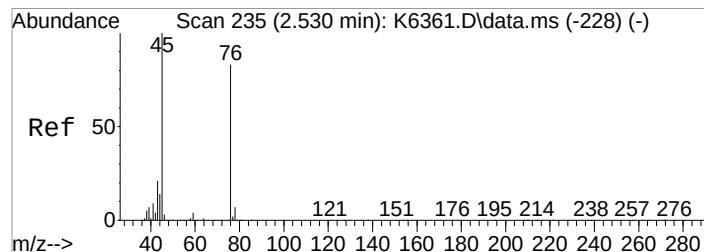
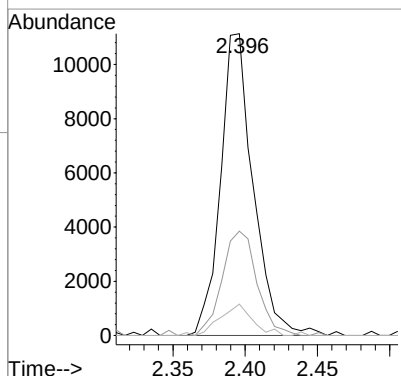
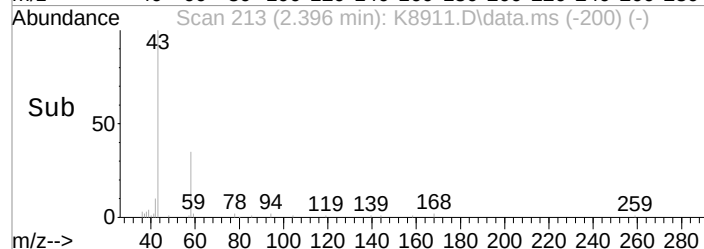
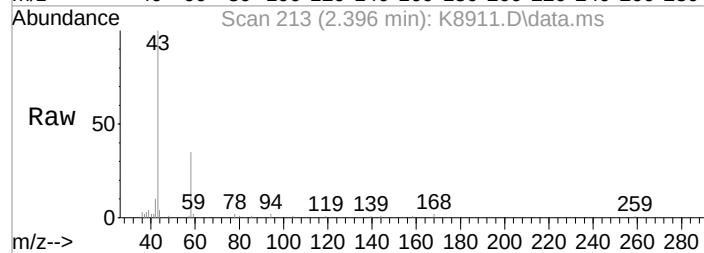
Tgt Ion: 96 Resp: 955
 Ion Ratio Lower Upper
 96 100
 98 71.9 44.1 84.1
 61 208.0 174.9 214.9





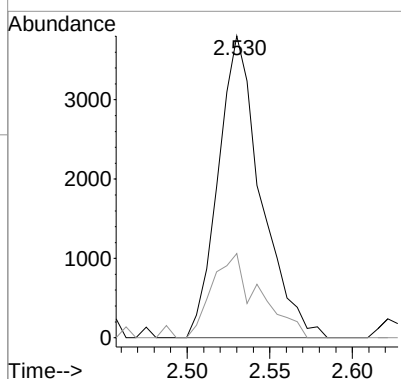
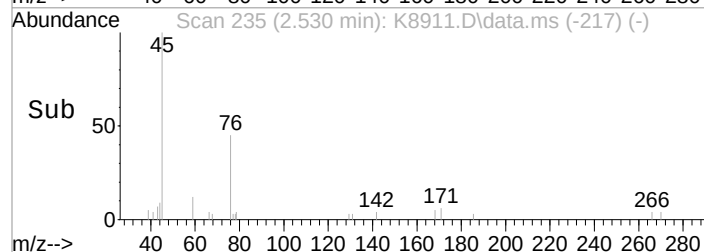
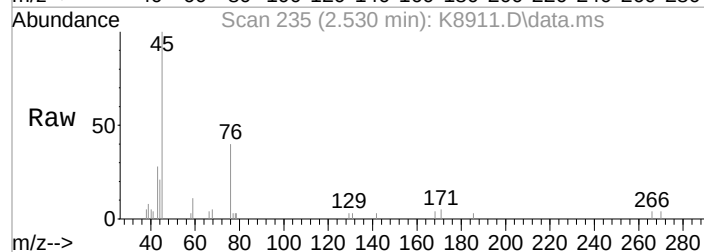
#15
 Acetone
 Concen: 5.86 ppb
 RT: 2.396 min Scan# 213
 Delta R.T. 0.007 min
 Lab File: K8911.D
 Acq: 12 Nov 2021 4:09 pm

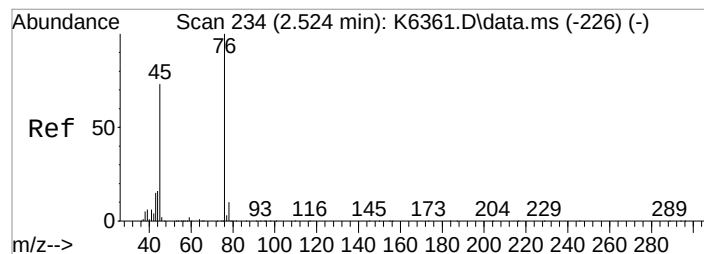
Tgt Ion: 43 Resp: 17540
 Ion Ratio Lower Upper
 43 100
 58 34.6 9.6 49.6
 42 10.4 0.0 27.7



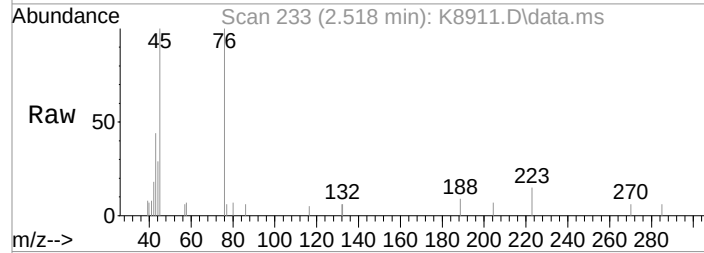
#16
 2-Propanol
 Concen: 13.48 ppb
 RT: 2.530 min Scan# 235
 Delta R.T. 0.000 min
 Lab File: K8911.D
 Acq: 12 Nov 2021 4:09 pm

Tgt Ion: 45 Resp: 6847
 Ion Ratio Lower Upper
 45 100
 43 27.9 0.6 40.6

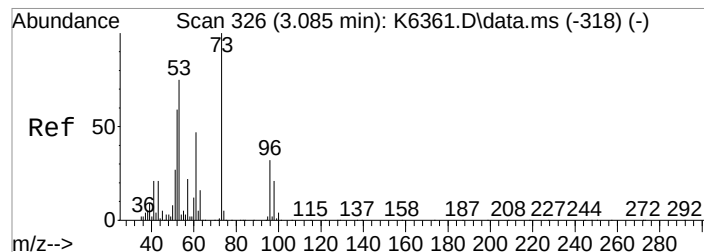
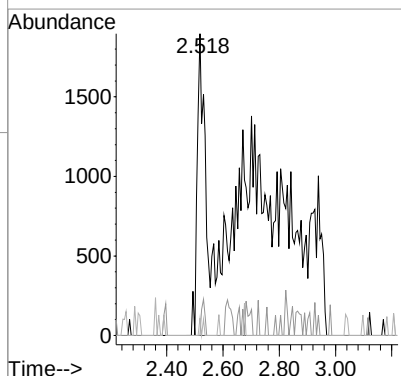
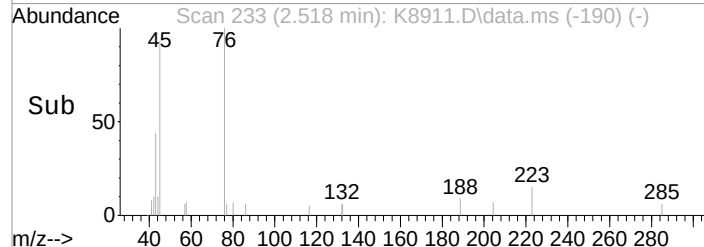




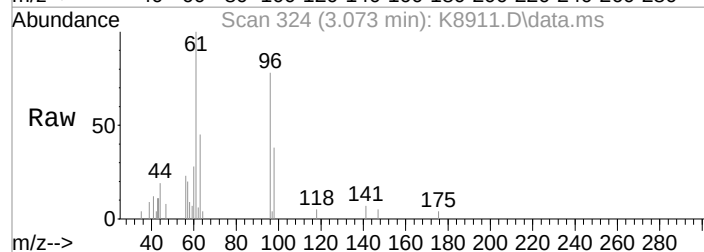
#18
 Carbon Disulfide
 Concen: 2.35 ppb m
 RT: 2.518 min Scan# 233
 Delta R.T. 0.006 min
 Lab File: K8911.D
 Acq: 12 Nov 2021 4:09 pm



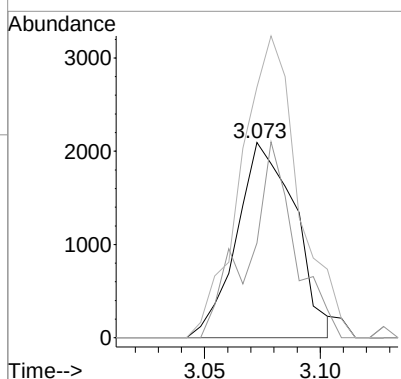
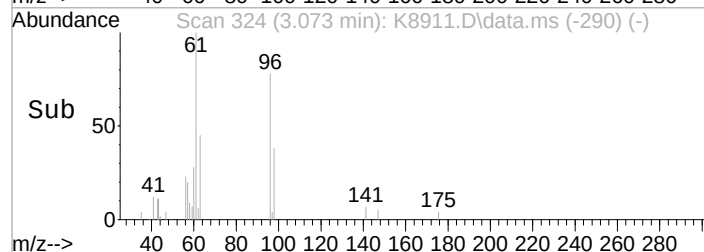
Tgt Ion:	76	Resp:	21640
Ion Ratio		Lower	Upper
76	100		
78	0.0	0.0	29.7
77	5.8	0.0	22.7

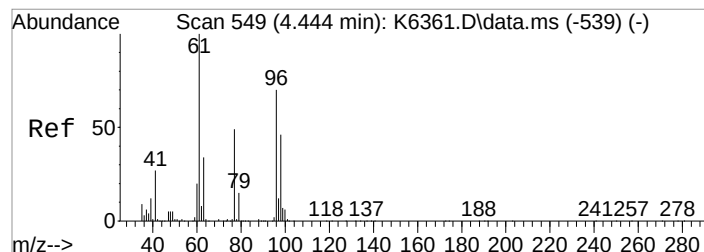


#26
 trans-1,2-Dichloroethene
 Concen: 0.89 ppb
 RT: 3.073 min Scan# 324
 Delta R.T. 0.000 min
 Lab File: K8911.D
 Acq: 12 Nov 2021 4:09 pm



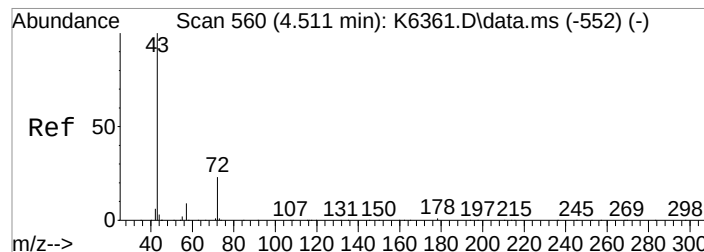
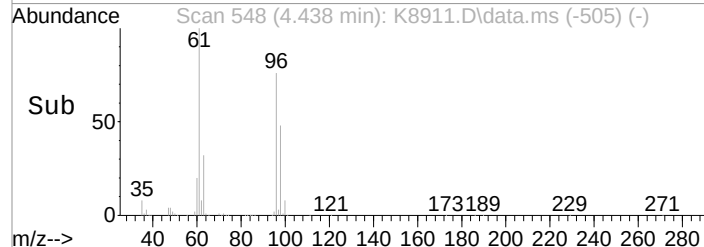
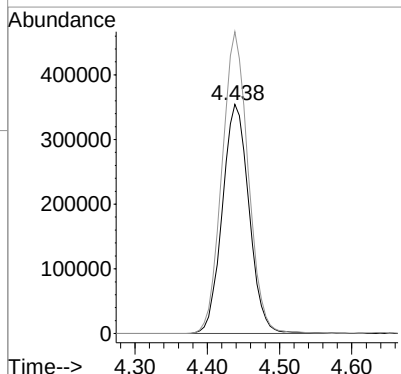
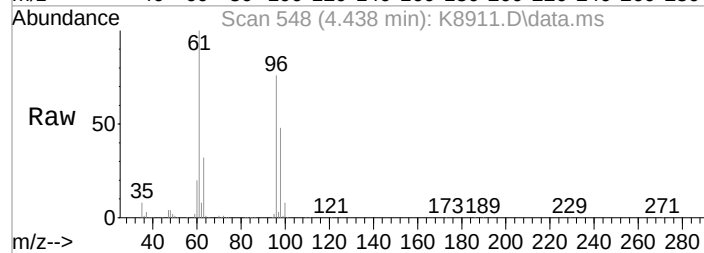
Tgt Ion:	96	Resp:	3692
Ion Ratio		Lower	Upper
96	100		
98	48.4	44.1	84.1
61	128.4	127.9	167.9





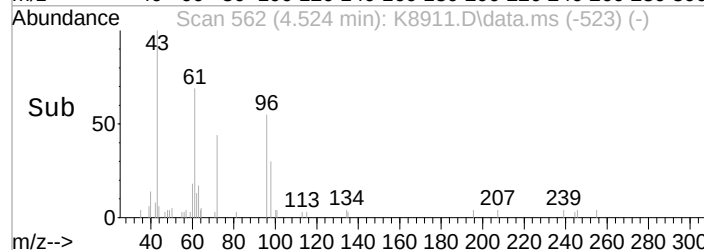
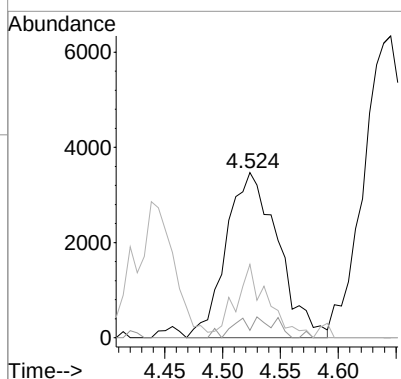
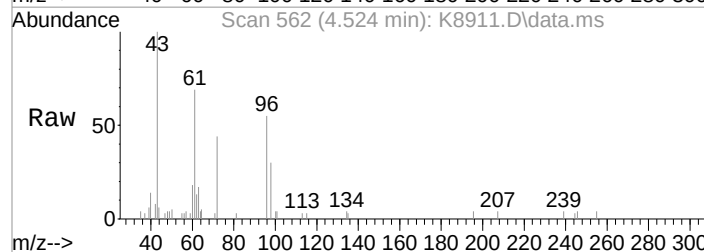
#34
 cis-1,2-Dichloroethene
 Concen: 190.03 ppb
 RT: 4.438 min Scan# 548
 Delta R.T. 0.000 min
 Lab File: K8911.D
 Acq: 12 Nov 2021 4:09 pm

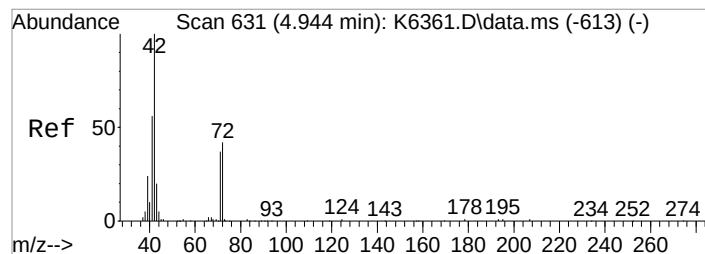
Tgt Ion: 96 Resp: 911002
 Ion Ratio Lower Upper
 96 100
 61 131.7 125.2 165.2



#35
 2-Butanone
 Concen: 3.22 ppb
 RT: 4.524 min Scan# 562
 Delta R.T. 0.012 min
 Lab File: K8911.D
 Acq: 12 Nov 2021 4:09 pm

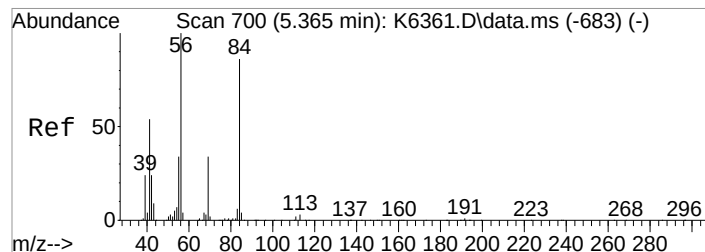
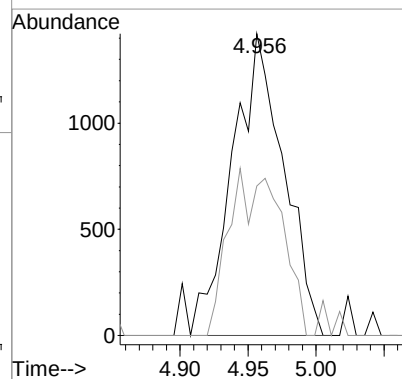
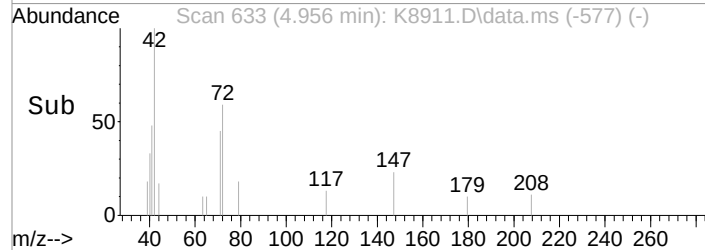
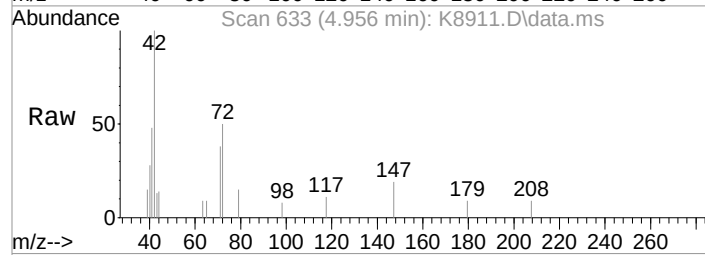
Tgt Ion: 43 Resp: 10894
 Ion Ratio Lower Upper
 43 100
 57 4.4 0.0 28.6
 72 44.3 3.4 43.4#





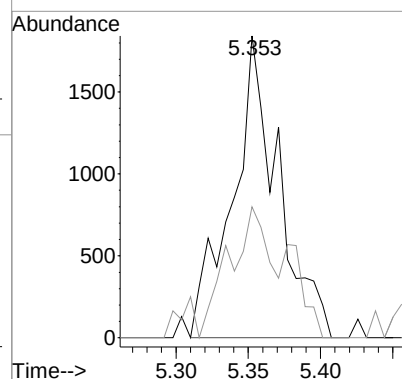
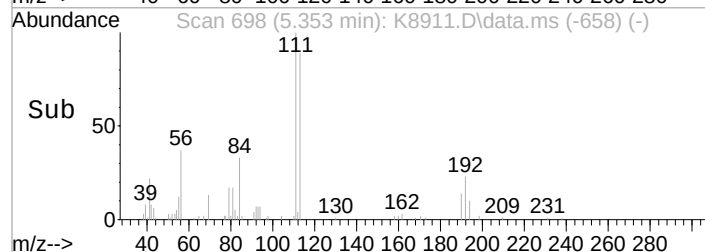
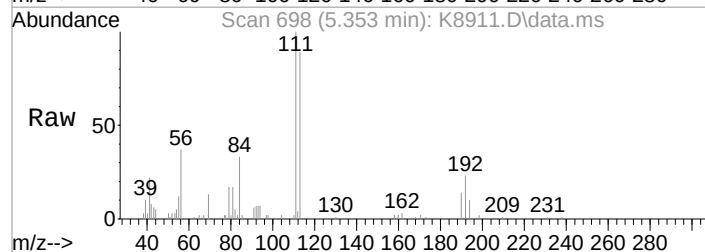
#39
 Tetrahydrofuran
 Concen: 1.65 ppb
 RT: 4.956 min Scan# 633
 Delta R.T. 0.024 min
 Lab File: K8911.D
 Acq: 12 Nov 2021 4:09 pm

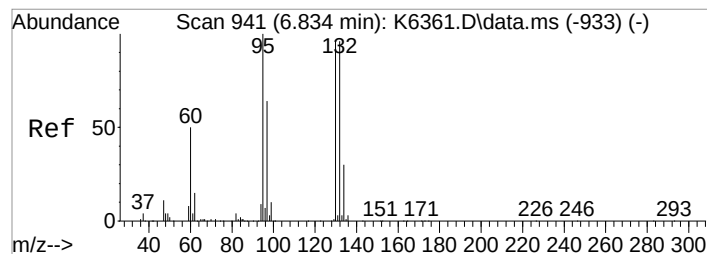
Tgt Ion: 42 Resp: 3728
 Ion Ratio Lower Upper
 42 100
 72 49.5 21.8 61.8



#44
 Cyclohexane
 Concen: 0.97 ppb
 RT: 5.353 min Scan# 698
 Delta R.T. -0.006 min
 Lab File: K8911.D
 Acq: 12 Nov 2021 4:09 pm

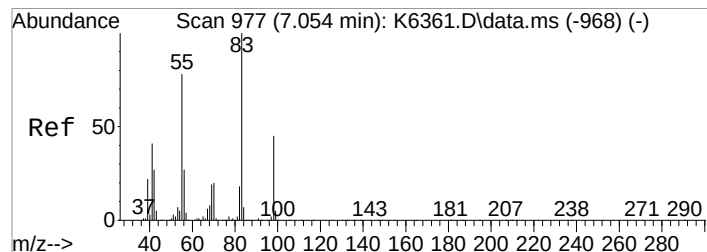
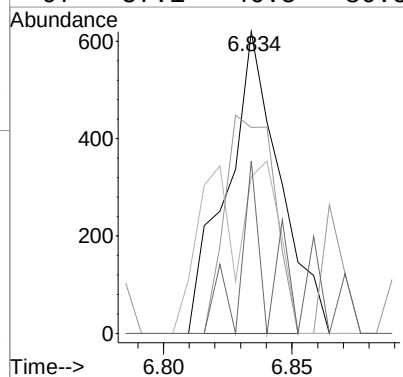
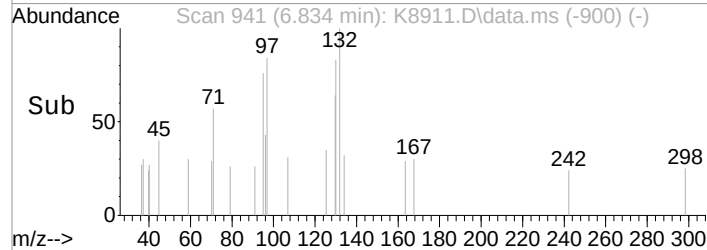
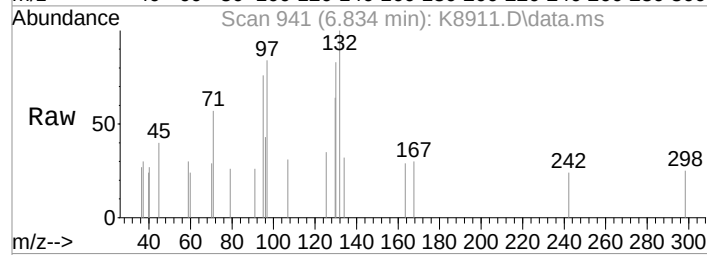
Tgt Ion: 41 Resp: 4066
 Ion Ratio Lower Upper
 41 100
 39 43.4 25.2 65.2





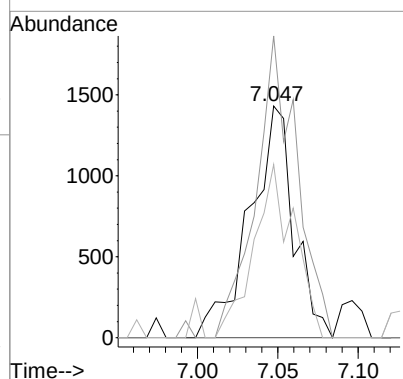
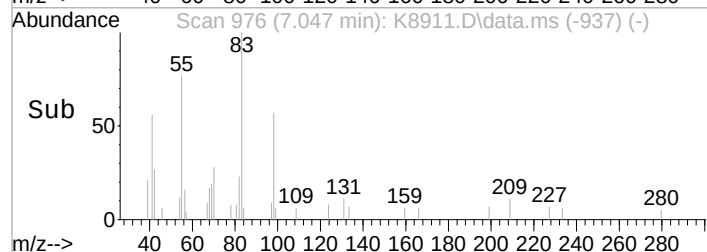
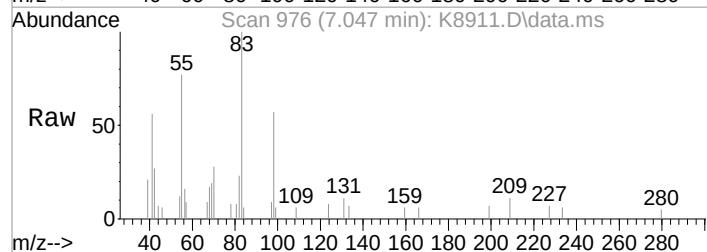
#54
 Trichloroethene
 Concen: 0.20 ppb
 RT: 6.834 min Scan# 941
 Delta R.T. 0.000 min
 Lab File: K8911.D
 Acq: 12 Nov 2021 4:09 pm

Tgt Ion	130	Resp	890
Ion Ratio	Lower	Upper	
130	100		
132	68.2	79.7	119.7#
95	51.9	83.8	123.8#
97	57.1	46.5	86.5



#55
 Methylcyclohexane
 Concen: 0.47 ppb m
 RT: 7.047 min Scan# 976
 Delta R.T. 0.000 min
 Lab File: K8911.D
 Acq: 12 Nov 2021 4:09 pm

Tgt Ion	55	Resp	2738
Ion Ratio	Lower	Upper	
55	100		
83	130.2	108.1	148.1
98	74.7	37.0	77.0



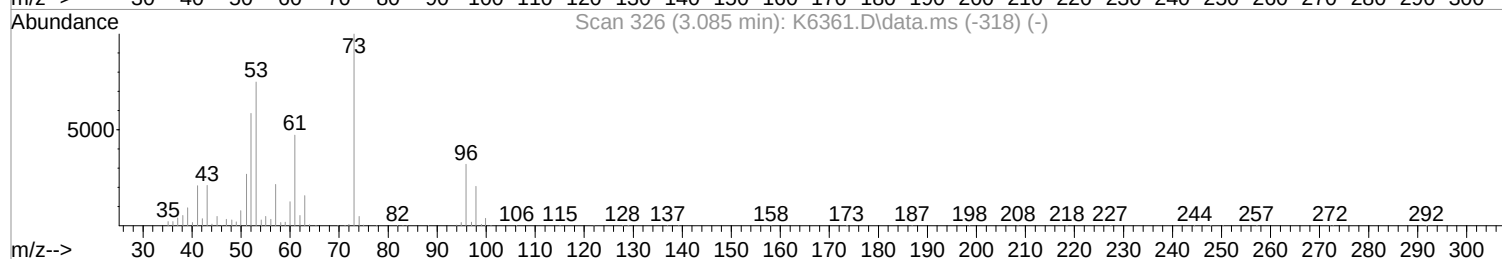
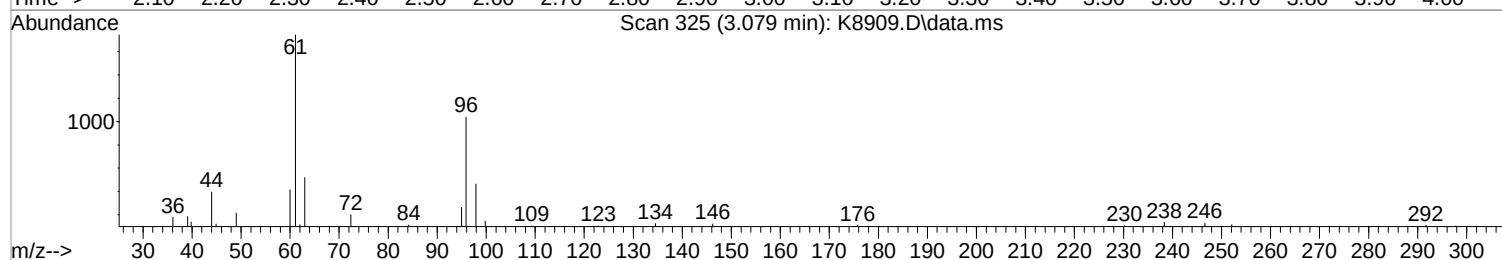
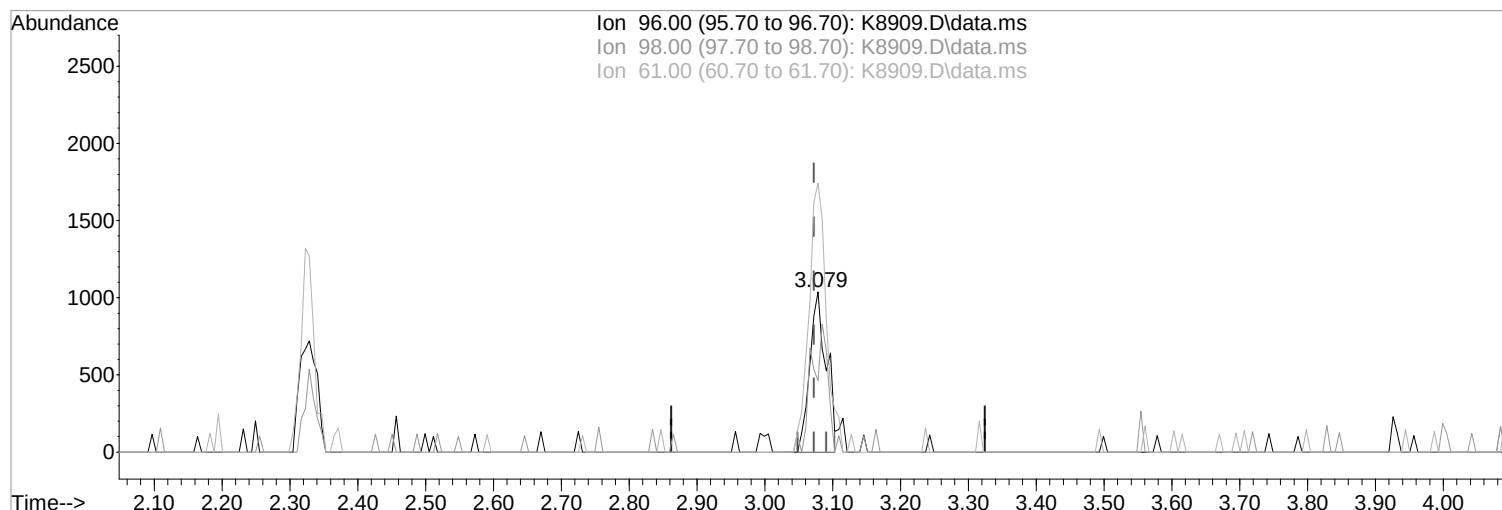
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8909.D
Acq On : 12 Nov 2021 3:26 pm
Operator : K.Ruest
Sample : R2111745-019|10
Misc : LIRO 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 15:45:22 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8909.D\data.ms

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

3.079min (+0.006) 0.43 ppb m

response 1785

Ion	Exp%	Act%
96.00	100	100
98.00	64.10	44.61
61.00	147.90	167.92#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

11/15/21

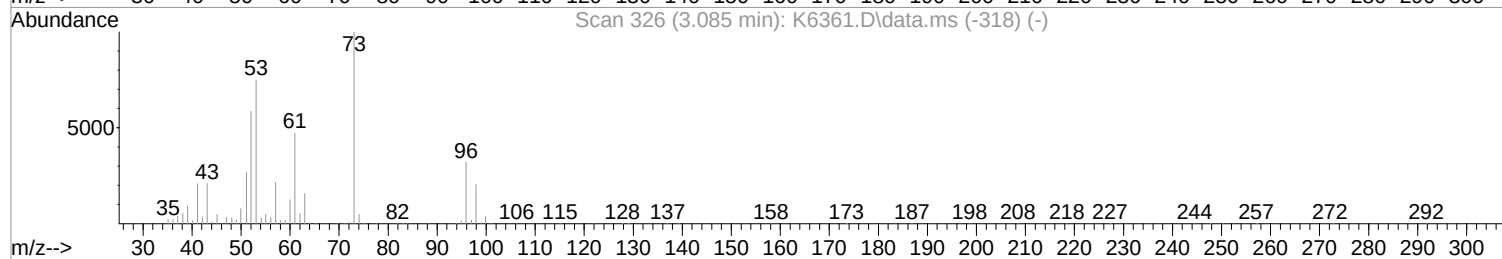
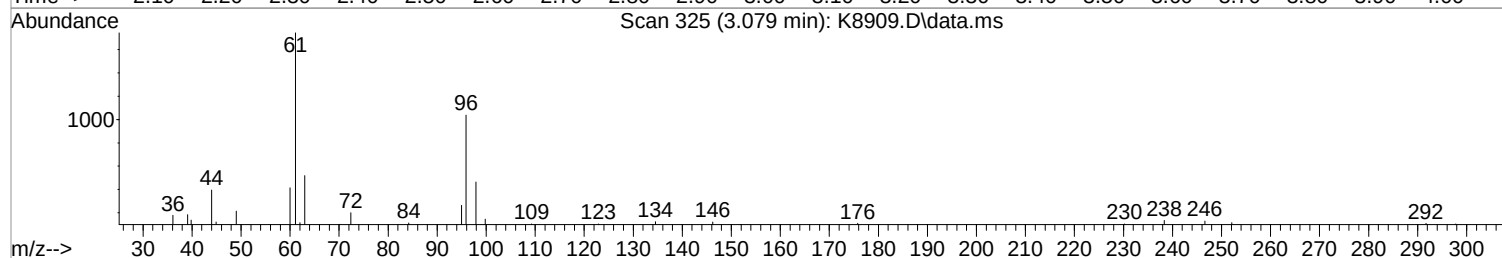
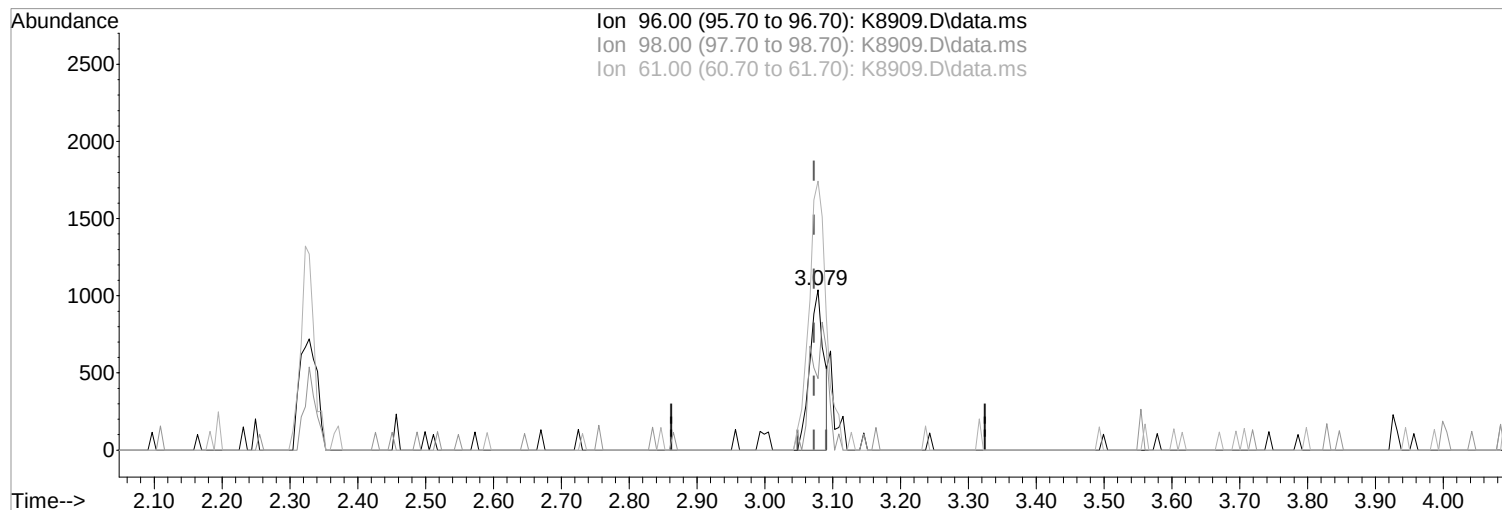
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8909.D
Acq On : 12 Nov 2021 3:26 pm
Operator : K.Ruest
Sample : R2111745-019|10
Misc : LIRO 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 15:45:22 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8909.D\data.ms

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

Manual Integration:

3.079min (+0.006) 0.36 ppb

Before

response 1502

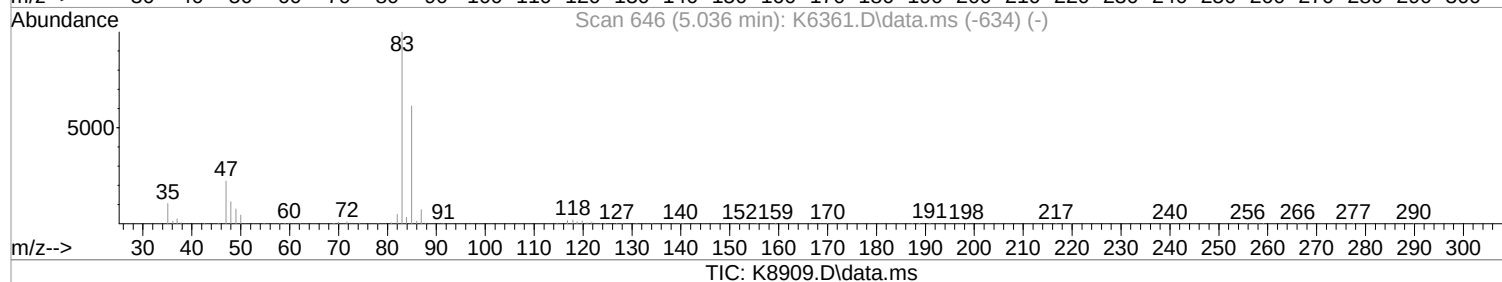
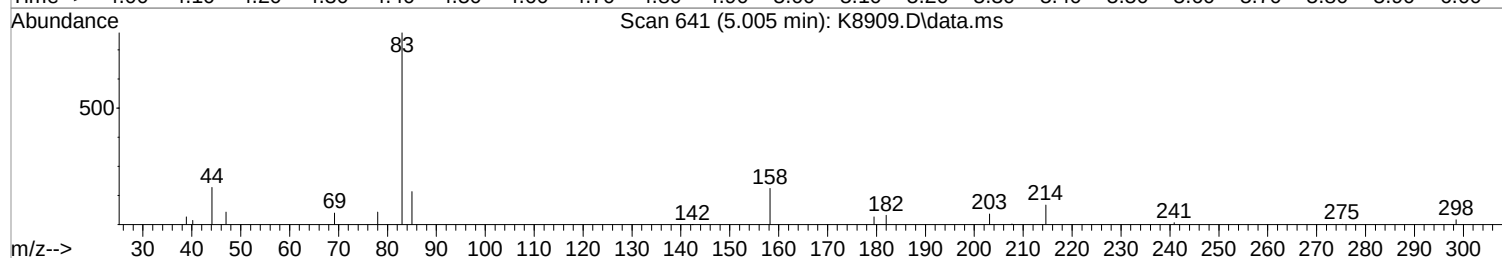
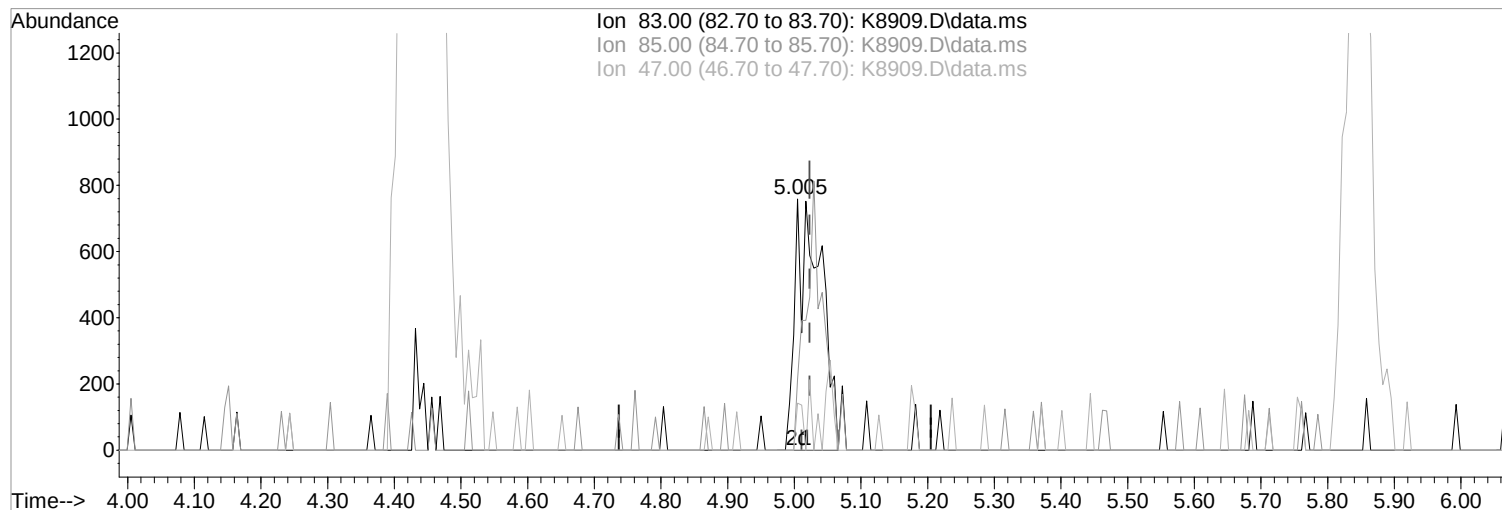
Ion	Exp%	Act%
96.00	100	100
98.00	64.10	44.61
61.00	147.90	167.92#
0.00	0.00	0.00

11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8909.D
Acq On : 12 Nov 2021 3:26 pm
Operator : K.Ruest
Sample : R2111745-019|10
Misc : LIRO 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 15:45:22 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



(40) Chloroform (P)

Manual Integration:

5.005min (-0.018) -0.23 ppb m

After

response 2035

Poor integration.

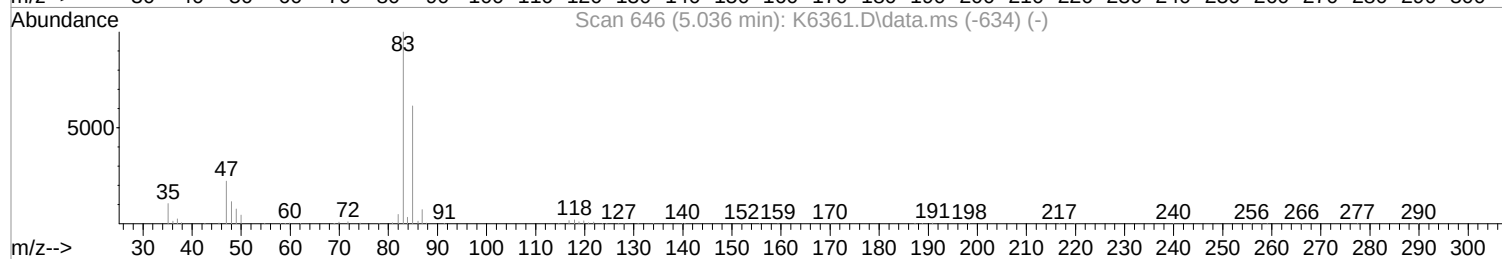
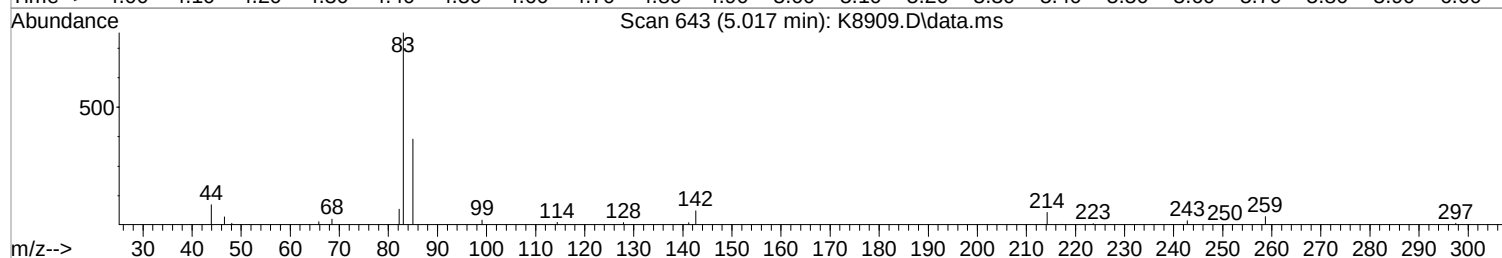
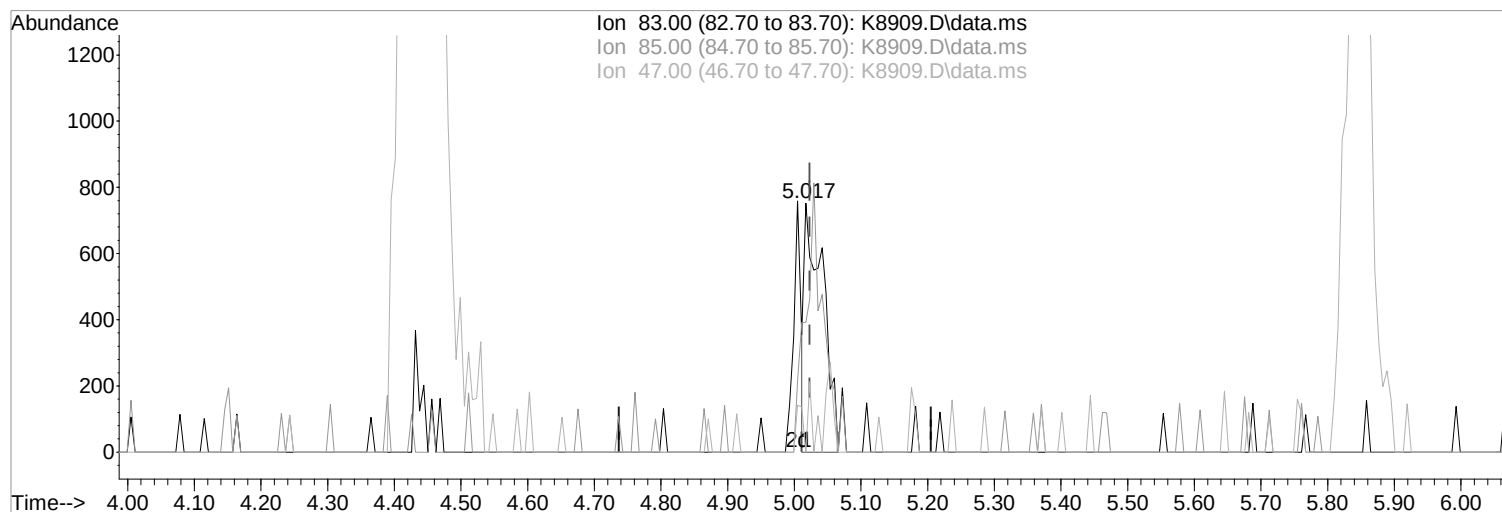
Ion	Exp%	Act%
83.00	100	100
85.00	61.50	28.06#
47.00	22.10	18.71
0.00	0.00	0.00

11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8909.D
Acq On : 12 Nov 2021 3:26 pm
Operator : K.Ruest
Sample : R2111745-019|10
Misc : LIRO 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 15:45:22 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8909.D\data.ms

(40) Chloroform (P)

Manual Integration:

5.017min (-0.006) -0.31 ppb

Before

response 1448

Ion Exp% Act%

11/15/21

83.00 100 100

85.00 61.50 52.13

47.00 22.10 0.00#

0.00 0.00 0.00

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8909.D
 Acq On : 12 Nov 2021 3:26 pm
 Operator : K.Ruest
 Sample : R2111745-019|10
 Misc : LIRO 8260 T4
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 15 15:57:21 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

foamy sample

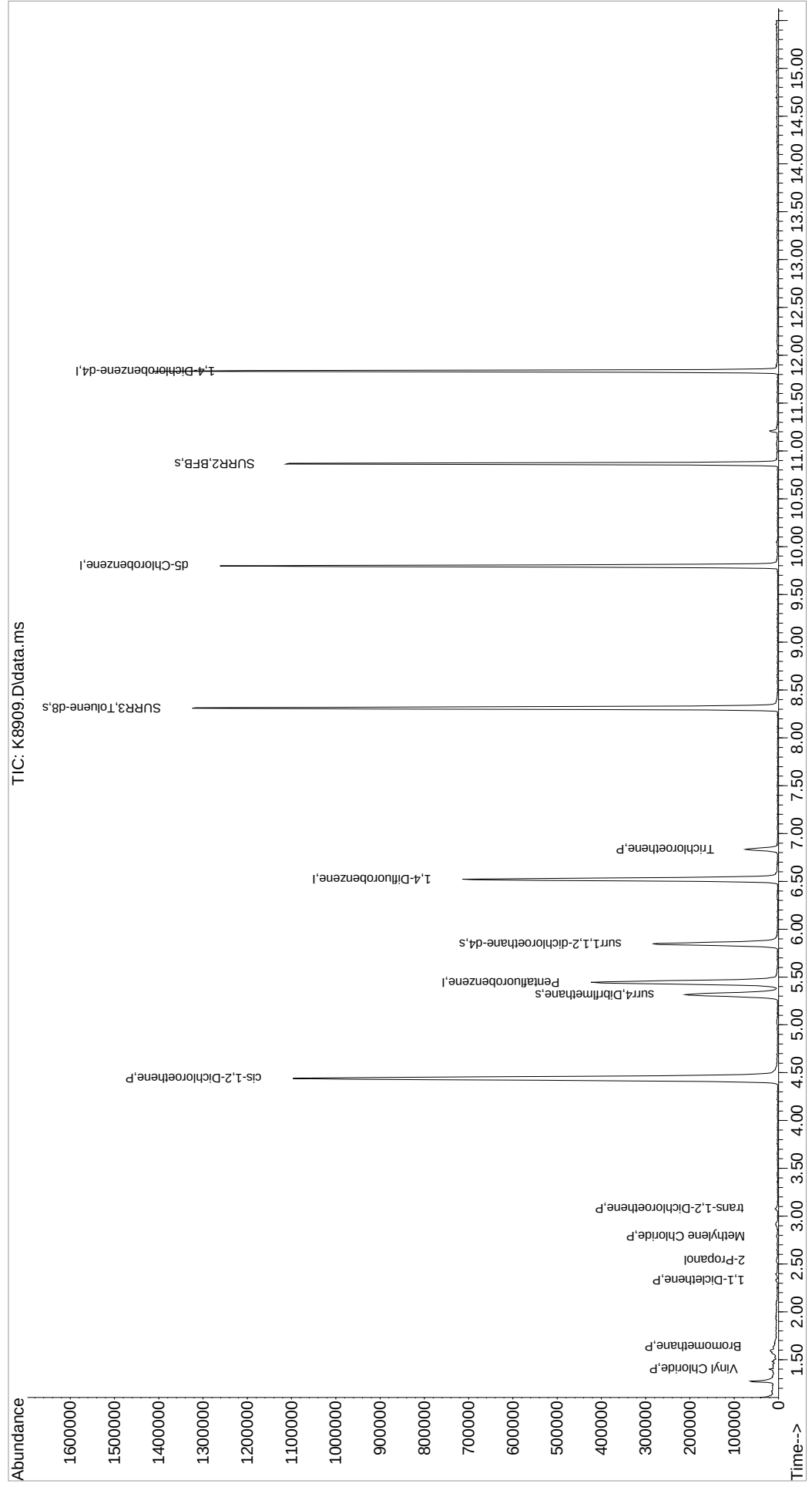
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.444	168	394005	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	647125	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	585339	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	274314	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.316	113	178910	50.79	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	101.58%	
48) surr1,1,2-dichloroetha...	5.846	65	234904	45.86	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	91.72%	
65) SURR3,Toluene-d8	8.309	98	870594	52.58	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	105.16%	
70) SURR2,BFB	10.864	95	321606	48.93	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	97.86%	
Target Compounds						
4) Vinyl Chloride	1.402	62	4173	0.78	ppb	Qvalue 70
5) Bromomethane	1.634	94	1684	0.48	ppb	# 18
13) 1,1-Dicethene	2.329	96	1322	0.34	ppb	87
15) Acetone	2.402	43	2568	Below	Cal	79
16) 2-Propanol	2.536	45	3376	6.60	ppb	92
22) Methylene Chloride	2.786	84	972	0.21	ppb	# 57
26) trans-1,2-Dichloroethene	3.079	96	1785m	0.43	ppb	
34) cis-1,2-Dichloroethene	4.438	96	665096	137.73	ppb	87
40) Chloroform	5.005	83	2035m	Below	Cal	
54) Trichloroethene	6.834	130	27391	6.01	ppb	91

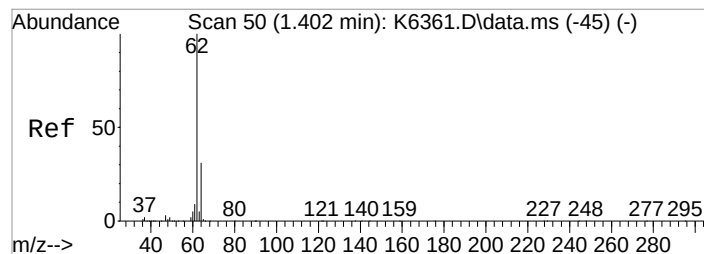
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : I:\ACQDATA\msvoa12\Data\111221\
Data File : K8909.D
Acq On : 12 Nov 2021 3:26 pm
Operator : K.Ruest
Sample : R2111745-019|10
Misc : LIRO 8260 T4
ALS Vial : 7 Sample Multiplier: 1

Inst : MSV0A-12

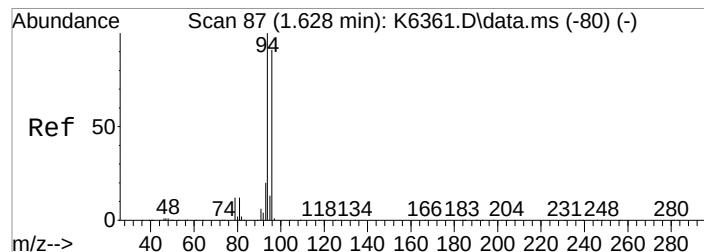
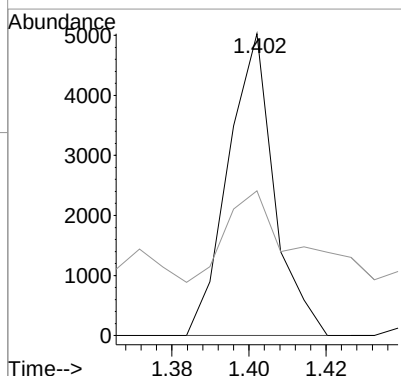
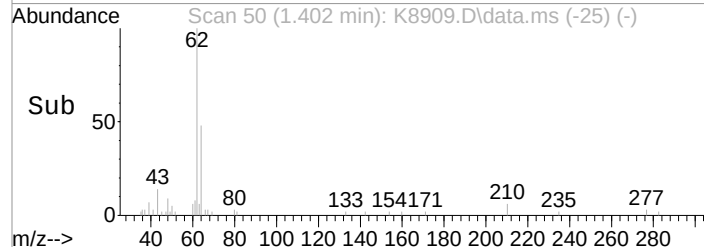
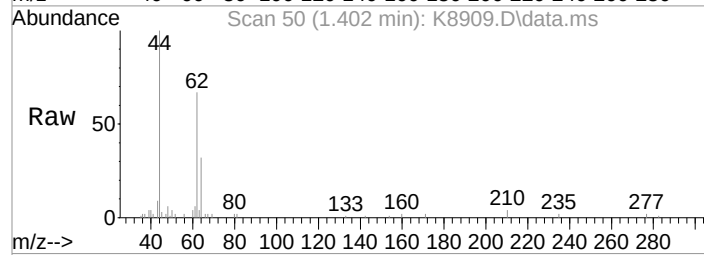
Quant Time: Nov 15 15:57:21 2021
Quant Method : I:\ACQDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration





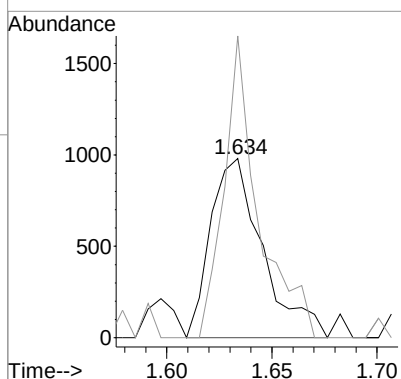
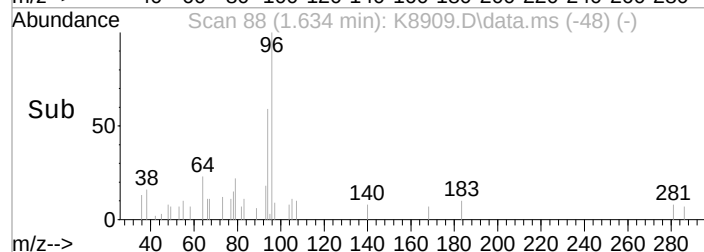
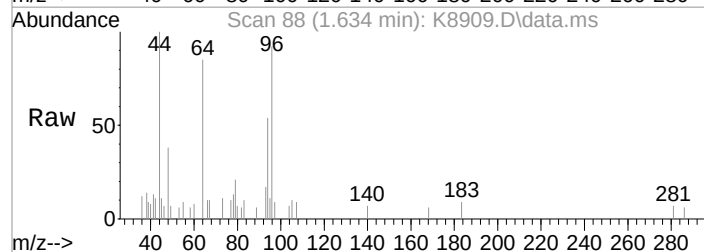
#4
Vinyl Chloride
Concen: 0.78 ppb
RT: 1.402 min Scan# 50
Delta R.T. 0.006 min
Lab File: K8909.D
Acq: 12 Nov 2021 3:26 pm

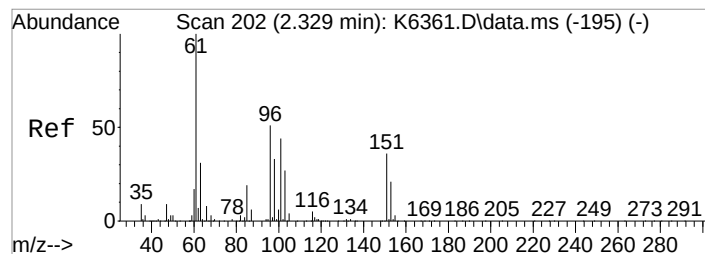
Tgt Ion: 62 Resp: 4173
Ion Ratio Lower Upper
62 100
64 48.0 11.5 51.5



#5
Bromomethane
Concen: 0.48 ppb
RT: 1.634 min Scan# 88
Delta R.T. 0.018 min
Lab File: K8909.D
Acq: 12 Nov 2021 3:26 pm

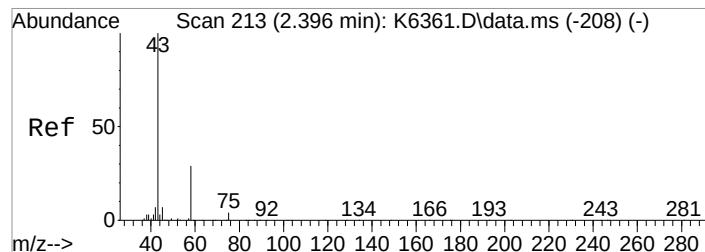
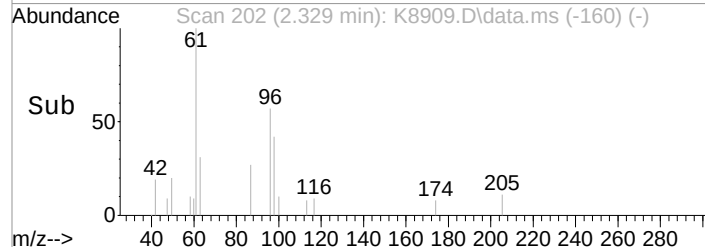
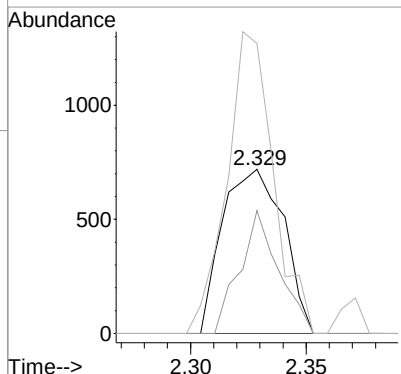
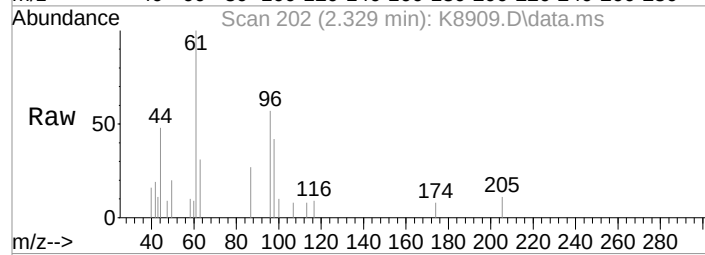
Tgt Ion: 94 Resp: 1684
Ion Ratio Lower Upper
94 100
96 168.4 71.0 111.0#





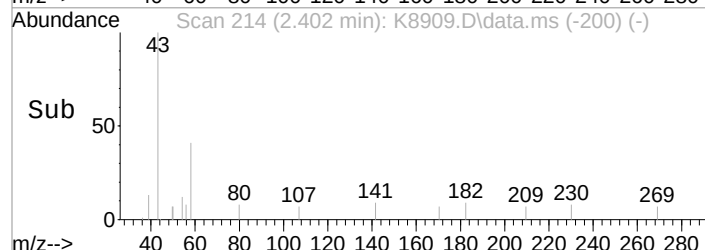
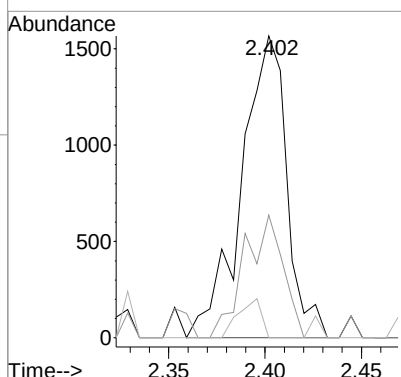
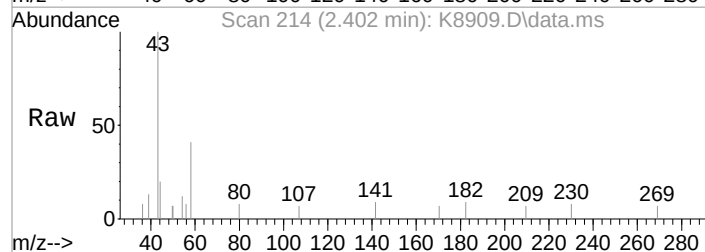
#13
 1,1-Dicloroethene
 Concen: 0.34 ppb
 RT: 2.329 min Scan# 202
 Delta R.T. 0.006 min
 Lab File: K8909.D
 Acq: 12 Nov 2021 3:26 pm

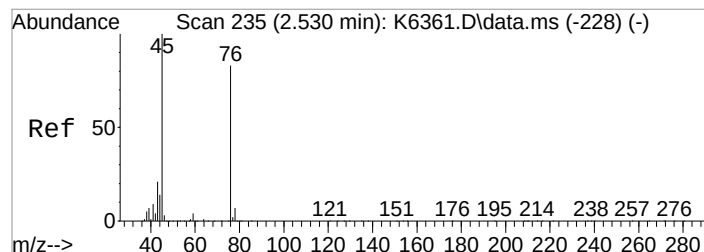
Tgt Ion: 96	Resp: 1322
Ion Ratio	Lower Upper
96	100
98	74.7 44.1 84.1
61	176.5 174.9 214.9



#15
 Acetone
 Concen: Below Cal
 RT: 2.402 min Scan# 214
 Delta R.T. 0.013 min
 Lab File: K8909.D
 Acq: 12 Nov 2021 3:26 pm

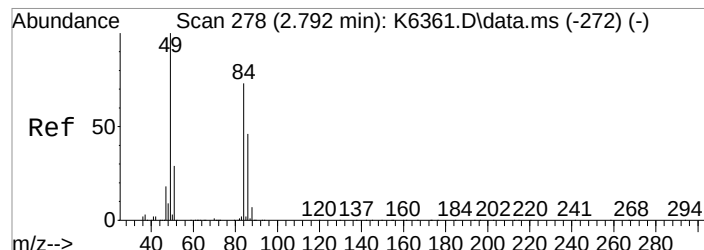
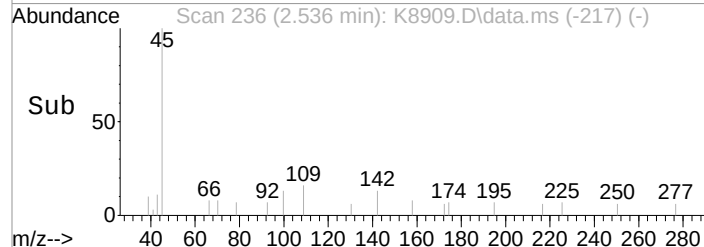
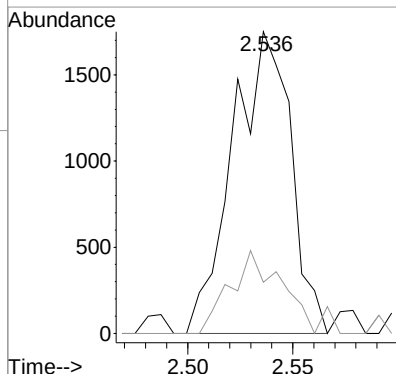
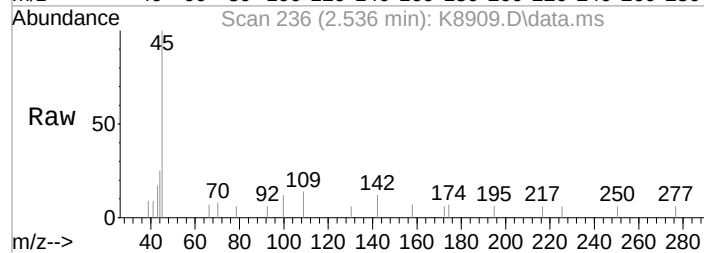
Tgt Ion: 43	Resp: 2568
Ion Ratio	Lower Upper
43	100
58	40.6 9.6 49.6
42	0.0 0.0 27.7





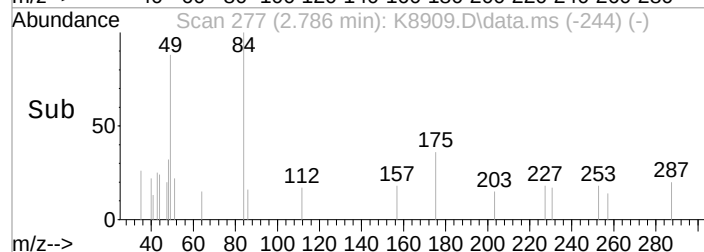
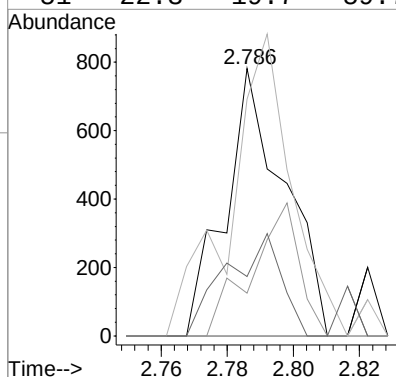
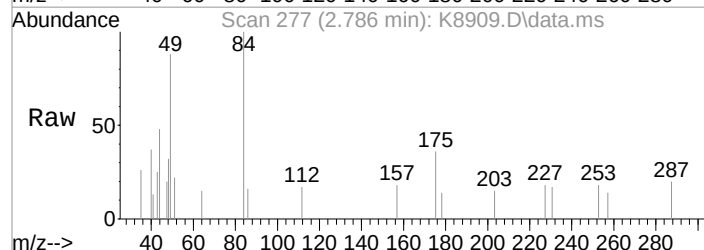
#16
 2-Propanol
 Concen: 6.60 ppb
 RT: 2.536 min Scan# 236
 Delta R.T. 0.006 min
 Lab File: K8909.D
 Acq: 12 Nov 2021 3:26 pm

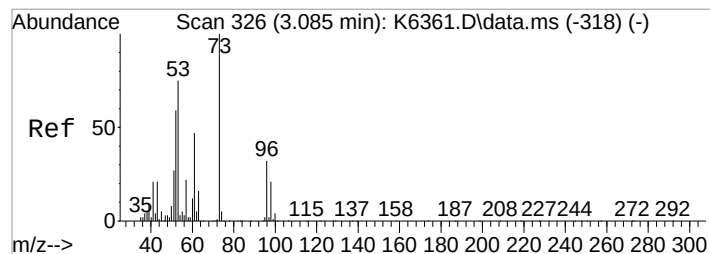
Tgt Ion: 45 Resp: 3376
 Ion Ratio Lower Upper
 45 100
 43 16.9 0.6 40.6



#22
 Methylene Chloride
 Concen: 0.21 ppb
 RT: 2.786 min Scan# 277
 Delta R.T. -0.000 min
 Lab File: K8909.D
 Acq: 12 Nov 2021 3:26 pm

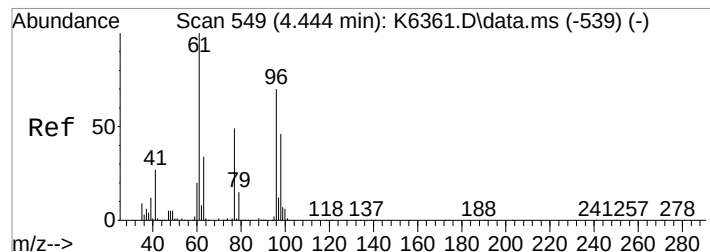
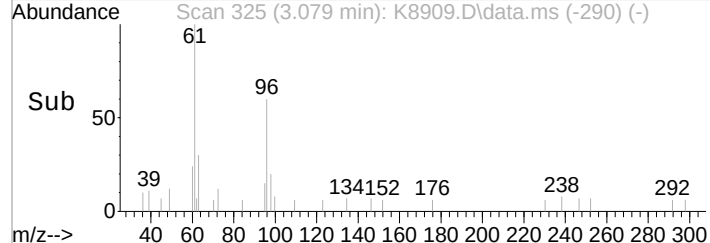
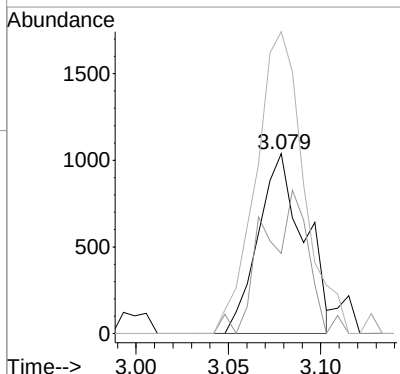
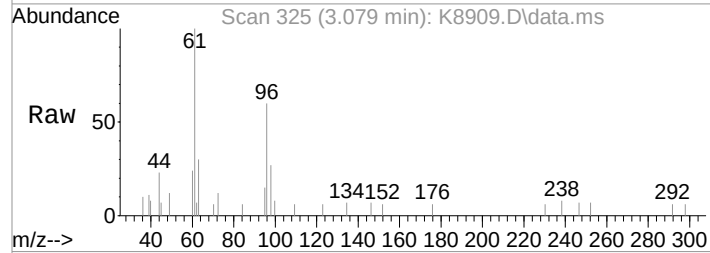
Tgt Ion: 84 Resp: 972
 Ion Ratio Lower Upper
 84 100
 86 16.0 42.7 82.7#
 49 88.5 116.5 156.5#
 51 22.3 19.7 59.7





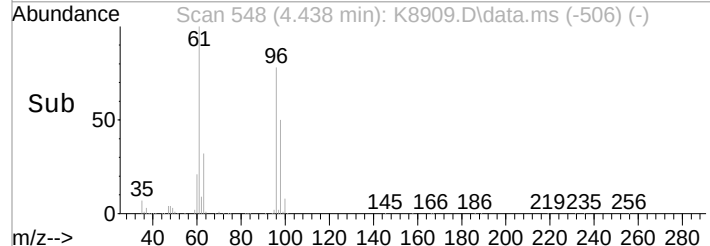
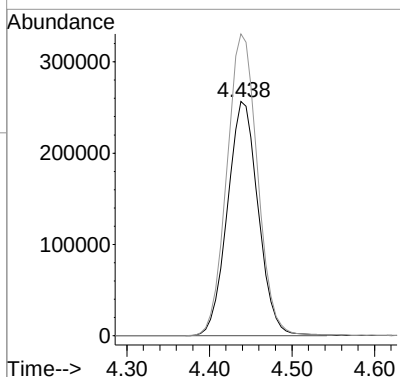
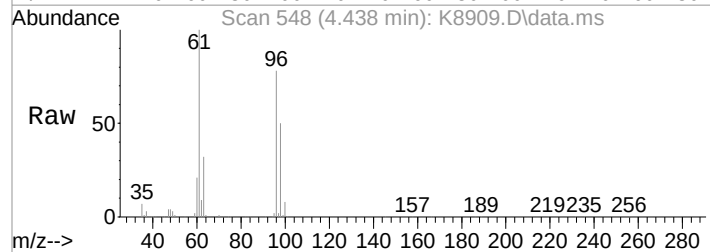
#26
 trans-1,2-Dichloroethene
 Concen: 0.43 ppb m
 RT: 3.079 min Scan# 325
 Delta R.T. 0.006 min
 Lab File: K8909.D
 Acq: 12 Nov 2021 3:26 pm

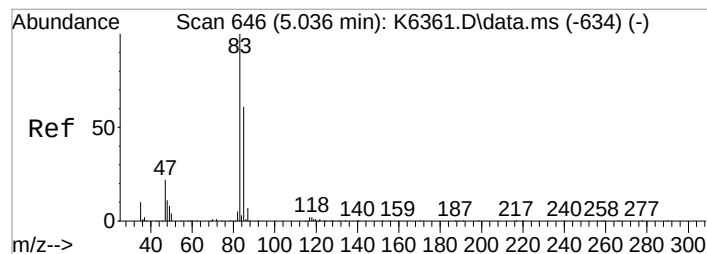
Tgt Ion: 96 Resp: 1785
 Ion Ratio Lower Upper
 96 100
 98 44.6 44.1 84.1
 61 167.9 127.9 167.9#



#34
 cis-1,2-Dichloroethene
 Concen: 137.73 ppb
 RT: 4.438 min Scan# 548
 Delta R.T. -0.000 min
 Lab File: K8909.D
 Acq: 12 Nov 2021 3:26 pm

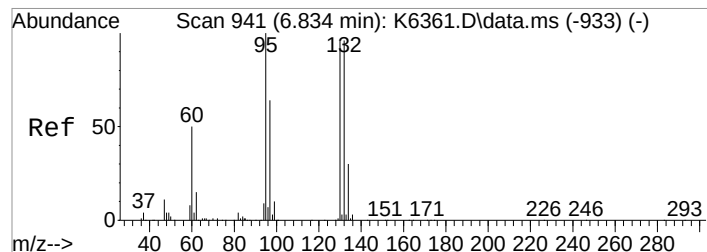
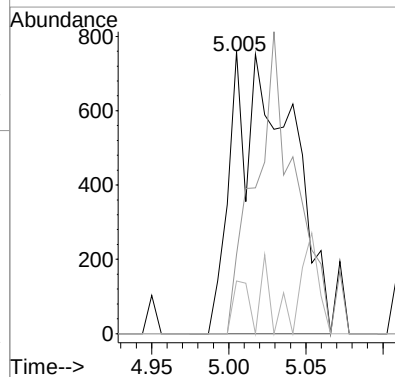
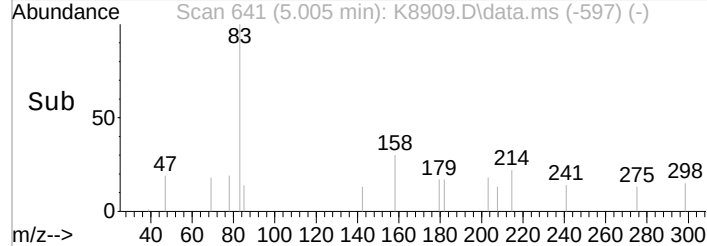
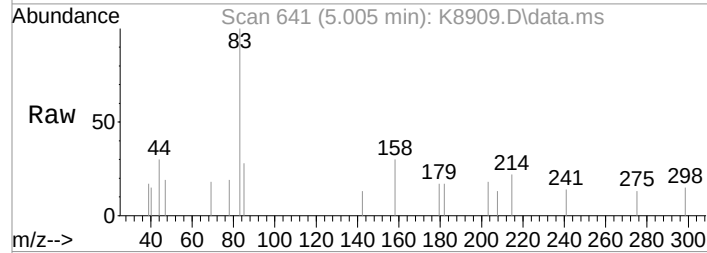
Tgt Ion: 96 Resp: 665096
 Ion Ratio Lower Upper
 96 100
 61 128.8 125.2 165.2





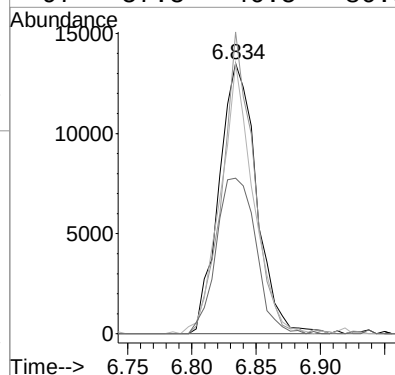
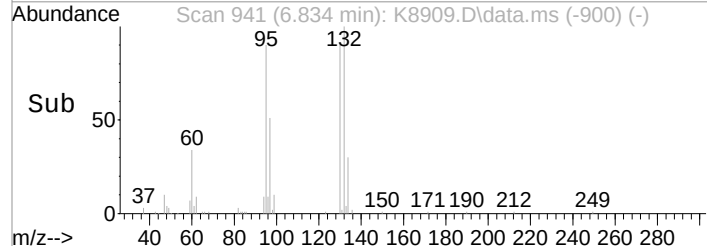
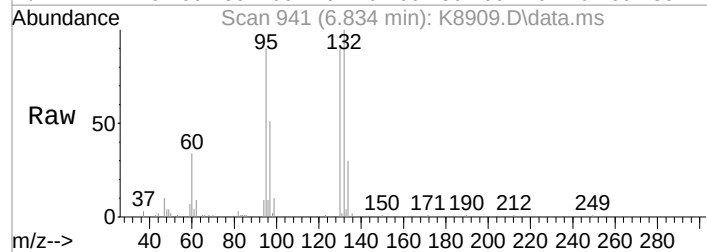
#40
 Chloroform
 Concen: Below Cal m
 RT: 5.005 min Scan# 641
 Delta R.T. -0.018 min
 Lab File: K8909.D
 Acq: 12 Nov 2021 3:26 pm

Tgt Ion:	83	Resp:	2035
Ion Ratio		Lower	Upper
83	100		
85	28.1	41.5	81.5#
47	18.7	2.1	42.1



#54
 Trichloroethene
 Concen: 6.01 ppb
 RT: 6.834 min Scan# 941
 Delta R.T. -0.000 min
 Lab File: K8909.D
 Acq: 12 Nov 2021 3:26 pm

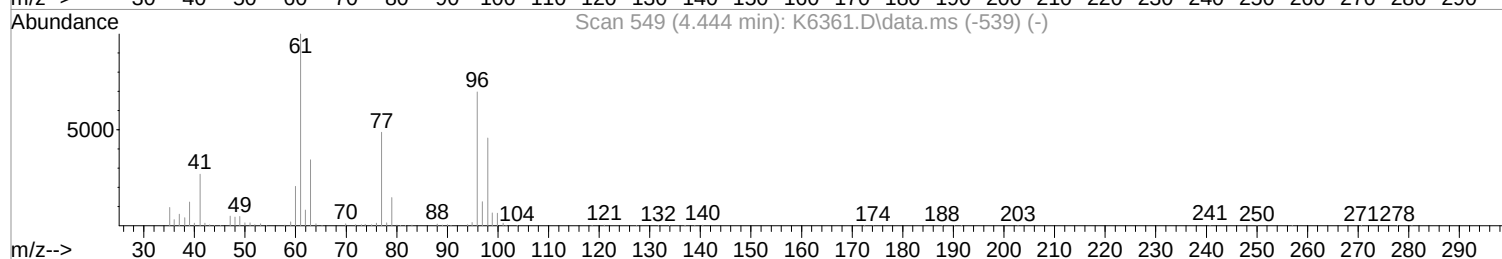
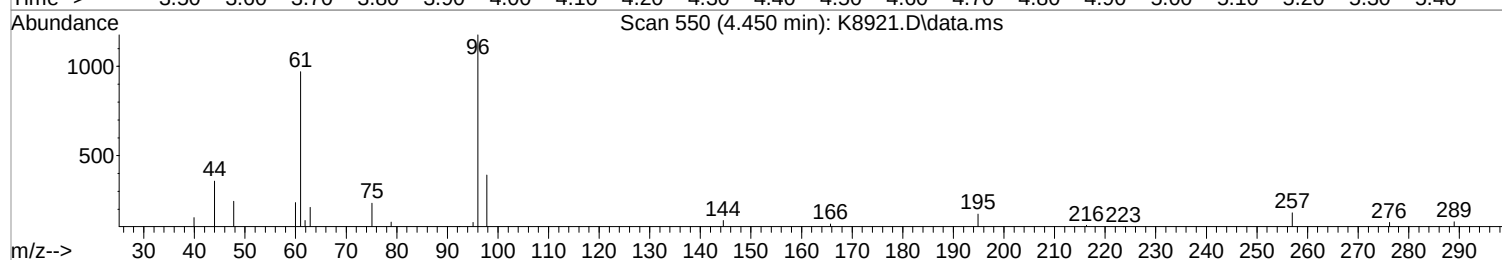
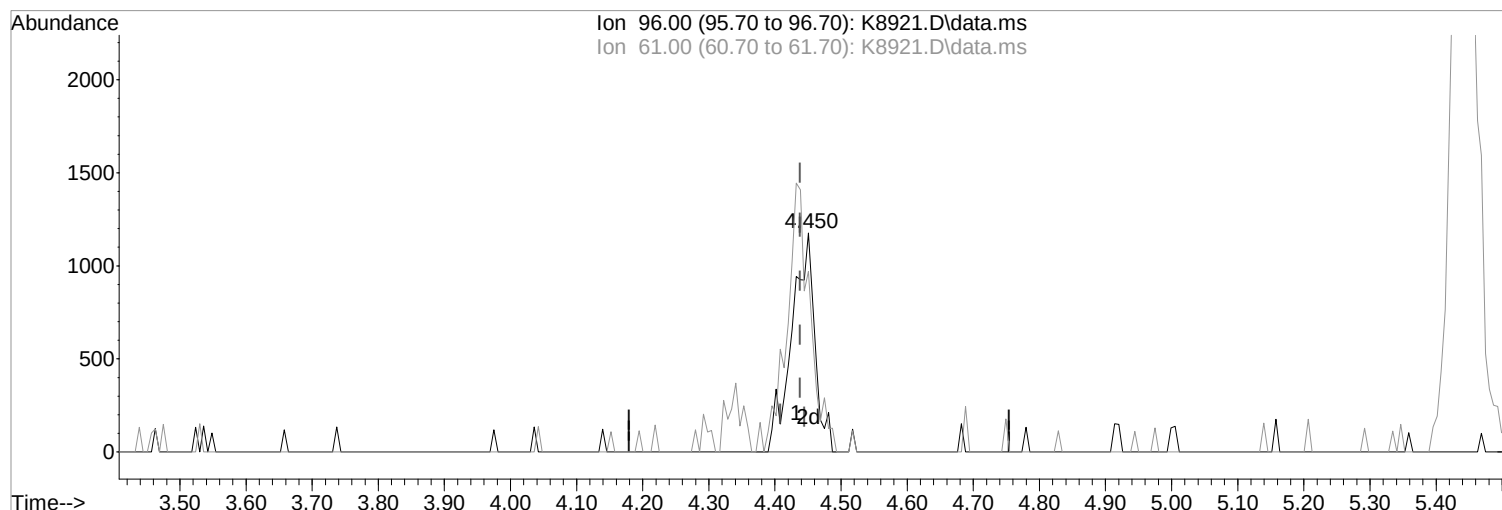
Tgt Ion:	130	Resp:	27391
Ion Ratio		Lower	Upper
130	100		
132	111.7	79.7	119.7
95	100.0	83.8	123.8
97	57.5	46.5	86.5



Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8921.D
Acq On : 12 Nov 2021 7:48 pm
Operator : K.Ruest
Sample : R2111745-020|1.0
Misc : LIRO 8260 T4
ALS Vial : 19 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 13 10:25:01 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8921.D\data.ms

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

4.450min (+0.012) 0.59 ppb m

response 2859

Ion	Exp%	Act%
96.00	100	100
61.00	145.20	82.41#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Split Peak

11/15/21

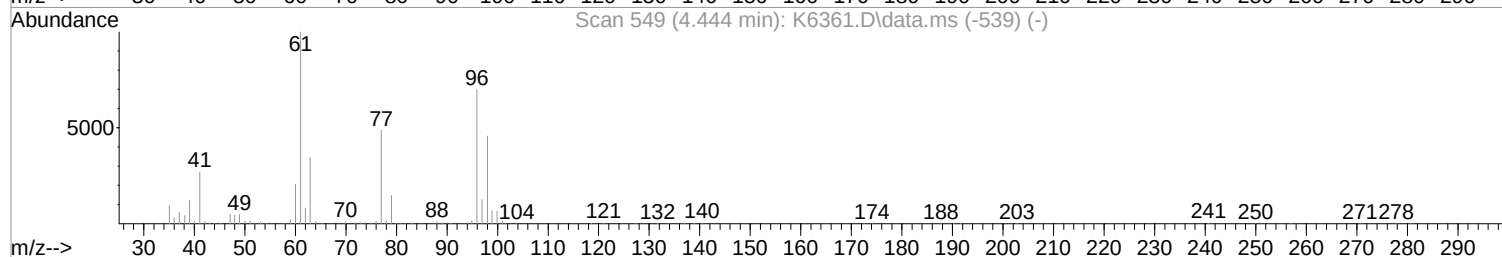
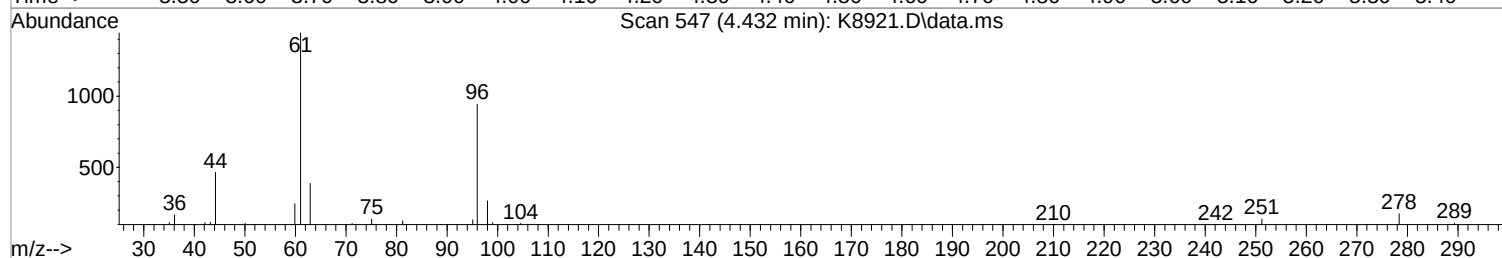
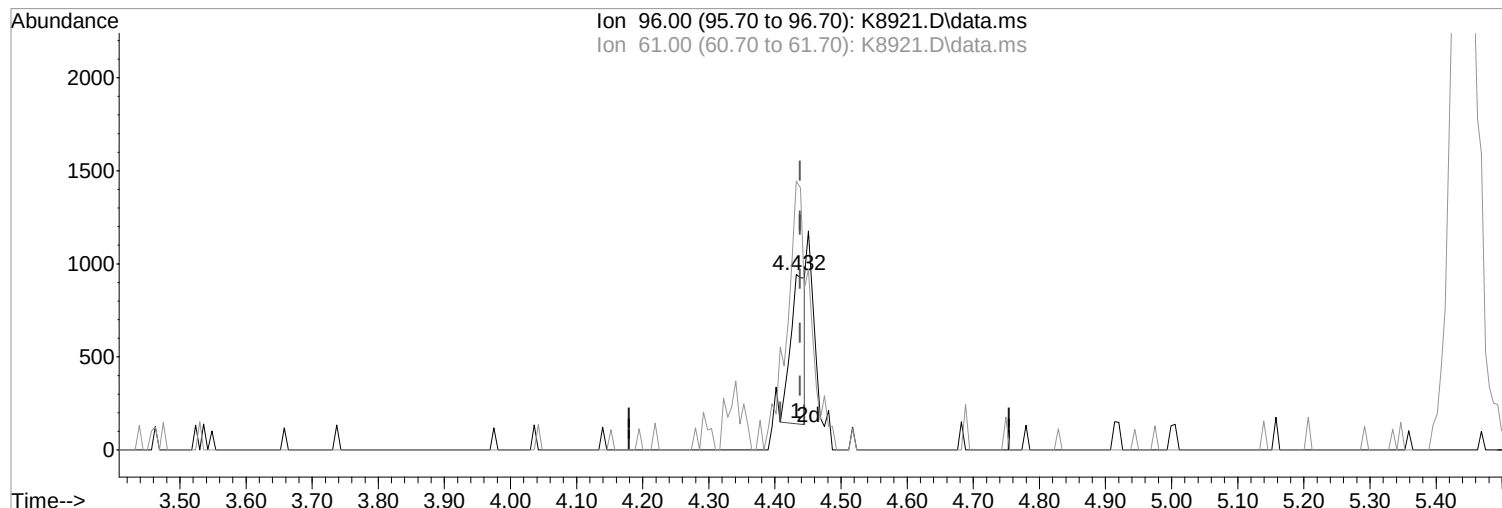
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8921.D
Acq On : 12 Nov 2021 7:48 pm
Operator : K.Ruest
Sample : R2111745-020|1.0
Misc : LIRO 8260 T4
ALS Vial : 19 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 13 10:25:01 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8921.D\data.ms

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

Manual Integration:

4.432min (-0.006) 0.25 ppb

Before

response 1223

Ion	Exp%	Act%
96.00	100	100
61.00	145.20	153.23
0.00	0.00	0.00
0.00	0.00	0.00

11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8921.D
 Acq On : 12 Nov 2021 7:48 pm
 Operator : K.Ruest
 Sample : R2111745-020|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 19 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 15 16:18:16 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

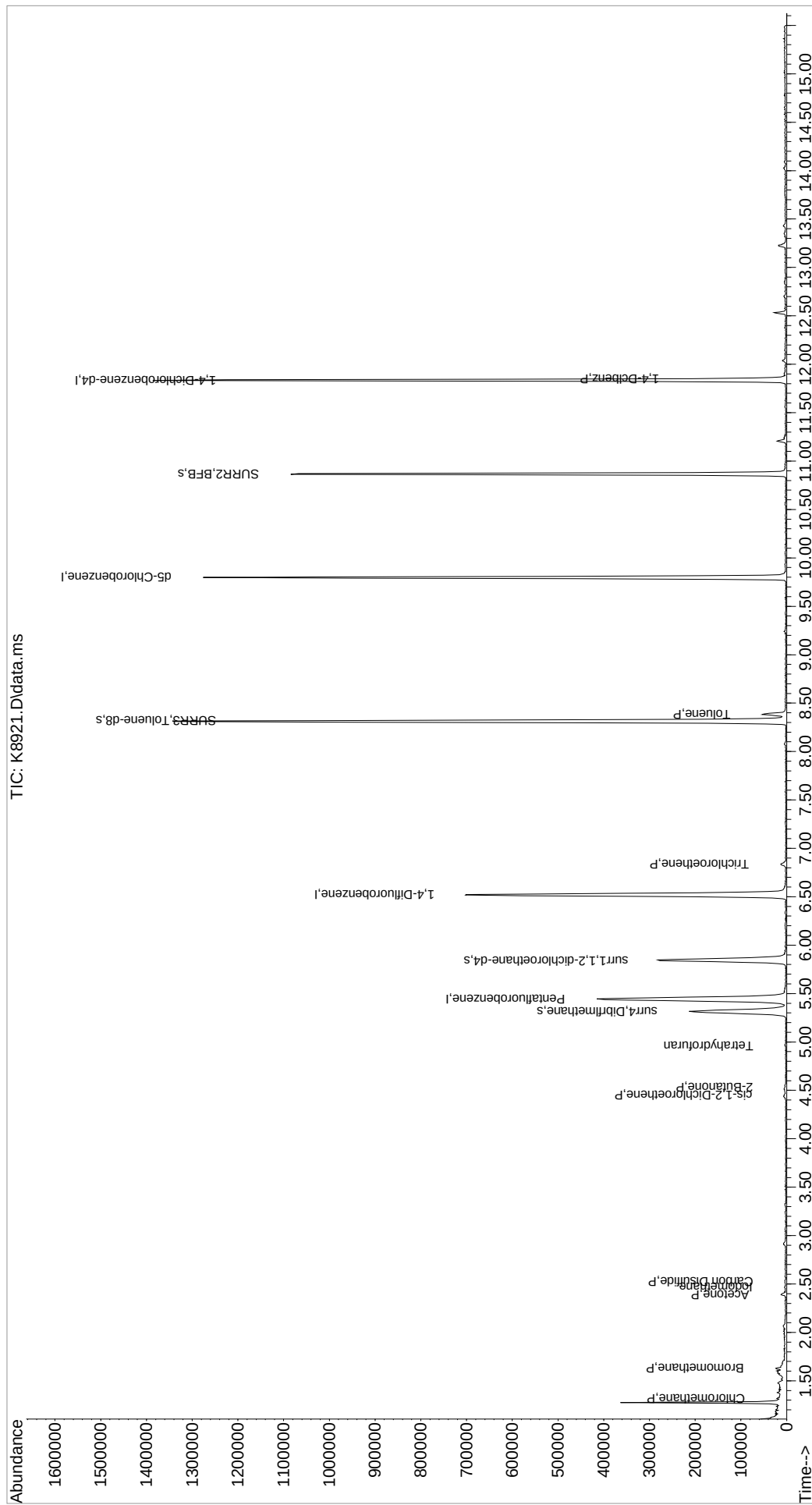
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.444	168	392400	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	643325	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	580400	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	274279	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.316	113	176716	50.46	ppb	0.00
Spiked Amount 50.000	Range 80 - 116		Recovery =	100.92%		
48) surr1,1,2-dichloroetha...	5.840	65	237975	46.73	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery =	93.46%		
65) SURR3,Toluene-d8	8.316	98	865159	52.56	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	105.12%		
70) SURR2,BFB	10.864	95	313282	47.94	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	95.88%		
Target Compounds						
3) Chloromethane	1.317	50	3531	0.77	ppb	75
5) Bromomethane	1.628	94	7410	2.14	ppb	98
15) Acetone	2.390	43	10027	2.43	ppb	86
17) Iodomethane	2.463	142	2103	1.83	ppb	71
18) Carbon Disulfide	2.524	76	1930	0.21	ppb	78
34) cis-1,2-Dichloroethene	4.450	96	2859m	0.59	ppb	
35) 2-Butanone	4.530	43	3808	1.12	ppb	# 62
39) Tetrahydrofuran	4.956	42	1201	0.53	ppb	97
54) Trichloroethene	6.834	130	4198	0.93	ppb	# 80
66) Toluene	8.383	91	32907	1.68	ppb	94
106) 1,4-Dclbenz	11.851	146	13524	1.34	ppb	92

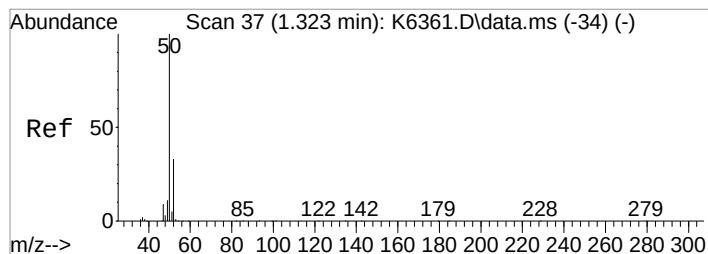
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : I:\ACQDATA\msvoa12\Data\111221\
 Data File : K8921.D
 Acq On : 12 Nov 2021 7:48 pm
 Operator : K.Ruest
 Sample : R2111745-020|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 19 Sample Multiplier: 1

Inst : MSV0A-12

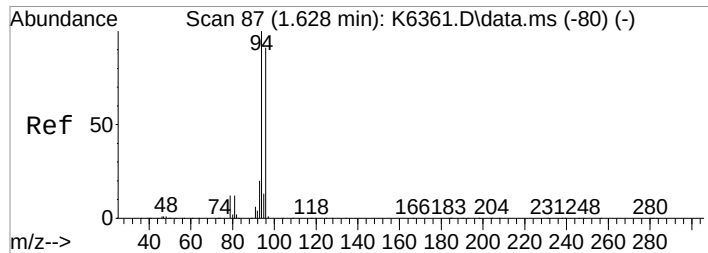
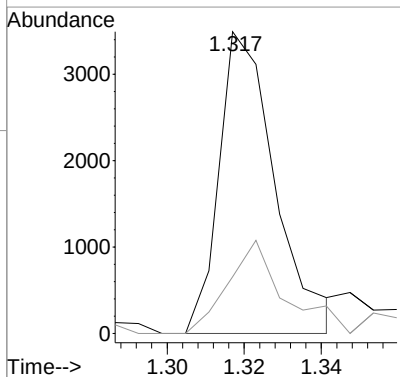
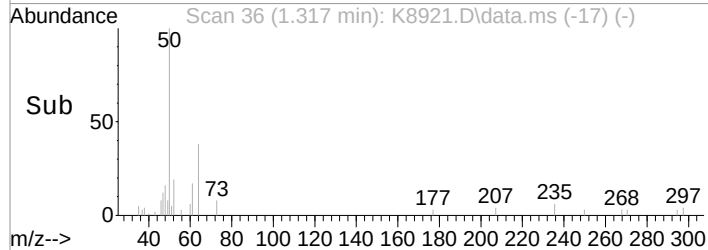
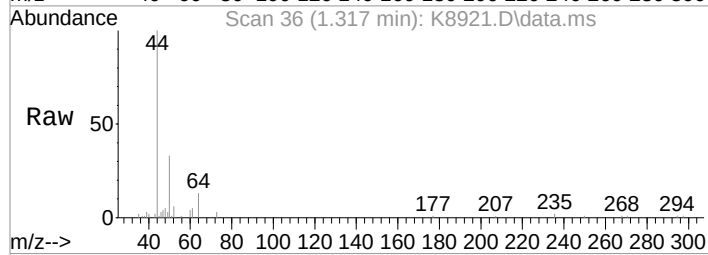
Quant Time: Nov 15 16:18:16 2021
 Quant Method : I:\ACQDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 Qlast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration





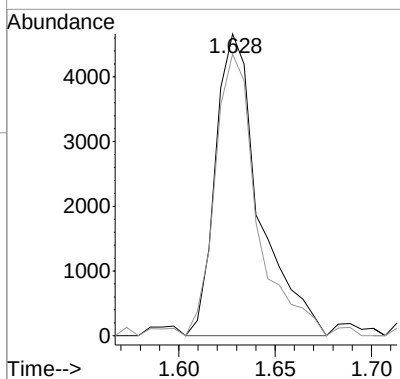
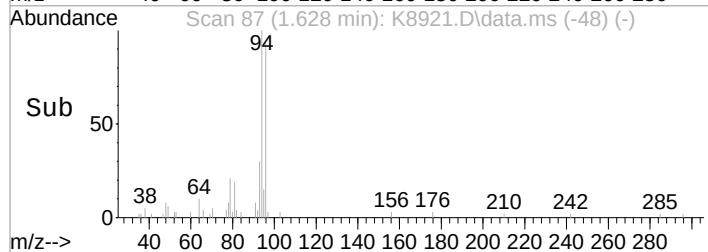
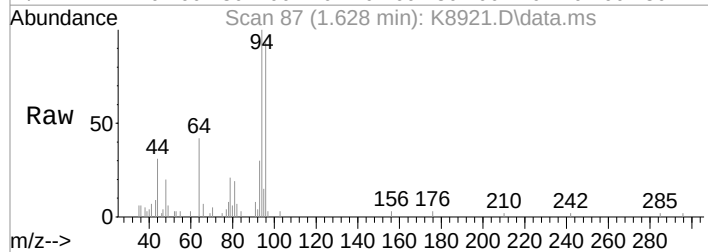
#3
 Chloromethane
 Concen: 0.77 ppb
 RT: 1.317 min Scan# 36
 Delta R.T. 0.000 min
 Lab File: K8921.D
 Acq: 12 Nov 2021 7:48 pm

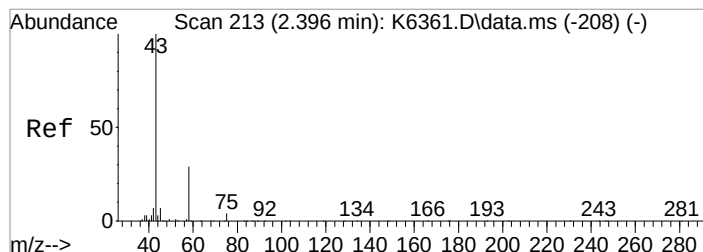
Tgt Ion: 50 Resp: 3531
 Ion Ratio Lower Upper
 50 100
 52 18.8 12.7 52.7



#5
 Bromomethane
 Concen: 2.14 ppb
 RT: 1.628 min Scan# 87
 Delta R.T. 0.012 min
 Lab File: K8921.D
 Acq: 12 Nov 2021 7:48 pm

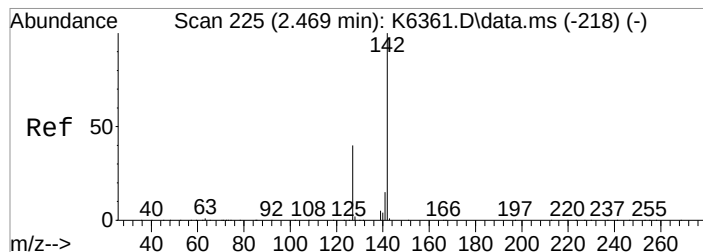
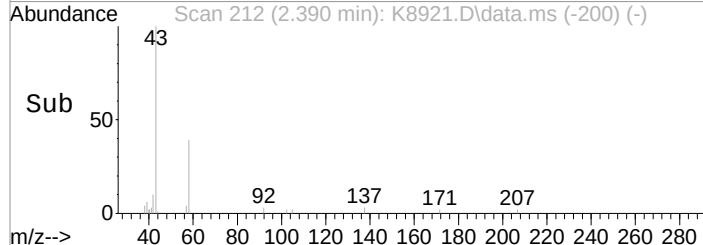
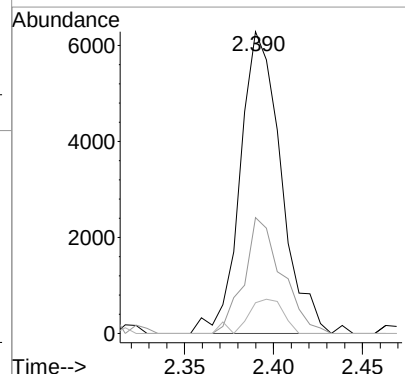
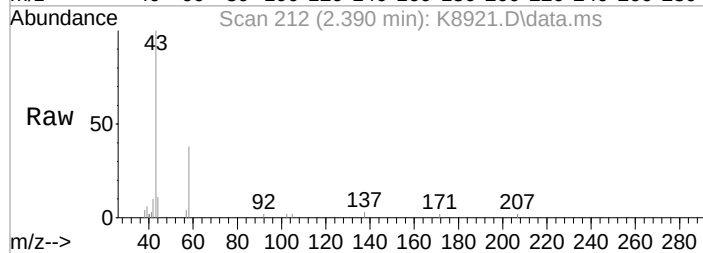
Tgt Ion: 94 Resp: 7410
 Ion Ratio Lower Upper
 94 100
 96 93.3 71.0 111.0





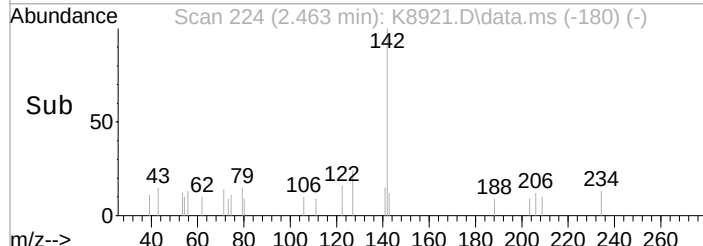
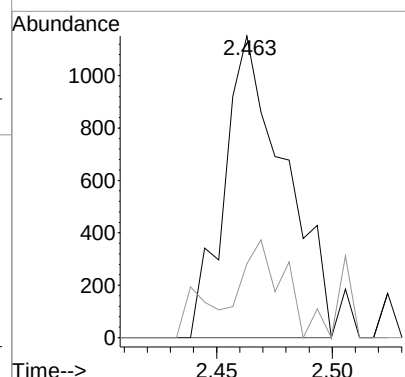
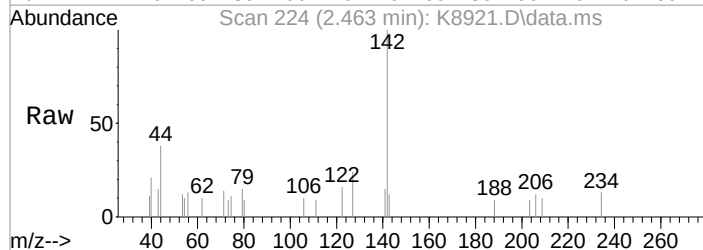
#15
 Acetone
 Concen: 2.43 ppb
 RT: 2.390 min Scan# 212
 Delta R.T. 0.001 min
 Lab File: K8921.D
 Acq: 12 Nov 2021 7:48 pm

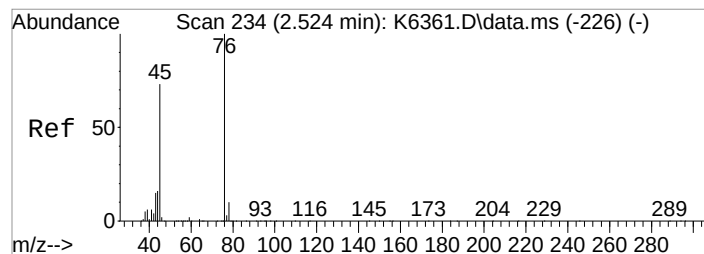
Tgt Ion	Ratio	Lower	Upper
43	100		
58	38.3	9.6	49.6
42	10.2	0.0	27.7



#17
 Iodomethane
 Concen: 1.83 ppb
 RT: 2.463 min Scan# 224
 Delta R.T. 0.007 min
 Lab File: K8921.D
 Acq: 12 Nov 2021 7:48 pm

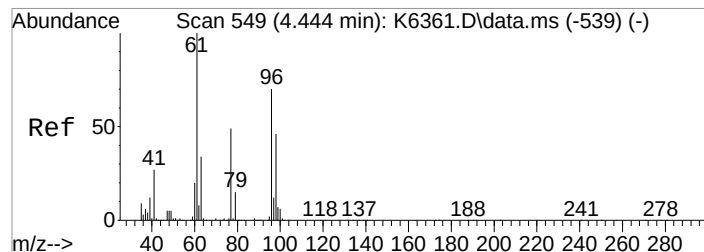
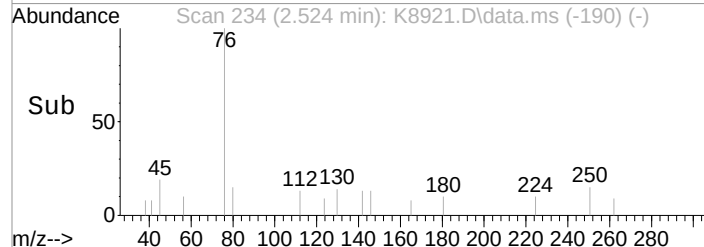
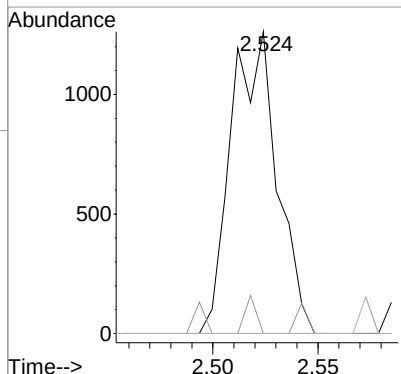
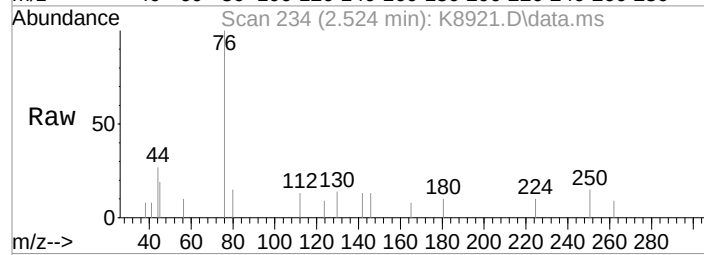
Tgt Ion	Ratio	Lower	Upper
142	100		
127	21.8	19.6	59.6





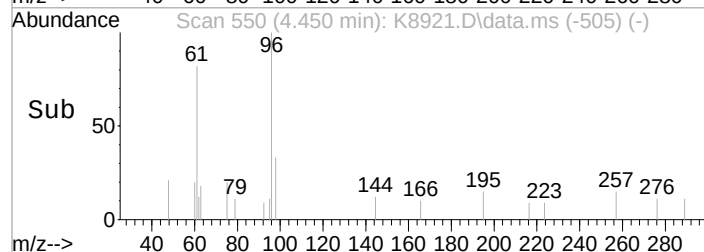
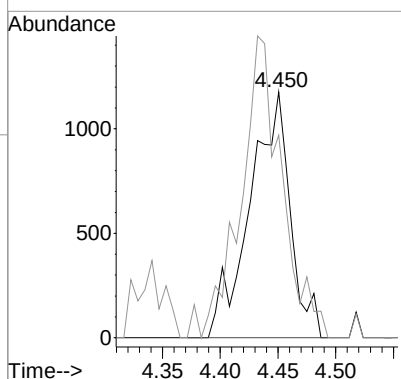
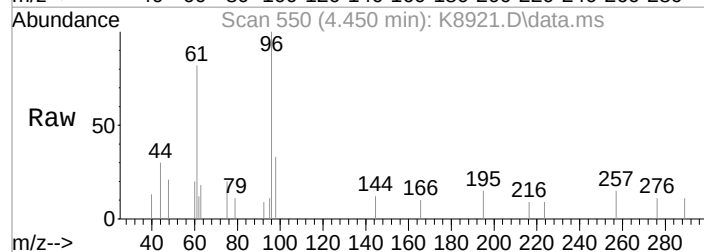
#18
 Carbon Disulfide
 Concen: 0.21 ppb
 RT: 2.524 min Scan# 234
 Delta R.T. 0.012 min
 Lab File: K8921.D
 Acq: 12 Nov 2021 7:48 pm

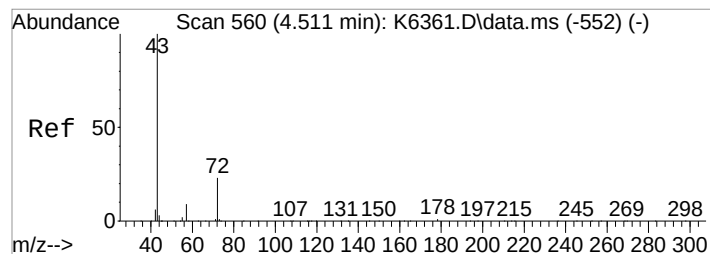
Tgt Ion:	76	Resp:	1930
Ion Ratio		Lower	Upper
76	100		
78	0.0	0.0	29.7
77	0.0	0.0	22.7



#34
 cis-1,2-Dichloroethene
 Concen: 0.59 ppb m
 RT: 4.450 min Scan# 550
 Delta R.T. 0.012 min
 Lab File: K8921.D
 Acq: 12 Nov 2021 7:48 pm

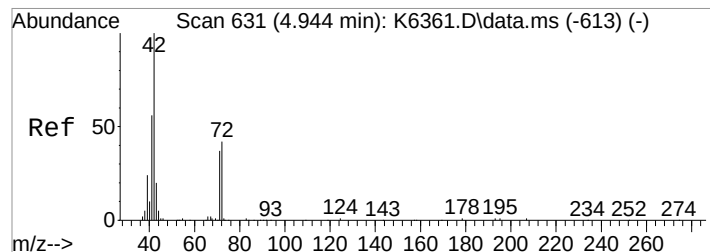
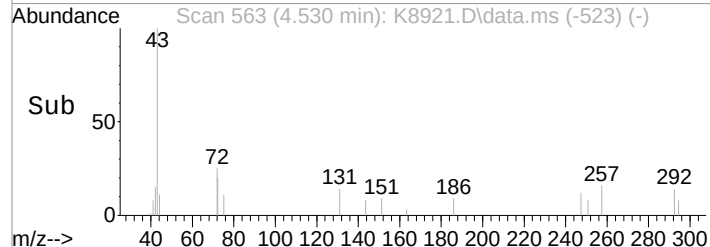
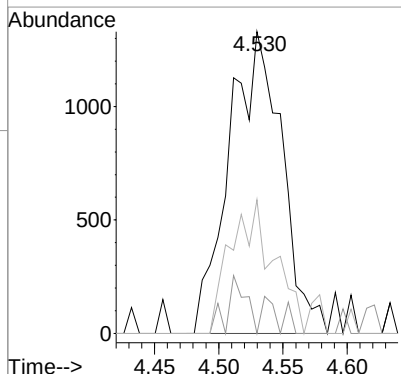
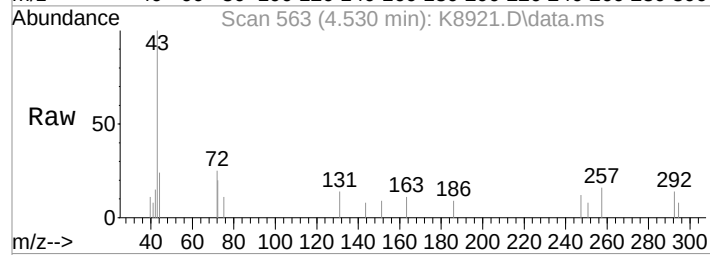
Tgt Ion:	96	Resp:	2859
Ion Ratio		Lower	Upper
96	100		
61	82.4	125.2	165.2#





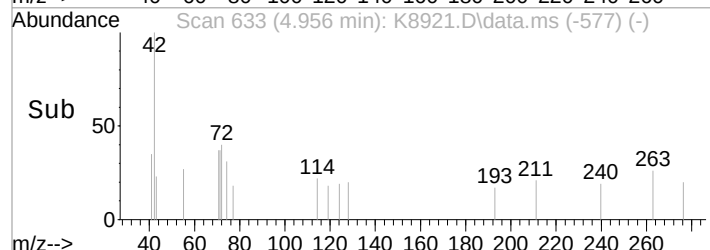
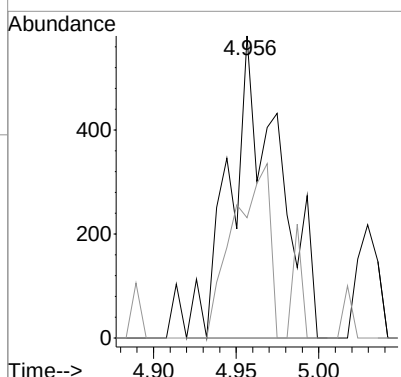
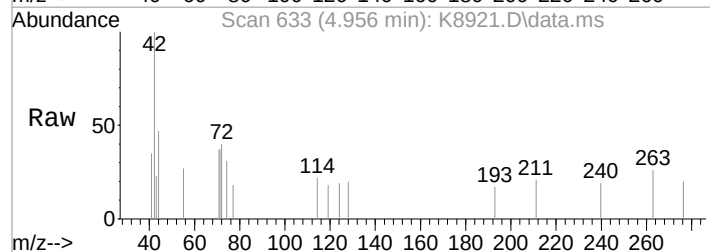
#35
 2-Butanone
 Concen: 1.12 ppb
 RT: 4.530 min Scan# 563
 Delta R.T. 0.018 min
 Lab File: K8921.D
 Acq: 12 Nov 2021 7:48 pm

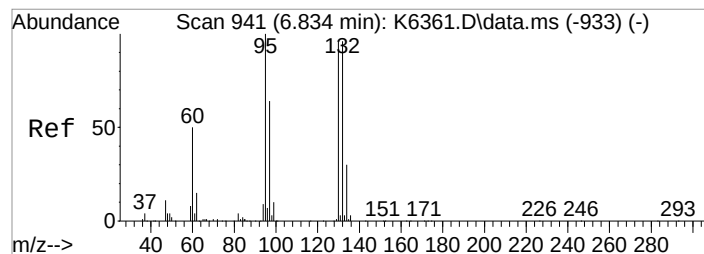
Tgt Ion: 43 Resp: 3808
 Ion Ratio Lower Upper
 43 100
 57 0.0 0.0 28.6
 72 44.3 3.4 43.4#



#39
 Tetrahydrofuran
 Concen: 0.53 ppb
 RT: 4.956 min Scan# 633
 Delta R.T. 0.025 min
 Lab File: K8921.D
 Acq: 12 Nov 2021 7:48 pm

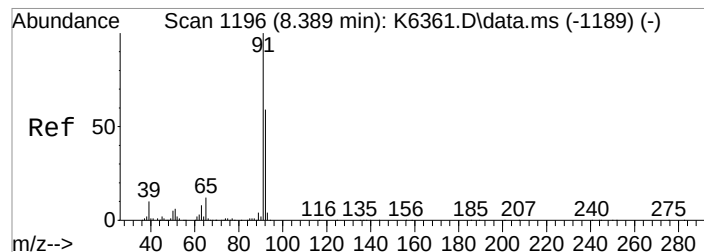
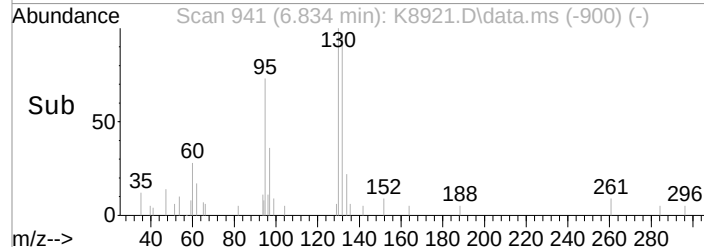
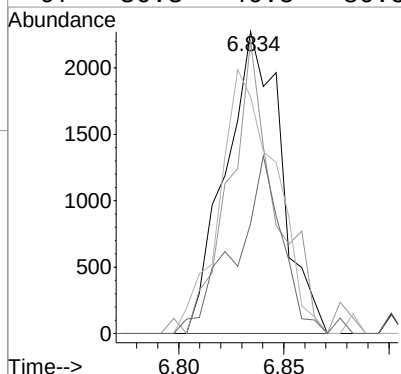
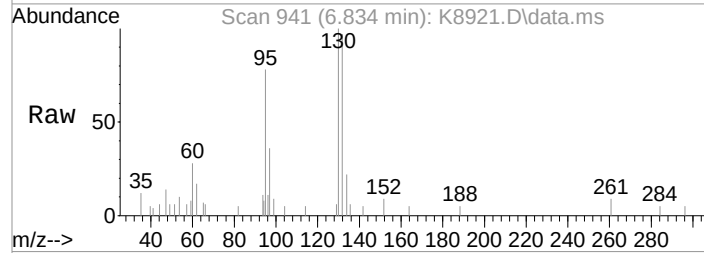
Tgt Ion: 42 Resp: 1201
 Ion Ratio Lower Upper
 42 100
 72 39.8 21.8 61.8





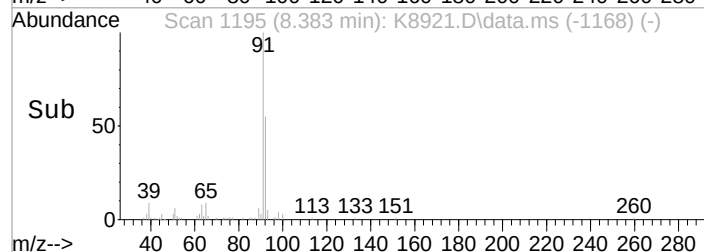
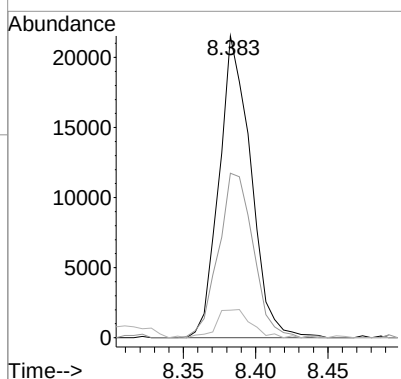
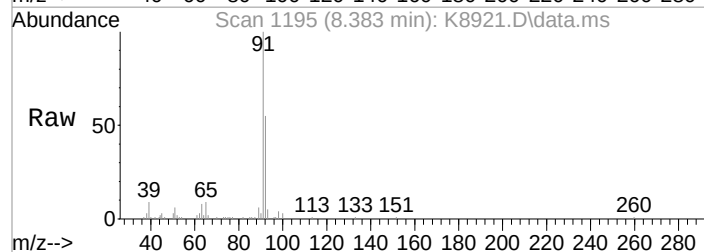
#54
 Trichloroethene
 Concen: 0.93 ppb
 RT: 6.834 min Scan# 941
 Delta R.T. 0.000 min
 Lab File: K8921.D
 Acq: 12 Nov 2021 7:48 pm

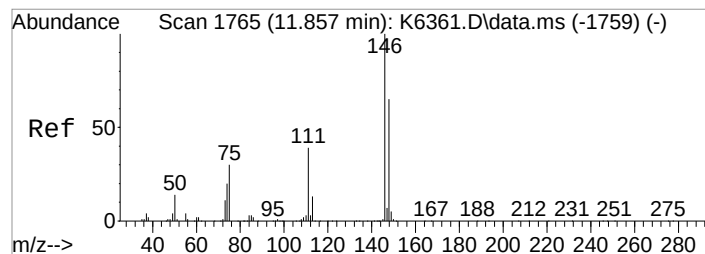
Tgt Ion:130	Resp:	4198
Ion Ratio	Lower	Upper
130	100	
132	97.0	79.7 119.7
95	78.4	83.8 123.8#
97	36.3	46.5 86.5#



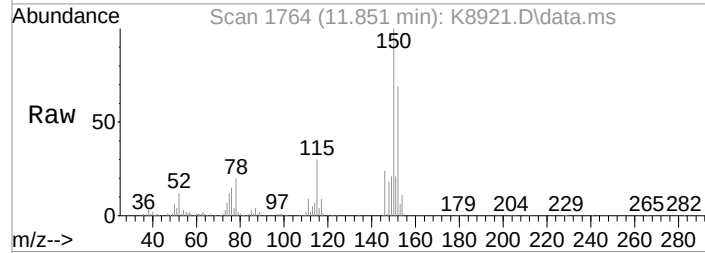
#66
 Toluene
 Concen: 1.68 ppb
 RT: 8.383 min Scan# 1195
 Delta R.T. -0.006 min
 Lab File: K8921.D
 Acq: 12 Nov 2021 7:48 pm

Tgt Ion: 91	Resp:	32907
Ion Ratio	Lower	Upper
91	100	
92	54.5	38.7 78.7
65	9.2	0.0 31.8

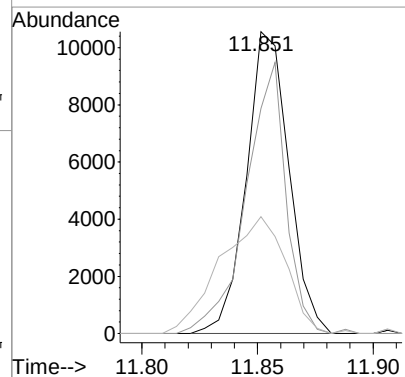
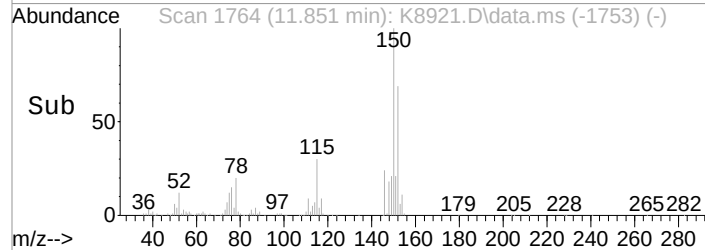




#106
 1,4-Dichlorobenzene
 Concen: 1.34 ppb
 RT: 11.851 min Scan# 1764
 Delta R.T. -0.006 min
 Lab File: K8921.D
 Acq: 12 Nov 2021 7:48 pm



Tgt Ion:	146	Resp:	13524
Ion Ratio		Lower	Upper
146	100		
148	74.5	45.0	85.0
111	38.7	19.4	59.4



Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8885.D
 Acq On : 12 Nov 2021 12:47 am
 Operator : K.Ruest
 Sample : R2111745-021|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 33 Sample Multiplier: 1

Inst : MSVOA-12

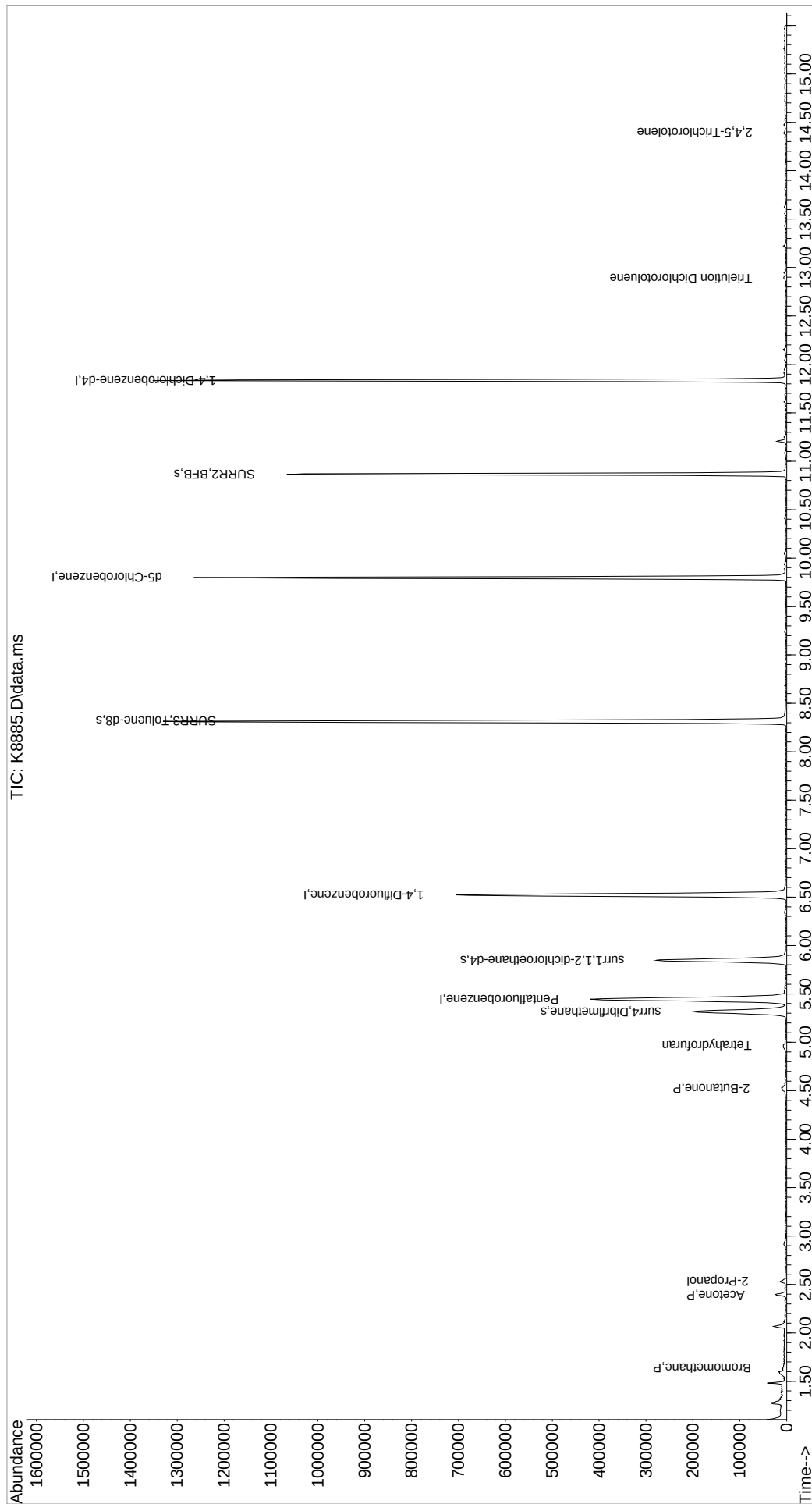
Quant Time: Nov 18 17:53:01 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

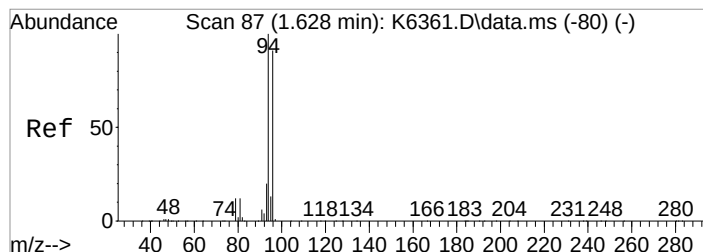
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.444	168	387765	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	628532	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	560070	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	260675	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.316	113	167560	48.97	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	97.94%	
48) surr1,1,2-dichloroetha...	5.846	65	235122	47.26	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	94.52%	
65) SURR3,Toluene-d8	8.315	98	854135	53.11	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	106.22%	
70) SURR2,BFB	10.864	95	309742	48.52	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	97.04%	
Target Compounds						
5) Bromomethane	1.640	94	1440	0.42	ppb	Qvalue # 67
15) Acetone	2.390	43	20961	7.50	ppb	97
16) 2-Propanol	2.530	45	12257	24.35	ppb	96
35) 2-Butanone	4.523	43	13994	4.18	ppb	97
39) Tetrahydrofuran	4.962	42	5226	2.34	ppb	76
112) Trielution Dichlorotol...	12.888	125	2121	0.25	ppb	# 62
119) 2,4,5-Trichlorotolene	14.394	159	1056	0.23	ppb	# 82

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

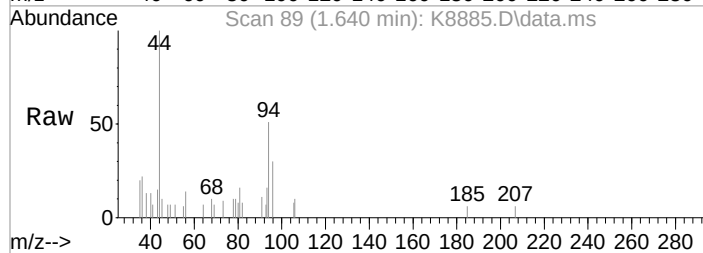
Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8885.D
 Acq On : 12 Nov 2021 12:47 am
 Operator : K.Ruest
 Sample : R2111745-021|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 33 Sample Multiplier: 1
 Inst : MSV0A-12

Quant Time: Nov 18 17:53:01 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

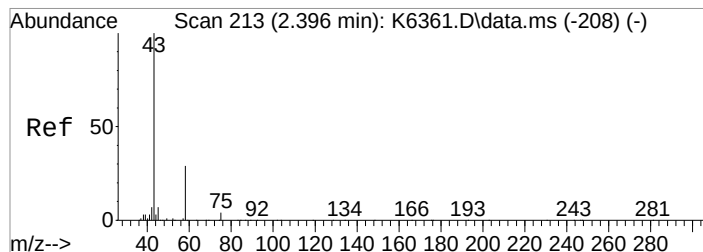
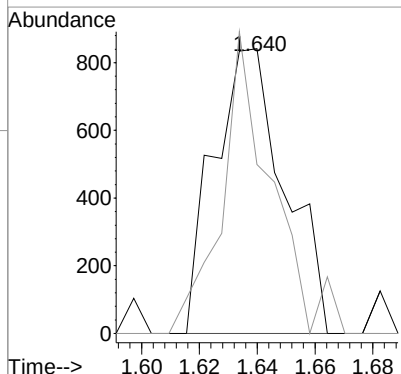
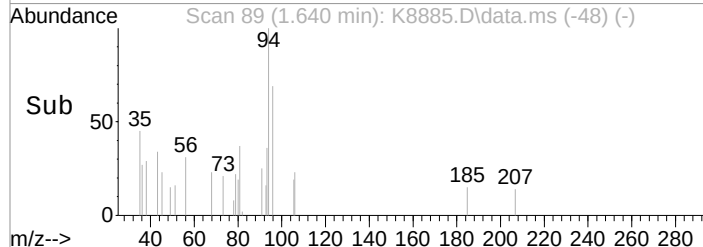




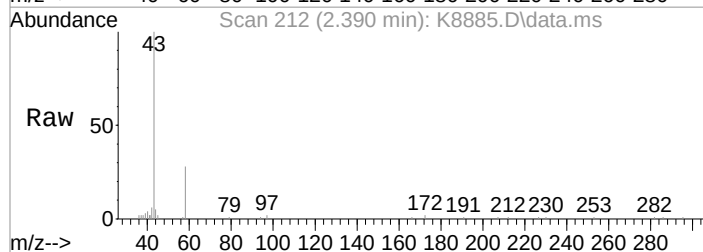
#5
 Bromomethane
 Concen: 0.42 ppb
 RT: 1.640 min Scan# 89
 Delta R.T. 0.024 min
 Lab File: K8885.D
 Acq: 12 Nov 2021 12:47 am



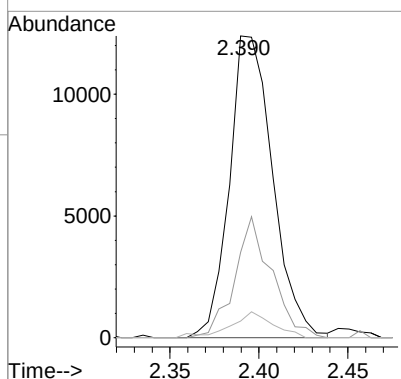
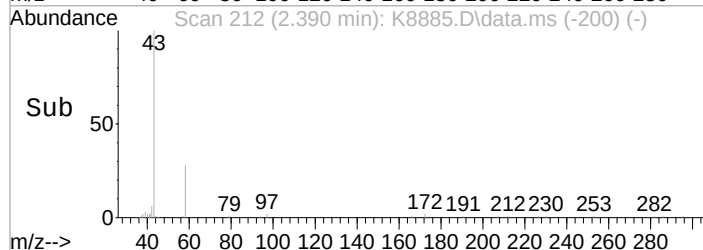
Tgt Ion: 94 Resp: 1440
 Ion Ratio Lower Upper
 94 100
 96 59.3 71.0 111.0#

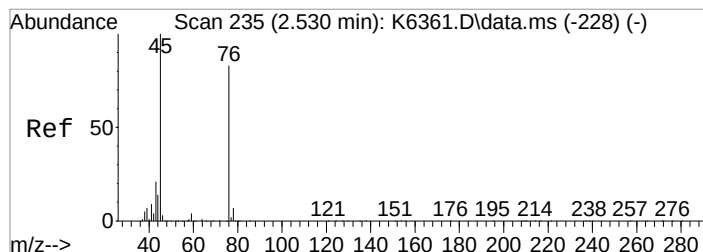


#15
 Acetone
 Concen: 7.50 ppb
 RT: 2.390 min Scan# 212
 Delta R.T. 0.001 min
 Lab File: K8885.D
 Acq: 12 Nov 2021 12:47 am



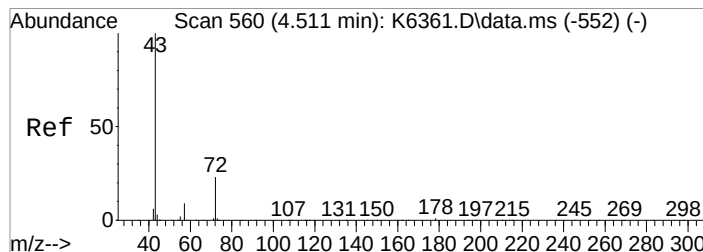
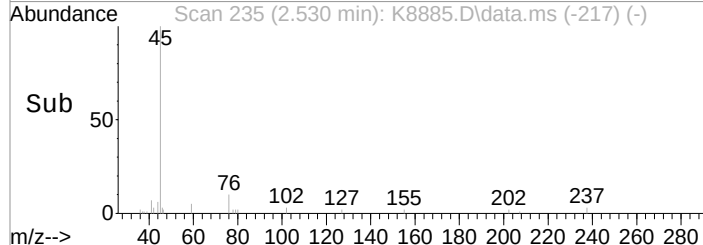
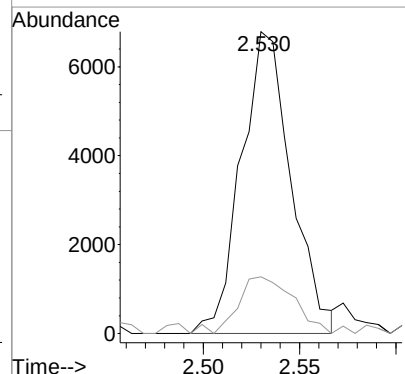
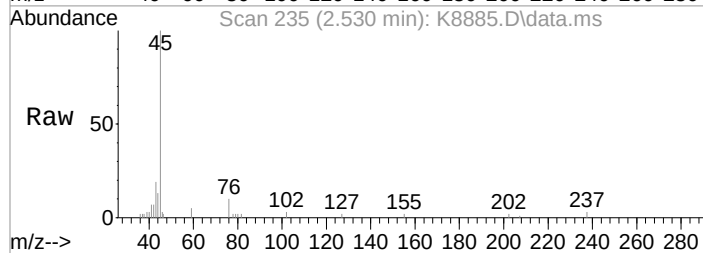
Tgt Ion: 43 Resp: 20961
 Ion Ratio Lower Upper
 43 100
 58 28.3 9.6 49.6
 42 5.5 0.0 27.7





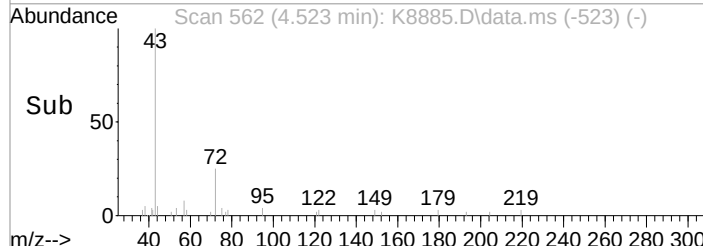
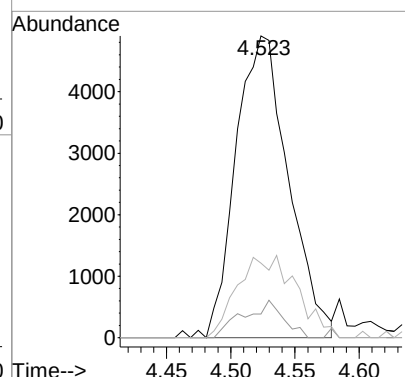
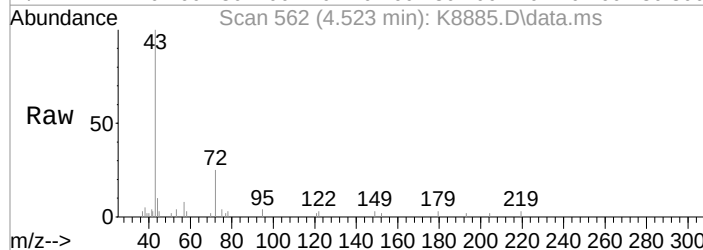
#16
 2-Propanol
 Concen: 24.35 ppb
 RT: 2.530 min Scan# 235
 Delta R.T. 0.000 min
 Lab File: K8885.D
 Acq: 12 Nov 2021 12:47 am

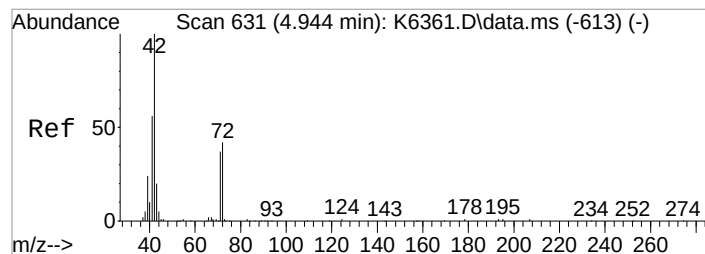
Tgt Ion: 45 Resp: 12257
 Ion Ratio Lower Upper
 45 100
 43 18.8 0.6 40.6



#35
 2-Butanone
 Concen: 4.18 ppb
 RT: 4.523 min Scan# 562
 Delta R.T. 0.012 min
 Lab File: K8885.D
 Acq: 12 Nov 2021 12:47 am

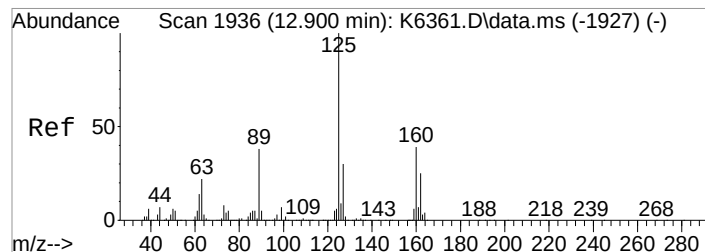
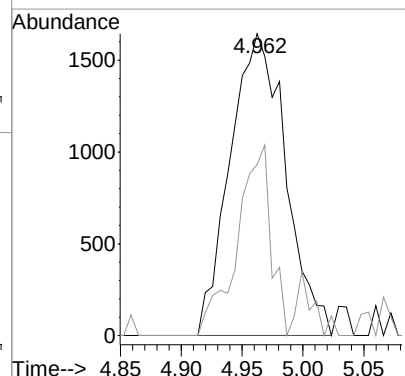
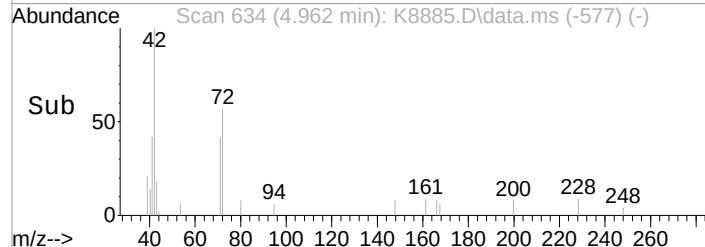
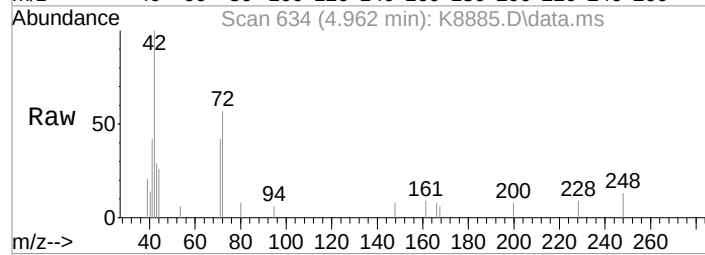
Tgt Ion: 43 Resp: 13994
 Ion Ratio Lower Upper
 43 100
 57 7.9 0.0 28.6
 72 24.7 3.4 43.4





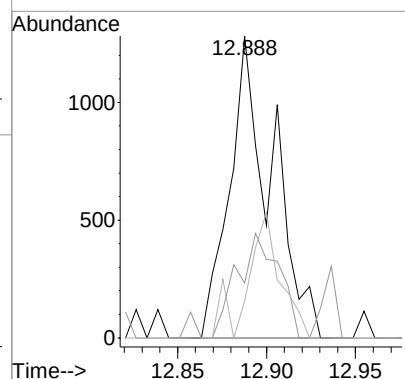
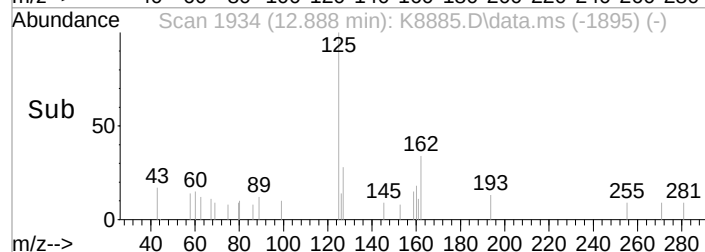
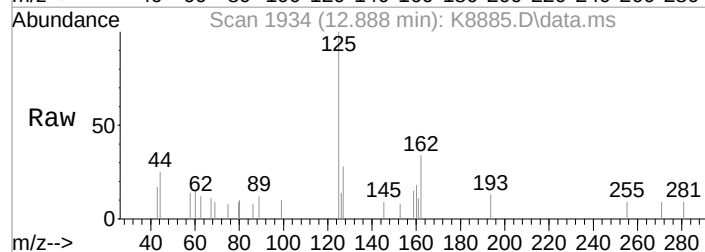
#39
 Tetrahydrofuran
 Concen: 2.34 ppb
 RT: 4.962 min Scan# 634
 Delta R.T. 0.030 min
 Lab File: K8885.D
 Acq: 12 Nov 2021 12:47 am

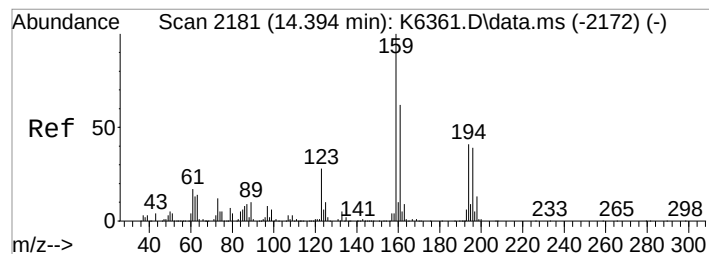
Tgt Ion: 42 Resp: 5226
 Ion Ratio Lower Upper
 42 100
 72 56.7 21.8 61.8



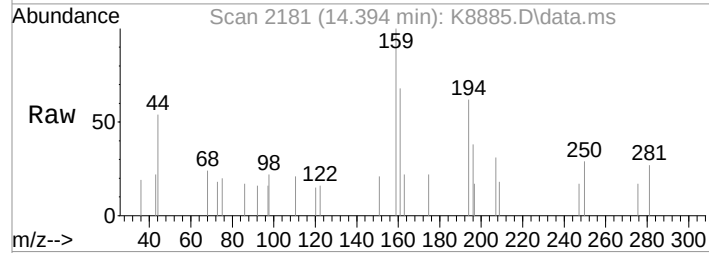
#112
 Trilution Dichlorotoluene
 Concen: 0.25 ppb
 RT: 12.888 min Scan# 1934
 Delta R.T. -0.012 min
 Lab File: K8885.D
 Acq: 12 Nov 2021 12:47 am

Tgt Ion: 125 Resp: 2121
 Ion Ratio Lower Upper
 125 100
 160 18.2 31.0 46.4#
 89 12.2 30.4 45.6#

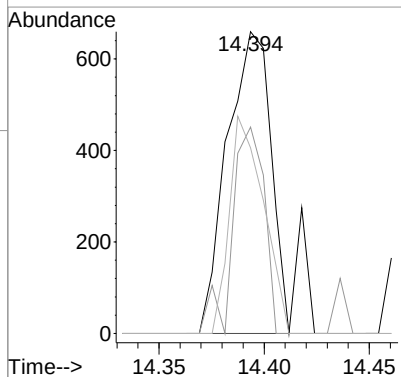
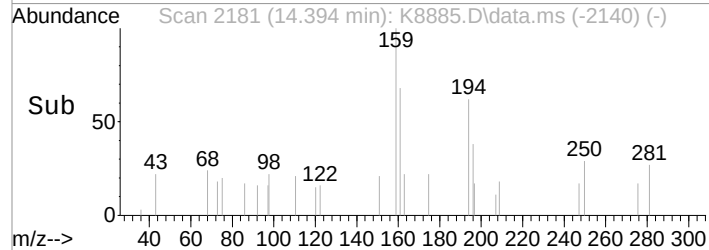




#119
 2,4,5-Trichlorotoluene
 Concen: 0.23 ppb
 RT: 14.394 min Scan# 2181
 Delta R.T. 0.000 min
 Lab File: K8885.D
 Acq: 12 Nov 2021 12:47 am



Tgt Ion:	159	Resp:	1056
Ion Ratio		Lower	Upper
159	100		
161	68.3	49.9	74.9
194	61.5	32.5	48.7#



Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8918.D
 Acq On : 12 Nov 2021 6:42 pm
 Operator : K.Ruest
 Sample : R2111745-022|100
 Misc : LIRO 8260 T4
 ALS Vial : 16 Sample Multiplier: 1

Inst : MSVOA-12

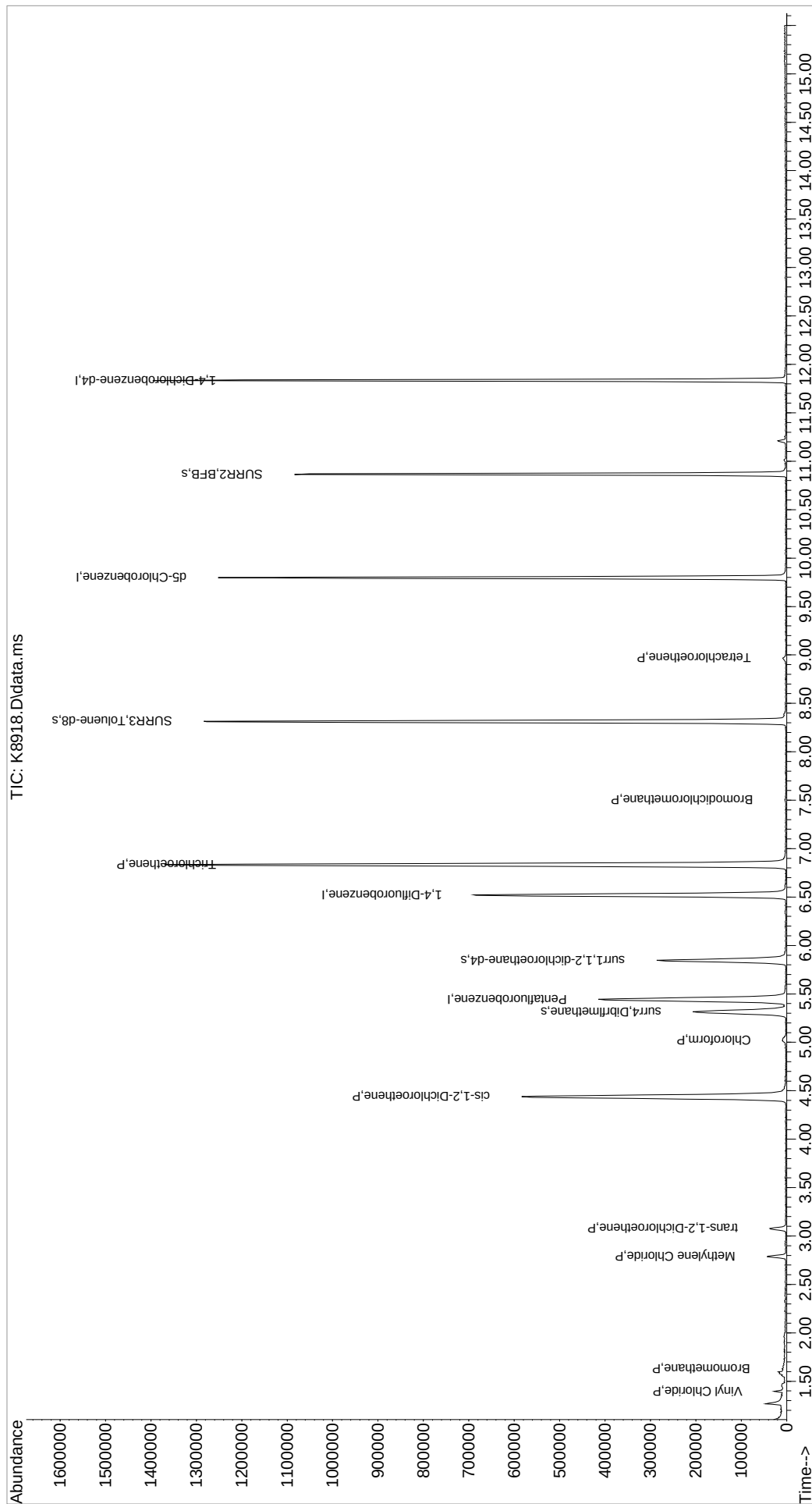
Quant Time: Nov 15 16:14:19 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

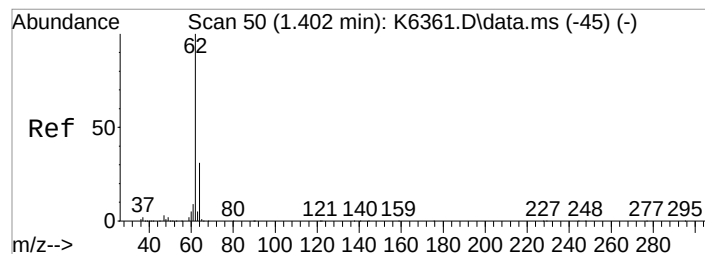
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.444	168	388938	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	638838	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	569499	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	275986	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.316	113	172072	49.48	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	98.96%	
48) surr1,1,2-dichloroetha...	5.846	65	230640	45.61	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	91.22%	
65) SURR3,Toluene-d8	8.315	98	848673	51.92	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	103.84%	
70) SURR2,BFB	10.864	95	314324	48.44	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	96.88%	
Target Compounds						
4) Vinyl Chloride	1.396	62	9618	1.83	ppb	Qvalue 80
5) Bromomethane	1.628	94	1208	0.35	ppb	# 64
15) Acetone	2.390	43	1083	Below	Cal	80
22) Methylene Chloride	2.786	84	16356	3.63	ppb	89
26) trans-1,2-Dichloroethene	3.078	96	13029	3.15	ppb	95
34) cis-1,2-Dichloroethene	4.438	96	356246	74.73	ppb	86
40) Chloroform	5.023	83	9278	0.74	ppb	96
54) Trichloroethene	6.834	130	500152	111.25	ppb	93
60) Bromodichloromethane	7.504	83	1459	0.26	ppb	91
72) Tetrachloroethene	8.968	164	1114	0.34	ppb	# 78

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

Data Path : I:\ACQDATA\msvoa12\Data\111221\
 Data File : K8918.D
 Acq On : 12 Nov 2021 6:42 pm
 Operator : K.Ruest
 Sample : R2111745-022|100
 Misc : LIRO 8260 T4
 ALS Vial : 16 Sample Multiplier: 1
 Inst : MSV0A-12

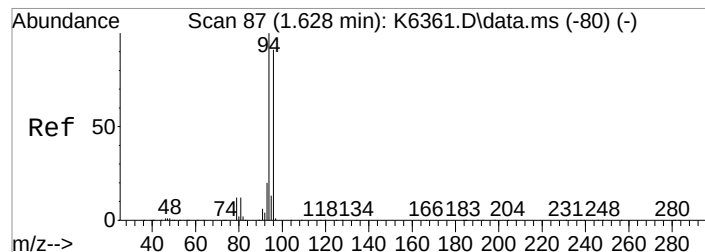
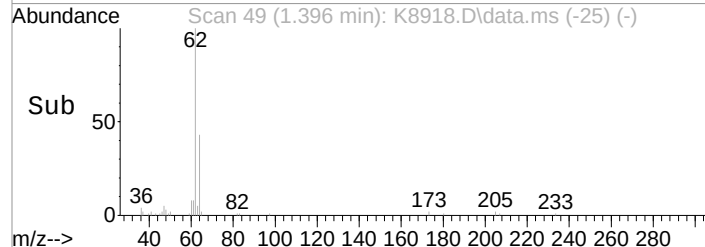
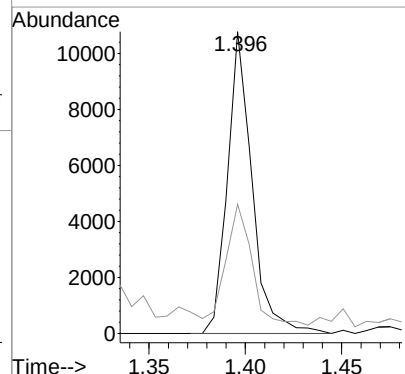
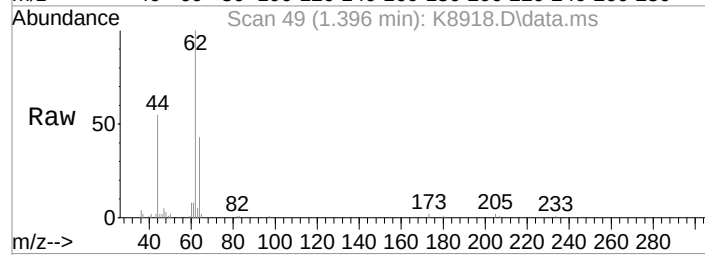
Quant Time: Nov 15 16:14:19 2021
 Quant Method : I:\ACQDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 Qlast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration





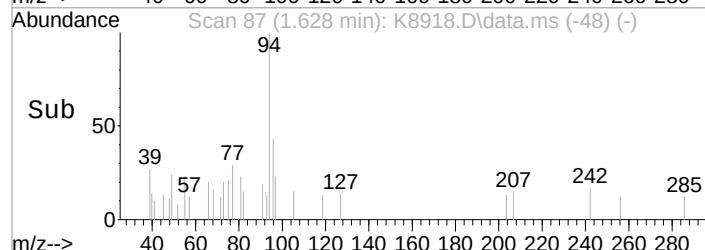
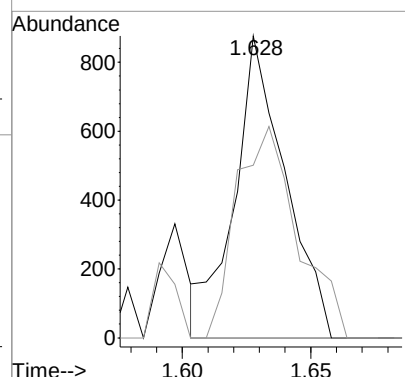
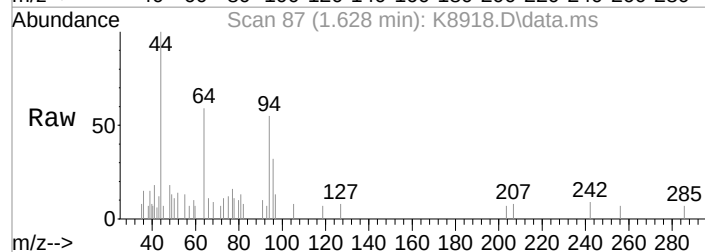
#4
 Vinyl Chloride
 Concen: 1.83 ppb
 RT: 1.396 min Scan# 49
 Delta R.T. -0.000 min
 Lab File: K8918.D
 Acq: 12 Nov 2021 6:42 pm

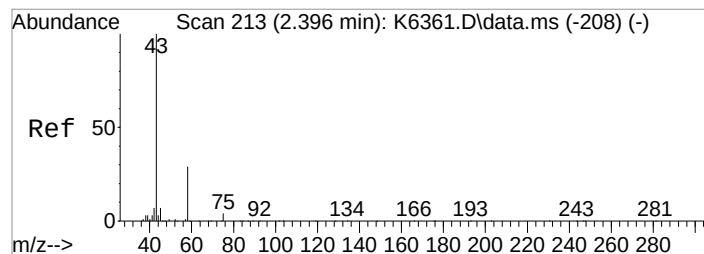
Tgt Ion: 62 Resp: 9618
 Ion Ratio Lower Upper
 62 100
 64 42.8 11.5 51.5



#5
 Bromomethane
 Concen: 0.35 ppb
 RT: 1.628 min Scan# 87
 Delta R.T. 0.012 min
 Lab File: K8918.D
 Acq: 12 Nov 2021 6:42 pm

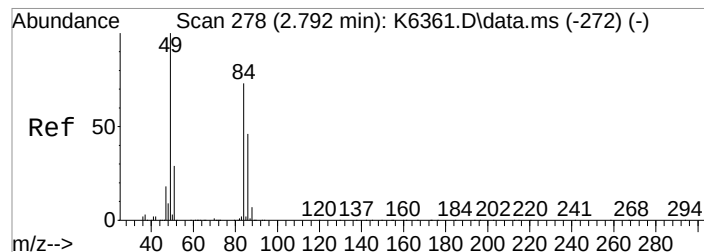
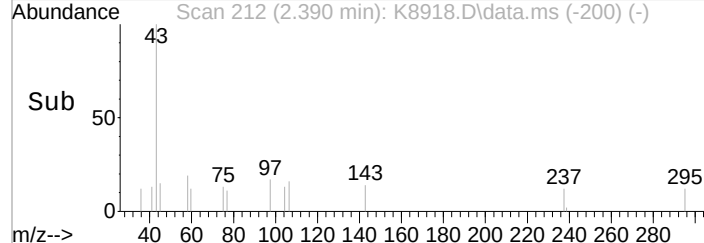
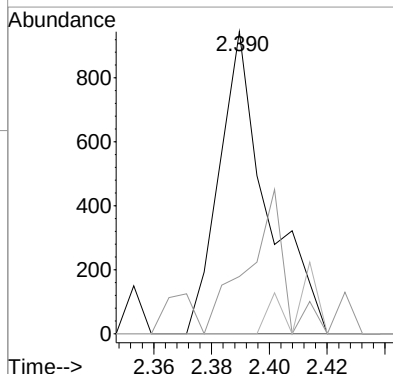
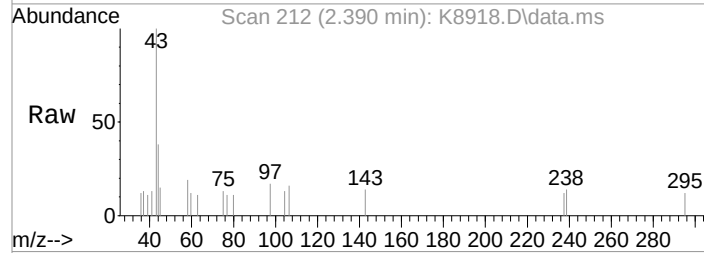
Tgt Ion: 94 Resp: 1208
 Ion Ratio Lower Upper
 94 100
 96 57.1 71.0 111.0#





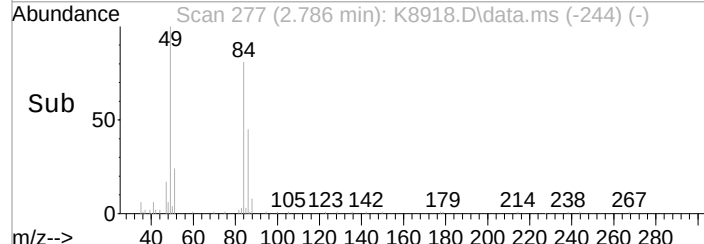
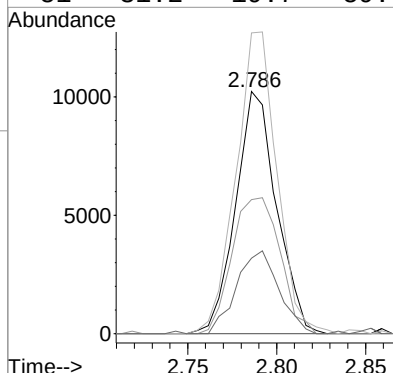
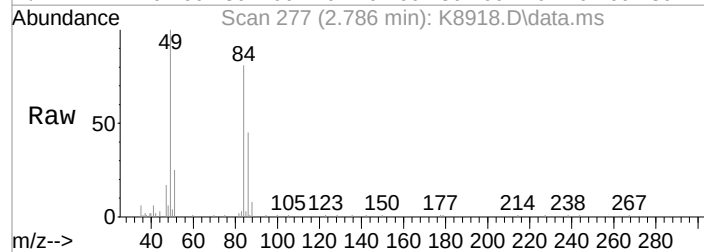
#15
 Acetone
 Concen: Below Cal
 RT: 2.390 min Scan# 212
 Delta R.T. 0.001 min
 Lab File: K8918.D
 Acq: 12 Nov 2021 6:42 pm

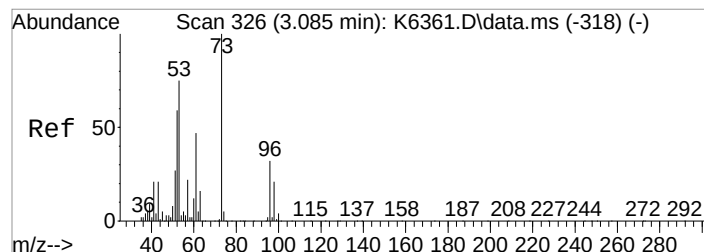
Tgt Ion:	43	Resp:	1083
Ion Ratio		Lower	Upper
43	100		
58	18.9	9.6	49.6
42	0.0	0.0	27.7



#22
 Methylene Chloride
 Concen: 3.63 ppb
 RT: 2.786 min Scan# 277
 Delta R.T. -0.000 min
 Lab File: K8918.D
 Acq: 12 Nov 2021 6:42 pm

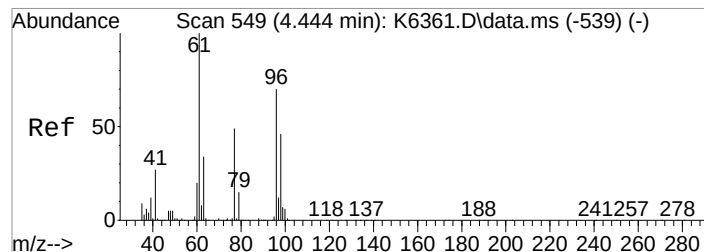
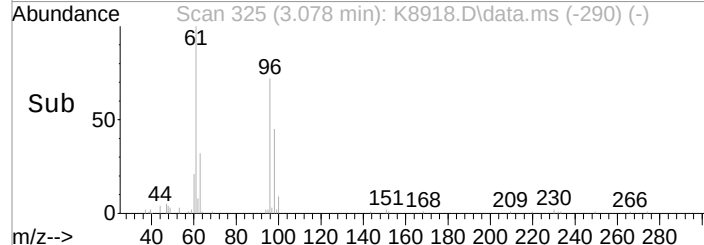
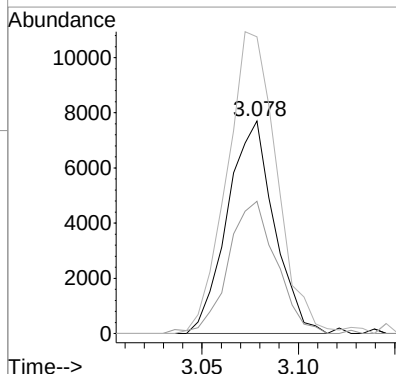
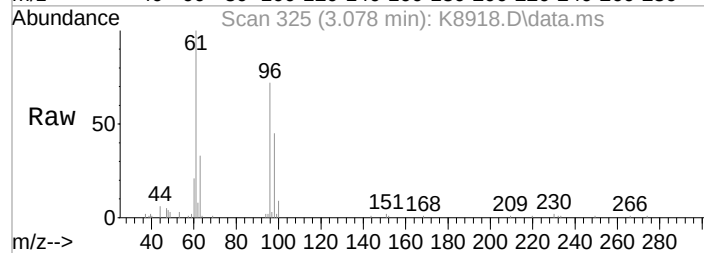
Tgt Ion:	84	Resp:	16356
Ion Ratio		Lower	Upper
84	100		
86	55.4	42.7	82.7
49	124.2	116.5	156.5
51	31.2	19.7	59.7





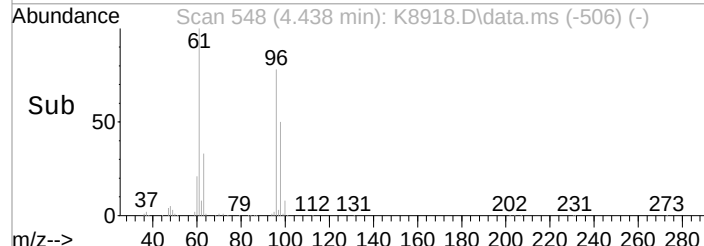
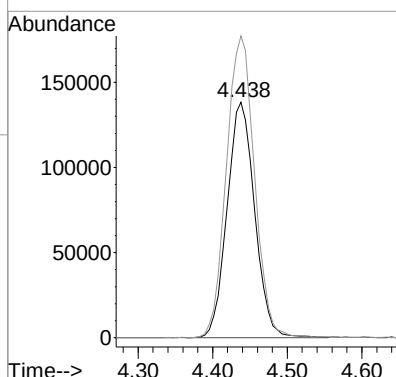
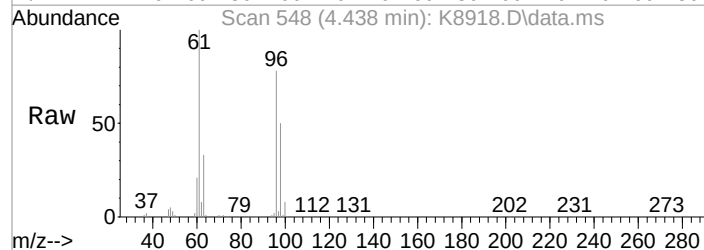
#26
 trans-1,2-Dichloroethene
 Concen: 3.15 ppb
 RT: 3.078 min Scan# 325
 Delta R.T. 0.006 min
 Lab File: K8918.D
 Acq: 12 Nov 2021 6:42 pm

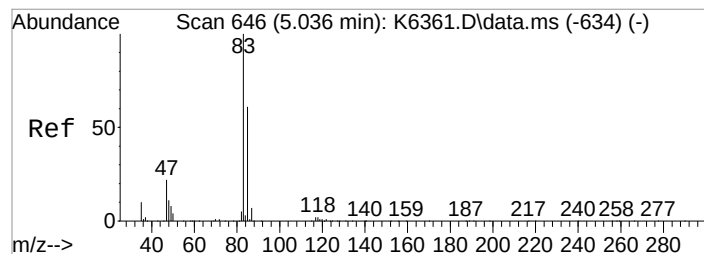
Tgt Ion: 96 Resp: 13029
 Ion Ratio Lower Upper
 96 100
 98 62.2 44.1 84.1
 61 139.5 127.9 167.9



#34
 cis-1,2-Dichloroethene
 Concen: 74.73 ppb
 RT: 4.438 min Scan# 548
 Delta R.T. -0.000 min
 Lab File: K8918.D
 Acq: 12 Nov 2021 6:42 pm

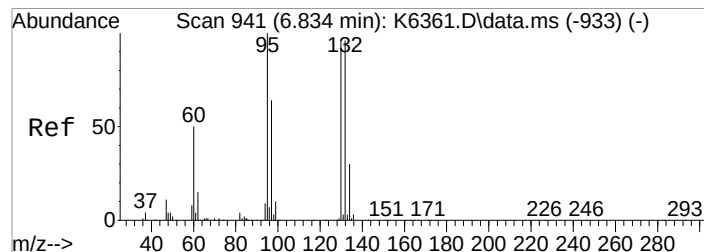
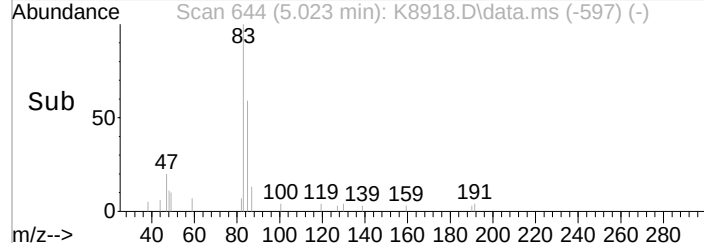
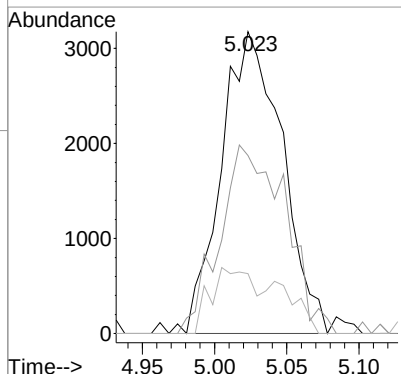
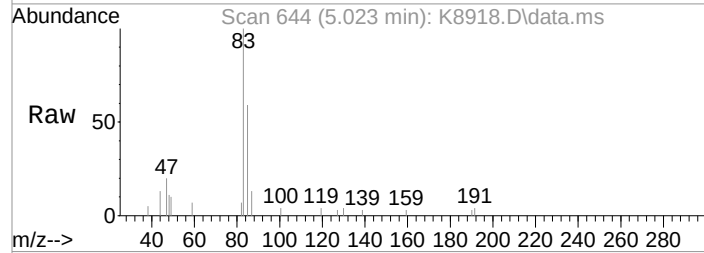
Tgt Ion: 96 Resp: 356246
 Ion Ratio Lower Upper
 96 100
 61 128.2 125.2 165.2





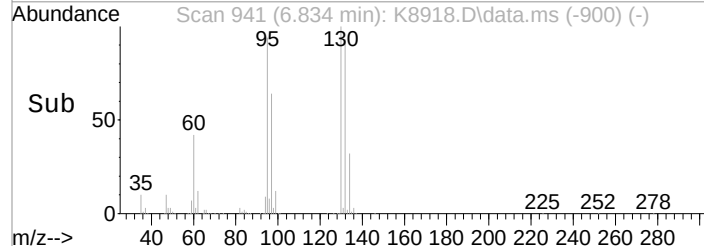
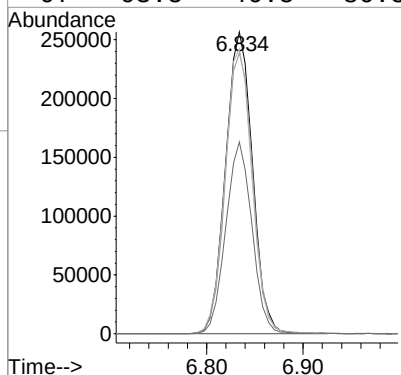
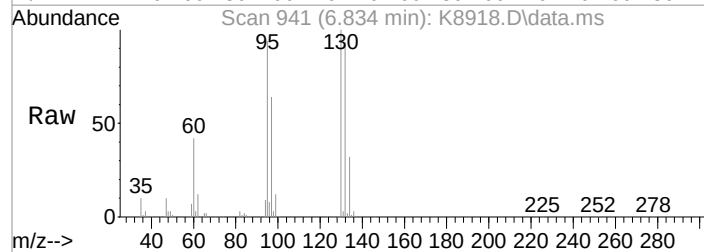
#40
Chloroform
Concen: 0.74 ppb
RT: 5.023 min Scan# 644
Delta R.T. 0.000 min
Lab File: K8918.D
Acq: 12 Nov 2021 6:42 pm

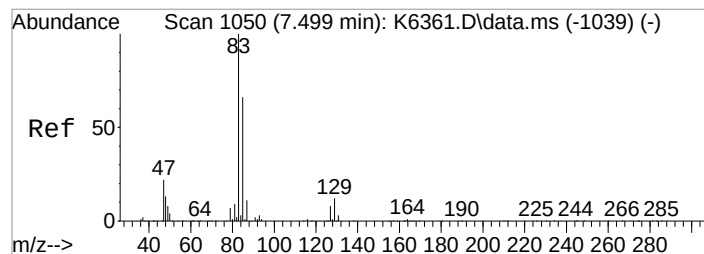
Tgt Ion:	83	Resp:	9278
Ion Ratio	Lower	Upper	
83	100		
85	58.9	41.5	81.5
47	19.8	2.1	42.1



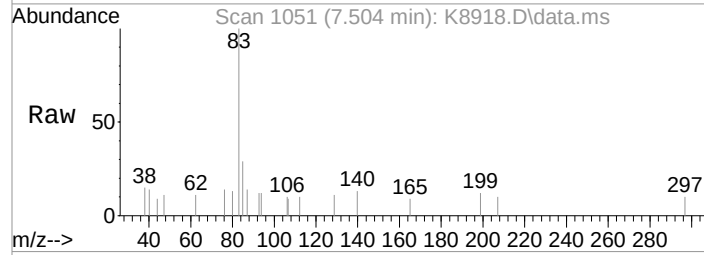
#54
Trichloroethene
Concen: 111.25 ppb
RT: 6.834 min Scan# 941
Delta R.T. -0.000 min
Lab File: K8918.D
Acq: 12 Nov 2021 6:42 pm

Tgt Ion:	130	Resp:	500152
Ion Ratio	Lower	Upper	
130	100		
132	93.0	79.7	119.7
95	94.3	83.8	123.8
97	63.5	46.5	86.5

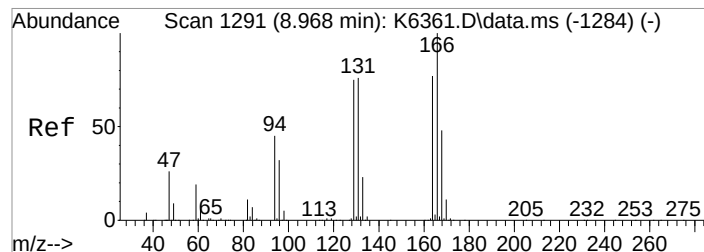
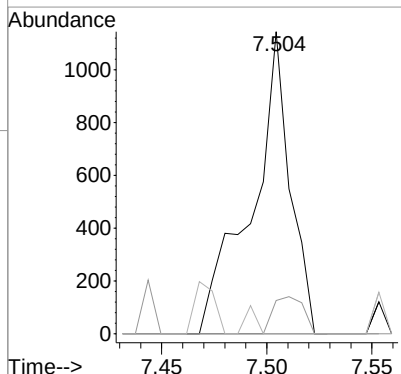
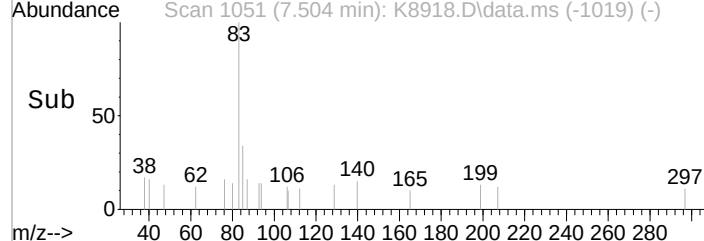




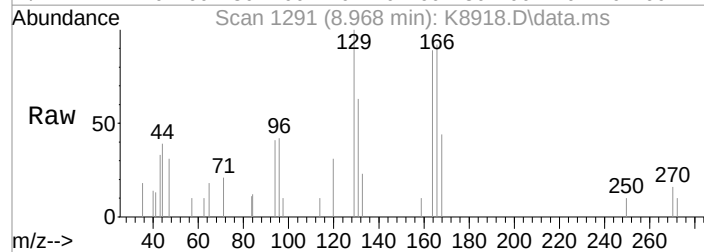
#60
 Bromodichloromethane
 Concen: 0.26 ppb
 RT: 7.504 min Scan# 1051
 Delta R.T. 0.006 min
 Lab File: K8918.D
 Acq: 12 Nov 2021 6:42 pm



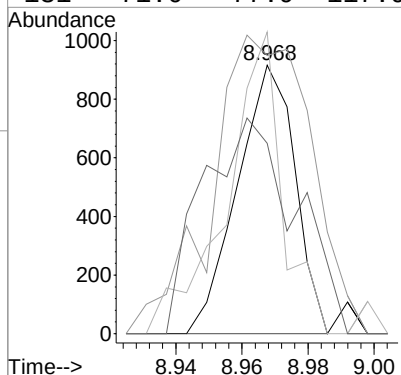
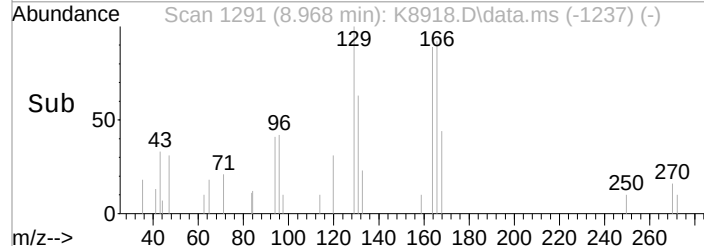
Tgt Ion:	83	Resp:	1459
Ion Ratio	100	Lower	Upper
129	11.0	0.0	31.6
127	0.0	0.0	27.5



#72
 Tetrachloroethene
 Concen: 0.34 ppb
 RT: 8.968 min Scan# 1291
 Delta R.T. -0.000 min
 Lab File: K8918.D
 Acq: 12 Nov 2021 6:42 pm



Tgt Ion:	164	Resp:	1114
Ion Ratio	100	Lower	Upper
166	103.6	109.5	149.5#
129	112.4	77.6	117.6
131	71.0	77.9	117.9#



Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8884.D
 Acq On : 12 Nov 2021 12:26 am
 Operator : K.Ruest
 Sample : MBLK-FP
 Misc :
 ALS Vial : 32 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 10:37:34 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

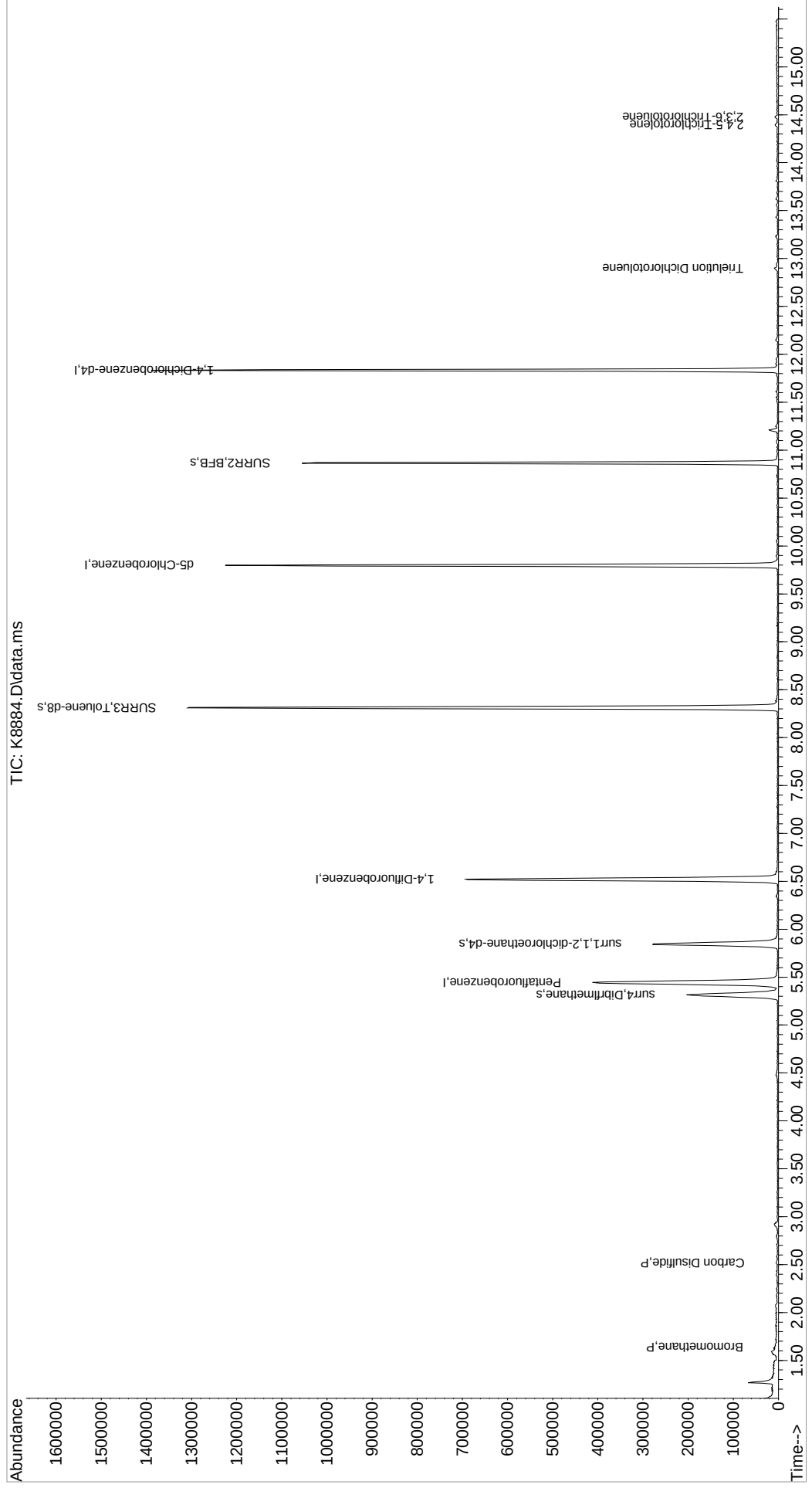
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.444	168	381260	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	624653	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	568789	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	260310	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.316	113	166775	49.04	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	98.08%	
48) surr1,1,2-dichloroetha...	5.846	65	237234	47.98	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	95.96%	
65) SURR3,Toluene-d8	8.309	98	847400	53.02	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	106.04%	
70) SURR2,BFB	10.864	95	306502	48.31	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	96.62%	
Target Compounds						
5) Bromomethane	1.634	94	982	0.29	ppb	Qvalue 87
15) Acetone	2.390	43	2309	Below	Cal	78
18) Carbon Disulfide	2.518	76	2250	0.25	ppb	93
112) Trielution Dichlorotol...	12.894	125	2399	0.29	ppb	# 83
119) 2,4,5-Trichlorotoluene	14.394	159	1363	0.30	ppb	# 82
120) 2,3,6-Trichlorotoluene	14.479	159	1043	0.25	ppb	# 84

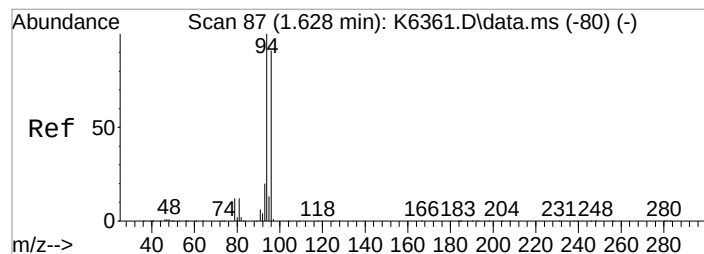
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8884.D
 Acq On : 12 Nov 2021 12:26 am
 Operator : K.Ruest
 Sample : MBLK-FP
 Misc :
 ALS Vial : 32 Sample Multiplier: 1

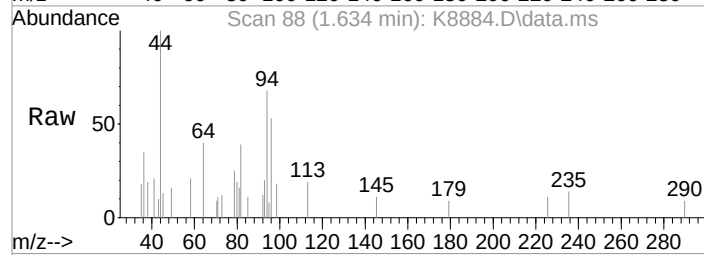
Inst : MSV0A-12

Quant Time: Nov 12 10:37:34 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 Qlast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

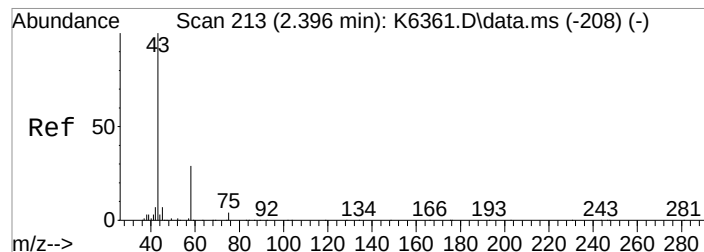
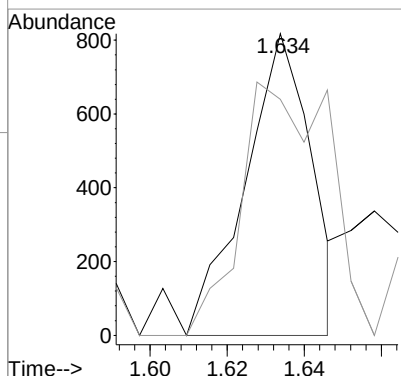
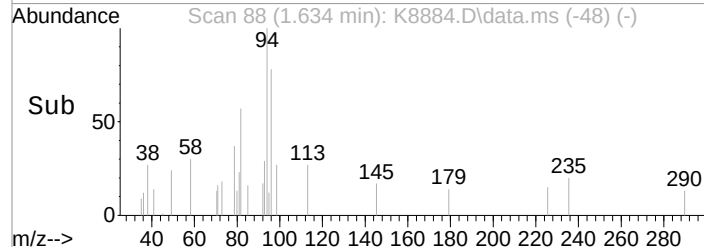




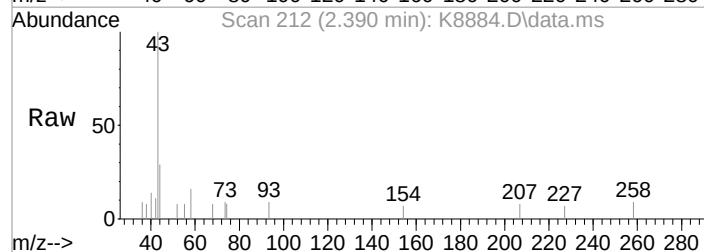
#5
 Bromomethane
 Concen: 0.29 ppb
 RT: 1.634 min Scan# 88
 Delta R.T. 0.018 min
 Lab File: K8884.D
 Acq: 12 Nov 2021 12:26 am



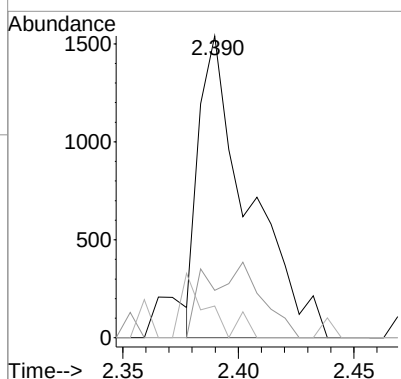
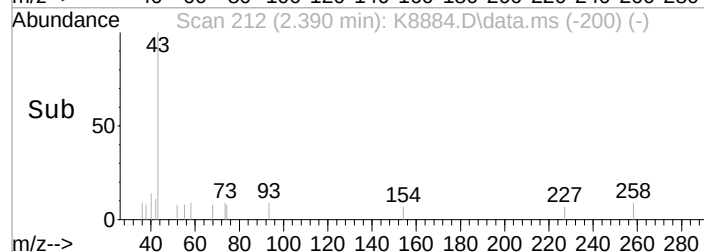
Tgt Ion: 94 Resp: 982
 Ion Ratio Lower Upper
 94 100
 96 78.2 71.0 111.0

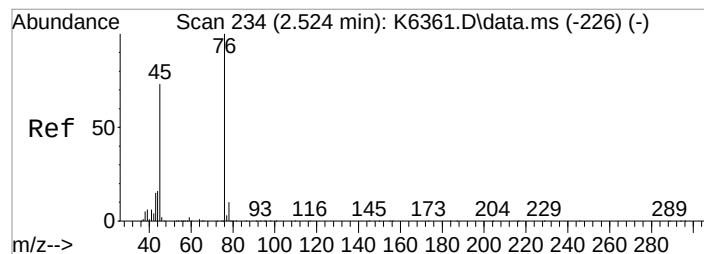


#15
 Acetone
 Concen: Below Cal
 RT: 2.390 min Scan# 212
 Delta R.T. 0.001 min
 Lab File: K8884.D
 Acq: 12 Nov 2021 12:26 am



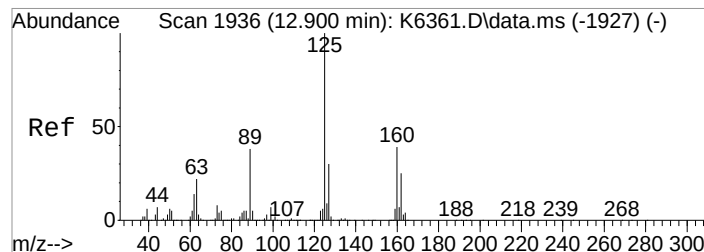
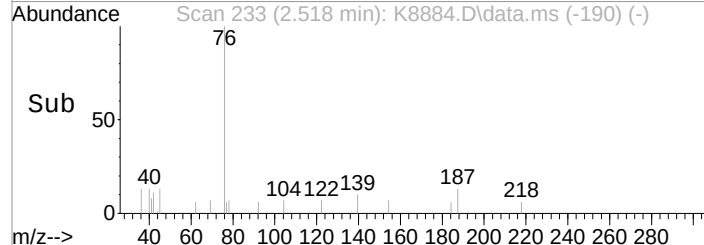
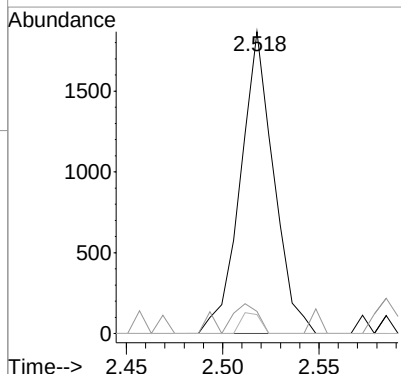
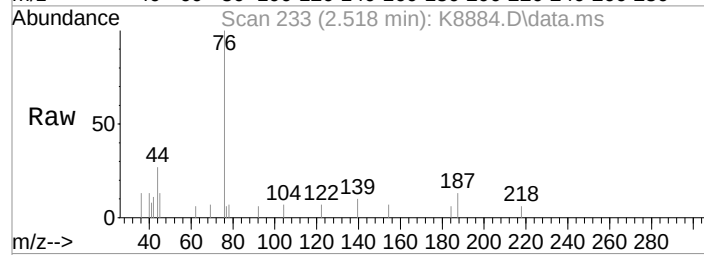
Tgt Ion: 43 Resp: 2309
 Ion Ratio Lower Upper
 43 100
 58 15.7 9.6 49.6
 42 10.6 0.0 27.7





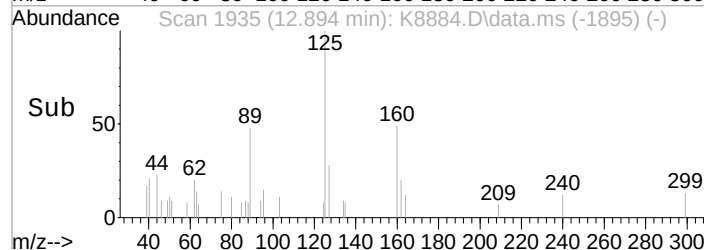
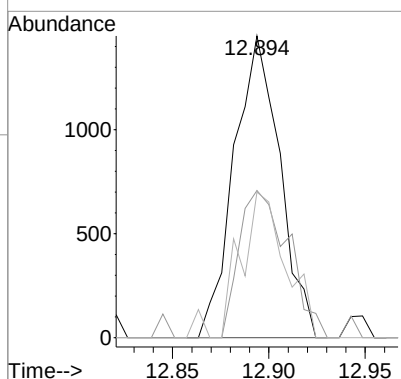
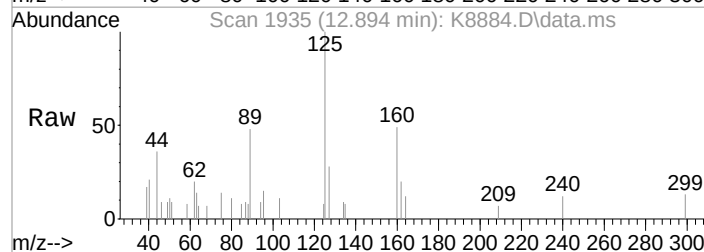
#18
Carbon Disulfide
Concen: 0.25 ppb
RT: 2.518 min Scan# 233
Delta R.T. 0.006 min
Lab File: K8884.D
Acq: 12 Nov 2021 12:26 am

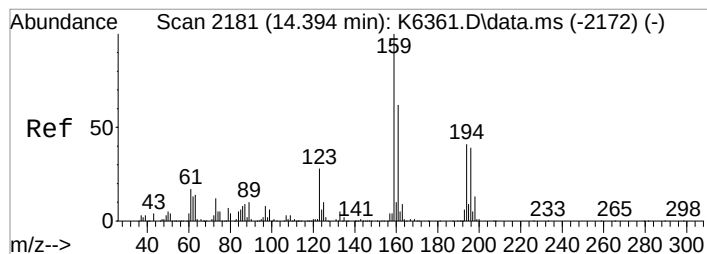
Tgt Ion	76	Resp	2250
Ion Ratio	100	Lower	Upper
76	100		
78	7.4	0.0	29.7
77	6.3	0.0	22.7



#112
Trielution Dichlorotoluene
Concen: 0.29 ppb
RT: 12.894 min Scan# 1935
Delta R.T. -0.006 min
Lab File: K8884.D
Acq: 12 Nov 2021 12:26 am

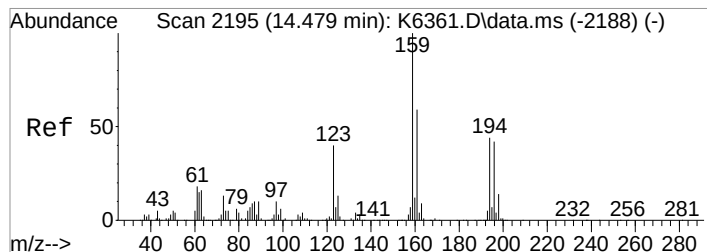
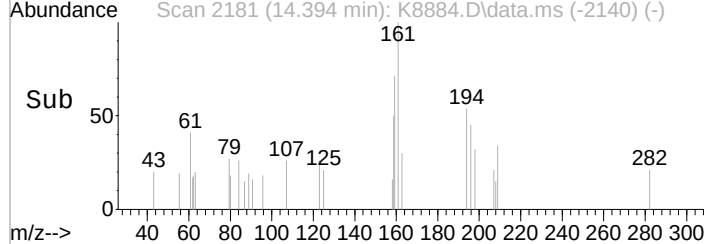
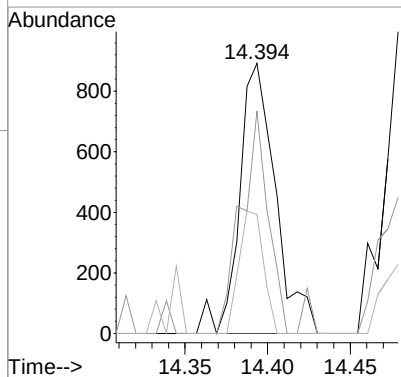
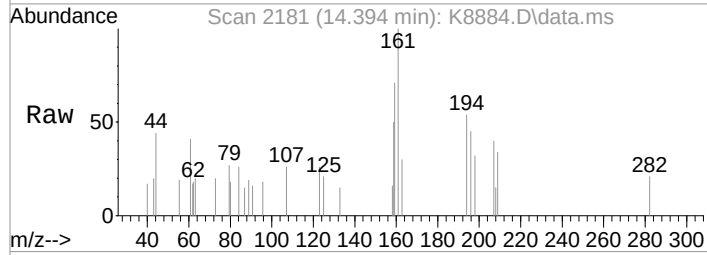
Tgt Ion	125	Resp	2399
Ion Ratio	100	Lower	Upper
125	100		
160	48.7	31.0	46.4#
89	48.2	30.4	45.6#





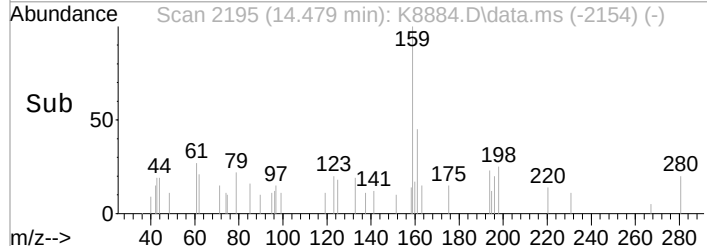
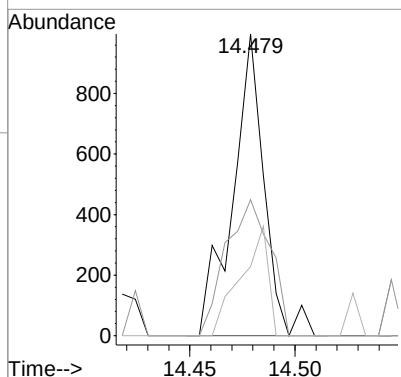
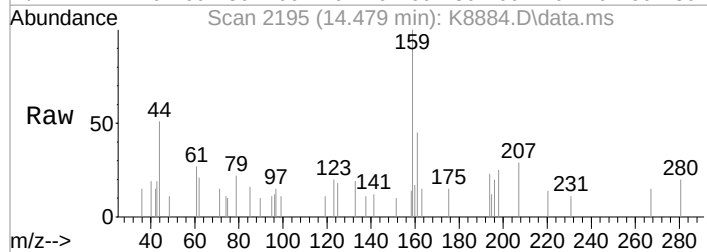
#119
 2,4,5-Trichlorotoluene
 Concen: 0.30 ppb
 RT: 14.394 min Scan# 2181
 Delta R.T. 0.000 min
 Lab File: K8884.D
 Acq: 12 Nov 2021 12:26 am

Tgt Ion:	159	Resp:	1363
Ion Ratio	Lower	Upper	
159	100		
161	82.3	49.9	74.9#
194	44.1	32.5	48.7



#120
 2,3,6-Trichlorotoluene
 Concen: 0.25 ppb
 RT: 14.479 min Scan# 2195
 Delta R.T. 0.000 min
 Lab File: K8884.D
 Acq: 12 Nov 2021 12:26 am

Tgt Ion:	159	Resp:	1043
Ion Ratio	Lower	Upper	
159	100		
161	45.0	47.1	70.7#
194	35.3	35.4	53.0#



Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8902.D
 Acq On : 12 Nov 2021 12:47 pm
 Operator : K.Ruest
 Sample : MBLK-FP
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA-12

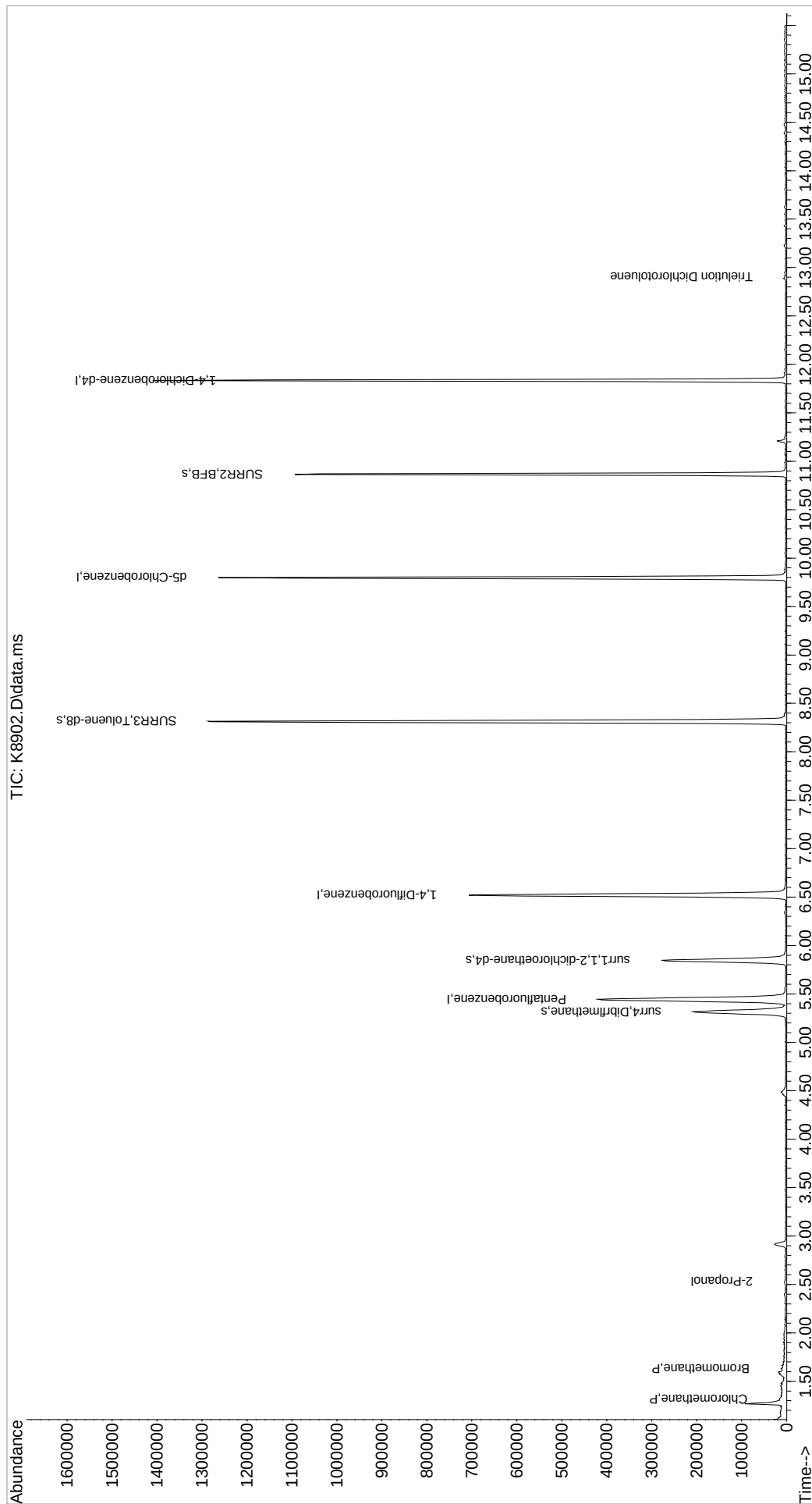
Quant Time: Nov 12 14:16:01 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

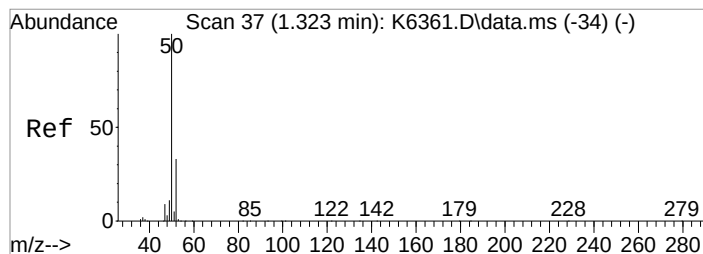
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.444	168	396659	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.517	114	647303	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	578732	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	277614	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.316	113	172246	48.88	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	97.76%	
48) surr1,1,2-dichloroetha...	5.846	65	235130	45.89	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	91.78%	
65) SURR3,Toluene-d8	8.316	98	859615	51.90	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	103.80%	
70) SURR2,BFB	10.864	95	313576	47.69	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	95.38%	
Target Compounds						
3) Chloromethane	1.317	50	1415	0.31	ppb	Qvalue 79
5) Bromomethane	1.628	94	1455	0.42	ppb	# 74
15) Acetone	2.402	43	2796	Below	Cal	# 45
16) 2-Propanol	2.530	45	1838	3.57	ppb	# 34
112) Trielution Dichlorotol...	12.900	125	1800	0.20	ppb	# 87

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

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8902.D
 Acq On : 12 Nov 2021 12:47 pm
 Operator : K.Ruest
 Sample : MBLK-FP
 Misc :
 ALS Vial : 3 Sample Multiplier: 1
 Inst : MSV0A-12

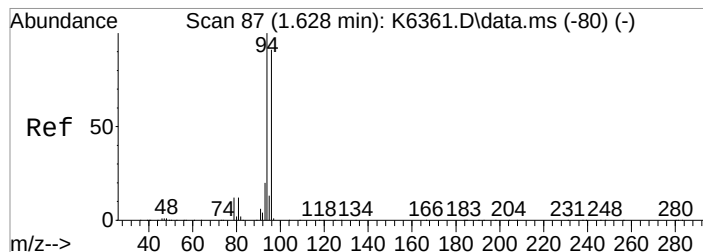
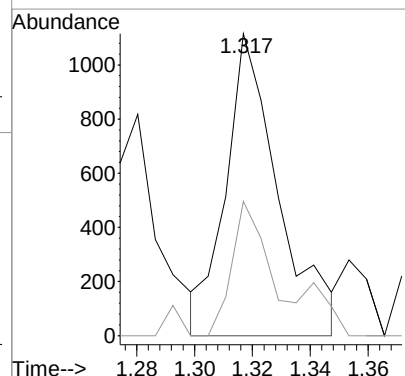
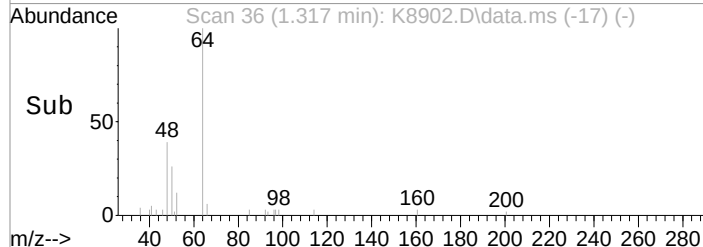
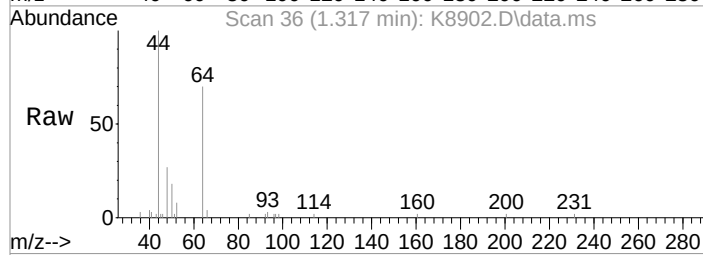
Quant Time: Nov 12 14:16:01 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 Qlast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration





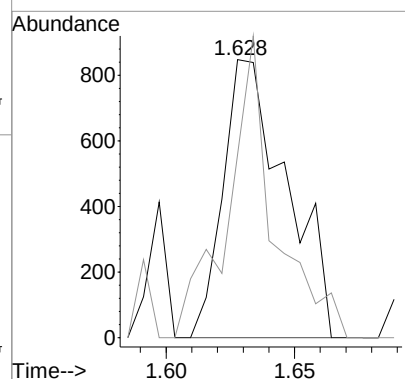
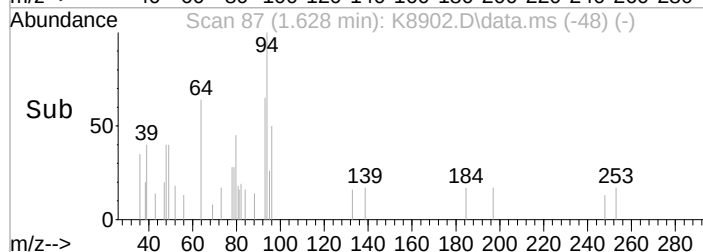
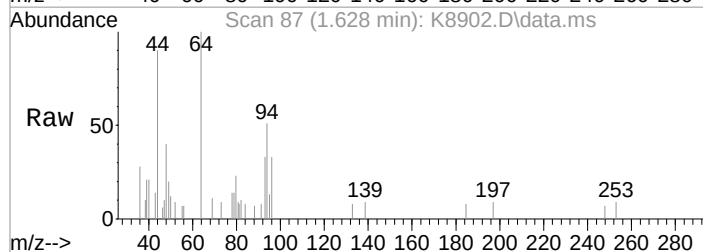
#3
 Chloromethane
 Concen: 0.31 ppb
 RT: 1.317 min Scan# 36
 Delta R.T. 0.000 min
 Lab File: K8902.D
 Acq: 12 Nov 2021 12:47 pm

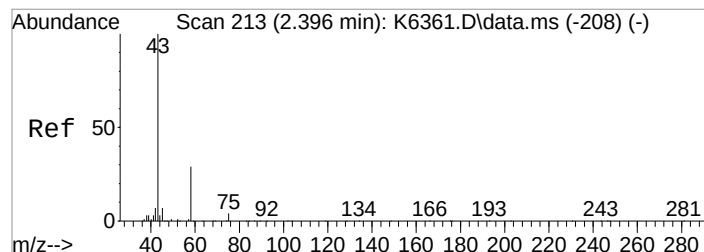
Tgt Ion: 50 Resp: 1415
 Ion Ratio Lower Upper
 50 100
 52 44.4 12.7 52.7



#5
 Bromomethane
 Concen: 0.42 ppb
 RT: 1.628 min Scan# 87
 Delta R.T. 0.012 min
 Lab File: K8902.D
 Acq: 12 Nov 2021 12:47 pm

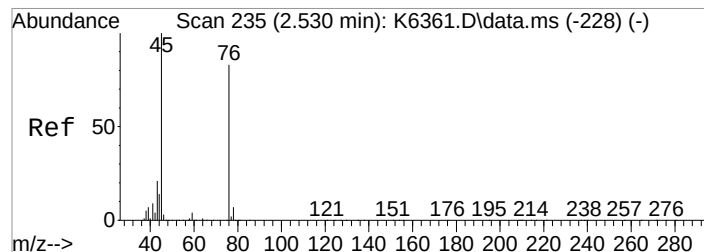
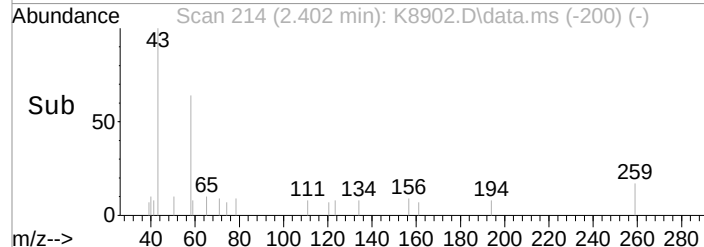
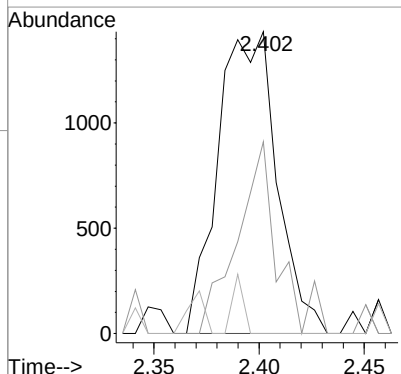
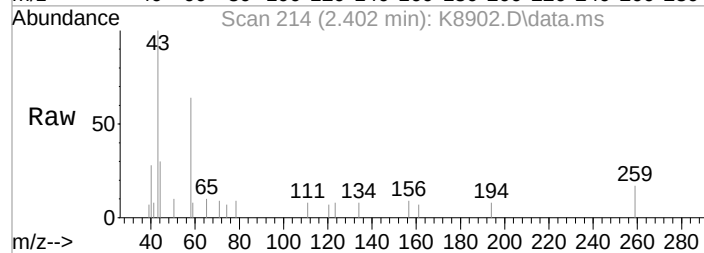
Tgt Ion: 94 Resp: 1455
 Ion Ratio Lower Upper
 94 100
 96 66.0 71.0 111.0#





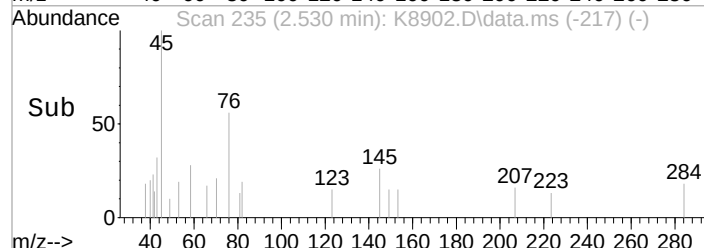
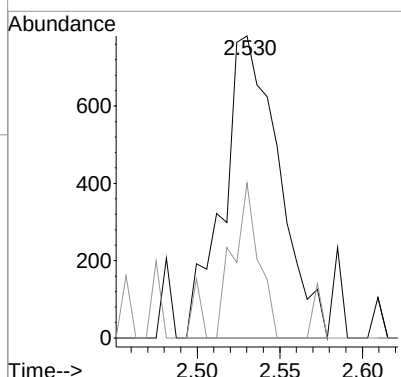
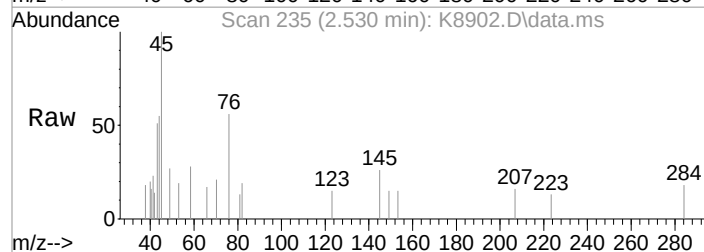
#15
 Acetone
 Concen: Below Cal
 RT: 2.402 min Scan# 214
 Delta R.T. 0.013 min
 Lab File: K8902.D
 Acq: 12 Nov 2021 12:47 pm

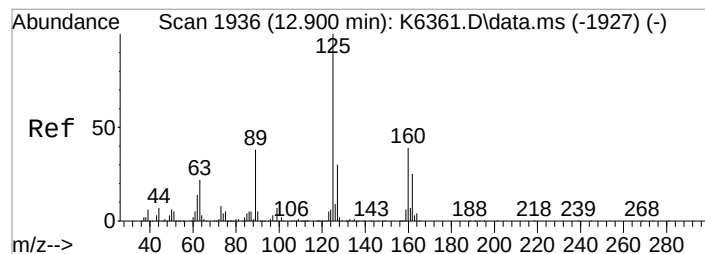
Tgt Ion	Ratio	Lower	Upper
43	100		
58	63.5	9.6	49.6#
42	0.0	0.0	27.7



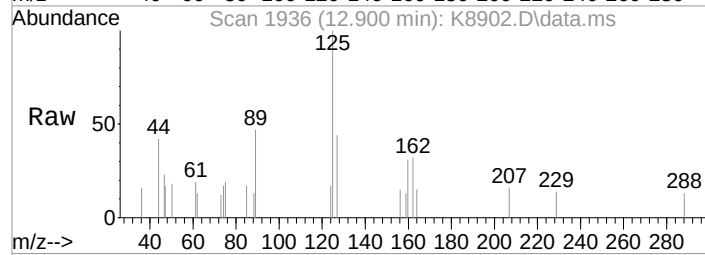
#16
 2-Propanol
 Concen: 3.57 ppb
 RT: 2.530 min Scan# 235
 Delta R.T. 0.000 min
 Lab File: K8902.D
 Acq: 12 Nov 2021 12:47 pm

Tgt Ion	Ratio	Lower	Upper
45	100		
43	51.3	0.6	40.6#

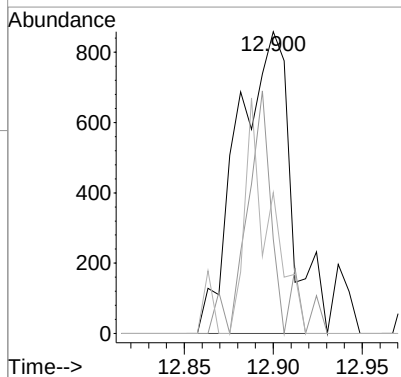
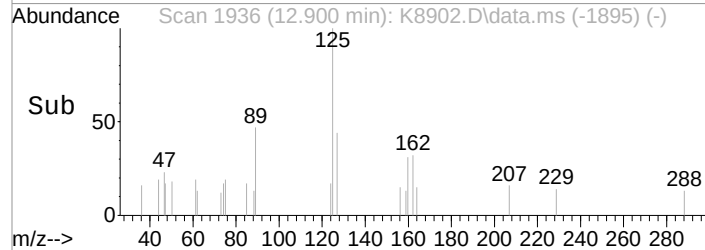




#112
 Trielution Dichlorotoluene
 Concen: 0.20 ppb
 RT: 12.900 min Scan# 1936
 Delta R.T. 0.000 min
 Lab File: K8902.D
 Acq: 12 Nov 2021 12:47 pm



Tgt Ion:	125	Resp:	1800
Ion Ratio		Lower	Upper
125	100		
160	31.3	31.0	46.4
89	46.7	30.4	45.6#



Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8902.D
 Acq On : 12 Nov 2021 12:47 pm
 Operator : K.Ruest
 Sample : MBLK-FP
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA-12

Integration Parameters: INTP90.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0.1

Filtering: 5

Min Area: 500 Area counts

Max Peaks: 100

Peak Location: TOP

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

Method : I:\ACQUDATA\msvoa12\Methods\W090221.M

Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: K8902.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	25	28	34	rBV	80496	96415	4.43%	0.871%
2	1.597	73	82	86	rBV8	12315	34993	1.61%	0.316%
3	2.914	291	298	306	rBV	25767	60978	2.80%	0.551%
4	4.487	546	556	565	rBV	10859	34746	1.60%	0.314%
5	5.316	681	692	703	rBV	206471	563334	25.90%	5.090%
6	5.444	703	713	727	rVB	416114	1107822	50.93%	10.010%
7	5.846	768	779	790	rBV2	276540	664201	30.54%	6.002%
8	6.517	880	889	901	rBV	705930	1452308	66.77%	13.123%
9	8.316	1176	1184	1193	rBV	1284220	2175060	100.00%	19.653%
10	9.797	1420	1427	1434	rBV	1262091	1721470	79.15%	15.555%
11	10.864	1597	1602	1613	rVB	1091341	1431314	65.81%	12.933%
12	11.211	1653	1659	1662	rBV	19005	25799	1.19%	0.233%
13	11.833	1755	1761	1767	rBV	1407386	1698799	78.10%	15.350%

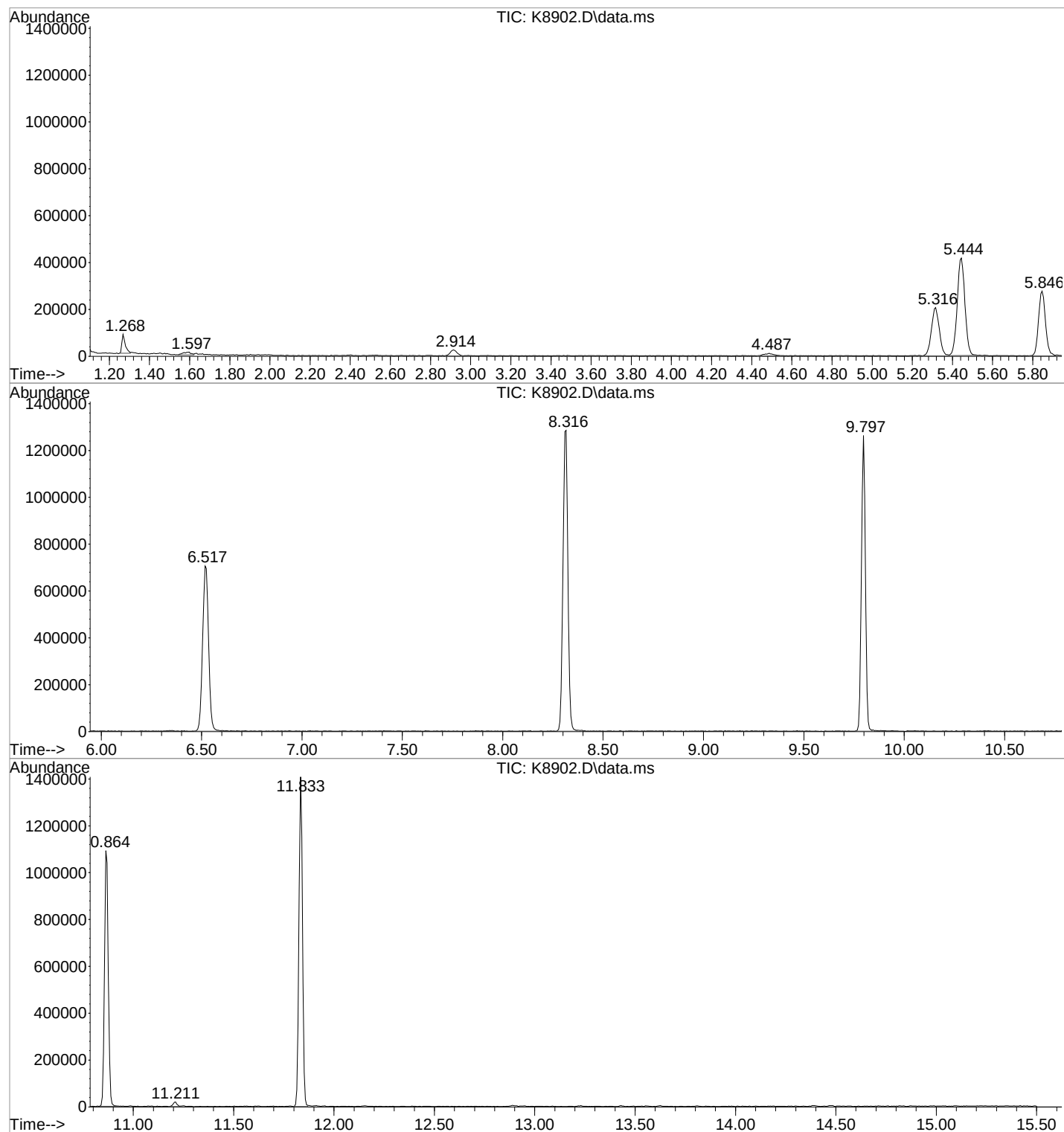
Sum of corrected areas: 11067239

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8902.D
Acq On : 12 Nov 2021 12:47 pm
Operator : K.Ruest
Sample : MBLK-FP
Misc :
ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA-12

Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.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

1st *102* 11/12/21
2nd *FN* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8902.D
Acq On : 12 Nov 2021 12:47 pmm
Operator : K.Ruestt
Sample : MBLK-FP Inst : MSVOA-122
Misc :
ALS Vial : 3 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

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

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

No Library Search Compounds Detected

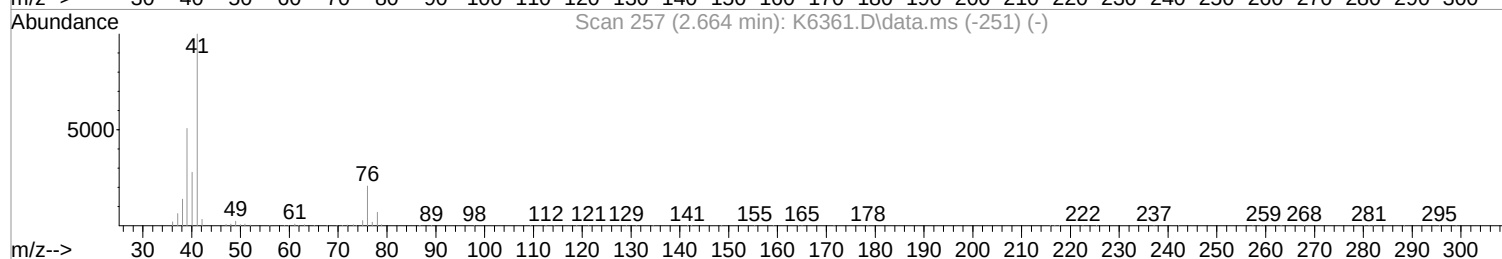
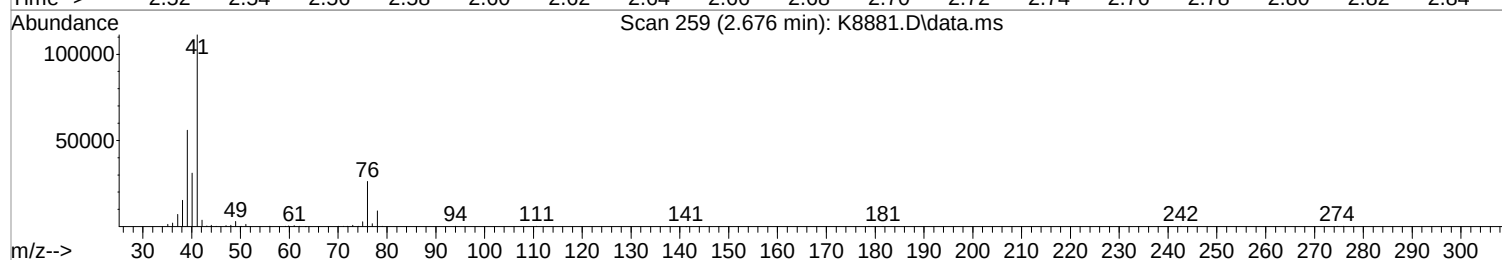
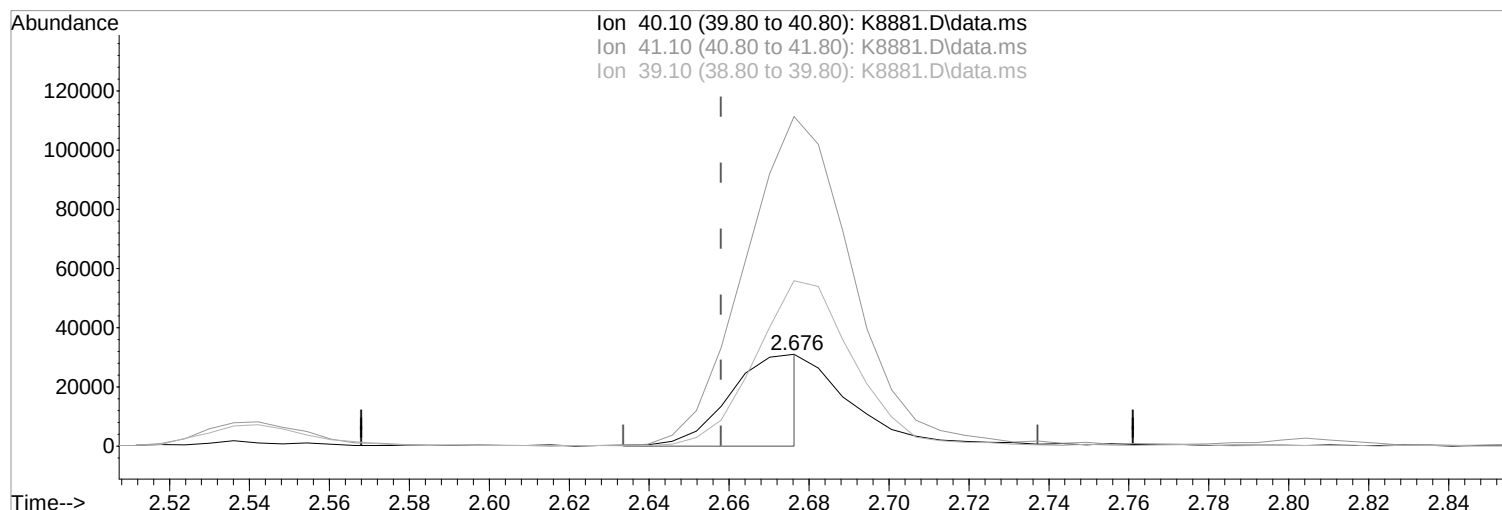
Quantitation Report (Qedit)

1st *FR* 11/12/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8881.D
Acq On : 11 Nov 2021 11:20 pm
Operator : K.Ruest
Sample : LCS-FP
Misc :
ALS Vial : 29 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 10:28:44 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8881.D\data.ms

(19) Acetonitrile

2.676min (+0.018) 123.03 ppb m

response 38783

Ion	Exp%	Act%
40.10	100	100
41.10	356.60	358.94
39.10	180.50	180.04
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

11/12/21

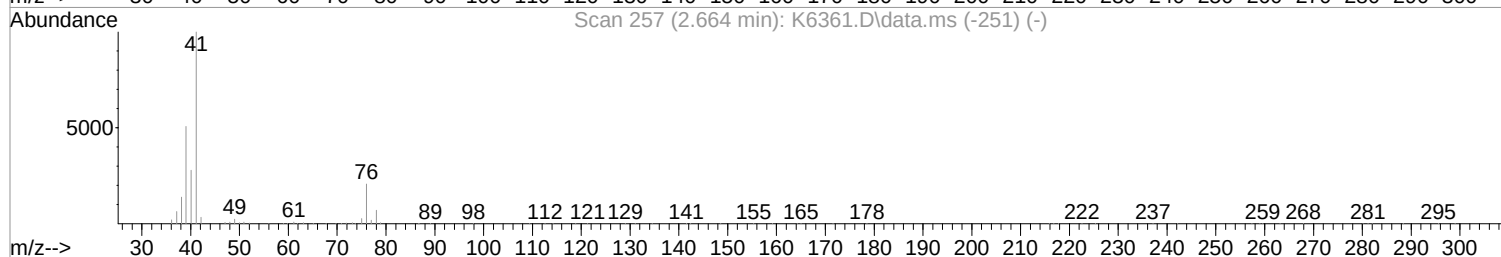
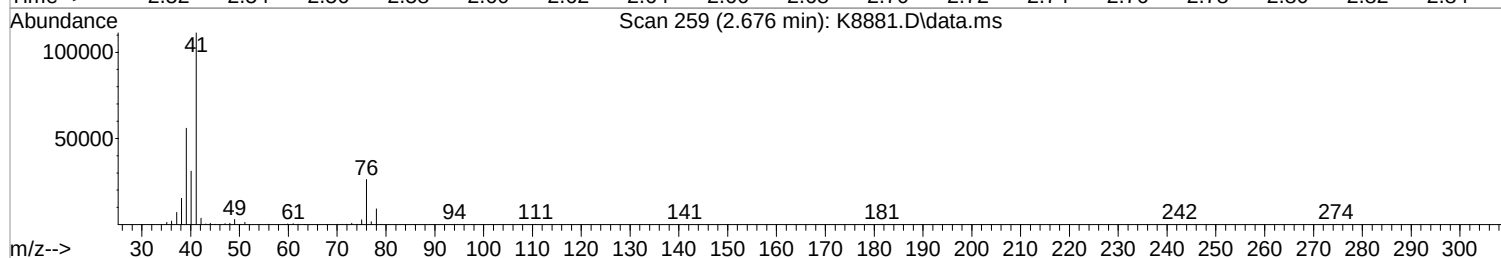
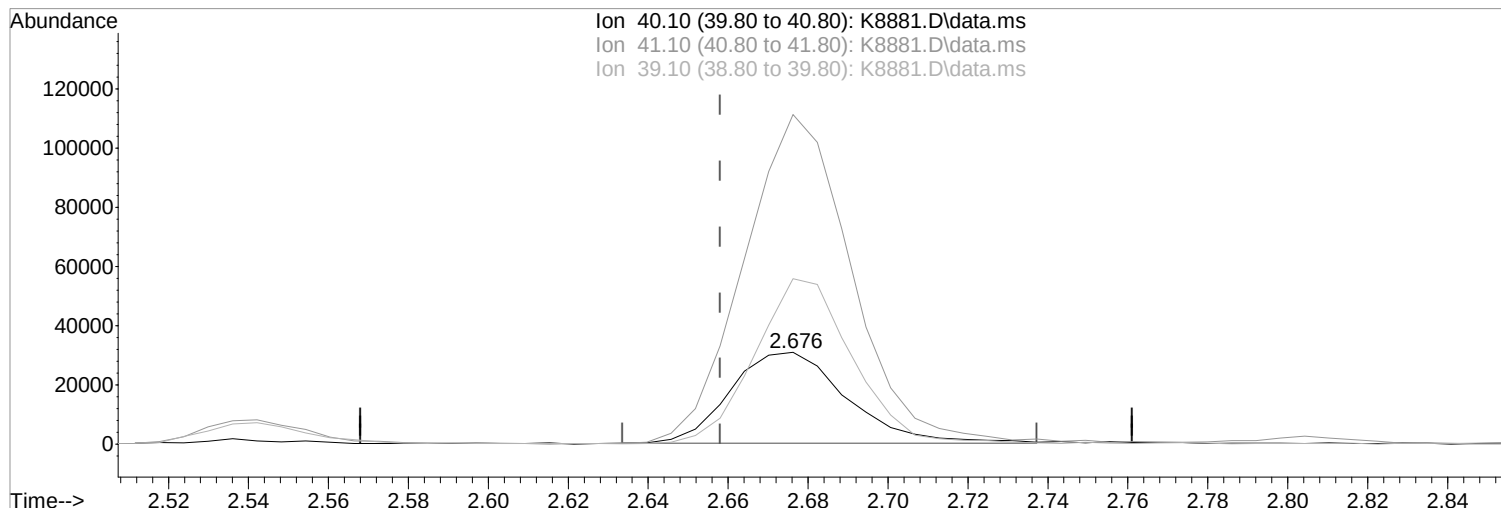
Quantitation Report (Qedit)

1st *12* 11/12/21
2nd *FJ* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8881.D
Acq On : 11 Nov 2021 11:20 pm
Operator : K.Ruest
Sample : LCS-FP
Misc :
ALS Vial : 29 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 10:28:44 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8881.D\data.ms

(19) Acetonitrile

Manual Integration:

2.676min (+0.018) 197.10 ppb

Before

response 62132

Ion Exp% Act%

11/12/21

40.10 100 100

41.10 356.60 358.94

39.10 180.50 180.04

0.00 0.00 0.00

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8881.D
 Acq On : 11 Nov 2021 11:20 pm
 Operator : K.Ruest
 Sample : LCS-FP
 Misc :
 ALS Vial : 29 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 10:31:31 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.456	168	363762	50.00	ppb	0.01
43) 1,4-Difluorobenzene	6.529	114	596243	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	544747	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	261076	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.328	113	167370	51.56	ppb	0.01
Spiked Amount	50.000	Range 80 - 116	Recovery	=	103.12%	
48) surr1,1,2-dichloroetha...	5.852	65	223969	47.45	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	94.90%	
65) SURR3,Toluene-d8	8.315	98	812534	53.26	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	106.52%	
70) SURR2,BFB	10.864	95	300710	49.65	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	99.30%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.207	85	95829	19.52	ppb	93
3) Chloromethane	1.335	50	119844	28.36	ppb	96
4) Vinyl Chloride	1.414	62	107054	21.76	ppb	98
5) Bromomethane	1.640	94	63795	19.87	ppb	98
6) Chloroethane	1.719	64	68701	21.27	ppb	95
7) Freon 21	1.872	67	139612	17.78	ppb	99
8) Trichlorofluoromethane	1.914	101	103580	16.60	ppb	95
9) Diethyl Ether	2.152	59	88455	22.96	ppb	95
10) Freon 123a	2.158	67	96840	20.76	ppb	94
11) Freon 123	2.213	83	105190	20.66	ppb	95
12) Acrolein	2.268	56	37974	37.01	ppb	92
13) 1,1-Dicethene	2.341	96	72457	20.48	ppb	# 74
14) Freon 113	2.341	101	61943	17.93	ppb	94
15) Acetone	2.408	43	41255	18.15	ppb	95
16) 2-Propanol	2.542	45	196043	415.16	ppb	98
17) Iodomethane	2.481	142	77499	19.67	ppb	95
18) Carbon Disulfide	2.530	76	220259	25.73	ppb	97
19) Acetonitrile	2.676	40	38783m	123.03	ppb	
20) Allyl Chloride	2.682	76	43372	19.98	ppb	# 83
21) Methyl Acetate	2.713	43	111554	24.05	ppb	98
22) Methylene Chloride	2.804	84	81654	19.35	ppb	98
23) TBA	2.951	59	335924	409.15	ppb	96
24) Acrylonitrile	3.085	53	254769	109.35	ppb	100
25) Methyl-t-Butyl Ether	3.097	73	289892	20.39	ppb	97
26) trans-1,2-Dichloroethene	3.091	96	76383	19.73	ppb	95
28) 1,1-Dicethane	3.603	63	148326	20.37	ppb	98
29) Vinyl Acetate	3.694	86	16003	15.47	ppb	# 94
30) DIPE	3.707	45	296521	22.79	ppb	92
31) 2-Chloro-1,3-Butadiene	3.719	53	136500	21.94	ppb	95
32) ETBE	4.237	59	276718	21.03	ppb	96
33) 2,2-Dichloropropane	4.438	77	100441	16.55	ppb	95
34) cis-1,2-Dichloroethene	4.450	96	90544	20.31	ppb	92
35) 2-Butanone	4.523	43	63483	20.20	ppb	97
36) Propionitrile	4.639	54	103889	101.92	ppb	95
37) Bromochloromethane	4.859	130	50605	19.88	ppb	97
38) Methacrylonitrile	4.889	67	53494	21.60	ppb	94
39) Tetrahydrofuran	4.950	42	45081	21.51	ppb	97
40) Chloroform	5.036	83	132717	18.43	ppb	98
41) 1,1,1-Trichloroethane	5.310	97	102176	17.54	ppb	95

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8881.D
 Acq On : 11 Nov 2021 11:20 pm
 Operator : K.Ruest
 Sample : LCS-FP
 Misc :
 ALS Vial : 29 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 10:31:31 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.133	73	286385	22.42	ppb	100
44) Cyclohexane	5.371	41	79619	20.18	ppb	91
46) Carbontetrachloride	5.566	117	76993	16.76	ppb	99
47) 1,1-Dichloropropene	5.590	75	103776	19.12	ppb	94
49) Benzene	5.907	78	342594	20.27	ppb	99
50) 1,2-Dichloroethane	5.968	62	113512	17.87	ppb	98
51) Iso-Butyl Alcohol	5.956	43	136649	400.83	ppb	99
52) n-Heptane	6.358	43	85945	16.83	ppb	94
53) 1-Butanol	6.901	56	233861	1054.52	ppb	98
54) Trichloroethene	6.840	130	81594	19.44	ppb	96
55) Methylcyclohexane	7.053	55	113270	20.52	ppb	97
56) 1,2-Dichloropropane	7.139	63	87530	19.96	ppb	99
57) Dibromomethane	7.279	93	53095	21.13	ppb	94
58) 1,4-Dioxane	7.346	88	39599	412.15	ppb	89
59) Methyl Methacrylate	7.352	69	84934	21.11	ppb	96
60) Bromodichloromethane	7.498	83	99603	18.77	ppb	96
63) cis-1,3-Dichloropropene	8.035	75	134253	20.96	ppb	97
64) 4-Methyl-2-pentanone	8.242	43	125432	21.46	ppb	97
66) Toluene	8.389	91	368082	20.33	ppb	99
67) trans-1,3-Dichloropropene	8.669	75	124762	21.00	ppb	92
68) Ethyl Methacrylate	8.797	69	133768	20.41	ppb	99
69) 1,1,2-Trichloroethane	8.858	97	82994	20.52	ppb	98
72) Tetrachloroethene	8.968	164	56292	17.93	ppb	94
73) 2-Hexanone	9.144	43	89161	20.78	ppb	97
74) 1,3-Dichloropropane	9.029	76	152669	21.03	ppb	99
75) Dibromochloromethane	9.248	129	59841	18.12	ppb	89
76) N-Butyl Acetate	9.291	43	154714	18.89	ppb	95
77) 1,2-Dibromoethane	9.346	107	82465	20.54	ppb	90
78) Chlorobenzene	9.827	112	231383	19.96	ppb	95
79) 3-CBTF	9.839	180	118319	20.87	ppb	92
80) 4-CBTF	9.894	180	105048	19.98	ppb	96
81) 1,1,1,2-Tetrachloroethane	9.913	131	72548	21.10	ppb	94
82) Ethylbenzene	9.937	106	122950	19.25	ppb	# 90
83) (m+p)Xylene	10.053	106	304653	39.46	ppb	95
84) o-Xylene	10.406	106	149800	19.64	ppb	90
85) Styrene	10.425	104	260074	20.38	ppb	97
87) Bromoform	10.583	173	40097	19.77	ppb	98
88) 2-CBTF	10.656	180	115217	21.54	ppb	94
89) Isopropylbenzene	10.736	105	363255	20.51	ppb	98
90) Cyclohexanone	10.821	55	114308	120.70	ppb	96
91) trans-1,4-Dichloro-2-B...	11.059	53	30422	20.45	ppb	93
92) 1,1,2,2-Tetrachloroethane	11.010	83	121565	22.13	ppb	98
93) Bromobenzene	10.992	156	94411	20.71	ppb	91
94) 1,2,3-Trichloropropane	11.040	110	41728	21.52	ppb	# 87
95) n-Propylbenzene	11.089	91	451757	20.44	ppb	99
96) 2-Chlorotoluene	11.156	91	267268	19.10	ppb	98
97) 3-Chlorotoluene	11.211	91	298385	21.33	ppb	96
98) 4-Chlorotoluene	11.248	91	315359	20.07	ppb	98
99) 1,3,5-Trimethylbenzene	11.242	105	324426	19.71	ppb	99
100) tert-Butylbenzene	11.510	119	264354	19.55	ppb	100
101) 1,2,4-Trimethylbenzene	11.553	105	328111	19.99	ppb	97
102) 3,4-DCBTF	11.614	214	85717	19.41	ppb	93
103) sec-Butylbenzene	11.693	105	390072	20.09	ppb	99
104) p-Isopropyltoluene	11.815	119	330083	19.40	ppb	97
105) 1,3-Dichlorobenz	11.778	146	182775	20.50	ppb	100
106) 1,4-Dichlorobenz	11.851	146	186961	19.48	ppb	97

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8881.D
 Acq On : 11 Nov 2021 11:20 pm
 Operator : K.Ruest
 Sample : LCS-FP
 Misc :
 ALS Vial : 29 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 10:31:31 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

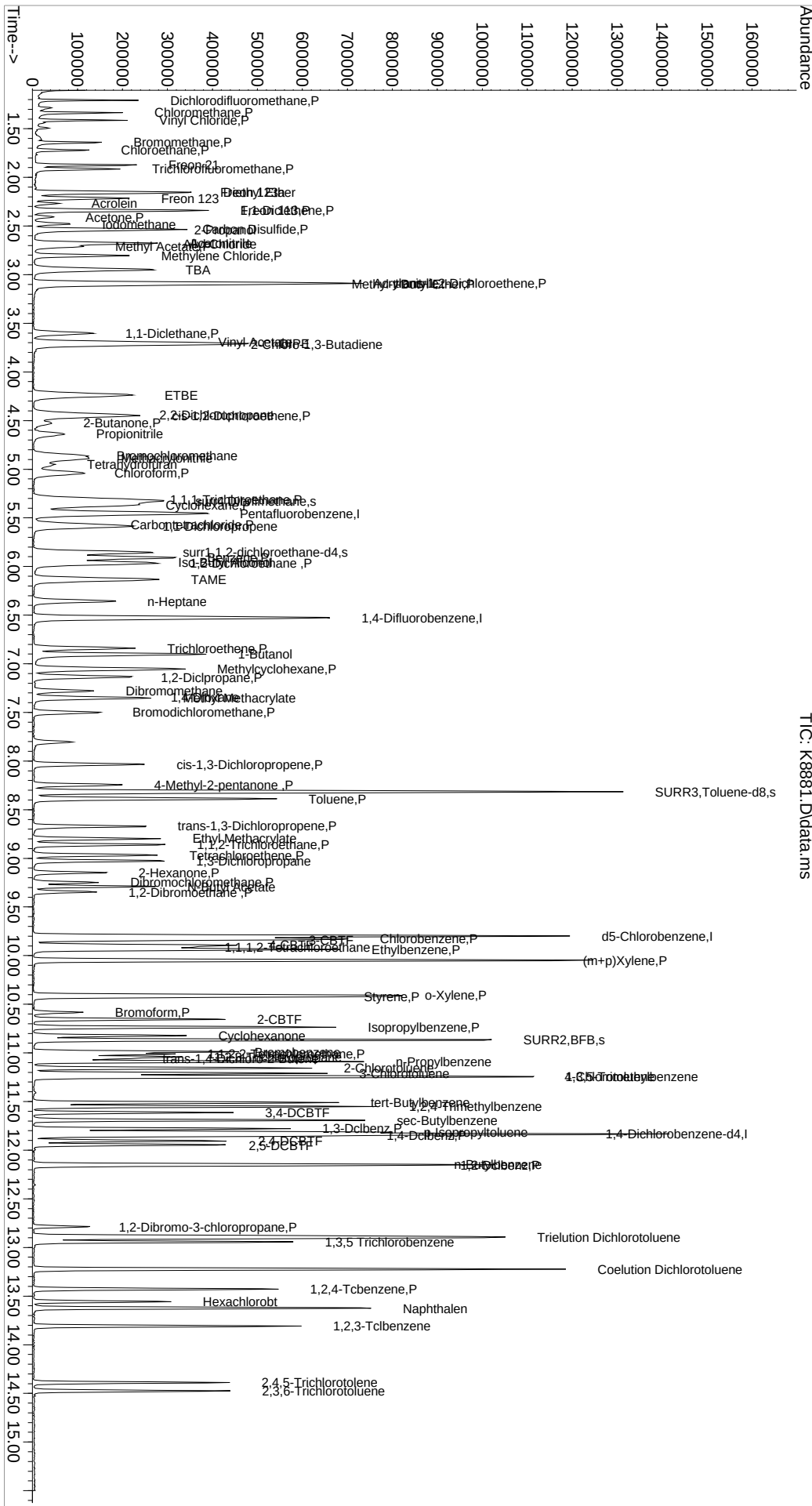
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 2,4-DCBTF	11.906	214	80201	20.66	ppb	98
108) 2,5-DCBTF	11.949	214	92449	21.47	ppb	94
109) n-Butylbenzene	12.144	91	301609	19.18	ppb	99
110) 1,2-Dclbenz	12.156	146	183639	20.69	ppb	96
111) 1,2-Dibromo-3-chloropr...	12.790	157	26467	22.17	ppb	92
112) Trielution Dichlorotol...	12.894	125	513797	61.49	ppb	95
113) 1,3,5 Trichlorobenzene	12.943	180	136865	20.93	ppb	100
114) Coelution Dichlorotoluene	13.223	125	387760	42.83	ppb	96
115) 1,2,4-Tcbenzene	13.430	180	137686	21.51	ppb	97
116) Hexachlorobt	13.558	225	44192	17.52	ppb	96
117) Naphthalen	13.625	128	454810	22.61	ppb	98
118) 1,2,3-Tclbenzene	13.808	180	138370	21.59	ppb	94
119) 2,4,5-Trichlorotoluene	14.387	159	87200	19.37	ppb	97
120) 2,3,6-Trichlorotoluene	14.473	159	81454	19.43	ppb	90

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

Data Path : I:\ACQDATA\msvoa12\Data\111121\
 Data File : K8881.D
 Acq On : 11 Nov 2021 11:20 pm
 Operator : K.Ruest
 Sample : LCS-FP
 PALS Vial : 29 Sample Multiplier: 1
 1st 11/12/21
 2nd 11/19/21

Inst : MSVOA-12

Quant Time: Nov 12 10:31:31 2021
 Quant Method : I:\ACQDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 Qlast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration



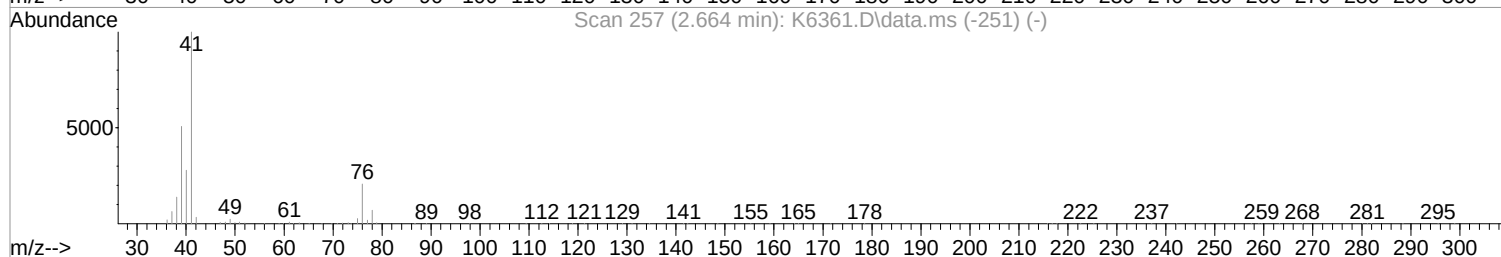
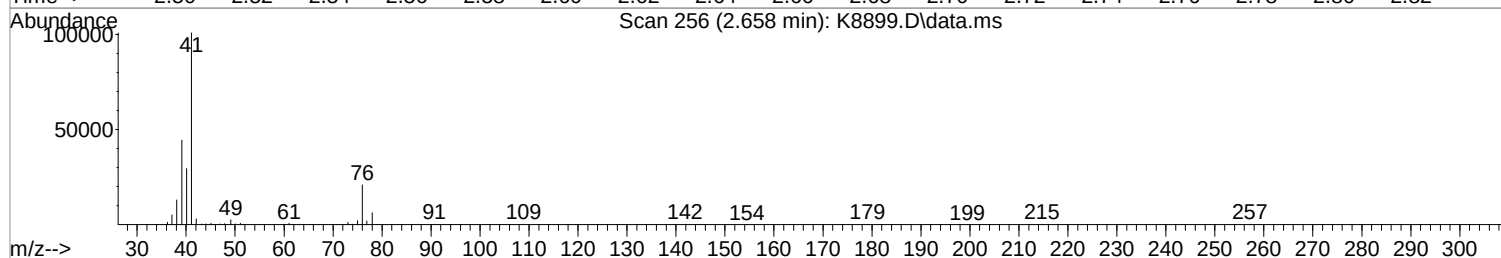
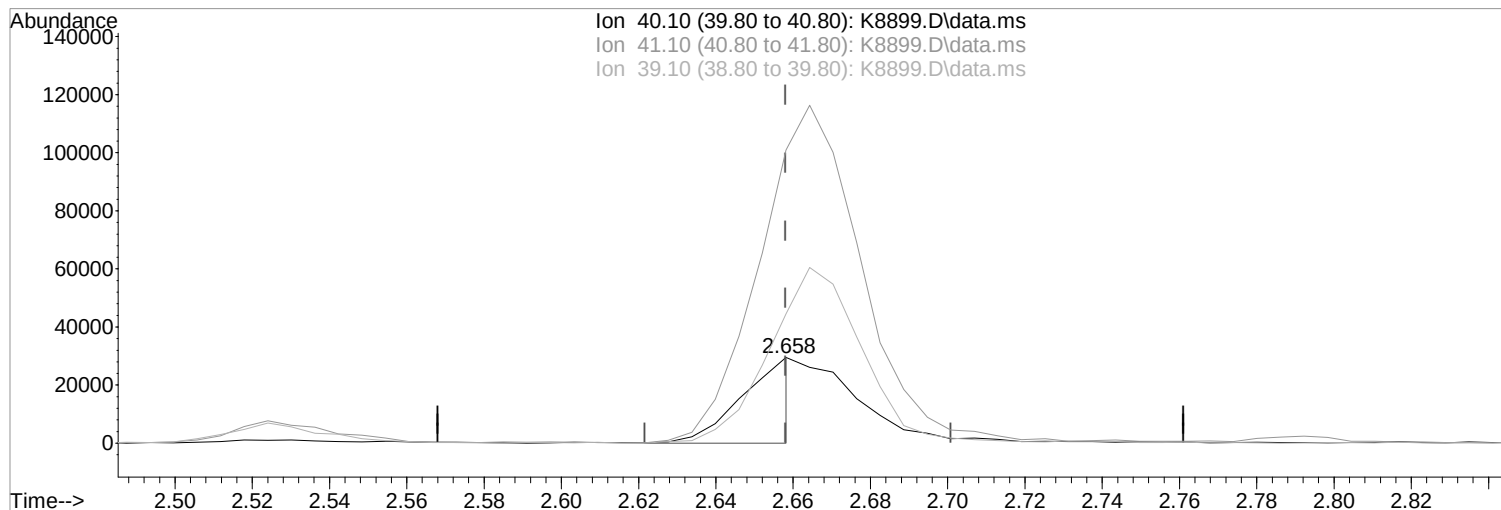
Quantitation Report (Qedit)

1st *FR* 11/12/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8899.D
Acq On : 12 Nov 2021 11:27 am
Operator : K.Ruest
Sample : LCS-FP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:45:12 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8899.D\data.ms

(19) Acetonitrile

2.658min (+0.000) 79.76 ppb m

response 27988

Ion	Exp%	Act%
40.10	100	100
41.10	356.60	342.03
39.10	180.50	150.73#
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

11/12/21

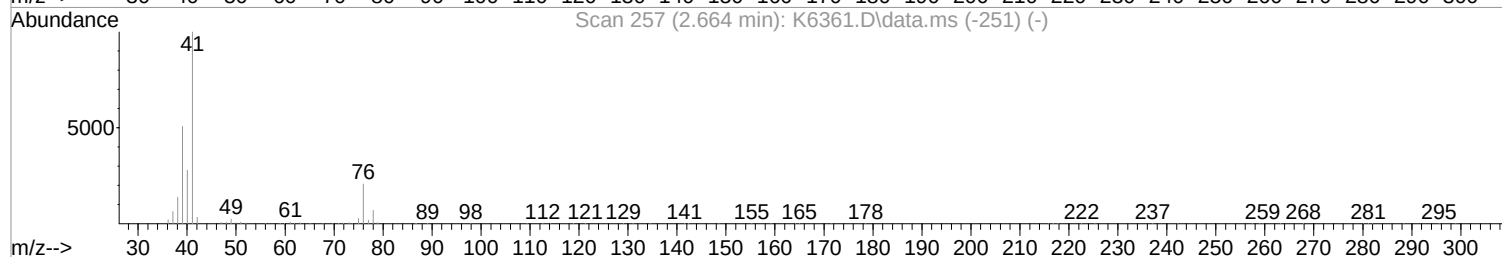
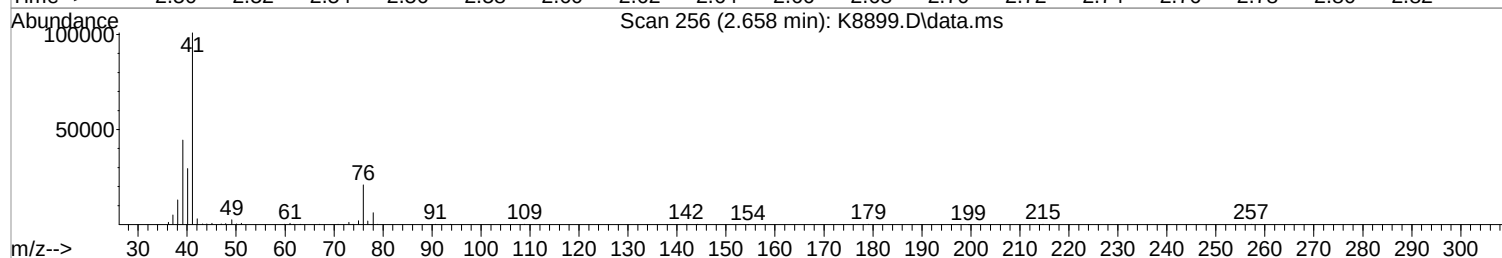
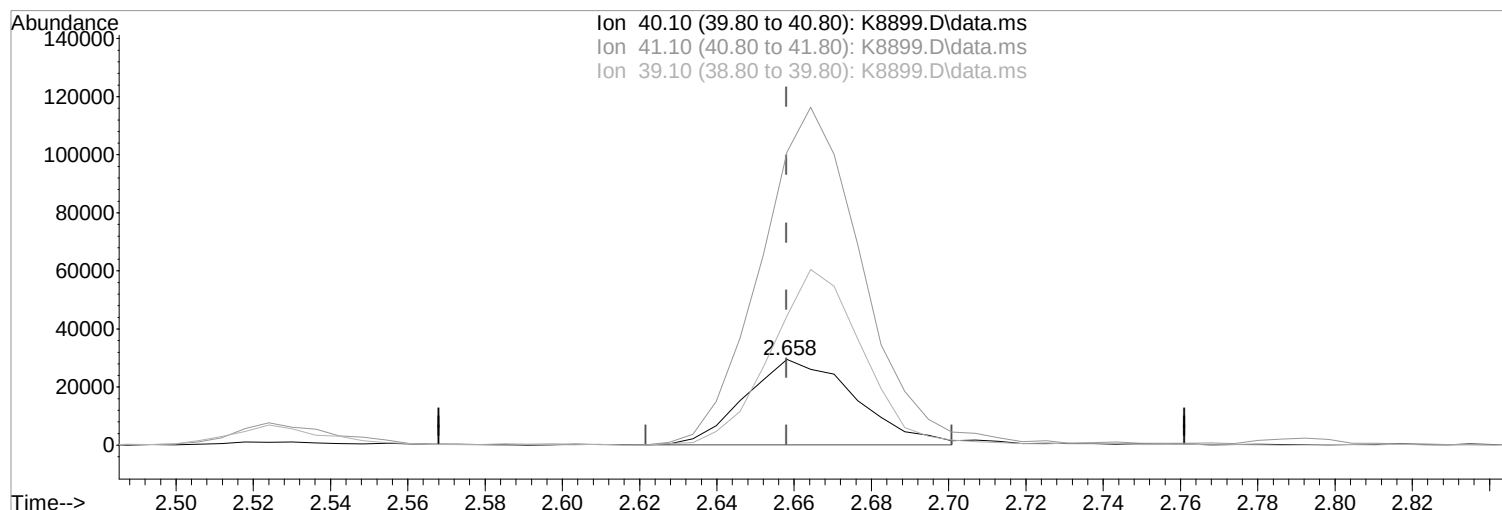
Quantitation Report (Qedit)

1st *FR* 11/12/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8899.D
Acq On : 12 Nov 2021 11:27 am
Operator : K.Ruest
Sample : LCS-FP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:45:12 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8899.D\data.ms

(19) Acetonitrile

Manual Integration:

2.658min (+0.000) 166.86 ppb

Before

response 58553

Ion Exp% Act%

11/12/21

40.10 100 100

41.10 356.60 342.03

39.10 180.50 150.73#

0.00 0.00 0.00

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8899.D
 Acq On : 12 Nov 2021 11:27 am
 Operator : K.Ruest
 Sample : LCS-FP
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:50:41 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.444	168	404928	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.517	114	666594	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	594275	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	292433	50.00	ppb	0.00

System Monitoring Compounds						
45) surr4,Dibrflmethane	5.316	113	184269	50.78	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	101.56%	
48) surr1,1,2-dichloroetha...	5.847	65	236103	44.74	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	89.48%	
65) SURR3,Toluene-d8	8.309	98	887206	52.01	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	104.02%	
70) SURR2,BFB	10.864	95	330190	48.77	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	97.54%	

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.195	85	109643	20.06	ppb	98
3) Chloromethane	1.323	50	123668	26.29	ppb	99
4) Vinyl Chloride	1.402	62	119487	21.81	ppb	100
5) Bromomethane	1.628	94	61612	17.24	ppb	99
6) Chloroethane	1.707	64	76833	21.37	ppb	99
7) Freon 21	1.860	67	144348	16.51	ppb	97
8) Trichlorofluoromethane	1.902	101	120474	17.35	ppb	98
9) Diethyl Ether	2.134	59	85917	20.04	ppb	96
10) Freon 123a	2.146	67	92073	17.73	ppb	99
11) Freon 123	2.201	83	100353	17.71	ppb	98
12) Acrolein	2.256	56	37648	32.96	ppb	91
13) 1,1-Dicethene	2.329	96	77779	19.75	ppb	# 86
14) Freon 113	2.323	101	73490	19.11	ppb	87
15) Acetone	2.396	43	38475	14.83	ppb	99
16) 2-Propanol	2.524	45	170736	324.81	ppb	98
17) Iodomethane	2.463	142	98484	22.21	ppb	90
18) Carbon Disulfide	2.518	76	234576	24.62	ppb	98
19) Acetonitrile	2.658	40	27988m	79.76	ppb	
20) Allyl Chloride	2.670	76	47216	19.54	ppb	# 83
21) Methyl Acetate	2.701	43	102323	19.82	ppb	94
22) Methylene Chloride	2.792	84	90311	19.23	ppb	90
23) TBA	2.932	59	321428	351.69	ppb	93
24) Acrylonitrile	3.067	53	242749	93.60	ppb	100
25) Methyl-t-Butyl Ether	3.085	73	302663	19.12	ppb	99
26) trans-1,2-Dichloroethene	3.073	96	84070	19.51	ppb	92
28) 1,1-Dicethane	3.585	63	153457	18.94	ppb	98
29) Vinyl Acetate	3.682	86	16107	13.98	ppb	# 77
30) DIPE	3.695	45	292595	20.20	ppb	85
31) 2-Chloro-1,3-Butadiene	3.707	53	139014	20.07	ppb	93
32) ETBE	4.225	59	283170	19.33	ppb	98
33) 2,2-Dichloropropane	4.420	77	125083	18.52	ppb	96
34) cis-1,2-Dichloroethene	4.438	96	97826	19.71	ppb	97
35) 2-Butanone	4.518	43	59184	16.92	ppb	89
36) Propionitrile	4.621	54	99252	87.47	ppb	100
37) Bromochloromethane	4.841	130	58265	20.56	ppb	93
38) Methacrylonitrile	4.883	67	54310	19.70	ppb	94
39) Tetrahydrofuran	4.938	42	38614	16.55	ppb	99
40) Chloroform	5.030	83	145794	18.18	ppb	95
41) 1,1,1-Trichloroethane	5.298	97	116857	18.02	ppb	98

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8899.D
 Acq On : 12 Nov 2021 11:27 am
 Operator : K.Ruest
 Sample : LCS-FP
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:50:41 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.121	73	300610	21.14	ppb	98
44) Cyclohexane	5.353	41	75959	17.22	ppb	98
46) Carbontetrachloride	5.560	117	85457	16.64	ppb	99
47) 1,1-Dichloropropene	5.578	75	114331	18.85	ppb	91
49) Benzene	5.901	78	363587	19.24	ppb	99
50) 1,2-Dichloroethane	5.962	62	123283	17.36	ppb	96
51) Iso-Butyl Alcohol	5.950	43	123561	324.19	ppb	88
52) n-Heptane	6.346	43	112336	19.68	ppb	98
53) 1-Butanol	6.895	56	211445	852.82	ppb	98
54) Trichloroethene	6.834	130	88093	18.78	ppb	95
55) Methylcyclohexane	7.048	55	116223	18.83	ppb	98
56) 1,2-Dichloropropane	7.127	63	97374	19.86	ppb	94
57) Dibromomethane	7.273	93	56547	20.13	ppb	84
58) 1,4-Dioxane	7.334	88	36443	339.27	ppb	96
59) Methyl Methacrylate	7.346	69	87400	19.43	ppb	94
60) Bromodichloromethane	7.493	83	105195	17.73	ppb	96
63) cis-1,3-Dichloropropene	8.029	75	146350	20.43	ppb	97
64) 4-Methyl-2-pentanone	8.242	43	115261	17.64	ppb	97
66) Toluene	8.383	91	407904	20.15	ppb	99
67) trans-1,3-Dichloropropene	8.669	75	136532	20.56	ppb	95
68) Ethyl Methacrylate	8.797	69	133451	18.21	ppb	97
69) 1,1,2-Trichloroethane	8.858	97	88727	19.62	ppb	98
72) Tetrachloroethene	8.962	164	68466	19.99	ppb	90
73) 2-Hexanone	9.145	43	83178	17.77	ppb	94
74) 1,3-Dichloropropane	9.023	76	162598	20.53	ppb	99
75) Dibromochloromethane	9.248	129	68902	19.12	ppb	93
76) N-Butyl Acetate	9.285	43	158640	17.75	ppb	96
77) 1,2-Dibromoethane	9.340	107	89960	20.54	ppb	97
78) Chlorobenzene	9.821	112	257962	20.40	ppb	95
79) 3-CBTF	9.840	180	132332	21.39	ppb	93
80) 4-CBTF	9.895	180	115485	20.13	ppb	95
81) 1,1,1,2-Tetrachloroethane	9.913	131	79053	21.07	ppb	96
82) Ethylbenzene	9.937	106	138683	19.90	ppb	# 90
83) (m+p)Xylene	10.047	106	342846	40.70	ppb	100
84) o-Xylene	10.407	106	168936	20.31	ppb	88
85) Styrene	10.419	104	292352	21.00	ppb	96
87) Bromoform	10.583	173	42865	18.87	ppb	95
88) 2-CBTF	10.657	180	126285	21.08	ppb	91
89) Isopropylbenzene	10.736	105	417840	21.07	ppb	100
90) Cyclohexanone	10.821	55	100960	95.18	ppb	100
91) trans-1,4-Dichloro-2-B...	11.059	53	31508	18.95	ppb	85
92) 1,1,2,2-Tetrachloroethane	11.010	83	129123	20.99	ppb	95
93) Bromobenzene	10.986	156	104352	20.44	ppb	95
94) 1,2,3-Trichloropropane	11.041	110	39183	17.96	ppb	99
95) n-Propylbenzene	11.089	91	519536	20.99	ppb	99
96) 2-Chlorotoluene	11.156	91	302675	19.32	ppb	95
97) 3-Chlorotoluene	11.211	91	322985	20.62	ppb	95
98) 4-Chlorotoluene	11.248	91	346700	19.70	ppb	96
99) 1,3,5-Trimethylbenzene	11.242	105	364974	19.80	ppb	96
100) tert-Butylbenzene	11.510	119	305795	20.19	ppb	100
101) 1,2,4-Trimethylbenzene	11.553	105	374830	20.39	ppb	98
102) 3,4-DCBTF	11.614	214	102430	20.71	ppb	95
103) sec-Butylbenzene	11.693	105	451407	20.76	ppb	98
104) p-Isopropyltoluene	11.815	119	381401	20.02	ppb	97
105) 1,3-Dichlorobenz	11.778	146	203340	20.36	ppb	99
106) 1,4-Dichlorobenz	11.851	146	208523	19.40	ppb	100

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8899.D
Acq On : 12 Nov 2021 11:27 am
Operator : K.Ruest
Sample : LCS-FP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA-12

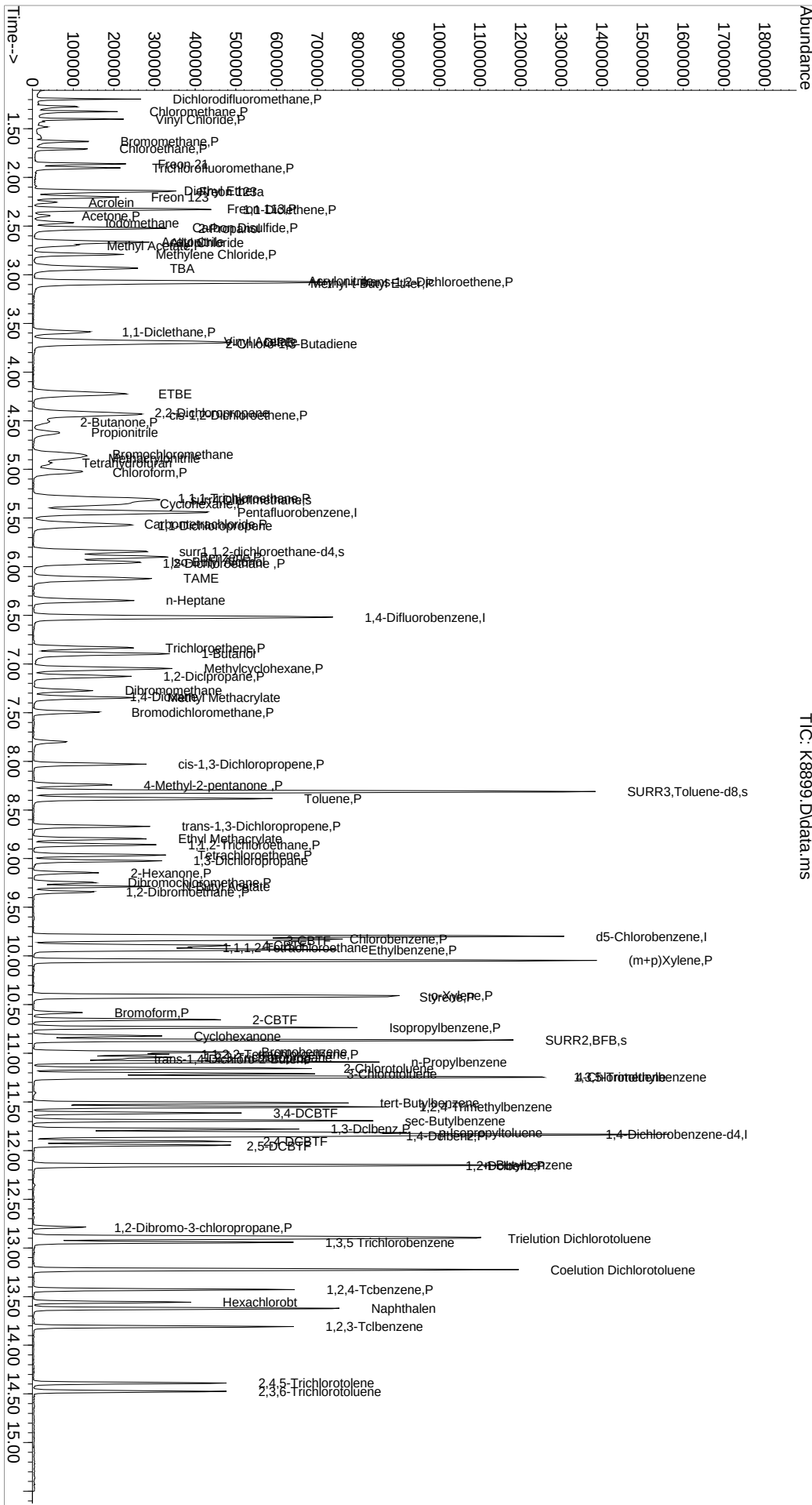
Quant Time: Nov 12 11:50:41 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 2,4-DCBTF	11.906	214	94791	21.80	ppb	95
108) 2,5-DCBTF	11.949	214	103417	21.44	ppb	96
109) n-Butylbenzene	12.144	91	352258	20.00	ppb	99
110) 1,2-Dclbenz	12.156	146	204825	20.60	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.790	157	27128	20.29	ppb	91
112) Trielution Dichlorotol...	12.900	125	550015	58.76	ppb	96
113) 1,3,5 Trichlorobenzene	12.943	180	152967	20.88	ppb	97
114) Coelution Dichlorotoluene	13.223	125	409768	40.41	ppb	97
115) 1,2,4-Tcbenzene	13.430	180	150834	21.04	ppb	98
116) Hexachlorobt	13.558	225	54681	19.36	ppb	98
117) Naphthalen	13.619	128	478262	21.22	ppb	99
118) 1,2,3-Tclbenzene	13.808	180	153342	21.36	ppb	99
119) 2,4,5-Trichlorotolene	14.388	159	100732	19.97	ppb	95
120) 2,3,6-Trichlorotoluene	14.473	159	89755	19.11	ppb	97

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

Data Path : I:\ACQDATA\msvoa12\Data\111221\
 Data File : K8899.D
 Acq On : 12 Nov 2021 11:27 am
 Operator : K.Ruest
 Sample : LCS-FP
 PALS Vial : 1 Sample Multiplier: 1
 Inst : MSVOA-12

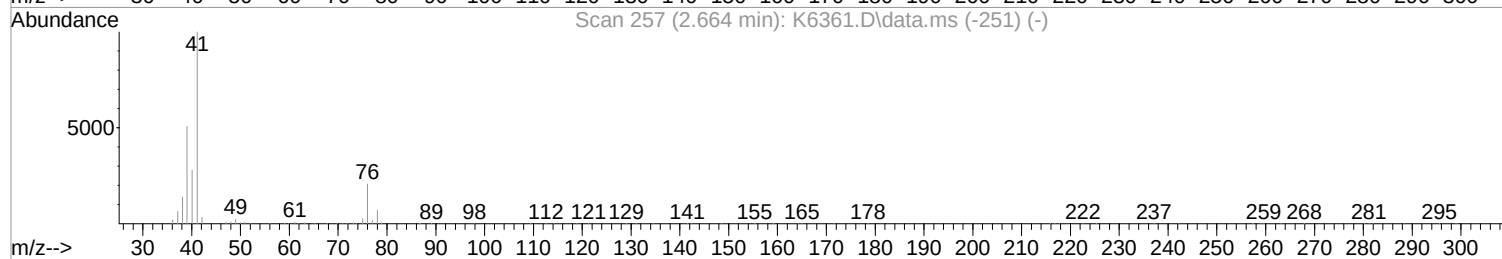
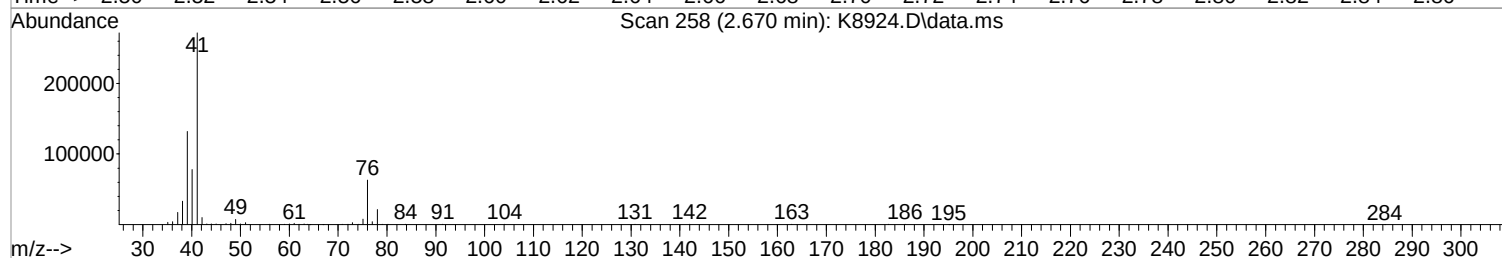
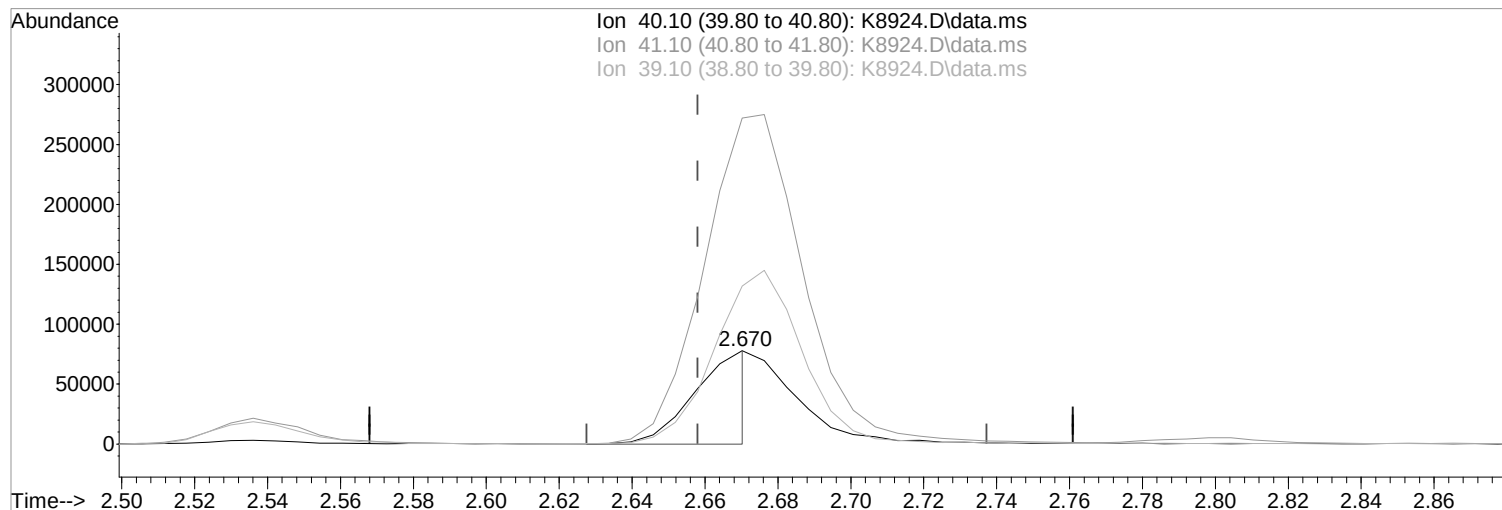
Quant Time: Nov 12 11:50:41 2021
 Quant Method : I:\ACQDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 Quant Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration



Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8924.D
Acq On : 12 Nov 2021 8:53 pm
Operator : K.Ruest
Sample : R2111745-018MS|1.0
Misc : LIRO 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 13 10:26:13 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8924.D\data.ms

(19) Acetonitrile

2.670min (+0.012) 249.28 ppb m

response 81928

Ion	Exp%	Act%
40.10	100	100
41.10	356.60	349.04
39.10	180.50	169.26
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

11/15/21

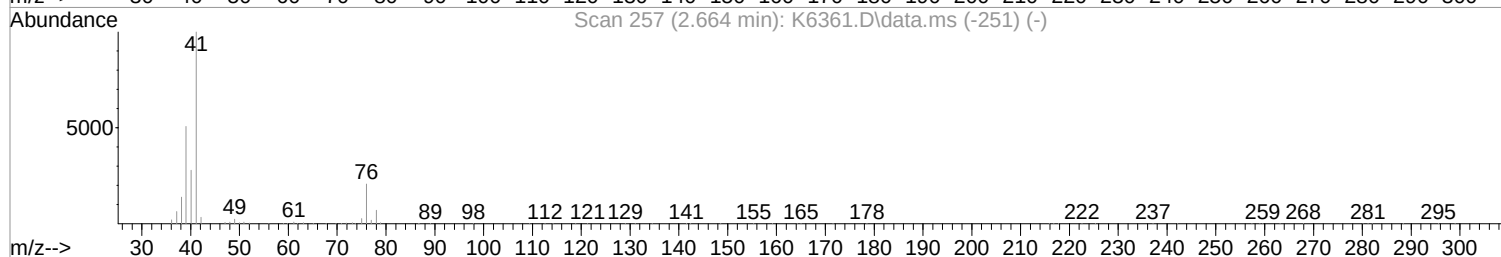
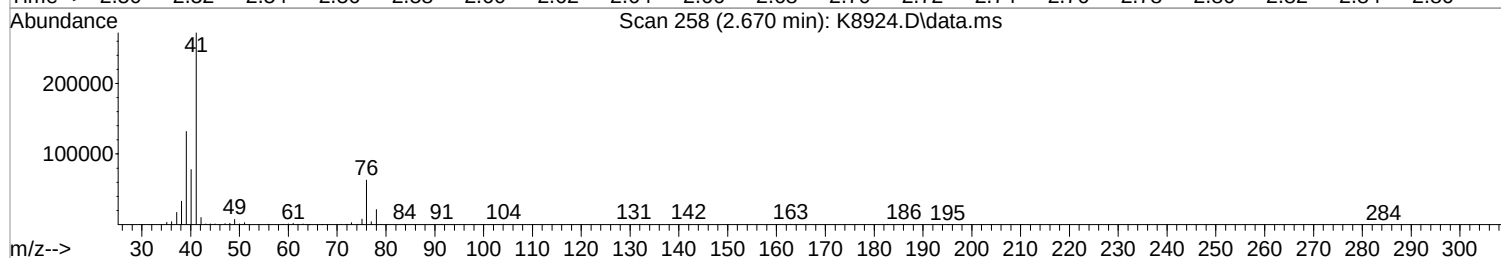
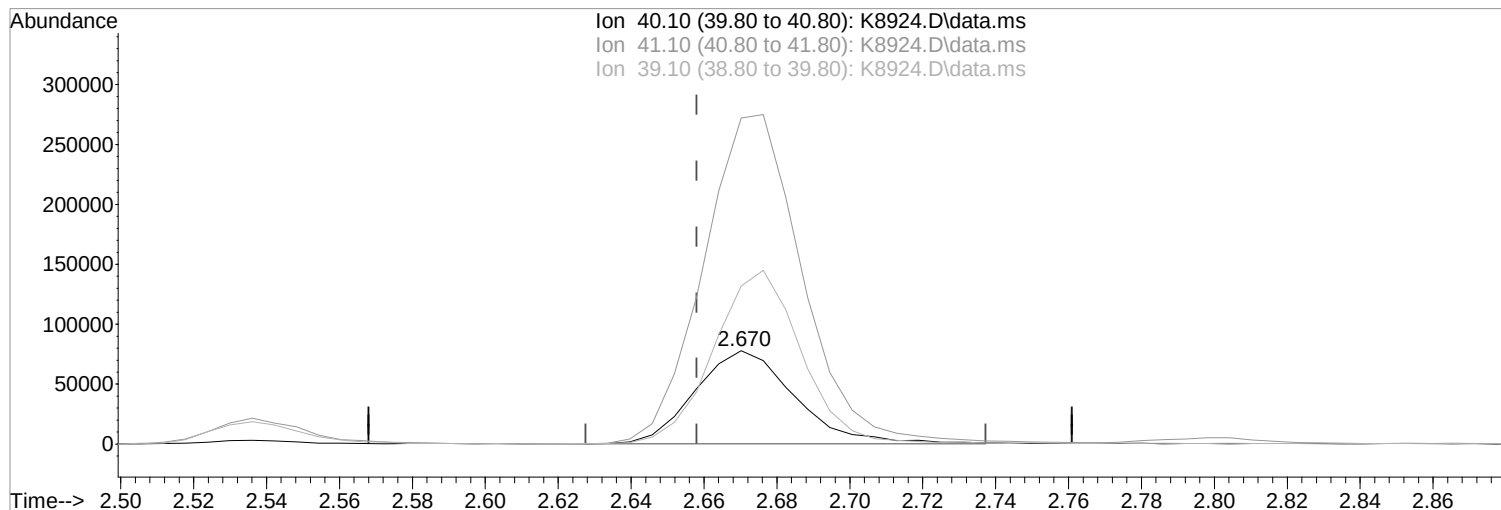
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8924.D
Acq On : 12 Nov 2021 8:53 pm
Operator : K.Ruest
Sample : R2111745-018MS|1.0
Misc : LIRO 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 13 10:26:13 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8924.D\data.ms

(19) Acetonitrile

Manual Integration:

2.670min (+0.012) 450.23 ppb

Before

response 147972

Ion Exp% Act%

11/15/21

40.10 100 100

41.10 356.60 349.04

39.10 180.50 169.26

0.00 0.00 0.00

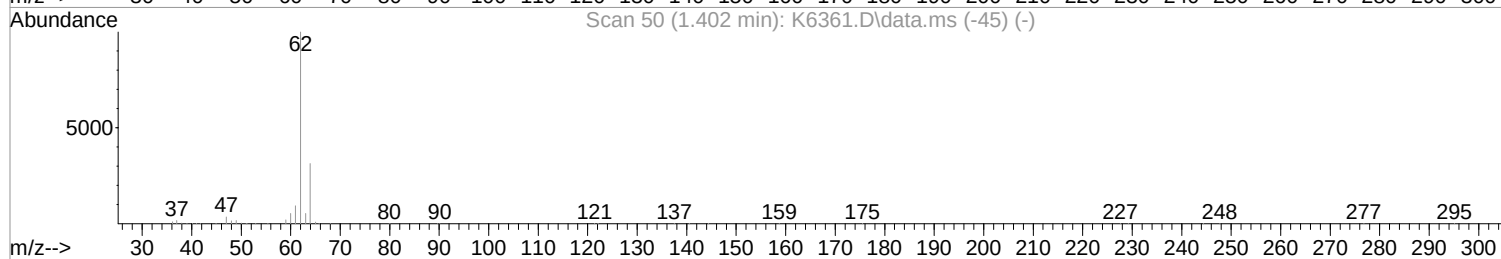
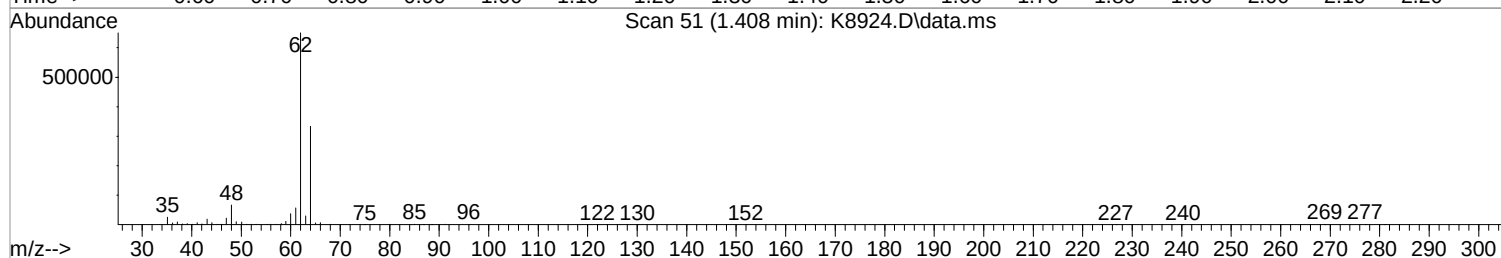
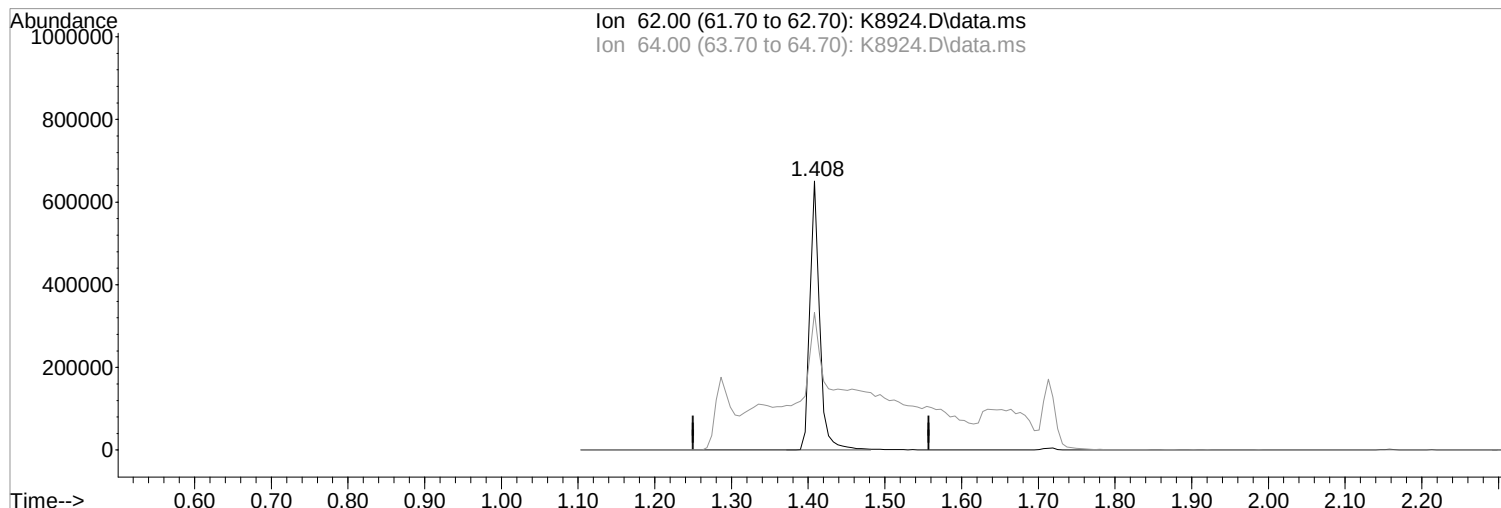
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8924.D
Acq On : 12 Nov 2021 8:53 pm
Operator : K.Ruest
Sample : R2111745-018MS|1.0
Misc : LIRO 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 13 10:26:13 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8924.D\data.ms

(4) Vinyl Chloride (P)

1.408min (+0.012) 113.72 ppb m

response 583397

Ion	Exp%	Act%
62.00	100	100
64.00	31.50	51.11
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Peak not found.

11/15/21

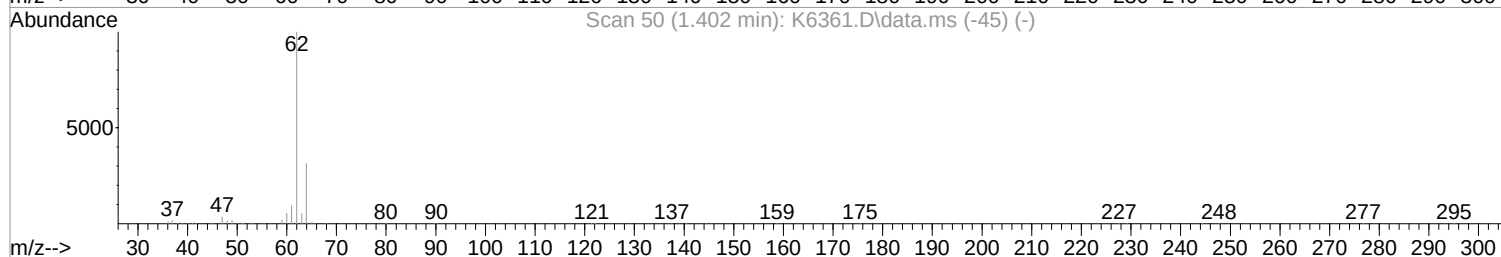
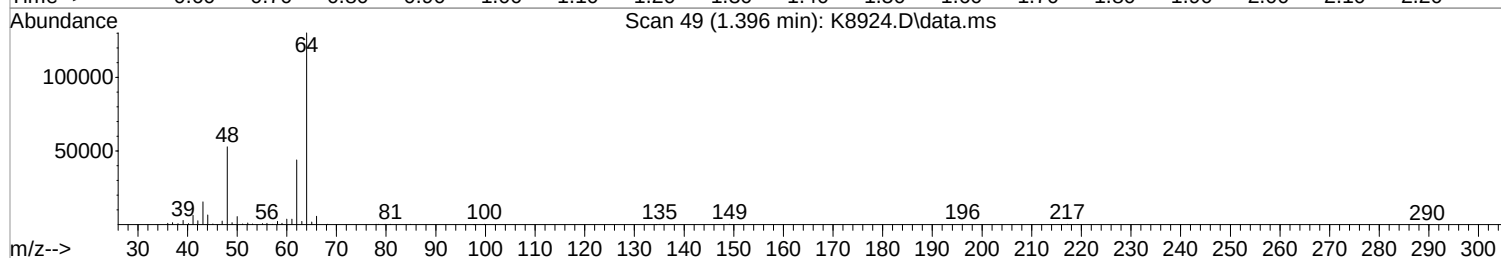
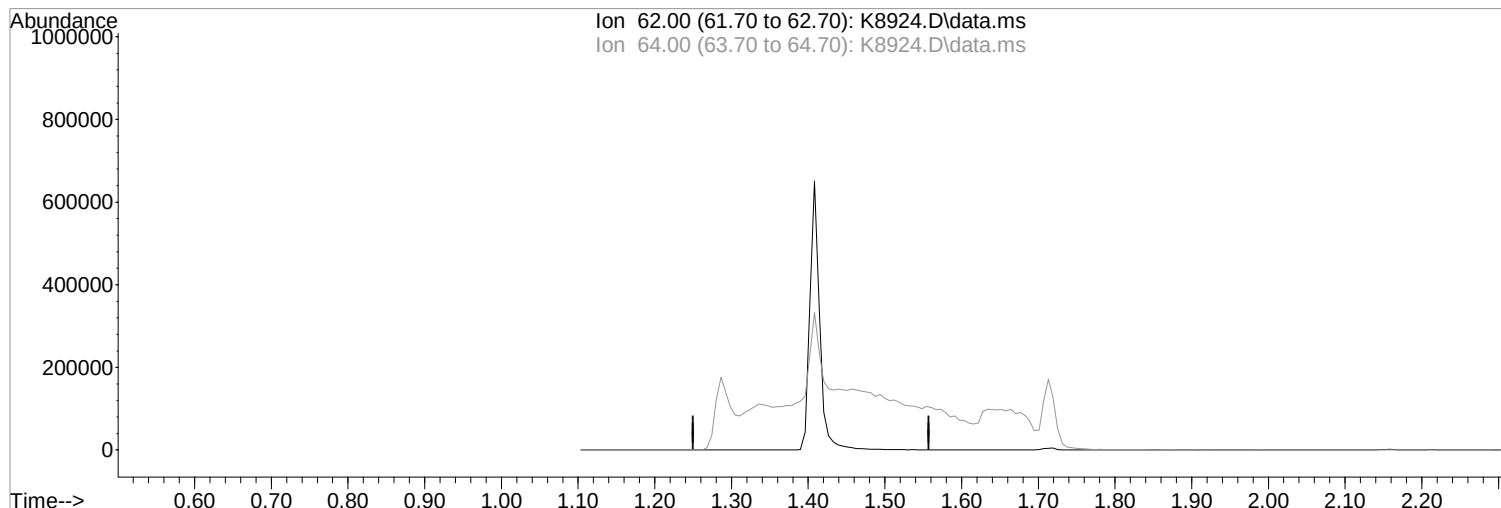
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8924.D
Acq On : 12 Nov 2021 8:53 pm
Operator : K.Ruest
Sample : R2111745-018MS|1.0
Misc : LIRO 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 13 10:26:13 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8924.D\data.ms

(4) Vinyl Chloride (P)

Manual Integration:

1.396min (-1.396) 0.00 ppb

Before

response 0

Ion	Exp%	Act%
62.00	100	0.00
64.00	31.50	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

11/15/21

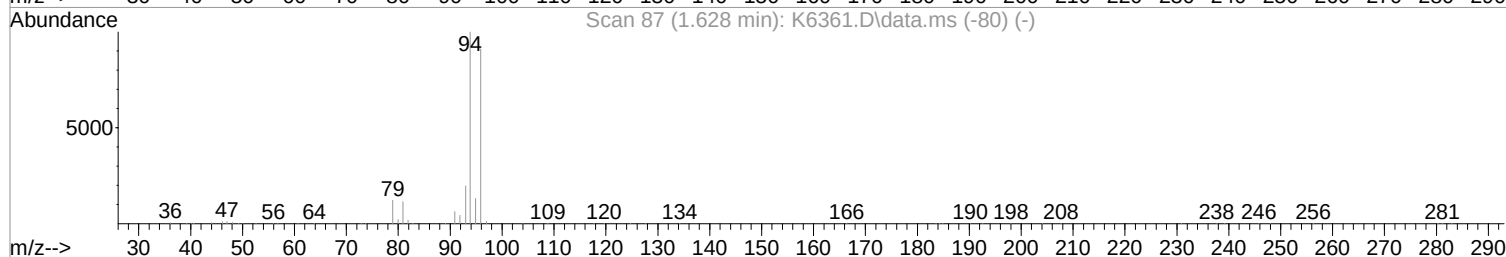
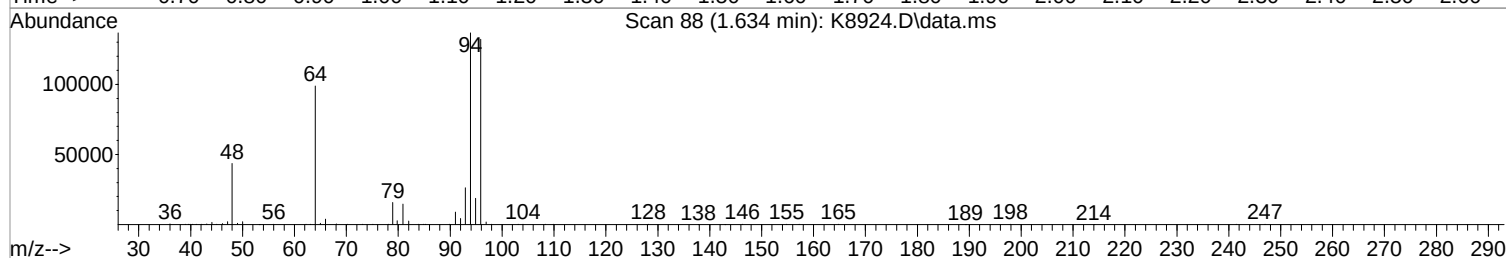
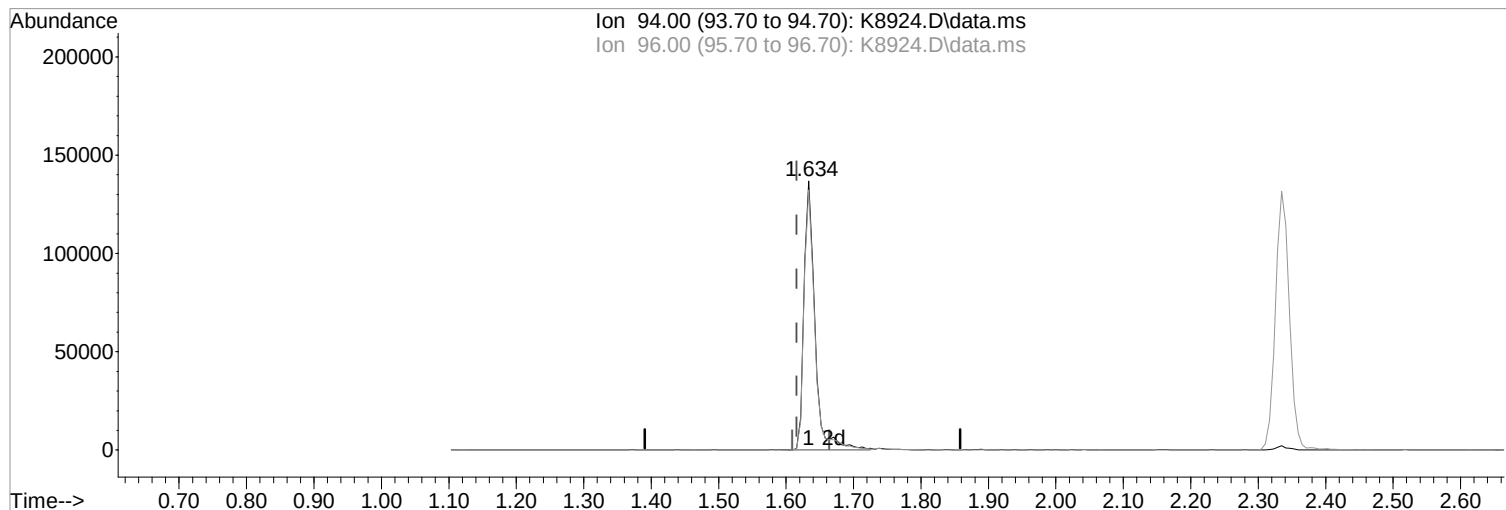
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8924.D
Acq On : 12 Nov 2021 8:53 pm
Operator : K.Ruest
Sample : R2111745-018MS|1.0
Misc : LIRO 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 13 10:26:13 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8924.D\data.ms

(5) Bromomethane (P)

1.634min (+0.018) 46.80 ppb m

response 156647

Ion	Exp%	Act%
94.00	100	100
96.00	91.00	96.63
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

11/15/21

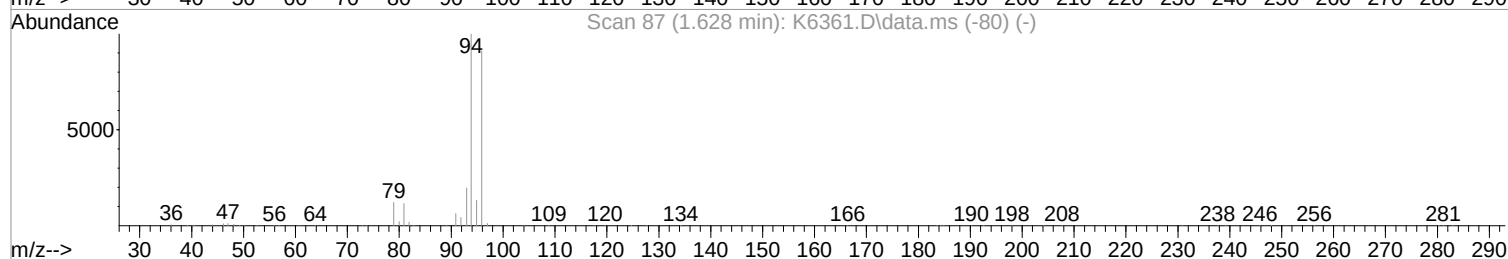
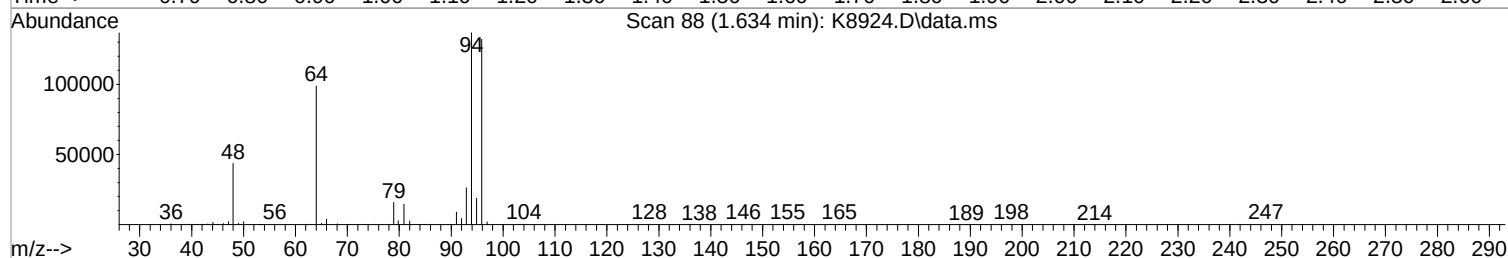
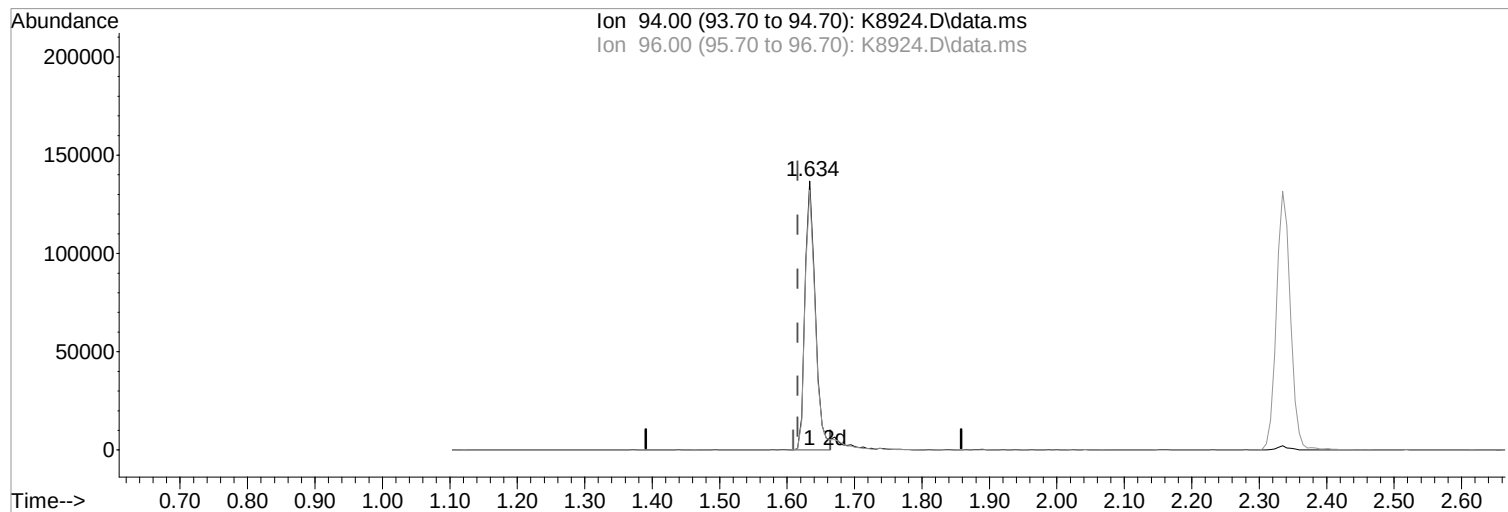
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8924.D
Acq On : 12 Nov 2021 8:53 pm
Operator : K.Ruest
Sample : R2111745-018MS|1.0
Misc : LIRO 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 13 10:26:13 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8924.D\data.ms

(5) Bromomethane (P)

Manual Integration:

1.634min (+0.018) 43.96 ppb

Before

response 147138

Ion	Exp%	Act%
94.00	100	100
96.00	91.00	96.63
0.00	0.00	0.00
0.00	0.00	0.00

11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8924.D
 Acq On : 12 Nov 2021 8:53 pm
 Operator : K.Ruest
 Sample : R2111745-018MS|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 22 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 15 16:23:17 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	379257	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	617422	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	561458	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	278535	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.322	113	178035	52.97	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	105.94%	
48) surr1,1,2-dichloroetha...	5.852	65	227074	46.46	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	92.92%	
65) SURR3,Toluene-d8	8.315	98	849865	53.79	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	107.58%	
70) SURR2,BFB	10.870	95	321962	51.34	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	102.68%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.201	85	263380	51.46	ppb	96
3) Chloromethane	1.329	50	307138	69.72	ppb	100
4) Vinyl Chloride	1.408	62	583397m	113.72	ppb	
5) Bromomethane	1.634	94	156647m	46.80	ppb	
6) Chloroethane	1.713	64	199383	59.21	ppb	97
7) Freon 21	1.865	67	372246	45.46	ppb	98
8) Trichlorofluoromethane	1.908	101	292249	44.93	ppb	95
9) Diethyl Ether	2.146	59	204172	50.83	ppb	95
10) Freon 123a	2.158	67	247406	50.87	ppb	98
11) Freon 123	2.213	83	268079	50.51	ppb	98
12) Acrolein	2.262	56	89947	84.08	ppb	94
13) 1,1-Dicethene	2.335	96	190703	51.70	ppb	# 85
14) Freon 113	2.335	101	178560	49.57	ppb	99
15) Acetone	2.402	43	108652	50.11	ppb	99
16) 2-Propanol	2.536	45	510275	1036.45	ppb	98
17) Iodomethane	2.475	142	268039	60.04	ppb	96
18) Carbon Disulfide	2.530	76	564759	63.28	ppb	98
19) Acetonitrile	2.670	40	81928m	249.28	ppb	
20) Allyl Chloride	2.676	76	115627	51.09	ppb	# 91
21) Methyl Acetate	2.707	43	281706	58.25	ppb	96
22) Methylene Chloride	2.798	84	218601	49.69	ppb	# 88
23) TBA	2.945	59	821829	960.08	ppb	96
24) Acrylonitrile	3.079	53	605317	249.20	ppb	100
25) Methyl-t-Butyl Ether	3.097	73	723027	48.77	ppb	100
26) trans-1,2-Dichloroethene	3.085	96	212454	52.65	ppb	96
28) 1,1-Dicethane	3.597	63	381871	50.31	ppb	100
29) Vinyl Acetate	3.694	86	40184	37.25	ppb	# 55
30) DIPE	3.700	45	699099	51.54	ppb	94
31) 2-Chloro-1,3-Butadiene	3.713	53	340642	52.51	ppb	91
32) ETBE	4.237	59	658620	48.00	ppb	97
33) 2,2-Dichloropropane	4.432	77	305361	48.26	ppb	90
34) cis-1,2-Dichloroethene	4.450	96	1067750	229.71	ppb	85
35) 2-Butanone	4.523	43	158153	48.28	ppb	95
36) Propionitrile	4.639	54	256440	241.31	ppb	95
37) Bromochloromethane	4.859	130	132740	50.02	ppb	93
38) Methacrylonitrile	4.889	67	130382	50.49	ppb	96
39) Tetrahydrofuran	4.950	42	101285	46.34	ppb	98
40) Chloroform	5.036	83	341622	46.23	ppb	95
41) 1,1,1-Trichloroethane	5.304	97	289767	47.72	ppb	97

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8924.D
 Acq On : 12 Nov 2021 8:53 pm
 Operator : K.Ruest
 Sample : R2111745-018MS|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 22 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 15 16:23:17 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.133	73	690791	51.88	ppb	99
44) Cyclohexane	5.365	41	193791	47.43	ppb	95
46) Carbontetrachloride	5.566	117	222158	46.71	ppb	100
47) 1,1-Dichloropropene	5.584	75	293138	52.17	ppb	95
49) Benzene	5.907	78	902124	51.54	ppb	98
50) 1,2-Dichloroethane	5.968	62	287542	43.73	ppb	98
51) Iso-Butyl Alcohol	5.956	43	338287	958.26	ppb	97
52) n-Heptane	6.352	43	259450	49.08	ppb	96
53) 1-Butanol	6.901	56	590170	2569.91	ppb	98
54) Trichloroethene	6.840	130	214509	49.37	ppb	90
55) Methylcyclohexane	7.053	55	294672	51.55	ppb	95
56) 1,2-Dicloropropane	7.133	63	224844	49.52	ppb	99
57) Dibromomethane	7.273	93	129125	49.62	ppb	94
58) 1,4-Dioxane	7.340	88	99764	1002.73	ppb	94
59) Methyl Methacrylate	7.352	69	214841	51.56	ppb	96
60) Bromodichloromethane	7.498	83	249648	45.43	ppb	97
62) 2-Chloroethylvinyl Ether	7.907	63	1681	0.57	ppb	98
63) cis-1,3-Dichloropropene	8.035	75	355885	53.65	ppb	96
64) 4-Methyl-2-pentanone	8.242	43	296293	48.96	ppb	98
66) Toluene	8.389	91	993158	52.97	ppb	99
67) trans-1,3-Dichloropropene	8.669	75	322616	52.45	ppb	96
68) Ethyl Methacrylate	8.797	69	330551	48.70	ppb	96
69) 1,1,2-Trichloroethane	8.858	97	207056	49.44	ppb	100
72) Tetrachloroethene	8.968	164	166344	51.41	ppb	96
73) 2-Hexanone	9.145	43	227703	51.50	ppb	100
74) 1,3-Dichloropropane	9.029	76	380510	50.85	ppb	98
75) Dibromochloromethane	9.248	129	166863	49.02	ppb	95
76) N-Butyl Acetate	9.291	43	437588	51.83	ppb	96
77) 1,2-Dibromoethane	9.346	107	208775	50.46	ppb	92
78) Chlorobenzene	9.827	112	611815	51.21	ppb	96
79) 3-CBTF	9.839	180	314075	53.74	ppb	94
80) 4-CBTF	9.894	180	278893	51.46	ppb	97
81) 1,1,1,2-Tetrachloroethane	9.913	131	190041	53.62	ppb	98
82) Ethylbenzene	9.937	106	347173	52.73	ppb	91
83) (m+p)Xylene	10.047	106	855532	107.51	ppb	99
84) o-Xylene	10.406	106	416493	52.99	ppb	90
85) Styrene	10.425	104	696921	52.98	ppb	95
87) Bromoform	10.583	173	109156	50.45	ppb	96
88) 2-CBTF	10.656	180	302967	53.09	ppb	93
89) Isopropylbenzene	10.736	105	1033397	54.70	ppb	99
90) Cyclohexanone	10.821	55	295374	292.35	ppb	95
91) trans-1,4-Dichloro-2-B...	11.059	53	72720	44.59	ppb	86
92) 1,1,2,2-Tetrachloroethane	11.010	83	323021	55.13	ppb	99
93) Bromobenzene	10.992	156	252962	52.01	ppb	95
94) 1,2,3-Trichloropropane	11.040	110	95502	47.13	ppb	93
95) n-Propylbenzene	11.089	91	1276645	54.14	ppb	99
96) 2-Chlorotoluene	11.156	91	738692	49.49	ppb	97
97) 3-Chlorotoluene	11.211	91	771804	51.72	ppb	97
98) 4-Chlorotoluene	11.248	91	847442	50.56	ppb	97
99) 1,3,5-Trimethylbenzene	11.242	105	911186	51.90	ppb	97
100) tert-Butylbenzene	11.510	119	755774	52.38	ppb	99
101) 1,2,4-Trimethylbenzene	11.553	105	910753	52.01	ppb	100
102) 3,4-DCBTF	11.614	214	241167	51.19	ppb	94
103) sec-Butylbenzene	11.693	105	1113863	53.78	ppb	99
104) p-Isopropyltoluene	11.815	119	952854	52.50	ppb	97
105) 1,3-Dclbenz	11.778	146	488137	51.32	ppb	95

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8924.D
 Acq On : 12 Nov 2021 8:53 pm
 Operator : K.Ruest
 Sample : R2111745-018MS|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 22 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 15 16:23:17 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

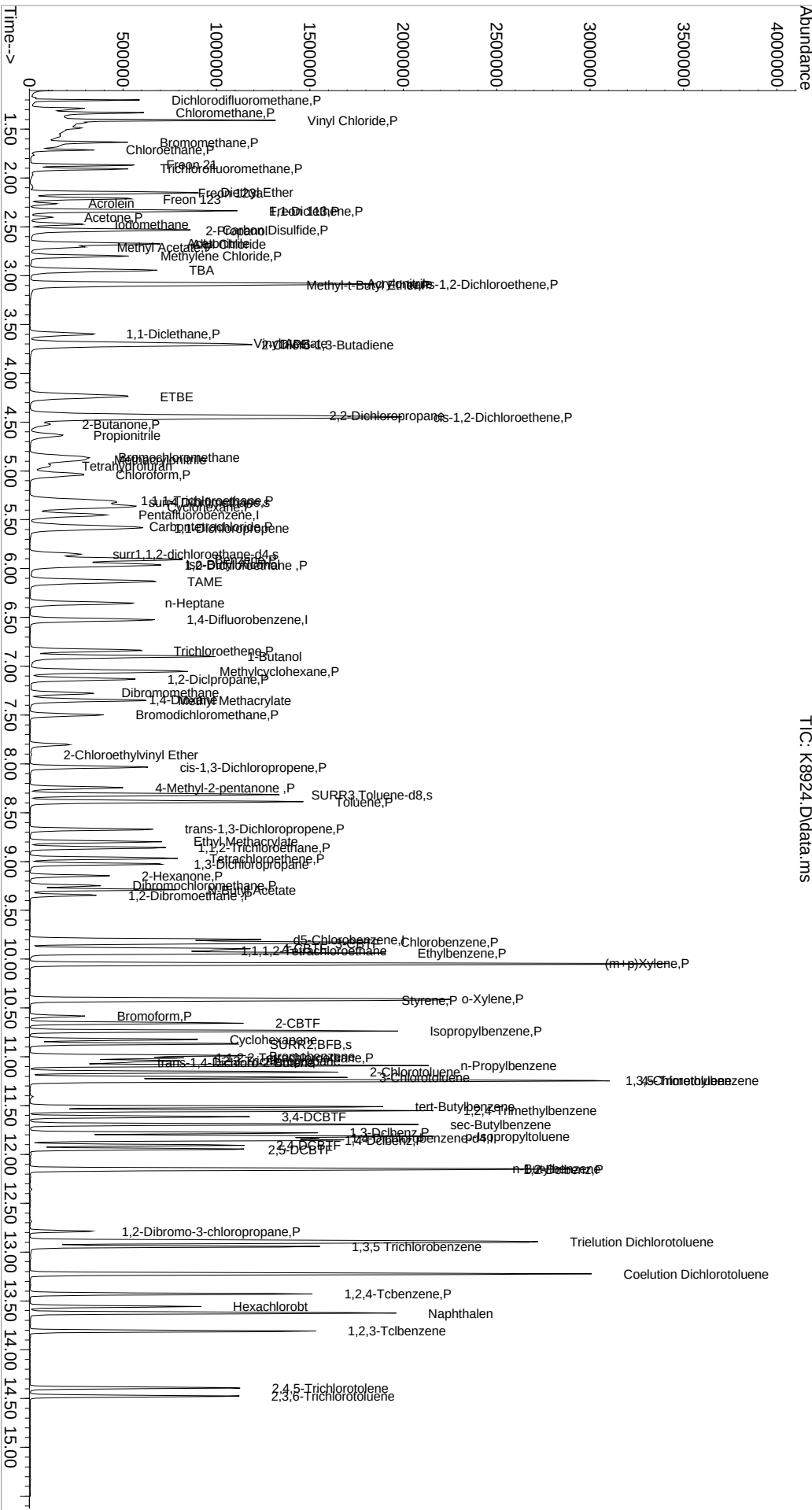
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.857	146	497953	48.63	ppb	97
107) 2,4-DCBTF	11.906	214	224514	54.21	ppb	100
108) 2,5-DCBTF	11.949	214	257377	56.02	ppb	97
109) n-Butylbenzene	12.144	91	872373	52.01	ppb	98
110) 1,2-Dclbenz	12.156	146	488901	51.62	ppb	98
111) 1,2-Dibromo-3-chloropr...	12.790	157	74029	58.12	ppb	91
112) Trielution Dichlorotol...	12.894	125	1346849	151.08	ppb	95
113) 1,3,5 Trichlorobenzene	12.943	180	367757	52.71	ppb	98
114) Coelution Dichlorotoluene	13.223	125	997292	103.26	ppb	97
115) 1,2,4-Tcbenzene	13.430	180	371780	54.45	ppb	97
116) Hexachlorobt	13.558	225	131549	48.89	ppb	97
117) Naphthalen	13.625	128	1208704	56.31	ppb	99
118) 1,2,3-Tclbenzene	13.808	180	359417	52.56	ppb	98
119) 2,4,5-Trichlorotoluene	14.393	159	239177	49.79	ppb	94
120) 2,3,6-Trichlorotoluene	14.473	159	217825	48.69	ppb	96

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

Data Path : I:\ACQDATA\msvoa12\Data\111221\
 Data File : K8924.D
 Acq On : 12 Nov 2021 8:53 pm
 Operator : K.Ruest
 Sample : R211745-018MS1.0
 Vial : LIR0 8260 T4
 PALS Vial : 22 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 15 16:23:17 2021
 Quant Method : I:\ACQDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 Quant Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration



TIC: K8924.D\data.ms

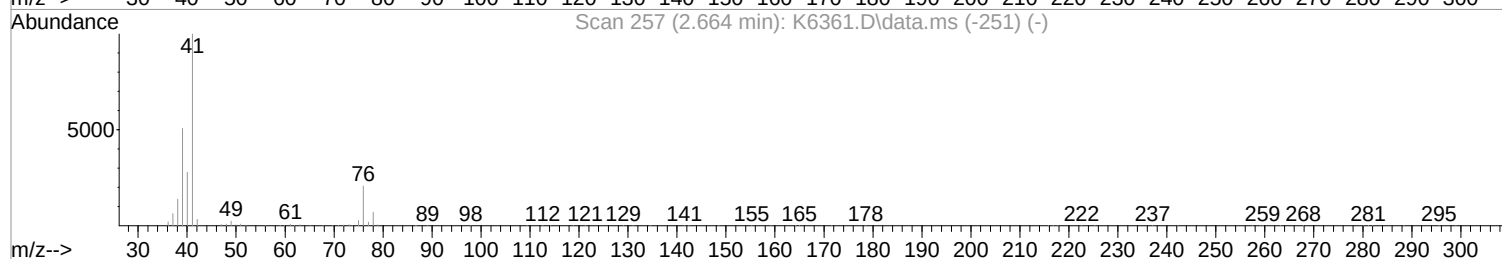
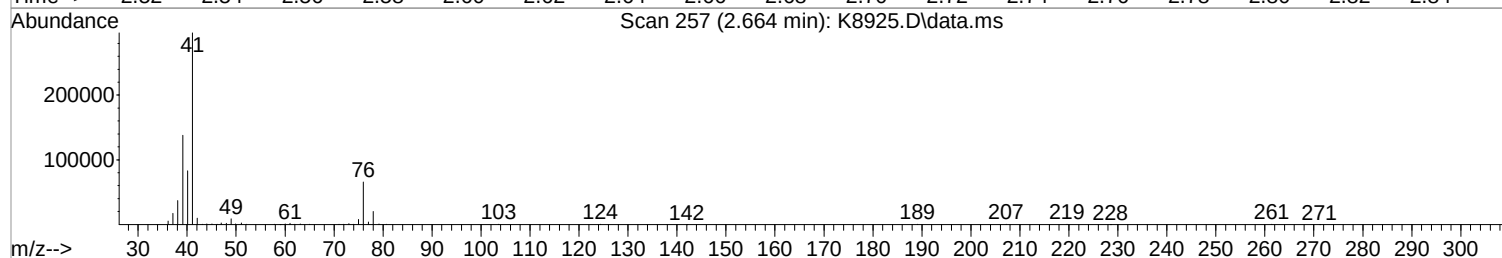
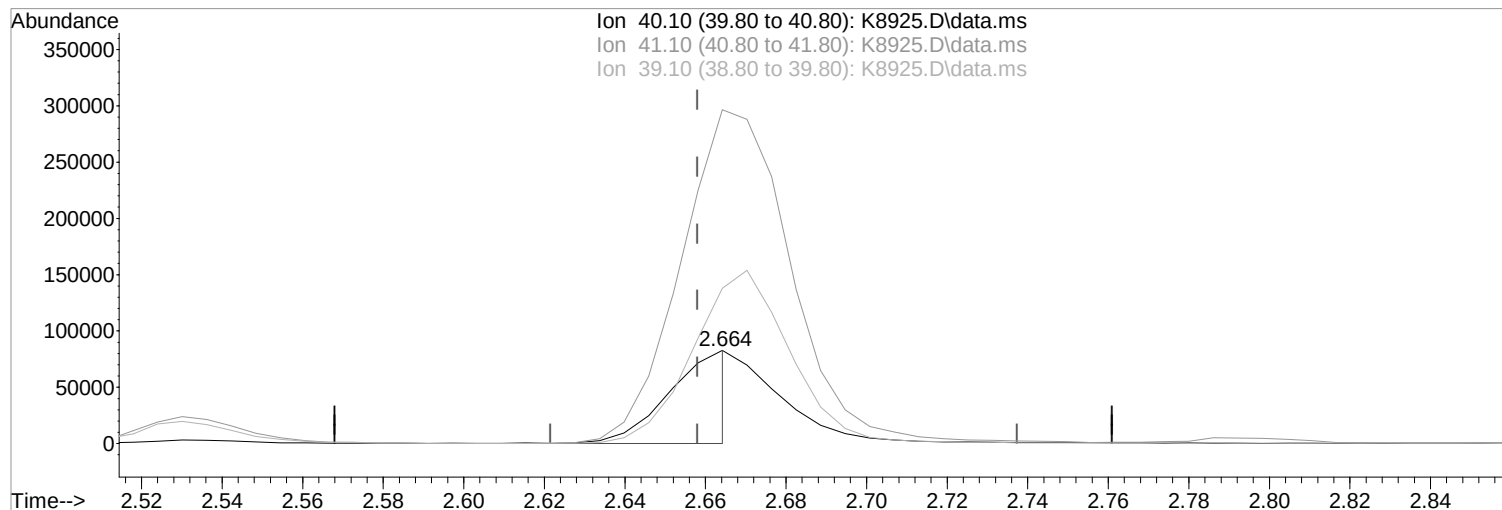
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8925.D
Acq On : 12 Nov 2021 9:15 pm
Operator : K.Ruest
Sample : R2111745-018DMS|1.0
Misc : LIRO 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 13 10:26:43 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8925.D\data.ms

(19) Acetonitrile

2.664min (+0.006) 259.13 ppb m

response 88601

Ion	Exp%	Act%
40.10	100	100
41.10	356.60	357.92
39.10	180.50	166.71
0.00	0.00	0.00

Manual Integration:

After

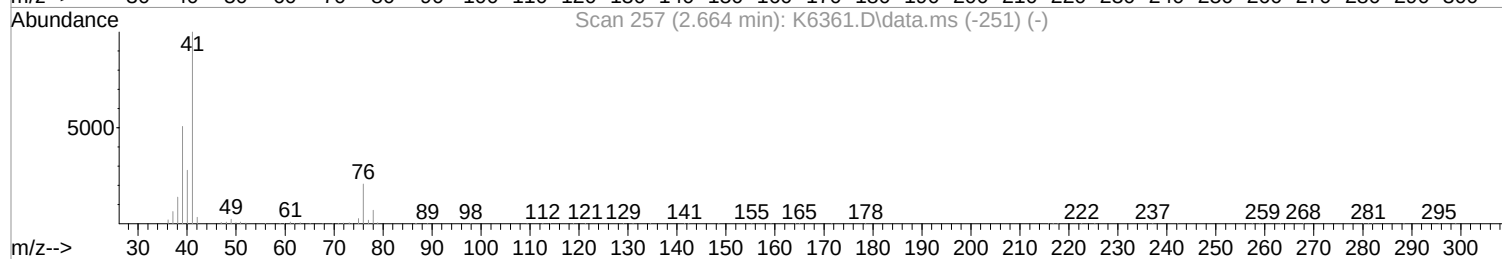
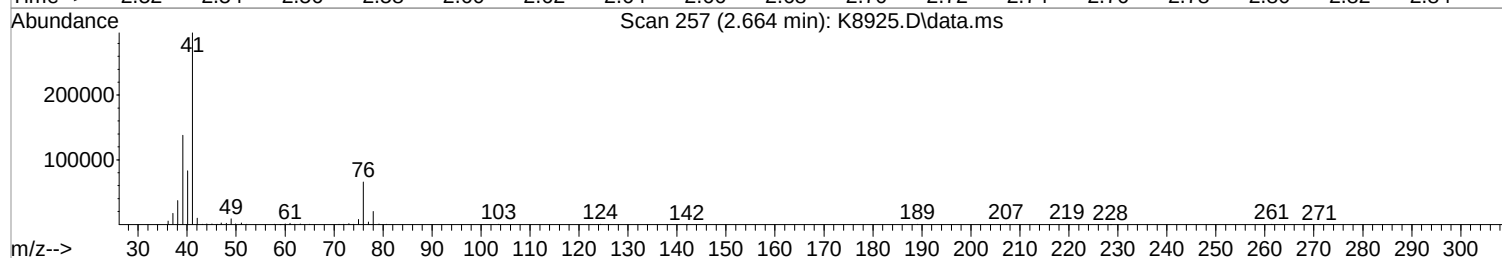
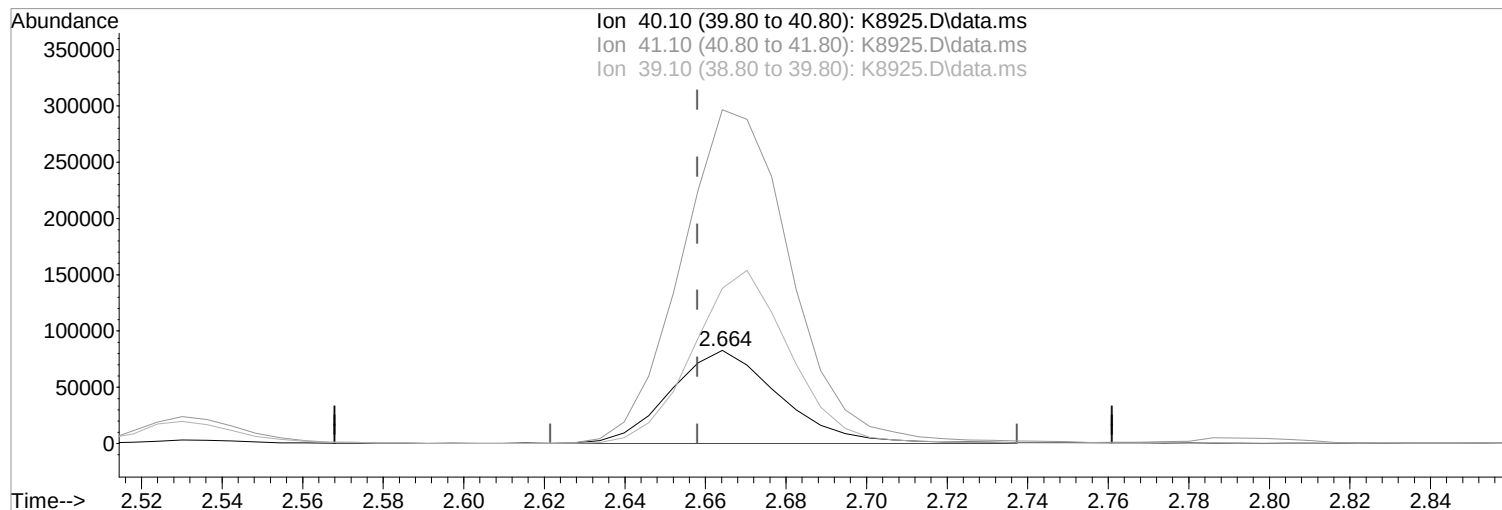
Poor integration.

11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8925.D
Acq On : 12 Nov 2021 9:15 pm
Operator : K.Ruest
Sample : R2111745-018DMS|1.0
Misc : LIRO 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 13 10:26:43 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8925.D\data.ms

(19) Acetonitrile

Manual Integration:

2.664min (+0.006) 456.63 ppb

Before

response 156129

Ion	Exp%	Act%

11/15/21

40.10	100	100

41.10	356.60	357.92

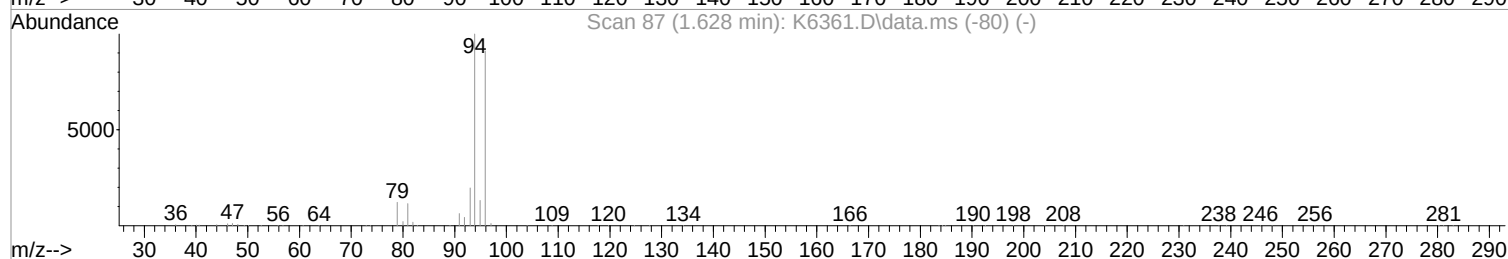
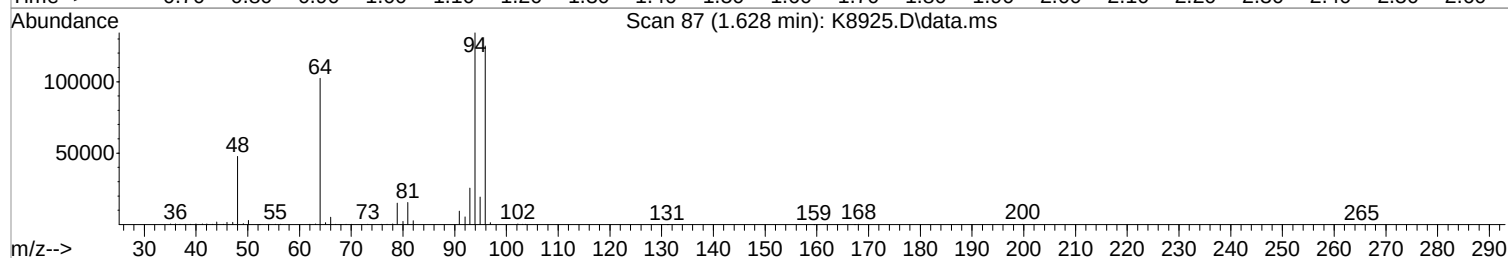
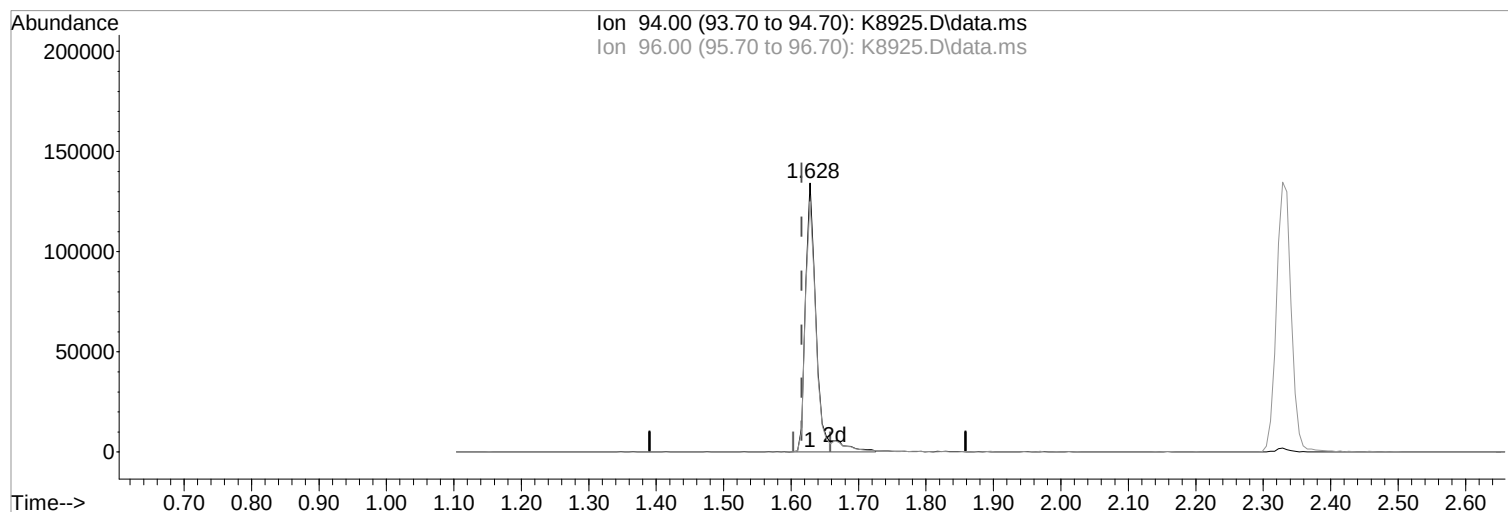
39.10	180.50	166.71

0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8925.D
Acq On : 12 Nov 2021 9:15 pm
Operator : K.Ruest
Sample : R2111745-018DMS|1.0
Misc : LIRO 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 13 10:26:43 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8925.D\data.ms

(5) Bromomethane (P)

1.628min (+0.012) 44.03 ppb m

response 153322

Ion	Exp%	Act%
94.00	100	100
96.00	91.00	93.13
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

11/15/21

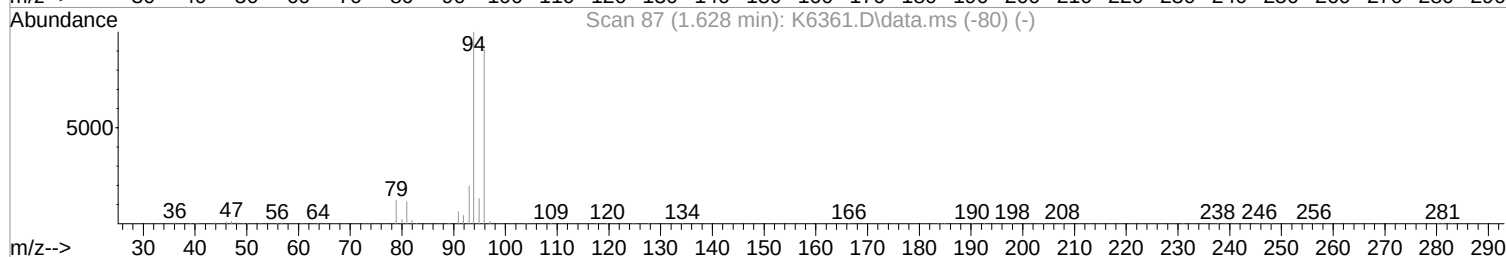
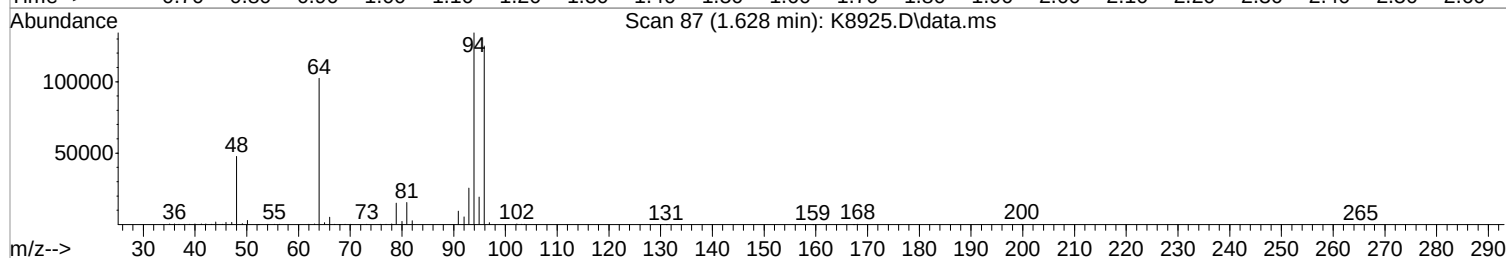
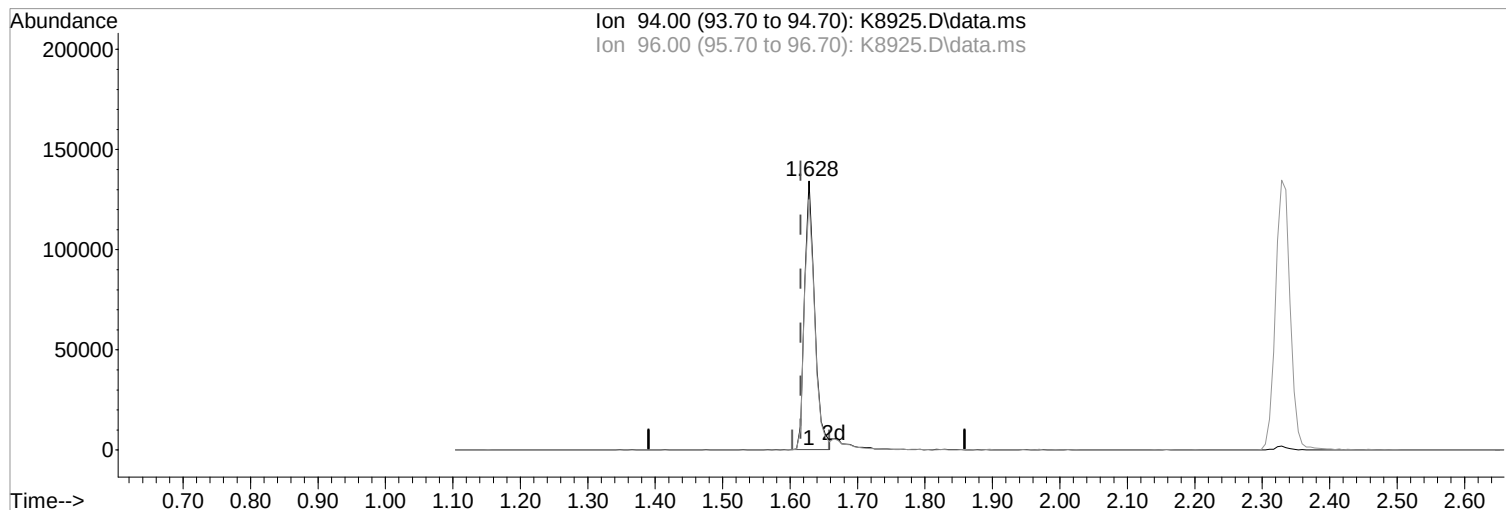
Quantitation Report (Qedit)

1st *FR* 11/15/21
2nd *FR* 11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8925.D
Acq On : 12 Nov 2021 9:15 pm
Operator : K.Ruest
Sample : R2111745-018DMS|1.0
Misc : LIRO 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 13 10:26:43 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8925.D\data.ms

(5) Bromomethane (P)

Manual Integration:

1.628min (+0.012) 40.86 ppb

Before

response 142290

Ion	Exp%	Act%
94.00	100	100
96.00	91.00	93.13
0.00	0.00	0.00
0.00	0.00	0.00

11/15/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8925.D
 Acq On : 12 Nov 2021 9:15 pm
 Operator : K.Ruest
 Sample : R2111745-018DMS|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 23 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 15 16:24:47 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	394556	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	635658	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	582943	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	291286	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.316	113	185937	53.73	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	107.46%	
48) surr1,1,2-dichloroetha...	5.853	65	229847	45.68	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	91.36%	
65) SURR3,Toluene-d8	8.316	98	867672	53.34	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	106.68%	
70) SURR2,BFB	10.864	95	321543	49.80	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	99.60%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.195	85	278060	52.22	ppb	98
3) Chloromethane	1.323	50	324816	70.88	ppb	98
4) Vinyl Chloride	1.402	62	595331	111.55	ppb	67
5) Bromomethane	1.628	94	153322m	44.03	ppb	
6) Chloroethane	1.707	64	193840	55.33	ppb	100
7) Freon 21	1.866	67	381831	44.82	ppb	100
8) Trichlorofluoromethane	1.902	101	312029	46.11	ppb	96
9) Diethyl Ether	2.140	59	223391	53.46	ppb	99
10) Freon 123a	2.152	67	260990	51.58	ppb	99
11) Freon 123	2.207	83	280465	50.80	ppb	98
12) Acrolein	2.256	56	95682	85.98	ppb	97
13) 1,1-Dicethene	2.329	96	204930	53.40	ppb	# 84
14) Freon 113	2.329	101	197373	52.66	ppb	91
15) Acetone	2.396	43	118815	52.88	ppb	96
16) 2-Propanol	2.530	45	544742	1063.56	ppb	93
17) Iodomethane	2.469	142	287514	61.78	ppb	91
18) Carbon Disulfide	2.524	76	599623	64.58	ppb	99
19) Acetonitrile	2.664	40	88601m	259.13	ppb	
20) Allyl Chloride	2.670	76	125128	53.14	ppb	# 80
21) Methyl Acetate	2.701	43	295221	58.68	ppb	98
22) Methylene Chloride	2.792	84	230278	50.31	ppb	90
23) TBA	2.939	59	897732	1008.08	ppb	96
24) Acrylonitrile	3.073	53	653295	258.52	ppb	96
25) Methyl-t-Butyl Ether	3.085	73	763233	49.49	ppb	97
26) trans-1,2-Dichloroethene	3.079	96	225191	53.64	ppb	98
28) 1,1-Dicethane	3.597	63	404547	51.23	ppb	99
29) Vinyl Acetate	3.695	86	43449	38.71	ppb	# 83
30) DIPE	3.695	45	763217	54.08	ppb	92
31) 2-Chloro-1,3-Butadiene	3.707	53	345543	51.20	ppb	90
32) ETBE	4.225	59	711676	49.86	ppb	97
33) 2,2-Dichloropropane	4.426	77	323490	49.14	ppb	89
34) cis-1,2-Dichloroethene	4.444	96	1099790	227.43	ppb	87
35) 2-Butanone	4.518	43	170730	50.10	ppb	90
36) Propionitrile	4.627	54	279500	252.81	ppb	95
37) Bromochloromethane	4.853	130	143624	52.02	ppb	90
38) Methacrylonitrile	4.883	67	139049	51.76	ppb	90
39) Tetrahydrofuran	4.944	42	115711	50.89	ppb	94
40) Chloroform	5.036	83	367890	47.87	ppb	99
41) 1,1,1-Trichloroethane	5.304	97	313236	49.58	ppb	96

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8925.D
 Acq On : 12 Nov 2021 9:15 pm
 Operator : K.Ruest
 Sample : R2111745-018DMS|1.0
 Misc : LIRO 8260 T4
 ALS Vial : 23 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 15 16:24:47 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.127	73	761375	54.96	ppb	99
44) Cyclohexane	5.359	41	205480	48.85	ppb	95
46) Carbontetrachloride	5.560	117	238633	48.74	ppb	97
47) 1,1-Dichloropropene	5.584	75	315305	54.50	ppb	97
49) Benzene	5.907	78	954018	52.94	ppb	99
50) 1,2-Dichloroethane	5.962	62	303324	44.80	ppb	98
51) Iso-Butyl Alcohol	5.950	43	373958	1028.92	ppb	96
52) n-Heptane	6.353	43	274415	50.42	ppb	93
53) 1-Butanol	6.901	56	670948	2837.84	ppb	98
54) Trichloroethene	6.834	130	228650	51.11	ppb	95
55) Methylcyclohexane	7.048	55	311440	52.92	ppb	95
56) 1,2-Dichloropropane	7.127	63	242194	51.81	ppb	98
57) Dibromomethane	7.273	93	140197	52.33	ppb	90
58) 1,4-Dioxane	7.334	88	102138	997.14	ppb	98
59) Methyl Methacrylate	7.346	69	235891	54.98	ppb	98
60) Bromodichloromethane	7.499	83	268069	47.38	ppb	98
63) cis-1,3-Dichloropropene	8.029	75	381382	55.84	ppb	99
64) 4-Methyl-2-pentanone	8.242	43	315843	50.70	ppb	97
66) Toluene	8.389	91	1049801	54.39	ppb	100
67) trans-1,3-Dichloropropene	8.669	75	349898	55.25	ppb	94
68) Ethyl Methacrylate	8.797	69	352192	50.40	ppb	96
69) 1,1,2-Trichloroethane	8.858	97	219494	50.91	ppb	93
72) Tetrachloroethene	8.968	164	176832	52.63	ppb	91
73) 2-Hexanone	9.145	43	238006	51.85	ppb	96
74) 1,3-Dichloropropane	9.023	76	401047	51.62	ppb	98
75) Dibromochloromethane	9.248	129	182593	51.66	ppb	98
76) N-Butyl Acetate	9.285	43	464782	53.02	ppb	98
77) 1,2-Dibromoethane	9.346	107	225115	52.41	ppb	90
78) Chlorobenzene	9.827	112	656014	52.88	ppb	94
79) 3-CBTF	9.840	180	343205	56.56	ppb	95
80) 4-CBTF	9.895	180	307389	54.63	ppb	94
81) 1,1,1,2-Tetrachloroethane	9.913	131	207761	56.46	ppb	98
82) Ethylbenzene	9.937	106	368557	53.92	ppb	92
83) (m+p)Xylene	10.047	106	904361	109.46	ppb	100
84) o-Xylene	10.407	106	440779	54.02	ppb	92
85) Styrene	10.425	104	739806	54.17	ppb	95
87) Bromoform	10.583	173	122490	54.14	ppb	97
88) 2-CBTF	10.657	180	332677	55.74	ppb	91
89) Isopropylbenzene	10.736	105	1109990	56.18	ppb	98
90) Cyclohexanone	10.821	55	316922	299.95	ppb	98
91) trans-1,4-Dichloro-2-B...	11.059	53	75222	44.13	ppb	80
92) 1,1,2,2-Tetrachloroethane	11.010	83	349015	56.96	ppb	99
93) Bromobenzene	10.992	156	265312	52.16	ppb	94
94) 1,2,3-Trichloropropane	11.041	110	105809	50.02	ppb	99
95) n-Propylbenzene	11.089	91	1360840	55.19	ppb	99
96) 2-Chlorotoluene	11.156	91	780203	49.99	ppb	97
97) 3-Chlorotoluene	11.211	91	828292	53.08	ppb	96
98) 4-Chlorotoluene	11.248	91	905562	51.66	ppb	95
99) 1,3,5-Trimethylbenzene	11.242	105	973470	53.02	ppb	98
100) tert-Butylbenzene	11.510	119	809933	53.68	ppb	99
101) 1,2,4-Trimethylbenzene	11.553	105	960549	52.45	ppb	98
102) 3,4-DCBTF	11.614	214	266787	54.15	ppb	96
103) sec-Butylbenzene	11.693	105	1190413	54.96	ppb	98
104) p-Isopropyltoluene	11.815	119	1022270	53.86	ppb	96
105) 1,3-Dichlorobenz	11.778	146	529467	53.23	ppb	97
106) 1,4-Dichlorobenz	11.858	146	528425	49.35	ppb	98

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8925.D
Acq On : 12 Nov 2021 9:15 pm
Operator : K.Ruest
Sample : R2111745-018DMS|1.0
Misc : LIRO 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 15 16:24:47 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration

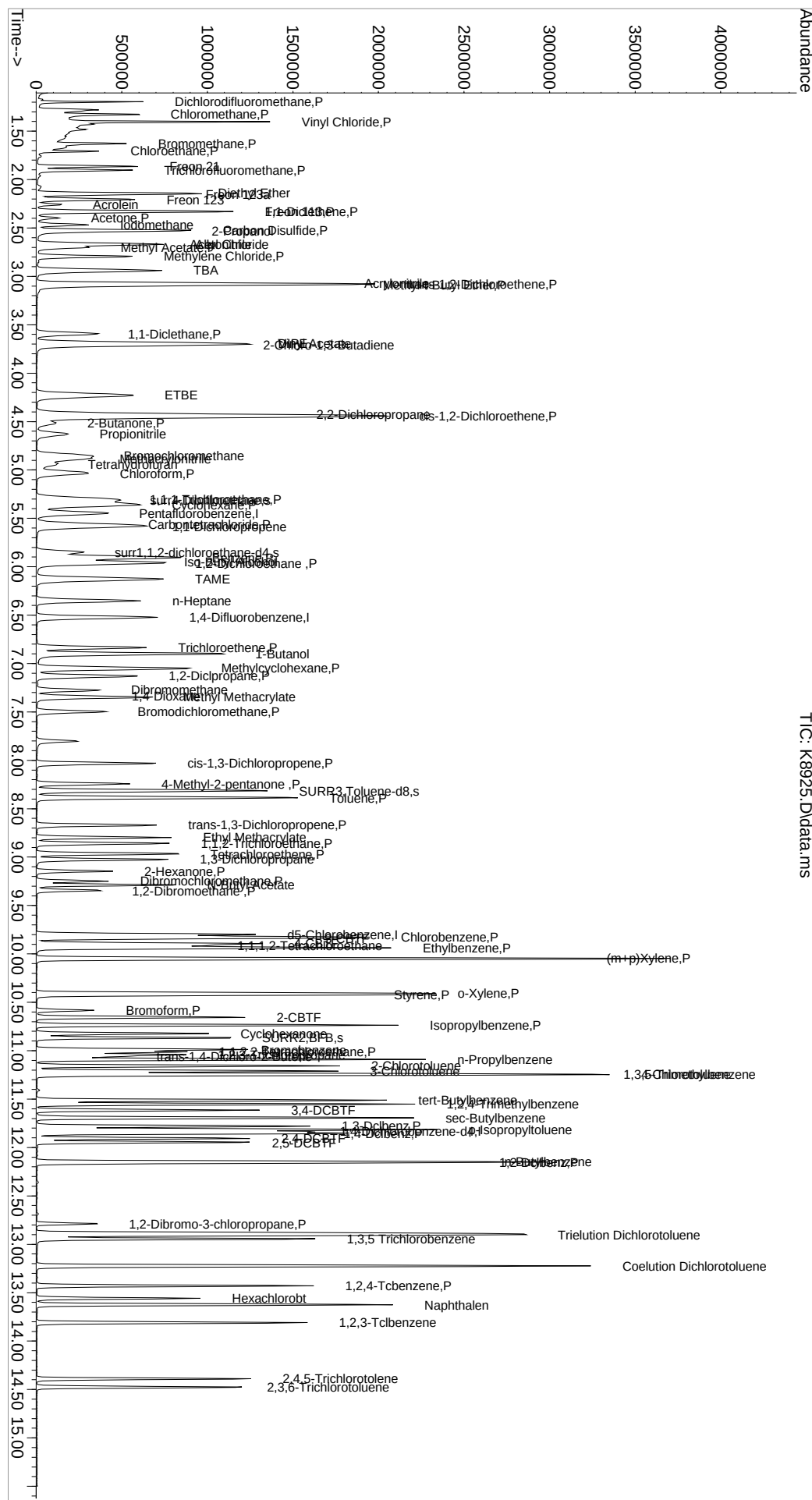
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 2,4-DCBTF	11.906	214	240570	55.55	ppb	98
108) 2,5-DCBTF	11.949	214	272729	56.76	ppb	94
109) n-Butylbenzene	12.144	91	927275	52.86	ppb	99
110) 1,2-Dclbenz	12.156	146	520951	52.60	ppb	97
111) 1,2-Dibromo-3-chloropr...	12.790	157	78750	59.12	ppb	91
112) Trielution Dichlorotol...	12.900	125	1464048	157.03	ppb	95
113) 1,3,5 Trichlorobenzene	12.943	180	397366	54.46	ppb	99
114) Coelution Dichlorotoluene	13.223	125	1078756	106.81	ppb	97
115) 1,2,4-Tcbenzene	13.430	180	389035	54.48	ppb	95
116) Hexachlorobt	13.558	225	140549	49.95	ppb	99
117) Naphthalen	13.625	128	1266030	56.40	ppb	98
118) 1,2,3-Tclbenzene	13.808	180	383757	53.67	ppb	97
119) 2,4,5-Trichlorotoluene	14.388	159	258938	51.54	ppb	98
120) 2,3,6-Trichlorotoluene	14.479	159	239971	51.29	ppb	93

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

Data Path : I:\ACQDATA\msvoa12\Data\111221\
 Data File : K8925.D
 Acq On : 12 Nov 2021 9:15 pm
 Operator : K.Ruest
 Sample : R211745-018DMS|1.0
 Vial : LIR0 8260 T4
 PALS Vial : 23 Sample Multiplier: 1

Inst : MSVOA-12

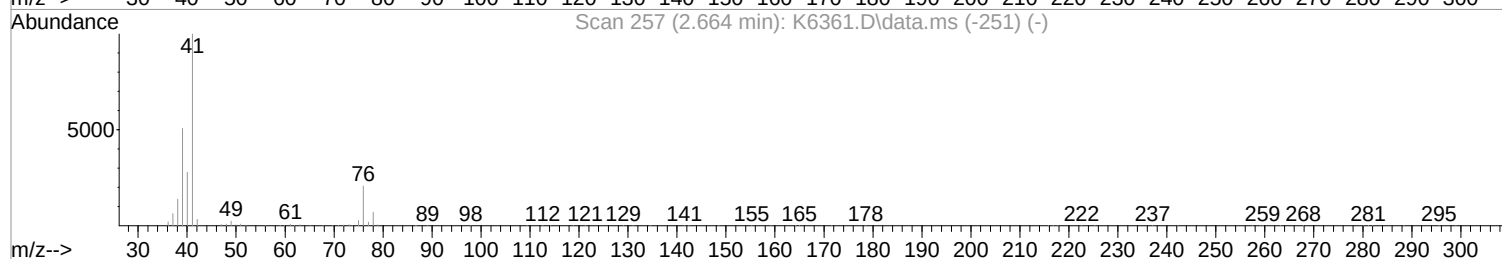
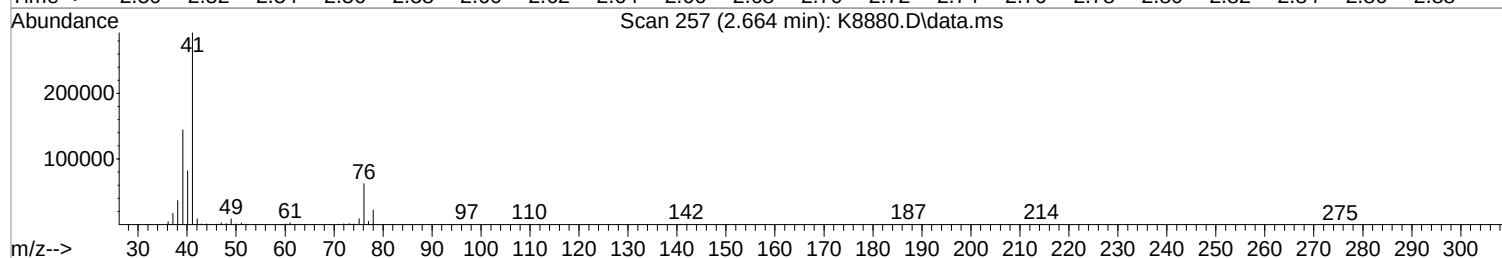
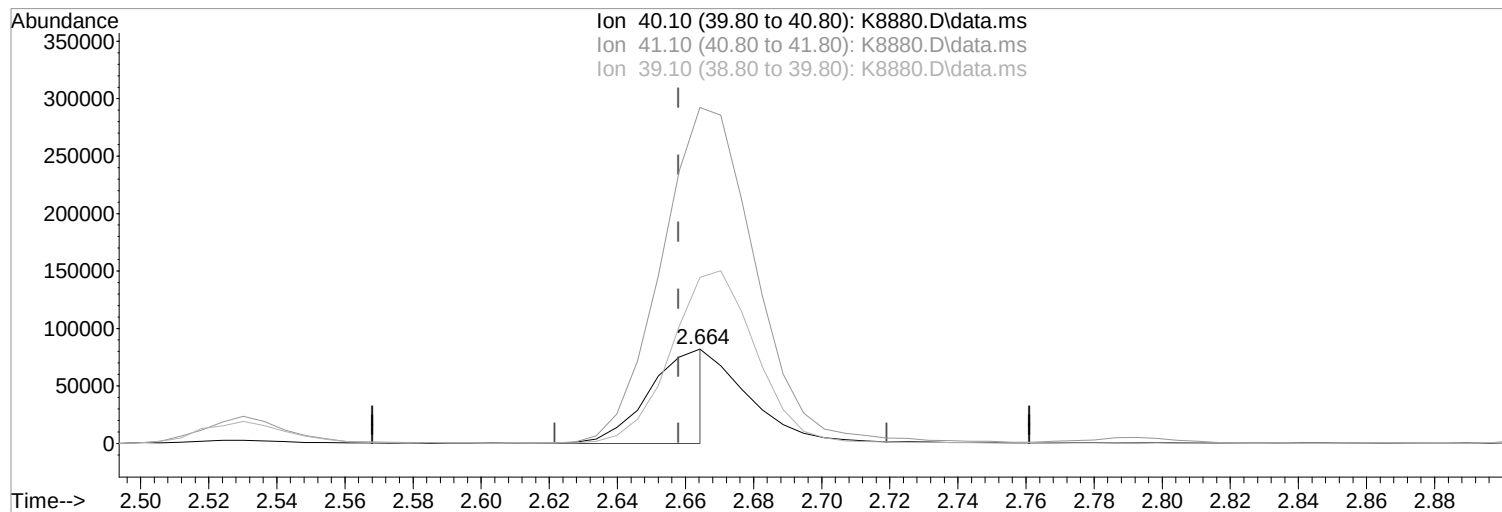
Quant Time: Nov 15 16:24:47 2021
 Quant Method : I:\ACQDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 Quant Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration



Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8880.D
Acq On : 11 Nov 2021 10:58 pm
Operator : K.Ruest
Sample : CCV
Misc :
ALS Vial : 28 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 10:23:22 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8880.D\data.ms

(19) Acetonitrile

2.664min (+0.006) 288.20 ppb m

response 96201

Ion	Exp%	Act%
40.10	100	100
41.10	356.60	356.80
39.10	180.50	176.25
0.00	0.00	0.00

Manual Integration:

After

Poor integration.

11/12/21

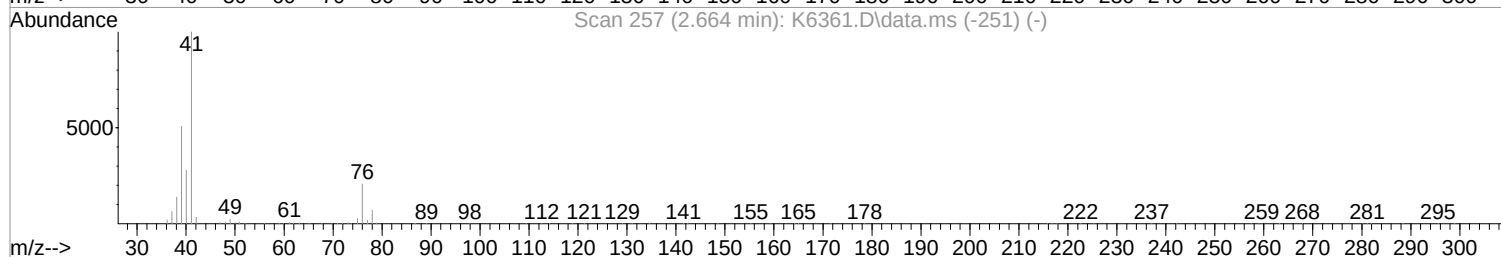
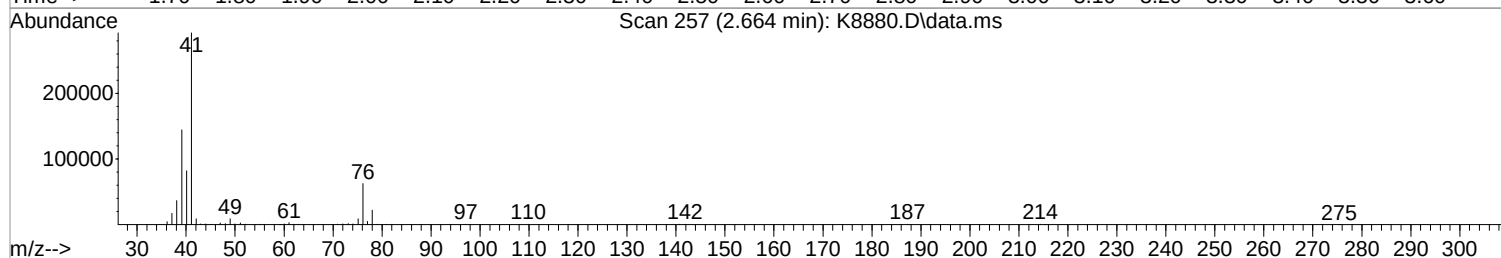
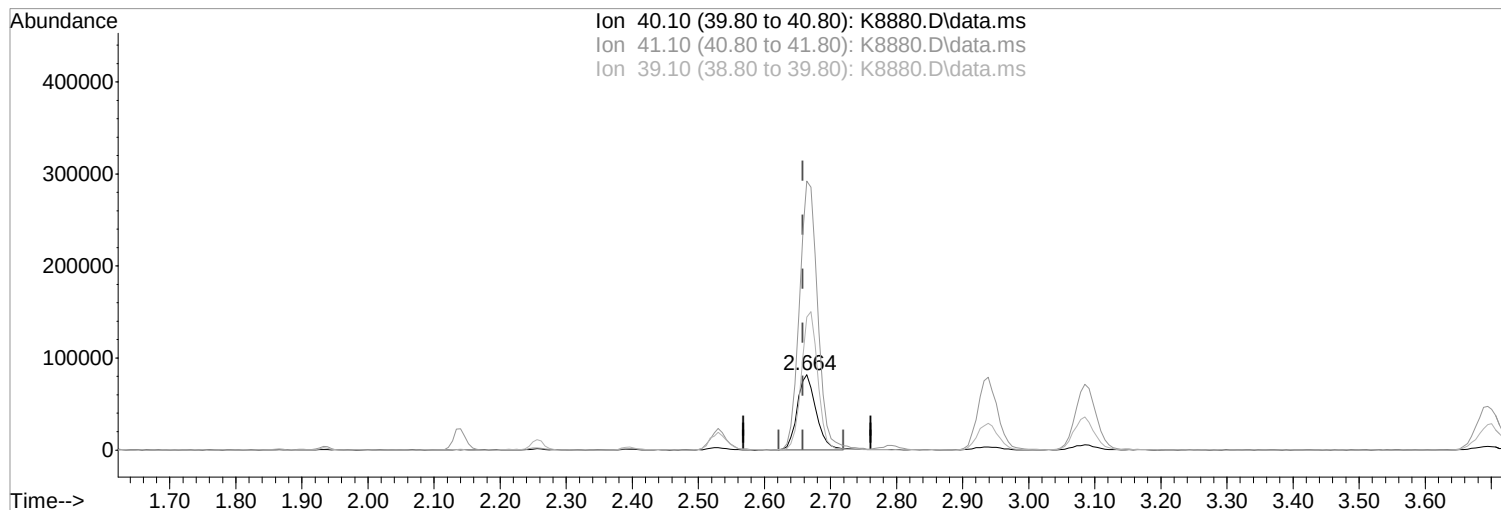
Quantitation Report (Qedit)

1st *FR* 11/12/21
2nd *FR* 11/19/21

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8880.D
Acq On : 11 Nov 2021 10:58 pm
Operator : K.Ruest
Sample : CCV
Misc :
ALS Vial : 28 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 10:23:22 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8880.D\data.ms

(19) Acetonitrile

Manual Integration:

2.664min (+0.006) 483.02 ppb

Before

response 161232

Ion Exp% Act%

11/12/21

40.10 100 100

41.10 356.60 356.80

39.10 180.50 176.25

0.00 0.00 0.00

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8880.D
 Acq On : 11 Nov 2021 10:58 pm
 Operator : K.Ruest
 Sample : CCV
 Misc :
 ALS Vial : 28 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 10:24:29 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.450	168	385196	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.523	114	634478	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	575282	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	288166	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.316	113	176519	51.11	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	102.22%	
48) surr1,1,2-dichloroetha...	5.847	65	238093	47.41	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	94.82%	
65) SURR3,Toluene-d8	8.316	98	861718	53.08	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	106.16%	
70) SURR2,BFB	10.864	95	314664	48.83	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	97.66%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.195	85	246362	47.39	ppb	96
3) Chloromethane	1.323	50	243194	54.36	ppb	98
4) Vinyl Chloride	1.402	62	255363	49.01	ppb	100
5) Bromomethane	1.628	94	164087	48.27	ppb	98
6) Chloroethane	1.707	64	160029	46.79	ppb	99
7) Freon 21	1.866	67	416926	50.13	ppb	98
8) Trichlorofluoromethane	1.902	101	272919	41.31	ppb	98
9) Diethyl Ether	2.140	59	217669	53.36	ppb	98
10) Freon 123a	2.152	67	254905	51.60	ppb	96
11) Freon 123	2.207	83	286451	53.14	ppb	96
12) Acrolein	2.256	56	302329	278.27	ppb	95
13) 1,1-Dicethene	2.329	96	183840	49.07	ppb	# 84
14) Freon 113	2.329	101	165936	45.35	ppb	90
15) Acetone	2.396	43	131407	60.50	ppb	96
16) 2-Propanol	2.530	45	513468	1026.86	ppb	97
17) Iodomethane	2.469	142	268353	59.25	ppb	92
18) Carbon Disulfide	2.524	76	575667	63.51	ppb	98
19) Acetonitrile	2.664	40	96201m	288.20	ppb	
20) Allyl Chloride	2.670	76	116594	50.72	ppb	94
21) Methyl Acetate	2.701	43	312623	63.65	ppb	99
22) Methylene Chloride	2.792	84	219090	49.03	ppb	93
23) TBA	2.939	59	826765	950.95	ppb	98
24) Acrylonitrile	3.073	53	655402	265.66	ppb	99
25) Methyl-t-Butyl Ether	3.085	73	774318	51.42	ppb	99
26) trans-1,2-Dichloroethene	3.079	96	201553	49.18	ppb	100
28) 1,1-Dicethane	3.591	63	382131	49.57	ppb	99
29) Vinyl Acetate	3.688	86	27797	25.37	ppb	# 1
30) DIPE	3.695	45	738400	53.59	ppb	# 80
31) 2-Chloro-1,3-Butadiene	3.707	53	362444	55.01	ppb	94
32) ETBE	4.225	59	757106	54.33	ppb	97
33) 2,2-Dichloropropane	4.426	77	266531	41.48	ppb	97
34) cis-1,2-Dichloroethene	4.438	96	228771	48.46	ppb	93
35) 2-Butanone	4.511	43	171240	51.47	ppb	95
36) Propionitrile	4.627	54	268318	248.59	ppb	99
37) Bromochloromethane	4.853	130	133388	49.49	ppb	98
38) Methacrylonitrile	4.877	67	135703	51.74	ppb	90
39) Tetrahydrofuran	4.938	42	108386	48.83	ppb	93
40) Chloroform	5.030	83	350860	46.75	ppb	94
41) 1,1,1-Trichloroethane	5.298	97	269683	43.73	ppb	97

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
 Data File : K8880.D
 Acq On : 11 Nov 2021 10:58 pm
 Operator : K.Ruest
 Sample : CCV
 Misc :
 ALS Vial : 28 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 10:24:29 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.127	73	731592	54.09	ppb	97
44) Cyclohexane	5.365	41	207261	49.36	ppb	92
46) Carbontetrachloride	5.560	117	198882	40.70	ppb	98
47) 1,1-Dichloropropene	5.578	75	264440	45.80	ppb	98
49) Benzene	5.901	78	900524	50.06	ppb	99
50) 1,2-Dichloroethane	5.962	62	292845	43.34	ppb	95
51) Iso-Butyl Alcohol	5.956	43	363373	1001.65	ppb	95
52) n-Heptane	6.353	43	232437	42.78	ppb	93
53) 1-Butanol	6.895	56	636125	2695.56	ppb	99
54) Trichloroethene	6.834	130	225332	50.46	ppb	94
55) Methylcyclohexane	7.048	55	301284	51.29	ppb	98
56) 1,2-Dichloropropane	7.127	63	231383	49.59	ppb	99
57) Dibromomethane	7.279	93	134758	50.39	ppb	88
58) 1,4-Dioxane	7.340	88	93435	913.87	ppb	89
59) Methyl Methacrylate	7.346	69	221307	51.68	ppb	97
60) Bromodichloromethane	7.499	83	257267	45.56	ppb	95
62) 2-Chloroethylvinyl Ether	7.901	63	141755	46.65	ppb	90
63) cis-1,3-Dichloropropene	8.029	75	350236	51.38	ppb	99
64) 4-Methyl-2-pentanone	8.242	43	322357	51.84	ppb	96
66) Toluene	8.383	91	952194	49.42	ppb	99
67) trans-1,3-Dichloropropene	8.669	75	319810	50.60	ppb	94
68) Ethyl Methacrylate	8.797	69	381256	54.66	ppb	99
69) 1,1,2-Trichloroethane	8.858	97	208605	48.47	ppb	94
72) Tetrachloroethene	8.962	164	145883	44.00	ppb	97
73) 2-Hexanone	9.145	43	247054	54.54	ppb	97
74) 1,3-Dichloropropane	9.023	76	396096	51.66	ppb	98
75) Dibromochloromethane	9.248	129	172283	49.40	ppb	93
76) N-Butyl Acetate	9.285	43	485765	56.15	ppb	100
77) 1,2-Dibromoethane	9.346	107	212016	50.02	ppb	92
78) Chlorobenzene	9.821	112	598148	48.86	ppb	97
79) 3-CBTF	9.840	180	301029	50.27	ppb	94
80) 4-CBTF	9.895	180	268473	48.35	ppb	96
81) 1,1,1,2-Tetrachloroethane	9.913	131	185882	51.19	ppb	96
82) Ethylbenzene	9.937	106	318800	47.26	ppb	98
83) (m+p)Xylene	10.047	106	785122	96.29	ppb	98
84) o-Xylene	10.407	106	386260	47.97	ppb	95
85) Styrene	10.425	104	679572	50.42	ppb	97
87) Bromoform	10.583	173	110982	49.58	ppb	100
88) 2-CBTF	10.657	180	299904	50.80	ppb	88
89) Isopropylbenzene	10.736	105	909628	46.54	ppb	97
90) Cyclohexanone	10.821	55	1212842	1160.30	ppb	98
91) trans-1,4-Dichloro-2-B...	11.059	53	86990	51.22	ppb	84
92) 1,1,2,2-Tetrachloroethane	11.010	83	292831	48.31	ppb	95
93) Bromobenzene	10.986	156	241697	48.03	ppb	90
94) 1,2,3-Trichloropropane	11.041	110	99018	47.23	ppb	98
95) n-Propylbenzene	11.089	91	1160705	47.58	ppb	99
96) 2-Chlorotoluene	11.156	91	721826	46.75	ppb	99
97) 3-Chlorotoluene	11.211	91	786879	50.97	ppb	96
98) 4-Chlorotoluene	11.248	91	789463	45.52	ppb	96
99) 1,3,5-Trimethylbenzene	11.242	105	847216	46.64	ppb	98
100) tert-Butylbenzene	11.510	119	674206	45.17	ppb	99
101) 1,2,4-Trimethylbenzene	11.553	105	854131	47.14	ppb	99
102) 3,4-DCBTF	11.614	214	225354	46.24	ppb	93
103) sec-Butylbenzene	11.693	105	990814	46.24	ppb	98
104) p-Isopropyltoluene	11.815	119	860361	45.82	ppb	98
105) 1,3-Dichlorobenz	11.778	146	453846	46.12	ppb	96

Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8880.D
Acq On : 11 Nov 2021 10:58 pm
Operator : K.Ruest
Sample : CCV
Misc :
ALS Vial : 28 Sample Multiplier: 1

Inst : MSVOA-12

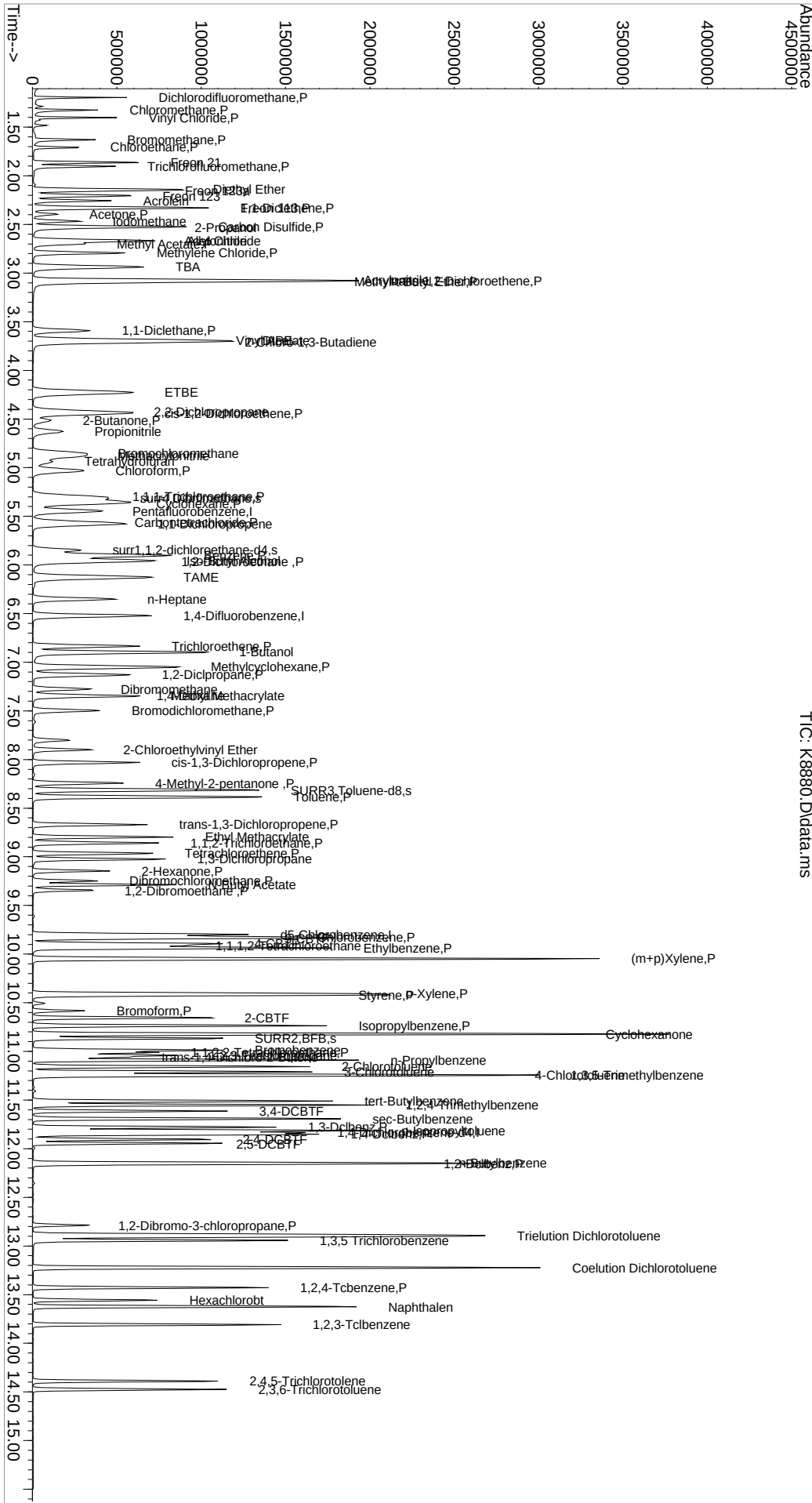
Quant Time: Nov 12 10:24:29 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.851	146	484207	45.71	ppb	98
107) 2,4-DCBTF	11.906	214	206715	48.25	ppb	96
108) 2,5-DCBTF	11.949	214	235389	49.52	ppb	95
109) n-Butylbenzene	12.144	91	798095	45.99	ppb	97
110) 1,2-Dclbenz	12.156	146	475179	48.49	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.790	157	71023	53.90	ppb	88
112) Trielution Dichlorotol...	12.894	125	1336928	144.95	ppb	96
113) 1,3,5 Trichlorobenzene	12.943	180	359419	49.79	ppb	99
114) Coelution Dichlorotoluene	13.223	125	987840	98.86	ppb	95
115) 1,2,4-Tcbenzene	13.430	180	332990	47.13	ppb	95
116) Hexachlorobt	13.558	225	109193	39.22	ppb	95
117) Naphthalen	13.626	128	1161502	52.31	ppb	99
118) 1,2,3-Tclbenzene	13.808	180	342005	48.35	ppb	97
119) 2,4,5-Trichlorotoluene	14.388	159	225519	45.38	ppb	99
120) 2,3,6-Trichlorotoluene	14.473	159	206846	44.69	ppb	96

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

Data Path : I:\ACQDATA\msvoa12\Data\111121\
 Data File : K8880.D
 Acq On : 11 Nov 2021 10:58 pm
 Operator : K.Ruest
 Sample : CCV
 PALS Vial : 28 Sample Multiplier: 1
 Inst : MSVOA-12

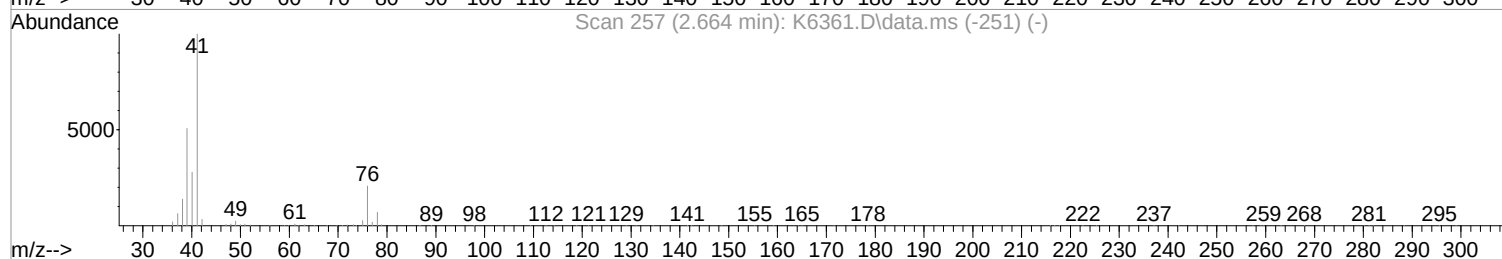
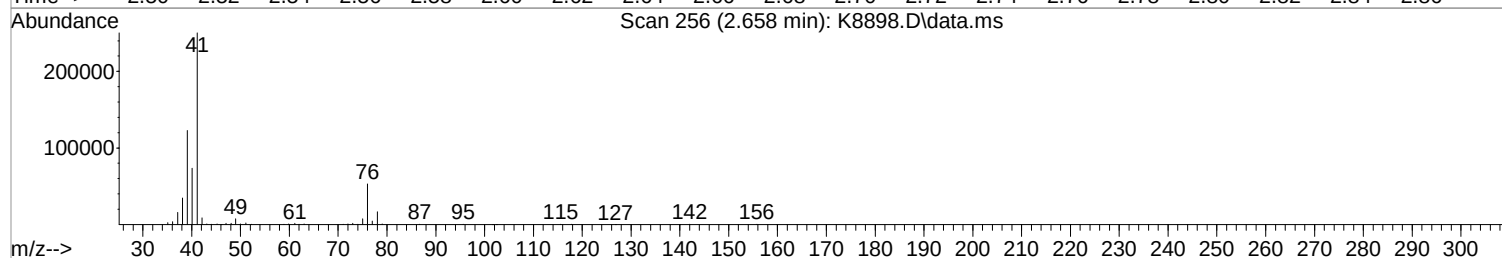
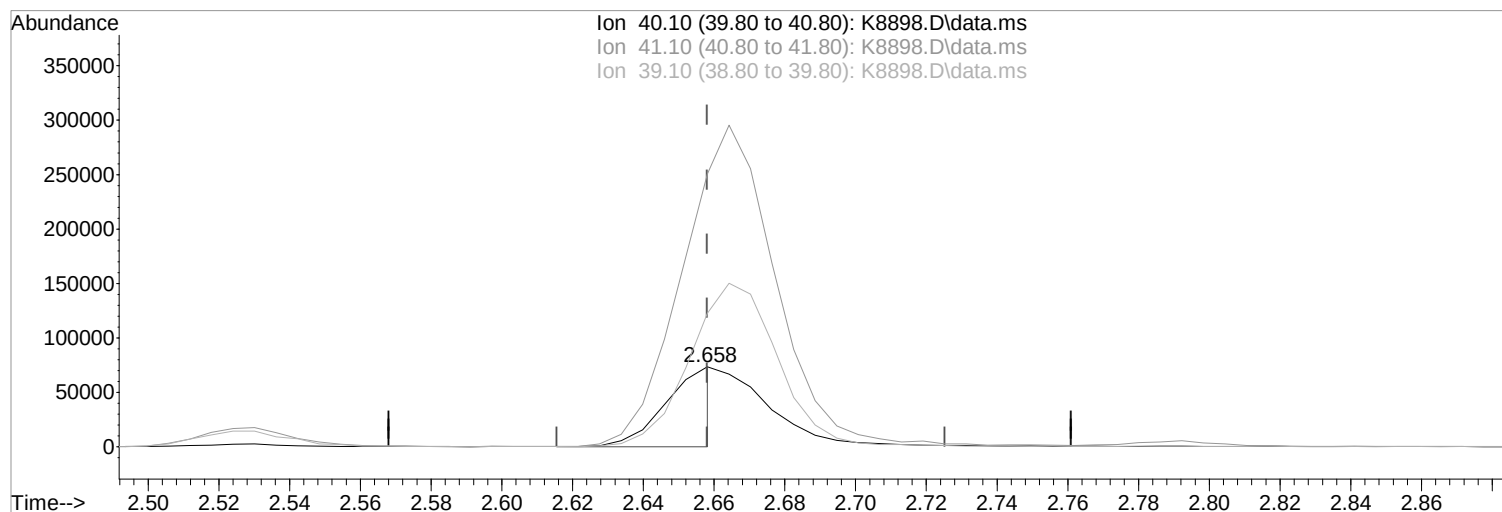
Quant Time: Nov 12 10:24:29 2021
 Quant Method : I:\ACQDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 Quant Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration



Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8898.D
Acq On : 12 Nov 2021 11:01 am
Operator : K.Ruest
Sample : CCV
Misc :
ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:37:25 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8898.D\data.ms

(19) Acetonitrile

2.658min (+0.000) 202.44 ppb m

response 71981

Ion	Exp%	Act%
40.10	100	100
41.10	356.60	340.20
39.10	180.50	166.54
0.00	0.00	0.00

Manual Integration:

After

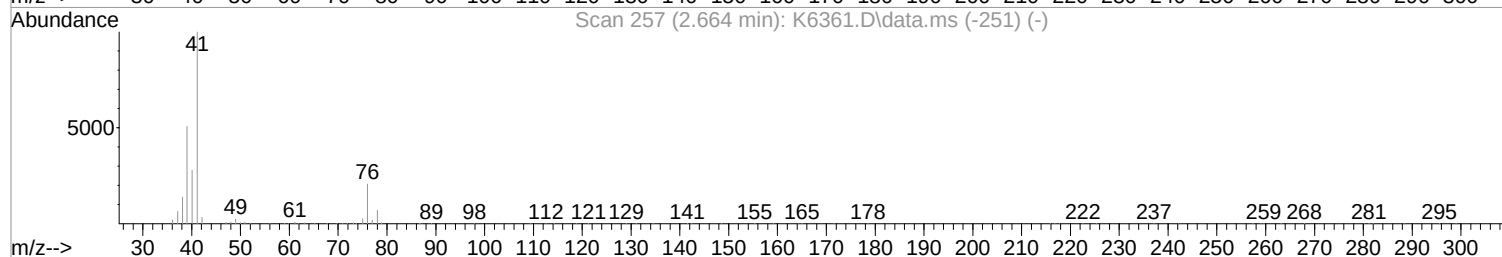
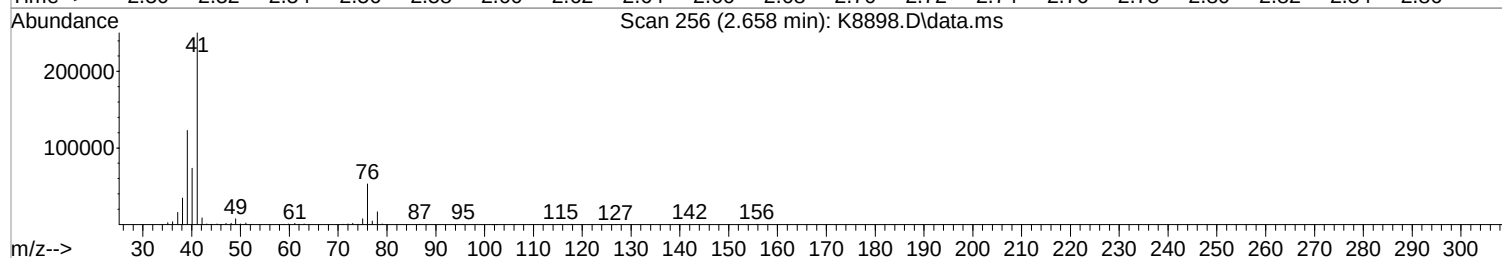
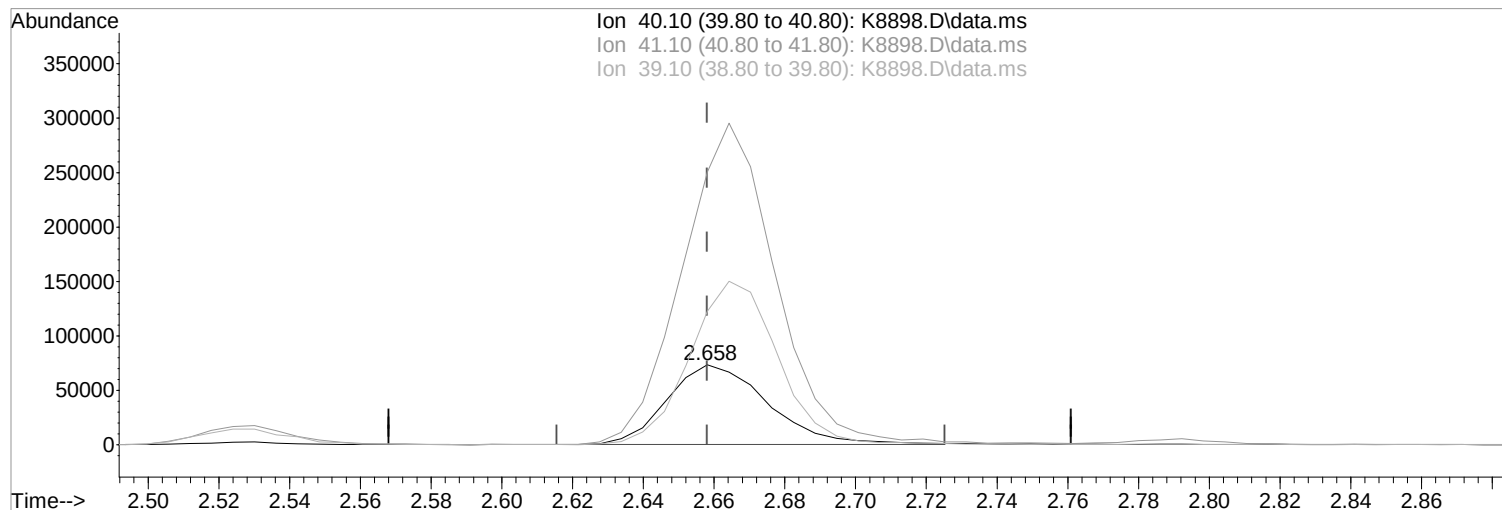
Poor integration.

11/12/21

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8898.D
Acq On : 12 Nov 2021 11:01 am
Operator : K.Ruest
Sample : CCV
Misc :
ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:37:25 2021
Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration



TIC: K8898.D\data.ms

(19) Acetonitrile

Manual Integration:

2.658min (+0.000) 407.85 ppb

Before

response 145022

Ion	Exp%	Act%

11/12/21

40.10	100	100

41.10	356.60	340.20

39.10	180.50	166.54

0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8898.D
 Acq On : 12 Nov 2021 11:01 am
 Operator : K.Ruest
 Sample : CCV
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:37:54 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.438	168	410322	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.517	114	675063	50.00	ppb	0.00
71) d5-Chlorobenzene	9.797	117	609990	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	11.833	152	302385	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.310	113	185358	50.44	ppb	0.00
Spiked Amount	50.000	Range 80 - 116	Recovery	=	100.88%	
48) surr1,1,2-dichloroetha...	5.846	65	243092	45.49	ppb	0.00
Spiked Amount	50.000	Range 73 - 125	Recovery	=	90.98%	
65) SURR3,Toluene-d8	8.309	98	908522	52.60	ppb	0.00
Spiked Amount	50.000	Range 87 - 121	Recovery	=	105.20%	
70) SURR2,BFB	10.864	95	336503	49.07	ppb	0.00
Spiked Amount	50.000	Range 85 - 122	Recovery	=	98.14%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.195	85	261773	47.27	ppb	96
3) Chloromethane	1.323	50	238149	49.97	ppb	99
4) Vinyl Chloride	1.402	62	253958	45.76	ppb	95
5) Bromomethane	1.628	94	154573	42.68	ppb	94
6) Chloroethane	1.707	64	166391	45.67	ppb	99
7) Freon 21	1.859	67	376415	42.49	ppb	98
8) Trichlorofluoromethane	1.902	101	297037	42.21	ppb	95
9) Diethyl Ether	2.134	59	219714	50.56	ppb	99
10) Freon 123a	2.146	67	225969	42.94	ppb	98
11) Freon 123	2.201	83	270534	47.12	ppb	96
12) Acrolein	2.256	56	303051	261.85	ppb	96
13) 1,1-Dicethene	2.329	96	201126	50.40	ppb	# 80
14) Freon 113	2.329	101	189379	48.59	ppb	100
15) Acetone	2.390	43	109488	46.41	ppb	93
16) 2-Propanol	2.524	45	422291	792.80	ppb	99
17) Iodomethane	2.463	142	291608	60.36	ppb	93
18) Carbon Disulfide	2.518	76	592364	61.35	ppb	97
19) Acetonitrile	2.658	40	71981m	202.44	ppb	
20) Allyl Chloride	2.664	76	123310	50.36	ppb	# 93
21) Methyl Acetate	2.695	43	276582	52.86	ppb	98
22) Methylene Chloride	2.792	84	227165	47.73	ppb	# 87
23) TBA	2.932	59	728124	786.21	ppb	96
24) Acrylonitrile	3.073	53	599524	228.13	ppb	99
25) Methyl-t-Butyl Ether	3.085	73	779760	48.61	ppb	99
26) trans-1,2-Dichloroethene	3.079	96	216220	49.52	ppb	97
28) 1,1-Dicethane	3.591	63	387427	47.18	ppb	99
29) Vinyl Acetate	3.676	86	41879	35.88	ppb	# 82
30) DIPE	3.688	45	683027	46.54	ppb	97
31) 2-Chloro-1,3-Butadiene	3.701	53	361226	51.47	ppb	92
32) ETBE	4.219	59	711238	47.91	ppb	96
33) 2,2-Dichloropropane	4.420	77	317729	46.41	ppb	97
34) cis-1,2-Dichloroethene	4.438	96	242722	48.26	ppb	92
35) 2-Butanone	4.505	43	154847	43.69	ppb	99
36) Propionitrile	4.621	54	243614	211.88	ppb	99
37) Bromochloromethane	4.841	130	145628	50.72	ppb	95
38) Methacrylonitrile	4.877	67	128492	45.99	ppb	95
39) Tetrahydrofuran	4.938	42	95746	40.49	ppb	91
40) Chloroform	5.024	83	366255	45.81	ppb	94
41) 1,1,1-Trichloroethane	5.292	97	292066	44.45	ppb	94

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8898.D
 Acq On : 12 Nov 2021 11:01 am
 Operator : K.Ruest
 Sample : CCV
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:37:54 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.121	73	702707	48.78	ppb	100
44) Cyclohexane	5.353	41	188037	42.09	ppb	96
46) Carbontetrachloride	5.560	117	225077	43.29	ppb	91
47) 1,1-Dichloropropene	5.578	75	293818	47.82	ppb	92
49) Benzene	5.901	78	948693	49.57	ppb	99
50) 1,2-Dichloroethane	5.962	62	314443	43.73	ppb	96
51) Iso-Butyl Alcohol	5.944	43	312338	809.21	ppb	98
52) n-Heptane	6.346	43	298926	51.72	ppb	97
53) 1-Butanol	6.895	56	531083	2115.15	ppb	97
54) Trichloroethene	6.834	130	228006	47.99	ppb	95
55) Methylcyclohexane	7.047	55	284197	45.47	ppb	94
56) 1,2-Dichloropropane	7.127	63	242375	48.82	ppb	96
57) Dibromomethane	7.273	93	133944	47.07	ppb	78
58) 1,4-Dioxane	7.334	88	93280	857.51	ppb	93
59) Methyl Methacrylate	7.346	69	210620	46.23	ppb	98
60) Bromodichloromethane	7.493	83	273911	45.59	ppb	97
62) 2-Chloroethylvinyl Ether	7.895	63	136108	42.10	ppb	99
63) cis-1,3-Dichloropropene	8.029	75	370656	51.10	ppb	97
64) 4-Methyl-2-pentanone	8.236	43	290106	43.85	ppb	99
66) Toluene	8.383	91	1024755	49.99	ppb	99
67) trans-1,3-Dichloropropene	8.669	75	338497	50.33	ppb	93
68) Ethyl Methacrylate	8.797	69	386307	52.06	ppb	95
69) 1,1,2-Trichloroethane	8.858	97	216950	47.38	ppb	98
72) Tetrachloroethene	8.962	164	171385	48.75	ppb	95
73) 2-Hexanone	9.145	43	219517	45.70	ppb	97
74) 1,3-Dichloropropane	9.023	76	397003	48.83	ppb	97
75) Dibromochloromethane	9.248	129	186125	50.33	ppb	95
76) N-Butyl Acetate	9.285	43	420305	45.82	ppb	98
77) 1,2-Dibromoethane	9.340	107	226147	50.31	ppb	91
78) Chlorobenzene	9.821	112	654267	50.40	ppb	96
79) 3-CBTF	9.840	180	325431	51.26	ppb	91
80) 4-CBTF	9.895	180	289928	49.24	ppb	95
81) 1,1,1,2-Tetrachloroethane	9.913	131	202939	52.71	ppb	98
82) Ethylbenzene	9.937	106	353273	49.39	ppb	92
83) (m+p)Xylene	10.047	106	884931	102.36	ppb	99
84) o-Xylene	10.407	106	428965	50.24	ppb	92
85) Styrene	10.419	104	734902	51.43	ppb	97
87) Bromoform	10.583	173	120368	51.24	ppb	95
88) 2-CBTF	10.657	180	316169	51.03	ppb	86
89) Isopropylbenzene	10.736	105	1055308	51.45	ppb	99
90) Cyclohexanone	10.821	55	1067754	973.47	ppb	98
91) trans-1,4-Dichloro-2-B...	11.059	53	82739	46.64	ppb	80
92) 1,1,2,2-Tetrachloroethane	11.010	83	314752	49.48	ppb	95
93) Bromobenzene	10.986	156	268856	50.92	ppb	97
94) 1,2,3-Trichloropropane	11.041	110	98098	44.51	ppb	99
95) n-Propylbenzene	11.089	91	1303882	50.94	ppb	99
96) 2-Chlorotoluene	11.156	91	790211	48.77	ppb	97
97) 3-Chlorotoluene	11.211	91	784191	48.41	ppb	95
98) 4-Chlorotoluene	11.248	91	876074	48.14	ppb	95
99) 1,3,5-Trimethylbenzene	11.242	105	984071	51.63	ppb	98
100) tert-Butylbenzene	11.510	119	791554	50.53	ppb	99
101) 1,2,4-Trimethylbenzene	11.553	105	971078	51.08	ppb	100
102) 3,4-DCBTF	11.614	214	251568	49.19	ppb	95
103) sec-Butylbenzene	11.693	105	1175732	52.29	ppb	98
104) p-Isopropyltoluene	11.815	119	1032172	52.39	ppb	97
105) 1,3-Dichlorobenz	11.778	146	529298	51.26	ppb	97

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
 Data File : K8898.D
 Acq On : 12 Nov 2021 11:01 am
 Operator : K.Ruest
 Sample : CCV
 Misc :
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA-12

Quant Time: Nov 12 11:37:54 2021
 Quant Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
 Quant Title : MS#12 - 8260B WATERS 10mL Purge
 QLast Update : Fri Sep 03 10:14:47 2021
 Response via : Initial Calibration

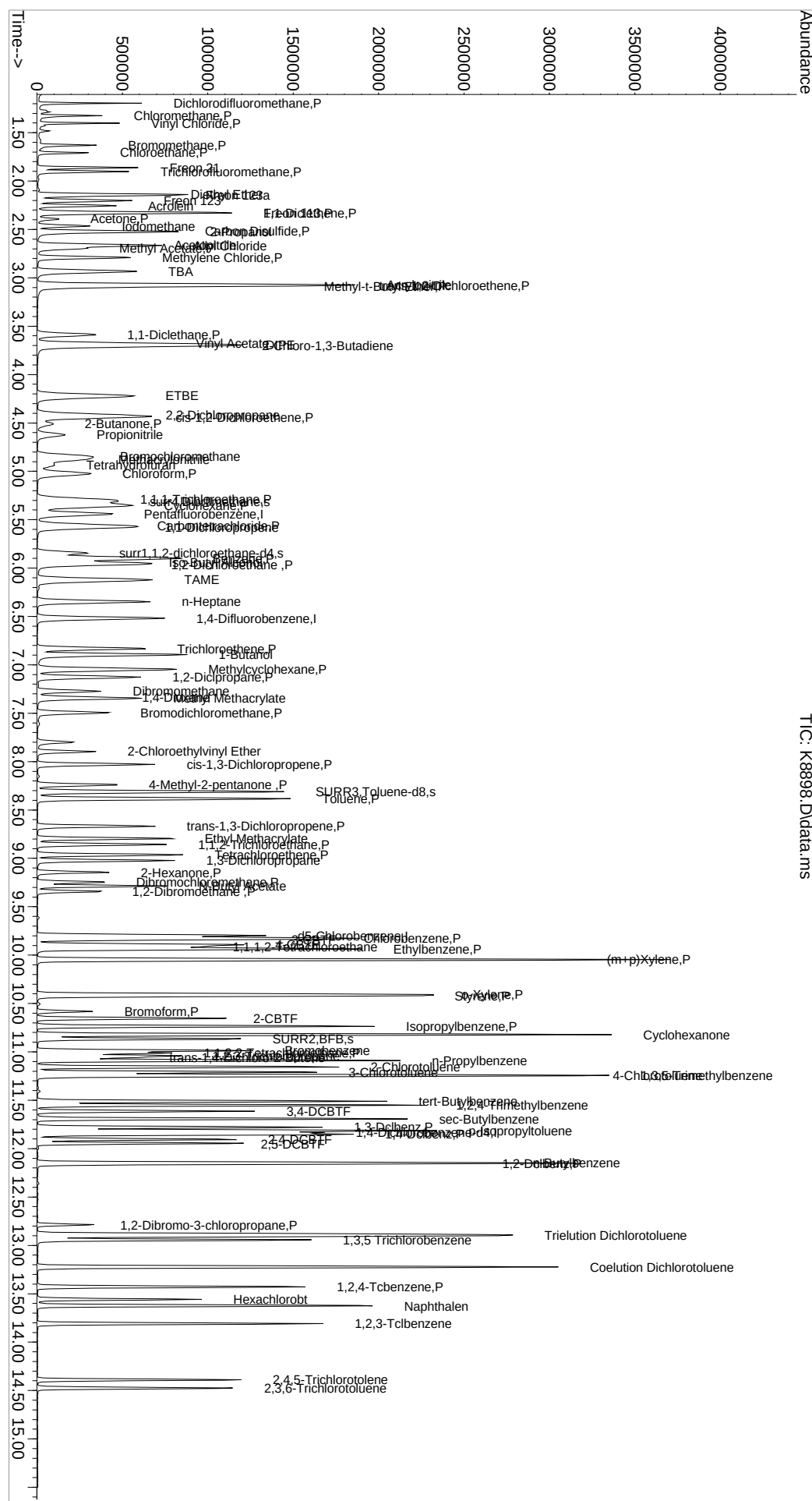
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	11.851	146	551656	49.63	ppb	97
107) 2,4-DCBTF	11.906	214	233147	51.86	ppb	97
108) 2,5-DCBTF	11.949	214	261908	52.51	ppb	96
109) n-Butylbenzene	12.144	91	969670	53.25	ppb	98
110) 1,2-Dclbenz	12.156	146	523893	50.95	ppb	99
111) 1,2-Dibromo-3-chloropr...	12.790	157	69280	50.11	ppb	91
112) Trielution Dichlorotol...	12.894	125	1407092	145.38	ppb	96
113) 1,3,5 Trichlorobenzene	12.943	180	380666	50.26	ppb	100
114) Coelution Dichlorotoluene	13.223	125	1042040	99.38	ppb	95
115) 1,2,4-Tcbenzene	13.430	180	397213	53.58	ppb	98
116) Hexachlorobt	13.558	225	140119	47.97	ppb	98
117) Naphthalen	13.625	128	1226637	52.64	ppb	98
118) 1,2,3-Tclbenzene	13.808	180	393395	53.00	ppb	96
119) 2,4,5-Trichlorotoluene	14.388	159	252648	48.45	ppb	98
120) 2,3,6-Trichlorotoluene	14.473	159	223091	45.94	ppb	95

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

Quantitation Report (QT Reviewed)

Quant Time: Nov 12 11:37:54 2021
Quant Method : I:\ACQDATA\msv0a12\Methods\W090221.M
Quant Title : MS#12 - 8260B WATERS 10ML Purge
Quant Update : Fri Sep 03 10:14:47 2021
Response via : Initial Calibration

Inst : MSVOA-12

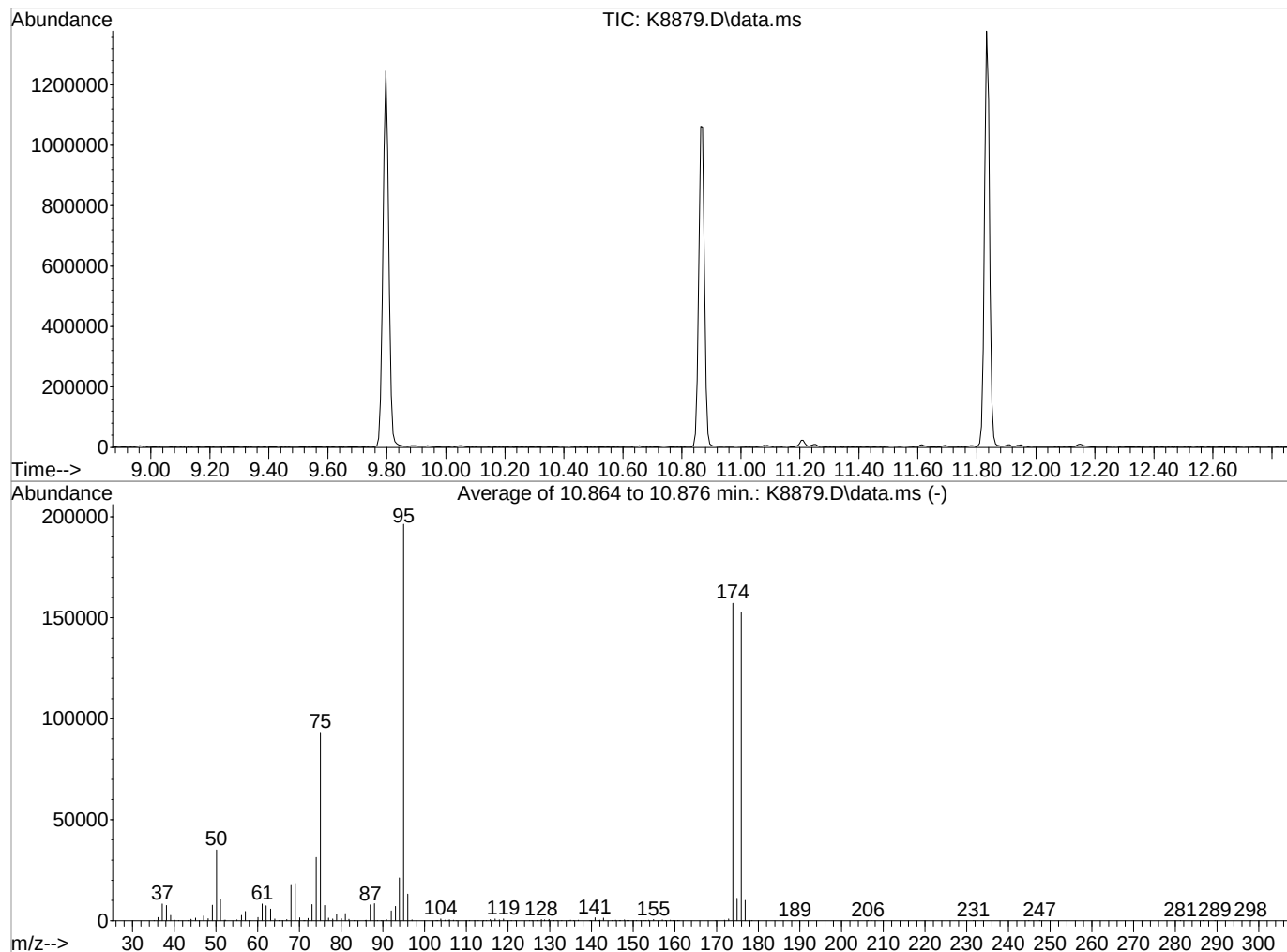


Data Path : I:\ACQUDATA\msvoa12\Data\111121\
Data File : K8879.D
Acq On : 11 Nov 2021 10:37 pm
Operator : K.Ruest
Sample : TUNE
Misc :
ALS Vial : 27 Sample Multiplier: 1

Inst : MSVOA-12

Integration File: INTP90.P

Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Fri Sep 03 10:14:47 2021



AutoFind: Scans 1602, 1603, 1604; Background Corrected with Scan 1594

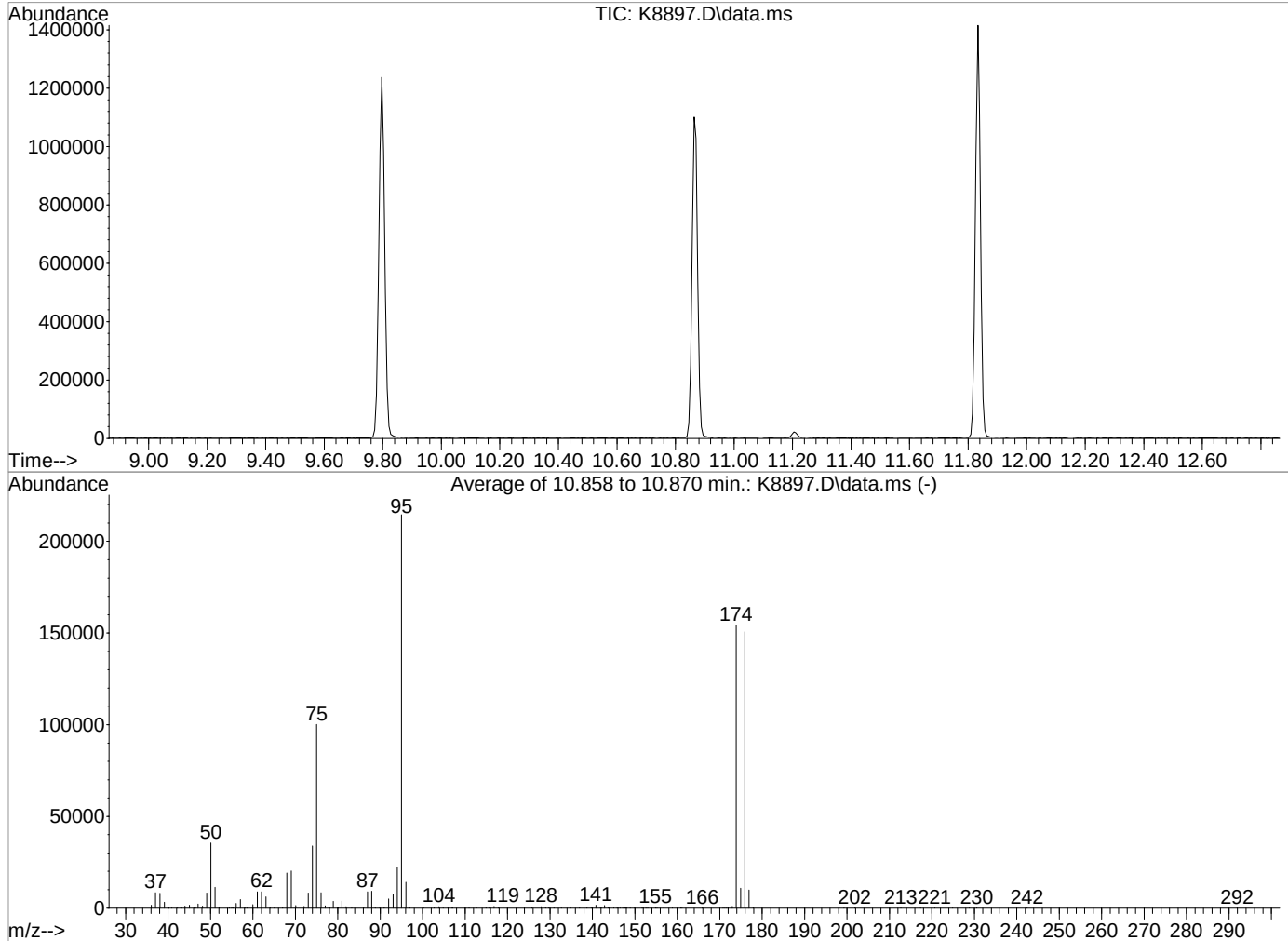
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	35024	PASS
75	95	30	60	47.5	93259	PASS
95	95	100	100	100.0	196360	PASS
96	95	5	9	6.7	13166	PASS
173	174	0.00	2	0.6	894	PASS
174	95	50	120	80.1	157235	PASS
175	174	5	9	7.1	11134	PASS
176	174	95	101	97.0	152571	PASS
177	176	5	9	6.6	10045	PASS

Data Path : I:\ACQUDATA\msvoa12\Data\111221\
Data File : K8897.D
Acq On : 12 Nov 2021 10:30 am
Operator : K.Ruest
Sample : TUNE
Misc :
ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA-12

Integration File: INTP90.P

Method : I:\ACQUDATA\msvoa12\Methods\W090221.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Fri Sep 03 10:14:47 2021



AutoFind: Scans 1601, 1602, 1603; Background Corrected with Scan 1594

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.6	35568	PASS
75	95	30	60	46.7	100157	PASS
95	95	100	100	100.0	214592	PASS
96	95	5	9	6.5	14011	PASS
173	174	0.00	2	0.6	958	PASS
174	95	50	120	72.0	154491	PASS
175	174	5	9	7.0	10838	PASS
176	174	95	101	97.6	150723	PASS
177	176	5	9	6.5	9811	PASS

ALS Group USA, Corp.

DBA ALS Environmental

QC/QC Report

Date Analyzed: 9/2/21 12:07

ICAL Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\090221\K6356.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	18.9	34549	PASS
75	95	30	60	50.9	93243	PASS
95	95	100	100	100.0	183147	PASS
96	95	5	9	6.6	12166	PASS
173	174	0	2	1.2	1539	PASS
174	95	50	120	70.7	129480	PASS
175	174	5	9	8.6	11139	PASS
176	174	95	101	99.9	129336	PASS
177	176	5	9	6.2	8072	PASS

Sample Name	Lab Code	File ID:	Date Analyzes: Q
1.0ppb	1.0ppb	I:\ACQUDATA\msvoa12\Data\090221\K6357.D	9/2/21 12:29
2.0ppb	2.0ppb	I:\ACQUDATA\msvoa12\Data\090221\K6358.D	9/2/21 12:51
5.0ppb	5.0ppb	I:\ACQUDATA\msvoa12\Data\090221\K6359.D	9/2/21 13:13
20ppb	20ppb	I:\ACQUDATA\msvoa12\Data\090221\K6360.D	9/2/21 13:35
50ppb	50ppb	I:\ACQUDATA\msvoa12\Data\090221\K6361.D	9/2/21 13:57
100ppb	100ppb	I:\ACQUDATA\msvoa12\Data\090221\K6362.D	9/2/21 14:18
150ppb	150ppb	I:\ACQUDATA\msvoa12\Data\090221\K6363.D	9/2/21 14:40
200ppb	200ppb	I:\ACQUDATA\msvoa12\Data\090221\K6364.D	9/2/21 15:02
ICV-50	ICV-50	I:\ACQUDATA\msvoa12\Data\090221\K6368.D	9/2/21 16:40

Analysis: 5000+60412021 Analyst: Y. West pH strips: N/A Tune Method: W090221
 Date: 9/2/21 Balance ID: N/A ResCl strips: N/A Run Method: ↓
 Instr: 12 50 mL Class A used for dilution FV Syringes: 217091 + 202106 LIMS Run#: 10AL

Pos.	Sample	Diln.	Diln. Prep./	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK							Y0353		
2	7.1M		5mL (H2O) 50					Y0354	✓	(auto) 11:13
1	1.8M	50mL	5mL					Y0355	Y	
2	0.5ppm	5mL	5mL					Y0356	Y	
3	1.0	10mL	—					Y0357	Y	
4	2.0	20mL	—					Y0358	Y	
5	5.0	50mL	—					Y0359	Y	
6	20	—	2mL					Y0360	Y	
7	50	—	5mL					Y0361	Y	
8	100	—	10mL					Y0362	Y	
9	150	—	15mL					Y0363	Y	
10	200	—	20mL					Y0364	Y	
11	BLK							Y0365	—	
12	↓							Y0366	—	
13	10V.50							Y0367	Y	
1	BLK							Y0368	Y	
2	BLK							Y0369	—	

END
 YR 9/3/21

All samples = 5 mL + 5 mL combined IS/Sur. 5 mL purged
 Primary Oxid: 218147
 Primary F+ : 219026
 Primary T6 : 218576
 Primary HSL : 218923
 10mL → 1.0mL MeOH = 5ppm
 200 Secondary F+ : 218025
 500 Secondary Oxid : 218150
 Secondary HSL : 218948
 Secondary T6 : 218705
 Combined IS/Sur :
 Surrogate SD : 219023
 Internal Std : 219024
 Reagents:

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: The LiRo Group
Project: Buffalo China

Service Request: R2111745
Calibration Date: 9/2/2021

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2100117
Instrument ID: R-MS-12

Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC2100117-01	0.5ppb	I:\ACQUDATA\msvoa12\Data\090221\K6356.D	09/02/2021 12:07
02	RC2100117-02	1.0ppb	I:\ACQUDATA\msvoa12\Data\090221\K6357.D	09/02/2021 12:29
03	RC2100117-03	2.0ppb	I:\ACQUDATA\msvoa12\Data\090221\K6358.D	09/02/2021 12:51
04	RC2100117-04	5.0ppb	I:\ACQUDATA\msvoa12\Data\090221\K6359.D	09/02/2021 13:13
05	RC2100117-05	20ppb	I:\ACQUDATA\msvoa12\Data\090221\K6360.D	09/02/2021 13:35
06	RC2100117-06	50ppb	I:\ACQUDATA\msvoa12\Data\090221\K6361.D	09/02/2021 13:57
07	RC2100117-07	100ppb	I:\ACQUDATA\msvoa12\Data\090221\K6362.D	09/02/2021 14:18
08	RC2100117-08	150ppb	I:\ACQUDATA\msvoa12\Data\090221\K6363.D	09/02/2021 14:40
09	RC2100117-09	200ppb	I:\ACQUDATA\msvoa12\Data\090221\K6364.D	09/02/2021 15:02

Analyte

1,1,1-Trichloroethane (TCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8585	02	1.000	0.8017	03	2.000	0.8029	04	5.000	0.8101
05	20.000	0.7424	06	50.000	0.8241	07	100.000	0.7763	08	150.000	0.8016
09	200.000	0.7877									

1,1,2,2-Tetrachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.124	02	1.000	0.9724	03	2.000	0.9269	04	5.000	1.093
05	20.000	1.068	06	50.000	1.136	07	100.000	1.045	08	150.000	1.026
09	200.000	1.075									

1,1,2-Trichloro-1,2,2-trifluoroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4638	02	1.000	0.5506	03	2.000	0.5199	04	5.000	0.4756
05	20.000	0.4346	06	50.000	0.4733	07	100.000	0.4426	08	150.000	0.4614
09	200.000	0.4528									

1,1,2-Trichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4028	02	1.000	0.3623	03	2.000	0.3651	04	5.000	0.3362
05	20.000	0.3166	06	50.000	0.3211	07	100.000	0.3161	08	150.000	0.3238
09	200.000	0.3083									

1,1-Dichloroethane (1,1-DCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.128	02	1.000	0.9369	03	2.000	0.935	04	5.000	1.054
05	20.000	0.9801	06	50.000	1.034	07	100.000	0.9778	08	150.000	0.9915
09	200.000	0.9683									

1,1-Dichloroethene (1,1-DCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5512	02	1.000	0.448	03	2.000	0.4884	04	5.000	0.5264
05	20.000	0.46	06	50.000	0.4824	07	100.000	0.4687	08	150.000	0.4779
09	200.000	0.4735									

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: The LiRo Group
Project: Buffalo China

Service Request: R2111745
Calibration Date: 9/2/2021

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2100117
Instrument ID: R-MS-12

Signal ID: 1

Analyte

1,2,3-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	1.238	03	2.000	1.285	04	5.000	1.316	05	20.000	1.191
06	50.000	1.29	07	100.000	1.191	08	150.000	1.14	09	200.000	1.168

1,2,4-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.284	02	1.000	1.235	03	2.000	1.236	04	5.000	1.296
05	20.000	1.191	06	50.000	1.278	07	100.000	1.19	08	150.000	1.143
09	200.000	1.18									

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1744	03	2.000	0.1896	04	5.000	0.2108	05	20.000	0.2277
06	50.000	0.2529	07	100.000	0.2559	08	150.000	0.25	09	200.000	0.2676

1,2-Dibromoethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3957	02	1.000	0.3702	03	2.000	0.3714	04	5.000	0.3667
05	20.000	0.37	06	50.000	0.3741	07	100.000	0.3587	08	150.000	0.3556
09	200.000	0.3533									

1,2-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.956	02	1.000	1.647	03	2.000	1.68	04	5.000	1.883
05	20.000	1.647	06	50.000	1.743	07	100.000	1.583	08	150.000	1.584
09	200.000	1.58									

1,2-Dichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5804	02	1.000	0.5709	03	2.000	0.572	04	5.000	0.5376
05	20.000	0.5326	06	50.000	0.5288	07	100.000	0.4984	08	150.000	0.4922
09	200.000	0.48									

1,2-Dichloropropane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4278	02	1.000	0.3929	03	2.000	0.3262	04	5.000	0.3621
05	20.000	0.3696	06	50.000	0.3707	07	100.000	0.3552	08	150.000	0.3558
09	200.000	0.3489									

1,3-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.872	02	1.000	1.827	03	2.000	1.77	04	5.000	1.716
05	20.000	1.634	06	50.000	1.757	07	100.000	1.59	08	150.000	1.602
09	200.000	1.598									

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.151	02	1.000	2.013	03	2.000	1.939	04	5.000	1.936

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QA/QC Report

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Service Request: R2111745
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1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	1.719	06	50.000	1.826	07	100.000	1.645	08	150.000	1.657
09	200.000	1.654									

1,4-Dioxane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.00974	04	100.000	0.007995	05	400.000	0.008264	06	1000.000	0.007646
07	2000.000	0.007728	08	3000.000	0.007579	09	4000.000	0.007447			

2-Butanone (MEK)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.514	04	5.000	0.5148	05	20.000	0.4032	06	50.000	0.4059
07	100.000	0.3956	08	150.000	0.3918	09	200.000	0.3979			

2-Hexanone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.3506	04	5.000	0.4102	05	20.000	0.4227	06	50.000	0.4031
07	100.000	0.3818	08	150.000	0.3991	09	200.000	0.3886			

4-Bromofluorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.5456	05	20.000	0.4792	06	50.000	0.497	07	100.000	0.5099
08	200.000	0.5076									

4-Methyl-2-pentanone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.4797	04	5.000	0.512	05	20.000	0.5312	06	50.000	0.4751
07	100.000	0.4699	08	150.000	0.4905	09	200.000	0.4718			

Acetone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.3984	05	20.000	0.3186	06	50.000	0.2854	07	100.000	0.2568
08	150.000	0.262	09	200.000	0.2542						

Benzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.557	02	1.000	1.465	03	2.000	1.536	04	5.000	1.4
05	20.000	1.347	06	50.000	1.417	07	100.000	1.335	08	150.000	1.377
09	200.000	1.324									

Bromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.378	02	1.000	0.3203	03	2.000	0.3954	04	5.000	0.3822
05	20.000	0.3258	06	50.000	0.3459	07	100.000	0.3317	08	150.000	0.336
09	200.000	0.3332									

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Bromodichloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4912	02	1.000	0.4673	03	2.000	0.455	04	5.000	0.4358
05	20.000	0.413	06	50.000	0.4365	07	100.000	0.4296	08	150.000	0.4426
09	200.000	0.4342									

Bromoform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.2911	03	2.000	0.3534	04	5.000	0.3406	05	20.000	0.3792
06	50.000	0.4186	07	100.000	0.4178	08	150.000	0.4424	09	200.000	0.4639

Bromomethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7288	02	1.000	0.7133	03	2.000	0.6393	04	5.000	0.5074
05	20.000	0.4558	06	50.000	0.4445	07	100.000	0.1574	08	150.000	0.1559
09	200.000	0.1691									

Carbon Disulfide

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.164	02	1.000	1.218	03	2.000	1.277	04	5.000	1.116
05	20.000	1.128	06	50.000	1.142	07	100.000	1.169	08	150.000	1.194
09	200.000	1.18									

Carbon Tetrachloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4226	02	1.000	0.4297	03	2.000	0.3525	04	5.000	0.3737
05	20.000	0.356	06	50.000	0.382	07	100.000	0.3683	08	150.000	0.395
09	200.000	0.3862									

Chlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.104	02	1.000	1.126	03	2.000	1.141	04	5.000	1.123
05	20.000	1.033	06	50.000	1.063	07	100.000	1.002	08	150.000	1.006
09	200.000	0.9782									

Chloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.582	02	1.000	0.4542	03	2.000	0.4831	04	5.000	0.4596
05	20.000	0.4023	06	50.000	0.435	07	100.000	0.3969	08	150.000	0.3967
09	200.000	0.3858									

Chloroform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	1.402	03	2.000	1.269	04	5.000	1.142	05	20.000	0.943
06	50.000	1.004	07	100.000	0.9382	08	150.000	0.9504	09	200.000	0.9284

Chloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6721	02	1.000	0.6578	03	2.000	0.6038	04	5.000	0.5381

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Chloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	0.522	06	50.000	0.5586	07	100.000	0.5392	08	150.000	0.5758
09	200.000	0.5594									

Cyclohexane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3918	03	2.000	0.3653	04	5.000	0.3375	05	20.000	0.3004
06	50.000	0.3184	07	100.000	0.3086	08	150.000	0.3188	09	200.000	0.3061

Dibromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2438	02	1.000	0.2909	03	2.000	0.3144	04	5.000	0.2862
05	20.000	0.2914	06	50.000	0.3244	07	100.000	0.3247	08	150.000	0.3281
09	200.000	0.3244									

Dibromofluoromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.2814	05	20.000	0.2613	06	50.000	0.2697	07	100.000	0.2769
08	200.000	0.2716									

Dichlorodifluoromethane (CFC 12)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6662	02	1.000	0.6084	03	2.000	0.6178	04	5.000	0.6335
05	20.000	0.699	06	50.000	0.7457	07	100.000	0.7021	08	150.000	0.7088
09	200.000	0.6914									

Dichloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7844	02	1.000	0.6382	03	2.000	0.5779	04	5.000	0.5841
05	20.000	0.5057	06	50.000	0.538	07	100.000	0.528	08	150.000	0.5369
09	200.000	0.5268									

Ethylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7053	02	1.000	0.5943	03	2.000	0.6029	04	5.000	0.5981
05	20.000	0.5207	06	50.000	0.5911	07	100.000	0.5596	08	150.000	0.5583
09	200.000	0.5465									

Isopropylbenzene (Cumene)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.515	02	1.000	3.18	03	2.000	3.717	04	5.000	3.78
05	20.000	3.277	06	50.000	3.609	07	100.000	3.163	08	150.000	3.16
09	200.000	3.121									

Methyl Acetate

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.6439	03	2.000	0.6631	04	5.000	0.6823	05	20.000	0.6228
06	50.000	0.6274	07	100.000	0.6336	08	150.000	0.6086	09	200.000	0.6187

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Methyl tert-Butyl Ether

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.883	02	1.000	1.741	03	2.000	1.94	04	5.000	2.146
05	20.000	1.996	06	50.000	1.988	07	100.000	1.981	08	150.000	1.954
09	200.000	1.962									

Methylcyclohexane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.498	03	2.000	0.4516	04	5.000	0.4832	05	20.000	0.4107
06	50.000	0.4675	07	100.000	0.4648	08	150.000	0.4709	09	200.000	0.4565

Styrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.195	02	1.000	1.142	03	2.000	1.103	04	5.000	1.189
05	20.000	1.142	06	50.000	1.252	07	100.000	1.183	08	150.000	1.197
09	200.000	1.139									

Tetrachloroethene (PCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3361	02	1.000	0.3286	03	2.000	0.3224	04	5.000	0.2847
05	20.000	0.262	06	50.000	0.2781	07	100.000	0.2598	08	150.000	0.2624
09	200.000	0.2594									

Toluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.473	02	1.000	1.519	03	2.000	1.546	04	5.000	1.687
05	20.000	1.492	06	50.000	1.536	07	100.000	1.462	08	150.000	1.515
09	200.000	1.434									

Toluene-d8

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	1.394	05	20.000	1.184	06	50.000	1.287	07	100.000	1.289
08	200.000	1.243									

Trichloroethene (TCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3717	02	1.000	0.4206	03	2.000	0.3682	04	5.000	0.381
05	20.000	0.3263	06	50.000	0.3391	07	100.000	0.3171	08	150.000	0.3294
09	200.000	0.3136									

Trichlorofluoromethane (CFC 11)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9375	02	1.000	0.8712	03	2.000	0.8941	04	5.000	0.9735
05	20.000	0.7974	06	50.000	0.8649	07	100.000	0.8119	08	150.000	0.8064
09	200.000	0.7608									

Vinyl Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7912	02	1.000	0.6684	03	2.000	0.6636	04	5.000	0.7104

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Vinyl Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	0.6316	06	50.000	0.686	07	100.000	0.6456	08	150.000	0.6517
09	200.000	0.6386									

cis-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7145	02	1.000	0.6919	03	2.000	0.6405	04	5.000	0.5991
05	20.000	0.5433	06	50.000	0.5917	07	100.000	0.5729	08	150.000	0.5864
09	200.000	0.575									

cis-1,3-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4802	02	1.000	0.5201	03	2.000	0.4602	04	5.000	0.5393
05	20.000	0.5338	06	50.000	0.5653	07	100.000	0.5674	08	150.000	0.5956
09	200.000	0.573									

m,p-Xylenes

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.7286	02	2.000	0.709	03	4.000	0.7252	04	10.000	0.7402
05	40.000	0.6751	06	100.000	0.7445	07	200.000	0.6936	08	300.000	0.6939
09	400.000	0.6679									

o-Xylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7754	02	1.000	0.7109	03	2.000	0.712	04	5.000	0.6962
05	20.000	0.6563	06	50.000	0.7293	07	100.000	0.6757	08	150.000	0.6837
09	200.000	0.6598									

trans-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6083	02	1.000	0.5661	03	2.000	0.5046	04	5.000	0.5603
05	20.000	0.4835	06	50.000	0.526	07	100.000	0.5091	08	150.000	0.522
09	200.000	0.5082									

trans-1,3-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4122	02	1.000	0.4837	03	2.000	0.4475	04	5.000	0.4549
05	20.000	0.4978	06	50.000	0.5379	07	100.000	0.5376	08	150.000	0.5593
09	200.000	0.5522									

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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	4.0	≤20	0.8006	0.100
1,1,2,2-Tetrachloroethane	TRG	Average RF	% RSD	6.5	≤20	1.052	0.300
1,1,2-Trichloro-1,2,2-trifluoroethane	TRG	Average RF	% RSD	7.9	≤20	0.4749	0.100
1,1,2-Trichloroethane	TRG	Average RF	% RSD	9.2	≤20	0.3391	0.100
1,1-Dichloroethane (1,1-DCA)	TRG	Average RF	% RSD	6.2	≤20	1.001	0.200
1,1-Dichloroethene (1,1-DCE)	TRG	Average RF	% RSD	6.7	≤20	0.4863	0.100
1,2,3-Trichlorobenzene	TRG	Average RF	% RSD	5.2	≤20	1.227	
1,2,4-Trichlorobenzene	TRG	Average RF	% RSD	4.3	≤20	1.226	0.200
1,2-Dibromo-3-chloropropane (DBCP)	TRG	Average RF	% RSD	14.9	≤20	0.2286	0.050
1,2-Dibromoethane	TRG	Average RF	% RSD	3.4	≤20	0.3684	0.100
1,2-Dichlorobenzene	TRG	Average RF	% RSD	8.0	≤20	1.7	0.400
1,2-Dichloroethane	TRG	Average RF	% RSD	6.9	≤20	0.5325	0.100
1,2-Dichloropropane	TRG	Average RF	% RSD	7.9	≤20	0.3677	0.100
1,3-Dichlorobenzene	TRG	Average RF	% RSD	6.2	≤20	1.707	0.600
1,4-Dichlorobenzene	TRG	Average RF	% RSD	9.9	≤20	1.838	0.500
1,4-Dioxane	TRG	Average RF	% RSD	9.8	≤20	0.008057	
2-Butanone (MEK)	TRG	Average RF	% RSD	13.1	≤20	0.4319	0.05
2-Hexanone	TRG	Average RF	% RSD	5.9	≤20	0.3937	0.05
4-Bromofluorobenzene	SURR	Average RF	% RSD	4.8	≤20	0.5079	
4-Methyl-2-pentanone	TRG	Average RF	% RSD	4.7	≤20	0.49	0.05
Acetone	TRG	Quadratic	COD	0.9984	≥0.99	0.2959	0.05
Benzene	TRG	Average RF	% RSD	6.0	≤20	1.418	0.500
Bromochloromethane	TRG	Average RF	% RSD	7.9	≤20	0.3498	
Bromodichloromethane	TRG	Average RF	% RSD	5.2	≤20	0.445	0.200
Bromoform	TRG	Average RF	% RSD	14.9	≤20	0.3884	0.100
Bromomethane	TRG	Average RF	% RSD	52.9	≤20	0.4413	0.100
Carbon Disulfide	TRG	Average RF	% RSD	4.2	≤20	1.177	0.100
Carbon Tetrachloride	TRG	Average RF	% RSD	7.0	≤20	0.3851	0.05
Chlorobenzene	TRG	Average RF	% RSD	5.8	≤20	1.064	0.500
Chloroethane	TRG	Average RF	% RSD	13.9	≤20	0.444	0.100
Chloroform	TRG	Linear	R2	0.9964	≥0.99	1.072	0.200
Chloromethane	TRG	Average RF	% RSD	9.2	≤20	0.5808	0.100
Cyclohexane	TRG	Average RF	% RSD	9.8	≤20	0.3309	0.100
Dibromochloromethane	TRG	Average RF	% RSD	9.2	≤20	0.3031	0.100

Client: The LiRo Group
Project: Buffalo China

Service Request: R2111745
Calibration Date: 9/2/2021

Initial Calibration Summary Volatile Organic Compounds by GC/MS

Calibration ID: RC2100117

Signal ID: 1

Instrument ID: R-MS-12

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Dibromofluoromethane	SURR	Average RF	% RSD	2.8	≤20	0.2722	
Dichlorodifluoromethane (CFC 12)	TRG	Average RF	% RSD	6.9	≤20	0.6748	0.100
Dichloromethane	TRG	Average RF	% RSD	14.9	≤20	0.58	0.100
Ethylbenzene	TRG	Average RF	% RSD	9.0	≤20	0.5863	0.100
Isopropylbenzene (Cumene)	TRG	Average RF	% RSD	7.8	≤20	3.391	0.100
Methyl Acetate	TRG	Average RF	% RSD	3.9	≤20	0.6375	0.100
Methyl tert-Butyl Ether	TRG	Average RF	% RSD	5.5	≤20	1.955	0.100
Methylcyclohexane	TRG	Average RF	% RSD	5.6	≤20	0.4629	0.100
Styrene	TRG	Average RF	% RSD	3.8	≤20	1.171	0.300
Tetrachloroethene (PCE)	TRG	Average RF	% RSD	11.1	≤20	0.2882	0.200
Toluene	TRG	Average RF	% RSD	4.8	≤20	1.518	0.400
Toluene-d8	SURR	Average RF	% RSD	6.0	≤20	1.279	
Trichloroethene (TCE)	TRG	Average RF	% RSD	10.2	≤20	0.3519	0.200
Trichlorofluoromethane (CFC 11)	TRG	Average RF	% RSD	8.2	≤20	0.8575	0.100
Vinyl Chloride	TRG	Average RF	% RSD	7.3	≤20	0.6763	0.100
cis-1,2-Dichloroethene	TRG	Average RF	% RSD	9.4	≤20	0.6128	0.100
cis-1,3-Dichloropropene	TRG	Average RF	% RSD	8.3	≤20	0.5372	0.200
m,p-Xylenes	TRG	Average RF	% RSD	3.9	≤20	0.7087	0.100
o-Xylene	TRG	Average RF	% RSD	5.3	≤20	0.6999	0.300
trans-1,2-Dichloroethene	TRG	Average RF	% RSD	7.3	≤20	0.532	0.100
trans-1,3-Dichloropropene	TRG	Average RF	% RSD	10.5	≤20	0.4981	0.100

ALS Group USA, Corp.
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QA/QC Report

Client: The LiRo Group
Project: Buffalo China

Service Request: R2111745
Calibration Date: 9/2/2021

Initial Calibration Verification Summary Volatile Organic Compounds by GC/MS

Calibration ID: RC2100117

Signal ID: 1

Instrument ID: R-MS-12

#	Lab Code	Sample Name	File Location	Acquisition Date
10	RC2100117-10	ICV-50	I:\ACQUDATA\msvoa12\Data\090221\K6368.D	09/02/2021 16:40

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	49.9	8.006E-1	7.992E-1	-0.174	±30	Average RF
1,1,2,2-Tetrachloroethane	50.0	47.9	1.052E0	1.007E0	-4.298	±30	Average RF
1,1,2-Trichloroethane	50.0	46.0	3.391E-1	3.121E-1	-7.983	±30	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	49.1	4.749E-1	4.66E-1	-1.875	±30	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	49.1	1.001E0	9.833E-1	-1.732	±30	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	47.8	4.863E-1	4.654E-1	-4.304	±30	Average RF
1,2,3-Trichlorobenzene	50.0	48.3	1.227E0	1.187E0	-3.307	±30	Average RF
1,2,4-Trichlorobenzene	50.0	49.9	1.226E0	1.223E0	-0.267	±30	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	49.0	2.286E-1	2.241E-1	-2.000	±30	Average RF
1,2-Dibromoethane	50.0	45.9	3.684E-1	3.38E-1	-8.246	±30	Average RF
1,2-Dichlorobenzene	50.0	46.7	1.7E0	1.589E0	-6.550	±30	Average RF
1,2-Dichloroethane	50.0	45.3	5.325E-1	4.82E-1	-9.482	±30	Average RF
1,2-Dichloropropane	50.0	47.5	3.677E-1	3.492E-1	-5.025	±30	Average RF
1,3-Dichlorobenzene	50.0	46.7	1.707E0	1.596E0	-6.535	±30	Average RF
1,4-Dichlorobenzene	50.0	44.4	1.838E0	1.633E0	-11.129	±30	Average RF
1,4-Dioxane	1000	832	8.057E-3	6.702E-3	-16.817	±30	Average RF
2-Butanone (MEK)	50.0	43.8	4.319E-1	3.784E-1	-12.371	±30	Average RF
2-Hexanone	50.0	45.5	3.937E-1	3.58E-1	-9.075	±30	Average RF
4-Methyl-2-pentanone	50.0	46.8	4.9E-1	4.59E-1	-6.329	±30	Average RF
Acetone	50.0	43.6	2.959E-1	2.521E-1	-12.716	±30	Quadratic
Benzene	50.0	46.0	1.418E0	1.306E0	-7.905	±30	Average RF
Bromochloromethane	50.0	47.6	3.498E-1	3.328E-1	-4.865	±30	Average RF
Bromodichloromethane	50.0	46.8	4.45E-1	4.167E-1	-6.360	±30	Average RF
Bromoform	50.0	49.7	3.884E-1	3.858E-1	-0.657	±30	Average RF
Bromomethane	50.0	49.4	4.413E-1	4.36E-1	-1.196	±30	Average RF
Carbon Disulfide	50.0	56.4	1.177E0	1.328E0	12.83	±30	Average RF
Carbon Tetrachloride	50.0	47.7	3.851E-1	3.678E-1	-4.507	±30	Average RF
Chlorobenzene	50.0	45.1	1.064E0	9.596E-1	-9.817	±30	Average RF
Chloroethane	50.0	52.6	4.44E-1	4.673E-1	5.25	±30	Average RF
Chloroform	50.0	48.2	1.072E0	9.379E-1	-3.685	±30	Linear
Chloromethane	50.0	54.1	5.808E-1	6.279E-1	8.12	±30	Average RF
Cyclohexane	50.0	45.2	3.309E-1	2.991E-1	-9.586	±30	Average RF
Dibromochloromethane	50.0	48.0	3.031E-1	2.913E-1	-3.901	±30	Average RF

ALS Group USA, Corp.
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QA/QC Report

Client: The LiRo Group
Project: Buffalo China

Service Request: R2111745
Calibration Date: 9/2/2021

Initial Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC2100117
Instrument ID: R-MS-12

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	48.4	6.748E-1	6.529E-1	-3.241	±30	Average RF
Dichloromethane	50.0	44.0	5.8E-1	5.1E-1	-12.076	±30	Average RF
Ethylbenzene	50.0	46.3	5.863E-1	5.428E-1	-7.418	±30	Average RF
Isopropylbenzene (Cumene)	50.0	50.6	3.391E0	3.434E0	1.25	±30	Average RF
Methyl Acetate	50.0	59.0	6.375E-1	7.526E-1	18.04	±30	Average RF
Methyl tert-Butyl Ether	50.0	49.2	1.955E0	1.924E0	-1.544	±30	Average RF
Methylcyclohexane	50.0	50.5	4.629E-1	4.673E-1	0.944	±30	Average RF
Styrene	50.0	47.2	1.171E0	1.105E0	-5.689	±30	Average RF
Tetrachloroethene (PCE)	50.0	46.6	2.882E-1	2.685E-1	-6.836	±30	Average RF
Toluene	50.0	47.8	1.518E0	1.451E0	-4.459	±30	Average RF
Trichloroethene (TCE)	50.0	45.2	3.519E-1	3.179E-1	-9.658	±30	Average RF
Trichlorofluoromethane (CFC 11)	50.0	46.7	8.575E-1	8.008E-1	-6.617	±30	Average RF
Vinyl Chloride	50.0	51.9	6.763E-1	7.015E-1	3.72	±30	Average RF
cis-1,2-Dichloroethene	50.0	48.3	6.128E-1	5.925E-1	-3.315	±30	Average RF
cis-1,3-Dichloropropene	50.0	51.5	5.372E-1	5.528E-1	2.91	±30	Average RF
m,p-Xylenes	100	94.1	7.087E-1	6.666E-1	-5.935	±30	Average RF
o-Xylene	50.0	47.4	6.999E-1	6.632E-1	-5.249	±30	Average RF
trans-1,2-Dichloroethene	50.0	48.2	5.32E-1	5.133E-1	-3.513	±30	Average RF
trans-1,3-Dichloropropene	50.0	51.3	4.981E-1	5.108E-1	2.55	±30	Average RF

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	50.4	5.079E-1	5.119E-1	0.786	±30	Average RF
Dibromofluoromethane	50.0	53.2	2.722E-1	2.896E-1	6.39	±30	Average RF
Toluene-d8	50.0	51.3	1.279E0	1.313E0	2.66	±30	Average RF

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QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/11/21 22:58

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\111121\K8880.D\
Signal ID: 1

Calibration Date: 9/2/2021
Calibration ID: RC2100117
Analysis Lot: 745816
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	43.7	0.8006	0.7001	-12.5	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	48.3	1.0518	1.0162	-3.4	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	48.5	0.3391	0.3288	-3.1	NA	±20	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	45.4	0.4749	0.4308	-9.3	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	49.6	1.0007	0.992	-0.9	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	49.1	0.4863	0.4773	-1.9	NA	±20	Average RF
1,2,3-Trichlorobenzene	50.0	48.3	1.2274	1.1868	-3.3	NA	±20	Average RF
1,2,4-Trichlorobenzene	50.0	47.1	1.2258	1.1555	-5.7	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	53.9	0.2286	0.2465	7.8	NA	±20	Average RF
1,2-Dibromoethane	50.0	50.0	0.3684	0.3685	0.0	NA	±20	Average RF
1,2-Dichlorobenzene	50.0	48.5	1.7002	1.649	-3.0	NA	±20	Average RF
1,2-Dichloroethane	50.0	43.3	0.5325	0.4616	-13.3	NA	±20	Average RF
1,2-Dichloropropane	50.0	49.6	0.3677	0.3647	-0.8	NA	±20	Average RF
1,3-Dichlorobenzene	50.0	46.1	1.7073	1.5749	-7.8	NA	±20	Average RF
1,4-Dichlorobenzene	50.0	45.7	1.8379	1.6803	-8.6	NA	±20	Average RF
1,4-Dioxane	1000	914	0.0081	0.0074	-8.6	NA	±20	Average RF
2-Butanone (MEK)	50.0	51.5	0.4319	0.4446	2.9	NA	±20	Average RF
2-Hexanone	50.0	54.5	0.3937	0.4294	9.1	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	51.8	0.49	0.5081	3.7	NA	±20	Average RF
Acetone	50.0	60.5	0.2959	0.3411	NA	21.0*	±20	Quadratic
Benzene	50.0	50.1	1.4176	1.4193	0.1	NA	±20	Average RF
Bromochloromethane	50.0	49.5	0.3498	0.3463	-1.0	NA	±20	Average RF
Bromodichloromethane	50.0	45.6	0.445	0.4055	-8.9	NA	±20	Average RF
Bromoform	50.0	49.6	0.3884	0.3851	-0.8	NA	±20	Average RF
Bromomethane	50.0	48.3	0.4413	0.426	-3.5	NA	±20	Average RF
Carbon Disulfide	50.0	63.5	1.1766	1.4945	27.0*	NA	±20	Average RF
Carbon Tetrachloride	50.0	40.7	0.3851	0.3135	-18.6	NA	±20	Average RF
Chlorobenzene	50.0	48.9	1.064	1.0397	-2.3	NA	±20	Average RF
Chloroethane	50.0	46.8	0.444	0.4154	-6.4	NA	±20	Average RF
Chloroform	50.0	46.8	1.0722	0.9109	NA	-6.5	±20	Linear
Chloromethane	50.0	54.4	0.5808	0.6314	8.7	NA	±20	Average RF
Cyclohexane	50.0	49.4	0.3309	0.3267	-1.3	NA	±20	Average RF
Dibromochloromethane	50.0	49.4	0.3031	0.2995	-1.2	NA	±20	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	47.4	0.6748	0.6396	-5.2	NA	±20	Average RF
Dichloromethane	50.0	49.0	0.58	0.5688	-1.9	NA	±20	Average RF
Ethylbenzene	50.0	47.3	0.5863	0.5542	-5.5	NA	±20	Average RF
Isopropylbenzene (Cumene)	50.0	46.5	3.3914	3.1566	-6.9	NA	±20	Average RF
Methyl Acetate	50.0	63.7	0.6375	0.8116	27.3*	NA	±20	Average RF
Methyl tert-Butyl Ether	50.0	51.4	1.9545	2.0102	2.8	NA	±20	Average RF

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QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/11/21 22:58

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUADATA\msvoa12\Data\111121\K8880.D\
Signal ID: 1

Calibration Date: 9/2/2021
Calibration ID: RC2100117
Analysis Lot: 745816
Units: ppb

Methylcyclohexane	50.0	51.3	0.4629	0.4749	2.6	NA	±20	Average RF
Styrene	50.0	50.4	1.1713	1.1813	0.8	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	44.0	0.2882	0.2536	-12.0	NA	±20	Average RF
Toluene	50.0	49.4	1.5183	1.5008	-1.2	NA	±20	Average RF
Trichloroethene (TCE)	50.0	50.5	0.3519	0.3551	0.9	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	41.3	0.8575	0.7085	-17.4	NA	±20	Average RF
Vinyl Chloride	50.0	49.0	0.6763	0.6629	-2.0	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	48.5	0.6128	0.5939	-3.1	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	51.4	0.5372	0.552	2.8	NA	±20	Average RF
m,p-Xylenes	100	96.3	0.7087	0.6824	-3.7	NA	±20	Average RF
o-Xylene	50.0	48.0	0.6999	0.6714	-4.1	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	49.2	0.532	0.5232	-1.6	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	50.6	0.4981	0.5041	1.2	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	48.8	0.5079	0.4959	-2.3	NA	±20	Average RF
Dibromofluoromethane	50.0	51.1	0.2722	0.2782	2.2	NA	±20	Average RF
Toluene-d8	50.0	53.1	1.2794	1.3582	6.2	NA	±20	Average RF

ALS Group USA, Corp.
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QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/12/21 11:01

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoo12\Data\111221\K8898.D\
Signal ID: 1

Calibration Date: 9/2/2021
Calibration ID: RC2100117
Analysis Lot: 745908
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	44.5	0.8006	0.7118	-11.1	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	49.5	1.0518	1.0409	-1.0	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	47.4	0.3391	0.3214	-5.2	NA	±20	Average RF
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	48.6	0.4749	0.4615	-2.8	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	47.2	1.0007	0.9442	-5.6	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	50.4	0.4863	0.4902	0.8	NA	±20	Average RF
1,2,3-Trichlorobenzene	50.0	53.0	1.2274	1.301	6.0	NA	±20	Average RF
1,2,4-Trichlorobenzene	50.0	53.6	1.2258	1.3136	7.2	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	50.1	0.2286	0.2291	0.2	NA	±20	Average RF
1,2-Dibromoethane	50.0	50.3	0.3684	0.3707	0.6	NA	±20	Average RF
1,2-Dichlorobenzene	50.0	51.0	1.7002	1.7325	1.9	NA	±20	Average RF
1,2-Dichloroethane	50.0	43.7	0.5325	0.4658	-12.5	NA	±20	Average RF
1,2-Dichloropropane	50.0	48.8	0.3677	0.359	-2.4	NA	±20	Average RF
1,3-Dichlorobenzene	50.0	51.3	1.7073	1.7504	2.5	NA	±20	Average RF
1,4-Dichlorobenzene	50.0	49.6	1.8379	1.8243	-0.7	NA	±20	Average RF
1,4-Dioxane	1000	858	0.0081	0.0069	-14.2	NA	±20	Average RF
2-Butanone (MEK)	50.0	43.7	0.4319	0.3774	-12.6	NA	±20	Average RF
2-Hexanone	50.0	45.7	0.3937	0.3599	-8.6	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	43.8	0.49	0.4297	-12.3	NA	±20	Average RF
Acetone	50.0	46.4	0.2959	0.2668	NA	-7.2	±20	Quadratic
Benzene	50.0	49.6	1.4176	1.4053	-0.9	NA	±20	Average RF
Bromochloromethane	50.0	50.7	0.3498	0.3549	1.4	NA	±20	Average RF
Bromodichloromethane	50.0	45.6	0.445	0.4058	-8.8	NA	±20	Average RF
Bromoform	50.0	51.2	0.3884	0.3981	2.5	NA	±20	Average RF
Bromomethane	50.0	42.7	0.4413	0.3767	-14.6	NA	±20	Average RF
Carbon Disulfide	50.0	61.3	1.1766	1.4437	22.7*	NA	±20	Average RF
Carbon Tetrachloride	50.0	43.3	0.3851	0.3334	-13.4	NA	±20	Average RF
Chlorobenzene	50.0	50.4	1.064	1.0726	0.8	NA	±20	Average RF
Chloroethane	50.0	45.7	0.444	0.4055	-8.7	NA	±20	Average RF
Chloroform	50.0	45.8	1.0722	0.8926	NA	-8.4	±20	Linear
Chloromethane	50.0	50.0	0.5808	0.5804	-0.1	NA	±20	Average RF
Cyclohexane	50.0	42.1	0.3309	0.2785	-15.8	NA	±20	Average RF
Dibromochloromethane	50.0	50.3	0.3031	0.3051	0.7	NA	±20	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	47.3	0.6748	0.638	-5.5	NA	±20	Average RF
Dichloromethane	50.0	47.7	0.58	0.5536	-4.5	NA	±20	Average RF
Ethylbenzene	50.0	49.4	0.5863	0.5791	-1.2	NA	±20	Average RF
Isopropylbenzene (Cumene)	50.0	51.5	3.3914	3.4899	2.9	NA	±20	Average RF
Methyl Acetate	50.0	52.9	0.6375	0.6741	5.7	NA	±20	Average RF
Methyl tert-Butyl Ether	50.0	48.6	1.9545	1.9004	-2.8	NA	±20	Average RF

ALS Group USA, Corp.
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QA/QC Report

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

Service Request: R2111745
Date Analyzed: 11/12/21 11:01

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\111221\K8898.D\
Signal ID: 1

Calibration Date: 9/2/2021
Calibration ID: RC2100117
Analysis Lot: 745908
Units: ppb

Methylcyclohexane	50.0	45.5	0.4629	0.421	-9.1	NA	±20	Average RF
Styrene	50.0	51.4	1.1713	1.2048	2.9	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	48.8	0.2882	0.281	-2.5	NA	±20	Average RF
Toluene	50.0	50.0	1.5183	1.518	0.0	NA	±20	Average RF
Trichloroethene (TCE)	50.0	48.0	0.3519	0.3378	-4.0	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	42.2	0.8575	0.7239	-15.6	NA	±20	Average RF
Vinyl Chloride	50.0	45.8	0.6763	0.6189	-8.5	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	48.3	0.6128	0.5915	-3.5	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	51.1	0.5372	0.5491	2.2	NA	±20	Average RF
m,p-Xylenes	100	102	0.7087	0.7254	2.4	NA	±20	Average RF
o-Xylene	50.0	50.2	0.6999	0.7032	0.5	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	49.5	0.532	0.527	-1.0	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	50.3	0.4981	0.5014	0.7	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	49.1	0.5079	0.4985	-1.9	NA	±20	Average RF
Dibromofluoromethane	50.0	50.4	0.2722	0.2746	0.9	NA	±20	Average RF
Toluene-d8	50.0	52.6	1.2794	1.3458	5.2	NA	±20	Average RF

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

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

Service Request: R2111745

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method:

Analysis Lot: 745816
Instrument ID: R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\111121\K8879.D\	ZZZZZZZ	ZZZZZZZ	11/11/2021	22:37:00	
I:\ACQUDATA\msvoa12\Data\111121\K8880.D\	Continuing Calibration Verification	RQ2114546-02	11/11/2021	22:58:00	
I:\ACQUDATA\msvoa12\Data\111121\K8881.D\	Lab Control Sample	RQ2114546-03	11/11/2021	23:20:00	
I:\ACQUDATA\msvoa12\Data\111121\K8884.D\	Method Blank	RQ2114546-04	11/12/2021	00:26:00	
I:\ACQUDATA\msvoa12\Data\111121\K8885.D\	Trip Blank	R2111745-021	11/12/2021	00:47:00	
I:\ACQUDATA\msvoa12\Data\111121\K8886.D\	MW-08	R2111745-001	11/12/2021	01:09:00	
I:\ACQUDATA\msvoa12\Data\111121\K8887.D\	MW-8A	R2111745-002	11/12/2021	01:31:00	
I:\ACQUDATA\msvoa12\Data\111121\K8888.D\	MW-14A	R2111745-003	11/12/2021	01:52:00	
I:\ACQUDATA\msvoa12\Data\111121\K8889.D\	MW-26	R2111745-004	11/12/2021	02:14:00	
I:\ACQUDATA\msvoa12\Data\111121\K8890.D\	MW-26A	R2111745-005	11/12/2021	02:36:00	
I:\ACQUDATA\msvoa12\Data\111121\K8891.D\	MW-9A	R2111745-006	11/12/2021	02:58:00	
I:\ACQUDATA\msvoa12\Data\111121\K8892.D\	MW-9	R2111745-007	11/12/2021	03:19:00	
I:\ACQUDATA\msvoa12\Data\111121\K8893.D\	MW-7	R2111745-008	11/12/2021	03:41:00	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

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

Service Request: R2111745

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method:

Analysis Lot: 745908
Instrument ID: R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\111221\K8897.D\	ZZZZZZZ	ZZZZZZZ	11/12/2021	10:30:00	
I:\ACQUDATA\msvoa12\Data\111221\K8898.D\	Continuing Calibration Verification	RQ2114594-02	11/12/2021	11:01:00	
I:\ACQUDATA\msvoa12\Data\111221\K8899.D\	Lab Control Sample	RQ2114594-03	11/12/2021	11:27:00	
I:\ACQUDATA\msvoa12\Data\111221\K8902.D\	Method Blank	RQ2114594-04	11/12/2021	12:47:00	
I:\ACQUDATA\msvoa12\Data\111221\K8903.D\	ZZZZZZZ	ZZZZZZZ	11/12/2021	13:15:00	
I:\ACQUDATA\msvoa12\Data\111221\K8904.D\	ZZZZZZZ	ZZZZZZZ	11/12/2021	13:36:00	
I:\ACQUDATA\msvoa12\Data\111221\K8905.D\	ZZZZZZZ	ZZZZZZZ	11/12/2021	13:58:00	
I:\ACQUDATA\msvoa12\Data\111221\K8907.D\	MW-15A	R2111745-014	11/12/2021	14:42:00	
I:\ACQUDATA\msvoa12\Data\111221\K8908.D\	MW-25A	R2111745-015	11/12/2021	15:04:00	
I:\ACQUDATA\msvoa12\Data\111221\K8909.D\	MW-11	R2111745-019	11/12/2021	15:26:00	
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Analysis: 5360 Waters Analyst: VBurst pH strips: 205521 Tune Method: h09021
 Date: 11/11/21 Balance ID: 21A Resol strips: N/A Run Method: ↓
 Instr. 12 50 mL Class A used for dilution FV Syringes: 217091 LIMS Run#: 745816
 Data Path: \\acquadalmvof\inst\ID\Date

Pos.	Sample	Diln.	Diln. Prep./	RL	Tier	Vial	pH	File#	OK?	Comments
27	TYPE									
28	CCV							Y5879	Y	22:37 (amb)
29	LCS.FP							Y5880	Y	
30	BAL							Y5881	Y	
31	MBLK.ump							Y5882	Y	ADT-15
32	MBLK.FP							Y5883	Y	
33	P2111745.004	1.0	021 (VB)	8043	4	1	22	Y5884	Y	
34		001	1.0					Y5885	Y	
35		002	1.0					Y5886	Y	
36		003	1.0					Y5887	Y	
37		004	1.0					Y5888	Y	
38		005	1.0					Y5889	Y	
39		006	1.0					Y5890	Y	
40		007	1.0					Y5891	Y	
41		008	1.0					Y5892	Y	
42		014	1.0					Y5893	Y	3:41
43		015	1.0					Y5894	Y	3:41
44		019	1.0					Y5895	Y	3:41
45		010	1.0					Y5896	Y	3:41
46		018	1.0					Y5897	Y	3:41
47		020	1.0					Y5898	Y	3:41
48		011	2.0					Y5899	Y	3:41
49		012	5.0					Y5900	Y	3:41
50		016	10					Y5901	Y	3:41
51		009	50					Y5902	Y	3:41
52		013	250					Y5903	Y	3:41
53		M5 016	1.0					Y5904	Y	3:41
54		M5 018	1.0					Y5905	Y	3:41
55		BAL						Y5906	Y	3:41

All samples = 5 mL + 5 uL combined IS/Surr. 5 mL purged
 200 Primary Oct : 219767 1.5 uL
 Primary Fr+ : 220110 → 30mL
 Primary T6 : 220246 = ccv
 Primary H2 : 220288
 Primary :
 200 Secondary Fr+ : 220206 5mL
 Secondary Oct : 219768 30mL
 Secondary T6 : 220298 30mL
 Secondary H2 : 220111 = LCS
 Secondary :
 Combined IS/Surr
 Surrogate SD : 220264
 Internal Std : 220265
 Reagents:

Analysis: 826010044 Analyst: K. West pH strips: 205501 Tune Method: W090201
 Date: 11/12/2010 (Wed) Balance ID: N/A ResCl strips: N/A Run Method: L
 Instr: 21 50 mL Class A used for dilution FV Syringes: 217091 LIMS Run#: 745908

Pos.	Sample	Diln.	Diln. Prep./	RL	Tier	Vial	pH	File#	OK?	Comments
1	Spent CV							Y4845		
2	BUL							Y4846		
3	NVE							Y4847		(auto) 10:30
1	CV							Y4848		
1	LC-6P							Y4849		
2	MULL. WMP							Y4850		Wt 10
3	MULL. FP							Y4851		Wt 10
1	P211703-012	1.0		6056	4	1	12	Y4852		
2	↓	2.0	35/50mbs	↓	2	2	12	Y4853	(Y)	(D) TCFM
3	BUL	1000	1/100 → 5/50mbs	6044	2	2	12	Y4854	(Y)	(D) Wt 10 + THF
4	BUL							Y4855		
5	P211745-014	1.0		6043	4	2	12	Y4856		
6	015	1.0				1	12	Y4857		
7	019	1.0				1	12	Y4858		formy - dil OK
8	010	1.0				1	12	Y4859		
9	018	1.0				1	12	Y4860		
10	020	1.0				1	12	Y4861	(D)	Wt 10
11	011	2.0	35/50mbs			1	12	Y4862		
12	017	2.5	30/50mbs			1	12	Y4863	(Y)	Wt 10 cis 100C
13	012	5.0	10/50mbs			1	12	Y4864		
14	016	1.0	5/50mbs			1	12	Y4865		
15	009	5.0	1/50mbs			1	12	Y4866	(D)	Wt 1.0
16	022	100	1/100mbs			1	12	Y4867		
17	013	250	1/250mbs	↓	↓	1	12	Y4868		
18	BUL							Y4869		
19	020	1.0		6043	4	2	12	Y4870		
20	009	1.0				2	12	Y4871		
21	017	1.0	5/50mbs			2	12	Y4872		
22	M5	1.0				3	12	Y4873	(Y)	(D) cis 100C
23	M5D 018	1.0				3	12	Y4874		
24	MSA HWH 5TD					3	12	Y4875		21:15 ✓

All samples = 5 mL + 5 mL combined IS/Sur. 5 mL purged

SMD Primary Oct: 210767
 Primary K+: 220110
 Primary T6: 220266
 Primary HSL: 220228
 Primary

SMD Secondary Oct: 220200
 Secondary K+: 210768
 Secondary T6: 220228
 Secondary HSL: 220111
 Secondary

Combined IS/Sur: 220204
 Surrogate SD: 220205
 Internal Std SD: 220205
 Reagents:

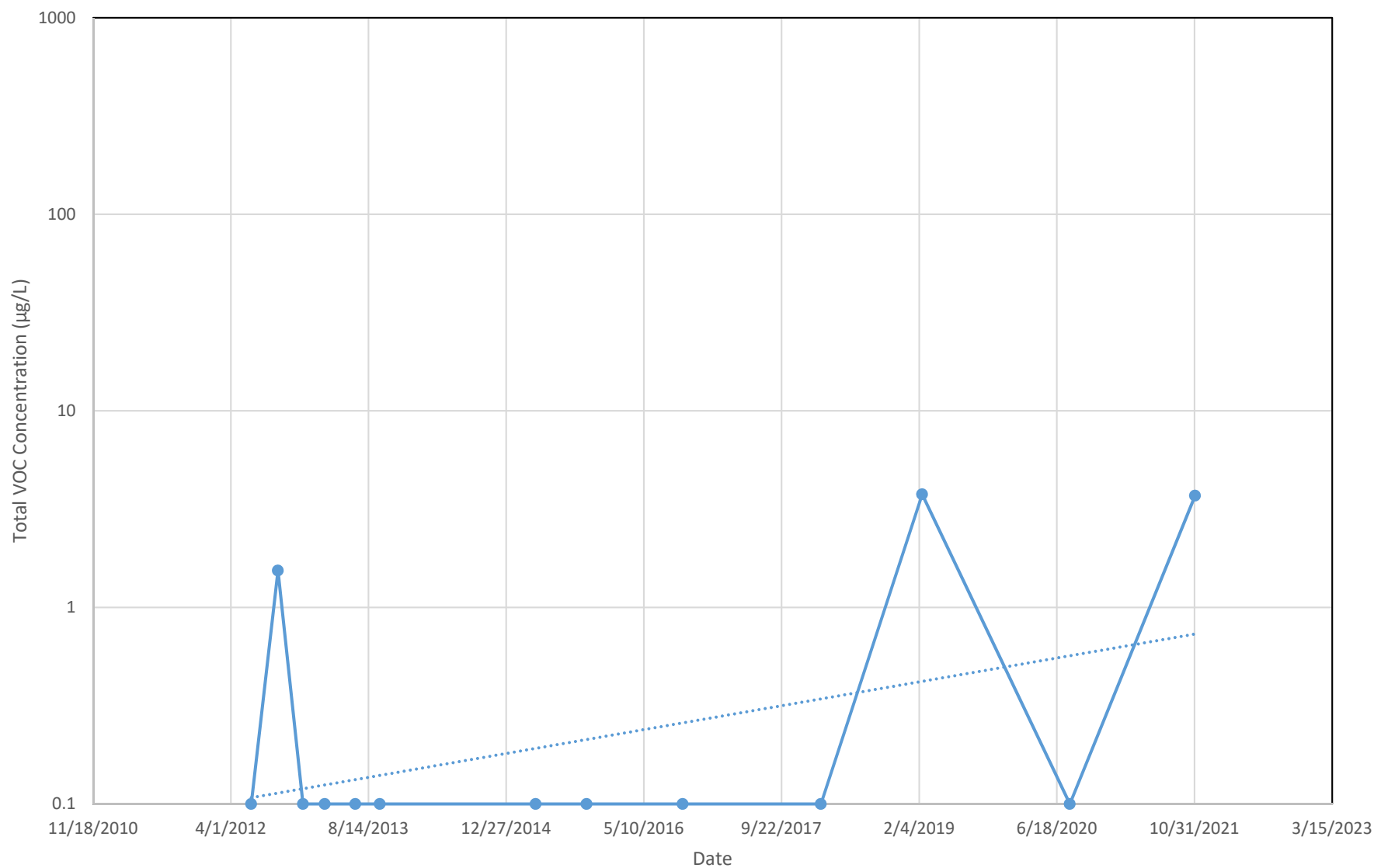
(25) BUL - 16987
 4 mls used = msl

Appendix E
Data Usability Summary Reports
(Will be provided upon completion)

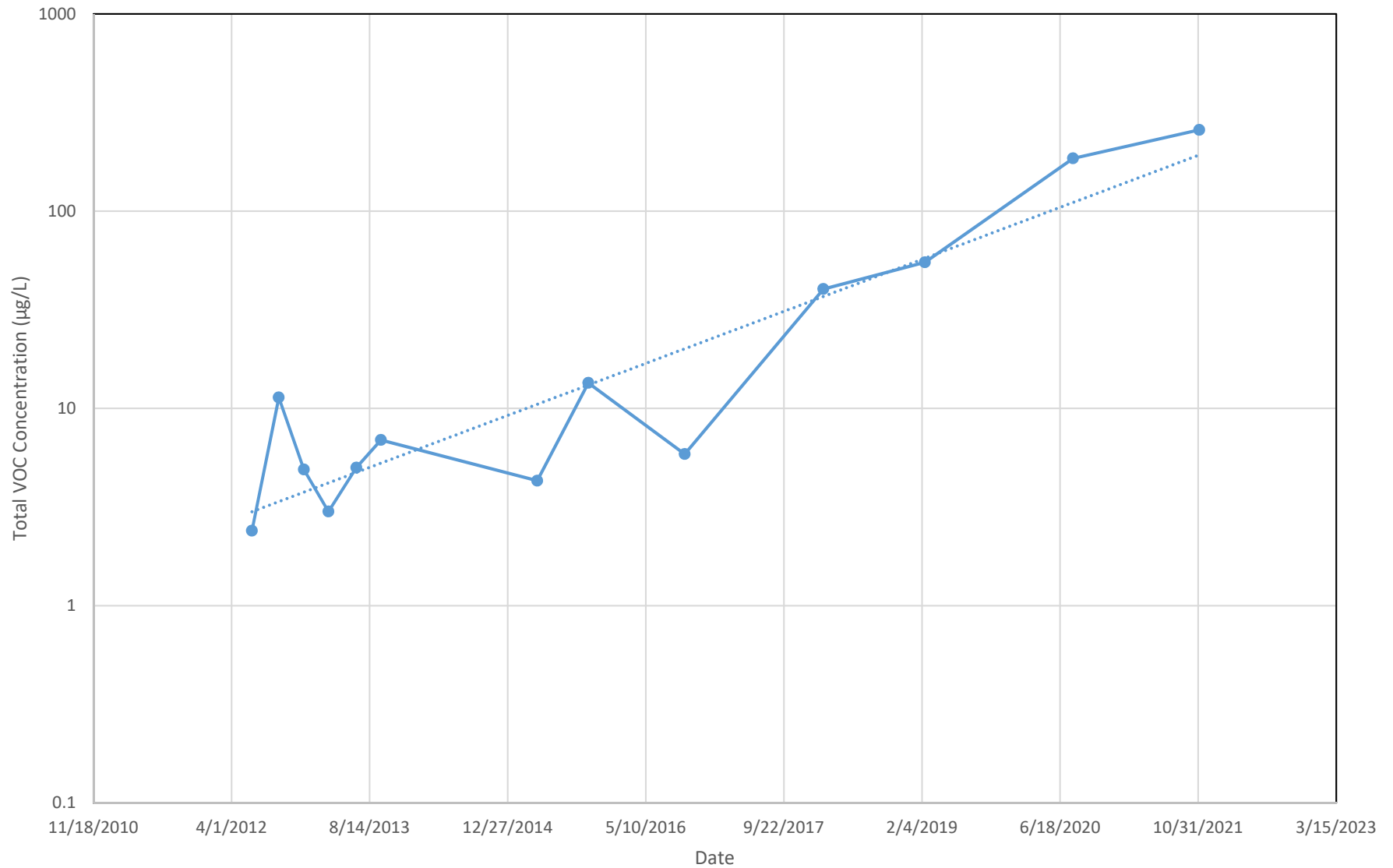
Appendix F

Concentration versus Time Plots for Contaminants of Concern

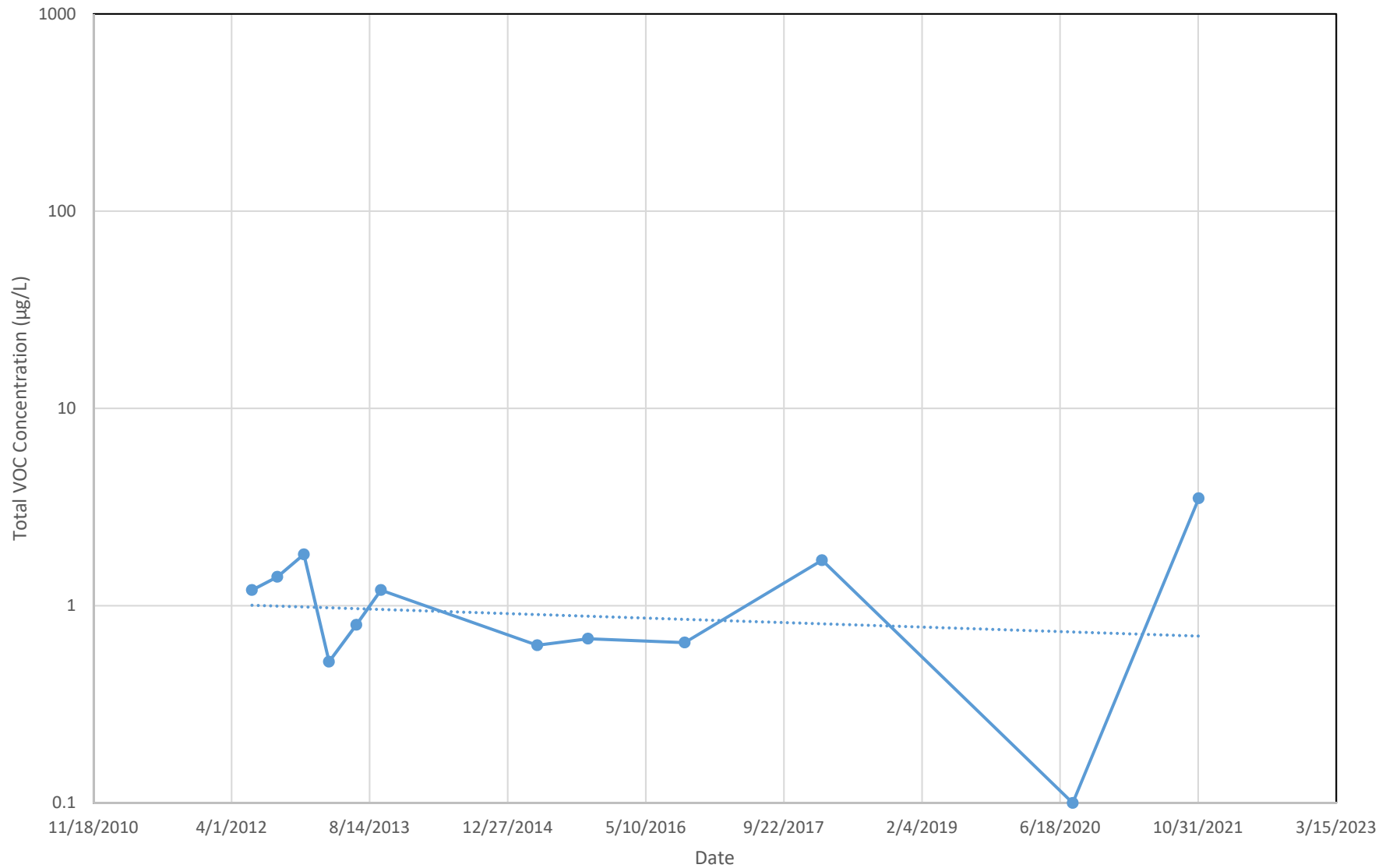
Monitoring Well MW-7
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



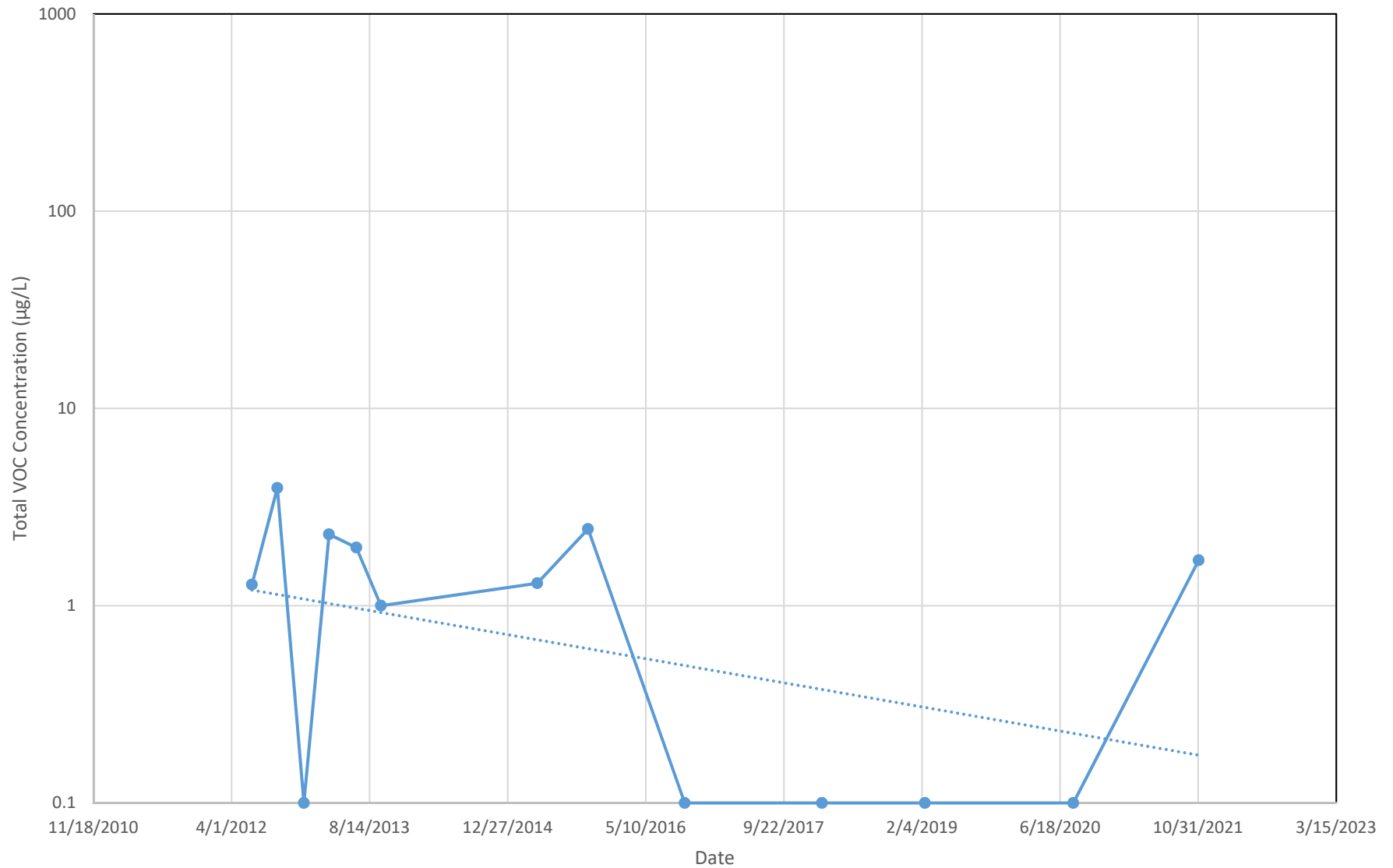
Monitoring Well MW-7A
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



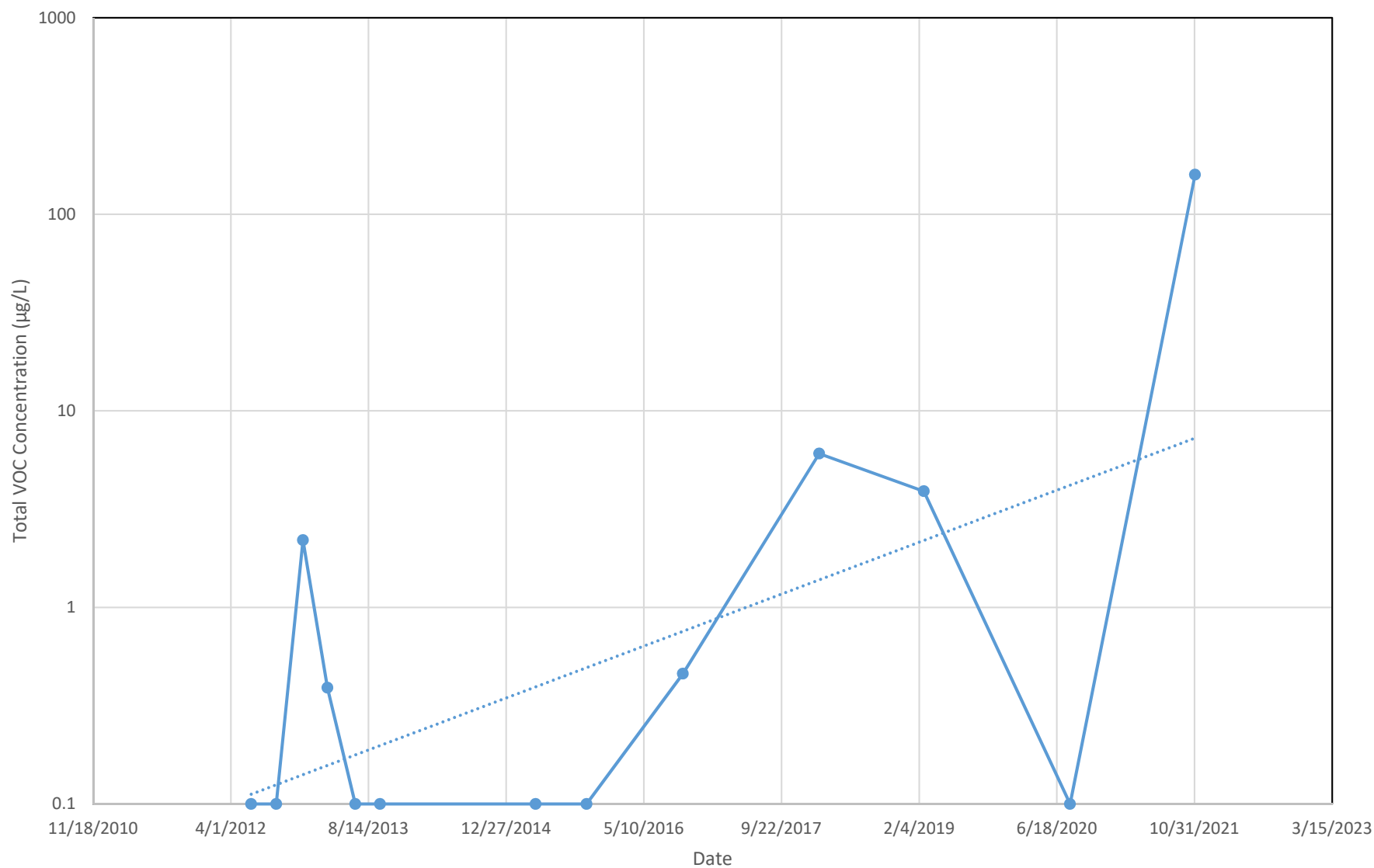
Monitoring Well MW-8
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



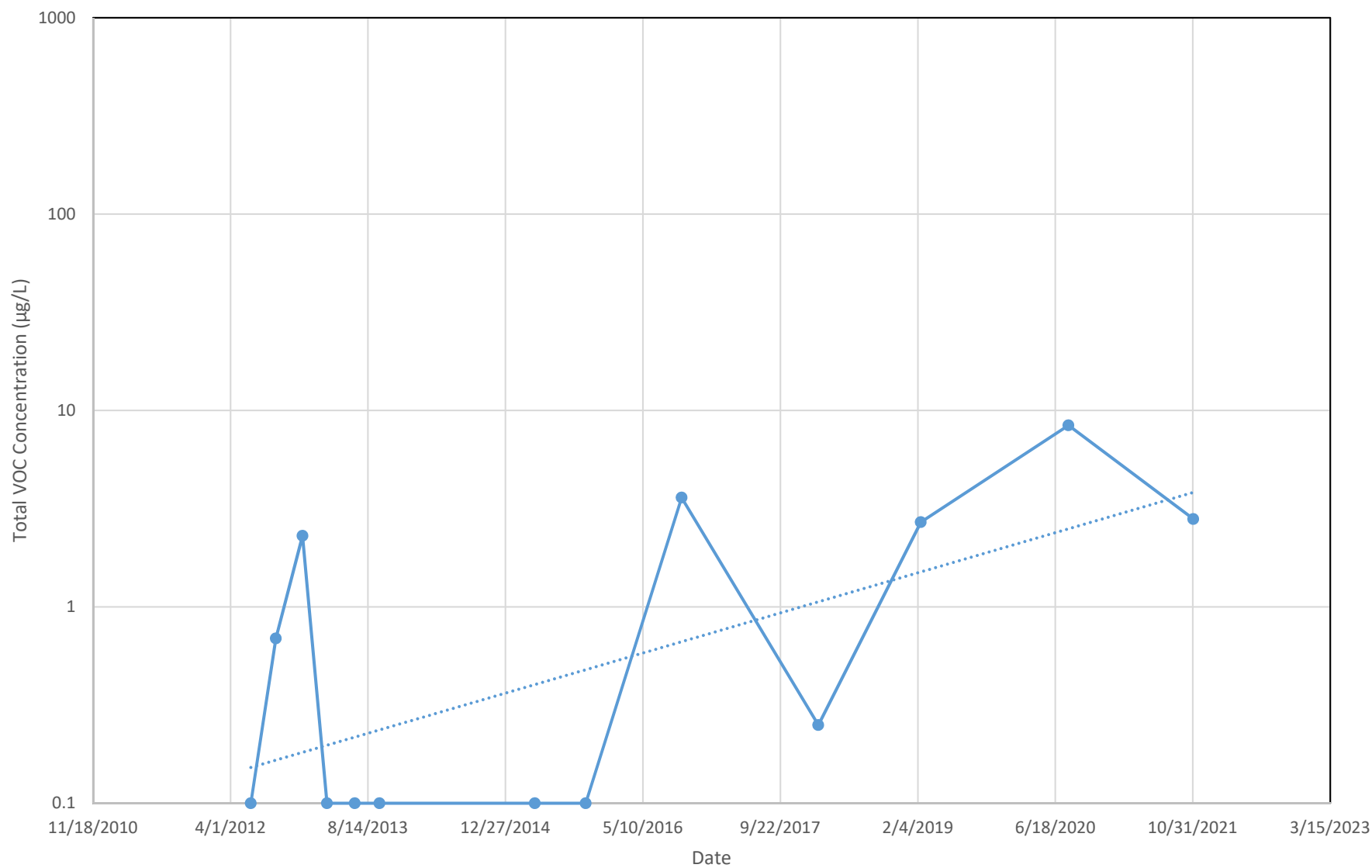
Monitoring Well MW-8A
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



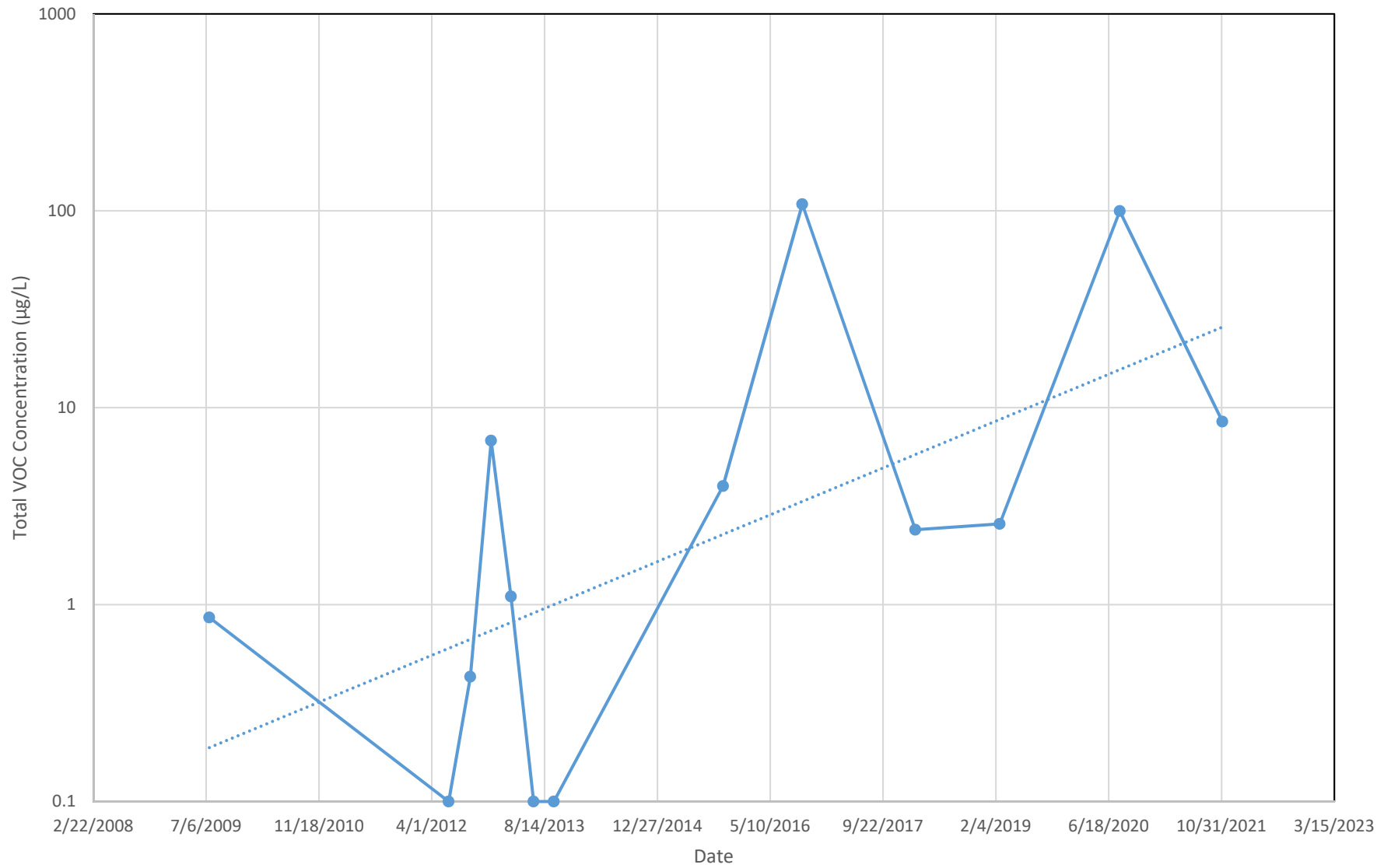
Monitoring Well MW-9
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



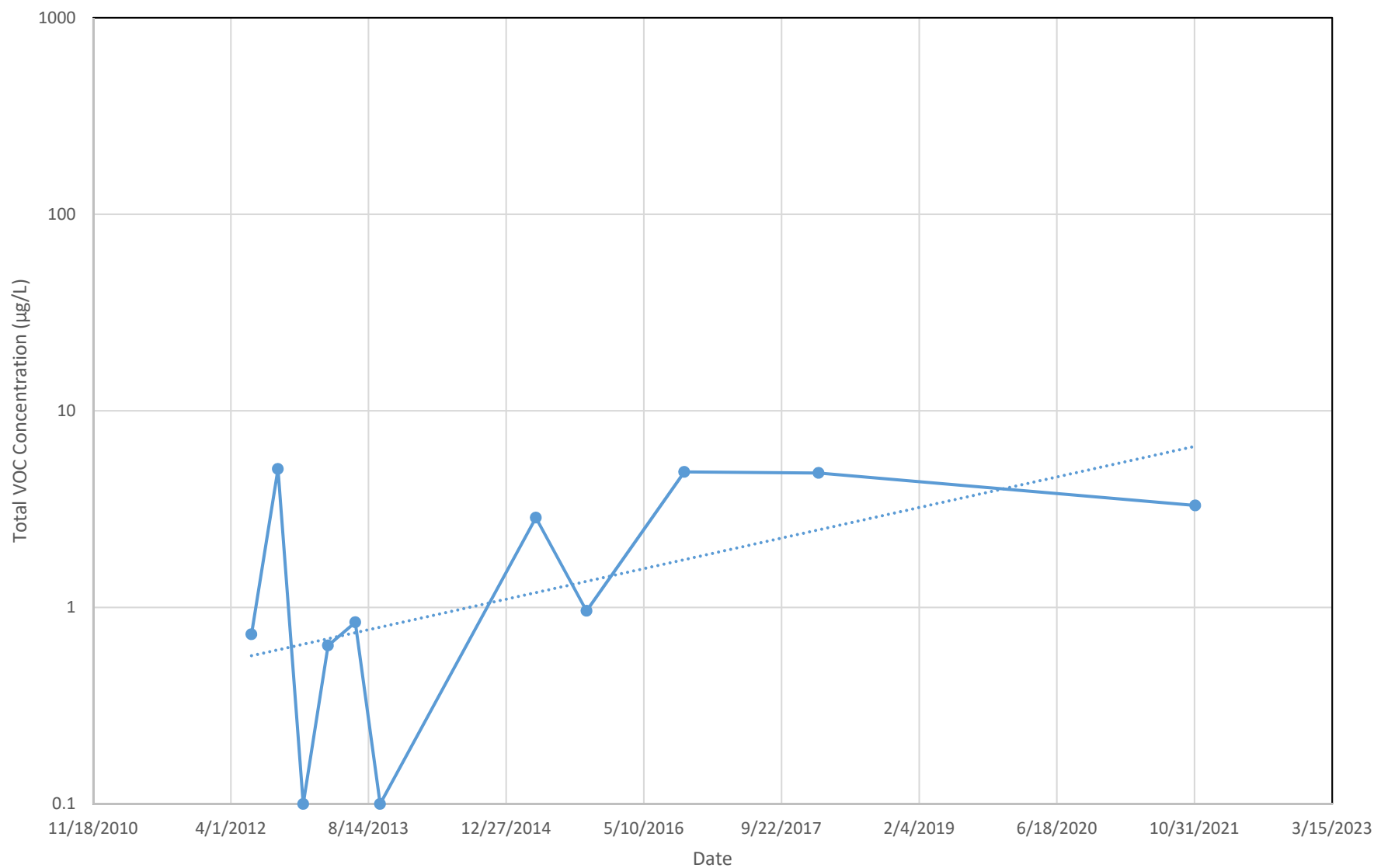
Monitoring Well MW-9A
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



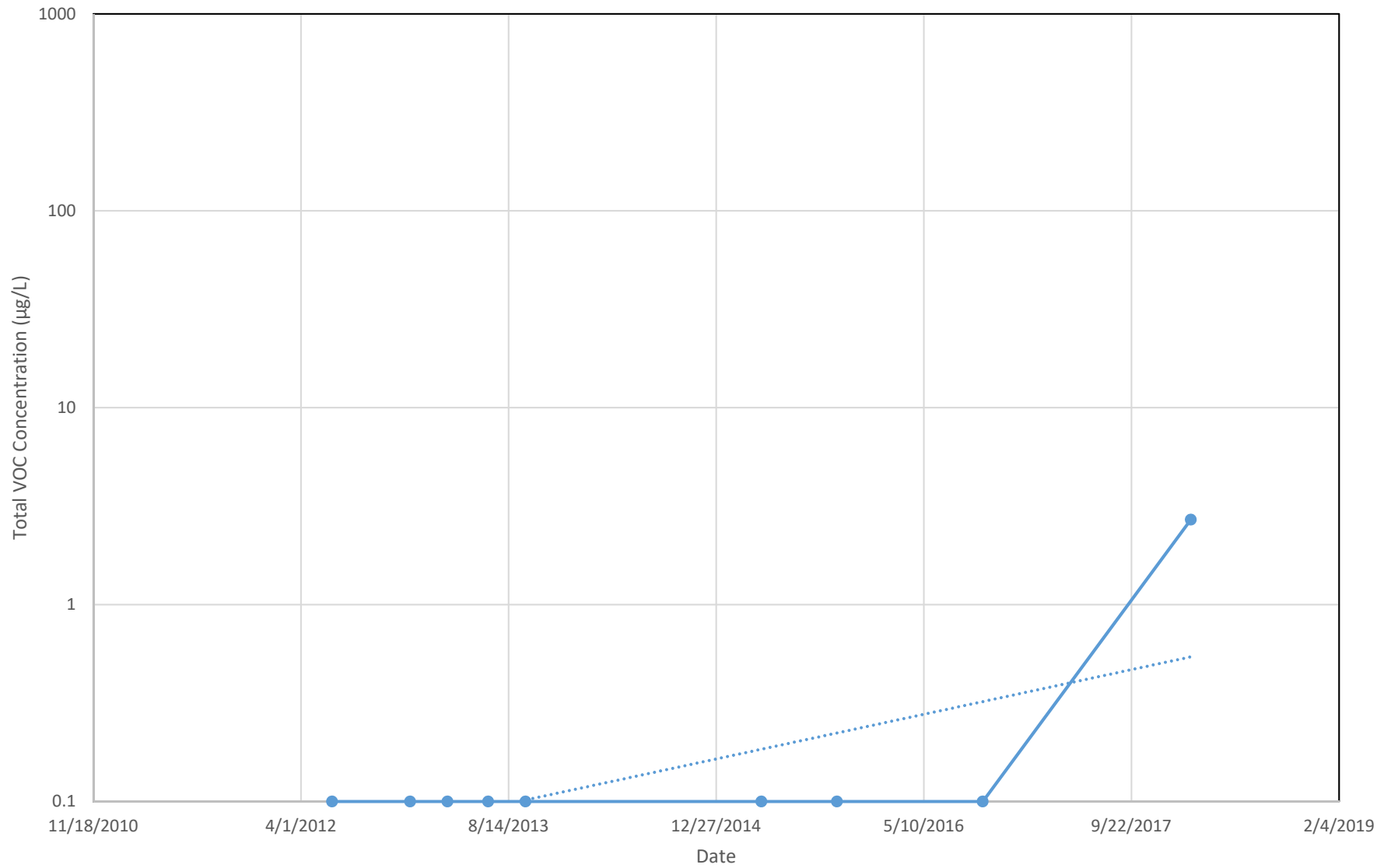
Monitoring Well MW-10
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



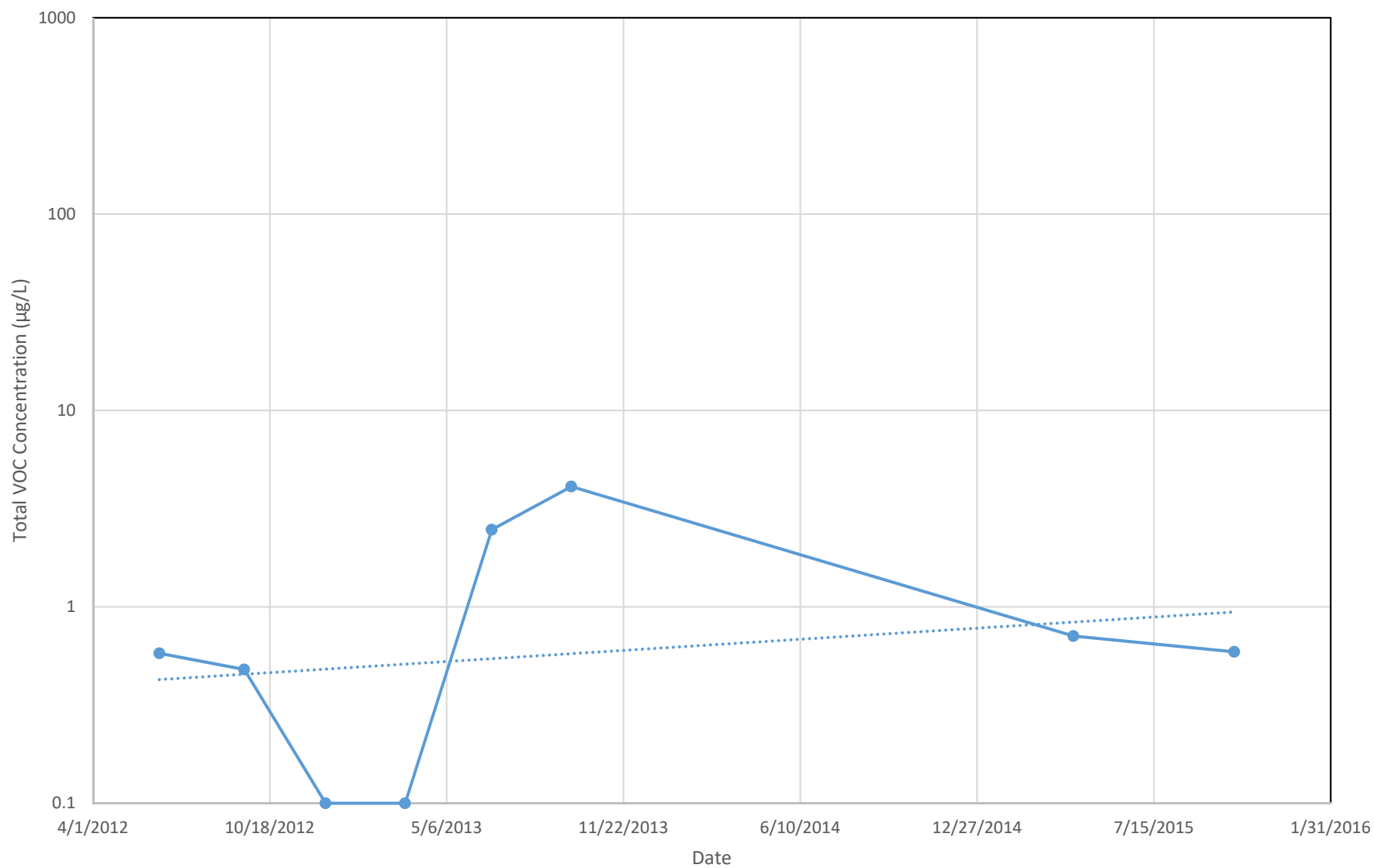
Monitoring Well MW-15A
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



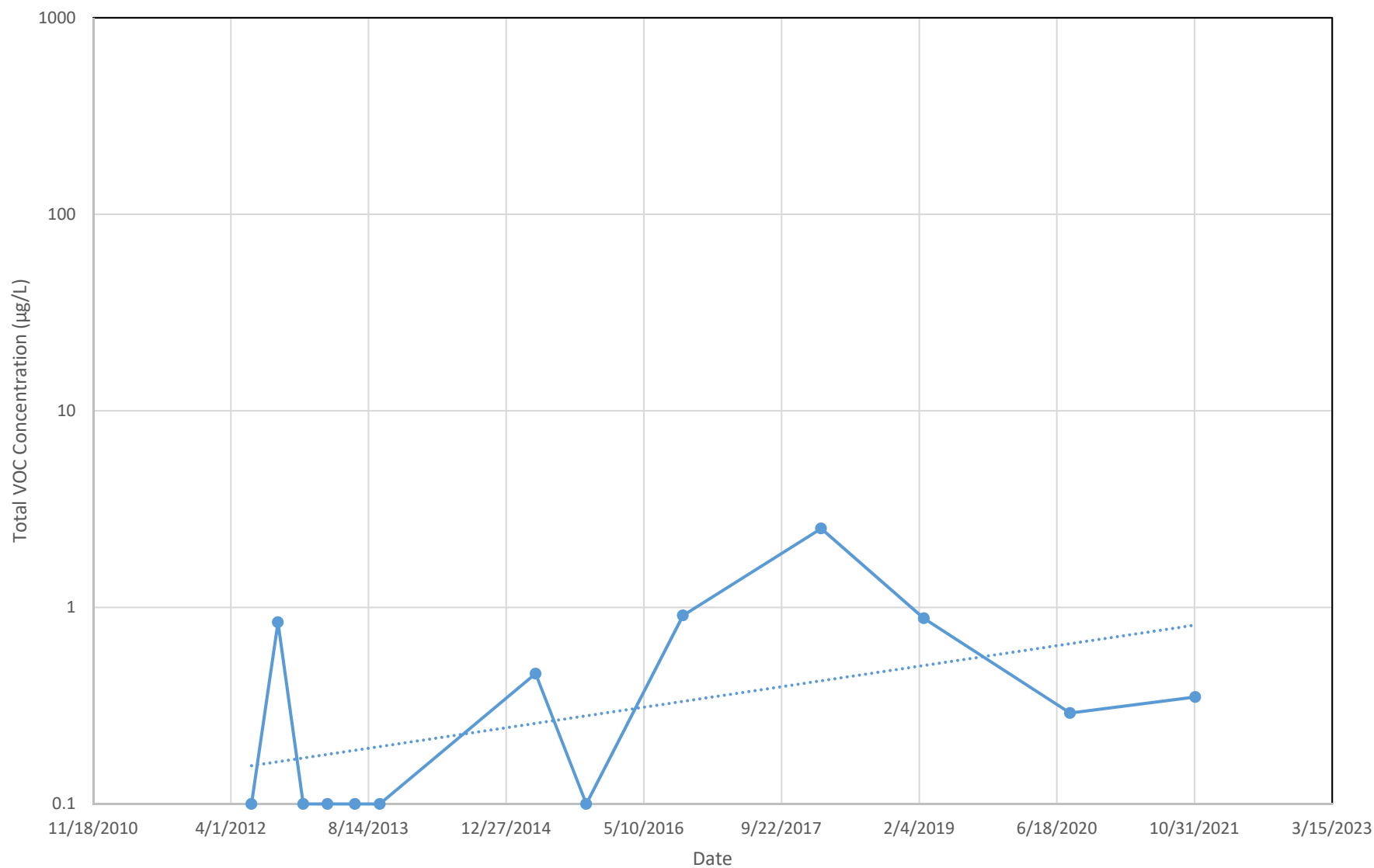
Monitoring Well MW-22
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



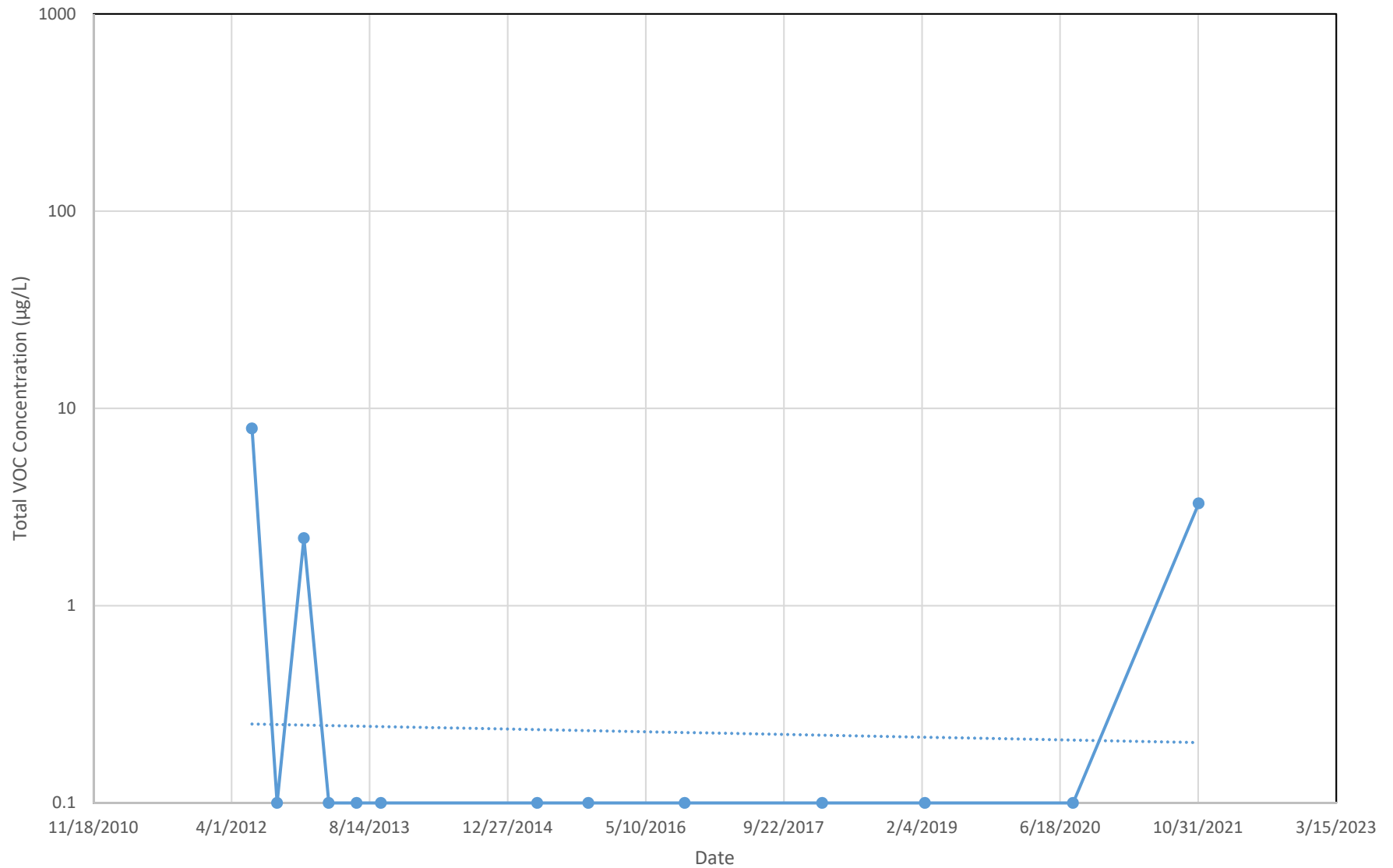
Monitoring Well MW-22A
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



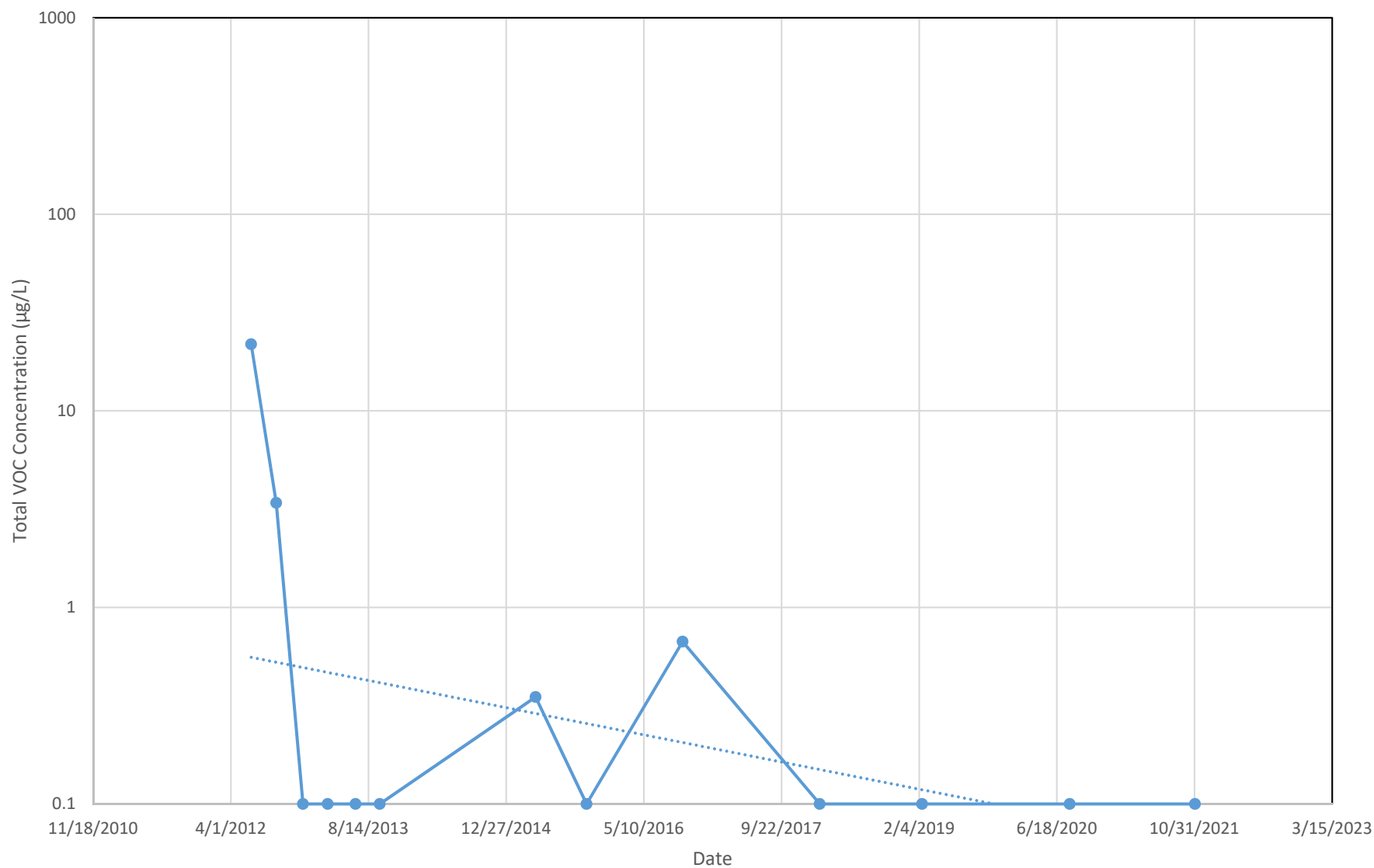
Monitoring Well MW-25A
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



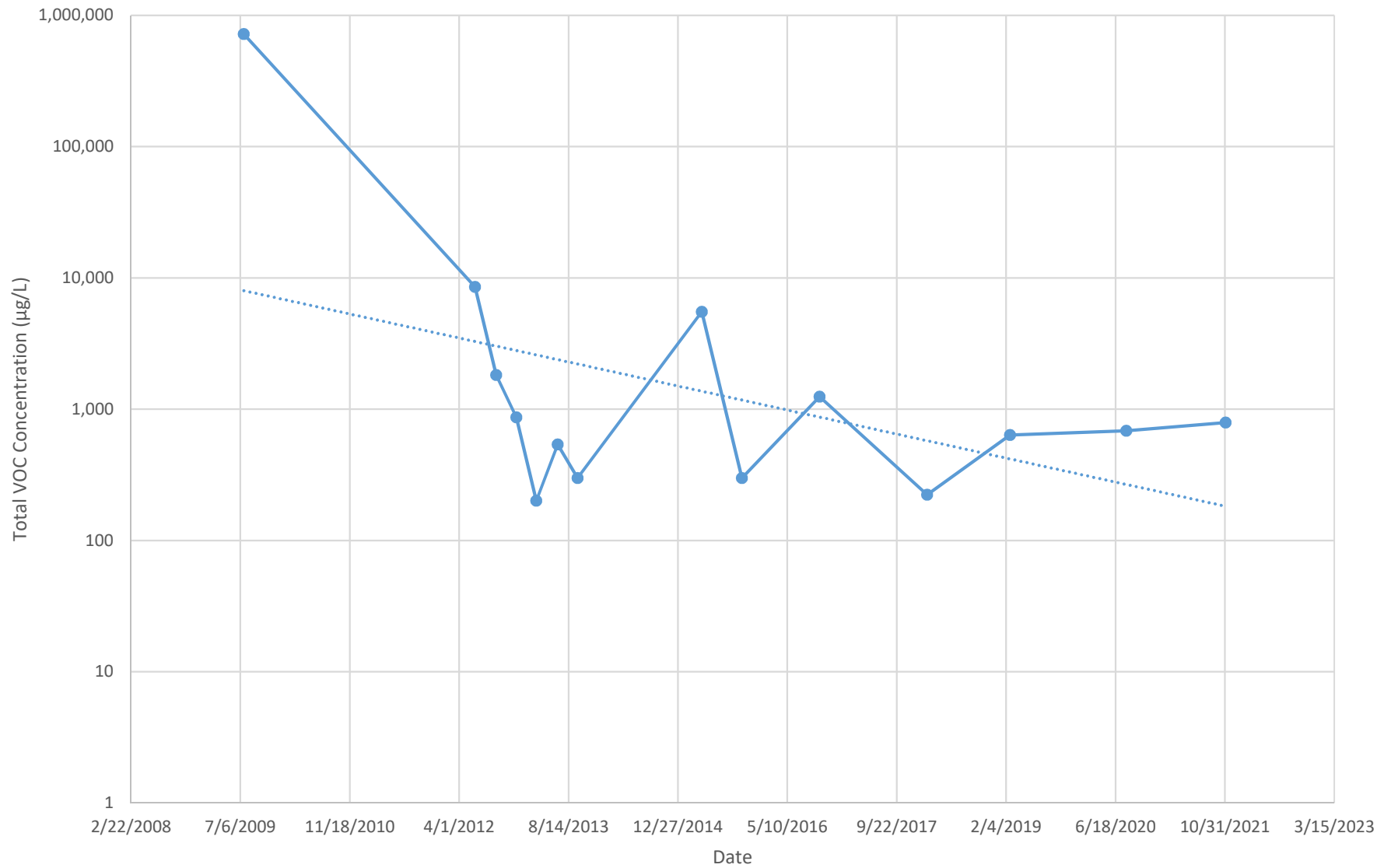
Monitoring Well MW-26
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



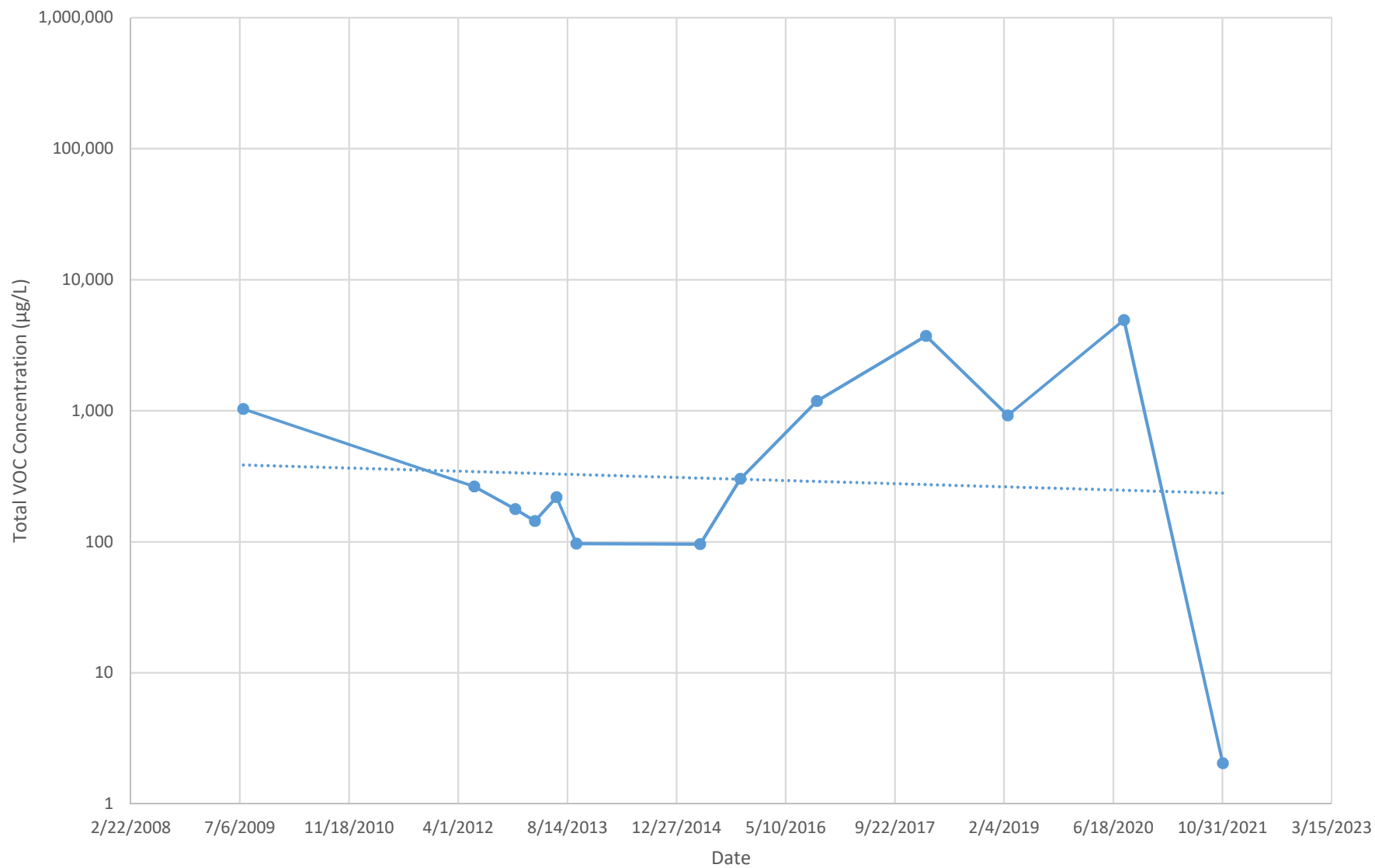
Monitoring Well MW-26A
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



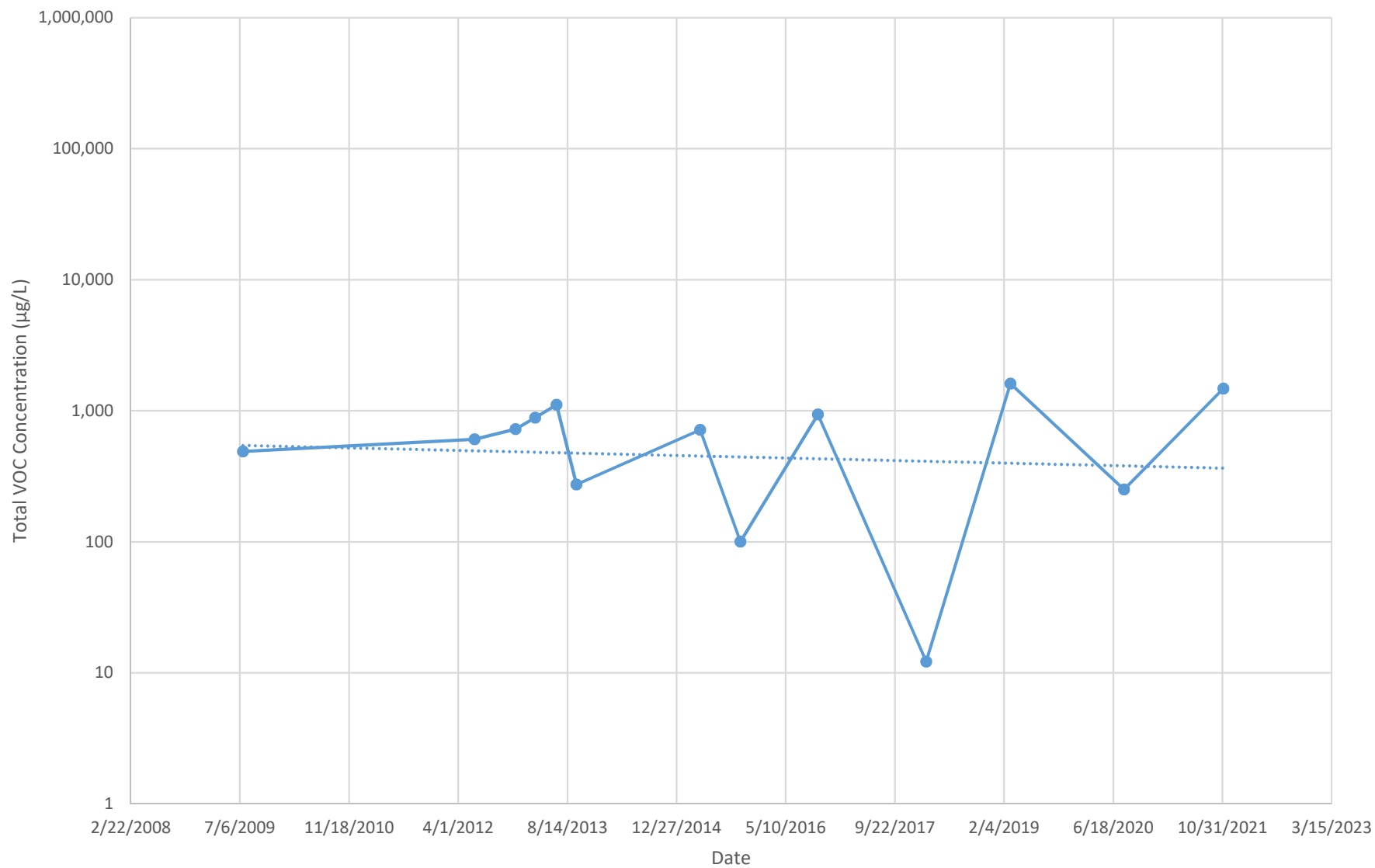
Monitoring Well MW-5R
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



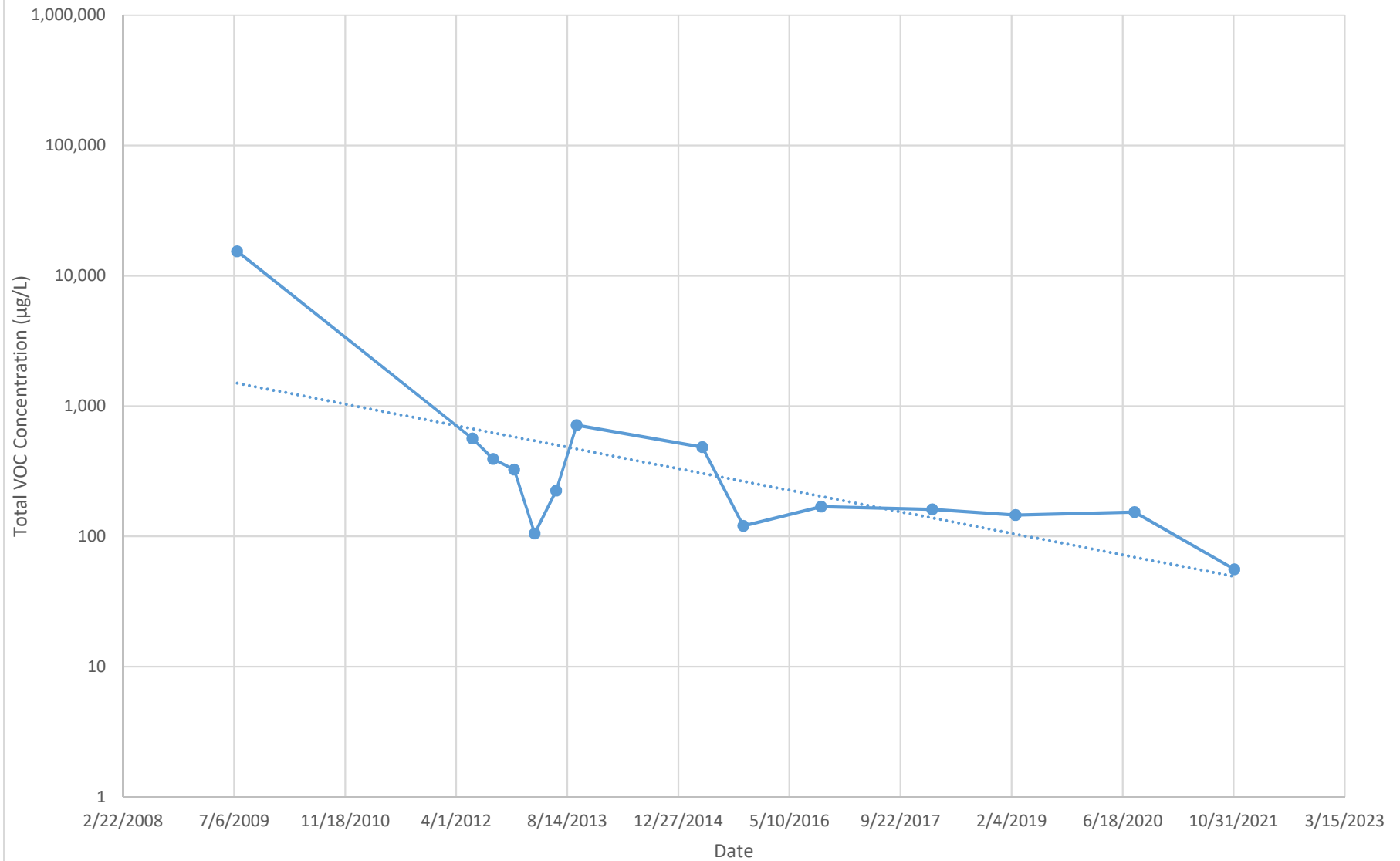
Monitoring Well MW-6
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



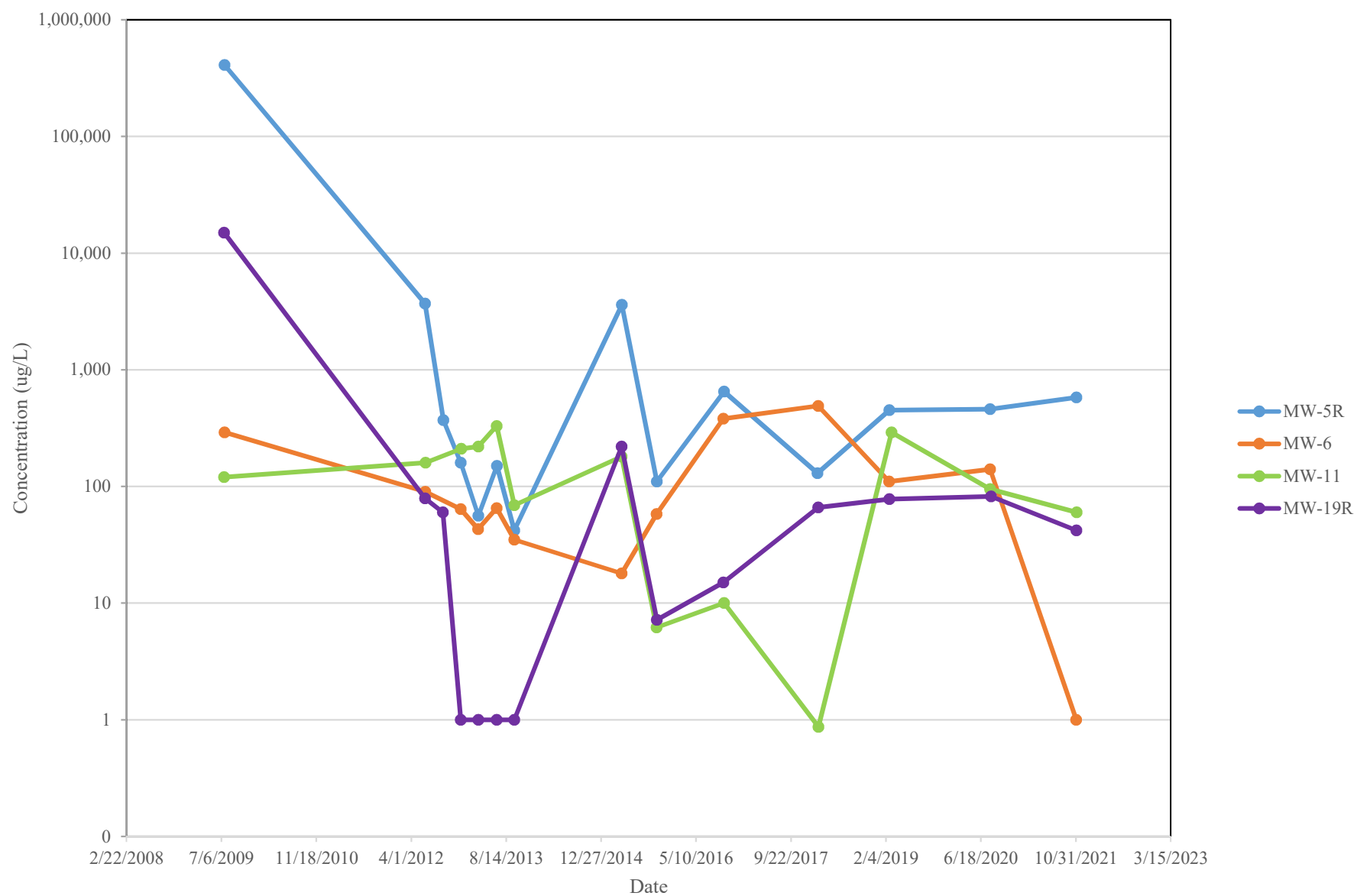
Monitoring Well MW-11
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



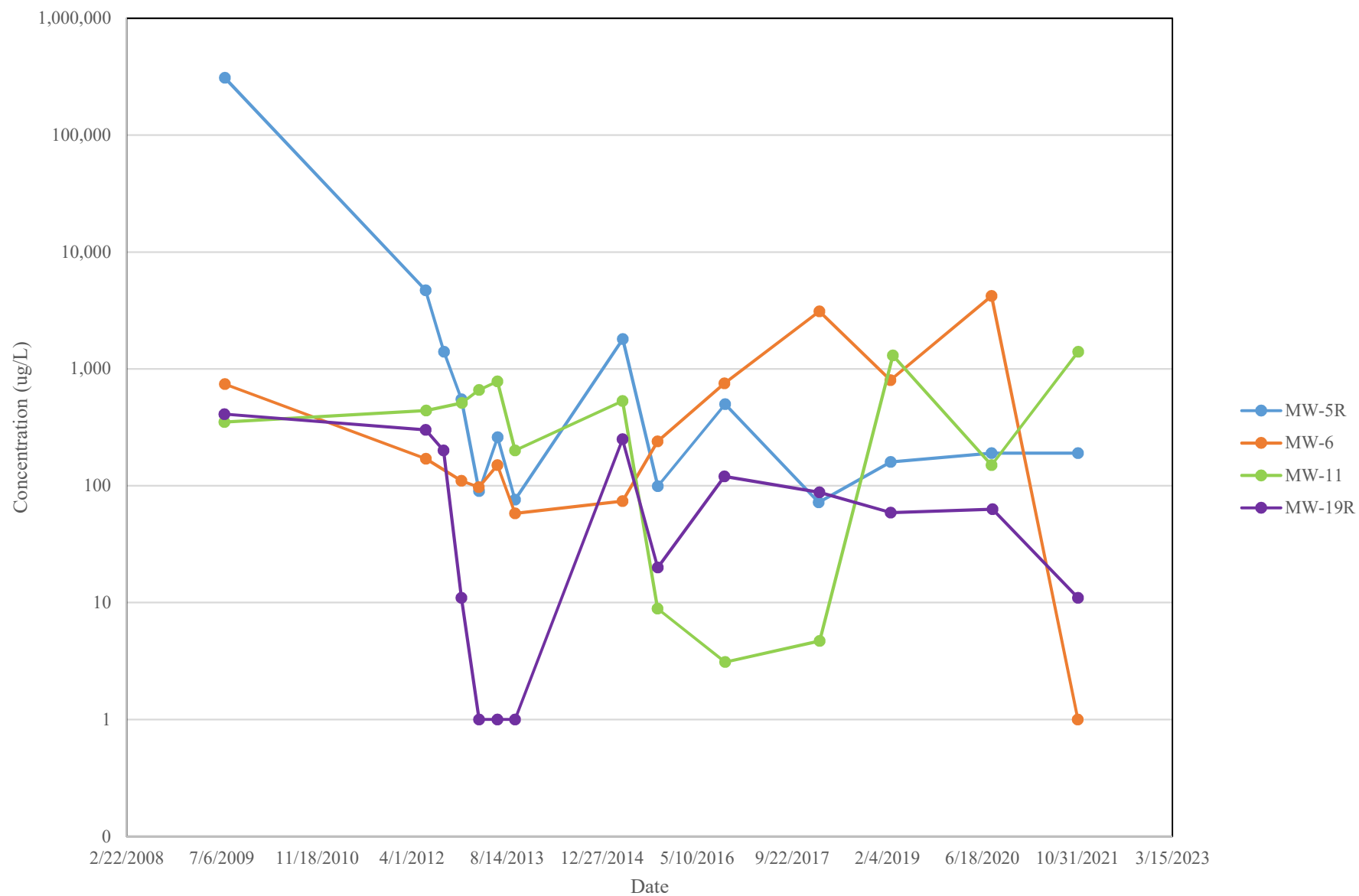
Monitoring Well MW-19R
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



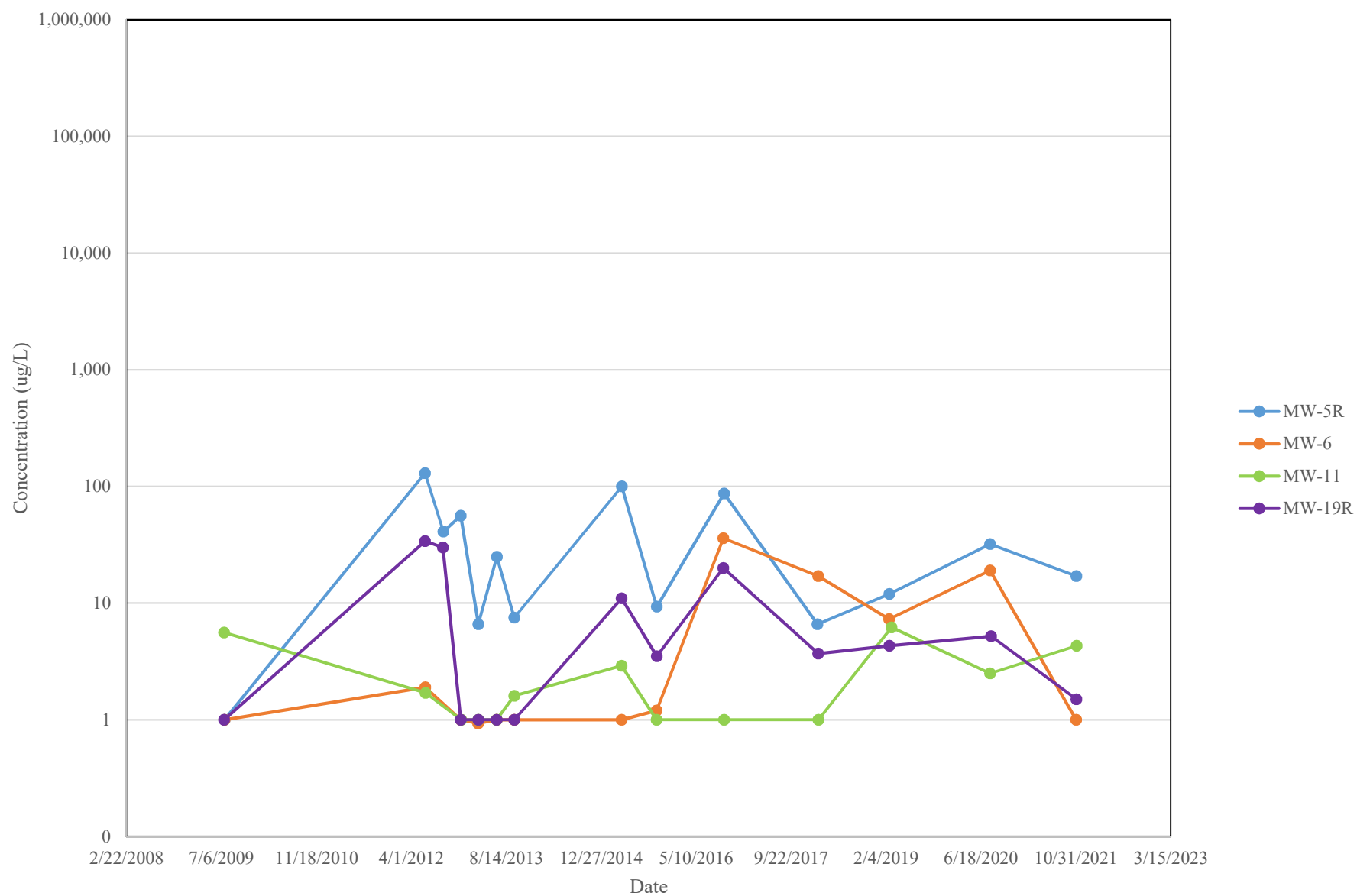
Trichloroethene Concentration Versus Time in Overburden Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report



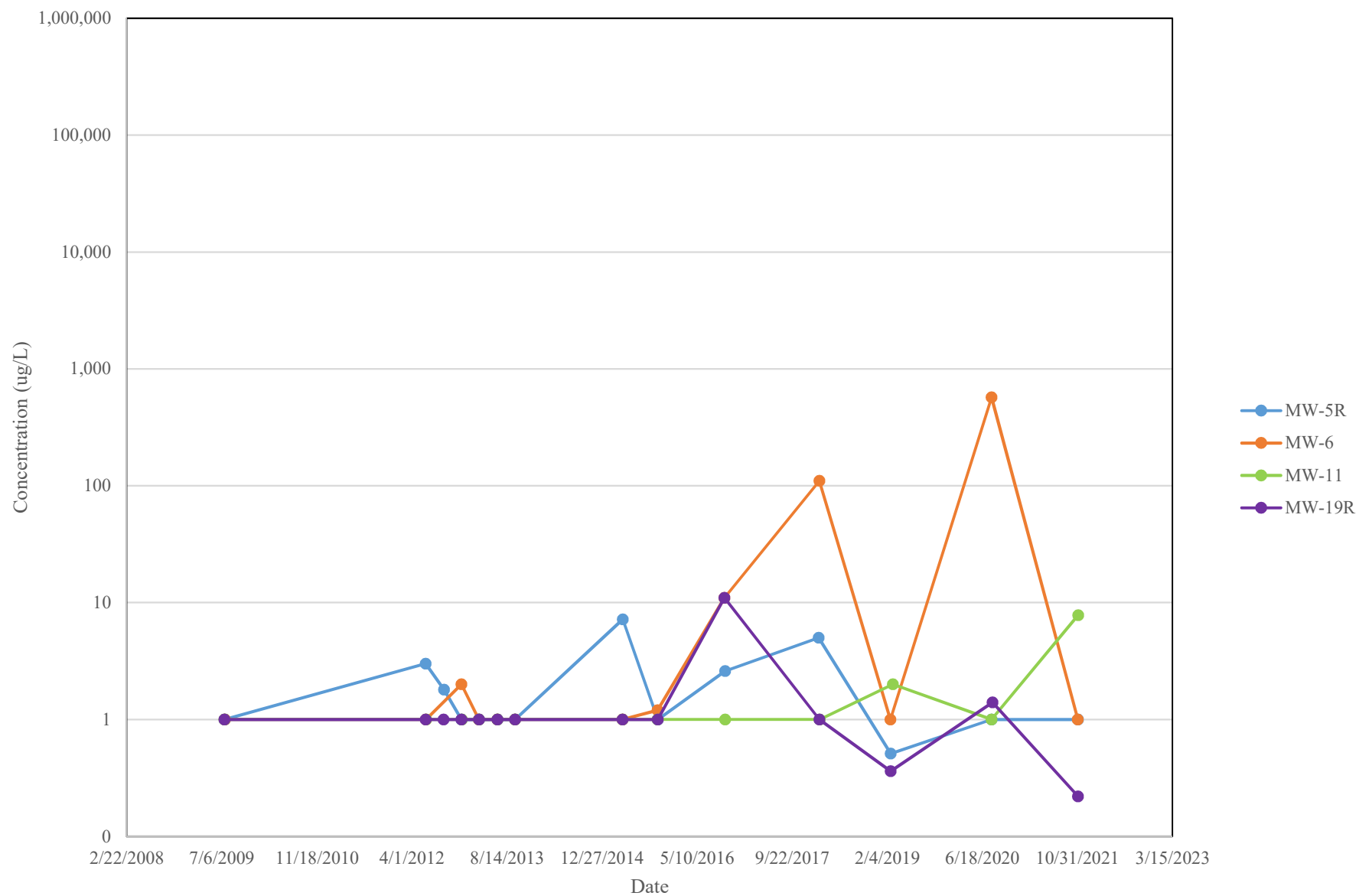
cis-1,2-Dichloroethene Concentration Versus Time in Overburden Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report



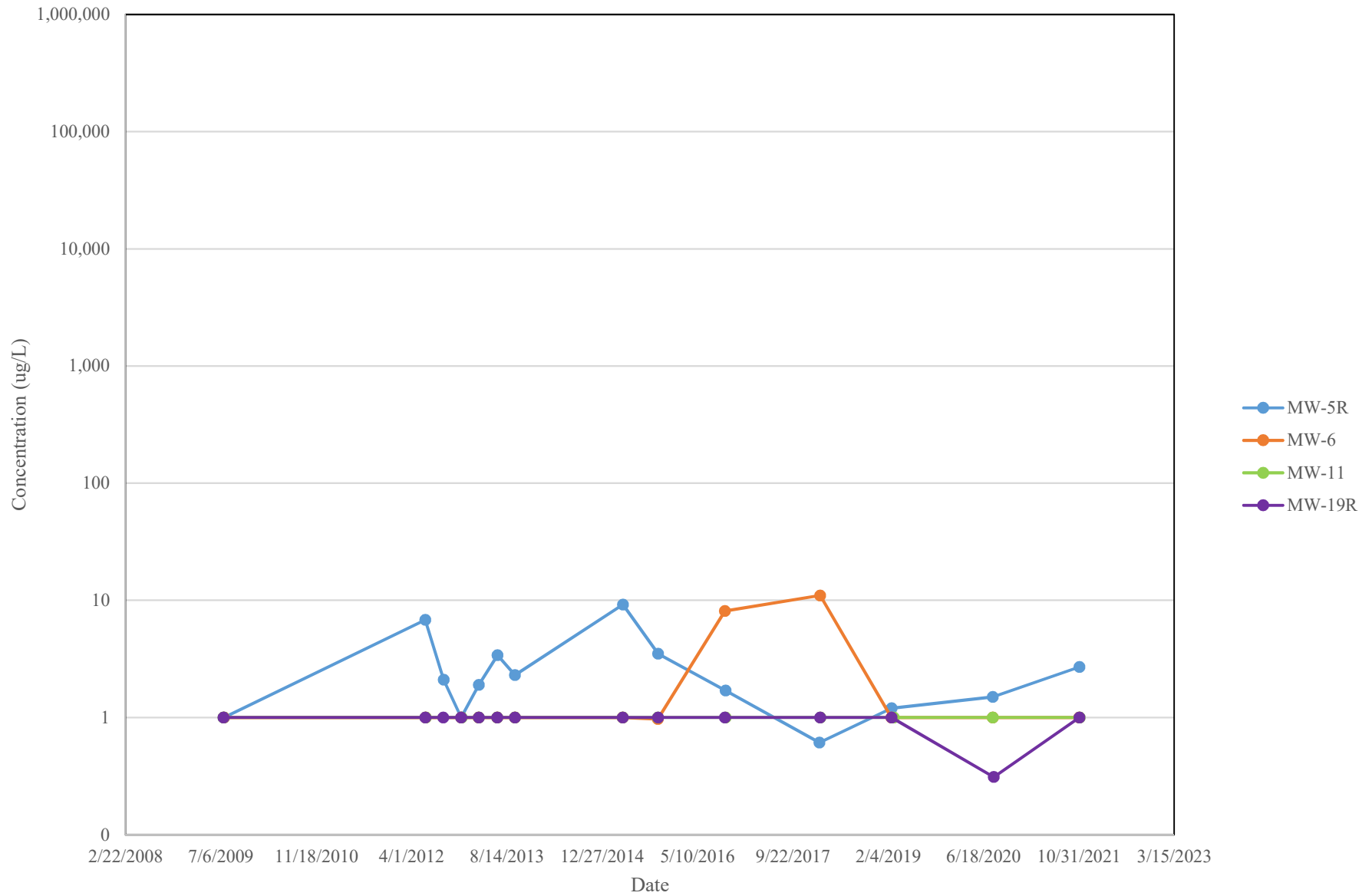
trans-1,2-Dichloroethene Concentration Versus Time in Overburden Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report



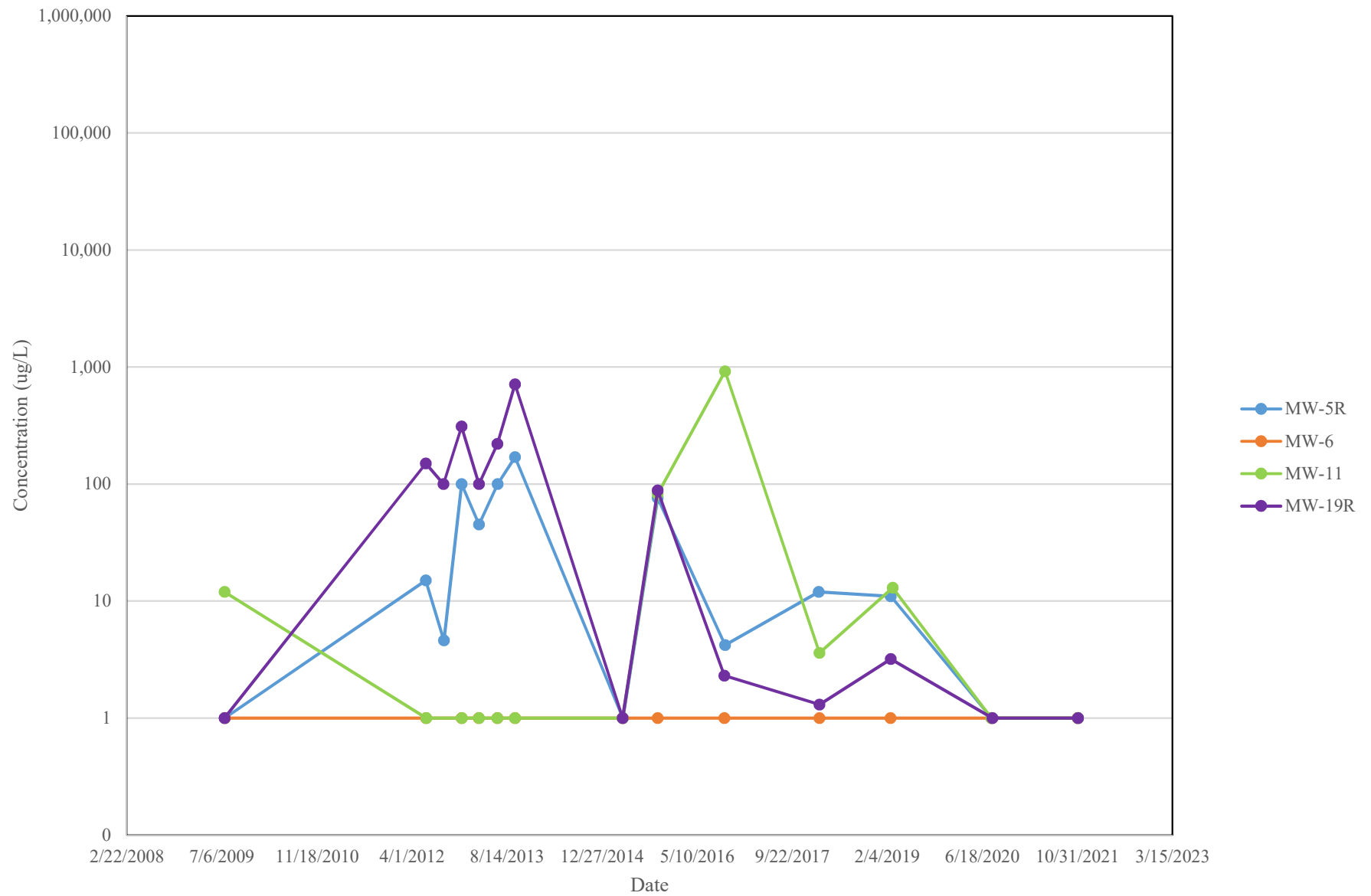
Vinyl Chloride Concentration Versus Time in Overburden Plume Wells Former Buffalo China Site (C915209) Periodic Review Report



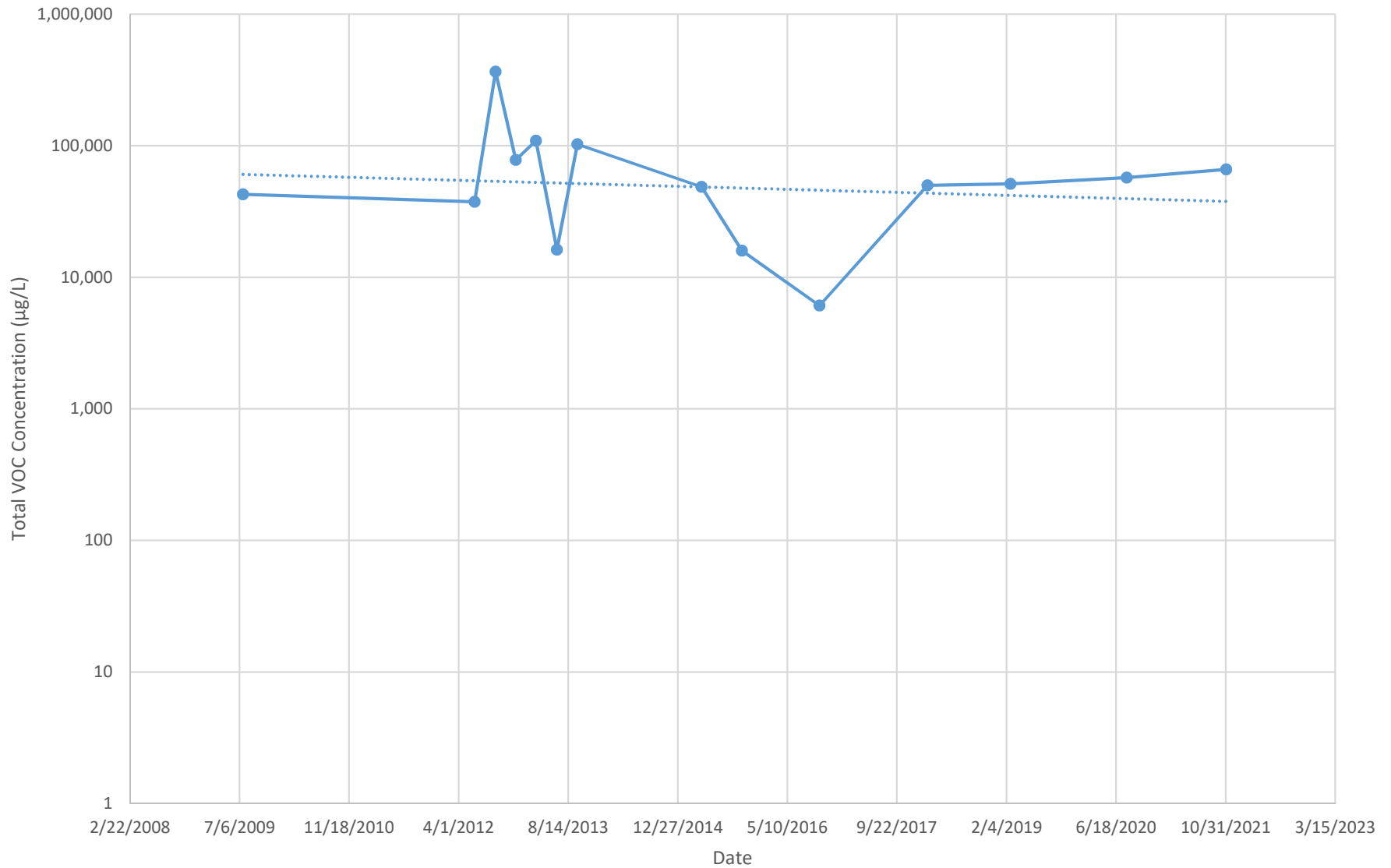
Tetrachloroethene Concentration Versus Time in Overburden Plume Wells Former Buffalo China Site (C915209) Periodic Review Report



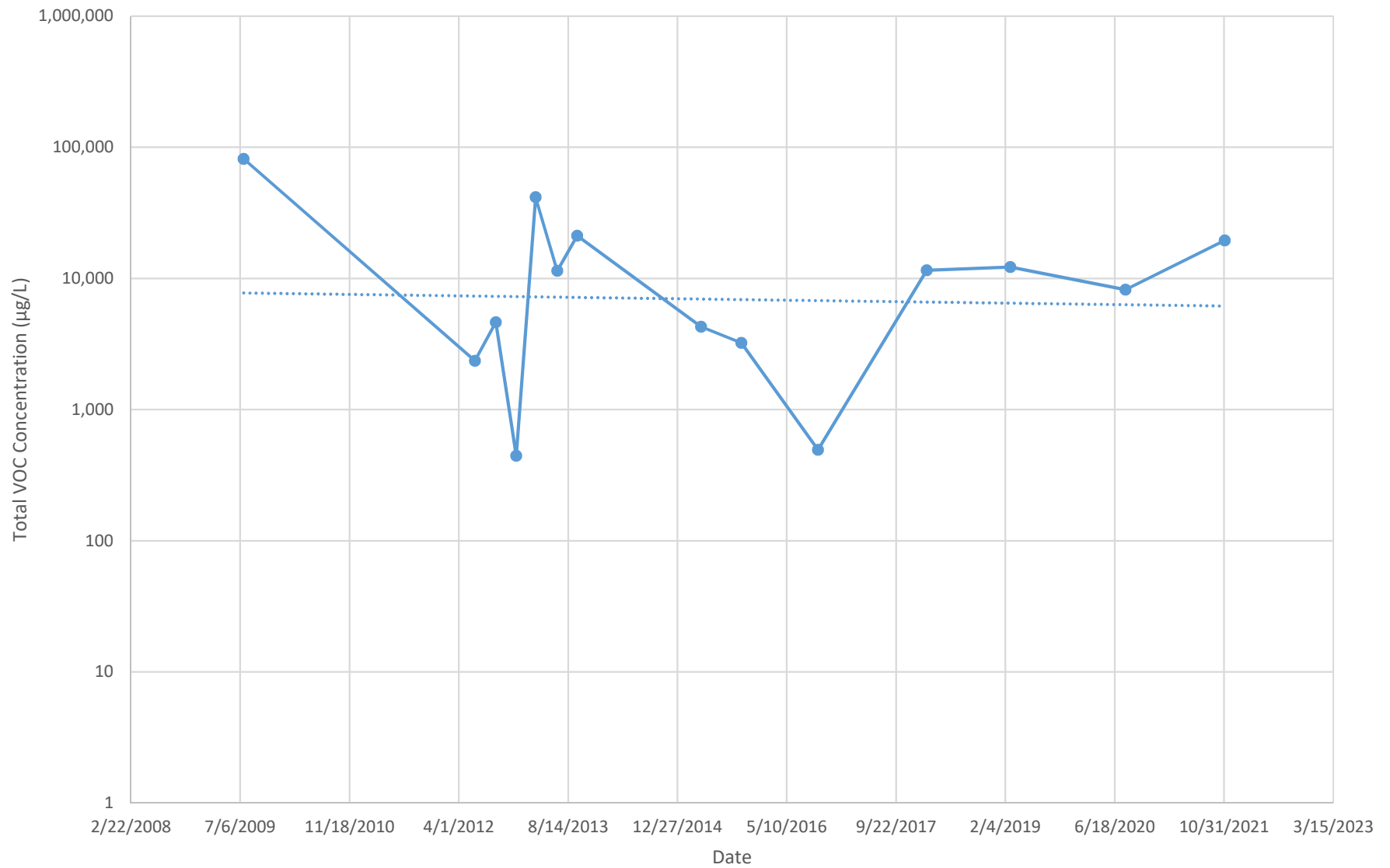
Acetone Concentration Versus Time in Overburden Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report



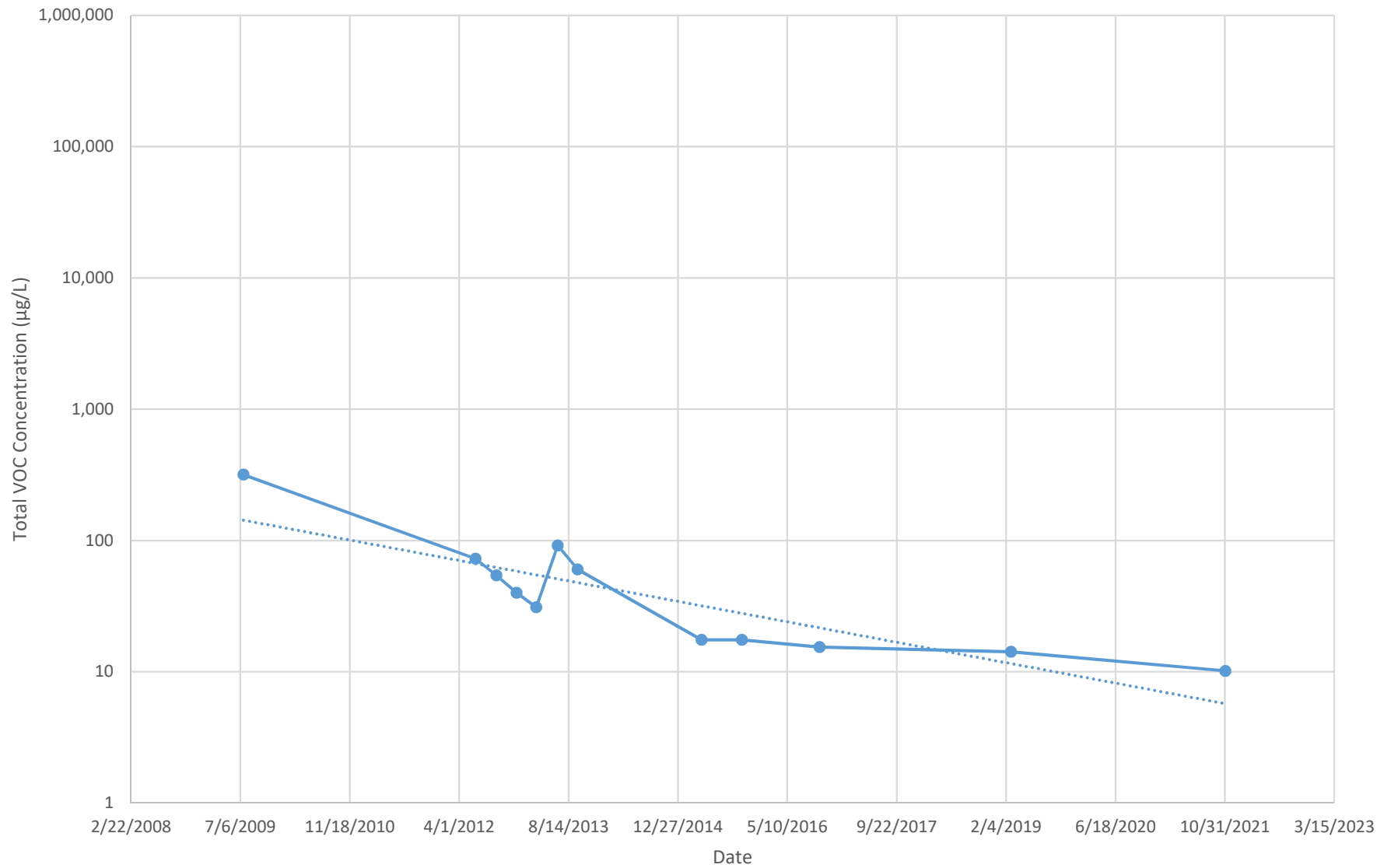
Monitoring Well MW-5AR
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



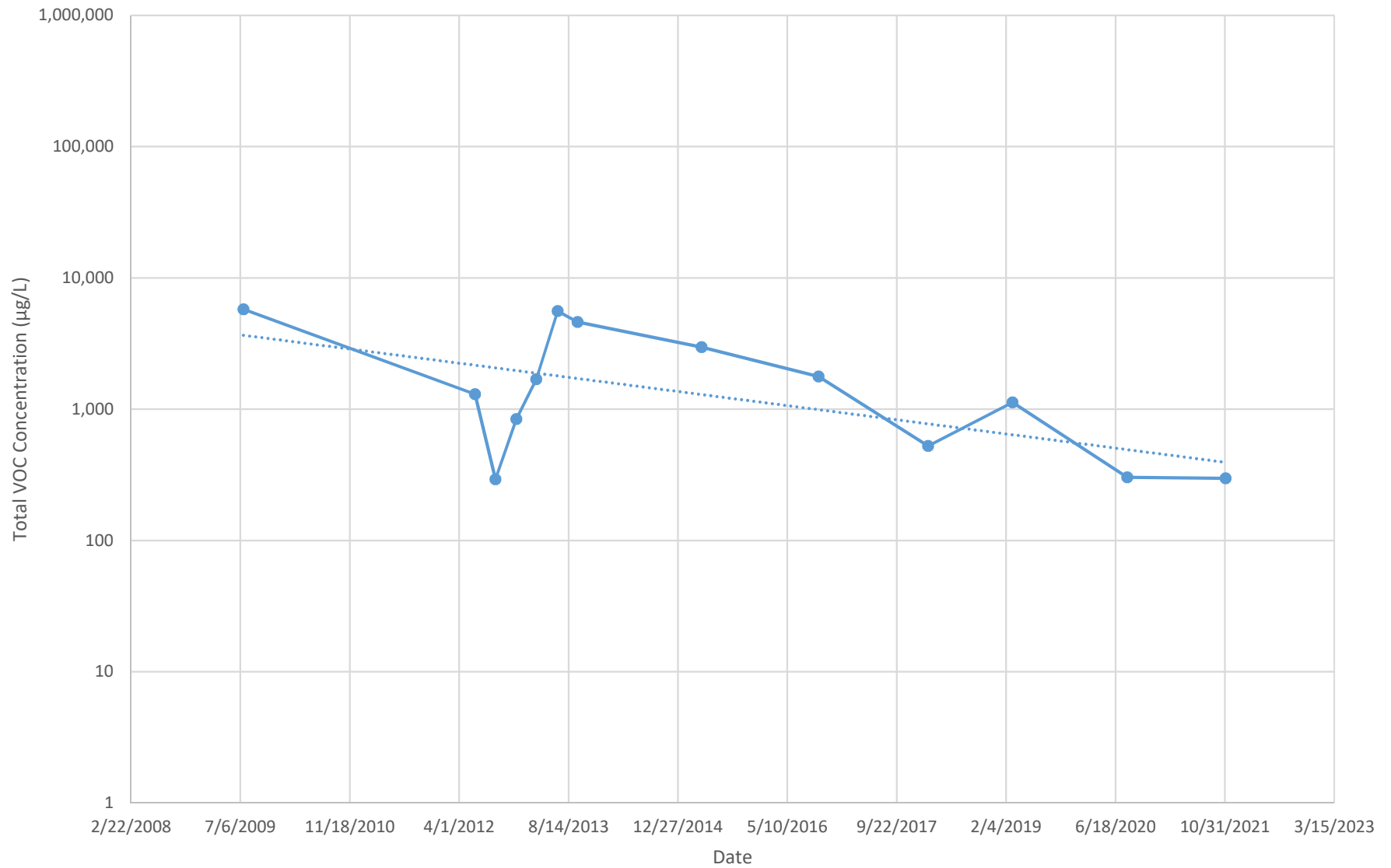
Monitoring Well MW-13A
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209)



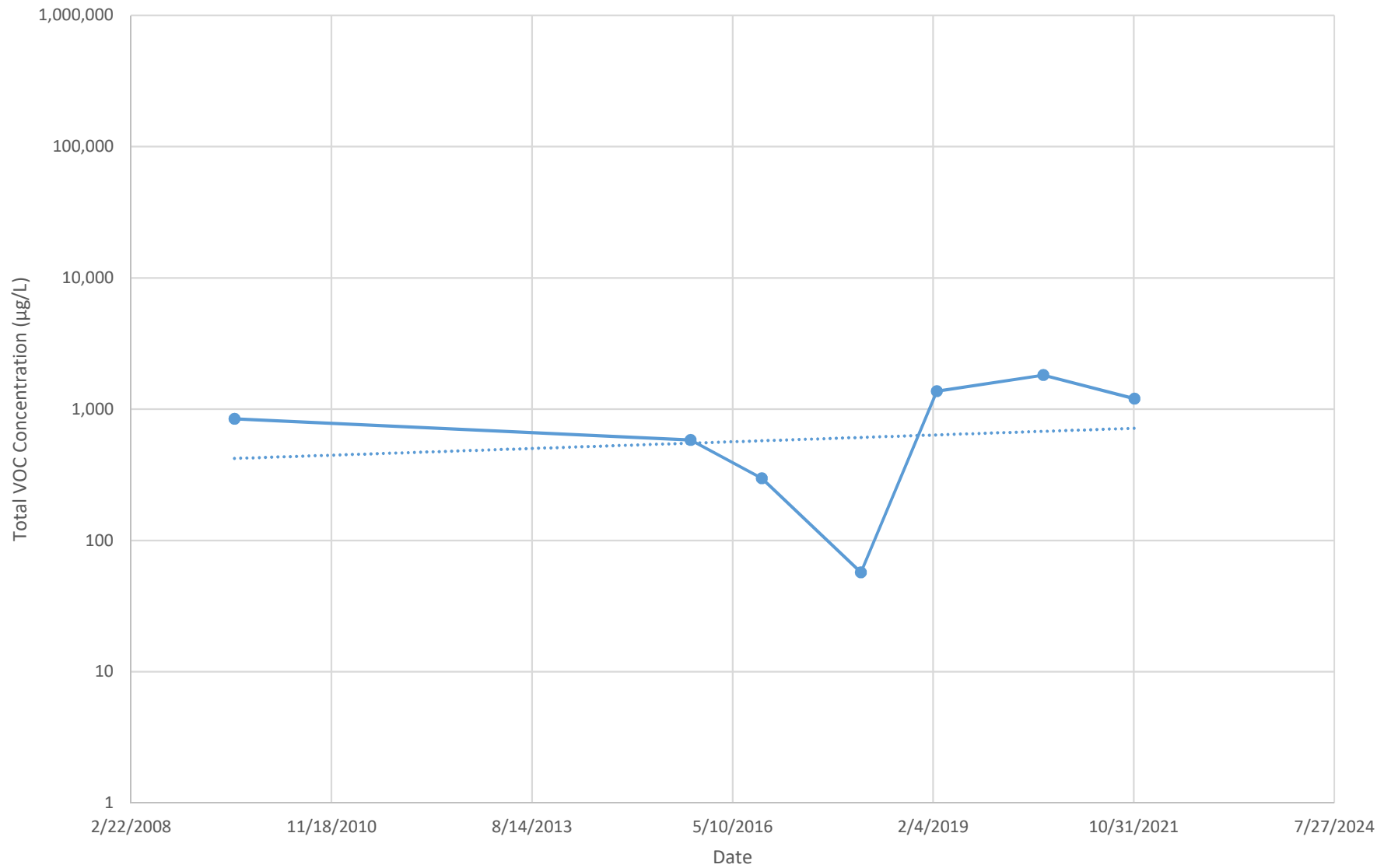
Monitoring Well MW-14A
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209)



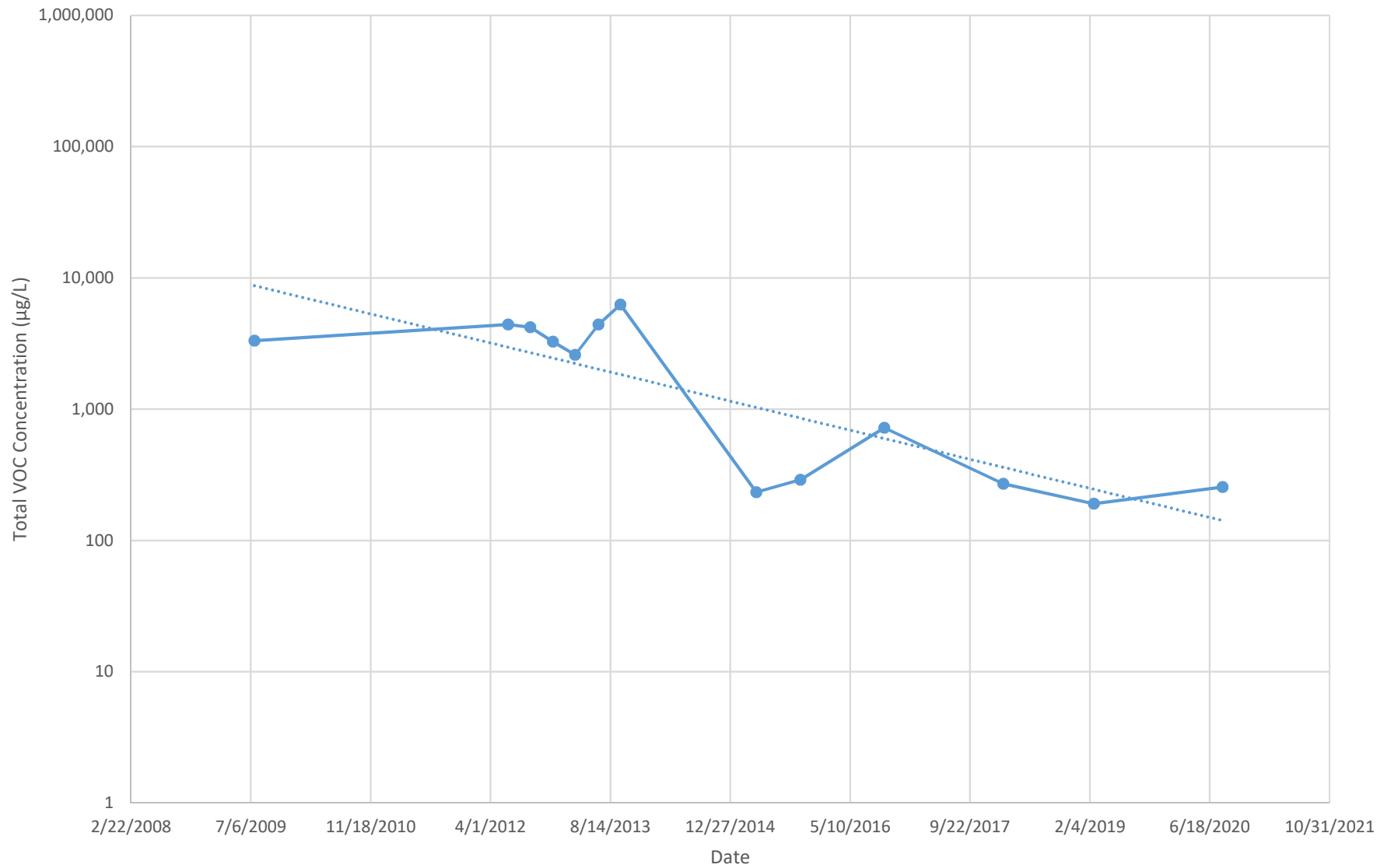
Monitoring Well MW-19AR
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209)



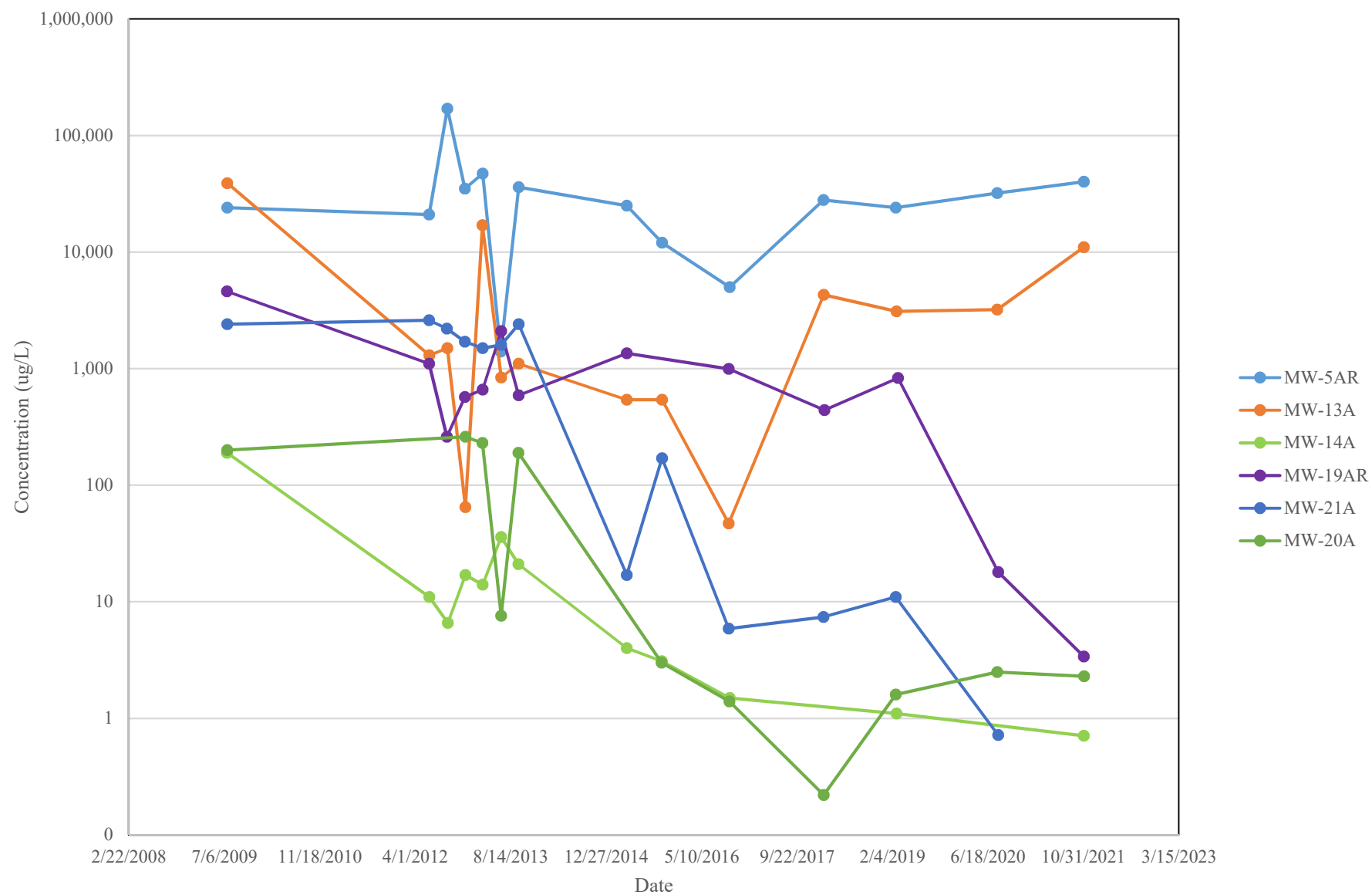
Monitoring Well MW-20A
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209) Periodic Review Report



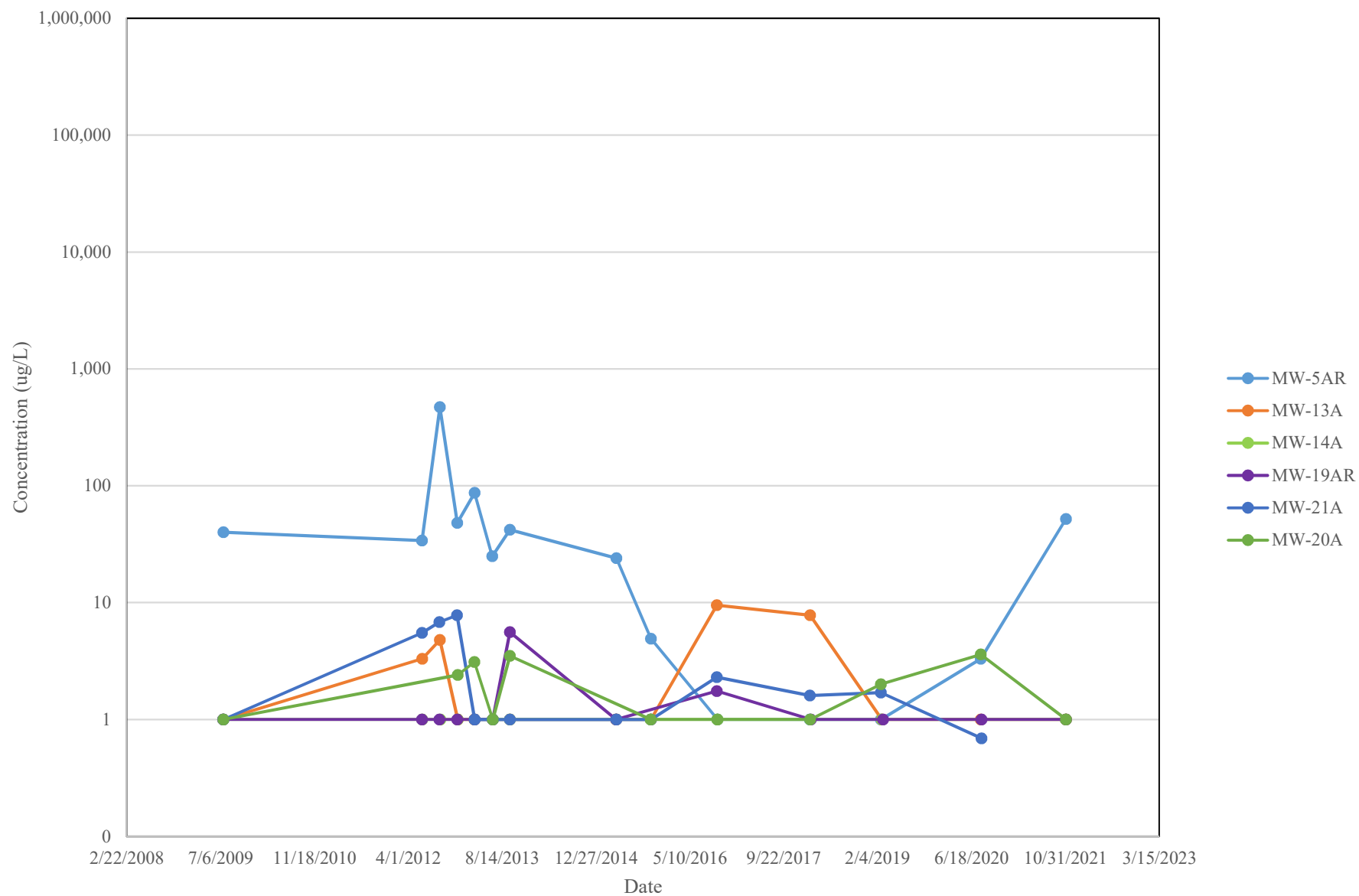
Monitoring Well MW-21A
Total VOC Concentration Versus Time
Former Buffalo China Site (C915209)



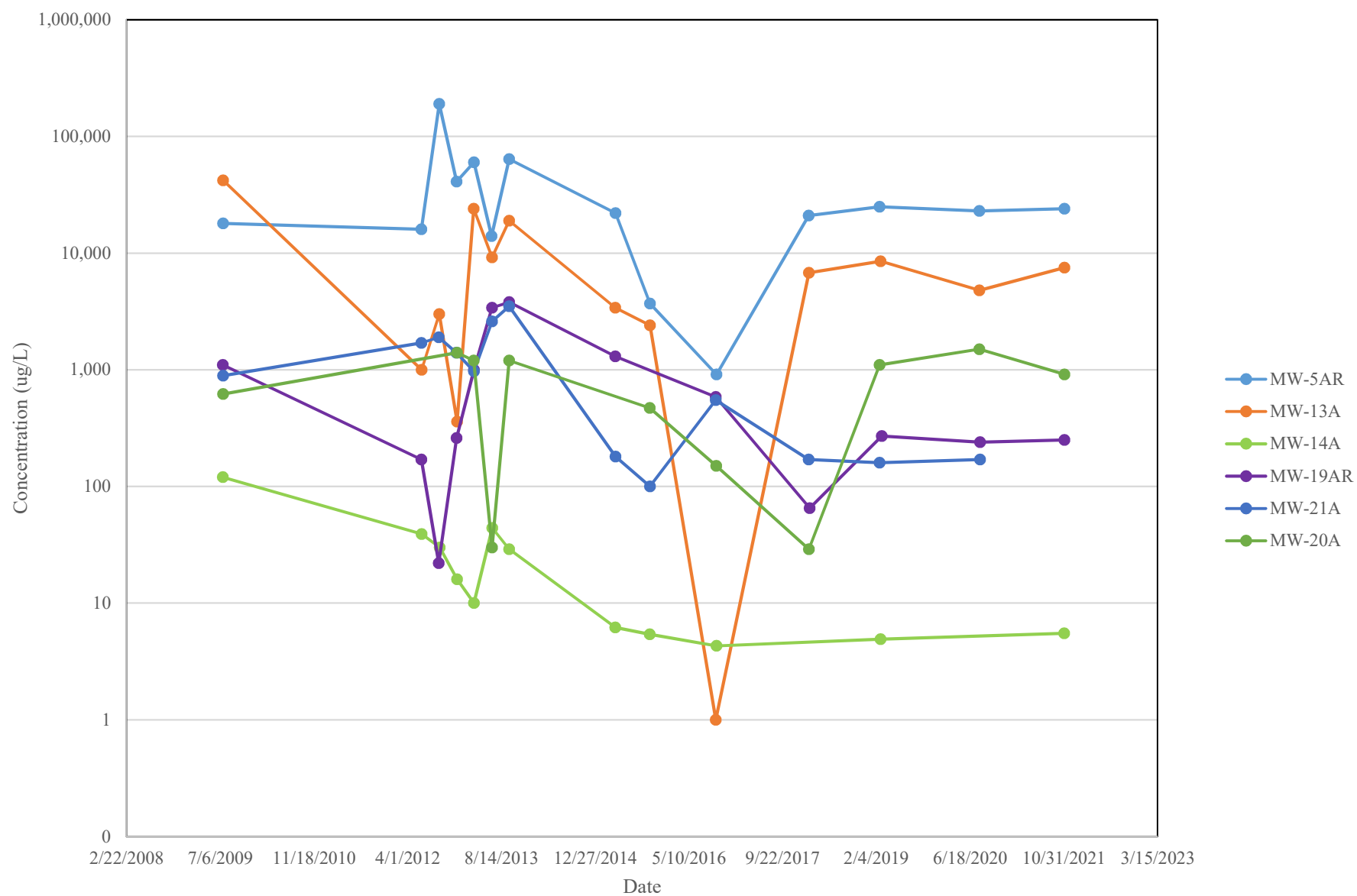
Trichloroethene Concentration Versus Time in Bedrock Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report



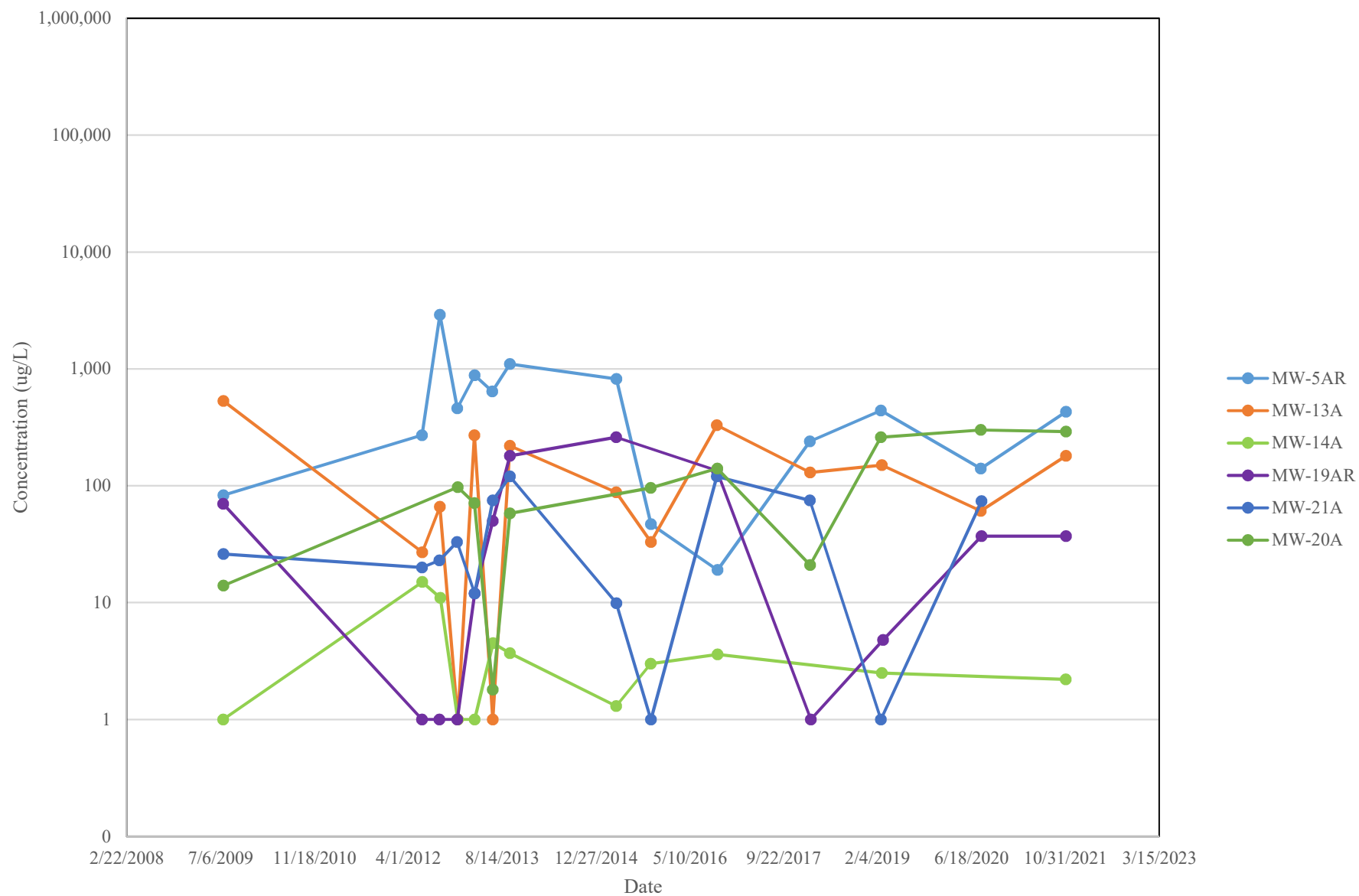
1,1-Dichloroethene Concentration Versus Time in Bedrock Plume Wells Former Buffalo China Site (C915209) Periodic Review Report



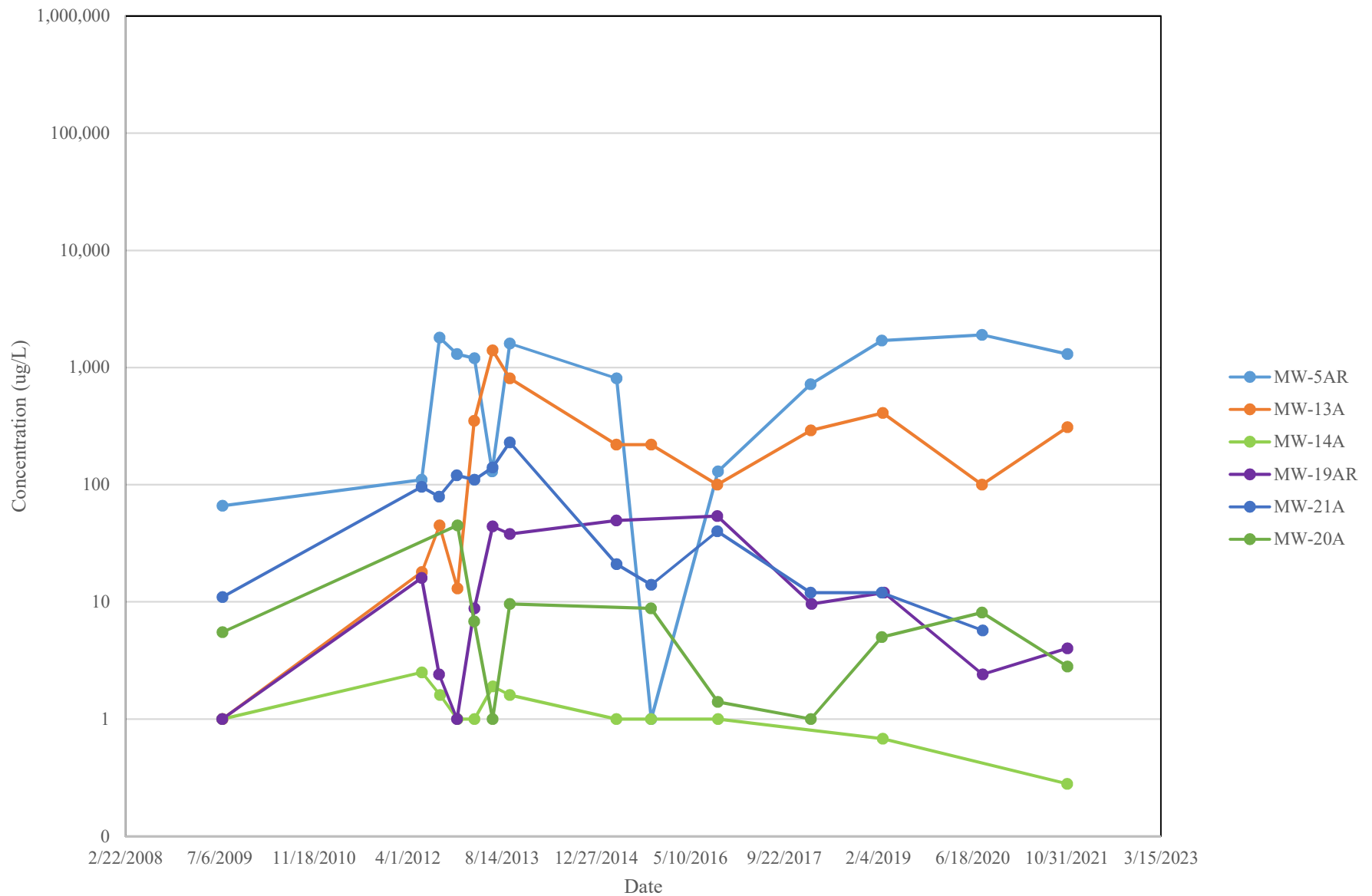
cis-1,2-Dichloroethene Concentration Versus Time in Bedrock Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report



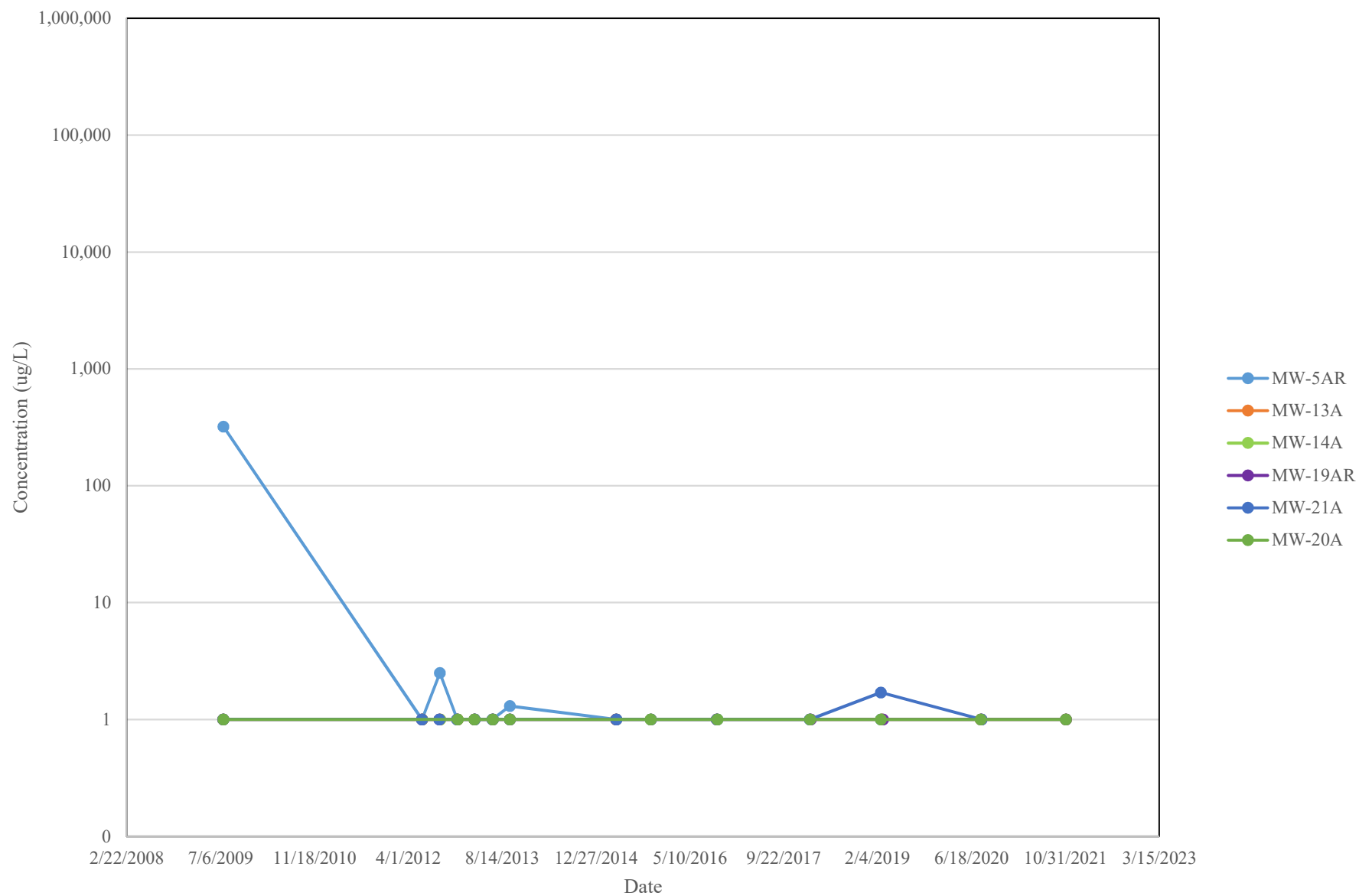
Vinyl Chloride Concentration Versus Time in Bedrock Plume Wells Former Buffalo China Site (C915209) Periodic Review Report



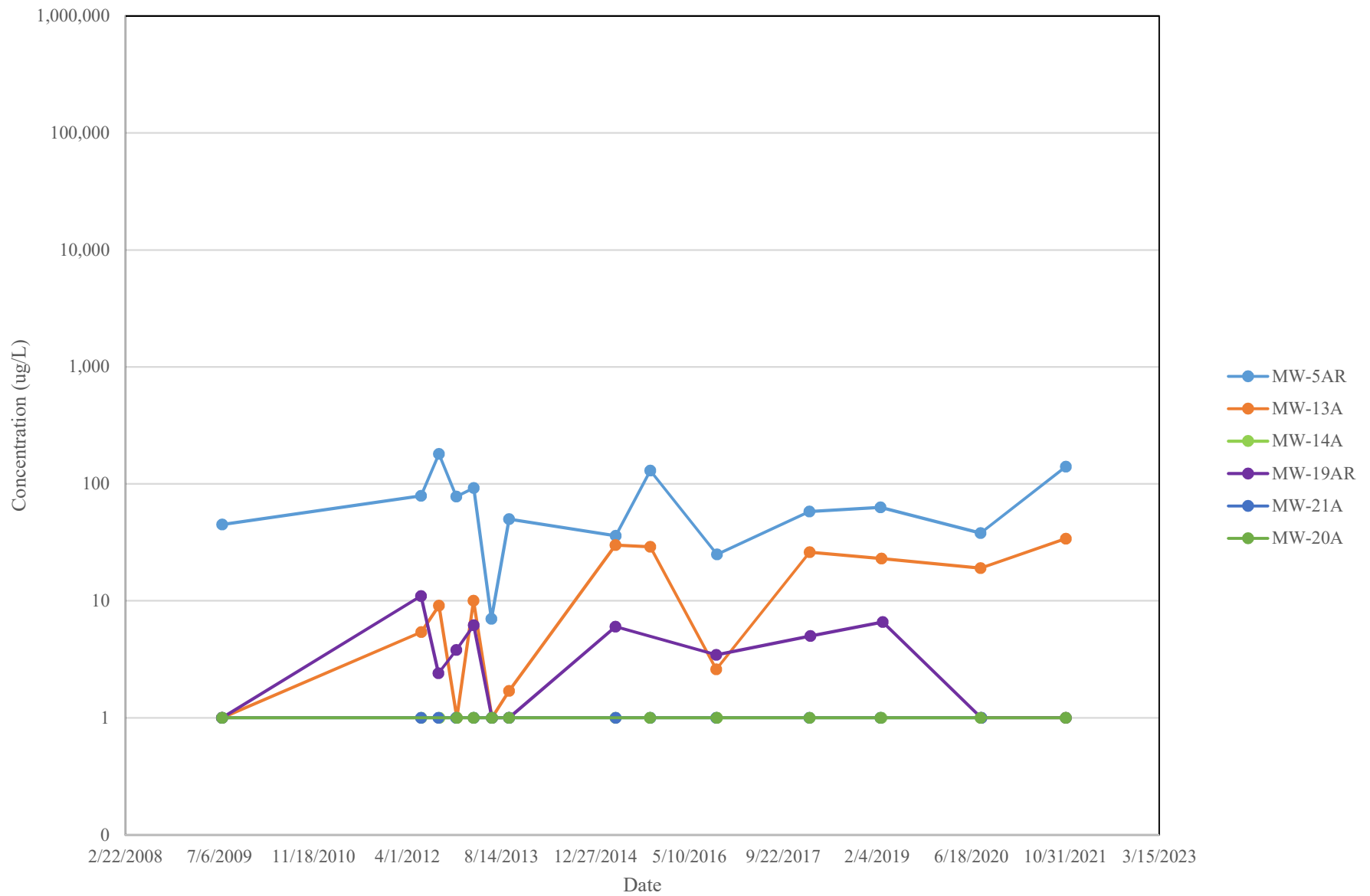
trans-1,2-Dichloroethene Concentration Versus Time in Bedrock Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report



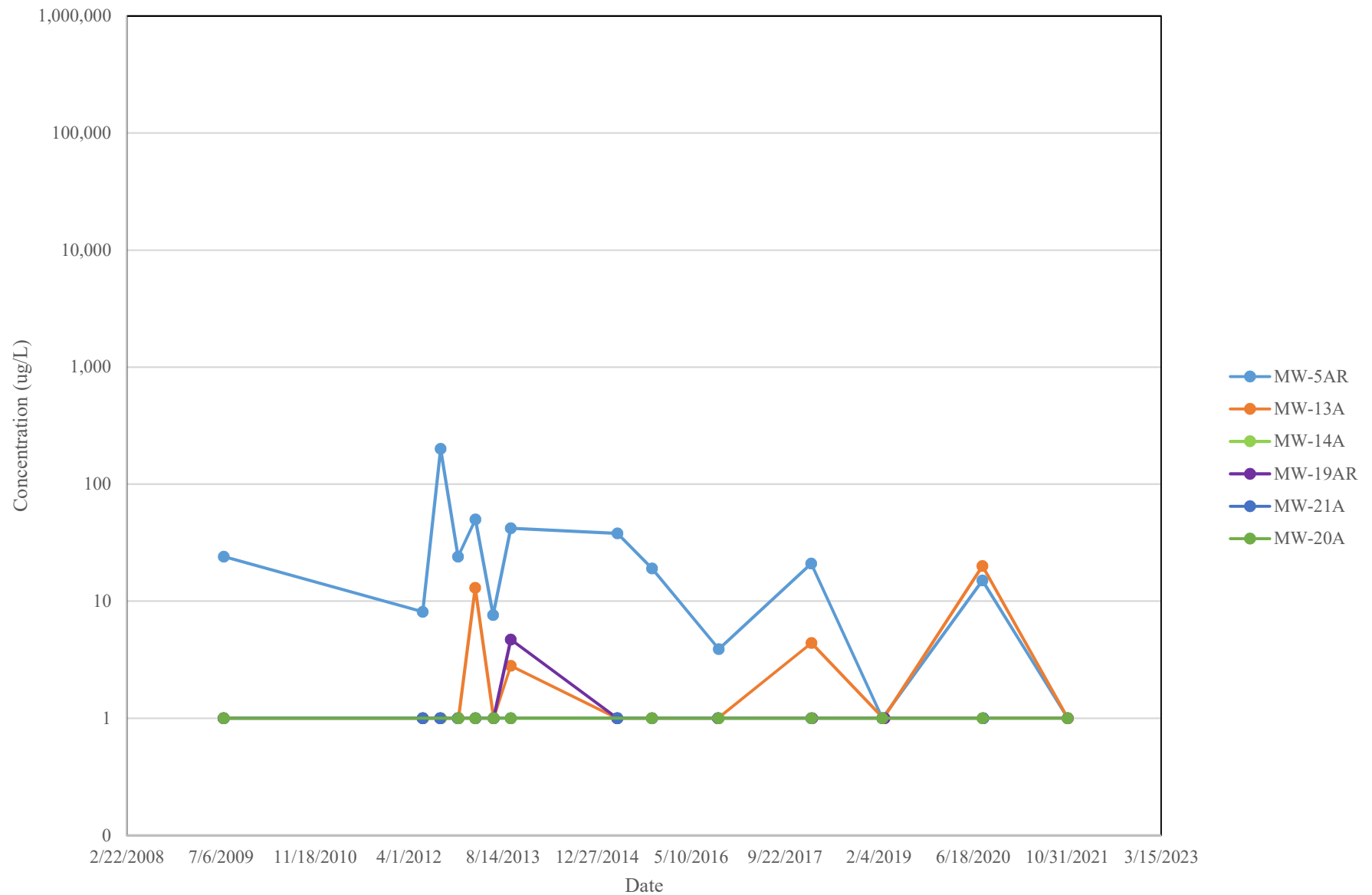
1,2-Dichloroethane Concentration Versus Time for Bedrock Plume Wells Former Buffalo China Site (C915209) Periodic Review Report



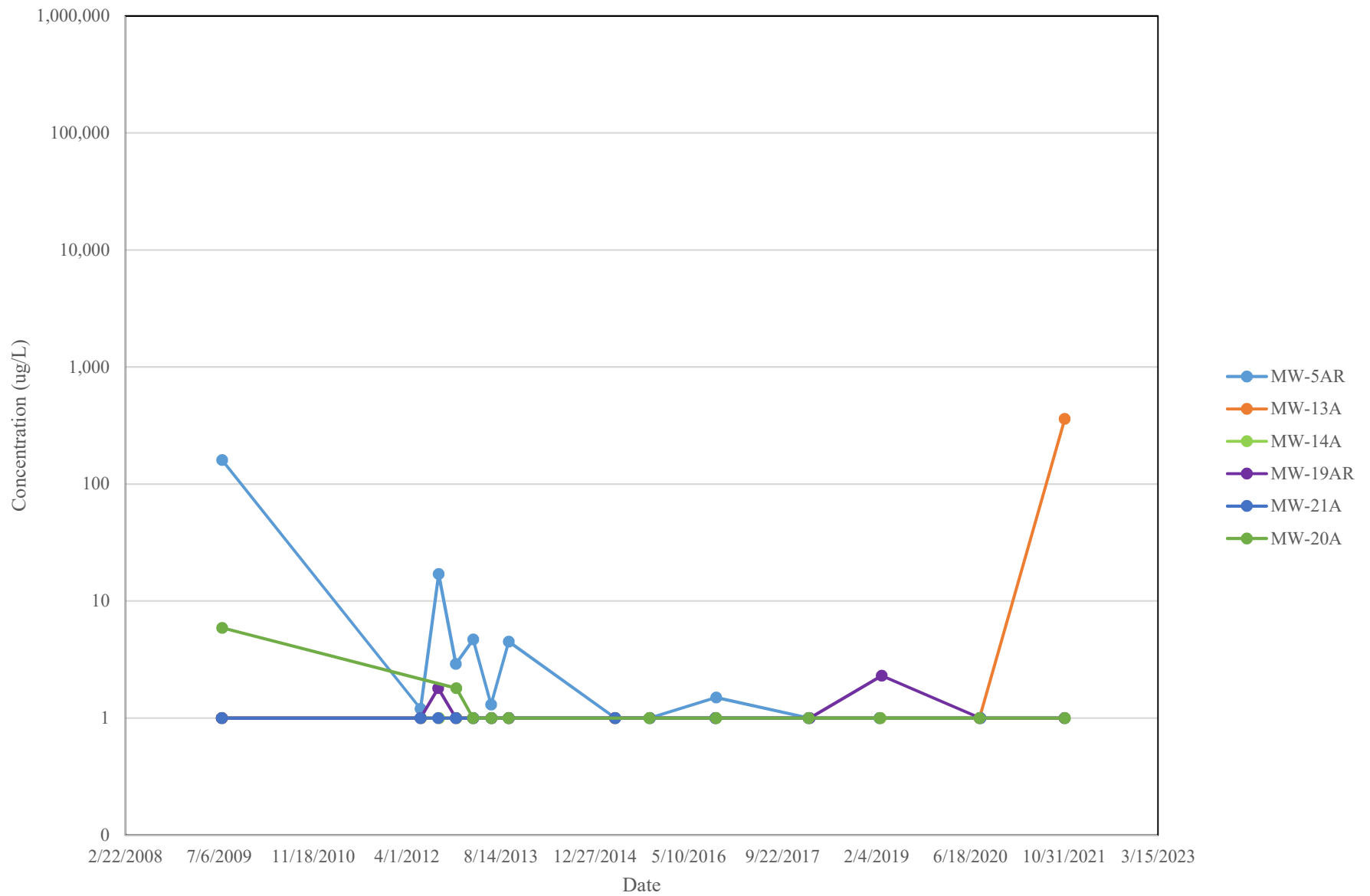
Tetrachloroethene Concentration Versus Time in Bedrock Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report



Toluene Concentration Versus Time in Bedrock Plume Wells
Former Buffalo China Site (C915209) Periodic Review Report



Methylene Chloride Concentration Versus Time in Bedrock Plume Wells Former Buffalo China Site (C915209) Periodic Review Report



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 No. C915209 **Site Details** **Box 1**

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: November 06, 2020 to November 6, 2021

	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 in place and functioning as designed?	☒	☐

**IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.



Signature of Owner, Remedial Party or Designated Representative

12/6/21

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

123.09-4-16.2

Owner

Scott Brady

Institutional Control

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

<u>Parcel</u>	<u>Engineering Control</u>
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

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 Engineering Control certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

☐☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

- (a) The 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

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

Appendix H

Purge Logs

Project Data:

Project Name:

Buffalo China

Ref. No.:

Date: 11/21/21

Personnel: J. Williams

Monitoring Well Data:

Well No.:

11-8

Vapour PID (ppm):

Measurement Point:

Constructed Well Depth (m/ft):

Measured Well Depth (m/ft):

Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):

Depth to Pump Intake (m/ft)⁽¹⁾:

Well Diameter, D (cm/in):

Well Screen Volume, $V_s(L)^{(2)}$:

Initial Depth to Water (m/ft):

[illegible]

Notes:

- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
- (2) The screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s = \pi(r^2) \times L$ in mL, where $r = (D/2)$ and L are in cm. For Imperial units, $V_s = \pi(r^2) \times L \times (2.54)^3$, where r and L are in inches
- (3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.
- (4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged = V_p / V_s .

11/2/21 0900

MW-8 VOCs

Project Data:

Project Name:

Ref. No.:

2020

2-1-2

Date: 11/2/21

Date: 11/25
Personnel: 1000

[illegible]

Monitoring Well Data:

Well No.:

4-11-11

Vapour PID (ppm):

Measurement Point:

Constructed Well Depth (m/ft):

Measured Well Depth (m/ft):

Depth of Sediment (m/ft):

Drawdown

Pumping Depth to

Water (cm/ft)

Precision Required:

[illegible]

Notes:

- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
- (2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_p = \pi r^2 \times L$ in mL, where r ($r=D/2$) and L are in cm. For Imperial units, $V_p = \pi r^2 \times L \times (2.54)^3$, where r and L are in inches
- (3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.
- (4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing). No. of Well Screen Volumes Purged = V_p/V_s .

11/2/21 0930

mw-SA

1005

Project Data:

Project Name: Buffalo China

Date: 11/2/21
Personnel: J. Williams
R. Cich

Monitoring Well Data:

Well No.: MW-26

Vapour PID (ppm):

Measurement Point:

Constructed Well Depth (m/ft):

Measured Well Depth (m/ft): 7.3

Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):

Depth to Pump Intake (m/ft)⁽¹⁾:

Well Diameter, D (cm/in):

Well Screen Volume, $V_s(L)^{(2)}$:

Initial Depth to Water (m/ft):

[illegible]

Notes:

- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
- (2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s = \pi(r^2)L$ in mL, where r ($r=D/2$) and L are in cm. For Imperial units, $V_s = \pi(r^2)L \cdot (2.54)^3$, where r and L are in inches
- (3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.
- (4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing). No. of Well Screen Volumes Purged = V_p/V_s .

11/2/21 1135
NW-26
VCLs

Project Data:

Project Name:

Buffalo China

Ref. No.:

Date:

11/2/21

Personnel:

J.Williams

Monitoring Well Data:

Well No.: W-26A

W-26A

Vapour PID (ppm):

Measurement Point:

Constructed Well Depth (m/ft):

Measured Well Depth (m/ft):

Depth of Sediment (m/ft):

Saturated Screen Length (m./ft):

Depth to Pump Intake (m/ft)⁽¹⁾:

Well Diameter, D (cm/in):

Well Screen Volume, $V_s(L)^{(2)}$:

Initial Depth to Water (m/ft):

[illegible]

Notes:

- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
- (2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s = \pi(r^2) \times L$ in mL, where $r = (D/2)$ and L are in cm. For Imperial units, $V_s = \pi(r^2) \times L \times (2.54)^3$, where r and L are in inches
- (3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.
- (4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing). No. of Well Screen Volumes Purged = V_p / V_s .

11/2/21 1200
MW-26A
VDCs

Project Data:

Project Name:

Ref. No.:

3410 China

Ref. No.:

Date:

Personnel:

11/2/21

11/2/11	11/2/11

Monitoring Well Data:

Well No.:

MW-9A

Vapour PID (ppm):

Measurement Point:

Constructed Well Depth (m / ft):

Measured Well Depth (m/ft):

Depth of Sediment (m/ft):

Depth of sediment (m/ft):

Saturated Screen Length (m/ft):

Depth to Pump Intake (m/ft)⁽¹⁾:Well Diameter D (cm/in):Well Screen Volume: $V_{\text{WS}} \cdot \Gamma_{\text{WS}}^{(2)}$.

Initial Depth to Water (m/ft):

[illegible]

Notes:

- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
- (2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s = \pi(r^2) \times L$ in mL, where $r = (D/2)$ and L are in cm. For Imperial units, $V_s = \pi(r^2) \times L$ (2.54)³, where r and L are in inches
- (3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.
- (4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing). No. of Well Screen Volumes Purged = V_p / V_s .

11/2/21 1325

mw-9A

VOCs

VOLs

Project Data:

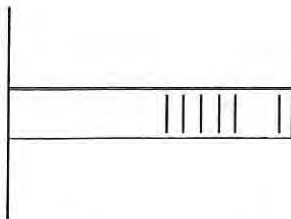
Project Name: Buffalo China
Ref. No.: _____

Date: 11/3/21
Personnel: J. Williams
B. Cich

Monitoring Well Data:

Well No.:	MW-19R
Vapour PID (ppm):	
Measurement Point:	
Constructed Well Depth (m/ft):	
Measured Well Depth (m/ft):	6.4
Depth of Sediment (m/ft):	

Saturated Screen Length (m/ft):
 Depth to Pump Intake (m/ft)⁽¹⁾:
 Well Diameter, D (cm/in):
 Well Screen Volume, V_s (L)⁽²⁾:
 Initial Depth to Water (m/ft):

[illegible]

Notes:

- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
- (2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_p = \pi(r^2) \times L$ in mL, where r ($r=D/2$) and L are in cm. For Imperial units, $V_p = \pi(r^2) \times L$ (2.54),³ where r and L are in inches
- (3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.
- (4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing). No. of Well Screen Volumes Purged= V_p/V_s .

11/13/21 0845
MW-19R
VOCs persul

Project Data:

Project Name:

Ref. No.:

Bfalo China

Date:

11/3/21

Personnel:

T. Asilina

Monitoring Well Data:

Well No.:

MW-5R

Vapour PID (ppm):

Measurement Point:

Constructed Well Depth (m/ft):

Measured Well Depth (m/ft):

Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):

Depth to Pump Intake (m/ft) ⁽¹⁾:

Well Diameter, D (cm/in):

Well Screen Volume, $V_s(L)^{(2)}$:

Initial Depth to Water (m/ft):

7.23

[illegible]

Notes:

- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
- (2) The pump screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_p = \pi r^2 L$ in mL, where r (=D/2) and L are in cm. For Imperial units, $V_p = \pi r^2 L * (2.54)^3$, where r and L are in inches
- (3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.
- (4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing). No. of Well Screen Volumes Purged= V_p/V_s .

11/3/21 0950

NW-5R

VOCs
Persulfate

Project Data:

Project Name:

Buffalo China

Ref. No.:

Date: 11/3/21

Wild ans

Monitoring Well Data:

Well No.:

mw-5AR

Vapour PID (ppm):

Measurement Point:

Constructed Well Depth (m/ft):

Measured Well Depth (m/ft):

Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):

Depth to Pump Intake (m/ft)⁽¹⁾:

Well Diameter, D (cm/in):

Well Screen Volume, $V_s(L)^{(2)}$:

Initial Depth to Water (m/ft):

[illegible]

Notes:

- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
- (2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s = \pi r^2 (\frac{L}{2})$ in mL, where $r = (D/2)$ and L are in cm. For Imperial units, $V_s = \pi r^2 (\frac{L}{2}) \times (2.54)^3$, where r and L are in inches
- (3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.
- (4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing). No. of Well Screen Volumes Purged = V_p/V_s .

11/3/21 1030

MW-5A2

VOCs.

persulfate

Project Data:

Project Name:

Ref. No.:

Buffalo chicken

Ref. No.:

Date: 11/3/21

Personnel: Tilly

Monitoring Well Data:

Well No.: MW-13A

Vapour PID (ppm):

Measurement Point:

Constructed Well Depth (m/ft).

Measured Well Depth (m/ft):

Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):

Depth to Pump Intake (m/ft)⁽¹⁾:

Well Diameter, D (cm/in):

Well Screen Volume, $V_s(L)^{(2)}$:

Initial Depth to Water (m/ft):

[illegible]

Notes:

- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
- (2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s = \pi r^2 (\frac{r}{2}) L$ in mL, where r ($=D/2$) and L are in cm. For imperial units, $V_s = \pi r^2 (\frac{r}{2}) L \cdot (2.54)^3$, where r and L are in inches
- (3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.
- (4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing). No. of Well Screen Volumes Purged = V_p/V_s .

11/3/21 1115

MW-13A

vids
persulfate

Project Data:

Project Name:

B. Paolo Chluba

Ref. No.:

Date: 11/3/21

Personnel:

Monitoring Well Data:

Well No.:

MW-15A

Vapour PID (ppm):

Measurement Point:

Constructed Well Depth (m/ft):

Measured Well Depth (m/ft):

Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):

Depth to Pump Intake (m/ft)⁽¹⁾:

Well Diameter, D (cm/in):

Well Screen Volume, $V_s(L)^{(2)}$:

Initial Depth to Water (m/ft):

[illegible]

Notes:

- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
- (2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_p = \pi r^2 L$ in mL, where r (=D/2) and L are in cm. For imperial units, $V_p = \pi r^2 L^* (2.54)^3$, where r and L are in inches
- (3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.
- (4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing). No. of Well Screen Volumes Purged = V_p / V_s .

11/3/21 1430
mw-15A
VOLs

Project Data:

Project Name:

Buffalo China

Ref. No.:

Date:

u13i21

Personnel:

محکمہ تعلیمات

Monitoring Well Data:

Well No.: MW-25A

Vapour PID (ppm):

Measurement Point:

Constructed Well Depth (m/ft):

Measured Well Depth (m/ft):

Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):

Depth to Pump Intake (m/ft)⁽²⁾:

Well Diameter, D (cm/in):

Well Screen Volume, $V_s(L)^{(2)}$:

Initial Depth to Water (m/ft):

[illegible]

Notes:

- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
- (2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s = \pi r^2 L$ in mL, where r ($=D/2$) and L are in cm. For Imperial units, $V_s = \pi r^2 L * (2.54)^3$, where r and L are in inches
- (3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.
- (4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing). No. of Well Screen Volumes Purged = V_p/V_s .

11/3/21 1500

NW-25A

VOLs

Project Data:

Project Name:

Buffalo chicken

Ref. No.:

Date:

21 | 4 | 24

Personnel:

J. Williams

Monitoring Well Data:

Well No.:

MW-7A

Vapour PID (ppm):

Measurement Point:

Constructed Well Depth (m/ft):

Measured Well Depth (m/ft):

Depth of Sediment (m/ft):

1

Saturated Screen Length (m/ft):

Depth to Pump Intake (m/ft)⁽²⁾:

Well Diameter, D (cm/in):

Well Screen Volume, $V_s(L)^{(2)}$:

Initial Depth to Water (m/ft):

1.90

[illegible]

Notes:

- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
- (2) The well screen volume will be based on a screen area of 1 m² (10.76 ft²) and a screen length of 1.5 m (4.92 ft).

(5) The wet screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s = \pi(r^3)L$ in mL, where r ($r=D/2$) and L are in cm. For Imperial units, $V_s = \pi(r^3)L^*$ (2.54)³, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.

(4) purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged = V_p/V_s .

11/4/21 1230
NW-7A MS/MSD
NOCs

Project Data:

Project Name:

Buffalo China

Ref. No.:

Date:

11/4/21

Personnel:

5 weeks
R. C. 1/2

Monitoring Well Data:

Well No.:

MW-20A

Vapour PID (ppm):

Measurement Point:

Constructed Well Depth (m/ft):

Measured Well Depth (m/ft):

Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):

Depth to Pump Intake (m/ft) ⁽⁷⁾:

Well Diameter, D (cm/in):

Well Screen Volume, $V_s(L)^{(2)}$:

Initial Depth to Water (m/ft):

[illegible]

Notes:

- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
- (2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s = \pi r^2 (\frac{r}{2}) L$ in mL, where $r = (D/2)$ and L are in cm. For imperial units, $V_s = \pi r^2 (\frac{r}{2}) L * (2.54)^3$, where r and L are in inches
- (3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.
- (4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be cleaning, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing). No. of Well Screen Volumes Purged = V_p / V_s .

11/4/21 1145/1200
NW-26A/ MW-Dup
JOLS
persulfate

Project Data:

Project Name:

Ref. No.:

B. A. Chibrikov

10

Date:

Personnel:

$$17/3/21$$

5

Monitoring Well Data:

Well No.:

Mo-11

Vapour PID (ppm):

Measurement Point:

Constructed Well Depth (m/ft):

Measured Well Depth (m/ft):

Depth of Sediment (m/ft):

1000

Saturated Screen Length (m/ft):

Depth to Pump Intake (m/ft) ⁽¹⁾:Well Diameter D (cm/in.)Well Screen Volume, V_w (L)⁽²⁾:

Initial Depth to Water (m/ft).

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level ^{1a} (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged ^{1b}
Precision Required: ±3 % ±3 % ±10 % ±0.1 Units ±10 mV											

[illegible]

Notes:

- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
- (2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s = \pi r^2 L$ in mL, where r ($=D/2$) and L are in cm. For Imperial units, $V_s = \pi r^2 L * (2.54)^3$, where r and L are in inches
- (3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.
- (4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be cleaning, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged = V_p / V_s .

[illegible]

Project Data:

Project Name:

Buffalo China

Ref. No.:

Date: 11/3/21

Personnel: T. Williams

Monitoring Well Data:

Well No.: MW-ID

Vapour PID (ppm):

Measurement Point:

Constructed Well Depth (m/ft).

Measured Well Depth (m/ft):

Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):

Depth to Pump Intake (m/ft) ⁽⁷⁾:

Well Diameter, D (cm/in.):

Well Screen Volume, $V_w(L)^{(2)}$:

Initial Depth to Water (m/ft).

[illegible]

Notes:

- (1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
- (2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s = \pi r^2 (\frac{r}{2}) L$ in mL, where $r = (D/2)$ and L are in cm. For imperial units, $V_s = \pi r^2 (\frac{r}{2}) L$ (2.54)³, where r and L are in inches
- (3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.
- (4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing). No. of Well Screen Volumes Purged = V_p / V_s .

11/4/21 1400
MW-10
VOCs

Appendix I
Supporting Studies Report for Partial Site Change of Use



July 23, 2021

Megan Kuczka
Division of Environmental Remediation
New York State Department of Environmental Conservation
270 Michigan Ave.
Buffalo, New York, 14203

**Re: Supporting Studies Report for Partial Site Change of Use
Former Buffalo China Site C915209**

Dear Ms Kuczka,

Pursuant to the Brownfield Cleanup Agreement Index #B9-0732-06-11 between Buffalo China, Inc. and the New York State Department of Environmental Conservation (NYSDEC) and the Site Management Plan (SMP) prepared for the Former Buffalo China Site, LiRo Engineers, Inc. (LiRo) on behalf of Hayes Place Management Group, Inc. (HPMG) (current owner) is submitting this Supporting Studies Report to convert a portion of the Site from Industrial Use to Commercial Use. The site is currently restricted to Industrial Use.

LiRo prepared a Corrective Measures Work Plan dated March 17, 2021 that detailed the scope of the supporting studies that were undertaken. These include:

- 1 – A Soil Vapor Intrusion (SVI) investigation.
- 2 – A Summary of Existing RI/Site data.
- 3 – An updated human exposure assessment specific to commercial use of the area.

The results of these investigations are detailed in the following pages.

Background

The Site is a 9.73-acre property located in a mixed residential and industrialized area of Buffalo, New York (Figure 1). A previous Site owner entered into a Brownfield Cleanup Agreement with NYSDEC and a remedial investigation (RI) was conducted between July 2007 and July 2009. The results of the RI were reported in the "Remedial Investigation Report" prepared by Conestoga Rovers and Associates dated September 2010. Based upon investigations conducted during and prior to the RI, the primary contaminants of concern included trichloroethene (TCE) and its associated degradation products in soil and groundwater, as well as lead contaminated soil in the northwestern portion of the Site. Remedial Actions were completed to address contaminated soil and a Final Engineering Report/Site Management Plan was completed in 2012. Groundwater treatment has continued in the northwestern portion of the Site.



The attached Figure 2 shows the location of the remedial areas and the portion of the site that is the subject of the Change of Use. As shown on the Figure, the Change of Use area is 26,000 square feet in size and located in the southeastern most portion of the Site. The site remediation was focused in the northwestern portion of the Site based on the distribution of contamination at the Site.

Conversion Area for Commercial Use

The area to be converted for commercial use is entirely within the building footprint. The entire area is already covered by the building floor slab and formerly was the Buffalo China warehouse area. In advance of the conversion, HPMG removed any equipment present in the area and pressure-washed the floor and walls.

Soil Vapor Intrusion Investigation

The SVI investigation sampling was conducted on March 31, 2021, LiRo obtained and deployed five (5) Summa canisters with 8-hour regulators to collect sub-slab, indoor air and outdoor air samples for the Site, in accordance with protocols found in the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006. LiRo conducted a survey to document sources of Volatile Organic Compound (VOCs) in the immediate area of the sample locations and no sources of VOC sources were observed. After the canisters were deployed, inches of Mercury (inHg) readings were noted at each location. After approximately 8-hours of sample collection, another set of inHg readings were collected and canister valves were closed and samples were submitted to York Analytical Laboratories, Inc. of Richmond Hill, New York (NELAP No. 12058).

The two sub-slab locations sampled were paired with indoor air at approximately the sample location (Figure 2). Each sub-slab sampling location port was constructed as a temporary sampling point and was backfilled after sampling. The sub-slab locations were drilled 2 inches below the bottom of the concrete floor slab into the sub-base. Tubing was placed down each hole and sealed with beeswax at the floor surface. One to three implant volumes was purged prior to sample collection using a photo-ionization detector (PID) acting as a low volume pump. The Summa Canister was immediately attached and activated. The co-located indoor air Summa canisters were set up with the inlet approximately three to four feet above the floor level. One Summa canister was situated three to four feet above the ground outside the entrance of the building.

All SVI sub-slab vapor, indoor air and outdoor air samples were submitted for analysis of volatile organic compounds (VOCs) using EPA Method TO-15.

For the SVI, two (2) sub-slab soil-vapor samples (VMP-1 and VMP-2), two (2) indoor air samples (IA-1 and IA-2) and one (1) outdoor air sample (OA-1) were collected at the Site using 6-liter Summa canisters equipped with 8-hour regulators.

The indoor air samples were paired in close proximity with the corresponding sub-slab soil-vapor samples. The single outdoor air sample was located outside the entrance to the curling center.

All Summa canisters were 6-liters in volume and equipped with 8-hour regulators and were monitored periodically during sampling.

Once sample collection was complete, a LiRo geologist closed the regulators and packed the canisters into the laboratory provided shipping containers and submitted the containers for shipment under chain-of-custody control to the York Analytical Laboratories, Inc. of Richmond Hill, New York.



SVI sub-slab soil-vapor, indoor air and outdoor air sample locations are presented in Figure 2. Laboratory Analytical Reports are provided in Appendix A and a Data Usability Report is provided in Appendix B. Air sample results were compared to the *New York State Department of Health's (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH GSV, 2006)* including updates provided by NYSDOH on their website.

One or more TO-15 VOCs were reported above laboratory reporting limits in all of the sub-slab, indoor and outdoor air sample results (Table 1). Three VOCs have criteria for indoor and outdoor air; Methylene Chloride with a guidance value of $60 \mu\text{g}/\text{m}^3$, Tetrachloroethene with a guidance value of $30 \mu\text{g}/\text{m}^3$ and Trichloroethene with a guidance value of $2 \mu\text{g}/\text{m}^3$. These values were not exceeded in any of the indoor or outdoor air samples.

The laboratory reported concentrations of the TO-15 VOCs were compared to NYSDOH GSV Soil Vapor/Indoor Air Decision Matrices A, B and C, as summarized below.

AIR DECISION MATRIX REVIEW

The NYSDOH GSV decision matrices provide guidance on actions that should be taken to address current and potential exposures related to soil-vapor intrusion. The matrices provide concentration action levels for sub-slab vapor and indoor air.

Decision Matrix A

There are four compounds listed in the NYSDOH Soil Vapor/Indoor Air decision Matrix A: Carbon Tetrachloride (CTET), 1,1-Dichloroethene (1,1-DCE), cis-1,2-Dichloroethene (cis-1,2-DCE) and Trichloroethene (TCE). Two of these compounds CTET and TCE were reported above laboratory reporting limits. Table 2 shows a summary the Matrix A compound concentrations and associated NYSDOH response. All subslab/indoor air results returned a response of No Further Action.

Decision Matrix B

There are three compounds listed in the NYSDOH Soil Vapor/Indoor Air decision Matrix B: 1,1,1-Trichloroethane (1,1,1-TCA), Methylene Chloride (MC) and Tetrachloroethene also known as Perchloroethene (PCE). Table 2 shows a summary the Matrix B compound concentrations and associated NYSDOH response. All subslab/indoor air results returned a response of No Further Action.

Decision Matrix C

There is one compound listed in the NYSDOH Soil Vapor/Indoor Air decision Matrix C: Vinyl Chloride (VC). There were no concentrations of VC reported above laboratory reporting limits in any of the air samples collected from the Site.

Summary of Existing RI/Site Data

LiRo reviewed the Remedial Investigation (RI) Report (Conestoga Rovers and Associates dated September 2010) and previous Site investigation data that were appended to the RI to identify soil and groundwater sampling conducted proximal to the Change in Use Area. As shown on Figure 2, the Site remediation area was limited to the northwestern portion of the Site. The primary source of Site contamination was the Harrison Street Warehouse (Figure 2) where historical silver plating operations (unrelated to the Buffalo China plant) had taken place. Accordingly, the majority of site investigation data was focused in that area. There were, however, Site-wide borings completed.



Figure 3 shows boring and well locations that were proximal to the Change in Use area. Soil data from those borings were compared to NYSDEC Part 375 Commercial Soil Cleanup Objectives (CSCOs) for this evaluation and the data is summarized in Figure 4. Much of the historical sampling focused on metals, however several samples were also analyzed for VOCs and semivolatile organic compounds (SVOCs). As shown on Figure 4, only one sample (ISB-3) reported a contaminant level (for lead) that exceeded a CSCO. All other soil samples reported results that were below CSCOs. The lead concentration at ISB-3 also exceeded the industrial use SCO and was addressed by incorporating the building floor slab into the site cover system.

Groundwater sampling data was limited to locations MW-7 and MW-8. These wells were last sampled in 2020 as part of the Site Management Plan groundwater monitoring program. The results of the sampling at MW-7 and MW-8 are summarized in Figure 5. There were no VOCs detected at concentrations in excess of groundwater standards listed in NYSDEC TOGS 1.1.1. Well MW-8 was historically tested for lead; the lead concentration did not exceed the groundwater standard. Wells MW-1 and Well-MW-2 were likely sampled during an early Phase II investigation, however, no data from those wells were reported in the RI or records of previous investigations that were available. Because there was no follow-up sampling conducted at those locations, it is inferred that earlier testing results reported no impacts.

Copies of the historical soil and groundwater sampling data that were used in this evaluation are attached as Appendix C.

Qualitative Human Exposure Assessment (Change in Use Area)

Exposure is defined as the contact of a receptor (i.e., person) with a chemical or physical agent. The exposure assessment is an estimate of the magnitude, frequency, and duration of the exposure for each potential exposure route. An exposure assessment provides a systematic analysis of the potential exposure mechanisms by which a receptor may be exposed to chemical or physical agents at or originating from a study area. The objectives of an exposure assessment are as follows:

1. Characterization of exposure setting
2. Identification of potential exposure pathways
3. Quantification of the exposure

This exposure assessment addresses the first two objectives.

As part of the assessment process, potential exposure pathways are determined through an evaluation of the physical setting of the Site and the potentially exposed populations. As noted above, the Change in Use area has already been cleaned. Parking for the Change in Use area is in a paved lot adjacent to the warehouse (Figures 2 through 5) and the area is accessed via a paved driveway and sidewalk. The Change in Use area is entirely within the building footprint covered with a floor slab. It is currently being used as a curling rink by a private curling club.

The potentially exposed population includes Site commercial workers (club volunteers primarily), commercial users (club members) and construction workers. Based on historical results and the results of the SVI investigation discussed above, VOC contamination is not present at concentrations that exceed any NYSDEC or NYSDOH thresholds. Contaminants of potential concern (COPCs) in this portion of the Site are limited to lead in soil.



There was only one exceedance of the CSCO for lead reported in the historical data. The sample was collected beneath the building floor slab, which is part of the Site Cover System. Based on these conditions, there are no completed exposure pathways for commercial workers or commercial users. Construction workers could potentially be exposed to lead-contaminated soil beneath the floor slab, however, protections for construction workers are incorporated into the Site Management Plan.

In summary, the qualitative exposure assessment indicates no completed exposure pathway for soil and groundwater in the Change in Use area. The SVI data indicated that there are no VOCs in subslab vapor that require mitigation or monitoring (i.e., all results indicate No Further Action).

Please advise us of the next steps required to complete the Change in Use process. Should you require any additional information or wish to discuss our evaluation in more detail, please contact me directly at 716-882-5476 x423 or by email at franks@liro.com.

Sincerely,

LiRo Engineers, Inc.

A handwritten signature in dark ink that reads "Stephen Frank". The signature is written in a cursive, flowing style.

Stephen Frank, PG
Senior Geologist

Cc
Scott Brady – Hayes Place Management Group, Inc.
Kevin Callahan – Hayes Place Management Group, Inc.

Attachments

Table 1 – 2021 Soil Vapor Intrusion Sampling Results

Table 2 - Comparison of Detected VOCs to NYSDOH Decision Matrices

Figure 1 – Site Location Map

Figure 2 – Site Plan, SVI Sample Locations and Existing BCP Cover System

Figure 3 – RI Sample Points and Wells Near Change in Use Area

Figure 4 – Historical Soil Sample Results

Figure 5 – Historical Groundwater Sample Results

Appendix A – SVI Laboratory Analytical Reports

Appendix B – SVI Data Usability Summary Reports

Appendix C – Historical Sampling Data

TABLES

TABLE - 1

**2021 Soil Vapor Intrusion Sampling
Former Buffalo China Site
NYSDEC Site No. C915209**

Parameters	Units	Matrix Indoor Air Concentration Range	Matrix Sub-slab Vapor Concentration Range	NYSDOH AGV	Location, Sample ID, Sample Date and Type				
					VMP-1	IA-1	VMP-2	IA-2	OA-1
					VMP-1	IA-1	VMP-2	IA-2	OA-1
					3/31/2021	3/31/2021	3/31/2021	3/31/2021	3/31/2021
					Sub-Slab	Indoor Air	Sub-Slab	Indoor Air	Ambient
1,1,1,2-Tetrachloroethane	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/m ³	3 to 10	100 to 1000	NC	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ug/m ³	NC	NC	NC	ND	0.6	ND	ND	ND
1,1,2-Trichloroethane	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
1,1-Dichloroethane	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
1,1-Dichloroethylene	ug/m ³	0.2 to 1	6 to 60	NC	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ug/m ³	NC	NC	NC	ND	ND	ND	0.7	ND
1,2-Dibromoethane	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
1,2-Dichloroethane	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
1,2-Dichloropropane	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
1,2-Dichlorotetrafluoroethane	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
1,3-Butadiene	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
1,3-Dichloropropane	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
1,4-Dioxane	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
2-Butanone	ug/m ³	NC	NC	NC	4.3	1.6	0.65	1.7	0.43
2-Hexanone	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
3-Chloropropene	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Acetone	ug/m ³	NC	NC	NC	38	13	4	13	3.5
Acrylonitrile	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Benzene	ug/m ³	NC	NC	NC	ND	0.5	0.7	0.54	0.31
Benzyl chloride	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Bromodichloromethane	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Bromoform	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Bromomethane	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Carbon disulfide	ug/m ³	NC	NC	NC	ND	ND	1.3	ND	ND
Carbon tetrachloride	ug/m ³	0.2 to 1	6 to 60	NC	0.43	0.45	0.32	0.45	0.41
Chlorobenzene	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Chloroethane	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Chloroform	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Chloromethane	ug/m ³	NC	NC	NC	ND	1	ND	1	0.95
cis-1,2-Dichloroethylene	ug/m ³	0.2 to 1	6 to 60	NC	ND	ND	ND	ND	ND
cis-1,3-Dichloropropylene	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Cyclohexane	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Dibromochloromethane	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ug/m ³	NC	NC	NC	36	2.1	2.2	2.3	2.1
Ethyl acetate	ug/m ³	NC	NC	NC	ND	0.65	ND	1.1	ND
Ethyl Benzene	ug/m ³	NC	NC	NC	ND	0.79	ND	1.7	ND
Hexachlorobutadiene	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Isopropanol	ug/m ³	NC	NC	NC	1.9	5	1.3	5.8	2.8
Methyl Methacrylate	ug/m ³	NC	NC	NC	ND	ND	ND	1.1	ND
Methyl tert-butyl ether (MTBE)	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Methylene chloride	ug/m ³	3 to 10	100 to 1000	60	ND	2.8	1.2	6.1	0.76
n-Heptane	ug/m ³	NC	NC	NC	ND	0.52	1.9	0.73	ND
n-Hexane	ug/m ³	NC	NC	NC	0.61	0.89	1.1	1.2	0.34
o-Xylene	ug/m ³	NC	NC	NC	ND	1.2	ND	2.7	ND
p- & m- Xylenes	ug/m ³	NC	NC	NC	1.8	2.8	1.7	6.6	ND
p-Ethyltoluene	ug/m ³	NC	NC	NC	ND	ND	ND	0.53	ND
Propylene	ug/m ³	NC	NC	NC	ND	ND	0.52	1.5	ND
Styrene	ug/m ³	NC	NC	NC	ND	ND	ND	0.88	ND
Tetrachloroethylene	ug/m ³	3 to 10	100 to 1000	30	ND	0.69	ND	ND	ND
Tetrahydrofuran	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Toluene	ug/m ³	NC	NC	NC	1.7	14	3	33	0.82
trans-1,2-Dichloroethylene	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Trichloroethylene	ug/m ³	0.2 to 1	6 to 60	2	ND	0.3	ND	0.72	ND
Trichlorofluoromethane (Freon 11)	ug/m ³	NC	NC	NC	270	160	370	260	1.1
Vinyl acetate	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Vinyl bromide	ug/m ³	NC	NC	NC	ND	ND	ND	ND	ND
Vinyl Chloride	ug/m ³	0.2 to >0.2	6 to 60	NC	ND	ND	ND	ND	ND

Notes:

ug/m3 - Micrograms per cubic meter

NC - No Criteria

ND - Not Detected

	- Soil Vapor/Indoor Air Matrix A
	- Soil Vapor/Indoor Air Matrix B
	- Soil Vapor/Indoor Air Matrix C

TABLE 2

Comparison of Detected VOCs to NYSDOH Decision Matrices
2021 Soil Vapor Intrusion Sampling
Former Buffalo China Site
NYSDEC Site No. C915209

Sub-Slab/Indoor Air Pairing	Sub-Slab Vapor Concentration ($\mu\text{g}/\text{m}^3$)	Indoor Air Concentration ($\mu\text{g}/\text{m}^3$)	NYSDOH Recommended Action
Trichloroethene (Matrix A)			
VMP-1/IA-1	ND	0.3	No Further Action
VMP-2/IA-2	ND	0.72	No Further Action
Carbon Tetrachloride (Matrix A)			
VMP-1/IA-1	0.43	0.45	No Further Action
VMP-2/IA-2	0.32	0.45	No Further Action
1,1-Dichloroethene (Matrix A)			
VMP-1/IA-1	ND	ND	No Further Action
VMP-2/IA-2	ND	ND	No Further Action
Cis-1,2-Dichloroethene (Matrix A)			
VMP-1/IA-1	ND	ND	No Further Action
VMP-2/IA-2	ND	ND	No Further Action
1,1,1-Trichloroethane (Matrix B)			
VMP-1/IA-1	ND	ND	No Further Action
VMP-2/IA-2	ND	ND	No Further Action
Methylene Chloride (Matrix B)			
VMP-1/IA-1	ND	2.8	No Further Action
VMP-2/IA-2	1.2	6.1	No Further Action
Tetrachloroethene (Matrix B)			
VMP-1/IA-1	ND	0.69	No Further Action
VMP-2/IA-2	ND	ND	No Further Action
Vinyl Chloride (Matrix C)			
VMP-1/IA-1	ND	ND	No Further Action
VMP-2/IA-2	ND	ND	No Further Action

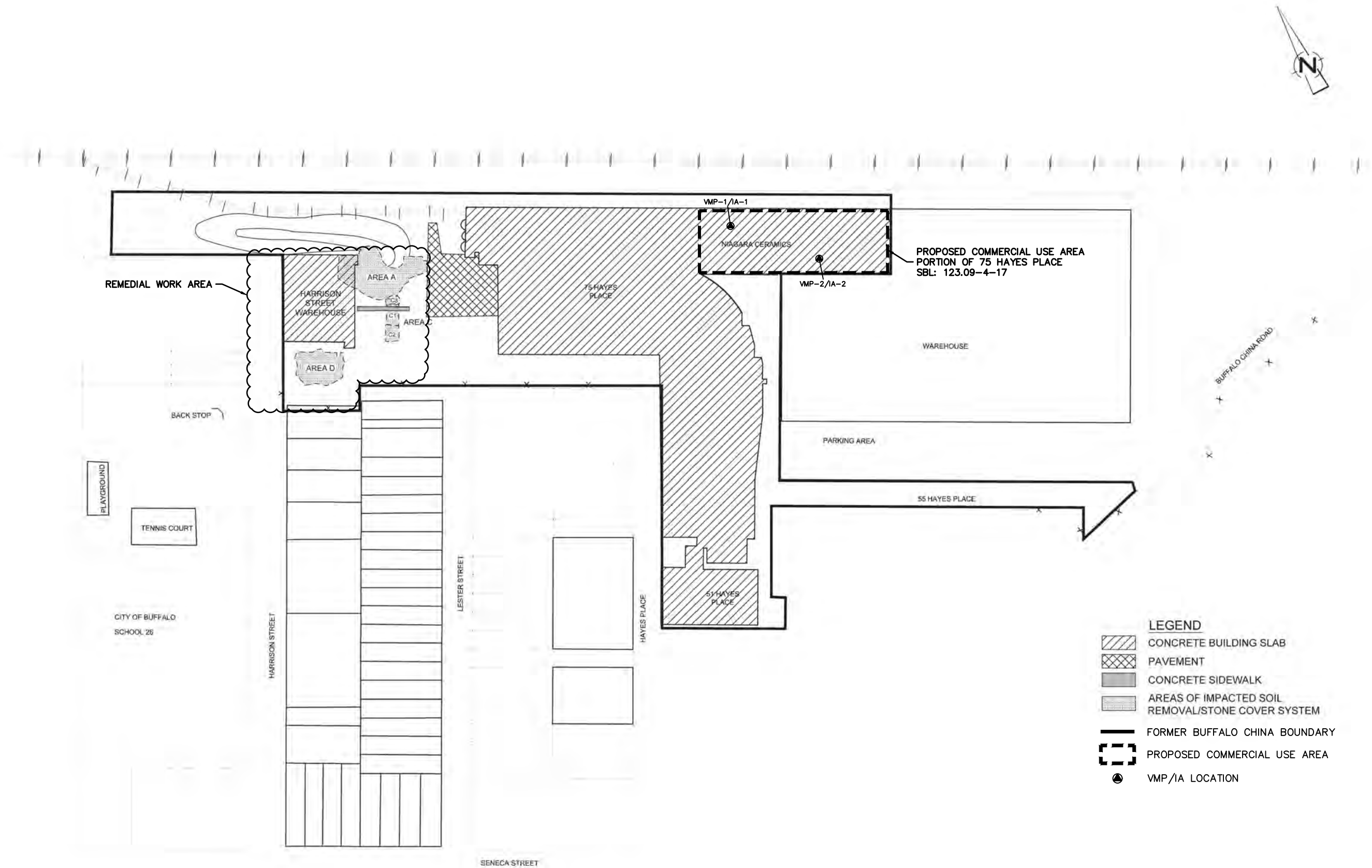
Notes:

$\mu\text{g}/\text{m}^3$ - Micrograms per cubic meter.

ND - Compound not detected.

FIGURES

\\16-344-1389\buffalochina\CAD\CHANGE IN USE REPORT\FORMER CHINA BUFFALO.dwg 6/9/2021 4:09 PM



- LEGEND**
- CONCRETE BUILDING SLAB
 - PAVEMENT
 - CONCRETE SIDEWALK
 - AREAS OF IMPACTED SOIL
REMOVAL/STONE COVER SYSTEM
 - FORMER BUFFALO CHINA BOUNDARY
 - PROPOSED COMMERCIAL USE AREA
 - VMP/IA LOCATION

80 0 80
APPROXIMATE SCALE IN FEET

WARNING

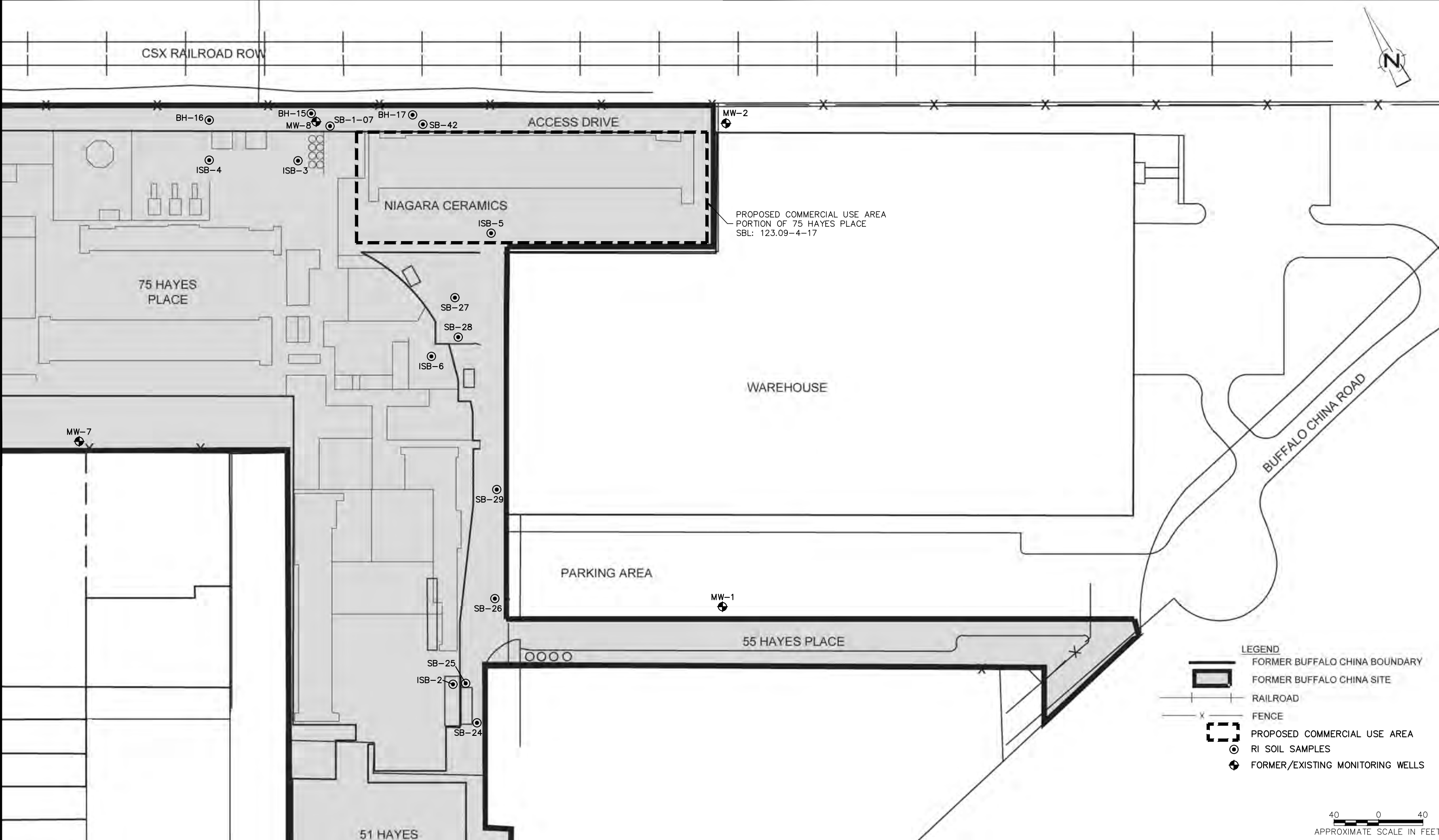
IT IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, OTHER THAN THOSE WHOSE SEAL APPEARS ON THIS DRAWING, TO ALTER IN ANY WAY AN ITEM ON THIS DRAWING. IF AN ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DATE	DESCRIPTION
REVISIONS		

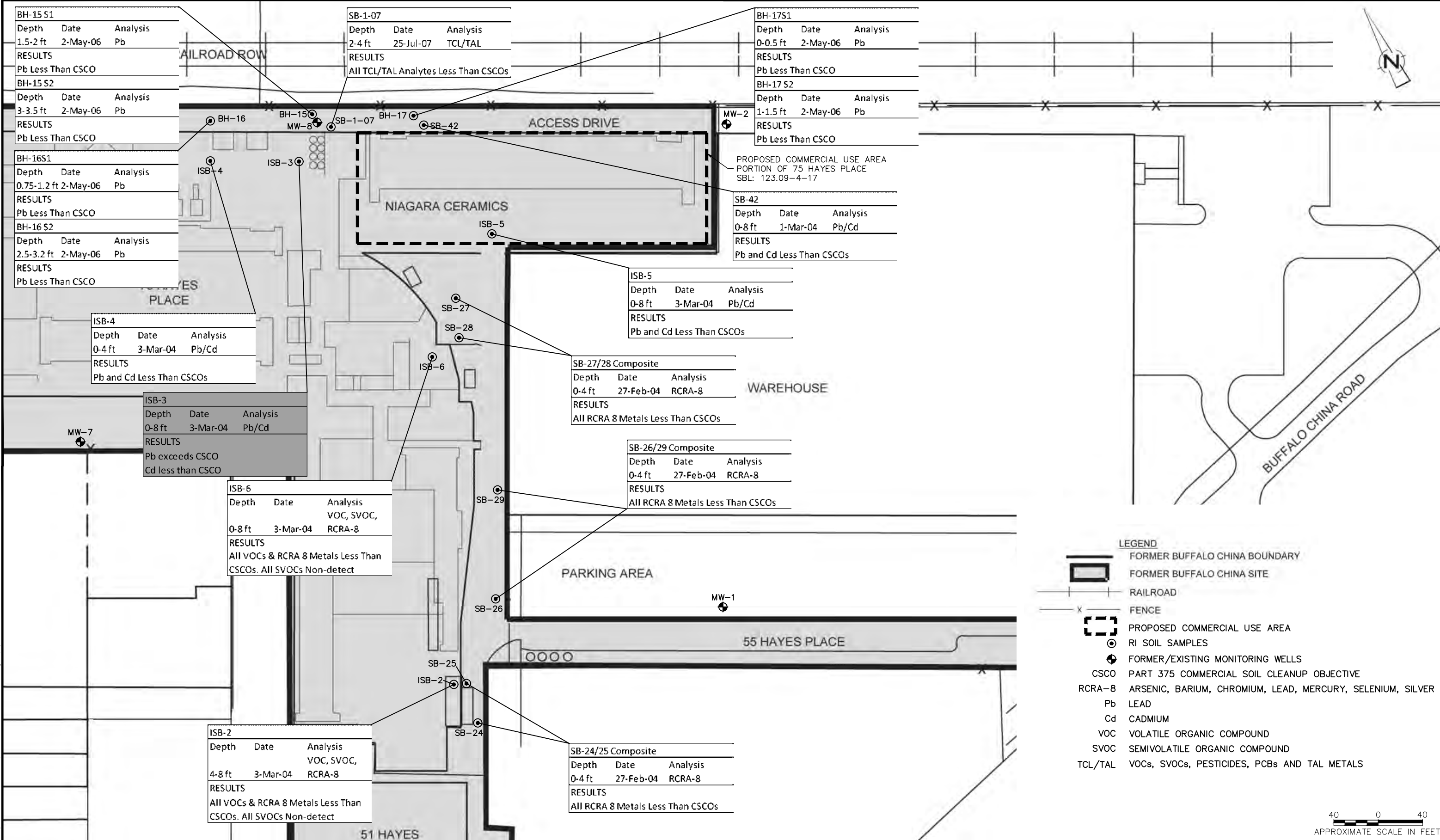


LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, New York

PROJ. ENG.:	CLIENT:	HAYES PLACE MANAGEMENT GROUP, INC.	JOB TITLE AND LOCATION: FORMER BUFFALO CHINA	LIRO JOB NO.: 16-344-1389 SHEET OF
DESIGNED BY:				
CHECKED BY:				
DRAWN BY: A.M.K.	DATE: MAY 2021	SCALE: AS SHOWN	DRAWING TITLE: SITE PLAN, SVI SAMPLE LOCATIONS AND EXISTING BCP COVER SYSTEM	FIGURE NO. 2

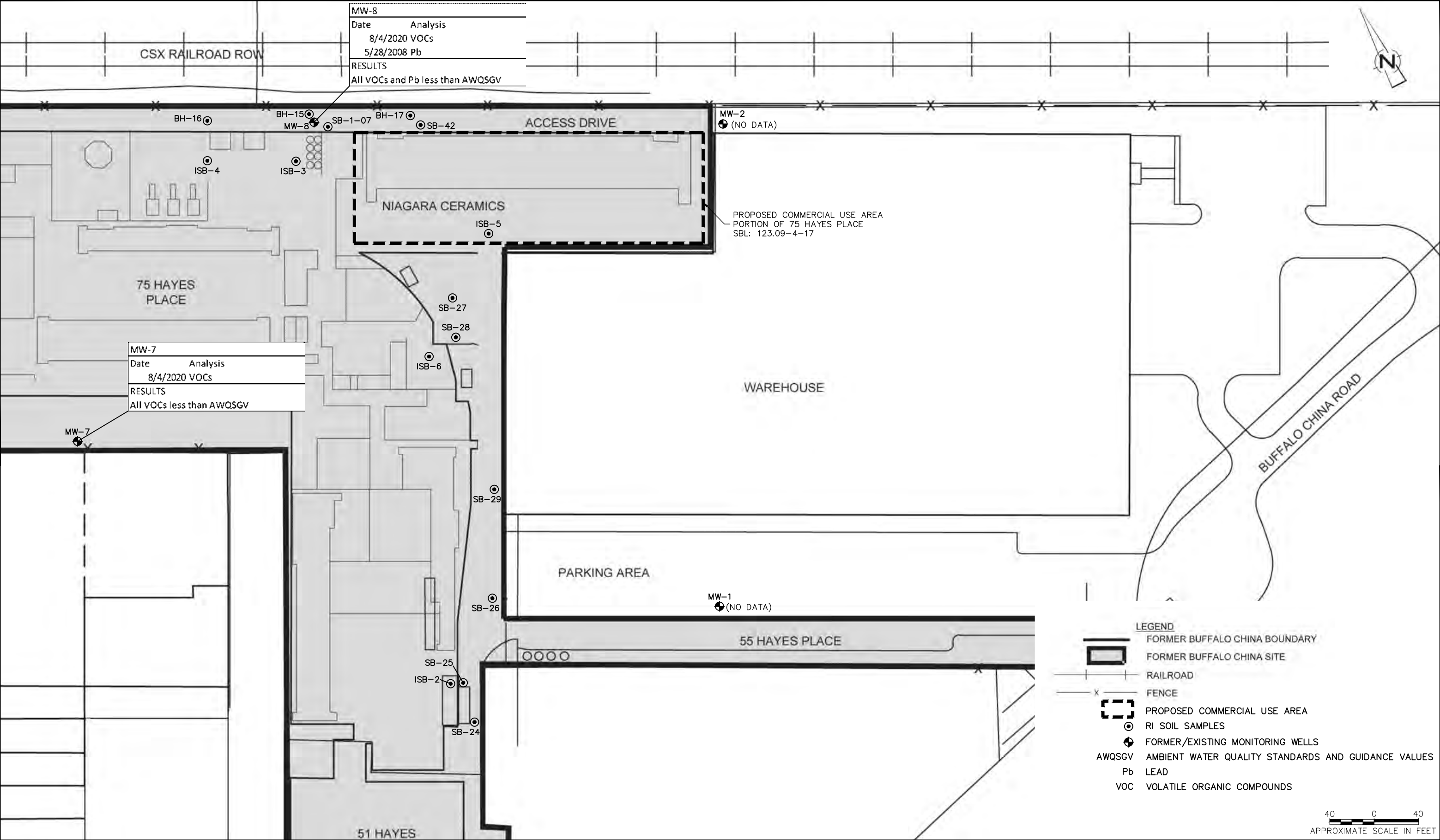


WARNING IT IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, OTHER THAN THOSE WHOSE SEAL APPEARS ON THIS DRAWING, TO ALTER IN ANY WAY AN ITEM ON THIS DRAWING. IF AN ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.				 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.:		
	DESIGNED BY:	16-344-1389										
	CHECKED BY:	DRAWING TITLE:			SHEET OF							
	NO.	DATE	DESCRIPTION		REVISIONS	DRAWN BY:	DATE:	SCALE:	RI SAMPLE POINTS AND WELLS NEAR CHANGE IN USE AREA		FIGURE NO.	
						A.M.K.	MAY 2021	AS SHOWN			3	



WARNING IT IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, OTHER THAN THOSE WHOSE SEAL APPEARS ON THIS DRAWING, TO ALTER IN ANY WAY AN ITEM ON THIS DRAWING. IF AN ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.				 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 OF										
	CHECKED BY:											
		NO.	DATE		DESCRIPTION		DRAWN BY: A.M.K.	DATE: MAY 2021	SCALE: AS SHOWN	DRAWING TITLE: HISTORICAL SOIL SAMPLE RESULTS		FIGURE NO. 4
	REVISIONS											

\\16-344-1389-buffalo china\CAD\CHANGE IN USE REPORT\FORMER CHINA BUFFALO SOIL.dwg 6/9/2021 3:43 PM



WARNING
IT IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, OTHER THAN THOSE WHOSE SEAL APPEARS ON THIS DRAWING, TO ALTER IN ANY WAY AN ITEM ON THIS DRAWING. IF AN ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DATE	DESCRIPTION
REVISIONS		



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

PROJ. ENG.:	HAYES PLACE MANAGEMENT GROUP, INC.		JOB TITLE AND LOCATION: FORMER BUFFALO CHINA		LIRO JOB NO.: 16-344-1389	
SHEET OF						
DESIGNED BY:			DRAWING TITLE: HISTORICAL GROUNDWATER SAMPLE RESULTS		FIGURE NO. 5	
CHECKED BY:						
DRAWN BY: A.M.K.	DATE: MAY 2021	SCALE: AS SHOWN				

APPENDIX A
SVI Laboratory Analytical Reports



Technical Report

prepared for:

LiRo Engineers (Buffalo, NY)

690 Delaware Ave.

Buffalo NY, 14209-2202

Attention: Steve Frank

Report Date: 04/13/2021

Client Project ID: 16-344-1389 Former Buffalo China Site

York Project (SDG) No.: 21D0416

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
www.YORKLAB.com

STRATFORD, CT 06615
(203) 325-1371



132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 04/13/2021
Client Project ID: 16-344-1389 Former Buffalo China Site
York Project (SDG) No.: 21D0416

LiRo Engineers (Buffalo, NY)
690 Delaware Ave.
Buffalo NY, 14209-2202
Attention: Steve Frank

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on April 06, 2021 and listed below. The project was identified as your project: **16-344-1389 Former Buffalo China Site**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
21D0416-01	VMP-1	Soil Vapor	03/31/2021	04/06/2021
21D0416-02	IA-1	Indoor Ambient Air	03/31/2021	04/06/2021
21D0416-03	VMP-2	Soil Vapor	03/31/2021	04/06/2021
21D0416-04	IA-2	Indoor Ambient Air	03/31/2021	04/06/2021
21D0416-05	OA-1	Outdoor Ambient Ai	03/31/2021	04/06/2021

General Notes for York Project (SDG) No.: 21D0416

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By:



Benjamin Gulizia
Laboratory Director

Date: 04/13/2021





Sample Information

Client Sample ID: VMP-1

York Sample ID: 21D0416-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

21D0416

16-344-1389 Former Buffalo China Site

Soil Vapor

March 31, 2021 4:30 pm

04/06/2021

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m ³	1.2	1.724	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 07:18	LJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.94	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.2	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	1.3	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.94	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.70	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.17	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	1.3	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.85	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
106-93-4	1,2-Dibromoethane	ND		ug/m ³	1.3	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	1.0	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.70	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.80	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	1.2	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.85	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
106-99-0	1,3-Butadiene	ND		ug/m ³	1.1	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	1.0	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.80	1.724	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 07:18	LJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	1.0	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
123-91-1	1,4-Dioxane	ND		ug/m ³	1.2	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
78-93-3	2-Butanone	4.3		ug/m ³	0.51	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
591-78-6	* 2-Hexanone	ND		ug/m ³	1.4	1.724	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 07:18	LJ



Sample Information

Client Sample ID: VMP-1

York Sample ID: 21D0416-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

21D0416

16-344-1389 Former Buffalo China Site

Soil Vapor

March 31, 2021 4:30 pm

04/06/2021

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m ³	2.7	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.71	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
67-64-1	Acetone	38		ug/m ³	0.82	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
107-13-1	Acrylonitrile	ND		ug/m ³	0.37	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
71-43-2	Benzene	ND		ug/m ³	0.55	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
100-44-7	Benzyl chloride	ND		ug/m ³	0.89	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
75-27-4	Bromodichloromethane	ND		ug/m ³	1.2	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
75-25-2	Bromoform	ND		ug/m ³	1.8	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
74-83-9	Bromomethane	ND		ug/m ³	0.67	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
75-15-0	Carbon disulfide	ND		ug/m ³	0.54	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
56-23-5	Carbon tetrachloride	0.43		ug/m ³	0.27	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
108-90-7	Chlorobenzene	ND		ug/m ³	0.79	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
75-00-3	Chloroethane	ND		ug/m ³	0.45	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
67-66-3	Chloroform	ND		ug/m ³	0.84	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
74-87-3	Chloromethane	ND		ug/m ³	0.36	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.17	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.78	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
110-82-7	Cyclohexane	ND		ug/m ³	0.59	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
124-48-1	Dibromochloromethane	ND		ug/m ³	1.5	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
75-71-8	Dichlorodifluoromethane	36		ug/m ³	0.85	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
141-78-6	* Ethyl acetate	ND		ug/m ³	1.2	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
100-41-4	Ethyl Benzene	ND		ug/m ³	0.75	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
87-68-3	Hexachlorobutadiene	ND		ug/m ³	1.8	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ



Sample Information

Client Sample ID: VMP-1

York Sample ID: 21D0416-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

21D0416

16-344-1389 Former Buffalo China Site

Soil Vapor

March 31, 2021 4:30 pm

04/06/2021

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-63-0	Isopropanol	1.9		ug/m ³	0.85	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.71	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.62	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
75-09-2	Methylene chloride	ND		ug/m ³	1.2	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
142-82-5	n-Heptane	ND		ug/m ³	0.71	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
110-54-3	n-Hexane	0.61		ug/m ³	0.61	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
95-47-6	o-Xylene	ND		ug/m ³	0.75	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
179601-23-1	p- & m- Xylenes	1.8		ug/m ³	1.5	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
622-96-8	* p-Ethyltoluene	ND		ug/m ³	0.85	1.724	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 07:18	LJ
115-07-1	* Propylene	ND		ug/m ³	0.30	1.724	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 07:18	LJ
100-42-5	Styrene	ND		ug/m ³	0.73	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
127-18-4	Tetrachloroethylene	ND		ug/m ³	1.2	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
109-99-9	* Tetrahydrofuran	ND		ug/m ³	1.0	1.724	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 07:18	LJ
108-88-3	Toluene	1.7		ug/m ³	0.65	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.68	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.78	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
79-01-6	Trichloroethylene	ND		ug/m ³	0.23	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
75-69-4	Trichlorofluoromethane (Freon 11)	270		ug/m ³	0.97	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
108-05-4	Vinyl acetate	ND		ug/m ³	0.61	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
593-60-2	Vinyl bromide	ND		ug/m ³	0.75	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ
75-01-4	Vinyl Chloride	ND		ug/m ³	0.22	1.724	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 07:18	LJ



Sample Information

Client Sample ID: IA-1

York Sample ID: 21D0416-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

21D0416

16-344-1389 Former Buffalo China Site

Indoor Ambient Air

March 31, 2021 1:45 pm

04/06/2021

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m ³	0.54	0.787	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 04:23	LJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.43	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.54	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.60		ug/m ³	0.60	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.43	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.32	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.078	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.58	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.39	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.60	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.47	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.32	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.36	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.55	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.39	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
106-99-0	1,3-Butadiene	ND		ug/m ³	0.52	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.47	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.36	0.787	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 04:23	LJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.47	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
123-91-1	1,4-Dioxane	ND		ug/m ³	0.57	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
78-93-3	2-Butanone	1.6		ug/m ³	0.23	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
591-78-6	* 2-Hexanone	ND		ug/m ³	0.64	0.787	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 04:23	LJ
107-05-1	3-Chloropropene	ND		ug/m ³	1.2	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ



Sample Information

Client Sample ID: IA-1

York Sample ID: 21D0416-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

21D0416

16-344-1389 Former Buffalo China Site

Indoor Ambient Air

March 31, 2021 1:45 pm

04/06/2021

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.32	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
67-64-1	Acetone	13		ug/m ³	0.37	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
107-13-1	Acrylonitrile	ND		ug/m ³	0.17	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
71-43-2	Benzene	0.50		ug/m ³	0.25	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
100-44-7	Benzyl chloride	ND		ug/m ³	0.41	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
75-27-4	Bromodichloromethane	ND		ug/m ³	0.53	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
75-25-2	Bromoform	ND		ug/m ³	0.81	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
74-83-9	Bromomethane	ND		ug/m ³	0.31	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
75-15-0	Carbon disulfide	ND		ug/m ³	0.25	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
56-23-5	Carbon tetrachloride	0.45		ug/m ³	0.12	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
108-90-7	Chlorobenzene	ND		ug/m ³	0.36	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
75-00-3	Chloroethane	ND		ug/m ³	0.21	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
67-66-3	Chloroform	ND		ug/m ³	0.38	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
74-87-3	Chloromethane	1.0		ug/m ³	0.16	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.078	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.36	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
110-82-7	Cyclohexane	ND		ug/m ³	0.27	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
124-48-1	Dibromochloromethane	ND		ug/m ³	0.67	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
75-71-8	Dichlorodifluoromethane	2.1		ug/m ³	0.39	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
141-78-6	* Ethyl acetate	0.65		ug/m ³	0.57	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
100-41-4	Ethyl Benzene	0.79		ug/m ³	0.34	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
87-68-3	Hexachlorobutadiene	ND		ug/m ³	0.84	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
67-63-0	Isopropanol	5.0		ug/m ³	0.39	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ



Sample Information

Client Sample ID: IA-1

York Sample ID: 21D0416-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

21D0416

16-344-1389 Former Buffalo China Site

Indoor Ambient Air

March 31, 2021 1:45 pm

04/06/2021

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.32	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.28	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
75-09-2	Methylene chloride	2.8		ug/m ³	0.55	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
142-82-5	n-Heptane	0.52		ug/m ³	0.32	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
110-54-3	n-Hexane	0.89		ug/m ³	0.28	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
95-47-6	o-Xylene	1.2		ug/m ³	0.34	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
179601-23-1	p- & m- Xylenes	2.8		ug/m ³	0.68	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
622-96-8	* p-Ethyltoluene	ND		ug/m ³	0.39	0.787	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 04:23	LJ
115-07-1	* Propylene	ND		ug/m ³	0.14	0.787	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 04:23	LJ
100-42-5	Styrene	ND		ug/m ³	0.34	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
127-18-4	Tetrachloroethylene	0.69		ug/m ³	0.53	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.46	0.787	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 04:23	LJ
108-88-3	Toluene	14		ug/m ³	0.30	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.31	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.36	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
79-01-6	Trichloroethylene	0.30		ug/m ³	0.11	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
75-69-4	Trichlorofluoromethane (Freon 11)	160		ug/m ³	0.44	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
108-05-4	Vinyl acetate	ND		ug/m ³	0.28	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
593-60-2	Vinyl bromide	ND		ug/m ³	0.34	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ
75-01-4	Vinyl Chloride	ND		ug/m ³	0.10	0.787	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 04:23	LJ



Sample Information

Client Sample ID: VMP-2

York Sample ID: 21D0416-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

21D0416

16-344-1389 Former Buffalo China Site

Soil Vapor

March 31, 2021 4:26 pm

04/06/2021

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m ³	1.2	1.684	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 06:15	LJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.92	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.2	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	1.3	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.92	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.68	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.17	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	1.2	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.83	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
106-93-4	1,2-Dibromoethane	ND		ug/m ³	1.3	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	1.0	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.68	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.78	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	1.2	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.83	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
106-99-0	1,3-Butadiene	ND		ug/m ³	1.1	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	1.0	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.78	1.684	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 06:15	LJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	1.0	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
123-91-1	1,4-Dioxane	ND		ug/m ³	1.2	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
78-93-3	2-Butanone	0.65		ug/m ³	0.50	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
591-78-6	* 2-Hexanone	ND		ug/m ³	1.4	1.684	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 06:15	LJ
107-05-1	3-Chloropropene	ND		ug/m ³	2.6	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ



Sample Information

Client Sample ID: VMP-2

York Sample ID: 21D0416-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

21D0416

16-344-1389 Former Buffalo China Site

Soil Vapor

March 31, 2021 4:26 pm

04/06/2021

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.69	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
67-64-1	Acetone	4.0		ug/m ³	0.80	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
107-13-1	Acrylonitrile	ND		ug/m ³	0.37	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
71-43-2	Benzene	0.70		ug/m ³	0.54	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
100-44-7	Benzyl chloride	ND		ug/m ³	0.87	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
75-27-4	Bromodichloromethane	ND		ug/m ³	1.1	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
75-25-2	Bromoform	ND		ug/m ³	1.7	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
74-83-9	Bromomethane	ND		ug/m ³	0.65	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
75-15-0	Carbon disulfide	1.3		ug/m ³	0.52	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
56-23-5	Carbon tetrachloride	0.32		ug/m ³	0.26	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
108-90-7	Chlorobenzene	ND		ug/m ³	0.78	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
75-00-3	Chloroethane	ND		ug/m ³	0.44	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
67-66-3	Chloroform	ND		ug/m ³	0.82	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
74-87-3	Chloromethane	ND		ug/m ³	0.35	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.17	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.76	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
110-82-7	Cyclohexane	ND		ug/m ³	0.58	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
124-48-1	Dibromochloromethane	ND		ug/m ³	1.4	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
75-71-8	Dichlorodifluoromethane	2.2		ug/m ³	0.83	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
141-78-6	* Ethyl acetate	ND		ug/m ³	1.2	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
100-41-4	Ethyl Benzene	ND		ug/m ³	0.73	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
87-68-3	Hexachlorobutadiene	ND		ug/m ³	1.8	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
67-63-0	Isopropanol	1.3		ug/m ³	0.83	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ



Sample Information

Client Sample ID: VMP-2

York Sample ID: 21D0416-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

21D0416

16-344-1389 Former Buffalo China Site

Soil Vapor

March 31, 2021 4:26 pm

04/06/2021

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.69	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.61	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
75-09-2	Methylene chloride	1.2		ug/m ³	1.2	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
142-82-5	n-Heptane	1.9		ug/m ³	0.69	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
110-54-3	n-Hexane	1.1		ug/m ³	0.59	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
95-47-6	o-Xylene	ND		ug/m ³	0.73	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
179601-23-1	p- & m- Xylenes	1.7		ug/m ³	1.5	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
622-96-8	* p-Ethyltoluene	ND		ug/m ³	0.83	1.684	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 06:15	LJ
115-07-1	* Propylene	0.52		ug/m ³	0.29	1.684	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 06:15	LJ
100-42-5	Styrene	ND		ug/m ³	0.72	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
127-18-4	Tetrachloroethylene	ND		ug/m ³	1.1	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.99	1.684	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 06:15	LJ
108-88-3	Toluene	3.0		ug/m ³	0.63	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.67	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.76	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
79-01-6	Trichloroethylene	ND		ug/m ³	0.23	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
75-69-4	Trichlorofluoromethane (Freon 11)	370		ug/m ³	0.95	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
108-05-4	Vinyl acetate	ND		ug/m ³	0.59	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
593-60-2	Vinyl bromide	ND		ug/m ³	0.74	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ
75-01-4	Vinyl Chloride	ND		ug/m ³	0.22	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 06:15	LJ



Sample Information

Client Sample ID: IA-2

York Sample ID: 21D0416-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

21D0416

16-344-1389 Former Buffalo China Site

Indoor Ambient Air

March 31, 2021 4:05 pm

04/06/2021

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m ³	0.62	0.896	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 08:29	LJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.49	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.62	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.69	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.49	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.36	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.089	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.66	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
95-63-6	1,2,4-Trimethylbenzene	0.70		ug/m ³	0.44	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.69	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.54	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.36	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.41	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.63	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.44	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
106-99-0	1,3-Butadiene	ND		ug/m ³	0.59	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.54	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.41	0.896	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 08:29	LJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.54	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
123-91-1	1,4-Dioxane	ND		ug/m ³	0.65	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
78-93-3	2-Butanone	1.7		ug/m ³	0.26	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
591-78-6	* 2-Hexanone	ND		ug/m ³	0.73	0.896	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 08:29	LJ
107-05-1	3-Chloropropene	ND		ug/m ³	1.4	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ



Sample Information

Client Sample ID: IA-2

York Sample ID: 21D0416-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

21D0416

16-344-1389 Former Buffalo China Site

Indoor Ambient Air

March 31, 2021 4:05 pm

04/06/2021

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.37	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
67-64-1	Acetone	13		ug/m ³	0.43	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
107-13-1	Acrylonitrile	ND		ug/m ³	0.19	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
71-43-2	Benzene	0.54		ug/m ³	0.29	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
100-44-7	Benzyl chloride	ND		ug/m ³	0.46	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
75-27-4	Bromodichloromethane	ND		ug/m ³	0.60	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
75-25-2	Bromoform	ND		ug/m ³	0.93	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
74-83-9	Bromomethane	ND		ug/m ³	0.35	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
75-15-0	Carbon disulfide	ND		ug/m ³	0.28	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
56-23-5	Carbon tetrachloride	0.45		ug/m ³	0.14	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
108-90-7	Chlorobenzene	ND		ug/m ³	0.41	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
75-00-3	Chloroethane	ND		ug/m ³	0.24	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
67-66-3	Chloroform	ND		ug/m ³	0.44	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
74-87-3	Chloromethane	1.0		ug/m ³	0.19	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.089	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.41	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
110-82-7	Cyclohexane	ND		ug/m ³	0.31	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
124-48-1	Dibromochloromethane	ND		ug/m ³	0.76	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
75-71-8	Dichlorodifluoromethane	2.3		ug/m ³	0.44	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
141-78-6	* Ethyl acetate	1.1		ug/m ³	0.65	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
100-41-4	Ethyl Benzene	1.7		ug/m ³	0.39	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
87-68-3	Hexachlorobutadiene	ND		ug/m ³	0.96	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
67-63-0	Isopropanol	5.8		ug/m ³	0.44	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ



Sample Information

Client Sample ID: IA-2

York Sample ID: 21D0416-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

21D0416

16-344-1389 Former Buffalo China Site

Indoor Ambient Air

March 31, 2021 4:05 pm

04/06/2021

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	Methyl Methacrylate	1.1		ug/m ³	0.37	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.32	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
75-09-2	Methylene chloride	6.1		ug/m ³	0.62	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
142-82-5	n-Heptane	0.73		ug/m ³	0.37	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
110-54-3	n-Hexane	1.2		ug/m ³	0.32	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
95-47-6	o-Xylene	2.7		ug/m ³	0.39	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
179601-23-1	p- & m- Xylenes	6.6		ug/m ³	0.78	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
622-96-8	* p-Ethyltoluene	0.53		ug/m ³	0.44	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
115-07-1	* Propylene	1.5		ug/m ³	0.15	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
100-42-5	Styrene	0.88		ug/m ³	0.38	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
127-18-4	Tetrachloroethylene	ND		ug/m ³	0.61	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.53	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
108-88-3	Toluene	33		ug/m ³	0.34	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.36	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.41	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
79-01-6	Trichloroethylene	0.72		ug/m ³	0.12	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
75-69-4	Trichlorofluoromethane (Freon 11)	260		ug/m ³	1.9	3.36	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/13/2021 11:39	04/13/2021 15:57	LJ
108-05-4	Vinyl acetate	ND		ug/m ³	0.32	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
593-60-2	Vinyl bromide	ND		ug/m ³	0.39	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ
75-01-4	Vinyl Chloride	ND		ug/m ³	0.11	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 08:29	LJ



Sample Information

Client Sample ID: OA-1

York Sample ID: 21D0416-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

21D0416

16-344-1389 Former Buffalo China Site

Outdoor Ambient Air

March 31, 2021 4:23 pm

04/06/2021

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m ³	0.55	0.808	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 09:39	LJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.44	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.55	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.62	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.44	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.33	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.080	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.60	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.40	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.62	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.49	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.33	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.37	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.56	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.40	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
106-99-0	1,3-Butadiene	ND		ug/m ³	0.54	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.49	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.37	0.808	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 09:39	LJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.49	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
123-91-1	1,4-Dioxane	ND		ug/m ³	0.58	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
78-93-3	2-Butanone	0.43		ug/m ³	0.24	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
591-78-6	* 2-Hexanone	ND		ug/m ³	0.66	0.808	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 09:39	LJ
107-05-1	3-Chloropropene	ND		ug/m ³	1.3	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ



Sample Information

Client Sample ID: OA-1

York Sample ID: 21D0416-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

21D0416

16-344-1389 Former Buffalo China Site

Outdoor Ambient Air

March 31, 2021 4:23 pm

04/06/2021

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.33	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
67-64-1	Acetone	3.5		ug/m ³	0.38	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
107-13-1	Acrylonitrile	ND		ug/m ³	0.18	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
71-43-2	Benzene	0.31		ug/m ³	0.26	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
100-44-7	Benzyl chloride	ND		ug/m ³	0.42	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
75-27-4	Bromodichloromethane	ND		ug/m ³	0.54	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
75-25-2	Bromoform	ND		ug/m ³	0.84	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
74-83-9	Bromomethane	ND		ug/m ³	0.31	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
75-15-0	Carbon disulfide	ND		ug/m ³	0.25	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
56-23-5	Carbon tetrachloride	0.41		ug/m ³	0.13	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
108-90-7	Chlorobenzene	ND		ug/m ³	0.37	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
75-00-3	Chloroethane	ND		ug/m ³	0.21	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
67-66-3	Chloroform	ND		ug/m ³	0.39	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
74-87-3	Chloromethane	0.95		ug/m ³	0.17	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.080	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.37	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
110-82-7	Cyclohexane	ND		ug/m ³	0.28	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
124-48-1	Dibromochloromethane	ND		ug/m ³	0.69	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
75-71-8	Dichlorodifluoromethane	2.1		ug/m ³	0.40	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
141-78-6	* Ethyl acetate	ND		ug/m ³	0.58	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
100-41-4	Ethyl Benzene	ND		ug/m ³	0.35	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
87-68-3	Hexachlorobutadiene	ND		ug/m ³	0.86	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
67-63-0	Isopropanol	2.8		ug/m ³	0.40	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ



Sample Information

Client Sample ID: OA-1

York Sample ID: 21D0416-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

21D0416

16-344-1389 Former Buffalo China Site

Outdoor Ambient Air

March 31, 2021 4:23 pm

04/06/2021

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.33	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.29	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
75-09-2	Methylene chloride	0.76		ug/m ³	0.56	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
142-82-5	n-Heptane	ND		ug/m ³	0.33	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
110-54-3	n-Hexane	0.34		ug/m ³	0.28	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
95-47-6	o-Xylene	ND		ug/m ³	0.35	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
179601-23-1	p- & m- Xylenes	ND		ug/m ³	0.70	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
622-96-8	* p-Ethyltoluene	ND		ug/m ³	0.40	0.808	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 09:39	LJ
115-07-1	* Propylene	ND		ug/m ³	0.14	0.808	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 09:39	LJ
100-42-5	Styrene	ND		ug/m ³	0.34	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
127-18-4	Tetrachloroethylene	ND		ug/m ³	0.55	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
109-99-9	* Tetrahydrofuran	ND		ug/m ³	0.48	0.808	EPA TO-15 Certifications:	04/12/2021 09:46	04/13/2021 09:39	LJ
108-88-3	Toluene	0.82		ug/m ³	0.30	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.32	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.37	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
79-01-6	Trichloroethylene	ND		ug/m ³	0.11	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
75-69-4	Trichlorofluoromethane (Freon 11)	1.1		ug/m ³	0.45	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
108-05-4	Vinyl acetate	ND		ug/m ³	0.28	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
593-60-2	Vinyl bromide	ND		ug/m ³	0.35	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ
75-01-4	Vinyl Chloride	ND		ug/m ³	0.10	0.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/12/2021 09:46	04/13/2021 09:39	LJ



Analytical Batch Summary

Batch ID: BD10576

Preparation Method: EPA TO15 PREP

Prepared By: LJ

YORK Sample ID	Client Sample ID	Preparation Date
21D0416-01	VMP-1	04/12/21
21D0416-02	IA-1	04/12/21
21D0416-03	VMP-2	04/12/21
21D0416-04	IA-2	04/12/21
21D0416-05	OA-1	04/12/21
BD10576-BLK1	Blank	04/12/21
BD10576-BLK2	Blank	04/12/21
BD10576-BLK3	Blank	04/12/21
BD10576-BS1	LCS	04/12/21
BD10576-DUP1	Duplicate	04/12/21

Batch ID: BD10611

Preparation Method: EPA TO15 PREP

Prepared By: LJ

YORK Sample ID	Client Sample ID	Preparation Date
21D0416-04RE1	IA-2	04/13/21
BD10611-BLK1	Blank	04/13/21
BD10611-BS1	LCS	04/13/21



Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD10576 - EPA TO15 PREP											
Blank (BD10576-BLK1)						Prepared & Analyzed: 04/12/2021					
1,1,1,2-Tetrachloroethane	ND	0.69	ug/m ³								
1,1,1-Trichloroethane	ND	0.55	"								
1,1,2,2-Tetrachloroethane	ND	0.69	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.77	"								
1,1,2-Trichloroethane	ND	0.55	"								
1,1-Dichloroethane	ND	0.40	"								
1,1-Dichloroethylene	ND	0.099	"								
1,2,4-Trichlorobenzene	ND	0.74	"								
1,2,4-Trimethylbenzene	ND	0.49	"								
1,2-Dibromoethane	ND	0.77	"								
1,2-Dichlorobenzene	ND	0.60	"								
1,2-Dichloroethane	ND	0.40	"								
1,2-Dichloropropane	ND	0.46	"								
1,2-Dichlorotetrafluoroethane	ND	0.70	"								
1,3,5-Trimethylbenzene	ND	0.49	"								
1,3-Butadiene	ND	0.66	"								
1,3-Dichlorobenzene	ND	0.60	"								
1,3-Dichloropropane	ND	0.46	"								
1,4-Dichlorobenzene	ND	0.60	"								
1,4-Dioxane	ND	0.72	"								
2-Butanone	ND	0.29	"								
2-Hexanone	ND	0.82	"								
3-Chloropropene	ND	1.6	"								
4-Methyl-2-pentanone	ND	0.41	"								
Acetone	ND	0.48	"								
Acrylonitrile	ND	0.22	"								
Benzene	ND	0.32	"								
Benzyl chloride	ND	0.52	"								
Bromodichloromethane	ND	0.67	"								
Bromoform	ND	1.0	"								
Bromomethane	ND	0.39	"								
Carbon disulfide	ND	0.31	"								
Carbon tetrachloride	ND	0.16	"								
Chlorobenzene	ND	0.46	"								
Chloroethane	ND	0.26	"								
Chloroform	ND	0.49	"								
Chloromethane	ND	0.21	"								
cis-1,2-Dichloroethylene	ND	0.099	"								
cis-1,3-Dichloropropylene	ND	0.45	"								
Cyclohexane	ND	0.34	"								
Dibromochloromethane	ND	0.85	"								
Dichlorodifluoromethane	ND	0.49	"								
Ethyl acetate	ND	0.72	"								
Ethyl Benzene	ND	0.43	"								
Hexachlorobutadiene	ND	1.1	"								
Isopropanol	ND	0.49	"								
Methyl Methacrylate	ND	0.41	"								
Methyl tert-butyl ether (MTBE)	ND	0.36	"								
Methylene chloride	ND	0.69	"								



Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BD10576 - EPA TO15 PREP

Blank (BD10576-BLK1)

Prepared & Analyzed: 04/12/2021

n-Heptane	ND	0.41	ug/m ³
n-Hexane	ND	0.35	"
o-Xylene	ND	0.43	"
p- & m- Xylenes	ND	0.87	"
p-Ethyltoluene	ND	0.49	"
Propylene	ND	0.17	"
Styrene	ND	0.43	"
Tetrachloroethylene	ND	0.68	"
Tetrahydrofuran	ND	0.59	"
Toluene	ND	0.38	"
trans-1,2-Dichloroethylene	ND	0.40	"
trans-1,3-Dichloropropylene	ND	0.45	"
Trichloroethylene	ND	0.13	"
Trichlorofluoromethane (Freon 11)	ND	0.56	"
Vinyl acetate	ND	0.35	"
Vinyl bromide	ND	0.44	"
Vinyl Chloride	ND	0.13	"

Blank (BD10576-BLK2)

Prepared & Analyzed: 04/12/2021

1,1,1,2-Tetrachloroethane	ND	0.69	ug/m ³
1,1,1-Trichloroethane	ND	0.55	"
1,1,2,2-Tetrachloroethane	ND	0.69	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.77	"
1,1,2-Trichloroethane	ND	0.55	"
1,1-Dichloroethane	ND	0.40	"
1,1-Dichloroethylene	ND	0.099	"
1,2,4-Trichlorobenzene	ND	0.74	"
1,2,4-Trimethylbenzene	ND	0.49	"
1,2-Dibromoethane	ND	0.77	"
1,2-Dichlorobenzene	ND	0.60	"
1,2-Dichloroethane	ND	0.40	"
1,2-Dichloropropane	ND	0.46	"
1,2-Dichlorotetrafluoroethane	ND	0.70	"
1,3,5-Trimethylbenzene	ND	0.49	"
1,3-Butadiene	ND	0.66	"
1,3-Dichlorobenzene	ND	0.60	"
1,3-Dichloropropane	ND	0.46	"
1,4-Dichlorobenzene	ND	0.60	"
1,4-Dioxane	ND	0.72	"
2-Butanone	ND	0.29	"
2-Hexanone	ND	0.82	"
3-Chloropropene	ND	1.6	"
4-Methyl-2-pentanone	ND	0.41	"
Acetone	ND	0.48	"
Acrylonitrile	ND	0.22	"
Benzene	ND	0.32	"
Benzyl chloride	ND	0.52	"
Bromodichloromethane	ND	0.67	"
Bromoform	ND	1.0	"
Bromomethane	ND	0.39	"
Carbon disulfide	ND	0.31	"



Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BD10576 - EPA TO15 PREP

Blank (BD10576-BLK2)

Prepared & Analyzed: 04/12/2021

Carbon tetrachloride	ND	0.16	ug/m ³
Chlorobenzene	ND	0.46	"
Chloroethane	ND	0.26	"
Chloroform	ND	0.49	"
Chloromethane	ND	0.21	"
cis-1,2-Dichloroethylene	ND	0.099	"
cis-1,3-Dichloropropylene	ND	0.45	"
Cyclohexane	ND	0.34	"
Dibromochloromethane	ND	0.85	"
Dichlorodifluoromethane	ND	0.49	"
Ethyl acetate	ND	0.72	"
Ethyl Benzene	ND	0.43	"
Hexachlorobutadiene	ND	1.1	"
Isopropanol	ND	0.49	"
Methyl Methacrylate	ND	0.41	"
Methyl tert-butyl ether (MTBE)	ND	0.36	"
Methylene chloride	ND	0.69	"
n-Heptane	ND	0.41	"
n-Hexane	ND	0.35	"
o-Xylene	ND	0.43	"
p- & m- Xylenes	ND	0.87	"
p-Ethyltoluene	ND	0.49	"
Propylene	ND	0.17	"
Styrene	ND	0.43	"
Tetrachloroethylene	ND	0.68	"
Tetrahydrofuran	ND	0.59	"
Toluene	ND	0.38	"
trans-1,2-Dichloroethylene	ND	0.40	"
trans-1,3-Dichloropropylene	ND	0.45	"
Trichloroethylene	ND	0.13	"
Trichlorofluoromethane (Freon 11)	ND	0.56	"
Vinyl acetate	ND	0.35	"
Vinyl bromide	ND	0.44	"
Vinyl Chloride	ND	0.13	"



Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BD10576 - EPA TO15 PREP

Blank (BD10576-BLK3)

Prepared: 04/12/2021 Analyzed: 04/13/2021

1,1,1,2-Tetrachloroethane	ND	0.69	ug/m ³
1,1,1-Trichloroethane	ND	0.55	"
1,1,2,2-Tetrachloroethane	ND	0.69	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.77	"
1,1,2-Trichloroethane	ND	0.55	"
1,1-Dichloroethane	ND	0.40	"
1,1-Dichloroethylene	ND	0.099	"
1,2,4-Trichlorobenzene	ND	0.74	"
1,2,4-Trimethylbenzene	ND	0.49	"
1,2-Dibromoethane	ND	0.77	"
1,2-Dichlorobenzene	ND	0.60	"
1,2-Dichloroethane	ND	0.40	"
1,2-Dichloropropane	ND	0.46	"
1,2-Dichlorotetrafluoroethane	ND	0.70	"
1,3,5-Trimethylbenzene	ND	0.49	"
1,3-Butadiene	ND	0.66	"
1,3-Dichlorobenzene	ND	0.60	"
1,3-Dichloropropane	ND	0.46	"
1,4-Dichlorobenzene	ND	0.60	"
1,4-Dioxane	ND	0.72	"
2-Butanone	ND	0.29	"
2-Hexanone	ND	0.82	"
3-Chloropropene	ND	1.6	"
4-Methyl-2-pentanone	ND	0.41	"
Acetone	ND	0.48	"
Acrylonitrile	ND	0.22	"
Benzene	ND	0.32	"
Benzyl chloride	ND	0.52	"
Bromodichloromethane	ND	0.67	"
Bromoform	ND	1.0	"
Bromomethane	ND	0.39	"
Carbon disulfide	ND	0.31	"
Carbon tetrachloride	ND	0.16	"
Chlorobenzene	ND	0.46	"
Chloroethane	ND	0.26	"
Chloroform	ND	0.49	"
Chloromethane	ND	0.21	"
cis-1,2-Dichloroethylene	ND	0.099	"
cis-1,3-Dichloropropylene	ND	0.45	"
Cyclohexane	ND	0.34	"
Dibromochloromethane	ND	0.85	"
Dichlorodifluoromethane	ND	0.49	"
Ethyl acetate	ND	0.72	"
Ethyl Benzene	ND	0.43	"
Hexachlorobutadiene	ND	1.1	"
Isopropanol	ND	0.49	"
Methyl Methacrylate	ND	0.41	"
Methyl tert-butyl ether (MTBE)	ND	0.36	"
Methylene chloride	ND	0.69	"
n-Heptane	ND	0.41	"



Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BD10576 - EPA TO15 PREP

Blank (BD10576-BLK3)

Prepared: 04/12/2021 Analyzed: 04/13/2021

n-Hexane	ND	0.35	ug/m ³
o-Xylene	ND	0.43	"
p- & m- Xylenes	ND	0.87	"
p-Ethyltoluene	ND	0.49	"
Propylene	ND	0.17	"
Styrene	ND	0.43	"
Tetrachloroethylene	ND	0.68	"
Tetrahydrofuran	ND	0.59	"
Toluene	ND	0.38	"
trans-1,2-Dichloroethylene	ND	0.40	"
trans-1,3-Dichloropropylene	ND	0.45	"
Trichloroethylene	ND	0.13	"
Trichlorofluoromethane (Freon 11)	ND	0.56	"
Vinyl acetate	ND	0.35	"
Vinyl bromide	ND	0.44	"
Vinyl Chloride	ND	0.13	"

LCS (BD10576-BS1)

Prepared & Analyzed: 04/12/2021

1,1,1,2-Tetrachloroethane	9.12		ppbv	10.0	91.2	70-130
1,1,1-Trichloroethane	8.70		"	10.0	87.0	70-130
1,1,2,2-Tetrachloroethane	9.37		"	10.0	93.7	70-130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.03		"	10.0	90.3	70-130
1,1,2-Trichloroethane	9.58		"	10.0	95.8	70-130
1,1-Dichloroethane	8.47		"	10.0	84.7	70-130
1,1-Dichloroethylene	8.43		"	10.0	84.3	70-130
1,2,4-Trichlorobenzene	7.81		"	10.0	78.1	70-130
1,2,4-Trimethylbenzene	9.52		"	10.0	95.2	70-130
1,2-Dibromoethane	9.44		"	10.0	94.4	70-130
1,2-Dichlorobenzene	8.45		"	10.0	84.5	70-130
1,2-Dichloroethane	8.20		"	10.0	82.0	70-130
1,2-Dichloropropane	9.54		"	10.0	95.4	70-130
1,2-Dichlorotetrafluoroethane	8.85		"	10.0	88.5	70-130
1,3,5-Trimethylbenzene	9.43		"	10.0	94.3	70-130
1,3-Butadiene	8.54		"	10.0	85.4	70-130
1,3-Dichlorobenzene	8.65		"	10.0	86.5	70-130
1,3-Dichloropropane	9.22		"	10.0	92.2	70-130
1,4-Dichlorobenzene	8.56		"	10.0	85.6	70-130
1,4-Dioxane	8.19		"	10.0	81.9	70-130
2-Butanone	8.82		"	10.0	88.2	70-130
2-Hexanone	9.20		"	10.0	92.0	70-130
3-Chloropropene	9.46		"	10.0	94.6	70-130
4-Methyl-2-pentanone	9.30		"	10.0	93.0	70-130
Acetone	7.56		"	10.0	75.6	70-130
Acrylonitrile	9.50		"	10.0	95.0	70-130
Benzene	8.90		"	10.0	89.0	70-130
Benzyl chloride	9.71		"	10.0	97.1	70-130
Bromodichloromethane	9.50		"	10.0	95.0	70-130
Bromoform	9.90		"	10.0	99.0	70-130
Bromomethane	7.28		"	10.0	72.8	70-130
Carbon disulfide	9.21		"	10.0	92.1	70-130
Carbon tetrachloride	8.34		"	10.0	83.4	70-130



Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BD10576 - EPA TO15 PREP

LCS (BD10576-BS1)

Prepared & Analyzed: 04/12/2021

Chlorobenzene	8.76		ppbv	10.0		87.6	70-130				
Chloroethane	7.34		"	10.0		73.4	70-130				
Chloroform	8.67		"	10.0		86.7	70-130				
Chloromethane	8.15		"	10.0		81.5	70-130				
cis-1,2-Dichloroethylene	8.44		"	10.0		84.4	70-130				
cis-1,3-Dichloropropylene	9.75		"	10.0		97.5	70-130				
Cyclohexane	9.78		"	10.0		97.8	70-130				
Dibromochloromethane	9.76		"	10.0		97.6	70-130				
Dichlorodifluoromethane	8.34		"	10.0		83.4	70-130				
Ethyl acetate	9.10		"	10.0		91.0	70-130				
Ethyl Benzene	9.30		"	10.0		93.0	70-130				
Hexachlorobutadiene	8.11		"	10.0		81.1	70-130				
Isopropanol	7.94		"	10.0		79.4	70-130				
Methyl Methacrylate	9.88		"	10.0		98.8	70-130				
Methyl tert-butyl ether (MTBE)	8.86		"	10.0		88.6	70-130				
Methylene chloride	8.32		"	10.0		83.2	70-130				
n-Heptane	9.57		"	10.0		95.7	70-130				
n-Hexane	8.47		"	10.0		84.7	70-130				
o-Xylene	9.60		"	10.0		96.0	70-130				
p- & m- Xylenes	18.7		"	20.0		93.6	70-130				
p-Ethyltoluene	9.54		"	10.0		95.4	70-130				
Propylene	8.85		"	10.0		88.5	70-130				
Styrene	9.77		"	10.0		97.7	70-130				
Tetrachloroethylene	8.75		"	10.0		87.5	70-130				
Tetrahydrofuran	8.88		"	10.0		88.8	70-130				
Toluene	9.29		"	10.0		92.9	70-130				
trans-1,2-Dichloroethylene	8.78		"	10.0		87.8	70-130				
trans-1,3-Dichloropropylene	9.80		"	10.0		98.0	70-130				
Trichloroethylene	8.95		"	10.0		89.5	70-130				
Trichlorofluoromethane (Freon 11)	8.65		"	10.0		86.5	70-130				
Vinyl acetate	7.96		"	10.0		79.6	70-130				
Vinyl bromide	9.65		"	10.0		96.5	70-130				
Vinyl Chloride	7.87		"	10.0		78.7	70-130				



Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD10576 - EPA TO15 PREP											
Duplicate (BD10576-DUP1)	*Source sample: 21D0194-01 (Duplicate)						Prepared & Analyzed: 04/12/2021				
1,1,1,2-Tetrachloroethane	ND	1.0	ug/m ³		ND					25	
1,1,1-Trichloroethane	ND	0.80	"		ND					25	
1,1,2,2-Tetrachloroethane	ND	1.0	"		ND					25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.1	"		ND					25	
1,1,2-Trichloroethane	ND	0.80	"		ND					25	
1,1-Dichloroethane	ND	0.59	"		ND					25	
1,1-Dichloroethylene	ND	0.14	"		ND					25	
1,2,4-Trichlorobenzene	ND	1.1	"		ND					25	
1,2,4-Trimethylbenzene	ND	0.72	"		ND					25	
1,2-Dibromoethane	ND	1.1	"		ND					25	
1,2-Dichlorobenzene	ND	0.88	"		ND					25	
1,2-Dichloroethane	ND	0.59	"		ND					25	
1,2-Dichloropropane	ND	0.67	"		ND					25	
1,2-Dichlorotetrafluoroethane	ND	1.0	"		ND					25	
1,3,5-Trimethylbenzene	ND	0.72	"		ND					25	
1,3-Butadiene	ND	0.97	"		ND					25	
1,3-Dichlorobenzene	ND	0.88	"		ND					25	
1,3-Dichloropropane	ND	0.67	"		ND					25	
1,4-Dichlorobenzene	ND	0.88	"		ND					25	
1,4-Dioxane	ND	1.0	"		ND					25	
2-Butanone	0.56	0.43	"		0.52				8.00	25	
2-Hexanone	ND	1.2	"		ND					25	
3-Chloropropene	ND	2.3	"		ND					25	
4-Methyl-2-pentanone	ND	0.60	"		ND					25	
Acetone	3.2	0.69	"		3.3				1.07	25	
Acrylonitrile	ND	0.32	"		ND					25	
Benzene	ND	0.47	"		ND					25	
Benzyl chloride	ND	0.75	"		ND					25	
Bromodichloromethane	ND	0.98	"		ND					25	
Bromoform	ND	1.5	"		ND					25	
Bromomethane	ND	0.57	"		ND					25	
Carbon disulfide	ND	0.45	"		ND					25	
Carbon tetrachloride	0.37	0.23	"		0.37				0.00	25	
Chlorobenzene	ND	0.67	"		ND					25	
Chloroethane	ND	0.38	"		ND					25	
Chloroform	ND	0.71	"		ND					25	
Chloromethane	1.0	0.30	"		1.3				21.1	25	
cis-1,2-Dichloroethylene	ND	0.14	"		ND					25	
cis-1,3-Dichloropropylene	ND	0.66	"		ND					25	
Cyclohexane	ND	0.50	"		ND					25	
Dibromochloromethane	ND	1.2	"		ND					25	
Dichlorodifluoromethane	2.0	0.72	"		2.0				0.00	25	
Ethyl acetate	ND	1.0	"		ND					25	
Ethyl Benzene	ND	0.63	"		ND					25	
Hexachlorobutadiene	ND	1.6	"		ND					25	
Isopropanol	2.0	0.72	"		1.9				5.50	25	
Methyl Methacrylate	ND	0.60	"		ND					25	
Methyl tert-butyl ether (MTBE)	ND	0.53	"		ND					25	
Methylene chloride	3.8	1.0	"		4.0				6.45	25	
n-Heptane	ND	0.60	"		ND					25	



Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BD10576 - EPA TO15 PREP

Duplicate (BD10576-DUP1)		*Source sample: 21D0194-01 (Duplicate)				Prepared & Analyzed: 04/12/2021					
n-Hexane	0.46	0.51	ug/m ³		0.56				20.0	25	
o-Xylene	ND	0.63	"		ND					25	
p- & m- Xylenes	ND	1.3	"		ND					25	
p-Ethyltoluene	ND	0.72	"		ND					25	
Propylene	ND	0.25	"		ND					25	
Styrene	ND	0.62	"		ND					25	
Tetrachloroethylene	6.4	0.99	"		5.1				22.2	25	
Tetrahydrofuran	ND	0.86	"		ND					25	
Toluene	0.33	0.55	"		0.33				0.00	25	
trans-1,2-Dichloroethylene	ND	0.58	"		ND					25	
trans-1,3-Dichloropropylene	ND	0.66	"		ND					25	
Trichloroethylene	ND	0.20	"		ND					25	
Trichlorofluoromethane (Freon 11)	1.1	0.82	"		1.1				0.00	25	
Vinyl acetate	ND	0.51	"		ND					25	
Vinyl bromide	ND	0.64	"		ND					25	
Vinyl Chloride	ND	0.19	"		ND					25	

Batch BD10611 - EPA TO15 PREP

Blank (BD10611-BLK1)		Prepared & Analyzed: 04/13/2021									
1,1,1,2-Tetrachloroethane	ND	0.69	ug/m ³								
1,1,1-Trichloroethane	ND	0.55	"								
1,1,2,2-Tetrachloroethane	ND	0.69	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.77	"								
1,1,2-Trichloroethane	ND	0.55	"								
1,1-Dichloroethane	ND	0.40	"								
1,1-Dichloroethylene	ND	0.099	"								
1,2,4-Trichlorobenzene	ND	0.74	"								
1,2,4-Trimethylbenzene	ND	0.49	"								
1,2-Dibromoethane	ND	0.77	"								
1,2-Dichlorobenzene	ND	0.60	"								
1,2-Dichloroethane	ND	0.40	"								
1,2-Dichloropropane	ND	0.46	"								
1,2-Dichlorotetrafluoroethane	ND	0.70	"								
1,3,5-Trimethylbenzene	ND	0.49	"								
1,3-Butadiene	ND	0.66	"								
1,3-Dichlorobenzene	ND	0.60	"								
1,3-Dichloropropane	ND	0.46	"								
1,4-Dichlorobenzene	ND	0.60	"								
1,4-Dioxane	ND	0.72	"								
2-Butanone	ND	0.29	"								
2-Hexanone	ND	0.82	"								
3-Chloropropene	ND	1.6	"								
4-Methyl-2-pentanone	ND	0.41	"								
Acetone	ND	0.48	"								
Acrylonitrile	ND	0.22	"								
Benzene	ND	0.32	"								
Benzyl chloride	ND	0.52	"								
Bromodichloromethane	ND	0.67	"								
Bromoform	ND	1.0	"								
Bromomethane	ND	0.39	"								



Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BD10611 - EPA TO15 PREP

Blank (BD10611-BLK1)

Prepared & Analyzed: 04/13/2021

Carbon disulfide	ND	0.31	ug/m ³
Carbon tetrachloride	ND	0.16	"
Chlorobenzene	ND	0.46	"
Chloroethane	ND	0.26	"
Chloroform	ND	0.49	"
Chloromethane	ND	0.21	"
cis-1,2-Dichloroethylene	ND	0.099	"
cis-1,3-Dichloropropylene	ND	0.45	"
Cyclohexane	ND	0.34	"
Dibromochloromethane	ND	0.85	"
Dichlorodifluoromethane	ND	0.49	"
Ethyl acetate	ND	0.72	"
Ethyl Benzene	ND	0.43	"
Hexachlorobutadiene	ND	1.1	"
Isopropanol	ND	0.49	"
Methyl Methacrylate	ND	0.41	"
Methyl tert-butyl ether (MTBE)	ND	0.36	"
Methylene chloride	ND	0.69	"
n-Heptane	ND	0.41	"
n-Hexane	ND	0.35	"
o-Xylene	ND	0.43	"
p- & m- Xylenes	ND	0.87	"
p-Ethyltoluene	ND	0.49	"
Propylene	ND	0.17	"
Styrene	ND	0.43	"
Tetrachloroethylene	ND	0.68	"
Tetrahydrofuran	ND	0.59	"
Toluene	ND	0.38	"
trans-1,2-Dichloroethylene	ND	0.40	"
trans-1,3-Dichloropropylene	ND	0.45	"
Trichloroethylene	ND	0.13	"
Trichlorofluoromethane (Freon 11)	ND	0.56	"
Vinyl acetate	ND	0.35	"
Vinyl bromide	ND	0.44	"
Vinyl Chloride	ND	0.13	"



Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BD10611 - EPA TO15 PREP											
LCS (BD10611-BS1)						Prepared & Analyzed: 04/13/2021					
1,1,1,2-Tetrachloroethane	9.60		ppbv	10.0		96.0	70-130				
1,1,1-Trichloroethane	9.77		"	10.0		97.7	70-130				
1,1,2,2-Tetrachloroethane	9.76		"	10.0		97.6	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.81		"	10.0		98.1	70-130				
1,1,2-Trichloroethane	9.99		"	10.0		99.9	70-130				
1,1-Dichloroethane	9.14		"	10.0		91.4	70-130				
1,1-Dichloroethylene	9.17		"	10.0		91.7	70-130				
1,2,4-Trichlorobenzene	8.58		"	10.0		85.8	70-130				
1,2,4-Trimethylbenzene	10.2		"	10.0		102	70-130				
1,2-Dibromoethane	10.0		"	10.0		100	70-130				
1,2-Dichlorobenzene	9.20		"	10.0		92.0	70-130				
1,2-Dichloroethane	9.27		"	10.0		92.7	70-130				
1,2-Dichloropropane	9.60		"	10.0		96.0	70-130				
1,2-Dichlorotetrafluoroethane	9.97		"	10.0		99.7	70-130				
1,3,5-Trimethylbenzene	10.0		"	10.0		100	70-130				
1,3-Butadiene	9.33		"	10.0		93.3	70-130				
1,3-Dichlorobenzene	9.30		"	10.0		93.0	70-130				
1,3-Dichloropropane	9.63		"	10.0		96.3	70-130				
1,4-Dichlorobenzene	9.27		"	10.0		92.7	70-130				
1,4-Dioxane	8.42		"	10.0		84.2	70-130				
2-Butanone	9.21		"	10.0		92.1	70-130				
2-Hexanone	9.53		"	10.0		95.3	70-130				
3-Chloropropene	9.84		"	10.0		98.4	70-130				
4-Methyl-2-pentanone	9.56		"	10.0		95.6	70-130				
Acetone	8.16		"	10.0		81.6	70-130				
Acrylonitrile	9.72		"	10.0		97.2	70-130				
Benzene	9.37		"	10.0		93.7	70-130				
Benzyl chloride	10.5		"	10.0		105	70-130				
Bromodichloromethane	10.2		"	10.0		102	70-130				
Bromoform	10.7		"	10.0		107	70-130				
Bromomethane	9.60		"	10.0		96.0	70-130				
Carbon disulfide	9.76		"	10.0		97.6	70-130				
Carbon tetrachloride	9.44		"	10.0		94.4	70-130				
Chlorobenzene	9.04		"	10.0		90.4	70-130				
Chloroethane	10.7		"	10.0		107	70-130				
Chloroform	9.54		"	10.0		95.4	70-130				
Chloromethane	8.91		"	10.0		89.1	70-130				
cis-1,2-Dichloroethylene	8.95		"	10.0		89.5	70-130				
cis-1,3-Dichloropropylene	10.2		"	10.0		102	70-130				
Cyclohexane	9.99		"	10.0		99.9	70-130				
Dibromochloromethane	10.5		"	10.0		105	70-130				
Dichlorodifluoromethane	9.54		"	10.0		95.4	70-130				
Ethyl acetate	9.52		"	10.0		95.2	70-130				
Ethyl Benzene	9.67		"	10.0		96.7	70-130				
Hexachlorobutadiene	8.99		"	10.0		89.9	70-130				
Isopropanol	8.31		"	10.0		83.1	70-130				
Methyl Methacrylate	10.1		"	10.0		101	70-130				
Methyl tert-butyl ether (MTBE)	9.69		"	10.0		96.9	70-130				
Methylene chloride	8.83		"	10.0		88.3	70-130				
n-Heptane	9.87		"	10.0		98.7	70-130				



Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BD10611 - EPA TO15 PREP

LCS (BD10611-BS1)

Prepared & Analyzed: 04/13/2021

n-Hexane	8.75		ppbv	10.0		87.5	70-130				
o-Xylene	10.1		"	10.0		101	70-130				
p- & m- Xylenes	19.6		"	20.0		97.9	70-130				
p-Ethyltoluene	10.2		"	10.0		102	70-130				
Propylene	9.59		"	10.0		95.9	70-130				
Styrene	10.2		"	10.0		102	70-130				
Tetrachloroethylene	9.42		"	10.0		94.2	70-130				
Tetrahydrofuran	9.15		"	10.0		91.5	70-130				
Toluene	9.68		"	10.0		96.8	70-130				
trans-1,2-Dichloroethylene	9.53		"	10.0		95.3	70-130				
trans-1,3-Dichloropropylene	10.5		"	10.0		105	70-130				
Trichloroethylene	9.32		"	10.0		93.2	70-130				
Trichlorofluoromethane (Freon 11)	9.80		"	10.0		98.0	70-130				
Vinyl acetate	8.54		"	10.0		85.4	70-130				
Vinyl bromide	10.4		"	10.0		104	70-130				
Vinyl Chloride	8.56		"	10.0		85.6	70-130				





Sample and Data Qualifiers Relating to This Work Order

TO-VAC	The final vacuum in the canister was less than -2 inches Hg vacuum. The time integrated sampling may be affected and not reflect proper sampling over the time period. The data user should take note.
TO-CCV	The value reported is ESTIMATED for this compound due to its behavior during continuing calibration verification (>30% Difference from initial calibration).

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.



For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.



~~Field Chain-of-Custody Record - A/R~~

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. signature binds you to YORK's Standard Terms & Conditions

YORK

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APPENDIX B
SVI Data Usability Reports

Data Usability Summary Report

Vali-Data of WNY, LLC
20 Hickory Grove Spur
Fulton, NY 13069

Buffalo China #16-344-1389
York Analytical Laboratories, Inc. SDG#21D0416
May 11, 2021
Sampling date: 3/31/2021

Prepared by:
Jodi Zimmerman
20 Hickory Grove Spur
Fulton, NY 13069

Buffalo China #16-344-1389
SDG#21D0416

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data packages for LiRo Engineers, project located at Buffalo China #16-344-1389, York Analytical Laboratories, Inc. SDG#21D0416, submitted to Vali-Data of WNY, LLC on May6, 2021. This DUSR has been prepared in general compliance with USEPA National Functional Guidelines(NFG) (SOP NO. HW-31, revision 6, June 2014) and NYSDEC Analytical Services Protocols. The laboratory performed the analysis using Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999.

VOLATILE ORGANIC COMPOUND

The following items/criteria were reviewed for this report:

- Data Completeness
- Narrative and Data Reporting Forms
- Chain-of-Custody and Traffic Reports
- Holding Times
- Internal Standard (IS) Area Performance
- Blanks
- Field Duplicate Precision
- Laboratory Control Samples
- MS/MSD
- Compound Quantitation
- Initial Calibration
- Continuing Calibration
- GC/MS Tuning
- Canister Certification Blanks

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 the Continuing Calibration.

All samples were diluted.

Sample: IA-2 was diluted due to high target analyte concentration.

Detects were reported to the Method Reporting limits.

DATA COMPLETENESS

All criteria were met.

NARRATIVE AND DATA REPORTING FORMS

All criteria were met except data was not reported to 3 significant figures. This does not affect the usability of the data.

Reissued 'Reporting forms' are attached due to the original limit being set at the Method Detection Limit.

Canister Certification data was not included in the original report. Those pages are attached.

CHAIN OF CUSTODY AND TRAFFIC REPORTS

All criteria were met.

HOLDING TIMES

All criteria were met.

INTERNAL STANDARD (IS)

All criteria were met.

BLANKS

All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION

No field duplicate was acquired.

LABORATORY CONTROL SAMPLES

All criteria were met.

MS/MSD

No MS/MSD was acquired.

COMPOUND QUANTITATION

All criteria were met.

INITIAL CALIBRATION

All criteria were met.

Alternative forms of regression were used on some of the target analytes with acceptable results.

CONTINUING CALIBRATION

All criteria were met except the %D of Bromomethane, Chloroethane and Vinyl acetate was outside QC limits in Y1D1330-CCV1. These target analytes should be qualified as estimated in the associated samples, blanks and spikes.

GC/MS TUNING

All criteria were met.

CANISTER CERTIFICATION BLANKS

All criteria were met.

Buffalo China #16-344-1389

SDG#21D0416

APPENDIX C
Historical Sampling Data

**METALS ANALYTICAL RESULTS SUMMARY - OVERBURDEN GROUNDWATER
BROWNFIELD CLEANUP PROGRAM REMEDIAL SITE INVESTIGATION
FORMER BUFFALO CHINA SITE (NO. C915209)
BUFFALO, NEW YORK**

Notes:
1.0 - Exceeds Criteria
 U - Not present at the associated value.
 J - Estimated concentration.
 NC - No criteria.

TABLE 4.3
ANALYTICAL RESULTS SUMMARY
VOCs in PERIMETER WELLS - AUGUST 2020
FORMER BUFFALO CHINA SITE (No. C915209)

Parameters	Units	New York State Water Quality															
		Guidance Values		Standards		Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter
		Overburden Monitoring Well	Bedrock Monitoring Well	Overburden Monitoring Well	Bedrock Monitoring Well	Overburden Monitoring Well	Bedrock Monitoring Well	Overburden Monitoring Well	Bedrock Monitoring Well	Overburden Monitoring Well	Bedrock Monitoring Well	Overburden Monitoring Well	Bedrock Monitoring Well	Overburden Monitoring Well	Bedrock Monitoring Well	Overburden Monitoring Well	Bedrock Monitoring Well
		MW-7	MW-7A	MW-8	MW-8A	MW-9	MW-9A	MW-9A D1P	MW-10	MW-15A	MW-22	MW-22A	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			
Volatile Organic Analytes																	
1,1,1-Trichloroethane (TCA)	ug/L	NC	5	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	NS	NS	NS	ND	ND	ND	
1,1,2-Trichloroethane	ug/L	NC	1	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	NS	NS	NS	ND	ND	ND	
1,1-Dichloroethane (1,1-DCE)	ug/L	NC	5	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	NS	NS	NS	ND	ND	ND	
1,2,3-Trichlorobenzene	ug/L	NC	5	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	NS	NS	NS	ND	ND	ND	
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	NC	0.04	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	NS	NS	NS	ND	ND	ND	
1,2-Dichlorobenzene	ug/L	NC	3	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	NS	NS	NS	ND	ND	ND	
1,2-Dichloropropane	ug/L	NC	1	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	NS	NS	NS	ND	ND	ND	
1,4-Dichlorobenzene	ug/L	NC	3	ND	ND	ND	ND	ND	ND	ND	3.0 J	NS	NS	ND	ND	ND	
1,4-Dioxane	ug/L	NC	NC	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	ND	ND	ND	
2-Hexanone	ug/L	50	NC	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	NS	NS	NS	ND	ND	ND	
Acetone	ug/L	50	NC	ND	ND	ND	ND	ND	ND	ND	8.9 J	NS	NS	ND	ND	ND	
Benzene	ug/L	50	1	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	NS	NS	NS	ND	ND	ND	
Bromodichloromethane	ug/L	50	NC	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	NS	NS	NS	ND	ND	ND	
Bromomethane	ug/L	NC	5	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	ND	ND	ND	
Carbon Tetrachloride	ug/L	NC	5	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	NS	NS	NS	ND	ND	ND	
Chloroethane	ug/L	NC	5	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	NS	NS	NS	ND	ND	ND	
Chloromethane	ug/L	NC	5	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	NS	NS	NS	ND	ND	ND	
Dibromochloromethane	ug/L	NC	5	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	NS	NS	NS	ND	ND	ND	
Methylene Chloride (Dichloromethane)	ug/L	NC	NC	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	NS	NS	NS	ND	ND	ND	
Isopropylbenzene (Cumene)	ug/L	NC	5	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	NS	NS	NS	ND	ND	ND	
Methyl tert-Butyl Ether	ug/L	10	NC	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	NS	NS	NS	ND	ND	ND	
Styrene	ug/L	NC	5	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	NS	NS	NS	ND	ND	ND	
Toluene	ug/L	NC	5	ND	ND	ND	ND	ND	ND	ND	83 JH	NS	NS	ND	ND	ND	
Trichloroethene (TCE)	ug/L	NC	5	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	NS	NS	NS	ND	ND	ND	
Vinyl Chloride	ug/L	NC	2	ND	24	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	NS	NS	NS	ND	ND	ND	
cis-1,3-Dichloropropene	ug/L	NC	NC	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	NS	NS	NS	ND	ND	ND	
o-Xylene	ug/L	NC	5	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	NS	NS	NS	ND	ND	ND	
trans-1,3-Dichloropropene	ug/L	NC	NC	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	
Field Parameters																	
Conductivity, field	mS/cm	NC	NC	0.593	1.64	0.699	0.556	1.54	1.48	1.48	1.74	NS	NS	NS	0.583	1	2.49
Dissolved oxygen (DO), field	ug/L	NC	NC	9.73	9.96	0	0	0	0	0	0	NS	NS	NS	0	0	6.26
Oxidation reduction potential (ORP), field	millivolts	NC	NC	-90	-65	-156	-123	-222	-222	-222	-104	NS	NS	NS	-42	38	-41
pH, field	s.u.	NC	6.5-8.5	7.73	7.8	8.03	8.03	6.99	7.35	7.35	7.1	NS	NS	NS	6.92	8.16	7.93
Temperature, field	Deg. C	NC	NC	18.08	16.75	14.3	14.3	17.39	12.92	12.92	18.79	NS	NS	NS	18.22	19.3	18.35
Turbidity, field	NTU	NC	NC	222	117	109	109	27.5	111	111	482	NS	NS	NS	33.3	35.5	175
Notes:																	
LB - Exceeds criteria																	
ND - Not detected																	
J - Estimated concentration																	
H - High																	
B - Compound detected in associated blank sample																	
NC - No criteria																	
ug/L - Microgram per liter																	

TABLE 6.2

HERBICIDE, PCB, AND PESTICIDE ANALYTICAL RESULTS SUMMARY- SUBSURFACE
SOIL
BCP REMEDIAL SITE INVESTIGATION
FORMER BUFFALO CHINA SITE (NO. C915209)
BUFFALO, NEW YORK

<i>Location ID:</i>				MW-14	MW-17	SB-12-07	SB-12-07	SB-18-07	SB-18-08	SB-3-07	SB-5-07	SB-8-07
<i>Sample Name:</i>				SB-37191-050808-JP-011	SB-37191-050908-JP-002	SO-37191-072507-RN-SB-1	SO-37191-072607-RN-SB-12	SO-37191-073007-CB-SB18	SB-37191-050908-JP-001	SO-37191-072707-RN-SB-3	SO-37191-072507-RN-SB-05	SO-37191-072507-RN-SB-8
<i>Sample Date:</i>				5/8/2008	5/9/2008	7/25/2007	7/26/2007	7/30/2007	5/9/2008	7/27/2007	7/25/2007	7/25/2007
<i>Depth:</i>				0-2 ft BGS	0-2 ft BGS	2-4 ft BGS	3.5-6 ft BGS	4-7.2 ft BGS	0-2 ft BGS	10-13 ft BGS	4-8 ft BGS	3.5-8 ft BGS
<i>On/Off - Site</i>				Off-Site	On-Site	On-Site	On-Site	On-Site	Off-Site	On-Site	On-Site	On-Site
6 NYCRR Part 375-6.8(b): Restricted Use Soil Cleanup Objectives Protection of Public Health ²												
<i>Parameters</i>	<i>Units</i> ¹	<i>Residential</i>	<i>Industrial</i>									
<i>Herbicides</i>												
2,4,5-T	mg/kg	NC	NC	0.024 U	0.023 U	0.028 U	0.025 U	0.021 U	0.024 U	0.024 U	0.024 U	0.025 U
2,4,5-TP (Silvex)	mg/kg	58	1000	0.024 U	0.023 U	0.028 U	0.025 U	0.021 U	0.024 U	0.024 U	0.024 U	0.025 U
2,4-DB	mg/kg	NC	NC	0.098 U	0.092 U	0.11 U	0.099 U	0.083 U	0.097 U	0.095 U	0.097 U	0.098 U
2,4-Dichlorophenoxyacetic acid (2,4-D)	mg/kg	NC	NC	0.098 U	0.092 U	0.11 U	0.099 U	0.083 U	0.097 U	0.095 U	0.097 U	0.098 U
2-Methyl-4-chlorophenoxyacetic acid (MCPA)	mg/kg	NC	NC	9.8 U	9.2 U	11 U	9.9 U	8.3 U	9.7 U	9.5 U	9.7 U	9.8 U
Dalapon	mg/kg	NC	NC	0.11 U	0.1 U	0.12 U	0.11 U	0.093 U	0.11 U	0.11 U	0.11 U	0.11 U
Dicamba	mg/kg	NC	NC	0.049 U	0.046 U	0.055 U	0.05 U	0.042 U	0.049 U	0.048 U	0.048 U	0.049 U
Dichloroprop	mg/kg	NC	NC	0.098 U	0.092 U	0.11 U	0.099 U	0.083 U	0.097 U	0.095 U	0.097 U	0.098 U
Dinoseb	mg/kg	NC	NC	0.015 U	0.014 U	0.017 U	0.015 U	0.012 U	0.015 U	0.014 U	0.015 U	0.015 U
Mecoprop (MCPP)	mg/kg	NC	NC	9.8 U	9.2 U	11 U	9.9 U	8.3 U	9.7 U	9.5 U	9.7 U	9.8 U
<i>PCBs</i>												
Aroclor-1016 (PCB-1016)	mg/kg	1 ³	25 ³	0.02 U	0.019 U	0.023 U	0.021 U	0.017 U	0.02 U	0.02 U	0.02 U	0.02 U
Aroclor-1221 (PCB-1221)	mg/kg	1 ³	25 ³	0.02 U	0.019 U	0.023 U	0.021 U	0.017 U	0.02 U	0.02 U	0.02 U	0.02 U
Aroclor-1232 (PCB-1232)	mg/kg	1 ³	25 ³	0.02 U	0.019 U	0.023 U	0.021 U	0.017 U	0.02 U	0.02 U	0.02 U	0.02 U
Aroclor-1242 (PCB-1242)	mg/kg	1 ³	25 ³	0.02 U	0.019 U	0.023 U	0.021 U	0.017 U	0.02 U	0.02 U	0.02 U	0.02 U
Aroclor-1248 (PCB-1248)	mg/kg	1 ³	25 ³	0.02 U	0.019 U	0.023 U	0.021 U	0.017 U	0.02 U	0.02 U	0.02 U	0.02 U
Aroclor-1254 (PCB-1254)	mg/kg	1 ³	25 ³	0.02 U	0.019 U	0.03	0.021 U	0.017 U	0.02 U	0.02 U	0.02 U	0.02 U
Aroclor-1260 (PCB-1260)	mg/kg	1 ³	25 ³	0.011 J	0.014 J	0.018 J	0.021 U	0.017 U	0.02 U	0.02 U	0.02 U	0.02 U
<i>Pesticides</i>												
4,4'-DDD	mg/kg	2.6	180	0.0021 U	0.0015 J	0.00085 J	0.0021 U	0.0018 U	0.0021 U	0.00055 J	0.0021 U	0.0021 U
4,4'-DDE	mg/kg	1.8	120	0.0046	0.002 U	0.002 J	0.0021 U	0.0018 U	0.0039	0.00052 J	0.0021 U	0.0021 U
4,4'-DDT	mg/kg	1.7	94	0.0035	0.002 U	0.0017 J	0.0021 U	0.0018 U	0.0068	0.002 U	0.0021 U	0.0021 U
Aldrin	mg/kg	0.019	1.4	0.0021 U	0.002 U	0.0021 J	0.0021 U	0.0018 U	0.0021 U	0.00028 J	0.0021 U	0.0021 U
alpha-BHC	mg/kg	0.097	6.8	0.0021 U	0.002 U	0.0023 U	0.0021 U	0.0018 U	0.0021 U	0.002 U	0.0021 U	0.0021 U
alpha-Chlordane	mg/kg	0.91	47	0.0021 U	0.002 U	0.0023 U	0.0021 U	0.0018 U	0.0021 U	0.002 U	0.0021 U	0.0021 U
beta-BHC	mg/kg	0.072	14	0.0021 U	0.002 U	0.0023 U	0.0021 U	0.0018 U	0.0021 U	0.002 U	0.0021 U	0.0021 U
delta-BHC	mg/kg	100	1000	0.0021 U	0.002 U	0.00054 J	0.0021 U	0.0018 U	0.0021 U	0.00033 J	0.0021 U	0.0021 U
Dieldrin	mg/kg	0.039	2.8	0.0021 U	0.002 U	0.0023 U	0.0021 U	0.0018 U	0.0021 U	0.002 U	0.0021 U	0.0021 U
Endosulfan I	mg/kg	4.8	920	0.0021 U	0.002 U	0.0023 U	0.0021 U	0.0018 U	0.0021 U	0.002 U	0.0021 U	0.0021 U
Endosulfan II	mg/kg	4.8	920	0.0021 U	0.002 U	0.0023 U	0.0021 U	0.0018 U	0.0021 U	0.002 U	0.0021 U	0.0021 U
Endosulfan sulfate	mg/kg	4.8	920	0.0021 U	0.002 U	0.00077 J	0.0021 U	0.0018 U	0.0021 U	0.002 U	0.0021 U	0.0021 U
Endrin	mg/kg	2.2	410	0.0021 U	0.002 U	0.0023 U	0.0021 U	0.0018 U	0.0021 U	0.002 U	0.0021 U	0.0021 U
Endrin aldehyde	mg/kg	NC	NC	0.0021 U	0.002 U	0.0023 U	0.0021 U	0.0018 U	0.0021 U	0.002 U	0.0021 U	0.0021 U
Endrin ketone	mg/kg	NC	NC	0.00091 J	0.002 U	0.0023 U	0.0021 U	0.0018 U	0.0021 U	0.002 U	0.0021 U	0.0021 U
gamma-BHC (Lindane)	mg/kg	0.28	23	0.0021 U	0.017 J	0.0075	0.0021 U	0.0018 U	0.0021 U	0.00098 J	0.0021 U	0.0021 U
gamma-Chlordane	mg/kg	NC	NC	0.0021 U	0.002 U	0.0023 U	0.0021 U	0.0018 U	0.0021 U	0.002 U	0.0021 U	0.0021 U
Heptachlor	mg/kg	0.42	29	0.0021 U	0.0016 J	0.0023 U	0.0021 U	0.0018 U	0.0021 U	0.002 U	0.0021 U	0.0021 U
Heptachlor epoxide	mg/kg	NC	NC	0.0021 U	0.002 U	0.0023 U	0.0021 U	0.0018 U	0.0021 U	0.002 U	0.0021 U	0.0021 U
Methoxychlor	mg/kg	NC	NC	0.004 U	0.0038 U	0.0035 J	0.0041 U	0.0034 U	0.004 U	0.0039 U	0.004 U	0.0041 U
Toxaphene	mg/kg	NC	NC	0.081 U	0.077 U	0.093 U	0.083 U	0.07 U	0.082 U	0.079 U	0.081 U	0.082 U

Notes:

¹ - Reported results were converted from ug/kg (ppb) to mg/kg (ppm) for ease of comparison to criteria.² - Sample results from locations identified as on-Site are compared to the Restricted Use - Industrial SCO. Sample results identified as off-Site are compared to the Restricted Use - Residential SCO.³ - The soil cleanup objective for total PCBs

1.0 - Exceeds Criteria

U - Not present at the associated value.

J - Estimated concentration.

NC - No criteria.

TABLE 6.3

**METALS ANALYTICAL RESULTS SUMMARY- SUBSURFACE
SOIL
BROWNFIELD CLEANUP PROGRAM REMEDIAL SITE INVESTIGATION
FORMER BUFFALO CHINA SITE (NO. C915209)
BUFFALO, NEW YORK**

Location ID:				MW-14	MW-17	SB-10-07	SB-1-07	SB-11-07	SB-12-07	SB-13-07	SB-14-07
Sample Name:				SB-37191-050808-JP-011	SB-37191-050908-JP-002	SO-37191-072507-RN-SB-10	SO-37191-072507-RN-SB-1	SO-37191-072607-RN-SB-11	SO-37191-072607-RN-SB-12	SO-37191-072607-RN-SB-13	SO-37191-072607-RN-SB-14
Sample Date:				5/8/2008	5/9/2008	7/25/2007	7/25/2007	7/26/2007	7/26/2007	7/26/2007	7/26/2007
Depth:				0-2 ft BGS	0-2 ft BGS	3-8 ft BGS	2-4 ft BGS	2-6 ft BGS	3.5-6 ft BGS	6-8 ft BGS	4-8 ft BGS
On/Off - Site				Off-Site	On-Site	On-Site	On-Site	On-Site	On-Site	On-Site	On-Site
6 NYCRR Part 375-6.8(b): Restricted Use Soil Cleanup Objectives Protection of Public Health ²											
Parameters	Units ¹	Residential	Industrial								
Metals											
Aluminum	mg/kg	NC	NC	8680	18700	--	9270	--	11300	--	--
Antimony	mg/kg	NC	NC	1.2 U	1.2 U	--	1.4 U	--	1.2 U	--	--
Arsenic	mg/kg	16	16	5.1	5.2	--	11.4	--	4.2	--	--
Barium	mg/kg	350	10000	47.0	200	--	103	--	107	--	--
Beryllium	mg/kg	14	2700	0.49 U	2.9	--	2.0	--	0.79	--	--
Cadmium	mg/kg	2.5	60	0.54 J	1.4 J	--	0.66 J	--	0.36 J	--	--
Calcium	mg/kg	NC	NC	2200	110000	--	103000	--	89800	--	--
Chromium, Total ³	mg/kg	22	800	11.9	63.9	--	13.0	--	16.5	--	--
Cobalt	mg/kg	NC	NC	3.8 J	2.6 J	--	6.1 J	--	7.8	--	--
Copper	mg/kg	270	10000	11.9	35.3	--	60.8	--	18.5	--	--
Iron	mg/kg	NC	NC	15300	27300	--	32300	--	17500	--	--
Lead	mg/kg	400	3900	48.4 J	87.3 J	196	78.3	2160	8.2	7.3	4.4
Magnesium	mg/kg	NC	NC	1950	15300	--	13700	--	15500	--	--
Manganese	mg/kg	2000	10000	135 J	3240 J	--	712	--	343	--	--
Mercury	mg/kg	0.81	5.7	0.16	0.035 J	--	0.45	--	0.041 U	--	--
Nickel	mg/kg	140	10000	11.4	12.8	--	16.0	--	19.8	--	--
Potassium	mg/kg	NC	NC	892	1350	--	1170	--	2320	--	--
Selenium	mg/kg	36	6800	0.49 J	1.2	--	0.69 U	--	0.62 U	--	--
Silver	mg/kg	36	6800	0.61 U	0.88	--	0.69 U	--	0.62 U	--	--
Sodium	mg/kg	NC	NC	41.7 J	527 J	--	572 J	--	239 J	--	--
Thallium	mg/kg	NC	NC	1.2 U	2.3 U	--	1.4 U	--	1.2 U	--	--
Vanadium	mg/kg	NC	NC	19.3	24.3	--	11.6	--	22.1	--	--
Zinc	mg/kg	2200	10000	71.7	169	--	107	--	46.2	--	--
Wet Chemistry											
Cyanide (total)	mg/kg	27	10000	0.61 U	3.3	--	0.29 J	--	0.62 U	--	--
Total Solids	%	NC	NC	81.8	86.9	85.1	72.4	75.1	80.5	81.6	87.3

Notes:

¹ - Reported results were converted from ug/kg (ppb) to mg/kg (ppm) for ease of comparison to criteria.

² - Sample results from locations identified as on-Site are compared to the Restricted Use - Industrial SCO. Sample results identified as off-Site are compared to the Restricted Use - Residential SCO.

³ - The Restricted Use Soil Cleanup Objective (RUSCO) for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO. The most restrictive SCO for hexavalent Chromium was used for comparison to the total chromium results.

1.0 - Exceeds Criteria

U - Not present at the associated value.

J - Estimated concentration.

NC - No criteria.

TABLE 6.4

VOC ANALYTICAL RESULTS SUMMARY- SUBSURFACE
SOIL
BROWNFIELD CLEANUP PROGRAM REMEDIAL SITE INVESTIGATION
FORMER BUFFALO CHINA SITE (NO. C915209)
BUFFALO, NEW YORK

Location ID:	MW-22A	MW-23A	MW-24A	MW-25	MW-25A	SB-10-07	SB-1-07	SB-11-07	SB-12-07			
Sample Name:	SO-37191-060109-JJW-005	SO-37191-060209-JJW-006	SO-37191-062209-JJW-011	SO-37191-062209-JJW-013	SO-37191-062209-JJW-012	SO-37191-072507-RN-SB-10	SO-37191-072507-RN-SB-1	SO-37191-072607-RN-SB-11	SO-37191-072607-RN-SB-12			
Sample Date:	6/1/2009	6/2/2009	6/22/2009	6/22/2009	6/22/2009	7/25/2007	7/25/2007	7/26/2007	7/26/2007			
Depth:	10-12 ft BGS	12-14 ft BGS	0-2 ft BGS	6-8 ft BGS	4-6 ft BGS	3-8 ft BGS	2-4 ft BGS	2-6 ft BGS	3.5-6 ft BGS			
On/Off - Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	On-Site	On-Site	On-Site	On-Site			
6 NYCRR Part 375-6.8(b): Restricted Use Soil Cleanup Objectives Protection of Public Health ²												
Parameters	Units ¹	Residential	Industrial									
Volatile Organic Compounds												
1,1,1-Trichloroethane	mg/kg	100	1000	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
1,1,2,2-Tetrachloroethane	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
1,1,2-Trichloroethane	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
1,1-Dichloroethane	mg/kg	19	480	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
1,1-Dichloroethene	mg/kg	100	1000	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
1,2,4-Trichlorobenzene	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	NC	NC	0.0061 UJ	0.0059 UJ	0.0065 UJ	0.0055 UJ	0.006 UJ	0.0059 U	0.0069 U	0.0067 U	0.0062 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
1,2-Dichlorobenzene	mg/kg	100	1000	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
1,2-Dichloroethane	mg/kg	2.3	60	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
1,2-Dichloropropane	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
1,3-Dichlorobenzene	mg/kg	17	560	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
1,4-Dichlorobenzene	mg/kg	9.8	250	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
2-Butanone (Methyl Ethyl Ketone)	mg/kg	100	1000	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
2-Hexanone	mg/kg	NC	NC	0.0061 UJ	0.0059 UJ	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Acetone	mg/kg	100	1000	0.024 U	0.024 UJ	0.026 U	0.022 U	0.024 U	0.012 J	0.028 U	0.027 U	0.0085 J
Benzene	mg/kg	2.9	89	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Bromodichloromethane	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Bromoform	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 UJ	0.0069 UJ	0.0067 UJ	0.0062 UJ
Bromomethane (Methyl Bromide)	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 UJ	0.0069 UJ	0.0067 UJ	0.0062 UJ
Carbon disulfide	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Carbon tetrachloride	mg/kg	1.4	44	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Chlorobenzene	mg/kg	100	1000	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Chloroethane	mg/kg	NC	NC	0.0061 UJ	0.0059 UJ	0.0065 U	0.0055 U	0.006 U	0.0059 UJ	0.0069 UJ	0.0067 UJ	0.0062 UJ
Chloroform (Trichloromethane)	mg/kg	10	700	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Chloromethane (Methyl Chloride)	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
cis-1,2-Dichloroethene	mg/kg	59	1000	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
cis-1,3-Dichloropropene	mg/kg	NC	NC	0.0061 UJ	0.0059 UJ	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Cyclohexane	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Dibromochloromethane	mg/kg	NC	NC	0.0061 UJ	0.0059 UJ	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Dichlorodifluoromethane (CFC-12)	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Ethylbenzene	mg/kg	30	780	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Isopropylbenzene	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Methyl acetate	mg/kg	NC	NC	0.0061 UJ	0.0059 UJ	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Methyl cyclohexane	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Methyl Tert Butyl Ether	mg/kg	62	1000	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Methylene chloride	mg/kg	51	1000	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Styrene	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Tetrachloroethene	mg/kg	5.5	300	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Toluene	mg/kg	100	1000	0.0061 U	0.0059 U	0.0011 J	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
trans-1,2-Dichloroethene	mg/kg	100	1000	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
trans-1,3-Dichloropropene	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Trichloroethene	mg/kg	10	400	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0017 J	0.0069 U	0.0067 U	0.0062 U
Trichlorofluoromethane (CFC-11)	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 UJ	0.0069 UJ	0.0067 UJ	0.0062 UJ
Trifluorotrichloroethane (Freon 113)	mg/kg	NC	NC	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Vinyl chloride	mg/kg	0.21	27	0.0061 U	0.0059 U	0.0065 U	0.0055 U	0.006 U	0.0059 U	0.0069 U	0.0067 U	0.0062 U
Xylene (total)	mg/kg	100	1000	0.018 U	0.018 U	0.02 U	0.017 U	0.018 U	0.018 U	0.021 U	0.02 U	0.019 U

Notes:

¹ - Reported results were converted from ug/kg (ppb) to mg/kg (ppm) for ease of comparison to criteria.² - Sample results from locations identified as on-Site are compared to the Restricted Use - Industrial SCO. Sample results identified as off-Site are compared to the Restricted Use - Residential SCO.

1.0 - Exceeds Criteria

U - Not present at the associated value.

J - Estimated concentration.

NC - No criteria.

SVOC ANALYTICAL RESULTS SUMMARY- SUBSURFACE

SB-1-07
SO-37191-072507-RN-SB-1
7/25/2007
2-4 ft BGS
On-Site

0.093 U
0.46 U
0.46 U
0.093 U
0.46 U
2.3 UJ
0.46 U
0.46 U
0.093 U
0.46 U
0.076 J
0.46 U
2.3 U
0.46 U
0.46 U
2.3 U
2.2 U
0.46 U
0.46 U
0.46 U
0.46 U
0.46 U
2.3 U
2.3 U
0.093 U
0.093 U
0.46 U
0.093 U
0.46 UJ
0.46 UJ
0.061 J
0.047 J
0.044 J
0.081 J
0.022 J
0.46 U
0.46 U
0.093 U
0.46 U
0.46 U
0.46 U
0.093 U
0.1
0.093 U
0.036 J
0.54
0.46 U
0.46 U
0.46 U
0.11

037191 (8)

TABLE 6.5

**SVOC ANALYTICAL RESULTS SUMMARY- SUBSURFACE
SOIL
BROWNFIELD CLEANUP PROGRAM REMEDIAL SITE INVESTIGATION
FORMER BUFFALO CHINA SITE (NO. C915209)
BUFFALO, NEW YORK**

Location ID:				MW-14	MW-17	SB-10-07	SB-1-07	SB-11-07	SB-12-07	SB-13-07
Sample Name:				SB-37191-050808-JP-011	SB-37191-050908-JP-002	SO-37191-072507-RN-SB-10	SO-37191-072507-RN-SB-1	SO-37191-072607-RN-SB-11	SO-37191-072607-RN-SB-12	SO-37191-072607-RN-SB-13
Sample Date:				5/8/2008	5/9/2008	7/25/2007	7/25/2007	7/26/2007	7/26/2007	7/26/2007
Depth:				0-2 ft BGS	0-2 ft BGS	3-8 ft BGS	2-4 ft BGS	2-6 ft BGS	3.5-6 ft BGS	6-8 ft BGS
On/Off - Site				Off-Site	On-Site	On-Site	On-Site	On-Site	On-Site	On-Site
6 NYCRR Part 375-6.8(b): Restricted Use Soil Cleanup Objectives Protection of Public Health²										
Parameters	Units¹	Residential	Industrial							
Fluorene	mg/kg	100	1000	0.082 U	0.36	0.079 U	0.093 U	0.034 J	0.083 U	0.082 U
Hexachlorobenzene	mg/kg	0.33	12	0.082 U	0.077 U	0.079 U	0.093 U	0.089 U	0.083 U	0.082 U
Hexachlorobutadiene	mg/kg	NC	NC	0.082 U	0.077 U	0.079 U	0.093 U	0.089 U	0.083 U	0.082 U
Hexachlorocyclopentadiene	mg/kg	NC	NC	0.4 U	0.38 U	0.39 U	0.46 U	0.44 U	0.41 U	0.4 U
Hexachloroethane	mg/kg	NC	NC	0.4 U	0.38 U	0.39 U	0.46 U	0.44 U	0.41 U	0.4 U
Indeno(1,2,3-cd)pyrene	mg/kg	0.5	11	0.14	2.1	0.076 J	0.055 J	0.55	0.083 U	0.082 U
Isophorone	mg/kg	NC	NC	0.4 U	0.38 U	0.39 U	0.46 U	0.44 U	0.41 U	0.4 U
Naphthalene	mg/kg	100	1000	0.023 J	0.15	0.079 U	0.041 J	0.024 J	0.083 U	0.082 U
Nitrobenzene	mg/kg	NC	NC	0.082 U	0.077 U	0.079 U	0.093 U	0.089 U	0.083 U	0.082 U
N-Nitrosodi-n-propylamine	mg/kg	NC	NC	0.082 U	0.077 U	0.079 U	0.093 U	0.089 U	0.083 U	0.082 U
N-Nitrosodiphenylamine	mg/kg	NC	NC	0.4 U	0.38 U	0.39 U	0.46 U	0.44 U	0.41 U	0.4 U
Pentachlorophenol	mg/kg	2.4	55	0.4 U	0.38 U	0.39 U	0.46 U	0.44 U	0.41 U	0.4 U
Phenanthrene	mg/kg	100	1000	0.22	4.4	0.1	0.15	0.6	0.083 U	0.082 U
Phenol	mg/kg	100	1000	0.082 U	0.077 U	0.079 U	0.093 U	0.089 U	0.083 U	0.082 U
Pyrene	mg/kg	100	1000	0.37	5.1	0.13	0.12	1.3	0.083 U	0.082 U

Notes:

¹ - Reported results were converted from ug/kg (ppb) to mg/kg (ppm) for ease of comparison to criteria.

² - Sample results from locations identified as on-Site are compared to the Restricted Use - Industrial SCO.
Sample results identified as off-Site are compared to the Restricted Use - Residential SCO.

1.0 - Exceeds Criteria

U - Not present at the associated value.

J - Estimated concentration.

NC - No criteria.

TABLE 3.1

SUMMARY OF DETECTED CONCENTRATIONS OF LEAD IN SOIL
 SUPPLEMENTAL SITE INVESTIGATION
 NIAGARA CERAMICS
 BUFFALO, NEW YORK

				<i>Sample Location:</i>	BH-14	BH-14	BH-15	BH-15	BH-16	BH-16	BH-17	BH-17
				<i>Sample Date:</i>	5/2/2006	5/2/2006	5/2/2006	5/2/2006	5/2/2006	5/2/2006	5/2/2006	5/2/2006
				<i>Sample Depth (ft. bgs):</i>	0.5 - 1.5	2.5 - 3	1.5 - 2	3 - 3.5	0.75 - 1.2	2.5 - 3.2	0 - 0.5	1 - 1.5
				<u>Regulatory Criteria</u>								
<i>Parameters</i>	<i>Unrestricted⁽¹⁾</i>	<i>Units</i>										
	<i>a</i>											
Lead	400	mg/kg	86.5 J	45.9 J	804	9.8	422	19.4	282	270		

Notes:

⁽¹⁾ Draft 6 NYCRR Part 375, November 2005.
 Concentration exceeds criterion.

ft bgs Feet Below Ground Surface.

J Estimated.

TABLE A-1

<i>Sample Location:</i> <i>Sample ID:</i> <i>Sample Date:</i> <i>Sample Depth:</i> <i>Code</i>		SB-24,25	SB-27,28	SB-26,29	SB-30,31,32	SB-33	SB-35	SB-36	SB-37	SB-39	SB-40	SB-41	SB-42	ISB-2	ISB-3	ISB-4	ISB-5	ISB-6	ISB-7,8	ISB-9
		27-Feb-04 0-4	27-Feb-04 0-4	27-Feb-04 0-4	01-Mar-04 4-10	01-Mar-04 0-4	01-Mar-04 4-10	01-Mar-04 8-9	01-Mar-04 4-5.5	01-Mar-04 8-8.5	01-Mar-04 0-4	01-Mar-04 0-6	01-Mar-04 0-8	03-Mar-04 4-8	03-Mar-04 0-8	03-Mar-04 0-4	03-Mar-04 0-8	03-Mar-04 0-8	03-Mar-04 4-8,7-10	03-Mar-04 0-7
<i>Units</i>																				
Percent Solids	%	90	82	82	88	73	83	82	87	85	84	89	79	85	82	90	89	86	88	83
Metals																				
Arsenic	mg/kg	9.3	2.9	6.0	<1.2	24	2.5	na	<1.2	<1.2	na	na	na	12	na	na	na	8.2	<1.2	6.3
Barium	mg/kg	39	40	84	38	290	66	na	59	37	na	na	na	82	na	na	na	83	68	130
Cadmium	mg/kg	4.6	1.5	1.0	1.3	5.6	2.2	na	2.1	1.5	3.3	1.6	2.5	1.7	4.5	3.0	1.6	2.8	1.8	3.1
Chromium	mg/kg	23	10.0	<6.1	8.9	25	16	na	14	10.0	na	na	na	11	na	na	na	25	16	23
Lead	mg/kg	51	23	180	14	210	<12	na	<11.0	29	110	<12	200	92	10000	46	<11	15	<11	36
Mercury	mg/kg	<0.26	<0.25	<0.25	<0.23	0.37	<0.25	na	<0.23	<0.25	na	na	na	0.48	na	na	na	<0.24	<0.23	0.80
Selenium	mg/kg	<0.63	0.95	<0.61	<0.57	7.5	<0.61	na	<0.58	<0.59	na	na	na	<0.59	na	na	na	<0.59	<0.6	<0.7
Silver	mg/kg	<6.3	<6.2	<6.2	<5.7	<6.8	<6	na	<5.7	<5.9	na	na	na	<5.9	na	na	na	<5.8	5.7	<6
VOCs																				
Chloromethane	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
Bromomethane	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
Vinyl Chloride	µg/kg	na	na	na	<33.0	<440	<30,000	na	<290	na	na	na	na	<2	na	na	na	<2	<2	<400
Chloroethane	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<400
Methylene Chloride	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	9	na	na	na	8	7	<600
Acetone	µg/kg	na	na	na	<57.0	<2,200	<100,000	na	<960	na	na	na	na	<12	na	na	na	<28	<11	<2,000
Carbon Disulfide	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
1,1-Dichloroethene	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
1,1-Dichloroethane	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
trans-1,2-Dichloroethene	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
cis-1,2-Dichloroethene	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	14	<600
Chloroform	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
1,2-Dichloroethane	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
2-Butanone	µg/kg	na	na	na	<57.0	<2,200	<100,000	na	<960	na	na	na	na	<12	na	na	na	<12	<11	<2,000
1,1,1-Trichloroethane	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
Carbon Tetrachloride	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
Bromodichloromethane	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
1,2-Dichloropropane	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
cis-1,3-Dichloropropene	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
Trichloroethene	µg/kg	na	na	na	100	<660	250000	na	620	na	na	na	na	<4	na	na	na	<3	130	<600
Dibromochloromethane	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
1,1,2-Trichloroethane	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
Benzene	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
Trans-1,3-Dichloropropene	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
Bromoform	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
4-Methy-2-pentanone	µg/kg	na	na	na	<57.0	<2,200	<100,000	na	<960	na	na	na	na	<12	na	na	na	<12	<11	<2,000
2-Hexanone	µg/kg	na	na	na	<17.0	<2,200	<100,000	na	<290	na	na	na	na	<12	na	na	na	<12	<11	<600
Tetrachloroethene	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	5	<600
1,1,1,2,2-Tetrachloroethane	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
Toluene	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
Chlorobenzene	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
Ethylbenzene	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	9600
Styrene	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600
m,p-Xylenes	µg/kg	na	na	na	<17.0	7600	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	11000
o-Xylenes	µg/kg	na	na	na	<17.0	<660	<30,000	na	<290	na	na	na	na	<4	na	na	na	<3	<3	<600

TABLE A-1

<i>Sample Location:</i> <i>Sample ID:</i> <i>Sample Date:</i> <i>Sample Depth:</i> <i>Code</i>		SB-24,25	SB-27,28	SB-26,29	SB-30,31,32	SB-33	SB-35	SB-36	SB-37	SB-39	SB-40	SB-41	SB-42	ISB-2	ISB-3	ISB-4	ISB-5	ISB-6	ISB-7,8	ISB-9
		27-Feb-04 0-4	27-Feb-04 0-4	27-Feb-04 0-4	01-Mar-04 4-10	01-Mar-04 0-4	01-Mar-04 4-10	01-Mar-04 8-9	01-Mar-04 4-5.5	01-Mar-04 8-8.5	01-Mar-04 0-4	01-Mar-04 0-6	01-Mar-04 0-8	03-Mar-04 4-8	03-Mar-04 0-8	03-Mar-04 0-4	03-Mar-04 0-8	03-Mar-04 0-8	03-Mar-04 4-8,7-10	03-Mar-04 0-7
<i>Units</i>																				
Percent Solids	%	90	82	82	88	73	83	82	87	85	84	89	79	85	82	90	89	86	88	83
SVOCs																				
Phenol	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
bis(2-Chloroethyl)ether	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
2-Chlorophenol	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
1,3-Dichlorobenzene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
1,4-Dichlorobenzene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
1,2-Dichlorobenzene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
2-Methylphenol	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
2,2-Oxybis(1-Chloropropane)	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
4-Methylphenol	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
n-Nitrosodnpropylamine	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Hexachloroethane	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Nitrobenzene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Isophorone	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
2-Nitrophenol	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
2,4-Dimethylphenol	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
bis(2-Chloroethoxy)methane	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
2,4-Dichlorophenol	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
1,2,4-Trichlorobenzene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Naphthalene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
4-Chloroanilene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Hexachlorobutadiene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
4-Chloro-3-methylphenol	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
2-Methylnaphthalene	µg/kg	na	na	na	na	1500	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Hexachlorocyclopentadiene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
2,4,6-Trichlorophenol	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
2,4,5-Trichlorophenol	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
2-Chloronaphthalene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
2-Nitroaniline	µg/kg	na	na	na	na	<46,000	na	<4,100	na	na	na	na	na	<3,900	na	na	na	<3,900	<3,800	<4,000
Dimethylphthalate	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Acenaphthalene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
2,6-Dinitrotoluene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
3-Nitroaniline	µg/kg	na	na	na	na	<46,000	na	<4,100	na	na	na	na	na	<3,900	na	na	na	<3,900	<3,800	<4,000
Acenaphthene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
2,4-Dinitrophenol	µg/kg	na	na	na	na	<46,000	na	<4,100	na	na	na	na	na	<390	na	na	na	<3,900	<3,800	<4,000
4-Nitrophenol	µg/kg	na	na	na	na	<46,000	na	<4,100	na	na	na	na	na	<3,900	na	na	na	<3,900	<3,800	<4,000
Dibenzofuran	µg/kg	na	na	na	na	<4,600	na	430	na	na	na	na	na	<390	na	na	na	<390	<380	<400
2,4-Dinitrotoluene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Diethylphthalate	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
4-Chlorophenylphenylether	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Fluorene	µg/kg	na	na	na	na	<4,600	na	480	na	na	na	na	na	<390	na	na	na	<390	<380	<400
4-Nitroanaline	µg/kg	na	na	na	na	<46,000	na	<4,100	na	na	na	na	na	<3,900	na	na	na	<3,900	<3,800	<4,000
2-Methy-4,6-dinitrophenol	µg/kg	na	na	na	na	<46,000	na	<4,100	na	na	na	na	na	<3,900	na	na	na	<3,900	<3,800	<4,000
n-Nitrosodiphenylamine	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
4-Bromophenylphenylether	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Hexachlorobenzene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400

TABLE A-1

<i>Sample Location:</i> <i>Sample ID:</i> <i>Sample Date:</i> <i>Sample Depth:</i> <i>Code</i>		SB-24,25	SB-27,28	SB-26,29	SB-30,31,32	SB-33	SB-35	SB-36	SB-37	SB-39	SB-40	SB-41	SB-42	ISB-2	ISB-3	ISB-4	ISB-5	ISB-6	ISB-7,8	ISB-9
		27-Feb-04 0-4	27-Feb-04 0-4	27-Feb-04 0-4	01-Mar-04 4-10	01-Mar-04 0-4	01-Mar-04 4-10	01-Mar-04 8-9	01-Mar-04 4-5.5	01-Mar-04 8-8.5	01-Mar-04 0-4	01-Mar-04 0-6	01-Mar-04 0-8	03-Mar-04 4-8	03-Mar-04 0-8	03-Mar-04 0-4	03-Mar-04 0-8	03-Mar-04 0-8	03-Mar-04 4-8,7-10	03-Mar-04 0-7
<i>Units</i>																				
Percent Solids	%	90	82	82	88	73	83	82	87	85	84	89	79	85	82	90	89	86	88	83
Pentachlorophenol	µg/kg	na	na	na	na	<9,100	na	<810	na	na	na	na	na	<780	na	na	na	<780	<760	<800
Phenanthrene	µg/kg	na	na	na	na	530	na	2700	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Anthracene	µg/kg	na	na	na	na	<4,600	na	590	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Carbazole	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Di-n-butylphthalate	µg/kg	na	na	na	na	18000	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Fluoranthene	µg/kg	na	na	na	na	660	na	2300	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Pyrene	µg/kg	na	na	na	na	1100	na	1800	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Butylbenzylphthalate	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
3,3-Dichlorobenzidine	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Benzo(a)anthracene	µg/kg	na	na	na	na	500	na	890	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Chrysene	µg/kg	na	na	na	na	560	na	750	na	na	na	na	na	<390	na	na	na	<390	<380	<400
bis(2-Ethylhexyl)phthalate	µg/kg	na	na	na	na	1700	na	<410	na	na	na	na	na	<390	na	na	na	<390	1400	1800
Di-n-octylphthalate	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Benzo(b)fluoranthene	µg/kg	na	na	na	na	930	na	930	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Benzo(k)fluoranthene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Benzo (a) pyrene	µg/kg	na	na	na	na	<4,600	na	630	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Indeno (1,2,3-cd) pyrene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Dibenzo(a,h)anthracene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400
Benzo(g,h,i)perylene	µg/kg	na	na	na	na	<4,600	na	<410	na	na	na	na	na	<390	na	na	na	<390	<380	<400

Notes:

na - not analyzed